

1999

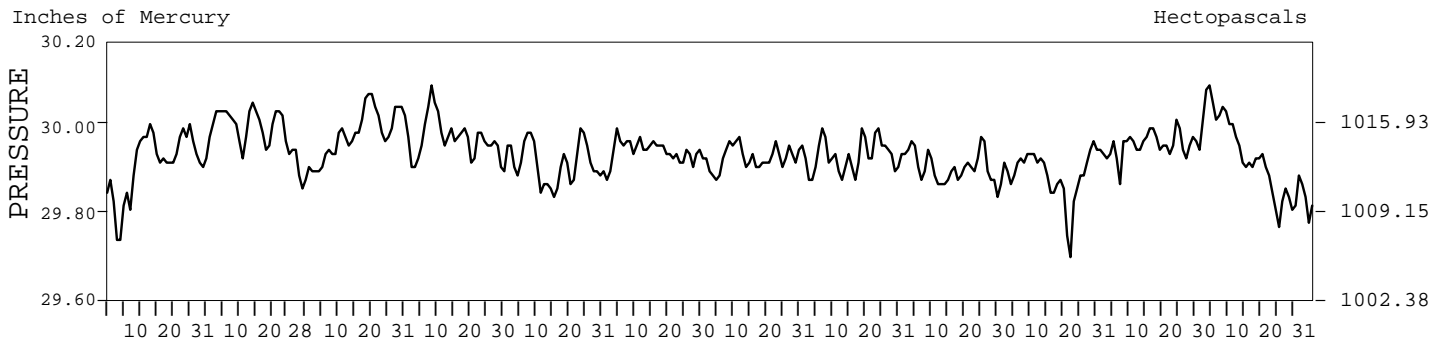
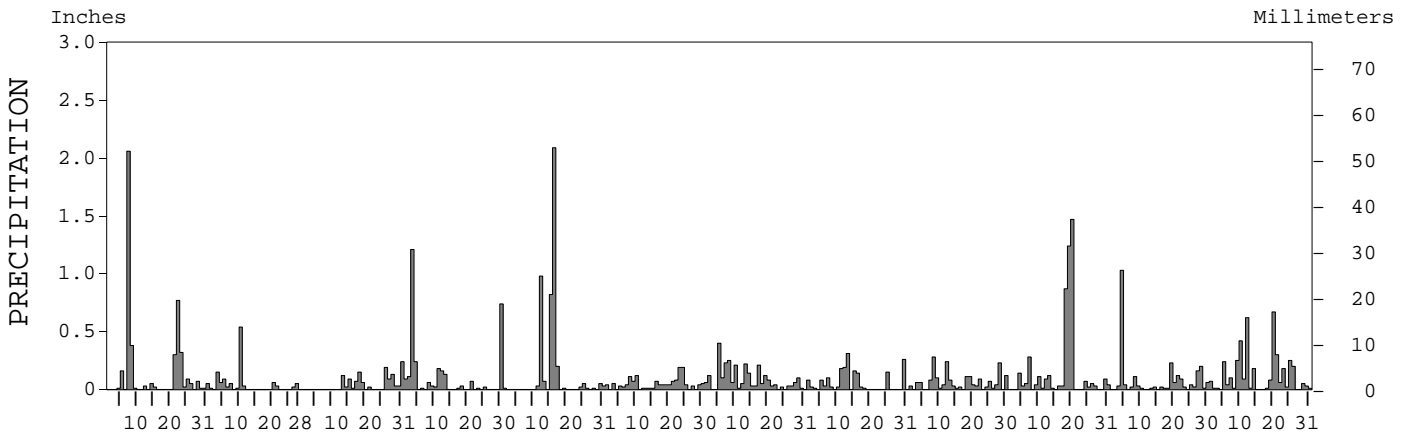
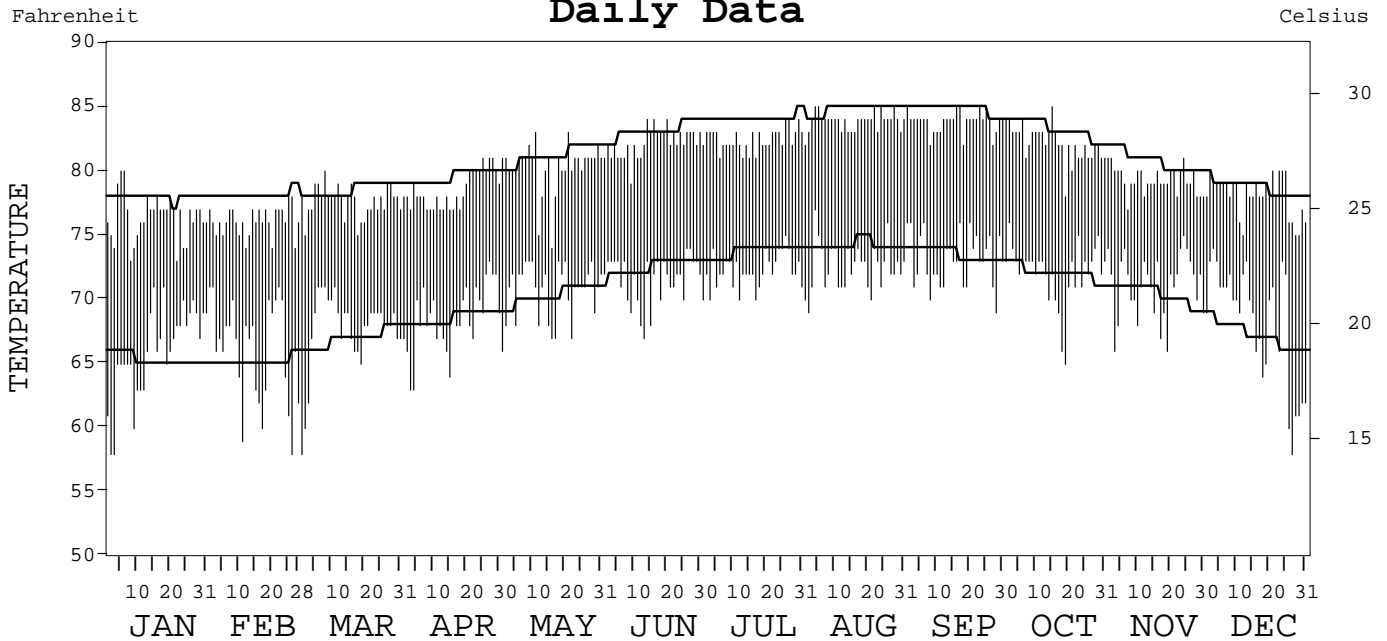
LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-1749

