

2005

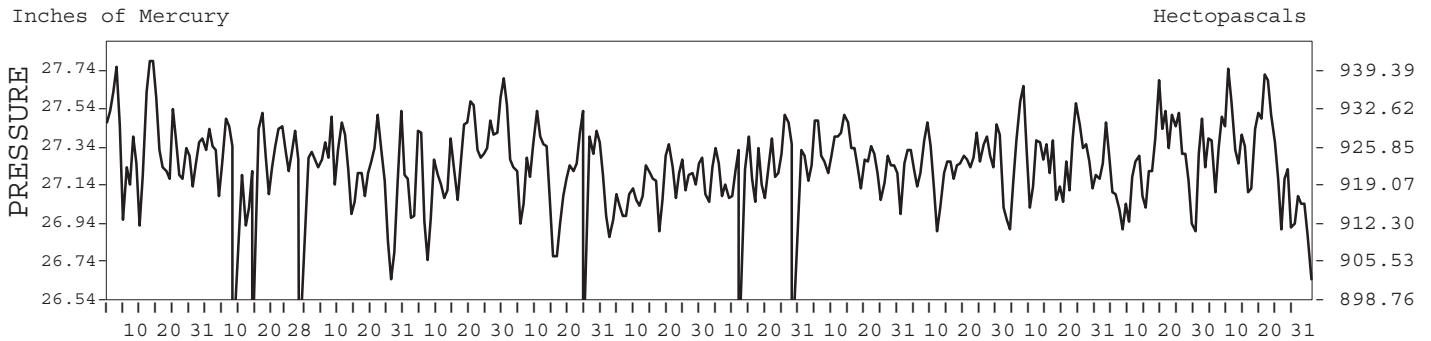
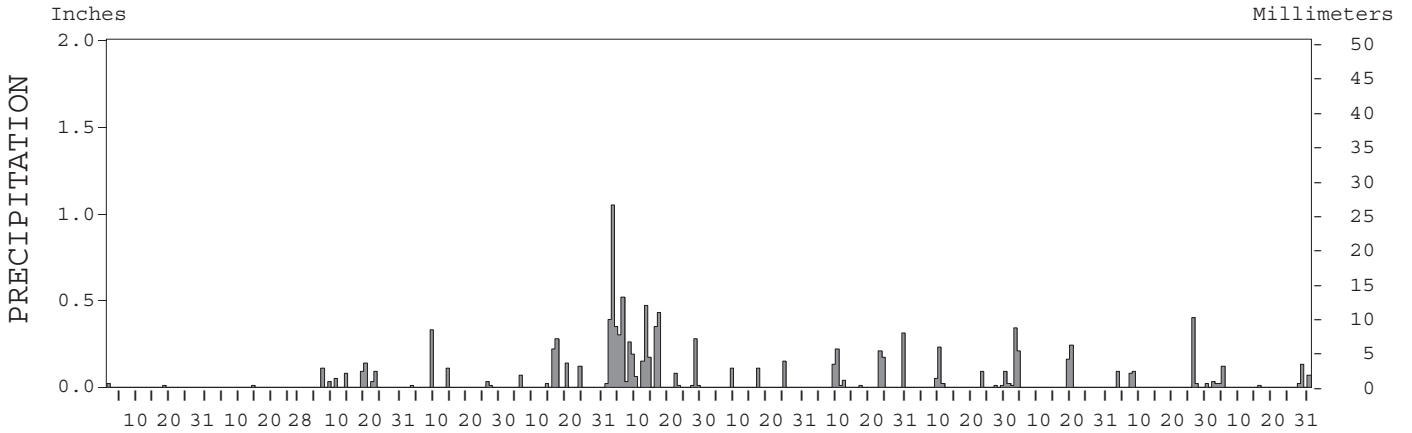
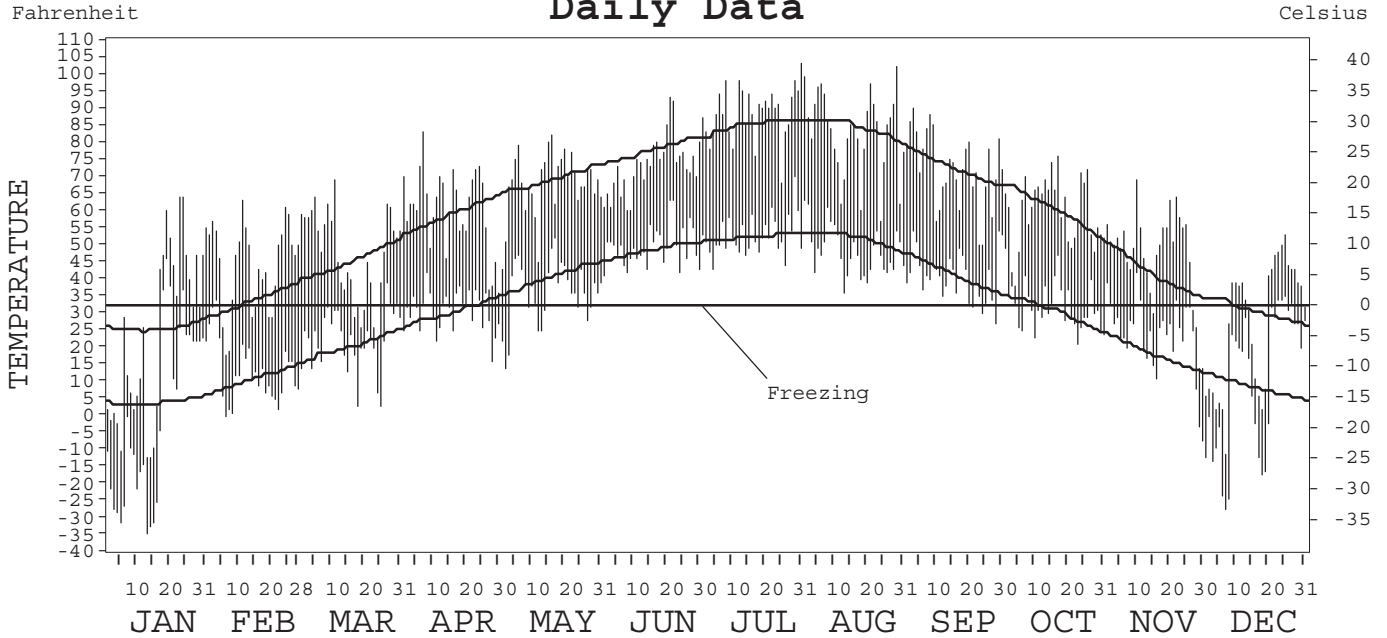
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-3008

