



2005 Water Year
YOUGHIOGHENY RIVER BASIN
03079000 Casselman River at Markleton, PA

Latitude: 39° 51 ' 35"

Longitude: 079° 13 ' 40"

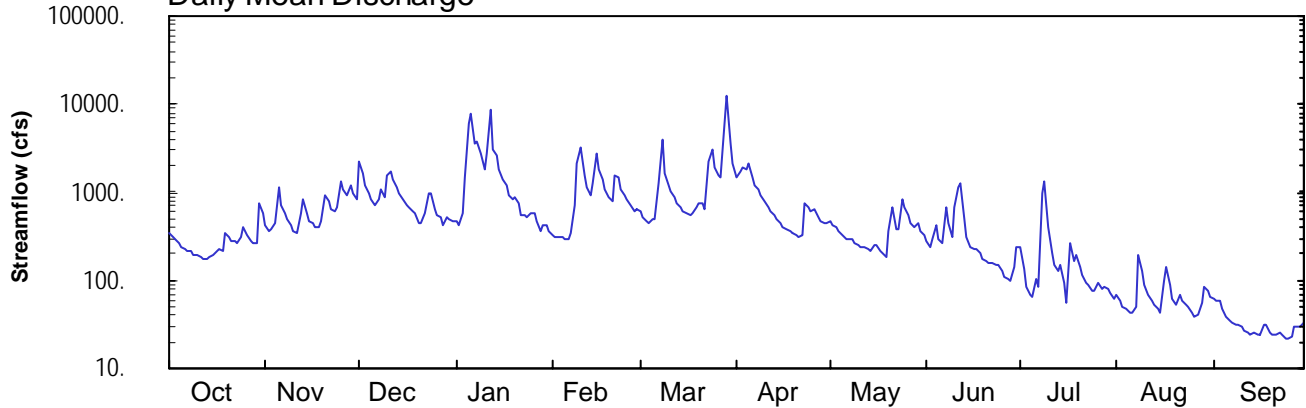
Hydrologic Unit Code: 05020006

Somerset County

Datum: 1655.29 feet

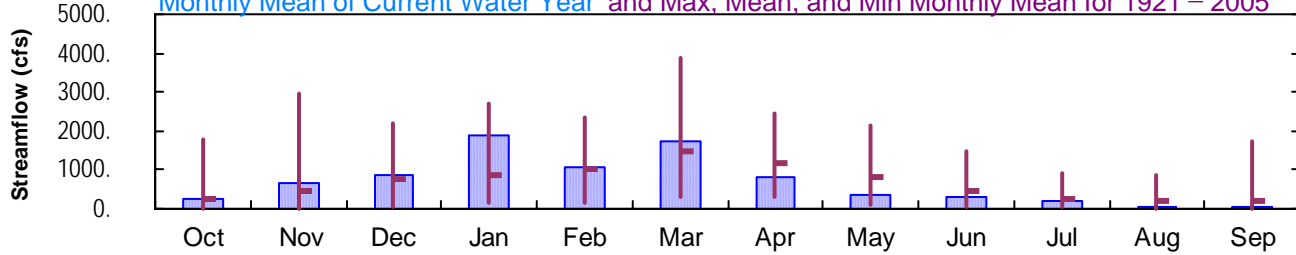
Drainage Area: 382. mi²

Daily Mean Discharge

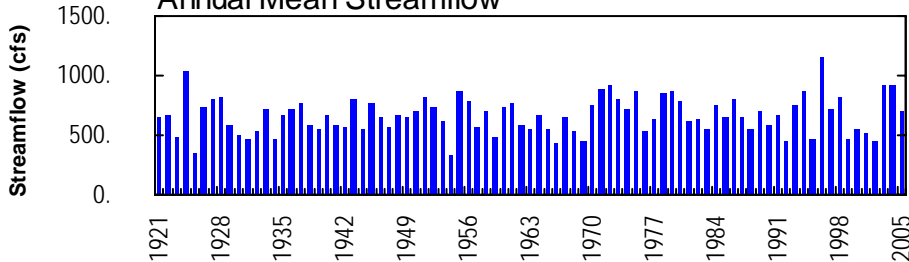


Monthly Statistics

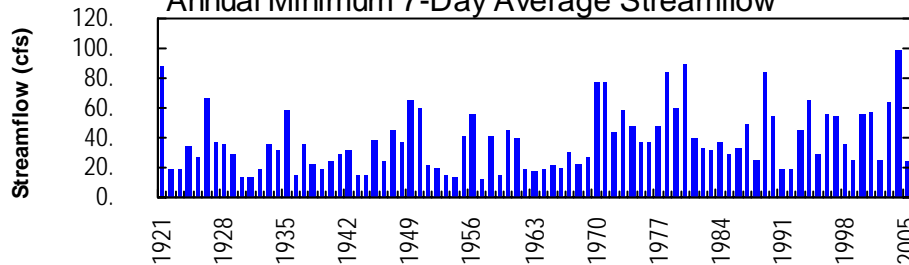
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1921 – 2005



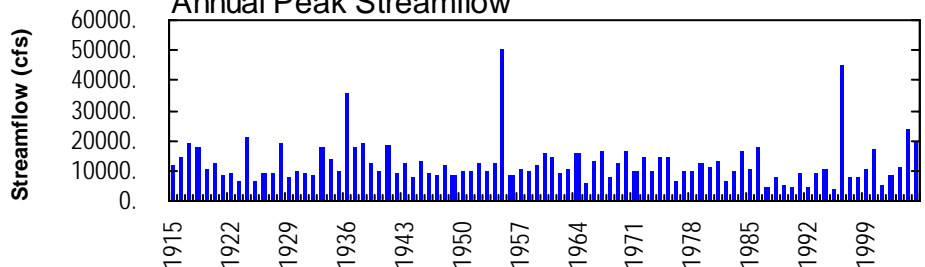
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



YOUGHIOGHENY RIVER BASIN

03079000 CASSELMAN RIVER AT MARKLETON, PA

LOCATION.--Lat 39°51'35", long 79°13'40", Somerset County, Hydrologic Unit 05020006, on right bank at downstream side of highway bridge at Markleton, 2 mi southwest of Casselman, and 7 mi downstream from Coxes Creek.

DRAINAGE AREA.--382 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August to September 1913 (gauge heights and discharge measurements only), October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. October 1913 to September 1920 (gauge heights and discharge measurements only) in reports of Water Supply Commission of Pennsylvania.

REVISED RECORDS.--WSP 743: Drainage area. WSP 1305: 1923-31. WSP 1435: 1932-34, 1935 (M), 1936-38. WSP 1625: 1924 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,655.29 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 19, 1940, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Slight diversion upstream of station to city of Frostburg, MD, in the Potomac River Basin. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 5	1800	10,400	7.46	Mar. 29	0200	*19,500	*a9.58
Jan. 12	0400	12,400	8.03				

a From peak-stage indicator.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	352	420	2250	472	335	601	1480	472	283	234	68	63
2	309	367	1650	423	308	518	1740	422	234	135	58	59