LIHUE, HAWAII (LIH)

Daily Data



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL AND INFORMATION SERVICE
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METEOROLOGICAL DATA FOR 1999

LIHUE, HI (LIH)

LATITUDE: 21° 58' 45" N LONGITUDE: 159° 20' 29" W ELEVATION (FT): GRND: 102 BARO: 102 TIME ZONE: HAWAII (UTC + 10) WBAN: 22536

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	76.4	76.1	77.6	78.5	80.3	82.2	82.5	83.9	83.8	82.2	79.3	78.1	80.1	
	HIGHEST DAILY MAXIMUM	80	78	80	81	83	84	84	85	85	85	81	80	85	
	DATE OF OCCURRENCE	06+	26+	08	28+	21+	20+	30+	28+	25+	15	24+	25+	OCT 15	
	MEAN DAILY MINIMUM	66.0	66.0	67.6	68.5	70.6	71.6	72.2	72.5	73.1	72.1	71.1	68.1	69.9	
	LOWEST DAILY MINIMUM	58	58	58	63	66	67	70	69	69	65	66	58	58	
	DATE OF OCCURRENCE	03+	26	01	04+	01	13	17+	02	28	19	19+	27	DEC 27	
	AVERAGE DRY BULB	71.2	71.1	72.6	73.5	75.5	76.9	77.4	78.2	78.5	77.2	75.2	73.1	75.0	
	MEAN WET BULB	67.3	66.4	67.2	67.7	70.0	70.5	71.4	71.8	71.5	71.3	69.6	68.5	69.4	
	MEAN DEW POINT	64.7	63.9	64.2	64.4	67.3	67.4	68.7	68.8	68.1	68.5	66.6	65.8	66.5	
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	MAXIMUM ≤ 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	MINIMUM ≤ 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	0	0	0	0	0	0	0	0	0	0	0	0	0	
	COOLING DEGREE DAYS	197	178	246	261	333	364	391	417	413	385	313	258	3756	
RH	MEAN (PERCENT)	80	79	77	75	77	74	76	74	72	76	75	79	76	
	HOUR 02 LST	85	83	82	81	82	79	81	80	78	81	78	83	81	
	HOUR 08 LST	85	82	80	75	78	76	78	77	74	80	76	82	79	
	HOUR 14 LST	73	73	68	66	70	67	69	64	63	68	70	72	69	
	HOUR 20 LST	81	81	80	78	79	76	80	75	74	78	77	80	78	
S	PERCENT POSSIBLE SUNSHINE			89	89	88	86	68	69	68	83	71			
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	0	0	0	0	0	0	0	0	0	1	0	0	1	
	THUNDERSTORMS	0	0	0	0	0	0	0	0	0	3	0	0	3	
CLOUDINESS	SUNRISE-SUNSET: (OKTAS)														
	CEILOMETER (≤ 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
	MIDNIGHT-MIDNIGHT: (OKTAS)														
	CEILOMETER (≤ 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
NUMBER OF DAYS WITH:															
CLEAR															
PARTLY CLOUDY															
CLOUDY															
PR	MEAN STATION PRESS. (IN.)	29.92	30.00	29.98	29.98	29.92	29.95	29.93	29.94	29.91	29.90	29.97	29.91	29.94	
	MEAN SEA-LEVEL PRESS. (IN.)	30.06	30.14	30.12	30.12	30.06	30.09	30.07	30.08	30.05	30.04	30.08	30.01	30.08	
WINDS	RESULTANT SPEED (MPH)	9.9	7.0	13.4	7.0	2.6	8.3	8.5	9.3	9.4	5.5	9.7	2.8	7.6	
	RES. DIR. (TENS OF DEGS.)	06	08	06	07	08	08	09	08	09	10	07	11	08	
	MEAN SPEED (MPH)	12.2	14.0	16.6	14.2	10.7	14.7	14.8	14.0	13.0	11.9	14.0	11.9	13.5	
	PREVAIL.DIR.(TENS OF DEGS.)	07	07	06	06	08	06	06	05	06	06	06	06	06	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	32	33	33	29	25	29	26	30	25	28	34	30	34	
	DIR. (TENS OF DEGS.)	05	09	04	06	06	06	08	08	07	09	07	08	07	
	DATE OF OCCURRENCE	22	03	20	11+	25+	08	28+	25	23+	08	28	06	NOV 28	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	38	40	40	34	29	35	32	33	30	31	43	36	43	
DIR. (TENS OF DEGS.)	05	09	03	05	09	06	08	07	06	13	07	08	07		
DATE OF OCCURRENCE	22	03	20	11	26+	24	28	25	23+	20	28	06	NOV 28		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	4.41	1.12	1.25	3.12	4.38	1.44	2.70	1.78	1.91	4.82	2.35	3.91	33.19	
	GREATEST 24-HOUR (IN.)	2.29	0.54	0.24	1.32	2.35	0.24	0.40	0.31	0.37	2.08	1.04	0.67	2.35	
	DATE OF OCCURRENCE	07-08	10	31	02-03	15-16	23-24	05	13	08-09	18-19	04-05	20	MAY 15-16	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	18	13	14	17	14	25	26	17	24	21	23	25	237	
PRECIPITATION ≥ 0.10	6	2	5	7	4	4	11	8	7	7	6	11	78		
PRECIPITATION ≥ 1.00	1	0	0	1	1	0	0	0	0	2	1	0	6		
SNOWFALL	SNOW,ICE PELLETS,HAIL:														
	TOTAL (IN.)														
	GREATEST 24-HOUR (IN.)														
	DATE OF OCCURRENCE														
	MAXIMUM SNOW DEPTH (IN.)														
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0															

NORMALS, MEANS, AND EXTREMES

LIHUE, HI (LIH)

LATITUDE: 21° 58' 45" N LONGITUDE: 159° 20' 29" W ELEVATION (FT): GRND: 102 BARO: 102 TIME ZONE: HAWAII (UTC + 10) WBAN: 22536

