SUPPLEMENTARY INFORMATION

Data Reduction Procedures

The VIMS instrument acquires spectra at 352 wavelengths between 0.35 and 5.2 μ m for an array of up to 64 × 64 spatial pixels to produce an "image cube" giving the spatially-resolved spectral properties of a scene²². For this analysis, we focus exclusively on data from the VIMS IR channel, which measures spectra at 256 wavelengths between 0.85 and 5.2 μ m with a typical spectral resolution of 0.016 μ m. Furthermore, we only considered 252 image cubes where the instrument could both resolve the plume and detect it with adequate signal to noise.

When operated in its highest-resolution mode, the VIMS IR channel has a pixel size (instantaneous field of view) of 0.25×0.5 mrad. The scale height of the plume is of order $100 \text{ km}^{6,7}$, so the spacecraft must be within 400,000 km of Enceladus in order for VIMS to obtain useful information about the plume's brightness as a function of altitude. Furthermore, this analysis only considers observations where the main axis of the plume is aligned with VIMS' high-resolution scan direction because these measurements can be most easily processed to produce well-sampled vertical profiles of the plume's brightness (see below). This orientation also minimizes potential contamination from Enceladus' bright limb (Light from bright sources is observed to couple into adjacent pixels in the low-resolution direction at about the 1% level).

The small particles that populate the plume are strongly forward-scattering⁶, so the plume is brightest when observed at high phase angles. However, even at high phase angles the plume's low optical depth makes it rather faint, so VIMS can only measure the plume's brightness with decent signal-to-noise when the exposure duration is sufficiently long. Hence, this study only includes VIMS observations made at phase angles above 145° and IR-channel exposure durations exceeding 400 ms/pixel. Furthermore, we excluded any observations where the plume was too close to one edge of the field of view to permit interpolation of the background signal level behind the plume, or where there was no part of Enceladus itself in the field of view to act as a navigation reference. Finally, we did not consider observations where the plume was superimposed on either the main rings or the planet. Note these criteria excluded all plume images obtained in 2006-2008.

Using the appropriate SPICE kernels, we computed the relevant geometric parameters for each of the remaining 252 observations. These include not only the phase angle α and Enceladus' orbital phase f, but also the range (distance between the spacecraft and the moon's center), and the sub-spacecraft latitude and longitude on Enceladus. These parameters are also tabulated for each image cube in Table S1 (along with the observation time), while Figure S1 illustrates the distribution of phase angles and Enceladus orbital phases.

Each image cube was calibrated using the standard routines to apply flat fields, remove backgrounds and convert the raw data numbers into I/F, a standard measure of reflectance that is unity for a Lambertian surface illuminated and viewed at normal incidence (the specific calibration curve used here is RC17²⁴). In addition, we navigated each image cube using the appropriate SPICE kernels and verified these geometry calculations by comparing the predicted and observed positions of Enceladus' limb. The predicted and observed limb positions usually matched to the level of about 1 VIMS pixel, and we applied small corrections

to the spacecraft pointing as needed to bring the predicted and observed limbs into alignment. Given the low resolution of the VIMS observations, these corrections were made "by eye".

After navigating each image cube, we re-projected the brightness data onto the plane containing the moon's spin axis whose normal makes the smallest angle with the line joining the moon's center to the spacecraft's position (see Figure S2). The point in this plane observed by each pixel is expressed in terms of the cartesian coordinates [x, y], which are defined such that [0,0] corresponds to the center of Enceladus and the positive y-axis is aligned with Enceladus' north pole. Since the plume is a diffuse, low optical depth feature, the brightness at a given value of x and y is actually the integrated brightness along a particular line of sight. Fortunately, the observations considered for this analysis were all obtained at low sub-spacecraft latitudes (less than $\pm 10^{\circ}$, most being below $\pm 1^{\circ}$) and large ranges (> 40,000 km, most being above 100,000 km), so these lines of sight will be nearly perpendicular to the xy plane. Thus we may approximate the re-projected brightness data as measures of the plume's total integrated brightness along a line of constant x and y.

In our previous analysis of VIMS plume observations⁷, we had to co-add data from multiple cubes in order to obtain plume spectra with the desired signal-to-noise. However, the primary goal of this analysis is to examine variations in the plume's brightness, so combining data from multiple cubes taken at different phase angles, orbital phases, or times would not be appropriate. Instead, we must derive estimates of the plume's brightness from individual cubes. The typical signal-to-noise of an individual spectral channel in a single cube is too low to yield useful brightness estimates at a given altitude. Hence we must sacrifice spectral resolution by combining data from multiple spectral channels. After some experimentation, we found that we could obtain reasonably robust brightness estimates by co-adding sets of 40 spectral channels (excluding those channels that have high background levels or are near filter gaps, where the calibration is less reliable). Thus each cube yields a series of six images which provide the average brightness in the following wavelength ranges: 0.88-1.56, 1.57-2.27, 2.28-2.93, 2.95-3.68, 3.70-4.43 and $4.45-5.11~\mu m$. Each pixel in all of these images represents the weighted average brightness among the relevant spectral channels, where the weights are derived from the rms signal variations in regions more than 300 km from Enceladus' center and more than 200 km from the plume axis (i.e. regions in the field of view far from the moon or the plume). The images derived from the 0.88-1.56 μ m data have the best signal-to-noise and thus are the primary focus of this analysis.

We quantify the plume's brightness at different altitudes in these spectrally-averaged images in terms of an equivalent width. Recall that the images considered here have the plume aligned with the y-axis (see Figure S2). Hence rows and columns in the image correspond roughly to lines of constant x and y (parallel and perpendicular to the plume) respectively. Thus by integrating the plume signal (above any instrumental or E-ring backgrounds) over a single column of pixels (i.e. over all values of x), we can obtain the equivalent width EW of the plume at a given value of y:

$$EW(y) = \int I/Fdx. \tag{1}$$

For this analysis, the total background signal as a function of x at a given y is estimated by fitting the data more than 200 km from the plume's axis to a quadratic, and then interpolating the resulting background model under the plume. The background-subtracted

I/F is then integrated over all x within 200 km of the plume's axis. Note that EW has units of kilometers and represents the total integrated brightness of all the material in the plume at a given y, and thus should be insensitive to the image resolution. Furthermore, since the plume has such a low optical depth, this integrated quantity should not depend on whether the fissures are viewed end-on or face-on. This makes EW a very useful quantity for comparing images taken in different viewing geometries.

The y-coordinate for each value of EW is directly related to the minimum altitude of the plume above Enceladus' south pole $z = y - r_E$ (r_E being the moon's radius). This effective altitude is then used to calculate the parameter $Z = \sqrt{z/(r_E + z)}$. As discussed in the main text, we fit the observed equivalent width at 0.88-1.56 microns versus Z derived from each cube to a linear function:

$$EW = EW_{85} \left(\frac{Z_{max} - Z}{Z_{max} - 0.5} \right) \tag{2}$$

where EW_{85} corresponds to the equivalent width where z=85 km (Z=0.5), and Z_{max} is the x-intercept of this linear trend. As mentioned in the main text, we only fit the data between altitudes of 50 km and 450 km (i.e. Z=0.4 and Z=0.8), thereby avoiding regions where the moon's limb might corrupt the data or the plume's brightness might be too low to be securely detected. Since the uncertainties in the individual estimates of EW are dominated by systematic uncertainties in the background subtraction rather than statistical errors, these linear fits are unweighted, and the errors on the fit parameters are derived from the scatter of the data points around the best-fit trend. Table S1 provides both these parameters and their errors for the 0.88-1.56 micron data from each cube.

Supplemental References

24 Clark, R. N. *et al.* The surface composition of Iapetus: Mapping results from Cassini VIMS. *Icarus* **218**, 831–860 (2012).

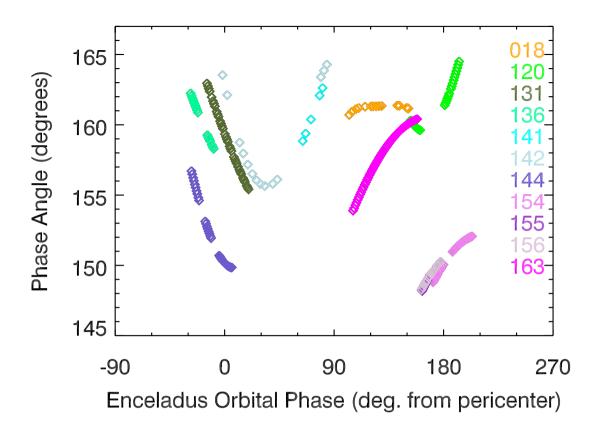


Figure S1: Overview of the observation geometry for the VIMS observations of the Enceladus plume considered in this study. Each data point indicates the phase angle and orbital phase of Enceladus for a single image cube, and the data points are color coded by Cassini Rev number (orbit around Saturn). Note that the available data cover a range of phase angles both when Enceladus is near its orbital pericenter (0 $^{\circ}$ on the x-axis) and its orbital apocenter (180 $^{\circ}$ on the x-axis).

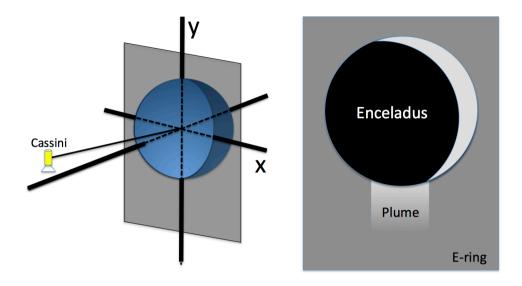


Figure S2: The image geometry associated with a given Enceladus observation. The brightness data from each image cube is re-projected onto a plane containing Enceladus' spin axis like the one shown in the left-hand diagram (note that this diagram is not to scale). Note that the chosen plane is also the one whose normal makes the smallest angle to the line joining the moon's center to the spacecraft. In this plane, we define the cartesian coordinates x and y such that the origin is at Enceladus' center and y increases northwards along Enceladus' spin axis. The right-hand diagram shows how Enceladus and its plume should appear in this coordinate system, (compare with the actual images shown in Figure 1).

