Characteristics of planetary candidates observed by *Kepler*, II: Analysis of the first four months of data

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Abstract. On 1 February 2011 the *Kepler* Mission released data for 156,453 stars observed from the beginning of the science observations on 2 May through 16 September 2009. There are 1235 planetary candidates with transit like signatures detected in this period. These are associated with 997 host stars. Distributions of the characteristics of the planetary candidates are separated into five class-sizes; 68 candidates of approximately Earth-size ($R_p < 1.25$ $R_\oplus$), 288 super-Earth size (1.25 $R_\oplus < R_p < 2$ $R_\oplus$), 662 Neptune-size (2 $R_\oplus$, $< R_p < 6$ $R_\oplus$), 165 Jupiter-size (6 $R_\oplus < R_p < 15$ $R_\oplus$), and 19 up to twice the size of Jupiter (15 $R_\oplus < R_p < 22$ $R_\oplus$). In the temperature range appropriate for the habitable zone, 54 candidates are found with sizes ranging from Earth-size to larger than that of Jupiter. Five are less than twice the size of the Earth. Over 74% of the planetary candidates are smaller than Neptune. The observed number versus size distribution of planetary candidates increases to a peak at two to three times Earth-size and then declines inversely proportional to area of the candidate. Our current best estimates of the intrinsic frequencies of planetary candidates, after correcting for geometric and sensitivity biases, are 6% for Earth-size candidates, 7% for super-Earth size candidates, 17% for Neptune-size candidates, and 4% for Jupiter-size candidates. Multi-candidate, transiting systems are frequent; 17% of the host stars have multi-candidate systems, and 33.9% of all the candidates are part of multi-candidate systems.

Keywords: Exoplanets, *Kepler* Mission

1. Introduction

Kepler is a Discovery-class mission designed to determine the frequency of Earth-size planets in and near the habitable zone (HZ) of solar-type stars. Details of the *Kepler* Mission and instrument can be found in Koch *et al*. (2010b), Jenkins *et al*. (2010c), and Caldwell *et al*. (2010). All data through 16 September 2009 are now available to the public through the Multi-Mission Archive (MAST[1]) at the Space Telescope Science Institute for analysis by the community.

Based on the first 43 days of data, five exoplanets with sizes between 0.37 and 1.6 Jupiter radii and orbital periods from 3.2 to 4.9 days were recognized and then confirmed by radial velocity observations during the 2009 observing season (Borucki *et al*. 2010, Koch *et al*. 2010a, Dunham *et al*. 2010, Jenkins *et al*. 2010a, and Latham *et al*. 2010). Ten more planets orbiting a total of 3 stars have subsequently been announced (Holman et al., 2010, Torres et al. 2011, and Batalha et al. 2011, Lissauer et al. 2011a).

Because of great improvements to the data-processing pipeline, many more candidates are much more visible than in the data used for the papers published in early 2010. When *Kepler's* first major exoplanet data release occurred on 15 June 2010, 706 targets stars had candidate exoplanets (Borucki et al. 2010). In this data release we identify 997 stars with a total of 1235 planetary candidates that show transit-like signatures in the first 132 days of data. Seventeen are over twice as large as Jupiter and 18 show only one transit. The single-transit candidates are not discussed here, but are listed in Table 2 where their characteristics are presented. This leaves 979 stars with candidates.A list of false positive events found in the released data is also included in the tables with a brief note explaining the reason for classification as a false positive. All false positives are also archived at the MAST. A total of 1202 planetary candidates are discussed herein.

[1] http://archive.stsci.edu/*Kepler*/data_search/search.php

The algorithm that searches for patterns of planetary transits also finds stars with multiple planet candidates. A separate paper presents an analysis of five of these candidates (Steffen *et al*. 2010). Data and search techniques capable of finding planetary transits are also very sensitive to eclipsing binary (EB) stars, and indeed the number of EBs discovered with *Kepler* exceeds the number of planetary candidates. With more study, some of the current planetary candidates might also be shown to be EBs and some planetary candidates or planet might be discovered orbiting some of the EBs. Prsa *et al*. (2010) present a list of EBs with their basic system parameters that have been detected in these early data.

2. Description of the Data

Data for all stars are recorded at a cadence of one per 29.4244 minutes (hereafter, long cadence, or LC). Data for a subset of up to 512 stars are also recorded at a cadence of one per 58.85 seconds (hereafter, short cadence or SC), sufficient to conduct asteroseismic observations needed for measurements of the stars' sizes, masses, and ages. The results presented here are based only on LC data. For a full discussion of the LC data and their reduction, see Jenkins *et al*. (2010b, 2010c). See Gilliland *et al*. (2010) for a discussion of the SC data.

The results discussed in this paper are based on three data segments; the first segment (labeled Q0) was taken during commissioning operations; the second data segment (labeled Q1) taken at the beginning of science operations that started on 13 May 2009 UT and finished on 15 June 2009 UT; and a third segment (labeled Q2) starting on 15 June and finishing on 17 September 2009. The durations of the segments are; 9.7, 33.5, and 93 days, respectively. A total of 156,097 LC targets in Q1 and 166247 LC and 1492 SC targets were observed in Q2. The stars observed in Q2 were mainly a superset of those observed in Q1. These data have been processed with SOC pipeline 6.2 and archived at the MAST. Originally, the bulk of these data were scheduled for release on 15 June 2011, but the exoplanet targets are being released early, so 165470 LC and 1478 SC targets will be publically available on or before 1 February 2011. The remaining few targets have a proprietary user other than the *Kepler* science team (e.g., guest observers). Data for these targets will become public by 15 June 2011. The current release date and the proprietary owner for each target are publically posted at MAST as soon as the data enter the archive, which occurs about four months after data acquisition for the quarter in question is complete.

The results reported here are for the LC observations of exoplanet target stars. A total of 153,196 stars observed during Q2 were used for the calculations presented here. Other stars were giants or super-giant, did not have valid parameter values, or were in some way inappropriate to the discussion of the exoplanet search. The enlarged set of stars observed in Q2 included most of the stars observed in Q1and additional stars due to the more efficient use of the available pixels. The selected stars are primarily main sequence dwarfs chosen from the *Kepler* Input Catalog[27] (KIC). Targets were chosen to maximize the number that were both bright and small enough to show detectable transit signals for small planets in and near the habitable zone (HZ) (Batalha *et al*. 2010b). Most stars were in the *Kepler* magnitude range $9 < Kp < 16$. The *Kepler* band pass covers both the V and R photometric pass bands (Figure 1 in Koch et al. 2010b). See the discussion in Batalha et al. (2010a).

[27] http://archive.stsci.edu/*Kepler*/*Kepler*_fov/search.php

2.1 Noise Sources in the Data

The *Kepler* photometric data contain a wide variety of both random and systematic noise sources. These sources and others are discussed in Jenkins *et al*. (2010b) and Caldwell *et al*. (2010). Work is underway to improve the mitigation and flagging of the affected data. Stellar variability over the periods similar to transit durations is also a major source of noise.

Because of the complexity of the various small effects that are important to the quality of the *Kepler* data, prospective users of *Kepler* data are strongly urged to study the data release notes (available at the MAST) for the data sets they intend to use. Note that the *Kepler* data analysis pipeline was designed to perform differential photometry to detect planetary transits, so other uses of the data products require caution.

2.2 Distinguishing Planetary Candidates from False Positive Events

Observed patterns of transits consistent with those from a planet transiting its host star are labeled "planetary candidates." (In a few cases, a single drop in brightness that had a high SNR and was of the form of a transit was sufficient to identify a planetary candidate.) Those that were at one time considered to be planetary candidates but subsequently failed some consistency test are labeled "false positives". Thus the search for planets starts with a search of the time series of each star for a pattern that exceeds a detection threshold commensurate with a non-random event. After passing all consistency tests described below, and only after a review of all the evidence by the entire *Kepler* Science Team, does the candidate become a *confirmed* or *validated* exoplanet. Steps such as high-precision radial velocity (RV) measurements (Borucki *et al*. 2010, Koch *et al*. 2010a, Dunham *et al*. 2010, Jenkins *et al*. 2010a, and Latham *et al*. 2010), or transit timing variations (Holman et al 2010, Lissauer et al. 2011a) are used when practical. When dynamical analysis cannot be used to *confirm* an exoplanet, an extensive analysis of spacecraft and ground-based data may allow *validation* of an exoplanet by showing that the planetary interpretation is at least 100 times as probable as a false positive (Torres et al. 2011, Lissauer et al. 2011a). This paper does not attempt to promote the candidates discussed herein to validated or confirmed exoplanets, but rather documents the full set of current candidates and the many levels of steps toward eventual validation, or in some cases, rejection as a planet that have been taken.

There are two general types of processes that cause false positive events in the *Kepler* data. These must be evaluated and excluded before a candidate planet can be considered a valid discovery: 1) statistical fluctuations or systematic variations in the time series, and 2) astrophysical phenomena that produce similar signals. A sufficiently high detection threshold (i.e., 7σ) was chosen such that the totality of data from Q0 thru Q5 (end date 23 June 2010) provides an expectation of fewer than 1 false positive event due to statistical fluctuations over the ensemble of all stars for entire mission duration. Similarly, systematic variations in the data have been interpreted in a conservative manner and only rarely should result in false positives. However, astrophysical phenomena that produce transit-like signals are common.

2.3 Search for False Positives in the Output of the Data Pipeline

The Transiting Planet Search (TPS) pipeline searches through each systematic error-corrected flux time series for periodic sequences of negative pulses corresponding to transit signatures. The approach is a wavelet-based, adaptive matched filter that characterizes the power spectral density (PSD) of the background process yielding the observed light curve and uses this time-variable PSD estimate to realize a pre-whitening filter and whiten the light curve (Jenkins 2002, Jenkins et al. 2010c,d). TPS then convolves a transit waveform, whitened by the same pre-whitening filter as the data, with the whitened data to obtain a time series of single event statistics. These represent the likelihood that a transit of that duration is present at each time step. The single event statistics are combined into multiple event statistics by folding them at trial orbital periods

ranging from 0.5 days to as long as one quarter (~93 days). Automated identification of candidates with periods longer than one quarter will be done by the pipeline in the coming months, but is currently done by *ad hoc* methods. The ad hoc methods produced many of the KOI with numbers larger than 1000, but might cause a bias against candidates with periods longer than one quarter. For a more comprehensive discussion of the data analysis, see Wu et al (2010) and Batalha et al (2010c).

After automatic identification with TPS or *ad hoc* detection of longer period candidates, the light curves of potential planet candidates were modeled and examined by eye to determine the gross viability of the candidate. If the potential candidate was not an obvious variable star or eclipsing binary showing significant ellipsoidal variation the candidate was elevated to Kepler Object of Interest (KOI) status, given a KOI number (see section 3.1) and was subjected to tests described in the next paragraphs. After passing these tests, the KOI is forwarded to the Follow-up Observation Program (FOP) for various types of observations and additional analysis. See the discussion in Gautier et al. (2010) and Bryson et al. (2011).

Using these estimates and information about the star from the KIC, tests are performed to search for a difference in even- and odd-numbered event depths. If a significant difference exists, this suggests that a comparable-brightness EB has been found for which the true period is twice the period initially determined due to the presence of primary and secondary eclipses. Similarly, a search is conducted for evidence of a secondary eclipse or a possible planetary occultation roughly halfway between the potential transits. If a secondary eclipse is seen, then this could indicate that the system is an EB with the period assumed. However, the possibility of a self-luminous planet (as with HAT-P-7; Borucki *et al.* 2009) must be considered before dismissing a candidate as a false positive.

A very sensitive validation technique that is used on all candidates is to determine the relative position of the image centroid during and outside of the transit epoch. The shift in the centroid position of the target star measured in and out of the transits must be consistent with that predicted from the fluxes and locations of the target and nearby stars. (See Bryson et al. 2011.)

Many false positives due to background eclipsing binaries (BGEBs) are not detected by the pipeline techniques described above, for example if their secondary transit signals are so weak that they are lost in the noise. The term “eclipsing binaries”, as distinct from BGEBs, are gravitationally-bound, multi-star targets and are usually detected by the secondary eclipse or RV observations. A post-processing examination uses an average difference image formed by subtracting the pixels during transit from the pixels out of transit. A pixel response function fit to this difference image provides a direct sub-pixel measurement of the transit source location on the sky (Torres et al. 2011). When the measured position of the transit source does not coincide with the target star the most common cause will be a BGEB false positive, although for strongly blended targets in the direct image further analysis is necessary to support this rejection. This method is capable of identifying BGEBs as close as about 1 arcsecond from the target star in favorable circumstances, even with *Kepler*'s 4-arcsecond pixel scale.

A much more comprehensive and intensive analysis has been done for the candidates listed here than was done for the data released in June 2010 (Borucki et al. 2011). Consequently the fraction of the candidates that are false positives in the active candidate list should be substantially smaller than the earlier estimate.

2.4 Development of a model to estimate the probability of an EB near the position of a candidate.

Low-mass planets, especially those in long-period orbits within the habitable zone have low amplitude RV signal levels that are often too small to be confirmed by current Doppler observation capabilities. Consequently, validation must be accomplished by the series of steps outlined above. An estimate is also made of the probability that an EB is present that is too near the target star to detect by adaptive optics (AO), speckle imaging, or centroid motion. The area number density of EBs is expected to be a constant fraction of all stars near the position of each target star. Because the area number density varies rapidly with Galactic latitude and because the *Kepler* FOV covers over 10° of latitude, predictions of the EB density also vary greatly over the FOV. Consequently, a model was constructed to estimate the probability per square arcsec that an EB is present in the magnitude range that would provide a signal with an amplitude similar to that of the candidate and at the position of each target star. The model is based on the fraction of stars observed by *Kepler* to be binary (Prsa et al. 2010), and it uses the number and magnitude distributions of stars from the Besancon model after correction from the V band to the *Kepler* band pass. The value is tabulated for each candidate.

Centroid analysis is conducted for each candidate that is unsaturated in the *Kepler* observations and follow up observations by AO and speckle imaging of the area near the target star are carried out for many candidates. AO observations in the infrared were conducted at the 4-m at Palomar Observatory and the 6.5 m at the MMT with ARIES; speckle observations were obtained at the WIYN 3.5m telescope. However, the area behind the star and immediately surrounding can conceal a BGEB that could imitate the candidate signature. The area that could conceal an EB varies with brightness of the target star because photon noise limitations to AO and speckle searches, but is of order 1 square arc sec. Model estimates of the *a priori* probability that an EB is present in the magnitude range that could mimic the transit signal range from 10^{-6} to 10^{-4}. Thus the estimated number of target locations that might have an EB too close to the star to be detected by AO or speckle imaging is 0.1 to 10 based on observations of 150,000 stars.

3. Results

The characteristics of the host stars and the candidates are summarized in Tables 1 and 2, respectively. A total of 1235 KOIs were found in the Q0 through Q2 data. Table 3 provides short notes on many of these KOIs. Table 4 lists the 511 candidates considered to be false positives; comments are included. The false positives have been removed from the list of candidates in Table 2. They are not used in the distributions discussed here. Those candidates estimated to have a diameter over twice that of Jupiter, were also removed from discussion. This leaves a total of 1202 candidates for consideration.

To provide the most accurate predictions for future observations, the values for the epoch and orbital period given in Table 2 are derived from all data currently available to the Kepler team; i.e., data obtained through Q5 (from 2 May 2009 through 23 June 2010) were used. For some candidates, reconnaissance spectra were taken with moderate exposures to look for double- and single-lined binaries. They are most useful in finding outliers for the stellar temperatures and log*g* listed in the KIC. Adaptive optics and speckle observations were taken to check for the presence of faint nearby stars that could be BGEBs or that could dilute the signal level. Flags also indicate the particularly interesting candidates for which radial velocity (RV) measurements of both extremely high precision (~ 2 m/s) or high precision (~ 10 m/s) observations were obtained. The last column of Table 2 indicates whether a note is available about that candidate in Table 3. For consistency, all values of the stellar parameters are derived from the Kepler Input Catalog.

3.1 Naming Convention

To avoid confusion in naming the target stars, host stars, planetary candidates, and confirmed/validated planets, the following naming convention has been used. Kepler stars are referred to as KIC NNNNNNN (with a space between the "KIC" and the number), where the integer refers to the ID in the *Kepler* Input Catalog archived at MAST. Confirmed planets are named Kepler followed by a hyphen, a number for the planetary system, and a letter designating the first, second, etc. confirmed planet as "b", "c", etc., for example Kepler-4b. Candidates are labeled *Kepler* Object of Interest ("KOI") followed by a decimal number. The two digits beyond the decimal provide identification of the candidates when more than one is found for a given star, e.g., KOI NNN.01, KOI NNN.02, KOI NNN.03, etc. For example KOI 377.03, the third transit candidate identified around star KOI 377, became Kepler 9d after validation (Torres et al. 2011). KOI numbers are always cross-referenced to a KIC ID. For a multi-candidate system these digits beyond the decimal indicate the order in which the candidates were identified by the analysis pipelines and are not necessarily in order of orbital period. It should be noted that the KOI list is not contiguous and not all integers have an associated KOI.

3.2 Estimate of false positive rate

While many of the candidates have been vetted through the steps described above, the process of determining the residual false positive fraction for *Kepler* candidates at various stages in the validation process has not proceeded far enough to make good quantitative statements about the expected true planet fraction, or reliability, of the released list. We can, however make rough estimates of the quality of the vetting that the KOIs have had. Several groups of KOIs in Table 2 are distinguished by the FOP ranking flag. These groups have had different levels of scrutiny for false positives and will therefore have different expectations for reliability.

KOIs with ranking of 1 are published planets with expected reliability above 98%. We are reluctant to state a higher reliability since unforeseen issues have led to retractions of apparently well-established planets in other planet detection programs.

KOIs with rankings of 2 and 3 have been subject to thorough analysis of their light curves to look for signs of eclipsing binary origin, analysis of centroid motion to detect BGEBs confused with their target stars, and varying degrees of spectroscopic and imaging follow-up observation from ground and space based observatories. These analyses and follow-up observations are generally sufficient to eliminate many stellar mass objects at or near the location of the target star as the source of the transit signal. The main sources of unreliability, false positives, among the rank 2 and 3 KOIs are likely to be BGEBs with angular separation from the target star too small to be detected by our centroid motion analysis, grazing eclipses in binary systems and eclipsing stars in hierarchical multiple systems where stellar and giant planet size transit depths are diluted by the light of other system components. Note that spectroscopy, even at low signal-to-noise such as the reconnaissance spectra we are pursuing, easily rules out grazing eclipsing binaries, as they would show RV variations of tens of km/s. However, those KOIs in Table 2 without a flag=1 in the FOP column did not have such spectroscopy, leaving open the possibility of such grazing eclipsing binaries.

For bright unsaturated stars with Kp $\leq$ 11.5 and transit depths strong enough to provide overall detection significances of 20σ and more, the limiting angular separation for the current centroid motion analysis is about 1 arcsec. This limit becomes significantly larger for fainter stars and/or low-amplitude transit signals associated with smaller planets. For these signal levels, the transit significance of ~10σ supports a centroid motion analysis constraint on the inner detection limit of about 3 arcsec. These inner detection angles of 1 to 3 arcsecs are quoted as 3σ angles beyond which high confidence of discriminating against BGEBs exists. High resolution imaging provided

additional reduction of the effective inner detection angle for about 100 of the rank 2 KOIs. We expect 10% of the BGEBs to remain in the rank 2 list. KOIs were given a rank of 3 when the centroid motion analysis or follow-up spectroscopy was ambiguous so that the KOI could not be definitely declared a false positive. We estimate that as many as 30% false positives could remain among the rank 3 KOIs.

About 12% of star systems in the solar neighborhood are found to be triple, or of higher multiplicity, hierarchical systems (Raghavan et al. 2010); a similar fraction is expected to appear in the *Kepler* target list. Only a small percentage of the hierarchical systems will produce eclipses that are seen by *Kepler* and many of these signals can be identified as binary star eclipses by examination of their light curve. From the rare occurrence rate of EBs and the also rare occurrence rate of triple star systems, the fraction of KOIs that are triple systems with an EB is expected to be less than 5%.

A potentially more frequent type of misidentification in a hierarchical system is a planet transiting in a binary system. If the double nature of the star system is not identified, dilution of the planetary transit by the second star will result in miscalculation of the planet size. Raghavan et al. (2010) give the binary star system fraction as 34%, but little is yet known about the frequency of planets in binary systems and, again, only a small fraction of planets in binary systems will transit. Adopting Raghavan et al.'s occurrence rate of binary stars, and assuming the typical number of planets per star system doesn't depend on the multiplicity of the system, we expect that up to 34% of the KOIs represent planets of larger radius than indicated in Table 2. The distribution of the amounts of dilution cannot be easily determined as it depends on two effects, namely the distribution of the ratio of star brightnesses and the distribution of planet sizes that transit one (or the other) of the two stars in the binary system. Estimating these planet-transit effects in binary systems requires knowledge of the systematic dependence of planet size on orbital distance, a chicken-and-egg problem that we cannot easily resolve at present. For binaries in which the transiting planet orbits the primary star, the dilution will be less than 50% flux. But for binaries in which the transiting object (planet or star) orbits the fainter secondary star, the transiting object's radius can be arbitrarily larger than that stated in Table 2.

Considering all sources of remaining false positives we expect the list of rank 2 KOIs to be >80% reliable and the rank 3 list to be >60% reliable. A careful assessment of false positive scenarios, especially background and gravitationally bound eclipsing binaries and planets, suggests that 90% to 95% of the Kepler planet candidates are indeed true planets (Morton & Johnson 2011). This agrees with our best estimates.

Rank 4 KOIs have had scant examination of their light curves and no follow-up observation and were therefore subject only to centroid motion analysis. We expect the reliability of rank 4 KOIs to be similar to that of rank 3.

3.3 Statistical Properties of Planet Candidates

We conducted a statistical analysis of the 1202 candidates to investigate the general trends and initial indications of the characteristics of the planetary candidates. The list of candidates was augmented with known planets in the field of view. In particular, TrES-2, HAT-P7b, HAT-P11b, (Kepler-1b, -2b, -3b, respectively), Kepler-4b-8b (Borucki *et al*. 2010, Koch *et al*. 2010a, Dunham *et al*. 2010, Latham *et al*. 2010a, and Jenkins *et al*. 2010). Kepler-9bcd (Holman et al. 2010, Torres et al. 2011), Kepler-10b (Batalha et al. 2011), and Kepler-11b-g (Lissauer et al. 2011a) were included. However one candidate identified by a guest observer (KOI 824.01) is included in the list of candidates but is not used in the graphs and statistics because it wasn't in the range of parameters chosen for the search. As noted above, not all candidates appearing in

Table 2 were used in the statistical analysis or in the graphical associations shown in the figures: Candidates greater than twice the size of Jupiter were excluded. The figures are indicative of the properties and associations of candidates with various parameters, but are not meant to be definitive.

The readers are cautioned that the sample contains many poorly quantified biases. Obviously some of the released candidates could be false positives, but other characteristics such as stellar radius, magnitude, noise spectrum, and analysis protocols can all play significant roles in the statistical results. Nevertheless, the large number of candidates provides interesting, albeit tentative, associations with stellar properties. Comparisons are limited to orbital periods of ≤ 125 days. No correction is made to the frequency plots due to the linearly decreasing probability of a second transit occurring during the Q0 through Q2 period because data for following quarters were used to calculate the epochs and periods for all candidates that showed at least one transit in the Q0 through Q2 period. In the figures below, the distributions of various parameters are plotted and compared with values in the literature and those selected from the Extrasolar Planets Encyclopedia[2] (EPE; values as of 7 December 2010). We consulted the literature to identify those planets discovered by the RV method and excluded those discovered by the transit method. This step avoids biasing the RV-discovered planets with the short-period planets that are often found by the transit method.

The results discussed here are primarily based on the observations of stars with Kp < 16, with effective temperature below 9500 K, and with size less than ten times the solar radius. The latter condition is imposed because the photometric precision is insufficient to find Jupiter-size and smaller planets orbiting stars with 100 times the area of the Sun. Stellar parameters are based on KIC data. The function of the KIC was to provide a target sample with a high fraction of dwarf stars that are suitable for transit work, and to provide a first estimate of stellar parameters that is intended to be refined spectroscopically for KOI targets at a later time. Although post-identification reconnaissance spectroscopic observations have been made for more than half of the stars with candidates, it is important to recognize that some of the characteristics listed for the stars are still uncertain, especially surface gravity (i.e., log g) and metallicity ([M/H]). The errors in the stellar diameters can reach 25%, with proportional changes to the estimated diameter of the candidates.

In Figure 1, the stellar distributions of magnitude and effective temperature are given for reference. In later figures, the association of the candidates with these properties is examined.

[2] Extrasolar Planet Encyclopedia; http://exoplanet.eu/

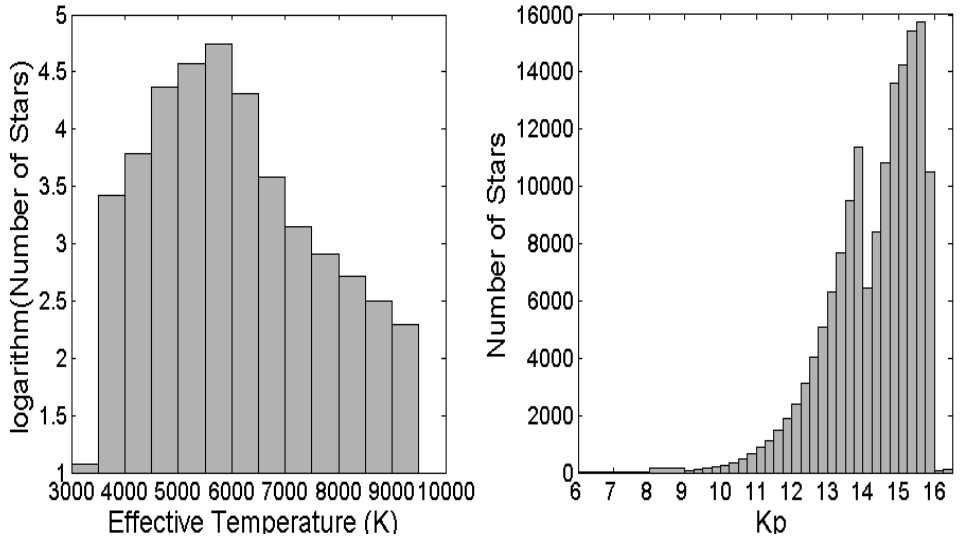

Figure 1. Distributions of effective temperature and magnitude for the stars observed during Q2 and considered in this study. Bin size for left panel is 500 K. The bin size for right hand panel is one magnitude from 6 to 9 and 0.25 mag from 9 to 16.5.

It is clear from the left panel in Figure 1 that most of the stars monitored by *Kepler* have temperatures between 4000 and 6500 K; they are mostly late F, G and K spectral types. Because of their faintness, only 2510 stars cooler than 4000 K (i.e., dwarf stars of spectral type M) were monitored. Although cooler stars are more abundant, hotter stars are the most frequently seen for a magnitude-limited survey of dwarfs.

The selection of target stars was purposefully skewed to enhance the detectability of Earth-size planets by choosing those stars with an effective temperature and magnitude that maximized the transit signal-to-noise ratio (SNR) (Batalha et al. 2010b). The step decrease seen in the right hand panel of figure 1 at Kepler magnitude (Kp) equal 14.0 and turnover near Kp = 15.5 are due to the selection of only those stars in the FOV bright enough and small enough to show terrestrial-size planets. The faintest stars tend to be the coolest M-type dwarfs -- stars that have been identified not only statistically, but also by including a) proper-motion K and M dwarfs from the LSPM-North catalog (Lepine & Shara 2005), b) stars with Hipparcos parallaxes that confirm their Main Sequence status, and c) M-dwarfs from the Gliese catalog. Early analyses noted the importance of including the coolest Main Sequence stars in spite of their intrinsic faintness (Jenkins & Doyle 2003; Gould et al. 2003). At the lower left of the right hand chart, the bin size has been increased to show the small number of candidates brighter than Kp = 9. *In the following figures, the bias introduced by the stellar size- and magnitude distributions must always be considered.*

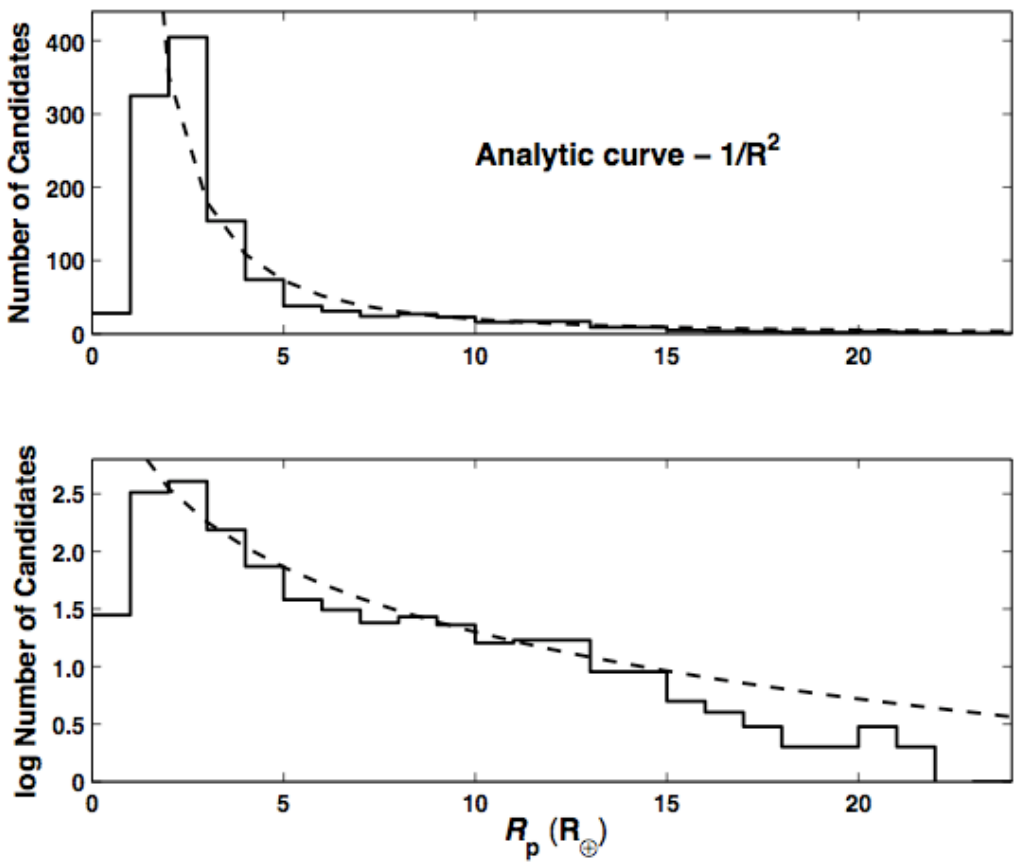

Figure 2. Size distribution of the number of *Kepler* candidates vs. planet radius (R_p) (upper panel). The logarithm of the number of candidates is presented in the lower panel to better show the tail of the distribution. Bin sizes in both panels are 1 $R_\oplus$.

As noted in Borucki et al. (2011), the results shown in Figure 2 imply that small candidate planets are much more common than large candidate planets. Of the 1202 candidates considered for the analysis, 69% are smaller than Neptune (R_p= 3.8 $R_\oplus$). Table 5 shows the observed distribution and the definition of sizes used throughout the paper for these 1202 candidates. Seventeen candidates with sizes greater than twice that of Jupiter were not used in the statistical analyses, but are listed in the tables of candidate characteristics. They were rejected because they are larger than many M dwarf stars, and these candidates are thus likely to be stars.

As shown in Figure 2, a R_p^{-2} curve fits the Kepler data well for planet sizes greater than 3 $R_\oplus$, including the large-candidate-sizes tail of the distribution. The data shown here are restricted to orbital periods ≤ 125 days. Because it is much easier to detect larger candidates than smaller ones, this result implies that the frequency of candidates decreases with the area of the candidate, assuming that the false positive rate, completeness, and other biases are independent of candidate size for candidates larger than 2 Earth radii. However, the current survey is not complete, especially for the fainter stars, smallest candidates, and long orbital periods, and further observations could influence the distribution.

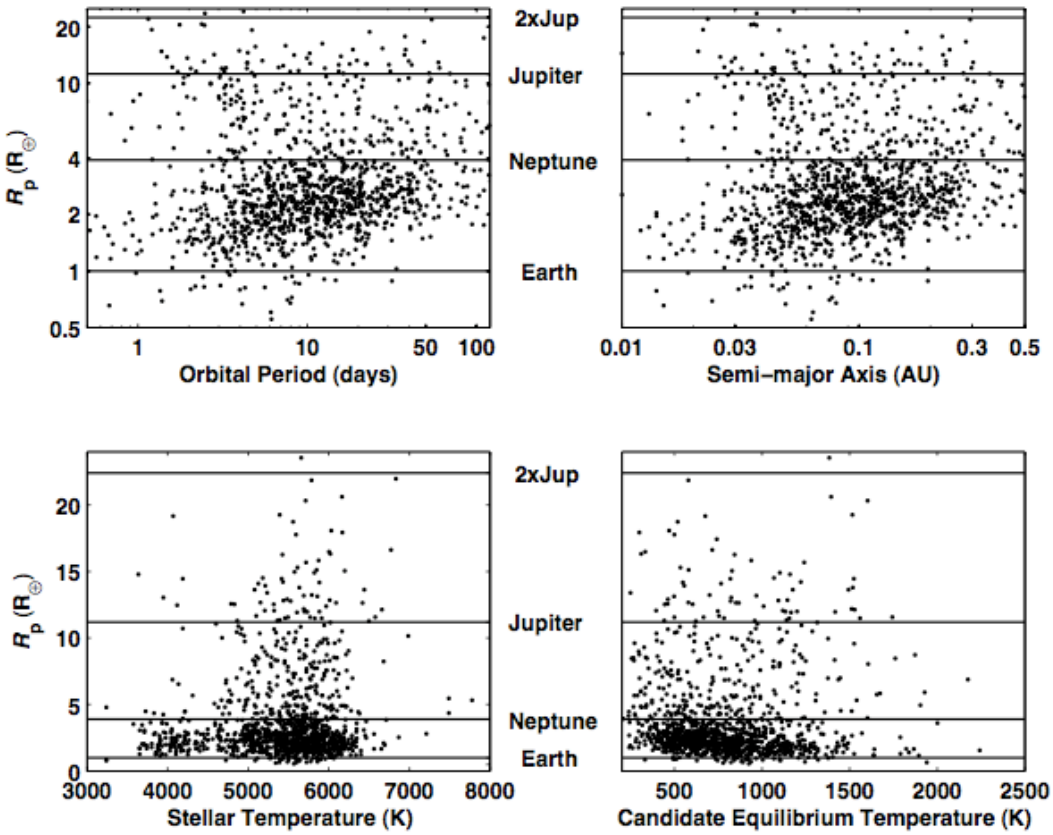

Figure 3. Candidate size versus orbital period, semi-major axis, stellar temperature, and candidate equilibrium temperature. Horizontal lines mark ratios of candidate sizes for Earth-size, Neptune-size , and Jupiter-size relative to Earth-size. Upper panels are log-log plots to better distribute the data.

Figure 3 presents scatter plots showing the size of individual candidates versus orbital period, semi-major axis, stellar temperature, and candidate temperature. To avoid the presentations being dominated by outliers, the values on the abcissa have limited to show only the most populous range. Outliers can be found in the table of candidates. The upper left panel shows a concentration (in log-log space) of candidates for orbital periods between 3 and 10 days and sizes between 1 and 4 $R_\oplus$. The upper right panel shows a similar concentration, but also shows a nearly empty area to the lower right that likely represents the lack of small candidates caused by the lower detectability of small candidates in long period orbits.

All panels in Figure 3 show a scarcity of candidates with radius R_p smaller than 1 $R_\oplus$. The paucity of small candidates at even the shortest orbital periods may be due in part to a decrease in the actual distribution, but part if not all of it is due to incompleteness for the smaller signals, coupled with analysis of only a portion of the eventually expected *Kepler* data, and higher than expected noise levels. The modestly higher noise levels than those anticipated are thought to follow primarily from an underestimate of intrinsic stellar noise and are the topic of an on-going study.

Table 5. Number of Candidates versus Size.

Candidate Label	Candidate Size ($R_\oplus$)	Number of Candidates plus known planets
Earth-size	$R_p \leq 1.25$	68
super-Earth-size	$1.25 < R_p \leq 2.0$	288
Neptune-size	$2.0 < R_p \leq 6.0$	662
Jupiter-size	$6.0 < R_p \leq 15$	165
very-Large-size	$15.0 < R_p \leq 22.4$	19
Not considered	$R_p > 22.4$	15

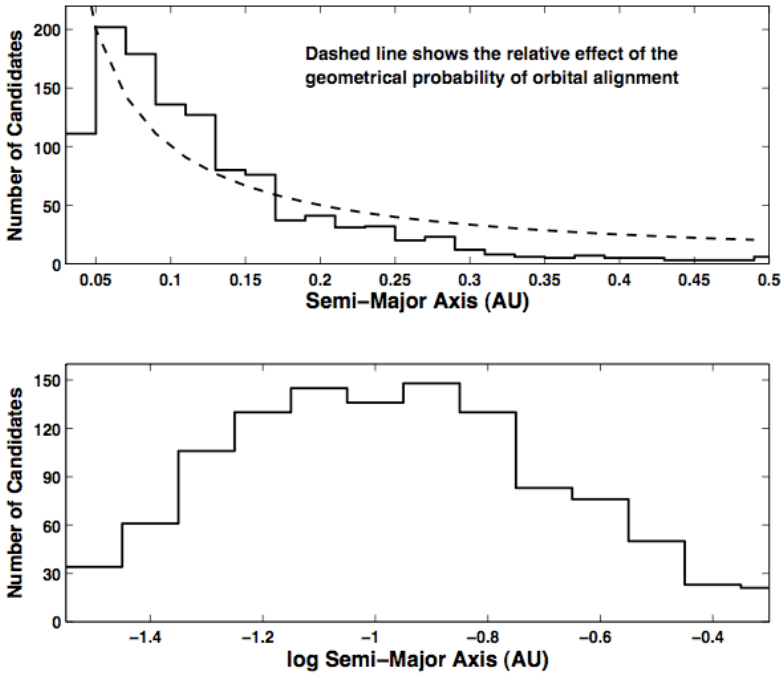

Figure 4. Upper panel: The number of candidates vs. linear intervals in the semi-major axis. The dashed line shows the relative effect of geometricical probability of alignment Lower panel: The number of candidates vs. logarithmic intervals of the semi-major axis. Bin size is 0.02 AU in the upper panel and 0.1 in the lower panel.

In Figure 4, the dependence of the number of candidates on the semi-major axis is examined. For *a* less than 0.04 AU, it is evident that the distribution is severely truncated. As is evident in Figure 5, this feature is present in each of the candidate size groups. In the upper panel of Figure 4, an analytic curve has been fit to show the expected reduction in the integrated number in each interval due to the decreasing geometrical probability that orbits are aligned with the line-of-sight. It has been fit over the range of semi-major axis from 0.04 to 0.5 AU, corresponding to orbital periods from 3 days to 125 days for a solar-mass star. The fit is fair-to-poor implying that the distribution is not constant with semi-major axis after a correction for the alignment probability.

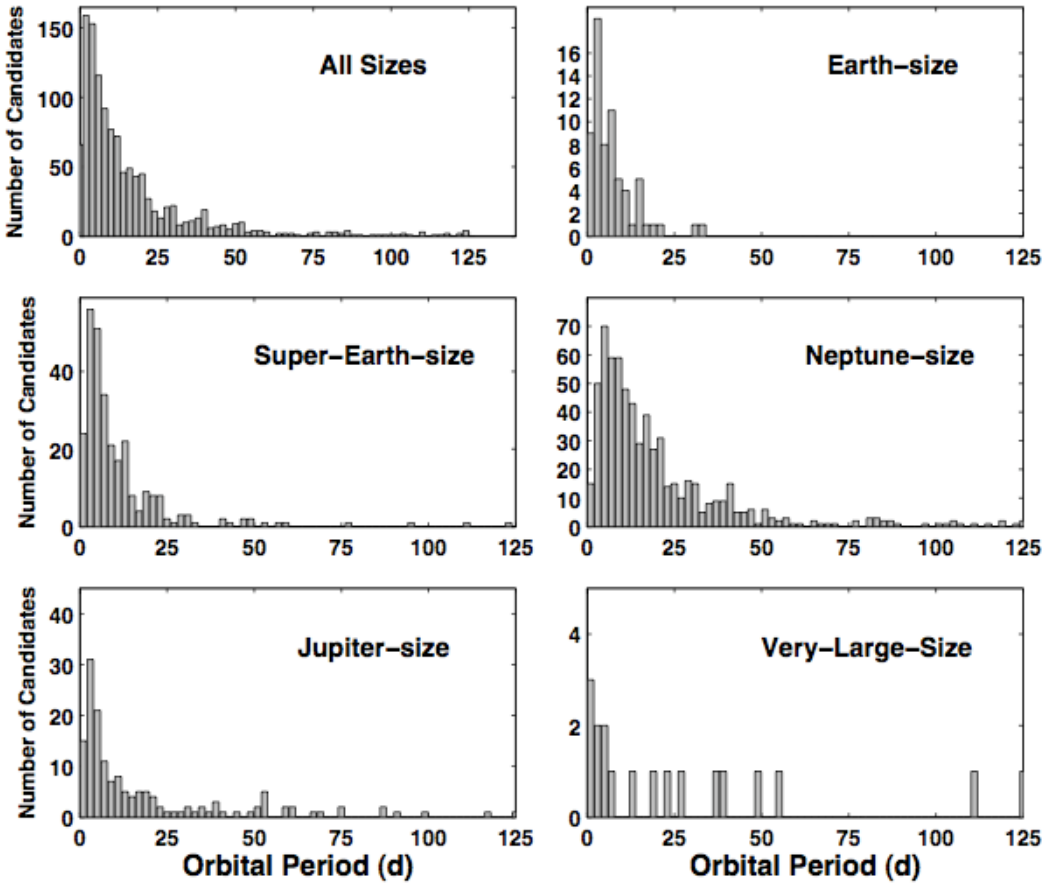

Figure 5. Number of candidates vs orbital period for several choices of candidate size. Bin size is 2 days. Refer to Table 5 for the definition of each size category.

The panels in Figure 5 show that the period distributions of the candidates of Neptune-size and super-Earth-size candidates have much larger abundances relative to Jupiter-size candidates in the period range from one week to one month as compared to periods of < 6 days. All show maxima in the number of candidates for orbital periods between 2 to 5 days for all sizes and a narrow dip at periods shorter than two days. (The small number of very-Large candidates might be the reason for the lack of a local minimum at the shortest orbital periods.) However these objects are as large as late M-dwarf stars and it is unclear what type of object they represent. Determination of their masses with RV techniques is clearly warranted because the results would not only provide masses, but densities as well when combined with the transit results.

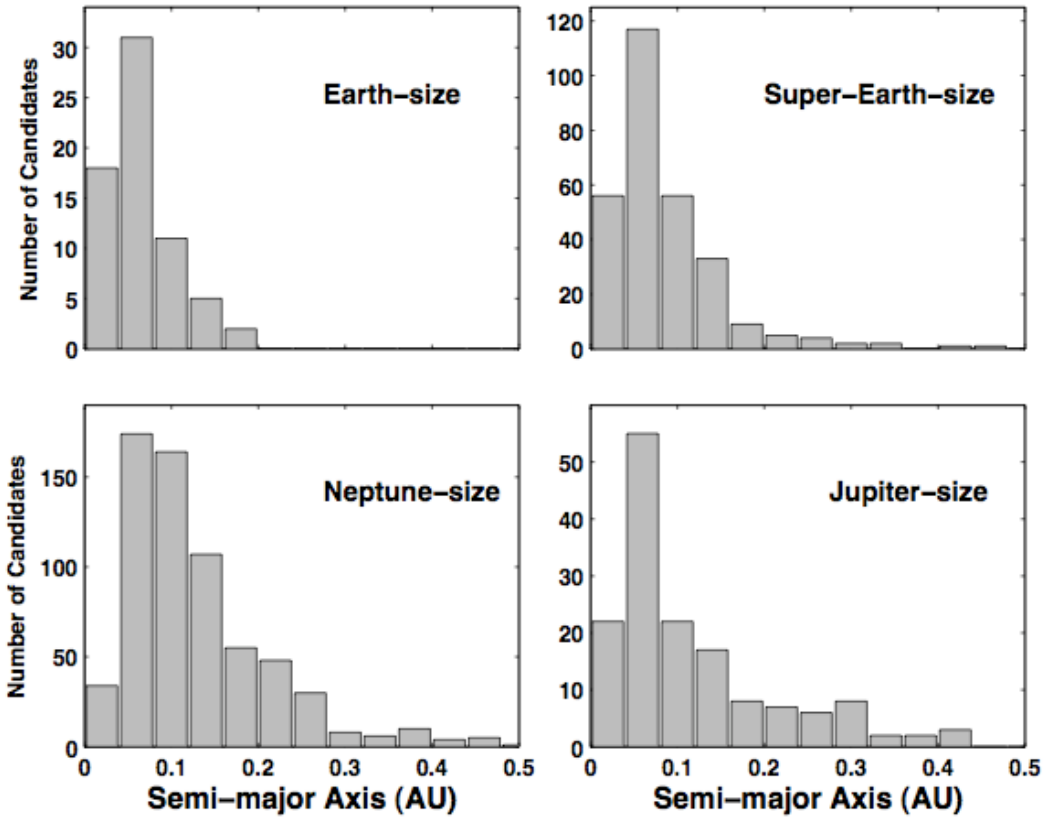

Figure 6. Number of observed candidates versus semi-major axis for four candidate size ranges. As defined in Table 5, Earth-size refers to $R_p < 1.25$ $R_\oplus$, super-Earth-size to 1.25 $R_\oplus < R_p < 2$ $R_\oplus$, Neptune-size to 2 $R_\oplus$, $< R_p < 6$ $R_\oplus$, and Jupiter-size refers to 6 $R_\oplus < R_p < 15$ $R_\oplus$. Bin size for the semi-major axis is 0.04 AU.

A breakout of the number of candidates versus semi-major axis is shown in Figure 6 using the definition for size in Table 5. "Earth-size" candidates and some of the "super-Earth-size" candidates are expected to be rocky type planets without a hydrogen-helium atmosphere. "Neptune-size" candidates could be similar to Neptune and the ice giants in composition. All size classes show a rise in the number of candidates for decreasing semi-major axis until a value of 0.04 AU and then a steep drop. The drop off in the number of Earth-size candidates for semi-major axes greater than 0.2 AU is due at least in part to the decreasing probability of a favorable geometrical alignment and the difficulty of detecting small planets when only a few transits are available.

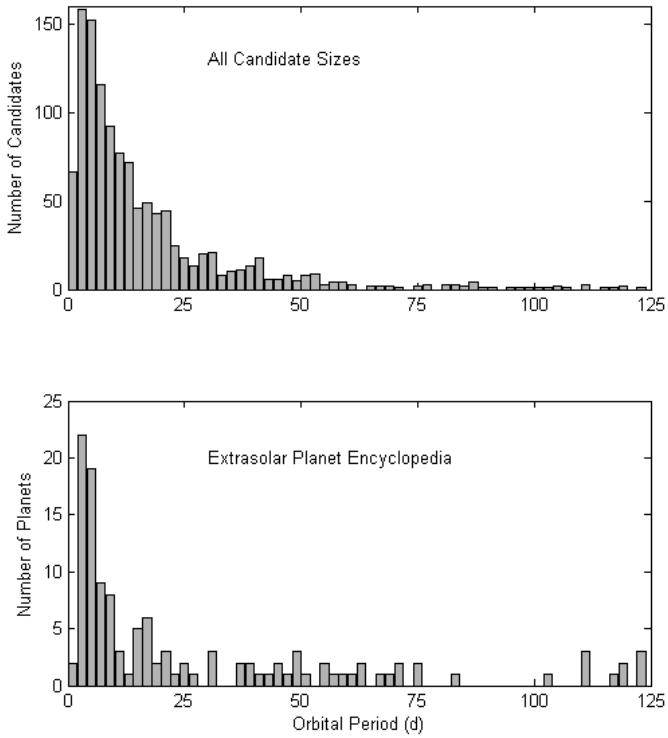

Figure 7. (Upper panel) Period distribution of Kepler planet candidates with orbital periods less than 125 days, uncorrected for observational selection effects. **(Lower panel) Period distribution of RV-discovered planet listed in the Extrasolar Planet Encyclopedia (EPE) as of 7 Dec 2010 (not including *Kepler* planets). In each panel the bin size is 2 days.**

Figure 7 compares the orbital period distribution of the Kepler planet candidates with the planets discovered by the RV method (as reported by the EPE). Both detection methods show a prominent peak at periods between two and six days, primarily due to giant planets (e.g., Santos & Mayor 2003). Based on typical disk masses and lifetimes, giant planets are believed to form at larger separations and migrate inwards, either due to interactions with a disk (e.g., Lin et al. 1996, Murray et al. 1998) or by a combination of eccentricity excitation and tidal damping (e.g., Rasio & Ford 1996; Fabrycky & Tremaine 2007). It is less clear whether Neptune and super-Earth-size planets can form in situ or must migrate from further out in the disk. The dichotomy in the distribution of orbital periods suggest that the two populations are sculpted by different processes.

Both detection methods also show a rapid decrease in the number of planets as a function of orbital period for periods less than two days. This feature is robust, as both detection methods are more sensitive to planets at shorter orbital periods. The small number of planets with orbital periods less than two days could be due to the planets undergoing orbital decay that accelerates rapidly at small distances. Alternatively, the high stellar irradiation and tidal heating could cause such planets to lose mass so they become undetectable or even destroyed.

For both detection methods, the change in the detection efficiency with orbital period is too gradual to explain the decrease in the number of planets 6 days to ~1 month. The transit probability decreases with orbital period more rapidly than the Doppler amplitude. Yet, the number of Kepler planet candidates decreases as a function of orbital decreases more slowly in the Kepler sample than among Doppler-discovered exoplanets. This arises since Kepler is more

sensitive to small planets which have a broader distribution in orbital period than the giant planets preferentially discovered by Doppler searches

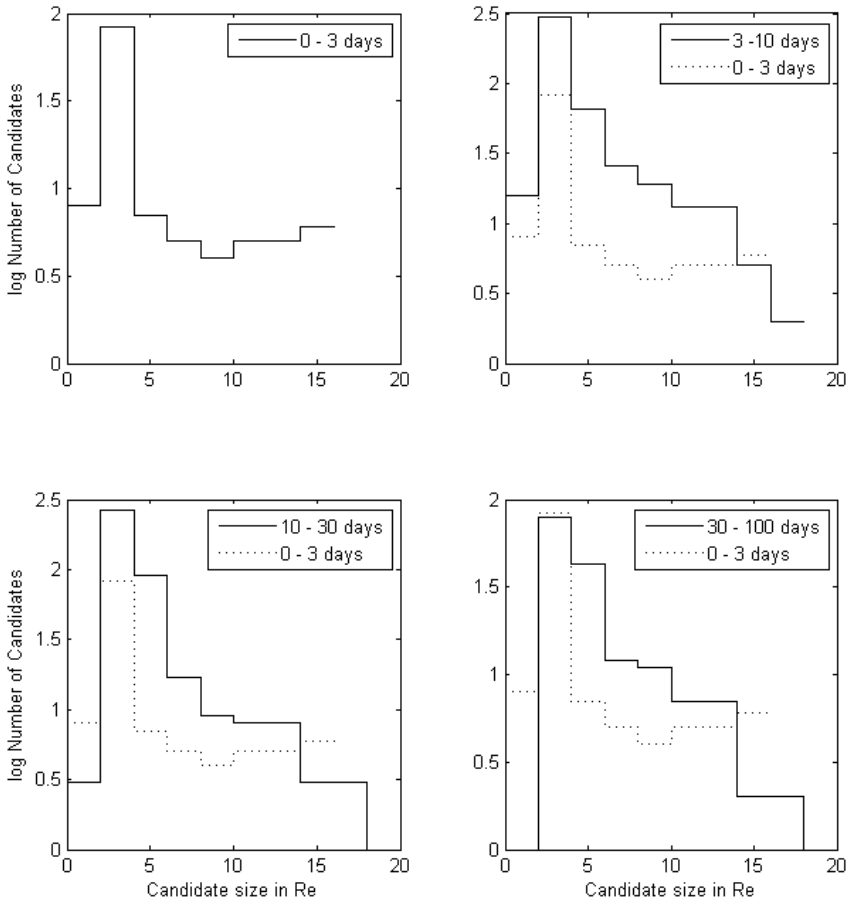

Figure 8. Distribution of candidate sizes for four ranges of orbital period, uncorrected for selection effects. Panels 2, 3, & 4 compare the distributions for longer periods with that of the shortest period range. Bin size is 2 $R_{\oplus}$.

Except for the peak between 2 to 4 $R_{\oplus}$, Figure 8 shows that the number of short-period (< 3 days) candidates is nearly independent of candidate size through 16 $R_{\oplus}$. However, small candidates are more numerous than large ones for longer orbital periods. This distribution suggests that short-period candidates might represent a different population compared to the populations at larger orbital periods and semi-major axes. In particular, they might represent rocky planets and the remnant cores of ice giants and gas giant planets that have lost their atmospheres. To confirm that this population is distinct from longer-period candidates will require an investigation of the comparison of the mass-radius relationships of the populations.

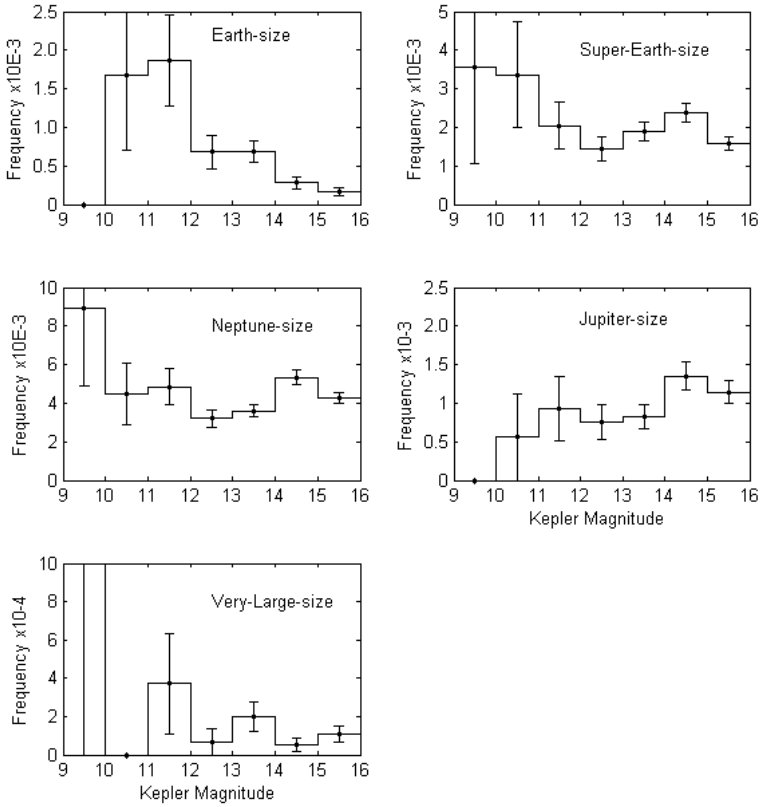

Figure 9. Observed frequencies, uncorrected for selection effects, of candidates for five size ranges defined in Table 5 as a function of *Kepler* magnitude. The error bars represent only the Poisson noise associated with the number of events in each bin, and the upper bar represents a single event if no events are observed.

In Figure 9, the observed frequency of candidates in each magnitude bin has been simply calculated from the number of candidates in each bin divided by the total number of stars monitored in each bin. The number of stars brighter than Kp = 9.0 and fainter than Kp = 16.0 in the current list is so small that the count is not shown.

The panels for Earth-size and super-Earth size candidates are consistent with a decrease in observed frequency with magnitude for magnitudes larger than Kp=11 and are indicative of difficulty in detecting small candidates around faint stars. Near-constant values of observed frequencies of the Neptune-size and larger candidates are expected if the survey were mostly complete for these large candidates for the orbital periods of the bulk of the transiting planet candidates reported here. This assumption presupposes that the distribution of stellar types is independent of apparent magnitude, which is not the case. In particular almost all M-dwarfs stars in the *Kepler* FOV have Kp > 14. Therefore if the frequency of large candidates around M-dwarfs is different than for other spectral types, then near-constant values of Neptune- and larger-size candidates should not be expected.

However, the distributions of the Jupiter-size and very-Large candidates appear to be inconsistent with that expectation. One possibility is that the effort to identify false positive events and remove them from the list of candidates was more successful for the brighter Jupiter-size candidates. The distribution of the very-Large-size candidates is not fully understood.

It should be noted that the distribution of stellar types varies with magnitude because of the method used to select the target stars. (See the discussion associated with Figure 1.) An examination of the upper left panel of Figure 9 indicates that several Earth-size candidates must be present in the 15th to 16th magnitude bin. The noise properties of the instrument are such that only the smallest stars or small stars with short-period candidates can appear in this bin. To get a measure of the variation of the observed frequency distributions with magnitude when the transit amplitude is held nearly constant, the distributions for five ranges of the ratio of the candidate radius to the radius of the host star are displayed in Figure 10.

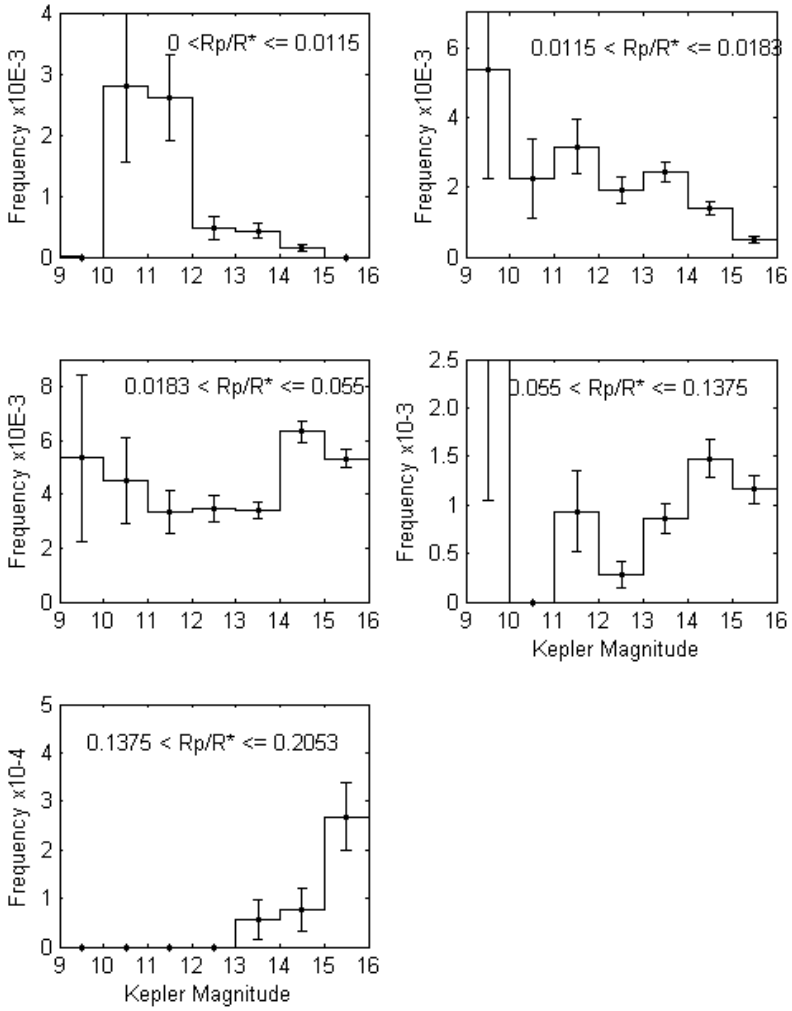

Figure 10. Frequency distribution (not corrected for selection effects) for 5 ranges of the ratio of the radius of the candidate to that of the host star versus magnitude.

