

1999

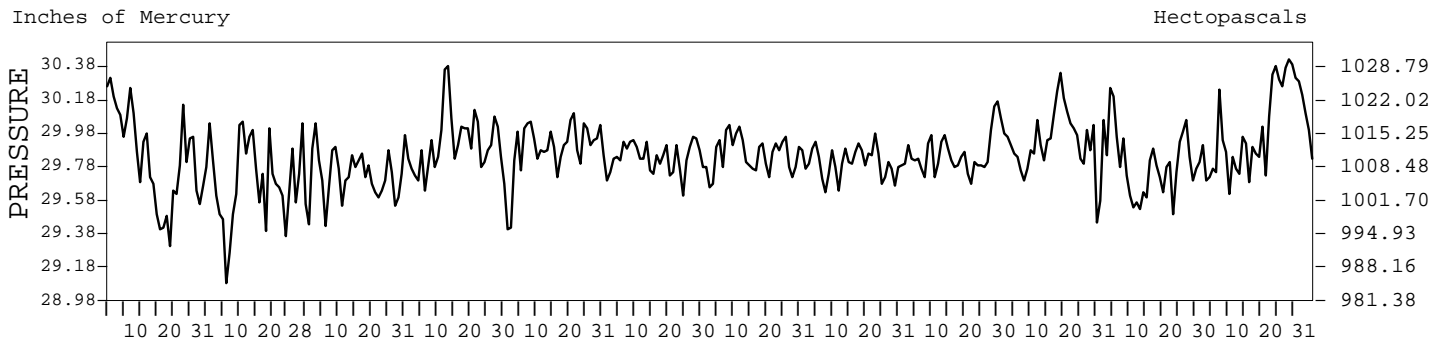
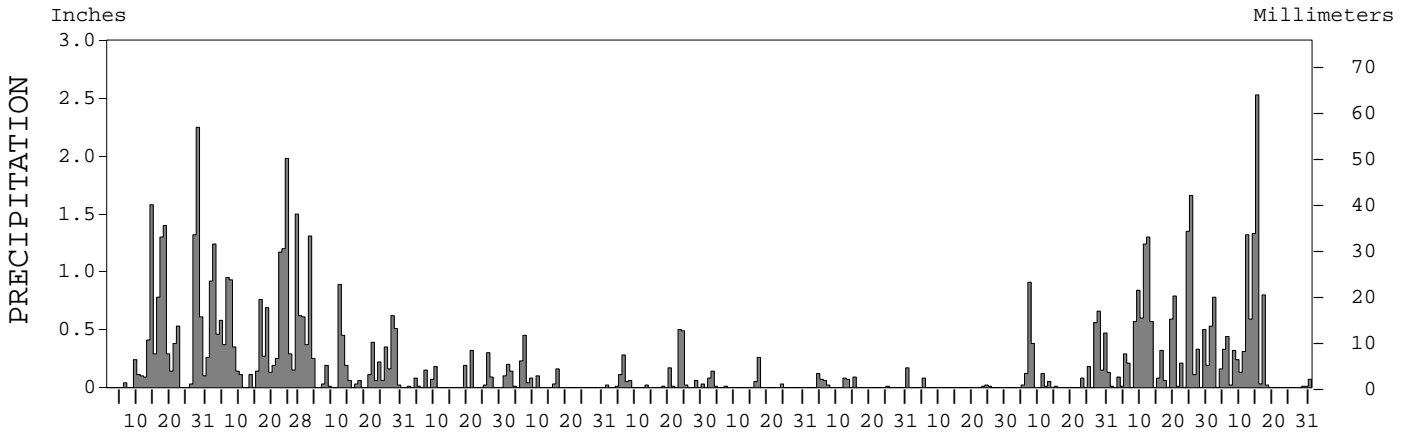
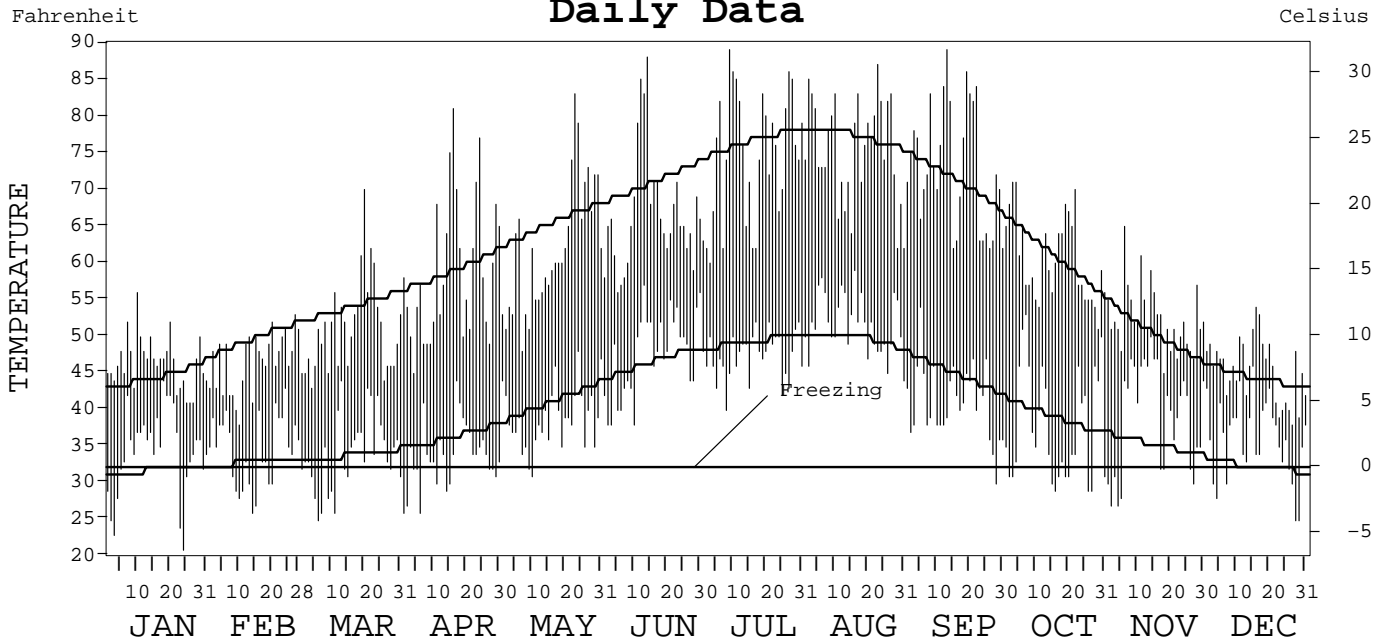
LOCAL CLIMATOLOGICAL DATA  
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-540X

