

**14180300 BLOWOUT CREEK NEAR DETROIT, OR**

Willamette Basin  
North Santiam Subbasin

LOCATION.--Lat 44°39'11", long 122°07'47" referenced to North American Datum of 1927, in NW ¼ sec.6, T.11 S., R.6 E., Linn County, OR, Hydrologic Unit 17090005, on left bank, 6.0 mi south of Detroit and at mile 5.5.

DRAINAGE AREA.--26.0 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,840 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--14 years (water years 1999-2012), 114 ft<sup>3</sup>/s, 59.83 in/yr, 82,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft<sup>3</sup>/s Dec. 28, 1998, gage height, 7.38 ft; minimum daily discharge, 2.1 ft<sup>3</sup>/s Sept. 3-5, 2003.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 30	0730	1,660	6.24
Jan 19	1645	2,070	6.55
Jan 25	1000	1,150	5.77
Mar 15	2115	1,660	6.24
Mar 30	1245	*2,130	*6.60

Minimum discharge, 6.1 ft<sup>3</sup>/s, Oct. 1, 2, gage height, 2.96 ft.

## 14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.1	9.2	71	338	263	96	634	315	86	54	15	8.4
2	7.7	8.6	62	245	214	85	434	261	95	50	14	8.1
3	7.8	9.4	55	218	175	83	339	357	83	48	14	7.9
4	8.5	9.4	49	182	144	87	281	414	102	44	13	7.8
5	10	8.9	44	167	122	98	233	336	121	41	13	7.7
6	8.9	9.6	40	145	106	104	196	273	113	38	14	7.6
7	8.3	9.7	37	126	94	95	166	231	121	36	13	7.4
8	7.8	9.3	34	110	97	90	151	220	146	34	13	7.9
9	7.3	9.3	32	98	129	95	151	215	178	33	13	8.6
10	13	9.3	30	90	163	110	164	188	153	31	13	9.0
11	35	9.2	28	80	245	140	197	162	129	29	13	9.1
12	18	12	27	73	192	139	213	147	112	28	12	8.8
13	13	13	25	68	153	193	195	149	102	26	11	8.3
14	11	15	24	65	128	178	188	170	90	25	11	8.2
15	9.6	18	24	62	108	912	185	182	80	24	11	8.0
16	9.1	25	23	58	95	1,070	307	169	73	24	10	8.0
17	8.5	136	22	58	97	577	374	147	67	23	10	7.8
18	8.1	69	22	270	116	365	390	124	66	23	10	7.7
19	7.8	42	22	1,540	102	256	433	107	63	22	10	7.8
20	7.8	31	21	1,280	109	316	552	97	56	22	9.9	8.0
21	7.6	57	20	1,070	174	352	477	105	52	20	9.8	8.1
22	7.5	398	19	589	344	315	458	134	52	20	9.7	8.4
23	7.5	246	e19	383	328	256	489	134	71	19	9.5	8.4
24	7.5	174	19	449	242	214	483	149	67	18	9.3	8.3
25	7.3	165	22	984	209	193	391	152	62	18	9.1	8.3
26	7.3	112	22	862	166	171	442	141	74	17	8.9	8.1
27	7.2	97	26	536	138	164	389	125	71	17	8.8	8.0
28	7.4	106	518	342	120	189	324	112	65	16	8.8	7.7
29	8.1	90	751	298	109	344	276	100	60	16	8.7	7.6
30	8.5	82	1,270	449	---	1,650	308	92	56	15	8.6	7.7
31	10	---	606	327	---	999	---	87	---	15	8.5	---
<b>Total</b>	299.2	1,989.9	3,984	11,562	4,682	9,936	9,820	5,595	2,666	846	342.6	242.7
<b>Mean</b>	9.65	66.3	129	373	161	321	327	180	88.9	27.3	11.1	8.09
<b>Max</b>	35	398	1,270	1,540	344	1,650	634	414	178	54	15	9.1
<b>Min</b>	6.1	8.6	19	58	94	83	151	87	52	15	8.5	7.4
<b>Ac-ft</b>	593	3,950	7,900	22,930	9,290	19,710	19,480	11,100	5,290	1,680	680	481
<b>Cfsm</b>	0.37	2.55	4.94	14.3	6.21	12.3	12.6	6.94	3.42	1.05	0.43	0.31
<b>In.</b>	0.43	2.85	5.70	16.54	6.70	14.22	14.05	8.01	3.81	1.21	0.49	0.35