The five ratios shown in Figure 10 of the candidate radius to the host star radius are appropriate for Earth-size, super-Earth-size, Neptune-size, Jupiter-size, and very-Large-size candidates transiting stars of radius $R_\star = 1\ R_\odot$, where the subscript $\odot$ signifies solar values. An examination of the upper left hand panel shows no candidates are found for the 15 to 16 magnitude range. The Earth-size candidates around faint stars (Kp>15) shown in the upper left panel of Figure 9 are around small stars. Therefore, they have a planet-star radius ratio greater than 0.0115 and do not appear in the upper left panel of Figure 10. The observed frequency distributions with magnitude decrease for the small radius ratio ranges shown in the two upper panels. The panels in the second row show a nearly constant frequency with magnitude for larger values of $R_p/R_\star$, which implies that such signal levels are readily detected over the magnitude range of interest. Contrary to what

might be expected, a nearly constant frequency with magnitude is not seen for the largest ratio-range. This result could be due to small-number statistics or a bias introduced by the tendency to avoid using telescope time to observe candidates more likely to be small stars rather than planets.

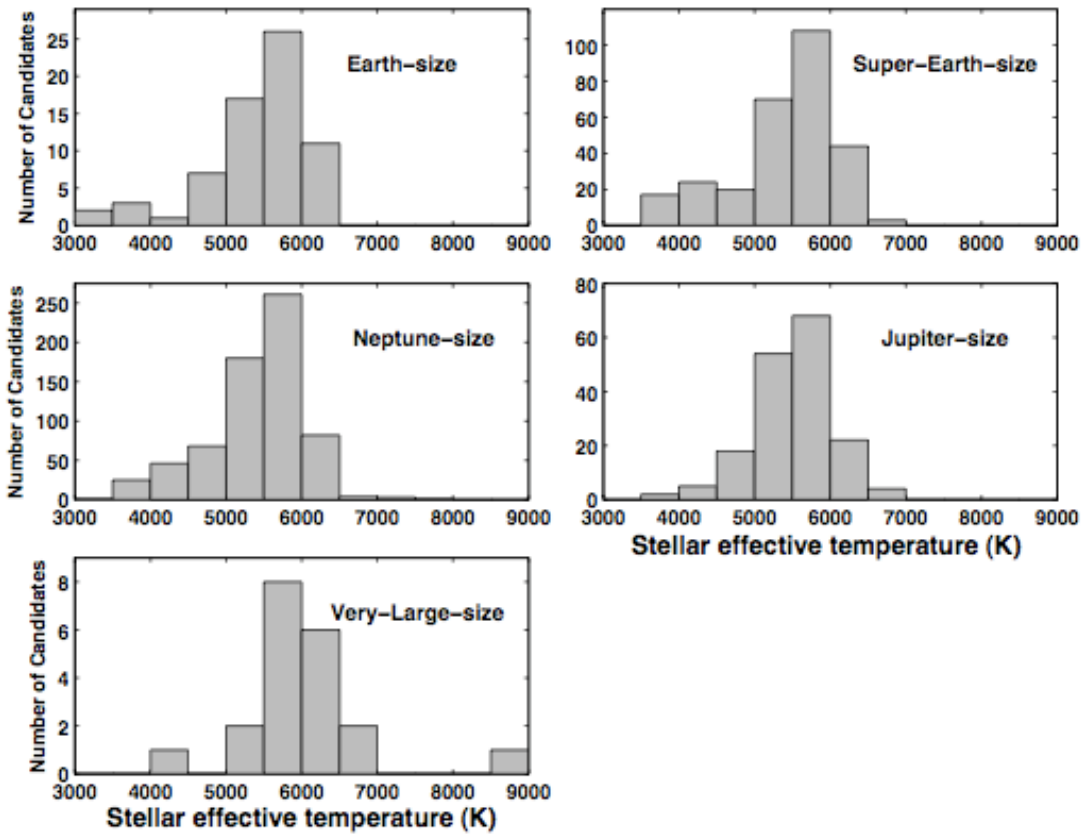

Figure 11. Number of candidates for various candidate sizes vs. stellar effective temperature, uncorrected for selection effects. Bin size is 500°K. Refer to Table 5 for the definition of each size category.

The number of candidates is a maximum for stars with temperatures between 5000 and 6000 K, i.e., G-type dwarfs (Figure 11). This result should be expected because the selection process explicitly emphasized these stars and because G-type stars are a large component of magnitude-limited surveys of dwarfs at the magnitudes of interest to the *Kepler* Mission.

3.4 Candidates in or near the Habitable Zone

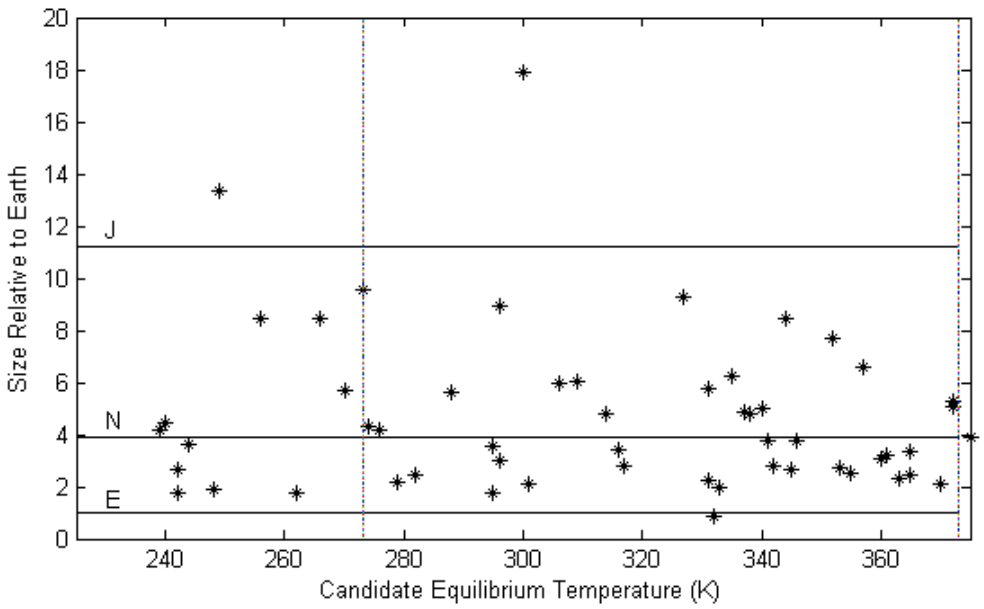

Figure 13. Candidate sizes for the estimated equilibrium temperature (T_{eq}) range centered on the habitable zone temperature range. The broken lines indicate the range of temperatures for water to exist as a liquid at one atmosphere of pressure. Uncertainties are discussed in the text.

The habitable zone (HZ) is often defined to be that region around a star where a rocky planet with an Earth-like atmosphere could have a surface temperature between the freezing point and boiling point of water, or analogously the region receiving roughly the same insolation as the Earth from the Sun (Rampino and Caldeira 1994, Kasting 1997, Heath et al. 1999, Joshi 2003, Tarter et al. 2007). The temperature range for actual habitable zones is likely to include equilibrium temperatures well below 273 K because of warming by any atmosphere that might be present. For example, the greenhouse effect raises the Earth's temperature by 33 K and that of Venus by approximately 500 K. Further, the spectral characteristics of the stellar flux vary strongly with T_{eff}. The factor affects both the atmospheric composition and the chemistry of photosynthesis (Heath et al. 1999, Segura et al. 2005). Consequently, the calculated equilibrium temperature should include temperatures well below the freezing point of water.

The calculated equilibrium temperatures shown in Figure 13 are for grey-body spheres without atmospheres. The calculations assume a Bond albedo of 0.3, emissivity of 0.9, and a uniform surface temperature. The uncertainty in the computed equilibrium temperatures is approximately 22% (see Appendix) because of uncertainties in the stellar size, mass, and temperature as well as the planetary albedo. The effect of any atmosphere is an additional uncertainty.

Over this temperature range, 54 candidates are present with sizes ranging from Earth-size to larger than that of Jupiter. Table 6 lists the candidates in the HZ. The detection of Earth-size candidates depends on the signal level, which in turn depends on the size of the candidate relative to the size of the star, the number of transits observed, and the combined noise of the star and the instrument. It is important to recognize that the size of the star is generally not well characterized until spectroscopic studies and analysis are completed. In particular, some of the cooler stars could be nearly double the size shown.

Table 6. Candidates in or near the Habitable Zone (sorted by T_{eq})

KOI	Kp (mag)	R_p ($R_\oplus$)	Period (days)	T_{eff} (°K)	R_H ($R_\odot$)	T_{eq} (°K)	a (AU)
683.01	13.71	4.14	278.12	5624	0.78	239	0.84
1582.01	15.4	4.44	186.38	5384	0.64	240	0.63
1026.01	14.75	1.77	94.1	3802	0.68	242	0.33
1503.01	14.83	2.68	150.24	5356	0.56	242	0.54
1099.01	15.44	3.65	161.53	5665	0.55	244	0.57
854.01	15.85	1.91	56.05	3743	0.49	248	0.22
433.02	14.92	13.37	328.24	5237	1.08	249	0.94
1486.01	15.51	8.43	254.56	5688	0.83	256	0.8
701.03	13.73	1.73	122.39	4869	0.68	262	0.45
351.01	13.8	8.48	331.65	6103	0.94	266	0.97
902.01	15.75	5.66	83.9	4312	0.65	270	0.32
211.01	14.99	9.58	372.11	6072	1.09	273	1.05
1423.01	15.74	4.28	124.42	5288	0.66	274	0.47
1429.01	15.53	4.15	205.93	5595	0.86	276	0.69
1361.01	14.99	2.2	59.88	4050	0.59	279	0.24
87.01	11.66	2.42	289.86	5606	1.14	282	0.88
139.01	13.49	5.65	224.79	5921	0.9	288	0.74
268.01	10.56	1.75	110.37	4808	0.79	295	0.41
1472.01	15.06	3.57	85.35	5455	0.56	295	0.37
536.01	14.5	2.97	162.34	5614	0.84	296	0.59
806.01	15.4	8.97	143.18	5206	0.88	296	0.53
1375.01	13.71	17.88	321.22	6169	1.17	300	0.96
812.03	15.95	2.12	46.19	4097	0.57	301	0.21
865.01	15.09	5.94	119.02	5560	0.73	306	0.47
351.02	13.8	6	210.45	6103	0.94	309	0.71
51.01	13.76	4.78	10.43	3240	0.27	314	0.06
1596.02	15.16	3.44	105.36	4656	0.98	316	0.42
416.02	14.29	2.82	88.25	5083	0.75	317	0.38
622.01	14.93	9.28	155.05	5171	1.17	327	0.57
555.02	14.76	2.27	86.5	5218	0.78	331	0.38
1574.01	14.6	5.75	114.73	5537	0.85	331	0.47
326.01	12.96	0.85	8.97	3240	0.27	332	0.05
70.03	12.5	1.96	77.61	5342	0.7	333	0.35
1261.01	15.12	6.25	133.46	5760	0.9	335	0.52
1527.01	14.88	4.84	192.67	5470	1.31	337	0.67
1328.01	15.67	4.81	80.97	5425	0.72	338	0.36
564.02	14.85	4.97	127.89	5686	0.93	340	0.51
1478.01	12.45	3.73	76.13	5441	0.7	341	0.35
1355.01	15.9	2.81	51.93	5529	0.52	342	0.27
372.01	12.39	8.44	125.61	5638	0.95	344	0.5

711.03	13.97	2.62	124.52	5488	1	345	0.49
448.02	14.9	3.78	43.62	4264	0.71	346	0.21
415.01	14.11	7.7	166.79	5823	1.15	352	0.61
947.01	15.19	2.74	28.6	3829	0.64	353	0.15
174.01	13.78	2.52	56.35	4654	0.8	355	0.27
401.02	14	6.6	160.01	5264	1.4	357	0.59
1564.01	15.29	3.07	53.45	5709	0.56	360	0.28
157.05	13.71	3.23	118.38	5675	1	361	0.48
365.01	11.2	2.34	81.74	5389	0.86	363	0.37
374.01	12.21	3.33	172.67	5829	1.26	365	0.63
952.03	15.80	2.4	22.78	3911	0.56	365	0.12
817.01	15.41	2.1	23.97	3905	0.59	370	0.13
847.01	15.20	5.1	80.87	5469	0.88	372	0.37
1159.01	15.33	5.3	64.62	4886	0.91	372	0.30

As can be seen in Table 6, there are candidates with R_p < 1.75 $R_\oplus$ present in the list. The uncertainty in the sizes of these candidates is approximately 25% to 35% due to the uncertainty in size of stars and of the transit depth.

The predicted semi-amplitudes of the RV signals for KOI 326.01, as an example of these small candidates, is 0.5 m/s, respectively. This RV amplitude follow from assuming a circular orbit and assuming a density of 5.5 g/cc for both candidates. RV semi-amplitudes of 1.0 m/s are at the very limit of what might currently be possible to detect with the largest telescopes and best spectrometers. In principle, an RV amplitudes under 1 m/s could be detected, but many nemeses arise including the surface velocity fields (turbulence) and spots on the rotating surface. In addition, stars with one transiting planet may well harbor multiple additional planets that do not transit, causing additional RV variations. Moreover, these two stars have V-band magnitudes of 14, making it very difficult to acquire sufficient photons in a high resolution spectrum to achieve the required Doppler precision. Of course, for all of these small planets RV measurements can place firm upper limits to their masses and densities.

4. Completeness Estimate

Although the purpose of the paper is to summarize the results of the observations and to act as a guide to content of the tables, a simple model was developed to provide a rough estimate of the intrinsic frequency of planetary candidates. The intrinsic frequency of planetary candidates refers to the actual number of candidates per number of target stars that produces the observed number of candidates in specified bins of semi-major axis *a* and candidate size *r* when various selection effects are applied.. The bin limits used for *a* are: 0.01, 0.02, 0.04, 0.08, 0.12, 0.16, 0.20 0.3, 0.4, and 0.5 AU. The bin limits for the planetary candidate size-classes are: Earth-size (0.5 ≤ r < 1.25 $R_\oplus$), super-Earth-size (1.25 ≤ r < 2.0 $R_\oplus$), Neptune-size (2.0≤ r <6.0 $R_\oplus$), Jupiter-size (6.0 ≤r < 15.0$R_\oplus$), and very-Large-size (15.0 ≤ r < 22.4 $R_\oplus$).

For every candidate in a Δa Δr bin, each of the 156,000 target stars was examined to determine if a planet orbiting it with the same size as the candidate and having the same *a* could be detected during the Q0 through Q2 observation period. The number of target stars needed to produce a minimum of two transits in the period of interest with a signal ≥7 σ was tabulated for each bin.

The actual period simulated is longer than the 126 days of the Q0 through Q2 period because the search for planetary candidates used data obtained in successive periods to obtain accurate values of the epoch and period.

Inputs to the model include the observed noise for 6-hour bins averaged over one quarter of data (Q2) for each target star and the target star's size, mass, and magnitude, as well as the values of the size and semi-major axis of each candidate in the Δa Δr bin. We also undertook an independent analysis that used the observed noise for 3-hour bins averaged over the Q3 data. Since the properties of the noises are not Gaussian, this serves as a check on our results. We report below the results based upon the 6-hour bins of the Q2 data.

The model computes the duration of the transits from the size and mass of the star at the specified value of the semi-major axis. The input value of the noise for each target star is scaled to the computed transit duration based on a $t^{-0.5}$ relationship. The signal level is computed from the square of the ratio of the candidate size to the size of the target star. This value is then divided by the noise value to get the estimated single-transit SNR. The total SNR is based on the single-transit SNR multiplied by the square root of number of transits that occur during the observation period. A correction is made for the loss of transits (and consequently, the reduction in the total SNR) due to the monthly and quarterly interruptions of observations. The probability of a recognized detection event is then computed from the value of the total SNR and a threshold level of 7σ. In particular, if the total SNR is 7.0, then it would be recognized 50% of the time while if the total SNR was estimated to be 8.0, then the transit pattern would be recognized 84% of the time. The value of this probability $p_1$is tabulated and then an adjustment is made for the probability that the planet's orbit is correctly aligned to the line-of-sight p_2. The value of p_2 is based on the size of the target star and the semi-major axis specified for the candidate. The product of these probabilities p_{nc} is the probability that the target star n could have produced the observed candidate c.

The probability p_{nc} is computed for each of the 156,000 stars and then summed to yield the estimated number of target stars $n^*_{c,a,r}$ that could have produced a detectable signal consistent with candidate's semi-major axis a and size r. (Subscripts designate candidate "c", semi-major axis value "a", candidate size "r".) This procedure is repeated for each candidate in the Δa Δr bin.

The sum of the number of candidates of size-class "k" in a bin (a, Δa, r, Δr) is designated $S_{a,r,k}$. The size-class "k" (k=1 to 5) represents Earth-size, super-Earth-size, Neptune-size, Jupiter-size, and very-large size planetary candidates, respectively.

After a value of $n^*_{c,a,r,k}$ has been computed for each candidate in the bin, the median value $N^*_{a,r,k}$ of $n^*_{c,a,r,k}$ is computed. Because of the large size range Δr for each size-class and the relatively large bins used for Δa, the range of values for $n^*_{c,a,r,k}$ in each bin is usually large compared to the average value of $n^*_{c,a,r,k}$, the median value $N^*_{a,r,k}$ is used to estimate the frequencies:

$$\mathrm{Freq}(k, r_i, \Delta r_i, a_i, \Delta a_i) = \frac{S_{a,r,k}}{N^*_{a,r,k}} \qquad \text{Eq. 1}$$

For each size-class, the sum of the frequencies over a and r is the estimate of the frequency for that size-class:

$$Freq(k) = \sum_{r=min}^{r=max} \sum_{a=0.01}^{a=0.5} \frac{S_{a,r,k}}{N^*_{a,r,k}}$$

Eq. 2

The summation for each size-class is done only for those bins that have at least 3 planetary candidates and an average of at least 100 target stars. This limit is used to reduce the impact of outlier values.

The uncertainties in the results are quite large because the calculated number of stars $n^*_{c,a,r,k}$ for the observed number of candidates $S_{a,r,k}$ is a sensitive function of the position of each planetary candidate inside of the Δa Δr bin and because the number of candidates in each bin is often small.

To provide an estimate of the dispersion $D_{a,r,k}$ of the estimated frequencies for each bin, the relative error associated with the number of candidates used in the estimate of the frequency is added in quadrature to the variance due to the dispersion of the values of $n^*_{c,a,r,k}$.

$$D_{a,r,k} = \sqrt{\frac{1}{S_{a,r,k}} + \frac{Var(n^*_{c,a,r,k})}{(\overline{n^*_{c,a,r,k}})^2}} \quad , \qquad \text{Eq. 3}$$

where $n^*_{c,a,r,k} = \sum_{c=1}^{c=max} n^*_{c,a,r,k}$. Eq. 4

It is important to note that the estimated frequencies calculated by the model are based the number of candidates found in the data. In turn, the number and size distributions depend on both the results from the analysis pipeline and a manual inspection of the results of the pipeline product. The current version of the analysis pipeline provides "threshold crossing events" and checks that that data are consistent with an astrophysical process. However, it does not yet have the capability to stitch together quarterly records. Thus the number of candidates discussed here is based on a combination of pipeline results, manual inspection, and an *ad hoc* program that does not use the more comprehensive detrending that is done in the pipeline, but does allow a longer period of data to be examined. In some cases, the candidates in the Q0-Q2 data were not discovered until the Q3 and Q5 data were examined. As discussed later, the procedure is designed to quickly find candidates that can be followed up, but is not well controlled for the purpose of the model calculations. Consequently, the results must be considered very preliminary.

Table 7 lists the calculated intrinsic frequencies, number of planetary candidates, median value of the number of target stars, and dispersion values for the range of *a* from 0.01 to 0.50 AU.

Table 7. Intrinsic Frequency of Candidates (Simulation of 0.5 years of observations)

Results for Earth-size Candidates

----- *a* (AU) -----		$S_{c,k,l=1}$	$N_{a,r,k=1}$	Freq(1)	Relative Dispersion
0.01	0.02	7	23366	3.00E-04	0.68
0.02	0.04	12	5048	2.38E-03	0.73
0.04	0.08	31	1786	1.74E-02	0.85
0.08	0.12	11	405	2.71E-02	0.77
0.12	0.16	5	360	1.39E-02	0.55
0.16	0.2	2	0	0.00E+00	0.89
0.2	0.3	0	0	0.00E+00	0.00

0.3	0.4	0	0	0.00E+00	0.00
0.4	0.5	0	0	0.00E+00	0.00

Results for super-Earth-size Candidates

----- *a* (AU) -----		$S_{c,k,l=2}$	$N_{a,r,k=2}$	Freq(1)	Relative Dispersion
0.01	0.02	10	34106	2.93E-04	0.38
0.02	0.04	43	13852	3.10E-03	0.32
0.04	0.08	107	6661	1.61E-02	0.32
0.08	0.12	52	3434	1.51E-02	0.30
0.12	0.16	32	1840	1.74E-02	0.36
0.16	0.2	6	1308	4.59E-03	0.49
0.2	0.3	8	764	1.05E-02	0.59
0.3	0.4	2	0	0.00E+00	0.74
0.4	0.5	2	0	0.00E+00	0.79

Results for Neptune-size Candidates

----- *a* (AU) -----		$S_{c,k,l=3}$	$N_{a,r,k=3}$	Freq(1)	Relative Dispersion
0.01	0.02	11	40213	2.74E-04	0.38
0.02	0.04	34	17839	1.91E-03	0.28
0.04	0.08	186	9012	2.06E-02	0.23
0.08	0.12	170	5396	3.15E-02	0.26
0.12	0.16	109	3707	2.94E-02	0.17
0.16	0.2	59	2723	2.17E-02	0.22
0.2	0.3	86	2076	4.14E-02	0.24
0.3	0.4	20	1366	1.46E-02	0.38
0.4	0.5	12	1105	1.09E-02	0.38

Results for Jupiter-size Candidates

----- *a* (AU) -----		$S_{c,k,l=4}$	$N_{a,r,k=4}$	Freq(1)	Relative Dispersion
0.01	0.02	6	38145	1.57E-04	0.49
0.02	0.04	28	17093	1.64E-03	0.27
0.04	0.08	58	9273	6.25E-03	0.27
0.08	0.12	23	5517	4.17E-03	0.25
0.12	0.16	15	3718	4.03E-03	0.29
0.16	0.2	8	2782	2.88E-03	0.40
0.2	0.3	18	1917	9.39E-03	0.36

0.3	0.4	10	1409	7.10E-03	0.46
0.4	0.5	6	1086	5.53E-03	0.50

Results for very-Large-size Candidates

----- *a* (AU) -----		$S_{c,k,l=5}$	$N_{a,r,k=5}$	Freq(1)	Relative Dispersion
0.01	0.02	2	0	0.00E+00	0.71
0.02	0.04	9	33157	2.71E-04	0.42
0.04	0.08	8	20679.1	3.87E-04	0.42
0.08	0.12	1	0	0.00E+00	1.00
0.12	0.16	3	7818	3.84E-04	0.58
0.16	0.2	2	0	0.00E+00	0.71
0.2	0.3	4	3998	1.00E-03	0.52
0.3	0.4	0	0	0.00E+00	0.00
0.4	0.5	0	0	0.00E+00	0.00

The estimated intrinsic frequencies summed over semi-major axis are 0.061, 0.067, 0.172, 0.041, and 0.002 for Earth-, super-Earth-, Neptune-, Jupiter- and very-Large-size planetary candidates, respectively. The average number of candidates per star is 0.344. However, the model results are strongly dependent on the value chosen for the duration of observations. In particular, to obtain the most accurate values of epoch and period, data from Q0 through Q5 were examined.

Consequently, the model simulates a search period of 1 year to approximate the expected number of discoveries. When the model is run to simulate a six-month period, the results are very similar for candidates Neptune-size and larger, but the frequencies of super-Earth and Earth-size candidates are increased by 3 for Earth-size candidates and 2 for super-Earth size candidates. The uncertainty in the predictions will decrease as the mission duration increases and the number of transits and resulting SNR increase.

In Figure 12 we present the intrinsic frequency distribution that reflects the sensitivity corrections discussed above. We find no evidence that the rate of occurrence of Earth-size candidate planets depends upon the stellar effective temperature, and we find a similar independence for super-Earth-size and Neptune-size candidates. We caution once again that many more potential systematic effects need to be considered before these distributions can be regarded as robust. In Figure 12 we also show the intrinsic rate of occurrence for Jupiter-size and very-large-size candidates, and here we find that the rate increases with stellar effective temperature. In Figure 12 we also show the total intrinsic rate of occurrence of planet candidates of all sizes. We do not see significant variations with stellar effective temperature, and we note the overall abundance is large (approximately 34%).

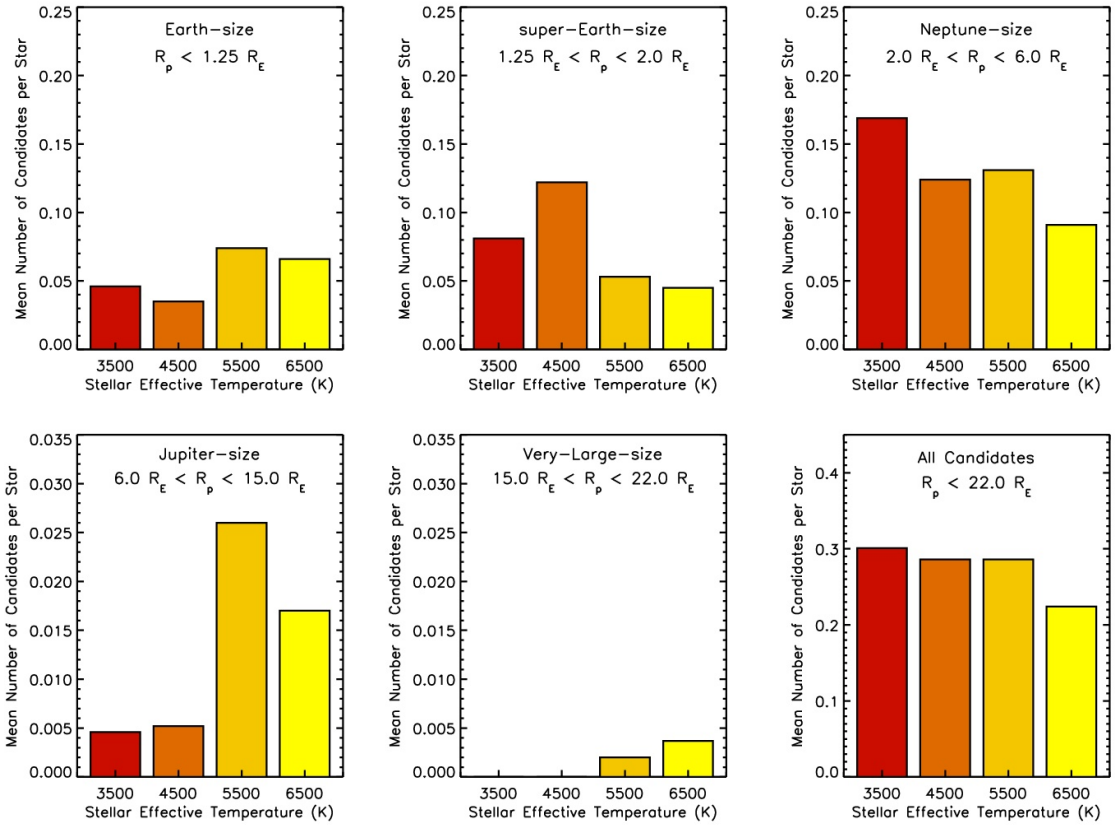

Figure 12. Mean number of candidates per star, as a function of stellar effective temperature, after implementing the sensitivity correction described in Section 4. The bins along the x-axis span 3000-4000K, 4000-5000K, 5000-6000K, 6000-7000K, with each bin labeled by the central value for each bin. Upper row: Once we account for the increased sensitivity to small planets orbiting small stars as opposed to Sun-like stars, we find there are no significant variations in rate of occurrence of Earth-sized candidates (left panel) with stellar effective temperature. The same conclusion holds for candidates that are super-Earth-sized (middle panel) and Neptune-sized (right panel), i.e. none of the differences with stellar effective temperature *within* a panel in the top row are significant. (Of course, the relative rates of occurrence of different kinds of planets, eg. comparing the overall population *between* panels, are significantly different, as discussed in Section 4.) Lower row: We find that the rate of occurrence of Jupiter-sized (right panel) and very-large-sized (middle panel) candidates does increase significantly with stellar effective temperature, as was known previously from radial-velocity surveys: Low-mass stars show a lower abundance of Jupiter-sized candidates. The lower right panel shows the rates of occurrence of planet candidates of all sizes. We find no significant variation in the population of candidates as a function of stellar effective temperature.

The intrinsic frequency distributions as a function of semi-major axis of each size-class are presented in Figure 14. All the panels show a large increase in intrinsic frequency with semi-major axis from the 0.01 to 0.02 AU bin to the 0.04 to 0.08 AU bin and a leveling off at larger values of the semi-major axis. The Mission is scheduled to continue collecting data for another 1.5 years. The extended period could provide information on the dependence of the frequency on semi-major axis and on stellar type.

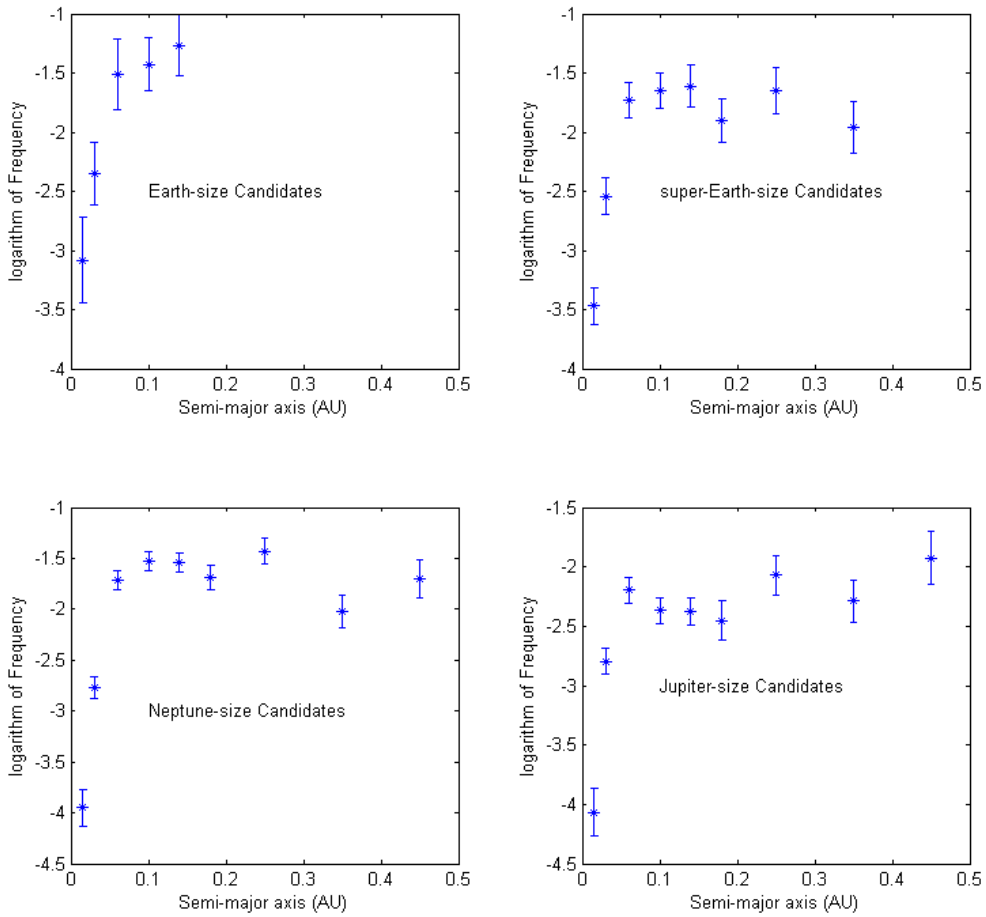

Figure 14. Variation of intrinsic frequencies as a function of semi-major axis for four size-classes. The error bars in this figure represent log(1.0+dispersion/frequency). The frequency estimates cover a shorter range for those size-classes with fewest members because intervals with less than 3 members are not plotted to reduce the impact of outliers. Importantly, the widths of the bins are reduced at smaller semi-major axes, creating the impression of a flat dependence beyond 0.1 AU.

It should be noted that the values for the intrinsic frequencies in Table 7 and in Figures 12 and 14 are only preliminary estimates. These values will be lowered when false positive events are recognized and removed. We note the values could also increase: we have assumed that the precision of the data improves as the square root of the number of measurements in transit. If, however, the performance of the data does not achieve this ideal case, then we were effectively searching fewer stars than assumed here. Thus, the inherent frequency would be higher than shown in Table 7 and associated figures. Furthermore, throughout the mission we will continue to make improvements to the data analysis pipeline. Thus, the capability of the system to recognize small candidates will continue to improve, and more candidates will be discovered. The latter is expected to occur in mid-year when the capability to stitch together quarters of observations becomes operational. Given the caveats, the results of the current analysis indicate that population of target stars have frequencies of 6.1%, 6.7%, 17.2%, 4.1%, and 0.02% for Earth-size, super-Earth-size, Neptune-size, Jupiter-size, and very-large candidates, respectively. The number of candidates of all sizes and for a range of semi-major axes from 0.01 to 0.5 AU is

34.4%. This value is interpreted to mean that 34% of the observed stars have an average of at least one candidate with semi-major axes less than 0.5 AU.

It is interesting to compare these results with those of Howard et al. 2010 for planets with periods $\leq$ 50 days discovered by RV. For planet masses 3 - 10 $M_{\oplus}$ (super-Earth-mass), they get approximately 10.7% to 11.8% while the present calculation for candidate with periods less than 125 days and super-Earth size gives 6.7%. For 10 - 30 $M_{\oplus}$, Howard et al. obtain 5.8 - 6.5% while the *Kepler* results for Neptune-size candidates predict 17.2%. The agreement is surprisingly good given the many uncertainties involved in the model estimates.

5. Overview of Multi-planet Systems

A total 170 of target stars with multiple planet candidates have been detected in the *Kepler* data. There are 115 stars with exactly two candidates, 45 with exactly three candidates, 8 stars with exactly 4 candidates, 1 star with 5, and 1 with 6 candidates. The fraction of host stars that have multi-candidate systems is 0.174 and the fraction of the candidates that are part of multi-candidate systems is 0.339. Because all the candidates show two or more transits, accurate orbital periods and epochs are available in Table 2.

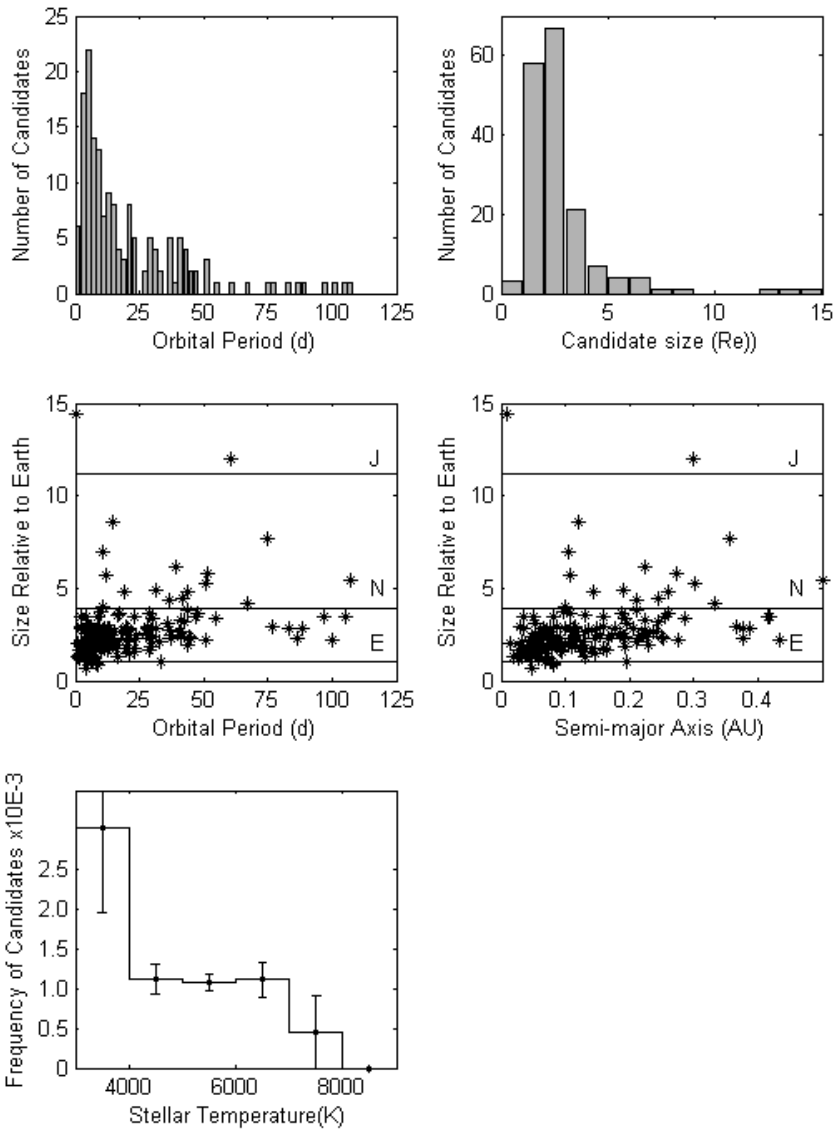

Figure 15. Distributions of candidates in multi-planet candidate systems. Bin sizes for the upper two panels and the lower panel are 2 days, 1 $R_{\oplus}$, and 1000 K, respectively. The letters "J", "N", and "E" refer to Jupiter-size, Neptune-size, and Earth-size. Refer to Table 5 for the definition of each size category.

Comparisons of the distributions presented in Figure 15 with previous figures show that they are similar to those for ensemble of all candidates. The number versus orbital period is very much like that seen in Figure 5; a lack of candidates with orbital periods less than 2 days, a maxima near 4 days, and a gradual reduction in the number with orbital period. The number versus candidate size in Figure 15 is quite similar to that in Figure 2. The peak in the frequency with stellar temperature for cool stars is also repeated. However, the distributions displayed in the two scatter plots in the middle panel of Figure 15 show that the size versus orbital period and semi-major axis are different from those in Figure 3. In particular, both of the distributions shown in Figure 15 display a lack of giant planets for close-in/short-period orbits compared to the distributions in Figure 3. There is a clear paucity of giant planets in the observed multi-candidate and multi-planet systems (see Latham et al. for details). This result is consistent with radial velocity surveys which indicate short-period giant planets are significantly less common in multiple planet systems (Wright et al. 2009).

Multiple planet candidate systems, as well as the single-planet candidate systems, could harbor additional planets that do not transit, or have not yet been recognized as such, and therefore are not seen in these data. Such planets might be detectable via transit timing variations (TTVs) of the transiting planets after several years of Kepler photometry (Agol et al. 2005, Holman and Murray 2005, Holman et al. 2010). A preliminary analysis of transit times of planets candidates with vetting flags equal to 1 or 2 based on data up to and including quarter 2, provide hints that ~10 KOIs may already exhibit transit timing variations. A statistical analysis of these and other marginal TTV signals is in preparation (Ford et al. 2011) and papers with TTV confirmation of three systems are already published (Holman et al. 2010; Lissauer et al. 2011a) or in preparation (Cochran et al. 2011).

It is important to note that it is possible for light from more than one background eclipsing binary star system to be within the photometric aperture, producing an apparent multi-planet transit signal in the light curve. A thorough analysis of each system and a check for background binaries are required before any discovery can be claimed. Approximately 34% of the Kepler candidates are part of multi-candidate systems. This fraction is substantially larger than that found by the RV method and listed in the Extrasolar Planets Encyclopedia; namely 47 multi-planet systems out of 395 systems or about 12%. While an exhaustive study remains to be done, the *Kepler* results suggest that nearly coplanar planetary systems might well be common. The dynamical attributes of Kepler multi-candidate systems are analyzed by Lissauer et al. (2011b).

6. Summary and Conclusions

Distributions of the characteristics of 1202 planetary candidates have been given. These include number and frequency distributions with orbital size and period, stellar temperature and magnitude. These distributions are separated into five class-sizes; 68 candidates of approximately Earth-size ($R_p < 1.25\ R_\oplus$), 288 super-Earth size ($1.25\ R_\oplus < R_p < 2\ R_\oplus$), 662 Neptune-size ($2\ R_\oplus, < R_p < 6\ R_\oplus$), 165 Jupiter-size ($6\ R_\oplus < R_p < 15\ R_\oplus$), and 19 up to twice the size of Jupiter ($15\ R_\oplus < R_p < 22\ R_\oplus$). An additional 17 candidates larger than twice that of Jupiter are listed in Table 2, but are not considered in the current analysis. Over the temperature range appropriate for the habitable zone, 54 candidates are found with sizes ranging from Earth-size to larger than that of Jupiter. Five planetary candidates in the habitable zone are less than twice the size of the Earth.

Over 74% of the planetary candidates are smaller than Neptune. The observed number versus size distribution of planetary candidates increases to a peak at two to three times Earth-size and then declines inversely proportional to area of the candidate.

There is a prominent decrease in the number of candidates with size in all class-sizes for semi-major axes smaller than 0.04 AU and for orbital periods less than 3 days. A group of candidates with orbital periods less 3 days is identified that appears distinctly different from those with longer periods in that size distribution of candidates with short orbital periods is nearly constant with candidate size.

The analysis of the first four months of Kepler observations is the first to estimate the frequency of small candidates (Earth-size, super-Earth-size, and Neptune-size) based on a uniform set of observations with the capability of detecting small candidates. After correcting for geometric and sensitivity biases, we find intrinsic frequencies of 6% for Earth-size candidates, 7% for super-Earth size candidates, 17% for Neptune-size candidates, and 4% for Jupiter-size candidates.

Multi-candidate, transiting systems are frequent; 17% of the host stars have multi-candidate systems, and 33.9% of all the candidates are part of multi-candidate systems.

There is also evidence for 34 candidates with sizes between 1.3 and 4.5 times that of Jupiter. The nature of these candidates is unclear. Those that are between 1.3 and 2.0 times the size of Jupiter are included in tables and figures because of the possibility that they are very inflated planetary objects, but the 15 largest were omitted from the discussion because it is more likely that they are stellar objects or that the estimated size of the host star is much smaller than listed in the KIC.

In the coming years, many of these candidates are expected to be reclassified as exoplanets as the validation effort proceeds. The number of candidates is so large that the *Kepler* team must be selective in its follow up program and will devote the majority of its efforts to the detection and validation of the smallest candidates and to those with orbital periods appropriate for the habitable zone and those amenable to follow up. Many candidates will be left to future work or for follow up by the community. The release of the Q0 through Q1 data and the early release of the Q2 data and the descriptions of the candidates with accurate positions, magnitudes, epochs, and periods should help the community to confirm and validate many of these candidates.

The data released here should also provide to the community a more comprehensive source of data and distributions needed for further developments of the theories of planet structure and planetary systems. These results have concentrated upon discovery of candidates, and initial levels of validations sufficient to cull out many false positives. Future studies by the *Kepler* science team will include efforts to robustly quantify the completeness of these candidate lists through simulation studies, and provide more refined confidence levels on probabilities of candidates being planets. Discovery of additional candidates will of course continue and reduce incompleteness for weak signals whether those follow from small planets, long orbital periods, or faint stars.

The *Kepler* Mission was designed to determine the frequency of extrasolar planets, the distributions of their characteristics, and their association with host star characteristics. The present results are an important milestone toward the accomplishment of *Kepler*'s goals.

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References
Agol, E., Steffen, J., Sari, R., and Clarkson, W. 2005. On detecting terrestrial planets with the timing of giant planet transits. *MNRAS* **359,** 567.

Almenara, J.M., et al. 2009. A&A **506**, 337
Batalha, N. M., *et al.* 2010a. Selection, prioritization, and characteristics of *Kepler* target stars. *ApJL* **713,** L103.
Batalha, N. M, *et al.* 2010b. Pre-spectroscopic false-positive elimination of *Kepler* planet candidates. *ApJL* **713,** L109.
Batalha, N. M, *et al.* 2011. Kepler's First Rocky Planet: Kepler-10b. *ApJ* (in press).
Borucki, W. J., *et al.* 2009. *Kepler*'s optical phase curve of the exoplanet HAT-P-7b. *Science* **325,** 709.
Borucki, W. J., *et al.* 2010. *Kepler*-4b: A hot Neptune-like planet of a G0 star near main-sequence turnoff. *ApJL* **713,** L126
Borucki, W. J., *et al.* 2011. Characteristics of *Kepler* planetary candidates based on the first data set. *ApJ* (in press).
Bryson, S.T. *et al.* False Positive Identification in the Kepler Data. 2011in preparation.
Caldwell, D. A., *et al.* 2010. Instrument performance in *Kepler*'s first months. *ApJL* **713,** L92.
Deeg, H. J., *et al*., 2009. A&A **506**, 343.
Dunham, E. W., *et al.* 2010. *Kepler*-6b: a transiting hot Jupiter orbiting a metal-rich star. *ApJ* **713,** L132.
Fabrycky, D., Tremaine, S. 2007, *ApJ* **669**, 1298-1315.
Gaudi, B. S., 2005. On the size distribution of close-in extrasolar giant planets. *ApJ* **628,** L73.
Gautier, T. N., *et al.* 2010. The *Kepler* follow-up observation program. *Preprint* arXiv:1001.0352.
Gilliland, R. L., *et al.* 2010. Initial characteristics of *Kepler* short cadence data. *ApJL* **713,** L160.
Gould, A., Pepper, J. and DePoy, D. L. 2003. Sensitivity of transit searches to habitable-zone planets. *ApJ* **594**, 533-537.
Heath, M.J., Doyle, L.R., Joshi, M.M., and Haberle, R.M. 1999. Habitability of planets around red dwarf stars. Origins of Life and Evolution of the Biosphere **29**, 405-424.
Holman, M. J., and Murray, N.W. 2005. The use of transit timing to detect terrestrial-mass extrasolar planets. Science 307 1288.
Holman, M.J., et al. 2010. *Kepler*-9: A System of Multiple Planets Transiting a Sun-Like, Confirmed by Timing Variations. *Science* **330**, 51-54
Howard, A.W., Marcy, G.W., Johnson, J.A., Fisher, D.A., Wright, J.T., Issacson, H., Valenti, J.A., Anderson, J., Lin, D.N.C., and Ida, S. 2010. The Occurrence and Mass Distribution of Close-in Super-Earths, Neptunes, and Jupiters. Science, 330, 653-655.
Jenkins, J.M. 2002. The Impact of Stellar Variability on the Detectability of Transiting Terrestrial Planets, Ap.J. **575**, 493-505.
Jenkins, J. M., and L. R. Doyle 2003. Detecting reflected light from close-in extrasolar giant planets with the *Kepler* photometer. *ApJ* **595***,* 419-445.
Jenkins, J. M, *et al*., 2010a. Discovery and Rossiter-McLaughlin effect of exoplanet *Kepler*-8b. Preprint arXiv:1001.0416.
Jenkins, J. M., *et al*. 2010b. Initial characteristics of *Kepler* long cadence data for detecting transiting planets. ApJL 713, L120.
Jenkins, J. M., *et al.* 2010c. Overview of the *Kepler* science processing pipeline. A*pJL* **713,** L87.
Jenkins, J.M.,Chandrasekarana,H., McCauliff, S. D., Caldwell, D. A., Tenenbaum, P., Li, J., Klaus, T. C., Cote, M.T, Middour, C."Transiting planet search in the *Kepler* pipeline," Proc. SPIE, Vol. 7740, 77400D (2010d).
Joshi, M. 2003. Climate model studies of synchronously rotating planets. Astrobiology **3** (2), 415-429.
Kasting, J.E., 1997. Habitable zones around low mass stars and the search for extraterrestrial life. Origins of Life and Evolution of the Biosphere **27**, 291-307.
Koch, D. G., *et al.* 2010. Discovery of the transiting planet *Kepler*-5b., *ApJL* **713,** L131.

Koch, D. G., *et al.* 2010. *Kepler* mission design, realized photometric performance, and early science. *ApJL* **713,** L79.
Latham, D. W., *et al.* 2010. *Kepler*-7b: a transiting planet with unusually low density. *ApJLett.* **713,** L140.
Latham, D. W. et al. 2011, ApJ (in prep).
Lin, D.N.C., Bodenheimer, P., Richardson, D.C. 1996. *Nature* **380**, 606-607.
Lissauer, J. J. et al. 2011a. Kepler-11: A Closely-Packed System of Low-Mass, Low-Density, Transiting Planets. Nature (in press).
Lissauer, J. J. et al. 2011b. ApJ (in prep)
Morton, T. D. and Johnson, J. A. 2011. On the Low False Positive Probabilities of Kepler Planet Candidates. *Preprint* arXiv:1101.5630.
Murray, N., Hansen, B., Holman, M., Tremaine, S. 1998. *Science* **279**, 69.
Prsa, A., *et al.*, 2010. *Kepler* Eclipsing Binary Stars. I. Catalog and principal characterization of 1832 eclipsing binaries in the first data release. *Preprint* arXiv:1006.2815.
Rampino, M.R., and Caldeira, K. 1994. The Goldilocks Problem: Climatic evolution and long-term habitability of terrestrial planets. Ann. Rev. Astron. Astrophys. **32**, 83-114.
Raghavan et al.2010. A Survey of Stellar Families:Multiplicity of Solar-Type Stars. ApJS **190**, 1
Rasio, F.A., Ford, E.B. 1996. *Science* **274**, 954-956.
Steffen, J. H., *et al.* 2010. Five *Kepler* target stars that show multiple transiting exoplanet candidates. ApJ 725, 1226 (2010).
Tarter, J.C., et al.A reappraisal of the habitability of planets around M dwarf stars. Astrobiology 7(1), 30-66, 2007.
Torres, G. et al. 2011. Modeling *Kepler* transit light curves as false positives: Rejection of blend scenarios for *Kepler*-9, and validation of *Kepler*-9d, a super-Earth-size planet in a multiple system. ApJ **727,** 24
Hayley Wu, Joseph D. Twicken, Peter Tenenbaum, Bruce D. Clarke, Jie Li, Elisa V. Quintana, Christopher Allen, Hema Chandrasekaran, Jon M. Jenkins, Douglas A. Caldwell, Bill Wohler, Forrest Girouard, Sean McCauliff, Miles T. Cote, Todd C. Klaus, "Data validation in the *Kepler* Science Operations Center pipeline," Proc. SPIE, Vol. 7740, 774019 (2010).
Wright, J.T., Upadhyay, S., Marcy, G.W., Fischer, D.A., Ford, E.B. & Johnson, J.A. 2009, ApJ, 693, 1084.

Table 1.
Host Star Characteristics

All parameters are from the Kepler Input Catalog (KIC) except where T_{eff} Flag = 1 indicates that no parameters were available in the KIC. In which case T_{eff}, log(g) and R are derived as noted.

Key:

KOI	Kepler Object of Interest number
KIC	Kepler Input Catalogue Identifier
Kp	Kepler magnitude
CDPP	6 hr Combined Differential Photometric Precision from Quarter 3
RA	Right Ascension (J2000)
Dec	Declination (J2000)
T_{eff}	Effective Temperature of host star as reported in the KIC. If T_{eff} Flag = 1, then T_{eff}, log(g), R are derived using KIC J-K colour and linear interpolation of luminosity class V stellar properties of Schmidt-Kaler (1982).
log(g)	Surface gravity reported by KIC. If T_{eff} Flag = 1, then log(g) is based on J-K interpolation.
R	Stellar radius reported by KIC. If T_{eff} Flag = 1, then R is based on J-K interpolation.
M	Stellar mass derived from log(g) and stellar radius.

