

2002

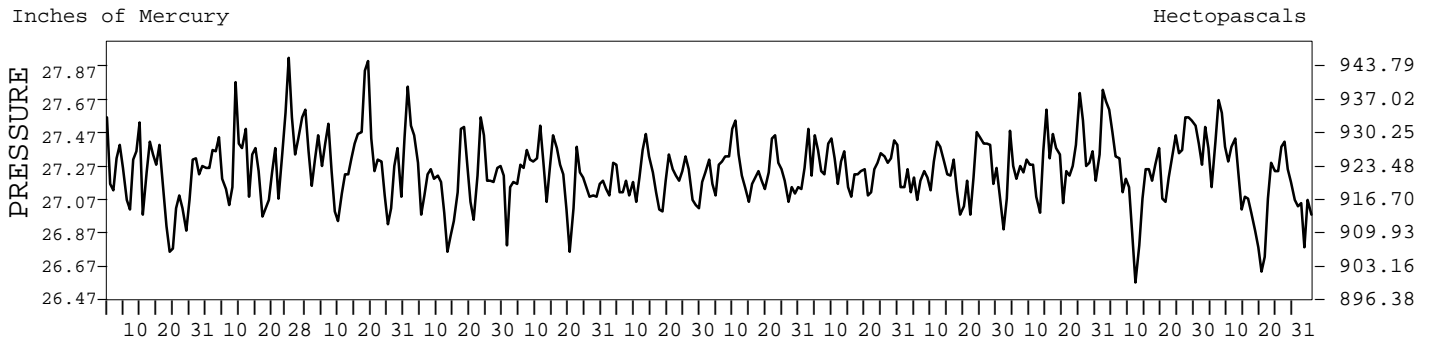
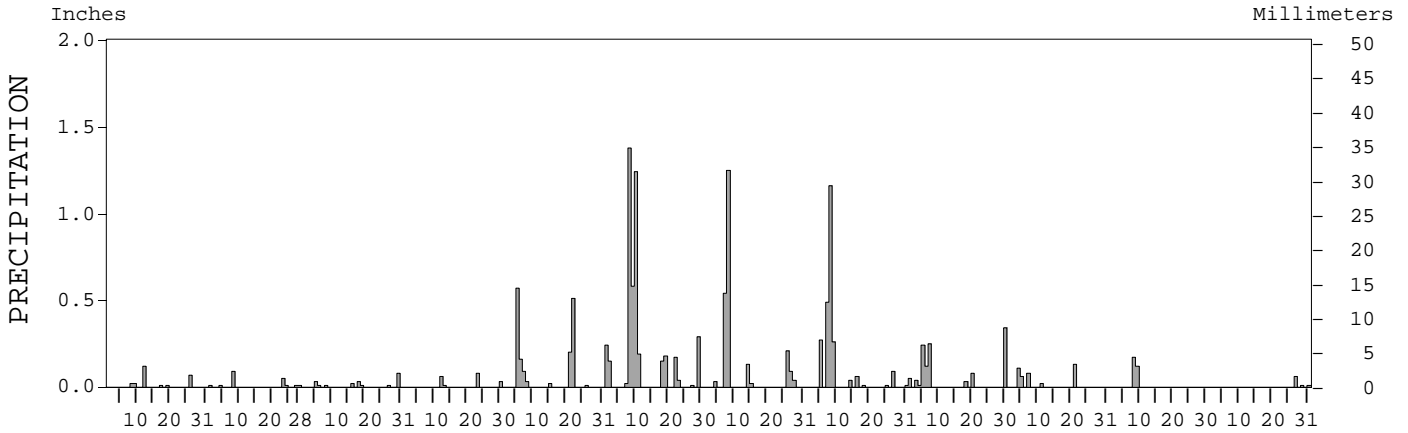
