

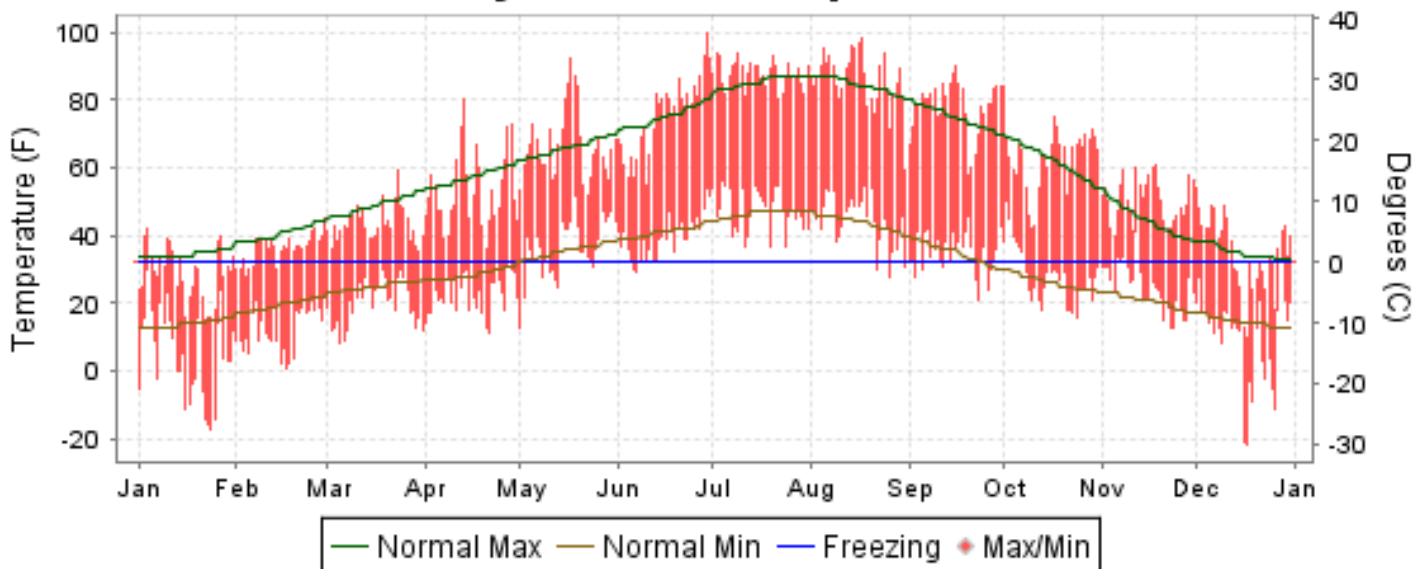


# 2008 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

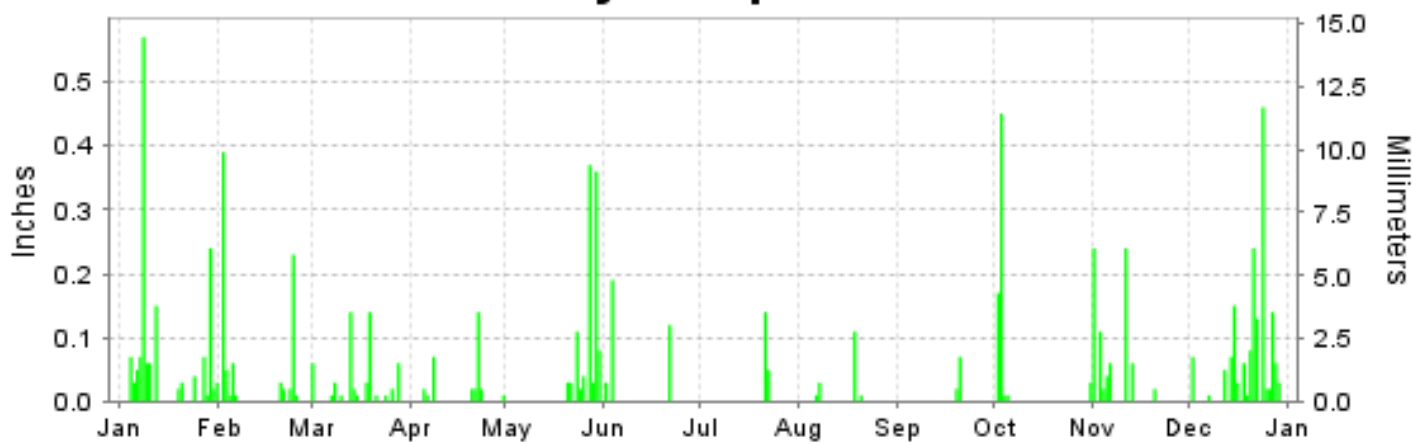
ISSN 0198-411X

## BURNS, OREGON (KBNO)

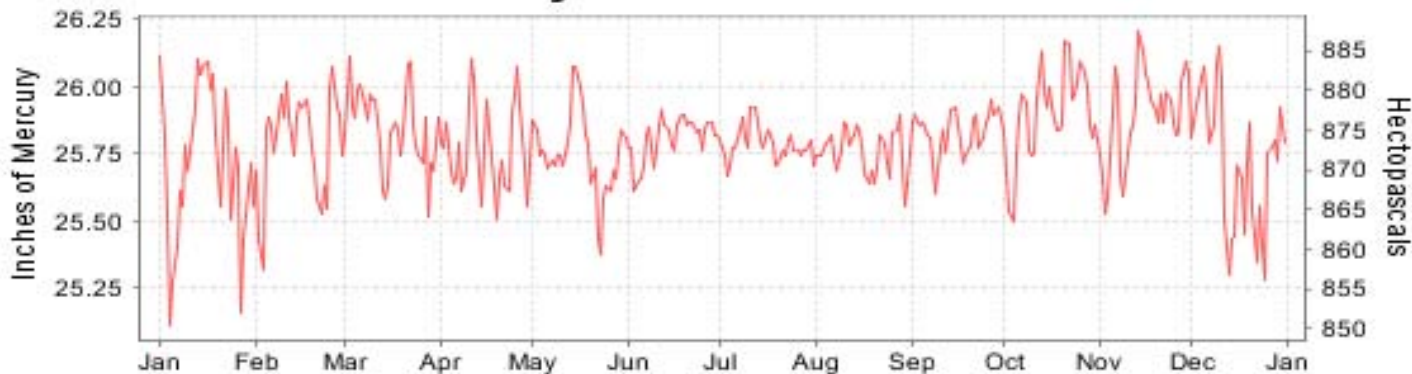
### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

