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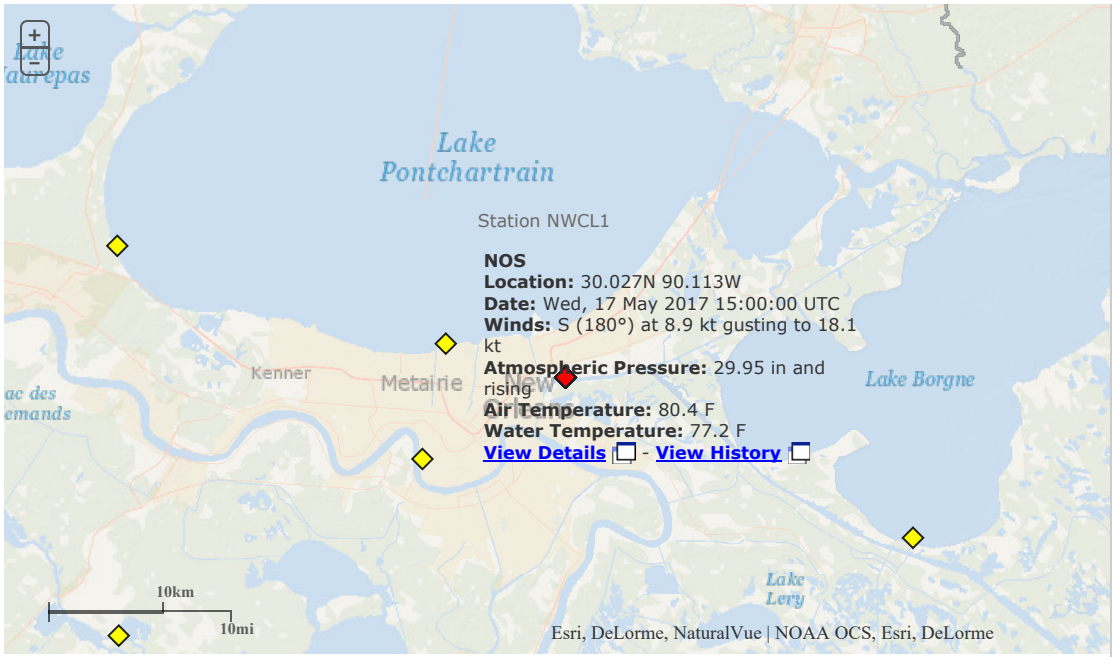
◉ Recent Data ○ Historical Data ☐ Show Labels Map Type: Oceans

Program Filter:	Owner Filter:
☐ NDBC Meteorological/Ocean	☐ NDBC
☐ International Partners	☐ Alaska Ocean Observing System
☐ IOOS Partners	☐ Amerada Hess

To save the current map view, **right click on this link** and select either "Add to Favorites" or "Bookmark this link".
To view observations, left-click a marker on the map.
To zoom the map, use the zoom buttons (+/-) on the map; or hold down the **Shift** key while dragging a box.



Select a region:

- Atlantic (Tropical)
- Atlantic (West)
- Australia
- Bay of Bengal
- Caribbean Sea
- Central America
- Chile
- Europe
- Gulf of Alaska
- Gulf of Mexico (West)
- Gulf of Mexico (East)/Florida
- Nova Scotia
- Pacific (North)
- Pacific (West)
- USA-Alaska
- USA-Hawaii
- USA-Great Lakes (East)
- USA-Lake Superior
- USA-Northeast
- USA-Northwest
- USA-Southeast
- USA-Southwest
- World

◇ Stations with recent data
◆ Stations with historical data only
◆ Stations with no data in last 8 hours (24 hours for tsunami stations)
◇ Tsunami station in event mode (within previous 24 hours)

1357 stations deployed
1006 have reported in the past 8 hours

Disclaimer (http://www.weather.gov/disclaimer#esri)

Get Observations by Program as KML

Get Observations by Owner as KML

How do I use KML?

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Measurement Descriptions and Units

Real Time files generally contain the last 45 days of "Realtime" data - data that went through automated quality checks and were distributed as soon as they were received. Historical files have gone through post-processing analysis and represent the data sent to the archive centers. The formats for both are generally the same, with the major difference being the treatment of missing data. Missing data in the Realtime files are denoted by "MM" while a variable number of 9's are used to denote missing data in the Historical files, depending on the data type (for example: 999.0 99.0).

General

Units: Station pages display the current hour's measurements in English units by default, but can be changed by the viewer to metric units. When accessing Real Time and Historical data files, the **measurements are generally in metric units**, as described below, and cannot be changed.

Time: Station pages show current observations in station local time by default, but can be changed by the viewer to UTC (formerly GMT). **Both Realtime and Historical files show times in UTC only**. See the Acquisition Time **help topic** for a more detailed description of observation times. For more information on the times in the files, see the changes page at **http://www.ndbc.noaa.gov/mods.shtml**.

Station ID: Five-digit WMO **Station Identifier**, used since 1976. ID's can be reassigned to future deployments within the same 1 degree square.

Formats: Data are classified according to the following groups. The header lines are shown at the beginning of group. Note that in the Realtime files, non-data lines begin with "#". Such lines should be treated as comment lines.

Standard Meteorological Data

```
#YY  MM DD hh mm WDIR WSPD GST  WVHT   DPD   APD MWD   PRES  ATMP  WTMP  DEWP  VIS PTDY  TIDE
#yr  mo dy hr mn degT m/s  m/s     m   sec   sec degT   hPa  degC  degC  degC  nmi  hPa    ft
2014 09 11 16 50 120  5.0  6.0   0.6     6   4.2 134 1016.5  29.3  30.5  24.4   MM +0.3    MM
```

WDIR	Wind direction (the direction the wind is coming from in degrees clockwise from true N) during the same period used for WSPD. See **Wind Averaging Methods**
WSPD	Wind speed (m/s) averaged over an eight-minute period for buoys and a two-minute period for land stations. Reported Hourly. See **Wind Averaging Methods**.
GST	Peak 5 or 8 second gust speed (m/s) measured during the eight-minute or two-minute period. The 5 or 8 second period can be determined by payload, See the **Sensor Reporting, Sampling, and Accuracy** section.
WVHT	Significant wave height (meters) is calculated as the average of the highest one-third of all of the wave heights during the 20-minute sampling period. See the **Wave Measurements** section.
DPD	Dominant wave period (seconds) is the period with the maximum wave energy. See the **Wave Measurements** section.
APD	Average wave period (seconds) of all waves during the 20-minute period. See the **Wave Measurements** section.
MWD	The direction from which the waves at the dominant period (DPD) are coming. The units are degrees from true North, increasing clockwise, with North as 0 (zero) degrees and East as 90 degrees. See the **Wave Measurements** section.
PRES	Sea level pressure (hPa). For C-MAN sites and Great Lakes buoys, the recorded pressure is reduced to sea level using the method described in *NWS Technical Procedures Bulletin 291* (11/14/80). (labeled BAR in Historical files)
ATMP	Air temperature (Celsius). For sensor heights on buoys, see **Hull Descriptions**. For sensor heights at C-MAN stations, see **C-MAN Sensor Locations**
WTMP	Sea surface temperature (Celsius). For buoys the depth is referenced to the hull's waterline. For fixed platforms it varies with tide, but is referenced to, or near **Mean Lower Low Water (MLLW) (http://tidesandcurrents.noaa.gov/datum_options.html#MLLW)**.
DEWP	Dewpoint temperature taken at the same height as the air temperature measurement.
VIS	Station visibility (nautical miles). Note that buoy stations are limited to reports from 0 to 1.6 nmi.
PTDY	Pressure Tendency is the direction (plus or minus) and the amount of pressure change (hPa)for a three hour period ending at the time of observation. (not in Historical files)
TIDE	The water level in feet above or below **Mean Lower Low Water (MLLW) (http://tidesandcurrents.noaa.gov/datum_options.html#MLLW)**.

Derived Met Values

```
#YY  MM DD hh mm CHILL  HEAT   ICE WSPD10 WSPD20
#yr  mo dy hr mn  degC  degC cm/hr    m/s    m/s
2014 09 11 16 50    MM  34.4    MM      5      5
```

HEAT	For more information on heat index, please see the **NWS Heat Wave (http://www.nws.noaa.gov/os/heat/index.shtml)** page.
CHILL	Please note that NDBC uses unadjusted winds to calculate wind chill. The winds are calculated at anemometer height. For more information on wind chill, please see the **NWS Wind Chill Temperature Index (http://www.nws.noaa.gov/om/windchill/index.shtml)**.
ICE	

Estimated ice accretion in inches per hour based on an algorithm developed by Overland and Pease at the Pacific Marine Environmental Laboratory in the mid-1980s. The algorithm relates icing to the presently observed wind speed, air temperature, and sea surface temperature. The method is designed for trawlers in the 20 to 75 meter length range, underway at normal speeds in open seas and not heading downwind. In general, NWS forecasters translate ice accretion rates to the following categories:

- light: 0.0 to 0.24 inches of ice accretion/hour;
- moderate: 0.25 to 0.8 inches/hour; and
- heavy: greater than 0.8 inches/hour.

WSPD10 The estimation of Wind Speed (WSPD) measurement raised or lowered to a height of 10 meters. NDBC uses the method of Liu et al., 1979: Bulk parameterization of air-sea exchanges in heat and water vapor including molecular constraints at the interface, *Journal of Atmospheric Science*, 36, pp. 1722-1735.

WSPD20 The estimation of Wind Speed (WSPD) measurement raised or lowered to a height of 20 meters. NDBC uses the method of Liu et al., 1979: Bulk parameterization of air-sea exchanges in heat and water vapor including molecular constraints at the interface, *Journal of Atmospheric Science*, 36, pp. 1722-1735.

Supplemental Measurements Data

```
#YY  MM DD hh mm   PRES PTIME  WSPD  WDIR WTIME
#yr  mo dy hr mn    hPa  hhmm   m/s  degT  hhmm
2014 09 11 16 50     MM    MM     6   110  1603
```

Lowest 1 minute pressure	Lowest recorded atmospheric pressure for the hour to the nearest 0.1 hPa and the time at which it occurred (hour and minute).
Highest 1 minute wind speed	Highest recorded wind speed for the hour to the nearest 0.1 m/s, its corresponding direction to the nearest degree, and the time at which it occurred (hour and minute).

Continuous Winds

```
#YY  MM DD hh mm WDIR WSPD GDR GST GTIME
#yr  mo dy hr mn degT m/s degT m/s hhmm
2014 09 11 16 50 117  5.2 120  6.0 1644
```

WDIR	Ten-minute average wind direction measurements in degrees clockwise from true North. (DIR in Historical files)
WSPD	Ten-minute average wind speed values in m/s. (SPD in Historical files)
GDR	Direction, in degrees clockwise from true North, of the GST, reported at the last hourly 10-minute segment.
GST	Maximum 5-second peak gust during the measurement hour, reported at the last hourly 10-minute segment.
GTIME	The minute of the hour that the GSP occurred, reported at the last hourly 10-minute segment.

For more information on continuous winds and the timing of these measurements, see the **continuous winds** help section.

Detailed Wave Summary (Realtime data files only)

```
#YY  MM DD hh mm WVHT  SwH  SwP  WWH  WWP SwD WWD  STEEPNESS  APD MWD
#yr  mo dy hr mn    m    m  sec    m  sec  -  degT     -      sec degT
2014 09 11 17 00  0.6  0.4  5.6  0.4  4.3  SE  MM        N/A  4.2 134
```

WVHT	Significant Wave Height is the average height (meters) of the highest one-third of the waves during a 20 minute sampling period.
SwH	Swell height is the vertical distance (meters) between any swell crest and the succeeding swell wave trough.
SwP	Swell Period is the time (usually measured in seconds) that it takes successive swell wave crests or troughs pass a fixed point.
WWH	Wind Wave Height is the vertical distance (meters) between any wind wave crest and the succeeding wind wave trough (independent of swell waves).
WWP	Wind Wave Period is the time (in seconds) that it takes successive wind wave crests or troughs to pass a fixed point.
SwD	The direction from which the swell waves at the swell wave period (SWPD) are coming. The units are degrees from true North, increasing clockwise, with North as 0 (zero) degrees and East as 90 degrees.
WWD	The direction from which the wind waves at the wind wave period (WWPD) are coming. The units are degrees from true North, increasing clockwise, with North as 0 (zero) degrees and East as 90 degrees.
STEEPNESS	Wave steepness is the ratio of wave height to wave length and is an indicator of wave stability. When wave steepness exceeds a 1/7 ratio; the wave becomes unstable and begins to break.
APD	Average Wave Period is the average period (seconds) of the highest one-third of the wave observed during a 20 minute sampling period.
MWD	The direction from which the waves at the dominant period (DPD) are coming. The units are degrees from true North, increasing clockwise, with North as 0 (zero) degrees and East as 90 degrees. See the **Wave Measurements** section.

Spectral Wave Data

```
#YY  MM DD hh mm Sep_Freq  < spec_1 (freq_1) spec_2 (freq_2) spec_3 (freq_3) ... >
2014 09 11 17 00 0.225 0.000 (0.033) 0.000 (0.038) 0.000 (0.043) ...>

#YY  MM DD hh mm alpha1_1 (freq_1) alpha1_2 (freq_2) alpha1_3 (freq_3) ... >
2014 09 11 17 00 999.0 (0.033) 999.0 (0.038) 999.0 (0.043) ...>

#YY  MM DD hh mm alpha2_1 (freq_1) alpha2_2 (freq_2) alpha2_3 (freq_3) ... >
2014 09 11 17 00 999.0 (0.033) 999.0 (0.038) 999.0 (0.043) ...

#YY  MM DD hh mm r1_1 (freq_1) r1_2 (freq_2) r1_3 (freq_3) ... >
2014 09 11 17 00 999.00 (0.033) 999.00 (0.038) 999.00 (0.043) ...>

#YY  MM DD hh mm r2_1 (freq_1) r2_2 (freq_2) r2_3 (freq_3) ... >
2014 09 11 17 00 999.00 (0.033) 999.00 (0.038) 999.00 (0.043) ...>
```

Sep_Freq	The Separation Frequency is the frequency that separates wind waves (WWH, WWP, WWD) from swell waves (SWH, SWP,SWD). NDBC inserts the value 9.999 if Sep_Freq is missing.
Spectral wave density	Energy in (meter*meter)/Hz, for each frequency bin (typically from 0.03 Hz to 0.40 Hz).
Spectral wave direction	Mean wave direction, in degrees from true North, for each frequency bin. A list of **directional stations** is available.
Directional Wave Spectrum	= C11(f) * D(f,A), f=frequency (Hz), A=Azimuth angle measured clockwise from true North to the direction wave is from. D(f,A) = (1/PI)*(0.5+R1*COS(A-ALPHA1)+R2*COS(2*(A-ALPHA2))). R1 and R2 are the first and second normalized polar coordinates of the Fourier coefficients and are nondimensional. ALPHA1 and ALPHA2 are respectively mean and principal wave directions. In terms of Longuet-Higgins Fourier Coefficients • $R1 = (SQRT(a_1*a_1+b_1*b_1))/a_0$ • $R2 = (SQRT(a_2*a_2+b_2*b_2))/a_0$ • $ALPHA1 = 270.0-ARCTAN(b_1,a_1)$ • $ALPHA2 = 270.0-(0.5*ARCTAN(b_2,a_2)+\{0. \text{ or } 180.\})$

Notes:

1. The R1 and R2 values in the monthly and yearly historical data files are scaled by 100, a carryover from how the data are transported to the archive centers. The units are hundredths, so the R1 and R2 values in those files should be multiplied by 0.01.
2. D(f,A) can take on negative values because of the trigonometric sine and cosine functions. There are several approaches to prevent or deal with the negative values. For more information and discussion of some approaches see: Use of advanced directional wave spectra analysis methods, M. D. Earle, K. E. Steele, and D. W. C. Wang, Ocean Engineering, Volume 26, Issue 12, December 1999, Pages 1421-1434.
3. ALPHA2 has ambiguous results in using the arctangent function with the Fourier Coefficients,b 2 ,a 2 . When necessary, NDBC adds 180 degrees to ALPHA2 in order to minimize the difference between ALPHA 1 and ALPHA2.