3	291	372	1180	579	310	480	1920	395	296	85	51	59
4	260	443	961	1490	308	454	1850	357	425	68	47	48
5	241	1110	815	6090	293	491	2140	322	295	66	44	39
6	229	729	718	7830	300	498	1510	300	271	106	43	35
7	220	576	824	3510	347	1280	1230	291	671	85	49	33
8	210	485	1100	3780	720	4040	1090	299	453	975	194	31
9	197	415	871	2690	2170	1650	909	272	302	1360	128	31
10	190	371	1550	1840	3200	1190	772	253	671	412	90	29
11	184	343	1760	2750	1550	1010	679	243	1140	208	70	27
12	179	565	1380	8470	1150	882	600	238	1260	148	58	26
13	174	834	1160	3140	939	762	546	229	486	129	53	25
14	185	568	981	2680	1260	665	494	217	318	149	48	25
15	190	471	837	1810	2830	598	440	253	239	95	44	24
16	207	439	717	1390	1810	565	401	252	229	57	98	24
17	232	413	690	1200	1420	540	376	218	230	268	140	31
18	215	393	607	935	1100	568	358	200	203	168	89	31
19	350	479	581	843	857	666	339	188	179	189	62	26
20	312	917	450	867	808	761	328	370	166	145	54	24
21	273	777	449	745	1560	737	313	677	156	113	69	24
22	276	635	570	561	1460	641	319	390	154	95	58	26
23	261	599	972	557	1060	2250	754	380	152	87	53	24
24	309	669	997	513	904	3130	677	848	148	77	50	22
25	399	1350	644	570	816	1870	597	669	128	77	42	22
26	322	1110	546	566	722	1520	640	547	112	93	38	23
27	284	908	515	473	614	1490	531	447	102	78	40	30
28	259	1180	416	362	631	6080	469	402	99	84	56	30
29	261	968	508	415	---	12300	441	436	141	79	83	29
30	737	834	485	420	---	3550	442	366	234	72	75	34
31	568	---	475	354	---	2070	---	320	---	61	64	---
TOTAL	8676	19740	27659	58325	29782	53857	24385	11273	9777	5998	2116	954
MEAN	280	658	892	1881	1064	1737	813	364	326	193	68.3	31.8
MAX	737	1350	2250	8470	3200	12300	2140	848	1260	1360	194	63
MIN	174	343	416	354	293	454	313	188	99	57	38	22
CFSM	0.73	1.72	2.34	4.93	2.78	4.55	2.13	0.95	0.85	0.51	0.18	0.08
IN.	0.84	1.92	2.69	5.68	2.90	5.24	2.37	1.10	0.95	0.58	0.21	0.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2005, BY WATER YEAR (WY)