Table S1: Summary of VIMS image cubes used in this analysis

Filename		rable 51:						in this ana.	
VI511794087 2005-331714-2600 12674 -0.75 105.7 106.7 102.5 0.18144-0.002 0.8515-0.032 0.8515-0.032 0.8515-0.032 0.851714-2601 0.8515-0.032 0.8561-0.035 0.85	Filename	UTC	Range	Sub-S/C	Sub-S/C	Phase	Orb. Phase	EW_{85}	Z_{max}^{b}
VISIT199976 2005-331714-39.05 128375 -0.77 107.2 160.9 101.8 0.1803±0.0041 0.8286±0.0455 VISIT199669 2006-331715.05.52 131177 -0.81 110.6 161.2 110.2 0.1853±0.0034 0.8384±0.0367 VISIT19500181 2006-331716.05.58 13177 -0.81 110.6 161.2 110.2 0.1853±0.0034 0.8384±0.0367 VISIT19500181 2006-331716.05.58 -0.87 119.1 161.3 120.4 0.1833±0.0026 0.7967±0.0385 VISIT19500181 2006-331716.05.48 -0.88 -0.88 -0.88 10.6 61.3 120.4 0.1833±0.0026 0.7967±0.0385 VISIT19500191 2006-331716.05.48 -0.88						(deg)	(deg)	$(km)^a$	
VI511795992 2005-331714-5501 13071. -0.79 10.92 161.1 10.9 0.1853±0.0034 0.8267±0.0354 VI511796376 2006-331716-5158 13109. +0.84 114.5 161.3 115.4 0.1913±0.0042 0.8101±0.0042 0.8101±0.0042 0.8101±0.0042 0.8101±0.0043 0.8267±0.0354 VI511800741 2006-331716-6148 183045 +0.88 12.8 161.3 12.1 0.1913±0.0036 0.8067±0.0358 VI511800741 2006-331716-6144 140794 +0.90 125.0 161.3 122.1 0.1913±0.0036 0.8067±0.0358 VI511803247 2005-331716-6248 122.2 +0.91 127.3 161.3 129.1 0.2556±0.0053 0.8016±0.0359 VI51180320 2005-331718-6306 16122 +0.93 143.8 161.4 142.0 0.3233±0.0010 0.7912±0.0357 VI51180787 2005-331718-6306 16122 +0.93 143.8 161.4 143.6 0.3233±0.0010 0.7912±0.0357 VI511810379 2005-331718-6306 16122 +0.93 151.6 161.2 150.9 0.3613±0.0030 0.7978±0.0351 VI511810379 2005-331718-63527 160056 +0.92 153.5 161.2 150.9 0.3613±0.0010 0.7636±0.0556 VI635801522 2009-3067213-256 2009-3.057213-056 2003-3.3 2.51.7 160.3 153.0 0.2273±0.0002 0.7978±0.0351 VI63580169 2009-3067213-056 2003-3.3 -0.34 2.52.6 160.2 153.6 0.213±0.0000 0.7978±0.0351 VI63580169 2009-3067213-056 2003-3.0 -0.35 2.55.6 159.9 156.3 0.1035±0.0056 VI635805643 2009-3067213-056 2003-306721-056	V1511794087	2005-331T14:26:00	126874.	+0.75	105.7	160.7	102.5	0.1814 ± 0.0029	0.8315 ± 0.0321
VISIT199659 2005-331T15-085-22 13107. -0.81 11.65 61.62 11.02 0.1857±0.0034 0.8884±0.0367 0.1511800181 2005-331T16-0658 137068 -0.87 119.1 61.3 12.4 0.1833±0.0026 0.7967±0.0388 VISI1800193 2005-331T16-2740 139392 -0.80 122.8 61.3 122.4 0.1833±0.0026 0.7967±0.0388 VISI1801403 2005-331T16-2740 139392 -0.80 122.8 61.3 122.6 0.1614±0.0036 0.8051±0.0340 VISI180247 2005-331T16-3248 142262 -0.91 127.3 161.3 126.8 0.2253±0.0041 0.8010±0.0363 VISI1800307 2005-331T18-3055 15790 -0.93 142.2 161.4 142.0 0.3218±0.010 0.7981±0.0357 VISI1800900 2005-331T18-3055 15790 -0.93 142.8 161.4 142.0 0.3218±0.010 0.7981±0.0575 VISI1809010 2005-331T18-3527 163065 -0.92 153.5 161.2 149.6 0.3413±0.0083 0.7966±0.0429 VISI18037 2005-331T18-3527 163065 -0.92 153.5 161.2 150.9 0.3613±0.0094 0.7636±0.0555 VISI1810387 2005-331T18-35527 163065 -0.92 153.5 161.2 150.9 0.3613±0.0094 0.7636±0.0555 VISI180387 2005-331T18-3553 209117 -0.34 253.8 161.2 150.9 0.3613±0.0096 0.7877±0.0341 VISS580176 2009-3057121-3556 209343 -0.34 252.6 160.2 153.6 0.2013±0.0096 0.7877±0.0341 VISS580616 2009-3057121-3636 208890 -0.34 253.8 160.1 154.6 0.2013±0.0096 0.7877±0.0341 VISS580667 2009-3057121-4632 208170 -0.35 255.6 159.9 156.3 0.1853±0.0007 0.7913±0.0056 0.7913±0.0056 2009-305712-4630 2	V1511794976	2005-331T14:39:05	128375.	+0.77	107.2	160.9	104.8	0.1805 ± 0.0041	0.8286 ± 0.0455
Vi511F80761 2006-331T166158 317068 -0.87 -1.011 -0.13 -0.16 -0	V1511795992	2005-331T14:56:01	130071.	+0.79	109.2	161.1	107.9	0.1863 ± 0.0034	0.8267 ± 0.0354
Vi511800181 2005-331T161418 133052 -0.57 119.1 161.3 122.4 0.1833±0.0020 0.8907±0.0380 Vi511801433 2005-331T16-0141 40704 -0.90 122.3 161.3 122.6 0.225±0.0030 0.805±0.0340 Vi511802301 2005-331T16-0141 40704 -0.90 127.3 161.3 126.8 0.225±0.0053 0.8016±0.0350 Vi511802301 2005-331T18-0355 152700 -0.93 142.2 161.4 412.0 0.325±0.0053 0.8016±0.0452 Vi511807805 2005-331T18-0350 1506.6 -0.93 142.2 161.4 412.0 0.325±0.0053 0.8016±0.0452 Vi511808901 2005-331T18-0355 161.22 -0.93 151.6 161.2 149.6 0.3613±0.0083 0.796±0.0452 Vi51180387 2005-331T18-0355 1605.5 -0.92 153.5 161.2 150.9 0.3461±0.0104 0.7636±0.0565 Vi51180387 2005-331T18-0355 6005.5 -0.92 153.5 161.2 150.9 0.3461±0.0104 0.7636±0.0565 Vi635804766 2009-305721:3056 2003-331 -0.34 252.6 160.2 153.6 0.223±0.0090 0.7878±0.0381 Vi63580616 2009-305721:3056 2003-305 -0.34 252.6 160.2 153.6 0.2203±0.0090 0.7878±0.0481 Vi63580616 2009-305721:3056 200870.0 -0.35 255.6 150.9 156.3 0.1958±0.0102 0.791±0.0692 Vi635806693 2009-305721:255 2007607 -0.35 255.6 150.9 156.3 0.1958±0.0102 0.7791±0.0482 Vi635806693 2009-305721:255 2007607 -0.35 255.6 150.9 156.3 0.1958±0.0102 0.7791±0.0492 Vi635806693 2009-305721:255 2007607 -0.35 255.6 150.9 156.3 0.1958±0.0102 0.7791±0.0492 Vi635806693 2009-305721:255 2007607 -0.35 255.6 150.9 156.3 0.1958±0.0102 0.7791±0.0492 Vi635806693 2009-305721:255 200687 -0.35 255.6 150.9 156.3 0.1958±0.0102 0.7791±0.0692 Vi63580693 2009-305721:255 200687 -0.35 255.6 150.9 156.3 0.1958±0.0102 0.7791±0.0692 Vi63580693 2009-305721:254 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-305722:054 2003-30	V1511796659	2005-331T15:08:52	131177.	+0.81	110.6	161.2	110.2	0.1857 ± 0.0034	0.8384 ± 0.0367
VI5118100741 2005-33IT16-61-18 138-015 -0.88 120.6 161.3 124.6 0.2164+0.0032 0.8907+0.0480 VI511800217 2005-33IT16-61-14 140704 -0.90 125.0 161.3 126.8 0.2225±0.0041 0.8010+0.0363 VI511800307 2005-33IT18-03-255 15270 -0.93 142.2 161.4 142.0 0.235±0.0053 0.8010±0.0429 VI511800707 2005-33IT18-03-255 15270 -0.93 142.2 161.4 142.0 0.235±0.0053 0.8010±0.0429 VI511800707 2005-33IT18-03-255 15270 -0.93 142.2 161.4 142.0 0.325±0.0053 0.8010±0.0429 VI511810037 2005-33IT18-03-25 163065 -0.92 153.5 161.2 150.9 0.361±0.001 0.798±0.0575 VI511810037 2005-33IT18-03-27 163065 -0.92 153.5 161.2 150.9 0.361±0.001 0.7660±0.0565 VI63550152 2009-305T21-355 200658 -0.93 -0.33 251.7 160.3 153.0 0.2270±0.000 0.7870±0.0351 VI63550164 2009-305T21-355 200117 -0.34 253.2 160.2 153.5 0.2270±0.000 0.7870±0.0351 VI63550164 2009-305T21-356 200343 -0.34 253.2 160.2 153.5 0.2270±0.000 0.7870±0.0351 VI63550164 2009-305T21-366 2008-0.93 -0.35 255.6 150.9 155.7 0.193±0.010 0.783±0.0070 0.7870±0.0351 VI63550064 2009-305T21-3254 207607 -0.36 257.0 159.5 159.7 159.5 0.193±0.010 0.783±0.0070 0.783±0.0070 VI635500694 2009-305T21-3554 207607 -0.36 257.0 159.5 159.7 159.7 0.158±0.010 0.775±0.0087 VI635500694 2009-305T21-354 207607 -0.36 257.0 159.7 159.7 0.158±0.009 0.775±0.0087 VI635500694 2009-305T21-354 207607 -0.36 257.0 159.7 159.7 0.158±0.009 0.775±0.0087 VI635500694 2009-305T21-354 200637 -0.36 257.0 159.7 159.7 0.158±0.009 0.775±0.0087 VI635500694 2009-305T21-354 200637 -0.36 257.0 159.7 159.7 0.158±0.009 0.775±0.0087 VI635500694 2009-305T21-354 200637 -0.36 257.0 159.7 159.7 0.158±0.009 0.775±0.0087 VI635500694 2009-305T21-354 2009-305T21-354 2009-305T21-354 2009-305T21-354 2009-305T21-354 2009-305T21-35	V1511798376	2005-331T15:37:29	134019.	+0.84	114.5	161.3	115.4	0.1919 ± 0.0042	0.8401 ± 0.0420
VI5118103493 2005-331T16-632-61 410794 +0.99 122.8 161.3 124.6 0.2256+10.030 0.8016+10.0340 VI511803701 2005-331T16-632-63 42262 +0.91 127.3 161.3 126.8 0.2256+10.053 0.8016+10.0420 VI51180775 2005-331T18-63-65 16122 +0.93 143.8 161.4 143.6 0.3329±10.010 0.7992±0.0575 VI511809910 2005-331T18-63-65 161222 +0.93 143.8 161.4 143.6 0.3329±10.010 0.7992±0.0575 VI511810387 2005-331T18-53-27 163065 +0.92 153.5 161.2 150.9 0.3461±10.010 0.7636±0.0565 VI511810387 2005-331T18-53-27 163065 +0.92 153.5 161.2 150.9 0.3461±10.010 0.7636±0.0565 VI518180387 2009-305712-72-26 200688 -0.33 251.7 160.3 153.6 0.2239±0.009 0.7978±0.0381 VI63580476 2009-305712-356 200943.8 -0.34 252.6 160.2 153.6 0.2230±0.009 0.7878±0.0481 VI635806413 2009-305712-36-66 20840.0 -0.34 252.6 160.2 153.6 0.2201±0.009 0.7898±0.0561 VI635806543 2009-305712-36-66 20840.2 -0.35 254.9 160.0 155.7 0.1953±0.010 0.7913±0.066 VI63580659 2009-305712-36-60 20840.2 -0.35 256.4 159.8 156.7 0.1590±0.010 0.7913±0.066 VI63580659 2009-305712-35-59 207843 -0.35 256.4 159.8 157.0 0.1590±0.010 0.7891±0.078 VI63580609 2009-30572-21-30 206884 -0.37 258.7 159.8 158.1 0.1591±0.009 0.7780±0.013 VI63580609 2009-30572-21-30 206884 -0.37 258.7 159.8 158.1 0.1591±0.009 0.7700±0.017 VI63580609 2009-30572-21-31 206385 -0.37 259.8 150.6 160.2 0.1707±0.0147 0.7701±0.0147 VI63580614 2009-30572-21-31 206385 -0.49 250.4 161.5 181.7 0.1590±0.010 0.7793±0.035 VI63580609 2009-30572-21-31 206385 -0.37 259.8 150.6 160.2 0.1707±0.0147 0.7701±0.0147 VI63580614 2009-305712-31 2003-305710-0066 2003-305712-00-23 2003-305712-00-23 2003-305712-00-23 2003-305712-00-23 2003-305712-00-23 2003-305712-00-23 2003-305712-00-20 2003-305712-00-20 2003-305712-00-20 2003-305712-00-20	V1511800181	2005-331T16:04:58	137068.	+0.87	119.1	161.3	120.4	0.1833±0.0026	0.7967 ± 0.0398
VI5118103493 2005-331T16-632-61 410794 +0.99 122.8 161.3 124.6 0.2256+10.030 0.8016+10.0340 VI511803701 2005-331T16-632-63 42262 +0.91 127.3 161.3 126.8 0.2256+10.053 0.8016+10.0420 VI51180775 2005-331T18-63-65 16122 +0.93 143.8 161.4 143.6 0.3329±10.010 0.7992±0.0575 VI511809910 2005-331T18-63-65 161222 +0.93 143.8 161.4 143.6 0.3329±10.010 0.7992±0.0575 VI511810387 2005-331T18-53-27 163065 +0.92 153.5 161.2 150.9 0.3461±10.010 0.7636±0.0565 VI511810387 2005-331T18-53-27 163065 +0.92 153.5 161.2 150.9 0.3461±10.010 0.7636±0.0565 VI518180387 2009-305712-72-26 200688 -0.33 251.7 160.3 153.6 0.2239±0.009 0.7978±0.0381 VI63580476 2009-305712-356 200943.8 -0.34 252.6 160.2 153.6 0.2230±0.009 0.7878±0.0481 VI635806413 2009-305712-36-66 20840.0 -0.34 252.6 160.2 153.6 0.2201±0.009 0.7898±0.0561 VI635806543 2009-305712-36-66 20840.2 -0.35 254.9 160.0 155.7 0.1953±0.010 0.7913±0.066 VI63580659 2009-305712-36-60 20840.2 -0.35 256.4 159.8 156.7 0.1590±0.010 0.7913±0.066 VI63580659 2009-305712-35-59 207843 -0.35 256.4 159.8 157.0 0.1590±0.010 0.7891±0.078 VI63580609 2009-30572-21-30 206884 -0.37 258.7 159.8 158.1 0.1591±0.009 0.7780±0.013 VI63580609 2009-30572-21-30 206884 -0.37 258.7 159.8 158.1 0.1591±0.009 0.7700±0.017 VI63580609 2009-30572-21-31 206385 -0.37 259.8 150.6 160.2 0.1707±0.0147 0.7701±0.0147 VI63580614 2009-30572-21-31 206385 -0.49 250.4 161.5 181.7 0.1590±0.010 0.7793±0.035 VI63580609 2009-30572-21-31 206385 -0.37 259.8 150.6 160.2 0.1707±0.0147 0.7701±0.0147 VI63580614 2009-305712-31 2003-305710-0066 2003-305712-00-23 2003-305712-00-23 2003-305712-00-23 2003-305712-00-23 2003-305712-00-23 2003-305712-00-23 2003-305712-00-20 2003-305712-00-20 2003-305712-00-20 2003-305712-00-20	V1511800741	2005-331T16:14:18	138045.	+0.88	120.6	161.3	122.1	0.1911 ± 0.0032	0.8097±0.0480
VISTIS 1803001 2005-331T1652-48 VIZ262 -0.91	V1511801493	2005-331T16:27:40	139392.	+0.89	122.8	161.3	124.6	0.2164 ± 0.0036	0.8051 ± 0.0340
VI51181087379 2005-331T18:4300 154064 +0.93 143.8 161.4 143.6 0.3238±0.0104 0.7942±0.0537 VI5118108971 2005-331T18:4606 161222 +0.93 151.6 161.2 150.9 0.3461±0.0104 0.7942±0.0537 VI511810387 2005-331T18:53:27 163065 +0.92 153.5 161.2 150.9 0.3461±0.0104 0.7636±0.0656 VI511810387 2005-331T18:53:27 163065 +0.92 153.5 161.2 150.9 0.3461±0.0104 0.7636±0.0565 VI635804522 2009-305T21:27:26 209658 -0.33 251.7 160.3 153.0 0.2279±0.0062 0.7877±0.0381 VI635804941 2009-305T21:35:1 209117 -0.34 252.6 160.2 153.6 0.21035±0.0069 0.7877±0.0381 VI635804941 2009-305T21:35:1 209117 -0.34 253.8 160.1 154.6 0.2017±0.0097 0.7793±0.0366 VI635805693 2009-305T21:42:28 208179 -0.35 255.6 159.9 156.3 0.1085±0.0102 0.7793±0.0666 VI6358056957 2009-305T21:45:29 208179 -0.35 255.6 159.9 156.3 0.1085±0.0102 0.7791±0.0847 VI635806694 2009-305T21:55:49 207607 -0.36 257.5 159.8 155.5 0.1697±0.0126 0.7790±0.0847 VI63580694 2009-305T21:55:49 207607 -0.36 257.5 159.8 155.1 0.1697±0.0126 0.7790±0.0847 VI63580694 2009-305T21:55:49 207607 -0.36 257.5 159.8 155.1 0.1697±0.0126 0.7790±0.0847 VI635806959 2009-305T21:55:49 207608 -0.36 257.5 159.8 155.1 0.1697±0.0126 0.7790±0.0847 VI635806959 2009-305T21:204 206387 -0.36 257.5 159.8 155.1 0.1697±0.0126 0.7790±0.0847 VI635806959 2009-305T21:204 206387 -0.36 257.5 159.8 155.1 0.1776±0.009 0.7760±0.071 VI635806959 2009-305T21:204 206387 -0.36 257.5 159.8 155.1 0.1776±0.009 0.7760±0.071 VI7635806959 2009-305T21:204 206387 -0.36 257.5 159.8 155.1 0.1776±0.009 0.7790±0.0847 VI635806959 2009-305T21:204 206387 -0.36 257.5 159.8 155.1 0.1776±0.009 0.7790±0.0847 VI635806959 2009-305T010000000000000000000000000000000000	V1511802247	2005-331T16:40:14	140794.	+0.90	125.0	161.3	126.8	0.2225 ± 0.0041	0.8010 ± 0.0363
VI511807805 2005-331T18:13:00 154064 -0.93 143.8 161.4 143.6 0.3329±0.0104 0.7942±0.0537 VI511810387 2005-331T18:55:27 163065 -0.92 153.5 161.2 150.9 0.3614±0.0083 0.7966±0.0424 VI511810387 2005-331T18:55:27 163065 -0.93 153.5 161.2 150.9 0.3614±0.0104 0.7636±0.0565 VI635804766 2009-305T21:30:56 2099438 -0.34 252.6 160.2 153.6 0.2279±0.0002 0.7978±0.0381 VI63580476 2009-305T21:33:51 209117 -0.34 252.6 160.2 153.6 0.2279±0.0009 0.7878±0.0491 VI635805413 2009-305T21:36:46 208890 -0.34 253.8 160.1 154.6 0.2017±0.0097 0.7893±0.0666 VI635805673 2009-305T21:40:2 208462 -0.35 254.9 160.0 155.7 0.1953±0.0104 0.7913±0.0666 VI635805690 2009-305T21:40:2 208462 -0.35 255.6 159.9 156.3 0.1985±0.0102 0.7913±0.0666 VI635806590 2009-305T21:40:5 207843 -0.35 256.4 159.8 157.0 0.1590±0.0102 0.7913±0.066 VI635806590 2009-305T21:55:49 207843 -0.35 256.4 159.8 157.5 0.1697±0.0007 0.7791±0.037 VI635806694 2009-305T21:55:49 207807 -0.36 257.0 159.8 157.5 0.1697±0.0009 0.7754±0.0814 VI635806694 2009-305T21:55:49 207808 -0.36 257.5 159.8 157.5 0.1697±0.0098 0.7705±0.037 VI635806694 2009-305T21:55:49 207808 -0.37 259.8 159.7 159.1 0.1776±0.0098 0.7705±0.0384 VI635806794 2009-305T22:01:39 206837 -0.37 259.8 159.6 160.7 0.1605±0.0099 0.7705±0.0364 VI635806794 2009-305T02:01-39 206837 -0.37 259.8 159.6 160.7 0.1605±0.0099 0.7705±0.0364 VI63580143 2009-305T02:01-39 206837 -0.37 259.8 159.6 160.7 0.1605±0.0094 0.7705±0.0354 VI63581437 2009-306T00:0421 190186 -0.48 279.3 161.5 181.7 0.314±0.0110 0.801±0.0510 0.7795±0.0354 VI63581543 2009-306T00:0421 18852 -0.49 281.0 162.2 184.6 0.325±0.0040 0.7795±0.0364 VI63581543 2009-306T00:0421 18852 -0.49 281.0 162.2 188.3 0.301±0.0104 0.801±0.0510 0.801±0.0510	V1511803001	2005-331T16:52:48	142262.	+0.91	127.3	161.3	129.1	0.2356 ± 0.0053	0.8016 ± 0.0429
VI5118109910 2005-331T18-40-06 161222 -4-038 -5-16	V1511807379	2005-331T18:03:55	152790.	+0.93	142.2	161.4	142.0	0.3218 ± 0.0104	0.7980 ± 0.0575
VI5118109910 2005-331T18-40-06 161222 -4-038 -5-16	V1511807805	2005-331T18:13:00	154064.	+0.93	143.8	161.4	143.6	0.3329 ± 0.0104	0.7942 ± 0.0537
\text{VIS1810387} 2005-33\text{VIS2} 2009-305\text{T21:27:26} 2096580.33	V1511809910	2005-331T18:46:06	161222.	+0.93	151.6		149.6		0.7966 ± 0.0424
\text{VIS1810387} 2005-33\text{VIS2} 2009-305\text{T21:27:26} 2096580.33	V1511810387	2005-331T18:53:27	163065.	+0.92	153.5	161.2	150.9	0.3461±0.0104	0.7636 ± 0.0565
\text{Vi635804522} & 2009-305T21:30:56 & 209343 & -0.34 & 252.6 & 160.2 & 153.6 & 0.2103±0.066 & 0.7877±0.0434 \text{Vi635804766} & 2009-305T21:30:56 & 209343 & -0.34 & 253.2 & 160.2 & 154.1 & 0.208±0.0099 & 0.7857±0.0434 \text{Vi635804516} & 2009-305T21:30:51 & 208802 & -0.34 & 253.8 & 160.1 & 154.6 & 0.2017±0.097 & 0.7813±0.0666 & 0.783585434 & 2009-305T21:42:28 & 208462 & -0.35 & 254.9 & 160.0 & 155.7 & 0.193±0.014 & 0.7843±0.0702 & 0.7813±0.0666 & 0.2017±0.097 & 0.7813±0.0666 & 0.2017±0.097 & 0.7813±0.0666 & 0.2017±0.097 & 0.7813±0.0666 & 0.2017±0.097 & 0.7813±0.0666 & 0.2017±0.097 & 0.7813±0.0666 & 0.2017±0.097 & 0.7813±0.0666 & 0.2017±0.091 & 0.7813±0.0666 & 0.2017±0.091 & 0.7817±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0817 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0814 & 0.7818±0.0712±0.0818 & 0.7818±0.0712±0.0814 & 0.7818±0.0812±0.081	V1511810387	2005-331T18:53:27	163065.		153.5	161.2	150.9	0.3461±0.0104	0.7636 ± 0.0565
\[\text{Vi635804766} 2009-305T21:33:51 2017. 252.6 \qq \qq \qq\qq\q\qq\qq\qq\qq\qq\qq\qq\qq\qq\qq\									
\text{V1635804941} 2009-305T21:33:51 209117. \text{\$-0.34\$} \text{\$253.2\$} \text{\$160.2\$} \text{\$154.6\$} \text{\$0.2017\$+0.0097} \text{\$0.7783\$+0.0666} \text{\$V1635805443} \text{\$2009-305T21:42:28} \text{\$208462}. \text{\$-0.35\$} \text{\$254.9\$} \text{\$160.0\$} \text{\$155.7\$} \text{\$0.1053\$+0.0102} \text{\$0.7794\$+0.0676} \text{\$V1635805657} \text{\$2009-305T21:42:28} \text{\$208462}. \text{\$-0.35\$} \text{\$255.6\$} \text{\$159.9\$} \text{\$156.3\$} \text{\$0.1055\$+0.0102} \text{\$0.7911\$+0.0692} \text{\$V1635806084} \text{\$2009-305T21:52:54} \text{\$207607}. \text{\$-0.36\$} \text{\$257.0\$} \text{\$159.8\$} \text{\$157.5\$} \text{\$0.1697\$+0.0126} \text{\$0.7779\$+0.0847} \text{\$V1635806289} \text{\$2009-305T21:55:44} \text{\$207607}. \text{\$-0.36\$} \text{\$257.0\$} \text{\$159.8\$} \text{\$158.15} \text{\$0.1697\$+0.0126} \text{\$0.7779\$+0.0847} \text{\$V1635806639} \text{\$2009-305T21:55:44} \text{\$20728}. \text{\$-0.36\$} \text{\$255.6\$} \text{\$159.8\$} \text{\$158.15} \text{\$0.1697\$+0.0126} \text{\$0.7766\$+0.0771} \text{\$V1635806689} \text{\$2009-305T22:01:39} \text{\$206837}. \text{\$-0.37\$} \text{\$258.7\$} \text{\$159.7\$} \text{\$159.7\$} \text{\$159.7\$} \text{\$0.1564\$+0.0096} \text{\$0.7766\$+0.0773} \text{\$V16358066784} \text{\$2009-305T22:01:29} \text{\$26637.} \text{\$-0.37\$} \text{\$259.2\$} \text{\$159.7\$} \text{\$159.7\$} \text{\$0.159.4\$} \text{\$0.0093} \text{\$0.7762\$+0.0736} \text{\$V1635806784} \text{\$2009-305T22:01:29} \text{\$26637.} \text{\$-0.37\$} \text{\$259.2\$} \text{\$159.7\$} \text{\$159.7\$} \text{\$0.159.4\$} \text{\$0.0094} \text{\$0.7762\$+0.0736} \text{\$V1635806734} \text{\$2009-305T22:01:24} \text{\$20633.} \text{\$-0.37\$} \text{\$259.2\$} \text{\$159.6\$} \text{\$160.2\$} \text{\$0.1077\$+0.0147} \text{\$0.771\$+0.0147} \text{\$0.772\$+0.0145} \text{\$0.772\$+0.0145} \text{\$0.772\$+0.0145} \t			1						
\text{V1635805146} 2009-305T21:42:28 2084620.35									
\text{V1635805643} 2009-305T21:42:22 \text{208462} 208179			l .						