For more information on the mathematics behind the measuring of surface water waves, see the **waves** help section.

Ocean Current Data

```
#YY  MM DD hh mm DEP01 DIR01 SPD01 DEP02 DIR02 SPD02 DEP03 DIR03 SPD03 ...>
#yr  mo dy hr mn     m  degT  cm/s     m  degT  cm/s     m  degT  cm/s ...>
2014 09 11 17 04     2    40     8    10   120     5    14   250    13 ...>
```

DEP01,DEP02,...	The distance from the sea surface to the middle of the depth cells, or bins, measured in meters.
DIR01,DIR02,...	The direction the ocean current is flowing toward. 0-360 degrees, 360 is due north, 0 means no measurable current.
SPD01,SPD02,...	The speed of the ocean current measured in cm/s.

Ocean Current Data (Expanded ADCP format)

```
#YY  MM DD hh mm I Bin   Depth Dir Speed ErrVl VerVl %Good3 %Good4 %GoodE   EI1   EI2   EI3   EI4   CM1   CM2   CM3   CM4 Flags
#yr  mo dy hr mn -   -     m  degT  cm/s  cm/s  cm/s      %      %      %     -     -     -     -     -     -     -     - -
2014 09 11 17 46 1   1    69.4 117  63.2  -0.7  -1.2      0    100      0   171   166   177   170   234   231   233   230 393333330
2014 09 11 17 46 1   2   101.4 122  63.1  -1.0  -3.7      0    100      0   147   145   154   150   236   236   235   237 393333330
2014 09 11 17 46 1   3   133.4 120  54.1   4.2  -3.4      0    100      0   142   134   142   140   225   238   236   238 393333330
```

Instrument Number	Stations may have more than one ADCP instrument. This field distinguishes these instruments by number. Valid values are 0-9, with 0 being reserved for surface measurements.
Bin	The bin number, ranging from 1 to 128, where 1 is the bin closest to the transducer head.
Depth	The distance from the sea surface to the middle of the depth cells, or bins, measured in meters.

Dir	The direction the ocean current is flowing toward. 0-360 degrees, 360 is due north, 0 means no measurable current.
Speed	The speed of the ocean current measured in cm/s.
ErrVl	The error velocity measured in cm/s.
VerVl	The vertical velocity of the ocean current measured in cm/s.
%Good3	The percentage of three-beam solutions that are good.
%Good4	The percentage of four-beam solutions that are good.
%GoodE	The percentage of transformations rejected.
EI1,EI2,EI3,EI4	The echo intensity values for the four beams. Valid values are 0 to 255. EI1 = Echo Intensity for beam #1; EI2 = Echo Intensity for beam #1; EI3 = Echo Intensity for beam #3; and EI4 = Echo Intensity for beam #4.
CM1,CM2,CM3,CM4	The correlation magnitude values for the four beams. Valid values are 0 to 255. CM1 = Correlation Magnitude for beam #1; CM2 = Correlation Magnitude for beam #1; CM3 = Correlation Magnitude for beam #3; and CM4 = Correlation Magnitude for beam #4.
Flags	The nine quality flags represent the results of the following quality tests based on their position in the flags field. Flag 1 represents the overall bin status. Flag 2 represents the ADCP Built-In Test (BIT) status. Flag 3 represents the Error Velocity test status. Flag 4 represents the Percent Good test status. Flag 5 represents the Correlation Magnitude test status. Flag 6 represents the Vertical Velocity test status. Flag 7 represents the North Horizontal Velocity test status. Flag 8 represents the East Horizontal Velocity test status. Flag 9 represents the Echo Intensity test status. Valid values are: 0 = quality not evaluated; 1 = failed quality test; 2 = questionable or suspect data; 3 = good data/passed quality test; and 9 = missing data.

Marsh-McBirney Current Measurements

```
YY MM DD hh mm    DIR    SPD
96 10 31 23  0    198    1.1
```

DIR Direction the current is flowing TOWARDS, measured in degrees clockwise from North.

SPD Current speed in cm/s.

Water Level

```
#YY  MM DD hh mm TG01 TG02 TG03 TG04 TG05 TG06 TG07 TG08 TG09 TG10
2014 07 01 00 00 10.6 10.6 10.6 10.5 10.6 10.6 10.6 10.7 10.7 10.8
```

TG01, TG02,...,TG10 Six-minute water levels representing the height, in feet, of the water above or below **Mean Lower Low Water (MLLW) (http://tidesandcurrents.noaa.gov/datum_options.html#MLLW)**, offset by 10 ft. to prevent negative values. Please subtract 10 ft. from every value to obtain the true water level value, in reference to MLLW.

Oceanographic Data

```
#YY  MM DD hh mm   DEPTH  OTMP   COND   SAL   O2% O2PPM  CLCON  TURB    PH    EH
#yr  mo dy hr mn       m  degC  mS/cm   psu     %   ppm   ug/l   FTU     -    mv
2014 09 11 17 00     1.0 29.05     MM 34.98    MM    MM     MM    MM    MM    MM
```

Depth (DEPTH)	Depth (meters) at which measurements are taken.
Ocean Temperature (OTMP)	The direct measurement (Celsius) of the Ocean Temperature (as opposed to the indirect measurement (see WTMP above)).
Conductivity (COND)	Conductivity is a measure of the electrical conductivity properties of seawater in milliSiemens per centimeter.

Salinity (SAL)	Salinity is computed by a known functional relationship between the measured electrical conductivity of seawater (CON), temperature (OTMP) and pressure. Salinity is computed using the Practical Salinity Scale of 1978 (PSS78) and reported in Practical Salinity Units.
Oxygen Concentration (O2%)	Dissolved oxygen as a percentage.
Oxygen Concentration (O2PPM)	Dissolved oxygen in parts per million.
Chlorophyll Concentration (CLCON)	Chlorophyll concentration in micrograms per liter (ug/l).
Turbidity (TURB)	Turbidity is an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through the sample (APHA 1980). Units are Formazine Turbidity Units (FTU).
pH (PH)	A measure of the acidity or alkalinity of the seawater.
Eh (EH)	Redox (oxidation and reduction) potential of seawater in millivolts.

Solar Radiation Data

```
#YY  MM DD hh mm  SRAD1  SWRAD  LWRAD
#yr  mo dy hr mn   w/m2   w/m2   w/m2
2014 09 11 18 00 1061.0     MM     MM
```

Shortwave Radiation (SRAD1, SWRAD)	Average shortwave radiation in watts per square meter for the preceding hour. Sample frequency is 2 times per second (2 Hz). If present, SRAD1 is from a LI-COR LI-200 pyranometer sensor, and SWRAD is from an Eppley PSP Precision Spectral Pyranometer.
Longwave Radiation (LWRAD)	Average downwelling longwave radiation in watts per square meter for the preceding hour. Sample frequency is 2 times per second (2 Hz). If present, LWRAD is from an Eppley PIR Precision Infrared Radiometer.

DART (Tsunameters) Measurements

```
#YY  MM DD hh mm ss T   HEIGHT
#yr  mo dy hr mn  s -        m
2014 09 11 17 00 00 1 5848.422
```

T (TYPE)	Measurement Type: • 1 = 15-minute measurement; • 2 = 1-minute measurement; and • 3 = 15-second measurement.
HEIGHT	Height of water column in meters.

tt = Tsunami Trigger Time, see the **Tsunami Detection Algorithm (http://www.ndbc.noaa.gov/dart/algorithm.shtml)**
ts = data Time Stamp(s)

24-Hour Rain Measurements

```
#YY  MM DD hh mm   RATE  PCT  SDEV
#yr  mo dy hr mn   mm/h   %     -
2008 01 01 12 00   0.0   0.0   0.1
```

24-Hour Rain Rate	Average precipitation rate in units of millimeters per hour over 24-hour period from 00:00 to 23:59.99 GMT.
Percent Time Raining in 24-Hour Period	Percentage of 144 ten-minute periods within a 24 hour period with a measurable accumulation of precipitation.
SDev	---
Flag	In the case of 24-hour rainfall measurements, a flag is assigned when over half of the 10-minute measurements from which it is derived are flagged.

Hourly Rain Measurements

```
#YY  MM DD hh mm  ACCUM
#yr  mo dy hr mn     mm
2008 01 01 00 30   0.0
```

Hourly Rain Accumulation	Total accumulation of precipitation in units of millimeters on station during the 60-minute period from minute 0 to minute 59:59.99 of the hour.
Flag	In the case of one-hour accumulation, a flag is assigned when over half of the 10-minute measurements from which it is derived have been flagged.

10-Minute Rain Measurements

```
#YY  MM DD hh mm   RATE
#yr  mo dy hr mn   mm/h
2008 01 01 00 00   0.0
```

10-Minute Rain Rate	Rain rate in units of millimeters per hour on station over the 10-minute period from 5 minutes before to 4 minutes 59.99 seconds after the time with which it is associated.
Flag	In the case of 10-minute rainfall measurements, a flag is assigned to any measurement when either the -5 or +5 minute rain measurement from which it is derived is missing or obviously an error.

Housekeeping Measurements

```
#YY  MM DD hh mm  BATTV BATTCURR BATTTEMP REMCAP
#yr  mo dy hr mn  Volts     Amps     DegC     Ah
2016 09 15 19 00 12.381   -0.177     32.9  116.8
```

BATTV	Hourly Average Battery Voltage (volts)
BATTCURR	Hourly Average Battery Current (amperes)
BATTTEMP	Hourly Average Battery Temperature (degrees Celsius)
REMCAP	Remaining Battery Capacity (ampere-hours)

Discontinued Measurement Abbreviations

Some historical files have column heading abbreviations that have changed over time. The old abbreviations are listed below with links to the new standardized abbreviation description.

Old	New Abbreviation
WD	**WDIR** - Wind Direction
DIR	**WDIR** - 10 Minute Wind Direction
SPD	**WSPD** - 10 Minute Wind Speed
GSP	**GST** - Gust in Continuous Winds data
GMN	**GTIME** - Time of Gust in Continuous Winds data
BARO	**PRES** - Pressure
H0	**WVHT** - Significant Wave Height
DOMPD	**DPD** - Dominant Wave Period
AVP	**APD** - Average Wave Period
SRAD	**SWRAD** - Short Wave Solar Radiation
SRAD2	**SWRAD** - LI-COR Short Wave Solar Radiation
LRAD	**LWRAD** - Long Wave Solar Radiation
LRAD1	**LWRAD** - Long Wave Solar Radiation