	275	477	755	867	1036	1494	1160	796	453	258	217	214
MEAN	275	477	755	867	1036	1494	1160	796	453	258	217	214
MAX	1769	2975	2217	2709	2324	3860	2437	2147	1499	920	842	1756
(WY)	1955	1986	1973	1937	1956	1936	1970	1924	1941	1924	1956	1996
MIN	14.9	22.6	55.3	133	153	307	316	126	60.6	35.6	24.5	19.9
(WY)	1954	1954	1999	1925	1934	1990	1921	1926	1965	1965	1957	1943

YOUGHIOGHENY RIVER BASIN

03079000 CASSELMAN RIVER AT MARKLETON, PA--Continued

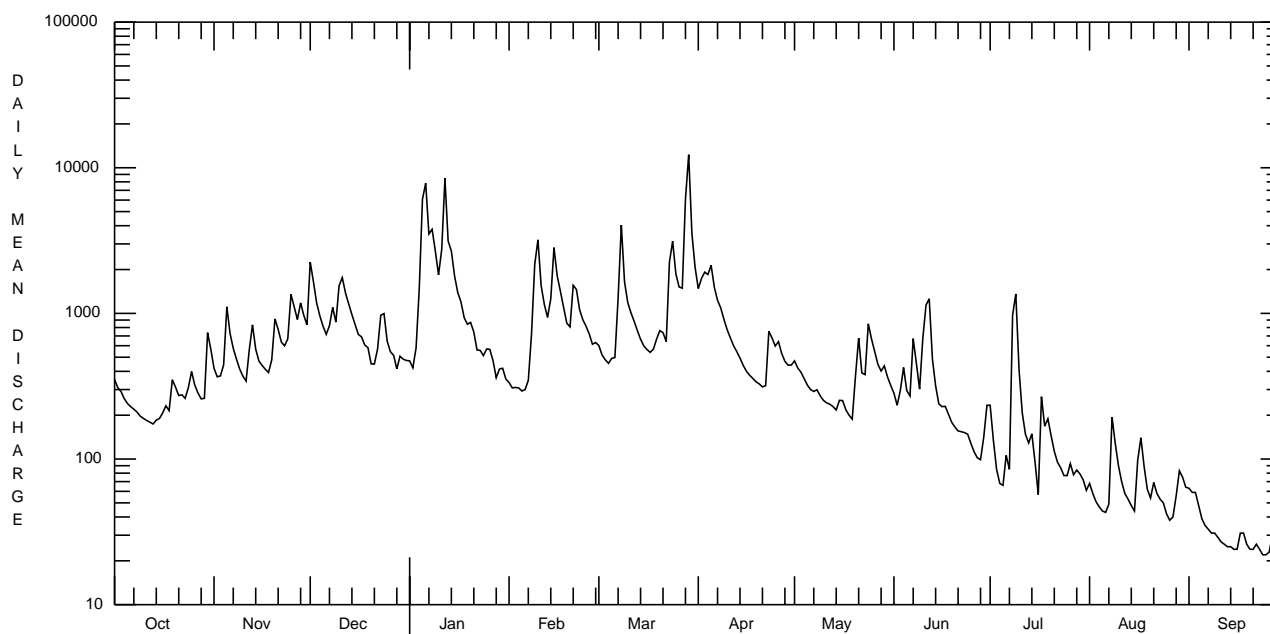
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1921 - 2005	
ANNUAL TOTAL	304572		252542			
ANNUAL MEAN	832		692		665	
HIGHEST ANNUAL MEAN					1151	1996
LOWEST ANNUAL MEAN					336	1954
HIGHEST DAILY MEAN	12800	Sep 18	12300	Mar 29	e25000	Jan 19 1996
LOWEST DAILY MEAN	80	Aug 11	22	Sep 24,25	11	Jul 23 1936 b
ANNUAL SEVEN-DAY MINIMUM	98	Aug 6	24	Sep 20	12	Sep 4 1957
MAXIMUM PEAK FLOW			19500	Mar 29	c50000	Oct 15 1954
MAXIMUM PEAK STAGE			a9.58	Mar 29	14.06	Oct 15 1954
INSTANTANEOUS LOW FLOW			21	Sep 24,25	10	Sep 9 1957
ANNUAL RUNOFF (CFSM)	2.18		1.81		1.74	
ANNUAL RUNOFF (INCHES)	29.66		24.59		23.66	
10 PERCENT EXCEEDS	1510		1500		1540	
50 PERCENT EXCEEDS	478		399		344	
90 PERCENT EXCEEDS	136		50		56	