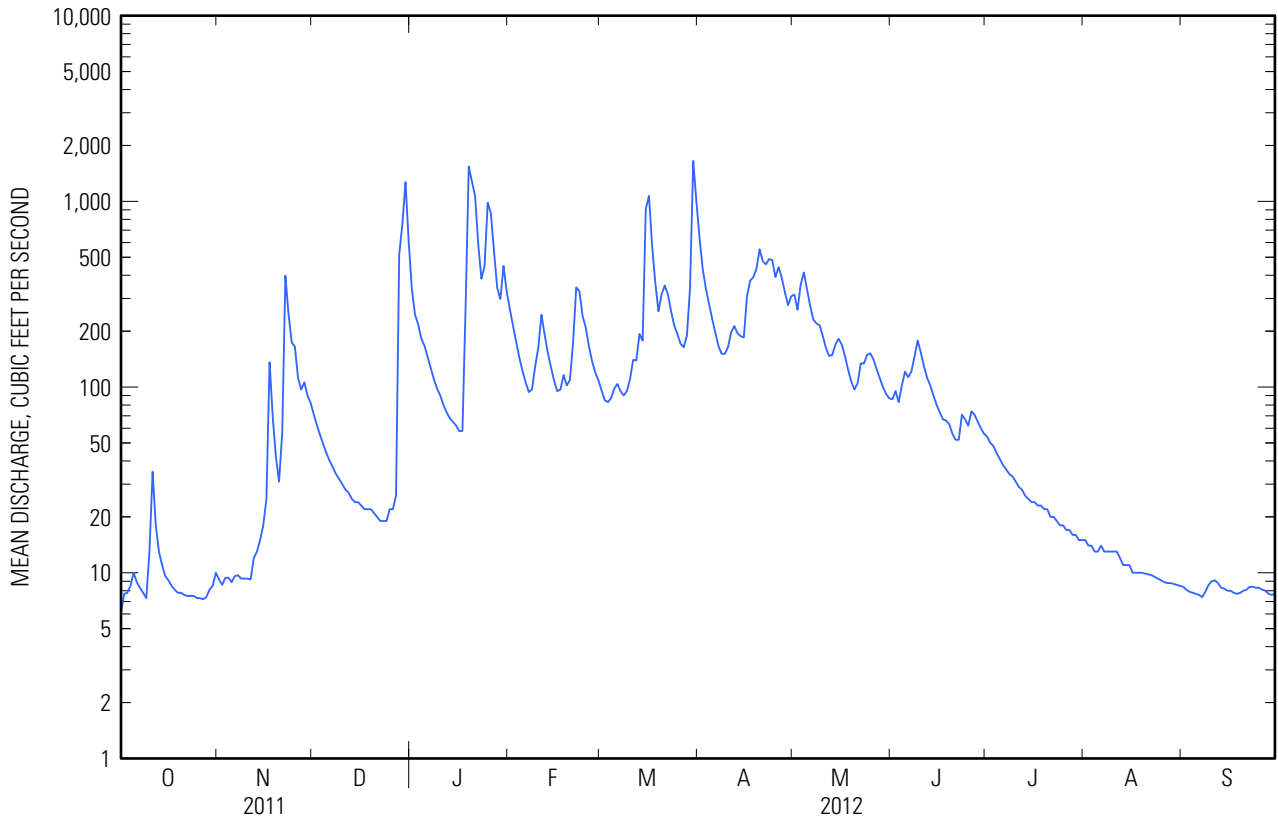
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2012, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	17.0	110	230	241	152	181	178	151	81.8	18.2	7.82	6.55
<b>Max</b>	49.4	253	425	452	308	333	327	357	191	33.9	12.7	19.6
<b>(WY)</b>	(2008)	(2007)	(1999)	(2006)	(2000)	(2003)	(2012)	(2008)	(2010)	(1999)	(2004)	(2004)
<b>Min</b>	4.62	22.7	81.4	53.5	49.3	79.5	100	54.6	17.4	6.84	2.81	3.28
<b>(WY)</b>	(2003)	(2001)	(2001)	(2001)	(2005)	(2006)	(2001)	(2007)	(2007)	(2003)	(2003)	(2007)