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	77.9	78.1	78.5	79.5	81.2	83.1	84.1	84.8	84.8	83.2	80.7	78.6	81.2	
	MEAN DAILY MAXIMUM	49	77.9	77.9	78.2	79.2	81.0	83.0	83.9	84.6	84.8	83.3	80.8	78.5	81.1	
	HIGHEST DAILY MAXIMUM	49	85	86	88	88	88	89	89	90	90	90	89	86	90	
	YEAR OF OCCURRENCE		1995	1986	1986	1981	1981	1969	1981	1987	1995	1957	1995	1995	SEP 1995	
	MEAN OF EXTREME MAXS.	49	82.1	82.1	82.4	82.6	83.7	84.8	85.8	86.5	86.7	86.2	84.0	82.3	84.1	
	NORMAL DAILY MINIMUM	30	65.3	65.1	66.9	68.5	70.3	72.5	73.7	74.2	73.5	72.0	70.3	67.1	69.9	
	MEAN DAILY MINIMUM	49	64.7	64.9	66.3	68.0	69.8	72.2	73.3	74.0	73.3	71.8	70.0	67.1	69.6	
	LOWEST DAILY MINIMUM	49	50	52	51	56	58	61	62	66	65	61	57	52	50	
	YEAR OF OCCURRENCE		1969	1962	1955	1958	1996	1987	1979	1979	1981	1993	1958	1953	JAN 1969	
	MEAN OF EXTREME MINS.	49	57.6	57.4	58.8	62.1	64.1	67.5	69.0	69.7	68.1	66.1	64.0	59.5	63.7	
	NORMAL DRY BULB	30	71.6	71.6	72.7	74.0	75.8	77.8	78.9	79.5	79.2	77.6	75.5	72.9	75.6	
	MEAN DRY BULB	49	71.4	71.4	72.3	73.6	75.5	77.5	78.6	79.3	79.1	77.5	75.4	72.8	75.4	
	MEAN WET BULB	16	65.8	65.7	66.6	67.8	69.2	71.4	72.6	73.0	73.0	72.1	70.3	67.8	69.6	
	MEAN DEW POINT	16	62.4	62.0	63.1	64.6	66.0	68.3	69.5	70.0	70.0	69.4	67.3	64.8	66.5	
	NORMAL NO. DAYS WITH:															
	MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
MAXIMUM ≤ 32°	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MINIMUM ≤ 32°	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MINIMUM ≤ 0°	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
H/C	NORMAL HEATING DEG. DAYS	30	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NORMAL COOLING DEG. DAYS	30	209	188	239	270	335	384	431	450	426	391	315	245	3883	
RH	NORMAL (PERCENT)	30	76	75	75	75	75	74	74	74	74	76	77	76	75	
	HOUR 02 LST	30	82	81	81	81	81	79	79	80	80	82	81	81	81	
	HOUR 08 LST	30	81	80	78	77	76	74	75	76	76	79	80	80	78	
	HOUR 14 LST	30	67	66	67	67	67	65	66	66	65	68	69	68	67	
	HOUR 20 LST	30	78	77	77	77	77	76	76	76	76	78	78	78	77	
S	PERCENT POSSIBLE SUNSHINE	48	55	57	56	55	61	63	62	64	67	59	49	49	58	
W/O	MEAN NO. DAYS WITH:															
	HEAVY FOG (VISBY ≤ 1/4 MI) THUNDERSTORMS	50 49	0.0 1.2	0.0 0.7	0.0 1.1	0.0 0.4	0.0 0.5	0.0 0.1	0.0 0.2	0.0 0.2	0.0 0.4	0.0 1.0	0.0 1.1	0.0 0.9	0.0 7.8	
CLOUDINESS	MEAN:															
	SUNRISE-SUNSET (OKTAS)	47	4.6	4.6	5.2	5.5	5.3	5.0	5.1	4.9	4.6	4.9	5.2	4.9	5.0	
	MIDNIGHT-MIDNIGHT (OKTAS)	32	4.5	4.5	5.1	5.4	5.2	5.0	5.2	4.9	4.6	4.9	5.2	4.8	4.9	
	MEAN NO. DAYS WITH:															
