



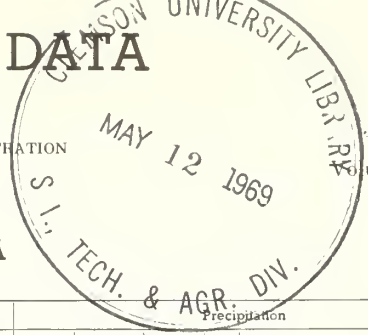
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CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
MAURICE H. STANS, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE



HAWAII
JANUARY 1969
Volume 65 No. 1

CLIMATOLOGICAL DATA

Station	Temperature											Precipitation											
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days			Total	Departure From Normal	Greatest Day	Date	Snow Sleet		No. of Days				
										80° or Above	32° or 32° or Below	0° or Below					Total	Max. Depth on Ground	Date	.10 or More	.50 or More		
																						Max.	Min.
* * * ISLAND OF KAUAI																							
ANAOHOLA 1111 A																							
KANALOHULUMULU 1075 A	58.7	47.2	53.0		64	12+	33	20		0	0	0	0	7.62	4.90								
KAPAA STABLES 1104 A														27.85		16.75	6				17	8	4
KILAUEA FIELDO 17 1135 A														4.46									
KILAUEA POINT 1133 A	76.9M	64.7M	70.8M		84	1	60	30+		0	0	0	0	16.84	6.75								
														9.27		4.28	5				10	5	3
* * * ISLAND OF OAHU																							
KOOLA 936 A														8.37	1.46	3.20	31						
LIHUE W8 AP 1020.1 R	73.1	58.5	65.8	- 5.1	78	2+	50	22		0	0	0	0	4.97	1.54	1.19	30				10	4	2
MANA 1026 A	75.7M	60.2M	68.0M	- 3.1	81	31+	54	22		0	0	0	0	4.43	.37	1.77	6				8	3	1
N WAILUA DITCH 1051 A														18.05		9.46	31						
PM WAINIHA 1115 A														32.40	22.17	16.70	6				12	8	5
PUEHU RIDGE 1040 A														5.65		1.72	2						
WAHIAWA 930 A														4.23									
WAIAMI LOWER 1054 A	73.4	53.0	63.2		77	15+	44	23+		0	0	0	0	11.49		4.71	31				9	5	4
WAIMEA 947 A														3.43	-.25	1.00	2				8	2	1
* * * ISLAND OF MAUI																							
MONOLULU OBSERV 702.2 R	76.9	61.2	69.1	- 3.4	82	31	52	20		0	0	0	0	11.96	6.55	3					9	4	3
MONOLULU W8FC 703 A	75.7M	61.9M	68.8M	- 2.6	83	2	53	20		0	0	0	0	8.20	3.91	3					7	4	3
KAMUKU 912 A	75.2	62.7	69.0	- 2.5	81	2	55	25		0	0	0	0	12.12	6.98	3.53	3						
KANEQHE MAUKA 781 A														15.76	8.46	6.66	3				15	9	4
KOOLA OAM 833 A														20.51	12.72	7.13	3				13	6	5
* * * ISLAND OF LANAI																							
LUALUALEI 804 A	76.4M	60.9M	68.7M		80	13+	52	20		0	0	0	0	12.55		6.62	3						
MAKAPUU POINT 724 A	74.4	63.1	68.8		78	11+	56	20		0	0	0	0	9.90	6.31	3.58	3				10	6	4
NUUANU RES 4 783 A														10.20	.61	2.48	2				10	7	4
OPAEULA 870 A	73.7	58.9	66.3	- .5	81	4	50	21+		0	0	0	0	11.92	5.19								
PALOLO VALLEY 718 A														14.54	3.62	3.50	30				10	9	6
* * * ISLAND OF HAWAII																							
PRI WAIHANA 820.2 A	72.6	57.2	64.9		80	13	47	21+		0	0	0	0	16.67									
PUNALUU 884 A														18.09		7.50	3						
WAIHANA OAM 863 A														14.14		6.38	2						
WAIAMOLE 837 A														21.01	8.62	10.20	3						
WAILUA 847 A	75.6	60.9	68.3	- 2.2	83	1	49	20		0	0	0	0	7.94	3.84	3.78	2						
WAIKIKI 717.2 A	78.1M	60.4M	69.3M		83	2	51	20		0	0	0	0	8.30		3.10	3				9	5	4
WAIKAMU 750 A														13.76	9.60	9.10	3						
* * * ISLAND OF MOLOKAI																							
KUALAPUU 534 A														11.52	7.38	3.61	9						
MAPULEMU 542 A														9.93	6.07	3.00	8						
MAUNALOHA 511 A														9.22	4.95								
MOLOKAI AP 524 A	74.8	61.6	68.2		80	13	52	20		0	0	0	0	10.03		3.19	9				11	4	3
* * * ISLAND OF HONOLULU																							
HALEAKALA B E S 434 A	56.4	40.2	48.3		70	1	30	24+		0	0	7	0	13.90	6.50								
HALEAKALA RS 338 A	77.6	60.6	69.1		83	3	53	20		0	0	0	0	15.03		3.30	4				14	9	5
HANA AIRPORT 355 A														11.87		2.78	4				13	8	6
HONOKOMUA 493 A														11.83		3.47	9						
KAAHAPALI AIRPORT A	76.9	64.3	70.6		82	1	55	22		0	0	0	0	8.19		3.31	9				10	6	2
* * * ISLAND OF MAUI																							
KAMULUI W8 AP 398 R	77.8	59.7	68.8	- 3.3	83	2	48	20		0	0	0	0	7.75	4.61	2.10	3				8	5	3
KAILUA 446 A	75.6	58.8	67.2	- 1.2	81	15+	52	21		0	0	0	0	16.26	7.72	5.40	4				12	5	5
KEANAE 346 A														21.80	6.57								
KIPAHULU 258 A														16.03	6.09	3.09	6						
KULA SANATORIUM 267 A	65.6	49.8	57.7	- 3.7	75	3	41	26		0	0	0	0	14.77	10.15	3.52	9				11	8	5
* * * ISLAND OF HAWAII																							
LAHAINA 361 A	78.6	62.6	70.6		84	1	56	20		0	0	0	0	7.78	4.99	2.23	9				8	5	3
PAIA 406 A														7.13	3.26	2.00	4						
WAILUKU 392 A	78.4M	61.9M	70.2M	- 1.5	83	12+	56	26+		0	0	0	0	7.97	4.18						10	4	3
* * * ISLAND OF HAWAII																							
HAINA 214 A	77.7	59.9	68.8	- .7	83	10	53	21		0	0	0	0	7.51	2.45	2.24	31				12	3	3
MAWAAI VOLCNS NP MQ 54 R	63.5	50.1	56.8	- 1.3	69	15	39	21		0	0	0	0	22.34	10.12	6.10	5				8	5	5
HILO W8 AIRPORT 87 R	79.4	63.4	71.4	.6	87	8	54	23		0	0	0	0	19.66	7.84	8.26	31				10	7	4
MUEHUE 92.1 A														10.00	5.87								
KAINALIU 73.2 A	74.1	58.0	66.1		80	31	52	27+		0	0	0	0	8.37	4.41	2.33	7				9	4	3
KAMUELA AIRPORT 191 A	69.3	44.7	57.0		74	10	37	1		0	0	0	0	5.05		1.65	9				9	2	1

See Reference Notes Following Station Index
SPECIAL WEATHER SUMMARY ON PAGE 3

CLIMATOLOGICAL DATA

HAWAII
JANUARY 1969

Continued

Station	Temperature											Precipitation												
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days			
										81° or Above	31° or Below	32° or Above	33° or Below					Total	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
KEAAU 92	80.8	60.4	70.6	.3	90	3	55	25		1	0	0	0	15.58	3.02	4.15	30	.0	0	0	11	7	4	
KEALAKEKUA 26.2	74.7	59.3	67.0		80	31+	54	24		0	0	0	0	7.17		2.14	7	.0	0	0	7	4	4	
KONA AIRPORT 68.3	78.9	62.5	70.7		83	13+	56	26+		0	0	0	0	5.73		2.10	7	.0	0	0	7	3	2	
KUKUIHAELE HIC 199														9.12		2.35	4	.0	0	0	14	6	5	
KULANI CAMP 79	63.0M	43.1M	53.1M		71	3	32	27		0	0	1	0	17.10		3.84	30	.0	0	0	11	8	6	
MAUNA KEA BEACH 98	80.6	64.4	72.5		87	31	58	24		0	0	0	0	2.95		.78	9	.0	0	0	8	2	0	
PAHALA 21	76.6	60.1	68.4	.6	82	3	54	21		0	0	0	0	15.79	7.76	6.28	6	.0	0	0	11	4	3	
POHAKULOA 107														3.17				.0	0	0				
PUAKO 95.1														3.33		.82	7	.0	0	0			0	
PUU WAAWAA 94.1														4.38	1.15	1.10	7	.0	0	0	7	4	1	
UMIKUA 118														6.14		2.50	30	.0	0	0			1	
WAIKAEA SCO 88.2														20.90	- 1.02	8.45	30	.0	0	0	10	7	4	
ISLAND			65.7											10.24				.0						

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 90° ON THE 30 AT KEAAU 92, HAWAII

LOWEST TEMPERATURE: 21° ON THE 17TH AT HALEAKALA SUMMIT 338.4, MAUI

GREATEST TOTAL PRECIPITATION: 35.40 AT HONOMANU GULCH 341, MAUI

LEAST TOTAL PRECIPITATION: 1.25 AT PUU MALI 113, HAWAII

GREATEST ONE-DAY PRECIPITATION: 16.75 ON THE 6TH AT KANALOHULUHULU 1075, KAUAI

See Reference Notes Following Station Index

SPECIAL WEATHER SUMMARY

The month's weather was enlivened by several heavy rains, a damaging windstorm, the second greatest 24-hour rainfall ever observed in the State, a prolonged cold spell, and a widespread fall of hail.

Late on the 2d a slow-moving cold front brought heavy rain especially to central Oahu, where 24-hour amounts of 7 to 10 inches inundated streets, fields, and low-lying areas, causing several persons to be evacuated from their homes in the Ewa Beach-Waipahu area, stranding dozens of cars along the Farrington Highway near Waipahu and Pearl City, and cutting crop production in the Waiawa area by about 50 percent. Shortly before 11 a.m. on the same day, a 14-year-old boy had been drowned when he was swept into a storm drain while playing in a rain-swollen drainage ditch near Pearl City.

The month's most destructive weather occurred on the morning of the 5th, when an "unusually large" thunderstorm, which had been apparently stationary out to sea to the northwest earlier in the day, suddenly swept across the Barking Sands Pacific Missile Range on western Kauai, doing an estimated \$350,000 in damage to its facilities. The weather station recorded torrential rain, and at 10:44 a.m. a peak northwesterly gust of 92 m.p.h., which tipped over 3 trailers and moved several others off their foundations; carried away 2 warehouses, whose contents were then heavily damaged by wind and rain; punctured structures with flying debris; and uprooted nearly half of the 50 or so 30-foot kiawe trees, limb-damaging most of the others. Power was knocked out when tin roofing cut the lines; the Weather Bureau's balloon inflation shelter was demolished; and a rectangular door-shaped piece of cast iron, about half a ton in weight, was carried some 500 yards from its repository on a storage dump. Along the west and southwest coasts from Barking Sands toward Kekaha, the winds apparently lessened in intensity since only slight damage occurred there, nor were they unusually strong elsewhere on Kauai.

The thunderstorm was apparently associated with a small surface low pressure system, first noticed about 150 miles south of Honolulu the previous night, which moved directly over Kauai and dropped pressure readings in the islands to near-record lows. For example, the sea-level pressure of 29.47 inches at Honolulu Airport at 2 p.m. on the 5th was the second lowest recorded there since records began in January 1947.

The same storm brought Hawaii its second greatest 24-hour rainfall of record -- the 34.10 inches recorded at Kokee, Kauai, during the 24 hours ending at 7:30 a.m. on the 6th. The heaviest

rains appear to have been highly localized (Kanalohuluhulu, only 2 miles to the southwest, received 16.75 inches during the same period, only half of what fell at Kokee) and may have been augmented by the rush of strong, moist, northwesterly winds up the steep-sided canyons that open in that direction.

Shorter-period intensities included 2.56 inches in about 35 minutes at Kanalohuluhulu, 2.15 inches in 25 minutes at Kilauea, and 1.8 inches in about 10 minutes at Power House Wainiha.

On the evening of the 5th rain-loosened boulders rolling down a Palolo Valley hillside on Oahu crashed into a residence, doing an estimated \$6,000 in damage. On the 5th and 6th heavy rains in the Kau district of Hawaii Island flooded the Belt Highway between Naalehu and Pahala.

Between the 15th and 26th, several fast-moving cold fronts and an intense low pressure area which remained north of the State for some days pulled polar air down across the islands, ushering in a long record-breaking cold spell that gave residents and visitors alike a taste of Mainland winter. Afternoon temperatures reached the mid-seventies, but nighttime minimums were near 50. Honolulu Airport's 52° and Kahului Airport's 48° on the 20th, and Lihue Airport's 50° on the 22d, were the lowest temperatures ever registered at those stations in their 22, 18, and 17 years of record, respectively. Hilo Airport's 54° on the 23d was its lowest December reading in 22 years of record. At Honolulu Airport, the average minimum temperature for the 8 days of January 20-27 was 54.8°, only .8° above the previous record low of 54°; and the average minimum temperature for the entire month was 61.2°, 4.8° below the average January low, and by far the lowest average monthly minimum ever recorded there.

During the evening of the 21st, strong, gusty winds did scattered damage to homes, garages, and some trees in Piipihonua, Puueo, Hamakua, and elsewhere on northeastern Hawaii Island, and knocked Radio Station KPUA off the air when tin roofing slashed through a transmission cable.

The weather finale of the month occurred just after 11 a.m. on the 30th, when a severe thunderstorm first noted off northeastern Oahu battered the eastern third of that island with torrential rains, strong and gusty surface winds, and hail up to half an inch in diameter. The hail was unusually widespread for Hawaii, being reported from scattered points along the windward coast east of Kaneohe, as well as from Aina Haina, Niu and Kuliouou Valleys, and Hawaii Kai in leeward southeastern Oahu. About 3.6 acres of

SPECIAL WEATHER SUMMARY - CONTINUED

lettuce on Koko Head were nearly completely destroyed by the hail and some lighter damage done to crops in the Waimanalo area. The loss, mainly to the Koko Head lettuce, was estimated at \$15,000 to \$20,000.

In general, monthly rainfall over the State was well above normal everywhere, except for a few gages in eastern, central, and southwestern Kauai, a gage or two on Oahu and Maui, and a few gages

on the northeastern slopes of Mauna Kea -- all of which received between 50 and 99 percent of their normals for the month. Scattered reports of 3 to 5 times the monthly mean came from Kauai, Oahu, east-central and southwestern Maui, and from the entire upper Kona area of Hawaii Island. In terms of percentage of normal, rainfall ranged from a low of 35 percent at Hanalei Tunnel in central Kauai to a high of 471 percent on Haleakala Summit, Maui.

STATIONS WITH MORE RAIN IN JANUARY 1969
THAN IN ANY PREVIOUS JANUARY

(25 years of record or more, only)

Station	Length of Record (Yrs.)	Previous Greatest January Total	January 1969
<u>MAUI</u>			
Honokohua	41	11.07 In.	11.83 In.
Honomanu Gulch	34	34.32	35.40
Nakalele	31	11.26	11.54
<u>HAWAII</u>			
Honaunau	31	6.59	7.25

STATIONS WITH LOWER MINIMUM TEMPERATURES IN
JANUARY 1969 THAN IN ANY PREVIOUS JANUARY

(10 years of record or more, only)

Station	Length of Record (Yrs.)	Previous Lowest January Temperature	Lowest Tempera- ture in Jan. 1969
<u>KAUAI</u>			
Lihue WBO	18	53°	50° *
Makahuena Point	10	58°	54°
Waiahi Lower	13	49°	44° *
<u>OAHU</u>			
Honolulu WBFO	22	56°	52° *
Makapuu Point	18	58°	56° **
<u>MAUI</u>			
Kahului WBO	14	54°	48° *
Kula Sanatorium	51	43°	41° **
<u>HAWAII</u>			
Hilo WBO	19	55°	54°
Kamuela Airport	15	38°	37° *
Kona Airport	19	57°	56° *

* -- Lowest in any month.
** -- Tied for lowest in any month.

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DAILY PRECIPITATION

HAWAII
JANUARY 1969

Continued

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ISLAND OF HAWAII																																	
KALAUAPA 563	6.42	*	*	.06	.13	*	*	.32	.90	3.52	*	*	*	.13	.12	*	*	.32	*	*	*	*	*	*	.58	*	*	*	.34	*	*	*	*
KAUNAKAI 530	7.44	*	*	3.26	*	*	1.67	4.52	1.81	*	*	*	*	*	3.75	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KAUNALELE PENS 551	8.27	*	*	*	*	*	1.64	.03	.80	3.61	.73	*	*	.04	1.14	.08	.01	*	.84	.04	*	.20	.23	.03	.15	*	.46	.02	.40	.07	*		
KUAIHOU 334	15.03	2.50	*	*	*	*	1.04	.03	.80	3.61	.73	*	*	.07	.04	.06	*	*	.84	.04	*	.20	.23	.03	.15	*	.46	.02	.40	.07	*		
KAUAIHOU 511	9.93	2.03	.58	1.46	.18	.95	3.00	.67	*	*	*	*	.07	.04	.06	*	*	.84	.04	*	.20	.23	.03	.15	*	.46	.02	.40	.07	*			
MAUNALUA 52	9.22	*	*	3.10	1.07	.03	.35	2.84	.82	*	*	*	.32	.12	*	*	*	.20	.23	.03	.15	.03	.15	.03	.15	.03	.15	.03	.15	.03	.15		
HUKUKAI AP 524	10.03	*	*	2.55	.40	1.22	.25	.41	3.19	.90	*	*	.15	T	.09	.01	*	.36	.04	.04	.12	.03	.15	.03	.15	.03	.15	.03	.15	.03	.15		
PUUHOLO RANCH 542.1	12.45	.06	1.66	.98	1.32	.03	.34	1.85	.25	.29	*	*	.15	T	.09	.01	*	.36	.04	.04	.12	.03	.15	.03	.15	.03	.15	.03	.15	.03	.15		
WAIKULU 540	17.34	*	*	*	*	5.87	*	*	*	*	*	*	5.80	*	*	*	*	*	*	*	2.47	.02	.90	.22	.04	.12	.03	.15	.03	.15	.03	.15	
ISLAND OF LANAI																																	
KANEHUU 690	7.48	*	T	*	*	*	*	4.42	1.59	.96	*	*	*	*	*	2.58	*	*	*	*	*	*	.48	*	*	*	*	T	*	T	*		
KUMALAPAU HARBOR 658	6.41	*	.82	*	*	1.84	.13	.67	1.59	.96	*	*	.05	T	.18	T	*	*	.03	.37	*	*	.48	*	*	.22	*	*	.05	.22	*		
LANAI CITY 612	11.16	*	T	.80	1.34	1.49	.43	.26	1.27	3.84	.72	.05	T	.18	T	*	*	.03	.37	*	*	.48	*	*	.22	*	*	.05	.22	*			
LANAI MALE 684	6.74	*	*	*	*	*	*	*	*	*	*	*	*	*	6.40	*	*	*	*	*	*	*	.18	*	*	*	*	*	*	.16	T	*	
KAHANA 694	10.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10.61	*		
MALAEUA 676	10.28	*	T	*	*	*	5.66	*	*	*	*	*	*	*	*	3.90	*	*	*	*	*	.72	*	*	*	*	*	*	.08	*	.03	*	
WAIKAEKUA 685	17.04	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7.20	*	*	*	*	*	.04	.29	*	*	*	*	*	*	*	.03	*	
ISLAND OF MAUI																																	
KUWAHI-252	12.34	*	*	*	*	10.70	*	*	*	*	*	*	*	.11	1.05	*	*	*	*	*	*	.59	*	*	*	*	*	*	3.20	1.19	*		
HALEKALUA RANCH 432	10.75	*	.17	*	4.21	1.22	.72	1.89	.35	.15	*	*	.04	.4	.24	*	*	.04	.06	.12	*	.12	.03	.24	*	*	*	1.04	.22	*			
HALEKALUA RANCH 432	10.75	*	.17	*	4.21	1.22	.72	1.89	.35	.15	*	*	.04	.4	.24	*	*	.04	.06	.12	*	.12	.03	.24	*	*	*	1.04	.22	*			
HALEKALUA RANCH 432	10.75	*	.17	*	4.21	1.22	.72	1.89	.35	.15	*	*	.04	.4	.24	*	*	.04	.06	.12	*	.12	.03	.24	*	*	*	1.04	.22	*			
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12	.15	.06	.12		
HALEKALUA SUMMIT 338.4	18.14	.58	1.89	3.75	2.02	2.05	2.15	3.32	.66	.02	*	*	.06	.11	.24	*	*	.06	.12	.1													

DAILY PRECIPITATION

HAWAII
JANUARY 1969

Continued

Station	Total	Day of Month																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
		KAUMANA 88.1	20.10	*	*	.03	1.03	1.65	.33	.91	.08	.02	.78	*	*	*	*	*	*	*	*	*	*	.01	*	*	*	*	*	*	*	*	*	*	.35	6.16	8.75
KAWAINUI LOWER 193	15.88	*	*	.34	*	*	*	*	*	*	10.41	*	*	*	*	*	*	.13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.88	
KEAAU 92	15.58	*	*	.13	.89	3.62	.73	1.05	.02	.11	.63	.16	*	*	*	*	*	*	*	*	*	*	*	*	.92	*	*	*	*	*	*	*	*	3.84		
KEALAKEUA 26.2	17.17	*	T	.05	.42	1.47	1.25	2.14	.22	1.39	.19	*	*	*	*	*	*	*	*	*	*	.04	*	*	*	*	*	*	*	*	*	*	.25	4.15	3.84	
KEHENA 181.2	19.09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	19.09	
KIDLAKAA A & F 6	12.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12.30		
KIPA 89.2	22.82	T	*	.03	1.04	1.11	1.08	.56	.14	.03	.67	T	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.46	6.60	11.10		
KOMALA 179.1	7.93	*	*	.09	*	*	3.80	.75	.06	1.09	.10	*	*	.05	*	*	*	*	*	*	*	.03	*	*	*	*	*	*	*	*	*	.01	.85	.98		
KOMALA MAULILI 176	10.20	*	*	.08	*	*	4.88	.57	.09	.73	.39	*	*	.26	*	*	*	*	*	*	*	.07	.01	.01	*	*	*	*	*	*	.02	1.57	1.42			
KOMALA MISSION 175.1	9.56	*	*	.15	2.56	.23	1.46	.71	.10	1.29	.11	*	*	.14	T	T	T	*	*	*	.08	T	*	*	*	.01	.01	.02	.01	*	.03	1.31	1.36			
KOIHAE LOWER 196	11.94	*	*	.36	*	*	*	*	*	*	8.69	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.25		
KONA AIRPORT 68.3	5.73	T	*	.05	.40	1.04	.69	2.10	.40	.45	.09	T	*	.06	*	*	.08	*	*	*	.45	T	*	*	.56	*	*	*	*	*	*	*	2.25			
KONA VILLAGE 93.8	5.18	*	.45	.50	.60	.75	1.75	.10	.48	.15	*	*	*	*	*	*	*	*	*	*	.40	*	*	*	*	*	*	*	*	*	*	.12	4.28	6.47		
KUKAIAU 222	19.14	*	*	.01	6.01	.37	.08	.07	.37	.07	.05	.01	*	*	*	*	*	*	*	*	.77	.42	*	*	.01	*	*	*	*	*	.02	1.27	1.05			
KUKULAELE HIC 199	9.12	*	*	.07	2.35	.14	.53	.21	.09	.28	1.20	*	*	.27	.02	*	*	*	*	.20	.11	*	*	*	.16	1.02	.01	*	*	*	.12	4.28	6.47			
KUKULAELE MILL 206	6.74	*	*	.04	*	*	1.89	.21	.05	.05	1.18	*	*	.85	.02	*	*	*	*	.17	.11	*	*	*	*	*	.20	*	*	*	.18	1.22	.57			
KULANI CAMP 79	17.10	*	*	.70	.82	3.38	1.42	2.25	.13	.10	.81	2.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.33	3.84	2.01			
KULANI MAUKA 76	5.94	*	*	.05	1.14	.86	.50	.08	.27	.85	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.27	.27	2.00		
KULANI SCHOOL SITE 78	7.28	*	*	.05	.40	1.53	.98	2.42	.40	.94	*	*	*	*	*	*	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.00			
LANIHU 68.2	7.67	*	*	.05	.40	1.53	.98	2.42	.40	.94	*	*	*	*	*	*	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.00			
MAUKA 2	8.11	*	.06	.12	*	*	5.90	.10	.80	.91	T	*	*	.22	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
MAUNA KEA BEACH 98	2.95	*	.09	.26	.31	.40	.57	.05	.78	.18	T	*	*	.10	*	*	*	*	*	*	.21	*	*	*	*	*	*	*	*	*	*	*	*			
MAUNA LOA SLOPE OBS	5.29	*	.06	.40	.93	1.17	1.17	.76	.13	.58	.09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	T	T			
MIDDLE HULUALOA 68.1	.88	*	*	*	*	*	*	*	*	*	.78	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
MIDDLE PEN 147.1	6.52	*	*	*	*	*	*	3.90	*	*	*	*	*	*	*	2.20	*	*	*	*	*	.42	.10	*	*	*	*	*	*	*	*	*	*			
MOAULA 18	14.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4.40		
MOUNTAIN VIEW 91	21.81	*	.15	.99	4.16	.84	1.14	.02	.16	.78	.20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.24	6.14	6.95			
NAALEHU 14	12.80	*	.78	.69	4.58	3.86	1.07	.21	.90	.20	T	*	*	3.05	.02	.03	.03	*	*	*	.01	*	*	.01	.02	T	*	*	.15	.03	.11	6.15				
NAPODOPO 28	4.64	*	*	*	*	1.58	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.03	6.10		
NAULU FOREST 38.6	23.49	*	*	*	8.65	6.60	*	*	*	*	1.85	*	*	.01	*	*	*	.21	*	*	.02	*	*	*	*	*	*	*	*	*	*	*	.05	6.10		
NIULII 179	7.99	*	.20	.15	*	*	3.22	.37	.10	.74	.09	*	*	.03	*	*	.02	*	*	.07	.07	.25	.04	*	*	.02	.05	*	*	.02	1.32	1.61				
ODKALA 223	14.78	*	.10	.67	1.88	.12	.25	.35	.10	.03	.22	.10	*	*	*	*	*	*	*	.99	.25	.11	T	.03	.04	*	*	.02	.05	.10	4.15	6.15				
OPIHIHALE 2 24.1	6.31	*	.17	1.44	1.43	1.18	.24	.98	.16	T	T	*	*	*	*	*	*	*	*	.99	.25	.11	T	.03	.04	*	*	.02	.05	.10	4.15	6.15				
ORCHID LAGO EST 91.5	18.45	*	.52	*	*	*	*	*	*	10.77	*	*	*	*	*	*	*	*	*	.17	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	6.99		
PAKUHAW 217	7.21	*	.01	.88	.25	.26	.07	.19	.09	.08	.03	*	*	.39	.01	*	*	.21	*	.02	.01	.10	.10	.16	.03	.16	.03	.11	1.51	2.23	.11	6.99				
PAAUILO 221	15.51	*	.03	4.78	.36	.07	.05	.25	.05	.02	.01	*	*	.06	.02	.02	.02	.02	.02	.89	.27	.22	.22	.04	T	.03	T	.07	3.20	5.43	.17	.27				
PAAULA 21	15.79	*	.36	.34	3.05	6.28	1.62	.14	.67	.37	.02	.08	*	*	*	*	*	*	.06	.02	.02	.02	.02	.02	.04	.01	.05	.01	.05	.01	.05	.32	2.65	2.53		
PAKOA 65	20.10	*	.17	1.90	7.73	1.57	2.26	.15	.18	.49	.06	*	*	*	*	*	*	*	*	.03	.03	.03	.03	.03	.06	.06	.06	.06	.06	.06	.06	.06	.17	.27		
PAKAO 37	17.70	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.32	2.65	2.53
PAPAIKOU 144.1	13.31	*	.01	.77	.91	1.08	.79	.07	.01	.43	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.27	3.11	5.86		
PAPAIKOU MAUKA 140.1	24.62	T	.85	1.14	.75	.86	.09	.02	.44	.33	*	*	.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.41	7.18	12.87			
PEEKEKE MAKAI 144	8.23	*	.05	.32	1.20	.51	.48	.06	.11	.43	.06	*	*	*	*	*	*	*	*	.01	.01	.01	.01	.01	.05	.05	.05	.05	.05	.05	.05	.16	2.33	2.25		
PIMUNUA 89	32.50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	32.50		
POHAKULDA 107	3.17	*	.08	*	*	1.67	.13	*	*	1.21	.01	*	*	*	*	*	*	*	*	.07	.07	.07	.07	.07	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01		
PUKAO 95.1	3.33	*	.09	.35	.23	.47	.82	.07	.70	.31	.01	*	*	.05	T	T	*	*	*	.22	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01			
PUU KINE 120	3.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.40		
PUU LAAU 102.1	3.62	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.62		
PUU LEHUA 73	8.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8.00		
PUU MALI 113	1.25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.25		
PUUKUNAU 167	11.94	*	.18	*	*	5.62	1.19	.12	2.38	.34	*	*	.36	.01	.02	*	*	*	*	.02	.02	.02	.02	.02	.05	.05	.05	.05	.05	.05	.05	.05	.03	1.08	.54	
PUU OO 82	7.85	*	.06	1.12	1.55	.39	.14	.10	.09	.55	.01	*	*	*	*	*	*	*	*	.02	.02	.02	.02	.02	.50	.50	.50	.50	.50	.50	.50	.29	2.25	1.30		
PUU WAAMAA 94.1	4.38	*	.04	.35	.45	.49	1.10	.09	.65	.66	*	*	*	*	*	*	*	*	.02	.02	.02	.02	.02	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	20.00		
SAUDLE ROAD 1 84	25.70	*	.90	*	*	*	*	*	*	4.00	*	*	*	*	*	*	*	*	.80	.80	.80	.80	.80	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	20.00		
SOUTH POINT CORRAL 3	3.11	*	.02	*	.83	.48	.05	.12	.14	.10	.08	*	*	.03	*	*	*	*	*	.12	.99	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	3.11		
UMIADA 118	6.14	*	.02	*	.83	.48	.05	.12	.14	.10	.08	*	*	.03	*	*	*	*	*	.12	.99	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01		
UPULU POINT USCG 159.2	8.60	*	.12	1.93	1.10	.73	1.47	.13	1.75	.09	.02	*	*	.08	*	*	*	*	*	.01	.06	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.51	.59	
WAIKAEA SCD 88.2	20.90	*	.05	.90	1.84	1.00	.82	.10	.10	.66	*	*	*	*	*	*	*	*	*	.01	.06	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.20	8.45	6.78	

SUPPLEMENTAL DATA

Station	Wind (Speed - m.p.h.)						Relative humidity averages - percent				Number of days with precipitation							Percent of possible sunshine	
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DAILY TEMPERATURES

HAWAII
JANUARY 1969

Station	Day of Month																															Average	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF KAUAI																																	
KANALOHULUHULU 1075	MAX	63	61	62	60	60	58	60	62	62	61	64	64	58	57	54	53	55	59	55	57	49	48	52	56	58	62	62	62	60	63	63	
	MIN	48	53	48	49	53	50	49	45	51	42	48	48	48	49	50	48	45	46	46	33	44	43	45	44	44	44	44	48	50	53	54	
KILAUEA POINT 1133	MAX	84		81	77	72	70	79	80	81	79	81	81	81	75	75	74	78	77	73	78	73	74	75	78	76	79	79	76	72	75	73	
	MIN	70		68	65	63	61	66	67	65	67	70	67	69	65	64	64	64	63	60	66	63	65	64	62	61	61	61	67	66	60	66	
LIHUE WB AP 1020.1	MAX	78	78	73	72	74	72	75	75	74	76	77	75	76	74	73	71	71	72	70	72	70	70	71	71	71	71	71	72	74	71	72	75
	MIN	71	68	64	65	62	59	58	59	61	57	58	59	57	55	57	59	52	53	57	51	52	50	51	54	53	53	56	61	67	67	69	
MAKAHUEA POINT 940.1	MAX	79	81	77	80	77	76	76	81	77	76	80	82	82	78	76	80	78	78	77	75	77	75	75	73	80	76	78	74	77	75		
	MIN	69	61	65	67	65	60	61	61	63	61	61	63	61	61	65	59	55	63	58	57	57	61	55	54	58	57	64	69	66	65		
MANA 1026	MAX							81	80		80	80	80	80	76	75	75	74	73	71	70	70	70	67	68	70	70	70	73	75	77	78	
	MIN							56	63		63	62	62	67	66	62	62	59	62	62	59	64	55	57	54	59	57	57	59	56	59	65	
NIU RIODE 1035	MAX	76	75	78	77	78	78	76	74	76	75	76	75	74	74	76	74	75	73	71	70	70	70	67	68	70	70	70	73	75	77	78	
	MIN	60	59	60	59	60	60	60	59	57	58	60	59	58	57	60	59	60	58	59	60	58	56	55	54	51	51	52	53	55	54	55	
WAIHI LOWER 1054	MAX	74	74	74	73	72	72	72	75	76	75	74	75	77	77	77	74	75	74	75	72	72	70	72	71	72	73	74	74	73	68	69	
	MIN	60	60	59	59	57	52	52	59	50	52	55	58	49	52	59	52	46	54	44	48	48	48	44	48	45	45	46	54	59	64	61	
ISLAND OF OAHU																																	
EWA PLANTATION 741	MAX	81	79	73	74	78	80	76	73	72	80	81	80	77	79	78	77	75	78	75	77	75	74	75	76	76	77	77	78	76	79	80	
	MIN	62	60	66	63	64	60	60	66	66	59	60	61	62	61	57	59	56	55	58	51	54	53	52	52	54	53	54	59	62	69	70	
HONOLULU WBFC 703	MAX	80	78	74	73	76	77	74	74	73	80	80	79	77	79	78	75	75	77	76	75	76	74	75	77	78	74	78	80	78	81	82	
	MIN	71	70	65	63	64	61	61	67	63	59	61	63	63	61	61	59	59	59	60	52	57	54	55	55	56	55	54	63	68	68	70	
HONOLULU SUBSTA 704	MAX	77	78	74	74	77	74	72	75	74	79	78	79	76	76	76	73	75	75	73	74	72	71	73	74	76	73	73	75	73	75	77	
	MIN	72	68	65	63	66	66	66	68	65	64	65	66	65	64	64	63	65	64	64	59	60	60	60	61	61	59	61	66	68	69	70	
KAHUKU 912	MAX	83	74			79	79	77	73		72		79	78	75	76	74	75		76	76	72	72	73		75	76	76	73	75			
	MIN	62	67			63	61	62	64	59		62	64	59	65	65	63	64		64	53	54	62	60	60		59	58	68	67	66		
KANEHE MAUKA 781	MAX	79	81	78	75	72	71	76	74	75	73	79	78	78	77	77	76	74	75	78	74	72	76	72	74	75	74	73	75	75	71	73	
	MIN	68	65	64	65	65	61	63	65	67	64	64	64	64	64	60	65	64	64	64	56	57	59	58	60	55	59	59	63	64	67	70	
LUALUALEI 804	MAX	80	75	78	74	77	78	77	75	74	74	79	79	80	76	78	73	75	76	76	77	75	75	73	74	77	76	76	77	77	75	77	
	MIN	66	67	62	64	65	66	62	64	60	62	62	61	61	62	62	59	58	62	52	53	57	56	56	58	57	55	59	61	68	70		
MAKAPUU POINT 724	MAX	75	78	78	77	74	75	75	75	70	75	78	75	76	75	71	74	68	76	75	75	69	77	71	75	73	77	72	76	75	74	73	
	MIN	70	70	66	65	65	63	65	64	66	65	67	65	66	63	65	62	63	62	62	56	60	57	60	57	67	58	60	58	59	60	69	
OPEAULA 870	MAX	77	77	75	81	76	78	73	73	70	69	80	77	75	72	73	72	70	75	75	72	72	69	70	71	77	74	73	76	73	67	73	
	MIN	70	69	67	69	66	58	60	60	64	58	59	58	60	59	59	60	58	61	57	50	50	57	56	52	53	53	52	52	54	56	64	
PRI WAHIAWA 620.2	MAX	75	70	70	69	69	72	73	75	72	70	76	78	80	72	74	73	71	70	75	76	72	71	69	69	70	70	72	76	78	70	75	
	MIN	60	66	59	63	60	60	57	59	65	56	57	58	56	58	58	58	57	55	59	47	47	57	54	50	51	53	51	53	54	67	67	
WAIALUA 847	MAX	83	81	74	74	73	79	73	78	74	73	77	78	81	75	76	75	74	75	76	74	76	73	72	73	75	75	74	75	77	72	78	
	MIN	58	66	68	66	64	64	59	61	63	59	59	60	58	59	65	67	65	65	60	49	60	59	63	55	56	57	55	57	59	64	68	
WAIKIKI 717.2	MAX	82	83	80	76	75	73	81	74	75	73	81	81	82	78	81	79	79	79	77	77	76	75	76	78	80	77	78	79	78	79		
	MIN	68	73	67	63	65	62	67	65	68	59	60	61	65	59	60	56	57	59	51	53	52	52	54	56	52	52	56	62	69	68		
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX	79	78	79	76	74	76	76	74	75	73	78	78	80	77	77	75	74	73	75	74	72	73	71	72	71	73	71	73	74	72	75	
	MIN	61	66	66	65	65	64	65	66	68	64	60	65	65	60	62	67	60	60	62	52	54	55	57	58	59	61	59	59	59	69	64	
ISLAND OF LANAI																																	
LANAI CITY 672	MAX	76	70	74	70	68	69	67	70	69	70	74	76	75	66	70	69	74	72	70	72	72	70	71	69	69	68	70	69	71	72	74	
	MIN	59	63	64	62	63	61	64	59	57	60	58	56	62	59	58	60	56	57	58	59	56	58	59	56	54	52	54	54	57	66	64	
ISLAND OF MAUI																																	
HALEAKALA R5 338	MAX	70	68	66	53	53	56	56	58	59	53	56	65	64	56	57	58	59	57	56	51	50	43	46	47	53	55	57	60	60	52	55	
	MIN	45	51	46	43	46	47	45	50	46	40	37	42	40	43	45	32	35	42	38	31	31	31	30	30	32	36	42	39	40	46	44	
HALEAKALA SUMMIT 338.4	MAX	64	57	57	58	57	44	44	49	42	47	55	59	60	46	46	41	45	46	34	34	35	52	40	46	42	52	54	55	61	42		
	MIN	44	41	38	39	33	35	40	36	35	37	42	30	32	34	29	21	30	30	26	25	26	25	26	30	30	32	35	34	37	34		
HANA AIRPORT 355	MAX	78	80	83	72	79	79	79	81	74	78	80	79	78	80	80	78	76	78	79	78	78	79	76	74	78	74	74	74	79	76	75	
	MIN	57	61	65	64	65	65	65	69	67	62	57	61	61	62	58	60	59	57	57	53	57	54	56	54	58	58	54	59	66	66	69	
KAANAPALI AIRPORT	MAX	82	81	81	75	73	78	78	78	77	74	78	80	80	79	77	78	78	76	77	76	75	74	74	74	74	75	75	75	75	76	79	
	MIN	67	75	67	66	65	71	65	67	68	63	61	63	69	70	69	65	66	62	63	57	59	55	57	60	60	58	61	59	67	67	70	
KAHULUI WB AP 398	MAX	81	83	74	73	79	78	82	79	75	80	79	80	80	81	79	78	78	79	77	75	76	74	76	75	74	74	76	78	78	80	81	
	MIN	58	71	67	66	67	66	66	70	66	60	56	58	61	60	58	63</																

DAILY TEMPERATURES

HAWAII
JANUARY 1969

Continued

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
HAILUKU 392	MAX	78	78	80		78	78	80	78	77	74	83	83	82	81	82	80	80	79	81	74	78	76	75	75	77	76	76	78	78	79	79	78.4
	MIN	59	69	64		64	68	63	69	69	62	63	65	64	61	60	64	58	59	60	57	57	56	58	58	58	56	57	59	65	67	68	61.9
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	78	81	82	75	73	80	75	78	81	83	82	79	80	80	82	80	78	78	80	76	74	77	77	77	75	73	74	75	76	75	75	77.7
	MIN	59	60	63	62	63	63	62	64	65	62	60	59	65	60	60	60	60	59	60	55	53	58	58	60	55	57	56	58	61	61	62	59.9
HAWAII VOLCNS NP HQ 54	MAX	67	67	68	62	61	61	62	67	64	65	67	64	64	66	69	65	65	59	62	65	58	67	58	61	63	63	62	61	63	58	63.5	
	MIN	50	52	52	54	54	56	56	58	59	53	49	52	50	50	52	49	53	51	47	44	39	47	45	44	42	48	47	47	48	51	54	50.1
HILO W8 AIRPORT 87	MAX	85	84	77	75	81	76	80	87	80	80	81	81	82	81	79	78	79	80	78	82	77	80	78	77	79	80	77	76	77	75	79.4	
	MIN	57	63	68	67	69	69	68	70	69	65	65	65	62	66	65	60	61	63	57	57	57	63	54	60	58	62	63	64	63	67	67	63.4
KAINALIU 73.2	MAX	74	78	78	71	70	75	69	75	78	73	75	75	76	76	74	74	74	71	75	74	72	72	71	71	74	74	73	73	74	77	80	74.1
	MIN	57	62	65	63	64	64	63	65	63	58	57	58	59	60	57	57	55	53	56	56	55	52	53	52	54	55	52	54	57	61	61	58.0
KAMUELA 192.2	MAX	73	74	77	68	64	76	70	76	76	75	69	73	74	74	68	76	70	67	69	72	68	64	65	66	66	70	67	66	66	70	70.3	
	MIN	44	47	52	57	56	58	57	56	59	57	50	45	44	47	45	48	50	45	44	46	48	48	45	44	47	40	44	48	52	55	55	49.5
KAMUELA AIRPORT 191	MAX	72	72	72	69	67	72	69	72	73	74	71	71	72	71	71	69	68	67	68	70	66	68	66	65	68	67	70	66	66	68	69	69.3
	MIN	37	42	52	40	58	50	47	41	48	42	44	45	42	45	43	40	39	44	42	42	52	49	46	44	48	40	41	41	44	42	57	44.7
KEAAU 92	MAX	83	83	90	78	78	78	78	84	85	78	82	82	82	87	83	82	80	82	82	82	79	81	80	80	79	79	79	80	74	75	80.8	
	MIN	60	60	61	65	65	66	67	67	68	63	58	58	58	58	60	59	58	56	56	56	56	59	58	56	55	61	61	61	61	63	64	60.4
KEALAKEKUA 26.2	MAX	74	79	80	72	71	76	69	76	78	74	76	75	77	77	75	73	75	72	75	74	74	72	71	71	75	74	75	74	77	80	74.7	
	MIN	59	63	65	63	64	65	62	65	63	59	58	59	59	61	59	58	57	56	57	58	56	55	55	54	56	57	55	58	58	62	62	59.3
KOHALA MISSION 175.1	MAX	77	78	82	69	73	75	74	81	83	81	78	80	79	79	77	76	78	75	77	76	75	73	74	75	74	74	74	74	75	74	76.3	
	MIN	60	61	63	65	65	66	64	65	67	66	63	61	61	63	66	63	63	59	63	57	58	59	61	59	58	58	58	59	65	65	65	62.1
KONA AIRPORT 68.3	MAX	81	82	82	76	76	78	83	78	80	75	81	82	83	80	79	78	78	80	78	77	74	74	77	78	78	78	79	81	82	81	78.9	
	MIN	62	68	68	69	65	69	68	68	70	66	64	60	60	67	68	62	68	64	60	56	60	62	56	57	59	56	57	57	57	57	59	62.5
KULANI CAMP 79	MAX	60	71	56	60	59	60	67	70	64	66	63	66	61	67	65	63															63.0	
	MIN	39	42	50	50	53	53	55	56	44	42	43	40	41	39	41	43															43.1	
MAUNA KEA BEACH 98	MAX	82	83	83	74	75	85	77	83	82	82	81	81	82	81	81	79	80	78	79	82	82	76	78	77	81	78	81	82	81	85	87	80.6
	MIN	63	66	67	68	65	67	66	69	69	68	64	64	64	66	66	67	65	64	63	62	67	60	61	58	62	59	59	61	63	65	67	64.4
MAUNA LOA SLOPE 085	MAX	56	52	46				48	49	49	40	49	56	49	44	47	42	47	45	44	38	38	40	39	49	45	47	52	49	49	46	48	46.5
	MIN	34	39	36	34			37	38	34	31	33	34	31	33	32	29	29	33	30	29	23	26	22	32	27	27	34	33	33	34	33	31.9
MOUNTAIN VIEW 91	MAX	77	77	82	70	69	72	72	79	78	74	75	77	72	78	76	73	78	71	72	76	71	77	70	74	73	75	73	73	71	71	68	74.0
	MIN	54	56	56	61	62	63	63	62	66	60	56	58	57	57	56	56	56	54	52	49	48	52	52	51	49	56	59	57	57	59	61	56.6
NAALEHU 14	MAX	79	79	82	82	76	76	74	81	78	80	80	80	79	79	80	80	79	79	79	79	76	76	77	77	77	77	76	77	78	78	78.3	
	MIN	61	61	68	68	64	64	65	68	68	62	62	62	63	65	65	63	62	62	62	60	60	65	60	60	60	60	60	60	65	65	66	63.1
OOKALA 223	MAX	79	79	82	75	75	76	73	75	81	80	78	80	79	80	82	76	75	74	76	74	75	77	74	73	74	73	75	73	76	74	74	76.4
	MIN	62	64	64	65	65	66	65	66	68	71	63	65	65	65	63	61	62	60	61	62	60	59	58	58	60	60	59	63	65	64	64	62.7
OPIHIHALE 2 24.1	MAX	79	82	71	71	78	72	78	75	72	76	75	75	75	76	73	64	72	73	75	74	73	73	72	73	74	73	72	73	76	80	79	74.3
	MIN	57	62	63	63	65	62	65	65	58	55	54	54	55	60	60	57	54	55	52	53	52	51	51	51	51	51	51	54	53	54	58	56.7
PAHALA 21	MAX	77	80	82	75	74	70	70	80	77	77	78	78	79	80	80	76	78	74	78	77	73	78	74	75	75	77	75	76	77	80	76	76.6
	MIN	59	65	63	63	63	64	65	67	68	61	58	60	62	62	62	59	59	63	58	57	54	57	58	58	55	55	59	56	56	63	65	60.1
UPOLU POINT USCG 159.2	MAX	79	80	82	72	75	79	79	81	81	81	80	81	80	81	80	81	80	76	78	81	82	76	76	76	75	76	76	76	76	77	78.4	
	MIN	68	67	67	67	68	67	66	68	70	68	67	67	67	68	67	65	65	64	64	62	59	65	63	63	62	62	62	63	66	66	67	65.5

EVAPORATION AND WIND

Station		Day of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * * ISLAND OF KAUAI																																	
LIHUE W8 AP 1020.1	EVAP	.22	.07	.10	.07	.00	.28	.13	.17	.03	.13	.13	.15	.16	*	*	.18	.25	.21	.15	.25	.21	.15	.24	.21	.20	.23	.18	.24	.25	.15	.34	5.08
	WIND	89	100	47	37	50	88	47	64	38	51	57	53	67	*	*	197	79	53	55	69	86	73	73	74	60	72	70	87	167	232	206	244.1
	MAX	83	79	82	75	75	78	78	81	77	79	78	81	79	-	-	79	76	79	81	78	76	70	72	76	77	77	77	80	82	74	71	77.6
	MIN	64	69	67	66	64	61	58	58	61	58	58	58	61	-	-	61	58	52	53	51	51	51	51	51	51	54	54	54	57	61	65	67	58.4
* * * ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.15	.10	-	.08	.03	-	.13	.04	-	.06	.10	.13	.06	.08	.12	.14	.15	.10	.15	.12	.12	.13	.12	.14	.11	.15	.14	.11	.15	.13	.15	3.538
	WIND	26	41	24	10	11	21	12	7	4	6	9	12	12	12	12	26	23	16	16	34	17	21	24	25	17	24	11	16	40	60	59	648
	MAX	83	83	79	79	73	82	83</																									

STATION INDEX

HAWAII JANUARY 1969

Main data table with columns: STATION, DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER, STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER. Includes sub-sections for ISLAND OF LANAI and ISLAND OF MAUI.

SPECIAL WEATHER SUMMARY

Highlighting February's weather were a major flash flood and long periods of unusually strong trade winds.

On the very first day of the month, a meteorological situation of a kind known to have produced some of windward Oahu's heaviest downpours -- an upper-level low pressure area overlying a deep layer of strong, moist trade winds -- brought that area torrential rains which inundated the Keapuka subdivision near Kaneohe -- the same locality hard-hit by a similar flood on February 4, 1965, almost exactly 4 years earlier.

Intensities appear to have been greatest between about 10 a.m. and 1 p.m. One rain gage in the vicinity registered 5.2 inches between 11 a.m. and noon, 1-1/2 inches during the last 15 minutes of that hour, and an hourly rate in excess of 1 inch in every 15 minutes from 11 a.m. to 12:30 p.m.

At 12:30 p.m., Kamooolii Stream, a tributary of Kaneohe Stream, was beginning to top its banks downstream of Keapuka; and it continued to rise, cresting at 3:30 p.m. By 2 p.m., however, the flood waters were already entering Keapuka's lower sections, and within an hour torrents 3 to 5 feet deep were racing through the streets, lawns, and houses of that community, forcing many residents from their homes.

State Civil Defense authorities estimated total damages in Keapuka at \$436,000: \$285,000 of it to 56 homes (of which four sustained serious, eight moderate, and the remainder light damage -- most of it to furnishings and personal effects); \$15,000 to 12 automobiles; \$80,000 to the Kamooolii Stream channel invert; \$6,000 to miscellaneous items; and \$50,000 for removing debris from the channel and flooded area.

Earlier that day, flooding also occurred at Kahaluu, 5 miles to the northwest, where \$50,000 in damage was done to six businesses and \$20,000 to a drainage canal.

In all, losses were set at \$156,000 to public facilities and \$350,000 to private property.

The same storm gave heavy rains also to Maui and Hawaii on the 1st, 2d, and 3d. Three-day totals of up to 25 inches on the slopes near Hilo flooded some downtown streets and businesses, but damage appears to have been light.

February was also one of the windiest months on record. For weeks at a time strong, northeasterly trade winds from intense high pressure systems, migrating eastward north of the State, swept over the mountains, becoming stronger and more turbulent in leeward than in windward areas.

At Honolulu International Airport, gusts exceeded 40 m.p.h. on the 3d, 15th, 16th, 20th, 21st, and 22d, and peaked at 52 m.p.h. at 6:07 a.m. on the 21st. Small craft warnings were in effect on 19 days, gale warnings on 3 days, and high wind warnings on 4 days.

Nevertheless, wind damage was surprisingly light and in the main confined to the 20th and 21st of the month. On Oahu during that period, 11 homes and garages on the Waianae coast lost roofing and three utility poles were downed. Elsewhere in leeward Oahu, only scattered tree damage and power outages occurred.

In leeward west Maui, gale-force trade winds rushing through mountain gorges to windward brought the area its legendary lehua or red wind, so named after the red lehua blossoms which are said to be torn from the trees by these strong winds and blown through the air in such numbers as to color the air crimson. Trees, electric poles, and roofing were extensively damaged. In Puukoolii a huge eucalyptus tree was blown down, cutting a house in two, but fortunately injuring no one.

Local residents described the winds as the strongest in 15 years. On the slopes of leeward west Maui, winds appear to have been unusually strong and turbulent, with gusts frequently exceeding 75 m.p.h. Peak gusts reached 50 m.p.h. at Kaanapali Airport, near the coast, at 10 a.m. and 11 a.m., and 53 m.p.h. at 1:04 p.m. at the Kahului Weather Bureau Office, in Maui's central valley, near where (in Paia) a greenhouse roof was smashed. In Kamuela on Hawaii Island, gusts of 48 m.p.h. blew a pine tree down onto a home on the night of the 20th.

On the 14th at Kahaluu, Oahu, one of the areas flooded on the 1st of the month, an estimated 200,000 cubic yards of mud, apparently loosened by frequent heavy rains, slid down a hillside, partially burying a house and killing 1 of 4 residents asleep inside.

Toward the end of the month smoke and haze from a volcanic eruption which began at 9:50 a.m. February 22 on the eastern flank of Hawaii Island's Kilauea Volcano drifted westward with the trade winds, lowering visibilities in the Kona district to 4 miles at Kailua Airport and to 6 miles at Kealahou.

Rainfall for the month followed the trade wind pattern, but with an even greater contrast between dry leeward and wet windward sections. On all islands, but particularly on Oahu, Maui, and Hawaii, many gages along the windward (eastern) coasts and slopes registered three to four times their average February rainfall,

H A W A I I - F E B R U A R Y 1 9 6 9
SPECIAL WEATHER SUMMARY - CONTINUED

while only a few miles away leeward gages recorded less than half, and some of them less than one-quarter, of their monthly means.

As the following list shows, a number of stations on Maui and Hawaii recorded their greatest February rainfall totals of record.

Stations With More Rain in February 1969
than in Any Previous February

(25 years of record or more, only)

Station	Length of Record (Yrs.)	Previous Greatest February Total	February 1969
<u>MAUI</u>			
Kahoma Intake	58	27.28 inches	36.46 inches
Kailiili	44	34.29	35.29
Paakea	64	64.70	65.04
<u>HAWAII</u>			
Hilo WBO	26	39.32	43.66
Keaau	68	33.13	50.19
Kukalau	73	41.40	49.02
Mountain View	68	47.92	60.66
Ookala	78	45.23	49.24
Pahoa	59	42.39	46.75 *
Papaikou	70	41.10	52.24
Papaikou Mauka	43	46.22	75.20
Puuokumau	41	17.53	21.33

* -- Greatest in any month.

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DAILY PRECIPITATION

HAWAII
FEBRUARY 1969

Continued

Station	Total	Day of Month																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
* ISLAND OF MOLOKAI																																				
KALAUAPAPA 503	7.95	1.02	*	*	*	*	*	*	*	*	*	*	*	2.56	1.53	*	1.26	.14	*	*	.13	*	*	*	.89	*	.42	*								
KAUNAKAKAI 536	.00																																			
KEONELE PENS 551	.39			.39																																
KUALAPUU 534	3.11			.18							.19																									
MAPULEHU 542	3.86	.93	.76		.16									.27	.25	.25		1.67		.07	.09	.10	.02		.17	.03	.37	.25	.11	.19	.31					
MAUHALOA 511	.55	*	*	.12																																
MOLOKAI HP 524	T	T		.11	.02					T																										
PUUOHOKI RANCH 542.1	3.00	.34	.65											.07	.32	.59																				
WAIKOLU 540	17.74			6.93							1.35																									
* ISLAND OF LANAI																																				
KANEPUU 690	.48	*	*	*	.06	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KAUMALAPAU HARBOR 658	T																																			
LANAI CITY 672	1.91		T	.03	T						.38							.66	.08	.73															.07	
LANAIHALE 684	2.63	*	*	*	.18	*	*	*	*	*	*	.26																								.29
MAHANA 694	.29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MALAUUA 676	.39	*	*	*	*	*	*	*	*	*	*	*	*	.39	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.04	
WAIAKEAKUA 685	1.17	*	*	.03	*	*	*	*	*	*	.10	*	*	*	*	*	*	.98	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
* ISLAND OF MAUI																																				
AUWAHI-252	2.90	*	*	2.00	*	*	*	*	*	*	*	*	*																							
HALEAKALA B E S 434	24.18	.32	7.93	2.67	1.18									3.14	.60	1.48	.33	1.39	.37	.55	.54	1.50	.50	.07	.79	.35	.36	.11								
HALEAKALA RANCH 432	8.61	.03	3.82	.84	.34	*	*	*	*	*	*	*	*	1.61	.23	.47	*	.30	.03	.06	*.41	*	*	.19	*	.28	*									
HALEAKALA R5 338	10.17	.50	2.13	1.80	1.36	T								.07	T	.29	.50	.43	.27	1.70	.13	.17	.10	T	.16	.11	.42									
HALEAKALA SUMMIT 338.4	13.08	1.90	3.43	.62	.37	.05										.08	1.10	1.05	1.15	2.20	1.05	.05	.03	T	T											
HALIIMALE 423	9.08	.03	*.45	.25	*	*	*	*	*	*	*	*	*	.81	*	1.51	.34	.08	.09	.24	*	*	.63	.21	.15	.26	.03									
HANAKUAPOKO 485	9.62	.23	1.77	1.31	.34	T								.40	1.38	2.18	.11	.32	.41	.14	.06	.12	.21	.05	.22	.26	.09	.02								
HANA 354	8.49	*	*	2.50	.07	.03								.01	1.75	*.75	.41	.60	.13	.04	*	*	.78	.21	.22	.01										
HANA AIRPORT 355	14.11	3.38	1.58	2.55	.03	T					.04			T	2.66	.82	.12	.31	1.08	.25	.11	.05	.32	.32	.20	.20	.02	T								
HANAHULI 281	20.64	8.68	2.10	1.01	.01	.09	.06	T			.10			T	.40	1.39	2.48	.25	.26	2.40	.10	.03	.13	.35	.20	.30	.08	.11								
HOLUA CABIN 259.5	12.70	1.90	*	*	*	5.60	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.20	*	*	*	*	*	*	*		
HONOKOHU 480	9.62	.23	1.77	1.31	.34	T								.01	1.38	2.18	.11	.32	.41	.14	.06	.12	.21	.05	.22	.26	.09	.02								
HONOKOHU 493	7.61	*	*	1.74	.51	.02								.28	*	3.11	.17	.31	.11	.12	*	*	.32	.62	.23	.07										
HONOHONO GULCH 341	15.00	*	*	*	*	*	*	*	*	*	*	*	*	.06	-.07	.07	.03	T				.02	*	*	*	*	*	*	*	*	*	*	*	*	5.00	
KANAPALI AIRPORT			.60	.13	.07																															
KAHOMA INTAKE 374	36.46	*	*	*	20.35	*	*	*	*	*	*	*	*	.51	*	*	*	*	*	*	*	*	*	*	*	15.60	*	*	*	*	*	*	*	*		
KAMUHI WB AP 398	8.59	.60	1.54	.22	*	*	*	*	*	*	*	*	*	.01	.17	.74	.01	T	.01	T	.02	T	.02	T	.01	.02	.14	*	*	*	*	*	*	*		
KAILIHI 436	35.29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
KAILUA 446	29.14	5.00	7.00	3.32	.99	.05	*	*	*	*	.02			.01	.52	2.17	2.45	.62	.73	2.39	1.00	.36	.24	.63	.20	.82	.52	.05	.03							
KAUULA INTAKE 375	6.45	*	*	2.13	*	*	*	*	*	*	1.97	.02																								
KEAHUA 410	2.96	*	1.68	.21	.04	*	*	*	*	*	*	*	*	.30	.07	.44	*	.02	*		.01	.01	.04	T	*	.02	.02	.10	T							
KEANEA 346	71.82	*	*	.02	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	71.82	
KEAWAKAPU BEACH 260.2	.05		.02	.03																																
KIHEI 311	.09			.04	T									T	.03				.02																	
KIPAHULU 258	24.74	2.35	3.87	1.12	.11						.23			.12	.18	.52	.60	.36	.31	1.98	1.05	.33			.64	.86	.11									
KULA HEIGHTS 329.2	.71		.34	.08	.01																															
KULA SANATORIUM 267	.15		.13	.02	T																															
LAHAINA 361	.32		.24																																	
LAUNIUPOKO INTAKE 376	.20		.18	.02																																
LAUNIUPOKO VILLAGE 372	.20		.18	.02																																
LUPI UPPER 442	43.20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	33.20	
MAHINAHINA 466	7.18	*	.68	1.27	.60	*	*	*	*	*	*	*	*	.70	*	.80	.14	.94	.58	.11		.26	*	.28	.42	.13	.27									
MAKALELE -FLO 60-497	4.48	*	1.51	1.78	.38	*	*	*	*	*	.31	*	*	*	*	1.35	*	*	*	*	*	*	*	*	*	.77	*	*	*	*	*	*	*	*	.27	
OLINDA 332	7.02	*	*.49	.54	.01									.71	*	*	.40	.06	*	*	*	*	*	*	*	.06	.19	.50	.06							
OLDWALU 296	.34	.06									.28																									
OLDWALU GULCH 377	65.04	10.44	11.15	3.14	1.22	.02	.02	.03	.03	.03	.03	.03	.04	5.88	7.65	10.80	.04	1.91	5.10	1.96	.61	.33	1.29	.48	1.90	.45										

DAILY TEMPERATURES

HAWAII
FEBRUARY 1969

Station	Day of Month																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ISLAND OF KAUAI																																
KANALOHULUHULU 1075	MAX MIN	60 54	61 57	61 54	64 52	62 53	69 50	74 51	70 50	68 56	68 58	67 58	69 58	64 55	59 51	57 51	56 51	60 51	66 52	65 53	63 55	59 54	64 54	65 52	61 54	58 50	60 50	62 47	67 48	63.5 52.8		
KILAUEA POINT 1133	MAX MIN	74 64	77 66	75 60	76 70	76 62	78 71	78 67	82 65	88 69	75 70	85 70	82 67	67 63	77 68	70 63	72 63	71 64	72 66	74 67	75 66	72 65	75 69	75 63	74 60	72 64	73 60	72 63	74 63	75 69	75.6 65.2	
LIHUE WB AP 1020.1	MAX MIN	75 67	75 69	74 68	75 68	75 70	78 69	78 66	78 65	81 65	77 68	79 70	81 68	72 63	73 62	68 63	70 64	71 66	75 67	73 69	75 68	72 66	75 69	75 65	73 63	72 64	73 65	74 66	74 67	74.6 66.4		
MAKAHUEA POINT 940.1	MAX MIN	78 68	75 69	78 72	76 66	78 67	78 67	83 58	78 64	80 68	85 69	80 70	85 70	85 69	79 66	76 65	71 59	72 63	75 63	78 65	75 69	72 67	74 65	78 63	75 60	78 57	80 59	81 57	86 58	78.0 66.0		
HANA 1026	MAX MIN	81 65	74 64	79 64	80 60	90 62	82 62	83 64	84 67	84 68	84 68	85 68	84 68	84 68	81 61	81 61	80 59	79 58	82 61	84 63	85 63	82 63	83 60	84 59	81 57	82 59	82 58	83 58	86 58	81.6 62.6		
NIU RIDGE 1035	MAX MIN	77 56	78 57	78 58	79 57	78 56	79 60	78 60	79 60	80 60	80 61	79 60	80 64	80 63	80 64	78 60	77 59	79 60	79 58	79 58	79 61	78 59	80 62	80 62	80 62	81 65	79 60	81 65	79 60	80 66	79.0 59.3	
WAIHAI LOWER 1054	MAX MIN	72 59	73 60	73 63	74 60	73 61	75 65	75 59	79 60	79 61	81 64	83 66	83 65	81 62	79 64	70 64	68 60	69 63	71 65	71 66	73 66	71 61	73 60	75 62	75 63	74 60	71 61	75 61	76 61	74.6 62.1		
ISLAND OF OAHU																																
EWA PLANTATION 741	MAX MIN	80 66	78 67	78 69	79 64	80 65	84 68	82 63	83 64	84 64	84 67	80 66	85 68	85 65	78 67	75 66	76 65	75 67	78 68	79 67	79 70	79 70	78 70	80 66	78 64	75 63	77 65	77 67	77 61	80 61	79.5 66.1	
HONOLULU WRFC 703	MAX MIN	79 66	78 69	79 69	81 68	82 68	83 68	84 65	81 66	80 71	85 68	81 68	82 71	81 69	78 68	75 67	77 67	75 68	81 69	79 70	79 68	79 68	82 68	81 67	81 66	77 65	78 65	81 68	81 66	79.9 67.8		
HONOLULU SUBSTA 704	MAX MIN	77 69	75 70	76 69	77 68	79 70	80 68	79 68	79 68	78 70	79 68	80 69	81 69	81 68	72 66	71 66	73 66	72 66	76 68	76 69	75 65	74 66	78 66	75 66	72 65	73 66	75 66	77 66	77 66	76.2 67.5		
KAHUKU 912	MAX MIN	78 66	75 69	78 70	78 72	78 66	80 66	80 66	80 69	82 67	82 69	80 68	81 68	81 65	72 65	74 67	75 68	76 68	75 68	76 68	75 68	76 66	74 66	76 66	74 65	75 65	76 65	76 65	76 68	77.4 67.5		
KANEHE MAUKA 781	MAX MIN	74 68	72 69	75 66	75 66	76 70	75 69	80 66	80 69	79 69	81 68	77 66	80 66	81 65	69 65	71 65	70 65	71 66	73 67	74 68	74 67	71 67	73 67	72 67	72 67	74 67	72 67	75 64	76 64	74.9 67.1		
LUALUALEI 804	MAX MIN	80 66	83 70	77 71	78 69	80 68	81 68	82 65	84 66	80 69	82 68	82 68	82 68	81 67	81 67	74 69	74 67	78 65	77 67	79 70	79 70	78 70	79 70	79 69	79 68	77 67	77 67	77 67	79 68	79.2 68.3		
MAKAPOU POINT 724	MAX MIN	74 65	74 68	71 68	74 70	74 71	75 71	78 70	77 71	81 71	80 71	83 71	79 71	84 70	71 67	77 68	76 67	69 66	76 67	72 69	79 69	78 69	74 67	76 68	74 68	81 69	70 65	79 69	80 69	76.3 68.6		
OPAELA 870	MAX MIN	73 63	68 64	70 64	73 65	73 66	82 62	83 62	82 62	82 62	83 65	83 64	83 64	78 63	76 64	79 61	66 59	64 60	68 62	61 61	67 62	66 61	67 61	66 61	66 59	64 58	65 58	66 60	68 58	71.8 61.6		
PRI WAIHAWA 820.2	MAX MIN	78 64	69 65	79 64	75 65	78 65	80 65	82 62	82 62	83 60	83 64	83 64	83 64	78 63	75 64	72 64	75 63	78 65	78 68	74 65	75 65	71 62	79 62	77 62	72 62	74 63	79 63	79 63	77.5 63.3			
WAILUA 847	MAX MIN	79 69	70 67	77 67	75 59	78 61	80 62	85 61	85 62	81 66	82 68	83 67	82 67	85 65	80 66	70 66	71 65	73 66	74 62	80 67	77 68	78 68	76 69	75 69	78 65	75 61	75 59	74 64	75 67	77.6 64.5		
WAIKIKI 717.2	MAX MIN	80 68	80 70	80 69	78 69	79 71	83 70	85 65	83 68	85 69	82 67	83 69	85 70	86 67	84 69	78 67	75 66	76 65	76 67	80 68	80 65	80 65	78 65	81 67	81 67	80 67	77 65	78 64	78 64	80.4 67.6		
ISLAND OF MOLOKAI																																
MOLOKAI AP 524	MAX MIN	77 65	74 69	73 65	75 65	77 65	80 65	80 62	81 64	79 66	78 65	80 66	82 67	83 68	80 65	73 63	69 66	72 63	71 64	77 67	77 65	72 67	76 66	75 67	77 67	75 64	71 63	73 64	76 63	76.2 65.2		
ISLAND OF LANAI																																
LANAI CITY 672	MAX MIN	74 61	77 63	70 63	73 60	75 63	76 60	80 64	75 64	74 63	76 65	75 64	74 63	76 64	77 65	71 57	77 62	67 59	68 61	71 62	74 59	71 60	74 60	72 61	73 60	73 59	74 61	73 62	72 60	73.6 61.6		
ISLAND OF MAUI																																
HALEAKALA PS 338	MAX MIN	57 48	57 48	55 47	53 41	61 41	62 44	65 47	65 48	65 48	62 49	65 49	68 49	68 46	66 46	60 45	55 44	53 43	49 42	59 47	57 43	57 43	55 42	54 38	58 38	55 38	54 38	50 37	55 33	58.6 43.6		
HALEAKALA SUMMIT 338.4	MAX MIN	45 37	60 37	47 38	34 34	52 39	45 42	55 40	55 43	59 43	55 42	59 44	61 40	57 40	56 39	46 40	43 34	41 33	40 32	40 32	49 33	49 33	43 29	49 33	48 29	47 29	41 25	43 35	49.6 36.0			
HANA AIRPORT 355	MAX MIN	75 67	73 68	74 66	78 66	80 69	80 72	79 71	80 72	80 66	80 66	81 68	81 68	84 68	72 64	70 65	72 66	74 66	75 68	76 69	76 69	78 70	75 67	76 66	74 65	71 65	74 66	75 66	75 67	76.6 67.4		
KAANAPALI AIRPORT	MAX MIN	82 69	83 69	78 68	74 66	80 65	82 65	82 67	83 68	80 66	82 66	82 66	82 69	82 67	74 65	74 67	74 67	79 67	82 67	82 67	79 67	82 67	79 67	80 67	78 66	77 66	78 66	77 67	78 69	79.3 66.8		
KAHULUI WB AP 398	MAX MIN	83 65	80 69	76 69	80 57	84 56	84 63	83 65	81 65	81 65	84 63	82 66	83 66	73 66	69 66	69 66	74 65	77 67	79 67	80 67	80 69	78 68	80 67	78 66	77 66	78 66	77 66	78 64	80 64	79.5 65.4		
KAILUA 446	MAX MIN	71 65	69 65	69 65	69 63	79 62	75 66	77 63	77 64	73 64	79 64	80 66	80 64	82 65	66 61	66 60	67 60	68 64	68 65	70 64	70 62	72 62	70 62	72 62	69 61	69 62	70 61	70 61	72.5 63.3			
KEAWAKAPU BEACH 260.2	MAX MIN	87 64	85 65	85 66	86 59	87 58	84 63	84 62	87 66	85 66	85 66	83 66	85 66	88 66	79 66	76 65	82 62	86 63	87 65	86 62	86 62	85 62	86 59	85 57	86 57	85 55	86 55	84 55	84 55	84.6 62.2		
KULA SANATORIUM 267	MAX MIN	72 54	71 61	69 59	70 57	72 50	72 52	70 55	69 56	79 58	70 55	71 56	70 57	72 60	70 55	71 60	68 56	69 59	70 60	69 58	70 55	71 55	68 52	68 52	70 51	68 50	70 50	70 47	67 48	70.0 54.9		
LAHAINA 361	MAX MIN	82 66	84 67	83 69	84 63	81 63	82 65	82 65	82 67	83 66	84 68	83 67	85 69	83 66	85 66	83 66	81 66	80 67	83 66	82 67	83 66	83 66	83 66	83 64	83 64	82 63	81 62	80 62	81 65	82.5 66.0		

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
FEBRUARY 1969

Continued

Station	Day of Month																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
WAILUKU 392	MAX MIN	80 69	79 69	74 68	74 68	80 65	82 67	82 65	83 66	82 65	85 66	83 67	85 68	84 67	87 68		70 65	70 65	75 67	78 67	80 70	76 68	79 70	78 67	80 67	74 66	78 64	74 65	77 66		78.9 66.9	
* * *																																
ISLAND OF HAWAII																																
HAINA 214	MAX MIN	76 63	80 64	74 64	72 62	78 63	77 62	79 60	77 61	80 63	80 61	80 63	83 63	81 64	83 64	72 63	68 60	70 59	72 60	74 61	77 63	75 61	75 62	70 59	71 59	76 62	70 59	77 59	75 60	72 61	76 59	
HAWAII VOLCNS NP HO 54	MAX MIN	60 54	61 56	63 55	60 51	64 50	66 53	59 53	63 53	65 54	65 52	69 56	72 51	73 51	70 55	68 57	62 54	57 50	55 53	58 53	59 53	58 52	57 52	58 52	59 48	63 48	55 47	59 47	60 50		62.1 52.0	
HILO W8 AIRPORT 87	MAX MIN	74 67	72 68	78 68	80 65	78 64	79 68	77 66	80 66	82 66	85 67	82 64	85 68	83 69	78 69	73 68	74 64	70 64	73 64	77 68	78 68	81 64	79 68	80 65	80 62	76 65	77 65	77 65	78 65	78 65	78.3 66.1	
KAINALIU 73.2	MAX MIN	78 62	79 60	76 60	80 65	76 60	77 59	77 62	78 62	76 62	75 60	78 64	77 63	76 63	76 63	75 62	74 60	70 60	77 61	78 62	75 61	75 61	76 61	76 60	79 61	76 60	71 61	75 60	77 59	71 58	76.2 61.5	
KAMUELA 192.2	MAX MIN	70 56	71 55	69 55	68 54	68 54	74 53	78 53	76 50	75 54	74 55	71 58	76 58	75 58	78 58	67 55	68 58	67 54	62 54	67 54	68 53	68 55	68 55	64 53	67 54	67 54	68 53	67 54	68 53	67 53	68.9 54.4	
KAMUELA AIRPORT 191	MAX MIN	70 57	71 59	69 42	68 42	68 43	75 54	74 49	74 48	74 56	75 53	74 49	72 49	72 56	69 51	68 54	62 50	63 45	69 46	70 55	68 53	68 42	68 46	69 38	70 36	68 44	69 44	66 56	67 55	67 55	69.9 49.2	
KEAAU 92	MAX MIN	75 65	75 65	75 65	76 63	80 62	82 66	77 63	84 63	84 63	84 63	84 65	85 63	84 66	84 66	75 61	73 61	75 62	73 65	77 65	76 64	79 60	79 60	76 60	76 60	81 61	74 61	75 61	78 62	78 62	78.0 62.9	
KEALAKEUA 26.2	MAX MIN	80 62	79 61	77 64	82 64	77 60	77 61	78 63	78 61	74 63	77 62	76 62	75 64	78 64	77 63	78 63	77 63	73 61	72 61	77 63	78 65	77 63	77 65	80 63	74 61	79 61	79 62	76 61	77 60	72 60	76.9 62.1	
KOHALA MISSION 175.1	MAX MIN	74 66	75 65	73 66	71 65	76 65	77 67	78 64	78 63	80 64	79 66	80 66	80 69	81 67	82 68	69 65	67 63	68 62	67 63	73 65	75 65	71 64	74 64	71 64	75 62	72 63	71 63	72 63	74 63	74 62	74.6 64.7	
KONA AIRPORT 68.3	MAX MIN	82 61	83 62	82 65	80 67	82 67	82 69	81 66	82 64	81 64	78 66	82 66	81 66	78 66	81 66	84 65	80 65	76 66	78 65	80 64	79 63	82 65	82 64	82 64	79 61	78 66	80 61	79 61	79 61	79 61	80.6 64.5	
KULANI CAMP 79	MAX MIN	59 51	60 38	58 52	57 48	62 45	62 49	58 46	61 38	62 46	60 48	65 48	70 48	70 47	68 51	64 47	62 53	62 46	62 46	56 50	57 49	54 42	57 43	54 47	55 44	58 45	54 42	58 42	56 42	56 46	60.0 46.5	
MAUNA KEA BEACH 98	MAX MIN	90 69	84 70	84 74	91 70	85 66	84 69		92 67	82 70	81 65	84 70	84 73	88 70	84 73	84 71	88 71	81 72	84 71	81 71	89 72	86 74	90 75	89 73	86 70	91 70	89 69	89 68	89 69	86.6 69.9		
MAUNA LOA SLOPE 085	MAX MIN	49 34	46 32	44 37	45 34	48 32	53 35	51 35	53 37	55 38	53 38	57 39	58 40	56 37	52 38	50 36	43 34	41 32	45 32	46 34	45 33	47 33	50 36	49 32	46 31	48 29	47 29	48 28	47 27	49.0 34.0		
MOUNTAIN VIEW 91	MAX MIN	69 61	70 62	69 62	69 60	72 57	72 58	69 60	70 59	73 62	77 58	78 62	79 62	80 61	78 63	72 61	72 63	72 63	64 58	67 61	68 62	69 59	69 61	71 58	70 56	73 56	67 56	68 56	70 61	71.3 59.5		
NAALEHU 14	MAX MIN	78 66	79 65	79 65	78 65	77 67	78 65	76 65	76 65	76 65	81 65	79 68	79 68	80 68	79 64	79 64	79 63	76 64	76 63	74 63	76 64	76 64	76 64	76 64	76 64	76 63	77 63	77 62	77 62	77.4 64.9		
OOKALA 223	MAX MIN	75 65	75 65	74 65	73 65	77 65	77 66	80 66	82 66	80 66	81 65	81 65	81 65	81 67	70 69	69 67	65 66	65 62	72 61	73 64	74 67	73 64	75 64	72 63	75 63	78 63	74 62	73 64	76 65	75.2 65.0		
OPIHIHALE 2 24.1	MAX MIN	78 59	76 60	78 61	78 53	79 58	75 59	73 60	74 59	75 59	75 61	77 65	77 65	73 62	73 62	75 62	72 61	71 59	75 60	78 60	75 60	78 59	74 58	75 57	76 57	77 56	77 56	75 55	75 55	75.4 59.0		
PAHALA 21	MAX MIN	78 64	78 64	77 64	77 61	78 62	77 65	72 61	75 60	75 63	79 64	77 63	79 62	80 62	79 64	78 65	76 63	75 62	71 62	74 63	74 62	77 63	78 65	77 64	78 64	77 60	77 59	83 54	79 56	76.9 62.5		
UPOLO POINT USCG 159.2	MAX MIN	77 67	78 68	78 68	76 67	78 68	78 68	79 68	85 68	80 71	80 69	83 68	85 71	79 69	72 67	84 65	69 63	69 63	75 64	77 63	78 63	78 67	76 65	72 65	76 65	76 66	76 66	76 66	76 62	77.5 67.3		

EVAPORATION AND WIND

Station	Day Of Month																															Total or Avg.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																
ISLAND OF OAHU																																
HONOLULU OBSERV 702.2	EVAP WIND MAX MIN	.22 45 84 68	.01 21 87 68	.14 49 82 67	.20 63 81 62	.21 46 82 64	.13 24 82 65	.15 13 87 67	.15 19 88 67	.13 10 89 68	.11 14 90 70	.12 18 90 69	.11 12 87 70	.25 48 94 66	.10 20 90 65	.15 36 85 65	.15 67 87 64	.18 76 86 63	.15 61 84 63	.16 48 84 64	.20 65 82 66	.23 88 80 66	.20 96 81 65	.23 84 82 64	.26 54 85 64	.23 53 85 63	.17 52 82 64	.21 70 80 61	.23 50 83 60	4.78 1302 84.0 65.3		

See Reference Notes Following Station Index

STATION INDEX

HAWAII FEBRUARY 1969

Main table with columns: STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER, STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER. Includes sections for ISLAND OF MOLOKAI and ISLAND OF MAUI.

STATION INDEX

HAWAII
FEBRUARY 1969

CONTINUED

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	
								TEMP.	PRECIP.	EVAP.	SPECIAL										TEMP.	PRECIP.	EVAP.	SPECIAL		
ISLAND OF HAWAII																										
AULANI SCHOOL SITE 78	5021	02	S HILO		2 19 35	155 20	5735	WI				ST DEPT OF SOCIAL SER	ISLAND OF HAWAII												STATE DIV OF FISH-GAME	
LALAMLO FLD OFF 1911	5260	01	S KOHALA		1 20 01	155 41	2615					STATE DEPT OF L + N RES	PUI LAU 102-1	A 8420	05	HAMAKUA		5 19 50	155 36	7440					GREENWELL RANCH	
LAIMAHU 68-2	5330	04	N KOHA		1 19 40	155 58	1530	BA				KONA EXPERIMENT STATION	PUI LEHUA 73	A 8460	04	N KOHA		4 19 34	155 49	4880					KUKAIKU RANCH CO	
LAVA TREE PARK 66-1	5460	02	PUNA		2 19 29	154 54	650					STATE DIV. OF PARKS	PUI MAHI 113	A 8518	01	HAMAKUA		1 19 55	155 26	6960					KOHALA DITCH CO LTD	
MANUKA 2	6134	03	KAU		3 19 07	155 50	1760	BA				STATE DIVISION OF PARKS	PUI OKUMU 167	A 8540	02	S HILO		2 19 44	155 23	6340					W. H. SHIPMAN, LTD	
MAUNA KEA BEACH 98	6180	04	S KOHALA		5 19 32	155 35	11146	MIO				MAUNA KEA BEACH HOTEL	PUI WAHAA 94-1	A 8555	01	N KOHALA		4 19 47	155 51	2520					DILLINGHAM RANCH INC	
MAUNA LOA SLOPE OBS 38	6198	05	HAMAKUA		4 19 19	155 58	475	BA				KONA EXPERIMENT STA	SADDLE ROAD 1 84	A 8590	02	S HILO		3 18 57	155 41	4000					BURRO OF WTR SUPPLY	
MIDDLE MOJUALO 68-1	6268	04	N KOHALA		1 20 06	155 50	1380	VAR				KUKAIKU RANCH	SOUTH POINT CORRAL 3	A 8675	03	KAU		3 18 57	155 41	3050					MUTCHINSON SUGAR CO	
MIDDLE PEN 147-1	6270	01	N KOHALA		1 20 06	155 50	1380	VAR				KUKAIKU RANCH	S POINT TRACKING STA	8678	03	KAU		3 18 57	155 41	3050					FEDERAL ELECTRIC CORP	
MOAULA 18	6407	03	KAU		3 19 11	155 30	600	MO				HAWAIIAN RANCH CO	UMIKOA 118	8780	01	HAMAKUA		1 19 59	155 23	3420					KUKAIKU RANCH CO	
MOUNTAIN VIEW 91	6552	02	PUNA		2 19 33	155 07	4530	6A	6A			PUNA SUGAR CO	UPOLU POINT USCG 159-2	6830	01	N KOHALA		1 20 15	155 43	61	BA	BA			S COA IT GUARD	
MAALEHU 14	6588	03	KAU		3 19 06	155 35	673	8A	8A			MUTCHINSON SUGAR CO	WAIKAEA SCD 88-2	9025	02	S HILO		2 19 46	155 08	1050					SHINICHI KANEISHIRO	
MARPOPOO 28	6697	04	S KOHA		4 19 28	155 55	395	7A				KONA EXPERIMENT STA	WAIKAWONGUA 178-6	9350	01	N KOHALA		1 20 08	155 47	3830					KAHUA RANCH	
MAU FOREST 38-6	6731	02	PUNA		2 19 19	155 08	1400	VAR				HAWAII VOLCANOES NAT PK														
MULLI 179	6806	01	N KOHALA		1 20 14	155 45	75	6A				KOHALA SUGAR CO														
MUKALA 223	7131	02	N HILO		2 22 01	155 17	1400	7A	7A			LAUPAHOEHONO SUGAR CO														
OPHIHALLE 2 24-1	7166	04	S KOHA		4 19 16	155 53	1270	7A	7A			KUMALA SUGAR CO														
ORCHID LAND EST 91-5	7189	02	PUNA		2 19 34	155 09	445	VAR				BOARD OF WATER SUPPLY														
PAUHAU 217	7204	01	HAMAKUA		1 20 05	155 22	800	7A	7A			PAUHAU SUGAR CO	MAAHA VALLEY BUD-1	A 5781	04	WAIANAE		4 21 29	158 12	100						CLOSED 2/26/69
PAUJULU 221	7312	01	HAMAKUA		1 20 03	155 22	800	7A	7A			HAMAKUA MILL CO	NEW STATION													
PAHALA 21	7421	03	KAU		3 19 12	155 29	870	8A	6A			HAWAIIAN AGR CO	ISLAND OF OAHU													
PAHAHA 85	7457	02	PUNA		2 19 30	154 57	670	8A	8A			PUNA SUGAR COMPANY	MAAHA PUMP 800-2	A 5782	04	OAHU		4 21 29	158 12	400						CAPITAL INVESTMENT CO.
PAKAO 37	7643	03	KAU		3 19 22	155 28	5000	MO				HAWAIIAN RANCH CO. INC.														
PAPAIKU 144-1	7711	02	S HILO		2 19 47	155 06	200	7A				MAUNA KEA SUGAR CO.														
PAPAIKU MAUKA 140-1	7721	02	S HILO		2 19 47	155 08	1270	7A				MAUNA KEA SUGAR CO.														
PEPEKOK MAKAI 144	8000	02	S HILO		2 19 51	155 09	190	MO				STATE DIVISION OF PARKS														
PIHONUA 89	A 8051	02	S HILO		2 19 44	155 10	1730	MO				STATE DIV OF FORESTRY														
POMAKUOLA 147	A 8063	02	HAMAKUA		2 19 45	155 32	6511	VAR				STATE DIVISION OF PARKS														
PUAKO 95-1	A 8186	05	KOHALA		5 19 59	155 50	5	6A				ERWIN H. RAPP														
PUI KIHE 120	A 8393	01	HAMAKUA		1 19 54	155 24	7750	MO				KUKAIKU RANCH CO														

↑ DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN
5-NORTH-CENTRAL MOLOKAI: 1-(NO INTRA-ISLAND DIVISIONS) LANAI: 1-(NO INTRA-ISLAND DIVISIONS) MAUI: 1-NORTHEASTERN
2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3850, Honolulu, Hawaii, or to any Weather Bureau office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII".

DIMENSIONAL UNITS - Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F, precipitation and evaporation in inches, and wind movement in miles per hour. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME - Data in the "Monthly Extremes", "Daily Precipitation" table, "Daily Temperature" table, and "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer-recorder located 6-8 inches above the pan.

NORMALS for all stations are climatological standard normals based on the period 1931-1960.

STATION NAMES - Hawaii state key numbers are included following station names in the several tables.

DELAYED DATA AND CORRECTIONS will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES for monthly precipitation totals may be found in the annual issue of this publication.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.
 - No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry.
 - + And also on an earlier date or dates
 - ++ Highest observed one minute wind speed. This station is not equipped with an instrument to measure fastest mile data
 - * Amount included in following measurement, its distribution unknown.
 - A The letter "A" shows following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index", indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gages are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.
 - B Adjusted to a full month.
 - J "Supplemental Data" table.
 - M One or more days of record missing, if average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.
 - R Amounts from recording gage.
 - T Trace, an amount too small to measure.
 - V Includes total for previous month.
- IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING**
- AR Observation made after rain.
 - C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.
 - MO Gage read once monthly; usually on the last day.
 - OC Gage readings at periods varying from a few weeks to several months.
 - S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.
 - SS Observation time is near sunset.
 - VAR Observation time is variable.
 - WI Gage read weekly or irregularly only.
 - WM Gage read weekly and last day of month.
 - # Thermometers are generally exposed in a shelter located a few feet above sod-covered ground, however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents, Resittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Subscription Price 20 cents per copy, monthly and annual; \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Resittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

CLIMATOLOGICAL DATA

HAWAII
MARCH 1969

Continued

Station	Temperature										Precipitation															
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days						
									Max.		Min.						Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
									90° or Above	31° or Below	31° or Below	29° or Below														
KEAAU 97	79.8	62.1	71.0	.7	83	17+	59	10+	0	0	0	0	31.73	16.15	7.50	5	.0	0		20	12	7				
KEĀLAKEKUA 26.2	77.7	60.5	69.1		80	31+	58	28	0	0	0	0	1.62		.30	3	.0	0		7	0	0				
KONA AIRPORT 68.3	81.2	62.9	72.1		83	17+	60	10+	0	0	0	0	.11		.10	3	.0	0		1	0	0				
KUKUIHAELE HIC 199													14.51	4.47	2.25	26	.0	0		19	7	6				
KULANI CAMP 79	59.9	44.6	52.3		69	28	39	28	0	0	0	0	11.80		2.90	1	.0	0			6	3				
MAUNA KEA BEACH 98	85.2M	68.6M	76.9M		92	21+	65	27+	0	0	0	0	.03		.03	25	.0	0		0	0	0				
PAHALA 21	77.2	59.8	68.5	-.4	80	31	57	30+	0	0	0	0	1.84	- 3.74	.65	12	.0	0		6	1	0				
PĀHAKULOĀ 107													.09		.09	8	.0	0		0	0	0				
PŪAKO 95.1													.11		.09	8	.0	0		0	0	0				
PŪU WĀHĀĀ 94.1													1.66	- 1.55	.98	6	.0	0		2	2	0				
UMIŪDA 118													10.72				.0	0								
WĀIAKEA SCD 88.2													34.61	- 2.01	7.05	4	.0	0		21	15	10				
ISLAND			67.1										9.71				.0									

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 92° ON THE 21+ AT MAUNA KEA BEACH 98, HAWAII
 LOWEST TEMPERATURE: 24° ON THE 5TH AT MAUNA LOA SLOPE OBS, HAWAII
 GREATEST TOTAL PRECIPITATION: 52.51 INCHES AT PAPAĪKOU MAUKA 140.1, HAWAII
 LEAST TOTAL PRECIPITATION: ZERO AT 4 STATIONS
 GREATEST ONE-DAY PRECIPITATION: 11.90 INCHES ON THE 16TH AT MANDA TUNNEL 2 716, OAHU

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
MARCH 1969

Continued

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
KAUHANA 88.1	34.47	2.42	.76	1.47	6.11	5.33	1.30	2.85	.43	2.80	.64	.17	.12	.04		.52	1.28	.57	.75	.31	.11	.07	.01	.02	1.04	1.26			.02	.05	4.02	
KAWAII LOWER 193	19.94	*	*	*	*	*	7.80	7.80	*	*	*	*	*	.92	*	*	.35	.06	.03	.01	9.30	*	*	*					1.92	*	*	*
KEAU 97	31.73	1.97	.82	1.32	6.73	7.50	1.39	1.69	.09	.48	.03	.19	.05	.01		.25	.45	.79	.78	.33	.26	.11	.02	.72	.75		.01	.05	.10	4.85		
KEALAKEUA 26.2	1.62	T	.29	.30	*	*	*	*	*	*	*	*	*	.17	.28	*	*	*	*	*	*	*	*	.14	T	.14						
KEHENA 181.2	21.36	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21.36	
KIDILAKAA A C F 6	3.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.00		
KIPIA 89.2	43.30	3.68	1.49	1.43	9.77	4.56	1.32	3.52	.68	3.22	.05	.40	.07	.02	.04	.83	1.52	.94	.92	.51	.40	.20	.03	.02	1.60	.84	.01	.03	.08	5.02		
KOHALA 179.1	10.58	*	1.76	3.04	.98	.07	1.96	.74	.01	.02	.02	.02	.02	.02	.02	.35	.06	.03	.01	.42	.95	.37	.03							.38		
KOHALA MAULILI 176	14.75	*	2.61	2.35	.44	.03	3.60	.80	.01	.01	*	*	*	.58	.18	.12	.06	.04	.28	2.49	.88	.07	.01	*	*	*	*	*	.19			
KOHALA MISSION 175.1	10.87	1.64	.52	.11	3.63	.44	.13	.41	.08	.58	.06	T	T		.04	.01	.28	.20	.10	.04	.01	.03	.01	.38	1.29	.54	.04		.30			
KOIAWE LOWER 196	14.42	*	*	*	*	*	3.82	*	*	*	*	*	*	.75	*	*	*	*	6.23	*	*	*	*	*	*	*	*	*	*	*		
KONA AIRPORT 68.3	.11	T		.10	T	T	.01	.28		.01																						
KONA VILLAGE 93.8	.43																															
KUKIHAU 22	28.24	2.73	.78	.21	3.05	2.99	.41	1.87	.61	2.13	.11	T	T			.01	2.11	1.34	.20	.32	.02	.24	.10	.12	.52	2.73	3.02	.28	.07	.01	T	2.56
KUKUIHALE HIC 199	14.51	1.90	.41		.30	.15	.10	2.00	.14	1.02	.11					1.98	.42	.12	.08												.36	
KUKUIHALE HILL 206	12.35	*	1.46	.73	.29	.03	2.06	*	*	.91				.07	.06	.01	1.40	.85	.20	.14	.05	.04	.04	.04	.81	1.54	1.43	.05	.03	*	.37	
KULANI CAMP 79	11.80	2.70	.61	.92	1.28	.68	.34	2.01	.08	*	.34	.21	.24	.07	.06	.01	.06	.44	.23	.10	.18	.03	.04	.04	.04	.26	.42		.05	.02	.06	
KULANI MAUKA 76	4.27	.66	.24	.45	.22	.23	.95	.06		.28	*	*	*	.50	*	*	.13	.03													.86	
KULANI SCHOOL SITE 78	4.80	*	*	*	*	*	*	*	*	*	*	*	*	.50	*	*																
LANIHAU 68.2	2.09	.32		.41	.61	.31	.15														.21		.08					1.80	*	*		
LANIHAU 68.2	2.09	.32		.41	.61	.31	.15														.21		.08					1.80	*	*		
MAHUKA 2	2.23			.08			*	*	*	.42	T	.02													.17	* 1.32	T	*	*	.22		
MAUNA KEA BEACH 98	.03																															
MAUNA LOA SLOPE DBS	1.36		.03	.09	.24	.04	.32	.23	.01																						.40	
MIDDLE MOULALOA 68.1	1.14	*	*	*	*	*	*	*	*	*	*	1.14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MIDDLE PEN 147.1	.22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.22	*	*	*	*	*	*	*	
MHAULA 18	1.35	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.35	
MOUNTAIN VIEW 91	40.66	3.38	1.42	2.22	9.50	4.54	1.36	2.89	.61	3.98	.27	.30	.14	.15		.28	.49	.55	.58	.54	.23	.24	.14	.04	.83	1.12	.01	.03	.03	.11	4.82	
NAALEHU 14	1.51	.38	T	T	.03	T	T	.23		.23															.01	.20	.04	.18	*	*	T	
NAPOOPOO 28	1.14	*	.07	*	*	*	*	.38	*	.38	*	*	*	*	*	.41	*	*	*	*	*	.14	*	.14	*	.295	*	*	*	*	*	
NAULU FOREST 38.6	8.88	*	*	5.20	*	*	*	*	*	2.11	*	*	*	*	*	.65	*	*	.39	*	*	T	*	.01	*	.01	*	*	*	*	.52	
NIHUI 179	14.57	*	2.08	3.67	.52	.28	2.24	*	*	1.51	*	*	*	*	*	.70	.05	.10	.05	*	*	*	*	.43	1.15	.52	.05	.10	.05	*	1.22	
OKALA 223	29.74	1.93	.33	.91	5.21	4.05	1.11	1.60	.28	1.33	.03				.73	2.97	2.00	.11	.42	.13	.61	.06	.14	1.25	2.45	.12	.10	.05	.03	1.79		
OPTIMAILE 2 24.1	2.88	*	.01	.03	.10	T	.03	.10	T	.03	.25	T	T	.50	T	.08	.04	.02	.01	T	.02	T	.14	.01						1.12		
ORCHID LAND EST 91.5	27.77	*	*	*	*	*	22.16	*	*	*	*	*	*	1.13	*	*	*	*	1.53	*	*	*	*	*	*	*	*	*	*	*	*	
PAAHUAU 217	14.35	1.85	.26	.01	1.47	.63	.14	1.45	.08	2.00	.02	*	*	*	*	1.80	.60	.06	.07	.01	.12		.31	1.39	1.35	.13	.08			.52		
PAAHUAU 221	23.02	2.19	1.13	.08	2.78	1.81	.34	1.93	.51	1.59	.08	T			.05	1.80	.89	.13	.22	.01	.16	.38	2.28	2.83	.24	.05	T	T	1.54			
PAAHUAU 21	1.84	.13		.03	.02		.15	.03		.03					.01							.17	.04	.01	.27	.02	.28			4.77		
PAAHUAU 65	24.30	1.25	.52	.83	5.01	3.23	2.49	1.41	.05	.30	.28	.18	.05	.03	.05	.09	.61	.16	.42	.32	.15	.02	.48	1.30	.03	.15	.04	.11	4.77			
PAKAO 37	6.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.41	2.07	1.68	.50	.38	.22	.07	.17	.09	.42	.93	.02	*	*	6.30		
PAPAIOU 144.1	36.76	1.04	.93	2.52	8.05	6.56	1.47	1.74	.05	1.71	.01	.14	.04	.14		.41	2.07	1.68	.50	.38	.22	.07	.17	.09	.42	.93	.02	.04	.02	5.34		
PAPAIOU MAUKA 140.1	52.51	3.67	1.13	1.60	9.48	6.98	1.79	2.76	1.07	4.65	.04	.23	.44	.01	.02	1.64	3.29	.42	.86	.94	.42	.84	.07	.03	1.48	1.70	.01	.12	.09	6.73		
PEPEEVE MAKAI 144	27.96	.52	.30	4.10	4.66	6.90	1.26	1.18	.08	.79	.03	.13	.02	*	*	1.0	1.8	.40	.13	.07	.33	.13	.20	.02	.13	.96	.10			4.15		
PIIHONUA 89	A	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
POMAKULOA 107	A	.09					.09																									
PUMAO 95.1	A	.11			.02		.09																									
PUU KIHIE 120	A	5.95	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.95	
PUU LEAUA 102.1	A	1.94	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.94	
PUU LEHUA 73	A	1.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.40	
PUU MALI 113	A	2.68	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.68	
PUUKUMAU 167	A	9.75	*	1.79	.43	.12	.08	2.98	*	.16	.01					.31	.13	.10	.11	.01			.22	2.63	.59	.03				.05		
PUU OO 82	A	9.71	1.75	.68	.78	.57	.34	.24	2.65	.06	.74	.25	.10	.25	.05	.02	.13	.07	.15	.10	.13	.02	.02	.05	.21	.16	.03	.03	.01	.12		
PUU WAHAA 94.1	A	1.66	*	.02			.98	.06																								
SADDLE ROAD 1 84	A	34.09	*	*	*	*	*	22.00	*	*	*	*	*	*	*	*	*	*	*	*	10.33	*	*	*	*	*	*	*	*	1.74	*	*
SOUTH POINT CORRAL 3	A	.93	.43	*	*	*	*	.22	*	.22	*	*	*	.12	*	*	*	*	*	*	*	*	.15	*	*	*	*	*	*	*	*	
UMIKA 118	A	10.72	*	1.27	.73	.21	.16	2.02	.02	*	.52	.02			.05	.13	.04	*	*	*	*	*	*	*	4.92	.22	.30			.01	.11	
UPULU POINT USCC 159.2	A	4.74	1.14	.27	.03	.17	.02	2.19	.14	.10	.87	.13	.17	.08		.01	.02	.03	.02	.02	.01	.02	.23	.42						3.50		
WAIKAEA SCO 88.2	A	34.61	1.98	1.08	1.69	7.05	5.87	.85	2.80	.51	2.10				.40	1.31	.81	.40	.16	.26												

SUPPLEMENTAL DATA

Station	Wind (Speed - m.p.h.)						Relative humidity averages percent				Number of days with precipitation						Percent of possible sunshine	Average sky cover sunrise to sunset	
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	150TH MERIDIAN TIME				Trace	01-09	10-49	50-99	100-199	200 and over			Total
							2 AM	8 AM	2 PM	8 PM									
HILO, HAWAII, WB AIRPORT	9	0.6	6.6	19	SW	30+	85	80	67	80	1	10	5	5	3	5	23	37	8.0
HONOLULU, OAHU, WB																			

DAILY TEMPERATURES

HAWAII
MARCH 1969

Station	Day of Month																															Average	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
* * *																																	
ISLAND OF KAUAI																																	
KANALOHULUHULU 1075	MAX MIN	63 50	63 52	65 51	67 46	69 50	69 51	68 54	66 53	67 51	65 42	68 37	68 42	68 41	68 46	61 42	65 46	63 55	65 55	69 51	70 54	71 48	68 42	66 50	63 51	61 53	59 49	59 49	62 50	62 46	64 50	61 54	65.3 48.7
KILAUEA POINT 1133	MAX MIN	73 67	76 68	77 67	77 69	77 68	77 69	78 64	78 64	78 62	78 67	78 67	82 67	82 67	78 67	73 65	75 69	77 69	78 64	77 57	78 69	80 63	80 63	80 63	71 61	73 63	72 62	73 65	75 66	76 68	71 64	76.5 65.0	
LIHUE W8 AP 1020.1	MAX MIN	76 68	75 67	76 67	76 70	76 69	76 65	76 70	77 68	77 69	77 70	75 63	77 58	76 59	77 61	72 59	74 61	75 59	76 61	77 59	77 61	78 65	78 63	75 63	73 63	72 62	73 60	74 60	74 62	75 62	74 65	69 66	75.2 64.5
MAKAHUENA POINT 940.1	MAX MIN	79 67	80 68	79 69	79 70	79 68	79 65	80 70	80 62	80 72	80 72	80 64	80 64	83 65	85 64	86 64	77 64	78 67	79 70	80 72	81 66	80 70	84 68	72 66	77 65	76 62	77 62	78 64	78 66	77 63	76 65	79.4 66.6	
MANA 1026	MAX MIN	84 57	84 57	84 57	81 70	81 63	82 61	83 63	83 84	84 84	84 84	84 84	83 82	82 82	82 82	83 81	84 85	85 85	86 86	84 84	83 85	85 85	85 85	86 86	86 86	82 61	80 59	81 59	81 60	81 60	84 59	85 60	83.1 60.1
NIJ RIDGE 1035	MAX MIN	80 61	80 60	79 55	80 61	80 60	80 60	81 54	80 60	80 61	79 60	80 56	79 57	81 59	80 60	80 60	80 57	79 57	78 55	79 55	77 55	77 55	83 57	81 56	81 56	81 56	79 55	80 56	80 57	80 58	79 57	78 55	79.7 57.7
WATAHI LOWER 1054	MAX MIN	76 61	75 62	75 64	76 64	77 62	79 63	78 60	78 65	78 61	80 60	81 63	80 54	80 55	80 55	80 55	77 61	71 65	74 64	75 62	78 65	78 62	78 65	72 55	72 60	71 56	71 58	77 58	75 59	78 60	74 60	74 58	76.3 60.4
* * *																																	
ISLAND OF OAHU																																	
EWA PLANTATION 741	MAX MIN	79 64	80 65	81 66	81 65	83 63	80 63	82 64	82 64	81 63	82 61	82 58	83 60	85 60	80 61	82 65	78 65	78 66	80 67	80 65	82 69	80 63	81 62	82 62	77 65	77 64	78 61	79 61	79 59	77 59	77 63	81 66	80.3 63.2
HONOLULU W8FC 703	MAX MIN	80 66	82 66	82 66	81 69	84 66	80 68	83 69	83 69	83 69	80 68	80 63	80 64	81 63	78 65	82 66	78 67	79 81	81 68	82 69	82 68	82 67	82 67	82 66	78 64	77 65	79 64	79 63	79 61	80 64	82 64	83 67	80.9 66.2
HONOLULU SUBSTA 704	MAX MIN	77 68	77 68	78 68	78 70	80 76	80 70	80 70	79 70	79 70	79 66	79 66	78 66	77 67	76 66	75 67	77 68	79 70	79 70	79 70	79 70	79 70	79 70	78 68	73 68	72 65	74 65	75 66	76 65	77 65	78 66	78 66	77.3 67.7
KAHUKU 912	MAX MIN		78 67	78 70	78 70	80 67	78 70	79 69	87 65	89 59	79 61	79 63	79 63	79 63	77 66	78 68	78 71	78 68	78 68	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	76 64
KANEHE MAUKA 781	MAX MIN	77 65	76 69	76 69	77 69	76 67	73 67	75 68	77 67	78 69	78 68	79 63	79 61	79 62	71 61	71 64	70 66	73 67	75 69	74 68	77 68	77 67	77 66	78 66	79 65	72 62	69 63	75 64	76 65	70 63	75 66	70 66	75.5 65.6
LUALUALEI 804	MAX MIN	80 67	79 68	79 66	81 71	81 65	82 65	80 70	83 71	83 81	80 71	83 61	83 62	84 68	80 66	78 67	76 81	82 70	81 72	81 67	80 64	83 63	82 63	76 67	78 64	79 62	79 62	80 65	80 65	78 67	76 70	80.2 66.6	
MAKAPUU POINT 724	MAX MIN	79 68	79 67	78 67	75 70	81 69	76 70	82 70	74 70	76 71	75 69	75 67	76 67	79 69	80 65	80 67	78 65	74 67	73 67	75 69	80 63	75 69	75 69	77 66	76 66	72 64	71 63	72 63	72 63	73 68	75 67	70 64	76.1 67.4
OPAELUA 870	MAX MIN	69 59	69 59	69 60	70 59	71 56	72 57	75 63	76 63	76 62	79 58	78 58	77 59	78 59	78 62	72 62	74 64	72 64	75 64	74 66	75 66	80 62	74 59	81 58	71 58	73 59	75 59	75 56	70 56	72 57	72 62	73 62	73.9 60.0
PRI WAHIAWA 820.2	MAX MIN	79 60	77 62	77 62	80 62	80 60	81 61	78 64	80 64	82 64	79 58	82 56	82 56	80 57	81 58	75 63	76 64	70 65	75 68	79 80	81 61	75 61	80 61	81 60	81 60	75 61	74 59	75 59	77 57	76 58	74 60	74 57	78.0 60.3
WAILAUA 847	MAX MIN	77 58	78 62	79 62	80 61	79 59	81 58	78 58	80 62	80 62	79 61	82 57	79 61	80 63	80 63	78 63	76 66	72 65	76 65	80 61	80 62	81 62	81 60	81 60	83 61	82 60	71 64	71 62	75 62	75 62	76 65	76 60	78.1 60.3
WAIKIKI 717.2	MAX MIN	80 66	80 69	81 69	81 70	82 70	82 70	83 70	82 70	83 69	82 60	83 60	83 62	84 63	84 63	82 62	81 66	80 68	79 70	81 71	81 70	82 70	82 70	82 68	82 63	82 67	79 65	77 64	79 62	79 61	80 69	80 70	81.0 66.7
* * *																																	
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX MIN	78 61	78 65	77 65	77 66	78 67	78 67	77 68	79 69	79 70	79 69	81 66	82 66	82 66	77 66	75 65	73 68	75 68	77 68	79 68	78 67	79 68	78 67	79 68	79 68	79 68	73 65	72 65	74 64	77 66	78 67	76 69	77.4 66.3
* * *																																	
ISLAND OF LANAI																																	
LANAI CITY 672	MAX MIN	74 64	72 59	74 62	75 64	73 61	74 62	75 65	77 64	77 64	76 59	76 61	78 58	77 60	78 62	77 62	75 64	70 64	69 62	73 63	75 63	75 63	75 63	75 63	75 63	75 63	71 61	69 59	69 62	72 59	72 61	73.9 61.6	
* * *																																	
ISLAND OF MAUI																																	
HALEAKALA RS 338	MAX MIN	55 38	54 40	59 38	55 43	53 37	57 39	53 42	58 39	58 40	52 35	56 36	57 37	59 36	56 38	58 39	60 36	55 43	62 46	57 44	64 43	66 48	63 39	58 40	62 40	60 35	59 39	64 40	61 39	60 38	58 39	60 44	58.4 39.7
HALEAKALA SUMMIT 338.4	MAX MIN	41 37	45 34	44 32	40 25	41 33	40 33	41 33	46 35	48 32	47 36	50 34	48 38	55 36	58 37	52 38	54 35	49 34	42 37	42 33	46 35	45 33	52 31	50 34	52 36	56 35	55 38	55 33	55 36	54 33	56 35	53 32	48.8 34.3
HANA AIRPORT 355	MAX MIN	78 67	78 66	78 67	78 68	81 68	81 67	80 66	80 66	80 68	82 67	80 63	80 63	81 65	79 65	78 66	79 69	77 66	79 65	80 65	80 65	80 65	80 65	79 65	77 64	74 63	75 60	76 63	77 60	78 66	78 66	78 66	78.4 65.8
KAANAPALI AIRPORT	MAX MIN	79 65	79 67	81 68	82 70	87 64	79 65	83 65	82 65	82 68	81 61	81 67	81 68	82 64	81 63	80 66	83 67	82 69	78 68	81 65	84 62	84 62	83 66	82 66	82 66	81 66	81 66	78 65	74 66	74 66	80 66	80 66	80.2 65.6
KAHULUI W8 AP 398	MAX MIN	79 65	81 63	81 65	82 69	81 61	82 68	82 68	83 61	81 68	83 56	83 58	84 58	81 58	78 67	81 67	77 69	79 69	82 70	83 67	85 66	81 59	81 66	81 66	81 66	76 64	76 62	77 57	79 59	80 60	78 66	80.5 63.8	
KAILUA 446	MAX MIN	71 60	72 62	71 62	74 61	72 64	73 64	74 64	70 64	75 65	73 61	76 62	77 59	78 60	79 61	80 61	78 64	74 65	75 64	75 63	77 63	77 63	77 63	77 63	77 63	77 63	77 63	77 63	77 63	77 63	77 63	77 63	74.0 61.6
KEAWAKAPU BEACH 260.2	MAX MIN	85 59	87 57	85 59	87 61	85 59	85 60	87 60	88 60	87 62	88 57	83 61	86 62	85 60	88 61	83 63	83 63	82 63	85 64	89 64	89 64	88 60	86 60	83 60	83 60	82 60	80 60	80 60	82 60	82 60	84 60	84 63	85.0 60.2
KULA SANATORIUM 267	MAX MIN	68 50	69 52	69 53	63 53	68 54	69 54	70 54	71 53	71 54	70 51	69 52	71 52	71 52	73 53	71 54	66 54	68 55	67 55	68 55	69 55	71 52	69 52	70 53	70 54	70 55	74 55	68 50	67 49	69 50	69 51	69 52	69.1 52.5
LAHAINA 361	MAX MIN	82 65	83 54	83 67	84 65	84 63	83 63	82 64	83 64	82 64	83 60	82 62	82 62	84 65	85 65	85 66	82 67	83 68	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	83 64	83 61	82 61	81 61	83 67	83.0 64.3	

See Reference Notes Following Station Index

DAILY TEMPERATURES

Continued

HAWAII
MARCH 1969

Station	Day of Month																															Average		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
WAILUKU 392	MAX MIN	79 66	88 67	79 67	79 67	76 68	81 68	78 68	81 68	76 69	79 65	82 63	83 63	83 63	84 63	82 65	79 68	78 68	77 68	74 69	79 68	81 67	84 66	82 68	78 65	78 62	78 62	78 62	79 67	79 67	79 67	79 66	60.0	
* * *																																		
ISLAND OF HAWAII																																		
HAINA 214	MAX MIN	75 60	73 60	76 61	78 61	77 61	78 60	70 61	78 62	79 61	77 58	78 58	80 57	80 60	82 61	81 59	78 60	80 62	79 62	76 63	77 61	79 60	79 62	79 61	76 61	68 59	73 60	72 59	78 59	79 61	79 62	79 62	77.2 60.5	
HAWAII VOLCNS NP HO 54	MAX MIN	58 51	57 50	58 50	58 53	58 53	63 53	62 51	64 52	66 53	64 47	66 49	63 46	62 52	67 49	67 50	67 53	66 50	66 53	62 53	63 51	65 51	66 50	66 50	65 53	61 50	61 47	63 46	64 46	68 50	68 53	68 53	63.6 50.5	
HILO W8 AIRPORT 87	MAX MIN	78 67	79 65	71 65	75 65	82 65	81 65	81 66	80 66	81 66	82 65	82 65	83 65	82 64	83 65	82 65	81 68	81 67	81 69	81 68	82 68	81 65	78 66	73 66	78 67	78 61	80 63	80 65	81 66	76 66	76 66	79 66	79 66	79.6 65.3
KAINALIU 73.2	MAX MIN	76 60	77 58	77 57	77 60	78 60	78 61	78 59	79 59	78 58	78 58	75 58	77 58	78 60	78 59	75 59	78 59	78 61	79 61	78 61	78 62	78 62	75 59	78 60	78 60	73 59	78 60	78 60	77 59	76 59	78 60	79 61	79 61	77.4 59.6
KAMUELA 192.2	MAX MIN	63 53	66 54	68 53	68 54	70 54	69 52	70 56	68 55	71 57	69 54	74 47	74 45	75 48	76 47	76 50	75 54	72 56	77 58	70 55	68 55	68 53	67 54	67 54	70 55	65 53	67 53	67 52	70 52	70 54	68 55	69 54	69 54	70.5 53.5
KAMUELA AIRPORT 191	MAX MIN	68 56	68 57	70 52	71 56	71 45	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71 49	71.1 50.8
KEAAU 92	MAX MIN	79 62	79 62	79 62	71 63	74 63	79 62	82 62	82 59	82 59	80 59	80 60	80 65	81 63	83 61	83 63	83 66	82 65	80 64	80 63	82 62	82 62	82 62	82 62	80 64	76 60	78 60	76 60	81 62	81 62	81 62	81 62	81 62	79.8 62.1
KEALAKEKUA 26.2	MAX MIN	76 60	78 59	77 59	78 60	78 61	77 62	79 61	79 61	78 60	78 59	75 60	78 61	80 61	80 63	77 63	78 66	79 66	80 66	80 66	79 66	78 66	77 66	77 66	77 66	77 66	77 66	77 66	77 66	77 66	77 66	77 66	77 66	77.7 60.5
KOHALA MISSION 175.1	MAX MIN	74 62	73 63	73 64	75 64	72 64	76 65	71 65	77 65	77 65	76 63	77 60	77 60	79 62	79 63	78 63	78 64	79 64	77 66	75 66	77 66	77 66	77 66	77 66	77 66	74 64	67 64	74 64	76 61	76 63	77 64	77 64	75.9 63.4	
KONA AIRPORT 68.3	MAX MIN	79 61	82 60	83 63	80 63	80 61	81 61	81 62	82 60	82 65	81 60	80 65	78 61	82 62	82 61	81 62	82 65	83 62	81 62	80 62	81 64	82 64	82 64	82 64	81 64	82 64	82 61	82 61	82 61	82 61	82 61	82 61	82 61	81.2 62.9
KULANI CAMP 79	MAX MIN	55 43	55 46	58 46	58 48	60 44	58 46	60 48	60 48	61 46	62 47	63 43	59 42	63 45	63 42	62 42	61 49	64 44	64 49	64 48	58 48	58 48	55 42	55 42	60 42	60 45	58 45	58 42	58 42	59 42	59 42	58 41	58 42	59.9 44.6
MAUNA KEA BEACH 98	MAX MIN	89 70	90 71	91 67	83 71	83 69	82 69	88 71	92 71	73 71	83 66	83 66	84 65	82 67	83 66	84 67	88 68	85 70	88 70	85 72	88 72	82 71	84 70	84 70	87 68	88 66	88 65	83 66	84 66	83 67	85 67	85 67	85.2 68.6	
MAUNA LOA SLOPE OBS	MAX MIN	44 28	47 28	45 25	45 29	42 24	43 30	43 31	42 30	45 30	49 28	50 29	49 31	52 33	53 33	52 34	47 30	51 29	55 35	55 36	56 34	53 34	54 33	54 37	50 33	52 34	48 30	47 28	47 30	44 32	44 32	44 32	48.7 30.9	
MOUNTAIN VIEW 91	MAX MIN	68 59	69 59	68 58	69 58	68 59	68 57	66 58	72 60	76 61	70 53	74 54	77 57	76 57	78 57	77 57	78 61	75 60	78 61	78 61	77 60	74 60	75 60	75 60	73 60	73 60	73 60	73 60	73 60	73 60	73 60	73 60	72.6 58.1	
NAALEHU 14	MAX MIN	77 64	77 64	76 63	78 65	78 66	78 63	78 66	76 63	78 63	77 63	78 62	78 62	78 64	78 64	79 63	79 67	79 67	78 67	78 67	79 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	77.6 63.8	
OOKALA 223	MAX MIN	71 62	73 64	74 63	75 63	72 63	77 63	71 65	77 64	78 65	77 63	77 63	79 62	78 63	79 64	81 65	78 64	79 65	79 65	76 64	78 64	78 64	79 64	78 64	78 64	78 64	78 64	78 64	78 64	78 64	78 64	78 64	78 64	76.4 63.4
OPIHIHALE 2 24.1	MAX MIN	76 56	78 54	79 55	80 56	76 58	79 57	79 57	80 56	80 56	78 55	78 55	76 55	78 56	73 57	75 57	78 57	77 59	78 59	78 59	77 59	78 59	77 59	76 59	76 59	75 58	75 58	76 58	76 58	79 58	79 58	79 58	79 58	77.0 57.3
PAHALA 21	MAX MIN	74 62	75 60	76 60	79 62	77 60	78 59	78 59	78 59	78 59	78 59	78 59	78 59	79 60	77 63	78 60	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	77.2 59.8
UPOLU POINT USCG 159.2	MAX MIN	75 64	76 67	74 67	76 66	78 64	77 64	78 64	78 67	79 68	83 64	82 64	82 64	80 64	80 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	78.7 65.6

EVAPORATION AND WIND

Station	Day of Month																															Total or Avg.		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
* * *																																		
ISLAND OF KAUAI																																		
LIHUE W8 AP 1020.1	EVAP WIND MAX MIN	.33 205 81 61	.34 230 78 64	.27 220 83 65	.28 201 85 67	.26 163 85 66	.25 147 88 66	.31 193 81 64	.21 170 85 63	.35 155 85 66	.32 170 85 64	.30 91 87 59	.21 68 86 59	.20 69 89 60	.20 53 86 60	.21 74 86 62	.09 78 87 62	.20 170 82 64	.16 180 81 64	.31 185 83 65	.33 200 85 65	.33 216 85 65	.35 131 87 63	.27 67 89 65	.12 162 77 65	.15 154 78 64	.24 128 76 62	.19 126 81 61	.19 127 82 62	.27 165 81 62	.32 185 82 62	.26 226 80 63	7.82 4709 83.0 63.5	
* * *																																		
ISLAND OF OAHU																																		
HONOLULU OBSERV 702.2	EVAP WIND MAX MIN	.25 45 86 61	.26 52 87 63	.24 44 88 64	.20 45 83 65	.22 37 85 64	.18 23 85 65	.17 43 87 64	.27 36 89 65	.23 28 89 65	.27 32 90 65	.20 21 89 64	.18 12 94 65	.23 15 94 65	.24 20 95 66	.04 10 76 65	.15 21 87 65	.13 19 80 66	.08 27 81 67	.22 39 89 65	.28 56 91 65	.25 43 89 64	.18 26 87 65	.22 19 92 65	.22 28 91 66	.14 46 83 63	.26 36 88 62	.15 25 89 63	.25 26 86 61	.23 24 87 54	.17 33 80 64	6.34 958 87.2 63.8		

STATION INDEX

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES			OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES			OBSERVER
								TEMP.	PRECIP.	ET/PA										TEMP.	PRECIP.	ET/PA		SPECIAL METHOD
ISLAND OF HAWAII																							
KULANI SCHOOL SITE 78	A 5021	02	S HILO	2	19 35	155 20	5735	W			ST DEPT OF SOCIAL SER	PUI LAU 102-1	A 8452	05	HAMAKUA	5	19 50	155 36	7440	MO		STATE DIV OF FISH-GAME	
LALAMLO FLD OFF 191.1	5330	04	N KOHALA	1	20 01	155 41	2615	BA			KONA EXPERIMENT STATION	PUI LEHUA 73	A 8460	04	N KOHALA	4	19 34	155 49	4880	MO		GREENWELL RANCH CO	
LANIHAU 88.2	5460	02	PUNA	2	19 29	154 54	650	BA			STATE DIV. OF PARKS	PUI MALI 113	A 8515	01	HAMAKUA	1	19 55	155 26	6960	MO		KUKAIUA RANCH CO	
LAVA TREE PARK 66.1	5460	02	PUNA	2	19 29	154 54	650	BA			STATE DIV. OF PARKS	PUI KUKUMAU 187	A 8548	01	N KOHALA	1	20 12	155 50	1800	TA		KOHALA GITECH CO LTD	
MANUKA 2	A 6134	03	KAU	3	19 07	155 50	1760	BA			STATE DIVISION OF PARKS	PUI OO 82	A 8550	02	S HILO	2	19 44	155 23	6340	6A		W. N. SHIPMAN LTD	
MAUNA KEA BEACH 98	A 6184	04	S HAMAKUA	4	19 32	155 35	11146	MO	HID		MAUNA KEA BEACH HOTEL	PUI WAIKOA 94-1	A 8550	03	N KOHALA	3	19 47	155 51	2520	7A		OILLINGHAM RANCH INC	
MAUNA LOA SLOPE OBS	A 6198	05	HAMAKUA	5	19 32	155 35	11146	MO	HID		MAUNA LOA OBSERVATORY	PUI WAIKOA 94-1	A 8550	03	N KOHALA	3	19 47	155 51	2520	7A		BOARD OF MTR SUPPLY	
MIDDLE HULLALO 68.1	A 6268	04	N KOHALA	4	19 37	155 58	475	BA			KONA EXPERIMENT STA	SOUTH POINT CORRAL 3	A 8675	03	KAU	3	18 57	155 41	400	WI		HUTCHINSON SUGAR CO	
MIDDLE PEN 187.1	A 6270	01	N KOHALA	1	20 04	155 50	1380	VAR			KAHUA RANCH	S POINT TRACKING STA	R679	03	KAU	3	18 57	155 41	385			FEDERAL ELECTRIC CORP	
MOAULA 18	A 6407	03	KAU	3	19 11	155 30	600	MO			HAWAIIAN RANCH CO	UMIKOA 118	A 8780	01	HAMAKUA	1	19 59	155 23	3420	7A		KUKAIUA RANCH CO	
MOUNTAIN VIEW 91	A 6552	02	PUNA	2	19 33	155 07	1530	6A	6A		PUNA SUGAR CO	UPULU POINT USCG 159-2	8830	01	N KOHALA	1	20 15	155 53	61	8A	8A	U S COAST GUARD	
NAALEHU 14	A 6588	03	KAU	3	19 04	155 35	673	BA	BA		HUTCHINSON SUGAR CO	WAIKOA SCD 88-2	9025	02	S HILO	2	19 40	155 08	1050	7A		SHINICHI KANESHIRO	
NAPOOPOO 28	A 6697	04	S KOHALA	4	19 28	155 55	395	7A			KONA EXPERIMENT STA	WAIKANDOUCLA 178-6	9350	01	N KOHALA	1	20 08	155 47	3810	7A		KAHUA RANCH	
NAUKU FOREST 38.6	6731	02	PUNA	2	19 19	155 08	1490	VAR			HAWAII VOLCANOES NAT PK												
NIULII 179	A 6806	01	N KOHALA	1	20 14	155 45	75	6A			KOHALA SUGAR CO												
OHOKALA 223	7131	02	N HILO	2	20 01	155 17	430	7A	7A		LAUPAHOE SUGAR CO												
OPHIHALE 2 24.1	7164	04	S KOHALA	4	19 16	155 53	1270	7A	7A		MISS C LEONARD												
ORCHID LAND EST 91.5	7185	02	PUNA	2	19 34	155 00	445	VAR			BOARD OF WATER SUPPLY												
PAAMUU 217	7204	01	HAMAKUA	1	20 05	155 26	415	7A			PAAPUHU SUGAR CO												
PAAULO 221	7312	01	HAMAKUA	1	20 03	155 22	800	7A			HAMAKUA MILL CO												
PAMALA 21	7421	03	KAU	3	19 12	155 29	870	BA	6A		HAWAIIAN AGR CO												
PAHOA 65	7457	02	PUNA	2	19 30	154 57	670	6A			PUNA SUGAR COMPANY												
PAHO 37	7493	03	KAU	3	19 22	155 28	5030	MO			HAWAIIAN RANCH CO INC.												
PAPAIAKU 144.1	7711	02	S HILO	2	19 47	155 06	200	7A			MAUNA KEA SUGAR CO.												
PAPAIAKU MAUKA 140.1	7721	02	S HILO	2	19 47	155 08	1270	7A			MAUNA KEA SUGAR CO.												
PEPEKEO MAUI 144	8000	02	S HILO	2	19 51	155 05	100	7A			PEPEKEO SUGAR CO												
PIIHOHUA 89	A 8051	02	S HILO	2	19 44	155 10	1730	MO			STATE DIV OF FORESTRY												
POHAKULOA 107	A 8063	02	HAMAKUA	2	19 45	155 32	8511	VAR			STATE DIVISION OF PARKS												
PUAKO 95.1	A 8186	05	KOHALA	5	19 59	155 32	5	6A			ERWIN H. RAPP												
PUI K1HE 120	A 8393	01	HAMAKUA	1	19 54	155 24	7750	MO			KUKAIUA RANCH CO												

† DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN
 5-NORTH-CENTRAL MOLOKAI: 1-(NO INTRA-ISLAND DIVISIONS) LANAI: 1-(NO INTRA-ISLAND DIVISIONS) MAUI: 1-NORTHEASTERN
 2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3650, Honolulu, Hawaii, or to any Weather Bureau Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII".

DIMENSIONAL UNITS Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F., precipitation and evaporation in inches, and wind movement in miles. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME Data in the "Monthly Extremes", "Daily Precipitation" table, "Daily Temperature" table, and "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 6-8 inches above the pan.

NORMALS for all stations are climatological standard normals based on the period 1931-1960.

STATION NAMES Hawaii state key numbers are included following station names in the several tables.

DELAYED DATA AND CORRECTIONS will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES for monthly precipitation totals may be found in the annual issue of this publication.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.

No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry.

+ And also on an earlier date or dates.

++ Highest observed one minute wind speed. This station is not equipped with an instrument to measure fastest mile data.

* Amount included in following measurement, time distribution unknown.

A The letter "A" shown following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index", indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement where gages are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.

B Adjusted to a full month.

J "Supplemental Data" table.

M One or more days of record missing, if average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.

R Amounts from recording gage.

T Trace, an amount too small to measure.

V Includes total for previous month.

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

AR Observation made after rain.

C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference 'R'. Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.

MO Gage read once monthly; usually on the last day.

OC Gage readings at periods varying from a few weeks to several months.

OS Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.

SS Observation time is near sunset.

VAR Observation time is variable.

WI Gage read weekly or irregularly only.

WM Gage read weekly and last day of month.

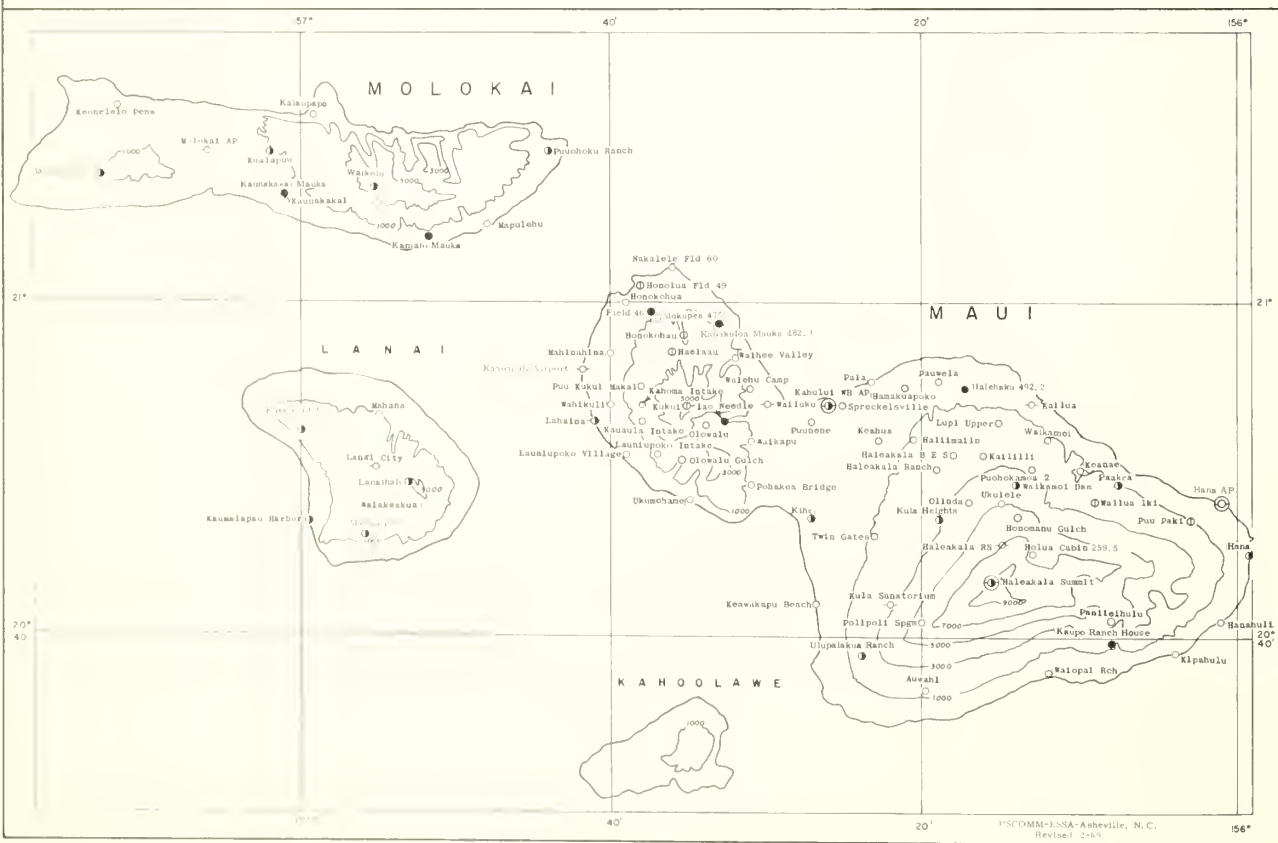
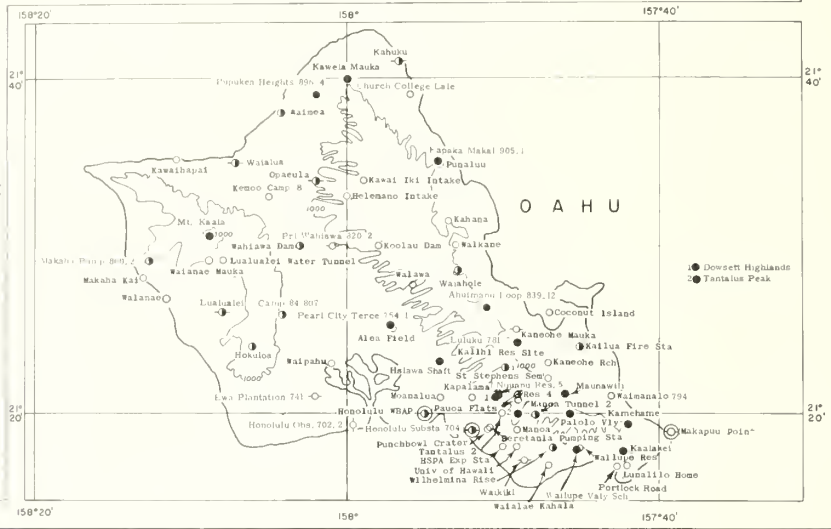
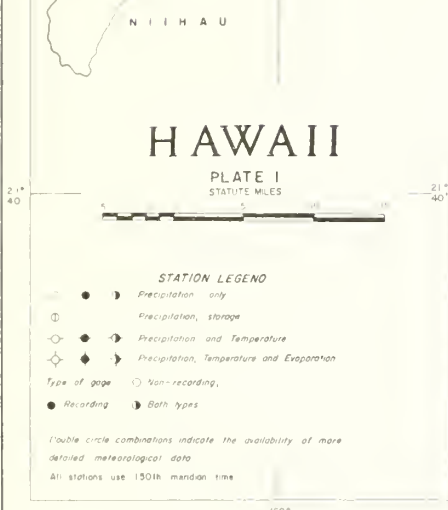
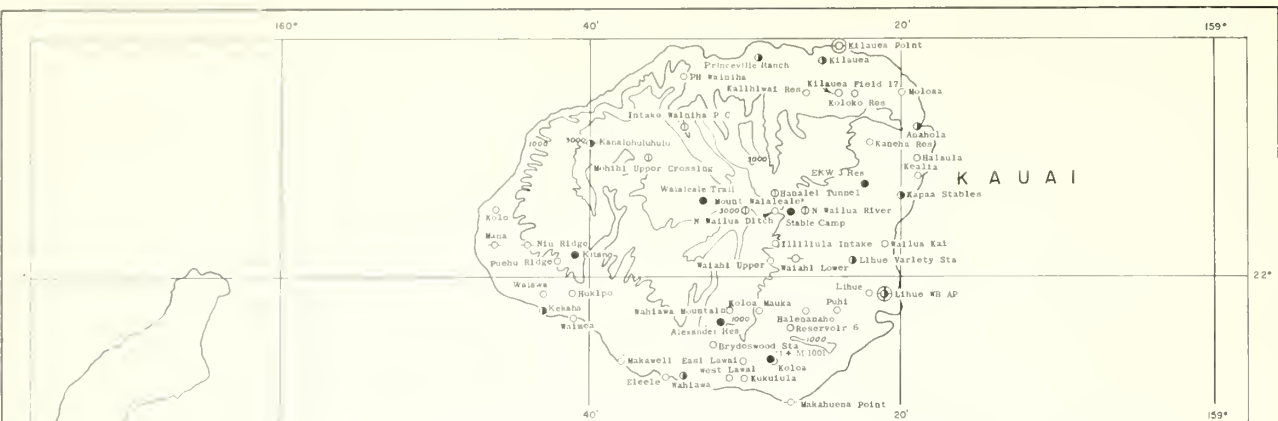
Thermometers are generally exposed in a shelter located a few feet above sod-covered ground; however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

Subscription Price 20 cents per copy, monthly and annual: \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Reprints and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.