OLYMPIA  
WASHINGTON (OLM)

Daily Data



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	NATIONAL ENVIRONMENTAL AND INFORMATION SERVICE	NATIONAL SATELLITE, DATA, AND INFORMATION SERVICE	NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA	DIRECTOR NATIONAL CLIMATIC DATA CENTER
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# METEOROLOGICAL DATA FOR 1999

## OLYMPIA, WA (OLM)

LATITUDE: 46° 58' 24" N      LONGITUDE: 122° 54' 12" W      ELEVATION (FT): GRND: 193      BARO: 193      TIME ZONE: PACIFIC (UTC + 8)      WBAN: 24227

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	46.4	46.6	51.1	58.8	62.0	66.8	74.4	75.5	73.0	60.6	52.5	45.5	59.4	
	HIGHEST DAILY MAXIMUM	56	53	70	81	83	88	89	87	89	71	65	54	89	
	DATE OF OCCURRENCE	10	27	20	16	23	14	09	23	13	04+	06	16	SEP 13	
	MEAN DAILY MINIMUM	34.3	34.5	34.0	33.7	38.9	47.6	47.4	51.7	41.1	37.8	39.1	36.0	39.7	
	LOWEST DAILY MINIMUM	21	26	25	26	31	38	40	44	30	29	27	25	21	
	DATE OF OCCURRENCE	24	14	06	06+	10	10+	08	31	28	27+	04+	29+	JAN 24	
	AVERAGE DRY BULB	40.4	40.6	42.6	46.3	50.5	57.2	60.9	63.6	57.1	49.2	45.8	40.8	49.6	
	MEAN WET BULB		40.0		41.9	46.2	52.4	55.4	58.1	51.1			40.2		
	MEAN DEW POINT		39.1		36.1	41.1	48.4	51.0	54.1	45.1			39.0		
	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°	9	9	12	11	2	0	0	0	1	10	9	7	70	
	MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	757	676	689	553	442	240	130	56	234	481	570	745	5573	
	COOLING DEGREE DAYS	0	0	0	0	0	14	8	19	1	0	0	0	42	
RH	MEAN (PERCENT)	96	94	86	70	73	75	73	74	69	82	90	92	81	
	HOUR 04 LST	99	96	96	88	93	93	94	91	92	93	95	95	94	
	HOUR 10 LST	96	96	87	62	66	70	69	70	64	83	87	93	79	
	HOUR 16 LST	91	88	70	51	53	57	50	55	40	58	83	88	65	
	HOUR 22 LST	97	95	93	77	80	82	80	79	78	91	92	93	86	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	6	6	7	6	1	0	1	3	6	12	9	10	67	
	THUNDERSTORMS	0	0	0	0	0	0	1	3	0	0	0	0	4	
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.)	29.83	29.68	29.72	29.92	29.88	29.83	29.84	29.80	29.86	29.92	29.76	30.01	29.84	
	MEAN SEA-LEVEL PRESS. (IN.)	30.05	29.89	29.94	30.14	30.09	30.04	30.06		30.07	30.14	29.97	30.23		
WINDS	RESULTANT SPEED (MPH)	5.7	8.3	4.8	2.2	3.5	4.1	1.8	1.5	0.3	1.8	3.4	5.6	3.4	
	RES. DIR. (TENS OF DEGS.)	19	18	18	20	21	21	21	21	02	19	18	18	19	
	MEAN SPEED (MPH)	7.0	9.6	7.3	5.9	6.6	6.2	5.6	5.3	4.6	5.1	5.7	7.7	6.4	
	PREVAIL. DIR. (TENS OF DEGS.)	18	17	19	20	19	20	19	18	01	18	18	18	18	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	38	36	38	25	23	22	28	22	25	31	26	30	38	
	DIR. (TENS OF DEGS.)	17	17	17	18	23	26	23	25	26	16	17	17	17	
	DATE OF OCCURRENCE	29	05	03	09	31+	05	13	30	25	27	24	15+	MAR 03	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	46	47	47	30	29	25	32	28	33	37	34	38	47	
DIR. (TENS OF DEGS.)	16	17	15	17	24	27	23	26	25	16	19	17	15		
DATE OF OCCURRENCE	29	05	03	09	06+	25	13	30	25+	27	24	02	MAR 03		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	12.25	15.50	6.95	1.42	1.54	1.84	0.58	0.69	0.12	3.85	11.93	9.97	66.64	
	GREATEST 24-HOUR (IN.)	2.70	2.91	1.32	0.32	0.45	0.99	0.28	0.17	0.08	1.13	1.86	2.93	2.93	
	DATE OF OCCURRENCE	27-28	23-24	03-04	21	07	23-24	16-17	31	05	07-08	11-12	14-15	DEC 14-15	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	21	25	23	11	11	15	7	9	4	15	24	20	185	
PRECIPITATION ≥ 0.10	18	25	15	5	7	5	2	2	0	10	18	14	121		
PRECIPITATION ≥ 1.00	5	5	1	0	0	0	0	0	0	0	4	3	18		
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