CLEAR	47	8.0	7.0	4.8	2.9	3.0	3.4	2.5	3.5	5.3	5.1	3.9	5.9	55.3		
PARTLY CLOUDY	47	12.8	12.1	13.9	13.8	16.5	17.5	18.6	18.1	17.3	15.3	13.9	13.4	183.2		
CLOUDY	47	10.2	9.1	12.3	13.2	11.5	9.0	9.4	8.8	6.9	10.1	11.6	11.1	123.2		
PR	MEAN STATION PRESSURE (IN)	27	29.84	29.87	29.92	29.92	29.91	29.91	29.89	29.87	29.84	29.84	29.85	29.86	29.88	
	MEAN SEA-LEVEL PRES. (IN)	16	30.00	30.02	30.06	30.07	30.07	30.06	30.04	30.02	29.98	29.99	30.01	30.02	30.03	
WINDS	MEAN SPEED (MPH)	32	11.3	12.0	12.8	13.7	13.4	13.6	14.1	13.4	12.1	11.9	12.7	12.2	12.8	
	PREVAIL. DIR (TENS OF DEGS)	20	06	07	06	06	06	06	06	06	06	06	06	06	06	
	MAXIMUM 2-MINUTE:															
	SPEED (MPH)	2	33	33	33	34	31	29	26	30	25	28	34	36	36	
	DIR. (TENS OF DEGS)		25	09	04	06	07	06	08	08	07	09	07	08	08	
	YEAR OF OCCURRENCE		1998	1999	1999	1998	1998	1999	1999	1999	1999	1999	1999	1998	DEC 1998	
	MAXIMUM 5-SECOND:															
SPEED (MPH)	2	38	40	40	39	37	35	32	33	30	31	43	41	43		
DIR. (TENS OF DEGS)		05	09	03	07	07	06	08	07	06	13	07	08	07		
YEAR OF OCCURRENCE		1999	1999	1999	1998	1998	1999	1999	1999	1999	1999	1999	1998	NOV 1999		
PRECIPITATION	NORMAL (IN)	30	5.89	3.33	4.17	3.50	3.15	1.69	2.13	1.76	2.37	4.41	5.45	5.15	43.00	
	MAXIMUM MONTHLY (IN)	49	17.56	11.35	14.54	10.65	12.59	4.83	8.85	8.13	10.87	18.04	18.45	22.91	22.91	
	YEAR OF OCCURRENCE		1956	1989	1951	1972	1977	1991	1954	1959	1980	1982	1955	1968	DEC 1968	
	MINIMUM MONTHLY (IN)	49	0.30	T	0.30	0.32	0.42	0.41	0.75	0.70	0.45	0.98	0.58	0.51	T	
	YEAR OF OCCURRENCE		1986	1983	1957	1992	1968	1975	1956	1984	1975	1998	1963	1985	FEB 1983	
	MAXIMUM IN 24 HOURS (IN)	49	11.09	7.28	6.42	6.52	6.70	2.17	5.04	5.43	7.16	8.46	11.20	11.54	11.54	
	YEAR OF OCCURRENCE		1956	1954	1989	1972	1977	1971	1954	1959	1980	1978	1955	1968	DEC 1968	
	NORMAL NO. DAYS WITH:															
PRECIPITATION ≥ 0.01	30	15.2	12.9	16.6	18.4	16.2	16.0	19.0	17.4	15.8	17.9	17.9	16.5	199.8		
PRECIPITATION ≥ 1.00	30	1.5	0.7	1.0	0.7	0.7	0.2	0.2	0.2	0.3	0.7	1.4	1.0	8.6		
SNOWFALL	NORMAL (IN)	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	MAXIMUM MONTHLY (IN)	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	YEAR OF OCCURRENCE															
	MAXIMUM IN 24 HOURS (IN)	48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	YEAR OF OCCURRENCE															
	MAXIMUM SNOW DEPTH (IN)	46	0	0	0	0	0	0	0	0	0	0	0	0	0	
YEAR OF OCCURRENCE																
NORMAL NO. DAYS WITH:																
SNOWFALL ≥ 1.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