\text{Vi635806084} 0009-305T21:49:50 \text{207607}0.36 \text{257.5} \text{159.8} \text{157.0} \text{157.5} \text{0.1697\pm.0.0102} 0.7779\pm.0.847 \text{Vi6358060259} \text{2009-305T21:55:49} \text{20760}0.36 \text{257.5} \text{159.8} \text{159.8} \text{155.1} \text{0.1591\pm.0.0099} 0.7754\pm.0.0101 \text{0.779\pm.0.847} \text{Vi635806609} \text{2009-305T21:58:44} \text{207128}0.36 \text{257.5} \text{159.8} \text{159.7} \text{158.6} \text{0.1605\pm.0.0099} 0.7754\pm.0.0101 \text{0.779\pm.0.0101} 0.779\pm.0.	V1635805443	2009-305T21:42:28			254.9		l .		0.7843±0.0702
\text{Vi635806084} 0009-305T21:49:50 \text{207607}0.36 \text{257.5} \text{159.8} \text{157.0} \text{157.5} \text{0.1697\pm.0.0102} 0.7779\pm.0.847 \text{Vi6358060259} \text{2009-305T21:55:49} \text{20760}0.36 \text{257.5} \text{159.8} \text{159.8} \text{155.1} \text{0.1591\pm.0.0099} 0.7754\pm.0.0101 \text{0.779\pm.0.847} \text{Vi635806609} \text{2009-305T21:58:44} \text{207128}0.36 \text{257.5} \text{159.8} \text{159.7} \text{158.6} \text{0.1605\pm.0.0099} 0.7754\pm.0.0101 \text{0.779\pm.0.0101} 0.779\pm.0.			1						
\text{Vi635806084} \text{Vi635806259} \text{2009-305T21:55:49} \text{207369} \text{207369} \text{-0.36} \text{257.0} \text{159.8} \text{157.5} \text{158.6} \text{158.1} \text{0.1591+0.0099} \text{0.7754+0.0814} \text{Vi6358066434} \text{2009-305T21:55:44} \text{207128} \text{-0.36} \text{258.1} \text{159.7} \text{158.6} \text{0.1605±0.0096} \text{0.7776±0.0098} \text{0.7754±0.0814} \text{Vi635806694} \text{2009-305T22:04:39} \text{206637.} \text{-0.37} \text{258.7} \text{159.7} \text{159.7} \text{159.7} \text{159.7} \text{159.7} \text{0.1588±0.0091} \text{0.1707±0.0147} \text{0.7761±0.1111} \text{Vi635806798} \text{2009-305T22:07:29} \text{20633.} \text{-0.37} \text{259.8} \text{159.6} \text{160.7} \text{160.7} \text{0.1588±0.0091} \text{0.7753±0.0854} \text{0.7751±0.1111} \text{Vi635813829} \text{2009-306T00:02:33} \text{191731} \text{-0.48} \text{279.3} \text{161.4} \text{180.9} \text{0.3144±0.0110} \text{0.7753±0.0864} \text{0.7751±0.056} \text{Vi635814307} \text{2009-306T00:06:37} \text{199088} \text{-0.48} \text{279.9} \text{161.7} \text{182.4} \text{0.3318±0.0180} \text{0.7931±0.056} \text{Vi635814307} \text{2009-306T00:14:45} \text{1838382} \text{-0.49} \text{281.0} \text{162.0} \text{183.9} \text{0.3228±0.0084} \text{0.7975±0.056} \text{Vi635814305} \text{2009-306T00:18:49} \text{188382} \text{-0.49} \text{281.0} \text{162.0} \text{183.9} \text{0.3228±0.0084} \text{0.7987±0.0361} \text{0.8184±0.0512} \text{0.8184±0.0512} \text{0.909-306T00:34:21} \text{18617.} \text{-0.50} \text{281.6} \text{162.2} \text{184.6} \text{0.3225±0.0050} \text{0.8184±0.0512} \text{0.7985±0.056} \text{0.7985±0.0560} \text{0.8184±0.0512} \text{0.909-306T00:34:21} \text{18510.0} \text{0.50} \text{284.3} \text{162.7} \text{186.7} \text{0.3313±0.0160} \text{0.8183±0.0681} \text{0.7985±0.0560} \text{0.7985±0.0560} \text{0.8184±0.0550} \text{0.909-306T00:34:21} \text{18510.0} \text{0.50} \text{0.8184±0.0510} \text{0.8184±0.0510} \text{0.8184±0.0510} \text{0.8184±0.0510} \text{0.8184±0.0510} \text{0.8184±0.0510} \text{0.8184±0.0510}	V1635805909	2009-305T21:49:59	207843.		256.4	159.8		0.1590 ± 0.0102	0.7779 ± 0.0847
\text{Vi635806299} \text{ 2009-305T21:55:49 } \text{ 207128.} \text{ 207128.} \text{ 20884.} \text{ 207128.} \text{ 20884.} \text{ 207128.} \text{ 20884.} \text{ 2087.} \text{ 258.7.} \text{ 159.7.} \text{ 158.6.} \text{ 159.7.} \text{ 169.7.} \t									
\text{V16358066434} 2009-305T21:58:44 207128. -0.36 258.7 159.7 158.6 0.1605 20.096 0.7706 20.0730 159.7 159.7 159.7 0.1588.6 0.9756 20.0736 159.7 159.7 0.1588.6 0.9756 20.0736 159.7 159.7 0.1588.6 0.910 10.762 0.0736 159.7 159.7 0.1588.6 0.910 10.762 0.0736 159.6 160.2 0.1707 0.0147 0.7701 0.1111 10.358607133 2009-305T22:10:24 206133. -0.37 250.3 159.6 160.2 0.1707 0.0147 0.7701 0.1111 10.3586138199 2009-306T00:06:33 19068. -0.48 279.3 161.5 181.7 0.314 0.0115 0.7915 0.0506 10.0506 10.09306T00:1445 189382. -0.49 280.4 161.9 183.1 0.314 0.0110 0.7915 0.0736 10.0734 10.073	V1635806259	2009-305T21:55:49	207369.	-0.36	257.5	159.8	158.1		0.7754 ± 0.0814
V1635806784 2009-305T22:04:34 20637. -0.37 259.2 159.7 159.7 0.1588±0.0091 0.7682±0.0735 V1635806959 2009-305T22:07:29 206387. -0.37 259.8 159.6 160.2 0.1707±0.0147 0.7701±0.1111 V1635813829 2009-306T00:02:33 191731. -0.48 278.7 161.4 180.9 0.3257±0.0077 0.7929±0.0326 V1635814073 2009-306T00:06:37 190968. -0.48 279.9 161.5 181.7 0.3144±0.0115 0.7915±0.056 V16358144501 2009-306T00:14:45 189382. -0.49 280.4 161.9 183.1 0.3114±0.0110 0.810±0.0512 V1635814561 2009-306T00:18:49 18858. -0.49 281.0 162.0 183.9 0.3228±0.0084 0.7987±0.0361 V1635815493 2009-306T00:34:21 186117. -0.50 281.6 162.2 184.6 0.3250±0.0150 0.8138±0.0684 V1635815493 2009-306T00:34:21 185209. -0.51 283.1 162.7 186.7 0.3913±0.01	V1635806434	2009-305T21:58:44			258.1		l .	0.1605±0.0096	
V1635806959 2009-305T22:07:29 206387. -0.37 259.8 159.6 160.2 0.1707±0.0147 0.7701±0.1111 V1635807134 2009-306T00:02:33 191731. -0.48 278.7 161.4 180.9 0.3257±0.0077 0.7929±0.0326 V16358148073 2009-306T00:10:41 190968. -0.48 279.3 161.5 181.7 0.314±0.0115 0.791±0.0506 V16358144973 2009-306T00:10:41 190186. -0.48 279.9 161.7 182.4 0.3318±0.0180 0.7931±0.0734 V16358144517 2009-306T00:18:49 189382. -0.49 280.4 161.9 183.1 0.3101±0.0110 0.8104±0.0512 V1635814505 2009-306T00:32:53 187712. -0.50 281.6 162.2 184.6 0.325±0.0050 0.813±0.0681 V1635814503 2009-306T00:34:21 185209. -0.51 282.6 162.6 185.9 0.4139±0.0164 0.8001±0.0560 V1635815737 2009-306T00:34:21 185209. -0.51 283.1 162.7 186.7 0.3913±0.	V1635806609	2009-305T22:01:39	206884.	-0.37	258.7	159.7	159.1	0.1776±0.0098	0.7805±0.0736
V1635806959 2009-305T22:07:29 26387. -0.37 259.8 159.6 160.2 0.1707±0.0147 0.7701±0.1111 V1635807134 2009-306T00:02:33 191731. -0.48 278.7 161.4 180.9 0.3257±0.0077 0.7929±0.0326 V16358149073 2009-306T00:10:41 190968. -0.48 279.3 161.5 181.7 0.314±0.0115 0.791±0.0506 V1635814317 2009-306T00:10:41 190186. -0.48 279.9 161.7 182.4 0.3318±0.0180 0.7931±0.0734 V1635814805 2009-306T00:18:49 188358. -0.49 280.4 161.9 183.1 0.3101±0.0110 0.8104±0.0512 V1635814905 2009-306T00:32:53 187712. -0.50 281.6 162.2 184.6 0.325±0.00150 0.8138±0.0681 V1635815493 2009-306T00:34:21 185209. -0.51 283.1 162.2 184.6 0.325±0.00150 0.8138±0.0681 V1635815943 2009-306T00:33:25 184279. -0.51 283.1 162.7 186.7 0.3913±0.0	V1635806784	2009-305T22:04:34	206637.		259.2	159.7	159.7	0.1588 ± 0.0091	0.7682 ± 0.0735
V1635813829 2009-306T00:00:33 191731 -0.48 278.7 161.4 180.9 0.3257±0.0077 0.7929±0.036 V1635814073 2009-306T00:06:37 190968 -0.48 279.3 161.5 181.7 0.3144±0.0115 0.7915±0.0506 V16358143617 2009-306T00:14:45 189382 -0.49 280.4 161.9 183.1 0.3101±0.0110 0.8104±0.0512 V1635814805 2009-306T00:18:49 188558 -0.49 281.0 162.0 183.9 0.3228±0.0084 0.7987±0.0361 V1635815493 2009-306T00:32:5 18712 -0.50 281.6 162.2 184.6 0.3250±0.0150 0.8138±0.0681 V1635815493 2009-306T00:32:21 18517 -0.50 282.6 162.6 185.9 0.4139±0.0164 0.801±0.0560 V1635815493 2009-306T00:32:21 185209 -0.51 283.6 162.9 187.4 0.435±0.0173 0.783±0.0534 V1635816737 2009-306T00:43:18 183133 -0.52 284.3 163.2 188.3 0.3756±0.0173	V1635806959	2009-305T22:07:29	206387.	-0.37	259.8		160.2	0.1707±0.0147	0.7701 ± 0.1111
V1635813829 2009-306T00:00:33 191731 -0.48 278.7 161.4 180.9 0.3257±0.0077 0.7929±0.0326 V1635814973 2009-306T00:06:37 199068 -0.48 279.3 161.5 181.7 0.3144±0.0115 0.7915±0.0506 V1635814361 2009-306T00:14:45 189382 -0.49 280.4 161.9 183.1 0.3101±0.0110 0.8104±0.0512 V1635814805 2009-306T00:18:49 188558 -0.49 281.0 162.0 183.9 0.3228±0.0084 0.7987±0.0361 V1635815493 2009-306T00:22:53 187712 -0.50 281.6 162.2 184.6 0.3250±0.0150 0.8138±0.0681 V1635815493 2009-306T00:31:21 18517 -0.50 282.6 162.6 185.9 0.4139±0.0164 0.801±0.0560 V1635815737 2009-306T00:38:25 184279 -0.51 283.6 162.9 187.4 0.4355±0.0173 0.7838±0.0534 V1635816724 2009-306T00:31:8 183133 -0.52 284.3 163.2 188.7 0.3415±0.0173	V1635807134	2009-305T22:10:24	206133.	-0.37	260.3	159.6	160.7	0.1644±0.0110	0.7753 ± 0.0884
V1635814317 2009-306T00:10:41 190186. -0.48 279.9 161.7 182.4 0.3318±0.0180 0.7931±0.0734 V1635814861 2009-306T00:14:45 189382. -0.49 280.4 161.9 183.1 0.3101±0.0110 0.8104±0.0512 V1635814805 2009-306T00:22:53 187712. -0.50 281.6 162.0 183.9 0.3228±0.0084 0.7987±0.0361 V1635815493 2009-306T00:30:17 186117. -0.50 281.6 162.2 184.6 0.3250±0.0150 0.8138±0.0681 V1635815793 2009-306T00:34:21 185209. -0.51 283.1 162.7 186.7 0.9313±0.0164 0.801±0.0560 V1635815981 2009-306T00:34:21 185209. -0.51 283.1 162.7 186.7 0.9313±0.0164 0.801±0.0532 V1635816794 2009-306T00:43:18 183133 -0.52 284.3 163.2 188.3 0.3755±0.0170 0.8084±0.0659 V1635816762 2009-306T00:51:26 181150 -0.53 285.3 163.6 189.8 0.3299±0.010	V1635813829	2009-306T00:02:33	1	-0.48	278.7		180.9	0.3257±0.0077	0.7929 ± 0.0326
V1635814561 2009-306T00:14:45 189382. -0.49 280.4 161.9 183.1 0.3101±0.0110 0.8104±0.0512 V1635814805 2009-306T00:18:49 188558. -0.49 281.0 162.0 183.9 0.3228±0.0084 0.7987±0.0361 V1635815493 2009-306T00:30:17 186117. -0.50 282.6 162.2 184.6 0.3250±0.0150 0.8138±0.0681 V1635815493 2009-306T00:34:21 185099. -0.51 283.1 162.7 186.7 0.3913±0.0146 0.801±0.0532 V1635815981 2009-306T00:33:25 184279. -0.51 283.6 162.9 187.4 0.4355±0.0173 0.7838±0.0534 V1635816781 2009-306T00:43:18 183133. -0.52 284.3 163.2 188.3 0.3756±0.0170 0.8084±0.0659 V1635816762 2009-306T00:47:22 18153. -0.52 284.8 163.4 189.0 0.4105±0.0154 0.8094±0.0559 V1635817782 2009-306T00:59:34 179074. -0.53 285.3 163.6 189.8 0.3299±0.0	V1635814073	2009-306T00:06:37	190968.	-0.48	279.3	161.5	181.7	0.3144±0.0115	0.7915±0.0506
\text{V1635814561} \text{ 2009-306T00:14:45} \text{ 189382}. \text{ -0.49} \text{ 280.4} \text{ 161.9} \text{ 183.1} \text{ 0.3101±0.0110} \text{ 0.8104±0.0512} \text{ V1635814805} \text{ 2009-306T00:28:49} \text{ 188558}. \text{ -0.49} \text{ 281.0} \text{ 162.0} \text{ 183.9} \text{ 0.3228±0.0084} \text{ 0.7987±0.0361} \text{ V1635815493} \text{ 2009-306T00:30:17} \text{ 186117}. \text{ -0.50} \text{ 282.6} \text{ 162.2} \text{ 184.6} \text{ 0.3250±0.0150} \text{ 0.8138±0.0681} \text{ V1635815493} \text{ 2009-306T00:34:21} \text{ 185209}. \text{ -0.51} \text{ 283.1} \text{ 162.7} \text{ 186.7} \text{ 0.3913±0.0146} \text{ 0.8001±0.0560} \text{ V1635815981} \text{ 2009-306T00:38:25} \text{ 18479}. \text{ -0.51} \text{ 283.6} \text{ 162.9} \text{ 187.4} \text{ 0.4355±0.0173} \text{ 0.788±0.0534} \text{ V1635816762} \text{ 2009-306T00:43:18} \text{ 183133}. \text{ -0.52} \text{ 284.3} \text{ 163.2} \text{ 188.3} \text{ 0.3756±0.0170} \text{ 0.8084±0.0659} \text{ V1635816762} \text{ 2009-306T00:47:22} \text{ 181150}. \text{ -0.53} \text{ 284.8} \text{ 163.4} \text{ 189.0} \text{ 0.4405±0.0154} \text{ 0.8094±0.0536} \text{ V1635817790} \text{ 2009-306T00:55:30} \text{ 180123}. \text{ -0.53} \text{ 285.8} \text{ 163.8} \text{ 190.5} \text{ 0.4209±0.0152} \text{ 0.8108±0.0519} \text{ V1635817790} \text{ 2009-306T00:55:30} \text{ 18010.} \text{ -0.54} \text{ 286.4} \text{ 164.0} \text{ 191.2} \text{ 0.4442±0.0154} \text{ 0.7991±0.0478} \text{ V1635817738} \text{ 2009-306T01:03:38} \text{ 178001}. \text{ -0.55} \text{ 287.4} \text{ 164.5} \text{ 192.7} \text{ 0.4482±0.0172} \text{ 0.7887±0.0802} \text{ V1635817738} \text{ 2009-306T01:07:42} \text{ 176904}. \text{ -0.55} \text{ 287.4} \text{ 164.5} \text{ 192.7} \text{ 0.4482±0.0172} \text{ 0.7991±0.0478} \text{ V165282958} \text{ 2010-137T19:56:59} \text{ 39728}. \text{ +0.22} \text{ 110.5} \text{ 162.6} \text{ 347.0} \text{ 0.0792±0.0065} \text{ 1.1231±0.0366} \text{ V1652820166} \text{ 2010-137T20:01:03} \text{ 388816}. \text{ +0.23} \text{ 113.0} \text{ 161.5} \tex	V1635814317	2009-306T00:10:41	190186.	-0.48	279.9	161.7	182.4	0.3318 ± 0.0180	0.7931 ± 0.0734
V1635815049 2009-306T00:22:53 187712. -0.50 281.6 162.2 184.6 0.3250±0.0150 0.8138±0.0681 V1635815493 2009-306T00:34:21 186117. -0.50 282.6 162.6 185.9 0.4139±0.0164 0.8001±0.0560 V1635815981 2009-306T00:33:25 184279. -0.51 283.6 162.7 186.7 0.3913±0.0146 0.801±0.0532 V1635815981 2009-306T00:33:25 184279. -0.51 283.6 162.9 187.4 0.4355±0.0170 0.7838±0.0534 V1635816518 2009-306T00:43:18 183133 -0.52 284.8 163.2 188.3 0.3756±0.0170 0.8084±0.0659 V1635816762 2009-306T00:51:26 181150. -0.53 285.3 163.6 189.8 0.3929±0.0101 0.8094±0.0536 V1635817006 2009-306T00:59:34 180123. -0.53 285.8 163.8 190.5 0.4209±0.0152 0.8108±0.0519 V1635817380 2009-306T00:59:34 179074. -0.54 286.4 164.0 191.2 0.4442±0.0	V1635814561	2009-306T00:14:45	189382.					0.3101±0.0110	0.8104 ± 0.0512
V1635815049 2009-306T00:22:53 187712. -0.50 281.6 162.2 184.6 0.3250±0.0150 0.8138±0.0681 V1635815493 2009-306T00:34:21 186117. -0.50 282.6 162.6 185.9 0.4139±0.0164 0.801±0.0560 V1635815981 2009-306T00:38:25 184279. -0.51 283.6 162.9 187.4 0.4355±0.0173 0.783±0.0534 V1635816974 2009-306T00:43:18 183133. -0.52 284.8 163.2 188.3 0.3756±0.0170 0.8084±0.0659 V1635816518 2009-306T00:47:22 182153. -0.52 284.8 163.4 189.0 0.4105±0.0154 0.8004±0.0536 V1635816762 2009-306T00:51:26 181150. -0.53 285.3 163.6 189.8 0.3929±0.0101 0.8096±0.0363 V1635817250 2009-306T00:59:34 179074. -0.54 286.4 164.0 191.2 0.4442±0.0154 0.7991±0.0478 V1635817494 2009-306T01:07:42 176904. -0.55 287.4 164.5 192.7 0.4482±0.0	V1635814805	2009-306T00:18:49	188558.	-0.49	281.0	162.0	183.9	0.3228 ± 0.0084	0.7987±0.0361
V1635815737 2009-306T00:34:21 185209. -0.51 283.1 162.7 186.7 0.3913±0.0146 0.8012±0.0532 V1635815981 2009-306T00:38:25 184279. -0.51 283.6 162.9 187.4 0.4355±0.0173 0.7838±0.0534 V1635816518 2009-306T00:43:18 183133. -0.52 284.8 163.4 189.0 0.4105±0.0154 0.8004±0.0559 V1635816518 2009-306T00:51:26 181150. -0.53 285.3 163.6 189.8 0.3929±0.0101 0.8096±0.0363 V1635816702 2009-306T00:55:30 180123. -0.53 285.8 163.8 190.5 0.4209±0.0152 0.8108±0.0519 V1635817250 2009-306T01:03:38 178001. -0.54 286.4 164.0 191.2 0.4442±0.0154 0.7991±0.0478 V1635817738 2009-306T01:07:42 176904. -0.55 287.4 164.5 192.7 0.4482±0.0172 0.7981±0.0536 V1652819782 2010-137T19:48:51 401576. +0.22 109.4 163.0 345.5 0.0605±0	V1635815049	2009-306T00:22:53	187712.	-0.50	281.6	162.2		0.3250 ± 0.0150	0.8138 ± 0.0681
V1635815737 2009-306T00:34:21 185209. -0.51 283.1 162.7 186.7 0.3913±0.0146 0.8012±0.0532 V1635815981 2009-306T00:38:25 184279. -0.51 283.6 162.9 187.4 0.4355±0.0173 0.7838±0.0534 V1635816518 2009-306T00:43:18 183133. -0.52 284.8 163.4 189.0 0.4105±0.0154 0.8004±0.0559 V1635816518 2009-306T00:51:26 181150. -0.53 285.3 163.6 189.8 0.3929±0.0101 0.8096±0.0363 V1635816702 2009-306T00:55:30 180123. -0.53 285.8 163.8 190.5 0.4209±0.0152 0.8108±0.0519 V1635817250 2009-306T01:03:38 178001. -0.54 286.4 164.0 191.2 0.4442±0.0154 0.7991±0.0478 V1635817738 2009-306T01:07:42 176904. -0.55 287.4 164.5 192.7 0.4482±0.0172 0.7981±0.0536 V1652819782 2010-137T19:48:51 401576. +0.22 109.4 163.0 345.5 0.0605±0	V1635815493	2009-306T00:30:17	186117.	-0.50	282.6	162.6	185.9	0.4139 ± 0.0164	0.8001 ± 0.0560
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1635815737	2009-306T00:34:21	185209.	-0.51	283.1	162.7	186.7	0.3913±0.0146	0.8012 ± 0.0532
V1635816518 2009-306T00:47:22 182153. -0.52 284.8 163.4 189.0 0.4105±0.0154 0.8004±0.0536 V1635816762 2009-306T00:51:26 181150. -0.53 285.3 163.6 189.8 0.3929±0.0101 0.8096±0.0363 V1635817006 2009-306T00:55:30 180123. -0.53 285.8 163.8 190.5 0.4209±0.0152 0.8108±0.0519 V1635817250 2009-306T01:03:38 178001. -0.54 286.4 164.0 191.2 0.4442±0.0154 0.7991±0.0478 V1635817494 2009-306T01:07:42 176904. -0.54 286.9 164.3 192.0 0.428±0.0256 0.7887±0.0802 V1635817738 2009-306T01:07:42 176904. -0.55 287.4 164.5 192.7 0.4482±0.0172 0.7981±0.0536 V1652819528 2010-137T19:48:51 401576. +0.22 109.4 163.0 345.5 0.0605±0.0081 1.4425±0.8566 V165282016 2010-137T19:56:59 393728. +0.22 110.5 162.6 347.0 0.0729±0.0	V1635815981	2009-306T00:38:25	184279.	-0.51	283.6	162.9	187.4	0.4355 ± 0.0173	0.7838 ± 0.0534
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1635816274	2009-306T00:43:18	183133.	-0.52	284.3	163.2	188.3	0.3756 ± 0.0170	0.8084 ± 0.0659
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1635816518	2009-306T00:47:22	182153.	-0.52	284.8	163.4	189.0	0.4105 ± 0.0154	0.8004 ± 0.0536
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1635816762	2009-306T00:51:26	181150.	-0.53	285.3	163.6	189.8	0.3929 ± 0.0101	0.8096 ± 0.0363
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1635817006	2009-306T00:55:30	180123.	-0.53	285.8	163.8	190.5	0.4209 ± 0.0152	0.8108 ± 0.0519
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1635817250	2009-306T00:59:34	179074.	-0.54	286.4	164.0	191.2	0.4442 ± 0.0154	0.7991 ± 0.0478
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1635817494	2009-306T01:03:38	178001.	-0.54	286.9	164.3	192.0	0.4284 ± 0.0256	0.7887 ± 0.0802
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		2009-306T01:07:42	176904.	-0.55	287.4	164.5	192.7	0.4482 ± 0.0172	0.7981 ± 0.0536
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1652819528	2010-137T19:48:51	401576.	+0.22	109.4	163.0	345.5	0.0605 ± 0.0081	1.4425 ± 0.8566
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		2010-137T19:52:55	397646.	+0.22	109.9	162.8	346.2	0.0749 ± 0.0074	0.8720 ± 0.1706
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1652820016		393728.	+0.22	110.5	162.6	347.0	0.0729 ± 0.0065	1.1231 ± 0.3096
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1652820260	2010-137T20:01:03	389821.	+0.22	111.0	162.4	347.7	0.0578 ± 0.0025	1.2409 ± 0.1960
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1652820783	2010-137T20:09:46	381486.	+0.23	112.2	162.0	349.3	0.0712 ± 0.0073	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1652821148	2010-137T20:15:51	375701.	+0.23	113.0	161.7	350.4	0.0936 ± 0.0053	0.9706 ± 0.1481
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1652821636	2010-137T20:23:59	368011.	+0.23	114.2	161.3	351.9	0.0518 ± 0.0057	2.4847 ± 2.5796
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1652822130	2010-137T20:32:13	360278.	+0.23	115.3	160.9	353.4	0.0702 ± 0.0027	1.0123 ± 0.1079
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	V1652822374	2010-137T20:36:17			115.9		354.2	0.0564 ± 0.0042	1.2008 ± 0.3368
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	V1652822618	2010-137T20:40:21			116.4	160.6	354.9	0.0688 ± 0.0028	1.0891 ± 0.1264
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	V1652823056	2010-137T20:47:39	345931.	+0.23	117.4	160.3	356.3	0.0400 ± 0.0081	1.2814 ± 1.0776
	V1652823300	2010-137T20:51:43	342183.	+0.23	118.0	160.1	357.0	0.0488 ± 0.0033	1.0615 ± 0.1978