HAVRE,
MONTANA (HVR)

Daily Data



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Thomas R. Karl

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METEOROLOGICAL DATA FOR 2005

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	24.6	43.8	47.4	60.2	67.7	73.1	88.5	82.8	72.2	59.9	47.0	26.9	57.8
	HIGHEST DAILY MAXIMUM	64	63	69	83	82	93	103	102	90	76	69	53	103
	DATE OF OCCURRENCE	24+	11	11	07	16	21	31	29	03	17	10	25	JUL 31
	MEAN DAILY MINIMUM	.7	12.8	22.3	30.7	36.2	49.5	52.7	48.2	40.9	32.2	23.5	9.9	30.0
	LOWEST DAILY MINIMUM	-34	0	3	16	14	41	43	36	27	21	-7	-27	-34
	DATE OF OCCURRENCE	13	06	25+	28	02	01	04	13	28	23	30	07	JAN 13
	AVERAGE DRY BULB	12.7	28.3	34.9	45.5	52.0	61.3	70.6	65.5	56.6	46.1	35.3	18.4	43.9
	MEAN WET BULB				38.2				53.3	47.5	40.3		17.2	
	MEAN DEW POINT				28.0				42.6	38.4	34.3		12.8	
	NUMBER OF DAYS WITH:													
	MAXIMUM ≥ 90°	0	0	0	0	0	2	16	9	1	0	0	0	28
	MAXIMUM ≤ 32°	18	7	6	0	0	0	0	0	0	0	5	15	51
	MINIMUM ≤ 32°	27	27	28	17	10	0	0	0	3	18	25	27	182
MINIMUM ≤ 0°	17	1	0	0	0	0	0	0	0	0	2	13	33	
H/C	HEATING DEGREE DAYS	1617	1023	928	577	397	137	11	82	257	581	883	1438	7931
	COOLING DEGREE DAYS	0	0	0	0	1	32	192	105	12	0	0	0	342
RH	MEAN (PERCENT)	74	55	67	55	52	69	44	49	56	69	64	76	61
	HOUR 05 LST	79	70	79	76	77	87	72	71	76	85	75	79	77
	HOUR 11 LST	72	49	58	44	38	56	30	38	46	57	53	73	51
	HOUR 17 LST	70	37	52	33	34	53	22	31	36	52	58	77	46
	HOUR 23 LST	76	62	77	65	62	81	54	59	64	78	72	77	69
S	PERCENT POSSIBLE SUNSHINE													
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG (VISBY ≤ 1/4 MI)	3	0	2	1	1	1	0	0	1	3	2	1	15
	THUNDERSTORMS	0	0	1	0	3	16	9	5	3	0	0	0	37
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.)	27.34			27.25		27.11		27.27	27.23	27.26	27.23	27.26	
	MEAN SEA-LEVEL PRESS. (IN.)	30.21							29.95	29.94	30.00		30.09	
WINDS	RESULTANT SPEED (MPH)	3.5			3.9				2.7	4.6	2.5		6.5	
	RES. DIR. (TENS OF DEGS.)	23			28				28	24	24		23	
	MEAN SPEED (MPH)	9.4	10.0	11.2	11.1	11.0	9.9		9.2	9.7	8.6	10.8	10.4	
	PREVAIL. DIR. (TENS OF DEGS.)	22	22	22	21	22	23	36	23	22	22	22	22	22
	MAXIMUM 2-MINUTE WIND:													
	SPEED (MPH)	35	37	37	39	35	47	41	44	36	37	39	33	47
	DIR. (TENS OF DEGS.)	21	21	21	27	20	23	29	23	25	26	26	21	23
	DATE OF OCCURRENCE	17	03	06	14	19	22	02	24	29	16	04	09	JUN 22
	MAXIMUM 5-SECOND WIND:													
	SPEED (MPH)	44	41	45	47	44	55	55	53	44	44	46	39	55
DIR. (TENS OF DEGS.)	21	21	21	26	21	24	32	22	25	23	33	21	32	
DATE OF OCCURRENCE	17	03	06	14	19	22	02	24	29	17+	18	09	JUL 02	
PRECIPITATION	WATER EQUIVALENT:													
	TOTAL (IN.)	0.03	0.01	0.62	0.49	0.85	5.13	0.37	1.10	0.50	0.98	0.70	0.42	11.20
	GREATEST 24-HOUR (IN.)	0.02	0.01	0.14	0.33	0.50	1.09	0.15	0.35	0.28	0.37	0.41	0.15	1.09
	DATE OF OCCURRENCE	01	14	20	09	16-17	02-03	25	09-10	09-10	19-20	26-27	28-29	JUN 02-03
	NUMBER OF DAYS WITH:													
	PRECIPITATION ≥ 0.01	2	1	8	5	6	20	3	8	7	6	6	8	80
PRECIPITATION ≥ 0.10	0	0	2	2	4	13	3	5	1	4	1	2	37	
PRECIPITATION ≥ 1.00	0	0	0	0	0	1	0	0	0	0	0	0	1	
SNOWFALL	SNOW, ICE PELLETS, HAIL:													
	TOTAL (IN.)	4.5	0.2	12.1	T	T	0.0	0.0	0.0	0.0	T	6.0	9.5	32.3
	GREATEST 24-HOUR (IN.)	2.1	0.2	3.8	T	T	0.0	0.0	0.0	0.0	T	4.0	4.8	4.8
	DATE OF OCCURRENCE	12	14	23	30+	01					04	26	05	DEC 05
	MAXIMUM SNOW DEPTH (IN.)	6	0	4	0	0	0	0	0	0	0	4	9	9
	DATE OF OCCURRENCE	08		23								27	06	DEC 06
NUMBER OF DAYS WITH:														
SNOWFALL ≥ 1.0	1	0	5	0	0	0	0	0	0	0	2	4	12	