NATIONAL  
OCEANIC AND  
ATMOSPHERIC ADMINISTRATION

NATIONAL  
ENVIRONMENTAL SATELLITE, DATA  
AND INFORMATION SERVICE

NATIONAL  
CLIMATIC DATA CENTER  
ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NATIONAL CLIMATIC DATA CENTER

# METEOROLOGICAL DATA FOR 2008

## BURNS (KBNO)

LATITUDE: 43° 35'N      LONGITUDE: -118° 57'W      ELEVATION (FT): GRND: 4140    BARO: 4148      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	28.8	36.2	43.3	53.4	66.5	75.5	87.8	86.0	78.0	63.1	50.5	35.2	58.7	
	HIGHEST DAILY MAXIMUM	42	45	59	80	92	100	94	98	90	84	61	54	100	
	DATE OF OCCURRENCE	04	29	23	13	17	29	09+	17	16	01	18	01	JUN 29	
	MEAN DAILY MINIMUM	4.8	12.4	20.1	22.3	36.5	39.5	47.5	44.5	35.0	28.0	24.7	9.8	27.1	
	LOWEST DAILY MINIMUM	-17	1	8	11	13	29	37	28	21	16	13	-22	-22	
	DATE OF OCCURRENCE	24	17	05	21	01	07	24+	26	23	24	24+	17	DEC 17	
	AVERAGE DRY BULB	16.8	24.3	31.7	37.9	51.5	57.5	67.7	65.3	56.5	45.6	37.6	22.5	42.9	
	MEAN WET BULB	16.8	24.2	28.4	31.7	43.9	46.8	52.0	51.1	43.4	36.8	33.7	21.4	35.9	
	MEAN DEW POINT	13.6	21.3	22.9	21.3	35.3	35.0	36.1	37.0	28.0	26.4	30.2	18.1	27.1	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	1	3	13	12	1	0	0	0	0	30
	MAXIMUM <= 32°	20	6	0	0	0	0	0	0	0	0	0	13	39	
	MINIMUM <= 32°	31	29	31	30	9	6	0	3	11	24	26	31	231	
MINIMUM <= 0°	13	0	0	0	0	0	0	0	0	0	0	7	20		
H/C	HEATING DEGREE DAYS	1488	1172	1025	807	420	241	15	78	247	595	812	1310	8210	
	COOLING DEGREE DAYS	0	0	0	0	8	25	105	92	0	0	0	0	230	
RH	MEAN (PERCENT)	82	84	72	57	58	47	35	39	39	55	80	81	61	
	HOUR 04 LST	84	89	85	81	81	76	62	68	64	75	91	87	79	
	HOUR 10 LST	79	79	61	40	43	33	24	26	26	38	68	75	49	
	HOUR 16 LST	80	79	57	34	39	26	16	18	18	37	73	78	46	
	HOUR 22 LST	84	87	80	68	72	59	41	49	47	64	89	85	69	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	12	5	2	3	0	1	0	0	0	1	5	4	33	
	THUNDERSTORMS	0	0	0	0	0	0	0	0	0	0	0	0	0	
CLOUDNESS	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.)	25.72	25.80	25.84	25.77	25.76	25.81	25.79	25.76	25.83	25.89	25.89	25.73	25.80	
	MEAN SEA-LEVEL PRESS. (IN.)	30.08	30.15	30.17	30.06	29.97	30.01	29.94	29.91	30.04	30.17	30.20	30.08	30.07	
WINDS	RESULTANT SPEED (MPH)	1.8	2.0	3.7	4.9	4.5	5.0	3.5	3.6	2.3	2.5	1.6	2.0	3.0	
	RES. DIR. (TENS OF DEGS.)	20	26	25	26	28	26	26	26	28	28	24	23	26	
	MEAN SPEED (MPH)	6.0	5.3	6.1	7.8	7.6	7.7	6.3	6.9	5.8	6.1	4.5	5.5	6.3	
	PREVAIL.DIR.(TENS OF DEGS.)	26	29	24	27	27	26	26	28	28	27	26	27	26	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	36	35	31	36	40	29	31	33	31	38	39	36	40	
	DIR. (TENS OF DEGS.)	21	26	20	23	30	20	20	25	10	32	26	23	30	
	DATE OF OCCURRENCE	31	07	26	29	22	21	21	25	30	11	20	12	MAY 22	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	43	43	38	46	48	39	39	53	43	48	49	47	53	
DIR. (TENS OF DEGS.)	20	26	25	23	30	24	13	19	10	32	25	23	19		
DATE OF OCCURRENCE	31	07	26	04	22	10	01	07	30	11	20	12	AUG 07		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	1.52	0.83	0.55	0.31	1.07	0.34	0.19	0.16	0.09	0.67	0.79	1.63	8.15	
	GREATEST 24-HOUR (IN.)	0.57	0.44	0.14	0.16	0.38	0.19	0.19	0.11	0.09	0.46	0.24	0.48	0.57	
	DATE OF OCCURRENCE	08	02-03	19+	22-23	28-29	03	21-22	18	19-20	03-04	11	24-25	JAN 08	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	16	10	13	8	9	3	2	4	2	5	8	17	97	
PRECIPITATION 0.10	3	2	2	1	3	2	1	1	0	2	3	5	25		
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	14	20	9	0	0	0	0	0	0	0	0	18	20	
	MAXIMUM SNOW DEPTH (IN.)	31+	03	01	0	0	0	0	0	0	0	0	28+	FEB 03	
DATE OF OCCURRENCE															
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0		