PRECIPITATION (inches) 1999 LIHUE, HI (LIH)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	7.32	0.89	0.93	2.83	5.85	0.77	1.76	1.33	1.42	2.74	11.05	2.29	39.18
1971	11.94	1.69	8.27	6.36	1.03	2.98	0.84	0.87	2.69	3.18	2.25	7.52	49.62
1972	6.44	7.77	1.99	10.65	0.75	1.74	2.25	1.27	1.95	6.07	1.39	1.27	43.54
1973	1.03	1.50	1.26	1.00	1.87	0.51	0.95	1.32	1.77	5.06	12.15	6.85	35.27
1974	5.59	0.90	6.29	5.57	3.67	1.87	4.69	2.23	3.73	2.94	6.51	1.61	45.60
1975	14.07	4.35	3.36	1.17	0.67	0.41	0.94	0.86	0.45	1.03	5.34	2.87	35.52
1976	3.55	4.86	7.39	3.41	0.86	1.09	2.09	2.04	1.73	2.40	1.22	2.19	32.83
1977	2.92	3.19	2.38	4.11	12.59	3.21	1.30	1.33	1.26	1.28	1.86	4.91	40.34
1978	1.37	0.54	1.49	2.11	4.56	4.56	2.74	1.19	1.85	11.02	3.79	3.89	39.11
1979	4.77	10.59	1.26	1.07	1.61	2.38	0.83	1.88	1.19	3.75	3.04	4.72	37.09
1980	6.12	1.65	2.81	3.25	12.20	3.07	2.76	1.27	10.87	4.49	1.89	4.26	54.64
1981	1.12	1.92	2.90	4.13	0.91	0.92	3.76	2.04	1.98	4.17	5.47	8.82	38.14
1982	14.08	5.04	10.56	4.88	3.63	2.02	2.72	3.37	1.71	18.04	3.67	4.68	74.40
1983	0.87	T	0.64	1.29	2.37	1.10	1.79	1.82	1.83	2.57	1.27	0.85	16.40
1984	2.19	1.21	0.96	3.19	0.48	0.87	1.25	0.70	3.23	1.94	9.76	4.34	30.12
1985	2.75	7.40	2.11	1.65	1.42	0.75	0.88	1.71	3.15	3.20	3.38	0.51	28.91
1986	0.30	1.02	2.02	1.95	2.59	1.85	3.20	2.97	2.85	1.98	5.98	1.28	27.99
1987	1.35	2.79	2.13	3.57	1.85	1.43	2.23	1.58	4.41	4.31	2.81	14.49	42.95
1988	9.81	1.46	2.63	1.60	3.79	0.53	1.95	3.28	1.09	1.88	8.18	6.86	43.06
1989	7.09	11.35	8.62	2.12	1.28	2.14	6.90	2.56	1.42	5.24	5.08	2.97	56.77
1990	9.75	1.75	2.94	2.94	2.30	0.48	1.51	1.27	2.00	1.12	9.97	3.34	39.37
1991	0.68	1.68	9.78	3.36	0.73	4.83	1.81	2.44	1.24	4.67	3.37	7.04	41.63
1992	1.13	3.23	4.26	0.32	2.58	1.05	1.68	2.44	3.13	5.86	2.29	22.20	50.17
1993	0.75	0.46	0.32	2.00	2.62	0.60	1.73	1.75	1.77	4.81	2.69	2.77	22.27
1994	3.99	6.73	3.33	1.48	1.46	3.03	1.35	0.92	3.02	5.41	1.18	1.09	32.99
1995	0.89	6.39	1.28	3.73	0.87	1.15	1.64	2.20	2.09	3.39	16.15	6.79	46.57
1996	5.14	4.16	3.90	1.25	1.51	4.38	1.82	0.93	7.85	7.24	12.24	5.72	56.14
1997	5.62	2.02	8.78	3.52	9.95	1.20	2.54	3.05	2.79	3.61	2.60	2.34	48.02
1998	5.56	0.64	1.50	1.93	1.42	1.90	1.47	5.69	1.31	0.98	1.92	2.15	26.47
1999	4.41	1.12	1.25	3.12	4.38	1.44	2.70	1.78	1.91	4.82	2.35	3.91	33.19
POR= 49 YRS	5.40	3.49	4.19	2.99	2.77	1.66	2.10	1.98	2.30	4.48	5.45	5.33	42.14

