0422026250 NORTHRUP CREEK AT NORTH GREECE, NY

Southwestern Lake Ontario Basin
Oak Orchard-Twelvemile Subbasin

LOCATION.--Lat 43°15′13″, long 77°44′33″ referenced to North American Datum of 1927, Monroe County, NY, Hydrologic Unit 04130001, on right bank 75 ft downstream from bridge on State Highway 18 (Latta Road), 0.5 mi west of North Greece, and 5.1 mi upstream from mouth.

DRAINAGE AREA.--10.1 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WDR NY-01-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 306 ft above NGVD of 1929, from topographic map.

COOPERATION.--Discharge measurements were provided by the Monroe County Environmental Health Laboratory at Rochester, N.Y.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Discharge includes undetermined diversion from Erie (Barge) Canal upstream from station. Unpublished water-quality records for prior years are available in files of Monroe County Department of Health.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,060 ft^3/s, Sept. 9, 2004, gage height, 5.01 ft, from rating extended above 200 ft^3/s on basis of contracted-opening measurement at gage height 4.36 ft; minimum discharge, 0.39 ft^3/s, Aug. 19, 1993, gage height 0.46 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 758 ft^3/s, May 17, 1974, gage height, 4.36 ft, on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 23	1930	211	2.61
Mar 20	0030	214	2.62
Jul 23	1745	*312	*3.01

Minimum discharge, 2.8 ft^3/s, Jan. 19, gage height, 0.95 ft, result of freezeup.

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8.1	9.7	e6.9	13	12	e7.1	78	11	7.8	6.9	9.8	6.5
2	8.5	9.8	e8.7	e8.3	22	12	35	11	7.7	6.4	7.8	6.3
3	8.2	9.7	25	e6.0	16	52	22	16	8.2	8.9	7.2	e6.3
4	8.3	9.7	17	e7.3	13	68	23	24	8.2	7.6	7.0	e6.4
5	8.2	9.6	e11	e8.7	e89	26	25	15	7.6	6.8	9.7	e6.5
6	8.7	11	e10	14	70	19	18	12	7.4	6.5	20	e6.4
7	13	11	e9.9	19	26	18	15	11	6.8	6.4	9.9	e7.2
8	11	9.6	9.6	15	17	e14	13	13	7.2	6.2	19	e7.0
9	10	9.3	9.1	13	e13	e13	13	10	7.9	6.2	12	7.6
10	8.9	9.4	8.8	11	e11	e14	12	9.1	7.7	5.9	16	7.5
11	9.0	9.4	10	31	e9.2	e14	33	8.5	7.7	6.1	18	7.6
12	9.1	9.5	29	20	e9.9	e12	66	8.2	7.3	6.3	12	8.5
13	9.0	9.6	19	14	e9.5	e11	29	7.8	11	7.3	9.2	8.1
14	9.2	9.3	15	14	e8.3	15	19	7.9	13	6.6	8.5	11
15	9.0	9.3	e11	12	e8.0	28	15	8.0	9.7	6.4	7.9	7.7
16	8.9	9.1	e9.5	11	8.2	31	12	7.8	14	6.3	7.4	6.6
17	9.6	8.6	e8.7	10	12	25	10	7.8	14	6.8	6.9	6.9
18	9.2	8.3	e8.0	11	83	24	10	9.1	10	6.1	6.8	6.9
19	9.9	8.5	e9.1	e8.8	e23	133	9.2	9.8	8.8	7.1	14	6.9
20	9.5	10	e10	e8.1	e15	135	8.5	8.4	8.4	19	8.5	6.9
21	9.2	15	e11	e7.5	e14	45	7.8	7.9	7.9	12	8.0	6.9
22	9.2	42	11	e6.8	e11	29	7.4	8.1	8.1	8.4	7.8	6.9
23	14	18	85	e6.4	e10	23	7.9	7.6	8.2	63	7.5	6.9
24	11	11	52	e6.3	e8.3	20	7.3	7.5	7.7	47	7.3	6.9
25	10	8.4	19	e6.3	e6.9	17	8.1	7.5	7.2	21	7.3	6.9
26	10	8.8	14	e6.1	e8.2	38	14	7.6	7.2	11	7.2	6.9
27	12	15	13	e6.1	e7.6	35	16	7.7	7.2	8.3	6.9	6.9
28	11	9.7	13	e6.0	e7.0	34	15	7.2	8.8	8.9	6.9	7.3
29	10	8.5	16	e5.8	e6.7	24	14	6.9	8.0	9.1	7.0	7.2
30	9.7	7.8	13	e5.8	---	21	12	6.9	7.6	7.7	6.9	7.1
31	9.6	---	12	e5.7	---	86	---	9.0	---	17	6.6	---
Total	301.0	334.6	504.3	324.0	554.8	1,043.1	575.2	299.3	258.3	359.2	297.0	214.7
Mean	9.71	11.2	16.3	10.5	19.1	33.6	19.2	9.65	8.61	11.6	9.58	7.16
Max	14	42	85	31	89	135	78	24	14	63	20	11
Min	8.1	7.8	6.9	5.7	6.7	7.1	7.3	6.9	6.8	5.9	6.6	6.3

