Predictions of planets for 586 exosystems and a method for predicting planets in multi-planetary exosystems

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ABSTRACT

We have applied a model of planetary system formation in the field of a standing sound wave (the 'SSW-Model') to the prediction of planets in 586 multi-planetary exosystems (384 bi-planetary, 127 tri-planetary and 75 exosystems with four or more confirmed planets). We have verified our predictions using transit-like events from the NASA Threshold-Crossing Event (TCE) catalogue, finding that more than 80% of these events are included in our list of exoplanet predictions. We describe a method for predicting the periods and semi-major axes of additional planets for exosystems with two or more confirmed planets. Recently discovered planets in the Kepler-47 system, with a period of 187.4 days, and those in the K2-16 system, with a period of 2.72 days, are present in our predictions (176 ± 19 and 2.58 ± 0.28 days). In the Kepler-47 system, we also predict the presence of another planet with a period of 96.5 ± 11 days between Kepler-47 b and Kepler-47 d. Our method can significantly facilitate targeted searches for planets in exosystems, enabling the detection of many new exoplanets, including those located in the habitable zones.

Keywords: Exoplanets; Protoplanetary discs; Planetary systems; Planet formation;

1. INTRODUCTION

In this paper, based on our model for the formation of the Solar System[1] (hereafter denoted as BB16), we present predictions for exoplanets in multi-planetary exosystems. This model explains very well many facts about, and observations of, our Solar System and exoplanetary systems, which current theories of the origins of planetary systems fail to explain. In our model, planets in the system are arranged in proportion to r^4, where r is the distance from the

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centre of the system. When we applied this distribution to the 'Trappist-1' exoplanetary system (Figure 1), we were astonished by how well the planets in this system are arranged in a straight line on a graph of $\sqrt[4]{(a_n)}$ *vs.* n, where a_n is the semi-major axis of the planet with ordinal number n.

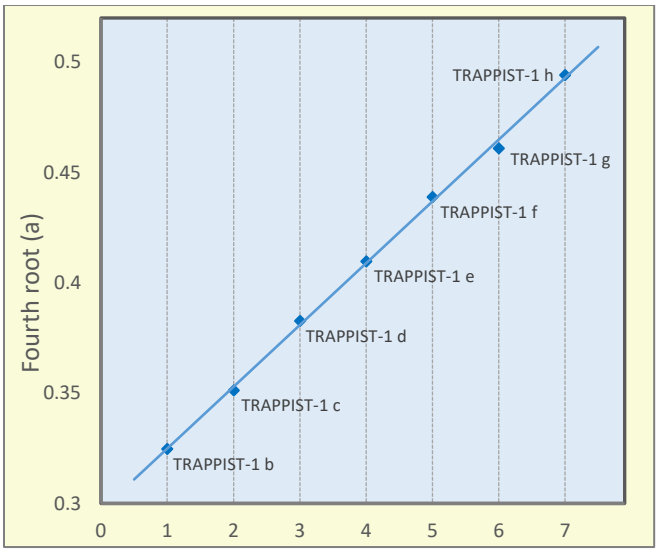

Figure 1. Distribution of planets in the 'Trappist-1' exoplanetary system.

We have also applied this correlation to other exoplanetary systems with 6–8 confirmed planets from a NASA Exoplanet Archive[2]. We obtain similar distributions of the planets in straight lines for all of the systems, with one or several gaps between the known planets (Figure 2).

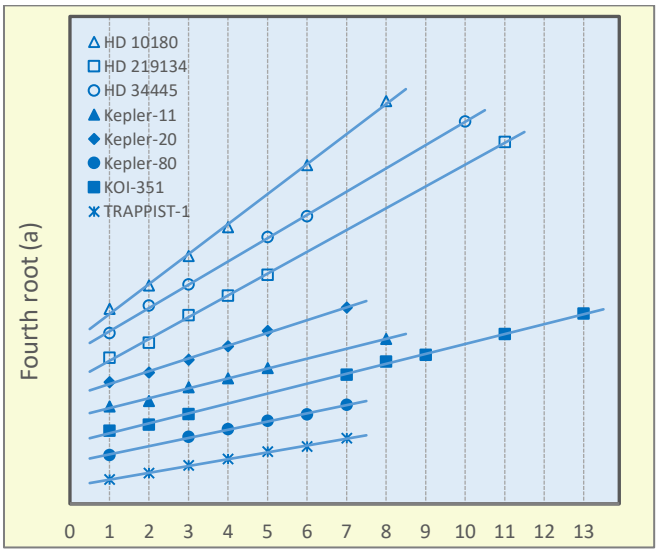

Figure 2. Distribution of planets in the exoplanetary system with six or more planets.

In Figures 1 and 2, it is clear that there are definite patterns in the distances of the planets from the centre of the system and that, in many exosystems, one can hypothesise the existence of undiscovered planets between the known ones.

For our Solar System, the so-called Titius–Bode Law (TB relation) has been known for more than 250 years; it describes in one simple mathematical formula the average distances of the planets from the Sun. This relation attracted great attention after the discovery of Uranus and the minor planet Ceres, providing the first instance of successful predictions of previously unknown planets. Bovaird & Lineweaver[3] used a generalised TB relation to predict 141 additional planets in 68 multi-planetary exosystems. Using these predictions, Huang & Bakos[4] discovered five planetary candidates within the limits of the predicted periods, but they concluded that such a small number of discovered candidates is insufficient to confirm the usefulness of the TB relation to predict new exoplanets.

Although the TB relation itself cannot be accepted as being generally applicable to exoplanetary systems, the idea of using the observed patterns in exosystems to predict new planets may be very productive, if there is a 'correct' theory or model for the origin of planetary systems. The TB relation does not have any physical foundation; on the contrary, our model[1] describes the formation of planetary systems from a purely physical standpoint, and although it still lacks a complete mathematical description, it may nevertheless be useful for the practical prediction of new exoplanets in multi-planetary systems. In Section 3, we present our predictions for 586 exosystems, and Section 4 verifies our predictions for a number of systems from the *Kepler* mission data. Furthermore, all five planetary candidates discovered by Huang & Bakos[4] are present in our predictions.

2. PHYSICAL GROUNDING OF THE MODEL

Many researchers[5-13] are working to understand and explain the observed patterns in the distributions of planets in the numerous recently discovered multi-planetary systems. However, they have experienced only minor success, since there is at present no physically sound theory that takes into account most of the known facts. In contrast, our model[1] is a theoretical construction that takes into account, from a purely physical point of view, most of the observational data and currently known facts about the formation and evolution of the Solar System and exoplanetary systems.

It is generally accepted that planetary systems are formed as a result of the collapse of a rotating cloud of gas and dust. In the process of contracting, the rotation of the cloud accelerates, and it forms a protoplanetary disc, within which the planets form. But what is a protoplanetary 'disc'? More than 99% of the initial protoplanetary cloud contains gas[14,15]. Owing to centrifugal force, the rotating gas–dust cloud takes the form of an ellipsoid of revolution, but it is prevented from collapsing into a thin, flat disc by gas pressure. Figures 3–6 show some images of protoplanetary discs obtained by the ALMA (the Atacama Large Millimeter/submillimeter Array).

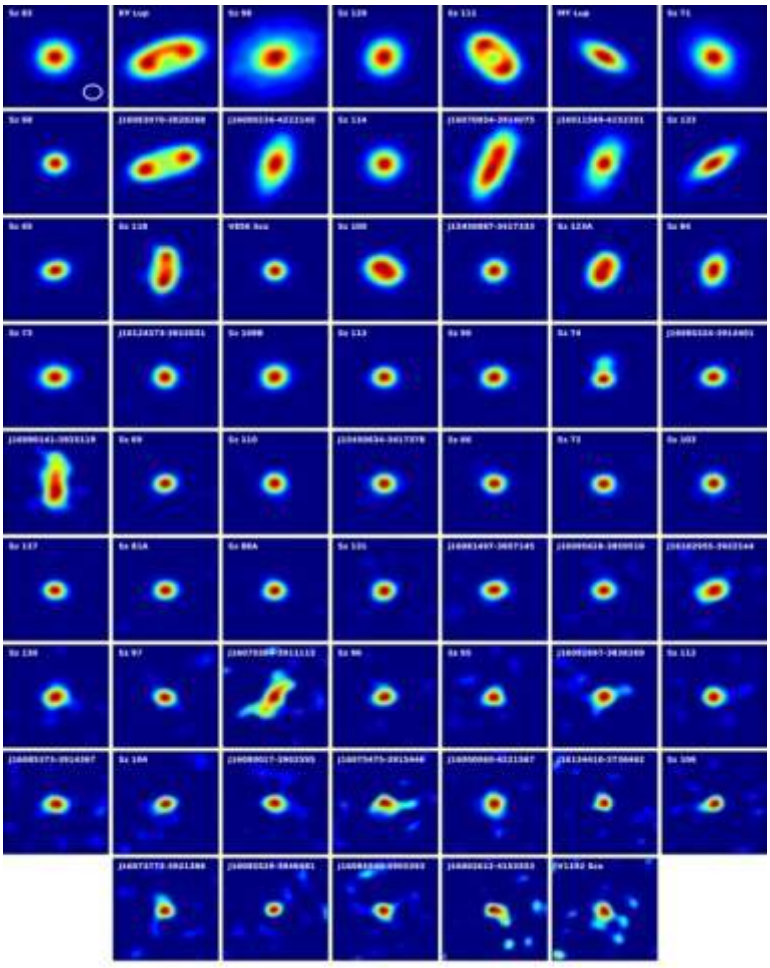

Figure 3. From the ALMA survey of Lupus protoplanetary discs[14] .

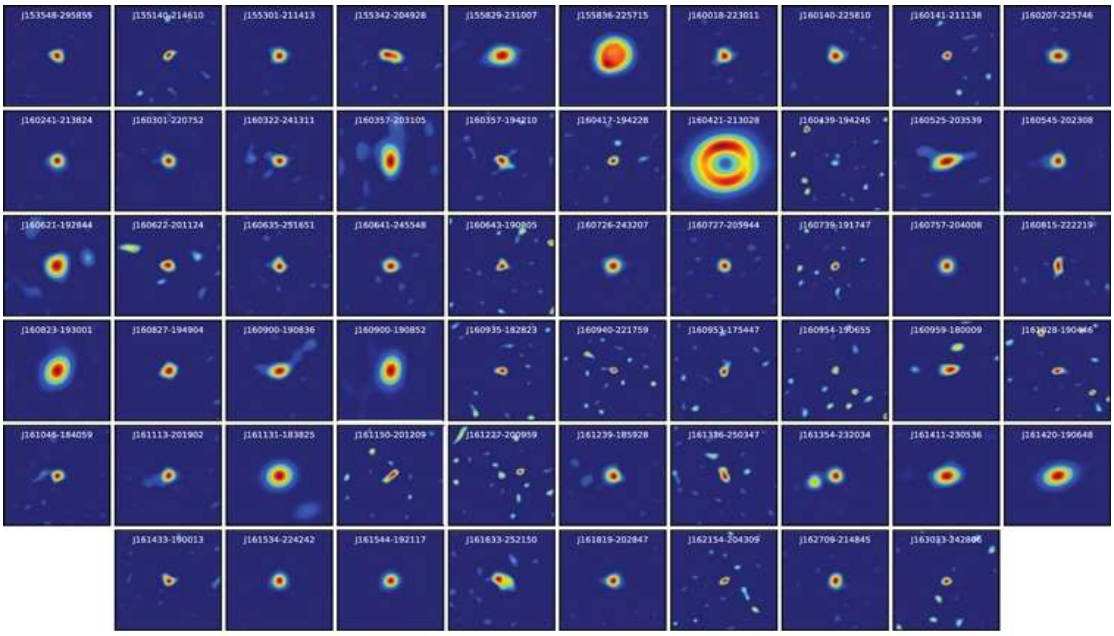

Figure 4. From ALMA observations of circumstellar discs in the Upper Scorpius OB association[21].

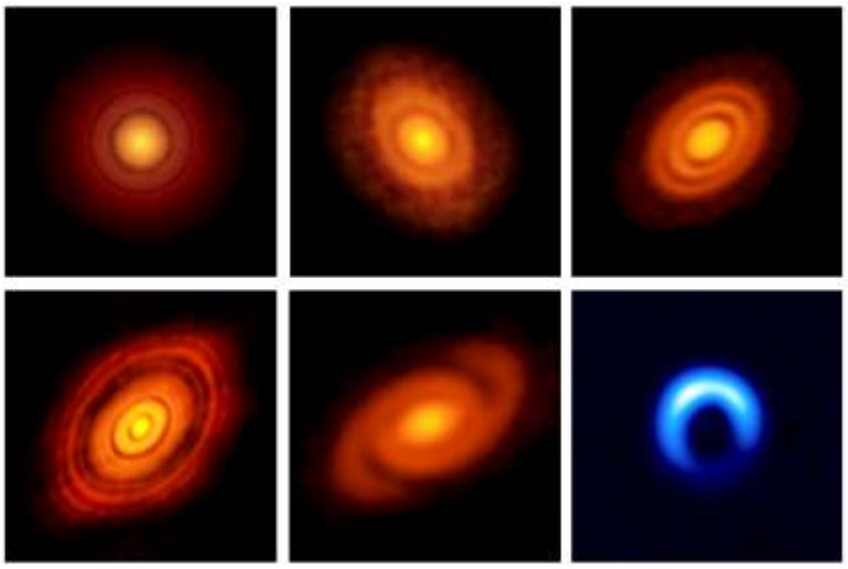

Figure 5. Gallery of high-angular-resolution continuum observations of planet forming discs obtained with ALMA. From left to right and from top to bottom: TW Hya[9], V883 Ori[22], HD 163296[23], HL Tau[24], Elias 2-27[25], and HD 142527[26]. Credits: S. Andrews, L. Cieza, A. Isella, A. Kataoka, B. Saxton (NRAO/AUI/NSF), and ALMA (ESO/NAOJ/NRAO).

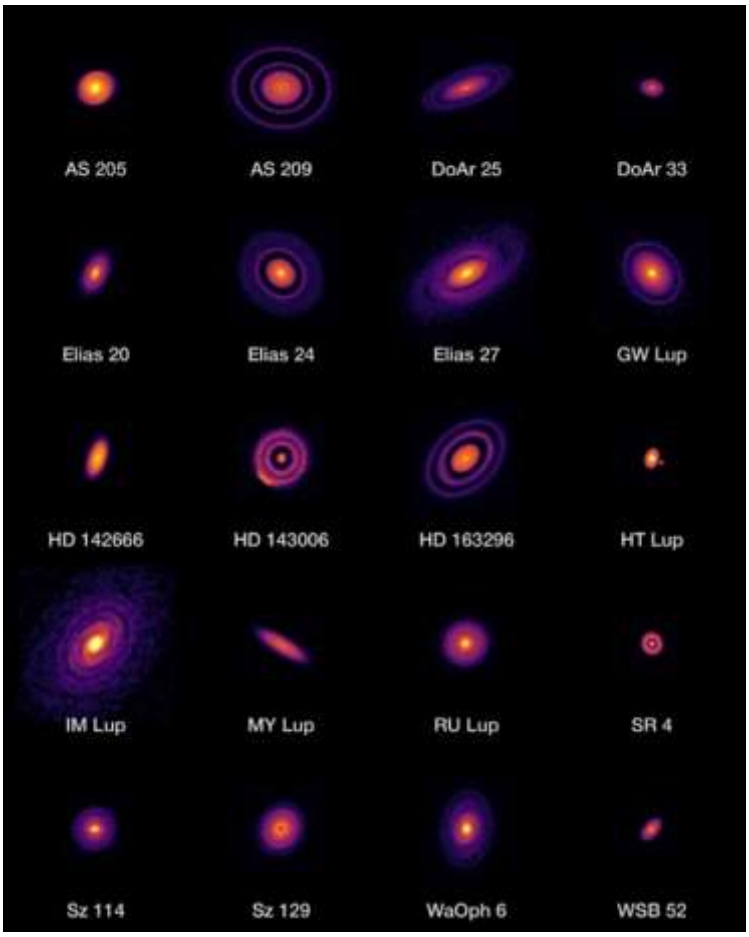

Figure 6. ALMA high-resolution images of nearby protoplanetary discs, from the Disc Substructures at High Angular Resolution Project (DSHARP). Credit: ALMA (ESO/NAOJ/NRAO), S. Andrews et al.; N. Lira.

Surprisingly, most appear to be oriented perpendicular to, or with only a slight deviation from 90° relative to, the line of sight from an observer on Earth. If these objects were actually flat discs, then it would appear that the Solar System occupies some favoured position in our galaxy towards which the emerging planetary systems 'look'. Of course, this cannot be the case. Our model[1] of the formation of a planetary system in the field of a standing sound wave (the SSW-Model) perfectly explains this contradiction: each ALMA image is in reality the projection of a three-dimensional object onto a plane perpendicular to our line of sight; if such an object is a sphere or an ellipsoid of revolution (a protoplanetary gas–dust cloud), we will obtain images identical to those in Figures 3–6, i.e. circles or ellipses, regardless of the place from which we observe the object. Ring-like structures in these images are dust spheres (ellipsoids of revolution) located inside one another that concentrate in the antinodes of the standing wave. We see them as rings because a line of sight near the edge of each sphere crosses a much greater thickness of dust than that near the centre (see BB16[1] for more detail). Note that ALMA observes mainly dust, or in some cases, gases such as CO[14,16], but not

hydrogen or helium, which constitute the bulk of the protoplanetary cloud. Based on the ALMA images, we conclude that the aspect ratio of the gas ellipsoids is between 1:1 and 1:2; to call such gas–dust protoplanetary clouds discs is at the very least incorrect.

The dust in the original protoplanetary cloud is distributed more or less evenly, and its behaviour is completely determined by the gravitational influence of the much larger mass of gas. The low concentration of dust in the cloud in turn causes a very low rate of adhesion of the dust particles among themselves, so it is problematic to conclude that planets may form in a short time (according to some estimates, 1 million years or even 100 thousand years[17]). Our model assumes a perhaps more realistic timescale of 2–10 million years.

In a collapsing gas cloud, as in any gaseous medium, sound waves can propagate. In BB16[1], we show that gas pressure oscillations occur spontaneously in such a cloud and establish a standing sound wave in which the energy losses are compensated for by periodic explosive processes in the central protostar. The sound pressure, directed from the centre to the periphery, stabilises the gas–dust cloud and slows down the accretion onto the protostar. A reverse process is also possible, in which the substance of the protostar is ejected into the surrounding space, becoming distributed throughout the cloud during the periodic explosions. In this quasi-stationary state, the rotational speeds of the matter in different parts of the protoplanetary cloud are redistributed in such a way that rotation occurs at Keplerian velocities. Such a ‘sounding’ state of the protoplanetary system can last for millions of years, until the conditions that support the standing wave change.

In the antinodes of the standing wave, large masses of gas gather periodically and the gravitational attraction of these masses leads to the concentration of dust in relatively thin, nested spheres (actually, ellipsoids of revolution). Viscous drag also plays a significant role; however, only gravity and centrifugal force cause the directional movement of dust. In these spheres, under the combined influence of centrifugal force and attraction to the central protostar, the dust particles drift towards the equatorial plane of rotation of the protoplanetary cloud. There they form rotating rings that coincide in location with the standing-wave antinodes. The concentrations of dust in these rings are many times higher than in the initial protoplanetary cloud. This causes the dust particles to adhere strongly to each other and form conglomerates. The clusters of dust in each separate ring move in almost identical Keplerian orbits, so they converge at very low speeds and hence do not cause fragmentation. On the contrary, the dust grains adhere to one another relatively quickly to form planetesimals. These in turn form planets, which are located in the antinodes of the standing wave.

Of course, this standing wave is different from, e.g. a sound wave in the Earth's atmosphere, primarily in that the wavelength can take on values of thousands, millions and even hundreds of millions of kilometres. This wave also propagates in a medium that is fundamentally different from the Earth's atmosphere, primarily because the acceleration of gravity $\boldsymbol{g}$ and the density of the gaseous medium $\boldsymbol{\rho}$ vary considerably within the distance that the wave travels during a single oscillation. Gas particles can easily move in the direction of less gravity and pressure than in the opposite direction; in such conditions, the wavelength increases as it propagates into regions of lesser gravity and gas density, i.e. the farther from the centre, the greater wavelength is and, accordingly, the greater is the distance between the antinodes of the standing sound wave. The acceleration of gravity $\boldsymbol{g}$ is proportional to $\boldsymbol{1/r^2}$, where $\boldsymbol{r}$ is the distance from the centre. The gas pressure $\boldsymbol{p}$ in turn depends upon the gravity and therefore also varies as $\boldsymbol{1/r^2}$. Accordingly, we expect the distribution of antinodes in the standing wave, which depends inversely on both of these quantities, to follow the dependence $\boldsymbol{r^4}$. According to our model, planets form in the antinodes of such a standing sound wave and maintain their initial positions, revolving around their star in Keplerian orbits.

3. METHODS AND RESULTS

3.1 Predictions for exosystems with three or more confirmed planets

Using data from the NASA Exoplanet Archive[2] (as at September 2018), we have applied the SSW-Model to predict the orbital periods and semi-major axes of additional planets in multi-planetary exosystems. We placed the confirmed planets from the NASA catalogue[2] on a graph of $\boldsymbol{\sqrt[4]{(a_n)}}$ *vs.* $\boldsymbol{n}$, where $\boldsymbol{a_n}$ is the semi-major axis of planet number $\boldsymbol{n}$, in such a way as to obtain the best approximation to a straight line with a minimum number of added intervals between the confirmed planets (for examples see Figures 1 and 2). For planets with missing data for the semi-major axes, we took the values for $\boldsymbol{a_n}$ from the Threshold-Crossing Event (TCE) catalogue[18] or calculated them from Kepler's third law using the known values of the periods $\boldsymbol{P}$ and semi-major axes $\boldsymbol{a}$ for the other planets in the given system. The TCE catalogue[18] (from the NASA Exoplanet Archive[2]) contains TCEs from the *Kepler* pipeline. Such an event is a sequence of transit-like features in the time series of the radiative flux from a given target star. We obtained the parameters $\boldsymbol{A}$ and $\boldsymbol{B}$ in the straight line equation $\boldsymbol{y = Ax + B}$ ($\boldsymbol{x}$ = 1, 2, …) using the method of linear regression. We obtained the correlation coefficient $\boldsymbol{R}$ and the

coefficient of determination R^2 simultaneously. We used the parameters A and B so obtained to find the values of the semi-major axes, and we used Kepler's third law to calculate the values of the periods for the predicted planets. In total, we processed 202 exoplanetary systems with three or more confirmed planets.

The criterion for approaching the straight line was $R^2>0.99$. We chose the number of added intervals to be no more than two in a row, exception for the following exosystems: for GJ 667 C, HD 181433, HD 215152, HD 34445, Kepler-11, Kepler-25, Kepler-62, Kepler-148, Kepler-319 and KOI-351, we added three intervals in a row, and for 55 Cnc, Kepler-169 and Kepler-403, we added four. In systems in which some individual planets are far from the rest—for example, Kepler-167—we did not include the distant planets in the calculation of the straight line, so they did not influence the predictions of new exoplanets. In Appendix A, Tables A1–A4 give for each exosystem the predictions of the interpolated planets between the known planets and five extrapolated planets—two 'near' and three 'far'. For some systems, there are several variants that satisfy the criterion $R^2>0.99$; we designate these variants as 'xxx_a', 'xxx_b', 'xxx_c', etc.

3.2 Predictions for systems with two confirmed planets

We assume that most planetary systems are formed according to our model of a standing sound wave, with the distribution of individual planets following the r^4 dependence, even for exosystems with only one or two confirmed planets. Of course, the prediction of new planets based solely on a single known planet is not possible. However, one can make such predictions based on our model[1] using two known planets. In this case, however, ambiguity arises because it is unknown beforehand whether the planets on the graph of $\sqrt[4]{(a_n)}$ *vs.* n are located next to one another or whether there are one or more intervals where other previously undiscovered planets may be found. A straight line can always be drawn through two points on the graph of $\sqrt[4]{(a_n)}$, and angle of inclination of the straight line (parameter A in equation $y = Ax + B$) will decrease if intervals are added between the two known planets. In Figure 7, we show a statistical analysis of the inclinations of these lines for systems with two known planets (orange line) in comparison with the inclinations of straight lines for systems with three or more planets (blue line; for systems with several variants, we chose option 'a' with the smallest number of added intervals). It is clear that the inclinations of the straight lines for bi-planetary systems are on average noticeably larger than for systems with three or more

planets. For the latter, we can with some degree of confidence assume that the straight lines are unique. It is reasonable to assume that, in terms of the distributions of planets, exosystems with only two known planets do not differ fundamentally from systems with a greater number of known planets. If this is the case, then the difference in the statistics of the inclinations of the straight lines shown in Figure 7 is due to the existence of one or more undiscovered planets between the two known ones in some bi-planetary exosystems.

