

Water-Data Report 2007

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL

Alabama Basin
Cahaba Subbasin

LOCATION.--Lat 33°31'27", long 86°34'32" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, on left bank on downstream side bridge on county road, 1.2 mi downstream from Dry Branch, 2.0 mi southwest of Leeds, and 12.8 mi upstream from mouth.

DRAINAGE AREA.--19.4 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1976 to September 1980 (gage heights and discharge measurements in files of Barton Laboratories), October 1980 to September 1981, May 1988 to December 2006 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 586.84 ft above NGVD of 1929.

REMARKS.--Estimated daily discharge: Oct 23, 24. Records good except those estimated which are poor.

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	9.6	32	18	---	---	---	---	---	---	---	---	---
2	9.8	33	13	---	---	---	---	---	---	---	---	---
3	8.2	20	11	---	---	---	---	---	---	---	---	---
4	9.7	13	11	---	---	---	---	---	---	---	---	---
5	8.4	12	9.1	---	---	---	---	---	---	---	---	---
6	8.8	12	8.7	---	---	---	---	---	---	---	---	---
7	7.8	65	7.5	---	---	---	---	---	---	---	---	---
8	8.1	34	10	---	---	---	---	---	---	---	---	---
9	8.7	24	11	---	---	---	---	---	---	---	---	---
10	8.8	20	10	---	---	---	---	---	---	---	---	---
11	8.8	17	10	---	---	---	---	---	---	---	---	---
12	10	15	9.1	---	---	---	---	---	---	---	---	---
13	9.0	14	11	---	---	---	---	---	---	---	---	---
14	9.8	14	7.9	---	---	---	---	---	---	---	---	---
15	11	142	9.0	---	---	---	---	---	---	---	---	---
16	12	117	7.7	---	---	---	---	---	---	---	---	---
17	96	40	6.8	---	---	---	---	---	---	---	---	---
18	26	31	7.9	---	---	---	---	---	---	---	---	---
19	19	26	5.5	---	---	---	---	---	---	---	---	---
20	22	21	7.5	---	---	---	---	---	---	---	---	---
21	16	20	6.6	---	---	---	---	---	---	---	---	---
22	112	19	120	---	---	---	---	---	---	---	---	---
23	e35	18	37	---	---	---	---	---	---	---	---	---
24	e23	16	24	---	---	---	---	---	---	---	---	---
25	19	14	35	---	---	---	---	---	---	---	---	---
26	18	13	27	---	---	---	---	---	---	---	---	---
27	72	11	21	---	---	---	---	---	---	---	---	---
28	36	11	19	---	---	---	---	---	---	---	---	---
29	25	11	18	---	---	---	---	---	---	---	---	---
30	23	13	16	---	---	---	---	---	---	---	---	---
31	17	---	131	---	---	---	---	---	---	---	---	---
Total	707.5	848	646.3	---	---	---	---	---	---	---	---	---
Mean	22.8	28.3	20.8	---	---	---	---	---	---	---	---	---
Max	112	142	131	---	---	---	---	---	---	---	---	---
Min	7.8	11	5.5	---	---	---	---	---	---	---	---	---
Cfsm	1.18	1.46	1.07	---	---	---	---	---	---	---	---	---
In.	1.36	1.63	1.24	---	---	---	---	---	---	---	---	---