#YY	MM	DD	hh	mm	WDIR	WSPD	GST	WVHT	DPD	APD	MWD	PRES	ATMP	WTMP	DEWP	VIS	PTDY	TIDE
#yr	mo	dy	hr	mn	degT	m/s	m/s	m	sec	sec	degT	hPa	degC	degC	degC	nmi	hPa	ft
2017	05	17	15	00	180	4.6	9.3	MM	MM	MM	MM	1014.1	26.9	25.1	MM	MM	+1.4	MM
2017	05	17	14	54	180	5.1	7.7	MM	MM	MM	MM	1014.0	26.9	25.1	MM	MM	MM	MM
2017	05	17	14	48	150	4.1	9.3	MM	MM	MM	MM	1013.8	27.2	25.0	MM	MM	MM	MM
2017	05	17	14	42	160	3.6	5.7	MM	MM	MM	MM	1013.8	27.1	25.0	MM	MM	MM	MM
2017	05	17	14	36	140	3.1	7.2	MM	MM	MM	MM	1013.7	26.7	25.0	MM	MM	MM	MM
2017	05	17	14	30	150	3.6	7.7	MM	MM	MM	MM	1013.7	26.3	25.0	MM	MM	MM	MM
2017	05	17	14	24	150	3.6	8.2	MM	MM	MM	MM	1013.6	26.3	24.9	MM	MM	MM	MM
2017	05	17	14	18	150	6.2	9.8	MM	MM	MM	MM	1013.6	26.0	24.9	MM	MM	MM	MM
2017	05	17	14	12	150	3.1	7.2	MM	MM	MM	MM	1013.7	26.2	24.9	MM	MM	MM	MM
2017	05	17	14	06	140	4.1	8.2	MM	MM	MM	MM	1013.6	26.0	24.9	MM	MM	MM	MM
2017	05	17	14	00	160	2.6	4.6	MM	MM	MM	MM	1013.5	25.9	24.9	MM	MM	+1.5	MM
2017	05	17	13	54	150	2.1	6.7	MM	MM	MM	MM	1013.5	25.6	24.9	MM	MM	MM	MM
2017	05	17	13	48	150	2.6	5.7	MM	MM	MM	MM	1013.5	25.7	24.9	MM	MM	MM	MM
2017	05	17	13	42	130	3.6	8.2	MM	MM	MM	MM	1013.5	25.5	24.9	MM	MM	MM	MM
2017	05	17	13	36	150	3.6	7.7	MM	MM	MM	MM	1013.4	25.4	24.9	MM	MM	MM	MM
2017	05	17	13	30	160	2.6	7.2	MM	MM	MM	MM	1013.3	25.3	24.9	MM	MM	MM	MM
2017	05	17	13	24	140	2.1	6.2	MM	MM	MM	MM	1013.3	25.2	24.9	MM	MM	MM	MM
2017	05	17	13	18	140	3.6	6.7	MM	MM	MM	MM	1013.3	25.1	24.9	MM	MM	MM	MM
2017	05	17	13	12	150	2.6	5.7	MM	MM	MM	MM	1013.3	25.3	24.9	MM	MM	MM	MM
2017	05	17	13	06	140	3.1	7.7	MM	MM	MM	MM	1013.2	25.0	24.8	MM	MM	MM	MM
2017	05	17	13	00	140	3.1	6.7	MM	MM	MM	MM	1013.2	25.0	24.8	MM	MM	+1.4	MM
2017	05	17	12	54	160	2.1	6.7	MM	MM	MM	MM	1013.0	24.9	24.8	MM	MM	MM	MM
2017	05	17	12	48	140	3.1	6.2	MM	MM	MM	MM	1013.0	24.8	24.8	MM	MM	MM	MM
2017	05	17	12	42	150	2.6	4.6	MM	MM	MM	MM	1012.9	24.7	24.8	MM	MM	MM	MM
2017	05	17	12	36	130	2.6	5.7	MM	MM	MM	MM	1012.9	24.5	24.8	MM	MM	MM	MM
2017	05	17	12	30	130	2.1	4.6	MM	MM	MM	MM	1012.8	24.4	24.8	MM	MM	MM	MM
2017	05	17	12	24	140	2.6	6.2	MM	MM	MM	MM	1012.9	24.1	24.9	MM	MM	MM	MM
2017	05	17	12	18	130	2.1	4.6	MM	MM	MM	MM	1012.8	24.1	24.8	MM	MM	MM	MM
2017	05	17	12	12	150	2.6	4.1	MM	MM	MM	MM	1012.8	23.9	24.8	MM	MM	MM	MM
2017	05	17	12	06	140	3.1	6.7	MM	MM	MM	MM	1012.8	23.9	24.8	MM	MM	MM	MM
2017	05	17	12	00	140	2.1	4.6	MM	MM	MM	MM	1012.7	23.9	24.8	MM	MM	+0.9	MM
2017	05	17	11	54	140	2.1	4.6	MM	MM	MM	MM	1012.6	23.8	24.9	MM	MM	MM	MM
2017	05	17	11	48	140	2.1	4.6	MM	MM	MM	MM	1012.6	23.7	24.9	MM	MM	MM	MM
2017	05	17	11	42	140	2.6	5.1	MM	MM	MM	MM	1012.5	23.7	24.8	MM	MM	MM	MM
2017	05	17	11	36	140	1.5	3.6	MM	MM	MM	MM	1012.5	23.4	24.8	MM	MM	MM	MM
2017	05	17	11	30	140	1.5	4.1	MM	MM	MM	MM	1012.4	23.3	24.9	MM	MM	MM	MM
2017	05	17	11	24	140	2.1	3.6	MM	MM	MM	MM	1012.2	23.3	24.9	MM	MM	MM	MM
2017	05	17	11	18	140	2.1	4.1	MM	MM	MM	MM	1012.1	23.2	24.9	MM	MM	MM	MM
2017	05	17	11	12	140	1.5	4.1	MM	MM	MM	MM	1012.1	23.2	24.9	MM	MM	MM	MM
2017	05	17	11	06	150	2.1	4.6	MM	MM	MM	MM	1012.1	23.2	24.9	MM	MM	MM	MM
2017	05	17	11	00	140	2.1	6.2	MM	MM	MM	MM	1012.0	23.2	24.9	MM	MM	+0.0	MM
2017	05	17	10	54	150	1.5	3.6	MM	MM	MM	MM	1012.0	23.1	24.9	MM	MM	MM	MM
2017	05	17	10	48	130	2.6	5.1	MM	MM	MM	MM	1011.9	23.1	24.9	MM	MM	MM	MM
2017	05	17	10	42	140	2.1	3.1	MM	MM	MM	MM	1011.8	23.1	24.9	MM	MM	MM	MM
2017	05	17	10	36	140	2.1	4.1	MM	MM	MM	MM	1011.9	23.1	24.9	MM	MM	MM	MM
2017	05	17	10	30	140	1.5	3.1	MM	MM	MM	MM	1012.0	23.2	24.9	MM	MM	MM	MM
2017	05	17	10	24	130	1.5	4.1	MM	MM	MM	MM	1012.0	23.2	24.9	MM	MM	MM	MM
2017	05	17	10	18	150	2.1	3.6	MM	MM	MM	MM	1012.0	23.1	24.9	MM	MM	MM	MM
2017	05	17	10	12	140	2.6	4.6	MM	MM	MM	MM	1011.8	23.1	24.9	MM	MM	MM	MM
2017	05	17	10	06	150	1.5	3.1	MM	MM	MM	MM	1011.7	23.1	24.9	MM	MM	MM	MM
2017	05	17	10	00	140	2.6	4.1	MM	MM	MM	MM	1011.8	23.1	24.9	MM	MM	-0.5	MM
2017	05	17	09	54	130	1.5	2.6	MM	MM	MM	MM	1011.9	23.1	24.9	MM	MM	MM	MM
2017	05	17	09	48	140	1.5	2.6	MM	MM	MM	MM	1011.8	23.1	24.9	MM	MM	MM	MM
2017	05	17	09	42	140	1.5	2.6	MM	MM	MM	MM	1011.8	23.2	24.9	MM	MM	MM	MM
2017	05	17	09	36	140	1.0	3.1	MM	MM	MM	MM	1011.7	23.2	25.0	MM	MM	MM	MM
2017	05	17	09	30	150	1.0	2.1	MM	MM	MM	MM	1011.8	23.3	25.0	MM	MM	MM	MM
2017	05	17	09	24	150	1.5	2.6	MM	MM	MM	MM	1011.8	23.3	25.0	MM	MM	MM	MM
2017	05	17	09	18	150	1.5	3.6	MM	MM	MM	MM	1011.8	23.3	25.0	MM	MM	MM	MM
2017	05	17	09	12	140	1.0	2.6	MM	MM	MM	MM	1011.8	23.3	25.0	MM	MM	MM	MM
2017	05	17	09	06	140	1.0	2.6	MM	MM	MM	MM	1011.9	23.3	25.0	MM	MM	MM	MM
2017	05	17	09	00	140	1.5	3.6	MM	MM	MM	MM	1011.8	23.3	25.0	MM	MM	-1.4	MM
2017	05	17	08	54	140	1.5	3.1	MM	MM	MM	MM	1011.8	23.3	25.0	MM	MM	MM	MM
2017	05	17	08	48	140	1.0	3.1	MM	MM	MM	MM	1011.8	23.4	25.0	MM	MM	MM	MM
2017	05	17	08	42	150	1.0	2.6	MM	MM	MM	MM	1011.8	23.4	25.0	MM	MM	MM	MM

2017	05	04	05	00	60	12.4	14.4	MM	MM	MM	MM	1011.4	19.1	22.2	MM	MM	+1.1	MM
2017	05	04	04	54	50	12.4	14.9	MM	MM	MM	MM	1011.7	18.8	22.3	MM	MM	MM	MM
2017	05	04	04	48	40	12.4	17.0	MM	MM	MM	MM	1011.7	18.1	22.3	MM	MM	MM	MM
2017	05	04	04	42	30	12.9	15.4	MM	MM	MM	MM	1012.4	18.3	22.3	MM	MM	MM	MM
2017	05	04	04	36	10	12.4	14.4	MM	MM	MM	MM	1013.6	18.8	22.3	MM	MM	MM	MM
2017	05	04	04	30	10	13.9	17.0	MM	MM	MM	MM	1013.6	19.3	22.3	MM	MM	MM	MM
2017	05	04	04	24	30	15.4	19.0	MM	MM	MM	MM	1012.1	19.3	22.3	MM	MM	MM	MM
2017	05	04	04	18	40	16.0	18.5	MM	MM	MM	MM	1010.6	19.5	22.4	MM	MM	MM	MM
2017	05	04	04	12	40	14.9	17.0	MM	MM	MM	MM	1010.7	20.1	22.4	MM	MM	MM	MM
2017	05	04	04	06	50	12.9	14.4	MM	MM	MM	MM	1011.6	19.9	22.4	MM	MM	MM	MM
2017	05	04	04	00	40	11.8	13.9	MM	MM	MM	MM	1011.6	19.8	22.3	MM	MM	+3.1	MM
2017	05	04	03	54	50	11.3	13.4	MM	MM	MM	MM	1011.1	19.5	22.3	MM	MM	MM	MM
2017	05	04	03	48	60	9.3	10.3	MM	MM	MM	MM	1011.5	19.0	22.2	MM	MM	MM	MM
2017	05	04	03	42	60	6.2	7.7	MM	MM	MM	MM	1011.6	17.6	22.2	MM	MM	MM	MM
2017	05	04	03	36	90	2.1	8.2	MM	MM	MM	MM	1010.3	17.5	22.2	MM	MM	MM	MM
2017	05	04	03	30	80	4.1	6.2	MM	MM	MM	MM	1010.8	17.5	22.2	MM	MM	MM	MM
2017	05	04	03	24	90	1.5	3.1	MM	MM	MM	MM	1011.3	17.5	22.2	MM	MM	MM	MM
2017	05	04	03	18	80	4.1	7.2	MM	MM	MM	MM	1010.5	17.4	22.3	MM	MM	MM	MM
2017	05	04	03	12	90	1.5	3.6	MM	MM	MM	MM	1011.6	17.5	22.3	MM	MM	MM	MM
2017	05	04	03	06	80	3.6	6.2	MM	MM	MM	MM	1011.6	17.5	22.3	MM	MM	MM	MM
2017	05	04	03	00	80	5.1	9.3	MM	MM	MM	MM	1010.4	17.8	22.4	MM	MM	-0.0	MM
2017	05	04	02	54	70	10.3	11.3	MM	MM	MM	MM	1010.4	18.3	22.4	MM	MM	MM	MM
2017	05	04	02	48	70	9.3	10.3	MM	MM	MM	MM	1011.7	18.5	22.4	MM	MM	MM	MM
2017	05	04	02	42	60	8.8	9.8	MM	MM	MM	MM	1012.2	18.4	22.4	MM	MM	MM	MM
2017	05	04	02	36	70	5.1	7.2	MM	MM	MM	MM	1012.2	17.9	22.4	MM	MM	MM	MM
2017	05	04	02	30	60	7.7	9.3	MM	MM	MM	MM	1011.8	18.1	22.4	MM	MM	MM	MM
2017	05	04	02	24	50	6.2	8.8	MM	MM	MM	MM	1012.7	17.7	22.4	MM	MM	MM	MM
2017	05	04	02	18	20	7.2	11.3	MM	MM	MM	MM	1013.1	18.2	22.3	MM	MM	MM	MM
2017	05	04	02	12	60	14.4	18.5	MM	MM	MM	MM	1009.1	19.1	22.3	MM	MM	MM	MM
2017	05	04	02	06	350	11.3	15.4	MM	MM	MM	MM	1012.5	19.1	22.3	MM	MM	MM	MM
2017	05	04	02	00	360	7.7	9.3	MM	MM	MM	MM	1010.3	20.0	22.1	MM	MM	-0.9	MM
2017	05	04	01	54	90	1.5	3.1	MM	MM	MM	MM	1009.2	18.9	21.8	MM	MM	MM	MM
2017	05	04	01	48	100	1.0	3.1	MM	MM	MM	MM	1008.2	18.8	21.8	MM	MM	MM	MM
2017	05	04	01	42	130	2.1	6.2	MM	MM	MM	MM	1008.6	18.9	21.9	MM	MM	MM	MM
2017	05	04	01	36	110	1.5	7.2	MM	MM	MM	MM	1008.1	18.9	21.8	MM	MM	MM	MM
2017	05	04	01	30	130	3.6	7.7	MM	MM	MM	MM	1008.5	18.9	21.7	MM	MM	MM	MM
2017	05	04	01	24	140	2.6	10.8	MM	MM	MM	MM	1007.8	18.9	21.7	MM	MM	MM	MM
2017	05	04	01	18	130	2.6	8.8	MM	MM	MM	MM	1007.9	18.8	22.1	MM	MM	MM	MM
2017	05	04	01	12	140	3.6	10.8	MM	MM	MM	MM	1008.6	18.7	22.2	MM	MM	MM	MM
2017	05	04	01	06	130	3.1	7.7	MM	MM	MM	MM	1008.4	18.5	22.1	MM	MM	MM	MM
2017	05	04	01	00	140	3.6	8.8	MM	MM	MM	MM	1008.5	18.2	22.1	MM	MM	-2.3	MM
2017	05	04	00	54	130	2.1	7.2	MM	MM	MM	MM	1008.4	18.0	22.4	MM	MM	MM	MM
2017	05	04	00	48	140	1.5	5.1	MM	MM	MM	MM	1010.1	18.4	22.4	MM	MM	MM	MM
2017	05	04	00	42	120	1.0	4.1	MM	MM	MM	MM	1010.5	18.8	22.3	MM	MM	MM	MM
2017	05	04	00	36	150	2.1	6.7	MM	MM	MM	MM	1010.6	19.3	22.3	MM	MM	MM	MM
2017	05	04	00	30	130	2.1	5.7	MM	MM	MM	MM	1010.4	19.4	22.4	MM	MM	MM	MM
2017	05	04	00	24	140	2.6	7.2	MM	MM	MM	MM	1010.5	19.4	22.4	MM	MM	MM	MM
2017	05	04	00	18	140	2.1	5.7	MM	MM	MM	MM	1010.5	19.3	22.4	MM	MM	MM	MM
2017	05	04	00	12	140	1.5	4.6	MM	MM	MM	MM	1010.8	19.3	22.4	MM	MM	MM	MM
2017	05	04	00	06	140	2.1	5.7	MM	MM	MM	MM	1010.6	19.2	22.4	MM	MM	MM	MM
2017	05	04	00	00	130	2.1	7.7	MM	MM	MM	MM	1010.6	19.2	22.4	MM	MM	-3.6	MM
2017	05	03	23	54	130	2.1	6.2	MM	MM	MM	MM	1010.4	19.1	22.4	MM	MM	MM	MM
2017	05	03	23	48	150	5.1	8.2	MM	MM	MM	MM	1010.5	19.0	22.4	MM	MM	MM	MM
2017	05	03	23	42	140	2.6	6.2	MM	MM	MM	MM	1010.4	19.2	22.4	MM	MM	MM	MM
2017	05	03	23	36	140	3.1	9.8	MM	MM	MM	MM	1010.6	19.2	22.3	MM	MM	MM	MM
2017	05	03	23	30	120	1.5	6.2	MM	MM	MM	MM	1011.0	19.4	22.3	MM	MM	MM	MM
2017	05	03	23	24	140	2.6	8.2	MM	MM	MM	MM	1011.2	19.4	22.3	MM	MM	MM	MM
2017	05	03	23	18	140	2.1	6.7	MM	MM	MM	MM	1011.3	19.4	22.1	MM	MM	MM	MM
2017	05	03	23	12	130	2.1	6.7	MM	MM	MM	MM	1011.1	19.6	22.1	MM	MM	MM	MM
2017	05	03	23	06	140	2.1	6.7	MM	MM	MM	MM	1011.1	19.7	22.1	MM	MM	MM	MM
2017	05	03	23	00	150	2.1	6.2	MM	MM	MM	MM	1011.2	19.8	22.2	MM	MM	-2.7	MM
2017	05	03	22	54	140	1.5	4.6	MM	MM	MM	MM	1011.1	19.9	22.2	MM	MM	MM	MM
2017	05	03	22	48	150	1.5	6.7	MM	MM	MM	MM	1010.9	19.9	21.9	MM	MM	MM	MM
2017	05	03	22	42	130	1.0	5.1	MM	MM	MM	MM	1010.8	19.9	21.4	MM	MM	MM	MM
2017	05	03	22	36	120	2.1	4.6	MM	MM	MM	MM	1010.7	19.8	22.3	MM	MM	MM	MM
2017	05	03	22	30	80	2.1	5.7	MM	MM	MM	MM	1010.8	19.6	22.3	MM	MM	MM	MM
2017	05	03	22	24	120	1.5	4.6	MM	MM	MM	MM	1011.2	18.8	22.3	MM	MM	MM	MM