## OLYMPIA, WA (OLM)

LATITUDE: 46° 58' 24" N      LONGITUDE: 122° 54' 12" W      ELEVATION (FT): GRND: 193      BARO: 193      TIME ZONE: PACIFIC (UTC + 8)      WBAN: 24227

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	44.4	49.5	53.9	58.8	65.3	70.9	76.5	77.1	71.0	60.5	50.0	44.2	60.2
	MEAN DAILY MAXIMUM	52	44.2	49.1	53.3	58.9	65.7	70.9	77.0	77.1	71.6	60.7	50.5	43.8	60.2
	HIGHEST DAILY MAXIMUM	58	63	73	76	87	96	101	103	104	98	90	74	64	104
	YEAR OF OCCURRENCE		1942	1986	1995	1987	1983	1942	1941	1981	1988	1987	1949	1958	AUG 1981
	MEAN OF EXTREME MAXS.	52	55.4	60.7	66.4	74.3	81.6	87.5	92.4	91.5	86.6	75.3	61.7	54.0	73.9
	NORMAL DAILY MINIMUM	30	31.6	32.7	33.6	36.2	41.0	46.4	49.2	49.5	44.7	38.8	35.0	32.1	39.2
	MEAN DAILY MINIMUM	52	31.3	32.7	33.6	35.8	40.7	46.6	49.4	49.5	45.3	39.5	35.6	32.0	39.3
	LOWEST DAILY MINIMUM	58	-8	-1	9	0	0	30	35	33	25	20	-1	-7	-8
	YEAR OF OCCURRENCE		1979	1972	1989	1997	1997	1976	1962	1973	1972	1971	1955	1983	JAN 1979
	MEAN OF EXTREME MINS.	52	13.9	18.5	22.9	26.6	30.4	37.7	41.3	40.1	34.3	27.9	21.9	16.8	27.7
	NORMAL DRY BULB	30	38.0	41.1	43.8	47.5	53.2	58.7	62.9	63.3	57.9	49.7	42.5	38.2	49.7
	MEAN DRY BULB	52	37.8	40.9	43.4	47.7	53.5	58.8	63.2	63.2	58.4	50.1	43.1	38.0	49.8
	MEAN WET BULB	14	38.3	38.9	41.9	45.2	49.5	53.8	57.4	54.2	53.8	44.0	41.7	34.9	46.1
	MEAN DEW POINT	14	36.4	36.2	38.3	40.9	44.8	49.4	52.5	49.5	49.6	41.6	40.0	33.4	42.7
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.1	0.6	2.2	2.5	0.6	*	0.0	0.0	6.0	
MAXIMUM ≤ 32°	30	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5	3.3	
MINIMUM ≤ 32°	30	15.5	13.5	13.9	8.9	2.1	0.1	0.0	0.0	0.7	5.6	10.2	15.4	85.9	
MINIMUM ≤ 0°	30	0.2	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.5	
H/C	NORMAL HEATING DEG. DAYS	30	837	669	657	525	366	201	96	102	222	474	675	831	5655
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	0	12	31	49	9	0	0	0	101
RH	NORMAL (PERCENT)	30	88	84	80	76	73	72	71	72	78	85	88	89	80
	HOUR 04 LST	30	91	91	91	90	90	91	91	91	93	94	93	92	92
	HOUR 10 LST	30	89	87	80	71	66	67	65	67	74	85	89	90	78
	HOUR 16 LST	30	80	71	62	57	54	54	50	50	55	68	80	84	64
	HOUR 22 LST	30	90	88	86	82	80	79	78	80	86	91	92	91	85
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	56	9.3	8.3	7.7	5.1	3.3	2.2	3.0	5.3	9.1	13.5	10.8	10.1	87.7
	THUNDERSTORMS	56	0.1	0.2	0.2	0.6	0.7	0.6	0.5	0.8	0.8	0.4	0.3	0.1	5.3
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
CLEAR	1	1.0	3.0	2.0		1.0									