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	6	29.3	33.6	44.3	58.7	67.2	74.8	87.6	85.2	71.8	58.0	44.6	34.9	57.5
	HIGHEST DAILY MAXIMUM	6	64	64	79	91	96	99	105	109	96	84	78	61	109
	YEAR OF OCCURRENCE		2005	2002	2004	2001	2001	2001	2003	2001	2003	2004	1999	2002	AUG 2001
	MEAN OF EXTREME MAXS.	6	54.8	53.2	70.3	80.3	87.0	93.4	102.3	99.7	92.8	78.6	68.3	56.2	78.1
	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	6	6.5	9.2	19.6	30.9	38.9	48.2	53.6	52.3	41.6	30.0	20.4	11.8	30.2
	LOWEST DAILY MINIMUM	6	-34	-31	-27	4	14	35	39	34	21	-2	-14	-30	-34
	YEAR OF OCCURRENCE		2005	2003	2002	2002	2005	2004	2000	2002	2000	2003	2003	2000	JAN 2005
	MEAN OF EXTREME MINS.	6	-22.0	-18.7	-3.3	15.8	23.3	38.4	42.1	38.4	27.0	11.0	0.0	-14.0	11.5
	NORMAL DRY BULB	30	14.6	21.9	32.5	44.3	54.5	62.7	68.3	67.6	56.3	44.6	29.1	19.0	43.0
	MEAN DRY BULB	6	17.9	21.5	32.0	44.8	53.0	61.5	70.6	68.8	56.8	44.0	32.6	23.4	43.9
	MEAN WET BULB	4	16.6	18.4	26.9	38.6	45.0	52.8	57.8	55.0	47.4	38.4	26.7	20.6	37.0
	MEAN DEW POINT	4	11.8	13.4	20.1	29.2	34.7	44.8	47.4	44.4	38.4	30.2	20.0	14.8	29.1
	NORMAL NO. DAYS WITH:														
	MAXIMUM ≥ 90°	0	0.0	0.0	0.0	*	0.3	3.3	9.1	9.4	2.0	*	0.0	0.0	24.1
MAXIMUM ≤ 32°	0	16.7	11.3	5.8	0.8	0.0	0.0	0.0	0.0	0.0	1.0	7.6	14.4	57.6	
MINIMUM ≤ 32°	0	29.5	26.3	27.2	15.7	2.9	0.1	0.0	0.0	3.6	17.0	26.5	29.6	178.4	
MINIMUM ≤ 0°	0	12.7	7.6	2.3	0.2	0.0	0.0	0.0	0.0	0.0	0.3	3.5	8.5	35.1	
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)	30	72	70	68	56	54	54	50	49	56	61	71	70	61
	HOUR 05 LST	30	75	76	80	74	73	75	72	70	73	74	76	74	74
	HOUR 11 LST	30	70	66	60	46	45	43	38	40	46	51	64	68	53
	HOUR 17 LST	30	68	62	52	40	38	36	31	30	36	44	62	68	47
	HOUR 23 LST	30	74	74	74	63	61	64	58	54	62	66	74	74	66
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	6	4.2	2.3	3.1	0.7	0.8	0.4	0.2	0.3	0.3	2.1	1.6	2.3	18.3
	THUNDERSTORMS	6	0.2	0.0	0.3	1.5	2.7	10.6	11.6	8.6	3.3	0.3	0.0	0.0	39.1
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
	CLEAR														
	PARTLY CLOUDY														
	CLOUDY														
PR	MEAN STATION PRESSURE (IN)	6	27.31	27.30	27.24	27.24	27.21	27.21	27.25	27.27	27.26	27.27	27.27	27.26	27.26
	MEAN SEA-LEVEL PRES. (IN)	5	30.16	30.13	30.04	29.96	29.90	29.91	29.91	29.94	29.96	29.98	30.07	30.06	30.00
