

1998

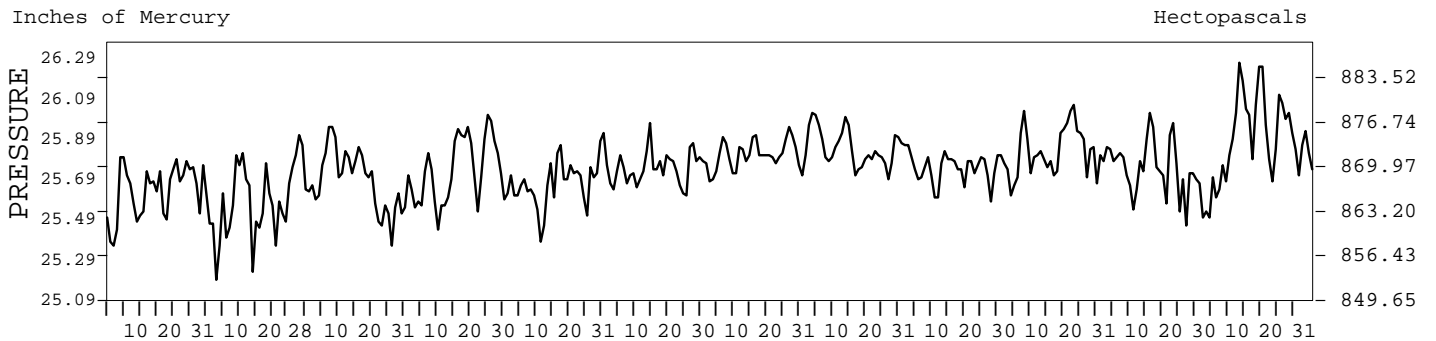
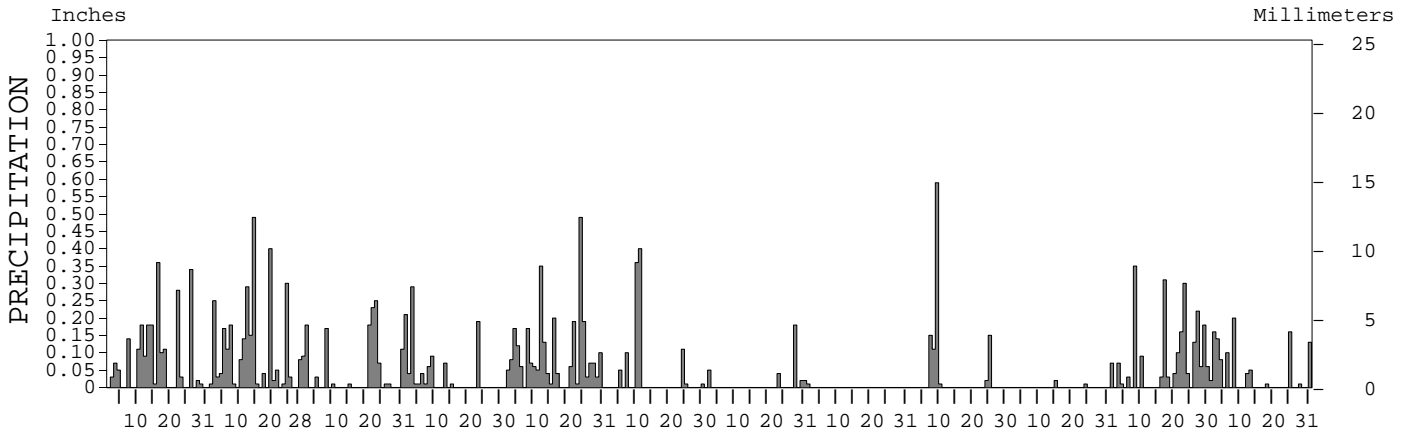
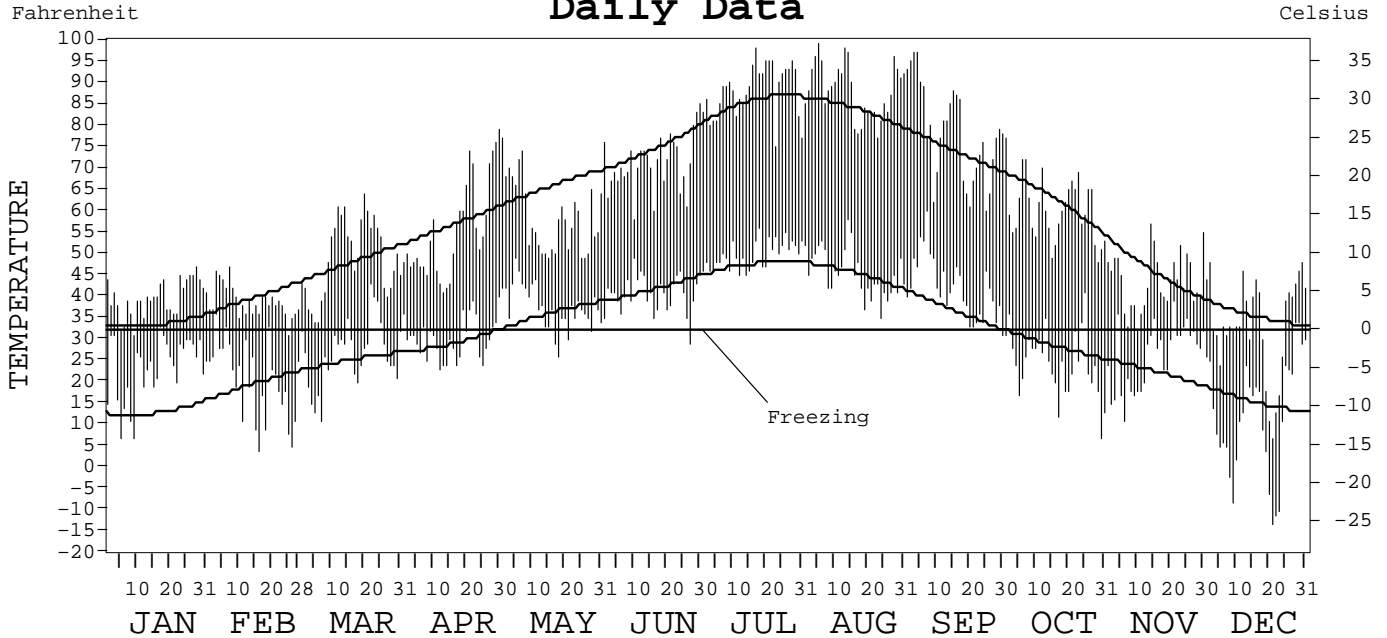
LOCAL CLIMATOLOGICAL DATA  
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-4128