14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1999 - 2012	
<b>Annual total</b>	42,011.8		51,965.4			
<b>Annual mean</b>	115		142		114	
<b>Highest annual mean</b>					162	1999
<b>Lowest annual mean</b>					48.3	2001
<b>Highest daily mean</b>	1,730	Jan 16	1,650	Mar 30	2,440	Dec 28, 1998
<b>Lowest daily mean</b>	5.9	Sep 23	6.1	Oct 1	2.1	Sep 3, 2003
<b>Annual seven-day minimum</b>	6.1	Sep 19	7.4	Oct 22	2.2	Aug 30, 2003
<b>Annual runoff (ac-ft)</b>	83,330		103,100		82,940	
<b>Annual runoff (cfsm)</b>	4.43		5.46		4.40	
<b>Annual runoff (inches)</b>	60.11		74.35		59.83	
<b>10 percent exceeds</b>	249		354		261	
<b>50 percent exceeds</b>	66		68		66	
<b>90 percent exceeds</b>	7.5		8.2		5.7	



**14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued**

**WATER-QUALITY RECORDS**

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1998 to January 2009.

pH: October 1998 to January 2009.

WATER TEMPERATURE: October 1998 to current year.

TURBIDITY: October 1998 to March 2010.

INSTRUMENTATION.--Temperature probe and data logger.

REMARKS.--Unpublished records for water year 2001 are available in the files of the Portland Field Office.

WATER TEMPERATURE: Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 55 microsiemens Oct. 20, 2003; minimum recorded, 17 microsiemens Dec. 17, 2001.

pH: Maximum recorded, 8.3 units Aug. 3, 20, 2003; minimum recorded, 6.5 units Dec. 17, 2001.

WATER TEMPERATURE: Maximum, 22.2°C July 31, Aug. 2, 2009; minimum, 0.0°C on many days during fall and winter.

TURBIDITY: Maximum recorded, >1,370 FNU Dec. 17, 2001; minimum, 0.0 FNU on many days each year.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 19.3°C Aug. 6, 17; minimum, 0.0°C Dec. 22, 23, Jan. 17, 18.