PARTLY CLOUDY	1		2.0	2.0		5.0	2.0								
CLOUDY	1	2.0	4.0	10.0		4.0	1.0								
PR	MEAN STATION PRESSURE (IN)	27	29.84	29.81	29.78	29.83	29.82	29.83	29.84	29.81	29.82	29.85	29.81	29.86	29.83
	MEAN SEA-LEVEL PRES. (IN)	16	30.06	30.04	30.02	30.06	30.03	30.04	30.07	30.04	30.03	30.07	30.04	30.12	30.05
WINDS	MEAN SPEED (MPH)	35	7.1	7.2	7.2	7.3	6.8	6.6	6.2	5.9	5.5	5.8	7.0	7.2	6.6
	PREVAIL. DIR (TENS OF DEGS)	20	20	19	20	20	20	20	21	20	20	20	20	20	20
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	4	38	36	38	33	28	26	28	22	29	33	33	45	45
	DIR. (TENS OF DEGS)		17	17	17	16	18	24	23	25	17	16	17	16	16
	YEAR OF OCCURRENCE		1999	1999	1999	1996	1996	1998	1999	1999	1997	1997	1998	1995	DEC 1995
	MAXIMUM 5-SECOND:														
SPEED (MPH)	4	46	47	48	41	36	33	32	28	34	45	47	66	66	
DIR. (TENS OF DEGS)		16	17	18	15	15	24	23	26	16	15	16	14	14	
YEAR OF OCCURRENCE		1999	1999	1997	1996	1996	1998	1999	1999	1997	1997	1998	1995	DEC 1995	
PRECIPITATION	NORMAL (IN)	30	8.01	5.77	4.95	3.29	2.09	1.63	0.82	1.29	2.26	4.31	8.05	8.12	50.59
	MAXIMUM MONTHLY (IN)	58	19.84	15.50	11.79	7.80	5.83	6.48	3.00	5.45	7.59	10.08	15.51	14.32	19.84
	YEAR OF OCCURRENCE		1953	1999	1997	1991	1948	1946	1983	1968	1978	1967	1962	1970	JAN 1953
	MINIMUM MONTHLY (IN)	58	0.29	0.22	0.48	0.37	0.15	0.04	T	0.00	T	0.39	1.37	2.28	0.00
	YEAR OF OCCURRENCE		1985	1993	1965	1956	1947	1945	1984	1946	1993	1987	1976	1944	AUG 1946
	MAXIMUM IN 24 HOURS (IN)	58	4.52	4.93	3.92	3.46	1.54	1.91	1.50	1.39	2.48	3.60	5.90	3.83	5.90
	YEAR OF OCCURRENCE		1990	1951	1972	1991	1948	1985	1979	1977	1978	1981	1990	1956	NOV 1990
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	19.3	17.3	17.9	14.9	11.6	8.7	5.1	6.0	8.8	13.2	19.8	21.1	163.7	
PRECIPITATION ≥ 1.00	30	1.7	1.0	0.6	0.2	0.1	0.1	0.1	0.2	0.3	0.7	1.8	2.1	8.9	
SNOWFALL	NORMAL (IN)	30	7.2	3.6	1.6	0.1	T	T	0.0	0.0	0.0	T	1.3	4.8	18.6
	MAXIMUM MONTHLY (IN)	55	58.7	27.4	20.6	2.2	T	T	0.0	0.0	T	T	14.8	21.4	58.7
	YEAR OF OCCURRENCE		1969	1990	1951	1972	1991	1994			1972	1975	1978	1968	JAN 1969
	MAXIMUM IN 24 HOURS (IN)	55	20.5	11.8	9.1	1.8	T	T	0.0	0.0	T	T	14.5	11.9	20.5
	YEAR OF OCCURRENCE		1972	1989	1966	1972	1991	1994			1972	1975	1978	1974	JAN 1972
	MAXIMUM SNOW DEPTH (IN)	48	24	20	7	0	0	0	0	0	0	0	13	10	24
	YEAR OF OCCURRENCE		1969	1969	1989								1978	1974	JAN 1969
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	2.3	1.0	0.6	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5	5.8	