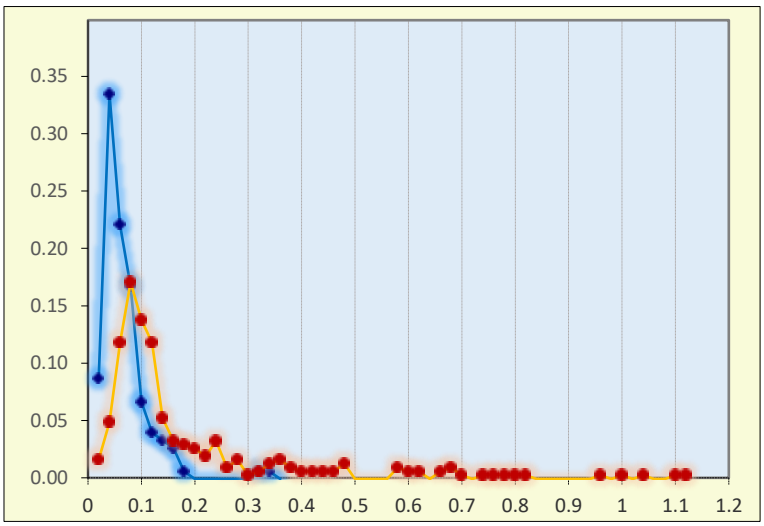

Figure 7. Normalised distribution of inclinations of the straight line (parameter A in equation $y = Ax + B$) on the graph of $\sqrt[4]{(a_n)}$ *vs.* n for systems with two confirmed planets (orange) and with three or more confirmed planets (blue). The horizontal axis represents the values of parameter A, and the vertical axis represents the number of exosystems with inclinations in the intervals of 0.02 divided by the total number of exosystems (149 for systems with three and more confirmed planets and 303 for systems with two confirmed planets).

Because the number of intervals to be added to these systems is impossible to predict in advance, we have predicted additional planets for each two-planet exosystem in three variants: without intervals, with one interval, and with two intervals (Appendix A, Table A5). In reality, only one of these distributions can exist, but one of these variants can be chosen more-or-less definitely only after one new planet has been detected for this system at minimum.

4. VERIFICATION OF PREDICTIONS

In Section 3, we made predictions of a large number of new exoplanets, and of course, the question of their validity arises. In order to test our predictions, we therefore compared them

with the data from the TCE catalogue[18] from the *Kepler* pipeline in the NASA Exoplanet Archive[2]. Note that a TCE is a sequence of features that sufficiently resembles the signature of a transiting planet to justify passing the target along for further analysis. All confirmed exoplanets are present in the TCE catalogue[18]. Apart from them, the catalogue also contains many other events that also may prove to be planets. In Table 1, we show the data for such objects in comparison with the predicted exoplanets.

Table 1

System	Confirmed planets	Planet predicted?	TCE		Prediction	
			Period, days	Semi-major axis, AU	Period, days	Semi-major axis, AU
KOI-351	8	Yes	238.944	0.787	268 ± 29	0.85
Kepler-102*	5	Yes	22.41	0.1445	20.7 ± 2.3	0.14
					21.4 ± 2.4	0.14
Kepler-150_b	5	Yes	93.8043	0.3901	95.8 ± 11	0.40
Kepler-154_a*	5	No	132.16	0.4893		
		No	202.9485	0.65365		
Kepler-169	5	Yes	199.592	0.6218	207 ± 23	0.64
Kepler-1388*	4	Yes	75.733	0.2965	72.6 ± 8.0	0.28
					80.5 ± 8.9	0.30
Kepler-1542*	4	Yes	7.235275	0.0716	7.73 ± 0.85	0.074
Kepler-402	4	Yes	16.5341	0.130825	16.0 ± 1.8	0.13
Kepler-25_b*	3	Yes	271.579	0.8695	295 ± 32	0.90
Kepler-279_b*	3	Yes	98.354	0.4389	93.6 ± 10	0.43
Kepler-289_b	3	Yes	330.0615	0.958	299 ± 33	0.89
Kepler-30_a	3	No	511.51	1.2465		
Kepler-305*	3	Yes	3.20534	0.039945	3.57 ± 0.39	0.043
Kepler-31_a	3	Yes	9.61727	0.08722	9.29 ± 1.0	0.092
Kepler-374_b	3	Yes	7.664763	0.075025	7.94 ± 0.87	0.076
		Yes	11.9291	0.100845	11.9 ± 1.3	0.099
Kepler-403_c*	3	No	24.560433	0.174333		
		No	49.1213	0.2847		
Kepler-58_b*	3	Yes	4.45819	0.05341	4.38 ± 0.48	0.054
Kepler-9	3	Yes	194.2695	0.656	176 ± 19	0.62
					187 ± 21	0.64
		No	231.199	0.7453		
		Yes	349.273	0.9699	324 ± 36	0.93
Kepler-101	2	Yes	12.0597	0.1071	12.7±1.4	0.11208
Kepler-1073*	2	Yes	2.504768	0.035198	2.63±0.29	0.03639
		Yes	6.13064	0.06477	5.98±0.66	0.06291
Kepler-1154*	2	Yes	31.4452	0.2098	30.0±3.3	0.19658
Kepler-131*	2	Yes	9.4882	0.08705	9.76±1.1	0.09020
Kepler-1321*	2	Yes	5.720878	0.053935	5.25±0.58	0.05095
Kepler-1371*	2	Yes	2.905115	0.036325	2.64±0.29	0.03352
					2.89±0.32	0.03559
		Yes	4.28891	0.046272	4.44±0.49	0.04735
					4.09±0.45	0.04480

		Yes	5.43103	0.0532	5.66±0.62	0.05569
Kepler-152	2	Yes	9.7477	0.083687	9.62±1.1	0.08115
		Yes	31.5323	0.182	32.3±3.6	0.18192
Kepler-1530*	2	Yes	9.20826	0.086925	10.1±1.1	0.09260
Kepler-155	2	Yes	265.563	0.7174	263±29	0.70494
		Yes	552.125	1.083	512±56	1.09849
Kepler-209	2	No	34.9484	0.2024		
Kepler-248	2	Yes	28.8671	0.1802	28.0±3.1	0.17753
Kepler-262	2	Yes	86.7236	0.3797	81.6±9.0	0.36598
Kepler-27	2	Yes	6.54631	0.066993	6.72±0.74	0.06824
Kepler-274	2	No	3.982222	0.04923		
Kepler-281	2	Yes	148.273	0.543475	162±18	0.58116
Kepler-283	2	Yes	1.42867	0.02091	1.46±0.16	0.02139
		No	2.14321	0.02727		
Kepler-297	2	Yes	150.01975	0.542725	135±15	0.49830
Kepler-302	2	No	489.672	1.206		
Kepler-312	2	Yes	37.840675	0.234225	36.6±4.0	0.23201
Kepler-352	2	Yes	6.88726	0.066077	7.05±0.78	0.06722
Kepler-361	2	No	20.18885	0.1496		
		Yes	215.393	0.7234	230±25	0.77622
Kepler-365	2	Yes	28.225167	0.183767	28.2±3.1	0.18662
Kepler-370	2	Yes	150.3805	0.5464	159±17	0.57543
Kepler-378	2	Yes	41.0136	0.2083	38.1±4.2	0.19936
					41.7±4.6	0.21152
Kepler-381	2	Yes	8.2563	0.084143	8.82±0.97	0.08878
					7.63±0.84	0.08062
Kepler-385	2	Yes	6.06343	0.06705	6.54±0.72	0.07266
		Yes	27.90385	0.18655	26.4±2.9	0.18441
Kepler-392	2	Yes	7.87842	0.07836	7.53±0.83	0.07455
Kepler-394	2	Yes	5.613598	0.064785	5.06±0.56	0.06130
Kepler-411*	2	Yes	0.853621	0.01627	0.94±0.10	0.01753
Kepler-415*	2	Yes	14.862425	0.10224	13.6±1.5	0.09627
Kepler-416*	2	Yes	3.076433	0.041325	3.02±0.33	0.04078
		No	24.843667	0.1648		
Kepler-529*	2	Yes	35.86565	0.21485	34.4±3.8	0.20884
Kepler-549*	2	Yes	24.6148	0.156575	24.2±2.7	0.15504
Kepler-610*	2	Yes	467.24	1.183	455±50	1.15480
Kepler-616*	2	Yes	51.067075	0.274	47.3±5.2	0.26032
		No	240.20375	0.76925		
Kepler-619*	2	Yes	11.678925	0.10235	12.3±1.4	0.10608
Kepler-750*	2	Yes	16.997633	0.137367	15.5±1.7	0.12855
Kepler-769*	2	Yes	13.23005	0.1132	12.5±1.4	0.10877
Kepler-953*	2	No	1.546267	0.026052		
		Yes	208.591	0.6944	213±23	0.69442
Kepler-968*	2	Yes	7.684333	0.063755	7.02±0.77	0.06002
					7.51±0.83	0.06278

*one or more values for a_n are obtained from the TCE catalogue[18] or calculated by Kepler's third law.

The periods of more than 80% of the transit-like objects in the TCE catalogue[18], which are also listed in Table 1, are within our predictions. This allows us to say on the one hand that many of these objects are likely to be real planets; they can be transferred to the ranks of confirmed exoplanets after new observations or re-analysis of existing data. On the other hand, this also confirms the efficiency of our model[1] of the origin and the evolution of planetary systems.

We have limited our predictions to five extrapolated and, in most cases, two interpolated exoplanets; otherwise, the volume of predictions would be too large. Of course, some exosystems may contain planets that are not included in our predictions. In Appendix B, Table B1, we present some advanced predictions for systems that also have transit-like objects from the TCE catalogue[18].

5. CONCLUSIONS

In this paper, we have applied the SSW-Model[1] to predict the existence of additional planets in 586 multi-planetary exosystems. The discovery of such predicted planets will be a significant confirmation of our model for the formation of planetary systems in the field of a standing sound wave. To some degree, such a confirmation already exists, as we did not use the unconfirmed planets from the NASA TCE catalogue[18] for our predictions. It is possible that the existence of many of these planets may soon be confirmed. If so, their presence among the predicted planets (see Table 1) will allow us to claim that our theoretical model actually describes the emergence and evolution of planetary systems. Recent observations of comet 67P/Churyumov-Gerasimenko by the ESA *Rosetta* space probe and of the Kuiper-belt object ‘Ultima Thule’ by the NASA *New Horizons* spacecraft—each of which object consists of two parts linked by a thin bond (Figure 8)—definitely show that the separate parts of these objects formed independently of one another, revolving around the proto-Sun in almost identical orbits and converging slowly to create composite bodies without a destructive collision. The fact that these objects are located far from each other in different parts of the Solar System allows us to infer that planets and minor bodies in the inner regions—as well as on the periphery of the Solar System—formed in similar conditions, in complete accord with our model.

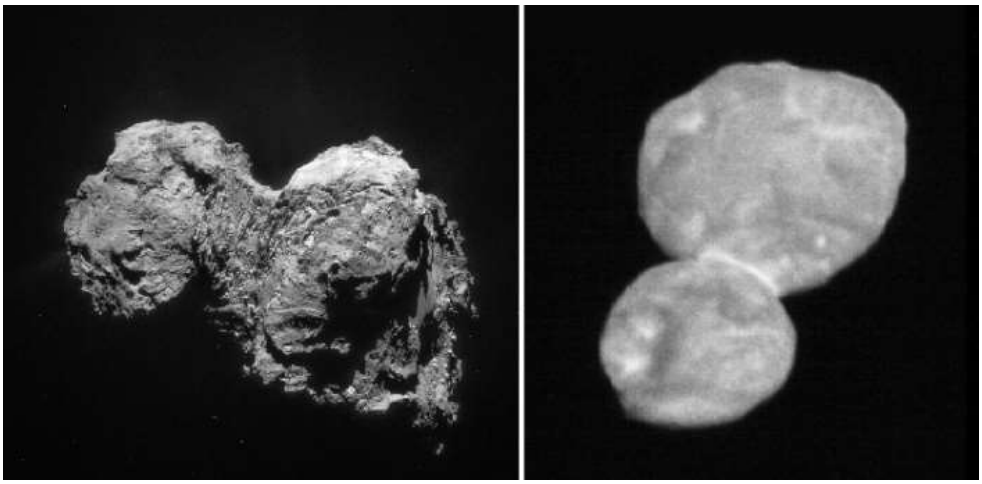

Figure 8. The images of Comet 67P/Churyumov-Gerasimenko (left, credit: ESA/Rosetta/NavCam) and Ultima Thule (right, credit: NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute).

We see no serious reason to assume that our Solar System is unique, and we believe that most exoplanets are formed similarly, without chaotic collisions and planetary catastrophes. Further observations will either confirm or disprove our point of view. We hope, however, that the results will find their explanation within the framework of our theoretical model.

The recent discoveries of Orosz et al.[19] of a third planet in the Kepler-47 system and Heller et al.[20] in the K2-16 system clearly demonstrate the importance and usefulness of reprocessing data to find new planets in already known exosystems. The orbital periods of the new planets orbiting Kepler-47 (187.4 days) and K2-16 (2.72 days) coincide with the predicted values of 176 ± 19 and 2.58 ± 0.28 days with very good accuracy. According to our predictions, in the Kepler-47 system another planet should exist with a period of 96.5 ± 11 days between Kepler-47 b and Kepler-47 d.

Modern observational astronomy is developing very rapidly, as more—and more accurate and sensitive—instruments and telescopes appear. We believe that a targeted search for planets in multi-planetary exosystems using our method can significantly facilitate and speed up the detection of large numbers of new exoplanets, including those in the habitable zones. The standing sound wave model is at the moment still in a developmental phase, and we would welcome any help or direct participation by interested researchers and organisations in further work both on the theoretical part of the SSW-Model and in its practical application to the search for exoplanets.

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Contributions

V.B. performed all calculations and analysis of the results.

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Competing Interests

The author declares no competing interests.

Data Availability

All data generated or analysed during this study are included in this published article (and its Supplementary Information files).

Figure Legends

Figure 1. Distribution of planets in the 'Trappist-1' exoplanetary system.

Figure 2. Distribution of planets in the exoplanetary system with six or more planets.

Figure 3. From the ALMA survey of Lupus protoplanetary discs[14] .

Figure 4. From ALMA observations of circumstellar discs in the Upper Scorpius OB association.[21]

Figure 5. Gallery of high-angular-resolution continuum observations of planet forming discs obtained with ALMA. From left to right and from top to bottom: TW Hya[9], V883 Ori,[22] HD 163296,[23] HL Tau,[24] Elias 2-27,[25] and HD 142527.[26] Credits: S. Andrews, L. Cieza, A. Isella, A. Kataoka, B. Saxton (NRAO/AUI/NSF), and ALMA (ESO/NAOJ/NRAO).

Figure 6. ALMA high-resolution images of nearby protoplanetary discs, from the Disc Substructures at High Angular Resolution Project (DSHARP). Credit: ALMA (ESO/NAOJ/NRAO), S. Andrews et al.; N. Lira.

Figure 7. Normalised distribution of inclinations of the straight line (parameter $\boldsymbol{A}$ in equation $\boldsymbol{y = Ax + B}$) on the graph of $\sqrt[4]{(a_n)}$ *vs.* $\boldsymbol{n}$ for systems with two confirmed planets (orange) and with three or more confirmed planets (blue). The horizontal axis represents the values of parameter $\boldsymbol{A}$, and the vertical axis represents the number of exosystems with inclinations in the intervals of 0.02 divided by the total number of exosystems (149 for systems with three and more confirmed planets and 303 for systems with two confirmed planets).

Figure 8. The images of Comet 67P/Churyumov-Gerasimenko (left, credit: ESA/Rosetta/NavCam) and Ultima Thule (right, credit: NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute).

APPENDIX A

Table A1. Predictions of planets for systems with six or more confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)																
HD 10180	0.99826	0	0.77 ± 0.08	÷	÷	÷	÷	304 ± 33	÷	1173 ± 129	÷	3530 ± 388	5723 ± 630	8950 ± 984				
		0	0.017	÷	÷	÷	÷	0.90	÷	2.2	÷	4.6	6.4	8.6				
HD 219134	0.99424	0.13 ± 0.01	0.73 ± 0.08	÷	÷	÷	÷	÷	177 ± 20	314 ± 35	529 ± 58							
		0.005	0.015	÷	÷	÷	÷	÷	0.57	0.84	1.2							
HD 34445_a	0.99461	3.19 ± 0.35	13.7 ± 1.5	÷	÷	÷	÷	÷	1995 ± 219	3420 ± 376	÷	8857 ± 974	13542 ± 1490	20131 ± 2214				
		0.043	0.11	÷	÷	÷	÷	÷	3.2	4.5	÷	8.6	11	15				
HD 34445_b	0.99956	8.52 ± 0.94	22.7 ± 2.5	÷	÷	÷	386 ± 42	÷	÷	1715 ± 189	2622 ± 288	3899 ± 429	÷	8030 ± 883	11181 ± 1230	15301 ± 1683		
		0.084	0.16	÷	÷	÷	1.1	÷	÷	2.9	3.8	5.0	÷	8.0	10	12		
Kepler-11_a	0.99629	3.61 ± 0.40	5.98 ± 0.66	÷	÷	÷	÷	÷	64.1 ± 7.0	88.0 ± 9.7	÷	159 ± 17	209 ± 23	271 ± 30				
		0.045	0.064	÷	÷	÷	÷	÷	0.31	0.38	÷	0.57	0.68	0.81				
Kepler-11_b	0.99594	4.54 ± 0.50	6.64 ± 0.73	÷	÷	18.3 ± 2.0	÷	÷	÷	56.9 ± 6.3	73.3 ± 8.1	93.4 ± 10	÷	147 ± 16	183 ± 20	226 ± 25		
		0.053	0.068	÷	÷	0.13	÷	÷	÷	0.29	0.34	0.40	÷	0.54	0.62	0.72		
Kepler-20	0.99703	0.71 ± 0.08	1.63 ± 0.18	÷	÷	÷	÷	÷	51.3 ± 5.6	÷	116 ± 13	168 ± 18	238 ± 26					
		0.015	0.027	÷	÷	÷	÷	÷	0.27	÷	0.46	0.59	0.74					
Kepler-80	0.99727	0.31 ± 0.03	0.59 ± 0.07	÷	1.78 ± 0.20	÷	÷	÷	÷	÷	20.6 ± 2.3	28.5 ± 3.1	38.8 ± 4.3					
		0.008	0.012	÷	0.026	÷	÷	÷	÷	÷	0.13	0.16	0.20					
TRAPPIST-1	0.99870	0.49 ± 0.05	0.88 ± 0.10	÷	÷	÷	÷	÷	÷	÷	25.7 ± 2.8	35.2 ± 3.9	47.5 ± 5.2					
		0.005	0.008	÷	÷	÷	÷	÷	÷	÷	0.074	0.091	0.11					
KOI-351	0.99882	2.19 ± 0.24	3.77 ± 0.41	÷	÷	÷	22.3 ± 2.5	32.4 ± 3.6	46.0 ± 5.1	÷	÷	÷	157 ± 17	÷	268 ± 29	÷	436 ± 48	549 ± 60	685 ± 75
		0.034	0.049	÷	÷	÷	0.16	0.21	0.26	÷	÷	÷	0.59	÷	0.85	÷	1.2	1.4	1.6

÷ confirmed planet

Table A2. Predictions of planets for systems with five confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)															
55 Cnc	0.99996	0	0	÷	3.92 ± 0.43	÷	÷	116 ± 13	÷	529 ± 58	998 ± 110	1773 ± 195	2995 ± 329	÷	7576 ± 833	11476 ± 1262	16923 ± 1862
		0	0	÷	0.048	÷	÷	0.46	÷	1.3	1.9	2.8	4.0	÷	7.4	9.8	13
GJ 667 C	0.99730	1.91 ± 0.21	3.64 ± 0.40	÷	11.1 ± 1.2	18.0 ± 2.0	÷	÷	÷	92.0 ± 10	130 ± 14	181 ± 20	÷	331 ± 36	439 ± 48	574 ± 63	
		0.021	0.032	÷	0.067	0.093	÷	÷	÷	0.28	0.35	0.43	÷	0.65	0.78	0.94	
HD 40307_a	0.99479	0.22 ± 0.02	1.05 ± 0.12	÷	÷	÷	÷	102 ± 11	÷	326 ± 36	541 ± 60	863 ± 95					
		0.006	0.018	÷	÷	÷	÷	0.39	÷	0.84	1.2	1.6					
HD 40307_b	0.99775	0.87 ± 0.10	2.16 ± 0.24	÷	÷	÷	31.6 ± 3.5	÷	85.6 ± 9.4	133 ± 15	÷	295 ± 32	424 ± 47	596 ± 66			
		0.016	0.030	÷	÷	÷	0.18	÷	0.34	0.46	÷	0.78	1.00	1.3			
K2-138	0.99736	0.77 ± 0.09	1.35 ± 0.15	÷	÷	÷	÷	÷	17.7 ± 1.9	24.8 ± 2.7	34.1 ± 3.8						
		0.016	0.023	÷	÷	÷	÷	÷	0.13	0.16	0.20						
Kepler-102_a*	0.99356	2.20 ± 0.24	3.40 ± 0.37	÷	÷	÷	÷	20.7 ± 2.3	÷	37.4 ± 4.1	49.2 ± 5.4	64.1 ± 7.1					
		0.031	0.041	÷	÷	÷	÷	0.14	÷	0.20	0.25	0.29					
Kepler-102_b*	0.99692	2.77 ± 0.30	3.88 ± 0.43	÷	÷	÷	12.8 ± 1.4	÷	21.4 ± 2.4	÷	34.5 ± 3.8	43.2 ± 4.8	53.7 ± 5.9				
		0.036	0.045	÷	÷	÷	0.100	÷	0.14	÷	0.19	0.22	0.26				
Kepler-122*	0.99436	1.33 ± 0.15	3.01 ± 0.33	÷	÷	÷	÷	÷	91.8 ± 10	140 ± 15	206 ± 23						
		0.024	0.042	÷	÷	÷	÷	÷	0.41	0.54	0.70						
Kepler-150_a	0.99516	0.89 ± 0.10	1.90 ± 0.21	÷	÷	÷	19.9 ± 2.2	÷	48.9 ± 5.4	73.2 ± 8.0	107 ± 12						
		0.018	0.030	÷	÷	÷	0.14	÷	0.26	0.34	0.43						
Kepler-150_b	0.99505	1.32 ± 0.15	2.18 ± 0.24	÷	5.30 ± 0.58	÷	÷	16.4 ± 1.8	22.8 ± 2.5	÷	42.2 ± 4.6	56.2 ± 6.2	73.8 ± 8.1				
		0.023	0.032	÷	0.059	÷	÷	0.12	0.16	÷	0.23	0.28	0.34				
Kepler-154_a*	0.99603	0.57 ± 0.06	1.68 ± 0.18	÷	÷	÷	÷	÷	105 ± 12	169 ± 19	263 ± 29						
		0.013	0.027	÷	÷	÷	÷	÷	0.43	0.59	0.79						
Kepler-154_b*	0.99817	1.26 ± 0.14	2.26 ± 0.25	÷	6.24 ± 0.69	÷	14.9 ± 1.6	÷	÷	44.8 ± 4.9	÷	84.8 ± 9.3	114 ± 13	151 ± 17			
		0.022	0.033	÷	0.065	÷	0.12	÷	÷	0.24	÷	0.37	0.45	0.54			
Kepler-169	0.99779	1.01 ± 0.11	1.89 ± 0.21	÷	÷	÷	÷	21.1 ± 2.3	31.0 ± 3.4	44.5 ± 4.9	62.5 ± 6.9	÷	117 ± 13	157 ± 17	207 ± 23		
		0.018	0.028	÷	÷	÷	÷	0.14	0.18	0.23	0.29	÷	0.44	0.53	0.64		
Kepler-238_a*	0.99510	0.21 ± 0.02	0.78 ± 0.09	÷	÷	÷	÷	÷	81.5 ± 9.0	136 ± 15	219 ± 24						
		0.007	0.018	÷	÷	÷	÷	÷	0.39	0.55	0.75						
Kepler-238_b*	0.99707	0.57 ± 0.06	1.14 ± 0.13	÷	3.67 ± 0.40	÷	9.76 ± 1.1	÷	÷	33.1 ± 3.6	÷	66.3 ± 7.3	91.3 ± 10	124 ± 14			
		0.014	0.022	÷	0.048	÷	0.093	÷	÷	0.21	÷	0.33	0.41	0.50			
Kepler-292	0.99940	1.24 ± 0.14	1.82 ± 0.20	÷	÷	5.10 ± 0.56	÷	9.27 ± 1.0	÷	16.0 ± 1.8	÷	26.3 ± 2.9	33.3 ± 3.7	41.7 ± 4.6			
		0.021	0.028	÷	÷	0.055	÷	0.082	÷	0.12	÷	0.16	0.19	0.22			
Kepler-296	0.99712	1.04 ± 0.11	2.55 ± 0.28	÷	÷	÷	÷	÷	96.1 ± 11	149 ± 16	224 ± 25						
		0.017	0.030	÷	÷	÷	÷	÷	0.34	0.45	0.59						
Kepler-32*	0.99924	0.13 ± 0.01	0.33 ± 0.04	÷	1.56 ± 0.17	÷	÷	÷	14.8 ± 1.6	÷	35.5 ± 3.9	52.6 ± 5.8	76.1 ± 8.4				
		0.004	0.008	÷	0.021	÷	÷	÷	0.096	÷	0.17	0.22	0.28				
Kepler-33	0.99527	1.98 ± 0.22	3.43 ± 0.38	÷	9.02 ± 0.99	÷	÷	÷	÷	60.1 ± 6.6	82.6 ± 9.1	112 ± 12					
		0.034	0.049	÷	0.092	÷	÷	÷	÷	0.33	0.40	0.49					
Kepler-444	0.99776	2.01 ± 0.22	2.70 ± 0.30	÷	÷	÷	÷	÷	12.3 ± 1.4	15.3 ± 1.7	18.9 ± 2.1						
		0.028	0.034	÷	÷	÷	÷	÷	0.095	0.11	0.13						

Table A2. (Continued) Predictions of planets for systems with five confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)													
Kepler-55*	0.99611	0.42 ± 0.05	1.05 ± 0.12	÷	÷	÷	16.0 ± 1.8	÷	÷	68.5 ± 7.5	104 ± 11	153 ± 17			
		0.010	0.018	÷	÷	÷	0.11	÷	÷	0.29	0.38	0.49			
Kepler-62_a	0.99584	0.87 ± 0.10	2.33 ± 0.26	÷	÷	÷	40.0 ± 4.4	68.7 ± 7.6	÷	178 ± 20	÷	406 ± 45	590 ± 65	838 ± 92	
		0.016	0.030	÷	÷	÷	0.20	0.29	÷	0.55	÷	0.95	1.2	1.5	
Kepler-62_b	0.99872	1.33 ± 0.15	2.94 ± 0.32	÷	÷	÷	32.9 ± 3.6	53.0 ± 5.8	82.5 ± 9.1	÷	183 ± 20	÷	370 ± 41	511 ± 56	695 ± 76
		0.021	0.036	÷	÷	÷	0.18	0.24	0.33	÷	0.56	÷	0.89	1.1	1.4
Kepler-84_a*	0.99442	1.38 ± 0.15	2.60 ± 0.29	÷	÷	÷	19.5 ± 2.1	÷	÷	62.5 ± 6.9	88.1 ± 9.7	122 ± 13			
		0.025	0.037	÷	÷	÷	0.14	÷	÷	0.31	0.39	0.49			
Kepler-84_b*	0.99657	1.70 ± 0.19	2.72 ± 0.30	÷	6.31 ± 0.69	÷	÷	18.5 ± 2.0	÷	34.5 ± 3.8	÷	60.6 ± 6.7	78.8 ± 8.7	101 ± 11	
		0.028	0.039	÷	0.068	÷	÷	0.14	÷	0.21	÷	0.31	0.37	0.43	

÷confirmed planet

*one or more values for a_n are obtained from the TCE catalogue[18] or calculated by Kepler's third law.