## 14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	12.8	11.6	12.1	7.2	5.4	6.5	4.2	3.6	3.8	4.6	4.2	4.4
2	13.7	11.6	12.3	5.4	3.9	4.7	3.8	3.1	3.6	4.8	4.1	4.4
3	12.4	11.2	11.8	5.8	4.9	5.2	3.1	2.5	2.8	5.2	4.6	4.9
4	12.2	10.5	11.2	5.5	4.6	5.0	2.8	2.3	2.5	5.4	4.2	4.7
5	11.4	9.5	10.3	5.9	4.6	5.2	2.4	1.7	2.1	5.4	4.4	5.1
6	9.8	8.9	9.4	6.6	5.4	5.8	2.4	1.6	2.0	4.4	3.8	4.1
7	10.7	9.4	10.0	6.4	4.9	5.7	2.4	1.6	2.1	4.1	3.6	3.8
8	12.1	9.8	10.6	6.2	5.2	5.7	2.2	1.5	1.9	3.6	3.1	3.3
9	11.7	9.6	10.4	6.4	4.9	5.7	2.2	1.4	1.8	3.9	3.2	3.5
10	11.4	10.1	10.6	5.5	4.0	4.8	2.3	1.3	1.8	3.9	3.0	3.7
11	10.5	9.7	10.1	5.0	3.3	4.2	3.3	2.3	2.8	3.1	2.3	2.7
12	10.7	9.4	9.8	5.7	4.6	5.2	2.7	1.0	1.9	2.7	1.7	2.3
13	10.8	9.2	9.9	6.3	5.3	5.8	1.0	0.2	0.7	3.0	2.0	2.5
14	11.6	9.7	10.5	6.5	5.6	6.0	2.2	0.5	1.3	3.6	2.3	2.8
15	12.2	10.2	11.0	6.1	4.9	5.6	3.0	2.2	2.6	2.7	1.2	1.8
16	12.1	9.4	11.0	5.9	4.6	5.1	2.8	2.1	2.5	2.2	1.1	1.7
17	10.1	8.4	9.1	6.2	4.9	5.7	2.1	1.6	1.9	1.1	0.0	0.4
18	9.5	7.2	8.5	4.9	3.7	4.2	3.0	1.9	2.5	2.7	0.0	1.0
19	9.7	8.1	9.0	4.5	3.6	4.0	2.8	2.0	2.6	4.3	2.7	3.5
20	10.3	8.4	9.4	4.0	3.5	3.8	2.9	1.6	2.3	4.7	4.3	4.5
21	11.3	9.4	10.2	4.2	3.7	3.9	2.7	1.0	2.1	4.7	4.2	4.5
22	11.2	9.3	10.2	5.6	4.0	5.1	1.0	0.0	0.4	4.4	4.1	4.3
23	11.3	9.6	10.3	6.1	5.1	5.7	1.0	0.0	0.5	4.3	4.0	4.2
24	10.1	7.3	8.9	5.1	4.6	4.8	1.8	0.6	1.2	4.6	3.5	4.0
25	7.3	5.4	6.4	5.1	4.6	4.9	2.2	1.0	1.6	4.9	4.6	4.7
26	6.6	4.4	5.6	5.5	4.7	5.1	2.8	2.1	2.4	4.8	4.2	4.6
27	6.7	4.8	5.8	6.0	4.7	5.3	3.3	2.4	2.8	4.2	3.5	3.8
28	7.0	4.7	5.9	5.9	5.2	5.5	5.3	3.2	4.4	4.1	3.3	3.7
29	8.6	7.0	7.6	5.4	4.8	5.1	5.7	5.0	5.3	4.6	3.9	4.2
30	9.6	7.9	8.7	5.7	4.2	5.1	5.9	4.6	5.3	4.8	4.2	4.5
31	9.2	7.2	8.3	---	---	---	4.6	4.2	4.5	4.8	4.2	4.4
Month	13.7	4.4	9.5	7.2	3.3	5.1	5.9	0.0	2.5	5.4	0.0	3.6