BURNS,  
OREGON (BNO)

Daily Data



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# METEOROLOGICAL DATA FOR 1998

## BURNS, OR (BNO)

LATITUDE: 43° 35' 32" N      LONGITUDE: 118° 57' 14" W      ELEVATION (FT): GRND: 4151      BARO: 4173      TIME ZONE: PACIFIC (UTC+ 8)      WBAN: 94185

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	39.7	38.8	49.0	55.5	58.6	71.0	88.1	88.1	78.1	60.4	43.7	33.4	58.7	
	HIGHEST DAILY MAXIMUM	47	47	64	79	77	85	98	99	97	77	57	48	99	
	DATE OF OCCURRENCE	28	7	20	30	01	30	17	05	04+	01	14	30+	AUG 05	
	MEAN DAILY MINIMUM	23.3	20.5	26.6	30.3	37.6	40.6	49.7	45.5	42.1	24.5	26.0	12.3	31.6	
	LOWEST DAILY MINIMUM	7	4	11	23	26	29	45	35	31	7	11	-13	-13	
	DATE OF OCCURRENCE	09+	16	07	12	18	27	14+	24	30	30	06	21	DEC 21	
	AVERAGE DRY BULB	31.5	29.7	37.8	42.9	48.1	55.8	68.9	66.8	60.1	42.5	34.9	22.9	45.2	
	MEAN WET BULB	30.6	29.0	33.9	37.6	44.1		57.1	53.5	48.1	34.7	32.2			
	MEAN DEW POINT	28.1	26.4	28.8	31.1	39.8		47.6	40.6	36.2	24.6	28.5			
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	0	14	14	5	0	0	0	0	33
	MAXIMUM ≤ 32°	2	1	0	0	0	0	0	0	0	0	1	13	17	17
	MINIMUM ≤ 32°	30	25	26	21	4	1	0	0	1	27	25	29	189	189
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	6	6	6	
H/C	HEATING DEGREE DAYS	1031	982	832	657	516	269	3	40	182	692	896	1297	7397	
	COOLING DEGREE DAYS	0	0	0	0	0	0	131	103	42	0	0	0	276	
RH	MEAN (PERCENT)	85	85	74	67	75	63	49	40	48	54	79	77	66	
	HOUR 04 LST	91	91	89	89	91	89	78	61	72	74	85	83	83	
	HOUR 10 LST	85	85	67	57	65	51	38	32	40	45	75	73	59	
	HOUR 16 LST	77	74	51	43	59	40	29	28	27	29	67	68	49	
	HOUR 22 LST	87	90	83	78	87	73	54	40	55	61	84	83	73	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	2	5	1	0	2	0	0	0	2	1	4	2	19	
	THUNDERSTORMS	0	0	0	0	0	0	0	0	0	0	0	0	0	
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.)	25.63	25.57	25.69	25.73	25.67	25.75	25.81	25.85	25.74	25.83	25.72	25.91	25.74	
	MEAN SEA-LEVEL PRESS. (IN.)	29.92		29.96	29.99	29.89		29.96	30.01	29.92	30.11	30.01			
WINDS	RESULTANT SPEED (MPH)	0.9	2.1	2.7	3.0	3.3		3.2	2.8	2.1	2.5	2.1	2.4		
	RES. DIR. (TENS OF DEGS.)	19	08	31	30	28		29	29	30	30	23	26		
	MEAN SPEED (MPH)	5.9	6.3	6.8	7.2	7.9	7.6	6.6	6.6	5.9	6.4	6.2	5.3	6.6	
	PREVAIL. DIR. (TENS OF DEGS.)	07	08	30	29	31	30	29	29	30	29	22	29	29	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	36	26	39	31	30	28	37	25	31	28	39	30	39	
	DIR. (TENS OF DEGS.)	26	32	34	22	23	28	20	31	21	34	23	21	23	
	DATE OF OCCURRENCE	17	24	29	23	02	15	28	23	17	25	30	02	NOV 30	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	44	31	47	38	45	32	44	32	38	34	45	36	47	
DIR. (TENS OF DEGS.)	28	32	35	21	21	29	21	26	23	23	22	20	35		
DATE OF OCCURRENCE	17	24	29	23	02	15	28	14	17	07	30	02	MAR 29		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	2.29	2.89	1.35	1.03	2.84	1.04	0.31	0.01	1.03	0.03	2.28	1.10	16.20	
	GREATEST 24-HOUR (IN.)	0.46	0.49	0.40	0.32	0.68	0.40	0.18	0.01	0.59	0.02	0.35	0.20	0.68	
	DATE OF OCCURRENCE	16-17	14	21-22	02-03	24-25	11	28	01	09	15	26-27+	08	MAY 24-25	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	18	22	13	12	25	7	5	1	6	2	19	12	142	
PRECIPITATION ≥ 0.10	10	10	6	3	10	4	1	0	4	0	8	6	62		
PRECIPITATION ≥ 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)														
	GREATEST 24-HOUR (IN.)														
	DATE OF OCCURRENCE														
	MAXIMUM SNOW DEPTH (IN.)												2		
	DATE OF OCCURRENCE												08		
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0															