Table A3. Predictions of planets for systems with four confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)												
GJ 3293_a	0.99174	3.45 ± 0.38	7.46 ± 0.82	÷	÷	÷	79.0 ± 8.7	÷	195 ± 21	292 ± 32	428 ± 47			
		0.033	0.056	÷	÷	÷	0.27	÷	0.49	0.65	0.83			
GJ 3293_b	0.99834	5.11 ± 0.56	8.48 ± 0.93	÷	20.8 ± 2.3	÷	÷	65.0 ± 7.1	90.9 ± 10	÷	169 ± 19	225 ± 25	296 ± 33	
		0.044	0.061	÷	0.11	÷	÷	0.24	0.30	÷	0.45	0.54	0.65	
GJ 876_a	0.99254	0	0.42 ± 0.05	÷	8.38 ± 0.92	÷	÷	÷	271 ± 30	507 ± 56	894 ± 98			
		0	0.008	÷	0.055	÷	÷	÷	0.56	0.85	1.2			
GJ 876_b	0.99918	0	0.49 ± 0.05	÷	5.57 ± 0.61	14.0 ± 1.5	÷	÷	÷	211 ± 23	356 ± 39	576 ± 63		
		0	0.008	÷	0.042	0.078	÷	÷	÷	0.48	0.67	0.93		
HD 141399_a	0.99799	6.41 ± 0.71	27.8 ± 3.1	÷	÷	562 ± 62	÷	2278 ± 251	÷	7082 ± 779	11626 ± 1279	18377 ± 2022		
		0.066	0.18	÷	÷	1.3	÷	3.3	÷	7.0	9.8	13		
HD 141399_b	0.99982	20.1 ± 2.2	49.2 ± 5.4	÷	÷	397 ± 44	697 ± 77	÷	1866 ± 205	2893 ± 318	÷	6377 ± 701	9134 ± 1005	12821 ± 1410
		0.14	0.25	÷	÷	1.0	1.5	÷	2.9	3.8	÷	6.5	8.2	10
HD 160691_a	0.99523	0	0.92 ± 0.10	÷	63.4 ± 7.0	÷	÷	1876 ± 206	÷	8551 ± 941	16141 ± 1776	28669 ± 3154		
		0	0.019	÷	0.32	÷	÷	3.1	÷	8.4	13	19		
HD 160691_b	0.99957	0.17 ± 0.02	1.89 ± 0.21	÷	39.0 ± 4.3	115 ± 13	÷	÷	1296 ± 143	2431 ± 267	÷	7226 ± 795	11660 ± 1283	18162 ± 1998
		0.006	0.031	÷	0.23	0.48	÷	÷	2.4	3.6	÷	7.5	10	14
HD 20794	0.99787	2.24 ± 0.25	6.94 ± 0.76	÷	÷	÷	÷	286 ± 31	485 ± 53	790 ± 87				
		0.030	0.064	÷	÷	÷	÷	0.76	1.1	1.5				
HD 215152_a	0.99622	2.67 ± 0.29	3.89 ± 0.43	÷	÷	÷	14.4 ± 1.6	19.1 ± 2.1	÷	32.6 ± 3.6	41.9 ± 4.6	53.3 ± 5.9		
		0.035	0.044	÷	÷	÷	0.11	0.13	÷	0.18	0.22	0.25		
HD 215152_b	0.99896	3.46 ± 0.38	4.47 ± 0.49	÷	÷	9.03 ± 0.99	÷	13.8 ± 1.5	16.9 ± 1.9	20.6 ± 2.3	÷	30.0 ± 3.3	35.8 ± 3.9	42.6 ± 4.7
		0.041	0.049	÷	÷	0.078	÷	0.10	0.12	0.13	÷	0.17	0.19	0.22
HR 8799_a	0.99259	3843 ± 423	8933 ± 983	÷	÷	÷	112159 ± 12338	÷	290718 ± 31979	444650 ± 48912	661234 ± 72736			
		5.3	9.4	÷	÷	÷	51	÷	95	127	165			
HR 8799_b	0.99994	7296 ± 803	11448 ± 1259	÷	25752 ± 2833	÷	52593 ± 5785	÷	99547 ± 10950	133740 ± 14711	÷	231856 ± 25504	299884 ± 32987	383788 ± 42217
		8.1	11	÷	19	÷	30	÷	46	57	÷	82	97	114
K2-72_a	0.99105	2.23 ± 0.24	3.51 ± 0.39	÷	÷	11.5 ± 1.3	÷	÷	31.0 ± 3.4	41.8 ± 4.6	55.5 ± 6.1			
		0.022	0.029	÷	÷	0.065	÷	÷	0.13	0.15	0.19			
K2-72_b	0.99618	2.80 ± 0.31	4.03 ± 0.44	÷	÷	10.7 ± 1.2	÷	19.0 ± 2.1	÷	32.0 ± 3.5	40.9 ± 4.5	51.8 ± 5.7		
		0.025	0.032	÷	÷	0.062	÷	0.090	÷	0.13	0.15	0.18		
K2-72_c	0.99803	3.27 ± 0.36	4.37 ± 0.48	÷	÷	9.61 ± 1.1	12.2 ± 1.3	÷	19.3 ± 2.1	÷	29.5 ± 3.2	36.1 ± 4.0	43.8 ± 4.8	
		0.028	0.034	÷	÷	0.058	0.068	÷	0.092	÷	0.12	0.14	0.16	
KOI-94	0.99691	0.23 ± 0.03	1.07 ± 0.12	÷	÷	÷	÷	102 ± 11	187 ± 21	325 ± 36				
		0.008	0.022	÷	÷	÷	÷	0.46	0.70	1.0				
Kepler-106*	0.99852	1.09 ± 0.12	2.80 ± 0.31	÷	÷	÷	÷	74.2 ± 8.2	120 ± 13	189 ± 21				
		0.021	0.039	÷	÷	÷	÷	0.35	0.48	0.65				
Kepler-107_a	0.99304	1.26 ± 0.14	2.07 ± 0.23	÷	÷	÷	10.7 ± 1.2	÷	21.2 ± 2.3	29.0 ± 3.2	39.1 ± 4.3			
		0.024	0.033	÷	÷	÷	0.100	÷	0.16	0.19	0.24			
Kepler-107_b	0.99908	1.83 ± 0.20	2.40 ± 0.26	÷	3.99 ± 0.44	÷	6.37 ± 0.70	÷	9.85 ± 1.1	12.1 ± 1.3	÷	17.9 ± 2.0	21.6 ± 2.4	25.9 ± 2.8
		0.031	0.037	÷	0.051	÷	0.070	÷	0.094	0.11	÷	0.14	0.16	0.18

Table A3. (Continued) Predictions of planets for systems with four confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)												
Kepler-1388_a*	0.99719	1.06 ± 0.12 0.017	2.62 ± 0.29 0.031	÷ ÷	÷ ÷	÷ ÷	÷ ÷	63.2 ± 6.9 0.26	102 ± 11 0.35	158 ± 17 0.47				
Kepler-1388_b*	0.99330	2.05 ± 0.23 0.026	3.45 ± 0.38 0.037	÷ ÷	8.64 ± 0.95 0.068	÷ ÷	÷ ÷	27.5 ± 3.0 0.15	÷ ÷	53.5 ± 5.9 0.23	72.6 ± 8.0 0.28	97.2 ± 11 0.34		
Kepler-1388_c*	0.99719	2.62 ± 0.29 0.031	3.93 ± 0.43 0.040	÷ ÷	8.22 ± 0.90 0.066	÷ ÷	15.9 ± 1.7 0.10	÷ ÷	28.7 ± 3.2 0.15	÷ ÷	49.1 ± 5.4 0.22	63.2 ± 6.9 0.26	80.5 ± 8.9 0.30	
Kepler-1542*	0.99825	2.13 ± 0.23 0.031	2.49 ± 0.27 0.035	÷ ÷	3.38 ± 0.37 0.043	÷ ÷	4.51 ± 0.50 0.052	÷ ÷	÷ ÷	6.78 ± 0.75 0.068	7.73 ± 0.85 0.074	8.78 ± 0.97 0.081		
Kepler-167	0.99839	1.06 ± 0.12 0.019	2.22 ± 0.24 0.031	÷ ÷	÷ ÷	13.2 ± 1.4 0.10	÷ ÷	34.0 ± 3.7 0.19	51.9 ± 5.7 0.25	77.0 ± 8.5 0.33				
Kepler-172_a	0.99325	0.20 ± 0.02 0.007	0.84 ± 0.09 0.017	÷ ÷	÷ ÷	÷ ÷	÷ ÷	63.1 ± 6.9 0.31	113 ± 12 0.46	194 ± 21 0.66				
Kepler-172_b	0.99325	0.84 ± 0.09 0.017	1.53 ± 0.17 0.026	÷ ÷	4.37 ± 0.48 0.053	÷ ÷	10.7 ± 1.2 0.095	÷ ÷	23.2 ± 2.6 0.16	÷ ÷	46.1 ± 5.1 0.25	63.2 ± 7.0 0.31	85.4 ± 9.4 0.38	
Kepler-172_c	0.99835	1.11 ± 0.12 0.021	1.83 ± 0.20 0.029	÷ ÷	4.48 ± 0.49 0.053	÷ ÷	9.75 ± 1.1 0.090	÷ ÷	19.4 ± 2.1 0.14	26.6 ± 2.9 0.18	÷ ÷	47.9 ± 5.3 0.26	62.9 ± 6.9 0.31	81.7 ± 9.0 0.37
Kepler-176*	0.99989	0.68 ± 0.07 0.014	2.12 ± 0.23 0.031	÷ ÷	÷ ÷	÷ ÷	÷ ÷	88.5 ± 9.7 0.37	151 ± 17 0.53	246 ± 27 0.73				
Kepler-197_a	0.99730	1.66 ± 0.18 0.027	3.19 ± 0.35 0.041	÷ ÷	÷ ÷	÷ ÷	÷ ÷	38.6 ± 4.2 0.22	57.2 ± 6.3 0.28	82.9 ± 9.1 0.36				
Kepler-197_b	0.99396	2.67 ± 0.29 0.037	3.91 ± 0.43 0.047	÷ ÷	7.85 ± 0.86 0.075	÷ ÷	÷ ÷	19.6 ± 2.2 0.14	÷ ÷	33.6 ± 3.7 0.20	43.3 ± 4.8 0.23	55.2 ± 6.1 0.28		
Kepler-197_c	0.99730	3.19 ± 0.35 0.041	4.31 ± 0.47 0.050	÷ ÷	7.56 ± 0.83 0.073	÷ ÷	12.6 ± 1.4 0.10	÷ ÷	20.2 ± 2.2 0.14	÷ ÷	31.3 ± 3.4 0.19	38.6 ± 4.2 0.22	47.1 ± 5.2 0.25	
Kepler-208_a	0.99475	1.51 ± 0.17 0.027	2.65 ± 0.29 0.039	÷ ÷	÷ ÷	÷ ÷	÷ ÷	24.3 ± 2.7 0.17	34.8 ± 3.8 0.22	48.8 ± 5.4 0.28				
Kepler-208_b	0.99475	2.65 ± 0.29 0.039	3.44 ± 0.38 0.047	÷ ÷	5.63 ± 0.62 0.065	÷ ÷	8.88 ± 0.98 0.088	÷ ÷	13.6 ± 1.5 0.12	÷ ÷	20.1 ± 2.2 0.15	24.3 ± 2.7 0.17	29.2 ± 3.2 0.20	
Kepler-208_c	0.99887	2.66 ± 0.29 0.040	3.34 ± 0.37 0.046	÷ ÷	5.14 ± 0.57 0.061	6.30 ± 0.69 0.070	÷ ÷	9.30 ± 1.0 0.091	÷ ÷	13.4 ± 1.5 0.12	÷ ÷	18.9 ± 2.1 0.15	22.3 ± 2.5 0.16	26.2 ± 2.9 0.18
Kepler-215	0.99799	3.37 ± 0.37 0.042	5.70 ± 0.63 0.060	÷ ÷	÷ ÷	22.0 ± 2.4 0.15	÷ ÷	46.9 ± 5.2 0.24	÷ ÷	91.7 ± 10 0.38	125 ± 14 0.47	168 ± 18 0.57		
Kepler-220	0.99941	0.83 ± 0.09 0.016	2.01 ± 0.22 0.028	÷ ÷	÷ ÷	16.0 ± 1.8 0.11	÷ ÷	÷ ÷	74.3 ± 8.2 0.31	115 ± 13 0.42	172 ± 19 0.55			
Kepler-221	0.99940	0.52 ± 0.06 0.012	1.28 ± 0.14 0.022	÷ ÷	÷ ÷	÷ ÷	÷ ÷	30.4 ± 3.3 0.18	48.8 ± 5.4 0.25	75.7 ± 8.3 0.33				
Kepler-223*	0.99458	3.31 ± 0.36 0.043	4.95 ± 0.54 0.056	÷ ÷	÷ ÷	÷ ÷	÷ ÷	26.7 ± 2.9 0.17	35.6 ± 3.9 0.21	46.9 ± 5.2 0.25				
Kepler-224_a	0.99912	0.65 ± 0.07 0.013	1.50 ± 0.17 0.023	÷ ÷	÷ ÷	÷ ÷	÷ ÷	30.8 ± 3.4 0.17	48.7 ± 5.4 0.24	74.5 ± 8.2 0.31				

Table A3. (Continued) Predictions of planets for systems with four confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)											
Kepler-224_b	0.99912	1.50 ± 0.16	2.19 ± 0.24	÷	4.40 ± 0.48	÷	8.20 ± 0.90	÷	14.4 ± 1.6	÷	24.2 ± 2.7	30.8 ± 3.4	38.9 ± 4.3
		0.023	0.030	÷	0.048	÷	0.072	÷	0.10	÷	0.15	0.17	0.20
Kepler-235_a	0.99585	0.18 ± 0.02	0.89 ± 0.10	÷	÷	÷	÷	87.5 ± 9.6	161 ± 18	280 ± 31			
		0.005	0.015	÷	÷	÷	÷	0.33	0.49	0.71			
Kepler-235_b	0.99378	0.92 ± 0.10	1.95 ± 0.21	÷	÷	11.9 ± 1.3	÷	31.1 ± 3.4	÷	71.1 ± 7.8	103 ± 11	147 ± 16	
		0.016	0.026	÷	÷	0.086	÷	0.16	÷	0.28	0.36	0.46	
Kepler-235_c	0.99585	0.89 ± 0.10	1.70 ± 0.19	÷	5.24 ± 0.58	÷	13.5 ± 1.5	÷	30.6 ± 3.4	÷	62.9 ± 6.9	87.5 ± 9.6	120 ± 13
		0.015	0.024	÷	0.050	÷	0.094	÷	0.16	÷	0.26	0.33	0.40
Kepler-24_a	0.99039	1.33 ± 0.15	2.51 ± 0.28	÷	÷	÷	÷	29.3 ± 3.2	43.3 ± 4.8	62.5 ± 6.9			
		0.024	0.036	÷	÷	÷	÷	0.19	0.24	0.31			
Kepler-24_b	0.99226	1.59 ± 0.18	2.56 ± 0.28	÷	6.01 ± 0.66	÷	÷	÷	24.6 ± 2.7	33.4 ± 3.7	44.6 ± 4.9		
		0.027	0.037	÷	0.065	÷	÷	÷	0.17	0.20	0.25		
Kepler-24_c	0.99994	2.52 ± 0.28	3.26 ± 0.36	÷	5.29 ± 0.58	6.65 ± 0.73	÷	10.3 ± 1.1	÷	15.4 ± 1.7	÷	22.4 ± 2.5	26.8 ± 3.0	32.0 ± 3.5
		0.036	0.043	÷	0.060	0.069	÷	0.093	÷	0.12	÷	0.16	0.18	0.20
Kepler-245_a*	0.99942	0.26 ± 0.03	1.01 ± 0.11	÷	÷	÷	÷	67.5 ± 7.4	120 ± 13	203 ± 22			
		0.008	0.019	÷	÷	÷	÷	0.31	0.45	0.64			
Kepler-245_b*	0.99942	1.01 ± 0.11	1.81 ± 0.20	÷	4.98 ± 0.55	÷	11.9 ± 1.3	÷	25.3 ± 2.8	÷	49.5 ± 5.4	67.5 ± 7.4	90.7 ± 10.0
		0.019	0.027	÷	0.054	÷	0.096	÷	0.16	÷	0.25	0.31	0.37
Kepler-251_a	0.99484	0.65 ± 0.07	1.80 ± 0.20	÷	9.14 ± 1.0	÷	÷	56.7 ± 6.2	÷	149 ± 16	229 ± 25	343 ± 38	
		0.014	0.028	÷	0.082	÷	÷	0.28	÷	0.53	0.70	0.92	
Kepler-251_b	0.99728	1.15 ± 0.13	2.53 ± 0.28	÷	9.41 ± 1.0	÷	÷	44.4 ± 4.9	68.9 ± 7.6	÷	152 ± 17	218 ± 24	306 ± 34
		0.021	0.035	÷	0.084	÷	÷	0.24	0.32	÷	0.53	0.68	0.85
Kepler-256	0.99760	0.31 ± 0.03	0.75 ± 0.08	÷	÷	÷	÷	17.7 ± 2.0	28.4 ± 3.1	44.1 ± 4.8			
		0.009	0.016	÷	÷	÷	÷	0.13	0.18	0.25			
Kepler-26_a*	0.99342	0.80 ± 0.09	1.73 ± 0.19	÷	6.29 ± 0.69	÷	÷	29.1 ± 3.2	÷	67.4 ± 7.4	98.5 ± 11	141 ± 15	
		0.015	0.024	÷	0.057	÷	÷	0.16	÷	0.28	0.36	0.46	
Kepler-26_b*	0.99391	1.23 ± 0.14	2.25 ± 0.25	÷	6.44 ± 0.71	÷	÷	23.6 ± 2.6	34.3 ± 3.8	÷	68.4 ± 7.5	93.9 ± 10	127 ± 14
		0.019	0.029	÷	0.058	÷	÷	0.14	0.18	÷	0.28	0.35	0.43
Kepler-26_c*	0.99777	1.21 ± 0.13	2.06 ± 0.23	÷	5.25 ± 0.58	7.97 ± 0.88	÷	÷	24.0 ± 2.6	33.3 ± 3.7	÷	61.1 ± 6.7	80.9 ± 8.9	106 ± 12
		0.019	0.027	÷	0.051	0.067	÷	÷	0.14	0.17	÷	0.26	0.32	0.38
Kepler-265_a	0.99734	1.86 ± 0.20	3.58 ± 0.39	÷	11.1 ± 1.2	÷	28.8 ± 3.2	÷	÷	95.0 ± 10	135 ± 15	188 ± 21	
		0.029	0.045	÷	0.095	÷	0.18	÷	÷	0.40	0.50	0.63	
Kepler-265_b	0.99496	2.65 ± 0.29	4.39 ± 0.48	÷	10.8 ± 1.2	÷	23.5 ± 2.6	33.6 ± 3.7	÷	÷	87.2 ± 9.6	116 ± 13	153 ± 17
		0.037	0.051	÷	0.094	÷	0.16	0.20	÷	÷	0.38	0.46	0.55
Kepler-265_c	0.99331	3.23 ± 0.36	4.99 ± 0.55	÷	10.9 ± 1.2	÷	21.9 ± 2.4	30.2 ± 3.3	÷	54.5 ± 6.0	÷	93.4 ± 10	120 ± 13	153 ± 17
		0.042	0.056	÷	0.095	÷	0.15	0.19	÷	0.28	÷	0.39	0.47	0.55
Kepler-282*	0.99966	4.35 ± 0.48	6.47 ± 0.71	÷	÷	18.6 ± 2.0	÷	34.3 ± 3.8	÷	59.8 ± 6.6	77.5 ± 8.5	99.4 ± 11	
		0.050	0.065	÷	÷	0.13	÷	0.20	÷	0.28	0.34	0.40	
Kepler-286	0.99942	0.33 ± 0.04	0.80 ± 0.09	÷	÷	÷	11.0 ± 1.2	18.2 ± 2.0	÷	44.9 ± 4.9	67.4 ± 7.4	98.5 ± 11	
		0.009	0.016	÷	÷	÷	0.091	0.13	÷	0.23	0.31	0.39	