WBAN : 22536

AVERAGE TEMPERATURE (°F) 1999 LIHUE, HI (LIH)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	71.6	71.3	74.3	75.6	77.2	78.5	79.5	80.8	79.9	78.4	75.4	75.2	76.5
1971	69.7	73.8	73.9	75.9	76.9	77.9	79.4	79.9	80.0	78.3	77.0	74.5	76.4
1972	70.4	70.9	72.4	74.0	76.7	77.6	78.4	79.9	78.8	78.2	76.1	70.5	75.3
1973	70.9	71.9	75.4	74.6	75.3	77.4	78.8	79.2	78.9	77.9	75.5	72.9	75.7
1974	74.4	74.5	73.5	75.9	76.9	78.6	79.0	80.0	79.9	79.3	75.9	75.9	77.0
1975	73.0	71.4	72.6	74.2	75.6	77.3	77.7	78.1	77.8	77.7	76.9	73.5	75.5
1976	73.9	72.8	72.5	75.1	77.8	78.7	79.9	79.3	78.5	76.9	73.8	74.1	76.1
1977	73.0	72.7	74.1	73.9	75.3	76.8	78.6	79.9	80.0	79.3	77.2	73.5	76.2
1978	72.0	72.2	73.6	74.2	75.2	76.9	78.6	79.4	79.5	77.8	73.8	73.1	75.5
1979	73.2	72.7	72.0	72.5	75.1	77.2	78.4	79.1	80.5	78.5	74.8	72.9	75.6
1980	72.3	71.1	73.1	73.5	75.5	76.6	78.2	79.0	79.1	76.7	75.7	73.9	75.4
1981	73.0	72.6	74.8	76.4	77.9	79.8	79.9	81.2	79.5	77.5	74.8	72.4	76.7
1982	71.3	72.0	72.8	74.6	76.3	78.3	80.7	80.2	79.8	77.4	76.4	72.4	76.0
1983	71.3	71.0	72.9	74.5	74.7	78.3	78.6	79.2	78.8	77.6	76.1	72.5	75.5
1984	73.8	73.7	75.2	76.4	78.2	79.3	80.1	80.5	80.0	79.0	77.5	73.7	77.3
1985	70.7	72.8	73.5	72.9	74.8	77.7	79.9	79.9	78.9	77.4	73.5	72.0	75.3
1986	71.1	71.3	73.3	75.4	76.3	77.8	79.5	80.2	80.1	78.7	76.2	73.0	76.1
1987	71.6	69.4	71.3	72.5	72.0	76.8	78.9	80.6	79.3	78.3	76.4	74.5	75.1
1988	71.7	73.8	73.6	75.4	76.4	78.9	78.7	79.2	79.9	77.1	77.2	74.2	76.3
1989	73.1	71.7	73.2	72.2	75.1	77.8	78.2	78.4	79.0	76.7	74.5	71.0	75.1
1990	72.5	69.8	71.4	73.5	74.4	77.6	78.5	80.0	80.0	79.2	74.9	72.1	75.3
1991	71.1	72.3	71.3	73.7	75.6	76.2	78.3	79.0	78.5	78.0	76.7	73.9	75.4
1992	70.4	70.1	72.5	72.5	74.7	78.6	79.3	80.0	79.7	77.5	74.9	74.5	75.4
1993	69.4	70.5	72.5	75.6	75.5	78.5	78.9	79.9	79.8	77.7	75.2	73.9	75.6
1994	70.2	72.5	71.6	74.0	76.2	77.2	79.5	81.2	80.8	79.1	78.0	74.0	76.2
1995	72.8	71.6	73.3	73.6	75.4	78.4	80.0	79.6	79.3	79.3	76.8	75.4	76.3
1996	72.5	70.1	70.6	75.2	75.9	78.6	80.1	80.5	79.8	78.8	76.0	71.9	75.8
1997	70.2	73.8	73.5	72.4	73.3	79.0	79.2	79.9	80.2	78.8	74.4	71.3	75.5
1998	69.1	69.9	71.8	73.0	74.0	76.1	76.8	77.3	78.1	77.1	75.7	72.3	74.3
1999	71.2	71.1	72.6	73.5	75.5	76.9	77.4	78.2	78.5	77.2	75.2	73.1	75.0
POR= 92 YRS	70.4	70.4	71.1	72.5	74.4	76.5	77.6	78.2	77.9	76.4	74.1	71.8	74.3