2017	05	03	22	18	90	2.6	6.7	MM	MM	MM	MM	1010.8	18.2	22.3	MM	MM	MM	MM
2017	05	03	22	12	110	1.0	3.1	MM	MM	MM	MM	1011.3	17.9	22.2	MM	MM	MM	MM
2017	05	03	22	06	100	1.0	2.6	MM	MM	MM	MM	1011.3	17.7	22.3	MM	MM	MM	MM
2017	05	03	22	00	80	2.6	5.7	MM	MM	MM	MM	1010.8	17.6	22.2	MM	MM	-6.3	MM
2017	05	03	21	54	80	1.5	7.7	MM	MM	MM	MM	1011.1	17.8	22.1	MM	MM	MM	MM
2017	05	03	21	48	90	3.1	6.7	MM	MM	MM	MM	1011.4	18.0	21.9	MM	MM	MM	MM
2017	05	03	21	42	80	4.1	8.8	MM	MM	MM	MM	1012.0	18.4	22.4	MM	MM	MM	MM
2017	05	03	21	36	80	8.8	11.3	MM	MM	MM	MM	1012.2	18.4	22.5	MM	MM	MM	MM
2017	05	03	21	30	80	7.2	10.8	MM	MM	MM	MM	1012.6	18.6	22.5	MM	MM	MM	MM
2017	05	03	21	24	70	11.3	12.9	MM	MM	MM	MM	1012.6	19.2	22.5	MM	MM	MM	MM
2017	05	03	21	18	70	9.3	10.8	MM	MM	MM	MM	1013.4	19.1	22.5	MM	MM	MM	MM
2017	05	03	21	12	60	9.8	11.3	MM	MM	MM	MM	1014.0	18.6	22.5	MM	MM	MM	MM
2017	05	03	21	06	60	8.2	9.8	MM	MM	MM	MM	1014.8	18.2	22.6	MM	MM	MM	MM
2017	05	03	21	00	60	9.8	11.3	MM	MM	MM	MM	1014.2	18.2	22.4	MM	MM	+2.7	MM
2017	05	03	20	54	50	10.3	11.3	MM	MM	MM	MM	1014.1	18.2	21.7	MM	MM	MM	MM
2017	05	03	20	48	60	9.3	10.3	MM	MM	MM	MM	1014.3	18.1	22.0	MM	MM	MM	MM
2017	05	03	20	42	70	4.6	7.7	MM	MM	MM	MM	1015.2	17.3	22.0	MM	MM	MM	MM
2017	05	03	20	36	80	2.6	4.6	MM	MM	MM	MM	1015.7	17.1	22.3	MM	MM	MM	MM
2017	05	03	20	30	70	8.2	9.8	MM	MM	MM	MM	1015.4	17.5	22.4	MM	MM	MM	MM
2017	05	03	20	24	60	10.3	12.4	MM	MM	MM	MM	1014.8	17.1	22.5	MM	MM	MM	MM
2017	05	03	20	18	70	8.2	10.3	MM	MM	MM	MM	1014.8	17.5	22.8	MM	MM	MM	MM
2017	05	03	20	12	70	9.8	11.3	MM	MM	MM	MM	1015.0	17.2	23.1	MM	MM	MM	MM
2017	05	03	20	00	70	12.9	14.9	MM	MM	MM	MM	1013.9	17.8	23.4	MM	MM	-1.0	MM
2017	05	03	19	48	360	4.6	6.7	MM	MM	MM	MM	1018.6	18.1	23.3	MM	MM	MM	MM
2017	05	03	19	42	350	8.2	13.4	MM	MM	MM	MM	1018.5	18.1	23.3	MM	MM	MM	MM
2017	05	03	19	36	350	11.3	13.4	MM	MM	MM	MM	1017.9	17.3	23.2	MM	MM	MM	MM
2017	05	03	19	30	10	8.8	10.3	MM	MM	MM	MM	1016.6	17.3	23.3	MM	MM	MM	MM
2017	05	03	19	24	10	9.3	10.8	MM	MM	MM	MM	1015.6	17.3	23.3	MM	MM	MM	MM
2017	05	03	19	18	30	9.8	12.9	MM	MM	MM	MM	1014.9	16.9	23.3	MM	MM	MM	MM
2017	05	03	19	12	20	9.8	11.8	MM	MM	MM	MM	1015.7	17.8	23.3	MM	MM	MM	MM
2017	05	03	19	06	10	8.8	10.8	MM	MM	MM	MM	1014.8	18.3	23.3	MM	MM	MM	MM
2017	05	03	19	00	300	5.1	10.8	MM	MM	MM	MM	1017.1	18.1	23.4	MM	MM	+1.1	MM
2017	05	03	18	48	320	3.6	7.7	MM	MM	MM	MM	1016.0	19.1	23.5	MM	MM	MM	MM
2017	05	03	18	42	70	5.1	11.3	MM	MM	MM	MM	1012.9	18.8	23.5	MM	MM	MM	MM
2017	05	03	18	36	290	3.1	8.8	MM	MM	MM	MM	1014.1	20.6	23.5	MM	MM	MM	MM
2017	05	03	18	30	280	5.1	10.8	MM	MM	MM	MM	1016.2	19.8	23.6	MM	MM	MM	MM
2017	05	03	18	24	280	2.1	4.6	MM	MM	MM	MM	1013.8	19.0	23.6	MM	MM	MM	MM
2017	05	03	18	18	60	3.6	5.1	MM	MM	MM	MM	1012.4	18.8	23.6	MM	MM	MM	MM
2017	05	03	18	12	200	2.6	3.6	MM	MM	MM	MM	1013.7	19.0	23.6	MM	MM	MM	MM
2017	05	03	18	06	250	1.0	2.6	MM	MM	MM	MM	1013.3	18.6	23.7	MM	MM	MM	MM
2017	05	03	18	00	80	4.1	6.7	MM	MM	MM	MM	1011.5	18.4	23.7	MM	MM	-2.1	MM
2017	05	03	17	54	140	2.1	3.6	MM	MM	MM	MM	1013.5	18.3	23.7	MM	MM	MM	MM
2017	05	03	17	48	110	1.5	5.1	MM	MM	MM	MM	1013.4	18.6	23.8	MM	MM	MM	MM
2017	05	03	17	42	140	1.5	3.6	MM	MM	MM	MM	1014.6	19.2	23.8	MM	MM	MM	MM
2017	05	03	17	36	210	3.6	4.6	MM	MM	MM	MM	1015.9	19.7	23.9	MM	MM	MM	MM
2017	05	03	17	30	240	4.1	6.2	MM	MM	MM	MM	1016.3	20.2	23.8	MM	MM	MM	MM
2017	05	03	17	24	230	2.6	4.1	MM	MM	MM	MM	1015.5	20.3	23.8	MM	MM	MM	MM
2017	05	03	17	18	180	1.5	2.6	MM	MM	MM	MM	1014.0	20.2	23.9	MM	MM	MM	MM
2017	05	03	17	12	140	0.5	2.6	MM	MM	MM	MM	1013.5	20.5	23.9	MM	MM	MM	MM
2017	05	03	17	06	110	1.0	3.1	MM	MM	MM	MM	1014.0	20.7	23.8	MM	MM	MM	MM
2017	05	03	17	00	200	2.1	3.6	MM	MM	MM	MM	1014.9	21.2	23.8	MM	MM	+0.9	MM
2017	05	03	16	54	170	2.1	3.1	MM	MM	MM	MM	1014.6	21.1	23.9	MM	MM	MM	MM
2017	05	03	16	48	100	1.5	3.6	MM	MM	MM	MM	1013.8	21.3	23.9	MM	MM	MM	MM
2017	05	03	16	42	140	2.6	5.7	MM	MM	MM	MM	1014.4	21.3	24.0	MM	MM	MM	MM
2017	05	03	16	36	130	1.5	5.1	MM	MM	MM	MM	1014.4	21.4	24.0	MM	MM	MM	MM
2017	05	03	16	30	90	1.5	5.1	MM	MM	MM	MM	1014.3	21.4	24.0	MM	MM	MM	MM
2017	05	03	16	24	140	2.6	5.1	MM	MM	MM	MM	1015.3	21.2	23.9	MM	MM	MM	MM
2017	05	03	16	18	90	1.5	2.6	MM	MM	MM	MM	1015.6	21.2	23.9	MM	MM	MM	MM
2017	05	03	16	12	70	1.0	2.6	MM	MM	MM	MM	1015.9	21.3	23.9	MM	MM	MM	MM
2017	05	03	16	06	80	2.1	3.6	MM	MM	MM	MM	1015.8	21.5	23.9	MM	MM	MM	MM
2017	05	03	16	00	30	0.5	1.5	MM	MM	MM	MM	1016.0	21.7	24.0	MM	MM	+1.4	MM
2017	05	03	15	54	MM	0.0	1.0	MM	MM	MM	MM	1015.9	22.0	24.0	MM	MM	MM	MM
2017	05	03	15	48	180	2.1	4.6	MM	MM	MM	MM	1015.6	22.7	23.9	MM	MM	MM	MM
2017	05	03	15	42	180	3.1	4.6	MM	MM	MM	MM	1014.8	23.4	24.0	MM	MM	MM	MM
2017	05	03	15	36	160	2.6	4.1	MM	MM	MM	MM	1014.4	23.6	24.0	MM	MM	MM	MM
2017	05	03	15	30	160	2.6	5.7	MM	MM	MM	MM	1014.1	23.8	24.0	MM	MM	MM	MM
2017	05	03	15	24	150	3.6	6.7	MM	MM	MM	MM	1013.9	23.8	24.0	MM	MM	MM	MM

2017	05	03	15	18	150	3.1	7.2	MM	MM	MM	MM	1013.8	23.8	24.0	MM	MM	MM	MM
2017	05	03	15	12	160	3.6	6.2	MM	MM	MM	MM	1013.8	23.9	24.1	MM	MM	MM	MM
2017	05	03	15	06	150	3.6	5.7	MM	MM	MM	MM	1013.7	24.0	24.1	MM	MM	MM	MM
2017	05	03	15	00	150	4.6	7.7	MM	MM	MM	MM	1013.6	24.1	24.1	MM	MM	-1.6	MM
2017	05	03	14	54	170	3.1	6.7	MM	MM	MM	MM	1013.8	24.2	24.1	MM	MM	MM	MM
2017	05	03	14	48	150	4.1	7.2	MM	MM	MM	MM	1013.7	24.1	24.1	MM	MM	MM	MM
2017	05	03	14	42	140	2.6	5.7	MM	MM	MM	MM	1013.3	24.1	24.1	MM	MM	MM	MM
2017	05	03	14	36	150	3.6	7.2	MM	MM	MM	MM	1013.3	24.2	24.1	MM	MM	MM	MM
2017	05	03	14	30	140	3.1	7.2	MM	MM	MM	MM	1013.1	24.2	24.1	MM	MM	MM	MM
2017	05	03	14	24	140	2.6	5.1	MM	MM	MM	MM	1013.3	24.4	24.1	MM	MM	MM	MM
2017	05	03	14	18	140	3.6	7.7	MM	MM	MM	MM	1013.5	24.4	24.1	MM	MM	MM	MM
2017	05	03	14	12	130	3.1	8.8	MM	MM	MM	MM	1013.7	24.5	24.1	MM	MM	MM	MM
2017	05	03	14	06	140	1.5	4.6	MM	MM	MM	MM	1013.8	24.7	24.1	MM	MM	MM	MM
2017	05	03	14	00	150	4.1	7.7	MM	MM	MM	MM	1014.0	24.6	24.1	MM	MM	-0.7	MM
2017	05	03	13	54	160	2.6	6.7	MM	MM	MM	MM	1014.2	24.5	24.1	MM	MM	MM	MM
2017	05	03	13	48	140	2.6	5.7	MM	MM	MM	MM	1014.2	24.2	24.1	MM	MM	MM	MM
2017	05	03	13	42	130	2.1	6.2	MM	MM	MM	MM	1014.3	24.1	24.0	MM	MM	MM	MM
2017	05	03	13	36	160	3.1	5.7	MM	MM	MM	MM	1014.5	24.2	24.0	MM	MM	MM	MM
2017	05	03	13	30	150	3.1	6.2	MM	MM	MM	MM	1014.5	23.9	24.0	MM	MM	MM	MM
2017	05	03	13	24	150	2.6	4.1	MM	MM	MM	MM	1014.8	23.7	24.0	MM	MM	MM	MM
2017	05	03	13	18	140	2.6	4.6	MM	MM	MM	MM	1014.4	23.4	24.0	MM	MM	MM	MM
2017	05	03	13	12	150	2.6	4.6	MM	MM	MM	MM	1014.5	23.2	24.0	MM	MM	MM	MM
2017	05	03	13	06	140	2.6	5.1	MM	MM	MM	MM	1014.6	22.9	24.0	MM	MM	MM	MM
2017	05	03	13	00	140	2.1	5.7	MM	MM	MM	MM	1014.6	22.8	24.0	MM	MM	+0.0	MM
2017	05	03	12	54	140	2.1	3.6	MM	MM	MM	MM	1014.5	22.7	24.0	MM	MM	MM	MM
2017	05	03	12	48	140	2.1	3.6	MM	MM	MM	MM	1014.5	22.6	24.1	MM	MM	MM	MM
2017	05	03	12	42	130	1.0	3.6	MM	MM	MM	MM	1014.7	22.5	24.1	MM	MM	MM	MM
2017	05	03	12	36	130	1.0	3.1	MM	MM	MM	MM	1014.9	22.3	24.0	MM	MM	MM	MM
2017	05	03	12	30	120	0.5	2.6	MM	MM	MM	MM	1014.9	22.2	24.1	MM	MM	MM	MM
2017	05	03	12	24	140	1.0	2.6	MM	MM	MM	MM	1015.0	21.8	24.1	MM	MM	MM	MM
2017	05	03	12	18	130	1.0	2.1	MM	MM	MM	MM	1015.1	21.6	24.1	MM	MM	MM	MM
2017	05	03	12	12	140	1.0	2.1	MM	MM	MM	MM	1015.1	21.5	24.1	MM	MM	MM	MM
2017	05	03	12	06	140	1.0	1.5	MM	MM	MM	MM	1015.2	21.1	24.1	MM	MM	MM	MM
2017	05	03	12	00	150	1.5	1.5	MM	MM	MM	MM	1015.2	20.7	24.1	MM	MM	+0.6	MM
2017	05	03	11	54	130	0.5	1.0	MM	MM	MM	MM	1015.1	21.0	24.1	MM	MM	MM	MM
2017	05	03	11	48	100	0.5	1.5	MM	MM	MM	MM	1015.0	20.8	24.1	MM	MM	MM	MM
2017	05	03	11	42	130	1.0	1.0	MM	MM	MM	MM	1015.1	20.2	24.1	MM	MM	MM	MM
2017	05	03	11	36	MM	0.0	1.0	MM	MM	MM	MM	1015.0	19.9	24.1	MM	MM	MM	MM
2017	05	03	11	30	130	0.5	1.5	MM	MM	MM	MM	1015.0	19.5	24.1	MM	MM	MM	MM
2017	05	03	11	24	140	1.0	1.5	MM	MM	MM	MM	1014.8	19.4	24.1	MM	MM	MM	MM
2017	05	03	11	18	140	1.0	1.5	MM	MM	MM	MM	1014.8	19.3	24.1	MM	MM	MM	MM
2017	05	03	11	12	150	1.0	1.5	MM	MM	MM	MM	1014.8	19.3	24.1	MM	MM	MM	MM
2017	05	03	11	06	170	1.0	1.5	MM	MM	MM	MM	1014.7	19.3	24.2	MM	MM	MM	MM
2017	05	03	11	00	150	1.0	2.1	MM	MM	MM	MM	1014.7	19.3	24.2	MM	MM	+0.0	MM
2017	05	03	10	54	140	1.0	1.5	MM	MM	MM	MM	1014.6	19.3	24.2	MM	MM	MM	MM
2017	05	03	10	48	140	1.5	2.1	MM	MM	MM	MM	1014.6	19.4	24.2	MM	MM	MM	MM
2017	05	03	10	42	140	1.5	2.6	MM	MM	MM	MM	1014.6	19.5	24.2	MM	MM	MM	MM
2017	05	03	10	36	170	1.0	1.5	MM	MM	MM	MM	1014.6	19.6	24.2	MM	MM	MM	MM
2017	05	03	10	30	150	2.1	2.6	MM	MM	MM	MM	1014.6	19.4	24.2	MM	MM	MM	MM
2017	05	03	10	24	160	1.5	2.1	MM	MM	MM	MM	1014.7	19.4	24.2	MM	MM	MM	MM
2017	05	03	10	18	140	1.0	1.5	MM	MM	MM	MM	1014.7	19.2	24.2	MM	MM	MM	MM
2017	05	03	10	12	MM	0.0	0.5	MM	MM	MM	MM	1014.7	19.4	24.2	MM	MM	MM	MM
2017	05	03	10	06	MM	0.0	0.0	MM	MM	MM	MM	1014.7	19.4	24.2	MM	MM	MM	MM
2017	05	03	10	00	MM	0.0	0.5	MM	MM	MM	MM	1014.7	19.4	24.2	MM	MM	-0.9	MM
2017	05	03	09	54	170	1.0	1.5	MM	MM	MM	MM	1014.7	19.5	24.2	MM	MM	MM	MM
2017	05	03	09	48	170	1.0	1.5	MM	MM	MM	MM	1014.6	19.6	24.2	MM	MM	MM	MM
2017	05	03	09	42	150	1.5	2.1	MM	MM	MM	MM	1014.6	19.6	24.2	MM	MM	MM	MM
2017	05	03	09	36	150	1.5	2.1	MM	MM	MM	MM	1014.5	19.6	24.2	MM	MM	MM	MM
2017	05	03	09	30	140	1.5	2.1	MM	MM	MM	MM	1014.5	19.5	24.3	MM	MM	MM	MM
2017	05	03	09	24	MM	0.0	0.5	MM	MM	MM	MM	1014.6	19.5	24.3	MM	MM	MM	MM
2017	05	03	09	18	130	0.5	1.0	MM	MM	MM	MM	1014.6	19.6	24.3	MM	MM	MM	MM
2017	05	03	09	12	150	1.0	1.5	MM	MM	MM	MM	1014.6	19.7	24.3	MM	MM	MM	MM
2017	05	03	09	06	160	1.0	1.0	MM	MM	MM	MM	1014.6	19.8	24.3	MM	MM	MM	MM
2017	05	03	09	00	170	1.0	1.5	MM	MM	MM	MM	1014.6	19.9	24.3	MM	MM	-1.4	MM
2017	05	03	08	54	150	1.5	2.1	MM	MM	MM	MM	1014.5	19.9	24.3	MM	MM	MM	MM
2017	05	03	08	48	160	1.0	2.6	MM	MM	MM	MM	1014.6	20.0	24.3	MM	MM	MM	MM
2017	05	03	08	42	150	1.5	2.6	MM	MM	MM	MM	1014.6	19.9	24.3	MM	MM	MM	MM