# NORMALS, MEANS, AND EXTREMES BURNS (KBNO)

LATITUDE:  
43° 35'N

LONGITUDE:  
-118° 57'W

ELEVATION (FT):  
GRND: 4140 BARO: 4148

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	34.7	40.5	49.0	57.4	66.1	75.1	85.4	84.5	75.0	62.4	44.8	35.1	59.2
	MEAN DAILY MAXIMUM	25	34.2	39.1	49.2	56.9	66.4	74.7	85.7	84.7	74.8	61.8	44.8	34.5	58.9
	HIGHEST DAILY MAXIMUM	24	57	67	74	84	94	100	107	100	97	86	70	57	107
	YEAR OF OCCURRENCE		2003	1995	2004	1987	1986	2008	2002	1996	1998	2001	1999	1993	JUL 2002
	MEAN OF EXTREME MAXS.	39	46.8	51.3	64.4	75.3	85.1	90.6	97.2	96.2	89.9	79.3	61.5	48.1	73.8
	NORMAL DAILY MINIMUM	30	14.0	19.4	24.9	28.6	35.6	41.1	46.4	43.9	35.0	26.4	20.6	14.6	29.2
	MEAN DAILY MINIMUM	25	14.6	18.3	25.6	29.3	36.7	41.2	47.4	44.7	36.0	27.5	21.9	14.7	29.8
	LOWEST DAILY MINIMUM	24	-27	-28	-14	10	13	21	25	22	17	-7	-15	-22	-28
	YEAR OF OCCURRENCE		1982	1985	1993	1997	2008	1996	1986	1999	1999	2002	2006	2008	FEB 1985
	MEAN OF EXTREME MINS.	39	-5.8	1.0	12.4	18.2	22.6	27.8	35.6	32.6	22.8	12.6	4.9	-4.3	15.0
	NORMAL DRY BULB	30	24.4	30.0	37.0	43.0	50.9	58.1	65.9	64.2	55.0	44.4	32.7	24.9	44.2
	MEAN DRY BULB	39	24.9	30.0	37.3	42.7	51.8	59.1	67.5	65.5	56.2	45.4	34.1	25.6	45.0
	MEAN WET BULB	21	23.5	26.9	33.1	37.0	43.5	48.1	52.1	50.0	43.6	36.8	30.3	23.9	37.4
	MEAN DEW POINT	21	21.2	23.6	27.6	30.1	35.7	39.5	41.9	38.9	33.9	29.1	26.3	21.4	30.8
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.0	0.2	1.8	9.2	8.3	1.3	0.0	0.0	0.0	20.8
	MAXIMUM <= 32	30	10.1	5.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.0	10.8	29.9
MINIMUM <= 32	30	29.9	26.2	27.1	19.8	8.6	2.7	0.6	1.0	7.8	23.3	27.0	30.1	204.1	
MINIMUM <= 0	30	3.9	1.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	3.7	10.6	
H/C	NORMAL HEATING DEG. DAYS	30	1259	982	869	661	439	226	89	96	313	638	968	1245	7785
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	0	19	117	70	12	0	0	0	218
RH	NORMAL (PERCENT)	30													
	HOUR 04 LST	30													
	HOUR 10 LST	30		77	62	50	46	44	35	33	40	51	73		
	HOUR 16 LST	30		65	48	38	35				27				
	HOUR 22 LST	30													
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	21	6.1	2.7	0.7	0.6	0.3	0.2	0.1	0.1	0.2	1.0	2.5	4.8	19.3