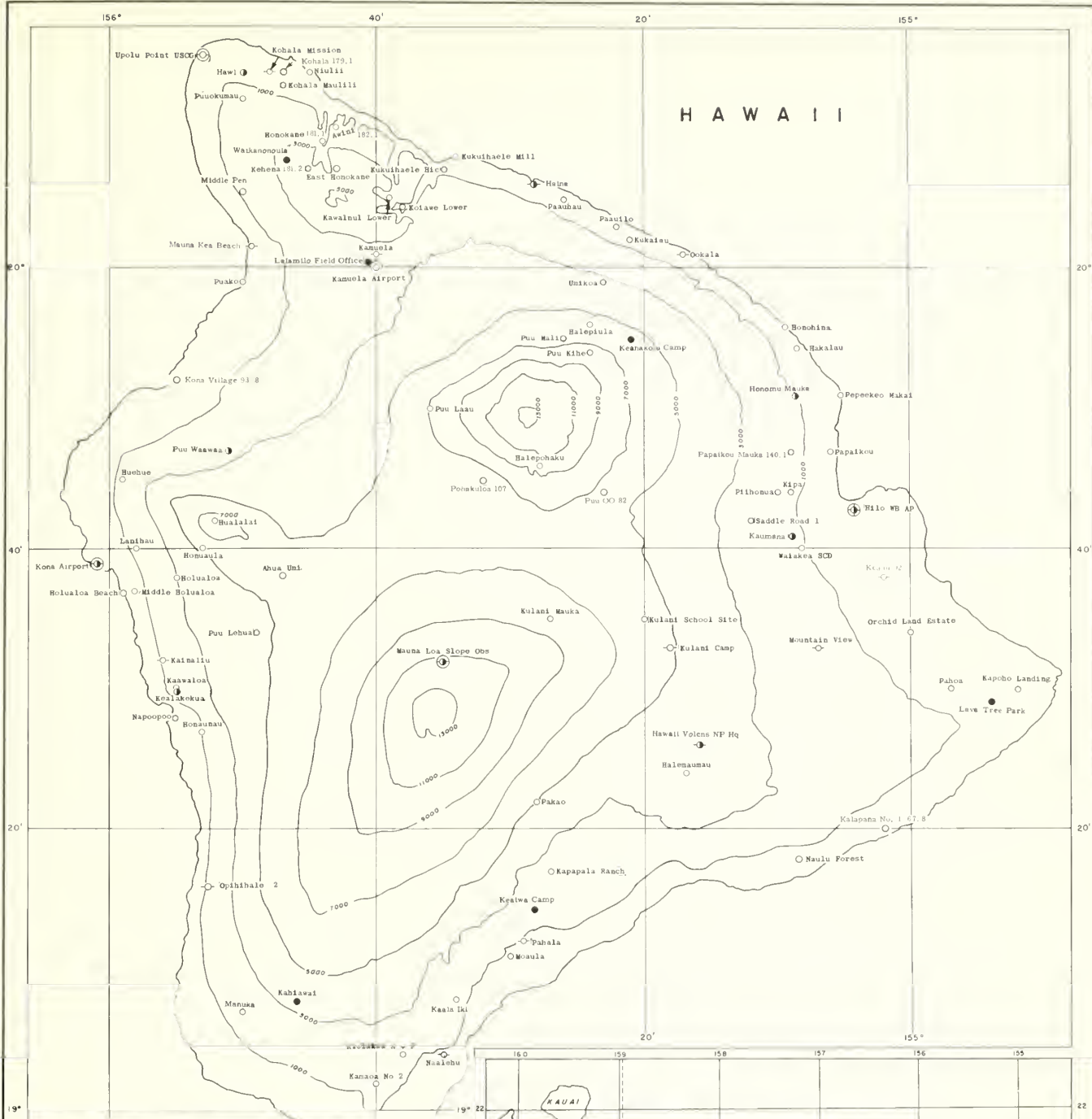
156°

40'

20°

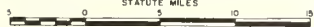
155°

HAWAII



HAWAII

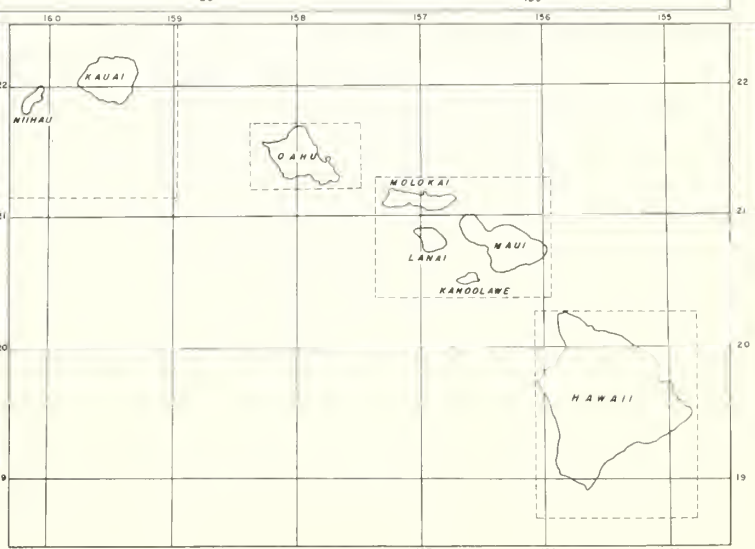
PLATE 2
STATUTE MILES



STATION LEGEND

- ● ① Precipitation only
- ⊖ Precipitation, storage
- ● ① Precipitation and Temperature
- ⊖ ● ① Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording, ● Recording
- ① Both types

Double circle combinations indicate the availability of more detailed meteorological data
All stations use ISOth meridian time



156°

40'

160

159

158

157

156

155



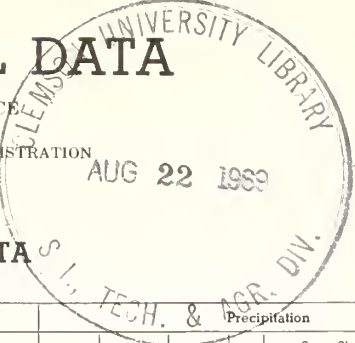
CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
MAURICE H STANS, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

HAWAII

APRIL 1969

Volume 65 No. 4



CLIMATOLOGICAL DATA

Station	Temperature											Precipitation								
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest Date	Lowest Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet		No. of Days			
							Max.		Min.						Total	Max. Depth on Ground	Date	1.0 or More	.50 or More	1.00 or More
							30° or Above	30° or Below	30° or Above	30° or Below										
* * * ISLAND OF KAUAI																				
ANAOHA 1111 A					74 15	45 26	0	0	0	0	1.61	- 2.50			.0	0		0	0	
KANALOHULUHULU 1075 A	65.8	51.5	58.7								2.25		.45	20	.0	0		8	0	0
KAPAA STABLES 1104 A											2.65	- 2.49	1.10	1	.0	0		1	1	0
KILAUEA FIELO 17 1135 A											5.32				.0	0				
KILAUEA POINT 1133	76.7	66.0	71.4		84 25	59 3	0	0	0	0	1.41		.26	11	.0	0		7	0	0
* * * ISLAND OF OAHU																				
KOLOA 936 A											7.70	2.97	3.30	1	.0	0				1
LIHUE W8 AP 1020.1 R	76.9	67.0	72.0	-.5	83 30	62 7*	0	0	0	0	1.52	- 1.82	.27	12	.0	0		6	0	0
MANA 1026	83.3	62.3	72.8	.1	87 17*	58 24*	0	0	0	0	.07	- 1.18	.07	1	.0	0		0	0	0
N WAILUA OITCH 1051 A											15.44		4.90	1	.0	0				
PH WAINIHA 1115											18.25	5.98	9.02	1	.0	0		20	7	4
* * * ISLAND OF MAUI																				
PUEHU R10GE 1040											.38		.28	1	.0	0		2	0	0
WAIHAWA 930 A											4.06	2.14	3.20	1	.0	0		1	1	1
WAIHI LDWR 1054	75.6	62.3	69.0		80 27	58 7*	0	0	0	0	9.99		3.48	1	.0	0		17	5	1
WAIHEA 947											.03	- 1.10	.03	20	.0	0		0	0	0
* * * ISLAND OF HAWAII																				
* * * ISLAND OF MOLOKAI																				
HONOLULU O8SERV 702.2 R	81.7	67.6	74.7	-.5	86 27	63 5	0	0	0	0	.40		.20	1	.0	0		2	0	0
HONOLULU W8FC 703											.10	- 1.21	.06	20	.0	0		0	0	0
KAHUKU 912 A	78.1M	68.0M	73.1M	-.1	82 28	63 25	0	0	0	0	1.81	- 1.04	.80	1	.0	0		1	0	0
KANEIHE MAUKA 781											5.11	-.42	1.28	1	.0	0		12	2	1
KOOLA OAM 833	76.3	66.4	71.4	- 1.1	81 26	62 9	0	0	0	0	11.61	4.66	3.13	20	.0	0		13	8	2
* * * ISLAND OF LANAI																				
LUALUALEI 804	81.7	68.8	75.3		86 30*	65 24*	0	0	0	0	1.56		.09		.0	0				0
MAKAPUU POINT 724	76.8	64.9	70.9		85 25	57 22	0	0	0	0	1.09	-.69	.26	20	.0	0		5	0	0
NUUANU RES 4 783											2.84	- 7.17	.52	29	.0	0		10	1	0
OPAEULA 870 A	74.7	62.1	68.4	.4	82 29*	56 5	0	0	0	0	3.69	-.47			.0	0				
PALOLO VALLEY 718											13.08	.57	2.96	29	.0	0		19	8	4
* * * ISLAND OF LANAI																				
PRI WAIHAWA 820.2 A	79.2	62.1	70.7		84 29*	57 5	0	0	0	0	1.70		.44	1	.0	0				0
PUNALUU 884 A											4.12		1.25	1	.0	0				1
WAIHAWA OAM 863 A											6.18				.0	0				
WAIHOLE 837 A											12.22	- 1.08	3.54	1	.0	0				
WAIALUA 847 A	78.6	63.3	71.0	-.5	83 29	57 23*	0	0	0	0	1.07	-.65			.0	0				0
* * * ISLAND OF MAUI																				
WAIKIKI 717.2	81.1	68.4	74.8		87 26	62 24	0	0	0	0	.50		.15	1	.0	0		2	0	0
WAIPAHU 750 A											.33	- 1.55	.10	1	.0	0		1	0	0
* * * ISLAND OF HAWAII																				
* * * ISLAND OF LANAI																				
KUALAPUU 534 A											2.12	-.94			.0	0				0
MAPULEHU 542 A											2.68	-.37	.33	19	.0	0				0
MAUNALOA 511 A											.96	- 1.35	.37	20	.0	0				0
MOLOKAI AP 524	76.9	67.5	72.2		84 26	62 24	0	0	0	0	1.12		.20	20	.0	0		3	0	0
* * * ISLAND OF LANAI																				
LANAI CITY 672 A	73.7M	62.0M	67.9M	.9	79 26	58 7	0	0	0	0	.93	- 1.99	.62	2	.0	0				1
* * * ISLAND OF MAUI																				
HALEAKALA B E S 434 A	61.0	43.0	52.0		69 9	35 5	0	0	0	0	18.70	10.74	5.67	2	.0	0		18	10	5
HALEAKALA RS 338											6.66		2.80	2	.0	0		7	4	3
HANA AIRPORT 355 A	78.2	67.0	72.6		82 15	63 6	0	0	0	0	7.05		2.52	1	.0	0		13	3	1
HONOKOHUA 493											2.55	-.63			.0	0				0
KAAHPALI AIRPORT	80.1M	66.5M	73.3M		85 29*	61 5	0	0	0	0					.0	0				0
* * * ISLAND OF HAWAII																				
KAHULUI W8 AP 398 R	81.1	65.8	73.5	.1	86 24	59 9	0	0	0	0	1.79	.35	.62	1	.0	0		5	2	0
KAILUA 446											17.39	5.86	4.26	1	.0	0		23	9	3
KEANAE 346 A	73.3	62.9	68.1	- 1.0	81 27	60 11*	0	0	0	0	42.40	17.30			.0	0				
KIPAHULU 258											6.75	-.29	1.63	2	.0	0		16	4	1
KULA SANATORIUM 267	70.3	53.9	62.1	.1	75 27*	50 7	0	0	0	0	.66	- 2.03	.60	2	.0	0		1	1	0
* * * ISLAND OF HAWAII																				
LAHAINA 361	82.9	65.1	74.0		87 26	59 7	0	0	0	0	.10	-.95	.08	2	.0	0				0
PAIA 406											3.16	.03	.65	2	.0	0				9
WAILUKU 392	79.1M	67.4M	73.3M	.7	85 25	64 24	0	0	0	0	2.65	-.05	.42	1	.0	0				0
* * * ISLAND OF HAWAII																				
* * * ISLAND OF HAWAII																				
HAINA 214	75.6	61.8	68.7	- 1.3	80 26	58 9	0	0	0	0	14.62	6.95	3.37	2	.0	0		22	7	3
HAWAII VOLCNS NP HO 54	62.8	52.1	57.5	- 1.6	69 26	47 10	0	0	0	0	11.10	2.70	1.84	12	.0	0		20	7	3
HILO W8 AIRPORT 87 R	79.1	66.4	72.8	1.2	82 25	62 10*	0	0	0	0	14.57	2.65	2.41	11	.0	0		22	9	3
HUEHUE 92.1 A											3.50	.49			.0	0				
KAINALIU 73.2	76.5	61.7	69.1		80 28*	58 7	0	0	0	0	3.47	- 2.19	1.09	1	.0	0		11	1	1
KAMUELA AIRPORT 191	69.0M	54.6M	61.8M		78 26		0	0	0	0			.70	11	.0	0				1

See Reference Notes Following Station Index

CLIMATOLOGICAL DATA

HAWAII
APRIL 1969

Continued

Station	Temperature										Precipitation											
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
									Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
									30° or Above	32° or Above	32° or Below	30° or Below										
KEAAU 92	78.9	62.7	70.8	- .3	83	16	60	9+	0	0	0	0	21.66	9.24	3.62	1	.0	0	27	13	6	
KEALAKEUA 26.2	76.7M	62.5M	69.6M		80	29	59	7	0	0	0	0	4.82		2.64	1	.0	0	8	2	1	
KONA AIRPORT 68.3	80.6	65.3	73.0		84	13	61	12	0	0	0	0	1.85		.80	1	.0	0	4	1	0	
KUKUIHAELE HIC 199													14.64	5.41	2.15	2	.0	0	24	10	4	
KULANI CAMP 79	60.2M	45.8M	53.0M		66	28	38	9+	0	0	0	0	15.85		3.50	12	.0	0	23	7	5	
MAUNA KEA BEACH 98	85.7M	70.4M	78.1M		91	13	66	7+	2	0	0	0	1.32	- 1.84	.40	30	.0	0	4	0	0	
PAHALA 71	78.5	61.3	69.9	.1	84	14	57	5	0	0	0	0	.30		.06	1	.0	0	0	0	0	
POHAKULOA 107													.06		.08	1	.0	0	0	0	0	
PUAKO 95.1													.17	- 2.13	.08	1	.0	0	0	0	0	
PUU WAAWAA 94.1																						
UMIKOA 118													19.29	9.96			.0	0				
WAIAKEA SCD 88.2													38.25		7.06	12	.0	0	30	21	14	
ISLAND			67.5										10.34				.0					

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 91° ON THE 13TH AT MAUNA KEA BEACH 98, HAWAII

LOWEST TEMPERATURE, 29° ON THE 7TH AT MAUNA LOA SLOPE OBS, HAWAII

GREATEST TOTAL PRECIPITATION: 38.25 INCHES AT WAIAKEA SCD 88.2, HAWAII

LEAST TOTAL PRECIPITATION: .00 AT 8 STATIONS

GREATEST ONE-DAY PRECIPITATION: 16.21 INCHES ON THE 2D AT WAIKAMOI DAM 336, MAUI

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
APRIL 1969

Continued

Station	Total	Day of Month																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
ISLAND OF MOLOKAI																																				
KILAUEA 563	3.48	.87	.52	*	.21	*	*	.30	*	*	*	.10	.06	*	.08	*	*	*	.04	.12	*	*	*	*	*	*	.46	.16	*	*	*	.56	*	*	*	
MAUNAKAKAI 53A	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
POHOLELE PENS 551	2.12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
HALAPU 534	.00	.07	.20	*	*	.09	*	*	*	.16	.15	.10	.07	.12	.03	.03	.05	.15	.03	.33	*	.45	.28	.12	*	*	.31	.12	.07	.09	.32	.08	*	*		
MAPULEHU 542	2.68	.24	*	*	*	*	*	*	*	*	.15	.20	.07	.12	.03	.03	.11	.08	.05	.33	*	.10	*	*	*	*	*	*	*	*	*	*	*	*		
ISLAND OF LANAI																																				
KANEPIU 690	.29	*	*	*	*	*	*	*	*	*	.18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.11	*	
KALMALAPAU HARBOR 658	.00	*	*	*	*	*	*	.18	T	*	*	*	*	*	T	*	*	*	*	*	*	*	*	*	*	*	*	*	.07	.06	.07	.06	*	*		
LANAI CITY 672	.93	*	.62	*	*	*	*	*	*	*	*	*	*	*	1.35	*	*	*	*	*	*	*	*	*	*	*	*	.06	*	*	*	*	.09	*		
LANAIMALE 684	1.85	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.14	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
MAHANA 694	.09	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
MALAUER 676	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.58	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.69	*	
KAIARAKUA 685	1.27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
ISLAND OF MAUI																																				
KAHANI-252	.16	*	*	*	*	*	*	*	*	*	*	.05	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.11	*	
MALEKAKA 8 E S 434	18.70	3.75	5.67	.12	.20	.04	.49	.57	.62	.03	*	.10	1.95	.88	*	*	.24	.24	.05	.19	1.31	.50	1.05	.63	*	*	*	*	*	*	.37	*	.37	*		
MALEKAKA RANCH 432	8.68	1.99	3.64	*	*	.28	.28	*	*	*	*	*	.98	*	*	*	*	*	*	.40	*	.59	*	*	*	*	*	*	*	*	*	*	*	.84	*	
MALEKAKA RS 338	6.64	1.22	2.80	T	*	.01	.01	.01	.01	.01	.01	.08	.81	.10	*	*	*	*	.07	.21	.01	.07	T	*	*	.10	.01	1.15	.05	*	*	*	*			
MALEKAKA SUMMIT 338.4	1.79	.40	1.34	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.01	T	*	.07	T	*	*	*	*	*	*	*	*	*	*	*		
ISLAND OF MAUI (cont.)																																				
MAIIMALE 423	6.44	.30	2.12	.04	.07	.11	*	.43	.21	.04	.02	.04	*	.81	.10	.15	.15	.17	.05	.03	.43	.17	.18	.25	T	.05	.01	.01	.06	.06	*	*	.06	*		
MAUNAKAPOKO 485	2.54	.93	1.04	*	.07	.28	.14	.24	.09	.02	.05	.09	.59	.15	.23	.15	.17	.05	.03	.43	.17	.18	.25	T	.05	.01	.01	.06	.06	*	*	.06	*	.06	*	
MAHA 354	7.88	3.90	.54	.02	.09	.13	*	1.10	.06	.02	.06	.08	.18	*	.29	.01	.08	.05	.11	.03	*	.58	.09	*	*	.17	.03	.46	.12	.20	T	.06	*	.06	*	
MAHA AIRPORT 355	7.05	2.52	.79	.02	.03	.16	.91	.30	.08	.03	.04	.09	.10	.15	.21	.02	.08	.04	.05	T	.42	T	.02	*	*	.17	.03	.46	.12	.20	T	.06	*	.06	*	
MAHANAUI 281	9.93	1.95	1.75	.05	T	.03	.50	.03	.13	.01	.15	.04	.20	.17	.23	.18	.09	.16	.12	.94	.04	.11	2.03	*	*	.15	.05	.28	.07	.34	.13	*	*	.13	*	
ISLAND OF MAUI (cont.)																																				
MOLUA CABIN 259.5	8.24	*	*	4.10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.80	*	*	*	*	*	*	*	*	*	3.34	*	*
HONOHOHU 480	2.55	.10	.25	.07	*	*	*	.30	.08	.02	.09	.13	*	*	.36	.01	.02	.05	.06	*	.48	.04	.03	*	*	.11	.12	.23	*	*	*	14.00	*	*		
HONOHONO GULCH 341	45.00	*	*	*	*	*	*	1.00	*	*	T	.01	.04	T	T	T	T	T	T	.13	T	.12	.03	*	*	*	*	*	*	*	*	*	*	*		
KAANAPALI AIRPORT	-.13	.12	T	.02	T	.01	.06	.01	*	*	T	.01	.04	T	T	T	T	T	.13	T	.12	.03	*	*	*	*	*	*	*	*	*	*	*	*		
ISLAND OF MAUI (cont.)																																				
KAHUNA INTAKE 374	12.67	*	*	*	*	*	*	7.09	*	*	*	*	*	.34	*	*	*	*	*	*	*	4.66	*	*	*	.58	*	*	*	*	*	*	*	.02	*	
KAHULUI W8 AP 398	1.79	.62	.02	T	.02	.06	.03	.62	.01	T	.13	.04	T	T	T	T	T	T	.11	.05	.16	.50	*	*	*	*	*	*	*	*	*	17.64	*	*		
KAILIHI 436	54.58	*	*	36.94	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KAILUA 445	17.33	4.26	3.10	.10	.07	.94	1.32	2.08	.58	.10	.13	.26	.58	.45	.32	.12	.29	.37	.42	.07	.68	.44	.06	.07	.03	.01	.29	.41	.87	.43	.16	*	*			
KADAUULA INTAKE 375	3.48	*	*	*	*	*	*	2.08	*	*	*	*	*	.67	*	*	*	*	*	*	.57	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
ISLAND OF MAUI (cont.)																																				
KAEMUA 410	2.36	.11	.90	T	.02	.02	*	.15	.09	T	*	.01	.10	.14	T	T	T	T	.10	.09	.04	.40	.21	*	*	*	*	*	*	*	*	23.00	*	*		
KEANAE 346	42.40	*	*	*	*	*	19.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KEANAKAHI BEACH 260.2	1.10	.10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KIMEI 311	1.16	.04	1.08	*	*	*	*	.01	*	*	*	*	*	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KIPAHUJU 258	6.75	.87	1.63	.06	*	*	*	.12	.06	*	.15	.23	*	.91	.04	.20	.22	.16	.12	.72	.06	.04	*	*	.17	.30	.11	.38	.20	*	*	*	*			
ISLAND OF MAUI (cont.)																																				
KULA HEIGHTS 323.2	1.07	.11	.94	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KULA SANATORIUM 267	.66	.60	*	*	*	*	*	*	*	*	*	*	*	.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
LAHAINA 351	1.10	.02	.08	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
LAHAINA WIND INTAKE 376	8.60	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8.60	*
LAUNIUKOPOK VILLAGE 372	-.14	.03	.11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
ISLAND OF MAUI (cont.)																																				
LUPI HIPPER 442	26.00	*	*	*	*	*	*	*	*	*	*	*	16.00	*	*	*	*	*	*	.04	*	.83	.15	.15	.47	*	*	*	*	*	*	*	10.00	*		
MAHAMAHA 466	5.68	1.00	1.25	.10	*	.53	.22	.07	.03	.05	.04	.40	.25	*	.75	*	*	*	.04	*	.83	.15	.15	.47	*	*	*	*	*	*	*	.10	*			
MAKALELE ELD 60-497	8.41	1.75	4.30	.03	.03	*	.28	.01	.01	.01	.01	*	*	.01	*	*	.01	.01	T	*	.17	.08	.06	.02	*	*	.41	.08	.09	.01	1.57	*	*			
OLINGA 332	8.41	1.75	4.30	.03	.03	*	.28	.01	.01	.01	.01	*	*	.01	*	*	.01	.01	T	*	.17	.08	.06	.02	*	*	.41	.08	.09	.01	1.57	*	*			
OWALU 296	.24	.24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
ISLAND OF MAUI (cont.)																																				
OWALU GULCH 377	6.50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6.50	*	
PAAKEA 350	32.39	4.64	4.92	.83	.08	.94	3.01	2.37	.92	.81	.19	.68	.69	1.38	.96	.30	.65	1.08	.57	.12	1.27	.36	.28	.32	.14	.38	1.45	1.74	1.31	.01	*	*	*			
PALA 405	3.16	.28	.65	.05	.14	.11	.09	.09	.07	T	.05	.21	.08	.06	.01	.07	.32	.10	.43	.23	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
PALEIEMULU 259.2	8.62	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
PAUKEA 490	7.69	1.17	1.44	.06	*	*	*	.96	.18	.08	.09	.12	*	1.27	*	.41	.22	.15	*	.48	.30	.16	*	*	.36	.18	.06	*	*	*	*	*	*			
ISLAND OF MAUI (cont.)																																				
POHAYEA BRIDGE 307.2	1.11	.09	.70	*	.04	.01	.15	.04	*	*	.06	*	*	*	*	*	*	*	*	*	.02	*	*	*	*	*	*	*	*	*	*	*	*	*		
POIPOI SPRINGS 267.2	1.77	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
POHOKAMOA 2 343	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
PUU KIKUI MAKAI 472	11.20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
PUUMENE 396	1.95	.10	.87	.01	*	*	*	.11	.09	*	.10	*	*	*	*	*	*	*	.01	.01	.49	.16	*	*	*	*	*	*	*	*	*	*	*	*		
ISLAND OF MAUI (cont.)																																				
SPRINGSVILLE 400.2	2.40	.15	.55	T	.06	.09	.05	.10	.10	T	.01	.13	.05	T	.03	*	*	*	.03	.10	.14	.07	.45	.32	*	*	*	*	*	*	*	*	3.85	*		
TWIN GATES 261.3	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
WAILUE 333	26.25	*	*	*	*	*	2.40	*	*																											

DAILY PRECIPITATION

Continued

HAWAII
APRIL 1969

Station	Total	Day of Month																																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
KAUMANA 88.1	35.69	3.15	3.90	1.28	.33	.12	.21	1.03	.25	.15	.05	.75	5.18	1.60	.90	1.01	.71	1.65	.77	.58	.69	.80	.88	.68	.11	.66	.01	.54	1.76	2.59	2.75						
KAWAIIU LOWEP 193	35.59	*	*	*	6.90	*	*	*	*	*	*	10.50	*	*	*	*	4.71	8.83	.22	.25	.46	.27	.23	.14	.11	1.60	.07	.12	T	T	T	T	T	T	T		
KEAUA 92	21.66	3.62	2.10	.65	.62	.09	.38	.74	.55	.12	.05	.30	2.71	.79	.43	.18	.47	.83	.22	.25	.46	.27	.23	.14	.11	1.60	.06	.43	1.38	1.36	.52						
KEALAKEUA 26.2	4.82	2.64	.01	.17	.01	T	*	*	*	*	*	.07	*	*	*	.02	.01	.21	.30	.60	.01	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KEHENA 181.2	13.60	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KIDLAKAA A C F 6	2.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KIPA 89.2	37.83	3.30	3.78	1.11	.42	.56	.50	1.42	.24	.13	.35	.85	3.40	1.70	1.79	.95	1.08	2.29	.93	.48	1.27	1.19	1.16	.98	.18	.56	*	.87	1.60	2.61	2.13						
KOHALA 179.1	8.05	.69	1.00	.08	*	*	*	1.24	.24	.14	.04	.05	*	1.35	.24	.05	.25	.04	*	1.02	.35	.24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KOHALA HAWILLI 176	9.49	.30	1.82	.19	*	*	*	1.26	.44	.21	.07	.17	*	1.62	.14	.13	.52	.06	*	.93	.27	.42	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KOHALA MISTION 175.1	9.34	.64	1.24	.11	.05	.78	.20	.46	.51	.09	.03	.10	.46	.73	.56	.18	.11	.45	.05	.02	.20	.50	.43	.35	T	.01	*	.48	.31	.14							
KOJAWE LOWFR 196	18.08	*	*	*	3.10	*	*	*	*	*	*	*	*	6.00	*	*	*	8.00	*	*	*	*	*	*	*	*	.98	*	*	*	*	*	*	*	*	*	
KONA AIRPORT 68.3	1.85	.80	.02	.05	.05	.05	.46	*	*	*	.30	*	*	6.00	.02	*	*	*	8.00	*	*	*	*	*	*	.98	T	*	*	*	*	*	.15	*	*		
KONA VILLAGE 93.8	.08	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KUKIHALE 222	23.40	.85	2.84	1.67	.27	1.55	.35	2.92	.92	.10	.43	.29	2.51	2.18	.12	.18	.25	.81	.57	.41	1.13	.41	.28	.85			.05	.01	1.00	.45							
KUKIHALE HIC 199	14.64	.41	2.15	.82	.15	1.08	.18	.81	.44	.25	.10	.28	1.24	1.51	.02	.06	.39	.48	.24	.48	.59	.34	.65	.30			.56	.07	1.72	.32							
KUKIHALE MILL 206	9.56	.53	1.40	.18	*	*	*	1.55	.26	.15	.13	.17	*	1.32	.05	.10	.45	.15	*	1.04	.23	.24	*	*	*	*	*	*	*	*	*	.72	.78	.14			
KULANI CAMP 79	15.85	1.05	1.85	.45	.20	.16	.25	.49	.17	.01	.05	.05	3.50	1.45	.45	.11	.15	.37	.43	.48	.32	.46	.48	.44	.44	.03	.09	*	.06	1.06	.52	.72					
KULANI QUUKA 76	4.50	.57	.37	*	*	*	.26	*	*	*	*	.89	.73	.12	.06	*	.20	.05	.19	.17	.09	.14	*	*	*	*	*	*	*	*	*	.05	*	.61			
KULANI SCHOOL SITE 78	14.03	*	*	*	4.23	*	*	*	*	*	*	.89	.73	.12	.06	*	.20	.05	.19	.17	.09	.14	*	*	*	*	*	*	*	*	*	.05	*	.61			
LANIHAU 68.2	2.90	.10	.06	.14	.25	*	*	*	*	*	*	.470	*	*	.07	.11	.15	.13	.26	.07					1.11	.11		1.80	.08		.22						
MAUNAKA 2	1.83	.22	T	T	*	*	*	.98	*	*	.02	*	*	.32	T	T	.04	*	.09	*	*	*	*	*	*	.09	*	*	*	.03	T	.04					
MAUNA KEA BEACH 98	.97	.59	T	.05	.01	*	*	*	.19	*	*	.22	.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.08					
MAUNA LOA SLOPE 085	2.01	*	*	.97	*	*	.14	*	.19	*	*	.22	.02	*	*	*	*	*	*	*	*	*	*	.30	*	*	*	*	*	*	*	.08					
MIDDLE HOLAUA 68.1	1.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.30	*	*	*	*	*	*	*	.08					
MIDDLE PEN 147.1	1.25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.30	*	*	*	*	*	*	*	.08					
MOAULA 18	1.25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.30	*	*	*	*	*	*	*	.08					
MOUNTAIN VIEW 91	32.43	2.61	3.37	.80	.73	.10	.46	.88	.45	.19	.23	.42	5.74	1.63	.97	.47	.64	1.05	.55	.54	.94	.55	.61	.64	.09	.33	.05	.36	1.17	3.83	2.03			1.25			
NAALEHU 14	1.03	.13	T	*	*	*	T	*	*	*	*	.01	T	.01	T	*	.64	1.05	.55	.54	.94	.55	.61	.64	.09	.33	.05	.36	1.17	3.83	2.03			1.25			
NARDWOOD 28	3.34	*	*	*	*	*	*	2.28	*	*	*	.14	*	.14	*	*	.80	*	*	*	.59	*	*	*	*	*	*	*	*	*	.33	*	*	*	*	*	
NAULU FOREST 38.6	2.90	*	*	*	*	*	*	.02	*	*	*	*	*	*	*	*	.80	*	*	*	.59	*	*	*	*	*	*	*	*	*	.33	*	*	*	*	*	
NIULI 179	10.51	1.02	1.21	.12	*	*	*	1.34	.44	.15	.07	.12	*	1.80	.58	.10	.53	.10	*	1.04	.18	.28	*	*	*	*	*	*	*	*	.76	.40	.27				
ODUALS 723	19.12	1.62	2.50	.98	.35	.58	.28	2.00	.94	.18	.05	.13	1.51	1.59	.25	.63	.29	.85	.40	.23	1.16	.85	.37	.36													
OPHIHALE 2 24.1	2.83	.02	T	.15	.01	*	*	.01	.14	T	.01	.60	.02	.22	.15	.34	.04	.28	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	
ORCHID LAND EST 91.5	20.53	*	*	*	*	*	*	8.92	*	*	*	*	*	3.27	*	*	5.07	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PAAHUAU 217	13.11	.61	3.82	.30	.19	.73	.27	1.12	.33	.11	.03	.23	1.18	1.27	.02	.03	.41	.20	.11	.28	.53	.15	.26	.14	*	*	3.27	*	.16	.20	.52	.72					
PAAULU 221	20.86	.52	2.68	1.63	.21	1.60	.26	2.87	.67	.07	.39	.72	2.35	1.55	.05	.07	.19	.79	.46	.33	.88	.33	.23	.79													
PAHALA 21	1.32	.18	.01	*	*	*	*	2.00	.94	.18	.05	.13	1.51	1.59	.25	.63	.29	.85	.40	.23	1.16	.85	.37	.36													
PAHOA 65	17.11	3.25	1.12	.21	.54	.08	.33	.64	.62	.27	.07	.24	1.93	.56	.30	.18	.40	.39	.46	.35	.63	.37	.14	.05	.28	.62	.02	.34	1.20	1.12	.40						
PAKAO 37	5.10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.59	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PAPAIAKU 144.1	17.94	2.33	1.16	.21	.40	.68	.06	1.18	.59	.15	.37	1.51	.07	.28	.79	.37	.72	.11	.23	.69	.75	.44	.37	.06	.40	T	.75	1.80	1.13	.34							
PAPAIAKU MAUKA 140.1	36.08	3.92	2.83	1.28	.54	.54	.44	2.35	.36	.23	.35	.58	2.59	1.69	1.54	1.54	.63	2.12	.43	.43	1.30	1.30	.85	.39	.15	.57	T	.68	2.31	2.27	1.87						
PEPEHEH MAWAI 144	19.35	3.65	.85	.18	.50	.01	.03	1.02	.32	.02	.07	.29	.53	.08	.48	.12	.47	.21	.03	.43	.55	.43	.45	.07	.10	.40	*	2.10	4.78	1.10	.68						
PIIHOHONA 89	87.60	*46.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
POMAKULA 107	.30	.15	*	.15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUAKO 95.1	.06	.06	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUU KIME 120	4.65	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUU LAU 102.1	.28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUU LEHUA 73	1.20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUU MALI 113	2.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUUKUMAU 167	9.15	.16	1.37	.28	*	*	*	1.32	.55	.11	.06	.17	*	1.47	.03	.21	.34	.11	*	1.17	.55	.54	.01	*	*	*	*	*	*	*	.17	.46	.07				
PUU OD 82	11.21	.75	1.40	.35	.13	.12	.19	.16	.14	.04	.02	.10	2.40	1.03	.26	.18	.54	.17	.31	.45	.36	.27	.26	.03	.09	.03	.02	.56	.35	.50							
PUU HAWAII 94.1	33.28	.08	T	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SAADLE ROAD 1 84	19.29	.32	3.05	.73	*	*	*	*	*	*	*	5.78	4.70	2.36	*	*	.07	.18	.15	*	.46	.57	.11	.04	*	*	*	*	*	*	.03	.65	.09				
SOUTH POINT CORRAL 3	.32	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
UMIKOA 118	19.29	.32	3.05	.73	*	*	*	*	*	*	*	5.78	4.70	2.36	*	*	.07	.18	.15	*	.46	.57	.11	.04	*	*	*	*	*	*	.03	.65	.09				
UPOLU POINT USCG 159.2	3.55																																				

DAILY TEMPERATURES

HAWAII
APRIL 1969

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ISLAND OF KAUAI																																	
KANALOHULUHU 1075	MAX	60	61	62	58	62	59	58	64	62	61	65	65	70	71	74	72	69	63	66	64	62	65	70	68	69	72	70	69	73	69		
	MIN	53	53	48	50	51	48	49	49	52	53	53	55	53	53	53	54	51	54	53	54	53	52	50	46	50	45	54	54	50	52		
KIIAUEA POINT 1133	MAX	74	73	72	74	75	74	74	75	75	75	76	74	77	77	78	76	75	78	79	78	76	77	76	79	84	82	82	80	77	78		
	MIN	62	68	59	65	66	64	66	66	66	69	66	68	71	67	67	68	61	62	62	66	70	64	68	62	70	69	69	66	67	67		
LIHUE WB AP 1020.1	MAX	74	71	75	74	73	73	71	74	75	74	76	76	77	77	78	77	77	77	77	76	78	79	80	79	82	82	81	81	81	83		
	MIN	65	64	66	64	63	62	62	64	64	66	68	66	69	69	69	69	67	67	67	67	67	68	69	70	67	65	65	70	73	73	71	
MAKAHUEA POINT 940.1	MAX	74	77	76	78	77	77	75	75	77	78	77	79	78	80	82	81	80	81	80	80	80	80	80	81	85	85	80	81	84	84		
	MIN	70	65	65	69	64	62	55	55	65	65	64	64	67	70	72	69	67	69	70	67	70	67	67	69	64	68	63	68	70	70		
MANA 1026	MAX	82	83	82	83	81	81	80	79	81	80	82	87	85	86	86	83	87	86	85	85	85	84	84	85	82	82	84	83	82	84	84	
	MIN	61	60	60	61	60	69	58	58	61	64	62	63	63	62	62	63	62	66	64	62	62	62	58	64	64	64	63	65	65	65		
NIU RIDGE 1035	MAX	75	78	75	77	76	77	79	78	77	77	78	78	79	79	81	80	80	79	78	78	78	78	78	78	82	80	79	78	80	80		
	MIN	57	58	56	58	55	58	60	60	55	62	63	60	61	60	61	60	60	59	58	59	58	59	60	55	57	58	58	60	59	60		
WAIHI LOWER 1054	MAX	72	72	72	74	72	72	72	73	73	73	78	75	77	77	78	75	76	75	75	78	75	78	78	79	79	78	80	78	78	78		
	MIN	64	60	58	58	64	58	58	61	60	62	62	64	65	67	65	64	65	63	64	64	62	63	64	62	63	62	62	60	62	62		
ISLAND OF OAHU																																	
FNA PLANTATION 741	MAX	77	75	77	78	79	77	78	78	80	78	81	81	82	83	83	81	81	81	80	80	80	79	82	82	85	83	82	84	83	82		
	MIN	66	66	65	64	60	63	62	62	62	66	67	68	67	68	65	68	70	68	67	66	67	67	63	62	66	66	66	65	65	66		
HONOLULU WBFC 703	MAX	78	76	78	79	81	79	80	80	81	78	78	82	83	85	84	84	84	82	82	81	81	83	83	83	83	83	86	85	85	84		
	MIN	67	66	66	66	63	65	64	66	65	68	68	69	69	70	70	69	68	68	66	66	68	68	67	64	70	68	68	71	71	70		
HONOLULU SUBSTA 704	MAX	74	73	74	76	75	74	74	74	77	76	78	76	78	79	79	78	78	79	77	77	76	76	78	82	81	79	80	80	79	78		
	MIN	67	67	68	67	67	67	66	66	66	70	69	68	68	68	69	69	67	67	66	66	67	69	68	66	70	71	72	72	70	70		
KAHUKU 912	MAX	77	75	74	76	77	76	76	77	76	78	75	78	79	80	80	79	79	79	78	78	78	79	79	78	81	82	80	80	80	80		
	MIN	66	65	68	66	65	66	65	67	66	68	69	68	69	70	70	68	68	69	67	67	70	70	70	63	62	62	62	62	61	61		
KANEHE MAUKA 781	MAX	75	73	72	74	75	76	73	76	75	77	74	77	78	72	78	77	79	80	78	77	76	75	75	78	79	81	78	75	79	77		
	MIN	68	69	65	66	63	64	64	65	62	66	68	67	67	68	68	67	69	66	64	68	69	66	67	65	67	67	66	65	69	68		
LUALUALEI 804	MAX	80	79	77	79	80	80	79	81	80	81	78	82	82	83	85	84	83	83	81	81	82	80	80	83	84	86	84	84	86	86		
	MIN	65	69	68	68	68	68	66	68	66	69	69	72	72	69	71	72	72	68	70	69	69	69	65	67	68	65	67	71	70	70		
MAKAPUU POINT 724	MAX	73	72	71	74	75	80	81	71	81	80	72	74	80	74	75	76	81	76	75	82	74	74	76	85	81	76	83	76	81			
	MIN	68	67	63	64	63	65	66	62	65	66	65	68	64	65	62	58	65	60	62	70	60	57	68	63	72	70	68	71	63	67		
OPEAULA 870	MAX	71	70	70	70	71	76	75	73	73	73	73	74	74	76	75	79	73	77	71	74	73	71	69	77	81	76	82	82	82	78		
	MIN	63	62	61	62	56	58	59	61	60	60	62	65	64	65	65	65	64	64	63	62	62	64	60	60	60	59	61	59	62	64		
PRI WAIHAWA 820.2	MAX	78	75	74	76	76	77	76	77	79	80	76	76	79	81	81	83	81	81	81	82	77	75	76	81	83	83	82	84	84	83		
	MIN	63	63	63	60	57	50	59	61	60	61	64	63	64	65	66	67	67	65	62	61	62	63	58	58	61	60	60	62	64	64		
WAIALUA 847	MAX	76	74	74	76	76	76	75	76	76	80	77	78	78	80	82	82	80	82	82	78	77	75	82	82	82	82	81	82	82	80		
	MIN	65	65	64	65	62	57	61	60	59	60	65	66	67	68	63	65	69	67	68	66	66	65	57	59	62	62	61	61	63	61		
WAIKIKI 717.2	MAX	81	77	76	78	71	80	79	79	78	80	79	81	81	81	84	83	82	82	82	86	80	80	81	82	85	87	86	83	85	83		
	MIN	68	66	69	67	64	67	67	68	67	67	70	70	69	72	72	71	69	68	68	67	68	69	62	67	69	69	72	72	70			
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX	77	72	71	75	73	76	74	75	73	77	75	74	74	78	80	79	77	79	78	78	77	75	74	79	83	84	77	81	83	78		
	MIN	68	66	64	67	65	66	64	67	68	67	68	66	69	71	68	70	69	69	68	68	68	67	63	62	68	69	70	70	72	69		
ISLAND OF LANAI																																	
LANAI CITY 672	MAX	74	71	72	71	71	71	71	68	69	73	72	72	74	73	75	75	75	74	71	75	74	74	76	77	79	72	77	77	75			
	MIN	62	60	62	62	62	62	58	60	62	60	61	61	64	65	64	64	62	62	59	63	62	63	61	59	65	64	65	59	64	63		
ISLAND OF MAUI																																	
HAIEAKALA PS 338	MAX	53	52	60	62	61	58	57	59	69	65	60	55	55	64	65	67	68	67	63	59	57	61	58	60	62	62	64	64	64	59		
	MIN	45	45	43	40	35	37	36	40	47	42	45	46	44	49	52	50	47	45	42	44	40	41	38	39	44	45	46	41	42	40		
HAIEAKALA SUMMIT 338.4	MAX	44	45	49	54	53	54	47	56	57	56	56	56	54	55	56	56	57	54	55	55	56	57	54	55	55	56	59	58	57	54		
	MIN	34	36	32	35	31	34	32	32	35	33	32	33	32	35	35	36	35	38	36	35	38	36	34	38	35	38	38	38	37	35		
HANA AIRPORT 355	MAX	76	74	77	78	75	75	73	75	75	78	78	76	79	78	82	81	80	80	80	78	78	80	80	80	80	81	80	80	80	80		
	MIN	65	65	68	65	67	63	65	65	64	67	67	68	69	68	68	68	69	68	66	66	65	69	64	69	67	67	69	70	70	69		
KAANAPALI AIRPORT	MAX	78	76	76	77	77	79	76	77	77	80	78	76	81	83	82	82	82	82	80	80	81	80	77	83	84	85	81	85	83			
	MIN	67	66	66	65	61	65	64	62	62	65	69	68	69	70	66	71	70	69	69	67	67	67	63	62	68	67	68	68	68	68		
KAHULUI WB AP 398	MAX	73	76	79	79	78	76	78	78	81	78	78	81	83	84	84	82	84	82	82	82	83	80	84	86	85	82	85	83	85	83		
	MIN	65	66	67	65	64	64	63	65	59	62	68	68	68	64	64	60	69	70	68	68	67	68	65	65	65	63	65	67	70	67		
KATLUA 446	MAX	69	70	68	70	69	71	67	69	69	74	74</																					

DAILY TEMPERATURES

Continued

HAWAII
APRIL 1969

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
WAILUKU 392	MAX	76	72	76	78	78	78	75	79	76	80	78	80	78	80	81	81	81	81	80	79	80	78	81	85	83	81	81	79	80	79.1 67.4		
	MIN	66	66	68	66	65	65	66	65	65	67	67	67	68	70	69	70	70	70	67	66	67	66	64	67	69	70	69	71	70			
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	75	72	71	74	75	75	75	73	72	74	78	75	73	76	77	79	76	79	78	79	75	77	71	74	76	80	76	76	77	79	75.6 61.8	
	MIN	63	62	60	59	59	60	60	59	58	60	62	63	62	64	62	63	62	63	60	64	61	61	64	68	61	60	64	64	65	60		
HAWAII VOLCONS NP HO 54	MAX	60	61	58	60	58	63	56	61	59	65	62	65	60	68	61	67	64	66	62	59	61	64	59	64	68	69	67	64	67	67	62.8 52.1	
	MIN	54	54	53	49	50	51	51	49	49	47	54	54	54	55	52	53	52	52	53	49	52	49	50	51	53	57	56	55	52			
HILO WA AIRPORT 87	MAX	77	79	73	78	78	78	76	75	79	80	79	81	81	79	81	80	81	80	80	79	80	79	81	78	82	81	76	81	81	81	79.1 66.4	
	MIN	67	69	67	68	64	63	66	65	62	62	68	69	70	68	65	68	69	66	66	67	66	66	64	66	65	66	68	68	67			
KAINALIU 73.2	MAX	76	72	76	75	76	76	80	77	72	71	77	78	80	78	79	75	79	77	78	74	75	76	76	74	77	80	75	80	79	76	76.5 61.7	
	MIN	62	61	64	63	60	59	58	60	59	60	63	62	60	61	62	63	65	64	61	62	61	62	60	61	63	63	64	62	63			
KAMUELA 192.2	MAX	70	68	70	68	69	67	66	66	65	69	70	70	65	70	68	70	70	68	70	70	69	70	70	70	75	78	74	70	73	72	69.5 55.0	
	MIN	57	54	55	54	54	55	54	54	53	53	55	56	55	56	57	56	56	55	54	55	56	55	55	52	50	53	58	58	58	57		
KAMUELA AIRPORT 191	MAX	70	68	66	66	68	69	67	62	62	66	69	68	68	70	68	68	67	70	71	67	69	67	70	74	78	70	74	72	69.0 54.6			
	MIN	50	58	57	52	52	55	58	58	58	58	59	58	68	70	58	51	52	52	58	55	55	53	51	53	48	56	61	63		53		
KEAAU 92	MAX	74	75	77	79	79	79	79	79	72	79	79	79	79	81	79	83	78	81	81	81	81	80	78	81	75	82	82	82	72	81	78.9 62.7	
	MIN	64	65	64	60	60	60	60	62	60	61	61	61	61	66	64	66	66	63	63	63	63	64	62	61	62	63	63	63	66	65		
KEALAKEKUA 26.2	MAX	76	72	77	77	76	76	79	76	73	76	77	78	79	78	79	74	79	76	78	75	78	75	76	79	75	79	80	76	77	76.7 62.5		
	MIN	62	62	64	62	61	60	59	61	60	62	64	63	61	62	64	63	65	65	62	62	61	63	62	62	63	64	65	64	64			
KOHALA MISSION 175.1	MAX	73	71	73	73	71	75	73	73	72	76	77	75	73	76	77	76	75	71	76	75	74	75	71	77	77	80	79	77	76	77	74.8 64.2	
	MIN	64	64	63	63	62	63	62	62	62	64	65	66	65	66	66	66	65	66	64	64	64	64	65	62	67	65	62	67	67	66		
KONA AIRPORT 68.3	MAX	80	78	80	80	79	81	83	80	76	80	80	82	84	83	82	80	82	80	83	81	79	82	79	78	80	82	81	81	81	82	80.6 65.3	
	MIN	63	67	66	68	66	64	64	66	62	62	62	61	67	67	67	66	66	66	62	68	65	66	64	64	64	68	68	68	68			
KULANI CAMP 79	MAX	61	60	58	56	58	58	56	58	58	60	60	60	64	60	64	62	62	62	58	58	60	56	58	64	65	66	62	62	62	60.2 45.8		
	MIN	42	42	38	42	45	45	41	38	44	49	50	50	44	44	49	50	48	48	48	48	48	48	42	43	46	49	53	49	48			
MAUNA KEA BEACH 98	MAX	82	83	85	86	85	86	89	88	86	83	83	90	91	87	84	85	87	85	88	86	89	86	88	83	84	84	82	84	86	85.7 70.4		
	MIN	70	73	71	68	66	67	66	69	69	70	71	74	77	72	69	72	71	72	69	71	70	70	70	69	69	71	72	71	72			
MAUNA LOA SLOPE 085	MAX	45	45	45	48	51	47	50	57	60	54	48	46	51	53	57	54	56	56	54	54	54	56	53	54	58	56	52	52	48	48	52.1 34.7	
	MIN	30	34	35	35	35	30	29	36	41	36	33	34	34	35	36	36	31	35	37	33	33	32	33	39	41	41	37	37	30	34		
MOUNTAIN VIEW 91	MAX	68	68	69	66	67	70	70	67	68	73	70	69	70	78	68	76	71	73	73	72	72	71	68	74	69	78	71	70	72	73	70.8 59.0	
	MIN	60	61	60	57	57	58	58	58	57	55	55	60	62	64	60	60	61	60	59	60	58	58	57	57	56	56	64	62	61	59		
NAALEHU 14	MAX	78	74	78	78	78	79	79	77	75	78	78	78	80	80	76	80	79	78	80	79	78	78	78	78	78	78	79	79	78	79	78.1 65.5	
	MIN	65	68	67	67	67	61	61	59	63	64	68	68	68	68	67	66	64	66	66	64	64	66	63	66	66	68	68	68	65			
OOKALA 223	MAX	75	72	72	71	75	77	77	70	70	76	77	78	73	78	75	78	76	78	79	77	74	77	74	78	76	80	80	79	75	78	75.8 63.7	
	MIN	64	64	63	61	62	63	61	60	61	64	67	65	65	67	66	66	65	66	63	63	64	63	63	65	56	62	65	65	67	65		
OPIHIHALE 2 24.1	MAX	77	78	75	78	78	80	72	76	74	76	78	78	80	79	78	80	76	79	73	76	75	73	77	77	80	77	78	80	79	73	77.0 60.2	
	MIN	60	60	64	60	58	56	57	56	56	60	60	59	62	62	61	62	63	61	59	58	60	60	59	59	61	63	64	63	63	59		
PAHALA 21	MAX	78	74	78	76	79	77	79	78	76	76	76	82	84	75	80	81	81	80	78	80	81	79	77	77	81	78	76	79	76	78.5 61.3		
	MIN	62	63	65	61	57	58	59	58	58	60	61	65	64	61	61	63	61	61	63	59	59	60	61	60	60	65	66	63	61			
UPOLU POINT USCG 159.2	MAX	74	73	78	77	77	77	78	78	74	77	75	79	77	79	80	80	80	81	80	78	79	78	76	79	80	82	82	82	77	78.3 65.8		
	MIN	65	66	64	65	64	67	64	64	64	65	66	67	67	69	67	68	65	70	65	67	69	65	63	67	66	61	69	68	61		67	

EVAPORATION AND WIND

Station		Day of Month																															Total Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																	
ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP	.13	.17	.17	.28	.22	.22	.30	.28	.27	.25	.22	.19	.29	.27	.30	.34	.22	.21	.36	.36	.31	.31	.33	.37	.45	.25	.14	.32	.39	.32	8.24 5638 83.0 64.5	
	WIND	269	246	201	213	177	131	203	230	180	144	191	225	218	176	158	194	223	210	245	234	217	231	200	143	82	69	115	155	159	199		
	MIN	73	78	72	78	76	80	78	77	79	82	79	82	84	86	88	88	84	84	84	85	82	84	84	88	92	87	88	90	91	87		
* * *																																	
ISLAND OF OAHU																																	
HONOLULU DRSERV 702.2	EVAP	.04	.23	.19	.21	.20	.30	.19	.30	.30	.17	.13	.30	.30	.08	.32	.30	.35	.33	.35	.30	.29	.29	.32	.27	.30	.28	.16	.16	.28	.26	7.50 1393 87.3 65.2	
	WIND	53	60	42	45	34	36	51	55	44	27	32	61	61	36	41	52	65	64	73	62	61	66	54	34	32	23	23	28	31	47		
	MIN	66	65	64	63	62	63	60	62	63	57	65	65	66	68	67	68	67	66	65	65	65	64	63	64	64	90	95	89	85	88		91	67

See Reference Notes Following Station Index

STATION INDEX

HAWAII
APRIL 1969

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER
								TEMP	PRECIP.	EVAP.	SPECIAL										TEMP	PRECIP.	EVAP.	SPECIAL	
ISLAND OF HAWAII																									
LANAI SCHOOL SITE 78	A 5021	02 S HILO		2	19 35	155 20	5735	W				ST DEPT OF SOCIAL SER	PIU LAU 102+1	A 8452	04 HAWAII		5	19 34	155 36	7440	W			FATE DIV OF FISH & GAME	
ALAMULO FLD OFF 191+1	5260	01 S KOHALA		1	20 01	155 41	2615	W				STATE DEPT OF L & N RES	PIU LEHUA 73	A 8463	04 N KONA		4	19 34	155 49	4980	MO			GREENWELL RANCH	
ANIHOU 68+2	5330	04 N KONA		4	19 29	155 58	1500	BA				KUNA EXPERIMENT STATION	PIU MAUI 113	A 8515	01 HAWAII		1	19 55	155 26	6760	MO			UKAIKAI RANCH CO	
AVA TREE PARK 66+1	5440	02 PUNA		2	19 09	154 54	650	BA				STATE DIV OF PARKS	POKUNUHA 167	A 8548	01 N KOHALA		1	20 12	155 40	1800	7A			HANALEI BETH CHURCH	
BAKA 2	6134	03 KAU		3	19 07	155 50	1760	BA				STATE DIVISION OF PARKS	PUU OO 82	A 8550	02 S HILO		2	19 44	155 23	6340	2A			W. H. SHIPMAN, LTD	
BAY AREA BEACH 98	6180	04 S KOHALA		4	19 55	155 50	1010	BA				MAUNA KEA BEACH HOTEL	PUU MAKAHA 74+1	A 8555	04 N KONA		5	19 47	155 41	2570	7A			BILLINGHAM RANCH INC	
BAY AREA SLOPE OBS 39	6198	05 HAWAII		5	19 32	155 35	1114+ MID MIL	W				MAUNA LOA OBSERVATORY	SAGLE ROAD 1 B4	A 8590	02 S HILO		2	19 42	155 41	2340	4M			BURO OF WATER SUPPLY	
BIDDLE HULLUA 68+1	6268	04 N KONA		4	19 37	155 58	475	BA				KUNA EXPERIMENT STA	SOUTH POINT CORRAL 3	A 8675	13 KAU		3	19 57	155 41	400	4A			HUTCHINSON RANCH	
BIDDLE PEN 147+1	6270	01 N KOHALA		1	20 04	155 20	1380	VAR				KANOA BRANCH	S POINT TRACKING STA	A 8679	03 KAU		3	18 57	155 41	305	7A			FEDERAL LEE TRIC CORP	
CAJALA 18	A 6407	03 KAU		3	19 11	155 30	600	MO				HAWAIIAN RANCH CO	UMI AOA 118	A 8780	01 HAWAII		1	19 59	155 23	2420	7A			UKAIKAI RANCH CO	
CAJALA 22+1	6552	02 PUNA		2	19 33	155 07	1510	6A 6A				PUNA SUGAR CO	UPOLU POINT UNCG 159+2	A 8830	01 N KOHALA		1	20 15	155 43	611	BA 6A			COAST & GEAR	
CAJALA 23+1	6588	03 KAU		3	19 04	155 35	673	BA 8A				HUTCHINSON SUGAR CO	WAIKAE 510 88+2	A 9025	02 S HILO		2	19 46	155 48	1050	7A			SHINCHI RANCHERS	
CAJALA 24+1	6697	04 S KONA		4	19 28	155 55	395	7A				KUNA EXPERIMENT STA	WAIKANOANUOLA 178+6	A 9350	01 N KOHALA		1	21 08	155 47	3830				KANOA RANCH	
CAJALA 25+1	6731	02 PUNA		2	19 19	155 08	1400	VAR				HAWAII VOLCANOES NAT PE													
CAJALA 26+1	A 6806	01 N KOHALA		1	20 14	155 45	75	6A				KUHULA SUGAR CO													
CAJALA 27+1	7131	02 N HILO		2	20 01	155 17	430	7A				LAUPAHELE SUGAR CO													
CAJALA 28+1	7166	04 S KONA		4	19 16	155 53	1270	7A 7A				MISS C LEONARD													
CAJALA 29+1	A 7185	02 PUNA		2	19 34	155 00	945	VAR				BURO OF WATER SUPPLY													
CAJALA 30+1	7204	01 HAWAII		1	20 05	155 24	915	7A				PAKAIHUI SUGAR CO													
CAJALA 31+1	7312	01 HAWAII		1	20 03	155 22	800	7A				HAWAII HILL CO													
CAJALA 32+1	7421	03 KAU		3	19 12	155 29	970	BA 6A				HAWAIIAN AGR CO													
CAJALA 33+1	7457	02 PUNA		2	19 30	154 57	670	6A				PUNA SUGAR COMPANY													
CAJALA 34+1	A 7643	03 KAU		3	19 22	155 18	5000	MO				HAWAIIAN RANCH CO, INC.													
CAJALA 35+1	7711	01 HILO		1	19 47	155 06	200	7A				MAUNA KEA SUGAR CO.													
CAJALA 36+1	7721	02 HILO		2	19 47	155 08	1270	7A				MAUNA KEA SUGAR CO.													
CAJALA 37+1	8000	02 HILO		2	19 51	155 05	100	7A				LAUPAHELE SUGAR CO													
CAJALA 38+1	A 8051	02 S HILO		2	19 44	155 10	1730	MO				MAUNA KEA SUGAR CO.													
CAJALA 39+1	A 8063	02 HAWAII		2	19 45	155 22	8511	VAR				STATE DIV OF FORESTRY													
CAJALA 40+1	A 8186	05 HAWAII		5	19 59	155 40	5	6A				STATE DIVISION OF PARKS													
CAJALA 41+1	A 8393	01 HAWAII		1	19 54	155 24	7750	MO				UKAIKAI RANCH CO													

DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN 5-NORTH-CENTRAL MOLOKAI: 1-INO INTRA-ISLAND DIVISIONS LANAI: 1-INO INTRA-ISLAND DIVISIONS MAUI: 1-NORTHEASTERN 2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

- Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3650, Honolulu, Hawaii, or to any Weather Bureau Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII".
- DIMENSIONAL UNITS** Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in F, precipitation and evaporation in inches, and wind movement in miles. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.
- OBSERVATION TIME** Data in the "Monthly Extremes", "Daily Precipitation" table, "Daily Temperature" table, and "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.
- EVAPORATION** Is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 8-8 inches above the pan.
- NORMALS** for all stations are climatological standard normals based on the period 1931-1960.
- STATION NAMES** Hawaii state key numbers are included following station names in the several tables.
- DELAYED DATA AND CORRECTIONS** will be carried only in the June and December issues of this bulletin.
- INTERPOLATED VALUES** for monthly precipitation totals may be found in the annual issue of this publication.
- IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:**
 - No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.
 - Mo record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry.
 - + And also on an earlier date or dates.
 - ** Highest observed one minute windspeed. This station is not equipped with an instrument to measure fastest mile data.
 - * Amount included in following measurement, time distribution unknown.
- A The letter "A" shown following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index", indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gages are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.
- B Adjusted to a full month.
- J "Supplemental Data" table.
- W One or more days of record missing, if average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.
- R Amounts from recording gage.
- T Trace, an amount too small to measure.
- V Includes total for previous month.
- IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:**
 - AR Observation made after rain.
 - C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.
 - MO Gage read once monthly, usually on the last day.
 - OC Gage readings at periods varying from a few weeks to several months.
 - S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.
 - SS Observation time is near sunset.
 - VAR Observation time is variable.
 - W1 Gage read weekly or irregularly only.
 - W2 Gage read weekly and last day of month.
 - * Thermometers are generally exposed in a shelter located a few feet above sod-covered ground, however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

Subscription Price: 20 cents per copy, monthly and annual, \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

CLIMATOLOGICAL DATA

HAWAII
MAY 1969

Continued

Station	Temperature										Precipitation											
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
									90° or Above	31° or Below	37° or Below	40° or Below					Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
KEAAU 92	81.9	63.5	72.7	.2	85	22+	59	12+	0	0	0	0	9.54	-.34	2.93	4	.0	0	0	15	5	3
KEALAKEKUA 26.2	77.5	63.0	70.3		82	15	59	10+	0	0	0	0	6.00		1.46	12	.0	0	0	9	5	2
KONA AIRPORT 68.3	82.3	66.4	74.4		86	15	62	6	0	0	0	0	2.14		1.25	7	.0	0	0	4	2	1
KUKUIHAELE HIC 199													4.48	-2.23	.84	16	.0	0	0	9	4	0
KULANI CAMP 79	64.3M	46.6M	55.5M		72	13	41	12+	0	0	0	0	2.54		.41	3	.0	0	0	0	0	0
MAUNA KEA BEACH 98	84.7	70.1	77.4		90	16	64	8	1	0	0	0	1.22		.90	6	.0	0	0	2	1	0
PAHALA 21	78.9	62.5	70.7	-.3	83	14	58	7+	0	0	0	0	2.42	.10	.34	20+	.0	0	0	11	0	0
POHAKULOA 107													1.20				.0	0	0			
PUAKO 95.1													1.32		.89	7	.0	0	0	2	1	0
PUU WAAHAA 94.1													1.04	-1.69	.27	5	.0	0	0			
UMIKOA 118													2.00	-3.06			.0	0	0			
WAIKAEA SCO 88.2													12.05		5.04	4	.0	0	0	17	5	2
ISLAND			69.1										4.06				.0					

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 91° AT KAHULUI WB AP 398, MAUI, ON THE 31+

LOWEST TEMPERATURE: 29° AT MAUNA LOA SLOPE OBS, HAWAII, ON THE 8+

GREATEST TOTAL PRECIPITATION: 32.94 AT KAHANA 883, OAHU

LEAST TOTAL PRECIPITATION: .00 AT 9 STATIONS

GREATEST ONE-DAY PRECIPITATION: 6.80 AT PRINCEVILLE RANCH 1117, KAUAI, ON THE 12TH

See Reference Notes Following Station Index

DAILY PRECIPITATION

Continued

HAWAII
MAY 1969

Station	Feet	Day of Month																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
KAUHANA 88.1	10.78	.38	.41	.70	4.25	.48	.36	.05		1.17		.05	.16	.12	.08	.06	1.24	.28	.05	.01	.21		.23	.09	.26	.03	.21	.55	.02		.27	.23			
KAWAINUI LOWER 193	14.73		6.40																																
KEAAU 92	9.54	.11	.63	1.09	2.93	.71	.26	.02						.21	.23	.30	1.98								3.70						.02	2.48			
KEALAKEUA 20.2	6.00	.80			T	.70	.28		.40	.09	T	.28				.30	1.42	.30	.02					.06	.06	.19	.02	.20	.46		.08				
KEHENA 181.2	4.67											1.46				1.10	.16	.09													.01		4.67		
KIDLAKAA A & F 6	3.70																															3.70			
KIPA 89.2	12.83	.25	.75	1.15	4.80	.52	1.44							.25	.15	.01															.06	.25	.19		
KOHALA 179.1	2.79	.01	.23			.92								.02	.50	.25			.04	.07			.32	.11	.25	.05	.25	.79							
KOHALA MAULILI 176	3.12	.01	.17			1.10								.05	.26	.31			.11	.01										.07	.28	.01			
KOHALA MISSION 175.1	3.16	.01	.35	.26	.76	T						.01	T	.06	.41	.27	.06												.08	.07	.57	.25	T		
KOIAWE LOWER 196	7.24		3.80														1.10																		
KONA AIRPORT 68.3	2.14						.55	1.25	.05	.29																						1.52			
KONA VILLAGE 93.8	2.30						.12	.110									.10																T		
KUKIAIU 222	6.06	.05	.08	.32	1.68	.31						.15	.26	.35	.20	1.40	.19	T		.10	.14		.12	.10	.27	.06	.28	T							
KUKUIHAELE HIC 199	4.48			.20	.82								.52	.62	.28	.84	.08	T		.04				.30	.32					.38					
KUKUIHAELE MILL 206	2.57		.11			.51							.12	.53	.25	.40			.05											.46					
KULANI CAMP 79	2.54	.15	.16	.41		.27	.30	.06	.01	.02	.14	.04		.06	.14	.28	.13				.08	.08		.07	.04			.46							
KULANI MAUKA 76	1.15	.03	.10	.77	.23	.02																													
KULANI SCHOOL SITE 78	7.25			2.80								3.15																							
LANIHAU 68.2	4.69	.12		.13	.06	.75	.91	.28		.02	1.23						.04		.78									.12					.40		
MAUKA 2	2.04	.04	.12					.58	.04	.16			.11	.06	.19	T				.72	T	.01							.01						
MAUNA KEA BEACH 98	1.22				.02		.90	.04	.17																										
MAUNA LOA SLOPE 085	.65	.12	.17	.02	.28																													.09	
MIDDLE HOUAUA 68.1	2.85	.62				.57		.54			.06						.60																		
MIDDLE PEN 147.1	A .83					.63		.20																											
MOAULA 18	A 1.73																																		
MOUNTAIN VIEW 91	13.45	.21	.20	1.78	4.85	1.18	1.05	.06	.02	.03		.16	.03	.02	.48	.06	1.02	.43	.03	.05	.19		.07	.12	.28	.03	.29	.30	.05	.05	.31	1.73			
NAALEHU 14	A 2.52	.01	.46	.08	.63	.06	.05	T	.28	.02			.01	T	.08	.01																			
NAPDOPPO 28	A 3.37					1.09																													
NAULU FOREST 38.6	A 6.48				2.95	.46		.32											1.75	.20															
NIHULI 179	A 3.38	.02	.38																																
OOKALA 223	A 8.26	.03	2.65		.43	.01	.01						.22	.26	.49	.42	.38			.08															
OPIHIKALE 2 24.1	A 2.38	.12	T	.01				T	.36	.07	T		.10	T	.08	.63	.31	.21	.01	.02	.17	.02													
ORCHID LAND EST 91.5	A 11.91		4.71													2.30																			
PAAUHAW 217	A 4.42	.01	.04	.09	1.17	.01						.13	.41		.61	.38	.58	.13		.02	.34		.07	.01	.21		.21				.81	.04	T		
PAAUULD 221	A 4.91	.02	.04	.16	1.14							.10	.30		.44	.31	1.13	.09	T	.14	.21		.17	.05	.26	.09	.26	T							
PAMALA 21	A 2.42		.16		.16	.02	.09	.16	.34	.01		.12	.04	.15	.20	.22																			
PANOLA 65	A 11.72	.21	.85	1.18	3.17	.77	.33					.13	.02		1.45	.75	.91	.08		.01	.06		.10	.14	.34	.04	.35	.35	.03	.12	.24	.09			
PAKAK 37	A 5.60																																		
PAPAIOU 144.1	A 7.11	.11	.61	.65	2.55	.37	.10					.05	.07	T		1.00	.16	.01	.06	.09			.14	.17	.08	T	.38	.37	.01	T	.09	T			
PAPAIOU MAUKA 140.1	12.65	.17	1.16	.54	3.68	.55	.38	.02				.14	.67	.01	.14	2.08	.27	.05	.15	T			.21	.22	.72	.01	.42	.69		.08	.23	.06			
PEPEKEK MAKAI 144	A 7.12	.02	1.12	.94	1.13	.32	.23					.29	.08	.01	.34	.41	.74	.10		.03			.08	.26	.03										
PILIHONUA 89	A 14.60																																		
POMAKULDA 107	A 1.20		.65	.31	.24																														
PUAKO 93.1	A 1.32					.38	.89	.03																											
PUU KINE 120	A 1.68																																		
PUU LAAU 102.1	A 1.52																																		1.68
PUU LEHUA 73	A 2.00																																		1.52
PUU MALI 113	A .62																																		2.00
PUUDUNAU 107	A 2.27	.01	.09			.71							.06		.05	.16	.13			.02	.01			.08										.62	
PUU OO 82	A -																																		
PUU WAANAA 94.1	A 1.04		.17		.08	.27	.18	.04					.10																						
SADDLE ROAD 1 84	A 15.25		7.30							7.00							.65							.10								.17			
SOUTH POINT CORRAL 3	A 1.35																																		
UNIKOA 118	A 2.00	.03	.10			.65							.19		.02		.77		.02	.02	.10		.05	.02										1.35	
UPOLU POINT USCC 159.2	1.37		.23	.11	.32	.02							.09		.01	.23																			
WATAKEA SCD 86.2	12.05	.20	.86	.74	5.04	.67	.12						.25	.11	.10	.07	.01	1.51	.20	.03	.24		.18	.09	.29	.02	.20	.49	.03	.07	.34	.09			

SUPPLEMENTAL DATA

Station	Wind (Speed - m.p.h.)							Relative humidity averages percent				Number of days with precipitation							Percent of possible sunshine	Average sky cover sunrise to sunset
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	150TH MERIDIAN TIME				Trace	01-09	10-49	50-99	1.00-199	2.00 and over	Total			
							2 AM	8 AM	2 PM	8 PM										
LIHUE, KAUAI, WB AIRPORT	5	7.0	10.2	21	E	03+	82	78	70	77	6	11	4	2	0	0	23	53	6.4	
HONOLULU, OAHU, WBFC	5	6.7	11.2	27	NE	03	80	70	58	73	5	3	1	1	0	0	10	73	4.8	
KAHULUI, MAUI, WB AIRPORT	4	10.0	11.1	31	E	03	85	73	57	76	3	8	0	0	0	0	11	81	4.5	
HILO, HAWAII, WB AIRPORT	17	0.6	7.4	22	E	11	91	79	73	84	3	12	7	1	2	1	26	44	7.3	

DAILY TEMPERATURES

HAWAII
MAY 1969

Station	Day of Month																															Average			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
* * *																																			
ISLAND OF KAUAI																																			
KANALOHULUHULU 1075	MAX MIN	69 54	67 54	67 54	68 53	72 45	68 43	70 50	64 52	65 52	67 55	67 56	65 56	67 53	68 54	70 54	63 50	70 51	69 49	68 45	73 44	73 46	71 47	74 54	71 60	72 55	74 56	74 49	74 48	72 50	73 55	70 50	69.5 51.4		
KILAUEA POINT 1133	MAX MIN	81 67	78 65	80 64	79 64	79 68	78 67	83 68	82 67	86 66	75 66	76 69	80 66	76 66	80 69	78 68	80 66	78 69	80 62	79 66	81 62	81 66	82 68	80 70	76 69	76 72	80 70	80 71	85 71	86 72	78 74	84 70	79.5 68.2		
LIMUFB WB AP 1020.1	MAX MIN	80 68	80 71	81 70	81 72	82 69	82 66	81 67	81 64	78 67	80 69	81 70	81 70	81 71	80 71	79 70	80 68	77 66	81 66	81 66	81 66	82 68	83 66	82 66	82 66	82 66	82 66	83 67	84 69	85 70	84 71	84 71	81.2 69.5		
MAKAHUEA POINT 940.1	MAX MIN	84 67	85 69	84 70	84 68	86 67	87 67	89 69	90 67	86 66	86 65	86 65	83 66	87 66	83 67	83 67	83 66	79 66	81 63	84 65	85 65	85 65	85 66	85 66	85 66	85 66	85 66	85 66	87 69	88 70	88 74	86 70	84.9 68.3		
HANA 1026	MAX MIN	86 62	83 60	85 62	86 61	85 61	86 63	88 65	83 63	83 63	83 64	83 65	86 66	82 63	87 62	82 62	84 61	85 63	84 64	83 65	85 65	85 65	85 66	85 66	88 67	88 68	87 68	87 67	88 67	88 67	88 69	89 70	85.4 64.5		
NIU RIDGE 1035	MAX MIN	80 58	79 58	78 56	79 58	79 58	78 58	78 59	79 59	78 59	78 59	78 60	78 60	75 59	80 60	78 60	76 60	78 60	79 60	80 60	80 60	81 60	81 60	79 60	79 60	80 60	81 60	81 60	82 60	81 63	82 64	82 63	79.2 60.1		
WAIAMI LOWER 1054	MAX MIN	78 60	77 64	75 64	78 65	78 62	78 58	78 61	75 58	75 59	73 63	73 65	76 66	79 61	78 64	75 60	76 60	75 60	78 61	76 58	78 60	79 60	80 62	80 64	78 64	79 63	77 65	78 67	80 63	79 61	78 64	80 65	77.2 62.0		
* * *																																			
ISLAND OF OAHU																																			
EWA PLANTATION 741	MAX MIN	82 62	81 66	82 67	82 67	82 63	80 63	83 62	81 61	79 61	82 61	85 63	85 63	85 64	84 69	83 67	81 65	84 65	84 65	84 62	85 62	85 62	85 62	85 62	85 62	85 62	85 62	85 62	85 62	85 62	85 62	85 62	85 62	83.1 65.1	
HONOLULU WBFC 703	MAX MIN	84 68	84 68	84 71	84 70	83 67	82 67	83 66	82 64	82 66	83 65	87 67	84 68	84 67	85 70	84 70	84 68	84 68	85 66	84 66	82 67	87 69	87 73	87 72	87 72	87 72	87 72	87 73	84 71	84 73	84 73	84 71	84.4 69.0		
HONOLULU SUBSTA 704	MAX MIN	80 69	79 68	79 68	80 68	78 66	80 66	82 67	78 67	77 67	80 66	81 67	82 68	83 69	79 69	78 70	80 69	80 71	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	80 70	80 72	83 71	80 73	80.1 69.4		
KAHUKU 912	MAX MIN	79 70	80 67	80 67	81 70	81 65	80 63	81 62	81 62	81 62	80 66	83 66	83 66	80 66	83 72	80 69	79 69	80 69	82 65	82 64	82 64	82 64	82 64	82 64	82 64	82 64	82 64	82 64	82 64	82 64	82 64	82 64	82 64	80.9 67.4	
KANEHOE MAUKA 781	MAX MIN	80 67	85 66	84 66	83 66	85 66	83 65	85 65	80 65	81 65	80 67	80 67	86 69	84 67	82 69	80 67	80 67	80 67	80 67	80 67	81 67	81 67	83 67	83 67	82 67	82 67	82 67	82 67	83 67	80 67	81 69	85 70	84 67	80.9 67.4	
LUALUALEI 804	MAX MIN	80 69	85 68	82 67	83 65	85 65	83 65	84 64	85 65	83 65	83 66	86 64	87 65	85 66	85 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84.5 68.6	
MAKAPUU POINT 724	MAX MIN	78 69	74 62	82 69	81 69	83 70	76 65	82 63	85 66	82 66	80 66	82 68	79 68	82 69	83 66	81 69	77 69	79 69	80 69	81 69	83 69	83 69	83 69	83 69	83 69	83 69	83 69	83 69	83 69	83 69	83 69	83 69	83 69	83 69	80.9 68.5
OPAUELA 870	MAX MIN	81 60	72 59	75 64	77 63	78 63	82 63	77 61	81 59	82 59	80 58	81 61	82 65	82 62	82 62	82 61	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	82 60	80.6 62.3
PRI WAHIAWA 820.2	MAX MIN	82 60	82 64	82 65	78 59	83 61	83 61	82 60	82 58	80 58	80 62	84 58	85 62	85 67	82 65	83 66	80 66	84 66	83 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	83.4 63.2
WAILUA 847	MAX MIN	80 59	81 61	80 67	80 64	82 62	83 63	81 62	84 63	83 62	81 62	83 65	82 62	85 62	80 65	80 64	83 64	85 64	83 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	83.0 63.5
WAIKIKI 717.2	MAX MIN	84 68	83 68	82 68	83 66	83 67	85 67	84 65	88 63	84 64	85 66	84 67	84 67	86 66	88 69	85 70	82 69	81 68	83 68	84 68	87 68	87 68	87 68	87 68	87 68	87 68	87 68	87 68	87 68	87 68	87 68	87 68	87 68	87 68	85.0 68.3
* * *																																			
ISLAND OF MOLOKAI																																			
MOLOKAI AP 524	MAX MIN	79 69	80 67	78 69	80 71	81 70	82 71	79 71	83 64	81 63	82 64	83 64	83 64	83 64	83 64	80 69	78 69	79 69	80 69	79 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81.0 69.9	
* * *																																			
ISLAND OF LANAI																																			
LANAI CITY 672	MAX MIN	74 63	75 64	73 62	75 64	76 58	76 63	74 60	74 61	76 60	76 64	80 66	81 67	77 65	76 64	76 64	79 63	76 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	79 63	76.2 62.8
* * *																																			
ISLAND OF MAUI																																			
HALEAKALA RS 338	MAX MIN	62 39	58 45	59 44	61 39	57 38	56 38	58 40	62 36	58 36	59 41	59 43	59 48	62 42	63 44	65 40	63 49	63 50	63 49	65 40	65 40	61 37	65 43	72 43	76 51	71 52	70 55	72 45	64 39	63 39	61 42	63 42	63.0 43.4		
HALEAKALA SUMMIT 338.4	MAX MIN	52 37	52 37	52 34	53 37	52 34	51 35	52 36	57 36	57 36	55 37	55 39	54 33	57 39	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58 34	58.5 43.4
HANA AIRPORT 355	MAX MIN	80 66	80 68	80 69	80 69	82 67	81 67	81 65	80 61	82 61	80 62	81 69	81 68	81 68	81 68	79 65	74 66	78 69	80 69	81 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	80.9 67.9
KAANAPALI AIRPORT	MAX MIN	82 65	82 68	83 69	83 66	82 64	82 64	85 65	82 63	82 64	82 65	84 65	84 66	83 66	80 68	81 66	84 66	84 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83.6 67.2	
KAHULUI WB AP 398	MAX MIN	84 64	84 65	84 69	86 68	87 61	87 62	85 61	83 58	83 58	83 58	82 58	86 57	85 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	85.5 65.4
KAILUA 446	MAX MIN	76 62	76 63	75 63	74 64	76 64	74 61	78 60	78 59	78 58	78 60	78 60	78 64	81 62	82 64	81 67	74 64	75 66	78 65	79 64	79 64	79 64	79 64	79 64	79 64	79 64	79 64	79 64	79 64	79 64	79 64	79 64	79 64	79 64	77.3 63.4
KEAWAKAPU BEACH 260.2	MAX MIN	84 59	87 64	89 67	88 61	86 64	85 63	86 60	87 60	85 60	86 60	86 60	86 60	83 62	89 62	84 67	84 64	83 64	86 64	86 64	85 64	86 64	86 64	86 64	86 64	86 64	86 64	86 64	86 64	86 64	86 64	86 64	86 64	86.6 63.7	
KULA SANATORIUM 267	MAX MIN	72 53	70 54	70 54	73 55	70 56	71 56	71 54	74 54	70 54	69 55	68 56	68 56	73 56	74 56	75 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72 56	72.4 56.3
LAHAINA 361	MAX MIN	84 64	85 68	87 68	84 66	87 67	84 67	86 66	82 64	82 65	86 64	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85 65	85.0 66.9	

DAILY TEMPERATURES

HAWAII
MAY 1969

Continued

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
WAILUKU 392	MAX	81	81	80	81	81	84	84	82	83	83	83	81	85	84	83	80	78	80	82	82	84	85	84	84	83	81	75	82	87	89	86	
	MIN	67	68	69	69	65	65	64	64	62	62	65	68	67	68	65	71	67	69	70	65	65	67	68	64	70	71	70	69	67	67	68	
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	80	78	79	75	79	81	80	82	80	80	79	80	82	82	78	78	73	78	80	80	81	82	83	80	81	82	81	83	82	83	84	
	MIN	60	61	61	61	60	60	59	59	58	58	64	62	62	62	65	64	62	64	62	62	61	60	62	64	63	65	65	62	61	63	60	61
HAWAII VOLCNS NP HO 54	MAX	66	66	60	64	61	66	62	65	65	69	70	74	75	72	69	68	65	63	65	67	70	72	66	66	69	71	71	70	72	67	72	
	MIN	90	92	91	94	93	92	98	98	98	97	93	94	94	98	98	95	92	94	94	97	91	90	96	96	95	97	96	93	98	90	94	
HILO WB AIRPORT 87	MAX	80	80	78	80	81	82	82	82	81	83	82	84	84	83	81	77	79	81	81	84	85	84	83	83	85	84	84	85	84	86	85	
	MIN	63	66	66	67	67	64	62	62	61	62	67	64	64	68	68	68	69	69	69	64	65	71	70	69	69	69	69	68	71	64	65	
KAINALIU 73.2	MAX	76	76	78	78	79	78	76	74	75	76	77	79	79	82	83	82	77	74	73	78	76	77	77	75	78	78	78	76	78	78		
	MIN	59	61	61	61	59	63	61	60	59	58	61	61	63	65	65	63	63	65	63	60	61	62	66	67	66	63	66	67	63	63	64	
KAMUELA 192.2	MAX	72	73	70	68	70	70	75	74	75	75	75	79	80	80	76	75	76	72	73	76	76	75	75	72	70	72	73	76	78	78		
	MIN	56	52	55	53	50	53	48	44	43	48	47	55	53	56	58	58	56	52	56	50	50	56	52	55	58	60	62	53	46	48		
KAMUELA AIRPORT 191	MAX	71	71	71	70	73	73	75	76	76	76	74	77	78	81	76	73	71	71	75	71	76	76	71	73	73	75	74	75	77	77		
	MIN	53	53	55	49	66	52	46	44	48	40	58	54	55	58	58	56	57	55	55	51	54	53	54	48	49	54	67	49	53	49		
KEAAU 92	MAX	80	78	80	80	80	78	81	83	81	84	84	84	85	82	81	75	80	80	80	84	84	85	83	83	83	83	83	82	83	84		
	MIN	62	62	63	63	63	64	60	60	59	59	59	59	62	64	68	65	64	64	64	63	64	65	67	67	67	67	67	67	66	63	63	
KEALAKEUA 26.2	MAX	77	77	78	78	78	77	76	74	74	77	78	79	79	81	82	80	77	73	74	77	77	78	78	76	78	75	79	80	79	79		
	MIN	61	62	62	62	61	63	61	59	59	59	61	61	65	65	66	65	63	65	63	62	61	62	67	67	66	64	65	66	63	64		
KUHALA MISSION 175.1	MAX	77	76	76	74	78	78	78	79	79	79	79	80	82	82	81	76	74	77	78	79	81	81	81	79	79	81	80	80	81	82		
	MIN	64	62	64	64	64	63	61	61	62	61	66	65	65	69	68	66	65	67	65	64	63	65	67	67	64	69	68	65	66	63		
KONA AIRPORT 68.3	MAX	82	82	82	81	82	82	79	78	80	79	83	83	85	85	86	83	84	83	82	83	82	81	81	81	85	83	83	82	82	84		
	MIN	64	64	64	64	63	62	64	64	63	65	67	67	68	67	67	68	67	69	66	67	67	67	67	67	67	67	67	67	68	68		
KULANI CAMP 79	MAX	61	60	62	56	60	58	57	64	58	66	70	72	70	65	59	60	58	64	63	66	68	66	67	68	66	67	68	70	71			
	MIN	48	46	45	44	48	42	44	42	41	41	48	50	55	52	48	46	48	48	47	46	48	46	46	46	46	46	48	44	48			
MAIINA KEA BEACH 98	MAX	86	84	86	85	83	84	82	84	84	81	82	84	84	87	89	90	86	83	84	85	84	84	85	86	87	85	84	84	84	85		
	MIN	70	69	72	71	69	66	66	64	66	66	68	70	70	73	73	72	73	71	72	70	70	72	71	72	73	70	73	71	71	70		
MAIINA LDA SLOPE 085	MAX	49	47	51	48	48	50	51	50	52	50	49	58	59	56	54	57	58	57	58	59	64	63	63	64	64	62	60	58	57			
	MIN	32	30	29	34	32	31	32	29	33	33	33	35	39	39	38	40	41	43	43	39	44	45	42	43	44	42	42	44	40			
MOUNTAIN VIEW 91	MAX	72	73	71	71	74	71	74	77	76	80	78	81	82	79	70	68	70	72	79	80	81	81	77	77	82	81	80	81	76			
	MIN	58	57	60	60	60	60	54	54	54	53	61	57	58	58	64	62	60	61	62	55	55	58	63	63	64	64	63	62	61			
NAALEHU 14	MAX	78	79	79	79	79	79	78	78	78	78	82	82	82	85	81	80	80	79	79	80	80	81	81	81	81	81	81	79	82			
	MIN	63	63	63	64	64	66	65	64	61	61	63	63	67	67	69	68	68	67	67	65	65	68	68	68	66	66	68	68	67			
ODAKA 223	MAX	78	72	75	78	80	79	79	79	78	80	80	79	81	83	80	72	72	77	77	78	80	78	81	80	80	81	80	80	80			
	MIN	64	58	62	65	66	66	63	62	63	62	66	65	65	66	68	62	64	67	68	65	65	66	67	67	66	67	67	67	66			
OPIHIHALE 2 24.1	MAX	74	80	78	80	80	78	73	74	75	77	78	80	81	82	78	76	73	74	76	74	80	75	74	78	77	77	82	80	83			
	MIN	58	58	59	59	61	63	58	58	57	59	57	59	64	66	65	65	65	63	63	60	61	61	62	64	63	62	62	63	60			
PAHALA 21	MAX	77	78	78	79	76	78	78	77	77	78	80	81	82	83	78	80	79	74	76	81	79	80	79	81	80	81	79	77	82			
	MIN	58	59	62	64	65	62	58	59	60	60	63	60	61	65	67	66	65	66	65	60	59	60	64	62	62	65	65	63	66			
UPOLU POINT USCG 159.2	MAX	81	80	80	80	80	81	81	80	80	81	82	84	84	85	82	82	78	79	79	82	82	82	82	82	82	82	82	81	82			
	MIN	66	65	65	64	66	60	65	64	65	65	67	71	70	70	69	67	68	68	72	68	68	69	69	65	70	70	69	69	68			

EVAPORATION AND WIND

Station		Day of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * * ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP	.35	.33	.32	.34	.35	.30	.33	.17	.17	.20	.32	.27	.14	.35	.36	.39	.38	-	.22	.29	.30	.22	.32	.32	.26	.30	.34	.32	.30	.20		
	WIND	139	167	204	208	157	87	70	68	69	128	128	160	87	109	154	166	135	96	100	97	77	77	136	166	169	179	141	92	68			
	MAX	86	89	84	86	89	93	91	87	83	84	88	86	91	90	88	87	85	77	84	91	92	91	90	87	87	91	93	96	91			
	MIN	65	67	66	67	68	68	65	62	63	66	67	67	68	68	66	63	63	65	65	65	65	65	68	70	68	68	70	70	68			
* * * ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.33	.30	.31	.35	.33	.25	.28	.28	.26	.08	.28	.23	.32	.30	.37	.30	.30	.33	.26	.30	.24	.23	.29	.38	.30	.31	.29	.25	.30			
	WIND	41	47	61	63	39	24	20	26	18	16	21	21	44	42	60	51	33	27	25	23	23	26	32	44	48	45	28	29				
	MAX	92	90	91	91	93	96	95	96	94	91	91	95	95	95	94	92	92	89	94	96	95	94	92	93	92	93	93	99	99			
	MIN	65	66	66	66	66	68	69	66	67	66	67	69	67	69	66	64	65	67	65	67	68	68	68	69	68	69	68	70	71			

See Reference Notes Following Station Index

STATION INDEX

HAWAII MAY 1969

Main data table with columns: STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER, STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER. Includes sub-sections for ISLAND OF MOLOKAI and ISLAND OF MAUI.

STATION INDEX

HAWAII
MAY 1969

CONTINUED

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER
								TEMP.	PRECIP.	EVAP.	SPECIAL										TEMP.	PRECIP.	EVAP.	SPECIAL	
ISLAND OF HAWAII																									
KULANI SCHOOL SITE 78	5021	02	5 HILO	2 19 35	155 20	5735		W				SI DEPTI OF SOCIAL SER	PUU LAU 102-1	A	8452	05	HAMAKUA	5 19 50	155 36	7440	MO		STATE DIV OF FISH-GAME		
LALANI FLD OFF 191-1	5263	01	5 KUHALA	1 20 01	155 41	2615						STATE DEPT OF L + N RES	PUU LEHUA 73	A	8463	04	N KONA	4 19 39	155 49	4880	MO		GREENWELL RANCH		
LANIKAU 68-2	5330	04	N KONA	4 19 40	155 58	1930						KONA EXPERIMENT STATION	PUU MALI 113	A	8510	01	HAMAKUA	1 19 55	155 26	6960	MO		KUKIAU RANCH CO		
LAVA TREE PARK 66-1	5460	02	PUNA	2 19 29	155 54	450						STATE DIV. OF PARKS	PUKUKUMAU 167	A	8548	01	N KOHALA	1 20 12	155 50	1800	TA		KUHALA DITCH CO LTD		
MANA 2	6134	03	KAU	3 19 07	155 50	1760		BA				STATE DIVISION OF PARKS	PUU OO 82	A	8550	02	5 HILO	2 19 45	155 23	6340	MO		KUHALA DITCH CO LTD		
MAUNA KEA BEACH 98	6180	04	5 KUHALA	4 19 37	155 58	475		BA				MAUNA KEA BEACH HOTEL	PUU WAWA 94-1	A	8555	05	N KONA	4 19 47	155 51	2520	TA		GILLINGHAM RANCH INC		
MAUNA LOA SLOPE 085 39	6198	05	HAMAKUA	5 19 32	155 35	1114		MIG	MIG			MAUNA LOA OBSERVATORY	SADOLE PUNA 1 86	A	8593	02	5 HILO	2 19 42	155 12	2340	MO		BURRO OF AIR SUPPLY		
MIDDLE KUHUALA 66-1	6268	04	N KONA	4 19 37	155 58	475		BA				KONA EXPERIMENT STA	SOUTH POINT COPRAL 3	A	8675	03	KAU	3 14 57	155 41	900	WI		HUTCHINSON SUGAR CO		
MIDDLE PEN 147-1	6274	01	N KOHALA	1 20 06	155 50	1380		VAR				MAUNA RANCH	S POINT TRACKING STA	A	8679	03	KAU	3 18 57	155 41	305	MO		FEDERAL ICE TOL CORP		
MOAULA 18	6407	03	KAU	3 19 11	155 30	600		MO				HAWAIIAN RANCH CO	UMIKOA 114	A	8703	01	HAMAKUA	1 17 59	155 23	1420	TA		KUKIAU RANCH CO		
MOUNTAIN VIEW 91	6552	02	PUNA	2 19 33	155 07	1930		BA	BA			PUNA SUGAR CO	UPOLU POINT USCG 159-2	A	8830	01	N KUHALA	1 20 15	155 53	61	BA		U S COAST GUARD		
NAALEHU 14	6588	01	KAU	3 19 04	155 35	673		BA	BA			HUTCHINSON SUGAR CO	WAIKAEA SCD 88-2	A	9025	02	5 HILO	2 19 46	155 8	1090	TA		SHINICHI KANE SHIRO		
NAPOKUPU 28	6697	04	5 KONA	4 19 28	155 55	395		TA				KONA EXPERIMENT STA	WAIKANOOUA 178-6	A	9350	01	N KOHALA	1 20 08	155 47	3830	MO		KAHUA RANCH		
NAULU FOREST 38-6	6731	02	PUNA	2 19 19	155 08	1400		VAR				HAWAII WILKAMES NAT PR													
NIHILII 179	6806	01	N KOHALA	1 20 14	155 45	75		BA				KUHALA SUGAR CO													
OHUALA 223	7131	02	N HILO	2 23 01	155 17	430		TA	TA			LAUPAHOEHOE SUGAR CO													
OPIHIHALE 2 24-1	7166	04	5 KONA	4 19 16	155 53	1270		TA	TA			MISS C LEONARD													
ORCHID LAND EST 91-5	7185	02	PUNA	2 19 34	155 00	445		VAR				BOARD OF WATER SUPPLY													
PAHAIA 217	7204	03	HAMAKUA	1 20 05	155 26	415		TA				PRAUNAU SUGAR CO													
PAALU 221	7312	01	HAMAKUA	1 20 03	155 22	800		TA				HAMAKUA MILL CO													
PAHALA 21	7421	03	KAU	3 19 12	155 29	870		BA	BA			HAWAIIAN AGR CO													
PAHAU 62	7457	02	PUNA	2 19 30	154 57	670		MO	BA			PUNA SUGAR COMPANY													
PAKAO 37	7643	03	KAU	3 19 22	155 28	5000		MO				HAWAIIAN RANCH CO. INC.													
PAPAIKOU 144-1	7711	02	5 HILO	2 19 47	155 06	200		TA				MAUNA KEA SUGAR CO.													
PAPAIKOU MAUNA 140-1	7721	02	5 HILO	2 19 47	155 08	1270		TA				MAUNA KEA SUGAR CO.													
PEPEKEE MAUI 144	8000	02	5 HILO	2 19 51	155 05	300		TA				PEPEKEE SUGAR CO													
PIIUNIA 89	8051	02	5 HILO	2 19 44	155 10	1730		MO				STATE DIV OF FORESTRY													
POMAKOUA 107	8063	03	HAMAKUA	2 19 45	155 32	6511		VAR				STATE DIVISION OF PARKS													
PUNAKO 95-1	8186	05	KUHALA	5 19 59	155 50	5		BA				ERWIN M. RAPP													
PUU KIME 120	8393	01	HAMAKUA	1 19 54	155 24	7750		MO				KUKIAU RANCH CO													

↑ DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU- 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN
5-NORTH-CENTRAL MOLOKAI: 1-(NO INTRA-ISLAND DIVISIONS) LANAI: 1-(NO INTRA-ISLAND DIVISIONS) MAUI: 1-NORTHEASTERN
2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3650, Honolulu, Hawaii, or to any Weather Bureau Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII".

DIMENSIONAL UNITS Unless otherwise indicated, dimensional units used in this bulletin are Temperature in F., precipitation and evaporation in inches, and wind movement in miles. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME Data in the "Monthly Extremes", "Daily Precipitation", "Daily Temperature", "Evaporation and Wind" table are for the 24 hours ending at the time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 6-8 inches above the pan.

NORMALS for all stations are climatological standard normals based on the period 1931-1960.

STATION NAMES Hawaii state key numbers are included following station names in the several tables.

DELAYED DATA AND CORRECTIONS will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES for monthly precipitation totals may be found in the annual issue of this publication.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.

No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry.

+ Add also on an earlier date or dates.

++ Highest observed one minute wind speed. This station is not equipped with an instrument to measure fastest mile data.

* Amount included in following measurement, time distribution unknown.

A The letter "A" shown following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index", indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gauges are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.

B Adjusted to a full month.

J "Supplemental Data" table.

M One or more days of record missing. If average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.

R Amounts from recording gage.

T Trace, an amount too small to measure.

V Includes total for previous month.

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

AR Observation made after rain.

C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.

MO Gage read once monthly, usually on the last day.

OC Gage readings at periods varying from a few weeks to several months.

S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.

SS Observation time is near sunset.

VAR Observation time is variable.

WI Gage read weekly or irregularly only.

WM Gage read weekly and last day of month.

Thermometers are generally exposed in a shelter located a few feet above sod-covered ground, however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publication MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, AND STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

Subscription Price: 20 cents per copy, monthly and annual; \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Resilience and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

USCOM-ESSA-ASHEVILLE-8/29/69-800

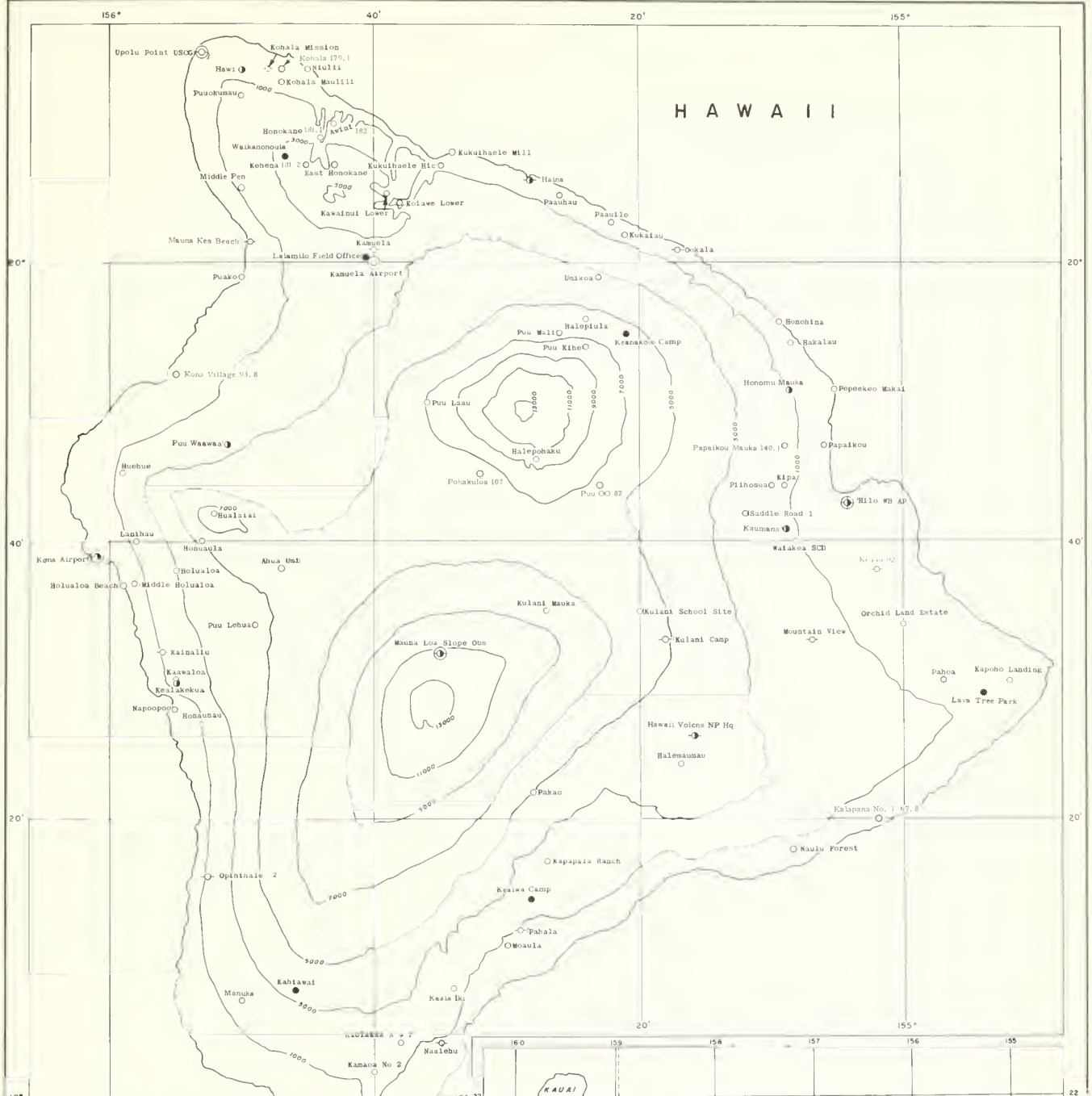
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40'

20'

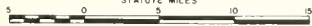
155°

HAWAII



HAWAII

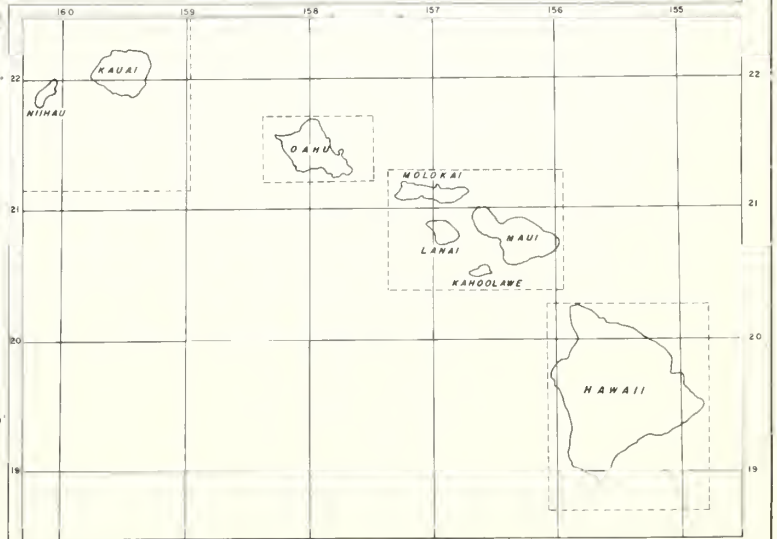
PLATE 2
STATUTE MILES



STATION LEGEND

- ● ● Precipitation only
- ⊕ Precipitation, storage
- ⊖ ● ● Precipitation and Temperature
- ⊕ ● ● Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording, ● Recording
- Both types

Double circle combinations indicate the availability of more detailed meteorological data
 All stations use ISOth meridian time



156°

40'



CLIMATOLOGICAL DATA

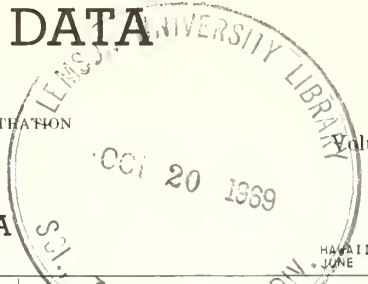
U.S. DEPARTMENT OF COMMERCE
 MAURICE H. STANS, Secretary
 ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
 ENVIRONMENTAL DATA SERVICE

HAWAII

JUNE 1969

Volume 65 No. 6

CLIMATOLOGICAL DATA



HAWAII
 JUNE 1969

Station	Temperature										Precipitation															
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days					Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Snow Sleet	No. of Days					
									90° or Above	80° or Above	70° or Above	60° or Above	50° or Above								Total	Total	Date	.10 or More	.50 or More	1.00 or More
* * * ISLAND OF KAUAI																										
ANAOHOLA 1111					78	30	40	4	0	0	0	0	0	0	1.99	.34		.0	0							
KANALOHULUHULU 1075	72.1	52.5M	62.3M						0	0	0	0	0	2.11		.82	25	.0	0			6	1	0		
KAPAA STABLES 1104														.89		.30	25	.0	0			0	0	0		
KILAUEA FIELDO 17 1135														4.76	-.29		.0	0								
KILAUEA POINT 1133	83.0	71.5	77.3		92	15	67	9	1	0	0	0	0	4.98		1.80	29	.0	0			9	3	1		
* * * ISLAND OF MAUI																										
KOLOA 936														2.09	-1.60		.0	0								
LIHUE WB AP 1020.1	84.3	72.3	78.3	1.7	89	15	67	14+	0	0	0	0	0	.89	-.57		.19	26	.0	0			3	0	0	
MANA 1026	87.8	68.2	78.0	1.3	90	30+	65	11	3	0	0	0	0	.62	-.02		.35	24	.0	0			2	0	0	
N WAILUA OITC 1051														7.14			.0	0								
PH WAINIHA 1115														6.98	1.00	1.48	10	.0	0				11	4	3	
* * * ISLAND OF HAWAII																										
PUEHU RIDGE 1040														1.24		.38	23	.0	0							
WAHIAWA 930														.48	-.84	.23	25	.0	0							
WAIHI LOWER 1054	80.5	64.4	72.5		86	15	59	9+	0	0	0	0	0	3.03		.54	22	.0	0				10	1	0	
WAIHEA 947														.32	.04	.21	25	.0	0							
* * * ISLAND OF OAHU																										
* * * ISLAND OF MOLOKAI																										
HONDULULU OBSERV 702.2														.36		.26	25	.0	0				1	0	0	
HONDULULU WBFC 703	86.7	71.4	79.1	1.2	90	20	67	13+	1	0	0	0	0	.23	-.10	.06	27+	.0	0				0	0	0	
KAHUKU 912	84.4M	70.8M	77.6M	.9					0	0	0	0	0	1.74	.33		.0	0								
KANEHE MAUKA 781	82.7	70.0	76.4	.5	86	15	61	10	0	0	0	0	0	3.20	.26	1.05	11	.0	0				6	2	1	
KOOLAUA OAM 833														V12.57		1.10	27	.0	0							
* * * ISLAND OF LANAI																										
LUALUALEI 804	87.2	70.2	78.7		90	26	66	9	1	0	0	0	0	.48		.22	25	.0	0							
MAKAPIU POINT 724	83.4	70.8	77.1		88	10	65	10	0	0	0	0	0	.63	.13	.32	11	.0	0				2	0	0	
NUUANU RES 4 783														4.42	-2.73	1.20	24	.0	0				11	2	2	
OPAULA 870	83.5	64.2	73.9	2.3	88	14	60	12	0	0	0	0	0	2.12	-.48	.55	11	.0	0							
PALOLO VALLEY 718														8.48	-.31	2.88	10	.0	0				15	4	2	
* * * ISLAND OF KAUAI																										
PRI WAHIAWA 820.2	85.9M	65.2M	75.6M		89	23+	60	5	0	0	0	0	0	.83		.22	20	.0	0							
PUNALUU 884														2.82			.0	0								
WAHIAWA OAM 863														.90			.0	0								
WAIHOLE 837														7.13	-.87	2.11	11	.0	0							
WAILUA 847	86.1	65.0	75.6	.3	90	6	61	12	1	0	0	0	0	.47	-.25	.13	16	.0	0							
WAIKIKI 717.2	87.2	70.4	78.8		91	17	65	13	1	0	0	0	0	.84		.60	10	.0	0				2	1	0	
WAIIPAHU 750														.26	-.34	.07	10	.0	0				0	0	0	
* * * ISLAND OF MAUI																										
* * * ISLAND OF HAWAII																										
* * * ISLAND OF MOLOKAI																										
KUALAPUU 534														1.17	.50	.94	11	.0	0							
MAPULEHU 542														1.94	-.25	.65	22	.0	0				4	1	0	
MAUNALOA 511														.50	-.25	.23	11	.0	0							
MOLOKAI AP 524	83.2	71.6	77.4		86	6	68	19+	0	0	0	0	0	1.68		.85	25	.0	0				2	2	0	
* * * ISLAND OF LANAI																										
* * * ISLAND OF MAUI																										
* * * ISLAND OF HAWAII																										
HALEAKALA B E S 434														2.15	-.63	1.67	11	.0	0				2	1	1	
HALEAKALA RS 338	65.8	44.4	55.1		73	4	41	28+	0	0	0	0	0	.72		.51	11	.0	0				1	1	0	
HANA AIRPORT 355	84.2	68.6	76.4		86	26+	65	15	0	0	0	0	0	3.21		.85	27	.0	0				9	3	0	
HONOKOHU 493														1.51	-.17	.86	11	.0	0							
KAANAPALI AIRPORT																	.0	0								
KAHULUI WB AP 398	88.5	67.3	77.9	.7	92	28+	61	5	9	0	0	0	0	.37	.19	.14	11	.0	0				2	0	0	
KAILUA 446	79.6	65.6	72.6	.7	84	16	61	7	0	0	0	0	0	4.66	-2.91	1.45	11	.0	0				9	3	1	
KEANAE 346														9.70	-4.07		.0	0								
KIPAHULU 258														3.59	-4.17	.52	30+	.0	0				11	2	0	
KULA SANATORIUM 267	73.3	58.0	65.7	.8	78	30	55	10+	0	0	0	0	0	1.34	-.35	.35	24	.0	0				5	0	0	
LAHAINA 361	86.3	69.0	77.7		88	30+	67	16+	0	0	0	0	0	.00	-.06	.00		.0	0							
PAIA 406														.39	-.80	.21	11	.0	0							
WAILUKU 392	86.1M	70.6M	78.4M	2.0	90	15	67	14+	1	0	0	0	0	.85	.51		.0	0								
* * * ISLAND OF MAUI																										
* * * ISLAND OF HAWAII																										
* * * ISLAND OF MOLOKAI																										
HAINA 214	83.0	64.4	73.7	.7	85	30+	61	8+	0	0	0	0	0	4.72	-2.80	3.40	12	.0	0				4	2	1	
HAWAII VOLCNS NP HQ 54	70.9	54.1	62.5	.5	78	19	50	8+	0	0	0	0	0	1.94	-2.59	.43	12	.0	0				5	0	0	
HILD WB AIRPORT 87	85.3	67.0	76.2	1.9	90	24	65	21+	1	0	0	0	0	2.76	-4.03	.79	11	.0	0				6	2	0	
HUEHUE 92.1														3.27	-1.23		.0	0								
KAINALIU 73.2	77.9	63.9	70.9		81	18+	61	11+	0	0	0	0	0	3.84	-4.11	.92	12	.0	0				12	1	0	
KAMUELA AIRPORT 191	75.8	54.6	65.2		79	1	49	21	0	0	0	0	0	.79		.29	13	.0	0				3	0	0	

See Reference Notes Following Station Index

CLIMATOLOGICAL DATA

HAWAII
JUNE 1969

Continued

Station	Temperature										Precipitation											
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
									Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
									60° or Above	70° or Above	70° or Below	80° or Below										
KEAAU 92	84.5	65.5	75.0	1.3	88	17+	62	18	0	0	0	0	3.39	- 4.47	.91	30	.0	0	0	11	2	0
KEALAKEUA 26.2	78.1	64.1	71.1		81	18+	61	9	0	0	0	0	3.12		.52	28	.0	0	0	11	1	0
KONA AIRPORT 68.3	83.0	67.1	75.1		85	28+	62	20	0	0	0	0	3.63		1.83	13	.0	0	0	6	2	1
KUKUIHAELE HIC 199													4.54	1.50	2.10	12	.0	0	0	6	3	1
KULANI CAMP 79	67.9M	46.3M	57.1M		72	20	41	6	0	0	0	0	2.01		.52	12	.0	0	0	7	1	0
MAUNA KEA BEACH 98	86.3	72.6	79.5		92	19	70	24+	2	0	0	0	1.07		.96	12	.0	0	0	1	1	0
PAHALA 21	80.6	62.8	71.7	.5	84	30	59	11+	0	0	0	0	1.36	.03	.41	12	.0	0	0	4	0	0
POHAKULOA 107													.49		.49	11	.0	0	0	1	0	0
PUAKU 95.1													.67		.61	24	.0	0	0	1	1	0
PUU WAAWAA 94.1													1.08	- 1.04	.60	21	.0	0	0	1	1	0
UMIKOA 118													4.76	3.06	2.80	12	.0	0	0	6	2	2
WAIKAE SCD 88.2													4.73		1.55	11	.0	0	0	10	3	1
ISLAND			70.7										2.68				.0					

TEMPERATURE AND PRECIPITATION EXTREMES

- HIGHEST TEMPERATURE: 93° ON THE 29+ AT 2 STATIONS
- LOWEST TEMPERATURE: 36° ON THE 30+ AT MAUNA LOA SLOPE OBS, HAWAII
- GREATEST TOTAL PRECIPITATION: 21.08 INCHES AT MOUNT WAIKAELE 1047, KAUAI
- LEAST TOTAL PRECIPITATION: .00 INCH AT 10 STATIONS
- GREATEST ONE-DAY PRECIPITATION: 4.65 INCHES ON THE 24TH AT MOUNT WAIKAELE 1047, KAUAI

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
JUNE 1969

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
* * * ISLAND OF MAUI																																
ANAHOLA 1111	1.99			.09						.10					1.09	.02	.03	.06			.09	.24	.02	.08	.04						.13	
BRYOWOOD STA 985	1.49	*	T	.01	.01					.01					.06	T		.04			.19	.04	.35	.11	.20					.47		
EAST LAWI 934	1.73			.02											T	.03	.15	.03			.18	.24	.40	.03	.14					.51		
ELEELE 927	1.18									T							.03				.02	T	1.01	.04						.08		
HAULAULA 1110	1.12				.03					.15						.20	.11	.05	.11			.02	T	1.01	.04					.11		
HALENAHANO 1006	2.25			.02							.03	.04	.08				.07			.23	.06	*	.59		.13	.09	.26	*	.65			
HUKIPO 945	.72														.43			.07	.11	.29	.05	*	.71	.12	.38	.45	.77	*	1.75			
KILAUEA INTAKE 1050	4.37			.04	.10						.35	.06		.10	*		.08		.79			2.45	.79						1.92			
INTAKE WAINIHA PC 1086	9.04			*	*	*	*	*	*	3.82	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
KALIHUAI RES 1131	4.48	*	.02	*	.04	*	*	*	*	.62	.31	.02	.07	*	*	.55	.74	.04	.21	.01	*	.22	.06	.32	.17	.14	*	*	.94			
KANALOHUIMULU 1075	2.11	.02		.05					.05	.17	.04		.05	*	.16	.30	.03	.04		.13	.02	.12	.02	.82	.02	.02	.03	.02	.05			
KANEHA RESERVOIR 1092	4.94	.05		.07					.57	.65	.03	.05	*	.10	.78	.25	.11	*	.11	.13	.45		.80	.02	.22	*	*	.81				
KAPAA STABLES 1104	.89								.03	.03					.02	.02	.17	*	*	.07		.30	.02	.13	*	*	*	.13				
KEALIA 1112	1.04			.02					.10	.03					.10	.05	.15	*	*	.03		.10	.08	.16	*	*	*	.22				
KEKAMA 944	.16														.10	.03						.03										
KILAUEA 1134	2.68		.01						.41	.05			.14	*	*	.39	.24	.01	.14	.04	*	.17	.05	.37	.14	*	*	.91				
KILAUEA FIELD 17 1135	4.76	*	.01	.02	.01	.06			.56	.06		.03	*	*	1.29	.68	.03	.09	.03	*	.22	.09	.78	.21	.02	*	*	.56				
KILAUEA POINT 1133	4.38								.50	.05		.16	.11	*	.40	.07	.03	.03	.02	.03	.04	.30	.80	.62				.45				
KILO 1033	1.46														.18	.53		.06			.13	.06										
KILOA 936	2.09	*	.02	.01	.01				.01	.03							.32	.06	*	*	.15	.20	.32	.06	.16	*	*	.68				
KILOA MAUKA 994	2.38								.05	.04			*	*	.05	*	*	*	*	*	.68		.07	.11	.53	*	*	.45				
KILOKO RES 1137	3.91		.01	.01	.07				.04	.22		.01	*	*	1.05	.57	.02	.02	.04	*	.21	.49	.10	.18	*	*	.45					
KUKUIULA 935	1.06																.20	.01	*	*	.09	.15	.32	.07	*	*	.22					
LIHUE VARIETY STA	1.56	*	.01	.03					.03	.14					.10	.17		.10		.24	.19	.02	.10	.12	.14	*	*	.18				
LIHUE 1020	1.54		.06	.02	.01	.02	*	*	.02	.07	.07	.02	.01	*	.01			.11	.12	*	.15	.01	.03	.09	.35	*	*	.39				
LIHUE WB AP 1020.1	.89	T	.02	T			T	T	.05	.10	.10	T			T	T	.04	.13	.02	.01	.08	.05	.05	.01	.19	.04	.03	.01	.06			
MAKAHUNA POINT 940.1	.89								.07	.02	T				.03	.24	.01	.06	.09	.16	.09		.01					.12				
MAKAHELI 965	.37																.03	.03		.04	.01	.29										
HANA 1026	.62														.09						.03	.35	.15									
MOHINI UPR CROSS 1083	3.96								.96	.56					.16	.08		.24	.50		.11	.50		.17	.17	.17	.17	.17				
MOLOAA 1145	2.37			.01					.11						1.45	.13	.05	.04	.02	*	.03	.19	.02	.17	*	*	.15					
MOUNT WAIKALELE 1047	21.08	.08	.12	.08	.20			1.69	1.06	.16				.16	.04	.47	.39	.39	.12	2.05	1.34	4.65	.28	2.52	1.42	1.30	1.10	1.46				
NIU RIDGE 1035	1.31		.53												.08				.05	.30	.20	.40	.40	*	*	*	1.70					
N WAILUA DITCH 1051	7.14		.20		.10			.07	.50	.20	.10	.03	*	*	.05	1.08	.02	.32	.05	*	.03	.40	.53	.05	.96	*	*	.32				
PH WAINIHA 1115	6.98		.02	.02					1.48	.63	.02	.03	*	*	.05	1.44	.05	.21	.04	*	.39	.02	.05	.38	.34	.40	.08	.46				
PRINCEVILLE RANCH 1117	5.69			.02					.78	.12		.08			.09	.03	.13	.13	.10	.14	.38	.01	.23	.03	.26	*	*	.27				
PUEHU RIDGE 1040	1.24			.05					.07	.21					.03	.13	.13	.10	.14		.38	.01	.23	.03	.26	*	*	.27				
PUEHU 1013	.71	*	.02	.05					.03	.02					.07						.03	.16	.20	*	*	*	.19	.08				
RESERVOIR 6 1004	2.15								.09						.07						.67	.07	.09	.16	.19	*	*	.68				
WAIKAWA 930	.48														.07						.04	.01	.23	.01	*	*	.12					
* * * ISLAND OF MAUI																																
WAIKAWA MOUNTAIN 990	6.13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6.13		
WAIKAWA LOWER 1054	3.03				.04				.22	.05					.04	.06	.19	.02	.11	.54	.08	.10	.22	.21	.37	.32	.09	.37				
WAIKAWA UPPER 1052	3.97		.01	.07					.28	.10					.05	.04	.21	.02	.12	.46	.06	.07	.30	.30	.65	.67	.13	.43				
WAIKAWA 943	.31														.18						.11	.02	.40									
WAILUA KAI 1065	1.07				.05				.07	.04										.12	*	.09	.04	.02	.04	.18	*	*	.04			
WAIKAWA 947	.32														.11						.20	.02	*	.21				.24				
WEST LAWI 931	1.11														.02	T				.20	.02	*	.10	.25	.23							
* * * ISLAND OF MAUI																																
ALIA FIELD 625 761	1.56			.03					.18	.24										.02	.02	*	.12	.20	.37	.06	*	*	.36			
BERETANIA PUMPING STA	.72								.05	.24	.11	T			.04		.01			.02	.02	*	.03	.14	.03	.13	.07	.05				
CAMP 84 807	.62	*	.03	*	*	*	*	*	.02	.24	*	*	*	*			.02	*	*	.01	*	.15	*	.02	*	*	*	.13				
CHURCH COLLEGE LAIE	2.77								.25						.01					.06	1.05	.05	.35	.25	.20	.10	.05	.20				
COCONUT ISLAND 840.1	3.21								1.20	.40			.01				.40			.50		.13		.24	.12	.02		.11				
EWA PLANTATION 741	.40								.05	.01					.09								.21	.03	T							
HELEMANU INTAKE 881	2.73	*	.05						.45	*	*	*	*	*	.65	*	*	*	.05	.08	*	.05	*	1.25	*	*	1.25					
HELEMANU 725.2	1.41	*	*	*	*	*	*	*	.06	T	T	*	*	*								.62		.26	.02	.02	.02	.14				
HONOLULU OBSERV 702.2	3.36								.06	T	T	*	*	*									.26	.02	.02	.02	.02	.14				
HONOLULU WBFC 703	.23		.01	T	T			T	.05	T	T	*	*	*						T	T	T	.02	T	.03	T	.06	.06	T			
HONOLULU SUBSTA 704	.66								.12						.04					.04	.06	.11	.02	.08	.05	.05	.04	.05				
H S P A EXP STA 707	1.40								.13	.34					.12					.07	.03	.06	.20	.05	.17	.01	*	.15				
KAHANA 883	11.92	*	*	*	*	*	*	.36							5.00	*	*	*	*	.07	.03	.06	2.56	*	*	*	4.00					
KAHUKU 912	1.74								.34	.20	.01				.15				.03	.04	*	.52	.10	.15	.07	*	.13					
KAILUA FIRE STA 791.3	1.89								1.40	.10	T				.07				T	T	T	T	.02	.04	T	.12	.05					
KALIHUAI RES SITE 777	6.88		.02	.18					2.60	.52		.02	.02		.02	.02	.04	.10	.08	.68	.22	.06	.24	*	*	*	.15					
KANEHE MAUKA 781	3.20			.06					.63	1.05	.02	.06			.06		.11	.01	.05	.09	.01	.43	.07	.04	.15	.34	.08	.12				
KANEHE RANCH 838	2.14	*	T	T	.13	T			.45	*	.90								.10	.10	.25		.70	.08	.10	.08	*	.90				
KAPALANA 713	3.25								.10								1.34	.11	T	.25		.05	.02	.12	.01	.04	*	.13				
KAWAHAPA 841	.85								.20	.20							.08					.05	.02	.12	.01	.04	*	.13				
KAWAI IKI INTAKE 880.2	5.50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.50			
KEMO CAMP 8 855	.81	*	.01	.01	.02				.05	.16																						

DAILY PRECIPITATION

Continued

HAWAII
JUNE 1969

Station	Total	Day of Month																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
		KAUMANA 88.1	4.59	.22	.02	.21	.09	.01			.04	.08	1.18	1.02	.01				.11			.24			.06	.08	.02	.12	.15		.12	.06	.75	
KAWAII LOWER 193	11.04																																	
KEAAU 92	3.39	.04		.04	.19	.01			.01	.10	.22	.75	.02																					
KEALAKERUA 26.2	3.12		.20	.06	.02	.19	.03		.15	.07	.13	.02		.19	.17	.21		.01	.01	.07	.27		.11	.03	.02	.02	.08	.09	.05	.52	.08	.32		
KEHEHA 181.2	4.05																																	
KIDLAKAA A & F 6	3.78																																	
KIHAHA 89.2	4.59	.39	.01	.17	.26	.01		T	.01	.12	.08	.31	1.28	.03	T					.28			.04	.34									3.78	
KOHALA 179.1	2.42			.12	.26	.02						.47	1.04	.32						.01														.72
KOHALA MAULILI 176	3.94			.33	.46	.01						.73	1.63	.23						.01														.06
KOHALA MISSION 175.1	2.83				.18	.32	T					.82	1.01	.24	T					.01													.23	
KOLAWE LOWER 196	6.07																																	.02
KONA AIRPORT 08.3	3.63		.07	.04				.01					.30	1.83	.05																			.80
KONA VILLAGE 93.8	1.22		.07										.01								.10		.04										.42	T
KUKAIUA 222	4.68	T		.11	.25					.02	.06	.20	3.81	.08				.03															.08	
KUKUIHAELE HIC 199	4.34			.09	.40							.40	2.10	.50	.70																		.02	
KUKUIHAELE MILL 206	4.08			.04		.17				.01		.30	2.85	.22				.15															.08	
KULANI CAMP 79	2.01		.09		.05					.06			.52	.12								.02											.12	
KULANI MAUKA 76	4.00											.24																					.16	
KULANI SCHOOL SITE 78	1.93							.02							.13																		.16	
LANIHAU 68.2	6.29		.61		.19	.04	.31		.10			1.73	.81						.11	.27	.12											.83		
MANUKA 2	1.18					.15				T			.17	.96	.44				T	.01	.08	.06	.24									.26		
MAUNA KEA BEACH 98	1.07																																.05	
MAUNA LOA SLOPE 085	.02												.02																					
MIDDLE HOLUALOA 68.1	3.09		.23			.23	.19						.30	1.03																			.36	
MIDDLE PEN 147.1	1.55											.07		.50																				
MOAULA 18	1.36																																	
MOUNTAIN VIEW 91	3.92	.16	.03	.23	.10	.05			.02			.06	.13	.90	.06																		1.36	
NAALEHU 14	1.04		.11	.05		.02						.06		.04	.15	.11					.29		.05									.04		
NAPOPOD 28	1.93		.09									.47									.21		.01										.06	
NAULU FOREST 38.6	.77	.15			.02											.22	.02																.76	
NIULII 179	2.93			.32	.28								.65	1.05	.38																		.11	
OKALA 223	3.98			.15	.20					.03	.35	.07	3.05	.03						.01													.22	
OPIMIHAELE 2 24.1	4.73		.02		1.80	.01	.01	.08	.03	T	.35	.22	.16	.04	T	.02	.08	.06	.04	.27	.01	.01											.04	
ORCHID LANE EST 91.5	3.93					1.50								.72																				
PAAHUAU 217	4.01		.07	.07					.02			.56	3.08	.13	.05																		.01	
PAAULI 221	4.24	T		.09	.13						.03	.15	3.70	.07				.01															T	
PAHALA 21	1.36			.12						.26	.03	.41	.05	.22		.01	.06																	
PAHIA 65	4.32	.14		.22	.20	.12	.09		.09			.12	.31	.22					.12	.15	.12	.19	.01										.91	
PAKAO 37	.58																																	.58
PAPAIKOU 144.1	2.05	.08	.01	.14	.19				.05	.12	.06	1.13	.03								.07		.04	.02									.47	
PAPAIKOU MAUKA 140.1	5.70	.24	.01	.17	.38				.09	.08	.08	.38	2.47	.05				.10			.17		.02	.02		.03	.20	.03	.15	.08	.95			
PEPEEKO MAKA 144	3.41	.13	.01	.13	.12	.01				.10	.01	.56	.97	.34							.07		.24										.51	
PIIHONUA 89	5.20																																	
POHAKULOA 107	.49												.49																					
POKAO 95.1	.67												.02																					
PUU KIME 120	.83																																	.83
PUU LAAU 102.1	.90																																	.90
PUU LEHUA 73	1.40																																	1.40
PUU MALLI 113	3.67																																	.67
PUUOKUMAU 167	4.49			.35	.49	.01						.81	1.37	.05		.03																	.14	
PUU OO 82	-																																	
PUU WAAHAA 94.1	1.08												.12																					
SADDLE ROAD 1 84	5.40						2.20																											
SOUTH POINT CORRAL 3	4.44																																	
UMIKOA 116	4.76		.02	.10								1.21	2.80		.19																		.44	
UPOLU POINT USCG 159.2	1.57			.09	.07							.52	.70	T																			.01	
WAIKAE SCD 88.2	4.73	.18	.07	.33	.12	.08			.05	.04	1.55	.70					.12																.57	

SUPPLEMENTAL DATA

Station	Wind (Speed - m.p.h.)						Relative humidity averages - percent				Number of days with precipitation						Percent of possible sunshine	Average sky cover sunrise to sunset	
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	150TH MERIDIAN TIME				Trace	01-09	10-49	50-99	1.00-1.99	2.00 and over			Total
							2 AM	8 AM	2 PM	8 PM									
HILO, HAWAII, WB AIRPORT	14	1.7	7.1	20	E	28	89	71	63	82	7	11	4	2	0	0	24	66	6.4
HONOLULU, OAHU, WBFC	5	8.5	11.9	25	E	30+	80	70	55	71	13	6	0	0	0	0	19	68	4.5
KAHULUI, MAUI, WB AIRPORT	5	8.9	11.3	27	E	30+	80	68	54	73	2	5	2	0	0	0	9	80	3.8
LIHUE, KAUAI, WB AIRPORT	6	7.0	10.2	22	SW	14	80	76	66	74	7	13	3	0	0	0	23	57	5.8

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Station	Day of Month																															Average	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
* * *																																	
ISLAND OF HAWAII																																	
KANALOHULUHULU 1075	MAX MIN	70 47	70 53	73 57	75 40	72 44	73 43	72 45	69 45	74 54	66 56	71 49	71 52	73 54	72 57	70 56	69 55	74 54	72 54	71 52	75 57	73 54	74 54	69 52	70 55	73 55	73 59	74 56	78 60	72.1 52.5			
KILAUEA POINT 1133	MAX MIN	83 72	84 73	83 69	82 72	82 70	81 70	85 72	84 72	80 67	81 70	80 70	84 69	83 70	87 73	92 70	81 74	82 71	82 74	86 73	85 74	81 74	82 74	80 71	82 74	82 74	82 70	84 74	85 70	82 70	83 70	82 72	83.0 71.5
LIHUE WB AP 1020.1	MAX MIN	84 69	84 75	84 76	84 72	84 69	84 69	85 69	84 67	85 70	83 72	81 72	82 67	83 68	87 67	89 69	84 69	84 74	83 75	84 74	86 75	86 74	86 73	86 74	86 74	86 76	84 74	85 74	83 71	85 72	85 71	85 74	84.3 72.3
MAKAHUEA POINT 940.1	MAX MIN	88 69	88 74	85 75	85 73	86 70	88 69	86 74	88 69	85 74	88 69	81 74	82 70	88 70	83 68	90 71	93 71	85 72	84 70	82 71	86 71	86 74	86 74	86 76	88 74	88 74	88 76	88 74	85 71	87 72	85 70	84 74	86.3 71.7
MANA 1026	MAX MIN	89 67	87 67	89 67	88 67	88 66	89 67	89 67	88 66	88 66	84 67	85 66	88 66	86 68	87 70	88 69	90 69	89 69	89 69	90 69	89 69	89 69	88 68	86 68	87 69	83 68	85 68	88 69	88 69	89 69	90 69	87.8 68.2	
NIU RIOGE 1035	MAX MIN	82 62	81 62	80 61	82 63	82 64	82 63	83 64	80 65	83 65	81 66	81 65	80 61	82 61	81 60	82 60	83 60	83 60	82 62	83 62	82 62	83 62	82 62	83 62	79 62	78 62	78 62	74 61	83 61	85 61	84 63	81.1 62.3	
WAIAMI LOWER 1054	MAX MIN	80 61	80 65	80 67	79 62	81 60	81 60	80 59	80 60	79 60	79 59	80 60	76 63	79 60	85 61	86 61	85 62	78 68	82 69	81 68	84 65	82 67	80 66	80 66	80 68	80 67	80 66	78 67	80 69	80 70	80 70	80.5 64.4	
* * *																																	
ISLAND OF OAHU																																	
EWA PLANTATION 741	MAX MIN	84 65	84 66	85 69	86 68	86 63	86 65	85 65	87 64	86 65	81 67	84 69	83 65	86 64	86 66	86 69	85 66	88 68	87 68	87 67	86 67	86 68	85 68	85 70	86 67	86 68	86 69	86 71	86 69	87 69	87 72	85.6 67.5	
HONOLULU WBFC 703	MAX MIN	86 70	85 73	86 73	86 72	88 67	88 68	85 70	88 69	87 72	81 68	85 70	83 67	85 70	85 72	86 70	89 71	89 75	87 71	88 72	90 71	88 75	88 72	86 74	86 72	86 74	88 70	88 72	88 74	88 75	88 75	86.7 71.4	
HONOLULU SUBSTA 704	MAX MIN	81 73	82 73	83 71	84 71	84 71	84 71	85 70	83 68	83 70	81 68	83 68	81 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82.0 66.0	
KAHUKU 912	MAX MIN	86 68	83 68	83 73	84 68	84 70	84 70	85 70	83 68	83 70	81 68	81 70	82 66	86 68	86 70	87 66	91 70	83 69	86 71	86 75	85 73	84 70	84 70	85 70	84 70	85 70	85 72	85 72	84 72	84 72	85 72	84.4 70.8	
KANEDHE MAUKA 781	MAX MIN	84 69	84 69	81 70	83 72	82 69	82 68	83 68	81 71	83 72	82 61	76 65	78 67	82 69	82 74	86 69	85 70	84 73	84 70	83 72	83 70	83 71	83 71	85 71	84 72	84 70	84 70	83 69	83 70	83 73	83 73	82.7 70.0	
LUALUALEI 804	MAX MIN	86 68	86 67	86 65	87 71	88 67	89 69	88 66	88 66	87 66	85 69	81 66	86 66	88 70	88 84	88 71	88 69	88 71	88 69	88 70	88 69	88 69	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	87.2 70.2	
MAKAPUU POINT 724	MAX MIN	86 73	83 67	83 71	80 67	86 68	84 70	86 68	86 70	84 66	84 69	84 70	83 68	86 68	86 70	82 66	85 69	82 69	82 67	82 67	82 67	82 67	82 67	82 67	82 67	82 67	82 67	82 67	82 67	82 67	82 67	83.4 70.8	
PAEPIA 870	MAX MIN	84 64	84 64	79 65	83 66	82 61	85 62	83 62	86 65	85 64	85 64	74 60	80 60	81 63	88 63	84 63	84 63	82 65	86 64	86 64	86 64	86 65	86 64	86 65	86 65	86 64	86 64	86 64	86 64	86 64	86 64	83.5 64.2	
PRI WAHIAWA 820.2	MAX MIN	89 67	88 62	85 66	84 68	85 60	88 62	88 60	88 62	87 62	87 62	79 62	82 65	84 65	82 61	86 62	86 65	86 65	86 65	86 65	86 65	86 65	86 65	86 65	86 65	86 65	86 65	86 65	86 65	86 65	86 65	85.9 65.2	
WAIALUA 847	MAX MIN	87 64	88 66	85 66	86 62	86 62	90 62	88 66	86 66	86 66	84 67	81 61	83 62	86 64	86 66	88 64	88 64	87 66	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	86.1 65.0	
WAIKIKI 717.2	MAX MIN	87 68	87 72	85 74	85 72	86 67	87 66	86 69	86 67	87 68	81 69	84 70	81 66	87 65	88 68	88 70	91 71	89 74	88 69	88 72	88 74	88 72	88 72	88 72	88 72	88 72	88 72	88 72	88 72	88 72	88 72	87.2 70.4	
* * *																																	
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX MIN	84 71	84 71	82 74	82 71	83 69	86 68	83 69	84 73	83 73	82 73	79 68	82 68	79 69	81 69	84 69	84 75	84 74	84 76	84 76	84 76	84 76	84 76	84 76	84 76	84 76	84 76	84 76	84 76	84 76	84 76	83.2 71.6	
* * *																																	
ISLAND OF LANAI																																	
LANAI CITY 672	MAX MIN	76 65	82 62	80 65	77 64	76 63	80 64	76 63	76 60	79 60	77 63	75 63	74 63	78 65	76 64	79 64	81 62	80 60	79 62	79 62	78 62	78 64	77 67	79 61	80 61	78 61	75 65	78 62	76 65	77 66	79 62	77.8 63.0	
* * *																																	
ISLAND OF MAUI																																	
HALEAKALA PS 338	MAX MIN	65 45	67 46	70 53	73 45	71 43	64 45	65 41	62 45	62 41	66 45	63 47	62 42	64 41	67 44	65 42	65 46	65 44	66 44	66 44	66 44	66 44	66 44	66 44	66 44	66 44	66 44	66 44	66 44	66 44	66 44	65.8 44.4	
HALEAKALA SUMMIT 338.4	MAX MIN	63 54	60 51	61 45	60 45	62 44	61 44	65 43	61 43	61 39	60 42	63 44	63 44	66 42	65 44	63 49	65 46	63 46	63 46	63 46	63 46	63 46	63 46	63 46	63 46	63 46	63 46	63 46	63 46	63 46	63 46	62.2 44.4	
KAHA AIRPORT 355	MAX MIN	84 71	84 70	83 69	81 69	83 66	83 66	84 66	85 66	84 67	83 67	80 67	81 67	80 69	85 66	86 65	86 66	85 69	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	84.2 68.6	
KAHANA PALI AIRPORT	MAX MIN	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84.2 68.6	
KAHULUI WB AP 398	MAX MIN	92 66	90 64	84 70	88 70	87 61	90 62	89 62	87 62	84 69	85 64	82 70	86 71	86 70	88 68	88 70	87 65	89 68	92 68	88 63	89 68	89 65	90 65	91 67	88 66	89 66	89 66	89 66	89 66	89 66	89 66	88.5 67.3	
KAILUA 446	MAX MIN	79 64	80 68	79 54	74 51	74 45	74 44	80 43	80 43	80 39	79 42	78 44	80 44	80 44	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	81 45	79.6 65.6	
KAWAKAPU BEACH 260.2	MAX MIN	85 67	90 64	89 65	89 62	87 63	87 63	89 63	87 63	87 63	87 63	84 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	88.2 65.9	
KULA SANATORIUM 267	MAX MIN	72 58	72 58	72 57	74 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	75 55	73.3 58.0	
LAHAINA 361	MAX MIN	85 69	87 69	85 68	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	86.3 69.0	

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Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
WAILUKU 392	MAX	88	87	84	84	84	85	84	85	86		84	83	81	84	90	88	88	88	87	88	87	87	88	87	88	87	88	88	88	88	85	
	MIN	69	70	70	70	69	68	67	67	69		76	70	69	67	68	69	71	72	72	72	73	72	72	71	72	73	71	72	72	74		
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	82	83	80	81	82	83	84	83	83	84	83	73	80	84	84	84	84	83	84	84	84	84	84	84	84	85	84	84	85	84	84	85
	MIN	61	62	64	61	62	61	61	61	62	65	65	66	63	64	65	66	69	68	63	64	66	67	67	65	64	65	66	65	66	69		
HAWAII VOLCANO NP HO 54	MAX	72	69	70	70	68	77	71	72	70	66	72	64	69	68	75	74	76	70	78	72	72	73	66	69	71	71	69	71	70	71		
	MIN	53	54	53	54	51	51	50	50	52	51	51	59	55	52	56	53	58	55	53	54	55	57	55	55	57	56	55	55	57	56		
HILO WB AIRPORT 87	MAX	85	83	82	83	86	85	86	85	83	84	80	83	87	87	87	87	86	85	85	87	88	86	86	90	87	85	87	86	85	84		
	MIN	66	68	70	69	65	65	65	67	65	65	69	69	68	66	65	65	68	67	66	67	65	67	67	67	67	67	69	68	67	68		
KAINALIU 73.2	MAX	77	76	77	78	78	76	76	77	77	79	77	78	70	76	79	80	81	81	79	80	79	79	79	77	79	80	78	79	77	79		
	MIN	62	63	65	63	66	65	63	63	61	61	61	65	64	63	62	64	65	67	67	64	64	63	65	64	63	65	64	63	66	66		
KAMUELA 192.2	MAX	80	78	76	70	72	76	76	77	75	73	73	72	75	75	79	80	75	78	76	75	75	80	80	77	80	74	75	76	75	74		
	MIN	50	54	56	55	54	56	51	54	56	58	58	57	55	58	53	56	60	60	57	57	58	57	60	54	57	60	58	58	60	60		
KAMUELA AIRPORT 191	MAX	79	77	74	70	74	75	78	78	74	74	74	71	73	76	77	76	75	77	76	77	78	78	77	78	78	77	76	76	76	76		
	MIN	52	59	58	50	52	51	58	50	57	52	50	60	54	50	53	58	58	50	50	59	49	58	57	59	50	59	54	54	54	62		
KEAAU 92	MAX	84	84	83	82	82	84	84	84	84	82	84	78	81	88	88	88	88	86	85	85	87	87	87	82	86	81	85	85	85	85		
	MIN	63	63	66	67	64	65	64	64	64	64	67	68	67	64	64	64	64	62	65	67	66	66	66	67	67	68	67	67	67	67		
KEALAKEKUA 26.2	MAX	78	77	77	78	78	78	77	77	77	78	78	79	73	76	79	80	81	81	79	80	78	77	78	78	79	80	77	78	78	80		
	MIN	63	63	64	63	65	66	63	63	61	62	63	66	63	63	63	64	64	67	67	65	64	64	65	64	64	64	65	64	65	66		
KOHALA MISSION 175.1	MAX	82	81	81	78	80	81	81	82	82	82	81	73	78	81	83	83	82	82	82	82	82	83	81	82	82	83	82	82	82	82		
	MIN	64	67	67	67	64	63	64	65	67	66	67	68	66	69	66	67	69	71	69	67	70	69	70	66	68	69	68	68	69	71		
KONA AIRPORT 68.3	MAX	83	83	83	82	82	82	84	84	83	82	82	82	74	84	84	84	85	83	83	85	84	84	83	84	84	83	82	85	84	82		
	MIN	68	68	70	72	67	66	67	66	67	65	65	65	67	66	66	66	66	66	66	62	66	67	66	67	71	71	71	67	67	69		
KULANI CAMP 79	MAX	70	67	68	68	66	68	67	69	67	62	68		68	70		71	70	68	68	72		69	68	68	66	68	68	66	66	68		
	MIN	43	47	48	48	42	41	43	43	46	48	45		46	43		44	48	48	43	48		45	48	48	48	50	51	50	45	52		
MAUNA KEA BEACH 98	MAX	85	85	87	91	86	86	86	84	87	87	89	86	81	84	84	85	86	88	92	86	86	87	86	85	87	87	86	86	87	87		
	MIN	71	72	72	73	71	73	70	70	73	70	73	71	71	75	73	73	74	74	73	72	73	76	72	70	71	75	71	74	74	77		
MAUNA LOA SLOPE 085	MAX	62	61	59	60	58	58	56	56	57	58	59	56	58	59	58	57	63	63	58	59	60	58	57	56	58	57	57	61	53	51		
	MIN	44	45	43	40	40	41	40	39	36	39	41	39	40	40	41	39	43	43	41	42	41	42	39	39	42	46	44	41	37	36		
MOUNTAIN VIEW 91	MAX	79	80	77	78	76	81	83	81	83	79	81	73	78	80	81	82	86	81	82	79	83	81	82	78	79	80	79	81	80	75		
	MIN	59	62	62	61	59	58	59	57	61	56	57	64	63	59	61	59	58	63	58	58	58	65	60	60	63	61	62	62	64	64		
NAALEHU 14	MAX	82	82	81	81	79	81	81	82	82	81	82	80	81	81	83	83	83	83	84	83	83	84	84	82	83	84	82	82	83	83		
	MIN	67	67	65	66	65	67	67	67	67	64	69	67	68	68	64	64	68	70	68	69	69	68	68	69	69	69	70	70	69	69		
OOKALA 223	MAX	80	82	80	79	82	81	82	82	82	80	81	81	77	82	81	82	82	82	84	82	83	84	83	85	84	82	82	83	85	83		
	MIN	68	68	67	66	67	70	62	75	67	65	66	67	66	64	64	69	69	71	69	70	70	80	74	70	71	71	70	72	71	71		
OPIHIHALE 2 24.1	MAX	78	79	81	84	78	80	80	79	78	79	75	72	76	79	78	77	77	79	80	77	78	76	78	80	77	79	79	82	84	86		
	MIN	66	63	62	63	66	63	61	61	60	61	63	63	60	59	61	62	64	63	63	62	63	66	61	63	63	65	62	62	62	64		
PAHALA 21	MAX	82	79	80	81	78	80	81	81	81	78	81	76	77	78	81	82	83	82	83	81	83	72	82	80	82	83	82	83	83	84		
	MIN	64	64	62	62	61	60	61	60	61	59	59	65	67	60	62	61	62	64	64	62	62	63	64	66	64	65	65	63	64	68		
UPOLU POINT USCG 159.2	MAX	86	86	83	80	83	84	84	84	83	84	84	79	82	85	85	85	84	85	85	85	84	86	85	86	86	84	84	84	85	85		
	MIN	69	70	69	69	67	69	67	69	68	70	68	69	71	71	73	74	71	73	69	70	71	71	70	71	71	70	72	70	70	70		

EVAPORATION AND WIND

Station		Day Of Month																															Total or Avg.
		1	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * * ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP	.31	.27	.35	.35	.36	.36	.34	.19	.30	.26	.20	.25	.20	.24	.36	.36	.25	.32	.24	.33	.39	.40	.35	.36	.35	.39	.45	.27	.36	.32		
	WIND	145	110	158	158	102	74	90	66	102	164	164	105	43	*	116	94	98	107	123	131	120	119	141	153	102	149	163	172	178	181		
	MAX	92	95	90	89	92	93	92	89	90	85	82	79	85	88	92	93	89	93	88	92	93	95	92	92	92	94	91	86	91	92		
	MIN	67	68	69	69	67	67	66	65	66	68	67	64	65	66	67	68	69	72	71	71	71	71	71	71	71	69	70	70	71	72		
* * * ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.29	.26	.26	.32	.27	.30	.25	.30	.23	.24	.24	.19	.23	.30	.32	.31	.28	.28	.33	.30	.30	.30	.30	.30	.30	.11	.27	.28	.24	.28		
	WIND	19	21	37	35	25	30	25	19	24	35	40	34	21	26	37	30	21	28	37	29	22	31	27	33	18	29	27	27	36	42		
	MAX	99	95	90	94	92	95	92	94	91	93	88	95	93	98	97	98	97	95	96	95	94	97	97	92	97	94	95	93	95	93		
	MIN	71	69	69	70	67	68	68	69	67	70	68	67	69	70	72	71	70	70	72	71	70	72	70	70	71	69	70	71	71	71		

See Reference Notes Following Station Index

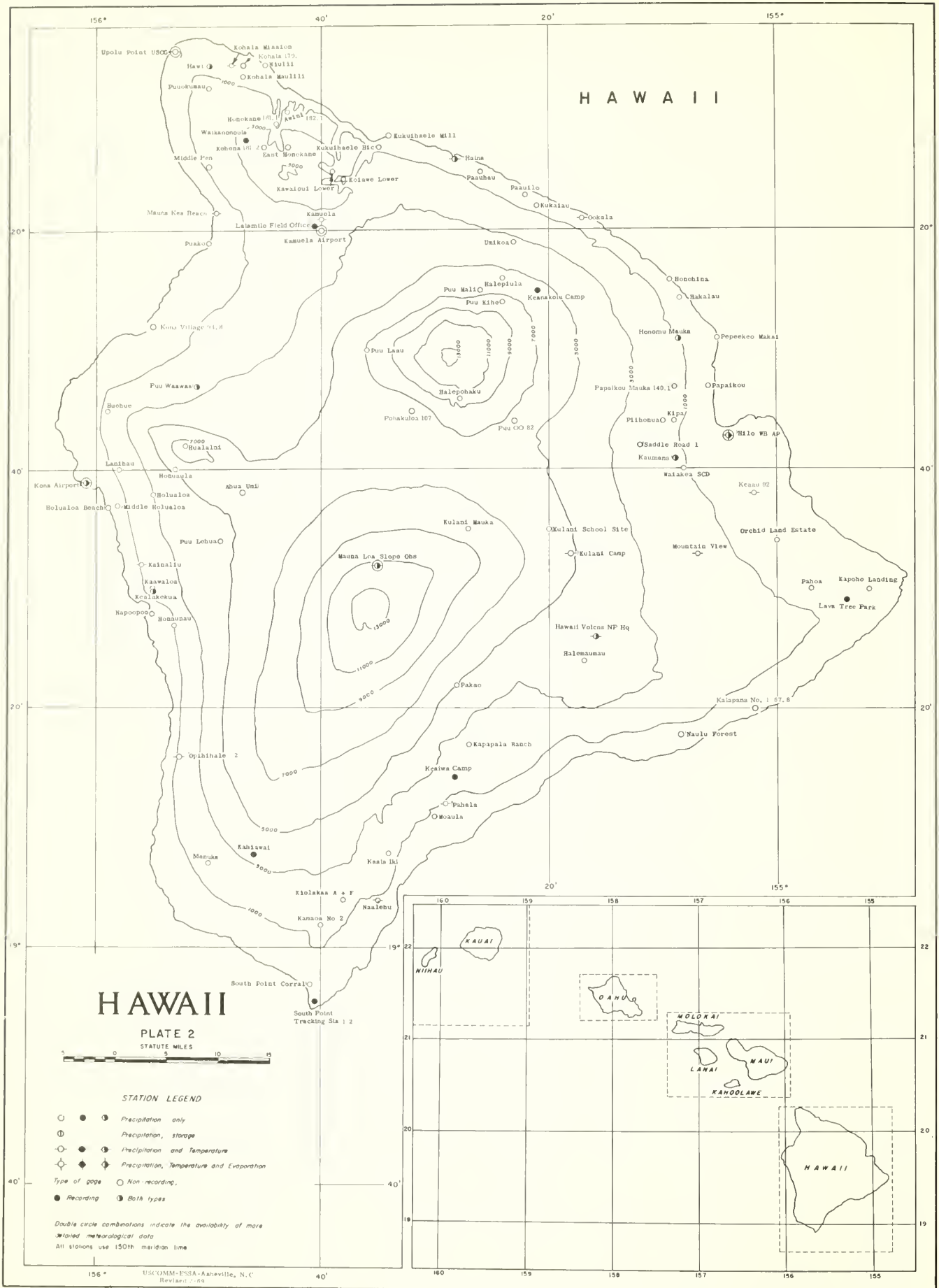
DAILY PRECIPITATION

HAWAII
JUNE 1968
DELAYED DATA

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
• • • JANUARY 1968																																	
MOUNT WAIALALE 1047	37.15	2.99	.31	.12	.39	1.14	.71	.04	.20	.04			.35	.16							.31	.04	.31	.08						.24	3.54	5.14	20.04
• • • FEBRUARY 1969																																	
MOUNT WAIALALE 1047	-	9.72	6.97	1.22	.43	4.17	.87																										

CORRECTIONS

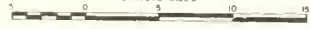
DATE	TABLE	STATION	CORRECTIONS
ISLAND OF MAUI			
MARCH 1968	CLIMATOLOGICAL DATA	WAILUKU 392	AVERAGE MINIMUM TEMPERATURE 67.0, AVERAGE TEMPERATURE 73.1, DEPARTURE FROM NORMAL 1.6
MARCH 1968	DAILY TEMPERATURE	WAILUKU 392	MINIMUM TEMPERATURE ON 20TH 65; AVERAGE MINIMUM TEMPERATURE 67.0
ISLAND OF HAWAII			
APRIL 1968	CLIMATOLOGICAL DATA	KULANI CAMP 79	AVERAGE MAXIMUM TEMPERATURE 63.6M, AVERAGE TEMPERATURE 55.8M, HIGHEST TEMPERATURE 71, DATE 6TH
APRIL 1968	DAILY TEMPERATURE	KULANI CAMP 79	MAXIMUM TEMPERATURE ON 30TH MISSING, AVERAGE MAXIMUM TEMPERATURE 63.6
JUNE 1968 THROUGH APRIL 1969	ALL TABLES	PUU OO 82	DELETE ALL DATA FROM JUNE 1968 THROUGH APRIL 1969



HAWAII

HAWAII

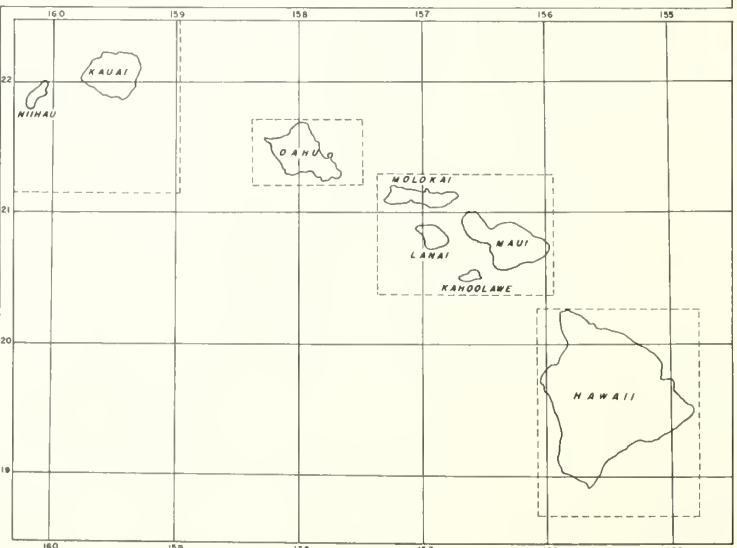
PLATE 2
 STATUTE MILES



STATION LEGEND

- ● ③ Precipitation only
- ⊕ Precipitation, storage
- ● ③ Precipitation and Temperature
- ⊕ ● ③ Precipitation, Temperature and Evaporation
- Type of gauges ○ Non-recording, ● Recording
- ③ Both types

Double circle combinations indicate the availability of more than one meteorological data
 All stations use 150th meridian time



CLIMATOLOGICAL DATA

HAWAII
JULY 1969

Continued

Station	Temperature										Precipitation													
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days				
									Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More		
									31° or Above	32° or Below	32° or Below	31° or Below												
KEAAU 92	82.9	67.0	75.0	.6	85	28+	64	16+	0	0	0	0	12.28	2.14	1.69	20	.0	0		26	8	3		
KEALAKEKUA 26.2	79.2	66.1	72.7		83	21+	63	4	0	0	0	0	5.31		1.22	8	.0	0		9	4	2		
KONA AIRPORT 68.3	84.5	68.1	76.3		88	13+	66	7+	0	0	0	0	4.00		1.00	3	.0	0		7	4	1		
KUKUIHAELE HIC 199													4.44	- 1.10	.70	2	.0	0		15	3	0		
KULANI CAMP 79	66.3M	49.1M	57.7M		71	20+	40	7	0	0	0	0	9.58		3.30	20	.0	0				2		
MAUNA KEA BEACH 98	88.6M	74.4M	81.5M		94	21+	69	24+	13	0	0	0	1.19		.64	24	.0	0		2	2	0		
PAHALA 21	82.6	65.6	74.1	.9	88	14	60	24	0	0	0	0	.62	-.90	.35	26	.0	0		2	0	0		
POHAKULDA 107													.94				.0	0				1	0	0
PUAKO 95.1													.38		.35	24	.0	0				4	2	1
PUU WAAWAA 94.1													2.55	.45	1.11	4	.0	0				4	2	1
UMIKOA 118													3.04	.05	1.17	20	.0	0				2	1	
WAIKAEA SCO 88.2													15.82		3.28	20	.0	0		25	10	4		
ISLAND			71.7										5.34				.0							

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 95° ON THE 1ST AT KEAWAKAPU BEACH 260.2, MAUI
 LOWEST TEMPERATURE: 31° ON THE 3D AT MAUNA LOA SLOPE OBS, HAWAII
 GREATEST TOTAL PRECIPITATION: 40.20 INCHES AT PUOHOKAMO A 2 343, MAUI
 LEAST TOTAL PRECIPITATION: .00 AT 3 STATIONS
 GREATEST ONE-DAY PRECIPITATION: 4.65 INCHES ON THE 20TH AT PUU OO B2, HAWAII

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
JULY 1969

Continued

Station	Total	Day of Month																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
ISLAND OF MOLOKAI																																			
LAUPAHA 003	A	1.21	*	*	*	.06	.03	.04	*	*	*	*	*	*	.09	*	.20	.12	.03	*	.08	*	*	.11	*	.05	.19	.03	*	.18	*	*	*		
ZUNUKAKAI 536	A	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
MELLELE PENS 551	A	.38	*	*	*	*	*	*	*	*	*	*	*	*	.38	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
WALUPUHI 534	A	.97	*	*	*	*	*	.16	.02	.06	T	*	*	.36	.01	.12	.06	*	*	*	T	*	*	*	*	.06	*	.06	*	.04	*	*	*		
WALUPEHI 542	A	.63	.24	.01	.17	.02	.01	.04	.22	.02	.16	.19	.04	.02	.34	.23	.05	.40	.03	.16	.13	.04	.11	.05	.06	.11	.19	*	.03	.10	.06	*	*		
WUNOIA 511	A	.93	*	*	.29	.34	*	*	*	*	*	*	*	.03	*	.05	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.22	*	*		
WUNOIA 512	A	.77	T	*	*	*	*	T	.13	.07	T	*	*	.27	*	.02	T	T	.02	T	.10	.10	.10	.16	*	*	*	*	T	.16	*	*	*		
PIIHOHAI RANCH 542.1	A	2.53	.02	.08	.08	T	.02	.02	.16	.07	.03	.42	.10	T	.03	.16	.25	T	.26	.01	.04	.25	.12	.13	.02	.09	.11	T	.64	.04	.02	T	*		
WAIKULU 540	A	5.77	*	*	*	*	*	.11	.11	.07	.03	.42	.10	T	.03	.16	.25	T	.26	.01	.04	.25	.12	.13	.02	.09	.11	T	.64	.04	.02	T	*		
ISLAND OF LANAI																																			
WAIKAPU 490	A	1.16	*	*	*	*	*	.4	.36	*	.45	*	*	*	*	*	*	.02	*	*	*	*	*	*	*	.05	*	*	*	*	*	*	.66	*	
WAIKAPU HARBOR 658	A	.44	*	*	*	*	*	.36	.36	*	.45	*	*	*	*	*	*	.02	*	*	*	*	*	*	*	.05	*	*	*	*	*	*	.66	*	
LANAI CITY 672	A	3.20	1	*	.18	.11	*	.05	T	*	.02	*	*	*	.03	T	.31	T	.17	*	.02	*	*	.03	.01	.60	*	.04	.01	*	*	T	*	*	
LANAI HALE 684	A	2.19	*	*	.95	*	*	*	*	*	*	*	.40	*	*	*	*	*	.27	*	*	*	*	*	*	*	*	*	*	*	*	*	.33	*	
LANAI 694	A	.33	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.33	*
LAUEA 676	A	.38	*	*	*	*	*	*	*	.02	*	*	*	*	*	*	.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.35	*
LAUEA EAKULA 685	A	.53	*	*	*	*	*	*	*	*	*	*	*	*	.51	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.02	*
ISLAND OF MAUI																																			
AWAHI-252	A	.18	*	*	*	*	*	.20	*	*	*	*	*	*	*	*	*	2.00	*	*	*	*	*	*	.20	*	*	*	*	*	*	*	*	*	
MALEKAKA B E S 434	A	10.04	1.24	.84	.60	*	.02	1.87	.90	.02	.11	.02	*	.04	1.11	1.81	*	.06	.38	.60	.05	*	.05	.01	.04	.22	.01	*	*	.34	*	*	*	*	
MALEKAKA RANCH 432	A	4.24	.52	.26	.14	*	.72	.26	*	*	*	*	*	.53	.81	*	*	.06	.11	.13	*	*	.05	.01	.04	.22	.01	*	*	.70	*	*	.06	*	
MALEKAKA S 338	A	6.02	.62	.52	.11	T	.11	.22	*	.03	.13	*	*	1.36	1.92	T	.07	T	.74	T	T	.06	.01	.01	.01	.01	.01	*	*	.02	*	*	.02	*	
MALEKAKA SUMMIT 338.4	A	.46	T	T	.02	*	T	*	*	*	*	*	*	.11	.06	*	*	*	T	.17	*	*	.03	.01	.03	.01	.03	*	.05	*	*	.09	*	*	
MALIMAILE 423	A	4.32	.45	.16	.47	.15	*	1.18	.03	.04	.04	*	*	.46	.47	*	.01	.01	.01	.01	.20	.01	.05	.01	.05	.47	*	*	.03	.09	*	*	.07	*	
HONANUAPUKO 485	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.1	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.2	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.3	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.4	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.5	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.6	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.7	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.8	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.9	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.10	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.11	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.12	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.13	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.14	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.15	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.16	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.17	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.18	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.19	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.20	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.21	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.22	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50	.29	.03	.07	.01	.24	.50	.17	.05	.04	.08	.28	.43	T	*	.02	.29	*	*	.02	*
HONANUAPUKO 485.23	A	5.36	.17	.25	.04	*	.20	.76	.21	.12	.53	.01	.05	.04	.50																				

DAILY PRECIPITATION

Continued

HAWAII
JULY 1969

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
KAUMANA 88.1	20.91	1.96	2.62	1.10	1.46	.21	.48	2.01	.84	.16	.64	.06	.12	.26	.21	.78	.19	.12	.12	.26	3.65	.57	.43	.36	.09	.40	.60	.02			1.05	.14	
KAWAUNUI LOWER 193	14.49	*	*	*	1.20	*	*	*	*	*	*	2.87	*	*	*	*	*	*	*	*	*	1.02	*	*	*	9.40	*	*	*	*	1.11	.32	.18
KEAAU 92	12.28	.68	1.13	.33	.32	.12	.26	1.00	.91	.33	.43	.22	.22	.29	.03	.88	.10	.20	.17	.39	1.69	.06	.60	.39	.02	.50	.40	*	*	.01	.32	.15	
KALAEKUA 26.2	5.31	.05	.06	.31	.03	*	*	.33	1.22	.08	T	.69	*	.05	T	.04	1.13	*	.01	*	*	.52	.34	.07	.12	*	T	*	*	.08	.01	.82	
KEHENA 181.2	12.50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	T	*	*	*	12.50	
KIDAKAA A C F 6	7.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7.40	
KIPA 89.2	22.36	2.57	3.09	.41	.40	.23	.61	1.84	.72	.20	.68	.22	.15	.40	.16	1.00	.12	.17	.16	.39	4.54	.37	.50	.32	.14	.50	.86	.04	.04	.18	1.08	.27	
KOHALA 179.1	3.14	.10	.20	*	*	*	.75	.12	.09	.06	*	*	.15	.27	.07	.03	.03	*	*	*	.63	.05	.10	.02	.04	*	*	*	*	.21	.22		
KOHALA HULLI 176	6.21	.33	.28	.01	T	T	*	1.65	.45	.20	.16	.02	*	.39	.28	.06	.01	.10	*	*	1.43	.05	.11	.04	.03	*	*	*	.34	.28			
KOHALA MISSION 175.1	5.42	.19	.13	*	T	T	.35	1.66	.24	.01	.17	T	.07	.02	.22	.37	.02	T	.04	.28	.69	.14	.06	.09	.03	.06	*	*	T	.29	.29		
KOIHAE LOWER 196	9.17	*	*	*	1.05	*	*	*	*	*	T	1.77	*	*	*	*	*	*	.90	*	*	*	*	*	*	5.45	*	*	*	*	*	*	
KONA AIRPORT 68.3	4.00	.15	.76	1.00	.01	*	*	T	.60	T	.08	*	*	T	*	*	.07	*	.90	.46	*	.85	T	.10	*	*	*	*	*	T	.01		
KONA VILLAGE 93.8	.24	.10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.05	T	.04	*	*	*	*	*	.08	.05	
KUKIAU 222	7.71	.53	2.74	*	.09	*	.81	.48	.32	.11	.10	T	*	.03	.50	.28	.02	.03	.01	1.26	.02	.06	.15	T	.04	*	*	*	.02	.08	.05		
KUKIHAELE MIC 199	4.44	.33	.70	*	.64	.30	.12	.12	.03	*	*	*	*	.51	.10	*	*	*	.14	.34	.05	.01	.19	.12	.38	*	*	*	.02	.08	.16		
KUKIHAELE HILL 206	4.74	.41	.82	.10	*	*	.88	.09	.15	.05	.05	*	.37	.22	.10	*	*	*	*	*	.35	.01	.13	.80	*	*	*	.01	.09	.23			
KULANI CAMP 79	9.58	.01	1.47	.12	.29	.03	.12	.50	*	.41	.36	.05	.06	.21	.25	.34	.09	.23	.10	.19	3.30	*	.10	.36	.10	*	.65	.02	.01	.05	.16		
KULANI MAUKA 76	3.93	.25	.15	.03	*	.31	.05	.05	.05	.05	.05	.06	.03	.55	.07	*	*	*	1.67	.25	*	.06	.02	*	.08	*	3.40	*	*	.31			
KULANI SCHOOL SITE 78	9.52	*	*	*	2.70	*	*	*	*	1.42	*	1.42	*	*	*	*	*	*	*	2.00	*	*	*	*	*	*	*	*	*	*	*		
KUHIAU 68.2	5.56	.08	.40	1.08	.08	.10	*	.04	1.55	*	.30	*	*	.55	*	*	*	*	*	*	*	.74	*	*	.21	*	*	.43	*	*	*		
MAUKA 2	3.15	.08	*	*	*	*	1.88	.12	T	T	T	T	T	T	.20	.02	.08	.06	*	*	*	*	.18	.16	*	*	*	.01	.08	.28	T		
MAUNA KEA BEACH 98	1.19	.05	.55	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.19	.02	*	*	.64	*	*	*	*	*	*			
MAUNA LOA SLOPE DBS	4.85	.99	T	.30	*	*	.40	1.38	*	.21	*	*	.21	*	.67	*	*	*	*	.21	*	*	*	*	.30	*	*	*	*	*	.48		
MIDDLE HOLUALOA 68.1	.31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.01	*	*	*	*	*	*	*	*	*	*	*		
MIDDLE PEN 147.1																																	
MOAUA 18	.35	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
MOUNTAIN VIEW 91	17.26	1.30	2.35	.04	.45	.16	.36	1.42	1.18	.27	.55	.24	.29	.37	.04	.78	.28	.18	.29	.60	2.57	.11	.35	.43	.09	.31	.85	.02	*	1.11	.17		
NAALEHU 14	1.14	.07	*	*	*	*	T	.93	*	*	.06	T	*	1.59	T	*	*	*	*	.72	T	*	T	.09	*	.20	*	*	.07	T			
NAPPOPO 28	5.55	*	*	*	*	*	.02	*	.77	.24	.09	.02	.12	*	*	.15	.01	*	.10	1.02	*	*	*	*	.03	.36	.22	.02	*	.29			
NAULU FOREST 38.6	3.66	.13	.07	*	.02	*	*	*	.77	.24	.09	.02	.12	*	*	.15	.01	*	.10	1.02	*	*	*	*	.03	.36	.22	.02	*	.29			
NIULI 179	4.02	.30	.22	.03	*	*	1.05	.10	.15	.07	.07	*	*	.19	.30	*	*	*	*	*	.79	.07	.15	.10	*	*	*	.30	.20				
ODDULA 223	10.87	.96	2.82	.38	.01	.01	.65	.71	.39	.09	.30	.04	.06	.10	.32	.70	.06	.04	.08	.04	1.51	.09	.15	.23	.02	.70	*	*	.21	.20			
OPHIHALE 2 24.1	6.73	1.84	T	.24	.01	*	.07	.02	T	.27	.05	T	.01	.27	*	*	*	.08	T	.87	.17	.03	.09	T	.02	.01	.19	.43	.05	.01			
ORCHIO LANO EST 91.5	10.61	*	2.64	*	*	*	.14	.11	.06	*	.31	.2	*	*	*	*	*	2.18	*	*	*	.29	.01	.05	.08	.12	*	.01	.03	.09			
PAAHUA 217	3.45	.71	.79	.04	*	.44	.14	.21	.06	*	.36	.12	*	.36	.12	*	*	*	.29	.01	.05	.08	.12	*	*	*	.01	.03	.09				
PAAUO 221	5.24	.63	1.57	.06	.60	.26	.22	.08	.08	.08	T	.02	.43	.13	.04	T	.89	T	.09	.08	T	.01	.01	.01	.01	.01	.01	.01	.01	.01			
PAHALA 21	.62	.06	.05	.03	*	*	.03	.13	.28	1.09	.68	.35	.79	.22	.27	.35	.04	.60	.15	.23	.28	.30	1.30	.05	.33	.48	.18	.74	1.44	.03			
PAHOA 65	13.25	.60	.46	.14	.35	.13	.28	1.09	.68	.35	.79	.22	.27	.35	.04	.60	.15	.23	.28	.30	1.30	.05	.33	.48	.18	.74	1.44	.03	.27	.58	.54		
PANAO 37	9.52	*	*	*	*	*	.07	.02	T	.27	.05	T	.01	.27	*	*	*	.08	T	.87	.17	.03	.09	T	.02	.01	.19	.43	.05	.01			
PAPAIOU 144.1	12.70	1.04	.46	.44	.12	.41	1.36	1.20	.48	.50	.58	.12	.11	.20	.05	.77	.07	.17	.15	.27	1.86	.14	.49	.28	.08	.19	.21	T	.02	.13	.52	.28	
PAPAIOU MAUKA 140.1	23.24	2.19	3.98	.32	.32	.12	1.50	1.60	1.54	.70	1.08	.18	.23	.48	.08	.88	.07	.15	.11	.34	3.89	.34	.48	.51	T	.47	.37	.01	.05	.22	.76	.27	
PEPEKEU MAKAI 144	11.89	.34	.72	.13	.13	.10	1.22	.87	.83	.21	.39	.14	.17	.22	.27	1.05	.03	.25	.05	.45	1.50	.02	.61	.18	.01	.22	.03	*	.12	.55	.88		
PILIHUNA 89	27.60	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.43	*	*	*	*	.35	*	*	*	*	.76		
POHAKULOA 107	.94	.27	.24	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.35	*	*	*	*	*		
PUAKO 95.1	.38	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03		
PUU KIME 120	2.65	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.65		
PUU LAAU 102.1	.90	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.90		
PUU LEHUA 73	1.55	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.55		
PUU MALI 113	.21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.21		
PUUKO MAUKA 167	5.05	.15	.10	*	*	*	1.20	.38	.08	.10	.01	*	.54	.31	.02	.10	.04	*	*	1.25	.01	.15	.05	.06	*	*	*	*	.18	.32			
PUU OO 82	11.08	.38	.21	.19	.12	.10	.20	.61	.23	.03	.36	.01	.02	.08	.12	.46	.10	.10	.07	.17	4.65	.12	.04	.52	.20	.35	.50	T	.30	.14	.70		
PUU PAHAHA 94.1	2.55	*	*	1.11	*	*	.05	*	*	.05	*	*	.47	.70	.39	*	*	*	*	*	*	*	*	*	.26	.72	*	*	*	.02	*		
SADOLE ROAD 184	24.12	*	7.62	*	*	*	*	*	*	.47	.70	.39	*	*	*	*	*	*	*	2.40	*	*	*	*	.00	.00	*	*	*	*	*		
SOUTH POINT CORRAL 3	1.17	*	*	*	*	*	*	*	*	.48	.02	.05	.13	.05	.02	.01	1.17	.01	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02			
UMIKOA 118	3.04	.51	.39	.08	*	*	.08	.02	.05	.13	.05	.02	.01	1.17	.01	.02	.01	1.17	.01	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02			
UPOLU POINT USCG 159.2	2.44	T	.12	T	.41	.13	.19	.01	.05	.13	.19	.01	.03	.17	.37	.01	T	T	.15	.36	.02	.02	T	.08	T	.08	T	.08	.14				
WAIKAEA SCO 88.2	13.82	1.32	2.21	.52	.16	.07	.51	1.07	.89	.30	.59	.15	.13	.41	.10	.79	.14	.13	.20														

DAILY TEMPERATURES

HAWAII JULY 1969

Station	Day of Month																															Average	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
* * *																																	
ISLAND OF KAUAI																																	
KANALOHULUMULU 1075	MAX MIN	75 58	70 57	69 57	71 55	74 56	74 58	72 61	72 60	75 58	70 56	74 54	73 56	72 59	71 59	68 58	72 59	74 58	73 54	74 54	75 62	76 58	74 58	74 57	74 58	71 56	73 54	75 52	72 51	73 56	75 58	74 60	72.9 57.0
KILAUEA POINT 1133	MAX MIN	80 70	82 73	82 74	83 73	82 73	82 72	81 70	81 71	82 69	82 73	81 69	81 60	82 71	82 69	81 70	80 74	82 70	81 73	80 75	82 75	81 75	82 74	81 74	82 74	81 74	81 74	82 74	82 75	83 74	82 74	81 72	81.8 71.4
LIHUE WB AP 1020.1	MAX MIN	85 75	84 72	84 72	85 75	85 75	85 74	85 75	85 75	85 74	85 74	84 76	84 73	85 75	85 73	84 73	85 75	85 75	85 75	85 74	84 74	85 74	85 74	84 74	84 74	85 74	84 74	84 72	85 74	87 74	88 74	86 75	85.0 73.9
MAKAHUENA POINT 940.1	MAX MIN	85 75	85 71	85 71	85 72	86 74	87 74	85 73	86 76	85 72	85 74	86 76	86 75	85 75	82 75	85 71	85 72	86 74	86 72	87 77	86 74	85 69	84 71	86 75	86 77	86 73	86 72	85 71	87 73	86 72	93 71	93 74	86.5 73.5
MANA 1026	MAX MIN	92 65	90 63	90 61	88 62	87 63	87 64	92 63	91 64	91 63	92 62	90 63	88 64	88 63	89 64	90 63	90 62	90 63	89 64	90 64	89 63	89 62	88 64	87 66	89 69	88 66	89 66	86 72	86 70	90 68	91 68	91 68	89.7 68.3
NIU RIOGE 1035	MAX MIN	86 65	85 63	82 61	83 62	84 63	85 64	84 63	85 64	84 63	83 62	84 63	85 64	84 63	83 64	85 64	84 62	84 63	84 63	85 64	85 64	84 62	85 64	85 63	85 62	86 63	87 64	85 63	86 65	86 64	85 65	87 65	84.7 63.3
WAIHI LOWER 1054	MAX MIN	79 69	79 66	78 66	78 65	80 65	78 67	79 72	79 69	79 69	78 70	72 69	77 68	78 67	79 70	79 68	77 70	80 65	83 67	79 68	79 67	79 68	80 69	79 67	79 67	80 70	79 67	79 66	79 67	81 66	83 68	80 69	78.9 67.9
* * *																																	
ISLAND OF OAHU																																	
EWA PLANTATION 741	MAX MIN	85 73	85 69	86 68	86 68	86 69	87 70	87 72	88 74	86 70	88 71	88 70	87 74	86 74	86 71	87 71	84 71	85 70	87 69	86 73	87 74	87 71	86 71	86 70	87 69	88 69	88 72	88 68	86 68	87 69	86 70	85 71	86.5 70.7
HONOLULU WBFC 703	MAX MIN	88 75	87 68	82 71	88 73	87 74	88 74	87 76	86 72	86 72	87 75	87 76	86 75	85 74	85 73	87 74	84 73	86 74	86 74	86 75	86 75	86 74	86 73	87 73	86 73	90 74	88 76	88 73	92 75	90 77	90 77	87 77	87.4 74.3
HONOLULU SUBSTA 704	MAX MIN	82 73	81 71	84 71	84 73	83 74	83 73	83 75	84 76	82 73	84 76	83 76	83 76	83 73	82 74	83 74	83 75	83 75	83 76	83 75	84 75	84 75	84 71	84 72	84 73	83 71	81 72	81 73	85 74	83 75	82 74	82 74	83.0 74.0
KAHUKU 912	MAX MIN	84 75	84 74	83 71	83 74	84 73	83 73	85 73	84 76	85 74	85 74	83 74	83 74	84 72	83 72	84 74	83 71	83 73	84 74	83 71	83 73	84 74	84 70	84 71	83 71	84 71	84 71	83 71	84 71	86 68	85 74	84 72	84.0 72.7
KANEDHE MAUKA 781	MAX MIN	82 75	83 66	82 71	83 72	84 72	83 72	84 71	82 72	83 71	82 71	82 72	83 74	82 73	84 72	81 72	83 73	81 74	82 74	84 74	80 74	81 74	82 72	84 72	83 72	83 72	81 72	81 69	83 71	85 72	83 72	83 72	82.6 72.4
LUALUALEI 804	MAX MIN	88 77	87 73	88 72	90 74	89 72	89 75	90 74	88 75	88 75	88 75	88 76	88 77	87 74	86 76	86 74	86 75	86 74	86 74	88 74	89 75	88 75	88 71	89 72	88 73	88 70	89 71	88 72	89 70	89 71	88 72	88 74	88.0 74.2
MAKAPUU POINT 724	MAX MIN	80 63	87 72	80 71	80 69	86 72	86 73	86 73	87 73	80 70	86 71	80 73	80 73	79 69	80 66	79 67	81 67	79 66	87 66	81 73	79 67	80 70	86 73	86 73	80 70	86 72	88 73	88 75	82 73	88 73	88 75	84 72	82.9 71.2
DPAEULA 870	MAX MIN	80 69	79 67	83 67	84 66	81 64	84 66	84 69	79 70	82 68	81 68	83 68	80 67	80 69	78 68	78 68	78 68	80 66	83 66	79 68	78 68	83 68	78 68	80 67	81 67	83 67	81 67	83 65	84 67	87 67	83 68	81 68	81.1 67.5
PRI WAHIAWA 820.2	MAX MIN	85 70	81 67	83 66	86 65	86 66	86 66	87 66	84 66	85 68	83 67	87 69	83 68	84 68	86 68	81 68	83 66	84 66	85 68	82 66	85 66	85 68	84 68	85 67	85 67	84 66	85 66	84 66	87 66	84 66	89 68	85 66	84.9 67.8
WAILALUA 847	MAX MIN	86 68	84 66	85 65	86 65	87 65	86 64	86 68	85 71	86 67	85 68	86 67	85 67	84 68	84 67	84 68	84 67	85 65	85 65	84 69	85 72	85 73	85 68	85 68	85 73	87 65	86 66	89 66	87 65	86 66	89 67	85 67	85.6 67.5
WAIKIKI 717.2	MAX MIN	87 69	86 73	87 70	88 74	87 74	87 74	88 75	88 76	87 72	88 72	88 74	87 76	87 75	87 72	86 73	87 75	86 73	86 74	87 76	87 75	87 74	86 76	85 72	85 73	86 74	85 73	85 71	87 74	88 73	88 72	85 74	86.7 73.4
* * *																																	
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX MIN	83 76	82 76	82 70	83 69	84 69	82 71	84 76	86 77	84 72	81 71	86 72	84 71	83 75	82 75	83 73	83 73	79 71	83 71	83 71	82 75	83 72	83 72	83 72	83 72	87 71	84 72	84 70	85 70	84 73	84 72	83 71	83.3 72.3
* * *																																	
ISLAND OF LANAI																																	
LANAI CITY 672	MAX MIN	79 62	79 63	79 64	79 63	79 62	79 62	81 63	81 62	81 62	81 65	79 63	79 63	75 62	79 61	79 61	79 61	78 67	78 66	78 65	73 67	78 65	79 64	79 64	79 64	81 65	81 64	78 64	81 64	81 64	81 64	81 64	79.1 63.6
* * *																																	
ISLAND OF MAUI																																	
HALEAKALA RS 338	MAX MIN	64 47	61 46	59 43	61 43	64 47	62 45	63 52	66 53	69 49	64 53	72 53	74 59	70 50	63 49	57 49	66 50	64 45	65 45	71 55	63 54	72 49	67 48	63 44	62 42	62 45	68 46	67 52	68 49	68 52	67 50	70 52	65.5 48.9
HALEAKALA SUMMIT 338.4	MAX MIN	50 42	52 39	48 37	48 39	48 37	48 37	49 45	56 45	59 42	55 44	62 37	61 39	58 43	58 43	58 43	58 43	60 46	60 46	64 54	63 49	64 45	58 48	58 48	57 45	59 48	59 48	60 42	59 42	60 42	59 42	57 40	57.4 41.4
HANA AIRPORT 355	MAX MIN	84 72	82 69	82 68	84 68	84 68	83 70	84 72	84 73	83 71	83 71	84 71	83 73	83 71	83 71	83 70	83 71	82 70	82 71	83 71	82 71	81 73	83 69	83 68	83 71	85 73	84 73	83 70	83 73	85 71	81 71	84 70	83.1 70.9
KAAHAPALI AIRPORT	MAX MIN	85 73	84 72	85 69	86 69	86 72	87 72	86 69	88 72	87 71	86 71	88 65	86 73	85 74	86 72	82 73	87 74	86 71	86 71	86 74	86 74	86 72	86 70	86 71	87 62	86 70	86 71	87 62	88 72	87 71	88 73	88 72	86.1 71.0
KAHULUI WB AP 398	MAX MIN	88 73	88 72	87 70	88 66	88 72	88 72	91 74	89 73	87 72	92 70	89 68	87 74	89 73	85 72	88 72	89 72	87 71	87 71	87 72	87 73	88 72	88 71	88 72	91 67	90 70	92 70	92 70	91 67	88 70	89 70	85 72	88.6 71.5
KAILUA 446	MAX MIN	77 69	79 66	80 66	81 68	81 69	80 71	78 69	80 67	80 67	77 69	79 69	79 69	79 68	79 68	75 65	80 70	79 68	79 68	79 68	79 68	79 67	79 67	79 66	80 68	80 66	80 66	80 66	80 66	80 66	80 66	80 66	79.2 67.9
KEAWAKAPU BEACH 260.2	MAX MIN	95 68	94 70	90 65	89 65	90 67	90 67	91 70	93 69	92 64	88 70	90 65	93 66	91 66	93 66	92 68	92 70	90 65	90 65	90 65	94 71	93 66	89 65	91 66	91 66	91 66	91 66	91 66	91 66	89 66	91 66	92 66	91.1 67.5
KULA SANATORIUM 267	MAX MIN	78 61	76 61	72 59	71 60	74 60	75 61	74 62	75 60	75 61	74 60	74 60	76 57	75 60	75 58	75 60	75 60	73 58	74 58	75 60	73 58	72 58	75 59	73 59	72 60	73 61	73 61	72 60	74 61	75 63	74 63	74 63	74.3 59.6
LAHAINA 361	MAX MIN	89 72	89 72	86 69	86 69	85 69	86 71	87 73	88 71	88 71	87 71	87 71	87 71	87 71	87 71	87 71	88 71	85 68	86 68	88 71	90 72	89 70	87 70	87 71	87 71	88 71	87 71	87 71	88 71	87 71	87 71	87 71	87.6 70.6

STATION INDEX

HAWAII
JULY 1969

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE I	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE I	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER
								TEMP	PRECIP	EVP	SPECIAL										TEMP	PRECIP	EVP	SPECIAL	
ISLAND OF HAWAII																									
KULANI SCHOOL SITE 78	A 5021	02	S MILO	2 19 35	155 20	5735	MI					ST DEPT OF SOCIAL SER	PUU LAU 102-1	A 8452	05	HAMAKUA	5 19 50	155 36	7440	MO			STATE DIV OF FISH-GAME		
LALAMLO FLO OFF 191-1	5260	01	S KOHALA	1 20 01	155 41	2645	MI					STATE DEPT OF L + N RES	PUU LEHUA 73	A 8460	04	N KONA	4 19 34	155 49	4880	MO			GREENWELL RANCH		
LANIHAU 68-2	5330	04	N KONA	4 19 40	155 50	1530	BA					KONA EXPERIMENT STATION	PUU MALI 113	A 8515	01	HAMAKUA	1 19 55	155 26	6960	MO			KOHALA DITCH CO LTO		
LAVA TREE PARK 66-1	5460	02	PUNA	2 19 29	154 54	650	BA					STATE DIV. OF PARKS	PUUDUKUAA 167	A 8548	01	N KOHALA	2 19 42	155 12	2340	MO			KUKIAIAU RANCH CO		
MAHUKA 2	A 6134	03	KAU	3 19 07	155 50	1760	BA					STATE DIVISION OF PARKS	PUU OO 82	A 8550	02	S MILO	5 19 45	155 23	6340	6A			W. H. SHIPMAN LTO		
MAUNA KEA BEACH 98	A 6180	04	S KOHALA	1 20 01	155 51	1830	VAR					MAUNA KEA BEACH HOTEL	PUU MAHUKA 54-1	A 8555	05	N KONA	5 19 47	155 51	2520	7A			GILLINGHAM RANCH INC		
MAUNA LOA SLOPE OBS 36	A 6198	05	HAMAKUA	5 19 32	155 35	11446	MID					MAUNA LOA OBSERVATORY	SADDLE ROAD 1 84	A 8590	02	S MILO	2 19 42	155 12	2340	MO			FEDERAL ELECTRIC CORP		
MIDDLE HONOLULU 68-1	A 6288	04	N KONA	4 19 37	155 54	475	BA					KONA EXPERIMENT STA	SOUTH POINT CORRAL 3	A 8675	03	KAU	3 18 57	155 41	400	MI			HUTCHINSON SUGAR CO		
MIDDLE PEN 147-1	A 6270	01	N KOHALA	1 20 06	155 50	1380	VAR					HAWAIIAN RANCH	S POINT TRACKING STA	A 8678	03	KAU	3 18 57	155 41	305	MI			FEDERAL ELECTRIC CORP		
MOAUA 18	A 6407	03	KAU	3 19 11	155 30	600	MO					HAWAIIAN RANCH CO	UMIKOA 118	A 8780	01	HAMAKUA	1 19 59	155 23	3420	7A			KUKIAIAU RANCH CO		
MOUNTAIN VIEW 91	A 6552	02	PUNA	2 19 33	155 07	1530	6A	6A				PUNA SUGAR CO	UPOLU POINT USCG 159-2	A 8830	01	N KOHALA	1 20 15	155 53	61	BA	RA		U S COAST GUARD		
NALACU 14	A 6588	03	KAU	3 19 04	155 35	673	BA	8A				HUTCHINSON SUGAR CO	WAIARAEA 500 88-2	A 9025	02	S MILO	2 19 40	155 08	1050	7A			SHINICHI KANEHISHI		
NADOPORO 28	A 6697	04	S KONA	4 19 28	155 55	395	7A					KONA EXPERIMENT STA	WAIKANOANUULA 178-6	A 9350	01	N KOHALA	1 20 08	155 47	3830	7A			KAHUA RANCH		
NAULU FOREST 38-6	A 6731	02	PUNA	2 19 19	155 08	1400	VAR					HAWAII VOLCANOES NAT PK													
NULIHI 175	A 6804	01	N KOHALA	1 20 14	155 45	75	6A					KOHALA SUGAR CO													
OKALA 23	A 7131	02	S MILO	2 20 01	155 17	430	7A					LAUPANOHOLE SUGAR CO													
OPHIHALE 2 24-1	A 7166	04	S KONA	4 19 16	155 53	1470	7A	7A				MISS C LEONARD													
ORCHID LAND EST 91-5	A 7185	01	PUNA	2 19 34	155 00	445	VAR					BOARD OF WATER SUPPLY													
PAAHUA 217	A 7204	01	HAMAKUA	1 20 05	155 26	415	7A					PAUPAUA SUGAR CO													
PAALU 221	A 7312	01	HAMAKUA	1 20 03	155 22	800	7A					HAMAKUA MILL CO													
PAHALA 21	A 7421	03	KAU	3 19 12	155 29	870	BA	6A				HAWAIIAN AGR CO													
PAHUA 65	A 7457	03	PUNA	2 19 30	154 57	670	6A					PUNA SUGAR COMPANY													
PAKAO 37	A 7643	01	KAU	3 19 22	155 28	5000	MO					HAWAIIAN RANCH CO INC.													
PAPA'IKOU 144-1	A 7721	02	S MILO	2 19 47	155 06	200	7A					MAUNA KEA SUGAR CO.													
PAPA'IKOU MAUKA 144-1	A 7721	02	S MILO	2 19 47	155 06	1270	7A					MAUNA KEA SUGAR CO.													
PEPEKOU MAKA 144	A 8000	02	S MILO	2 19 51	155 05	120	7A					PEREYRE SUGAR CO													
PILIHONUA 89	A 8051	02	S MILO	2 19 44	155 10	1730	MO					STATE DIV OF FORESTRY													
PUNAKOOLA 147	A 8063	01	HAMAKUA	2 19 45	155 32	6511	VAR					STATE DIVISION OF PARKS													
PUNAKO 95-1	A 8186	05	KOHALA	5 19 59	155 50	5	6A					ERWIN H RAPP													
PUU AHI 120	A 8393	01	HAMAKUA	1 19 54	155 24	7750	MO					KUKIAIAU RANCH CO													

1 DRAINAGE CODE: KAUAL: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN 5-NORTH-CENTRAL MOLOKAI: 1-(NO INTRA-ISLAND DIVISIONS) LANAI: 1-(NO INTRA-ISLAND DIVISIONS) MAUI: 1-NORTHEASTERN 2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3650, Honolulu, Hawaii, or to any Weather Bureau office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII".