KOI	KIC	Kp	CDPP	RA	DEC	T_{eff}	log(g)	R	M	T_{eff} Flag
		[mag]	[ppm]	[Hr]	[Deg]	[K]	[cgs]	[R_{sun}]	[M_{sun}]	
1	11446443	11.338	14	19.12056	49.3164	5713	4.14	1.50	1.14	
2	10666592	10.463	21.9	19.48315	47.9695	6577	4.32	1.34	1.36	1
3	10748390	9.147	97.8	19.84729	48.0809	4628	4.53	0.76	0.71	1
4	3861595	11.432	126	19.62377	38.9474	6054	4.41	1.08	1.11	
5	8554498	11.665	20.2	19.31598	44.6474	5766	4.04	1.73	1.18	
7	11853905	12.211	71.2	19.04102	50.1358	5701	4.35	1.16	1.08	
10	6922244	13.563	58.6	18.75254	42.4511	6164	4.44	1.05	1.12	
12	5812701	11.353	82	19.83025	41.0110	6419	4.26	1.32	1.17	
13	9941662	9.958	10.4	19.13141	46.8684	8848	3.93	2.44	1.83	
17	10874614	13.000	38.6	19.78915	48.2399	5724	4.47	0.91	0.91	1
18	8191672	13.369	63.9	19.96047	44.0351	5816	4.46	0.95	0.95	1
20	11804465	13.438	46.8	19.08290	50.0404	6012	4.47	1.01	1.09	
22	9631995	13.435	63.5	18.84198	46.3234	5859	4.53	0.94	1.07	
41	6521045	11.000	32.7	19.42573	41.9903	5692	4.51	0.95	1.06	
42	8866102	9.364	41.6	18.87671	45.1398	6035	4.22	1.37	1.14	
44	8845026	13.483	324	20.01012	45.0896	5490	4.48	0.88	0.85	1
46	10905239	13.770	52.1	18.88370	48.3552	5562	4.48	0.89	0.87	1
49	9527334	13.704	142	19.48327	46.1648	5848	4.45	0.97	0.97	1
51	6056992	13.761	461	19.72792	41.3324	3240	4.90	0.27	0.21	1
63	11554435	11.582	171	19.28175	49.5482	5533	4.40	1.07	1.05	
64	7051180	13.143	119	19.76737	42.5474	5128	3.94	1.94	1.19	
69	3544595	9.931	11.1	19.42789	38.6724	5480	4.43	1.03	1.04	
70	6850504	12.498	73.7	19.17987	42.3387	5342	4.72	0.70	0.95	
72	11904151	10.961	44.2	19.04529	50.2413	5491	4.47	0.98	1.03	
75	7199397	10.775	27.6	19.43315	42.7285	5718	4.40	1.08	1.08	
82	10187017	11.492	59.6	18.76552	47.2080	4727	3.96	1.86	1.14	
84	2571238	11.898	50.9	19.36139	37.8518	5347	4.58	0.84	0.98	

85	5866724	11.018	41.6	19.24591	41.1512	6006	4.07	1.66	1.19
87	10593626	11.664	32.5	19.28117	47.8845	5606	4.36	1.14	1.07
89	8056665	11.642	28.4	19.98808	43.8143	7490	3.90	2.24	1.45
92	7941200	11.667	34	18.89165	43.7882	5850	4.28	1.26	1.11
94	6462863	12.205	-	19.82220	41.8911	6090	4.08	1.66	1.20
97	5780885	12.885	35.6	19.23877	41.0898	5944	4.27	1.29	1.12
98	10264660	12.128	46.7	19.18059	47.3331	6659	3.92	2.08	1.31
99	8505215	12.960	43.8	19.69562	44.5311	4951	4.33	1.11	0.97
100	4055765	12.598	115	19.41186	39.1995	6440	3.69	2.79	1.39
102	8456679	12.566	31.2	19.98032	44.4358	5919	3.90	2.08	1.24
103	2444412	12.593	78.7	19.44556	37.7516	5493	4.63	0.80	1.00
104	10318874	12.895	42.4	18.74632	47.4971	4411	4.56	0.73	0.71
105	8711794	12.870	33.6	19.92914	44.8579	5450	3.96	1.88	1.19
107	11250587	12.702	58.4	19.65568	48.9824	5816	4.46	1.01	1.08
108	4914423	12.287	30.5	19.26564	40.0645	5872	4.36	1.15	1.10
110	9450647	12.663	43.7	18.97038	46.0638	6344	4.35	1.18	1.14
111	6678383	12.596	32.5	19.17364	42.1668	5853	4.46	1.02	1.08
112	10984090	12.772	44.7	19.70991	48.4956	5839	4.31	1.22	1.11
113	2306756	12.394	36.7	19.48492	37.6716	5362	4.34	1.15	1.04
115	9579641	12.791	59.4	19.19249	46.2762	6202	4.25	1.34	1.15
116	8395660	12.882	71.9	20.05760	44.3376	5980	3.96	1.91	1.22
117	10875245	12.487	55.1	19.80188	48.2086	5725	4.47	1.00	1.07
118	3531558	12.377	41.6	19.15752	38.6496	5605	4.49	0.97	1.05
119	9471974	12.654	31.7	19.63728	46.0623	5380	4.44	1.00	1.02
122	8349582	12.346	46.5	18.96550	44.3980	5569	4.58	0.86	1.03
123	5094751	12.365	48.6	19.35951	40.2849	5897	4.29	1.25	1.11
124	11086270	12.935	41.1	19.52861	48.6028	6076	4.25	1.32	1.14
127	8359498	13.938	261	19.30720	44.3454	5570	4.53	0.92	1.04
128	11359879	13.758	70.7	19.74671	49.1401	5718	4.18	1.43	1.13
131	7778437	13.797	239	19.93984	43.4976	6244	4.40	1.10	1.13
135	9818381	13.958	266	19.01606	46.6683	5953	4.51	0.95	1.08
137	8644288	13.549	54.7	19.87196	44.7463	5289	4.25	1.27	1.05
138	8506766	13.960	55	19.72939	44.5784	6772	4.12	1.62	1.26
139	8559644	13.492	68.4	19.44355	44.6883	5921	4.56	0.90	1.07
141	12105051	13.687	74.6	19.20255	50.6516	5277	4.60	0.81	0.97
142	5446285	13.113	87.2	19.40987	40.6694	5361	4.68	0.74	0.96
144	4180280	13.698	122	19.76829	39.2498	4724	4.00	1.75	1.11
148	5735762	13.040	95.1	19.94261	40.9490	5063	4.51	0.89	0.94
149	3835670	13.397	86.8	19.10867	38.9456	6059	4.23	1.35	1.14
150	7626506	13.771	75.8	19.79873	43.2098	5538	4.29	1.23	1.08
151	2307199	14.000	104	19.49165	37.6310	6028	4.40	1.09	1.11
152	8394721	13.914	108	20.03448	44.3816	6187	4.54	0.94	1.10
153	12252424	13.461	89.6	19.19986	50.9443	4647	4.41	0.95	0.85
155	8030148	13.494	76.3	19.48810	43.8812	5651	4.18	1.42	1.12
156	10925104	13.738	142	19.60809	48.3495	4450	4.54	0.76	0.73
157	6541920	13.709	111	19.80767	41.9091	5675	4.47	1.00	1.06
159	8972058	13.431	78.6	19.84746	45.2619	5823	4.31	1.22	1.10
161	5084942	13.341	81.1	19.13678	40.2116	4768	4.04	1.66	1.09

162	8107380	13.837	66.9	19.67759	43.9630	5632	4.45	1.01	1.06
163	6851425	13.536	75.8	19.20451	42.3554	5151	4.37	1.08	1.00
165	9527915	13.938	82.9	19.49913	46.1962	4956	4.76	0.64	0.85
166	2441495	13.575	78.4	19.40146	37.7698	5216	4.24	1.28	1.04
167	11666881	13.273	66.5	19.63093	49.7650	6285	4.60	0.87	1.10
168	11512246	13.438	73.8	19.61460	49.4792	5877	3.97	1.88	1.21
171	7831264	13.717	79.7	19.64947	43.5368	6287	4.41	1.10	1.13
172	8692861	13.749	79.6	19.55073	44.8689	5603	4.80	0.66	0.98
173	11402995	13.844	57	19.46047	49.2621	5752	4.52	0.94	1.06
174	10810838	13.779	64.5	19.78819	48.1076	4654	4.54	0.80	0.80
176	6442377	13.432	56.9	19.44312	41.8847	6340	4.49	1.00	1.12
177	6803202	13.182	52.8	19.87848	42.2370	5620	4.39	1.10	1.07
179	9663113	13.955	57.8	19.80303	46.3287	5827	4.42	1.07	1.08
180	9573539	13.024	70.7	18.95962	46.2491	5549	4.62	0.82	1.01
183	9651668	14.290	343	19.52372	46.3912	5722	4.71	0.74	1.02
186	12019440	14.952	128	19.66642	50.4701	5826	4.56	0.89	1.06
187	7023960	14.857	103	19.24863	42.5509	5768	4.70	0.75	1.03
188	5357901	14.741	82.9	19.35720	40.5677	5087	4.73	0.67	0.89
189	11391018	14.388	88.8	18.99200	49.2670	4787	4.50	0.86	0.86
190	5771719	14.137	416	18.97659	41.0150	5425	4.23	1.33	1.08
191	5972334	14.991	134	19.68582	41.2220	5495	4.52	0.92	1.02
192	7950644	14.221	82.7	19.21697	43.7049	5936	4.46	1.01	1.09
193	10799735	14.904	96.7	19.52508	48.1953	5883	4.47	1.01	1.08
194	10904857	14.804	561	18.86441	48.3451	5883	4.63	0.82	1.05
195	11502867	14.835	284	19.29564	49.4734	5604	4.50	0.96	1.05
196	9410930	14.465	84.4	19.63422	45.9816	5585	4.51	0.94	1.04
197	2987027	14.018	267	19.38888	38.1844	4907	4.38	1.03	0.94
199	10019708	14.879	94.4	19.66838	46.9560	6214	4.60	0.87	1.09
200	6046540	14.412	82.1	19.53950	41.3555	5774	4.69	0.76	1.03
201	6849046	14.014	70.3	19.14204	42.3502	5491	4.45	1.00	1.04
202	7877496	14.309	141	19.07402	43.6810	5912	4.44	1.04	1.09
203	10619192	14.141	760	19.89302	47.8150	5634	4.49	0.97	1.05
204	9305831	14.678	202	20.00682	45.7621	5287	4.48	0.95	0.99
205	7046804	14.518	104	19.69978	42.5379	5060	4.57	0.83	0.93
206	5728139	14.463	134	19.83958	40.9773	5771	4.35	1.16	1.09
208	3762468	14.996	962	19.68717	38.8816	6094	4.59	0.88	1.08
209	10723750	14.274	74.9	19.25287	48.0402	6221	4.48	1.01	1.11
211	10656508	14.989	105	19.19802	47.9721	6072	4.41	1.09	1.11
212	6300348	14.858	-	19.74265	41.6032	5843	4.54	0.92	1.07
214	11046458	14.256	114	19.90833	48.5775	5322	4.44	1.00	1.01
216	6152974	14.711	164	19.94754	41.4248	5086	4.31	1.16	1.00
217	9595827	15.127	707	19.65770	46.2859	5504	4.72	0.71	0.98
219	6305192	14.153	235	19.81427	41.6640	5347	4.73	0.70	0.95
220	7132798	14.236	57.9	19.72976	42.6589	5388	4.87	0.59	0.92
221	3937519	14.622	98.9	19.06205	39.0981	5176	4.69	0.72	0.92
222	4249725	14.735	181	19.19278	39.3391	4353	4.71	0.58	0.64
223	4545187	14.708	139	19.07747	39.6780	5128	4.66	0.74	0.92
225	5801571	14.784	270	19.66089	41.0747	6037	4.55	0.92	1.08

226	5959753	14.817	149	19.44273	41.2410	5043	4.89	0.54	0.84	
227	6185476	14.267	156	18.95680	41.5192	4043	4.54	0.67	0.57	
229	3847907	14.720	114	19.38439	38.9280	5608	4.37	1.12	1.07	
232	4833421	14.247	64.8	19.40746	39.9491	5868	4.68	0.77	1.04	
234	8491277	14.283	112	19.35721	44.5188	5735	4.36	1.15	1.09	
235	8107225	14.353	100	19.67400	43.9152	5041	4.65	0.74	0.90	
237	8041216	14.176	97.5	19.73009	43.8521	5679	4.53	0.92	1.05	
238	7219825	14.061	58.9	19.79991	42.7820	6032	4.44	1.05	1.10	
239	6383785	14.762	171	19.81344	41.7302	5983	4.54	0.92	1.08	
240	8026752	14.982	215	19.40534	43.8602	5996	4.60	0.86	1.07	
241	11288051	14.139	88.3	19.11685	49.0649	5055	4.85	0.57	0.85	
242	3642741	14.747	404	19.37577	38.7077	5437	4.51	0.93	1.02	
244	4349452	10.734	15.8	19.10923	39.4879	6104	4.37	1.14	1.10	1
245	8478994	9.710	22.6	18.93730	44.5182	5419	4.48	0.87	0.83	1
246	11295426	10.000	36.3	19.40215	49.0403	5658	4.41	1.06	1.07	
247	11852982	14.216	130	18.99991	50.1468	3804	4.56	0.60	0.48	
248	5364071	15.264	232	19.48631	40.5918	3974	4.53	0.67	0.55	
249	9390653	14.486	123	18.99479	45.9724	3654	4.42	0.73	0.51	
250	9757613	15.473	296	18.99607	46.5665	3933	4.51	0.68	0.55	
251	10489206	14.752	322	19.88388	47.6049	3846	4.58	0.59	0.49	
252	11187837	15.613	238	19.36010	48.8226	3897	4.60	0.58	0.49	
253	11752906	15.254	320	19.03829	49.9623	3951	4.57	0.62	0.52	
254	5794240	15.979	357	19.52486	41.0643	3948	4.54	0.65	0.53	
255	7021681	15.108	216	19.19054	42.5426	3989	4.48	0.73	0.58	
256	11548140	15.373	1996	19.01234	49.5654	3639	4.17	1.10	0.65	
257	5514383	10.868	43	18.97568	40.7198	6023	4.10	1.61	1.18	
258	11231334	9.890	115	18.96946	48.9613	6278	4.17	1.48	1.18	
260	8292840	10.500	24.5	19.28982	44.2085	6096	4.37	1.13	1.09	1
261	5383248	10.297	39	19.80464	40.5251	5588	3.96	1.89	1.20	
262	11807274	10.421	30.6	19.20672	50.0337	6143	4.24	1.35	1.15	
263	10514430	10.821	39.4	18.75159	47.7744	5550	4.33	1.17	1.07	
265	12024120	11.994	36	19.80126	50.4090	6032	4.38	1.13	1.11	
268	3425851	10.560	23.4	19.04859	38.5070	4808	4.51	0.79	0.73	1
269	7670943	10.927	22.6	19.15638	43.3784	6258	4.12	1.58	1.20	
270	6528464	11.411	26.7	19.58219	41.9008	5594	4.48	0.90	0.88	1
271	9451706	11.485	35.5	19.01267	46.0280	6089	4.47	1.01	1.10	
273	3102384	11.457	23.1	19.16523	38.2288	5503	4.76	0.68	0.97	
274	8077137	11.390	26.9	18.83282	43.9802	6013	4.37	1.14	1.11	
275	10586004	11.696	35.2	19.02075	47.8486	5809	4.46	0.95	0.94	1
276	11133306	11.854	22.8	19.31096	48.7062	5949	4.36	1.15	1.11	
277	11401755	11.866	42.1	19.41668	49.2318	5848	4.45	0.97	0.97	1
279	12314973	11.684	70.9	19.69910	51.0135	6152	4.27	1.30	1.14	
280	4141376	11.072	23.1	19.11263	39.2119	6435	4.22	1.39	1.18	
281	4143755	11.947	36.1	19.17700	39.2443	5699	3.89	2.08	1.23	
282	5088536	11.529	42.6	19.23004	40.2453	5900	4.43	1.01	0.99	1
283	5695396	11.525	37.1	19.23539	40.9423	5679	3.99	1.82	1.19	
284	6021275	11.818	25.5	18.88239	41.3430	5898	4.13	1.54	1.16	
285	6196457	11.565	48.1	19.27240	41.5630	5822	4.45	0.96	0.95	1

288	9592705	11.020	27.8	19.58110	46.2267	5946	4.41	1.04	1.01	1
289	10386922	12.747	46.2	18.86304	47.5749	5812	4.46	0.95	0.94	1
291	10933561	12.848	54.8	19.81853	48.3203	5491	4.61	0.82	1.01	
292	11075737	12.872	51	19.15511	48.6734	5743	4.26	1.29	1.11	
294	11259686	12.674	61.5	19.88460	48.9167	5861	4.46	1.02	1.08	
295	11547513	12.324	56.1	18.98260	49.5984	5936	4.41	1.04	1.01	1
296	11802615	12.935	43.7	19.00278	50.0754	5811	4.39	1.10	1.09	
297	11905011	12.182	41.9	19.08315	50.2424	6050	4.27	1.30	1.13	
298	12785320	12.713	47.1	19.36628	52.0555	5445	4.48	0.88	0.84	1
299	2692377	12.899	95.6	19.04411	37.9645	5544	3.97	1.88	1.19	
301	3642289	12.730	53.3	19.36634	38.7955	6131	4.34	1.19	1.13	
302	3662838	12.059	63.5	19.70725	38.7357	6711	4.15	1.56	1.24	
303	5966322	12.193	35.5	19.57835	41.2954	5497	4.50	0.95	1.03	
304	6029239	12.549	52.6	19.13933	41.3739	5885	3.98	1.86	1.21	
305	6063220	12.970	59.4	19.82360	41.3001	4653	4.27	1.17	0.92	
306	6071903	12.630	74.7	19.95464	41.3846	5120	4.16	1.42	1.07	
307	6289257	12.797	59.1	19.54536	41.6178	6081	4.39	1.11	1.11	
308	6291837	12.351	58.1	19.59531	41.6029	6054	4.14	1.53	1.17	
312	7050989	12.459	40.8	19.76449	42.5988	6014	4.38	1.09	1.04	1
313	7419318	12.990	50.9	18.80904	43.0391	5205	4.35	1.12	1.01	
314	7603200	12.925	201	19.35877	43.2930	3900	4.59	0.61	0.53	1
315	7700622	12.968	58.6	19.81813	43.3333	4711	4.17	1.35	0.99	
316	8008067	12.701	60.5	18.82613	43.8894	5561	4.32	1.18	1.07	
317	8121310	12.885	64.2	19.92109	43.9980	6464	4.06	1.72	1.24	
318	8156120	12.211	80.1	19.21027	44.0688	6366	4.25	1.34	1.17	
319	8684730	12.711	32.2	19.34117	44.8729	5835	4.45	0.97	0.96	1
321	8753657	12.520	34.7	19.45654	44.9682	5433	4.74	0.70	0.96	
323	9139084	12.465	89	18.93741	45.5069	5403	4.26	1.27	1.06	
326	9880467	12.960	189	19.11040	46.7835	3240	4.90	0.27	0.21	1
327	9881662	12.996	45.3	19.15797	46.7682	6144	4.47	1.02	1.11	
330	11361646	13.928	85.9	19.79061	49.1621	5749	4.25	1.31	1.11	
331	10285631	13.497	64.2	19.74556	47.3588	5335	4.86	0.59	0.91	
332	10290666	13.046	45.6	19.84340	47.3963	5552	4.73	0.71	0.99	
333	10337258	13.390	219	19.39719	47.4063	6310	4.45	1.05	1.13	
335	10470206	13.893	65.7	19.45457	47.6753	6380	4.14	1.54	1.20	
337	10545066	13.936	83.5	19.71232	47.7481	5778	4.55	0.91	1.06	
338	10552611	13.448	108	19.86473	47.7317	4910	4.18	1.36	1.02	
339	10587105	13.763	88.4	19.05922	47.8804	6013	4.69	0.77	1.05	
340	10616571	13.057	372	19.84431	47.8014	5544	3.86	2.15	1.23	
341	10878263	13.338	114	19.86410	48.2444	5425	4.33	1.16	1.05	
343	10982872	13.203	79.1	19.67459	48.4813	5703	4.45	1.02	1.07	
344	11015108	13.400	68.9	18.88935	48.5490	5715	4.34	1.16	1.08	
345	11074541	13.340	82.8	19.10165	48.6836	4794	4.10	1.51	1.05	
346	11100383	13.524	105	19.91073	48.6064	4962	4.39	1.04	0.96	
348	11194032	13.933	115	19.57905	48.8251	4667	4.20	1.28	0.96	
349	11394027	13.586	52.3	19.12351	49.2617	5652	4.36	1.14	1.08	
350	11395587	13.387	66	19.19076	49.2645	5775	4.37	1.12	1.09	
351	11442793	13.804	88.2	18.96223	49.3052	6103	4.53	0.94	1.09	

352	11521793	13.770	77.6	19.87118	49.4126	5714	4.39	1.10	1.08	
353	11566064	13.374	92.7	19.68085	49.5622	6679	4.37	1.18	1.18	
354	11568987	13.235	91.9	19.76124	49.5401	5941	3.90	2.09	1.25	
355	11621223	13.174	65.7	19.77111	49.6963	6062	4.47	1.01	1.10	
356	11624249	13.807	124	19.84909	49.6372	5124	4.07	1.61	1.12	
360	12107021	13.021	-	19.28099	50.6509	5994	4.39	1.08	1.04	1
361	12404954	13.100	90.5	19.32538	51.2771	5706	4.56	0.89	1.05	
364	7296438	10.087	17.6	19.72482	42.8812	5551	4.45	1.01	1.05	
365	11623629	11.195	17.8	19.83246	49.6235	5389	4.57	0.86	0.99	
366	3545478	11.714	32.6	19.44428	38.6193	6987	4.30	1.44	1.52	1
367	4815520	11.105	36.7	18.96481	39.9118	6046	4.33	1.19	1.12	
368	6603043	11.375	14.5	19.39031	42.0869	9034	4.13	1.89	1.77	
369	7175184	11.992	35.2	18.79438	42.7755	6153	4.46	1.03	1.11	
370	8494142	11.931	38.2	19.42585	44.5291	6207	3.83	2.29	1.30	
371	5652983	12.193	49.9	19.97841	40.8565	4997	3.60	3.01	1.33	
372	6471021	12.391	72.2	19.94150	41.8668	5638	4.50	0.95	1.05	
373	7364176	12.765	37.2	19.48233	42.9095	5816	4.26	1.30	1.11	
374	8686097	12.209	25.4	19.37502	44.8740	5829	4.28	1.26	1.11	
375	12356617	13.293	51.7	19.41341	51.1443	5692	4.43	1.04	1.07	
377	3323887	13.803	146	19.03826	38.4009	5722	4.78	0.68	1.00	
379	2446113	13.319	62	19.47045	37.7762	6203	4.11	1.59	1.19	
384	3353050	13.281	72.6	19.60998	38.4583	5744	4.30	1.22	1.09	
385	3446746	13.435	66.1	19.48101	38.5486	5466	4.42	1.04	1.04	
386	3656121	13.838	102	19.60738	38.7102	5969	4.38	1.12	1.11	
387	3733628	13.577	116	19.14791	38.8625	4460	4.54	0.74	0.69	1
388	3831053	13.644	59.2	18.98046	38.9368	5569	4.48	0.89	0.87	1
392	3942670	13.954	72.3	19.19838	39.0872	5684	4.28	1.25	1.09	
393	3964109	13.542	68.8	19.60194	39.0519	6084	4.75	0.72	1.05	
398	9946525	15.342	236	19.31908	46.8588	5101	4.55	0.86	0.94	
401	3217264	14.001	69.9	19.05691	38.3841	5264	4.18	1.40	1.08	
403	4247092	14.169	90.9	19.12531	39.3784	5565	4.44	1.02	1.05	
408	5351250	14.985	199	19.21561	40.5209	5631	4.49	0.96	1.05	
409	5444548	14.150	89.7	19.37109	40.6920	5709	5.01	0.51	0.95	
410	5449777	14.454	82.9	19.48320	40.6961	5968	4.38	1.12	1.10	
412	5683743	14.288	80.6	18.88384	40.9905	5584	4.28	1.26	1.09	
413	5791986	14.769	167	19.47752	41.0232	5236	4.56	0.86	0.97	
415	6289650	14.110	65.1	19.55374	41.6064	5823	4.36	1.15	1.09	
416	6508221	14.290	94	19.12437	41.9891	5083	4.65	0.75	0.91	
417	6879865	14.847	222	19.74997	42.3355	5635	4.59	0.85	1.04	
418	7975727	14.479	68.8	19.79329	43.7072	5153	4.42	1.01	0.98	
419	8219673	14.519	142	19.05942	44.1817	5723	4.70	0.75	1.02	
420	8352537	14.247	79.4	19.07458	44.3453	4687	4.51	0.83	0.82	
421	9115800	14.995	179	19.99373	45.4397	5181	4.32	1.16	1.02	
422	9214713	14.740	132	19.35932	45.6653	6002	4.40	1.09	1.10	
423	9478990	14.327	268	19.79735	46.0343	5992	4.45	1.03	1.10	
425	9967884	14.694	236	19.86495	46.8046	5689	4.54	0.91	1.05	
426	10016874	14.733	122	19.60153	46.9996	5796	4.33	1.19	1.10	
427	10189546	14.621	170	18.86819	47.2611	5293	4.50	0.93	0.99	

428	10418224	14.588	88.9	19.78758	47.5266	6127	4.55	0.92	1.09
429	10616679	14.486	292	19.84668	47.8638	5093	4.49	0.93	0.96
430	10717241	14.897	163	19.03234	48.0543	4124	4.58	0.64	0.57
431	10843590	14.262	117	18.83070	48.2571	5249	4.43	1.00	1.00
432	10858832	14.279	109	19.38318	48.2420	5830	4.46	1.02	1.08
433	10937029	14.924	289	19.90339	48.3325	5237	4.37	1.08	1.01
435	11709124	14.534	138	19.31870	49.8965	5709	4.66	0.78	1.03
438	12302530	14.258	174	19.23306	51.0819	4351	4.60	0.68	0.66
439	12470954	14.313	199	19.76046	51.3582	5267	4.90	0.55	0.89
440	2438264	14.172	161	19.35310	37.7495	4980	4.56	0.82	0.91
442	3745690	14.002	94.5	19.40648	38.8756	5750	4.54	0.92	1.06
443	3833007	14.200	93.5	19.03446	38.9324	5614	4.62	0.83	1.03
444	3847138	14.112	130	19.36863	38.9427	5732	4.52	0.94	1.06
446	4633570	14.427	137	18.93548	39.7813	4492	4.60	0.70	0.72
448	5640085	14.902	206	19.80468	40.8688	4264	4.55	0.71	0.65
452	6291033	14.641	110	19.58056	41.6151	5935	4.41	1.08	1.09
454	7098355	14.805	119	18.97719	42.6527	5138	4.57	0.84	0.94
456	7269974	14.619	122	19.18490	42.8693	5644	4.52	0.94	1.05
457	7440748	14.196	154	19.36777	43.0838	4931	4.65	0.73	0.87
458	7504328	14.708	132	18.85885	43.1920	5593	4.28	1.25	1.08
459	7977197	14.248	67	19.81859	43.7240	5601	4.43	1.04	1.06
460	8043638	14.743	125	19.77579	43.8028	5387	4.33	1.15	1.04
463	8845205	14.708	196	20.01374	45.0181	3576	4.44	0.68	0.47
464	8890783	14.361	165	19.58314	45.1072	5362	4.46	0.97	1.01
465	8891318	14.188	61.7	19.59523	45.1425	6029	4.48	1.00	1.10
466	9008220	14.663	191	19.07680	45.3326	5907	4.90	0.59	1.00
467	9583881	14.794	91.3	19.34131	46.2738	5583	4.54	0.91	1.04
468	9589524	14.767	126	19.49642	46.2898	4999	4.50	0.90	0.93
469	9703198	14.711	84.4	19.24252	46.4215	6005	4.63	0.83	1.07
470	9844088	14.749	253	19.78922	46.6264	5542	4.65	0.78	1.00
471	10019643	14.415	94.8	19.66685	46.9873	5548	4.67	0.77	1.00
472	10123064	15.000	218	18.90786	47.1967	5682	4.58	0.87	1.04
473	10155434	14.673	107	19.78724	47.1719	5379	4.69	0.74	0.96
474	10460984	14.282	102	19.18539	47.6299	6143	4.47	1.02	1.11
475	10577994	14.802	149	18.71273	47.8097	5056	4.54	0.86	0.93
476	10599206	14.958	138	19.43697	47.8145	4993	4.51	0.88	0.93
477	10934674	14.687	179	19.84484	48.3023	5039	4.51	0.89	0.94
478	10990886	14.273	185	19.87371	48.4012	3727	4.38	0.80	0.55
479	11015323	14.106	93.1	18.90048	48.5526	5602	4.53	0.92	1.04
480	11134879	14.332	108	19.36251	48.7919	5324	4.51	0.92	0.99
481	11192998	14.701	145	19.54401	48.8812	5227	4.64	0.77	0.94
483	11497977	14.675	140	19.10340	49.4187	5410	4.70	0.72	0.97
484	12061222	14.472	128	19.41474	50.5813	5065	4.76	0.65	0.88
486	12404305	14.118	79.6	19.30141	51.2373	5625	5.00	0.51	0.94
487	12834874	14.528	112	19.34980	52.1491	5463	4.51	0.93	1.02
488	2557816	14.720	141	19.13093	37.8297	5488	4.49	0.96	1.03
490	3239945	14.023	129	19.51056	38.3454	4781	4.40	1.00	0.90
492	3559935	14.424	145	19.67886	38.6542	5373	4.26	1.26	1.06

494	3966801	14.885	176	19.64746	39.0738	4854	4.90	0.52	0.78
496	4454752	14.411	113	19.25033	39.5637	5237	4.32	1.16	1.02
497	4757437	14.606	100	19.64734	39.8251	6045	4.50	0.98	1.09
499	4847534	14.272	85.6	19.66680	39.9529	5362	4.53	0.90	1.00
500	4852528	14.804	257	19.74084	39.9788	4250	4.52	0.74	0.66
501	4951877	14.612	153	19.89821	40.0759	5556	4.50	0.95	1.04
503	5340644	15.000	226	18.89999	40.5528	4110	4.55	0.67	0.59
504	5461440	14.560	106	19.69552	40.6482	5403	4.75	0.68	0.95
505	5689351	14.194	122	19.06666	40.9193	4985	4.24	1.26	1.01
506	5780715	14.731	116	19.23392	41.0959	5777	4.56	0.90	1.06
507	5812960	14.915	193	19.83358	41.0570	5117	4.41	1.02	0.98
508	6266741	14.387	109	18.96808	41.6296	5497	4.26	1.27	1.08
509	6381846	14.883	246	19.78479	41.7555	5437	4.57	0.87	1.00
510	6422155	14.532	161	18.89123	41.8219	5355	4.39	1.07	1.03
511	6451936	14.209	110	19.64311	41.8841	5802	4.40	1.08	1.09
512	6838050	14.825	157	18.80742	42.3545	5406	4.32	1.18	1.05
513	6937692	14.856	135	19.21537	42.4136	6288	4.58	0.90	1.10
517	8015907	14.034	122	19.10190	43.8734	5510	4.31	1.19	1.07
518	8017703	14.287	92.4	19.16261	43.8321	4822	4.60	0.76	0.84
519	8022244	14.939	157	19.30355	43.8762	5807	4.52	0.94	1.06
520	8037145	14.550	149	19.64453	43.8533	5048	4.47	0.95	0.95
521	8162789	14.633	165	19.38234	44.0913	5767	4.39	1.09	1.08
522	8265218	14.406	172	20.07653	44.1045	5663	4.91	0.57	0.97
523	8806123	15.000	98.3	19.06981	45.0532	5942	4.42	1.07	1.09
524	8934495	14.868	137	18.90294	45.2256	5187	4.70	0.71	0.92
525	9119458	14.539	150	20.06052	45.4579	5524	4.28	1.24	1.07
526	9157634	14.427	124	19.53715	45.5512	5467	4.63	0.80	0.99
528	9941859	14.598	109	19.14007	46.8965	5448	4.35	1.14	1.05
530	10266615	14.909	152	19.24471	47.3991	5517	4.84	0.61	0.96
531	10395543	14.418	129	19.17941	47.5469	3946	4.49	0.70	0.56
532	10454313	14.708	142	18.95048	47.6890	5874	4.54	0.92	1.07
533	10513530	14.680	133	18.70942	47.7519	5198	4.44	0.99	0.99
534	10554999	14.613	142	19.91092	47.7620	5145	4.79	0.63	0.89
535	10873260	14.434	140	19.75904	48.2335	5782	4.45	1.02	1.07
536	10965008	14.499	93.3	19.06827	48.4318	5614	4.60	0.84	1.03
537	11073351	14.665	112	19.05271	48.6833	5889	4.91	0.58	1.00
538	11090765	14.560	114	19.66343	48.6512	5923	4.43	1.06	1.09
541	11656721	14.748	81.4	19.26144	49.7620	5369	4.71	0.71	0.96
542	11669239	14.350	107	19.70476	49.7746	5509	4.36	1.13	1.06
543	11823054	14.707	158	19.74343	50.0958	5166	4.72	0.69	0.91
546	12058931	14.896	143	19.32201	50.5862	5989	4.49	0.99	1.09
547	12116489	14.773	156	19.63803	50.6730	5086	4.62	0.78	0.92
548	12600735	14.020	81.4	19.30005	51.6857	6154	4.57	0.90	1.09
550	4165473	14.070	125	19.56467	39.2528	5635	4.68	0.77	1.02
551	4270253	14.943	126	19.56872	39.3159	5627	4.67	0.78	1.02
552	5122112	14.741	237	19.82655	40.2292	6018	4.43	1.06	1.10
554	5443837	14.545	333	19.35674	40.6870	5835	4.64	0.81	1.05
555	5709725	14.759	114	19.54156	40.9348	5218	4.63	0.78	0.95

557	5774349	14.970	138	19.06077	41.0694	5002	4.42	1.01	0.96
558	5978361	14.874	135	19.77752	41.2612	5281	4.58	0.84	0.97
559	6422367	14.791	94.7	18.89807	41.8732	5187	4.47	0.96	0.98
560	6501635	14.721	146	18.92220	41.9787	5142	4.83	0.59	0.88
561	6665695	14.005	89.5	18.80031	42.1765	5059	4.60	0.80	0.92
563	6707833	14.519	79.4	19.73547	42.1420	5879	4.48	0.99	1.08
564	6786037	14.854	115	19.61873	42.2910	5686	4.53	0.93	1.05
566	7119481	14.718	96.8	19.48773	42.6263	5865	4.56	0.90	1.07
567	7445445	14.338	116	19.46346	43.0747	5536	4.52	0.92	1.03
568	7595157	14.140	70.4	19.15303	43.2799	5265	4.86	0.58	0.90
569	8008206	14.458	107	18.83121	43.8899	5039	4.55	0.85	0.93
571	8120608	14.625	187	19.91018	43.9550	3881	4.54	0.64	0.51
572	8193178	14.173	102	19.98643	44.0893	5666	4.31	1.21	1.09
573	8344004	14.674	124	18.75198	44.3155	5729	4.35	1.15	1.08
574	8355239	14.859	169	19.17098	44.3050	5047	4.67	0.73	0.90
575	8367113	14.686	89.8	19.49516	44.3813	5979	4.48	0.99	1.09
577	8558011	14.405	-	19.40381	44.6324	5043	4.31	1.15	1.00
578	8565266	14.684	159	19.59220	44.6381	5777	4.36	1.14	1.09
579	8616637	14.137	107	19.23894	44.7338	5074	4.60	0.80	0.92
580	8625925	14.856	143	19.48135	44.7000	5603	4.92	0.56	0.96
581	8822216	14.807	158	19.54476	45.0656	5514	4.86	0.60	0.95
582	9020160	14.808	159	19.41223	45.3232	5103	4.65	0.75	0.92
583	9076513	14.573	96.6	19.06700	45.4804	5735	4.55	0.90	1.05
584	9146018	14.129	102	19.19453	45.5929	5350	4.80	0.63	0.93
585	9279669	14.911	148	19.42364	45.7479	5437	4.74	0.70	0.96
586	9570741	14.608	122	18.85245	46.2450	5707	4.67	0.78	1.03
587	9607164	14.574	123	19.89232	46.2760	5112	4.42	1.01	0.98
588	9631762	14.337	114	18.83004	46.3214	4431	4.46	0.85	0.76
589	9763754	14.547	85.6	19.24331	46.5978	5880	4.64	0.81	1.05
590	9782691	14.615	134	19.76657	46.5772	6106	4.55	0.92	1.09
592	9957627	14.292	93.6	19.63084	46.8215	5810	4.41	1.08	1.08
593	9958962	14.957	214	19.66594	46.8383	5737	4.62	0.83	1.04
596	10388286	14.818	147	18.91605	47.5163	3740	4.55	0.60	0.47
597	10600261	14.915	142	19.46476	47.8642	5833	4.42	1.07	1.09
598	10656823	14.813	207	19.20806	47.9667	5171	4.81	0.61	0.89
599	10676824	14.854	131	19.74138	47.9215	5820	4.54	0.92	1.06
600	10718726	14.827	119	19.08332	48.0609	5869	4.45	1.03	1.08
601	10973664	14.697	144	19.38994	48.4160	5862	4.58	0.88	1.06
602	12459913	14.647	113	19.41063	51.3349	6007	4.41	1.09	1.10
605	4832837	14.915	161	19.39515	39.9142	4270	4.76	0.53	0.60
607	5441980	14.377	-	19.32061	40.6158	5497	4.61	0.83	1.01
609	5608566	14.491	179	19.21071	40.8789	5696	4.30	1.23	1.09
610	5686174	14.672	150	18.96523	40.9331	4072	4.53	0.69	0.58
611	6309763	14.022	106	19.88627	41.6838	6122	4.55	0.92	1.09
612	6587002	14.157	78.5	18.99790	42.0792	5105	4.22	1.32	1.04
614	7368664	14.517	89.3	19.57242	42.9289	5675	4.89	0.59	0.98
617	9846086	14.608	76.5	19.82791	46.6443	5594	4.53	0.92	1.04
618	10353968	14.959	227	19.79911	47.4774	5471	4.52	0.92	1.02

620	11773022	14.669	385	19.76532	49.9377	5803	4.54	0.91	1.06	
622	12417486	14.932	153	19.72535	51.2638	5171	4.31	1.17	1.01	
623	12068975	11.811	33.3	19.68176	50.5590	6191	4.07	1.67	1.21	
624	3541946	13.597	141	19.37821	38.6910	5537	4.73	0.71	0.99	
625	4449034	13.592	104	19.10425	39.5345	6199	3.86	2.21	1.29	
626	4478168	13.490	62.2	19.67956	39.5397	6134	4.40	1.10	1.12	
627	4563268	13.307	86	19.47670	39.6376	5851	4.22	1.36	1.13	
628	4644604	13.946	82.7	19.24658	39.7083	5668	4.25	1.31	1.10	
629	4656049	13.949	122	19.47362	39.7679	6203	4.18	1.46	1.17	
632	4827723	13.359	65.5	19.29452	39.9450	5273	4.64	0.77	0.95	
633	4841374	13.871	63.5	19.56180	39.9424	5759	4.03	1.74	1.18	
635	5020319	13.034	170	19.62490	40.1946	6065	4.42	1.07	1.11	
638	5113822	13.595	121	19.70396	40.2363	5722	4.31	1.21	1.09	
639	5120087	13.500	87.7	19.79238	40.2282	6166	4.44	1.05	1.11	
640	5121511	13.332	69.3	19.81684	40.2886	5131	4.37	1.07	0.99	
641	5131180	13.583	146	19.95330	40.2351	4054	4.34	0.93	0.68	
644	5356593	13.725	69.9	19.33112	40.5327	5395	3.80	2.33	1.25	
645	5374854	13.716	60.6	19.68116	40.5923	5890	4.09	1.61	1.17	
647	5531694	13.550	48.1	19.41300	40.7027	6154	4.38	1.13	1.12	
649	5613330	13.310	57.8	19.31822	40.8007	6000	4.29	1.26	1.12	
650	5786676	13.594	83.8	19.35975	41.0401	4928	4.32	1.13	0.97	
652	5796675	13.653	166	19.57279	41.0952	4628	4.79	0.57	0.72	
654	5941160	13.984	101	18.96066	41.2375	5799	4.24	1.33	1.12	
655	5966154	13.004	48.3	19.57507	41.2728	6249	4.44	1.06	1.12	
657	6020753	13.872	109	18.86489	41.3220	4632	4.63	0.70	0.76	
658	6062088	13.989	119	19.80600	41.3880	5676	4.53	0.93	1.05	
659	6125481	13.413	55.3	19.49448	41.4169	6463	4.23	1.38	1.18	
660	6267535	13.532	59.9	18.99463	41.6172	5250	4.15	1.45	1.09	
661	6347299	13.909	75.4	19.02315	41.7619	5825	4.40	1.09	1.09	
662	6365156	13.336	57.3	19.47913	41.7271	5889	4.41	1.08	1.09	
663	6425957	13.506	74.8	19.01914	41.8612	4156	4.53	0.70	0.61	
664	6442340	13.484	55.3	19.44231	41.8339	5725	4.24	1.32	1.11	
665	6685609	13.182	103	19.33537	42.1661	5864	4.38	1.12	1.09	
666	6707835	13.721	65.9	19.73548	42.1317	5553	4.59	0.85	1.02	
667	6752502	13.826	847	18.81033	42.2346	4135	4.57	0.67	0.60	1
670	7033671	13.774	66.9	19.45490	42.5162	5608	4.35	1.15	1.07	
671	7040629	13.749	49.5	19.59268	42.5280	5845	4.45	0.97	0.96	1
672	7115785	13.998	110	19.41130	42.6408	5565	4.16	1.45	1.12	
673	7124613	13.343	95.7	19.58897	42.6250	6338	4.34	1.19	1.15	
674	7277317	13.781	-	19.35515	42.8983	4864	3.67	2.74	1.29	
676	7447200	13.822	249	19.50023	43.0832	4218	4.55	0.69	0.63	
678	7509886	13.283	102	19.02928	43.1685	5073	4.17	1.39	1.06	
679	7515212	13.178	51.1	19.17472	43.1417	5929	4.41	1.03	1.01	1
680	7529266	13.643	62.5	19.48582	43.1973	6060	4.35	1.16	1.12	
682	7619236	13.916	69.7	19.67987	43.2695	5504	4.50	0.95	1.03	
683	7630229	13.714	78.1	19.85495	43.2584	5624	4.67	0.78	1.02	
684	7730747	13.831	66.3	18.75269	43.4133	5331	3.96	1.88	1.18	
685	7764367	13.949	76.4	19.69838	43.4931	6187	4.16	1.49	1.18	

686	7906882	13.579	46.1	19.78938	43.6471	5360	4.47	0.96	1.01	
687	7976520	13.813	134	19.80781	43.7114	5606	4.50	0.96	1.05	
688	8161561	13.992	79.4	19.35485	44.0358	6157	4.26	1.31	1.15	
689	8361905	13.766	-	19.36476	44.3871	5438	4.60	0.83	1.00	
691	8480285	13.965	64.9	18.98589	44.5917	6037	4.35	1.17	1.12	
692	8557374	13.648	50.4	19.38828	44.6472	5608	4.90	0.58	0.96	
693	8738735	13.949	76.7	18.98366	44.9560	6121	4.50	0.97	1.10	
694	8802165	13.939	91.9	18.92664	45.0169	5596	4.87	0.60	0.97	
695	8805348	13.437	49.1	19.04373	45.0796	5980	4.36	1.16	1.11	
697	8878187	13.684	-	19.26673	45.1543	5779	4.05	1.70	1.18	
698	8891278	13.816	91.2	19.59424	45.1898	5705	4.47	0.91	0.90	1
700	8962094	13.580	54.7	19.66490	45.2137	5601	4.37	1.12	1.07	
701	9002278	13.725	83.4	18.88085	45.3499	4869	4.70	0.68	0.83	
703	9162741	13.361	60.2	19.66080	45.5667	6178	4.36	1.17	1.14	1
704	9266431	13.704	75.7	18.95908	45.7197	5276	4.47	0.96	0.99	
707	9458613	13.988	103	19.27184	46.0052	5933	4.27	1.29	1.12	
708	9530945	13.998	95	19.58187	46.1292	6036	4.53	0.94	1.09	
709	9578686	13.940	75	19.15552	46.2035	5468	4.53	0.90	1.02	
710	9590976	13.294	48.2	19.53585	46.2775	6653	4.31	1.36	1.38	1
711	9597345	13.967	63	19.69419	46.2665	5488	4.45	1.00	1.04	
712	9640976	13.720	61.1	19.19942	46.3569	5500	4.76	0.68	0.97	
714	9702072	13.393	93.4	19.20054	46.4736	5444	4.66	0.76	0.98	
716	9846348	13.754	53.3	19.83281	46.6945	5845	4.50	0.96	1.07	
717	9873254	13.387	51.6	18.81420	46.7178	5412	4.96	0.52	0.90	
718	9884104	13.764	93.4	19.24927	46.7626	5801	4.67	0.78	1.04	
719	9950612	13.177	55.6	19.43374	46.8957	4405	4.55	0.73	0.68	1
720	9963524	13.749	150	19.77698	46.8353	5123	4.54	0.86	0.95	
721	9964801	13.645	57.1	19.80456	46.8343	5812	4.10	1.59	1.17	
722	9965439	13.489	54.9	19.81727	46.8432	6133	4.63	0.83	1.08	
723	10002866	15.063	218	19.19374	46.9378	5244	4.66	0.76	0.94	
725	10068383	15.765	707	19.26705	47.0404	5046	4.65	0.74	0.90	
728	10221013	15.356	356	19.77615	47.2303	5976	4.54	0.92	1.08	
730	10227020	15.344	213	19.88789	47.2795	5599	4.39	1.10	1.07	
732	10265898	15.342	240	19.22186	47.3816	5360	4.59	0.83	0.98	
733	10271806	15.644	375	19.39562	47.3576	5038	4.85	0.58	0.85	
734	10272442	15.344	214	19.41315	47.3078	5719	4.70	0.75	1.02	
735	10287242	15.637	375	19.77956	47.3922	5080	4.47	0.94	0.96	
736	10340423	15.962	310	19.47960	47.4571	4157	4.55	0.68	0.60	
737	10345478	15.684	163	19.60807	47.4088	5117	4.60	0.80	0.93	
738	10358759	15.282	176	19.88989	47.4912	5711	4.54	0.91	1.05	
739	10386984	15.488	204	18.86559	47.5786	4050	4.54	0.67	0.57	
740	10395381	15.556	228	19.17388	47.5097	4711	4.64	0.70	0.79	
741	10418797	15.278	138	19.79715	47.5538	5556	4.73	0.71	0.99	
743	10464078	15.487	204	19.28388	47.6353	4877	4.30	1.14	0.96	
745	10485250	15.788	374	19.81030	47.6687	4957	4.43	0.97	0.94	
746	10526549	15.302	165	19.20922	47.7245	4681	4.55	0.79	0.81	
747	10583066	15.784	251	18.91406	47.8633	4357	4.68	0.61	0.65	
749	10601284	15.416	201	19.49174	47.8810	5374	4.78	0.65	0.94	

750	10662202	15.377	177	19.36434	47.9292	4619	4.62	0.70	0.76
751	10682541	15.861	486	19.85388	47.9467	5174	4.55	0.86	0.96
752	10797460	15.347	211	19.46228	48.1417	5584	4.41	1.07	1.06
753	10811496	15.436	263	19.80032	48.1341	5648	4.84	0.62	0.98
755	10854555	15.509	291	19.25033	48.2262	5781	4.44	1.04	1.08
756	10872983	15.714	249	19.75241	48.2247	5787	4.51	0.95	1.07
757	10910878	15.841	321	19.13330	48.3758	4956	4.69	0.70	0.87
758	10987985	15.390	270	19.80171	48.4786	4869	4.28	1.17	0.96
759	11018648	15.082	149	19.04790	48.5059	5401	4.56	0.86	1.00
760	11138155	15.263	118	19.47780	48.7276	5887	4.62	0.83	1.05
762	11153539	15.395	201	19.89712	48.7916	5779	4.60	0.85	1.05
763	11242721	15.536	142	19.40626	48.9338	5788	4.39	1.10	1.09
764	11304958	15.400	188	19.70367	49.0173	5263	4.37	1.09	1.02
765	11391957	15.317	287	19.03328	49.2774	5345	4.70	0.72	0.95
766	11403044	15.506	158	19.46241	49.2540	5913	4.47	1.00	1.09
767	11414511	15.052	301	19.80103	49.2253	5431	4.44	1.01	1.03
769	11460018	15.356	140	19.61772	49.3141	5461	4.64	0.79	0.99
771	11465813	15.207	126	19.77991	49.3165	5574	4.38	1.10	1.06
772	11493732	15.250	179	18.91506	49.4795	5885	4.41	1.08	1.09
773	11507101	15.172	109	19.44813	49.4809	5667	4.62	0.82	1.03
774	11656840	15.270	746	19.26579	49.7337	5873	4.46	1.01	1.08
775	11754553	15.095	239	19.11587	49.9758	4075	4.54	0.68	0.58
776	11812062	15.523	178	19.38572	50.0541	5309	4.83	0.61	0.91
777	11818800	15.487	547	19.62112	50.0802	5256	4.48	0.95	0.99
778	11853255	15.135	262	19.01175	50.1498	4082	4.61	0.61	0.55
779	11909839	15.562	177	19.28237	50.2410	5527	4.40	1.08	1.05
780	11918099	15.334	245	19.58889	50.2304	4833	4.67	0.70	0.82
781	11923270	15.937	405	19.74813	50.2872	3833	4.40	0.79	0.57
782	11960862	15.312	247	19.33987	50.3216	5733	4.41	1.07	1.08
783	12020329	15.080	328	19.69702	50.4946	5284	4.76	0.66	0.93
784	12066335	15.385	254	19.59822	50.5319	4112	4.57	0.65	0.58
785	12070811	15.505	214	19.73476	50.5678	5380	4.73	0.70	0.96
786	12110942	15.242	147	19.44149	50.6182	5638	4.72	0.73	1.01
787	12366084	15.367	300	19.72108	51.1217	5615	4.53	0.92	1.05
788	12404086	15.234	177	19.29331	51.2503	4950	4.63	0.75	0.88
790	12470844	15.339	312	19.75777	51.3195	5176	5.06	0.44	0.82
791	12644822	15.140	463	19.27415	51.7374	5564	4.53	0.92	1.03
794	2713049	15.026	203	19.42933	37.9057	5744	4.49	0.97	1.07
795	3114167	15.591	258	19.39137	38.2736	5455	4.80	0.64	0.95
797	3115833	15.657	477	19.41880	38.2417	5725	4.53	0.92	1.05
799	3246984	15.279	257	19.62455	38.3103	5491	4.41	1.05	1.04
800	3342970	15.541	353	19.44357	38.4947	5938	4.61	0.85	1.07
801	3351888	15.001	166	19.59146	38.4229	5472	4.39	1.08	1.04
802	3453214	15.562	391	19.58775	38.5636	5556	5.01	0.50	0.92
804	3641726	15.387	239	19.35558	38.7282	5136	4.53	0.87	0.95
805	3734868	15.646	462	19.17978	38.8865	5415	4.37	1.11	1.04
806	3832474	15.403	652	19.01891	38.9473	5206	4.53	0.88	0.97
809	3935914	15.530	279	19.01425	39.0275	5690	4.48	0.98	1.06

810	3940418	15.119	224	19.13960	39.0607	4997	4.57	0.82	0.91
811	4049131	15.398	322	19.28770	39.1533	4764	4.43	0.94	0.88
812	4139816	15.954	341	19.07194	39.2783	4097	4.66	0.57	0.55
813	4275191	15.725	239	19.64368	39.3084	5357	4.73	0.70	0.95
814	4476123	15.583	251	19.64737	39.5217	5236	4.86	0.58	0.89
815	4544670	15.684	255	19.06133	39.6248	5344	4.49	0.95	1.00
816	4664847	15.670	261	19.63266	39.7714	5699	4.50	0.96	1.06
817	4725681	15.414	253	18.92443	39.8981	3905	4.59	0.59	0.50
818	4913852	15.877	315	19.25413	40.0334	3785	4.36	0.83	0.58
821	5021899	15.540	263	19.65179	40.1537	5408	4.41	1.05	1.03
822	5077629	15.805	475	18.90256	40.2180	5458	4.61	0.82	1.00
823	5115978	15.202	249	19.73380	40.2954	5976	4.43	1.06	1.10
824	5164255	16.422	-	18.88357	40.3582	4829	4.44	0.94	0.90
825	5252423	15.289	203	18.88143	40.4218	4735	4.58	0.76	0.81
826	5272878	15.090	137	19.40997	40.4205	5557	4.84	0.62	0.97
827	5283542	15.546	197	19.61493	40.4179	5837	4.54	0.92	1.06
829	5358241	15.386	137	19.36412	40.5625	5858	4.57	0.89	1.06
830	5358624	15.224	111	19.37212	40.5774	4915	4.90	0.53	0.80
833	5376067	15.446	193	19.70029	40.5055	5781	4.66	0.79	1.04
834	5436502	15.084	123	19.19314	40.6378	5614	4.60	0.85	1.03
835	5456651	15.208	181	19.61348	40.6634	4817	4.95	0.48	0.75
837	5531576	15.660	237	19.41058	40.7503	4817	4.75	0.62	0.80
838	5534814	15.311	339	19.48096	40.7598	5794	4.48	0.99	1.07
840	5651104	15.028	194	19.95441	40.8224	4916	4.39	1.03	0.94
841	5792202	15.855	467	19.48245	41.0859	5226	4.66	0.76	0.94
842	5794379	15.389	254	19.52754	41.0609	4497	4.52	0.79	0.76
843	5881688	15.270	250	19.56644	41.1376	5784	4.40	1.09	1.08
844	6022556	15.581	304	18.92429	41.3465	5381	4.81	0.63	0.94
845	6032497	15.447	198	19.23400	41.3018	5646	4.44	1.02	1.06
846	6061119	15.482	175	19.79255	41.3961	5612	4.60	0.85	1.03
847	6191521	15.201	105	19.14362	41.5658	5469	4.56	0.88	1.01
849	6276477	15.018	199	19.26628	41.6333	5303	4.48	0.96	1.00
850	6291653	15.305	130	19.59187	41.6618	5236	4.55	0.87	0.97
851	6392727	15.287	486	19.94579	41.7427	5570	4.55	0.89	1.03
852	6422070	15.257	170	18.88776	41.8371	5448	4.47	0.98	1.03
853	6428700	15.376	246	19.10438	41.8084	4842	4.47	0.91	0.89
854	6435936	15.849	493	19.30057	41.8121	3743	4.69	0.49	0.43
855	6522242	15.196	122	19.45069	41.9441	5316	4.59	0.83	0.97
856	6526710	15.344	127	19.54529	41.9692	5858	4.59	0.86	1.06
857	6587280	15.086	162	19.00737	42.0340	5033	4.63	0.76	0.91
858	6599919	15.060	261	19.32652	42.0092	5440	4.45	1.00	1.03
861	6685526	15.001	247	19.33384	42.1165	5066	4.63	0.76	0.91
863	6784235	15.533	295	19.58776	42.2125	5651	4.59	0.85	1.04
864	6849310	15.604	214	19.14951	42.3014	5337	4.77	0.66	0.93
865	6862328	15.085	139	19.43892	42.3682	5560	4.70	0.73	1.00
867	6863998	15.219	231	19.47368	42.3803	5059	4.52	0.88	0.94
868	6867155	15.172	254	19.53386	42.3072	4118	4.52	0.71	0.61
869	6948054	15.599	277	19.44260	42.4363	5085	4.46	0.96	0.96

870	6949607	15.036	224	19.47580	42.4294	4590	4.29	1.12	0.89
871	7031517	15.215	1141	19.40798	42.5071	5650	5.05	0.48	0.93
872	7109675	15.262	349	19.28458	42.6042	5127	4.59	0.81	0.94
873	7118364	15.024	101	19.46428	42.6961	5470	4.78	0.66	0.96
874	7134976	15.024	154	19.76556	42.6634	5037	4.56	0.84	0.93
875	7135852	15.692	331	19.77960	42.6261	4198	4.87	0.45	0.54
876	7270230	15.877	727	19.19227	42.8324	5417	4.87	0.59	0.93
877	7287995	15.019	272	19.57580	42.8250	4211	4.57	0.68	0.62
878	7303253	15.316	164	19.83067	42.8399	4749	4.28	1.16	0.94
880	7366258	15.158	213	19.52489	42.9661	5512	4.49	0.96	1.03
881	7373451	15.859	243	19.66065	42.9353	5053	4.82	0.60	0.86
882	7377033	15.533	645	19.72236	42.9431	5081	4.57	0.83	0.93
883	7380537	15.766	342	19.77887	42.9679	4674	4.82	0.55	0.73
884	7434875	15.067	324	19.24283	43.0393	4931	4.87	0.55	0.81
886	7455287	15.847	288	19.65160	43.0563	3705	4.63	0.53	0.44
887	7458762	15.031	116	19.71010	43.0298	5601	4.53	0.92	1.04
889	757450	15.264	371	19.40917	36.5774	5101	4.48	0.93	0.96
890	7585481	15.261	131	18.84663	43.2727	5976	4.56	0.90	1.07
891	7663691	15.063	161	18.90872	43.3794	5851	4.59	0.86	1.06
892	7678434	15.193	241	19.35955	43.3639	5010	4.60	0.79	0.91
893	7685981	15.662	177	19.53104	43.3464	5729	4.46	1.01	1.07
895	7767559	15.403	593	19.76068	43.4554	5436	4.37	1.10	1.04
896	7825899	15.258	268	19.53743	43.5814	5206	4.63	0.78	0.94
897	7849854	15.257	263	19.97079	43.5036	5734	4.46	1.01	1.07
898	7870390	15.777	350	18.81550	43.6656	4051	4.53	0.68	0.57
899	7907423	15.234	176	19.79900	43.6585	3653	4.59	0.55	0.43
900	7938496	15.425	191	18.79737	43.7031	5692	4.34	1.17	1.09
901	8013419	15.750	163	19.01117	43.8763	4213	4.72	0.55	0.58
902	8018547	15.754	390	19.19016	43.8980	4312	4.62	0.65	0.64
903	8039892	15.813	167	19.70241	43.8845	5620	4.78	0.68	0.99
904	8150320	15.791	221	19.01122	44.0265	4362	4.56	0.72	0.69
905	8180063	15.289	410	19.76717	44.0361	5668	5.04	0.48	0.94
906	8226994	15.460	197	19.30632	44.1420	5017	4.56	0.84	0.92
907	8247638	15.223	153	19.77108	44.1059	5634	4.35	1.15	1.08
908	8255887	15.113	158	19.90904	44.1709	5391	4.25	1.29	1.07
910	8414716	15.651	179	18.96203	44.4805	5017	4.86	0.56	0.84
911	8490993	15.399	226	19.35089	44.5565	5820	4.78	0.68	1.02
912	8505670	15.058	183	19.70529	44.5460	4214	4.61	0.64	0.60
913	8544996	15.198	164	18.98870	44.6581	5463	4.75	0.69	0.97
914	8552202	15.371	195	19.24844	44.6075	5479	4.97	0.52	0.92
916	8628973	15.142	154	19.56366	44.7928	5401	4.48	0.96	1.01
917	8655354	15.172	204	20.06997	44.7063	5681	4.48	0.98	1.06
918	8672910	15.011	235	18.93183	44.8116	5321	4.54	0.88	0.99
920	8689031	15.067	140	19.44782	44.8873	5330	4.86	0.59	0.91
921	8689373	15.532	250	19.45613	44.8581	5046	4.71	0.69	0.89
922	8826878	15.365	261	19.65646	45.0344	5253	4.46	0.98	0.99
923	8883593	15.543	223	19.40616	45.1155	5669	4.60	0.85	1.04
924	8951215	15.229	174	19.41387	45.2444	5951	4.53	0.94	1.08

926	9077124	15.603	227	19.09067	45.4143	5741	4.56	0.89	1.05	
928	9140402	15.251	128	18.98396	45.5991	5450	4.53	0.91	1.01	
929	9141746	15.649	152	19.03699	45.5789	5820	4.42	1.06	1.08	
931	9166862	15.272	144	19.75954	45.5686	5714	4.78	0.68	1.01	
934	9334289	15.843	309	19.21098	45.8165	5733	4.66	0.79	1.03	
935	9347899	15.237	186	19.60153	45.8531	6345	4.70	0.77	1.09	
936	9388479	15.073	188	18.91547	45.9588	3684	4.44	0.72	0.51	
937	9406990	15.412	176	19.53455	45.9147	5349	4.69	0.74	0.96	
938	9415172	15.596	199	19.73762	45.9768	5342	4.58	0.84	0.98	
939	9466668	15.065	157	19.50536	46.0974	5649	4.57	0.88	1.04	
940	9479273	15.017	73.1	19.80304	46.0274	5284	4.63	0.79	0.96	
941	9480189	15.471	305	19.82107	46.0233	4998	4.30	1.16	0.99	
942	9512687	15.386	203	18.97926	46.1723	4997	4.73	0.66	0.87	
943	9513865	15.733	202	19.02609	46.1809	5178	4.73	0.68	0.91	
944	9595686	15.361	196	19.65332	46.2076	5166	4.50	0.92	0.97	
945	9605514	15.083	166	19.86344	46.2647	6059	4.59	0.87	1.08	
947	9710326	15.190	228	19.45752	46.4293	3829	4.53	0.64	0.50	
949	9766437	15.485	218	19.33787	46.5791	5733	4.70	0.75	1.02	
951	9775938	15.223	198	19.60457	46.5793	4767	4.26	1.21	0.95	
952	9787239	15.801	291	19.85616	46.5743	3911	4.64	0.56	0.49	
953	9820483	15.954	349	19.09882	46.6925	5491	4.58	0.86	1.01	
954	9823457	15.219	139	19.21413	46.6150	5677	4.64	0.80	1.03	
955	9825625	15.067	133	19.29545	46.6175	6121	4.51	0.96	1.10	
956	9875711	15.223	197	18.92440	46.7896	4580	4.33	1.05	0.87	
960	8176650	15.513	165	19.69805	44.0107	5213	4.72	0.70	0.92	
961	8561063	15.920	157	19.48127	44.6192	4188	4.56	0.68	0.62	1
972	11013201	9.275	30.8	18.80002	48.5422	7779	3.82	2.54	1.56	
974	9414417	9.582	26	19.72018	45.9881	6069	4.34	1.19	1.12	
975	3632418	8.224	25.5	19.15745	38.7140	6017	4.38	1.09	1.05	1
976	3441784	9.729	149	19.39629	38.5389	7822	4.28	1.62	1.84	1
977	11192141	10.523	125	19.51464	48.8520	3240	4.90	0.27	0.21	1
981	8607720	10.733	101	18.91576	44.7133	5064	3.36	4.10	1.41	
984	1161345	11.631	101	19.40325	36.8399	5836	4.15	1.50	1.15	
986	2854698	14.138	175	19.46173	38.0141	5348	4.92	0.54	0.90	
987	7295235	12.550	42.4	19.70494	42.8064	5244	4.56	0.85	0.97	
988	2302548	13.562	126	19.42432	37.6092	5052	4.01	1.75	1.14	
991	10154388	13.581	48.4	19.76641	47.1829	5681	4.07	1.66	1.16	
992	1432789	15.214	195	19.43330	37.0593	5648	4.65	0.79	1.02	
993	1718189	14.246	129	19.38191	37.2527	5616	4.79	0.67	0.99	
994	1431122	14.613	174	19.40950	37.0613	5398	4.47	0.98	1.02	
998	1432214	15.661	278	19.42551	37.0730	5814	4.60	0.86	1.06	
999	2165002	15.391	351	19.49798	37.5678	5118	4.57	0.83	0.94	
1001	1871056	13.038	59.6	19.46964	37.3762	5956	3.81	2.33	1.29	
1002	1865042	13.615	82.4	19.37882	37.3551	5112	4.82	0.60	0.87	
1003	2438502	16.209	1381	19.35519	37.7267	5126	4.50	0.92	0.96	
1005	5780460	15.703	337	19.22777	41.0298	4975	4.46	0.95	0.94	
1010	1027438	13.620	94.8	19.42360	36.7845	6452	4.16	1.52	1.21	
1013	6047498	15.348	183	19.55904	41.3498	5359	4.88	0.58	0.92	

1014	8125580	15.759	261	19.99315	43.9039	4630	4.60	0.72	0.77
1015	8158127	14.500	111	19.27313	44.0044	6243	4.47	1.02	1.12
1017	8174625	15.007	146	19.65626	44.0777	5350	4.41	1.04	1.02
1019	8179973	10.266	58.6	19.76546	44.0092	4788	4.09	1.54	1.06
1020	2309719	12.899	74	19.52872	37.6066	5786	4.14	1.52	1.15
1022	2716853	15.762	340	19.48454	37.9556	5469	4.54	0.89	1.01
1024	2715135	14.496	204	19.46022	37.9023	4162	4.61	0.62	0.58
1026	1996399	14.748	189	19.09389	37.4268	3802	4.49	0.68	0.52
1029	2164169	14.757	163	19.48607	37.5808	5739	4.48	0.99	1.07
1030	2574338	15.399	232	19.40923	37.8593	6205	4.72	0.75	1.07
1031	2584163	15.160	251	19.55027	37.8462	5688	4.46	1.00	1.07
1032	2162635	13.862	125	19.46517	37.5326	4787	3.57	3.15	1.33
1050	5809890	13.999	136	19.79073	41.0973	4894	4.40	1.01	0.93
1051	6131236	15.391	127	19.61088	41.4518	5825	4.69	0.76	1.04
1052	5956342	15.381	215	19.36736	41.2448	6066	4.51	0.96	1.09
1053	5956656	15.376	264	19.37386	41.2011	5403	4.59	0.83	0.99
1054	6032981	11.899	188	19.24551	41.3073	5118	4.39	1.05	0.99
1059	6060203	14.803	114	19.77870	41.3865	5364	4.77	0.67	0.94
1060	5880320	14.348	104	19.53897	41.1354	6400	4.50	0.98	1.13
1061	6037187	14.502	114	19.34210	41.3815	5720	4.45	1.02	1.07
1072	8229696	14.743	136	19.36691	44.1436	5876	4.41	1.09	1.09
1078	10166274	15.438	294	19.98869	47.1575	3931	4.73	0.49	0.48
1081	10149023	15.220	125	19.65124	47.1328	5909	4.73	0.73	1.04
1082	10141900	15.692	270	19.47630	47.1574	5087	4.63	0.76	0.92
1083	10157458	15.302	124	19.82621	47.1646	5575	4.58	0.86	1.03
1085	10118816	15.233	188	18.73667	47.1882	3978	4.52	0.67	0.55
1086	10122255	14.609	107	18.87897	47.1557	5791	4.40	1.09	1.09
1089	3247268	14.696	127	19.62890	38.3555	5915	4.42	1.07	1.09
1094	2721030	15.678	296	19.54564	37.9698	5704	4.62	0.83	1.04
1095	3329204	15.617	183	19.17446	38.4023	5470	4.60	0.83	1.00
1099	2853093	15.435	238	19.43861	38.0358	5665	4.95	0.55	0.96
1101	3245969	15.681	320	19.60771	38.3935	4825	4.79	0.59	0.79
1102	3231341	14.925	204	19.36088	38.3438	5800	4.34	1.17	1.10
1106	3240158	14.818	163	19.51421	38.3582	5954	4.56	0.90	1.07
1108	3218908	14.604	128	19.09936	38.3749	5350	4.73	0.70	0.95
1109	3235672	14.792	222	19.44046	38.3481	4977	4.45	0.95	0.94
1110	2837111	14.794	120	19.16294	38.0884	5689	4.51	0.95	1.06
1111	3120276	15.212	236	19.48527	38.2845	5473	4.68	0.75	0.99
1112	3109930	14.633	144	19.31845	38.2623	5835	4.45	1.02	1.08
1113	2854914	13.703	90.9	19.46508	38.0551	6132	4.39	1.11	1.12
1114	3337425	14.928	187	19.34233	38.4042	5568	4.37	1.12	1.06
1115	3116412	13.974	98.5	19.42824	38.2166	5487	4.23	1.33	1.09
1116	2849805	13.333	64.4	19.39231	38.0576	5776	4.49	0.97	1.07
1117	3114811	12.808	57.3	19.40213	38.2120	6270	4.54	0.94	1.11
1118	2853446	13.835	87.6	19.44340	38.0282	6054	4.34	1.19	1.12
1128	6362874	13.507	61.1	19.42889	41.7034	5281	4.76	0.67	0.93
1129	6272413	15.456	131	19.15151	41.6356	4904	4.33	1.10	0.96
1141	8346392	15.950	422	18.84827	44.3465	4021	4.54	0.67	0.56