Table A3. (Continued) Predictions of planets for systems with four confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)											
Kepler-299_a	0.99114	0.19 ± 0.02 0.006	0.83 ± 0.09 0.017	÷ ÷	÷	÷	68.2 ± 7.5 0.32	123 ± 14 0.48	212 ± 23 0.69				
Kepler-299_b	0.99134	0.53 ± 0.06 0.013	1.40 ± 0.15 0.024	÷ ÷	÷	23.6 ± 2.6 0.16	÷	66.3 ± 7.3 0.32	105 ± 12 0.43	160 ± 18 0.57			
Kepler-299_c	0.99114	0.83 ± 0.09 0.017	1.54 ± 0.17 0.026	÷ 4.50 ± 0.50 ÷ 0.053	÷	11.2 ± 1.2 0.097	÷	24.6 ± 2.7 0.16	÷	49.4 ± 5.4 0.26	68.1 ± 7.5 0.32	92.3 ± 10 0.40	
Kepler-299_d	0.99973	1.10 ± 0.12 0.021	1.84 ± 0.20 0.029	÷ 4.60 ± 0.51 ÷ 0.054	÷	10.2 ± 1.1 0.091	÷	20.5 ± 2.3 0.15	28.3 ± 3.1 0.18	÷	51.5 ± 5.7 0.27	67.9 ± 7.5 0.32	88.6 ± 9.7 0.39
Kepler-304_a*	0.99593	0.32 ± 0.03 0.008	0.74 ± 0.08 0.014	÷ ÷	÷	÷	15.8 ± 1.7 0.11	25.1 ± 2.8 0.15	38.4 ± 4.2 0.20				
Kepler-304_b*	0.99563	0.59 ± 0.06 0.012	0.96 ± 0.11 0.017	÷ 2.32 ± 0.25 ÷ 0.031	÷	÷	7.08 ± 0.78 0.065	÷	13.5 ± 1.5 0.100	18.1 ± 2.0 0.12	24.1 ± 2.6 0.15		
Kepler-304_c*	0.99593	0.75 ± 0.08 0.014	1.10 ± 0.12 0.019	÷ 2.22 ± 0.24 ÷ 0.030	÷	4.17 ± 0.46 0.046	÷	7.37 ± 0.81 0.067	÷	12.4 ± 1.4 0.095	15.9 ± 1.7 0.11	20.0 ± 2.2 0.13	
Kepler-306_a	0.99463	1.27 ± 0.14 0.021	2.42 ± 0.27 0.032	÷ ÷	12.1 ± 1.3 0.094	÷	28.9 ± 3.2 0.17	÷	61.8 ± 6.8 0.28	87.5 ± 9.6 0.35	121 ± 13 0.44		
Kepler-306_b	0.99866	1.74 ± 0.19 0.026	2.92 ± 0.32 0.037	÷ ÷	11.1 ± 1.2 0.089	÷	23.6 ± 2.6 0.15	33.2 ± 3.7 0.19	÷	62.5 ± 6.9 0.28	83.7 ± 9.2 0.34	111 ± 12 0.41	
Kepler-338*	0.99885	4.45 ± 0.49 0.055	6.55 ± 0.72 0.072	÷ ÷	18.3 ± 2.0 0.14	÷	33.4 ± 3.7 0.21	÷	57.7 ± 6.3 0.31	74.4 ± 8.2 0.36	95.1 ± 10 0.43		
Kepler-341	0.99880	1.70 ± 0.19 0.028	3.01 ± 0.33 0.042	÷ ÷	12.8 ± 1.4 0.11	19.4 ± 2.1 0.14	÷	÷	57.8 ± 6.4 0.30	80.0 ± 8.8 0.37	109 ± 12 0.45		
Kepler-342*	0.99719	0.24 ± 0.03 0.008	0.70 ± 0.08 0.016	÷ 3.81 ± 0.42 ÷ 0.051	7.64 ± 0.84 0.081	÷	÷	÷	67.7 ± 7.4 0.35	105 ± 12 0.47	159 ± 17 0.61		
Kepler-37*	0.99397	6.41 ± 0.70 0.064	9.62 ± 1.1 0.084	÷ ÷	28.2 ± 3.1 0.17	÷	÷	70.3 ± 7.7 0.32	92.7 ± 10 0.38	121 ± 13 0.45			
Kepler-402	0.99784	2.50 ± 0.28 0.037	3.17 ± 0.35 0.044	÷ 4.96 ± 0.55 ÷ 0.059	÷	7.51 ± 0.83 0.078	÷	÷	13.3 ± 1.5 0.11	16.0 ± 1.8 0.13	19.0 ± 2.1 0.14		
Kepler-48*	0.99687	0.53 ± 0.06 0.012	1.70 ± 0.19 0.026	÷ ÷	21.8 ± 2.4 0.15	÷	76.0 ± 8.4 0.33	130 ± 14 0.48	213 ± 23 0.66				
Kepler-49_a*	0.99345	0.69 ± 0.08 0.013	1.35 ± 0.15 0.020	÷ 4.30 ± 0.47 ÷ 0.044	÷	÷	÷	26.2 ± 2.9 0.15	38.2 ± 4.2 0.19	54.5 ± 6.0 0.24			
Kepler-49_b*	0.99072	1.01 ± 0.11 0.017	1.71 ± 0.19 0.024	÷ 4.35 ± 0.48 ÷ 0.044	÷	÷	14.0 ± 1.5 0.096	÷	27.4 ± 3.0 0.15	37.3 ± 4.1 0.18	50.1 ± 5.5 0.22		
Kepler-758*	0.99614	1.42 ± 0.16 0.025	2.67 ± 0.29 0.039	÷ ÷	÷	÷	30.3 ± 3.3 0.20	44.5 ± 4.9 0.25	64.0 ± 7.0 0.32				
Kepler-79	0.99630	2.85 ± 0.31 0.041	6.65 ± 0.73 0.073	÷ ÷	÷	÷	138 ± 15 0.55	219 ± 24 0.75	335 ± 37 0.99				
Kepler-82*	0.99985	0.21 ± 0.02 0.007	0.79 ± 0.09 0.016	÷ ÷	13.2 ± 1.5 0.11	÷	÷	89.6 ± 9.9 0.38	151 ± 17 0.54	244 ± 27 0.75			

Table A3. (Continued) Predictions of planets for systems with four confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)											
Kepler-85*	0.99972	3.52 ± 0.39	5.52 ± 0.61	÷	÷	÷	÷	35.1 ± 3.9	47.9 ± 5.3	64.3 ± 7.1			
		0.044	0.059	÷	÷	÷	÷	0.20	0.25	0.30			
WASP-47	0.99888	0	0.26 ± 0.03	÷	1.95 ± 0.21	÷	÷	16.6 ± 1.8	29.3 ± 3.2	49.4 ± 5.4			
		0	0.008	÷	0.031	÷	÷	0.13	0.19	0.27			
tau Cet_a	0.99500	0.90 ± 0.10	5.03 ± 0.55	÷	÷	÷	321 ± 35	÷	1225 ± 135	2170 ± 239	3657 ± 402		
		0.017	0.053	÷	÷	÷	0.85	÷	2.1	3.0	4.3		
tau Cet_b	0.99451	2.17 ± 0.24	7.20 ± 0.79	÷	÷	97.4 ± 11	÷	345 ± 38	÷	982 ± 108	1557 ± 171	2389 ± 263	
		0.030	0.067	÷	÷	0.38	÷	0.89	÷	1.8	2.4	3.2	
tau Cet_c	0.99745	3.94 ± 0.43	10.0 ± 1.1	÷	÷	86.4 ± 9.5	÷	259 ± 29	420 ± 46	÷	994 ± 109	1466 ± 161	2112 ± 232
		0.045	0.084	÷	÷	0.35	÷	0.73	1.0	÷	1.8	2.3	3.0

÷confirmed planet

*one or more values for a_n are obtained from the TCE catalogue[18] or calculated by Kepler's third law.

Table A4. Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
47 UMa_a	0.99527	64.3 ± 7.1	294 ± 32	÷	÷	6381 ± 702	÷	26474 ± 2912	48339 ± 5317	83545 ± 9190		
		0.32	0.88	÷	÷	6.9	÷	18	27	38		
47 UMa_b	0.99951	177 ± 19	474 ± 52	÷	÷	4504 ± 495	8167 ± 898	÷	23060 ± 2537	36478 ± 4013	55853 ± 6144	
		0.63	1.2	÷	÷	5.5	8.1	÷	16	22	29	
61 Vir_a	0.99011	0	0.30 ± 0.03	÷	÷	÷	421 ± 46	1109 ± 122	2553 ± 281			
		0	0.009	÷	÷	÷	1.1	2.1	3.6			
61 Vir_b	0.99183	0	0.69 ± 0.08	÷	14.9 ± 1.6	÷	÷	251 ± 28	509 ± 56	959 ± 105		
		0	0.015	÷	0.12	÷	÷	0.77	1.2	1.9		
61 Vir_c	0.99977	0.48 ± 0.05	1.55 ± 0.17	÷	9.65 ± 1.1	20.2 ± 2.2	÷	70.7 ± 7.8	÷	199 ± 22	315 ± 35	482 ± 53
		0.012	0.026	÷	0.087	0.14	÷	0.33	÷	0.66	0.89	1.2
GJ 163	0.99646	0	1.12 ± 0.12	÷	÷	97.1 ± 11	256 ± 28	÷	1221 ± 134	2344 ± 258	4219 ± 464	
		0	0.016	÷	÷	0.30	0.58	÷	1.6	2.5	3.8	
GJ 3138	0.99834	0	0	÷	÷	29.7 ± 3.3	94.9 ± 10	÷	581 ± 64	1211 ± 133	2330 ± 256	
		0	0	÷	÷	0.17	0.36	÷	1.2	2.0	3.0	
GJ 581	0.99897	1.01 ± 0.11	1.84 ± 0.20	÷	÷	8.41 ± 0.92	÷	19.3 ± 2.1	28.2 ± 3.1	40.2 ± 4.4		
		0.013	0.020	÷	÷	0.054	÷	0.095	0.12	0.15		
GJ 9827	0.99942	0.30 ± 0.03	0.62 ± 0.07	÷	2.17 ± 0.24	÷	÷	9.67 ± 1.1	14.8 ± 1.6	22.0 ± 2.4		
		0.007	0.012	÷	0.028	÷	÷	0.076	0.10	0.13		
HD 125612	0.99876	0	0	÷	82.7 ± 9.1	÷	÷	9769 ± 1075	26753 ± 2943	63374 ± 6971		
		0	0	÷	0.38	÷	÷	9.1	18	32		
HD 181433_a	0.99818	0	0.62 ± 0.07	÷	65.3 ± 7.2	274 ± 30	÷	÷	5284 ± 581	10990 ± 1209	21106 ± 2322	
		0	0.013	÷	0.29	0.76	÷	÷	5.5	8.9	14	
HD 181433_b	0.9999	0	1.15 ± 0.13	÷	43.9 ± 4.8	150 ± 16	416 ± 46	÷	÷	4180 ± 460	7667 ± 843	13303 ± 1463
		0	0.020	÷	0.22	0.51	1.00	÷	÷	4.7	7.0	10
HD 3167_a	0.9942	0	0	÷	÷	÷	102 ± 11	273 ± 30	634 ± 70			
		0	0	÷	÷	÷	0.41	0.78	1.4			
HD 3167_b	0.9985	0	0.34 ± 0.04	÷	2.19 ± 0.24	4.66 ± 0.51	÷	16.7 ± 1.8	÷	47.7 ± 5.2	75.8 ± 8.3	117 ± 13
		0	0.009	÷	0.031	0.052	÷	0.12	÷	0.25	0.33	0.44
HD 37124	0.99988	12.4 ± 1.4	49.7 ± 5.5	÷	396 ± 44	÷	÷	3513 ± 386	6280 ± 691	10664 ± 1173		
		0.099	0.25	÷	1.0	÷	÷	4.3	6.3	9.0		
HD 69830	0.99955	0.25 ± 0.03	1.93 ± 0.21	÷	÷	83.6 ± 9.2	÷	424 ± 47	831 ± 91	1520 ± 167		
		0.007	0.029	÷	÷	0.36	÷	1.1	1.6	2.5		
HD 7924	0.99934	1.75 ± 0.19	3.25 ± 0.36	÷	9.48 ± 1.0	÷	÷	35.3 ± 3.9	51.7 ± 5.7	74.1 ± 8.1		
		0.027	0.041	÷	0.084	÷	÷	0.20	0.26	0.33		
HIP 14810_a	0.99923	0	0	÷	÷	÷	4268 ± 470	13963 ± 1536	37549 ± 4130			
		0	0	÷	÷	÷	5.2	11	22			
HIP 14810_b	0.99923	0	0.73 ± 0.08	÷	37.3 ± 4.1	÷	394 ± 43	÷	2128 ± 234	4258 ± 468	7930 ± 872	
		0	0.016	÷	0.22	÷	1.1	÷	3.2	5.2	7.8	
HIP 57274_a	0.99616	0	0.64 ± 0.07	÷	÷	143 ± 16	÷	1056 ± 116	2339 ± 257	4721 ± 519		
		0	0.013	÷	÷	0.48	÷	1.8	3.1	4.9		

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
HIP 57274_b	0.99916	0.20 ± 0.02 0.006	1.76 ± 0.19 0.025	÷ ÷	÷ ÷	85.1 ± 9.4 0.34	206 ± 23 0.61	÷ ÷	880 ± 97 1.6	1624 ± 179 2.4	2832 ± 312 3.5	
K2-133	0.99991	1.11 ± 0.12 0.017	1.89 ± 0.21 0.024	÷ ÷	÷ ÷	7.41 ± 0.81 0.059	÷ ÷	15.9 ± 1.7 0.099	22.5 ± 2.5 0.12	31.3 ± 3.4 0.15		
K2-148_a	0.99589	1.77 ± 0.19 0.025	2.86 ± 0.31 0.034	÷ ÷	÷ ÷	÷ ÷	14.2 ± 1.6 0.099	20.0 ± 2.2 0.12	27.6 ± 3.0 0.16			
K2-148_b	0.99589	2.86 ± 0.31 0.034	3.58 ± 0.39 0.040	÷ ÷	5.49 ± 0.60 0.053	÷ ÷	8.18 ± 0.90 0.069	÷ ÷	11.9 ± 1.3 0.088	14.2 ± 1.6 0.099	16.9 ± 1.9 0.11	
K2-155	0.99682	1.31 ± 0.14 0.020	3.12 ± 0.34 0.035	÷ ÷	÷ ÷	23.9 ± 2.6 0.14	÷ ÷	68.4 ± 7.5 0.27	109 ± 12 0.37	167 ± 18 0.50		
K2-19_a	0.99744	0.68 ± 0.07 0.014	1.36 ± 0.15 0.023	÷ ÷	4.51 ± 0.50 0.051	÷ ÷	÷ ÷	19.0 ± 2.1 0.13	28.8 ± 3.2 0.17	42.3 ± 4.7 0.23		
K2-19_b	0.99838	0.96 ± 0.11 0.018	1.57 ± 0.17 0.025	÷ ÷	3.80 ± 0.42 0.045	5.65 ± 0.62 0.059	÷ ÷	÷ ÷	16.2 ± 1.8 0.12	22.1 ± 2.4 0.15	29.8 ± 3.3 0.18	
K2-233_a	0.99209	0.32 ± 0.04 0.008	1.02 ± 0.11 0.018	÷ ÷	÷ ÷	13.1 ± 1.4 0.10	÷ ÷	45.4 ± 5.0 0.23	77.7 ± 8.6 0.33	127 ± 14 0.46		
K2-233_b	0.99981	0.73 ± 0.08 0.015	1.40 ± 0.15 0.023	÷ ÷	4.25 ± 0.47 0.048	÷ ÷	10.9 ± 1.2 0.089	16.6 ± 1.8 0.12	÷ ÷	35.4 ± 3.9 0.20	50.1 ± 5.5 0.25	69.6 ± 7.7 0.31
K2-239_a	0.99315	3.21 ± 0.35 0.032	4.09 ± 0.45 0.037	÷ ÷	6.47 ± 0.71 0.051	÷ ÷	÷ ÷	12.1 ± 1.3 0.077	14.8 ± 1.6 0.088	17.9 ± 2.0 0.10		
K2-239_b	0.99994	3.92 ± 0.43 0.036	4.53 ± 0.50 0.040	÷ ÷	5.99 ± 0.66 0.048	6.85 ± 0.75 0.053	÷ ÷	8.90 ± 0.98 0.063	÷ ÷	11.4 ± 1.3 0.074	12.9 ± 1.4 0.081	14.5 ± 1.6 0.087
K2-3_a	0.99302	1.46 ± 0.16 0.021	4.24 ± 0.47 0.043	÷ ÷	÷ ÷	÷ ÷	85.8 ± 9.4 0.32	151 ± 17 0.47	252 ± 28 0.66			
K2-3_b	0.99902	4.85 ± 0.53 0.047	7.01 ± 0.77 0.061	÷ ÷	13.8 ± 1.5 0.095	18.8 ± 2.1 0.12	÷ ÷	33.6 ± 3.7 0.17	÷ ÷	56.9 ± 6.3 0.24	72.8 ± 8.0 0.29	92.3 ± 10 0.34
K2-32	0.99882	3.24 ± 0.36 0.041	5.49 ± 0.60 0.058	÷ ÷	13.9 ± 1.5 0.11	÷ ÷	÷ ÷	45.1 ± 5.0 0.24	63.6 ± 7.0 0.30	88.2 ± 9.7 0.37		
K2-37	0.99864	1.73 ± 0.19 0.027	2.80 ± 0.31 0.038	÷ ÷	÷ ÷	9.72 ± 1.1 0.086	÷ ÷	19.7 ± 2.2 0.14	27.2 ± 3.0 0.17	37.1 ± 4.1 0.21		
K2-58_a	0.99144	0 0	0.52 ± 0.06 0.012	÷ ÷	÷ ÷	÷ ÷	51.6 ± 5.7 0.26	110 ± 12 0.43	215 ± 24 0.67			
K2-58_b	0.9995	0.81 ± 0.09 0.016	1.49 ± 0.16 0.025	÷ ÷	4.30 ± 0.47 0.050	÷ ÷	10.6 ± 1.2 0.091	15.8 ± 1.7 0.12	÷ ÷	33.0 ± 3.6 0.19	46.2 ± 5.1 0.24	63.5 ± 7.0 0.30
K2-80_a*	0.99821	1.33 ± 0.15 0.023	2.87 ± 0.32 0.038	÷ ÷	10.5 ± 1.2 0.091	÷ ÷	÷ ÷	48.9 ± 5.4 0.25	75.7 ± 8.3 0.34	114 ± 12 0.44		
K2-80_b*	0.99766	1.96 ± 0.22 0.030	3.37 ± 0.37 0.042	÷ ÷	8.75 ± 0.96 0.080	13.4 ± 1.5 0.11	÷ ÷	÷ ÷	41.2 ± 4.5 0.23	57.4 ± 6.3 0.28	78.6 ± 8.6 0.35	
Kepler-100*	0.99972	1.72 ± 0.19 0.029	3.61 ± 0.40 0.047	÷ ÷	÷ ÷	21.6 ± 2.4 0.15	÷ ÷	56.1 ± 6.2 0.29	85.7 ± 9.4 0.39	128 ± 14 0.50		

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
Kepler-104_a	0.99707	1.46 ± 0.16	4.39 ± 0.48	÷	÷	÷	95.4 ± 10	169 ± 19	286 ± 31			
		0.024	0.050	÷	÷	÷	0.39	0.57	0.80			
Kepler-104_b	0.99707	4.38 ± 0.48	7.11 ± 0.78	÷	16.8 ± 1.9	÷	35.8 ± 3.9	÷	70.0 ± 7.7	95.3 ± 10	128 ± 14	
		0.050	0.069	÷	0.12	÷	0.20	÷	0.31	0.39	0.47	
Kepler-114_a*	0.99854	2.22 ± 0.24	3.43 ± 0.38	÷	÷	÷	15.1 ± 1.7	20.7 ± 2.3	28.1 ± 3.1			
		0.030	0.040	÷	÷	÷	0.11	0.13	0.16			
Kepler-114_b*	0.99854	3.43 ± 0.38	4.21 ± 0.46	÷	6.24 ± 0.69	÷	9.02 ± 0.99	÷	12.8 ± 1.4	15.1 ± 1.7	17.7 ± 1.9	
		0.040	0.046	÷	0.060	÷	0.077	÷	0.097	0.11	0.12	
Kepler-124_a	0.99375	0.40 ± 0.04	1.25 ± 0.14	÷	7.42 ± 0.82	÷	÷	52.3 ± 5.8	89.0 ± 9.8	145 ± 16		
		0.009	0.020	÷	0.066	÷	÷	0.24	0.34	0.48		
Kepler-124_b	0.99998	1.04 ± 0.11	1.93 ± 0.21	÷	5.64 ± 0.62	9.04 ± 0.99	÷	21.0 ± 2.3	÷	44.1 ± 4.8	61.8 ± 6.8	85.2 ± 9.4
		0.018	0.027	÷	0.055	0.075	÷	0.13	÷	0.22	0.27	0.33
Kepler-1254_a*	0.99416	1.02 ± 0.11	1.95 ± 0.22	÷	÷	÷	15.4 ± 1.7	23.5 ± 2.6	34.8 ± 3.8			
		0.018	0.028	÷	÷	÷	0.11	0.15	0.19			
Kepler-1254_b*	0.99416	1.95 ± 0.22	2.64 ± 0.29	÷	4.62 ± 0.51	÷	7.70 ± 0.85	÷	12.3 ± 1.4	15.4 ± 1.7	19.1 ± 2.1	
		0.028	0.034	÷	0.050	÷	0.070	÷	0.096	0.11	0.13	
Kepler-1254_c*	0.99852	2.31 ± 0.25	2.92 ± 0.32	÷	4.54 ± 0.50	÷	6.85 ± 0.75	8.33 ± 0.92	÷	12.1 ± 1.3	14.5 ± 1.6	17.2 ± 1.9
		0.031	0.037	÷	0.049	÷	0.065	0.074	÷	0.095	0.11	0.12
Kepler-126	0.99726	1.05 ± 0.12	3.58 ± 0.39	÷	÷	50.3 ± 5.5	÷	181 ± 20	314 ± 34	519 ± 57		
		0.021	0.048	÷	÷	0.28	÷	0.66	0.96	1.3		
Kepler-127_a	0.99551	3.29 ± 0.36	7.33 ± 0.81	÷	÷	÷	83.7 ± 9.2	135 ± 15	211 ± 23			
		0.046	0.079	÷	÷	÷	0.40	0.55	0.75			
Kepler-127_b	0.99551	7.33 ± 0.81	10.5 ± 1.2	÷	20.6 ± 2.3	÷	37.5 ± 4.1	÷	64.8 ± 7.1	83.6 ± 9.2	107 ± 12	
		0.079	0.10	÷	0.16	÷	0.24	÷	0.34	0.40	0.47	
Kepler-130_a	0.99888	0.16 ± 0.02	1.56 ± 0.17	÷	÷	÷	210 ± 23	460 ± 51	920 ± 101			
		0.006	0.026	÷	÷	÷	0.68	1.1	1.8			
Kepler-130_b	0.99888	1.55 ± 0.17	3.75 ± 0.41	÷	15.9 ± 1.8	÷	51.1 ± 5.6	÷	136 ± 15	209 ± 23	314 ± 34	
		0.026	0.046	÷	0.12	÷	0.27	÷	0.51	0.68	0.89	
Kepler-138_a*	0.99985	5.67 ± 0.62	7.72 ± 0.85	÷	÷	17.9 ± 2.0	÷	29.6 ± 3.3	37.4 ± 4.1	47.0 ± 5.2		
		0.053	0.065	÷	÷	0.11	÷	0.16	0.19	0.22		
Kepler-138_b*	0.99604	7.07 ± 0.78	8.48 ± 0.93	÷	12.0 ± 1.3	÷	16.7 ± 1.8	19.6 ± 2.2	÷	26.5 ± 2.9	30.7 ± 3.4	35.5 ± 3.9
		0.062	0.069	÷	0.088	÷	0.11	0.12	÷	0.15	0.16	0.18
Kepler-142	0.99977	0.17 ± 0.02	0.66 ± 0.07	÷	÷	11.0 ± 1.2	22.2 ± 2.4	÷	73.7 ± 8.1	124 ± 14	200 ± 22	
		0.006	0.015	÷	÷	0.099	0.16	÷	0.35	0.50	0.69	
Kepler-148_a*	0.99821	0	0.47 ± 0.05	÷	÷	11.6 ± 1.3	25.2 ± 2.8	÷	92.9 ± 10	163 ± 18	271 ± 30	
		0	0.011	÷	÷	0.097	0.16	÷	0.39	0.56	0.79	
Kepler-148_b*	0.9999	0.22 ± 0.02	0.68 ± 0.07	÷	÷	8.40 ± 0.92	16.1 ± 1.8	28.8 ± 3.2	÷	80.0 ± 8.8	126 ± 14	192 ± 21
		0.007	0.015	÷	÷	0.080	0.12	0.18	÷	0.36	0.49	0.64
Kepler-149	0.99992	6.76 ± 0.74	14.8 ± 1.6	÷	÷	96.0 ± 11	÷	257 ± 28	399 ± 44	600 ± 66		
		0.069	0.12	÷	÷	0.41	÷	0.78	1.1	1.4		