## 14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
<b>1</b>	4.8	4.0	4.4	2.5	0.7	1.8	4.2	3.7	4.0	6.4	4.4	5.1
<b>2</b>	4.0	3.6	3.9	3.7	2.4	2.9	5.3	3.8	4.3	6.4	4.2	5.2
<b>3</b>	3.9	3.2	3.6	4.5	2.9	3.4	5.0	3.9	4.3	6.2	5.0	5.4
<b>4</b>	4.0	3.0	3.5	4.3	2.9	3.5	4.3	3.6	3.9	5.8	4.6	5.0
<b>5</b>	3.8	2.8	3.3	3.6	2.7	3.0	4.6	3.2	3.8	6.1	4.3	5.1
<b>6</b>	3.6	2.6	3.1	3.4	2.2	2.7	4.7	3.3	3.8	7.9	4.4	5.9
<b>7</b>	4.3	2.8	3.5	3.4	2.1	2.6	5.5	2.7	3.9	8.8	4.8	6.6
<b>8</b>	4.4	3.7	4.0	4.1	2.3	3.1	6.2	3.6	4.7	9.1	5.7	7.1
<b>9</b>	5.0	4.1	4.4	4.4	2.6	3.3	6.4	3.5	4.8	7.9	5.3	6.5
<b>10</b>	5.0	4.3	4.6	4.7	3.1	3.8	5.7	4.1	4.8	7.4	3.8	5.4
<b>11</b>	4.9	3.8	4.4	3.7	2.9	3.2	5.6	4.3	4.8	8.4	3.9	5.9
<b>12</b>	4.1	3.3	3.8	3.7	2.8	3.2	5.5	3.7	4.5	9.6	4.8	6.9
<b>13</b>	4.7	3.7	4.0	3.5	2.4	2.8	5.6	3.6	4.5	10.5	5.8	7.9
<b>14</b>	3.8	3.0	3.4	3.2	2.9	3.1	6.8	4.3	5.2	10.6	6.6	8.3
<b>15</b>	3.3	2.9	3.1	3.7	3.1	3.4	6.8	4.1	5.3	10.7	6.9	8.4
<b>16</b>	3.8	2.9	3.3	4.6	3.7	4.1	5.7	4.6	5.1	10.0	6.5	7.9
<b>17</b>	4.6	3.5	4.0	4.6	3.7	4.1	5.1	4.0	4.5	9.3	5.9	7.2
<b>18</b>	4.1	3.1	3.4	4.2	3.1	3.7	5.8	4.3	4.9	8.6	5.2	6.6
<b>19</b>	3.7	2.8	3.2	3.9	2.8	3.3	5.4	4.5	4.9	8.0	4.7	6.4
<b>20</b>	4.2	2.9	3.5	3.7	2.3	3.2	6.4	4.8	5.3	9.2	6.7	7.8
<b>21</b>	4.8	3.7	4.2	2.8	1.2	2.1	7.4	4.7	5.7	8.2	7.2	7.7
<b>22</b>	4.9	4.0	4.5	4.2	2.7	3.5	7.8	4.7	5.9	7.5	6.3	7.0
<b>23</b>	4.4	3.5	3.9	4.7	3.4	3.8	8.0	5.0	6.1	7.8	5.6	6.6
<b>24</b>	4.5	3.1	3.8	5.3	3.5	4.1	6.9	5.3	5.8	6.6	5.8	6.1
<b>25</b>	4.0	2.3	2.8	4.4	3.5	4.0	6.6	5.2	5.8	8.2	5.5	6.6
<b>26</b>	3.6	2.8	3.2	5.1	3.5	4.1	5.9	4.4	5.2	8.8	6.2	7.3
<b>27</b>	3.7	2.7	3.1	4.9	3.9	4.3	6.1	4.1	5.0	9.8	6.7	7.9
<b>28</b>	2.9	1.9	2.4	5.2	3.8	4.4	7.2	4.9	5.8	8.7	7.1	7.7
<b>29</b>	2.3	1.4	2.0	4.8	4.0	4.3	8.3	5.3	6.5	10.1	6.5	7.9
<b>30</b>	---	---	---	4.1	3.5	3.9	6.8	5.2	6.1	10.5	6.5	8.3
<b>31</b>	---	---	---	4.8	3.9	4.2	---	---	---	11.9	7.8	9.5
<b>Month</b>	5.0	1.4	3.6	5.3	0.7	3.4	8.3	2.7	5.0	11.9	3.8	6.9