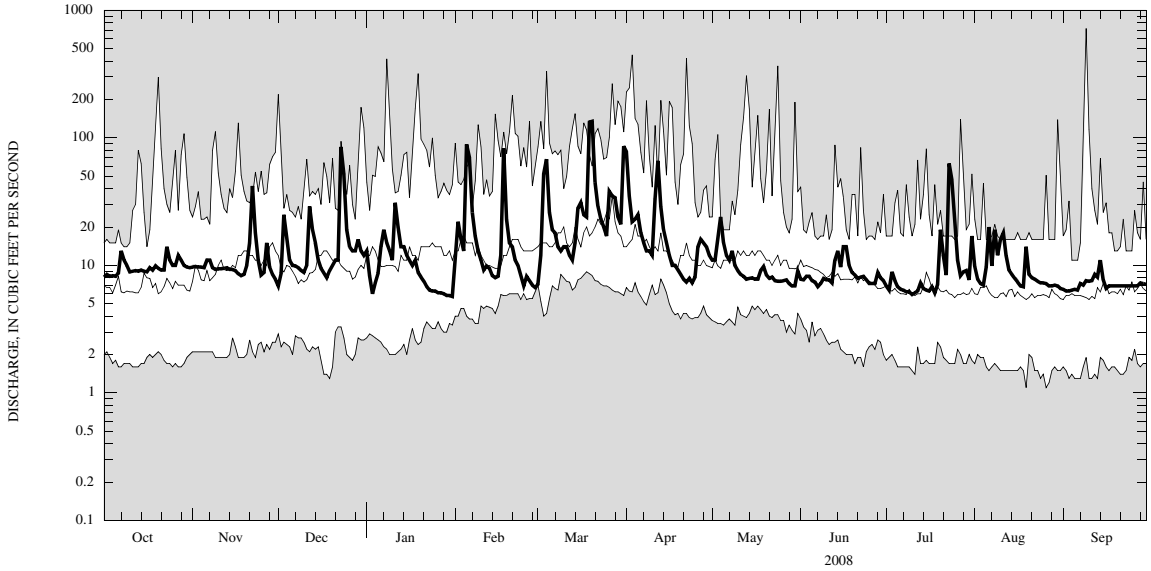
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	9.91	12.9	14.3	17.5	19.6	26.5	23.1	15.8	9.03	8.19	7.25	8.79
Max	30.9	26.4	26.5	45.6	38.9	40.7	48.2	31.3	16.8	22.0	16.0	41.3
(WY)	(1997)	(1997)	(2005)	(1998)	(1990)	(1993)	(2005)	(2002)	(1996)	(2004)	(2007)	(2004)
Min	1.83	2.49	3.00	6.39	7.44	11.2	5.27	4.77	3.06	1.96	1.60	1.92
(WY)	(1995)	(1992)	(1999)	(2000)	(2007)	(2006)	(1995)	(1993)	(1991)	(1993)	(1993)	(1994)

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1990 - 2008	
Annual total	6,668.5		5,065.5			
Annual mean	18.3		13.8		14.4	
Highest annual mean					21.7	2007
Lowest annual mean					7.33	1995
Highest daily mean	193	Apr 16	135	Mar 20	720	Sep 9, 2004
Lowest daily mean	5.8	Feb 16	5.7	Jan 31	1.1	Aug 19, 1993
Annual seven-day minimum	5.9	Feb 14	6.0	Jan 25	1.4	Aug 22, 1993
10 percent exceeds	25		23		26	
50 percent exceeds	16		9.2		9.1	
90 percent exceeds	8.2		6.9		3.5	



CURRENT WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1989 to current year.
CHEMICAL DATA: Water years 1989 (a), 1990 to 2003 (e), 2004-05 (d), 2006-07 (c), 2008 (d).
NUTRIENT DATA: Water years 1989 (a), 1990 to 2003 (e), 2004-05 (d), 2006-07 (c), 2008 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to current year.