 $[^]b$ Value of Z corresponding to the x-intercept of the linear fit to the 0.88-1.56-micron data between Z=0.4 and 0.8.

Victoro	0010 197000 55 47	220450	10.00	110.0	150.0	257.0	0.1001 0.0040	9.0454 1.9690
V1652823544	2010-137T20:55:47	338450.	+0.23	118.6	159.9	357.8	0.1281 ± 0.0042	3.2454±1.3638
V1652823788	2010-137T20:59:51	334731.	+0.23	119.1	159.7	358.5	0.0364 ± 0.0015	0.8410 ± 0.0663
V1652824319	2010-137T21:08:42	326688.	+0.24	120.4	159.3	0.2	0.0333 ± 0.0037	0.8646 ± 0.1993
V1652824626	2010-137T21:13:49	322070.	+0.24	121.1	159.1	1.1	0.0307 ± 0.0044	0.7839 ± 0.1975
V1652824870	2010-137T21:17:53	318417.	+0.24	121.7	159.0	1.8	0.0328 ± 0.0023	0.8307 ± 0.1175
V1652825114	2010-137T21:21:57	314779.	+0.24	122.3	158.8	2.6	0.0343 ± 0.0045	0.8117 ± 0.2062
V1652825597	2010-137T21:30:00	307624.	+0.24	123.4	158.5	4.1	0.0319 ± 0.0046	0.7728 ± 0.1923
V1652825841	2010-137T21:34:04	304033.	+0.24	124.0	158.3	4.8	0.0306 ± 0.0041	0.9095 ± 0.2823
V1652826085	2010-137T21:38:08	300458.	+0.24	124.6	158.1	5.6	0.0349 ± 0.0024	0.8083 ± 0.1041
V1652826740	2010-137T21:49:03	290944.	+0.24	126.1	157.7	7.6	0.0425 ± 0.0025	0.8319 ± 0.0920
V1652826984	2010-137T21:53:07	287430.	+0.24	126.7	157.6	8.3	0.0399 ± 0.0044	0.7918 ± 0.1489
V1652827228	2010-137T21:57:11	283933.	+0.24	127.3	157.4	9.1	0.0474 ± 0.0062	0.8232 ± 0.1993
V1652827472	2010-137T22:01:15	280453.	+0.24	127.9	157.2	9.8	0.0403 ± 0.0045	0.8126 ± 0.1652
V1652827842	2010-137T22:07:25	275210.	+0.24	128.8	157.0	11.0	0.0378 ± 0.0124	0.8310 ± 0.5255
V1652828212	2010-137T22:13:35	270006.	+0.25	129.7	156.8	12.1	0.0398 ± 0.0021	0.8515±0.0917
V1652828456	2010-137T22:17:39	266597.	+0.25	130.3	156.6	12.8	0.0315 ± 0.0038	0.8498 ± 0.2123
V1652828700	2010-137T22:21:43	263206.	+0.25	130.9	156.5	13.6	0.0398 ± 0.0095	0.7831 ± 0.3317
V1652829196	2010-137T22:29:59	256368.	+0.25	132.1	156.2	15.1	0.0271 ± 0.0051	0.7244 ± 0.2052
V1652829440	2010-137T22:34:03	253032.	+0.25	132.8	156.1	15.9	0.0520 ± 0.0063	0.8536 ± 0.2133
V1652829684	2010-137T22:38:07	249715.	+0.25	133.4	155.9	16.6	0.0694 ± 0.0057	0.8522 ± 0.1365
V1652830180	2010-137T22:46:23	243029.	+0.25	134.6	155.7	18.1	0.0737 ± 0.0040	0.8193 ± 0.0844
V1652830424	2010-137T22:50:27	239769.	+0.25	135.2	155.5	18.9	0.0907 ± 0.0067	0.7882 ± 0.0991
V1652830668	2010-137T22:54:31	236528.	+0.25	135.8	155.4	19.6	0.0605 ± 0.0073	0.9114 ± 0.2460
V1660401755	2010-137122:54:31 2010-225T13:58:24	314820.	-6.67	121.7	162.2	332.0	0.0544 ± 0.0057	0.8698 ± 0.1819
V1660401799	2010-225T14:02:28	311196.	-6.70	122.3	162.1	332.8	0.0662 ± 0.0017	0.8208 ± 0.0382
V1660401333	2010-225T14:02:28 2010-225T14:06:32	307588.	-6.74	122.8	161.9	333.5	0.0429 ± 0.0066	0.8527 ± 0.2581
V1660402243 V1660402487	2010-225T14:00:32 2010-225T14:10:36	303996.	-6.79	123.4	161.7	334.3	0.0429 ± 0.0000 0.0624 ± 0.0032	0.8527 ± 0.2381 0.8518 ± 0.0862
V1660402487	2010-225T14:10:30 2010-225T14:14:40	300419.	-6.83	124.0	161.5	335.0	0.0519 ± 0.0024	0.8495 ± 0.0785
V1660402751	2010-225T14:14:40 2010-225T14:18:44	296859.	-6.87	124.6	161.4	335.8	0.0579 ± 0.0024 0.0579 ± 0.0018	0.8075 ± 0.0447
V1660402973 V1660403219	2010-225T14:18:44 2010-225T14:22:48	290839.	-6.91	124.0 125.2	161.4	336.5	0.0379 ± 0.0018 0.0636 ± 0.0047	0.7830 ± 0.0999
V1660403219 V1660403463	2010-225T14:26:52	289786.	-6.95	125.2 125.7	161.2	337.3	0.0521 ± 0.0023	0.7830 ± 0.0999 0.8818 ± 0.0850
	2010-225T14:20:56		-6.99	126.3				
V1660403707		286275.			160.9	338.0	0.0536 ± 0.0087	0.8156 ± 0.2373
V1660406223	2010-225T15:12:52	251068.	-7.47	132.4	159.3	345.7	0.0445 ± 0.0042	0.8048 ± 0.1364
V1660406467	2010-225T15:16:56	247755.	-7.51	133.1	159.1	346.5	0.0432 ± 0.0054	0.7993 ± 0.1799
V1660406711	2010-225T15:21:00	244460.	-7.56	133.7	159.0	347.2	0.0410 ± 0.0050	0.8191 ± 0.1790
V1660406955	2010-225T15:25:04	241183.	-7.61	134.3	158.8	348.0	0.0418 ± 0.0031	0.8171 ± 0.1083
V1660407443	2010-225T15:33:12	234686.	-7.72	135.5	158.6	349.5	0.0406 ± 0.0021	0.8060 ± 0.0753
V1660407687	2010-225T15:37:16	231466.	-7.77	136.1	158.4	350.2	0.0440 ± 0.0019	0.8207 ± 0.0658
V1660407931	2010-225T15:41:20	228265.	-7.82	136.7	158.3	351.0	0.0393 ± 0.0040	0.8039 ± 0.1522
V1669796401	2010-334T07:39:31	94604.	-0.07	284.7	158.8	64.2	0.1039 ± 0.0091	0.7796 ± 0.1159
V1669797182	2010-334T07:52:32	90649.	-0.06	286.5	159.4	66.6	0.0993 ± 0.0112	0.8053 ± 0.1609
V1669798601	2010-334T08:16:11	83076.	-0.04	289.8	160.4	70.9	0.0860 ± 0.0158	0.7852 ± 0.2453
V1669800961	2010-334T08:55:31	69537.	+0.00	295.1	162.1	78.1	0.1157 ± 0.0223	0.8063 ± 0.2799
V1669801742	2010-334T09:08:31	64847.	+0.02	296.9	162.6	80.5	0.1655 ± 0.0259	0.7805 ± 0.2057
V1671579308	2010-354T22:53:39	52753.	+0.13	300.5	163.4	79.1	0.1789 ± 0.0203	0.7561 ± 0.1370
V1671580116	2010-354T23:07:07	47732.	+0.17	302.4	163.9	81.6	0.1760 ± 0.0327	0.7336 ± 0.2067
V1671580920	2010-354T23:20:31	42702.	+0.21	304.4	164.3	84.0	0.1120 ± 0.0278	0.7739 ± 0.3206
V1671552668	2010-354T15:32:37	156808.	-0.14	219.0	163.5	358.3	0.0505 ± 0.0038	0.8579 ± 0.1265
V1671553901	2010-354T15:53:10	152410.	-0.13	224.3	162.1	2.1	0.0575 ± 0.0054	0.8068 ± 0.1369
V1671557277	2010-354T16:48:53	142390.	-0.12	238.3	158.7	12.3	0.0569 ± 0.0037	0.8562 ± 0.1132
V1671558253	2010-354T17:05:08	139839.	-0.11	242.1	158.0	15.3	0.0582 ± 0.0058	0.8353 ± 0.1579
V1671559411	2010-354T17:25:00	136893.	-0.11	246.5	157.2	19.0	0.0760 ± 0.0038	0.8436 ± 0.0810
V1671560658	2010-354T17:45:47	133738.	-0.10	251.1	156.5	22.8	0.0626 ± 0.0042	0.8066 ± 0.0977
V1671561876	2010-354T18:05:32	130589.	-0.10	255.3	156.0	26.4	0.0679 ± 0.0054	0.8470 ± 0.1319
V1671562852	2010-354T18:21:47	127967.	-0.09	258.5	155.8	29.4	0.0828 ± 0.0065	0.8313 ± 0.1232
V1671564000	2010-354T18:40:56	124715.	-0.08	262.2	155.7	32.9	0.0886 ± 0.0051	0.7930 ± 0.0800