a From peak-stage indicator.

b Also Sept. 7-9, 1957.

c Estimated on basis of summation of peak flows at nearby stations.

e Estimated.



OCTOBER 1, 2004 TO SEPTEMBER 30, 2005

YOUGHIOGHENY RIVER BASIN

03079000 CASSELMAN RIVER AT MARKLETON, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 2005 to current year.

pH: June 2005 to current year.

WATER TEMPERATURE: June 2005 to current year.

INSTRUMENTATION.--Automated sampler interfaced with a data collection platform with 60-minute recording interval. Satellite telemetry at station.

REMARKS.--Specific conductance, pH, and water temperature records rated fair except for periods June 1, July 7-14, and Sept. 30, which are poor. Other interruptions in the record were due to malfunctions of the equipment.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	545	367	463	716	692	702	677	635	648
2	334	321	328	552	526	541	721	667	696	728	677	707
3	349	330	338	563	528	545	733	684	710	729	700	714
4	458	332	366	610	563	592	749	725	736	700	686	691
5	333	324	330	624	590	605	770	749	756	698	691	694
6	351	300	339	614	585	600	791	769	778	706	689	695
7	374	297	331	650	526	599	799	771	792	737	703	720
8	326	285	301	626	432	549	771	547	684	760	737	747
9	328	293	312	616	365	462	684	492	545	784	757	769
10	384	216	279	420	365	405	570	549	561	813	784	802
11	307	263	288	487	408	454	604	555	579	---	---	---
12	316	272	288	508	483	491	659	604	629	---	---	---
13	321	296	307	544	485	508	694	658	673	---	---	---
14	346	321	334	583	502	537	725	694	709	906	882	893
15	358	345	350	502	453	467	756	725	737	907	900	904
16	370	358	364	531	482	516	767	547	683	903	892	900
17	408	367	380	600	467	532	724	557	644	892	876	882
18	464	392	405	467	435	446	719	594	635	898	841	866
19	406	389	395	493	434	460	657	613	624	860	831	845
20	417	397	406	618	493	540	680	657	674	896	852	871
21	438	414	423	542	516	528	673	603	644	923	896	911
22	444	419	434	565	542	555	724	667	697	936	923	927
23	505	442	471	601	562	587	754	709	732	940	920	932
24	491	462	475	632	599	618	756	732	742	920	913	917
25	536	459	479	643	605	631	761	733	748	932	919	924
26	542	495	510	688	602	654	776	760	766	935	919	929
27	525	501	513	703	654	683	783	761	772	930	919	926
28	547	511	528	687	654	671	766	753	758	926	896	911
29	552	520	532	699	678	688	840	763	813	925	896	913
30	539	406	511	692	675	683	830	696	750	---	---	---
31	---	---	---	708	677	691	697	638	667	---	---	---
MONTH	552	216	390	708	365	558	840	492	698	940	635	832