# NORMALS, MEANS, AND EXTREMES

## BURNS, OR (BNO)

LATITUDE: 43° 35' 32" N      LONGITUDE: 118° 57' 14" W      ELEVATION (FT): GRND: 4151      BARO: 4173      TIME ZONE: PACIFIC (UTC+ 8)      WBAN: 94185

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	33.6	39.5	47.7	56.5	65.6	74.4	85.1	83.3	73.6	61.8	45.2	35.2	58.5
	MEAN DAILY MAXIMUM	14	34.6	36.9	49.2	53.3	65.7	73.5	78.3	84.5	73.8	56.6	43.8	34.1	57.0
	HIGHEST DAILY MAXIMUM	14	55	67	71	84	94	98	100	100	97	86	68	57	100
	YEAR OF OCCURRENCE		1994	1995	1986	1987	1986	1992	1980	1996	1998	1992	1997	1993	AUG 1996
	MEAN OF EXTREME MAXS.	14	47.7	49.0	62.9	70.5	84.0	89.2	89.3	95.9	89.9	73.3	60.2	47.4	71.6
	NORMAL DAILY MINIMUM	30	13.0	19.3	24.9	29.0	35.9	41.6	47.2	45.0	36.3	28.1	22.0	15.1	29.8
	MEAN DAILY MINIMUM	14	15.1	18.0	25.9	27.7	37.1	41.3	43.7	44.7	36.3	25.4	21.7	14.6	29.3
	LOWEST DAILY MINIMUM	14	-27	-28	-14	10	15	21	25	24	17	-3	-13	-20	-28
	YEAR OF OCCURRENCE		1982	1985	1993	1997	1996	1996	1986	1992	1984	1991	1985	1984	FEB 1985
	MEAN OF EXTREME MINS.	14	-7.1	0.8	13.0	17.1	23.7	27.7	33.0	33.1	23.3	11.6	5.9	-4.4	14.8
	NORMAL DRY BULB	30	23.3	29.4	36.3	42.8	50.8	58.0	66.2	64.2	55.0	45.0	33.6	25.1	44.1
	MEAN DRY BULB	14	24.9	27.5	37.5	40.5	51.5	57.5	61.0	64.6	55.2	41.0	32.8	24.3	43.2
	MEAN WET BULB	10	24.5	29.0	35.4	39.5	45.9	51.2	50.5	53.3	47.4	35.5	31.2	21.3	38.7
	MEAN DEW POINT	10	20.5	23.9	27.0	29.2	34.6	38.2	37.3	37.3	33.5	25.1	25.5	17.5	29.1
NORMAL NO. DAYS WITH:															
MAXIMUM ≥ 90°															
MAXIMUM ≤ 32°															
MINIMUM ≤ 32°															
MINIMUM ≤ 0°															
H/C	NORMAL HEATING DEG. DAYS	30	1293	997	890	666	440	224	58	103	315	620	942	1237	7785
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	0	14	95	78	15	0	0	0	202
RH	NORMAL (PERCENT)														
	HOUR 04 LST														
	HOUR 10 LST														
	HOUR 16 LST														
	HOUR 22 LST														
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	7	2.7	1.0	0.4	0.0	0.5	0.2	0.2	0.0	0.7	0.7	2.1	2.3	10.8
	THUNDERSTORMS	7	0.0	0.0	0.2	0.2	1.1	0.9	0.8	1.2	0.2	0.0	0.0	0.0	4.6
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
CLEAR	1					5.0									
PARTLY CLOUDY	1														