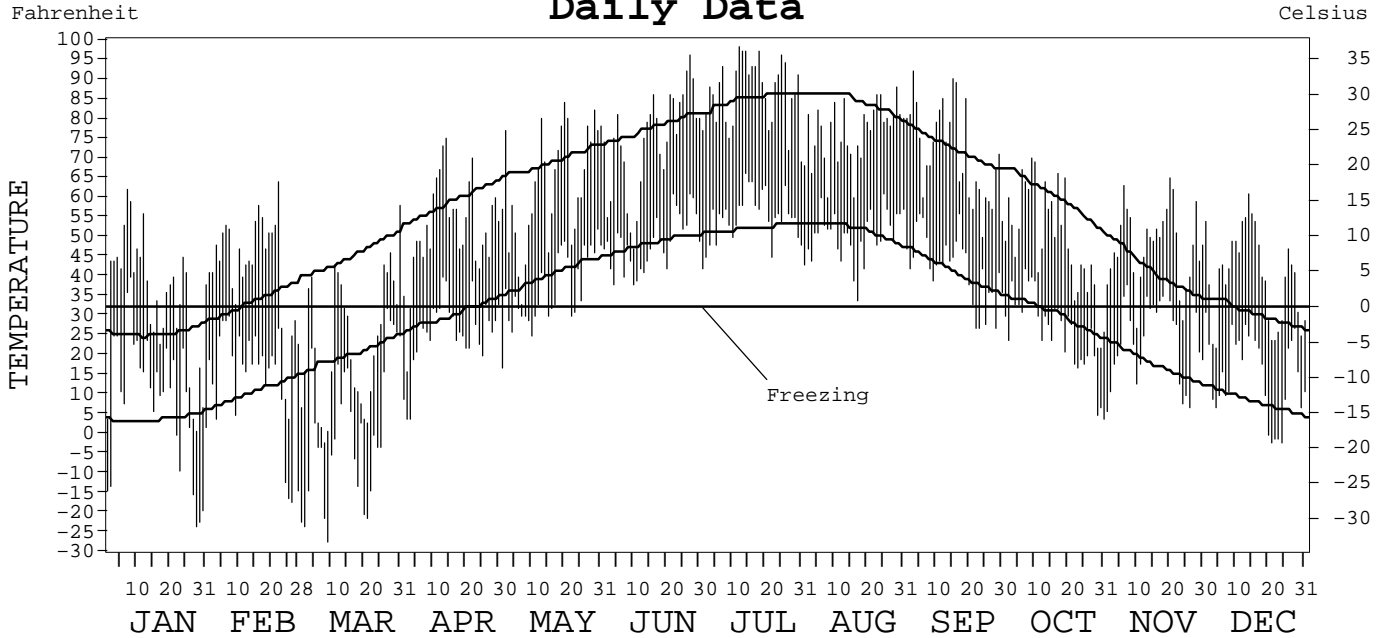
LOCAL CLIMATOLOGICAL DATA  
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-3008