DIMENSIONAL UNITS: Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in F., precipitation and evaporation in inches, and wind movement in miles. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME: Data in the "Monthly Extremes", "Daily Precipitation", "Daily Temperature" table, and "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION: is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise specified by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extrema of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind in the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 6-8 inches above the pan.

NORMALS: for all stations are climatological standard normals based on the period 1931-1960.

STATION NAMES: Hawaii state key numbers are included following station names in the several tables.

DELAYED DATA AND CORRECTIONS: will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES: for monthly precipitation totals may be found in the annual issue of this publication.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.

No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry.

+ And also on an earlier date or dates.

++ Highest observed one minute wind speed. This station is not equipped with an instrument to measure fastest mile data.

• Amount included in following measurement, time distribution unknown.

A The letter "A" shown following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index", indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gages are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.

B Adjusted to a full month.

J "Supplemental Data" table.

M One or more days of record missing; if average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.

R Amounts from recording gage.

T Trace, an amount too small to measure.

V Includes total for previous month.

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

AR Observation made after rain.

C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletins. If daily amounts are published in "Climatological Data" bulletins they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletins.

MO Gage read once monthly; usually on the last day.

OC Gage readings at periods varying from a few weeks to several months.

S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.

SS Observation time is near sunset.

VAR Observation time is variable.

W1 Gage read weekly or irregularly only.

W2 Gage read weekly and last day of month.

Thermometers are generally exposed in a shelter located a few feet above sod-covered ground; however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

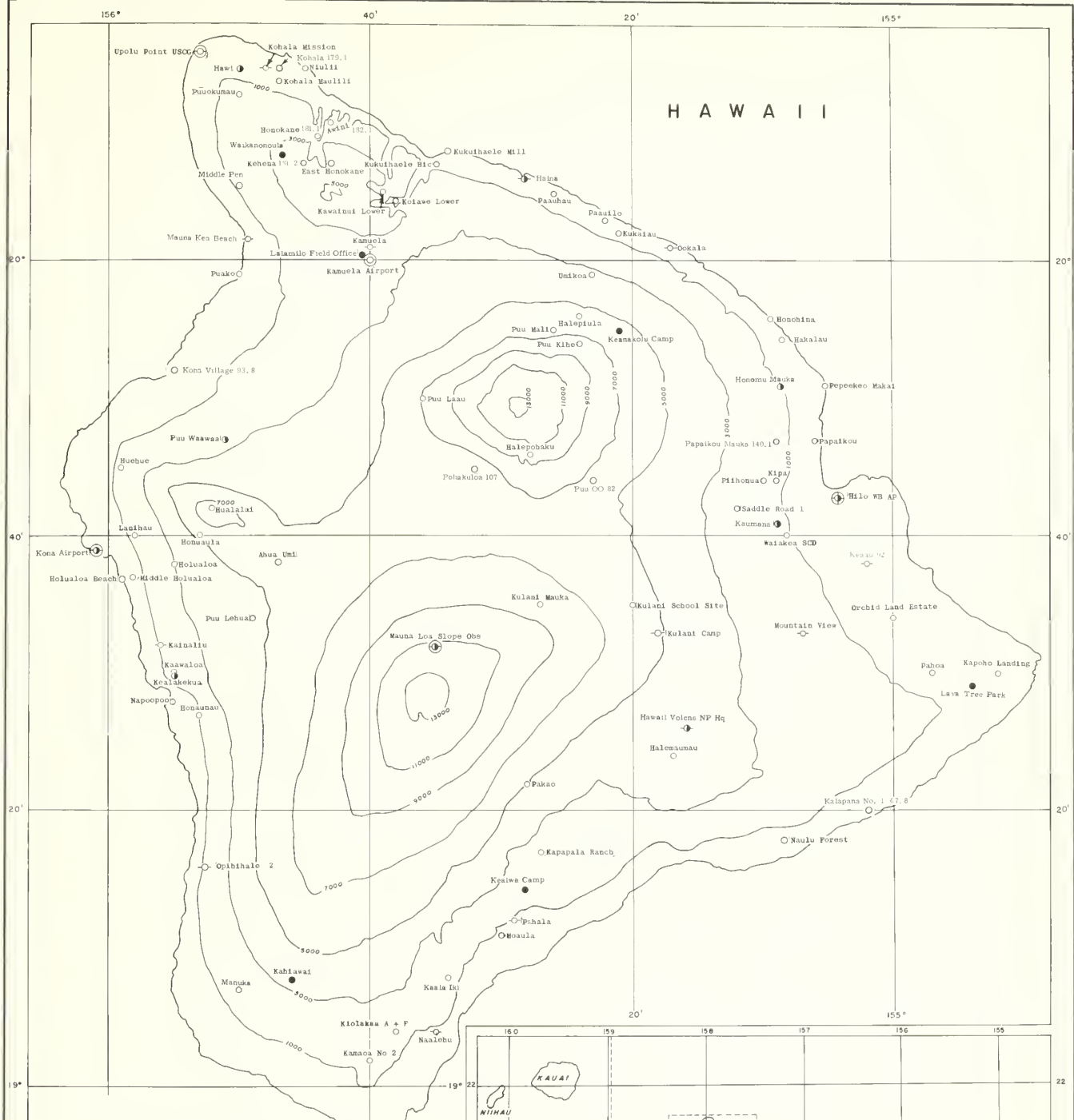
Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORE DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

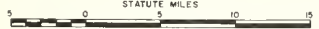
Subscription Price - 20 cents per copy, monthly and annual, \$2.40 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

USCOMM-ESSA-ASHEVILLE-10/29/69-890



HAWAII

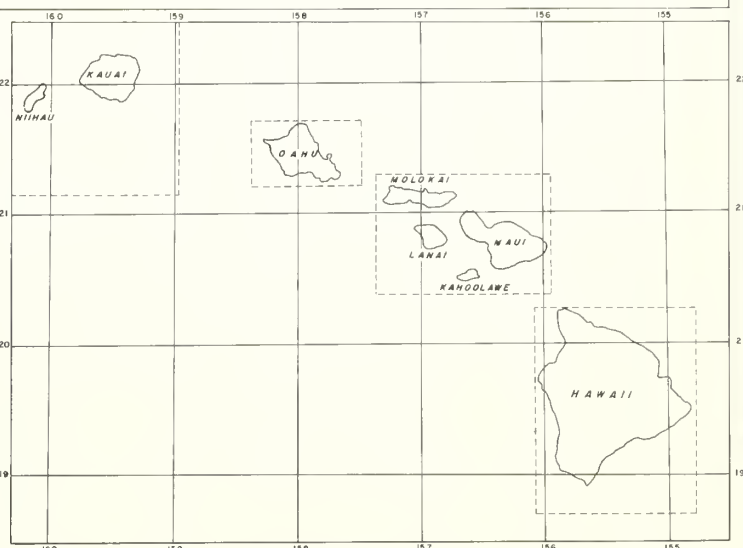
PLATE 2
STATUTE MILES



STATION LEGEND

- ● ① Precipitation only
- ⊖ Precipitation, storage
- ⊕ ● ① Precipitation and Temperature
- ⊖ ● ① Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording, ● Recording, ① Both types

Double circle combinations indicate the availability of more detailed meteorological data
All stations use 150th meridian time





CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
 MAURICE H. STANS, Secretary
 ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
 ENVIRONMENTAL DATA SERVICE

HAWAII

AUGUST 1969

Volume 65 No. 8

DEC 29 1969

CLIMATOLOGICAL DATA

Station	Temperature													Precipitation									
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow/Sleet		No. of Days			
										90° or Above	80° or Above	70° or Above	60° or Above					Total	Total	Max. Depth on Ground	Date	.10 or More	.50 or More
* * * ISLAND OF KAUAI																							
ANAOHOLA 1111	A												.97	- 1.92			.0	0	0	0	0		
KANALOHULUHULU 1075	A	73.2	57.2	65.2		78	29+	54	10+	0	0	0	0	1.69		.31	9	.0	0	5	0	0	
KAPAA STABLES 1104	A												1.28			.17	11+	.0	0	0	0	0	
KILAUEA FIELDO 17 1135	A												4.13	- 3.56		.0	0	.0	0	0	0	0	
KILAUEA POINT 1133	A	82.3	72.4	77.4		85	23+	68	13	0	0	0	0	3.96		.82	10	.0	0	14	1	0	
* * * ISLAND OF OAHU																							
KOOLA 936	A												3.70	- 2.82		.0	0	.0	0	0	0	0	
LIHUE WB AP 1020.1	R	84.9	75.0	80.0	1.6	86	10+	72	26+	0	0	0	0	.89	- 1.63	.24	30	.0	0	4	0	0	
MANA 1026	A	89.5	67.7	76.6	.3	92	18	66	26+	16	0	0	0	.19	- .80	.19	11	.0	0	1	0	0	
N WAILUA OITCH 1051	A												10.70			.0	0	.0	0	0	0	0	
PH WAINIHA 1115	A												5.81	- 4.84	1.04	27	.0	0	.0	0	16	3	1
* * * ISLAND OF MAUI																							
PUEHU RIDGE 1040	A												1.43		.80	9	.0	0	.0	0	3	2	0
WAIHIAWA 930	A												.62	- 1.90	.0	0	.0	0	.0	0	0	0	0
WAIAMI LOWER 1054	A	79.5	67.3	73.4		83	8	65	24+	0	0	0	0	8.30		.83	31	.0	0	25	5	0	
WAIMEA 947	A												.00	- 1.04	.00	0	.0	0	.0	0	0	0	
* * * ISLAND OF MOLOKAI																							
HONOLULU OBSERV 702.2	R	90.4	76.0	83.2	3.8	92	27+	73	29+	28	0	0	0	.02		.02	26	.0	0	0	0	0	
HONOLULU WBFC 703	A												.11	- .78	.05	26	.0	0	.0	0	0	0	
KAHUKU 912	M												1.37	- 1.29	.0	0	.0	0	.0	0	0	0	
KANEIHE MAUKA 781	A	83.0	71.7	77.4	.3	86	9	69	30+	0	0	0	0	4.53	.24	.76	21	.0	0	14	1	0	
KOOLA OAM 833	A												10.13	1.60	1.10	30	.0	0	.0	0	7	2	
* * * ISLAND OF LANAI																							
LUALUALEI 804	A	88.3	74.9	81.6		90	29+	72	25	4	0	0	0	.19		.07	20	.0	0	0	0	0	
MAKAPUU POINT 724	A	80.4M	71.2M	75.8M		84	9	69	30+	0	0	0	0	.12	- .49	.12	15	.0	0	2	0	0	
MOJUANU RES 4 783	A												2.54	- 8.05	.54	15	.0	0	.0	0	1	0	
OPAEULA 870	A	81.9	66.9	74.4	1.4	87	10	64	20	0	0	0	0	2.95	- .96	.40	27	.0	0	17	0	0	
PALDOL VALLEY 718	A												9.90	- 1.84	1.30	30	.0	0	.0	0	24	8	2
* * * ISLAND OF HAWAII																							
PRI WAIHIAWA 820.2	A	84.9	67.3	76.1		88	11+	64	23+	0	0	0	0	1.20		.0	0	.0	0	0	0	0	
PUNALUU 884	A												3.32		.0	0	.0	0	.0	0	0	0	
WAIHIAWA OAM 863	A												.89		.0	0	.0	0	.0	0	0	0	
WAIHOOLE 837	A												7.69	- 4.20	.17	27	.0	0	.0	0	2	0	0
WAIALUA 847	A	85.8	66.4	76.1	-.6	89	10+	63	24+	0	0	0	0	.52	- .86	.0	0	.0	0	0	0	0	
WAIKIKI 717.2	A	86.6M	74.2M	80.4M		90	8	70	19	1	0	0	0	.60		.12	26	.0	0	2	0	0	
WAIPAHU 750	A												.25	- .98	.0	0	.0	0	.0	0	0	0	
* * * ISLAND OF MOLOKAI																							
KUALAPUU 534	A												.58	- .64	.15	15	.0	0	.0	0	1	0	0
MAPULEHU 542	A												3.82	.72	.60	30	.0	0	.0	0	0	0	
MAUNALO A 511	A												.11	- 1.09	.04	26+	.0	0	.0	0	0	0	
MOLOKAI AP 524	A	83.7	71.9	77.8		87	17	70	26+	0	0	0	0	.19		.09	25	.0	0	0	0	0	
* * * ISLAND OF LANAI																							
LANAI CITY 672	A	77.5M	64.3M	70.9M	- 1.0	83	4	61	30	0	0	0	0	.53	- 1.25	.0	0	.0	0	0	0	0	
* * * ISLAND OF MAUI																							
HALEAKALA B E S 434	A	64.1	45.9	55.0		68	29+	41	22	0	0	0	0	4.69	.01	1.30	14	.0	0	12	3	1	
HALEAKALA RS 338	A	83.2	70.1	76.7		85	25+	67	21	0	0	0	0	3.31		1.03	14	.0	0	8	2	1	
HANA AIRPORT 355	A												7.93		1.09	20	.0	0	.0	0	24	4	1
HONOKOHUA 493	A												4.23	1.65	.0	0	.0	0	.0	0	0	0	
KAA NAPALI AIRPORT	A	86.4M	70.9M	78.7M		89	28	68	11+	0	0	0	0	.0		.0	0	.0	0	0	0	0	
KAHULUI WB AP 398	R	87.9	71.1	79.5	.5	92	8	63	9	2	0	0	0	.71	.36	.23	6	.0	0	2	0	0	
KAILUA 446	A	78.9	67.8	73.4	.2	80	31+	65	20	0	0	0	0	15.45	4.14	2.99	15	.0	0	24	13	3	
KEANAE 346	A												32.60	10.85	.0	0	.0	0	.0	0	0	0	
KIPAHULU 258	A												10.13	1.67	1.42	1	.0	0	.0	0	24	8	1
KULA SANATORIUM 267	A	74.2	58.8	66.5	-.2	76	30+	57	14+	0	0	0	0	.95	- 1.34	.40	3	.0	0	3	0	0	
LAHAINA 361	A	87.0	70.2	78.6		89	16+	68	24+	0	0	0	0	.00	- .42	.00	0	.0	0	0	0	0	
PAIA 406	A												2.47	.55	.34	26	.0	0	.0	0	11	0	0
WAILUKU 392	A		71.8M	M									*		.24	6	.0	0	.0	0	0	0	
* * * ISLAND OF HAWAII																							
HAINA 214	A	83.2M	66.0M	74.6M	.1	85	28+	64	25+	0	0	0	0	10.31	5.67	2.89	15	.0	0	15	5	3	
HAWAII VOLCONS NP HQ 54	R	70.0	56.2M	63.1M	-.5	77	2	54	30+	0	0	0	0	10.59	3.00	3.53	15	.0	0	17	5	3	
HILO WB AIRPORT 87	R	83.6	68.8	76.2	.4	87	27	67	9	0	0	0	0	17.50	6.05	5.10	15	.0	0	24	7	4	
HUEHUE 92.1	A												.00	- 2.72	.00	0	.0	0	.0	0	0	0	
KAINALIU 73.2	A	79.4	64.9	72.2		82	17	62	22	0	0	0	0	7.90	.21	1.60	19	.0	0	12	5	2	
KAMUELA AIRPORT 191	A	75.5M	58.3M	66.9M		79	25	44	12	0	0	0	0	1.74		.82	16	.0	0	3	2	0	

See Reference Notes Following Station Index

CLIMATOLOGICAL DATA

HAWAII
AUGUST 1969

Continued

Station	Temperature										Precipitation												
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days			
									Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More	
									80° or Above	32° or Below	32° or Below	60° or Below											
KEAAU 92	82.0	67.3	74.7	- .4	85 28+	65 25+			0	0	0	0	21.26	9.51	3.95	16		.0	0		25	13	5
KEALAKEKUA 26.2	78.8	65.8	72.3		82 17+	63 22+			0	0	0	0	8.00		1.58	4		.0	0		12	6	3
KONA AIRPORT 68.3	84.9	67.5	76.2		88 17+	66 30+			0	0	0	0	1.76		.43	24		.0	0		6	0	0
KUKUIHAELE HIC 199													9.71	3.74	2.30	15		.0	0		18	6	3
KULANI CAMP 79	M	49.4M	M			43 31			0	0	0	0	15.84		5.62	15		.0	0		18	6	3
MAUNA KEA BEACH 98	88.5	74.0	81.3		94 26	70 27+			6	0	0	0	.36		.14	15		.0	0		3	0	0
PAHALA 21	81.7	65.8	73.8	- .2	86 15	62 24			0	0	0	0	3.44	.38	1.63	15		.0	0		5	2	1
PIHAKULOA 107													1.26		.0	0		.0	0		0	0	0
PUNAKO 95.1													.64		.28	16		.0	0		3	0	0
PUU WAHAWAA 94.1													1.27	-.86	.83	21		.0	0		2	1	0
UMIKOA 118													13.07	8.01	6.55	15		.0	0				2
WAIKAEA SCO 88.2													32.33		8.73	16		.0	0				
ISLAND			73.1										8.72					.0					

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 94° ON THE 26TH AT MAUNA KEA BEACH 98, HAWAII
 LOWEST TEMPERATURE: 33° ON THE 31+ AT 2 STATIONS
 GREATEST TOTAL PRECIPITATION: 43.00 INCHES AT PIHONUA 89, HAWAII
 LEAST TOTAL PRECIPITATION: .00 AT 9 STATIONS
 GREATEST ONE-DAY PRECIPITATION: 9.56 INCHES ON THE 16TH AT KIPA 89.2, HAWAII

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
AUGUST 1969

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * * ISLAND OF KAUAI																																	
ANAOHOLA 1111	A	.97	*	*	.08	.01		.03	*		.16	.01	.11						.02	.10	.03	.10	.03	*	.07	.09	.11	.01	.01	*	*		
BRYOESWOOD STA 985	A	3.64	.06	*	.32	.04		.01	*		1.02	.42	.04	.12	.02	*			.34	.01	.42	.02	*	.14	.01	.56	.09	T	*	*			
EAST LAWA'I 934	A	3.28	.12	*	.59	.18	.02	.05	.05	*	.05	.11	.08	.18	.16	*			.20	.04	.17	.22	.03	*	.47	T	.48	.06	.02	*	*		
ELELE 927	A	2.47	.04	*	.09	.02					.04	T	.02	T						.01		.20	.02	*	.02	T	.25	.05	*	*			
HALEAUA 1110	A	2.21	*	*				.16	*		.57	T	.04	.09					.24	.35	.02	.03	.20	*	.05	.05	.18		.04	*	*		
HALEANGAHD 1006	A	3.16	.18	*	.48	.05		.05	*		.49	.09	.04	.15					.29	.12	.19	.30	.06	*	.38		.29		*	*			
HUKIHO 945	A	1.11	*	*																													
LIILILUILUA INTAKE 105U	A	10.32	.55	*	1.01	.05	.11	.14	.70	*	1.33	.48	.25	.28	.05	*			1.33	.18	.58	.93	.08	*	.65	.24	.81	.39	.18	*	*		
INTAKE MAINIHA PC 1086	A	8.17	*	*	1.48	*		.65	*		1.90	*	1.42	.39	*				.29	*	*	*	*	*	2.66	*	*	*	*	*			
KALIHIWA RES 1131	A	6.92	.17	*	.85	.15	.05	.04	.38	*	.89	.22	.05	.48	.06	*			1.14	.02	.27	.17	.23	*	.25	.64	.61	.41	.04	*	*		
KANALIHUHUHU 1075	A	1.65	.02	.05	.09	*					.03	.31		.12	.07				.09	.03	.02	.12	.07	.01	.29	.02	.02	.17		.06	.08		
KANEHA RESERVOIR 1092	A	3.64	.42	*	.16	.02	.03	.05	.20	T	.40	.15	.04	.42	.04	*			.10	.20	.20	.50	.32	*	.15	.16	.24	.05	.03	*	*		
KAPAA STABLES 1104	A	1.28	.17	*	.03	.02		.06	*		.17	.02		.08	*				.09	.13	.13	.09	*	*	.03	.02	.15	.02	.03	*	*		
KALIA 1112	A	1.01	.11	*	.09			.10	*		.15		.01	.11					.05	.09		.04	*	*	.02	.10	.09		.05	*	*		
KAKAIA 944	A	.06		.06																													
KILAUEA 1134	A	2.47	.12	*	.42	.02	.01	.02	.14	*	.24	.02	.11	.24	.01	*			.13	.07	.06	.06	.04	*	.23	.04	.38	.08	.02	*	*		
KILAUEA FIELD 17 1135	A	4.13	.22	*	.30	.03	.02	.01	.34	*	.67	.04	.05	.23	.02	*			.54	.07	.20	.13	.17	*	.29	.12	.43	.13	.04	*	*		
KILAUEA POINT 1133	A	3.96	.24	.12	.06			.06	.01	.20	.82	.04	.22	.10	.55	.42	*		.07	.03	.95	.14	.02	.08	.20	.02	.35	.16	.14	.29	.02	*	
KOLO 1033	A	.23																			.08	.15											
KOLOA 936	A	3.70	.15	*	.81	.11	.03	.03	.21	*	.11	.05		.23	.20	*			.24	.10	.30	.21	.15	*	.42	.29	.04	.02	*	*			
KOHA MAUKA 994	A	4.73	.16	*	.62	.06		.10	*		.76	.15		.31					.64	.19	.25	.34	.11	*	.33	.63		.08	*	*			
KOLOKO RES 1137	A	4.35	.14	*	.47	.05	.05	.17	.20	*	.57	.02	.06	.42	.04	*			.48	.19	.36	.18	.01	*	.15	.42	.36	.18	.03	*	*		
KUKULUA 925	A	1.75	.03	*	.32	.06	T	.04	.04	*	.04	.02	.01	.11	.19	*			.07	.25	.05	T	*	.25	.27								
LIHUE VARIETY STA	A	3.63	.05	.53	.05			.04	.04	*	.03	.18	.02	.01	.16	.07	.08	*	.15	.16	.18	.49	.26	.02	.04	.01	.05	.16	.01	.03	.13	.34	
LIHUE 1020	A	1.65	.02	*	.06	.02	.03	.02	.10	*	.10	.03	.04	.04	.02	*			.11	.10	.03	.12	.01	*	.04	.02	.12		.01	*	*		
LIHUE WR AP 1020.1	R	.83	T	.08	T	T	.02	T		.05	T	.01	.03	.02	.14	*	.01		.10	T	T	T	T	T	T	.11	.01	T	.24	T	*		
MAKAHOUA POINT 940.1	A	1.08	.16	.01	.01	.08		.03			.01		.11	.03					.01	.12	.17	.03			.05	.01		.14	.09	*	*		
MAKALEI 965	A	.19							.05		.19																						
MAKA 1026	A	.19									.19																						
MOHIHI GPR CROSS 1083	A	2.82	.24	*				.44			.15	.10	.15	.15	.05	*			.10	.15	.05		.10	.15	.05	.44	.15		.15	.15	*		
MOLDAA 1145	A	1.39	.05	*	.12	.01	.04	.06	*		.12	.04	.06	*					.09	.03	.25	.01	*	.14	.18	.17	.02	*	*	*	*		
MOUNT MAIALEALE 104.7	A	30.22	.35	.98	.33	.43	.14	.16	.43	1.18	.77	1.85	2.80	.63	1.65	3.35	1.14	3.23	2.40	.24	1.65	1.18	.83	.12	.47	.32	.63	1.22	1.61	.16	.75	1.22	1.14
NIU KIDGE 1035	A	.29			.26																												
N. WAIAHOLE DITCH 1051	A	10.70	.56	*	.40	.20		.40	.55	.03	.15	.80	.30	.66	*				1.40	.30	.40	.40	.30	*	.60	.16	.96	.30	.30	*	*		
PH. WAIAHOLE 1115	A	5.81	.02	.34	.12	.35	.05	.01	.14	.07	T	.01	.61	.08	.05	.42	.01	.30	.05	.08	.10	.28	.14	.03	.07	.17	.34	1.04	.18	T	.21	.54	
PRINCEVILLE RANCH 1117	A	6.01	.07	.30	.51	.02	.02	.30	.25	.02	.03	.45	.04	.05	.29		.23	.24	.13	.19	.18	.58	.09	.02	.21	.08	.61	.25	.02	.25	.58		
PUHEHU LODGE 1040	A	1.64	.06		.52			.10	.04		.05	.07	.80						.05	.05	.03	.08	.03	.15	.16	.06	.17	.22	.23	.05	*	*	
PUNU 1013	A	3.92	.17	*	.68	.06		.15	*		.57	.16		.23					.28	.32	.24	.16	T	*	.36	.47		.07	*	*	*		
RESERVOIR 6 1004	A	.62	.07	*	.14	.05					.01	T	.12	.02	T	*	T	*	T														
WAIAHOLE MOUNTAIN 990	A	1.15																															
WAIAHI LOWER 1054	A	8.30	.28	.49	.29	.28	.19	.06	.10	.46	.17	.13	.66	.11	.09	.23	.01	.73	.12	.23	.18	.26	.78	.17	.10	.17	.07	.06	.60	.23	.03	.19	.83
WAIAHI UPPER 1052	A	10.52	.48	.52	.49	.39	.13	.04	.17	.48	.36	.17	.32	.30	.05	.25	.02	1.09	.26	.15	.10	.53	.94	.02	.11	.23	.27	.17	.73	.39	.15	.11	1.10
WAIAHOLE 1044	A	1.77			.13																												
WAIAHOLE KAI 1065	A	.75	.06	*	.20	.03		.05	*		.05		.06	*																			
WAIMEA 947	A	.00																															
WEST LAWA'I 931	A	1.34	.07	*	.22	.04		T	.03		T		.01	.08	.12	*	*	*	.03	T	.21	.07	T	*	.18	T	.23	.03	.02	T	T	*	
* * * ISLAND OF OAHU																																	
AIEA FIELD 625 761	A	1.94	.02	*	.33			*			.06		.12						.32	.21	.20	.09	*	.18	.18	.15		.10					
BERETANIA PUMPING STA	A	.90	.02	.03	.05	T					.03		.05	.23	.02		.04	T	.04	.11			*	.02	.03	.03		.06	.08	.03	*	*	
CAMP 84 807	A	1.38	.14	*	.01	*		.01	*	1.25	*	.01		.05	.01				.05	.01													
COUCH COLLEGE LAIE	A	7.55	.10	.15	.05	.10	.00	.10	.10	.05	.10	.10	.10	.10	.10				.40	.10	.05	.10		.10	.10	.10	.10	.10	.10	.10	.10	.10	
COCONUT ISLAND 840.1	A	2.55	.06	.10	.01	.02	.04	.03		.01		.16		.02	.13	.48			.11	.21	.18	.16		.01	.27	.01	.13	.01	.07	.04	.29	*	
EWING PLANTATION 741	A	.04	*	.01																													
HELEMANU INTAKE 881	A	4.45	.05	*	.49	*		T	*	*			.07	*					.60	*	*	.59	*	.38	.02	*	1.85	*	*	*	*	*	
HOKULUA 725.2	A	.54	.05	.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.19	*	*	*	*	.10	*	*	*	*	*	*	*	*	
HONOLULU DBSERV 702.2	A	.02																															
HONOLULU W8FC 703	R	.11	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
HONOLULU SURSTA 704	A	.65	.02								.05		.17						.13														
H. S. P. A EXP STA 707	A	1.87	.12	.10	.01	*	.02	*			.05		.10	.20	.10		.11	.02	.518		.07	.35	*	.04	.01	.06	.07	.08	.08	.08	.08	.08	
KALAMA 883	A	17.33	*	*	1.25	.03		.01	.01	*	2.71	*	.03	.03					.17	*	*	.09	.04	*	.430	*	*	.21	.03	.89	*	*	
KAMUKU 912	A	1.37	.02	.04	.23	.03		.02	T		.03	.03	.04	.02	.03				.08	.04	.02	.03	T	*	.44	.15	.22	.21	.03	.14	.04	.05	
KALIWA FIRE STA 791.3	A	.76	.02	.04	.02	T					.04																						

DAILY PRECIPITATION

Continued

HAWAII
AUGUST 1969

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
KAUMANA 88.1	32.29	1.66	.83	.57	.15	.17	1.36	.44	.15	.04		.84	.27	.77	2.14	7.40				.53	.33	.09	.33	1.13	.42	1.10	.20	.02	.20	.22	.14	.09
KAWAII LOWER 193	23.90	1.22	*	*	*	*	*	4.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KAAU 92	21.26	1.02	.26	.08		.02	.42	.40	.15			.20	.41	.68	2.70	3.33	3.95	.92	.85	1.70	.10	.08	.22	.60	.21	.58	.28	.07	.17	.12	.53	.01
KEALAKUUA 26.2	8.05	.02	.03	T				T						.22	.86	.09	.06		.10	.69	T	.09	.56	.21	1.31	.08	.18	T	*	*	*	
KEHENA 181.2	14.10	*	*	*	1.58	*	*	*	*	*	1.32	*	.05	.22	.86	.09	.06		.10	.69	T	.09	.56	.21	1.31	.08	.18	T	*	*	*	
KIDULAKAA A & F 6	14.80	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KIPA 89.2	40.80	1.55	.76	.89	.09	.09	1.31	.97	.16	.07		1.63	.50	1.71	3.12	7.48	9.56	1.61	2.89	.30	1.60	.11	.90	1.48	.41	.91	.18	.02	.06	.14	.09	4.80
KOHALA 179.1	7.86	.51	*	.68		.37	.20	.01	*	*		.13	.03	.25	.81	2.51																
KOHALA MAULILI 176	4.55	.68	*	*	.60	.25	.27	.01	*	*		.34	.02	.33	1.01	2.80			1.65	.10	.01		.02	*	.35	.12	*	*	*	*	*	
KOHALA MISSION 175.1	6.82	.55	.09	.57		.02	.34	.20	.01	*		.24	.04	.25	.75	2.86	.25	.53	.93	.12	T		.01	.04	.09	.48	.13	T	*	*	*	
KOIAWE LOWER 196	11.39	.88	*	*	*	*	*	1.42	*	*		*	*	*	*	6.00	*	*	*	*	*	*	2.49	*	*	*	*	*	*	*	*	*
KONA AIRPORT 88.3	1.76	*	*	*	T			.05	*	*	T				.12	.03				.22	T		.05	.26	.43	.40	*	*	*	*	*	
KONA VILLAGE 93.8	.38	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.05																
KUKIUAU 222	17.01	.36	.29	.41	.10	.04	1.28	.26		.16		.05	.12	1.01	1.97	5.71	2.65	.25	1.04	.12	.11		.14	.48	.54	.19	.05	.03	.14	.22	.05	
KUKIHAELE MIC 199	9.71	.16	.18		.27	.01	1.00	.76		.16		.04	.06	.55	1.87	2.30	.27	.32	.39	.10	.06		.14	.48	.54	.19	.05	.03	.14	.22	.05	
KUKIHAELE MILL 206	8.33	.10	*	*	.52	.02	1.17	.70	.02	*		.08	.05	.55	1.65	1.95	*	*	.64	.05	.13	.02	.07	*	.48		.03	.10	*	*	*	
KULANI CAMP 79	15.84	.84	.84	.32	.04	.01	.02	.01	.03	*	.21	.20	.12	.60	1.65	5.62	2.80	.40	.27	.12	.42	.05	.14	.25	.08	.42	.12	.08	.05	.10	.04	
KULANI MAUKA 76	4.92	.03	.10	*	*	.04	.04	.03	*	*		.02	.02	.74	1.86	1.44	.05	.05	.04	.23	.06	*	.07	*	.08		.04	*	*	*	*	
KULANI SCHOOL SITE 78	15.94	*.110	*	*	*	.04	.04	.03	*	.64		.02	.02	.74	1.86	1.44	.05	.05	.04	.23	.06	*	.07	*	.08		.04	*	*	*	*	
LANIHAU 59.2	1.093	.18	.42	2.03	.11					.72					1.39			1.90		1.99	.65	.39	.10	.18	1.18	.06	*	*	*	*	*	
MANUKA 2	3.04	*	*	*	.25	T	T	T						.05	.30	*	1.05		.09	.40	.10	T	*	*	.79	*	.02	T	*	*	*	
MAUNA KEA BEACH 98	.36	*	*	.70	*	*	*	*	*	*				.03	.06	.06	.11		.02	.10	T	.03	*	*								
MAUNA LOA SLOPE 085	1.00	*	*	.70	*	*	*	*	*	*				.03	.06	.06	.11		.02	.10	T	.03	*	*								
MIDDLE HUALAIA 68.1	5.02	*	*	*	1.22	*	*	*	*	*		.10	*	*	.91	.17	*	*	1.88	*	.79	.72	*	*		.62	*	*	*	*	*	
MIDDLE PEN 147.1	1.59	*	*	*	1.22	*	*	*	*	*		.10	*	*	.91	.17	*	*	1.88	*	.79	.72	*	*		.62	*	*	*	*	*	
MOAULA 18	2.30	*	*	*	*	*	*	*	*	*		.10	*	*	.91	.17	*	*	1.88	*	.79	.72	*	*		.62	*	*	*	*	*	
MOUNTAIN VIEW 91	29.37	1.15	.36	.89	.02	.05	1.14	.72	.29	.05		.59	.25	1.60	2.47	5.42	6.11	1.44	1.26	.87	.33	.15	.37	.40	.30	.88	.45	.10	.22	.13	.49	2.30
NAALEHU 14	5.45	*	*	*	.11	.69	.49	.14	.04	*	.41	.29	1.12	1.28	2.71	1.02	.47	.44	.63	.03	.21	.26	.67	.23	.65	.26	.15	.14	.20	.33	.38	
NAPOOPOO 28	7.40	*	*	.159	*	*	*	*	*	*		.56	*	.38	4.07	.45	*	*	.42	.31												
NAULU FOREST 38.6	6.44	.18	.11	*	*	.04	*	*	.05	*		.56	*	.38	4.07	.45	*	*	.42	.31												
NIULI 179	8.88	.54	*	*	.90	.40	.20	.02	*	*		.20	.02	.40	.77	2.80	*	1.95	.12	.61			.05	*	.40	.08		.02	*	*	*	
ODKALA 223	19.81	.55	.63	.61	.03	1.28	.84	.06	*	*		.22	.25	1.36	1.60	4.55	3.71	.60	.70	.23	.10	.01	.12	.61	.48	.44	.12	.08	.07	.31	.25	
OPHIHALE 2 24.1	6.37	.50	T	.24	T	.01	T	T	.50	.28	T	.33	.28	T	T	.51	.03	.18	.02	T	.68	.09	1.38	.02	.06	T	*	*	*	*	*	
ORCHID LAND EST 91.5	10.91	2.17	*	*	*	.01	T	T	1.63	.28	T	.33	.28	T	T	.51	.03	.18	.02	T	.68	.09	1.38	.02	.06	T	*	*	*	*	*	
PAAHUHAU 217	9.26	.15	.11	.18	.02	.52	.36	.01	*	*		.06	.87	.86	3.24	.60	.15	.28	.02	.04	.10	.33	.37				.03	.19	.29	.08		
PAUULU 221	14.23	.22	.16	.30	.03	.03	1.18	.26	.04	*	T	.08	.80	1.60	5.49	1.74	.18	.56	.05	.05	T	.07	.51	.40	.25	.02	.01	.08	.10	.06		
PAHALA 21	3.44	*	*	.70	*	*	*	.04	*	*		.08	.80	1.60	5.49	1.74	.18	.56	.05	.05	T	.07	.51	.40	.25	.02	.01	.08	.10	.06		
PAHOA 65	10.87	.89	.18	.45	*	.11	.69	.49	.14	.04	*	.41	.29	1.12	1.28	2.71	1.02	.47	.44	.63	.03	.21	.26	.67	.23	.65	.26	.15	.14	.20	.33	
PAKAO 37	5.15	*	*	*	*	.11	.69	.49	.14	.04	*	.41	.29	1.12	1.28	2.71	1.02	.47	.44	.63	.03	.21	.26	.67	.23	.65	.26	.15	.14	.20	.33	
PAPAIAKOJ 144.1	25.28	1.29	.44	1.42	.11	.06	.78	.81	.09	T	.23	.18	1.05	1.83	4.24	4.17	1.88	2.03	1.23	.05	.19	.33	.63	.50	.50	.46	.04	.09	.14	.32	.42	
PAPAIAKOJ MAUKA 140.1	33.35	1.76	.76	1.37	.20	.13	1.33	1.28	.22	.03	.87	.57	.94	2.66	6.40	6.65	1.54	3.11	.45	.49	.15	.97	.96	.36	1.04	.15	.06	.05	.17	.32	.26	
PEPEKEK MAKAI 144	20.04	.95	.05	.86	.05	.23	.24	.07	.21	*	.28	.17	.90	.70	3.86	4.38	1.07	1.24	.27	.01	.19	.29	1.63	.83	.52	.43	.01	.30	.12	.70	.33	
PIHUNUA 89	4.00	*	*	*	*	*	*	.07	.21	*	.28	.17	.90	.70	3.86	4.38	1.07	1.24	.27	.01	.19	.29	1.63	.83	.52	.43	.01	.30	.12	.70	.33	
POMAHUUA 107	1.25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.43	.22	.30	.17	*	.14	*	.03	.15	*	*	*	*	*	*	*	
PUAKU 95.1	.64	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.43	.22	.30	.17	*	.14	*	.03	.15	*	*	*	*	*	*	*	
PUU KINE 120	.85	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.18	.28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUU KAU 102.1	1.08	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUU LEHUA 73	3.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUU NALI 113	2.90	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PUUKUHUA 167	6.17	.47	*	*	.29	.22	.17	.01	*	*		.28	.03	.38	1.16	1.94	*	*	.67	.04	.04				.20	.10	.01	.16	*	*	*	
PUU OD 82	12.23	.29	.20	.18		.08	T	.01	*	*	.45	.03	.15	1.70	4.75	1.90	.39	.20	.23	.30	.11	.28	.09	.27	.19	.13	.01	.14	.15	*	*	
PUU WAAWAA 94.1	1.47	.03	*	*	*	*	*	*	*	*				.36	7.00	*	*	*	*	.05	.83											
SADDLE RIDGE 184	39.43	3.60	*	*	*	*	*	*	3.36	*	*	*	*	*	6.55	*	*	*	*	*	*	22.20	*	*	*	*	*	*	3.27	*	*	*
SOUTH POINT CORRAL 3	2.80	*	*	*	*	*	*	*	*	*				.43	2.79	6.00	*	*	.55	.03	.07	.01	.08	*	*	*	*	*	*	*		
UMIKUUA 118	1.07	.10	*	.20	.50	.30	.30	.20	*	*				.43	2.79	6.00	*	*	.55	.03	.07	.01	.08	*	*	*	*	*	*	*		
UPOLU POINT USCG 159.2	3.61	.15	.03	.05	T	.24	.07	T	*	*	.09	.08	.18	.41	1.13	.07	.10	.30	.05	.05				.05	.09	.16	.07	.21	.03	.03	.03	
WAIKAE SCD 88.2	32.33	1.54	.58	.70	.03	1.36	.49	.13	*	*	.59	.30	1.01	2.06	6.81	8.73	*	2.49	.41	1.35	.05	.30	1.05	.36	.76	.13	.10	.28	.25	.18	.29	

SUPPLEMENTAL DATA

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DAILY TEMPERATURES

HAWAII
AUGUST 1969

Station	Day of Month																															Average	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF KAUAI																																	
KANALOHULUHULU 1075	MAX MIN	72 58	73 59	70 55	73 58	74 59	74 56	75 55	72 54	73 56	72 54	74 60	75 56	73 57	66 56	66 55	75 60	77 58	76 58	78 58	69 58	74 55	72 59	76 56	75 56	74 56	75 58	71 56	73 58	78 58	71 58	72 60	73.2 57.2
KILAHEA POINT 1133	MAX MIN	81 70	82 70	82 72	82 71	83 75	83 71	84 75	82 72	84 75	82 72	84 69	82 72	81 68	81 73	82 74	82 73	81 73	82 76	81 75	85 73	82 72	85 71	83 72	85 71	83 72	80 71	79 75	83 71	81 75	82 74	82 74	82.3 72.4
LIHUE WB AP 1020.1	MAX MIN	85 75	85 75	85 76	85 76	85 76	85 76	86 76	85 75	85 77	86 74	85 76	85 74	85 75	85 75	85 75	85 76	85 77	85 76	85 77	85 76	85 75	84 72	85 73	85 75	85 76	84 73	84 72	85 75	84 76	85 75	84.9 75.0	
MAKAHUEA POINT 940.1	MAX MIN	85 75	88 73	87 76	86 73	87 75	87 75	86 73	92 76	89 76	88 72	88 71	88 73	87 77	85 71	85 74	88 72	87 71	82 73	82 73	88 70	88 74	89 75	87 72	86 76	86 70	86 74	85 72	87 72	86 75	84 75	85 72	86.7 73.5
HANA 1026	MAX MIN	90 68	90 67	91 68	91 68	90 67	90 67	90 67	90 67	89 70	89 70	88 69	88 68	87 69	89 70	89 66	90 67	90 68	92 68	91 68	90 67	90 66	90 67	90 67	90 66	90 66	90 66	89 67	89 69	89 69	89 67	89.5 67.7	
NIU RIUQE 1035	MAX MIN	85 75	84 73	85 76	83 76	83 75	84 75	85 75	84 65	84 63	83 63	84 61	85 63	84 61	85 62	85 62	85 66	85 66	85 66	85 66	80 61	82 62	82 60	82 62	83 63	84 62	83 62	85 64	85 63	84 62	84 62	83.8 62.1	
WAIHI LOWER 1054	MAX MIN	79 66	79 67	80 67	78 69	80 75	80 68	80 66	82 67	79 67	79 70	80 70	79 69	79 68	78 67	80 66	79 68	80 68	79 66	79 65	79 66	81 66	80 66	80 65	80 65	80 66	79 66	78 68	80 66	79 66	79 66	79.5 67.3	
ISLAND OF MAUI																																	
EWA PLANTATION 741	MAX MIN	85 70	86 70	86 70	86 69	86 69	88 72	85 68	87 68	87 74	86 74	85 70	86 72	86 72	88 70	86 72	87 71	87 70	85 69	85 69	87 72	87 69	85 69	87 72	87 69	85 69	86 70	87 70	88 70	87 70	85 70	87 70	86.3 70.2
HONOLOLU WBFC 703	MAX MIN	90 77	90 77	91 76	90 76	90 77	92 78	91 77	92 76	90 77	92 78	91 77	90 76	89 75	90 76	90 76	90 77	90 74	90 74	90 76	91 76	90 76	91 76	89 76	89 76	91 74	89 75	92 74	91 78	90 75	90 77	90.4 76.0	
HONOLOLU SU6STA 704	MAX MIN	82 75	82 74	82 75	83 76	84 76	84 76	84 76	85 77	84 76	84 76	83 76	83 76	82 76	82 74	83 74	82 74	83 74	82 74	82 72	83 72	83 72	83 72	84 73	84 73	82 73	83 73	83 73	85 75	81 75	82 73	83 72	82.9 74.4
KAHUKU 912	MAX MIN	84 75	84 75	84 75	84 75	85 75	84 75	84 75	87 74	87 74	85 74	85 73	83 73	83 73	85 74	85 74	85 74	86 71	85 74	85 74	86 71	86 71	85 74	85 74	85 74	85 74	84 74	85 74	84 74	84 74	84 74	84.9 74.9	
KANEHE MAUKA 781	MAX MIN	83 72	82 70	83 71	84 73	83 72	83 72	83 74	86 72	84 72	83 71	83 74	84 71	83 71	83 71	82 71	82 72	81 71	83 72	82 71	81 69	81 69	83 71	84 72	84 72	83 72	82 72	82 72	82 72	83 69	82 69	82 72	83.0 71.7
LUALUALEI 804	MAX MIN	87 75	89 76	90 76	89 74	88 76	89 76	89 76	90 77	89 74	89 74	88 74	88 75	88 73	86 76	86 76	89 77	88 75	88 75	88 74	88 76	88 76	89 74	89 74	88 76	86 76	86 73	86 74	89 76	87 74	88 76	88 76	88.3 74.9
MAKAPOU POINT 724	MAX MIN	80 73	80 71	80 73	80 73	82 70	81 73	84 72	81 74	80 74	80 69	80 69	80 70	80 69	80 70	79 69	79 80	78 71	79 71	80 72	80 72	81 72	80 72	80 73	81 73	80 73	80 71	81 69	81 69	81 69	80.4 71.2		
UPAEULA 870	MAX MIN	82 67	81 67	82 68	82 68	82 68	84 68	85 67	86 67	87 67	87 69	82 69	82 69	81 68	81 67	81 67	81 67	84 66	83 66	82 65	82 65	82 65	83 65	84 65	83 65	83 65	81 66	81 66	81 66	80.8 66.9			
PRI WAIHAWA 820.2	MAX MIN	84 68	86 68	86 68	80 66	86 67	86 67	88 67	88 67	86 67	86 67	86 69	86 69	85 68	85 68	83 69	87 68	80 68	85 68	84 68	83 69	83 69	86 66	84 66	84 66	86 66	85 66	85 67	85 67	85 67	85 67	84.9 67.3	
WAILUA 847	MAX MIN	86 65	84 66	85 67	86 66	85 65	86 65	86 65	89 66	86 66	89 66	86 66	85 67	85 67	84 67	85 67	87 67	87 69	86 64	86 64	86 64	86 64	87 63	88 63	86 63	86 63	83 65	85 65	86 67	86 67	85.8 66.4		
WAIKIKI 717.2	MAX MIN	86 73	85 73	87 74	87 75	87 75	90 82	87 74	88 75	87 75	87 75	87 73	85 73	86 73	87 73	87 73	87 74	87 74	86 74	86 74	86 72	86 72	86 72	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86.6 74.2	
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX MIN	84 71	83 71	84 73	84 73	84 71	83 72	84 72	84 70	84 74	83 73	85 74	83 72	83 71	82 72	83 73	87 73	82 72	83 71	83 72	83 71	83 71	86 72	85 73	86 72	84 70	83 70	84 71	85 72	82 71	83 72	83 72	83.7 71.9
ISLAND OF LANAI																																	
LANAI CITY 672	MAX MIN	81 67	81 65	81 65	63 66	79 67	75 65	76 65	77 65	79 65	73 65	79 63	78 63	78 64	74 64	75 64	76 64	75 64	79 64	77 64	75 65	79 63	78 63	77 65	77 65	78 64	79 63	79 64	82 64	78 62	77 61	74 65	77.5 64.3
ISLAND OF HAWAII																																	
HALEAKALA RS 336	MAX MIN	61 43	62 46	65 43	64 44	64 45	65 45	68 49	68 45	65 44	65 43	64 51	68 51	68 45	66 47	66 51	63 45	65 51	65 44	64 43	62 43	61 40	60 41	63 41	62 42	63 42	64 44	62 48	61 47	64 47	64 47	64.1 45.9	
HALEAKALA SUMMIT 338.4	MAX MIN	62 42	62 42	62 42	61 43	57 43	59 46	61 43	61 43	58 42	54 42	56 43	50 42	56 40	56 40	55 39	55 37	54 37	52 40	55 41	56 41	56 41	56 41	56 41	56 41	55 40	59 43	59 43	56 42	56 42	56 42	56 42	56.4 45.9
HANA AIRPORT 355	MAX MIN	81 70	83 70	84 70	84 72	84 70	82 70	84 70	85 69	83 70	82 70	83 70	81 70	81 70	85 70	82 70	82 72	82 72	82 72	83 72	83 72	83 72	84 71	84 71	84 69	85 71	84 69	84 72	84 71	83 69	82 70	83 70	83.2 70.1
KAANAPALI AIRPORT	MAX MIN	85 73	86 73	86 69	87 69	87 85	86 82	88 68	87 68	86 74	87 68	86 74	87 69	86 69	85 69	87 72	87 72	85 70	87 70	87 70	85 69	86 70	86 70	87 69	87 69	87 71	86 71	87 70	87 70	86 72	85 72	87 72	86.4 70.9
KAHULUI WB AP 398	MAX MIN	87 72	87 71	89 72	88 74	87 72	87 72	89 71	89 63	89 63	85 71	89 72	88 71	87 71	86 71	88 67	88 72	89 72	87 71	87 72	87 71	87 71	88 71	88 72	88 72	88 72	88 72	89 71	89 71	88 71	87 72	87.9 71.1	
KAILUA 446	MAX MIN	78 66	88 67	79 67	79 68	79 69	79 69	80 69	80 69	78 69	78 69	80 69	78 69	80 69	79 67	80 67	76 67	79 67	77 67	78 66	78 66	79 66	79 66	79 66	79 66	79 66	78 66	79 66	80 66	79 66	79 66	78.9 67.8	
KEAWAKAPU BEACH 260.7	MAX MIN	89 67	91 67	89 65	90 66	92 66	89 66	88 66	88 66	89 66	85 67	85 67	91 67	90 67	92 67	90 67	90 67	93 67	92 67	91 65	92 65	91 65	90 65	90 65	90 65	90 65	90 65	92 65	92 65	88 66	90.2 66.6		
KULA SANATORIUM 267	MAX MIN	73 59	76 59	74 58	73 56	74 58	73 58	74 58	74 58	74 58	72 59	73 61	76 58	74 57	75 58	72 58	74 60	75 60	74 59	75 59	74 59	72 58	74 58	75 58	74 58	76 58	74 60	72 60	73 59	76 58	72 58	74.2 58.8	
LAMAINA 361	MAX MIN	85 69	86 70	88 69	87 69	88 70	88 70	88 70	88 68	88 68	86 70	88 71	88 70	89 70	89 70	89 70	88 70	88 71	87 69	86 69	86 69	87 69	86 69	86 69	86 69	86 69	87 69	87 69	88 69	87 69	87 69	87.0 70.2	

See Reference Notes Following Station Index

DAILY TEMPERATURES

Station		Day of Month																															Average						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							
MAIILUKU 392	MAX MIN	72	72		71	74	72	72	71	74		72	73	70	70	71	73		71	71	72	72	73			70	70	72	75	71							71.8		
* * *																																							
ISLAND OF HAWAII																																							
HAINA 214	MAX MIN	81 65	84 65	84 65	83 66	84 66	84 68	84 68	84 67	85 67	84 64	84 67	84 68	84 66	83 65	80 66	82 66	80 66	83 67	82 67	83 65	83 64	85 65	85 66	83 66	81 64	83 66	83 68	85 68	83 68	85 65	83 66	83 66	85 66	83 66	83 66	83 66	83.2 66.0	
HAWAII VOLCNS NP HO 54	MAX MIN	68 57	77 56	70 56	64 56	71 56	72 60	71 73	73 57	72 55	69 55	69 55	72 55	69 55	69 57	66 57	72 58	69 58	67 57	67 55	69 54	67 54	71 56	70 55	69 54	67 54	69 55	70 56	74 56	71 56	70 54	71 58	70 58	71 58	70 58	71 58	70.0 56.2		
MILU W8 AIRPORT 87	MAX MIN	84 68	82 68	83 68	85 68	84 68	85 71	86 70	85 68	85 67	84 68	83 68	82 68	81 69	83 70	83 71	84 70	83 69	81 68	84 68	84 68	82 68	82 68	82 68	84 68	85 68	87 69	83 70	82 70	85 69	87 69	85 69	87 69	83 69	83 69	85 69	83.6 68.8		
KAINALIU 73.2	MAX MIN	78 65	80 63	78 64	78 63	81 66	80 66	80 66	81 65	84 64	80 65	80 65	81 67	77 64	77 64	80 67	77 65	82 66	81 65	80 66	79 66	77 64	79 65	79 65	80 66	78 65	78 66	79 67	81 67	81 66	80 66	80 66	80 66	80 66	80 66	80 66	79.4 64.9		
KAMUELA 192.2	MAX MIN	73 60	74 61	73 61	73 61	73 65	74 62	76 60	78 61	76 61	74 60	73 60	73 60	70 61	73 60	72 61	72 62	73 60	74 60	74 60	75 60	73 59	73 59	73 61	71 62	74 60	74 51	75 54	72 59	72 60	73 62	73 62	73 62	73 62	73 62	73 62	73.4 60.2		
KAMUELA AIRPORT 191	MAX MIN	74 55	76 51	75 59	76 59	72 62	77 61	76 60	78 59	78 60	78 60	77 60	74 60	73 60	71 60	73 60	74 60	74 60	75 60	76 60	76 60	75 59	76 60	76 60	68 57	68 57	60 54	60 54	60 51	62 60	60 51	62 60	60 51	62 60	62 60	62 60	62 60	60.5 58.3	
KEAAU 92	MAX MIN	78 64	83 67	83 67	83 67	82 68	82 68	84 70	83 68	85 68	85 68	82 68	82 68	82 68	78 68	78 68	82 68	82 68	78 68	78 68	80 66	82 65	82 65	82 65	80 65	82 65	82 65	82 65	82 65	84 65	82 65	84 65	82 65	82 65	84 65	83 65	83 65	82.0 67.3	
KEALAKEUA 26.2	MAX MIN	78 67	77 66	78 64	79 64	80 67	80 67	80 65	77 65	80 68	82 65	79 68	80 68	77 65	79 67	78 66	82 66	81 66	79 65	78 65	75 65	77 65	79 65	78 65	78 65	79 65	80 64	81 64	79 64	80 64	82 64	81 64	82 64	81 64	81 64	81 64	78.8 65.8		
KOHALA MISSION 175.1	MAX MIN	77 68	81 68	81 67	81 69	81 70	82 70	80 69	81 69	83 69	82 69	81 69	81 69	80 68	79 68	80 68	79 68	81 68	81 68	80 68	80 68	82 68	81 68	81 68	82 68	82 68	81 68	81 68	82 68	81 68	82 68	81 68	82 68	81 68	82 68	81 68	82 68	80.7 68.5	
KONA AIRPORT 68.3	MAX MIN	82 68	85 66	85 66	83 68	83 68	86 68	84 68	85 69	88 66	88 66	84 69	86 69	87 69	87 68	84 68	85 66	88 66	86 68	87 68	84 68	82 68	84 67	87 65	85 65	84 65	87 65	85 65	84 65	85 64	85 64	84 64	85 64	84 64	85 64	84 64	84.9 67.5		
KULANI CAMP 79	MAX MIN	64 55	61 56	51	48	51	52	52	51	51	47	52	52	45	46	54	43	54	49	49	49	48	50																
MAUNA KEA BEACH 98	MAX MIN	89 73	88 76	87 74	88 74	88 73	87 75	88 75	88 74	88 73	88 74	88 73	88 76	87 74	88 77	88 76	88 74	88 74	88 75	88 73	88 73	85 73	85 73	88 73	88 74	88 73	88 74	87 74	87 74	87 70	87 70	87 70	87 70	87 70	87 70	87 70	88.5 74.0		
MAUNA LOA SLOPE OBS	MAX MIN	54 35	54 35	51 38	50 37	55 36	58 38	54 34	54 33	54 36	60 39	58 37	56 38	52 35	53 37	52 38	55 37	57 40	54 38	50 35	48 39	50 35	54 35	52 39	60 39	60 45	60 44	55 41	55 44	61 38	55 39	55 41	55 41	55 38	55 38	55 38	55.0 37.7		
MOUNTAIN VIEW 91	MAX MIN	73 64	77 64	80 64	76 63	78 64	79 66	79 66	81 65	82 65	76 62	78 65	78 64	75 63	72 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	73 64	76.8 63.2	
MAALEHU 14	MAX MIN	80 70	80 70	80 68	84 68	83 67	84 73	83 71	81 69	81 69	84 69	84 69	84 69	83 68	80 67	84 67	84 67	83 67	83 67	81 68	81 68	81 68	82 68	82 68	82 68	82 68	82 68	82 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	82.1 68.3	
OOKALA 223	MAX MIN	79 69	81 70	81 70	82 70	83 69	82 69	81 69	82 69	82 69	84 70	82 68	80 68	80 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81 68	81.0 68.8	
OPIHIHALE 2 24.1	MAX MIN	77 65	82 65	77 65	80 66	83 66	82 65	79 65	81 65	82 65	80 65	79 65	78 65	76 62	78 63	76 62	80 62	80 63	81 63	78 63	78 63	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	76 62	78.9 63.3	
PAHALA 21	MAX MIN	80 66	83 67	83 67	81 65	84 66	84 67	80 65	80 65	82 67	81 65	82 65	84 65	83 65	83 65	86 65	78 67	83 67	78 67	78 67	80 67	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81.7 65.8	
UPDLU POINT USCG 159.2	MAX MIN	82 69	84 72	83 69	83 71	83 71	84 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	85 71	83.2 70.5	

EVAPORATION AND WIND

Station		Day of Month																															Total to Avg.							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31								
* * * ISLAND OF KAUAI																																								
LIHUE W8 AP 1020.1	EVAP WIND MAX MIN	.44 - 91 69	.45 115 90 69	.37 112 90 70	.50 109 91 70	.40 110 91 70	.43 108 91 70	.30 96 91 71	.43 73 94 71	.39 63 94 71	.38 74 92 71	.37 90 92 70	.44 116 103 70	.36 103 86 70	.38 84 88 70	.35 28 88 70	.45 28 91 73	.38 28 91 73	.44 - 90 69	.40 - 89 69	.41 - 89 70	.37 - 89 69	.40 - 89 70	.45 210 91 71	.44 234 90 70	.44 258 90 69	.31 233 88 72	.47 220 89 70	.36 227 89 70	.40 190 91 70	.33 213 88 70	.32 213 88 69	12.36 41298 90.0 70.2							
* * * ISLAND OF OAHU																																								
HONOLULU OBSERV 702.2	EVAP WIND MAX MIN	.36 42 95 69	.33 44 92 70	.40 39 95 69	.27 35 91 70	.32 37 92 70	.34 38 92 71	.34 38 95 71	.33 28 95 71	.28 29 94 70	.26 28 92 70	.30 39 92 71	.40 51 92 70	.31 39 95 70	.39 49 93 70	.31 49 91 70	.28 43 92 72	.28 36 92 72	.20 27 91 70	.33 34 95 69	.30 30 89 69	.28 30 92 70	.22 33 88 68	.35 29 92 70	.30 40 92 69	.33 50 92 68	.32 32 92 68	.28 32 93 70	.33 31 89 71	.30 31 94 69	.33 53 93 70	.30 213 88 70	9.67 1133 92.7 69.9							

STATION INDEX

HAWAII
AUGUST 1969

CONTINUED

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER
								TEMP.	PRECIP.	EVAP.	SPECIAL										TEMP.	PRECIP.	EVAP.	SPECIAL	
ISLAND OF HAWAII																									
KULANI SCHOOL SITE 78	A 5021	02	S HILO	2	19 35	155 20	5735					ST DEPT OF SOCIAL SER	PUU LAU 102.1	A 8452	05	HAMAKUA	5	19 50	155 36	7440	MO		STATE DIV OF FISH-&W		
LALANI FLD OFF 191.1	5280	01	S KOHALA	1	20 01	155 43	2615	W				STATE DEPT OF L & A RES	PUU LEHUA 73	A 8460	04	N KONA	4	19 34	155 49	4880	MO		GREENWELL RANCH		
LANIHAU 68.2	5330	04	N KONA	4	19 04	155 58	1930	BA				KONA EXPERIMENT STA	PUU MALE 113	A 8515	01	HAMAKUA	1	19 55	155 26	6760	MO		KUKIAU RANCH CO		
LAVA TREE PARK 66.1	5460	02	PUNA	2	19 29	154 54	650	BA				STATE DIV. OF PARKS	PUUKUMAU 167	A 8548	01	N KOHALA	1	20 12	155 50	1800	TA		KUMULA DITCH CO. LTD		
MAKAHA 2	A 8124	03	KAU	3	19 07	155 50	1760	BA				STATE DIVISION OF PARKS	PUU OO 82	A 8550	02	S HILO	2	19 44	155 23	6340	GA		DON WINTERS		
MAUNA KEA BEACH 98	6180	04	S KUHALA	4	19 01	155 50	103	BA				MAUNA KEA BEACH HOTEL	PUU MAKAHA 94.1	A 8550	05	N KONA	5	19 47	155 41	2520	TA		DILLINGHAM RANCH INC		
MAUNA LOA SLOPE OBS 39	6198	05	HAMAKUA	5	19 32	155 35	11146	MO				MAUNA LOA OBSERVATORY	SADDLE ROAD 1 86	A 8590	02	S HILO	2	19 42	155 12	2340	WM		BOARD OF WTR SUPPLY		
MIDDLE MAUNALOA 68.1	A 8268	04	N KONA	4	19 37	155 49	1380	BA				STATE DIVISION OF FORESTRY	SOUTH POINT CORRAL 3	A 8675	03	KAU	3	18 57	155 41	400	WI		HUTCHINSON SUGAR CO		
MIDDLE PEN 147.1	A 8272	03	N KOHALA	3	19 06	155 50	1380	VAR				FAHUA RANCH	S POINT TRACKING SEA	8679	03	KAU	3	18 57	154 41	395	C		FEDERAL ELE TRIC CORP		
MOAULA 18	A 8407	03	KAU	3	19 11	155 50	600	MO				HAWAIIAN RANCH CO	UMIKA 118	8780	01	HAMAKUA	1	19 59	154 23	2420	TA		KUKIAU RANCH CO		
MOUNTAIN VIEW 91	6552	02	PUNA	2	19 33	155 07	2510	GA				PUNA SUGAR CO	UPOLU POINT USCG 159.2	8830	01	N KOHALA	1	20 15	155 53	61	BA		COAST GUARD		
NAALEHU 14	A 6586	03	KAU	3	19 04	155 55	673	BA				HUTCHINSON SUGAR CO	WAIKAEA SCD 88.2	9025	-2	S HILO	2	19 46	155 08	1050	TA		SHINICHI KANEHIRO		
NAPOOPOO 28	A 6697	04	S KONA	4	19 28	155 55	395	TA				HAWAII VOLCANOES NAT PK	WAIKARUNOULA 178.6	9350	01	N KOHALA	1	20 08	155 47	3810	C		KAHUA RANCH		
NAULU FOREST 38.6	6733	02	PUNA	2	19 19	155 08	1400	VAR				KOHALA SUGAR CO													
NELELI 179	A 6806	01	N KOHALA	1	20 01	155 45	103	BA				LAUPAHOLOE SUGAR CO													
OKALA 223	7131	02	N HILO	2	20 01	155 17	430	TA				MISS C LEONARD													
ORIHIALE 2 24.1	7166	04	S KONA	4	19 16	155 53	1270	TA				BUARO OF WATER SUPPLY													
ORCHID LAND EST 91.5	A 7189	02	PUNA	2	19 34	155 00	445	VAR				PAUHAU SUGAR CO													
PAUHAU 217	7204	01	HAMAKUA	1	20 05	155 26	415	TA				HAMAKUA HILL CO													
PAUJULO 221	7312	01	HAMAKUA	1	20 03	155 22	800	TA				HAWAIIAN AGR CO													
PAHALA 21	7421	03	KAU	3	19 12	155 29	870	BA				PUNA SUGAR COMPANY													
PAHAIA 95	7497	02	PUNA	2	19 30	154 57	670	GA				HAWAIIAN RANCH CO. INT.													
PAKAO 37	A 7643	03	KAU	3	19 22	155 28	5000	MO				MAUNA AKA SUGAR CO.													
PAPAIKOU 144.1	7711	02	S HILO	2	19 47	155 06	200	TA				MAUNA AKA SUGAR CO.													
PAPAIKOU MAKA 144.1	7721	02	S HILO	2	19 47	155 08	1270	TA				MOLOKAI SUGAR CO.													
PEPEEKO MAKA 144	8000	03	S HILO	3	19 51	155 05	100	TA				PEPEEKO SUGAR CO.													
PILIHONIA 89	A 8051	02	S HILO	2	19 44	155 10	1730	MO				STATE DIV OF FORESTRY													
POHAKILOA 107	A 8093	02	HAMAKUA	2	19 45	155 32	9511	VAR				STATE DIVISION OF PARKS													
PUKAU 95.1	A 8186	05	KUHALA	5	19 59	155 50	5	GA				ERWIN H. RAPP													
PUU KIME 120	A 8193	01	HAMAKUA	1	19 54	155 24	7750	MO				KUKIAU RANCH CO													

↓ DRAINAGE CODE: KAUAI 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN
5-NORTH-CENTRAL MOLOKAI 1-NO INTRA-ISLAND DIVISIONS LANAI 1-NO INTRA-ISLAND DIVISIONS MAUI 1-NORTHEASTERN
2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3650, Honolulu, Hawaii, or to any Weather Bureau Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII".

DIMENSIONAL UNITS Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in F., precipitation and evaporation in inches, and wind direction in miles per hour. In the "Climatological Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME Data in the "Monthly Extremes", "Daily Precipitation", "Daily Temperature", "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extreme of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 8 inches above the pan.

NORMALS for all stations are climatological standard normals based on the period 1931-1960.

STATION NAMES Hawaii state key numbers are included following station names in the several tables.

DELAYED DATA AND CORRECTIONS will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES for monthly precipitation totals may be found in the annual issue of this publication.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.

o No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry.

* And also on an earlier date or dates.

++ Highest observed one minute windspeed. This station is not equipped with an instrument to measure fastest mile data.

* Amount included in following measurement, time distribution unknown.

A The letter "A" shows following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index", indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gages are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.

B Adjusted to a full month.

J "Supplemental Data" table.

M One or more days of record missing, if average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.

R Amounts from recording gage.

T Trace, an amount too small to measure.

V Includes total for previous month.

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

AR Observation made after rain.

C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.

MO Gage read once monthly, usually on the last day.

OC Gage readings at periods varying from a few weeks to several months.

S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.

SS Observation time is near sunset.

VAR Observation time is variable.

W1 Gage read weekly or irregularly only.

WM Gage read weekly and last day of month.

Thermometers are generally exposed in a shelter located a few feet above sod-covered ground; however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

Subscription Price: 20 cents per copy, monthly and annual, \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

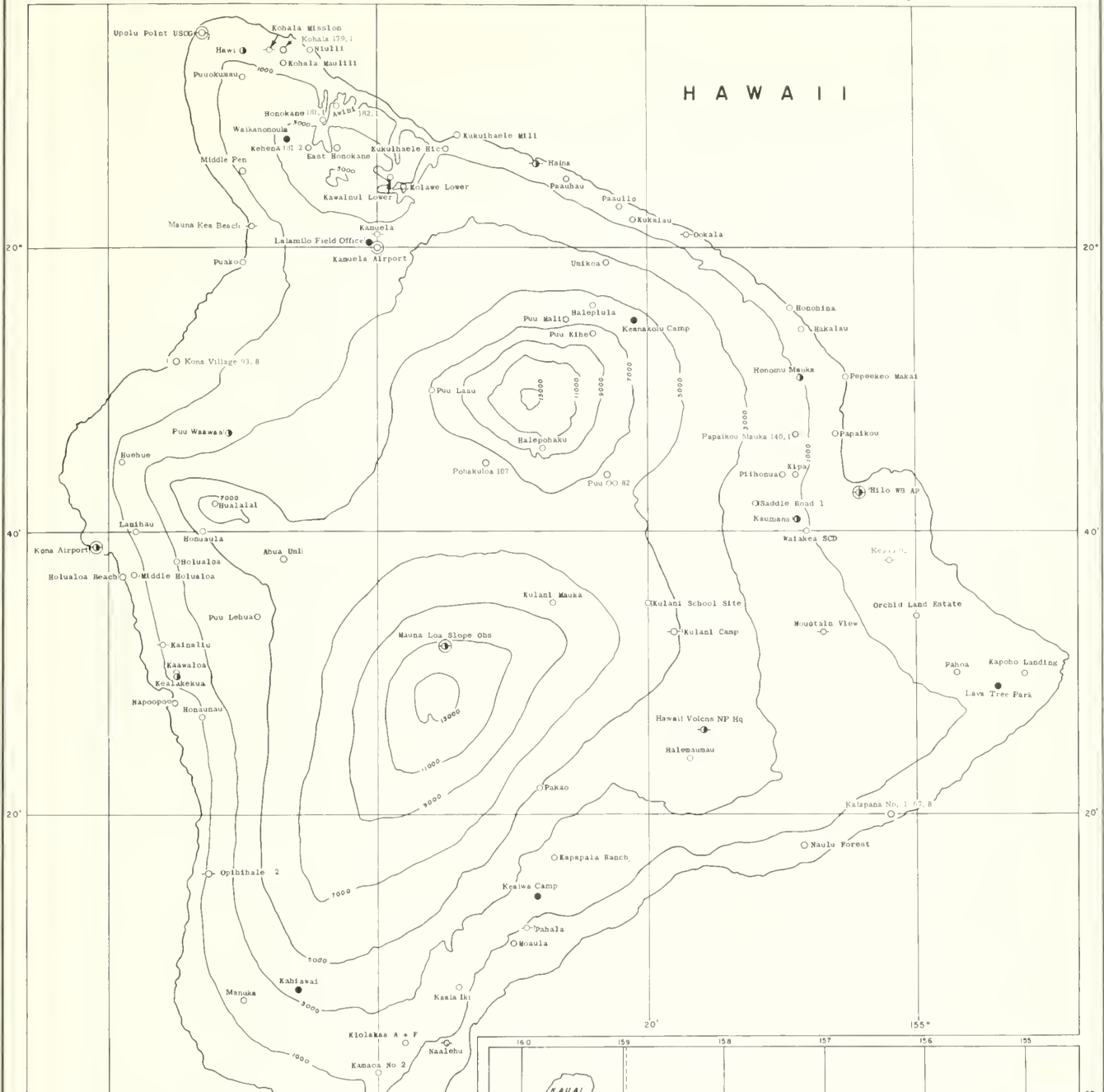
156°

40'

20'

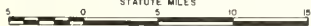
155°

HAWAII



HAWAII

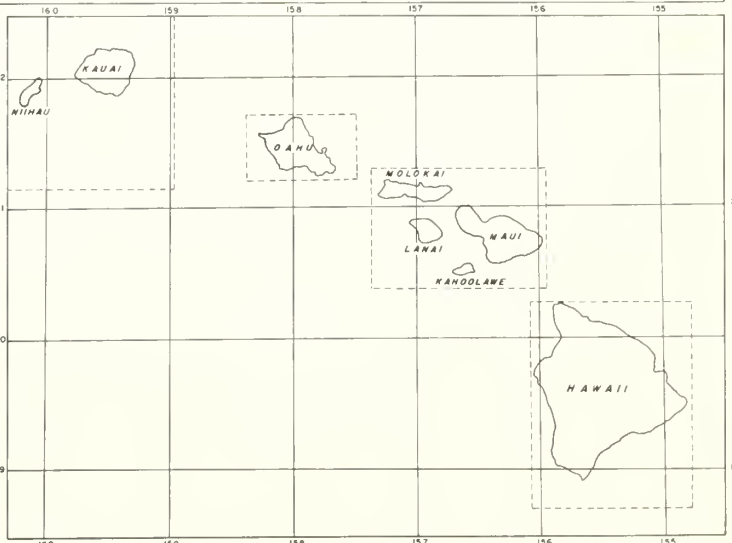
PLATE 2
STATUTE MILES



STATION LEGEND

- ● ● Precipitation only
- ⊕ Precipitation, storage
- ⊕ Precipitation and Temperature
- ⊕ ⊖ Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording,
- Recording ⊕ Both types

Double circle combinations indicate the availability of more detailed meteorological data
All stations use 150°W meridian time



156°

USCOMM-ESSA-Anheville, N.C.
Revised 3-59

40'

CLIMATOLOGICAL DATA

HAWAII
SEPTEMBER 1969

Continued

Station	Temperature										Precipitation												
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
										Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										30° or Above	32° or Above	32° or Below	30° or Below										
KAMUELA AIRPORT 191	75.4M	56.2M	65.8M		78	12	48	6+		0	0	0	0	.50	.12	27		.0	0		1	0	0
KEAAU 92	82.6	66.0	74.3	-.6	85	22+	62	29+		0	0	0	0	9.51	1.91	22+		.0	0		23	5	2
KEALAKEUA 26.2	78.5	65.3	71.9		82	23+	63	28+		0	0	0	0	5.06	1.40	11		.0	0		13	2	2
KONA AIRPORT 68.3	84.3M	68.6M	76.5M		86	22+	65	30+		0	0	0	0					.0	0				
KUKUIHAELE HIC 199														3.26	.47			.0	0		10	1	0
KULANI CAMP 79	64.9	49.6	57.3		69	15+	44	6		0	0	0	0	5.53	1.90	22		.0	0		17	1	1
MAUNA KEA BEACH 98	88.3	73.5	80.9		94	3	71	21+		10	0	0	0	.17	.16	10		.0	0		1	0	0
PAHALA 21	81.1	64.3	72.7	-1.0	85	29	61	10+		0	0	0	0	2.63	1.10	22		.0	0		4	2	1
POHAKULDA 107														.00	.00			.0	0		0	0	0
PUAKO 95.1														.15	.13	10		.0	0		1	0	0
PUU WAAWAA 94.1														.91	1.42			.0	0		4	0	0
UMIKOA 118														2.74	.58			.0	0		1	1	1
WAIAKEA SCO 88.2														13.61	3.07	22		.0	0		23	7	4
ISLAND			71.2											4.14				.0					

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 94° ON THE 3D AT MAUNA KEA BEACH 98, HAWAII

LOWEST TEMPERATURE: 32° ON THE 16TH AT MAUNA LOA SLOPE OBS, HAWAII

GREATEST TOTAL PRECIPITATION: 34.39 INCHES AT MOUNT WAIALEALE 1047, KAUAI

LEAST TOTAL PRECIPITATION: .00 AT 7 STATIONS

GREATEST ONE-DAY PRECIPITATION: 5.76 INCHES ON THE 21ST AT PAUOA FLATS, 784, OAHU

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
SEPTEMBER 1969

Station	Total	Day of Month																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
* * * ISLAND OF HAWAII																																			
ANAHOLA 1111	A	2.14	*	.16	.02	.11	.02	*		.07	.01	.51	.04	*		.17		.02	.44	.05	*		.75	.01	.03	.05	.05	*		.17	.09	*			
BRYDESWOOD STA 985	A	3.33	*	.58	T	.12	.10	*		.02	.05	.10	.04	*		.17		.02	.44	.05	*		.81	.01	.12	.05	.03	*		.32	.30	*			
EAST LAWA 934	A	4.63	*	.95	.01	.26	.16	*		.11		.11	.01	*		.28		.03	.31	.10	*		.84	.05	.13	.58	.07	*		.43	.20	*			
ELEELE 927	A	1.03	*	.23	.07	.12	.06	*				T		*		.03			.03		*		.26	.05	.06	T	*		.04	.10	*				
HALAULA 1110	A	2.21	*	.22	.10	.13	.06	*		.20		.03	.52	*		.07			.07		*		.42	.05	.06	T	*		.07	.06	*				
HALENAHANO 1006	A	5.25	*	.73		.16	.11	*		.27	.23	.35	.03	*		.16		.10	.37	.27	*		1.54	.05	.08	.04	*		.46	.19	*				
HUKIPO 945	A	1.15	*					*						*				.10	.16	3.70	.45	*		3.25	.04	.39	.11	.03	*		.56	.88	*		
KAILUA INTAKE 1050	A	16.36	*	1.84	.06	.38	.26	*		.15	.41	.06	1.34	.15	*	1.99		.15	.16	3.70	.45	*		2.48	.05	.05	.05	*		1.50	.08	*			
INTAKE WAINIPA PC 1086	A	8.64	*					*		2.00	*	.61	*	*		*				1.95	.05	*		2.36	.03	.08	.41	.21	*		.28	.08	*		
KALIHUAI RES 1131	A	8.38	*	1.29	.11	.14	.06	*		.19	.01	.51	.09	*		1.12		.03	.15	1.04	.19	*		3.26	.03	.08	.41	.21	*		.28	.08	*		
KANALOMULUHULU 1075	A	2.36	*			.47	.08	.05		.04		.09			.02		.15	.51		.09	.02		1.12	.02	.17	.05	.05	*		.03	.08	.37	*		
KANEHA RESERVOIR 1092	A	7.54	*	.56	.05	.21	.13	*		.37	.05	.95	.04	*		1.90		.02	.13	.42	.29	*		1.40	.11	.05	.11	*		.05	.05	*			
KAPAA STABLES 1104	A	2.23	*	.32	.10	.03	*			.10	.02	.08	.30	*		.06				.10	.05	*		.55	.02	.09	*		.19	.22	*				
KALIA 1112	A	1.92	*	.33	.07	.03	.05	*		.15		.30		*		.06				.03	.04	*		.55	.02	.09	*		.19	.22	*				
KAKAUA 944	A	.02	*					*						*								*						*						*	
* * * ISLAND OF MAUI																																			
KILAUEA 1134	A	4.37	*	.72	.08	.10	.06	*		.11	.06	.01	.38	.01	*		.74		.05	.12	.09	*		1.42	.11	.12	.01	*		.14	.04	*			
KILAUEA FIELD 17 1135	A	6.08	*	.82	.05	.21	.11	*		.15	.02	.38	.07	*		1.12		.04	.08	.59	.25	*		1.41	.02	.09	.29	.09	*		.26	.03	*		
KILAUEA POINT 1133	A	4.50	*.10	.04	.32	.03	.03	*		.05	.03	.50	.05	.04	.24		.01	.15	.04	.10	.11	2.00		.02	.04	.04			.05	.25	.10	*			
KOLO 1033	A	1.10	*					*						*								*						*						*	
KOLO 936	A	5.11	*	1.21		.18	.20	*		.12	.04	.17		*		.33		.17	.25	.14	*		.75	.18	.25	.05	*		.52	.55	*				
KOLO MAUKA 994	A	7.11	*	1.23		.18	.13	*		.21		.72		*		.78		.09	.71	.21	*		1.61	.21	.11	.05	*		.58	.29	*				
KOLOKO RES 1137	A	6.73	*	1.03	.09	.12	.05	*		.09		.04	.65	.02	*		1.40		.03	.14	.48	.13	*	1.72	.03	.05	.19	.15	*		.28	.04	*		
KUKULUA 935	A	2.15	*	.31		.09	.13	*		.10		.10		*		.12		.05	.11	.03	.05	*		.48	T	.07			.42	.24	*				
LIHUE VARIETY STA	A	4.75	*.01	.04	.07	.01	.07	*		.12	.13	.03	1.16	.01	*		.15		.04	.03	.32	.04	.22	*	1.29	.15	.09	.12	*		.23	.42	*		
LITHUE 1020	A	2.73	*	.31	.02	.21	.04	*		.29	.02	.16	.35	.01	*				.03	.05	.08	*		.70	.01	.04	.02	*		.22	.17	*			
LITHUE WR AP 1020.1	R	1.49	*.01	T	.01	.08	T	.03		.02	.18	T	.22				.05	.05	T	.03	.53	T	T	.03	T	.02	.10	.10	.03	*			*		
KANEHA RESERVOIR 940.1	A	1.17	*.01	.11		.06	.05	.08		.02	.02	.08	T	.04			.26		.03	.10	.04		.01	.03	.03	.03	.04	.05	.02	.24	*		*		
HANA 1026	A	.03	*					*				.03										*						*						*	
HOMIHI UPR CROSS 1083	A	3.22	*			.34	.24	.05		.10		.15		.05			.27	.16		.16	.16		.16	.05	.11	.05	.32	.11	.84	*			*		
HOLAUA 1145	A	2.23	*	.34	.06	.03	.01	*		.08		.30		*		.18		.02	.05	.14	.04	*		.51	.03	.03	.02	.15	*		.08	.06	*		
HOUNT WAIALEALE 1047	A	34.39	*.61	.43	.39	.90	1.42	.32		.16	.43	.08	2.13	1.54	.28	.75	.03	1.18	1.42	3.94	2.01	.20	2.05	4.33	.51	1.67	1.12	1.30	.32	1.97	.59	1.65	*		
NIU RIDGE 1035	A	.29	*					*		.03		.07		*						.07		*		.10	.09			*						*	
N WAILUA OITCH 1051	A	17.74	*.25	.03	.02	.13	.08	.02		.02	.01	.61	T	.05	.40	.04		.01	1.21	.11	.11	.39	3.16	.05	.23	.12	.12	.06	.16	.21	*		*		
PRINCEVILLE RANCH 1117	A	5.99	.25	.01	.32	.10	.07			.01		.32	.04	.07	.04	.76		.32	.22	.08	.02	1.98	.74	.08	.03	.19	.16	.18	*				*		
PUEHU RIDGE 1040	A	.34	*					*		.05		.18					.03		.05	.23	.07	*	.05	.03				.33	.11	*			*		
PUEHU 1013	A	5.62	*.53	.39	.05	*		.21	.34	.03	.70	.01	*		.06		.03		.05	.23	.07	*	1.03	.01	.07			.41	.20	*			*		
RESERVOIR 6 1004	A	1.42	*	.31	T	.25	.03	*		.51	.04	T			.16		.26	.23	.19	*		1.54	.31	.10	.06	*		.41	.20	*			*		
WAIHAWA 930	A	1.42	*	.31	T	.25	.03	*		.51	.04	T			.16		.26	.23	.19	*		1.54	.31	.10	.06	*		.41	.20	*			*		
* * * ISLAND OF MOLOKAI																																			
WAIHAWA MOUNTAIN 990	A	12.75	*					*						*								*					*							*	
WAIHAI LOWER 1054	A	9.32	*.39	.01	.16	.17	.22	.11	.08	.04	.22	.02	1.47	.02	.01	.02	1.51	.05	.15	1.77	.22	.22	.63	1.43	.26	.09	.08	.21	.15	.61	*		*		
WAIHAI UPPER 1052	A	12.84	*.51	.10	.03	.35	.45	.04	.02	.01	.36	.01	1.61	.11	.01	.28	1.65	.10	.15	1.61	.36	.65	.67	1.87	.01	.32	.20	.06	.23	.17	.03	.88	*		
WAIHAWA 943	A	.13	*					*				.31										*						*						*	
WAILUA KAI 1065	A	2.72	*	.27		.05	.05	*		.27	.03	.31								.26		*		.88	.13			.12	.35	*			*		
WAIHAWA 947	A	.43	*					*				.12						.23	.18			*												*	
WEST LAWA 931	A	2.50	*	.47	T	.24	.10	*		.03		.12				.13		.23	.18			.02	.07	.02	.05	.52	T	.08	.05	.08	*		.37	.20	*
* * * ISLAND OF OAHU																																			
AIEA FIELD 625 761	A	1.54	*	.36	.07	.11	.31	*				.05										*		.27										*	
BERETANIA PUMPING STA	A	1.42	*	.02	.09	.07	.11	*				.04				.12	.03					*	.07	.10	.48	.03	.02	*		.01	.09	.14	*		
CAMP 84 807	A	1.19	*	.04	*	.03	.09	*		.07	*	.39	*									*	.02												*
CHURCH COLLEGE LAIE	A	10.30	*.40	.10		.04	.05	*		.01	.50	1.60	1.10	.05	.10	.20	.30	.10	.10	.05	.10	.25	1.25	1.15	1.00	.25	.10	.10	.10	.05	.15	.75	*		
COCONUT ISLAND 840.1	A	2.06	*.04		.04	.04	.21	.09		.01	.13	.07	.09	.04		.01		.02	.09			*		.13	.37	.19	.16	.02	.05	.16	.10			*	
* * * ISLAND OF WAIALEALE																																			
EWA PLANTATION 741	A	.90	*			.13	.05	*				.05				.06						*	.13	.46										*	
HELENAHANO INTAKE 881	A	4.27	*.00	*	.39	*	*	*		.46	*	*	*	*		.65	*				.07	*	1.00	.39	*	*	*	*	.31	*	*	*	*	*	
HOKULUA 725.2	A	2.01	*					*		.19	*	*	*	*		.72	*				*	*	.26	.59	T	*	*	*	*	T	*	*	*	*	
HONOLULU OBSERV 702.2	A	.76	T	T	T	.03	.03	*						*								*	.08	T	.54	T	*	*	*	*	*	*	*	*	
HONOLULU WBFC 703	R	.87	T	T	T	.01	.06	*				.04	T		.03	.01	.08	T				T	.03	.57	T	.01	T	*	*	*	*	*	*	*	
* * * ISLAND OF KAUAI																																			
HONOLULU SUBSTA 704	A	1.16	*	.10	.07	.04	*					.05				.08				.06	.46	.21	.08											*	
H S P & EXP STA 707	A	1.80	*.10	.06	.11	.15	.01	*				.03				.15	.04					*	.12	.56	.21	.06	.04	*		.05	.09	.08	*		*
KAHANA 883	A	20.81	*.21	.09	*	*	*	*		3.00	*	*	*	*		6.84	*	*				.09</													

DAILY PRECIPITATION

HAWAII
SEPTEMBER 1969

Continued

Station	Total	Day of Month																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF MOLOKAI																																		
WALAUPAPA 363	A	3.14	.62	.08	.02	*	*	.11	*	*	.12	*	*	.20	*	*	*	*	.10	.12	.25	.13	*	*	*	1.19	.31	.49	*	*	*	*		
KAUNAKAI 536	A	2.20																			2.20	.63												
EDGELELE PENS 531	A	2.20																																
WALAPU 534	A	1.32			.03	.02					.13	.21	.04	.05	*	*	.30	.17	.02	.26	1.12	.11	*	.25	*	.04	.13	.07	.16	.13	.03			
WAPULEHU 542	A	3.64	.16	.04	.07			.07	*	.20	.13	.21	.04	.05	.14	*	*																	
ISLAND OF OAHU																																		
AUNALO 911	A	.91									.20	.36								.05	*	*	.57	*				.03	*	.06	*	*		
MOLOKAI AP 524	A	1.32	T	T		.07	.05														.29	T						.02	T		.02	.05		
KAUNAKAI RANCH 542.1	A	3.16	.21	.04	.03	.07	.06	.02	.04	.03	.29	.16	.12	.01	.03						.01	.12	.14		.13	.02	.02	.02	.03	.06	1.97			
KAUNAKAI 540	A	6.11	1.75						.69								.45		.16	.08	.10	1.01	.15	.55										
ISLAND OF MAUI																																		
KAHEPAU 690	A	.83									.54	*	*	*	*	*		.14	*	*	*	*	*	*	*	.15								
KAMAHAU HARBOR 654	A	.03								.03			T	1.08	.06										.62	.01	T	T						
KAHEPAU 672	A	1.96																																
KAHEPAU 684	A	1.36	*	*	*	.60	*	*	*	*	*	*	*	.33	*	*	*	*						.25	*	*	*	*	*	*	*	*		
KAHEPAU 694	A	.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.30		
KAHEPAU 676	A	T	*	*	*	*	*	*	*	*	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
KAHEPAU 685	A	.69	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.33	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.36	
ISLAND OF HAWAII																																		
KAHEPAU 252	A	1.49				.17					.60																.65	.16	.66	.15	.34	.24	*	
KAHEPAU B E S 434	A	3.56	.82	.49	.10	.09	.09	.05		.02	.01	.03	.02	*	.09	*	*	*	*	*	.03	.01	.10	.18	*	*	.16	.28	.05	.22	.22	*		
KAHEPAU RANCH 432	A	1.49	.27	.07	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KAHEPAU S 338	A	2.31	.25	.12					.06	.10	.01	.02	.26	*	.02	T	*	*	*			.95	T	.15	.02	.02	.02	.06	.14	.13	*	*		
KAHEPAU SUMMIT 336.4	A	1.32																																
KAHEPAU 423	A	1.96	*	.55	.07	.07	.14	.11			.01																.06	.04	.26	*	.14	.35	*	
KAHEPAU 485	A	4.47	.37	.37	.20	.14	.25	.03	.04	.09	.09	.03	.02	.04	.08	T		.02				.07	.10	1.15	.35	.07	.06	.02	.21	.40	.07	.21	.03	
KAHEPAU 354	A	5.55	.70	.17	.22	.09	.07	*	.45	.45	.30	.23	.04		.42	*						.15	.75	.36	.01	.54	.11	*	.31	*	*	*		
KAHEPAU AIRPORT 355	A	1.96	.45	.11	.21	.07	.10	.02	.09	.18	.14	.58	.14	T							.28	.30	.28	.60	.13	.32	.23	.02	.61	.13	.16	.29	T	
KAHEPAU 281	A	7.81	.73	.10	.11	.01	.25	.20	.10	.28	.49	.19	.10	.17	.55						.08	.16	1.03	.50	*	*	.72	.38	.40	.13	.10	.36	*	
KAHEPAU 259.5	A	1.15	*	*	*	.51	*	*	*	*	*	.13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.51	*	*	*	*	*	*	
KAHEPAU 480	A	9.50	*	*	*	*	*	*	*	*	*	.13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9.50	
KAHEPAU 493	A	1.85	*	.09	.08	.08	*	*	.11	.02	*	.04	.02	*	*	*	*	*	*	*	.07	.04	*	*	.82	.04	.12	.02	.02	*	.24	.04	*	
KAHEPAU GULCH 341	A	5.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.00	
KAHEPAU AIRPORT	A	.34	.02	.13	.01	T	*	*	*	*	.06	*	*	*	*	*	*	*	*	*		.01	.03	*	*	T	.02	.02	.02	.02	.02			
KAHEPAU INTAKE 374	A	8.78	*	*	*	*	*	*	4.42	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4.07	
KAHEPAU 398	A	.49	.02	.04	.01	.02	.03	T	.01	T		.02	T										.05	*	*	.05	.01	.05	.02	.16	*	*		
KAHEPAU 430	A	6.62	*	*	*	*	*	*	.12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6.62	
KAHEPAU 444	A	10.48	.76	.75	.42	.24	.13	.17	.62	.70	.23	.44	.24	.03	.21	.92	.07	.01	.24	.32	.21	.29	.50	.53	.14	.37	.17	.60	.58	.36	.19	.04	*	
KAHEPAU INTAKE 375	A	2.05	*	.48	*	*	*	*	.72	*	*	*	*	*	.14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KAHEPAU 410	A	.65	.04	.20	.01	.05	.01	.03	*	*	*	*	*	.03	*	*	*	*	*	*	*	*	*	*	*	*	.03	*	.03	.02	.10	.10	*	
KAHEPAU 346	A	15.80	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	15.80	
KAHEPAU BEACH 260.2	A	.03																																
KAHEPAU 311	A	.00																																
KAHEPAU 258	A	8.53	.30	.90	.23	.31	.63	.46	.16	.64	.27	.12	.66				.08	.54	.05	.05	1.05	.50	.03	.62	.30									
KAHEPAU HEIGHTS 323.7	A	.35										.19																						
KAHEPAU SANATORIUM 267	A	.26	.05						.06	.01	.09			.02																				
KAHEPAU 361	A	.00																																
KAHEPAU INTAKE 376	A	3.50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.50	
KAHEPAU VILLAGE 372	A	.05									.05																							
KAHEPAU UPPER 442	A	13.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13.00	
KAHEPAU 466	A	2.11	.30	.50	.10	.05	*	.18	*	*	*	*	*	.08	*	*	*	*	*	*	*	*	*	*	*	.20	.08	.06	.22	.24	.10	*		
KAHEPAU FLO 60-497	A	2.27	*	*	*	*	*	*	.11	*	*	*	*	.40	*	*	*	*	*	*	*	*	*	*	*	1.48	*	*	*	*	*	.28	*	
KAHEPAU 332	A	1.98	*	.38	T	T	*	*	.04	T	.45	.02	*	.08	T	*	*	*	*	*	*	*	*	*	.41	T	T	*	*	.31	.37	*		
KAHEPAU 296	A	.00																																
KAHEPAU GULCH 377	A	4.00																															4.00	
KAHEPAU 350	A	18.05	1.60	1.14	.92	.30	.57	.15	.64	1.18	.42	.58	.32	.01	.16	.78	.24	.19	.31	.59	.44	.38	1.32	1.17	.62	.74	.27	.92	1.31	.20	.55	*		
KAHEPAU 351	A	1.35	.18	.07	.05	.05	.10	.03	.12	*	*	*	*	.09	.78	.24	.19	.31	.59	.44	.38	1.32	1.17	.62	.74	.27	.92	1.31	.20	.55	*	*		
KAHEPAU 259.4	A	4.87	*	*	*	*	*	*	.12	*	*																							

DAILY PRECIPITATION

Continued

HAWAII
SEPTEMBER 1969

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
KAHUANA 88.1	13.58	1.27	.95	.53	1.05	.75	.29	.02	.73	.13	.30	.10	.20		.21	.01	.10	.05	.15	.67	.02	.06	2.95	1.44	.05	.18	.10	.05	.18	.11	.93		
KAWAIAUI LOWER 193	5.79				2.10										.67																		
KEAAU 92	4.51	1.91	.77	.28	.25	.10	.10	.05	.30	.10	.18	.05	.02	.13	.32		.06	.15	.10	.58	.09	.22	1.91	.70	.13	.21	.26	.05	.22	.14	.13		
KEALAKUHA 26.2	5.05	1.09	.47	.21	.15	.05	.15	.19	.05	.10	.33	1.40	T	.04		.01	.20	.01	.15	.01	.05	T	T	T	.03	.04	.03	.01	.19	T	.10		
KEHENA 181.2	3.88																														3.88		
KIDLAKAA A & F 6	4.00																														4.00		
KIPIA 89.2	13.88	.83	1.33	.64	.66	.33	.60	.17	.22	.13	.49	.14	.12	.02	.22	.10	.15	.06	.02	.03	.03										4.00		
KOHALA 179.1	3.19		1.30	.11	.01	.07								.02	.22	.10	.26	.13	.30	.92	.04	.11	3.66	1.05	.34	.23	.15	.19	.13	.27	.10		
KOHALA MAUULLI 176	3.54		1.53	.04	.09	.02			.01	.18	.04				.05	.03	.01	.03	.03				.30	.05	.03	.19	.08			.58	.06		
KOHALA MISSION 175.1	3.22	.65	.35	.11	.01	.07	.02		T	.05	.03			.08	.04	.09	.12	.02	.03	.02		.08	.31	.02	.01	.14	.11	.13	.43	.30			
KOIAWE LOWER 196	4.16				1.70							.30																					
KONA AIRPORT 68.3	-	.13	.90	.60	.03	T	T	.09	T		.07	.08	T							.64	*	*	*	*	*	1.52	*	*	*	*			
KONA VILLAGE 93.8	.04												.01		.01								.70	.07						.02			
KUKUIAU 222	3.14	.11	.49		.41	.15	.15																										
KUKUIHAELE HIC 199	3.26	.24	.73	.06	.47	.09	.02							.14			.01	T	.02	.44			.11	.26	.01	.02	.09	.25	.18	.21	.18		
KUKUIHAELE "ILL 206	2.48	.25	.75	.06	.25	.13	*	.05	.17		.13	.05	.20	.10	.10		.09		.01				.04	*	*		.08	*	*	.47	.10		
KULANI MAUKA 76	1.10	.05	.05	.31	.20	.15	.18		.04	.05	.03	.02	T		.05	T					.25	.02	.190	.35	.10	.15	.03	.02	.15	.15	.05		
KULANI SCHDL SITE 78	4.22	*	*	*	*	1.30	*	*	*	*	*	*	*	.40	*	*	*	*	*	*	*	.37	.45	.44	*	*	*	2.15	*	*	.09		
LANTHUN 68.2	3.41	.10	.11	.08	*	.53	*	.23	.58	.15	.34	.31	.06	.06	*	*	*	*	.19	*	*	.37	*	*	*	.59	.04	*	*	.04			
MAHUKA 2	1.90	*	1.10	.01	*	*	*	T	*	*	*	*	*	*	.01	T	.30	T	.15	*	*	*	.14	T	.14	*	*	*	.05	T			
MAUNA KEA BEACH 98	.17							.01			.16																						
MAUNA LOA SLOPE DBS	.39																																
MIDDLE HOLLUA 68.1	5.35	2.16	*	.69	*	*	*		.76	*	*	.87	*	*	*	*	T						.39										
MIDDLE PEN 147.1	.72	*	*	*	*	*	*		.72	*	*	*	*	*	*	*	*		.40	*	*	*	*	.28	*	*	*	*	*	*	.19	*	
HDAULA 18	2.17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.17		
MOUNTAIN VIEW 91	13.54	1.76	.71	.28	.31	.37	.20	.11	.64	.23	.27	.12	.19	.13	.30	T	.05	.15	.17	.85	.11	.33	2.65	1.74	.21	.37	.25	.10	.41	.26	.27		
NAALEHU 14	2.26								.05	.07	.72	.02	T		.05	T							1.08	.16	T					.11	.01		
NAPOOPOO 28	3.59	1.30	*	*	*	*	*		.68	*	*	*	*	*	1.17	*	*	*	*	*	*	*											
NAULU FOREST 38.6	2.76	.17	*	.23	.03	T	*	*	*	*	.31	.07	.08	*	*	*	*	*	.05	.94	*	*			.72	.07	T	T	.02	*	.07		
NIULII 179	3.88	*	1.52	.12	.02	.12	*			.10	.05				.12		.05	.05	.03	.01	*	*	.27	.07		.21	.23	*	*	.87	.04		
ODKALA 223	4.47	.27	.58	.08	.57	.20	.18		.08		.02			.03	.01		.05	.02	.04	.27	.18	.04	.08	.61	.05	.08	.14	.33	.27	.21	.13		
OPHIHALE 2 24.1	2.57	T	.13	.06	.01	.07	.01	.17	.02	.21	.03	T	T		.03	.02	.02	.48	.11	.09	T	.09	.04	T	.04	.03	.03	T	.21	.49	.14		
ORCHIO LAND EST 91.5	9.81	*	*	*	3.63	*	*	*	*	*	*	1.13	*	*	*	*	*	*	*	*	*	*											
PAAUHAU 217	2.55	.22	.38	.11	.32	.06	.04				.22									1.81			.10	.04	.07	.08		.02	.03	.10	.18	.43	.15
PAAUULO 221	2.54	.06	.41	.06	.40	.07	.08		T		.02						.01	T	.01	.31			.10	.17	T	.02	.07	.22	.27	.17	.09		
PAHALA 21	2.63							.09		.65	.46												1.10	.33									
PAHOA 65	10.58	1.18	.47	.07	.07	.26	.08	.05	.26	.04	.23	.09	.14	.34		.05	.19	.38	.69	.10	.25	2.17	1.10	.31	.06	.23	.15	.63	.41	.35			
PAPAKO 37	6.30																														6.30		
PAPAIAKOU 144.1	11.56	1.12	1.00	.38	.28	.05	.23	.03	.17	.05	.29	.01	.12	.11	.12	.01		.60	.21	.19	.02	.11	4.73	.35	.04	.40	.32	.04	.21	.27	.10		
PAPAIAKOU MAUKA 140.1	15.37	1.40	1.11	.46	.73	.30	.52	.08	.64	.08	.24	.05	.25	.05	.23	.15	.02	.42	.37	.49	.10	.04	5.06	.99	.15	.28	.27	.14	.15	.48	.10		
PEPEKED MAKAI 144	7.06	1.10	.63	.49	.40	.11	.02	.02	.32	.12	.19	.02	.05	.02	.10		.03	.11	.19	.23	.08	.03	1.37	.38	.07	.07	.34	.05		.20	.12		
PFIHONUA 89	15.60	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
POMAKULOA 107	A	.00																															
PUKAKO 95.1	A	.15						.02			.13																						
PUU KIME 120	A	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.03	
PUU LAU 102.1	A	.95	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.95	
PUU LEHUA 73	A	2.20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.20	
PUU MALI 113	A	.58	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.58	
PUUKUHAI 167	A	3.13	*	1.46	.02	.15	.02			.07	.01					.01	.01			.01	.05	*	.16	.01	.05	.01	.22	*	*	.85	.02		
PUU OD 82	3.99	.12	.15	.11	.08	.15	.14	.06	.10	.10	.05	.23	T	.07	T					T	.07	.07	1.12	1.16	.01	.09	.05	.02	.04	T			
PUU WAAHAA 94.1	A	.91	*	*	*	4.20	*	*	*	*	.23	.33	.11							2.20	*	*					.24	*	*	*	*		
SAOOLE ROAD 1 84	A	12.90	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
SOUTH POINT CDRAL 3	A	1.49	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
UMIKOA 118	A	2.74	*	.16	1.02	.20	.22	.12			.10					.02							.05	*	*	.05	*	*	.35	.09	1.49	.33	
UPDLU POINT USCG 159.2	1.43	.27	.25	.02	.07									.05									.08	.02	.11	.03	.18	.15	.06	.06	.14		
WAIKAEA SCD 89.2	13.61	1.07	1.00	.43	.91	.48	.30	.15	.69	.16	.36	.08	.21	.04	.30		.20	.03	.17	.60	.19	3.07	1.70	.09	.25	.16	.08	.32	.43	.14			

SUPPLEMENTAL DATA

	Wind (Speed - m.p.h.)						Relative humidity averages- percent				Number of days with precipitation						Percent of Possible sunshine	Average sky cover sunrise to sunset	
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	Standard of Time 150TH MERIDIAN				Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over			Total
							02	08	14	20									
							02	08	14	20									
HILO, HAWAII, WB AIRPORT	28	0.5	6.3	16	NE	25	91	82	74	85	1	10	15	3	0	1	30	33	8.0
HONOLULU, OAHU, WBFC	5	13.1	13.9	29	NE	02	70	66	51	66	10	10	0	1	0	0	21	67	6.6
KAHULUI, MAUI, WB AIRPORT	5	12.0	12.6	29	NE	01	79	74	58	76	6	12	1	0	0	0	19	71	6.2
LIHUE, KAUAI, WB AIRPORT	6	12.6	13.2	26	E	29+	78	75	65	76	8	11	4	1	0	0	24	51	7.8

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
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Station	Day of Month																															Average	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF KAUAI																																	
KANALOHUHU 1075	MAX MIN	71 59	73 57	71 56	70 57	71 54	70 55	71 51	72 50	75 48	77 55	76 57	76 59	76 59	73 60	71 56	74 55	76 59	72 57	74 58	75 56	74 58	76 54	76 57	78 57	72 58	69 58	68 57	68 55	69 58	72.6 56.2		
KILAUEA POINT 1133	MAX MIN	83 74	81 72	82 74	81 72	82 74	85 72	83 71	81 71	81 71	82 69	83 76	83 77	83 77	79 77	79 76	82 77	82 77	80 74	82 74	82 74	82 73	80 75	79 73	81 70	80 71	82 73	80 71	82 72	79 72	81.4 72.3		
LIMUE WB AP 1020.1	MAX MIN	85 76	85 76	85 75	85 73	84 74	85 73	84 71	84 71	85 71	83 69	85 76	86 77	85 77	85 77	85 76	85 76	85 77	85 75	85 74	85 75	83 76	85 75	85 74	85 75	86 74	83 74	85 73	85 72	82 73	82 72	84.6 74.3	
MAKAHUEA POINT 940.1	MAX MIN	86 71	85 70	86 74	85 72	86 71	83 71	88 76	88 69	88 69	88 68	88 72	88 72	88 74	89 73	87 76	86 74	86 74	85 75	85 71	85 72	85 77	85 74	86 75	85 75	86 71	86 71	84 71	84 71	83 74	83 71	86.1 72.7	
MANA 1026	MAX MIN	89 67	89 66	88 68	88 67	89 68	88 67	87 68	87 67	88 67	90 68	89 67	88 67	87 68	87 67	88 67	86 67	89 67	87 67	87 67	89 67	89 68	90 67	90 66	87 66	87 66	87 66	89 66	87 66	88 66	90 66	88.1 67.6	
NIU RIOGE 1035	MAX MIN	83 64	80 62	82 63	84 65	85 62	84 63	81 63	83 63	83 63	80 60	82 63	81 63	84 62	85 64	83 65	83 64	84 63	85 63	84 62	86 65	86 65	86 65	85 64	86 65	85 65	86 65	85 64	85 63	83 63	82 61	83.5 63.2	
WAI'IHI LOWER 1054	MAX MIN	79 66	78 67	80 67	79 66	78 66	77 64	78 63	79 64	79 64	80 59	79 68	79 64	79 64	80 66	81 67	81 66	79 66	79 68	79 68	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	78.9 65.1	
ISLAND OF OAHU																																	
EWA PLANTATION 741	MAX MIN	85 72	85 72	85 70	85 69	86 68	87 68	85 66	86 67	85 67	83 67	86 69	85 69	85 69	87 70	86 68	86 67	85 71	85 69	84 69	81 70	83 70	85 67	86 67	84 69	84 67	85 69	84 68	83 67	84 67	84 67	84.8 69.0	
HONOLULU WAFCC 703	MAX MIN	89 64	89 62	88 63	89 74	90 73	90 76	91 73	89 74	87 74	87 70	89 74	89 77	90 77	89 75	90 76	90 77	89 76	88 74	84 73	89 76	88 75	84 73	87 76	89 75	89 76	89 76	88 75	88 76	87 74	87 73	88.8 75.1	
HONOLULU SUBSTA 704	MAX MIN	81 74	83 73	83 73	82 71	82 71	82 74	84 73	83 74	83 74	80 73	83 74	82 72	82 74	82 75	82 74	82 74	82 74	83 74	83 72	81 72	81 74	81 73	81 74	81 74	81 74	81 74	81 74	81 74	81 74	81 74	82.0 73.4	
KAHUKU 912	MAX MIN	84 71	84 75	85 69	83 70	83 71	83 72	86 72	84 73	83 71	83 72	83 71	83 75	84 73	85 74	85 73	84 73	84 73	84 74	84 74	84 74	84 74	84 74	84 74	84 74	84 74	84 74	84 74	84 74	84 74	84 74	83.4 72.3	
KANEIHE MAUKA 781	MAX MIN	83 74	82 72	82 71	82 70	82 69	83 70	81 69	83 70	79 69	82 70	82 74	82 74	82 72	82 72	82 72	82 72	82 72	81 73	81 73	81 73	81 73	81 73	81 73	81 73	81 73	81 73	81 73	81 73	81 73	81 73	81.3 71.3	
LUALUALEI 804	MAX MIN	86 76	89 73	88 73	87 71	86 71	89 72	87 74	87 74	87 74	87 74	87 74	87 74	87 74	86 76	86 76	86 76	87 76	87 76	87 76	87 76	87 76	87 76	87 76	87 76	87 76	87 76	87 76	87 76	87 76	87 76	86.2 72.9	
MAKAPUU POINT 724	MAX MIN	80 71	79 72	80 69	80 69	80 69	87 76	88 73	88 72	81 68	84 68	83 75	83 75	80 72	80 73	80 74	80 75	80 75	80 75	80 75	80 75	80 75	80 75	80 75	80 75	80 75	80 75	80 75	80 75	80 75	80 75	82.3 71.6	
OPAELUA 870	MAX MIN	82 68	79 69	80 69	80 68	80 68	80 68	85 65	84 66	84 66	84 66	83 66	83 67	83 67	81 70	81 67	80 67	84 64	82 64	82 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81 64	81.1 66.7	
PRI WAHIANA 820.2	MAX MIN	83 69	84 67	85 69	86 66	86 64	84 64	85 66	86 66	86 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	83.4 66.3	
WAI'ALUA 847	MAX MIN	88 68	85 65	85 65	85 66	84 66	85 66	87 63	86 65	83 65	85 65	85 67	85 67	85 67	84 67	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84 66	84.3 65.7	
WAIKIKI 717.2	MAX MIN	86 74	86 75	86 74	86 73	86 72	86 72	87 72	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	87 74	85.7 73.4	
WAIMANALO EXP FARM	MAX MIN	85 75	86 74	86 74	85 74	85 74	85 74	86 74	86 75	87 75	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	84.6 74.0	
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX MIN	82 72	83 73	83 72	83 71	83 71	86 73	83 71	85 72	81 72	82 72	81 70	83 73	83 75	86 74	81 73	81 71	83 70	82 70	82 71	84 71	80 72	81 70	81 70	81 70	81 70	81 70	81 70	81 70	81 70	81 70	81.9 71.7	
ISLAND OF LANAI																																	
LANAI CITY 672	MAX MIN	78 63	77 65	77 64	77 64	77 64	77 64	79 67	77 65	79 64	78 66	78 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	79 65	77.8 64.7	
ISLAND OF MAUI																																	
HALEAKALA RS 338	MAX MIN	63 48	64 50	69 43	66 45	68 41	61 38	59 38	58 39	58 42	55 46	58 44	65 43	65 43	62 42	62 47	66 48	69 45	63 46	63 52	73 49	69 48	64 48	66 48	65 48	65 50	64 41	66 51	68 48	69 46	62 45	64.2 45.5	
HALEAKALA SUMMIT 338.4	MAX MIN	60 38	62 45	62 45	63 45	63 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	65 45	59.2 42.9	
HANA AIRPORT 355	MAX MIN	82 71	82 72	82 70	84 70	83 68	84 68	81 68	82 69	82 69	83 69	82 71	83 71	83 71	84 72	83 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	84 73	83.0 70.3	
KAANAPALI AIRPORT	MAX MIN	88 71	84 72	84 73	85 71	85 71	85 71	86 65	85 73	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85.0 70.8	
KAHULUI WB AP 398	MAX MIN	86 67	86 68	86 67	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	87 66	86.9 68.9	
KAJLUA 446	MAX MIN	78 67	78 68	77 67	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	78.7 66.9	
KEAWAKAPU BEACH 260.2	MAX MIN	90 67	91 67	90 66	92 65	91 65	89 64	88 64	89 66	83 66	80 66	83 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	86 66	88.7 66.1	
KULA SANATORIUM 267	MAX MIN	71 60	75 61	77 59	73 57	72 57	72 57	74 58	74 58	70 58	71 58	70 58	72 58	75 58	81 59	73 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	73.8 58.4

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HAWAII
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Station		Day of Month																														Average	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		31
LAHAINA 361	MAX MIN	88 71	88 70	88 69	88 71	87 69	87 68	87 69	87 71	85 70	85 72	84 71	85 69	88 69	87 71	87 70	87 70	85 70	85 72	87 69	86 70	88 72	87 72	87 68	87 71	87 68	87 69	87 67	86 68	86 71	87 67	87 67	84.7 69.8
WAILUKU 392	MAX MIN		71	72	71	71	72		70	71	72	73	74	73	74	73	73	73	74	72		70	73	72	72	70	69		70	71		71.8	
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX MIN		83 64	83 66	83 65	82 66	83 64	83 65	82 66	83 65	83 64	83 65	84 65	83 65	83 69	84 67	79 66	83 67	83 70	81 68	83 69	83 67	83 70	82 66	83 69	82 66	83 69	83 67	82 68	81 66	82 67	82 65	82.6 66.4
HAWAII VOLCNS NP HO 54	MAX MIN	71 56	68 55	68 56	68 54	67 54	70 54	70 54	72 55	68 53	67 54	72 54	68 54	67 54	70 54	72 55	71 57	71 54	69 55	69 55	69 57	69 57	67 58	67 55	72 56	72 55	71 55	71 55	71 55	70 55	66 53	70 52	69.5 55.1
HILO WB AIRPORT 87	MAX MIN	82 69	83 69	82 69	83 69	82 69	83 66	83 66	81 65	81 65	83 68	82 67	82 67	80 67	80 69	84 67	82 68	82 68	83 68	83 69	78 69	78 69	83 70	81 70	83 69	82 69	81 69	81 69	81 69	81 69	81 65	81.9 68.1	
KAINALIU 73.2	MAX MIN	80 64	80 66	79 66	80 64	78 64	78 64	79 66	80 66	80 63	79 66	78 63	79 66	80 66	79 63	78 63	79 68	81 63	81 68	77 69	82 63	82 61	81 61	81 61	81 61	81 65	78 65	78 65	79 65	79 65	80 65	79.3 64.6	
KAMUELA 192.2	MAX MIN	72 62	70 60	74 61	72 60	73 60	72 64	75 61	74 58	75 61	74 58	75 58	75 58	73 58	75 61	74 60	75 60	75 61	74 60	74 62	76 54	76 54	78 57	75 57	73 55	74 56	73 57	73 56	70 57	71 58	70 58	73.8 58.8	
KAMUELA AIRPORT 191	MAX MIN	75 56	74 66	74 48	75 59	75 54	74 48	77 55	76 56	76 56	78 56	77 56	76 56	78 55	76 62	76 62	74 52	76 52	76 59	76 54	76 54	76 54	76 53	76 54	76 53	76 53	76 58	76 56	72 59	76 65	72 65	75.4 56.2	
KEAAU 92	MAX MIN	83 66	83 66	82 67	81 67	82 66	82 66	82 65	82 66	83 67	82 66	83 67	83 66	83 66	83 66	83 66	83 66	83 66	83 66	83 66	85 66	85 66	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	85 67	82.6 66.0
KEALAKEKUA 26.2	MAX MIN	79 64	80 66	79 67	78 65	77 65	77 65	79 65	79 65	78 64	77 64	77 64	78 64	78 64	78 64	78 64	78 64	78 64	78 64	75 69	79 63	82 66	82 66	80 66	80 66	79 65	77 65	77 65	80 65	78 65	81 65	78.5 65.3	
KOHALA MISSION 175.1	MAX MIN	81 68	79 68	79 68	80 69	80 68	81 68	81 68	81 67	81 67	82 68	81 68	82 68	82 68	82 69	82 69	79 67	82 67	82 67	80 69	81 67	82 67	81 67	81 69	81 69	81 68	81 68	79 68	81 68	80 68	79 67	79 67	80.7 68.3
KONA AIRPORT 68.3	MAX MIN	85 69	84 70	84 70	85 70	85 67	85 67	86 68	86 68	86 70	86 70	85 73	85 73	85 68	85 68	85 68	85 68	85 68	85 68	84 68	85 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84.3 68.6
KULANI CAMP 79	MAX MIN	66 52	63 53	64 52	64 51	63 44	64 44	63 48	64 48	65 46	62 46	62 46	62 46	68 46	69 55	69 48	65 52	67 52	67 52	67 52	65 48	65 48	64 50	62 50	62 50	64 50	63 50	63 50	63 50	63 48	64 47	64.9 49.6	
MAUNA KEA BEACH 98	MAX MIN	91 77	90 78	94 73	87 75	90 73	87 72	88 73	86 72	86 71	84 72	87 73	86 73	86 75	86 74	88 73	85 73	88 73	88 73	89 73	88 73	88 73	88 73	88 73	88 73	88 73	88 73	88 73	88 73	88 73	88 73	88.3 73.5	
MAUNA LOA SLOPE OBS	MAX MIN	60 38	62 41	60 39	59 40	58 39	56 40	60 42	61 44	60 44	63 44	60 44	63 44	53 40	54 41	52 37	49 32	54 39	56 37	59 38	58 38	58 38	58 37	57 40	60 39	58 39	60 41	59 41	58 40	59 41	59 42	59 42	57.8 39.7
MOUNTAIN VIEW 91	MAX MIN	79 64	73 65	74 66	75 64	77 63	76 59	79 61	79 62	77 57	75 58	75 60	75 62	79 61	79 63	75 63	75 63	75 63	75 63	75 63	74 63	78 61	78 61	72 63	72 63	79 63	80 63	80 63	77 63	76 63	76 63	76 63	76.9 62.0
NAALEHU 14	MAX MIN	81 67	82 67	82 69	78 66	81 66	81 66	82 66	82 66	80 66	82 66	80 66	80 66	80 66	82 66	81 66	80 66	80 66	80 66	80 66	77 66	77 66	82 66	83 66	83 66	83 66	83 66	82 66	82 66	83 66	83 66	83 66	81.1 67.4
ODKALA 223	MAX MIN	81 70	81 69	81 68	81 68	81 67	82 67	82 67	80 69	81 69	81 71	82 71	82 71	82 70	82 70	82 71	80 70	81 71	81 71	78 68	81 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	81.0 69.0
OPIHIHALE 2 24.1	MAX MIN	82 63	80 64	76 63	77 62	80 62	78 62	77 61	74 63	75 63	78 63	79 63	77 63	77 63	79 63	75 63	76 62	76 62	76 62	79 61	76 61	80 61	82 61	82 61	80 61	79 61	78 61	78 61	76 61	72 61	72 61	78.2 62.8	
PAHALA 21	MAX MIN	81 64	82 67	82 67	80 64	82 63	81 63	81 63	80 63	78 63	78 63	79 64	79 64	81 64	82 65	84 65	81 66	81 66	79 66	82 65	83 65	82 65	83 65	83 65	83 65	83 65	83 65	83 65	83 65	83 65	83 65	83 65	81.1 64.3
UPOLU POINT USCG 159.2	MAX MIN	82 70	80 68	83 68	80 71	83 70	83 69	83 70	83 69	84 70	81 70	84 70	85 70	85 70	85 71	85 71	84 71	84 71	84 72	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	83.2 70.4

EVAPORATION AND WIND

Station		Day Of Month																														Total Or Avg.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		31
* * * ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP WIND MAX MIN	.41 233 90 70	.44 262 87 70	.45 262 88 69	.41 254 87 69	.32 246 87 68	.43 148 89 68	.34 133 89 68	.35 154 89 68	.41 122 88 68	.30 89 86 65	.28 153 86 65	.28 179 91 65	.45 223 91 70	.34 198 86 71	.40 177 91 71	.40 165 90 70	.38 174 89 70	.27 220 88 70	.37 234 88 68	.43 253 87 69	.34 224 88 70	.37 227 87 69	.32 189 86 69	.34 194 86 69	.35 224 89 70	.39 223 89 69	.29 227 86 68	.28 202 86 68	.30 271 85 68	.33 257 86 68	10.77 6117 88.1 68.8	
* * * ISLAND OF OAHU																																	
HONDLULU OBSERV 702.2	EVAP WIND MAX MIN	.27 36 93 70	.40 45 93 71	.36 48 93 69	.30 40 91 70	.32 33 93 70	.32 29 94 68	.30 22 91 67	.15 17 84 68	.15 15 84 69	.12 9 84 69	.17 13 85 68	.22 14 87 69	.15 31 86 68	.38 19 87 70	.14 17 91 70	.34 20 93 70	.10 19 92 70	.21 24 92 70	.30 31 92 71	.31 32 90 68	.24 24 78 68	.23 7 88 67	.25 19 88 67	.17 23 92 67	.29 26 90 71	.29 34 86 67	.29 34 88 67	.23 28 86 67	.30 48 91 67	.27 39 91 67	7.57 796 89.6 68.9	

See Reference Notes Following Station Index

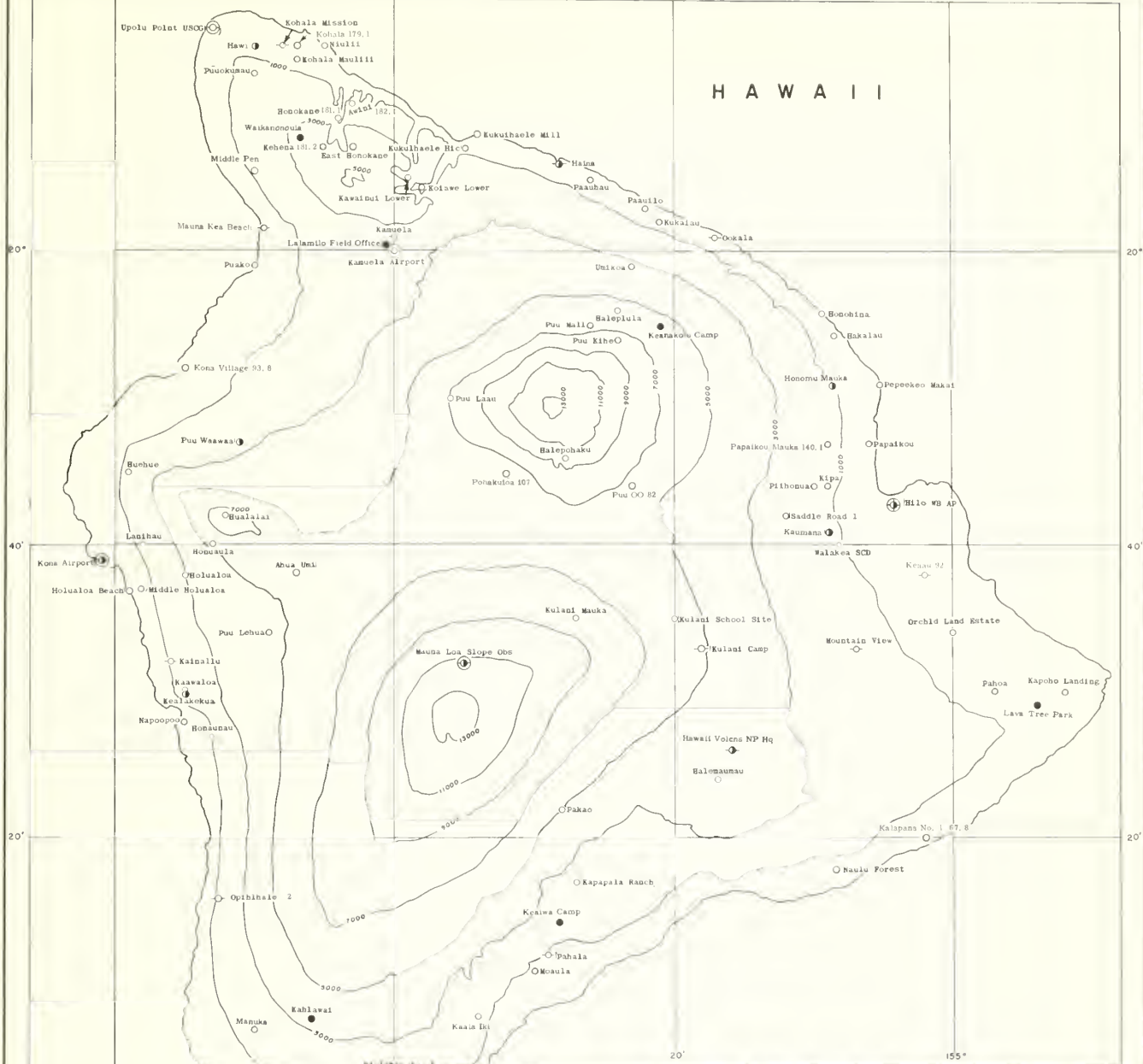
156°

40'

20'

155°

HAWAII



HAWAII

PLATE 2

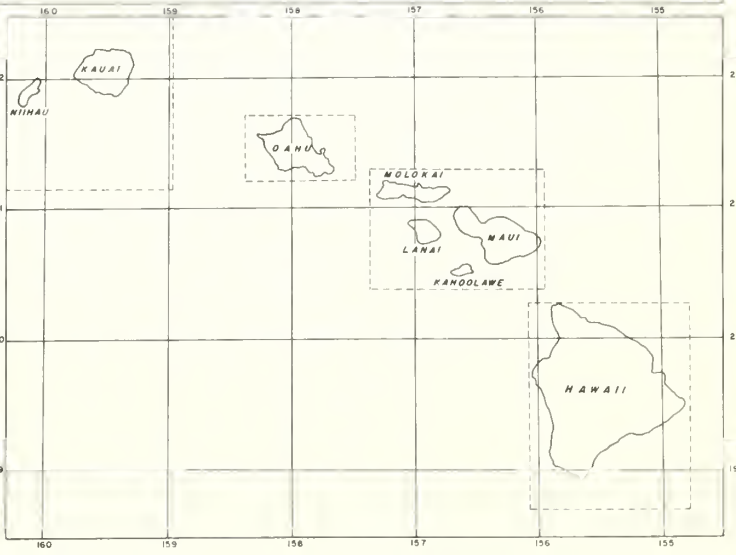
STATUTE MILES



STATION LEGEND

- ● ○ Precipitation only
- ⊕ Precipitation, storage
- ⊙ Precipitation and Temperature
- ⊕ ⊙ Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording, ● Recording, ⊕ Both types

Double circle combinations indicate the availability of more detailed meteorological data
 All stations use 150th meridian time



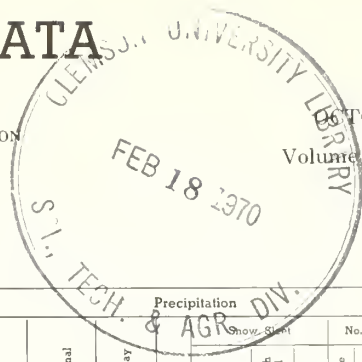
156°

40'



CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
MAURICE H. STANS, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE



HAWAII
OCTOBER 1969
Volume 65 No. 10

CLIMATOLOGICAL DATA

Station	Temperature										Precipitation												
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Show, Sleet			No. of Days			
									By or Above 32° or Below 32°	Above 32° or Below 32°	By or Above 32° or Below 32°	Above 32° or Below 32°					Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More	
																							Max.	Min.	Total	Date	.10 or More	.50 or More	1.00 or More
* * * ISLAND OF KAUAI																							
ANAOHOLA 1111 A	71.7	51.4	61.6		78	8	43	31+	0	0	0	0	2.77	- 2.15	.66	28	.00	0	0	0	4	2	0
KANALDHULUHULU 1075 A													2.78		.98	28	.00	0	0	0	1	0	0
KAPAA STABLES 1104 A													2.41		.50	22	.00	0	0	0	0	0	0
KILAUEA FIELDO 17 1135 A	82.5	71.3	76.9		86	27+	69	10	0	0	0	0	2.72	- 2.58	4.49	10	.00	0	0	0	8	1	0
KILAUEA PDINT 1133 A															.75	10	.00	0	0	0	0	0	0
* * * ISLAND OF OAHU																							
KOLOA 936 A	83.0	71.1	77.1	.2	85	17+	63	3	0	0	0	0	4.60	- .71	1.28	28	.00	0	0	0	6	2	2
LIHUE W8 AP 1020.1 R	86.9	66.0	76.5	-.5	90	12+	64	21+	2	0	0	0	3.15	- .88	1.13	27	.00	0	0	0	1	0	0
MANA 1026 A													.32	- 1.73	.13	27	.00	0	0	0	1	0	0
N WAILUA OITCH 1051 A													9.79				.00	0	0	0	0	0	0
PH WAINIHA 1115 A													8.69	.45	2.73	11	.00	0	0	0	11	5	2
* * * ISLAND OF MOLOKAI																							
PUEHU RIDGE 1040 A	79.3	63.3	71.3		83	31	58	5	0	0	0	0	3.68		1.56	29+	.00	0	0	0	5	2	2
WAHIAWA 930 A													2.08	- .94			.00	0	0	0	0	0	0
WAIAMI LOWER 1054 A													5.55		1.02	22	.00	0	0	0	12	5	1
WAIHEA 947 A													.51	- 1.40	.43	27	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MOLOKAI																							
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M	.7	81	25	63	29+	0	0	0	0	1.33	- 1.62	.73	21	.00	0	0	0	1	0	0
* * * ISLAND OF MAUI																							
* * * ISLAND OF HAWAII																							
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	78.4M	64.3M	71.4M</																				

SPECIAL WEATHER SUMMARY

Dry weather, which had been adversely affecting many of the lower elevation crop and pasture lands during the previous months, became more widespread and severe in October, with rainfall on the northern two-thirds of Hawaii Island, the west and south coasts of Maui, all of Lanai and the southwest coast of Kauai averaging less than 25 percent of the monthly mean.

Of 216 climatological stations reporting, only 8 (4 percent) reached or exceeded their normal rainfall for October. Fifty-one stations (24 percent) recorded less than one-fourth of the October normal, 76 (35 percent) between one-fourth and one-half of normal, and 81 (38 percent) from one-half to slightly less than normal.

The dry weather has been most persistent along Kauai's southwest and eastern coasts, Oahu's western and southern coasts and central highlands, western Molokai, all of Lanai, Maui's west coast, central valley, and western slopes of Haleakala, and all of Hawaii Island (except the Hamakua coast and the north Kohala, south Hilo and Puna district). During the first 10 months in 1969 (January through October) rainfall in those areas was below normal in from 7 to 10 months and -- at 16 climatological stations -- for 6 consecutive months or more (Table II).

The effects of the dry weather included:

- (1) A water emergency (from October 24 to November 7) in the Lalamilo growing area of Hawaii Island, with irrigation restricted to day-time use only. Some ranches in north Kona began hauling water.
- (2) An increased fire hazard. A fire which began on September 24 in the south Kohala district burned for over a week, consuming an estimated 37,000 acres of forest and brush in a strip roughly 14 miles long and 3 miles wide.
- (3) Dry pastures in the Waimea, south Kohala and Kona areas on Hawaii; in the Ulupalakua, Waikapu and western areas on Maui; lower leeward Oahu; and in west and south Kauai.