1142	8288947	15.764	201	19.16516	44.2375	5141	4.69	0.71	0.91	
1144	8302450	15.282	84.8	19.52398	44.2006	5730	4.57	0.88	1.05	
1145	8313667	14.143	106	19.76991	44.2647	5808	4.56	0.90	1.06	
1146	8351704	15.649	178	19.04190	44.3109	3868	4.70	0.51	0.46	
1148	8410727	13.908	71.7	18.81334	44.4223	6158	4.28	1.28	1.14	
1149	8349405	15.602	136	18.95904	44.3913	5195	4.57	0.84	0.96	
1150	8278371	13.326	53.7	18.78443	44.2926	5601	4.52	0.93	1.04	
1151	8280511	13.404	44.1	18.86686	44.2842	5431	4.44	1.01	1.03	
1152	10287248	13.987	621	19.77971	47.3273	4069	4.57	0.65	0.58	1
1159	10354039	15.332	159	19.80099	47.4864	4886	4.48	0.91	0.90	
1160	10330115	15.987	352	19.17691	47.4148	5164	4.88	0.56	0.87	
1161	10426656	14.678	113	19.94183	47.5938	5109	4.36	1.10	0.99	
1162	10528068	12.783	45.7	19.25788	47.7594	5833	4.28	1.26	1.11	
1163	10468940	14.968	163	19.42015	47.6978	5419	4.50	0.93	1.01	
1164	10341831	14.960	188	19.51593	47.4907	3851	4.42	0.76	0.56	
1165	10337517	13.916	85.7	19.40420	47.4848	5549	4.27	1.26	1.08	
1166	10351231	15.440	128	19.74209	47.4388	5833	4.55	0.91	1.07	
1168	10460629	13.997	70.3	19.17245	47.6000	6209	4.23	1.37	1.16	
1169	10319385	13.248	49.5	18.77008	47.4700	5693	4.59	0.85	1.04	
1170	10482160	14.657	118	19.74881	47.6790	5558	4.94	0.55	0.94	
1175	10350571	13.290	63.7	19.72804	47.4486	5394	4.59	0.84	0.99	
1176	3749365	15.715	362	19.47122	38.8423	4601	4.69	0.65	0.74	
1177	3547091	15.537	861	19.47190	38.6315	5360	4.74	0.69	0.95	
1187	3848972	14.489	193	19.40475	38.9990	5286	4.85	0.59	0.91	
1192	3644071	14.215	86.6	19.40214	38.7039	5399	4.35	1.13	1.04	
1193	3942446	15.289	146	19.19254	39.0787	5486	4.37	1.11	1.05	
1198	3447722	15.319	257	19.49865	38.5149	6297	4.71	0.76	1.08	
1199	3859079	14.887	183	19.58293	38.9393	4746	4.50	0.86	0.85	
1201	4061149	15.597	388	19.50514	39.1209	3852	4.72	0.49	0.46	
1202	3444588	15.854	434	19.44616	38.5729	4196	4.74	0.53	0.57	
1203	3962243	15.368	210	19.57121	39.0363	5812	4.55	0.90	1.06	
1204	3438507	15.291	243	19.33336	38.5399	6084	4.53	0.95	1.09	
1205	3869014	14.507	143	19.73168	38.9466	5951	4.50	0.97	1.08	
1207	3732821	15.187	172	19.12781	38.8722	5058	4.47	0.94	0.95	
1208	3962440	13.594	65.8	19.57458	39.0226	6293	4.43	1.07	1.13	
1210	3962357	14.377	122	19.57306	39.0295	6156	4.74	0.73	1.06	
1212	3749134	14.981	201	19.46712	38.8207	5702	4.45	1.02	1.07	
1214	3660924	14.621	107	19.68111	38.7743	5538	4.35	1.15	1.06	
1215	3939150	13.420	60.9	19.10554	39.0772	6306	4.24	1.35	1.16	
1216	3839488	13.459	67.9	19.20891	38.9969	5842	4.33	1.19	1.10	
1218	3442055	13.331	64	19.40127	38.5456	5617	4.38	1.10	1.07	
1219	3440861	14.463	126	19.37779	38.5683	4972	4.44	0.97	0.94	
1220	4043190	12.988	54	19.15386	39.1447	4874	4.49	0.89	0.89	
1221	3640905	11.584	56.9	19.34048	38.7022	4972	3.39	3.93	1.39	
1222	4060815	12.203	75.2	19.49979	39.1932	4722	4.56	0.78	0.82	
1226	6621116	15.324	139	19.72446	42.0627	5045	4.47	0.94	0.95	
1227	6629332	13.997	401	19.84714	42.0474	5452	4.82	0.63	0.95	
1230	6470149	12.263	127	19.92988	41.8122	4864	3.02	6.16	1.46	

1236	6677841	13.659	124	19.15941	42.1948	6562	4.46	1.04	1.15	
1238	6383821	14.556	113	19.81393	41.7817	5408	4.52	0.92	1.01	
1240	6690082	14.466	99.9	19.42603	42.1806	5543	4.55	0.89	1.03	
1241	6448890	12.440	104	19.58389	41.8719	4857	3.23	4.83	1.43	
1242	6607447	13.750	48.4	19.48189	42.0354	6234	4.50	0.98	1.11	
1244	6692833	14.503	91.1	19.48248	42.1543	5871	4.65	0.80	1.05	
1245	6693640	14.200	69.6	19.49855	42.1423	6119	4.52	0.95	1.10	
1246	6441738	14.898	104	19.42850	41.8782	6032	4.43	1.06	1.10	
1257	8751933	14.651	104	19.41501	44.9274	5142	4.30	1.19	1.02	
1258	8630788	15.773	256	19.60721	44.7707	5517	4.72	0.72	0.99	
1261	8678594	15.120	118	19.14499	44.8786	5760	4.55	0.90	1.06	
1264	8612847	15.762	216	19.10499	44.7952	5418	4.62	0.81	0.99	
1266	8547140	15.314	189	19.07168	44.6646	4342	4.57	0.70	0.67	
1268	8813698	14.814	94.4	19.32598	45.0057	6064	4.43	1.06	1.11	
1270	8564587	14.809	118	19.57609	44.6570	5145	4.87	0.57	0.87	
1273	8806072	14.862	118	19.06772	45.0078	5468	4.60	0.84	1.00	
1275	8583696	13.672	78.4	19.94811	44.6939	5427	4.43	1.02	1.03	
1276	8804283	14.766	105	19.00241	45.0711	5440	4.85	0.60	0.94	
1278	8609450	15.204	129	18.97849	44.7977	5876	4.58	0.88	1.07	
1279	8628758	13.749	71.2	19.55815	44.7851	5582	4.81	0.65	0.98	
1281	8742590	14.427	93.6	19.13112	44.9925	5546	4.62	0.82	1.02	
1282	8822366	12.547	42	19.54866	45.0533	6060	4.25	1.33	1.14	
1283	8700771	11.731	23	19.73381	44.8535	5776	4.47	0.93	0.92	1
1285	10599397	14.546	147	19.44247	47.8323	5278	4.52	0.90	0.98	
1288	10790387	15.128	129	19.26801	48.1198	6130	4.43	1.07	1.11	
1298	10604335	15.847	338	19.57425	47.8390	4157	4.48	0.77	0.64	
1299	10864656	12.183	94.7	19.55215	48.2859	4950	3.47	3.58	1.37	
1300	10975146	14.285	161	19.43961	48.4456	4369	4.51	0.77	0.71	
1301	10538176	15.824	-	19.54310	47.7297	5414	4.81	0.63	0.94	
1302	10724369	14.755	118	19.27224	48.0181	5659	4.60	0.84	1.04	
1303	10867062	14.965	114	19.61534	48.2045	5239	4.22	1.32	1.06	
1304	10744335	15.803	203	19.77432	48.0826	5733	4.65	0.80	1.03	
1305	10730034	15.173	193	19.42606	48.0656	5235	4.71	0.70	0.93	
1306	10858691	15.587	198	19.37841	48.2943	5714	4.52	0.94	1.06	
1307	10973814	14.775	97.7	19.39516	48.4436	5559	4.40	1.07	1.06	
1308	10586208	13.971	75.2	19.02829	47.8346	5709	4.51	0.95	1.06	
1309	10854768	13.832	77.5	19.25702	48.2085	6869	4.27	1.33	1.22	
1310	10964440	14.569	94.3	19.04418	48.4354	5800	4.52	0.94	1.07	
1311	10713616	13.498	51.1	18.90220	48.0943	5920	4.20	1.40	1.14	
1312	10963242	14.706	101	18.99403	48.4316	6157	4.64	0.82	1.08	
1314	10585852	13.242	68.9	19.01474	47.8814	5033	3.70	2.66	1.29	
1315	10928043	13.137	57	19.68626	48.3748	6160	4.32	1.23	1.13	
1316	10794087	11.926	32.8	19.37016	48.1263	5861	4.44	0.98	0.97	1
1325	4282872	15.062	222	19.74901	39.3703	5589	4.83	0.63	0.98	
1328	4074736	15.671	206	19.72039	39.1780	5425	4.70	0.72	0.97	
1329	4072526	15.030	190	19.69139	39.1772	5157	4.61	0.80	0.94	
1335	4155328	13.968	135	19.40134	39.2207	5970	4.03	1.76	1.20	
1336	4077526	14.820	184	19.75724	39.1152	5843	4.38	1.12	1.09	

1337	4243911	14.829	169	19.04116	39.3795	5067	4.57	0.83	0.93	
1338	4466677	14.609	173	19.48507	39.5502	5597	4.44	1.03	1.06	
1339	4135665	14.801	125	18.97217	39.2202	5533	4.34	1.16	1.06	
1341	4650674	14.946	119	19.36516	39.7320	5933	4.40	1.09	1.10	
1342	4275721	14.207	110	19.65133	39.3985	5972	4.41	1.09	1.10	
1344	4136466	13.446	57.1	18.99068	39.2406	5731	4.57	0.88	1.05	
1353	7303287	13.956	113	19.83102	42.8828	6031	4.10	1.62	1.19	
1355	7211141	15.897	210	19.66440	42.7086	5529	4.97	0.52	0.93	
1360	7102227	15.596	287	19.09400	42.6816	4953	4.66	0.72	0.87	
1361	6960913	14.995	149	19.68697	42.4753	4050	4.62	0.59	0.53	
1363	6936909	15.934	271	19.19442	42.4373	5702	4.64	0.80	1.03	
1364	6962977	15.956	219	19.71774	42.4243	5311	4.48	0.96	1.00	
1366	6932987	15.368	179	19.09054	42.4065	5559	4.64	0.79	1.01	
1367	6934291	15.055	159	19.12582	42.4713	4927	4.64	0.74	0.87	
1369	7287415	14.878	124	19.56460	42.8224	5778	4.47	0.99	1.07	
1370	6924203	14.931	154	18.82219	42.4638	5489	4.67	0.77	0.99	
1372	6880531	15.384	120	19.75999	42.3871	5760	4.55	0.91	1.06	
1375	6766634	13.709	52.5	19.22136	42.2614	6169	4.36	1.17	1.14	1
1376	6774826	13.997	75.4	19.40091	42.2831	7211	4.29	1.50	1.61	1
1377	7211469	14.788	85.8	19.67029	42.7568	6027	4.41	1.09	1.11	
1378	7375795	13.601	51.1	19.70071	42.9306	5234	4.48	0.85	0.79	1
1379	7211221	13.687	51.9	19.66570	42.7277	5635	4.84	0.63	0.98	
1382	9446824	15.653	576	18.81229	46.0069	5921	4.39	1.10	1.10	
1385	9278553	15.840	215	19.39224	45.7659	5848	4.76	0.70	1.02	
1387	8949247	14.669	92	19.36620	45.2059	5696	4.47	0.99	1.06	
1391	8958035	14.360	152	19.58060	45.2864	6012	4.51	0.96	1.09	
1395	8935810	15.977	301	18.94731	45.2581	5279	4.83	0.61	0.91	
1396	9455556	15.843	305	19.15947	46.0593	5667	4.57	0.88	1.04	
1401	9030447	13.440	114	19.65267	45.3916	6693	4.30	1.28	1.19	
1402	9034103	15.906	184	19.72841	45.3839	5738	4.74	0.71	1.02	
1403	9214942	15.473	214	19.36533	45.6007	4209	4.57	0.67	0.61	
1404	8874090	15.931	280	19.13697	45.1804	4400	4.73	0.58	0.65	
1405	9264949	15.965	178	18.90495	45.7348	6009	4.61	0.85	1.07	
1406	9271752	14.630	103	19.16352	45.7044	6027	4.49	0.99	1.09	
1407	9007866	15.755	179	19.06591	45.3778	5487	4.81	0.64	0.96	
1408	9150827	14.688	166	19.35297	45.5646	4036	4.47	0.75	0.60	
1409	9391208	15.198	119	19.01645	45.9502	5593	4.38	1.10	1.07	
1410	9391506	15.300	137	19.02903	45.9760	5929	4.54	0.93	1.08	
1412	8950853	13.601	67.7	19.40498	45.2426	5997	4.40	1.10	1.10	
1413	9006449	14.447	99.9	19.02306	45.3678	5394	4.44	1.01	1.02	
1419	11125936	15.507	299	19.02746	48.7252	5848	4.46	1.01	1.08	
1422	11497958	15.921	300	19.10267	49.4373	3712	4.41	0.75	0.53	
1423	11177707	15.740	235	18.95009	48.8096	5288	4.77	0.66	0.93	
1424	11611600	15.127	137	19.48857	49.6535	4667	4.72	0.63	0.75	
1425	11254382	15.269	198	19.75480	48.9715	5639	4.85	0.61	0.98	
1426	11122894	14.232	76.1	18.88061	48.7776	5854	4.43	1.05	1.09	
1427	11129738	15.840	229	19.19052	48.7741	4027	4.53	0.68	0.56	
1428	11401182	14.631	105	19.39717	49.2038	4757	4.51	0.85	0.85	

1429	11030711	15.531	162	19.49010	48.5111	5595	4.58	0.87	1.03	
1430	11176127	15.415	212	18.86932	48.8254	4502	4.60	0.71	0.73	
1432	11014932	15.017	170	18.88046	48.5805	5675	4.65	0.80	1.03	
1433	11288505	15.650	203	19.13713	49.0460	5560	4.83	0.63	0.97	
1434	11493431	14.782	167	18.90032	49.4510	4731	4.47	0.89	0.86	
1435	11037335	14.201	77.7	19.68591	48.5997	5744	4.70	0.75	1.03	
1436	11389771	14.271	152	18.93220	49.2330	5616	4.52	0.93	1.05	
1437	11599038	15.280	179	18.98978	49.6924	5791	4.46	1.01	1.07	
1438	11193263	14.056	74.6	19.55255	48.8116	5596	4.43	1.04	1.06	
1439	11027624	12.849	44.6	19.39012	48.5213	5967	4.31	1.22	1.12	
1440	11032227	15.451	131	19.53896	48.5754	5970	4.68	0.77	1.05	
1441	11356260	15.135	132	19.64535	49.1402	5575	4.43	1.04	1.06	
1442	11600889	12.521	52.7	19.06909	49.6145	5469	4.24	1.30	1.08	
1444	11043167	13.949	92.2	19.82611	48.5607	6101	4.25	1.33	1.14	
1445	11336883	12.320	44.2	18.92912	49.1103	6336	4.36	1.18	1.14	
1448	9705459	15.418	1365	19.32035	46.4917	5658	4.36	1.14	1.08	
1452	7449844	13.630	440	19.55210	43.0558	6834	4.10	1.66	1.27	
1459	9761199	15.692	484	19.14288	46.5081	4060	4.40	0.84	0.65	
1463	7672940	12.328	48.2	19.21724	43.3765	6020	4.38	1.09	1.05	1
1465	11702948	14.245	179	19.07663	49.8675	5619	4.85	0.62	0.98	
1468	9851226	15.262	276	19.92150	46.6503	5635	4.44	1.02	1.06	
1472	7761545	15.061	103	19.64216	43.4005	5455	4.92	0.56	0.93	
1474	12365184	13.005	70.4	19.69453	51.1848	6498	4.08	1.68	1.23	
1475	4770365	15.937	-	19.82869	39.8478	4097	4.59	0.63	0.56	
1476	12406749	15.792	292	19.39028	51.2228	5275	4.52	0.90	0.98	
1477	7811397	15.917	299	19.17693	43.5057	5346	4.71	0.71	0.95	
1478	12403119	12.450	36.3	19.25658	51.2091	5441	4.73	0.70	0.97	
1480	7512982	15.887	310	19.11612	43.1901	4948	4.74	0.65	0.85	
1486	7898352	15.505	170	19.62113	43.6293	5688	4.62	0.83	1.04	
1488	9589323	15.623	212	19.49026	46.2263	4984	4.51	0.88	0.92	
1489	9823487	15.554	205	19.21578	46.6059	5014	4.61	0.78	0.91	
1494	11821363	15.858	-	19.69714	50.0772	4559	4.54	0.78	0.77	
1495	7629518	15.430	139	19.84430	43.2490	5661	4.50	0.95	1.05	
1498	9636135	15.776	188	19.00381	46.3207	5941	4.67	0.78	1.05	
1499	7841925	14.480	92.1	19.84829	43.5274	5264	4.38	1.07	1.01	
1501	7439316	15.835	269	19.34149	43.0856	4659	4.51	0.83	0.82	
1502	12061238	15.202	140	19.41541	50.5670	5034	4.64	0.75	0.90	
1503	12400538	14.827	134	19.15235	51.2500	5356	4.90	0.56	0.91	
1505	9813499	15.695	213	18.82423	46.6752	5701	4.54	0.92	1.05	
1506	12254792	14.982	177	19.29497	50.9941	5582	4.62	0.82	1.02	
1507	12020218	15.259	198	19.69350	50.4786	5881	4.54	0.92	1.07	
1508	7690844	15.689	208	19.63514	43.3682	5695	4.93	0.56	0.97	
1510	11870545	15.929	275	19.67228	50.1146	4772	4.79	0.59	0.77	
1511	7901948	15.106	128	19.69450	43.6056	5520	4.61	0.83	1.01	
1512	11955499	14.880	155	19.12583	50.3771	5068	4.70	0.70	0.90	
1515	7871954	14.390	121	18.87570	43.6571	4103	4.57	0.66	0.58	
1516	12418724	14.829	155	19.76021	51.2713	6092	4.56	0.90	1.09	
1517	7456001	14.683	117	19.66379	43.0143	5815	4.43	1.06	1.08	

1518	7549209	15.219	117	19.82009	43.1419	5563	4.57	0.88	1.03	
1519	7663405	15.369	154	18.89855	43.3838	4994	4.68	0.71	0.88	
1520	9765975	14.516	85.8	19.32394	46.5227	5235	4.51	0.91	0.98	
1521	9818462	14.817	128	19.01975	46.6034	4962	4.42	0.99	0.95	
1522	12266636	14.264	106	19.72044	50.9098	5609	4.41	1.07	1.06	
1523	9850893	14.673	134	19.91534	46.6887	5207	4.37	1.08	1.01	
1525	7869917	12.082	77.1	18.79808	43.6728	6680	4.24	1.38	1.20	
1526	9824805	15.216	135	19.26617	46.6708	6011	4.69	0.77	1.05	
1527	7768451	14.879	94.1	19.77809	43.4984	5470	4.24	1.31	1.08	
1528	7691260	14.083	73.3	19.64333	43.3356	5087	4.95	0.51	0.84	
1529	9821454	14.307	77.3	19.13597	46.6401	6074	4.53	0.94	1.09	
1530	11954842	13.029	43.9	19.09558	50.3003	5973	4.41	1.08	1.10	
1531	11764462	13.069	54.7	19.50563	49.9232	5811	4.41	1.07	1.08	
1532	11656246	12.841	48.9	19.24410	49.7372	6225	4.31	1.24	1.14	
1533	7808587	13.939	60.1	19.08478	43.5952	6122	4.43	1.07	1.11	
1534	4741126	13.470	51.5	19.33939	39.8170	6193	4.42	1.09	1.12	
1535	11669125	13.046	41.8	19.70141	49.7386	5924	4.33	1.19	1.11	
1536	12159249	12.710	47.6	19.43115	50.7595	5848	4.41	1.08	1.09	
1537	9872292	11.740	31.3	18.76411	46.7899	6063	4.37	1.12	1.07	1
1540	5649956	15.559	759	19.94022	40.8493	5390	4.53	0.90	1.00	
1541	4840513	15.189	705	19.54634	39.9073	6164	4.53	0.95	1.10	
1543	5270698	14.985	953	19.36316	40.4429	5821	4.54	0.92	1.06	
1546	5475431	14.456	177	19.90091	40.6396	5505	4.97	0.52	0.93	
1549	8053552	15.135	155	19.93706	43.8972	5401	4.36	1.12	1.04	
1553	7951018	15.182	122	19.22905	43.7635	5942	4.52	0.95	1.08	
1557	5371776	14.840	222	19.62945	40.5576	4783	4.25	1.22	0.96	
1560	8046659	15.042	111	19.82798	43.8766	5620	4.39	1.09	1.07	
1561	4940438	15.549	252	19.73556	40.0196	5659	4.48	0.98	1.06	
1564	5184584	15.287	127	19.40559	40.3553	5709	4.92	0.56	0.97	
1569	8009350	15.587	240	18.87531	43.8882	4639	4.61	0.72	0.77	
1573	5031857	14.373	115	19.78974	40.1386	5838	4.57	0.89	1.06	
1574	10028792	14.600	85.3	19.86113	46.9651	5537	4.58	0.85	1.02	
1576	5299459	14.072	152	19.85301	40.4177	5445	4.35	1.13	1.05	
1577	12506770	15.988	270	19.28604	51.4089	4165	4.61	0.62	0.58	
1581	7939330	15.481	200	18.82928	43.7345	5301	4.57	0.85	0.98	
1582	4918309	15.402	132	19.34191	40.0218	5384	4.80	0.64	0.94	
1583	12602568	15.068	135	19.37246	51.6958	5619	4.63	0.82	1.03	
1584	9941066	15.961	321	19.10569	46.8709	4147	4.52	0.72	0.62	
1585	5470739	15.401	217	19.83217	40.6808	5514	4.66	0.78	1.00	
1586	10022908	14.940	169	19.74515	46.9990	4692	4.70	0.65	0.77	
1587	9932970	15.700	254	18.77459	46.8142	5007	4.54	0.85	0.93	
1588	5617854	14.699	145	19.41020	40.8875	4106	4.58	0.64	0.57	
1589	5301750	14.764	160	19.88347	40.4961	5755	4.42	1.06	1.08	
1590	5542466	15.674	255	19.62432	40.7209	4830	4.50	0.88	0.88	
1591	10028140	15.372	173	19.84932	46.9419	5130	4.97	0.49	0.84	
1593	5289854	15.809	182	19.71901	40.4396	5676	4.54	0.91	1.05	
1595	10006581	14.904	128	19.31545	46.9538	5669	4.52	0.94	1.05	
1596	10027323	15.157	162	19.83399	46.9613	4656	4.39	0.99	0.87	

1597	5039228	12.681	94.7	19.89126	40.1734	6178	4.36	1.17	1.14	1
1598	10004738	14.279	107	19.25596	46.9867	5565	4.52	0.93	1.04	
1599	5474613	14.802	119	19.89159	40.6184	5627	4.48	0.98	1.05	
1601	5438757	14.659	108	19.25140	40.6642	5502	4.60	0.83	1.01	
1602	4860678	14.943	173	19.85313	39.9214	5596	4.58	0.87	1.03	
1603	5177104	14.429	96.4	19.25486	40.3891	5995	4.67	0.79	1.06	
1605	5009189	14.832	123	19.41592	40.1635	5680	4.33	1.17	1.08	
1606	9886661	13.984	76	19.33674	46.7134	5377	4.57	0.85	0.99	
1608	10055126	13.797	74.4	18.80409	47.0855	6030	4.39	1.12	1.11	
1609	5009743	13.956	62.5	19.42704	40.1255	6063	4.45	1.03	1.10	

Table 2
List of Planetary Candidates and their Characteristics

Key:

KOI	Kepler Object of Interest number † indicates that this KOI was detected on the basis of a single transit with the period derived from the transit duration and stellar radius.
Dur	Transit duration, first contact to last contact
Depth	Transit depth at center of transit
SNR	Total SNR of all transits detected. SNR=Depth/(Std*sqrt(N)) where Std is the standard deviation of all data outside of transits (Q0 through Q5) and N is the total number of measurements inside of all transits.
t_0, t_0_unc	Time of a transit center based a linear fit to all observed transits and its uncertainty
Period, P_unc	Average interval between transits based on a linear fit to all observed transits and uncertainty
a/R*, a/R*_unc	Ratio of semi-major axis to stellar radius assuming zero eccentricity, a parameter derived from the light curve, and uncertainty
r/R*, r/R*_unc	Ratio of planet radius to stellar radius and uncertainty
b, b_unc	Impact parameter of the transit and uncertainty. Note, there is a strong co-variance between b and a/R*
R_p	Radius of planet in units of R_{Earth} = 6378 km
a	Semi-major axis of orbit based on Newton's generalization of Kepler's third law and the stellar mass in Table 1.
T_{eq}	Equilibrium temperature of the planet (see main text and Appendix for discussion)
EB prob	Probability of background eclipsing binary confused with planet's host star (see text for discussion)
V	Vetting flag
	1 Confirmed and published planet
	2 Strong probability candidate, cleanly passes tests that were applied
	3 Moderate probability candidate, not all tests cleanly passed but no definite test failures
	4 Insufficient follow-up to perform full suite of vetting tests
FOP	Follow-up observation description (to be revised)
	1 Reconnaissance spectra taken
	2 Adaptive optics observations taken
	3 Speckle observations taken
	4 10 m/s RV spectra taken
	5 2 m/s RV spectra taken
	No Obs No observations yet taken
N	Notes flag. A "1" indicates a note on this KOI or its host star in Table 3.

KOI	Dur [h]	Depth [ppm]	SNR	t_0 [BJD-2454900]	t_0_unc	Period [days]	P_unc	a/R*	a/R*_unc	r/R*	r/R*_unc	b	b_unc	Rp [R_{Earth}]	a [AU]	T_{eq} [K]	EB prob	V	FOP	N
1.01	1.7952	13140	2062	55.76258	0.00004	2.4706131	0.0000004	8.519	0.082	0.12429	0.00029	0.816	0.067	20.3	0.037	1603	1.4E-06	1		1
2.01	3.9107	6205	2413	54.35781	0.00005	2.2047355	0.0000004	4.152	0.041	0.07931	0.00012	0.51	0.1	11.6	0.037	1743	2.4E-06	1		1

3.01	2.3607	3873	328	57.81227	0.00033	4.8878177	0.0000089	16.1	9.1	0.0577	0.0073	0.29	0.86	4.8	0.05	796	2.0E-06	1		1
4.01	2.3866	1099	136	90.5261	0.00055	3.84937	0.000014	10	24	0.034	0.015	0.7	1.4	4.0	0.05	1242	-	3		1
5.01	2.0326	876	263	65.9735	0.00025	4.7803247	0.0000058	7.3	2.2	0.03707	0.0002	0.91	0.27	7.0	0.059	1376	-	3		1
7.01	3.6234	683	231	56.61126	0.00041	3.213682	0.000011	3.94	0.56	0.02911	0.00069	0.86	0.23	3.7	0.044	1290	9.5E-06	1		1
10.01	3.2860	8686	237	54.11809	0.00062	3.522297	0.00008	8.15	0.34	0.09138	0.00071	0.53	0.21	10.5	0.047	1287	6.5E-06	1		1
12.01	7.4343	8559	604	79.59772	0.00038	17.855038	0.000038	19.9	0.025	0.0874	0.0001	0.0003	-	12.6	0.141	868	9.4E-06	3	NoObs	1
13.01	3.2029	4286	1147	53.56498	0.00012	1.7635892	0.0000014	4.51	0.2	0.07695	0.00043	0.26	0.24	20.5	0.035	3257	1.8E-06	2	2,3	1
17.01	3.9011	9939	724	54.48575	0.00007	3.2347003	0.0000012	6.9639	0.0036	0.09467	0.00004	-	-	9.4	0.041	1192	1.6E-05	1		1
18.01	4.6271	6690	496	55.90127	0.00022	3.548461	0.000033	6.7257	0.0047	0.0788	0.00005	0.0001	-	8.2	0.045	1180	3.3E-05	1		1
20.01	4.7062	15524	2001	104.00835	0.00006	4.4379643	0.0000013	8.0762	0.0038	0.11678	0.00004	0.0001	-	12.8	0.054	1145	4.8E-06	2	1,2,3	
22.01	4.3233	9783	1098	110.24939	0.00011	7.8914455	0.0000059	15.471	0.013	0.09222	0.00006	0.0271	-	9.4	0.079	890	5.3E-06	2	1,2,3	
41.01	6.3192	206	44	55.9589	0.0042	12.81521	0.00029	15.67	0.24	0.01353	0.00019	0.001	0.01	1.4	0.109	741	3.6E-05	2	1,2,3,4	
42.01	4.4845	231	34	114.235	0.018	17.8328	0.0022	21.8612	0.0027	0.01721	-	0.6978	-	2.6	0.14	834	6.1E-06	2	1,3	
44.01	14.0968	2543	67	93.395	0.013	66.5126	0.007	17.3	1.2	0.0782	0.0013	0.83	0.17	7.5	0.304	412	-	2		1
46.01	3.8313	1241	145	103.931	0.00083	3.487714	0.000028	7.241	0.044	0.03279	0.00016	0.0021	-	3.2	0.043	1117	1.1E-05	2	1	
49.01	3.6652	1026	17	108.99	0.0053	8.31393	0.00041	19	1.1	0.0266	0.0014	0.03	0.072	2.8	0.079	906	3.4E-05	2	1	
51.01	3.3759	24059	275	66.93528	0.00052	10.431147	0.00002	21.1	6.3	0.16271	0.00076	0.56	0.17	4.8	0.056	314	NaN	3		1
63.01	2.9910	3783	97	110.8421	0.0015	9.434152	0.000098	27.57	0.63	0.0566	0.001	0.025	0.036	6.6	0.089	844	5.3E-06	2	3	1
64.01	1.6811	1127	132	90.54051	0.00046	1.9510939	0.0000057	4.4	1.3	0.04	0.00034	0.84	0.25	8.5	0.032	1760	4.3E-05	3	1,2,3,4	1
69.01	2.8948	248	138	67.92512	0.00069	4.726745	0.000018	12.706	0.084	0.01465	0.00008	0	0.014	1.6	0.056	1036	-	3		1
70.01	3.7978	946	135	71.60857	0.00081	10.854042	0.000039	20	18	0.0297	0.0054	0.49	1	2.3	0.094	643	1.7E-05	2	1,2,3	
70.02	2.4785	345	58	67.5005	0.0011	3.696125	0.000017	6.2	9.6	0.0209	0.0055	0.85	0.78	1.6	0.046	919	2.3E-05	2	1,3	
70.03	7.2380	731	34	97.729	0.01	77.609	0.0063	83.39	0.99	0.02575	0.00033	0.198	0.035	2.0	0.35	333	1.9E-05	2	1,2,3	
70.04	2.7697	68	15	68.93	0.0055	6.09852	0.00014	16	95	0.0079	0.0087	0.4	2.7	0.6	0.064	779	3.4E-05	2		
72.01	1.8200	169	101	64.57364	0.0007	0.8374958	0.0000042	3.609	0.035	0.01211	0.00009	0.029	0.027	1.3	0.018	1790	1.0E-05	1	1,2,3	1
72.02	6.8565	425	74	71.676	0.0021	45.29491	0.00069	35	38	0.0214	0.0042	0.73	0.84	2.3	0.252	478	8.1E-06	2	1,2	
75.01	17.4137	1175	165	89.9691	0.0019	105.8885	0.0014	47.1	2.3	0.0362	0.0012	0.01	0.23	4.3	0.449	391	-	2		
82.01	4.1390	904	102	67.7519	0.0014	16.14583	0.00012	18.3	6.7	0.0337	0.0025	0.85	0.38	6.8	0.131	786	5.6E-06	2	1,2,3,4,5	
82.02	3.2778	228	31	67.0745	0.0044	10.312	0.00026	13	30	0.0182	0.0083	0.86	0.92	3.7	0.097	914	8.8E-06	2	1,2,3,4,5	
84.01	3.4186	638	141	68.99092	0.00073	9.287047	0.00003	21.25	0.15	0.02349	0.00013	0.0009	-	2.2	0.086	737	4.2E-05	2	1,2,3	
85.01	4.0746	300	117	65.0392	0.0012	5.859965	0.000039	7.7	5.7	0.0179	0.0022	0.73	0.69	3.2	0.067	1318	2.4E-05	2	1,2,3,4	
85.02	3.2040	91	53	66.5008	0.0019	2.15488	0.000018	4.5	1.3	0.00923	0.00013	0.277	0.083	1.7	0.035	1823	-	4		
85.03	4.2219	95	34	70.9924	0.0035	8.13119	0.00012	7	15	0.0111	0.0039	0.88	0.81	2.0	0.084	1177	-	4		
87.01	7.5747	443	38	66.6987	0.0033	289.8605	0.0047	311.1	5	0.01956	0.00033	0.02	0.066	2.4	0.877	282	1.2E-05	2	1,2	
89.01	10.4048	343	35	83.587	0.012	84.6763	0.0075	56	156	0.018	0.01	0.5	1.7	4.4	0.427	756	6.2E-05	2	1,2,3	
89.02	7.4240	347	22	222.855	0.005	107.5	0.0097	48	14	0.02241	0.00061	0.86	0.26	5.5	0.501	698	5.4E-05	2	1	
92.01	3.7259	648	39	70.4508	0.0042	65.7008	0.0019	56	17	0.03169	0.00074	0.89	0.27	4.4	0.33	505	8.0E-06	2	1,2,3	
94.01	7.0052	5240	382	65.74223	0.00047	22.34094	0.00065	24.3	4	0.07	0.0024	0.39	0.45	12.6	0.165	851	2.2E-05	2	1,2,3	
94.02	5.3435	690	34	71.0084	0.0051	10.42361	0.00022	13.73	0.76	0.022	0.051	0.201	0.081	4.0	0.099	1099	8.8E-05	2	1,3	
94.03	9.0070	1778	53	94.2397	0.0044	90.5323	0.0017	84.7	4.5	0.0382	0.0016	0.006	0.076	6.9	0.419	534	4.5E-05	2	1,3	
97.01	5.5128	6835	1275	67.27602	0.00013	4.8854906	0.0000024	7.8838	0.0076	0.07784	0.00007	-	-	11.0	0.059	1226	1.3E-05	1		1

98.01	6.8561	2120	478	71.08749	0.00048	6.790119	0.000019	8.004903	0.000022	0.0534	0.0094	0.0001	-	12.1	0.077	1528	9.0E-06	2	1,2,3	
†99.01	19.7865	1662	72	73.0486	0.0019	817	12	327.4	4.9	0.03768	-	-	-	4.6	1.693	177	4.2E-05	3	1	1
100.01	4.5162	1388	95	74.1515	0.0016	9.966512	0.000092	7.8	2.3	0.04475	0.00052	0.88	0.26	13.6	0.101	1493	3.1E-05	3	1,3	1
102.01	2.4232	860	240	68.05961	0.00042	1.7351339	0.0000041	4	1.8	0.0303	0.0024	0.76	0.52	6.9	0.03	2175	5.8E-05	2	1,2,3	1
103.01	3.4297	737	72	74.3331	0.0015	14.91155	0.00013	36.15	0.44	0.02642	0.00024	0.025	0.027	2.3	0.119	628	4.8E-05	2	1,2,3	
104.01	1.2727	1082	68	67.99798	0.0007	2.508091	0.000013	16	11	0.035	0.0048	0.45	0.86	2.8	0.032	927	8.4E-06	2	1,2,3	
105.01	2.3693	997	114	69.6502	0.0014	8.98092	0.000096	12.2	3.6	0.0394	0.00059	0.91	0.27	8.1	0.09	1100	4.4E-05	2	1	
107.01	4.8694	427	91	67.0215	0.0015	7.257003	0.000062	11.608	0.094	0.01932	0.00014	0.009	0.017	2.1	0.075	943	2.6E-05	2	1	
108.01	4.5210	465	79	75.1762	0.0016	15.96534	0.00016	22	28	0.0211	0.0047	0.6	1.1	2.7	0.128	777	3.0E-05	2	1,2,3	
110.01	3.9364	481	98	68.2136	0.0013	9.94075	0.000079	13	12	0.0229	0.0034	0.74	0.76	2.9	0.095	985	1.5E-05	2	1	
111.01	4.5716	466	84	70.6135	0.0015	11.427514	0.000074	14	14	0.0222	0.0038	0.72	0.82	2.5	0.102	814	2.1E-05	2	1,2,3	
111.02	5.7168	420	65	65.7105	0.0022	23.6686	0.00022	28	40	0.0203	0.0052	0.5	1.2	2.3	0.166	638	2.1E-05	2	1	
111.04	7.5697	586	38	359.3572	0.0047	103.5112	0.0066	108	2	0.02271	0.00038	0.018	0.071	2.5	0.443	391	-	2		
112.01	6.3832	697	67	118.1798	0.0018	51.07943	0.00063	40	29	0.0276	0.0033	0.78	0.63	3.7	0.279	539	2.2E-05	3	2,3	1
112.02	2.5592	109	24	66.9837	0.0036	3.709209	0.000057	6	20	0.0128	0.0079	0.9	1	1.7	0.048	1300	-	4		
†113.01	4.6696	956	21	87.3183	0.0041	300	-	167	50	0.066	0.021	1.02	0.31	8.3	0.888	269	1.9E-05	2	1,2	
115.01	2.9014	548	96	66.1414	0.0011	5.412245	0.000032	13	19	0.0231	0.006	0.5	1.2	3.4	0.063	1260	1.6E-05	2	1,2	
115.02	2.7875	177	28	72.0079	0.0042	7.12575	0.00017	11	41	0.0151	0.0088	0.9	1.2	2.2	0.076	1147	2.1E-05	2	1	
116.01	3.5494	434	43	69.2763	0.003	13.57096	0.00023	21	42	0.0227	0.0078	0.8	1.1	4.7	0.119	1057	8.1E-05	2	1,2,3	
116.02	6.7062	554	44	84.9344	0.0044	43.8448	0.0013	54.1	0.84	0.02306	0.00033	0.021	0.025	4.8	0.26	715	7.9E-05	2	1	
117.01	6.1280	366	68	71.7751	0.003	14.74942	0.00025	8.8	3	0.0219	0.0012	0.89	0.32	2.4	0.12	729	4.4E-05	2	1,2,3	
117.02	4.0855	108	29	71.6097	0.0052	4.90134	0.00015	5	13	0.0121	0.0052	0.87	0.98	1.3	0.058	1048	6.1E-05	3	1,2	1
117.03	3.3490	104	33	66.5106	0.0039	3.17985	0.000052	3.9	9.8	0.0118	0.0048	0.8	1	1.3	0.043	1217	5.8E-05	3	1,2	1
117.04	4.1670	40	8.8	70.838	0.014	7.9572	0.00051	11.11552	0.00071	0.0062	-	0.6594	-	0.7	0.08	892	-	4		
118.01	5.7166	239	36	71.6798	0.0044	24.99348	0.0006	17	22	0.0172	0.0036	0.86	0.68	1.8	0.17	590	3.0E-05	2	2	
119.01	11.2962	1455	144	74.9125	0.0016	49.18381	0.00044	34.44916	0.00031	0.035	0.018	0.0009	-	3.9	0.264	462	2.3E-05	3	1	1
122.01	3.9263	469	89	64.9714	0.0013	11.522904	0.000062	22.89	0.21	0.02023	0.00016	0.0038	-	1.9	0.101	716	1.3E-05	2	1,2,3	
123.01	3.6301	270	66	55.9766	0.0017	6.481654	0.000047	11	14	0.0166	0.0039	0.6	1.1	2.3	0.071	1091	3.6E-05	2	1,2,3,4	
123.02	6.4510	336	65	70.5763	0.0024	21.22222	0.00023	19	25	0.0183	0.0042	0.7	1	2.5	0.155	739	3.4E-05	2	1,4	
124.01	3.8682	205	32	70.1234	0.0039	12.69116	0.00029	14	32	0.0161	0.0057	0.85	0.95	2.3	0.111	926	2.5E-05	2	1,2	
124.02	5.0544	324	39	75.822	0.0038	31.71954	0.00071	28	46	0.0196	0.005	0.84	0.84	2.8	0.205	681	2.2E-05	2	1	
127.01	2.9074	10776	1078	67.02957	0.0001	3.5787781	0.000002	10.33	0.01	0.09665	0.00007	0.0038	-	9.7	0.046	1098	1.4E-05	2	1,2	
128.01	3.5022	10407	1191	69.32863	0.00024	4.9427813	0.000002	12.11	0.93	0.10066	0.00052	0.58	0.16	15.7	0.059	1240	1.1E-05	2	1	
131.01	4.6736	6399	458	66.17565	0.00071	5.014177	0.000021	8.885	0.017	0.07492	0.00012	0.0008	-	9.0	0.06	1181	-	3		1
135.01	2.7842	7318	766	65.41537	0.00014	3.0241018	0.0000017	8.998787	0.000005	0.0795	0.0074	0.0089	-	8.3	0.042	1250	9.3E-06	2	1	1
137.01	3.5437	2170	155	68.40567	0.00078	7.641577	0.000023	17.82	0.11	0.04345	0.00022	0.027	0.02	6.0	0.077	949	6.2E-05	2	1,2,3,4	
137.02	3.7766	3025	297	61.15248	0.00045	14.859006	0.000025	19.3	2.1	0.0616	0.0013	0.84	0.21	8.6	0.12	760	4.8E-05	2	1,4	
137.03	2.0761	248	38	66.5071	0.0022	3.50472	0.000029	8	26	0.0167	0.0093	0.8	1.3	2.3	0.046	1228	-	4		
138.01	6.1103	6547	245	73.7648	0.0019	48.93807	0.00058	37	11	0.09401	0.00057	0.82	0.25	16.6	0.282	716	-	2		
139.01	10.7262	3268	102	75.0881	0.0028	224.7937	0.0032	126	22	0.0576	0.0022	0.67	0.37	5.7	0.741	288	1.9E-05	2	1	
139.02	2.6756	107	13	74.354	0.0066	3.3418	0.00012	7	36	0.012	0.011	0.7	2	1.2	0.045	1169	4.4E-05	2	1	

141.01	1.4408	2232	167	65.30523	0.00055	2.624219	0.000011	10.7	8.4	0.0489	0.0077	0.73	0.72	4.3	0.037	1090	1.5E-05	2	1,2	
142.01	3.7354	1095	105	66.0242	0.0013	10.914785	0.000076	23	6.9	0.03073	0.0003	-	-	2.5	0.095	661	2.9E-05	2	1,3	
144.01	3.7045	1287	166	66.08938	0.00084	4.176263	0.00002	7.9	4.7	0.0345	0.0047	0.53	0.78	6.6	0.053	1198	7.5E-05	2	1	1
148.01	2.6944	417	54	57.0628	0.0021	4.777978	0.000053	9	16	0.0218	0.0076	0.8	1	2.1	0.054	908	1.5E-04	2	1,2,3	
148.02	3.2778	885	107	58.3427	0.0013	9.67374	0.000068	16	16	0.0305	0.006	0.72	0.82	3.0	0.087	716	1.1E-04	2	1	
148.03	5.6283	478	37	79.0652	0.0037	42.89554	0.0007	53	16	0.02093	0.00041	0.216	0.065	2.0	0.235	435	1.3E-04	2	1	
149.01	7.8599	886	114	78.0897	0.0017	14.55792	0.00015	14.722	0.083	0.02799	0.00016	0.0005	-	4.1	0.122	890	2.9E-05	2	1	
150.01	3.5591	721	75	67.0052	0.0016	8.408848	0.000076	18.63	0.21	0.02552	0.00024	0.006	-	3.4	0.083	939	6.7E-05	2	1	
150.02	5.0711	733	53	76.8337	0.003	28.57378	0.0005	33	55	0.0276	0.0081	0.7	1.1	3.7	0.187	625	6.5E-05	2	1	
151.01	2.6612	1200	58	65.8279	0.0017	13.44739	0.00013	22.5	6.8	0.03831	0.00062	0.74	0.22	4.6	0.114	823	5.9E-05	3	2	1
152.01	8.5892	2624	118	91.7438	0.0019	52.09119	0.00063	48.52	0.27	0.04816	0.00026	0.0002	-	4.9	0.282	497	5.6E-05	2		
152.02	6.7876	694	39	66.6192	0.0059	27.40415	0.00089	31.74	0.67	0.02485	0.00051	0.024	0.032	2.5	0.184	616	9.1E-05	2		
152.03	5.0646	586	40	69.6257	0.005	13.484	0.00039	18	66	0.024	0.015	0.5	1.9	2.4	0.114	782	9.4E-05	2		
153.01	2.7092	912	57	72.7136	0.0017	8.925031	0.000085	19	34	0.03	0.012	0.7	1.1	3.2	0.08	708	1.8E-05	2	1,2	
153.02	2.5456	734	67	61.5475	0.0015	4.753978	0.000039	8	12	0.0295	0.0086	0.83	0.8	3.1	0.053	870	2.0E-05	2	1,2	
155.01	4.5785	675	84	70.4159	0.0017	5.660629	0.000057	9.64	0.09	0.02428	0.0002	0.0011	-	3.8	0.065	1164	2.9E-05	2	1	1
156.01	2.4887	510	35	76.0363	0.0028	8.04144	0.00013	18	46	0.023	0.013	0.7	1.4	1.9	0.071	642	2.4E-05	2	1	
156.02	2.4671	304	26	78.3602	0.0039	5.18856	0.00012	10	36	0.02	0.014	0.8	1.3	1.6	0.053	743	2.8E-05	2	1	
156.03	2.8987	1311	96	75.7045	0.001	11.776179	0.000054	32.64	0.37	0.03337	0.00028	0.027	0.027	2.8	0.091	567	1.9E-05	2	1	
157.01	4.6051	697	83	71.1768	0.002	13.02495	0.000093	15	11	0.0278	0.0038	0.76	0.69	3.0	0.111	751	1.5E-04	1	1	1
157.02	5.5677	898	80	81.4549	0.002	22.68696	0.00015	17.8	5	0.0322	0.0015	0.84	0.34	3.5	0.16	625	1.4E-04	1	1	1
157.03	4.3105	1246	86	87.1604	0.0015	31.99541	0.00018	33.5	9.7	0.0387	0.002	0.84	0.35	4.2	0.201	558	1.1E-04	1	1	1
157.04	6.3817	483	36	158.0328	0.0034	46.68872	0.00081	57.4	1.1	0.02041	0.00036	0.014	0.025	2.2	0.259	491	1.7E-04	1	1	1
157.05	9.7575	1031	54	220.288	0.004	118.3772	0.0031	95.9	1.2	0.02976	0.00034	0.03	0.032	3.2	0.481	361	1.3E-04	1	1	1
157.06	4.1041	274	36	71.5062	0.0038	10.3039	0.00013	18.2	5.5	0.01559	0.00033	0.128	0.038	1.7	0.095	811	2.0E-05	1		1
159.01	4.1073	439	46	69.7359	0.0033	8.99093	0.00017	8.9	9.1	0.0235	0.0038	0.86	0.62	3.1	0.087	963	1.1E-04	2	1	
161.01	1.9363	827	137	66.21002	0.00063	3.105501	0.000011	11	12	0.0293	0.0068	0.69	0.91	5.3	0.043	1306	2.5E-05	2	1	
162.01	4.6255	650	62	75.2079	0.0024	14.00656	0.00019	23.73	0.3	0.02379	0.00026	0.0008	-	2.6	0.116	733	7.2E-05	2	1	
163.01	3.3145	603	58	72.7543	0.002	11.11978	0.00013	22	37	0.0242	0.0082	0.6	1.3	2.8	0.097	756	2.4E-05	2	1	
165.01	2.7694	844	50	72.5644	0.002	13.22216	0.00016	29	69	0.028	0.014	0.7	1.4	1.9	0.104	541	3.8E-05	2	1	
166.01	2.4622	649	45	71.4619	0.002	12.49334	0.00015	34	84	0.026	0.013	0.7	1.4	3.7	0.107	796	5.9E-05	2	1	
167.01	4.2389	382	70	67.602	0.002	4.919592	0.000055	8	13	0.0195	0.0055	0.6	1.3	1.8	0.058	1072	3.0E-05	2	1	
168.01	6.1290	330	42	66.2761	0.0041	10.74356	0.00025	12	22	0.018	0.006	0.5	1.4	3.7	0.102	1112	3.2E-05	2	1	
168.02	5.7377	74	13	70.389	0.011	5.0918	0.00025	6.93	0.29	0.00908	0.00035	0.029	0.01	1.9	0.062	1427	-	4		
168.03	4.7708	90	13	71.317	0.011	7.10664	0.00032	11.4	0.53	0.00978	0.00042	0.015	0.01	2.0	0.077	1280	-	4		
171.01	3.6443	450	62	70.1549	0.002	5.968839	0.000069	12.89	0.17	0.02039	0.00022	0.0172	-	2.5	0.067	1125	7.6E-05	2	1	
172.01	4.9815	540	46	70.8361	0.0034	13.72288	0.00026	21.44	0.35	0.02184	0.00031	0.0102	-	1.6	0.112	598	4.0E-05	2	1	
173.01	4.4592	388	44	71.9655	0.0033	10.06092	0.00019	17.75	0.31	0.01863	0.00028	0	0.025	1.9	0.093	808	2.8E-05	2	1	
174.01	3.3658	977	27	77.8417	0.0054	56.3509	0.0025	142.2	5.3	0.02897	0.00083	0.027	0.05	2.5	0.267	355	4.3E-05	2	1	
176.01	6.5324	366	36	67.5141	0.0049	30.2303	0.0008	24	41	0.0202	0.0056	0.8	1	2.2	0.197	630	5.4E-05	2	1	
177.01	4.8343	259	26	76.6066	0.0059	21.05996	0.00071	28	86	0.0162	0.0092	0.6	1.7	1.9	0.153	664	1.7E-04	2	1	

179.01	10.2799	896	94	75.8002	0.0027	20.74007	0.00033	15.93	0.1	0.02832	0.00019	0.0005	-	3.3	0.152	681	-	2		1
180.01	3.2069	577	20	62.0919	0.0038	10.0456	0.0002	25.5	1.4	0.02066	0.00093	0.028	0.062	1.8	0.092	731	1.6E-05	2	1,2,3	1
183.01	2.6997	16999	1464	66.35411	0.0001	2.684327	0.0000015	8.581648	0.000005	0.122	0.019	0.0072	-	9.9	0.038	1113	1.5E-05	2	1	
186.01	3.0609	16081	1071	66.66821	0.00012	3.2432615	0.0000021	9.1033	0.0094	0.11805	0.00009	-	-	11.5	0.044	1156	1.6E-05	2	NoObs	
187.01	5.3569	23230	739	84.52867	0.00025	30.88252	0.000048	50.291303	0.000079	0.142	0.013	0.0007	-	11.6	0.194	499	1.2E-05	2		
188.01	2.2281	13737	1052	66.5079	0.00009	3.7970199	0.0000018	14.451	0.017	0.10841	0.00009	0.0004	-	8.0	0.046	859	2.1E-05	2		
189.01	6.0251	20886	778	81.09127	0.00024	30.360407	0.000057	42.5	1.1	0.13323	0.00083	0.29	0.18	12.6	0.181	461	6.0E-06	2	NoObs	
190.01	4.4351	10616	431	72.30197	0.00032	12.265011	0.000024	15.27	0.32	0.11222	0.0006	0.814	0.1	16.3	0.107	843	1.0E-05	2	NoObs	
191.01	4.1332	14205	523	65.38412	0.00025	15.358776	0.000016	28.4	1.3	0.115	0.0011	0.49	0.22	11.6	0.122	666	4.6E-05	2		1
191.02	2.1206	626	41	65.5052	0.0019	2.418402	0.00002	8.45	0.5	0.028	0.0013	0.0176	-	2.8	0.036	1226	1.3E-04	3		1
191.03	1.4863	193	21	66.3662	0.0029	0.7086217	0.000009	3.035907	0.000039	0.01386	-	0.615	-	1.4	0.016	1839	-	2		
191.04	5.3874	244	9.6	77.73	0.015	19.3245	0.0013	29.5	7.9	0.0148	0.0037	0.006	0.027	1.5	0.142	617	-	2		
192.01	4.2999	9274	511	70.02102	0.0003	10.291006	0.000018	19.951591	0.000035	0.09	0.021	0.0001	-	9.9	0.095	855	1.4E-05	2	1	
193.01	5.0147	19422	667	90.34941	0.00029	37.590346	0.00007	74.98	0.12	0.12875	0.00016	0.0017	-	14.2	0.226	548	1.1E-05	2		1
194.01	2.0031	15099	118	72.46531	0.00061	3.120831	0.000011	8.9	1	0.1338	0.0037	0.79	0.24	12.0	0.043	1133	6.7E-06	2		
195.01	2.1873	13626	494	66.631	0.00019	3.2175236	0.0000035	11.28	0.91	0.1144	0.0019	0.57	0.28	11.9	0.043	1165	1.2E-05	2		
196.01	2.2855	9994	1009	70.18042	0.00009	1.8555565	0.000001	5.87	0.27	0.09728	0.00088	0.51	0.22	10.0	0.03	1377	2.1E-05	2	NoObs	
197.01	4.2447	9974	593	66.83869	0.00027	17.276276	0.000027	36.447	0.065	0.09147	0.00012	0.0002	-	10.3	0.128	615	2.6E-05	2	NoObs	
199.01	3.4738	9788	847	70.48111	0.00015	3.2686931	0.0000029	7.899543	0.000007	0.093	0.017	0.0001	-	8.7	0.044	1216	2.2E-05	2	NoObs	
200.01	2.8848	7827	542	67.34424	0.0002	7.3407361	0.0000086	21.103	0.04	0.08279	0.00012	-	-	6.9	0.075	810	2.8E-05	2		
201.01	2.8358	5581	777	70.5598	0.0003	4.2253865	0.0000072	12.387	0.032	0.07155	0.00014	0.0103	-	7.8	0.052	1064	-	3		
202.01	1.9597	9499	1056	66.02029	0.00008	1.7208618	0.0000008	5.27	0.12	0.10151	0.00047	0.74	0.12	11.5	0.029	1559	1.3E-05	2	1	
203.01	2.2791	19438	500	65.79282	0.00014	1.4857106	0.0000012	5.682	0.014	0.13028	0.00024	-	-	13.8	0.026	1518	1.6E-05	2	NoObs	
204.01	3.0172	6631	430	66.37805	0.0003	3.2467374	0.0000053	8.855	0.021	0.07562	0.00014	-	0.01	7.9	0.043	1098	6.4E-05	2		1
205.01	3.0463	9293	554	75.17334	0.00022	11.720115	0.000015	30.4	3	0.0918	0.002	0.46	0.33	8.3	0.099	647	3.4E-05	2	NoObs	
206.01	6.2693	4617	464	64.98094	0.00042	5.334076	0.000013	6.941	0.011	0.06342	0.00009	0.0016	-	8.0	0.062	1102	-	2		
208.01	3.2881	8559	99	67.711	0.0011	3.00385	0.000019	7.443	0.071	0.08887	0.00066	0.0003	-	8.5	0.042	1229	5.6E-05	3		1
209.01	10.8828	5394	209	68.6335	0.0011	50.78974	0.00031	38.12	0.12	0.06873	0.00021	0.031	0.02	7.6	0.278	522	1.2E-05	2		
209.02	7.1448	2166	147	78.8225	0.0031	18.79567	0.00034	21.0514	0.003	0.044	0.04	0	0.014	4.9	0.143	728	1.6E-05	2		
211.01	4.8294	7210	91	69.0141	0.001	372.1084	0.0015	639.12	0.68	0.081	0.096	0.023	0.039	9.6	1.048	273	-	3		1
212.01	3.5920	4757	250	72.23136	0.00055	5.69584	0.000048	12.88171	0.00011	0.064	0.014	0.0002	-	6.5	0.064	977	5.3E-05	2		
214.01	1.4852	5359	324	64.74221	0.00022	3.3118618	0.0000042	9.4	2.8	0.1106	0.0035	0.93	0.28	12.1	0.044	1119	2.2E-05	2		
216.01	3.6988	4986	146	74.2081	0.00097	20.17213	0.00013	52.37	0.4	0.06487	0.00038	0.0005	-	8.2	0.145	635	8.3E-05	2	NoObs	
217.01	2.8377	20621	818	66.41389	0.00019	3.9050889	0.0000051	11.892	0.017	0.13352	0.00014	0.0004	-	10.4	0.048	935	2.0E-05	2		1
219.01	5.3499	2948	228	65.46923	0.00078	8.025085	0.000037	12.067	0.042	0.0505	0.00015	0.0012	-	3.8	0.077	710	1.0E-04	2		
220.01	2.5693	1763	265	65.93893	0.00038	2.4220912	0.0000053	6.3	3.3	0.041	0.0042	0.55	0.72	2.6	0.034	987	6.1E-05	2		
220.02	2.8695	100	12	66.6388	0.0072	4.12515	0.00012	11.37	0.64	0.01042	0.00052	0.0198	-	0.7	0.049	822	-	4		
221.01	2.6291	3689	283	65.44215	0.00037	3.4130416	0.0000073	10.544	0.04	0.05615	0.00016	-	-	4.4	0.043	935	2.7E-05	2		
222.01	2.8034	1203	65	65.6572	0.0017	6.312382	0.000058	18.28	0.28	0.03254	0.00039	0.0298	-	2.1	0.057	613	3.7E-05	2	1	
222.02	3.2313	821	32	63.7728	0.0044	12.79397	0.0003	30.47	0.95	0.02647	0.00065	0.0253	-	1.7	0.092	482	3.9E-05	2	1	
223.01	1.5125	1039	67	67.477	0.0011	3.177431	0.000019	12	24	0.034	0.013	0.7	1.2	2.7	0.041	964	3.6E-05	2		1