V1671566150	2010-354T19:17:19	117983.	-0.07	268.6	155.8	39.6	0.0753 ± 0.0044	0.8296 ± 0.0916
V1671567368	2010-354T19:37:37	113717.	-0.06	272.0	156.1	43.3	0.0878 ± 0.0059	0.8255 ± 0.1033
V1675101079	2011-030T17:05:29	226523.	+0.31	214.7	156.7	332.7	0.0358 ± 0.0081	0.7619 ± 0.2726
V1675101287	2011-030T17:08:57	225850.	+0.31	215.6	156.5	333.4	0.0578 ± 0.0071	0.7635 ± 0.1575
V1675101532	2011-030T17:13:02	225081.	+0.30	216.6	156.2	334.1	0.0430 ± 0.0042	0.8680 ± 0.1797
V1675101740	2011-030T17:16:30	224450.	+0.30	217.5	156.0	334.7	0.0407 ± 0.0081	0.9012 ± 0.4115
V1675101985	2011-030T17:20:35	223730.	+0.30	218.5	155.8	335.5	0.0437 ± 0.0055	0.7929 ± 0.1810
V1675102193	2011-030T17:24:03	223139.	+0.30	219.4	155.5	336.1	0.0397 ± 0.0031	0.8386 ± 0.1323
V1675102438	2011-030T17:28:08	222465.	+0.29	220.4	155.3	336.9	0.0462 ± 0.0027	0.8835 ± 0.1060
V1675102646	2011-030T17:31:36	221913.	+0.29	221.3	155.1	337.5	0.0365 ± 0.0039	0.7266 ± 0.1135
V1675102916	2011-030T17:36:06	221221.	+0.29	222.4	154.8	338.3	0.0295 ± 0.0032	0.8053 ± 0.1605
V1675103124	2011-030T17:39:34	220707.	+0.28	223.3	154.6	339.0	0.0352 ± 0.0030	0.8656 ± 0.1529
V1675104776	2011-030T18:07:06	217154.	+0.26	229.9	153.1	344.0	0.0275 ± 0.0037	0.7940 ± 0.1855
V1675104984	2011-030T18:10:34	216767.	+0.25	230.7	153.0	344.7	0.0283 ± 0.0027	0.8793 ± 0.1730
V1675105229	2011-030T18:14:39	216326.	+0.25	231.7	152.8	345.4	0.0336 ± 0.0047	0.8427 ± 0.2267
V1675105437	2011-030T18:18:07	215965.	+0.25	232.5	152.6	346.1	0.0183 ± 0.0031	1.1460 ± 0.6373
V1675105682	2011-030T18:22:12	215552.	+0.24	233.4	152.4	346.8	0.0239 ± 0.0026	0.9208 ± 0.2291
V1675105890	2011-030T18:25:40	215214.	+0.24	234.2	152.3	347.5	0.0273 ± 0.0039	0.8365 ± 0.2280
V1675106135	2011-030T18:29:45	214827.	+0.23	235.2	152.1	348.2	0.0273 ± 0.0029	0.8131 ± 0.1575
V1675106343	2011-030T18:33:13	214510.	+0.23	236.0	151.9	348.9	0.0282 ± 0.0052	0.8279 ± 0.2872
V1675108515	2011-030T19:09:25	211636.	+0.19	244.0	150.7	355.5	0.0254 ± 0.0017	0.8288 ± 0.1087
V1675108723	2011-030T19:12:53	211393.	+0.19	244.7	150.6	356.2	0.0271 ± 0.0011 0.0273 ± 0.0024	0.7914 ± 0.1272
V1675108968	2011-030T19:12:59 2011-030T19:16:58	211111.	+0.18	245.5	150.5	356.9	0.0292 ± 0.0021 0.0292 ± 0.0018	0.8134 ± 0.0978
V1675109176	2011-030T19:20:26	210875.	+0.18	246.3	150.4	357.5	0.0259 ± 0.0037	0.8504 ± 0.2542
V1675109421	2011-030T19:24:31	210600.	+0.17	247.1	150.3	358.3	0.0283 ± 0.0054	0.8148 ± 0.3024
V1675109629	2011-030T19:27:59	210369.	+0.17	247.8	150.3	358.9	0.0263 ± 0.0004 0.0247 ± 0.0029	0.9568 ± 0.2976
V1675110253	2011-030T19:38:23	209685.	+0.16	249.9	150.5	0.8	0.0247 ± 0.0025 0.0391 ± 0.0044	0.8003 ± 0.1789
V1675110255	2011-030T19:41:51	209459.	+0.15	250.6	150.1	1.5	0.0331 ± 0.0044 0.0288 ± 0.0039	0.8691 ± 0.2780
V1675110706	2011-030T19:45:56	209193.	+0.15	251.4	150.0	2.2	0.0235 ± 0.0035 0.0335 ± 0.0046	0.8031 ± 0.2760 0.8038 ± 0.2217
V1675110914	2011-030T19:49:24	208966.	+0.15	252.1	150.0	2.9	0.0305 ± 0.0010 0.0315 ± 0.0042	0.8050 ± 0.2217 0.8050 ± 0.2157
V1675111228	2011-030T19:54:38	208622.	+0.14	253.1	149.9	3.8	0.0319 ± 0.0042 0.0389 ± 0.0035	0.8476 ± 0.1597
V1675111436	2011-030T19:58:06	208393.	+0.14	253.8	149.9	4.5	0.0303 ± 0.0033 0.0270 ± 0.0033	0.7849 ± 0.1777
V1675111430 V1675111681	2011-030T19:58:00 2011-030T20:02:11	208333.	+0.14 $+0.13$	254.6	149.9	5.2	0.0270 ± 0.0033 0.0315 ± 0.0022	0.7849 ± 0.1777 0.7822 ± 0.0973
V1675111889	2011-030120:02:11 2011-030T20:05:39	207888.	+0.13	255.2	149.9	5.9	0.0319 ± 0.0022 0.0390 ± 0.0044	0.7974 ± 0.1700
V1696147993	2011-030120:05:39 2011-274T07:25:10	228708.	+0.13 +0.26	135.8	148.8	171.3	0.0993±0.0066	0.7967 ± 0.0965
V1696148201	2011-274T07:28:38	225939.	+0.26	136.4	148.9	172.0	0.0995 ± 0.0000 0.1086 ± 0.0037	0.8075 ± 0.0488
V1696148409	2011-274T07:28:38 2011-274T07:32:05	223339. 223184.	+0.26	136.9	149.0	172.6	0.1080 ± 0.0037 0.1071 ± 0.0074	0.8073 ± 0.0488 0.7847 ± 0.0922
V1696148616	2011-274T07:32:03 2011-274T07:35:33	220447.	+0.26	137.4	149.0	173.2	0.1071 ± 0.0074 0.0881 ± 0.0047	0.7847 ± 0.0922 0.8188 ± 0.0788
V1696148824	2011-274T07:39:00 2011-274T07:39:00	217719.	+0.26	137.4	149.1	173.2	0.0965 ± 0.0071	0.8188 ± 0.0788 0.8095 ± 0.1065
V1696148824 V1696149032	2011-274T07:39:00 2011-274T07:42:28	217719. 215005.	+0.26	138.4	149.2	174.5	0.0903 ± 0.0071 0.0933 ± 0.0058	0.8093 ± 0.1003 0.8154 ± 0.0918
V1696149032 V1696149239	2011-274T07.42.28 2011-274T07:45:56	213005. 212309.		138.9	149.3	175.1		0.8134 ± 0.0918 0.8034 ± 0.1017
V1696149239 V1696149723	1	206078.	+0.26				0.0990 ± 0.0070	0.8034 ± 0.1017 0.7924 ± 0.0754
	2011-274T07:55:03		+0.26	140.2	149.6	176.7	0.1094 ± 0.0059	
V1696150058	2011-274T08:00:38	201804.	+0.26	141.0	149.8	177.7	0.1043 ± 0.0052	0.7816 ± 0.0677
V1696150393	2011-274T08:06:13	197568.	+0.26	141.9	149.9	178.8	0.0974 ± 0.0043	0.7784 ± 0.0579
V1696150728	2011-274T08:11:48	193367.	+0.26	142.7	150.0	179.8	0.0957 ± 0.0055	0.7738 ± 0.0750
V1696153294	2011-274T08:54:30	162435.	+0.26	149.4	151.0	187.5	0.0956 ± 0.0042	0.7679 ± 0.0556
V1696153619	2011-274T08:59:55	158675.	+0.26	150.3	151.1	188.5	0.1066±0.0079	0.8128 ± 0.1089
V1696153945	2011-274T09:05:20	154946.	+0.26	151.2	151.2	189.4	0.1188 ± 0.0054	0.7849 ± 0.0620
V1696154270	2011-274T09:10:45	151258.	+0.26	152.1	151.3	190.4	0.1094 ± 0.0059	0.8022 ± 0.0770
V1696154595	2011-274T09:16:10	147606.	+0.26	152.9	151.3	191.4	0.1034 ± 0.0055	0.7968 ± 0.0757
V1696155274	2011-274T09:27:30	140087.	+0.26	154.8	151.5	193.4	0.1165 ± 0.0056	0.7707 ± 0.0610
V1696155599	2011-274T09:32:55	136546.	+0.25	155.7	151.6	194.4	0.1133±0.0088	0.7722 ± 0.0984
V1696155925	2011-274T09:38:20	133035.	+0.25	156.6	151.7	195.4	0.1014 ± 0.0046	0.7603 ± 0.0561