Table I

Stations with Less Rain in October 1969 than in Any Previous October

(25) years of record or more, only)

<u>Station</u>	<u>Length of Recd (Yrs.)</u>	<u>Prev. Least Oct Tot.</u>	<u>Oct. 1969</u>
OAHU			
Nuuanu Reservoir #4	64	2.27	2.00
Waialae-Kahala	46	0.28	0.25
HAWAII			
Ahua Umi	45	0.13	0.10
Holualoa	40	1.58	1.20
Honohina	75	2.76	2.21
Honomu Mauka	30	5.04	4.35
Papaikou Mauka	43	4.77	4.23
Puu Lehua	45	0.35	0.30

Table II

NUMBER OF CONSECUTIVE MONTHS WITH RAINFALL BELOW NORMAL JANUARY THROUGH OCTOBER 1969

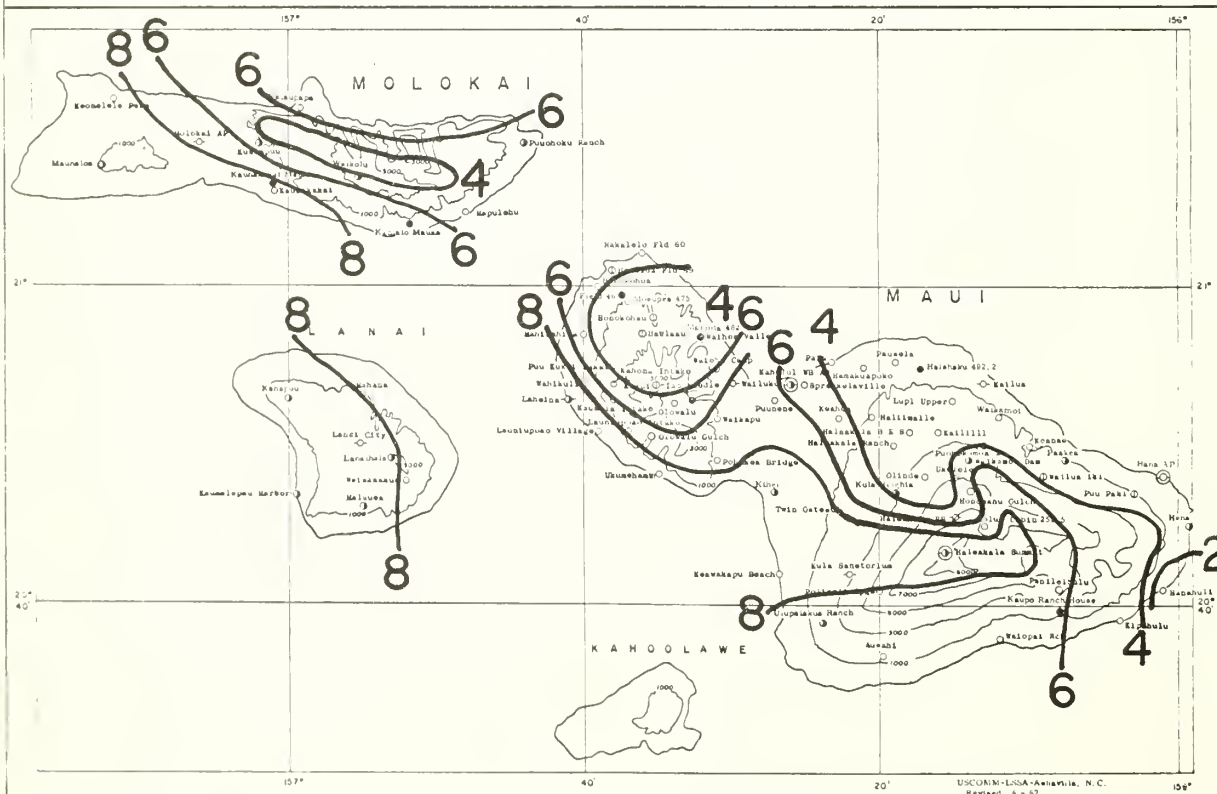
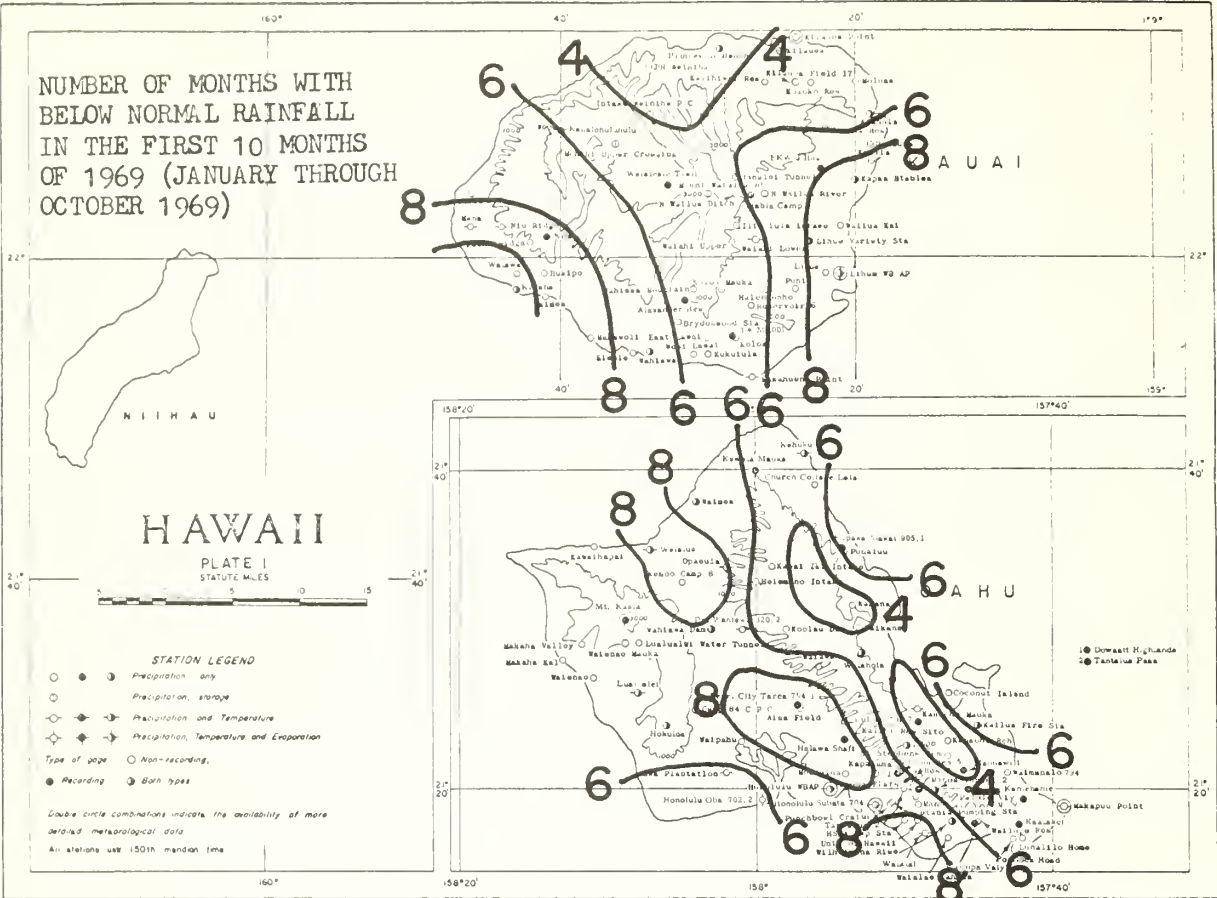
(6 consecutive months or more, only)

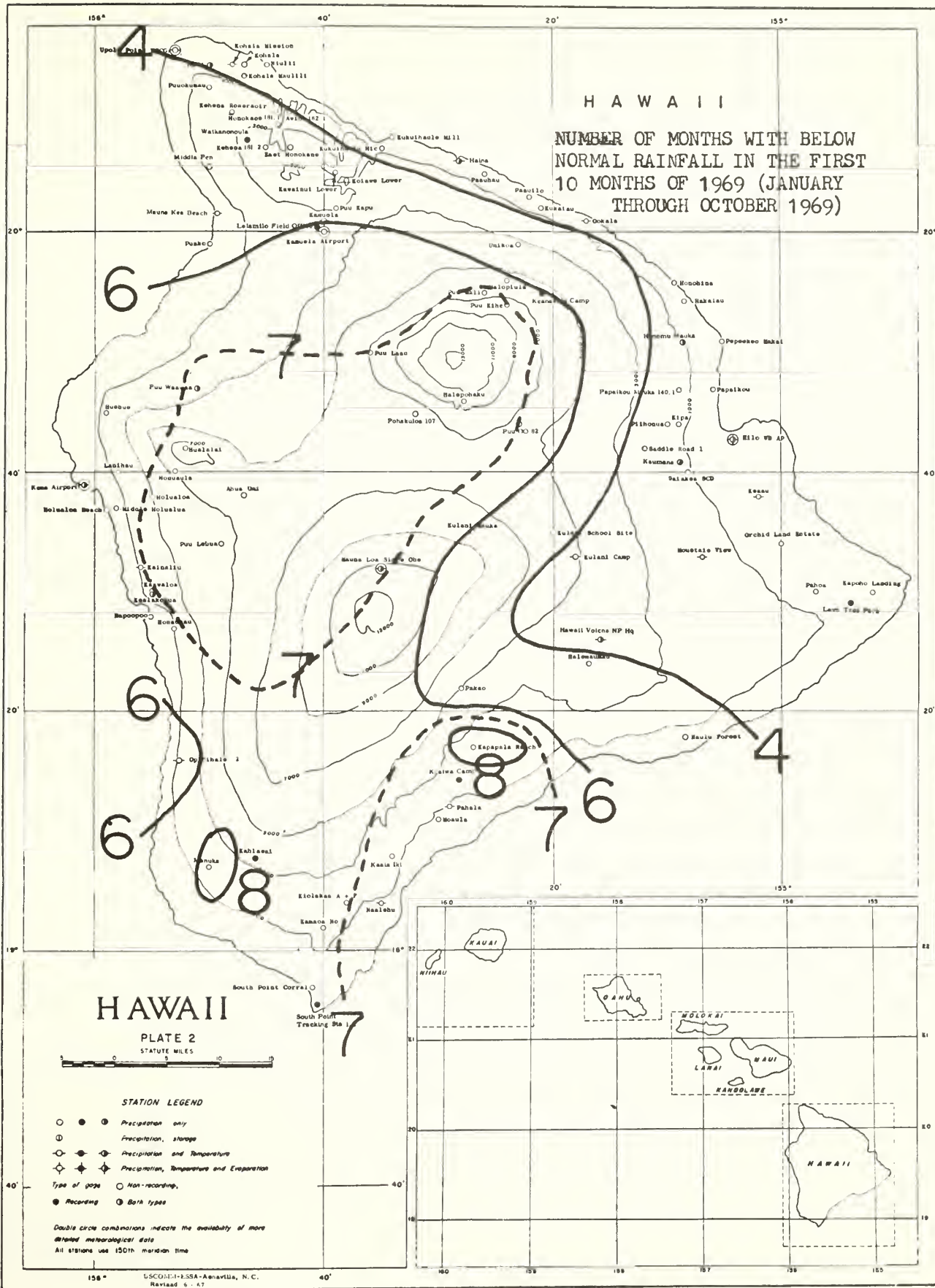
Waiawa, Kauai	10
Kekaha, Kauai	10
Mana, Kauai	9
Kemoo Camp 8, Oahu	9
Maunaloa, Molokai	9
Kaunakakai, Molokai	9
Waiakeakua, Lanai	9
Lahaina, Maui	9
Manuka, Hawaii	9
Kapapala Ranch, Hawaii	9
Moaula, Hawaii	9
Haleakala Summit, Maui	8
Ahua Umi, Hawaii	8
Hualalai, Hawaii	7
Kihei, Maui	6
Mauna Loa Slope Observatory, Hawaii	6

Saul Price
ESSA-Regional Climatologist
P. O. Box 3650
Honolulu, Hawaii 96811

Russell Dorr
ESSA-Acting State Climatologist
P. O. Box 3650
Honolulu, Hawaii 96811

NUMBER OF MONTHS WITH BELOW NORMAL RAINFALL IN THE FIRST 10 MONTHS OF 1969 (JANUARY THROUGH OCTOBER 1969)





DAILY PRECIPITATION

HAWAII
OCTOBER 1969

Station	Total	Day of Month																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
ISLAND OF HAWAII																																			
ANAHOLA 1111	A	2.77	.25	.30			.12	.03	.11	.03	.15	*	*	.34	.04	.02	*	*	.55	.13	.04			.01							.66			.01	
BRYCESWOOD STA 985	A	2.31	.17	.17	.01			.04	.13	.03	.05				.02	.08	.01	*	*	.28	.02	.16								.39	.76	.01		.01	
EAST LAWA 934	A	3.18	.59	.30				.05	.14	.06	.06	*	*	.15	T	.13	.02	*	*	.27	.04	.22							.89	.67	.05		.02		
ELEELI 927	A	2.01	.04	.04	T			.05	.02	.02							.03			.08	.05	.05							.05	.05	.04				
HAWAIIA 1110	A	3.36	.34	.19	.13			.07	.04	.02	.45	*	*	.49	.06	.10				.13	.46	.17							.05	.56	.04				
HALENAHMO 1006	A	3.43	.21	.15				.11	.21	.06	.29	*	*	.63	.07	.34				.25	.14	.18							.29	.39	.11				
HUKILO 945	A	1.19																											.17	.02					
ILIIILUA INTAKE 1050	A	7.83	.71	.61	.02			.25	.24	.31		.13	*	.19	.04	*	*	.45	.04	*	.53	.12	.98	.02				.04	.82	.08	.06		.04		
INTAKE MAINIMA PC 1080	A	8.51	*	*	*			2.00				5.82	*	*						.09	*	*								.09	*			.60	
KALIHUAI RES 1131	A	6.26	.19	.28				.07	.09	.12	.05	.12	*	*	2.17	.02	.01	.13	.04	*	.32	.97	.83	.02					.81	.01	.01				
KANALOHLULULU 1075	A	2.78	.07	.06	.03	.03		.03	.04			.90	.27		.03	.03				.05	.13	.02	.03			.02	.01	.05	.98	.03					
KANEHA RESERVOIR 1092	A	6.79	.46	.50	.04	*		.11	.09	.22	.11	.12	*	*	2.80	.03	.04	.20	*	*	.25	.32	.32	.02				.03	.10	.03					
KAPPA STABLES 1104	A	2.41	.19	.23	.05	*		.04	.05	.10	.06	*	*	.33			.08			.08	.25	.50						.15	.30						
KEALIA 1112	A	2.08	.24	.18	.10			.08	.06	.03	.01	.30	*	*	.39			.12			.07	.22	.04					.07	.17						
KEKANA 944	A	1.11			.03																								.07	.17					
KILAUEA 1134	A	2.68	.07	.10		*		.04	.11	.15	.04	.18	*	*	1.31	.02	.01	*	*	.10	.36	.09							.06	.09	.01				
KILAUEA FIELO 17 1135	A	4.49	.08	.19	.02	*		.20	.11	.06	.05	.15	*	*	1.56	.01	.12	.07	*	*	.31	.57	.27	.01				.01	.66	.03	.01				
KILAUEA POINT 1133	A	2.72	.29	.01	.10		.11	.17	.31	.06	.33	.75	.04			.04	.05	.14		.05	.35							.04	.04						
KILO 1033	A	.41							.04	.19	.05	.08	*	*	.68			.27	*	*	.27	.09	.20	.08					.70	1.28	.14				
KOLDA 936	A	4.60	.40	.13	.14				.05	.19	.05	.08	*	*																					
KOLOA HAUKA 994	A	4.47	.31	.21		*		.09	.15	.33	.05	.23	*	*	.40	.06	.39	*	*	.41	.18	.43						.28	.64	.03			.28		
KOLOHO RES 1137	A	7.17	.12	.26	.01	*		.21	.22	.12	.02	.20	*	*	1.95	.02	.08	.09	*	*	.54	.69	.55					.01	2.45	.02	.01				
KUNUIULA 935	A	2.36	.20	.03		*		.05	.08	T	.02	*	*	.18			.12	.04	*	*	.21	T	.18					.85	.30	.10					
LIHUE VARIETY STA	A	6.31	.21	.42		*		.02	.21	.09	.02	.26	.65	*	*	.20	.10	.18	*	*	.08	.65	.35	.14				.16	.50	.05					
LIHUE 1020	A	5.65	.10	.14	.01	*		.02	.05	.18		.39	*	*	1.26	.01	.10	.10	.01	*	.27	.21	.46					.40	1.87	.07					
LIHUE WB AP 1020.1	R	3.15	.08	T				.10	T	.18	1.00	.15			.02	.02				.03	.06	.22	.02				.02	1.13	T	T					
MAKAHUEA POINT 940.1	R	2.77	.15	.10				.04	.12		.07	.41			.03	.06				.02	.04	.27	.08					1.27	.09	.04					
MAKAWELI 965	A	.57										.08																.19	.26	.01					
MANA 1026	A	.32			.06							.06																	.13						
MOHINI HPR CROSS 1083	A	2.75	.05	.11		.05		.11	.05		.16	1.27	.16							.16	.11	.05						.42	.05						
HOLDNA 1145	A	4.70	.07	.18		*		.16	.17	.02	.23	*	*	.73	.01	.01				.07	.15	.03						2.79	.08						
HOUNT WATALEALE 1047	A	18.60	.71	.75		.16		1.34	.87	.04	1.65	6.61	.25		.10	.87	.12	.28	.08	.75	1.90	1.77	.59				.55	.08							
HUI RIDGE 1035	A	5.51	.06	.11																	.05	.06						.10							
N. WAILUA DITCH 1051	A	9.79	.50	.86	.20	*		.20	.36	.50	.30	.35	*	*	2.20			.60	*	*	.60	.60	1.50					.66	.20	.16					
PH WAINIMA 1115	A	8.09	.16	.13		T			.30	.34	.05	.02	2.73	2.45				.02	.09	.01	.21	.17	.88	.62	T			.51	T						
PRINCEVILLE RANCH 1117	A	3.69	.15	.31				.05	.16	.22		.19	.65	.15						.02	.20	.14	.46	.22				.09	1.96	1.56					
PUEHU RIDGE 1040	A	3.68	.02	.14											.15														.27	.81	.22				
PUNI 1013	A	4.54	.16	.37	.01	*		.02	.07	.24	.02	.21	*	*	1.13	.04		.17	.05	*	.20	.21	.34					.45	.66	.03					
RESEVOIR B 1004	A	4.17	.24	.27				.25	.27		.19	*	*	.47	.05			.22	.22	*	.37	.35	.35					.85	.65	.05					
WAINIMA 930	A	2.08	.15	.05					.10	.01								.05	.03	*	.08	.06							.85	.65	.05				
ISLAND OF MAUI																																			
WAINIMA MOUNTAIN 990	A	5.75	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.75	*
WAIHI LOWER 1054	A	5.55	.49	.51		*		.02	.04	.16	.16	.02	.26	.46	.05	.02			.35	.03	.08	.12	.55	.51	.02	.02		.02	.58	.08					
WAIHI UPPER 1052	A	6.25	.67	.60	.01	.02	.18	.24	.06	.25	.05	.14	.61	.22				.29	.03	.02	.04	.42	.63	.83	.01			.01	.78	.07	.03	.04			
WAIKANA 943	A	.15			.02																								.13						
WAILUA KAI 1065	A	3.12	.11	.54		*		.03	.15	.08		.05	*	*	.85			.11	*	*	.28	.16	.09					.18	.46	.03					
WAIMEA 947	A	.51																											.43	.08					
WEST LAWA 931	A	1.72	.44	.01		T		.01	.04	.03	T	*	*	.07			.13	.03	*	*	.15	.02	.10	T				.41	.12	.16					
ISLAND OF MOLOKAI																																			
AIEA FIELO 625 761	A	1.71													1.24							.27	.20												
BERTANIA PUMPING STA	A	1.43	.01	T	*	*		.01	*	*	.02	.04	.36	T	.48							.20	.02												
CAMP 84 807	A	3.50	.05	.01								.20	.05	.50								.70	.20												
CHURCH COLLEGE LAIE	A	1.85		.01							.08	.10	*	*	.97	.01	*	*	.06										.10						
COCONUT ISLAND 840.1	A																																		
ISLAND OF OAHU																																			
EWA PLANTATION 741	A	.34										.01	.12	.01								.20													
HELEMANO INTAKE 881	A	4.33	*	.45	*	*	*		.36	*	*				2.51	*	.03	*	*	*	.37	*	.32	*	*	*	*	*	.29	*	*	*	*	*	
HOKULUA 725.2	A	2.36	*	*	*	*	*	.03	*	*					.95	*					.18	*	.06						.20	*	*	*	*	*	
HONOLULU OBSERV 702-2	A	.73										.03	.07	.01							.57		.01	.04											
HONOLULU WBFC 703	R	.96	T	T	T										.06	.16	T	.01																	
HONOLULU SUBSTA 704	A	.60	.02								.01	.08	.25								.15	.09													
M S P A EXP STA 707	A	.83	.02	.01							.03	.08	.45	.02					.01		.19		.02												
KAHANA 883	A	13.32	*	*	*	*	*	1.34	*	*	*	*	*	*	7.26	*	*				1.18	*	*	*	*	*	*	*	3.28	*	*	*	*	*	
KAHUKU 912	A	2.23	.03	.06																															

DAILY PRECIPITATION

HAWAII
OCTOBER 1969

Continued

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
		KAIHANA 88.1	4.02	*	*	2.98	*	*	*	.50	.01	.40	*	.17	.01	*	*	*	.01	.02	.30	1.62	.45	*	1.52	.30	*	*	.16	.14	*	*	3.45
KAWAUNU LOWER 193	8.17	*	*	2.98	*	*	*	.49	*	.12	*	.17	.10	*	.01	.05	*	.06	.03	.34	1.47	.21	.02	.13	.24	*	.12	.13	.12	*	*	
KEARU 92	4.25	.49	.09	.03	*	*	*	.49	*	.53	*	.01	.57	T	*	.10	*	*	*	.18	.02	*	*	*	*	*	*	*	*	.02	*	
KEALAKEUA 26.2	3.07	T	.22	.02	.68	.46	.04	*	*	*	*	*	*	*	*	*	*	*	*	.18	.02	*	*	*	*	*	*	*	*	.02	*	
KEMENA 181.2	3.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.30	*
KIDLAKAS A & F 6	5.60	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.60	*
KIPU 89.2	5.30	.36	.03	*	.03	*	*	.91	*	.13	T	*	*	*	*	.02	.10	.03	.19	1.87	.33	*	*	.35	.93	*	*	.08	*	*		
KOHALA 179.1	1.34	.51	.01	*	*	*	*	.28	*	*	*	*	.01	.02	.02	.03	*	.07	.06	.03	.07	.06	.03	*	*	*	.29	.01	*	*		
KOHALA MAULILI 176	1.70	.27	.02	*	*	.01	.15	.01	.01	*	*	.08	.02	.02	.03	.02	*	.10	.41	.02	*	*	*	*	*	.21	.21	.01	*	*		
KOHALA MISSION 175.1	1.52	.47	T	*	.06	.26	T	.02	*	*	*	.02	.02	.02	.03	.01	.12	T	.11	.03	*	*	.28	*	*	.07	*	*	*	*		
KOIAWE LOWER 196	5.23	*	*	2.06	*	*	*	*	*	*	.05	*	*	*	*	.04	*	*	*	*	*	*	1.08	*	*	*	*	*	*	2.00	*	
KONA AIRPORT 68.3	.35	T	*	.01	*	*	*	.30	*	*	.30	*	*	*	*	*	*	*	*	*	*	*	*	.04	*	*	T	T	*	*		
KONA VILLAGE 93.6	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KUKAIAU 222	1.52	.49	.02	*	*	.22	.01	T	T	*	*	*	*	*	T	*	*	*	*	.31	.32	.01	.14	*	*	*	*	*	*	*		
KUKUHALE MIC 199	1.76	.24	*	*	*	.08	.01	T	T	*	*	*	*	*	*	*	*	*	*	.15	.05	.01	1.15	*	*	*	*	.09	*	*		
KUKUHALE MILL 206	.65	.13	.03	*	*	.09	*	*	*	*	.05	.06	*	*	*	*	*	*	*	.02	.02	.02	.04	.01	.03	.08	*	*	*	*	*	
KULANI CAMP 79	1.81	.04	.22	.06	.10	.07	.10	.01	*	*	.20	*	*	*	T	.02	.02	.06	*	.12	.12	.02	.06	.04	.01	.03	.08	*	*	*		
KULANI MAUKA 76	.16	*	*	*	.62	*	*	*	*	.20	*	*	*	*	*	.09	*	.18	*	.22	*	*	.93	.17	*	*	*	*	*	*	*	
KULANI SCHOOL SITE 78	2.69	*	*	.89	.22	*	*	.34	*	*	*	*	*	*	*	.09	*	.18	*	.22	*	*	.93	.17	*	*	.58	*	*	*	*	
LANIHAU 68.2	2.69	*	*	.89	.22	*	*	.34	*	*	*	*	*	*	*	.09	*	.18	*	.22	*	*	.93	.17	*	*	.58	*	*	*	*	
MANUKA 2	.66	.06	.16	.04	*	.10	.03	*	*	.27	*	*	*	*	*	*	*	*	*	.01	*	*	*	*	*	*	*	*	*	*	*	
MAUNA KEA BEACH 98	.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MAUNA LOA SLOPE OBS	.58	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MIDDLE MOUWALOA 68.1	1.16	*	.35	*	*	*	*	*	*	*	.56	*	*	*	*	*	*	*	*	*	.01	*	*	*	*	*	*	*	*	.25	*	
MIDDLE PEN 147.1	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MOAULA 18	3.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.30	*	
MOUNTAIN VIEW 91	4.23	.28	.04	.01	.02	.10	.42	.01	.25	.02	.04	.01	.25	.02	.04	.01	.25	.02	.04	.01	.25	.02	.04	.01	.25	.02	.04	.01	.25	.02	.04	
NAALEHU 14	2.07	*	.11	*	.04	.02	.02	.26	.25	.34	.01	T	*	*	*	.39	T	.15	T	*	*	*	*	.15	*	.83	T	.04	.02	.12	*	
NAPPOPOO 28	2.83	*	*	.96	*	*	.08	*	.49	*	*	*	*	*	*	*	*	*	*	*	.06	*	.15	*	.15	*	.15	*	*	*	*	
NAULU FOREST 38.6	4.82	.07	.01	.24	T	T	.24	T	T	T	T	T	1.46	*	.02	.01	.02	.11	*	.176	*	*	.02	2.26	.02	*	.04	*	*	*		
NIULII 179	1.85	.75	.02	*	.30	.35	.05	.34	.01	T	*	*	*	*	.01	.01	.01	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01		
ODAKA 223	4.89	.70	T	.29	T	T	.26	.25	.34	.01	T	*	*	*	.61	*	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01		
OPHIHALE 2 24.1	4.19	.09	.05	.03	.29	T	T	.26	.25	.34	.01	T	*	*	.61	*	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01		
ORCHID LAND EST 91.5	5.06	*	.143	*	*	.08	*	.49	*	*	*	*	*	*	.61	*	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01		
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*	.01	.06	*	*	.61	*	.39	.38	.05	T	.11	2.60	.02	.01	.07	.07	.01	.01	.01	
PAAHUHAU 217	1.45	.47	.05	*	.05	.08	*	.49	*	*	*	*</																				

DAILY TEMPERATURES

HAWAII
OCTOBER 1969

Continued

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
LAHAINA 361	MAX	85	86	87	88	88	87	85	86	87	87	86	88	88	87	88	85	85	86	87	86	86	87	86	84	85	85	86	85	84	85	84	
	MIN	68	67	66	67	66	66	69	71	69	69	68	68	67	68	68	68	68	68	68	69	67	69	68	67	67	68	68	69	67	68	67	
WAILUKU 392	MAX	81	80	80	80	81	81	81	81	82	82	81	80	81	80	81	81	81	81	81	81	81	81	80	80	80	80	80	80	81	82		
	MIN	71	67	67	68	67	67	69	72	71	71	71	71	70	71	72	71	72	71	72	71	71	71	72	70	70	70	69	67	68	68		
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	81	82	82	83	82	83	83	83	83	84	84	83	83	83	83	83	83	82	82	82	83	82	81	82	81	83	85	85	84	83		
	MIN	65	65	65	64	66	65	68	70	65	66	65	67	67	65	65	66	67	66	66	66	65	68	67	66	66	67	68	66	67	65		
HAWAII VOLCNS NP HQ 54	MAX	65	71	73	71	71	71	73	71	71	71	71	70	72	70	71	70	72	71	73	72	74	72	75	73	77	74	73	70	72	71		
	MIN	56	47	56	52	50	50	56	55	54	53	53	55	56	53	54	53	55	52	55	53	57	56	55	55	59	59	56	55	52	52		
HILO WB AIRPORT 87	MAX	82	82	82	81	81	82	82	81	83	82	82	83	83	82	83	83	83	83	83	85	84	83	81	84	85	85	84	84	83	84		
	MIN	66	64	67	65	65	66	70	66	66	66	64	64	65	66	67	64	65	67	64	65	64	68	69	66	66	70	69	67	68	67		
KAINALIU 73.2	MAX	75	78	76	78	77	78	80	80	81	79	77	79	78	79	79	80	81	81	79	79	80	81	81	81	80	82	83	82	80	81		
	MIN	62	61	61	62	62	62	63	65	65	65	61	62	63	63	62	61	63	62	61	61	63	66	62	63	65	65	64	63	64	61		
KAMUELA 192.2	MAX	70	72	80	78	80	76	78	73	74	78	78	72	78	74	75	74	78	75	73	77	78	75	78	78	80	80	77	76	74	81		
	MIN	58	56	49	50	49	52	60	55	55	56	58	60	56	53	56	56	58	56	60	51	54	60	52	55	56	58	55	58	60	48		
KAMUELA AIRPORT 191	MAX	72	73	76	78	78	76	80	77	72	76	78	76	77	76	76	75	77	76	76	76	77	76	75	79	78	80	79	78	76	79		
	MIN	53	52	55	49	49	54	50	50	50	55	53	55	54	53	51	50	58	55	54	54	48	53	51	45	47	56	52	56	50	47		
KEAAU 92	MAX	81	81	82	84	84	84	84	82	80	85	83	83	83	85	85	85	85	85	85	85	85	84	82	83	88	88	88	83	84	83		
	MIN	65	62	62	65	65	65	66	66	65	66	65	65	65	65	65	67	66	66	65	65	67	66	66	66	67	67	67	64	64	62		
KEALAKĒKUA 26.2	MAX	75	79	77	78	76	77	80	79	79	78	74	79	76	78	79	80	80	80	80	81	80	80	80	81	81	81	83	79	82	79		
	MIN	63	61	62	62	62	62	64	64	64	64	61	61	66	63	63	63	62	64	62	62	62	65	62	64	64	64	65	65	64	63		
KOHALA MISSION 175.1	MAX	80	79	81	82	81	81	81	80	81	81	82	81	81	81	81	82	81	81	81	80	82	82	81	82	82	81	84	81	81	81		
	MIN	66	65	65	65	65	65	69	70	65	66	66	69	69	68	69	69	69	69	68	66	66	68	65	66	67	68	67	68	69	65		
KONA AIRPORT 68.3	MAX	85	86	86	84	84	84	83	84	84	84	82	83	84	83	83	84	84	84	85	84	84	85	84	84	85	84	84	85	84	84		
	MIN	64	65	62	66	65	65	65	65	65	65	69	64	64	67	69	67	67	67	63	63	63	63	66	65	65	64	64	66	60	60		
KULANI CAMP 79	MAX	62	63	62	64	67	62	63	61	61	63	65	65	61	65	65	65	67	67	65	65	68	68	68	66	70	71	69	68	65	67		
	MIN	48	44	47	45	45	45	53	45	45	43	47	43	59	47	50	41	48	43	40	42	58	51	48	50	43	43	47	46	49	45		
MAUNA KEA BEACH 98	MAX	93	88	86	87	86	87	87	94	95	87	86	91	85	87	88	88	85	88	86	85	84	85	85	87	86	85	86	85	87	86		
	MIN	72	69	70	70	70	71	73	77	72	72	70	72	71	70	72	69	73	70	70	69	72	71	70	69	72	73	70	69	72	69		
MAUNA LOA SLOPE 085	MAX	55	54	55	56	56	57	63	62	56	55	54	57	60	59	57	60	58	58	58	58	50	52	54	54	53	51	52	50	51	54		
	MIN	43	34	36	36	41	44	44	45	42	37	36	38	43	43	39	39	38	39	38	37	38	34	35	38	36	35	36	34	35	35		
MOUNTAIN VIEW 91	MAX	76	77	79	81	82	80	79	80	73	79	79	81	81	81	81	80	78	77	81	78	81	79	78	79	81	81	81	81	78	80		
	MIN	58	57	57	60	58	58	58	61	59	62	57	57	61	60	60	60	62	56	61	57	61	62	59	59	60	65	63	61	61	58		
NAALEHU 14	MAX	82	83	83	83	83	83	83	83	82	82	82	83	83	81	83	83	83	82	82	82	82	81	83	83	83	83	83	85	80	81		
	MIN	64	65	66	66	66	66	67	69	68	68	68	65	65	64	66	69	69	69	67	67	69	69	66	67	67	67	63	70	69	68		
ODKALA 223	MAX	81	80	80	82	81	82	82	81	81	82	83	81	82	82	83	82	81	82	83	83	81	80	80	81	84	82	82	80	80	82		
	MIN	66	63	67	67	66	67	67	68	69	68	68	70	68	69	69	70	70	70	68	69	68	69	67	68	70	68	70	68	71	66		
OPIHIHALE 2 24.1	MAX	75	74	77	75	75	78	80	78	78	77	74	75	74	77	77	80	80	78	79	79	79	77	79	79	82	81	79	78	76	80		
	MIN	61	61	61	61	59	60	62	61	62	63	62	62	60	60	59	59	61	60	60	60	62	60	60	61	62	63	64	63	61	58		
PAMALA 21	MAX	81	84	82	81	80	80	83	83	82	83	80	83	81	80	82	81	82	80	82	80	81	81	82	83	85	84	80	79	79	80		
	MIN	61	62	63	63	63	63	63	63	63	64	60	64	61	62	63	64	63	62	65	60	65	64	63	63	64	64	64	65	64	62		
UPOLU POINT USCG 159.2	MAX	83	83	83	83	83	83	84	82	80	85	84	83	83	83	83	84	83	83	82	82	83	83	83	83	83	84	82	83	83	82		
	MIN	71	69	65	70	68	69	71	75	69	69	72	74	74	69	71	73	71	70	68	70	71	73	69	69	72	75	71	70	70	69		

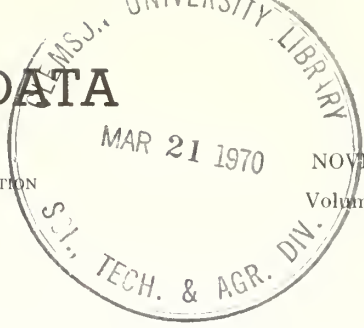
EVAPORATION AND WIND

Station		Day Of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																	
ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP	.21	.15	.30	.23	.30	.26	.22	.22	.30	.23	.34	.27	.28	.35	.34	.19	.33	.34	.36	.27	.23	.33	.26	.21	.24	.24	.21	.26	.25	.25	.19	
	WIND	195	170	98	89	84	85	120	172	131	72	100	252	108	118	149	163	200	211	183	166	161	188	109	71	90	75	73	52	114	122	68	
	MIN	68	68	64	64	66	64	68	70	68	68	68	67	65	65	68	68	68	69	69	69	69	70	64	64	64	65	65	69	70	68	63	
* * *																																	
ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.30	.15	.30	-	.21	.20	.22	.29	.29	.25	.22	.13	*	.28	.21	.15	.24	.30	.21	.20	.22	.15	.08	.14	.30	.15	.04	.18	.22	.21	.22	
	WIND	36	26	19	18	16	20	22	31	25	24	23	14	15	17	23	17	22	31	23	19	20	14	18	15	15	19	14	13	24	20	20	
	MIN	91	91	93	-	91	93	93	89	90	94	92	85	87	90	91	86	89	91	88	89	90	88	86	91	92	91	91	94	93	91	91	
MIN	66	67	67	-	67	66	65																										



CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
MAURICE H STANS, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE



HAWAII
NOVEMBER 1969
Volume 65 No. 11

CLIMATOLOGICAL DATA

Station	Temperature											Precipitation															
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow/Sleet			No. of Days						
										No. of Days								Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										50° or Above	32° or 33° or Below	32° or 33° or Below	50° or Below														
* * * ISLAND OF KAUAI																											
ANAOHA 1111	A	68.0	51.6	59.8		73	4+	37	27	0	0	0	0	6.46	1.70	1.73	13	.0	0				10	3	2		
KANALOHULUHULU 1075	A									0	0	0	0	5.59		1.37	13	.0	0								
KAPAA STABLES 1104	A									0	0	0	0	9.36		3.67	13	.0	0								
KILAUEA FIELD 17 1135	A									0	0	0	0	10.72	2.44	2.33	20	.0	0								
KILAUEA POINT 1133	A	80.8	70.3	75.6		88	16	66	27+	0	0	0	0	7.93		2.70	12	.0	0				14	5	2		
* * * ISLAND OF OAHU																											
KOLOA 936	A									0	0	0	0	8.19	2.12			.0	0								
LIHUE WB AP 1020.1	R	80.7	70.5	75.6	- 1.1	83	15+	64	28	0	0	0	0	7.45	2.92	3.82	12	.0	0				8	5	1		
MANA 1026	A	83.7	65.3	74.5	- .2	89	7	58	28	0	0	0	0	4.62	2.57	1.41	13	.0	0				6	4	3		
N WAILUA DITCH 1051	A									0	0	0	0	17.00		2.90	13	.0	0								
PH WAINIHA 1115	A									0	0	0	0	9.07	-.90	2.60	20	.0	0				14	5	4		
* * * ISLAND OF MAUI																											
PUEHU RIDGE 1040	A									0	0	0	0	6.39		2.80	13	.0	0								
WAHIAWA 930	A									0	0	0	0	4.74	1.65			.0	0								
WAIHI LOWER 1054	A									0	0	0	0	12.25		3.16	13	.0	0								
WAIWEA 947	A	77.9	62.7	70.3		82	2	54	28	0	0	0	0	3.20	1.46	1.73	13	.0	0				18	8	2		
* * * ISLAND OF HAWAII																											
* * * ISLAND OF MOLOKAI																											
* * * ISLAND OF LANAI																											
* * * ISLAND OF MAUI																											
* * * ISLAND OF HAWAII																											
HAINA 214	A	80.6	65.9	73.3	- 1.3	84	6+	62	28	0	0	0	0	5.40	-.27	2.56	30	.0	0				11	4	1		
HAWAII VOLCNS NP HQ 54	R	68.2	52.7	60.5	- .3	76	3	45	1	0	0	0	0	6.24	- 3.94	1.55	7	.0	0				11	4	1		
HILD WB AIRPORT 87	R	81.5	65.0	73.3	- .1	86	30	61	27	0	0	0	0	6.33	- 7.04	1.15	7	.0	0				11	4	1		
HUEHUE 92.1	A									0	0	0	0	.00	- 2.93	.00		.0	0								
KAINALIU 73.2	A	78.8	61.6	70.2		82	17+	58	28	0	0	0	0	3.00	- 1.27	.97	24	.0	0				11	4	1		

CLIMATOLOGICAL DATA

HAWAII
NOVEMBER 1969

Continued

Station	Temperature										Precipitation																
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days						
										Max.		Min.						Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										90° or Above	32° or Below	32° or Below	10° or Below														
KAMUELA AIRPORT 191	75.4M	50.6M	63.0M		80	23+	44	10		0	0	0	0	.73		.50	30	.0	0		2	1	0				
KEAAU 92	81.9	64.3	73.1	.5	85	17+	61	13		0	0	0	0	5.55	- 8.38	.78	7	.0	0		13	4	0				
KEALAKEKUA 26.2	79.6	62.7	71.2		82	17+	59	28		0	0	0	0	.98		.34	24	.0	0		3	0	0				
KONA AIRPORT 68.3	83.1	65.6	74.4		86	5+	62	5+		0	0	0	0	1.21		1.13	24	.0	0		1	1	1				
KUKUIHAELE HIC 199														4.04	- 2.72	1.75	30	.0	0		6	3	1				
KULANI CAMP 79	63.9M	45.7M	54.8M		71	3+	41	8+		0	0	0	0	6.69		2.00	7	.0	0				5	2			
MAUNA KEA BEACH 98	85.9	70.6	78.3		92	8+	66	28		6	0	0	0	.21		.20	24	.0	0		1	0	0				
PAHALA 21	79.8	62.6	71.2	.6	87	6	60	27+		0	0	0	0	1.05	- 4.39	.26	23	.0	0		5	0	0				
POHAKULOA 107														.18				.0	0					0	0		
PJAKO 95.1														1.91		1.86	24	.0	0		1	1	1				
PJU WAAHAA 94.1														.99	- 1.10	.66	24	.0	0		2	1	0				
UMIKOA 118														2.70	- 3.70	1.83	7	.0	0		1	1	1				
WAIKOA SCD 88.2														9.37		2.58	7	.0	0		14	7	1				
ISLAND			69.4											3.14				.0									

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 92° ON THE 8+ AT MAUNA KEA BEACH 98, HAWAII
 LOWEST TEMPERATURE: 28° ON THE 25TH AT MAUNA LOA SLOPE OBS, HAWAII
 GREATEST TOTAL PRECIPITATION: 29.76 AT MOUNT WAIKOA 1047, KAUAI
 LEAST TOTAL PRECIPITATION: .00 AT 4 STATIONS
 GREATEST ONE-DAY PRECIPITATION: 4.96 ON THE 19TH AT MOUNT WAIKOA 1047, KAUAI

See Reference Notes Following Station Index

SPECIAL WEATHER SUMMARY

The month was characterized by continued dry weather over all the islands except Kauai and Oahu, by gale-force trade winds on the 5th, and by the sighting of three funnel clouds.

Very dry weather continued over most of the State. Only on Kauai and Oahu did more than a few scattered rain gages receive more than their averages for the month. All rainfall stations on Molokai and Lanai, more than one-half of those on Maui and more than one-third of those on Hawaii reported less than one-half their November normals. The 3.56 inches at East Honokane, Hawaii, and the 0.20 inches at Olowalu Gulch, Maui, were the lowest November totals ever recorded at those stations in 43 and 57 years of record, respectively. But despite the protracted dry weather (for some parts of Molokai, Lanai, Maui, and Hawaii, it was the tenth consecutive month of below-normal rainfall, and for many places on Oahu and Kauai the first month with above-normal rainfall in the same period), little in the way of water shortages or of damage to pastures, crops, or livestock was being reported.

Northeast to easterly trade winds from a strong high pressure area centered 1,200 miles north of the Hawaiian Islands brought 40 to 45 mile-an-hour gusts to many parts of the State on November 5. On Hawaii Island winds accelerated in sweeping through the saddle between the Kohala Mountains and Mauna Kea gusted to 69 m.p.h. at Kamuela Airport (elevation 2,665 feet) at 9:55 a.m., the highest speed recorded in the State during the period, and spilled over into the ordinarily sheltered leeward coast, where Mauna Kea Beach registered a fastest mile (approximately a 1-minute average) of 49 m.p.h.

from the east at 1:14 p.m., and some slight damage.

Along the west Maui coastal strip, trade winds funnelling through mountain gorges to the east did scattered damage to roofs and to public utility poles and lines, while reddish dust lifted hundreds of feet high from fields and construction sites blanketed sections of the area, greatly reduced visibilities, and -- according to one newspaper report -- reached at least to Kahoolawe Island, about 15 miles to the south.

Several funnel clouds were sighted during the month, but all of them appear to have remained aloft.

At 4:53 p.m., November 12, a dark grey pencil-like funnel lasting 12 minutes, and moving north-westward far southwest of Honolulu International Airport, preceded by about half an hour the arrival of heavy thunderstorms accompanying a cold front. At its lowest, the funnel reached 1,000 feet below cloud bases at 2,500 feet, and it alternately extended and retracted until obscured by approaching showers.

At 11:25 a.m., on the 13th, a funnel lasting 8 minutes, and accompanied by a rainshower, was sighted over the ocean about 5 miles southeast of Honolulu International Airport, extending from one of many scattered clouds with bases at 2,300 feet.

On November 20 at 10 a.m., a funnel cloud was spotted 5 miles northwest of Kona Airport, Hawaii Island, lasting 10 minutes and extending from scattered clouds with bases at 2,500 feet.

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DAILY PRECIPITATION

HAWAII
NOVEMBER 1969

Station	Total	Day of Month																																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
ISLAND OF KAUAI																																						
ANAMOLA 1111	A	6.4			.16	.03	.10				.60	.03	1.73	.48			.65			.42	.39	.63			1.20	.04												
BRYDWOOD STA 985	A	5.66		.01	.01	.10	.20	.13			1.36	.03	.35	.59	.28			.81	.01	.30	.24	.75			.44	.05	.04											
EAST LAWA 934	A	7.30			.12	.43	.14				1.32	.01	.33	1.45	.43			.91		.14	.63	.32			1.04	.03												
ELELE 927	A	3.60			.02	.09	T				.98	T	.46	.67	.08			.76		.10	.01	.24			.76	.18												
HALAULA 1110	A	8.04			.16	.11	.03				1.35	.25	.04	2.45	.35			.80		.35	.50	.62			.90	.09	.04											
HALENAHOU 1006	A	9.20			.11	.13	.05				.35	.28	.08	2.90	.24			.84		.27	.97	.46			2.42	.10												
HUKIPI 945	A	3.71									.30				.12			.65																		.07		
LILIUUA INTAKE 1050	A	14.29			.05	.46	.38	.20			2.47	.46	.18	2.12	.11			1.25	.02	.68	2.10	.99			2.42	.24	.06											
INTAKE WAINIHA PC 1086	A	12.42				1.25					1.22			1.60				.59			6.20	.39			1.05													
KALIMIHAI RES 1131	A	10.89			.23	.22	.10				.36	.25	.12	1.86	.05			.88		.71	3.23	1.25			1.40	.19	.04											
ISLAND OF MAUI																																						
KANALOHULUHULU 1075	A	5.59			.02	.33	.06	.28	.02		.85		.64	1.37	.34	1.05		.17	.03	.49	.34	.10	.05	.05	.06												.08	
KANEHA RESERVOIR 1092	A	12.56		.02	.30	.35	.13				.80	.45	.10	1.70	.20			1.40		.55	1.70	.95			3.40	.10	.11											
KAPAA STABLES 1104	A	9.36		.01	.23	.05	.04				1.00	.80	.02	3.67	.08			.98		.67	.45	.25			1.09	.02												
KEALIA 1112	A	6.09			.14	.07	.05				.80	.03	.02	3.05	.15			.30		.62	.35	.20			.47	.04												
KEKAAHA 944	A	4.07									.19		.55	2.37	.07	.62			.09						.02	.06	.04											
ISLAND OF HAWAII																																						
KILAUEA I134	A	8.93			.14	.07	.04				.11	.24	.11	2.58	.03			.85		.92	2.00	.60			.92	.34												
KILAUEA FIELDO 17 1135	A	10.72			.18	.23	.03				.38	.22	.12	2.24	.04			1.20	.01	.29	2.33	1.37			1.95	.09	.04											
KILAUEA POINT 1133	A	7.95		.30	.27	.10	.12	.12	.10		.14	.09	2.70	.03	.40			1.20		.95	.65	.11		.51	.05	.08												
KOLO 1033	A	2.90									.11	.57	.98	.14	.87			.04							.10	.09												
KOLOA 936	A	8.19			.09	.24	.37				1.13	.03	.53	.73	.73			.43		.24	.68	.36			2.50	.13												
KOLOA MAUKA 994	A	8.67			.16	.31	.05	*			1.47	.13	.14	1.88	.13			1.13		.52	.75	.31			1.61	.08												
KOLOA RES 1137	A	9.97		.01	.15	.20	.03				1.20	.02	.07	1.45	.07			.92	.01	.85	2.40	.58			1.78	.22	.01											
KUUIULA 935	A	5.96			.02	.10	.18	*			1.15		.29	.55	.80			.61		.15	.36	.58			1.26	.11												
LIHUE VARIETY STA	A	10.58			.19	.21	.05	.24			1.00	.33	.01	3.85	.33	.51		.65	.03	.60	.69	.25		.01	1.86	.13	.02											
LIHUE 1020	A	6.94			.04	.05	*				.36		.05	2.56	.35			1.02		.31	.71	.18			1.31													
LIHUE #8 AP 1020.1	R	7.45		.02	.02	.03	T		.01		.93	T	3.82	.11	.21	.68			.05	.67	.18	T	.05	.61	T												.06	
MAKAHUNA POINT 940.1	A	8.62		.01	.04	.36			.02	.03	3.80	.05	.33	.98	.34	.30	.06		.01	.10	.37	.25			1.06	.13	.20										.05	
MAKSWELL 965	A	2.99							.08	.28	.01	.16	1.68	.03	.48	.03					.07			.09	.01												.06	
MANA 1026	A	4.62									.70	1.41	.20	1.02					1.01		.01	.08	.01			.02	.16											
MOHIHI UPR CROSS 1083	A	6.56			.11	.48	.16	.48	.05				1.38	.05	.32	.58				1.95	.47			.13	.20	.07											.13	
ISLAND OF MOLOKAI																																						
MOLOKAI 1145	A	5.83			.13	.11	.03	*			.75		.07	.92	.18			1.09		.50	1.12	.35			.43	.18	.02											
MOUNT MAHALEALE 1047	A	29.76		1.42	.67	.58	1.97	3.66	.20		.55	.16	1.85	.28	.17	.12		.98	.12	4.96	2.20	3.86		2.32	1.77	.63												
NIU RIDGE 1035	A	3.17									.06		.42	1.15	.14	.23	.94							.10	.08													
N WAILUA OIITEH 1051	A	17.00			.80	.46	.40	*			2.00	.76	.30	2.90	.44	*		2.60	.06	.66	1.50	.80			2.80	.30	.20	*									.05	
PH WAINIHA 1115	A	9.07			.20	.29	.11	.79	T		.35	1.10	.08	.15						1.06	2.60	1.22			.16	.45	.35	.11	.01									
ISLAND OF OAHU																																						
PRINCEVILLE RANCH 1117	A	7.51		.18	.09				.59		.05	.27	.82	.08	.21	.07				.95	1.76	.60		.14	1.18	.22	.08	.02										
PUEHU RIDGE 1040	A	6.39									.28	.17	.55	2.80	.35		.73								.77	.33											.06	
PUMI 1013	A	7.54			.06	.11	.03	*			.63	.02	.04	2.06	.30	*		.81	.02	.35	.79	.36			1.92	.04												
RESERVOIR 6 1004	A	8.85			.13	.11					.78	.08	.21	2.27	.26	*		1.17		.33	1.09	.22			2.09	.11												
WAIHANA 930	A	4.74			.02	.18	.05	*			1.40	.01	.65	.49	.14	*		.95	T	.11	.05	.38			.29	.02												
ISLAND OF MOLOKAI																																						
WAIHANA MOUNTAIN 990	A	14.25		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14.25		
WAIHANA LOWER 1054	A	12.25			.32	.37	.18	.23	.19		.26	.49	.06	3.16	.25	.51		.91	.09	.49	.95	.64		.54	1.68	.72	.16	.02										.01
WAIHANA UPPER 1052	A	12.42			.40	.40	.20	.45	.55		.35	.44	.13	2.66	.18	.50		.95	.15	.60	.93	.70		.73	1.55	.78	.05	.02										
WAIHANA 943	A	4.22					.03				.10		.47	.44	.08	.92				.04	.02			.07	.05													
WAILUA KAI 1065	A	7.48			.09	.02	.03	*			.36	.30	.02	3.80	.10	*		.75		.20	.60				.86	.05												
WAIHANA 947	A	3.20									.11	.45	1.73	.11				.59																				

DAILY PRECIPITATION

HAWAII
NOVEMBER 1969

Continued

Station	Total	Day of Month																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
KAWAII LOWER 193	4.36						2.38							.32				.39	.09		.98										.68			1969
KEAAU 92	5.55			.35		.02	.02	.53		.78	.63	.05									.12	.77												
KFALAKEKUA 26.2	.98				.03				.06	.06																								
KIHEA 181.2	2.93																																	
KIDOKAIA A Z F O	7.40																																	
KIPA 89.2	12.23			.66	.04	.08	.89		3.83	1.33	.18		.01		.14		.09		.63	.09		.22	.65	.46	1.18	.10	.04	.96	.32	T	.11	.22		
KOHALA 179.1	4.28			.01			.16		.67				.16					.05								.01		.01						
KOHALA MAULLI 176	5.34			.02	.01		.08		1.35				.22	.01				.10	.01							.02		.02						
KOHALA MISSION 175.1	5.73			.01	.02		.26		.98	.06								.08	T						.01	.02								
KOJIANE LOWER 195	2.56								1.80								.02																	
KONA AIRPORT 68.3	1.21				.02	T				.05						.01																		
KONA VILLAGE 93.8	.53						.02											.01																
KUKAIUA 222	4.99			.01					3.03	.92															.05	.02		.08	.03		.27	.42		
KUKUIMAELE MIC 199	4.04			.10			.85	.31									.01	.03						.07	.03		.08	.08		.63	1.75			
KUKUIMAELE MILL 206	2.86						.06	.63	*			.17													.01									
KULANI CAMP 79	6.69			.08	.01		1.00		2.00	.75	*		.32	.04			.03	.13		.01	.30	*		.01	.10	.12	.79	.36	.02	.50	.67	*	.05	
KULANI MAUKA 76	2.40					.15	.82		.28							.18		.06			.06			.12	.53	.02	.09	.10		.05				
KULANI SCHOOL SITE 78	8.71	.11	*	*	*	*	*	*	3.85	*	*	*	*	*	*	.40	*	*	*	*	*	*	.60	*	*	*	*	*	*	3.75	*	*	*	
LANTHAU 68.2	2.94								.64				.26	*		.04										.19			.15	*	*	*	*	
MANUKA 2	1.06			.23					.21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MAUNA KEA 8FACH 98	.21												T	T																			.01	
MAUNA LOA SLOPE DBS	.08																																	
MIDDLE HONOLULUA 68.1	2.31									.30	*	*	*	*	*	.21	*	*	*	*	*	*	*	*	*	1.11	*	*	*	.52	*	.12	*	
MIDDLE PEN 147.1	.00																																.45	
MGAULA 18	4.45																																	
MOUNTAIN VIEW 91	9.06			.61	.05		.70	1.98	1.71	.14					.09			.36	.19	.02	.10	.77	.63	.88	.25	.02	.25	.20		.11	*	*		
NAALEHU 14	3.22			.34	.01					T	.08		.02		.48	T	.78	*	.02	.50	.03	*	*	.01	.25	.61	.09	*	*	*	*	*		
NAPPOPOO 28	4.48			.01																													*	
NAULU FOREST 38.6	6.13	T	*	.28	.01	.02	.40	.25	.31	.25	*	*	*	*	3.00	T																	*	
NIULII 179	4.15			.02			.12	.87	*	*	*		.15	*	*	*	*		.05														2.88	
OOKALA 223	3.69		.01	.04			.11	1.10	1.28	.01							.07		.20	.03			.10	.05		.13	.04	.08	.01	.04		.46	.25	
OPTIMAILE 2 24.1	.50	T	*	*	.03	T	*	*					T	.01	T		.07	*						.02	T	.05	T							
ORCHID LAND EST V1.5	6.40									1.99	*	*	*	*	*	.49	*	*	*	*	*	*	*	2.27	*	*	*	*	*	1.65	*	*	*	
PAAHAU 217	3.06			.02			.14	1.18	.06																.01		.04	.01	.04	.01	.73	.72	*	
PAALUU 221	4.39			T			.08	2.06	.78																.02	T	.04	T	.06	.01	.75	.59	*	
PAAHALA 21	1.05		.13								.05		.13				.22		.02	.03			.01	.11	.26	.06							*	
PAHOA 65	6.87			.48	.03	.05	.67	.69	.53	.05				.03	*	*			.75	.19	.11	.12	1.62	.34	.31	.13	.24	.03	.23	*	.16	*		
PAKAO 37	2.30																																	2.30
PAPAIAO 144.1	7.28			.33	.01	.01	.35	1.34	.56	.06																								*
PAPAIKOU MAUKA 140.1	10.60			1.00	.04	.02	.45	3.23	.89	.16			.19		.06	.06		.02	.55	.14													*	
PEPEKEO MAKAI 144	7.02		.01	.74	.01	.14	.59	.69	.82	.20								.42	.01	.01	.19	.75	.12	.88	.02	.07	.15	.06		1.04	.10	*		
PIIHUNU 89	18.40																																	18.40
POMAHUOLA 107	1.18																																	*
PUAO 95.1	1.91																																	.05
PUU KIHE 120	1.88																																	1.88
PUU LAU 102.1	.92																																	.92
PUU LEHUA 73	.35																																	.35
PUU MALI 113	4.43																																	.43
PUUOHIAU 167	6.24			.02	.01		.43	1.48					.02		.01	.01			.06	.01													4.17	
PUU OO 82	4.59			T		.02	.34	.84	.65	.12		.03	T			.17	.05			.17	.05		.01	T	.08	.15	.90	.58	T	.42	.04		.02	
PUU WAHAA 94.1	.99									.03							.04																	.26
SADOLE ROAD 1 84	15.96								6.57	*	*	*	*	*	*	3.37	*	*	*	*	*	*	*	1.26	*	*	*	*	*	4.66	*	*	*	
UMIKO 118	2.70						.02	1.83	.08	*	*	.03	*	*	*	.01	*	*	*	*	*	*	*	.03	.02	*	*	*	.06	.45	*	.17	*	
UPOLU POINT USCG 159.2	3.30						.57	.59																									.57	1.35
WALAEKA SCO 88.2	9.37			.80	.07	.20	.92	2.58	.86	.15				T	T	.02																	.10	

SUPPLEMENTAL DATA

Station	Wind (Speed - m.p.h.)						Relative humidity averages - percent				Number of days with precipitation						Percent of Possible sunshine	Average sky cover sunrise to sunset	
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	Standard of Time 150TH MERIDIAN				Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over			Total
							02	08	14	20									
HILO, HAWAII, WB AIRPORT	17	2.1	5.9	22	SE	30	87	79	71	84	4	5	11	3	1	0	24	40	7.2
HONOLULU, OAHU, WBFC	6	7.7	10.9	30	NE	05	75	72	57	70	6	5	1	0	2	1	15	59	5.1
KAHULUI, MAUI, WB AIRPORT	6	6.8	9.9	30	NE	07+	81	81	59	77	3	4	2	0	0	0	9	72	4.7
LIHUE, KAUAI, WB AIRPORT	5	5.8	10.4	27	E	07	84	83	71	81	5	7	3	4	0	1	20	44	6.8

DAILY TEMPERATURES

HAWAII
NOVEMBER 1969

Station	Day of Month																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																
ISLAND OF KAUAI																																
KANALDHULUHULU 1075	MAX MIN	72 44	73 45	72 46	73 45	72 59	66 59	68 56	68 55	66 51	69 55	67 50	63 54	66 49	63 55	66 58	72 54	70 48	66 55	65 58	64 58	69 55	68 57	68 56	67 55	65 51	68 49	68 37	70 38	70 44	66 53	68.0 51.6
KILAUEA POINT 1133	MAX MIN	87 70	83 71	81 71	80 72	81 81	83 71	79 71	80 81	83 70	81 70	87 69	78 68	81 70	80 71	86 74	86 73	81 74	80 73	81 73	82 72	75 67	78 70	78 71	79 70	78 66	73 68	78 71	81 66	81 68	82 68	80.8 70.3
LIHUE W8 AP 1020.1	MAX MIN	81 65	82 68	82 70	83 74	83 76	83 76	82 74	82 71	77 70	81 70	83 67	75 68	83 69	77 71	83 73	81 73	82 73	80 72	77 68	80 71	81 68	78 74	79 71	81 73	81 70	81 68	80 65	80 64	80 62	82 58	80.7 70.5
MAKAHUEA POINT 940.1	MAX MIN	87 69	86 71	85 71	85 72	85 76	85 69	82 72	81 69	85 75	79 70	84 70	86 70	86 70	86 70	86 67	85 75	83 70	84 74	89 70	76 71	79 68	82 74	79 68	82 69	82 70	84 74	81 67	81 70	82 66	82 62	83.2 70.4
MANA 1026	MAX MIN	86 66	88 63	88 62	85 61	84 66	87 65	89 63	84 66	86 62	84 69	86 68	85 67	80 68	85 71	80 71	85 73	84 66	85 66	84 69	81 68	80 70	81 67	82 68	81 66	82 65	84 62	83 67	81 62	83 58	85 65	83.7 65.3
NIU RIIOE 1035	MAX MIN	81 60	82 61	83 61	83 60	82 61	83 62	82 61	83 60	82 60	81 60	82 65	75 60	80 60	81 60	82 61	80 60	81 60	80 61	78 61	77 61	80 61	81 62	80 64	81 63	82 65	82 62	80 60	79 60	80 61	81 60	80.7 60.9
WAIHI LOWER 1054	MAX MIN	81 62	82 60	81 59	79 66	79 68	76 70	76 66	80 64	86 64	76 65	79 61	78 61	78 61	78 63	79 65	80 65	80 65	79 65	80 66	76 66	75 66	75 66	74 66	75 66	78 60	76 61	76 56	78 54	79 55	80 56	77.9 62.7
* * *																																
ISLAND OF OAHU																																
EWA PLANTATION 741	MAX MIN	83 63	86 61	85 64	85 67	84 74	81 72	82 71	84 67	83 62	85 65	83 65	86 68	83 64	79 70	84 66	84 65	85 66	82 64	82 69	83 67	82 66	82 69	81 67	81 67	78 64	81 61	83 61	83 61	85 67	83.0 65.9	
HONOLULU W8FC 703	MAX MIN	86 69	87 68	90 71	89 75	89 77	84 75	68 74	88 74	85 68	87 71	85 71	84 71	85 70	82 71	85 71	88 70	88 72	85 72	86 74	87 74	85 73	84 72	86 73	86 72	85 66	86 71	85 69	86 66	84 66	87 73	86.0 71.4
HONOLULU SUBSTA 704	MAX MIN	80 69	84 69	85 72	82 75	82 75	79 74	78 72	81 71	80 70	83 71	79 72	79 72	80 69	79 70	83 70	82 71	78 71	82 72	79 70	80 72	82 73	81 71	78 71	79 72	80 72	80 70	79 68	82 68	80 70	81 72	80.6 71.1
KAHUKU 912	MAX MIN				85 63	84 71	84 71	82 73	80 72	84 66	84 69	83 69	83 68	82 66	83 68	83 68	82 68	83 68	82 67	83 73	82 70	82 74	81 71	81 71	79 65	81 71	79 65	80 61	79 61	80 61	85 65	80.6 67.9
KANEHE MAUKA 781	MAX MIN	83 66	83 65	84 69	81 71	82 72	80 74	76 71	78 70	80 66	82 67	82 68	82 69	83 66	82 66	80 66	81 66	80 66	82 69	81 68	80 72	80 69	78 69	78 72	78 60	90 62	77 66	79 65	80 65	81 65	80.6 67.9	
LUALUALEI 804	MAX MIN	86 66	86 66	88 64	88 68	85 73	85 73	83 72	84 75	85 65	86 70	84 67	86 65	83 67	84 68	84 67	85 67	84 68	84 73	83 68	84 73	83 71	81 73	85 73	82 68	80 66	83 66	83 66	82 63	84 63	85 62	84.1 68.4
MAKAPUU POINT 724	MAX MIN	83 68	83 64	83 69	83 68	86 70	78 66	84 64	85 66	81 66	84 74	81 67	81 71	84 71	80 65	80 71	80 67	80 71	77 67	75 67	76 67	74 73	76 71	76 71	75 66	77 65	75 66	70 62	74 73	75 72	79.3 69.5	
OPAEOULA 870	MAX MIN	84 66	83 60	87 65	85 65	80 65	77 65	76 68	79 61	84 64	83 63	80 65	80 65	76 66	77 68	84 65	85 66	84 68	84 65	84 63	80 62	80 66	79 63	78 62	80 65	76 61	75 60	82 63	78 61	85 63	88 62	80.7 63.8
PRI WAIHAWA 820.2	MAX MIN	88 61	90 60	89 58	82 63	86 65	81 65	79 61	80 66	82 66	83 59	84 62	81 63	78 61	83 62	87 64	87 62	83 64	87 62	83 64	80 60	80 66	83 67	77 63	79 63	80 63	78 60	84 58	83 62	82 67	85 63	82.6 62.5
WAIALUA 847	MAX MIN	84 62	84 64	87 61	88 63	85 69	85 71	81 66	80 67	83 68	84 62	83 67	83 67	80 63	83 65	77 67	88 65	88 61	83 65	84 61	83 62	84 64	83 65	81 67	81 67	82 61	78 59	82 60	81 62	81 64	82.9 64.1	
WAIKIKI 717.2	MAX MIN	88 66	87 65	89 67	86 72	81 73	84 66	84 66	85 65	85 65	86 65	87 65	86 65	85 66	84 66	84 67	86 65	84 66	84 66	84 66	82 63	83 63	83 63	83 63	81 62	83 61	83 61	82 61	86 61	84 60	84.5 68.1	
WAIMANALO EXP FARM	MAX MIN	85 68	86 66	85 74	84 73	84 72	83 72	78 72	82 68	83 63	85 65	84 67	83 68	83 66	84 68	78 68	83 68	81 68	83 68	81 67	82 71	80 70	80 72	81 70	80 69	82 70	82 68	81 65	84 66	84 66	82.3 68.6	
* * *																																
ISLAND OF MOLOKAI																																
MOLOKAI AP 524	MAX MIN	80 66	82 63	84 66	82 72	82 70	82 69	79 69	82 70	80 69	83 66	83 67	83 70	80 70	83 71	81 66	84 68	83 69	81 71	80 69	80 70	78 70	81 68	80 69	80 69	79 69	79 67	79 67	78 65	78 65	78 70	80.8 68.5
* * *																																
ISLAND OF LANAI																																
LANAI CITY 672	MAX MIN	79 64		78 63	78 65	79 64	76 63	77 64	79 62		80 64	78 62	77 62	80 63	79 65		80 64	78 64	79 65	77 63	78 64	78 64	76 61	80 60	73 65	74 63	76 62				77.7 63.3	
* * *																																
ISLAND OF MAUI																																
HALEAKALA RS 338	MAX MIN	66 42	71 40	64 44	65 50	71 50	67 46	58 45	59 45	58 38	64 42	63 43	65 43	66 43	61 45	58 43	62 48	68 48	67 53	67 46	61 45	63 45	59 45	59 45	60 43	59 43	61 43	63 42	63 42	62 45	62 46	63.1 44.5
MANA AIRPORT 355	MAX MIN	84 64	84 68	85 68	85 69	83 72	84 70	78 68	79 68	81 68	82 66	83 68	82 68	82 67	83 71	83 69	83 72	83 70	83 66	81 66	81 69	81 69	78 66	78 66	81 62	81 62	80 62	80 62	81 65	80 65	85 65	81.7 67.9
KAANAPALI AIRPORT	MAX MIN	84 66		85 63	84 68	83 67	85 70		84 65	84 65	83 65	83 68		68 65	84 66	83 66	84 66	83 66		82 69	82 69	81 67	81 71	83 66	80 66	81 62	83 62	78 62	81 62	81 62	82.5 66.7	
KAHULUI W8 AP 398	MAX MIN	85 63	89 61	88 61	86 73	85 82	82 71	82 66	85 61	80 62	84 61	85 62	84 62	85 66	88 66	86 65	87 65	84 65	87 65	84 65	83 64	83 64	83 64	85 63	81 62	84 62	83 59	82 59	80 59	82 59	84 68	84.4 65.2
KAILUA 446	MAX MIN	80 64	80 62	80 63	79 67	78 68	77 67	74 66	74 63	75 61	78 61	77 65	80 63	78 63	79 64	80 65	85 65	80 65	78 67	77 67	76 67	75 65	75 65	75 65	76 66	76 63	76 60	76 60	77 64	77 66	77.5 64.4	
KEAWAKAPU BEACH 260.2	MAX MIN																															
KULA SANATORIUM 267	MAX MIN	74 57	74 56	75 57	75 58	75 60	79 60	75 58	73 56	72 56	76 57	76 57	74 57	72 59	71 58	76 58	72 55	71 55	76 55	72 55	72 55	70 56	70 57	72 57	71 58	69 58	70 55	71 54	70 52	73 55	73 59	72.8 56.7
LAHAINA 361	MAX MIN	85 67	86 66	85 69	84 68	86 71	90 71	87 70	86 66	85 65	85 65	84 65	84 65	83 66	85 66	85 66	85 66	83 66	83 66	85 66	83 66	83 66	85 66	85 66	84 66	84 66	85 66	84 63	84 63	85 63	85 69	84.7 67.1

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
NOVEMBER 1969

Continued

Station	Day of Month																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
MAILUKU 392	MAX			84	83	82	82	81		84	82	81	80	85		83	81	80	80	80		81	80	79								
	MIN			66	73	72	70	71		65	65	67	68	69		67	70	69	70	71		70	69	68								
* * *																																
ISLAND OF HAWAII																																
HAINA 214	MAX	83	84	83	82	82	84	74	76	79	82	81	82	82	82	83	82	81	79	81	81	80	81	79	79	80	80	79	80	80	77	
	MIN	64	66	69	69	69	69	66	66	63	64	64	66	64	65	65	64	67	65	66	68	69	67	68	68	66	65	63	62	65	66	
HAWAII VOLCNS NP HQ 54	MAX	74	75	76	67	68	66	62	61	66	65	65	70	71	73	70	72	71	65	68	70	68	63	63	65	66	63	68	70	72	74	
	MIN	45	54	57	55	55	56	54	54	55	48	50	49	47	58	52	52	56	52	53	53	55	53	54	52	52	52	48	50	57	53	
HILO W8 AIRPORT 87	MAX	83	85	83	83	82	80	80	80	82	83	84	82	83	84	82	81	82	82	80	80	77	77	78	81	80	80	80	82	82	86	
	MIN	65	65	67	67	67	70	68	66	65	63	63	64	62	66	65	64	67	63	65	66	65	64	66	65	63	64	61	63	68	63	
KAINALIU 73.2	MAX	79	81	80	80	80	80	82	79	78	78	76	80	76	80	81	81	82	79	73	79	79	81	80	74	78	77	77	77	78	79	
	MIN	60	62	61	65	63	63	62	62	60	61	60	60	60	62	63	62	62	62	62	61	63	62	64	63	60	61	60	58	63	61	
KAMUELA 192.2	MAX	78	80	80	73	73	78	69	70	73	78	74	78	78	80	80	82	74	74	73	74	70	72	78	75	72	72	72	74	75	72	
	MIN	48	51	60	57	60	60	56	58	47	50	50	50	50	50	49	50	53	57	54	57	57	58	58	57	58	58	57	48	51	58	
KAMUELA AIRPORT 191	MAX	78	80	79	75	74	77	74	72	72	78	75	76	74	78	79	80	75	75	76	73	75	75	80	71	72	70	75	76	72		
	MIN	45	50	52	58	48	47	57	55	48	44	47	48	51	47	49	50	51	51	50	53	49	54	50	59	52	47	51	47	55		
KEAAU 92	MAX	83	83	83	82	83	82	79	82	82	82	82	84	84	84	85	85	85	83	82	82	81	78	78	78	80	79	79	82	83	83	
	MIN	65	65	65	67	66	65	66	63	63	63	63	64	61	62	65	65	65	64	64	64	66	65	67	65	62	63	62	64	64	65	
KEALAKEKUA 26.2	MAX	78	82	81	81	80	81	80	80	79	79	75	81	79	79	82	81	82	81	78	80	79	81	80	76	76	79	80	79	79	81	
	MIN	62	63	62	66	64	64	63	64	60	61	61	62	62	63	64	65	63	63	62	63	63	62	65	62	62	62	61	59	63	64	
KOHALA MISSION 175.1	MAX	81	82	81	82	79	80	74	75		81	80	81	80	82	82	81	82	81	79	79	79	79	77	75	79	79	78	79	80	74	
	MIN	65	65	69	69	71	69	66	66		63	64	63	64	65	66	67	67	68	68	69	69	67	63	69	68	68	63	64	64	62	
KONA AIRPORT 68.3	MAX	84	86	86	84	86	84	83	84	83	83	81	82	83	82	84	85	85	83	84	84	81	82	83	80	81	82	81	82	81	84	
	MIN	67	62	63	62	62	65	65	69	63	63	64	65	66	64	64	64	64	64	68	67	66	68	68	70	68	68	68	66	66	64	
KULANI CAMP 79	MAX	71	70	71	66	65	61	61	58		60	61	62	62	70	59	69	69		65	57	60	62	64	65	60	66	69	66	69		
	MIN	41	43	49	46	42	47	49	41		42	42	42	44	51	48	46	47		42	52	45	43	42	46	57	48	45	48	45		
MAUNA KEA BEACH 98	MAX	84	87	84	85	89	92	92	92	84	83	85	84	89	83	84	84	86	85	91	91	90	83	83	81	85	84	87	84	82	85	
	MIN	68	70	71	75	75	75	73	71	68	68	69	69	69	70	70	70	73	71	70	72	73	69	74	69	69	69	68	66	73	71	
MAUNA LOA SLOPE 085	MAX	58	61	60	56	53	57	50	48	51	53	53	53	49	52	54	54	59	57	53	53	49	50	42	50	48	50	54	56	52	58	
	MIN	37	43	44	41	39	37	35	34	33	34	36	33	34	33	35	37	41	38	37	38	37	35	35	32	28	31	36	38	40	37	
MOUNTAIN VIEW 91	MAX	82	81	81	76	76	75	70	69	74	73	78	79	78	78	78	81	79	76	79	76	77	70	71	71	74	73	81	81	81	81	
	MIN	56	61	66	63	62	62	62	61	63	57	56	58	57	56	61	58	59	59	58	60	59	58	61	58	57	59	52	52	52	52	
NAALEHU 14	MAX	81	82	82	80	81	84	76	76	80	80	79	81	79	81	81	81	81	77	79	80	80	80	79	79	77	77	77	77	82	82	
	MIN	66	64	64	70	72	71	69	69	76	74	66	67	63	66	66	67	67	65	64	68	67	67	67	67	66	66	66	63	63	63	
OOKALA 223	MAX	81	82	82	79	82	82	73	74	78	79	80	80	79	82	76	78	81	80	80	80	79	79	79	74	80	79	79	80	81	76	
	MIN	66	66	66	70	70	72	67	67	68	63	67	68	66	67	66	68	67	68	68	66	69	68	66	69	67	67	65	65	69	69	
OPIHIHALE 2 24.1	MAX	79	79	78	78	79	76	77	79	75	78	77	77	76	80	78	77	76	74	79	77	78	75	74	74	77	74	76	75	76	80	
	MIN	60	60	61	61	60	61	61	58	58	59	59	58	58	58	61	63	63	59	59	59	60	61	61	58	58	58	57	57	60	60	
PAHALA 21	MAX	82	82	83	78	82	87	80	80	79	75	78	81	79	81	78	80	80	75	80	83	79	75	73	75	81	76	80	82	85	85	
	MIN	60	61	62	64	64	67	66	65	63	60	61	61	60	60	63	62	61	62	61	62	65	61	64	63	61	61	60	61	66	68	
UPOLU POINT USCG 159.2	MAX	85	83	83	83	82	83	79	78	82	84	82	84	86	82	84	84	82	82	81	80	81	81	80	80	81	80	80	80	82	78	
	MIN	73	70	72	72	71	69	68	70	64	68	70	69	70	70	72	72	70	71	69	70	70	69	72	72	69	69	68	68	70	70	

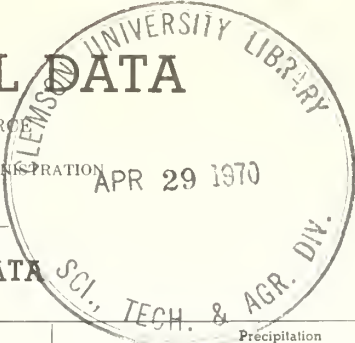
EVAPORATION AND WIND

Station	Day Of Month																															Total or Avg.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																
ISLAND OF KAUAI																																
LIHUE W8 AP 1020.1	EVAP	.18	.18	.22	.26	.26	.27	.44	.39	.25	.39	.24	.11	-	.17	-	.18	.23	.23	.15	.13	.18	.26	.07	.23	.18	.36	.12	.21	.15	.17	
	WIND	72	68	63	153	258	287	297	285	114	56	68	68	52	59	68	87	101	110	103	75	192	196	142	145	148	127	102	76	58	71	
	MIN	63	63	65	67	70	69	67	67	66	66	68	65	64	64	68	69	70	71	68	67	67	68	68	71	65	65	61	60	60	62	
* * *																																
ISLAND OF OAHU																																
HONOLULU OBSERV 702.2	EVAP	.19	.22	.19	.20	.29	.23	.25	.30	.20	.26	.13	.17	-	.16	-	.18	.15	.17	.16	.16	.10	.18	.12	.08	.17	.10	.15	.15	.14		
	WIND	18	20	17	24	62	64	51	48	28	18	24	10	13	23	25	14	19	17	32	24	5	21	13	14	14	10	15	12	19	17	
	MIN	66	65	64	66	68	69	67	66	65	66	68	68	66	66	68	68	67	65	65	68	67	67	68	66	65	62	61	62	64	65	



CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
 MAURICE H. STANS, Secretary
 ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
 ENVIRONMENTAL DATA SERVICE



HAWAII
 DECEMBER 1969
 Volume 65 No. 12

CLIMATOLOGICAL DATA

Station	Temperature											Precipitation													
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet		No. of Days					
										31° or Above	32° or Below	33° or Below	34° or Below					Total	Max. Depth on Ground	Date	10 or More	50 or More	100 or More		
																								Max.	Min.
* * * ISLAND OF KAUAI																									
ANAOHA 1111	A																								
KANALOHULUHULU 1075	A	65.2	50.1	57.7		70	22	40	6+	0	0	0	0	5.17	- .23	1.70	28					12	5	3	
KAPAA STABLES 1104	A													7.17											
KILAUEA FIELO 17 1135	A													5.52											
KILAUEA POINT 1133	A	78.3	66.5	72.4		85	1	48	28	0	0	0	0	12.33	2.82	1.73	27					14	3	1	
KOLDA 936	A													6.06											
LIHUE W8 AP 1020.1	R	78.7	67.9	73.3	1.1	84	3	60	21	0	0	0	0	7.24	-.38	3.65	27					8	1	1	
MANA 1026	A	81.9	64.0	73.0	.9	87	30+	58	17	0	0	0	0	5.91	.73	.31	28					3	0	0	
N WAILUA OITCH 1051	A													10.62	- 2.65										
PH WAINIHA 1115	A													23.45	9.86	6.20	28					14	10	8	
PUEHU RIOGE 1040	A													1.17	.37	.28							4	0	0
WAHIAWA 930	A	75.6	60.4	68.0		80	27+	52	21	0	0	0	0	1.13	- 3.36	1.82	27					12	5	3	
WAIAMI LOWER 1054	A													7.87		.19	28					1	0	0	
WAIIMEA 947	A													.21	- 3.14										
ISLAND																									
* * * ISLAND OF OAHU																									
HONOLULU OBSERV 702.2	R	83.9	69.1	76.5	2.9	87	7+	62	22	0	0	0	0	.31		.19	28					1	0	0	
HONOLULU W8FC 703	R													1.34	- 1.65	.29	29+					6	0	0	
KAHUKU 912	A		64.7M	M	.6			56	23+	0	0	0	0	6.47	2.19										
KANEOME MAUKA 781	A	78.1	66.6	72.4	.3	82	10+	60	23	0	0	0	0	7.93	1.08	3.03	28					13	3	2	
KOOLAU OAM 833	A													V26.36		3.03	25								
LUALUALEI 804	A		65.7	73.6		84	2+	58	22+	0	0	0	0	.91									0	0	
MAKAPUU POINT 724	A	81.4	65.9	70.8		81	4+	52	28	0	0	0	0	4.60	- 1.29	2.40	28					6	2	1	
NUUANU RES 4 783	A													6.50	- 4.56	2.74	27					10	4	1	
OPAUELA 870	A					83	3+	55	29+	0	0	0	0	7.99	1.02										
PALDD VALLEY 718	A													18.02	4.71	5.38	27					15	6	5	
PRI WAHIAWA 820.2	A	79.7	60.4	70.1		84	21+	52	23+	0	0	0	0	2.50											
PUNALUU 884	A													8.65											
WAHIAWA OAM 863	A													2.86											
WAIAMOLE 837	A													14.33											
WAILUA 847	A	80.2	61.4	70.8	-.4	87	1	53	22	0	0	0	0	2.30	- 1.64	.71	4					6	2	0	
WAIKIKI 717.2	A	82.1M	66.4M	74.3M		86	1	57	22	0	0	0	0	1.49		.32	25						0	0	
WAIHANALO EXP FARM	A	80.1	65.8	73.0		84	23	58	23	0	0	0	0	5.37		3.36	28					7	1	1	
WAIPAHU 750	A													1.39	- 2.15										
ISLAND																									
* * * ISLAND OF MOLOKAI																									
KUALAPUU 534	A													3.47	-.79										
MAPULEHU 342	A													V 5.70		.80	27								
MAUNALOA 511	A													1.74	- 1.76										
MOLOKAI AP 524	A	78.4	66.4	72.4		83	3+	59	22	0	0	0	0	3.05		1.58	25					6	1	1	
ISLAND																									
* * * ISLAND OF LANAI																									
LANAI CITY 672	A	75.2M	61.6M	68.4M	1.9	83	3	57	24+	0	0	0	0	4.73	1.01										
ISLAND																									
* * * ISLAND OF MAUI																									
HALEAKALA 8 E S 434	A	60.8	43.4	52.1		69	23	37	15+	0	0	0	0	20.53	10.07	8.95	29					13	8	5	
HALEAKALA RS 338	A													16.01		8.50	29						5	4	
HANA AIRPORT 355	A	79.5M	65.0M	72.3M		83	2	60	23+	0	0	0	0	5.76	1.11	1.86	25								
HONOKOHUA 493	A													2.21		.91	29						7	1	0
KAAANAPALI AIRPORT	A	80.7M	67.1M	73.9M		85	3	59	22	0	0	0	0	5.81	3.11	2.81	28						8	3	1
KAHULUI W8 AP 398	R	80.9	64.4	72.7	-.0	86	1	53	23+	0	0	0	0	15.75	3.90	4.43	29					16	8	5	
KAILUA 446	A	75.8	62.4	69.1	.2	83	22+	55	23	0	0	0	0	28.01	5.69										
KEANAE 346	A													11.32	1.41	3.91	25								
KIPAHULU 258	A													1.73	- 1.30	.62	29						6	1	0
KULA SANATORIUM 267	A	70.7	54.7	62.7	.4	76	1	49	23+	0	0	0	0	1.46	-.83	1.38	28					1	1	1	
LAHAINA 361	A	83.2	65.2	74.2		87	9+	59	21	0	0	0	0	7.09	2.87	3.61	29					10	2	1	
PAIA 406	A													V 3.97											
WAILUKU 392	A					86	22+	58	22	0	0	0	0												
ISLAND																									
* * * ISLAND OF HAWAII																									
HAINA 214	A	78.3	63.9	71.1	-.9	83	3+	60	22	0	0	0	0	5.83	- 1.87	1.59	5					9	3	2	
HAWAII VOLCNS NP HQ 54	R	68.5	50.8	59.7	1.0	75	22	40	21	0	0	0	0	3.76	- 6.38	.92	26					8	3	0	
HILD W8 AIRPORT 87	R	79.8	63.2	71.5	-.0	85	4	57	21+	0	0	0	0	8.10	- 7.08	1.80	14					15	4	2	
HUEHUE 92.1	A													3.04	.68										
KATNALIU 73.2	A	77.2	60.0	68.6		82	1	55	22+	0	0	0	0	3.69	.68	.77	7					0	4	0	

See Reference Notes Following Station Index

CLIMATOLOGICAL DATA

HAWAII
DECEMBER 1969

Continued

Station	Temperature										Precipitation												
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
										Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										50° or Above	60° or Above	32° or Below	40° or Below										
KAMUELA AIRPORT 191	71.9 ^M	48.1 ^M	60.0 ^M		78	2+	40	22		0	0	0	0	.49				.0	0		3	0	0
KEAAU 92	80.4	62.9	71.7	.7	85	4+	59	31+		0	0	0	0	7.39	- 8.78	2.00	25	.0	0		1	4	0
KEALAKEKUA 26.2	77.5	61.0	69.3		82	2+	56	22		0	0	0	0	2.79		1.10	5	.0	0		5	2	0
KONA AIRPORT 68.3	82.1	63.3	72.7		86	1	60	22+		0	0	0	0	1.09	- 2.73	.75	5	.0	0		8	1	0
KUKUIHAELE HIC 199										0	0	0	0	6.49		2.21	5	.0	0		0	0	0
KULANI CAMP 79	64.9	43.4	54.2		78	22	34	24		0	0	0	0	8.47		1.72	26	.0	0		11	4	4
MAUNA KEA BEACH 98										0	0	0	0	.18		.08	6+	.0	0		0	0	0
PAHALA 21	79.5 ^M	60.8 ^M	70.2 ^M	.1	84	25	55	22+		0	0	0	0	1.63	- 2.80	.77	5	.0	0		3	1	0
POHAKULOA 107										0	0	0	0	.26				.0	0		0	0	0
PUAKO 95.1										0	0	0	0	.24		.11	7	.0	0		1	0	0
PUU WAAWAA 94.1														.81	- .89	.50	30	.0	0		2	1	0
UMIKOA 118														7.47	- 4.02	2.55	5	.0	0		0	0	0
WAIAKEA SCO 88.2														9.00		2.04	26	.0	0		13	6	3
ISLANDO			66.9											3.93				.0					

EXTREMES

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 91° ON THE 6TH AT MAKAHUENA POINT 940.1, KAUAI
 LOWEST TEMPERATURE: 29° ON THE 27TH AT MAUNA LOA SLOPE OBS, HAWAII
 GREATEST TOTAL PRECIPITATION: 45.60 AT PUOHOKAMOA 2 343, MAUI
 LEAST TOTAL PRECIPITATION: .17 AT KONA VILLAGE 93.8, HAWAII
 GREATEST ONE-DAY PRECIPITATION: 9.50 ON THE 30TH AT WAIKOLU 540, MOLOKAI

SUPPLEMENTAL DATA

	Wind (Speed - m.p.h.)						Relative humidity averages-percent				Number of days with precipitation						Percent of Possible sunshine	Average sky cover sunrise to sunset	
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	Standard of Time				Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over			Total
							150TH MERIDIAN												
							02	08	14	20									
HILO, HAWAII, WB AIRPORT	20	1.1	5.8	20	NW	19	86	80	68	85	1	6	11	2	2	0	22	45	5.6
HONOLULU, OAHU, WBFC	4	7.3	11.4	35	NE	25	76	75	57	71	9	4	6	0	0	0	19	60	4.6
KAHULUI, MAUI, WB AIRPORT	5	7.1	10.4	29	NE	25+	83	87	62	82	5	5	5	2	0	1	18	69	3.9
LIHUE, KAUAI, WB AIRPORT	3	7.7	11.9	32	NE	28+	81	81	69	79	4	8	7	0	0	1	20	47	5.5

SPECIAL WEATHER SUMMARY

December's weather was highlighted by the most destructive surf in recent history, but it included also damaging winds and frost, and continued widespread dry weather.

Early on November 30 a large low pressure area drifting slowly eastward about 1,500 miles northwest of the Hawaiian Islands, and carrying winds of 45 to 60 miles an hour in its southwest quadrant, sent unusually heavy ocean swell crashing against exposed coasts of all the islands, demolishing seaboard homes and parks, eroding beaches and shorelines, and leaving behind one death, a number of injuries, and damages totaling over \$1.5 million.

The storm swell reached Kauai, northernmost of the Hawaiian Islands, during the afternoon of December 1 with waves reported up to 30 feet high. At Polihale Beach Park on the north shore, beach facilities and the access road were damaged and the beach severely eroded. On Kauai's west coast, seas sweeping nearly 600 feet inland washed 1 foot deep into 15 homes under construction just north of Kokole Point, and left splash marks under the eaves of several located 350 feet inland and about 18-1/2 feet above sea level.

The waves struck Oahu soon after dark on the 1st, pounding hardest at the well populated 12-mile stretch of northwest-facing coastline between Waialua Bay and Kawela Bay. Sunset Beach was battered worst, and its Ke Iki Road residential area virtually wiped out when waves, some of them estimated at 40 to 50 feet in height, and described as the largest in local memory, topped a heavily built-on 25-foot rise, demolishing 14 homes, crushing some, smashing others against utility poles and one another, and -- of a few -- leaving nothing behind but scattered appliances and timbers. Eight other houses and 6 cottages and their contents suffered lesser damage in the same onslaught. In the dip inland of the rise, water up to 6 feet deep inundated 12 homes and a number of parked cars. Losses in the Ke Iki Road area alone amounted to about \$535,000 -- almost half the \$1.27 million total for all Oahu.

In the small boat harbor at Haleiwa, boulders were torn from the breakwater and groin and 16 boats varying in length from 15 to 52 feet, beached, battered, or sunk. Water covered an adjoining parking lot (3 to 4 feet above sea level) to a depth of 5 feet and heavily damaged six businesses and four automobiles in the area. Losses in and about the boat harbor were estimated at \$324,000.

Haleiwa Beach Park, on the north side of Waialua Bay, was heaped with tons of sand eroded from nearby beaches.

At Kawela Bay surf rushing inland to an elevation of 22 feet above sea level destroyed 2 homes and damaged 12 others, 2 of them severely. A 10-year-old girl was seriously injured and several other persons narrowly escaped drowning when their homes were mauled by the waves.

At Pupukea Beach Park, waves swept 750 feet inland, and along the Pupukea-Waimea coast damaged 24 houses and left swash marks and debris on the ground at elevations of up to about 35 feet above sea level. Elsewhere on Oahu's north coast, about 40 homes on Waialua Bay, and 25 in the Waialea and Kawailoa Beach areas, sustained minor damage from water and undermining.

On Molokai on December 1 and 2, 40-foot surf destroyed a concrete mooring dolphin and deposited huge boulders in the Kalaupapa barge harbor, making it unsafe. Damage was estimated at about \$25,000.

Hawaii Island was shielded by the islands to the northwest except for the extreme southwest coast where early on the 2d the village of Milolii was struck by 20-foot waves which destroyed its entire fishing fleet, consisting of nine fishing canoes and two skiffs, damaged four homes and the only grocery store and washed out 1,200 feet of beach road -- for a damage total of \$85,000.

On December 4 high surf from a second North Pacific storm added to previous damage, particularly at Kauai's Polihale Beach Park and at Oahu's Mokuleia Beach.

Total damage to all islands from both surf episodes was estimated at \$1.51 million. One person drowned when he was swept away while watching the waves at Oahu's Waimea Bay.

Meanwhile, the swell rolled into the Southern Hemisphere, reaching heights of 13 to 20 feet at the Gilbert and Ellice Islands and 10 feet at Rarotonga, South Cook Islands and at Tahiti, and causing slight damage at Samoa and the North Cook Islands.

Several other weather events of interest occurred during December.

Early on the morning of the 21st an unaccustomed light frost covered Hawaii Island's Volcano area and slightly damaged plantings of squash, lettuce, and cabbage. At Hawaii Volcanoes National Park (elevation 3,971 feet), the minimum temperature dropped to 40°, only 1° higher than the lowest previous December reading and 3° above the lowest temperature ever noted there in 55 years of record. Other temperature readings in the

HAWAII - DECEMBER 1969
SPECIAL WEATHER SUMMARY - CONTINUED

area were as low as 25°, but the exposure of the thermometers makes these values questionable.

On the 25th at Lahaina, Maui, a dock-side shed collapsed, apparently struck by the remnants of a large dust devil observed near it just minutes before. Of seven persons in the shed at the time, two were injured seriously and five slightly. The dust devil is suspected to have been one of several seen moving slowly seaward (westward) near the Lahaina Shopping Center. Winds in the area were easterly trades with occasional gusts to 40 miles an hour.

On the 27th a cold front brought Kauai and Oahu gale-force northerly winds and scattered heavy showers. Gusts which reached 46 miles an hour at Barking Sands, Kauai, and 47 miles an hour at the Kaneohe Marine Corps Air Station on windward Oahu did scattered damage to powerlines and trees.

On the 8th a small dark cone-shaped funnel cloud accompanied by a heavy rain shower was spotted moving westward about 20 miles northwest of the Hilo Weather Bureau Office. The

funnel moved from the ocean to the land, did not reach the ground, and lasted about 7 minutes.

Rainfall continued deficient over much of the State. On Kauai, Oahu, Molokai, and Maui, only windward (eastern and northeastern) sections received average or above rainfall for the month, while leeward coastal sections reported well below half their monthly means. On the Big Island only North Kona and a few gages in Kohala received more rainfall than the December average. The remainder of the island was dry and many places particularly in the Kau area (the southeastern section) had well below half of their normal December rainfall.

At the stations listed below, December was the 11th successive month of deficient rainfall.

Kaunakakai, Molokai
Maunaloa, Molokai
Waiakeakua, Lanai
Lahaina, Maui
Kapapala Ranch, Hawaii
Manuka, Hawaii
Moaula, Hawaii

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DAILY PRECIPITATION

HAWAII
OCTOBER 1969

continued

Station	Total	Day of Month																																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31											
ISLAND OF MOLOKAI																																											
KALAUPAPA 503	A	3.46	*	*	*	*	*	.05	.14	*	.19	*	*	.31	*	.35	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.36	*	*	.12	.26	.68			
KAUNAKAI 536	A	1.90	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.54	*	*			
KEONELELE PEWIS 551	A	1.90	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.90	*	*			
KUALAPUU 534	A	3.47	*	*	.02	.13	*	*	*	.02	.12	.17	.08	.18	*	*	*	1.04	.04	*	.01	*	*	*	.16	*	*	*	*	*	*	.29	.27	.80	*	*	.20	.28	.21	.34			
HAPULEU 542	V	5.70	*	.19	.35	*	*	.02	.12	.17	.08	.18	*	*	.16	.07	.07	.03	.02	.01	*	*	*	.16	*	*	*	*	*	*	.25	T	.50	1.58	.03	.08	.44	.16	.08	.25	.28	.26	.23
MAUNALO 511	A	1.74	*	.14	.06	*	*	.03	.08	.05	T	.15	.21	.03	T	.25	.07	.02	.04	4.42	*	*	*	*	*	1.48	T	.50	1.58	.03	.08	.44	.16	.08	.25	.28	.26	.23					
MOLOKAI AP 524	A	3.05	*	*	.03	.08	.05	T	.15	.21	.03	T	.25	.07	.02	.04	4.42	*	*	*	*	*	*	*	*	1.48	T	.50	1.58	.03	.08	.44	.16	.08	.25	.28	.26	.23					
PUUOHOKU RANCH 542.1	A	4.54	T	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9.50	*	
WAIKOLU 540	A	17.74	1.19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
ISLAND OF LANAI																																											
KANEPUU 690	A	4.82	*	*	1.66	*	*	*	*	*	*	*	*	*	.07	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.06	*	*	*	*	3.03			
KAHALAPAA HARBOR 658	A	.75	*	*	.18	*	*	*	*	.02	*	.02	.07	.30	.87	*	.49	1.97	.30	*	*	*	*	*	.53	.04	*	*	*	*	*	*	.16	T	*	.34	.21	.02	*				
LANAI CITY 672	A	4.73	.22	*	.12	.52	T	*	.39	*	.32	*	.02	T	*	1.0	*	.10	*	*	.05	*	.12	*	*	*	*	*	*	*	*	.80	*	.26	1.51	2.17	*	.02					
LANAI MALE 684	A	1.34	*	*	*	*	*	*	.32	*	*	*	*	*	*	*	1.0	*	.10	*	*	.12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.14			
MAHONA 654	A	2.14	*	*	*	*	*	*	.32	*	*	*	*	*	*	*	1.0	*	.10	*	*	.12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.14			
MALAEUA 676	A	.66	*	*	.60	*	*	*	*	*	*	*	*	*	*	*	.44	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.06				
WAIKAEKUA 685	A	1.66	*	*	.60	*	*	*	*	*	*	*	*	*	*	*	.44	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.22				
ISLAND OF MAUI																																											
AUWAHI-252	A	2.06	*	*	*	*	*	*	1.08	*	*	*	.05	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.13	.05	.15	*	*					
HALEAKALA B E S 434	A	20.53	*	*	.67	.03	.02	.02	.07	.30	.87	*	.49	1.97	.30	*	.49	1.97	.30	*	.53	.04	*	*	*	*	*	*	*	*	*	2.34	1.18	.16	2.28	8.95	.30	.01					
HALEAKALA RANCH 432	A	11.26	*	*	.65	*	*	*	*	.13	.38	*	1.41	.15	*	*	*	*	*	.46	*	.46	*	*	*	*	*	*	*	*	*	*	1.88	2.33	.16	1.51	2.17	*	.02				
HALEAKALA RS 338	A	16.01	T	*	*	*	*	T	T	.14	*	.05	*	.23	*	*	*	.01	*	.22	*	*	*	*	*	*	*	*	*	*	*	*	1.88	2.33	.16	1.51	2.17	*	.02				
HALEAKALA SUMMIT 338.4	V	7.14	.48	T	*	*	*	T	T	.14	*	.05	*	.23	*	*	*	.01	*	.22	*	*	*	*	*	*	*	*	*	*	*	*	1.88	2.33	.16	1.51	2.17	*	.02				
HALIIMAILLE 423	A	9.04	*	*	.45	*	*	.02	.05	.18	.19	*	*	1.16	*	*	*	*	*	.02	.11	*	*	*	*	*	*	*	*	*	*	*	.13	.05	.15	4.05	1.85	.12	*				
HAMA LAROKO 485	A	9.17	*	*	.28	.08	.09	.19	.11	.35	.51	T	*	.93	.17	*	*	*	.02	.11	*	.02	.11	*	.70	.84	.11	.60	3.37	.90	.13	.06	3.37	.90	.13	.06	3.37	.90					
HANA 354	A	9.15	.25	*	1.03	*	*	.10	.35	.20	*	*	1.18	*	*	*	*	.08	.02	.11	*	.02	.11	*	2.52	.66	1.24	.85	.07	.07	.07	.07	1.06	1.05	.52	.85	.49	.19	T				
HANA AIRPORT 355	A	.07	*	T	.72	.02	T	.10	.16	.25	.92	.02	.19	.05	.01	T	.35	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T				
HANAHOLI 281	A	6.91	*	T	.80	.10	.07	.05	.10	.35	.45	*	.10	.38	.05	*	*	*	.01	*	.22	*	*	*	*	*	*	*	*	*	*	2.80	1.10	1.41	.15	*	*	*					
HOLUA CABIN 259.5	A	12.52	*	*	*	*	*	*	*	.72	*	*	*	*	*	*	*	*	1.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10.50			
HONOKOHU 48J	A	15.00	*	*	*	*	*	*	*	.72	*	*	*	*	*	*	*	*	1.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	15.00				
HONOKOHU 493	A	5.76	.12	*	.06	*	*	.30	.10	.15	.65	*	*	.60	*	*	*	*	.60	*	.60	*	.60	*	1.53	*	1.32	.78	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15				
HONOHANUI GULCH 361	A	27.00	*	*	.06	*	*	.30	.10	.15	.65	*	*	.60	*	*	*	*	.60	*	.60	*	.60	*	1.53	*	1.32	.78	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15			
KAANAPALI AIRPORT	A	2.21	*	T	*	*	.04	.04	.12	.15	.17	*	.15	.17	*	*	*	.15	.17	*	.15	.17	*	.36	.03	.25	.91	.04	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10				
KAHOHA INTAKE 374	A	18.60	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18.60			
KAHULUI HB AP 398	R	5.81	*	*	.67	T	*	T	.03	.15	.32	T	.30	.18	T	*	*	*	.07	*	.07	*	.07	*	.04	.27	T	.01	2.81	.88	.08	.08	.08	.08	.08	.08	.08						
KAILIILI 436	A	29.50	*	*	.67	T	*	T	.03	.15	.32	T	.30	.18	T	*	*	*	.07	*	.07	*	.07	*	.04	.27	T	.01	2.81	.88	.08	.08	.08	.08	.08	.08	.08	.08					
KAILUA 446	A	15.75	*	*	1.27	.02	.17	.16	.42	.48	.78	*	.28	1.43	.31	.01	*	*	.20	.01	.07	.07	.07	.07	.07	1.99	1.79	.83	.59	4.43	.48	.03	.03	.03	.03	.03	.03	.03					
KAUULA INTAKE 375	A	2.91	*	*	.80	.10	.07	.05	.10	.35	.45	*	.10	.38	.05	*	*	*	.01	*	.22	*	*	*	*	*	*	*	*	*	*	2.80	1.10	1.41	.15	*	*	*					
KEAMUA 410	A	6.10	.04	*	.29	*	*	.30	.10	.15	.65	*	*	.60	*	*	*	.60	*	.60	*	.60	*	1.53	*	1.32	.78	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15				
KEANAE 346	A	28.01	*	*	.01	.13	*	.30	.10	.15	.65	*	*	.60	*	*	*	.60	*	.60	*	.60	*	1.53	*	1.32	.78	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15			
KEANAPUU BEACH 200.2	A	2.27	*	*	.01	.13	*	.30	.10	.15	.65	*	*	.60	*	*	*	.60	*	.60	*	.60	*	1.53	*	1.32	.78	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15			
KIHEI 311	A	2.04	*	*	.01	1.76	*	*	.04	.12	.15	.17	*	.15	.17	*	*	*	.15	.17	*	.15	.17	*	.36	.03	.25	.91	.04	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10				
KIPAHULU 258	A	11.32	.31	*	.79	*	*	.54	.08	.32	.86	*	.02	.01	.21	*	*	*	.02	.01	.21	*	.02	.01	.21	*	.02	.01	.21	*	.02	.01	.21	*	.02	.01	.21	*	.02				
KULA HEIGHTS 323.2	A	2.87	*	*	.36	*	*	.28	.23	.60	.61	1.16	.04	.60	3.04	1.06	.06	*	.06	*	.06	*	.06	*	4.50	3.00	1.00	1.73	5.23	.96	.47	.47	.47	.47	.47	.47	.47	.47					
KULA SANATORIUM 267	A	1.73	.02	*	.20	.04	*	*	.01	.06	.53	T	.40	.74	.05	.40	.74	.05	.40	.74	.05	.40	.74	.05	.40	.74	.05	.40	.74	.05	.40	.74	.05	.40	.74	.05	.40	.74	.05				
LAHAINA 361	A	1.46	*	*	.03	*	*	.02	.02	.07	.30	.87	*	.49	1.97	.30	*	.49	1.97	.30	*	.53	.04	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*				
LAUNIUPOKO INTAKE 376	A	8.60	*	*	.03	*	*	.02	.02	.07	.30	.87	*	.49	1.97	.30	*	.49	1.97	.30	*	.53	.04	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*				
LAUNIUPOKO VILLAGE 372	A	.98	*	*	.03	*	*	.02	.02	.07	.30	.87	*	.49	1.97	.30	*	.49	1.97	.30	*	.53	.04	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*				
LUPI UPPER 442	A	21.60	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21.60			
MAHINAHA 466	A	7.88	.08	*	.16	*	*	.30	.10	.15	.65	*	*	.60	*	*	*	.60	*	.60	*	.60	*	1.53	*	1.32	.78	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15			
MAKALEI - FLD 00-497	A	4.09	*	*	.01	.13	*	.30	.10	.15	.65	*	*	.60	*	*	*	.60	*	.60	*	.60	*	1.53	*	1.32	.78	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15			
OLINOA 332	A	13.14	1.03	*	.32	*	*	.01	.06	.53	T	.																															

DAILY TEMPERATURES

HAWAII
DECEMBER 1969

Station	Day of Month																															Average			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
ISLAND OF KAUAI																																			
KANALOHULUHULU 1075	MAX MIN	69 49	69 52	66 52	65 53	68 40	68 40	65 50	62 57	65 58	63 56	67 56	61 56	63 53	69 50	65 49	65 43	65 43	67 52	60 55	66 48	69 41	70 43	66 46	60 50	65 54	66 56	59 49	58 50	64 53	68 47	68 48	65.2 50.1		
KILAUEA POINT 1133	MAX MIN	85 71	80 68	84 78	79 66	82 67	81 70	81 71	79 69	80 65	77 69	78 70	78 70	76 65	73 68	78 70	69 63	67 60	83 68	74 67	77 66	80 66	81 68	73 63	78 66	74 69	72 69	51 51	48 67	65 70	77 71	78 68	78.3 66.5		
LIHUE WB AP 1020.1	MAX MIN	82 67	80 69	84 70	79 65	80 64	81 68	81 74	80 73	81 73	79 73	78 71	76 69	79 71	76 71	77 66	78 64	77 61	80 63	79 65	75 62	79 60	82 64	78 65	76 70	79 73	79 67	73 67	75 70	78 71	78 68	78.7 67.9			
MAKAHUEA POINT 940.1	MAX MIN	83 72	85 72	85 68	83 68	83 62	91 71	80 59	82 61	81 72	81 67	81 72	81 71	83 71	79 64	79 68	79 65	84 61	85 69	82 63	82 65	80 70	82 67	85 71	85 69	85 69	85 69	76 59	78 71	78 68	79 70	82.0 67.8			
MANA 1026	MAX MIN	85 65	85 67	84 67	86 70	78 61	82 61	85 60	87 60	85 64	87 64	86 66	82 64	79 64	82 62	80 58	80 62	80 58	82 62	82 65	77 64	82 63	83 64	77 62	82 61	79 61	82 64	79 69	85 67	87 64	81 67	81.9 64.0			
NIU RIOGE 1035	MAX MIN	79 63	80 62	80 60	80 61	80 60	80 60	80 61	79 60	80 61	80 63	79 62	80 60	80 60	80 59	80 58	79 58	77 58	80 60	81 65	80 62	80 60	80 63	81 64	80 65	84 63	86 61	85 62	84 60	80 61	82 62	80.6 60.8			
WAI'AHU LOWER 1054	MAX MIN	80 58	80 62	80 60	80 58	80 59	79 58	77 58	72 66	74 66	74 66	73 66	74 65	72 64	74 58	73 57	76 53	75 53	73 55	76 59	74 61	72 52	74 53	77 59	76 65	79 65	80 66	80 62	73 64	74 62	76 60	75.6 60.4			
ISLAND OF OAHU																																			
EWA PLANTATION 741	MAX MIN	85 71	84 62	85 65	79 67	85 65	84 62	82 65	82 70	81 69	81 68	82 67	82 62	80 63	78 63	78 63	81 61	80 58	81 58	81 62	77 57	82 55	81 55	81 58	79 66	81 67	81 67	81 68	80 65	78 66	82 65	81 63	81.1 63.7		
HONOLULU WBFC 703	MAX MIN	85 72	85 68	84 71	83 72	87 70	87 68	87 74	86 73	85 73	86 73	85 74	85 67	85 69	83 71	82 72	83 64	81 64	81 64	83 68	82 67	82 63	81 62	85 63	82 70	83 69	85 70	84 69	84 69	86 70	86 69	81 69	83.9 69.1		
HONOLULU SUBSTA 704	MAX MIN	80 73	83 70	81 71	78 70	82 71	82 70	80 73	79 72	78 70	77 71	78 70	78 70	77 69	75 69	76 70	77 68	77 65	77 65	78 70	76 67	80 66	79 67	77 66	80 65	79 64	79 65	79 65	76 64	79 65	79 66	78 67	79 68	78.2 66.7	
KAHUKU 912	MAX MIN	84 66	82 63	82 64	77 66	77 68	82 69	80 69	80 70	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80.7 64.7	
KANEHOE MAUKA 781	MAX MIN	82 74	81 66	81 66	79 62	79 62	81 62	79 62	81 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79 62	79.1 66.6	
LUALUALEI 804	MAX MIN	84 64	84 60	83 65	83 69	80 66	83 66	82 66	83 65	82 65	81 65	83 65	83 65	81 65	78 65	82 65	80 65	80 65	79 65	80 65	82 65	81 65	80 65	82 65	81 65	82 65	79 65	82 65	83 65	80 65	83 65	82 65	82 65	81.4 65.7	
HAKAPUU POINT 724	MAX MIN	81 66	80 70	83 68	81 66	74 71	78 72	80 72	77 72	77 67	77 67	76 67	76 66	73 61	72 61	74 61	70 61	77 67	79 66	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78.7 65.9	
OPAUELA 870	MAX MIN	81 67	83 60	83 60	80 65	75 59	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79.7 60.4	
PRI WAHIAWA 820.2	MAX MIN	84 58	84 60	84 59	81 65	77 62	84 60	81 64	84 60	79 67	80 65	80 65	80 65	77 60	74 62	80 60	76 56	78 53	81 55	77 60	84 54	83 52	80 56	81 56	74 64	79 67	80 66	79 66	76 61	80 61	80 63	80 63	79.7 60.4		
WAI'ALUA 847	MAX MIN	87 68	83 61	81 61	85 67	79 59	82 59	86 61	82 63	81 66	80 64	81 61	81 61	79 62	77 59	77 62	79 58	80 57	80 58	78 58	80 61	78 56	77 56	77 56	80 53	79 64	83 66	80 66	83 66	80 66	80 66	80 66	80.2 61.4		
WAIKIKI 717.2	MAX MIN	86 73	82 72	83 73	85 80	83 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	85 64	82.1 66.4	
WAIHANALO EXP FARM	MAX MIN	82 72	81 66	81 66	78 65	80 67	82 68	82 70	81 70	80 69	80 69	80 69	80 69	81 70	80 69	79 68	81 64	80 64	81 64	80 64	79 64	79 64	79 64	79 64	80 64	81 64	81 64	81 64	77 67	76 68	79 70	79 68	81 68	80.1 65.8	
ISLAND OF MOLOKAI																																			
MOLOKAI AP 524	MAX MIN	80 72	83 67	83 65	79 66	78 65	81 69	81 69	78 69	80 71	78 71	79 70	79 66	80 67	76 67	77 67	74 64	78 61	78 61	78 61	79 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78.4 66.4	
ISLAND OF LANAI																																			
LANAI CITY 672	MAX MIN	75 64	83 61	83 61	78 65	76 65	75 64	77 62	75 63	77 63	74 63	76 63	76 63	72 61	74 63	74 64	74 61	76 60	75 62	74 57	76 65	75 58	76 57	76 57	75 60	79 64	79 66	78 66	78 66	77 60	74 65	77 65	78 59	75.2 61.6	
ISLAND OF MAUI																																			
HALEAKALA RS 338	MAX MIN	64 47	60 45	63 50	60 47	60 44	63 44	62 46	62 46	62 46	55 43	52 44	65 42	65 44	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60 37	60.8 43.4	
HALEAKALA SUMMIT 338.4	MAX MIN	56 38	53 40	52 39	49 37	49 37	51 40	53 37	45 36	48 39	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55 43	55.7 43.4
HANA AIRPORT 355	MAX MIN	82 66	83 67	82 66	82 65	78 66	81 68	81 70	80 70	80 70	80 70	80 70	80 70	81 63	81 63	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79.5 65.0	
KAANAPALI AIRPORT	MAX MIN	82 75	83 68	85 65	82 71	82 71	83 73	82 73	82 73	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80.7 67.1	
KAHULUI WB AP 398	MAX MIN	86 72	85 65	85 64	79 66	85 63	85 63	82 71	84 72	79 70	82 70	82 70	82 70	80 69	79 67	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80.9 64.4	
KAILUA 446	MAX MIN	79 64	79 66	80 64	79 66	79 66	80 64	79 66	78 66	76 63	72 63	73 63	75 63	76 63	72 62	73 62	74 60	75 59	75 59	74 59	83 58	83 58	83 58	83 58	83 58	83 58	83 58	83 58	83 58	83 58	83 58	83 58	83 58	75.8 62.4	
KEAWAKAPU BEACH 260.2	MAX MIN	86 70	86 64	87 67	83 69	79 64	85 65	85 65	88 66	89 66	89 66	89 66	89 66	87 66	86 66	86 66	84 65	82 66	82 66	83 66	83 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	83.6 62.5	
ULA SANATORIUM 267	MAX MIN	76 61	75 58	74 58	72 59	68 57	72 57	72 57	71 58	73 58	71 58	73 58	73 58	70 57	74 54	69 54	71 55	70 55	71 55	68 52	69 53	71 53	71 53	71 53	70 53	70 53	70 53	70 53	70 53	70 53	70 53	70 53	70 53	70.7 54.7	

See Reference Notes Following Station Index

DAILY TEMPERATURES

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
LAHAINA 361	MAX	84	85	85	84	83	87	85	84	87	86	83	84	85	83	83	82	83	83	81	84	82	83	80	82	84	80	85	83	74	82	84	
	MIN	71	66	66	70	66	67	68	70	70	67	63	64	64	63	62	63	63	63	64	65	59	60	61	63	66	67	69	67	65	65	65	
WAILUKU 392	MAX	86	86	81	86	80				82	80	76	76	78			78	77	77	77	79												
	MIN	65	68	66	66	69				66	69	68	68	65			65	64	62	63	61												
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	80	83	83	82	82	80	80	79	78	80	77	80	78	77	70	74	78	79	79	77	74	78	79	78	78	78	77	79	76	76	78	
	MIN	65	67	66	66	65	64	66	67	66	66	64	64	66	64	65	63	62	62	62	63	65	64	60	61	64	62	65	63	64	62	63	61
HAWAII VOLCNS NP HO 54	MAX	71	72	70	73	69	71	69	61	66	69	68	68	67	65	72	64	65	68	72	71	71	75	73	68	74	62	60	67	65	68	69	
	MIN	53	56	51	51	57	50	56	55	54	51	50	50	51	53	53	46	47	48	53	46	40	43	52	51	52	52	50	52	51	52	48	
HILD W8 AIRPORT 87	MAX	84	84	84	85	83	83	78	83	78	78	81	81	76	72	74	80	81	80	79	78	80	81	79	80	77	77	80	76	81	80	80	
	MIN	64	65	64	63	64	64	67	67	66	63	63	64	62	67	66	64	60	60	62	57	61	57	65	65	64	65	65	64	64	62	60	
KAINALIU 73.2	MAX	82	80	79	78	78	76	78	74	75	79	77	77	79	77	78	77	77	78	74	76	76	76	75	75	77	77	79	77	79	76	76	
	MIN	61	61	61	61	63	62	61	65	65	64	61	58	59	60	59	58	60	59	59	59	55	55	58	57	61	59	59	60	59	61	59	
KAMUELA 192.2	MAX	78	80	80	78	78	75	72	72	71	70	66	71	72	66	65	66	74	74	72	70	70	70	74	68	69	70	71	74	67	73	77	
	MIN	52	54	57	53	56	56	56	55	58	57	55	53	56	54	53	55	45	48	54	53	43	41	44	55	55	54	48	51	55	54	48	
KAMUELA AIRPORT 191	MAX	78	78	76	77	76	76	69	72	72	68	66	72	68	66	66	73	73	72	70	69	72	74	69	71	70	70	72	68	72	76		
	MIN	51	51	45	54	51	59	54	44	42	44	50	56	44	50	56	46	46	46	46	46	42	40	44	44	50	45	50	52	47	44		
KEAAU 92	MAX	85	82	85	85	84	84	82	77	80	79	78	80	80	77	75	74	80	83	83	82	78	81	80	81	80	78	77	80	79	81	82	
	MIN	64	64	65	65	64	64	66	68	66	64	63	63	62	64	64	59	60	61	60	62	60	61	65	62	63	64	62	64	61	61	59	
KEALAKEKUA 26.2	MAX	82	82	81	77	80	76	77	76	79	77	75	78	79	77	78	78	78	78	74	76	77	74	74	74	78	79	81	78	76	76	79	
	MIN	63	62	62	61	63	64	62	65	65	64	62	61	60	61	60	60	60	59	60	60	57	56	59	60	61	60	61	60	61	61	62	
KOHALA MISSION 175.1	MAX	81	82	81	82	81	79	80	75	78	70	76	77	77	74	70	76	77	77	80	78	74	77	77	77	71	74	75	78	77	76	77	
	MIN	67	66	67	67	67	65	67	69	67	68	66	64	66	65	63	63	62	62	62	66	60	60	60	67	68	67	65	66	63	63	62	
KONA AIRPORT 68.3	MAX	86	84	83	82	82	82	82	82	82	82	82	82	81	84	82	82	82	81	80	82	82	83	82	80	82	82	82	82	82	81	82	
	MIN	69	64	62	66	66	63	66	67	68	64	66	61	61	61	63	61	62	61	61	64	60	60	62	61	65	63	61	62	62	62	61	
KULANI CAMP 79	MAX	72	69	67	68	68	66	61	62	60	58	59	60	65	67	58	59	62	64	66	67	70	78	75	72	60	65	64	61	62	62	65	
	MIN	47	46	43	45	48	40	51	51	50	47	45	37	37	43	45	44	41	46	43	44	42	36	36	34	37	43	44	51	44	45	40	
MAUNA KEA BEACH 98	MAX	84	84	84	85	83	86	84	83	91	91	88																					
	MIN	70	71	71	70	70	69	72	71	67	71	73																					
MAUNA LOA SLOPE 085	MAX	58	51	51	50	50	51	49	53	53	51	53	54	54	49	54	57	56	55	57	56	58	58	60	52	48	42	46	44	47	46	44	
	MIN	38	37	36	37	35	35	35	34	37	36	36	33	35	33	33	36	38	36	38	40	39	40	40	35	32	31	29	31	30	30	32	
MOUNTAIN VIEW 91	MAX	81	79	79	80	79	80	80	80	80	73	73	76	75	75	75	69	76	77	76	78	78	78	78	76	73	73	75	75	75	75	78	
	MIN	52	59	59	60	63	57	57	57	57	58	58	57	57	57	57	59	55	55	54	49	49	49	57	57	59	59	56	56	56	57	55	
NAALEHU 14	MAX	82	81	81	81	79	79	79	79	79	78	79	79	81	81	81	78	77	78	78	78	78	85	78	79	79	79	79	79	78	78	79	
	MIN	63	65	65	66	67	67	67	67	69	67	64	65	65	59	59	59	64	62	60	60	60	62	64	61	65	65	65	65	63	61	61	
OOKALA 223	MAX	82	82	82	83	82	82	82	79	79	79	76	78	78	78	73	73	78	78	79	75	78	78	78	78	71	85	77	76	77	78		
	MIN	68	66	64	68	63	65	68	67	67	65	65	66	64	64	64	63	63	65	67	63	59	60	62	68	65	59	58	64	64	66	61	
OPIHIHALE 2 24.1	MAX	78	77	77	74	73	75	76	73	75	76	77	74	74	75	76	74	76	72	73	75	75	72	72	74	75	75	72	75	75	73	74	
	MIN	61	60	59	59	61	60	60	64	64	58	57	58	58	57	57	57	57	55	56	55	55	56	56	58	57	57	57	57	57	57	58	
PAHALA 21	MAX	83	79	81	83	83	79	80	78	79	80	80	79	82	79	82	76	82	82	77	78	78	84	82	77	70	76	79	79	79	79		
	MIN	64	63	62	62	65	63	64	65	64	63	61	60	60	61	60	59	59	60	58	57	55	55	61	58	61	65	61	61	60	58	59	
UPOLU POINT USCG 159.2	MAX	84	86	84	85	85	81	81	80	80	80	78	79	79	79	76	77	78	79	81	80	82	79	79	79	79	76	77	81	81	87	80	
	MIN	72	71	72	72	69	70	70	71	70	66	67	67	67	67	66	66	67	66	71	69	66	65	67	70	70	68	67	67	67	68	68	

EVAPORATION AND WIND

Station		Day Of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * * ISLAND OF KAUAI																																	
LIHUE W8 AP 1020.1	EVAP	.10	.18	.12	.22	.23	.15	.23	.25	.21	.24	.20	.14	.15	.33	.31	-	.20	.16	.15	.24	.19	.17	-	.15	.17	.17	.14	-	.30	.20	.16	
	WIND	71	59	67	98	61	55	127	195	233	232	188	108	115	222	241	103	76	75	63	116	103	70	78	184	349	244	164	197	239	136	88	
	MAX	82	84	86	84	80	83	84	81	78	80	79	83	76	80	74	80	81	80	80	78	77	79	84	80	82	85	81	70	77	79	82	
	MIN	63	62	66	63	59	58	64	67	68	67	67	66	64	62	61	60	58	57	59	59	57	57	57	60	63	65	65	63	60	63	65	
* * * ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.15	.28	.03	.10	.12	.25	.15	.15	.15	.30	.12	.15	.15	.15	.19	.15	.10	.15	.15	.15	.11	.15	.15	.15	.22	.14	.16	*	.08	.15		
	WIND	42	19	11	40	22	16	17	21	37	37	29	18	20	24	31	19	10	17	20	33	17	8	16	20	68	51	23	58	36	19	4	
	MAX	89	90	88	87	81	86	87	84																								

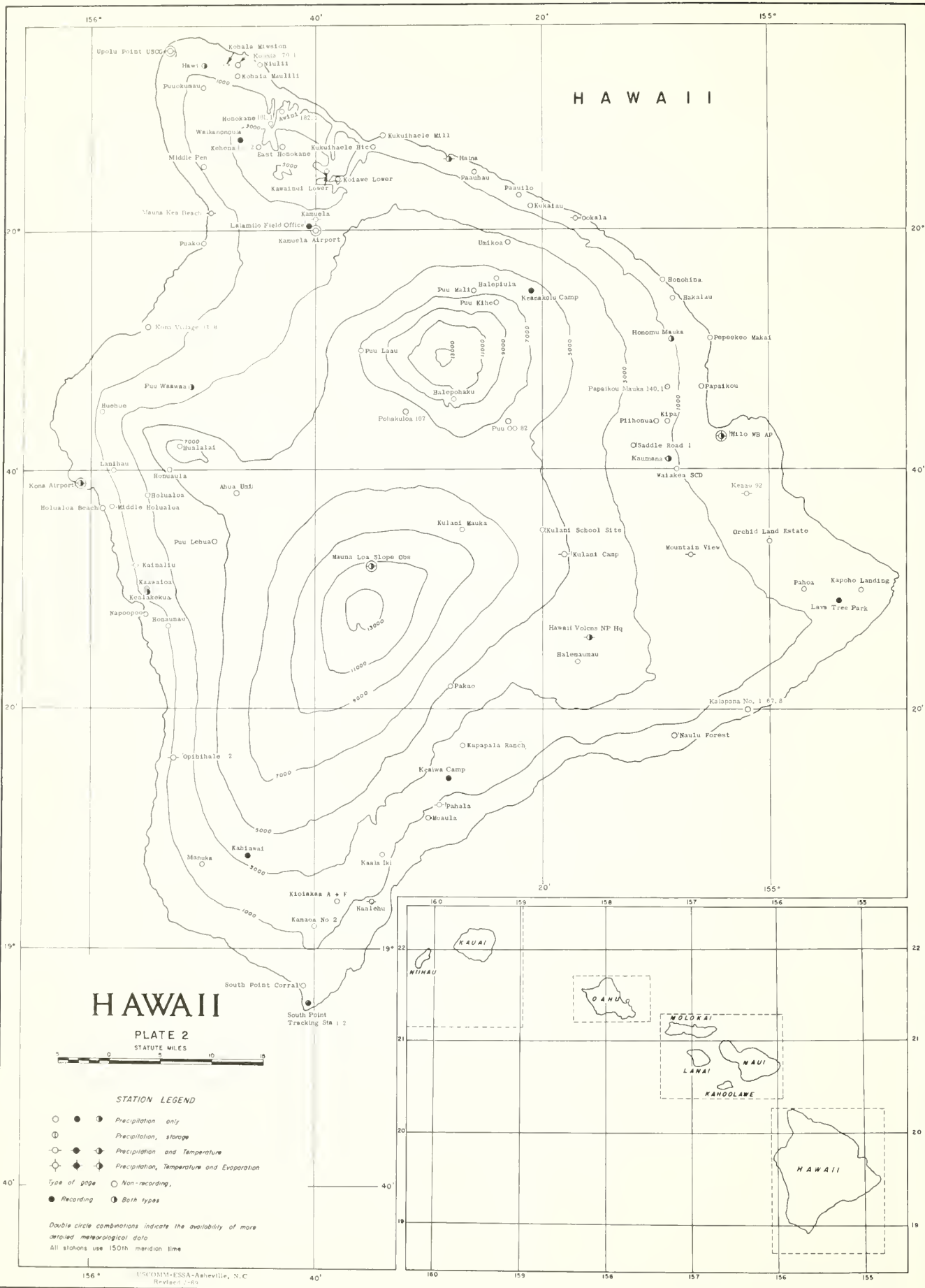
DAILY PRECIPITATION

HAWAII
DECEMBER 1969
DELAYED DATA

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
• • • APRIL 1969																																	
MOUNT WAIALEALE 1047	30.83	3.27	2.80	.28	.31	1.22	.47	.79	.47	1.14	1.46	.94	.94	.20	1.30	.04	.63	1.14	1.50	.59	1.89	.28	.47	.24	.35			1.81	2.36	3.35	.59		
• • • MAY 1969																																	
KALAUPAPA 563 MOUNT WAIALEALE 1047	A 1.51 24.27	.51	1.50	.55	.43	3.35	*	*	*	*	*	*	*	1.28	.16	*	*	*	*	*	*	*	.07	*	*	*	*	*	*	*	*	*	
• • • JULY 1969																																	
MOUNT WAIALEALE 1047	39.20	.98	1.10	1.58	1.58	.16	.59	2.40	1.16	1.54	2.09	1.38	1.22	.98	.67	1.89	1.22	.32	1.38	5.79	2.92	.32	1.02	.43	1.46	3.07	.04			.24	1.65		

CORRECTIONS

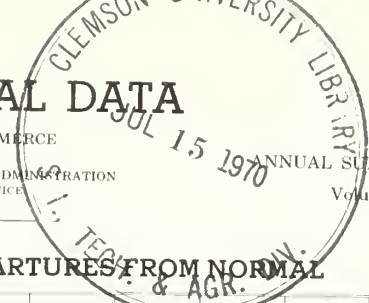
DATE	TABLE	ISLAND	STATION	CORRECTION
AUGUST 1969	DAILY TEMPERATURE	ISLAND OF KAUAI	NIU RIDGE 1035	MINIMUM TEMPERATURE 31ST 63; AVERAGE MINIMUM TEMPERATURE 63.0





CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE



HAWAII

ANNUAL SUMMARY 1969

Volume 65 No. 13

AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL

Table 1

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual			
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure		
ISLAND OF KAUAI																												
KANALOHUHU 1075	53.0		58.2		57.0		58.7		60.5		62.3M		65.0		65.2		64.5		61.6		59.8		57.7		60.3M			
KILAUEA POINT 1133	70.8M		70.4M		70.8		71.4		73.9		74.6		77.4		77.4		76.9		76.9		75.4		73.4		74.2M			
LIHUE WB AP 1020.1	65.8	- 5.1	70.5	- .2	69.9	- 1.1	72.0	- .5	75.4	- .9	78.3	1.7	79.5	1.9	80.0	1.6	79.5	1.4	77.1	- .2	75.6	1.1	73.3	1.1	74.7	- .2		
MAKAUENA POINT 940.1	69.5M		72.0M		73.0		72.9		76.6		79.0		80.0		80.1		79.4		78.6		76.8		74.9		76.1M			
MAKAUENA POINT 940.1	68.0M	- 3.1	72.1	1.1	71.6	- .4	72.8	1.1	75.0	- .3	78.0	1.3	79.0	1.1	78.6	1.3	77.9	1.0	76.5	- .5	74.5	- .2	73.0	1.1	74.8M	1.2		
ISLAND OF MAUI																												
NIU RIDGE 1035	65.4		69.2		68.7		68.5		69.7		71.7		74.0		73.4		73.4		72.2		70.8		70.7		70.6			
WAIHAI LOWER 1054	63.2		68.4		68.4		69.0		69.6		72.5		74.0		73.4		73.4		72.5		70.3		70.8		68.0			
ISLAND	64.2		67.9		67.5		68.8		70.9		73.7		74.7		74.9		74.3		72.7		71.2		68.9		70.8			
ISLAND OF OAHU																												
EWA PLANTATION 741	68.2	- 2.8	72.8	1.9	71.8	- .0	72.9	- .2	74.1	- .8	76.6	- .2	78.6	- .9	78.3	1.0	76.9	- .7	75.6	- 1.0	74.5	1.0	72.4	1.0	74.4	- .2		
HONOLULU MFC 703	69.1	- 3.4	73.9	1.5	73.6	- .8	74.7	- .5	76.7	- .8	79.1	1.2	80.9	2.1	83.2	3.8	82.0	2.8	80.5	2.3	78.7	2.8	76.5	2.9	77.4	- 1.5		
HONOLULU SUBSTA 704	69.7	- 2.3	73.9	1.5	73.6	- .8	74.7	- .5	76.7	- .8	79.1	1.2	80.9	2.1	83.2	3.8	82.0	2.8	80.5	2.3	78.7	2.8	76.5	2.9	77.4	- 1.5		
KAHUKU 912	69.8M	- 2.6	72.5M	1.9	71.8	- .0	72.9	- .2	74.1	- .8	76.6	- .2	78.6	- .9	78.3	1.0	76.9	- .7	75.6	- 1.0	74.5	1.0	72.4	1.0	74.4	- .2		
KANEHE MAUKA 781	69.0	- 2.5	71.0	- .2	70.6	- .7	71.4	- 1.1	74.2	- .0	76.4	1.5	77.5	1.0	77.4	1.3	76.3	- .5	75.7	- .4	74.3	1.0	72.4	1.0	73.9	- .2		
LUALUALEI 804	68.7M		73.8M		73.4		75.3		76.6		78.7		81.1		81.6		79.6		77.7M		76.3		73.6		76.4M			
MAKAPUU POINT 724	68.8		72.5		71.8M		70.9		74.7		77.1		77.1		75.6M		77.0		77.1		74.4		70.8		74.0M			
DPAEULA 870	66.3	- .5	66.7	0.0	67.0	- .2	68.4	1.4	71.5	1.7	73.9	2.3	74.3	2.1	74.4	1.4	73.9	1.7	73.3	1.9	72.3	2.1	70.1	1.0	72.3M			
PRI MAHANA 820.2	64.9		70.4		69.2		70.7		73.3		75.6M		76.4		76.1		74.9		73.8		72.6		70.1		72.3M			
WAIKIKI 717.2	69.3	- 2.2	71.1	1.9	69.2	- 1.1	71.0	- .5	73.3	- 1.1	75.6	1.3	76.6	1.4	76.1	1.6	75.0	1.3	74.4	- 1.0	73.5	1.1	70.8	1.0	72.9	- .5		
WAIMANALO EXP FARM	69.3M		74.0		73.9M		74.8		76.7		78.8		80.1		80.4M		79.6		77.7		76.3M		74.3M		76.3M			
ISLAND	68.1		71.8		71.1		72.3		74.6		77.0		78.0		78.1		77.6		76.4		74.9		72.7		74.4			
ISLAND OF MOLOKAI																												
MOLOKAI AP 524	68.2		70.7		71.9M		72.2		75.5		77.4		77.8		77.8		76.8		75.9		74.7		72.4		74.3M			
ISLAND	68.2		70.7		71.9		72.2		75.5		77.4		77.8		77.8		76.8		75.9		74.7		72.4		74.3			
ISLAND OF LANAI																												
LANAI CITY 672	64.7	- .9	67.6	2.1	67.8M	1.8	67.9M	1.9	69.5M	1.0	70.4	1.3	71.4M	1.8	70.9M	1.0	71.3M	1.1	71.4M	1.7	70.5M	1.1	68.4M	1.9	69.3M	1.7		
ISLAND	64.7	- .9	67.6	2.1	67.8	1.8	67.9	1.9	69.5	1.0	70.4	1.3	71.4	1.8	70.9	1.0	71.3	1.1	71.4	1.7	70.5	1.1	68.4	1.9	69.3	1.7		
ISLAND OF HAWAII																												
HALEAKALA RS 338	48.3		51.1		49.1		52.0		53.2		55.1		57.2		55.0		54.9		54.4		53.8		52.1		53.0			
HALEAKALA SUMMIT 338.4	40.9M		42.8		41.0		44.7M		44.4M		46.3M		49.4M		49.0M		47.6		50.0M		48.8		47.3		44.1M			
HANA AIRPORT 355	69.1		72.0		72.1		72.6		74.4M		75.4		77.0		76.7		76.7		75.6		74.8		72.3M		74.1M			
KANAPALI AIRPORT	70.6		73.1M		72.9		73.3M		75.4		78.6		78.6M		78.7M		77.9M		76.2M		74.6M		73.9M		73.9M			
KAHULUI WB AP 398	68.8	- 3.3	72.5	1.8	72.2	- .0	73.5	1.1	75.5	2.2	77.9	3.7	80.1	1.8	79.5	1.5	77.9	- .5	76.1	- 1.2	74.8	- .2	72.7	1.0	75.1	- .1		
KAILUA 446	67.2	- 1.2	67.9	- .2	67.8	- .3	68.1	- 1.0	70.4	1.0	72.6	1.7	73.6	1.9	73.4	2.2	72.8	- .5	72.0	- .5	71.0	1.0	69.1	1.0	70.5	- .2		
KEANAKAPU BEACH 260.2	70.1		73.4M		72.6		73.3		75.2		77.1M		78.4		78.4		77.4		75.9		75.1		73.1		75.1			
KULA SANATORIUM 267	57.7	- 3.7	62.5	1.4	60.8	- .4	62.1	- 1.1	64.4	1.9	65.7	1.8	67.0	1.0	66.5	- .2	66.1	- .4	65.1	- 1.1	64.8	1.4	62.7	1.4	63.8	- .2		
LAHAINA 361	70.6		74.3		73.7		74.0		76.0		77.7		79.1		78.6		78.3		77.0		75.9		74.2		75.8			
WAILUKU 392	70.2M	- 1.5	72.9M	1.6	72.9M	1.4	73.3M	1.7	74.9	1.5	78.4M	2.0	80.1	1.8	79.5	1.5	77.9	- .5	76.1	- 1.2	74.8	- .2	72.7	1.0	75.1	- .1		
ISLAND	65.3		68.3		67.7		68.6		70.5		72.0		73.2		72.6		72.1		71.5		70.0		68.1		70.0			
ISLAND OF HAWAII																												
HAINA 214	68.8	- .7	68.8	- .7	68.9	- .6	68.7	- 1.3	70.9	- .5	73.7	1.7	75.0	1.9	74.6M	1.1	74.5M	1.0	74.4	1.0	73.3	1.3	71.1	1.9	71.9M	1.0		
HAWAII VOLCNS NP HO 54	56.8	- 1.3	57.1	- .8	57.1	- .8	57.5	- 1.6	60.4M	- .2	62.5	1.5	63.1	2.2	63.1M	1.0	63.0	1.0	63.0	1.1	60.5	- .3	59.7	1.0	60.3M	1.4		
HILO WB AIRPORT 87	71.4	- .6	72.2	1.0	72.5	1.9	72.8	1.0	74.5	1.5	76.2	1.9	75.8	1.9	76.2	1.4	75.0	- .5	74.5	- .6	73.3	1.1	71.5	1.0	73.8	1.7		
KAINALIU 73.2	66.1		68.9		68.5		69.1		70.0		70.9		72.4		72.2		72.0		71.2		70.2		68.6		70.0			
KAMUELA 192.2	59.9		62.2		62.0		62.3		63.7		66.3		67.4		66.8		66.3		65.8		64.6		62.3		64.1			
KAMUELA AIRPORT 191	57.0		59.6		61.0M		61.8M		63.7		65.2		65.6M		66.9M		65.8M		64.3		63.0M		60.0M		62.6M			
KEAAU 92	70.6	1.3	70.5	1.2	71.0	1.7	70.8	1.3	72.7	2.2	75.0	1.3	75.0	1.6	74.7	1.4	74.3	1.6	74.7	1.3	73.1	1.5	71.7	1.7	72.8	1.2		
KEALAKEUA 26.2	67.0		69.5		69.1		69.0M		70.3		71.1		72.7		72.3		71.9		71.2M		70.4		69.3		70.4M			
KOHALA MISSION 175.1	69.2	- .3	69.7	1.3	69.7	1.3	69.5	1.0	71.9	1.0	74.4	1.0	74.8	1.7	74.6	1.1	74.5	1.1	74.1	1.0	72.7M	1.7	70.9	1.8	72.2M	1.2		
KONA AIRPORT 68.3	70.7		72.6		72.1		73.0		74.4		75.1		76.3		76.2		76.5M		74.9		74.2		72.7		74.1M			
KULANI CAMP 79	53.1M		53.3		52.3		53.0M		55.5M		57.1M		57.7M		57.3		5											

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

HAWAII
1969

Table 2

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual		
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	
ISLAND OF KAUAI																											
ANAHOU 1111	7.62	.90	2.79	-2.67	1.66	-4.55	1.61	-2.50	3.56	.61	1.99	.34	3.56	1.17	.97	-1.92	2.14	.01	2.77	-2.15	6.46	1.70	5.17	-.23	40.30	9.29	
BRYOESWOOD STA 985	9.07	1.88	16.75	10.59	2.11	-3.66	5.58	2.01	4.77	1.45	1.49	1.72	4.71	.61	3.64	-1.58	3.33	-.18	2.31	-2.75	5.86	1.29	3.33	3.61	62.88	3.20	
EAST LAMAI 934	7.65	.83	11.04	5.61	2.61	-3.39	9.04	4.66	5.08	1.28	1.79	2.02	5.75	-.78	3.28	-2.89	4.63	.49	3.18	-2.12	7.30	1.62	4.55	-1.69	67.24	2.98	
ELUELE 927	4.51	-1.24	3.45	1.51	.47	-2.88	2.30	.61	1.75	.43	1.18	-.18	1.11	-.15	.47	-1.63	1.03	-.41	2.00	-.71	3.60	.65	1.68	-3.50	24.55	6.17	
HAAUUA 1110	5.67	1.24	3.46	-1.89	2.59	-3.45	2.16	-1.70	4.30	1.32	1.12	-.79	4.12	1.86	2.21	-.69	2.21	-.08	3.36	-1.23	8.04	2.85	5.57	.05	44.81	5.03	
HALENANAHU 1006	7.67	9.24	3.00		5.90		7.24		2.25		7.75		3.14		5.25		3.43		9.20		8.13		72.22				
HUKILO 945	3.57		5.03		.25		.14		1.23		.72		1.13		.15		.19		3.71		.40		15.70				
LILILULUA INTAKE 1050	11.94		26.50		13.72		15.62		13.25		5.37		17.69		10.32		16.16		7.83		14.29		9.97		164.66		
INTAKE MAINHA 31088	14.40		5.99		15.72		17.94		23.84		9.04		16.66		8.17		8.64		8.51		12.42		26.47		177.22		
KALIHUAI RES 1131	17.51		13.33		9.52		8.60		13.72		6.48		11.58		6.92		8.38		6.26		10.89		14.15		125.34		
KANALOHULUHU 1075	27.85		5.53		2.16		2.25		3.90		2.11		3.14		1.65		2.36		2.78		5.59		7.17		66.49		
KANEHA RESERVOIR 1092	12.20		8.91		8.40		6.22		10.49		4.94		9.51		3.64		7.54		6.79		12.56		11.44		102.64		
KAPPA STABLES 1104	4.46		3.34		1.94		2.85		4.54		.89		5.01		1.28		2.23		2.41		9.36		5.52		44.33		
LIMU 927	4.42	-1.26	2.61	-2.08	1.78	-3.52	2.14	-1.22	3.44	1.25	1.04	-.59	3.74	1.83	1.01	-1.52	1.92	-.18	2.08	-1.72	6.07	1.60	4.90	-.07	35.37	7.34	
KEKAA 944	3.40	-.28	2.70	-.22	.31	-2.22	.00	-1.07	.39	-.39	-.16	-.18	.03	-.35	.06	-.91	.02	-.60	-.11	-1.73	4.07	2.48	.38	-2.91	11.63	8.44	
KILAUHA 1134	11.87	3.74	6.22	1.10	3.04	-4.35	3.41	-2.10	6.45	1.45	2.68	-.59	6.05	1.61	2.47	-2.52	4.37	-.76	2.68	-2.46	8.93	2.26	9.92	2.72	58.09	6.62	
KILAUHA FIELD 17 1135	16.84	6.75	9.21	1.03	5.17	-4.71	5.32	-2.49	8.15	.56	4.76	-.29	8.78	2.07	4.13	-3.56	6.08	.80	4.49	-2.58	10.72	2.44	12.33	2.82	95.98	2.84	
KILAUHA POINT 1133	9.27		3.22		2.34		1.41		6.06		4.98		5.84		3.96		4.50		2.72		7.93		6.06		58.79		
KOLO 1033	5.51		1.16		.23		.08		1.06		1.46		.32		.23		.10		.41		2.19		1.20		14.86		
KOLOA 936	8.37	1.46	9.85	3.61	4.04	-2.59	7.70	2.97	4.93	.58	2.09	-1.60	6.60	1.54	3.20	-2.82	5.11	-.73	4.60	-.71	8.19	2.12	7.24	-.38	72.42	4.91	
KOLOA MAUKA 994	11.12	1.95	14.10	4.77	4.12	-4.53	8.30	1.64	8.11	1.95	2.38	-3.34	8.01	.64	4.73	-4.07	7.11	.73	4.47	-3.47	8.67	.40	6.82	-3.37	87.94	7.30	
KOLOA RES 1137	15.36		9.10		4.64		4.66		7.88		3.91		9.28		4.35		6.73		7.17		9.97		10.78		93.83		
KUKULUA 935	7.85	2.49	5.71	1.24	1.14	-3.22	3.63	1.22	3.39	1.48	1.06	-.35	2.62	.56	1.75	-1.49	4.22	-.11	6.31	1.01	6.92	1.95	6.07	1.54	41.27	1.22	
LIMU VARIETY STA	6.65	.20	3.48	-2.24	2.70	-3.82	2.48	-1.38	3.77	.57	1.54	-.75	2.83	.05	1.05	-2.48	2.73	-.17	5.65	-.67	10.58	1.81	8.21	2.60	47.50	5.58	
LIMU WB AP 1020.1	4.97	-.54	1.94	-3.36	1.75	-2.81	1.52	-1.82	2.80	.21	.89	-.57	1.47	-.47	.83	-1.63	1.49	-.59	3.15	-.88	7.45	2.92	5.91	.73	34.17	8.83	
MAKAHANA POINT 940.1	9.18		2.99		.99		1.55		1.98		.89		.94		1.08		1.17		2.77		8.62		2.97		36.48		
MAKAWALI 965	3.76	-.13	1.95	-1.69	.59	-1.91	.09	-1.04	1.47	.61	.37	-.00	.31	-.30	1.10	-1.07	.56	-.32	.57	-1.68	2.99	.82	.49	-2.91	13.31	9.62	
HANA 1026	4.43	.37	1.48	-1.33	.09	-2.56	.07	-1.18	1.64	.26	.62	-.02	.25	-.31	1.19	-1.80	.50	-.76	-.32	-1.73	4.62	2.57	6.55	-2.65	13.39	8.66	
MOHINI UP CRUSS 1083	11.00		6.82		7.20		3.43		4.99		3.96		5.09		2.82		3.22		2.75		6.56		3.02		60.86		
MOLDOA 1145	11.96	5.05	6.28	-1.42	2.28	-4.20	1.77	-2.34	4.59	1.24	3.27	-.66	4.04	1.66	1.39	-1.66	2.23	.05	4.70	-.08	5.83	.82	6.11	.90	51.55	.84	
MOUNT WAIALEALE 1047	37.15		64.26		83.45		30.83		24.27		21.08		39.20		30.22		34.39		18.60		29.76		29.78		837.99		
NIU ROTOLE 1035	5.05		2.40		.21		.27		.81		1.31		.76		1.28		.29		.51		3.17		.98		16.05		
N WAHILUA DITCH 1051	18.05	31.21	13.15		15.44		12.78		17.42		17.34		10.70		17.01		17.02		9.79		17.00		10.22		180.64		
PM MAINHA 1115	32.40	22.17	27.82	16.17	23.25	8.80	18.25	5.98	16.03	6.87	6.98	1.00	9.72	-.36	5.81	-4.84	7.60	1.53	8.69	-.45	9.07	.90	23.45	9.86	189.07	66.73	
PRINCEVILLE RANCH 1117	15.31	6.98	9.25	1.87	5.78	-3.80	5.27	-1.51	15.01	8.67	5.69	.67	7.99	1.82	6.01	-1.31	5.99	1.17	3.69	-2.61	7.51	1.34	13.81	4.61	101.31	16.22	
STUEBE FIELD 1040	7.81		5.34		3.40		3.99		5.46		1.71		4.43		1.64		3.87		4.54		7.54		9.88		59.67		
RESERVOIR 6 1004	4.76	-.28	9.65	2.45	3.10	-3.91	5.72	6.44	5.17	.69	2.15	-1.61	6.55	1.21	3.92	-3.03	5.62	.87	4.17	-1.90	8.85	2.10	7.44	-.58	69.50	3.35	
MAHIAHIA 930	4.29	-.74	5.33	1.07	.47	-3.03	4.06	2.14	1.53	.03	.48	-.84	1.59	1.10	.62	-1.90	1.42	-.29	2.08	-.94	4.74	1.65	1.13	-3.36	27.74	6.31	
MAHIAHIA MOUNTAIN 990	32.50	19.21	24.16	11.83	13.09	.08	9.25	1.99	9.50	1.33	6.13	-5.15	17.00	3.02	1.15	-14.52	12.75	1.96	5.75	-9.56	14.25	1.45	9.50	4.62	155.03	3.98	
MAHAI LOWER 1054	11.49		17.37		7.64		9.99		9.34		3.03		12.20		9.32		9.32		5.55		12.25		7.87		114.35		
MAHAI UPPER 1052	14.97		24.16		10.14		13.05		11.49		3.97		13.67		10.52		12.84		6.25		12.42		9.15		142.03		
MAHIA 943	3.87	-.05	2.43	-.23	4.08	-2.24	1.71	-.98	3.18	-.64	1.07	-.19	1.38	-.40	.75	-.92	2.72	-.59	3.12	-1.80	7.48	4.44	4.22	2.65	44.81	8.28	
MAHIA KAI 1065	4.07		3.12		1.78		1.71		3.18		1.07		4.36		.75		2.72		3.12		7.48		9.15		37.90		
MAIMEA 947	3.43	-.25	3.69	-.29	.16	-2.20	.03	-1.10	.57	-.28	.32	-.04	1.17	-.30	.00	-1.04	.43	-.23	.51	-1.40	3.20	1.46	.21	-3.14	12.72	8.15	
WEST LAMAI 931	6.68	1.18	7.63	2.92	1.36	-3.04	6.78	4.26	3.18	1.15	1.11	-.71	2.67	.24	1.31	-1.93	2.50	.03	1.72	-1.97	6.45	2.15	3.52	-1.78	44.94	2.50	
ISLAND																											
	11.37		9.10		4.63		5.05		5.48		2.68		5.39		3.11		4.34		3.82		8.07		6.75		69.79		
ISLAND OF OAHU																											
AIEA FIELD 625 761	12.46	7.60	3.16	-1.75	3.08	-1.51	2.00	-.82	2.28	-.23	1.56	-.53	3.92	1.08	1.94	-1.24	1.54	-.64	1.71	-2.20	6.91	2.73	3.52	-1.90			

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

HAWAII
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Table 2—Continued

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
HAIALAIA KAHALA 715	8.20		1.48		.87		1.36		1.19		.41		1.33		1.31		1.92		.25		3.77		3.53		25.62	
HAIALAIA 847	7.94	3.84	4.17	.04	2.99	.81	1.07	.65	.57	.53	.47	.25	.72	.02	.52	.86	1.27	.48	.77	1.92	3.48	1.13	2.30	1.64	26.57	1.27
HAIANAE 798	14.37	10.58	3.52	2.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HAIANAE MAUKA 803	17.83	9.05	2.98	4.67	3.72	4.14	3.66	1.13	4.43	.28	2.39	.73	5.63	1.81	1.74	2.62	3.40	.13	5.30	.08	8.35	3.56	10.63	1.59	70.06	3.05
HAIANAE 836	19.92	8.28	21.53	8.59	12.23	1.61	4.88	6.52	15.87	3.02	9.86	.98	18.38	5.08	14.84	.43	8.45	1.52	7.30	3.72	14.13	2.03	18.63	3.14	158.97	10.18
HAIKANE 885	24.04	12.17	41.25	28.03	17.83	2.59	16.35	2.35	15.87	4.01	8.34	.36	13.26	2.50	9.15	2.52	12.23	1.69	9.18	2.77	4.73	6.43	21.17	6.93	193.40	48.91
HAIKUKI 717.2	8.30		.83		.52		.50		1.83		.84		.79		.60		1.13		.18		3.90		1.49		20.91	
HAILUPE RESV. 723.2	9.92		4.63		3.94		2.89		2.17		3.30		2.30		2.63		1.16		1.16		3.58		1.49		45.05	
HAIMALALO 794	12.08		7.05		3.81		1.78		3.05		1.53		1.99		1.09		-		-		-		-		-	
HAIMALALO EXP FARM	-		-		-		-		-		-		-		-		1.60		1.08		2.44		5.37		-	
HAIMEA 892	10.07	4.69	9.44	3.54	4.72	.62	3.16	.09	2.22	.44	1.64	.40	4.00	1.01	2.61	.83	2.85	.93	2.70	1.21	5.08	.91	6.32	.80	54.81	7.79
HAIPAHU 750	13.76	9.68	1.62	2.07	1.21	1.97	1.12	1.33	1.53	1.77	.57	.26	.34	.51	.18	.25	1.02	.06	1.18	1.16	5.31	2.75	1.39	2.15	28.61	2.48
WILHELMINA RISE 721	9.22	4.59	4.86	.84	4.86	.34	4.08	.88	1.52	.92	3.10	1.64	3.94	1.58	3.50	1.25	2.80	.94	1.10	2.18	4.46	1.42	5.84	1.56	48.58	11.94
ISLAND	13.39		9.29		6.15		3.88		3.36		2.45		4.29		2.74		3.23		2.36		5.14		5.83		62.11	
ISLAND OF MOLOKAI																										
KALAUAPAPA 563	6.42		7.95		18.13		3.48		1.51		.15		1.21		1.10		3.14		1.34		1.81		3.46		49.70	
KAIUNAKAI 536	7.44		.00		.00		.00		.00		.00		.00		.00		.00		.00		.00		.54		7.98	
KENELELE PEHS 551	8.27		.39		2.38		1.09		2.12		.57		1.17		.50		3.28		2.20		2.26		2.70		19.20	
KUALAPU 534	11.52	7.38	3.11	.43	5.45		2.12	.94	2.15	.57	1.17	.50	3.23	.09	3.58	.84	1.32	.54	2.48	.06	1.36	1.74	1.40	.79	35.90	5.59
MAPULEHU 542	9.93	6.07	3.86	.24	4.51	.29	2.68	.37	1.71	1.00	1.94	.25	3.28	.29	3.02	.92	3.64	1.04	2.67	1.74	1.26	2.39	4.44	.23	43.99	3.85
HAUNALOA 511	9.22	4.95	.55	2.53	1.13	2.64	.96	1.35	.53	.94	.50	.25	.93	.33	.11	1.09	.91	.20	.62	1.75	.62	2.13	1.74	1.76	17.82	10.02
HAUNALOA AP 524	10.33		10.77		10.77		10.77		10.77		10.77		10.77		10.77		10.77		10.77		10.77		10.77		10.77	
PUUOHOKU RANCH 542.1	12.45		3.00		3.87		2.02		1.08		1.68		2.53		2.65		1.32		1.61		.78		3.05		26.37	
WAIKIDLU 540	17.34		10.77		16.72		6.81		3.45		1.74		2.53		3.77		6.11		6.73		3.68		17.74		118.84	
ISLAND	10.18		2.34		3.58		1.72		1.34		1.32		1.48		1.18		1.80		1.85		1.01		3.18		30.98	
ISLAND OF LANAI																										
KANEPU 690	7.48		.48		1.01		.29		.07		1.15		1.16		.86		.83		.25		.37		4.72		18.77	
KAUNAKAKAI 536	6.41		.00		.00		.00		.00		.10		.44		.26		.03		.00		.38		.75		5.84	
LANAI CITY 872	11.16	6.54	1.91	1.82	6.94	.99	2.03	1.99	2.03	.66	1.47	.25	3.20	1.48	1.25	1.96	.31	1.73	1.62	2.88	2.34	4.73	1.01	73.29	1.70	
LANAIHALE 684	6.74		2.63		6.45		1.55		2.76		.93		2.19		.94		1.36		2.43		1.10		1.34		30.02	
MAHANA 694	10.61		.29		1.08		.04		.04		.56		.33		.02		.30		.29		.38		2.14		16.13	
HALALUA 676	10.28		.39		.00		.00		.37		.00		.38		1.14		T		.06		.24		.66		13.52	
WAIKAEKUA 685	17.64		1.17		2.27		1.27		.66		.17		.53		.23		.69		.69		.51		1.66		27.49	
ISLAND	11.16		1.91		3.34		.93		2.01		1.67		3.20		.53		1.96		1.33		.52		4.73		33.29	
ISLAND OF MAUI																										
AUWAHI-252	12.34		2.90		2.64		.16		1.30		.62		.18		.56		1.49		.72		.92		2.06		25.89	
HALEKAKALA R E 5 434	13.90	6.50	24.18	15.06	17.55	8.34	18.70	10.74	5.40	1.00	2.15	.63	10.04	5.91	4.69	.01	3.54	1.24	2.38	1.91	5.08	1.16	20.53	10.07	128.14	55.17
HALEKAKALA RANCH 432	10.75	4.92	8.61	2.13	7.37	1.59	8.66	4.04	2.63	.79	1.12	.24	4.24	2.72	1.42	.75	1.49	.17	1.36	1.31	2.81	.63	11.26	4.63	61.74	18.54
HALEKAKALA RS 338	15.03		10.17		6.84		1.09		1.09		.74		6.02		1.12		1.32		1.05		.98		6.16		72.18	
HALEKAKALA SUMMIT 338.4	18.14		13.08		3.10		1.79		.70		.74		.46		1.10		1.32		1.05		.98		6.16		47.88	
HALIIMALE 423	10.11		9.08		7.92		6.44		2.71		1.06		4.32		2.40		1.94		.93		2.68		9.04		58.63	
HAMAKUAPOKO 485	8.34	3.57	9.62	4.92	12.21	6.67	5.54	.65	2.46	.82	1.10	1.67	1.90	6.56	2.86	4.97	2.33	2.01	1.46	2.50	1.93	9.17	3.08	69.34	20.50	
HANA 354	11.87		8.49		7.87		7.88		2.53		1.66		7.31		5.97		5.55		2.58		3.46		9.15		74.32	
HANA AIRPORT 355	11.87		14.11		9.83		7.05		8.71		3.21		8.80		7.93		5.65		2.50		4.17		7.82		91.65	
HANAHULI 281	16.74		20.64		10.50		9.93		6.71		3.59		12.08		9.57		7.81		3.84		5.01		6.91		113.33	
HOLUA CABIN 259.5	22.60		12.70		2.11		8.24		1.21		.81		4.03		3.57		2.18		2.18		2.52		12.52		73.64	
HONOKOHU 490	9.82		11.76		9.24		11.55		3.85		16.24		5.20		11.10		9.50		5.10		6.30		15.00		114.66	
HONOKOHU 493	11.83	7.77	7.61	3.87	6.61	2.53	2.55	.63	1.44	.82	1.51	.17	3.63	1.25	4.23	1.65	1.85	.17	1.08	1.60	1.28	2.04	5.76	1.11	49.38	13.09
HONOKOHU GULCH 341	35.60		15.90		22.00		8.24		2.80		1.60		14.60		11.20		5.00		2.00		5.00		27.00		184.20	
KANAPALI AIRPORT	8.19		1.02		3.33		1.74		.22		1.01		.80		.44		.34		.34		.43		2.21		20.07	
KAHOMA INTAKE 374	15.13	5.78	36.46	26.54	30.23	18.65	12.67	3.54	4.06	4.31	3.81	3.34	16.81	8.09	7.17	.50	8.78	4.17	3.50	2.34	4.61	3.14	18.60	5.42	161.77	58.52
KAHOMA WR 49 398	25.36	4.61	4.95	1.97	1.95	1.73	3.35	2.42	.62	.42	.19	.19	1.53	.10	.34		1.24		.58		.50	1.02	3.81	3.11	25.21	8.88
KAILIILL 4																										

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual		
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	
MAILUKU 392	7.97	4.18	3.82	-.03	2.95	-.79	2.65	-.05	1.34	-.08	.85	-.51	-.45	-.26	.75	-.11	-.16	-.44	.55	1.31	2.35	1.99	3.62	-.70	25.47	-.91	
WAIPIAI RANCH 256	9.93	5.94	8.61	5.21	2.78	-.62	1.00	1.92	1.04	1.06	1.00	-.22	-.25	-.08	-.69	-.25	-.18	-.77	.82	-.82	2.08	-.28	2.36	1.01	28.94	6.26	
ISLANDO	12.33		15.03				8.58		4.21		2.27		6.47		6.44		3.91		1.58		3.12		9.78		85.48		
ISLAND OF HAWAII																											
AMU UNI 75	6.80	4.73	2.40	.23	1.40	-.19	1.10	1.18	2.10	-.36	.80	-.87	1.00	-.87	.90	-.20	2.09	1.10	1.52	1.10	1.79	2.23	1.37	1.35	-.07	18.28	-6.66
AMINI 182.1	18.42	7.80	39.61	28.18	29.19	13.14	28.46	11.53	8.23	-.41	7.31	-.86	9.70	-.90	17.59	5.28	6.40	-.07	2.91	5.77	7.20	3.01	11.70	2.19	186.79	47.09	
EAST HONOHANE 183.2	21.42	6.29	25.00	12.07	23.64	6.18	8.12	6.15	7.23	5.47	18.43	2.17	20.76	6.37	6.93	1.87	5.63	-.84	3.56	8.42	11.75	6.31	178.08	4.76			
HAINA 214	7.51	2.65	24.54	17.82	15.04	6.48	14.62	8.53	4.66	-.26	4.72	2.80	4.69	1.23	10.31	5.67	3.28	-.99	1.56	3.69	5.40	-.27	5.83	1.87	102.16	38.10	
HAKALUA 142	10.92	-.27	19.14	35.56	13.81	16.91	21.08	6.95	6.94	-.29	2.52	4.31	12.74	2.91	19.50	7.72	6.61	1.31	2.15	9.10	6.72	5.62	11.03	-.39	181.15	45.06	
HALEKUNAHU 52	20.40		10.34		5.22		2.98		1.70		1.56		1.87		3.94		1.70		.94		1.86		1.41		53.92		
HALEPIHUA 117	3.05	-.67	7.11	1.37	4.25	-.27	4.58	-.51	-.94	1.25	1.11	-.08	1.55	-.08	6.00	2.23	1.43	1.21	.33	3.18	1.45	1.80	2.29	3.16	33.09	9.87	
HALEPOHUKU 111																											
HAWAII VOLCNS NP MO 54	22.34	10.12	28.37	18.12	14.29	2.31	11.10	2.70	5.00	1.07	1.94	2.59	9.13	4.01	10.59	3.00	5.17	-.08	1.99	4.89	6.24	3.94	3.76	6.38	11.92	21.47	
HAWI 168	8.41	3.71	10.74	6.40	9.06	3.88	5.91	-.87	2.53	1.03	2.24	-.72	3.41	-.52	6.21	2.02	2.31	-.04	1.35	2.26	5.00	-.98	4.59	1.33	61.78	12.02	
HILD #8 AIRPORT 87	19.66	7.84	43.66	30.72	30.64	15.94	14.57	2.65	7.83	1.50	2.76	4.03	11.75	1.93	17.50	6.05	7.24	1.26	3.19	7.61	6.33	7.04	8.10	7.08	173.23	36.61	
HOLUALOA 70	17.20	12.69	3.25	1.06	6.20	-.04	6.40	-.77	7.60	2.40	6.80	2.91	8.60	-.22	10.40	8.55	5.20	2.91	1.20	4.67	2.50	1.64	2.40	-.06	83.75	4.00	
HOLUALOA BEACH 68	6.12	3.82	1.00	1.86	1.55	1.92	2.59	-.28	1.26	1.37	3.99	-.66	5.11	2.57	3.18	1.32	4.85	2.14	1.97	1.51	1.52	-.22	2.73	1.17	32.89	4.95	
HONAKAU 27	7.25	1.24	2.48		5.32		6.37		6.37		3.30		9.44		13.51		7.22		5.40		3.43		3.29		68.25		
HONOHINA 137	11.99	-.24	54.59	38.94	39.48	21.54	22.49	7.00	8.63	-.68	3.23	4.49	13.27	1.30	23.97	10.23	7.00	2.15	2.21	10.66	6.14	7.57	13.03	4.16	206.09	46.54	
HONOKANE 181.1	20.06	8.51	35.70	24.17	25.91	8.83	29.26	12.61	5.38	-.01	6.45	2.55	12.82	1.14	16.44	4.02	6.33	-.62	3.22	4.89	8.08	5.25	12.74	3.66	183.79	39.24	
HONOHANA NAUKA 138	22.38	3.32	81.55	63.23	48.29	27.17	35.15	16.17	14.05	1.20	6.43	4.06	18.89	3.89	31.79	14.14	13.31	1.58	4.35	11.30	9.94	7.65	16.28	5.32	303.41	103.91	
HONOHANA 71	12.20	8.43	4.70	1.27	4.80	1.20	1.70	1.17	2.40	2.23	3.10	1.00	2.80	1.27	6.00	3.46	1.20	2.14	.30	1.92	1.72	-.08	.80	-.75	42.02	2.84	
HUALALAI 72	3.80	2.04	5.40	3.59	2.20	-.15	1.84	-.55	1.78	1.08	1.10	-.31	1.80	-.71	1.22	-.20	1.50	-.25	1.00	1.94	.98	1.38	-.22	-.40	18.84	1.68	
HUEHUE 92.1	10.00	5.87	1.83	-.88	3.12	-.59	3.50	-.49	3.20	1.47	3.27	1.23	2.15	-.35	4.00	2.72	4.19	-.96	1.63	1.96	1.00	2.98	3.04	.96	35.93	4.13	
KAALA 1K1 12	15.66		5.51		2.62		3.59		5.13		2.58		1.37		6.30		4.25		5.11		4.41		1.67		58.25		
KAALAWA 29	6.99	3.26	1.06	2.34	1.13	3.77	4.59	-.37	5.43	-.94	2.95	3.74	5.18	1.90	7.30	1.71	4.88	2.03	2.99	2.83	1.23	2.35	2.78	-.05	46.51	16.35	
KAINALU 73.2	6.37	4.41	1.08	2.31	1.13	4.15	3.47	2.19	6.12	1.58	3.84	4.11	6.28	2.16	7.90	4.21	3.07	1.22	3.75	3.97	1.00	1.27	1.52	-.08	92.10	17.26	
KALAPANA NO 1 67.8	20.94		22.25		11.23		3.36		4.99		1.28		4.58		5.94		4.80		6.13		2.25		2.25		92.10		
KAMADA NO 2 5.5	10.31		1.56		1.29		1.88		1.91		1.84		2.41		5.08		4.17		2.29		.83		.83		29.28		
KAMUELA 192.2	6.89	2.58	4.34	1.12	2.24	2.03	5.36	1.47	1.53	2.13	1.18	-.60	1.67	-.97	3.00	-.08	1.35	-.05	.55	1.74	1.30	1.37	3.10	1.59	31.61	6.29	
KAMUELA AIRPORT 191	6.58		1.31		1.79		3.05		1.79		1.79		1.79		1.79		1.50		.73		.73		.49		17.46		
KAPAPA RANCH 36	19.35	10.34	5.48	2.05	3.53	3.81	2.74	2.36	3.70	-.31	1.46	-.64	1.83	-.32	3.29	1.09	3.55	-.54	3.97	1.63	1.26	4.97	1.03	3.64	51.11	19.12	
KAPPOD LANDING 93.5	21.72		30.42		10.42		11.94		11.03		3.07		10.82		11.25		7.18		5.08		6.66		5.23		134.10		
KAUNAHUA 88.1	20.10		70.10		34.47		35.69		10.78		4.59		20.91		32.29		13.58		4.02		10.17		8.90		265.60		
KAUNAHU LINDER 193	15.68	2.49	38.47	23.80	19.94	-.22	35.50	14.52	14.73	2.83	11.64	1.17	14.49	1.16	23.90	6.95	5.79	1.94	8.17	3.04	4.36	7.08	20.10	1.73	212.77	34.37	
KEAUA 92	15.58	3.02	50.19	36.70	31.73	16.19	21.60	9.24	9.54	-.30	3.39	4.47	12.28	2.14	21.26	9.51	9.51	4.66	4.25	8.13	5.55	8.38	7.39	8.78	192.33	47.18	
KEALEKAUA 26.2	7.17		1.49		1.62		4.62		6.30		3.12		5.31		8.06		3.07		1.98		1.98		1.98		12.70		
KEHENA 181.2	19.09	8.77	23.75	13.69	21.34	8.66	13.60	9.8	4.67	-.64	4.65	2.70	12.50	2.95	14.10	4.91	3.88	-.99	3.30	2.85	2.93	5.36	9.35	3.59	133.18	20.03	
KIDILAKAA A & F 6	12.30	4.91	5.70	1.58	3.00	3.05	2.30	2.87	3.70	1.34	3.78	1.40	7.40	1.92	14.80	8.23	4.00	1.92	5.60	3.5	7.40	1.82	1.00	3.47	70.98	.60	
KIPA 89.2	22.82		75.72		43.30		37.83		12.83		4.59		22.36		40.80		13.88		5.36		12.23		9.52		301.24		
KOHALA 179.1	7.83	3.06	9.97	5.49	10.50	4.76	8.95	2.26	6.79	1.45	4.59	-.97	6.19	1.41	4.00	2.77	3.11	-.22	1.34	3.19	1.17	5.54	-.91	67.09	10.46		
KOHALA MAUI 176	10.20	3.27	22.70	15.74	14.75	5.97	9.49	-.00	3.12	3.61	3.94	1.24	6.21	-.61	8.55	1.61	3.54	-.53	1.70	4.38	5.34	1.10	5.90	3.37	95.44	11.93	
KOHALA MISSION 175.1	9.56	4.10	14.76	9.62	10.87	4.38	9.34	2.56	3.16	1.59	2.83	-.85	5.42	-.22	8.82	3.15	3.22	-.28	1.92	3.04	5.73	1.71	6.02	1.23	81.25	18.29	
KOIAWE LINDER 196	11.94	3.03	19.77	9.43	14.57	1.59	18.08	4.78	7.24	3.09	6.07	-.59	9.17	1.22	11.39	3.1	4.12	-.17	5.23	1.76	2.56	4.34	12.77	9.4	122.80	9.40	
KONA AIRPORT 68.3	5.73		2.56		.11		1.85		2.14		3.63		4.00		1.76		2.73		.35		1.21		1.09		27.16		
KONA VILLAGE 93.8	5.18		.30		.43		1.08		2.30		1.22		.24		.78		.04		.00		.53		.17		10.87		
KUKIAU 222	19.14	11.49	49.02																								

Table 3

TEMPERATURE EXTREMES

HAWAII
1969

Station	Highest	Date	Lowest	Date	Station	Highest	Date	Lowest	Date
* * *					* * *				
ISLAND OF KAUAI					ISLAND OF MAUI				
KANALOHULUHULU 1075	78	10- 8+	33	1-20	HALEAKALA RS 338	76	5-24	30	1-24+
KILAUEA POINT 1133	92	6-15	48	12-28	HALEAKALA SUMMIT 338.4	70	5-23	21	1-17
LIHUE WB AP 1020.1	89	6-15	50	1-22	HANA AIRPORT 355	86	6-26+	53	1-20
MAKAHUENA POINT 940.1	93	7-28+	54	1-25	KAANAPALI AIRPORT	89	8-28+	55	1-22
MANA 1026	92	8-18+	54	1-22	KAHULUI WB AP 398	93	7-27	48	1-20
NIU RIDGE 1035	87	7-31+	51	1-23+	KAILUA 446	85	11-16	52	1-21
WAIHAI LOWER 1054	86	6-15	44	1-23+	KEAWAKAPU BEACH 260.2	95	7- 1	53	1-28+
* * *					KULA SANATORIUM 267	81	9-14	41	1-26
ISLAND OF OAHU					LAHAINA 361	92	7-14	56	1-20
EWA PLANTATION 741	88	8-27+	51	1-20	WAILUKU 392	-	-	56	1-26+
HONOLULU WBFC 703	92	8-27+	52	1-20	* * *				
HONOLULU SUBSTA 704	86	10-25	59	1-26+	ISLAND OF HAWAII				
KAHUKU 912	89	3-12	53	1-20	HAINA 214	85	10-27+	53	1-21
KANEOME MAUKA 781	90	11-25	55	1-25	HAWAII VOLCNS NP HQ 54	79	7-12	39	1-21
LUALUALEI 804	90	8-29+	52	1-20	HILO WB AIRPORT 87	90	6-24	54	1-23
MAKAPUU POINT 724	89	9-16	52	12-28	KAINALIU 73.2	83	10-27+	52	1-27+
OPAELUA 870	88	6-14	50	1-21+	KAMUELA 192.2	82	11-16+	40	1-26
PRI WAHIAWA 820.2	90	11- 2	47	1-21+	KAMUELA AIRPORT 191	84	3-11	36	2-25
WAIALUA 847	91	7-29	49	1-20	KEAAU 92	90	1- 3	55	1-25
WAIKIKI 717.2	91	6-17	51	1-20	KEALAKEKUA 26.2	83	10-27+	54	1-24
WAIMANALO EXP FARM	-	-	-	-	KOHALA MISSION 175.1	84	10-27+	57	1-20
* * *					KONA AIRPORT 68.3	88	8-17+	36	1-26+
ISLAND OF MOLOKAI					KULANI CAMP 79	78	12-22	32	1-27
MOLOKAI AP 524	87	10-28+	52	1-20	MAUNA KEA BEACH 98	95	10- 9	55	2-14
* * *					MAUNA LOA SLOPE OBS	66	5-31	22	1-23
ISLAND OF LANAI					MOUNTAIN VIEW 91	86	6-17	48	1-21
LANAI CITY 672	83	12- 3+	52	1-26+	NAALEHU 14	85	12-22+	59	12-16+
					OOKALA 223	85	12-27+	56	4-25
					OPIHIHALE 2 24.1	86	6-30	50	1-25+
					PAHALA 21	88	7-14	54	2-27+
					UPOLU POINT USCG 159.2	88	9-23	59	1-21

See Reference Notes Following Station Index

TOTAL EVAPORATION AND WIND MOVEMENT

HAWAII
1969

Table 4

Station		Jan	Feb.	Mar	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
* * * ISLAND OF KAUAI														
LIMU E WB AP 1020.1	EVAP	5.08	-	7.82	8.24	9.058	9.48	10.01	12.36	10.77	8.16	6.658	6.058	-
	WIND	244.1	-	470.9	563.8	377.5	362.8	354.1	412.98	611.7	398.9	370.1	433.7	-
	MIN	58.4	-	63.5	64.5	66.5	68.7	70.4	70.2	68.8	66.9	66.1	62.4	-
* * * ISLAND OF OAHU														
KONDOLULU OBSERV 702.2	EVAP	3.538	4.78	6.34	7.50	8.89	8.18	9.84	9.67	7.57	6.268	5.308	4.60	82.46
	WIND	64.8	130.2	95.8	139.3	103.5	86.5	126.5	113.3	79.6	63.3	69.1	80.3	1152.2
	MAX	79.2	84.0	87.2	87.3	93.7	94.5	92.3	92.7	89.6	90.4	86.0	83.3	88.4
	MIN	61.1	65.3	63.8	65.2	67.6	69.8	70.5	69.9	68.9	67.4	65.9	63.2	66.6

NAME

RELOCATION AND CHANGES OF EQUIPMENT

DATE

ISLAND OF KAUAI

KALIHUAI RESERVOIR 1131
KANEHA RESERVOIR 1092
WAIMEA 947

EQUIPMENT MOVED 1,000 FEET WSW
EQUIPMENT MOVED 600 FEET SW
EQUIPMENT MOVED 200 FEET ESE

MAY 15, 1969
JANUARY 1, 1969
MARCH 1, 1969

ISLAND OF OAHU

WAIANA E 798

EQUIPMENT MOVED 1,500 FEET SSW

APRIL 1, 1969

ISLAND OF HAWAII

KONA VILLAGE 93.8
KOAWALOA 29
KULANI MAUKA 76
NAALEHU 14
SOUTH POINT CORRAL 3

EQUIPMENT MOVED 600 FEET S
EQUIPMENT MOVED 125 FEET N
EQUIPMENT MOVED 25 FEET NE
EQUIPMENT MOVED 200 FEET W
RECORDING RAIN GAGE ADDED

JUNE 7, 1969
JULY 1, 1969
JANUARY 1, 1969
APRIL 27, 1956
NOVEMBER 6, 1969

STATION INDEX

ISLAND OF KAUAI										ISLAND OF HONOLULU																
Station	Index No.	Division No.	DISTRICT	Drainage	Latitude	Longitude	Elevation	Temp.	Years of record	Opened or closed during yr.	Refer to tables	Station	Index No.	Division No.	DISTRICT	Drainage	Latitude	Longitude	Elevation	Temp.	Years of record	Opened or closed during yr.	Refer to tables			
								Precip.	Evap.	Month opened	Month closed									Precip.	Evap.	Month opened	Month closed			
ALEXANDER RESV. 993	0140	02	KOOLA		2 21 57 159 32	1510						HOLKAI AR 524	6334	01	HOLKAI		1 21 09 157 04	450	18	20						
ANAHOLA 1111	0143	01	KAWAIAU		2 22 09 159 19	1114		39				PUGHKAI 524	6332	02	HOLKAI		1 21 08 156 58	6930	7							
BRVOSWOOD STA 985	0240	02	KOOLA		2 21 56 159 32	720		69				WAIKULU 540	9404	01	HOLKAI		1 21 08 156 53	3350	5							
EVAS LAVAL 934	0750	02	KOOLA		2 21 55 159 30	440		68				ISLAND OF LANAI														
EVAS 3 RESERV 1094.1	0450	02	KOOLA		2 22 06 159 12	310		69				KANEPU 690	3130	01	LANAI		1 20 52 157 00	1650	15							
EELELE 927	0470	02	KOOLA		2 21 54 159 34	163		69				KAMUHALEPA HARBOUR 658	3461	01	LANAI		1 20 47 157 00	30								
HALAULA 1110	0970	01	KAWAIAU		1 22 07 159 19	253		68				LANAI CITY 672	5284	01	LANAI		1 20 50 156 55	1820	36	47						
HAUANAHO 1060	1100	02	KOOLA		2 21 55 159 24	699		38				LANAIHOLE 684	5301	01	LANAI		1 20 49 156 53	3370	1							
HANALEI TUNNEL 1053	1170	01	KAWAIAU		1 22 05 159 28	1218						MAHANA 694	4570	01	LANAI		1 20 53 156 55	1430	15							
HUKIPO 945	2161	03	HAHANA		3 21 59 144 41	404		29				MAHOLEA 676	4612	01	LANAI		1 20 55 156 55	1190	7							
ILILILUA INTAK 1050	2222	02	LIHUE		2 22 02 159 28	1070		35				WAIKAKAUA 685	5021	01	LANAI		1 20 47 156 52	200	15							
INTAKE WAININA PC 1094	2227	01	HANALEI		1 22 09 159 34	690		35				ISLAND OF MAUI														
KAPAA STABLES 1104	3974	01	HANALEI		1 22 11 159 24	380		33				AWAHI-252	0175	02	HANA		2 20 37 156 20	2060	7							
KANALOHULUHUI 1075	3099	03	HAHANA		3 22 08 159 40	3600		50				FIELD 46 474	0941	04	HANA		4 20 59 156 38	1050								
KANEA RESERV 1092	3104	01	KAWAIAU		1 22 08 159 23	830		73				HALEKALUA 477	0790	04	LANAI		2 20 57 156 36	2960	3							
KAPAA STABLES 1104	3139	01	KAWAIAU		1 22 05 159 20	179		70				HALEKALUA RANCH 432	0999	01	HAWAII		1 20 50 156 19	1850	78							
KALIA 1112	3932	01	KAWAIAU		1 22 06 159 19	9		70				HALEKALUA SUMMIT 338.4	1008	02	HAWAII		2 20 43 156 16	9960	24	30						
KEKANA 944	2272	03	HAHANA		3 21 58 159 43	9		75				HALEMAKU 492.7	1010	02	HAWAII		1 20 55 156 17	690								
KILAUEA 1134	4571	01	HANALEI		1 22 13 159 25	317		67				HALIMAHOLE 423	1075	01	HAWAII		1 20 55 156 10	1070	6							
KILAUEA FIELD 17 1135	4580	01	HANALEI		1 22 11 159 24	415		39				HAKAPUPOKO 485	1016	02	HAWAII		4 20 55 156 21	320	86							
KILAUEA POINT 1133	4589	01	HANALEI		1 22 14 159 24	415	18	19				HANA 354	1122	01	HANA		1 20 45 155 59	120								
KITAND 1037.1	4650	03	HAHANA		3 22 02 159 41	2150		33				HANA AIRPORT 153	1125	01	HANA		1 20 48 156 01	81	19	19						
KOLO 1033	4735	03	HAHANA		3 22 04 159 46	36		33				HANAHUI 281	1148	01	HANA		1 20 41 156 01	323	21							
KOOLA 936	4742	02	KOOLA		2 21 55 159 28	240		63				HONOHONOHU 249.5	1074	02	HAWAII		2 20 47 156 13	700	9							
KOOLA MAUKA 994	4750	02	KOOLA		2 21 56 159 29	647		33				HONOHONOHU 490	1882	04	HAWAII		4 20 58 156 36	870	9							
KOOLKO RES 1137	4758	01	KAWAIAU		1 22 11 139 23	373		36				HONOHONOHU 493	1887	04	LANAI		4 21 00 156 39	135	42							
KUWILA 935	4802	02	HAHANA		2 22 13 159 25	100		37				HONOHONOHU 494	1914	04	HAWAII		4 20 58 156 36	870	9							
LIHUE VARIETY STA	5560	02	LIHUE		2 22 01 159 23	373		37				HONOHONOHU 741	1935	01	HAWAII		1 22 07 156 14	6260	3A							
LIHUE 1020	5575	02	LIHUE		2 21 59 159 22	207		63				HONOHONOHU 742	1935	01	HAWAII		1 22 07 156 14	6260	3A							
LIHUE WB SP 1020.1	5580	02	LIHUE		2 21 59 159 21	103		19	19			HONOHONOHU 743	1935	01	HAWAII		1 22 07 156 14	6260	3A							
MAKAHANA POINT 940.1	3785	02	KOOLA		2 21 52 159 27	52		12				HONOHONOHU 744	1935	01	HAWAII		1 22 07 156 14	6260	3A							
MAKALEI 903	5814	03	HAHANA		3 21 55 159 31	73		32				HONOHONOHU 745	1935	01	HAWAII		1 22 07 156 14	6260	3A							
MANA 1026	6092	03	HAHANA		3 22 02 139 40	11		56				KANAPALI AIRPORT	2307	04	LANAI		2 20 56 156 42	8	2							
MANA 1001	6097	02	KOOLA		2 21 55 159 28	300		60				KANAKOOLA MAUKA 422.3	2453	03	WAILUKU		4 20 59 156 33	950	50							
MOUNTAIN VIEW 1085	6098	01	HANALEI		1 22 05 159 20	3300		43				KANALUI WB SP 398	2372	03	WAILUKU		4 20 54 156 29	2700	50	14						
MOUNTAIN VIEW 1085	6099	01	HANALEI		1 22 05 159 20	3300		43				KAILIILI 430	2630	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 147	6585	03	HAHANA		2 22 04 159 37	5148		22				KAILIILI 444	2679	01	HAWAII		2 20 51 156 10	2520	49							
MOUNT WAILEALE 1																										

STATION INDEX

HAWAII
1969

CONTINUED

Station	Index No.	Division No.	DISTRICT	Drainage	Latitude	Longitude	Elevation	Years of record			Opened or closed during yr.		Refer to tables	
								Temp.	Precip.	Evap.	Month opened	Month closed		
ISLAND OF HAWAII														
MIDDLE HONOLULU 89.1	A	8288 04	N KONA	4	19 37	155 58	475	27						
MIDDLE PEA 147.1	A	6270 01	N KUHALA	1	20 06	155 50	1380	5						
MOLUKEA 18	A	8407 03	KAUAI	3	19 11	155 30	800	26						
MOUNTAIN VIEW 91	A	8352 02	PUNA	2	19 33	155 07	1430	37						
NAALEHU 14	A	8386 03	KAUAI	3	19 04	155 35	673	15						
NAPPODUD 28	A	8697 04	S KONA	4	19 28	155 55	398	2						
NALU FOREST 38.6	A	8731 02	PUNA	2	19 30	155 08	1400	5						
NIIHUI 179	A	6808 01	N KUHALA	1	20 14	155 45	75	86						
ODAKA 223	A	7131 02	N HILU	2	20 01	155 17	430	49						
OPINIHUALE 2 24.1	A	7106 03	S KONA	4	19 16	155 53	1270	12						
ORCHARD LAGOON EST 91.5	A	7185 02	PUNA	2	19 34	155 00	445	7						
PAAHUAU 217	A	7204 01	HAKAUA	1	20 03	155 28	418	80						
PAAULUO 221	A	7312 01	HAKAUA	1	20 03	155 22	800	67						
PAAULA 21	A	7421 03	KAUAI	3	19 12	155 27	878	60						
PAHOA 65	A	7457 02	PUNA	2	19 30	155 07	1700	60						
PAKAU 37	A	7643 03	KAUAI	3	19 22	155 28	5000	41						
PAPAIKOU 144.1	A	7711 02	S HILU	2	19 47	155 08	420	71						
PAPAIKOU "MAKA 146.1	A	7721 02	S HILU	2	19 47	155 08	1470	71						
PEPEKOE MAKA 144	A	8000 02	S HILU	2	19 41	155 05	100	79						
PIIHOHUA 89	A	8051 02	S HILU	2	19 44	155 10	1730	44						

↓ DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN
 5-NORTH-CENTRAL MOLOKAI: 1-(NO INTRA-ISLAND DIVISIONS) LANAI: 1-(NO INTRA-ISLAND DIVISIONS) MAUI: 1-NORTHEASTERN
 2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3630, Honolulu, Hawaii 96811, or to any Weather Bureau Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII".