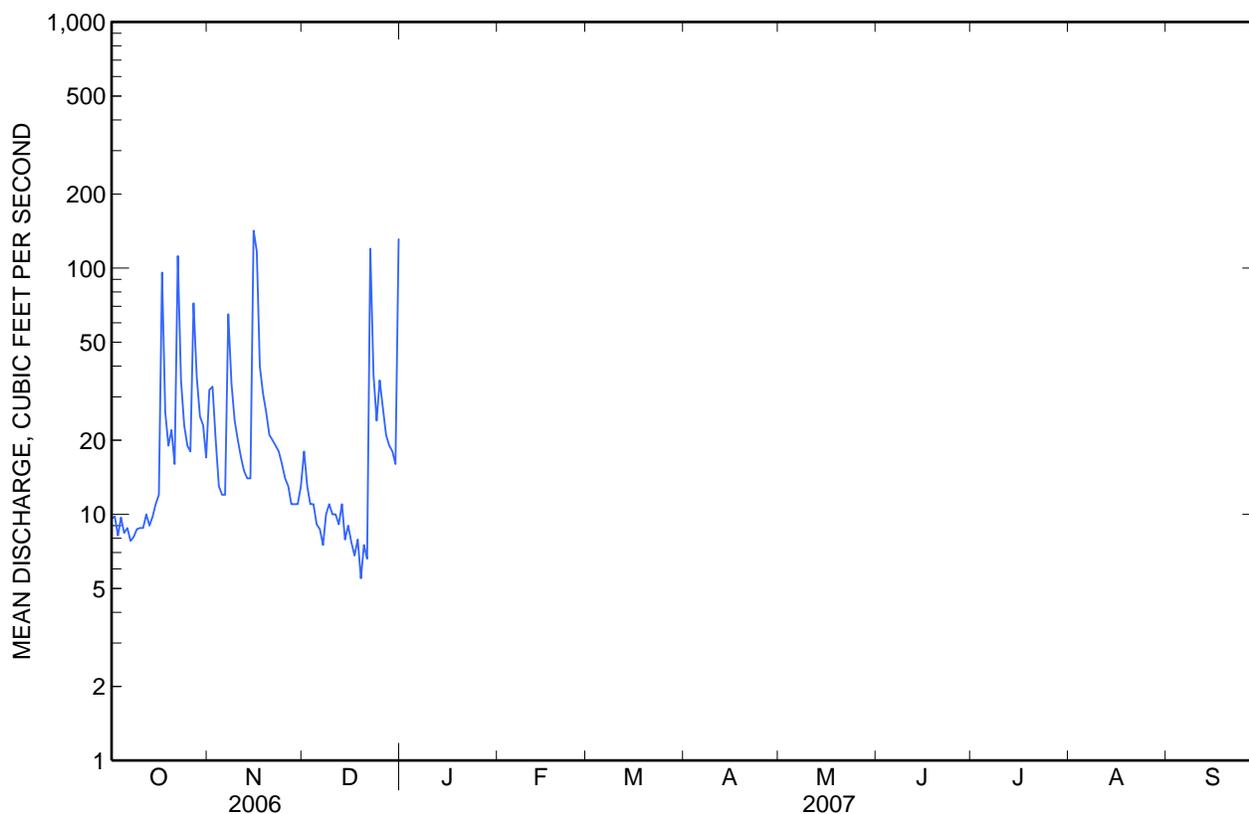
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	19.5	34.2	35.0	58.3	67.1	68.7	48.6	34.0	34.8	31.9	15.6	23.9
Max	49.3	120	77.4	147	163	126	118	217	116	99.7	33.8	81.1
(WY)	(2003)	(2005)	(2003)	(1998)	(1990)	(1996)	(2000)	(2003)	(1999)	(1989)	(1998)	(2004)
Min	8.75	11.1	11.2	8.79	22.5	39.5	22.3	10.4	6.02	7.65	6.37	6.21
(WY)	(1992)	(2000)	(1981)	(1981)	(2000)	(2004)	(1990)	(1988)	(1988)	(1995)	(1988)	(2000)

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Years 1981 - 2007	
Annual total	14,282.9			
Annual mean	39.1		39.5	
Highest annual mean			67.5	2003
Lowest annual mean			24.6	1992
Highest daily mean	696	Feb 6	1,700	May 8, 2003
Lowest daily mean	5.5	Dec 19	3.9	Nov 4, 2000
Annual seven-day minimum	7.3	Dec 15	4.9	Oct 15, 2000
Maximum peak flow			5,490	May 7, 2003
Maximum peak stage			13.92	May 7, 2003
Annual runoff (cfsm)	2.02		2.04	
Annual runoff (inches)	27.39		27.67	
10 percent exceeds	89		73	
50 percent exceeds	20		21	
90 percent exceeds	8.9		8.8	