	THUNDERSTORMS	21	0.0	0.0	0.1	0.3	0.6	0.9	0.5	0.8	0.1	0.0	0.0	0.0	3.3
CLOUDNESS	MEAN: SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH: CLEAR														
	PARTLY CLOUDY CLOUDY														
PR	MEAN STATION PRESSURE(IN)	21	26.00	25.78	25.77	25.76	25.76	25.78	25.81	25.81	25.81	25.83	25.83	25.84	25.82
	MEAN SEA-LEVEL PRES. (IN)	21	30.21	30.11	30.06	30.01	29.97	29.96	29.97	29.98	30.02	30.10	30.14	30.19	30.06
WINDS	MEAN SPEED (MPH)	21	4.9	5.8	6.9	8.1	7.7	7.1	6.5	6.3	6.1	6.0	5.6	5.1	6.3
	PREVAIL.DIR(TENS OF DEGS)	15	08	08	31	31	31	31	30	30	31	31	31	08	31
	MAXIMUM 2-MINUTE: SPEED (MPH)	13	44	40	39	39	41	35	44	37	41	41	39	40	44
	DIR. (TENS OF DEGS)		26	24	34	27	20	24	18	22	32	27	26	25	26
	YEAR OF OCCURRENCE		2004	2000	1998	2006	2000	2006	2002	2007	2003	2004	2008	2000	JAN 2004
	MAXIMUM 3-SECOND SPEED (MPH)	13	51	47	47	46	48	45	52	59	52	49	51	48	59
	DIR. (TENS OF DEGS)		26	24	35	23	30	22	13	11	31	26	19	24	11
YEAR OF OCCURRENCE		2004	2000	1998	2008	2008	1997	2006	2006	2003	2004	2006	2000	AUG 2006	
PRECIPITATION	NORMAL (IN)	30	1.18	1.11	1.24	0.85	1.05	0.66	0.40	0.45	0.50	0.72	1.11	1.30	10.57
	MAXIMUM MONTHLY (IN)	24	2.84	3.50	3.66	2.21	3.26	3.05	1.22	1.16	2.13	1.72	2.73	4.45	4.45
	YEAR OF OCCURRENCE		1995	1986	1983	1993	2005	1992	1987	1984	1986	2000	1984	2005	DEC 2005
	MINIMUM MONTHLY (IN)	24	0.09	0.12	0.23	0.12	0.10	0.11	T	0.00	0.00	0.03	0.23	0.28	0.00
	YEAR OF OCCURRENCE		1985	1997	1997	1986	1992	1985	1994	1994	1999	1998	1993	1991	SEP 1999
	MAXIMUM IN 24 HOURS (IN)	24	0.68	1.04	0.99	0.55	1.03	1.15	0.89	1.01	0.92	0.87	0.69	5.31	5.31
	YEAR OF OCCURRENCE		1997	1986	1996	1993	2006	1992	1985	1984	2000	1982	1981	1995	DEC 1995
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	10.3	10.2	11.6	8.8	9.4	6.2	2.9	3.1	3.8	5.9	11.5	10.1	93.8
PRECIPITATION >= 1.00	30	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	
SNOWFALL	NORMAL (IN)	30	7.3	6.7	4.3	0.7	0.2	0.*	0.0	0.0	0.*	0.7	5.9	9.6	35.4
	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)	21	23	26	26	4	0	0	0	0	0	5	8	18	26
	YEAR OF OCCURRENCE		1993	1993	1993	1999						1991	1985	2008	MAR 1993
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	2.5	2.2	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.0	3.4	11.5	