HAVRE,  
MONTANA (HVR)

Daily Data



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.

*Thomas R. Karl*

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE	NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA	DIRECTOR NATIONAL CLIMATIC DATA CENTER
---	---	---	---

# METEOROLOGICAL DATA FOR 2002

## HAVRE, MT (HVR)

LATITUDE: 48° 33' 34" N      LONGITUDE: 109° 46' 48" W      ELEVATION (FT): GRND: 2581      BARO: 2584      TIME ZONE: MOUNTAIN (UTC + 7)      WBAN: 94012

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	34.1	41.7	23.5	52.2	63.0	74.2	86.6	76.6	71.2	49.2	47.8	40.0	55.0	
	HIGHEST DAILY MAXIMUM	62	64	58	75	84	96	98	88	92	70	65	61	98	
	DATE OF OCCURRENCE	07	22	31	14	20	27	12	29	03	09	20	14	JUL 12	
	MEAN DAILY MINIMUM	9.0	14.2	1.6	25.9	36.8	48.6	55.0	50.4	42.2	26.2	24.5	15.5	29.2	
	LOWEST DAILY MINIMUM	-23	-17	-27	4	17	38	42	34	27	4	6	-2	-27	
	DATE OF OCCURRENCE	28	26	09	03+	01	10+	01	17	28+	31	01	24+	MAR 09	
	AVERAGE DRY BULB	21.6	28.0	12.6	39.1	49.9	61.4	70.8	63.5	56.7	37.7	36.2	27.8	42.1	
	MEAN WET BULB		23.9	11.4			54.0	59.9	55.3			31.2	23.6		
	MEAN DEW POINT		16.2	7.5			47.3	51.7	49.4			24.4	17.7		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	3	13	0	2	0	0	0	0	18
	MAXIMUM ≤ 32°	11	6	20	2	0	0	0	0	0	3	2	10	54	
	MINIMUM ≤ 32°	29	28	31	25	13	0	0	0	4	24	21	31	206	
MINIMUM ≤ 0°	8	4	17	0	0	0	0	0	0	0	0	5	34		
H/C	HEATING DEGREE DAYS	1340	1032	1617	771	464	165	20	90	259	840	859	1146	8603	
	COOLING DEGREE DAYS	0	0	0	0	2	64	209	51	17	0	0	0	343	
RH	MEAN (PERCENT)	72	65	79	58	56	64	54	64	61	70	66	71	65	
	HOUR 05 LST	76	73	85	77	76	84	79	84	83	84	75	78	80	
	HOUR 11 LST	70	60	77	47	49	52	42	54	47	64	58	67	57	
	HOUR 17 LST	67	52	73	40	40	45	34	43	41	54	61	64	51	
	HOUR 23 LST	76	72	83	63	65	73	63	74	71	79	72	77	72	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	1	1	7	0	1	0	0	0	0	0	1	1	12	
	THUNDERSTORMS	0	0	0	0	4	7	13	12	4	0	0	0	40	
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.)	27.21	27.34	27.34	27.25	27.22	27.20	27.26	27.30	27.23	27.37	27.28	27.17	27.26	
	MEAN SEA-LEVEL PRESS. (IN.)		30.15	30.20			29.89	29.92	29.99			30.05	29.96		
WINDS	RESULTANT SPEED (MPH)		8.4	0.8			2.7	1.7	2.9			9.9	7.3		
	RES. DIR. (TENS OF DEGS.)		25	31			27	27	28			23	22		
	MEAN SPEED (MPH)		12.3	9.7	11.9	13.0	10.7	9.6	9.1	8.7	7.6	11.8	10.5		
	PREVAIL. DIR. (TENS OF DEGS.)	23	22	08	36	08	23	09	08	36	36	22	22	22	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	43	45	35	49	43	41	51	35	44	32	37	36	51	
	DIR. (TENS OF DEGS.)	29	30	22	28	28	26	21	34	31	33	30	21	21	
	DATE OF OCCURRENCE	12	11	11	13	21	18	14+	16	01	05	17	28+	JUL 14+	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	49	52	40	58	51	49	60	41	53	38	46	41	60	
DIR. (TENS OF DEGS.)	28	30	21	27	26	26	21	32	32	33	29	21	21		
DATE OF OCCURRENCE	12	11	11	13	21	18	14	02	01	05	17	28	JUL 14		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.25	0.19	0.20	0.18	1.59	4.64	2.31	2.40	1.16	0.40	0.29	0.08	13.69	
	GREATEST 24-HOUR (IN.)	0.12	0.09	0.08	0.08	0.73	1.66	1.79	1.40	0.37	0.13	0.24	0.06	1.79	
	DATE OF OCCURRENCE	12	08	30	23	05-06	08-09	07-08	08-09	06-07	21	08-09	27	JUL 07-08	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	6	7	8	4	8	13	8	10	9	5	2	3	83	
PRECIPITATION ≥ 0.10	1	0	0	0	4	10	4	4	4	2	2	0	31		
PRECIPITATION ≥ 1.00	0	0	0	0	0	2	1	1	0	0	0	0	4		
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

## HAVRE, MT (HVR)

LATITUDE: 48° 33' 34" N      LONGITUDE: 109° 46' 48" W      ELEVATION (FT): GRND: 2581      BARO: 2584      TIME ZONE: MOUNTAIN (UTC + 7)      WBAN: 94012