V1696156250	2011-274T09:43:45	129565.	+0.25	157.5	151.7	196.4	0.1067 ± 0.0054	0.7595 ± 0.0622
V1696156575	2011-274T09:49:10	126130.	+0.25	158.4	151.8	197.4	0.1059 ± 0.0064	0.8106 ± 0.0882
V1696157252	2011-274T10:00:28	119085.	+0.24	160.4	151.9	199.4	0.1195 ± 0.0056	0.8043 ± 0.0665
V1696157577	2011-274T10:05:53	115759.	+0.24	161.3	151.9	200.4	0.1118 ± 0.0032	0.7676 ± 0.0364
V1696157903	2011-274T10:11:18	112463.	+0.24	162.2	152.0	201.4	0.1012 ± 0.0038	0.8070 ± 0.0545
V1696158228	2011-274T10:16:43	109206.	+0.24	163.1	152.0	202.3	0.1170 ± 0.0064	0.8107 ± 0.0820
V1696158553	2011-274T10:22:08	105983.	+0.23	164.1	152.1	203.3	0.1062 ± 0.0045	0.7729 ± 0.0551
V1697685856	2011-292T02:36:03	245611.	+0.23	132.4	148.2	162.4	0.0739 ± 0.0080	0.8388 ± 0.1766
V1697686101	2011-292T02:40:08	242252.	+0.23	133.0	148.3	163.1	0.0779 ± 0.0018	0.7967±0.0334
V1697686346	2011-292T02:44:13	238911.	+0.23	133.6	148.5	163.9	0.0899 ± 0.0029	0.8108 ± 0.0487
V1697686591	2011-292T02:48:18	235588.	+0.23	134.2	148.6	164.6	0.0692 ± 0.0048	0.7999 ± 0.0982
V1697686836	2011-292T02:52:23	232283.	+0.23	134.8	148.7	165.4	0.0642 ± 0.0038	0.8197 ± 0.0853
V1697687081	2011-292T02:56:28	228996.	+0.23	135.4	148.8	166.1	0.0788 ± 0.0044	0.8166 ± 0.0820
V1697687326	2011-292T03:00:33	225729.	+0.23	136.0	149.0	166.8	0.0816 ± 0.0052	0.8452 ± 0.1041
V1697688040	2011-292T03:12:27	216312.	+0.23	137.8	149.3	169.0	0.0650 ± 0.0043	0.8066 ± 0.0971
V1699226646	2011-309T22:36:23	223820.	+0.23	137.1	148.3	161.8	0.0643 ± 0.0046	0.7864 ± 0.0941
V1699226984	2011-309T22:42:01	219369.	+0.23	137.9	148.4	162.8	0.0751 ± 0.0061	0.7909 ± 0.1100
V1699227322	2011-309T22:47:39	214954.	+0.23	138.7	148.6	163.9	0.0615 ± 0.0044	0.8166 ± 0.1080
V1699227660	2011-309T22:53:17	210576.	+0.23	139.6	148.7	164.9	0.0659 ± 0.0041	0.7805 ± 0.0808
V1699227998	2011-309T22:58:55	206234.	+0.23	140.5	148.9	165.9	0.0738 ± 0.0035	0.8008 ± 0.0663
V1699228542	2011-309T23:07:59	199325.	+0.23	141.8	149.1	167.5	0.0818 ± 0.0080	0.7639 ± 0.1203
V1699228880	2011-309T23:13:37	195081.	+0.22	142.7	149.2	168.5	0.0848 ± 0.0039	0.7827 ± 0.0611
V1699229218	2011-309T23:19:15	190875.	+0.22	143.6	149.4	169.6	0.0799 ± 0.0064	0.7927 ± 0.1084
V1699229556	2011-309T23:24:53	186706.	+0.22	144.5	149.5	170.6	0.0956 ± 0.0063	0.8154 ± 0.0983
V1699229894	2011-309T23:30:31	182576.	+0.22	145.4	149.6	171.6	0.0755 ± 0.0030	0.7757±0.0518
V1699230860	2011-309T23:46:37	170984.	+0.22	147.9	150.0	174.5	0.0878 ± 0.0067	0.8113±0.1108
V1699231198	2011-309T23:52:15	167002.	+0.22	148.8	150.1	175.5	0.0911 ± 0.0043	0.7509 ± 0.0563
V1699231536	2011-309T23:57:53	163059.	+0.22	149.7	150.2	176.5	0.0964 ± 0.0067	0.7924 ± 0.0980
V1699231874	2011-310T00:03:31	159155.	+0.22	150.6	150.3	177.5	0.0855 ± 0.0060	0.7824 ± 0.0910
V1711536135	2012-087T09:53:14	343540.	+0.44	117.2	153.9	105.6	0.0554 ± 0.0030	0.8138 ± 0.0824
V1711536423	2012-087T09:58:02	339078.	+0.44	117.9	154.1	106.4	0.0455 ± 0.0023	0.8436 ± 0.0842
V1711536777	2012-087T10:03:56	333603.	+0.45	118.7	154.3	107.5	0.0408 ± 0.0006	0.8561 ± 0.0261
V1711537065	2012-087T10:08:44	329184.	+0.45	119.3	154.5	108.4	0.0419 ± 0.0030	0.8450 ± 0.1262
V1711537413	2012-087T10:14:32	323855.	+0.45	120.1	154.7	109.4	0.0534 ± 0.0023	0.8186 ± 0.0609
V1711537701	2012-087T10:19:20	319480.	+0.45	120.8	154.8	110.3	0.0441 ± 0.0035	0.7914 ± 0.1029
V1711538046	2012-087T10:25:05	314250.	+0.45	121.6	155.0	111.4	0.0384 ± 0.0034	0.7971±0.1179
V1711538334	2012-087T10:29:53	309921.	+0.46	122.3	155.2	112.2	0.0530 ± 0.0070	0.8103 ± 0.1881
V1711538684	2012-087T10:35:43	304672.	+0.46	123.1	155.4	113.3	0.0559 ± 0.0042	0.8273 ± 0.1166
V1711538972	2012-087T10:40:31	300389.	+0.46	123.8	155.6	114.2	0.0494 ± 0.0016	0.7758 ± 0.0428
V1711539317	2012-087T10:46:16	295273.	+0.46	124.6	155.7	115.2	0.0554 ± 0.0015	0.7885 ± 0.0360
V1711539605	2012-087T10:51:04	291038.	+0.46	125.2	155.9	116.1	0.0766 ± 0.0049	0.8171 ± 0.0943
V1711539953	2012-087T10:56:52	285936.	+0.47	126.1	156.1	117.1	0.0679 ± 0.0059	0.8159 ± 0.1304
V1711540241	2012-087T11:01:40	281752.	+0.47	126.7	156.2	118.0	0.0765 ± 0.0053	0.8178 ± 0.1061
V1711540588	2012-087T11:07:27	276725.	+0.47	127.6	156.4	119.0	0.0734 ± 0.0112	0.8196 ± 0.2236
V1711540876	2012-087T11:12:15	272591.	+0.47	128.3	156.6	119.9	0.0726 ± 0.0016	0.7838 ± 0.0291
V1711541224	2012-087T11:18:03	267612.	+0.48	129.1	156.7	121.0	0.0771 ± 0.0053	0.8522 ± 0.1095
V1711541512	2012-087T11:22:51	263531.	+0.48	129.8	156.9	121.8	0.0735 ± 0.0035	0.8235 ± 0.0709
V1711541857	2012-087T11:28:36	258658.	+0.48	130.6	157.0	122.9	0.0857 ± 0.0059	0.8224 ± 0.1042
V1711542145	2012-087T11:33:24	254629.	+0.48	131.3	157.2	123.8	0.0814 ± 0.0015	0.7920 ± 0.0261
V1711542490	2012-087T11:39:09	249821.	+0.48	132.2	157.3	124.8	0.0999 ± 0.0031	0.8134 ± 0.0474
V1711542778	2012-087T11:43:57	245847.	+0.49	132.9	157.5	125.7	0.1024 ± 0.0028	0.8106 ± 0.0389
V1711543130	2012-087T11:49:49	241009.	+0.49	133.7	157.6	126.7	0.0858 ± 0.0054	0.8145 ± 0.0949
V1711543418	2012-087T11:54:37	237090.	+0.49	134.4	157.7	127.6	0.0883 ± 0.0034	0.7973 ± 0.0515
V1711543762	2012-087T12:00:21	232429.	+0.49	135.3	157.9	128.6	0.1111 ± 0.0065	0.7881 ± 0.0783
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V1711544050 2012-087T12:05:09 228567. +0.49 136.0 158.0 129.5 0.1184±0.0069 0.7992±0.0817 V1711544387 2012-087T12:10:58 223907. +0.50 136.9 158.1 130.6 0.1064±0.0022 0.8167±0.0504 V1711545033 2012-087T12:21:32 215552. +0.50 138.4 158.2 131.4 0.1143±0.0041 0.7887±0.0504 V1711545321 2012-087T12:26:20 211806. +0.50 139.2 158.5 133.3 0.1108±0.0077 0.7823±0.0911 V171545666 2012-087T12:32:05 207339. +0.50 140.0 158.6 134.4 0.1190±0.0044 0.7861±0.0499 V1711545954 2012-087T12:36:53 203661. +0.51 140.8 158.7 135.3 0.1143±0.0051 0.7757±0.0587 V1711546301 2012-087T12:47:28 195603. +0.51 141.7 158.8 136.3 0.1306±0.056 0.7782±0.0755 V1711546939 2012-087T12:53:18 191217. +0.51 143.3 159.0 138.2 0.1268±0.0066 0.7782±0.0705 V171154727 2012-087T12:53:18 191217. +0.51 144.0 159.1 139.1 0.1268±0.0066 0.7782±0.0705 V1711547571 2012-087T13:03:50 183413. +0.52 145.7 159.3 141.0 0.1243±0.0065 0.7767±0.0653 V1711548949 2012-087T13:14:25 175705. +0.52 145.7 159.3 141.0 0.1243±0.0066 0.7762±0.0663 V1711548949 2012-087T13:29:53 16692. +0.52 145.7 159.5 142.9 0.1329±0.0068 0.7802±0.0663 V1711549477 2012-087T13:29:53 16692. +0.52 149.1 159.5 142.9 0.1329±0.0068 0.7802±0.0893 V1711549477 2012-087T13:35:36 16692. +0.52 149.1 159.5 142.9 0.1329±0.0068 0.7802±0.0893 V1711549477 2012-087T13:35:36 16698. +0.53 150.0 159.7 145.9 0.1329±0.0068 0.7602±0.0893 V1711559709 2012-087T13:56:49 146197. +0.53 150.5 159.9 148.5 0.154±0.0057 0.7678±0.0473 V1711550709 2012-087T13:56:49 146197. +0.53 151.5 159.9 148.5 0.154±0.0057 0.7602±0.0503 V1711552021 2012-087T14:20:4 157367. +0.53 151.5 159.9 148.5 0.154±0.0057 0.7602±0.0503 V1711552021 2012-087T14:20:4 153607. +0.53 151.5 150.0 150.0 150.0 0.7692±0.0503 V1711552021									
V1711544687 2012-087T12:15:46 220102. +0.50 137.6 158.2 131.4 0.1143±0.0041 0.7887±0.0504 V1711545033 2012-087T12:21:32 215552. +0.50 138.4 158.4 132.5 0.1178±0.0080 0.7882±0.0940 V1711545266 2012-087T12:36:53 20339. +0.50 140.0 158.6 134.4 0.1190±0.0044 0.7861±0.0499 V1711545954 2012-087T12:36:53 203651. +0.51 140.8 158.7 135.3 0.1143±0.0051 0.7757±0.0587 V1711546301 2012-087T12:42:40 199231. +0.51 141.7 158.8 136.3 0.1306±0.0056 0.7680±0.0564 V1711546393 2012-087T12:53:18 191217. +0.51 142.4 158.9 137.2 0.1317±0.0056 0.7772±0.0557 V1711547927 2012-087T12:58:06 187650. +0.51 144.0 159.1 139.1 0.1268±0.0066 0.7782±0.0655 V1711547859 2012-087T13:03:50 183413. +0.52 144.9 159.2 140.1 0.1268±0.	V1711544050	2012-087T12:05:09	228567.	+0.49	136.0	158.0	129.5	0.1184 ± 0.0069	0.7992 ± 0.0817
V1711545033 2012-087T12:21:32 215552 +0.50 138.4 158.4 132.5 0.1178±0.0080 0.7882±0.0940 V1711545321 2012-087T12:3c:05 207339 +0.50 140.0 158.6 133.3 0.1108±0.0077 0.7823±0.0911 V1711545954 2012-087T12:3c:53 203651 +0.51 140.0 158.6 134.4 0.1190±0.0044 0.7861±0.0499 V1711545954 2012-087T12:42:40 199231 +0.51 141.7 158.8 136.3 0.1306±0.0056 0.7680±0.0564 V1711546589 2012-087T12:47:28 195603 +0.51 141.7 158.8 136.3 0.1306±0.0056 0.7680±0.0564 V1711546939 2012-087T12:53:18 191217 +0.51 143.3 159.0 138.2 0.1263±0.0068 0.7772±0.0557 V1711547527 2012-087T12:58:06 187650 +0.51 144.0 159.1 139.1 0.1263±0.0068 0.7767±0.0575 V1711547859 2012-087T13:08:38 179906 +0.52 145.7 159.3 141.0 0.1243±0.0065 </td <td>V1711544399</td> <td>2012-087T12:10:58</td> <td>223907.</td> <td>+0.50</td> <td>136.9</td> <td>158.1</td> <td>130.6</td> <td>0.1064 ± 0.0022</td> <td>0.8167 ± 0.0311</td>	V1711544399	2012-087T12:10:58	223907.	+0.50	136.9	158.1	130.6	0.1064 ± 0.0022	0.8167 ± 0.0311
V1711545321 2012-087T12:26:20 211806. +0.50 139.2 158.5 133.3 0.110±0.0077 0.7823±0.0911 V1711545666 2012-087T12:32:05 207339. +0.50 140.0 158.6 134.4 0.1190±0.0044 0.7861±0.0499 V1711546954 2012-087T12:36:53 203651. +0.51 140.8 158.7 135.3 0.1143±0.0051 0.7757±0.0587 V1711546301 2012-087T12:47:28 195603. +0.51 141.7 158.8 136.3 0.1306±0.0056 0.7680±0.0564 V1711546939 2012-087T12:53:18 191217. +0.51 141.4 158.9 137.2 0.1317±0.0056 0.7777±0.0557 V1711547227 2012-087T13:08:06 187650. +0.51 144.0 159.1 139.1 0.1268±0.0066 0.7632±0.0655 V1711547859 2012-087T13:08:38 179906. +0.52 144.9 159.2 140.1 0.1326±0.0066 0.7762±0.0663 V1711548206 2012-087T13:19:13 172260. +0.52 145.7 159.3 141.0 0.123±0.	V1711544687	2012-087T12:15:46	220102.	+0.50	137.6	158.2	131.4	0.1143 ± 0.0041	0.7887 ± 0.0504
V1711545666	V1711545033	2012-087T12:21:32	215552.	+0.50	138.4	158.4	132.5	0.1178 ± 0.0080	0.7882 ± 0.0940
V1711545954 2012-087T12:36:53 203651. +0.51 140.8 158.7 135.3 0.1143±0.0051 0.7757±0.0587 V1711546301 2012-087T12:42:40 199231. +0.51 141.7 158.8 136.3 0.1306±0.0056 0.7680±0.0564 V1711546589 2012-087T12:53:18 19503. +0.51 142.4 158.9 137.2 0.1317±0.0056 0.7777±0.0557 V1711546939 2012-087T12:58:06 187650. +0.51 144.0 159.1 139.1 0.1263±0.0066 0.7632±0.0655 V1711547227 2012-087T13:03:50 183413. +0.52 144.9 159.2 140.1 0.1268±0.0066 0.7632±0.0653 V1711547859 2012-087T13:08:38 179906. +0.52 145.7 159.3 141.0 0.1243±0.0065 0.7767±0.0473 V1711548206 2012-087T13:19:13 172260. +0.52 145.7 159.3 141.0 0.1243±0.0068 0.7696±0.0653 V1711548494 2012-087T13:29:53 164692. +0.52 147.4 159.5 142.9 0.1329±0	V1711545321	2012-087T12:26:20	211806.	+0.50	139.2	158.5	133.3	0.1108 ± 0.0077	0.7823 ± 0.0911
$\begin{array}{c} V1711546301 & 2012-087T12:42:40 & 199231. & +0.51 & 141.7 & 158.8 & 136.3 & 0.1306\pm0.0056 & 0.7680\pm0.0564 \\ V1711546589 & 2012-087T12:47:28 & 195603. & +0.51 & 142.4 & 158.9 & 137.2 & 0.1317\pm0.0056 & 0.7777\pm0.0557 \\ V1711546939 & 2012-087T12:53:18 & 191217. & +0.51 & 143.3 & 159.0 & 138.2 & 0.1263\pm0.0068 & 0.7782\pm0.0705 \\ V1711547227 & 2012-087T13:03:50 & 187650. & +0.51 & 144.0 & 159.1 & 139.1 & 0.1268\pm0.0066 & 0.7632\pm0.0655 \\ V1711547571 & 2012-087T13:08:38 & 179906. & +0.52 & 144.9 & 159.2 & 140.1 & 0.1326\pm0.0047 & 0.7767\pm0.0473 \\ V1711548206 & 2012-087T13:14:25 & 175705. & +0.52 & 146.6 & 159.4 & 142.1 & 0.1339\pm0.0068 & 0.7811\pm0.0663 \\ V1711548494 & 2012-087T13:19:13 & 172260. & +0.52 & 144.4 & 159.5 & 142.9 & 0.1329\pm0.0068 & 0.7696\pm0.0653 \\ V1711548494 & 2012-087T13:25:05 & 168075. & +0.52 & 148.3 & 159.6 & 144.0 & 0.1486\pm0.0064 & 0.7724\pm0.0559 \\ V1711549134 & 2012-087T13:29:53 & 164692. & +0.52 & 149.1 & 159.6 & 144.9 & 0.1421\pm0.0098 & 0.7802\pm0.0893 \\ V1711549765 & 2012-087T13:35:36 & 160688. & +0.53 & 150.0 & 159.7 & 145.9 & 0.1372\pm0.0069 & 0.8047\pm0.0710 \\ V1711550399 & 2012-087T13:50:58 & 150143. & +0.53 & 151.7 & 159.9 & 147.8 & 0.1749\pm0.0083 & 0.7698\pm0.0473 \\ V1711551038 & 2012-087T13:50:58 & 150143. & +0.53 & 152.5 & 159.9 & 147.8 & 0.1749\pm0.0088 & 0.7604\pm0.0644 \\ V1711550750 & 2012-087T14:01:36 & 143000. & +0.53 & 153.4 & 160.0 & 149.7 & 0.1684\pm0.0087 & 0.7741\pm0.0667 \\ V1711551038 & 2012-087T14:01:36 & 143000. & +0.53 & 155.1 & 160.1 & 150.6 & 0.1800\pm0.0084 & 0.7980\pm0.0651 \\ V1711551039 & 2012-087T14:12:01 & 136148. & +0.53 & 155.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ V1711552021 & 2012-087T14:22:47 & 129206. & +0.53 & 157.7 & 160.3 & 154.4 & 0.1701\pm0.0082 & 0.7762\pm0.0503 \\ V1711552942 & 2012-087T14:23:30 & 122538. & +0.54 & 159.5 & 160.3 & 155.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ V1711552942 & 2012-087T14:23:30 & 122538. & +0.54 & 159.5 & 160.3 & 155.5 & 0.1686\pm0.0088 & 0.7762\pm0.0078 \\ V1711552942 & 2012-087T14:23:30 & 122538. & +0.54 & 159.5 & 160.3 & 155.3 & 0.1705\pm0.0105 & 0.7$	V1711545666	2012-087T12:32:05	207339.	+0.50	140.0	158.6	134.4	0.1190 ± 0.0044	0.7861 ± 0.0499