223.02	4.0259	913	25	80.0334	0.004	41.0084	0.00084	68	381	0.03	0.034	0.6	2.4	2.4	0.226	410	-	4	
225.01	1.2452	2371	200	74.537	0.00032	0.838598	0.0000022	4.2	1.3	0.04932	0.00032	0.47	0.14	4.9	0.018	1903	-	3	1
226.01	3.0258	712	39	71.1091	0.0029	8.3089	0.00014	15	39	0.028	0.014	0.7	1.3	1.6	0.076	595	6.1E-05	3	1
227.01	4.6968	1202	55	69.5662	0.0024	17.66076	0.00025	42.02	0.57	0.03955	0.00039	0.031	0.033	2.9	0.11	440	1.9E-05	2	3
229.01	2.9170	2817	228	67.93353	0.0005	3.5732	0.00001	9.976	0.044	0.04922	0.00017	0.0003	-	6.0	0.047	1207	5.9E-05	2	1
232.01	4.9765	2080	158	67.00465	0.00095	12.465891	0.000067	19.996	0.1	0.04269	0.00018	0.028	0.017	3.6	0.107	694	3.4E-05	2	NoObs
232.02	3.7903	326	32	67.0179	0.0056	5.76607	0.00018	11.83	0.36	0.0185	0.00048	0.0102	-	1.6	0.064	897	5.6E-05	2	NoObs
234.01	4.5866	717	53	65.1832	0.0026	9.61391	0.00014	11	15	0.0278	0.0067	0.73	0.95	3.5	0.091	897	3.4E-05	2	
235.01	2.0142	609	46	66.8175	0.0019	5.632479	0.000061	21.29	0.51	0.02282	0.00042	0.0027	-	1.8	0.06	781	7.9E-05	2	1
237.01	3.4487	554	50	67.7859	0.0024	8.50827	0.00011	19.7	0.33	0.02262	0.00031	0.021	-	2.3	0.083	834	8.0E-05	2	
238.01	4.4245	435	32	68.0935	0.0047	17.23217	0.00045	23	61	0.0214	0.0098	0.7	1.4	2.5	0.135	742	8.5E-05	2	NoObs
239.01	2.8293	1270	76	71.5556	0.0013	5.640649	0.000043	9.3	5.9	0.0382	0.0041	0.81	0.56	3.9	0.064	1003	1.6E-04	2	1
240.01	4.2286	1218	84	71.6146	0.0016	4.286837	0.000041	8.04	0.076	0.03302	0.00027	0.0098	-	3.1	0.053	1063	3.5E-05	2	1
241.01	3.5173	760	46	64.7933	0.0027	13.82145	0.00027	22	49	0.028	0.012	0.7	1.3	1.7	0.107	516	1.4E-05	2	
242.01	5.7720	3636	193	71.34318	0.00098	7.258477	0.000041	10.183	0.042	0.05567	0.0002	0.0013	-	5.7	0.074	850	5.6E-05	2	
244.01	2.8876	1084	211	111.52718	0.00043	12.720359	0.000038	19.1	2.7	0.03659	0.00081	0.87	0.22	4.5	0.11	865	-	2	
244.02	3.5837	364	157	104.7062	0.0013	6.23855	0.000058	7.5	6.3	0.0214	0.0027	0.84	0.59	2.6	0.068	1101	-	2	
245.01	4.7135	530	96	108.239	0.0013	39.79454	0.00038	67.02	0.57	0.02158	0.00015	0.0171	-	2.1	0.215	482	5.3E-06	2	1,2,3
246.01	3.4381	261	127	106.85727	0.0007	5.398753	0.000027	9.5	6.7	0.0167	0.0022	0.63	0.78	1.9	0.062	1032	1.2E-05	2	1,2,3
247.01	2.0575	921	22	114.1234	0.0023	13.81524	0.00032	52.5	2.3	0.0312	0.0011	0.0309	-	2.1	0.089	437	1.3E-05	2	1,2,3
248.01	2.5695	1662	54	103.2885	0.0013	7.203494	0.000065	22.73	0.4	0.03948	0.00055	0.025	0.033	2.9	0.06	584	5.5E-05	2	3
248.02	2.0752	1242	28	102.8387	0.0022	10.91401	0.00018	43.1	1.8	0.0343	0.0011	0.0088	-	2.5	0.079	509	5.5E-05	2	3
248.03	1.6378	704	31	105.1278	0.0019	2.576536	0.000033	13	38	0.027	0.012	0.1	2	2.0	0.03	825	6.7E-05	2	3
249.01	1.8415	1636	74	108.75705	0.00086	9.549259	0.000058	43	101	0.039	0.014	0.5	1.6	3.1	0.07	519	1.5E-05	2	1,2,3
250.01	2.8200	2633	74	103.4024	0.0012	12.282356	0.000097	36.32	0.48	0.04892	0.00048	0.028	0.03	3.6	0.085	491	1.8E-05	2	3
250.02	2.1205	1854	39	82.8815	0.0023	17.25204	0.00025	34	10	0.0486	0.0015	0.81	0.24	3.6	0.107	438	1.8E-05	2	3
250.03	1.9814	316	15	69.2598	0.0046	3.543871	0.000071	14.5	1	0.0173	0.001	0.0412	-	1.3	0.037	744	-	4	
251.01	1.8489	2159	82	104.08747	0.0008	4.164371	0.000023	18.37	0.28	0.04436	0.0005	0.02	0.027	2.9	0.04	653	4.6E-05	2	1,2,3
252.01	3.5652	1892	45	103.5012	0.002	17.60439	0.00024	40	135	0.042	0.022	0.1	2.2	2.7	0.104	406	2.8E-05	2	3
253.01	1.7694	1989	49	103.6019	0.0012	6.38324	0.000071	31.13	0.81	0.04291	0.00079	0.0427	-	2.9	0.054	592	1.4E-05	2	3
254.01	1.9011	36662	795	103.82108	0.00009	2.4552389	0.0000016	11.95	0.42	0.1841	0.0012	0.44	0.2	13.0	0.029	824	2.5E-05	3	NoObs 1
255.01	4.1157	2266	65	122.8256	0.0015	27.52156	0.00031	54.25	0.7	0.04484	0.00047	0.018	0.01	3.6	0.149	388	2.5E-05	2	NoObs
256.01	1.2273	15751	55	102.77735	0.00093	1.378681	0.000012	9	2.7	0.1235	0.0023	0.158	0.048	14.8	0.021	1160	-	3	1
257.01	2.3916	474	33	105.6621	0.0021	6.883344	0.000098	18	65	0.023	0.014	0.7	1.6	4.0	0.075	1230	-	2	
258.01	5.2610	920	39	105.4942	0.0018	4.157642	0.000069	5.2	7.6	0.0281	0.0069	0	1.4	4.5	0.054	1449	-	3	1
260.01	4.5271	87	20	105.786	0.0063	10.49577	0.00046	17.32	0.52	0.0096	0.00026	0.012	0.01	1.2	0.097	919	-	2	
260.02	10.7302	298	37	178.0423	0.0039	100.27937	0.00052	61	127	0.0178	0.006	0.6	1.4	2.2	0.435	434	-	2	
261.01	3.8752	638	45	104.0206	0.0022	16.23844	0.00017	20	29	0.027	0.0067	0.8	0.85	5.6	0.133	929	-	2	
262.01	4.1589	102	27	105.6257	0.0035	7.81279	0.00019	7	21	0.0111	0.0046	0.9	1	1.6	0.081	1106	1.7E-05	2	1,2
263.01	4.1456	152	13	117.7331	0.0086	20.7183	0.0013	40.1	2.3	0.01143	0.00058	0.021	0.054	1.5	0.151	682	8.0E-06	3	1,2,3 1
265.01	3.1809	81	19	102.7477	0.0036	3.567971	0.000083	8.67	0.27	0.0087	0.00024	0.012	0.036	1.1	0.047	1303	3.2E-05	2	1,2,3

268.01	12.0373	448	68	108.9277	0.0032	110.3742	0.003	61	73	0.0205	0.0041	0.5	1.1	1.8	0.406	295	1.6E-05	2		1
269.01	6.1397	82	25	118.0993	0.0059	18.01136	0.00073	12	30	0.0099	0.0037	0.8	1	1.7	0.143	918	2.3E-05	2	1,2	
270.01	5.9033	97	32	108.033	0.0043	12.58084	0.00036	16.01	0.34	0.00925	0.00018	0.01	0.01	0.9	0.101	735	4.8E-05	2	1,2	
270.02	8.3939	128	31	95.044	0.0059	33.67205	0.00087	31.08	0.65	0.01051	0.00022	0.017	0.01	1.0	0.195	529	-	4		
271.01	6.9832	287	43	105.5501	0.0041	48.6292	0.0014	33	48	0.0181	0.0042	0.79	0.87	2.0	0.269	520	1.2E-05	2	1,2,3	
271.02	6.9360	311	66	142.0721	0.0022	29.39292	0.00036	32.9	9.9	0.01655	0.00021	-	-	1.8	0.192	615	1.2E-05	3	1,2	1
273.01	1.8180	259	49	108.0667	0.0012	10.573667	0.000089	46.9	1	0.01548	0.00028	0.016	0.033	1.1	0.093	655	2.3E-05	2	1,2,3	
274.01	4.5111	56	14	108.9264	0.0072	15.09124	0.00055	12	63	0.0089	0.0067	0.9	1.2	1.1	0.124	805	1.7E-05	3	1,2,3	1
275.01	7.0060	144	32	109.8237	0.0048	15.79142	0.00077	14	30	0.0118	0.0045	0.6	1.4	1.2	0.121	717	1.3E-05	2	1,2,3	
276.01	4.6992	395	58	143.4006	0.0023	41.74523	0.00077	47	65	0.0207	0.0048	0.75	0.93	2.6	0.244	569	1.5E-05	2	1	
277.01	7.6827	388	93	104.6804	0.0018	16.23675	0.00021	16.85	0.1	0.01945	0.00012	0.029	0.022	2.1	0.124	723	1.7E-05	2	1	
279.01	8.0747	1262	176	109.70148	0.00091	28.45557	0.00019	24.1	8.6	0.0346	0.0022	0.5	0.62	4.9	0.191	708	1.4E-05	2	1	
279.02	6.4306	196	31	69.9418	0.0054	15.41304	0.00034	13	30	0.0147	0.0068	0.7	1.3	2.1	0.127	868	-	4		
280.01	2.5779	314	80	113.89515	0.00098	11.87286	0.000081	16.6	5	0.02031	0.00023	0.82	0.25	3.1	0.108	1018	1.8E-05	2	1	
281.01	8.0749	262	57	122.0403	0.0029	19.55687	0.00048	13	14	0.0163	0.0031	0.71	0.87	3.7	0.152	930	2.7E-05	2	1,2	
282.01	5.8542	597	112	115.1037	0.0014	27.50882	0.00026	26	15	0.0251	0.0027	0.72	0.64	2.8	0.178	620	2.3E-05	2	1	
282.02	3.2310	67	18	72.0688	0.0048	8.45735	0.00017	20	124	0.008	0.01	0.2	2.9	0.9	0.081	919	-	4		
283.01	3.3342	424	37	103.5999	0.0028	16.09173	0.00031	20	28	0.0237	0.0053	0.89	0.65	4.7	0.132	930	2.2E-05	2	1,2	
284.01	2.7486	159	20	112.423	0.0037	18.01109	0.00046	19.8	5.9	0.01509	0.00058	0.88	0.26	2.5	0.141	859	1.8E-05	2	1,2,3	1
284.02	3.4231	99	23	102.6342	0.0039	6.41508	0.00017	8	26	0.0117	0.0062	0.9	1.1	2.0	0.071	1211	2.2E-05	3	1,2	
284.03	3.2542	98	23	101.8617	0.0036	6.17824	0.00015	7	27	0.0112	0.0063	0.9	1.1	1.9	0.069	1228	2.3E-05	3	1,2	
285.01	5.8394	374	30	112.2811	0.0054	13.74872	0.00052	13	29	0.0201	0.008	0.7	1.2	2.1	0.11	757	2.7E-05	2	1,2	
288.01	6.2875	186	57	110.2711	0.0026	10.2754	0.00019	12.72	0.15	0.01287	0.00014	0.0046	-	1.5	0.093	878	2.8E-05	2	1	
289.01	7.8380	417	52	124.9949	0.0026	26.62907	0.00054	26.43	0.33	0.01911	0.00023	0.007	0.017	2.0	0.171	604	1.2E-05	2	1	
291.01	7.3578	312	38	118.1545	0.0041	31.51605	0.00086	33.08	0.58	0.01626	0.00027	0.016	0.014	1.5	0.196	495	5.1E-05	2	1	
291.02	2.1775	129	16	67.1034	0.0048	8.12993	0.00017	28	197	0.012	0.017	0.4	2.9	1.0	0.079	780	-	4		
292.01	2.2814	202	48	104.8415	0.0015	2.58665	0.000037	9	20	0.0139	0.0057	0.2	1.7	2.0	0.038	1478	1.5E-05	2	1,2	
294.01	5.5281	389	32	126.0347	0.0037	34.4361	0.001	35	83	0.0195	0.008	0.7	1.4	2.2	0.213	565	4.5E-05	2	1	
295.01	2.8818	255	19	104.8769	0.0018	5.317406	0.000085	7	33	0.017	0.012	0.9	1.2	2.0	0.06	1088	1.3E-05	2	1	
296.01	5.2805	403	25	111.4863	0.0038	28.8605	0.0017	30	96	0.02	0.011	0.7	1.4	2.4	0.189	619	1.3E-05	2	1	
297.01	2.9110	113	21	105.2745	0.0035	5.65189	0.00019	8	27	0.0126	0.0067	0.8	1.2	1.8	0.065	1192	1.5E-05	2	1	
298.01	2.6557	239	17	111.308	0.0039	19.96343	0.00059	29	146	0.017	0.014	0.9	1.3	1.7	0.136	610	2.2E-05	3	NoObs	
299.01	1.9962	287	51	103.5428	0.0012	1.541677	0.000013	3.8	9.7	0.0176	0.0076	0.8	1.1	3.6	0.028	2002	3.1E-05	2	1	
301.01	3.8551	169	34	104.716	0.0029	6.00245	0.00011	11.91	0.27	0.01253	0.00024	0.029	0.044	1.6	0.067	1142	7.7E-05	2	1	
302.01	8.6779	497	52	106.9965	0.0031	24.85467	0.00051	22.35	0.23	0.02266	0.00024	0.02	0.02	3.8	0.179	873	5.8E-05	2	1	
303.01	6.3927	702	64	106.3643	0.0021	60.92983	0.00085	48	35	0.0277	0.0036	0.77	0.64	2.9	0.306	426	3.3E-05	2		
304.01	2.6128	556	58	107.9095	0.0016	8.511982	0.000093	18	35	0.0249	0.0079	0.8	0.98	5.0	0.087	1199	1.7E-05	2	1	
305.01	2.3541	383	36	104.8397	0.0022	4.603576	0.000072	12	29	0.02	0.011	0.7	1.4	2.5	0.053	963	1.4E-04	2	1	
306.01	2.9825	507	12	111.3658	0.0068	24.3077	0.0013	71.9	5.5	0.0232	0.0014	0.011	0.022	3.6	0.168	657	8.5E-05	2	1,2	
307.01	3.6490	206	24	109.2686	0.004	19.67445	0.00055	42.2	1.4	0.01374	0.0004	0.008	0.01	1.7	0.148	736	5.2E-05	3	1	
308.01	6.3242	695	55	120.5441	0.0024	35.59061	0.00058	22	8	0.0281	0.0016	0.88	0.34	4.7	0.223	699	3.3E-05	2	1	

312.01	2.7215	181	24	108.586	0.0036	11.57898	0.00029	33.1	1.1	0.01322	0.00037	0.015	0.037	1.6	0.102	867	6.6E-05	2	1	
313.01	3.1424	504	36	110.6353	0.0022	18.73564	0.00031	25	37	0.0254	0.0068	0.87	0.72	3.1	0.139	651	1.3E-05	2	1,2,3	
313.02	3.2232	295	33	112.8879	0.0026	8.43628	0.00015	14	39	0.0178	0.0095	0.7	1.3	2.2	0.081	852	1.7E-05	2	1,2	
314.01	2.4517	688	42	110.852	0.0015	13.78105	0.00016	24.2	7.3	0.02918	0.00058	0.74	0.22	1.9	0.091	446	2.3E-05	2	1	
314.02	2.0157	514	21	103.9994	0.0028	23.0904	0.00034	73	680	0.023	0.039	0.7	2.5	1.6	0.128	376	2.3E-05	2	1	
315.01	4.3681	902	68	121.9796	0.0017	35.5917	0.00045	41	30	0.0325	0.0049	0.81	0.59	4.8	0.211	526	4.6E-05	2	1	
316.01	5.0479	483	56	117.9011	0.002	15.77135	0.00022	18	26	0.0221	0.0056	0.7	1.1	2.8	0.126	750	1.4E-05	3	1,2	
317.01	7.2681	393	44	139.3631	0.003	22.20767	0.0006	18	33	0.0199	0.0058	0.6	1.2	3.7	0.166	918	9.9E-05	3	1	
318.01	10.3373	1185	44	107.8303	0.0025	38.58439	0.00038	29.99	0.45	0.03035	0.00048	0.03	0.036	4.4	0.235	671	1.2E-05	3	1	
319.01	5.3951	1653	137	109.6254	0.001	46.15115	0.00034	54	16	0.04055	0.00022	0.39	0.12	4.3	0.248	508	1.7E-05	2	1	
321.01	2.5947	160	39	103.4551	0.002	2.426307	0.000032	7.27	0.16	0.01226	0.00022	0.0016	-	0.9	0.035	1068	-	2		
323.01	3.3770	545	11	102.8509	0.0073	5.83674	0.00029	14.5	1.2	0.021	0.0014	0.03	0.085	2.9	0.065	1051	1.3E-05	2	1	
326.01	2.9995	820	26	104.0345	0.0031	8.97297	0.0002	19	80	0.029	0.023	0.6	1.9	0.9	0.05	332	1.4E-05	3	NoObs	
327.01	2.9306	135	30	105.6621	0.0025	3.254241	0.000056	8.974	0.082	0.01156	0.00024	0.0593	-	1.3	0.044	1304	2.5E-05	2	1	
330.01	5.2342	259	27	107.5328	0.0048	7.97398	0.00025	7	17	0.0174	0.0071	0.8	1.1	2.5	0.081	1021	3.3E-05	3	NoObs	
331.01	6.3739	327	32	103.8303	0.0047	18.68416	0.00059	22.47	0.48	0.01684	0.00034	0.012	0.01	1.1	0.134	494	4.0E-05	2	1	
332.01	3.8993	204	40	105.0885	0.0028	5.458491	0.0001	11.27	0.22	0.01399	0.00022	0.0377	-	1.1	0.06	841	4.7E-05	2	1	
333.01	6.0214	318	24	102.8642	0.0039	13.28468	0.00025	17.1828	0.0013	0.02	0.13	0.011	0.01	1.9	0.114	843	2.6E-05	2	1	
335.01	7.4741	703	53	129.3109	0.0024	46.56623	0.00083	45	95	0.0257	0.0093	0.4	1.6	4.3	0.269	674	2.3E-05	2	NoObs	
337.01	5.3936	298	25	110.7155	0.004	19.78404	0.00042	28.67	0.78	0.01613	0.00043	0.011	0.01	1.6	0.146	636	6.3E-05	3	NoObs	
338.01	2.9400	270	27	107.5777	0.0033	7.01048	0.00016	19.24	0.66	0.01587	0.00043	0.011	0.035	2.3	0.072	940	5.7E-05	3	NoObs	
339.01	2.4238	263	44	103.1393	0.0017	1.980349	0.000031	3.9	9.1	0.0175	0.0064	0.8	1.1	1.5	0.031	1319	1.8E-05	3	NoObs	
339.02	3.1373	154	17	71.3385	0.0052	6.41681	0.00015	16.6	0.19	0.01286	0.00043	0.0625	-	1.1	0.069	884	-	4		
340.01	14.2340	19737	172	93.6222	0.0073	23.67378	0.00058	14.366	0.071	0.12942	0.00052	0.001	0.01	30.4	0.173	862	-	3		1
341.01	2.9799	733	31	109.6648	0.0026	7.17068	0.00013	19.09	0.54	0.02618	0.0006	0.027	0.042	3.3	0.074	949	4.5E-05	2	1	
341.02	2.7109	276	14	110.6123	0.0054	4.69975	0.00012	14.3	0.8	0.01781	0.00077	0.011	0.046	2.3	0.056	1091	5.7E-05	2	1	
343.01	3.3150	437	68	103.3364	0.0013	4.76166	0.000044	11.21	0.14	0.01969	0.0002	0.0089	-	2.2	0.057	1065	2.9E-05	2	NoObs	
343.02	2.4768	216	47	103.4963	0.0018	2.024138	0.000025	6.593	0.042	0.0147	0.00021	0.041	-	1.6	0.032	1421	3.4E-05	2	1	
344.01	5.8847	1026	70	104.3354	0.0018	39.3095	0.00054	42	49	0.0318	0.0067	0.6	1	4.0	0.232	564	1.0E-05	2	1	
345.01	4.8165	1148	79	106.1889	0.0015	29.88569	0.00055	37	32	0.0351	0.0063	0.72	0.76	5.8	0.192	592	9.9E-06	2	NoObs	
346.01	2.7973	911	20	103.7797	0.0045	12.92463	0.00041	36	241	0.03	0.045	0.1	3.1	3.4	0.106	684	4.0E-05	2	NoObs	
348.01	4.6221	1740	108	120.3634	0.0012	28.51109	0.00027	51.65	0.43	0.03813	0.00026	0.018	0.017	5.3	0.18	549	1.0E-05	2	1	
349.01	2.3194	536	38	103.4557	0.0019	14.38666	0.00025	51.7	1.4	0.02231	0.00044	0.028	0.04	2.8	0.119	772	1.3E-05	2	NoObs	
350.01	2.5804	366	24	110.2199	0.0027	12.99192	0.00033	22	96	0.02	0.014	0.9	1.3	2.5	0.111	810	1.4E-05	2	1	
351.01	14.4207	7703	210	73.4753	0.0012	331.6457	0.0017	190.34	0.16	0.0827	0.0064	0.011	0.035	8.5	0.966	266	1.9E-05	3	NoObs	
351.02	11.9806	3909	60	80.098	0.0015	210.4526	0.0021	142.4	1.6	0.05855	0.00061	0.001	0.069	6.0	0.713	309	-	4		
351.03	8.0060	424	21	91.9518	0.0078	59.7389	0.0022	53	713	0.019	0.044	0.4	4	1.9	0.308	471	-	4		
352.01	4.4932	362	21	124.8039	0.0049	27.08268	0.00098	28	85	0.02	0.01	0.8	1.2	2.4	0.181	621	5.9E-05	2	NoObs	
353.01	7.0683	3400	93	109.5299	0.0019	152.1011	0.0027	95.2	8.3	0.064	0.0012	0.88	0.17	8.2	0.589	417	1.5E-05	2		
354.01	4.5028	436	32	104.5198	0.0034	15.95999	0.00037	21	51	0.0217	0.0094	0.7	1.3	4.9	0.134	1034	2.6E-05	2	1	
355.01	2.8403	280	38	105.8966	0.0021	4.903454	0.000074	10	25	0.0179	0.0077	0.7	1.4	2.0	0.058	1115	3.2E-05	2	1	

356.01	2.1029	1101	143	103.52521	0.00051	1.8270789	0.0000064	6	6.3	0.0328	0.0071	0.59	0.99	5.8	0.03	1655	2.4E-05	2	NoObs	
360.01	4.5515	138	15	104.5813	0.0051	5.94042	0.00063	9.13	0.41	0.01108	0.00046	0.03	0.066	1.3	0.065	1075	2.8E-05	3	1	
361.01	2.5126	176	24	104.2741	0.0031	3.247565	0.000069	10.37	0.37	0.01302	0.00038	0.0439	-	1.3	0.044	1132	2.7E-05	2	1	
†364.01	4.5649	415	28	156.9082	0.0022	173.9	1.6	132	39	0.02395	0.00058	0.84	0.25	2.6	0.619	313	1.7E-05	3		
365.01	6.6552	588	83	144.6778	0.0019	81.7378	0.0015	64	44	0.0251	0.0032	0.75	0.66	2.3	0.368	363	1.5E-05	2	1,2	
366.01	4.9911	3513	271	140.7142	0.00036	75.1119	0.00021	77.4	3.8	0.06441	0.00061	0.83	0.15	10.2	0.4	586	1.3E-05	2	NoObs	
367.01	2.8404	2090	176	110.20526	0.00049	31.57867	0.00011	98	108	0.0438	0.0085	0.6	1	5.7	0.203	646	3.6E-06	2	1	
368.01	12.7602	6753	1409	130.36472	0.0002	110.32148	0.00015	51.53	0.31	0.08456	0.00008	0.715	0.064	17.4	0.544	742	6.1E-06	2		
369.01	1.8748	132	19	107.4265	0.003	5.88521	0.00013	20	90	0.0116	0.0089	0.5	2.2	1.3	0.066	1073	1.5E-05	2	1	
370.01	9.7635	321	46	136.6501	0.0035	42.8821	0.0012	21	20	0.0194	0.003	0.8	0.69	4.9	0.262	810	2.4E-05	2	1	
†371.01	10.1954	1108	58	177.0753	0.0048	278	1488	65	20	0.2	3.8	1.3	0.39	60.1	0.916	400	5.1E-06	3		
372.01	9.1846	7643	46	186.349	0.0044	125.6125	0.0064	111	65	0.0813	0.0093	0.17	0.9	8.5	0.499	344	2.0E-05	2	NoObs	
373.01	8.7090	597	35	123.9263	0.005	135.1937	0.0072	92	142	0.025	0.0067	0.7	1.1	3.5	0.534	400	3.9E-05	2		
374.01	11.2542	595	44	169.9597	0.0038	172.6735	0.0051	96	124	0.0243	0.0055	0.6	1.1	3.3	0.628	365	2.1E-05	2		
†375.01	7.0221	4696	121	172.22424	0.00095	220	-	150.80509	-	0.07725	-	0.8738	-	8.8	0.729	300	9.7E-06	2	NoObs	
377.01	4.5242	6938	129	115.66381	0.00078	19.25832	0.00017	32	6.4	0.0776	0.003	0.56	0.44	5.7	0.141	553	1.8E-05	1	1,2,3	1
377.02	5.0267	6240	83	108.4011	0.0014	38.9116	0.0006	36.2	2.9	0.0839	0.0017	0.88	0.16	6.2	0.225	438	2.1E-05	1	1,2	1
377.03	1.7745	225	22	115.0924	0.0059	1.592928	0.000068	7	41	0.014	0.016	0.2	2.9	1.0	0.027	1264	3.6E-05	1		1
379.01	2.5183	251	24	103.9955	0.003	6.71743	0.00014	13	54	0.018	0.012	0.8	1.3	3.1	0.074	1267	6.8E-05	3	1	
384.01	5.0735	176	30	107.4333	0.0036	5.07977	0.00012	4.7	9.5	0.015	0.0051	0.8	1	2.0	0.06	1143	1.2E-04	2	1	
385.01	3.4446	269	19	107.8373	0.0042	13.14613	0.0004	30	151	0.016	0.016	0.2	2.6	1.8	0.11	743	7.7E-05	2	NoObs	
386.01	5.3012	845	46	106.905	0.0029	31.15847	0.00063	47.12	0.75	0.02782	0.00038	0.029	0.036	3.4	0.2	623	9.3E-05	2	NoObs	
386.02	5.9833	660	24	133.6702	0.0064	76.735	0.0034	101.1	3.2	0.02374	0.00071	0.011	0.04	2.9	0.366	461	9.7E-05	2	NoObs	
387.01	3.3365	941	32	115.8646	0.003	13.89952	0.0003	28	98	0.031	0.02	0.5	1.9	2.5	0.1	534	2.8E-05	2	NoObs	
388.01	5.3710	267	34	102.5496	0.0035	6.14974	0.00015	10	158	0.006	0.017	0	4.8	0.6	0.063	925	4.1E-05	2	NoObs	
392.01	7.3677	216	14	104.316	0.01	33.4205	0.0024	35.4	1.6	0.01417	0.00061	0.013	0.042	1.9	0.209	614	4.6E-05	3	NoObs	
393.01	6.7617	229	21	109.2556	0.0066	21.41586	0.00096	19	72	0.0152	0.0097	0.6	1.8	1.2	0.154	578	1.2E-04	2	NoObs	
398.01	4.7975	8729	155	103.085	0.001	51.84581	0.00033	80	14	0.092	0.0036	0.57	0.41	8.6	0.267	403	1.4E-05	2	3	
398.02	2.4429	1571	74	106.7183	0.0015	4.180054	0.000043	13.67	0.27	0.03726	0.00056	0.0002	-	3.5	0.05	932	2.3E-05	2	3	
398.03	1.7407	453	28	66.8188	0.0024	1.729364	0.000018	6.9	2.1	0.02047	0.00065	0.218	0.065	1.9	0.028	1246	-	4		
401.01	5.3596	1986	100	118.4415	0.0013	29.19859	0.00029	45.63	0.38	0.041	0.00028	0.0002	-	6.2	0.19	629	2.5E-05	2	NoObs	
401.02	6.2359	1411	30	184.2868	0.0049	160.0112	0.0069	114	43	0.0434	0.0034	0.9	0.32	6.6	0.591	357	-	4		
403.01	1.5859	1206	41	104.1305	0.0016	21.0569	0.00024	31.9	9.6	0.35598	0.00096	1.74	0.52	39.7	0.152	637	1.0E-05	3		
408.01	3.1757	1369	63	106.0728	0.0015	7.381987	0.000074	18.92	0.29	0.03466	0.00041	0.0189	-	3.6	0.075	889	4.4E-05	2	1	
408.02	3.7260	801	31	99.7951	0.0039	12.56093	0.00034	25.58	0.69	0.02735	0.00062	0.011	0.01	2.9	0.108	741	5.0E-05	2	1	
408.03	5.0363	676	20	85.9989	0.0061	30.82869	0.00088	49	315	0.024	0.032	0	3	2.6	0.196	550	-	4		
409.01	4.3307	582	49	112.5253	0.0025	13.24874	0.00024	17	34	0.0247	0.0098	0.7	1.2	1.4	0.108	545	4.6E-05	2		
410.01	1.8788	3744	211	109.28616	0.00033	7.216812	0.000017	14.5	4.4	0.1016	0.005	0.97	0.29	12.4	0.076	1009	-	2		
412.01	3.0251	3335	226	103.32514	0.00037	4.147024	0.00001	11.416	0.052	0.05341	0.00019	0.0011	-	7.3	0.052	1211	1.6E-05	2		
413.01	2.6270	943	34	109.5582	0.0025	15.22926	0.00027	47.8	1.4	0.02991	0.00062	0.042	0.01	2.8	0.119	619	1.2E-04	2		
415.01	7.0021	4456	118	178.1412	0.0014	166.7879	0.0019	229.111	0.016	0.062	0.063	0.006	0.01	7.7	0.611	352	2.8E-05	2		

416.01	3.7319	1516	83	118.8413	0.0013	18.20811	0.00017	38.65	0.11	0.03601	0.00028	0.0038	-	2.9	0.131	536	2.4E-05	2	
416.02	4.0059	1053	32	86.78	0.0033	88.2547	0.0013	115	200	0.035	0.012	0.78	0.97	2.8	0.376	317	-	4	
417.01	2.4571	6216	185	109.96607	0.00044	19.193112	0.000062	36	11	0.0972	0.0017	0.84	0.25	9.0	0.142	608	3.9E-05	2	
418.01	4.8665	11258	610	105.79613	0.00023	22.418338	0.000036	24.82	0.36	0.11484	0.00044	0.803	0.085	12.7	0.155	580	3.1E-05	2	
419.01	2.7205	7097	292	122.38996	0.0003	20.13146	0.000044	42	13	0.09084	0.00037	0.65	0.19	7.5	0.146	573	1.1E-05	2	
420.01	2.2582	2490	195	107.08404	0.0004	6.010401	0.000017	21	17	0.0474	0.0081	0.39	1	4.3	0.061	763	1.4E-05	2	
421.01	2.6993	16119	687	105.81931	0.00025	4.4542074	0.000009	16.852	0.036	0.11481	0.00018	0.001	-	14.5	0.053	1068	3.9E-05	2	
†422.01	9.0034	16242	274	183.63055	0.00071	200	-	136.12	0.016	0.13831	-	0.8077	-	16.5	0.692	333	1.4E-05	2	
423.01	6.0128	8420	241	135.856	0.00051	21.087391	0.000085	29.034	0.097	0.08496	0.00025	0.0003	-	9.6	0.154	685	2.7E-05	2	
425.01	1.5268	11348	122	102.75274	0.00034	5.428352	0.000013	15	4.2	0.133	0.014	0.9	0.26	13.2	0.061	967	-	2	
426.01	3.4978	836	36	105.1505	0.0027	16.30089	0.00035	37.91	0.94	0.02709	0.00055	0.029	0.01	3.5	0.13	773	4.2E-05	2	
427.01	2.9072	1670	44	124.7364	0.002	24.6157	0.00034	38	11	0.0457	0.001	0.75	0.22	4.6	0.165	554	1.1E-05	2	
428.01	6.8663	3529	361	105.51811	0.00049	6.873163	0.000023	8.103	0.017	0.05591	0.0001	0	0.01	5.6	0.073	959	4.1E-05	2	
429.01	4.0370	2667	150	105.52804	0.00079	8.600087	0.000048	17.1	0.1	0.04762	0.00023	0.027	0.017	4.8	0.081	760	4.3E-05	3	
430.01	2.7448	1585	52	112.4041	0.0016	12.37645	0.00019	33	80	0.038	0.018	0.4	1.7	2.7	0.087	493	1.4E-05	2	
431.01	3.1580	1039	44	111.7122	0.002	18.86998	0.00031	36	84	0.033	0.015	0.7	1.3	3.6	0.139	622	1.2E-05	2	
431.02	3.8717	768	24	87.3073	0.0045	46.90198	0.00094	51	68	0.032	0.008	0.88	0.66	3.5	0.254	460	-	4	
432.01	2.1018	959	72	107.35008	0.0009	5.263436	0.000033	14	24	0.0321	0.0096	0.7	1.1	3.6	0.061	1049	2.3E-05	2	
433.01	2.8751	2730	104	104.09249	0.00084	4.03042	0.000023	11	19	0.049	0.018	0.3	1.5	5.8	0.05	1076	4.7E-05	3	
433.02	11.7758	12016	195	132.2029	0.0013	328.2403	0.0019	176.2	8.4	0.1133	0.0013	0.73	0.18	13.4	0.935	249	-	4	
435.01	5.4169	1436	57	111.9483	0.0019	20.54902	0.00033	29.53	0.4	0.0352	0.00041	0.003	0.01	3.0	0.148	579	2.2E-05	2	
438.01	2.3764	866	42	107.7956	0.0017	5.931204	0.00007	16	39	0.03	0.016	0.6	1.4	2.2	0.056	668	2.3E-05	2	
439.01	2.1891	2065	201	103.44904	0.00038	1.9022064	0.000005	5.8	4.1	0.0447	0.0063	0.56	0.83	2.7	0.029	1014	2.5E-05	2	NoObs
440.01	4.0463	907	41	110.9313	0.0023	15.90655	0.00027	22	47	0.031	0.014	0.7	1.2	2.8	0.12	576	7.2E-05	2	NoObs
440.02	1.6038	689	36	103.8861	0.0015	4.973444	0.00005	23.7	0.77	0.02488	0.00048	0.031	0.048	2.2	0.055	850	9.6E-05	2	NoObs
442.01	4.4306	392	26	104.6832	0.0043	13.53981	0.00041	23.22	0.68	0.01862	0.00048	0.008	0.01	1.9	0.113	722	8.2E-05	2	NoObs
442.02	2.3333	173	23	67.5316	0.0036	1.732341	0.000026	6.29	0.2	0.01435	0.00037	0.06	-	1.4	0.029	1425	-	4	
443.01	4.7403	686	44	113.0459	0.0027	16.21718	0.0003	26.46	0.44	0.02481	0.00037	0.0056	-	2.2	0.127	631	3.7E-05	2	
444.01	4.0665	432	29	110.3174	0.0039	11.7228	0.00031	22	114	0.02	0.019	0	2.7	2.0	0.103	763	8.4E-05	2	NoObs
446.01	2.7087	790	23	107.7539	0.0032	16.70916	0.00036	32	129	0.03	0.025	0.8	1.5	2.3	0.115	490	2.4E-05	2	NoObs
446.02	3.7173	561	14	118.4722	0.0066	28.5532	0.0015	59	364	0.022	0.031	0.2	2.9	1.7	0.164	411	2.6E-05	2	NoObs
448.01	2.8620	1164	27	111.4491	0.0033	10.13961	0.00023	28.6	1.2	0.03002	0.00094	0.013	0.04	2.3	0.079	564	1.7E-04	2	NoObs
448.02	5.0051	2158	33	127.4625	0.0037	43.6205	0.0013	45	38	0.0488	0.0088	0.79	0.67	3.8	0.21	346	1.5E-04	2	NoObs
452.01	5.0013	422	50	102.9417	0.0025	3.705996	0.000064	5.758	0.08	0.01956	0.00025	0.0028	-	2.3	0.048	1242	6.7E-05	2	
454.01	4.6580	766	23	103.5546	0.0047	29.008	0.001	40	156	0.027	0.022	0.6	1.9	2.4	0.181	487	2.8E-05	2	
456.01	4.2628	1007	51	104.4739	0.0023	13.70035	0.00023	25.57	0.38	0.03051	0.00039	0.009	0.022	3.1	0.114	714	2.9E-05	2	
456.02	2.9208	222	18	67.0265	0.0054	4.30954	0.0001	13.06	0.56	0.01621	0.00054	0.0615	-	1.7	0.053	1047	-	4	
457.01	1.8924	684	40	107.2985	0.0017	4.921331	0.000057	13	40	0.028	0.017	0.8	1.3	2.2	0.054	799	3.2E-05	2	
458.01	4.0333	3084	60	141.0775	0.0018	53.71858	0.00079	49	15	0.0768	0.0062	0.93	0.28	10.5	0.286	515	1.1E-05	3	
459.01	3.5933	899	47	103.1027	0.0022	19.44639	0.00036	24	20	0.0325	0.0045	0.84	0.59	3.7	0.144	664	6.9E-05	2	
459.02	3.3100	145	13	67.1191	0.0079	6.91977	0.00023	16.04	0.25	0.0113	0.00058	0.12	0.01	1.3	0.072	939	-	4	

460.01	4.2947	1332	64	109.0751	0.0018	17.58782	0.00022	32.97	0.43	0.03389	0.00036	0.031	0.036	4.3	0.134	696	7.1E-05	2	
463.01	2.2233	2610	60	118.2658	0.0014	18.47817	0.00019	83.5	2.1	0.04736	0.00092	0.0236	-	3.5	0.107	398	7.9E-05	2	NoObs
464.01	6.3270	5126	162	129.55353	0.00077	58.3625	0.00033	76.39	0.36	0.06667	0.00028	0.0095	-	7.1	0.295	430	2.7E-05	2	1
464.02	2.2822	668	42	128.7576	0.0023	5.350243	0.000097	17	74	0.025	0.022	0.4	2.3	2.7	0.06	953	5.1E-05	2	1
†465.01	7.8994	1483	25	137.0202	0.0047	350	-	177	53	0.0442	0.0015	0.82	0.24	4.8	1.002	266	3.2E-05	3	
466.01	2.1253	2512	71	103.53919	0.00086	9.391009	0.000057	31.7	9.5	0.04855	0.00057	0.216	0.065	3.1	0.087	679	-	2	
467.01	4.8878	2916	129	115.4428	0.0011	18.00891	0.00013	29.66	0.19	0.05027	0.00026	0.002	-	5.0	0.136	636	1.8E-05	2	
468.01	3.2229	1426	48	107.5957	0.0019	22.18452	0.0003	58.1	1.2	0.03537	0.00057	0.019	-	3.5	0.151	538	3.7E-05	2	
469.01	1.5075	2258	80	107.60632	0.00065	10.329116	0.00005	24.7	7.4	0.0612	0.0029	0.9	0.27	5.5	0.095	782	1.6E-05	2	
470.01	1.9936	2270	140	104.15067	0.00048	3.750839	0.000012	13	13	0.0464	0.0088	0.5	1	4.0	0.047	997	4.7E-05	2	
471.01	3.6749	465	24	104.7317	0.0048	21.34737	0.00069	25	58	0.0242	0.0095	0.84	0.98	2.0	0.151	551	4.6E-05	3	
472.01	3.4034	1349	85	106.5627	0.0012	4.243748	0.000035	9.95	0.11	0.03403	0.0003	0.0015	-	3.2	0.052	1023	1.5E-05	2	
473.01	2.3654	815	36	113.6359	0.0023	12.70512	0.00021	43.8	1.3	0.02715	0.0006	0.0281	-	2.2	0.105	629	5.6E-05	2	
474.01	3.1718	493	32	109.72	0.0027	10.94564	0.0002	27	132	0.021	0.018	0.2	2.6	2.3	0.1	863	2.4E-05	2	
474.02	3.3543	412	17	67.7739	0.0059	28.98843	0.00077	47	309	0.021	0.027	0.7	2.1	2.3	0.191	625	-	4	
475.01	2.5576	697	27	109.7	0.003	8.18066	0.00017	25.89	0.96	0.02514	0.00071	0.0033	-	2.4	0.078	740	1.6E-05	2	1
475.02	2.8820	818	26	104.7906	0.0035	15.31341	0.00037	33	154	0.028	0.027	0.6	2.1	2.6	0.118	602	1.5E-05	2	1
476.01	2.9423	685	22	111.4386	0.0038	18.42776	0.0005	40	188	0.025	0.025	0.6	2	2.4	0.133	567	3.0E-05	2	
477.01	3.7966	760	28	102.6428	0.0038	16.54318	0.00044	28	98	0.027	0.02	0.6	1.8	2.6	0.125	593	5.9E-05	2	
478.01	1.7873	1759	62	104.1148	0.0011	11.023452	0.000085	21.4	6.4	0.0515	0.0018	0.9	0.27	4.5	0.079	522	3.7E-05	3	NoObs
479.01	5.3442	1019	48	126.387	0.0025	34.18966	0.00069	41	85	0.031	0.012	0.6	1.4	3.2	0.209	518	1.3E-05	2	NoObs
480.01	2.0071	678	37	105.3089	0.0015	4.301702	0.000044	14	51	0.027	0.019	0.6	1.8	2.7	0.052	985	2.5E-05	2	
481.01	2.7127	910	56	104.969	0.0015	7.650377	0.000079	19	40	0.029	0.013	0.6	1.4	2.5	0.075	738	2.7E-05	2	1
481.02	1.6900	388	42	102.8291	0.0016	1.554014	0.000017	7	17	0.0197	0.0098	0.1	1.8	1.7	0.026	1253	3.3E-05	2	1
481.03	4.8919	962	38	116.228	0.0039	34.2603	0.00092	28	14	0.0355	0.0034	0.87	0.41	3.0	0.202	450	2.8E-05	2	1
483.01	3.0292	762	50	106.2564	0.0017	4.798596	0.000077	9	18	0.028	0.011	0.7	1.2	2.3	0.055	866	1.7E-05	2	
484.01	3.6637	968	38	108.059	0.0024	17.20516	0.0003	36.19	0.83	0.02881	0.00051	0.029	0.041	2.0	0.125	509	2.4E-05	2	
486.01	5.1182	625	31	102.4949	0.0041	22.1831	0.00058	26	84	0.025	0.015	0.6	1.6	1.4	0.152	454	2.5E-05	2	
487.01	3.0191	602	26	106.0424	0.0033	7.65867	0.00017	21.02	0.78	0.02338	0.00067	0.0423	-	2.4	0.077	837	3.1E-05	3	
488.01	3.3557	433	17	109.447	0.0048	9.37924	0.00032	14	61	0.021	0.015	0.8	1.5	2.2	0.088	797	4.7E-05	3	
490.01	2.3764	382	12	105.8695	0.007	4.39312	0.00021	10	76	0.021	0.033	0.7	2.2	2.3	0.051	932	7.9E-05	3	NoObs
490.03	2.8056	360	26	67.0685	0.0035	7.4063	0.00011	13	57	0.021	0.017	0.8	1.6	2.2	0.072	784	-	4	
492.01	6.3675	819	34	127.7091	0.0038	29.91151	0.00093	38.59	0.81	0.02692	0.00051	0.014	0.01	3.7	0.192	607	1.1E-04	2	
494.01	3.7520	957	26	121.7839	0.0035	25.69719	0.00067	44	152	0.031	0.024	0.6	1.8	1.8	0.157	388	1.2E-04	2	
496.01	1.5390	376	8	102.8045	0.0067	1.616844	0.000073	5	1.5	0.021	0.0026	0.66	0.2	2.7	0.027	1514	5.0E-05	3	NoObs
497.01	4.9474	516	32	108.6103	0.0036	13.19281	0.00032	15	37	0.0233	0.0095	0.7	1.3	2.5	0.113	785	1.3E-04	2	
497.02	3.6013	148	13	67.5572	0.0082	4.4255	0.00015	6	24	0.016	0.013	0.8	1.3	1.7	0.054	1135	-	4	
499.01	2.4759	373	24	107.5364	0.0032	9.66856	0.00022	18	79	0.021	0.016	0.8	1.5	2.0	0.089	750	1.2E-04	2	
500.01	2.5052	1343	51	109.4766	0.0017	7.053478	0.000083	22.62	0.47	0.03412	0.00054	0.0244	-	2.7	0.063	642	1.1E-04	2	1
500.02	2.4154	1306	44	110.4801	0.0021	9.5217	0.00014	29	83	0.035	0.023	0.4	1.8	2.8	0.076	584	1.0E-04	2	1
500.03	2.0724	400	22	67.025	0.0035	3.072166	0.000046	11.53	0.6	0.01825	0.00074	0.0162	-	1.5	0.036	849	-	4	

500.04	2.0486	490	22	67.5914	0.0034	4.645353	0.000067	11	51	0.026	0.023	0.8	1.5	2.1	0.047	743	-	4	
500.05	1.4084	266	22	66.1708	0.0027	0.986779	0.000012	5	19	0.015	0.014	0.4	2.2	1.2	0.017	1235	-	4	
501.01	7.9692	451	20	103.3382	0.0086	24.794	0.0015	23	123	0.02	0.02	0.2	2.7	2.1	0.169	580	2.0E-04	2	
503.01	2.6971	1303	41	105.9557	0.0018	8.22236	0.0001	24.44	0.6	0.03383	0.00065	0	0.01	2.5	0.067	575	2.5E-05	2	
504.01	5.3925	626	23	132.256	0.0043	40.6068	0.0015	58	1.8	0.02324	0.00066	0.017	0.028	1.7	0.228	411	1.2E-04	2	
505.01	2.9555	594	29	107.809	0.0026	13.76725	0.00025	39.7	1.4	0.02282	0.0006	0.011	0.01	3.1	0.113	734	2.4E-05	2	
506.01	1.1470	670	61	102.96485	0.00078	1.5831619	0.0000085	12.11	0.26	0.02594	0.00045	0.0211	-	2.5	0.027	1468	4.6E-05	3	
507.01	3.5887	1454	26	106.4976	0.0026	18.49248	0.00032	36	150	0.039	0.033	0.5	2.1	4.3	0.136	619	1.5E-04	2	
508.01	3.5907	685	46	102.5153	0.002	7.93059	0.00011	12	23	0.0272	0.0099	0.7	1.1	3.8	0.08	965	2.5E-05	2	1
508.02	4.0833	645	33	113.2053	0.0031	16.66519	0.00038	27	84	0.025	0.015	0.6	1.7	3.5	0.131	754	2.6E-05	2	1
509.01	2.7553	789	50	102.7129	0.0018	4.167068	0.000051	9	24	0.028	0.014	0.6	1.5	2.7	0.051	988	1.9E-04	2	
509.02	2.7152	840	33	70.3827	0.0028	11.46349	0.00014	23	94	0.03	0.025	0.7	1.6	2.9	0.1	705	-	4	
510.01	2.7078	410	29	102.8992	0.0026	2.940409	0.000053	5	16	0.023	0.012	0.8	1.2	2.7	0.041	1208	3.1E-05	2	1
510.02	3.1918	492	25	108.4732	0.0033	6.38914	0.00015	12	46	0.023	0.017	0.7	1.8	2.7	0.068	938	2.9E-05	2	1
511.01	3.2069	596	43	103.5031	0.0021	8.00573	0.00012	19.76	0.4	0.02329	0.00038	0.0106	-	2.8	0.081	936	5.6E-05	2	
512.01	3.3326	474	20	105.921	0.0044	6.5098	0.0002	15	90	0.02	0.025	0.4	2.6	2.6	0.069	985	2.2E-05	3	
513.01	7.0369	800	33	103.0988	0.0042	35.18059	0.00096	39.22	0.74	0.02732	0.0005	0.006	0.01	2.7	0.217	563	3.2E-05	2	
517.01	2.0898	694	55	104.2588	0.0012	2.75236	0.000024	7	15	0.028	0.011	0.8	1.1	3.6	0.039	1343	2.6E-05	2	NoObs
518.01	3.0039	927	50	114.9745	0.002	13.98172	0.00019	36.78	0.72	0.02854	0.00041	0.027	0.035	2.4	0.107	567	2.7E-05	2	1
518.02	5.0627	525	21	143.7633	0.0076	43.9985	0.0025	57	224	0.023	0.019	0.5	2	1.9	0.23	387	3.1E-05	2	1
519.01	4.1728	545	23	111.3384	0.005	11.90376	0.00043	16	66	0.024	0.017	0.7	1.8	2.4	0.104	768	4.2E-05	2	
520.01	3.4450	816	39	103.3046	0.0025	12.7599	0.00022	19	41	0.03	0.012	0.8	1.1	3.1	0.105	668	7.7E-05	2	
520.02	2.3531	260	16	71.3679	0.0049	5.43316	0.00012	11	62	0.019	0.02	0.8	1.7	2.0	0.06	884	-	4	
520.03	2.7291	668	22	69.4611	0.004	25.75125	0.00044	62	396	0.027	0.034	0.7	2.3	2.8	0.168	528	-	4	
521.01	3.0740	1200	57	105.0012	0.0017	10.16104	0.00012	23	64	0.033	0.016	0.5	1.7	3.9	0.094	868	3.0E-05	3	
522.01	2.8393	1042	39	102.9428	0.0022	12.83012	0.00019	35.55	0.15	0.03071	0.00052	0.0148	-	1.9	0.106	580	1.1E-04	2	
523.01	4.8395	3125	81	131.2301	0.0014	49.41297	0.00062	43.4	4.8	0.0629	0.0015	0.88	0.19	7.3	0.272	519	1.5E-05	2	
523.02	7.2861	586	21	71.9294	0.0081	36.8539	0.0014	39.6089	0.0058	0.02	0.19	0.073	0.014	2.7	0.223	573	-	4	
524.01	2.3748	923	56	105.0022	0.0014	4.592522	0.000042	15.85	0.3	0.02923	0.00041	0.0227	-	2.3	0.053	838	2.1E-05	2	
525.01	2.1406	1110	34	106.6783	0.0023	11.53219	0.00019	52	2	0.03138	0.00085	0.026	0.045	4.3	0.102	850	9.7E-05	2	
526.01	1.7639	853	73	104.04377	0.0008	2.104719	0.000012	6	10	0.0305	0.0088	0.7	1	2.6	0.032	1203	4.1E-05	2	
528.01	3.3634	648	38	109.6802	0.0023	9.57676	0.00016	17	44	0.025	0.012	0.7	1.4	3.1	0.09	855	2.3E-05	2	
528.02	6.0786	886	26	73.1959	0.006	96.6704	0.0024	130.6	3.9	0.02763	0.00072	0.031	0.06	3.4	0.419	396	-	4	
528.03	2.4763	662	23	78.0287	0.0039	20.55273	0.00034	61	625	0.026	0.053	0.6	3.1	3.2	0.149	664	-	4	
530.01	2.1729	522	18	103.3025	0.0036	10.94062	0.00026	40.2	3	0.0197	0.0011	0.001	0.01	1.3	0.095	619	2.7E-05	2	NoObs
531.01	1.3319	2593	156	103.88016	0.00035	3.6874622	0.0000089	26	19	0.0554	0.0076	0.52	0.86	4.3	0.038	749	1.6E-05	3	1
532.01	3.1402	579	42	106.6964	0.0022	4.221737	0.000066	11.06	0.23	0.02321	0.0004	0.0195	-	2.3	0.052	1089	1.7E-05	2	
533.01	4.2317	609	23	104.7024	0.0052	16.54915	0.0006	32.7	1.1	0.02425	0.00065	0.031	0.057	2.6	0.126	641	1.7E-05	2	
534.01	1.8349	693	31	107.0234	0.0021	6.400136	0.000094	17	67	0.03	0.022	0.8	1.4	2.0	0.065	706	5.8E-05	2	NoObs
534.02	1.8465	384	27	104.0967	0.0025	2.735879	0.000047	12.24	0.46	0.02015	0.00059	0.0291	-	1.4	0.037	936	6.8E-05	2	NoObs
535.01	4.5283	1014	89	104.1811	0.0014	5.852997	0.000054	10.152	0.089	0.02989	0.00023	0.0075	-	3.3	0.065	1011	5.4E-05	2	

536.01	7.5537	1126	29	111.5934	0.0054	162.3361	0.0078	150.1292	0.0072	0.03241	-	0.4793	-	3.0	0.588	296	1.7E-05	2	
537.01	2.4773	413	34	103.7859	0.0022	2.820204	0.000057	6	18	0.022	0.011	0.7	1.4	1.4	0.039	1003	2.0E-05	2	
538.01	5.3723	607	30	104.6569	0.0044	21.2147	0.00074	20	38	0.0255	0.0082	0.8	1	2.9	0.155	683	3.6E-05	2	
541.01	3.4665	521	18	113.3505	0.0044	13.64591	0.00044	20	89	0.025	0.02	0.8	1.5	1.9	0.11	603	3.0E-05	2	
542.01	5.8419	543	21	111.6873	0.0058	41.8867	0.0017	55.7	1.8	0.02195	0.00066	0.023	0.028	2.7	0.241	526	3.5E-05	3	
543.01	1.9101	694	36	106.4363	0.0019	4.302187	0.000057	17.38	0.52	0.02529	0.00057	0.0378	-	1.9	0.05	844	3.5E-05	2	
543.02	1.8077	304	18	66.5566	0.0038	3.137846	0.000051	15.57	0.68	0.02041	0.00067	0.0847	-	1.5	0.041	932	-	4	
546.01	6.2656	776	28	103.1884	0.0048	20.68457	0.00068	26.2	0.66	0.02575	0.0006	0.003	0.01	2.8	0.152	673	2.8E-05	3	
547.01	4.4977	2050	68	121.059	0.0017	25.30298	0.0003	44.79	0.56	0.04137	0.00043	0.0096	-	3.5	0.164	489	2.8E-05	2	
548.01	4.0011	583	25	122.7062	0.0042	21.30056	0.00071	30	111	0.026	0.016	0.7	1.7	2.6	0.155	654	2.4E-05	3	NoObs
550.01	4.1038	539	33	111.5233	0.0031	13.02371	0.00027	25.5	0.64	0.02143	0.00047	0.032	0.01	1.8	0.109	660	1.1E-04	2	NoObs
551.01	3.2954	564	24	111.8449	0.0039	11.63684	0.00034	19	75	0.025	0.018	0.7	1.6	2.1	0.101	688	1.3E-04	3	
551.02	2.1328	406	20	66.9544	0.0039	5.688042	0.000092	23.6	1.1	0.02122	0.00074	0.0662	-	1.8	0.063	871	-	4	
552.01	1.7536	7064	133	104.09836	0.0005	3.055172	0.000011	8.6	2.6	0.0967	0.0013	0.79	0.24	11.2	0.043	1316	6.9E-05	2	
554.01	2.2625	3255	43	103.5436	0.0016	3.658495	0.00004	6	1.3	0.0687	0.0034	0.9	0.25	6.1	0.047	1068	3.4E-05	3	
555.01	2.4562	227	18	105.4452	0.0043	3.70178	0.00011	7	31	0.018	0.015	0.8	1.5	1.5	0.046	947	8.0E-05	2	NoObs
555.02	6.8853	807	21	114.886	0.01	86.4958	0.0038	100.4	3.3	0.02676	0.00079	0.041	0.039	2.3	0.376	331	-	4	
557.01	3.7725	827	30	103.7845	0.0032	15.65554	0.00034	28	92	0.028	0.019	0.5	1.8	3.1	0.121	636	2.8E-05	3	
558.01	2.1952	694	30	106.0859	0.0025	9.17892	0.00016	34	128	0.025	0.019	0.1	2.3	2.3	0.085	730	1.8E-04	2	
559.01	2.4524	197	9.7	106.705	0.0067	4.33065	0.0002	11.6	3.5	0.0137	0.0011	0.29	0.087	1.4	0.052	981	3.4E-05	3	
560.01	4.2117	813	14	112.2715	0.0067	23.6758	0.0011	35	234	0.028	0.039	0.6	2.4	1.8	0.154	445	3.0E-05	2	
561.01	2.5786	451	32	102.6083	0.0024	5.379017	0.000089	11	33	0.024	0.013	0.7	1.4	2.1	0.058	829	1.9E-05	2	NoObs
563.01	5.4260	249	17	108.6355	0.0069	15.28368	0.00064	16	65	0.017	0.012	0.7	1.7	1.8	0.124	734	1.0E-04	2	
564.01	7.4094	579	27	104.8916	0.0054	21.05821	0.00075	22.39	0.5	0.02326	0.00051	0.019	0.01	2.4	0.152	619	6.7E-05	2	
564.02	13.5324	2840	86	179.495	0.003	127.8872	0.0024	75.79	0.58	0.04929	0.00037	0.013	0.04	5.0	0.505	340	-	4	
566.01	4.0033	632	16	125.5736	0.0064	25.8548	0.002	50	682	0.024	0.058	0.2	4.3	2.3	0.175	586	6.1E-05	3	
567.01	3.3311	703	40	102.9293	0.0024	10.68782	0.00018	15	23	0.0286	0.0075	0.82	0.83	2.9	0.096	758	5.6E-05	2	NoObs
567.02	4.4409	463	23	109.8004	0.005	20.3032	0.00071	21	73	0.023	0.013	0.8	1.3	2.3	0.147	612	6.1E-05	2	NoObs
567.03	3.4536	567	20	131.3635	0.0042	29.02356	0.00067	66	682	0.022	0.043	0.1	3.8	2.2	0.187	543	5.6E-05	2	NoObs
568.01	1.3950	254	22	102.64	0.0023	3.383517	0.000051	16	66	0.016	0.012	0.6	1.9	1.0	0.043	856	3.6E-05	2	NoObs
569.01	2.7713	528	17	118.4404	0.0043	20.72804	0.00067	60.2	3.3	0.02221	0.00096	0.017	0.01	2.1	0.144	540	1.9E-05	3	
571.01	2.2027	647	28	107.316	0.0026	7.26733	0.00013	26	106	0.024	0.015	0.1	2.4	1.7	0.059	563	1.2E-04	2	1
571.02	2.6903	817	32	109.9	0.0023	13.34331	0.00015	40	1.2	0.02827	0.00067	0.0141	-	2.0	0.088	461	1.2E-04	2	1
571.03	1.8168	500	29	66.3315	0.0023	3.886758	0.000038	9	17	0.026	0.007	0.87	0.8	1.8	0.039	692	-	4	
572.01	5.2873	356	25	112.774	0.0054	10.6405	0.00042	16.33	0.39	0.01827	0.00045	0.024	0.01	2.4	0.097	882	1.3E-04	2	
573.01	3.1200	646	35	105.5032	0.0026	5.9966	0.00011	14	52	0.025	0.018	0.3	2.1	3.2	0.066	1054	2.0E-05	2	
573.02	2.0590	211	16	66.2019	0.0048	2.061872	0.000042	8.378	0.08	0.01674	0.00053	0.0437	-	2.1	0.033	1491	-	4	
574.01	3.4080	1030	36	104.3661	0.003	20.13504	0.0004	41	162	0.031	0.025	0.4	2.1	2.4	0.14	507	3.0E-05	2	
575.01	4.1934	519	16	116.4044	0.0064	24.3178	0.0012	32	165	0.024	0.022	0.7	1.9	2.6	0.169	640	3.8E-05	3	
577.01	5.2888	461	9	111.55	0.011	39.6729	0.003	59	477	0.02	0.034	0.1	3.4	2.6	0.227	502	3.5E-05	3	
578.01	5.1938	1081	90	102.8794	0.0015	6.412547	0.000063	9.811	0.082	0.03075	0.00023	0.004	-	3.8	0.069	1035	4.1E-05	2	