DIMENSIONAL UNITS: Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F, precipitation and evaporation in inches, and wind speed in miles.

EVAPORATION: is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are monthly averages of daily extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 5-8 inches above the pan.

NORMALS: for all stations are climatological normals based on the period 1931-1960. "DEP" in Table 4 refers to departures from long-term means based on periods varying from 10 to 28 years which are used in place of normals.

STATION NAMES: Figures and letters following the station name, such as 181.1, are Pineapple Research Institute gage numbers.

DELETED DATA AND CORRECTIONS: will be carried in the June and December issues of Climatological Data.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- No record.
- + Also on earlier date (dates) or months.
- Amount included in following measurement.
- A The letter "A" shown following station name, (Table 2 and Station Index): Amounts carried in the monthly "Precipitation" column are for the period from last measurement of a preceding month through the last measurement of the current month. See Daily Precipitation Table of the monthly Climatological Data for the dates of measurement. Measurements made on the first of a month are credited to the last day of the preceding month.
- B Adjusted to a full month.
- E Amount is wholly or partially estimated.
- W One or more days record missing; if average value is entered, less than 10 days record is missing. See monthly Climatological Data for detailed daily record.
- R Amounts from recording gages.
- T Trace, an amount too small to measure.
- V Includes total for previous month. V in annual column means total is for a two-year period.

IF THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- # Thermometers are generally exposed in a shelter located a few feet above and covered ground; however, the reference indicates that the thermometers are exposed in a shelter located on the roof of a building.
- C is Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.
- S Storage precipitation station. Precipitation measurements, made at irregular intervals, will be published in the December issue of Climatological Data.

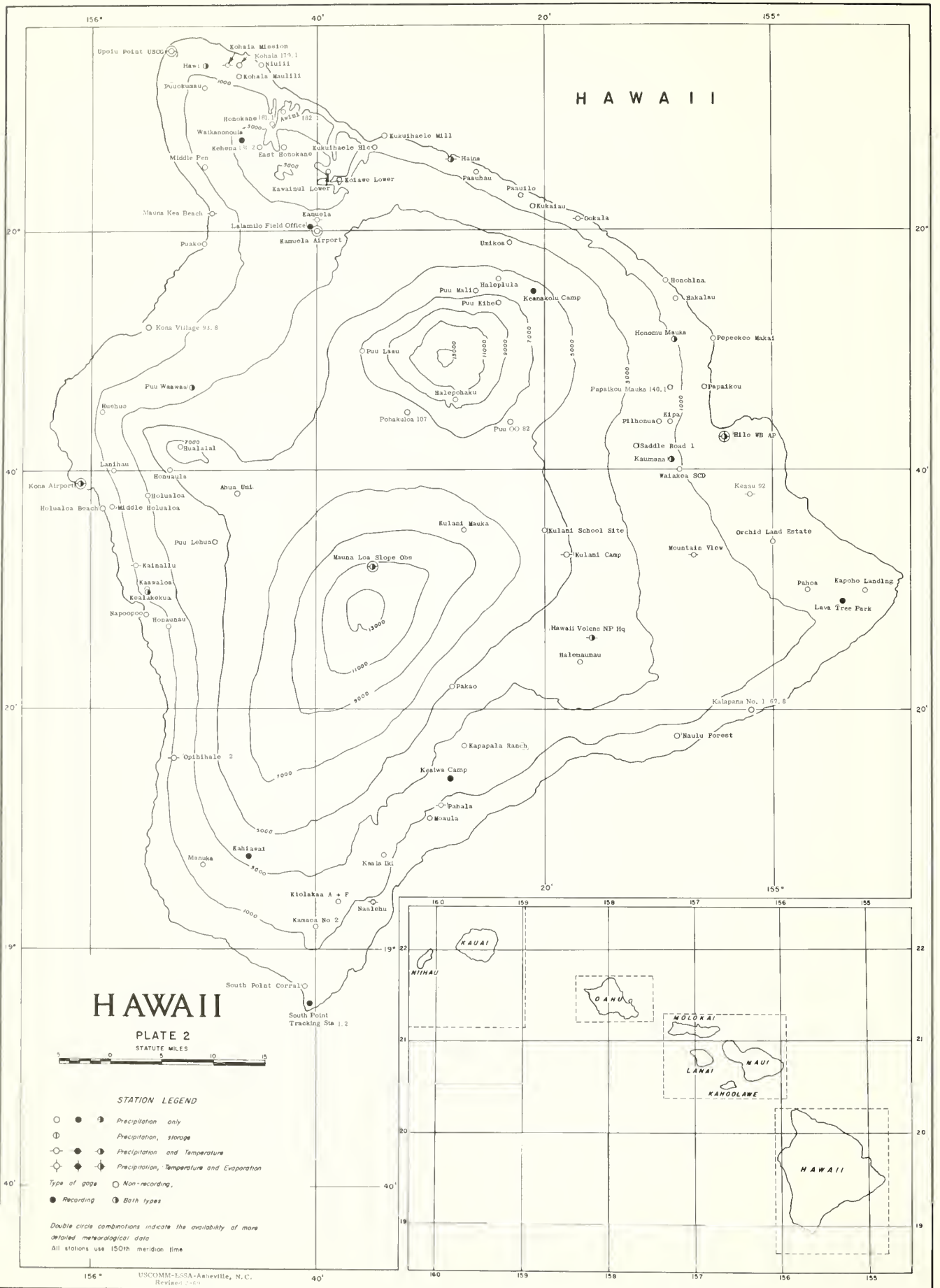
Years of record as shown in the Station Index are approximate since gaps in the records may not have been considered in arriving at the totals shown.

The four-digit identification numbers in the Index are assigned on an island basis. There will be no duplication of numbers within an island.

Information concerning the history of changes in location, elevations, exposures, etc., of substations through 1957 may be found in the publication "Substation History" for this State. That publication may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, for 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, obtained as indicated above, price 15 cents.

Subscription Price: 30 cents per copy, monthly and annual: \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Resilience and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

USCOMM-ESSA-ASHEVILLE-6/22/70-990



Small 31 1/2

SPECIAL WEATHER SUMMARY

The month's outstanding weather event was the destructive windstorm of January 13-14, which resulted in the greatest dollar damage (\$6.84 million) ever reported in the State for a single weather event and Oahu's highest wind of record (a gust of 96 m.p.h. at Kaneohe Marine Corps Air Station). Damage was most severe in areas to the lee of mountain crests and passes, and the winds so much higher there than in places more directly exposed, as to strongly suggest the influence of terrain in increasing the strength and gustiness of the wind.

Winds over the islands began increasing by the morning of January 13, well in advance of the approaching cold front then still near French Frigate Shoals, about 450 miles west-northwest of Kauai, and moving eastward at about 30 m.p.h. The front was preceded by a wide band of south and southwest winds, which reached sustained speeds of 30 to 45 m.p.h. over the open sea and gusts of 35 to 45 m.p.h. as far distant as central Maui, some 650 miles east-southeast of the front. The atmospheric pressure difference between French Frigate Shoals and Lihue Airport at 8 a. m. on January 13 was 0.3 inches, a large gradient for the subtropics.

As the front approached, wind speeds over the islands increased. By 4:30 p.m. on the 13th, Lihue Airport on eastern Kauai had frequent gusts of 60 to 70 m.p.h.; and at 7:58 p.m., about 1-1/2 hours before the front passed, a peak gust of 84 m.p.h., the strongest recorded there in 19 years of record. Between 7 p.m. on the 13th and 2:30 a.m. on the 14th, Kaneohe Marine Corps Air Station on eastern Oahu registered 60 to 70 gusts of 60 m.p.h. or more and 9 to 12 gusts of 70 m.p.h. or more, including one of 81 m.p.h. at 9:46 p.m., and the strongest gust of the period, 96 m.p.h., at 11:41 p.m., about 3 hours before the front passed.

Other peak gusts included, on Kauai: Kilauea Point, 86 m.p.h.; and Makaha Ridge (elevation 1,614 feet), 93 m.p.h. At Kaena Point (elevation 1,342 feet), an ordinarily windy locality on Oahu, a hand-held anemometer registered a gust of 98 m.p.h., but this could not be counted as official. In contrast, Barbers Point and Honolulu, Oahu, on the coastal plain facing the wind, recorded maximum gusts of only 45 and 42 m.p.h., respectively, about half the magnitude of those observed leeward of the Koolau Mountains.

The greatest dollar damage reported was to the U. S. Army's Schofield Barracks on central Oahu. Most of it occurred over a period of several hours from late on the 13th to early on the 14th. The destructive winds in this

area appear to have been highly localized, since points only a mile or so distant in all directions reported little if any damage -- a circumstance which strongly suggests that the southwesterly winds may have been accelerated in passing through Kolekole Pass in the Waianae Mountains, about 3 miles southwest of the Barracks. Wheeler Field, about 2 miles southeast of Schofield, recorded nothing higher than 69 m.p.h., but winds may have been stronger during periods when power outages made the equipment inoperative.

The U. S. Army estimated \$4.48 million in damage at Schofield Barracks: 7 large warehouses and shops destroyed, and 50 others damaged; \$3.125 million; supplies and equipment destroyed or damaged by wind and rain: \$850,000; utilities and communications equipment, \$108,000; family housing, \$46,000; trees and grounds repair, \$50,000; cleanup, \$220,000; and miscellaneous, \$84,000. Five hundred large trees were blown down.

Most of the remaining damage on Oahu (\$1.95 million) occurred in the residential communities of Kailua and Kaneohe, on eastern Oahu, where one \$45,000 home was demolished, over 50 roofs partially ripped off or damaged by falling trees and branches, and utility lines downed. Some sections of Kaneohe and Kahaolu were without electricity for up to 36 hours. At the height of the storm, 121 persons were evacuated from the area. The nearby Kaneohe Marine Corps Air Station reported \$450,000 in damage: \$255,000 to 86 buildings, mostly roofs (damage extensive to 3, moderate to 22, and light to 61); \$185,000 to a radar antenna; and \$10,000 for the post-storm cleanup. Fifty trees at the Air Station were uprooted or split and 350 others injured.

Other damage on Oahu included \$50,000 to City and County property (park structures, street lights, and road cleanup); \$100,000 to utilities; \$17,000 to State property; \$14,000 to plantation-owned structures; and \$115,000 to crops -- \$95,000 of it to 160 acres of bananas, and \$20,000 to 66 acres of papayas.

Kauai reported approximately \$341,000 in damage, \$155,000 of it to public property, including \$100,000 to buildings and experimental crops at the University of Hawaii's Experiment Station at Wailua, and roof and window damage to schools, libraries, and other public buildings. Private property damage amounted to about \$161,000: \$87,000 to 15 business establishments (mainly to roofs and plate glass); \$65,000 to 20 homes (roofs and garages); \$10,000 to utilities. Crop losses totalled \$25,000, principally to bananas, papayas, and cucumbers.

(Continued)

SPECIAL WEATHER SUMMARY

Of the \$60,000 in damage on Hawaii Island, \$5,000 was to public property and \$14,000 to private property -- mostly to utility wires and poles, but including \$8,000 to a home in Kaumana damaged by a falling tree. However, the bulk of Hawaii Island's loss was incurred by papayas: \$40,000 to marketable fruit, and an unestimated, but probably much larger sum, to papaya trees, of which an estimated 5-10 percent of all on the island were damaged (including 6,000 destroyed). Most of the affected papaya orchards appear to have been on high ground exposed to the wind or in areas where terrain may have increased its effects.

Maui reported only scattered damage, to utilities and to the roofs of 2 homes, for an estimated \$24,000.

The damaging winds of January 13-14 were associated with the fifth of seven cold fronts which passed Honolulu during the month, the greatest number to do so in January, and the second greatest number of fronts in any month (figures based on a study going back to 1937).

The frequency of frontal passages, and the related infrequency of the northeasterly trade winds, were reflected in the number of days -- 14 -- on which the strongest winds of the day

(the "fastest mile") at Honolulu International Airport were from the southwest -- the greatest number in any month since such records began there in 1951.

The prolonged dry spell, which in some portions of the State had persisted throughout 1969, was somewhat alleviated on Kauai, Oahu, and Maui by showers which brought rainfall totals near normal for January; but continued in western Molokai and in the Kau and Puna districts of the Big Island, where it spread into the south Hilo district.

The 5 locations listed below reported their twelfth successive month of deficient rainfall.

Kaunakakai, Molokai
Maunaloa, Molokai
Kapapala Ranch, Hawaii
Manuka, Hawaii
Moaula, Hawaii

On the 25th a waterspout extending vertically to the sea surface from well-developed cumulus clouds was observed for about 3 minutes 10 to 15 miles east-southeast of Kamalo on Molokai's south shore, before it gradually retracted into the clouds.

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SPECIAL WEATHER SUMMARY

While not particularly variable or violent by the standards of the rest of the world, Hawaii's weather during the year 1969 did include strong winds, intense rains, flash floods, hail, high surf, and drought, and took a toll of three lives and over \$2 million in damages.

Late on January 2 rains of 7 to 10 inches inundated low-lying areas in central Oahu and brought Hawaii its first weather-related death -- a 14-year-old boy swept into a storm drain while playing in a rain-swollen drainage ditch near Pearl City. On the morning of the 5th, a severe thunderstorm moving onto Kauai's west shore from the sea battered the Barking Sands Pacific Missile Range with gusts that momentarily reached 92 miles an hour. Warehouses were demolished, trailers overturned, buildings punctured with flying debris, and nearly half of the base's fifty 30-foot keawe trees uprooted. Damage was estimated at \$350,000. On the same day, rainfall at Kokee, Kauai, registered 34.10 inches, the second greatest 24-hour total ever recorded in the State, and the barometric pressure at Honolulu International Airport dropped to 29.47 inches, the second lowest observed there since records began in January 1947.

On January 20 polar air behind a fast-moving cold front ushered in a record-breaking cold spell that gave the islands a taste of Mainland winter. Although afternoon temperatures climbed to the mid-seventies, the nighttime minimums of 52° at Honolulu, 48° at Kahului, and 50° at Lihue (on January 22) were the lowest temperatures ever observed there in 22, 18, and 17 years of record, respectively. At Honolulu Airport the minimum temperature for January 20 to 27 averaged 11° below the January normal.

For a finale, a severe thunderstorm on January 30 raked the eastern third of Oahu with wind and driving rain, and with hail that devastated four acres of lettuce in the Koko Head area, with a loss of \$15,000 to \$20,000.

February lost no time in following suit. On the afternoon of the very first day of the month torrential rains of up to 5 inches an hour overwhelmed streams and sent flood waters 3 to 5 feet deep racing through the Keapuka Subdivision near Kaneohe, Oahu -- the same locality hit by a similar flood on February 4, 1965, almost exactly 4 years earlier. While many residents fled their homes, the flood did \$285,000 in damage to 56 houses and an additional \$150,000 to other property. Kahaluu, about 5 miles to the northwest, suffered \$70,000 in flood damage from the same storm. On February 14, again in Kahaluu, 200,000 cubic yards of rain-soaked mud slid down a hillside partially burying a house and killing one of four residents asleep inside.

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On February 22 smoke and haze from a volcanic outbreak in Kilauea drifted westward with the trade winds, lowering visibilities in the Kona district to 4 miles at Kailua Airport and to 6 miles at Kealahou.

February was also one of the windiest months on record, with trade winds unusually strong for weeks at a time. Small craft warnings were in effect on 19 days, gale warnings on 3 days, and high wind warnings on 4 days. On the 21st, gusts reached 50 m.p.h. on Oahu and elsewhere, but damage was confined to a few roofs and trees.

The year continued uneventfully. However, by the end of October it became evident that during the preceding months a widespread and severe dry spell had quietly been establishing itself. Almost everywhere in the State, rainfall had been deficient for 6 or more of the first 10 months of the year; and in some localities had fallen below normal for 8 to 10 successive months. The effects of the dry weather included a brief water emergency in Hawaii's Lalamilo area from October 24 to November 7 and a severe fire which consumed 37,000 acres of forest and brush in south Kohala in late September.

On all islands but Kauai and Oahu the dry spell continued through November. On November 5, strong trade wind gusts of 40 to 45 m.p.h. hit many parts of the State. On Hawaii Island winds swept through the Waimea saddle (gusts reached 69 m.p.h. at Kamuela Airport) and into the ordinarily sheltered leeward coast, causing slight damage in the Mauna Kea Beach area. Along the west Maui coast, trade winds funnelling through mountain gorges to the east downed trees and utility poles and lines and carried reddish dust from fields and construction sites hundreds of feet into the air and at least to Kahoolawe Island, about 15 miles to the south.

The year's most spectacular weather event began on the night of December 1, when huge waves generated by an unusually large and intense low pressure area 1,500 miles to the north-northwest, crashed against the islands, sweeping away homes, boats and cars, and washing out roads and beaches from the north coast of Kauai to the little fishing village of Milolii on Hawaii Island's southwestern shore. Damage was greatest along Oahu's north shore from Haleiwa to Kahuku, where waves were estimated as high as 50 feet. Two days later, early on December 4, heavy surf from a second storm washed into a number of homes in the Mokuleia area of Oahu's north coast. Total damage from the high waves was estimated at \$1.25 million, and one life was lost.

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DAILY PRECIPITATION

HAWAII
JANUARY 1970

Continued

Station	Total	Day of Month																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
KAUAPANA 88.1	3.55	.49	.03	.01		.23	.01	.04					.06										1.27	.73				.22	.18	.10	.18			
KAAIINU LOWER 193	20.68		.92	*						10.53													6.15							1.81				
KEAAU 92	3.10	.43			1.00	.15	.28						.05										.78	.08				.08	.10	.15	.02			
KEALAEKUA 26.2	2.93			.10									.61							.02	.04	T							.24	.20	T			
KEHENA 181.2	17.98			*																										17.98				
KIOLA KAA A & F 6	3.20			*																														
KIPA 89.2	5.08	.07	.07	.13	.10	.48	.03	.07					.15										1.74	.42				.18	.22	.27	.15			
KOHALA 179.1	6.87			*	.42	.07	1.03			.12			.46	.01	.45	.01				.32				1.62			1.22	.70	.42	.02	*			
KOHALA MAULILI 176	8.66			*	.20	.05	.89	.14					.80	.57	.01					.28				.05	3.54		.76	1.09	.10	.07	*			
KOHALA MISSION 175.1	9.06	.01	.13	T	.16	.12	.06	1.17	.19		.03	.49	1.59			.39				T		T		2.27	.80		.31	.97	.24	.01	.03	.07		
KOIHANE LOWER 196	14.25		.30	*						8.40													3.59							.45	*			
KONA AIRPORT 68.3	1.51			*	.15		.37	T				.78	T	.21																	*			
KONA VILLAGE 93.8	2.92			*	.02	.20		.30	.01		.87	.02	1.45							.05											*			
KUKAIUA 222	10.55	.02	T		4.70	.67	.06	.13				.01												3.69	.84				.22		.01	.20		
KUKUIHAELE NIC 199	8.31	.15	.05		1.76	.64	.01	.40				.10												.04	2.40	1.80		.12	.20		.12	.25		
KUKUIHAELE MILL 206	6.33		.13	*		.68	.01	.33				.05												3.65			1.04	.21			.13	*		
KULANI CAMP 79	1.71	.05	.03	*	.17	.12	.23	.03				.08												.07	.30	.12	.01	.09	.02	.10	.24	.04	.02	
KULANI MAUKA 76	1.57			*	.13		.28			.01																					*			
KULANI SCHOOL SITE 78	1.37			.05							.46								.05	.26							.42					.39		
LANIHAU 68.2	4.50			*	.27	.42					.72		.35						.26										1.47		.93	.08	*	
MANUKA 2	1.73			*	.63	.06	.58	T	T			.12	.09	.05	T													.06	.12	.01	*			
MAUNA KEA BEACH 98	6.54			*	.07		2.27	T	.02			2.12	T	2.06	T																*			
MAUNA LOA SLOPE 085	1.79			*	.20		1.04					.06	.06	.37	.06																*			
MIDDLE HOUALOA 68.1	2.71			*	.45	*	.23	*				.87	.76																	.35	*			
MIDDLE PEN 147.1	5.01			*			2.54	*				1.07		.90														.50	*	*	*			
MOAULA 18	1.72			*																												1.72		
MOUNTAIN VIEW 91	4.64	.54		*	1.24	.18	.04	.70					.10											.63	.18			.18	.56	.15	.14	*		
NAALEHU 14	2.26	.01	.47	*	.29	.53	.23	.20					.37	.05	.01															.01	*			
NAPPOPOO 28	1.57			*	.42	*						.84																			*			
NAULU FOREST 38.6	1.92	.07	.20	T	.22	*		T	T	.02		.16						.50	T	.02	T		.24	.09	.01	.02	.04	T	.16	.02	.06	.09		
NIULII 179	6.82			*		.71	.01	.66	.07			.55	.02	.23										1.80			1.45	.65	.45	.02	*			
OPUKA 223	5.00	.11	.06	*	1.38	.79	.01	.43	.02					.01										1.21	.39		.02	.25	.04	.23	.04	*		
OPIMIHAELE 2 24.1	3.66	T	.39	.32	.46	T	1.35	T		.30	.01		.14	.01					.01	.01	.02	T					T	.28	T			*		
ORCHID LANE EST 91.5	2.81			*					1.41										.01					.57	*						.82	*		
PAAIHOU 217	4.21			*	.68	.58	.28					.02		.06										1.88	.39		.12	.02			.09	.03		
PAUULU 221	10.28	.02	T		5.18	.63	.02	.14	T	T		.01		T	.01									2.84	1.04	.05	.01	.11	T		.22	*		
PANALA 21	2.20	.23	.04	.05	.49	.71	.07			.10	.25		.07	.01	.05	.25	.03							.07	.01						.10	.58	.09	.02
PANAMA 65	4.42	.51		*	1.17	.17	.03	.06					.36											.85	.23								6.90	
PAKAO 37	6.90			*																													.05	
PAPAIAKOU 144.1	6.04	1.87	.01	*	.74	.87	T					T	.11	T										1.37	.29			.01	.43	.26	.05	.05		
PAPAIAKOU MAUKA 140.1	6.22	1.09	.00	*	.59	.45	.04	.04				.75												1.68	.40	T		.01	.27	.10	.64	.08		
PEPEEKEO MAKAI 144	7.09	.64		*	1.50	.63	.01	.01	.07		.20		.33	.01										1.75	.69		.78	.01	.11	.28	.06	.01		
PIIHONUA 89	8.00			*																													8.00	
PONAKULOA 107	2.03		.03	*	.23	*			.87			.10			.79																		*	
PUSKQ 95.1	3.42			*		T	1.13	T	.01			1.35	T	T	.92													.01					*	
PUU KIME 120	.80			*																													.80	
PUU LAU 102.1	2.82			*																													2.82	
PUU LEHUA 73	2.40			*																													2.40	
PUU MALI 113	1.59			*																													1.59	
PUUKUMAU 167	8.96			*	1.17	.01	1.18	.01	.26			.83	.01	1.89	.01									2.10			.35	.59	.35	.02	*			
PUU OO 82	1.90	.04	T		.01	.20	.05	.44	T				.23											.20	.30	T	T	.23	.20	T		*		
PUU WAAHAA 94.1	2.02			.10	.63		.10		.04			.38		.36												.09	.02			.30	*			
SADDLE ROAD 1 84	3.18			*					1.00								.10								.98	*					1.10	*		
SOUTH POINT CORRAL 3	1.70			*																													1.70	
UMIKOA 118	7.52			*	2.83	.20	.82					.02		.04	.12	.18	*		.02					2.76	.47		.03	.02			.01	*		
UPULU POINT USCG 159.2	6.09			*	.01	.04	2.39	.50				1.53		.86				.01							.01	.25	.07	.30	.07		.05	*		
WAIKOA SCO 88.2	3.67	.37		*	.35	.05	.04					.04																.35	.17	.09		.21		

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
JANUARY 1970

Station	Day of Month																															Average		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
* * *																																		
ISLAND OF KAUAI																																		
KANALOHULUHULU 1075	MAX MIN	66 47	65 47	59 47	62 53	65 41	59 43	63 48	53 49	56 42	62 44	59 45	63 50	65 50	58 52	63 31	63 40	63 53	69 58	65 47	65 51	60 55	66 38	64 42	61 53	61 55	68 49	69 45	68 50	69 53	69 43	68 43	63.4 47.2	
KILAUEA POINT 1133	MAX MIN	78 68	82 67	83 64	78 66	76 63	78 63	80 64	74 61	81 63	80 64	74 61	80 63	79 61	75 60	80 62	83 61	80 62	79 68	82 68	83 64	84 68	80 67	78 69	80 66	78 66	75 64	75 68	74 69	76 69	85 70	78.7 66.0		
LIMUE W8 AP 1020.1	MAX MIN	78 69	77 64	74 69	74 66	81 63	79 61	75 59	75 58	74 58	77 59	77 58	77 60	77 60	72 57	79 60	79 60	82 68	82 68	81 68	81 65	78 70	75 64	77 61	82 68	74 68	77 64	80 70	79 73	80 73	79 73	81 66	77.8 65.3	
MAKAHUEA POINT 940.1	MAX MIN	78 69	81 67	79 67	83 65	75 64	78 66	81 61	81 58	80 55	74 60	80 57	80 65	80 68	78 69	80 56	78 70	79 69	82 72	83 67	84 65	84 73	80 66	80 64	79 67	76 67	84 70	71 71	81 72	80 68	79 67	80 69	79 69	82.2 65.9
MANA 1026	MAX MIN	82 69	80 64	79 63	77 66	76 63	80 59	77 60	76 61	74 60	73 63	79 60	72 62	78 60	75 60	76 60	80 57	76 56	80 56	82 57	81 57	82 57	81 57	76 62	77 58	79 59	80 65	74 61	82 60	81 61	82 66	80 64	78.0 60.9	
NIU RIODE 1035	MAX MIN	80 58	82 60	80 60	81 60	78 58	77 58	72 56	71 56	70 56	69 52	70 53	75 54	76 54	71 50	70 58	70 50	73 60	75 60	74 60	78 59	78 60	76 59	77 56	79 56	79 57	72 55	77 55	80 60	79 59	80 61	80 61	75.6 61.1	
WAIHI LOWER 1054	MAX MIN	70 65	76 68	74 67	72 63	74 53	78 61	78 50	73 52	75 47	71 65	69 54	78 54	77 59	77 64	78 49	75 63	77 66	79 66	79 68	80 58	74 60	74 54	75 56	79 62	80 65	75 65	75 60	76 64	79 60	78 60	79 59	76.0 59.8	
* * *																																		
ISLAND OF OAHU																																		
EWA PLANTATION 741	MAX MIN	82 65	83 62	78 64	79 68	80 61	80 63	78 56	80 59	77 55	77 51	80 54	80 59	80 64	78 69	77 55	82 65	83 69	83 69	82 62	83 65	82 66	78 64	80 63	81 63	81 64	80 64	81 64	80 66	81 66	81 66	85 61	80.5 62.2	
HONDLULU W8FC 703	MAX MIN	82 69	81 69	81 68	82 70	82 65	81 66	78 62	80 66	78 60	76 58	80 62	79 64	77 68	77 61	77 68	81 65	82 73	82 72	81 68	81 70	82 71	79 68	82 68	81 68	81 68	85 68	81 68	85 68	84 68	85 68	85 66	81.1 67.3	
HONDLULU SUBSTA 704	MAX MIN	80 69	79 68	78 68	77 68	78 63	77 63	74 63	77 64	75 61	74 59	77 64	75 65	78 64	76 62	75 66	79 66	79 72	79 72	78 69	79 72	78 70	75 69	80 69	79 70	78 70	77 69	77 70	78 72	79 73	82 72	71 67	77.6 67.9	
KAHUKU 912	MAX MIN					79 64	78 63	77 58	79 59	79 60	80 52	79 60	84 66	76 53	76 53	76 53	85 61	86 61	86 62	84 66	86 67	75 66	84 66	86 67	86 67	84 66	86 66	84 65	86 65	80 69	78 70	79 71	76.8 65.5	
KANEONE MAUKA 781	MAX MIN	80 67	76 65	80 65	72 65	75 64	78 65	78 61	76 61	74 61	74 56	74 56	75 58	77 62	77 61	77 60	75 59	79 62	79 73	81 72	80 73	80 71	80 68	75 67	80 67	80 67	74 68	81 68	72 68	76 69	79 70	77 71	76.8 65.5	
LUALUALEI 804	MAX MIN	82 68	82 69	83 66	78 66	81 62	80 64	80 58	77 58	79 58	76 56	78 58	79 54	77 54	77 61	75 59	81 69	82 72	81 64	81 67	80 69	80 69	77 69	82 66	83 66	83 66	80 65	83 66	81 65	81 65	84 65	80 66	79.8 64.4	
MAKAPUU POINT 724	MAX MIN	78 70	74 64	79 66	72 68	74 66	74 60	75 65	74 56	74 56	71 57	74 60	76 61	76 68	75 56	75 67	72 67	73 58	72 58	73 59	80 68	79 71	76 69	75 67	75 69	76 71	74 65	75 56	71 64	75 60	71 63	75 63	74.2 63.5	
OPAEULA 870	MAX MIN	75 64	76 63	69 63	70 62	85 56	75 57	75 54	75 57	75 57	72 52	75 58	70 58	73 57	73 64	80 53	80 67	79 64	80 62	81 62	81 62	74 62	79 58	74 58	77 65	73 58	75 58	73 65	81 64	77 64	77 64	80 64	75.5 59.4	
PRI WAHIAWA 820.2	MAX MIN	81 64	82 69	71 62	75 65	84 59	81 58	74 53	78 52	76 55	76 48	72 54	76 47	77 56	77 53	81 53	81 53	80 68	82 62	81 62	81 62	79 62	75 61	75 61	80 61	81 62	73 62	80 61	81 62	77 64	81 65	84 59	78.6 59.6	
WAIALUA 847	MAX MIN	78 62	79 64	79 62	70 66	73 61	78 59	76 56	79 60	74 56	76 52	78 58	78 60	80 68	76 56	75 56	82 57	84 72	83 64	84 65	84 65	83 65	78 64	84 69	75 60	78 66	81 65	76 65	80 62	78 62	80 60	80 60	78.5 61.0	
WAIKIKI 717.2	MAX MIN	83 64	84 65	83 65	83 66	81 66	82 66	80 57	79 67	81 55	78 58	78 60	80 69	82 77	79 66	79 65	80 73	83 68	84 68	84 68	84 68	83 68	80 68	80 68	80 68	83 68	83 68	83 68	86 68	82 68	82 68	81 68	82 68	81.7 65.2
WAIHANA EXP FARM	MAX MIN	80 61	80 64	80 65	74 66	78 64	78 63	78 57	76 58	77 62	76 54	76 58	76 59	77 58	78 58	78 58	84 70	85 71	84 66	84 66	82 70	81 66	78 66	75 64	80 66	80 66	76 65	78 66	77 66	79 66	80 66	78.8 64.4		
* * *																																		
ISLAND OF MOLOKAI																																		
MOLOKAI AP 524	MAX MIN	79 66	78 66	80 69	78 64	77 65	77 65	76 61	76 60	76 62	74 57	74 57	74 64	77 64	75 64	76 64	78 62	78 69	78 64	79 70	76 70	78 70	80 66	73 66	77 64	77 64	77 64	74 67	74 67	78 68	77 68	77 65	76.8 65.5	
* * *																																		
ISLAND OF LANAI																																		
LANAI CITY 672	MAX MIN	76 62	74 59		70 61	72 59	74 56	75 58	73 58	73 51	71 55	69 54	67 57	71 57	73 59	74 58		76 64	75 62	73 60	73 60	74 57	74 59			74 63	72 61	72 60	72 60	73 62	73 62	72.7 58.8		
* * *																																		
ISLAND OF MAUI																																		
HALEAKALA RS 338	MAX MIN	58 43	59 42	56 40	54 41	51 40	55 43	49 36	59 40	54 34	53 36	50 38	55 43	53 45	52 49	54 42	61 45	63 47	63 49	63 47	62 45	65 49	64 43	61 39	61 38	56 39	58 43	61 39	59 43	58 43	61 39	67 53	57.9 42.5	
HALEAKALA SUMMIT 338.4	MAX MIN					49 32	47 34	42 28	43 34	44 27		44 27	42 37	44 34	47 35					54 39	55 41	58 41	54 41	54 40			56 43	49 34	53 34	40 40				
MANA AIRPORT 355	MAX MIN	80 68	80 65	81 62	79 64	77 62	77 61	77 56	77 57	77 57	75 55	75 53	79 66	81 60	77 59	82 64	80 64	81 62	82 62	82 62	80 62	80 62	78 65	80 65	80 66	82 66	80 66	79 69	80 69	80 69	80 69	80 71	79.0 63.1	
KAANAPALI AIRPORT	MAX MIN	82 66	81 66	80 66	85 66	81 63	84 64	75 60	80 60	79 63	74 67	76 68	78 70	75 62			80 60	81 67	81 66	80 66	82 66	79 66	80 66	81 66	80 66	80 66	81 66	81 66	81 66	81 66	81 66	81 66	79.1 65.5	
KAHULUI W8 AP 398	MAX MIN	81 65	80 62	79 63	77 66	78 61	76 61	77 54	77 55	73 55	75 50	81 60	80 68	78 72	76 59	76 59	80 58	81 73	82 71	82 71	80 69	80 66	80 66	79 68	79 68	82 71	80 66	80 66	77 66	81 66	81 66	80 66	79.0 63.9	
KAILUA 446	MAX MIN	75 62	75 61	76 61	76 60	76 59	76 60	75 56	75 55	77 57	73 53	71 55	81 58	82 60	78 58	79 61	81 61	82 61	81 61	80 61	80 61	78 61	79 60	80 60	80 60	80 61	81 61	81 62	81 62	81 62	81 62	81 62	77.0 60.1	
KEAWAKAPU BEACH 260.2	MAX MIN	82 64	83 62	83 63	85 65	81 61	84 61	75 55	80 59	82 60	78 54	80 58	80 67	78 70	76 51	76 51	81 52	81 52	85 56	85 56	85 56	85 56	85 56	85 56	85 56	85 56	85 56	85 56	85 56	85 56	85 56	85 56	81.9 63.3	
KULA SANATORIUM 267	MAX MIN	69 53	69 54	70 58	71 59	69 56	70 57	65 44	67 45	65 51	64 49	65 50	68 55	70 57	68 51	65 56	72 52	78 59	78 56	72 57	71 56	70 57	71 55	64 53	68 54	69 54	71 54	66 54	66 54	69 54	69 54	69 54	69.1 54.2	

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
JANUARY 1970

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
LAHAINA 361	MAX	84	83	81	85	82	81	79	79	80	79	76	77	81	79	76	82	77	80	82	82	81	81	82	81	81	82	81	79	84	83	84	84
	MIN	65	64	64	65	63	64	61	62	61	58	61	65	67	70	61	62	70	70	71	66	68	67	64	65	69	67	65	66	65	63	64	
WAILUKU 392	MAX				79	76	78	77	80				77	81	78	77	75			85	84	83	85	73			83	72	76	78	78		
	MIN				63	62	58	56	57				63	62	70	59	59			68	64	66	66	65			63	66	69	69	67		
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	76	77	79	79	74	77	76	78	80	76	76	82	81	85	85	77	80	80	82	81	80	80	74	72	80	82	76	78	79	79	77	
	MIN	62	62	63	64	62	62	63	63	64	59	59	59	65	60	66	61	64	65	65	64	63	63	64	63	63	63	63	63	65	62	63	60
HAWAII VOLCONS NP HO 54	MAX	70	71	68	69	62	68	61	67	68	66	61	64	69	69	74	65	64	66	70	75	71	70	70	68	70	69	66	69	76	74	67	
	MIN	53	52	48	54	50	53	48	47	46	44	47	52	55	57	55	55	58	51	48	46	54	47	56	51	56	53	52	54	51	51	50	
HILO WB AIRPORT 87	MAX	81	82	81	77	78	78	79	79	76	78	79	84	88	84	76	80	82	87	85	84	82	81	74	83	82	83	84	83	80	81	83	
	MIN	63	64	63	66	62	61	59	60	60	60	59	63	62	68	68	60	65	64	62	61	61	60	65	63	64	65	65	64	64	64	62	
KAINALIU 73.2	MAX	77	77	77	77	76	76	71	77	79	75	76	80	79	80	79	75	82	78	78	77	78	80	78	78	80	79	78	76	76	77	78	
	MIN	60	60	59	61	59	61	55	54	58	56	57	63	65	68	59	60	64	61	58	59	61	59	61	63	65	60	63	59	60	61	57	
KAMUELA 192.2	MAX	76	76	75	77	69	74	74	73	74	68	69	74	72	78	74	74	73	72	77	77	75	75	72	72	76	75	72	71	70	69	70	
	MIN	48	46	48	51	55	54	52	48	51	40	43	47	57	58	56	56	56	54	54	50	53	46	49	56	56	50	53	58	57	50	44	
KAMUELA AIRPORT 191	MAX	74	73	75	75	68	72	68	72	67	69	70	76	70	80	76	71	73	71	71	76	73	75	71	70	73	75	71	71	70	71	70	
	MIN	50	48	47	50	48	50	48	48	52	41	48	55	45	45	45	57	50	52	55	46	46	47	50	55	55	48	51	46	53	44	44	
KEAAU 92	MAX	83	82	85	83	79	80	82	79	79	77	82	84	83	90	86	77	83	87	87	86	85	83	81	81	82	84	83	82	81	79	81	
	MIN	63	63	63	63	62	60	59	59	59	59	57	60	64	74	68	63	65	66	62	61	61	59	62	66	65	65	65	65	63	62	62	
KEALAKEKUA 26.2	MAX	78	78	79	79	76	78	71	79	76	75	76	82	81	81	79	76	82	78	79	79	78	81	78	78	82	79	77	74	77	78	78	
	MIN	61	61	61	62	59	60	57	57	58	58	58	63	65	69	59	60	64	60	60	60	62	60	62	63	65	61	64	61	61	61	58	
KOHALA MISSION 175.1	MAX	78	79	78	79	75	75	73	77	76	74	74	80	80	83	80	79	80	81	81	79	79	82	70	71	78	81	76	77	77	77		
	MIN	62	63	62	64	62	62	65	61	61	59	59	64	67	73	63	63	64	66	65	63	63	63	65	65	65	66	66	66	67	67	61	
KONA AIRPORT 68.3	MAX	82	82	80	83	80	80	79	80	80	78	84	84	81	82	82	80	83	84	85	82	81	84	84	83	83	84	82	82	83	82	82	
	MIN	63	63	62	62	61	63	65	64	64	64	54	57	65	69	62	62	64	64	64	62	62	62	64	66	63	62	66	65	64	66		
KULANI CAMP 79	MAX	65	67	72	66	61	66	60	64	62	61	60	65	69	62	66	59	63	69	67	60	72	69	65	69	67	51	54	58	61	62		
	MIN	46	45	45	47	45	46	38	38	44	38	38	35	46	41	55	55	48	58	46	36	42	40	42	46	44	41	47	50	34	35	38	
MAUNA LOA SLOPE OBS	MAX	47	51	50	49	45	42	44	44	39	41	42	42	46	44	45	50	49	52	54	59	54	58	54	56	59	50	50	50	52	54		
	MIN	29	32	34	31	32	31	28	28	25	29	32	32	34	37	35	36	36	35	33	35	37	36	37	38	37	36	33	32	32	38		
MOUNTAIN VIEW 91	MAX	78	78	78	78	78	74	75	72	74	77	71	71	75	82	80	71	83	83	83	82	80	79	79	79	79	79	78	74	72	78		
	MIN	55	55	55	55	55	57	55	54	54	51	51	51	60	69	63	58	56	56	56	56	57	56	58	58	58	58	58	60	58	58	56	
NAALEHU 14	MAX	79	79	79	79	80	78	79	81	84	84	80	80	82	81	82	78	78	82	83	80	82	83	80	80	83	83	81	80	80	80		
	MIN	61	61	61	62	62	62	62	62	62	62	59	58	69	69	69	63	63	63	63	63	60	64	66	65	65	65	67	67	67	65	65	
OOKALA 223	MAX	80	80	80	79	76	77	74	76	78	75	74	78	80	80	82	75	80	82	82	80	79	81	75	73	80	81	78	78	78	72	78	
	MIN	62	60	70	67	63	63	63	62	63	61	62	62	64	65	69	63	65	67	67	65	64	64	64	67	68	65	65	67	66	64	65	
OPIHIHALE 2 24.1	MAX	75	73	73	72	76	73	71	74	73	73	81	77	82	77	75	82	79	75	75	79	75	74	75	76	79	72	74	73	74	77		
	MIN	57	58	58	59	57	55	55	54	52	52	55	63	66	60	56	60	59	57	57	57	57	57	56	58	58	58	58	58	55	55	55	
PAHALA 21	MAX	83	82	82	82	80	79	85	80	79	78	71	81	82	82	91	73	79	89	80	81	82	81	80	76	83	79	80	80	81	81		
	MIN	59	60	59	60	62	61	61	59	59	52	50	54	64	67	69	62	64	60	57	58	61	62	61	63	62	63	62	63	62	61	62	
UPOLO POINT USCG 159.2	MAX	88	80	82	81	79	78	75	78	78	76	78	83	81	83	83	77	81	84	83	82	81	82	76	81	82	77	79	80	78	79		
	MIN	68	67	69	69	67	68	66	64	65	64	64	65	70	76	67	68	70	70	68	68	70	69	67	68	70	68	68	69	69	67	65	

EVAPORATION AND WIND

Station		Day Of Month																															Total of Mo Avg
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * * ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP	.17	.20	-	-	.10	-	.19	.18	.14	.27	.10	.31	.16	-	.20	.14	.12	.15	.34	.19	.06	.13	.34	*	.27	.07	.15	.21	.07	.23	.29	
	WIND	136	47	81	202	75	51	59	59	92	80	112	105	80	231	58	55	113	121	62	117	132	53	91	73	77	33	73	128	158	162	160	
	MIN	65	62	62	62	61	60	54	54	53	71	51	56	57	64	54	53	58	64	62	62	62	59	58	59	66	61	60	67	66	64	62	
* * * ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.12	.15	.14	.15	.07	.19	.08	.14	.15	.15	.15	.07	.10	-	.15	.10	.18	.14	.18	.13	.13	.17	.13	.15	.11	.08	.10	.16	.13	.19	.15	
	WIND	11	9	18	25	11	20	20	12	37	16	23	67	28	115	34	21	63	25	24	18	43	53	17	20	33	23	16	16	28	31	19	
	MIN	64	66	65	64	60	60	59	59	56	56	53	61	60	69	57	57	63	70	67	67	67	66	61	61	65	66	65	66	64	62	62	

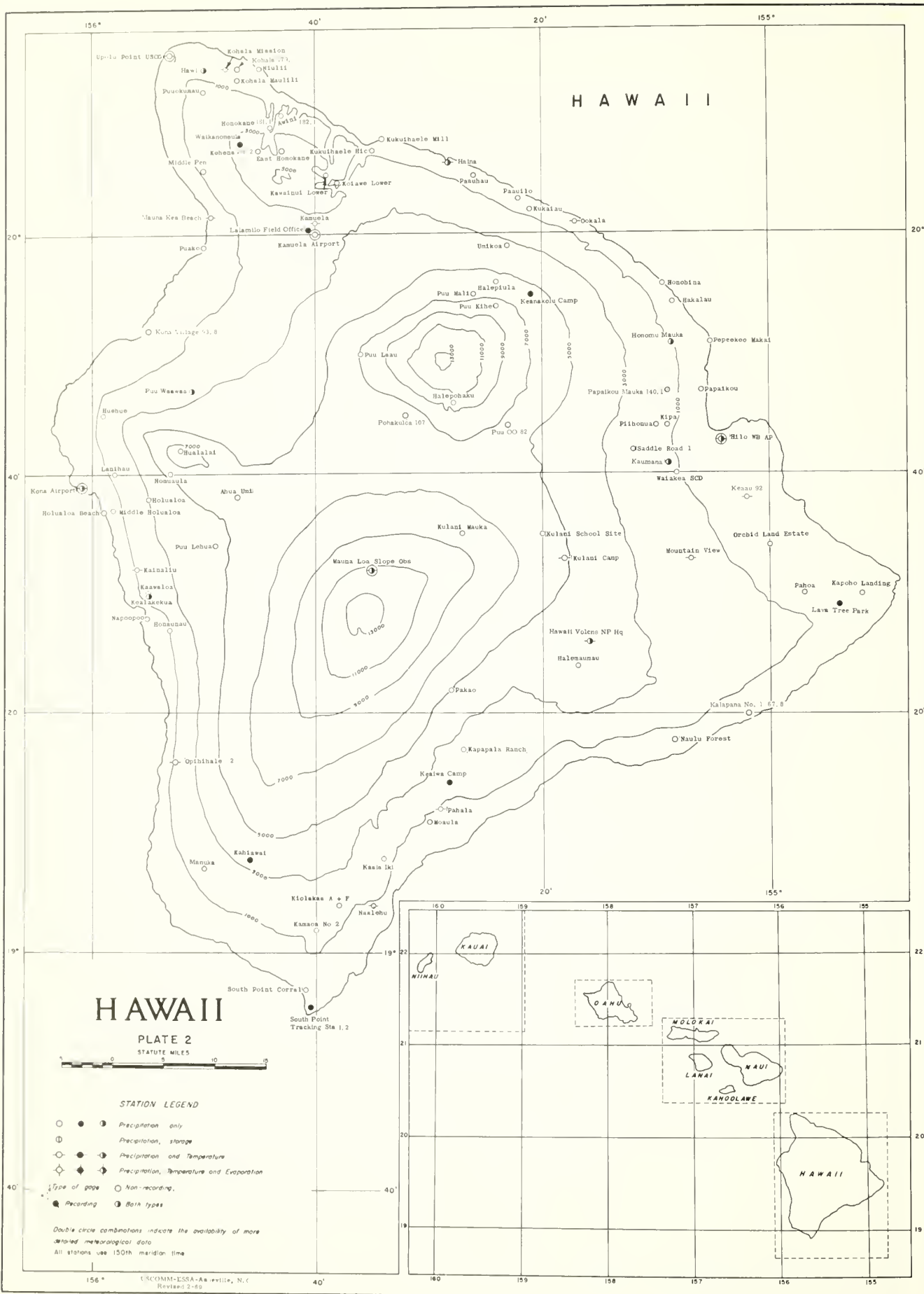
See Reference Notes Following Station Index

ANNEX INDEX

HAWAII JANUARY 1970

Table with columns: STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER. Contains station data for ISLAND OF KAUAI.

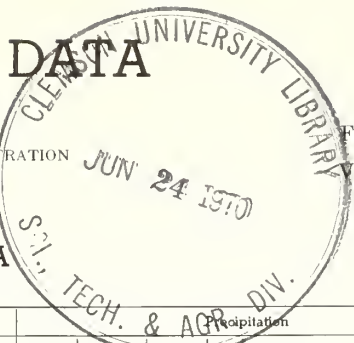
Table with columns: STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER. Contains station data for ISLAND OF MOLOKAI.





CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE



HAWAII

FEBRUARY 1970

Volume 66 No. 2

CLIMATOLOGICAL DATA

Station	Temperature													Precipitation									
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
										90° or Above	80° or Above	70° or Above	60° or Above					Total	Max. Depth on Ground	Date	-10 or More	.50 or More	1.00 or More
* * * ISLAND OF KAUAI																							
ANAHOLA 1111 A																							
KANALDHULUHULU 1075 A	62.6	44.4	53.5		70	2+	35	27+		0	0	0	0	1.66	- 3.80	.47	10	.0	0			0	0
KAPAA STABLES 1104 A														6.74		2.59	10	.0	0			5	3
KILAUEA FIELD 17 1135 A														1.89				.0	0			0	0
KILAUEA POINT 1133 A	76.6	66.5	71.6		85	19+	64	27+		0	0	0	0	3.50	- 4.68	.67	20	.0	0			5	2
														2.37				.0	0			0	0
KOLOA 936 A														.59	- 5.65	.24	18	.0	0			2	0
LIHUE WB AP 1020.1 R	77.5	65.1	71.3	.6	83	19+	58	20		0	0	0	0	.89	- 4.43	.32	17	.0	0			4	0
MANA 1026 A	79.8	60.5	70.2	.8	84	14+	51	16		0	0	0	0	1.10	- 1.71	.46	10	.0	0			3	0
N WAILUA OITCH 1051 A														2.83				.0	0			0	0
PH WAINIHA 1115 A														5.78	- 5.87	2.20	10	.0	0			5	3
																		.0	0			0	0
PUEHU RIOGE 1040 A														1.82				.0	0			0	0
WAHIAWA 930 A														.56				.0	0			0	0
WAIAMI LDWR 1054 A	76.8	56.5	66.7		84	20	51	22+		0	0	0	0	1.32	- 3.70	.25	18	.0	0			0	0
WAIWEA 947 A														.55	- 2.85	.30	18	.0	0			2	1
																		.0	0			0	0
ISLAND																							
			66.7											2.25				.0	0				
* * * ISLAND OF OAHU																							
HONOLULU OBSERV 702.2 R	80.9	65.6	73.3	.9	86	1	62	27+		0	0	0	0	.71		.55	14	.0	0			2	1
HONOLULU WBFC 703 A														.77	- 2.53	.34	14	.0	0			0	0
KAHUKU 912 A	79.0M	61.0M	70.0M	1.6						0	0	0	0	1.44	- 3.63			.0	0			0	0
KANEIHE MAUKA 781 A	76.7	64.3	70.5	.7	84	3	61	12+		0	0	0	0	2.03	- 5.19	1.07	14	.0	0			3	2
KODLAU OAM 833 A														*				.0	0			0	0
LUALUALEI 804 A	79.7	62.2	71.0		85	5+	56	9		0	0	0	0	*				.0	0			0	0
MAKAPUU POINT 724 A	73.2	60.9	67.1		79	6+	51	4		0	0	0	0	.82	- 2.71	.35	10	.0	0			0	0
NUUANU RES 4 783 A														1.08	- 9.97	.42	13	.0	0			0	0
OPAEULA 870 A	75.9	57.8	66.9	.2	82	2	52	11+		0	0	0	0	2.67	- 5.74			.0	0			0	0
PALDLO VALLEY 718 A														2.78	- 8.22	1.06	9	.0	0			6	2
																		.0	0			1	0
PR1 WAHIAWA 820+2 A	78.4	56.4	67.4		87	18	51	12+		0	0	0	0	.90				.0	0			0	0
PUNALUU 884 A														2.00		.81	10	.0	0			2	0
WAHIAWA OAM 863 A														1.48				.0	0			0	0
WAIHOLE 837 A														3.26	- 9.86			.0	0			0	0
WAIALUA 847 A	78.2	59.0	68.6	1.6	85	2	52	28+		0	0	0	0	2.61	- 2.20	1.01	15	.0	0			5	3
																		.0	0			1	0
WAIKIKI 717.2 A	80.4	63.2	71.8		86	5+	57	22+		0	0	0	0	.57		.32	14	.0	0			2	0
WAIMANALO EXP FARM A	78.4	62.6	70.5		83	20	56	12		0	0	0	0	2.02				.0	0			0	0
WAIPAHU 750 A														.40	- 3.29			.0	0			0	0
																		.0	0			0	0
ISLAND																							
			69.7											1.60				.0	0				
* * * ISLAND OF MOLOKAI																							
KUALAPUU 534 A														2.82	- .82			.0	0				
MAPULEHU 542 A														1.08	- 3.02	.89	13	.0	0			2	1
MAUNALOA 511 A														2.34	- .74			.0	0			0	0
MOLOKAI AP 524 A	76.3	62.9	69.6		85	1	56	12		0	0	0	0	1.71		.70	15	.0	0			3	2
																		.0	0			0	0
ISLAND																							
			69.6											1.99				.0	0				
* * * ISLAND OF LANAI																							
LANAI CITY 672 A	75.4M	59.5M	67.5M	2.0						0	0	0	0	1.52	- 2.21			.0	0				
																		.0	0				
ISLAND																							
			67.5											1.52				.0	0				
* * * ISLAND OF MAUI																							
HALEAKALA B E S 434 A														4.18	- 4.94	2.54	15	.0	0			4	2
HALEAKALA RS 338 A	60.3	39.6	50.0		69	4	34	27+		0	0	0	0	2.13		1.37	15	.0	0			3	2
HANA AIRPRT 355 A	77.9M	64.4M	71.2M		81	10+	59	13		0	0	0	0	3.95		1.37	18	.0	0			6	3
HONOKOHUA 493 A														1.94	- 1.80			.0	0			0	0
KAANAPALI AIRPRT A	78.5M	63.2M	70.9M		83	2	59	17+		0	0	0	0	1.54				.0	0			0	0
KAHULUI WB AP 398 R	78.9	60.5	69.7	2.0	83	1	52	12+		0	0	0	0	1.64	- .90	.93	14	.0	0			2	2
KAILUA 446 A	74.4	60.2	67.3	.8	80	16+	56	17+		0	0	0	0	4.46	- 6.01	2.13	15	.0	0			4	2
KEANAE 346 A														4.00	- 15.41			.0	0			0	0
KIPAHULU 258 A														1.91	- 7.02	.70	15	.0	0			3	3
KULA SANATORIUM 267 A	67.9	48.3	58.1	3.0	72	19+	43	8		0	0	0	0	1.90	- 1.98	.98	15	.0	0			3	1
																		.0	0			0	0
LAHAINA 361 A	81.0	61.7	71.4		86	1	56	16		0	0	0	0	1.24	- .85	.68	14	.0	0			3	1
PAIA 406 A														2.14	- 1.42	1.25	15	.0	0			3	1
WAILUKU 392 A	77.4M	62.7M	70.1M	1.2	83	2	58	17+		0	0	0	0	*				.0	0			0	0
																		.0	0			0	0
ISLAND																							
			66.1											2.59				.0	0				
* * * ISLAND OF HAWAII																							
HAINA 214 A	77.4	61.6	69.5	.0	83	1	58	12		0	0	0	0	7.00	- .08	2.83	15	.0	0			4	2
HAWAII VOLCNS NP HQ 54 R	66.3	48.4	57.4	.5	81	7	43	5		0	0	0	0	.95	- 9.30	.19	15	.0	0			0	0
HILD WB AIRPRT 87 A	79.8	62.3	71.1	.5	85	20	58	14		0	0	0	0	2.56	- 10.38	1.68	21	.0	0			1	1
HUEHU 92.1 A														.51	- 2.20			.0	0			0	0
KAINALIU 73.2 A	77.2	58.4	67.8		82	7	54	26		0	0	0	0	1.46	- 1.93	1.21	21	.0	0			2	1

CLIMATOLOGICAL DATA

HAWAII
FEBRUARY 1970

Continued

Station	Temperature										Precipitation												
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
										Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										90° or Above	32° or Below	32° or Below	90° or Above										
KAMUELA AIRPORT 191	70.4M	44.9M	57.7M		76	21	37	18		0	0	0	0	.72		.36	15	.0	0		4	0	0
KEAAU 92	80.8	62.2	71.5	1.2	89	13	59	26+		0	0	0	0	.95	-12.48	.19	1	.0	0		4	0	0
KEALAKEKUA 26.2	77.3	59.7	68.5		82	14+	56	26		0	0	0	0	2.32		2.24	21	.0	0		1	1	1
KONA AIRPORT 68.3	81.0M	60.3M	70.7M		83	8+	58	13+		0	0	0	0					.0	0		0	0	0
KUKUIHAELE HIL 199														4.89	-2.42	2.18	15	.0	0		7	3	2
KULANI CAMP 79	61.9	40.6	51.3		70	20+	31	8		0	0	1	0	.63		.16	2	.0	0		1	0	0
PAHALA 21	79.3	58.4	68.9	.1	86	15	52	8		0	0	0	0	2.45	-4.14	1.15	18	.0	0		4	2	2
POHAKULOA 107														.36				.0	0		0	0	0
PUAKO 95.1														.39		.26	15	.0	0		2	2	1
PUU WAAHAA 94.1														1.03	-1.54	.90	22	.0	0		2	1	0
UMIKOA 118														6.10	-4.45	1.93	15	.0	0		7	5	2
WAIKAE SCD 88.2														.69		.35	2	.0	0		2	0	0
ISLAND			65.4											2.06				.0					

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 89° ON THE 13TH AT KEAAU 92, HAWAII
 LOWEST TEMPERATURE: 26° ON THE 17+ AT MAUNA LOA SLOPE OBS, HAWAII
 GREATEST TOTAL PRECIPITATION: 7.48 AT KUKAIAU 222, HAWAII
 LEAST TOTAL PRECIPITATION: .00 AT 3 STATIONS
 GREATEST ONE-DAY PRECIPITATION: 4.12 ON THE 15TH AT PAAUILO 221, HAWAII

SUPPLEMENTAL DATA

	Wind (Speed - m.p.h.)						Relative humidity averages - percent				Number of days with precipitation						Percent of Possible sunshine	Average sky cover sunrise to sunset	
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	Standard of Time				Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over			Total
							150TH MERIDIAN												
							02	08	14	20									
HILO, HAWAII, WB AIRPORT	3	0.4	8.0	23	NW	15+	72	65	55	70	6	6	3	0	1	0	16	50	6.4
HONOLULU, DAHU, WBFC	4	6.3	11.2	33	NE	23	73	70	51	66	8	1	3	0	0	0	12	72	4.9
KAHULUI, MAUI, WB AIRPORT	4	6.3	10.0	31	ENE	16	81	79	58	74	4	3	0	2	0	0	9	73	4.5
LIHUE, KAUAI, WB AIRPORT	4	5.0	11.1	26	NE	23+	74	72	60	71	8	5	4	0	0	0	17	48	6.3

SPECIAL WEATHER SUMMARY

February saw the continuation and spread of the prolonged dry spell which, in some areas, had persisted since the beginning of 1969.

In 96 percent of the rain gages in the State, rainfall was below the average for February; and in 70 percent, less than half the average. Oahu's rainfall was even more deficient: 93 percent of the stations reporting had less than half, and 62 percent less than one-quarter, of their average rainfall for February. Five stations reported their 13th consecutive month of deficient rainfall: Kaunakakai, Molokai; Maunaloa, Molokai; Kapapala Ranch, Hawaii; Manuka, Hawaii; and Moaula, Hawaii. The Lihue Weather Bureau Office's 0.89 inches was its lowest February total in 19 years of record.

The consequences of the protracted dry weather included:

1) The declaration of a drought emergency for parts of Hawaii Island -- on February 5 in the Puna district and on February 13 in the Kau district, where water restrictions were imposed and the number of families having to haul water for domestic use increased to 68 by the end of the month. (Many homes in those areas depend on roof catchment for their water supply.)

2) A major forest fire which in the course of 4 days burned over 3,000 acres in the Kipapa section of the mountains above Wahiawa, Oahu, until extinguished by the efforts of hundreds of fire fighters and by heavy showers on the early morning of the 25th. The fire was by far the largest on Oahu since records of this kind began in 1950.

Despite the lack of rain, crops and livestock were not as yet being seriously affected.

That the dry weather might be due in part to a lower moisture content of the atmosphere itself, was suggested by the low average dew point at Honolulu International Airport: 58.6° at mid-day, 3.1° below the February mean. The Airport station also recorded its highest February temperature since records there began in 1950: 86°, on the 1st of the month.

At about 3:15 p.m. on February 4, an intense dust devil, occurring under rather cloudy, calm conditions, ripped off about 300 square feet of

wooden and tin roofing from an Army map storage warehouse near Fort Shafter on Oahu and carried a number of the maps to a height estimated at several hundred feet. Although no details were available concerning the dust devil, several others observed in the same area in the past few years were described as averaging no more than about 20 feet in diameter and 3 minutes in duration, during which time they travelled 200 to 300 feet.

For a number of stations with long periods of record, this was the driest February ever.

Stations With Less Rain in February 1970 than in any Previous February

(25 years of record or more, only)

Station	Length of Record (Yrs.)	Prev. Lowest Feb. Total (Inches)	Feb. 1970 (Ins.)
<u>KAUAI</u>			
Intake Wainiha	57	1.89	1.46
Koloa Mauka	65	1.22	1.06
Wahiawa Mountain	69	1.50	1.25
<u>OAHU</u>			
Kaneohe Ranch	25	1.67	1.59
<u>MAUI</u>			
Kailiili	45	3.58	1.65
<u>HAWAII</u>			
Halemaumau	37	0.80	0.79
Hawaii Volcanoes National Park	57	0.96	0.95
Honomu Mauka	31	2.86	2.84
Kaala Iki	31	1.09	0.87
Kaumana	31	2.42	0.95
Lanihau	27	0.29	0.24
Pahoa	60	2.02	1.83

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DAILY PRECIPITATION

HAWAII
FEBRUARY 1970

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ISLAND OF KAUAI																																
ANAHOLA 1111	1.06			.01		.02				.47			.01			.28	.21	.28		.18			.15			.05	.03	.01				
BRVOES*701	.84			.02						.14						.23																
EAST LAHAI 934	1.84			.02						.11			.06			.31				.01												
ELELE #27	.04									.12						.20																
HALAULA 1110	1.45			.01		.04				.49			.02			.30	.04						.19			.01						
HALENAHANG 1006	.92									.03			.07			.39								.03			.03	.05				
HUKIP# 943	.93									.04			.04	.20																		
ILIIULIUA INTAKE 1050	2.97		.06	.08	.03	.02	.04			.13	.03		.04	.20		1.23	.02	.36		.04	.04			.21	.02	.02	.14					
INTAKE WAIIHANA PC 1986	1.44									.03			.32			.12								.92								
KALIHAI#1 RES 1131	4.44				.04	.73	.08			.94	.02					.82			.07				2.24	.01	.05	.10	.02					
KANALUHELOHULU 1075	6.74				.74	.08		.03		2.39		.07	2.31	.42						.35		.08	.03				.02					
KANEHA RESERVOIR 1092	3.95				.03	.01	.07			1.15		.02				.40	.02	.22		.02												
KAPA STABLES 1104	1.83			.01						.28						.20	.10	.27														
KEALIA 1112	1.08				.01		.07			.31			.01			.30	.02	.31														
KEKAMA 944	.88									.27					.21								.02									
KILAUEA 1134	2.83		.24	.01	.02	.02	.11			.64						.70		.09			.02	.02			.90		.03	.03				
KILAUEA FIELO 17 1135	3.30			.02	.03	.02	.14			.88						.95	.01	.59			.02			1.16								
KILAUEA POINT 1133	2.37	.03			.03	.23				.38			.31	.34		.01	.06	.01		.04	.47											
KOLA 1033	1.47									.04			.56																			
KOLLA 936	.59			.02						.04			.04			.19										.01	.01	.02				
KOOLA HAUNA 994	1.04									.11			.04			.41		.39														
KOLOK RES 1137	1.24			.03		.02	.13			.81						.92	.01	.08														
KUKUIA 934	.55			.01						.10			.05			.11		.27				.26			1.23	.01	.04	.07				
LIMUE VARIETY STA	6.90									.02	.06		.09	.26		.01		.42														
LIMUE 1920	.90					.03				.01	.14		.03			.24	.02	.34		.02												
LIMUE WA AP 1020.1	.89			T	T		T			.16	T		.10	.05		.32	.07				T		T	T	.02	.03	.12	T				
MAKAHUNA POINT 940.1	.75				.06	.02				.03	.10		.01	.12	.18																	
MAKAHOLI 965	.74									.13			.04			.24																
MANA 1026	1.10						.02			.44			.01	.22	.08																	
MOHIHI HPR CROSS 1083	28.04									6.00			1.13	.14	.16									.11								
MOLOKA 1145	3.38									.54						.68		.12			.07			1.90				.02				
MOUNT WAIALEALE 1047	1.26									.50					.43																	
NIU RIDGE 1035	2.83		.18	.04	.04	.05	.27	.02		.15	.07		.02		.43																	
PH WAIHANA 1115	5.78									2.20			1.02	.40		.77	.14	.43														
PRINCEVILLE RANCH 1117	5.32						.07			.02			.79	.20							1.16	2.38		.05								
PUEHU RIDGE 1040	1.82									.03				.59																		
PUMU 1013	.77				.03	.01				.11			.01			.13		.35		.01												
RESERVOIR # 1004	.90									.04			.05			.43		.31														
WAIHANA 930	.56			T						.01	.08					.22		.75		T												
ISLAND OF MAUI																																
WAIANA MOUNTAIN 990	1.25																															
WAIAMI LOWER 1034	1.32																															
WAIAMI UPPER 1032	1.76			.04			.02			.04	.02		.72		.37																	
WAIANA 943	.70				.09	.03	.02			.12	.01		.03	.70	.05	.35		.39		.01	.01	.17				.01	.04	.02				
WAILUA KAI 1043	.93									.38				.14		.39		.76						.22								
WAIPIA 947	.35									.10			.15			.30		.31														
WEST LAHAI 931	.53			T						.09			T			.11		.31		T												
ISLAND OF OAHU																																
AIEA FIELD #25 761	.53									.14					.37		.02															
BERETANIA PUMPING STA	.58			T		T	.01			.07			.40		.07	T	.03															
CAMP #4 807	1.21									.36		.05			.75		.05															
CHURCH COLLEGE LAIE	2.34									.58			1.30	.23																		
COCONUT ISLAND #40.1	.71				.02		.01	.01		.24	.01		.24	.25	.01	.11								.01	.11	.01	.01					
EWA PLANTATION 741	.52									.10				.30	.10			.02														
HELEMANU INTAKE 881	.52					.19								.80		1.30				.05												
HOKULUA 725.2	1.49														1.33																	
HONOLULU OBSERV 702.2	.71									.10				.55	.06																	
HONOLULU WPC 703	.77			T		T				.10			.32	.34	T			.01														
HONOLULU SUBSTA 704	.57				.02					.08			.09	.35																		
H S P A EXP STA 707	.82			T		.01		.01					.57	.09																		
KAHANA 883	3.05									.24					2.00		.09															
KAMUKU 912	1.44				.02					.53					.83		.06															
KAILUA FIRE STA 701.3	.87			T						.51	T	.03			.04		.03															
KALIHAI RES SITE 777	2.54									.84			.52	.94	.04																	
KANEHE MAUKA 781	1.23							.03		.04			.43	.01	.02																	
KANEHE RANCH 838	1.09	T	T	T		.05				.63	T	.60			.30	T	.01															
KAPALAMA 773	1.10									.07					.55																	
KAWAIHAPAI 841	2.87				.07	.01				.73					1.89		.20															
KAWAI IKI INTAKE 880.2	22.30				22.30																											
KEHOI CAMP 8 835	3.62				.01		.01			1.02					2.42		.12			.02												
KOOLAUA DAM 833	1.00			.03	.10		.04																									

DAILY PRECIPITATION

HAWAII
FEBRUARY 1970

Continued

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
KAAHULUOHI 193	7.21					.46							2.47							2.32												
KAHAU 92	.94	.19	.18								.07	.04	.02	.02	.11	.01		.03				.02	.09			.11	.06					
KAALAEKUPU 26.2	2.32													.04	.04						2.24											
KAHANA 181.2	4.03																															4.65
KALAEWA 2 E F 5	3.14																															3.14
KIPE 89.2	4.79		.38				.01							.05		.01	3.40					.01	.07	.05	.23	.02	.07		.09			
KIHALA 174.1	2.09		.10	.01							.39	.10	.01																			
KIHALA 74 LILT 176	3.54		.09	.04							1.13	.01				3.48	.01								.37	.01	.08	.20	.12			
KIHALA MISSION 175.1	3.13			.04	.01						.49	T			.05		.05					.04	.49	T	.22	.17	.16		.02			
KIHALA LORPE 196	3.99					.18							1.31								1.29											1.12
KONA CAMP RT 08.3															.02																	
KONF VILLAGO 93.8	.04													.04																		
K KAIKAU 222	7.48					.04	T				1.34	.71			3.27	.52	T					.30	.97	.14	.15	.02	.01					
KIKI I-24LF -IC 190	4.88					.03					1.18	.12			2.18	.20						.20	.98	.06	.18	.17	.06					
KIKI I-24LF -ILL 276	6.28					.10					2.05	.33				2.70							.93	.01	.08	.01	.07					
KULANI CAMP 79	.03		.16											.02		.06	.05	.02	.03		.02		.05	.09	.03	.01	.05	.02		.02		
KULANI CEMET 76	.11													.02		.01																
KULANI SCHOOL SITE 78	.90						.10							.02		.01																
LANIWA DR.2	.24														.16																	
MANA 2	2.81															.29								2.51	.01	T						
MAUNA KEA BEACH 98																																
MAUNA LWA SLOPE ORS	.00																															
MIDDLE HOLELOA 89.1	.51														.04						.05		.42									
WIDOLE BEH 147.1	.40															.40																
MAULA 18	1.09																															
MOUNTAIN VIEW 91	1.99	.17	.16	.34							.03	.05	.07	.05	.05		.02	.44					.06	.30	.02	.09	.03	.02				
MALENO 24	.32		.11											.01		.13	T	T						.01		.12	.06					
NAPPOPO 28	.44		.09													.02																
NAULU FOREST 38.6	4.04		.79	T										.11	.34	.04			2.75													
NIULI 179	3.22		.10	.02							1.45	.04				1.07								1.96		.01	T					
OKALA 223	5.87						.03	T			.80	.36		.01	3.30	.53						.17	.44	.02	.09	.11	.01					
OPIMINALE 2 24.1	1.14													.20	.12						.05	1.01										
OPIMIC LAND EST 91.5	1.26					.38					1.45	.15				2.82	.45					.21			.60	.38	.01	.06	.04	.03		
PAAHUA 217	0.98					.04					1.52	.45	T			4.12	.52	T					.48	.73	.16	.09	.02	.01				
PAAHUA 2-1	0.27					.02	.10											1.15				.75		.43		.13						
PAAHUA 21	2.45		.02											.02		.09	.18			.44		.02		.01	.09	.02	.11	.13	.06			
PAAHUA 04	1.81	.19			.03						.13	.08	.08																			1.15
PAAHUA 37	1.11																															
PAPAIU 144.1	1.92		.26	T			.07	T			.03	.12	T	.01	.04	.03	.17	.12				.60	.19	T	.15	.01	.08		.06			
PAPAIU MAKA 140.1	2.42		.32				.07	T	T		.03	.17		.01	.01	.03	.09	.97					.17	.05	.24	.01	.08		.19			
PEPEVED MAKAI 144	1.67		.22	.01			.02				.15	.06		.02	.58	.18	.05	.02						.14	.02	.08	.01	.09		.02		
PIIMAUJA 89	4.00																															4.00
PIIKOULU A 107	.34															.33						.03										
PIKAO 95.1	.39															.26																
PIU KIME 120	2.25																															2.25
PIU LAI 107.1	.82																															.82
PIU LEHIA 77	1.43																															1.43
PIU MAIT 119	1.38																															1.38
PIUOKUHAU 147	3.88		.21	.06							1.30		.01			1.87	.02						.18	.01	.09	.01	.07					
PIU OF 42	1.35		.28									.04		T	T	.24	.09	T			.50	T	T	.15	.03	.02						
PIU WAAVA 94.1	1.03															.13							.90									.50
SAOPE ROAD 1 84	.82					.32																										.04
SOUTH POINT CRRAL 3	.04						.02																									
UHIKOA 118	0.10										.81	.93				1.93	.97						.11	1.01	.30						.02	
UPUIU POINT USCG 159.2	1.36										.38					.59										.11		.08				
WAIKOA SCD 89.2	.69		.35			.03						.02			.06								.03		.05						.04	

DAILY TEMPERATURES

HAWAII
FEBRUARY 1970

Station	Day of Month																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																
ISLAND OF KAUAI																																
KANALOHULU 1075	MAX MIN	70 49	70 52	63 43	63 50	65 38	59 49	57 37	62 35	59 41	57 46	64 43	64 41	61 49	56 53	60 46	63 45	57 44	67 44	68 44	66 45	63 48	57 48	61 46	60 47	64 45	63 42	60 35	65 39	62.6 44.4		
KILAUEA POINT 1133	MAX MIN	84 70	78 69	75 72	78 69	83 67	73 67	75 66	76 66	79 66	70 65	78 64	80 68	85 65	74 65	73 68	75 66	78 66	85 65	71 64	78 68	83 65	71 67	73 65	74 66	75 67	74 64	74 69	76.6 66.5			
LIHUE WB AP 1020.1	MAX MIN	82 66	80 72	80 72	80 73	80 62	75 65	76 69	78 62	76 70	74 66	76 63	80 60	83 68	77 66	74 65	80 61	76 67	76 65	77 66	83 63	76 68	79 66	76 62	74 69	77 61	77 65	76 61	77 63	77.5 65.1		
MAKAHUENA POINT 940.1	MAX MIN	85 69	80 68	81 71	82 74	83 62	79 67	84 69	77 62	81 70	80 64	82 69	78 66	84 65	82 65	84 60	73 58	77 68	77 68	80 65	85 63	84 66	79 66	84 62	78 69	80 61	78 61	81 64	78 64	80.6 69.7		
MANA 1026	MAX MIN	84 59	83 66	81 62	79 61	79 61	80 65	80 65	80 65	82 56	82 60	77 65	77 65	81 69	84 63	74 65	76 51	74 58	74 60	82 61	81 60	81 62	80 63	80 64	83 54	81 58	81 57	81 55	79.8 60.5			
NIU RIODE 1035	MAX MIN	79 60	80 60	78 60	79 60	79 57	80 56	79 60	78 60	76 60	74 54	70 52	75 55	78 69	77 65	78 57	74 59	75 54	70 60	76 60	80 60	79 60	78 60	76 54	78 54	76 53	78 55	79 56	77.0 57.1			
WAIHAI LOWER 1054	MAX MIN	81 59	79 59	80 59	80 52	80 54	78 56	75 58	75 59	77 54	73 58	74 57	76 51	78 56	78 57	76 57	74 59	73 56	79 60	78 58	84 62	78 62	78 62	76 61	71 60	72 60	74 62	77 52	76 56	76.8 56.5		
* * *																																
ISLAND OF OAHU																																
EWA PLANTATION 741	MAX MIN	84 59	82 63	80 65	83 63	83 56	80 60	78 57	80 54	83 56	75 61	79 56	80 54	83 64	74 66	74 56	76 62	80 57	83 65	84 59	83 62	82 59	78 57	75 62	76 63	78 62	77 55	78 55	79 56	79.5 59.6		
HONOLULU WBFC 703	MAX MIN	86 66	84 70	83 70	83 68	83 64	80 64	79 67	82 63	78 63	81 65	81 65	82 62	73 70	76 63	81 66	80 63	82 68	82 68	82 65	81 66	81 64	78 64	78 68	82 66	82 68	82 62	82 63	80.9 65.6			
HONOLULU SUBSTA 704	MAX MIN	82 72	78 73	78 72	79 69	78 65	75 65	77 66	76 67	77 65	72 66	74 67	77 69	75 64	74 69	75 67	74 65	77 67	81 68	79 68	78 66	77 66	75 66	73 66	73 66	75 65	75 66	76 65	76.5 66.8			
KAHUKU 912	MAX MIN	83 60	80 60	81 71	81 57	82 52	77 52	77 53	83 56	74 65	76 55	60 55	60 55	84 55	75 55	82 55	77 62	81 64	79 60	81 59	79 60	79 61	79 65	76 66	76 67	76 66	79.0 61.0					
KANEOME MAUKA 781	MAX MIN	83 66	80 67	84 71	77 66	79 63	82 64	80 64	80 61	79 61	74 63	75 66	75 61	79 62	78 67	70 65	72 66	73 62	80 65	81 63	81 63	80 63	76 62	67 63	73 64	74 66	74 64	76 62	76.7 64.3			
LUALUALEI 804	MAX MIN	85 64	85 63	85 69	82 67	85 60	81 60	80 65	80 58	79 56	75 60	77 58	77 58	80 60	74 68	74 58	80 62	77 60	82 68	82 60	82 61	81 66	76 66	80 59	78 65	80 58	76 54	79 56	79 64	79.7 62.2		
MAKAPOU POINT 724	MAX MIN	76 64	78 63	75 69	75 63	79 67	68 59	69 58	70 58	69 58	76 54	70 62	69 59	78 63	77 60	70 60	69 58	68 56	72 62	68 59	71 60	79 60	77 60	75 64	70 64	67 56	72 62	70 60	73.2 60.9			
OPAEOULA 870	MAX MIN	81 60	82 62	77 64	75 64	79 65	79 55	73 58	75 52	79 52	78 55	72 52	74 54	68 54	77 60	71 56	70 56	79 58	80 57	81 60	81 58	73 60	78 59	78 60	71 60	71 54	78 55	75 55	75.9 57.8			
PRI WAHIAWA 820.2	MAX MIN	82 59	80 63	83 59	81 53	83 53	81 53	76 58	78 51	80 51	79 53	73 56	78 51	74 52	67 58	69 57	80 52	75 56	84 56	84 60	78 58	76 61	76 62	84 62	78 61	78 62	74 58	77 53	78 53	78.4 56.4		
WAIALUA 847	MAX MIN	83 62	85 60	80 61	81 63	80 57	76 59	77 53	77 53	82 53	73 60	73 55	77 54	82 60	68 55	69 62	73 57	75 60	78 61	84 62	80 62	80 62	77 66	76 66	75 56	78 56	78 52	80 52	78.2 59.0			
WAIKIKI 717.2	MAX MIN	86 66	84 70	81 71	82 67	86 59	84 60	80 66	78 57	82 60	84 62	71 64	79 57	84 59	84 68	77 64	82 59	85 64	84 61	85 61	83 57	71 65	71 64	78 64	79 64	79 67	79 59	80.4 63.2				
WAIMANALO EXP FARM	MAX MIN	82 62	81 70	80 69	79 68	81 58	82 59	80 60	79 62	79 58	82 61	75 65	78 56	79 62	79 66	70 62	73 63	75 65	81 61	80 63	83 62	81 59	79 65	75 66	75 66	75 63	77 66	77 64	78.4 62.6			
* * *																																
ISLAND OF MOLOKAI																																
MOLOKAI AP 524	MAX MIN	85 65	79 66	78 69	78 64	79 60	79 60	75 66	75 57	76 57	78 60	74 64	77 56	79 62	77 68	70 65	71 64	74 61	78 61	79 61	79 62	77 64	75 64	73 67	73 66	74 65	73 63	74 64	77 60	76.3 62.9		
* * *																																
ISLAND OF LANAI																																
LANAI CITY 672	MAX MIN	76 62	74 61	76 62	76 60	76 62	74 63	75 61	73 57	74 59	75 61	76 61	73 59	75 61	76 61	73 55	75 61	79 60	77 59	77 60	76 59	75 58	77 59	76 57	74 61	75.4 59.5						
* * *																																
ISLAND OF MAUI																																
HALEAKALA RS 338	MAX MIN	64 41	62 44	66 52	69 45	64 39	61 39	62 43	64 40	64 35	60 37	59 34	59 37	60 35	53 41	58 38	59 38	58 40	54 40	59 41	58 43	54 42	61 38	62 42	63 37	59 37	59 34	62 38	60.3 39.6			
HALEAKALA SUMMIT 338.4	MAX MIN	52 38	54 38	55 44	56 45	50 32	57 32	61 42	52 41	46 34	60 39	59 39	59 39	58 34	48 34	48 34	48 34	48 34	48 34	48 34	48 34	51 35	51 36	54 38	56 39	53 38	57.0 37.0					
HANA AIRPORT 355	MAX MIN	80 69	77 65	80 68	80 69	81 66	81 61	77 64	77 64	79 65	81 63	76 61	77 65	80 59	80 61	78 66	74 66	78 66	80 63	80 62	80 62	75 62	72 64	73 66	75 64	76 67	77 64	77.9 64.4				
KAANAPALI AIRPORT	MAX MIN	82 64	83 66	82 70	81 66	81 61	80 64	78 59	77 62	79 63	78 63	78 59	80 63	75 62	73 65	79 62	80 61	79 61	80 61	80 61	79 61	79 63	76 67	76 66	77 65	76 61	79 63	78.5 63.2				
KAHULUI WB AP 398	MAX MIN	83 60	81 60	82 65	82 65	77 60	79 52	77 52	81 64	79 52	74 66	79 52	80 52	80 66	74 66	74 65	77 56	79 66	82 65	79 59	79 59	77 68	77 68	78 66	80 64	78 63	79 57	82 57	78.9 60.5			
KAILUA 446	MAX MIN	78 61	78 61	75 65	75 66	75 63	78 60	75 60	72 60	76 60	76 60	66 56	71 56	75 58	76 58	80 58	80 58	70 56	76 56	76 61	78 62	77 61	76 62	71 61	70 60	71 60	71 60	71 60	74.4 60.2			
KEAWAKAPU BEACH 260.2	MAX MIN	85 62	85 60	85 59	82 59	82 61	83 60	82 55	82 64	82 64	85 63	77 54	81 57	82 58	75 62	83 62	75 56	82 61	82 59	83 62	82 62	81 65	79 63	80 55	81 55	80 55	82 55	83 55	81.6 59.0			
KULA SANATORIUM 267	MAX MIN	70 51	72 50	70 51	71 54	69 50	70 51	66 44	68 43	68 44	69 46	65 48	67 44	68 45	71 48	64 53	64 46	67 45	72 46	70 55	70 55	69 54	65 46	65 44	64 45	65 46	63 47	65 46	67.9 48.3			

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
FEBRUARY 1970

Continued

Station	Day of Month																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
LAWAINA 361	MAX MIN	86 65	84 66	84 64	82 62	82 62	82 65	82 59	80 59	80 65	81 64	78 58	79 59	81 63	81 65	79 63	76 56	80 59	82 61	82 64	83 64	85 62	82 63	79 60	79 58	80 60	80 60	79 61	80 60	81 60	81.0 61.7	
WAILUKU 392	MAX MIN		83 63	78 69	79 66	79 62	79 60		77 61	82 63	73 63	75 58	77 60			79 61	74 58	78 59	80 64	78 64			78 63	74 66	75 65	75 64	74 65			77.4 62.7		
ISLAND OF HAWAII																																
HAINA 214	MAX MIN	83 62	81 61	78 63	79 61	78 61	81 63	79 63	76 62	77 62	82 61	70 62	75 58	79 61	80 64	80 61	66 60	74 59	80 61	80 63	80 63	82 64	80 63	72 62	69 62	77 60	76 60	76 62	76 62	76 62	77.4 61.6	
HAWAII VOLCNS NP HQ 54	MAX MIN	70 48	65 53	66 50	67 49	68 43	67 48	81 47	65 44	68 49	67 49	57 47	63 48	70 52	69 48	57 46	61 48	63 48	71 52	72 48	71 52	82 48	71 48	65 52	60 47	60 48	63 48	63 49	63 48	63 49	66.3 48.4	
HILO WB AIRPORT 87	MAX MIN	80 63	81 62	82 62	82 62	81 61	79 59	78 66	80 62	81 63	70 62	79 65	83 66	83 60	82 58	73 65	80 64	82 60	83 61	85 62	82 61	77 63	77 65	77 63	77 65	78 61	77 63	81 63	79 63	79 63	79.8 62.3	
KAINALIU 73.2	MAX MIN	78 57	78 61	79 57	76 55	77 55	77 60	82 58	74 55	73 60	77 58	77 60	78 55	76 58	81 58	77 60	78 62	77 60	78 60	77 61	77 60	77 59	77 60	76 58	78 58	75 57	74 58	75 58	76 57	77.2 58.4		
KAMUELA 192.2	MAX MIN	75 43	78 66	76 54	70 47	70 43	75 46	71 51	65 52	72 55	73 56	63 52	70 43	74 45	72 54	70 45	65 44	75 47	76 51	76 47	76 51	75 48	70 52	60 52	65 53	69 52	70 52	68 52		71.0 48.9		
KAMUELA AIRPORT 191	MAX MIN		75 45	70 46	72 44	71 48	72 44	70 51	70 44	71 51	62 44	66 39	72 46	70 38	72 42	72 42	61 37	74 45	73 45	72 49	76 49	76 49	74 48	70 48	73 48	66 49	66 44	71 44	69 44	70.4 44.9		
KEAAU 92	MAX MIN	73 64	79 63	81 63	81 62	81 61	82 60	82 62	78 62	81 65	83 63	81 63	82 63	83 63	83 60	85 64	85 60	77 62	79 62	87 69	85 62	85 60	85 60	85 62	80 62	81 63	81 62	76 59	79 60	79 61	80.8 62.2	
KEALAKEKUA 26.2	MAX MIN	78 61	78 62	78 59	78 58	77 58	77 60	82 60	72 57	74 63	79 60	78 57	82 61	77 59	82 61	77 60	77 60	78 61	78 61	79 59	78 59	77 59	78 60	78 59	78 58	73 58	72 58	72 59	76 59	77.3 59.7		
KOHALA MISSION 175.1	MAX MIN	81 60	81 61	77 65	77 64	77 62	79 62	78 63	71 62	76 62	80 64	72 64	74 58	78 62	82 62	80 62	72 62	79 60	79 60	83 64	82 63	81 64	80 61	71 64	69 63	73 61	74 61	73 61	74 62	76.5 62.0		
KONA AIRPORT 68.3	MAX MIN	83 59	81 59	82 60	83 58	82 58	82 58	83 59	83 58	81 58	82 58	82 58	80 58	80 58	82 62	80 64	80 62	80 62	81 65	80 64	81 65	80 64	81 65	80 64	80 60	81 63	80 63	78 63	78 63	81.0 60.3		
KULANI CAMP 79	MAX MIN	69 41	64 41	60 35	63 41	64 35	65 41	65 36	65 31	53 35	53 35	58 39	58 41	58 39	58 41	67 43	67 41	67 39	67 41	67 41	67 41	67 41	67 41	67 41	67 41	67 41	67 41	67 41	67 41	61.9 40.6		
MAUNA LOA SLOPE OBS	MAX MIN	53 33	54 37	56 39	57 34	56 37	58 34	58 37	53 32	58 38	60 31	46 26	48 32	53 33	57 33	56 33	45 29	46 26	48 30	53 32	46 30	48 31	48 30	51 29	53 29	54 32	52 33	51 32	49 30	51.6 32.6		
MOUNTAIN VIEW 91	MAX MIN	78 56	78 56	75 57	76 54	75 54	79 54	79 55	79 55	79 55	79 55	79 55	79 55	83 55	83 55	83 55	73 55	75 55	82 55	82 55	79 55	81 55	81 55	68 55	68 55	72 55	74 55	74 55	74 55	77.1 55.8		
NAALEHU 14	MAX MIN	80 66	80 66	80 65	80 66	79 64	81 62	82 62	83 58	80 63	80 62	78 64	79 66	83 66	83 66	83 66	77 66	77 66	82 66	82 66	82 66	80 62	80 62	81 61	81 61	78 64	78 64	78 62	78 62	80.1 63.4		
OOKALA 223	MAX MIN	80 62	85 64	80 65	88 66	77 62	77 62	74 65	76 63	76 65	79 63	69 61	69 62	75 61	78 62	79 61	67 61	73 60	77 60	78 62	80 64	80 64	80 64	72 62	72 61	75 61	75 61	75 62	76 62	76.8 62.3		
OPIHIKALE 2 24.1	MAX MIN	77 57	77 61	76 65	76 64	75 60	79 59	71 56	72 57	79 57	76 58	74 56	75 55	81 57	76 57	81 60	73 57	77 56	76 56	75 56	75 56	75 56	76 56	75 56	71 58	72 54	74 53	72 54	74 54	75.3 56.5		
PAMALA 21	MAX MIN	80 62	75 60	80 57	80 62	79 59	83 59	84 56	77 52	78 54	80 55	80 55	77 55	86 61	86 60	79 59	86 60	80 59	81 60	80 59	79 59	79 59	82 59	82 59	82 59	77 54	74 56	75 57	75 57	79.3 58.4		
UPOLU POINT USCG 159.2	MAX MIN	82 67	84 69	79 68	78 66	79 66	81 67	79 67	78 63	78 69	82 65	76 68	76 64	79 65	83 69	83 65	75 66	75 66	80 66	83 66	82 66	80 67	81 67	77 65	75 65	76 63	78 65	76 63	81 69	79.1 66.3		

EVAPORATION AND WIND

Station	Day of Month																															Total or Avg.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ISLAND OF KAUAI																																
LIMUE WB AP 1020.1	EVAP WIND MAX MIN	.23 78 83 59	.13 69 86 61	.19 196 83 65	.28 174 80 64	.21 75 86 61	.22 76 83 60	* 183 74 59	.86 121 75 59	.38 64 77 58	.40 112 80 57	.42 199 104 57	.23 89 86 56	.27 113 74 56	.20 65 86 65	.23 235 74 56	.58 175 73 55	.39 175 73 57	- 26 85 61	.30 80 87 64	.21 60 82 56	.06 80 83 56	.23 175 79 58	.46 260 73 58	.34 227 75 58	.28 110 82 59	.21 133 79 57	.23 109 83 58	.30 109 83 57	8.138 3444 79.1 58.8		
ISLAND OF OAHU																																
HONOLULU OBSERV 702.2	EVAP WIND MAX MIN	.21 18 87 62	.15 13 83 63	.18 29 86 65	.20 20 84 65	.17 12 88 61	.18 22 84 59	.22 33 84 58	.20 22 84 57	.20 16 84 58	.14 40 86 57	.24 35 80 57	.15 22 81 57	.21 15 81 59	.16 30 88 67	.11 39 74 58	.23 56 81 56	.20 34 87 57	.11 15 87 60	.18 9 87 64	.21 21 91 65	.24 14 90 63	.15 20 84 59	.30 44 81 58	.30 64 83 62	.15 28 78 62	.20 31 88 62	.19 22 86 58	.24 26 86 62	5.42 758 84.1 60.3		

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STATION INDEX

MAY 1971

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE I	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	
								TEMP	PRECIP	EVAP	SPECIAL METHODS		
ISLAND OF KAUAI													
ALEXANDER RESV. 983	0140	02	KULOA		21 57	159 32	1010						
ANAHOUA WAINIPA PC 1008A	227	01	HANALEI		22 09	159 23	690						
AROUNDWOOD STA 985	0240	02	KOLOA		21 56	159 30	440						
EAST LAHAI 934	0458	02	KOLOA		21 55	159 30	450						
FAHUNA 3	0458	02	KOLOA		21 55	159 30	450						
ELEETE 927	0470	02	KOLOA		21 54	159 35	163						
HAILUHA 1110	0935	01	KAWAIIHAU		22 07	159 19	293						
HAILUHA 1000	0935	01	KAWAIIHAU		22 07	159 19	293						
HANALEI TUNNEL 1053	1170	01	KAWAIIHAU		22 05	159 28	1218						
HUKILO 945	2161	03	WAIPIA		21 59	159 49	800						
ILLILUHA INTAKE 1050	2222	02	LIMUHE		22 02	159 28	1070						
KITANO 1371	227	01	HANALEI		22 09	159 23	690						
KALIMAHAI RES 1131	2974	01	HANALEI		22 11	159 26	380						
KANALOHULU 1075	3099	03	WAIPIA		22 08	159 40	3600						
KANOE RESERVOIR 1092	3104	01	KAWAIIHAU		22 08	159 23	800						
KAPPA STARLES 1104	3159	01	KAWAIIHAU		22 05	159 20	179						
KEGIA 1112	3962	01	KAWAIIHAU		22 06	159 19	9						
KEKANE 944	4272	03	WAIPIA		22 02	159 28	375						
KILAUHA 1134	4561	01	HANALEI		22 12	159 25	317						
KILAUHA FIELD 17 1135	4568	01	HANALEI		22 11	159 25	415						
KILAUHA POINT 1133	4568	01	HANALEI		22 14	159 24	180						
KILOA 1033	4735	03	WAIPIA		22 04	159 46	2150						
KILOA 936	4742	02	KOLOA		22 05	159 28	36						
KILOA HILLS 994	4759	02	KOLOA		22 08	159 29	640						
KILOA RES 1137	4758	01	KAWAIIHAU		22 11	159 23	737						
KUMUKU 935	4950	02	KOLOA		22 04	159 30	100						
KUMUKU CITY STA	5503	02	KOLOA		22 01	159 28	375						
LIMUHE 102	5575	02	LIMUHE		22 09	159 22	207						
LIMUHE HP #1020.1	5580	02	LIMUHE		2 21	59 159 21	103	MID					
MAKAHEHA POINT 940.1	5785	02	KOLOA		22 02	159 27	52						
MAMA 105	6082	03	WAIPIA		22 02	159 46	11	9A					
MAMA 1026	6082	03	WAIPIA		22 02	159 46	11	9A					
MMA 1001	6097	02	KOLOA		22 11	159 28	300						
MOLUKA CROSS 1083	6159	01	KAWAIIHAU		22 15	159 30	330						
MOLUHA 1145	6549	01	KAWAIIHAU		22 11	159 20	330						
MOUNT WAIALEALE 1047	6565	03	WAIPIA		22 04	159 30	5148						
MOUNT WAIALEALE 1051	6565	03	WAIPIA		22 04	159 30	5148						
N WAIPIA OTCM 1051	6888	02	WAIPIA		22 04	159 28	1110						
N WAIPIA UPPER 1055	6893	01	KIMUHE		22 04	159 26	650						
PH WAINIPA 1115	8155	01	HANALEI		22 12	159 34	101						
PINEAPPLE PLANT 1117	8205	03	WAIPIA		22 01	159 42	1000						
PUMU RIDGE 1040	8217	02	LIMUHE		22 08	159 24	309						
PUMU RIDGE 1004	8217	02	LIMUHE		22 08	159 24	309						
STABLE CAMP 1055.1	8694	02	LIMUHE		22 02	159 27	740						
WAIPIA 930	8941	02	KOLOA		22 06	159 34	215						
WAIPIA MOUNTAIN 990	8941	02	KOLOA		22 06	159 34	215						
WAIPIA UPPER 1054	8958	02	LIMUHE		22 01	159 27	508						
WAIPIA LOWER 1052	8968	02	LIMUHE		22 01	159 28	780						
WAIPIA 943	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 947	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 948	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 949	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 950	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 951	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 952	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 953	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 954	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 955	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 956	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 957	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 958	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 959	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 960	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 961	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 962	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 963	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 964	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 965	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 966	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 967	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 968	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 969	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 970	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 971	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 972	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 973	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 974	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 975	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 976	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 977	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 978	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 979	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 980	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 981	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 982	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 983	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 984	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 985	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 986	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 987	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 988	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 989	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 990	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 991	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 992	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 993	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 994	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 995	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 996	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 997	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 998	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 999	9253	03	WAIPIA		22 09	159 43	21						
WAIPIA 1000	9253	03	WAIPIA		22 09	159 43	21						

STATION	INDEX NO.	DIVISION	DISTRICT
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SPECIAL WEATHER SUMMARY

The dry weather which had affected all of the islands since early in the year, reached its peak in March. Without exception, every reporting rain gage station in the State had well under its average rainfall for the month, and nearly two-thirds of the gages had less than one-fourth their average March rainfall. The wettest part of the State was the Kohala Mountains in northeastern Hawaii Island; but even there only one station, Hawi, had as much as 84 percent of its monthly mean.

Not since March 1966 had a rainfall deficiency in the State been so widespread; but even that month was no match for March 1970 in the severity of the deficiency.

The worsening drought was most seriously felt on Hawaii Island, where:

1) On March 6 and March 18, respectively, the North Kona and South Kona Districts were declared "drought disaster areas" by the Mayor of Hawaii County -- a status already shared by the Puna and Kau Districts. To help offset the lack of rain, State agencies were hauling water to the Naalehu Reservoir from a well in Honuapo, and to approximately 70 families in Puna and 40 in North Kona -- areas largely dependent upon roof catchment for domestic water supplies. By March 19, more than \$30,000 of State funds had been spent in this and other drought emergency measures.

2) The livestock death rate rose and calf prospects fell, as farms and ranches reported severe shortages of water and feed. The Statistical Reporting Service of the U. S. Department of Agriculture estimated that as of March 27, 150 head of cattle had died from lack of water and adequate pasturage and from related diseases.

3) Crops declined in growth and quality. In Kona the growth of bananas and cucumbers was retarded and in Puna papaya were reported to be smaller than usual. Some young macadamia trees were dying in South Kona.

During the last week in March, Oahu experienced its second serious forest fire in as many months, with the burning of approximately 850 acres near the Pupukea Boy Scout camp in the northwestern Koolau Mountains, an ordinarily wet locality. The Oahu Forest District placed the number of acres burned in Kipapa in the February fire (see the February 1970 Special Weather Summary) and in smaller flare-ups in March at 4,175, and the cost of fighting the fire at nearly \$67,000.

The month was warm as well as dry. The average monthly temperature reached 74.3° at the Lihue, Kauai, Weather Bureau Office -- tying a similar

reading in 1959 for the highest in March in 39 years of record; and 76.9° at Honolulu International Airport, the highest March reading there in 23 years of record, and 1.2° above the previous warmest March.

Five stations reported their 14th consecutive month of below-normal rainfall: Kaunakakai, Molokai; Maunaloa, Molokai; Kapapala Ranch, Hawaii; Manuka, Hawaii; and Moaula, Hawaii; and for many gages in the State this was by far the driest March ever reported.

Stations with less Rain in March 1970 than in any Previous March

(25 years of record or more, only)

Station	Length of Record (Yrs.)	Prev. Least Mar. Total (Inches)	March 1970 (Ins.)
<u>KAUAI</u>			
Anahola	39	1.02	0.66
Eleele	69	0.08	0.03
Halenanaho	38	1.35	0.83
Hanalei Tunnel	40	3.40	1.10*
Iliiliula Intake	35	4.21	2.77
Puhi	34	1.47	0.87
Reservoir #6	56	1.34	1.08
Wahiawa	65	0.21	0.14
West Lawai	68	0.37	0.26
<u>OAHU</u>			
Aiea Fld 625	62	0.96	0.90
Kapalama	48	1.17	0.54
Kawaihapai	40	0.24	0.06
Kemoo Camp 8	45	0.47	0.28
Nuuanu Reservoir #4	65	2.26	1.40
Wahiawa Dam	56	0.77	0.44
Waialua	70	0.36	0.12
Waianae Mauka	65	1.81	0.47
Waimea	54	0.66	0.52

MOLOKAI - Continued on next page

H A W A I I - M A R C H 1 9 7 0

SPECIAL WEATHER SUMMARY

Stations with less Rain in March 1970
than in any Previous March

(25 years of record or more, only)

Station	Length of Record (Yrs.)	Prev. Least Mar. Total (Inches)	March 1970 (Ins.)	Station	Length of Record (Yrs.)	Prev. Least Mar. Total (Inches)	March 1970 (Ins.)
<u>MOLOKAI</u>				<u>HAWAII - (Cont'd)</u>			
Maunaloa	41	0.27	0.16	Middle Holualoa	27	0.79	0.04
<u>MAUI</u>				Napoopoo	30	0.67	0.47
Wailuku	68	0.20	0.10	* - Driest month in entire period of record.			
<u>HAWAII</u>				Percent of Gages with Indicated Percentage of Average March Rainfall in March 1970			
Ahua Umi	47	0.22	0.15	No. of Gages	0 - 24%	25 - 49%	50 - 99%
Holualoa	41	0.90	0.00	Kauai 43	95	5	--
Huehue	66	0.13	0.06	Oahu 49	73	27	--
Kaawaloa	28	1.13	0.57	Molokai 6	83	17	--
Kainaliu	39	1.13	0.98	Lanai 6	100	--	--
Kiolakaa A & F	40	1.04	0.08	Maui 47	58	36	6
Lanihau	27	2.09	0.37	Hawaii 72	42	26	32
Manuka	41	0.90	0.26	<u>STATE</u> 223	63	26	11

Saul Price
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Russell Dorr
ESSA-Acting State Climatologist
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DAILY PRECIPITATION

HAWAII
MARCH 1970

Station	Unit	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
* * * ISLAND OF KAUAI																																
ANAHOLA 1111	A	.66							.08	.02		.02				.12	.11	.08			.02										.09	.12
ARYDESWOOD STA 985	A	.83						.03	.01	T	.10					.01	.01	.20	.14		.04				.02						.02	.04
EAST LAMAI 934	A	.82	.01					.08	.02		.01					.01	.08	.08			.10	T										.14
ELEELE 927	A	.03						.01								T	.02															.14
HALAULA 1110	A	.60						.04			.07	.14				.09	.04	.05	.02	*		.02									.07	.06
HALENANAH 1006	A	.83									.11					.04		.28	.03	*		.15									.14	.08
HUKIPO 945	A	.38	.10								.28																					
ILILIULA INTAKE 1050	A	2.77	.01			.04			.21		.20				.49	.14	.19	.58	.07	*		.15	.05		.02	*				.35	.27	
INTAKE WAINIHA PC 1086	A	2.33						.07			.14						.97				.15	*										
KALIHUAI RES 1131	A	2.11						.11	.08	.07	.04					.09	.30	.28	.07	*		.09	.01		.04	*				.39	.52	
KANALDHULUHULU 1075	A	.68	.02	.19					.25	.07	.10	.29				.10	.09	.03	.02	.04	.02									.07	*	
KANEHA RESERVOIR 1092	A	2.03	.05					.04	.02	.16	.43		.02	*		.05		.18	.09	*		.15	*							.11	.52	
KAPAA STABLES 1104	A	.85						.04	.02	.16	.43					.05		.18	.09	*		.15	*							.03	.09	
KEALIA 1112	A	.60						.03		.06	.20					.06	.02		.04	*		.09	*							.05	.05	
KEKAHA 944	A	.52								.40								.12														
KILAUEA 1134	A	1.30						.06	.05	.03	.07					.16	.16	.28	.01	*		.01	.04		.02	*			.18	.22		
KILAUEA FIELD 17 1135	A	2.16	.01					.06	.02	.05	.08		.01	*		.32	.37	.01	.21	.04	*		.09	.01	.02	*			.25	.57		
KILAUEA POINT 1133	A	1.06					.05	.19		.02	.03			.05		.01	.44	.02	.02	.01				.04	.04	.01	.04	.13	.01	*	*	
KLOA 1033	A	.13									.03						.10															
KOLOA 936	A	1.12						.11	.02		.05					.02		.35	.08	*		.15	*							.20	.14	
KOLOA MAUKA 994	A	1.15				.07		.05			.04					.09	.39	.09	.31	.04	*		.14		.07	*			.11	.14		
KOLOA RES 1137	A	2.27	.05			.05		.06	.22	.09					.40	.39		.34	T	*		.07		.02	*			.35	.28	.35		
KUKULULA 935	A	.38						.03	.02		.09					.13	T	*			.06								.10	.01		
LIHUE VARIETY STA	A	1.64				.08	*	.02	.40	.16					.02	.18	.06	.16	*	*		.11	.15	.25	.05	*		.15	.25			
LIHUE 1020	A	.89				.03		.24		.17		.01	*		.01	.20	.03	*	*		.07	*							.03	.08		
LIHUE W8 AP 1020.1	R	.93	.02			.05		.08	T	.50						.09	.06	.02	.02	.04	T		.04	T					T	.07		
MAKAHUNA POINT 940.1	A	.35				.03		.13	.01	.01					T			.03	.01			.02						.09	.02	.01		
MAKAWELI 965	A	.04				.01			.01	.23						.13	.06															
MANA 1026	A	.42							.11	.23							.16													.16	.16	
MOHII UPR CROSS 1083	A	.75				.05			.11	.23							.16													.16	.16	
MOLAA 1145	A	1.10						.10	.04	.07						.12	.10	.07	*	*		.13	*						.04	.43		
MOUNT WAIALEALE 1047	A	10.76	.12	.04		.31	.16	.08		.10	.04	.07		1.06	2.60	.04	2.24	.35	.08	.67	.39	.28	.12	.04	.20	.20	.24	.12	.94	.20		
NEW RIDGE 1035	A	.31							.28	.02						.29																
N WAILUA OITCH 1051	A	4.11						.36		.40					.60	.30		.67	.20	*		.36	.20	.16	*			.40	.46			
PH WAINIHA 1115	A	2.00				.07	.06	.01	.36	.26					.02	T	.02	.56	.05	.01	.06	.02	.01	.25	.06	.04	T	.13	.37			
PRINCEVILLE RANCH 1117	A	2.23	.02			.04	.03		.02	.07					.07	.75	.02	.63	.02					.14	.09	.04			.09	.20		
PUEHU RIDGE 1040	A	.03							.03	.03																						
PUHI 1013	A	.87						.06	.10	.11						.07	.07	.24	.14	*		.10						.04	.08			
RESERVOIR 6 1004	A	1.08				.12		.04		.04					.02	.07	.07	.04	.03	*		.02		.05	*			.01	.14			
WAIHANA 930	A	.14						.02							.02			.04	.03	*		.02								.04		
* * * ISLAND OF MAUI																																
WAIHANA MOUNTAIN 990	A	2.75						.07	.02							.23	.10	.49	.03		.07	.04	.04			.13	.05	.03	.03	2.75		
WAIHAI LOWER 1054	A	1.66	.01				.28	.02		.09					.45	.04	.34	.27	.07	.01	.02	.09	.03			.12	.11	.05	.06	.25		
WAIHAI UPPER 1052	A	2.38							.17	.33																						
WAIHANA 943	A	.37						.02	.08	.06						.07	.04	.05	*	*		.05	*						.04	.27		
WAILUA KAI 1065	A	1.24						.02	.08	.06						.07	.04	.05	*	*		.05	*						.04	.27		
WAIHANA 947	A	.08	.06							.02																						
WEST LAMAI 931	A	.26						.05		.02								.10	.02	*		.04	*						.03	.02		
* * * ISLAND OF OAHU																																
AIEA FIELD 625 761	A	.90	.02												.25	.23	.08	.08	*	*	.15	*							.09	*		
BERETANIA PUMPING STA	A	.46	.02			T									.35	.11	.02	.01	.02	.02	.02											
CAMP 84 807	A	.21													.05	.11	.02	.01	.02	.02	.02											
CHURCH COLLEGE LAIE	A	1.08				T	.01								.08	.12	.42	.23	.07		.28	.01							T	.03		
COCONUT ISLAND 840.1	A	.51	.01						.13	.01					.23	.07					.03	.07			.07					.02		
* * * ISLAND OF MOLOKAI																																
EWA PLANTATION 741	A	.07													.02			.03	T	T	.02											
HELEMANU INTAKE 881	A	1.37													.30	*	.75	*	*	.15	*		.10	*					.07	*		
HOKULUA 725.2	A	.45							.02	.02					.06	*													.37	*		
HONOLULU OBSERV 702.2	A	.10													.03	T	T	.05	.01	T	.01	T	T	T	T	T	T	T	T			
HONOLULU WBFC 703	R	.03													T	T	.05	.01	T	.01	T	T	T	T	T	T	T	T	T			
HONOLULU SUBSTA 704	A	.35	.01						.65				.01		.07	.20	.03	.05	.12	.38	.04	.02							.01	.01		
H S P A EXP STA 707	A	.70	.03			T									.40	.12	.38	.05	.02		.02								.01	.01		
KAHANA 883	A	8.50						.01							2.40	.12	.38	.05	.02		.02								.41	.01		
KAHUKU 912	A	.76						.01	.08	*					.37	.02	.15	*	*		.10	*							.02	.01		
KAILUA FIRE STA 791.3	A	.44						T	T	.01					.28	T	.08	T	.02	T	.02	T	.05	T	T	T	T	T	T			
KALIHU RES SITE 777	A	3.38	.08		.04	.04		.02	.08						.58	.40	.60	.02	.04	.14	.18								.14	*		
KANEHE MAUKA 781	A	1.44	.05		.14				.02	.08					.15	.53	.01	.17	.09	.03	.02	.17	.02					.02	.02	*		
KANEHE RANCH 838	A	1.12		T	.15				.13						.01	.40	.18	T	.10	*		.05	*					.10	.02	T		
KAPALAHUA 773	A	.54													.18							.21	*						.15	*		
KAWAIHAPAI 841	A	.06															.04	.02	*	*												
KAWAI IKI INTAKE 880.2	A	2.20			2.20	*																										

DAILY PRECIPITATION

HAWAII
MARCH 1970

Continued

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ISLAND OF MOLOKAI																																	
KALAPAPA 363	A	.74		.19												.26			.12												.17		
KUUNAKAHI 530	A	.00																															
KEONELELE PENS 551	A	.00																															
KUALAPUU 534	A	.47								.09																							.09
WAIPELEHU 542	A	1.52	.08									.03		.26	.14		.02	.06	.01	.15	.05		.05	.05	.05	.03	.07	.03	.08	.14	.37		
MAUNALO A 511	A	.16		.03												.01	.02	.08	.09	T												.02	
MOLOKAI AP 524	A	.25		.08	T					.04	T															.04	T					.16	
POOHOOHU RANCH 542.1	A	.76		.02	T								.02		.05	.18	T	.03	.05	.03	T		T		.88	T		.01	.13	T	.08		
WAIKOLU 540	A	2.55		.52												.82															.33		
ISLAND OF LANAI																																	
KANEPUU 690	A	.07																														.07	
KUAMALAPAU HARBOR 698	A	.00																														.09	
LANAI CITY 672	A	.16																															
LANAIHALE 684	A	.49							.21					.07									.14										
MAHANA 694	A	.00																															
MAHAUEA 676	A	.00																															
WAIKAEKUA 683	A	.06																														.06	
ISLAND OF MAUI																																	
AUKAHI-252	A	.13					.13																										
HALEAKALA 8 E S 434	A	4.51	.43	.62	.04			.02	.23				.15	.04		.01	.48	.31	.41	.04	.04	.34	.11	.06	.06	.01	.40	.15	.31	.30			
HALEAKALA RANCH 432	A	1.27		.31									.13	.06			.15	.08	.16	*	.08										.21	.09	
HALEAKALA RS 338	A	.61	T	.05	.01		.08	T						T	.26	.11	.07				T	T	.02	T		T	T				.01		
HALEAKALA SUMMIT 338.4	A	.06													.03	.03																	
HALIHALE 423	A	1.88		.45						.10			.12			.10	.15	.14	*	*	.07	.16	.05	*	*	*	*	*	*	.46	.08		
HAKAUPOKO 485	A	1.43	.05	.02	.08	.01		.02	.02			.04		.15	.05	.01	.15	.25	.05		.06	.11	.09				.03	.07	.02	.10	.05		
HANA 354	A	3.13		.13	.04		.85	.06	.04	T				.15		.20	.12	.20	.10	T	T	.18	.06	.02	.21	T	.07	.02	.08	.08			
HANA AIRPORT 355	A	2.21		.06	.04	.03	.85	.06	.04	T				.17		.20	.12	.20	.10	T	T	.18	.06	.02	.21	T	.07	.02	.08	.08			
HANAHULI 281	A	3.43				.12			.56	T	.13	.04	.18		.04	.48						.10			.10	.58	.12			.18			
HOLUA CABIN 259.5	A	.40					.25										.12		.03														
HONOHUHU 480	A	5.70																														5.70	
HONOHUHU 493	A	1.84		.11	.02											.39	.03	.19	.07	.02			.51	.02							.14		
HONOHUHU GULCH 341	A	2.00																														2.00	
KANAPALI AIRPORT	A	.14	T	.03												T	.04															.07	
KAHOMA INTAKE 374	A	3.76																														3.76	
KAHULUI NB AP 398	R	.29	.05	T			.03		.02				.03					.03	T	T		.01	T								.02		
KAILIHI 436	A	4.41																														.41	
KAIUA 440	A	6.29	.14	.13	.02	.02	.29		.02		.02	.22	.03	.53	.23	.45	.38	.10	.03		.10	.27	.24	.11	.08	.48	.01	.19	.20	.20			
KAUULA INTAKE 375	A	.71		.17						.23												.13										.18	
KESAWA 410	A	.85	.21	T				.03				.05	.07				.01		.04	T			.08	.03			.01		.09	.04			
KEANAE 346	A	11.50																														11.50	
KEAWAKAPU BEACH 260.2	A	.11																														.11	
KIMEI 311	A	.00																															
KIPAHULU 258	A	4.32		.11		.78	.34				.03	.06				.87	.46	.18	.04				.11	.08			1.03				.23		
KULA HEIGHTS 323.2	A	.00																															
KULA SANATORIUM 267	A	.03				T																		.03									
LANAIHA 361	A	.00																															
LAUNIUPOKO INTAKE 376	A	1.50																														1.50	
LAUNIUPOKO VILLAGE 372	A	.00																															
LUPI UPPER 442	A	6.00																														6.00	
MAHINAHINA 466	A	2.13		.60	.05											.12	.09	.19														.24	
NAKALELE - FLD 60-497	A	1.53		.08												.37	.09	.19						.23	.25			.14		.24	.45		
OLINDA 332	A	.96		.12	.04	.01					.02	T	.03	*		.16	T	.38	.07	*	*	.23	.01	.02	.01	*	*	*	*	.05	.04		
OLDWALU 296	A	.00																															
OLDWALU GULCH 377	A	2.00																														2.00	
PAKAA 350	A	8.88	.07	.08	.19	.11	.78		.19	.13			.08	.04	.33	1.19	.09	.81	.55	.30		.12	.41	.73	.18	.32	.06	.54	.40	.51	.70		
PAIA 406	A	.61	.10		.01			.06	.04				.07	.03	T	.01	.09	.02	.07	.03	T		.06	.01	.08	.01	.02	T	.05	.02			
PANILEIHULU 259.2	A	1.82																															
POHAKA BRIDGE 307.2	A	.10	.01																													.02	
POLIPOLI SPRINGS 267.2	A	.15																														.15	
POOHOMOHUA 2 343	A	.00																															
PUU KUKUI HAWAII 472	A	2.40																														2.40	
PUUMENE 396	A	.18		.04									.03																			.04	
SPRECKELSVILLE 400.2	A	.52	.10	T				.09	T			.08	T				.05	.03					.04	.02	.03						.01		
TWIN GATES 261.3	A	.00																															
UKULELE 333	A	2.00																														2.00	
UKUHEANE 301	A	.00																															
ULUPALAKUA RANCH 250	A	.66		.49																													
WAIKULU 364	A	.02		.02																												.02	
WAIHEU CAMP 484	A	.76	.02											.06	.06	.04	.02	.04		.09	*	.10	*	*	*	*	.05	.07	.07	.12			
WAIHEU VALLEY 492	A	1.01	.06		.03			.04	*	*	*	*	.02	.02	.02		.10	.10	.04		.23	*	*	*	*	*	.05	.04	*	*	.28		
WAIKAMOI 449	A	7.20																														7.20	
WAIKAMOI DAM 336	A	13.93		2.63	.46																												

DAILY PRECIPITATION

HAWAII
MARCH 1970

Continued

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
KAWAII LOWER 193	11.87	*	*	*	*	*	1.85	*	*	*	*	*	*	2.55	*	*	*	*	*	3.12	*	*	*	*	*	*	4.35	*	*	*	*	*	*
KEAAU 92	5.45	.05	.26	.25	.03	.35	.03	.10	.33	*	*	*	*	.08	.04	.37	.70	.12	.32	.25	.06	.07	.18	.60	.32	.02	.21	.01	.41	.05	.01	.43	
KEALEKUA 26.2	.89	*	*	.02	*	.04	*	*	*	*	*	*	*	.01	T	*	*	*	*	.07	.06	.02	.02	.42	T	*	*	*	*	*	*	.07	
KEHENA 181.2	8.64	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.05
KIOLAKEA A & F 6	.08	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.08
KIPA 89.2	11.73	.22	.38	.49	.02	.74	.01	.79	.40	*	*	*	*	.21	.17	.65	1.00	.17	.85	.96	.10	.10	.21	.41	2.10	.26	.14	.29	.28	.20	.58	*	
KDHALA 179.1	3.84	*	.40	.25	.01	.18	*	*	.17	*	*	*	*	.10	*	*	.53	.02	.51	.19	.04	*	*	.53	.48	.07	.01	*	*	.19	.13	*	
KDHALA MAULILI 176	5.67	*	.64	.17	.02	.17	*	*	.53	.12	.01	*	*	.11	*	*	.91	.14	.54	.27	.09	*	*	.28	.62	.26	.05	*	*	.23	.51	*	
KDHALA MISSION 175.1	4.50	.28	.09	.20	T	.16	T	.13	.20	T	.06	*	*	.11	.68	*	.16	.01	.53	.39	.03	.02	.08	.46	.43	.07	.01	.05	.05	.16	.14	*	
KOIAWE LOWER 196	6.93	*	*	*	*	*	.94	*	*	*	*	*	*	1.23	*	*	*	*	*	*	2.15	*	*	*	*	*	*	2.61	*	*	*	*	*
KONA AIRPORT 68.3	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KONA VILLAGE 93.8	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KUKAIUA 222	5.66	.18	.56	.17	.10	T	*	.21	.10	*	*	*	.36	.11	*	*	.01	.32	.12	.82	.11	.22	.20	1.07	.08	T	T	.20	T	.24	.48	*	
KUKUIHAELE MIC 199	6.82	.26	.68	.10	.01	.03	.68	.03	*	*	*	*	.42	.05	*	.05	1.92	.02	.52	.14	.42	.42	.01	.05	.45	.04	.52	.04	.52	.04	.52	.04	.52
KUKUIHAELE HILL 206	3.96	*	.85	.10	.02	.02	*	*	.22	*	*	*	.27	.05	*	.11	.02	.80	.06	.27	*	*	.22	.31	.05	*	*	*	*	.28	.36	*	*
KULANI CAMP 79	4.90	.12	.42	.18	.05	.36	.03	.05	.18	*	.01	*	.12	.28	.56	.03	.30	.21	.12	.05	.15	.04	.96	.10	.04	.02	.10	.10	.22	.10	.22	.10	
KULANI MAUKA 76	.95	.10	.02	*	*	*	*	.95	*	*	*	*	.04	.07	*	*	.33	*	*	.12	*	1.58	*	*	*	*	*	1.44	*	*	.02	.06	*
KULANI SCHOOL SITE 78	4.34	.10	.02	*	.03	*	*	*	*	*	.12	*	*	.33	*	*	*	*	.12	*	.15	*	*	*	*	*	*	*	*	.02	.06	*	
LANIHAU 68.2	.37	*	.02	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.15	*	*	*	*	*	*	*	*	*	*	*	*
MANUKA 2	.26	*	.02	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.09	.06	.02	*	*	*	*	.04	*	*	*	
MAUNA KEA BEACH 9R	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MAUNA LOA SLOPE 085	.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.02	*	*	*	*	*	*	*	*	*	*	*
MIDDLE HOLUALOA 68.1	.04	*	*	*	*	*	*	*	*	.04	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MIDDLE PEN 147.1	.12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.12	*	*	*	*	*	*	*	*	*	*	*	*
MOAULA 18	.52	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.52	*
MOUNTAIN VIEW 91	8.82	.04	.20	.31	.47	.03	.12	.42	.01	.22	.09	.73	1.40	.29	.32	.55	.27	.05	.14	.47	1.15	.07	.05	.02	.42	.05	.02	.42	.05	.02	.42	.05	
NAALEHU 14	.61	T	T	*	.45	.05	.02	.01	*	*	*	*	.06	*	T	*	*	*	*	*	.41	.03	T	*	*	*	*	*	*	*	.02	.01	
NAPDOPOG 28	.47	*	*	*	.61	.02	.56	.08	*	.14	.44	1.10	.11	.74	.37	.12	.15	.30	.20	.49	.10	.04	T	.46	.09	.17	.32	.46	.09	.17	.32	.46	
NAULU FOREST 38.6	1.42	T	.09	.06	.03	.01	.02	.03	.03	.01	.01	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	
NIULILI 179	4.31	*	.34	.29	.01	.20	.15	.12	.05	T	.12	.05	T	.05	*	*	.48	.45	.40	.08	*	.64	.53	.12	*	*	*	*	.35	.25	*	*	
OOKALA 223	6.05	.18	.67	.36	.10	.01	.42	.07	*	T	.07	.41	.24	.07	T	.12	.51	.13	.45	.21	.13	.33	.77	.15	.03	.02	.15	.01	.16	.35	*	*	
ORCHIDALE 2 24.1	1.58	T	.37	T	.34	T	.02	.01	*	*	.07	.56	*	*	T	.05	.08	.07	.01	.31	T	.02	T	.88	*	*	*	*	.02	.01	*	*	
ORCHID LANO EST 91.5	5.26	*	*	*	.125	*	*	*	*	*	*	.56	.04	.02	T	.43	.10	.34	.01	.12	.36	.19	.20	.01	.04	.32	.34	.08	.90	*	*		
PAAHUHU 217	5.27	.08	.74	.11	.03	.01	.15	.08	.04	.02	.47	.02	T	.24	.10	.75	.06	.13	.26	1.04	.06	T	.01	.17	T	.25	.46	*	*	*	*		
PAALUO 221	4.97	.11	.52	.10	.04	.01	T	.12	.05	T	.12	.05	T	.12	.05	T	.12	.05	T	.12	.05	T	.12	.05	T	.12	.05	T	.12	.05	T	.12	
PAHALA 21	.56	*	*	*	.10	.03	.11	.35	*	.06	.14	.15	.04	.37	.03	.71	.04	.69	.58	.22	.08	.20	.67	.93	.12	.03	.20	.04	.53	*	*		
PAHOA 65	2.02	*	*	*	.65	.09	.11	.35	*	.06	.14	.15	.04	.37	.03	.71	.04	.69	.58	.22	.08	.20	.67	.93	.12	.03	.20	.04	.53	*	*		
PAKAO 37	8.83	.05	.04	.12	.61	.02	.56	.08	*	.14	.44	1.10	.11	.74	.37	.12	.15	.30	.20	.49	.10	.04	T	.46	.09	.17	.32	.46	.09	.17	.32	.46	
PAPAIIKOU 144.1	12.61	.23	.55	.58	.03	.75	.75	.44	*	.21	.01	.54	1.33	.15	1.15	.38	.48	.16	.39	.71	1.26	.22	.33	.02	.65	.40	.19	.70	*	*			
PAPAIIKOU MAUKA 140.1	12.61	.23	.55	.58	.03	.75	.75	.44	*	.21	.01	.54	1.33	.15	1.15	.38	.48	.16	.39	.71	1.26	.22	.33	.02	.65	.40	.19	.70	*	*			
PEPEEKED MAKAI 144	6.70	.01	.23	.10	.01	.49	.01	.05	.22	.01	.14	.82	.80	.22	.62	.28	.49	.05	.20	.20	.10	.22	.10	.01	.75	.32	.04	.21	*	*			
PILIHONUA 89	14.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
POHAKALOA 107	.16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.13	*	*	*	*	*	*	*	.03	*	*	
PUAKO 95.1	.07	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.07	*	*	*	*	*	*	*	T	*	*	
PUU KIME 120	.47	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.47	*
PUU LAHU 102.1	.48	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.48	*
PUU LEHUA 73	.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.40	*
PUU MALI 113	.14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.14	*
PUUDUKUHAU 167	3.99	*	.58	.16	.01	.03	.01	*	.47	.07	.01	.12	.82	.80	.22	.62	.28	.49	.05	.20	.20	.10	.22	.10	.01	.75	.32	.04	.21	*	*		
PUU OO 82	4.95	.11	.35	.07	.41	T	.12	.82	.80	.22	.62	.28	.49	.05	.20	.20	.10	.22	.10	.01	.75	.32	.04	.21	*	*	.17	.11	.37	.09	*		
PUU WAANAA 94.1	.42	*	*	*	*	.65	.06	*	*	*	*	1.35	*	*	*	*	.07	*	*	4.00	*	*	*	*	*	*	*	*	*	*	.06	*	
SHOOLE ROAD 1 84	6.00	*	*	*	*	.65	.06	*	*	*	*	1.35	*	*	*	*	.07	*	*	4.00	*	*	*	*	*	*	*	*	*	*	.06	*	
SOUTH POINT CORRAL 3	.18	*	*	*	*	.65	.06	*	*	*	*	1.35	*	*	*	*	.07	*	*	4.00	*	*	*	*	*	*	*	*	*	*	.06	*	
UMIKOA 118	4.99	.10	.03	.05	1.07	.03	T	.23	.06	.38	.13	.01	.15	.29	.01	.13	.30	.52	.02	.45	.07	1.04	.13	.03	.26	.04	.87	.13	.14	*	*		
UPOLU POINT USCG 159.2	2.36	.21	.03	.05	1.07	.03	T	.23	.06	.38	.13	.01	.15	.29	.01	.13	.30	.52	.02	.45	.07	1.04	.13	.03	.26	.04	.87	.13	.14	*	*		
WAIKAEA SCO 88.2	10.50	.04	.28	.40	.67	T	.41	.44	*	.19	.01	.52	1.40	.08	.48	.41	.15	.47	.60	1.66	.34	.08	.62	.26	.10	.89	*	*	*	*	*		

DAILY TEMPERATURES

HAWAII
MARCH 1970

Station	Day of Month																															Average		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
* * *																																		
ISLAND OF KAUAI																																		
KANALOHULUHULU 1075	MAX MIN	62 41	66 42	68 41	66 39	68 42	67 44	69 48	72 51	70 35	69 43	62 45	67 42	69 42	67 36	68 40	70 43	70 46	66 48	64 46	66 51	65 54	61 56	66 46	67 50	69 45	69 48	70 51	70 47	69 48	70 50	66 52	67.4 45.5	
KILAUEA POINT 1133	MAX MIN	76 68	76 69	75 68	76 68	78 70	76 69	76 69	76 70	76 66	86 67	80 68	76 69	75 68	75 69	75 67	76 69	75 66	74 68	75 64	73 67	74 69	75 68	73 67	74 67	75 69	75 66	76 69	75 66	76 66	76 66	76 68	76 68	75.8 67.8
LIHUE WB AP 1020.1	MAX MIN	78 70	78 70	78 70	78 64	78 65	79 70	80 71	80 72	80 69	85 66	80 62	77 64	77 69	78 69	79 72	80 73	80 73	80 69	79 70	79 71	77 70	78 71	79 71	79 71	79 70	79 70	80 71	80 72	80 71	80 68	79.1 69.4		
MAKAHUEA POINT 940.1	MAX MIN	78 64	80 69	80 71	79 69	82 64	83 71	83 73	82 72	81 71	85 72	86 69	74 65	84 68	84 70	84 70	79 58	83 61	81 60	82 60	81 59	81 58	81 56	84 59	86 58	83 56	84 59	84 56	84 59	85 67	83 62	80 65	81.0 66.9	
MANA 1026	MAX MIN	81 56	82 55	82 55	82 56	80 60	83 60	83 60	83 60	83 60	86 64	81 60	81 60	61 58	81 60	81 60	82 58	87 61	83 60	84 59	86 58	81 56	83 59	83 58	84 58	84 56	84 59	84 56	84 59	85 67	83 62	84 65	85 61	83.0 59.7
NIU RIDGE 1035	MAX MIN	78 55	79 56	79 57	78 58	80 59	79 56	80 57	81 57	80 58	85 57	80 60	77 57	77 55	78 57	79 56	80 58	80 60	81 57	81 60	82 60	82 60	81 60	80 58	80 57	81 58	80 57	81 58	81 58	80 58	81 58	80 58	79.8 57.6	
WAIHAI LOWER 1054	MAX MIN	78 54	78 56	78 54	78 54	79 55	79 62	78 64	79 64	78 60	79 64	80 60	79 55	79 58	78 58	79 59	77 62	79 64	81 64	76 62	77 62	79 60	79 61	76 59	77 60	78 59	77 58	78 57	79 60	79 61	78 60	79 61	78.2 59.3	
* * *																																		
ISLAND OF OAHU																																		
EWA PLANTATION 741	MAX MIN	80 61	80 59	79 60	80 59	79 59	81 60	80 63	81 65	80 61	81 61	83 59	81 64	80 61	81 59	83 63	81 67	83 64	80 66	81 67	80 68	78 64	79 64	80 61	80 64	81 62	81 62	81 62	84 61	82 62	82 62	82 64	80.8 62.4	
HONOLULU WBFC 703	MAX MIN	84 68	83 66	83 68	81 66	85 65	85 68	85 72	85 73	84 70	83 67	82 65	84 67	83 70	84 71	86 81	85 73	86 72	84 71	84 71	83 71	83 71	83 71	84 71	84 71	85 70	85 71	84 70	85 71	85 70	84 71	85 71	84 71	84.1 69.7
HONOLULU SUBSTA 704	MAX MIN	75 68	76 68	78 68	78 70	78 67	79 69	77 69	78 70	78 68	79 66	78 66	78 69	77 68	78 69	80 70	80 69	77 68	78 70	80 68	80 69	77 69	76 69	78 70	77 68	78 70	78 69	78 70	79 69	78 69	78 70	76 68	77.8 68.8	
KAHUKU 912	MAX MIN	78 66	78 66	78 68	79 68	79 68	79 68	79 69	79 69	79 69	80 66	80 58	80 59	78 68	80 66	80 71	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80.8 69.7
KANEHE MAUKA 781	MAX MIN	75 66	75 66	77 66	77 66	77 66	71 65	78 65			82 67	78 63	82 64	77 68	77 68	78 67	78 68	78 64	78 64	78 66	77 67	77 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78.2 66.4	
LUALUALEI 804	MAX MIN	80 69	80 62	81 63	81 60	81 61	80 61	82 71	81 72	82 68	82 61	82 63	81 66	84 63	81 66	83 62	83 66	85 62	85 69	81 69	83 68	82 70	82 69	81 69	82 70	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	82.1 66.5
MAKAPUU POINT 724	MAX MIN	69 59	72 61	73 67	73 60	76 57	75 68	74 67	74 64	76 60	80 63	80 69	80 69	73 51	72 62	76 62	76 60	77 60	77 60	77 60	74 62	74 60	74 59	74 60	74 64	73 63	73 63	73 63	73 63	75 68	75 68	76 65	78 70	73.3 63.2
OPAELA 870	MAX MIN	77 54	76 56	77 56	77 55	78 55	81 57	78 62	81 60	77 63	79 63	77 57	79 57	86 62	78 68	77 58	78 64	78 63	78 61	78 63	77 63	77 63	75 63	73 63	74 62	74 60	75 59	76 59	76 60	76 59	76 59	76 60	77.5 59.6	
PRI WAHIAWA 820.2	MAX MIN	78 61	80 59	80 53	79 57	81 57	82 61	79 66	81 66	80 60	83 58	82 55	82 56	80 60	79 60	80 62	77 62	77 62	77 62	75 62	75 62	75 62	75 62	75 62	75 62	75 62	75 62	75 62	75 62	75 62	75 62	75 62	75 62	80.3 59.6
WAIALUA 847	MAX MIN	78 54	78 59	81 55	81 56	81 57	82 57	80 60	79 62	81 61	83 60	81 62	82 62	78 58	82 59	80 57	82 63	84 63	80 60	80 60	80 60	78 60	78 60	76 60	79 60	80 60	80 60	81 60	81 60	81 60	81 60	82 60	80.6 59.9	
WAIKIKI 717.2	MAX MIN	80 62	81 65	80 68	80 66	83 63	82 68	82 70	81 69	82 68	84 80	85 67	84 68	83 64	79 69	81 69	81 70	83 68	81 68	83 69	83 69	80 69	83 69	80 69	80 69	80 69	80 69	80 69	80 69	80 69	80 69	80 69	81.7 67.5	
WAIMANALO EXP FARM	MAX MIN	78 66	78 64	78 67	79 68	78 66	79 68	78 68	78 60	79 68	80 66	81 68	81 68	80 66	79 66	79 66	80 66	80 66	81 66	81 66	79 67	79 65	79 65	79 65	78 66	79 66	79 66	79 66	80 66	80 66	81 66	80 65	79.3 66.4	
* * *																																		
ISLAND OF MOLOKAI																																		
MOLOKAI AP 524	MAX MIN	77 60	77 65	76 67	77 62	79 60	77 61	77 64	77 69	79 69	82 62	81 64	81 64	77 67	79 64	77 68	81 67	83 66	82 65	82 65	78 67	78 67	77 68	76 69	77 69	78 67	77 66	79 66	79 66	79 66	80 66	80 66	78.5 66.0	
* * *																																		
ISLAND OF LANAI																																		
LANAI CITY 672	MAX MIN	77 63	77 63	78 54	75 57	75 59	74 60			76 58	77 63	76 62	78 60	78 61			77 64	78 60	77 62					78 62										
* * *																																		
ISLAND OF MAUI																																		
HALEAKALA RS 338	MAX MIN	56 36	58 36	53 39	62 40	56 34	59 40	65 42	65 47	66 50	67 43	61 38	62 41	64 44	63 41	59 38	61 47	60 38	58 39	65 44	63 44	65 45	63 43	59 35	55 33	55 33	58 37	56 35	60 33	61 33	60 37	60 42	60.7 39.8	
HALEAKALA SUMMIT 338.4	MAX MIN	46 32	53 34	48 36	55 39	57 32	48 39	50 38	50 37	56 40	55 42	58 38	58 36	52 36	53 36	50 37	49 34	51 35	51 37	53 36	52 35	46 37	54 36	55 36	48 37	50 37	50 39							
MANA AIRPORT 355	MAX MIN	80 66	80 67	78 67	81 67	80 65	80 61	80 68	80 69	80 69	80 69	80 62	80 62	80 68	80 68	80 68	80 67	80 68	81 68	80 67	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80.0 65.9	
KAANAPALI AIRPORT	MAX MIN	79 65	76 61	76 62	79 59	82 62	80 68	79 63	81 68	83 65	80 63	81 63	83 63	80 65	81 65	81 65	83 65	83 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	81 65	80.4 64.9	
KAHULUI WB AP 348	MAX MIN	80 65	81 60	81 64	81 55	83 59	82 66	85 64	85 59	85 66	81 64	83 59	81 60	80 69	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	83 60	82.4 63.1	
KAILUA 446	MAX MIN	74 61	74 61	74 64	74 63	75 63	75 62	75 64	75 64	75 64	75 64	77 63	77 63	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	73 65	74.5 63.4
KEAWAKAPU BEACH 260.2	MAX MIN	80 55	82 57	85 57	84 56	82 59	84 57	85 57	85 57	85 57	84 60	85 59	85 59	84 60	85 60	85 60	82 58	83 58	81 59	85 58	86 58	86 58	86 58	86 58	86 58	86 58	86 58	86 58	86 58	86 58	86 58	86 58	83.9 58.5	
KULA SANATORIUM 267	MAX MIN	67 47	68 47	68 47	65 48	69 51	68 47	66 48	70 52	69 53	70 51	69 52	70 52	72 52	70 51	68 51	72 52	73 51	75 52	72 51	70 49	70 49</												

DAILY TEMPERATURES

HAWAII
MARCH 1970

Continued

Station		Day of Month																															Average			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
LAMAINA 361	MAX MIN	80 63	81 62	82 62	81 62	84 63	81 62	85 63	85 62	81 62	82 62	83 63	84 60	82 62	84 64	84 65	83 65	83 64	84 66	85 65	83 62	81 62	82 64	82 65	83 64	83 62	82 63	83 63	82 63	83 63	82 64	83 63	83 64	82 64	82.7 63.0	
WAILUKU 386	MAX MIN	78 65	76 67	76 62	77 63	78 66				78 67	79 63	78 61	81 63	77 68						79 67	81 68	80 68	78 67	79 67		77 66	74 67	78 65	77 67				78 67	78 66		
* * *																																				
ISLAND OF HAWAII																																				
HAINA 214	MAX MIN	74 62	75 61	77 63	76 60	74 62	78 64	78 64	75 66	76 63	78 61	80 63	82 61	80 64	74 64	76 65	75 65	80 66	80 64	78 64	78 63	79 61	78 61	76 63	76 60	78 60	77 60	76 60	78 60	75 62	75 61	77 61	79 61	77 63	76.8 62.6	
HAWAII VOLCNS NP HO 54	MAX MIN	64 48	66 48	63 50	65 47	65 51	66 48	66 49	69 50	66 49	69 40	69 47	69 48	68 50	69 50	68 50	69 53	68 51	67 53	66 51	63 54	64 43	65 50	62 49	64 52	63 48	65 48	65 48	65 48	67 52	66 48	61 49	68 52	66.0 49.2		
HILU WB AIRPORT 87	MAX MIN	81 59	75 61	79 63	74 61	80 64	81 63	76 62	81 61	81 62	83 65	81 61	81 59	60 66	76 64	82 66	82 65	80 65	80 65	79 66	79 64	80 65	78 64	75 63	80 63	77 63	80 62	76 62	80 63	80 61	79 61	79 61	79 61	79.2 62.9		
KAINALIU 73.2	MAX MIN	79 58	78 57	77 57	77 58	76 60	79 59	79 59	77 59	79 59	76 58	79 58	77 60	78 63	79 60	79 63	78 60	79 61	79 59	73 60	73 59	73 60	77 61	76 58	76 58	76 58	77 58	77 58	77 58	78 59	79 59	76 59	73 59	77.4 59.1		
KAMUELA 192.2	MAX MIN	69 53	70 52	69 53	70 50	74 53	74 53	73 53	68 53	70 54	68 48	72 47	72 50	69 56	66 56	66 55	69 50	72 53	71 57	67 56	67 54	67 54	67 55	68 55	68 57	68 54	68 55	70 54	68 55	70 54	71 56	69 54	72 56	71 56	69.6 53.7	
KAMUELA AIRPORT 191	MAX MIN	69 51	71 57	67 47	69 44	72 47	72 47	70 45	68 52	70 44	73 44	72 48	71 48	69 50	70 48	70 48	72 45	70 44	70 42	70 42	68 46	70 46	69 56	68 42	68 39	69 46	69 46	71 51	70 46	72 46	72 46	72 50	72 50	70.1 47.1		
KEAAU 92	MAX MIN	82 61	80 61	78 61	80 59	74 61	80 63	81 66	76 66	80 66	81 62	83 63	83 64	81 65	81 63	76 68	81 65	82 66	82 65	80 64	80 63	79 61	79 61	82 62	80 64	80 61	79 61	76 61	79 61	80 61	79 61	80 61	81 61	81 61	79.8 61.7	
KEALAKEKUA 26.2	MAX MIN	73 59	76 59	77 59	77 59	75 60	78 60	79 60	78 60	79 60	77 60	79 59	79 60	78 63	81 60	79 60	79 62	79 60	79 60	78 60	78 61	76 60	76 60	76 60	76 61	77 61	77 61	77 61	77 60	77 59	78 59	78 59	74 60	74 59	77.5 59.7	
KOHALA MISSION 175.1	MAX MIN	72 61	73 61	74 64	76 60	74 60	78 63	71 66	72 66	76 66	82 62	80 64	83 64	81 65	76 68	72 68	75 68	78 65	76 65	76 65	76 65	76 65	75 64	76 64	75 64	75 64	77 64	75 64	77 64	76 65	73 64	78 64	78 64	75.7 64.0		
KONA AIRPORT 68.3	MAX MIN	83 61	81 61	80 64	81 64	80 69	78 69	82 61	83 62	81 62	78 63	84 60	84 63	81 65	81 61	83 61	83 61	82 62	82 61	81 63	81 63	80 60	80 60	82 61	82 60	82 60	82 61	82 61	82 61	80 59	82 60	82 60	81 60	81 60	81.5 61.7	
KULANI CAMP 79	MAX MIN	59 42	59 43	58 45	60 46	58 40	60 46	62 40	65 42	65 48	66 38	65 39	65 38	62 44	62 42	62 42	62 42	62 43	62 36	62 46	62 42	62 42	62 42	62 42	62 34	62 44	62 44	60 38	59 38	58 41	60 42	60 48	62.0 41.8			
MAUNA LOA SLOPE 085	MAX MIN	46 30	48 30	53 33	51 34	49 32	52 31	53 32	53 35	50 36	52 37	50 31	50 30	52 31	52 33	54 34	51 36	54 33	52 34	51 34	51 32	52 32	51 32	51 32	51 31	51 31	49 29	49 31	51 30	50 31	52 30	52 30	55 37	51.4 32.7		
MOUNTAIN VIEW 91	MAX MIN	74 56	74 56	70 57	74 54	69 57	75 58	76 56	76 56	76 56	76 57	78 55	78 52	76 58	76 58	76 58	76 58	77 58	77 58	74 60	73 58	74 58	74 59	74 59	74 59	72 56	74 56	75 56	74 56	75 56	75 56	77 56	75 56	77 56	74.7 56.2	
NAALEHU 14	MAX MIN	79 63	79 63	77 62	79 64	76 64	80 62	80 64	81 64	81 64	80 66	81 63	81 62	80 64	82 66	82 66	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	81 65	81 65	81 65	79.7 63.8	
ODKALA 223	MAX MIN	77 62	77 62	74 62	76 64	75 64	78 65	75 65	75 66	77 66	76 64	78 65	77 64	79 64	77 64	78 64	78 64	78 64	77 64	77 64	76 62	76 62	79 62	76 63	76 63	76 63	75 63	78 63	78 63	78 63	77 63	77 63	77 63	77.1 63.6		
OPIHIHALE 2 24.1	MAX MIN	77 54	72 55	75 55	77 57	77 56	74 55	77 55	72 56	75 56	78 56	74 57	73 57	76 57	75 57	77 57	77 57	78 58	78 58	78 58	76 58	76 58	76 58	76 58	76 58	76 58	76 58	76 58	76 58	76 58	76 58	76 58	76 58	76 58	75.3 56.9	
PAHALA 21	MAX MIN	79 57	77 57	76 58	79 58	78 59	80 59	80 58	81 58	80 58	80 58	81 58	81 58	80 58	83 60	83 60	81 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	80 63	79.4 59.2	
UPOLU POINT USCG 159.2	MAX MIN	78 67	77 64	81 65	79 65	77 65	80 69	80 67	79 68	80 68	83 68	82 65	83 65	81 67	78 68	78 67	78 67	80 67	80 67	80 67	79 66	78 66	78 66	78 66	78 66	78 66	78 66	78 66	78 66	78 66	78 66	78 66	78 66	78 66	79.4 66.3	

EVAPORATION AND WIND

Station		Day of Month																															Total or Avg.			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
* * *																																				
ISLAND OF KAUAI																																				
LIHUE WB AP 1020.1	EVAP WIND MAX MIN	.33 150 84 60	.31 178 82 61	.32 163 83 62	.35 134 84 60	.25 76 83 60	.26 159 82 62	.45 203 88 64	.36 232 84 64	.36 203 87 63	.25 98 87 63	.30 74 87 60	.21 70 87 58	.38 175 81 60	.37 189 83 60	.35 187 84 61	.34 200 83 65	.19 183 81 65	.37 212 87 67	.20 245 81 63	.36 298 83 62	.49 247 81 62	.22 213 80 62	.31 210 79 62	.43 225 83 61	.28 243 83 61	.46 207 83 62	.29 200 85 63	.32 205 85 63	.36 174 86 64	.42 182 85 64	.26 185 85 63	10.15 5718 83.0 62.3			
* * *																																				
ISLAND OF DAHU																																				
HONDOLU D8SERV 702.2	EVAP WIND MAX MIN	.15 22 82 62	.21 29 82 60	.26 26 87 59	.26 23 89 61	.24 12 90 61	.22 20 88 63	.25 29 87 63	.29 36 88 63	.25 30 89 63	.21 20 88 63	.15 20 81 60	.23 14 90 62	.27 34 89 62	.25 28 87 60	.21 21 87 61	.22 28 90 66	.30 20 91 66	.22 28 90 66	.30 45 88 64	.37 59 88 63	.30 35 87 63	.30 32 85 62	.20 32 85 61	.25 40 85 62	.30 27 87 62	.30 23 83 62	.24 20 83 62	.20 21 83 62	.27 25 83 62	.25 24 87 63	.25 24 87 62	7.77 873 87.1 62.4			

See Reference Notes Following Station Index

CLIMATOLOGICAL DATA

HAWAII
APRIL 1970

Continued

Station	Temperature										Precipitation											
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
									Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
									90° or Above	80° or Below	70° or Below	60° or Below										
KAMUELA AIRPORT 191	70.9	49.8M	60.4M	.6	74	22+	61	28+	0	0	0	0	2.56	12.03	1.14	20	.0	0		8	2	1
KEAAU 92	79.4	63.9	71.7		81	27+	59	1	0	0	0	0	24.45		5.33	22	.0	0		25	15	7
KEALAKEKUA 26.2	77.6	61.5	69.6		81	10+	60	7+	0	0	0	0	3.22		.91	13	.0	0		8	2	0
KONA AIRPORT 68.3	81.9M	64.2M	73.1M		85	30+			0	0	0	0			.0		.0	0				
KUKUIHALE HIC 199									0	0	0	0	13.19	3.96	1.96	24	.0	0		23	8	4
KULANI CAMP 79	60.3	45.1	52.7		66	21	32	20	0	0	1	0	21.04		3.43	23	.0	0		24	12	7
PAHALA 21	79.8	62.2	71.0	1.2	84	3	57	18	0	0	0	0	3.57	.41	1.60	21	.0	0		5	3	1
POHAKULOA 107									0	0	0	0	1.82		.0		.0	0				
PUAKO 95.1									0	0	0	0	.07		.04	11	.0	0		0	0	0
PUU WAAWAA 94.1	85.6	70.0	77.8		89	26	66	20+	0	0	0	0	2.31	.01	1.00	12	.0	0		1		1
UMIKOA 118													19.26	9.93	7.60	24	.0	0				4
WAIAKEA SCD 88.2													36.16		4.28	27	.0	0		27	18	12
ISLANDO			67.9										12.11				.0					

EXTREMES

HIGHEST TEMPERATURE 2 STATIONS	89	DATE	26+
LOWEST TEMPERATURE MAUNA LOA SLOPE DBS, HAWAII	28	DATE	29+
GREATEST TOTAL PRECIPITATION WAIKAMOI DAM 336, MAUI A	50.48		
LEAST TOTAL PRECIPITATION 2 STATIONS, MOLOKAI	.00		
GREATEST 1 DAY PRECIPITATION HONOMU MAUKA 138, HAWAII	9.18	DATE	21

See Reference Notes Following Station Index

SPECIAL WEATHER SUMMARY

Foresters, ranchers, and agricultural interests in much of the State breathed sighs of relief with the arrival in mid-month of the first substantial rains in many weeks. Showers and thunderstorms on the 11th and 12th and again on the 20th and 21st brought widespread, although by no means complete, relief from the prolonged drought which in some areas had persisted for as long as a year.