CLOUDY	1	1.0		1.0		2.0									
PR	MEAN STATION PRESSURE (IN)	3	25.72	25.72	25.75	25.75	25.73	25.76	25.81	25.81	25.78	25.82	25.78	25.82	25.77
	MEAN SEA-LEVEL PRES. (IN)	10	30.19	30.12	30.04	30.03	29.95	29.96	29.99	30.00	30.02	30.11	30.13	30.22	30.06
WINDS	MEAN SPEED (MPH)	3	5.6	6.2	7.4	8.1	7.8	7.6	6.9	6.8	6.3	6.6	5.7	5.0	6.7
	PREVAIL. DIR (TENS OF DEGS)	5	08	08	30	31	30	30	30	30	31	30	30	30	30
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	2	36	29	39	32	32	33	37	34	32	37	39	30	39
	DIR. (TENS OF DEGS)		26	28	34	30	02	21	20	24	30	19	23	21	23
	YEAR OF OCCURRENCE		1998	1997	1998	1997	1996	1997	1998	1996	1996	1997	1998	1998	NOV 1998
	MAXIMUM 5-SECOND:														
SPEED (MPH)	3	44	34	47	39	45	45	44	49	41	43	45	36	49	
DIR. (TENS OF DEGS)		26	28	35	28	21	22	21	30	29	19	22	20	30	
YEAR OF OCCURRENCE		1997	1997	1998	1997	1998	1997	1997	1996	1996	1997	1998	1998	AUG 1996	
PRECIPITATION	NORMAL (IN)	30	0.99	0.76	1.01	0.65	0.98	0.83	0.40	0.66	0.56	0.72	1.25	1.15	9.96
	MAXIMUM MONTHLY (IN)	14	2.84	3.50	3.66	2.21	2.84	3.05	1.22	1.16	2.13	1.43	2.73	3.88	3.88
	YEAR OF OCCURRENCE		1995	1986	1983	1993	1998	1992	1987	1984	1986	1982	1984	1981	DEC 1981
	MINIMUM MONTHLY (IN)	14	0.09	0.12	0.23	0.12	0.10	0.11	T	0.00	T	0.03	0.23	0.28	0.00
	YEAR OF OCCURRENCE		1985	1997	1997	1986	1992	1985	1994	1994	1995	1998	1993	1991	AUG 1994
	MAXIMUM IN 24 HOURS (IN)	14	0.68	1.04	0.99	0.55	0.85	1.15	0.89	1.01	0.76	0.87	0.69	5.31	5.31
	YEAR OF OCCURRENCE		1997	1986	1996	1993	1995	1992	1985	1984	1985	1982	1981	1995	DEC 1995
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01															
PRECIPITATION ≥ 1.00															
SNOWFALL	NORMAL (IN)														
	MAXIMUM MONTHLY (IN)	11	23.7	27.6	13.5	3.2	1.4	0.6	0.0	0.0	T	3.6	17.4	26.8	27.6
	YEAR OF OCCURRENCE		1993	1986	1985	1982	1983	1981			1986	1984	1983	1983	FEB 1986
	MAXIMUM IN 24 HOURS (IN)	11	6.2	8.5	6.4	1.7	0.9	0.6	0.0	0.0	T	5.0	7.0	6.5	8.5
	YEAR OF OCCURRENCE		1987	1986	1985	1980	1986	1981			1986	1991	1983	1981	FEB 1986
	MAXIMUM SNOW DEPTH (IN)	11	23	26	26	1	0	0	0	0	0	5	8	13	26
YEAR OF OCCURRENCE		1993	1993	1993	1982						1991	1985	1985	MAR 1993	
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0															