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
Kepler-157_a*	0.99931	0.26 ± 0.03 0.008	0.72 ± 0.08 0.016	÷ ÷	3.68 ± 0.40 0.046	÷ ÷	÷ ÷	23.1 ± 2.5 0.16	38.2 ± 4.2 0.22	60.9 ± 6.7 0.30		
Kepler-157_b*	0.99761	0.64 ± 0.07 0.014	1.12 ± 0.12 0.020	÷ ÷	3.00 ± 0.33 0.039	4.64 ± 0.51 0.052	÷ ÷	10.2 ± 1.1 0.088	÷ ÷	20.5 ± 2.3 0.14	28.2 ± 3.1 0.17	38.3 ± 4.2 0.21
Kepler-164_a	0.99374	1.20 ± 0.13 0.022	2.65 ± 0.29 0.038	÷ ÷	÷ ÷	17.7 ± 2.0 0.13	÷ ÷	48.1 ± 5.3 0.26	74.9 ± 8.2 0.35	113 ± 12 0.46		
Kepler-164_b	0.99998	2.10 ± 0.23 0.032	3.31 ± 0.36 0.044	÷ ÷	7.49 ± 0.82 0.076	÷ ÷	15.4 ± 1.7 0.12	21.4 ± 2.3 0.15	÷ ÷	39.3 ± 4.3 0.23	52.1 ± 5.7 0.28	68.3 ± 7.5 0.33
Kepler-166_a*	0.9971	0 0	0.12 ± 0.01 0.004	÷ ÷	÷ ÷	÷ ÷	99.7 ± 11 0.40	254 ± 28 0.74	570 ± 63 1.3			
Kepler-166_b*	0.9971	0.12 ± 0.01 0.004	0.47 ± 0.05 0.011	÷ ÷	3.72 ± 0.41 0.045	÷ ÷	17.3 ± 1.9 0.12	÷ ÷	58.6 ± 6.4 0.28	99.5 ± 11 0.40	162 ± 18 0.55	
Kepler-171_a	0.99361	0.56 ± 0.06 0.013	1.75 ± 0.19 0.028	÷ ÷	÷ ÷	21.3 ± 2.3 0.15	÷ ÷	72.6 ± 8.0 0.34	123 ± 14 0.48	201 ± 22 0.66		
Kepler-171_b	0.99998	1.27 ± 0.14 0.023	2.38 ± 0.26 0.034	÷ ÷	7.07 ± 0.78 0.071	÷ ÷	17.8 ± 2.0 0.13	26.8 ± 3.0 0.17	÷ ÷	56.7 ± 6.2 0.28	79.9 ± 8.8 0.36	110 ± 12 0.44
Kepler-174	0.99991	0.62 ± 0.07 0.012	3.63 ± 0.40 0.041	÷ ÷	÷ ÷	110 ± 12 0.40	÷ ÷	507 ± 56 1.1	959 ± 105 1.7	1707 ± 188 2.5		
Kepler-178	0.99784	0.91 ± 0.10 0.018	3.20 ± 0.35 0.041	÷ ÷	÷ ÷	47.8 ± 5.3 0.25	÷ ÷	175 ± 19 0.59	306 ± 34 0.86	510 ± 56 1.2		
Kepler-18_a	0.99988	0.52 ± 0.06 0.013	1.46 ± 0.16 0.025	÷ ÷	÷ ÷	÷ ÷	27.5 ± 3.0 0.18	47.8 ± 5.3 0.26	79.3 ± 8.7 0.36			
Kepler-18_b	0.99988	1.46 ± 0.16 0.025	2.31 ± 0.25 0.034	÷ ÷	5.23 ± 0.58 0.058	÷ ÷	10.7 ± 1.2 0.094	÷ ÷	20.4 ± 2.2 0.14	27.5 ± 3.0 0.18	36.5 ± 4.0 0.21	
Kepler-184_a	0.99751	4.92 ± 0.54 0.055	7.31 ± 0.80 0.071	÷ ÷	15.0 ± 1.7 0.12	÷ ÷	÷ ÷	38.4 ± 4.2 0.22	50.9 ± 5.6 0.26	66.8 ± 7.3 0.31		
Kepler-184_b	0.99936	6.85 ± 0.75 0.068	8.62 ± 0.95 0.080	÷ ÷	13.3 ± 1.5 0.11	16.4 ± 1.8 0.12	÷ ÷	24.3 ± 2.7 0.16	÷ ÷	35.1 ± 3.9 0.20	41.8 ± 4.6 0.23	49.6 ± 5.5 0.26
Kepler-191_a*	0.99766	1.44 ± 0.16 0.024	2.98 ± 0.33 0.039	÷ ÷	÷ ÷	÷ ÷	28.5 ± 3.1 0.18	44.9 ± 4.9 0.24	68.4 ± 7.5 0.31			
Kepler-191_b*	0.99766	2.98 ± 0.33 0.039	4.16 ± 0.46 0.049	÷ ÷	7.71 ± 0.85 0.073	÷ ÷	13.5 ± 1.5 0.11	÷ ÷	22.5 ± 2.5 0.15	28.5 ± 3.1 0.18	36.0 ± 4.0 0.21	
Kepler-192_a*	0.99955	2.37 ± 0.26 0.035	3.94 ± 0.43 0.049	÷ ÷	÷ ÷	14.6 ± 1.6 0.12	÷ ÷	30.6 ± 3.4 0.19	42.8 ± 4.7 0.24	59.0 ± 6.5 0.30		
Kepler-192_b*	0.99708	3.41 ± 0.38 0.044	4.58 ± 0.50 0.054	÷ ÷	7.96 ± 0.88 0.078	÷ ÷	13.2 ± 1.4 0.11	16.7 ± 1.8 0.13	÷ ÷	26.2 ± 2.9 0.17	32.3 ± 3.6 0.20	39.7 ± 4.4 0.23
Kepler-194_a	0.99313	0 0	0.39 ± 0.04 0.010	÷ ÷	6.98 ± 0.77 0.071	÷ ÷	÷ ÷	106 ± 12 0.44	211 ± 23 0.69	391 ± 43 1.0		
Kepler-194_b	0.99994	0.28 ± 0.03 0.008	0.83 ± 0.09 0.017	÷ ÷	4.62 ± 0.51 0.054	9.35 ± 1.0 0.087	÷ ÷	31.1 ± 3.4 0.19	÷ ÷	84.6 ± 9.3 0.38	132 ± 15 0.51	199 ± 22 0.67

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
Kepler-198_a*	0.99869	0	0	÷	÷	÷	341 ± 38	1025 ± 113	2595 ± 285			
		0	0	÷	÷	÷	0.97	2.0	3.8			
Kepler-198_b*	0.99869	0	0.24 ± 0.03	÷	5.42 ± 0.60	÷	41.6 ± 4.6	÷	190 ± 21	359 ± 39	637 ± 70	
		0	0.007	÷	0.059	÷	0.23	÷	0.64	0.97	1.4	
Kepler-203_a	0.99609	1.21 ± 0.13	2.03 ± 0.22	÷	÷	7.76 ± 0.85	÷	16.4 ± 1.8	23.2 ± 2.5	32.0 ± 3.5		
		0.023	0.032	÷	÷	0.078	÷	0.13	0.16	0.20		
Kepler-203_b	0.99984	1.74 ± 0.19	2.37 ± 0.26	÷	4.16 ± 0.46	÷	6.98 ± 0.77	8.90 ± 0.98	÷	14.1 ± 1.5	17.5 ± 1.9	21.5 ± 2.4
		0.029	0.035	÷	0.051	÷	0.073	0.085	÷	0.12	0.13	0.15
Kepler-206_a	0.9974	1.95 ± 0.22	4.01 ± 0.44	÷	÷	÷	37.5 ± 4.1	58.9 ± 6.5	89.4 ± 9.8			
		0.031	0.050	÷	÷	÷	0.22	0.30	0.40			
Kepler-206_b	0.9974	4.01 ± 0.44	5.58 ± 0.61	÷	10.3 ± 1.1	÷	17.8 ± 2.0	÷	29.6 ± 3.3	37.5 ± 4.1	47.2 ± 5.2	
		0.050	0.063	÷	0.094	÷	0.14	÷	0.19	0.22	0.26	
Kepler-207_a	0.99814	0.31 ± 0.03	0.75 ± 0.08	÷	÷	÷	10.0 ± 1.1	16.6 ± 1.8	26.4 ± 2.9			
		0.010	0.017	÷	÷	÷	0.097	0.14	0.19			
Kepler-207_b	0.99814	0.75 ± 0.08	1.11 ± 0.12	÷	2.26 ± 0.25	÷	4.29 ± 0.47	÷	7.64 ± 0.84	10.00 ± 1.1	12.9 ± 1.4	
		0.017	0.022	÷	0.036	÷	0.055	÷	0.081	0.097	0.12	
Kepler-217_a*	0.99148	1.37 ± 0.15	2.27 ± 0.25	÷	÷	÷	12.3 ± 1.4	17.6 ± 1.9	24.6 ± 2.7			
		0.026	0.037	÷	÷	÷	0.11	0.14	0.18			
Kepler-217_b*	0.99148	2.28 ± 0.25	2.89 ± 0.32	÷	4.54 ± 0.50	÷	6.91 ± 0.76	÷	10.2 ± 1.1	12.3 ± 1.4	14.8 ± 1.6	
		0.037	0.043	÷	0.058	÷	0.077	÷	0.100	0.11	0.13	
Kepler-217_c*	0.99949	2.59 ± 0.29	3.13 ± 0.34	÷	4.47 ± 0.49	÷	6.27 ± 0.69	7.37 ± 0.81	÷	10.1 ± 1.1	11.7 ± 1.3	13.5 ± 1.5
		0.040	0.045	÷	0.058	÷	0.072	0.080	÷	0.099	0.11	0.12
Kepler-218*	0.99985	0	0.56 ± 0.06	÷	14.6 ± 1.6	÷	÷	275 ± 30	570 ± 63	1090 ± 120		
		0	0.013	÷	0.12	÷	÷	0.83	1.3	2.1		
Kepler-219	0.99888	0.46 ± 0.05	1.60 ± 0.18	÷	10.9 ± 1.2	÷	÷	86.3 ± 9.5	150 ± 17	250 ± 28		
		0.012	0.028	÷	0.10	÷	÷	0.40	0.58	0.82		
Kepler-222_a	0.99566	0.18 ± 0.02	1.00 ± 0.11	÷	÷	÷	60.5 ± 6.7	122 ± 13	228 ± 25			
		0.006	0.019	÷	÷	÷	0.30	0.48	0.73			
Kepler-222_b	0.99566	1.00 ± 0.11	2.00 ± 0.22	÷	6.56 ± 0.72	÷	17.7 ± 1.9	÷	41.3 ± 4.5	60.7 ± 6.7	87.0 ± 9.6	
		0.019	0.031	÷	0.068	÷	0.13	÷	0.23	0.30	0.38	
Kepler-226_a	0.99212	1.69 ± 0.19	2.59 ± 0.28	÷	÷	÷	11.1 ± 1.2	15.1 ± 1.7	20.4 ± 2.2			
		0.027	0.036	÷	÷	÷	0.094	0.12	0.14			
Kepler-226_b	0.99932	2.89 ± 0.32	3.39 ± 0.37	÷	4.60 ± 0.51	÷	6.15 ± 0.68	7.07 ± 0.78	÷	9.27 ± 1.0	10.6 ± 1.2	12.0 ± 1.3
		0.038	0.043	÷	0.052	÷	0.063	0.070	÷	0.083	0.091	0.099
Kepler-228_a	0.99818	0.72 ± 0.08	1.39 ± 0.15	÷	÷	6.99 ± 0.77	÷	16.8 ± 1.8	25.0 ± 2.7	36.1 ± 4.0		
		0.016	0.025	÷	÷	0.074	÷	0.13	0.17	0.22		
Kepler-228_b	0.99768	1.11 ± 0.12	1.75 ± 0.19	÷	÷	5.72 ± 0.63	8.10 ± 0.89	÷	15.4 ± 1.7	20.7 ± 2.3	27.4 ± 3.0	
		0.022	0.029	÷	÷	0.065	0.082	÷	0.13	0.15	0.18	
Kepler-229_a	0.99807	0.36 ± 0.04	1.74 ± 0.19	÷	÷	÷	87.4 ± 9.6	172 ± 19	317 ± 35			
		0.009	0.027	÷	÷	÷	0.36	0.57	0.85			

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
Kepler-229_b	0.99807	1.75 ± 0.19	3.36 ± 0.37	÷	10.3 ± 1.1	÷	26.7 ± 2.9	÷	60.5 ± 6.7	87.7 ± 9.6	124 ± 14	
		0.027	0.041	÷	0.087	÷	0.16	÷	0.28	0.36	0.46	
Kepler-23_a	0.99822	3.04 ± 0.33	4.75 ± 0.52	÷	÷	÷	21.5 ± 2.4	29.8 ± 3.3	40.6 ± 4.5			
		0.043	0.057	÷	÷	÷	0.16	0.19	0.24			
Kepler-23_b	0.99822	4.73 ± 0.52	5.84 ± 0.64	÷	8.73 ± 0.96	÷	12.7 ± 1.4	÷	18.1 ± 2.0	21.5 ± 2.4	25.3 ± 2.8	
		0.057	0.066	÷	0.086	÷	0.11	÷	0.14	0.16	0.18	
Kepler-244_a	0.99995	0.53 ± 0.06	1.66 ± 0.18	÷	÷	÷	38.3 ± 4.2	68.6 ± 7.5	117 ± 13			
		0.012	0.027	÷	÷	÷	0.22	0.32	0.45			
Kepler-244_b	0.99995	1.66 ± 0.18	2.72 ± 0.30	÷	6.57 ± 0.72	÷	14.2 ± 1.6	÷	28.0 ± 3.1	38.3 ± 4.2	51.7 ± 5.7	
		0.027	0.037	÷	0.067	÷	0.11	÷	0.17	0.22	0.26	
Kepler-247_a	0.998	0.26 ± 0.03	1.09 ± 0.12	÷	÷	÷	43.1 ± 4.7	82.8 ± 9.1	149 ± 16			
		0.008	0.020	÷	÷	÷	0.23	0.36	0.53			
Kepler-247_b	0.998	1.08 ± 0.12	1.98 ± 0.22	÷	5.67 ± 0.62	÷	13.9 ± 1.5	÷	30.2 ± 3.3	43.0 ± 4.7	60.1 ± 6.6	
		0.020	0.030	÷	0.060	÷	0.11	÷	0.18	0.23	0.29	
Kepler-249_a	0.99825	0.41 ± 0.05	1.27 ± 0.14	÷	÷	÷	28.6 ± 3.2	51.1 ± 5.6	86.7 ± 9.5			
		0.009	0.018	÷	÷	÷	0.15	0.22	0.31			
Kepler-249_b	0.99825	1.26 ± 0.14	2.07 ± 0.23	÷	4.96 ± 0.55	÷	10.6 ± 1.2	÷	20.9 ± 2.3	28.6 ± 3.1	38.5 ± 4.2	
		0.018	0.026	÷	0.046	÷	0.076	÷	0.12	0.15	0.18	
Kepler-25_a*	0.99688	0.51 ± 0.06	1.91 ± 0.21	÷	÷	31.6 ± 3.5	63.8 ± 7.0	÷	212 ± 23	356 ± 39	575 ± 63	
		0.013	0.031	÷	÷	0.20	0.32	÷	0.72	1.0	1.4	
Kepler-25_b*	0.99998	1.03 ± 0.11	2.70 ± 0.30	÷	÷	24.6 ± 2.7	44.1 ± 4.9	75.3 ± 8.3	÷	193 ± 21	295 ± 32	437 ± 48
		0.021	0.039	÷	÷	0.17	0.25	0.36	÷	0.68	0.90	1.2
Kepler-250	0.99983	1.24 ± 0.14	2.34 ± 0.26	÷	÷	11.4 ± 1.3	÷	27.1 ± 3.0	39.9 ± 4.4	57.5 ± 6.3		
		0.022	0.033	÷	÷	0.094	÷	0.17	0.22	0.28		
Kepler-253_a	0.99516	1.01 ± 0.11	2.00 ± 0.22	÷	6.51 ± 0.72	÷	÷	27.0 ± 3.0	40.6 ± 4.5	59.5 ± 6.5		
		0.019	0.030	÷	0.066	÷	÷	0.17	0.22	0.29		
Kepler-253_b	0.99997	1.79 ± 0.20	2.64 ± 0.29	÷	5.39 ± 0.59	7.48 ± 0.82	÷	13.7 ± 1.5	÷	23.7 ± 2.6	30.7 ± 3.4	39.2 ± 4.3
		0.028	0.036	÷	0.058	0.072	÷	0.11	÷	0.16	0.18	0.22
Kepler-254_a	0.99673	2.32 ± 0.25	3.72 ± 0.41	÷	8.71 ± 0.96	÷	÷	25.8 ± 2.8	35.6 ± 3.9	48.3 ± 5.3		
		0.034	0.047	÷	0.083	÷	÷	0.17	0.21	0.26		
Kepler-254_b	0.99968	3.44 ± 0.38	4.53 ± 0.50	÷	7.58 ± 0.83	9.65 ± 1.1	÷	15.2 ± 1.7	÷	23.3 ± 2.6	28.4 ± 3.1	34.6 ± 3.8
		0.045	0.054	÷	0.076	0.089	÷	0.12	÷	0.16	0.18	0.21
Kepler-255_a*	0.99692	0.11 ± 0.01	0.37 ± 0.04	÷	2.47 ± 0.27	÷	÷	19.2 ± 2.1	33.4 ± 3.7	55.4 ± 6.1		
		0.004	0.010	÷	0.036	÷	÷	0.14	0.21	0.29		
Kepler-255_b*	0.99875	0.20 ± 0.02	0.47 ± 0.05	÷	1.91 ± 0.21	3.47 ± 0.38	÷	÷	15.5 ± 1.7	23.7 ± 2.6	35.3 ± 3.9	
		0.007	0.012	÷	0.030	0.045	÷	÷	0.12	0.16	0.21	
Kepler-257	0.99708	0.28 ± 0.03	0.93 ± 0.10	÷	÷	12.9 ± 1.4	÷	45.8 ± 5.0	79.2 ± 8.7	131 ± 14		
		0.008	0.018	÷	÷	0.10	÷	0.24	0.35	0.49		
Kepler-267	0.99864	0.42 ± 0.05	1.26 ± 0.14	÷	÷	14.8 ± 1.6	÷	49.9 ± 5.5	84.5 ± 9.3	137 ± 15		
		0.009	0.019	÷	÷	0.100	÷	0.22	0.32	0.44		

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)									
Kepler-272_a	0.99971	0.56 ± 0.06 0.012	1.37 ± 0.15 0.023	÷ ÷	÷ ÷	÷ ÷	19.4 ± 2.1 0.13	32.4 ± 3.6 0.19	51.9 ± 5.7 0.26		
Kepler-272_b	0.99971	1.37 ± 0.15 0.023	2.05 ± 0.23 0.030	÷ ÷	4.27 ± 0.47 0.048	÷ ÷	8.20 ± 0.90 0.075	÷ ÷	14.8 ± 1.6 0.11	19.4 ± 2.1 0.13	25.2 ± 2.8 0.16
Kepler-275	0.99999	3.82 ± 0.42 0.051	6.41 ± 0.70 0.071	÷ ÷	÷ ÷	24.2 ± 2.7 0.17	÷ ÷	51.2 ± 5.6 0.29	72.0 ± 7.9 0.36	99.5 ± 11 0.44	
Kepler-276*	0.99816	5.33 ± 0.59 0.062	8.80 ± 0.97 0.087	÷ ÷	21.5 ± 2.4 0.16	÷ ÷	÷ ÷	66.4 ± 7.3 0.33	92.7 ± 10 0.42	127 ± 14 0.51	
Kepler-279_a*	0.99927	3.67 ± 0.40 0.050	6.96 ± 0.77 0.077	÷ ÷	21.0 ± 2.3 0.16	÷ ÷	÷ ÷	81.3 ± 8.9 0.39	120 ± 13 0.51	173 ± 19 0.65	
Kepler-279_b*	0.99592	5.07 ± 0.56 0.062	7.97 ± 0.88 0.084	÷ ÷	18.0 ± 2.0 0.14	26.0 ± 2.9 0.18	÷ ÷	÷ ÷	69.6 ± 7.7 0.36	93.6 ± 10 0.43	124 ± 14 0.52
Kepler-288_a	0.99883	0.16 ± 0.02 0.006	1.28 ± 0.14 0.023	÷ ÷	÷ ÷	÷ ÷	132 ± 15 0.51	282 ± 31 0.84	553 ± 61 1.3		
Kepler-288_b	0.99883	1.28 ± 0.14 0.023	2.89 ± 0.32 0.040	÷ ÷	11.3 ± 1.2 0.098	÷ ÷	34.2 ± 3.8 0.21	÷ ÷	87.0 ± 9.6 0.38	132 ± 15 0.51	195 ± 22 0.66
Kepler-289_a	0.99955	6.07 ± 0.67 0.066	15.2 ± 1.7 0.12	÷ ÷	÷ ÷	÷ ÷	226 ± 25 0.74	380 ± 42 1.0	614 ± 68 1.4		
Kepler-289_b	0.99955	15.4 ± 1.7 0.12	23.3 ± 2.6 0.16	÷ ÷	49.2 ± 5.4 0.27	÷ ÷	95.5 ± 11 0.41	÷ ÷	174 ± 19 0.62	229 ± 25 0.74	299 ± 33 0.89
Kepler-295_a	0.99923	3.86 ± 0.43 0.045	7.21 ± 0.79 0.068	÷ ÷	÷ ÷	÷ ÷	53.2 ± 5.9 0.26	80.2 ± 8.8 0.34	118 ± 13 0.44		
Kepler-295_b	0.99923	7.25 ± 0.80 0.068	9.68 ± 1.1 0.083	÷ ÷	16.6 ± 1.8 0.12	÷ ÷	27.2 ± 3.0 0.17	÷ ÷	43.1 ± 4.7 0.22	53.5 ± 5.9 0.26	65.9 ± 7.2 0.30
Kepler-298	0.9993	1.72 ± 0.19 0.024	4.58 ± 0.50 0.046	÷ ÷	÷ ÷	43.2 ± 4.8 0.21	÷ ÷	134 ± 15 0.44	220 ± 24 0.61	348 ± 38 0.83	
Kepler-30_a	0.99865	3.55 ± 0.39 0.045	10.9 ± 1.2 0.095	÷ ÷	÷ ÷	÷ ÷	249 ± 27 0.76	445 ± 49 1.1	754 ± 83 1.6		
Kepler-30_b	0.99865	11.2 ± 1.2 0.095	18.3 ± 2.0 0.13	÷ ÷	43.9 ± 4.8 0.24	÷ ÷	94.4 ± 10 0.39	÷ ÷	186 ± 20 0.62	254 ± 28 0.76	342 ± 38 0.93
Kepler-301_a	0.99147	0.64 ± 0.07 0.014	1.37 ± 0.15 0.024	÷ ÷	÷ ÷	8.54 ± 0.94 0.081	÷ ÷	22.5 ± 2.5 0.16	34.7 ± 3.8 0.21	51.8 ± 5.7 0.27	
Kepler-301_b	0.9905	0.80 ± 0.09 0.017	1.41 ± 0.16 0.025	÷ ÷	3.83 ± 0.42 0.048	÷ ÷	8.99 ± 0.99 0.084	÷ ÷	19.0 ± 2.1 0.14	26.7 ± 2.9 0.17	36.9 ± 4.1 0.22
Kepler-301_c	0.9997	1.10 ± 0.12 0.021	1.69 ± 0.19 0.028	÷ ÷	3.71 ± 0.41 0.047	÷ ÷	7.44 ± 0.82 0.074	10.2 ± 1.1 0.092	÷ ÷	18.5 ± 2.0 0.14	24.4 ± 2.7 0.16	31.7 ± 3.5 0.20
Kepler-305*	0.99982	2.26 ± 0.25 0.032	3.57 ± 0.39 0.043	÷ ÷	÷ ÷	11.8 ± 1.3 0.096	÷ ÷	23.4 ± 2.6 0.15	32.0 ± 3.5 0.19	43.1 ± 4.7 0.23	
Kepler-31_a	0.999998	3.56 ± 0.39 0.049	9.29 ± 1.0 0.092	÷ ÷	÷ ÷	÷ ÷	151 ± 17 0.59	257 ± 28 0.84	418 ± 46 1.2		