YOUGHIOGHENY RIVER BASIN

03079000 CASSELMAN RIVER AT MARKLETON, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	---	---	---	7.9	7.2	7.4	8.2	7.6	7.8	8.3	7.7	7.9
2	7.5	7.1	7.3	8.1	7.3	7.6	8.2	7.5	7.8	8.3	7.7	7.9
3	7.4	7.1	7.2	8.2	7.3	7.6	8.2	7.6	7.8	8.2	7.6	7.8
4	7.5	7.1	7.3	8.1	7.3	7.5	8.3	7.7	7.9	8.1	7.6	7.7
5	7.7	7.2	7.3	8.1	7.3	7.5	8.3	7.8	8.0	8.1	7.4	7.6
6	7.7	7.2	7.3	8.1	7.4	7.6	8.5	7.9	8.1	7.9	7.4	7.5
7	7.7	7.2	7.3	8.1	7.4	7.6	8.5	7.9	8.1	7.8	7.3	7.5
8	7.7	7.2	7.4	7.6	7.3	7.5	8.4	8.0	8.1	7.9	7.4	7.5
9	7.7	7.2	7.3	7.9	7.2	7.7	8.5	8.1	8.3	8.0	7.4	7.5
10	7.5	7.1	7.2	8.2	7.7	7.8	8.5	8.2	8.3	8.1	7.3	7.5
11	7.3	7.0	7.2	8.4	7.6	7.8	8.9	8.2	8.4	---	---	---
12	7.4	7.1	7.3	8.5	7.6	7.8	8.8	8.0	8.3	---	---	---
13	7.7	7.2	7.4	8.3	7.5	7.8	8.7	7.9	8.2	---	---	---
14	8.0	7.3	7.4	8.4	7.5	7.8	8.7	8.0	8.2	8.3	7.5	7.8
15	7.8	7.2	7.4	8.6	7.6	7.9	8.6	8.0	8.2	8.3	7.4	7.8
16	7.5	7.1	7.2	8.6	7.6	8.0	8.3	8.0	8.1	8.3	7.7	7.8
17	7.5	7.1	7.2	8.2	7.6	7.8	8.6	8.0	8.2	8.3	7.6	7.9
18	7.6	7.0	7.2	8.2	7.5	7.7	8.9	7.9	8.3	8.3	7.8	8.0
19	7.6	7.0	7.3	8.2	7.5	7.7	8.8	8.0	8.2	8.3	7.8	7.9
20	7.6	7.1	7.3	8.4	7.5	7.8	8.7	7.9	8.2	8.1	7.8	7.9
21	7.6	7.1	7.3	8.3	7.5	7.8	8.8	8.0	8.2	8.2	7.6	7.8
22	7.5	7.1	7.2	8.2	7.5	7.7	8.8	7.9	8.2	8.2	7.7	7.8
23	7.6	7.1	7.3	8.0	7.4	7.6	8.8	8.0	8.3	8.3	7.7	7.8
24	7.6	7.1	7.3	8.0	7.4	7.6	8.6	8.0	8.2	8.3	7.8	7.9
25	7.6	7.1	7.3	7.9	7.4	7.5	8.3	7.7	8.0	8.2	7.8	7.9
26	7.7	7.1	7.4	8.3	7.4	7.8	8.2	7.6	7.8	8.0	7.7	7.8
27	7.6	7.2	7.3	8.3	7.6	7.8	8.0	7.6	7.7	8.0	7.7	7.9
28	7.6	7.1	7.3	8.4	7.7	7.9	8.2	7.5	7.7	8.1	7.6	7.8
29	8.1	7.2	7.5	8.3	7.7	7.9	8.0	7.5	7.6	8.2	7.7	7.9
30	8.1	7.2	7.4	8.3	7.6	7.8	8.0	7.5	7.6	8.0	7.6	7.8
31	---	---	---	8.2	7.6	7.9	8.2	7.4	7.8	---	---	---
MAX	8.1	7.3	7.5	8.6	7.7	8.0	8.9	8.2	8.4	8.3	7.8	8.0
MIN	7.3	7.0	7.2	7.6	7.2	7.4	8.0	7.4	7.6	7.8	7.3	7.5