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	25.5	33.4	44.9	58.5	68.8	77.4	84.6	83.9	71.9	59.4	40.8	30.1	56.6	
	MEAN DAILY MAXIMUM	3	33.2	34.0	42.7	57.1	68.6	75.7	87.3	85.8	72.5	56.7	46.5	36.1	58.0	
	HIGHEST DAILY MAXIMUM	3	62	64	77	91	96	99	103	109	96	82	78	61	109	
	YEAR OF OCCURRENCE		2002	2002	1999	2001	2001	2001	2001	2001	2001	2001	1999	2002	2002	AUG 2001
	MEAN OF EXTREME MAXS.	3	54.7	55.0	68.3	79.7	88.7	94.0	101.2	99.5	92.8	76.5	68.8	55.5	77.9	
	NORMAL DAILY MINIMUM	30	3.7	10.4	20.0	30.0	40.2	48.0	52.0	51.3	40.7	29.8	17.3	7.8	29.3	
	MEAN DAILY MINIMUM	3	8.5	7.9	18.7	29.6	39.8	48.2	53.5	52.8	41.6	28.4	21.7	11.3	30.2	
	LOWEST DAILY MINIMUM	3	-23	-23	-27	4	17	36	39	34	21	4	-6	-30	-30	
	YEAR OF OCCURRENCE		2002	2001	2002	2002	2002	2000	2000	2002	2000	2002	2000	2000	2000	DEC 2000
	MEAN OF EXTREME MINS.	3	-13.3	-17.7	-8	13.2	24.5	38.5	42.2	38.7	27.0	10.0	3.0	-8.2	13.1	
	NORMAL DRY BULB	30	14.3	21.1	31.1	43.8	54.7	63.7	69.7	68.3	56.5	45.8	29.6	17.4	43.0	
	MEAN DRY BULB	3	20.9	21.0	30.7	43.4	54.2	61.9	70.4	69.4	57.1	42.6	34.2	23.8	44.1	
	MEAN WET BULB	2	18.7	18.5	26.3	37.6	45.2	52.9	57.8	55.4	47.4	37.3	28.1	20.5	37.1	
	MEAN DEW POINT	2	13.8	12.6	19.6	27.7	32.8	44.3	48.0	43.8	37.7	27.8	20.7	14.0	28.6	
	NORMAL NO. DAYS WITH: MAXIMUM ≥ 90° MAXIMUM ≤ 32° MINIMUM ≤ 32° MINIMUM ≤ 0°															
	H/C	NORMAL HEATING DEG. DAYS	30	1547	1201	999	613	324	113	33	49	270	622	1067	1412	8250
NORMAL COOLING DEG. DAYS		30	0	0	0	1	10	59	146	141	19	1	0	0	377	
RH	NORMAL (PERCENT)															
	HOUR 05 LST															
	HOUR 11 LST															
	HOUR 17 LST															
	HOUR 23 LST															
S	PERCENT POSSIBLE SUNSHINE															
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY≤1/4 MI)	3	5.0	2.0	4.8	0.5	0.5	0.0	0.2	0.5	0.0	1.3	1.8	2.5	19.1	
	THUNDERSTORMS	3	0.3	0.0	0.2	1.7	2.3	8.7	12.5	7.5	3.8	0.5	0.0	0.0	37.5	
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)															
	MIDNIGHT-MIDNIGHT (OKTAS)															
	MEAN NO. DAYS WITH: CLEAR															
	PARTLY CLOUDY CLOUDY															
PR	MEAN STATION PRESSURE(IN)	3	27.27	27.32	27.26	27.25	27.21	27.22	27.25	27.27	27.27	27.30	27.29	27.27	27.26	
	MEAN SEA-LEVEL PRES. (IN)	2	30.10	30.14	30.07	29.98	29.89	29.89	29.91	29.93	29.95	30.01	30.07	30.08	30.00	
WINDS	MEAN SPEED (MPH)	2	8.8	9.4	10.3	11.3	12.0	10.8	9.8	9.3	9.6	9.1	10.4	10.8	10.1	
	PREVAIL.DIR(TENS OF DEGS)															
	MAXIMUM 2-MINUTE: SPEED (MPH)	3	43	45	43	49	46	41	51	39	44	60	39	45	60	
	DIR. (TENS OF DEGS)		29	30	28	28	31	26	21	25	31	27	23	29	27	
	YEAR OF OCCURRENCE		2002	2002	2001	2002	2001	2002	2002	1999	2002	1999	1999	2001	OCT 1999	
	MAXIMUM 5-SECOND: SPEED (MPH)	3	49	52	51	58	61	49	62	46	53	69	46	53	69	
	DIR. (TENS OF DEGS)		28	30	28	27	32	26	22	25	32	26	29	30	26	
YEAR OF OCCURRENCE		2002	2002	2001	2002	2001	2002	2001	1999	2002	1999	2002	2001	OCT 1999		
PRECIPITATION	NORMAL (IN)	30	0.47	0.36	0.70	0.87	1.84	1.90	1.51	1.20	1.03	0.62	0.45	0.51	11.46	
	MAXIMUM MONTHLY (IN)	3	0.25	0.19	0.44	1.39	2.06	4.64	2.97	2.40	1.21	0.87	0.29	0.15	4.64	
	YEAR OF OCCURRENCE		2002	2002	2000	1999	2000	2002	2001	2002	1999	1999	2002	2000	JUN 2002	
	MINIMUM MONTHLY (IN)	0													0.00	
	YEAR OF OCCURRENCE														DEC	
	MAXIMUM IN 24 HOURS (IN)	3	0.15	0.09	0.19	0.63	0.96	1.66	1.79	1.40	0.79	0.58	0.24	0.06	1.79	
	YEAR OF OCCURRENCE		2001	2002	2000	1999	2000	2002	2002	2002	1999	1999	2002	2000	JUL 2002	
NORMAL NO. DAYS WITH: PRECIPITATION ≥ 0.01 PRECIPITATION ≥ 1.00																
SNOWFALL	NORMAL (IN)	30	8.8	6.5	8.1	4.8	1.5	0.0	0.0	0.*	0.3	2.4	5.4	7.6	45.4	
	MAXIMUM MONTHLY (IN)											T				
	YEAR OF OCCURRENCE											1999				
	MAXIMUM IN 24 HOURS (IN)											T				
	YEAR OF OCCURRENCE											1999				
	MAXIMUM SNOW DEPTH (IN)															
NORMAL NO. DAYS WITH: SNOWFALL ≥ 1.0	30	2.7	2.4	2.2	1.4	0.3	0.0	0.0	0.0	0.1	0.8	2.0	2.7	14.6		