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
Kepler-31_b	0.999998	9.29 ± 1.0 0.092	14.2 ± 1.6 0.12	÷ ÷	30.9 ± 3.4 0.21	÷ ÷	61.2 ± 6.7 0.32	÷ ÷	113 ± 12 0.49	151 ± 17 0.59	198 ± 22 0.71	
Kepler-310	0.99823	2.56 ± 0.28 0.036	6.42 ± 0.71 0.066	÷ ÷	28.8 ± 3.2 0.18	÷ ÷	÷ ÷	160 ± 18 0.56	259 ± 28 0.78	403 ± 44 1.0		
Kepler-319_a	0.99733	1.09 ± 0.12 0.020	2.21 ± 0.24 0.032	÷ ÷	÷ ÷	12.4 ± 1.4 0.10	20.1 ± 2.2 0.14	÷ ÷	47.5 ± 5.2 0.25	70.0 ± 7.7 0.32	101 ± 11 0.41	
Kepler-319_b	0.999999	1.58 ± 0.17 0.026	2.69 ± 0.30 0.037	÷ ÷	÷ ÷	10.5 ± 1.2 0.091	15.5 ± 1.7 0.12	22.5 ± 2.5 0.15	÷ ÷	44.1 ± 4.9 0.24	60.3 ± 6.6 0.29	81.0 ± 8.9 0.36
Kepler-325_a	0.99459	0.15 ± 0.02 0.005	1.01 ± 0.11 0.019	÷ ÷	÷ ÷	÷ ÷	86.3 ± 9.5 0.38	180 ± 20 0.61	348 ± 38 0.95			
Kepler-325_b	0.99459	1.01 ± 0.11 0.019	2.18 ± 0.24 0.032	÷ ÷	7.99 ± 0.88 0.077	÷ ÷	23.2 ± 2.6 0.16	÷ ÷	57.5 ± 6.3 0.29	86.3 ± 9.5 0.38	126 ± 14 0.48	
Kepler-325_c	0.99829	1.56 ± 0.17 0.026	2.79 ± 0.31 0.038	÷ ÷	7.71 ± 0.85 0.075	÷ ÷	18.4 ± 2.0 0.13	27.2 ± 3.0 0.17	÷ ÷	55.5 ± 6.1 0.28	77.1 ± 8.5 0.35	105 ± 12 0.43
Kepler-326_a	0.99759	0.96 ± 0.11 0.018	1.49 ± 0.16 0.024	÷ ÷	3.29 ± 0.36 0.041	÷ ÷	÷ ÷	9.09 ± 1.00 0.081	12.3 ± 1.4 0.099	16.5 ± 1.8 0.12		
Kepler-326_b	0.99932	1.39 ± 0.15 0.023	1.79 ± 0.20 0.027	÷ ÷	2.89 ± 0.32 0.038	3.62 ± 0.40 0.044	÷ ÷	5.54 ± 0.61 0.058	÷ ÷	8.25 ± 0.91 0.076	9.97 ± 1.1 0.086	12.0 ± 1.3 0.097
Kepler-327_a	0.99564	0.63 ± 0.07 0.011	1.36 ± 0.15 0.019	÷ ÷	÷ ÷	8.54 ± 0.94 0.065	÷ ÷	22.6 ± 2.5 0.12	34.8 ± 3.8 0.17	52.2 ± 5.7 0.22		
Kepler-327_b	0.99992	1.09 ± 0.12 0.016	1.68 ± 0.19 0.022	÷ ÷	3.70 ± 0.41 0.037	÷ ÷	7.43 ± 0.82 0.059	10.2 ± 1.1 0.073	÷ ÷	18.5 ± 2.0 0.11	24.4 ± 2.7 0.13	31.8 ± 3.5 0.16
Kepler-331_a	0.99991	1.50 ± 0.17 0.021	3.79 ± 0.42 0.038	÷ ÷	÷ ÷	÷ ÷	57.3 ± 6.3 0.23	96.7 ± 11 0.33	156 ± 17 0.46			
Kepler-331_b	0.99991	3.79 ± 0.42 0.038	5.74 ± 0.63 0.050	÷ ÷	12.2 ± 1.3 0.083	÷ ÷	23.8 ± 2.6 0.13	÷ ÷	43.4 ± 4.8 0.19	57.3 ± 6.3 0.23	74.9 ± 8.2 0.28	
Kepler-332_a	0.99788	1.02 ± 0.11 0.018	3.01 ± 0.33 0.037	÷ ÷	÷ ÷	÷ ÷	62.7 ± 6.9 0.28	111 ± 12 0.41	186 ± 20 0.59			
Kepler-332_b	0.99788	3.01 ± 0.33 0.037	4.83 ± 0.53 0.051	÷ ÷	11.3 ± 1.2 0.091	÷ ÷	23.8 ± 2.6 0.15	÷ ÷	46.2 ± 5.1 0.23	62.7 ± 6.9 0.28	83.9 ± 9.2 0.34	
Kepler-334_a	0.99928	0.73 ± 0.08 0.016	2.19 ± 0.24 0.033	÷ ÷	÷ ÷	÷ ÷	47.8 ± 5.3 0.26	84.9 ± 9.3 0.38	143 ± 16 0.54			
Kepler-334_b	0.99928	2.19 ± 0.24 0.033	3.55 ± 0.39 0.046	÷ ÷	8.43 ± 0.93 0.081	÷ ÷	17.9 ± 2.0 0.13	÷ ÷	35.1 ± 3.9 0.21	47.8 ± 5.3 0.26	64.2 ± 7.1 0.31	
Kepler-336	0.99748	0.21 ± 0.02 0.007	0.72 ± 0.08 0.016	÷ ÷	4.75 ± 0.52 0.058	÷ ÷	÷ ÷	36.4 ± 4.0 0.22	63.1 ± 6.9 0.32	104 ± 11 0.45		
Kepler-339_a	0.99437	2.05 ± 0.23 0.030	3.22 ± 0.35 0.041	÷ ÷	÷ ÷	÷ ÷	14.7 ± 1.6 0.11	20.4 ± 2.2 0.14	27.8 ± 3.1 0.17			
Kepler-339_b	0.99437	3.22 ± 0.35 0.041	3.98 ± 0.44 0.047	÷ ÷	5.96 ± 0.66 0.062	÷ ÷	8.70 ± 0.96 0.080	÷ ÷	12.4 ± 1.4 0.10	14.7 ± 1.6 0.11	17.4 ± 1.9 0.13	

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
Kepler-339_c	0.99841	3.62 ± 0.40 0.045	4.27 ± 0.47 0.050	÷	5.89 ± 0.65 0.062	÷	7.97 ± 0.88 0.075	9.23 ± 1.0 0.083	÷	12.2 ± 1.3 0.10	14.0 ± 1.5 0.11	16.0 ± 1.8 0.12
Kepler-350_a*	0.99994	4.46 ± 0.49 0.056	7.20 ± 0.79 0.077	÷	÷	÷	35.8 ± 3.9 0.23	50.5 ± 5.5 0.28	69.7 ± 7.7 0.35			
Kepler-350_b*	0.99994	7.38 ± 0.81 0.077	9.25 ± 1.0 0.090	÷	14.2 ± 1.6 0.12	÷	21.1 ± 2.3 0.16	÷	30.7 ± 3.4 0.20	36.7 ± 4.0 0.23	43.7 ± 4.8 0.25	
Kepler-351_a*	0.9992	12.2 ± 1.3 0.10	21.6 ± 2.4 0.15	÷	÷	91.5 ± 10 0.39	÷	204 ± 22 0.67	293 ± 32 0.85	412 ± 45 1.1		
Kepler-351_b*	0.99609	17.9 ± 2.0 0.13	26.7 ± 2.9 0.17	÷	÷	76.8 ± 8.4 0.35	105 ± 12 0.43	÷	189 ± 21 0.63	248 ± 27 0.76	321 ± 35 0.90	
Kepler-354_a	0.9941	1.58 ± 0.17 0.024	3.07 ± 0.34 0.037	÷	9.66 ± 1.1 0.079	÷	÷	38.7 ± 4.3 0.20	57.8 ± 6.4 0.26	84.0 ± 9.2 0.33		
Kepler-354_b	0.9998	2.19 ± 0.24 0.029	3.51 ± 0.39 0.040	÷	8.18 ± 0.90 0.071	12.0 ± 1.3 0.091	÷	÷	33.2 ± 3.6 0.18	45.0 ± 4.9 0.22	60.1 ± 6.6 0.27	
Kepler-357_a	0.99366	0.26 ± 0.03 0.007	1.54 ± 0.17 0.024	÷	÷	÷	108 ± 12 0.41	220 ± 24 0.66	418 ± 46 1.0			
Kepler-357_b	0.99366	1.54 ± 0.17 0.024	3.18 ± 0.35 0.039	÷	10.9 ± 1.2 0.090	÷	30.3 ± 3.3 0.18	÷	72.6 ± 8.0 0.32	108 ± 12 0.41	156 ± 17 0.53	
Kepler-357_c	0.99876	2.31 ± 0.25 0.032	4.01 ± 0.44 0.046	÷	10.5 ± 1.2 0.088	÷	24.2 ± 2.7 0.15	35.3 ± 3.9 0.20	÷	70.4 ± 7.7 0.31	96.6 ± 11 0.38	131 ± 14 0.47
Kepler-359_a	0.99638	10.8 ± 1.2 0.10	17.0 ± 1.9 0.14	÷	38.4 ± 4.2 0.23	÷	÷	110 ± 12 0.47	150 ± 17 0.58	202 ± 22 0.71		
Kepler-359_b	0.99906	13.5 ± 1.5 0.12	18.6 ± 2.0 0.14	÷	34.0 ± 3.7 0.22	45.1 ± 5.0 0.26	÷	÷	97.3 ± 11 0.43	123 ± 14 0.51	155 ± 17 0.59	
Kepler-363_a	0.99398	1.36 ± 0.15 0.025	2.23 ± 0.25 0.035	÷	5.38 ± 0.59 0.063	÷	÷	16.4 ± 1.8 0.13	22.8 ± 2.5 0.16	31.2 ± 3.4 0.20		
Kepler-363_b	0.99999	2.05 ± 0.23 0.033	2.73 ± 0.30 0.040	÷	4.66 ± 0.51 0.057	5.98 ± 0.66 0.067	÷	9.56 ± 1.1 0.092	÷	14.8 ± 1.6 0.12	18.2 ± 2.0 0.14	22.2 ± 2.4 0.16
Kepler-372	0.9982	2.00 ± 0.22 0.033	3.84 ± 0.42 0.051	÷	11.9 ± 1.3 0.11	÷	÷	46.8 ± 5.2 0.27	69.6 ± 7.7 0.35	101 ± 11 0.45		
Kepler-374_a	0.99759	0.59 ± 0.06 0.013	1.09 ± 0.12 0.020	÷	÷	÷	7.94 ± 0.87 0.076	11.9 ± 1.3 0.099	17.5 ± 1.9 0.13			
Kepler-374_b	0.99759	1.09 ± 0.12 0.020	1.46 ± 0.16 0.024	÷	2.49 ± 0.27 0.035	÷	4.07 ± 0.45 0.048	÷	6.40 ± 0.70 0.066	7.94 ± 0.87 0.076	9.77 ± 1.1 0.087	
Kepler-398_a*	0.99948	1.18 ± 0.13 0.019	2.26 ± 0.25 0.030	÷	÷	÷	17.8 ± 2.0 0.12	27.1 ± 3.0 0.16	40.2 ± 4.4 0.20			
Kepler-398_b*	0.99948	2.26 ± 0.25 0.030	3.05 ± 0.34 0.036	÷	5.34 ± 0.59 0.053	÷	8.90 ± 0.98 0.074	÷	14.2 ± 1.6 0.10	17.8 ± 2.0 0.12	22.0 ± 2.4 0.14	
Kepler-399_a	0.99231	4.96 ± 0.55 0.051	8.91 ± 0.98 0.075	÷	÷	39.0 ± 4.3 0.20	÷	88.0 ± 9.7 0.34	127 ± 14 0.44	180 ± 20 0.55		

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)												
Kepler-399_b	0.99984	7.49 ± 0.82	10.5 ± 1.2	÷	19.7 ± 2.2	÷	34.8 ± 3.8	45.3 ± 5.0	÷	74.5 ± 8.2	94.1 ± 10	118 ± 13		
		0.067	0.084	÷	0.13	÷	0.19	0.22	÷	0.31	0.36	0.42		
Kepler-401_a*	0.9919	0.15 ± 0.02	2.17 ± 0.24	÷	÷	÷	441 ± 48	1003 ± 110	2067 ± 227					
		0.006	0.034	÷	÷	÷	1.2	2.0	3.3					
Kepler-401_b*	0.9919	2.17 ± 0.24	5.79 ± 0.64	÷	28.3 ± 3.1	÷	98.9 ± 11	÷	279 ± 31	441 ± 48	674 ± 74			
		0.034	0.066	÷	0.19	÷	0.44	÷	0.87	1.2	1.6			
Kepler-401_c*	0.99938	3.72 ± 0.41	7.72 ± 0.85	÷	26.6 ± 2.9	÷	74.4 ± 8.2	117 ± 13	÷	265 ± 29	384 ± 42	544 ± 60		
		0.049	0.080	÷	0.18	÷	0.36	0.49	÷	0.85	1.1	1.4		
Kepler-403_a*	0.99761	0.97 ± 0.11	2.76 ± 0.30	÷	÷	28.9 ± 3.2	÷	93.3 ± 10	155 ± 17	249 ± 27				
		0.020	0.041	÷	÷	0.19	÷	0.43	0.60	0.82				
Kepler-403_b*	0.99823	1.94 ± 0.21	3.91 ± 0.43	÷	÷	21.8 ± 2.4	35.2 ± 3.9	÷	82.9 ± 9.1	122 ± 13	175 ± 19			
		0.032	0.051	÷	÷	0.16	0.22	÷	0.39	0.51	0.65			
Kepler-403_c*	0.99999	3.36 ± 0.37	4.92 ± 0.54	÷	9.87 ± 1.1	÷	18.4 ± 2.0	24.6 ± 2.7	32.4 ± 3.6	42.2 ± 4.6	÷	69.1 ± 7.6	87.3 ± 9.6	109 ± 12
		0.047	0.060	÷	0.095	÷	0.14	0.18	0.21	0.25	÷	0.35	0.41	0.47
Kepler-42	0.99993	0.14 ± 0.02	0.26 ± 0.03	÷	0.76 ± 0.08	÷	÷	2.81 ± 0.31	4.11 ± 0.45	5.87 ± 0.65				
		0.003	0.004	÷	0.008	÷	÷	0.020	0.026	0.033				
Kepler-431_a	0.99289	3.61 ± 0.40	4.96 ± 0.55	÷	÷	÷	15.3 ± 1.7	19.7 ± 2.2	25.0 ± 2.8					
		0.047	0.058	÷	÷	÷	0.12	0.15	0.17					
Kepler-431_b	0.99289	4.96 ± 0.55	5.78 ± 0.64	÷	7.76 ± 0.85	÷	10.3 ± 1.1	÷	13.4 ± 1.5	15.3 ± 1.7	17.4 ± 1.9			
		0.058	0.064	÷	0.078	÷	0.095	÷	0.11	0.12	0.13			
Kepler-431_c	0.99907	5.39 ± 0.59	6.08 ± 0.67	÷	7.69 ± 0.85	÷	9.63 ± 1.1	10.7 ± 1.2	÷	13.3 ± 1.5	14.8 ± 1.6	16.3 ± 1.8		
		0.062	0.067	÷	0.078	÷	0.091	0.098	÷	0.11	0.12	0.13		
Kepler-445*	0.99962	2.00 ± 0.22	2.65 ± 0.29	÷	4.47 ± 0.49	÷	÷	9.07 ± 1.00	11.3 ± 1.2	13.9 ± 1.5				
		0.019	0.022	÷	0.032	÷	÷	0.051	0.059	0.068				
Kepler-446_a*	0.99866	0.36 ± 0.04	0.79 ± 0.09	÷	÷	÷	8.73 ± 0.96	14.0 ± 1.5	21.8 ± 2.4					
		0.008	0.013	÷	÷	÷	0.064	0.087	0.12					
Kepler-446_b*	0.99866	0.79 ± 0.09	1.13 ± 0.12	÷	2.19 ± 0.24	÷	3.95 ± 0.43	÷	6.78 ± 0.75	8.73 ± 0.96	11.1 ± 1.2			
		0.013	0.016	÷	0.025	÷	0.038	÷	0.054	0.064	0.075			
Kepler-450_a*	0.99959	1.31 ± 0.14	3.33 ± 0.37	÷	÷	÷	50.9 ± 5.6	86.0 ± 9.5	139 ± 15					
		0.025	0.047	÷	÷	÷	0.29	0.41	0.57					
Kepler-450_b*	0.99959	3.33 ± 0.37	5.05 ± 0.56	÷	10.7 ± 1.2	÷	21.0 ± 2.3	÷	38.5 ± 4.2	50.9 ± 5.6	66.5 ± 7.3			
		0.047	0.063	÷	0.10	÷	0.16	÷	0.24	0.29	0.35			
Kepler-46_a	0.99663	0.90 ± 0.10	2.71 ± 0.30	÷	15.5 ± 1.7	÷	÷	106 ± 12	179 ± 20	290 ± 32				
		0.018	0.037	÷	0.12	÷	÷	0.42	0.60	0.83				
Kepler-46_b	0.99893	1.57 ± 0.17	3.37 ± 0.37	÷	12.2 ± 1.3	21.1 ± 2.3	÷	÷	86.0 ± 9.5	129 ± 14	188 ± 21			
		0.025	0.042	÷	0.100	0.14	÷	÷	0.37	0.48	0.62			
Kepler-51_a	0.9917	13.0 ± 1.4	25.4 ± 2.8	÷	÷	÷	212 ± 23	327 ± 36	489 ± 54					
		0.11	0.17	÷	÷	÷	0.71	0.94	1.2					
Kepler-51_b	0.9917	25.4 ± 2.8	34.7 ± 3.8	÷	61.7 ± 6.8	÷	104 ± 11	÷	169 ± 19	212 ± 23	265 ± 29			
		0.17	0.21	÷	0.31	÷	0.44	÷	0.61	0.71	0.82			

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)										
Kepler-51_c	0.99944	27.8 ± 3.1 0.18	35.5 ± 3.9 0.21	÷ ÷	56.3 ± 6.2 0.29	70.1 ± 7.7 0.34	÷ ÷	106 ± 12 0.44	÷ ÷	156 ± 17 0.57	188 ± 21 0.65	225 ± 25 0.73
Kepler-52_a*	0.99595	0.94 ± 0.10 0.016	2.93 ± 0.32 0.034	÷ ÷	÷ ÷	÷ ÷	67.7 ± 7.5 0.28	121 ± 13 0.41	206 ± 23 0.58			
Kepler-52_b*	0.99595	2.93 ± 0.32 0.034	4.81 ± 0.53 0.047	÷ ÷	11.6 ± 1.3 0.085	÷ ÷	25.1 ± 2.8 0.14	÷ ÷	49.6 ± 5.5 0.22	67.9 ± 7.5 0.28	91.5 ± 10 0.34	
Kepler-53_a*	0.99502	1.60 ± 0.18 0.027	4.15 ± 0.46 0.051	÷ ÷	÷ ÷	÷ ÷	66.6 ± 7.3 0.33	113 ± 12 0.47	185 ± 20 0.65			
Kepler-53_b*	0.99502	4.17 ± 0.46 0.051	6.39 ± 0.70 0.068	÷ ÷	13.8 ± 1.5 0.11	÷ ÷	27.3 ± 3.0 0.18	÷ ÷	50.4 ± 5.5 0.27	67.0 ± 7.4 0.33	87.9 ± 9.7 0.39	
Kepler-54*	0.99878	3.23 ± 0.36 0.036	4.95 ± 0.54 0.048	÷ ÷	÷ ÷	15.2 ± 1.7 0.10	÷ ÷	28.9 ± 3.2 0.16	39.0 ± 4.3 0.19	51.8 ± 5.7 0.23		
Kepler-58_a*	0.99622	2.93 ± 0.32 0.041	5.44 ± 0.60 0.062	÷ ÷	÷ ÷	25.5 ± 2.8 0.17	÷ ÷	59.4 ± 6.5 0.31	87.0 ± 9.6 0.40	125 ± 14 0.50		
Kepler-58_b*	0.99914	4.38 ± 0.48 0.054	6.75 ± 0.74 0.072	÷ ÷	÷ ÷	21.0 ± 2.3 0.15	29.3 ± 3.2 0.19	÷ ÷	54.5 ± 6.0 0.29	72.6 ± 8.0 0.35	95.5 ± 11 0.42	
Kepler-60_a*	0.9928	4.02 ± 0.44 0.050	5.35 ± 0.59 0.061	÷ ÷	÷ ÷	÷ ÷	15.0 ± 1.6 0.12	18.9 ± 2.1 0.14	23.6 ± 2.6 0.16			
Kepler-60_b*	0.9928	5.35 ± 0.59 0.061	6.15 ± 0.68 0.067	÷ ÷	8.04 ± 0.88 0.080	÷ ÷	10.4 ± 1.1 0.094	÷ ÷	13.3 ± 1.5 0.11	15.0 ± 1.6 0.12	16.8 ± 1.8 0.13	
Kepler-60_c*	0.9991	5.78 ± 0.64 0.064	6.44 ± 0.71 0.069	÷ ÷	7.97 ± 0.88 0.079	÷ ÷	9.79 ± 1.1 0.091	10.8 ± 1.2 0.097	÷ ÷	13.2 ± 1.4 0.11	14.5 ± 1.6 0.12	15.9 ± 1.7 0.13
Kepler-603_a*	0.99986	0.21 ± 0.02 0.007	1.46 ± 0.16 0.025	÷ ÷	÷ ÷	55.2 ± 6.1 0.28	÷ ÷	270 ± 30 0.82	522 ± 57 1.3	946 ± 104 1.9		
Kepler-603_b*	0.99602	0.88 ± 0.10 0.018	2.40 ± 0.26 0.035	÷ ÷	12.1 ± 1.3 0.10	÷ ÷	43.2 ± 4.8 0.24	74.8 ± 8.2 0.35	÷ ÷	196 ± 22 0.66	302 ± 33 0.88	450 ± 50 1.2
Kepler-65_a	0.99388	0.75 ± 0.08 0.017	1.32 ± 0.15 0.025	÷ ÷	3.57 ± 0.39 0.049	÷ ÷	÷ ÷	12.3 ± 1.4 0.11	17.6 ± 1.9 0.14	24.8 ± 2.7 0.18		
Kepler-65_b	0.99984	0.99 ± 0.11 0.021	1.48 ± 0.16 0.027	÷ ÷	3.08 ± 0.34 0.044	4.31 ± 0.47 0.055	÷ ÷	÷ ÷	10.7 ± 1.2 0.10	14.0 ± 1.5 0.12	18.2 ± 2.0 0.14	
Kepler-770*	0.9994	0.11 ± 0.01 0.005	0.48 ± 0.05 0.012	÷ ÷	÷ ÷	9.20 ± 1.0 0.087	÷ ÷	36.7 ± 4.0 0.22	66.0 ± 7.3 0.32	113 ± 12 0.46		
Kepler-81_a*	0.99934	1.14 ± 0.13 0.018	2.73 ± 0.30 0.033	÷ ÷	÷ ÷	÷ ÷	36.5 ± 4.0 0.19	60.4 ± 6.6 0.26	96.1 ± 11 0.35			
Kepler-81_b*	0.99934	2.77 ± 0.30 0.033	4.10 ± 0.45 0.043	÷ ÷	8.39 ± 0.92 0.069	÷ ÷	15.9 ± 1.7 0.11	÷ ÷	28.3 ± 3.1 0.16	37.0 ± 4.1 0.19	47.9 ± 5.3 0.22	
Kepler-83_a*	0.99415	2.11 ± 0.23 0.027	3.53 ± 0.39 0.038	÷ ÷	÷ ÷	13.3 ± 1.5 0.092	÷ ÷	27.9 ± 3.1 0.15	39.3 ± 4.3 0.19	54.2 ± 6.0 0.24		
Kepler-83_b*	0.999998	3.03 ± 0.33 0.034	4.09 ± 0.45 0.042	÷ ÷	7.17 ± 0.79 0.061	÷ ÷	12.0 ± 1.3 0.086	15.2 ± 1.7 0.10	÷ ÷	23.9 ± 2.6 0.14	29.7 ± 3.3 0.16	36.5 ± 4.0 0.18

Table A4. (Continued) Predictions of planets for systems with three confirmed planets

System	R^2	Period P_n (days) Semi-major axis a_n (AU)									
Kepler-9_a	0.99561	0	0.35 ± 0.04	÷	6.03 ± 0.66	÷	÷	88.8 ± 9.8	176 ± 19	324 ± 36	
		0	0.010	÷	0.065	÷	÷	0.39	0.62	0.93	
Kepler-9_b	0.99939	0.13 ± 0.01	0.52 ± 0.06	÷	4.18 ± 0.46	9.54 ± 1.0	÷	÷	67.4 ± 7.4	115 ± 13	187 ± 21
		0.005	0.013	÷	0.051	0.089	÷	÷	0.33	0.47	0.64
Kepler-92_a*	0.99995	2.69 ± 0.30	6.42 ± 0.71	÷	÷	÷	85.3 ± 9.4	141 ± 16	225 ± 25		
		0.040	0.070	÷	÷	÷	0.40	0.55	0.75		
PSR B1257+12	0.99862	8.72 ± 0.96	15.4 ± 1.7	÷	41.8 ± 4.6	÷	÷	144 ± 16	207 ± 23	292 ± 32	
		0.093	0.14	÷	0.26	÷	÷	0.60	0.77	0.96	
Wolf 1061_a	0.99571	0	0.48 ± 0.05	÷	÷	74.0 ± 8.1	÷	508 ± 56	1098 ± 121	2176 ± 239	
		0	0.008	÷	÷	0.23	÷	0.83	1.4	2.2	
Wolf 1061_b	0.99936	0.17 ± 0.02	1.20 ± 0.13	÷	÷	44.9 ± 4.9	105 ± 12	÷	424 ± 47	767 ± 84	1317 ± 145
		0.004	0.015	÷	÷	0.16	0.29	÷	0.73	1.1	1.6
YZ Cet_a	0.99997	0.72 ± 0.08	1.21 ± 0.13	÷	÷	÷	6.86 ± 0.75	9.87 ± 1.1	13.9 ± 1.5		
		0.008	0.011	÷	÷	÷	0.036	0.046	0.057		
YZ Cet_b	0.99997	1.21 ± 0.13	1.55 ± 0.17	÷	2.47 ± 0.27	÷	3.79 ± 0.42	÷	5.66 ± 0.62	6.86 ± 0.75	8.25 ± 0.91
		0.011	0.013	÷	0.018	÷	0.024	÷	0.031	0.036	0.040
ups And_a	0.99459	0	0	÷	50.2 ± 5.5	÷	÷	3497 ± 385	8923 ± 982	20061 ± 2207	
		0	0	÷	0.29	÷	÷	4.9	9.2	16	
ups And_b	0.999998	0	0.50 ± 0.05	÷	23.5 ± 2.6	84.0 ± 9.2	÷	587 ± 65	÷	2546 ± 280	4723 ± 520	8268 ± 909
		0	0.013	÷	0.17	0.41	÷	1.5	÷	4.0	6.0	8.7

÷confirmed planet

*one or more values for a_n are obtained from the TCE catalogue[18] or calculated by Kepler's third law.