**PRECIPITATION (inches) 2008 BURNS (KBNO)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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
1999	1.65	1.94	0.72	0.32	0.42	0.20	0.08	0.56	0.00	0.37	0.44	0.57	7.27
2000	1.63	1.89	0.77	0.80	0.28	0.18	0.96	T	1.16	1.72	0.63	0.47	10.49
2001	0.33	0.39	0.64	0.53	0.63	0.71	1.07	T	0.95	0.61	1.42	1.05	8.33
2002	0.88	0.39	0.32	1.00	0.46	0.40	0.07	0.07	0.05	0.05	0.27	1.97	5.93
2003	1.24	0.14	1.45	1.55	1.16	0.11	0.50	0.26	0.60	0.12	1.06	1.56	9.75
2004	1.46	1.26	0.37	0.52	1.22	0.47	0.16	0.91	0.27	1.67	0.38	1.80	10.49
2005	0.60	0.39	1.24	1.69	3.26	0.73	0.65	T	0.17	1.04	2.16	4.45	16.38
2006	2.13	0.35	1.05	1.32	2.29	0.72	0.66	0.11	0.33	0.77	1.31	1.38	12.42
2007	0.14	1.58	0.41	1.27	0.30	0.80	0.01	0.57	0.25	0.91	1.18	1.32	8.74
2008	1.52	0.83	0.55	0.31	1.07	0.34	0.19	0.16	0.09	0.67	0.79	1.63	8.15
POR= 39 YRS	1.52	1.10	1.14	0.81	1.03	0.62	0.40	0.39	0.46	0.75	1.30	1.63	11.15