2017	05	03	08	36	150	1.0	2.1	MM	MM	MM	MM	1014.5	19.9	24.3	MM	MM	MM	MM
2017	05	03	08	30	150	1.5	2.6	MM	MM	MM	MM	1014.6	19.9	24.3	MM	MM	MM	MM
2017	05	03	08	24	150	1.5	2.1	MM	MM	MM	MM	1014.7	19.9	24.3	MM	MM	MM	MM
2017	05	03	08	18	140	1.5	2.1	MM	MM	MM	MM	1014.7	20.0	24.3	MM	MM	MM	MM
2017	05	03	08	12	140	1.5	2.1	MM	MM	MM	MM	1014.7	20.1	24.3	MM	MM	MM	MM
2017	05	03	08	06	150	1.5	2.6	MM	MM	MM	MM	1014.8	20.2	24.3	MM	MM	MM	MM
2017	05	03	08	00	140	1.5	2.6	MM	MM	MM	MM	1014.8	20.1	24.3	MM	MM	-1.7	MM
2017	05	03	07	54	140	1.5	2.6	MM	MM	MM	MM	1014.9	20.2	24.3	MM	MM	MM	MM
2017	05	03	07	48	160	1.5	2.1	MM	MM	MM	MM	1015.1	20.3	24.3	MM	MM	MM	MM
2017	05	03	07	42	150	1.5	2.1	MM	MM	MM	MM	1015.1	20.3	24.3	MM	MM	MM	MM
2017	05	03	07	36	140	1.5	2.1	MM	MM	MM	MM	1015.2	20.3	24.3	MM	MM	MM	MM
2017	05	03	07	30	140	1.5	2.1	MM	MM	MM	MM	1015.3	20.1	24.3	MM	MM	MM	MM
2017	05	03	07	24	160	1.0	1.5	MM	MM	MM	MM	1015.4	20.1	24.4	MM	MM	MM	MM
2017	05	03	07	18	170	1.0	1.5	MM	MM	MM	MM	1015.4	20.3	24.4	MM	MM	MM	MM
2017	05	03	07	12	160	1.0	1.5	MM	MM	MM	MM	1015.5	20.5	24.4	MM	MM	MM	MM
2017	05	03	07	06	170	1.5	2.1	MM	MM	MM	MM	1015.6	20.5	24.4	MM	MM	MM	MM
2017	05	03	07	00	170	1.0	1.5	MM	MM	MM	MM	1015.6	20.4	24.4	MM	MM	-1.3	MM
2017	05	03	06	54	160	1.0	2.1	MM	MM	MM	MM	1015.6	20.6	24.4	MM	MM	MM	MM
2017	05	03	06	48	170	1.0	1.5	MM	MM	MM	MM	1015.6	20.7	24.4	MM	MM	MM	MM
2017	05	03	06	42	170	1.0	1.5	MM	MM	MM	MM	1015.7	20.8	24.4	MM	MM	MM	MM
2017	05	03	06	36	180	1.0	1.5	MM	MM	MM	MM	1015.8	20.8	24.4	MM	MM	MM	MM
2017	05	03	06	30	170	1.0	1.5	MM	MM	MM	MM	1015.8	20.9	24.4	MM	MM	MM	MM
2017	05	03	06	24	170	1.0	1.5	MM	MM	MM	MM	1015.9	20.9	24.4	MM	MM	MM	MM
2017	05	03	06	18	160	1.0	1.5	MM	MM	MM	MM	1015.9	21.0	24.4	MM	MM	MM	MM
2017	05	03	06	12	170	1.0	1.5	MM	MM	MM	MM	1016.0	21.1	24.4	MM	MM	MM	MM
2017	05	03	06	06	170	1.0	1.5	MM	MM	MM	MM	1016.0	21.2	24.4	MM	MM	MM	MM
2017	05	03	06	00	170	1.0	1.5	MM	MM	MM	MM	1016.0	21.3	24.4	MM	MM	-0.9	MM
2017	05	03	05	54	170	1.0	1.5	MM	MM	MM	MM	1016.0	21.4	24.5	MM	MM	MM	MM
2017	05	03	05	48	170	1.0	2.1	MM	MM	MM	MM	1016.1	21.4	24.5	MM	MM	MM	MM
2017	05	03	05	42	170	1.0	2.1	MM	MM	MM	MM	1016.2	21.4	24.4	MM	MM	MM	MM
2017	05	03	05	36	170	1.0	2.1	MM	MM	MM	MM	1016.3	21.5	24.4	MM	MM	MM	MM
2017	05	03	05	30	160	1.5	2.6	MM	MM	MM	MM	1016.4	21.6	24.4	MM	MM	MM	MM
2017	05	03	05	24	170	1.5	2.6	MM	MM	MM	MM	1016.4	21.7	24.4	MM	MM	MM	MM
2017	05	03	05	18	180	1.5	2.6	MM	MM	MM	MM	1016.4	21.7	24.4	MM	MM	MM	MM
2017	05	03	05	12	180	1.5	2.6	MM	MM	MM	MM	1016.5	21.6	24.4	MM	MM	MM	MM
2017	05	03	05	06	170	1.0	1.5	MM	MM	MM	MM	1016.5	21.7	24.4	MM	MM	MM	MM
2017	05	03	05	00	160	1.0	1.5	MM	MM	MM	MM	1016.5	21.7	24.5	MM	MM	+0.0	MM
2017	05	03	04	54	150	1.5	2.6	MM	MM	MM	MM	1016.5	21.8	24.5	MM	MM	MM	MM
2017	05	03	04	48	160	1.5	2.6	MM	MM	MM	MM	1016.5	21.9	24.4	MM	MM	MM	MM
2017	05	03	04	42	150	1.5	2.6	MM	MM	MM	MM	1016.6	22.0	24.3	MM	MM	MM	MM
2017	05	03	04	36	150	2.1	3.1	MM	MM	MM	MM	1016.6	22.0	24.5	MM	MM	MM	MM
2017	05	03	04	30	150	1.5	2.6	MM	MM	MM	MM	1016.7	22.1	24.6	MM	MM	MM	MM
2017	05	03	04	24	160	2.1	3.6	MM	MM	MM	MM	1016.7	22.3	24.6	MM	MM	MM	MM
2017	05	03	04	18	160	2.1	3.1	MM	MM	MM	MM	1016.8	22.4	24.5	MM	MM	MM	MM
2017	05	03	04	12	150	2.6	4.1	MM	MM	MM	MM	1016.8	22.3	24.6	MM	MM	MM	MM
2017	05	03	04	06	160	2.1	3.6	MM	MM	MM	MM	1016.9	22.2	24.6	MM	MM	MM	MM
2017	05	03	04	00	150	2.1	3.6	MM	MM	MM	MM	1016.9	22.3	24.6	MM	MM	+0.7	MM
2017	05	03	03	54	170	2.1	3.6	MM	MM	MM	MM	1017.0	22.4	24.6	MM	MM	MM	MM
2017	05	03	03	48	150	1.5	2.6	MM	MM	MM	MM	1017.0	22.4	24.6	MM	MM	MM	MM
2017	05	03	03	42	150	1.5	2.6	MM	MM	MM	MM	1017.0	22.3	24.5	MM	MM	MM	MM
2017	05	03	03	36	140	1.5	2.6	MM	MM	MM	MM	1016.9	22.4	24.6	MM	MM	MM	MM
2017	05	03	03	30	140	1.5	2.1	MM	MM	MM	MM	1016.9	22.5	24.6	MM	MM	MM	MM
2017	05	03	03	24	140	1.0	2.1	MM	MM	MM	MM	1016.9	22.6	24.5	MM	MM	MM	MM
2017	05	03	03	18	140	1.5	2.6	MM	MM	MM	MM	1016.9	22.7	24.4	MM	MM	MM	MM
2017	05	03	03	12	130	1.5	3.1	MM	MM	MM	MM	1016.9	22.6	24.6	MM	MM	MM	MM
2017	05	03	03	06	140	1.5	2.6	MM	MM	MM	MM	1016.9	22.6	24.6	MM	MM	MM	MM
2017	05	03	03	00	140	1.5	2.6	MM	MM	MM	MM	1016.9	22.6	24.3	MM	MM	+1.3	MM
2017	05	03	02	54	140	1.0	2.1	MM	MM	MM	MM	1016.9	22.7	24.0	MM	MM	MM	MM
2017	05	03	02	48	140	0.5	1.5	MM	MM	MM	MM	1016.9	22.8	24.6	MM	MM	MM	MM
2017	05	03	02	42	MM	0.0	0.5	MM	MM	MM	MM	1016.9	23.0	24.7	MM	MM	MM	MM
2017	05	03	02	36	MM	0.0	1.0	MM	MM	MM	MM	1016.9	23.1	24.5	MM	MM	MM	MM
2017	05	03	02	30	160	1.0	2.1	MM	MM	MM	MM	1016.8	23.2	24.3	MM	MM	MM	MM
2017	05	03	02	24	140	1.0	3.1	MM	MM	MM	MM	1016.8	23.2	24.7	MM	MM	MM	MM
2017	05	03	02	18	130	1.0	2.1	MM	MM	MM	MM	1016.8	23.4	24.6	MM	MM	MM	MM
2017	05	03	02	12	110	0.5	1.5	MM	MM	MM	MM	1016.7	23.4	24.5	MM	MM	MM	MM
2017	05	03	02	06	MM	0.0	1.0	MM	MM	MM	MM	1016.6	23.6	24.6	MM	MM	MM	MM
2017	05	03	02	00	MM	0.0	1.5	MM	MM	MM	MM	1016.5	23.7	24.7	MM	MM	+1.0	MM