PRECIPITATION (inches) 1999 OLYMPIA WA (OLM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	12.48	4.30	3.07	4.76	1.21	0.14	0.16	0.15	3.20	2.71	7.40	14.32	53.90
1971	11.15	4.41	9.11	2.78	1.50	3.00	0.78	0.71	3.06	4.43	7.59	9.18	57.70
1972	12.43	11.06	10.01	5.87	0.83	1.07	1.72	0.70	5.04	0.85	4.17	10.66	64.41
1973	5.66	1.71	3.02	2.23	2.66	2.60	0.05	0.59	2.18	4.60	12.95	11.61	49.86
1974	10.57	5.68	6.65	4.77	2.65	1.57	2.29	0.07	0.50	1.38	7.44	8.86	52.43
1975	9.70	5.61	4.32	1.88	1.51	0.72	0.25	3.97	T	8.38	9.54	11.42	57.30
1976	9.40	7.25	4.24	2.79	2.66	1.07	1.26	2.71	1.22	2.64	1.37	3.00	39.61
1977	1.55	3.70	4.44	1.27	5.21	0.64	0.32	4.17	4.58	3.40	9.30	12.36	50.94
1978	6.61	4.39	3.45	3.97	2.90	1.54	1.49	1.47	7.59	0.78	6.81	2.95	43.95
1979	2.67	9.25	2.73	2.21	1.40	1.11	1.58	1.56	2.72	6.20	2.38	13.01	46.82
1980	6.27	6.18	3.98	4.14	0.93	2.46	0.41	0.36	2.21	1.84	9.77	10.92	49.47
1981	2.54	9.19	3.86	4.77	1.81	2.96	0.36	0.85	2.44	8.17	7.22	8.60	52.77
1982	7.79	9.91	4.67	3.89	0.51	1.15	0.54	0.55	1.89	6.12	5.74	10.64	53.40
1983	9.99	7.09	6.63	2.26	1.51	2.80	3.00	2.18	1.89	1.66	12.84	7.28	59.13
1984	6.97	5.49	6.42	3.67	5.48	3.74	T	0.21	1.76	5.13	12.19	4.97	56.03
1985	0.29	3.54	4.10	2.65	0.94	2.48	0.37	0.70	2.65	9.86	4.99	2.50	35.07
1986	12.14	6.84	2.29	2.87	3.20	0.92	1.11	0.01	3.38	4.12	11.09	5.20	53.17
1987	8.38	3.55	7.14	3.11	2.71	0.32	0.84	0.24	0.29	0.39	3.65	9.14	39.76
1988	5.18	2.35	5.66	4.94	3.36	2.06	0.42	0.43	1.93	2.26	10.14	5.16	43.89
1989	5.41	4.19	7.88	2.49	1.99	1.47	0.70	0.55	0.49	2.42	8.50	5.66	41.75
1990	14.53	8.52	3.54	3.29	2.06	2.86	0.32	1.79	0.03	6.34	15.06	5.05	63.39
1991	5.35	5.85	4.32	7.80	1.69	1.30	0.33	2.31	T	2.20	7.00	4.28	42.43
1992	9.45	4.19	1.50	5.15	0.19	1.15	0.36	0.82	2.44	2.80	6.82	5.28	40.15
1993	5.36	0.22	4.95	6.67	4.57	1.77	1.35	0.15	T	1.63	2.86	6.02	35.55
1994	3.80	6.38	4.83	1.82	1.44	1.90	0.29	0.80	1.52	7.65	7.75	11.49	49.67
1995	5.76	6.10	6.73	2.70	1.16	1.10	1.71	1.22	1.97	5.20	13.32	3.24	50.21
1996	7.39	11.07	2.65	7.61	3.14	1.14	0.71	0.42	2.21	5.46	6.25		
1997	9.22	5.03	11.79	4.80	3.10	2.94	1.18	2.45	4.57	8.18	6.07	5.50	64.83
1998	10.43	5.04	5.71	1.21	2.11	1.29	0.18	T	0.31	3.41	15.28	12.99	57.96
1999	12.25	15.50	6.95	1.42	1.54	1.84	0.58	0.69	0.12	3.85	11.93	9.97	66.64
POR= 58 YRS	7.78	6.13	5.09	3.40	1.99	1.66	0.70	1.08	1.99	4.73	8.14	7.75	50.44