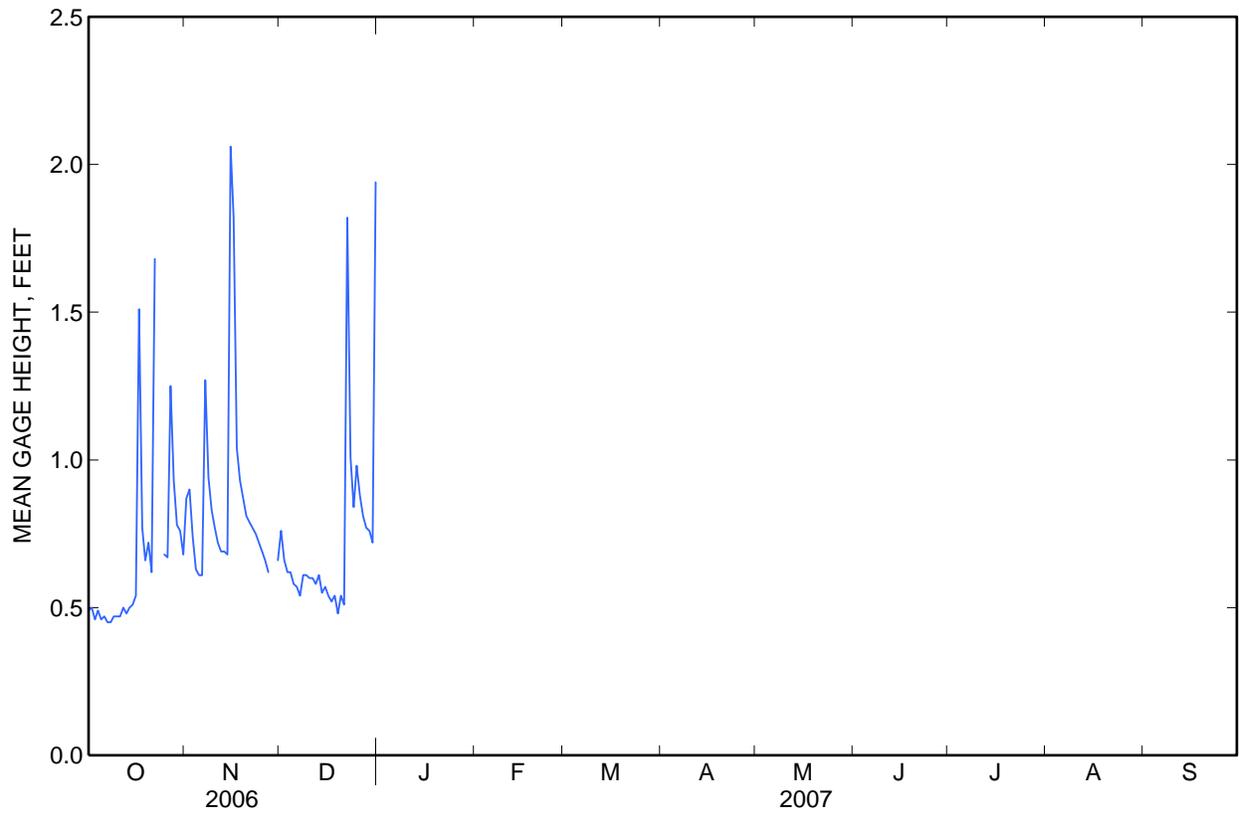


02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.49	0.87	0.76	---	---	---	---	---	---	---	---	---
2	0.50	0.90	0.66	---	---	---	---	---	---	---	---	---
3	0.46	0.74	0.62	---	---	---	---	---	---	---	---	---
4	0.49	0.63	0.62	---	---	---	---	---	---	---	---	---
5	0.46	0.61	0.58	---	---	---	---	---	---	---	---	---
6	0.47	0.61	0.57	---	---	---	---	---	---	---	---	---
7	0.45	1.27	0.54	---	---	---	---	---	---	---	---	---
8	0.45	0.94	0.61	---	---	---	---	---	---	---	---	---
9	0.47	0.83	0.61	---	---	---	---	---	---	---	---	---
10	0.47	0.77	0.60	---	---	---	---	---	---	---	---	---
11	0.47	0.72	0.60	---	---	---	---	---	---	---	---	---
12	0.50	0.69	0.58	---	---	---	---	---	---	---	---	---
13	0.48	0.69	0.61	---	---	---	---	---	---	---	---	---
14	0.50	0.68	0.55	---	---	---	---	---	---	---	---	---
15	0.51	2.06	0.57	---	---	---	---	---	---	---	---	---
16	0.54	1.82	0.54	---	---	---	---	---	---	---	---	---
17	1.51	1.04	0.52	---	---	---	---	---	---	---	---	---
18	0.77	0.93	0.54	---	---	---	---	---	---	---	---	---
19	0.66	0.87	0.48	---	---	---	---	---	---	---	---	---
20	0.72	0.81	0.54	---	---	---	---	---	---	---	---	---
21	0.62	0.79	0.51	---	---	---	---	---	---	---	---	---
22	1.68	0.77	1.82	---	---	---	---	---	---	---	---	---
23	---	0.75	1.01	---	---	---	---	---	---	---	---	---
24	---	0.72	0.84	---	---	---	---	---	---	---	---	---
25	0.68	0.69	0.98	---	---	---	---	---	---	---	---	---
26	0.67	0.66	0.88	---	---	---	---	---	---	---	---	---
27	1.25	0.62	0.81	---	---	---	---	---	---	---	---	---