(1) On Hawaii Island the drought emergency in effect for the Puna District since February 5 was lifted on April 14, and those declared on February 13 for Kau and on March 6 and 18, respectively, for the North and South Kona Districts, were rescinded on April 16.

(2) After a thunderstorm on the 12th, snow extended down to the 9,000-foot level on the northern slopes of Mauna Loa and Mauna Kea.

(3) Late on the 20th, 2 thunderstorms about 6 hours apart drifted south or southeastward along the windward Oahu coast from Kailua to Makapuu Point. The second of the storms gave Waimanalo 4.7 inches of rain, 3.6 inches of which occurred in the single hour from 11:15 p.m. to 12:15 a.m. and 1.2 inches in the 15 minutes beginning at midnight. Some street flooding resulted in Kailua and Waimanalo.

Despite the rains, many areas remained dry. Western sections of Kauai and Oahu, the southwestern coast of West Maui, and scattered gages elsewhere, had well below half their average

rainfall for April; and a number of other gages on all the islands received less than the month's normal.

Of the 5 stations which in March had reported their 14th consecutive month of below-normal rainfall, 4 added yet another month: Kaunakakai and Maunaloa on Molokai; and Kapapala Ranch and Manuka on Hawaii Island. In contrast Papaikou Mauka, on the slopes above the Hilo coast, had the wettest April in its 44 years of record; 47.38 inches. (Its previous record was 47.00 inches, in 1963.)

April continued the warm trend of March, as Weather Bureau Offices at Lihue and Honolulu reported some of their highest temperatures of record.

LIHUE -- 21 years of record:

Highest average minimum	70.8	(68.8)
Highest mean	75.6	(75.0)

HONOLULU -- 24 years of record:

Highest average maximum	85.0	(83.6)
Highest average minimum	71.6	(69.9)
Highest mean	78.3	(76.7)

() -- former record

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 ESSA-Acting State Climatologist
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DAILY PRECIPITATION

HAWAII
APRIL 1970

Continued

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
KAUMANA 88.1	38.81	.13	.86	2.17	2.26	.75	.37	.04	.01	.27	.17	2.68	2.20	.94	.58	.72	1.61	1.42	.20	.13	.06	2.15	2.91	1.86	5.70	.54	.30	5.10	.50	.60	1.58		
KAUAI NUI Lower 193	29.87	.	.	4.72	.	.	.	.	.	.	6.12	.	.	.	.	.	2.08	.	.	.	.	.	.	18.90	.	.	.	.	.	.
KEAHI 92	74.45	.74	.44	1.66	.75	.60	.07	.12	.01	.16	.20	2.16	.92	.34	.18	.01	1.02	.72	.06	.05	.12	2.62	5.33	.95	.52	.29	.72	2.28	.52	.38	1.21		
KEELAKEA A 26.2	3.22	.04	.	.	.19	T	.02	.	.	.	T	.30	.	.91	.39	T	.28	.05	.19	.02	.	.	.69	.13	.01	.	.	.	.	.
KEHENA 181.2	16.25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
KOJIKAE A & F 6	3.44	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
KOJIKAE LOWER 196	14.49	.	.	2.25	.	.	.	.	.	.	2.64	.	.	.24	.04	.	.	2.80	.	.	.	.	.	.	.	6.80	.	.	.	.
KONA AIRPORT 68.3	-	.	.	T	.	.	.	.	.	.	T	.02	.	.	.	.	.	.	.	.01	.	.	.	.	.02	T	.02	.	.	.
KONA WILLOE 93.8	20.84	.33	.53	.64	.64	.35	.06	.01	.11	.19	.46	.82	.39	.42	2.80	.37	1.28	T	.01	.23	.15	.85	1.28	3.95	.46	.01	1.67	.16	1.08	1.32			
KUKAIKU 222	13.19	.53	.43	.16	.40	.44	.35	.	.16	.49	.52	1.26	.36	.18	.34	.34	.34	.	.02	.15	.02	.43	1.43	1.96	.58	.01	1.43	.05	.50	.31			
KUKUIMAELE MIC 199	13.19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
KUKUIMAELE HILL 200	11.86	.65	.47	.16	.	.	.00	2.72	.16	.66	.11	.31	.	.17	.01	.54	.62	1.62	.	.	.	1.95	.01	.45	.25		
KULANI CAMP 79	21.04	.65	.13	1.24	.96	.12	.09	.02	.02	.38	.24	1.73	1.10	.25	.21	.45	.51	.73	.08	.10	.20	.79	1.22	3.43	2.50	.17	.24	3.00	.39	.37	.65		
KULANI MAUKA 76	4.74	.13	.50	.28	.18	.	.	.	.05	.37	.42	.19	.	.15	.05	.07	.38	.05	.09	.07	.31	.30	1.80	.45	.01	.38	.75	.03	.41	.32
KULANI SCHOOL SITE 78	16.42	.	.	.	2.80	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANIHAU 68.2	3.00	.	.	.	.	.	.	.	.	.	.05	.12	.	1.10	.38	.	.14	.09	.	.	.	.	.70	.09	.33	.	.	.	.	.
MAUKA 2	4.73	.	.18	.	.	.	.58	.	.	.	.08	.	.	1.25	.95	T	.	.	.	.	.34	.04	.73	.24	.01	.	.	.12	.04	.17
MAUNA KEA BEACH 98	1.46	.	.	.	.	.	.	.	.	.	.03	.51	.08	.11	.	.	.03	T	.	.	.	.07	.03	.12	.30	.	.	.18	.	.
MAUNA LOA SLOPE OBS	2.38	.	.	.	.	.	.	.	.	.	.	.	.60	.82	.	.50	.	.	.	.	.	.	.21	.	.	.	.	.25	.	.
MIDDLE MOJUALOA 68.1	4.63	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MIDDLE PEN 147.1	4.63	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MAUNA 18	7.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MOUNTAIN VIEW 91	38.63	.40	.68	2.93	1.54	1.22	.14	.18	.02	.04	.47	3.96	1.70	.63	.67	.35	.71	2.03	.22	.19	.45	2.83	1.60	2.85	1.64	.40	.98	3.06	1.38	2.08	3.28		
NAZLEHU 14	3.83	.	.	.	.	.	.	.05	.	.	.	1.36	.40	.19	T	.	.	.	.	.	.	.07	.03	.12	.30	.	.	.80	T	.
NAPOOPOO 78	1.44	.	.	.	.	.	.	.47	.	.	.	.	.	.34	.	.	.	.	.	.	.	.30	.	.	.	.	.	.35	.	.
NAULU FOREST 38.6	14.15	.	.05	.63	.24	.13	.01	.	.01	.	2.20	.62	.	.09	T	.	.36	.16	T	.	.04	5.38	.57	.30	T	.	2.31	.43	.19	.33			
NAULU 179	7.73	.20	.47	.27	.	.	1.17	.03	.05	.56	.	.	.	.77	.19	.47	.59	.46	.	.10	.33	.40	.62	.16	.	.	.48	.04	.03	.34
OKALA 223	20.55	.30	.74	.69	.75	.32	.25	.02	.01	.94	.01	2.13	1.80	.68	.25	.40	.52	.67	.06	T	.30	1.24	1.60	1.46	2.36	.55	.02	1.15	.21	.70	.42		
OPHIKALE 2 24.1	3.51	.	.13	1.12	T	.	.	.	.	.	.36	.30	.11	.23	T	.	.02	.01	.	.	1.02	T	.08	.03	T	.	.09	T	.	.
ORCHID LANE EST 91.5	19.78	.	.	3.18	.	.	.	.	.	.	1.72	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PAAUHAU 217	12.11	.30	.52	.50	.50	.33	.17	.	.08	.	.50	.71	.	.08	.13	.64	.	.10	1.12	.	.07	.02	.10	.22	1.57	1.76	.47	.12	.01	.49	.60		
PAHALU 221	19.43	.26	.83	.46	.53	.33	.04	.01	.04	T	.75	.68	.28	.53	2.79	.29	1.05	T	.03	.15	.13	.59	1.43	4.03	.28	.01	1.58	.11	.83	1.42			
PAHALU 21	3.57	.	.	.02	.	.	.	.02	.02	.	.83	.10	.07	.01	.	.	.03	.	.	.	.01	1.60	.09	.18	.	.02	.57	.	.	.
PAHOA 65	23.68	.21	.35	1.10	.63	.50	.06	.14	.09	.11	.36	3.02	1.30	.48	.25	.09	1.35	.59	.12	.10	.23	3.25	1.49	.31	.15	.39	.96	3.01	.36	.45	2.23		
PAHOA 37	12.40		
PAPAIKOU 144.1	32.04	.12	.87	2.29	1.02	.45	.18	.18	.03	.05	.15	3.36	2.23	.34	.39	.18	1.66	.42	.28	.15	.17	6.32	4.89	1.34	2.62	1.02	.54	.32	.01	.12	.34		
PAPAIKOU MAUKA 146.1	47.38	.16	1.10	2.55	1.79	.87	.43	.08	.24	.55	.13	4.49	3.18	.37	.90	.72	2.38	.90	.22	.14	.28	7.44	3.08	2.45	7.45	1.00	.55	1.95	.65	.50	.83		
PEPEEKO MAKAI 144	23.15	.18	1.01	1.74	.39	.59	.13	.08	.01	.53	.13	2.86	2.92	.50	.12	.11	1.88	.10	.38	.14	.28	4.00	1.02	.49	1.19	.21	.66	.64	.38	.15	.33		
PEPEEKO MAKAI 144	47.00		
POHAKULOA 107	1.82	.	.	.	.	.	.	.	.	.	.	.54	.16	.	.	.	.74	.	.	.	.	.24	.	.03	.	.	.	.	.	.
PUAKO 95.1	4.07	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PUU KIME 120	10.50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PUU LAU 102.1	3.25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PUU LEHUA 73	1.86	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PUU MAUI 113	2.96	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PUUKUMAU 167	7.23	.	1.35	.	.	.	.	.	.	.	2.14	.	.	.	.	.	1.06	.	.	.	.	.	.	.	.	.	.	.	.	.
PUU OO 82	17.03	.04	.05	1.43	.34	.04	.11	.02	.	.	.15	1.15	.31	3.60	.25	2.00	2.95	.34	.25	2.94	.30	.29	.45	
PUU WAHAE 94.1	2.31	.	.	.	.	.	.	.	.	.	.	.30	1.07	.28	.	.	.	.	.	.05	.	.	.42	.	.	.	.	.	.	.
SADDLE ROAO 1 84	43.81	.	.	7.05	.	.	.	.	.	.	3.76	.	.	.	.	.	13.40	.	.	.	.	.	.	19.00	.	.	.	.	.	.
SOUTH POINT CORRAL 3	3.19	.	.	.	.55	.	.	.	.	.	.53	.	.	.	.	.	.	.	.	.	.	.47	.	.	.	.	.	.	.	.
UMIKUA 118	19.26	.	.75	.27	1.02	.08	.0781	.23	.35	.1743	.	.	.17	3.23	7.60	.36	.21	2.34	.13	.64	.40
WOLU POINT USCG 159.2	2.73	.23	.29	.15	.07	.20	.08	.04	.01	.28	.	.02	.09	.	.02	.19	.21	.13	.	.01	.	.	.01	.23	.16	.	.	.27	.	.05	T		
WAIKAE A SCO 88.2	36.16	.41	.64	2.26	1.34	.86	.16	T	T	.26	.34	3.81	2.37	.71	.52	.80	1.69	1.67	.25	.05	.27	2.23	2.46	1.93	3.51	.39	.27	4.28	.67	.48	1.60		

SUPPLEMENTAL DATA

	Wind (Speed - m.p.h.)					Relative humidity averages- percent				Number of days with precipitation						Percent of Possible sunshine	Average sky cover sunrise to sunset		
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Standard of Time				Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over			Total	
						150TH MERIDIAN													
						02	08	14	20										
HILO, HAWAII, WB AIRPORT	8	1.1	6.7	18	NE	26	86	81	71	82	0	7	7	8	5	3	30	32	8.2
HONOLULU, DAHU, WBFC	5	14.5	15.2	37	NE	23	70	65	50	66	13	13	1	0	0	0	27	75	4.8
KAHULUI, MAUI, WB AIRPORT	5	12.6	13.1	32	E	16	78	74	59	78	11	8	6	0	0	0	25	75	5.2
LIHUE, KAUAI, WB AIRPORT	5	14.0	14.6	29	E	24	77	73	68	74	7	16	5	0	1	0	29	45	6.6

DAILY TEMPERATURES

HAWAII
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Station	Day of Month																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																
ISLAND OF KAUAI																																
KANALOHULUHULU 1075	MAX MIN	66 54	63 54	66 52	65 51	69 51	71 45	66 43	70 45	72 48	70 53	70 55	69 53	68 54	68 53	69 51	67 53	70 53	68 54	67 47	70 51	68 55	62 54	63 51	65 50	67 54	67 55	66 52	64 53	70 53	67.4 51.6	
KI LAHEA POINT 1133	MAX MIN	75 69	74 70	75 69	74 68	75 66	74 67	76 69	77 72	78 67	75 68	77 68	75 69	76 67	76 69	76 67	77 68	76 68	77 67	77 65	79 67	76 65	75 67	73 65	76 67	74 66	75 67	74 68	75 68	75 68	75.6 67.8	
LIHUE W8 AP 1020.1	MAX MIN	80 71	76 70	80 71	79 70	80 71	79 71	80 71	82 72	81 71	82 71	81 71	81 69	81 70	81 72	81 73	81 70	80 72	80 72	81 76	80 71	81 70	81 68	80 70	80 72	81 72	79 73	81 71	80 71	81 73	80.3 70.8	
MAKAHUENA POINT 940.1	MAX MIN	83 72	80 68	80 70	78 66	79 70	80 79	81 70	81 69	82 69	81 69	82 69	83 74	80 66	82 72	80 69	80 69	81 71	80 72	81 76	82 68	83 68	82 68	76 63	79 68	83 80	80 70	79 72	81 71	81 73	80.7 69.8	
HANA 1026	MAX MIN	86 62	87 64	86 65	85 59	86 60	86 62	82 61	81 60	87 64	85 63	86 66	87 62	86 65	86 64	86 62	86 61	86 62	84 62	86 61	86 60	85 60	85 60	87 60	88 65	87 59	85 60	86 64	86 65	87 61	85.7 62.4	
NIU RIDGE 1035	MAX MIN	82 65	80 60	81 60	80 59	80 57	80 55	81 59	81 59	82 59	81 59	82 59	82 59	81 60	82 61	83 60	84 61	83 60	84 60	85 60	85 60	80 60	80 60	82 60	83 61	82 60	80 61	80 60	81 60	80 60	81.6 60.1	
WAIACHI LOWER 1054	MAX MIN	77 60	78 61	75 65	76 62	78 63	77 62	78 59	80 60	79 64	78 65	78 64	76 65	77 64	77 64	78 64	77 65	77 68	77 68	75 62	78 62	80 65	78 64	78 64	75 64	77 61	74 64	77 64	75 62	77 64	77.1 63.1	
* * *																																
ISLAND OF OAHU																																
EWING PLANTATION 741	MAX MIN	82 66	81 67	82 70	81 65	81 65	80 64	83 64	82 61	84 65	84 67	85 66	82 66	83 65	83 67	82 65	81 69	83 67	83 67	85 65	85 63	85 67	82 66	80 68	80 65	82 64	83 64	83 68	81 64	82 66	84 66	82.5 65.8
HONOLULU W8FC 703	MAX MIN	86 73	83 70	85 72	85 71	84 71	84 72	86 69	86 70	85 72	85 74	85 74	85 72	85 73	85 72	86 71	85 70	85 72	86 72	86 73	86 72	84 71	86 70	86 71	85 72	85 71	86 71	86 71	85 72	85 73	86 73	85.0 71.6
HONOLULU SUBSTA 704	MAX MIN	77 68	77 70	79 69	77 68	78 67	77 69	80 69	80 70	80 70	79 68	79 70	78 70	79 69	79 70	78 69	78 69	78 68	79 69	79 68	76 68	75 68	76 69	76 68	77 70	79 71	79 71	77 70	78 68	80 70	78.1 69.1	
KAPUKU 912	MAX MIN	80 69	79 69	78 68	78 68	80 70	81 72	82 71	80 70	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	79.5 69.1
KANEIHE MAUKA 781	MAX MIN	78 70	79 68	77 67	77 68	77 67	78 66	78 69	81 69	80 68	80 68	80 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	79 68	78.3 67.6
LUALUALEI 804	MAX MIN	64 70	84 71	81 72	83 69	84 68	81 69	85 65	84 69	85 72	86 72	83 73	86 70	86 71	83 71	82 70	85 72	85 67	85 70	85 71	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	83.5 70.1
MAKAPUU POINT 724	MAX MIN	76 63	76 69	76 65	75 58	75 64	75 61	73 63	76 60	76 62	77 65	72 60	72 65	75 60	78 63	75 64	75 65	78 64	75 65	77 65	77 61	77 60	78 60	78 60	77 60	77 60	77 60	77 60	77 60	77 60	77 60	73.8 63.6
OPAELILA 870	MAX MIN	81 61	75 63	74 64	73 63	77 63	77 63	77 61	80 61	82 61	79 63	73 63	82 63	78 63	78 63	78 63	77 63	77 63	78 63	78 63	77 63	77 63	78 63	78 63	78 63	78 63	78 63	78 63	78 63	78 63	78 63	77.1 62.5
PKI WAHIANA 820.2	MAX MIN	81 61	75 65	77 66	78 63	78 63	79 63	79 63	81 63	81 65	82 63	82 65	83 63	80 63	81 63	80 63	79 63	79 63	79 63	80 63	83 62	85 62	85 62	77 64	77 64	77 64	77 64	81 62	80 63	80 63	80.0 63.0	
WAIALUA 847	MAX MIN	82 61	79 64	78 69	80 68	80 65	83 65	83 63	86 58	85 61	84 62	84 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	82 62	81.1 63.2	
WAIKIKI 717.2	MAX MIN	83 70	82 69	81 69	81 68	81 68	80 68	83 68	85 68	84 77	83 75	83 75	82 75	82 69	82 69	81 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	83 68	82.2 69.3
WAIMANAHO EXP FARM	MAX MIN	81 68	80 69	79 69	78 68	80 68	78 69	80 71	82 70	82 71	81 70	81 70	80 68	81 70	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	79.7 68.6
* * *																																
ISLAND OF MOLOKAI																																
MULUKAI AP 524	MAX MIN	77 69	73 70	76 69	78 68	76 68	75 68	78 69	79 68	79 69	77 69	80 70	78 69	80 69	79 69	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78.2 68.6
* * *																																
ISLAND OF LANAI																																
LANAI CITY 672	MAX MIN		78 59	71 64		72 62	72 59	74 59	74 59	75 62		73 64	74 63	74 63	72 60	78 60						74 61	74 61	75 62	73 62	68 61		74 60	75 61	74 60	75 61	73.8 61.1
* * *																																
ISLAND OF MAUI																																
HALEAKALA RS 338	MAX MIN	61 44	55 46	57 46	56 44	63 45	66 47	67 53	68 44	64 39	58 41	59 43	58 44	60 42	60 40	60 37	61 43	59 39	58 40	58 38	59 45	58 42	60 38	54 45	53 40	57 34	58 39	57 45	57 40	57 38	59.2 42.3	
HALEAKALA SUMMIT 338.4	MAX MIN	50 34	42 35	46 35	47 37	50 37	51 37	54 40	52 40	51 40	53 36		52 35	48 36	51 35	48 34	47 34	47 34	47 34	47 34	47 34	47 34	47 34	47 34	47 34	47 34	47 34	47 34	47 34	47 34	49.8 35.5	
HANA AIRPORT 355	MAX MIN	79 66	78 66	80 68	79 68	79 68	80 68	80 68	81 68	82 68	81 67	81 67	80 67	78 67	79 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80.0 67.1
KAANAPALI AIRPORT	MAX MIN	80 67	81 69	80 68	81 67	77 67	78 66	84 66	83 65	84 66	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	81.2 67.0
KAHULUI W8 AP 398	MAX MIN	82 67	82 70	82 70	81 68	82 68	83 69	84 65	85 65	82 66	81 68	81 69	83 69	85 69	84 69	85 68	85 68	85 68	84 68	85 68	85 68	85 68	85 68	85 68	85 68	85 68	85 68	85 68	85 68	85 68	85 68	83.2 67.1
KAILUA 446	MAX MIN	74 63	75 65	73 65	73 64	72 64	75 65	74 64	76 64	77 65	77 65	77 65	77 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75 65	75.0 64.4
KEAWAKAPU BEACH 260.2	MAX MIN	84 62	86 63	89 63	88 63	80 61	85 60	87 60	80 63	84 64	85 64	82 63	83 63	86 61	84 62	84 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	87 63	85.6 62.1
KU'IA SANATORIUM 267	MAX MIN	72 52	71 53	72 54	73 54	70 51	69 54	69 54	70 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	69 54	70.3 52.9

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
APRIL 1970

Continued

Station		Day of Month																															Average						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							
LAHAINA 361	MAX	83	84	86	85	84	84	84	83	83	83	84	84	84	83	83	85	84	86	85	85	85	84	83	83	84	86	84	84	84	84	84	84	84	84	84			
	MIN	56	68	67	65	65	64	66	65	66	67	65	65	65	65	66	67	66	66	65	68	68	69	68	68	69	64	63	64	69	65	65	65	65	65	65	65		
HAILUKU 386	MAX	79	77	77	77	78	78	79	80	80	80	79	78	78	78	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80		
	MIN	68	69	68	67	67	69	69	71	71	71	71	71	68	69	69	69	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	
ISLAND OF HAWAII																																							
HAINA 214	MAX	78	78	79	79	78	76	77	78	79	79	79	79	80	79	79	78	79	77	79	82	80	78	75	73	79	79	77	79	77	79	77	79	77	79	77	79		
	MIN	63	64	65	65	65	61	61	61	62	63	63	64	64	65	65	65	62	63	63	63	66	65	63	63	61	63	68	62	63	64	62	63	64	62	63	64	64	
HAWAII VOLCNS NP HQ 54	MAX	67	68	70	64	68	62	59	68	70	68	69	69	54	65	67	64	60	65	68	69	70	68	62	60	62	60	62	60	61	61	61	61	61	61	61	61	61	
	MIN	53	54	53	53	53	50	51	51	52	52	54	54	54	52	53	51	50	51	51	50	56	53	53	50	50	52	49	51	52	52	52	52	52	52	52	52	52	
HILO WB AIRPORT 87	MAX	79	81	83	80	80	78	80	83	81	75	81	81	79	80	80	80	80	80	82	83	78	80	80	74	80	80	79	80	80	76	80	80	76	80	76	80		
	MIN	66	66	67	67	66	65	64	64	65	64	66	68	66	66	68	64	66	61	63	63	66	66	68	62	60	59	64	61	59	60	60	61	60	60	60	60	60	
KAINALIU 73.2	MAX	73	77	79	80	76	76	73	79	77	79	79	78	77	74	76	74	77	75	77	78	79	80	75	79	77	76	78	75	77	77	77	77	77	77	77	77	77	
	MIN	60	61	62	63	59	62	60	59	61	62	64	61	61	59	61	61	62	60	60	61	60	63	63	62	60	59	64	61	59	60	60	60	60	60	60	60	60	
KAMUELA 192.2	MAX	72	61	70	71	71	71	68	79	76	72	72	73	73	71	70	70	70	74	78	75	78	72	69	70	68	68	68	66	66	66	66	66	66	66	66	66	66	66
	MIN	56	56	56	57	57	57	52	48	48	52	49	49	52	52	46	47	48	48	54	59	58	59	54	59	55	51	55	55	55	55	55	55	55	55	55	55	55	
KAMUELA AIRPORT 191	MAX	70	70	71	73	70	69	71	69	73	70	74	73	72	72	71	72	70	73	72	72	71	74	70	68	68	71	72	68	71	68	70	69	68	71	68	70	69	
	MIN	49	51	51	41	51	52	48	48	52	49	49	52	52	46	47	47	48	54	50	47	47	55	51	55	55	46	48	48	48	48	48	48	48	48	48	48	48	
KEAAU 92	MAX	80	79	81	80	81	79	79	80	80	80	78	81	80	78	80	81	79	80	79	80	81	78	79	79	75	79	81	78	78	78	78	78	78	78	78	78	78	78
	MIN	65	64	64	66	64	63	63	63	64	64	65	65	65	64	65	64	64	61	62	64	63	66	65	64	62	64	66	61	62	64	61	62	64	61	62	64	61	62
KEALAKEUA 26.2	MAX	75	78	79	81	78	77	75	79	77	81	79	78	79	76	77	74	77	76	77	77	79	79	77	77	76	78	80	76	77	78	77	78	77	78	77	78	77	78
	MIN	59	62	62	64	60	62	61	60	62	62	63	61	62	62	61	62	61	60	60	62	61	63	63	63	61	61	63	61	60	60	60	60	60	60	60	60	60	60
KOHALA MISSION 175.1	MAX	77	77	76	75	72	74	74	75	78	78	78	78	78	78	78	78	76	77	72	78	80	78	76	74	76	78	78	76	77	78	77	78	77	78	77	78	77	78
	MIN	65	66	66	65	65	63	65	64	64	64	66	65	65	66	66	65	64	65	64	64	66	66	65	65	63	63	65	64	64	66	64	64	66	64	64	66	64	66
KONA AIRPORT 68.3	MAX	78	80	81	82	82	82	82	82	82	80	80	83	82	82	82	80	81	81	83	82	82	83	84	80	84	83	83	85	80	85	81	85	80	85	81	85	81	
	MIN	65	68	66	66	60	62	60	63	65	62	63	65	62	64	68	64	64	65	62	63	62	63	72	63	74	62	61	62	65	63	62	65	63	62	65	63	62	
KULANI CAMP 79	MAX	61	61	63	61	63	58	58	63	64	61	63	65	64	60	59	58	55	59	62	60	66	58	55	55	58	61	62	58	59	58	60	3	3	3	3	3	3	3
	MIN	49	36	50	49	47	45	44	42	45	44	51	50	50	35	49	48	43	47	43	32	52	49	35	48	48	46	45	43	41	46	45	46	45	46	45	46	45	
MAUNA LOA SLOPE 085	MAX	52	52	51	52	54	54	56	50	52	47	43	41	45	45	49	43	44	49	49	47	46	48	46	45	44	47	46	48	49	49	48	49	49	48	49	49	48	
	MIN	35	30	32	31	33	36	38	32	35	31	33	31	31	30	29	31	28	31	32	28	30	31	32	32	30	28	32	28	30	31	32	30	31	32	30	31	32	30
MOUNTAIN VIEW 91	MAX	74	75	76	76	76	76	72	74	76	75	76	76	76	71	73	74	72	74	74	74	76	71	76	70	76	76	76	70	71	71	71	71	71	71	71	71	71	
	MIN	61	60	59	59	59	59	58	59	59	58	59	59	59	61	62	61	59	55	55	58	61	61	59	57	57	57	55	57	57	55	57	57	55	57	57	55	57	57
NAALEHU 14	MAX	82	82	84	83	82	82	76	80	81	82	82	81	81	81	80	81	79	79	80	80	81	78	79	80	80	80	80	78	78	78	78	78	78	78	78	78	78	78
	MIN	64	68	69	68	65	65	67	65	67	66	66	63	63	66	68	66	67	67	64	64	66	67	66	68	68	62	62	64	66	68	68	62	62	64	66	68	68	68
OOKALA 223	MAX	78	77	79	78	77	77	75	78	79	78	73	78	78	78	79	78	75	77	78	79	81	78	77	73	75	79	77	75	78	76	77	78	76	78	76	78	76	78
	MIN	64	65	65	66	66	65	64	65	66	65	65	65	65	67	67	65	64	66	67	65	64	65	64	63	63	64	66	64	63	63	63	63	63	63	63	63	63	
OPIHIHALE 2 24.1	MAX	73	80	79	77	75	74	77	75	79	80	75	77	76	76	76	79	77	76	73	80	81	74	74	76	77	76	75	76	76	76	76	76	76	76	76	76	76	
	MIN	59	59	60	58	58	58	56	58	58	59	59	61	59	59	60	61	60	59	59	59	60	60	62	57	59	60	56	57	58	58	58	58	58	58	58	58	58	58
PAHALA 71	MAX	81	82	84	81	82	79	78	80	80	80	80	81	78	79	80	78	79	78	80	80	82	77	80	78	79	83	79	77	80	78	79	80	78	79	80	78	79	80
	MIN	61	62	62	63	62	62	63	61	62	62	63	63	63	61	62	64	64	57	61	63	64	62	64	64	59	63	64	60	61	63	60	61	63	60	61	63	60	61
PUAKO 95.1	MAX	87	86	86	87	85	86	81	84	84	84	87	84	85	87	86	87	85	86	87	84	85	86	86	85	86	86	89	85	85	86	88	85	86	88	85	86	88	
	MIN	72	71	73	70	67	71	67	66	67	68	70	70	71	72	72	73	71	71	69	66	68	72	72	72	69	69	72	69	70	70	70	70	70	70	70	70	70	70
UPOLU POINT USCG 159.2	MAX	80	78	80	79	80	79	78	81	80	80	80	86	82	81	82	80	81	81	82	83	85	83	81	78	80	81	78	80	82	81	81	81	81	81	81	81	81	
	MIN	67	68	69	63	67	66	67	65	66	68	68	68	68	69	67	67	66	65	68	68	68	69	61	64	66	68	66	66										

STATION INDEX

HAWAII
APRIL 1970

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE I	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE I	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER
								TEMP	PRECIP	EVAP	SPECIAL										TEMP	PRECIP	EVAP	SPECIAL	
ISLAND OF HAWAII																									
MAUNA LOA	A 6407	03 KAU			19 11	155 30	600					HAWAIIAN RANCH CO	PUI KIME 120	A 8393	01 HAKAUA			19 54	155 24	7750				KUKAIAU RANCH CO	
MOUNTAIN VIEW 91	A 6532	02 PUNA			19 33	155 07	1530	6A	6A			PUNA SUGAR CO	PUI LAU 102.1	A 8452	05 HAKAUA			19 50	155 36	7400				STATE DIV OF FISH-GAME	
NAALEHU 4	A 6588	03 KAU			19 44	155 35	673	6A	6A			HUTCHINSON SUGAR CO	PUI LEHUA 73	A 8515	01 HAKAUA			19 55	155 26	6900				GREENWELL RANCH	
NAPOLI 24	A 6697	04 S KONA			19 28	155 55	395	7A				ONA EXPERIMENT STA	PUI MAI 113	A 8500	04 N KOHALA			19 34	155 49	4680				KUKAIAU RANCH CO	
NAULU STREET 38.6	A 6731	02 PUNA			20 14	155 45	79	6A				HAWAII VOLCANOES NAT PK	PUI OOH 82	A 8548	06 N KOHALA			20 12	155 50	1800	7A			KOHALA DITCH CO LTO	
NAULU 119	A 6854	01 N KOHALA			20 01	155 17	430	7A	7A			LAUPAHEME SUGAR CO	PUI WAHANA 94.1	A 8555	05 N KONA			19 47	155 51	2520	7A			ODD WINTERS	
OGALA 723	A 7185	04 S KONA			19 16	155 33	1270	7A	7A			HISS C LEONARD	SADDLE ROAD 1.84	A 8590	02 S HILO			2 19 42	155 12	2340	7A			GILLINGHAM RANCH INC	
ORCHARD AND EST 81.5	A 7204	01 HAKAUA			20 05	155 22	800	7A				ADAMO OF WATER SUPPLY	SOUTH POINT CORRAL 3	A 8578	03 KAU			3 18 57	155 41	900	7A			BOARD OF WTA SUPPLY	
PAALUA 21	A 7312	01 HAKAUA			19 30	154 57	670	6A	6A			PAALUA SUGAR CO	UMIKOA 118	A 8780	01 HAKAUA			1 19 59	155 23	3420	7A			HAWAIIAN RANCH COMPANY	
PAALUA 22	A 7421	03 KAU			19 22	155 28	5000					HAWAIIAN RANCH CO, INC.	UPOLI POINT USCG 159.2	A 8830	01 N KOHALA			1 20 15	155 53	61	6A	6A		U S COAST GUARD	
PANOE 05	A 7643	03 KAU			19 47	155 00	200	7A				HAUNA KEA SUGAR CO	WAIKAEA SCD 89.2	A 9025	02 S HILO			2 19 40	155 08	1050	7A			SHINICHI KANEHIRO	
PAPAHOI 144.1	A 7741	02 S HILO			19 47	155 08	1270	7A				PEREKO SUGAR CO	WAIKANDUULA 178.6	A 9350	01 N KOHALA			1 20 08	155 47	3630	7A			WAHUA RANCH	
PAPAHOI MAUKA 145.1	A 7851	02 S HILO			19 51	155 05	100	7A				STATE DIV OF FORESTRY													
PEREKO MAUKA 144	A 8051	02 S HILO			2 19 44	155 10	1730					STATE DIVISION OF PARKS													
PISHOHA 89	A 8053	02 HAKAUA			2 19 45	155 32	6511	5A	6A			ERWIN H. RAPP													
POMAKULA 107	A 8186	05 KOHALA			19 39	155 50							HILO COUNTRY CLUB 8616	A 1487	02 HAWAII			2 19 41	155 10	1520	VAR				HILO COUNTRY CLUB
POWAI 95																									

1 DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN
 5-NORTH-CENTRAL MOLOKAI: 1-(NO INTRA-ISLAND DIVISIONS) LANAI: 1-(NO INTRA-ISLAND DIVISIONS) MAUI: 1-NORTHEASTERN
 2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3650, Honolulu, Hawaii, or to any Weather Bureau Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII".

DIMENSIONAL UNITS: Unless otherwise indicated, dimensional units used in this bulletin are Temperature in F., precipitation and evaporation in inches, and wind speed in miles. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME: Data in the "Monthly Extremes", "Daily Precipitation" table, "Daily Temperature" table, and "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION: Is measured in the standard Weather Bureau type unit of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extremes of temperature of water in pan as recorded during the 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 8-8 inches above the pan.

NORMALS: For all stations are climatological standard normals based on the period 1931-1960.

STATION NAMES: Hawaii state key numbers are included following station names in the several tables.

DELAYED DATA AND CORRECTIONS: will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES: for monthly precipitation totals may be found in the annual issue of this publication.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.
- No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by ex entry.
- Add also on an earlier date or dates
- Highest observed one minute wind speed. This station is not equipped with an instrument to measure fastest mile data.
- Amount included is following measurement, time distribution unknown.
- A The letter "A" shown following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index"; indicates amount carried in the "Totals" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gages are read only once monthly, measurements made on the first day of a month are credited to the last day of the preceding month.
- B Adjusted to a full month.
- J "Supplemental Data" table.
- M One or more days of record missing. If average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.
- R Amounts from recording gage.
- T Trace, an amount too small to measure.
- V Includes total for previous month.

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- AR Observation made after rate.
- C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.
- MO Gages read once monthly; usually on the last day
- OC Gages read at periods varying from a few weeks to several months.
- S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.
- SS Observation time is near sunset.
- VAR Observation time is variable.
- W1 Gage read weekly or irregularly only.
- W2 Gage read weekly and last day of month.
- * Thermometers are generally exposed in a shelter located a few feet above sod-covered ground; however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

Subscription Price: 20 cents per copy, monthly and annual; \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

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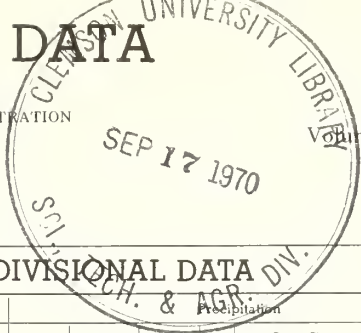
CLIMATOLOGICAL DATA

HAWAII

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

MAY 1970

Volume 66 No. 5



MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

Station	Temperature											Precipitation				Snow, Sleet		No. of Days															
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More										
										90° or Above	80° or Above	70° or Above	60° or Above											Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										Max.	Mn.	0° or Below	1° or Below																					2° or Below
* * * ISLAND OF KAUAI																																	
ANAOHA 1114	A																																
KANALOHULUHULU 1075	A	71.5	52.2	61.9		76	7	41	29+		0	0	0	0	3.30	.35																	
KAPAA STABLES 1104	A														1.89		.96	3					6	1	0								
KILAUEA FIELD 17 1135	A														4.28																		
KILAUEA POINT 1133	A	78.8	70.5	74.7		84	23	67	23+		0	0	0	0	6.51	- 1.08																	
* * * ISLAND OF OAHU																																	
KOLOA 936	A														6.52	2.17																	
LIHUE W8 AP 1020.1	R	81.5	72.8	77.2	2.7	84	17	68	23		0	0	0	0	5.85	3.26	2.05	2					7	3	3								
MANA 1026	A	86.1	64.9	75.5	.8	89	11	58	20		0	0	0	0	1.57	.67	1.07	3					2	1	1								
N WAILUA OITCH 1051	A														15.66																		
PH WAINIHA 1115	A														6.11	- 3.05	1.50	1															
* * * ISLAND OF MOLOKAI																																	
PUEHU RIDGE 1040	A														2.40		1.73	3															
WAIHAWA 930	A	79.4	65.2	72.3		82	31+	59	29		0	0	0	0	4.20	2.70																	
WAIHI LOWER 1054	A														11.15		2.95	3															
WAIHEA 947	A														2.43	1.58	1.75	3															
* * * ISLAND OF LANAI																																	
HONOLULU OBSERV 702.2	R	86.8	74.0	80.4	4.5	89	30+	70	24		0	0	0	0	.12		.06	30															
HONOLULU W8FC 703	R														.21	- .78	.10	4															
KAHUKU 912	M														3.60	1.44																	
KANEHOE MAUKA 781	M	79.7	69.7	74.7	.5	85	25	66	25		0	0	0	0	6.60	2.05	2.38	2															
KOOLAUA OAM 833	M														9.06	2.95	1.62	10															
* * * ISLAND OF MAUI																																	
LUALUALEI 804	A	85.3	71.3	78.3		88	31	66	25		0	0	0	0	.77																		
MAKAPUU POINT 724	A	77.1	66.4	71.8		82	24	64	10+		0	0	0	0	1.06		.77	4															
NUUANU RES 4 783	A														7.78	- 2.03																	
OPAEULA 870	A	79.9	64.7	72.3	2.5	85	24	60	24		0	0	0	0	2.82	- .46																	
PAOLO VALLEY 718	A														7.54	- 4.58	1.00	10															
* * * ISLAND OF HAWAII																																	
PRI WAIHAWA 820.2	A	82.5M	64.3M	73.4M		86	29+	60	29+		0	0	0	0	1.11																		
PUNALUU 884	A														9.20																		
WAIHAWA DAM 863	A														1.52																		
WAIHOLE 837	A														13.08																		
WAILUA 847	A	84.1	64.9	74.5	1.1	88	30+	60	3		0	0	0	0	.45	- .65	.08	11															
WAIKIKI 717.2	M														.34		.27	4															
WAIMANALO EXP FARM	M	81.9	71.0	76.5		84	31+	65	23		0	0	0	0	1.17		.37	3															
WAIPAHU 750	A														.20	- 1.00																	
* * * ISLAND OF HAWAII																																	
KUALAPUU 534	A														.08	- 1.50	.02	15+															
MAPULEHU 542	A														2.71	.00	1.40	22															
MAUNALO 511	A														.11	- 1.36	.04	26															
MOLOKAI AP 524	A	82.0	69.9	76.0		84	31+	66	5		0	0	0	0	.03		.02	1															
* * * ISLAND OF HAWAII																																	
LANAI CITY 672	A														.69	- 1.98																	
* * * ISLAND OF HAWAII																																	
HALEAKALA B E S 434	A														2.14	- 2.26	.67	26															
HALEAKALA RS 338	A	63.5	45.2	54.4		75	13	37	24		0	0	0	0	3.01		.76	2															
HANA AIRPORT 355	A	81.9M	69.2M	75.6M		84	17	66	24+		0	0	0	0	3.17		.35	24															
HONOKOHUA 493	A														1.69	- .57	.37	26															
KAANAPALI AIRPORT	M																																
KAHULUI W8 AP 398	R	86.6	67.2	76.9	1.6	90	2	62	24		1	0	0	0	.02	- .67	.02	26															
KAILUA 446	A	76.3	66.0	71.2	.8	80	25	63	29+		0	0	0	0	8.01	- 1.91	.81	2															
KEANAE 346	A														18.40	- 2.70																	
KIPAHULU 258	A														3.98	- 3.96	.60	2															
KULA SANATORIUM 267	A	71.7	55.2	63.5	.0	74	11	51	21+		0	0	0	0	.48	- 1.62	.19	2															
LAHAINA 361	A	85.6	67.9	76.8		90	14	65	20		1	0	0	0	.12	- .23	.07	26															
PAIA 406	A														.56	- 1.55	.21	26															
WAILUKU 386	A	80.9M	69.7M	75.3M	.9	83	25+	66	25		0	0	0	0	.06	- 1.2	.08	26															
* * * ISLAND OF HAWAII																																	
HAINA 214	A	79.4	65.2	72.3	.9	83	7	63	13+		0	0	0	0	9.14	4.22	2.95	1															
HAWAII VOLCONS NP HQ 54	R	69.0M	54.0M	61.5M	.9	74	15+	50	22		0	0	0	0	15.49	9.42	3.67	2															
HILO W8 AIRPORT 87	R	81.3	66.0	73.7	.7	86	14	63	24		0	0	0	0	20.26	10.93	6.40	26															
HUEHUE 92.1	A														6.29	1.62	1.83	10															
KAINALIU 73.2	A	78.2	63.4	70.8		80	29+	61	24+		0	0	0	0	2.05	- 5.65	.37	30															

See Reference Notes Following Station Index

MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

HAWAII
MAY

1970

Continued

Station	Temperature										Precipitation																
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days						
										Max.		Min.						Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										91° or Above	33° or Below	32° or Below	1° or Below														
KAMUELA AIRPORT 191	73.1	54.4	63.8		78	4	45	19		0	0	0	0	1.01		25	15	.0	0				5	0	0		
KEAHU 92	80.7	65.6	73.2	.7	84	25+	64	22+		0	0	0	0	27.13	17.25	4.62	1	.0	0				22	14	5		
KEALAKEUA 26.2	77.5	64.1	70.8		79	29+	62	25+		0	0	0	0	2.69		.56	17	.0	0				9	1	0		
KONA AIRPORT 68.3	82.2M	67.0M	74.6M		85	31	64	31+		0	0	0	0					.0	0								
KUJUHAELE HIC 199														8.59	1.88	2.13	1	.0	0				16	7	1		
KULANI CAMP 79	63.0	47.0	55.0		69	7	38	11		0	0	0	0	19.17		4.31	28	.0	0				21	10	7		
PAHALA 21	79.3	63.2	71.3	.3	83	31	61	28+		0	0	0	0	6.95	4.63	4.52	2	.0	0				7	3	1		
POHAKULOA 107														.41				.0	0								
PUNAKO 95.1														.12		.06	16	.0	0				0	0	0		
PUU WAAHAA 94.1	86.1	70.9	78.5		89	27+	68	24+		0	0	0	0	2.76	.03	.75	29	.0	0					1	0		
JMIKOA 118														5.05	.01	1.52	27	.0	0					3	2		
WAIKAEA SCD 88.2														35.99		5.01	1	.0	0								
ISLAND			69.6											10.19				.0									

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 95° ON THE 24TH AT MAKAHUENA POINT 940.1, OAHU

LOWEST TEMPERATURE: 31° ON THE 18+ AT MAUNA LOA SLOPE OBS, HAWAII

GREATEST TOTAL PRECIPITATION: 40.45 AT KIPA 89.2, HAWAII

LEAST TOTAL PRECIPITATION: .00 AT 7 STATIONS

GREATEST ONE-DAY PRECIPITATION: 6.68 ON THE 1ST AT HONOMU MAUKA 138, HAWAII

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
MAY 1970

Station	Total	Day of Month																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
ISLAND OF KAUAI																																			
ANAHOLA 1114	3.30	.02	*	*	2.10	.35							.10	.02	.02	*	*	.05			.04	.03	.04	.19	*	*	.30	.09	.02	*	*	*	*		
BYRDWOOD STA 985	5.34	.22	*	*	3.29	.11	.02	T	.05	*	*	.56	.06	.20	.02	.05	*	*	.07			.04	.03	.05	.05	*	*	.03	.36	.11	.02	*	*	*	
EAST LAWAI 934	3.46	.32	*	*	2.65	.28	.03		.01	.05	*	.90	.20	.18	T	.09	*	*	.42	.02	.06	.05	.04	*	*	*	.03	.28	.07	T	*	*	*	*	
ELELE 927	3.38	.03	*	*	2.52	.02	.01			.02	*					.03	*	*	.05	.01		.02	.06	*	*	*	.42	.06	*	*	*	*	*	*	
HALAULA 1110	4.00	.02	*	*	2.00	.30						.11	.02	.05	.02	*	*	.03			.03	.95	*	*	.30	.14	.03	*	*	*	*	*	*	*	
HALENAHMO 1006	5.13	.15	*	*	2.86	.28	.05		.04	.06	*	.49	.11	.06	.06	*	*					.05	.27	*	*	*	.07	.21	.24	*	*	*	*	*	
HUKIPO 945	2.43			1.78	.55	.10																.16	*	*	*	*	.07	.21	.24	*	*	*	*	*	
ILILIULA INTAKE 1050	12.81	.72	*	*	4.85	.87	.04		.23	.35	*	1.42	.34	.35	.11	.22	*	*	.67			.17	.03	.28	.30	*	*	.35	.79	.65	.07	*	*	*	
INTAKE WAINIHA PC 1086	4.91	2.10	*	*	.87	*						1.79	*	*	.15	*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	
KALIHIMAI RES 1131	8.46	.81	*	*	3.60	.11	.01		.10	*	*	1.19	.21	.32	.02	.04	*	*	.37			.09	.10	.02	.25	*	*	.31	.49	.37	.05	*	*	*	
KANALOHULUHULU 1075	1.89		.12	.96	.36	.12					.08	.10		.02																					
KANEHA RESERVOIR 1092	6.79	.05	*	*	3.55	.35	.08		.02	*	*	.25	.10	.05	.03	*	*					.09	.04	.03	.60	*	*	1.10	.20	.15	.05	*	*	*	
KAPAA STABLES 1104	4.28		*	*	2.55	.14						.23	.10															.15							
KEALIA 1112	3.20		*	*	1.95	.27						.17	.05	.01													.15								
KEKAMA 944	2.00		.05	1.45	.46	.04									.04	*	*										.10	.06							
KILAUEA 1134	5.55	.13	*	*	2.09	.11						.43	.19	.42	.02	.12	*	*	.04	.06		.11	.01	.64	*	*	.99	.18	.04	.01	*	*	*	*	
KILAUEA FIELO 17 1135	6.51	.20	*	*	2.72	.13	.03		.09	.08	*	.72	.11	.44	.04	.03	*	*	.08	.05	.11	.01	.51	*	*	.95	.16	.08	*	*	*	*	*	*	
KILAUEA POINT 1133	4.38	.11	1.50	.16	.10					.27	.03	.08	.04						.02	.12			.15	.08	.04	.04	.01								
KOLD 1033	1.18			.63	.25							.10															.10								
KOLDA 936	6.52	.40	*	*	2.66	.69	.01		.03	.16	*	.99	.18	.14	.15	*	*	.24	.02	.09	.02	.04	*	*	*	.27	.31	.12	*	*	*	*	*	*	
KOLDA HAUKA 994	7.24	.14	*	*	3.09	.12	.03		.06	.15	*	1.07	.15	.07	.03	.14	*	*	.45	.10	.03	.12	.39	*	*	.32	.43	.29	.03	*	*	*	*	*	
KOKULU RES 1137	6.65	.27	*	*	3.30	.16				.08	*	.59	.14	.62	.05	.03	*	*	.15	.03	.02	.02	.89	*	*	.06	.23	.01	*	*	*	*	*	*	
KODUHU 935	3.60	.09	*	*	2.37	.30	.01			.03	*	.36	.01		.07	*	*	.07	.03	.02	.02	.89	*	*	T	.18	.03	*	*	*	*	*	*	*	
LIHUE VARIETY STA	1.74	.12	.08	2.40	.82	.15			.01	.04	*	.57	.05	.12	.03	.05	.05	*	.03	.03	.11	.05	.02	*	*	.11	.26	.02	.04	*	*	*	*	.45	
LIHUE 1020	6.31	.09	*	*	3.60	.37	.01					.13	.06	.02	.05	.02	*	*	.03			.05	1.45	*	*	.02	.28	.13	*	*	*	*	*	*	
LIHUE WB AP 1020.1	9.85	T	2.05	1.03	.18	.48			T	.04	.04	.03	.01	.04	.01				.01	.05		.07	1.42	*	*	.16	.06	T	*	*	*	*	.22	.35	
MAKAHUNA POINT 940.1	2.38	.04	.01	1.23	.16	.06				.07	.08	*	*													.95	.16	.08	*	*	*	*	*	*	
MAKAWELI 965	2.82	.03	2.20	.38	.01	.08			.01	.02	.01								.04			.01	.01			.02								.01	
MANA 1026	1.57		.03	1.07	.47																														
MOHIMI UPR CROSS 1083	1.23		.43	.64	.05	.11																													
ISLAND OF MAUI																																			
MOLOAA 1145	3.23	.05	*	*	1.67	.83						.14	.02	.03	*	*						.03	.02	.31	*	*	.03	.06							
MOUNT WAI'ALEALE 1047	32.17	4.29	2.68	2.28	.24	.04		.47	1.81	1.50	2.04	.51	.67	1.85	.28	.67	.71	.91	.31	.59	.20	.91	.67	.08		2.09	3.27	1.02	.35	.04	.04	1.65			
NIU RIDGE 1035	1.83			1.16	.52	.02																					.13								
N WAIHUA DITCH 1051	15.69	.60	*	*	6.00	.40	.20	.40	.46	*	*	1.80	.46	.56	.40	.36	*	*	1.20	.26	.16	.20	.70	*	*	.20	.50	.60	.20	*	*	*	*		
PIU WAINIHA 1115	6.11	1.50	.22	.65	.22	.05		.40	.47	.23	.43	.95	.09	.01	.03	.08	*	*	1.26	.11	.03	.03	.01	*	*	.02	.42	.48	.02					.18	
PRINCEVILLE RANCH 1117	4.71	.48	.64	1.05	.21	.03		.04	.05	.09	.36	.20	.13	.06	.03	.05	.15		.04		.03	.04	.12	.03	.11	.39	.03							.35	
PUEHU RIDGE 1040	2.40			1.73	.47	.10																													
PUIHI 1013	5.43	.07	*	*	2.90	.38	.05			.03	*	.30	.05	.07	.09	*	*	.03			.03	.04	.59	*	*	.20	.39	.21	*	*	*	*	*	*	
RESERVOIR 6 1004	5.74	.21	*	*	3.03	.15		.05	.03	*	*	.45	.21	.17	.03	*	*	.13	.05	.02	.03	.41	*	*	.07	.41	.26	.03	*	*	*	*	*	*	
WAIHANA 930	4.20	.07	*	*	3.27	.12	.01	T	.02	*	*	.26	.05	.04	T	.03	*	*	.05	.01		.11	.04	*	*	.12									
WAIHANA MOUNTAIN 990	14.50		*	*	5.21	2.95	.12	.11	.22	.37	.64	.91	.29	.21	.04	.28	.01	.14	.11	.06	.11	.07	.29	.40	*	*	.70	.37	.04	.02	.46			4.50	
WAIHAI LOWER 1034	11.15	.36	.51	2.95	.63	.85	.02	.21	.24	.23	.67	.87	.24	.30	.04	.21	.21	.20	.21	.15	.05	.05	.25	.07	.23	.89	.63	.13	.03				.40		
WAIHAI UPPER 1052	11.08	.51	.51	2.95	.63	.85	.02	.21	.24	.23	.67	.87	.24	.30	.04	.21	.21	.20	.21	.15	.05	.05	.25	.07	.23	.89	.63	.13	.03				.40		
WAIHANA 943	1.74			1.35	.37	.02																													
WAILUA KAI 1005	6.11			3.27	.45							.34	.04		.05							.90	*	*	.85	.17	*	*	*	*	*	*	*	*	
WAIHEA 947	2.43			1.75	.67	.01						.42	.02																						
WEST LAWAI 931	3.96	.12	*	*	2.48	.12	T	.01				.42	.02					.03	*	*	.06	.01	.09	.03	.01		.24	.32	.02	*	*	*	*		
ISLAND OF OAHU																																			
AIEA FIELD 625 761	1.85	*	*	.03	.07	*	*	*	*	*	.95	*	.08	*	*	*	*	*	*	*	*	.05	*	*	*	*	.55	.04	*	*	*	*	*	*	
BERETANIA PUMPING STA	.74			.10				T	T	*	.10	.10		.04												.07	.28								
CAMP 84 807	1.00			.																															

DAILY PRECIPITATION

HAWAII
MAY 1970

Continued

Station	Total	Day of Month																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
ISLAND OF MOLOKAI																																			
KALAUAPA 563	A	.86	*	*	*	*	*	*	*	*	*	*	*	*	*	.12	.40	*	*	*	*	.10	*	.16	*	*	.08	*	*	*	*	*	*		
KAUAKAKAI 530	A	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
KEONELE PENS 551	A	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
KUALAU 534	A	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MAPULEHU 542	A	2.71	.03	.02	.05	.08	.12	.03	.21	.03	.01	.08	.02	.06	.01	.04	1.40	.22	.02	.14	.04	.03	.04	.14	.04	.03	.08	.01	.02	*	*	*			
MAUNALO 311	A	.11	*	*	.03	*	*	*	*	*	*	*	.01	*	*	*	*	*	*	*	*	*	*	.03	.04	*	*	*	*	*	*	*	*		
MOLOKAI AP 524	A	.03	.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
PUUOHOKU RANCH 542.1	A	.97	.05	T	T	.04	.16	.11	.14	.04	.06	T	T	.01	T	.07	T	T	T	T	T	T	.04	.11	T	.32	.05	.05	*	.04	*	*			
WAIKOLU 540	A	2.53	*	*	.38	T	.16	.11	.14	.04	.06	T	T	.01	T	.07	T	T	T	T	T	.04	.11	T	.32	.05	.05	*	.04	*	*	*	*		
ISLAND OF LANAI																																			
KANEPUU 690	A	2.95	*	*	*	*	*	*	2.87	*	*	*	*	T	*	*	*	*	*	*	*	*	*	*	*	*	*	.06	*	*	.02	*	*		
KAUMALAPAU HARBOR 658	A	T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
LANAI CITY 672	A	.69	.03	*	.07	*	T	*	*	.10	*	.01	.09	.15	*	*	*	*	*	*	*	.30	*	.27	.01	*	.44	*	*	.11	*	*	*		
LANAI-MALE 684	A	1.27	*	.18	*	*	.04	*	.30	*	*	*	.03	*	*	*	*	*	*	*	*	.30	*	.27	.01	*	.44	*	*	.11	*	*	*		
MAHANA 694	A	.72	*	*	*	*	.04	*	.30	*	*	*	.03	*	*	*	*	*	*	*	*	.30	*	.27	.01	*	.44	*	*	.11	*	*	*		
MALAUUA 676	A	.23	*	*	*	*	*	*	*	*	*	*	.08	*	.18	*	*	*	*	*	*	*	*	*	*	*	.15	*	*	T	*	*	*		
WAIKAEKUA 585	A	.90	*	*	*	*	*	*	*	*	*	*	.08	*	.18	*	*	*	*	*	*	*	*	*	*	*	.15	*	*	T	*	*	*	.02	
ISLAND OF MAUI																																			
AUWAHI-252	A	1.07	*	*	*	1.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.05	*	*	*	*	.03	*	
HALEAKALA B E S 434	A	2.14	*	.25	.01	*	.03	*	.16	.32	.01	*	.04	.25	.07	*	.02	*	*	*	*	*	*	.04	.67	.16	.08	*	*	*	*	.03	*	*	
HALEAKALA RANCH 432	A	.84	*	.46	.23	*	.03	*	.16	.32	.01	*	.04	.25	.07	*	.02	*	*	*	*	*	.04	.67	.16	.08	*	*	*	*	.03	*	*	*	
HALEAKALA RS 338	A	3.01	.06	.76	.48	T	*	*	.01	.09	T	*	*	.04	T	*	*	*	*	*	*	T	.02	T	.59	.12	.31	.03	.50	*	*	*	*		
HALEAKALA SUMMIT 338.4	A	.51	*	*	1.05	*	*	*	.01	.09	T	*	*	.04	T	*	*	*	*	*	*	T	.02	T	.59	.12	.31	.03	.50	*	*	*	*	*	
HALLIMALE 423	A	1.15	*	*	.03	*	*	*	.12	T	*	.03	.35	.02	.01	.20	.07	.08	.52	.14	.08	.17	.05	.19	.32	.03	.05	*	*	*	*	.03	*		
HANAUPOKO 485	A	2.32	.06	.07	*	.03	.04	.13	.28	.09	.20	.13	T	.24	.07	.17	.21	.01	.42	.03	.09	.02	.03	.35	.19	.34	.32	.03	.05	*	*	.05	*		
HANA 354	A	2.80	.03	.23	*	.03	.04	.13	.28	.09	.20	.13	T	.24	.07	.17	.21	.01	.42	.03	.09	.02	.03	.35	.19	.34	.32	.03	.05	*	*	.05	*		
HANA AIRPORT 355	A	3.17	.06	.32	T	.06	.04	.13	.28	.09	.20	.16	T	.27	.08	.23	.11	.05	.05	.23	.11	.08	.09	.02	.03	.35	.19	.34	.32	.03	.05	*	*		
HANAHULI 281	A	3.06	.06	.32	T	.15	.04	.13	.28	.09	.20	.16	T	.27	.08	.23	.11	.05	.05	.23	.11	.08	.09	.02	.03	.35	.19	.34	.32	.03	.05	*	*		
HOLUA CABIN 259.5	A	.35	*	*	*	.35	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
HONOKOHU 440	A	7.10	.03	*	*	*	.16	*	.22	.09	*	.08	*	.17	.02	.02	.04	.12	.03	.21	.37	.07	.03	.7.10	*	*	*	*	*	*	*	*	*	*	
HONOKOHU 493	A	1.69	.03	*	.04	*	.16	*	.22	.09	*	.08	*	.17	.02	.02	.04	.12	.03	.21	.37	.07	.03	.7.10	*	*	*	*	*	*	*	*	*	*	
HONOHANI GULCH 341	A	6.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KAANAPALI AIRPORT	A	-.26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KAHOMA INTAKE 374	A	2.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
KAHULUI WB 48 398	A	1.02	*	*	*	*	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
KAILIILI 436	A	31.18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KAILUA 446	A	8.01	.67	.81	.22	.05	.02	.59	.62	.21	.56	.27	.10	.12	.28	.66	.51	.17	.40	.34	.01	.01	.27	.67	.54	.06	.08	.14	.14	.14	.14	.14	.14	.14	
KAILUA INTAKE 375	A	1.92	*	*	.92	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KEAHUA 410	A	.49	.05	.01	*	*	*	*	*	*	*	*	*	.20	T	*	*	*	*	*	*	*	.03	.20	*	*	*	*	*	*	*	*	*	*	
KEANAE 340	A	18.40	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18.40
KEAWAKAPU BEACH 260.2	A	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KIMEI 311	A	-.02	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KIPAHULU 258	A	3.98	.21	.60	.08	.14	.10	.17	.24	.14	.09	.23	.04	.29	.10	.32	.12	.09	.22	.15	.52	.05	.02	.18	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	
KULA HEIGHTS 323.2	A	.44	.28	.19	*	.05	.09	.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
KULA SANATORIUM 267	A	.12	.05	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LAHAINA 361	A	1.10	.07	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LAUNIPOKO INTAKE 376	A	.18	.07	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LAUNIPOKO VILLAGE 372	A	.18	.07	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LUPI UPPER 442	A	9.70	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9.70
MAHINAHINA 466	A	1.72	.10	*	*	*	.09	.19	.28	.07	.10	.24	.09	.14	.09	.14	.09	.14	.09	.14	.09	.14	.09	.14	.09	.14	.09	.14	.09	.14	.09	.14	.09	.14	.09
MAKALELE -FLO 60-497	A	1.02	*	*	.02	*	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01
OLIMOI 332	A	.90	.12	*	.06	.01	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01	.02	.01	.01
OLOWALU 296	A	.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OLOWALU GULCH 377	A	4.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PAKAA 350	A	17.41	1.15	2.23	1.47	.03	.09	.80	1.																										

DAILY PRECIPITATION

Continued

HAWAII
MAY 1970

Station	Total	Day of Month																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
HAWAII LOWER 193	26.32	6.20	*	*	*	*	*	4.25	*	*	*	*	*	5.67	*	*	*	*	*	*	*	3.45	*	*	*	*	*	*	6.75	*	*			
KEAAU 92	27.13	4.62	3.82	.55	.02	.11	.11	.55	.67	.27	.96	.74	.06	.03	.75	.17	.79	*	*	*	*	*	*	.12	.53	3.45	3.72	3.85	.65	.02	.02			
KEALAKEUA 26.2	2.69	*	*	*	*	.05	.11	.20	.07	.20	.09	.03	.26	*	*	*	*	*	*	*	*	*	*	.07	.10	.12	.06	.20	.01	.21	.22			
KEHENA 181.2	25.60	*	*	*	*	*	*	*	*	*	*	*	*	*	.01	.02	.56	.05	*	*	*	*	*	*	*	*	*	*	*	*	5.60			
KIOLAKAA A & F 6	11.06	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
KIP4 89.2	40.45	3.79	5.01	2.06	.02	.02	.22	.06	1.59	1.80	1.26	2.00	1.04	.05	.12	.98	.69	.92	1.14	.98	.44	.30	.28	.49	T	1.36	3.85	5.52	2.85	.49	.81	.31		
KOHALA 179.1	6.03	1.87	*	*	.03	.03	.01	.28	*	1.14	.18	.05	.09	.45	*	.69	.05	.05	.07	.06	*	.05	.32	.33	.13	.15	*	*	*	*				
KOHALA MAULILI 176	7.74	1.71	*	*	.07	.10	.01	.48	*	1.70	.41	.24	.01	.30	*	.90	.13	.05	.06	.11	*	.05	.39	.46	.16	.42	*	*	*	*				
KOHALA MISSION 175.1	6.90	1.85	.04	*	.01	.10	.02	.38	1.19	.05	.52	.11	.07	.03	.60	.40	.25	.05	.04	.04	.06	.08	.02	T	.42	.28	.13	.33	.01	.02				
KOIAWE LOWER 196	16.49	4.00	*	*	*	*	1.30	*	*	*	*	*	*	3.95	*	*	*	*	*	*	*	2.02	*	*	*	*	*	*	*	5.22	*			
KONA AIRPORT 68.3					.03	T	.03	.01	.02	T	.25				.25	.02	.18	.24	1.30							.03	.31							
KONA VILLAGE 93.8	.88	.06			.02			.13							.15	.12	.28	2.36	.46	.29	.03				.14	.14	.08							
KUKAIUA 222	14.21	4.06	.02				.39	.31	.85	.43	.79				.19	.24	.14	.74	.11	.31	.04			.05	.02	.65	.42	.56	.76					
KUKUIAIELE MIC 199	8.59	2.13					.60	.40	.44	.17	.62				.03			.75	.11	.39	.05			.05	.02	.65	.42	.56	.76					
KUKUIAIELE MILL 206	7.84	2.50					.30	*	*	.30	1.16				.03									.05	.46	1.07	.45	.40	.87	*	*			
KULANI CAMP 79	19.17	2.80	.24	.02			.22	.74	1.00	1.02	1.06		.05	.08	.14	.16	.61	.39	.40	.02	.06	.06	.28	.10	.51	2.00	2.00	4.31	.45	.13	.12			
KULANI MAUKA 76	3.98	.16	.02	*	*	*	.07	.15	.41	.03			.04	.10	.04									.71	.05	1.33	.83	.04						
KULANI SCHOOL SITE 78	16.16	6.40	*	*	*	*	.88	*	*	*	*			2.00	*							1.48	*	*	*	*	*	*	5.40	*	*			
LAIHUA 68.2	5.83				.18	.22	T	.34	.04	*	1.50	.34	.13			.29	.18	.10	.64	.20	.08	.22	.27	*	1.05	.26	.01	T						
MAHUKA 2	2.95	.35	*	*	.10	.24	T				.30	.36		.09	.03						.09	.03												
MAUNA KEA BEACH 98																																		
MAUNA LIDA SLOPE 085	1.51	.02	*	*	*	*																												
MIDDLE HOUALOA 68.1	2.34	*	*	*	*	*	.07	*	.20	.16	1.50	*	*	*	*		.14	.43	*	*	*	*		.01		.62	.32	.13		.25	*			
MIDDLE PEN 147.1	.10	*	*	*	*	*	*	*	*	*	*	*	*	*	*		.10																	
MOAULA 18	1.51	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.51			
MOUNTAIN VIEW 91	32.74	3.53	4.95	.68	.06	.02	.17	.07	1.22	1.34	.54	1.95	.38	.05	.11	.57	.38	1.73	.02	.21	.10	.21	.06	.21	.25	1.12	3.20	3.88	4.16	1.17	.20	.20		
NAALEHU 14	4.22	.12	2.15	.36	T	.07	T	.06	T	*	T	*	*	.02	.31	*	*	*	.01	*	*	*	.20	.20	T	.18	.11	.06	.06	.49	*	*		
NAPOOPOO 28	.59	*	*	*	*	*	*	*	*	.10	*	*	*	*	.32	*	*	*	.31	*	*	*	*	*	*	*	*	*	*	*	*	*		
NAULU FOREST 38.6	12.91	.88	2.80	.01	.11	T	T	.11	T	.18	.12	.15	.04	*	.03	.32	.03	.04	.02	.02	.03	T	.02	.03	T	.02	2.00	1.89	3.36	.02	.18			
NIULII 179	6.91	2.11	*	.10	.10	.02	.01	.23	*	*	1.19	.19		.05	.52	.03	.04	.02	.87	.15	.04	.03				.05	.38	.53	.12	.20	*	*		
ODHALA 223	15.69	5.34	.10	.02			.09	T	.13	.43	T	.97	.59	.34	.72	.75	.01	.23	.25	.44	.69	.26	.17	.06	.02	.15	.84	1.52	1.97	.21	.04	.04		
OPIHIHALE 2 24.1	2.90	*	*	*	*	*	*	*	*	*	*	*	*	*	7.00	*	.02	.12	.02	.09	.08	T	T	T	T	.09	.07	.47	.59	.01	.04	.13		
ORCHID LANO EST 91.5	26.40	8.51	*	*	*	*								.12	.23	.02	.08	.11	.80	.20	.08	1.74	*	*	*	.02	.54	.73	.79	.90	.01	.01		
PAAHU 217	8.16	2.90	*	.01			.25	.06	.30	.14	.20			.02	.08	.11	.80	.20	.08							.02	.54	.73	.79	.90	.01	.01		
PAAILU 221	11.42	4.08	.01				.18	.09	.76	.22	.53	T		.08	.13	.24	1.83	.44	.25	.02	T	T				.02	.14	.60	.91	.82	.09	*		
PAHALA 21	6.95	.02	4.52	.82	.01		.10			.02				.01								.06	.09		.02	.17	.21	.35	.52	.03	*	*		
PAHDA 65	23.98	2.63	3.34	.46	.04	.04	.21	.12	.56	.77	.31	1.11	.39	.21	.09	.41	.22	.98	.01	.05	.21	.29	.05	.34	.43	1.88	1.92	3.36	2.34	.65	.13	.13		
PAKAO 37	6.10	*	*	*	*	*	*	*	*	.04	.09	.90	.93	.25	.82	.70	.07	.65	.53	1.16	.29	.24	.08	.37	.21	.08	1.22	2.15	4.52	1.61	.14	.11	.03	6.10
PAPAIKOU 144.1	29.51	5.20	5.70	1.42	.04	.04	.09	.90	.93	.25	.82	.70	.07	.65	.53	1.16	.29	.24	.08	.37	.21	.08	1.22	2.15	4.52	1.61	.14	.11	.03	.03	.03	.03		
PAPAIKOU MAUKA 140.1	35.25	4.49	5.10	2.20	.01	.02	.24	.07	1.76	1.80	.38	2.10	.89	.01	.06	1.12	.72	1.22	.38	.28	.51	.09	1.34	.35	.09	1.56	3.24	3.61	1.11	.21	.18	.11	.11	
PEPEEKED HAKAI 144	20.49	4.05	4.92	.79	.04	.01	.04	.21	.65	.32	.47	.75	.40	.03	.04	.59	.36	.90	.02	.01	.08	.10	.01	.02	.01	.32	2.73	1.65	.84	.03	.05	.05	.05	
PIIHONUA 89	42.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
POHAKULDA 107	.41	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
PUAKO 95.1	.12	.05	*	*	*	*	.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
PUU KIHE 120	3.05	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.05	*	
PUU LAU 102.1	4.98	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4.98	*	
PUU LEHUA 73	2.30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.30	*	
PUU MALI 113	1.52	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.52	*	
PUUKUHAU 167	5.46	*	*	*	*	*	1.21	*	*	*	*	*	*	2.54	*	*	*	*	*	*	*	.90	*	*	*	*	*	*	*	*	7.2	*	*	
PUU QD 82	12.57	1.10	1.56	.33	.03		.26	.39	.48	.96				.13	.25	.09	.30	.39	.26	.17			.16		.12	.10	.54	1.92	.85	1.62	.51	.20	.10	
PUU WAHAA 94.1	2.76	.04	*	.28	.04		.02	*	.15	.18	*	*	*	.05	*	.28	*	*	*	*	*	.10	*	.23	T	.17	.07	.75	.45	*	*	*	*	
SADDLE ROAD 1 84	45.72	16.77	*	*	*	*	*	*	*	*	*	*	*	*	12.80	*	.28	*	*	*	*	5.15	*	.23	*	*	*	*	*	*	*	*	*	
SOUTH POINT CORRAL 3	1.63	.13	*	1.12	*	*	*	*	*	.02	*	*	*	*	*	*	*	*	*	*	*	.03	*	*	*	*	*	*	*	*	*	2.6	*	
UMIKOA 118	5.05	.13	*	.03						.17				.02	.01	.11	.13	.14	.02	.10	.02	.01	.01	.02	.01	.48	1.36	1.52	.85	.18	.02	.02		
UPOLU POINT USCG 199.2	2.78	.61	*	*	.10		.60	.51	.02	.04	.07	.08	.02	.18	.11	.13	.14	.02	.10	.02	.01	.04	.10		.48	1.36	1.52	.85	.18	.02	.02	.02		
WATAKEA SCO 88.2	35.99	5.01	4.45	1.49	.02	.01	.11	*	2.72	.91	1.70	.25	.03	1.24	.56	1.10	1.16	.31	.11	*	.77	.48	*		.73	4.53	3.30	3.64	.97	.17	.22	*	*	

SUPPLEMENTAL DATA

	Wind (Speed — m.p.h.)				Relative humidity averages— percent				Number of days with precipitation					Percent of Possible sunshine	Average sky cover	sunrise to sunset				
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	Standard of Time				Trace	.01-.09	.10-.49				.50-.99	1.00-1.99	2.00 and over	Total
							150TH MERIDIAN													
	02	08	14	20																
HILU, HAWAII, WB AIRPORT	14	1.9	7.2	19	E	16	90	80	71	82	3	6	8	5	3	3	28	37	8.0	
HONOLULU, OAHU, WBFC	6																			

DAILY TEMPERATURES

HAWAII
MAY 1970

Station	Day of Month																															Average				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
ISLAND OF KAUAI																																				
KANALOHULUHULU 1075	MAX MIN	71 54	68 51	65 54	69 59	71 59	75 61	76 53	75 55	75 57	70 57	71 54	72 55	70 50	72 48	75 53	73 41	70 43	71 54	71 57	70 52	71 54	70 49	70 47	73 58	73 57	69 56	72 53	72 42	70 41	74 44	73 49	71.5 52.2			
KILAUEA POINT 1133	MAX MIN	75 69	76 68	76 69	83 71	82 70	76 71	77 69	77 69	80 70	77 71	79 73	79 74	80 73	80 72	80 74	78 72	80 72	77 71	79 71	80 72	80 67	78 69	80 67	84 69	84 69	79 72	80 70	80 70	76 70	81 69	80 68	78 72	78.8 70.5		
LIMUE #8 AP 1020.1	MAX MIN	82 73	80 72	78 70	81 74	82 73	81 72	83 75	81 74	82 72	81 74	81 73	81 73	82 75	82 72	82 75	82 75	84 75	82 71	81 71	81 75	81 74	81 70	81 70	82 74	81 74	80 74	82 75	81 75	80 74	82 75	82 74	83 75	82 72	81.5 72.8	
MAKAHUENA POINT 940.1	MAX MIN	80 68	82 74	86 74	82 75	81 70	80 75	85 68	84 74	85 73	84 70	81 72	84 74	87 73	92 75	84 71	83 70	84 77	85 74	82 70	81 74	81 70	81 74	82 74	83 74	95 75	85 75	84 75	84 75	84 75	85 74	84 75	85 74	85 74	84.1 72.3	
HANA 1026	MAX MIN	85 64	85 67	86 68	83 68	84 71	85 69	87 67	86 66	88 67	86 65	89 65	88 65	84 66	87 66	83 61	84 65	86 61	87 65	87 61	88 65	88 58	87 65	88 65	86 64	86 64	87 65	88 63	86 62	87 61	86 61	87 61	87 62	87 62	86.1 64.9	
NIU RIODE 1035	MAX MIN	81 60	82 61	80 59	79 60	79 62	80 65	81 64	82 65	83 62	82 60	80 60	81 60	81 60	80 61	80 60	80 61	80 62	81 60	80 62	80 61	80 62	80 61	81 61	81 61	82 60	80 60	81 60	80 61	81 60	81 60	80 61	81 61	80.7 61.1		
WAIAMI LOWER 1054	MAX MIN	78 66	78 65	79 66	78 68	78 68	82 66	82 66	80 68	81 65	77 67	78 64	78 66	79 66	80 68	80 68	79 67	79 65	79 61	79 61	78 64	78 64	78 64	78 64	80 65	82 65	80 65	78 61	78 65	78 65	80 65	82 65	82 65	82 65	79.4 65.2	
ISLAND OF OAHU																																				
EWA PLANTATION 741	MAX MIN	84 66	83 67	84 68	81 69	81 67	87 66	85 69	84 67	84 67	85 68	83 68	86 67	85 68	87 69	85 68	86 67	84 67	83 66	85 66	85 66	83 66	83 66	86 66	86 63	86 63	85 63	84 63	85 63	85 68	85 67	86 68	86 67	86 67	84.6 67.0	
HONOLULU WBFC 703	MAX MIN	87 74	84 75	84 74	83 75	83 73	89 72	88 76	88 75	88 73	87 75	86 73	88 74	87 73	87 75	88 75	88 75	87 75	87 75	87 75	87 74	87 73	87 73	87 73	88 73	88 73	88 70	88 71	87 74	87 74	88 76	88 75	88 75	88 74	86.8 74.0	
HONOLULU SUBSTA 704	MAX MIN	81 73	82 74	80 74	78 72	78 71	81 71	81 73	81 73	82 72	81 71	81 71	82 71	80 71	82 72	81 72	81 74	81 74	80 74	80 72	79 70	79 70	79 70	78 72	78 71	79 70	80 71	78 71	78 73	80 72	83 71	82 74	81 73	81 73	80.2 72.1	
KAHUKU 912	MAX MIN	80 69	81 69	78 69	81 68	81 68	81 73	81 70	81 73	80 70	81 70	83 70	83 73	83 73	83 73	83 73	83 73	81 71	81 71	81 71	82 71	81 69	81 69	82 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69
KANEHE MAUKA 781	MAX MIN	79 68	80 70	80 69	80 71	76 67	78 69	82 72	81 72	79 70	81 71	79 69	79 70	81 71	80 71	83 70	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	80 71	79.7 69.7
LUALUALEI 804	MAX MIN	87 72	87 74	84 71	87 70	77 70	82 69	85 75	86 73	85 75	87 75	84 74	84 72	86 71	85 73	87 73	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	86 74	85.3 71.3
MAKAPOU POINT 724	MAX MIN	75 65	77 64	81 66	79 65	80 66	79 67	76 64	76 64	75 64	72 64	76 65	76 65	75 66	77 66	77 65	77 65	77 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65
OPAELUA 870	MAX MIN	80 64	78 67	81 66	76 65	75 64	77 65	84 64	80 65	79 68	83 65	76 65	76 65	80 65	83 65	84 65	77 65	82 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	80 65	79.9 64.7
PRI WAHIAWA 820.2	MAX MIN	84 68	83 68	84 68	84 68	75 64	80 64	85 63	80 66	83 65	79 67	85 63	78 63	73 62	86 63	86 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63	85 63
WAIALUA 847	MAX MIN	83 62	83 63	81 60	83 68	80 68	82 64	88 67	84 66	81 66	85 68	86 69	86 69	85 69	88 67	84 67	84 67	84 67	83 67	83 67	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	84.1 64.9
WAIKIKI 717.2	MAX MIN	84 72	83 72	87 82	82 72	82 72	85 72	85 72	85 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72
WAIMANALO EXP FARM	MAX MIN	82 72	81 72	84 72	79 71	78 69	81 70	82 72	82 72	83 72	83 72	80 70	80 70	82 71	82 72	83 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	82 72	81.9 71.0
ISLAND OF MOLOKAI																																				
MOLOKAI AP 524	MAX MIN	80 68	81 69	84 75	83 70	83 66	81 68	82 70	83 69	81 69	81 73	81 69	80 73	83 69	83 69	83 69	81 69	82 74	82 69	82 69	80 71	80 70	80 70	81 68	83 71	84 70	81 70	82 71	81 71	81 69	83 70	84 70	84 70	82.0 69.9		
ISLAND OF LANAI																																				
LANAI CITY 672	MAX MIN	75 63	75 63	75 63	77 65	76 64	76 64	77 63	75 65	75 65	72 63	74 63	77 61	77 64	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	78 61	
ISLAND OF MAUI																																				
HALEAKALA RS 338	MAX MIN	58 45	57 48	57 47	64 49	68 52	67 52	69 54	70 46	66 52	65 45	64 47	64 44	75 52	69 51	67 49	62 42	64 43	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63 42	63.5 45.2	
HALEAKALA SUMMIT 338.4	MAX MIN	44 38	58 41	58 42	58 44	55 45	55 45	56 44	58 45	58 41	50 40	51 40	53 38	55 41	52 40	57 40	53 38	52 39	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	52 38	54.4 40.8	
HANA AIRPORT 355	MAX MIN	82 69	82 66	80 67	82 72	82 70	80 70	82 71	82 70	82 70	81 70	81 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	82 69	81.9 69.2	
KAAHAPALI AIRPORT	MAX MIN	74 68	83 69	83 69	84 69	82 69	84 69	85 69	84 69	84 69	85 72	84 72	84 72	85 72	86 72	85 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	83 72	
KAHULUI #B AP 398	MAX MIN	86 69	90 69	88 68	87 67	84 64	89 67	87 65	86 65	86 65	85 71	83 70	87 64	88 64	89 63	87 70	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86 63	86.6 67.2
KAILUA 446	MAX MIN	74 65	76 66	76 67	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76 65	76.3 66.3	
KEAWAKAPU BEACH 260.2	MAX MIN	84 63	84 63	88 68	86 69	87 66	82 69	88 66	86 69	86 69	88 65	86 65	85 65	86 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	88 65	87.3 64.9
KULA SANATORIUM 267	MAX MIN	70 55	72 58	72 58	70 59	73 58	71 54	70 57	69 53	71 56	73 52	74 52	72 52	71 53	72 56	71 56	73 56	72 56	73 56	73 56	73 56	73 56														

DAILY TEMPERATURES

Continued

HAWAII
MAY 1970

Station		Day of Month																															Average	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
LAHAINA 361	MAX MIN	82 68	85 69	87 70	85 73	86 69	81 69	84 71	85 69	85 67	85 67	83 68	86 67	86 69	90 69	86 68	86 67	87 67	87 67	86 67	85 65	85 66	85 68	85 67	84 67	86 67	88 69	87 68	87 67	86 66	85 66	87 66	87 66	85.6 67.9
WAILUKU 386	MAX MIN	79 71			83 71	81 68	81 70	81 74				81 69	80 69	83 67	83 71	80 70		81 71		80 71	80 70	79 68	80 71				83 66	81 69	80 70	81 70	80 68		80.9 69.7	
* * *																																		
ISLAND OF HAWAII																																		
HAINA 214	MAX MIN	79 64	79 67	80 65	80 64	79 63	80 67	83 67	80 67	77 67	78 67	76 64	79 64	81 63	82 64	82 67	79 66	79 66	79 66	79 66	78 65	78 65	80 64	78 65	80 65	82 66	82 66	79 64	80 66	77 64	78 65	78 66	79.4 65.2	
HAWAII VOLCNS NP HO 54	MAX MIN	64 55	65 56	65 52	68 53	69 52	73 55	68 52	66 56	70 56	72 56	70 55	74 55	74 53	74 54	70 54	70 54		69 53	66 53	64 52	68 50	69 56	67 54	71 54	71 56		69 54	71 55	70 54	70 54	70 54	69.0 54.0	
HILO WB AIRPORT 87	MAX MIN	78 66	81 67	83 65	80 65	84 64	85 67	77 67	80 68	83 69	78 67	81 65	81 65	84 68	86 68	81 66	82 68	82 68	81 65	78 65	80 64	80 63	81 63	80 63	81 63	83 66	78 66	81 65	83 67	84 67	82 67	81.3 66.0		
KAINALIU 73.2	MAX MIN	79 62	80 63	79 64	79 64	78 67	79 65	74 67	77 66	74 66	78 65	78 62	75 63	79 63	79 63	79 62	79 63	75 63	77 63	79 62	79 61	78 61	79 61	78 61	80 64	80 62	80 62	80 62	80 62	78 62	78 62	78 62	78.2 63.4	
KAMUELA 192.2	MAX MIN	70 60	68 60	78 60	75 60	75 60	72 62	72 60	71 60	72 60	74 60	78 58	78 58	72 56	72 60	72 60	72 61	70 60	68 62	68 61	68 60	68 63	75 56	75 56	75 62	72 62	75 62	72 60	68 61	75 64	75 60	73 60	73.0 60.0	
KAMUELA AIRPORT 191	MAX MIN	70 54	72 60	76 58	78 52	74 50	75 52	76 49	73 62	72 58	71 52	72 51	76 51	77 51	72 57	76 57	70 57	70 45	73 47	73 52	77 53	77 53	74 53	74 53	70 53	74 53	70 53	74 54	77 54	75 50	75 59	73.1 54.4		
KEAAU 92	MAX MIN	77 64	80 65	80 67	83 64	80 63	84 65	78 67	78 67	80 67	82 65	77 65	80 65	81 64	83 65	80 66	82 66	81 67	82 66	80 64	80 64	79 65	79 65	82 65	82 65	79 65	82 65	84 63	83 65	77 65	80 65	82 65	80.7 65.6	
KEALAKEKUA 26.2	MAX MIN	79 62	79 64	79 64	79 66	79 65	77 66	73 66	76 66	74 66	78 62	79 62	79 65	79 64	79 65	79 65	79 63	78 63	74 63	73 63	77 63	77 63	79 62	79 63	77 63	79 62	79 62	77 63	78 63	79 64	77 64	77 64	77.5 64.1	
KOHALA MISSION 175.1	MAX MIN	77 65	77 66	79 67	79 67	78 68	79 68	79 67	76 68	74 68	72 67	76 67	77 67	78 65	80 67	78 66	78 68	78 68	79 66	78 65	80 65	81 65	79 65	78 65	80 65	81 65	79 65	77 65	78 65	73 65	79 65	80 65	77.9 66.5	
KONA AIRPORT 68.3	MAX MIN	82 66	83 65	81 66	81 64	83 64	80 69	81 68	82 70	81 70	82 69	81 69	83 68	83 67	82 67	84 66	83 66	84 66	83 66	79 66	81 66	81 66	81 66	83 66	83 66	82 66	81 66	83 66	83 66	82 66	84 66	85 66	82.2 67.0	
KULANI CAMP 79	MAX MIN	58 45	60 46	61 47	56 43	61 48	64 50	63 48	64 53	63 48	65 48	61 38	62 40	64 41	65 42	67 42	59 48	64 49	63 49	62 47	60 47	63 46	60 45	61 45	63 45	64 43	65 43	65 43	65 43	65 44	65 44	67 48	63.0 47.0	
MAUNA LOA SLOPE 065	MAX MIN	52 32	51 36	55 36	58 40	57 41	57 42	60 39	58 40	54 37	52 36	52 33	52 33	54 31	56 34	52 35	54 34	52 31	53 34	55 34	53 36	55 36	55 33	55 33	55 33	55 33	55 33	51 33	46 35	43 33	44 33	50 33	49 33	52.6 35.1
MOUNTAIN VIEW 91	MAX MIN	70 60	76 61	76 61	76 58	79 60	79 62	73 61	79 60	79 60	76 60	77 60	74 59	77 59	80 59	77 61	77 61	76 61	76 61	72 59	78 60	79 60	79 60	79 60	79 60	79 60	79 60	79 60	79 60	79 60	79 60	79 60	76.1 60.5	
NAALEHU 14	MAX MIN	79 66	79 66	79 67	79 68	78 68	78 68	78 69	78 69	81 66	81 66	80 68	78 68	81 67	80 67	81 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	81 65	81 65	77 65	78 65	81 65	79.5 66.5	
ODKALA 223	MAX MIN	78 63	80 64	78 67	79 66	79 67	79 67	80 67	72 66	72 66	79 66	76 65	78 65	79 65	80 65	79 65	78 65	78 65	78 65	78 65	78 65	76 65	77 65	78 65	82 65	80 65	82 65	80 65	78 65	78 65	79 65	81 65	78.4 65.9	
OPIHIHALE 2 24.1	MAX MIN	81 61	79 62	78 64	79 64	75 66	77 66	77 64	77 64	76 60	76 60	80 62	81 62	81 62	80 62	79 62	79 62	77 62	77 62	77 62	75 61	75 61	75 61	75 61	75 61	75 61	75 61	75 61	75 61	75 61	75 61	75 61	78.0 62.0	
PAHALA 21	MAX MIN	79 63	78 64	78 64	78 66	76 63	80 63	79 68	80 68	80 68	82 68	80 62	78 62	79 62	79 62	80 62	80 62	80 62	80 62	80 62	80 62	80 62	80 62	80 62	80 62	80 62	80 62	81 62	81 65	77 62	78 62	79 62	79.3 63.2	
PUAKO 95.1	MAX MIN	88 69	85 72	85 70	85 69	84 71	84 71	84 71	87 73	87 70	87 73	89 73	89 73	84 68	85 70	84 68	88 72	88 73	88 74	88 74	88 74	86 71	89 68	89 68	89 68	89 68	89 68	87 70	87 71	87 72	87 72	87 72	86.1 70.9	
UPOLO POINT USCG 159.2	MAX MIN	78 66	78 71	84 71	84 69	82 69	82 69	81 69	75 69	82 69	80 67	83 68	83 68	82 69	82 69	83 69	82 69	82 69	82 69	82 69	82 69	82 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	82.5 68.8	

EVAPORATION AND WIND

Station		Day of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * * ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP WIND MAX MIN	.37 242 86 66	.41 179 87 67	- 72 83 66	.32 48 80 66	.25 64 83 63	.12 70 85 62	.03 130 91 69	.36 190 89 68	.28 198 86 68	.28 217 88 68	.31 211 84 66	.25 186 87 67	.33 173 88 67	.35 123 92 68	.31 162 90 68	.43 216 88 66	.38 215 86 68	.44 224 87 66	.37 251 86 66	.45 209 84 66	.39 205 86 65	.44 153 87 64	- 52 88 65	.27 121 90 65	.36 210 85 66	.28 205 81 67	.21 185 89 66	.30 136 87 64	.40 130 89 64	.30 119 89 64	.34 119 89 68	9.975 4950 86.9 66.1
* * * ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP WIND MAX MIN	.31 39 89 65	.31 32 92 66	.15 23 89 71	.20 16 88 70	.20 20 92 69	.15 6 82 68	.22 19 89 69	.39 34 93 67	.28 40 91 67	.30 46 89 67	.30 45 89 67	.22 26 89 66	.26 22 90 67	.29 31 85 68	.22 38 91 70	.37 215 88 66	.35 215 86 67	.39 224 87 66	.38 251 86 66	.41 209 84 66	.40 205 86 65	.15 52 88 65	.28 121 90 65	.20 210 85 66	.39 205 81 67	.45 185 89 66	.30 136 87 64	.32 130 89 64	.24 119 89 64	.34 119 89 68	9.07 906 90.5 67.1	

STATION INDEX

HAWAII 1970

Main table with columns: STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER, STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER. Includes sub-sections for ISLAND OF LANAI and ISLAND OF MOLOKAI.

STATION INDEX

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES			OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES			OBSERVER
								TEMP.	PRECIP.	SPECIAL USE TABLES										TEMP.	PRECIP.	SPECIAL USE TABLES	
ISLAND OF HAWAII																							
NAPOOPOO 28	A 6597	04	S KONA	4	19 28	155 55	395	7A			KONA EXPERIMENT STA	PUU MALI 113	A 8515	01	HAWAIIA	1	19 55	155 24	8940			KUNIAU RANCH CO LTD	
NAULU FOREST 38.6	A 6731	02	PUNA	2	19 19	155 08	1400	VAR			HAWAII VOLCANIC NAT PK	PUUOKUHAI 167	A 8548	01	N KONA	1	20 12	155 50	1800	7A		KONA DITCH CO LTD	
NIULII 179	A 6806	01	N KONA	1	20 14	155 05	75	6A			KONA SUGAR CO	PUU OKU 82	A 8550	02	S HILD	2	19 44	155 23	6340	6A		ODN WINTERS	
OKALA 223	A 7131	02	N HILD	2	20 01	155 17	430	7A			LAUPAHOE SUGAR CO	PUU HAKAA 94.1	A 8555	05	N KONA	5	19 47	155 51	2320	7A		DILLINGHAM RANCH INC	
OPINIMALE 2 24.1	A 7166	04	S KONA	4	19 16	155 53	1270	7A			MISS C LENAPU	SADDLE ROAD 1 84	A 8590	01	S HILD	2	19 42	155 12	2340			BOARD OF WTR SUPPLY	
ORCHID LAND EST 91.5	A 7185	02	PUNA	2	19 34	155 00	445	VAR			BOARD OF WATER SUPPLY	SOUTH POINT CORRAL 3	A 8675	03	KAU	3	18 57	155 41	500			HAWAIIAN RANCH COMPANY	
PAUHAU 217	A 7204	01	HAWAIIA	1	20 05	155 46	415	7A			PAUHAU SUGAR CO	UNION 118	A 8740	01	HAWAIIA	1	19 59	155 23	3420	7A		KUNIAU RANCH CO	
PAUULU 221	A 7312	01	HAWAIIA	1	20 03	155 42	800	7A			HAWAIIA SUGAR CO	UPOLU POINT USCG 159.7	A 8830	01	N KONA	1	20 15	155 53	61	6A	8A	U S COAST GUARD	
PAMOLA 21	A 7421	03	KAU	3	19 12	155 29	870	8A	6A		HAWAIIAN RANCH CO	WAIKOA SUG 88.2	A 9025	02	S HILD	2	19 40	155 08	1050	7A		SHINICHI KANESHIRO	
PAMUA 65	A 7457	02	PUNA	2	19 30	154 57	670	6A			PUNA SUGAR COMPANY	WAIKONOHOLA 176.6	A 9300	01	N KONA	1	20 08	155 47	3830	7A		KAMUA RANCH	
PAKAD 37	A 7643	03	KAU	3	19 22	155 28	5000				HAWAIIAN RANCH CO. INC.	CLOSED STATIONS											
PAPAIKOU 144.1	A 7711	02	S HILD	2	19 47	155 06	200	7A			MAUNA KEA SUGAR CO.	ISLAND OF HAWAII											
PAPAIKOU MAUKA 140.1	A 7721	02	S HILD	2	19 47	155 08	1270	7A			MAUNA KEA SUGAR CO.	KAUMANA 88.1	A 3510	02	S HILD	2	19 41	155 09	1123	6A	C	CLOSED 4/30/70	
PEPEKEU HAWAII 144	A 8000	02	S HILD	2	19 51	155 05	100	7A			PEPEKEU SUGAR CO.												
PIKUNUA 89	A 8051	02	S HILD	2	19 44	155 10	1730				STATE DIV OF FORESTRY												
PONAKULA 107	A 8063	03	HAWAIIA	3	19 45	155 32	851	VAR	C		STATE DIVISION OF PAPERS												
PUAKO 95.1	A 8186	03	KONA	3	19 59	155 50	5	8A	8A		ERWIN M. RAPP												
PUU KIME 120	A 8339	01	HAWAIIA	1	19 54	155 24	775				KUNIAU RANCH CO												
PUU LAU 102.1	A 8452	05	HAWAIIA	5	19 50	155 56	7440				STATE DIV OF FISH-GAME												
PUU LEHUA 73	A 8460	04	N KONA	4	19 34	155 49	4880				GREENWELL RANCH												

↑ DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN
 5-NORTH-CENTRAL MOLOKAI: 1-INO INTRA-ISLAND DIVISIONS LANAI: 1-INO INTRA-ISLAND DIVISIONS MAUI: 1-NORTEASTERN
 2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3650, Honolulu, Hawaii, or to any Weather Bureau Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII"

DIMENSIONAL UNITS Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F., precipitation and evaporation in inches, and wind movement in miles. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME Data in the "Monthly Extremes", "Daily Precipitation" table, "Daily Temperature" table, and "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 5-8 inches above the pan.

NORMALS for all stations are climatological standard normals based on the period 1931-1960

STATION NAMES Hawaii state key numbers are included following station names in the several tables

DELAYED DATA AND CORRECTIONS will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES for monthly precipitation totals may be found in the annual issue of this publication

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index
- No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry
- + And also on an earlier date or dates
- .. Highest observed one minute windspeed. This station is not equipped with an instrument to measure fastest mile data.
- * Amount included in following measurement, time distribution unknown.
- A The letter "A" shown following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index", indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gages are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.
- B Adjusted to a full month
- J "Supplemental Data" table
- M One or more days of record missing, if average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record
- R Amounts from recording gage.
- T Trace, an amount too small to measure
- V Includes total for previous month

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING

- AR Observation made after rain
- C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.
- MO Gage read once monthly; usually on the last day
- OC Gage readings at periods varying from a few weeks to several months.
- S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.
- SS Observation time is near sunset.
- VAR Observation time is variable
- WF Gage read weekly or irregularly only.
- WM Gage read weekly and last day of month.
- # Thermometers are generally exposed in a shelter located a few feet above sod-covered ground, however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

Subscription Price: 20 cents per copy, monthly and annual, \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

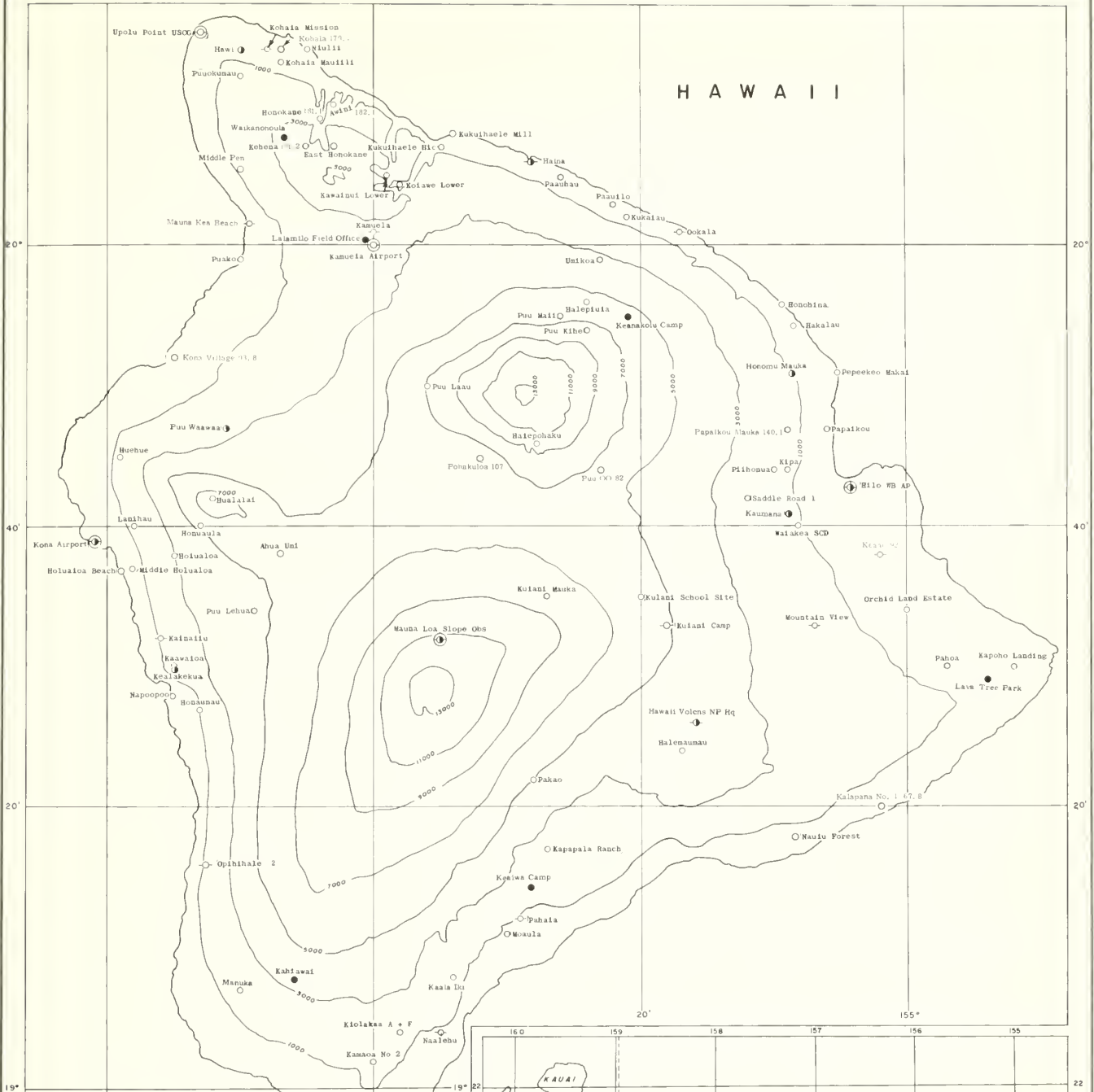
156°

40'

20'

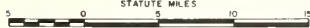
155°

HAWAII



HAWAII

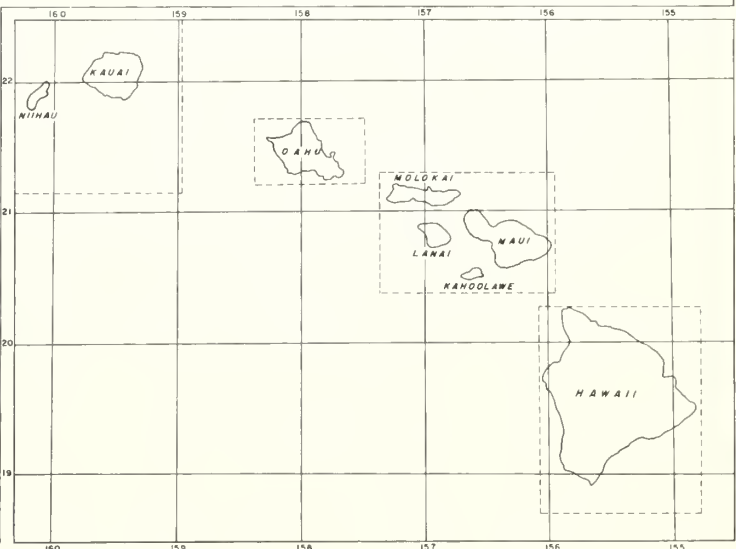
PLATE 2



STATION LEGEND

- ● ● Precipitation only
- ○ Precipitation, storage
- ● ● Precipitation and Temperature
- ● ● Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording,
- Recording ● Both types

Double circle combinations indicate the availability of more detailed meteorological data
 All stations use 150th meridian time



156°

40'



MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

Station	Temperature										Precipitation												
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
										Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										90° or Above	32° or Below	32° or Below	32° or Below										
KAMJELA AIRPORT 191	75.7	52.6M	63.8M		78	9				0	0	0	0	.82		.14	18+	.0	0		5	0	0
KEAU 92	82.0	65.9	74.0	.3	84	27+	64	27+		0	0	0	0	5.94	- 1.92	.92	28	.0	0		15	3	0
KAIKAEKUA 26.2	77.4	64.7	71.1		80	23+	62	5+		0	0	0	0	3.37		.71	15	.0	0		3	0	0
KONA AIRPORT 68.3	81.7M	65.9M	74.8M		86	23+	62	7+		0	0	0	0			.0	0	.0	0				
KUKIHAELE HIC 199														2.68	- .36	.51	18	.0	0		8	1	0
KUJUNI CAMP 79	64.1	44.8	55.5		69	14	36	1		0	0	0	0	2.09		.25	28	.0	0		9	0	0
PAHALA 21	78.8M	63.4M	71.1M	- 1.1	81	30+	60	20		0	0	0	0	1.12	- .21	.80	4	.0	0		2	1	0
POHAKULUA 107														+		.0	0	.0	0				
PUNO 45.1														.65		.59	14	.0	0		1	1	0
PUNAHANA 94.1										1	0	0	0	.27	- 1.85	.0	0	.0	0		0	0	0
UMIKOA 118														3.02	1.32	2.20	4	.0	0		4	1	1
WAIKAEA SCD 88.2														9.55		.0	0	.0	0				
ISLAND			70.0											3.00		.0	0	.0	0				

TEMPERATURE AND PRECIPITATION EXTREMES

- HIGHEST TEMPERATURE: 93° ON THE 24TH AT AWAKAPU BEACH 260.2, MAUI
- LOWEST TEMPERATURE: 34° ON THE 6TH AT MAUNA LOA SLOPE OPS, HAWAII
- GREATEST TOTAL PRECIPITATION: 21.70 AT EAST HONOKANE 143.2, HAWAII
- LEAST TOTAL PRECIPITATION: .00 AT 19 STATIONS
- GREATEST ONE-DAY PRECIPITATION: 2.64 ON THE 20TH AT PAUDA FLATS 784, OAHU

DAILY PRECIPITATION

HAWAII
JUNE 1970

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ISLAND OF KAUAI																																
ANAOHOLA 1114	A	1.43	.27					.10		.02	.02				.02		.16	.05	.03			.30	.05	.05		.19			.16	.06		
BRYDESWOOD STA 945	A	2.48	.07			.05				.01	.02	.04			.02		.07	.09	.03			.75	.01	.17		.34	.05		.42	.28		
EAST LAHAI 914	A	4.09	.15	T		.02				.13	.01	.05			.29		.10	.17	.06	.02		.80	.01	.21		.45	.30		.81	.50		
ELELE 927	A	1.07	.06								T						.06	.01				.20	.01	.12		.11			.37	.13		
HALAULA 1110	A	1.77	.27	.02						.17	.02						.11	.05			.06		.22	.29	.04		.20		.25	.07		
HALENANAHU 1006	A	3.23	.34		.03		.06			.24	.02				.19		.08	.16	.11	.06		.74		.07		.26	.18		.26	.34		
KUKUI 945	A	10.60	.73		.03	.01	.01		.73	.68	.06	.04	.04	.19		.73	.34	.60	.07	.10		1.97	.25	.66	1.02	.42		1.90	.75			
INTAKE WAHIANA PH 1086	A	4.90				.35															1.55				1.91			1.09				
KALIHUAI RES 1131	A	6.01	.61	.01					.51	.01	.04	.30	.09		.49		.06	.08	.02	.04		1.18	.03	.06	.72	.31		1.12	.33			
KANALOHU LUMULU 1075	A	.34																														
KANEHA RESERVOIR 1092	A	4.03	.52	.05					.59		.03	.02	.10		.10		.05	.20	.05	.05		.80	.33	.08	1.06	.36		.50	.10			
KAPAA STABLES 1104	A	1.79	.70						.10						.10		.05	.05	.03	.03		.13	.04	.04		.19		.30	.24			
KALIA 1112	A	1.37	.36	.03					.05		.05						.05	.06	.03	.03		.13	.04	.04	.07	.10		.25	.06			
KEPAHA 944	A	.19											.19																			
KILAUEA 1134	A	2.70	.24	.05				.29		.02	.03	.02			.22	.04	.09	.02	.04		.15	.02		.41	.09		.54	.43				
KILAUEA FIFL 17 1135	A	5.24	.52	.01				.37	.02	.01	.02	.03			.74	.12	.07	.03	.04	.03	.68	.02	.01	.45	.21		.63	.22				
KILO 1033	A	1.46	.00	.04	.01		.01	.09		.02	.01		.02		.10	.08	.02	.03	.03	.16	.02	.03	.02	.24	.15	.14		.11	.07			
KILOA 936	A	3.23	.20		.02			.21		.07	.15				.30	.13	.13		.02		.69	.02	.07	.19	.37		.30	.33				
KOLOA MAUKA 994	A	5.17	.28		.06			.26		.06	.19				.23	.19	.14	.10	.11		.96	.05	.19	.51	.21		1.05	.58				
KOLOKO RES 1137	A	5.52	.32					1.98		.01	.02	.04			.86	.00	.01	.01	.11		.50	.03	.02	.39	.19		.59	.37				
KUKUIA 935	A	1.33	.15			.01		.10		.01	.05	.03	.01	T		.01	.05	.03	.01	T	.45	.01	.03	.14	.10		.13	.11				
LIHUE VARIETY STA	A	2.95	.01	.01		.02		.05	.06	.01	.01	.02	.06		.02	.30	.13	.05	.07		.51	.10	.05	.26	.37	.06	.27	.47				
LIHUE 1025	A	1.54	.28	.02	.02		.05		.07	.01		.05	.08		.03	.03	.04	.03	.05		.23	.13	.03	.03	.09		.12	.15				
LIHUE WB AP 1020.1	R	.77	T	.01		.01		.02	T	.04	T	.04	T		.03	T	.08	.03	.04	.05	.03	.12	T	.07	.06	.02	.01	.04	.15			
MAKAHUEHA PJ/NT 940.1	A	1.27						.10		.10	.00				.08						.20	.48		.08	.05	.05	.02	.01	.13			
MAKAHELI 945	A	.25																														
MANA 1026	A	.00																			.02	.05		.04	.01							
MOHINI UPR CROSS 1083	A	1.53														.60						.10	.31		.10	.21		.21				
MOLAA 1145	A	1.17	.09					.17								.03			.05		.18			.15	.05		.20	.25				
MOUNT WAIALEALE 1047	A																															
NIU RIDGE 1035	A	.05																														
N WAIIUA OTIUM 1051	A	11.67	1.00		.10			.80	.10	.10	.10	.10	T	1.00	.25	.76	.20	.25		2.10	.36	.30	.90	.50		2.10	.75					
PH WAHIANA 1110	A	4.64	.05		.01		.05	.08	.10				.10	T	.07	.20	.02	.02	.05	.20	.59	.09	.01	.08	1.64	.32	.18	.13	.26	.50		
PRINCEVILLE RANCH 1117	A	3.44				.10	.15	.11			.09				.25	.15	.05		.03	.05	.57	.03	.07	.55	.11	.14	.09	.10	.50	.32		
PUEHI RIDGE 1040	A	2.31	.33	.03		.05		.11		.04	.08	.04			.02	.07	.15	.04	.05		.45	.09	.05	.12	.17		.21	.17				
PUMU 1013	A	3.12	.24	.03		.04		.19		.09					.12	.13	.11	.09	.03		.83	.13	.25	.18		.39	.34					
RESERVOIR 6 1004	A	1.59	.05					.05							.04	.01	.05	.01			.36	.13	.22	.05		.28	.25					
WAHIANA MOUNTAIN 990	A	13.50				.01	.01	.04	.14	.19	.04	.10	.14	.22	.19	.24	.28	.33	.09	.02	.45	.61	.10	.02	.10	.70	.66	.63	.27	.72	.53	
WAIAHI LOWER 1054	A	7.24	.44			.01	.01	.04	.14	.19	.04	.07	.14	.32	.30	.10	.06	.54	.09	.05	1.05	.30	.15	.18	.13	1.15	.85	.44	.30	.65	.99	
WAIAHI JPPR 1052	A	9.10	.45	.02	.01		.10	.23	.18	.01			.03								.01											
WAIAWA 943	A	.04																														
WAILUA KAI 1065	A	1.24	.18					.05							.11			.07				.32	.04		.11	.09		.22	.07			
WAIHEA 947	A	.08																														
WEST LAHAI 931	A	1.81	.08					.08							.08	.04	.10	.03				.52	.01	.27	.13		.16	.21				
ISLAND OF MAUI																																
AIEA FIELD 675 701	A	1.24	.04	.07				.04								.10					.42							.26	.19			
BERETANIA PUMPING STA	A	.47	.01							T				.07							.11	.01						.07	T			
CAMP 84 807	A	.44	.07																		.07		.11				.14	*				
CHURCH COLLEGE LATE	A	1.75	.04	.06	.01	.02	.04	.07	.03		.02	.01	.01	.02	.01	.01	.02	.01	.01		.14	.36	.08	.04	.29	.03	.10	.03	.04	.05		
COCONUT ISLAND 940.1	A	.57			.03										.01						.13	.05	.07	.12	.08	.03	.02	.04	.05			
EWA PLANTATION 741	A	.10													.02						.04	.02										
HELEMANU INTAKE 891	A	3.39	.15					.20		.10				.34			.27					1.23	*		.37	*		.76	*			
HOKULA 725.1	A	11.15				.14										.26		.27								.27	.29	.20	*			
HONOLULU DBSERV 702.2	A	.04																			.02	T	T	T	T	T	T	T	T	T		
HONOLULU WBFC 703	R	.23	T	.01		T	T	T	.05	.01			.01		T	T	T	T	T	.02	T	T	T	T	T	T	T	T	T	T		
HONOLULU SURSTA 704	A	.30													.03					.08		.02		.04	.02	.09	.01	.01				
H S P A EXP STA 707	A	.89		.02						.16		.01	.12	.03		.01	.03		T	.15	.03	T	.03	.09	.14	.01	.07	.08	.03	.05		
KAHANA 883	A		.16	.02	.07	.02				.15	.01				.05	.01	.01	.01			.21		.10	.03		.44	.05					
KAHUKU 912	A	1.44	.16	.02	.07	.02				.15	.01				.05	.01	.01	.01			.21		.10	.03		.44	.05					
WAILUA FIRE STA 791.3	A	.83	.02	.10	T			T	T										.05		.21		.10	.03		.44	.05					
KALIHU RES 517E 777	A	7.14	.02	.04	.01	.04	.10	.30		.04	.04		.20	.20	.26	.90				.10	1.54	.62	.06	.48	.34	.44	.02	.14	.92	.18		
KANEUE MAUKA 781	A	2.17	.03	.01		.01	.01		.01	.02					.01	.22			.01		.07	.73	.13	.05	.08	.19	.09	.12		.23	.09	
KANEUE RANCH 838	A																															
KAPALAMA 713	A	3.4	.04												1.00						.60	.02	.25	.23		1.20	.06					
KAWAIHAPAI 841	A	.32	.12		.04	</																										

DAILY PRECIPITATION

HAWAII
JUNE 1970

Continued

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
KAAIWI LOWER 19.1	7.59	*	*	*	*	1.59	*	*	*	*	*	1.71	*	*	*	*	*	*	2.10	*	*	*	*	*	2.10	*	*	*	*	*	1970	
KEAAU 92	5.94	.01	.11	.04	.55	.09	.03	.17	.09	.02	.16	.66	.05	.37	.15	.17	.21	.26	.11	.02	.06	.22	.23	.37	.11	.31	.24	.92	.55	.03		
KEALAKEKUA 26.2	3.37	.12	*	.02	.01	.06	.01	.02	.05	*	.01	T	.50	.03	.11	.71	*	*	*	*	*	*	.03	.03	*	*	*	.29	T	.09		
KENEKA 181.2	10.55	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10.55	
KIULAKAA A & E F 6	5.50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.50		
KIFA 89.2	12.44	*	.28	.08	1.07	.12	.07	.15	.22	.07	.05	.15	.29	.04	1.00	.21	.45	.24	1.76	.33	.02	.21	.72	.24	.52	2.31	.30	.25	.52	.75	.02	
KOHALA 179.1	3.91	.04	.29	.30	.07	*	*	.10	.02	.01	.8	*	*	.72	.34	.18	.62	.14	*	*	*	.07	.03	.11	.13	.16	*	*	.29	.01		
KOHALA MAHILI 176	4.52	.09	.22	.08	.12	.01	*	*	.09	.01	.06	.52	*	*	.68	.11	.20	1.05	.29	*	*	.08	.02	.13	.26	.15	*	*	.33	.02		
KOHALA MISSION 175.1	4.44	*	.50	.08	.04	T	*	.08	.07	.03	.02	*	.8	.09	.65	.15	.31	.36	.71	.13	T	.04	.03	.03	.12	.10	.14	.09	.13	.09	.01	
KOTAHE LOWER 196	5.11	*	*	*	*	.73	*	*	*	*	*	1.02	*	*	*	*	*	*	1.64	*	*	*	*	*	*	1.72	*	*	*	*		
KONA AIRPORT 68.3	-																															
KONA VILLAGE 93.8	.21				.30						.02	.15	.03		.14					.02	T	.06										
KUKAIAU 227	3.09	.05		.02	.02								.40		.04			.99	.21			.73	.14	.11	.25	.06	T	.12	.22	.01		
KUKUIMAELE CTC 190	2.65				.07	.08	*	*	*	*	*	*	.09	*	.01			.03	.51	.33	*	.18	.14	.18	.40	.06	.04	.06	.14	*		
KUKUIMAELE M'LL 206	2.27	.05	.05	.09	.30	.08	*	*	.03				.09	*	.01			.01	.45	.20	*	.14	.13	.01	.53	.03	*	*	.07	*		
KULANI CAMP 99	2.09			.08	.20	.20	.01		.01		*	.02	.03	.18	.07	.22		.13	.01		.02	.08	.04	.13	.12	.05	.02	.25	.22	*		
KULANI MAIKA 76	.31																															
KULANI SCHOOL SITE 78	1.91					.11	*	*	*	*	*	*	.32	*	*	*	*	.46	*	*	*	*	*	*	*	.31	.72	*	*	*		
LAMIHAI 68.2	3.54	.06	*	.16		.39	*	*	.09	*	*	.35	.08	.21	.35		.13	.14	.60	.32	*	.10	*	*	.13	*	.33	.10	*			
MANUKA ?	2.05	1.51			.01							.08	.21		.21	.13	T			*	.05	T		.04	*	*	.10	T	*			
MAUNA KFA REACH 98	.07																															
MAUNA LOA SLOPE 085	2.87	.14	*	*	*	.56	*	*	*	*	*	*	*	*	.86	*	.05	*	.87	.24	*	*	*	*	*	*	.02	*	.10	*		
MIDDLE MOLOAIA 68.1	4.0																															
MIDDLE PEM 147.1	.70	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.70		
MOUNTAIN VIEW 91	9.88	.10	.20	.16	.64	.30	.04	.03	.23	.04	.08	.22	.21	.09	.66	.26	.43	.20	1.00	.25	.06	.17	.60	.27	.68	.89	.58	.20	.77	.46		
NAALEHU 14	1.14				.38	T	*	*	.33	*	*	.05	*	*	.56	*	.01	T	*	*	.03	T	*	.71	*	*	.31	.09	*	*		
NAPPOPOO 28	3.17	1.02	*	*	*	*	*	*	*	*	*	*	*	*	.96	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.15	*	
NAULU FOREST 38.6	2.25			.74	.42	T	*	*	.05	.04	*	*	*	.07	.16	.01	.01	.03	*	.11	.03	.06	.12	.01	.05	*	.11	.12	.12	.14		
NIHULI 179	4.11	.08	.40	.40	.06	*	*	*	*	*	*	.26	*	*	.89	.31	.16	.76	.10	*	*	.02	.12	.04	.15	*	*	.26	*	*		
OKALA 223	3.4	.01	.01	.06	.21	T	*	.10	.02	.01	T	.12	*	.02	*	.02	.67	.14	.03	.02	.40	.35	.15	.52	.12	.05	.41	.05	*	*		
OPIMIALE 74.1	1.90	.01	.09	T	.11	.02	.04	.02	T	.13	.01	.19	.14	.05	.07	.01	.06	.01	.11	.17	.01	.03	.02	.04	.22	.01	.01	.20	.12	T		
ORCHID LAND ST 91.5	6.63	*	*	*	*	2.14	*	*	*	*	*	1.11	*	*	*	*	*	*	2.00	*	*	*	*	1.38	*	*	*	.04	*	*		
PAALU 217	1.12			.03	.02	.01	.02	*	*	*	*	*	*	*	.89	.31	.16	.76	.10	*	*	.22	.04	.02	.08	.03	*	.04	*	*		
PAALUO 221	*	.01	T	T	.14	T	*	T	*	*	*	*	*	*	*	*	*	*	.76	.22	*	.41	.08	.04	.10	.05	T	.17	T	*		
PAHALA 21	1.10				.80	.29	*	*	.04	.30	.09	.09	.13	.22	.07	.49	.20	.34	.37	.45	.23	.02	.07	.21	.23	.40	.13	.15	.26	1.00	.60	.05
PANDA 65	7.97	.06	.19	.42	.59	.31	.06	.04	.30	.09	.09	.13	.22	.07	.49	.20	.34	.37	.45	.23	.02	.07	.21	.23	.40	.13	.15	.26	1.00	.60	.05	
PAYAD 37	1.93	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.19	
PAPAIAKOI 144.1	7.56			.23	.40	.12	.01	.11	.22	.19	.02	.12	.32	.10	.27	.22	.16	.23	.72	.08	.13	.13	.60	.11	.96	.27	.26	.39	.83	.57	.19	
PAPAIAKOI MAUKA 140.1	11.45		.07	.15	1.14	.10	.03	.20	.33	.14	.06	.17	.25	.03	.87	.20	.47	.45	1.70	.61	.13	.22	.53	.30	.68	.82	.38	.25	.69	.94	.04	
PEPEKOE MAKAI 144	7.21	.01	.08	.61	.48	.08	*	.07	.17	.05	.08	.09	.12	*	.17	.14	.22	.55	.40	.22	.01	1.00	.07	.32	.38	.30	.24	.86	.40	.09		
PIIHONUA 89	16.08	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.06	
POHAKUOLA 107	4.5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.06	
PUNAO 95.1	8.5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.06	
PUU KIME 120	.31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.31		
PUU LAAU 102.1	.22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.22		
PUU LEHA 73	1.25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.22		
PUU MALI 113	.22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.22		
PUUKUKUA 147	3.24	*	*	*	.36	*	*	*	*	*	*	.15	*	*	.07	*	*	2.07	*	*	*	*	*	*	.66	*	*	*	*	.22		
PUU DD 82	2.44		.11		.18	.19	T					.04	.07		.13	T	.26				.08	.13	.05	.30	.10	.23	T	.31	.18	T		
PUU WAAWAA 94.1	.27	*	*	*	*	*	*	*	*	*	*	.11	T	*	*	*	*	*	3.40	*	*	*	*	*	*	2.20	*	*	*	*	*	
SAULE ROAD J 84	9.03	*	*	*	2.67	*	*	*	*	*	*	.71	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
SOUTH POINT CORRAL 3	.19	*	*	*	*	.15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
UNIKOA 119	3.03	.02	*	.20	.01	*	*	.03	.02	*	.01	.21	.04	.02	.29	.01	.01	.12	.44	.07	.02	.26	.20	.05	.02	.01	.09	.05	.01	.10		
UPULU POINT USCJ 159.2	1.84	.22	.01					.03	.05	*	.01	.21	.04	.02	.29	.01	.01	.12	.44	.07	.02	.26	.20	.05	.02	.01	.09	.05	.01	.10		
WAIATAKA SCO 88.2	9.55	*	*	1.34	.19	.14	.02	.05	*	*	.15	.02	.51	.20	.43	.81	.72	.45	*	*	.17	.73	.35	.47	.86	.50	.11	.59	.71	.01		

SUPPLEMENTAL DATA

Station	Wind (Speed — m.p.h.)						Relative humidity averages— percent				Number of days with precipitation						Percent of Possible sunshine	Average sky cover sunrise to sunset	
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	Standard of Time				Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over			Total
							150TH MERIDIAN												
							02	08	14	20									
HILO, HAWAII, WB AIRPORT	14	0.5	6.2	17	E	30+	91	80	69	84	0	10	18	2	0	0	30	28	8.1
HONOLULU, DAHU, WBFC	6	13.6	14.2	26	NE	30+	70	64	52	66	17	5	1	0	0	0	23	65	5.6
KAHULUI, MAUI, WB AIRPORT	5	13.1	14.0	31	E	23	78	69	54	73	11	2	0	0	0	0	13	77	4.5
LIHUE, KAUAI, WB AIRPORT	6	13.0	13.3	23	E	23+	77	74	66	74	6	15	2	0	0	0	23	36	6.7

DAILY TEMPERATURES

Continued

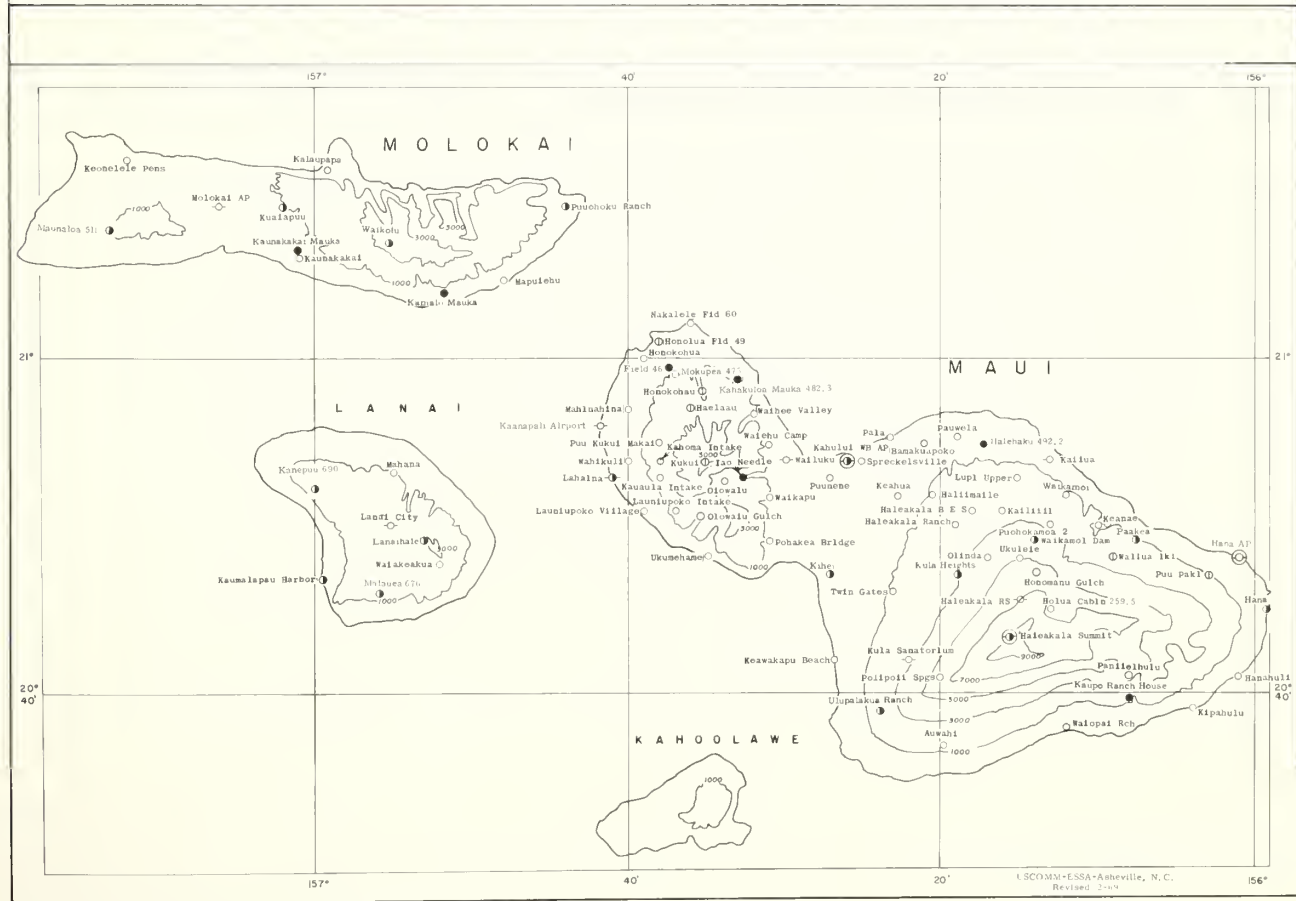
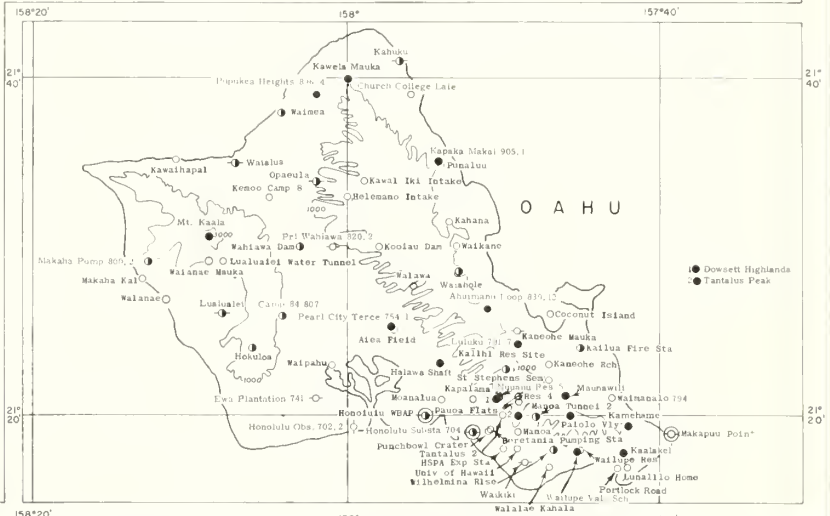
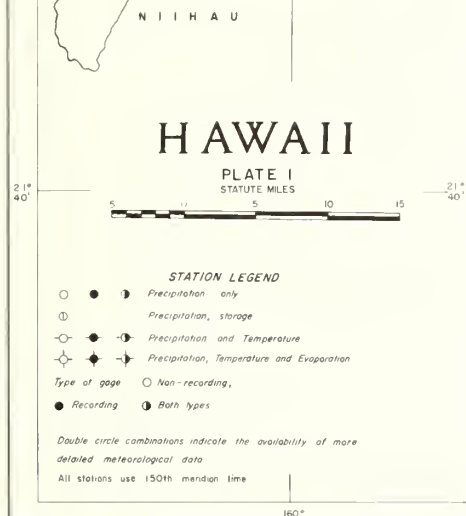
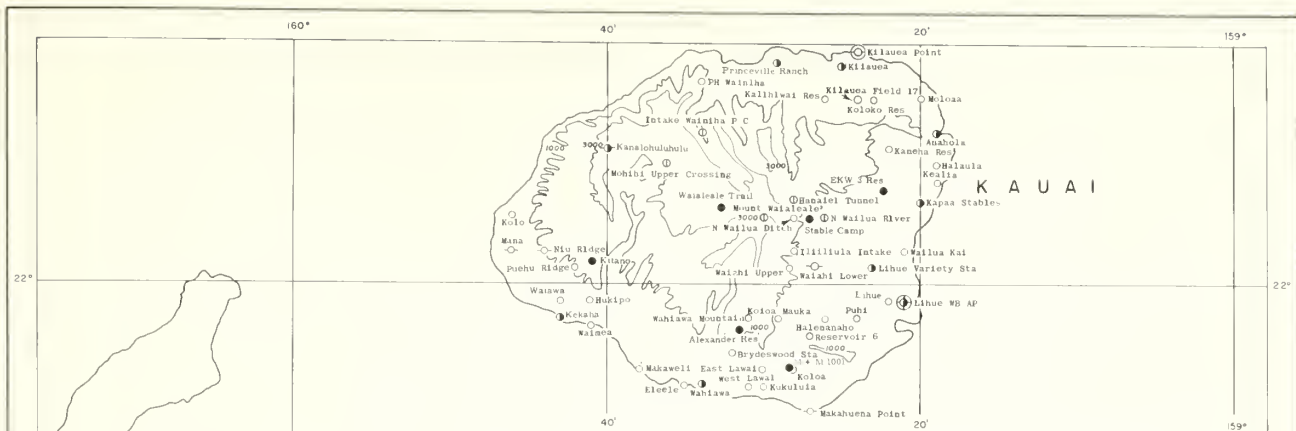
HAWAII
JUNE

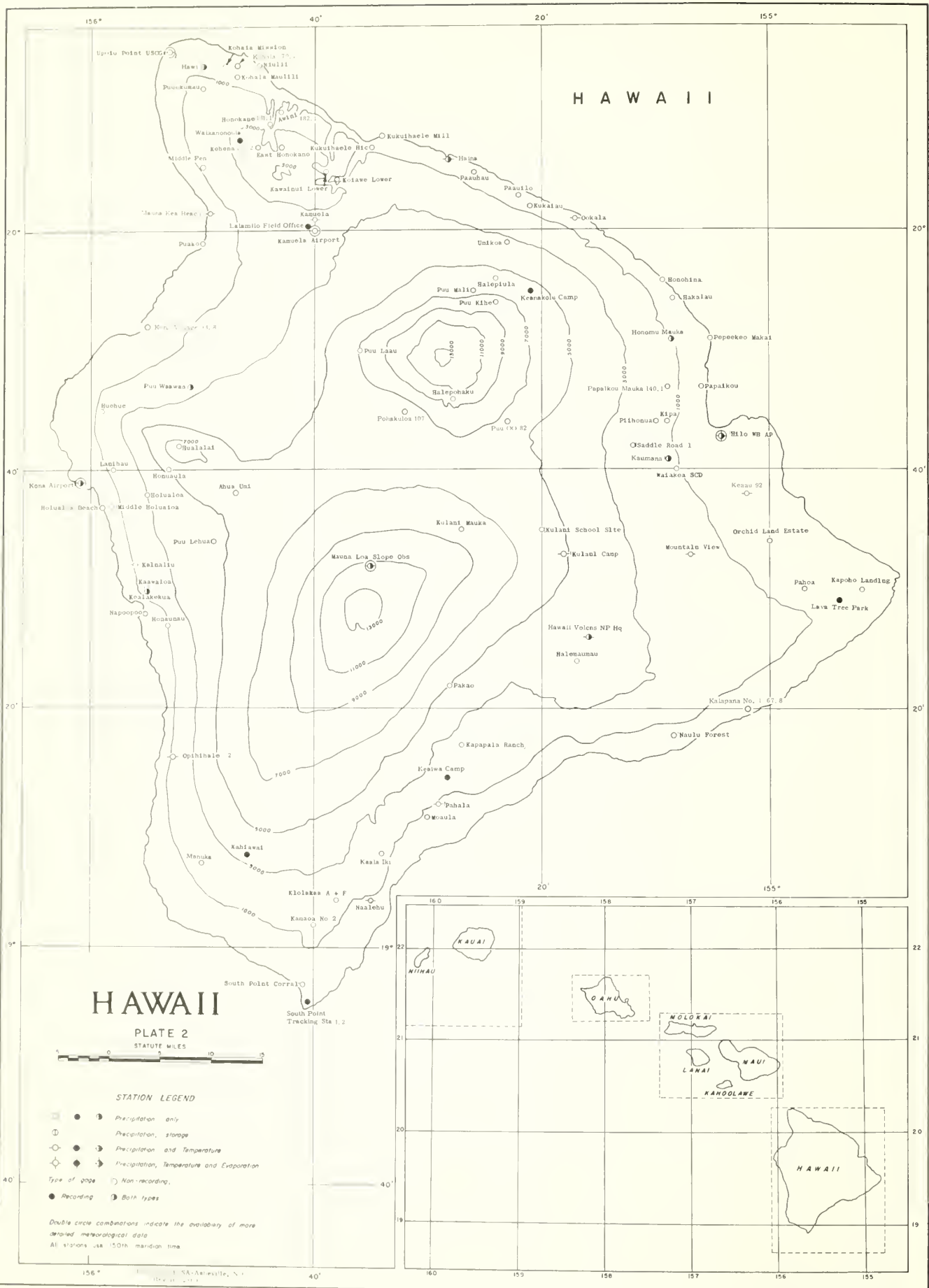
1970

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
LAHAINA 361	MAX	87	87	87	85	85	86	88	86	86	85	85	85	85	86	89	87	87	87	86	86	84	85	87	86	85	85	84	85	85	87		
	MIN	66	65	65	63	67	68	67	68	70	69	69	68	68	68	68	69	67	67	67	67	69	68	69	69	68	69	69	69	70	71		
WAILUKU 386	MAX	83	80	80	80	82		84	82	83	82	82			84	83	81	83	81			81	82	80	82	79			84	82			
	MIN	68	70	69	69	70		72	73	72	69	72			70	72	70	72	71			71	70	71	70	71			72	72			
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	81	81	80	74	81	80	83	82	80	79	81	81	82	81	79	81	82	75	78	83	83	80	77	81	83	78	82	83	81	80		
	MIN	65	66	64	66	66	65	66	68	68	67	66	68	67	68	67	68	67	66	64	64	67	67	66	68	68	65	67	67	68	68		
HAWAII VOLCNS NP HO 54	MAX	68	69	69	72	67	69	70	71	68	70	69	70	67	71	70	70	68	64	68	71	70	67	67	65	69	68	83	66	69	70		
	MIN	51	55	50	57	53	54	54	54	54	58	57	55	56	56	55	54	54	56	55	52	55	56	54	55	57	53	55	55	56	55		
HILO WB AIRPORT 87	MAX	81	82	80	78	82	84	82	83	80	79	83	84	81	84	80	82	80	83	82	84	84	82	79	83	80	82	82	82	81	82		
	MIN	64	66	64	69	67	65	67	68	68	68	66	67	66	67	64	64	65	66	64	64	65	67	65	65	66	62	69	67	66	64		
KAINALIU 73.2	MAX	79	75	78	77	80	79	78	77	80	77	77	78	77	77	76	78	78	77	78	77	78	79	81	80	79	78	76	79	78			
	MIN	62	63	62	61	62	64	64	64	65	65	64	64	65	62	65	63	62	64	65	64	63	66	65	63	66	65	63	64	64	65		
KAMUELA 192.2	MAX	75	75	75	73	75	75	75	75	75	75	75	75	76	76	76	76	72	67	70	72	71	73	70	71	73	70	73	75	73			
	MIN	60	60	62	65	62	62	62	62	62	60	63	63	63	63	63	63	58	56	57	58	58	58	58	58	57	58	60	57	57	57		
KAMUELA AIRPORT 191	MAX	72	71	72	73	76	75	74	70	78	69	70	75	76	75	74	75	74	69	75	75	74	75	72	74	76	75	76	76	76	74		
	MIN	42	48	52	54	56	53	48	42	57	52	48	54	54	59	57	60	58	58	58	52	55	48	57	59	48	50	55	52	58			
KEAAU 92	MAX	83	82	82	82	81	83	83	83	81	80	80	83	84	82	83	82	83	80	81	83	84	84	79	79	84	79	84	81	83	81		
	MIN	65	65	65	65	60	66	65	66	65	67	65	65	68	69	66	66	66	66	65	65	67	68	67	66	66	64	64	66	68	65		
KEALAKEUA 76.2	MAX	79	77	79	76	77	80	79	76	77	76	76	78	77	77	74	78	77	76	78	77	77	78	80	77	79	77	74	78	78	78		
	MIN	64	63	63	62	62	63	66	65	66	66	64	65	65	64	66	64	65	65	64	65	64	67	67	65	67	66	63	64	65	66		
KOHALA MISSION 175.1	MAX	79	78	79	79	80	80	80	80	79	78	79	81	80	72	78	79	79	72	77	80	81	80	79	79	81	78	80	80	81	78		
	MIN	67	66	66	65	65	68	67	68	69	68	67	68	69	68	69	67	67	66	66	67	68	68	68	67	68	67	67	67	68	70		
KONA AIRPORT 68.3	MAX	85	82	80	84	85	86	84	82	82	83	83	80	84	83	83	84	84	84	84	85	86	86	84	82	84	85	85	85	85			
	MIN	64	65	68	68	62	62	62	61	64	64	64	64	64	64	66	67	67	67	67	65	65	65	66	66	66	67	68	67	67	68		
KULANI CAMP 79	MAX	60	65	64	63	62	62	65	68	67	68	61	66	64	69	65	66	67	61	65	59	65	66	67	61	61	61	64	62	64	65		
	MIN	36	47	45	40	47	45	43	43	45	47	46	46	47	48	45	47	48	45	47	48	45	47	48	45	51	50	49	51	50	49		
MAUNA LOA SLOPE 085	MAX	57	58	54	57	57	57	55	58	59	56	59	62	65	61	58	62	61	62	58	57	57	59	63	57	55	55	50	60	60	58		
	MIN	39	37	35	38	37	34	35	40	40	43	42	42	44	43	41	41	42	42	41	41	42	40	44	41	38	41	38	37	38	40		
MOUNTAIN VIEW 91	MAX	77	76	75	77	73	78	78	78	75	73	79	78	78	78	78	77	76	70	73	79	79	79	73	71	77	70	78	78	75			
	MIN	60	60	59	60	60	61	61	61	63	62	62	62	61	61	61	62	62	63	61	59	59	59	62	62	62	59	59	59	61			
NAALEHU 14	MAX	81	80	81	81	79	79	82	82	81	78	76	81	81	79	79	81	79	73	77	77	82	82	81	78	82	75	75	82	82	81		
	MIN	63	65	66	67	66	66	66	66	66	66	66	69	69	68	68	67	67	68	67	67	65	65	66	69	70	63	63	68	68	69		
OAKALA 223	MAX	80	79	78	76	80	80	80	80	80	79	76	80	80	80	79	79	80	79	77	80	80	81	80	78	81	77	80	81	80	80		
	MIN	67	66	66	66	66	69	68	67	68	69	68	67	69	68	69	69	66	66	66	67	67	67	67	67	69	67	66	66	67	69		
OPIHIHALE 2 24.1	MAX	80	80	80	76	75	91	76	79	76	75	75	74	73	81	79	81	75	80	60	77	77	81	79	75	77	77	77	79	76	81		
	MIN	61	60	60	61	63	66	65	66	64	61	62	64	64	66	61	61	64	64	61	62	64	63	65	65	62	62	63	63	63	63		
PAHALA 21	MAX	80	81	79	77	76	78	75	81	80	78	76	79	76	80	77	81	80	77	79	78	81	78	78	80	75	75	79	79	81			
	MIN	61	61	62	62	61	62	62	62	62	62	62	64	63	67	62	62	63	65	63	60		64	64	64	67	61	63	67	67	64		
PUAKO 95.1	MAX	87	87	87	87	86	87	88	87	86	88	85	85	84	85	84	88	89	87	86	86	87	87	90	86	88	88	87	87	87	87		
	MIN	72	70	68	70	69	74	72	73	73	73	69	70	69	71	70	73	73	72	72	70	72	72	73	71	73	72	73	72	71	72		
UPOLU POINT USCG 159.2	MAX	84	85	82	83	85	82	85	84	83	81	83	84	85	83	83	88	83	80	80	83	84	84	83	83	84	81	84	84	84	84		
	MIN	66	68	69	69	70	68	68	66	69	70	69	69	71	71	72	71	69	68	69	68	68	70	71	69	71	68	69	72	70	72		