WBAN : 24227

AVERAGE TEMPERATURE (°F) 1999 OLYMPIA WA (OLM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	38.1	42.7	43.4	45.1	51.8	60.8	64.1	62.1	55.1	47.6	42.4	36.8	49.2
1971	38.6	39.2	40.0	46.0	53.7	54.8	63.5	65.4	55.3	48.6	43.6	36.0	48.7
1972	34.0	38.8	45.3	43.8	54.9	58.0	62.8	64.2	55.1	46.5	43.0	35.5	48.5
1973	36.5	40.4	43.5	47.2	53.9	57.9	62.7	59.5	58.8	49.8	39.8	40.5	49.2
1974	37.4	41.9	44.7	46.6	51.8	59.6	62.4	64.7	63.2	49.5	43.6	40.1	50.5
1975	38.4	39.4	40.5	44.0	52.5	57.5	63.9	60.7	57.8	49.1	41.3	38.6	48.6
1976	40.1	39.3	40.3	46.0	51.5	54.9	61.7	60.7	58.9	49.6	43.2	39.1	48.8
1977	35.7	45.2	43.4	50.2	51.4	59.8	59.7	64.6	56.7	48.5	40.4	38.0	49.5
1978	41.8	43.6	45.9	48.1	52.9	63.1	65.2	63.5	56.8	50.6	37.9	34.1	50.3
1979	30.9	40.3	47.5	49.6	54.7	58.7	65.1	62.8	59.3	51.7	40.2	41.3	50.2
1980	31.6	39.8	42.0	48.9	52.8	56.3	62.9	62.3	59.6	51.9	46.5	43.7	49.9
1981	42.1	43.5	47.1	49.0	53.9	57.8	62.7	67.4	60.0	49.7	45.3	39.7	51.5
1982	38.0	40.6	42.6	45.8	54.1	62.9	63.1	64.4	59.5	50.8	40.2	38.6	50.1
1983	42.6	45.3	47.5	48.9	56.5	58.7	62.0	64.1	56.3	49.2	46.0	33.9	50.9
1984	41.7	43.0	46.7	46.7	51.6	57.8	63.3	63.8	58.2	48.4	43.3	35.4	50.0
1985	35.7	37.4	42.1	48.9	54.5	59.0	67.5	63.5	56.6	49.2	33.8	34.0	48.5
1986	42.0	40.2	47.2	46.3	54.4	60.8	59.7	66.5	57.2	51.4	43.4	38.7	50.7
1987	38.7	43.2	46.0	50.0	55.5	60.2	62.4	63.6	60.1	52.4	46.1	37.6	51.3
1988	37.9	42.5	43.8	48.4	53.3	56.7	62.6	62.1	57.3	53.8	43.0	39.3	50.1
1989	39.4	33.2	41.1	50.9	53.9	60.3	61.1	62.4	59.4	49.7	44.7	41.1	49.8
1990	40.3	37.4	44.2	49.6	52.5	57.7	65.8	66.0	61.1	48.5	44.0	32.6	50.0
1991	37.1	45.1	41.4	46.4	51.9	55.7	63.8	65.1	59.7	49.3	44.6	41.0	50.1
1992	41.2	45.2	47.9	50.4	57.5	63.0	64.7	64.8	58.2	51.4	43.7	37.0	52.1
1993	34.9	38.5	45.1	49.1	58.6	59.3	60.3	64.1	59.7	53.1	39.1	39.9	50.1
1994	42.9	39.4	46.5	50.7	55.9	59.1	66.3	64.6	62.2	49.1	39.5	38.2	51.2
1995	40.4	42.7	44.8	48.5	57.2	60.7	65.6	61.7	62.3	50.8	47.6	40.1	51.9
1996	38.9	40.0	44.7	49.6	50.7	57.4	65.1	63.8	56.2	49.2	42.2		
1997	39.6	40.8	44.4			57.8	63.1	65.9	60.7	49.9	45.6	38.7	
1998	40.4	43.4	45.0	48.1	53.4	58.8	66.9	64.3	60.4	49.9	44.8	37.9	51.1
1999	40.4	40.6	42.6	46.3	50.5	57.2	60.9	63.6	57.1	49.2	45.8	40.8	49.6
POR= 58 YRS	37.8	40.9	43.4	47.0	52.8	58.7	63.3	63.3	58.4	50.3	43.1	38.1	49.8

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HEATING DEGREE DAYS (base 65°F) 1999 OLYMPIA WA (OLM)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	65	102	293	535	672	868	810	716	771	560	344	304	6040
1971-72	113	49	286	500	639	891	954	752	602	632	315	204	5937
1972-73	85	69	295	570	651	909	874	681	659	528	345	223	5889
1973-74	97	170	184	465	748	749	852	644	625	544	403	161	5642
1974-75	103	51	78	472	634	763	817	711	751	624	377	225	5606
1975-76	73	138	210	486	703	811	766	739	760	563	410	296	5955
1976-77	104	127	177	470	649	798	902	547	660	438	415	158	5445
1977-78	166	90	242	502	734	829	711	596	587	502	367	91	5417
1978-79	55	78	240	442	803	952	1048	683	536	454	314	188	5793
1979-80	59	71	165	404	737	726	1027	724	702	476	371	254	5716
1980-81	81	96	158	399	549	653	701	597	551	474	336	212	4807
1981-82	100	50	161	465	585	777	831	678	686	570	330	103	5336
1982-83	78	63	170	435	738	813	687	545	535	476	275	182	4997
1983-84	98	38	255	482	566	958	712	631	560	545	408	211	5464
1984-85	80	64	205	507	644	911	903	767	704	476	320	181	5762
1985-86	15	68	245	484	932	954	704	689	542	555	332	128	5648
1986-87	158	25	244	414	642	803	812	604	583	442	293	162	5182
1987-88	100	75	153	382	562	841	834	645	650	492	360	250	5344
1988-89	108	106	242	340	656	790	789	882	735	420	336	153	5557
1989-90	128	88	164	467	604	735	760	768	640	454	380	220	5408
1990-91	39	31	116	505	622	1000	854	551	725	549	398	273	5663
1991-92	73	59	159	478	604	736	729	567	525	434	235	107	4706
1992-93	49	57	205	417	630	862	927	737	609	468	197	171	5329
1993-94	139	66	175	361	772	770	679	712	566	426	275	170	5111
1994-95	35	41	89	488	761	823	754	618	621	489	236	146	5101
1995-96	39	111	86	434	516	765	799	715	622	457	436	222	5202
1996-97	72	74	255	482	677		782	673	633			210	
1997-98	70	30	126	462	575	808	755	597	612	499	356	181	5071
1998-99	28	58	144	461	599	833	757	676	689	553	442	240	5480
1999-	130	56	234	481	570	745							