PRECIPITATION (inches) 1998 BURNS, OR (BNO)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1968	0.99	1.63	0.13	0.09	1.14	0.21	T	1.73	0.03	0.73	2.22	1.83	10.73
1969	3.17	1.47	0.31	0.45	0.30	1.33	T	T	0.22	1.03	0.46	3.10	11.84
1970	5.73	0.72	0.45	0.23	0.66	0.43	0.02	0.00	0.22	1.21	3.20	2.53	15.40
1971	1.77	0.46	2.02	0.33	2.02	0.98	1.14	T	0.57	0.51	1.62	2.06	13.48
1972	2.07	0.97	1.83	0.17	0.31	0.40	0.01	0.33	0.47	0.31	1.31	2.11	10.29
1973	1.37	0.45	0.43	0.15	1.06	0.04	T	0.31	0.63	0.62	2.69	2.45	10.20
1974	0.85	0.82	2.42	0.72	0.09	0.01	0.59	0.10	0.00	0.35	0.11	1.36	7.42
1975	1.54	1.78	1.71	1.22	0.05	0.38	0.58	0.19	0.07	1.35	0.82	1.64	11.33
1976	1.49	1.46	0.45	0.59	0.37	0.66	0.55	1.97	0.51	0.11	0.30	T	8.46
1977	0.69	0.45	0.27	0.16	1.67	0.41	0.51	0.29	1.11	0.44	2.09	2.31	10.40
1978	2.54	1.42	1.56	1.88	0.18	0.44	0.45	0.56	1.11	0.00	1.21	0.54	11.89
1979	2.96	1.74	0.99	0.82	0.81	0.21	0.03	1.99	0.56	1.03	1.93	1.62	14.69
1980	1.58	2.01	0.61	0.57	1.08	0.85	0.26	0.03	0.56	0.88	0.59	1.36	10.38
1981	0.79	0.91	1.62	0.84	2.14	0.47	0.23	0.18	0.54	1.34	2.62	3.88	15.56
1982	1.15	1.70	0.78	0.90	0.64	0.90	0.41	0.35	1.06	1.43	1.09	2.56	12.97
1983	1.04	2.13	3.66	1.10	1.54	0.31	1.09	0.70	0.06	1.08	2.44	3.09	18.24
1984	0.21	0.76	1.71	0.80	1.04	0.88	0.49	1.16	0.05	1.02	2.73	0.87	11.72
1985	0.09	0.49	1.03	0.34	1.37	0.11	0.92	0.09	1.12	0.81	0.97	0.73	8.07
1986	1.41	3.50	1.33	0.12	0.53	0.26	0.37	0.04	2.13	0.34	0.30	0.28	10.61
1987	1.30	1.00	1.54	0.75	0.56	1.50	1.22	0.16					
1988													
1989													
1991					1.91	0.73	T	0.38	0.06	1.10	1.07	0.28	
1992	0.18	1.03	0.49	0.66	0.10	3.05	0.30	0.34	0.09	1.39	0.90	1.71	10.24
1993	2.08	1.17	1.41	2.21	0.93	0.70	0.55	0.51	0.03	0.87	0.23	0.95	11.64
1994	0.39	0.74	0.37	0.51	1.23	0.52	T	0.00	0.23	0.34	1.50	0.68	6.51
1995	2.84	0.47	1.68	1.39				0.83	T	0.21	0.65	2.53	
1996	1.85		1.50		1.69	0.66		0.34	0.72	0.92	1.13	3.07	
1997	2.46	0.12	0.23	1.03	1.47	0.29	0.68	0.17	0.61	0.68	1.08	0.63	9.45
1998	2.29	2.89	1.35	1.03	2.84	1.04	0.31	0.01	1.03	0.03	2.28	1.10	16.20
POR= 14 YRS	1.29	1.29	1.34	0.92	1.29	0.82	0.47	0.27	0.48	0.82	1.34	1.60	11.93