2017	05	03	01	54	MM	0.0	0.5	MM	MM	MM	MM	1016.4	23.8	24.6	MM	MM	MM	MM
2017	05	03	01	48	MM	0.0	1.5	MM	MM	MM	MM	1016.4	24.0	24.4	MM	MM	MM	MM
2017	05	03	01	42	140	1.5	2.6	MM	MM	MM	MM	1016.4	24.1	24.4	MM	MM	MM	MM
2017	05	03	01	36	140	1.0	2.6	MM	MM	MM	MM	1016.4	24.2	24.8	MM	MM	MM	MM
2017	05	03	01	30	140	1.5	2.6	MM	MM	MM	MM	1016.3	24.3	24.8	MM	MM	MM	MM
2017	05	03	01	24	140	1.5	2.6	MM	MM	MM	MM	1016.3	24.4	24.9	MM	MM	MM	MM
2017	05	03	01	18	140	1.5	2.6	MM	MM	MM	MM	1016.2	24.5	24.8	MM	MM	MM	MM
2017	05	03	01	12	140	1.5	3.1	MM	MM	MM	MM	1016.3	24.7	24.8	MM	MM	MM	MM
2017	05	03	01	06	150	1.5	2.6	MM	MM	MM	MM	1016.3	24.9	24.8	MM	MM	MM	MM
2017	05	03	01	00	150	1.5	3.1	MM	MM	MM	MM	1016.2	25.0	24.7	MM	MM	+0.4	MM
2017	05	03	00	54	150	2.1	3.6	MM	MM	MM	MM	1016.2	25.0	24.8	MM	MM	MM	MM
2017	05	03	00	48	140	2.1	4.1	MM	MM	MM	MM	1016.1	25.1	24.7	MM	MM	MM	MM
2017	05	03	00	42	150	1.5	2.6	MM	MM	MM	MM	1016.0	25.3	24.5	MM	MM	MM	MM
2017	05	03	00	36	140	2.1	3.6	MM	MM	MM	MM	1016.0	25.5	24.4	MM	MM	MM	MM
2017	05	03	00	30	140	2.1	3.6	MM	MM	MM	MM	1015.9	25.7	25.0	MM	MM	MM	MM
2017	05	03	00	24	140	2.6	3.6	MM	MM	MM	MM	1015.8	26.0	24.8	MM	MM	MM	MM
2017	05	03	00	18	130	1.0	4.6	MM	MM	MM	MM	1015.7	26.3	24.6	MM	MM	MM	MM
2017	05	03	00	12	140	1.5	3.1	MM	MM	MM	MM	1015.6	26.6	24.6	MM	MM	MM	MM
2017	05	03	00	06	140	1.5	2.6	MM	MM	MM	MM	1015.6	26.8	25.1	MM	MM	MM	MM
2017	05	03	00	00	130	1.0	3.1	MM	MM	MM	MM	1015.6	26.9	24.9	MM	MM	-0.8	MM
2017	05	02	23	54	150	0.5	2.6	MM	MM	MM	MM	1015.6	27.2	24.8	MM	MM	MM	MM
2017	05	02	23	48	140	2.6	5.1	MM	MM	MM	MM	1015.6	27.3	24.6	MM	MM	MM	MM
2017	05	02	23	42	150	1.0	3.1	MM	MM	MM	MM	1015.5	27.5	25.1	MM	MM	MM	MM
2017	05	02	23	36	150	2.1	3.6	MM	MM	MM	MM	1015.5	27.6	25.0	MM	MM	MM	MM
2017	05	02	23	30	150	2.6	4.6	MM	MM	MM	MM	1015.5	27.7	24.8	MM	MM	MM	MM
2017	05	02	23	24	140	1.0	3.6	MM	MM	MM	MM	1015.5	27.9	24.4	MM	MM	MM	MM
2017	05	02	23	18	140	2.6	4.1	MM	MM	MM	MM	1015.5	27.9	25.4	MM	MM	MM	MM
2017	05	02	23	12	150	2.1	4.1	MM	MM	MM	MM	1015.5	28.2	25.3	MM	MM	MM	MM
2017	05	02	23	06	120	0.5	1.5	MM	MM	MM	MM	1015.5	28.4	25.1	MM	MM	MM	MM
2017	05	02	23	00	140	2.1	3.1	MM	MM	MM	MM	1015.5	28.4	25.2	MM	MM	-1.4	MM
2017	05	02	22	54	120	1.0	3.1	MM	MM	MM	MM	1015.5	28.7	25.2	MM	MM	MM	MM
2017	05	02	22	48	140	2.6	4.6	MM	MM	MM	MM	1015.5	28.5	25.0	MM	MM	MM	MM
2017	05	02	22	42	170	1.5	3.6	MM	MM	MM	MM	1015.6	28.7	25.0	MM	MM	MM	MM
2017	05	02	22	36	150	2.1	4.1	MM	MM	MM	MM	1015.6	28.6	25.2	MM	MM	MM	MM
2017	05	02	22	30	160	1.0	3.6	MM	MM	MM	MM	1015.7	29.0	25.1	MM	MM	MM	MM
2017	05	02	22	24	130	1.5	5.1	MM	MM	MM	MM	1015.7	28.9	25.1	MM	MM	MM	MM
2017	05	02	22	18	120	0.5	2.6	MM	MM	MM	MM	1015.7	29.2	25.1	MM	MM	MM	MM
2017	05	02	22	12	140	1.5	3.6	MM	MM	MM	MM	1015.8	29.2	25.2	MM	MM	MM	MM
2017	05	02	22	06	130	1.0	2.6	MM	MM	MM	MM	1015.8	29.4	25.4	MM	MM	MM	MM
2017	05	02	22	00	120	1.0	3.6	MM	MM	MM	MM	1015.8	29.3	25.2	MM	MM	MM	MM
2017	05	02	21	54	130	1.5	4.1	MM	MM	MM	MM	1015.8	29.2	25.3	MM	MM	MM	MM
2017	05	02	21	48	160	3.1	5.1	MM	MM	MM	MM	1015.9	29.2	25.3	MM	MM	MM	MM
2017	05	02	21	42	150	2.6	4.6	MM	MM	MM	MM	1015.9	29.3	25.0	MM	MM	MM	MM
2017	05	02	21	36	140	1.0	4.1	MM	MM	MM	MM	1016.0	29.5	25.0	MM	MM	MM	MM
2017	05	02	21	30	150	2.6	4.6	MM	MM	MM	MM	1016.0	29.3	25.1	MM	MM	MM	MM
2017	05	02	21	24	160	1.5	3.1	MM	MM	MM	MM	1016.1	28.9	25.4	MM	MM	MM	MM
2017	05	02	21	18	160	2.6	4.1	MM	MM	MM	MM	1016.2	29.1	25.2	MM	MM	MM	MM
2017	05	02	21	12	190	2.1	3.1	MM	MM	MM	MM	1016.2	28.9	25.1	MM	MM	MM	MM
2017	05	02	21	06	190	1.5	3.1	MM	MM	MM	MM	1016.3	28.8	25.1	MM	MM	MM	MM
2017	05	02	21	00	150	2.1	3.6	MM	MM	MM	MM	1016.4	29.1	25.0	MM	MM	-1.5	MM
2017	05	02	20	54	160	2.1	4.1	MM	MM	MM	MM	1016.4	29.2	25.2	MM	MM	MM	MM
2017	05	02	20	48	100	1.5	5.1	MM	MM	MM	MM	1016.5	29.5	25.1	MM	MM	MM	MM
2017	05	02	20	42	130	1.5	3.6	MM	MM	MM	MM	1016.5	29.4	25.0	MM	MM	MM	MM
2017	05	02	20	36	160	2.1	4.1	MM	MM	MM	MM	1016.6	29.4	24.8	MM	MM	MM	MM
2017	05	02	20	30	190	2.1	3.1	MM	MM	MM	MM	1016.7	28.6	24.9	MM	MM	MM	MM
2017	05	02	20	24	90	1.5	2.6	MM	MM	MM	MM	1016.7	29.1	25.4	MM	MM	MM	MM
2017	05	02	20	18	130	1.0	4.6	MM	MM	MM	MM	1016.8	29.4	25.1	MM	MM	MM	MM
2017	05	02	20	12	140	2.1	4.6	MM	MM	MM	MM	1016.9	29.3	25.0	MM	MM	MM	MM
2017	05	02	20	06	130	2.1	4.6	MM	MM	MM	MM	1016.9	29.0	25.0	MM	MM	MM	MM
2017	05	02	20	00	140	1.0	2.6	MM	MM	MM	MM	1016.9	29.2	25.1	MM	MM	-1.6	MM
2017	05	02	19	54	MM	0.0	2.6	MM	MM	MM	MM	1017.0	29.3	25.2	MM	MM	MM	MM
2017	05	02	19	48	90	1.0	2.6	MM	MM	MM	MM	1017.1	28.7	25.4	MM	MM	MM	MM
2017	05	02	19	42	140	1.5	4.1	MM	MM	MM	MM	1017.1	29.0	25.3	MM	MM	MM	MM
2017	05	02	19	36	70	1.5	2.6	MM	MM	MM	MM	1017.2	28.2	25.1	MM	MM	MM	MM
2017	05	02	19	30	190	1.0	2.1	MM	MM	MM	MM	1017.2	28.6	25.1	MM	MM	MM	MM
2017	05	02	19	24	90	2.1	4.1	MM	MM	MM	MM	1017.2	28.3	25.1	MM	MM	MM	MM
2017	05	02	19	18	110	0.5	1.5	MM	MM	MM	MM	1017.3	29.0	25.3	MM	MM	MM	MM

2017	05	02	19	12	80	2.1	3.1	MM	MM	MM	MM	1017.3	28.6	25.6	MM	MM	MM	MM
2017	05	02	19	06	170	1.0	2.1	MM	MM	MM	MM	1017.4	28.2	25.2	MM	MM	MM	MM
2017	05	02	19	00	70	2.6	3.6	MM	MM	MM	MM	1017.4	28.4	25.0	MM	MM	-1.4	MM
2017	05	02	18	54	140	1.0	2.6	MM	MM	MM	MM	1017.5	28.6	25.2	MM	MM	MM	MM
2017	05	02	18	48	130	1.5	3.1	MM	MM	MM	MM	1017.5	28.9	25.2	MM	MM	MM	MM
2017	05	02	18	42	130	1.0	4.1	MM	MM	MM	MM	1017.5	28.7	25.0	MM	MM	MM	MM
2017	05	02	18	36	180	1.0	2.6	MM	MM	MM	MM	1017.6	28.8	25.0	MM	MM	MM	MM
2017	05	02	18	30	110	1.0	3.6	MM	MM	MM	MM	1017.6	28.8	25.0	MM	MM	MM	MM
2017	05	02	18	24	190	2.6	4.1	MM	MM	MM	MM	1017.7	27.8	25.0	MM	MM	MM	MM
2017	05	02	18	18	180	3.1	4.1	MM	MM	MM	MM	1017.8	27.7	25.0	MM	MM	MM	MM
2017	05	02	18	12	180	2.1	4.6	MM	MM	MM	MM	1017.9	28.8	25.0	MM	MM	MM	MM
2017	05	02	18	06	190	1.5	3.6	MM	MM	MM	MM	1017.9	28.3	25.0	MM	MM	MM	MM
2017	05	02	18	00	150	1.5	3.6	MM	MM	MM	MM	1017.9	28.8	25.1	MM	MM	-1.0	MM
2017	05	02	17	54	170	3.6	5.7	MM	MM	MM	MM	1018.0	28.3	25.0	MM	MM	MM	MM
2017	05	02	17	48	100	1.5	3.6	MM	MM	MM	MM	1018.0	28.4	25.0	MM	MM	MM	MM
2017	05	02	17	42	140	1.5	4.6	MM	MM	MM	MM	1018.1	28.8	25.1	MM	MM	MM	MM
2017	05	02	17	36	80	1.0	2.1	MM	MM	MM	MM	1018.2	28.5	25.1	MM	MM	MM	MM
2017	05	02	17	30	170	1.5	3.1	MM	MM	MM	MM	1018.2	28.5	24.8	MM	MM	MM	MM
2017	05	02	17	24	130	1.0	3.1	MM	MM	MM	MM	1018.3	28.7	24.8	MM	MM	MM	MM
2017	05	02	17	18	130	0.5	2.1	MM	MM	MM	MM	1018.3	28.0	24.9	MM	MM	MM	MM
2017	05	02	17	12	110	1.0	2.1	MM	MM	MM	MM	1018.3	28.6	24.9	MM	MM	MM	MM
2017	05	02	17	06	100	1.5	3.6	MM	MM	MM	MM	1018.4	27.9	24.7	MM	MM	MM	MM
2017	05	02	17	00	150	3.1	4.6	MM	MM	MM	MM	1018.5	28.2	24.6	MM	MM	-0.3	MM
2017	05	02	16	54	180	2.1	2.6	MM	MM	MM	MM	1018.5	27.9	24.6	MM	MM	MM	MM
2017	05	02	16	48	140	0.5	2.1	MM	MM	MM	MM	1018.5	27.8	24.6	MM	MM	MM	MM
2017	05	02	16	42	70	2.1	4.1	MM	MM	MM	MM	1018.6	27.3	24.6	MM	MM	MM	MM
2017	05	02	16	36	120	1.0	2.6	MM	MM	MM	MM	1018.7	28.2	24.5	MM	MM	MM	MM
2017	05	02	16	30	70	1.0	1.5	MM	MM	MM	MM	1018.6	27.5	24.5	MM	MM	MM	MM
2017	05	02	16	24	290	0.5	1.5	MM	MM	MM	MM	1018.7	27.6	24.5	MM	MM	MM	MM
2017	05	02	16	18	150	1.0	3.1	MM	MM	MM	MM	1018.7	27.7	24.6	MM	MM	MM	MM
2017	05	02	16	12	190	0.5	1.0	MM	MM	MM	MM	1018.7	27.4	24.6	MM	MM	MM	MM
2017	05	02	16	06	140	1.5	3.6	MM	MM	MM	MM	1018.8	27.8	24.5	MM	MM	MM	MM
2017	05	02	16	00	MM	0.0	1.0	MM	MM	MM	MM	1018.8	27.5	24.5	MM	MM	+0.4	MM
2017	05	02	15	54	160	2.1	3.1	MM	MM	MM	MM	1018.8	27.4	24.5	MM	MM	MM	MM
2017	05	02	15	48	160	1.5	3.1	MM	MM	MM	MM	1018.8	27.4	24.5	MM	MM	MM	MM
2017	05	02	15	42	120	1.5	4.1	MM	MM	MM	MM	1018.7	26.9	24.5	MM	MM	MM	MM
2017	05	02	15	36	160	1.0	2.6	MM	MM	MM	MM	1018.7	27.3	24.5	MM	MM	MM	MM
2017	05	02	15	30	140	1.0	2.6	MM	MM	MM	MM	1018.7	26.6	24.5	MM	MM	MM	MM
2017	05	02	15	24	80	2.1	3.1	MM	MM	MM	MM	1018.7	26.4	24.4	MM	MM	MM	MM
2017	05	02	15	18	90	1.5	2.6	MM	MM	MM	MM	1018.8	26.5	24.5	MM	MM	MM	MM
2017	05	02	15	12	180	0.5	2.6	MM	MM	MM	MM	1018.8	26.7	24.5	MM	MM	MM	MM
2017	05	02	15	06	130	1.5	3.6	MM	MM	MM	MM	1018.8	26.5	24.5	MM	MM	MM	MM
2017	05	02	15	00	MM	0.0	2.6	MM	MM	MM	MM	1018.9	26.4	24.5	MM	MM	+1.2	MM
2017	05	02	14	54	130	1.5	4.1	MM	MM	MM	MM	1018.9	26.2	24.5	MM	MM	MM	MM
2017	05	02	14	48	100	1.0	2.6	MM	MM	MM	MM	1018.8	26.0	24.5	MM	MM	MM	MM
2017	05	02	14	42	MM	0.0	1.5	MM	MM	MM	MM	1018.8	25.9	24.5	MM	MM	MM	MM
2017	05	02	14	36	80	1.0	2.6	MM	MM	MM	MM	1018.8	25.3	24.4	MM	MM	MM	MM
2017	05	02	14	30	130	1.0	2.6	MM	MM	MM	MM	1018.8	25.5	24.4	MM	MM	MM	MM
2017	05	02	14	24	90	1.5	3.1	MM	MM	MM	MM	1018.8	25.4	24.4	MM	MM	MM	MM
2017	05	02	14	18	130	1.0	2.1	MM	MM	MM	MM	1018.9	25.2	24.4	MM	MM	MM	MM
2017	05	02	14	12	130	0.5	2.1	MM	MM	MM	MM	1018.9	24.8	24.4	MM	MM	MM	MM
2017	05	02	14	06	70	1.0	1.5	MM	MM	MM	MM	1018.8	24.0	24.4	MM	MM	MM	MM
2017	05	02	14	00	100	1.0	2.1	MM	MM	MM	MM	1018.8	23.6	24.4	MM	MM	+1.8	MM
2017	05	02	13	54	50	1.5	2.1	MM	MM	MM	MM	1018.8	23.3	24.4	MM	MM	MM	MM
2017	05	02	13	48	60	1.5	2.1	MM	MM	MM	MM	1018.7	23.1	24.4	MM	MM	MM	MM
2017	05	02	13	42	60	1.5	1.5	MM	MM	MM	MM	1018.7	23.1	24.4	MM	MM	MM	MM
2017	05	02	13	36	60	1.5	2.1	MM	MM	MM	MM	1018.7	22.9	24.4	MM	MM	MM	MM
2017	05	02	13	30	60	1.5	2.1	MM	MM	MM	MM	1018.6	22.9	24.4	MM	MM	MM	MM
2017	05	02	13	24	80	1.0	1.5	MM	MM	MM	MM	1018.6	22.8	24.4	MM	MM	MM	MM
2017	05	02	13	18	80	1.5	2.1	MM	MM	MM	MM	1018.6	22.6	24.4	MM	MM	MM	MM
2017	05	02	13	12	60	2.1	2.1	MM	MM	MM	MM	1018.5	22.4	24.4	MM	MM	MM	MM
2017	05	02	13	06	80	1.5	2.1	MM	MM	MM	MM	1018.5	22.4	24.4	MM	MM	MM	MM
2017	05	02	13	00	90	0.5	1.5	MM	MM	MM	MM	1018.4	22.4	24.4	MM	MM	+2.0	MM
2017	05	02	12	54	80	1.0	1.5	MM	MM	MM	MM	1018.4	22.0	24.4	MM	MM	MM	MM
2017	05	02	12	48	MM	0.0	0.5	MM	MM	MM	MM	1018.4	21.8	24.4	MM	MM	MM	MM
2017	05	02	12	42	MM	0.0	1.0	MM	MM	MM	MM	1018.3	21.1	24.4	MM	MM	MM	MM
2017	05	02	12	36	140	0.5	1.0	MM	MM	MM	MM	1018.2	20.9	24.4	MM	MM	MM	MM