INSTRUMENTATION.--Automatic water sampler since October 1989. Water temperature recorder since November 1994 provides 15-minute-interval readings.

REMARKS.--Prior to 1994 water year, data published in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587.

COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, NY.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 29.0°C, July 18, 2005; minimum, 0.0°C, on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 25°C, July 8; minimum, 0.0°C, on many days during winter period.

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	18.0	16.0	17.0	12.5	10.0	11.5	1.0	0.0	0.0	2.5	1.5	2.0
2	17.5	17.0	17.0	10.0	9.0	9.5	0.0	0.0	0.0	1.5	0.0	0.0
3	18.0	17.0	17.5	9.5	7.5	9.0	1.5	0.0	0.5	0.0	0.0	0.0
4	18.5	17.0	17.5	10.0	9.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0
5	19.0	16.5	17.5	9.5	8.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0
6	20.0	18.0	19.0	9.0	7.5	8.5	0.0	0.0	0.0	0.5	0.0	0.0
7	19.5	17.5	18.5	7.5	6.5	7.0	0.0	0.0	0.0	6.5	0.5	4.5
8	21.0	17.5	19.0	7.0	6.0	6.5	2.0	0.0	1.0	9.0	6.5	7.5
9	20.5	18.0	19.5	7.0	6.0	6.5	1.0	1.0	1.0	8.5	5.5	7.5
10	18.0	16.0	17.0	7.0	5.5	6.5	2.0	1.0	1.5	5.5	4.0	4.5
11	16.0	14.5	15.0	6.5	4.5	5.5	2.5	2.0	2.0	5.5	4.0	4.5
12	14.5	13.0	13.5	9.0	6.5	7.5	2.5	2.0	2.0	4.5	4.0	4.5
13	13.0	12.0	12.5	9.5	8.5	9.0	2.0	0.5	1.5	4.0	3.0	3.5
14	14.0	13.0	13.5	9.5	7.5	8.5	2.0	1.0	1.5	4.0	3.5	3.5
15	14.5	13.5	14.0	9.5	8.0	9.0	1.0	0.0	0.0	3.5	2.0	2.5
16	14.0	13.0	13.5	8.0	5.5	6.5	0.0	0.0	0.0	2.5	1.5	2.0
17	16.0	13.5	14.5	6.0	5.0	5.5	0.0	0.0	0.0	2.5	1.0	2.0
18	17.0	15.0	16.0	5.5	4.5	5.0	0.0	0.0	0.0	2.5	0.5	2.0
19	17.5	16.5	17.0	5.5	4.0	5.0	0.0	0.0	0.0	0.5	0.0	0.0
20	17.0	15.0	16.0	7.5	5.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0
21	16.0	14.0	15.0	7.5	6.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0
22	16.5	15.0	16.0	7.0	4.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0
23	16.5	14.5	16.0	4.5	2.5	3.5	3.0	0.0	2.0	0.0	0.0	0.0
24	14.5	13.0	14.0	2.5	1.5	2.0	2.0	1.0	1.0	0.0	0.0	0.0
25	13.5	12.0	13.0	3.5	2.0	3.0	2.0	1.0	1.5	0.0	0.0	0.0
26	13.5	11.5	12.5	5.0	3.5	4.5	2.0	1.5	2.0	0.0	0.0	0.0
27	14.5	13.0	14.0	5.5	3.5	5.0	3.0	2.0	2.5	0.0	0.0	0.0
28	13.0	10.0	11.5	3.5	2.5	3.0	3.0	2.5	2.5	0.0	0.0	0.0
29	11.0	9.0	10.0	4.0	2.5	3.0	3.5	3.0	3.0	0.0	0.0	0.0
30	12.0	10.5	11.0	2.5	1.0	2.0	3.0	2.0	2.5	0.0	0.0	0.0
31	12.5	10.5	11.5	---	---	---	2.5	2.0	2.0	0.0	0.0	0.0
Month	21.0	9.0	15.1	12.5	1.0	6.3	3.5	0.0	1.0	9.0	0.0	1.6