WBAN : 94185

AVERAGE TEMPERATURE (°F) 1998 BURNS, OR (BNO)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1968	27.0	38.9	40.2	40.6	51.7	61.1	72.4	62.2	57.4	45.4	35.9	28.3	46.8
1969	25.9	26.2	34.1	44.3	56.8	61.0	68.5	67.0	59.9	42.3	37.0	31.1	46.2
1970	29.7	36.9	37.3	37.8	52.3	63.0	69.9	69.5	52.9	43.9	36.8	22.9	46.1
1971	29.9	33.1	33.4	42.7	52.1	56.8	68.6	70.8	52.0	43.9	34.8	23.9	45.2
1972	23.4	30.7	41.6	40.5	54.7	62.2	67.3	68.1	52.1	48.3	35.2	20.7	45.4
1973	25.6	34.2	36.9	44.0	55.1	60.6	70.8	66.2	57.7	46.5	34.6	32.4	47.1
1974	26.6	32.9	36.8	42.8	50.2	65.8	67.5	67.0	61.5	48.2	36.5	28.4	47.0
1975	25.1	30.2	33.9	38.1	50.5	58.6	70.9	63.5	61.8	45.4	33.6	30.8	45.2
1976	27.6	30.3	34.1	41.9	53.9	56.6	68.7	61.2	60.4	48.2	40.9	29.8	46.1
1977	19.2	35.3	34.7	48.4	47.1	66.0	67.2	68.9	56.3	48.6	34.7	31.8	46.5
1978	30.1	31.8	43.6	42.9	49.1	58.8	68.3	64.6	54.6	50.6	32.8	21.8	45.8
1979	15.8	31.2	39.2	44.2	53.6	61.4	69.3	66.8	62.3	51.0	32.0	29.8	46.4
1980	25.2	35.1	35.1	45.2	50.9	54.2	65.8	61.0	55.6	44.5	35.8	29.0	44.8
1981	30.1	29.2	37.6	44.6	49.2	56.6	64.1	66.5	55.5	42.3	35.6	29.1	45.0
1982	17.6	24.7	35.3	39.1	49.1	57.8	64.9	64.3	52.9	43.5	29.0	22.8	41.8
1983	28.7	33.4	39.1	40.9	51.6	55.0	61.1	64.6	53.9	47.2	35.7	21.7	44.4
1984	17.0	23.1	35.8	40.7	50.0	54.5	67.0	64.9	52.7	39.7	33.6	19.0	41.5
1985	16.9	23.0	31.3	46.3	51.1	59.1	70.7	61.4	48.9	41.8	20.9	11.9	40.3
1986	27.4	33.5	42.3	42.6	51.8	63.1	61.6	69.3	50.8	46.9	36.3	26.7	46.0
1987	19.8	32.7	38.8	49.0	54.1	61.1	63.2	65.1					
1988													
1989													
1991					47.8	54.5	68.4	67.0	59.2	45.0	35.5	28.8	
1992	27.7	37.1	41.8	46.6	57.3	62.4	64.7	66.0	55.9	47.4	30.1	19.8	46.4
1993	14.8	18.4	33.4	41.7	54.3	54.4	56.7	60.3	56.3	46.6	27.2	28.5	41.1
1994	31.8	29.0	39.8	44.4	53.4	58.6	69.9	66.2	58.7	43.2	26.1	22.8	45.3
1995	30.1	39.2	37.8	41.5				60.5	56.4	41.4	38.6	28.4	
1996	26.9		39.0		48.4	57.9		64.6	52.8		35.9	29.7	
1997	27.6	31.6	39.0	41.8	54.8	57.3	64.0	64.7	56.8	43.3	36.3	24.6	45.2
1998	31.5	29.7	37.8	42.9	48.1	55.8	68.9	66.8	60.1	42.5	34.9	22.9	45.2
POR= 14 YRS	24.6	29.1	37.3	41.7	51.5	57.6	60.1	64.8	54.6	40.6	32.4	23.9	43.2

HEATING DEGREE DAYS (base 65°F) 1998 BURNS, OR (BNO)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	29	38	182	697	836	1044	1085	782	852	809	386	158	6898
1970-71	12	6	357	645	841	1298	1077	889	973	665	390	248	7401
1971-72	68	31	381	647	900	1267	1287	989	716	730	330	114	7460
1972-73	47	41	394	513	888	1369	1211	857	864	624	313	189	7310
1973-74	19	62	229	570	904	1002	1184	895	866	662	453	84	6930
1974-75	60	60	115	515	849	1127	1231	967	960	801	440	199	7324
1975-76	39	107	123	599	934	1054	1150	998	949	687	339	262	7241
1976-77	25	150	154	512	717	1083	1413	825	928	493	551	51	6902
1977-78	47	86	278	499	903	1020	1075	923	656	655	484	189	6815
1978-79	34	122	310	443	961	1335	1517	941	792	618	350	150	7573
1979-80	33	45	103	434	984	1082	1227	862	918	587	430	321	7026
1980-81	52	130	274	627	868	1110	1074	996	844	607	487	255	7324
1981-82	80	46	287	696	875	1106	1461	1123	914	770	484	224	8066
1982-83	86	76	360	659	1075	1303	1116	882	793	720	424	294	7788
1983-84	154	76	328	544	872	1339	1481	1210	898	719	464	324	8409
1984-85	21	45	363	778	937	1421	1487	1170	1037	555	421	190	8425
1985-86	14	131	475	715	1314	1639	1155	873	697	665	448	96	8222
1986-87	124	19	431	552	853	1181	1396	900	806	473	332	158	7225
1987-88	93	56											
1988-89													
1989-90											529	312	
1990-91											246	136	6418
1991-92	16	25	177	615	879	1114	1149	802	712	547	329	317	8568
1992-93	80	88	270	539	1040	1395	1544	1301	972	693	329	317	8568
1993-94	252	166	262	564	1126	1123	1019	1002	776	611	353	211	7465
1994-95	33	31	184	667	1161	1302	1071	718	839	703			
1995-96		163	263	727	788	1127	1174		800		507	214	
1996-97		96	361		868	1090	1155	926	799	688	313	225	
1997-98	87	56	245	662	853	1246	1031	982	832	657	516	269	7436
1998-	3	40	182	692	896	1297							