2017	05	02	12	30	MM	0.0	1.0	MM	MM	MM	MM	1018.1	21.1	24.4	MM	MM	MM	MM
2017	05	02	12	24	MM	0.0	0.0	MM	MM	MM	MM	1018.0	21.4	24.4	MM	MM	MM	MM
2017	05	02	12	18	MM	0.0	0.0	MM	MM	MM	MM	1018.0	22.6	24.4	MM	MM	MM	MM
2017	05	02	12	12	MM	0.0	0.0	MM	MM	MM	MM	1017.9	22.3	24.4	MM	MM	MM	MM
2017	05	02	12	06	MM	0.0	0.0	MM	MM	MM	MM	1017.8	21.9	24.5	MM	MM	MM	MM
2017	05	02	12	00	MM	0.0	0.0	MM	MM	MM	MM	1017.7	21.6	24.4	MM	MM	+1.4	MM
2017	05	02	11	54	MM	0.0	0.0	MM	MM	MM	MM	1017.7	21.1	24.5	MM	MM	MM	MM
2017	05	02	11	48	MM	0.0	0.0	MM	MM	MM	MM	1017.6	20.8	24.5	MM	MM	MM	MM
2017	05	02	11	42	MM	0.0	0.0	MM	MM	MM	MM	1017.6	19.6	24.5	MM	MM	MM	MM
2017	05	02	11	36	MM	0.0	0.0	MM	MM	MM	MM	1017.5	19.3	24.6	MM	MM	MM	MM
2017	05	02	11	30	MM	0.0	0.0	MM	MM	MM	MM	1017.5	18.9	24.6	MM	MM	MM	MM
2017	05	02	11	24	MM	0.0	0.0	MM	MM	MM	MM	1017.4	18.6	24.6	MM	MM	MM	MM
2017	05	02	11	18	MM	0.0	0.0	MM	MM	MM	MM	1017.3	18.3	24.6	MM	MM	MM	MM
2017	05	02	11	12	MM	0.0	0.0	MM	MM	MM	MM	1017.2	18.3	24.7	MM	MM	MM	MM
2017	05	02	11	06	200	1.5	1.5	MM	MM	MM	MM	1017.1	18.2	24.7	MM	MM	MM	MM
2017	05	02	11	00	200	2.1	2.6	MM	MM	MM	MM	1017.0	18.1	24.8	MM	MM	+0.9	MM
2017	05	02	10	54	190	2.1	2.6	MM	MM	MM	MM	1017.0	18.1	24.7	MM	MM	MM	MM
2017	05	02	10	48	200	2.1	2.1	MM	MM	MM	MM	1016.8	18.2	24.7	MM	MM	MM	MM
2017	05	02	10	42	190	1.5	2.1	MM	MM	MM	MM	1016.8	17.9	24.7	MM	MM	MM	MM
2017	05	02	10	36	190	2.1	2.6	MM	MM	MM	MM	1016.6	17.8	24.8	MM	MM	MM	MM
2017	05	02	10	30	190	1.5	2.1	MM	MM	MM	MM	1016.6	17.9	24.8	MM	MM	MM	MM
2017	05	02	10	24	190	2.1	2.6	MM	MM	MM	MM	1016.6	17.9	24.8	MM	MM	MM	MM
2017	05	02	10	18	190	2.1	2.6	MM	MM	MM	MM	1016.5	17.9	24.8	MM	MM	MM	MM
2017	05	02	10	12	180	2.6	2.6	MM	MM	MM	MM	1016.4	17.9	24.8	MM	MM	MM	MM
2017	05	02	10	06	190	1.5	2.6	MM	MM	MM	MM	1016.4	18.4	24.8	MM	MM	MM	MM
2017	05	02	10	00	200	2.1	2.6	MM	MM	MM	MM	1016.4	18.3	24.8	MM	MM	+0.6	MM
2017	05	02	09	54	190	2.6	2.6	MM	MM	MM	MM	1016.4	18.3	24.8	MM	MM	MM	MM
2017	05	02	09	48	190	2.1	2.6	MM	MM	MM	MM	1016.3	18.1	24.9	MM	MM	MM	MM
2017	05	02	09	42	180	2.1	2.6	MM	MM	MM	MM	1016.4	17.7	24.9	MM	MM	MM	MM
2017	05	02	09	36	190	2.6	3.1	MM	MM	MM	MM	1016.4	17.9	25.0	MM	MM	MM	MM
2017	05	02	09	30	190	3.1	3.6	MM	MM	MM	MM	1016.4	17.9	25.0	MM	MM	MM	MM
2017	05	02	09	24	180	2.6	3.1	MM	MM	MM	MM	1016.3	17.7	25.0	MM	MM	MM	MM
2017	05	02	09	18	180	2.1	3.1	MM	MM	MM	MM	1016.3	17.7	25.0	MM	MM	MM	MM
2017	05	02	09	12	170	2.1	2.6	MM	MM	MM	MM	1016.3	17.9	25.0	MM	MM	MM	MM
2017	05	02	09	06	170	2.6	3.1	MM	MM	MM	MM	1016.3	18.2	25.1	MM	MM	MM	MM
2017	05	02	09	00	180	1.5	2.1	MM	MM	MM	MM	1016.3	18.4	25.1	MM	MM	+0.8	MM
2017	05	02	08	54	180	2.1	2.1	MM	MM	MM	MM	1016.3	18.1	25.1	MM	MM	MM	MM
2017	05	02	08	48	180	1.5	2.1	MM	MM	MM	MM	1016.3	18.2	25.0	MM	MM	MM	MM
2017	05	02	08	42	190	2.1	2.6	MM	MM	MM	MM	1016.4	18.1	25.2	MM	MM	MM	MM
2017	05	02	08	36	180	2.1	2.6	MM	MM	MM	MM	1016.3	18.3	25.2	MM	MM	MM	MM
2017	05	02	08	30	190	1.5	2.1	MM	MM	MM	MM	1016.3	18.7	25.2	MM	MM	MM	MM
2017	05	02	08	24	190	1.0	1.5	MM	MM	MM	MM	1016.2	19.0	25.1	MM	MM	MM	MM
2017	05	02	08	18	210	0.5	1.0	MM	MM	MM	MM	1016.2	19.1	25.2	MM	MM	MM	MM
2017	05	02	08	12	210	0.5	1.0	MM	MM	MM	MM	1016.1	19.2	25.2	MM	MM	MM	MM
2017	05	02	08	06	200	1.0	1.0	MM	MM	MM	MM	1016.1	19.3	25.2	MM	MM	MM	MM
2017	05	02	08	00	200	1.0	1.5	MM	MM	MM	MM	1016.1	19.7	25.2	MM	MM	+0.6	MM
2017	05	02	07	54	220	1.0	1.5	MM	MM	MM	MM	1016.1	19.8	25.2	MM	MM	MM	MM
2017	05	02	07	48	240	1.5	2.1	MM	MM	MM	MM	1016.1	19.3	25.2	MM	MM	MM	MM
2017	05	02	07	42	210	1.0	1.5	MM	MM	MM	MM	1016.1	19.0	25.2	MM	MM	MM	MM
2017	05	02	07	36	180	1.5	1.5	MM	MM	MM	MM	1016.1	18.8	25.2	MM	MM	MM	MM
2017	05	02	07	30	190	2.1	2.6	MM	MM	MM	MM	1016.1	18.9	25.3	MM	MM	MM	MM
2017	05	02	07	24	180	2.1	2.6	MM	MM	MM	MM	1016.0	19.0	25.3	MM	MM	MM	MM
2017	05	02	07	18	190	1.5	2.1	MM	MM	MM	MM	1015.9	19.6	25.3	MM	MM	MM	MM
2017	05	02	07	12	200	1.5	1.5	MM	MM	MM	MM	1015.8	19.3	25.3	MM	MM	MM	MM
2017	05	02	07	06	190	2.6	3.1	MM	MM	MM	MM	1015.9	19.2	25.4	MM	MM	MM	MM
2017	05	02	07	00	190	2.6	3.1	MM	MM	MM	MM	1015.8	19.2	25.4	MM	MM	+0.3	MM
2017	05	02	06	54	190	1.5	2.1	MM	MM	MM	MM	1015.6	19.5	25.3	MM	MM	MM	MM
2017	05	02	06	48	180	2.6	2.6	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2017	05	02	06	42	180	2.1	2.6	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2017	05	02	06	36	210	1.0	1.5	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2017	05	02	06	30	210	1.5	1.5	MM	MM	MM	MM	1015.7	20.7	25.4	MM	MM	MM	MM
2017	05	02	06	24	220	1.0	1.5	MM	MM	MM	MM	1015.7	20.6	25.4	MM	MM	MM	MM
2017	05	02	06	18	230	1.0	1.5	MM	MM	MM	MM	1015.7	20.7	25.4	MM	MM	MM	MM
2017	05	02	06	12	230	1.0	1.5	MM	MM	MM	MM	1015.7	20.6	25.4	MM	MM	MM	MM
2017	05	02	06	06	220	1.5	1.5	MM	MM	MM	MM	1015.6	20.7	25.4	MM	MM	MM	MM
2017	05	02	06	00	230	1.5	2.1	MM	MM	MM	MM	1015.5	21.0	25.4	MM	MM	+0.0	MM
2017	05	02	05	54	240	1.0	1.5	MM	MM	MM	MM	1015.5	20.7	25.5	MM	MM	MM	MM