WINDS	MEAN SPEED (MPH)	5	9.6	9.3	10.7	11.0	11.3	10.2	9.7	9.4	9.4	9.4	10.6	10.6	10.1
	PREVAIL. DIR (TENS OF DEGS)														
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	6	46	45	45	49	46	47	51	49	44	60	39	45	60
	DIR. (TENS OF DEGS)		25	30	26	28	31	23	21	26	31	27	26	29	27
	YEAR OF OCCURRENCE		2003	2002	2004	2002	2001	2005	2002	2004	2002	1999	2005	2001	OCT 1999
	MAXIMUM 5-SECOND:														
	SPEED (MPH)	6	55	52	53	60	61	58	62	63	55	69	46	53	69
DIR. (TENS OF DEGS)		25	30	25	32	32	24	22	26	24	26	33	30	26	
YEAR OF OCCURRENCE		2003	2002	2004	2003	2001	2003	2001	2004	2004	1999	2005	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)	6	0.25	0.19	0.62	1.96	3.50	5.13	2.97	2.40	1.36	0.98	0.70	0.42	5.13
	YEAR OF OCCURRENCE		2002	2002	2005	2003	2004	2005	2001	2002	2003	2005	2005	2005	JUN 2005
	MINIMUM MONTHLY (IN)	0													0.00
	YEAR OF OCCURRENCE														DEC
	MAXIMUM IN 24 HOURS (IN)	6	0.16	0.09	0.19	0.94	1.09	1.66	1.79	1.40	0.89	0.58	0.41	0.16	1.79
	YEAR OF OCCURRENCE		2003	2002	2000	2003	2004	2002	2002	2002	2003	1999	2005	2003	JUL 2002
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	7.4	5.8	7.9	7.5	9.7	10.4	7.9	7.8	7.0	5.4	6.1	7.0	89.9	
PRECIPITATION ≥ 1.00	30	0.0	0.0	*	*	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	1.0	
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)	1	4.5	0.2	12.1	2.7	3.6	0.0	0.0	0.0	0.0	2.8	6.0	9.5	12.1
	YEAR OF OCCURRENCE				2005	2004	2004					2004	2004	2004	MAR 2005
	MAXIMUM IN 24 HOURS (IN)	1	2.1	0.2	3.8	2.7	3.1	0.0	0.0	0.0	0.0	1.7	4.0	4.8	4.8
	YEAR OF OCCURRENCE		2005	2005	2005	2004	2004					2004	2005	2005	DEC 2005
	MAXIMUM SNOW DEPTH (IN)	1	6		4	2	3	0	0	0	0	2	4	9	9
	YEAR OF OCCURRENCE		2005		2004	2004	2004					2004	2005	2005	DEC 2005
	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) 2005 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
2003	0.22	0.14	0.20	1.96	1.65	2.39	0.42	0.77	1.36	0.37	0.09	0.24	9.81
2004	0.19	0.05	0.09	0.76	3.50	2.06	1.08	1.50	1.36	0.67	0.10	0.16	11.52
2005	0.03	0.01	0.62	0.49	0.85	5.13	0.37	1.10	0.50	0.98	0.70	0.42	11.20
POR= 7 YRS	0.17	0.10	0.27	0.86	1.74	2.80	1.35	1.03	0.99	0.63	0.24	0.18	10.36