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COOLING DEGREE DAYS (base 65°F) 1998 BURNS, OR (BNO)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	0	0	105	171	151	0	0	0	0	427
1971	0	0	0	0	0	8	187	219	0	0	0	0	414
1972	0	0	0	0	14	38	124	141	16	0	0	0	333
1973	0	0	0	0	17	63	206	106	15	0	0	0	407
1974	0	0	0	0	2	114	145	127	18	0	0	0	406
1975	0	0	0	0	0	11	230	71	35	0	0	0	347
1976	0	0	0	0	1	15	150	37	24	0	0	0	227
1977	0	0	0	0	3	87	120	214	27	0	0	0	451
1978	0	0	0	0	0	12	142	118	5	0	0	0	277
1979	0	0	0	0	3	48	172	111	27	6	0	0	367
1980	0	0	0	0	0	2	81	11	0	0	0	0	94
1981	0	0	0	0	0	11	61	102	13	0	0	0	187
1982	0	0	0	0	0	13	88	62	3	0	0	0	166
1983	0	0	0	0	16	0	41	71	0	0	0	0	128
1984	0	0	0	0	3	14	89	48	4	0	0	0	158
1985	0	0	0	0	0	18	199	27	0	0	0	0	244
1986	0	0	0	0	42	48	25	158	12	0	0	0	285
1987	0	0	0	0	2	45	44	70					
1988													
1989													
1991					0	1	129	95	9	0	0	0	
1992	0	0	0	0	13	66	77	128	4	0	0	0	288
1993	0	0	0	0	4	4	2	28	10	0	0	0	48
1994	0	0	0	0	0	24	194	74	0	0	0	0	292
1995	0	0	0	0	0	0	0	29	10	0	0	0	
1996	0	0	0	0	0	9		88	2	0	0	0	
1997	0	0	0	0	3	4	64	52	6	0	0	0	129
1998	0	0	0	0	0	0	131	103	42	0	0	0	276

SNOWFALL (inches) 1998 BURNS, OR (BNO)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0.0	0.0	0.0	1.1	0.9	10.3	14.6	0.1	3.3	0.2	2.3	0.0	32.8
1970-71	0.0	0.0	0.0	4.9	6.1	22.1	5.3	4.4	7.2	1.6	T	0.0	51.6
1971-72	0.0	0.0	0.2	1.3	7.2	22.0	11.7	8.9	6.1	0.2	0.0	0.0	57.6
1972-73	0.0	0.0	T	0.3	1.2	10.2	10.1	4.0	0.8	0.7	T	0.4	27.7
1973-74	0.0	0.0	0.0	T	11.9	11.7	4.5	6.8	8.6	2.0	0.7	0.0	46.2
1974-75	0.0	0.0	0.0	0.0	0.1	9.9	15.9	13.0	13.0	7.1	T	0.0	59.0
1975-76	0.0	0.0	0.0	4.4	5.2	9.9	11.8	10.5	1.0	1.0	0.0	0.0	43.8
1976-77	0.0	0.0	0.0	0.0	T	T	7.0	4.1	3.3	0.4	1.4	0.0	16.2
1977-78	0.0	0.0	0.0	T	14.6	12.7	13.3	9.4	3.6	5.8	T	0.0	59.4
1978-79	0.0	0.0	T	0.0	1.2	6.0	22.0	16.8	2.5	1.2	0.9	0.0	50.6
1979-80	0.0	0.0	0.0	T	11.0	13.7	5.5	7.0	4.9	1.9	T	0.0	44.0
1980-81	0.0	0.0	0.0	0.3	1.0	5.2	4.8	1.9	1.6	T	T	0.6	15.4
1981-82	0.0	0.0	0.0	T	4.5	24.4	13.8	2.3	3.4	3.2	0.2	T	51.8
1982-83	0.0	0.0	0.0	T	2.1	16.0	7.1	7.2	8.3	0.3	1.4	0.0	42.4
1983-84	0.0	0.0	0.0	0.0	17.4	26.8	4.2	9.4	2.7	1.5	T	0.0	62.0
1984-85	0.0	0.0	0.0	3.6	9.2	7.2	1.1	5.8	13.5	1.6	0.0	0.0	42.0
1985-86	0.0	0.0	0.0	1.7	13.8	7.4	5.3	27.6	5.2	T	1.3	0.0	62.3
1986-87	0.0	0.0	T	0.0	1.4	4.2	12.8	6.9	3.6	0.0	0.0	0.0	28.9
1987-88	0.0	0.0											
1988-89													
1989-90													
1990-91											0.0	0.0	
1991-92	0.0	0.0	0.0		0.6	0.4	1.9	3.2	T	0.0	0.0	0.0	
1992-93	0.0	0.0	0.0	0.0	7.7	19.9	23.7	15.3	3.7	0.6	0.0	0.0	70.9
1993-94	0.0	0.0	0.0	0.0	0.7	5.5	1.4	6.5	T	T	0.0	0.0	14.1
1994-95	0.0	0.0	0.0	0.0	17.0	13.4	10.1	1.6	1.2	T			
1995-96													
1996-97													
1997-98													
1998-													
POR= 11 YRS	0.0	0.0	T	0.6	7.4	12.5	7.2	7.3	3.6	0.6	0.3	0.1	39.6