V1711546589 2012-087T12:47:28 195603. +0.51 142.4 158.9 137.2 0.1317±0.0056 0.7777±0.0557 V1711546939 2012-087T12:53:18 191217. +0.51 143.3 159.0 138.2 0.1263±0.0068 0.7782±0.0705 V1711547227 2012-087T12:58:06 187650. +0.51 144.0 159.1 139.1 0.1268±0.0066 0.7632±0.0655 V1711547571 2012-087T13:03:50 183413. +0.52 144.9 159.2 140.1 0.1326±0.0047 0.7767±0.0473 V1711548206 2012-087T13:14:25 175705. +0.52 145.7 159.3 141.0 0.1243±0.0065 0.7762±0.0663 V1711548494 2012-087T13:19:13 172260. +0.52 146.6 159.4 142.1 0.1329±0.0068 0.7696±0.0653 V1711549134 2012-087T13:29:53 164692. +0.52 144.3 159.6 144.0 0.1486±0.0064 0.7724±0.0559 V1711549476 2012-087T13:40:24 157367. +0.53 150.0 159.7 145.9 0.1372±	V1711545954	2012-087T12:36:53	203651.	+0.51	140.8	158.7	135.3	0.1143 ± 0.0051	0.7757 ± 0.0587
V1711546939 2012-087T12:53:18 191217. +0.51 143.3 159.0 138.2 0.1263±0.0068 0.7782±0.0705 V1711547227 2012-087T12:58:06 187650. +0.51 144.0 159.1 139.1 0.1268±0.0066 0.7632±0.0655 V1711547571 2012-087T13:03:50 183413. +0.52 144.9 159.2 140.1 0.1326±0.0047 0.7767±0.0473 V1711547859 2012-087T13:08:38 179906. +0.52 145.7 159.3 141.0 0.1243±0.0065 0.7762±0.0663 V1711548206 2012-087T13:14:25 175705. +0.52 146.6 159.4 142.1 0.1339±0.0068 0.7811±0.0663 V1711548494 2012-087T13:19:13 172260. +0.52 147.4 159.5 142.9 0.1329±0.0068 0.7696±0.0653 V1711549447 2012-087T13:29:53 164692. +0.52 149.1 159.6 144.0 0.1486±0.0064 0.7724±0.0559 V1711549134 2012-087T13:35:36 160688. +0.53 150.0 159.7 145.9 0.1372±0.0069 0.8047±0.0710 V1711549765 2012-087T13:40:24 157367. +0.53 150.8 159.8 146.8 0.1514±0.0057 0.7678±0.0473 V1711550111 2012-087T13:46:10 153402. +0.53 151.7 159.9 147.8 0.1749±0.0083 0.7899±0.0640 V1711550399 2012-087T13:50:58 150143. +0.53 152.5 159.9 148.7 0.1730±0.0088 0.7664±0.0644 V1711550750 2012-087T13:6:49 146197. +0.53 152.5 159.9 148.7 0.1730±0.0088 0.7664±0.0644 V1711551375 2012-087T14:01:36 143000. +0.53 151.7 159.9 148.7 0.1730±0.0088 0.7664±0.0667 V1711551375 2012-087T14:01:40 143040. +0.53 155.1 160.1 151.6 0.1886±0.0076 0.7629±0.0503 V1711552021 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7698±0.0776 V1711552039 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7698±0.0766 V1711552039 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7698±0.0766 V1711552039 2012-087T14:22:47 129206. +0.53 157.7 160.3 154.4 0.1701±0.0082 0.7699±0.0661 V1711552042 2012-087T14:22:47 129206. +0.53 157.7 160.3 154.4 0.1701±0.0082 0.7699±0.0614 V1711552042 2012-087T14:23:33 125550. +0.54 158.7 160.3 155.5 0.1686±0.0085 0.7766±0.0778 V1711552042 2012-087T14:23:33 125550. +0.54 158.7 160.3 155.5 0.1686±0.0085 0.7761±0.0754 V1711552042 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711552042 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.4 0.183	V1711546301	2012-087T12:42:40	199231.	+0.51	141.7	158.8	136.3	0.1306 ± 0.0056	0.7680 ± 0.0564
V1711547227 2012-087T12:58:06 187650. +0.51 144.0 159.1 139.1 0.1268±0.0066 0.7632±0.0655 V1711547571 2012-087T13:03:50 183413. +0.52 144.9 159.2 140.1 0.1326±0.0047 0.7767±0.0473 V1711547859 2012-087T13:08:38 179906. +0.52 145.7 159.3 141.0 0.1243±0.0065 0.7762±0.0663 V1711548206 2012-087T13:14:25 175705. +0.52 146.6 159.4 142.1 0.1339±0.0068 0.7811±0.0663 V1711548494 2012-087T13:19:13 172260. +0.52 147.4 159.5 142.9 0.1329±0.0068 0.7696±0.0653 V1711548466 2012-087T13:25:05 168075. +0.52 148.3 159.6 144.0 0.1486±0.0064 0.7724±0.0559 V1711549134 2012-087T13:29:53 164692. +0.52 149.1 159.6 144.9 0.1421±0.0098 0.7802±0.0893 V1711549477 2012-087T13:40:24 157367. +0.53 150.0 159.7 145.9 0.1372±0.0069 0.8047±0.0710 V1711550111 2012-087T13:46:10 153402. +0.53 150.8 159.8 146.8 0.1514±0.0057 0.7678±0.0473 V1711550399 2012-087T13:50:58 150143. +0.53 152.5 159.9 147.8 0.1749±0.0083 0.7899±0.0640 V1711551038 2012-087T14:01:36 143000. +0.53 154.2 160.1 150.6 0.1800±0.0084 0.7980±0.0651 V17115512039 2012-087T14:01:36 143000. +0.53 154.2 160.1 150.6 0.1800±0.0084 0.7980±0.0651 V1711552042 2012-087T14:22:47 129206. +0.53 157.7 160.3 154.4 0.1701±0.0082 0.7697±0.0614 V1711552942 2012-087T14:23:30 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711552390 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711552390 2012-087T14:33:20 122538. +0.54 159.5 160.4 157.4 0.1833±0.0074 0.7671±0.0506	V1711546589	2012-087T12:47:28	195603.	+0.51	142.4	158.9	137.2	0.1317 ± 0.0056	0.7777±0.0557
V1711547571 2012-087T13:03:50 183413. +0.52 144.9 159.2 140.1 0.1326±0.0047 0.7767±0.0473 V1711547859 2012-087T13:08:38 179906. +0.52 145.7 159.3 141.0 0.1243±0.0065 0.7762±0.0663 V1711548206 2012-087T13:14:25 175705. +0.52 146.6 159.4 142.1 0.1339±0.0068 0.7811±0.0663 V1711548494 2012-087T13:19:13 172260. +0.52 147.4 159.5 142.9 0.1329±0.0068 0.7696±0.0653 V1711548846 2012-087T13:25:05 168075. +0.52 148.3 159.6 144.0 0.1486±0.0064 0.7724±0.0559 V1711549134 2012-087T13:29:53 164692. +0.52 149.1 159.6 144.9 0.1421±0.0098 0.7802±0.0893 V1711549477 2012-087T13:35:36 160688. +0.53 150.0 159.7 145.9 0.1372±0.0069 0.8047±0.0710 V1711549765 2012-087T13:40:24 157367. +0.53 150.8 159.8 146.8 0.1514±0.0057 0.7678±0.0473 V1711550111 2012-087T13:50:58 150143. +0.53 152.5 159.9 147.8 0.1749±0.0083 0.7899±0.0640 V1711550399 2012-087T13:50:58 150143. +0.53 152.5 159.9 148.7 0.1730±0.0088 0.7664±0.0644 V1711551038 2012-087T14:01:36 143000. +0.53 154.2 160.1 150.6 0.1800±0.0084 0.7980±0.0651 V1711551663 2012-087T14:01:36 143000. +0.53 154.2 160.1 150.6 0.1800±0.0084 0.7980±0.0651 V1711551663 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7620±0.0503 V1711552021 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7698±0.0776 V1711552399 2012-087T14:22:47 129206. +0.53 157.7 160.3 154.4 0.1701±0.0082 0.7697±0.0614 V1711552942 2012-087T14:28:33 125550. +0.54 158.7 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711552942 2012-087T14:23:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V171553290 2012-087T14:33:20 122538. +0.54 159.5 160.4 157.4 0.1833±0.0074 0.7671±0.0506	V1711546939	2012-087T12:53:18	191217.	+0.51	143.3	159.0	138.2	0.1263 ± 0.0068	0.7782 ± 0.0705
V1711547859 2012-087T13:08:38 179906. +0.52 145.7 159.3 141.0 0.1243±0.0065 0.7762±0.0663 V1711548206 2012-087T13:14:25 175705. +0.52 146.6 159.4 142.1 0.1339±0.0068 0.7811±0.0663 V1711548494 2012-087T13:19:13 172260. +0.52 147.4 159.5 142.9 0.1329±0.0068 0.7696±0.0653 V1711548846 2012-087T13:25:05 168075. +0.52 148.3 159.6 144.0 0.1486±0.0064 0.7724±0.0559 V1711549134 2012-087T13:29:53 164692. +0.52 149.1 159.6 144.9 0.1421±0.0098 0.7802±0.0893 V1711549477 2012-087T13:35:36 160688. +0.53 150.0 159.7 145.9 0.1372±0.0069 0.8047±0.0710 V1711549765 2012-087T13:40:24 157367. +0.53 150.8 159.8 146.8 0.1514±0.0057 0.7678±0.0473 V1711550111 2012-087T13:50:58 150143. +0.53 151.7 159.9 147.8 0.1749±0.0083 0.7899±0.0640 V1711550399 2012-087T13:50:58 150143. +0.53 152.5 159.9 148.7 0.1730±0.0088 0.7664±0.0644 V1711551038 2012-087T14:01:36 143000. +0.53 154.2 160.1 150.6 0.1800±0.0084 0.7980±0.0651 V1711551375 2012-087T14:01:36 143000. +0.53 155.1 160.1 151.6 0.1886±0.0076 0.7620±0.0503 V1711552021 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7698±0.0776 V1711552309 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7698±0.0776 V1711552309 2012-087T14:22:47 129206. +0.53 157.7 160.3 154.4 0.1701±0.0082 0.7697±0.0614 V1711552942 2012-087T14:23:33 125550. +0.54 158.7 160.3 155.5 0.1686±0.0085 0.7824±0.0673 V1711552942 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711553290 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711553290 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711553290 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711553290 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711553290 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711553290 2012-087T14:33:20 122538. +0.54 159.5 160.4 157.4 0.1833±0.0074 0.7671±0.0506	V1711547227	2012-087T12:58:06	187650.	+0.51	144.0	159.1	139.1	0.1268 ± 0.0066	0.7632 ± 0.0655
$\begin{array}{c} \text{V1711548206} & 2012-087\text{T}13:14:25 & 175705. & +0.52 & 146.6 & 159.4 & 142.1 & 0.1339\pm0.0068 & 0.7811\pm0.0663 \\ \text{V1711548494} & 2012-087\text{T}13:19:13 & 172260. & +0.52 & 147.4 & 159.5 & 142.9 & 0.1329\pm0.0068 & 0.7696\pm0.0653 \\ \text{V1711548846} & 2012-087\text{T}13:25:05 & 168075. & +0.52 & 148.3 & 159.6 & 144.0 & 0.1486\pm0.0064 & 0.7724\pm0.0559 \\ \text{V1711549134} & 2012-087\text{T}13:29:53 & 164692. & +0.52 & 149.1 & 159.6 & 144.9 & 0.1421\pm0.0098 & 0.7802\pm0.0893 \\ \text{V1711549767} & 2012-087\text{T}13:35:36 & 160688. & +0.53 & 150.0 & 159.7 & 145.9 & 0.1372\pm0.0069 & 0.8047\pm0.0710 \\ \text{V1711549765} & 2012-087\text{T}13:40:24 & 157367. & +0.53 & 150.8 & 159.8 & 146.8 & 0.1514\pm0.0057 & 0.7678\pm0.0473 \\ \text{V1711550111} & 2012-087\text{T}13:46:10 & 153402. & +0.53 & 151.7 & 159.9 & 147.8 & 0.1749\pm0.0083 & 0.7899\pm0.0640 \\ \text{V1711550399} & 2012-087\text{T}13:50:58 & 150143. & +0.53 & 152.5 & 159.9 & 148.7 & 0.1730\pm0.0088 & 0.7664\pm0.0644 \\ \text{V1711550750} & 2012-087\text{T}13:56:49 & 146197. & +0.53 & 153.4 & 160.0 & 149.7 & 0.1684\pm0.0087 & 0.7741\pm0.0667 \\ \text{V1711551038} & 2012-087\text{T}14:01:36 & 143000. & +0.53 & 155.1 & 160.1 & 150.6 & 0.1800\pm0.0084 & 0.7980\pm0.0651 \\ \text{V1711551663} & 2012-087\text{T}14:07:14 & 139284. & +0.53 & 155.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ \text{V1711552021} & 2012-087\text{T}14:18:00 & 132278. & +0.53 & 156.9 & 160.2 & 153.6 & 0.1568\pm0.0088 & 0.7756\pm0.0718 \\ \text{V1711552309} & 2012-087\text{T}14:22:47 & 129206. & +0.53 & 157.7 & 160.3 & 154.4 & 0.1701\pm0.0082 & 0.7697\pm0.0614 \\ \text{V1711552942} & 2012-087\text{T}14:28:33 & 125550. & +0.54 & 159.5 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V1711552942} & 2012-087\text{T}14:33:20 & 122538. & +0.54 & 159.5 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V1711553290} & 2012-087\text{T}14:39:09 & 118925. & +0.54 & 159.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7671\pm0.0506 \\ \text{V1711553290} & 2012-087\text{T}14:39:09 & 118925. & +0.54 & 160.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7671\pm0.0506 \\ \text{V1711553290} & 2012-087\text{T}14:39:09 & 118925. & +0.54 & 160.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7$	V1711547571	2012-087T13:03:50	183413.	+0.52	144.9	159.2	140.1	0.1326 ± 0.0047	0.7767±0.0473
V1711548494 2012-087T13:19:13 172260. +0.52 147.4 159.5 142.9 0.1329±0.0068 0.7696±0.0653 V1711548846 2012-087T13:25:05 168075. +0.52 148.3 159.6 144.0 0.1486±0.0064 0.7724±0.0559 V1711549134 2012-087T13:29:53 164692. +0.52 149.1 159.6 144.9 0.1421±0.0098 0.7802±0.0893 V1711549477 2012-087T13:35:36 160688. +0.53 150.0 159.7 145.9 0.1372±0.0069 0.8047±0.0710 V1711549765 2012-087T13:40:24 157367. +0.53 150.8 159.8 146.8 0.1514±0.0057 0.7678±0.0473 V1711550111 2012-087T13:46:10 153402. +0.53 151.7 159.9 147.8 0.1749±0.0083 0.7899±0.0640 V1711550399 2012-087T13:50:58 150143. +0.53 152.5 159.9 148.7 0.1730±0.0088 0.7664±0.0644 V1711551038 2012-087T14:01:36 143000. +0.53 154.2 160.1 150.6 0.1800±0.0084 0.7980±0.0651 V1711551663 2012-087T14:07:14 139284. +0.53 155.1 160.1 151.6 0.1886±0.0076 0.7620±0.0503 V1711552021 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7698±0.0776 V1711552039 2012-087T14:12:01 136148. +0.53 155.9 160.2 152.5 0.1531±0.0096 0.7698±0.0776 V1711552039 2012-087T14:18:00 132278. +0.53 156.9 160.2 153.6 0.1568±0.0088 0.7756±0.0718 V1711552654 2012-087T14:22:47 129206. +0.53 157.7 160.3 154.4 0.1701±0.0082 0.7697±0.0614 V1711552942 2012-087T14:28:33 125550. +0.54 158.7 160.3 155.5 0.1686±0.0085 0.7824±0.0673 V1711552942 2012-087T14:33:20 122538. +0.54 159.5 160.3 156.3 0.1705±0.0105 0.7617±0.0754 V1711553290 2012-087T14:39:09 118925. +0.54 159.5 160.4 157.4 0.1833±0.0074 0.7671±0.0506	V1711547859	2012-087T13:08:38	179906.	+0.52	145.7	159.3	141.0	0.1243 ± 0.0065	0.7762±0.0663
$\begin{array}{c} \text{V}1711548846 \\ \text{V}1711549134 \\ \text{V}2012-087\text{T}13:25:05 \\ \text{V}1711549134 \\ \text{V}2012-087\text{T}13:29:53 \\ \text{I}64692. \\ \text{V}1711549134 \\ \text{V}1711549134 \\ \text{V}1711549134 \\ \text{V}1711549134 \\ \text{V}2012-087\text{T}13:29:53 \\ \text{I}64692. \\ \text{V}1711549134 \\ \text{V}1711549477 \\ \text{V}2012-087\text{T}13:35:36 \\ \text{I}60688. \\ \text{V}153 \\ \text{I}50.0 \\ \text{I}50.0 \\ \text{I}59.7 \\ \text{I}45.9 \\ $	V1711548206	2012-087T13:14:25	175705.	+0.52	146.6	159.4	142.1	0.1339 ± 0.0068	0.7811±0.0663