579.01	1.8672	294	31	103.0698	0.0021	2.020003	0.000028	9.093	0.05	0.01747	0.00038	0.0295	-	1.5	0.03	1154	4.1E-05	2	NoObs	
580.01	2.7903	685	32	108.7093	0.0025	6.52125	0.00011	18	95	0.025	0.025	0	2.7	1.5	0.067	716	3.9E-05	2		
581.01	2.6717	1111	49	108.9144	0.0016	6.996895	0.000074	20.47	0.39	0.03159	0.00048	0.001	-	2.1	0.07	714	4.2E-05	2		
582.01	2.5505	778	34	103.4687	0.002	5.945053	0.000083	17	74	0.027	0.024	0.4	2.3	2.2	0.062	783	3.7E-05	3		
583.01	3.1312	227	28	103.7392	0.0033	2.436893	0.000055	4	12	0.0164	0.0083	0.7	1.4	1.6	0.036	1266	2.8E-05	3		
584.01	3.7109	663	47	108.6885	0.0021	9.9265	0.00015	21.68	0.46	0.02287	0.0004	0.0173	-	1.6	0.088	633	2.2E-05	2	1	
584.02	4.4730	509	27	103.3728	0.0044	21.22343	0.00069	37	1.1	0.02177	0.00053	0.025	0.01	1.5	0.146	492	2.3E-05	2	1	
585.01	1.9189	754	37	104.558	0.0017	3.722176	0.000042	15.33	0.43	0.02686	0.00053	0.0528	-	2.0	0.046	932	3.8E-05	2		
586.01	3.7971	526	23	108.9754	0.0041	15.77916	0.00044	22	72	0.024	0.014	0.7	1.4	2.1	0.124	630	1.7E-05	3		
587.01	3.4973	752	38	104.6019	0.0028	14.03513	0.00026	25	63	0.028	0.014	0.6	1.5	3.0	0.113	672	5.7E-05	2		
588.01	2.6497	548	19	108.6871	0.0041	10.35547	0.0003	23	100	0.023	0.023	0.7	1.9	2.2	0.085	619	1.4E-05	2		
589.01	4.2971	174	8.6	119.5356	0.0092	17.4808	0.00085	21	180	0.014	0.02	0.8	2.2	1.2	0.134	637	3.2E-05	3	NoObs	
590.01	3.7243	380	22	107.5461	0.0045	11.38933	0.00035	17	72	0.021	0.015	0.7	1.7	2.1	0.102	809	7.0E-05	2		
590.02	5.8287	567	20	74.3251	0.0073	50.6962	0.0017	68.1	2.4	0.02208	0.00071	0.031	0.063	2.2	0.276	492	-	4		
592.01	4.7864	440	19	108.4815	0.0061	39.7521	0.0018	35	85	0.0229	0.0088	0.85	0.98	2.7	0.234	550	4.4E-05	3		
593.01	3.2745	483	16	104.7889	0.0051	9.99757	0.00034	18	124	0.023	0.028	0.7	2.4	2.1	0.092	760	5.2E-05	2		
596.01	1.3419	635	42	103.4508	0.0012	1.682706	0.000014	10.097	0.022	0.02575	0.00042	0.0338	-	1.7	0.022	864	1.6E-05	2	NoObs	
597.01	4.8348	470	17	109.9401	0.0056	17.30819	0.00069	27.63	0.97	0.02229	0.00072	0.014	0.01	2.6	0.135	724	3.4E-05	2		
597.02	2.6017	169	14	66.0722	0.0064	2.092181	0.000057	6.2	1.9	0.01204	0.00079	-	-	1.4	0.033	1464	-	4		
598.01	2.9641	707	34	104.1666	0.0027	8.30811	0.00016	21.48	0.56	0.02527	0.00052	0.0223	-	1.7	0.077	644	2.6E-05	2		
599.01	2.4207	535	29	106.2091	0.0027	6.45469	0.00012	17	93	0.023	0.022	0.6	2.2	2.3	0.069	935	6.6E-05	3		
600.01	2.5733	357	26	103.3635	0.0032	3.59594	0.00011	10.27	0.33	0.01839	0.00049	0.0478	-	2.1	0.047	1213	2.2E-05	3		
601.01	2.5206	760	19	105.1847	0.0038	5.40425	0.00014	17.1	1.6	0.0182	0.0015	0.11	0.01	1.7	0.062	974	2.8E-05	2	NoObs	
602.01	5.2372	410	19	110.2739	0.0063	12.91408	0.00054	19.55	0.77	0.01904	0.00068	0.002	0.01	2.3	0.111	831	3.2E-05	3		
605.01	1.7663	903	54	102.7178	0.0011	2.628144	0.00002	11.29	0.26	0.02757	0.00044	0.023	0.033	1.6	0.031	782	4.8E-05	2		
607.01	1.5864	6124	74	106.48563	0.00036	5.894028	0.000052	39.45	0.91	0.07544	0.00093	0.031	0.032	6.8	0.064	871	-	3		1
609.01	1.8343	3942	56	105.028	0.0011	4.396913	0.000034	9.4	2.8	0.089	0.011	0.92	0.28	12.0	0.054	1200	2.1E-05	3		
610.01	2.5145	816	26	113.8431	0.0026	14.28246	0.00026	45.2	1.8	0.02681	0.00084	0.022	0.044	2.0	0.096	481	2.6E-05	2		
611.01	1.4497	4012	319	104.05987	0.00018	3.2516578	0.0000041	10.3	3.1	0.07259	0.00037	0.79	0.24	7.3	0.044	1235	6.6E-05	2	NoObs	
612.01	3.3581	497	26	106.2164	0.0031	20.74022	0.00046	32	102	0.024	0.015	0.8	1.3	3.5	0.15	668	2.4E-05	2	NoObs	
612.02	5.3336	736	28	149.5591	0.0046	47.4276	0.0019	72.4	2.1	0.02517	0.00061	0.004	0.01	3.6	0.26	507	2.2E-05	2	NoObs	
614.01	1.8723	3556	122	103.02216	0.00059	12.874706	0.00005	39	12	0.06268	0.0006	0.58	0.17	4.0	0.107	587	-	3		
617.01	2.9128	6471	158	131.59768	0.00057	37.86537	0.00017	52	16	0.177	0.021	1.11	0.33	17.8	0.224	499	-	3		
618.01	2.6232	947	38	111.3474	0.0022	9.07071	0.00014	19	54	0.031	0.017	0.7	1.4	3.2	0.086	790	5.8E-05	2		
620.01	5.8762	5914	53	92.1077	0.0026	45.15416	0.00078	63.25	0.93	0.07225	0.00091	0.016	0.022	7.2	0.253	486	2.6E-05	2		
622.01	8.9133	4310	58	146.4969	0.0031	155.0467	0.0044	81	12	0.0732	0.0025	0.85	0.24	9.3	0.568	327	2.5E-05	3		
623.01	4.2819	98	23	107.0644	0.0043	10.3496	0.00032	9	31	0.0112	0.0055	0.9	1	2.0	0.099	1121	2.9E-05	3	1	
623.02	5.5070	95	21	112.4629	0.0054	15.67781	0.00065	22.78	0.74	0.00954	0.00026	0.032	0.078	1.7	0.13	978	3.0E-05	3	1	
623.03	3.7922	68	21	104.4771	0.0049	5.5992	0.00018	6	19	0.0099	0.0048	0.9	1	1.8	0.066	1373	3.1E-05	3	1	
624.01	4.4288	849	23	115.4407	0.0046	17.78948	0.00056	31.6	1.1	0.02703	0.00078	0.031	0.066	2.1	0.133	565	-	2		
625.01	4.4579	1158	58	113.4422	0.0025	38.13719	0.00073	23.4	7	0.0623	0.0097	1	0.3	15.1	0.241	828	2.0E-05	2	1	

626.01	3.9008	316	29	105.2217	0.0039	14.58635	0.00037	21	68	0.0186	0.0099	0.7	1.5	2.2	0.121	817	1.1E-04	2	NoObs
627.01	3.5631	368	38	109.1711	0.0028	7.75193	0.00015	12	30	0.0197	0.0082	0.7	1.3	2.9	0.08	1066	7.1E-05	2	1
628.01	3.0462	380	22	108.0042	0.0041	14.48612	0.00041	21	89	0.022	0.015	0.9	1.3	3.1	0.12	826	4.3E-05	2	NoObs
629.01	6.7051	353	18	105.5659	0.008	40.7013	0.0023	35	142	0.019	0.013	0.7	1.8	3.0	0.244	669	7.8E-05	2	NoObs
632.01	3.1532	246	21	104.22	0.0044	7.23848	0.00022	17.76	0.71	0.01483	0.00047	0.028	0.055	1.2	0.072	761	4.6E-05	2	NoObs
633.01	10.3584	657	31	103.6091	0.007	161.4682	0.0099	64	31	0.0283	0.0023	0.86	0.42	5.4	0.614	428	9.5E-05	2	
635.01	3.4572	555	20	104.4013	0.0042	16.71985	0.0005	28	163	0.023	0.022	0.7	2	2.7	0.132	762	8.4E-05	2	1
638.01	5.2480	1057	64	105.6573	0.002	23.63591	0.00031	19.5	6.3	0.036	0.002	0.84	0.36	4.8	0.166	682	8.0E-05	2	NoObs
638.02	7.1418	1147	47	79.5663	0.0034	67.0936	0.0011	75.5	1.2	0.03133	0.00043	0.017	0.022	4.1	0.333	482	-	4	
639.01	5.6758	389	33	115.2433	0.0039	17.97984	0.0005	25.46	0.56	0.01868	0.00037	0.026	0.035	2.1	0.139	747	1.7E-04	2	1
640.01	3.1182	626	39	124.7843	0.0023	30.99665	0.00051	72	225	0.025	0.016	0.6	1.8	2.9	0.193	533	1.2E-04	2	1
641.01	3.3757	1080	37	110.9992	0.0023	14.85198	0.00025	32	70	0.031	0.016	0.5	1.6	3.2	0.104	535	1.2E-04	3	NoObs
644.01	7.3023	22486	903	173.59859	0.00015	45.977503	0.000048	54.776631	0.000058	0.1387	0.0078	0.0008	-	35.3	0.271	698	2.1E-06	2	NoObs
645.01	2.8982	169	17	103.8637	0.0049	8.50365	0.00029	13	64	0.015	0.012	0.8	1.5	2.6	0.086	1124	1.3E-04	2	1
645.02	7.6570	193	21	112.7424	0.0075	23.7847	0.0013	21	71	0.0141	0.0085	0.5	1.9	2.5	0.171	797	1.3E-04	2	NoObs
647.01	4.6876	172	33	103.3185	0.0035	5.16923	0.00012	6	12	0.0145	0.005	0.8	1.1	1.8	0.061	1168	5.3E-05	2	1
649.01	8.1220	226	29	115.9258	0.0058	23.44942	0.00088	22.24	0.46	0.01421	0.0003	0.01	0.02	2.0	0.167	727	4.8E-05	2	1
650.01	2.3266	797	58	111.7215	0.0014	11.95458	0.00011	26	40	0.031	0.0093	0.83	0.83	3.8	0.101	728	3.2E-05	2	1
652.01	2.9306	2957	87	115.75856	0.00095	16.08075	0.0001	44	87	0.049	0.023	0.1	1.7	3.0	0.112	459	3.2E-05	2	1
654.01	2.9044	302	20	104.6352	0.0037	8.59449	0.00022	13	51	0.02	0.013	0.8	1.3	2.9	0.085	1013	2.7E-05	2	NoObs
655.01	5.6200	368	44	125.0972	0.003	25.67234	0.00061	35.25	0.57	0.01781	0.00027	0.0157	-	2.1	0.177	674	5.0E-05	2	1
657.01	2.0229	490	35	104.0183	0.0018	4.069378	0.000049	15.71	0.51	0.02084	0.00049	0.014	0.036	1.6	0.046	798	2.5E-05	2	NoObs
657.02	2.8468	736	34	113.7963	0.0022	16.28267	0.00025	45	1.4	0.02489	0.00057	0	0.01	1.9	0.115	504	2.3E-05	2	NoObs
658.01	1.9455	460	46	102.6422	0.0015	3.162668	0.000033	12.13	0.46	0.01513	0.0005	0.04	-	1.5	0.043	1162	1.7E-04	2	NoObs
658.02	2.0263	439	35	105.2367	0.0022	5.370662	0.000079	15	60	0.022	0.016	0.7	1.7	2.2	0.061	975	1.7E-04	2	NoObs
659.01	4.2939	268	20	113.7619	0.0048	23.2056	0.0008	31	144	0.016	0.013	0.7	1.9	2.5	0.168	818	5.4E-05	2	NoObs
660.01	6.7029	224	37	103.5844	0.0039	6.07977	0.00016	7.05	0.12	0.01413	0.00024	0.0093	-	2.2	0.067	1077	2.9E-05	2	1
661.01	3.4869	321	20	107.9834	0.004	14.40135	0.00042	27	143	0.018	0.017	0.5	2.3	2.1	0.119	776	2.7E-05	2	NoObs
662.01	5.5389	208	30	103.7094	0.0048	10.21362	0.00033	13	53	0.0127	0.0094	0	2.4	1.5	0.095	875	5.8E-05	2	1
663.01	1.8327	486	64	103.84688	0.00089	2.755602	0.000017	7	11	0.0245	0.0065	0.84	0.81	1.9	0.033	846	2.3E-05	2	1
663.02	2.8399	593	39	105.6543	0.0021	20.30708	0.00029	57	1.5	0.02282	0.00043	0.031	0.049	1.7	0.124	436	2.1E-05	2	1
664.01	4.6566	186	22	103.228	0.006	13.13755	0.00052	15	44	0.0149	0.0077	0.7	1.4	2.1	0.113	863	6.1E-05	3	NoObs
665.01	4.0178	390	59	103.3258	0.0018	5.867973	0.000072	11.55	0.16	0.01863	0.00022	0.0003	-	2.3	0.066	1066	4.0E-05	2	1
665.02	3.1579	82	21	66.5664	0.0048	1.611912	0.000033	1.9	7.9	0.0097	0.0068	0.9	1.1	1.2	0.028	1636	-	4	
665.03	3.7875	69	14	66.3005	0.0079	3.07154	0.0001	6.2	0.4	0.00685	0.00043	0.008	0.01	0.8	0.043	1320	-	4	
666.01	3.9017	567	44	107.1338	0.0026	22.24844	0.00039	45	183	0.022	0.017	0.1	2.4	2.0	0.156	570	7.2E-05	2	1
667.01	2.7220	9374	124	103.45173	0.00088	4.305252	0.000024	13.95	0.13	0.08972	0.00064	0.024	0.022	6.5	0.044	711	7.1E-06	3	
670.01	3.2407	232	20	104.926	0.0042	9.49006	0.00028	14	57	0.016	0.011	0.8	1.5	2.1	0.09	883	6.2E-05	3	NoObs
671.01	3.2752	140	21	103.7411	0.0045	4.22875	0.00012	6	22	0.0135	0.0085	0.8	1.3	1.4	0.051	1126	7.2E-05	2	NoObs
672.01	3.0784	510	32	105.8116	0.0028	16.08822	0.00033	25	67	0.025	0.011	0.8	1.1	4.0	0.13	821	5.1E-05	2	1
672.02	5.8817	890	50	86.8426	0.0037	41.749	0.0012	58.85	0.87	0.02823	0.00037	0.016	0.022	4.5	0.245	598	4.7E-05	2	1

673.01	3.0279	228	20	103.7904	0.0041	4.41748	0.00013	11.98	0.55	0.01412	0.00056	0.0305	-	1.8	0.055	1303	5.6E-05	2	1	
674.01	9.4755	1484	97	110.9192	0.0022	16.33886	0.00021	11.3	5.8	0.0378	0.0042	0.59	0.69	11.3	0.137	959	2.4E-05	3		
676.01	2.8769	2841	53	104.5826	0.0014	7.972513	0.000076	12	3.6	0.0593	0.0034	0.84	0.35	4.5	0.067	598	3.4E-05	2	NoObs	
676.02	1.7470	1561	41	103.8934	0.0014	2.453224	0.000023	9.5	2.8	0.03888	0.00086	0.308	0.092	2.9	0.03	894	3.9E-05	2	NoObs	
678.01	2.7421	104	21	105.59	0.013	6.04097	0.00054	10.2	3.1	0.011	0.0026	0.66	0.2	1.7	0.066	1028	3.3E-05	3	1	
679.01	8.1270	283	33	123.2486	0.0051	31.8049	0.0012	30.4	9.1	0.01568	0.00039	-	-	1.8	0.197	598	2.8E-05	2	1	
680.01	8.9336	4046	586	110.64238	0.00045	8.600116	0.000027	7.817	0.011	0.05966	0.00008	0.0002	-	7.6	0.085	989	-	2		
†682.01	9.9203	4548	163	118.99358	0.00099	164	-	156.9	1.4	0.04688	0.0004	0.002	0.032	4.9	0.591	307	5.1E-05	2		
683.01	4.4673	2146	55	110.5186	0.0021	278.1232	0.003	385	340	0.0489	0.0078	0.8	0.67	4.2	0.839	239	3.8E-05	2		
684.01	1.8215	732	50	105.2568	0.0012	4.034923	0.000033	6	1.8	0.0407	0.0042	0.96	0.29	8.3	0.052	1414	1.3E-05	2	NoObs	
685.01	3.4760	263	41	103.9261	0.0024	3.173885	0.000053	4.7	9.9	0.0175	0.006	0.8	1.1	2.8	0.045	1570	8.9E-05	2	NoObs	
686.01	3.0231	13473	620	104.67404	0.00014	52.513492	0.000039	147.001	0.00011	0.1077	0.0032	0.0028	-	11.3	0.275	442	2.7E-06	3		
687.01	2.1209	263	13	104.983	0.0059	4.17853	0.00017	11.6	3.5	0.0164	0.0013	0.44	0.13	1.7	0.052	1060	-	3		1
688.01	2.9239	249	31	103.2535	0.0027	3.275814	0.00006	5	16	0.0175	0.0083	0.8	1.2	2.5	0.045	1465	4.1E-05	2	NoObs	
689.01	3.5876	536	21	115.398	0.0047	15.87403	0.00046	34.3	1.3	0.02165	0.00074	0.021	0.01	2.0	0.123	622	6.5E-05	2		
691.01	8.3024	566	47	122.3661	0.0038	29.66717	0.00092	27.7	0.36	0.02253	0.0003	0.018	0.01	2.9	0.195	653	2.0E-05	2	NoObs	
691.02	6.1582	99	9.7	77.039	0.015	16.2245	0.001	20.8	1.3	0.01006	0.00059	0.056	0.014	1.3	0.13	799	-	4		
692.01	1.8674	159	20	104.8412	0.0028	2.462367	0.000047	10.33	0.41	0.01309	0.00042	0.0614	-	0.8	0.035	1004	4.2E-05	2	1	
693.01	7.3509	286	27	126.3107	0.0058	28.7784	0.0013	24	74	0.0169	0.0088	0.6	1.7	1.8	0.19	611	2.3E-05	2	NoObs	
693.02	7.0385	296	36	79.3547	0.0051	15.66002	0.00032	18.23	0.23	0.01624	0.00029	0.022	0.01	1.7	0.126	750	-	4		
694.01	4.8698	762	56	117.2445	0.0023	17.42154	0.00028	27.97	0.39	0.02593	0.00028	0.031	0.055	1.7	0.13	530	1.9E-05	2	NoObs	
695.01	4.9238	521	45	108.293	0.0027	29.90653	0.00063	32	51	0.0241	0.0065	0.76	0.98	3.1	0.195	643	1.7E-05	2	NoObs	
697.01	3.6358	442	45	104.7324	0.0021	3.032186	0.00004	5	10	0.0215	0.008	0.7	1.3	4.0	0.043	1601	3.3E-05	2		
698.01	2.4663	7188	386	105.99432	0.00028	12.718733	0.000023	23	6.9	0.1209	0.0025	0.92	0.28	12.0	0.103	748	1.2E-05	2		
700.01	2.9694	520	28	105.9348	0.0031	30.86436	0.00069	45	113	0.025	0.01	0.86	0.97	3.1	0.197	588	3.5E-05	2	1	
700.02	3.2972	194	19	104.9588	0.0044	9.36127	0.00028	13	45	0.0159	0.0091	0.8	1.2	1.9	0.089	875	4.6E-05	2	1	
701.01	2.9877	847	48	113.8108	0.0017	18.16428	0.00025	35	74	0.03	0.013	0.7	1.2	2.2	0.127	496	1.7E-05	2	1	
701.02	2.3257	379	34	103.9187	0.0023	5.714973	0.000087	14	41	0.021	0.013	0.7	1.5	1.5	0.059	728	2.0E-05	2	1	
701.03	6.8714	642	25	83.398	0.0045	122.3894	0.0017	138.6	4	0.02341	0.00059	0.015	0.046	1.7	0.454	262	-	4		
703.01	1.6971	124	24	102.9528	0.0025	1.3686	0.000024	3	15	0.013	0.0093	0.9	1.3	1.7	0.025	1866	5.1E-05	2	NoObs	
704.01	2.5400	459	14	118.13	0.0051	18.39714	0.00067	60.8	5.1	0.0167	0.0014	0.015	0.01	1.7	0.136	619	1.6E-05	2	NoObs	
707.01	7.8208	624	48	122.631	0.0036	21.77654	0.00055	21.9	0.29	0.02384	0.0003	0.0044	-	3.4	0.159	745	2.1E-05	2	1	
707.02	9.8121	365	23	105.5817	0.0091	41.0315	0.0025	32.14	0.77	0.01873	0.00047	0.041	0.01	2.6	0.242	604	2.5E-05	2	1	
707.03	8.5541	344	22	68.8687	0.0091	31.7845	0.0012	29.17	0.77	0.01761	0.00047	0.029	0.04	2.5	0.204	658	-	4		
707.04	6.4886	227	21	76.6803	0.0079	13.17535	0.00045	11	38	0.0156	0.009	0.7	1.6	2.2	0.113	884	-	4		
708.01	6.7713	484	42	104.0034	0.0035	17.40696	0.00044	20.02	0.3	0.02136	0.0003	0.027	0.028	2.2	0.135	703	4.4E-05	2	1	
708.02	4.9436	248	26	109.5127	0.0047	7.69315	0.00025	10	33	0.0167	0.0098	0.6	1.7	1.7	0.078	924	5.2E-05	2	1	
709.01	3.7885	567	31	111.791	0.0029	21.38418	0.00044	43	202	0.023	0.021	0.3	2.5	2.2	0.152	588	2.1E-05	2	NoObs	
710.01	3.9341	129	21	103.9326	0.0044	5.37503	0.00016	10.67	0.16	0.0113	0.00031	0.0171	-	1.7	0.067	1320	5.1E-05	2	1	
711.01	6.1018	724	34	107.8257	0.0048	44.6987	0.0019	56.3	1.2	0.02508	0.00047	0.004	0.025	2.7	0.249	486	4.6E-05	2	NoObs	
711.02	3.1710	169	22	68.4376	0.0044	3.619344	0.000069	4	23	0.012	0.011	0.9	1.3	1.3	0.047	1118	-	4		

711.03	9.8334	631	25	187.1803	0.0076	124.5229	0.0058	87	382	0.024	0.021	0.5	2.2	2.6	0.494	345	-	4	
712.01	1.9895	122	17	104.23	0.0031	2.178191	0.000046	9.893	0.073	0.01118	0.00044	0.0809	-	0.8	0.033	1101	-	3	
714.01	2.2176	794	89	105.78778	0.00081	4.182017	0.000023	14.8	0.18	0.02607	0.00024	0.0001	-	2.2	0.051	929	1.8E-05	2	1
716.01	2.2744	2012	103	112.95307	0.0008	26.89291	0.00016	40	12	0.0606	0.0027	0.93	0.28	6.3	0.18	595	3.0E-05	2	NoObs
717.01	3.1618	263	22	108.7924	0.0038	14.70752	0.00037	37.7	1.5	0.01569	0.0005	0.044	0.01	0.9	0.114	510	1.5E-05	3	1
718.01	3.2541	338	42	102.8579	0.0021	4.585494	0.000048	9	21	0.0186	0.0082	0.6	1.5	1.6	0.055	964	2.4E-05	2	1
718.02	5.7207	460	33	80.2934	0.0041	22.71449	0.00042	31.07	0.65	0.02078	0.00038	0.031	0.054	1.8	0.159	567	-	4	
718.03	5.5414	306	16	74.9787	0.0082	47.9042	0.0019	55	327	0.017	0.018	0.6	2.2	1.5	0.261	443	-	4	
719.01	1.6354	496	41	104.013	0.0015	9.034227	0.000093	32	111	0.024	0.014	0.8	1.4	1.9	0.075	605	2.0E-05	2	1
720.01	2.4833	1138	27	107.0488	0.0026	5.69057	0.0001	17	102	0.032	0.04	0.4	2.7	3.0	0.061	849	4.3E-05	2	NoObs
721.01	6.8323	190	25	113.6486	0.0064	13.72423	0.0006	15.7	0.39	0.01352	0.00032	0.029	0.044	2.3	0.118	942	6.5E-05	3	NoObs
722.01	6.9235	431	35	125.9894	0.0038	46.408	0.0013	51.86	0.95	0.01951	0.00036	0.001	0.025	1.8	0.259	485	6.0E-05	2	1
723.01	1.8098	1224	24	102.6479	0.0026	3.936985	0.000069	17.4	0.84	0.034	0.0011	0.0378	-	2.8	0.048	918	2.3E-05	2	NoObs
723.02	4.3932	1200	13	127.916	0.0049	28.08205	0.00043	50.5	2.5	0.0349	0.0015	0.025	0.049	2.9	0.177	478	2.3E-05	2	NoObs
723.03	1.4752	1420	15	106.0831	0.0034	10.0888	0.00025	66.1	7.2	0.0384	0.0031	0.015	-	3.2	0.09	670	2.1E-05	2	NoObs
725.01	3.3669	8138	31	102.6447	0.0023	7.305	0.00011	18	5.4	0.0833	0.0024	-	-	6.8	0.071	720	-	2	
728.01	2.0043	7197	211	103.11774	0.00035	7.18937	0.000018	17.5	5.2	0.09887	0.00097	0.8	0.24	9.9	0.075	922	-	3	
730.01	5.7701	687	20	109.796	0.0062	14.7845	0.00099	17	77	0.026	0.021	0.5	2.1	3.1	0.12	746	7.0E-05	2	
730.02	5.4941	362	13	71.36	0.011	9.84978	0.00047	13.71	0.67	0.01915	0.00083	0.04	0.01	2.3	0.092	852	-	4	
730.03	4.3590	316	9.7	68.131	0.011	9.85997	0.00051	12	103	0.021	0.033	0.7	2.4	2.5	0.092	852	-	4	
730.04	5.2290	239	9.1	70.475	0.014	7.38469	0.00047	11.25	0.44	0.01532	0.00098	0.049	0.01	1.8	0.076	937	-	4	
732.01	1.7619	1059	72	103.4084	0.00081	1.2602586	0.000007	5.834	0.018	0.0318	0.00031	0.0447	-	2.9	0.023	1424	2.6E-05	2	
733.01	2.6528	1419	41	102.7156	0.002	5.924992	0.000081	17.95	0.43	0.03568	0.00066	0.0002	-	2.2	0.061	683	3.0E-05	2	
733.02	2.9996	1062	23	67.3199	0.0042	11.34917	0.0002	30	1.2	0.0307	0.001	0.025	0.01	1.9	0.094	551	-	4	
733.03	2.1611	424	16	68.6747	0.0047	3.132968	0.000064	9	51	0.024	0.027	0.6	2.2	1.5	0.04	844	-	4	
734.01	7.1431	991	34	120.9151	0.0043	24.54369	0.0008	26.84	0.52	0.02948	0.00055	0.012	0.01	2.4	0.166	535	3.1E-05	2	
735.01	4.7686	2739	28	104.5711	0.0051	22.34101	0.00073	37.4	1.1	0.0483	0.0011	0.032	0.1	5.0	0.153	557	5.4E-05	2	
736.01	3.0657	1311	19	110.7903	0.0042	18.79523	0.0006	43	244	0.036	0.038	0.5	2.5	2.6	0.117	442	3.1E-05	2	
736.02	3.1139	559	14	68.2816	0.0074	6.7388	0.00021	20.4	1.1	0.0264	0.0011	0.064	0.01	2.0	0.059	623	-	4	
737.01	3.1240	2997	73	115.6786	0.0014	14.49847	0.00015	18	2.5	0.0638	0.002	0.89	0.2	5.6	0.114	597	3.9E-05	2	
738.01	3.1466	1123	34	103.4322	0.0028	10.33677	0.0002	22	83	0.033	0.024	0.6	1.9	3.3	0.095	781	6.0E-05	2	NoObs
738.02	3.3240	860	23	105.0429	0.0041	13.29175	0.0004	32	248	0.029	0.042	0.3	3.1	2.9	0.112	719	6.5E-05	2	NoObs
739.01	1.4949	718	42	102.8178	0.0013	1.287052	0.000012	7.23	0.2	0.02741	0.00051	0.0416	-	2.0	0.019	1058	1.9E-05	2	NoObs
740.01	3.1145	796	18	119.3644	0.0045	17.67221	0.00061	25	94	0.03	0.023	0.8	1.4	2.3	0.123	497	3.0E-05	3	
741.01	3.9182	35053	874	102.83287	0.00017	23.355367	0.000028	33.6	3	0.2416	0.0062	0.89	0.15	18.7	0.159	518	-	3	1
743.01	10.5338	9189	189	105.4889	0.0014	19.40335	0.00021	15.3162	0.0011	0.087	0.021	0.006	0.01	10.9	0.139	617	1.6E-05	2	
745.01	9.3456	10081	98	113.8723	0.0031	16.47063	0.00034	14.67	0.12	0.0917	0.00065	0.0082	-	9.7	0.124	613	4.2E-05	2	
746.01	3.3082	1194	46	106.2476	0.0021	9.27391	0.00013	16	29	0.036	0.014	0.7	1.1	3.1	0.08	648	2.5E-05	2	
747.01	1.5804	1757	37	104.6042	0.0016	6.029222	0.000065	24	82	0.043	0.032	0.7	1.6	2.8	0.056	633	1.5E-05	2	
749.01	3.0377	781	33	104.8065	0.0028	5.349518	0.000099	14.486	0.099	0.02772	0.00052	0.0612	-	2.0	0.059	789	3.3E-05	2	
749.02	2.3564	345	15	69.0904	0.0052	3.940973	0.000088	12.83	0.7	0.01895	0.00081	0.0316	-	1.4	0.048	875	-	4	

750.01	3.3702	908	21	104.5295	0.0049	21.67821	0.00074	30	57	0.034	0.013	0.85	0.86	2.6	0.139	458	3.2E-05	2	
751.01	2.0883	917	20	104.74	0.0045	4.99682	0.00014	13	61	0.034	0.031	0.7	1.7	3.2	0.056	896	7.0E-05	2	
752.01	3.0592	546	19	103.5366	0.0044	9.48851	0.0003	22	130	0.023	0.026	0.4	2.6	2.7	0.089	853	3.4E-05	2	
752.02	4.1260	815	14	95.5164	0.0081	54.4154	0.0022	84	693	0.029	0.048	0.7	2.6	3.4	0.286	476	-	4	
753.01	1.8813	6886	48	108.8504	0.0014	19.89939	0.00019	49	15	0.1015	0.0072	0.84	0.25	6.9	0.143	519	-	3	
755.01	1.6211	608	25	104.5925	0.0029	2.525605	0.000046	12.53	0.55	0.02434	0.00072	0.0327	-	2.8	0.037	1350	2.9E-05	2	
756.01	4.6503	1384	39	104.2018	0.004	11.09431	0.00028	18.85	0.37	0.03516	0.00059	0.027	0.033	3.7	0.099	791	6.5E-05	2	
756.02	3.0514	637	25	105.9703	0.0047	4.13463	0.00013	10.55	0.36	0.02509	0.0007	0.0209	-	2.6	0.052	1092	7.9E-05	2	
756.03	2.4819	213	9.4	112.5496	0.0086	2.5667	0.00011	8.67	0.63	0.017	0.0011	0.2236	-	1.8	0.037	1294	-	4	
757.01	3.5566	4814	99	106.622	0.001	16.0686	0.00017	37.1	0.37	0.06336	0.0005	0.0188	-	4.8	0.119	530	1.4E-05	2	NoObs
757.02	4.6490	2208	35	98.035	0.0038	41.19249	0.00069	72	2.1	0.0431	0.0011	0.013	0.022	3.3	0.223	387	1.7E-05	2	NoObs
757.03	2.4488	774	22	104.3013	0.0044	6.25288	0.00025	14	58	0.03	0.026	0.7	1.7	2.3	0.063	729	2.2E-05	2	NoObs
758.01	3.4108	1181	22	109.354	0.0041	16.016	0.00074	39.8	2	0.03	0.0011	0.003	0.01	3.8	0.123	663	5.9E-05	2	
759.01	4.8992	1579	40	127.1363	0.0031	32.6272	0.001	55	1.1	0.03774	0.00064	0.0003	-	3.6	0.2	495	1.5E-05	2	
760.01	2.0728	9215	425	105.25698	0.00017	4.9593304	0.0000059	12.01	0.35	0.10675	0.00076	0.85	0.11	9.7	0.058	982	1.6E-05	2	
762.01	3.7651	445	18	104.3455	0.0055	4.4987	0.00016	9.19	0.46	0.01832	0.0008	0.027	0.01	1.7	0.054	1013	7.8E-05	3	
763.01	4.9957	11640	307	112.40123	0.00055	19.65119	0.00012	24.49	0.94	0.10979	0.0009	0.71	0.16	13.2	0.147	700	1.7E-05	2	
764.01	10.3560	2472	71	141.9341	0.0031	41.43958	0.00098	31.83	0.27	0.04707	0.0004	0.003	0.02	5.6	0.236	500	3.1E-05	2	
765.01	2.2835	912	24	104.6302	0.003	8.35404	0.00023	20	106	0.03	0.03	0.7	1.9	2.4	0.079	713	1.9E-05	2	
766.01	3.1048	1334	63	102.7521	0.0016	4.125488	0.000042	10.66653	0.00011	0.035	0.073	0.0065	-	3.8	0.052	1144	3.0E-05	2	
767.01	2.6063	16217	915	103.96676	0.00009	2.8165077	0.0000018	7.05	0.18	0.12849	0.00076	0.68	0.14	14.2	0.039	1221	1.6E-05	2	NoObs
769.01	2.8675	634	31	104.8993	0.0027	4.280889	0.000079	11.636	0.1	0.02389	0.0005	0.019	-	2.0	0.051	946	4.3E-05	2	
771.01	48.1018	17923	236	142.0388	0.0035	10389	133	1855	24	0.12445	-	-	-	15.0	9.514	84	NaN	2	
772.01	5.5841	4023	30	106.8349	0.0042	61.2592	0.0032	53	17	0.0695	0.0044	0.84	0.36	8.2	0.313	482	1.2E-05	2	
773.01	5.5792	638	20	105.817	0.005	38.37813	0.00087	51.4	1.9	0.02311	0.00078	0.015	0.01	2.1	0.225	477	3.2E-05	3	
774.01	2.8950	24627	359	102.9705	0.00031	7.442665	0.000016	27.75	0.11	0.14349	0.00043	0.0002	-	15.8	0.077	939	-	3	1
775.01	2.8272	880	13	105.724	0.0047	16.38523	0.0007	44.3	3.2	0.0285	0.0016	0.043	0.01	2.1	0.105	458	1.8E-05	2	NoObs
775.02	2.4216	1217	22	109.3746	0.0023	7.87761	0.00018	26.4	1.2	0.0332	0.0012	0.027	0.052	2.5	0.065	582	1.6E-05	2	NoObs
776.01	2.6154	4953	212	104.79264	0.00039	3.7287253	0.0000099	11.606493	0.000031	0.065	0.023	0.0007	-	4.3	0.046	852	2.0E-05	2	
777.01	2.9867	6360	29	106.5648	0.0031	40.41887	0.00089	52	16	0.3477	0.0036	1.56	0.47	36.0	0.23	471	1.2E-05	3	
778.01	1.1499	747	27	103.6798	0.0017	2.24334	0.000036	17.99	0.98	0.0279	0.001	0.01	0.042	1.9	0.027	857	1.8E-05	2	
779.01	6.4631	13641	377	110.19884	0.0006	10.405935	0.000066	13.752186	0.000088	0.109	0.021	-	-	12.8	0.095	821	1.6E-05	2	
780.01	1.9891	866	41	104.7599	0.0016	2.337466	0.000026	9.901	0.046	0.02856	0.00048	0.0496	-	2.2	0.032	995	3.8E-05	2	NoObs
781.01	2.5888	2897	44	113.3936	0.0018	11.59823	0.00015	39	113	0.05	0.029	0.2	2	4.3	0.083	521	3.0E-05	2	NoObs
782.01	4.3279	2699	107	106.63389	0.00093	6.57526	0.000045	12.201573	0.000083	0.048	0.093	0.0001	-	5.6	0.07	989	2.3E-05	2	
783.01	7.3311	2787	176	102.9929	0.001	7.27509	0.000053	7.987	0.034	0.04895	0.00019	0.029	0.017	3.5	0.072	707	2.7E-05	2	
784.01	2.9416	1148	20	119.7842	0.0044	19.2693	0.00059	47	256	0.032	0.033	0.5	2.5	2.3	0.117	429	3.3E-05	2	
785.01	3.3041	863	19	111.7494	0.0046	12.39325	0.00037	29.4	1.4	0.027	0.0011	0.042	0.01	2.1	0.103	620	4.0E-05	2	
786.01	2.3232	435	19	103.36	0.0035	3.689947	0.000087	13.82	0.62	0.02241	0.00076	0.0624	-	1.8	0.047	980	3.5E-05	3	
787.01	3.1631	950	39	104.0208	0.0025	4.431061	0.000075	11.1	0.27	0.02873	0.00055	0	0.03	2.9	0.054	1020	3.8E-05	2	
787.02	2.1124	401	12	66.8549	0.0064	5.68952	0.00015	21.8	1.5	0.0219	0.0012	0.0618	-	2.2	0.063	944	-	4	

788.01	3.3280	1574	29	109.0511	0.0032	26.3953	0.00057	47	158	0.04	0.028	0.7	1.6	3.2	0.166	463	2.4E-05	2	
790.01	2.6555	913	23	107.1626	0.0039	8.47239	0.00023	25.1	1.1	0.02876	0.00094	0.02	0.01	1.4	0.076	551	3.8E-05	2	
791.01	4.9811	5794	181	113.89115	0.00077	12.611939	0.000069	20.757	0.099	0.07053	0.00028	0.0007	-	7.1	0.107	718	1.8E-05	2	
794.01	2.4001	369	22	102.6744	0.0036	2.539147	0.000061	8.98	0.35	0.02019	0.00063	0.0296	-	2.1	0.037	1296	1.0E-04	2	NoObs
795.01	1.8917	1318	31	103.5759	0.0022	6.77034	0.0001	29.7	1.2	0.03458	0.00099	0.02	0.042	2.4	0.069	733	8.6E-05	2	
797.01	2.9281	5617	111	110.1418	0.0011	10.18151	0.000069	21.8	6.5	0.07652	0.00073	0.49	0.15	7.7	0.094	791	5.9E-05	3	
799.01	1.6033	1406	70	102.81727	0.00087	1.6266615	0.0000097	5.6	1.7	0.03934	0.00063	0.57	0.17	4.5	0.027	1511	1.1E-04	3	
800.01	3.0081	886	38	103.0385	0.0023	2.711437	0.000043	7.37	0.17	0.02941	0.00053	0.0402	-	2.7	0.039	1224	9.4E-05	2	NoObs
800.02	3.9728	851	26	105.8128	0.0044	7.21227	0.00022	14	99	0.027	0.034	0.2	3.1	2.5	0.075	882	9.5E-05	2	NoObs
801.01	2.4077	7753	533	103.82617	0.00016	1.6255204	0.0000017	5.639292	0.000006	0.081	0.013	0.001	-	9.6	0.027	1525	6.4E-05	2	NoObs
802.01	2.2149	20618	264	114.88094	0.00028	19.620402	0.00004	83	15	0.1345	0.0049	0.26	0.49	7.3	0.139	464	4.6E-05	2	
804.01	3.1943	909	29	110.2	0.0033	9.02971	0.00022	16	56	0.031	0.021	0.7	1.6	3.0	0.083	735	9.3E-05	2	
805.01	7.8222	17128	430	107.58168	0.00069	10.327948	0.000074	11.377346	0.000082	0.1195	0.0095	0.0002	-	14.4	0.094	820	2.2E-05	3	
806.01	8.9776	9416	57	87.2386	0.0035	143.1814	0.0027	133	47	0.0933	0.0073	0.29	0.68	9.0	0.53	296	3.0E-05	2	NoObs
806.02	6.6246	18462	195	176.89513	0.00088	60.32875	0.00037	78.27	0.44	0.12509	0.00053	0.03	0.017	12.1	0.298	395	2.4E-05	2	NoObs
806.03	4.6342	1027	14	83.6924	0.0086	29.1654	0.0012	47.3	7	0.032	0.08	0.391	0.03	3.1	0.183	504	4.4E-05	2	NoObs
809.01	1.9942	15323	602	103.64747	0.00018	1.5947453	0.0000027	7.145002	0.000012	0.114	0.065	0.0001	-	12.2	0.027	1512	2.2E-05	2	
810.01	2.3449	944	41	103.51	0.0018	4.782942	0.000062	14	45	0.03	0.022	0.5	1.8	2.7	0.054	859	4.2E-05	2	
811.01	4.2008	2090	48	114.4316	0.0021	20.50617	0.00032	39.8	0.74	0.04186	0.0006	0.031	0.041	4.3	0.141	544	4.3E-05	2	
812.01	1.8467	1620	43	104.9773	0.0015	3.34024	0.000035	13	50	0.039	0.028	0.5	2.1	2.5	0.036	720	4.3E-05	2	
812.02	3.2972	1374	21	80.4576	0.0054	20.06086	0.00047	50.3	2.2	0.0352	0.0011	0.031	0.064	2.2	0.118	398	-	4	
812.03	4.7450	1356	14	98.2376	0.01	46.1851	0.0019	75.7	4.2	0.0341	0.0017	0.003	0.017	2.1	0.206	301	-	4	
813.01	2.2740	8285	258	103.52731	0.0003	3.8959257	0.0000082	14.23	0.067	0.08461	0.00029	0.0009	-	6.5	0.048	902	8.1E-05	2	
814.01	5.1665	867	19	108.4529	0.005	22.367	0.00045	33	173	0.028	0.031	0.4	2.5	1.8	0.15	456	1.4E-04	2	
815.01	2.9262	4547	62	105.6313	0.0017	34.8442	0.00043	47	14	0.101	0.013	0.94	0.28	10.4	0.209	502	2.6E-05	2	
816.01	3.4728	2224	70	107.9981	0.0018	7.748017	0.000094	17.74	0.23	0.04406	0.00045	0.02	0.022	4.6	0.078	882	1.1E-04	2	
817.01	3.1504	1145	12	119.2141	0.0058	23.9716	0.0011	64.4	4.6	0.033	0.002	0.03	0.028	2.1	0.129	370	2.7E-05	3	NoObs
818.01	2.4193	1491	33	109.3409	0.0023	8.11429	0.00013	21	59	0.04	0.021	0.7	1.4	3.6	0.066	591	5.0E-05	2	NoObs
821.01	4.3866	1138	21	107.0084	0.0072	21.8131	0.0015	34	171	0.034	0.033	0.6	2.2	3.9	0.154	623	1.2E-04	2	
822.01	3.0811	15030	257	105.18019	0.00031	7.919371	0.000017	15.49	0.73	0.1279	0.0015	0.73	0.18	11.5	0.078	783	-	3	
823.01	1.4379	5028	58	103.22827	0.00086	1.0284369	0.0000061	4.2	1.3	0.0753	0.0015	0.6	0.18	8.7	0.021	1874	-	3	
824.01	3.7671	17920	80	106.6086	0.0014	15.3755	0.00048	39.69	0.58	0.1221	0.0013	0.028	0.028	12.5	0.117	604	1.7E-05	2	
825.01	3.2182	779	21	109.9535	0.004	8.10341	0.00023	16	66	0.028	0.026	0.6	1.9	2.4	0.074	671	3.2E-05	2	
826.01	2.9092	705	40	104.134	0.0022	6.365997	0.000094	17.35	0.39	0.02535	0.00045	0.017	-	1.7	0.066	749	5.3E-05	2	
827.01	2.5968	792	30	107.7764	0.0028	5.97569	0.00012	12	40	0.03	0.017	0.8	1.4	3.1	0.066	960	1.3E-04	2	
829.01	4.2648	823	27	107.7772	0.0041	18.64902	0.00053	34.8801	0.0027	0.03	0.34	0.015	0.01	2.6	0.14	651	5.4E-05	2	
829.02	4.1408	371	17	71.7806	0.0073	9.75222	0.00032	14	76	0.02	0.022	0.7	2.1	1.9	0.091	807	-	4	
829.03	4.5589	899	22	96.8416	0.0056	38.5596	0.001	67.1	2.6	0.02809	0.00086	0.008	0.033	2.7	0.228	510	-	4	
830.01	2.6064	21628	1241	103.04717	0.00007	3.5256346	0.0000018	11.745	0.012	0.13434	0.0001	0.0003	-	7.7	0.042	767	2.1E-05	2	1
833.01	1.5895	2225	80	106.2753	0.00075	3.951399	0.000021	13.5	4	0.04987	0.00071	0.6	0.18	4.3	0.05	1012	1.0E-04	2	
834.01	8.1433	3244	156	104.3739	0.0012	23.65422	0.00021	23.3	0.1	0.05283	0.00022	0.02	0.014	4.9	0.163	564	3.7E-05	2	

834.02	6.4410	413	23	73.3322	0.0074	13.23311	0.0004	14	66	0.02	0.02	0.5	2.2	1.9	0.111	683	-	4	
834.03	4.6117	254	18	67.8245	0.0074	6.15542	0.0002	10.44	0.18	0.01505	0.00052	0.03	0.01	1.4	0.066	886	-	4	
834.04	3.3378	130	14	67.1598	0.0078	2.090925	0.000069	5.63	0.2	0.01504	0.00044	0.083	-	1.4	0.032	1273	-	4	
835.01	2.9410	919	32	113.9362	0.0028	11.76296	0.00024	24	77	0.031	0.021	0.7	1.6	1.6	0.092	485	1.3E-04	2	
837.01	2.2850	815	21	107.6615	0.0035	7.95367	0.00019	26.7	1.3	0.02694	0.00099	0.0149	-	1.8	0.072	625	5.8E-05	2	
837.02	2.3116	338	13	68.9218	0.006	4.14459	0.00011	15.96	0.96	0.0213	0.00091	0.0707	-	1.4	0.047	774	-	4	
838.01	2.0055	4352	92	106.0116	0.00083	4.859373	0.000027	12.5	3.7	0.07226	0.00097	0.7	0.21	7.8	0.057	1066	-	3	
840.01	1.9910	9578	454	102.9486	0.00017	3.0403244	0.0000034	12	1.7	0.0957	0.0031	0.62	0.35	10.7	0.04	1098	6.8E-05	2	NoObs
841.01	3.4700	2885	35	107.0016	0.003	15.33611	0.00033	34.98	0.96	0.0485	0.0011	0.015	0.01	4.0	0.118	583	5.5E-05	2	NoObs
841.02	4.7489	4056	41	86.4334	0.0028	31.32865	0.00044	54.1	1.1	0.05959	0.00099	0	0.027	4.9	0.191	458	4.9E-05	2	NoObs
842.01	3.0857	1131	32	108.3511	0.0028	12.71862	0.00026	28	87	0.032	0.022	0.5	1.8	2.8	0.097	565	6.2E-05	2	
842.02	4.2580	1503	31	131.5836	0.0034	36.06539	0.00066	69.7	1.9	0.03655	0.00081	0.0255	-	3.1	0.195	399	-	4	
843.01	2.8728	2842	149	104.4417	0.00059	4.1904	0.000017	9.1	4.6	0.0531	0.0049	0.65	0.65	6.3	0.052	1169	-	2	
844.01	3.0333	1932	68	104.987	0.0012	3.709881	0.000031	9.73	0.14	0.04117	0.00047	0.0006	-	2.8	0.046	878	2.7E-05	2	3
845.01	5.7133	931	35	110.2954	0.0042	16.3294	0.00046	16	26	0.0323	0.0095	0.7	1.1	3.6	0.129	701	5.3E-05	2	
846.01	4.1032	24577	550	119.71309	0.00025	27.807488	0.000048	44.82	0.76	0.16567	0.0008	0.769	0.098	15.3	0.182	534	5.5E-05	3	
847.01	11.0533	3316	91	136.8967	0.003	80.8711	0.0024	59.0063	0.0017	0.054	0.033	0.0064	-	5.1	0.368	372	2.9E-05	2	
849.01	3.3150	670	28	103.9345	0.0034	10.35545	0.00024	18	62	0.027	0.018	0.7	1.5	2.8	0.093	750	5.2E-05	2	
850.01	2.7054	9550	317	109.52167	0.00029	10.526305	0.000022	32.5	6.8	0.0924	0.0042	0.45	0.49	8.7	0.093	704	3.3E-05	2	
851.01	2.7220	3674	58	102.9729	0.0013	4.583526	0.000042	13.63	0.25	0.05609	0.00073	0.028	0.035	5.5	0.055	989	1.4E-04	2	
852.01	2.9127	505	20	104.9044	0.0039	3.76179	0.0001	10.2	0.44	0.0221	0.00075	0.0256	-	2.4	0.048	1086	3.4E-05	2	
853.01	2.7276	962	29	102.6947	0.0025	8.20371	0.00014	21	79	0.029	0.023	0.5	2	2.9	0.077	733	3.3E-05	2	
853.02	3.2261	450	11	76.4118	0.0093	14.49679	0.00059	30	377	0.021	0.054	0.5	3.6	2.1	0.112	607	-	4	
854.01	4.1155	1320	14	134.1698	0.0062	56.0517	0.0027	105.3	5.3	0.0357	0.0016	0.002	0.036	1.9	0.217	248	5.1E-05	3	NoObs
855.01	5.2392	22662	571	128.78669	0.00024	41.40846	0.00011	72.69	0.13	0.13793	0.00019	0.018	0.01	12.5	0.232	444	2.4E-05	2	
856.01	5.7434	13139	335	105.85507	0.00044	39.74897	0.00013	30	1.5	0.1396	0.0025	0.89	0.11	13.1	0.232	498	3.2E-05	3	
857.01	2.5010	791	34	107.8799	0.0021	5.715374	0.000085	17	81	0.027	0.027	0.3	2.4	2.2	0.061	786	3.0E-05	2	
858.01	2.4580	5299	97	106.98673	0.00068	13.610127	0.000068	24.2	7.3	0.0912	0.0027	0.86	0.26	9.9	0.113	713	-	3	
861.01	1.8610	314	22	103.8132	0.0033	2.237565	0.000049	9.37	0.41	0.01774	0.00061	0.0079	-	1.5	0.032	1090	6.5E-05	3	NoObs
863.01	2.1284	752	32	105.1473	0.0024	3.16792	0.000051	9	29	0.029	0.018	0.7	1.6	2.7	0.043	1109	7.0E-05	2	
864.01	2.7477	1030	45	106.5739	0.0024	4.311802	0.000067	12.46	0.27	0.03025	0.00051	0.026	0.036	2.2	0.051	846	3.6E-05	2	
864.02	4.2836	705	18	121.0857	0.0067	20.05052	0.00067	36.1	1.6	0.0249	0.0009	0.023	0.02	1.8	0.141	509	-	4	
864.03	1.4038	641	14	119.5789	0.0038	9.76742	0.00019	56	5.3	0.0253	0.0016	0.072	-	1.8	0.087	648	-	4	
865.01	8.1358	6801	142	155.237	0.0014	119.0213	0.002	120.686	0.085	0.074	0.036	0.004	0.032	6.0	0.473	306	4.6E-05	2	
867.01	3.7401	1460	45	113.2774	0.0021	16.08561	0.00025	34.88	0.71	0.03503	0.00057	0.023	0.03	3.4	0.122	600	5.6E-05	2	
†868.01	7.6456	21449	160	141.4312	0.0034	234	14	171	13	0.1606	0.0025	0.84	0.14	12.5	0.629	193	2.8E-05	2	
869.01	2.7105	909	19	107.9535	0.0045	7.49	0.00024	18	100	0.03	0.035	0.6	2.2	3.2	0.074	809	6.7E-05	2	NoObs
869.02	4.2450	1447	18	134.2345	0.0067	36.2911	0.0019	37	45	0.0413	0.0097	0.83	0.74	4.3	0.212	478	5.6E-05	2	NoObs
870.01	2.7731	829	23	105.1871	0.004	5.91213	0.00017	11.9	3.6	0.0298	0.0013	0.53	0.16	3.6	0.062	859	5.8E-05	2	NoObs
870.02	4.3907	987	29	108.6825	0.0043	8.98597	0.00027	21.71	0.84	0.02837	0.00089	0.003	0.01	3.5	0.081	751	5.8E-05	2	NoObs
871.01	2.1775	37608	206	112.4222	0.00037	12.940664	0.000033	38.6	2.5	0.2084	0.0044	0.77	0.19	10.9	0.105	531	1.8E-05	2	

872.01	4.3863	6150	128	119.68414	0.00099	33.60167	0.00025	50.2	7.4	0.0842	0.0027	0.69	0.33	7.4	0.199	456	2.0E-05	2	
873.01	2.2081	334	19	105.2243	0.0038	4.34761	0.00011	15.47	0.73	0.01882	0.00068	0.0167	-	1.3	0.051	866	7.6E-05	2	
874.01	2.1926	662	28	102.9798	0.0027	4.601803	0.000083	16.56	0.63	0.02429	0.00071	0.0081	-	2.2	0.053	882	9.0E-05	2	
875.01	2.9703	2189	99	103.6225	0.00094	4.220936	0.000027	11.42	0.11	0.04377	0.00034	0.014	0.02	2.2	0.042	607	8.0E-05	2	
876.01	1.8643	16531	89	104.89891	0.00077	6.998077	0.000038	21.8	3.6	0.1436	0.0066	0.81	0.28	9.2	0.07	693	1.9E-05	2	
877.01	2.2818	1219	32	103.9571	0.0025	5.95487	0.0001	19	78	0.034	0.026	0.4	2.2	2.5	0.055	652	5.4E-05	2	
877.02	2.7065	1091	21	114.2249	0.0037	12.03957	0.00034	35.1	1.6	0.0314	0.0011	0.02	0.042	2.3	0.088	516	5.7E-05	2	
878.01	4.4967	1255	33	106.8197	0.0039	23.58879	0.00063	19.5	6.9	0.0414	0.0031	0.9	0.31	5.2	0.158	568	8.1E-05	2	
880.01	4.0223	1635	40	127.1322	0.0027	26.44302	0.00052	25.1	6.9	0.0466	0.0024	0.89	0.28	4.9	0.176	569	5.4E-05	2	1
880.02	6.5130	3466	93	107.1236	0.0017	51.52991	0.00041	64.08	0.53	0.05485	0.00041	0.018	0.017	5.8	0.274	456	4.6E-05	2	1
880.03	2.8108	638	32	69.7841	0.0029	5.902243	0.000072	12	41	0.026	0.016	0.7	1.6	2.8	0.065	936	-	4	
880.04	2.2269	228	16	68.0797	0.0048	2.382948	0.000049	5	25	0.019	0.016	0.8	1.5	2.0	0.035	1275	-	4	
881.01	3.9739	1693	35	140.6795	0.0029	21.02147	0.00051	41.2	1	0.0387	0.00076	0.0431	-	2.5	0.142	459	8.5E-05	2	NoObs
881.02	7.2304	2948	29	140.3562	0.0051	226.8916	0.0062	139	42	0.0598	0.0039	0.84	0.35	3.9	0.693	208	7.2E-05	2	NoObs
882.01	1.9042	23209	121	103.69391	0.00049	1.9568099	0.0000067	7.8	2.3	0.1511	0.0015	0.36	0.11	13.6	0.03	1176	3.6E-05	3	
883.01	2.1328	33731	333	103.10127	0.00024	2.6888995	0.0000044	11.296	0.052	0.16675	0.00054	0	0.014	10.0	0.034	829	3.5E-05	2	
884.01	2.8824	2809	86	110.1842	0.0011	9.439536	0.000073	24	37	0.05	0.017	0.4	1.3	3.0	0.082	564	2.5E-05	2	1
884.02	3.5113	1879	42	111.6901	0.0021	20.47687	0.00024	53.6	1.2	0.04552	0.0008	0.019	0.03	2.7	0.137	436	3.0E-05	2	1
884.03	2.2744	407	19	68.3065	0.0042	3.336241	0.00006	11.74	0.55	0.0207	0.00072	0.0542	-	1.2	0.041	797	-	4	
886.01	2.1724	1221	25	103.1784	0.0029	8.01281	0.00016	28	256	0.035	0.04	0.4	3.4	2.0	0.059	488	9.2E-05	2	NoObs
887.01	2.5948	573	30	108.3458	0.0029	7.41121	0.00015	22.71	0.76	0.02269	0.00058	0.0059	-	2.3	0.075	867	9.1E-05	2	
889.01	2.6190	16292	311	102.99117	0.00034	8.884903	0.00002	36.26	0.18	0.11449	0.00035	0.03	0.017	11.7	0.083	754	2.9E-05	2	
890.01	4.2560	6795	219	109.62331	0.00052	8.09888	0.00003	15.649	0.064	0.07701	0.00026	0	0.01	7.6	0.081	878	1.3E-05	2	
891.01	4.9086	839	38	109.9676	0.0033	10.00634	0.00024	14	40	0.028	0.015	0.6	1.7	2.7	0.093	785	2.1E-05	2	
892.01	2.8869	1125	31	105.6161	0.003	10.37176	0.00021	24	95	0.033	0.027	0.5	2	2.8	0.09	654	3.8E-05	2	
893.01	4.3828	578	25	105.1843	0.0064	4.40845	0.00028	7.85	0.23	0.0233	0.00059	0.0248	-	2.6	0.054	1091	7.9E-05	3	
895.01	3.9799	13626	73	104.8936	0.0017	4.409394	0.000052	9.459	0.054	0.1066	0.0011	0.01	-	12.8	0.053	1093	4.5E-05	2	
896.01	4.0317	2405	64	108.5683	0.0018	16.2398	0.00021	32.61	0.45	0.04535	0.00052	0.015	0.022	3.9	0.123	578	5.1E-05	2	
896.02	3.0443	1216	47	107.0462	0.0022	6.308146	0.000095	16.7	0.36	0.0331	0.00056	0.0237	-	2.8	0.066	789	5.8E-05	2	
897.01	2.1494	13798	663	102.88985	0.00014	2.0523497	0.0000019	8.527	0.019	0.10906	0.00015	0.03	0.01	12.0	0.032	1417	5.4E-05	2	NoObs
898.01	2.5752	1798	30	108.7101	0.0026	9.77059	0.00018	31	144	0.041	0.037	0.3	2.4	3.0	0.074	540	1.9E-05	2	NoObs
898.02	2.0540	1115	23	105.6293	0.0031	5.16991	0.00011	18	96	0.033	0.032	0.4	2.5	2.4	0.049	664	2.3E-05	2	NoObs
898.03	3.3063	1255	17	80.9862	0.0062	20.08923	0.00054	44	278	0.034	0.041	0.4	2.7	2.5	0.12	424	-	4	
899.01	2.0930	791	29	107.3219	0.0023	7.11388	0.00011	24	128	0.028	0.019	0.5	2.4	1.7	0.055	510	8.7E-05	2	NoObs
899.02	1.8687	477	25	67.3709	0.0028	3.306569	0.000039	13.34	0.53	0.02123	0.00066	0.0214	-	1.3	0.033	658	-	4	
899.03	2.4349	726	21	80.3944	0.0037	15.36813	0.00026	35	221	0.029	0.036	0.7	2	1.7	0.091	397	-	4	
900.01	3.0479	1282	24	105.3395	0.0038	13.81001	0.00056	39.4	1.7	0.0334	0.0011	0.056	0.01	4.3	0.116	798	1.9E-05	2	
901.01	1.9512	6298	123	109.93915	0.00052	12.732557	0.000046	53.09	0.54	0.07377	0.00054	0.009	0.02	4.4	0.089	463	1.6E-05	2	
902.01	6.9808	7810	90	169.8066	0.0014	83.9042	0.0017	107.2	1.1	0.07978	0.00066	0.005	0.01	5.7	0.324	270	2.1E-05	2	
903.01	4.2191	6760	262	106.43312	0.00049	5.007341	0.000017	9.815	0.034	0.07665	0.00021	-	0.01	5.6	0.057	853	6.3E-05	2	
904.01	1.8541	563	20	103.1507	0.0031	2.211073	0.000047	7	33	0.027	0.028	0.7	1.8	2.1	0.029	960	2.9E-05	2	NoObs