2017	05	02	05	48	190	2.1	2.6	MM	MM	MM	MM	1015.5	20.6	25.5	MM	MM	MM	MM
2017	05	02	05	42	210	1.5	2.1	MM	MM	MM	MM	1015.5	21.3	25.2	MM	MM	MM	MM
2017	05	02	05	36	220	1.5	2.1	MM	MM	MM	MM	1015.5	21.4	25.1	MM	MM	MM	MM
2017	05	02	05	30	210	1.5	2.1	MM	MM	MM	MM	1015.6	21.6	25.1	MM	MM	MM	MM
2017	05	02	05	24	210	2.6	3.1	MM	MM	MM	MM	1015.5	21.5	25.3	MM	MM	MM	MM
2017	05	02	05	18	210	2.1	2.6	MM	MM	MM	MM	1015.5	21.5	25.7	MM	MM	MM	MM
2017	05	02	05	12	220	2.1	2.6	MM	MM	MM	MM	1015.5	21.6	25.7	MM	MM	MM	MM
2017	05	02	05	06	210	2.6	3.6	MM	MM	MM	MM	1015.5	21.8	25.3	MM	MM	MM	MM
2017	05	02	05	00	210	2.6	3.1	MM	MM	MM	MM	1015.5	21.7	25.0	MM	MM	+0.3	MM
2017	05	02	04	54	210	2.6	3.1	MM	MM	MM	MM	1015.5	21.6	25.6	MM	MM	MM	MM
2017	05	02	04	48	220	2.6	4.1	MM	MM	MM	MM	1015.5	21.6	25.7	MM	MM	MM	MM
2017	05	02	04	42	220	2.6	3.6	MM	MM	MM	MM	1015.5	21.7	25.2	MM	MM	MM	MM
2017	05	02	04	36	210	2.1	2.6	MM	MM	MM	MM	1015.5	21.3	24.6	MM	MM	MM	MM
2017	05	02	04	30	180	1.5	2.1	MM	MM	MM	MM	1015.5	21.7	24.9	MM	MM	MM	MM
2017	05	02	04	24	230	1.5	2.6	MM	MM	MM	MM	1015.5	22.0	25.4	MM	MM	MM	MM
2017	05	02	04	18	200	2.6	3.1	MM	MM	MM	MM	1015.5	21.7	25.6	MM	MM	MM	MM
2017	05	02	04	12	200	1.5	1.5	MM	MM	MM	MM	1015.5	22.3	25.1	MM	MM	MM	MM
2017	05	02	04	06	220	1.5	2.1	MM	MM	MM	MM	1015.5	22.6	24.8	MM	MM	MM	MM
2017	05	02	04	00	210	2.6	3.1	MM	MM	MM	MM	1015.5	22.6	25.2	MM	MM	+0.6	MM
2017	05	02	03	54	220	2.1	2.6	MM	MM	MM	MM	1015.4	22.6	25.2	MM	MM	MM	MM
2017	05	02	03	48	230	1.5	2.1	MM	MM	MM	MM	1015.4	22.9	25.3	MM	MM	MM	MM
2017	05	02	03	42	210	1.5	2.1	MM	MM	MM	MM	1015.4	23.1	25.2	MM	MM	MM	MM
2017	05	02	03	36	200	1.5	2.1	MM	MM	MM	MM	1015.4	23.2	24.9	MM	MM	MM	MM
2017	05	02	03	30	270	1.5	3.1	MM	MM	MM	MM	1015.4	24.1	25.0	MM	MM	MM	MM
2017	05	02	03	24	280	1.5	2.1	MM	MM	MM	MM	1015.4	23.9	25.2	MM	MM	MM	MM
2017	05	02	03	18	240	1.0	2.1	MM	MM	MM	MM	1015.5	23.5	25.2	MM	MM	MM	MM
2017	05	02	03	12	240	1.0	1.5	MM	MM	MM	MM	1015.5	23.7	24.9	MM	MM	MM	MM
2017	05	02	03	06	240	0.5	1.0	MM	MM	MM	MM	1015.5	23.8	24.9	MM	MM	MM	MM
2017	05	02	03	00	230	0.5	1.0	MM	MM	MM	MM	1015.5	23.8	25.0	MM	MM	+0.9	MM
2017	05	02	02	54	210	1.0	1.5	MM	MM	MM	MM	1015.5	24.0	25.1	MM	MM	MM	MM
2017	05	02	02	48	200	2.1	2.6	MM	MM	MM	MM	1015.5	24.2	24.9	MM	MM	MM	MM
2017	05	02	02	42	260	1.0	1.5	MM	MM	MM	MM	1015.4	24.6	24.8	MM	MM	MM	MM
2017	05	02	02	36	240	1.0	1.5	MM	MM	MM	MM	1015.4	24.7	24.9	MM	MM	MM	MM
2017	05	02	02	30	260	1.0	2.1	MM	MM	MM	MM	1015.4	25.0	25.0	MM	MM	MM	MM
2017	05	02	02	24	290	1.0	1.5	MM	MM	MM	MM	1015.4	25.2	25.0	MM	MM	MM	MM
2017	05	02	02	18	MM	0.0	0.5	MM	MM	MM	MM	1015.4	25.2	25.1	MM	MM	MM	MM
2017	05	02	02	12	MM	0.0	1.0	MM	MM	MM	MM	1015.4	25.2	25.2	MM	MM	MM	MM
2017	05	02	02	06	300	1.0	2.1	MM	MM	MM	MM	1015.3	25.3	25.0	MM	MM	MM	MM
2017	05	02	02	00	MM	0.0	1.0	MM	MM	MM	MM	1015.2	25.3	25.0	MM	MM	+0.4	MM
2017	05	02	01	54	310	0.5	1.0	MM	MM	MM	MM	1015.2	25.3	25.1	MM	MM	MM	MM
2017	05	02	01	48	320	1.0	2.1	MM	MM	MM	MM	1015.2	25.4	25.0	MM	MM	MM	MM
2017	05	02	01	42	310	0.5	1.5	MM	MM	MM	MM	1015.2	25.5	24.8	MM	MM	MM	MM
2017	05	02	01	36	MM	0.0	1.5	MM	MM	MM	MM	1015.1	25.5	24.9	MM	MM	MM	MM
2017	05	02	01	30	340	1.0	2.6	MM	MM	MM	MM	1015.1	25.5	25.0	MM	MM	MM	MM
2017	05	02	01	24	340	1.5	2.6	MM	MM	MM	MM	1015.1	25.6	24.9	MM	MM	MM	MM
2017	05	02	01	18	MM	0.0	1.5	MM	MM	MM	MM	1015.1	25.6	24.6	MM	MM	MM	MM
2017	05	02	01	12	310	1.0	2.1	MM	MM	MM	MM	1015.0	25.6	24.4	MM	MM	MM	MM
2017	05	02	01	06	MM	0.0	1.0	MM	MM	MM	MM	1015.0	25.7	24.4	MM	MM	MM	MM
2017	05	02	01	00	320	1.0	2.1	MM	MM	MM	MM	1014.9	25.7	24.9	MM	MM	-0.3	MM
2017	05	02	00	54	330	1.0	2.1	MM	MM	MM	MM	1014.9	25.7	25.3	MM	MM	MM	MM
2017	05	02	00	48	320	0.5	2.1	MM	MM	MM	MM	1014.8	25.8	25.2	MM	MM	MM	MM
2017	05	02	00	42	300	1.0	2.6	MM	MM	MM	MM	1014.7	25.7	24.7	MM	MM	MM	MM
2017	05	02	00	36	320	1.0	1.0	MM	MM	MM	MM	1014.7	25.6	24.9	MM	MM	MM	MM
2017	05	02	00	30	300	0.5	1.0	MM	MM	MM	MM	1014.6	25.7	25.0	MM	MM	MM	MM
2017	05	02	00	24	260	1.0	2.1	MM	MM	MM	MM	1014.6	25.9	24.9	MM	MM	MM	MM
2017	05	02	00	18	260	1.5	1.5	MM	MM	MM	MM	1014.6	26.1	24.7	MM	MM	MM	MM
2017	05	02	00	12	260	1.0	1.5	MM	MM	MM	MM	1014.6	26.1	24.7	MM	MM	MM	MM
2017	05	02	00	06	260	1.0	1.5	MM	MM	MM	MM	1014.6	26.2	25.1	MM	MM	MM	MM
2017	05	02	00	00	340	1.0	1.5	MM	MM	MM	MM	1014.6	26.2	24.9	MM	MM	-1.1	MM
2017	05	01	23	54	250	1.5	2.1	MM	MM	MM	MM	1014.6	26.3	24.7	MM	MM	MM	MM
2017	05	01	23	48	310	1.0	2.1	MM	MM	MM	MM	1014.7	26.6	24.7	MM	MM	MM	MM
2017	05	01	23	42	310	0.5	2.6	MM	MM	MM	MM	1014.7	26.6	24.7	MM	MM	MM	MM
2017	05	01	23	36	320	1.0	2.1	MM	MM	MM	MM	1014.7	26.7	24.9	MM	MM	MM	MM
2017	05	01	23	30	280	1.0	2.1	MM	MM	MM	MM	1014.7	26.8	24.5	MM	MM	MM	MM
2017	05	01	23	24	320	1.0	1.5	MM	MM	MM	MM	1014.7	27.0	24.6	MM	MM	MM	MM
2017	05	01	23	18	300	1.0	2.6	MM	MM	MM	MM	1014.8	27.0	24.4	MM	MM	MM	MM
2017	05	01	23	12	310	1.0	2.1	MM	MM	MM	MM	1014.8	26.9	24.3	MM	MM	MM	MM

2017	05	01	23	06	300	1.0	2.1	MM	MM	MM	MM	1014.8	26.7	24.4	MM	MM	MM	MM
2017	05	01	23	00	320	0.5	2.1	MM	MM	MM	MM	1014.8	26.8	24.4	MM	MM	-1.4	MM
2017	05	01	22	54	300	1.0	2.1	MM	MM	MM	MM	1014.8	26.7	24.3	MM	MM	MM	MM
2017	05	01	22	48	340	1.5	2.6	MM	MM	MM	MM	1014.9	26.2	24.1	MM	MM	MM	MM
2017	05	01	22	42	350	2.1	3.1	MM	MM	MM	MM	1014.9	26.1	24.3	MM	MM	MM	MM
2017	05	01	22	36	330	1.5	3.1	MM	MM	MM	MM	1015.0	26.2	24.4	MM	MM	MM	MM
2017	05	01	22	30	350	2.1	3.1	MM	MM	MM	MM	1015.0	26.1	24.5	MM	MM	MM	MM
2017	05	01	22	24	340	1.5	3.1	MM	MM	MM	MM	1015.1	26.1	24.3	MM	MM	MM	MM
2017	05	01	22	18	350	2.1	2.6	MM	MM	MM	MM	1015.2	26.0	24.3	MM	MM	MM	MM
2017	05	01	22	12	10	2.6	3.1	MM	MM	MM	MM	1015.2	25.7	24.4	MM	MM	MM	MM
2017	05	01	22	06	360	1.5	2.6	MM	MM	MM	MM	1015.2	25.6	24.2	MM	MM	MM	MM
2017	05	01	22	00	20	2.6	3.6	MM	MM	MM	MM	1015.2	25.6	24.0	MM	MM	-1.4	MM
2017	05	01	21	54	20	3.1	4.1	MM	MM	MM	MM	1015.2	25.5	24.2	MM	MM	MM	MM
2017	05	01	21	48	20	2.6	4.1	MM	MM	MM	MM	1015.3	25.6	24.2	MM	MM	MM	MM
2017	05	01	21	42	20	2.1	2.6	MM	MM	MM	MM	1015.4	25.5	23.9	MM	MM	MM	MM
2017	05	01	21	36	20	2.6	4.1	MM	MM	MM	MM	1015.4	25.3	24.1	MM	MM	MM	MM
2017	05	01	21	30	10	2.6	4.1	MM	MM	MM	MM	1015.5	25.3	24.2	MM	MM	MM	MM
2017	05	01	21	24	30	2.1	2.6	MM	MM	MM	MM	1015.5	25.2	24.0	MM	MM	MM	MM
2017	05	01	21	18	20	1.0	1.5	MM	MM	MM	MM	1015.6	25.1	23.7	MM	MM	MM	MM
2017	05	01	21	12	40	2.1	2.6	MM	MM	MM	MM	1015.6	24.9	23.8	MM	MM	MM	MM
2017	05	01	21	06	20	2.1	2.6	MM	MM	MM	MM	1015.7	24.9	24.0	MM	MM	MM	MM
2017	05	01	21	00	30	2.6	3.6	MM	MM	MM	MM	1015.7	25.0	24.0	MM	MM	-1.1	MM
2017	05	01	20	54	20	1.5	2.1	MM	MM	MM	MM	1015.7	24.8	23.8	MM	MM	MM	MM
2017	05	01	20	48	20	2.1	2.6	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2017	05	01	20	42	10	2.1	2.6	MM	MM	MM	MM	1015.9	24.7	23.8	MM	MM	MM	MM
2017	05	01	20	36	340	1.5	2.1	MM	MM	MM	MM	1015.9	24.8	23.9	MM	MM	MM	MM
2017	05	01	20	30	340	1.5	2.6	MM	MM	MM	MM	1015.9	24.9	23.9	MM	MM	MM	MM
2017	05	01	20	24	360	1.5	1.5	MM	MM	MM	MM	1015.9	24.3	23.7	MM	MM	MM	MM
2017	05	01	20	18	10	1.5	2.6	MM	MM	MM	MM	1015.9	24.4	23.9	MM	MM	MM	MM
2017	05	01	20	12	10	2.1	2.1	MM	MM	MM	MM	1016.0	24.3	24.0	MM	MM	MM	MM
2017	05	01	20	06	20	1.5	2.1	MM	MM	MM	MM	1016.1	24.2	23.9	MM	MM	MM	MM
2017	05	01	20	00	30	1.5	2.1	MM	MM	MM	MM	1016.2	24.2	23.7	MM	MM	-1.0	MM
2017	05	01	19	54	50	1.5	2.1	MM	MM	MM	MM	1016.2	24.1	23.6	MM	MM	MM	MM
2017	05	01	19	48	30	1.0	1.5	MM	MM	MM	MM	1016.3	24.1	23.8	MM	MM	MM	MM
2017	05	01	19	42	10	1.0	1.5	MM	MM	MM	MM	1016.3	24.1	23.8	MM	MM	MM	MM
2017	05	01	19	36	350	1.0	1.5	MM	MM	MM	MM	1016.4	24.0	23.7	MM	MM	MM	MM
2017	05	01	19	30	330	1.0	2.1	MM	MM	MM	MM	1016.4	24.6	23.4	MM	MM	MM	MM
2017	05	01	19	24	330	1.0	1.5	MM	MM	MM	MM	1016.5	24.6	23.4	MM	MM	MM	MM
2017	05	01	19	18	320	1.0	2.1	MM	MM	MM	MM	1016.5	24.4	23.7	MM	MM	MM	MM
2017	05	01	19	12	350	1.0	1.5	MM	MM	MM	MM	1016.6	23.9	23.7	MM	MM	MM	MM
2017	05	01	19	06	360	0.5	1.0	MM	MM	MM	MM	1016.6	24.1	23.8	MM	MM	MM	MM
2017	05	01	19	00	280	1.0	2.1	MM	MM	MM	MM	1016.6	24.6	23.6	MM	MM	-0.3	MM
2017	05	01	18	54	300	1.0	2.1	MM	MM	MM	MM	1016.6	24.3	23.4	MM	MM	MM	MM
2017	05	01	18	48	340	1.0	2.1	MM	MM	MM	MM	1016.7	24.0	23.4	MM	MM	MM	MM
2017	05	01	18	42	260	1.0	2.6	MM	MM	MM	MM	1016.6	24.0	23.5	MM	MM	MM	MM
2017	05	01	18	36	300	0.5	2.6	MM	MM	MM	MM	1016.7	24.3	23.4	MM	MM	MM	MM
2017	05	01	18	30	280	1.0	1.5	MM	MM	MM	MM	1016.7	24.1	23.4	MM	MM	MM	MM
2017	05	01	18	24	280	1.5	2.6	MM	MM	MM	MM	1016.7	23.9	23.4	MM	MM	MM	MM
2017	05	01	18	18	300	1.5	2.6	MM	MM	MM	MM	1016.7	23.9	23.4	MM	MM	MM	MM
2017	05	01	18	12	300	1.0	2.6	MM	MM	MM	MM	1016.8	23.7	23.4	MM	MM	MM	MM
2017	05	01	18	06	270	1.0	2.1	MM	MM	MM	MM	1016.8	23.4	23.4	MM	MM	MM	MM
2017	05	01	18	00	310	1.0	2.6	MM	MM	MM	MM	1016.8	23.2	23.4	MM	MM	-0.3	MM
2017	05	01	17	54	310	1.5	2.1	MM	MM	MM	MM	1016.8	23.3	23.3	MM	MM	MM	MM
2017	05	01	17	48	330	1.0	2.1	MM	MM	MM	MM	1016.8	23.1	23.4	MM	MM	MM	MM
2017	05	01	17	42	340	1.5	2.1	MM	MM	MM	MM	1016.8	22.6	23.4	MM	MM	MM	MM
2017	05	01	17	36	320	1.0	2.6	MM	MM	MM	MM	1016.9	23.1	23.4	MM	MM	MM	MM
2017	05	01	17	30	350	1.5	2.1	MM	MM	MM	MM	1016.9	22.2	23.3	MM	MM	MM	MM
2017	05	01	17	24	300	1.0	1.5	MM	MM	MM	MM	1017.1	22.6	23.3	MM	MM	MM	MM
2017	05	01	17	18	350	1.5	2.6	MM	MM	MM	MM	1017.1	22.0	23.3	MM	MM	MM	MM
2017	05	01	17	12	360	1.5	1.5	MM	MM	MM	MM	1017.1	21.9	23.3	MM	MM	MM	MM
2017	05	01	17	06	20	1.0	1.5	MM	MM	MM	MM	1017.1	21.7	23.3	MM	MM	MM	MM
2017	05	01	17	00	10	1.0	1.5	MM	MM	MM	MM	1017.2	21.6	23.3	MM	MM	+0.3	MM
2017	05	01	16	54	360	1.5	2.1	MM	MM	MM	MM	1017.2	21.4	23.2	MM	MM	MM	MM
2017	05	01	16	48	350	1.5	1.5	MM	MM	MM	MM	1017.2	21.4	23.2	MM	MM	MM	MM
2017	05	01	16	42	340	1.5	2.1	MM	MM	MM	MM	1017.2	21.6	23.3	MM	MM	MM	MM
2017	05	01	16	36	350	1.5	2.1	MM	MM	MM	MM	1017.2	21.4	23.2	MM	MM	MM	MM
2017	05	01	16	30	350	1.5	2.1	MM	MM	MM	MM	1017.1	21.4	23.2	MM	MM	MM	MM