WBAN : 94185

**AVERAGE TEMPERATURE (°F) 2008 BURNS (KBNO)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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
1999	28.0	25.9	34.0	41.0	48.2	57.2	62.5	63.5	54.2	45.2	39.3	26.4	43.8
2000	27.2	35.0	36.9	47.4	51.5	59.8	65.8	65.3	54.3	44.5	28.7	24.2	45.1
2001	19.7	24.0	38.2	39.9	53.5	57.0	65.2	68.4	58.4	45.4	34.4	22.5	43.9
2002	22.9	23.8	33.3	43.6	49.9	60.5	70.2	61.3	55.6	41.0	34.3	29.7	43.8
2003	33.2	30.8	40.1	40.1	51.6	60.7	71.5	66.3	58.5	48.9	31.1	30.2	46.9
2004	22.6	23.7	40.3	46.5	50.4	60.3	68.3	66.2	54.3	45.7	35.0	30.4	45.3
2005	23.3	29.9	40.3	43.5	52.9	55.4	68.3	66.9	54.5	45.9	34.1	21.8	44.7
2006	26.5	25.8	34.8	44.6	54.5	62.5	72.6	64.6	56.9	44.1	35.7	25.4	45.7
2007	24.3	32.8	41.0	43.1	52.9	59.7	72.2	65.3	54.3	42.5	34.4	20.4	45.2
2008	16.8	24.3	31.7	37.9	51.5	57.5	67.7	65.3	56.5	45.6	37.6	22.5	42.9
POR= 39 YRS	24.9	30.0	37.3	42.7	51.8	59.1	67.5	65.5	56.2	45.4	34.1	25.6	45.0

**HEATING DEGREE DAYS (base 65°F) 2008 BURNS (KBNO)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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													
1990-91											529	312	
1991-92	16	25	177	615	879	1114	1149	802	712	547	246	136	6418
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
1998-99	3	40	182	692	896	1297	1140	1088	953	714	512	240	7757
1999-00	125	102	315	608	763	1190	1163	865	864	519	411	165	7090
2000-01	59	65	323	628	1082	1254	1396	1140	824	747	360	257	8135
2001-02	76	15	194	598	912	1310	1296	1149	974	636	468	178	7806
2002-03	9	128	278	736	913	1084	979	952	765	741	421	147	7153
2003-04	9	28	213	491	1010	1072	1310	1193	760	548	446	167	7247
2004-05	17	70	315	590	894	1066	1286	978	759	640	367	287	7269
2005-06	26	44	312	582	917	1331	1187	1093	930	604	332	111	7469
2006-07	5	73	257	642	873	1220	1254	896	735	652	367	170	7144
2007-08	8	46	320	691	913	1377	1488	1172	1025	807	420	241	8508
2008-	15	78	247	595	812	1310							

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**COOLING DEGREE DAYS (base 65°F) 2008 BURNS (KBNO)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
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				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
1999	0	0	0	0	0	14	51	64	0	0	0	0	129
2000	0	0	0	0	0	17	91	83	9	0	0	0	200
2001	0	0	0	0	10	23	90	127	2	0	0	0	252
2002	0	0	0	0	5	49	175	23	3	0	0	0	255
2003	0	0	0	0	11	24	217	74	24	0	0	0	350
2004	0	0	0	0	0	34	128	116	0	0	0	0	278
2005	0	0	0	0	0	4	135	112	6	0	0	0	257
2006	0	0	0	0	12	44	247	67	21	0	0	0	391
2007	0	0	0	0	2	21	237	61	6	0	0	0	327
2008	0	0	0	0	8	25	105	92	0	0	0	0	230

**SNOWFALL (inches) 2008 BURNS (KBNO)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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													
1998-99													
1999-00													
2000-01													
2001-02													
2002-03													
2003-04													
2004-05													
2005-2006-													
POR= 26 YRS	0.0	0.0	T	0.7	4.2	7.9	6.6	5.2	3.0	0.8	0.2	T	28.6

WBAN : 94185

**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 (1971 - 2000). 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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p> <p><b>NOTE:</b> The "Period of Record:(POR) for all "averages" is based on the "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p>
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# 2008 BURNS OREGON (KBNO)

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**

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	Latitude		Longitude		ELEVATION ABOVE								REMARKS	
				NORTH	WEST	GROUND TEMPERATURE SITE	SEA LEVEL	GROUND						HYGROTHERMOMETER	AUTOMATIC OBSERVING EQUIPMENT *		
								WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET RAIN GAUGE	WEIGHING RAIN GAUGE				8 INCH RAIN GAUGE
*NOTE:																	
AIRPORT																	
Burns Airport	02/15/80	07/01/95	5 mi. E	43° 35'	118° 57'	4141	M	5 d5	5 d5				5 d5	5 d5	M	M	M. RAMOS commissioned 02/15/80. d. Minor move 06/03/83.
Municipal Airport	07/01/95	Present	NA	43° 36'	118° 57'	e4145										S	ASOS Commissioned 07/01/95 e. Ground Elevation

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\* NOTES: For earlier station history see previous editions.