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COOLING DEGREE DAYS (base 65°F) 1999 OLYMPIA WA (OLM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	0	0	29	44	16	0	0	0	0	89
1971	0	0	0	0	0	3	71	67	0	0	0	0	141
1972	0	0	0	0	8	0	25	50	5	0	0	0	88
1973	0	0	0	0	6	14	35	7	5	0	0	0	67
1974	0	0	0	0	0	6	30	50	32	0	0	0	118
1975	0	0	0	0	0	4	45	9	1	0	0	0	59
1976	0	0	0	0	0	2	9	3	0	0	0	0	14
1977	0	0	0	0	0	14	7	87	1	0	0	0	109
1978	0	0	0	0	1	43	64	38	0	0	0	0	146
1979	0	0	0	0	0	6	73	12	2	0	0	0	93
1980	0	0	0	0	0	0	21	19	3	2	0	0	45
1981	0	0	0	0	0	2	35	131	18	0	0	0	186
1982	0	0	0	0	0	46	24	52	10	0	0	0	132
1983	0	0	0	0	18	1	10	18	0	0	0	0	47
1984	0	0	0	0	0	1	34	37	6	1	0	0	79
1985	0	0	0	0	3	7	97	30	0	0	0	0	137
1986	0	0	0	0	12	9	0	78	17	0	0	0	116
1987	0	0	0	0	8	25	26	40	12	1	0	0	112
1988	0	0	0	0	4	7	39	23	17	0	0	0	90
1989	0	0	0	0	0	20	13	14	3	0	0	0	50
1990	0	0	0	0	0	5	71	70	6	0	0	0	152
1991	0	0	0	0	0	0	42	69	7	0	0	0	118
1992	0	0	0	0	9	50	48	57	8	0	0	0	172
1993	0	0	0	0	5	6	0	49	22	0	0	0	82
1994	0	0	0	0	0	1	82	37	15	0	0	0	135
1995	0	0	0	0	2	27	65	14	10	0	0	0	118
1996	0	0	0	0	0	2	79	43	0	0	0	0	124
1997	0	0	0	0	0	0	16	66	4	0	0	0	
1998	0	0	0	0	0	1	95	45	12	0	0	0	153
1999	0	0	0	0	0	14	8	19	1	0	0	0	42

SNOWFALL (inches) 1999 OLYMPIA WA (OLM)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.0	T	0.4	9.0	15.4	5.1	6.1	0.1	T	T	36.1
1971-72	0.0	0.0	0.0	T	T	17.2	29.2	2.4	3.6	2.2	0.0	0.0	54.6
1972-73	0.0	0.0	T	0.0	0.0	5.8	2.9	0.0	T	0.0	0.0	0.0	8.7
1973-74	0.0	0.0	0.0	0.0	1.9	2.6	4.1	1.1	T	T	T	0.0	9.7
1974-75	0.0	0.0	0.0	0.0	T	13.5	7.2	1.5	0.3	T	T	0.0	22.5
1975-76	0.0	0.0	0.0	T	4.5	3.7	0.6	7.2	T	T	T	T	16.0
1976-77	0.0	0.0	0.0	0.0	0.0	0.0	1.8	T	0.8	T	T	0.0	2.6
1977-78	0.0	0.0	0.0	0.0	3.8	1.6	0.0	0.0	T	0.0	T	0.0	5.4
1978-79	0.0	0.0	0.0	0.0	14.8	2.5	0.1	1.5	0.0	0.0	0.0	0.0	18.9
1979-80	0.0	0.0	0.0	0.0	T	T	19.7	11.9	4.1	T	0.0	0.0	35.7
1980-81	0.0	0.0	0.0	0.0	T	3.0	0.0	0.9	0.0	0.4	0.0	0.0	4.3
1981-82	0.0	0.0	0.0	0.0	0.0	2.8	11.8	5.1	1.9	T	0.0	0.0	21.6
1982-83	0.0	0.0	0.0	0.0	T	T	0.0	0.0	0.0	T	0.0	0.0	T
1983-84	0.0	0.0	0.0	0.0	0.0	4.9	T	0.0	T	0.0	T	0.0	4.9
1984-85	0.0	0.0	0.0	0.0	T	4.7	T	13.8	T	T	T	0.0	18.5
1985-86	0.0	0.0	0.0	0.0	12.3	7.3	0.0	5.3	0.0	T	T	0.0	24.9
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
1987-88	0.0	0.0	0.0	0.0	T	1.0	T	0.1	0.0	0.2	T	0.0	1.3
1988-89	0.0	0.0	0.0	0.0	T	T	6.8	13.8	9.0	T	0.0	T	29.6
1989-90	0.0	0.0	0.0	0.0	0.0	0.0	1.7	27.4	0.2	0.0	0.0	0.0	29.3
1990-91	0.0	0.0	0.0	0.0	T	2.2	3.0	0.0	T	T	T	0.0	5.2
1991-92	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T	0.0	0.0	T
1992-93	0.0	0.0	0.0	0.0	0.0	9.4	3.8	0.2	0.0	0.0	0.0	0.0	13.4
1993-94	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.8	T	T	0.0	T	1.3
1994-95	0.0	0.0	0.0	0.0	0.1	6.2	0.0	2.6	T	T	0.0	0.0	8.9
1995-96	0.0	0.0	0.0	0.0	0.0	0.0	3.0		0.0	0.0	0.0	0.0	
1996-97	0.0	0.0	0.0	0.0									
1997-98													
1998-99													
1999-													
POR= 54 YRS	0.0	0.0	T	T	1.4	3.5	6.8	3.1	1.7	0.1	T	T	16.6

WBAN : 24227

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  
OLYMPIA  
WASHINGTON (OLM)

The climate of Olympia and vicinity is characterized by warm, generally dry summers and wet, mild winters.