HEATING DEGREE DAYS (base 65°F) 1999 LIHUE, HI (LIH)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1983-84	0	0	0	0	0	0	0	0	0	0	0	0	0
1984-85	0	0	0	0	0	0	3	1	0	0	0	0	4
1985-86	0	0	0	0	0	0	0	0	0	0	0	0	0
1986-87	0	0	0	0	0	0	0	0	0	0	0	0	0
1987-88	0	0	0	0	0	0	0	0	0	0	0	0	0
1988-89	0	0	0	0	0	0	0	0	0	0	0	0	0
1989-90	0	0	0	0	0	0	0	0	0	0	0	0	0
1990-91	0	0	0	0	0	0	0	0	0	0	0	0	0
1991-92	0	0	0	0	0	0	0	0	0	0	0	0	0
1992-93	0	0	0	0	0	0	0	0	0	0	0	0	0
1993-94	0	0	0	0	0	0	0	0	0	0	0	0	0
1994-95	0	0	0	0	0	0	0	0	0	0	0	0	0
1995-96	0	0	0	0	0	0	0	2	0	0	0	0	2
1996-97	0	0	0	0	0	0	1	0	0	0	0	0	1
1997-98	0	0	0	0	0	0	0	2	0	0	0	0	0
1998-99	0	0	0	0	0	0	0	0	0	0	0	0	0
1999-	0	0	0	0	0	0	0	0	0	0	0	0	0

WBAN : 22536

COOLING DEGREE DAYS (base 65°F) 1999 LIHUE, HI (LIH)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	211	184	293	325	387	412	455	498	455	425	320	324	4289
1971	156	253	283	336	376	393	454	471	456	423	365	301	4267
1972	174	178	237	278	368	383	423	472	420	417	341	180	3871
1973	191	199	328	292	326	377	435	445	424	406	321	252	3996
1974	300	272	272	335	378	418	441	473	452	449	336	344	4470
1975	255	187	240	281	336	376	403	413	394	399	365	268	3917
1976	282	234	244	312	404	420	470	450	412	372	271	288	4159
1977	255	224	288	273	326	357	430	469	456	450	376	269	4173
1978	224	205	274	284	323	362	425	454	443	402	269	260	3925
1979	263	224	220	229	320	374	423	445	474	426	303	252	3953
1980	229	186	258	261	330	353	417	438	429	369	328	283	3881
1981	254	217	311	347	406	453	469	508	444	396	300	238	4343
1982	200	202	246	292	357	406	494	480	451	391	346	237	4102
1983	202	173	252	292	307	404	430	445	420	397	338	238	3898
1984	281	260	325	347	412	434	476	487	459	444	380	277	4582
1985	186	224	272	243	309	387	469	472	425	392	260	225	3864
1986	198	183	264	321	358	390	458	477	459	430	344	254	4136
1987	213	130	203	234	226	360	438	490	435	420	349	301	3799
1988	217	263	275	317	363	422	431	450	452	384	375	294	4243
1989	256	193	261	222	321	389	415	426	425	368	293	189	3758
1990	240	142	203	262	298	386	425	473	453	446	305	225	3858
1991	194	210	205	268	334	343	421	445	412	411	356	281	3880
1992	173	153	240	230	306	417	449	471	447	396	304	302	3888
1993	144	160	243	323	330	409	439	469	452	401	314	281	3965
1994	169	216	211	277	353	376	458	509	482	445	397	288	4181
1995	247	192	261	264	327	410	472	459	438	450	360	332	4212
1996	240	157	180	314	346	413	475	487	449	435	337	221	4054
1997	171	254	267	228	265	424	448	470	463	435	289	201	3915
1998	133	145	220	244	286	338	374	388	398	385	328	235	3474
1999	197	178	246	261	333	364	391	417	413	385	313	258	3756