28	0.93	---	0.77	---	---	---	---	---	---	---	---	---
29	0.78	---	0.76	---	---	---	---	---	---	---	---	---
30	0.76	0.66	0.72	---	---	---	---	---	---	---	---	---
31	0.68	---	1.94	---	---	---	---	---	---	---	---	---
Mean	---	---	0.73	---	---	---	---	---	---	---	---	---
Max	---	---	1.94	---	---	---	---	---	---	---	---	---
Min	---	---	0.48	---	---	---	---	---	---	---	---	---

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL—Continued



02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1988 to December 2006 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1988 to December 2006.

WATER TEMPERATURE: September 1988 to December 2006.

DISSOLVED OXYGEN: September 1988 to December 2006.

INSTRUMENTATION.--Water-quality monitor September 1988 to December 2006.

REMARKS.--Maximum and minimum values given in EXTREMES FOR PERIOD OF RECORD and EXTREMES FOR CURRENT YEAR may have been exceeded during periods of missing record.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 631 microsiemens, Mar. 11, 1991; minimum, 68 microsiemens, Sept. 16, 2004.

WATER TEMPERATURE: Maximum, 28.2°C, June 7, 1992; minimum, 4.0°C, Jan. 3, 2001.

DISSOLVED OXYGEN: Maximum, 16.4 mg/L, Jan. 13, 2001; minimum, 2.0 mg/L, Sept. 9, 1988.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 456 microsiemens/cm, Oct. 16; minimum, 165 microsiemens/cm, Oct. 22.

WATER TEMPERATURE: Maximum, 21.0°C, Oct. 5; minimum, 6.5°C, Dec. 9.

DISSOLVED OXYGEN: Maximum, 13.5 mg/L, Dec. 10, 18, 19; minimum, 5.6 mg/L, Oct. 5, 6.