$\begin{array}{c} \text{V1711549134} & 2012\text{-}087\text{T}13:29:53 & 164692. & +0.52 & 149.1 & 159.6 & 144.9 & 0.1421\pm0.0098 & 0.7802\pm0.0893 \\ \text{V1711549477} & 2012\text{-}087\text{T}13:35:36 & 160688. & +0.53 & 150.0 & 159.7 & 145.9 & 0.1372\pm0.0069 & 0.8047\pm0.0710 \\ \text{V1711549765} & 2012\text{-}087\text{T}13:40:24 & 157367. & +0.53 & 150.8 & 159.8 & 146.8 & 0.1514\pm0.0057 & 0.7678\pm0.0473 \\ \text{V1711550111} & 2012\text{-}087\text{T}13:46:10 & 153402. & +0.53 & 151.7 & 159.9 & 147.8 & 0.1749\pm0.0083 & 0.7899\pm0.0640 \\ \text{V1711550399} & 2012\text{-}087\text{T}13:50:58 & 150143. & +0.53 & 152.5 & 159.9 & 148.7 & 0.1730\pm0.0088 & 0.7664\pm0.0644 \\ \text{V1711550750} & 2012\text{-}087\text{T}13:56:49 & 146197. & +0.53 & 153.4 & 160.0 & 149.7 & 0.1684\pm0.0087 & 0.7741\pm0.0667 \\ \text{V1711551038} & 2012\text{-}087\text{T}14:01:36 & 143000. & +0.53 & 155.1 & 160.1 & 150.6 & 0.1800\pm0.0084 & 0.7980\pm0.0651 \\ \text{V1711551663} & 2012\text{-}087\text{T}14:12:01 & 136148. & +0.53 & 155.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ \text{V1711552021} & 2012\text{-}087\text{T}14:12:01 & 136148. & +0.53 & 156.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ \text{V1711552309} & 2012\text{-}087\text{T}14:22:47 & 129206. & +0.53 & 157.7 & 160.3 & 154.4 & 0.1701\pm0.0082 & 0.7697\pm0.0614 \\ \text{V1711552942} & 2012\text{-}087\text{T}14:28:33 & 125550. & +0.54 & 158.7 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V1711552942} & 2012\text{-}087\text{T}14:33:20 & 122538. & +0.54 & 159.5 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V1711553290} & 2012\text{-}087\text{T}14:33:20 & 122538. & +0.54 & 159.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7671\pm0.0506 \\ \end{array}$	V1711548494	2012-087T13:19:13	172260.	+0.52	147.4	159.5	142.9	0.1329 ± 0.0068	0.7696±0.0653
$\begin{array}{c} \text{V1711549477} & 2012\text{-}087\text{T}13:35:36 & 160688. & +0.53 & 150.0 & 159.7 & 145.9 & 0.1372\pm0.0069 & 0.8047\pm0.0710 \\ \text{V1711549765} & 2012\text{-}087\text{T}13:40:24 & 157367. & +0.53 & 150.8 & 159.8 & 146.8 & 0.1514\pm0.0057 & 0.7678\pm0.0473 \\ \text{V1711550111} & 2012\text{-}087\text{T}13:46:10 & 153402. & +0.53 & 151.7 & 159.9 & 147.8 & 0.1749\pm0.0083 & 0.7899\pm0.0640 \\ \text{V1711550399} & 2012\text{-}087\text{T}13:50:58 & 150143. & +0.53 & 152.5 & 159.9 & 148.7 & 0.1730\pm0.0088 & 0.7664\pm0.0644 \\ \text{V1711550750} & 2012\text{-}087\text{T}13:56:49 & 146197. & +0.53 & 153.4 & 160.0 & 149.7 & 0.1684\pm0.0087 & 0.7741\pm0.0667 \\ \text{V1711551038} & 2012\text{-}087\text{T}14:01:36 & 143000. & +0.53 & 154.2 & 160.1 & 150.6 & 0.1800\pm0.0084 & 0.7980\pm0.0651 \\ \text{V1711551663} & 2012\text{-}087\text{T}14:12:01 & 136148. & +0.53 & 155.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ \text{V1711552021} & 2012\text{-}087\text{T}14:18:00 & 132278. & +0.53 & 156.9 & 160.2 & 153.6 & 0.1568\pm0.0088 & 0.7756\pm0.0718 \\ \text{V1711552654} & 2012\text{-}087\text{T}14:28:33 & 125550. & +0.54 & 158.7 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7621\pm0.0754 \\ \text{V1711552942} & 2012\text{-}087\text{T}14:33:20 & 122538. & +0.54 & 159.5 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V1711553290} & 2012\text{-}087\text{T}14:39:09 & 118925. & +0.54 & 160.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7671\pm0.0506 \\ \end{array}$	V1711548846	2012-087T13:25:05	168075.	+0.52	148.3	159.6	144.0	$0.1486 {\pm} 0.0064$	0.7724 ± 0.0559
$\begin{array}{c} \text{V}1711549765 \\ \text{V}1711550111 \\ \text{Z}012-087\text{T}13:40:24 \\ \text{Z}012-087\text{T}13:46:10 \\ \text{Z}012-087\text{T}13:46:10 \\ \text{Z}012-087\text{T}13:46:10 \\ \text{Z}012-087\text{T}13:50:58 \\ \text{Z}012-087\text{T}13:50:58 \\ \text{Z}012-087\text{T}13:50:58 \\ \text{Z}012-087\text{T}13:50:58 \\ \text{Z}012-087\text{T}13:50:49 \\ \text{Z}012-087\text{T}13:50:49 \\ \text{Z}012-087\text{T}13:50:49 \\ \text{Z}012-087\text{T}14:01:36 \\ \text{Z}012-087\text{T}14:20:47 \\ \text{Z}012-087\text{T}14:20:47 \\ \text{Z}012-087\text{T}14:20:47 \\ \text{Z}012-087\text{T}14:20:33 \\ \text{Z}012-087\text{T}14:20:33 \\ \text{Z}012-087\text{T}14:20:33 \\ \text{Z}012-087\text{T}14:20:33 \\ \text{Z}012-087\text{T}14:20:33 \\ \text{Z}012-087\text{T}14:20:33 \\ \text{Z}012-087\text{T}14:20:34 \\ \text{Z}012-087\text{T}14:20:35 \\ \text{Z}012-087\text{T}14:20:00505 \\ \text{Z}012-087\text{Z}012-087\text{Z}012-087\text{Z}012-087\text{Z}012-087\text{Z}012-087\text{Z}012-087\text$	V1711549134	2012-087T13:29:53	164692.	+0.52	149.1	159.6	144.9	0.1421 ± 0.0098	0.7802±0.0893
$\begin{array}{c} \text{V1711550111} & 2012\text{-}087\text{T}13\text{:}46\text{:}10 & 153402. & +0.53 & 151.7 & 159.9 & 147.8 & 0.1749\pm0.0083 & 0.7899\pm0.0640 \\ \text{V1711550399} & 2012\text{-}087\text{T}13\text{:}50\text{:}58 & 150143. & +0.53 & 152.5 & 159.9 & 148.7 & 0.1730\pm0.0088 & 0.7664\pm0.0644 \\ \text{V1711550750} & 2012\text{-}087\text{T}13\text{:}56\text{:}49 & 146197. & +0.53 & 153.4 & 160.0 & 149.7 & 0.1684\pm0.0087 & 0.7741\pm0.0667 \\ \text{V1711551038} & 2012\text{-}087\text{T}14\text{:}01\text{:}36 & 143000. & +0.53 & 154.2 & 160.1 & 150.6 & 0.1800\pm0.0084 & 0.7980\pm0.0651 \\ \text{V1711551375} & 2012\text{-}087\text{T}14\text{:}01\text{:}14 & 139284. & +0.53 & 155.1 & 160.1 & 151.6 & 0.1886\pm0.0076 & 0.7620\pm0.0503 \\ \text{V1711551663} & 2012\text{-}087\text{T}14\text{:}12\text{:}01 & 136148. & +0.53 & 155.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ \text{V1711552021} & 2012\text{-}087\text{T}14\text{:}18\text{:}00 & 132278. & +0.53 & 156.9 & 160.2 & 153.6 & 0.1568\pm0.0088 & 0.7756\pm0.0718 \\ \text{V1711552654} & 2012\text{-}087\text{T}14\text{:}28\text{:}33 & 125550. & +0.54 & 158.7 & 160.3 & 155.5 & 0.1686\pm0.0085 & 0.7824\pm0.0673 \\ \text{V1711552942} & 2012\text{-}087\text{T}14\text{:}33\text{:}20 & 122538. & +0.54 & 159.5 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V1711553290} & 2012\text{-}087\text{T}14\text{:}39\text{:}09 & 118925. & +0.54 & 160.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7671\pm0.0506 \\ \end{array}$	V1711549477	2012-087T13:35:36	160688.	+0.53	150.0	159.7	145.9	0.1372 ± 0.0069	0.8047±0.0710
$\begin{array}{c} \text{V}1711550399 & 2012\text{-}087\text{T}13\text{:}50\text{:}58 & 150143. & +0.53 & 152.5 & 159.9 & 148.7 & 0.1730\pm0.0088 & 0.7664\pm0.0644 \\ \text{V}1711550750 & 2012\text{-}087\text{T}13\text{:}56\text{:}49 & 146197. & +0.53 & 153.4 & 160.0 & 149.7 & 0.1684\pm0.0087 & 0.7741\pm0.0667 \\ \text{V}1711551038 & 2012\text{-}087\text{T}14\text{:}01\text{:}36 & 143000. & +0.53 & 154.2 & 160.1 & 150.6 & 0.1800\pm0.0084 & 0.7980\pm0.0651 \\ \text{V}1711551375 & 2012\text{-}087\text{T}14\text{:}07\text{:}14 & 139284. & +0.53 & 155.1 & 160.1 & 151.6 & 0.1886\pm0.0076 & 0.7620\pm0.0503 \\ \text{V}1711551663 & 2012\text{-}087\text{T}14\text{:}12\text{:}01 & 136148. & +0.53 & 155.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ \text{V}1711552021 & 2012\text{-}087\text{T}14\text{:}18\text{:}00 & 132278. & +0.53 & 156.9 & 160.2 & 153.6 & 0.1568\pm0.0088 & 0.7756\pm0.0718 \\ \text{V}1711552309 & 2012\text{-}087\text{T}14\text{:}22\text{:}47 & 129206. & +0.53 & 157.7 & 160.3 & 154.4 & 0.1701\pm0.0082 & 0.7697\pm0.0614 \\ \text{V}1711552942 & 2012\text{-}087\text{T}14\text{:}28\text{:}33 & 125550. & +0.54 & 158.7 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V}1711553290 & 2012\text{-}087\text{T}14\text{:}33\text{:}20 & 122538. & +0.54 & 159.5 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V}1711553290 & 2012\text{-}087\text{T}14\text{:}39\text{:}09 & 118925. & +0.54 & 160.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7671\pm0.0506 \\ \end{array}$	V1711549765	2012-087T13:40:24	157367.	+0.53	150.8	159.8	146.8	0.1514 ± 0.0057	0.7678 ± 0.0473
$\begin{array}{c} \text{V}1711550750 \\ \text{V}1711550750 \\ \text{Z}012-087\text{T}13:56:49 \\ \text{Z}012-087\text{T}14:01:36 \\ \text{Z}012-087\text{T}14:01:36 \\ \text{Z}012-087\text{T}14:07:14 \\ \text{Z}012-087\text{T}14:07:14 \\ \text{Z}012-087\text{T}14:07:14 \\ \text{Z}012-087\text{T}14:07:14 \\ \text{Z}012-087\text{T}14:07:14 \\ \text{Z}012-087\text{T}14:07:14 \\ \text{Z}012-087\text{T}14:12:01 \\ Z$	V1711550111	2012-087T13:46:10	153402.	+0.53	151.7	159.9	147.8	0.1749 ± 0.0083	0.7899±0.0640
$\begin{array}{c} \text{V}1711551038 & 2012\text{-}087\text{T}14\text{:}01\text{:}36 & 143000. & +0.53 & 154.2 & 160.1 & 150.6 & 0.1800\pm0.0084 & 0.7980\pm0.0651 \\ \text{V}1711551375 & 2012\text{-}087\text{T}14\text{:}07\text{:}14 & 139284. & +0.53 & 155.1 & 160.1 & 151.6 & 0.1886\pm0.0076 & 0.7620\pm0.0503 \\ \text{V}1711551663 & 2012\text{-}087\text{T}14\text{:}12\text{:}01 & 136148. & +0.53 & 155.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ \text{V}1711552021 & 2012\text{-}087\text{T}14\text{:}18\text{:}00 & 132278. & +0.53 & 156.9 & 160.2 & 153.6 & 0.1568\pm0.0088 & 0.7756\pm0.0718 \\ \text{V}1711552309 & 2012\text{-}087\text{T}14\text{:}22\text{:}47 & 129206. & +0.53 & 157.7 & 160.3 & 154.4 & 0.1701\pm0.0082 & 0.7697\pm0.0614 \\ \text{V}1711552654 & 2012\text{-}087\text{T}14\text{:}28\text{:}33 & 125550. & +0.54 & 158.7 & 160.3 & 155.5 & 0.1686\pm0.0085 & 0.7824\pm0.0673 \\ \text{V}1711552942 & 2012\text{-}087\text{T}14\text{:}33\text{:}20 & 122538. & +0.54 & 159.5 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V}1711553290 & 2012\text{-}087\text{T}14\text{:}39\text{:}09 & 118925. & +0.54 & 160.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7671\pm0.0506 \\ \end{array}$	V1711550399	2012-087T13:50:58	150143.	+0.53	152.5	159.9	148.7	0.1730 ± 0.0088	0.7664±0.0644
$\begin{array}{c} \text{V}1711551375 \\ \text{V}1711551663 \\ \text{Z}012-087\text{T}14:12:01 \\ \text{Z}012-087\text{T}14:12:01 \\ \text{Z}012-087\text{T}14:12:01 \\ \text{Z}012-087\text{T}14:12:01 \\ \text{Z}012-087\text{T}14:13:00 \\ \text{Z}012-087\text{T}14:13:00 \\ \text{Z}012-087\text{T}14:13:00 \\ \text{Z}012-087\text{T}14:13:00 \\ \text{Z}012-087\text{T}14:13:00 \\ \text{Z}012-087\text{T}14:22:47 \\ \text{Z}012-087\text{T}14:22:47 \\ \text{Z}012-087\text{T}14:22:47 \\ \text{Z}012-087\text{T}14:23:33 \\ \text{Z}012-087\text{T}14:23:33 \\ \text{Z}012-087\text{T}14:23:33 \\ \text{Z}012-087\text{T}14:23:33 \\ \text{Z}012-087\text{T}14:23:34 \\ \text{Z}012-087\text{T}14:23:30 \\ \text{Z}012-087\text{T}14:23:30 \\ \text{Z}012-087\text{T}14:33:20 \\ Z$		2012-087T13:56:49	146197.	+0.53	153.4	160.0	149.7	0.1684 ± 0.0087	0.7741±0.0667
$\begin{array}{c} \text{V1711551663} & 2012\text{-}087\text{T}14\text{:}12\text{:}01 & 136148. & +0.53 & 155.9 & 160.2 & 152.5 & 0.1531\pm0.0096 & 0.7698\pm0.0776 \\ \text{V1711552021} & 2012\text{-}087\text{T}14\text{:}18\text{:}00 & 132278. & +0.53 & 156.9 & 160.2 & 153.6 & 0.1568\pm0.0088 & 0.7756\pm0.0718 \\ \text{V1711552309} & 2012\text{-}087\text{T}14\text{:}22\text{:}47 & 129206. & +0.53 & 157.7 & 160.3 & 154.4 & 0.1701\pm0.0082 & 0.7697\pm0.0614 \\ \text{V1711552654} & 2012\text{-}087\text{T}14\text{:}28\text{:}33 & 125550. & +0.54 & 158.7 & 160.3 & 155.5 & 0.1686\pm0.0085 & 0.7824\pm0.0673 \\ \text{V1711552942} & 2012\text{-}087\text{T}14\text{:}33\text{:}20 & 122538. & +0.54 & 159.5 & 160.3 & 156.3 & 0.1705\pm0.0105 & 0.7617\pm0.0754 \\ \text{V1711553290} & 2012\text{-}087\text{T}14\text{:}39\text{:}09 & 118925. & +0.54 & 160.5 & 160.4 & 157.4 & 0.1833\pm0.0074 & 0.7671\pm0.0506 \\ \end{array}$	V1711551038	2012-087T14:01:36	143000.	+0.53	154.2	160.1	150.6	0.1800 ± 0.0084	0.7980 ± 0.0651
$\begin{array}{c} \text{V}1711552021 \\ \text{V}1711552021 \\ \text{Z}012-087\text{T}14:18:00 \\ \text{Z}012-087\text{T}14:22:47 \\ \text{Z}012-087\text{T}14:22:47 \\ \text{Z}012-087\text{T}14:22:47 \\ \text{Z}012-087\text{T}14:23:30 \\ \text{Z}012-087\text{T}14:23:31 \\ \text{Z}012-087\text{T}14:23:32 \\ \text{Z}012-087\text{T}14:33:20 \\ Z$	V1711551375	2012-087T14:07:14	139284.	+0.53	155.1	160.1	151.6	$0.1886 {\pm} 0.0076$	0.7620 ± 0.0503
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1711551663	2012-087T14:12:01	136148.	+0.53	155.9	160.2	152.5	0.1531 ± 0.0096	0.7698 ± 0.0776
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1711552021	2012-087T14:18:00	132278.	+0.53	156.9	160.2	153.6	0.1568 ± 0.0088	0.7756±0.0718
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1711552309	2012-087T14:22:47	129206.	+0.53	157.7	160.3	154.4	0.1701 ± 0.0082	0.7697±0.0614
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	V1711552654	2012-087T14:28:33	125550.	+0.54	158.7	160.3	155.5	0.1686 ± 0.0085	0.7824±0.0673
	V1711552942	2012-087T14:33:20	122538.	+0.54	159.5	160.3	156.3	0.1705 ± 0.0105	0.7617±0.0754
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	V1711553290	2012-087T14:39:09	118925.	+0.54	160.5		157.4	0.1833 ± 0.0074	0.7671±0.0506
	V1711553578	2012-087T14:43:56	115974.	+0.53	161.3	160.4	158.2	0.1821 ± 0.0061	0.7700 ± 0.0435