EVAPORATION AND WIND

Station		Day of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																	
ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP	.35	.31	.35	.35	.30	.49	.36	.38	.37	.29	.23	.39	.39	.34	.37	.38	.40	.42	.24	.43	.26	.31	.35	.41	.24	.23	.32	.44	.13	.18		
	WIND	176	136	153	105	127	173	203	203	229	189	145	166	181	155	182	188	250	224	183	185	238	163	193	249	255	175	179	240	231	204		
	MIN	65	65	65	64	64	68	67	67	67	67	68	68	69	69	68	68	66	66	66	66	67	68	64	65	67	67	66	67	67	68	68	
* * *																																	
ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.45	.19	.35	.34	.30	.29	.33	.37	.35	.24	.27	.26	.30	.24	.30	.30	.39	.32	.40	.42	.20	.31	.34	.33	.29	.33	.40	.33	.40	.19		
	WIND	38	20	27	25	20	22	30	37	42	25	16	17	22	18	32	26	41	35	29	31	23	22	31	37	32	38	18	29	32	38		
	MIN	89	90	90	93	89	93	92	92	89	85	88	92	91	91	90	92	92	89	91	93	86	92	91	89	88	93	86	91	92	95		
MIN	66	67	65	65	66	68	68	68	67	67	67	68	69	69	67	68	73	67	68	69	69	69	69	69	68	68	68	69	68	70</			







MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

Station	Temperature											Precipitation																	
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow Sleet			No. of Days								
										Max.	Min.	30° or Above	25° or Below					20° or Below	0° or Below	Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
KAMUELA AIRPORT 191	73.8	51.5	62.7	- .3	76	30+	32	15		0	0	1	0	1.03		.41	10		.0	0		3	0	0					
KEAAU 92	82.0	66.1	74.1		84	22+	63	11		0	0	0	0	14.38	4.24	2.02	10		.0	0		24	11	3					
KEALAKEKUA 26.2	78.2	64.6	71.4		81	26+	63	29+		0	0	0	0	4.20		1.58	24		.0	0		8	3	1					
KONA (KAILUA) 68.3					88	12	68	29+		0	0	0	0			1.37	24		.0	0				1					
KUKUIHAELE HIC 199														10.52	4.98	1.45	18		.0	0		21	7	3					
KULANI CAMP 79	64.9	47.5	56.2		71	14	35	31+		0	0	0	0	8.26		1.60	7		.0	0		17	6	1					
PAHALA 21					86	20	61	30+		0	0	0	0	.34	- 1.18	.17	28		.0	0		1	0	0					
POHAKULOA 107														.49					.0	0				0					
PUAKO 95.1														.22		.18	10		.0	0		1	0	0					
PUU WA'AWAA 94.1	87.7	72.2	80.0		90	15	68	27		1	0	0	0	1.71	- .39	.72	10		.0	0				1					
UMIKOA 118														4.93	1.94	2.10	10		.0	0				1					
WAI'AKEA SCO 88.2														14.45		1.92	8		.0	0		22	12	4					
ISLAND			69.5											5.91					.0										

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 93° ON THE 29TH AT KEAWAKAPU BEACH 260.2, MAUI
 LOWEST TEMPERATURE: 30° ON THE 26TH AT MAUNA LOA SLOPE OBS, HAWAII
 GREATEST TOTAL PRECIPITATION: 30.57 AT MOUNT WAI'ALEALE 1047, KAUAI
 LEAST TOTAL PRECIPITATION: .00 AT 9 STATIONS
 GREATEST ONE-DAY PRECIPITATION: 8.54 ON THE 25TH AT NUUANU RES 4 783, OAHU

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
JULY 1970

Station	Total	Day of Month																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF KAUAI																																		
ANAHOLA 1114	A	2.97	.06	.16	*	*	*	.10	.04	.15	.35	.10	*	1.45	.10	.02	.10	.04	*	*	.20		.02	.03	*	*	.15		.04	.01	*			
BRYCESWOOD STA 985	A	5.78	.16	.10	*	*	.18	.22	.16	*	.05	*	*	1.59	.14	.12	.01	.11	*	.13	T		.04	.11	*	.18	.15	.01	.18	.01	.01	.10		
EAST LAWA 934	A	5.29	.16	.09	*	*	.139	.27	.20	.16	.42	*	*	.52	.32	.05	.03	.36	*	*	.52	T	.02	.15	.19	*	.12	.08	.02	.03	.11	*		
ELEEE 927	A	1.74	.01	.04	*	*	.08	.07	.03	.01	.12	*	*	.07	.05	*	.03	*	*	.06	*		T	T	*	.14	T	.02	.01	*				
MALAUULA 1110	A	3.24	.07	.10	*	*	.06	.06	.05	.36	.24	*	*	1.15	.22	*	.05	.03	*	.16			T	T	*	.44	.03	.02	.02	*				
HALEMANAHO 1006	A	6.48	.21	.14	*	*	.43	.08	.35	.38	.44	*	*	.71	.18	.09		.22	*	*	.31	.02	.03	.15	.31	*	.178	.04	.03	.04	.54	*		
HUKIPO 945	A	.28																								.28								
LILIUULA INTAKE 1050	A	12.23	.30	.17	*	*	.94	.58	.31	.73	.92	*	*	1.45	.58	.65	.05	.77	*	.69	*	.01	.06	1.23	*	2.03	.30	.14	.13	.19	*			
INTAKE MAINIHA FC 1086	A	9.44	.82	*	*	*	1.19																			3.00								
KALIHIMAI RES 1131	A	9.29	.37	.15	.01	*	*	.55	.15	.49	.54	*	*	2.25	.51	.18	.03	.16	*	.51	*		.04	.13	*	2.25	.56	.06	.16	.19	*			
ISLAND OF MAUI																																		
KANALOHULU 1075	A	.58																								.07								
KANEHA RESERVOIR 1092	A	6.81	.30	.20	*	*	.30	.09	.19	.70	.70	*	*	1.75	.30	.11	.10	.05	*	.51	*	.73	.04	.03	.17	.15	*	.63	.03					
KAPAA STABLES 1104	A	2.85	.10	.13	*	*	.10	.03	.16	.12	*	*	.99	.20	.08	.09	.18	*	*	.02	.03				.12	*	.42							
KEALIA 1112	A	2.75	.05	.15	*	*	.20	.05	.02	.11	.24	*	*	1.05	.15	.10	.03	.10	*	.04	.01			.02	.04	*	.30							
KEKAMA 944	A	.12									.01						.01									.10								
KILAUEA 1134	A	6.15	.02	.03	.01	*	*	.26	.43	.72	.07	*	*	2.45	.12	.11	.02	.15	*	*	.21	.01		.07	*	1.24	.08							
KILAUEA FIELD 17 1135	A	6.52	.25	.04	.02	*	*	.30	.04	.50	.32	*	*	2.23	.28	.04	.01	.10	*	.26	.01		.01	.09	*	2.93	.96	.01	.12	.03	*			
KILAUEA POINT 1133	A	4.83	.82	*		.15	.15	.04		.43	.05			.25	.05		.10		.05				.10		.56		.15							
KOLO 1033	A	.54																									.15							
KOLOA 936	A	5.76	.22	.09	*	*	.45	.25		.37	.34	*	*	.42	.67	.02		.26	*	.57			.06	.15	*	1.38	.08	.02	.05	.36	*			
KOLOA MAUKA 994	A	7.65	.14	.13	*	*	.52	.18	.54	.41	.54	*	*	.64	.23	.17	.09	.29	*	.28	.07	.05	.07	.37	*	2.31	.06	.04	.31	.21	*			
KOLOKO RES 1137	A	5.88	.05	.10	.01	*	.12	.28	.15	.55	.16	*	*	2.82	.20	.10	.01	.09	*	.31			.09											
KOKUIULA 935	A	2.98	.04	.07	*	*	.13	.05	.05	.12	.11	*	*	.11	.10		T	.35	*	.27			.01	.06	*	1.15	.11	.12	.13	*				
LIMUE VARIETY STA	A	5.24	.10	.22	*	*	.39	.06	.12	.33	.22	.02	1.0T	.20	.19	.03	.05	.65	.02	.35		.05	.05	.02	.07	.12	.57	.15	.16	.08	*			
LIHUE 1020	A	3.85	.11	.11	*	*	.12	.03	.14	.18	.06	*	*	.73	.02			.18	*	.03	.02		.10	.09	.20	.14	.58	.74	.04	.14	.07	*		
LIHUE WR AP 1020.1	R	1.76	.08	T	.08	.01	.02	.02	.15	.17	.01	.32	.01	.06	.05	.01	T	.13	T	.02	.02	.09	.10	.11	.30	.01	.30	.01	T	T	.06	*		
MAKAHUNA POINT 940.1	A	3.42					.07	.02	.30	.01	.08		.05	.01	.05		.01	.06	.18	.02		.09	.01	.15	.28	1.83	T	.04	.08	*				
MANAMELI 965	A	.20					.05		.13	.05	.05		.04	.01	.01		.01	.01					.03	.05		.36								
MANA 1026	A	.54																								.36								
MOHINI UPR CROSS 1083	A	4.34	.10			.10	.21	.10	.21	.10	.21	.21	.10	.10	.10			.62	.10			.10	.10	.10	1.46									
MOLOA 1145	A	3.97	.07	*	*	*	.07	.05	.02	.18	.12	*	*	2.15	.08	.07	.05	*	*	.09				.04	*	.52	.25							
MOLOA WAIKALELE 1047	A	30.57	.83	.16	.32	.67	.83	.63	.24	2.80	1.10	2.20	3.54	.90	.07	.10	.12	1.42	.32	.55		.12	1.26	1.61	3.66	2.56	.08	.24	.24	.87	.04	*		
NIU RIDGE 1035	A	.94								.20	.20															.61								
N WAILUA DITCH 1051	A	13.14	.50	.35	*	*	1.05	.56	.20	.76	1.00	*	*	1.90	.76	.46	.20	.50	*	.90		.01	.20	.90	*	4.71	.10	.50	.20					
PH MAINIHA 1115	A	13.86	.15	.15	.01	.06	.33	.42	.30	.34	.59	2.00	.04	1.19	.61	.64	.05	.03	.25	.32	.21	.02	.01	.32	.12	.41	.02	.18	.47	.32	*			
PRINCEVILLE RANCH 1117	A	6.86	.06	.05	.03	.02	.38	*	.20	.50	*	.22	1.72	.62	.12	.02	.18	.02	.07	.03						1.75	.09	.37	.38	.03	*			
PUEHU RIDGE 1040	A	.38									.23		.07	.07																				
PUMI 1013	A	4.79	.16	.11	*	*	.17	.18	.22	.20	.30	*	*	.08	.11	.04	.03	.23	*	.19		.03	.19	.39	*	.91	.04	.05	.20	.36	*			
RESERVOIR 6 1004	A	3.53	.17	.11	*	*	.42	.11	.46	.43	.61	T	T	.52	.41	.05	.06	.21	.61	.38	.02		.08	.11	.47	.21	1.52	.17	.04	.23	.22	*		
WAIHANA 930	A	2.20	.05	.04	*	*	.09	.18	.14	.07	.12	*	*	.02	.03	T	.06	*	*	.13		T	.02	.05	*	1.19	T							
ISLAND OF MOLOKAI																																		
WAIHANA MOUNTAIN 990	A	12.13																																
WAIHAI LOWER 1054	A	10.87	.28	.30	.04	.02	.24	.46	.24	.29	.41	.54	1.0	.93	.27	.53	.04	.03	.63	.15	.13	.19	.02	.09	.50	.29	1.07	.30	.12	.03	.12	.13		
WAIHAI UPPER 1052	A	10.87	.25	.27	.02	.03	.25	.57	.59	.30	.61	1.18	.40	.68	.31	.55	.10	.05	.94	.33	.32	.01	.02	.09	.75	.75	.95	.40	.20	.11	.10	.10		
WAIHAI 943	A	.11									.02			.50	.15											.07	.02							
WAILUA KAI 1065	A	2.98	.10	.17	*	*	.27	.09	.05	.04	.20	*	*	.50	.15			.09	*	.47		.10	.04	.10	*	.43	.07							
WAIHEA 947	A	.21																								.21								
WEST LAWA 931	A	2.96	.05	.06	*	*	.17	.13	.06	.12	.16	*	*	.12	.11			.22	*	.30		.02	.02	.08	*	1.25	T							
ISLAND OF OAHU																																		
AIEA FIELD 925 761	A	4.30	.18	.02	*	*	.17	.02	.01	.07	.02	.01	.02	.25	.12		.14	.91	T		.04		.06	.06	.05	.18	.03	.02	.28	.81	.09	.06	.21	.10
BERTANIA PUMPING STA	A	1.91	.02				.02	.02	.03	.03			.34	.01			.19	.04	.02		.02		.03	.02	*	.89	*	.37	*					
CAMP 84 807	A	4.28																																

DAILY PRECIPITATION

Continued

HAWAII
JULY 1970

Station	Total	Day of Month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
		KAWAIIUI LOWER 193 KEAAU 92 KEALAKEUA 26.2 KEHENA 181.2 KILOAKAA A 2 F 6	24.21 14.38 4.20 15.00 4.70	*	*	5.73	*	*	*	*	*	*	7.75	*	*	*	*	5.18	*	*	*	*	*	*	*	*	2.60	*	*	*	*	*

SUPPLEMENTAL DATA

	Wind (Speed - m.p.h.)					Relative humidity averages- percent				Number of days with precipitation						Percent of Possible sunshine	Average sky cover sunrise to sunset	
	Resultant Direction	Resultant Speed	Average	Fastest mile	Direction of fastest mile	Standard of Time 150TH MERIDIAN				Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over			Total
						02	08	14	20									
						Date of fastest mile	02	08	14										20
HILO, HAWAII, WB AIRPORT	34	0.6	6.4	16	NE 11	87	78	66	79	0	4	15	8	1	0	28	49	7.1
HONOLULU, DAHU, WBFC	5	14.1	14.8	29	NE 16+	70	64	49	64	10	9	5	1	0	0	25	74	4.5
KAHULUI, MAUI, WB AIRPORT	4	14.0	14.5	29	NE 01	78	71	56	74	12	7	0	0	0	0	19	76	4.5
LIHUE, KAUAI, WB AIRPORT	5	13.2	13.6	25	E 17+	77	73	65	75	7	15	6	0	0	0	28	38	6.4

DAILY TEMPERATURES

HAWAII
JULY 1970

Station	Day of Month																															Average		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
ISLAND OF KAUAI																																		
KANALOHULUHULU 1075	MAX MIN																																	
KILAUEA POINT 1133	MAX MIN	82 74	81 74	79 72	81 73	80 68	80 74	82 72	81 73	82 70	81 72	80 65	81 71	80 69	81 71	82 70	81 74	82 69	81 74	82 71	84 71	85 74	80 70	81 70	82 72	81 74	82 71	83 75	82 73	84 74	82 72	81.5 71.8		
LIMUE WB AP 1020.1	MAX MIN	84 75	84 75	83 75	83 75	85 85	85 74	85 73	85 73	84 72	85 72	83 72	83 74	82 76	85 72	84 74	85 73	83 76	85 74	85 73	86 74	85 74	86 73	85 73	86 73	85 73	86 74	85 75	86 76	87 77	86 76	85 75	86 73	84.5 74.5
MAKAHUEA POINT 940.1	MAX MIN	84 66	85 72	83 75	83 69	83 73	86 67	83 75	85 71	82 74	84 75	81 67	92 79	82 70	83 76	86 75	85 70	82 69	84 71	83 75	83 75	83 75	85 73	86 73	86 73	84 76	83 70	83 76	85 72	85 77	85 70	84 74	84 72	84.2 72.1
HANA 1026	MAX MIN	89 65	90 67	88 65	88 65	89 65	89 64	90 68	89 67	90 67	88 65	88 65	89 67	88 67	88 67	89 68	87 63	88 68	87 67	89 65	89 69	89 69	90 67	90 68	89 68	87 67	88 68	90 66	89 66	89 68	89 68	89 64	88.8 66.4	
NIU RIOGE 1035	MAX MIN	85 63	83 62	82 62	83 61	82 62	83 61	84 61	83 61	81 60	84 63	83 62	81 60	82 63	83 61	84 63	83 62	89 64	88 63	88 64	85 63	86 64	85 64	84 62	83 61	83 62	84 62	83 63	85 64	82 63	83 62	81 62	83 62	83.5 62.2
WAIAMI LOWER 1054	MAX MIN	81 68	80 66	80 67	79 68	80 67	80 68	80 67	79 66	79 66	80 67	79 66	80 67	80 66	79 66	81 66	81 66	82 66	81 66	81 66	82 66	82 63	83 65	83 65	83 68	82 69	82 67	83 68	83 66	84 63	83 66	83 63	83 63	81.1 66.6
ISLAND OF OAHU																																		
EWA PLANTATION 741	MAX MIN	85 70	85 69	85 70	85 70	85 68	86 69	85 70	85 69	85 69	86 71	87 69	85 70	85 69	85 69	85 69	86 70	85 70	86 70	85 70	87 70	87 70	88 70	86 70	84 70	87 70	85 69	86 69	87 70	85 67	86 67	85 68	85 68	85.6 69.5
HONOLULU W8FC 703	MAX MIN	89 76	89 75	88 75	88 76	88 74	89 75	88 74	89 75	89 74	89 75	88 76	89 75	90 72	89 73	89 76	89 75	90 75	88 75	90 77	89 77	89 77	89 75	89 75	90 77	90 74	90 75	90 78	90 75	90 72	89 76	90 72	89 72	89.2 75.2
HONOLULU SUBSTA 704	MAX MIN	81 74	82 72	81 72	82 74	82 73	82 73	82 75	82 73	83 73	82 73	82 73	83 73	82 70	82 73	83 74	82 72	82 72	83 72	83 75	83 74	83 74	81 72	82 74	82 72	84 72	84 72	84 74	85 72	83 73	81 72	82 74	82 74	82.4 72.9
KAHUKU 912	MAX MIN	83 72	83 74		84 71	83 70	83 69	84 71	84 69	84 72	83 70	83 69	84 70	83 72	83 71	84 73	83 72	83 74	83 72	85 72	85 73	84 72	84 69	83 72	84 69	83 72	85 72	85 71	85 74	85 71	83 72	83 72	83.8 71.9	
KANEHE MAUKA 781	MAX MIN	81 73	81 70	79 71	81 73	82 73	82 73	81 70	80 69	82 69	83 72	80 70	80 70	81 69	81 70	82 72	82 69	83 72	84 71	83 72	83 72	84 72	80 69	80 69	80 69	82 71	81 72	83 71	83 70	83 69	83 68	81 68	81 68	81.8 70.9
LUALUALEI 804	MAX MIN	85 73	84 75	88 75	84 75	86 72	87 74	87 74	85 74	88 76	88 74	88 76	89 73	88 70	88 74	88 74	89 75	88 74	88 74	89 73	88 73	88 73	90 73	90 73	88 72	88 70	88 72	88 74	88 72	89 73	88 73	88 73	87.5 73.4	
MAKAPUU POINT 724	MAX MIN	75 60	78 64	78 65	76 65	75 63	78 63	80 67	79 66	80 66	79 66	79 66	80 67	80 67	79 67	79 67	78 67	79 67	80 67	81 67	81 73	81 73	76 69	78 69	80 69	80 69	79 69	81 69	80 69	80 69	80 69	78.8 68.4		
OPAEOULA 870	MAX MIN	81 67	77 64	80 64	78 66	79 66	80 66	79 66	78 65	78 65	82 66	83 66	77 65	81 66	81 65	81 65	81 66	82 66	80 66	82 66	82 65	83 65	84 66	81 67	81 67	82 67	78 65	80 64	80 64	81 64	81 64	81 64	80.7 65.4	
PRI MAHIAWA 820.2	MAX MIN	83 67	80 66	85 67	78 68	82 66	84 66	85 66	84 66	83 66	85 66	84 66	82 66	85 67	85 66	85 66	86 66	82 66	85 66	85 66	86 66	82 66	86 66	85 66	85 66	83 66	85 66	83 66	85 66	81 66	84 66	82 66	83.9 66.3	
WAIALUA 847	MAX MIN	86 67	85 64	86 64	83 69	85 69	85 68	88 68	87 68	87 68	85 63	86 63	85 64	86 64	85 64	88 68	88 68	85 68	86 68	86 68	87 68	87 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86.1 66.5	
WAIKIKI 717.2	MAX MIN	85 74	85 73	85 72	84 73	85 73	85 73	86 71	86 72	86 73	86 72	86 73	86 73	86 73	86 73	86 73	86 73	86 73	86 73	86 73	86 73	87 73	87 73	87 73	87 73	87 73	87 73	87 73	87 73	87 73	87 73	87 73	86.1 72.6	
WAIMANALO EXP FARM	MAX MIN	84 72	84 73	84 69	83 71	84 72	83 71	84 70	84 71	85 71	84 73	83 73	83 73	83 70	82 72	83 74	85 71	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	85 70	84.5 72.1
ISLAND OF MOLOKAI																																		
MOLOKAI AP 524	MAX MIN	78 72	83 70	83 69	82 72	82 73	82 70	83 72	82 71	82 70	83 70	83 70	82 75	82 70	82 70	85 72	83 70	83 70	83 70	83 70	83 70	84 70	84 70	81 69	81 69	81 69	84 70	84 70	84 70	83 71	82 73	84 70	83 70	82.8 71.0
ISLAND OF LANAI																																		
LANAI CITY 672	MAX MIN	70 66	76 67	72 67	74 66	76 65	78 65	74 63	78 63	78 63	77 63	76 66	73 64	76 67	76 63	76 63	78 65	78 65	78 65	79 64	78 67	79 66	80 65	76 64	78 67	81 62	78 67	77 66	79 65	80 66	80 66	76.7 65.2		
ISLAND OF MAUI																																		
HALEAKALA RS 338	MAX MIN	64 47	67 43	68 43	68 49	69 49	66 42	62 42	58 42	60 42	58 48	62 49	65 43	64 42	63 44	64 45	62 45	63 45	64 45	62 45	67 45	62 45	64 45	62 45	64 45	65 44	62 48	65 48	61 49	66 44	64 48	64 48	64 48	64.0 45.8
HALEAKALA SUMMIT 338.4	MAX MIN	58 43	61 40		59 41	53 38	52 37	52 36	51 38	51 38	51 38	56 41	56 38	56 42	56 42	56 41	56 41	56 41	56 41	56 41	56 41	54 39	54 40	54 37	54 37	56 37	56 37	56 37	53 42	53 40	54 38	54 39	54.8 39.5	
HANA AIRPORT 355	MAX MIN	82 68	83 68	80 66	82 67	83 69	82 69	81 70	82 70	85 70	83 69	82 69	82 69	83 70	83 69	84 71	80 69	84 71	85 69	85 68	85 68	84 68	81 68	83 70	83 70	84 73	84 70	84 70	84 69	84 68	85 69	85 68	83.0 69.7	
KAAHAPALI AIRPORT	MAX MIN	83 80	83 70		84 70	85 70		88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	88 70	
KAHULUI WB AP 398	MAX MIN	86 73	85 70	87 72	86 71	87 69	87 71	88 72	88 66	88 67	88 73	88 70	87 71	89 72	91 67	88 72	89 73	89 73	89 73	90 66	88 71	89 71	88 71	89 73	87 71	86 73	88 73	88 71	88 71	88 73	88 73	88 73	87.8 70.9	
KAILUA 446	MAX MIN	73 68	80 68	74 66	77 67	77 66	78 67	75 65	76 66	78 66	76 66	76 67	77 66	77 67	77 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	80 68	77.5 67.1	
KEAWAKAPU BEACH 260.2	MAX MIN	87 69	90 65	90 64	92 65	91 65	92 64	89 66	85 66	89 66	87 65	88 66	88 65	88 65	88 65	91 65	92 65	89 66	89 66	89 66	89 66	89 66	89 66	89 66	89 66	89 66	89 66	89 66	89 66	89 66	89 66	89 66	88.9 65.5	
KULA SANATORIUM 267	MAX MIN	76 61	75 58	73 57	76 56	71 55	74 56	72 57	75 58	76 59	75 58	72 61	72 58	73 58	72 58	74 58	73 58	74 58	73 58	74 58	73 58	74 58	73 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	74 58	73.9 57.7

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
JULY 1970

Continued

Station		Day of Month																															Average	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
LAHAINA 361	MAX	86	88	86	87	87	86	87	88	86	87	88	88	87	87	89	87	87	86	87	87	87	86	86	86	84	86	87	87	87	86	86	86	86.7
	MIN	69	70	68	69	70	70	68	69	68	71	72	69	71	70	68	68	68	68	68	69	69	69	69	69	69	69	69	69	69	69	69	69	69.0
WAILUKU 386	MAX	80	82	79				81	80	83	82			83	84	83	83	83			83	83	83	82	80			85	83	83	83	83	82.3	
	MIN	72	70	70				69	72	73	73			71	72	73	73	72			71	73	72	70	72			72	72	72	72	72	71.7	
* * * ISLAND OF HAWAII																																		
HAINA 214	MAX	82	79	81	77	79	80	81	83	82	79	81	82	83	83	82	83	82	75	79	80	84	84	84	82	84	84	83	83	83	84	85	81.7	
	MIN	66	67	67	65	65	64	65	67	67	65	65	66	68	67	67	67	64	68	66	68	65	65	67	67	66	69	67	68	65	67	68	66.4	
HAWAII VOLCNS NP HO 54	MAX	71	65	66	68	69	63	68	69	68	72	70	70	65	66	65	65	68	73	72	74	72	71	68	69	72	71	73	70	71	69	70	69.1	
	MIN	58	57	55	55	56	54	54	57	55	55	53	55	54	54	54	56	53	57	55	54	55	55	57	55	55	55	55	55	55	55	54	55.1	
HILO WB AIRPORT 87	MAX	78	81	82	80	83	82	83	82	81	82	82	82	82	82	83	82	81	83	84	84	84	83	83	84	84	83	83	84	82	84	83	82.5	
	MIN	68	67	66	66	66	67	68	68	66	65	62	65	64	64	64	67	63	67	65	66	64	68	67	67	68	65	65	68	63	65	66	65.8	
KAINALIU 73.2	MAX	78	76	75	77	75	76	76	78	80	81	78	76	78	78	79	77	78	79	80	81	82	80	80	77	78	79	80	81	79	79	77	78.3	
	MIN	65	64	65	63	63	63	63	63	63	66	62	65	63	62	64	63	64	64	64	63	64	64	64	63	64	63	64	63	62	64	63	63.7	
KAMUELA 192.2	MAX	70	70	71	67	67	70	71	72	73	74	77	73	74	77	72	70	72	70	72	70	71	72	72	72	73	75	73	74	74	72	74	71.8	
	MIN	57	58	58	57	58	60	60	60	58	60	55	58	56	60	59	60	58	60	58	60	59	58	60	59	59	60	60	59	59	57	59	58.7	
KAMUELA AIRPORT 191	MAX	73	73	75	73	70	73	72	75	75	74	74	75	74	74	75	74	74	73	73	74	70	74	74	70	75	75	76	75	75	76	74	73.8	
	MIN	50	51	53	49	49	54	56	50	59	57	52	50	52	52	52	52	55	59	57	50	43	51	62	53	60	54	52	52	47	47	51.5		
KEAAU 92	MAX	83	79	80	82	80	82	81	83	81	84	82	84	83	82	83	81	81	81	82	84	83	84	82	82	83	83	81	81	81	83	82.0		
	MIN	66	68	67	67	66	66	66	67	67	67	63	65	65	66	65	65	64	64	67	67	66	66	66	67	68	68	67	67	65	65	66	66.1	
KEALAKEUA 26.2	MAX	78	77	75	76	77	77	77	78	80	81	78	75	78	80	79	74	77	78	81	81	81	80	77	77	78	79	78	81	80	78	78	78.2	
	MIN	66	64	66	64	64	66	64	65	64	67	64	67	66	64	65	64	65	64	64	64	64	64	65	65	63	63	64	66	63	65	64	64.6	
KOHALA MISSION 175.1	MAX	79	75	78	77	72	78	78	80	80	80	79	81	80	82	80	80	79	78	78	81	81	81	80	80	81	81	80	80	79	80	81	79.3	
	MIN	69	67	67	67	67	68	66	67	67	68	68	68	68	69	67	67	68	68	71	68	68	68	68	68	68	69	69	67	67	67	66	67.7	
KONA (KAILUA) 68.3	MAX													88	83	86	86	82	85	86		86	87	86	84	85	84	87	86	85	85	84		
	MIN													68	69	68	76	71	71	78		72	72	70	71	69	79	72	72	68	69	70		
KULANI CAMP 79	MAX	65	65	60	61	61	61	62	62	64	65	65	65	66	71	68	64	64	67	67	70	68	67	64	64	66	65	67	63	65	63	66	64.9	
	MIN	41	55	51	53	52	53	52	53	42	47	45	46	43	48	47	48	43	60	35	48	47	40	48	49	53	46	46	39	49	57	35	47.5	
MAUNA LOA SLOPE OBS	MAX	60	58	56	58	56	55	51	50	48	49	62	55	62	59	58	55	53	49	51	55	58	59	60	54	49	51	55	54	59	58	57	55.3	
	MIN	40	39	38	38	36	34	34	35	31	36	37	40	42	42	37	37	33	31	33	32	40	41	42	38	35	30	35	36	43	43	39	37.0	
MOUNTAIN VIEW 91	MAX	78	72	74	76	76	76	76	77	76	80	77	77	77	74	75	74	75	81	81	81	80	81	77	79	81	81	81	77	78	79	80	77.6	
	MIN	62	64	63	62	62	62	62	64	61	63	57	57	57	61	60	62	59	59	59	59	61	62	63	64	61	61	61	64	59	62	62	61.6	
NAALEHU 14	MAX	81	80	80	80	80	80	80	82	82	84	84	83	83	83	79	77	82	82	82	85	84	84	83	77	77	83	83	82	83	84	83	81.7	
	MIN	69	67	67	67	67	67	67	68	68	69	69	66	66	68	67	68	65	65	65	68	65	66	68	69	69	69	69	69	64	69	67	67.3	
ODKALA 223	MAX	80	80	80	79	77	79	79	81	80	80	80	81	80	84	80	80	80	79	79	82	81	81	80	80	80	83	81	80	81	81	82	80.3	
	MIN	68	67	67	67	67	65	67	66	67	66	66	66	68	68	67	69	67	66	70	70	68	66	67	67	68	68	68	68	66	65	69	67.2	
OPIHIHALE 2 24.1	MAX	75	74	78	77	75	76	78	80	78	81	74	76	77	81	73	81	76	84	82	79	80	78	77	80	78	83	82	77	78	77	79	78.2	
	MIN	63	65	61	61	63	61	61	61	60	63	63	64	60	61	60	62	64	63	62	62	63	64	62	61	62	64	62	63	64	61	62.1		
PAHALA 21	MAX	80	80	77				80	80	84				83	79	79	80	80			86	83	84	80	76			82	81	82	82	83		
	MIN	65	67	65				62	63	66				62	64	63	63	63			62	63	64	64			63	64	61	61	62			
PUAKO 95.1	MAX	87	89	87	88	88	88	88	88	88	87	88	84	87	88	90	88	87	86	87	88	89	89	89	84	86	88	87	88	89	89	89	87.7	
	MIN	73	74	70	74	73	74	72	73	71	71	69	69	71	70	74	74	72	75	71	73	73	74	74	72	70	71	68	74	73	72	74	72.2	
UPOLO POINT USCG 159.2	MAX	83	78	81	83	81	82	81	82	84	84	82	84	83	84	85	83	82	82	82	83	84	82	83	82	83	86	84	81	85	83	82	82.7	
	MIN	70	70	71	69	69	70	69	69	71	69	69	69	70	71	70	68	70	72	72	73	70	70	70	70	71	70	71	73	72	70	71	70.3	

EVAPORATION AND WIND

Station		Day Of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * * ISLAND OF KAUAI																																	
LIHUE WB AP 1020.1	EVAP	*	.24	.35	.40	.37	.38	.40	.43	.20	.35	.34	.22	.33	.23	.38	.32	.45	.26	.36	.41	.40	.40	.40	.27	.41	.38	.38	.43	.29	.28	.40	10.46
	WIND	207	204	216	258	243	230	239	188	160	202	209	205	170	158	168	193	190	192	182	175	125	143	181	206	202	226	193	184	175	166	166	595.6
	MAX	86	84	85	83	82	86	87	86	79	87	86	78	86	84	89	86	86	86	88	88	89	90	88	85	90	88	89	89	89	88	86.3	
	MIN	68	66	66	67	67	66	67	67	67	67	68	68	68	68	68	67	67	67	67	68	68	68	68	66	67	67	68	69	66	67	67.3	
* * * ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.30	.30	.40	.26	.45	.28	.38	.30	.28	.30	.30	.25	.30																			

STATION INDEX

HAWAII
JULY 1970

CONTINUED

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES				OBSERVER
								TEMP.	PRECIP.	EVAP.	SPECIAL										TEMP.	PRECIP.	EVAP.	SPECIAL	
ISLAND OF HAWAII																									
KAPULA 18	A 0407	03	KAU	3	19 11	155 30	600					HAWAIIAN RANCH CO	PUU KIME 120	A 8393	01	HAMAKUA	1	19 54	155 24	7750				KUKAIAU RANCH CO	
MOUNTAIN VIEW 91	A 8502	02	PUNA	3	19 33	155 07	1330	RA	AA			PUNA SUGAR CO	PUU LAU 102.1	A 8452	03	HAMAKUA	1	19 50	155 36	7400				STATE OIV OF FISH-GAME	
MALEHU 14	A 8518	03	KAU	3	19 04	155 39	673	RA	AA			MUTCHINGS SUGAR CO	PUU LEMU 73	A 8400	04	N KOHA	1	19 34	155 49	4880				GREENWELL RANCH	
NAPPOPO 28	A 8697	04	S KOHA	1	19 28	155 55	395	TA				KONA EXPERIMENT STA	PUU HALL 113	A 8515	01	HAMAKUA	1	19 55	155 26	6960				KUKAIAU RANCH CO	
NAULU FOREST 38.0	A 8731	02	PUNA	3	19 19	155 08	1400	VAR				PUNA SUGAR COMPANY	PUUDUNAHU 167	A 8548	06	N KOHALA	1	20 12	155 50	1800	7A			KOHALA DITCH CO LTD	
NIULII 179	A 8808	01	N KOHALA	1	20 14	155 08	1400	VAR				HAWAII VOLCANOES NAT PK	PUU OO 82	A 8550	02	S HILO	1	19 44	155 23	6340	6A			ODN HINTERS	
OKALA 223	A 7131	02	N HILO	2	20 01	155 17	430	7A	7A			LAUPAHEHE SUGAR CO	PUU WAAWA 94.1	A 8559	05	N KOHA	1	19 47	155 51	2520	7A			DILLINGHAM RANCH INC	
OPINAHOLE 2 24-1	A 7100	04	S KOHA	4	19 18	155 53	1270	7A	7A			MISS C LEONARD	SAOOLE ROAD 1 84	A 8590	02	S HILO	1	19 42	155 12	2340				BOARD OF WTR SUPPLY	
ORCHID LAND EST 91.5	A 7148	02	PUNA	3	19 34	155 00	445	VAR				BOARD OF WATER SUPPLY	SOUTH POINT CORRAL 3	A 8675	03	KAU	1	18 57	155 11	500				HAWAIIAN RANCH COMPANY	
PAAHUHU 217	A 7204	01	HAMAKUA	1	20 05	155 26	415	7A				PAAHUHU SUGAR CO	UMIKOA 118	A 8760	01	HAMAKUA	1	19 59	155 23	3420	7A			KUKAIAU RANCH CO	
PAUULD 221	A 7312	01	HAMAKUA	1	20 03	155 22	800	7A				HAMAKUA MILL CO	UPULU POINT USCG 159.2	A 8830	01	N KOHALA	1	20 15	155 53	61	RA	AA		U S COAST GUARD	
PAHALA 21	A 7421	03	KAU	3	19 19	155 29	870	RA	AA			HAWAIIAN AGR CO	WAIKANA SCD 84.2	A 9025	02	S HILO	1	19 40	155 08	1050	7A			SHINICHI KANESEHO	
PANEA 65	A 7457	02	PUNA	3	19 30	154 57	870	6A				PUNA SUGAR COMPANY	WAIKANDONUIA 174.0	A 9350	01	N KOHALA	1	20 08	155 47	3830	7A			KANUHA RANCH	
PAKAD 37	A 7648	03	KAU	3	19 22	155 28	9000					PUNA SUGAR COMPANY	NEW STATIONS												
PAPAIAKOU 144-1	A 7711	02	S HILO	2	19 47	155 06	203	7A				HAWAIIAN RANCH CO, INC.	ISLAND OF HAWAII												
PAPAIAKOU MAUKA 140.1	A 7721	02	S HILO	2	19 47	155 08	1270	7A				MAUNA KEA SUGAR CO.	HOLUALOA MAKA 69.16	A 1570	04	HAWAII	4	19 38	155 58	1040				SIO WEINRICH	
PEPEKED MAKA 144	A 8000	02	S HILO	2	19 51	155 05	100	7A				MAUNA KEA SUGAR CO.													
PIIKONIA 89	A 8051	02	S HILO	2	19 44	155 10	1730	7A				PEPEKED SUGAR CO													
POHAKULOA 107	A 8063	02	HAMAKUA	1	19 45	155 32	8511	VAR	C			STATE OIV OF FORESTAY													
PUAO 95.1	A 8184	05	KOHALA	5	19 59	155 50	5	RA	AA			STATE DIVISION OF PARKS													
												ERWIN N. RAPP													

‡ DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN 5-NORTH-CENTRAL MOLOKAI: 1-(NO INTRA-ISLAND DIVISIONS) LANAI: 1-(NO INTRA-ISLAND DIVISIONS) MAUI: 1-NORTHEASTERN 2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the Environmental Science Services Administration Regional Climatologist, P. O. Box 3650, Honolulu, Hawaii, or to any Weather Bureau Office near you. Additional precipitation data are contained in "BOURLY PRECIPITATION DATA HAWAII"

DIMENSIONAL UNITS: Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F, precipitation and evaporation in inches, and wind movement in miles. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME: Data in the "Monthly Extremes", "Daily Precipitation" table, "Daily Temperature" table, and "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION: Is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 6-8 inches above the pan.

NORMALS: for all stations are climatological standard normals based on the period 1931-1960.

STATION NAMES: Hawaii state key numbers are included following station names in the several tables.

DELAYED DATA AND CORRECTIONS: will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES: for monthly precipitation totals may be found in the annual issue of this publication.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.
- No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry.
- + And also on an earlier date or dates.
- ++ Biggest observed one minute wind speed. This station is not equipped with an instrument to measure fastest mile data.
- * Amount included in following measurement, time distribution unknown.
- A The letter "A" shown following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index"; indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gages are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.
- B Adjusted to a full month.
- J "Supplemental Data" table.
- M One or more days of record missing. If average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.
- R Amounts from recording gage.
- T Trace, an amount too small to measure.
- V Includes total for previous month.

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- AR Observation made after rain.
- C In Special Column of Station Index indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.
- MO Gage read once monthly; usually on the last day.
- OC Gage readings at periods varying from a few weeks to several months.
- S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.
- SS Observation time is near sunset.
- VAR Observation time is variable.
- W1 Gage read weekly or irregularly only.
- W2 Gage read weekly and last day of month.
- # Thermometers are generally exposed in a shelter located a few feet above eod-covered ground; however, the reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

Subscription Price: 20 cents per copy, monthly and annual, \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Resittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

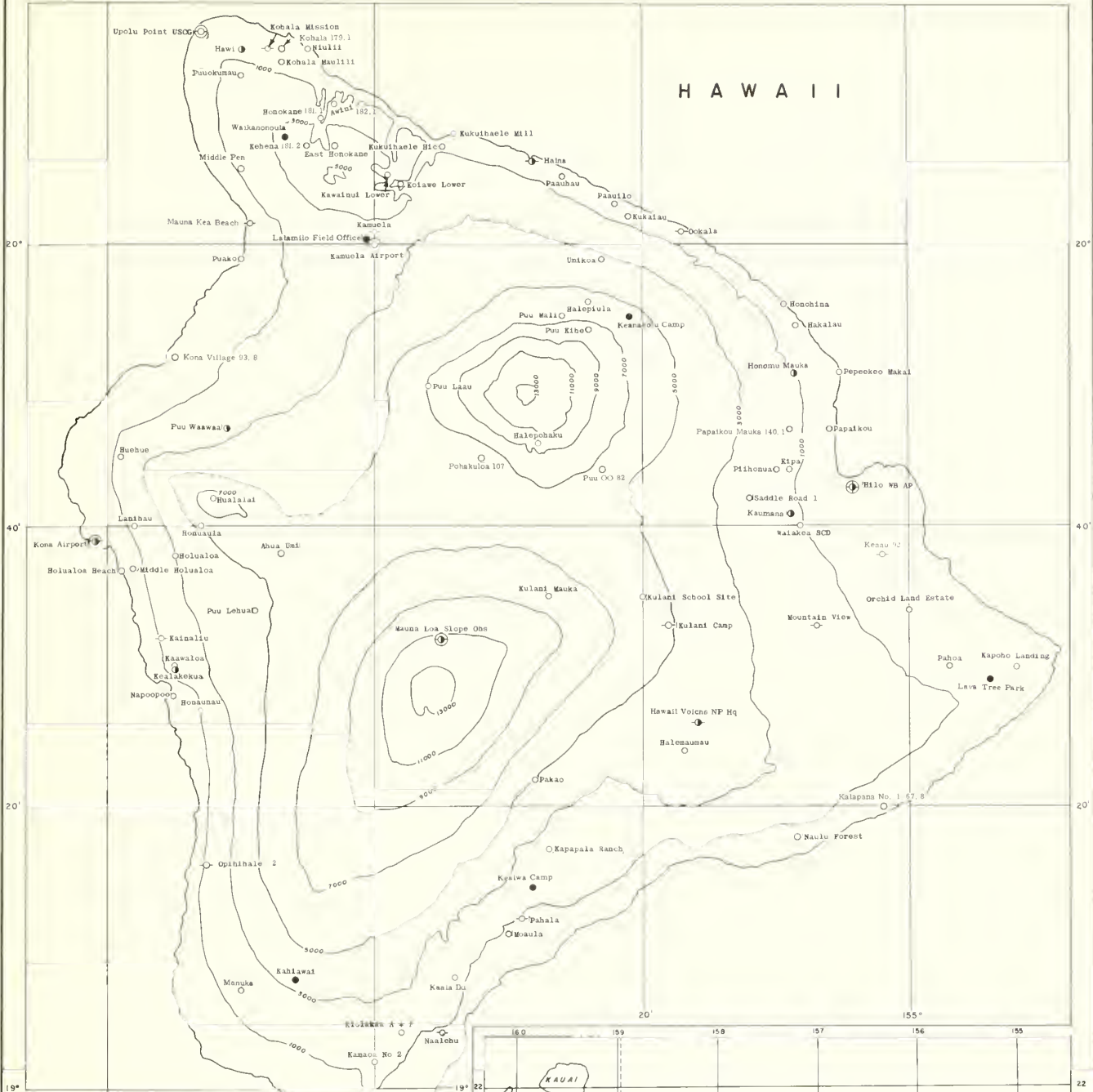
156°

40'

20'

155°

HAWAII



HAWAII

PLATE 2

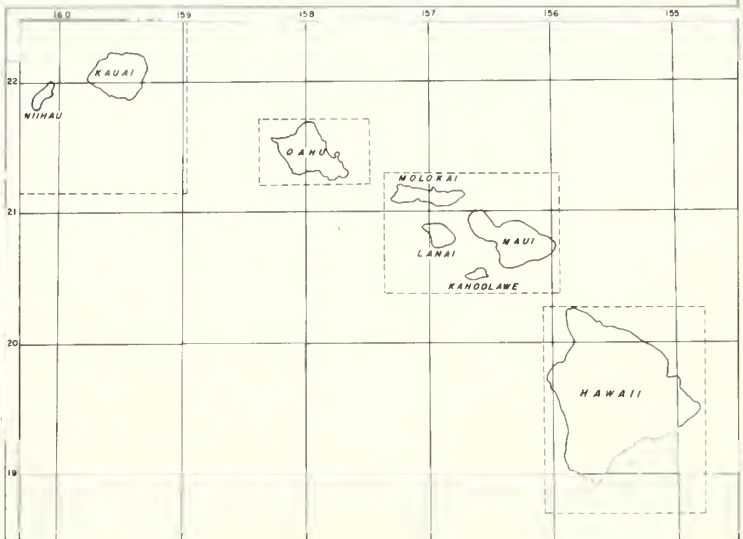
STATUTE MILES



STATION LEGEND

- ● ● Precipitation only
- ⊙ Precipitation, storage
- ● ⊙ Precipitation and Temperature
- ⊙ ● ⊙ Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording
- Recording ● Both types

Double circle combinations indicate the availability of more detailed meteorological data
 All stations use 150th meridian time



156°

USCOMM-ESSA-Asheville, N. C.
Revised 2-69

40'

160

159

158

157

156

155

19°

20°

21°

22°

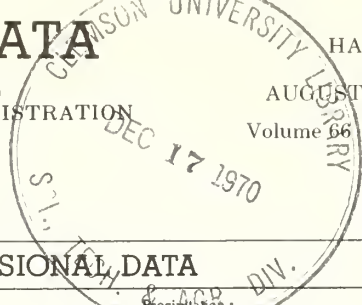
CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

HAWAII

AUGUST 1970

Volume 66 No. 8



MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

Station	Temperature											Precipitation					Snow, Sleet		No. of Days							
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days					Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More			
									No. of Days		30° or Above	20° or Below	10° or Below											0 or Below	Total	
									Max.	Min.																
* * * ISLAND OF KAUAI																										
ANAHOLA 1114	A																									
KANALOHULUHULU 1075	A	73.7	56.2	65.0		78	30+	46	9																	
KAPAA STABLES 1104	A																									
KILAUEA FIELD 17 1135	A																									
KILAUEA POINT 1133	A	81.7	72.9	77.3		85	9	69	30																	
* * * ISLAND OF OAHU																										
KOLOA 936	A																									
LIHUE WSO 1020.1	//R	85.8	75.7	80.8	2.4	87	31+	73	13+																	
MANA 1026	A	88.9	67.6	78.3		91	31	64	6																	
N WAILUA DITCH 1051	A																									
PH WAINIHA 1115	A																									
PUEHU RIDGE 1040	A																									
WAHIAWA 930	A																									
WAIAHI LOWER 1054	A	82.0	68.0	75.0		86	29	64	1																	
WAIMEA 947	A																									
* * * ISLAND OF MOLOKAI																										
HONOLULU OBSERV 702.2	R	90.5	77.1	83.8	4.4	92	28+	74	2																	
HONOLULU WBFC 703	A																									
KAHUKU 912	A	82.9	71.9	77.4		85	30+	69	24+																	
KANEHE MAUKA 781	A																									
KOOLAU DAM 833	A																									
* * * ISLAND OF MAUI																										
LUALUALEI 804	A	88.2	75.1	81.7		91	24	72	13+																	
MAKAPUU POINT 724	A	79.6	70.1	74.9		82	31	67	18+																	
NUUANU RES 4 783	A																									
OPAEULA 870	A	81.5	67.4	74.5	1.5	89	30	64	2+																	
PAOLO VALLEY 718	A																									
* * * ISLAND OF HAWAII																										
PRI WAHIAWA 820.2	A	85.8	67.4	76.6		90	31+	63	17																	
PUNALUU 884	A																									
WAHIAWA DAM 863	A																									
WAIAHOE 837	A																									
WAIALUA 847	A	86.7	67.7	77.2	.5	90	21	64	10+																	
WAIKIKI 717.2	A	88.6	73.9	81.3		90	29+	72	12+																	
WAIMANALO EXP FARM	A	85.4	72.5	79.0		87	30	70	31+																	
WAIPIHU 750	A																									
* * * ISLAND OF LANAI																										
KUALAPUU 534	A																									
MAPULEHU 542	A																									
MAUNALO A 511	A																									
MOLOKAI AP 524	A	83.7	71.7	77.7		85	29+	70	21+																	
* * * ISLAND OF LANAI																										
LANAI CITY 672	A	79.4	65.8	72.6	.7	87	8+	58	1																	
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MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

HAWAII
AUGUST 1970

Continued

Station	Temperature											Precipitation											
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
										Max.		Min.						Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										80° or Above	32° or Below	32° or Below	50° or Below										
KAMUELA AIRPORT 191	74.5				80	8	50	15		0	0	0	0	1.91		1.19	26	.0	0		2	1	1
KEAAU 92	81.2	67.5	74.4	-.7	84	30	65	10+		0	0	0	0	23.58	11.83	11.64	26	.0	0		25	9	4
KEALAKEKUA 26.2	79.2	65.1	72.2		82	27	63	21+		0	0	0	0	4.25		1.21	25	.0	0		9	1	1
KONA (KAILUA) 68.3	85.6M	72.7M	79.2M		87	31+	69	3		0	0	0	0	3.32				.0	0				
KUKUIHAELE HIC 199														14.54	8.57	3.56	26	.0	0		18	8	5
KULANI CAMP 79	65.7	51.2	58.5		77	19	46	12+		0	0	0	0	17.65		12.43	26	.0	0		12	3	3
PAHALA 21					87	12	61	10		0	0	0	0	7.68	4.62	5.72	26	.0	0			2	2
POHAKULOA 107														1.30				.0	0				
PUAKO 95.1														.65		.62	26	.0	0		1	1	0
PUU WAAWAA 94.1	88.4	72.8	80.6		92	19	66	27		7	0	0	0	1.70	-.43	.66	26	.0	0			1	0
UMUKA 118														12.42	7.36	10.33	26	.0	0		5	2	1
WAIKAE SCD 88.2														38.49		19.20	26	.0	0		25	12	9
ISLAND			72.2											10.94				.0					

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 94° ON THE 15TH AT KEAWAKAPU BEACH 260.2, MAUI
 LOWEST TEMPERATURE: 32° ON THE 9TH AT MAUNA LOA SLOPE OBS, HAWAII
 GREATEST TOTAL PRECIPITATION: 43.03 AT HONOMU MAUKA 138, HAWAII
 LEAST TOTAL PRECIPITATION: .00 AT 10 STATIONS
 GREATEST ONE-DAY PRECIPITATION: 19.20 ON THE 26TH AT WAIKAE SCD 88.2, HAWAII

See Reference Notes Following Station Index

SPECIAL WEATHER SUMMARY

The highlight of the month's weather in Hawaii was the near approach of Tropical Storm MAGGIE, which began its career off the coast of southern Mexico and then drifted westward toward the Islands. MAGGIE appears to have reached its maximum strength with winds of approximately 65 m.p.h. when still several hundred miles southeast of Hawaii Island. At its closest, less than 100 miles south of South Point, the southernmost spot in the Hawaiian Islands (and in the United States), MAGGIE had weakened to a tropical depression, with peak winds of only about 35 m.p.h. near its center. Nevertheless, it was still capable of causing torrential rains and high seas.

Hawaii Island bore the brunt of the storm. Owing apparently to the effects of MAGGIE's circulation in erasing the trade wind inversion and in strengthening the trade winds, rainfall over the lower windward (eastern and northeastern) flanks of Mauna Loa and Mauna Kea was unusually heavy, with a number of stations on the slopes above

the Hilo coast reporting 24-hour amounts in excess of 18 inches and storm totals of 25 inches or more. Despite these accumulations, intensities seldom exceeded an inch an hour, so that only minor and local flooding, landslides, and crop damage occurred. Surf estimated to be up to 25 feet in height pounded the Kapoho Beach area on the easternmost tip of Hawaii Island, but without doing significant damage.

Otherwise, it was a dry month for most of the State. All of Kauai and almost all of Oahu, Molokai, and Maui had below average rainfall for the month, with leeward (western and southern) areas reporting many gages with well under half their monthly means.

On Hawaii Island, a number of stations with long periods of record exceeded their previous greatest 24-hour total for August. A selected list of these is given below.

Stations Whose Previous Greatest 24-Hour Rainfall Totals
were Exceeded in August 1970

(25 years of record or more, only)

Station	Length of Record (Yrs.)	Previous August 24-Hour Extreme	August 1970
<u>HAWAII ISLAND</u>			
Hakalau	65	8.29 inches	10.15 inches
Hawaii Volcanoes NP Hq.	57	9.05	11.02
Hilo WSO	27	9.38	9.65
Honohina	65	7.78	13.93
Honomu Mauka	59	12.33	18.50
Keaau	65	8.10	11.64
Mountain View	65	11.14	15.60
Ookala	65	8.50	10.50
Pahoa	65	7.28	9.35
Papaikou	65	8.13	11.30
Papaikou Mauka	44	12.65	14.07
Pepeekeo Makai	65	6.55	8.54
Umikoa	49	9.30	10.33

Saul Price
Regional Climatologist for the Pacific Region
National Weather Service
P. O. Box 3650
Honolulu, Hawaii 96811

DAILY TEMPERATURES

HAWAII
AUGUST 1970

Station	Day of Month																															Average		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
* * *																																		
ISLAND OF KAUAI																																		
KANALOHULUHULU 1075	MAX MIN	74 55	76 56	74 56	72 56	72 57	73 57	74 53	74 46	73 55	75 54	69 56	69 57	76 59	75 58	74 47	74 61	73 61	76 61	75 62	76 51	74 56	74 54	77 56	73 58	69 58	69 54	77 58	78 58	78 58	70 57	73.7 56.2		
KILAUEA POINT 1133	MAX MIN	84 74	81 72	83 74	82 72	82 74	82 73	83 74	85 73	80 73	84 72	80 71	80 71	82 74	80 75	79 72	82 75	80 73	82 74	80 71	82 73	81 72	82 74	82 73	83 70	80 71	80 75	83 75	83 76	82 75	81 73	81.7 72.9		
LIHUE WSD 1020.1	MAX MIN	85 74	87 74	85 76	86 74	87 75	85 73	86 74	87 76	85 77	86 77	85 77	86 74	86 73	85 74	87 76	87 75	86 77	87 77	86 78	87 77	86 78	86 76	84 75	84 75	86 76	84 76	86 78	85 77	87 78	87 76	85.8 75.7		
MAKAHUEA POINT 940.1	MAX MIN	85 69	83 77	87 72	86 77	86 70	85 67	86 68	85 77	85 77	86 74	86 68	86 72	86 69	88 73	86 68	87 72	86 75	84 75	84 71	86 73	86 71	86 75	86 71	87 72	85 75	83 71	85 71	81 64	84 70	86 76	84 74	85.3 72.0	
MANA 1026	MAX MIN	90 66	87 65	87 65	89 65	90 64	89 62	88 63	89 62	89 62	90 66	88 66	90 67	88 67	90 69	89 70	90 68	89 68	90 68	90 68	90 68	90 68	90 68	90 68	90 68	88 67	88 65	90 68	88 70	88 70	91 69	91 67	89.9 67.6	
NIU RIODE 1035	MAX MIN	83 65	84 66	83 65	84 65	83 62	84 63	87 62	85 62	89 64	89 66	89 66	89 65	88 65	89 66	88 67	90 65	91 66	92 65	86 65	86 64	87 65	86 65	85 64	86 65	82 61	82 60	81 60	80 60	82 63	85 62	83 62	85.6 63.9	
WAIHI LOWER 1054	MAX MIN	83 64	82 65	81 66	84 68	85 66	82 67	81 69	82 68	81 65	84 68	84 69	83 66	80 65	80 67	81 68	83 69	81 71	82 69	82 71	84 67	82 70	82 67	84 67	81 66	82 65	82 69	80 68	78 70	80 70	78 71	82 68	82.0 68.0	
* * *																																		
ISLAND OF OAHU																																		
EWA PLANTATION 741	MAX MIN	87 70	85 70	86 73	86 70	86 71	86 71	87 70	86 70	86 67	87 71	86 69	85 70	86 71	87 72	86 71	87 73	87 71	87 69	88 68	87 70	87 70	86 72	87 74	85 74	87 74	85 72	86 72	87 72	86 72	88 72	86.5 70.9		
HONOLULU W8FC 703	MAX MIN	90 77	90 74	90 77	90 78	90 75	91 78	90 78	91 78	92 76	90 78	90 76	91 77	91 78	90 77	91 79	91 79	91 77	91 79	90 77	91 77	90 77	90 76	91 76	89 75	91 75	89 75	91 78	90 78	90 76	89 77	90.5 77.1		
HONOLULU SUBSTA 704	MAX MIN	83 74	82 73	83 74	83 75	83 71	83 73	84 75	83 75	83 75	83 75	82 74	83 74	83 74	82 75	83 75	84 75	84 76	83 74	84 75	83 76	83 75	83 75	84 75	83 75	83 74	82 75	82 74	85 77	85 77	83 75	82 74	83.2 74.6	
KAHUKU 912	MAX MIN	85 72	85 72	85 73	85 73	85 75	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	85 74	87 72	
KANEHE MAUKA 781	MAX MIN	83 70	82 70	82 71	82 69	82 71	83 71	83 71	84 74	83 71	84 71	83 69	83 70	83 72	82 70	82 72	82 73	84 71	83 71	84 71	84 71	84 71	84 71	84 71	84 71	84 71	84 71	84 71	84 71	84 71	84 71	84 71	84 71	82.9 71.9
LUALUALEI 804	MAX MIN	88 74	88 77	89 77	87 75	88 74	87 75	88 74	88 75	88 76	89 76	89 76	88 76	87 76	88 77	88 77	88 77	87 75	88 74	88 77	88 77	89 76	88 75	89 75	88 75	89 75	88 75	89 75	88 75	87 76	88 76	89 76	88.2 75.1	
MAKAUU POINT 724	MAX MIN	80 73	80 71	79 73	79 70	79 69	79 73	79 70	79 68	80 69	80 69	80 67	80 67	81 70	80 69	80 70	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	80 67	79.6 70.1	
OPAEULA 870	MAX MIN	81 64	81 64	81 68	81 68	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81.5 67.4	
PRI WAHIAWA 820.2	MAX MIN	84 66	85 67	85 64	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85.8 67.4	
WAIALUA 847	MAX MIN	87 64	87 66	87 67	86 65	86 66	86 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	85 66	86.7 67.7	
WAIKIKI 717.2	MAX MIN	90 73	89 74	89 73	88 73	88 73	88 75	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88.6 73.9	
WAIMANALO EXP FARM	MAX MIN	85 74	84 72	83 73	84 72	85 70	86 73	85 71	86 74	85 71	86 74	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85 72	85.4 72.5	
* * *																																		
ISLAND OF MOLOKAI																																		
MOLOKAI AP 524	MAX MIN	84 71	84 76	85 70	84 73	83 72	83 70	82 70	84 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83 70	83.7 71.7	
* * *																																		
ISLAND OF LANAI																																		
LANAI CITY 672	MAX MIN	79 58	79 65	81 64	81 66	87 67	87 61	84 68	87 67	79 65	81 66	79 66	78 66	79 66	79 66	78 66	78 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79 66	79.4 65.8	
* * *																																		
ISLAND OF MAUI																																		
HALEAKALA RS 338	MAX MIN	61 41	63 45	61 40	63 43	68 41	65 44	65 43	64 44	65 44	66 44	68 44	63 49	71 55	71 55	67 48	65 50	67 50	65 50	66 47	67 43	62 39	62 42	67 43	65 45	68 45	67 51	66 48	66 40	67 40	67 40	65.5 46.3		
HALEAKALA SUMMIT 338.4	MAX MIN			60 44	64 49	64 48	64 48	63 44		58 41	60 44	56 46	59 48		53 46	54 42	58 45	58 44	60 42		58 39	58 42	60 44	56 44	56 44	56 44	54 44	54 44	59 40			59 40		
HANA AIRPORT 355	MAX MIN	84 68	83 70	84 71	86 71	84 71	87 71	85 71	85 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	86 71	85.3 70.8	
KAANAPALI AIRPORT	MAX MIN	87 70		87 73																														
KAHULUI WSD 398	MAX MIN	89 72	89 69	89 70	88 72	90 73	89 73	88 72	89 72	89 72	91 64	90 74	87 70	87 73	87 72	87 73	88 74	89 74	88 74	88 74	87 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88 74	88.6 71.9	
KAILUA 446	MAX MIN	78 65	79 68	79 68	79 67	80 68	80 68	80 68	79 68	79 68	80 69	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	79 67	78.9 68.1	
KEAWAKAPU BEACH 260.2	MAX MIN	86 65	89 65	91 65	92 65	88 67	91 65	91 64	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90 65	90.3 66.8	
KULA SANATORIUM 267	MAX MIN	76 58	75 58	74 59	75 58	76 59	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	76 60	75.5 59.5	

See Reference Notes Following Station Index

DAILY TEMPERATURES

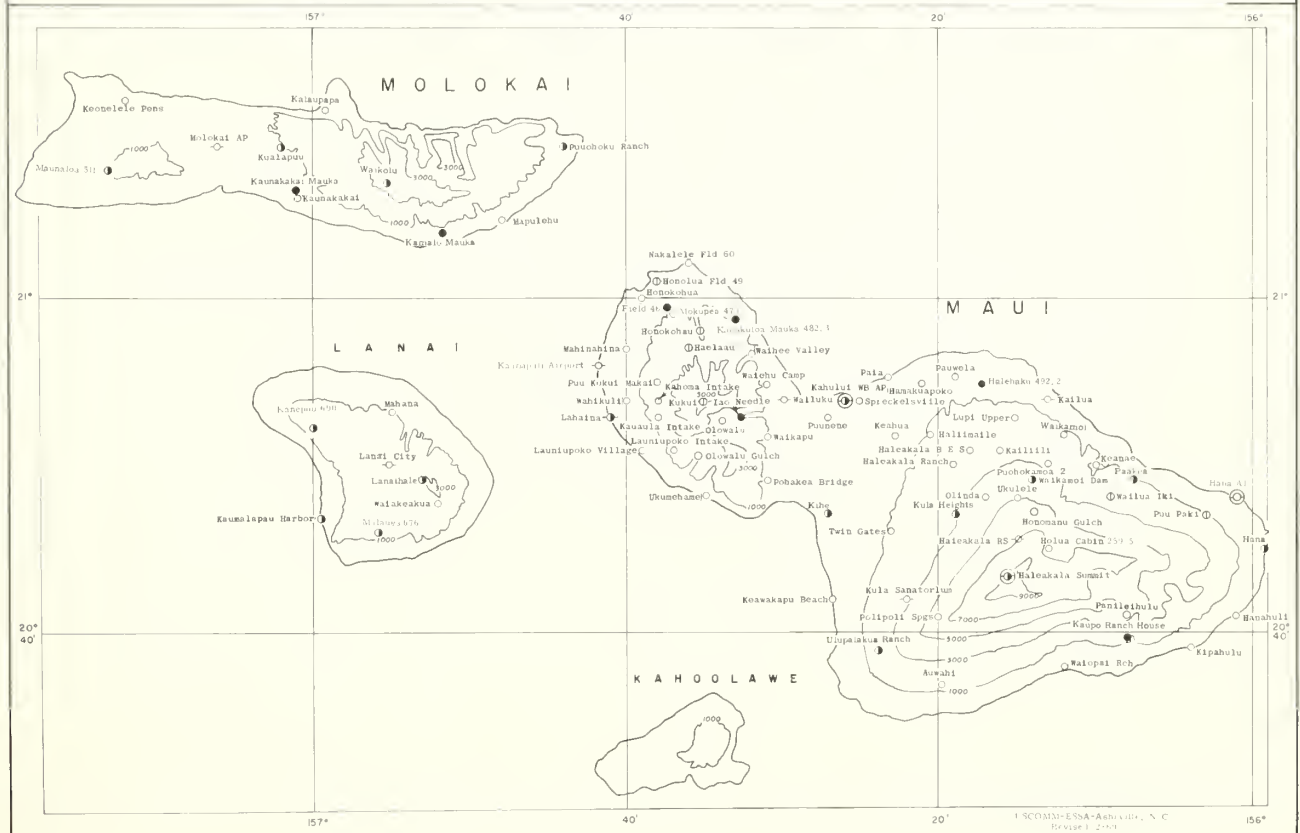
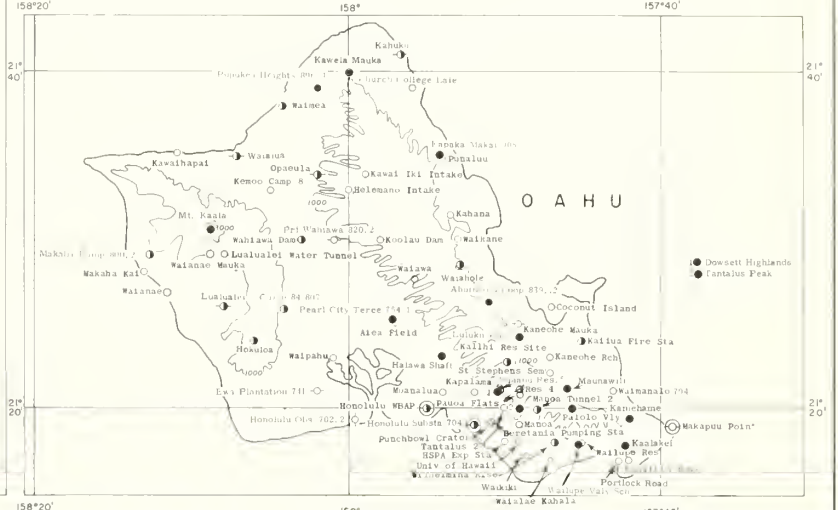
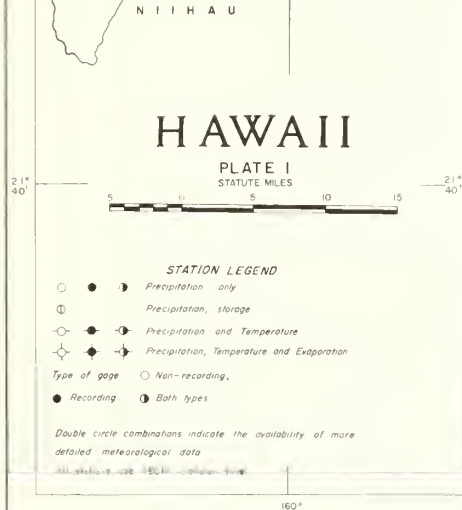
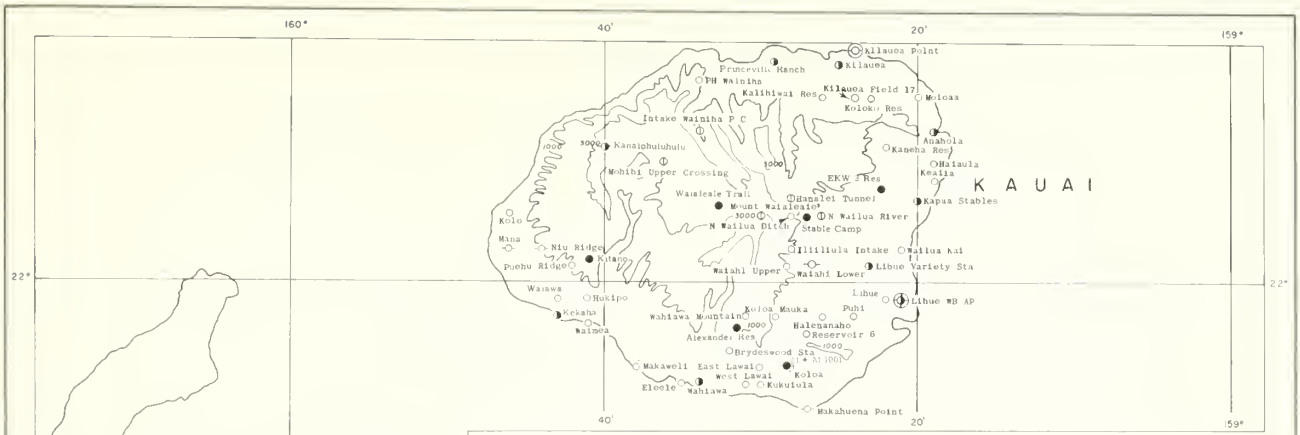
HAWAII
AUGUST 1970

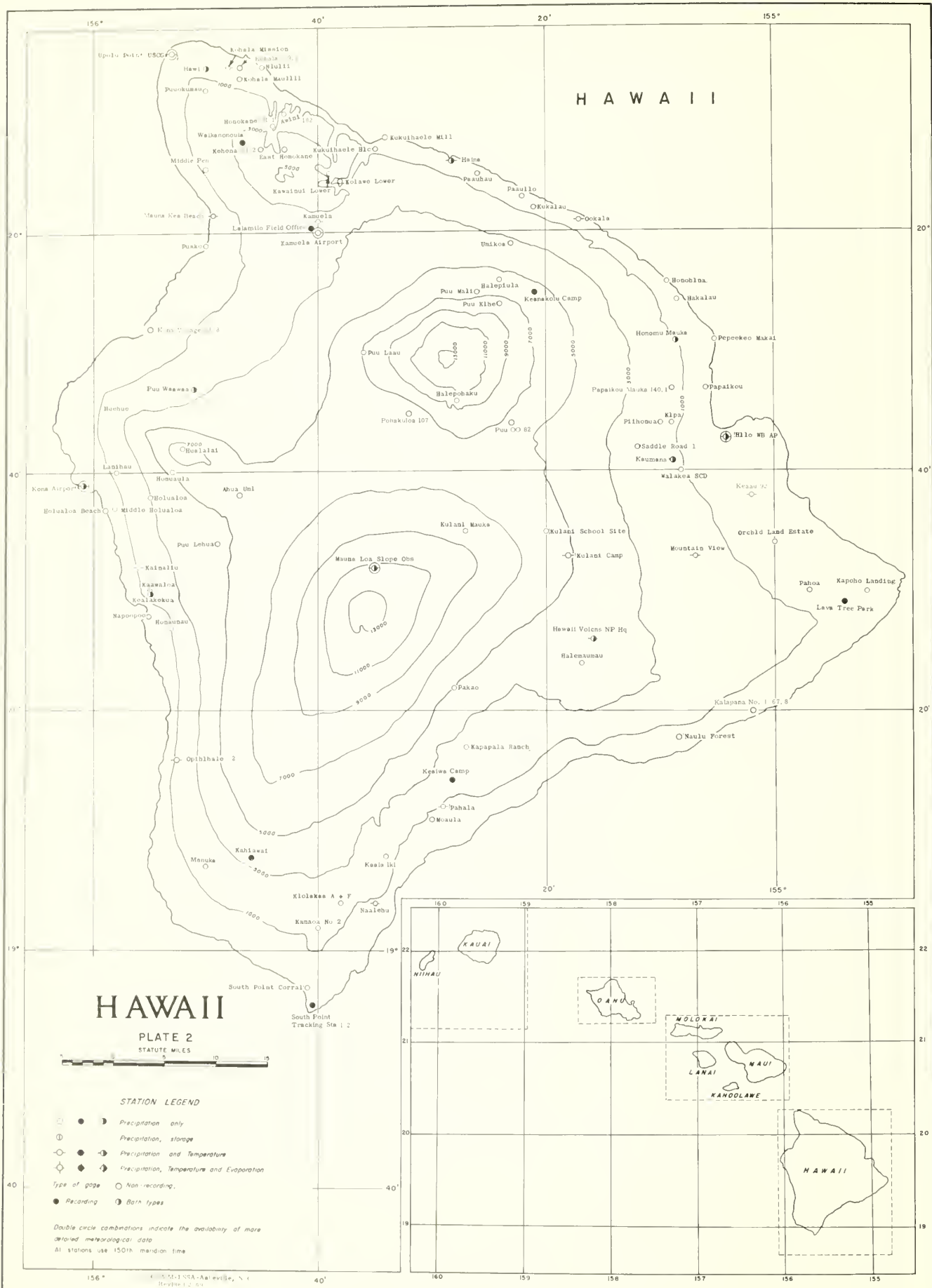
Continued

Station	Day of Month																															Average			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
KAHAINA 161	MAX 69	87	87	88	89	88	88	88	88	88	87	88	88	88	89	89	91	92	89	89	88	88	88	89	87	89	89	88	88	88	89	89	88	89	88.5
KAHAINA 161	MIN	69	71	71	68	67	69	71	63	68	68	71	70	69	69	72	70	71	71	70	70	69	68	68	72	71	74	72	71	70	72	68	68	69.9	
KAHAIKU 386	MAX		84	83	84	83	83				84	85	84	81	83			84	83	85	83	83		83	81	83	79						84		
KAHAIKU 386	MIN		72	72	72	73	72				71	72	71	70	73			73	73	74	74	73		72	72	73	74						72		
ISLAND OF HAWAII																																			
KAHAIKU 214	MAX	84	84	84	84	83	75	84	82	82	82	85	85	82	84	84	84	84	83	83	81	82	84	83	84	80	84	74	74	82	81	80	83	82.2	
KAHAIKU 214	MIN	66	69	68	66	67	66	68	66	67	66	67	67	66	68	67	67	67	69	69	69	69	67	67	67	67	67	67	67	70	68	69	67	67.4	
HAWAII VOLCANO NP HQ 54	MAX	71	72	65	68	69	72	70	71	70	71	70	69	71	77	72		72	72	73	72		71	68	72	70	68	69	66	68	76	69	70.5		
HAWAII VOLCANO NP HQ 54	MIN	55	53	55	54	56	56	56	57	53	54	56	55	54	54	58		57	55	59	55		56	57	57	59	61	44	58	57	59	53	55.6		
HILLO WSO 87	MAX	82	82	83	82	81	82	84	82	83	83	82	82	82	82	83	84	84	83	80	84	84	83	81	83	76	77	82	80	85	83	83	82.4		
HILLO WSO 87	MIN	64	66	66	65	68	66	68	66	64	64	68	66	66	68	69	68	68	69	70	67	66	68	68	68	72	71	69	70	66	70	64	67.4		
KAINALIU 73.2	MAX	79	79	80	79	80	80	79	81	77	79	80	79	80	81	79	78	80	81	81	79	79	80	80	79	80	80	82	79	77	77	78	79.4		
KAINALIU 73.2	MIN	63	64	67	63	65	65	64	67	65	64	66	64	64	63	64	65	65	65	65	64	64	64	64	64	64	66	65	68	66	66	66	65.1		
KAMUHILLA 192.2	MAX	73	74	73	73	71	70	72	71	72	73	73	72	70	74	72	73	75	71	70	73	75	72	74	72	74	70	71	72	73	78	72	72.5		
KAMUHILLA 192.2	MIN	58	60	60	60	59	60	59	59	60	60	60	59	60	60	60	62	62	60	60	60	60	59	60	60	60	60	62	62	60	59	60	60.3		
KAMUHILLA AIRPORT 191	MAX	76	76	72	75	74	72	74	80	75	75	75	75	72	75	75	74	75	75	72	75	74	76	74	75	76	71	71	72	75	76	76	74.5		
KAMUHILLA AIRPORT 191	MIN	58	58	55	62	56	52	58	58	58	58	58	58	58	50	52	52	52	52	52	52	59	52	52	52	54	56	60	56	56	61	52	52		
KEAHO 92	MAX	83	82	82	81	81	80	82	81	81	81	81	82	81	82	81	82	83	82	82	83	81	81	79	80	83	75	77	81	82	84	81	81.2		
KEAHO 92	MIN	66	66	67	66	67	68	66	68	65	65	66	67	66	68	68	68	69	69	68	69	67	67	67	67	67	67	69	70	68	68	68	66	67.5	
KEALAKEKUA 26.2	MAX	77	79	79	78	79	81	80	81	77	78	79	79	77	81	78	78	80	81	80	80	78	79	78	81	80	80	82	79	78	78	80	79.2		
KEALAKEKUA 26.2	MIN	63	65	65	65	64	65	64	65	65	64	65	63	64	64	64	65	66	65	65	63	65	65	66	65	67	68	65	66	67	67	67	65.1		
KOHALA MISSION 175.1	MAX	81	81	80	80	80	78	80	81	79	80	81	81	79	80	82	81	81	80	80	80	81	80	80	79	80	73	74	79	78	81	81	79.7		
KOHALA MISSION 175.1	MIN	66	67	68	67	69	68	69	68	69	69	70	68	68	69	70	68	69	70	69	69	69	68	68	67	69	70	68	69	70	69	69	69	68.6	
KONA (KAILUA) 58.3	MAX	86	87	85	86	87	84	86	85	86	85	86	85	86	85	86	86	86	85	87	87	87	87	87	80	83	75	77	81	82	84	81	81.2		
KONA (KAILUA) 58.3	MIN	79	69	72	72	73	71	81	71	81	71	73	72	70	72	72	72	75	72	71	71	71	71	71	72	74	72	73	73	73	73	73	72.7		
KULANI CAMP 79	MAX	65	66	62	63	61	67	64	66	65	65	65	64	65	67	67	67	64	67	67	65	67	67	65	63	65	64	67	67	65	64	69	64	65.7	
KULANI CAMP 79	MIN	45	49	52	49	51	48	49	50	49	49	51	46	48	50	53	53	55	49	55	47	50	54	53	55	55	56	57	55	50	55	49	51.2		
MAUNA LOA SLOPE 085	MAX	54	56	62	66	63	61	59	52	52	57	59	56	57	58	55	54	60	59	57	53	50	53	54	61	50	49	49	54	55	52	57	55.9		
MAUNA LOA SLOPE 085	MIN	39	37	40	46	45	44	38	33	32	36	37	40	39	38	39	38	42	39	40	37	33	35	33	38	39	42	37	38	38	38	38	38.3		
MOUNTAIN VIEW 91	MAX	79	79	79	77	77	77	78	77	77	77	77	78	76	79	78	76	79	79	79	77	76	78	78	79	79	79	79	79	70	71	75	81	81	81.2
MOUNTAIN VIEW 91	MIN	59	59	59	61	62	63	64	60	60	60	63	61	61	63	64	64	64	64	64	64	61	61	61	61	61	61	65	67	65	65	59	59	59	62.0
NAALEHU 14	MAX	83	82	82	81	82	82	82	82	82	82	78	81	81	82	82	82	82	82	82	82	82	82	82	81	82	78	76	78	78	81	81	81.2		
NAALEHU 14	MIN	67	67	67	66	68	67	70	70	70	68	68	69	68	67	67	67	68	69	72	70	68	68	68	67	70	69	67	69	69	67	67	68	68.2	
OKALA 223	MAX	81	80	82	80	81	76	81	81	80	80	81	82	80	82	82	83	82	81	80	81	82	82	80	81	81	74	77	80	79	82	81	80.5		
OKALA 223	MIN	68	68	69	67	67	67	68	67	67	67	66	66	66	69	69	70	69	69	69	69	68	68	68	68	68	69	68	67	66	67	67	67	67.8	
OPIHIHALE 2 24.1	MAX	81	79	78	79	81	82	82	81	82	87	78	79	82	81	77	80	78	82	83	81	78	80	80	79	78	81	78	78	82	79	76	80.1		
OPIHIHALE 2 24.1	MIN	62	62	63	62	62	62	63	66	66	66	63	61	62	62	63	65	65	67	66	66	62	64	64	65	65	66	66	66	68	66	60	64.1		
PAHALA 21	MAX		82	84	83	83					84	80	87	83	83			84	84	85	84	84		84	84	80	79	77				83			
PAHALA 21	MIN		62	64	65	63	64				61	65	65	64	65			65	65	66	66	64	64	68	68	69	67	64				63			
PAAK 95.1	MAX	88	87	90	91	89	89	91	88	88	89	88	87	90	88	88	85	87	90	92	91	89	89	88	89	89	88	85	88	85	86	89	88.4		
PAAK 95.1	MIN	73	74	72	74	74	69	72	74	73	72	75	73	74	73	76	74	74	74	70	72	75	73	72	74	76	72	66	73	71	69	73	72.8		
POLOU POINT JSCG 159.2	MAX	83	80	83	84	85	83	82	84		82	86	79	85	83	85	85	84	82	85	83	82	84	83		78	79	82	78	82	81	82.6			
POLOU POINT JSCG 159.2	MIN	69	61	72	70	72	70	69	73		72	69	72	70	72	71	71	72	72	72	71	71	71	71		73	71	71	71	74	73	71.0			

EVAPORATION AND WIND

Station	Day of Month																															Total or Avg.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF KAUAI																																	
LIHUE WSO 1020.1	EVAP	.37	.29	.39	-	.45	.38	.40	.30	.24	.37	.33	.35	.37	.24	.37	.32	.40	.37	.37	.36	.27	.39	.42	*	*	.74	.34	.46	.22	.41	10.638	
LIHUE WSO 1020.1	WIND	144	191	207	234	226	230	221	196	171	183	195	177	186	154	186	176	190	227	215	178	159	200	198	204	*	*	640	222	196	162	222	6090
LIHUE WSO 1020.1	MAX	90	90	89	90	89	85	88	90	88	87	88	88	88	86	88	88	88	86	85	86	91	88	84	87	-	-	87	81	85	92	89	87.6
LIHUE WSO 1020.1	MIN	67	67																														

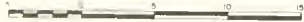




HAWAII

HAWAII

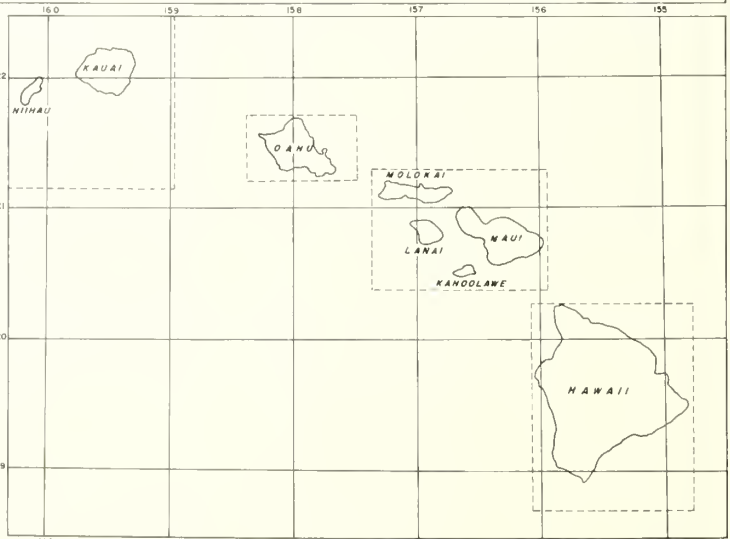
PLATE 2
STATUTE MILES



STATION LEGEND

- ● ☉ Precipitation only
 - ⊖ ● ☉ Precipitation, storage
 - ● ☉ Precipitation and Temperature
 - ● ☉ Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording,
● Recording ☉ Bain types

Double circle combinations indicate the availability of more
advanced meteorological data
All stations use ISO-K meridian time





MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

HAWAII
SEPTEMBER 1970

Continued

Station	Temperature										Precipitation																
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days						
										Max.		Min.						Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										81° or Above	32° or Below	32° or Below	1° or Below														
KAMUELA AIRPORT 191	75.1	54.7	64.9		80	28	47	25		0	0	0	0	.11		.03	19+	.0	0		0	0	0				
KEAAU 92	81.8	66.0	73.9	- 1.0	83	30+	62	30		0	0	0	0	5.36	- 3.69	.68	18	.0	0		20	2	0				
KEALAKEKUA 26.2	79.5	64.5	72.0		81	14+	62	11		0	0	0	0	4.43		1.07	30	.0	0		9	4	1				
KONA (KAILUA) 68.3	85.7M	70.7M	78.2M		87	28+	68	21		0	0	0	0	3.70		1.06	16	.0	0				1				
KUKUHAOLE HIC 199														2.06	- .73	.51	22	.0	0		7	1	0				
KUJLANI CAMP 79	64.9	49.6	57.3		77	24	42	30		0	0	0	0	4.74		.45	28	.0	0		18	0	0				
PAHALA 21	81.4M	62.9M	72.2M	- 1.5	83	18+	61	30+		0	0	0	0	3.01	.48	.92	29	.0	0		1	0	0				
POHAKULOA 107														.68				.0	0				0				
PUNAO 95.1										8	0	0	0	.33		.20	15	.0	0		2	0	0				
PUU WAHAA 94.1					90	29+	68	30+						.78	- 1.55			.0	0				0				
UMIKOA 118														1.61	- .55	.30	23	.0	0				0				
WAIKOA SCO 88.2														11.25				.0	0				0				
ISLAND			71.1											3.42				.0									

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 93° ON THE 7+ AT KEAWAKAPU BEACH 260.2, MAUI

LOWEST TEMPERATURE: 31° ON THE 14TH AT MAUNA LOA SLOPE OBS, HAWAII

GREATEST TOTAL PRECIPITATION: 14.01 AT WAIKAMOI DAM 36, MAUI

LEAST TOTAL PRECIPITATION: .00 AT 9 STATIONS

GREATEST ONE-DAY PRECIPITATION: 4.02 ON THE 18TH AT KOOLAU DAM 833, OAHU

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
SEPTEMBER 1970

Station	Total	Day of Month																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
ISLAND OF KAUAI																																			
ANAHOLA 1114	A	1.38	.30	.13					.25	.04	.03	.03	*	.02	.22	.05	.17	*	*	.05		.05	.11												
BYDESWOOD STA 965	A	3.02	.24	.37	.02	.01	*	*	.40	.04	.03	.03	*	.01	.08	.02	.17	.65	*	*	.67	.02	.14	.06								.03	.05	.01	
EAST LAKE 954	A	4.43	.02	.61	.05	.02	*	*	.61	.53	.10	T	*	*	.09	.17	.04	.04	.33	*	*	.81	.11	.16	.12	.02	*	*	*	*	.31	.05	T		
ELELE 927	A	.68	.02	.14					.11				*	T	T			.05	.12	*	*	.22	.01	T							.01				
HALEAULA 1110	A	1.81	.35	.17					.35	.04		.04	*	.03	.28	.10	.06			*	*	.15	.09	.10								.05			
HALENANAH 1006	A	4.83	.17	.48	.09	.18	*	*	.53	.11	.46	.04	*	.28	.32	.17	.14	.45	*	*	.94	.09	.19	.08	.02	*	*	*	*	.02	.07	.17			
HUIPO 945	A	.69												.39	.13																				
ILLILIULA INTAKE 1050	A	11.34	.94	1.33	.12	.10	*	*	1.30	.87	.05	.02	*	.26	1.04	.10	.35	1.13	*	*	2.93	.14	.17	.09	.04	*	*	*	*	.26	.06	.04			
INTAKE WAINIPA PC 1086	A	8.79				1.42	*	*	1.45	*	*	*	*	1.15	*	*	2.70	*	*	*	1.70	*	*	*	.37	*	*	*	*	*	*	*	*	*	
KALIHIWAI RES 1131	A	4.76	.60	.30	.05	.02	*	*	.65	.02	.30	.05	*	.03	.36	.42	.11	.25	*	*	.77	.10	.14	.21					.07		.31				
KANALOHULUHULU 1075	A	2.80	.15	.04		.04	.09	.07	.33		.20	.25	*	.41	.05		.03	.32	.24	.09	*		.13	.03	.03	.03	.03	.03	.03	.03	.06	.66			
KANEHA RESERVOIR 1092	A	4.29	.50	.40				.40	.16		.20	.25	*	.25	.35	.45	.15	.05	*	*	.45	.15	.15	.18	.05	*	*	*	.15	.02					
KAPAA STABLES 1104	A	1.95	.32	.35		.02	*	*	.64	.04	.19	*	*	.14	.08		.05			*	.32	.05	.05	.02	*	*	*	*	.20						
KEALIA 1112	A	1.61	.15	.21		.02	*	*	.23	.02			*	.10	.20	.02	.06	.02	*	*	.13		.15	.05					.20	.02					
KEKAHA 944	A	.91												.36	.46												.06					.03			
KILAUEA 1134	A	2.87	.40	.06		.05	*	*	.38		.25	.19	*	.06	.27	.01	.05		*	*	.13	.04	.02	.06					.03	.87					
KILAUEA FIELE 17 1135	A	3.54	.37	.11	.01		*	*	.52	.01	.42	.05	*	.06	.16	.23	.03	.08	*	*	.36	.13	.17	.17	.01	*	*	*	.08	.57					
KILAUEA POINT 1133	A	1.80			.03		.14	.12	.04	.05	.08	.05	.01	.01	.21	.11	.01	.02	.09	.07	.10	.07								.60					
KOLO 1033	A	1.04			.13									.38							.23									.27					
KOLA 936	A	4.44	.09	.13		.11	*	*	.63	.15	.12	.08	*	.20	.12	.08	.04	.15	*	*	1.52	.17	.32	.30	.04	*	*	*	.04	.11					
KOLA MAUKA 994	A	6.79	.63	.49	.09	.19	*	*	.53	.48	.19	.05	*	.17	.35	.15	.15	.86	*	*	1.89	.08	.16	.14	.02	*	*	*	.04	.10	.03				
KOLOHE RES 1137	A	4.39	.44	.05	.10			.69	.45	.19	*	*	*	.04	.55	.20	.12	.11	*	*	.69	.05	.10	.10	.01	*	*	*	.24	.02	.23				
KUKUIA 925	A	3.40	.10	.55	T	.10	*	*	.64	.04	.19	*	*	.32	.05	.06	.01	.16	*	*	.58	.02	.14	.14	.01	*	*	*	.13	.02					
LIHUE VARIETY STA	A	3.40	.32	.42	.15	.09	*	*	.16	.03	.04	.19	.15	.15	.26	.12	.13	.15	.02	.38	.05	.06	.25	.16	.05	*	*	*	.01						
LIHUE 1020	A	2.04	.29	.03	.02	.07	*	*	.17	.03	.30	.07	*	.18	.12	.10	.05	.05	*	*	.14	.05	.13	.09	.01	*	*	*	.14						
LIHUE WSQ 1040.1	//R	1.42	.07	T	T	.03	.04	.02	T	T	.23	.01	.05	T	.02	.13	T	.02	.03	.13	T	.03	T	.10						T	.42				
MAKAHUNA POINT 940.1	A	.05				.15	.04		.01	.03	.07		.08		.06	.07	.01	.14	.14	.08	.12	.01	.03	.02	.05	.04	.09								
MAKAWELL 965	A	.55	.07																		.03	.03	.01										.37		
MAKA 1026	A	6.03																																.17	
MOHINI UPR CROSS 1083	A	-	.25	.23		.08	.16	.08	.16												.23						1.75								
MOLOAA 1145	A	.91	.33						.28				.04		.12	.01	.04		*	*															
MOLOAA RESERVOIR 1047	A	9.09		.25										1.53	3.65																				
NIU FIELE 1015	A	13.59	1.00	1.40	.35	.10	*	*	1.20	.50	.30	.20	*	.56	1.10	.36	.25	.80	*	*	3.90	.46	.40	.30	.10	*	*	*	.31				1.06		
N WAILUA DITCH 1001	A	5.24	.63	.32	.02	.01	.05	.31	.22	.21	.01	.30		T	T	.32	.07	.19	.50	.57	.35	.01	.61	.50	.13					.01	.50				
PRINCEVILLE RANCH 1117	A	2.37	.53	.05		.10	.12	.21	.18	.10	.43				.03				.02	.15	.02	.05	.07	.08	.02								.21		
PUEHU RIDGE 1040	A	3.10												.75	.99						.10	.07										.65	.13	.41	
PUMI 1013	A	3.54	.34	.16	.03	.03	*	*	.26	.02	.61	.28	*	.18	.38	.24	.08	.07	*	*	.44	.04	.17	.09	.03	*	*	*	.03	.06					
RESERVOIR 6 1004	A	5.07	.47	.38	.06	.07	*	*	.66	.15	.54	.04	*	.11	.38	.15	.09	.47	*	*	.93	.10	.27	.12											
WAIHANA 930	A	1.57	.07	.27	.01	T	*	*	.56	.01	T	*	*	.03	.02	T	.16	.25	*	*	.16	T	.02	.01											
ISLAND OF MAUI																																			
BERETANIA PUMPING STA	A	1.06	.09	.01	T	T	.03	.01	.07	.08		T		.03	.09	.23	.11	.05	.13	.12	T														
CAMP 84 807	A	.70				.02	*	*	.38	*		.07									.04	*	.16												
CHURCH COLLEGE LAIE	A	2.41	.08			.02	.04	.04	.03	.05	.03	.10		.02	.01	.01	.04	.21	*	*	.13	.38	.02	.10					.05	.65	.01	.01			
COCONUT ISLAND 840.1	A	2.23	.05			.07	.04	.43	.06	.04			.10	.03	.03	.20	.04	.30			.17	.11			.01										
EMA PLANTATION 741	A	.25	.02			.01			.03	.04								.04			.01														
HELEMANO INTAKE 881	A	3.59	*	*	.52	*	*	.95	.05	*	*	*	*	*	.24	*	.56	*	*	*	1.28	*	*	.04	*	*	*	*	*	*	*	*	*	*	
HOKULOA 725.2	A	.83	*	*	*	*	.13	.39	*	*	*	*	*	*	.06	.02	.03	*	*	*	*	*	*	*	*	*	*	*	*	*	.25	*	*		
HONOLULU OBSERV 702.2	A	.21				.03		.06	.04							.02	.03	.02																	
HONOLULU WSFC 703	R	.39				T	T	.05	T	.15	T		.02	T	.14	T	.02	T																	
HONOLULU SUBSTA 704	A	.83	.06	T	T	T		.14					.09		.28	.10					.08	.03											.05		
H S P & EXP STA 707	A	1.21	.15	*	T	.04	.01	.08	.02	.07	.02	*	*	.02	.10	.24	.10	.10	.14	.11	.01														
KAHANA 883	A	15.36	*	*	*	*	*	.58																											

DAILY TEMPERATURES

HAWAII
SEPTEMBER 1970

Station	Day of Month																															Average	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF KAUAI																																	
KANALOHULUHULU 1075	MAX MIN	78 60	74 56	74 57	74 57	73 56	69 56	74 54	77 58	75 50	74 59	73 51	72 59	73 62	69 54	74 56	73 52	67 56	68 58	71 55	70 57	72 54	69 52	74 52	73 59	73 57	74 46	74 44	72 56	73 62	67 49	72.4 55.1	
KILAUEA POINT 1133	MAX MIN	83 78	83 76	83 76	83 74	80 74	81 74	86 78	82 75	83 76	83 75	83 69	81 74	82 70	85 75	83 73	85 77	81 75	81 76	82 73	81 75	81 75	82 74	84 74	85 73	85 74	81 72	85 75	92 72	89 72	88 73	83.5 74.2	
LIMUE 450 1020.1	MAX MIN	85 75	87 78	85 77	86 77	84 74	86 75	86 76	85 77	85 72	86 76	86 73	86 73	87 72	85 77	86 74	87 76	85 75	86 74	86 76	86 77	85 77	86 77	86 75	86 73	86 73	86 72	85 72	84 72	84 70	85 66	84 69	85.4 74.3
MAKAHUEA POINT 940.1	MAX MIN	85 69	86 70	86 70	83 68	84 76	83 71	85 71	85 70	88 74	86 70	85 70	84 71	88 68	88 72	88 65	86 67	85 65	86 70	85 70	84 65	85 65	84 65	87 66	84 66	85 68	85 69	84 66	85 66	85 67	89 67	90 73	85.7 71.3
MANA 1026	MAX MIN	90 72	85 67	89 67	91 64	89 66	86 66	89 67	92 69	91 68	90 65	86 68	86 67	86 65	87 66	88 65	88 67	89 65	88 67	89 67	88 70	88 65	87 65	85 66	88 66	89 68	88 69	87 66	86 66	87 67	84 68	85 68	87.5 67.3
NIU RIDGE 1035	MAX MIN	85 64	82 64	83 65	84 66	82 65	83 64	84 65	83 66	85 66	85 63	85 63	83 62	83 64	85 66	83 65	83 62	84 66	85 63	83 62	83 62	84 63	82 62	83 63	85 63	85 63	84 63	84 63	83 64	82 61	80 60	83.3 63.4	
WAIAMI LOWER 1054	MAX MIN	80 70	80 68	81 67	81 68	81 68	83 67	83 69	83 64	83 66	84 65	84 66	83 66	84 65	81 67	82 64	79 67	79 69	80 68	79 68	80 68	80 68	81 66	83 67	83 66	84 65	84 62	84 60	86 59	83 61	83 61	82.2 65.8	
ISLAND OF OAHU																																	
EWA PLANTATION 741	MAX MIN	85 71	86 72	86 70	86 71	85 70	86 71	86 66	85 66	87 66	87 66	85 67	86 67	86 69	85 69	86 68	85 70	85 71	85 72	84 69	84 67	84 67	86 69	86 69	85 69	85 69	85 65	85 65	87 65	87 64	86 64	85.6 68.3	
HONOLULU WSPC 703	MAX MIN	86 73	86 75	86 74	86 75	85 73	86 71	87 70	87 70	88 71	88 71	88 71	88 71	86 74	87 75	86 71	85 72	85 72	88 72	88 72	88 72	88 72	87 73	86 72	88 72	88 72	87 70	87 70	86 70	85 68	84 69	86.3 71.7	
HONOLULU SUBSTA 704	MAX MIN	83 74	82 76	82 75	84 76	84 74	83 73	83 74	83 71	84 73	85 73	85 74	83 73	82 74	83 75	81 74	82 73	83 74	81 73	81 73	83 72	83 71	83 72	81 72	81 72	82 72	82 72	82 72	82 72	82 72	82 71	82 71	82.8 72.9
KAHUKU 912	MAX MIN	84 73	85 75	85 73	85 75	85 73	85 72	85 70	85 72	86 72	86 72	86 72	87 70	87 74	85 73	85 72	85 72	85 72	85 72	85 72	85 71	85 71	85 71	85 71	85 71	85 71	85 69	85 69	85 69	85 69	85 69	85 69	85.2 71.0
KANEHE MAUKA 781	MAX MIN	83 74	83 75	82 75	82 74	82 73	82 74	83 71	83 70	83 71	84 70	84 70	85 71	84 71	82 74	83 74	82 74	81 70	81 69	81 69	81 70	81 68	81 68	82 68	82 67	82 67	84 70	84 70	83 68	83 66	85 67	82.9 70.6	
LUALUALEI 804	MAX MIN	87 75	89 76	88 76	88 74	88 76	87 76	86 71	86 68	86 68	87 70	86 70	86 68	89 72	89 69	89 75	89 71	87 75	86 75	86 72	86 72	86 72	88 75	87 76	88 76	88 76	86 72	86 69	86 68	87 68	87 67	87.2 72.1	
MAKAPUU POINT 724	MAX MIN	80 71	78 70	80 69	81 70	81 73	81 70	78 70	79 70	80 73	80 70	82 73	83 70	82 73	83 71	81 70	82 69	82 72	81 70	81 69	81 69	81 69	81 69	82 72	82 70	80 69	80 73	80 70	83 69	83 70	83 72	80.0 70.6	
OPAELA 870	MAX MIN	82 68	80 68	80 68	81 68	81 68	81 67	78 67	82 64	83 63	83 63	83 63	86 64	82 64	82 66	82 65	80 66	76 67	77 66	78 66	79 65	79 65	81 66	82 66	81 65	81 65	82 64	82 62	84 62	86 62	86 62	81.7 65.0	
PRI WAIHAWA 820.2	MAX MIN	85 67	86 69	86 67	86 67	86 67	86 67	84 66	88 65	84 65	84 63	84 63	85 64	85 64	85 68	87 66	84 67	84 65	84 65	84 65	84 65	84 65	84 65	86 65	86 63	87 63	85 62	87 62	88 61	88 51	89 61	85.9 65.1	
WAIALUA 847	MAX MIN	87 69	88 67	87 66	87 66	86 66	86 67	85 70	86 68	86 64	86 64	86 65	90 66	88 65	87 66	85 66	85 66	85 68	85 68	84 70	82 68	82 65	82 65	82 65	82 65	82 65	82 65	82 63	82 63	88 64	85 63	84 63	86.4 65.9
WAIKIKI 717.2	MAX MIN	87 76	85 75	88 78	88 75	88 73	88 73	88 71	89 71	89 71	89 68	89 68	90 70	88 68	88 75	89 70	89 74	88 74	88 74	87 74	87 74	87 72	87 72	89 74	89 71	88 70	88 68	88 68	90 67	88 66	88 66	88.3 71.0	
WAIMANALU EXP FARM	MAX MIN	85 71	85 75	85 75	86 73	86 74	85 74	85 71	85 72	86 74	86 72	86 72	86 74	86 75	86 75	86 70	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85 73	85.6 71.9	
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX MIN	84 73	84 73	83 70	83 71	83 72	84 74	82 71	83 72	84 71	83 73	83 68	85 72	84 71	83 71	84 71	83 71	83 71	83 71	83 69	83 68	83 68	83 68	84 68	85 70	83 70	85 70	84 69	83 69	83 67	83 65	83.4 70.5	
ISLAND OF LANAI																																	
LANAI CITY 672	MAX MIN	77 67	79 68	78 67	77 66	77 66	77 66	77 65	78 64	77 65	78 67	78 63	79 65	78 66	79 66	79 62	79 61	77 57	77 61	77 64	77 65	80 65	79 66	78 67	79 66	79 66	82 66	80 63	80 63	81 63	80 61	78.6 64.5	
ISLAND OF MAUI																																	
HALEAKALA RS 338	MAX MIN	65 48	66 47	62 47	66 40	62 42	63 45	63 46	65 43	65 41	64 47	63 40	62 44	62 41	62 45	60 42	60 46	66 46	66 46	66 48	66 48	62 48	58 41	62 41	61 42	61 42	61 42	61 42	61 42	61 42	62 42	62 42	62.5 43.1
HALEAKALA SUMMIT 338.4	MAX MIN	52 41	54 39	53 39	50 40	50 40	57 48	57 48	54 40	54 37	55 40	54 37	51 38	49 38	59 39	58 44	60 42	58 42	58 44	58 44	58 44	58 44	58 44	58 44	58 44	58 44	58 44	58 44	58 44	58 44	58 44	58 44	55.9 41.3
HANA AIRPORT 355	MAX MIN	85 71	85 70	85 69	85 70	86 70	85 69	85 71	85 69	86 68	85 68	85 68	85 68	84 68	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84 69	84.3 68.9
KAAHAPALI AIRPORT	MAX MIN	86 70	87 70	86 72	84 68	84 72	84 71	86 72	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	86 68	85.5 69.5
KAHULUI WSO 398	MAX MIN	90 74	88 73	87 71	89 71	88 73	89 73	87 71	88 63	87 63	87 63	89 63	89 73	89 73	88 72	88 70	88 72	88 71	88 71	88 71	88 71	88 71	88 71	88 71	88 71	88 71	88 71	88 71	88 71	88 71	88 71	88 71	87.7 68.3
KAILUA 446	MAX MIN	80 67	78 69	78 68	78 67	78 68	78 66	78 66	79 66	79 66	79 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	80 66	78.7 66.8
KEAWAKAPU BEACH 263.2	MAX MIN	91 67	91 67	93 66	92 65	91 64	93 64	90 64	90 64	88 64	85 64	85 65	89 65	88 65	87 65	90 65	91 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	87 65	89.6 65.2
KULA SANATORIUM 267	MAX MIN	76 58	77 59	77 58	75 59	79 57	73 57	77 58	77 58	77 58	72 58	74 57	73 57	72 57	77 57	75 58	78 58	74 59	73 59	73 58	73 58	73 58	73 58	71 59	74 58	73 57	71 58	72 58	73 57	72 60	73 59	73 58	74.3 58.1

See Reference Notes Following Station Index

DAILY TEMPERATURES

HAWAII
SEPTEMBER 1970

Continued

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
LAHAINA 361	MAX	89	88	91	87	88	88	89	88	89	88	86	85	86	87	89	87	86	86	89	88	88	86	87	88	87	86	87	87	90	89	86	
	MIN	71	69	69	70	70	68	69	70	68	69	70	69	69	69	67	68	68	69	71	69	70	66	67	69	66	68	69	69	69	69		
WAILUKU 386	MAX	82	84	83	83				83	83	82	82			83	81	83	83	79			84	82	82	82	83			84	83	83		
	MIN	73	73	72	72				72	73	73	73			71	74	72	72	71			70	73	73	73	70			69	70	69		
* * *																																	
ISLAND OF HAWAII																																	
HAINA 214	MAX	83	83	83	83	83	83	83	84	84	84	85	85	84	84	84	84	84	79	83	82	82	82	82	82	80	83	83	85	83	85		
	MIN	69	68	65	67	66	67	67	66	67	67	67	67	67	66	67	67	67	68	66	65	65	67	66	66	65	67	67	68	67	64		
HAWAII VOLCNS NP HQ 54	MAX	72	69		70	68	67	70	73	72	72	73	71	74	70	71	70	70	73	68	67	71	72	68	69	71	71	73	73	69	72		
	MIN	54	56		53	56	53	54	56	55	54	54	51	54	53	53	54	55	56	56	55	52	58	55	53	52	57	56	59	57	54		
HILO WSO 87	MAX	83	83	83	83	84	81	82	83	83	85	85	84	84	83	83	82	81	83	81	84	84	82	82	83	85	85	86	84	86	86		
	MIN	69	67	65	70	67	65	64	69	65	65	64	65	65	64	64	68	68	69	68	66	65	68	67	64	64	68	70	67	66	61		
KAINALIU 73.2	MAX	79	79	78	80	79	79	80	81	80	79	80	80	82	81	79	78	78	78	80	82	78	80	80	77	80	80	78	81	79	77		
	MIN	65	65	63	64	67	65	63	64	63	63	61	63	63	64	64	64	63	66	67	65	63	63	63	63	62	62	63	64	63	64		
KAMUELA 192.2	MAX	72	73	73	74	73	73	69	74	75	74	75	76	78	74	74	73	73	71	73	74	72	73	74	72	75	74	76	79	80	79		
	MIN	60	60	60	60	61	60	59	60	59	60	58	55	56	58	60	61	60	61	61	60	59	61	60	59	59	60	57	56	55	46		
KAMUELA AIRPORT 191	MAX	74	75	75	74	74	75	71	75	75	76	75	74	77	75	76	75	75	74	71	76	75	75	75	74	76	76	75	80	78	78		
	MIN	52	60	58	56	57	58	51	52	52	55	53	52	52	52	59	58	59	56	51	58	58	59	58	54	47	57	50	54	56	48		
KEAAU 92	MAX	82	82	81	81	81	81	81	82	82	83	83	83	82	83	82	83	81	80	83	80	82	82	80	79	82	83	83	83	82	83		
	MIN	66	67	66	66	68	66	66	67	67	66	66	65	66	66	65	65	67	67	67	66	65	65	67	65	64	64	68	69	66	62		
KEALAKEKUA 26.2	MAX	79	80	79	80	79	80	81	81	77	79	81	79	80	81	79	80	79	79	80	80	79	79	80	80	80	80	78	80	80	78		
	MIN	65	66	64	65	67	66	63	64	64	63	62	64	64	65	64	66	64	67	67	66	63	63	64	63	63	65	65	64	65	65		
KOHALA MISSION 175.1	MAX	80	80	80	81	80	80	79	80	81	81	82	82	83	82	82	82	80	77	81	79	80	81	81	81	82	82	81	84	83	83		
	MIN	69	68	68	67	68	68	67	68	67	68	68	68	68	68	69	68	67	68	68	68	68	68	67	68	64	67	68	69	69	64		
KONA (KAILUA) 68.3	MAX	85	86	85	86				87	85	86	85			87	86	86	85	86			86	86	85	86	86			87	86	83		
	MIN	72	72	72	72				72	70	72	72			69	71	69	72	72			68	70	69	70	69			70	70	71		
KULANI CAMP 79	MAX	65	64	61	65	64	61	64	67	69	65	67	67	65	62	66	64	62	65	62	60	65	67	63	77	62	67	65	67	63	65		
	MIN	53	57	48	45	57	45	44	42	51	49	47	46	48	48	48	54	51	52	53	50	46	55	52	49	44	50	48	48	45	42		
MAUNA LOA SLOPE OBS	MAX	58	59	59	57	64	62	64	57	55	53	50	48	50	52	52	56	63	60	56	55	56	55	51	51	51	52	52	54	54	54		
	MIN	39	38	40	40	43	43	44	40	37	37	32	32	34	31	36	37	44	44	38	36	39	37	36	34	36	36	35	38	38	39		
MOUNTAIN VIEW 91	MAX	79	78	77	75	78	78	78	78	77	78	80	79	79	79	78	79	77	72	78	78	78	78	75	73	78	79	79	79	78	81		
	MIN	62	63	61	61	59	59	59	59	61	60	61	59	59	59	59	59	62	63	58	58	58	58	62	58	57	58	58	58	61	55		
NAALEHU 14	MAX	80	80	80	81	81	81	81	81	81	81	81	81	81	81	81	81	80	81	81	81	81	81	81	81	81	81	82	82	81	81		
	MIN	70	70	68	70	70	70	70	67	66	66	68	68	68	67	68	69	67	68	69	69	67	67	67	69	66	65	66	66	68	67	65	
OOKAIA 223	MAX	81	81	82	81	81	82	80	81	82	82	82	82	81	83	81	82	81	77	84	81	81	81	81	80	81	81	82	83	80	82		
	MIN	67	68	68	67	68	67	70	69	68	67	68	67	66	67	67	67	67	67	69	66	67	67	67	67	67	67	67	69	68	65		
OPIHIHALE 2 24.1	MAX	77	76	76	79	80	79	80	76	75	79	79	83	81	75	79	75	75	79	77	76	75	74	80	80	80	79	76	76	78			
	MIN	61	64	64	61	62	60	61	61	60	61	60	60	62	61	62	62	61	63	63	62	60	61	61	61	61	61	63	64	65	62		
PAHALA 21	MAX	82	82	83	82				83	82	82	82			81	81	81	81	83	83			81	81	79	80	82	82	77	81			
	MIN	64	67	63	63				62	63	62	64			63	62	63	64	64	64			61	61	63	61	62	62	64	61			
PUAKO 95.1	MAX	85	87	90	90	90	89	88	90	90	89	87	87	88	88	87	87	88	87	90	90	88	86	86	89	88	88	85	87	90	86		
	MIN	71	69	73	73	73	72	71	71	72	71	70	68	68	72	69	75	73	73	75	73	70	74	71	69	69	71	69	71	71	68		
UPOLU POINT USCG 159.2	MAX	82	83	82	81	81	83	84	83	82	83	83	84	84	83	84	83	82	82	83	83	83	83	84	83	83	84	84	87	84	85		
	MIN	71	70	71	70	71	70	73	72	70	71	70	72	71	71	75	69	72	72	70	71	70	70	72	71	69	70	72	73	70	70		

EVAPORATION AND WIND

Station		Day Of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																	
ISLAND OF KAUAI																																	
LIHUE WSO 1020.1	EVAP	.38	.35	.39	.40	.47	.23	.46	.34	.37	.42	.31	.33	.46	.33	.38	.35	.32	.40	.37	.38	.28	.42	.32	.28	.34	.35	.28	.33	.23	.43		
	WIND	209	221	216	220	233	243	209	194	130	132	102	109	110	161	213	190	231	309	250	240	206	189	181	128	100	99	84	73	61	59		
	MAX	87	86	87	85	88	82	87	89	89	88	90	90	90	90	88	88	87	87	82	81	79	86	85	85	86	87	88	88	89	87	88	
	MIN	68	68	67	66	67	67	67	67	66	67	68	67	66	66	66	67	66	65	66	67	67	67	67	67	66	66	65	64	61	63		
* * *																																	
ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP	.23	.30	.26	.36	.40	.28	.30	.33	.19	.24	.20	.29	.27	.29	.27	.32	.29	.30	.28	.28	.22	.29	.17	.26	.23	.28	.23	.25	.22			
	WIND	29	42	40	35	49	34	33	27	15	15	15	27	34	20	33	35	35	48	36	36	25	23	24	24	20	26	31	21	23	14		
	MAX	88	89	89	91	90	90	89	92	88	87	88	92	91	89	89	91	87	89	88	88	90	92	92	90	89	90	89	91	92	93		
	MIN	69	68	67	67	68	68	67</																									

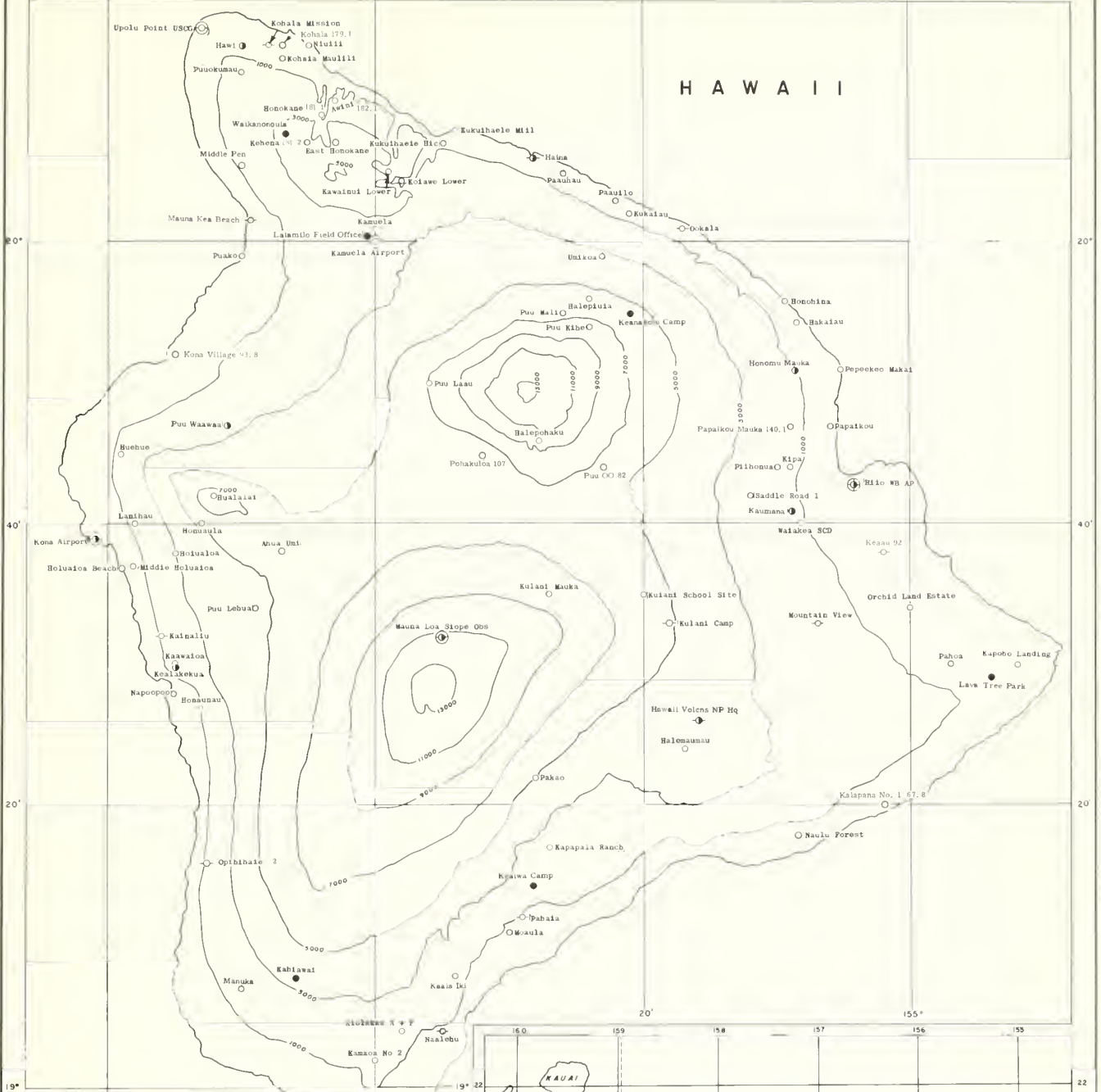
156°

40'

20'

155°

HAWAII



HAWAII

PLATE 2

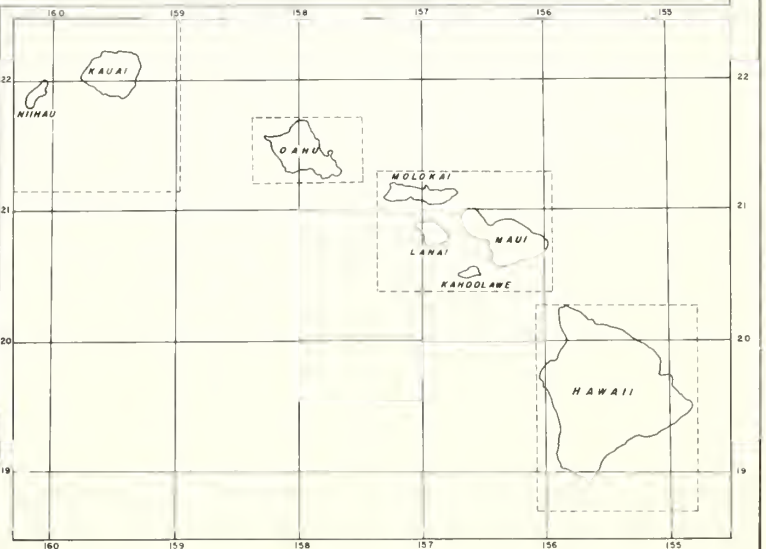
STATUTE MILES



STATION LEGEND

- ● ● Precipitation only
- ○ Precipitation, storage
- ● ○ Precipitation and Temperature
- ● ○ Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording, ● Recording ● Both types

Double circle combinations indicate the availability of more detailed meteorological data
 All stations use 150th meridian time



156°

USCOMM-ESSA-Ashville, N. C.

40'

Revised 2-65

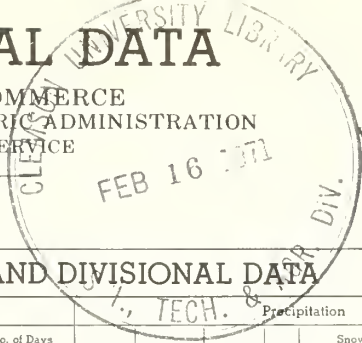
CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

HAWAII

OCTOBER 1970

Volume 66 No. 10



MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

Station	Temperature											Precipitation																		
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days		Total	Departure From Normal	Greatest Day	Date	Snow, Sleet		No. of Days												
										50° or Above	60° or Above					Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More										
* * * ISLAND OF KAUAI																														
ANAHOLA 1114	A											5.76	.84																	
KANALOHULUHULU 1075	A	70.6	54.1	62.4		78	4	45	12	0	0	0	0	3.48		1.34	3													
KAPAA STABLES 1104	A											3.61								6	2	1								
KILAUEA FIELD 17 1135	A											4.29										0								
KILAUEA POINT 1133	A	82.4	73.2	77.8		85	11+	68	30+	0	0	0	0	4.60		1.00	13				10	4	1							
KOLOA 936	A											4.11	- 1.20																	
LIHUE WSO 1020.1	//R	83.4	73.3	78.4	- 1.5	86	3+	67	31	0	0	0	0	2.74	- 1.29	.62	1					7	1	0						
MANA 1026	A	87.2	66.3	76.8	- .2	90	23	63	22	1	0	0	0	1.45	- .60	.51	20					3	1	0						
N WAILUA DITCH 1051	A											12.21																		
PH WAINIHA 1115	A											7.14	- 1.10											12	5	1				
PUEHU RICE 1040	A											3.34																		
WAHIAWA 930	A											2.76	- .26													1				
WAIAHI LOWER 1054	A	81.5	65.2	73.4		85	16+	59	29+	0	0	0	0	8.54		1.37	3							17	5	2				
WAIMEA 947	A											1.82	- .09													0				
ISLAND																														
73.8																														
4.70																														
* * * ISLAND OF OAHU																														
HONOLULU OBSERV 702.2																														
HONOLULU WSFC 703	R	85.1	71.8	78.5	.3	88	13	68	30	0	0	0	0	3.15		2.43	3							4	1	1				
KAHUKU 912	A	83.6M	70.9M	77.3M	.0	87	15+	65	19	0	0	0	0	1.88	.04	.69	2								4	1	0			
KANEOME MAUKA 781	A	81.8	70.5	76.2	.1	86	4+	67	31+	0	0	0	0	4.59	.43										15	2	1			
KODIAU DAM 833	A											V25.30		5.77	.02	2.00	16									3				
LUALUALEI 804	A	86.1	72.0	79.1		91	5	68	30+	2	0	0	0	1.21												0				
MAKAPUU POINT 724	A	79.4	70.4	74.9		84	4	67	23	0	0	0	0	2.07	- .93	.79	3								7	1	0			
NUUANU RES 4 783	A											9.62	.69													3	0			
OPAEULA 870	A	79.9	65.6	72.8	.4	86	15	62	31+	0	0	0	0	4.91	.06	.90	3								17	2	0			
PALOLO VALLEY 718	A											11.46	.63													21	8	4		
PRI WAHIANA 820.2	A	84.0	65.6	74.8		88	19+	60	1	0	0	0	0	2.16																
PUNALUU 884	A											5.48																		
WAHIAWA DAM 863	A											2.89																		
WAIAHOLE 837	A											10.08	- 2.00													15	9	2		
WAILUA 647	A	85.1	66.4	75.8	.4	89	18	61	13	0	0	0	0	1.54	- 1.15	.57	3								5	1	0			
WAIKIKI 717.2	A	86.7	71.2	79.0		89	29+	66	30	0	0	0	0	2.16		1.56	3									3	1	1		
WAIMANALU EXP FARM	A	83.4	72.0	77.7		88	1	66	17	0	0	0	0	4.72		1.56	3									9	4	1		
WAIPIAHU 750	A											2.61	.27																	
ISLAND																														
76.6																														
4.49																														
* * * ISLAND OF MOLOKAI																														
KUALAPUU 534																														
MAPULEHU 542	A											1.20	- 1.22														1	0		
MAUNALOA 511	A											4.41	1.00															1	0	
MOLOKAI AP 524	A	83.1	71.0M	77.1M		88	14	63	14	0	0	0	0	1.01	- 1.36	.39	3										3	0	0	
ISLAND																														
77.1																														
1.95																														
* * * ISLAND OF LANAI																														
LANAI CITY 672																														
A	78.4	65.9	72.2	1.5	82	15+	63	25+	0	0	0	0	1.78	- 1.17	.70	31										6	1	0		
ISLAND																														
72.2																														
1.78																														
* * * ISLAND OF MAUI																														
HALEAKALA 8 E S 434																														
HALEAKALA RS 338	A	63.0	45.0	54.0		68	20+	38	30	0	0	0	0	4.55	.26	.92	24									11	3	0		
HANA AIRPORT 355	A	83.0	69.3	76.2		87	2+	64	30	0	0	0	0	2.12		.60	26										6	2	0	
HONOKOHUA 493	A											6.37															17	2	1	
KAANAPALI AIRPORT	A	84.4	70.6	77.5		87	15+	66	29	0	0	0	0	1.65	- 1.03												2	0	0	
KAHULUI WSO 398	R	87.1	69.4	78.3	1.0	92	3	64	31+	4	0	0	0	.48	- .39	.25	30										2	0	0	
KAILUA 446	A	79.0	67.1	73.1	.4	82	4+	63	31	0	0	0	0	7.62	- 1.70	1.10	16										16	5	1	
KEANAE 346	A											18.20	2.85																	
KIPAHULU 258	A											4.89	- 3.41														13	3	0	
KULA SANATORIUM 267	A	73.4	58.9	66.2	.0	77	21	57	31+	0	0	0	0	.35	- 1.91	.10	26+										2	0	0	
LAHAINA 361	A	87.0	69.3	78.2		89	26+	65	31	0	0	0	0	.06	- .94	.06	1											0	0	0
PAIA 406	A											.78	- 1.38															4	0	0
WAILUKU 386	A	82.7M	71.5M	77.1M	.1	87	2	67	30+	0	0	0	0	*														0	0	0
ISLAND																														
72.6																														
3.95																														
* * * ISLAND OF HAWAII																														
HAINA 214																														
HAWAII VOLCNS NP HO 54	R	82.3	67.0	74.7	.7	85	19+	63	12	0	0	0	0	2.95	- 2.30	.73	24									10	2	0		
HILD WSO 87	A	70.0	54.9	62.5	.4	75	2	50	30	0	0	0	0	5.13	- 1.75	.93	22										10	4	0	
HUEHUE 92.1	A	83.7	66.8	75.3	.2	89	1	62	29	0	0	0	0	8.44	- 2.36	1.44	26										16	5	3	
KAINALIU 73.2	A	79.3	63.7	71.5		82	17	60	31+	0	0	0	0	4.46	- 3.13	.25	1											0	0	0
	A											4.24	- 1.96														8	4	2	

See Reference Notes Following Station Index

MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

HAWAII
OCTOBER 1970

Continued

Station	Temperature										Precipitation													
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days			
										90° or Above	80° or Above	70° or Above	60° or Above					Total	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
KAMUELA AIRPORT 191	75.4	54.2M	64.8M	- .4	79	19+	47	30	0	0	0	0	0	.69	- 3.27	.36	3	.0	0		2	0	0	
KEAAU 92	81.6	66.4	74.0		86	2+	63	2	0	0	0	0	0	9.11		1.08	5	.0	0		16	9	1	
KEALAKEUA 26.2	78.9	64.7	71.8		81	25+	61	31	0	0	0	0	0	3.18		.85	6	.0	0		6	3	0	
KONA (KAILUA) 68.3	85.7M	70.9M	78.3M		88	19	68	28+	0	0	0	0	0	.33		.28	21	.0	0		1	0	0	
KUKIHAELE HIC 199									0	0	0	0	0	2.86	- 3.08	.74	31	.0	0		10	1	0	
KULANI CAMP 79	64.9	49.5	57.2		72	2	41	15	0	0	0	0	0	5.20		1.00	24	.0	0		13	3	1	
PAHALA 21	82.0M	63.3M	72.7M	- .5	84	26	60	1	0	0	0	0	0	1.60	- 2.41	.00		.0	0		0	0	0	
POHAKULOA 107									0	0	0	0	0	.00		.00		.0	0		0	0	0	
PJAKO 95.1					90	20+	66	14	2	0	0	0	0	.02		.01	3+	.0	0		0	0	0	
PJU WAAWA 94.1														.63	- 2.25	.00		.0	0		0	0	0	
UMIKOA 118														3.70	- 1.25	.00		.0	0		0	0	0	
WAIKOA SCD 88.2														8.88		1.63	5	.0	0		13	8	4	
ISLAND			71.1											3.38		.0		.0						

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 95° ON THE 22D AT KEAWAKAPU BEACH 260.2, MAUI

LOWEST TEMPERATURE: 30° ON THE 28TH AT MAUNA LOA SLOPE OBS., HAWAII

GREATEST TOTAL PRECIPITATION: 14.69 AT HONOMU MAUKA 138, HAWAII

LEAST TOTAL PRECIPITATION: .00 AT 6 STATIONS.

GREATEST ONE-DAY PRECIPITATION: 2.90 ON THE 16TH AT KANEOHE RANCH 838, OAHU

See Reference Notes Following Station Index

DAILY PRECIPITATION

HAWAII
OCTOBER 1970

Station	Total	Day of Month																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF KAUAI																																		
ANAMOLA 1114	A	5.76	.05	.40	*	.15	.09	.02	.03	*	*	.02			.01					3.40	.03	.03	.10	*	*	.58	.02	.05	.51	.27	*	*		
BRYCESWOOD STA 985	A	2.96	.02	1.12	*	.57	.03	.02	.02	*	*	.04								10	.09	.03	.02	.24	*	.31		.05	.06	.04	*	*		
EAST LAWA 934	A	4.76	.50	1.52	*	.71	.06	.09	.05	T	*	*									.23	.14	.19	.02	.38	.52	.05	.05	.11	.14	*	*		
ELEELE 927	A	3.04	.08	1.04	*	.75															.14	.04	.09	.09	*	.04	T	.35	.04	*	*			
HALAULA 1110	A	4.09	.03	.40	*	.20	.20	.04	.02	.04	*	*									1.35	.05	.04	.13	*	.65	.03	.11	.50	.27	*	*		
HALENAHOU 1006	A	7.19	.47	1.82	*		1.34	.09	.07	.02	.03	*	.16			.14	*			.93	.08	.18	.02	.34	*	.42	.16	.24	.22	.46	*	*		
HUIPO 945	A	1.99	.46	.17	*	.55														.32								.49						
ILIIHUI INTAKE 1050	A	11.99	.11	.19	*		2.35	.37	.12	.06	.02	*	.25	*	.03					.85	.25	.52	.35	.58	*	2.73	.08	.42	1.35	.47	*	*		
INTAKE WAINIHA PC 1086	A	4.64	*	2.00	*																			1.04	*									
KALIHUAI RES 1131	A	5.40	.01	.23	*	.86	.24	.11	.06	.01	*	.07	.01	.30		.04	*			.23	.04	.16	.07	.37	*	.98	.12	.84	.41	.24	*	*		
KANALOHULUHULU 1075	A	3.48	.25	.79	1.34	.02						.03								.03	.23	.14	.05	.08	.08	.05	.02	.20	.04	.08	*	*		
KANEHA RESERVOIR 1092	A	6.02	.05	.22	*	.110	.10	.20		.06	*	*	.15	.07	.07	.30				.35	.11	.17	.25	*	.70	.06	.75	1.01	.30	*	*			
KAPAA STABLES 1104	A	3.61	.05	.40	*	.50	.10	.93					.10		.10					.34	.12	.15	*		.67	.01	.20	.62	.22	*	*			
KEALIA 1112	A	1.94	.10	.32	*	.19	.05	.02	.02						.10					.27	.02	.05	.07	*	.67	.01	.11	.19	.10	*	*			
KEKAMA 944	A	2.41	.59	.22	*	.86						.22								.38	.03	.05						.01	.05	*	*			
KILAUEA 1134	A	2.95	.20	*	*	.01	.04	.06	.02	.02	*	.03		.05		.02	*			.21	.04	.21	.02	.11	*	.60	.21	.25	.15	.10	*	*		
KILAUEA FIELO 17 1135	A	4.29	.01	.22	*	.60	.19	.06	.02	.01	*	.08		.04	.18	.04				.32		.23	.02	.18	*	.93	.03	.51	.31	.36	*	*		
KILOA POINT 1133	A	4.00	.90	.64	*	.12	.61				.01			1.00						.03	.50		.14	.21	.02	.93	.08	2.14	.44	.68	.02	*		
KOLO 1033	A	1.69	.45	.12	.45															.04	.26					.38	.08	.25	.32					
KOLOA 936	A	4.11	.02	.87	*	1.37	.05	.11	.04	*	*	.03								.08	.05	.15	.02	.23	*	.61	.15	.10	.12	.11	*	*		
KOLOA HAUKA 994	A	5.70	.19	.27	*	.73	.07	.95	.03	.07	*	.14								.07	*	.51	.06	.26	.04	.61	.69	.13	.24	.21	*	*		
KOLOKO RES 1137	A	5.17	.05	.05	*	.67	.16	.04	.04	.01	*	.03		.10	.27					.06	*	.75	.02	.07	.01	.40	*1.09	.17	.73	.32	.22	*	*	
KUKUIJUA 935	A	3.30	.16	.96	*	.89	.05	.05	.12	.01	*											.15	.06	.15	*	.22	.05	.04	.27	.06	*	*		
LIHUE VARIETY STA	A	7.15	.23	.83	.85	.16	.08	.01	.01	.02	*	.06	.01							.95	*	.34	.04	.15	.02	.51	*.30	.59	.13	.44	.61	.81	*	
LIHUE 1020	A	5.05	.42	1.48	*	.83	.03	.07				.07								.03	*	.96	.03	.15	.27	*	.19	.05	.29	.73	.18	*	*	
LIHUE WSO 1020.1	//R	2.74	.62	.16	.41	T	T	.01	T			.01	T			.04	.48	.02	T	.01	T	.01	T	.13	T	.03	.08	.01	.13	.48	.01	.02	.09	
MAKAHEHA POINT 940.1	A	3.66	.05	.46	.70	.72	.03	.02	.05	.01	.07	.01	T	.10						.47	.05	.02	.09	.02	.10	.22	.23	.02	.15	.03	*	*		
MAKAHELI 965	A	2.24	.57	.77	*															.48	.02	.02	.01					.35						
MANA 1026	A	1.45	.33	.03	.43	.01															.08	.06	.51											
MOHIMI UPR CROSS 1083	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MOLOAA 1145	A	3.59	.05	.09	*	.45	.09	.04	.02	*	*	.07				.37				.25	*	.54		.02		.09	*	.72	.05	.34	.34	.15	*	*
MOUNT MAHALEALE 1047	A	-	.83	1.69	1.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NIU RIGGE 1035	A	2.40	.40	.12	*	.65														.07	.04	.40					1.56	.26	.96	1.60	.60	*	*	
N WAILUA DITCH 1051	A	12.21	.86	*	*	2.20	.30	.20	.20	.26	*	.46									1.20	.30	.86	.26	.33	.04	.60	.36	.64	2.14	.44	.68	.02	*
PH WAINIHA 1115	A	7.14	.07	.69	.01	.01	.19	.11	.05	T	.05									.06	.02	.01	.08	.14	.02	.36	.04							
PRINCEVILLE RANCH 1117	A	2.91	.06	.02	*	.02	.21	.02				.06				.16				.01	.03		.01	.13	.02	.15	.02	.03	.72	.11	.93	.14	.06	*
PUHEI RIGGE 1040	A	3.34	.47	.30	*	1.06														.08	.11	.18						1.08						
PUHI 1013	A	7.14	.50	1.72	2.43	T	.05	*				.11								.08	*	1.44	.02	.05	.22	*	.42	.09	.18	.62	.29	*	*	
RESERVOIR 6 1004	A	6.00	.90	1.81	*	1.14	.11	.04	.03	.01	*	.12								.02	*	.55	.04	.07	.04	.54	*	.26	.07	.12	.37	*	*	
WAIHAKA 930	A	2.76	T	1.28	*	.69	T	*	*	*	*	.07								.02	*	.12	.09	.12	*	.13	.07	.15	.07	*	*			
ISLAND OF MAUI																																		
BERETANIA PUMPING STA	A	2.23	.05	.13	1.33		.04	.02	T	T	.01			.01						.03		.05	.02	.01		.03	.33	.05	.07	.02	*	*		
CAMP 84 807	A	2.25	.24	*	*	.47	*	*	.05	*	*	*	*		.14					.05	*	.03	.05	.06	*	.20	*	.04	*	*	*	*		
CHURCH COLLEGE LAIE	A	4.28	.32	.30	.01	.05	.08	.09	.02	.08	.06	.01		.20	.06	.02	.03	.38	.74	*		.16	.12	.06	.09	.02	.23	.05	.07	.09	.21	.33	.40	*
COCONUT ISLAND 840.1	A	4.04	.02	.10	1.02	.02	.16	.05	.02	.03				.01						.02	.08	.04	.01	.03	.03	.13	.06	.03	.62	.05	*	*		
EWA PLANTATION 741	A	2.80	.11	.24	2.10	.05	.06	.01												.06														
HELEMANO INTAKE 881	A	3.90	.10	*	*	1.11	*	*	.30	*	*	*	*	*	*	*	*	*	*	.75	*	.58	*	*	*	.76	*	.30	*	*	*	*	*	
HOKULUA 725.2	A	3.03	*2.50	*	.01	*	*	*	.30	*	*	*	*	*	*	*	*	*	*	*	.75	*	.58	*	*	.76	*	.30	*	*	*	*	*	
HONOLULU OBSERV 702.2	A	3.15	.06	.40	2.43	T	.05	*						.10	.01	.20					T	T	T	T	.10									
HONOLULU MISC 703	R	1.88	.02	.49	.30	T	.06	.01	T	T	.03			.03							T	.04	T	.01	T	.13	.01	.02	T	.03	.06	.05	.03	
HONOLULU SUBSTA 704	A	1.83	.10	.67	.58	.03			.02	.02	.03			.03						.02	.02					.20	.05	.04						
H S P A EXP STA 707	A	2.96	.03	.13	1.71		.03																											

DAILY TEMPERATURES

HAWAII
OCTOBER 1970

Station	Day of Month																															Average	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
ISLAND OF KAUAI																																	
KANALOHULU 1075	MAX	66	67	74	78	73	72	73	71	72	71	72	73	70	72	72	72	70	72	71	70	72	71	70	68	70	70	71	69	66	68	64	70.6
	MIN	60	59	62	63	58	55	57	55	52	49	46	45	46	46	46	48	50	59	57	58	55	57	58	56	55	59	58	57	47	52	52	54.1
KILAUEA POINT 1133	MAX	83	83	85	83	84	82	85	81	82	83	85	83	84	83	83	82	83	83	81	82	80	81	80	82	82	82	82	82	82	82	82	82.4
	MIN	75	72	77	75	75	75	74	75	74	72	75	72	72	73	74	72	73	74	76	75	75	71	75	71	73	73	73	72	68	68	70	73.2
LIHUE WSO 1020-1	MAX	85	86	86	84	84	84	84	84	84	83	84	83	84	83	83	83	84	83	83	84	83	81	84	83	83	84	83	82	82	80	83	83.4
	MIN	70	72	70	71	70	70	72	71	70	70	74	66	69	71	70	75	63	74	77	73	72	70	70	72	70	71	71	70	67	73	69	70.7
MAKAHUEA POINT 960.1	MAX	83	88	85	88	83	82	85	86	84	82	84	83	84	85	87	84	84	89	87	85	85	81	85	82	85	78	82	87	83	83	83	84.3
	MIN	70	72	70	71	70	70	72	71	70	70	74	66	69	71	70	75	63	74	77	73	72	70	70	72	70	71	71	70	67	73	69	70.7
MANA 1026	MAX	85	85	83	85	87	89	89	87	87	85	86	87	87	88	87	88	87	89	88	88	88	85	90	89	88	88	89	87	85	87	85	87.2
	MIN	67	71	71	69	66	66	69	65	66	67	69	67	64	67	67	67	66	66	67	67	65	63	64	65	64	64	66	66	64	66	65	66.3
NIU RIDGE 1035	MAX	80	79	80	80	82	80	81	83	80	84	83	85	83	83	80	83	82	81	83	80	82	81	83	83	83	82	83	80	79	80	81	81.6
	MIN	65	60	60	63	63	61	62	60	63	60	62	61	59	62	60	61	61	62	63	60	60	63	60	62	63	61	63	62	60	60	61	61.4
WAIAMI LOWER 1034	MAX	82	84	81	84	83	81	82	82	81	83	83	83	83	85	84	85	84	83	79	83	78	79	78	78	78	81	81	78	80	80	79	81.5
	MIN	67	68	69	67	67	67	66	65	63	64	60	59	59	61	62	67	65	67	71	70	66	66	68	67	68	67	64	65	59	60	66	65.2
ISLAND OF OAHU																																	
EWA PLANTATION 741	MAX	83	83	85	84	85	83	84	84	83	85	85	85	85	87	85	86	85	87	86	85	86	84	84	83	83	83	83	84	85	82	82	84.2
	MIN	69	70	71	70	70	69	69	69	69	68	69	67	66	66	66	66	67	66	70	71	69	71	70	69	68	69	68	67	69	65	64	68.4
HONOLULU WSCF 703	MAX	82	83	86	87	85	86	86	85	85	84	87	87	88	87	87	86	85	87	86	85	80	84	84	84	85	85	85	86	83	83	84	85.1
	MIN	69	72	72	74	73	73	73	74	74	71	69	70	88	87	87	72	70	73	75	74	73	73	71	73	73	73	72	71	69	68	69	71.8
HONOLULU SUBSTA 704	MAX	80	81	83	85	83	82	83	83	82	81	81	82	85	83	83	82	81	84	83	82	78	82	81	82	82	81	83	81	80	78	80	81.7
	MIN	70	71	73	75	74	75	74	75	74	74	72	74	74	74	74	75	72	75	77	75	74	72	74	73	73	73	72	73	70	71	69	73.3
KAHUKU 912	MAX	87	83		85	84		84	84	84				84	82	87		84															83.6
	MIN	69	71		72	74		75	74	71				66	67	69	74		71														
KANEHE MAUKA 781	MAX	86	79	81	86	82	81	83	82	82	82	81	82	82	80	85	84	83	85	82	83	82	77	83	82	80	82	81	80	80	79	79	81.8
	MIN	73	74	72	73	74	69	71	71	72	70	68	69	69	70	72	70	69	71	71	72	72	71	70	71	70	71	70	67	68	68	67	70.5
LUALUALEI 804	MAX	87	83	83	90	91	86	87	87	87	87	86	86	85	87	86	86	84	88	87	87	85	84	85	85	84	85	87	87	87	83	84	86.1
	MIN	69	74	74	74	73	73	73	74	74	76	74	68	68	68	69	72	69	72	68	73	74	75	71	76	76	73	73	70	72	68	70	72.0
MAKAPUU POINT 724	MAX	82	81	83	84	80	79	79	80	78	79	78	79	80	80	82	80	80	80	78	81	79	76	79	78	78	78	78	79	79	77	77	79.4
	MIN	71	70	73	73	71	70	69	73	70	70	69	70	72	70	70	72	70	70	70	70	71	69	67	74	71	71	70	69	70	70	68	70.4
OPEULA 870	MAX	82	78	75	83	82	78	81	81	80	81	80	83	81	81	86	84	80	85	80	80	79	75	78	76	79	79	79	79	80	77	78	79.9
	MIN	62	62	68	68	69	66	65	66	66	63	62	63	63	63	65	64	65	68	60	68	68	68	67	66	68	68	66	65	65	64	62	65.6
PRI MAHIAWA 820.2	MAX	88	81	82	88	88	82	83	85	85	84	82	84	84	85	87	87	84	88	88	86	85	79	84	82	82	84	82	82	83	81	78	84.0
	MIN	60	67	69	68	68	66	65	66	66	64	63	63	64	63	63	64	63	66	63	70	68	70	68	69	70	67	66	64	65	64	62	65.6
WAIALUA 847	MAX	85	85	85	86	86	84	86	86	85	87	85	87	87	87	87	88	82	89	85	88	86	79	85	83	83	84	85	84	85	83	80	85.1
	MIN	66	70	73	71	68	65	65	65	65	66	64	63	63	63	65	65	70	67	69	69	66	66	66	69	66	68	64	65	64	65	66.4	
WAIKIKI 717.2	MAX	89	87	83	87	88	86	88	82	87	87	87	87	87	86	86	89	88	89	85	88	89	84	87	86	87	88	87	88	89	85	83	86.7
	MIN	72	73	73	73	73	72	73	73	74	68	67	67	70	68	69	73	68	72	72	74	73	75	73	75	74	73	71	67	68	66	67	71.2
WAIMANALO EXP FARM	MAX	88	84	80	83	84	83	84	84	84	85	84	85	84	85	85	83	85	85	82	83	83	79	82	82	83	83	83	84	81	82	83.4	
	MIN	70	73	72	70	74	71	73	74	75	71	73	74	70	74	72	72	66	72	75	73	72	72	73	72	72	73	73	72	70	70	69	72.0
ISLAND OF MOLOKAI																																	
MOLOKAI AP 524	MAX	87	85	85	85	85	84	83	83	83	83	84	83	83	88	86	84	85	84	84	83	83	78	83	81	81	81	80	82	81	79	79	83.1
	MIN	67	71	74	73	73	73	67	73	73	72	71	71	71	63	69	70	73	76	72	72	72	72	70	70	75	70	70	71	71	69	70	71.0
ISLAND OF LANAI																																	
LANAI CITY 672	MAX	82	79	79	79	81	79	78	78	79	79	77	78	78	80	82	78	80	78	78	80	79	76	77	76	78	78	77	79	78	77	72	78.4
	MIN	68	68	66	64	68	66	64	67	67	67	63	67	66	67	64	68	63	63	67	66	68	66	67	67	63	67	66	64	67	65	64	65.9
ISLAND OF MAUI																																	
HALEAKALA RS 336	MAX	64	63	62	66	65	68	67	63	62	61	60	62	59	62	65	66	63	59	64	68	62	66	64	61	64	62	60	62	62	61	60	63.0
	MIN	46	44	45	46	49	47	43	43	42	40	39	40	41	42	45	46	47	46	52	51	50	52	47	41	49	48	47	45	40	38	43	45.0
HALEAKALA SUMMIT 338.4	MAX	55	54		55	58		58	59	60			62	58	59	59	60																
	MIN	40	40		42	44		46	46	45			43	43	43	44	43																
MANA AIRPORT 355	MAX	87	87	86	86	85	82	80	84	85	82	84	83	84	85	84	83	83	84	83	80	81	77	63	83	82	82	82	82	81	81	83.0	
	MIN	67	67	67	69	72	69	68	69	68	68	68	69	67	70	70	72	71	73	72	71	73	69	71	73	68	71	70					

DAILY TEMPERATURES

HAWAII
OCTOBER 1970

Station		Day of Month																															Average		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
LAHAINA 30.1	MAX MIN	85 73	84 70	87 73	87 69	87 74	88 70	88 69	88 68	86 68	87 68	87 68	87 69	86 70	88 70	88 69	89 72	87 69	89 71	88 70	87 72	89 68	87 68	89 67	88 67	89 67	88 67	89 69	87 67	86 66	84 65	83 65	87.0 69.3		
WAILUKU 38.6	MAX MIN	85 72	87 74		86 71	84 73	82 71	81 73	81 73				83 70	82 70	84 73	85 73	82 73			84 70	84 73	83 72	82 73	82 71			81 71	81 72	79 70	81 67	80 67	82.7 71.5			
* * *																																			
ISLAND OF HAWAII																																			
HAINA 21.4	MAX MIN	85 68	81 69	85 68	84 67	85 66	83 69	85 68	84 66	83 66	84 67	83 67	84 63	83 67	84 65	83 65	82 65	83 66	82 67	85 70	83 70	78 69	82 68	80 68	78 68	84 68	80 66	78 66	84 66	80 66	79 64	81 65	81 64	80 66	82.3 67.0
HAWAII VOLCANO NP HQ 54	MAX MIN	74 53	75 58	67 53	72 55	73 56	69 57	71 56	69 56	69 55	67 55	68 56	67 56	68 54	72 56	72 54	73 53	74 52	71 52	72 54	73 57	70 58	64 56	68 56	63 55	69 56	72 56	64 56	69 55	72 56	64 56	71 54	70 54	71 54	70.0 54.9
HILD WSD 87	MAX MIN	89 65	87 66	86 68	84 65	84 71	84 70	83 70	81 69	83 69	82 66	84 67	83 67	87 68	87 65	84 66	86 66	86 68	83 67	81 68	82 66	83 66	81 67	84 65	80 66	83 66	84 66	80 66	83 66	81 66	83 66	82 66	81 66	83 66	83.7 66.8
KAINALIU 73.2	MAX MIN	80 63	78 65	80 65	78 65	80 65	80 65	78 64	80 65	78 63	78 63	75 63	78 65	78 62	80 63	80 61	81 65	82 64	80 65	80 65	81 66	81 66	77 66	81 66	79 65	81 65	80 63	80 63	75 63	77 63	81 63	79 60	79 60	79 60	79.3 63.7
KAMUELA 192.2	MAX MIN	87 58	77 54	78 57	74 60	76 61	74 61	75 60	73 61	73 61	74 61	75 61	74 59	75 54	81 55	78 56	74 55	80 56	76 56	70 56	75 60	70 58	73 60	71 60	72 60	70 60	71 60	73 60	71 59	73 60	74 50	79 53	74 53	79 53	74.9 58.0
KAMUELA AIRPORT 191	MAX MIN	79 52	79 55	77 53	78 63	76 59	76 59	75 57	74 59	75 59	75 59	75 51	75 52	75 56	79 49	78 53	74 50	78 54	75 51	75 51	76 54	76 54	73 54	73 54	73 54	73 54	73 54	73 54	73 54	73 54	73 54	73 54	73 54	73 54	75.4 54.2
KEAAU 92	MAX MIN	86 66	86 66	83 67	83 66	85 68	82 68	81 67	81 67	82 67	81 67	81 66	81 66	82 66	83 65	81 65	84 66	84 67	84 67	84 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	81.6 66.4
KEALAKEKUA 20.2	MAX MIN	80 64	78 67	81 65	78 66	79 66	78 66	77 65	77 65	77 65	79 65	76 65	79 65	81 64	81 63	80 63	81 63	77 63	80 63	81 63	77 63	81 63	78 63	81 63	78 63	78 63	78 63	79 63	81 63	79 63	78 63	79 63	79 63	80 63	78.9 64.7
KUHALA MISSION 175.1	MAX MIN	82 65	82 67	82 68	82 68	83 68	80 68	82 68	81 67	81 67	80 67	82 67	81 66	84 66	82 67	81 67	82 67	81 67	82 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	81 67	80.5 67.3
KONA (KAILUA) 60.3	MAX MIN	85 71	84 72		86 71	85 71	82 71	86 71	87 71	86 70	87 70			87 70	86 73	86 70	86 70	85 72			88 72	86 71	85 71	87 72			87 71	81 71	81 68	86 68	86 68	84 69	85 69	85 69	85.7 70.9
KULANI CAMP 79	MAX MIN	69 43	72 55	70 50	69 48	67 55	68 53	64 58	65 52	64 51	61 49	61 51	61 48	61 51	67 44	67 41	68 43	68 48	68 45	65 53	60 52	60 50	59 50	59 52	61 54	64 49	65 52	69 49	65 47	69 45	62 48	65 48	69 48	64 53	64.9 49.5
MAUNA LOA SLOPE DBS	MAX MIN	56 36	55 39	54 38	55 40	56 39	56 37	56 39	56 39	57 40	54 38	54 41	53 38	54 37	55 38	55 36	55 41	55 41	55 41	58 40	60 40	60 41	60 41	56 39	55 38	56 38	56 38	56 38	56 38	56 38	56 38	56 38	56 38	56 38	54.0 37.2
MOUNTAIN VIEW 91	MAX MIN	82 62	82 63	81 60	81 60	81 64	79 63	77 63	76 63	73 63	78 61	78 61	78 61	79 61	80 58	80 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	83 61	79.0 62.4
NAALEHU 14	MAX MIN	81 68	81 68	81 68	82 68	82 68	77 67	82 67	80 67	78 67	80 67	81 67	81 66	82 66	80 66	80 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	81 66	80.3 68.1
POKALA 223	MAX MIN	81 63	80 67	84 68	82 68	83 68	82 68	81 68	80 68	80 68	82 68	82 68	82 68	82 68	83 68	81 68	81 68	81 68	81 68	83 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	84 68	81.0 67.1
OPIHIHALE 2 24.1	MAX MIN	77 63	86 64	79 65	79 64	79 64	79 63	77 63	76 62	74 62	80 63	80 61	83 61	83 61	78 59	82 61	77 62	83 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	82 63	78.7 62.0
PAHALA 21	MAX MIN	82 60	82 63		83 62	81 65	81 66	82 66	81 64	81 64			82 62	83 62	81 62	82 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83 62	83.3 63.3
PUAKU 95.1	MAX MIN	88 71	88 70	87 71	88 70	88 70	88 74	88 72	88 72	88 69	87 70	88 72	87 69	88 69	86 69	88 69	86 69	88 69	84 70	84 72	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	84 70	87.2 70.4
UPDLU POINT USCG 159.2	MAX MIN	86 72	88 73	89 73	84 69	85 71	85 70	84 70	81 71	84 70	83 66	84 66	84 66	83 66	84 66	85 66	83 66	87 66	85 66	83 66	85 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	82 66	83.6 70.4

EVAPORATION AND WIND

Station		Day of Month																															Total or Avg.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
* * *																																		
ISLAND OF KAUAI																																		
LIHUE WSD 1020.1	EVAP WIND MAX MIN	.28 119 88 64	.46 158 82 68	.29 123 84 68	.30 86	.32 181	.36 177	.27 163	.26 172	.35 187	.28 131	.25 103	.39 102	.23 98	.27 110	.26 69	.25 123	.21 77	.23 62	.21 139	.23 205	.33 252	.21 262	.19 229	.43 306	.27 207	.25 189	.28 146	.25 135	.14 77	.24 115	.18 70	8.47 4579 84.0 65.6	
* * *																																		
ISLAND OF OAHU																																		
HONOLULU OBSERV 702.2	EVAP WIND MAX MIN	.21 30 94 68	.14 64 81 70	- 36 71	.20 23	.25 36	.19 31	.25 32	.23 27	.20 26	.21 23	.23 19	.19 19	.17 20	.25 25	.23 23	.27 16	.16 21	.15 14	.19 19	.22 40	.34 39	.15 38	.30 47	.23 44	.21 36	.23 29	.22 27	.22 23	.22 21	.20 13	.16 19	.16 19	6.578 880 86.9 66.6

STATION INDEX

HAWAII OCTOBER 1970

Main data table with columns: STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER, STATION, INDEX NO., DIVISION, DISTRICT, DRAINAGE, LATITUDE, LONGITUDE, ELEVATION, OBSERVATION TIME AND TABLES, OBSERVER. Includes sub-sections for ISLAND OF MAUI and ISLAND OF HAWAII.