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	27.3	22.4	24.6	30.0	23.1	26.3	25.1	19.7	21.9
2	18.8	15.9	17.3	26.7	22.3	24.3	29.8	23.0	26.2	25.3	19.6	22.2
3	17.1	15.5	16.1	25.7	20.5	23.2	30.3	22.6	26.3	23.9	18.5	21.3
4	19.3	14.6	16.8	27.6	21.1	24.3	29.5	23.0	26.3	24.7	17.9	21.1
5	23.4	16.8	20.0	26.2	22.6	24.2	26.7	23.4	24.5	23.3	17.3	20.5
6	24.0	19.8	21.7	27.5	22.0	24.5	26.3	22.2	24.1	23.9	17.0	20.5
7	23.8	18.1	21.0	---	---	---	27.1	21.8	24.1	24.3	17.1	20.7
8	23.3	19.6	21.7	---	---	---	23.5	21.4	22.4	23.7	16.9	20.5
9	23.8	19.8	21.9	---	---	---	26.9	21.3	23.8	23.9	18.3	21.2
10	25.0	19.7	22.4	---	---	---	29.1	22.4	25.5	25.0	18.7	21.8
11	23.3	20.0	21.4	---	---	---	29.3	23.4	26.1	---	---	---
12	24.0	19.8	21.7	---	---	---	29.3	23.9	26.6	---	---	---
13	25.0	20.6	22.8	---	---	---	29.6	23.9	26.7	---	---	---
14	25.3	21.7	23.5	---	---	---	29.3	23.6	26.4	23.4	18.6	21.3
15	23.5	21.0	22.1	28.6	22.6	25.4	27.7	24.4	26.1	24.9	19.4	22.3
16	21.0	18.3	19.7	28.7	24.1	26.3	25.7	21.6	23.4	25.7	21.2	23.1
17	19.9	16.2	18.1	27.5	24.3	25.8	26.4	20.1	23.0	24.1	21.3	22.5
18	21.2	16.1	18.7	27.7	24.2	25.7	26.4	20.9	23.7	22.8	19.3	20.8
19	21.3	16.7	19.0	27.4	24.0	25.6	26.8	22.4	24.3	23.6	17.7	20.4
20	22.4	17.1	19.6	29.8	24.1	26.5	28.9	22.7	25.7	20.9	18.7	19.7
21	23.6	18.0	20.7	28.3	23.6	26.0	28.6	24.1	26.0	23.5	17.5	19.9
22	23.4	19.6	21.3	27.1	23.7	25.2	25.5	21.1	23.3	23.0	16.5	19.9
23	25.7	18.6	22.1	29.3	23.1	25.9	24.8	19.4	22.0	23.3	19.8	21.4
24	27.4	20.2	23.6	26.2	21.5	24.0	25.6	18.9	22.1	21.7	19.2	20.4
25	29.0	21.5	25.0	28.7	22.9	25.0	24.4	18.4	21.8	22.4	17.7	20.0
26	29.1	22.6	25.7	29.2	22.5	25.7	22.3	19.7	20.7	20.9	19.6	20.3
27	28.5	22.6	25.5	28.1	24.4	26.0	20.6	19.5	20.0	22.4	17.7	19.7
28	29.8	22.5	25.8	27.3	22.7	24.8	25.0	19.6	21.8	20.9	14.5	17.9
29	29.0	23.7	26.1	28.5	21.9	25.0	22.7	20.3	21.4	19.2	15.1	17.8
30	29.7	23.6	26.1	28.9	22.0	25.2	23.1	20.6	21.9	17.9	11.7	14.8
31	---	---	---	29.2	22.4	25.7	22.4	21.2	21.9	---	---	---
MONTH	29.8	14.6	21.6	29.8	20.5	25.2	30.3	18.4	24.0	25.7	11.7	20.5