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	447	383	413	445	286	399	423	383	401	---	---	---
2	445	398	421	384	328	361	431	395	414	---	---	---
3	446	379	407	407	360	399	430	397	413	---	---	---
4	444	396	420	409	395	402	435	400	423	---	---	---
5	447	388	410	414	399	406	438	403	421	---	---	---
6	451	387	413	414	390	406	436	405	418	---	---	---
7	452	328	412	393	280	309	420	402	413	---	---	---
8	440	350	404	378	295	348	445	405	428	---	---	---
9	448	372	413	414	359	384	449	411	429	---	---	---
10	449	387	418	424	394	407	451	414	433	---	---	---
11	440	388	416	437	401	419	451	402	437	---	---	---
12	440	404	416	431	408	420	444	402	418	---	---	---
13	438	402	415	443	401	421	444	410	428	---	---	---
14	439	404	418	442	417	430	448	403	428	---	---	---
15	455	391	414	418	198	284	452	413	430	---	---	---
16	456	391	420	300	188	250	451	401	415	---	---	---
17	446	167	287	365	297	334	452	394	426	---	---	---
18	354	251	312	395	355	375	445	399	425	---	---	---
19	405	335	353	411	378	396	439	399	410	---	---	---
20	406	342	376	417	390	408	436	407	421	---	---	---
21	431	358	390	425	404	415	433	407	417	---	---	---
22	386	165	251	431	405	420	415	178	249	---	---	---
23	---	---	---	431	396	418	333	254	292	---	---	---
24	413	366	397	437	413	423	366	313	337	---	---	---
25	425	384	398	442	409	431	363	308	333	---	---	---
26	441	391	413	439	407	425	365	317	337	---	---	---
27	425	256	323	443	408	424	381	333	364	---	---	---
28	371	303	338	446	410	431	393	349	380	---	---	---
29	397	356	384	443	409	429	400	354	390	---	---	---
30	430	385	410	438	404	417	409	362	395	---	---	---
31	439	401	419	---	---	---	403	189	272	---	---	---
Month	---	---	---	446	188	393	452	178	393	---	---	---

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	20.3	18.0	19.0	18.1	16.0	16.9	17.9	13.1	15.5	---	---	---
2	20.2	18.9	19.6	17.5	14.5	16.1	13.3	11.6	12.4	---	---	---
3	20.4	18.4	19.4	14.5	12.9	13.7	13.2	11.7	12.4	---	---	---
4	20.9	19.1	20.0	14.0	12.1	13.1	11.9	9.4	10.5	---	---	---
5	21.0	19.0	20.0	14.4	12.5	13.4	10.8	8.3	9.6	---	---	---
6	20.8	18.8	19.8	15.6	13.6	14.6	11.9	9.4	10.6	---	---	---
7	18.8	16.7	17.8	15.8	15.1	15.5	11.7	9.1	11.1	---	---	---
8	18.4	16.3	17.4	16.1	15.0	15.5	9.1	7.3	8.2	---	---	---
9	19.0	16.5	17.8	16.6	14.0	15.5	9.2	6.5	7.9	---	---	---
10	19.6	17.1	18.4	17.2	15.0	16.2	10.0	7.4	8.6	---	---	---
11	20.2	18.5	19.3	16.9	14.8	16.3	11.4	8.7	10.1	---	---	---
12	19.6	17.3	18.1	15.1	13.6	14.4	13.5	11.1	12.4	---	---	---
13	17.6	15.0	16.1	14.5	12.2	13.4	14.9	12.8	13.8	---	---	---
14	16.1	13.6	14.9	14.9	12.8	14.0	13.8	11.8	12.8	---	---	---
15	16.1	13.8	15.0	15.6	14.6	15.1	14.0	11.7	12.8	---	---	---
16	16.0	15.2	15.5	15.2	14.1	14.4	13.8	11.6	12.6	---	---	---
17	18.8	16.0	17.6	14.8	13.4	14.1	13.5	11.1	12.4	---	---	---
18	19.8	18.3	19.0	15.0	12.9	13.9	14.2	11.5	12.8	---	---	---
19	19.9	18.9	19.3	14.1	12.9	13.5	14.9	12.5	13.7	---	---	---
20	19.8	15.9	17.4	12.9	11.8	12.3	14.9	13.0	14.0	---	---	---
21	16.5	14.1	15.4	12.6	10.8	11.7	14.8	14.1	14.5	---	---	---
22	16.8	15.0	16.0	13.1	10.5	12.0	14.6	13.2	13.9	---	---	---
23	---	---	---	13.3	10.9	12.2	14.5	13.4	13.9	---	---	---
24	15.1	13.8	14.6	13.8	11.3	12.6	13.7	12.1	13.0	---	---	---
25	14.4	13.0	13.8	14.2	11.9	13.0	13.6	12.5	13.2	---	---	---
26	15.1	14.1	14.6	14.2	12.3	13.2	12.5	11.3	11.8	---	---	---
27	15.9	14.7	15.3	14.2	12.2	13.2	11.8	10.5	11.1	---	---	---
28	16.3	15.1	15.6	15.6	13.9	14.8	11.9	10.0	10.9	---	---	---
29	16.2	14.2	15.2	16.7	15.3	16.1	13.2	11.2	12.3	---	---	---
30	16.4	14.3	15.4	18.1	16.3	17.3	14.6	12.6	13.4	---	---	---
31	16.6	15.3	16.0	---	---	---	15.1	14.2	14.7	---	---	---
Month	---	---	---	18.1	10.5	14.3	17.9	6.5	12.2	---	---	---