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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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1998  
BURNS,  
OREGON (BNO)

Burns is located near the center of the high plateau area that comprises much of central Oregon. The crest of the Cascade Range is some 135 miles to the west, the Steens Mountains about 45 miles to the southeast. A prong of the Blue Mountains to the north approaches within 40 miles of Burns with lower hills reaching the city limits. Approximately 30 miles east, a number of low hills separate this area from the Malheur Valley. From the Blue Mountains in the north to the southern border of Oregon and between the foothills of the Cascades in the west to the chain of lesser mountains to the east is a series of shallow valleys, each with its own small creek or creeks. These are separated by slightly higher, gently rolling bench lands which in turn are cut here and there by rough, rocky canyons, and with numerous buttes or small mesas interspersed through the area, rising from 500 to 1,500 feet above the general terrain. Well distributed over much of central Oregon south of Burns are a number of large, relatively shallow landlocked lakes and marshes.

Burns, in common with most of the Great Basin area of the Western Plateau, has a semi-arid climate. Maritime air moving in from the Pacific Ocean is greatly modified by its passage over the Coastal and Cascade Mountain Ranges that lie between Burns and the coast. In its ascent over them much of its precipitable moisture has been given up and annual precipitation totals here are small and humidities generally low. This makes for an abundance of sunshine and a rather wide range between daily maximum and minimum temperatures. Nighttime frosts may occur any month in the year. An occasional continental air mass moving from northern Canada southward through this area,

instead of in its usual trajectory along the east slope of the Rocky Mountains, will produce even lower humidities along with fairly strong winds and more extreme temperatures. The average total precipitation for the entire high plateau region of Oregon is between 9 and 12 inches. About one-third of this falls in the form of snow. There are several thunderstorms each year. Occasionally these are accompanied by hail, but seldom do either cause appreciable damage. No tornadoes have ever been reported in the immediate area of Burns, but funnel clouds have been sighted.

Approximately 90 percent of the agricultural income in Harney County, of which Burns is the county seat, is derived from beef cattle and sheep, with far the greater portion coming from cattle. The very low nightly temperatures during much of the year necessitate the raising of only very hardy, frost-resistant crops with a short growing season. The low annual precipitation total limits cultivation to valley bottom lands. Through the use of spring runoff water and some reservoir storage for summer irrigation, about 120,000 acres of native grasslands have been developed into native grass hay meadows and about 40,000 additional acres are in cultivated crops, principally the small hardy grains, with some 6,000 acres of alfalfa. The rest of the more than 6,000,000 acres in Harney County is in range with about 400,000 acres of the rangeland covered by pine forests along the northern border.

# STATION LOCATION

BURNS, OREGON

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											* Type M = AMOS T = AUTOB S = ASOS W = AWOS	REMARKS	
						SEA LEVEL	GROUND												A U C I O M P A T H O G R A P H Y
							G R O U N D	W I N D	E M E R S O N	E M E R S O N	P E R M O D E R N	S W I T C H	T H E R M O C O U P L E R	R A I N G A G E	W E I G H T I N G R A I N	8 I N C H R A I N G A G E			
<u>COOPERATIVE</u>																			
Broadway Street	10/1903	04/1916	NA	43° 35'	119°03'			12									Intermittent record prior to 1903.		
Near Court House	03/1917	04/1921	1000 ft. W	43° 35'	119°03'														
<u>CITY</u>																			
Dalton Residence Whorton Street between E and F Streets	12/13/30	01/30/38	1200 ft. W	43° 35'	119°03'	4206	28	5	5						3				
Dalton Residence Corner Alvord and Adams 1 block NW of PO	01/30/38	09/01/42	0.25 mi. SE	43° 35'	119°03'	4154	43	5	5						3				
Voegtly Building Broadway and Adams 1 block NE of PO	09/01/42	06/28/50	200 ft. ENE	43° 35'	119°03'	4143	45	35	35					34	34				
Federal Building	06/28/50	02/15/80	350 ft. SW	43° 35'	119°03'	4151	62 a68	c5	c5	NA	NA	c5	5 b	NA	NA		a - Effective 05/26/52. b - Removed in 1966 c - Minor move 10/24/66 Sta. moved to Airport 02/15/80.		
<u>AIRPORT</u>																			
Burns Airport	02/15/80	Present	5 mi. E	43° 35'	118°57'	4141	M	5 d5	5 d5	NA	NA	5 d5	5 d5	M	M		M - RAMOS commissioned 02/15/80. d - Minor move 06/03/83. S ASOS Commissioned 07/01/95		

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