Fall rains usually begin about mid-October, borne inland to the Cascade Mountains by frequent maritime disturbances originating in the Pacific Ocean. These rains continue with few interruptions through spring. Daytime temperatures will be in the 40s and low 50s, with nighttime temperatures in the 30s. The progression of the wet and mild Pacific disturbances is usually broken once or twice each winter by the formation of large anticyclones, which originate in Alaska and northwestern Canada, and move southward over the state of Washington. These southerly migrations of polar-continental air from the interior will normally lower daytime temperatures to about freezing and nighttime temperatures to 10 - 20 degrees. In exceptional cases, temperatures slightly below zero have been recorded in this vicinity. Often the onset of the cold weather is accompanied by a little snow, but during these cold snaps the air is dry and skies are clear. Snow in an amount sufficient to seriously hinder highway travel occurs only once every two or three years.

During the spring months, the track of the Pacific storms moves gradually farther north, and the semi-permanent Pacific anticyclone also moves northward. The effects of the maritime disturbances lessen, and the periods of improving weather between storms lengthen. During the spring and early fall, clearing skies at night will usually be followed by fog or low stratus clouds in the early morning, which normally dissipate by noon.

Daily high temperatures average 70 to 80 degrees during July, August, and September. The temperature will equal or exceed 90 degrees about 6 days each summer, but as the warm weather is usually accompanied by lowering humidity, it is seldom uncomfortably hot. Rainfall is near 1 inch per month during July and August and about 2 inches per month during the transitional period of May, June, and September. About two-thirds of the days are sunny in July, August, and September, and about half are sunny during May and June.

Olympia and vicinity are quite well protected by the Coast Range from the strong south and southwest winds accompanying many of the Pacific storms during the fall and winter. Winds which reach hurricane force along the coast, only 45 miles away, will reach only 50 or 55 mph in gusts in this vicinity. Some damage to utility lines occurs every fall and winter from trees and limbs broken or felled by the wind, but damage rarely occurs to dwellings or buildings. The prevailing wind in Olympia is southerly during most of the year, but during the fair weather in the summers the wind is gentle and from the north to east.

The length of the growing season in the vicinity of Olympia varies with distance from the waterfront and elevation above sea level. The average length of the growing season is 166 days.

# STATION LOCATION

OLYMPIA, WASHINGTON

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE										REMARKS	
						SEA LEVEL	GROUND										
							WIND	EMER	EMER	EMER	EMER	EMER	EMER	EMER	EMER		EMER
<b>CITY</b>																	
Granger's Building Main & 5th Streets	7/01/77	9/01/84		47°03'	122°53'	27	-	23	23								
Israel's Block, 4th St. between Main & Wash.	9/01/84	10/05/91	1 block NE	47°03'	122°53'	20	-	46	46								
Stuart Block Main & 6th Streets	10/05/91	12/29/92	2 blocks SW	47°03'	122°53'	27	54	39	39								
Chilberg Block, Main St between 4th & 5th	12/29/92	5/01/94	1/16 mi. N	47°03'	122°53'	17	67	56	56								
<b>COOPERATIVE</b>																	
4th St. near Franklin	5/01/94	9/30/95	1-1/2 blks NNE	47°03'	122°54'	21											
4th & Main Streets	12/06/95	9/30/98	2 blocks W	47°03'	122°54'	20		18						a16			a - 3 feet above roof.
814 Franklin Street	10/01/98	9/30/04	1/2 mi. SW	47°02'	122°54'	51											
103 Pear Street	10/01/04	11/01/06	1/2 mi. NE	47°02'	122°54'	36		#10						3			# - Estimated elevations.
1008 Page Street	11/02/06	2/29/08	1-1/2 mi. WNW	47°03'	122°54'	160											
814 Franklin Street	3/01/08	9/30/13	1-1/8 mi. SW	47°02'	122°54'	51		#5						3			
State Capitol 6th & Franklin	10/01/13	1/31/18	1/8 mi. NNW	47°03'	122°54'	31		#130						#130			
1 mile from Post Office (no address)	7/07/19	9/25/24	-	47°03'	122°54'	#71		#5						#3			
Capitol Grounds 12th & Capitol	2/01/25	1/14/29	-	47°02'	122°54'	105		#4						3			
Priest Point Park	1/15/29	1/17/56	2 mi. N	47°03'	122°54'	69		#4						3			
<b>AIRPORT</b>																	
Administration Building Olympia Municipal Airport	5/12/41	10/09/74	7 mi. S	46°58'	122°54'	f195	c20	x35	34		g3	d4	xb3	e5			b - 34 feet to 2/1/48. c - 53 feet to 10/24/49 and 54 feet to 4/15/59. d - Added 10/1/54. e - Commissioned 11/1/59 about 1650 feet S of thermometer site. f - 190 feet to 4/15/59. x - Removed prior to 1964. g - Added 1/6/69.
NWS Building Olympia Airport	10/09/74	11/01/95	1000 ft. S	46°58'	122°54'	195	h20	NA	5	NA	2	2	3	h5 15	NA		h - Same site as prior to 10/9/74. i - Type change 9/30/85.
Olympia Airport	11/01/95	Present	NA	46°58'	122°54'	193								S			ASOS Commissioned 11/01/95

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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 Asheville NC 28801-5001

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