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	8.7	7.1	7.8	8.7	7.0	7.8	10.2	8.1	9.1	---	---	---
2	8.3	7.0	7.6	8.3	6.7	7.5	11.6	9.5	10.2	---	---	---
3	8.5	7.1	7.7	9.2	7.9	8.5	11.8	9.7	10.4	---	---	---
4	8.4	6.8	7.5	9.5	8.4	8.8	12.2	10.0	10.9	---	---	---
5	7.6	5.6	6.9	9.5	8.2	8.7	12.6	10.6	11.3	---	---	---
6	6.6	5.6	6.0	9.4	7.7	8.4	12.7	10.2	11.2	---	---	---
7	7.3	5.8	6.6	8.0	7.3	7.7	12.2	10.0	10.8	---	---	---
8	7.5	6.6	7.1	8.7	7.7	8.0	13.1	10.8	11.8	---	---	---
9	7.9	6.9	7.3	8.9	7.6	8.1	13.3	11.6	12.2	---	---	---
10	8.0	6.8	7.2	9.0	7.5	8.1	13.5	11.4	12.1	---	---	---
11	7.6	6.5	7.0	8.2	7.1	7.6	13.0	10.3	11.5	---	---	---
12	7.8	6.4	7.0	9.1	7.8	8.4	12.5	9.7	10.7	---	---	---
13	8.4	6.4	7.5	10.5	8.1	9.1	12.3	9.5	10.4	---	---	---
14	8.8	7.8	8.2	10.3	8.5	9.3	12.8	9.6	10.6	---	---	---
15	9.1	7.7	8.3	9.1	8.3	8.7	12.8	9.8	10.9	---	---	---
16	8.6	7.7	8.2	8.9	8.5	8.7	13.1	9.8	10.9	---	---	---
17	8.3	7.3	7.8	9.5	8.5	8.9	13.1	9.9	11.0	---	---	---
18	7.8	7.0	7.4	9.8	8.7	9.2	13.5	9.8	11.1	---	---	---
19	7.5	6.7	7.1	10.2	8.9	9.4	13.5	9.5	10.9	---	---	---
20	8.2	7.0	7.7	10.5	9.3	9.9	13.4	9.4	10.9	---	---	---
21	9.2	8.0	8.5	10.8	9.6	10.1	12.2	9.2	10.2	---	---	---
22	9.5	8.1	8.7	10.8	9.6	10.1	10.6	9.2	10.1	---	---	---
23	---	---	---	10.9	9.5	10.0	10.8	9.4	10.0	---	---	---
24	9.2	8.5	8.9	10.8	9.5	10	11.8	9.8	10.6	---	---	---
25	9.5	8.5	9.0	11.0	9.4	10.0	10.9	9.9	10.3	---	---	---
26	9.3	8.3	8.7	11.0	9.3	9.9	11.6	10.2	10.8	---	---	---
27	8.6	8.0	8.3	11.2	9.3	10.0	12.6	10.8	11.4	---	---	---
28	8.7	7.7	8.1	10.3	9.0	9.6	12.9	10.8	11.5	---	---	---
29	8.8	7.6	8.2	10.3	8.6	9.3	12.8	10.4	11.4	---	---	---
30	8.8	7.7	8.2	10.2	8.1	8.9	12.2	9.8	10.7	---	---	---
31	8.7	7.5	7.9	---	---	---	10.4	9.6	10.1	---	---	---
Month	---	---	---	11.2	6.7	9.0	13.5	8.1	10.8	---	---	---