904.02	3.2550	1537	20	111.8263	0.0045	27.93886	0.00095	58	299	0.038	0.042	0.6	2.1	3.0	0.159	410	2.2E-05	2	NoObs
905.01	2.4135	1634	51	105.6967	0.0016	5.795111	0.000065	18.83	0.39	0.03715	0.00053	0.029	0.037	2.0	0.062	698	7.8E-05	3	NoObs
906.01	2.5473	803	24	107.1339	0.0033	7.15684	0.00016	18	83	0.031	0.029	0.7	1.7	2.8	0.071	759	4.1E-05	2	
907.01	4.1177	886	26	109.117	0.0039	16.51385	0.0007	32.2	1	0.02811	0.00071	0.03	0.052	3.5	0.13	738	8.5E-05	2	NoObs
907.02	5.0796	806	21	123.386	0.0058	30.1324	0.002	48.4	1.7	0.02725	0.00087	0.025	0.01	3.4	0.194	604	8.9E-05	2	NoObs
907.03	2.9275	164	8.2	69.3138	0.0097	4.79085	0.00021	8	60	0.017	0.021	0.8	2	2.1	0.057	1115	-	4	
908.01	3.3536	7657	398	104.44572	0.00028	4.7083263	0.0000091	12.227	0.034	0.08075	0.00017	0.0001	-	11.4	0.056	1140	6.7E-05	2	
910.01	3.0648	1067	47	104.724	0.002	5.392096	0.000073	14.21	0.28	0.03107	0.00049	0.0403	-	1.9	0.057	696	2.5E-05	2	
911.01	2.2475	599	22	104.007	0.0033	4.093609	0.000094	14.8	0.73	0.02338	0.00085	0.0196	-	1.7	0.05	945	4.5E-05	2	
912.01	2.8941	1504	24	104.804	0.0036	10.84847	0.00027	28	121	0.037	0.031	0.4	2.3	2.6	0.081	521	7.7E-05	2	
913.01	3.2508	17268	1072	102.63655	0.0001	4.0822762	0.0000027	10.784082	0.000007	0.1216	0.0049	0.0002	-	9.1	0.049	902	-	3	
914.01	3.2170	461	23	102.7363	0.0042	3.88667	0.00011	9.85	0.35	0.02162	0.00061	0.0097	-	1.2	0.047	805	4.8E-05	2	
916.01	1.7644	1278	67	104.31311	0.00091	3.314908	0.000021	12	23	0.037	0.013	0.7	1.2	3.9	0.044	1112	4.1E-05	2	
917.01	2.1878	763	23	106.3562	0.0032	6.71972	0.00015	19	69	0.03	0.02	0.7	1.6	3.2	0.071	932	1.3E-04	3	
918.01	6.5105	14377	228	139.58885	0.00095	39.64552	0.00038	51.72	0.2	0.11111	0.00035	0.0034	-	10.6	0.226	463	1.2E-05	2	
920.01	2.8954	1010	23	123.4895	0.0038	21.80587	0.0006	53.5	2.1	0.02909	0.0008	0.031	0.084	1.9	0.148	469	3.9E-05	2	
921.01	3.5805	1048	29	108.3417	0.0034	10.28175	0.00025	23.15	0.2	0.03071	0.00069	0.023	0.01	2.3	0.089	618	4.1E-05	2	NoObs
921.02	4.0886	1498	32	115.6245	0.0036	18.11903	0.00046	36.3	1	0.03581	0.00081	0.026	0.037	2.7	0.13	512	3.6E-05	2	NoObs
921.03	1.6334	317	10	66.2771	0.0064	3.78406	0.0001	19	1.7	0.0198	0.0015	0.0153	-	1.5	0.046	860	-	4	
922.01	2.7126	601	19	104.6377	0.0049	5.15456	0.00017	12	57	0.026	0.024	0.6	2	2.7	0.058	951	5.3E-05	2	
923.01	3.4256	1135	40	107.8993	0.0022	5.743325	0.000091	13.24	0.3	0.03148	0.00057	0.015	0.03	2.9	0.064	911	4.0E-05	2	
924.01	2.6522	1027	17	106.3084	0.0049	39.4766	0.0014	127	1723	0.03	0.073	0.3	4.1	3.1	0.233	526	3.3E-05	3	
926.01	3.3262	1439	75	103.964	0.0017	3.166392	0.000035	7.537	0.037	0.03513	0.00032	0.0107	-	3.4	0.043	1154	2.3E-05	2	
928.01	1.8191	437	27	103.8588	0.0022	2.494093	0.000027	12	35	0.023	0.014	0.1	2.1	2.3	0.036	1208	2.6E-05	3	3
929.01	4.1458	7116	252	107.63388	0.00064	6.49162	0.000042	12.851	0.047	0.07807	0.00023	0.0007	-	9.0	0.07	998	1.5E-05	2	
931.01	3.2164	15642	806	103.67816	0.00014	3.8556046	0.0000038	10.241915	0.000011	0.1162	0.0075	0.0059	-	8.6	0.048	948	4.0E-05	2	
934.01	2.9175	1532	48	106.0083	0.0018	5.826727	0.000073	15	52	0.037	0.024	0.3	2.1	3.2	0.064	889	2.6E-05	2	
934.02	3.3818	535	12	75.543	0.0087	12.41208	0.00047	25	247	0.023	0.047	0.5	3.2	2.0	0.106	691	-	4	
934.03	3.9208	756	15	80.1226	0.0085	18.74711	0.00068	29	220	0.028	0.042	0.6	2.6	2.4	0.14	601	-	4	
935.01	5.1637	1790	62	113.0119	0.002	20.85987	0.00029	25	19	0.0426	0.0054	0.64	0.8	3.6	0.152	632	4.1E-05	2	
935.02	6.4005	1626	43	74.1845	0.0038	42.6329	0.00069	52.68	0.37	0.03741	0.00055	0.016	0.02	3.2	0.246	496	-	4	
935.03	8.5789	954	20	67.9393	0.0084	87.6464	0.0036	74	499	0.029	0.04	0.4	2.9	2.5	0.397	391	-	4	
936.01	2.5574	2042	62	111.4147	0.0012	9.467895	0.000083	31.19	0.49	0.04437	0.00046	0.031	0.039	3.5	0.07	519	1.7E-05	2	NoObs
936.02	1.1718	672	45	67.5395	0.0011	0.8930442	0.0000044	6	12	0.026	0.011	0.2	1.7	2.0	0.014	1161	-	4	
937.01	4.1031	905	22	109.5797	0.0041	20.83479	0.00058	39.5	1.4	0.02849	0.00085	0.018	0.037	2.3	0.146	530	5.1E-05	2	
938.01	3.2072	934	29	104.7015	0.0033	9.94611	0.00022	18	61	0.032	0.021	0.7	1.6	2.9	0.09	719	5.2E-05	2	
938.02	1.7854	216	16	66.9239	0.0043	1.0456	0.00002	4.65	0.29	0.01405	0.00074	0.0461	-	1.3	0.02	1525	-	4	
939.01	2.6119	275	17	103.5282	0.004	3.388069	0.000089	9.74	0.14	0.01682	0.00056	0.018	0.01	1.6	0.045	1099	6.2E-05	2	NoObs
940.01	4.7016	1949	187	102.573	0.00073	6.104843	0.00003	10.38695	0.000051	0.041	0.024	0.0004	-	3.5	0.064	816	5.2E-05	2	
941.01	3.2620	2171	61	107.7862	0.0016	6.581521	0.000076	16.67	0.27	0.04256	0.00051	0.03	0.035	5.4	0.069	904	5.4E-05	2	NoObs
941.02	1.8622	586	21	103.6646	0.0034	2.382649	0.000056	8	45	0.027	0.034	0.7	2.1	3.4	0.035	1269	6.9E-05	2	NoObs

941.03	3.3174	2417	38	122.0188	0.0028	24.66469	0.00051	45	50	0.052	0.012	0.8	0.75	6.6	0.165	585	4.8E-05	2	NoObs	
942.01	2.1136	1228	33	107.8585	0.0022	11.51507	0.00018	37	174	0.034	0.035	0.6	2.1	2.5	0.095	582	2.2E-05	2		
943.01	2.2705	774	33	104.9918	0.0023	3.601425	0.000058	9	31	0.03	0.02	0.7	1.5	2.2	0.045	887	2.7E-05	2	NoObs	
944.01	2.2498	1789	89	103.24424	0.00084	3.108254	0.000018	11.23	0.15	0.03893	0.00038	0.023	0.027	3.9	0.041	1080	4.2E-05	2		
945.01	5.8083	488	16	121.8574	0.0074	25.8529	0.0014	37.25	0.73	0.02154	0.00081	0.04	0.01	2.0	0.175	595	7.0E-05	3		
945.02	7.1766	695	19	79.35	0.0085	40.7193	0.0016	35	96	0.028	0.015	0.7	1.4	2.6	0.238	510	-	4		
947.01	3.6722	1550	31	122.9264	0.0025	28.59891	0.00057	49	15	0.03953	0.00093	0.4	0.12	2.7	0.146	353	2.6E-05	2	NoObs	
949.01	4.0447	1054	35	103.7626	0.003	12.53274	0.00026	24.61	0.57	0.03051	0.0006	0.0129	-	2.5	0.106	670	2.7E-05	2		
951.01	3.7463	2150	67	104.545	0.0016	13.19712	0.00014	23	29	0.046	0.012	0.6	1	6.0	0.108	702	3.7E-05	2		
952.01	2.1831	1513	40	104.4075	0.0019	5.901255	0.000076	21.08	0.53	0.03745	0.00067	0.028	0.04	2.3	0.05	575	6.4E-05	2	NoObs	
952.02	2.2980	1271	29	103.6308	0.0026	8.75246	0.00015	20	40	0.038	0.011	0.8	1	2.3	0.065	504	6.6E-05	2	NoObs	
952.03	3.1143	1749	30	88.2077	0.0029	22.78033	0.00031	57.6	1.7	0.04023	0.00093	0.015	0.033	2.4	0.124	365	-	4		
952.04	1.6236	355	12	66.6118	0.0051	2.896029	0.000063	14.6	1.4	0.0188	0.0015	0.0155	-	1.1	0.031	730	-	4		
953.01	2.7191	2545	98	103.4274	0.0011	3.584109	0.000025	10.46	0.11	0.04688	0.00038	0.0058	-	4.4	0.046	1045	2.5E-05	2		
954.01	2.9184	735	29	107.5203	0.0029	8.11522	0.00016	20	110	0.027	0.028	0.4	2.6	2.3	0.08	792	2.8E-05	2	NoObs	
954.02	4.7151	851	19	107.2189	0.0057	36.9254	0.0014	52	300	0.028	0.03	0.5	2.4	2.5	0.219	479	2.6E-05	2	NoObs	
955.01	3.9934	510	28	108.7269	0.0035	7.03918	0.00018	13	84	0.021	0.024	0.3	2.9	2.3	0.074	975	2.9E-05	3		
956.01	2.8217	2027	72	108.6457	0.0012	8.36077	0.000072	21	35	0.044	0.017	0.6	1.3	5.1	0.077	746	1.3E-05	2		
960.01	6.1820	37221	1062	110.15256	0.0002	15.801109	0.000035	20.85	0.22	0.18276	0.0005	0.46	0.11	13.9	0.12	555	1.7E-05	2		
961.01	0.5391	1483	50	103.48288	0.00053	1.2137724	0.0000044	9.3	2.8	0.053	0.0033	0.82	0.25	3.9	0.019	1106	-	3		1
961.02	0.5518	1181	71	66.86865	0.00041	0.4532882	0.0000009	2.6	0.78	0.19431	0.00081	1.29	0.39	14.4	0.01	1524	-	4		
961.03	0.7135	905	31	66.7918	0.0011	1.8651126	0.0000091	6.7	2	0.14	0.23	1.2	0.36	10.7	0.025	964	-	4		
972.01	4.5448	328	134	194.53889	0.0006	13.118925	0.000085	16	14	0.0192	0.0025	0.76	0.74	5.3	0.126	1540	3.7E-06	2		1
974.01	10.3158	151	37	105.9806	0.006	53.5067	0.002	39.95	0.57	0.01176	0.00019	0.012	0.028	1.5	0.289	542	1.8E-05	2		
975.01	3.4387	64	37	193.8369	0.0017	2.785755	0.000034	3.4	8.7	0.0089	0.0037	0.8	1	1.1	0.039	1404	1.3E-05	2		
976.01	5.7336	22147	137	117.971	0.0011	52.56862	0.00047	62	19	0.1553	0.0015	0.55	0.17	27.5	0.337	757	-	3		1
977.01	3.5914	1053	42	194.4372	0.0019	1.353659	0.000027	2.95	0.89	0.02656	0.00079	0.051	0.015	0.8	0.014	628	-	3		1
981.01	3.0023	96	12	194.726	0.0052	3.99942	0.00022	2.9	0.87	0.0132	0.0012	0.96	0.29	5.9	0.055	1928	-	3		1
984.01	2.8947	661	12	195.0462	0.0047	4.28899	0.00022	7.9	2.4	0.027	0.0021	0.58	0.17	4.4	0.054	1358	-	3		1
986.01	3.1093	509	19	193.8655	0.0034	8.18758	0.0003	19	157	0.022	0.039	0.4	3.1	1.3	0.077	626	6.9E-05	2		
987.01	1.0682	162	13	194.8413	0.0023	3.179301	0.000077	23	165	0.014	0.021	0.6	2.5	1.3	0.042	1041	6.7E-05	2		
988.01	3.1800	744	9.7	201.0204	0.0038	10.38143	0.00044	11.8	3.5	0.0328	0.0021	0.84	0.25	6.3	0.097	947	5.6E-05	2		
991.01	2.3459	275	24	71.2251	0.0035	12.06208	0.00018	29	179	0.018	0.021	0.8	1.8	3.2	0.108	981	-	2		
992.01	3.9772	383	12	69.4505	0.0098	9.93167	0.00042	18.8	1.2	0.01897	0.00098	0.024	0.014	1.6	0.091	735	-	3		1
993.01	3.3032	374	14	77.3278	0.0074	21.85242	0.0007	44	418	0.019	0.036	0.5	3.1	1.4	0.152	519	8.8E-05	3		1
994.01	2.1635	195	11	65.8649	0.0069	4.29889	0.00013	11.4	3.4	0.0142	0.0011	0.46	0.14	1.5	0.052	1032	1.1E-04	3		1
998.01	5.2630	85277	564	147.03869	0.00025	161.78801	0.00019	297.87	0.69	0.26748	0.00042	0.001	0.014	25.0	0.592	308	-	3		1
999.01	4.0767	1126	23	79.1504	0.0052	16.56815	0.00039	30	215	0.032	0.048	0.4	3	2.9	0.125	583	8.7E-05	2		
1001.01	12.8302	125	19	68.321	0.014	20.4024	0.0013	12.28752	0.00076	0.01033	-	-	-	2.6	0.159	1006	8.1E-05	3		1
1002.01	1.8181	143	14	65.9865	0.0046	3.481678	0.000066	18.11	0.9	0.01455	0.00054	0.0848	-	1.0	0.043	842	9.5E-05	3		1
1003.01	7.3074	22962	158	105.2651	0.0014	8.360619	0.000057	9.94	0.06	0.1409	0.00067	0.0047	-	14.1	0.08	766	-	3		1

1005.01	8.5483	4547	105	130.0317	0.0021	35.61842	0.00039	33.93486	0.00038	0.062	0.043	0.0023	-	6.5	0.208	469	-	4	
1010.01	18.1142	210	12	78.953	0.036	110.645	0.021	26	48	0.0162	0.0055	0.85	0.86	2.7	0.48	506	-	4	
1013.01	0.7714	794	62	66.661	0.00064	0.5187505	0.0000015	6.51	0.21	0.02606	0.00049	0.014	0.03	1.6	0.012	1641	-	4	
1014.01	3.1358	1324	19	75.3548	0.0048	17.31731	0.0004	45	384	0.035	0.061	0.2	3.4	2.7	0.12	502	-	4	
1015.01	4.4039	509	26	73.1092	0.0052	9.42869	0.00018	16	108	0.021	0.029	0.3	3	2.4	0.091	921	-	4	
1015.02	3.3973	139	9.6	68.752	0.011	4.08909	0.00017	6	42	0.015	0.02	0.8	1.9	1.6	0.052	1218	-	4	
1017.01	4.1116	683	26	74.676	0.0046	17.44529	0.00036	23	84	0.027	0.02	0.7	1.6	3.0	0.133	659	-	4	
1019.01	2.5586	36	8.2	68.32	0.01	2.49677	0.00011	7.94	0.47	0.00728	0.00041	0.018	-	1.2	0.037	1364	-	4	
1020.01	6.3051	9573	300	97.06991	0.00072	54.35611	0.0002	42	12	0.1318	0.0024	0.88	0.26	21.9	0.294	580	-	4	1
1022.01	4.6376	924	14	129.1832	0.008	18.82778	0.00079	32	1.7	0.0289	0.0013	0.025	0.05	2.8	0.139	612	-	4	
1024.01	1.8696	721	26	66.2982	0.0027	5.747732	0.000065	25.2	1.1	0.02563	0.00082	0.073	-	1.7	0.052	635	-	4	
1026.01	18.9471	667	19	118.039	0.018	94.1023	0.0097	38.8	1.1	0.02401	0.0008	0.019	0.076	1.8	0.325	242	-	4	
1029.01	5.5950	615	15	66.871	0.011	32.3113	0.0014	47.1	2.3	0.0235	0.001	0.007	0.014	2.5	0.203	558	-	4	
1030.01	2.8480	385	10	71.431	0.009	9.22978	0.00036	24.8	1.5	0.0223	0.0011	0.089	0.01	1.8	0.088	799	-	4	
1031.01	6.1479	280	8.6	68.978	0.019	14.5563	0.0012	17	146	0.018	0.032	0.4	3.2	2.0	0.119	728	-	4	
1032.01	24.0138	3843	87	109.1034	0.0044	615.3	4.3	106	32	0.0764	0.0015	0.86	0.26	26.2	1.558	300	-	4	1
1050.01	1.5002	321	37	66.3422	0.0016	1.2690943	0.0000089	4	16	0.021	0.015	0.8	1.3	2.3	0.022	1462	-	4	
1051.01	2.9340	395	18	71.1168	0.0054	6.79673	0.00016	19.8	0.93	0.02049	0.00075	0.0435	-	1.7	0.071	841	-	4	
1052.01	4.3752	503	15	76.3472	0.008	17.0282	0.00058	18	65	0.025	0.017	0.8	1.3	2.6	0.133	719	-	4	
1053.01	1.6860	212	14	66.2102	0.0048	1.224848	0.000025	3	15	0.021	0.018	0.8	1.4	1.9	0.022	1466	-	4	
1054.01	3.7930	202	13	67.384	0.0091	3.32361	0.00013	7.05	0.28	0.01749	0.00055	0.027	0.048	2.0	0.043	1116	-	4	
1059.01	1.4113	141	15	66.4557	0.0039	1.022666	0.000017	8.259	0.023	0.01997	0.0004	0.134	-	1.4	0.019	1400	-	4	
1060.01	5.5786	229	17	73.2117	0.0084	12.10963	0.00045	17.02	0.69	0.01436	0.00053	0.008	0.01	1.5	0.107	856	-	4	
1060.02	4.8600	117	13	70.697	0.01	4.75793	0.00021	5	25	0.011	0.012	0.8	1.6	1.2	0.058	1163	-	4	
1061.01	5.8923	374	14	75.732	0.01	41.818	0.0021	34	162	0.021	0.019	0.8	1.6	2.3	0.241	520	-	4	
1072.01	3.6243	428	19	72.112	0.006	10.12804	0.00026	19.22	0.34	0.01809	0.00099	0.467	0.01	2.1	0.094	881	-	4	
1078.01	1.4965	1203	30	67.8711	0.002	3.353682	0.000029	18.96	0.81	0.0349	0.001	0.0461	-	1.9	0.034	660	-	4	
1081.01	3.2893	570	24	67.3026	0.0042	9.95693	0.00018	21.7	1.2	0.01779	0.00081	0.052	0.01	1.4	0.092	732	-	4	
1082.01	2.5360	480	12	68.2737	0.0071	6.50318	0.0002	20.98	0.25	0.0227	0.0011	0.0542	-	1.9	0.066	763	-	4	
1083.01	3.5414	311	14	71.5846	0.0079	7.33679	0.00025	16.4	0.96	0.01694	0.00082	0.032	0.01	1.6	0.075	834	-	4	
1085.01	1.9381	394	10	72.1556	0.0069	7.71794	0.00023	30.9	4	0.0167	0.0019	0.015	0.01	1.2	0.063	573	-	4	
1086.01	5.9559	403	17	77.8771	0.0092	27.6625	0.0012	24	93	0.021	0.016	0.8	1.5	2.5	0.184	623	-	4	
1089.01	10.1641	8028	199	108.5986	0.0011	86.67747	0.00047	70.54	0.26	0.0827	0.00028	0.002	0.022	9.6	0.395	429	-	4	
1089.02	2.8501	1745	61	73.321	0.0015	12.21822	0.000083	19	12	0.0488	0.006	0.86	0.48	5.7	0.107	824	-	4	
1094.01	4.7951	780	24	68.5851	0.0056	6.10027	0.00015	9.95	0.32	0.02633	0.00072	0.0201	-	2.4	0.066	893	-	4	
1095.01	2.7384	5394	50	136.9783	0.0019	51.59825	0.00052	70	21	0.2841	0.0019	1.41	0.42	25.8	0.272	422	-	4	
1099.01	3.7160	4404	34	131.003	0.0027	161.5252	0.0021	352.6	9.6	0.0613	0.0012	0.031	0.056	3.7	0.573	244	-	4	
1101.01	2.2767	333	11	67.8593	0.0075	2.847635	0.000091	10.01	0.88	0.0177	0.0012	0.0617	-	1.1	0.036	865	-	4	
1102.01	3.8679	500	18	70.6093	0.0063	12.3318	0.00034	14	36	0.025	0.013	0.8	1.1	3.2	0.108	841	-	4	
1102.02	3.8409	376	17	73.563	0.0067	8.14561	0.00024	11.4	1.2	0.0074	0.0031	0.744	0.022	0.9	0.082	966	-	4	
1106.01	3.6049	337	15	72.9022	0.0069	7.42603	0.00022	14.1	1.6	0.0093	0.0013	0.015	0.014	0.9	0.076	905	-	4	

1108.01	3.6924	340	18	73.0373	0.0063	9.46255	0.00026	20.15	0.89	0.01828	0.00064	0.012	0.01	1.4	0.086	672	-	4
1109.01	6.4230	213	11	67.738	0.015	6.72233	0.00043	8	83	0.013	0.03	0.4	3.6	1.4	0.068	822	-	4
1110.01	3.5692	312	11	68.093	0.01	8.73492	0.00039	20.4	1.4	0.0182	0.0011	0.031	0.01	1.9	0.085	837	-	4
1111.01	3.7924	330	10	69.5	0.011	10.26494	0.00051	21.3553	0.0018	0.02	0.83	0.041	0.01	1.6	0.092	689	-	4
1112.01	7.9162	402	14	91.323	0.013	37.8122	0.0023	36.4	1.6	0.01946	0.00084	0.053	0.014	2.2	0.226	547	-	4
1113.01	4.6584	380	18	82.7491	0.0072	25.93496	0.00086	23	84	0.022	0.014	0.8	1.2	2.6	0.178	676	-	4
1113.02	7.0361	452	15	91.699	0.01	83.4411	0.0042	52	141	0.023	0.012	0.8	1.1	2.8	0.388	458	-	4
1114.01	2.3308	280	11	72.7953	0.0073	7.0472	0.00022	14.1	4.2	0.0181	0.0014	0.66	0.2	2.2	0.073	960	-	4
1115.01	6.0624	214	17	69.3262	0.0097	12.99172	0.00055	16.66	0.45	0.01371	0.00052	0.012	0.014	2.0	0.111	837	-	4
1116.01	1.9015	172	21	68.1021	0.0033	3.749224	0.000053	14	68	0.013	0.013	0.4	2.3	1.4	0.048	1144	-	4
1117.01	6.1980	136	21	74.7572	0.0081	11.08977	0.00039	11	41	0.0119	0.009	0.6	1.8	1.2	0.101	842	-	4
1118.01	1.7024	182	12	70.6009	0.0056	7.37325	0.00018	36.4	3.1	0.01365	0.00097	0.023	0.01	1.8	0.077	1049	-	4
1128.01	1.7084	177	44	66.0736	0.0015	0.9748817	0.0000064	4.493	0.078	0.01342	0.0003	0.0103	-	1.0	0.019	1378	-	4
1129.01	1.4556	310	9.1	66.3832	0.0063	4.89768	0.00013	24	145	0.022	0.027	0.7	2.1	2.7	0.056	959	-	4
1141.01	2.7088	705	15	68.1853	0.0063	5.72796	0.00015	16.43	0.91	0.0273	0.0012	0.0488	-	2.0	0.052	634	-	4
1142.01	2.0797	428	16	66.4288	0.0046	3.755719	0.000073	13.9	4.2	0.01927	0.00098	0.031	0.009	1.5	0.046	892	-	4
1144.01	3.4602	207	14	67.5826	0.0077	2.441836	0.000078	5.44	0.21	0.01666	0.00054	0.0224	-	1.6	0.036	1250	-	4
1145.01	5.3510	448	23	95.8746	0.0052	30.5908	0.00075	45.6	1.4	0.02011	0.00055	0.023	0.014	2.0	0.195	549	-	4
1146.01	2.0887	371	12	69.3494	0.0063	7.09695	0.0002	22	201	0.024	0.044	0.7	2.4	1.3	0.056	512	-	4
1148.01	4.7868	186	15	68.4025	0.009	11.47566	0.00044	10	44	0.015	0.012	0.8	1.3	2.2	0.104	952	-	4
1149.01	1.7338	248	7.3	69.2328	0.0088	7.16918	0.00027	18.3	5.5	0.0173	0.0021	0.7	0.21	1.6	0.072	783	-	4
1150.01	1.9085	76	20	66.9456	0.0036	0.677375	0.000011	2.78	0.22	0.00648	0.00053	0.0522	-	0.7	0.015	1940	-	4
1151.01	3.3203	104	14	67.8179	0.007	5.21785	0.00015	11.62	0.54	0.0107	0.00041	0.0566	-	1.2	0.059	989	-	4
1151.02	3.4924	107	12	68.7486	0.008	7.41084	0.00025	18.1	1	0.0109	0.00051	0.057	0.01	1.2	0.075	877	-	4
1152.01	3.4095	81037	309	111.24288	0.00037	4.7222503	0.0000086	12.99	0.5	0.2689	0.003	0.41	0.21	19.2	0.046	676	-	4
1159.01	5.0986	2254	34	99.1389	0.0072	64.6198	0.002	54	18	0.0538	0.0039	0.87	0.34	5.3	0.304	372	-	4
1160.01	3.1995	998	19	73.5808	0.0053	13.21436	0.00029	32.4	1.6	0.0296	0.0011	0.013	0.044	1.8	0.104	529	-	4
1161.01	3.7439	342	21	68.9164	0.0054	6.05767	0.00014	9	46	0.02	0.019	0.7	1.9	2.3	0.065	925	-	4
1162.01	11.7092	861	65	106.9379	0.0033	158.6951	0.0026	90	86	0.0285	0.0056	0.54	0.98	3.9	0.594	375	-	4
1163.01	1.8096	320	20	68.7149	0.0034	2.936566	0.000043	12.94	0.56	0.01869	0.00061	0.0677	-	1.9	0.04	1153	-	4
1163.02	3.4700	321	17	67.8239	0.0066	8.01533	0.00022	18.36	0.88	0.01746	0.0007	0.027	0.01	1.8	0.079	821	-	4
1164.01	3.5820	206	15	66.3891	0.0073	2.801128	0.000088	5.95	0.26	0.01489	0.00055	0.0147	-	1.2	0.032	829	-	4
1165.01	1.8463	473	35	69.3531	0.002	7.05404	0.00006	34.8	1.3	0.02087	0.0006	0.0053	-	2.9	0.074	1009	-	4
1166.01	1.5231	513	15	66.2153	0.004	7.67503	0.00013	30	221	0.028	0.04	0.8	2	2.8	0.078	880	-	4
†1168.01	23.2431	779	28	161.4507	0.008	458	2054	154	693	0.02577	-	-	-	3.9	1.221	291	-	4
1169.01	1.5932	181	48	66.2862	0.0013	0.6892091	0.000004	3.4	1	0.01247	0.00026	-	-	1.2	0.015	1895	-	4
1170.01	1.2491	470	19	70.3023	0.0028	7.343619	0.00009	29	185	0.024	0.029	0.8	1.9	1.4	0.073	670	-	4
1175.01	12.4129	106	13	75.956	0.02	31.5953	0.0028	19.76	0.73	0.00972	0.00043	0.025	0.02	0.9	0.195	493	-	4
1176.01	1.8347	28812	735	111.6887	0.0001	1.9737605	0.000001	9.635	0.024	0.15708	0.00029	0.001	0.01	11.1	0.028	974	-	4
1177.01	2.5220	19849	46	113.6797	0.0018	3.3056	0.00003	11.3	3.4	0.1301	0.003	-	-	9.8	0.043	945	-	4
1187.01	0.7778	1692	187	66.79903	0.00021	0.3705285	0.0000004	3.809	0.035	0.03961	0.00024	0.0263	-	2.5	0.01	1789	-	4

†1192.01	17.0021	1289	31	105.5114	0.0099	123	-	57.3	0.19	0.033	0.055	0.017	0.069	4.1	0.491	362	-	4
1193.01	3.2991	2482	33	82.2193	0.0035	59.5309	0.0011	59	18	0.106	0.038	1.04	0.31	12.9	0.303	463	-	4
1198.01	5.4692	608	17	72.4887	0.0086	16.08903	0.00063	20	152	0.024	0.037	0.5	2.8	2.0	0.128	679	-	4
1198.02	5.2647	279	9.9	75.726	0.014	10.30133	0.00063	16.75	0.97	0.0184	0.00095	0.038	0.01	1.5	0.095	788	-	4
1199.01	5.5648	973	23	80.864	0.0062	53.5296	0.0015	76.9	2.5	0.02917	0.00083	0.007	0.028	2.7	0.263	379	-	4
1201.01	0.9997	568	12	66.0546	0.0039	2.757529	0.000046	13	3.9	0.0262	0.0028	0.67	0.2	1.4	0.03	686	-	4
1202.01	1.3660	381	15	66.8036	0.0037	0.928308	0.000015	6.04	0.28	0.02657	0.00085	0.059	-	1.5	0.015	1104	-	4
1203.01	5.2656	749	15	93.2296	0.0092	31.8811	0.0014	46.8	2.4	0.0254	0.0011	0.03	0.07	2.5	0.201	544	-	4
1203.02	3.3983	475	12	75.9003	0.0086	14.12823	0.00054	21	146	0.025	0.033	0.8	2	2.4	0.117	713	-	4
1204.01	6.4828	300	13	69.33	0.013	8.39776	0.00048	9.82	0.3	0.01683	0.00073	0.047	0.01	1.7	0.083	906	-	4
1205.01	5.2040	348	19	72.9508	0.0078	8.63851	0.00029	8	34	0.02	0.016	0.8	1.6	2.1	0.085	888	-	4
1207.01	2.1368	662	16	75.3282	0.0046	13.73459	0.00028	29	158	0.029	0.029	0.9	1.4	2.9	0.111	650	-	4
†1208.01	8.5880	3055	74	182.4388	0.0017	300	-	182.55974	-	0.05951	-	0.8091	-	7.0	0.913	301	-	4
1210.01	5.8162	263	17	67.0989	0.0091	14.55495	0.00057	19.4	0.8	0.01534	0.00058	0.009	0.01	1.2	0.119	673	-	4
1212.01	3.8647	252	9.4	67.918	0.013	11.30143	0.00059	24.8	2.1	0.0159	0.0012	0.214	0.01	1.8	0.101	798	-	4
1214.01	2.8863	163	9.8	66.4458	0.0095	4.24176	0.00017	9.81878	0.0004	0.01236	-	0.5139	-	1.5	0.052	1146	-	4
1215.01	7.4620	210	25	75.118	0.0069	17.32298	0.00055	13	38	0.015	0.0086	0.7	1.5	2.2	0.138	869	-	4
1215.02	7.2268	235	20	78.3889	0.0084	33.0058	0.0015	35	289	0.014	0.024	0.1	3.4	2.1	0.212	701	-	4
1216.01	4.0428	167	16	67.3671	0.0074	11.13127	0.00035	12	51	0.015	0.012	0.8	1.3	2.0	0.101	883	-	4
1218.01	4.7972	268	21	66.6822	0.006	29.61863	0.00078	28	91	0.018	0.011	0.8	1.2	2.2	0.192	593	-	4
1219.01	3.0841	89	7.8	67.686	0.012	3.50394	0.00018	8.93	0.24	0.01088	0.00063	0.034	0.01	1.2	0.044	1031	-	4
1220.01	2.3617	119	14	69.8892	0.0058	6.40068	0.00016	15.6	4.7	0.011	0.00063	0.45	0.14	1.1	0.065	797	-	4
1221.01	7.8099	137	16	71.535	0.013	30.1562	0.0016	27	149	0.012	0.013	0.6	2.3	5.0	0.212	944	-	4
1221.02	12.5482	121	15	85.316	0.016	51.0917	0.0039	18	46	0.0124	0.0059	0.8	1	5.3	0.301	792	-	4
1222.01	3.2088	54	8.7	67.499	0.011	4.28545	0.00019	10.81	0.53	0.00955	0.00042	0.018	0.01	0.8	0.048	841	-	4
1226.01	7.8230	79904	1238	106.16362	0.00021	137.75992	0.00016	169	51	0.25847	0.00028	-	-	26.6	0.514	301	-	4
1227.01	1.7476	16872	105	66.57494	0.00064	2.1552826	0.0000059	10.6	3.2	0.1204	0.0013	-	-	8.3	0.032	1066	-	4
1230.01	31.8501	5970	313	147.034	0.0028	165.7537	0.004	43.5	2.4	0.07472	0.00091	0.62	0.22	50.2	0.67	650	-	4
1236.01	7.8927	689	39	84.0494	0.005	35.74468	0.00084	35.69	0.62	0.02448	0.0004	0.028	0.033	2.8	0.222	627	-	4
1236.02	5.6648	179	20	70.6889	0.0076	6.15488	0.00021	8.25	0.21	0.01465	0.00034	0.0146	-	1.7	0.069	1125	-	4
1238.01	7.1034	490	24	72.1086	0.0079	27.07239	0.00092	29.55	0.86	0.02088	0.00055	0.021	0.022	2.1	0.177	543	-	4
1240.01	2.2251	236	26	66.6516	0.003	2.13957	0.000027	7.74	0.27	0.01517	0.00042	0.0088	-	1.5	0.033	1272	-	4
1241.01	10.5451	315	30	80.0705	0.009	21.40827	0.00083	9	10	0.0198	0.0039	0.84	0.67	10.4	0.17	1142	-	4
1241.02	12.6584	141	22	68.746	0.013	10.49447	0.00056	4.2	8.5	0.0133	0.0051	0.8	1.1	7.0	0.106	1446	-	4
1242.01	4.6572	2603	85	216.2398	0.0015	99.642	0.0011	95	29	0.05844	0.00065	0.78	0.23	6.3	0.436	412	-	4
1244.01	3.0620	301	18	67.0974	0.0056	10.80458	0.00025	23	178	0.017	0.027	0.5	2.8	1.5	0.097	746	-	4
1245.01	5.3201	239	18	73.7271	0.0084	13.72029	0.00051	20.1	0.8	0.01464	0.00051	0.005	0.01	1.5	0.116	774	-	4
1246.01	3.5116	326	13	81.5517	0.0086	19.03726	0.00071	23	97	0.021	0.016	0.9	1.2	2.4	0.144	723	-	4
1257.01	4.4410	7473	110	106.7926	0.0011	86.64814	0.00043	164.8	1.4	0.07981	0.00052	0.026	0.02	10.4	0.385	398	-	4
1258.01	6.3287	2841	58	93.3913	0.0028	36.33921	0.00048	37	22	0.0533	0.0066	0.63	0.72	4.2	0.214	446	-	4
1261.01	11.5198	4741	90	149.0435	0.0024	133.4589	0.0018	94.43	0.75	0.06354	0.00046	0.026	0.017	6.3	0.521	335	-	4

1264.01	3.5197	1034	25	75.2628	0.0044	14.13146	0.00027	31.8	1.1	0.03033	0.00087	0.003	0.01	2.7	0.114	637	-	4
1266.01	3.9623	816	30	70.6651	0.0041	11.41944	0.0002	23.21	0.66	0.02688	0.00062	0.029	0.047	2.0	0.087	543	-	4
†1268.01	10.3358	5940	76	293.0702	0.0019	191	14	135.9	9.9	0.07383	-	0.4742	-	8.6	0.671	336	-	4
1270.01	1.2127	815	29	71.5555	0.0017	5.729434	0.000043	20	65	0.033	0.02	0.9	1.1	2.0	0.06	698	-	4
1273.01	5.3917	1064	35	102.9068	0.004	40.05949	0.00075	58.8	1.3	0.03022	0.00057	0.028	0.039	2.8	0.23	460	-	4
1275.01	6.3429	970	50	100.6306	0.0041	50.28661	0.0009	56	150	0.03	0.016	0.4	1.8	3.3	0.269	466	-	4
1276.01	5.1517	517	26	71.6997	0.0053	22.78864	0.00052	26	94	0.023	0.016	0.7	1.7	1.5	0.154	474	-	4
1278.01	5.8956	263	14	78.079	0.011	12.40287	0.00061	16.24	0.72	0.01629	0.00068	0.061	0.01	1.6	0.107	744	-	4
1278.02	6.2243	682	20	94.3182	0.0078	44.3474	0.0016	56.8	2	0.02488	0.0008	0.042	0.01	2.4	0.25	487	-	4
1279.01	4.9091	292	25	71.2073	0.0056	14.37428	0.00035	22.86	0.67	0.016	0.00042	0.015	0.033	1.1	0.115	584	-	4
1281.01	2.8618	523	15	74.8243	0.0056	49.4787	0.0012	134	1323	0.022	0.045	0.4	3.4	2.0	0.265	431	-	4
1282.01	8.5310	212	30	95.883	0.006	30.86317	0.00087	28.97	0.62	0.0138	0.00029	0.027	0.01	2.0	0.201	688	-	4
1283.01	5.8824	53	20	71.0524	0.0075	8.09166	0.00026	10.16	0.31	0.00717	0.00021	0.028	0.01	0.7	0.077	883	-	4
1285.01	1.6718	4576	94	67.72319	0.00069	0.937416	0.0000028	2.12	0.28	0.0814	0.0029	0.9	0.19	8.0	0.019	1606	-	4
1288.01	6.6527	8365	135	152.7044	0.0013	117.93	0.001	170.9	1.2	0.08401	0.00047	0.008	0.014	9.8	0.488	400	-	4
1298.01	2.0927	1391	28	76.2253	0.0027	11.00823	0.00013	22	20	0.0445	0.0079	0.9	0.5	3.7	0.084	554	-	4
1299.01	15.1959	789	68	104.5278	0.0048	52.4989	0.0013	28	0.24	0.02601	0.00024	0.021	0.017	10.2	0.305	748	-	4
1300.01	1.1440	416	57	66.94395	0.00089	0.6313314	0.0000025	4.779	0.012	0.02036	0.00025	0.07	-	1.7	0.013	1485	-	4
1301.01	2.6177	703	13	117.9894	0.0064	12.69902	0.00037	33	379	0.027	0.064	0.6	3.4	1.9	0.104	588	-	4
1301.02	3.5078	1045	13	122.2828	0.0083	37.5214	0.0014	60	432	0.034	0.048	0.7	2.2	2.3	0.215	409	-	4
1302.01	6.8896	804	28	120.558	0.0049	55.6394	0.0014	63.6	1.6	0.02629	0.0006	0.004	0.01	2.4	0.289	427	-	4
1303.01	18.2696	383	24	76.689	0.014	34.2936	0.0021	14.62	0.32	0.01818	0.00046	0.026	0.03	2.6	0.21	579	-	4
1304.01	3.1186	297	11	69.4812	0.0089	4.59723	0.00018	9	60	0.021	0.029	0.7	2.3	1.8	0.055	964	-	4
1305.01	2.2079	262	15	67.5591	0.0051	2.633895	0.000057	9.19	0.11	0.0174	0.00058	0.0493	-	1.3	0.036	1020	-	4
1306.01	1.7321	239	14	66.327	0.0047	1.796375	0.000036	10.201	0.054	0.02101	0.00057	0.0975	-	2.1	0.029	1431	-	4
1306.02	2.2614	264	13	69.007	0.0059	3.468005	0.000088	6	28	0.022	0.018	0.9	1.3	2.2	0.046	1136	-	4
1306.03	3.7452	216	11	66.458	0.011	5.91495	0.00027	9	63	0.018	0.025	0.7	2.3	1.8	0.065	956	-	4
1307.01	3.8988	736	23	105.4744	0.0045	44.84967	0.00096	96	1068	0.025	0.058	0.1	4	3.0	0.252	505	-	4
1307.02	2.3012	512	18	70.6975	0.0042	20.342	0.00039	58	404	0.024	0.033	0.7	2.2	2.8	0.149	657	-	4
1308.01	5.5317	382	24	78.9578	0.0056	23.58427	0.00063	28	134	0.019	0.019	0.6	2.2	2.0	0.164	607	-	4
1309.01	4.6916	266	25	70.4515	0.0053	10.11672	0.00022	11	32	0.0175	0.01	0.8	1.3	2.5	0.098	1117	-	4
1310.01	3.6617	403	16	72.4384	0.0063	19.12903	0.00057	36	330	0.02	0.037	0.5	3.1	2.0	0.143	657	-	4
1311.01	7.2596	576	32	135.4621	0.005	83.5755	0.0021	93.4	2	0.0223	0.00045	0.026	0.032	3.4	0.391	494	-	4
1312.01	2.6895	261	15	68.0665	0.0055	6.14681	0.00015	19.34	0.19	0.01764	0.00062	0.084	-	1.6	0.067	950	-	4
1314.01	7.8679	128	18	73.143	0.01	8.57549	0.00038	6	22	0.012	0.0086	0.7	1.6	3.5	0.089	1213	-	4
1315.01	3.4409	136	21	66.7627	0.0054	6.84639	0.00015	7	23	0.0142	0.0077	0.89	0.96	1.9	0.074	1106	-	4
1316.01	6.4621	50	16	71.33	0.01	7.64981	0.00033	9.1	2.7	0.00653	0.00032	-	-	0.7	0.075	936	-	4
1325.01	3.4427	2699	93	70.4706	0.0012	10.035392	0.000051	23.55971	0.00012	0.049	0.037	0.0227	-	3.3	0.09	652	-	4
1328.01	3.1414	4598	25	93.9747	0.0035	80.966	0.0014	266	15	0.061	0.0025	0.024	0.055	4.8	0.362	338	-	4
1329.01	5.1611	990	24	86.6605	0.0057	33.19959	0.00088	50.6	1.7	0.02911	0.0008	0.027	0.042	2.5	0.198	457	-	4
1335.01	11.2408	1716	40	226.4189	0.0051	127.8295	0.0072	84	221	0.04	0.021	0.5	1.7	7.6	0.528	480	-	4

1336.01	3.6241	422	15	69.8593	0.0072	10.21869	0.00031	22	1.1	0.02046	0.00081	0.026	0.049	2.5	0.095	884	-	4
1337.01	1.8187	218	13	67.5043	0.0052	1.922787	0.000043	7	39	0.016	0.017	0.5	2.4	1.4	0.03	1177	-	4
1338.01	3.0650	211	16	111.0667	0.0059	3.223004	0.000091	8.24	0.36	0.01526	0.00058	0.0451	-	1.7	0.044	1195	-	4
1339.01	2.8821	246	15	67.9005	0.0063	4.16804	0.00011	8	66	0.016	0.025	0.7	2.2	2.0	0.052	1150	-	4
1341.01	2.9285	214	14	67.0276	0.0067	4.51434	0.00013	11.49	0.18	0.0133	0.00076	0.2746	-	1.6	0.055	1165	-	4
1342.01	3.1222	160	17	67.0578	0.0058	3.773707	0.000093	9.94	0.4	0.01364	0.00046	0.0572	-	1.6	0.049	1242	-	4
1344.01	2.6231	117	15	66.3603	0.0055	4.48761	0.0001	15.27	0.15	0.01191	0.0004	0.047	-	1.1	0.054	1021	-	4
1353.01	10.8183	12406	72	169.6578	0.0039	125.8649	0.003	115.5	1.4	0.1025	0.0011	0.029	0.025	18.1	0.52	469	-	4
1355.01	5.1862	2845	35	84.9328	0.0039	51.92904	0.0009	80.9	1.9	0.04945	0.00097	0.023	0.03	2.8	0.266	342	-	4
1360.01	4.5398	1377	25	97.298	0.0049	36.76944	0.00082	62	441	0.035	0.051	0.2	3.1	2.7	0.207	408	-	4
1360.02	2.3547	836	17	74.93	0.0045	14.58951	0.00029	39	361	0.029	0.054	0.6	2.9	2.3	0.112	555	-	4
1361.01	4.8039	1362	32	84.1831	0.0039	59.8791	0.0011	100.4	2.5	0.03422	0.00072	0.017	0.032	2.2	0.243	279	-	4
1363.01	2.3642	455	16	67.8975	0.0051	3.546626	0.000077	11.87	0.74	0.0202	0.00095	0.0643	-	1.8	0.046	1052	-	4
1364.01	4.0375	851	13	119.0465	0.0076	20.83299	0.00082	41.3	2.6	0.0274	0.0013	0.03	0.11	2.9	0.148	596	-	4
1364.02	2.8321	723	16	114.9246	0.0051	7.05519	0.00018	20.6	1.2	0.0263	0.0012	0.035	0.01	2.7	0.072	854	-	4
1366.01	4.5442	886	28	97.7735	0.0042	19.25493	0.0004	33.04	0.94	0.02751	0.00066	0.025	0.039	2.4	0.141	582	-	4
1367.01	0.9983	315	33	67.06	0.0014	0.5678602	0.0000036	5	31	0.015	0.018	0.2	2.9	1.2	0.013	1639	-	4
1369.01	2.7220	254	19	66.8903	0.0047	3.016111	0.00006	9.07	0.11	0.01642	0.00047	0.0586	-	1.8	0.042	1239	-	4
1370.01	2.3585	402	12	68.2586	0.0065	6.88354	0.00019	22.7	1.7	0.0198	0.0011	0	0.01	1.7	0.071	795	-	4
1372.01	10.4241	488	12	109.049	0.017	69.7118	0.0057	43	265	0.022	0.027	0.6	2.4	2.2	0.338	416	-	4
1375.01	4.7760	2369	61	139.9267	0.0022	321.2161	0.0031	207	62	0.141	0.017	1.14	0.34	17.9	0.958	300	-	4
1376.01	2.6400	274	21	117.2434	0.0038	7.13906	0.00014	21.28	0.8	0.01706	0.00051	0.0486	-	2.8	0.085	1337	-	4
1377.01	5.0697	178	12	67.557	0.012	11.29698	0.00059	17.91	0.96	0.01362	0.00066	0.03	0.014	1.6	0.102	868	-	4
1378.01	4.8532	218	23	66.3534	0.0055	19.30204	0.00049	30	181	0.014	0.018	0.3	2.8	1.3	0.13	590	-	4
1379.01	2.4909	149	20	69.8878	0.004	5.621614	0.000095	18.43	0.85	0.01196	0.00044	0.0058	-	0.8	0.062	790	-	4
1382.01	3.7694	46634	148	112.53263	0.00071	4.202347	0.000015	10.271	0.082	0.2003	0.0012	0.0001	-	24.1	0.053	1191	-	4
1385.01	4.0744	46306	772	72.08453	0.00018	18.610068	0.000015	42	13	0.19775	0.0003	-	-	15.1	0.138	581	-	4
1387.01	4.8792	56665	1404	85.56423	0.00014	23.799979	0.000015	36	11	0.2885	0.0017	0.73	0.22	31.1	0.165	615	-	4
1391.01	1.9404	4222	90	66.8021	0.00089	7.981177	0.000031	17.9	5.4	0.079	0.0016	0.84	0.25	8.3	0.08	921	-	4
1395.01	1.5514	1455	20	114.2969	0.0029	6.230288	0.000089	35.1	2.7	0.0378	0.0022	0.0253	-	2.5	0.064	718	-	4
1396.01	3.1586	778	21	116.9867	0.0045	6.62641	0.00015	16.7	0.72	0.02646	0.00092	0.034	0.01	2.5	0.07	884	-	4
1396.02	2.5938	339	11	113.2709	0.0075	3.70128	0.00014	11.85	0.85	0.0194	0.0011	0.0099	-	1.9	0.048	1067	-	4
1401.01	2.6369	240	64	66.8031	0.0014	0.5667194	0.0000035	1.773	0.018	0.01408	0.00018	0	0.025	2.0	0.014	2820	-	4
1402.01	3.8080	425	14	70.1876	0.0087	7.13962	0.00025	14.72	0.7	0.02196	0.00087	0.0547	-	1.7	0.073	792	-	4
1403.01	3.0231	759	15	74.7225	0.0063	18.75409	0.00051	40	408	0.028	0.057	0.6	3.1	2.0	0.117	444	-	4
1404.01	3.0415	430	11	68.2404	0.0092	6.66205	0.00026	13	98	0.024	0.036	0.7	2.4	1.5	0.06	603	-	4
1405.01	4.0389	494	11	119.3	0.0097	11.41969	0.00057	23.5	1.5	0.023	0.0012	0.085	0.01	2.1	0.102	767	-	4
1406.01	3.9013	481	27	69.9238	0.0047	11.36121	0.00022	16	59	0.023	0.017	0.7	1.6	2.5	0.102	828	-	4
1407.01	2.6597	200	14	67.2441	0.0064	1.387195	0.000039	4	52	0.01	0.027	0.5	3.7	0.7	0.024	1245	-	4
1408.01	3.2050	521	16	78.4231	0.0062	14.53451	0.00039	36.3	2	0.02179	0.00095	0.021	0.01	1.8	0.098	492	-	4
1409.01	2.4035	674	19	66.4929	0.0045	16.56074	0.00031	25.3	7.6	0.0307	0.0014	0.83	0.25	3.7	0.13	719	-	4

1410.01	4.5646	550	21	83.2427	0.0062	15.74997	0.00043	26.6	2	0.01582	0.00097	0.057	0.017	1.6	0.126	709	-	4
1412.01	8.7616	349	22	67.6756	0.0089	37.8118	0.0016	33.8	1	0.01737	0.0005	0.007	0.01	2.1	0.228	580	-	4
1413.01	7.9911	170	16	71.634	0.012	12.6449	0.00064	9	39	0.014	0.012	0.7	1.8	1.5	0.107	730	-	4
1419.01	1.3238	1953	95	111.25851	0.00052	1.3361033	0.0000035	4.1	1.3	0.0529	0.0035	0.9	0.3	5.8	0.024	1674	-	4
1422.01	2.0371	1254	26	68.9225	0.0027	5.841618	0.000071	17	94	0.038	0.041	0.7	2	3.1	0.051	627	-	4
1422.02	2.9373	1451	20	66.6483	0.0042	19.85037	0.00038	57.3	2.8	0.0358	0.0013	0.02	0.044	2.9	0.116	416	-	4
1422.03	1.5785	425	10	67.7522	0.0057	3.621387	0.000093	18.6	1.6	0.0247	0.0016	0.0002	-	2.0	0.037	736	-	4
1423.01	4.0874	4218	30	83.5949	0.0035	124.4198	0.0019	277.7	9.5	0.0599	0.0015	0.031	0.062	4.3	0.475	274	-	4
1424.01	1.5471	448	35	66.4598	0.0018	1.2195667	0.0000092	7.26	0.22	0.02292	0.00049	0.0673	-	1.6	0.02	1151	-	4
1425.01	2.1991	474	29	66.7336	0.0027	2.053893	0.000024	5	59	0.012	0.028	0.8	2.5	0.8	0.031	1106	-	4
1426.01	6.7799	851	29	104.2748	0.0046	38.87641	0.00096	46.5	1	0.02863	0.00056	0.017	0.01	3.3	0.231	551	-	4
1426.02	5.2850	4033	88	58.0562	0.0022	74.91443	0.00065	86	17	0.0673	0.0028	0.79	0.32	7.7	0.357	443	-	4
1426.03	4.8985	3989	76	157.6733	0.0019	150.0341	0.0015	103	31	0.314	0.001	1.53	0.46	36.1	0.568	352	-	4
1427.01	1.7776	520	18	66.1119	0.0036	2.613011	0.000041	11.48	0.78	0.02063	0.00098	0.0377	-	1.5	0.031	830	-	4
1428.01	1.4407	439	60	66.90506	0.00098	0.9278604	0.000004	5.068	0.098	0.02028	0.00034	0.017	-	1.9	0.018	1439	-	4
1429.01	10.1791	2270	33	185.7365	0.0056	205.9317	0.0078	161.6	3.4	0.04413	0.00087	0.008	0.074	4.2	0.69	276	-	4
1430.01	2.3132	972	22	85.6439	0.0034	10.4753	0.00017	35	300	0.03	0.054	0.3	3.3	2.3	0.084	577	-	4
1432.01	3.4501	419	19	71.4089	0.0056	6.88589	0.00016	14	91	0.021	0.029	0.5	2.6	1.9	0.072	833	-	4
1433.01	3.6136	650	13	72.3786	0.0074	19.80752	0.0007	37	391	0.025	0.055	0.5	3.3	1.7	0.142	516	-	4
1434.01	2.1140	260	14	66.2056	0.005	2.34324	0.000051	8.4	0.14	0.01481	0.00076	0.1399	-	1.4	0.033	1084	-	4
1435.01	8.4693	478	26	79.5568	0.0073	40.7174	0.0014	36	174	0.02	0.02	0.3	2.5	1.7	0.234	454	-	4
1436.01	2.4834	212	16	68.0097	0.0049	2.508513	0.000055	8.09	0.4	0.01464	0.00063	0.0331	-	1.5	0.037	1240	-	4
1437.01	3.2369	264	8.8	66.896	0.011	7.01738	0.00034	11	90	0.02	0.031	0.8	2.2	2.2	0.073	951	-	4
1438.01	5.6224	183	25	69.6485	0.0061	6.91126	0.00018	9.59	0.27	0.01294	0.00032	0.021	0.033	1.5	0.072	939	-	4
†1439.01	23.0602	1084	72	110.8684	0.0034	1155	26	393.3	9	0.03041	-	0.0686	-	4.1	2.235	195	-	4
1440.01	3.0898	245	11	69.0574	0.009	7.19298	0.00027	19.1	1.3	0.01675	0.00098	0.032	0.01	1.4	0.074	851	-	4
1441.01	3.1188	261	12	67.646	0.0087	8.50695	0.00031	12	86	0.02	0.025	0.8	1.7	2.3	0.083	871	-	4
1442.01	1.5890	117	36	67.1309	0.0016	0.6693109	0.0000049	2.54	0.76	0.01096	0.00026	0.46	0.14	1.6	0.015	2242	-	4
1444.01	6.4860	380	19	73.2196	0.0089	44.9279	0.0018	34	117	0.021	0.014	0.8	1.4	3.0	0.259	611	-	4
1445.01	4.6119	92	18	68.682	0.0065	7.16875	0.0002	12.62	0.49	0.00943	0.00033	0.027	0.01	1.2	0.076	1099	-	4
1448.01	2.9237	42267	86	67.1094	0.0012	2.486588	0.000013	8.24	0.13	0.1899	0.0021	0.025	0.028	23.5	0.037	1383	-	4
1452.01	2.3632	12264	76	66.2764	0.0012	1.1522207	0.0000057	3.01	0.9	0.1211	0.0021	0.67	0.2	22.0	0.023	2562	-	4
1459.01	1.0700	4439	116	66.11011	0.00041	0.692023	0.0000013	3.4	1	0.0754	0.001	0.72	0.22	6.9	0.013	1435	-	4
†1463.01	11.9788	21262	1036	77.08517	0.00018	253	-	188.3	2.5	0.13679	0.00042	0.22	0.13	16.3	0.795	311	-	4
1465.01	1.6975	4492	61	68.5853	0.001	9.771425	0.000044	30.9	9.3	0.0728	0.0014	0.66	0.2	4.9	0.089	653	-	4
1468.01	6.2072	1283	65	68.8407	0.0025	8.480842	0.000093	10.89	0.12	0.03339	0.00034	0.019	0.02	3.7	0.083	873	-	4
1472.01	6.5891	4089	93	94.0088	0.0018	85.35029	0.00072	104.42	0.89	0.05905	0.00044	0.03	0.022	3.6	0.37	295	-	4
1474.01	5.8511	4198	125	129.0525	0.0014	69.74538	0.00075	149.2	1.4	0.06164	0.00046	0.001	0.028	11.3	0.356	622	-	4
1475.01	1.5907	752	18	111.9412	0.0033	1.609323	0.000024	7.5	2.3	0.0259	0.0013	0.106	0.032	1.8	0.022	969	-	4
1475.02	3.0303	1103	15	118.4738	0.0059	9.51248	0.00025	24.8	1.5	0.0317	0.0015	0.006	0.01	2.2	0.073	532	-	4
1476.01	5.7031	2555	24	155.2876	0.0058	56.3647	0.0024	80.6	2.7	0.0467	0.0013	0.001	0.01	4.6	0.286	413	-	4