WBAN : 94012

AVERAGE TEMPERATURE (°F) 2005 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
2003	20.8	19.6	27.7	47.2	52.7	62.6	73.0	73.3	55.9	49.2	21.2	24.0	43.9
2004	11.3	17.9	38.5	47.2	49.8	58.9	69.2	65.2	56.1	42.8	34.6	26.1	43.1
2005	12.7	28.3	34.9	45.5	52.0	61.3	70.6	65.5	56.6	46.1	35.3	18.4	43.9
POR= 7 YRS	15.4	18.4	32.1	44.8	53.1	61.5	70.6	68.8	56.8	44.0	32.6	23.4	43.5

HEATING DEGREE DAYS (base 65°F) 2005 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
2002-03	20	90	259	840	859	1146	1365	1262	1152	525	384	127	8029
2003-04	10	21	303	495	1306	1262	1656	1358	814	530	465	189	8409
2004-05	23	62	272	681	906	1197	1617	1023	928	577	397	137	7820
2005-	11	82	257	581	883	1438							

WBAN : 94012

COOLING DEGREE DAYS (base 65°F) 2005 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
2003	0	0	0	0	11	60	263	286	37	9	0	0	666
2004	0	0	0	0	0	15	161	76	11	0	0	0	263
2005	0	0	0	0	1	32	192	105	12	0	0	0	342

SNOWFALL (inches) 2005 HAVRE, MT (HVR)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2004-05	0.0	0.0	0.0	2.8	1.2	0.9	4.5	0.2	12.1	T	T	0.0	21.7
2005-	0.0	0.0	0.0	T	6.0	9.5							
POR= 1 YRS	0.0	0.0	0.0	1.4	3.6	5.2	4.5	0.2	6.1	1.4	1.8	0.0	24.2

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 (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.

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.

2005
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 BUCKET	RAIN GAUGE	WINDHOLE RAIN GAUGE	8 INCH RAIN GAUGE		
<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.	

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