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	0.0	0.0	0.0	0.0	0.0	0.0	9.0	5.5	6.5	11.5	8.0	10.0
2	0.0	0.0	0.0	0.0	0.0	0.0	6.5	3.0	5.0	11.5	10.5	11.0
3	0.0	0.0	0.0	2.5	0.0	0.5	8.0	3.0	5.5	14.0	11.0	12.5
4	0.0	0.0	0.0	1.5	0.0	1.0	7.0	5.5	6.0	14.0	11.5	12.5
5	1.0	0.0	0.5	1.0	0.0	0.5	9.0	4.5	7.0	15.0	10.0	12.5
6	1.0	0.0	0.5	3.0	0.0	1.0	11.0	5.5	8.0	14.5	12.0	13.5
7	0.0	0.0	0.0	2.0	0.0	1.0	12.0	7.0	9.5	14.5	11.5	13.0
8	1.5	0.0	1.0	0.0	0.0	0.0	13.5	8.5	11.0	15.0	12.5	14.0
9	2.5	1.0	1.5	0.0	0.0	0.0	13.0	10.0	11.5	14.0	11.0	12.0
10	2.0	0.0	0.5	0.0	0.0	0.0	12.0	8.5	10.5	15.5	11.0	13.0
11	0.0	0.0	0.0	0.0	0.0	0.0	10.0	7.0	8.5	14.0	12.0	13.0
12	0.0	0.0	0.0	0.5	0.0	0.0	8.5	6.5	7.5	14.5	12.0	13.5
13	0.0	0.0	0.0	1.5	0.0	0.5	10.0	6.5	8.0	16.5	11.5	14.0
14	0.0	0.0	0.0	3.5	1.0	2.5	11.5	6.5	9.0	15.5	13.0	14.5
15	0.0	0.0	0.0	3.0	1.5	2.0	11.5	6.5	9.0	16.0	14.0	15.0
16	0.0	0.0	0.0	3.5	1.0	2.0	13.0	7.0	10.0	14.5	12.5	13.5
17	0.0	0.0	0.0	3.0	0.0	1.5	15.0	9.0	12.0	15.0	12.0	13.0
18	1.0	0.0	0.5	2.5	1.0	2.0	17.0	11.0	14.0	13.5	11.0	12.5
19	0.5	0.0	0.0	2.0	1.0	1.5	17.5	12.5	15.0	11.0	9.5	10.5
20	0.0	0.0	0.0	2.0	1.0	1.5	17.5	13.5	15.5	12.5	9.0	11.0
21	0.0	0.0	0.0	3.0	0.0	1.5	18.0	14.0	16.0	12.0	10.0	10.5
22	0.0	0.0	0.0	3.5	0.0	2.0	18.5	13.5	15.5	12.5	9.5	11.0
23	0.0	0.0	0.0	4.0	0.0	2.0	17.5	13.5	15.0	14.5	10.5	12.5
24	0.5	0.0	0.0	3.5	1.0	2.0	17.0	12.0	14.0	16.0	12.0	13.5
25	2.0	0.0	1.0	3.0	0.5	2.0	15.0	12.0	13.5	17.0	12.5	14.5
26	1.5	0.0	1.0	5.5	2.0	3.5	17.5	13.5	15.5	17.5	14.5	16.0
27	0.0	0.0	0.0	4.5	2.0	3.0	16.5	12.0	14.5	17.0	13.5	15.5
28	0.0	0.0	0.0	3.5	1.5	2.5	14.5	10.0	12.0	15.0	11.5	13.0
29	0.0	0.0	0.0	4.5	0.5	2.5	13.0	8.5	10.5	16.5	12.0	14.0
30	---	---	---	5.0	0.5	3.0	10.5	8.0	9.5	15.5	13.5	14.5
31	---	---	---	5.5	3.0	4.5	---	---	---	18.5	15.0	16.5
Month	2.5	0.0	0.2	5.5	0.0	1.5	18.5	3.0	10.8	18.5	8.0	13.1