Table A5. Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
24 Sex	90.6 ± 10.0	214 ± 24	÷	÷	1609 ± 177	2778 ± 306	4582 ± 504			0.46	0.81	÷	÷	3.1	4.5	6.2		
	214 ± 24	315 ± 35	÷	638 ± 70	÷	1201 ± 132	1609 ± 177	2128 ± 234		0.81	1.0	÷	1.7	÷	2.6	3.1	3.7	
	277 ± 30	356 ± 39	÷	570 ± 63	712 ± 78	÷	1086 ± 119	1326 ± 146	1609 ± 177	1.0	1.1	÷	1.6	1.8	÷	2.4	2.7	3.1
BD+20 2457	23.3 ± 2.6	98.6 ± 11	÷	÷	1932 ± 213	4030 ± 443	7755 ± 853			0.18	0.48	÷	÷	3.5	5.7	8.9		
	98.6 ± 11	181 ± 20	÷	524 ± 58	÷	1290 ± 142	1932 ± 213	2822 ± 310		0.48	0.73	÷	1.5	÷	2.7	3.5	4.5	
	149 ± 16	219 ± 24	÷	445 ± 49	615 ± 68	÷	1120 ± 123	1480 ± 163	1932 ± 213	0.64	0.82	÷	1.3	1.6	÷	2.4	2.9	3.5
BD-06 1339	0	0	÷	÷	1121 ± 123	5548 ± 610	19592 ± 2155			0	0	÷	÷	1.9	5.4	12.6		
	0	0.19 ± 0.02	÷	28.3 ± 3.1	÷	414 ± 46	1121 ± 123	2630 ± 289		0	0.006	÷	0.16	÷	1.0	1.9	3.3	
	0	0.63 ± 0.07	÷	15.7 ± 1.7	48.5 ± 5.3	÷	286 ± 31	588 ± 65	1121 ± 123	0	0.013	÷	0.11	0.23	÷	0.75	1.2	1.9
BD-08 2823	0	0	÷	÷	2144 ± 236	10969 ± 1207	39531 ± 4348			0	0	÷	÷	3.0	9.0	21.3		
	0	0.23 ± 0.03	÷	48.0 ± 5.3	÷	773 ± 85	2144 ± 236	5125 ± 564		0	0.007	÷	0.24	÷	1.5	3.0	5.4	
	0	0.84 ± 0.09	÷	25.8 ± 2.8	84.2 ± 9.3	÷	527 ± 58	1107 ± 122	2144 ± 236	0	0.016	÷	0.16	0.35	÷	1.2	2.0	3.0
CoRoT-20	0	0	÷	÷	26208 ± 2883	171171 ± 18829	713402 ± 78474			0	0	÷	÷	18.1	63.2	163.7		
	0	0	÷	215 ± 24	÷	7760 ± 854	26208 ± 2883	72056 ± 7926		0	0	÷	0.74	÷	8.0	18.1	35.5	
	0	0.23 ± 0.03	÷	89.4 ± 9.8	463 ± 51	÷	4862 ± 535	11973 ± 1317	26208 ± 2883	0	0.008	÷	0.41	1.2	÷	5.9	10.7	18.1
CoRoT-24	0.60 ± 0.07	1.92 ± 0.21	÷	÷	24.6 ± 2.7	47.5 ± 5.2	85.7 ± 9.4			0.013	0.029	÷	÷	0.16	0.25	0.37		
	1.92 ± 0.21	3.19 ± 0.35	÷	7.87 ± 0.87	÷	17.2 ± 1.9	24.6 ± 2.7	34.5 ± 3.8		0.029	0.041	÷	0.075	÷	0.13	0.16	0.20	
	2.71 ± 0.30	3.75 ± 0.41	÷	6.83 ± 0.75	9.03 ± 0.99	÷	15.2 ± 1.7	19.5 ± 2.1	24.6 ± 2.7	0.037	0.046	÷	0.068	0.082	÷	0.12	0.14	0.16
CoRoT-7	0	0.12 ± 0.01	÷	÷	12.0 ± 1.3	32.1 ± 3.5	74.7 ± 8.2			0	0.005	÷	÷	0.10	0.19	0.34		
	0.12 ± 0.01	0.35 ± 0.04	÷	1.86 ± 0.20	÷	6.86 ± 0.75	12.0 ± 1.3	20.0 ± 2.2		0.005	0.010	÷	0.029	÷	0.069	0.10	0.14	
	0.25 ± 0.03	0.48 ± 0.05	÷	1.45 ± 0.16	2.36 ± 0.26	÷	5.62 ± 0.62	8.31 ± 0.91	12.0 ± 1.3	0.008	0.012	÷	0.025	0.034	÷	0.061	0.079	0.10
GJ 1132	0	0	÷	÷	33.6 ± 3.7	99.4 ± 11	249 ± 27			0	0	÷	÷	0.12	0.24	0.44		
	0	0.56 ± 0.06	÷	4.05 ± 0.45	÷	18.0 ± 2.0	33.6 ± 3.7	59.2 ± 6.5		0	0.007	÷	0.028	÷	0.076	0.12	0.17	
	0.37 ± 0.04	0.81 ± 0.09	÷	3.03 ± 0.33	5.33 ± 0.59	÷	14.4 ± 1.6	22.3 ± 2.5	33.6 ± 3.7	0.006	0.010	÷	0.023	0.034	÷	0.065	0.088	0.12
GJ 1148	0	0.44 ± 0.05	÷	÷	3180 ± 350	12573 ± 1383	38450 ± 4230			0	0.008	÷	÷	3.0	7.5	15.8		
	0.44 ± 0.05	6.50 ± 0.72	÷	170 ± 19	÷	1391 ± 153	3180 ± 350	6576 ± 723		0.008	0.048	÷	0.43	÷	1.7	3.0	4.9	
	3.01 ± 0.33	12.9 ± 1.4	÷	110 ± 12	255 ± 28	÷	1027 ± 113	1856 ± 204	3180 ± 350	0.029	0.076	÷	0.32	0.56	÷	1.4	2.1	3.0
GJ 273	0	0.79 ± 0.09	÷	÷	57.0 ± 6.3	146 ± 16	329 ± 36			0	0.011	÷	÷	0.19	0.36	0.62		
	0.79 ± 0.09	2.07 ± 0.23	÷	9.76 ± 1.1	÷	33.5 ± 3.7	57.0 ± 6.3	92.9 ± 10		0.011	0.021	÷	0.059	÷	0.13	0.19	0.27	
	1.53 ± 0.17	2.76 ± 0.30	÷	7.74 ± 0.85	12.2 ± 1.3	÷	27.7 ± 3.0	40.2 ± 4.4	57.0 ± 6.3	0.017	0.025	÷	0.051	0.069	÷	0.12	0.15	0.19
GJ 3323	0	0	÷	÷	184 ± 20	613 ± 67	1670 ± 184			0	0	÷	÷	0.35	0.77	1.5		
	0	1.40 ± 0.15	÷	16.1 ± 1.8	÷	90.4 ± 9.9	184 ± 20	346 ± 38		0	0.013	÷	0.068	÷	0.22	0.35	0.53	
	0.83 ± 0.09	2.27 ± 0.25	÷	11.4 ± 1.3	22.2 ± 2.4	÷	70.0 ± 7.7	116 ± 13	184 ± 20	0.009	0.018	÷	0.054	0.085	÷	0.18	0.25	0.35
GJ 3998	0	0.25 ± 0.03	÷	÷	52.0 ± 5.7	152 ± 17	380 ± 42			0	0.006	÷	÷	0.21	0.44	0.80		
	0.25 ± 0.03	0.90 ± 0.10	÷	6.40 ± 0.70	÷	28.0 ± 3.1	52.0 ± 5.7	91.2 ± 10		0.006	0.014	÷	0.053	÷	0.14	0.21	0.31	
	0.61 ± 0.07	1.31 ± 0.14	÷	4.81 ± 0.53	8.40 ± 0.92	÷	22.4 ± 2.5	34.6 ± 3.8	52.0 ± 5.7	0.011	0.018	÷	0.044	0.063	÷	0.12	0.16	0.21
GJ 832	0	0	÷	÷	48193 ± 5301	291164 ± 32028	1159658 ± 127562			0	0	÷	÷	19.9	66.0	165.8		
	0	0.19 ± 0.02	÷	558 ± 61	÷	15220 ± 1674	48193 ± 5301	126684 ± 13935		0	0.005	÷	1.0	÷	9.2	19.9	37.9	
	0	1.89 ± 0.21	÷	255 ± 28	1116 ± 123	÷	9809 ± 1079	22917 ± 2521	48193 ± 5301	0	0.023	÷	0.60	1.6	÷	6.9	12.1	19.9

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
HAT-P-11	0	0	÷	÷	72361 ± 7960	542737 ± 59701	2446359 ± 269099		0	0	÷	÷	31.7	121.4	331.2	
	0	0	÷	302 ± 33	÷	19033 ± 2094	72361 ± 7960	215581 ± 23714	0	0	÷	0.82	÷	13.0	31.7	65.6
	0	0	÷	102 ± 11	759 ± 83	÷	11310 ± 1244	30727 ± 3380	72361 ± 7960	0	0	÷	0.40	1.5	÷	9.2	17.9	31.7
HAT-P-17	0	0	÷	÷	112510 ± 12376	824834 ± 90732	3670892 ± 403798		0	0	÷	÷	41.5	156.5	423.4	
	0	0	÷	529 ± 58	÷	30188 ± 3321	112510 ± 12376	330767 ± 36384	0	0	÷	1.2	÷	17.2	41.5	85.1
	0	0	÷	185 ± 20	1291 ± 142	÷	18100 ± 1991	48364 ± 5320	112510 ± 12376	0	0	÷	0.58	2.1	÷	12.3	23.6	41.5
HAT-P-44	0	0	÷	÷	13976 ± 1537	92444 ± 10169	388116 ± 42693		0	0	÷	÷	11.1	39.2	102.1	
	0	0	÷	108 ± 12	÷	4094 ± 450	13976 ± 1537	38707 ± 4258	0	0	÷	0.44	÷	4.9	11.1	21.9
	0	0	÷	44.2 ± 4.9	236 ± 26	÷	2553 ± 281	6343 ± 698	13976 ± 1537	0	0	÷	0.24	0.73	÷	3.6	6.6	11.1
HD 106315	1.31 ± 0.14	3.84 ± 0.42	÷	÷	42.4 ± 4.7	79.2 ± 8.7	139 ± 15		0.024	0.049	÷	÷	0.24	0.37	0.54	
	3.84 ± 0.42	6.17 ± 0.68	÷	14.4 ± 1.6	÷	30.2 ± 3.3	42.4 ± 4.7	58.4 ± 6.4	0.049	0.068	÷	0.12	÷	0.19	0.24	0.30
	5.29 ± 0.58	7.16 ± 0.79	÷	12.6 ± 1.4	16.4 ± 1.8	÷	26.8 ± 2.9	33.9 ± 3.7	42.4 ± 4.7	0.061	0.075	÷	0.11	0.13	÷	0.18	0.21	0.24
HD 108874	4.32 ± 0.48	62.7 ± 6.9	÷	÷	5058 ± 556	13176 ± 1449	30078 ± 3309		0.051	0.30	÷	÷	5.7	10.8	18.7	
	62.7 ± 6.9	169 ± 19	÷	834 ± 92	÷	2940 ± 323	5058 ± 556	8321 ± 915	0.30	0.59	÷	1.7	÷	4.0	5.7	7.9
	124 ± 14	228 ± 25	÷	657 ± 72	1049 ± 115	÷	2425 ± 267	3542 ± 390	5058 ± 556	0.48	0.72	÷	1.5	2.0	÷	3.5	4.5	5.7
HD 109271	0.11 ± 0.01	1.35 ± 0.15	÷	÷	93.5 ± 10	238 ± 26	536 ± 59		0.005	0.024	÷	÷	0.41	0.77	1.3	
	1.35 ± 0.15	3.48 ± 0.38	÷	16.2 ± 1.8	÷	55.1 ± 6.1	93.5 ± 10	152 ± 17	0.024	0.046	÷	0.13	÷	0.29	0.41	0.57
	2.58 ± 0.28	4.63 ± 0.51	÷	12.9 ± 1.4	20.2 ± 2.2	÷	45.7 ± 5.0	66.0 ± 7.3	93.5 ± 10	0.037	0.055	÷	0.11	0.15	÷	0.25	0.33	0.41
HD 113538	41.8 ± 4.6	195 ± 21	÷	÷	4346 ± 478	9277 ± 1020	18186 ± 2000		0.20	0.55	÷	÷	4.4	7.2	11.3	
	195 ± 21	370 ± 41	÷	1122 ± 123	÷	2860 ± 315	4346 ± 478	6426 ± 707	0.55	0.84	÷	1.8	÷	3.3	4.4	5.6
	301 ± 33	452 ± 50	÷	945 ± 104	1325 ± 146	÷	2471 ± 272	3299 ± 363	4346 ± 478	0.73	1.0	÷	1.6	2.0	÷	3.0	3.6	4.4
HD 11506	0	12.4 ± 1.4	÷	÷	6293 ± 692	20271 ± 2230	53933 ± 5933		0	0.11	÷	÷	6.9	15.0	28.7	
	12.4 ± 1.4	61.0 ± 6.7	÷	606 ± 67	÷	3178 ± 350	6293 ± 692	11620 ± 1278	0.11	0.31	÷	1.4	÷	4.3	6.9	10.3
	37.6 ± 4.1	95.6 ± 11	÷	437 ± 48	827 ± 91	÷	2484 ± 273	4025 ± 443	6293 ± 692	0.23	0.42	÷	1.2	1.8	÷	3.7	5.1	6.9
HD 11964	0	0	÷	÷	20527 ± 2258	111003 ± 12210	413775 ± 45515		0	0	÷	÷	15.2	46.9	112.6	
	0	0.90 ± 0.10	÷	373 ± 41	÷	7087 ± 780	20527 ± 2258	50643 ± 5571	0	0.019	÷	1.1	÷	7.5	15.2	27.8
	0.12 ± 0.01	4.12 ± 0.45	÷	191 ± 21	681 ± 75	÷	4746 ± 522	10320 ± 1135	20527 ± 2258	0.005	0.052	÷	0.67	1.6	÷	5.7	9.6	15.2
HD 12661	0.18 ± 0.02	19.9 ± 2.2	÷	÷	6671 ± 734	20618 ± 2268	53277 ± 5860		0.006	0.15	÷	÷	7.1	15.1	28.4	
	19.9 ± 2.2	84.4 ± 9.3	÷	718 ± 79	÷	3465 ± 381	6671 ± 734	12043 ± 1325	0.15	0.39	÷	1.6	÷	4.6	7.1	10.5
	54.1 ± 6.0	128 ± 14	÷	528 ± 58	962 ± 106	÷	2738 ± 301	4345 ± 478	6671 ± 734	0.29	0.51	÷	1.3	2.0	÷	3.9	5.3	7.1
HD 128311	79.9 ± 8.8	203 ± 22	÷	÷	1738 ± 191	3086 ± 339	5210 ± 573		0.34	0.63	÷	÷	2.7	3.9	5.5	
	203 ± 22	307 ± 34	÷	653 ± 72	÷	1276 ± 140	1738 ± 191	2332 ± 257	0.63	0.84	÷	1.4	÷	2.2	2.7	3.2
	268 ± 29	351 ± 39	÷	579 ± 64	734 ± 81	÷	1147 ± 126	1417 ± 156	1738 ± 191	0.76	0.9	÷	1.3	1.5	÷	2.0	2.3	2.7
HD 133131 A	1.04 ± 0.11	59.3 ± 6.5	÷	÷	13456 ± 1480	39853 ± 4384	99910 ± 10990		0.020	0.29	÷	÷	10.9	22.4	41.4	
	59.3 ± 6.5	221 ± 24	÷	1616 ± 178	÷	7190 ± 791	13456 ± 1480	23732 ± 2611	0.29	0.70	÷	2.6	÷	7.2	10.9	15.9
	147 ± 16	323 ± 36	÷	1210 ± 133	2130 ± 234	÷	5745 ± 632	8926 ± 982	13456 ± 1480	0.54	0.9	÷	2.2	3.2	÷	6.2	8.3	10.9
HD 134987	0	0.61 ± 0.07	÷	÷	35669 ± 3924	156796 ± 17248	513673 ± 56504		0	0.014	÷	÷	21.6	57.9	127.7	
	0.61 ± 0.07	26.1 ± 2.9	÷	1360 ± 150	÷	14436 ± 1588	35669 ± 3924	78271 ± 8610	0.014	0.18	÷	2.4	÷	11.8	21.6	36.4
	9.49 ± 1.0	62.2 ± 6.8	÷	823 ± 91	2163 ± 238	÷	10331 ± 1136	19819 ± 2180	35669 ± 3924	0.089	0.31	÷	1.7	3.3	÷	9.4	14.6	21.6

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)								
HD 13908	0	0	÷ ÷	9577 ± 1053	51152 ± 5627	189245 ± 20817			0	0	÷ ÷	9.6	29.4	70.3			
	0	0.52 ± 0.06	÷ 183 ± 20	÷	3339 ± 367	9577 ± 1053	23462 ± 2581		0	0.014	÷ 0.69	÷	4.8	9.6	17.5		
	0	2.25 ± 0.25	÷ 94.5 ± 10	330 ± 36	÷	2245 ± 247	4845 ± 533	9577 ± 1053	0	0.037	÷ 0.44	1.0	÷	3.7	6.1	9.6	
HD 142	0	1.29 ± 0.14	÷ ÷	41106 ± 4522	175871 ± 19346	566217 ± 62284			0	0.024	÷ ÷	24.5	64.6	140.8			
	1.29 ± 0.14	39.9 ± 4.4	÷ 1713 ± 188	÷	16973 ± 1867	41106 ± 4522	88842 ± 9773		0.024	0.24	÷ 2.9	÷	13.6	24.5	40.9		
	15.6 ± 1.7	90.0 ± 9.9	÷ 1055 ± 116	2682 ± 295	÷	12246 ± 1347	23131 ± 2544	41106 ± 4522	0.13	0.41	÷ 2.1	4.0	÷	10.9	16.7	24.5	
HD 1461	0.66 ± 0.07	2.15 ± 0.24	÷ ÷	28.4 ± 3.1	55.1 ± 6.1	100 ± 11			0.015	0.033	÷ ÷	0.18	0.29	0.42			
	2.15 ± 0.24	3.59 ± 0.39	÷ 8.96 ± 0.99	÷	19.8 ± 2.2	28.4 ± 3.1	39.9 ± 4.4		0.033	0.046	÷ 0.085	÷	0.14	0.18	0.23		
	3.04 ± 0.33	4.23 ± 0.47	÷ 7.77 ± 0.85	10.3 ± 1.1	÷	17.5 ± 1.9	22.4 ± 2.5	28.4 ± 3.1	0.041	0.051	÷ 0.077	0.09	÷	0.13	0.16	0.18	
HD 147018	0	0	÷ ÷	7805 ± 859	35786 ± 3936	120426 ± 13247			0	0	÷ ÷	7.5	20.7	46.6			
	0	3.58 ± 0.39	÷ 258 ± 28	÷	3061 ± 337	7805 ± 859	17537 ± 1929		0	0.045	÷ 0.77	÷	4.0	7.5	12.9		
	1.14 ± 0.13	9.35 ± 1.0	÷ 152 ± 17	421 ± 46	÷	2162 ± 238	4251 ± 468	7805 ± 859	0.021	0.085	÷ 0.54	1.1	÷	3.2	5.0	7.5	
HD 147873	1.09 ± 0.12	17.6 ± 1.9	÷ ÷	1563 ± 172	4124 ± 454	9506 ± 1046			0.023	0.15	÷ ÷	2.9	5.6	9.8			
	17.6 ± 1.9	48.8 ± 5.4	÷ 250 ± 28	÷	901 ± 99	1563 ± 172	2589 ± 285		0.15	0.29	÷ 0.87	÷	2.0	2.9	4.1		
	35.4 ± 3.9	66.2 ± 7.3	÷ 196 ± 22	316 ± 35	÷	741 ± 82	1089 ± 120	1563 ± 172	0.24	0.36	÷ 0.74	1.0	÷	1.8	2.3	2.9	
HD 154857	0	14.3 ± 1.6	÷ ÷	16651 ± 1832	57807 ± 6359	161966 ± 17816			0	0.14	÷ ÷	15.3	35.1	69.7			
	14.3 ± 1.6	96.3 ± 11	÷ 1305 ± 144	÷	7986 ± 878	16651 ± 1832	32041 ± 3525		0.14	0.49	÷ 2.8	÷	9.4	15.3	23.7		
	54.5 ± 6.0	162 ± 18	÷ 908 ± 100	1839 ± 202	÷	6118 ± 673	10306 ± 1134	16651 ± 1832	0.34	0.70	÷ 2.2	3.5	÷	7.8	11.1	15.3	
HD 155358	32.6 ± 3.6	84.5 ± 9.3	÷ ÷	755 ± 83	1352 ± 149	2298 ± 253			0.19	0.36	÷ ÷	1.6	2.3	3.3			
	84.5 ± 9.3	129 ± 14	÷ 279 ± 31	÷	552 ± 61	755 ± 83	1017 ± 112		0.36	0.48	÷ 0.81	÷	1.3	1.6	1.9		
	113 ± 12	148 ± 16	÷ 247 ± 27	314 ± 35	÷	495 ± 54	614 ± 68	755 ± 83	0.44	0.53	÷ 0.74	0.87	÷	1.2	1.4	1.6	
HD 159243	0	0	÷ ÷	1797 ± 198	7943 ± 874	26118 ± 2873			0	0	÷ ÷	3.0	8.1	17.8			
	0	1.24 ± 0.14	÷ 67.2 ± 7.4	÷	724 ± 80	1797 ± 198	3955 ± 435		0	0.023	÷ 0.34	÷	1.6	3.0	5.1		
	0.44 ± 0.05	2.98 ± 0.33	÷ 40.5 ± 4.5	107 ± 12	÷	517 ± 57	996 ± 110	1797 ± 198	0.012	0.042	÷ 0.24	0.46	÷	1.3	2.0	3.0	
HD 159868	8.28 ± 0.91	71.1 ± 7.8	÷ ÷	3384 ± 372	8170 ± 899	17616 ± 1938			0.083	0.35	÷ ÷	4.6	8.2	13.8			
	71.1 ± 7.8	165 ± 18	÷ 666 ± 73	÷	2064 ± 227	3384 ± 372	5344 ± 588		0.35	0.61	÷ 1.5	÷	3.3	4.6	6.2		
	126 ± 14	213 ± 23	÷ 539 ± 59	817 ± 90	÷	1734 ± 191	2445 ± 269	3384 ± 372	0.51	0.73	÷ 1.3	1.8	÷	2.9	3.7	4.6	
HD 1605	11.5 ± 1.3	112 ± 12	÷ ÷	6080 ± 669	14971 ± 1647	32767 ± 3604			0.11	0.50	÷ ÷	7.1	13.0	21.9			
	112 ± 12	269 ± 30	÷ 1143 ± 126	÷	3662 ± 403	6080 ± 669	9703 ± 1067		0.50	0.89	÷ 2.3	÷	5.1	7.1	9.8		
	204 ± 22	352 ± 39	÷ 919 ± 101	1411 ± 155	÷	3062 ± 337	4357 ± 479	6080 ± 669	0.74	1.1	÷ 2.0	2.7	÷	4.5	5.7	7.1	
HD 163607	0	0.26 ± 0.03	÷ ÷	9028 ± 993	38751 ± 4263	125017 ± 13752			0	0.008	÷ ÷	8.8	23.1	50.5			
	0.26 ± 0.03	8.48 ± 0.93	÷ 372 ± 41	÷	3719 ± 409	9028 ± 993	19548 ± 2150		0.008	0.084	÷ 1.0	÷	4.8	8.8	14.6		
	3.28 ± 0.36	19.3 ± 2.1	÷ 229 ± 25	584 ± 64	÷	2681 ± 295	5073 ± 558	9028 ± 993	0.045	0.14	÷ 0.75	1.4	÷	3.9	6.0	8.8	
HD 164922	0	0.40 ± 0.04	÷ ÷	7680 ± 845	32070 ± 3528	101638 ± 11180			0	0.010	÷ ÷	7.4	19.1	41.1			
	0.40 ± 0.04	9.48 ± 1.0	÷ 346 ± 38	÷	3228 ± 355	7680 ± 845	16375 ± 1801		0.010	0.085	÷ 0.9	÷	4.1	7.4	12.2		
	3.92 ± 0.43	20.5 ± 2.3	÷ 217 ± 24	534 ± 59	÷	2346 ± 258	4371 ± 481	7680 ± 845	0.047	0.14	÷ 0.68	1.2	÷	3.3	5.1	7.4	
HD 168443	0	0	÷ ÷	15159 ± 1667	73913 ± 8130	258541 ± 28440			0	0	÷ ÷	12.0	34.4	79.3			
	0	3.24 ± 0.36	÷ 405 ± 45	÷	5673 ± 624	15159 ± 1667	35264 ± 3879		0	0.043	÷ 1.1	÷	6.2	12.0	21.0		
	0.81 ± 0.09	9.96 ± 1.1	÷ 227 ± 25	687 ± 76	÷	3930 ± 432	8017 ± 882	15159 ± 1667	0.017	0.09	÷ 0.73	1.5	÷	4.9	7.8	12.0	