PRECIPITATION (inches) 2002 HAVRE, MT (HVR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999			0.19	1.39	1.80	3.27	0.39	1.01	1.21	0.87	0.18	0.02	
2000	0.15	0.11	0.44	0.54	2.06	0.59	1.79	0.13	0.93	0.64	0.18	0.15	7.71
2001	0.23	0.09	0.07	0.62	0.61	1.45	2.97	0.18	0.33	0.34	0.04	0.01	6.94
2002	0.25	0.19	0.20	0.18	1.59	4.64	2.31	2.40	1.16	0.40	0.29	0.08	13.69
POR= 4 YRS	0.16	0.11	0.23	0.69	1.52	2.49	1.87	0.94	0.92	0.57	0.18	0.08	9.76

WBAN : 94012

AVERAGE TEMPERATURE (°F) 2002 HAVRE, MT (HVR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999			37.7	42.7	52.5	60.1	65.5	69.8	54.0	45.8	38.2	32.4	
2000	16.1	23.7	36.1	45.0	54.2	60.7	71.2	69.3	56.9	42.8	25.8	13.6	43.0
2001	24.9	11.4	36.7	46.7	60.2	65.5	74.2	74.6	60.7	43.9	36.4	21.2	46.4
2002	21.6	28.0	12.6	39.1	49.9	61.4	70.8	63.5	56.7	37.7	36.2	27.8	42.1
POR= 4 YRS	15.7	15.8	30.8	43.4	54.3	61.9	70.4	69.4	57.1	42.6	34.2	23.8	43.3