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	17.0	16.0	16.5	22.0	19.0	20.0	23.5	21.0	22.0	21.0	18.5	19.5
2	19.0	14.5	16.5	21.5	18.5	20.0	23.0	21.5	22.0	21.5	18.5	20.0
3	17.5	15.5	16.5	21.0	19.5	20.5	22.0	21.0	21.5	---	---	---
4	16.5	15.0	15.5	20.5	18.0	19.0	23.0	20.5	21.5	---	---	---
5	19.0	15.0	17.0	21.0	17.5	19.0	23.5	20.5	22.0	---	---	---
6	23.5	19.0	21.0	22.0	18.5	20.0	23.5	21.5	22.5	---	---	---
7	24.0	21.5	22.5	24.0	20.5	22.0	22.5	21.5	22.0	---	---	---
8	24.5	21.5	23.0	25.0	22.0	23.5	21.5	19.0	20.5	---	---	---
9	25.5	22.0	24.0	24.5	22.0	23.5	21.0	19.0	20.0	19.0	18.0	18.5
10	24.0	21.5	23.0	22.5	20.0	21.5	20.5	19.5	20.0	18.0	16.0	17.0
11	22.5	20.0	21.0	21.0	20.0	20.5	20.5	18.5	19.5	18.0	14.5	16.0
12	20.5	18.5	19.5	23.5	20.0	21.5	21.0	19.0	20.0	19.5	17.5	18.5
13	22.5	18.0	20.0	23.0	21.5	22.5	21.0	19.0	20.0	20.5	19.5	20.0
14	21.5	21.0	21.5	21.5	20.0	20.5	---	---	---	22.5	20.0	21.5
15	22.5	20.0	21.0	22.0	19.0	20.0	---	---	---	22.0	17.0	19.5
16	21.0	19.5	20.0	23.5	20.0	21.5	22.0	19.0	20.5	17.0	16.0	16.5
17	20.0	17.5	18.5	24.0	21.0	22.5	---	---	---	18.0	15.0	16.5
18	19.0	16.5	17.5	24.5	23.0	24.0	---	---	---	18.0	16.0	17.0
19	18.0	16.5	17.5	24.0	22.5	23.5	---	---	---	16.5	14.0	15.5
20	19.5	17.0	18.0	23.5	22.5	23.0	19.5	17.0	18.5	18.0	15.5	17.0
21	20.5	17.5	19.0	23.5	22.0	22.5	20.5	17.5	19.0	18.0	15.5	17.0
22	21.0	19.0	20.0	22.5	21.0	22.0	---	---	---	---	---	---
23	21.0	19.0	20.0	23.0	20.0	21.5	23.0	21.0	22.0	16.0	14.0	15.0
24	21.0	18.5	19.5	21.0	19.0	20.0	22.5	21.5	22.0	---	---	---
25	22.0	18.5	20.0	22.5	19.0	20.5	---	---	---	18.0	16.0	17.0
26	22.0	20.0	21.0	23.0	20.5	21.5	---	---	---	---	---	---
27	22.0	20.5	21.5	23.0	21.0	22.0	---	---	---	18.0	16.5	17.5
28	22.5	20.5	21.5	23.0	21.5	22.0	19.5	18.5	19.0	18.0	17.5	18.0
29	23.0	20.5	21.5	23.0	20.5	21.5	20.0	18.0	19.0	17.5	15.5	16.5
30	21.0	19.5	20.0	22.5	20.5	21.5	21.5	20.0	20.5	16.0	15.5	15.5
31	---	---	---	22.5	21.0	22.0	21.0	19.0	20.0	---	---	---
Month	25.5	14.5	19.8	25.0	17.5	21.5	---	---	---	---	---	---

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
[Remark codes: <, less than.]

Date	Begin time	End time	Dis-charge, ft3/s (00060)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total non-filter-able, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L as P (00665)
Dec										
22-26	0955	1055	42	184	114	2.8	.885	1.64	.075	.359
Jan										
10-16	1415	0914	17	194	29	1.3	.536	1.85	.044	.141
Feb										
05-11	0900	0959	36	182	51	1.1	.335	1.58	.041	.129
Mar										
15-19	0530	1130	33	204	18	1.3	.302	1.40	.025	.108
Mar										
19-26	1255	1155	53	119	21	.97	.172	1.29	.029	.110
Mar 31-										
Apr 07	1100	1000	39	105	19	.69	.035	1.17	.016	.072
May										
03-05	0925	0925	21	108	27	1.0	.010	1.38	.024	.145
Jul										
21-23	1135	0835	8.8	83.6	47	.95	.014	.560	.046	.231
Jul										
23-30	0900	0800	24	75.7	76	.84	.016	.646	.069	.211
Sep										
12-16	2040	0739	8.8	50.0	30	.58	<.010	.475	.047	.130