†1477.01	8.3090	13927	84	161.9327	0.0016	400	-	315.54302	-	0.12163	-	0.7224	-	9.4	1.044	195	-	4
1478.01	8.0856	2793	150	132.4853	0.001	76.13333	0.00047	75.54	0.34	0.04886	0.00022	0.002	0.017	3.7	0.348	341	-	4
1480.01	3.9475	1381	26	75.3196	0.0047	20.38139	0.0004	41.2	1.4	0.03472	0.00094	0	0.014	2.5	0.138	475	-	4
1486.01	7.0829	7664	75	96.8928	0.0021	254.5598	0.003	206.4403	0.0024	0.09359	-	0.7941	-	8.5	0.796	256	-	4
1486.02	5.4993	782	18	79.6407	0.0083	30.1839	0.0012	43.3	1.8	0.0263	0.00098	0.038	0.025	2.4	0.192	521	-	4
1488.01	1.6191	762	24	67.6076	0.0026	3.949663	0.000044	20.809	0.089	0.0273	0.00075	0.0355	-	2.6	0.048	941	-	4
1489.01	3.8636	905	20	73.4823	0.0057	16.00474	0.00042	32.5	1.4	0.02796	0.00095	0.028	0.048	2.4	0.12	564	-	4
1494.01	2.9005	707	13	69.6943	0.0092	8.19571	0.00026	17	162	0.028	0.054	0.7	2.7	2.4	0.073	659	-	4
1495.01	5.0903	740	26	70.5618	0.0057	15.5947	0.00037	24.32	0.74	0.02528	0.00066	0.024	0.037	2.6	0.124	693	-	4
1498.01	3.9280	462	19	71.7503	0.0061	5.83375	0.00016	11.59	0.46	0.02101	0.00071	0.0229	-	1.8	0.064	917	-	4
1499.01	4.2960	679	41	73.59	0.0033	14.16394	0.00019	21	66	0.026	0.016	0.6	1.7	3.0	0.115	708	-	4
1501.01	2.1661	407	16	67.0247	0.0048	2.61709	0.000053	8.9	2.7	0.01899	0.00098	0.103	0.031	1.7	0.035	1003	-	4
1502.01	1.5056	413	19	66.1275	0.0032	1.876417	0.000025	10.2	0.48	0.02283	0.0008	0.0573	-	1.9	0.029	1131	-	4
1503.01	10.8923	2254	36	71.289	0.0057	150.2421	0.005	110	2.2	0.04384	0.00077	0.001	0.059	2.7	0.535	242	-	4
1505.01	3.1205	415	14	70.3243	0.007	5.03266	0.00015	13.09	0.63	0.02214	0.00087	0.074	-	2.2	0.058	999	-	4
1506.01	6.3551	783	19	72.5005	0.0081	40.4291	0.0015	50.8	1.9	0.02622	0.00088	0.019	0.014	2.3	0.232	462	-	4
1507.01	6.0774	589	17	68.0439	0.0094	21.36041	0.00093	27.6	1.2	0.02269	0.00087	0.023	0.01	2.3	0.154	634	-	4
1508.01	4.5912	677	15	69.4735	0.0085	22.04698	0.00079	38.888	0.0057	0.03	0.53	0.022	0.014	1.6	0.152	483	-	4
1510.01	1.1235	469	19	111.3478	0.0025	0.839992	0.00001	7	21	0.028	0.018	0.2	2	1.8	0.016	1275	-	4
1511.01	2.2855	332	23	66.2205	0.0036	2.578886	0.000039	9.04	0.36	0.01828	0.00056	0.0019	-	1.6	0.037	1150	-	4
1512.01	2.0692	646	19	70.867	0.0039	9.04184	0.00015	25	167	0.028	0.037	0.7	2.1	2.1	0.082	652	-	4
1515.01	1.5355	305	25	67.7191	0.0025	1.937029	0.000021	9.96	0.4	0.01774	0.00056	0.014	0.044	1.3	0.025	927	-	4
1516.01	5.1817	623	22	72.5445	0.006	20.55453	0.00052	31	237	0.024	0.037	0.1	3.3	2.3	0.151	656	-	4
1517.01	6.0046	931	37	84.8066	0.0041	40.06897	0.00076	53.1	1.1	0.02823	0.00051	0.029	0.036	3.3	0.235	544	-	4
1518.01	5.2245	510	17	84.8435	0.008	27.50658	0.00096	29	158	0.023	0.025	0.7	2	2.2	0.18	541	-	4
1519.01	2.2369	321	11	66.8256	0.0067	5.1445	0.00015	17	127	0.019	0.03	0.4	3	1.5	0.056	785	-	4
1520.01	3.2262	499	21	71.162	0.0048	18.45865	0.00037	40	328	0.022	0.036	0.4	3.1	2.1	0.136	597	-	4
1521.01	4.0344	547	17	89.1984	0.0074	25.94116	0.00083	49	559	0.022	0.052	0.3	3.8	2.4	0.168	532	-	4
1522.01	5.0713	524	20	81.9293	0.0074	33.3857	0.0011	52.6	2.1	0.02135	0.00072	0.023	0.042	2.5	0.207	562	-	4
1523.01	5.3847	239	15	68.8682	0.01	8.47997	0.00038	7	28	0.019	0.013	0.8	1.4	2.2	0.082	835	-	4
1525.01	4.4884	202	22	66.5555	0.0058	7.71467	0.00019	12.78	0.4	0.01394	0.00037	0.006	0.032	2.1	0.081	1214	-	4
1526.01	3.0765	184	10	66.4632	0.0094	4.44448	0.00017	12.62	0.87	0.01487	0.00086	0.0388	-	1.3	0.054	1003	-	4
1527.01	5.6836	1029	18	95.8719	0.008	192.674	0.011	222	705	0.034	0.021	0.8	1.3	4.9	0.67	337	-	4
1528.01	1.5604	194	17	67.0984	0.0035	3.989558	0.000057	21.7	1.3	0.01431	0.00079	0.0163	-	0.8	0.046	746	-	4
1529.01	3.5244	277	15	80.7485	0.0074	17.97619	0.00056	36	320	0.017	0.03	0.5	3.1	1.7	0.138	699	-	4
1530.01	3.5406	239	20	72.7821	0.0048	12.98486	0.00028	16	70	0.017	0.014	0.8	1.4	2.0	0.112	819	-	4
1531.01	2.3874	158	20	69.5839	0.0042	5.69927	0.0001	18	103	0.012	0.014	0.2	2.8	1.4	0.064	1049	-	4
1532.01	4.9255	192	18	80.4987	0.0085	18.11417	0.00067	17	70	0.015	0.011	0.8	1.5	2.0	0.141	816	-	4
1533.01	3.0841	143	16	67.8854	0.006	6.24151	0.00016	15	99	0.012	0.016	0.3	2.9	1.4	0.069	1062	-	4
1534.01	5.9455	157	16	79.9832	0.0099	20.42238	0.00086	16	65	0.014	0.01	0.8	1.4	1.6	0.152	730	-	4
1535.01	6.6899	349	18	121.5617	0.0078	70.699	0.0029	66	314	0.019	0.018	0.6	2	2.4	0.347	485	-	4

1536.01	2.9231	60	13	66.5632	0.0071	3.74438	0.00011	10.32	0.47	0.00854	0.00036	0.0514	-	1.0	0.049	1209	-	4
1537.01	6.1963	59	14	69.678	0.012	10.19201	0.00049	12.83	0.34	0.00785	0.0003	0.029	0.01	1.0	0.094	922	-	4
1540.01	2.9953	45881	207	111.21359	0.00049	1.2078522	0.0000029	3.8	1.1	0.1971	0.0011	-	-	19.3	0.022	1516	-	4
1541.01	3.2386	46979	549	66.6509	0.00021	2.37928	0.0000021	6.760957	0.000011	0.2	0.013	0.0001	-	20.6	0.036	1394	-	4
1543.01	4.7888	25650	349	69.02882	0.00042	3.9643332	0.000007	7.3	0.021	0.14827	0.00032	0.0016	-	14.9	0.05	1102	-	4
1546.01	1.7236	11934	105	66.9341	0.00064	0.9175586	0.0000026	4.14	0.042	0.10122	0.00077	0.026	0.022	5.8	0.018	1309	-	4
1549.01	3.7446	11305	254	67.22398	0.00053	29.481036	0.000071	36	11	0.26867	0.00068	1.24	0.37	32.8	0.189	579	-	4
1553.01	6.6202	5521	78	89.3039	0.0022	52.75935	0.00051	65.33	0.67	0.06878	0.0006	0	0.022	7.1	0.282	481	-	4
1557.01	1.9833	1654	54	66.9645	0.0014	3.295711	0.000019	13	58	0.039	0.035	0.4	2.3	5.2	0.043	1123	-	4
1560.01	2.7667	4015	95	91.2984	0.0011	31.56915	0.00016	39	12	0.24781	0.00089	1.35	0.41	29.6	0.2	580	-	4
1561.01	2.0755	2052	34	115.081	0.002	9.085928	0.000088	19.1	5.7	0.0521	0.0016	0.78	0.23	5.6	0.087	836	-	4
1564.01	5.3239	2920	70	82.2007	0.0022	53.44931	0.00052	80.68	0.97	0.05007	0.0005	0.0032	-	3.1	0.275	360	-	4
1569.01	2.7366	1098	21	76.0275	0.0042	13.75242	0.00026	41.4	2	0.0314	0.0012	0.025	0.053	2.5	0.103	543	-	4
1573.01	3.4077	1743	63	89.521	0.0015	24.80762	0.00017	61.33	0.92	0.03919	0.00046	0.021	0.025	3.8	0.17	589	-	4
1574.01	11.5744	4475	134	98.1547	0.0021	114.7316	0.001	80.46	0.4	0.06184	0.0003	0	0.022	5.8	0.465	331	-	4
1576.01	2.7055	774	37	76.0467	0.0022	10.41565	0.00011	29	163	0.026	0.03	0.3	2.7	3.2	0.095	828	-	4
1577.01	1.7039	514	13	66.7309	0.005	2.806213	0.00006	11.2	3.4	0.022	0.0015	0.252	0.076	1.5	0.032	810	-	4
1581.01	10.6245	579	15	70.537	0.017	29.5511	0.0022	16	60	0.025	0.018	0.7	1.7	2.3	0.186	499	-	4
1582.01	4.7382	3514	47	79.9795	0.0025	186.3827	0.0019	210	63	0.0636	0.0012	0.64	0.19	4.5	0.626	240	-	4
1583.01	4.5321	444	18	70.2059	0.0072	8.04725	0.00025	13.64	0.58	0.01984	0.00072	0.03	0.01	1.8	0.079	797	-	4
1584.01	2.3611	509	14	70.2416	0.0061	5.87084	0.00015	23.3	1.5	0.0248	0.0011	0.0676	-	1.9	0.054	667	-	4
1585.01	4.9613	768	21	72.7384	0.0065	19.1797	0.0006	30.7	0.47	0.02583	0.0008	0.062	0.014	2.2	0.14	573	-	4
1586.01	2.0622	559	25	68.4635	0.003	6.991262	0.000091	20	125	0.024	0.03	0.7	2.2	1.7	0.066	647	-	4
1587.01	3.1788	3872	35	92.0623	0.003	52.97102	0.00077	68	20	0.0795	0.0067	0.88	0.26	7.4	0.269	393	-	4
1588.01	1.5328	460	20	68.5461	0.003	3.517485	0.000045	19.21441	0.00025	0	1.8	0.0582	-	1.5	0.037	751	-	4
1589.01	4.2548	405	22	71.7748	0.0064	8.72548	0.00024	16.32	0.57	0.01933	0.00058	0.017	0.01	2.2	0.085	895	-	4
1589.02	4.0724	420	19	68.2065	0.0061	12.88195	0.00033	24.9	1	0.01983	0.00068	0.011	0.01	2.3	0.11	787	-	4
1590.01	3.6462	718	13	134.2278	0.0062	25.78004	0.00084	34	106	0.029	0.017	0.8	1.3	2.8	0.163	494	-	4
1590.02	1.5004	305	11	110.8828	0.0051	2.355804	0.000058	13.15	0.92	0.0198	0.001	0.0393	-	1.9	0.033	1098	-	4
1591.01	2.4255	764	17	73.2918	0.0051	19.65703	0.00044	67.4	4	0.027	0.0013	0.029	0.01	1.5	0.134	434	-	4
1593.01	2.6164	553	12	115.4672	0.0075	9.69448	0.00035	18	152	0.026	0.041	0.8	2.2	2.5	0.09	794	-	4
1595.01	5.1212	724	21	75.0828	0.007	40.1088	0.0012	41	158	0.028	0.021	0.7	1.5	2.9	0.233	502	-	4
1596.01	2.7169	359	17	67.6846	0.0053	5.9236	0.00013	12	65	0.021	0.022	0.7	1.9	2.3	0.061	825	-	4
1596.02	4.3349	1092	16	71.6868	0.0073	105.3551	0.0039	205	2218	0.032	0.071	0.5	3.5	3.5	0.416	316	-	4
1597.01	4.6377	315	31	67.42	0.0042	7.79663	0.00014	13.1	0.31	0.01668	0.00035	0.019	0.032	2.1	0.08	1043	-	4
1598.01	5.6905	1032	37	76.8112	0.0039	56.4754	0.0011	78.7	1.6	0.02968	0.00055	0.002	0.025	3.0	0.292	437	-	4
1599.01	4.8627	446	17	72.9972	0.0075	20.42116	0.00068	19	56	0.023	0.013	0.8	1.2	2.5	0.149	636	-	4
1601.01	6.2071	263	20	66.7171	0.0079	10.35066	0.00036	11	54	0.016	0.016	0.5	2.2	1.5	0.093	726	-	4
1602.01	5.8532	242	12	70.223	0.013	9.97788	0.00058	8	42	0.018	0.017	0.8	1.7	1.7	0.092	757	-	4
1603.01	2.7672	179	20	66.485	0.0046	3.02153	0.000059	5	21	0.016	0.013	0.8	1.4	1.4	0.042	1146	-	4
1605.01	1.4484	333	17	68.0478	0.0035	4.939157	0.000074	16	1	0.01413	0.00073	0.017	0.053	1.8	0.058	1126	-	4

1606.01	1.9798	222	18	66.2173	0.004	5.082573	0.000087	18.52	0.14	0.0131	0.00066	0.2899	-	1.2	0.058	908	-	4
1608.01	4.4061	190	17	71.7175	0.0074	9.1759	0.00028	15.85	0.66	0.01344	0.00049	0.047	0.01	1.6	0.089	943	-	4
1609.01	5.4671	346	20	102.5701	0.0077	41.6984	0.0015	31	74	0.0206	0.009	0.86	0.95	2.3	0.243	551	-	4

Table 3.
Notes to table of Planet Candidate Characteristics

Key:

APO	Active pixel offset. The pixel that actually dims during a transit is offset from the position of the target star implying a background variable star.
Double star	There is within 4" an object evident in images that has not been ruled out as the source of the transit.
V-shaped	The transit light curve is "V" shaped, a possible indication of an eclipsing binary
Odd-even	Transit depths are alternately deeper and shallower, an indication of an eclipsing binary
Occultation	Evidence of secondary eclipse, implying possible EB or self luminous planet
SB1	RV varies by over 1 km/s in low SNR reconnaissance spectra. Double lines not seen.
SB2	Double lines seen in spectrum.

KOI	Note
1.01	TrES-2; O'Donovan et al. 2006 ApJ 650 L61
2.01	HAT-P-7b; Kashyap et al. 2008 ApJ 687 1339
3.01	HAT-P-11b; Dittman et al. 2009 ApJ 699 L48
4.01	Rapid rotator Vrot = 40 km/s
5.01	Double star; 0.16" NE; delta_m=3.1 at 692 nm
7.01	Kepler-4b; Borucki et al. 2010 ApJ 713 L126
10.01	Kepler-8b; Jenkins et al. 2010 ApJ 724 1108
12.01	Marginally saturated
13.01	Double star; 0.8" E; delta_m=0.4 mag at 692 nm
17.01	Kepler-6b; Dunham et al. 2010 ApJ 713 L136
18.01	Kepler-5b; Koch et al. 2010 ApJ 713 L131
44.01	Variable transit depths
51.01	Light curve has spot/rotation modulation
63.01	Radial velocity variations have a dispersion 23 m/s
64.01	May be an F-M binary
69.01	Saturated. Double star; 0.05" NW; delta_mag=1.4 mag
72.01	Kepler-10b; Batalha et al. 2011 ApJ accepted
97.01	Kepler-7b; Latham et al. 2010 ApJ 713 L140
99.01	Double star; 4" SE
100.01	Rapid rotator; Vrot=35 km/s
102.01	Double star; 2.5" SW
112.01	Double star; 0.09"; delta_m = 2.7 at 692 nm
117.02	Possible APO
117.03	Possible APO
119.01	Possible SB1
131.01	Possible APO
135.01	Centroid analysis clean
144.01	KIC radius likely overestimated
151.01	V-shaped; may be triple system
155.01	Double star; 2" W
157.01	Kepler-11b; Lissauer et al. 2011 Nature accepted
157.02	Kepler-11c; Lissauer et al. 2011 Nature accepted
157.03	Kepler-11d; Lissauer et al. 2011 Nature accepted

157.04	Kepler-11e; Lissauer et al. 2011 Nature accepted
157.05	Kepler-11f; Lissauer et al. 2011 Nature accepted
157.06	Kepler-11g; Lissauer et al. 2011 Nature accepted
179.01	Double Star; 4” E
180.01	Variable star
184.01	Odd-even
191.01	Double star; 1” E
191.02	Possible APO; Double star 1” E
208.01	Variable star with possible spots
225.01	Possible ellipsoidal variations
226.01	Possible APO
254.01	5% primary transit
256.01	KIC stellar radius may be too large
258.01	V-shaped; Multiple stars 1” and 2” E
263.01	Double star; 4” E
268.01	Multiple Stars: 2” S and 3” SE
271.02	Possible Odd-even
274.01	Possible APO
284.01	Double star; 0.9” E
340.01	Radius large; but log g may be too low in the KIC
377.01	Kepler-9b; Holman et al. 2010 Science 330 51
377.02	Kepler-9c; Holman et al. 2010 Science 330 51
377.03	Kepler-9d; Torres et al. 2010 arXiv:1008.4393
531.01	Strange light curve; worth follow-up.
607.01	Odd light curve; worth follow-up.
687.01	Varying depths; possible encroaching companion.
741.01	Slight V shape and deep; no APO.
774.01	Possible occultation
961.01	Short duration, under sampled transit
962.01	Weak transit signal; possible low radius planet
968.01	Not convincing transit
972.01	Pulsating star
973.01	Possible APO; poor light curve
976.01	V-shaped; poor fit
977.01	Phase-correlated variations; saturated
978.01	Possibly spurious
981.01	V-shaped; saturated
984.01	V-shaped
992.01	Poor fit to light curve
993.01	Possible APO
994.01	Possible APO
998.01	Eccentric eclipsing binary
1063.01	V-shaped; large planet radius (2.1 RJ)

Table 4
Expected False Positives

Key:

t_0	Time of a transit center based a linear fit to all observed transits and its uncertainty
Period	Average interval between transits based on a linear fit to all observed transits and uncertainty
APO	Active pixel offset. The pixel that actually dims during a transit is offset from the position of the target star implying a background variable star.
Double star	There is within 4" an object evident in images that has not been ruled out as the source of the transit.
V-shaped	The transit light curve is "V" shaped, a possible indication of an eclipsing binary
Odd-even	Transit depths are alternately deeper and shallower, an indication of an eclipsing binary
Occultation	Evidence of secondary eclipse, implying possible EB or self luminous planet
SB1	RV varies by over 1 km/s in low SNR reconnaissance spectra. Double lines not seen.
SB2	Double lines seen in spectrum.

KOI	Kepler ID	t_0 (BJD-2454900)	Period (days)	Depth (ppm)	SNR	Comment
6.01	3248033	66.69954	1.334103	397	97	APO Binary
8.01	5903312	54.70223	1.160154	399	41	APO Binary
9.01	11553706	68.06724	3.719813	3423	380	APO Binary
11.01	11913073	104.65803	3.748075	547	65	APO Binary
14.01	7684873	104.53055	2.947317	302	59	Rapid rotator; Vrot = 90 km/s; Secondary eclipse
15.01	3964562	68.25804	3.012481	1599	301	APO Binary
16.01	9110357	66.40566	0.895298	1527	283	APO Binary
19.01	7255336	66.93003	1.203197	2472	92	Binary, Odd-even
21.01	10125352	54.97329	4.288459	3127	246	Binary
23.01	9071386	69.86191	4.693309	14756	1443	SB1; 18 km/s radial velocity amplitude; secondary eclipse in light curve
24.01	4743513	103.98992	2.086268	10806	421	APO Binary
25.01	10593759	69.00948	3.132604	7879	122	Binary
26.01	5021737					Binary
27.01	3832716	103.33754	1.141879	291300	189	Multiple stellar eclipses
28.01	4247791	101.14347	4.100902	111224	97	Multiple stellar eclipses
31.01	6956014	102.7	0.925516	742	26	Binary
33.01	5725087	66.55824	0.366201	356	52	Probable binary star (Per=0.2 d)
43.01	9025922	110.08114	11.320908	2518	39	APO Binary
45.01	3742855	107.36379	6.397234	18199	287	APO Binary
48.01	7837302	106.7648	23.836924	27844	1008	Binary
52.01	3558981	101.0114	2.987841	46738	127	Binary
53.01	2445975	105.26025	3.388834	8807	55	APO Binary
61.01	8248939	114.8623	1.633372	623	16	APO Binary
66.01	10620329	103.68382	1.308783	691	206	Binary
68.01	8669092	1.63959	1.000977	2518	53	Double star: 0.83arcsec SE; delta_m=2.7 mag at 692 nm; Light curve shows modulation in phase with the transit.
74.01	6889235	58.87577	5.188712	790	50	Binary
76.01	9955262	87.75975	77.451216	914	27	Saturated star; Variable star
80.01	9552608	68.41332	9.250714	988	193	SB1: V-shaped; Secondary eclipse

81.01	8823868	76.07155	23.875999	1640	37	Binary
88.01	7700871	66.88714	2.589751	236	70	APO Binary
90.01	9210823	68.72067	0.828212	240	50	APO Binary
106.01	10489525	64.86603	1.612021	240	45	APO Binary 12arcsec S
109.01	4752451	65.86384	6.4149	414	61	APO Binary
114.01	6721123	65.26635	7.360901	297	11	APO Binary
120.01	11869052	70.89987	20.546581	1860	141	Binary
121.01	3247396	69.45725	8.810982	389	52	APO Binary 1.2arcsec SW
125.01	11449844	84.85057	38.479316	23913	284	SB1
126.01	5897826	135.33287	33.77925	17432	1050	Hierarchical triple
129.01	11974540	65.88433	24.666561	4378	171	Binary
130.01	5297298	88.29605	34.193562	14449	1123	SB1
132.01	8892910	65.95236	10.810049	5811	366	Binary
133.01	11673674	66.38896	4.618688	6661	542	APO Binary
134.01	9032900	86.18499	67.179946	5056	167	SB1
136.01	7601633	80.39962	15.66349	5055	128	SB1; V-shaped
140.01	5130369	70.17318	19.979085	1132	59	APO Binary 6arcsec N
143.01	4649305	73.33962	22.650871	2388	141	SB1
145.01	9904059	91.0779	45.002812	1612	20	Binary
146.01	9048161	70.34138	8.667811	4611	407	APO Binary
147.01	1996679	79.05365	20	2697	22	APO Binary
154.01	9970525	72.72903	30	1078	57	APO Binary
158.01	10555375	70.57828	5.801762	527	55	APO Binary
160.01	6631721	67.43403	13.738118	625	39	APO Binary 4arcsec N; Odd-even
164.01	5652237	65.31493	4.464747	202	20	APO Binary
169.01	6185711	84.13743	11.700984	537	31	APO Binary
170.01	11044770	77.29725	15.608935	233	22	APO Binary
175.01	8323753	67.31485	6.714228	457	49	APO Binary 8arcsec NE; 3% transit on nearby KIC 8323764
178.01	11455491	68.159	6.143084	179	28	APO Binary MAST FP
181.01	12504988	72.71686	5.093946	26156	1050	Binary
182.01	5376836	69.79714	3.479294	19156	205	SB1: secondary eclipse; 30 km/s variation RV variation
184.01	7972785	66.56668	7.300705	13378	864	Binary Brown Dwarf Odd-even
185.01	4178389	67.38638	23.210439	29037	792	Binary
198.01	10666242	86.36912	87.233068	20687	403	SB1: V-shaped; 9 km/s RV variation
210.01	10602291	72.32516	20.927351	8264	276	SB1: V-shaped; 10 km/s RV variation
213.01	9164836	103.83962	48.118647	78601	1240	SB1
215.01	12508335	88.20608	42.943545	9709	158	V-shaped Double star: 2arcsec N
218.01	9838975	76.83238	18.692915	56736	648	Binary
224.01	5547480	65.07193	3.979789	1016	51	APO Binary 4arcsec S
230.01	3862246	69.3061	4.70253	4069	90	Binary
231.01	4043443	95	119.7	6424	60	Binary
233.01	5023956	80.48307	1.824639	8311	685	APO Binary
236.01	8453211	76.0925	5.776826	3961	323	APO Binary
243.01	9592579	67.21109	2.637587	5743	359	APO Binary
259.01	5790807	140.12541	79.996026	24236	667	Binary
264.01	3097346	103.6909	4.029783	177	61	APO Binary SB1; 10arcsec E

266.01	7375348	104.51168	25.308485	133	26	APO Binary 2arcsec NW
267.01	8167959	140.33404	170.564783	118	9.2	Spurious Detection Light curve artifact
272.01	5716763	102.6666	1.281318	490	101	APO Binary
286.01	8258171	106.63073	23.631011	126	28	Binary; V-shaped, secondary eclipse
287.01	8703887	108.60714	14.170948	9409	268	APO: 8arcsec NE
290.01	10488450	104.42464	2.683386	327	53	APO Binary
293.01	11200415	105.21434	4.639598	144	31	APO: 8arcsec W
300.01	3438975	104.66069	2.976105	111	28	APO: 2arcsec S
309.01	7024222	103.19735	1.633091	64	12	APO: 8arcsec NE, V-shaped, Secondary eclipse possibly on nearby KIC 7024229
311.01	7024511	108.64811	66.155811	3579	30	APO Binary
320.01	8700558	106.51072	4.791957	137	32	Binary
322.01	8948424	106.58265	5.888834	15417	110	Binary
324.01	9641041	104.2285	1.089083	139	62	Binary
325.01	9724984	104.00304	7.863267	449	45	Binary
328.01	9895004	103.32188	2.250817	545	49	APO: 3arcsec S, Double star: 2" S, delta_mag > 5 mag at I filter
329.01	10031885	107.94672	8.590949	113	14	APO: 8arcsec E
334.01	10383687	109.93541	8.487801	363	27	APO Binary
336.01	10518725	108.25221	19.506989	173	12	APO Binary
347.01	11189127	102.85301	2.671944	15250	142	Binary
358.01	12017140	105.8018	22.845232	46728	2495	Binary
359.01	12106929	104.5856	5.936699	348	24	APO: 10arcsec S
362.01	1571511	110.5945	14.022451	20957	2270	Binary
363.01	2438070	104.0968	2.442946	989	130	Binary
376.01	12643589	144.53871	220.7246	3856	50	Binary
376.02	12643589	111.26218	1.411632	513	36	Binary; deep transit
378.01	2449074	106.75081	4.943872	928	57	APO Binary
380.01	2452450	103.8115	8.09694	1108	109	APO Binary
381.01	3230578	103.18917	6.337653	1734	99	SB1: 90 km/s RV variation, secondary eclipse
382.01	3231137	105.36798	3.900201	883	85	APO Binary
389.01	3847708	104.70781	3.741174	862	86	APO
390.01	3849155	103.60189	1.168317	308	40	APO: 3arcsec S
391.01	3858804	107.83701	25.958842	405	31	APO: 7arcsec E
394.01	4159347	107.35772	12.28406	511	27	APO: 2arcsec S
395.01	4165960	104.01164	6.774472	548	38	APO: 4arcsec S
396.01	4252322	113.84957	14.591555	1296	50	Binary
397.01	4376644	106.79527	27.67775	8384	386	SB2
399.01	7289157	106.82975	5.266478	72027	523	SB2, V-shaped, Secondary eclipse
400.01	2695110	142.98685	44.190443	4005	63	APO
402.01	3342592	103.54579	17.17733	24757	972	Binary
404.01	4949751	119.38611	31.805916	3360	107	APO Binary
405.01	5003117	123.6832	37.617744	29139	1119	Binary
406.01	5035972	124.18974	49.266722	8503	215	Binary
407.01	5218441	104.42236	3.613743	5160	362	Binary
411.01	5478055	107.23072	15.851644	721	21	APO Binary
414.01	5872150	108.3429	20.355117	27585	1154	SB1: 20 km/s RV variation, Possible Odd-even, Possible secondary eclipse

414.02	5872150	106.82314	5.922128	366	19	SB1: 20 km/s RV variation, Possible Odd-even, Possible secondary eclipse
424.01	9597411	103.39252	1.575632	24382	482	Binary
434.01	11656302	106.10122	22.265052	19044	783	Transit depth too deep, Double star: 3" SE at J
436.01	11805075	158.3578	200	32503	327	Binary; deep transit depth
437.01	11824222	110.1409	15.84134	22106	139	Binary
441.01	3340312	106.91384	30.547936	632	18	APO: 2arcsec S
445.01	4384675	191.3437	200	4254	33	Partial Single Transit
447.01	5021176	105.68099	4.045084	869	51	Binary
449.01	5779852	173.23463	252.079331	4341	73	Binary
450.01	6042214	104.95475	27.046295	1062	37	APO: 4arcsec NE
451.01	6200715	105.18015	3.723577	585	39	APO: 8arcsec W
453.01	6758917	102.64822	2.23609	29399	58	Binary
455.01	7101828	126.20207	47.880541	923	24	APO Binary
461.01	8621348	105.84204	11.344441	916	44	Binary
462.01	8773869	103.88046	1.576334	839	132	APO Binary
482.01	11255761	102.55198	4.992736	771	38	APO:4arcsec ESE
485.01	12316431	108.55026	17.908864	1061	46	APO
489.01	2576197	104.69565	2.217017	683	42	APO
491.01	3541800	102.66617	4.661868	354	22	APO: 8 arcsec S
493.01	3834360	103.12284	2.908459	678	39	APO: 4 arcsec SE
495.01	4049108	102.63841	4.804379	677	39	APO: 12 arcsec E
498.01	4833135	110.53567	8.660657	111	7	Spurious Detection
502.01	5282051	104.15518	5.910368	232	19	APO: 10 arcsec S
514.01	7602070	109.0658	11.756019	788	36	APO: 8 arcsec SE, transit depth changes
515.01	7812179	102.60907	17.792292	1310	54	APO Binary
516.01	7840044	104.09574	13.542045	607	32	APO
527.01	9636569	104.68827	10.636614	330	24	APO Binary
529.01	10068030	103.51226	2.023127	1277	48	Binary
539.01	11246364	104.24141	200	362	8.3	Spurious Detection
540.01	11521048	127.8248	25.702616	5252	54	APO: 4 arcsec NW, V-shaped, Odd-even
544.01	11913012	104.66417	3.747895	389	27	APO: 10 arcsec NE
545.01	11972666	103.37698	1.091763	195	16	APO: 10 arcsec E
549.01	3437776	126.50951	42.899607	758	13	APO
549.02	3437776	66.41894	0.635578	407	63	APO
553.01	5303551	104.45359	2.399009	326	20	APO: 6 arcsec S
556.01	5738496	108.65576	9.503451	437	17	Binary
565.01	7025846	103.19693	2.340506	181	22	APO: 8 arcsec N
570.01	8106610	105.78106	12.398394	583	24	APO: 8 arcsec S
576.01	8474898	173.84915	199.444158	5745	82	APO: 8 arcsec W
591.01	9886221	103.79579	2.992808	140	10	APO
595.01	10294465	183.93512	200	4037	40	Spurious Detection
603.01	2441151	104.6703	2.19201	1490	105	APO Binary
604.01	3970233	107.4336	8.254955	20142	662	Binary
606.01	5014753	105.04683	3.170623	14181	140	Binary
608.01	5562784	125.90668	25.337283	2035	74	APO
613.01	6960456	104.55631	5.074714	566	23	APO Binary

615.01	8374580	125.50459	176.239818	6046	100	APO: 3 arcsec SW
616.01	9714696	102.84973	1.433356	415	28	Binary
619.01	10384962	103.7099	2.879242	49699	232	Binary
621.01	12251650	107.18212	17.762041	22623	466	Binary
630.01	4659405	104.92727	4.532367	425	41	APO Binary
631.01	4742414	106.78138	15.458069	4358	693	SB1
634.01	4861736	105.57831	6.277803	1838	162	APO Binary
636.01	5090690	109.63508	12.011655	13445	1336	SB1
637.01	5098444	110.97822	26.948407	16053	162	SB2
642.01	5181817	104.43335	4.350379	183	20	APO Binary
643.01	5309353	102.73079	1.376372	309	26	SB2
646.01	5384802	103.49023	3.041456	19146	1237	Hierarchical triple
648.01	5596440	105.11995	10.474877	2184	81	Secondary eclipse; radius 7 Rjup - too large.
651.01	5796186	137.12803	42.559655	2070	82	APO Binary
653.01	5893123	102.632	1.125969	144	24	APO: 8 arcsec SW
656.01	5966660	103.06339	1.906628	530	110	APO Binary
668.01	6805146	111.68746	13.7797	26160	2903	Binary
669.01	6960445	104.56468	5.074351	933	88	APO Binary
675.01	7385509	102.54614	1.655473	1999	139	APO: 6 arcsec W; V-shaped
677.01	7466863	104.07983	11.971853	454	17	APO: 4 arcsec
681.01	7598128	121.49531	44.258089	20356	1032	SB1
690.01	8409588	102.70818	1.360839	1361	119	Binary
696.01	8869680	107.15636	7.033951	105	20	APO
699.01	8908102	107.60562	5.414584	4914	172	SB1; V-shaped
702.01	9053112	102.867	1.27484	359	82	APO Binary
705.01	9300285	103.18743	1.012676	1190	146	APO Binary
706.01	9426071	115.60821	28.714155	43504	1755	Binary
713.01	9640985	104.22897	2.178174	410	56	Binary
715.01	9834719	103.35853	1.621665	6413	56	SB2
724.01	10005020	107.70358	6.970892	477	25	APO Binary
726.01	10157573	106.26507	5.11578	960	39	APO: 4 arcsec E
727.01	10191070	103.58189	1.213737	1772	130	APO Binary
729.01	10225800	102.67394	1.423802	2091	91	APO: 2 arcsec N
731.01	10259031	102.86523	7.061031	3608	99	APO Binary
742.01	10419211	103.83978	11.52139	17206	446	Binary
744.01	10480982	117.55132	19.221399	72570	1554	Binary
748.01	10583180	103.73521	2.696436	383	25	Binary
754.01	10848459	103.3066	1.736957	7825	331	Binary
761.01	11152159	103.69418	2.701326	1176	39	APO: 6 arcsec NE
768.01	11442465	119.67371	33.93387	8042	170	APO
770.01	11463211	103.9971	1.506357	2287	109	APO: 3 arcsec NE
789.01	12459725	104.49591	14.180511	462	7.4	APO: 10 arcsec E
792.01	2440757	103.40219	1.433833	1890	75	Binary
793.01	2445129	106.31213	10.318845	704	21	APO
796.01	3114661	102.86259	1.332894	12019	87	APO: 10 arcsec S
798.01	3120431	104.64252	3.34192	1045	33	Binary
803.01	3554600	104.78318	7.546344	382	11	APO

807.01	3836375	103.50377	1.540409	1667	54	APO: 12 arcsec SE
808.01	3838486	104.98512	2.990307	646	29	APO
819.01	4932348	129.93326	38.03697	87384	1478	Binary
820.01	4936180	106.72046	4.640905	4430	103	Binary, V-shaped, Possible ellipsoidal variations
828.01	5287983	104.00036	2.507109	1886	64	APO
831.01	5370302	106.39528	3.904278	16419	521	Binary
832.01	5372966	104.82031	9.286365	46813	1422	Binary
836.01	5481416	104.58344	2.384036	1269	24	APO: 6 arcsec E, Odd-even
839.01	5649215	103.67139	2.4467	3144	209	APO Binary
848.01	6267425	105.00138	3.166479	4834	124	Binary
859.01	6675056	108.40596	10.443261	859	23	APO: 12 arcsec SE
862.01	6756669	106.82149	5.851534	35214	1170	Binary
866.01	6862603	104.64695	2.861178	1298	46	Binary
888.01	7552344	102.96884	1.000786	1889	107	Binary
894.01	7708215	107.5174	7.943013	2911	81	APO Binary
909.01	8256049	105.76151	16.371955	9842	178	APO Binary
915.01	8605074	127.71347	37.601454	64858	742	Binary
919.01	8686150	106.53537	51.426011	71051	1213	Binary
925.01	9016295	104.62927	19.974485	39181	762	Binary
927.01	9097120	121.98166	23.899733	21886	428	APO Binary, V-shaped
930.01	9159275	105.00944	3.044891	1431	103	APO Binary
932.01	9166870	103.68018	3.855545	1497	89	APO
933.01	9171801	104.6591	3.185933	1094	13	APO
946.01	9661877	109.71686	20.427268	2285	58	APO Binary
948.01	9761882	106.70756	24.586099	984	21	APO: 6 arcsec W
950.01	9772531	116.40765	31.201504	32363	396	Binary
957.01	7661409	111.46762	3.140565	1971	120	Binary
958.01	1026957	99.5413	21.761045	933	8.9	Grazing EB
959.01	10002261	108.07184	12.713795	36851	957	White Dwarf
964.01	10657664	104.23836	3.273699	7811	58	Possible white dwarf
965.01	3337351	108.0321	7.047115	41819	452	APO
967.01	6579806	106.60816	9.880483	17819	299	Binary star
968.01	3560301	194.28976	4.649301	122	42	Spurious Detection
970.01	11502218	104.01865	3.988635	729	28	Occultation
971.01	11180361	104.2261	0.533058	1237	102	Binary
978.01	11494130	195.43461	18.954856	471	100	Binary
980.01	12167361	112.0942	47.931219	1826	137	Binary
982.01	1433962	66.91651	1.592683	931	58	5.5-sig odd-even
983.01	11607193	199.05683	7.15466	985	18	Spurious Detection
985.01	10227501	194.95809	2.002925	363	20	Spurious Detection Poor fit to light curve
989.01	10743597	117.30935	81.192668	14022	72	Planet radius too large
989.02	10743597	65.83445	0.817026	2431	111	APO Binary
990.01	10015516	71.53571	67.684214	23489	39	Planet radius too large
995.01	3858949	87.9233	25.946596	671	27	Secondary eclipse; eccentric
996.01	3858824	87.88238	25.952109	1733	45	Secondary eclipse; eccentric

997.01	2157247	66.01327	5.686521	4902	113	APO Binary Contact binary; transit on nearby object
1000.01	2441728	66.6694	0.856917	97	22	APO
1004.01	2309585	285.71837	1.838472	949	33	APO
1006.01	5738346	307.63528	30.607094	4889	28	APO
1008.01	1722276	181.92435	300	31943	189	V-shaped Binary
1009.01	892772	290.53448	5.092371	272	8.8	APO
1011.01	5728283	116.37238	6.198276	51074	1568	Secondary eclipse; eccentric
1012.01	8127639	287.8211	1.023438	1603	57	APO
1016.01	8176653	67.06724	2.866656	761	26	APO
1018.01	8183911	70.07805	8.307384	160	12	APO
1021.01	2558363	111.56191	0.546248	671	29	APO
1023.01	2445154	72.67279	8.410946	702	25	APO
1025.01	2574201	90.33265	37.475525	1555	17	APO
1028.01	2166206	73.73622	8.0974	425	30	APO
1034.01	5899544	287.88718	1.739454	11695	76	APO
1035.01	5963222	66.32803	1.217267	7546	486	APO
1036.01	5982353	67.35396	19.563101	12463	1216	40-sigma secondary eclipse
1037.01	6205468	112.30246	3.722924	2947	204	APO
1038.01	6153201	287.98492	0.530301	2537	108	APO Binary 23-sigma secondary eclipse
1039.01	5802486	110.92264	1.07392	2365	133	APO
1040.01	5817553	69.44957	4.206046	1539	137	APO Binary
1041.01	5982368	302.11007	19.564094	3526	71	APO
1042.01	5816811	67.45204	2.227715	1457	118	APO
1043.01	5816165	288.35413	0.591908	1091	34	13-sigma secondary eclipse; odd-even
1044.01	5802246	66.74212	0.525157	962	90	APO Binary 48-sigma secondary eclipse
1045.01	6066403	67.21317	1.303856	439	75	APO Binary 11-sigma odd-even
1046.01	6209637	66.44315	0.734491	342	164	Contact binary
1047.01	5988031	67.4955	2.5555	329	41	APO Binary V-shaped
1048.01	5820218	66.17894	3.411778	588	21	APO
1049.01	5876368	66.18536	0.525428	329	37	APO Binary 7.2-sigma odd-even
1055.01	5866099	66.63221	36.976706	1000	78	APO Binary Secondary Eclipse; eccentric binary
1056.01	5964985	66.26465	1.850845	117	27	Contact binary
1057.01	6066416	67.20831	1.303879	145	78	APO Binary 6-sigma secondary eclipse
1058.01	6124941	69.20124	5.670144	607	29	APO
1062.01	6147122	75.21795	15.450994	241	38	APO Binary Secondary eclipse; eccentric
1063.01	8257407	109.30531	89.69815	266763	7754	V-shaped Binary V-shaped; large planet radius (2.1 RJ)
1064.01	8218274	66.46468	1.187353	19234	310	Binary
1065.01	8242681	66.63778	4.020627	21849	257	Binary
1068.01	8264070	383.76246	2.897046	1148	30	APO
1071.01	8244190	66.18984	1.092087	220	28	APO
1073.01	8262210	111.53907	1.612925	152	13	Contact binary
1075.01	10232123	66.27522	1.343764	4752	168	Binary
1076.01	10223616	75.16079	29.122922	6778	102	Stellar binary - TTV
1077.01	10268907	287.58283	1.103981	2351	62	APO Likely a blend

1079.01	10153827	66.58797	0.293626	831	68	Contact binary
1080.01	10158990	66.60619	1.09661	257	27	APO 4.7-sigma secondary
1084.01	10148521	67.05846	1.204265	218	22	APO Binary 3.8-sigma secondary
1087.01	3124412	67.36639	0.948955	3595	200	APO Binary Blend; eccentric binary
1088.01	3113266	66.34181	1.493792	4881	99	APO
1090.01	3232859	71.90254	8.387211	5448	220	APO
1091.01	3098184	302.53435	15.243206	2244	48	APO Secondary eclipse; eccentric
1092.01	2720309	66.20765	1.240024	1636	57	APO Contact binary
1093.01	3239636	66.3844	0.528753	463	72	APO 12-sigma odd/even
1097.01	3340070	75.61968	10.904413	647	22	APO Binary
1098.01	3240706	67.1046	5.489896	517	19	APO Binary Secondary eclipse; eccentric
1100.01	3228824	288.9061	0.730941	240	13	Contact binary
1104.01	2851100	66.2646	0.890105	426	15	APO Binary Secondary eclipse
1105.01	3130300	66.31262	5.765791	378	22	APO
1107.01	3228959	66.70972	0.730867	212	14	Contact binary
1119.01	3003992	72.09994	7.244998	72	21	APO
1120.01	6307537	90.41441	29.744338	161172	451	Stellar binary
1121.01	6359798	73.69733	14.154037	58683	441	Binary
1122.01	6311681	67.21665	0.844784	2986	189	APO Binary Stellar binary
1123.01	6365321	66.58381	0.848485	1856	116	Binary
1124.01	6301035	76.27948	11.991361	1982	75	APO
1125.01	6292162	290.51705	7.815272	2065	45	Secondary eclipse
1126.01	6307521	90.4045	29.743666	585	25	APO
1130.01	8279765	68.23281	2.757787	37543	362	Secondary eclipse
1132.01	8330548	67.64426	1.91416	7236	122	APO
1133.01	8374494	290.32645	5.251691	6185	151	APO
1134.01	8414907	210.0594	200.611031	23227	188	APO
1134.02	8414907	389.85157	200.622704	12103	109	APO
1135.01	8397446	381.592	0.986617	2226	69	APO
1136.01	8386035	67.51314	1.634815	948	82	APO
1138.01	8415745	299.70512	31.827907	4644	51	APO
1139.01	8378634	67.70132	3.629444	628	90	APO
1140.01	8397675	66.44743	0.553259	1146	120	Binary occultation
1143.01	8312852	67.76284	7.440416	592	23	APO
1147.01	8299955	67.25617	2.682674	132	21	APO
1153.01	10351767	67.01944	0.635073	36772	273	Binary
1154.01	10295951	69.04584	6.810826	14832	713	Binary occultation
1155.01	10342041	66.38725	0.933744	2797	469	APO
1156.01	10514770	67.36536	1.872422	2964	112	Binary occultation
1157.01	10342065	66.38704	0.933747	1474	377	Binary grazing binary
1158.01	10352945	289.38614	6.471815	583	26	APO
1167.01	10485179	66.97753	0.445263	206	42	APO
1171.01	10485069	66.52966	0.445267	182	21	Binary contact binary
1172.01	10341913	67.31822	0.933753	122	55	APO
1173.01	10480921	66.616	2.037225	111	16	APO
1178.01	3869825	67.36948	4.800633	13791	132	Binary phase linked variations
1179.01	3655332	73.65674	15.066423	25123	163	APO

1180.01	4042026	96.01592	34.820008	18755	488	Binary eccentric binary
1181.01	3344419	66.11162	0.651782	4689	188	APO
1182.01	3865567	66.09875	11.116227	5904	127	APO
1183.01	3544689	67.65783	1.922868	2214	56	APO
1184.01	4037164	67.18271	0.635445	2951	122	APO
1185.01	3443790	66.86259	1.665782	1707	108	Binary occultation
1186.01	3966912	89.34976	55.659966	2702	54	APO
1188.01	3860441	66.26721	2.988155	845	37	APO
1189.01	3765771	66.22795	2.783865	898	43	APO
1190.01	3557341	111.58633	0.393729	727	34	Binary contact binary
1196.01	3348082	68.5425	3.981818	510	19	APO
1197.01	3853673	66.98158	0.643798	478	33	APO
1200.01	3557493	66.3066	0.393732	424	41	Binary contact binary
1211.01	3858704	68.64523	3.003592	139	38	APO
1213.01	3556220	66.08445	0.796712	132	35	APO
1217.01	3542588	66.75171	3.47124	105	15	APO
1223.01	6613006	66.93373	7.388831	11651	777	APO
1224.01	6606653	69.33242	2.698025	7480	50	Binary
1225.01	6620003	66.31535	1.714272	28197	668	Binary
1228.01	6387450	68.26916	3.661328	17248	376	Binary occultation
1229.01	6432059	66.29515	0.769738	10490	210	Binary occultation
1231.01	6462874	88.08445	22.342917	3039	45	APO
1232.01	6665223	165.64948	238.814686	18640	289	Binary (large radius)
1233.01	6545358	111.59514	1.171542	1366	48	APO
1234.01	6390824	66.49873	0.973544	1442	75	APO
1235.01	6546528	66.88287	3.053602	459	33	APO
1237.01	6531491	297.38226	14.325861	772	13	APO
1243.01	6677256	289.40143	3.126045	261	13	APO
1247.01	8801343	67.54977	2.739874	22189	455	Binary (phased locked variations)
1248.01	8488878	290.45296	5.801871	20730	495	APO
1250.01	8620565	67.02127	0.782044	14820	195	APO
1251.01	8616873	67.10443	0.576082	9222	383	Binary
1252.01	8737796	67.48073	0.885763	4247	281	APO
1253.01	8462258	290.24997	3.611524	2157	71	APO
1254.01	8454250	70.25924	5.082704	2168	58	APO
1256.01	8848271	70.44893	9.991579	3415	167	APO
1259.01	8823426	111.18663	1.506477	739	47	APO
1260.01	8766222	110.97695	5.296678	997	30	APO
1262.01	8703884	292.82951	14.170888	2374	45	APO
1263.01	8560840	66.88154	31.971634	1074	27	Binary eccentric binary
1265.01	8552583	66.84451	1.061949	407	39	APO
1267.01	8519253	69.53055	5.938123	834	35	APO
1269.01	8757910	66.17576	0.655003	382	87	APO
1272.01	8552498	66.84806	0.530968	201	60	Binary 12 sigma odd-even
1277.01	8552565	66.84725	1.061938	161	46	APO
1280.01	8509361	68.52649	6.099026	225	25	APO
1284.01	10960993	66.12539	1.558546	8533	426	Binary
1286.01	10879208	111.2802	0.668484	3332	126	APO

1289.01	10748393	287.53941	4.88778	3142	26	APO
1290.01	10874226	77.77651	11.973776	3485	78	Binary
1291.01	10661771	66.0339	1.231376	980	129	APO
1292.01	10924853	67.3941	2.102421	1783	78	APO
1293.01	10874926	66.72149	11.703074	3999	88	Binary occultation
1294.01	10549562	72.07875	9.089494	1023	64	APO
1295.01	10666230	66.30807	1.577794	684	51	Binary occultation
1296.01	10971674	68.32449	2.380863	34583	1371	Binary occultation
1297.01	10676923	66.9362	1.031112	384	39	APO
1313.01	10785538	66.74787	0.522466	184	40	APO
1318.01	4070376	66.96805	1.634614	19619	195	Binary
1319.01	4078157	300.69473	16.025273	20671	218	APO
1321.01	4480676	67.22337	0.711965	6016	245	Binary
1322.01	4079535	289.79691	17.726895	16147	276	APO
1324.01	4551328	66.1377	0.522059	1448	113	Binary 24 sigma odd-even
1326.01	4639868	68.97114	53.100926	13485	847	Binary
1327.01	4372768	292.04613	15.642622	1720	25	APO
1330.01	4150539	67.32308	8.65258	688	19	APO
1333.01	4285107	66.44838	2.24301	277	28	APO
1334.01	4150624	67.29188	8.653379	510	15	APO
1340.01	4386059	112.84431	2.900473	206	18	APO
1343.01	4570931	66.5491	1.54492	138	20	APO
1345.01	7284688	66.6039	0.32302	48165	262	Contact Binary
1346.01	7199774	70.07146	4.708125	52057	318	Binary occultation
1348.01	6866228	70.56335	7.702363	16949	93	Binary
1349.01	6847018	75.18696	16.662103	22623	107	Binary
1350.01	7220322	67.04433	0.752164	5591	130	APO
1352.01	6956233	291.16441	4.818807	3700	124	APO
1354.01	6891543	67.47279	1.752572	771	66	APO
1365.01	7174351	66.9749	1.487105	408	13	APO
1368.01	7357531	163.02483	251.059866	6255	89	APO
1371.01	6878167	66.6844	0.833971	216	28	APO
1373.01	6863839	66.7014	1.926129	185	19	APO
1374.01	7296086	67.56837	0.890732	218	28	APO
1380.01	7025526	66.84556	1.074081	65	28	APO
1381.01	9451127	67.58585	5.117403	64104	411	Binary occultation
1383.01	8953257	69.14077	3.221787	45922	317	Binary occultation
1384.01	8971432	66.04537	0.62438	38858	415	Binary occultation
1386.01	9143254	66.80499	1.137524	16933	537	Binary
1388.01	9346253	83.45355	34.064261	28776	684	Binary
1389.01	9002237	67.79932	4.350087	21642	162	Binary
1390.01	9288786	67.50781	1.744101	9692	124	Binary
1392.01	9040849	290.25992	4.118762	1838	57	APO
1394.01	8937021	66.88839	5.663653	2236	53	APO
1400.01	9157908	75.33007	9.414682	783	70	Binary
1414.01	8916492	69.24279	4.02365	34	20	APO
1415.01	11193447	66.80918	0.312943	34162	250	Contact Binary
1416.01	11517719	68.335	2.495801	26075	154	Binary

1443.01	11197126	67.77461	4.494499	232	28	APO
1446.01	12506351	66.78619	1.227759	44429	235	Binary
1447.01	7622486	94.30528	40.246662	148151	303	V-shaped Binary
1447.02	7622486	66.63923	2.279999	15260	205	Binary Brown Dwarf
1449.01	7802136	70.1369	10.980248	49724	929	Binary
1450.01	7532973	66.98404	2.144631	18255	225	Binary
1451.01	9632895	92.74682	27.322068	78850	1241	Binary occultation
1453.01	7842610	66.85321	0.971933	9596	344	APO
1454.01	7830637	70.3035	121.590891	11369	35	Binary occultation
1455.01	4760746	296.54861	15.068135	13227	143	APO
1460.01	7751571	296.97389	17.041841	5115	110	APO
1461.01	9579499	73.70776	7.946693	5706	68	Binary
1462.01	11913013	288.31141	3.747881	2747	25	APO
1464.01	7838655	289.32963	2.113152	1991	92	APO
1467.01	7770450	287.74883	1.157752	1040	47	APO
1469.01	7543649	288.51958	3.581956	1168	54	APO
1471.01	11858748	110.82595	1.780979	881	35	APO
1482.01	7812167	298.35756	17.792773	1545	30	APO
1485.01	9692345	66.66256	0.687895	517	38	APO
1487.01	12062667	66.72336	2.929223	427	50	APO
1490.01	9602514	66.51884	3.556617	324	40	APO
1492.01	12108312	66.80535	0.705449	490	57	APO
1497.01	11774387	111.15178	0.520205	430	26	APO
1500.01	9719634	67.27943	3.351587	486	34	APO
1504.01	9641018	67.1991	2.178178	346	41	APO
1509.01	9535080	86.04295	49.644312	650	64	Binary phased locked variations
1513.01	9784222	66.96052	1.197304	319	31	APO
1514.01	9520668	66.61153	1.399319	276	15	APO
1524.01	4826110	67.18301	1.333363	189	13	APO
1538.01	9963461	116.00779	10.581586	115934	982	Eccentric Binary
1539.01	8081482	66.8696	2.819448	72512	205	Binary
1542.01	8113154	66.81655	2.586873	26617	162	Binary
1548.01	9940565	68.06092	2.13933	5437	114	Binary
1550.01	8111381	67.72031	2.233799	2966	197	APO Binary Secondary eclipse
1551.01	5444549	348.94868	31.138459	9975	122	APO
1554.01	9899355	287.58427	1.332604	911	49	APO Binary Secondary eclipse
1555.01	12644774	312.12282	41.077414	4286	60	APO
1556.01	9902856	210.32841	135.913711	10827	95	APO
1559.01	9899280	66.37641	1.332583	621	66	APO
1562.01	5308663	288.58306	0.784473	905	33	APO
1565.01	5636648	66.97062	0.466743	837	72	APO
1566.01	5564247	288.36227	1.727256	649	14	APO
1568.01	5210475	287.85676	1.008933	432	19	APO
1571.01	5557821	289.29149	2.928799	473	19	APO
1575.01	5553652	74.04144	24.329742	1217	15	APO Eccentric Binary
1578.01	5629985	67.78972	2.272058	255	36	APO
1579.01	9898364	67.47018	7.132434	695	64	APO
1580.01	5193400	80.18576	21.382619	418	18	APO

1592.01	5217586	76.14359	26.06809	681	30	APO
1594.01	9895709	66.12217	1.818944	325	21	APO
1600.01	4860932	67.76764	3.091207	235	17	APO
1604.01	10033279	72.77578	72.491574	1267	49	APO
1607.01	5477805	67.53825	5.006818	232	20	APO
1610.01	5474733	66.60625	0.883781	122	17	APO

Appendix

Discussion of the uncertainty in the estimated planet equilibrium temperature.

The following calculations assume that the planet radiates as a grey body; i.e., it does not have an atmosphere. The uncertainties associated with the effect of an atmosphere could dwarf the uncertainties discussed here.

Stellar flux absorbed by the planet $F = \sigma(T_\star)^4 4\pi(R_\star)^2(1-\alpha)\pi(R_p)^2/4\pi a^2$ Eq. A.1

The flux radiated by the planet; $f = \beta 4\pi(r_p)^2 \varepsilon\sigma(T_p)^4$ Eq. A.2

Where σ is the Stefan-Boltzmann constant, $T_\star$ is the effective temperature of the star, $R_\star$)is the radius of the star, α is the planet albedo, R_p is the planet radius, a is the planet semi-major axis, β represents the fraction of the surface of the planet that reradiates the absorbed flux (varies from 0.25 for a slowly rotating body to 1.0 for a rapidly rotating body, as an approximation for the effects of heat advection), and T_p is the temperature of the planet. Here, the emissivity ε is assumed to be 0.9 with an uncertainty of 10%. The uncertainties of these quantities should be considered only order-of-magnitude estimates.

Setting the f=F and canceling common terms generates; $T_p=[\{(1-\alpha)(R_\star)^2\}/(4\beta\varepsilon a^2)]^{1/4}\, T_*$ Eq. A.3

The relative uncertainty in T_p due to the uncertainty in $T_\star$ is; $dT_p/T_p = (dT_\star/T_\star) \sim 3.6\%$ with an uncertainty in $T_\star$ of 200°K and for $T_{\star *}$ near 5500K.

The uncertainty in T_p due to the uncertainty in $R_\star$ is; $dT_p/T_p = (dR_\star)/2R_\star)) \sim 12.5\%$ with an uncertainty in $R_\star$ of 25%.

The uncertainty in T_p due to the uncertainty in β is; $dT_p =/ T_p = (d\beta/4\beta) \sim 15\%$ where β is assumed to be ~ 0.62 ±0.38.

Similarly the 10% uncertainty in ε leads to an uncertainty of ~ 2.5%.

The uncertainty in T_p due to the uncertainty in a is; $dT_p/T_p = (da/2a)$. The relative uncertainty in a is estimated from the uncertainty in stellar mass, assuming that the uncertainty in the orbital periods is negligible; $da \simeq dM_\star/3M_\star$. Thus $dT_p/T_p = 4\%$, assuming that the uncertainty in the stellar mass is 25%.

The uncertainty in T_p due to the uncertainty in albedo is; $dT_p/T_p = \{d\alpha/4(1-\alpha)\} \sim 7\%$ for α is assumed to be 0.3 with an uncertainty of 0.2.

Taking the root square sum of all the uncertainties, gives an uncertainty of 22% in the equilibrium temperature.