HEATING DEGREE DAYS (base 65°F) 2002 HAVRE, MT (HVR)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1998-99									841	660	389	153	
1999-00	85	17	333	586	799	1002	1508	1192	889	593	330	147	7481
2000-01	9	38	254	683	1170	1585	1236	1496	870	545	187	72	8145
2001-02	4	2	146	646	848	1352	1340	1032	1617	771	464	165	8387
2002-	20	90	259	840	859	1146							

WBAN : 94012

COOLING DEGREE DAYS (base 65°F) 2002 HAVRE, MT (HVR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1999			0	0	9	12	108	175	10	0	0	0	
2000	0	0	0	0	3	25	205	178	15	0	0	0	426
2001	0	0	0	6	46	92	298	308	25	0	0	0	775
2002	0	0	0	0	2	64	209	51	17	0	0	0	343

SNOWFALL (inches) 2002 HAVRE, MT (HVR)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
POR=													

WBAN : 94012

REFERENCE NOTES :

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).

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).

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.

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.

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.

## 2002 HAVRE, MONTANA (HVR)

Havre, Montana, is located in a level valley formed by the Milk River, which courses through the city from west to east. Most of the city lies on the south side of the river. On the north side, hills rise abruptly to about 200 feet above the valley floor. The land mass north to the Canadian border is gently rolling and increases slightly in elevation. During winter months, frequent invasions of cold polar continental air move down across these rolling plains, bringing snow and sub-zero temperatures.

The Bearpaw Mountains extend from 15 to 30 miles south of Havre. Most of the peaks are from 4,000 to 5,000 feet above sea level, and several are above 6,000 feet. The highest is Old Baldy, 6,916 feet above sea level.

Winters are cold in the Havre area, but snow cover is seldom more than a few inches, and usually some ground is bare. Spells of mild weather do occur at least a few times each winter, arriving with sometimes fresh to strong southwest to west foehn winds. During winter months, rain rarely falls. Winter precipitation is almost always in the form of snow. The transition from winter to spring conditions is fairly rapid in the usual year, but cold snaps and snow can occur as late as early May or as early as September.

Summers are characterized by warm weather, seldom exceeding 95 degrees. Daytime warmest readings usually run from the 80s to the mid-90s during most of July and August, but summer relative humidities are seldom as high as 50 percent during afternoon hours. Summertime night temperatures are rarely oppressively warm. Most spring and summer precipitation falls as showers, but occasionally steady rains lasting several hours are observed in May and June, and again in September. Fall seasons are characterized by much clear weather, although cold snaps of a day or two, with some snow, can occur as early as mid-September.

# STATION LOCATION

HAVRE, MONTANA

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE										AUTOMATIC OBSERVING * EQUIPMENT	* TYPE  M = AMOS T = AUTOB S = ASOS W = AWOS  REMARKS
						GROUND											
						SEA LEVEL	GROUND	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING GAUGE	BUCKET	WEIGHING RAIN GAGE	8 INCH RAIN GAGE		
<u>AIRPORT</u> City-County Airport	04/01/94	Present	NA	48° 34'	109° 47'	a2581									S	ASOS Commissioned 04/01/94. a. Ground elevation.	

**For Hard Copy Subscription:**

Price and ordering information: NCDC Subscribing Service Center, 310 State Route 956, Building 300, Rocket Center, WV 26726.

**INQUIRIES/COMMENTS CALL: Toll Free (866) 742-3322**

Visit our Web Site for other weather data: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)

**Non-Subscription Request:**

NCDC Customer Services;  
Phone: 828-271-4800  
Fax: 828-271-4876  
Email: [ncdc.orders@noaa.gov](mailto:ncdc.orders@noaa.gov)

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300  
CHANGE SERVICE REQUESTED

**FIRST CLASS**  
**POSTAGE & FEES PAID**  
United States Department of Commerce  
NOAA Permit No. G - 19