## 14180300 BLOWOUT CREEK NEAR DETROIT, OR—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	13.0	8.3	10.3	12.8	9.9	11.0	17.0	11.4	13.9	14.9	10.3	12.5
2	10.8	8.8	9.7	13.9	10.0	11.5	16.7	11.5	13.8	14.3	9.8	12.0
3	9.1	8.0	8.5	11.7	9.6	10.6	17.3	11.4	14.0	14.9	10.0	12.3
4	8.7	7.7	8.1	13.0	8.5	10.4	18.0	11.9	14.6	15.3	10.4	12.7
5	8.1	6.7	7.3	13.8	8.8	11.1	18.3	12.9	15.3	15.9	11.2	13.4
6	9.5	6.1	7.5	14.8	9.8	12.0	19.3	13.8	16.2	15.9	11.3	13.5
7	8.8	7.0	7.7	15.8	10.5	12.8	19.1	14.2	16.2	15.9	11.4	13.5
8	8.0	6.0	7.0	16.5	11.4	13.6	18.5	14.2	15.9	15.6	11.6	13.6
9	7.4	5.6	6.4	16.8	12.4	14.2	17.5	12.8	14.8	15.5	12.5	13.6
10	9.4	5.8	7.4	16.3	11.8	13.8	17.9	12.8	15.0	14.4	11.4	12.9
11	10.2	6.3	8.1	16.5	11.4	13.8	17.6	11.9	14.6	13.5	9.4	11.3
12	9.3	7.8	8.5	16.1	11.8	13.8	18.4	12.8	15.3	13.7	9.1	11.3
13	11.0	8.1	9.2	16.7	11.5	13.8	19.1	13.7	16.0	13.6	9.1	11.3
14	11.3	7.5	9.0	16.7	11.8	13.9	18.4	12.8	15.4	14.3	10.2	12.2
15	12.0	7.1	9.3	16.3	12.5	14.0	18.8	13.7	16.1	15.0	10.9	12.7
16	13.0	8.6	10.4	13.4	11.8	12.5	18.9	13.9	16.2	14.5	10.1	12.2
17	13.4	9.9	11.2	15.0	11.6	13.2	19.3	14.3	16.7	14.4	10.2	12.2
18	10.4	8.7	9.5	14.6	12.4	13.1	17.9	15.2	16.2	14.4	10.4	12.3
19	9.5	8.0	8.7	17.0	12.2	13.9	18.9	14.7	16.4	14.7	11.0	12.7
20	12.7	7.7	9.8	14.9	12.7	13.6	17.4	13.0	15.3	14.7	10.9	12.7
21	13.6	8.7	10.8	16.8	11.9	13.8	18.0	13.5	15.4	14.6	12.0	12.9
22	10.8	9.4	10.0	15.6	11.8	13.3	17.2	12.5	14.7	14.9	12.1	13.0
23	10.0	8.7	9.2	16.1	11.2	13.2	16.4	11.9	14.0	13.8	11.3	12.4
24	10.1	8.3	9.1	16.4	10.6	13.3	16.0	11.1	13.4	13.4	10.1	11.6
25	9.2	8.0	8.6	17.3	11.7	14.2	15.9	11.0	13.3	14.2	10.7	12.0
26	10.1	8.0	8.7	17.9	12.5	14.8	16.7	12.0	14.0	13.0	9.3	11.1
27	11.9	7.8	9.5	17.3	13.2	14.8	16.4	12.2	14.0	12.8	9.4	11.1
28	11.2	8.5	9.9	17.3	12.3	14.3	15.4	13.2	14.1	14.1	11.1	12.3
29	11.7	9.3	10.3	17.1	11.7	14.1	15.9	11.5	13.5	14.0	10.7	12.2
30	11.1	9.7	10.4	17.3	12.1	14.2	15.7	10.6	13.0	14.1	10.8	12.1
31	---	---	---	17.3	12.3	14.3	15.6	10.9	13.1	---	---	---
<b>Month</b>	13.6	5.6	9.0	17.9	8.5	13.3	19.3	10.6	14.9	15.9	9.1	12.4

	Max	Min	Mean
<b>Year</b>	19.3	0.0	7.4