SNOWFALL (inches) 1999 LIHUE, HI (LIH)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1971-72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972-73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974-75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975-76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976-77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977-78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978-79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980-81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981-82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982-83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983-84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984-85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985-86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987-88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988-89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990-91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992-93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993-94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994-95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1995-96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996-97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997-98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1998-99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POR= 47 YRS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

WBAN : 22536

REFERENCE NOTES:

<p>PAGE 1: THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3: H/C INDICATES HEATING AND COOLING DEGREE DAYS. RH INDICATES RELATIVE HUMIDITY W/O INDICATES WEATHER AND OBSTRUCTIONS S INDICATES SUNSHINE. PR INDICATES PRESSURE. CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL: T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE. + INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES. BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA. NORMALS ARE 30-YEAR AVERAGES (1961 - 1990). ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING. WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED. 0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05. CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.</p>	<p>GENERAL CONTINUED: CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED. WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH. RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION. AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2. SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL. A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65° F. DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR. DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY. WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY.</p> <p>ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
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1999
LIHUE,
HAWAII (LIH)

Lihue Airport, a little more than 100 feet above sea level, is located near the eastern shore of the island of Kauai. The island is 33 miles long and 25 miles wide and has an area of 555 square miles. The eastern one third of Kauai consists of broadly eroded valley lands, the western two thirds is mostly mountainous. Kawaikini, the highest elevation on the island, 5,170 feet above sea level, lies near the center of Kauai and is 20 miles northwest of the airport.

The outstanding features of the climate are the equable temperatures from day to day and season to season, the persistent northeasterly trade winds and the marked variation in rainfall from the wet to the dry season and place to place.

The equable temperatures are associated with the mid-ocean location of the island and to the small seasonal variation in the amount of energy received from the sun. The range in normal temperature from the coolest month, February, to the warmest month, August, less than 8 degrees. The daily range in temperature is also small, less than 15 degrees.

The trade winds blow across the island during most of each year and the dominance of these winds has a marked influence on the climate of the area. Completely cloudless skies are quite rare. On the average, six tenths to seven tenths of the sky is covered by clouds during the daylight hours.

Trade-wind showers are relatively common. Although heavy at times, most of the showers are light and of short duration. The frequency and intensity of the showers increase toward the mountains to the west. Mt. Waialeale receives 486 inches annually, the highest recorded annual average in the world. Mt. Waialeale has recorded annual rainfalls over 620 inches.

Normal annual rainfall is over 40 inches. Three-fourths of this total, on the average, falls during the seven-month wet season which extends from October through April. Widespread rainstorms, which account for much of the precipitation, occur most frequently during this period. Normal precipitation in January, the wettest month, is over 6 inches.

The dry season includes the months of May through September. June, the driest month, receives only about 1 1/2 inches of rain, on the average.

Hurricanes and other severe windstorms are quite rare. Strong winds do occur at times in connection with storm systems moving through the area, but seldom cause extensive damage.

Relative humidity, moderate to high in all seasons, is slightly higher in the wet season than in the dry. However, even during periods when the temperature and humidity are both high, the weather is seldom oppressive. This is due to the trade winds which provide a system of natural ventilation during most of each year.

STATION LOCATION

LIHUE, HAWAII

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											* Type	REMARKS								
						SEA LEVEL	GROUND																			
							WIND	TEMP	EXH	OR	S	T	R	W	8	H			A							
<u>COOPERATIVE</u> Lihue Town (Opposite Post Office)	1905	Present		21° 59'	159°22'	207																				
<u>AIRPORT</u> Lihue Airport 2 miles ENE of Post Office	1/06/50	12/01/97		21° 59'	159°21'	d103	c20 g20 j20	a5 e	a5 e	f8 m7	3 m4	NA	NA	b5 h5 j5 k5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Began limited airways observations 1/8/50. Began 24-hour airways observations daily 2/5/50. a - 6 feet to 12/25/54. b - Commissioned 850 ft. NE of thermometer site 7/28/64. c - 32 feet to 7/29/64. d - 115 feet to 7/29/64. e - Removed 3/12/72. f - Commissioned 3/12/57. g - Moved 50 ft. E 11/82. h - Moved 40 ft. E 11/82. i - Moved to roof 3/10/83. j - Moved 775' SE 10/21/83. k - Moved 5' SE and type change 10/9/85. m - Minor move 4/25/90.
Lihue Airport	12/01/97	Present	NA	21°59'	159°20'	102																			S ASOS Commissioned 12/01/97	

SUBSCRIPTION: Price and ordering information available through: National Climatic Data Center, Federal Building, Asheville, North Carolina 28801. INQUIRIES/COMMENTS CALL: (828) 271-4800

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