STATION INDEX

STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES			OBSERVER	STATION	INDEX NO.	DIVISION	DISTRICT	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES			OBSERVER			
								TEMP	PRECIP	SPECIAL										TEMP	PRECIP	SPECIAL				
ISLAND OF HAWAII																										
NAPOOPOO 28	A 6697 04	S KONA		6 19 28	195 55	395		7A				KONA EXPERIMENT STA														
MAULU FOREST 38.6	A 6730 02	PUNA		2 19 19	195 08	1400		VAR				HAWAII VOLCANOES NAT PK														
MULIHI 179	A 6859 01	N KOHALA		20 14	195 45	75		8A				KOMALA SUGAR CO														
OKALA 223	A 7131 02	N HILO		20 01	195 17	430		7A	7A			LAUPAHEME SUGAR CO														
OPIMAHALA 2 24.1	A 7168 04	S KONA		19 16	195 93	1270		7A	7A			MISS C LEONARD														
ORCHID LAND EST 91.5	A 7185 02	PUNA		19 34	195 00	445		VAR				BOARD OF WATER SUPPLY														
PAALUHA 217	A 7204 01	HAWAII		20 05	195 26	415		7A				PAALUHA SUGAR CO														
PAALUO 221	A 7204 01	HAWAII		20 03	195 22	800		7A				HAWAIIAN HILL CO														
PAHALA 21	A 7421 03	KAU		3 19 12	195 29	870		8A	8A			HAWAIIAN AGR CO														
PAHUA 85	A 7437 02	PUNA		2 19 30	194 57	670		8A				PUNA SUGAR COMPANY														
PAKAO 37	A 7643 03	KAU		3 19 22	195 28	5000						HAWAIIAN RANCH CO, INC.														
PAPAIOU 144.1	A 7711 02	S HILO		19 47	195 08	200		7A				MAUNA KEA SUGAR CO.														
PEPEKEO MAUKA 140.1	A 7721 02	S HILO		19 47	195 08	1270		7A				MAUNA KEA SUGAR CO.														
PEPEKEO MAUKA 144	A 8050 02	S HILO		19 51	195 05	100		7A				PEPEKEO SUGAR CO.														
PONOBUA 89	A 8051 02	S HILO		19 44	195 10	1750		7A				STATE DIV OF FORESTRY														
POMAKULOA 107	A 8063 02	HAWAII		19 45	195 32	6511		VAR	C			STATE DIVISION OF PAPAKS														
PUMAO 95.1	A 8186 05	KOHALA		1 19 59	195 50	5		8A	8A			ERWIN M. RAPP														
PUU KIME 120	A 8393 01	HAWAII		1 19 54	195 24	7750						KUKAIUA RANCH CO														
PUU LAAU 102.1	A 8452 05	HAWAII		5 19 50	195 36	7440						STATE DIV OF FISH-GAME														
PUU LEHUA 73	A 8460 04	N KONA		4 19 34	195 49	4580						GREENWELL PANCH														
PUU MALI 113	A 8519 01	HAWAII		1 19 55	195 26	6960						KUKAIUA RANCH CO														
PUKUKOHU 107	A 8548 08	N KOHALA		1 20 12	195 50	1800		7A				KOHALA DITCH CO LTD														
PUU OO 82	A 8550 02	S HILO		19 44	195 23	6340		8A	C			DON WINTERS														
PUU WAKAHA 94.1	A 8558 05	N KONA		19 47	195 51	2520		7A	C			OILLINGHAM RANCH INC														
SADDLE ROAD 1 84	A 8575 02	S HILO		2 19 47	195 12	2340						BUSBO OF WTR SUPPLY														
SOUTH POINT CORRAL 3	A 8675 03	KAU		3 18 57	195 41	500						HAWAIIAN RANCH COMPANY														
UMIKOA 118	A 8783 01	HAWAII		1 19 59	195 23	3420						KUKAIUA RANCH CO														
UPULU POINT USCG 159.2	A 8830 01	N KOHALA		1 20 13	195 53	61		8A	8A			U S COAST GUARD														
WAIKAEA SCD 86.2	A 9028 02	S HILO		2 19 40	195 08	1050		7A				SMINICHI KANESHIRO														
WALKANONDULA 176.6	A 9350 01	N KOHALA		1 20 08	195 47	3850						KAMUA PANCH														

1 DRAINAGE CODE: KAUAI: 1-NORTHERN 2-SOUTHEASTERN 3-SOUTHWESTERN OAHU: 1-WINDWARD KOOLAU 2-HONOLULU 3-SOUTH-CENTRAL 4-WESTERN
 5-NORTH-CENTRAL MOLOKAI: 1-(NO INTRA-ISLAND DIVISIONS) LANAI: 1-(NO INTRA-ISLAND DIVISIONS) MAUI: 1-NORTHEASTERN
 2-SOUTHERN 3-CENTRAL 4-WESTERN HAWAII: 1-NORTHERN 2-EASTERN 3-SOUTHERN 4-WESTERN 5-CENTRAL

REFERENCE NOTES

Additional information regarding the climate of Hawaii may be obtained by writing to the National Oceanic and Atmospheric Administration Regional Climatology, P. O. Box 9550, Honolulu, Hawaii, or to any National Weather Service Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA HAWAII."

DIMENSIONAL UNITS Unless otherwise indicated, dimensional units used in this bulletin are Temperature in F, precipitation and evaporation in inches, and wind movement in miles. In "Supplemental Data" table directions entered in figures are tens of degrees. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations.

OBSERVATION TIME Data in the "Monthly Extreme", "Daily Precipitation" table, "Daily Temperature" table, and "Evaporation and Wind" table are for the 24 hours ending at time of observation unless indicated otherwise by reference letters in the Station Index. The Station Index shows observation time in local standard time.

EVAPORATION is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind in the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 6-8 inches above the pan.

NORMALS for all stations are climatological standard normals based on the period 1931-1960.

STATION NAMES Hawaii state key numbers are included following station names in the several tables.

DELAYED DATA AND CORRECTIONS will be carried only in the June and December issues of this bulletin.

INTERPOLATED VALUES for monthly precipitation totals may be found in the annual issue of this publication.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING

- No record in the "Supplemental Data" table, "Daily Precipitation" table, "Evaporation and Wind" table, "Snowfall and Snow on Ground" table, and the Station Index.
- No record in the "Climatological Data" table and the "Daily Temperature" table is indicated by no entry
- + And also on an earlier date or dates.
- ++ Highest observed one minute windspeed. This station is not equipped with an instrument to measure fastest mile data.
- * Amount included in following measurement, time distribution unknown
- A The letter "A" shown following station name in "Climatological Data" table, "Daily Precipitation" table, and "Station Index", indicates amount carried in the "Total" column is for the period from last measurement of a preceding month through the last measurement of the current month. See "Daily Precipitation" table of this and previous bulletins for dates of measurement. Where gages are read only once monthly, measurements made on the first of a month are credited to the last day of the preceding month.
- B Adjusted to a full month
- J "Supplemental Data" table
- M One or more days of record missing, if average value is entered, less than 10 days record is missing. See "Daily Temperature" table for detailed daily record.
- R Amounts from recording gage.
- T Trace, an amount too small to measure
- V Includes total for previous month

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USE, INDICATE THE FOLLOWING

- AR Observation made after rain.
- C In Special Column of Station Index Indicates Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in the "Hourly Precipitation Data" bulletin. If daily amounts are published in "Climatological Data" bulletin they are from a separate non-recording gage, except where indicated by reference "R". Such amounts may differ from amounts published from the recording gage in the "Hourly Precipitation Data" bulletin.
- MO Gage read once monthly, usually on the last day.
- OC Gage readings at periods varying from a few weeks to several months
- S Storage Precipitation Station. Precipitation measurements, made at irregular intervals, are published in the December issue, or as delayed data in the June issue of this publication.
- SS Observation time is near sunset.
- VAR Observation time is variable.
- W1 Gage read weekly or irregularly only.
- W2 Gage read weekly and last day of month.
- * Thermometers are generally exposed in a shelter located a few feet above sod-covered ground, however, this reference indicates that the thermometers are exposed in a shelter located on the roof of a building.

Stations appearing in the tables with no data were either missing or received too late to be included in this issue.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, CLIMATOLOGICAL DATA NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1957 may be found in the publication "Substation History" for this State, price 40 cents. Similar information for regular Weather Bureau stations may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the Superintendent of Documents at the address shown above.

Subscription Price 20 cents per copy, monthly and annual, \$2.50 per year. (Yearly subscription includes the Annual Summary.) Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

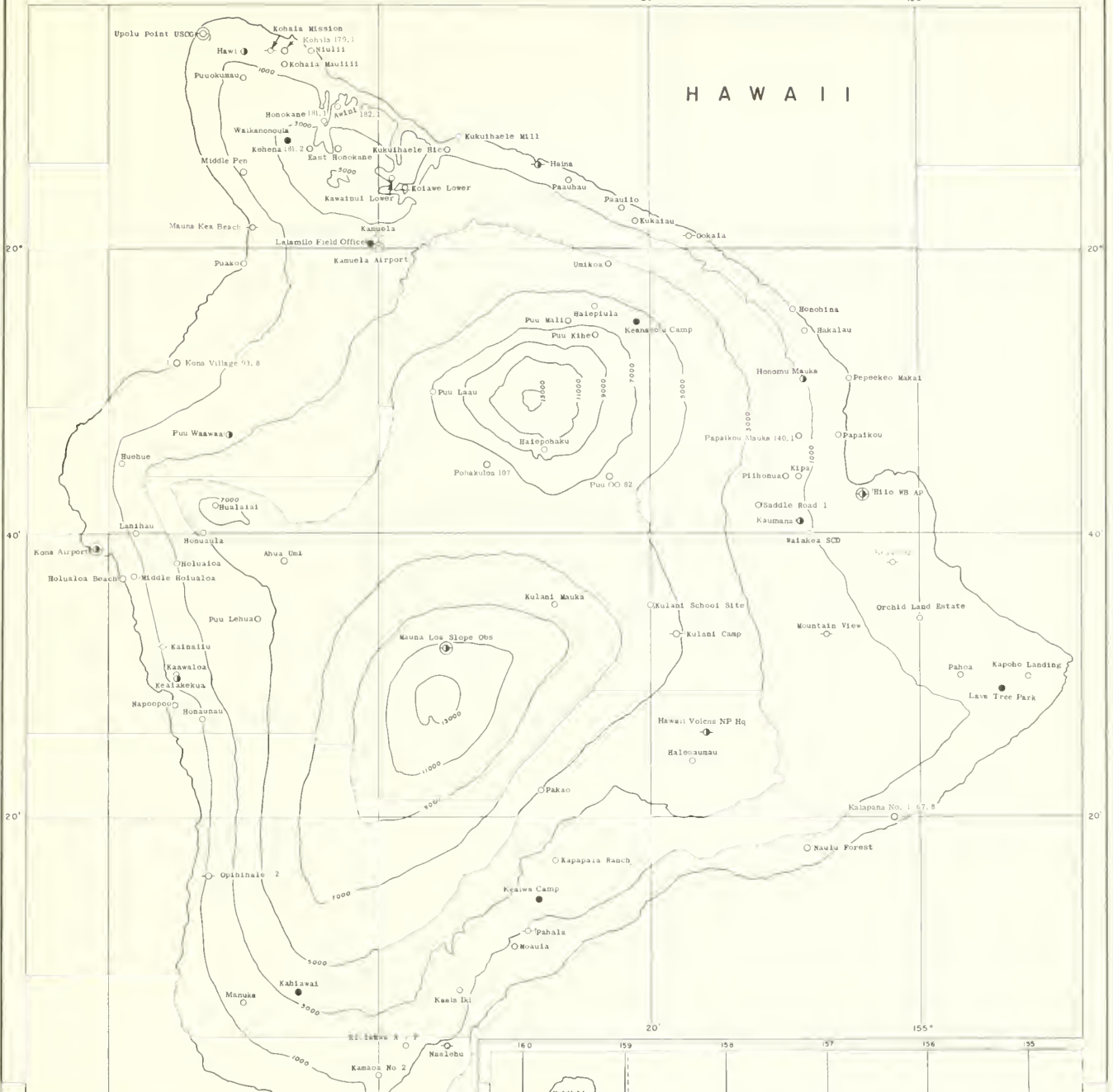
156°

40'

20'

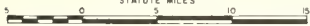
155°

HAWAII



HAWAII

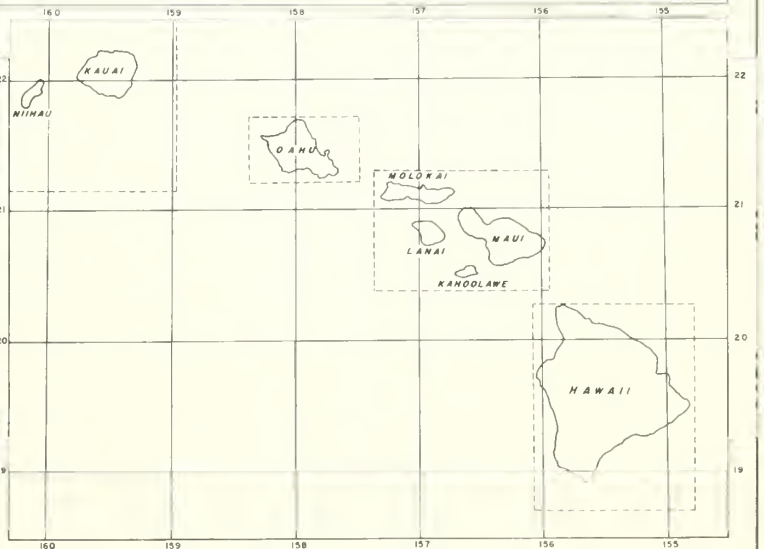
PLATE 2
STATUTE MILES



STATION LEGEND

- ● ● Precipitation only
- ⊙ Precipitation, storage
- ⊖ ⊕ Precipitation and Temperature
- ⊖ ⊕ ⊖ Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording, ● Recording ● Both types

Double circle combinations indicate the availability of more detailed meteorological data
All stations use 150th meridian time



156°

USCOMM-ESSA-Ashville, N. C.
Revised 2-69

40'

160

159

158

157

156

155

19°

20°

21°

22°



CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

HAWAII

NOVEMBER 1970

Volume 66 No. 11

MAR 19 1971

MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

Station	Temperature											Precipitation												
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet		No. of Days				
										80° or Above	70° or Above	32° or Below	0° or Below					Total	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
* * * ISLAND OF KAUAI																								
ANAHOLA 1114	A																							
KANALDHULUHULU 1075		65.9	50.9	58.4		73	7	44	27															
KAPAA STABLES 1104	A																							
KILAUEA FIELD 17 1135	A																							
KILAUEA POINT 1133		79.0M	68.7M	73.9M		83	1	60	26															
KOOLA 936																								
LIHUE WSD 1020.1	//R	80.3	70.5	75.4	-.9	84	19+	64	27+															
MANA 1026		83.7	64.8	74.3	-.4	88	11+	61	27+															
N WAILUA OITCH 1051	A																							
PH WAINIHA 1115																								
PUEHU RIDGE 1040																								
WAHIANA 930	A																							
WATAHI LOWER 1054		78.2	63.1	70.7		83	7+	56	22															
WAIMEA 947																								
ISLAND																								
* * * ISLAND OF OAHU																								
HONOLULU OBSERV 702.2	R	82.4	69.2	75.8	-.1	85	17+	63	5															
HONOLULU WSFC 703																								
KAHUKU 912	A																							
KANEIHE MAUKA 781		78.6	67.7	73.2	-1.0	82	28+	63	28+															
KOOLA OAM 833																								
LUALUALEI 804		82.8	69.7	76.3		86	11+	65	4															
MAKAPUU POINT 724		75.7	67.5	71.6		79	20	63	23+															
NUUANU RES 4 783																								
OPAEULA 870	A	77.2	63.1	70.2	.0	81	6	57	22															
PALLO VALLEY 718																								
PRI WAHIANA 820.2	A	79.4	63.6	71.5		85	10	56	23															
PUNALUU 884	A																							
WAHIANA OAM 863	A																							
WAIHOLE 837	A																							
WATALUA 847	A	82.2M	64.4M	73.3M	-.1	87	6	60	4															
WAIKIKI 717.2		83.9	69.0	76.5		87	20+	60	22															
WAIMANALO EXP FARM		80.1	68.7	74.4		83	11+	63	24															
WAIPAHU 750	A																							
ISLAND																								
* * * ISLAND OF MOLOKAI																								
KUALAPUU 534	A																							
MAPULEHU 542																								
MAUNALOA 511	A																							
MOLOKAI AP 524		79.9	68.8	74.4		83	12	65	4															
ISLAND																								
* * * ISLAND OF LANAI																								
LANAI CITY 672	A	75.6M	64.9M	70.3M		79	18+	60	3															
ISLAND																								
* * * ISLAND OF MAUI																								
HALEAKALA 8 E S 434	A																							
HALEAKALA RS 338		59.6	44.3	52.0		66	1	35	23															
HANA AIRPORT 355		79.9	68.4	74.2		83	11+	64	24+															
HONOKOHUA 493	A																							
KAANAPALI AIRPORT		79.4	68.0	73.7		88	21	53	30															
KAHULUI WSD 398	R	82.7	68.2	75.5	.5	86	29+	59	3															
KAILUA 446		77.8	65.4	71.6	-.6	80	25+	61	23															
KEANAE 346	A																							
KIPAHULU 258																								
KULA SANATORIUM 267		72.1	58.3	65.2	.8	77	20	54	3															
LAHAINA 361		83.8	67.7	75.8		87	13+	64	23+															
PAIA 406																								
WAILUKU 386	M																							
ISLAND																								
* * * ISLAND OF HAWAII																								
HAINA 214		78.5	65.6	72.1	.1	83	21	63	26+															
HAWAII VOLCNS NP HO 54	R	68.2	54.2	61.2	.4	73	19	48	18															
HILD WSD 87		81.9	65.9	73.9	.7	87	16	61	8+															
HUEHUE 92.1	A																							
KAINALIU 73.2		78.4	62.7	70.6		81	20+	61	15+															

See Reference Notes Following Station Index

SPECIAL WEATHER SUMMARY ON PAGE 123

MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

HAWAII
NOVEMBER 1970

Continued

Station	Temperature											Precipitation															
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow/Sleet			No. of Days						
										90° or Above	32° or Below	32° or Below	32° or Below					Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
KEAAU 92	79.9	64.7	72.3	- .3	84	28+	63	8+	0	0	0	0	13.32	-.61	5.15	21	.0	0		13	7	3					
KEALAKEKUA 26.2	78.1M	63.7	70.9M		82	6	62	25+	0	0	0	0	3.88		1.03	25	.0	0		8	3	1					
KONA (KAILUA) 68.3	84.7M	69.5M	77.1M		90	2	67	30+	1	0	0	0	2.10		.63	25	.0	0		5	2	0					
KUKUIHAELE HIC 179													10.07	3.31	1.58	25	.0	0		15	7	4					
KULANI CAMP 79	64.5	48.3	56.4		70	21	41	3	0	0	0	0	10.69		4.95	21	.0	0		14	6	1					
PAHALA 21					84	4	59	3	0	0	0	0	6.94				.0	0									
PDHAKULOA 107													2.06				.0	0									
PJAKO 95.1	84.7	68.3	76.5		90	1	65	27+	1	0	0	0	1.91		.66	27	.0	0		4	3	0					
PUU WAAHAA 94.1													3.37	1.28	1.10	25	.0	0									
UMIKOA 118													7.52	1.12	1.48	25	.0	0		11	5	4					
WAIKEA SCD 88.2													8.49		1.83	21	.0	0		11	6	4					
WAIKOA KOHALA	72.3	55.6	64.0		78	17	49	17	0	0	0	0	2.28		.85	25	.0	0		5	2	0					
ISLAND			69.5										6.17				.0										

TEMPERATURE AND PRECIPITATION EXTREMES

HIGHEST TEMPERATURE: 91° ON THE 10TH AT KEAWAKAPU BEACH 260.2, MAUI

LOWEST TEMPERATURE: 31° ON THE 15+ AT MAUNA LOA SLOPE OBS, HAWAII

GREATEST TOTAL PRECIPITATION: 37.05 AT PAAKEA 350, MAUI

LEAST TOTAL PRECIPITATION: .80 AT HUALALI 72, HAWAII

GREATEST ONE-DAY PRECIPITATION: 13.10 ON THE 26TH AT PAAKEA 350, MAUI

See Reference Notes Following Station Index

SPECIAL WEATHER SUMMARY

During November, as a sign that winter had come to Hawaii, nature put on a broad display of destructive weather: thunderstorms and lightning, high waves and surf, heavy rains and flash flooding.

Although trees, poles, and structures are struck and ignited by lightning from time to time in Hawaii, any resulting fires are ordinarily quickly quenched by the heavy rains which almost invariably accompany Hawaiian thunderstorms. Consequently, large fires set by lightning are extremely rare in the State. One of these exceptions appears to have occurred on November 7, when what may have been Hawaii's first well documented instance of an extensive lightning-caused fire, destroying 2,000 acres of grass and shrub land on the Puu Waawaa Ranch in Hawaii Island's North Kona district.

The lightning which set the fire was witnessed by two pilots and two Kona Village Inn employees, who reported the day as dark and overcast, with rain falling further upslope, but not in the area where the lightning struck. The fire, which took 3 days to extinguish, was estimated to have cost \$14,000 -- \$7,000 in damage to pastureland, and an equal amount spent in extinguishing it.

On the evening of the 20th, lightning again played havoc on Hawaii Island, this time in what residents of the Hilo area described as their worst lightning and thunderstorm display in years. According to firemen, many small blazes were set when lightning short-circuited TV sets. Most of these appear to have been extinguished without significant damage, but one of them is believed to have been responsible for the fire which completely destroyed a \$49,000 home in Hilo. Lightning also split numerous electric poles, burned out or damaged 125 transformers and destroyed 4 generators in power plants. Electricity was out for several hours in parts of Hilo and in Kau, Kona, Puna, and North Kohala. Damage attributable to lightning in the Hilo area was estimated to total over \$60,000.

Beginning on November 24, a slowly-moving storm approximately 1,000 miles to the north-northeast lashed the northern shores of the Hawaiian Islands with waves of 25 feet or more. Mokuleia, Oahu, one of the localities damaged by the high surf of December 4, 1969, (described in that month's issue of the Hawaii CD), was hardest hit when, beginning at 1:20 a.m. on the 24th, waves destroyed 12 retaining walls and did an estimated \$100 to \$2,000 in damage to each of 19 beach homes. On the other islands some parks and roads exposed to the giant waves sustained minor damage. Total wave damage for the State was estimated to be at least \$64,000.

The waves had scarcely subsided, when heavy

thunderstorm rains swept over all the islands but Hawaii during the evening of the 25th and the early morning of the 26th, Thanksgiving Day. The most intense rains appear to have occurred from thunderstorms associated with an upper level low pressure system and the orographic ascent of surface trade winds, and to have been localized in a small area between Oahu's windward coast and the Koolau Mountains, the scene of previous severe floods that occurred under similar meteorological circumstances. Kaneohe Mauka, at an elevation of 200 feet, had a 24-hour total of 12.3 inches, while the Haiku Naval Station, in the same area but at an elevation of 630 feet, registered 6 inches in 2 hours and 11-1/2 inches in 4-1/2 hours. The resulting flash floods were most serious, and damages heaviest, between Kahaluu and Waimanalo, where at least 20 homes and a church were flooded, 11 automobiles water-damaged, and storm drain facilities undermined. Fifteen people stranded in their homes by rising water were evacuated by firemen. Property damage from flood waters was estimated at about \$120,000.

Flooding also occurred on Maui, Kauai, and Molokai, but did much less damage than on Oahu. The Honokowai Stream on West Maui and the Wailua River on Kauai overflowed and flooded a few homes and other buildings along their banks. Several roads were flooded and blocked temporarily by rocks, mud, and debris. Some agricultural areas experienced minor flooding and field erosion, but damage to crops was light. Flood costs on islands other than Oahu were estimated to be about \$23,000.

The rainstorm spared Hawaii Island, but greeted its residents on Thanksgiving morning with the first major snowfall of the winter season -- a blanket 1 to 2 feet deep which whitened Mauna Kea and Mauna Loa down to about the 12,000-foot level.

A minor incident of the month was the funnel cloud reported on November 19 as moving westward toward shore about 1,000 feet off Maui's McGregor Point, while creating a disturbance in the water beneath.

The month's rains brought widespread relief from the dry weather which had affected many parts of the State during the previous months. Only extreme West Kauai and the coast and slopes of Hawaii Island's Hilo and Kau districts received below their average rainfall for November.

Long period stations which exceeded their previous greatest November rainfall totals are listed below.

HAWAII - NOVEMBER 1970

SPECIAL WEATHER SUMMARY - Continued

Stations Whose Previous Greatest November Rainfall Totals
were Exceeded in November 1970

(25 years of record or more, only)

Station	Length of Record (Yrs.)	Previous Greatest November Total	November 1970
<u>KAUAI</u>			
Anahola	40	13.37 Inches	14.18 Inches
<u>MOLOKAI</u>			
Mapulehu	51	12.49	14.66
<u>MAUI</u>			
Haelaau	39	22.00	24.00
Hamakuapoko	87	14.15	15.66
Kukui	43	71.50	72.00

Stations Whose Previous Greatest 24-Hour Rainfall Total
was Exceeded in November 1970

(25 years of record or more, only)

<u>KAUAI</u>			
Waiahi Upper	38	7.90	10.46
<u>OAHU</u>			
Kaneohe Mauka	42	11.37	12.25
<u>MAUI</u>			
Keahua	52	3.38	3.51

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DAILY PRECIPITATION

HAWAII
NOVEMBER 1970

Station	Total	Day of Month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ISLAND OF KAUAI																																	
ANAOHOLA 1114	A	14.18	.30	.03	.05	.12	.	.	.29	.02	.09	.07	.	.	.40	.20			1.30	.	.	.85	.03	.20	4.81	.57	.	.	.49	.	.		
BRYOWOOD STA 985	A	6.17	.02	.07	.	.	.	.52	.07	T	.19	.17	.	.	.30	.06	.45		.02	2.30	.	.	.11	.01	.	.	.	.	.16	.	.
EAST LAWA 934	A	8.82	.08	.11	.04	.01	.49	.	.61	.11	.02	.15	.27	.	.56	.04	.03		.01	1.42	.	.	.24	.	.	.	.	.	.43	.	.
ELELE 927	A	2.63	T	T	T	.	.	.	.	.	.05	.03	.	.	.07	T	.02		1.62	.	.	.08	.	.	.	.	.	.	.50	.	.
HAAULA 1110	A	11.00	.15	.03	.03	.11	.	.	.39	.	.	.12	.	.	.13	.	.40		1.40	.	.	.95	.02	.20	4.16	.66	.	.	.20	.	.		
HALENANAO 1006	A	12.59	.18	.09	.27	.19	.11	.	.83	.13	.05	.21	.26	.	.44	.07	.05		.03	2.63	.	.	.41	.01	.	.	.	.	.63	.	.
HUKIPII 945	A	2.07	.	.	.	.	.	.	.	.20	.	.	.	.	.	.	.		1.43	.	.	.10	.	.	.	.	.	.	.25	.	.
ILILILUA INTAKE 1050	A	19.40	.25	.07	.08	.49	.	.15	.22	.09	.02	.31	.	.	1.79	.09	.12		3.60	.	.	1.92	.	.02	.	.	.	.10	.	.10	
INTAKE WAINIHA PC 1086	A	18.11	.	.	.46	.	.	.20	.06	.	.	.34	.08	.	3.60	.	.		3.20	.	.	4.20	.	.	.	.	.	.10	.	.10	
KANALOHULUHU 1075	A	6.99	.12	.03	.02	.12	.02	1.13	.06	.02	.40	.44	.08	.	.26	.02	.42		.95	1.70	.	.13	.62	.02	.	.	.33	.02	.02	.	.		
KANEHA RESERVOIR 1092	A	17.35	.75	.07	.05	.10	.	.65	.22	.	.40	.20	.	.	.95	.15	1.10		.02	1.00	.	.	1.80	.05	.10	5.98	2.05	.	.	.17	.		
KAPAA STABLES 1104	A	11.15	.19	.05	.02	.32	.	.37	.	.	.07	.13	.	.	.14	.30	.		1.62	.	.	1.07	.19	.27	3.68	.80	.	.	.19	.	.19		
KEALIA 1112	A	10.08	.24	.04	.06	.17	.	.23	.	.	.10	.10	.	.	.05	.25	.		1.45	.	.	.98	.02	.50	4.97	.72	.	.	.20	.	.		
KEKAHA 944	A	3.22	.	.	.	.	.	1.42	.	.	.03	.03	.65	.36	.	.	.		1.26	.26	.	.	.96	.10	.62	.	.	.	.68	.	.
KILAUEA 1134	A	13.37	.10	.01	.07	.07	.06	.	.86	.03	.03	.65	.36	.	1.14	.03	.93		.01	.57	.	.	.	.	.	.	.	.	.64	.	.
KILAUEA FIELD 17 1135	A	16.22	.11	.	.32	.01	.32	.	1.10	.18	.05	.40	.20	.	1.19	.01	1.17		.68	.	.	1.41	.11	.58	.	.	.	.	.83	.	.
KILAUEA POINT 1133	A	10.51	.	.	.22	.	.32	.20	.03	.	.47	.33	.05	.22	1.04	.	.		.34	.54	.52	.13	.18	.01	1.08	3.10	.21	.20	.10	.10	.		
KOLD 1033	A	10.89	.21	.12	.09	.01	.41	.	.21	.23	.02	.23	.20	.	.57	.08	.		1.65	.	.	.28	.	.	.	.	.	.	.65	.	.
KOLDA HAUKA 994	A	16.28	.13	.08	.09	.08	.33	.	.77	.16	.09	.23	.32	.	.63	.05	.08		.03	3.32	.	.	.24	.	.	.	.	.95	.	.	
KOLOKO RES 1137	A	16.86	.10	.07	.11	.03	.08	.	1.12	.02	.06	.25	.26	.	.90	.55	.72		.86	.	.	1.72	.12	1.23	.	.	.	.	.86	.	.
KUKUIULA 935	A	8.07	.02	.06	.04	.02	.05	.	.17	.06	.30	.22	.	.	.19	.01	.01		1.40	.	.	.26	.	.	.	.	.	.	.52	.	.
LIMUE VARIETY STA	A	13.68	.19	.02	.14	.19	.51	.69	.10	.30	.40	.15	.01	.29	.08	.02	.		2.80	.34	.	.29	.01	.01	5.16	1.02	.	.	.29	.38	.		
LIMUE 1020	A	8.06	.05	.01	.13	.10	.05	.	.79	.10	.02	.22	.10	.	.14	.02	.05		1.01	1.92	.	.81	.01	.15	.	.	.	.33	.	.	
LIMUE WSD 1020.1	/R	11.05	T	T	T	.05	.14	.16	T	.03	T	.33	.03	T	.12	T	.10	T	1.16	1.10	.04	.37	.01	.48	2.76	1.75	T	2.14	.02	.26	.	.	
MAKAHUNA POINT 940.1	A	4.24	.11	.	.02	.02	.14	.01	.01	.	.04	.	.03	.03	.	.14	.	.02		1.75	.05	.	.10	.	.	1.10	.61	.	.02	.	.		
MAKAWELL 965	A	2.87	.	.	.	.	.77	.	.05	.	.	.	.	.	.03	.	.02		1.66	.04	.	.01	.20	.	.02	.31	.	.	.26	.	.
HANA 1026	A	1.0847	
MOHIHI UPR CROSS 1083	A	12.87	.06	.	.05	.	.49	.16	.	.16	.98	.49	.	.16	.33	.25	.02		5.37	.38	.41	.74	.10	.	.	.	.	.	.09	.	.
MOLDA 1145	A	12.87	.06	.	.05	.	.49	.16	.	.16	.98	.49	.	.16	.33	.25	.02		5.37	.38	.41	.74	.10	.	.	.	.	.	.09	.	.
ISLAND OF MAUI																																	
MOUNT WAIALEALE 1047	A	1.2061	.17	
NIU RIGGE 1035	A	22.38	.46	.20	.16	.20	.66	.	2.26	.36	.20	.30	.46	.	1.26	.20	.60		3.10	.	.	2.46	.20	.30	.	.	.	.90	.	.	
N WAILUA DITCH 1051	A	11.34	.37	.04	.05	.	.08	.03	.01	1.91	.04	.30	.45	.05	.72	.74	.67	.52		2.55	.62	2.30	.02	.26	.71	.39	1.49	.07	T	1.05	.21	.02	.44
PRINCEVILLE RANCH 1117	A	15.29	.02	.08	.28	.	1.42	.06	.64	.01	.12	.80	.01	.12	.80	.31	1.30		.08	.34	.42	.15	.87	.05	1.27	4.31	.23	.15	.65	.71	.	.	
ISLAND OF HAWAII																																	
PUHU RIGGE 1040	A	1.2061	.17	
PUM 1013	A	11.34	.37	.04	.05	.	.08	.03	.01	1.91	.04	.30	.45	.05	.72	.74	.67	.52		2.55	.62	2.30	.02	.26	.71	.39	1.49	.07	T	1.05	.21	.02	.44
RESERVOIR 6 1004	A	15.86	.09	.05	.37	.39	.24	.	1.19	.06	.03	.23	.12	.	.67	.04	.07		.02	2.92	.	.38	.	.	.	.	.	.	.89	.	.
WAIANA 930	A	3.06	.03	T	.	.	.	.	.09	.02	.05	.02	.	.	.22	.02	.25		.02	1.30	.	.14	.	.	.	.	.	.	.90	.	.
WAIANA MOUNTAIN 990	A	18.50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.18	.	.
WAIHI LOWER 1054	A	18.81	.12	.02	.08	.09	.09	.24	1.61	.15	.46	.11	.08	.04	.54	.05	.13		1.26	.14	.16	.02	2.33	1.13	.02	.19	T	7.46	.92	.09	.11	1.12	.
WAIHI UPPER 1052	A	21.66	.11	.02	.08	.06	.01	.21	1.43	.01	.10	.20	.02	.11	.30	.11	.11		1.48	.10	.11	.01	1.90	1.55	.05	.28	.02	10.46	.89	.21	.04	1.68	.
WAIANA 943	A	2.46	1.1704	.88	.	.	.1324
WAIANA KAI 1065	A	14.73	.78	.08	.07	.11	.	.43	.	.37	.04	.10	.02	.03	.	.15	.		3.00	.	.	.82	.	.	1.02	5.66	.58	.	.	.15	.	.	
WAIANA 947	A	2.9343		2.05	.	.	.1827
WEST LAWA 931	A	6.06	.07	.06	.06	T	.07	.	.	.17	.02	.19	.18	.	.47	.03	.05		1.12	.	.	.1534
ISLAND OF OAHU																																	
BERETANIA PUMPING STA	A	7.02	.03	.	.65	.55	.18	.25	.09	.	.17	.10	.02	.51	.30	.	.		T	.31	1.20	.	.07	.	.10	.26	.29	.71	.90	.33	.	.	
CAMP 84 807	A	6.08	.05	.10	.	.	.20	.	.10	.	.0280	.	.		.12	.	.	.83	.	.	.1937
CHURCH COLLEGE LAIE	A	8.54	.05	.10	.	.	.04	.28	.03	.06	.	.27	.13	.02	.57	.10	.30	.28		.16	.23	.	.43	.04	.38	2.35	1.38	.31	1.03	.10	.	.	
COCONUT ISLAND 840.1	A	14.21	.05	.01	.	.94	.08	.05	.04	.06	.01	.04	.08	.06	.22	.95	.40	.		.06	.45	.	1.20	.35	.25	.18	4.12	.30	1.40	2.65	.22	.	.
EHA PLANTATION 741	A	6.16	.	.	.27	.	.	.06	.	.	.01	.09	.01	.	.36	.	.		.15	.78	.	.	.0229	1.30	.09	.	.	
HELEHANO INTAKE 881	A	9.56	.60	.	.	.47	.	.	.62	.	.	.18	.	.	1.9069	.	.1640
HOKULUA 725.2	A	7.9772	.18	.65	.		.43	.	.05	.	.	.03	.09	.54	.38	.40	.08	.	.	
HONOLULU RESERV 702.2	A	3.6134	.01	.	.01	.	.02	.17	.21	.2325	.61	.16	.07	.	.	.06	.41	1.03	.61	.55	T	.	.	
HONOLULU WSPC 703	R	5.94	T	T	T	1.50	.02	.37	T	T	.03	.10	.10	.38	.02	T	.	.	.08	.67	.06	.01	
HONOLULU SUBSTA 704	R	5.99	T	T	T	1.15	.06	.20	.05	T	.	.09	.02	.	.11	.03	.08		1.38
H S P A EXP STA 707	A	7.69	.13	.	.	.85	.11	.	.26	.17	.	.25	.08	.26	.53	.40	T		.01	.28	1.55	.	.11	.	.23	.20	.31	.72	.91	.33	.	.	
KAHANA 883	A	43.36	2.64	6.80	6.3023	.80	.	.	.
KAHUKU 912	A	7.4102	.	.36	.02	.03	.02	.	.	.84	.02	.02		.02	.20	.	.89	.16	.0740
KAILUA FIRE STA 791.3	A	12.23	.01	.03	.05	.	.12	.01	.02	.01	.	.05	T	.04	.97	T	.70		.02	1.30	T	.03	.33	.35	.15	3.30	.13	1.25	1.98	1.20	.	.	
KALII RES SITE 777	A	22.05	.06	.	1.42	.12	.3																										

DAILY TEMPERATURES

HAWAII
NOVEMBER 1970

Station	Day of Month																															Average		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
ISLAND OF KAUAI																																		
KANALOHULUHULU 1075	MAX MIN	66 53	61 52	69 55	70 50	71 48	62 46	73 51	70 53	70 51	70 50	72 52	63 56	61 54	62 51	65 51	67 57	63 53	64 53	65 53	64 52	61 52	62 47	69 49	60 49	64 46	63 47	67 44	65 47	69 46	68 54	65.9 50.9		
KILAUEA POINT 1133	MAX MIN	83 70	81 72	82 71	80 73	81 74	80 74	82 72	80 70	80 74	80 70	81 69	78 69	76 67	78 70	78 71	75 65	77 67	75 68	82 68	82 65	82 65	75 64	74 64	76 66	74 66	73 60	80 70	81 67	79 72	79.0 68.7			
LIHUE WSO 1020.1	MAX MIN	82 73	82 72	82 73	84 71	83 75	83 73	83 71	82 75	83 73	84 75	82 76	82 72	77 72	81 74	81 73	75 68	75 68	84 73	77 68	77 65	76 65	77 64	76 66	75 68	75 66	82 64	78 68	82 68	81 74	80.3 70.5			
MAKAHUEA POINT 940.1	MAX MIN	85 65	85 68	80 70	81 67	84 69	84 70	85 71	82 67	82 69	82 70	82 69	83 69	75 65	81 68	80 70	78 73	74 70	79 67	85 66	80 72	80 65	78 69	72 62	79 66	79 66	80 68	75 70	73 68	74 69	84 70	86 64	82 68	80.4 68.5
MANA 1026	MAX MIN	87 66	85 63	86 63	87 63	87 62	85 67	84 66	85 65	88 65	88 65	85 65	86 63	80 63	84 61	84 62	82 67	84 67	79 68	83 65	85 62	82 65	80 63	79 66	80 66	79 66	80 64	82 65	80 61	84 65	85 61	83 66	83.7 64.8	
NIU RINGE 1035	MAX MIN	82 61	79 60	78 60	80 60	79 61	79 60	80 61	78 60	78 60	80 63	81 62	82 61	81 60	80 60	81 60	79 60	78 61	80 62	79 60	78 60	77 60	79 60	77 58	77 59	78 60	76 60	78 58	79 61	79 60	78 60	79.0 60.3		
WAIAMI LOWER 1054	MAX MIN	80 64	80 60	79 61	81 63	83 65	83 68	83 68	80 63	80 64	78 64	79 66	81 66	81 62	77 69	81 68	78 67	73 67	73 67	80 63	79 69	78 58	77 56	75 60	75 60	74 60	75 60	78 60	78 59	79 68	79 68	78.2 63.1		
ISLAND OF OAHU																																		
EWA PLANTATION 741	MAX MIN	82 67	81 64	81 65	82 61	84 68	83 68	84 66	84 64	83 65	83 68	84 66	83 67	81 67	81 67	81 67	82 68	82 64	85 67	82 68	84 71	84 67	82 60	80 64	78 65	79 66	80 66	80 64	74 64	84 68	79 64	81 64	81.8 65.8	
HONOLULU W5FC 703	MAX MIN	81 69	81 68	84 71	85 68	84 63	85 71	83 69	84 71	84 72	83 73	83 72	80 72	82 71	84 69	83 71	85 68	82 68	83 72	82 67	81 67	82 68	79 64	80 68	79 67	84 67	84 67	80 67	83 67	82 67	82 72	82.4 69.2		
HONOLULU SUBSTA 704	MAX MIN	77 71	78 71	79 73	81 71	81 72	83 73	82 73	80 73	82 73	81 74	82 72	80 72	76 71	77 71	80 70	80 72	80 71	79 69	81 72	81 69	78 69	80 68	77 69	78 69	78 68	77 68	81 68	79 68	80 70	79.5 70.7			
KAHUKU 912	MAX MIN	82 70	81 72	83 73	85 74	85 74	84 74	82 70	81 71	83 72	83 73	82 72	81 72	81 72	80 72	81 69	78 66	79 66	81 66	78 67	79 66	79 65	82 60	81 64	78 67	79 67	78 67	82 65	82 65	82 65	82 65	82 65		
KANEONE MAUKA 781	MAX MIN	80 69	76 66	80 69	80 67	82 68	80 67	80 70	81 71	81 71	78 72	81 72	80 72	76 69	78 68	79 68	80 68	79 65	80 68	78 68	81 65	78 67	81 67	78 68	78 64	74 63	77 63	78 67	82 63	78 67	78 68	78.6 67.7		
LUALUALEI 804	MAX MIN	85 72	85 70	84 69	86 65	85 66	85 67	86 69	84 68	85 68	84 73	86 73	85 72	83 74	81 72	84 72	83 68	85 68	82 71	81 72	82 72	80 72	81 72	78 69	80 69	80 67	78 67	80 67	80 67	78 66	82 67	82 66	82.8 69.7	
MAKAPOU POINT 724	MAX MIN	76 69	78 65	77 65	77 68	78 68	78 73	77 69	74 69	75 69	84 69	78 68	76 69	76 68	76 71	69 65	76 65	76 65	79 66	78 65	79 66	76 66	75 63	74 63	74 64	73 65	74 65	76 65	72 65	75 64	75.7 67.5			
OPAEOUA 870	MAX MIN	80 64	76 62	78 63	79 61	80 62	81 64	78 64	78 65	80 69	81 65	79 65	76 65	76 62	77 64	76 64	78 63	79 61	80 68	79 68	80 63	79 64	81 62	75 62	76 60	77 60	75 63	78 63	78 65	81 63	81 63	77.2 63.1		
PRI WAHIAWA 820.2	MAX MIN	81 65	81 61	81 62	82 62	84 62	83 65	82 66	79 62	80 63	83 64	83 64	78 65	79 64	78 63	80 63	80 63	79 63	81 63	75 63	76 62	78 62	76 64	77 64	71 65	78 63	78 63	81 63	73 63	78 63	81 63	79.4 63.6		
WAIALUA 847	MAX MIN	82 63	83 65	82 63	85 60	86 65	87 65	85 66	85 66	85 64	83 63	86 65	83 64	79 64	81 61	80 64	82 64	80 64	80 64	78 65	80 64	82 64	76 65	84 65	82 64	75 65	76 64	83 65	82 65	75 64	82.2 64.4			
WAIKIKI 717.2	MAX MIN	87 70	84 70	85 70	87 67	86 71	87 71	83 70	84 70	84 70	85 73	86 72	85 72	82 71	83 70	83 70	84 68	87 68	83 71	87 68	83 68	83 68	84 68	80 68	84 68	80 68	82 68	81 68	85 70	78 67	82 68	83.9 69.0		
WAIMANALO EXP FARM	MAX MIN	82 68	81 69	82 72	82 71	83 70	82 72	83 71	81 70	82 70	83 72	82 72	81 70	81 70	80 69	79 69	80 65	80 65	78 68	78 68	79 68	78 69	82 68	78 68	75 65	75 63	76 63	80 65	75 65	81 68	79 69	76 69	80.1 68.7	
ISLAND OF MOLOKAI																																		
MOLOKAI AP 524	MAX MIN	81 73	82 69	82 69	82 65	82 68	82 69	82 70	80 70	82 70	82 70	82 70	82 70	82 69	79 69	79 71	80 68	80 67	78 67	78 68	77 68	78 68	78 66	75 66	76 68	76 68	79 68	79 68	81 69	82 69	82 69	79.9 68.8		
ISLAND OF LANAI																																		
LANAI CITY 672	MAX MIN	73 64	74 65	74 60	75 65	79 67	79 66	78 66	74 66	75 66	76 64	77 67	79 65	75 66	74 64	75 66	77 67	79 64	74 66	78 69	75 65	73 63	73 63	70 62	70 62	78 61	78 61	78 61	78 61	78 61	78 61	75.6 64.9		
ISLAND OF MAUI																																		
HALEAKALA RS 338	MAX MIN	66 46	57 39	60 40	61 42	60 45	63 47	60 44	61 47	61 40	61 45	65 43	62 43	59 45	60 45	57 48	62 49	63 45	61 45	57 44	64 51	59 48	60 48	57 35	52 38	52 45	55 45	61 48	59 49	55 45	57 43	59.6 44.3		
HALEAKALA SUMMIT 338.4	MAX MIN	36	53 42	56 42	51 38	52 40	51 38	50	59 38	58 42	58 39	50	48 38	50 40	52 38	51 39	51 39	58	49 37	48 39	48 39	58	49 37	48 39	48 39	48 39	48 39	48 39	48 39	48 39	48 39	48 39	48 39	48 39
MANA AIRPORT 355	MAX MIN	79 68	82 69	82 66	81 67	80 71	83 70	82 68	82 68	82 69	79 72	83 74	82 72	82 67	75 69	80 69	80 69	80 69	78 65	82 69	82 69	82 69	79 64	75 64	72 64	82 66	82 66	81 69	82 70	82 66	79.9 68.4			
KAANAPALI AIRPORT	MAX MIN	81 69	76 69	78 65	79 65	82 69	82 71	81 69	80 69	80 69	82 67	82 69	82 72	79 67	79 68	76 68	78 68	80 68	80 68	78 68	82 69	82 69	79 67	75 67	72 67	80 67	82 67	81 67	82 67	82 67	79.4 68.0			
KAHULUI WSO 398	MAX MIN	82 69	84 67	84 59	86 61	86 68	86 69	85 68	85 71	86 70	84 73	86 71	84 70	80 69	83 69	86 65	80 65	85 65	82 65	80 65	80 65	81 65	76 67	76 67	76 67	77 67	76 67	80 67	80 67	84 67	82.7 68.2			
KAILUA 446	MAX MIN	79 64	79 65	76 66	78 65	76 66	76 67	77 65	77 66	77 66	78 68	78 66	77 66	77 66	76 66	77 66	76 65	80 65	79 65	80 65	80 65	79 67	80 67	78 67	78 67	80 67	80 67	79 67	79 67	79 67	79.8 65.4			
KEAWAKAPU BEACH 260.2	MAX MIN	86 70	84 61	85 60	86 60	87 68	85 67	88 64	89 64	89 63	91 64	84 65	87 65	85 63	89 63	85 63	86 63	88 63	86 63	87 63	84 63	81 63	83 62	82 62	78 62	81 62	86 62	83 62	82 62	85 62	85 62	85.3 65.5		
KULA SANATORIUM 267	MAX MIN	71 60	72 55	73 54	73 55	72 59	71 60	74 58	73 57	71 57	72 58	71 60	72 60	72 58	71 58	72 58	73 58	73 58	73 58	72 60	77 58	75 59	71 55	72 56	74 57	72 58	69 58	72 58	69 58	70 56	72.1 58.3			

DAILY TEMPERATURES

Table with columns for Station, Day of Month (1-31), and Average. Rows include stations like LAHAINA 361, HAILUKU 386, ISLAND OF HAWAII, HAINA 214, HAWAII VOLCANO NP HQ 54, HILO WSO 87, KAINALIU 73.2, KAMUELA 192.2, KEAAU 92, KEALAKEKUA 26.2, KOHALA MISSION 175.1, KONA (KAILUA) 68.3, KULANI CAMP 79, MAUNA LOA SLOPE 085, MOUNTAIN VIEW 91, NAALEHU 14, OOKALA 223, OPIHIHALE 2 24.1, PAHALA 21, PUAKO 95.1, UPOLU POINT USCG 159.2, and WAIHEA KOHALA.

EVAPORATION AND WIND

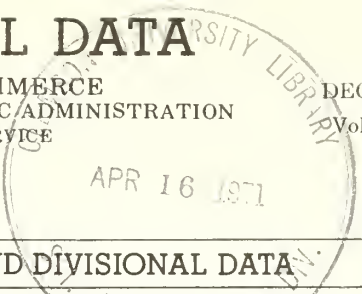
Table with columns for Station, Day of Month (1-31), and Total or Avg. Rows include stations like ISLAND OF KAUAI, LIHUE WSO 1020.1, ISLAND OF OAHU, and HONOLULU OBSERV 702.2. Columns include EVAP, WIND, MAX, and MIN values.

CLIMATOLOGICAL DATA

HAWAII

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

DECEMBER 1970
Volume 66 No. 12



MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

Station	Temperature											Precipitation									
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days		Total	Departure From Normal	Greatest Day	Date	Snow Sleet		No. of Days			
										90° or Above	Min.					Total	Max. Depth on Ground	Date	.10 or More	.50 or More	1.00 or More
										Below	90° or Below										
* * * ISLAND OF KAUAI																					
ANAMOLA 1114	A											3.14	- 2.26	.39	3	.0	0		0	0	
KANALOHULUHULU 1075	A	65.3	53.5	59.4		75	10	47	31			5.69		1.53	27	.0	0	14	3	1	
KAPAA STABLES 1104	A											3.74				.0	0		0	0	
KILAUEA FIELO 17 1135	A											7.84	- 1.67			.0	0		0	0	
KILAUEA POINT 1133	A	76.2	69.1	72.7		79	5	63	23			3.44		.42	1	.0	0	12	0	0	
* * * ISLAND OF OAHU																					
KOLOA 936	A											7.97	.35			.0	0				
LIHUE WSD 1020.1	//R	79.0	71.3	75.2	3.0	81	15+	66	30+			2.29	- 2.89	.34	26+	.0	0	8	0	0	
MAHA 1026	A	82.8	62.1	72.5	.4	86	15+	57	28			.37	- 2.93	.16	2	.0	0	1	0	0	
N WAILUA OITCH 1051	A											25.26				.0	0				
PH WATINHA 1115	A											16.60	3.01	2.45	20	.0	0	22	12	7	
* * * ISLAND OF MOLOKAI																					
PUEHU RIDGE 1040	A											.35		.20	2	.0	0		1	0	
WAIHAWA 930	A											4.15	- .34			.0	0				
WAIHI LOWER 1054	A	75.4	64.4	69.9		78	18+	60	31+			13.35		1.31	3	.0	0	23	10	3	
WAIMEA 947	A											.29	- 3.06	.10	27	.0	0	1	0	0	
* * * ISLAND OF MAUI																					
* * * ISLAND OF HAWAII																					
* * * ISLAND OF MOLOKAI																					
* * * ISLAND OF LANAI																					
* * * ISLAND OF MAUI																					
HALEAKALA 8 E S 434	A											26.47	16.01	3.50	18	.0	0	22	13	10	
HALEAKALA RS 338	A	56.3	42.8	49.6		66	16+	35	30+			25.24		7.10	27	.0	0	17	10	6	
HANA AIRPORT 355	A	78.3M	68.0M	73.2M		81	5	64	31			6.40		.93	19	.0	0	20	4	0	
HONOKOHUA 493	A											5.35	.70			.0	0				
KAANAPALI AIRPORT	A	79.2M	68.3M	73.8M		82	14+	63	1			1.63		.92	18	.0	0	3	1	0	
* * * ISLAND OF HAWAII																					
KAHULUI WSD 398	R	80.8	67.0	73.9	1.2	86	15	59	13			1.77	- .93	.50	27	.0	0	7	1	0	
KAILUA 446	A	73.7	64.8	69.3	.4	79	2	59	28			16.68	4.83	2.69	3	.0	0	24	14	7	
KEANAE 346	A											30.50	8.18			.0	0				
KIPAHULU 258	A											11.43	.52	1.20	2	.0	0	21	11	2	
KULA SANATORIUM 267	A	71.0	54.3	62.7	.4	75	13	49	30			.39	- 2.64	.19	1	.0	0	2	0	0	
* * * ISLAND OF HAWAII																					
LAHAINA 361	A	82.8	65.7	74.3		86	12	60	30			1.05	- 1.24	.98	28	.0	0	1	1	0	
PAIA 406	A											4.73	.51	.57	28	.0	0	18	2	0	
WAILUKU 386	M											1.09	- 3.23	.26	5	.0	0				
* * * ISLAND OF HAWAII																					
* * * ISLAND OF HAWAII																					
HAINA 214	A	76.1	64.0	70.1	- .1	82	15	57	29			16.98	9.28	2.18	27	.0	0	23	13	7	
HAWAII VOLCNS NP HO 54	R	82.2	51.6	56.9	- 1.8	88	11+	45	29			34.26	24.12	4.35	27	.0	0	23	20	13	
HILD WSD 87	A	80.2	65.2	72.7	1.2	85	14+	61	31			35.25	20.07	9.33	2	.0	0	29	19	10	
HUEHUE 92.1	A											2.04	- .34	1.15	3	.0	0				
KAINALIU 73.2	A	77.6	60.0	68.8		80	20+	57	31+			1.80	- 1.21	.91	2	.0	0	3	1	0	

See Reference Notes Following Station Index

MONTHLY SUMMARIZED STATION AND DIVISIONAL DATA

Station	Temperature											Precipitation											
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest		Lowest		Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days		
					90° or Above	32° or Below	21° or Below	10° or Below		Total	Total	Max. Depth on Ground	Date					.10 or More	.50 or More	1.00 or More			
																					Max.	Min.	
KEAAU 92	76.7	63.4	70.1	- .9	80	14+	58	31	0	0	0	0	37.43	21.26	6.17	3		.0	0	0	29	19	12
KEALAKEKUA 26.2	77.7M	61.1M	69.4M		80	1	58	31+	0	0	0	0	.90		.28	3		.0	0	0	3	0	0
KONA (KAILUA) 68.3					84	21+	63	30+	0	0	0	0	.38		.34	2		.0	0	0	1	0	0
KUKUIHAELE HIC 199													15.34	6.12	1.80	2		.0	0	0	20	10	6
KULANI CAMP 79	59.1	45.8	52.5		74	17	40	15+	0	0	0	0	38.37		6.00	20		.0	0	0	24	18	15
PAHALA 21		M	M	M		83	18	58	30	0	0	0	*					.0	0	0			
POHAKULOA 107													1.91		.90	20		.0	0	0			0
PUNAKO 95.1													.14		.13	20		.0	0	0			0
PUNAWAAHAA 94.1													.87		.57	20		.0	0	0			1
UMIKOA 118													32.07	.83	.57	20		.0	0	0			2
WAIKAMOI SCD 88.2													46.64		4.98	27		.0	0	0			16
WAIKAMOI KOHALA	69.9	50.1M	60.0M		76	15	44	22+	0	0	0	0	2.50	20.58	4.98	27		.0	0	0			27
ISLAND			66.2										16.68		.50	29		.0	0	0			8

TEMPERATURE AND PRECIPITATION EXTREMES

- HIGHEST TEMPERATURE: 88° ON THE 19+ AT 2 STATIONS
- LOWEST TEMPERATURE: 23° ON THE 28+ AT MAUNA LOA SLOPE OBS, HAWAII
- GREATEST TOTAL PRECIPITATION: 67.11 AT WAIKAMOI DAM 336, MAUI
- LEAST TOTAL PRECIPITATION: .00 AT 3 STATIONS
- GREATEST ONE-DAY PRECIPITATION: 13.27 ON THE 3D AT PAPAIKOU MAUKA 140.1, HAWAII

See Reference Notes Following Station Index

SPECIAL WEATHER SUMMARY

The month displayed almost every variety of winter weather known to Hawaii; intense rains, high swell and surf, heavy snowfalls on mountain summits, a severe ice storm on Haleakala, and a damaging "whirlwind". In addition, the normally moderate trade winds turned blustery and lashed the Islands for days on end.

Small craft or gale warnings for Hawaiian waters were in effect on 21 days, and at Honolulu International Airport the trades had an observed frequency of 97 percent, in comparison with their December average of about 60 percent. The persistent trade winds, and the absence of North Pacific storms, were responsible for the prolonged absence of suitable surf at Makaha Beach, in the lee of the trades, and the consequent postponement of the Duke Kahanamoku Surfing Competition.

By themselves, or in combination with recurring low pressure in the upper atmosphere, the trades were responsible for most of the month's harsh weather. On December 2, strong trade winds and moist unstable air produced torrential rainfall over the eastern slopes of Hawaii Island, where Papaikou Mauka and Kipa registered 13.27 and 12.95 inches, respectively, their greatest 24-hour December totals of record. As the attached rainfall chart (Figure 1) shows, the rainfall was heaviest near the eastern coast, while the entire western two-thirds of the Island received less than half an inch of rain.

On the 16th, sea swell reported to be up to 15 feet in height, generated by strong trade winds blowing unimpeded over an 1,800-mile-long fetch to the east of the Islands, battered the windward coasts with high surf which, at Kapoho Beach near the eastern tip of Hawaii Island, reached heights estimated at 20 feet or more.

On Christmas morning and until the afternoon of the 29th, very strong northeasterly trade winds from a nearby stationary high pressure area 800 to 1,200 miles north of Hawaii, and intermittently reinforced by migratory high pressure cells, buffeted the State, resulting in widespread, although relatively minor, damage.

On Oahu, on the 26th, winds with gusts estimated at 50 to 60 m.p.h. ripped roofs off three homes, two apartments, and many garages and patios in the Honolulu area. A 40-foot Norfolk pine fell on a home, causing about \$3,000 in damage. Fallen trees, branches, and debris made driving hazardous. Electricity was out at scattered locations, and a snapped powerline started a brush fire in the Koolau Range.

On Maui on Christmas morning, a "whirlwind" presumably generated within the turbulent trade winds destroyed a flower farm greenhouse in Kula, scattering lumber and fiberglass panels in all directions. On the night of the 26th, severe icing and strong winds knocked out powerlines, loaded with as much as 3 inches of ice, to the television transmitter atop 10,000-foot Mt. Haleakala, causing residents of Maui, Hawaii, and windward Oahu to miss the live National Football Conference playoff game the next morning.

Roads in the Kula, Olinda, and Kokomo areas were blocked by downed trees, branches, electric and telephone lines, and other debris. In the region around Lahaina, always vulnerable to strong winds tunnelling through mountain gorges to the east, a home was unroofed, electric wires short-circuited, signs knocked down, telephone poles tilted, and two persons injured -- apparently by shards from a shattered plate glass window. Two of the large branches of the famous Lahaina banyan tree fell to the ground (but fortunately were not broken) when support beams collapsed. On the 27th a strong gust flipped over a light plane taxiing down a runway at Kahului Airport, but the pilot escaped without injury and the plane with only minor damage.

On Hawaii Island (as on Maui), strong trade winds sweeping through the 2,600-foot saddle between Mauna Kea and the Kohala Mountains, burst into the usually well-protected western coastal region, unroofing a home in Puako and a warehouse in Kawaihae, disrupting electricity and telephone services, and toppling 52 trees at Hapuna Beach Park and over 100 trees on the grounds of the Mauna Kea Beach Hotel. Falling trees and branches knocked out power to over 100 homes, mainly in the Kohala and Kau areas. At South Point a man knocked into the ocean by a giant wave, and his cousin who jumped into the rough waters to save him, were swept out to sea and drowned on the morning of the 27th.

Associated with the month's predominant trade winds, Honolulu International Airport, in leeward Oahu, received 76 percent of possible sunshine for December, as compared to the month's average of 59 percent. In contrast, Lihue and Hilo Airports on the windward side of their Islands, received only 24 percent and 14 percent of possible sunshine during the month, as compared to their normals of 48 percent and 45 percent, respectively.

Hilo Airport recorded rain on every day and 1/2 inch or more on 19 days, for a monthly total of

SPECIAL WEATHER SUMMARY - Continued

35.25 inches -- 20 inches above the December normal.

Over the State as a whole, rainfall totals were mixed. Central mountain uplands on Oahu and Kauai ranged somewhat above normal for the month, while windward and leeward coastal plains had many gages with less than half and, particularly in the western lowlands, less than one-fourth of their December average. On Maui, the saddle area, Kula, and the western coasts of both east and west Maui had less than half or even one-fourth their monthly averages, while Haleakala's summit

and upper slopes had three to four times the December mean. All of Lanai and all but eastern Molokai were dry, while on Hawaii Island rainfall ranged from much below normal at lower elevations in the Kona area to three to four times normal in the Kulani to Volcanoes area and at higher elevations in Kona.

Cool weather slowed crop growth and strong winds caused bruising in exposed areas and toppled 7 acres of banana trees on Hawaii. Pasture conditions were good with improved soil moisture, but cool temperatures retarded grass growth.

Peak Gusts Observed During the
Strong Winds of December 25-29, 1970

Island	Location	Peak Gust (m.p.h.)	Island	Location	Peak Gust (m.p.h.)
Kauai	Kilauea Point	46	Molokai	Molokai Airport	44
	Kokee	52		Maui	Kaanapali	50
	Lihue Airport	45	Kahului Airport		40
Oahu	Barbers Point NAS	35	Hawaii	Hilo Airport	30
	Honolulu Airport	50		Kapoho	54
	Kaena Point	69		Kawaihae	52
	* Kaneohe MCAS	36		Ke-ahole Airport	62
	* Nuuanu Pali	90 (est.)		Kiolakaa-Keaa	54
Lanai	Lanai Airport	46			

* The Nuuanu Pali, a 1,000-foot-high pass in the Koolau Mountains, is open to the northeast trade winds, which ordinarily blow through the Pali at speeds considerably above those near sea level at the same time. The 90 m.p.h. speed indicated above were observed by hand-held anemometer at 10 a.m. on the 29th, at which time Honolulu International Airport and the Kaneohe Marine Corps Air Station were recording only 24 m.p.h. and 14 m.p.h., respectively. This is a much greater difference than is usually observed between trade wind speeds at sea level and at Nuuanu Pali.

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DAILY PRECIPITATION

HAWAII
DECEMBER 1970

Station	Total	Day of Month																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
ISLAND OF MAUI																																				
ANAHOLA 1114	A	3.14	.10	.36	.39	.32	*	*	.30	.14	.11	.01	.01	*	*	.06	.02	.02	.01	.03	*	*	.30	.36	.04	.15	*	*	*	*	.34	.06	.12	*	*	
BIRD STAD STA 955	A	10.26	.20	.69	.86	.35	*	*	.83	.20	.17	.50	.01	*	*	.06	.02	.02	.11	.08	*	*	2.19	.38	.28	*	*	*	*	2.74	.45	.12	*	*		
EAST WAIAI 944	A	8.19	.37	.77	1.09	.47	*	*	.78	.25	.29	.69	.05	*	*	.03	.02	.01	.13	.12	*	*	.63	.25	.12	*	*	*	*	1.58	.30	.24	*	*		
ELEE 927	A	3.90	T	.18	.84	.05	*	*	.56	.07	.17	.07	T	*	*	.01							.28	.15	.03	*	*	*	*	1.75	.14	T	*	*		
HALA 1110	A	2.66	.06	.41	.47	.31	*	*	.17	.14	.11	.12	T	*	*	.01							.24	.16	.04	.06	*	*	*	.21	.11	.12	*	*		
HELENAHAWA 106	A	8.21	.46	.75	1.10	.42	*	*	.50	.33	.09	.75	.12	*	*	.10							.45	.32	.52	*	*	*	*	1.60	.22	.36	*	*		
HUKIPPO 945	A	.11																				.06	.92	.55	1.10	*	*	.02	*	4.44	.13	.28	*	*		
KAIKULUA INTAKE 1050	A	23.04	.11	1.30	2.52	3.15	*	*	1.25	.44	.92	1.33	.20	*	*	.31	.04	.13	.06	.32	*	*	2.54	.92	.55	1.10	*	*			10.30					
KAPAE STABLES 1076	A	23.47	.19	.23	.32	.11	.15	*	.02	.07	.02	.10	.02	.01	*	*	.01	.01	.07	.49	.02	.09	.10	.16	.18	.91	1.53		.09	.59	.18	.02				
KANEHA RESERVOIR 1092	A	8.25	.11	1.16	.93	.72	*	*	.76	.26	.23	.36	.04	*	*	.22	.02	.06	.18	*	*	.78	.21	.43	.16	*	*	*	.92	.08	.62	*	*			
KAPAE STABLES 1104	A	3.74	.10	.45	.38	.45	*	*	.20	.15	.12	.18	.02	*	*	.02						.33	.25	.08	.25	*	*	*	.26	.05	.10	*	*			
KEALIA 1112	A	2.84	.11	.57	.46	.05	*	*	.32	.12	.07	.06	T	*	*	.02						.20	.21	.05	.17	*	*	*	.60	.04	.18	*	*			
KEKANA 944	A	.09																																		
KILAUEA 1134	A	5.11	.14	.33	.16	.22	*	*	.27	.09	.35	.10	.02	*	*	.32						.87	.10	.37	.37	*	*	*	.60	.04	.10	*	*			
KILAUEA FIELD 17 1135	A	7.84	.51	.52	.61	.57	*	*	.58	.20	.31	.34	.07	*	*	.33						.06	.11	.05	*	*	*	.95	.10	.15	*	*				
KILAUEA POINT 1133	A	3.44	.42	.15	.01		.04	.02	.04	.17	.12	.04	.01	*	*	.07						.10	.19	.33	.39	.02	.07	.04	.07	.04	.16	.04	.01			
KOLOA 936	A	7.97	.37	.59	1.07	.44	*	*	.68	.24	.15	.58	.12	*	*	.04						.19	.17	*	*	*	*		1.45	.26	.60	*	*			
KOLOA MAUKA 994	A	12.26	.61	1.15	1.70	.75	*	*	.82	.34	1.40	1.00	.05	*	*	.12						.04	.14	.10	*	*	*	2.18	.42	.29	*	*				
KULJAO RES 1137	A	6.90	.24	.82	.85	.67	*	*	.15	.12	.42	.23	.05	*	*	.13	.03					.10	.10	*	*	*	*		.77	.06	.17	*	*			
KUKULUA 935	A	4.04	.05	.35	.78	.18	*	*	.51	.11	.09	.12	.04	*	*	.03	.01					.10	.10	*	*	*	*		.76	.29	.31	*	*			
LIHUE VARIETY STA	A	5.74	.29	.52	.51	.22	.09	*	.15	.14	.14	.57	.04	.27	*	*	.03					.01	.03	.30	*	*	.27	.28	.24	.07	.29	.31	.03			
LIHUE 1020	A	3.72	.17	.42	.28	.21	*	*	.17	.13	.04	.36	.03	*	*	.03						.03	.04	.03	T	.05	.02	.13	.17	.04	.34	.03	.04	.30	.08	
LIHUE 850 1020.1	//R	2.29	.14	.34	.19	.07	T	.01	.03	.02	.13	.04	.01	T								.03	.04	.03	T	.05	.02	.13	.17	.04	.34	.03	.04	.30	.08	
MAKALENA POINT 940.1	A	3.38	.01	.05	.41	.04	.04	.24	.02	.11	.07	.03				.01	.10	.07	.13	.04	.04	.05	.12	.12	.22	.08	.96	.10	.14	.22						
MAKALENA 965	A	1.25	.13	.05	.15		.01	.01	.01	.01	.04	.02				.04						.13	.02	.12					.46	.06	.13					
MAKALENA 1074	A	.37	.07	.16	.08																															
MOHINI JPA CROSS 1083	A	3.04	.04	.17	.27	.49	*	*	.11	.05	.30	.02	.03	*	*	.02	.02					.08	.09	*	*	.37	.07	.16	.10							
MOLOKA 145	A	3.04	.04	.17	.27	.49	*	*	.11	.05	.30	.02	.03	*	*	.02	.02					.08	.09	*	*	.37	.07	.16	.10							
MOUNT MAHALEALE 1047	A	52.28	2.32	0.10	2.91	1.54	.51	.12	.71	1.93	2.40	1.38	.67	.16	.71	.24	1.14	.63	.55	3.07	7.72	4.69	1.14	1.77	3.15	.94	1.69	.79	.39	.55	1.06	.47	.83			
MIU RIDGE 1035	A	.46	.25	.12																		.05														
N. HALLUA DITCH 1051	A	25.26	2.30	1.93	2.66	1.72	*	*	1.13	.40	.70	1.15	.14	*	*	.41	.02	.59	.15	.28	*	*	5.32	1.08	.71	1.32	*	*	2.50	.32	.45	*	*			
PH. WAINIHA 1115	A	16.60	.84	1.09	1.31	1.50	1.08	.08	.05	.57	.22	.76	.07	.16	.01	T	.08	.06	.02	.14	.18	*	*	1.19	2.45	.32	1.81	1.23	.62	.23	.05	.34	.40	.04		
PRINCIVILLE RANCH 1117	A	7.57	.21	.60	.31	.21	.10	.07	.16	.34	.45	.37	.04	*	*	.08													.05	.33	.05					
PUEHU RIDGE 1040	A	.35	.20	.03								.04										.06														
PUNEI 1012	A	5.28	.15	.58	.56	.44	*	*	.49	.16	.10	.12	.04	*	*	.04						.10	.03	*	*	.22	.20	.26	*	*	1.08	.32	.49	*	*	
RESERVOIR 1004	A	9.18	.22	.60	.98	.76	*	*	.71	.27	.13	.95	.08	*	*	.10	.08	*	*			.10	.08	*	*	.77	.77	.42	*	*	2.50	.20	.36	*	*	
WAINIHA 930	A	4.15	.02	.27	.55	.12	*	*	.80	.15	.18	.11	T	*	*	.02						.06	*	*	.18	.05	.02	*	*	1.36	.25	.03	*	*		
WAINIHA MOUNTAIN 993	A	24.00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	24.00		
WAINIHA LOWER 1055	A	13.35	.84	.80	1.31	.92	.45	.02	.13	.27	.28	1.02	.06	.27	.03	.01						.02	.03	.24	1.00	.27	.38	.63	.47	.93	.51	.82	.49	.04	.42	.42
WAINIHA UPPER 1052	A	17.46	1.01	.95	2.16	1.54	.80	.38	.15	.42	.83	1.20	.10	.12	.10	.10						.10	.04	.21	.95	1.35	.25	.15	.50	1.07	1.50	.39	.30	.15	.10	.49
WAINIHA 943	A	.10										.06																								
WAINIHA 1011 1065	A	3.84	.22	.50	.45	.15	*	*	.05	.10	.12	.23	*	*	.03							.02	.02	*	*	.62	.20	.02	.20	.03	.08	.10				
WAINIHA 947	A	.24										.05																								
WEST LAWAII 931	A	4.76	.12	.46	.65	.29	*	*	.59	.10	.12	.24	.05	*	*	.02						.10	.03	*	*	.18	.13	.03	*	*	1.19	.28	.18	*	*	
ISLAND OF MOLOKA																																				
BEKETANIA BUMPING STA	A	4.72	*	.11	.11	.44	.36	.05	.18	.09	*	.14	.03	*	T	.03						.04	.01	.09	1.06	.05	.12	.08	.12	.54	.40	.38	.22	.07		
CAMP 84 803	A	1.89	*		.10	*			.12	*	*	.17	*	*	.01	*						.03	*		.37	*		.02	*	1.01	*					
CHURCH COLLEGE LAIE	A	2.99	.10	.44	.07	.15	T	.06	.03	.04	.09	.09	.06	*	.01	.01	.03					.03	.51	.52	.01	.06	.06	.08	.05	.11	.05	.05	.04	.01	.02	.05
COCONUT ISLAND 840.1	A	1.51	.08	.18	.02	.04	.12																													

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Station	Day of Month																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
* * *																																
ISLAND OF KAUAI																																
KANALOHULUHULU 1075	MAX MIN	55 55	63 56	64 55	62 53	64 52	63 52	70 57	68 55	75 55	67 54	67 54	69 50	70 52	67 55	66 53	65 56	67 57	68 58	65 56	72 54	65 55	63 54	62 53	58 51	55 49	60 49	66 52	61 52	67 50	66 47	65.3 53.9
KILAUEA POINT 1133	MAX MIN	77 68	76 64	77 64	75 70	79 70	76 71	77 70	76 70	77 71	77 72	78 71	77 70	78 72	78 72	76 70	76 68	77 69	76 70	76 69	76 63	76 63	74 69	72 67	74 67	74 69	76 66	74 69	74 66	74 69	74 69	76.2 69.1
LIHUE WSD 1020.1	MAX MIN	80 73	79 70	80 70	79 74	81 70	79 71	81 73	80 72	80 73	80 74	81 75	80 75	81 69	81 68	80 73	81 71	80 74	79 74	79 75	79 72	79 71	79 71	79 70	77 70	77 67	78 70	77 66	77 66	77 71	79.0 71.3	
MAKAHUEA POINT 940.1	MAX MIN	81 72	82 72	79 73	80 69	80 68	77 72	78 73	79 72	80 68	81 70	81 73	80 70	81 67	81 68	80 70	81 66	79 67	80 70	79 68	79 68	79 70	79 68	79 70	77 70	77 67	78 71	77 70	76 70	77 67	79.0 69.6	
HANA 1026	MAX MIN	83 65	82 65	82 63	85 64	82 61	86 62	84 62	82 64	81 65	83 61	84 62	83 62	86 61	86 62	85 63	84 61	83 62	84 62	83 62	84 62	82 62	85 62	80 58	84 62	79 62	81 61	83 58	81 57	79 59	80 59	82.8 62.1
NIU RIIOGE 1035	MAX MIN	80 60	79 60	80 59	79 60	81 58	79 59	80 59	78 57	80 60	80 60	81 60	80 60	81 60	80 59	80 60	79 60	79 60	79 61	79 60	79 60	79 60	79 60	79 61	78 60	78 61	79 59	78 60	79 60	79 60	79.1 59.7	
WAIHAI LOWER 1054	MAX MIN	76 65	76 66	76 65	75 65	75 64	74 63	75 64	76 66	76 67	77 66	75 64	77 65	78 63	78 61	77 66	78 66	78 66	77 66	78 66	74 67	74 66	74 65	75 66	74 65	74 66	75 63	74 63	74 64	75 60	75.4 64.4	
* * *																																
ISLAND OF OAHU																																
EWA PLANTATION 741	MAX MIN	81 68	80 68	81 66	80 66	81 67	80 67	79 65	79 65	81 66	78 66	80 66	81 66	81 65	85 65	82 66	81 69	80 69	80 69	80 68	80 68	80 68	81 68	78 67	78 68	79 65	78 65	76 65	76 65	76 62	76 61	79.6 66.3
HONOLULU W5FC 703	MAX MIN	81 71	81 71	82 71	80 70	80 71	80 70	82 71	80 71	81 71	81 71	81 71	82 71	86 68	83 70	81 70	80 71	81 70	80 70	80 70	79 69	79 69	79 69	79 69	76 66	77 66	76 66	77 66	77 65	77 68	79 68	79.8 69.5
HONOLULU SUBSTA 704	MAX MIN	79 71	79 71	79 69	79 69	78 73	76 70	77 70	80 72	78 70	79 72	79 74	79 74	81 70	79 72	78 71	77 72	78 72	77 73	77 71	78 71	77 69	77 69	76 69	76 70	76 69	73 67	73 65	74 66	76 69	77.1 70.3	
KAHUKU 912	MAX MIN	80 71	80 70	80 70	79 73	79 70	80 69	79 69	79 73	77 69	77 73	77 73	80 74	80 74	81 70	80 68	79 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78 67	78.9 68.3	
KANEHE MAUKA 781	MAX MIN	79 72	79 71	79 69	79 69	76 68	78 68	74 68	79 68	78 69	75 68	75 69	78 73	78 67	81 67	78 69	78 69	76 72	77 72	77 72	78 72	73 67	73 67	73 67	73 67	73 67	73 67	73 67	73 67	73 67	73.3 68.8	
LUALUALEI 804	MAX MIN	82 72	82 72	82 72	82 70	80 71	81 70	81 68	81 73	82 71	80 72	82 72	82 72	83 68	83 63	82 70	81 73	79 72	81 73	81 69	79 72	79 73	79 70	78 68	78 67	76 68	76 67	78 67	72 67	77 68	78.8 69.8	
MAKAPUU POINT 724	MAX MIN	80 66	75 65	75 69	76 64	76 64	75 65	75 68	75 68	75 68	72 68	75 68	75 68	75 69	75 69	76 68	74 65	74 65	73 68	74 68	75 68	74 66	74 66	73 66	73 66	73 66	73 66	72 66	72 62	71 63	72.4 66.1	
OPAULA 870	MAX MIN	80 65	78 66	79 65	79 65	78 66	80 66	80 65	80 65	77 65	77 65	78 67	78 67	80 61	83 61	81 65	80 67	77 67	78 65	78 65	78 65	78 65	78 65	78 65	78 65	78 65	78 65	78 65	78 65	78 65	78.2 64.4	
PRI WAIHAWA 820.2	MAX MIN	82 64	81 64	80 63	80 62	80 65	78 65	79 65	81 65	78 65	77 65	78 65	78 65	81 65	85 63	83 63	81 66	81 66	80 67	80 67	77 67	77 67	77 67	77 67	77 67	77 67	77 67	77 67	77 67	77 67	78.9 64.2	
WAIKIKI 717.2	MAX MIN	83 72	82 72	82 71	83 72	83 71	80 70	82 71	84 72	81 72	83 73	83 73	87 68	88 63	84 71	84 71	82 71	82 71	81 71	81 71	81 71	81 71	81 71	81 71	81 71	81 71	81 71	81 71	81 71	81 71	81.9 70.5	
WAIMANALO EXP FARM	MAX MIN	80 72	79 72	79 72	78 70	79 71	79 70	79 68	79 70	79 70	75 69	75 68	78 68	79 68	81 71	79 69	83 70	81 69	80 71	79 70	78 70	78 70	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78 68	78.3 69.1	
* * *																																
ISLAND OF MOLOKAI																																
MOLOKAI AP 524	MAX MIN	79 69	79 71	78 70	78 69	77 70	77 69	77 67	79 67	78 69	78 70	78 69	81 72	81 67	84 67	82 67	77 69	77 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78.8 68.7	
* * *																																
ISLAND OF LANAI																																
LANAI CITY 672	MAX MIN	74 66	72 65	73 65	73 64	76 65	74 62	71 64	74 63	75 64	71 66	73 66	72 60	78 61	76 63	79 62	77 65	71 64	71 64	71 64	71 64	71 64	71 64	71 64	71 64	71 64	71 64	71 64	71 64	71 64	71.9 63.3	
* * *																																
ISLAND OF MAUI																																
HALEAKALA RS 338	MAX MIN	58 44	57 47	53 42	58 43	53 44	60 45	60 39	62 45	62 48	65 45	59 44	59 43	60 44	66 46	66 45	62 46	52 46	56 47	60 48	59 46	59 46	58 44	55 44	53 41	49 39	47 38	44 35	44 35	45 35	53 41	56.3 42.8
HALEAKALA SUMMIT 338.4	MAX MIN	50 39	50 39	47 36	48 36	44 40	51 40	53 38	51 40	54 40	52 39	50 40	44 40	41 41	55 40	49 38	46 38	45 38	50 38	51 38	48 36	44 36	44 34	44 33	40 30	35 28	35 28	35 28	35 28	35 28	49 35	47.7 36.8
HANA AIRPORT 355	MAX MIN	79 68	78 69	80 67	79 67	81 68	79 68	80 68	80 69	80 68	77 68	77 69	79 69	80 69	79 69	76 69	77 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78.3 68.0	
KAANAPALI AIRPORT	MAX MIN	82 63	80 71	80 70	80 69	80 69	80 69	80 69	80 69	80 69	80 69	80 69	80 69	82 66	81 66	80 68	80 68	77 69	79 69	79 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	81 69	79.2 68.3	
KAHULUI WSD 398	MAX MIN	82 71	80 71	82 71	80 70	81 69	82 70	81 68	82 71	82 64	82 65	82 70	85 59	85 61	86 62	81 61	79 60	80 66	82 67	82 67	80 67	82 67	81 67	80 67	80 67	82 66	78 66	75 66	77 66	78 66	80.8 67.0	
KAILUA 446	MAX MIN	78 65	79 66	78 65	78 65	77 65	75 66	74 66	73 66	75 66	76 66	74 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	75 66	73.7 64.8	
KEAWAKAPU BEACH 260.2	MAX MIN	87 64	87 64	88 64	85 63	85 62	88 63	85 60	82 62	87 61	84 63	84 61	87 60	84 61	84 62	87 61	87 62	87 62	87 62	87 62	87 62	87 62	87 62	87 62	87 62	87 62	87 62	87 62	87 62	87 62	87.4 61.2	
KULA SANATORIUM 267	MAX MIN	72 56	70 56	71 54	72 55	70 57	71 58	70 56	73 54	74 55	72 55	72 55	70 55	72 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71 55	71.0 54.3		

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Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
LAMAINA 361	MAX MIN	85 67	84 68	85 67	84 67	84 67	85 65	85 65	85 68	84 66	84 66	86 66	85 64	84 65	83 65	84 65	85 69	80 58	84 67	84 66	85 66	83 66	85 66	85 67	82 65	74 66	74 66	73 61	81 61	80 60	83 63	82.8 65.7	
WAILUKU 386	MAX MIN	79 70	78 70	77 70	78 70		78 68	76 70	79 70	79 70	78 69	79 70			74 68	82 68	81 70	79 69					86 68	78 68	86 69				78 68	77 67			
ISLAND OF HAWAII																																	
HAINA 214	MAX MIN	81 66	79 66	73 64	78 63	77 62	76 66	65 66	66 64	64 67	67 67		75 66	79 63	82 63	80 68	77 64	75 63	75 65	76 66	77 66	77 65	76 65	73 64	75 62	69 61	73 59	72 57	72 62	73 63	76.1 64.0		
HAWAII VOLCNS NP HO 54	MAX MIN	67 53	68 56	61 54	62 51	65 54	61 55	67 52	67 52	63 51	63 52		64 52	66 50	67 51	64 52	63 52	65 57	61 54	62 54	59 52	63 53	61 51	59 50	59 52	57 49	57 48	56 45	56 47	58 49	62.2 51.6		
HILO WSD 87	MAX MIN	81 65	73 69	81 66	81 65	81 67	80 65	85 63	83 64	82 65	81 66	81 65	84 64	85 64	84 66	82 64	78 67	78 67	81 67	82 66	81 66	81 66	81 66	77 65	77 65	73 65	75 65	78 66	78 66	79 64	81 61	80.2 65.2	
KAINALIU 73.2	MAX MIN	79 62	78 62	78 62	78 61	78 61	78 61	77 60	79 61	79 60	79 60	79 60	80 60	80 60	78 60	78 60	78 62	79 62	80 61	77 61	77 61	77 61	77 61	77 61	76 61	77 61	76 61	76 61	75 61	75 61	77.6 60.0		
KAMUELA 192.2	MAX MIN	72 56	70 58	69 57	70 57	69 57	70 57	68 56	71 57	70 56	71 57		68 48	75 47	76 45	72 48	69 53	68 53	71 54	69 57	67 56	68 52	67 53	67 56	62 54	62 52	65 53	63 53	62 52	65 53	68.5 54.2		
KEAAU 92	MAX MIN	80 64	78 64	71 65	78 63	77 65	78 66	79 65	80 66	80 64	79 65	78 65	72 64	80 64	79 64	77 65	79 64	75 65	74 65	75 65	77 64	78 64	78 62	75 61	75 61	75 61	75 61	74 61	73 61	78 61	76.7 63.4		
KEALAKEUA 26.2	MAX MIN	80 63	79 63	78 63	77 62	79 62	78 63	78 62	78 61	79 61	78 61	77 61	79 62	77 61	78 61	79 61	78 61	79 62	78 62	79 62	78 62	78 62	76 61	76 61	77 60	76 60	76 60	76 60	75 60	77.7 61.1			
KOHALA MISSION 175.1	MAX MIN	79 67	77 66	74 66	76 64	75 66	74 66	75 66	77 67	77 65	77 67		73 67	77 65	80 66	77 66	75 66	71 66	74 64	75 65	74 64	74 64	74 64	72 63	73 62	69 61	72 62	71 63	71 61	72 61	74.4 64.8		
KONA (KAILUA) 68.3	MAX MIN	84 70	83 67	83 69	82 68		84 68	84 67	84 68	83 66	83 67		84 66	83 67	83 67	82 69	83 69					84 68	83 67	83 68				83 64	81 63	81 63			
KULANI CAMP 79	MAX MIN	61 47	64 46	58 49	66 47	66 44	57 51	58 49	68 47	61 43	62 46	67 46	60 46	61 45	60 47	60 50	60 48	58 48	66 45	55 45	58 48	56 45	55 45	53 48	53 43	52 42	50 42	50 42	52 43	55 45	59.1 45.8		
MAUNA LOA SLOPE OBS	MAX MIN	45 33	44 33	42 34	42 30	42 33	48 34	53 35	51 35	50 35	48 32	43 35	48 32	52 37	54 37	50 33	47 33	46 34	44 34	45 34	47 34	45 31	42 28	41 28	39 29	35 26	32 23	33 23	35 26	41 24	45 28	44.5 31.3	
MOUNTAIN VIEW 91	MAX MIN	75 58	72 61	67 61	70 58	74 59	74 59	74 59	76 60	75 59	76 59	77 59	75 60	75 59	73 59	73 60	72 60	69 62	71 60	71 60	67 60	67 60	69 60	69 60	69 60	69 60	69 60	69 60	66 60	66 60	71.7 58.7		
NAALEHU 14	MAX MIN	78 66	79 69	77 67	77 65	78 65	78 64	78 65	78 65	79 66	79 67	79 67	78 66	78 66	78 68	78 68	78 65	78 65	78 65	78 65	78 65	76 65	76 67	76 67	76 67	76 67	76 67	76 67	75 64	74 62	77.2 65.7		
OOKALA 223	MAX MIN	80 65	78 66	73 66	77 63	77 64	76 64	77 65	79 66	79 67	79 67	74 64	80 65	83 66	80 65	78 65	73 65	75 65	75 65	75 65	75 65	76 64	75 64	74 64	74 61	69 60	74 60	73 60	73 61	75 61	76.0 64.0		
OPIHIKALE 2 24.1	MAX MIN	75 60	74 60	73 60	73 59	76 58	79 57	76 56	76 56	77 56	77 56	77 56	77 56	78 56	78 56	77 56	75 56	75 56	75 56	75 56	75 56	75 56	75 56	75 56	75 56	75 56	75 56	75 56	75 56	75 56	75.2 56.8		
PAHALA 21	MAX MIN	79 61	81 62	78 64	77 62		80 60	79 60	81 60	80 63			82 62	80 64	81 65	83 64					78 65	73 67	77 62				78 61	77 64	78 65				
PUAKO 95.1	MAX MIN	84 66	84 68	83 68	84 67	85 68	85 67	84 66	84 66	85 67	84 67	84 67	84 64	84 64	85 66	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	83 67	84 68	79 68	78 67	79 68	77 69	81 68	83.0 67.7		
UPOLU POINT USCG 159.2	MAX MIN	81 72	82 68	77 71	78 67	79 70	80 70	78 69	79 67	81 71	80 71	79 69	79 68	82 69	81 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78 69	78.8 67.4		
WAIKOA KOHALA	MAX MIN	74 54	71 51	72 54	71 52	70 52	69 54	73 52	73 52	73 56	71 56	73 56	72 48	72 45	76 45	73 52	71 45	70 51	72 54	70 44	67 44	69 44	68 46	69 52	69 50	68 47	65 48	63 52	63 47	65 47	69.9 50.1		

EVAPORATION AND WIND

Station		Day of Month																															Total or Avg.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ISLAND OF KAUAI																																	
LIIHUE WSD 1020.1	EVAP WIND MAX MIN	.23 82 65	.19 79 65	.17 75 64	.26 78 63	.31 78 63	.20 75 62	.23 75 62	.20 75 63	.18 79 69	.15 76 64	.19 78 64	.18 78 64	.17 78 64	.21 75 64	.20 79 64	.22 78 65	.28 78 64	.25 74 63	.16 75 65	.18 75 65	.18 73 63	.26 75 63	.22 73 63	.28 73 63	.26 62	.27 59	.42 58	.32 59	.26 58	.34 58	.26 60	7.23 75.8 62.8
ISLAND OF OAHU																																	
HONOLULU OBSERV 702.2	EVAP WIND MAX MIN	.15 25 86 65	.17 30 83 66	.18 41 84 65	.26 34 82 64	.16 34 82 64	.14 46 81 64	.18 34 82 64	.19 37 83 64	.19 28 83 64	.13 21 83 65	.15 20 82 65	.24 29 84 65	.15 39 84 63	.15 18 85 63	.15 16 85 63	.22 37 85 65	.21 55 82 64	.19 54 81 64	.18 34 83 66	.16 49 83 65	.21 56 82 63	.20 58 81 63	.20 58 81 63	.18 57 79 62	.21 67 80 62	.24 92 75 60	.13 88 77 59	.18 88 74 58	.30 86 77 58	.15 20 79 59	.11 14 77 59	5.66 81.2 63.1

PRECIPITATION MEASURED IN STORAGE GAGES

HAWAII
DECEMBER 1970

Station	Observation date	Amount since last obs.	Snow on ground	Station	Observation date	Amount since last obs.	Snow on ground	Station	Observation date	Amount since last obs.	Snow on ground
ISLAND OF KAUAI				ISLAND OF MAUI				ISLAND OF MAUI (CONTINUED)			
HALEI TUNNEL 1053	1970			HAELAAU 477	1970			KUKUI	1970		
	JAN 31	12.60			JAN 31	6.40			JAN 31	28.00	
	FEB 28	2.40			FEB 28	4.40			FEB 28	20.00	
	MAR 31	1.10			MAR 31	6.50			MAR 31	29.00	
	APR 30	18.00			APR 30	3.72			MAY 9	108.00	
	MAY 31	11.00			MAY 30	9.00			MAY 30	40.00	
	JUN 30	5.00			JUN 30	6.00			JUN 27	24.00	
	JUL 31	7.00			JUN 1	14.00			AUG 1	48.00	
	AUG 31	8.00			AUG 29	8.00			AUG 29	36.00	
	SEP 30	8.80			OCT 3	7.80			OCT 3	10.80	
	OCT 31	7.00			OCT 31	5.50			OCT 31	15.75	
	NOV 30	15.00			NOV 30	24.00			NOV 30	72.00	
	DEC 31	28.00			JAN 2	20.00			JAN 2	72.00	
TOTAL		123.90		TOTAL		115.32		TOTAL		503.55	
WAILUA RIVER 1055	1970			HONOLUA FLD 49 494	1970			MOKUPEA 475	1970		
	JAN 31	5.40			JAN 30	6.09			FEB 2	11.69	
	FEB 28	2.00			MAR 2	2.12			MAR 2	2.58	
	MAR 31	3.00			MAR 31	1.97			MAR 31	4.39	
	APR 30	12.40			APR 30	5.52			APR 30	11.75	
	MAY 9	37.20			MAY 29	1.53			MAY 29	4.65	
	MAY 31	10.40			JUN 30	2.71			JUN 30	5.63	
	JUN 30	*			JUL 31	4.76			JUL 31	8.85	
	JUL 31	7.20			AUG 31	2.70			AUG 31	9.31	
	AUG 31	5.60			SEP 30	1.71			SEP 30	3.66	
	SEP 30	5.00			OCT 31	2.18			OCT 31	4.63	
	OCT 31	5.60			NOV 30	15.44			NOV 30	23.06	
	NOV 30	23.60			DEC 31	4.70			DEC 31	11.71	
	DEC 31	8.40		TOTAL		51.43		TOTAL		101.91	
TOTAL		125.80						PUU PAKI 352	1970		
									MAR 31	31.00	
									JUN 30	58.00	
									SEP 30	49.00	
									DEC 30	43.00	
								TOTAL		181.00	
								WAILUA IKI 348	1970		
									MAR 31	32.67	
									JUN 30	84.00	
									SEP 30	86.00	
									DEC 29	94.00	
								TOTAL		296.67	

DAILY PRECIPITATION

HAWAII
DECEMBER 1970
DELAYED DATA

Station	Total	Day of Month																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
APRIL 1969																																			
MAKAHA PUMP 800.2	.13	.10	.01			.02																													
MAY 1969																																			
MAKAHA PUMP 800.2	1.55	.76					.34			.01	.05	.02	.03																			.34			
JUNE 1969																																			
MAKAHA PUMP 800.2	1.76										.19						.47	.07					.09			.86		.08							
JULY 1969																																			
MAKAHA PUMP 800.2	.45																				.05				.05	.35									
AUGUST 1969																																			
MAKAHA PUMP 800.2	.00																																		
SEPTEMBER 1969																																			
MAKAHA PUMP 800.2	.81										.42		.03										.36												
OCTOBER 1969																																			
MAKAHA PUMP 800.2	2.17		.14										.88										.36							.74					
NOVEMBER 1969																																			
MAKAHA PUMP 800.2	3.99					.27						.04	.59	.07	2.75									.06		.21									
DECEMBER 1969																																			
MAKAHA PUMP 800.2	5.65	.07	.08	.23																		.11			.15		.06		4.92	.01	.02				
JUNE 1970																																			
MOUNT WAIALEALE 1047	31.48	.04		.08	2.48	.94	.67			.32	.79	1.02	1.34	.20	.35	1.34	.47	.24	.83	3.23	3.11	.90	.94	2.00	1.61	1.06	1.38	1.06	2.32	2.16					
SEPTEMBER 1970																																			
MAKAHA PUMP 800.2	.18	.01								.10		.04	.03																						
MIDDLE PEN 147.1	22.70	.69	.20	.08	.39	.59	.91	.39	.51	.75	.35	.08	.28	.04	.51	1.02	.35	.98	3.90	2.40	4.41	2.44	.67	.24	.12		.04	.12		.24					
MOUNT WAIALEALE 1047																																			
OCTOBER 1970																																			
MAKAHA PUMP 800.2	1.98	.08	.32	1.29	.09											.02	.02							.03											
NOVEMBER 1970																																			
MAKAHA PUMP 800.2	3.75	.05				.01		.11	.30							.12	.10	.06		.12				.12	.51	.02	.11		.04	6.18	2.28	.51	.90	.31	.40
MOUNT WAIALEALE 1047																																			

STATION INDEX

HAWAII
DECEMBER 1970

STATION	INDEX NO.	DIVISION	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES			OBSERVER	STATION	INDEX NO.	DIVISION	DRAINAGE	LATITUDE	LONGITUDE	ELEVATION	OBSERVATION TIME AND TABLES			OBSERVER
							TEMP.	PRECIP.	ET/VP									TEMP.	PRECIP.	ET/VP		SPECIAL
ISLAND OF HAWAII																					
ALEXANDER RESV. 993	A 0140	02	KOLA	N 21 57 199	32	1010				MCBRYDE SUGAR CO.	KAUNALAPAU HARBOR 658	A 3461	01	LAHAINA	N 20 47 157	00	78				OLE COMPANY
ANGOLA 1114	A 0145	01	KAWAHAU	N 22 08 159	18	1010	7A			LIHUE PLANTATION CO.	LANAI CITY 672	A 5286	01	LAHAINA	N 20 50 156	35	1020	7A	7A		OLE COMPANY
BRIDGEWOOD STA 985	A 0240	02	KOLA	N 21 56 159	32	720	7A			MC BRYDE SUGAR CO LTD	LANAIE 676	A 5301	01	LAHAINA	N 20 49 156	53	7370			ST. DIV. OF FISH & GAME	
ESK 3 RESERVOIR 1094-1	A 0405	02	KOLA	N 22 06 159	22	300	7A			MC BRYDE SUGAR CO LTD	MALEKAHA 894	A 5002	01	NAKAWAMU	N 20 42 156	11	996	8A	8A		ST. DIV. OF FISH & GAME
ELIKA 127	A 0440	01	KAWAHAU	N 22 06 159	22	300	7A			LIHUE PLANTATION	MALEKAHA SUMMIT 338.4	A 1008	02	NAKAWAMU	N 20 46 156	15	1150			OLE COMPANY	
HALENA 1110	A 0935	01	KAWAHAU	N 22 07 159	19	230	7A			MC BRYDE SUGAR CO LTD	MALEKAHA 985	A 5021	01	LAHAINA	N 20 46 156	15	1150			OLE COMPANY	
HALENAHUA 1006	A 0238	02	LIHUE	N 22 08 159	26	400	8A			LIHUE PLTN CO LTD	ISLAND OF MAUI										
HAWAII TUNNEL 1053	A 3902	01	KAWAHAU	N 22 08 159	24	110	8A			GRUVE FARM CO LTD	AUHAH-292	A 0175	02	HANA	N 20 37 156	20	2000	VAR			ULUPALUKA RANCH
HUKIPO 945	A 2159	01	MAIMEA	N 21 59 159	41	800	8A			KEKAMA SUGAR CO LTD	FIELD 40 474	A 0570	04	LAHAINA	N 20 37 156	20	1050				MAUI PINEAPPLE CO
ILLILUIA INTAKE 1050	A 2222	02	LIHUE	N 22 02 159	26	1070	7A			LIHUE PLTN CO LTD	MALEAAU 477	A 0540	04	LAHAINA	N 20 37 156	26	298				MAUI PINEAPPLE CO
INTAKE MAIMEA PK 1080A	A 2227	01	HANAIEI	N 22 09 159	34	600	8A			MC BRYDE SUGAR CO LTD	MALEKAHA R 5 E 434	A 0995	01	NAKAWAMU	N 20 37 156	19	2100				MAUI PINEAPPLE CO
KAMAHAMA RESERVOIR 1092	A 3104	01	KAWAHAU	N 22 08 159	23	830	7A			KENALOHULUHLU R. S.	MALEKAHA RANCH 432	A 0949	01	NAKAWAMU	N 20 36 156	19	1850	6A			MALEKAHA RANCH CO
KAPPA STABLES 1104	A 3159	01	KAWAHAU	N 22 05 159	20	175	7A			LIHUE PLANTATION CO.	MALEKAHA R 5 432	A 0949	01	NAKAWAMU	N 20 36 156	19	7030	8A	8A		MALEKAHA RANCH CO
KAWAHAU 1112	A 3902	01	KAWAHAU	N 22 08 159	24	110	8A			LIHUE PLTN CO LTD	MALEKAHA 423	A 1008	02	NAKAWAMU	N 20 42 156	21	996	8A	8A		KNEEDER SP. C. HSLE DIV.
KEKAMA 944	A 4272	03	MAIMEA	N 21 58 159	43	9	8A			LIHUE PLTN CO LTD	MALEKAHA 492.2	A 1012	02	NAKAWAMU	N 20 35 156	17	69				PHIL SCOTT
KILAUEA 1134	A 4501	01	HANAIEI	N 22 13 159	25	317	8A			LIHUE PLTN CO LTD	MALEKAHA 485	A 1084	01	NAKAWAMU	N 20 35 156	16	320	8A			MAUI PINEAPPLE CO & SUGAR CO
KILAUEA FIELD 17 1135	A 4508	01	HANAIEI	N 22 13 159	24	118	8A			KILAUEA SUG PLTN CO	MANA 354	A 1122	01	HANA	N 20 43 159	59	12	8A			HAWAII HASEGAWA
KILAUEA POINT 1133	A 4508	01	HANAIEI	N 22 14 159	24	100	8A			U. S. COAST GUARD	MANA AIRPORT 355	A 1125	01	HANA	N 20 48 159	01	61	11A	11A		MAUI AIRLINES
KITANO 1037-1	A 6050	03	MAIMEA	N 22 02 159	41	2130	8A			KEKAMA SUGAR CO	MANUHUI 281	A 1148	01	HANA	N 20 41 156	01	325	7A			KOALI RANCH
KOLD 1039	A 6735	03	MAIMEA	N 22 04 159	46	74	7A			KEKAMA SUGAR CO LTD	MOLUKA CASIN 259.5	A 1252	02	NAKAWAMU	N 20 47 156	13	9940				MAUI PINEAPPLE CO
KOLDA 936	A 4750	02	KOLA	N 21 58 159	28	400	7A			GRUVE FARM CO LTD	MONDOKOHU 480	A 1862	04	LAHAINA	N 20 58 156	36	800				MAUI PINEAPPLE CO
KOLDA MAUKA 994	A 4750	02	KOLA	N 21 58 159	29	600	7A			GRUVE FARM CO LTD	MONDOKOHU 449.9	A 1864	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
KOLDA RESV 1137	A 4758	01	KAWAHAU	N 22 01 159	23	737	7A			KILAUEA SUG PLTN CO	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
KUKUNA 835	A 4803	02	KOLA	N 21 58 159	30	100	7A			MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
LIHUE VARIETY STA	A 5505	02	LIHUE	N 22 01 159	23	375	7A			MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
LIHUE 1020	A 5505	02	LIHUE	N 22 01 159	22	207	7A			MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
LIHUE 1020-1	A 5505	02	LIHUE	N 22 01 159	21	215	7A			MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MAKAEHUA POINT 940-1	A 5785	02	KOLA	N 21 58 159	27	52	8A			MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MAKAEHUI 905	A 5804	03	MAIMEA	N 21 55 159	28	140	7A			MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 6082	03	MAIMEA	N 22 02 159	46	11	9A	9A		MAIARUVE SUG CO LTD	MONDOKOHU 499	A 1874	04	LAHAINA	N 21 00 156	39	139	6A			MAUI PINEAPPLE CO
MANA 1026	A 60																				

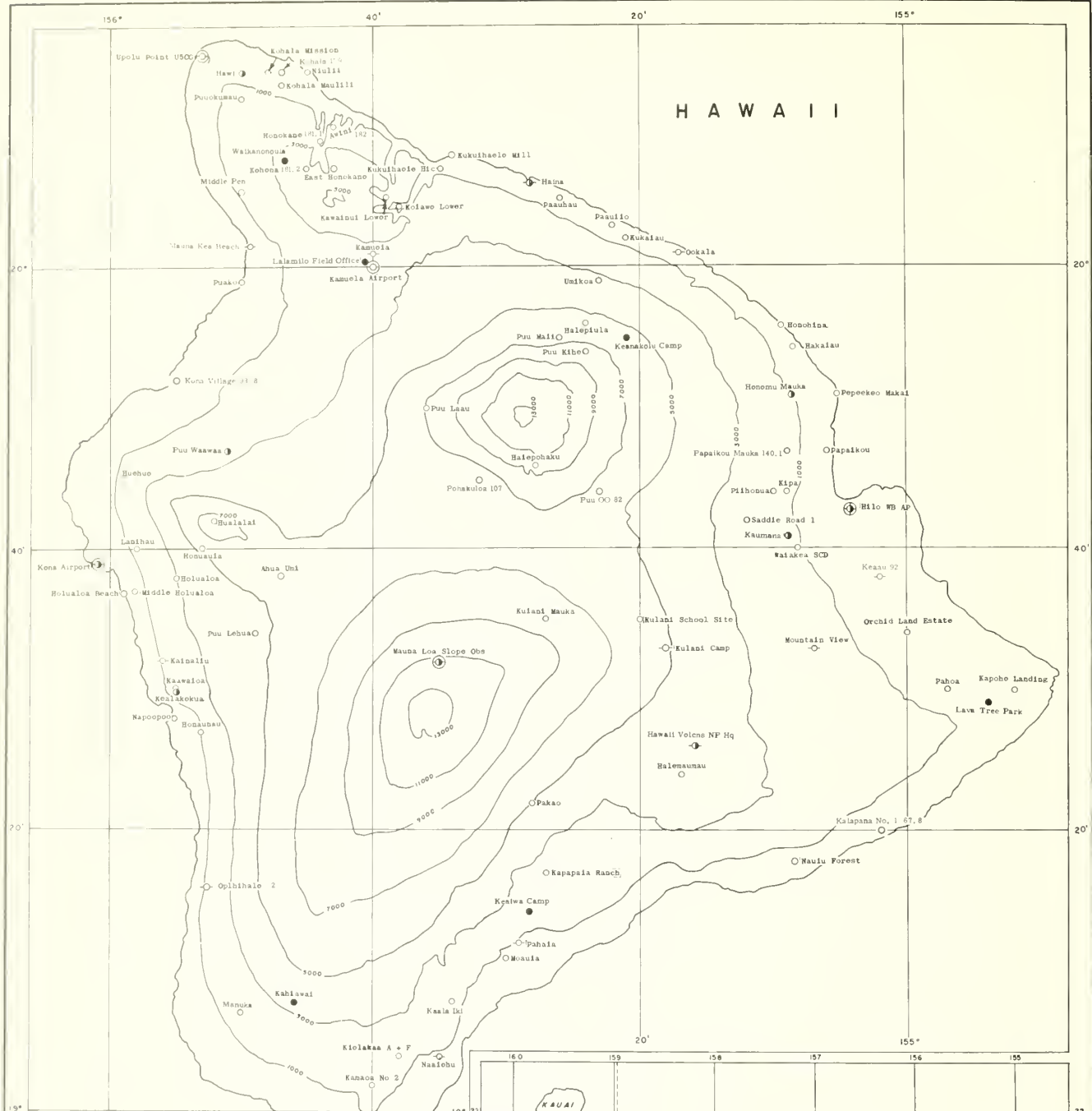
156°

40'

20'

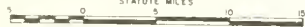
155°

HAWAII



HAWAII

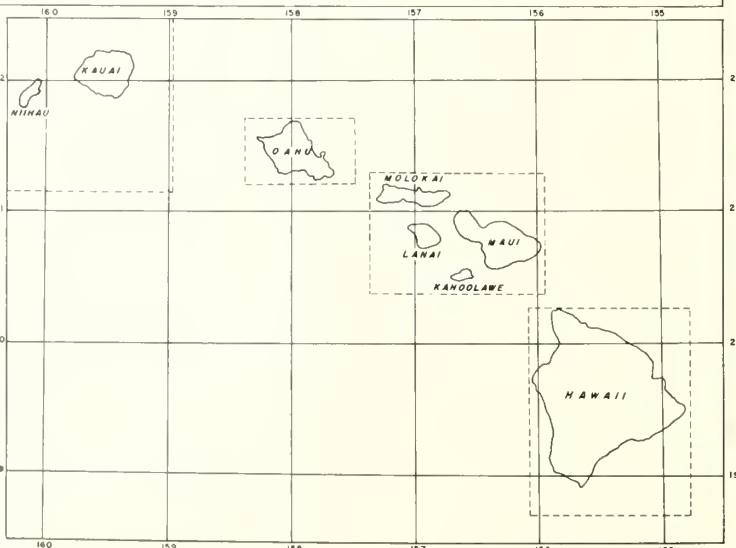
PLATE 2
STATUTE MILES



STATION LEGEND

- ● ③ Precipitation only
- ① Precipitation, storage
- ● ③ Precipitation and Temperature
- ● ③ Precipitation, Temperature and Evaporation
- Type of gage ○ Non-recording, ● Recording
- ③ Both types

Double circle combinations indicate the availability of more detailed meteorological data
 All stations use 150th meridian time



156°

NSCOMM-ESSA-Anneville, N.C.
Edition 1-60

40'

160

159

158

157

156

155

22

21

20

19

CLIMATOLOGICAL DATA

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

HAWAII

ANNUAL SUMMARY 1970

Volume 66 No. 13

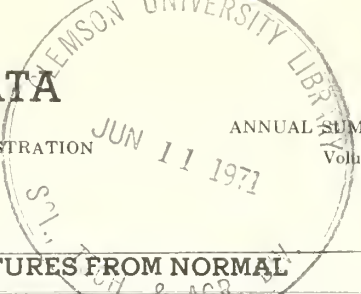


Table 1

AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual				
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure			
* * *																													
ISLAND OF KAUAI																													
KANALOHULU 1075	55.3	53.5	56.5	59.5	59.5	59.5	61.9	62.0	61.9	62.0	65.0	65.0	63.8	62.4	58.4	59.4	59.4	59.4	58.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
KILAUEA POINT 1133	72.4	71.6	71.8	71.7	71.7	71.7	74.7	74.8	74.7	74.8	76.7	77.3	78.9	77.8	73.9	72.7	72.7	73.9	73.9	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
LIIHUE WSD 1020.1	71.6	71.3	74.3	75.6	75.6	75.6	77.2	78.5	77.2	78.5	79.5	80.8	79.9	78.4	75.4	75.2	75.4	75.4	75.4	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
MAKAHUNA POINT 940.1	73.1	73.2	75.0	75.3	75.3	75.3	78.2	78.0	78.2	78.0	78.2	78.7	77.5	77.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
MANA 1026	69.5	70.2	71.4	74.1	74.1	74.1	75.5	77.2	75.5	77.2	77.2	78.3	77.4	76.8	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
* * *																													
NIU RIDGE 1035																													
MAIAHI LOWER 1054	66.5	67.1	68.7	70.9	70.9	70.9	72.3	73.5	72.3	73.5	73.9	74.8	73.4	73.4	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
* * *																													
ISLAND OF OAHU																													
EWA PLANTATION 741																													
HONOLULU WSD 703	74.2	73.3	76.9	78.3	78.3	78.3	80.4	81.1	80.4	81.1	82.2	83.8	82.2	79.0	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
HONOLULU SUBSTA 704	72.8	71.7	73.3	73.4	73.4	73.4	76.2	77.0	76.2	77.0	77.7	78.9	77.7	75.4	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
KAHUKU 912	71.2	70.5	71.9	73.0	73.0	73.0	74.7	75.7	74.7	75.7	76.2	77.4	76.8	75.3	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
KANEHUE MAUKA 781	71.2	71.0	74.3	76.8	76.8	76.8	78.3	79.4	78.3	79.4	80.5	81.7	79.7	79.1	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
LUALUALEI 804	68.9	67.1	68.3	68.7	68.7	68.7	71.8	72.2	71.8	72.2	73.6	74.9	75.3	74.9	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
DPAEULA 870	67.5	66.9	68.6	69.8	69.8	69.8	72.3	72.7	72.3	72.7	73.1	74.5	73.4	72.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
PRII WAIHANA 820.2	69.1	67.4	70.0	71.5	71.5	71.5	73.4	74.9	73.4	74.9	75.1	76.6	75.5	74.8	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5
WAIALUA 847	69.8	68.6	70.3	72.2	72.2	72.2	74.5	75.7	74.5	75.7	76.3	77.2	76.2	75.8	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5
* * *																													
WAIKIKI 717.2																													
WAIMANALO EXP FARM	73.5	71.8	74.6	75.8	75.8	75.8	78.0	79.0	78.0	79.0	79.4	81.3	79.7	79.0	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
* * *																													
ISLAND																													
71.1	69.9	72.1	73.5	73.5	73.5	76.7	77.3	76.7	77.3	78.5	77.3	76.7	76.7	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
* * *																													
ISLAND OF MOLOKAI																													
MOLOKAI AP 524																													
71.2	69.6	72.3	73.4	73.4	73.4	76.0	76.7	76.0	76.7	76.9	77.7	77.0	77.0	74.4	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
* * *																													
ISLAND OF LANAI																													
LANAI CITY 672																													
65.8	67.5	72.0	67.5	67.5	67.5	70.4	71.0	70.4	71.0	71.0	72.6	71.6	72.2	70.3	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
* * *																													
ISLAND OF MAUI																													
HALEAKALA RS 338																													
50.2	50.0	50.3	50.8	50.8	50.8	54.4	57.2	54.4	57.2	54.9	55.9	52.8	54.0	52.0	49.6	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
* * *																													
ISLAND OF HAWAII																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
* * *																													
HALEAKALA SUMMIT 338.4																													
71.1	71.2	73.0	73.6	73.6	73.6	75.6	76.3	75.6	76.3	76.4	78.1	78.1	78.1	76.2	74.2	74													

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

HAWAII 1970

STATION	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL			
	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE		
ISLAND OF KAUAI																												
ANAMOLA 1114	A	7.86	1.14	1.66	3.80	.66	5.55	2.78	1.33	3.30	.35	1.43	.22	2.97	.58	1.83	1.06	1.38	.75	5.76	.84	14.18	9.42	3.14	2.26	46.95	2.64	
BOYDESWOOD STA 985	A	5.89	1.30	.84	5.32	.63	5.14	5.29	1.72	5.34	2.02	2.48	.73	3.78	.32	1.96	3.18	3.02	.50	2.96	2.10	6.17	.80	10.26	3.06	48.62	10.99	
EAST LAWA 934	A	9.69	2.87	.87	5.16	.82	5.18	7.17	2.81	5.72	1.92	4.09	.34	5.29	.32	3.11	3.04	4.43	.29	4.76	.54	8.62	2.94	6.19	1.15	62.96	1.30	
ELEELE 927	A	6.09	1.29	.64	3.30	.03	3.30	1.10	.59	3.38	2.06	1.07	.07	1.74	.48	2.88	1.82	1.68	.74	3.04	.33	2.63	.32	3.90	.28	24.58	6.14	
HALAULA 1110	A	6.20	1.29	1.45	3.90	.60	5.44	4.52	.60	4.00	1.02	1.77	.14	3.24	.98	2.39	.51	1.81	.48	4.09	.50	11.00	5.81	2.66	2.86	45.73	4.13	
HALENANAO 1006	A	10.35	.92	.83	.83	.83	.83	8.58	5.13	5.13		3.23		6.48		5.82		4.83		7.19		12.59		8.21		74.16		
MUKIPO 945	A	5.09		.38		.15		2.43		4.00				3.28		1.90		1.69		2.07		2.07		.11		14.12		
LILILIULU INTAKE 1050	A	16.75		2.57		16.75		12.81		10.60				12.23		12.26		11.34		11.99		19.90		23.04		153.01		
INTAKE WAHINA PC 1086	A	23.26		1.46		23.33		30.71		4.91		4.90		9.44		5.68		8.79		4.64		18.11		23.47		137.70		
KALIMAI RES 1131	A	12.88		4.44		2.11		9.44		8.46		6.01		9.29		5.67		4.76		5.40								
KANALOHULU 1075	A	21.63		6.74		.68		4.96		1.89		.36		.58		1.13		2.80		3.48		6.99		5.69		56.93		
KANEHA RESERVOIR 1092	A	13.11		3.95		2.03		10.64		6.79		4.03		6.81		4.88		4.29		6.02		17.35		8.25		88.15		
KAPAA STABLES 1104	A	6.58		1.83		.85		4.23		4.28		1.78		2.85		2.84		1.95		3.61		11.15		3.74		45.69		
KEAHA 1112	A	7.08	1.20	1.08	3.61	.60	4.70	3.15	.21	3.20	1.01	1.37	.26	2.75	.84	2.38	.20	1.61	.49	1.94	1.89	10.08	5.59	2.84	1.99	38.03	4.68	
KEKAHA 944	A	4.39	.71	.80	2.32	.52	2.01	.11	.96	2.00	1.22	.19	.15	1.12	.26	.08	.89	.91	.23	2.41	.57	3.22	1.53	.09	3.20	14.84	5.23	
KILAUEA 1134	A	7.22	.91	2.83	3.29	1.30	6.09	5.00	.51	5.55	.55	2.70	.57	6.15	1.71	3.54	1.45	2.87	.74	2.99	2.19	13.37	6.70	5.11	2.09	58.50	8.88	
KILAUEA FIELO 17 1135	A	10.05	.04	3.50	4.68	2.16	7.72	7.58	.23	6.51	1.00	5.20	.15	4.83	.19	6.09	3.60	3.54	1.74	4.29	2.78	10.22	7.94	7.84	1.67	77.50	15.64	
KILAUEA POINT 1133	A	6.22		2.37		1.06		3.21		3.21		1.46		4.83		2.56		1.80		4.60		10.51		3.44		46.44		
KOLD 1033	A	6.22		1.47		.13		.32		1.18		.00		.32		.00		1.04		1.69		.82		.31		13.50		
KOLUA 936	A	9.50	2.59	.59	5.05	1.12	5.51	8.24	3.51	6.52	2.17	3.23	.46	5.76	.70	3.07	3.45	4.44	.06	4.11	1.20	10.89	4.82	7.97	.35	65.44	2.07	
KOLUA MAUKA 994	A	12.23	2.46	1.06	8.27	1.15	7.50	9.76	3.10	7.24	1.08	5.17	.55	7.65	.28	6.54	2.26	6.79	.41	5.70	2.24	15.28	8.01	12.26	2.07	91.83	3.41	
KOLDOV RES 1137	A	12.59		3.62		2.27		6.55		6.65				5.88		4.58		4.39		5.17		16.86		6.90		80.98		
KUKUIA 935	A	8.69	3.33	.55	3.92	.38	3.98	4.23	1.82	3.60	1.69	1.33	.08	2.98	.92	1.84	1.35	3.16	.90	3.30	.07	8.07	4.06	4.04	1.57	42.22	1.75	
LILUUE VARIETY STA	A	7.05	.45	.85	4.82	1.84		6.98		6.98				2.98		2.97		2.97		3.00		13.64		3.74		45.69		
LILUUE WSO	A	8.91	2.46	.90	4.92	.89	4.63	5.07	1.21	3.61	2.57	1.54	.75	3.85	1.07	2.17	1.35	2.04	.86	5.65	.67	8.06	2.93	3.72	4.46	49.11	3.97	
LILUUE 1020	A	7.32	1.81	.89	4.43	.93	3.63	2.83	.51	5.85	3.26	.77	.69	1.76	.18	1.33	1.13	1.42	.68	2.74	1.29	11.05	6.52	2.29	2.89	39.18	3.82	
MAKAMUHUA POINT 940.1	A	8.39		.75		.35		2.72		1.58		1.25		1.84		1.14		4.24		1.10		3.38		3.38		21.90		
MAKAHAI 965	A	5.06	1.17	.76	2.88	.04	2.46	.27	.86	1.37	1.94	.55	.12	.20	.41	.04	1.19	.55	.33	2.24	.01	2.87	.70	1.25	2.15	16.35	6.58	
MANA 1026	A	6.09	2.03	1.10	1.71	.42	2.23	.12	1.13	2.57	.67	.00	.64	.54	.02	.01	.98	6.03	5.24	1.45	.60	1.08	.97	3.77	2.93	18.78	3.27	
MOMIHI UPD CROSS 1083	A	23.14		4.90		.75		10.17		1.23		1.53		4.34		1.98		2.94		5.86		14.74		5.50		77.08		
MOLAI 1145	A	9.62	2.71	3.38	2.32	1.10	5.38	2.51	1.60	3.23	.12	1.17	.54	3.97	1.59	1.70	1.35	.91	1.27	3.59	1.03	12.87	7.86	3.04	2.17	47.09	3.62	
MOUNT WAIALEALE 1047	A	24.36		4.11		10.76		48.55		32.17		31.48		30.57		30.74		22.70				2.40		1.20		52.28		
NIU RIDGE 1035	A	8.58		1.36		.31		.28		1.83		.05		.94		.15		9.09				2.40		1.20		2.46		
N WAILUUA DITCH 1051	A	18.91		2.83		4.11		20.43		15.66		11.67		13.14		12.34		13.59		12.21		22.38		17.15		60.38		
PH WAINIHA 1115	A	20.82	10.59	5.78	5.87	2.00	12.45	18.36	6.09	6.11	3.05	4.64	1.34	13.86	3.78	4.99	5.66	5.24	.83	7.14	1.10	16.11	6.14	16.60	3.01	121.65	.69	
PRINCEVILLE RANCH 1117	A	8.11	.22	5.32	2.06	2.23	7.35	8.85	2.07	4.71	1.63	3.46	1.56	6.86	.69	4.93	2.39	2.37	2.45	2.91	3.59	1.29	7.44	7.57	1.63	72.61	12.48	
PUEHU RIDGE 1040	A	8.33		1.82		.03		1.50		2.40		.35		.38		.10		3.10		1.14		1.20		1.20		21.90		
PUMI 1013	A	8.72		.77		.87		7.11		6.93		2.31		4.70		6.87		7.14		7.14		11.34		5.38		60.87		
RESERVOIR 6 1004	A	9.82	2.38	.90	6.30	1.08	5.93	7.42	2.34	5.74	1.26	3.12	.64	6.47	1.13	5.91	1.04	5.07	.32	6.00	.07	15.86	9.11	9.18	1.16	76.57	3.72	
WAHIAHA 930	A	6.32	1.29	.56	3.70	.14	3.63	2.85	.93	4.20	2.70	1.50	.18	2.20	.51	6.77	1.85	1.57	.14	2.76	.26	3.06	.03	4.15	.34	29.98	4.07	
WAHIAHA MOUNTAIN 990	A	13.50	.21	1.25	11.08	2.75	10.26	19.75	8.51	14.50	3.67	13.50	2.22	12.13	1.85	12.01	3.66	9.13	1.66	7.90	4.21	18.50	5.70	24.00	9.88	148.52	2.53	
WAHIAHI LOWER 1054	A	10.02		1.32		1.66		13.07		11.15		7.24		8.48		8.15		8.25		8.54		18.81		13.35		110.04		
WAHIAHI UPPER 1052	A	15.05		1.76		2.38		14.14		11.88		9.10		10.87		9.57		9.63		9.28		21.66		17.46		132.78		
WAHIAHA 943	A	4.08	.16	.79	1.87	.37	1.96	.02	1.10	1.74	.90	.04	.46	1.11	.42	.23	.86	1.83	1.11	2.38	2.46	.85	1.10	3.18	14.11	6.44		
WAILUA KAI 1065	A	6.25		.95		1.24		3.50		6.11		1.26		2.98		2.30		2.47		5.18		14.73		3.84		50.79		
WAHIAHA 947	A	5.10	1.42	.55	2.85	.08	2.28	.12	1.01	2.43	1.58	.08	.20	.21	.26	.00	1.04	1.02	.36	1.82	.09	2.93	1.19	.29	3.06	14.63	6.24	
WEST LAWA 931	A	7.76	2.26	.53	4.18	.26	4.14	4.17	1.65	3.96	1.93	1.81	.01	2.96	.53	2.11	1.16	2.83	.38	3.24	.45	6.06	1.76	4.76	.54	40.45	1.99	

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

TABLE 2 - CONTINUED

HAWAII
1970

STATION	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL						
	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE					
WAILIUA 847	6.60	2.50	2.61	-2.20	.12	-3.38	1.69	-.03	.45	-.05	.14	-.58	2.17	1.43	.43	-.95	.45	-.34	1.54	-1.15	4.00	1.05	1.67	-2.27	21.87	-5.97					
WAIANA 798.2	4.59	-3.20	.00	-3.13	.00	-2.31	.03	-1.09	.10	-.51	.00	-.29	.88	.50	.10	-.74	.45	-.32	1.25	-.62	2.62	.81	.19	-2.47	6.27	-13.37					
WAIANA MAUKA 803	4.67	4.11	3.39	6.26	4.07	7.39	7.26	2.47	1.81	2.34	3.22	-1.10	3.93	1.11	1.02	-2.74	2.57	-.70	3.48	-1.92	13.08	8.29	4.34	-4.70	49.82	-17.19					
WAIANA 836	8.38	-3.26	2.10	-10.84	4.14	-9.70	13.15	1.75	8.63	-3.21	11.49	-6.55	20.98	7.68	9.18	-5.25	9.70	-.27	11.86	-.82	33.78	11.18	22.83	7.34	15.08	-3.11					
WAIKANE 885	30.27	18.40	2.47	-10.75	3.88	-11.36	16.66	2.66	12.94	-10.01	4.24	-3.74	11.38	.62	8.72	-2.95	7.16	-3.38	8.79	-3.16	37.02	29.88	9.09	-5.13	152.62	8.13					
WAIKIKI 717.2	2.38	.57	.19	.70	.17	.98	.34	.08	.17	.80	.64	.51	.89	.51	.29	.26	.29	.26	2.16	4.72	5.20	1.37	1.06	14.71	1.06						
WAIMANALO EXP FARM	8.65	2.02	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	2.16	4.72	5.20	1.37	1.06	14.71	1.06						
WAIHEA 892	7.76	2.38	2.23	-3.67	.52	-4.82	3.72	.47	1.31	-1.35	2.37	-.17	10.78	7.79	1.71	-1.73	1.94	-.02	2.32	-1.59	5.74	1.57	5.72	-.20	46.12	-.90					
WAIIPAHU 750	3.97	-.19	.40	-3.29	.15	-3.03	1.33	-.53	.40	-1.00	.40	-.20	1.96	1.29	.30	-.93	.40	-.68	2.61	-.27	7.62	5.06	1.18	-2.36	20.52	-5.61					
WILHELMINA RISE 721	3.66	-.97	.88	-3.14	1.36	-3.16	5.68	2.48	2.06	-.38	1.56	-.10	4.16	2.30	2.50	-.25	1.72	.06	4.00	-.72	11.90	8.86	4.00	-.28	43.48	6.84					
ISLAND	7.42	1.56	1.26	4.79	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39	3.53	2.39			
ISLAND OF MOLOKAI																															
KALAUAPPA 563	9.00	3.06	.74	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86	4.91	.86		
KAUNAKAKAI 536	2.44	.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
KEONELE PENS 551	3.07	3.32	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		
KUALAPUU 534	6.29	2.13	2.82	-.82	4.47	4.09	2.85	-.21	.08	-1.50	1.39	-.28	.87	-.01	.68	-.54	.30	-.46	1.20	-1.22	9.67	6.57	2.44	-1.82	28.08	-2.23					
MARULEHU 542	4.01	1.14	1.08	-3.02	1.52	-2.70	8.01	4.96	2.71	1.00	2.47	-.28	5.24	2.30	2.57	-.33	2.07	-.53	4.41	-1.00	14.86	11.01	4.38	-.17	53.12	13.28					
HAUNALOA 511	3.91	-.36	2.38	-.74	1.66	-3.61	1.94	-.37	1.11	-1.36	-.00	-.75	1.22	-.40	.90	-.30	2.07	-.96	1.01	-1.36	4.67	1.92	1.77	-.73	19.10	-1.87					
HOKAIA AP 524	4.40	1.71	.25	2.05	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03		
PUDHOKU RANCH 542.1	7.53	1.99	.69	4.13	2.47	1.33	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95		
WAIKOLU 540	11.74	6.76	2.55	16.03	2.53	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	3.15	4.31	
ISLAND	4.65	1.99	.60	3.71	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	.73	
ISLAND OF LANAI																															
KANEPUU 690	5.10	1.72	.07	.68	2.95	.34	.58	.58	1.55	.58	1.55	.58	1.55	.58	1.55	.58	.02	.62	.88	.39	8.48	.39	22.50	.30	25.53	.30	25.53	.30	25.53		
KAUNALAPAU HARBOR 658	3.15	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
LANAI CITY 672	6.06	1.44	1.52	-2.21	.16	-4.17	2.11	-.81	.69	-1.98	1.47	-.05	1.84	-.12	2.09	-.31	.37	-1.90	1.78	-1.17	10.73	7.87	1.33	-3.39	29.15	-5.84					
LANAIHALE 684	4.35	2.13	.97	.61	1.03	1.37	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	.62	1.00	1.20	1.17	12.05	5.58	3.46	1.16	34.16	1.16					
HAHANA 694	5.28	1.13	.00	.48	.72	.14	.14	.14	.14	.14	.14	.14	.14	.14	.14	.14	.01	.35	.73	.09	10.73	7.87	1.33	-3.39	29.15	-5.84					
HALAUEA 676	4.95	.99	.00	.93	.23	.23	.23	.23	.23	.23	.23	.23	.23	.23	.23	.23	.25	.42	.72	.72	7.23	.02	13.21	.02	21.08	.02	21.08				
WAIKAEAKUA 685	6.41	1.79	.06	1.17	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.54	.58	.81	.45	8.71	.45	21.08	.45	21.08	.45	21.08	.45	21.08		
ISLAND	6.06	1.52	.16	2.11	.69	.69	.69	.69	.69	.69	.69	.69	.69	.69	.69	.69	.73	1.78	1.78	1.78	10.73	.33	29.15	-23.94							
ISLAND OF MAUI																															
AUWAHI-252	9.07	2.80	.13	1.45	1.07	.45	.07	.30	1.47	.30	1.47	.30	1.47	.30	1.47	.30	1.47	.30	1.47	.30	1.47	.30	1.47	.30	1.47	.30	1.47	.30	1.47	.30	1.47
HALEKALALA 8 E S 434	11.92	4.52	4.18	4.94	4.56	4.65	14.75	6.79	2.14	-2.26	4.37	-.24	2.18	-2.50	2.95	-.65	4.55	-.26	13.10	6.86	26.47	16.01	91.93	18.96							
HALEKALALA RANCH 432	9.31	3.48	3.95	2.53	1.27	4.51	6.51	1.89	.84	1.00	.00	-.90	1.07	-.48	.92	-1.25	.49	-.83	1.28	-1.39	9.89	6.45	11.30	4.67	46.83	3.63					
HALEKALALA RS 338	14.35	2.13	.61	1.03	1.37	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	1.43	1.95	.62	1.00	1.20	1.17	12.05	5.58	3.46	1.16	34.16	1.16					
WAIKOLU SUMMIT 338.4	10.90	E .52	E .06	3.44	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	E .21	E .06	
HALIIMALE 423	6.54	4.10	1.88	5.50	1.15	.96	1.88	.78	2.23	.95	2.23	.95	2.23	.95	2.23	.95	2.23	.95	2.23	.95	2.23	.95	2.23	.95	2.23	.95	2.23	.95	2.23	.95	2.23
HANAKUPOKO 485	10.80	.01	2.84	1.86	1.43	4.11	3.00	2.32	2.40	3.24	3.74	.28	3.74	.28	3.74	.28	3.74	.28	3.74	.28	3.74	.28	3.74	.28	3.74	.28	3.74	.28	3.74	.28	3.74
HANA 354	9.75	3.95	2.21	12.98	3.17	4.24	6.22	3.57	3.98	6.37	16.00	6.40	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
HANA AIRPORT 355	10.44	4.28	3.43	10.17	3.06	4.97	6.30	3.52	2.23	4.13	18.39	4.54	75.46																		
HANAHAULI 281																															
HOLUA CABIN 259.5	11.89	.92	.40	7.64	.35	.08	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59	.79	1.59
HONOKOHUA 480	14.36	5.40	5.70	18.70	7.10	10.20	14.30	14.10	16.40	7.50	36.00	16.60	156.36																		
HONOKOHUA 482	5.34	1.28	1.64	2.44	4.57	1.39	1.69	.57																							

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

HAWAII 1970

STATION	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL	
	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE
HAIOPAI RANCH 256	4.07	2.70	3.96	.56	.26-	2.74	3.29	1.37	2.18	1.60	.39	.17	.00-	.33	.25-	.69	.25-	.70	3.15	1.51	8.45	6.09	3.73	10.21	69.92-	53.62
ISLAND	9.30	2.52	2.33	10.56	3.26	2.38	5.31	4.19	3.05	3.69	13.12	10.21	69.92-	53.62												
ISLAND OF HAWAII																										
AMU UHI 75	2.10	.03	.30-	1.87	.15-	2.84	2.93	.60	2.00-	.46	.30-	1.42	1.00-	.87	2.00-	.99	.60-	1.02	.60-	1.29	3.02	1.42	2.00	.72	17.03-	7.91
AKINI 182.1	14.48	3.86	6.20-	5.23	10.71-	5.28	16.06	.98	16.37	3.94	7.34-	.83	9.16-	3.50	24.54	12.23	7.12	.79	5.54-	3.14	15.18	4.97	12.00	2.29	144.27	4.64
CITY OF REFUGE 27.4	15.84	2.71	5.86-	7.07	13.50-	5.43	24.00	5.46	14.90	.63	21.70	9.00	24.50	8.24	23.76	7.37	8.86-	3.74	9.00-	.53	22.50	10.52	24.00	5.94	206.42	33.10
HAINA 214	5.00-	.06	7.00	.08	6.02-	2.34	15.11	7.44	9.16	4.22	1.28-	.64	8.08	4.62	13.69	9.05	2.08-	.21	2.95-	3.20	2.76	3.47	16.78	9.28	90.76	32.70
MAKALAU 142	5.61-	5.04	2.41-	11.17	5.35-	9.54	24.56	12.01	21.26	11.41	6.29-	.54	13.51	3.68	20.02	8.24	7.23-	.69	8.22-	3.03	10.87-	1.47	32.79	18.17	158.12	22.03
HALEHAUUA J 52	3.62	.79	.68		4.09		6.58		5.28		.62		.98		9.09		.68		1.41		7.01		2.00		52.51	
HALEPULU 117	1.93-	1.79	3.44-	2.30	.92-	6.14	9.67	5.60	2.00-	.19	.31-	.72	.93	1.13	9.38	5.61	1.65-	.39	1.67-	1.84	3.00-	.25	17.50	12.05	51.67	8.51
HALEPOHAKU 111	2.99		.07		3.01		3.08		3.08		.93		4.48		4.48		.93		.22		1.68		6.04		23.71	
HAWAII VOLCANO NP HQ 54	3.40-	8.92	.95-	9.30	3.37-	8.61	15.80	7.40	15.49	9.42	2.94-	1.59	5.91	1.79	16.62	9.03	4.57-	.52	5.13-	1.75	9.74-	.44	34.26	24.12	118.18	19.73
WAI 168	8.63	3.93	2.15-	2.19	4.37-	.85	4.86-	.18	4.63	1.07	3.27	.31	6.03	2.70	7.23	3.04	2.11-	.16	2.56-	1.05	7.06	3.04	7.47	1.55	60.37	10.61
HIO COUNTY CLUB 86.6	2.76-	9.06	2.56-	10.38	4.89	.91	28.60	16.08	20.26	10.93	9.08		19.86		39.74		9.65		10.33		7.83		57.53			
HIO WSO 87	1.93-	2.89	1.50-	2.81	.00-	6.24	4.10-	3.07	1.80-	1.86	4.00-	5.71	2.00-	6.38	3.30-	4.53	8.04-	.07	7.08	1.21	4.80	.68	9.06	6.60	59.48-	19.27
HOLUALOA 70	2.49	.19	.39-	1.47	.03-	2.44	2.42	.11	1.92-	.72	2.82-	.51	1.53-	1.01E	4.66	1.80	3.42	2.71	1.26-	1.22	2.89	1.12	.59-	.97E	26.43-	2.61
HONAUUA 27	4.04		1.43		1.39		5.65		5.45		5.39		5.39		5.05		9.25		7.11		10.78		.19		57.28	
HONOHINA 137	4.85-	6.90	3.28-	12.37	6.08-	11.86	27.23	11.74	21.06	8.75	6.53-	1.19	12.24	.27	26.46	12.72	6.64-	2.57	8.07-	4.80	10.86-	2.85	36.13	16.94	167.43	7.88
HONOKU 2	18.31	3.76	5.29-	7.24	9.54-	7.54	10.52-	6.13	6.25-	5.14	4.57-	4.43	15.79	3.11	19.28	8.86	4.38-	.22	6.60-	1.83	9.32		9.58	6.82	126.13-	22.42
HONOHU MAUKA 138	8.73-	7.33	2.84-	15.48	11.88-	9.24	43.60	24.62	34.96	19.71	11.40	.91	19.88	4.88	43.03	25.38	9.28-	2.45	14.69-	1.02	12.20-	5.39	53.33	31.73	265.82	66.32
HONAUULA 71	3.40-	.37	.80-	2.63	.50-	3.00	2.80-	.19	4.80	.17	1.60-	2.50	1.50-	2.57	2.80-	.54	3.06-	.28	3.00	.78	3.20	1.56	4.80	3.25	32.26-	6.92
HUALALAI 72	4.51-	1.22	.00-	1.85	.04-	2.01	1.53	.14	2.98	1.12	.70-	.71	.65-	.86	1.27-	.19	.70-	1.05	.64-	.30	.80	.20	6.44	.02	10.49-	6.67
HUEHUE 92.1	2.29-	1.84	.51-	2.20	.06-	3.65	4.22-	.79	6.29	1.62	.95-	3.55	2.16-	.34	2.02-	.70	2.07-	1.16	1.40-	3.13	2.58-	.35	2.04-	.32	23.65-	16.41
KAALA 1K1 12	2.92		.87		1.52		5.09		6.30		1.99		1.90		11.25		2.52		4.86		4.49		4.45		48.17	
KAWALOA 70	3.27-	.46	1.91-	1.49	.57-	4.33	3.42-	1.54	1.66-	4.71	3.72-	2.97	4.30-	2.78	5.16-	1.43	4.01-	2.90	2.73-	3.09	4.31	.75	1.25-	1.58	36.31-	26.53
KAIHALUO 73.2	3.35-	.61	1.46-	1.93	.98-	4.30	4.30-	1.36	2.55-	5.65	4.71-	3.24	5.68-	2.87	5.67-	2.02	5.68-	1.92	4.24-	1.96	4.04-	.23	1.80-	1.21	49.76-	27.30
KALAPANA NO 1 67.8	1.51		1.68		1.40		10.50		15.87		2.98		7.21		8.21		1.86		3.67		3.05		25.47		88.89	
KAMAHOA NO 2 5	3.73		.99		.56		3.58		2.35		1.65		3.00		7.03		2.09		3.49		2.90		4.85		36.22	
KAMUELA 192.2	8.36	2.05	3.77-	3.25	1.98-	2.29	5.68	1.42	1.90	.86	1.24-	.50	2.36-	.28	3.70	.64	1.98-	.92	1.18-	1.14	3.39	.72	6.75	.04	93.53-	4.37
KAMUELA AIRPORT 191	4.51		.72		.97		2.56		1.01	.86	1.03		1.03		1.91		.11		1.69		2.90		4.85		33.53-	4.37
KAPAPALA RANCH 36	3.76-	5.25	1.52-	6.01	.83-	6.51	3.45-	1.65	6.58	2.57	1.27-	.83	.53-	1.62	9.22	4.84	2.01-	2.08	5.07-	.53	7.01	.78	3.69-	.98	44.94-	17.27
KAPOHO LANDING 93.5	4.80		1.96		3.96		11.49		16.33		4.45		13.72		12.22		7.10		7.71		17.16		13.71		114.61	
KAUNAHUA 86.1	3.95		7.21		9.98		38.81		29.82		7.50		2.97		24.21		11.66		3.93		6.00		4.63		19.21	
KAWAUNI LOWER 193	20.68	7.49	8.10-	7.46	11.87-	8.29	29.82	8.84	26.32	8.76	5.20-	2.97	24.21	8.50	21.61	4.66	11.66	3.93	6.00-	4.63	19.21	7.27	22.52	4.15	209.21	30.81
KEAUA 92	3.10-	9.46	.95-	12.48	5.65-	9.93	24.45	12.03	27.13	17.25	5.94-	1.92	14.38	4.24	23.58	11.83	5.36-	3.69	9.11-	3.27	13.32-	.61	37.43	21.26	170.40	25.25
KEALAKEUA 26.2	2.93		2.32		.89		3.22		2.13		3.37		4.20		4.25		4.43		3.18		3.86		.90		36.26	
KEHENA 181.2	17.98	7.66	4.65-	5.41	8.04-	4.06	16.25	3.63	25.60	16.49	10.55	3.20	15.00	5.45	13.90	4.71	2.82-	2.05	6.00-	.15	18.06	9.77	24.00	11.06	163.45	50.30
KIOLA KAA A C F 6	3.20-	.19	3.16-	4.14	.08-	5.97	3.44-	1.73	11.06	6.02	5.50	.32	4.70-	.78	14.40	7.83	12.60	6.68	13.06	7.81	15.40	8.82	18.00	13.56	104.58	34.20
KIPIA 89.2	5.08		4.70		11.73		50.03		40.45		12.44		19.99		38.67		10.19		13.21		10.30		3.30		278.52	
KOHALA 179.1	6.87	2.10	2.69-	1.79	5.84-	1.98	9.68	.89	6.03	1.79	3.91	.52	7.67	3.12	9.26	4.17	2.36-	.31	2.60-	1.73	7.82	3.90	9.88	2.52	93.58	12.31
KOHALA MAULILI 176	8.66	1.73	5.69-	1.42	5.07-	3.11	8.13-	1.36	7.74	1.01	4.82-	.66	10.04	3.22	13.00	6.00	3.57-	.32	4.06-	2.02	9.91	3.47	10.89	1.62	91.73	8.22
KOHALA MISSION 175.1	9.06	3.60	3.13-	2.01	4.50-	2.01	7.10	.32	6.90	2.15	4.48	.80	8.39	3.19	11.85	6.18	2.53-	.41	3.44-	1.12	8.51	3.49	10.81	3.56	80.70	17.74
KOIEA LOWER 194	14.25	3.34	3.70-	6.44	6.93-	5.90	14.49	6.19	9.11	1.53	8.11-	1.53	18.33	8.20	3.72	2.64	2.76-	2.12	3.35-	3.74	10.47	3.57	10.48	4.25	122.37	15.87
KONA (KAILUA) 68.3	1.51		.32		.00		E 3.39		E 2.32		E 3.18		E 3.15		3.32		3.70		.33		2.10		.38		E 20.70	
KONA VILLAGE 93.8	2.92		.04		.00		.27		.88		.21		1.87		4.27	24.78	1.87		.02		3.03		.38		10.28	
KUKAIUA 222	10.55	2.90	7.48-	4.17	5.66-	8.95	20.88	7.46	14.21	5.50	3.09-	.32	10.65	4.27	24.78	16.64	3.13-	.49	5.15-	2.70	12.49	3.02	30.77	17.55	148.84	40.81
KUKUIHAELE HIC 199	8.31	2.18	4.89-																							

Table 3

TEMPERATURE EXTREMES

HAWAII
1970

Station	Highest	Date	Lowest	Date	Station	Highest	Date	Lowest	Date
* * *					* * *				
ISLAND OF KAUAI					ISLAND OF MAUI				
KANALOHULUHULU 1075	78	10- 4+	31	1-15	HALEAKALA RS 338	75	5-13	33	3-26+
KILAUEA POINT 1133	92	9-28	60	11-26+	HALEAKALA SUMMIT 338.4	65	8-24+	27	12-28+
LIHUE WSD 1020.1	87	9-17+	56	1-10	HANA AIRPORT 355	87	10- 2+	53	1-11
MAKAHUENA POINT 940.1	95	5-24	55	1- 9	KAANAPALI AIRPORT	88	11-21	53	11-30
MANA 1026	92	9- 8	51	2-16	KAHULUI WSD 398	92	10- 3+	50	1-10
NIU RIDGE 1035	92	8-19	50	1-15	KAILUA 446	87	8-31	53	1-10
WAIHI LOWER 1054	86	9-28+	47	1- 9	KEAWAKAPU BEACH 260.2	95	10-22	53	2-16
* * *					KULA SANATORIUM 267	80	8-31	43	2- 8
ISLAND OF OAHU					LAHAINA 361	92	8-18	56	2-16
EWA PLANTATION 741	88	8-31+	51	1-10	WAILUKU 386	87	10- 2	56	1- 8
HONOLULU WSFC 703	92	8-28+	58	1-10	* * *				
HONOLULU SUBSTA 704	85	10-13+	59	1-10	ISLAND OF HAWAII				
KAHUKU 912	88	9-28	52	1-12	HAINA 214	85	10-19+	57	12-29
KANEHOE MAUKA 781	86	10- 4+	56	1-11+	HAWAII VOLCNS NP HQ 54	83	6-27	40	3-10
LUALUALEI 804	91	10- 5+	54	1-12	HILO WSD 87	89	10- 1	58	2-14
MAKAPUU POINT 724	84	10- 4	51	3-13+	KAINALIU 73.2	82	10-17+	54	2-26+
OPAEULA 870	89	8-30	50	1-11	KAMUELA 192.2	81	10-14	40	1-10
PRI WAHIAWA 820.2	90	8-31+	47	1-12	KAMUELA AIRPORT 191		-		-
WAIALUA 847	90	9-12+	52	2-28+	KEAAU 92	90	1-14	57	1-11
WAIKIKI 717.2	90	9-29+	55	1-15+	KEALAKEKUA 26.2	82	11- 6+	56	2-26
WAIMANALO EXP FARM	88	10- 1	54	1-10	KOHALA MISSION 175.1	84	10-14+	58	2-13+
* * *					KONA (KAILUA) 68.3	90	11- 2	54	1-11
ISLAND OF MOLOKAI					KULANI CAMP 79	77	9-24+	31	2- 8
MOLOKAI AP 524	88	10-14	56	2-12	MAUNA LOA SLOPE OBS	66	8- 4	23	12-28+
* * *					MOUNTAIN VIEW 91	83	10-19+	51	1-12+
ISLAND OF LANAI					NAALEHU 14	85	7-20	58	2- 9+
LANAI CITY 672	87	8- 8+	-	-	OOKALA 223	88	2- 4	59	12-28
					OPIHIHALE 2 24.1	87	8-10	52	12-31+
					PAHALA 21	91	1-15	50	1-11
					PUAKO 95.1	92	8-19	-	-
					UPOLU POINT USCG 159.2	89	10-14+	61	8- 2+
					WAIMEA KOHALA		-		-

See Reference Notes Following Station Index

TOTAL EVAPORATION AND WIND MOVEMENT

HAWAII
1970

Table 4

Station		Jan	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
* * * ISLAND OF KAUAI														
LIHUE WSO 1020.1	EVAP	5.498	8.138	10.15	-	9.978	10.01	10.46	10.638	10.70	8.47	6.088	7.23	-
	WIND	3076	3444	5718	-	4950	5680	5956	6090	5102	4579	-	-	-
	MAX	80.1	79.1	83.0	-	86.9	87.0	86.3	87.6	86.7	84.0	78.5	75.8	-
	MIN	60.3	58.8	62.3	-	66.1	66.7	67.3	67.7	66.1	65.6	62.6	62.8	-
* * * ISLAND OF OAHU														
HONOLULU OBSERV 702.2	EVAP	4.178	5.42	7.77	8.60	9.07	9.63	9.338	9.93	8.06	6.578	4.77	5.66	88.98
	WIND	896	758	873	1194	906	853	885	1054	869	880	632	1411	11211
	MAX	83.7	84.1	87.1	88.3	90.5	90.5	91.3	91.5	89.8	86.9	83.0	81.2	87.3
	MIN	62.5	60.3	62.4	64.4	67.1	68.0	67.9	68.7	68.7	66.9	66.6	64.3	63.1	65.2

CHANGE IN STATION NAMES

NAME	FORMER NAME	DATE
ISLAND OF KAUAI		
ANAHOLA 1114	ANAHOLA 1111	APRIL 9, 1970
ISLAND OF OAHU		
MAKAHA KAI 796.1 WAIANAE 798.2	MAKAHA 796 WAIANAE 798	JULY 1, 1970 MAY 1, 1970
ISLAND OF MAUI		
WAILUKU 386	WAILUKU 392	JULY 8, 1969
ISLAND OF HAWAII		
KONA (KAILUA) 68.3	KONA AIRPORT 68.3	JULY 13, 1970

RELOCATION AND CHANGES OF EQUIPMENT

ISLAND OF KAUAI		
ANAHOLA 1114 N. WAILUA OITCH 1051	EQUIPMENT MOVED 3,600 FEET SE EQUIPMENT MOVED 60 FEET ENE	APRIL 9, 1970 MAY 15, 1970
ISLAND OF OAHU		
COCONUT ISLAND 840.1 MAKAHA KAI 796.1 WAIANAE 798.2 WAIKIKI 717.2	EQUIPMENT MOVED 900 FEET SSE EQUIPMENT MOVED 1,750 FEET NW EQUIPMENT MOVED 1,000 FEET NNW EQUIPMENT RELOCATED 85 FEET WSW	MARCH 3, 1970 JULY 1, 1970 MAY 1, 1970 AUGUST 25, 1970
ISLAND OF MAUI		
WAILUKU 386	EQUIPMENT RELOCATED 800 FEET N	JULY 8, 1969
ISLAND OF HAWAII		
KEAAU 92 KONA (KAILUA) 68.3	EQUIPMENT RELOCATED 125 FEET SSW EQUIPMENT MOVED 2,400 FEET E	MAY 1, 1970 JULY 13, 1970

See Reference Notes Following Station Index

STATION INDEX

HAWAII
1970

ISLAND OF KAUAI										ISLAND OF HONOLULU																			
Station	Index No.	Division No.	DISTRICT	Drainage	Latitude	Longitude	Elevation	Temp.	Precip.	Evap.	Months opened	Months closed	Refer to tables	Station	Index No.	Division No.	DISTRICT	Drainage	Latitude	Longitude	Elevation	Temp.	Precip.	Evap.	Months opened	Months closed	Refer to tables		
ALEXANDER RESV. 983	0140	02	KOOLA	2 21 57 159 32	1610									HONOLULU AP 524	0148	01	HONOLULU	1 21 09 157 06	450	20	22								
ANAKOHA 1114	0945	02	KOOLA	2 21 54 159 26	380									HONOLULU KAI 545.1	0148	01	HONOLULU	1 21 05 156 10	10										
BYRDWOOD STA 985	0240	02	KOOLA	2 21 56 159 32	720									PUEHONUKU RANCH 542.1	0549	01	HONOLULU	1 21 09 156 44	700										
EAST LANAI 934	0456	02	KOOLA	2 21 55 159 30	440									WAIKUKU 540	9404	01	HONOLULU	1 21 08 156 55	3550										
KA 3 RESERVOIR 1094.1	0456	02	KOOLA	2 21 55 159 30	440									ISLAND OF LANAI															
ELEEE 927	0470	02	KOOLA	2 21 54 159 35	163									KANEPUU 690	2330	01	LAHAINA	1 20 52 157 00	1650										
HAAHUA 1006	0935	01	KAWAII	1 22 07 159 19	253									KAWAII LAHAINA HAPOR 658	3448	01	LAHAINA	1 20 57 156 30	340										
HAAHUA TUNNEL 1053	1070	01	KAWAII	1 22 05 159 28	1218									LANAI CITY 672	5286	01	LAHAINA	2 20 50 156 55	1850										
HUKIPU 945	2161	03	WAIHEA	2 21 59 159 41	800									LANAIHOLE 684	5301	01	LAHAINA	2 20 49 156 53	3370										
														MAHAMA 694	5704	01	LAHAINA	1 20 52 156 57	1330										
														MALEKA 676	6012	01	LAHAINA	1 20 46 156 55	1150										
														WALAEKAUA 685	9021	01	LAHAINA	1 20 46 156 52	2040										
														ISLAND OF MAUI															
														AUNAHU-152	0175	02	MAHA	2 20 37 156 20	2060										
														HALEAAU 477	0790	04	LAHAINA	2 20 57 156 36	1050										
														HALEAKALA B E S 434	0995	01	MAKAWA	1 20 51 156 18	2100										
														HALEAKALA RANCH 432	0906	01	MAKAWA	1 20 50 156 19	1850										
														HALEAKALA RS 338	1004	02	MAKAWA	2 20 46 156 15	7030										
														HALEAKALA SUMMIT 338.4	1008	02	MAKAWA	2 20 43 156 16	9900										
														HALEAKALA 492.2	1022	04	MAKAWA	2 20 55 156 17	700										
														HALLIMALE 423	1075	01	MAKAWA	1 20 52 156 21	1070										
														HAKUKAUPOKO 485	1086	01	MAKAWA	1 20 55 156 21	320										
														HANA 354	1122	01	HANA	1 20 45 155 59	120										
														HANA AIRPORT 355	1125	01	HANA	1 20 46 156 01	01										
														HANA 1184	1148	01	HANA	1 20 44 156 03	870										
														HANA CABIN 259.5	1152	02	MAKAWA	1 20 44 156 13	6930										
														HONOKOHU 480	1882	04	LAHAINA	2 20 58 156 36	275										
														HONOKOHU 493	1882	04	LAHAINA	2 20 58 156 36	275										
														HONOLUA FLD 49 494	1914	04	LAHAINA	2 20 10 156 33	125										
														HONOHU GULCH 341	1935	01	MAKAWA	1 20 47 156 14	6780										
														145 0023 WAILUKU	2007	04	WAILUKU	2 20 39 156 38	1100										
														KANAPALI AIRPORT	2207	04	LAHAINA	2 20 36 156 40	8										
														KANAKOHA MAUKA 482.3	2453	03	WAILUKU	4 20 39 156 33	580										
														KANOHU INTAKE 398	2552	04	LAHAINA	4 20 54 156 38	2000										
														KANUHI 150 374	2572	03	WAILUKU	3 20 54 156 26	48										
														KANUHI 340 336	2671	01	MAKAWA	1 20 51 156 16	2520										
														KAWAII 445	2679	01	MAKAWA	1 20 54 156 18	1870										
														KAWAII UPPER 425	2679	01	MAKAWA	1 20 54 156 18	1870										
														KAWAII UPPER 425	2679	01	MAKAWA	1 20 54 156 18	1870										
														KAWAII UPPER 425	2679	01	MAKAWA	1 20 54 156 18	1870										
														KAWAII UPPER 425	2679	01	MAKAWA	1 20 54 156 18	1870										
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														KAWAII UPPER 425	2679	01	MAKAWA	1 20 54 156 18	1870										
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