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
HD 169830	0	6.10 ± 0.67	÷	÷	10716 ± 1179	38465 ± 4231	110249 ± 12127			0	0.073	÷	÷	10.6	25.0	50.3		
	6.10 ± 0.67	48.4 ± 5.3	÷	764 ± 84	÷	5021 ± 552	10716 ± 1179	21004 ± 2310		0.073	0.29	÷	1.8	÷	6.4	10.6	16.7	
	26.2 ± 2.9	84.5 ± 9.3	÷	522 ± 57	1093 ± 120	÷	3812 ± 419	6535 ± 719	10716 ± 1179	0.19	0.42	÷	1.4	2.3	÷	5.3	7.7	10.6
HD 176986	0.52 ± 0.06	2.09 ± 0.23	÷	÷	38.2 ± 4.2	78.8 ± 8.7	150 ± 17			0.012	0.030	÷	÷	0.21	0.33	0.51		
	2.09 ± 0.23	3.78 ± 0.42	÷	10.6 ± 1.2	÷	25.7 ± 2.8	38.2 ± 4.2	55.5 ± 6.1		0.030	0.044	÷	0.088	÷	0.16	0.21	0.26	
	3.13 ± 0.34	4.55 ± 0.50	÷	9.07 ± 1.00	12.4 ± 1.4	÷	22.4 ± 2.5	29.4 ± 3.2	38.2 ± 4.2	0.039	0.050	÷	0.079	0.10	÷	0.14	0.17	0.21
HD 177830	3.59 ± 0.39	26.4 ± 2.9	÷	÷	1054 ± 116	2476 ± 272	5230 ± 575			0.050	0.19	÷	÷	2.2	3.9	6.4		
	26.4 ± 2.9	58.4 ± 6.4	÷	220 ± 24	÷	654 ± 72	1054 ± 116	1640 ± 180		0.19	0.32	÷	0.78	÷	1.6	2.2	3.0	
	45.3 ± 5.0	74.4 ± 8.2	÷	180 ± 20	268 ± 29	÷	552 ± 61	770 ± 85	1054 ± 116	0.27	0.38	÷	0.68	0.89	÷	1.4	1.8	2.2
HD 183263	2.04 ± 0.22	68.7 ± 7.6	÷	÷	10990 ± 1209	31252 ± 3438	76083 ± 8369			0.033	0.34	÷	÷	10.1	20.3	36.8		
	68.7 ± 7.6	228 ± 25	÷	1463 ± 161	÷	6033 ± 664	10990 ± 1209	18959 ± 2085		0.34	0.76	÷	2.6	÷	6.8	10.1	14.6	
	157 ± 17	325 ± 36	÷	1115 ± 123	1899 ± 209	÷	4870 ± 536	7418 ± 816	10990 ± 1209	0.60	1.0	÷	2.2	3.1	÷	5.9	7.8	10.1
HD 190360	0	0	÷	÷	44067 ± 4847	284778 ± 31326	1179655 ± 129762			0	0	÷	÷	24.4	84.6	218.2		
	0	0	÷	380 ± 42	÷	13164 ± 1448	44067 ± 4847	120417 ± 13246		0	0	÷	1.0	÷	10.9	24.4	47.7	
	0	0.48 ± 0.05	÷	160 ± 18	809 ± 89	÷	8280 ± 911	20243 ± 2227	44067 ± 4847	0	0.012	÷	0.58	1.7	÷	8.0	14.5	24.4
HD 192310	0	4.00 ± 0.44	÷	÷	2302 ± 253	7507 ± 826	20144 ± 2216			0	0.046	÷	÷	3.2	6.9	13.4		
	4.00 ± 0.44	20.6 ± 2.3	÷	215 ± 24	÷	1153 ± 127	2302 ± 253	4280 ± 471		0.046	0.14	÷	0.65	÷	2.0	3.2	4.8	
	12.5 ± 1.4	32.6 ± 3.6	÷	154 ± 17	294 ± 32	÷	898 ± 99	1465 ± 161	2302 ± 253	0.10	0.18	÷	0.52	0.80	÷	1.7	2.3	3.2
HD 200964	359 ± 39	477 ± 52	÷	÷	1040 ± 114	1320 ± 145	1662 ± 183			1.1	1.4	÷	÷	2.3	2.7	3.1		
	477 ± 52	547 ± 60	÷	713 ± 78	÷	919 ± 101	1040 ± 114	1173 ± 129		1.4	1.5	÷	1.8	÷	2.1	2.3	2.5	
	522 ± 57	572 ± 63	÷	683 ± 75	744 ± 82	÷	882 ± 97	958 ± 105	1040 ± 114	1.5	1.5	÷	1.7	1.8	÷	2.1	2.2	2.3
HD 204313	0	0	÷	÷	21073 ± 2318	115722 ± 12729	435397 ± 47894			0	0	÷	÷	15.1	46.9	113.5		
	0	0.70 ± 0.08	÷	361 ± 40	÷	7188 ± 791	21073 ± 2318	52449 ± 5769		0	0.016	÷	1.0	÷	7.4	15.1	27.7	
	0	3.47 ± 0.38	÷	182 ± 20	666 ± 73	÷	4788 ± 527	10514 ± 1157	21073 ± 2318	0	0.045	÷	0.63	1.5	÷	5.6	9.5	15.1
HD 207832	0	8.56 ± 0.94	÷	÷	5064 ± 557	16555 ± 1821	44504 ± 4895			0	0.080	÷	÷	5.7	12.5	24.1		
	8.56 ± 0.94	44.5 ± 4.9	÷	469 ± 52	÷	2531 ± 278	5064 ± 557	9427 ± 1037		0.080	0.24	÷	1.2	÷	3.6	5.7	8.6	
	27.0 ± 3.0	70.7 ± 7.8	÷	336 ± 37	643 ± 71	÷	1971 ± 217	3218 ± 354	5064 ± 557	0.17	0.33	÷	0.9	1.4	÷	3.0	4.2	5.7
HD 215497	0	0	÷	÷	7654 ± 842	47826 ± 5261	194282 ± 21371			0	0	÷	÷	7.5	25.5	64.8		
	0	0	÷	76.6 ± 8.4	÷	2351 ± 259	7654 ± 842	20513 ± 2256		0	0	÷	0.35	÷	3.4	7.5	14.5	
	0	0.16 ± 0.02	÷	33.6 ± 3.7	158 ± 17	÷	1497 ± 165	3577 ± 393	7654 ± 842	0	0.006	÷	0.20	0.57	÷	2.5	4.5	7.5
HD 217107	0	0	÷	÷	82124 ± 9034	602294 ± 66252	2681042 ± 294915			0	0	÷	÷	39.4	148.8	402.6		
	0	0	÷	386 ± 42	÷	22028 ± 2423	82124 ± 9034	241489 ± 26564		0	0	÷	1.1	÷	16.4	39.4	80.9	
	0	0	÷	135 ± 15	941 ± 104	÷	13205 ± 1453	35295 ± 3882	82124 ± 9034	0	0	÷	0.55	2.0	÷	11.7	22.4	39.4
HD 219828	0	0	÷	÷	116959 ± 12865	922396 ± 101464	4274567 ± 470202			0	0	÷	÷	49.5	196.0	544.8		
	0	0	÷	373 ± 41	÷	29434 ± 3238	116959 ± 12865	358818 ± 39470		0	0	÷	1.1	÷	19.7	49.5	104.4	
	0	0	÷	115 ± 13	1000 ± 110	÷	17140 ± 1885	48334 ± 5317	116959 ± 12865	0	0	÷	0.49	2.1	÷	13.8	27.4	49.5
HD 30177	26.8 ± 2.9	422 ± 46	÷	÷	36796 ± 4048	96850 ± 10654	222808 ± 24509			0.17	1.1	÷	÷	21.4	40.7	70.9		
	422 ± 46	1165 ± 128	÷	5918 ± 651	÷	21240 ± 2336	36796 ± 4048	60872 ± 6696		1.1	2.1	÷	6.3	÷	14.8	21.4	29.9	
	846 ± 93	1577 ± 173	÷	4645 ± 511	7469 ± 822	÷	17478 ± 1923	25654 ± 2822	36796 ± 4048	1.7	2.6	÷	5.4	7.4	÷	13.0	16.8	21.4

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
HD 33844	173 ± 19	318 ± 35	÷ ÷	1457 ± 160	2244 ± 247	3358 ± 369			0.74	1.1	÷ ÷	3.1	4.1	5.3		
	318 ± 35	422 ± 46	÷ 714 ± 79	÷	1160 ± 128	1457 ± 160	1815 ± 200		1.1	1.3	÷ 1.9	÷	2.6	3.1	3.5	
	385 ± 42	462 ± 51	÷ 656 ± 72	777 ± 85	÷	1073 ± 118	1253 ± 138	1457 ± 160	1.3	1.4	÷ 1.8	2.0	÷	2.5	2.8	3.1
HD 37605	0	0	÷ ÷	28764 ± 3164	155005 ± 17051	576581 ± 63424			0	0	÷ ÷	18.3	56.2	134.8		
	0	1.34 ± 0.15	÷ 530 ± 58	÷	9958 ± 1095	28764 ± 3164	70825 ± 7791		0	0.024	÷ 1.3	÷	9.0	18.3	33.3	
	0.18 ± 0.02	6.04 ± 0.66	÷ 272 ± 30	965 ± 106	÷	6677 ± 734	14486 ± 1593	28764 ± 3164	0.006	0.065	÷ 0.82	1.9	÷	6.9	11.6	18.3
HD 38529	0	0	÷ ÷	31769 ± 3495	202501 ± 22275	832178 ± 91540			0	0	÷ ÷	22.4	76.9	197.2		
	0	0	÷ 291 ± 32	÷	9599 ± 1056	31769 ± 3495	86127 ± 9474		0	0	÷ 1.0	÷	10.1	22.4	43.5	
	0	0.46 ± 0.05	÷ 125 ± 14	612 ± 67	÷	6069 ± 668	14698 ± 1617	31769 ± 3495	0	0.013	÷ 0.56	1.6	÷	7.4	13.4	22.4
HD 4203	0	3.20 ± 0.35	÷ ÷	40905 ± 4500	167148 ± 18386	522292 ± 57452			0	0.043	÷ ÷	23.7	60.7	129.7		
	3.20 ± 0.35	62.1 ± 6.8	÷ 1974 ± 217	÷	17469 ± 1922	40905 ± 4500	86164 ± 9478		0.043	0.31	÷ 3.1	÷	13.5	23.7	39.0	
	26.9 ± 3.0	129 ± 14	÷ 1252 ± 138	3013 ± 331	÷	12778 ± 1406	23515 ± 2587	40905 ± 4500	0.18	0.51	÷ 2.3	4.2	÷	10.9	16.4	23.7
HD 45364	90.2 ± 9.9	146 ± 16	÷ ÷	505 ± 56	725 ± 80	1021 ± 112			0.37	0.51	÷ ÷	1.2	1.5	1.9		
	146 ± 16	183 ± 20	÷ 280 ± 31	÷	417 ± 46	505 ± 56	607 ± 67		0.51	0.59	÷ 0.78	÷	1.0	1.2	1.3	
	169 ± 19	196 ± 22	÷ 261 ± 29	300 ± 33	÷	391 ± 43	445 ± 49	505 ± 56	0.56	0.62	÷ 0.75	0.82	÷	1.0	1.1	1.2
HD 47186	0	0	÷ ÷	24461 ± 2691	170917 ± 18801	740364 ± 81440			0	0	÷ ÷	16.5	60.3	160.2		
	0	0	÷ 146 ± 16	÷	6840 ± 752	24461 ± 2691	69932 ± 7693		0	0	÷ 0.54	÷	7.1	16.5	33.2	
	0	0	÷ 55.2 ± 6.1	338 ± 37	÷	4178 ± 460	10787 ± 1187	24461 ± 2691	0	0	÷ 0.28	0.9	÷	5.1	9.6	16.5
HD 4732	0	16.4 ± 1.8	÷ ÷	12417 ± 1366	41530 ± 4568	113411 ± 12475			0	0.15	÷ ÷	12.6	28.2	55.1		
	16.4 ± 1.8	93.6 ± 10	÷ 1080 ± 119	÷	6111 ± 672	12417 ± 1366	23408 ± 2575		0.15	0.48	÷ 2.5	÷	7.9	12.6	19.2	
	55.3 ± 6.1	152 ± 17	÷ 765 ± 84	1496 ± 165	÷	4730 ± 520	7814 ± 860	12417 ± 1366	0.34	0.67	÷ 2.0	3.1	÷	6.6	9.3	12.6
HD 47366	79.9 ± 8.8	179 ± 20	÷ ÷	1215 ± 134	2052 ± 226	3321 ± 365			0.44	0.76	÷ ÷	2.7	3.9	5.3		
	179 ± 20	257 ± 28	÷ 503 ± 55	÷	919 ± 101	1215 ± 134	1588 ± 175		0.76	1.0	÷ 1.5	÷	2.3	2.7	3.2	
	228 ± 25	289 ± 32	÷ 452 ± 50	558 ± 61	÷	834 ± 92	1010 ± 111	1215 ± 134	0.89	1.0	÷ 1.4	1.6	÷	2.1	2.4	2.7
HD 5319	318 ± 35	456 ± 50	÷ ÷	1203 ± 132	1610 ± 177	2126 ± 234			1.0	1.3	÷ ÷	2.5	3.1	3.7		
	456 ± 50	542 ± 60	÷ 755 ± 83	÷	1034 ± 114	1203 ± 132	1394 ± 153		1.3	1.5	÷ 1.9	÷	2.3	2.5	2.8	
	512 ± 56	574 ± 63	÷ 716 ± 79	797 ± 88	÷	983 ± 108	1088 ± 120	1203 ± 132	1.4	1.6	÷ 1.8	1.9	÷	2.2	2.4	2.5
HD 60532	9.27 ± 1.0	52.5 ± 5.8	÷ ÷	1523 ± 168	3398 ± 374	6898 ± 759			0.10	0.31	÷ ÷	3.0	5.1	8.1		
	52.5 ± 5.8	107 ± 12	÷ 357 ± 39	÷	975 ± 107	1523 ± 168	2305 ± 254		0.31	0.50	÷ 1.1	÷	2.2	3.0	3.9	
	85.0 ± 9.4	133 ± 15	÷ 297 ± 33	427 ± 47	÷	834 ± 92	1135 ± 125	1523 ± 168	0.43	0.58	÷ 1.0	1.3	÷	2.0	2.4	3.0
HD 65216	1.77 ± 0.19	24.6 ± 2.7	÷ ÷	1907 ± 210	4942 ± 544	11236 ± 1236			0.028	0.16	÷ ÷	2.9	5.5	9.5		
	24.6 ± 2.7	65.5 ± 7.2	÷ 319 ± 35	÷	1112 ± 122	1907 ± 210	3129 ± 344		0.16	0.31	÷ 0.88	÷	2.0	2.9	4.1	
	48.1 ± 5.3	87.9 ± 9.7	÷ 251 ± 28	400 ± 44	÷	919 ± 101	1339 ± 147	1907 ± 210	0.25	0.37	÷ 0.75	1.0	÷	1.8	2.3	2.9
HD 67087	0	21.0 ± 2.3	÷ ÷	10101 ± 1111	32380 ± 3562	85851 ± 9444			0	0.16	÷ ÷	10.1	22.0	42.2		
	21.0 ± 2.3	101 ± 11	÷ 986 ± 108	÷	5118 ± 563	10101 ± 1111	18603 ± 2046		0.16	0.47	÷ 2.1	÷	6.4	10.1	15.2	
	62.6 ± 6.9	158 ± 17	÷ 713 ± 78	1342 ± 148	÷	4006 ± 441	6476 ± 712	10101 ± 1111	0.34	0.63	÷ 1.7	2.6	÷	5.5	7.5	10.1
HD 73526	35.3 ± 3.9	86.7 ± 9.5	÷ ÷	701 ± 77	1229 ± 135	2052 ± 226			0.21	0.39	÷ ÷	1.6	2.3	3.2		
	86.7 ± 9.5	130 ± 14	÷ 270 ± 30	÷	518 ± 57	701 ± 77	934 ± 103		0.39	0.51	÷ 0.82	÷	1.3	1.6	1.9	
	114 ± 13	147 ± 16	÷ 240 ± 26	302 ± 33	÷	467 ± 51	574 ± 63	701 ± 77	0.46	0.55	÷ 0.76	0.89	÷	1.2	1.4	1.6

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
HD 74156	0	0	÷ ÷	25487 ± 2804	136135 ± 14975	503676 ± 55404			0	0	÷ ÷	18.2	55.7	133.3		
	0	1.39 ± 0.15	÷ 486 ± 53	÷	8886 ± 977	25487 ± 2804	62440 ± 6868		0	0.026	÷ 1.3	÷	9.0	18.2	33.1	
	0.20 ± 0.02	5.98 ± 0.66	÷ 251 ± 28	879 ± 97	÷	5975 ± 657	12892 ± 1418	25487 ± 2804	0.007	0.069	÷ 0.84	1.9	÷	6.9	11.6	18.2
HD 82943	40.3 ± 4.4	100 ± 11	÷ ÷	824 ± 91	1451 ± 160	2433 ± 268			0.24	0.44	÷ ÷	1.8	2.6	3.7		
	100 ± 11	150 ± 17	÷ 315 ± 35	÷	608 ± 67	824 ± 91	1101 ± 121		0.44	0.58	÷ 0.9	÷	1.5	1.8	2.2	
	132 ± 15	171 ± 19	÷ 280 ± 31	353 ± 39	÷	548 ± 60	674 ± 74	824 ± 91	0.53	0.63	÷ 0.87	1.0	÷	1.4	1.6	1.8
HD 9446	0	1.99 ± 0.22	÷ ÷	798 ± 88	2513 ± 276	6579 ± 724			0	0.031	÷ ÷	1.7	3.6	6.9		
	1.99 ± 0.22	8.99 ± 0.99	÷ 81.8 ± 9.0	÷	409 ± 45	798 ± 88	1456 ± 160		0.031	0.085	÷ 0.37	÷	1.1	1.7	2.5	
	5.67 ± 0.62	13.8 ± 1.5	÷ 59.6 ± 6.6	110 ± 12	÷	322 ± 35	516 ± 57	798 ± 88	0.062	0.11	÷ 0.30	0.45	÷	0.9	1.3	1.7
HIP 5158	2.22 ± 0.24	0.19 ± 0.02	÷ ÷	72091 ± 7930	338832 ± 37272	1158228 ± 127405			0.030	0.006	÷ ÷	31.0	87.1	197.6		
	0.19 ± 0.02	24.6 ± 2.7	÷ 2191 ± 241	÷	27746 ± 3052	72091 ± 7930	164264 ± 18069		0.006	0.15	÷ 3.0	÷	16.4	31.0	53.7	
	7.19 ± 0.79	68.3 ± 7.5	÷ 1262 ± 139	3630 ± 399	÷	19449 ± 2139	38805 ± 4269	72091 ± 7930	0.067	0.30	÷ 2.1	4.2	÷	13.0	20.5	31.0
HIP 65407	2.99 ± 0.33	10.2 ± 1.1	÷ ÷	144 ± 16	282 ± 31	516 ± 57			0.040	0.090	÷ ÷	0.52	0.82	1.2		
	10.2 ± 1.1	17.3 ± 1.9	÷ 44.2 ± 4.9	÷	99.4 ± 11	144 ± 16	203 ± 22		0.090	0.13	÷ 0.24	÷	0.41	0.52	0.66	
	14.6 ± 1.6	20.4 ± 2.2	÷ 38.2 ± 4.2	51.0 ± 5.6	÷	87.5 ± 9.6	113 ± 12	144 ± 16	0.11	0.14	÷ 0.22	0.26	÷	0.38	0.45	0.52
HIP 67851	0	0	÷ ÷	16800 ± 1848	77870 ± 8566	263851 ± 29024			0	0	÷ ÷	15.1	42.1	94.9		
	0	6.79 ± 0.75	÷ 536 ± 59	÷	6535 ± 719	16800 ± 1848	37981 ± 4178		0	0.083	÷ 1.5	÷	8.1	15.1	26.1	
	2.09 ± 0.23	18.2 ± 2.0	÷ 312 ± 34	880 ± 97	÷	4601 ± 506	9104 ± 1001	16800 ± 1848	0.038	0.16	÷ 1.1	2.1	÷	6.4	10.1	15.1
K2-106	0	0	÷ ÷	121 ± 13	575 ± 63	1985 ± 218			0	0	÷ ÷	0.43	1.2	2.8		
	0	0	÷ 3.48 ± 0.38	÷	45.9 ± 5.0	121 ± 13	277 ± 30		0	0	÷ 0.041	÷	0.23	0.43	0.75	
	0	0	÷ 1.98 ± 0.22	5.82 ± 0.64	÷	32.0 ± 3.5	64.4 ± 7.1	121 ± 13	0	0	÷ 0.028	0.057	÷	0.18	0.28	0.43
K2-117	0	0.18 ± 0.02	÷ ÷	18.2 ± 2.0	49.1 ± 5.4	115 ± 13			0	0.005	÷ ÷	0.11	0.22	0.38		
	0.18 ± 0.02	0.51 ± 0.06	÷ 2.78 ± 0.31	÷	10.4 ± 1.1	18.2 ± 2.0	30.5 ± 3.4		0.005	0.010	÷ 0.032	÷	0.077	0.11	0.16	
	0.37 ± 0.04	0.70 ± 0.08	÷ 2.16 ± 0.24	3.53 ± 0.39	÷	8.49 ± 0.93	12.6 ± 1.4	18.2 ± 2.0	0.008	0.013	÷ 0.027	0.038	÷	0.068	0.088	0.11
K2-154	0.54 ± 0.06	1.52 ± 0.17	÷ ÷	15.7 ± 1.7	29.1 ± 3.2	50.7 ± 5.6			0.011	0.022	÷ ÷	0.11	0.16	0.23		
	1.52 ± 0.17	2.40 ± 0.26	÷ 5.48 ± 0.60	÷	11.3 ± 1.2	15.7 ± 1.7	21.5 ± 2.4		0.022	0.030	÷ 0.053	÷	0.086	0.11	0.13	
	2.07 ± 0.23	2.78 ± 0.31	÷ 4.81 ± 0.53	6.22 ± 0.68	÷	10.1 ± 1.1	12.6 ± 1.4	15.7 ± 1.7	0.028	0.034	÷ 0.048	0.057	÷	0.079	0.09	0.11
K2-158	1.72 ± 0.19	3.29 ± 0.36	÷ ÷	16.4 ± 1.8	25.8 ± 2.8	39.2 ± 4.3			0.027	0.042	÷ ÷	0.12	0.17	0.22		
	3.29 ± 0.36	4.44 ± 0.49	÷ 7.75 ± 0.85	÷	12.9 ± 1.4	16.4 ± 1.8	20.6 ± 2.3		0.042	0.051	÷ 0.075	÷	0.10	0.12	0.14	
	4.03 ± 0.44	4.89 ± 0.54	÷ 7.09 ± 0.78	8.47 ± 0.93	÷	11.9 ± 1.3	14.0 ± 1.5	16.4 ± 1.8	0.048	0.055	÷ 0.070	0.079	÷	0.10	0.11	0.12
K2-16	0.69 ± 0.08	2.58 ± 0.28	÷ ÷	42.2 ± 4.6	85.2 ± 9.4	160 ± 18			0.013	0.032	÷ ÷	0.21	0.33	0.51		
	2.58 ± 0.28	4.55 ± 0.50	÷ 12.3 ± 1.4	÷	28.8 ± 3.2	42.2 ± 4.6	60.6 ± 6.7		0.032	0.047	÷ 0.09	÷	0.16	0.21	0.27	
	3.79 ± 0.42	5.43 ± 0.60	÷ 10.5 ± 1.2	14.3 ± 1.6	÷	25.2 ± 2.8	32.8 ± 3.6	42.2 ± 4.6	0.042	0.053	÷ 0.083	0.10	÷	0.15	0.18	0.21
K2-18	0	1.69 ± 0.19	÷ ÷	96.1 ± 11	238 ± 26	524 ± 58			0	0.020	÷ ÷	0.29	0.53	0.9		
	1.69 ± 0.19	4.12 ± 0.45	÷ 17.8 ± 2.0	÷	57.6 ± 6.3	96.1 ± 11	154 ± 17		0.020	0.036	÷ 0.09	÷	0.21	0.29	0.40	
	3.11 ± 0.34	5.40 ± 0.59	÷ 14.3 ± 1.6	22.0 ± 2.4	÷	48.1 ± 5.3	68.7 ± 7.6	96.1 ± 11	0.030	0.043	÷ 0.082	0.11	÷	0.18	0.23	0.29
K2-21	2.86 ± 0.31	5.31 ± 0.58	÷ ÷	24.9 ± 2.7	38.6 ± 4.2	58.1 ± 6.4			0.035	0.052	÷ ÷	0.15	0.20	0.26		
	5.31 ± 0.58	7.07 ± 0.78	÷ 12.1 ± 1.3	÷	19.8 ± 2.2	24.9 ± 2.7	31.2 ± 3.4		0.052	0.063	÷ 0.09	÷	0.13	0.15	0.17	
	6.44 ± 0.71	7.76 ± 0.85	÷ 11.1 ± 1.2	13.2 ± 1.5	÷	18.3 ± 2.0	21.4 ± 2.4	24.9 ± 2.7	0.059	0.067	÷ 0.085	0.10	÷	0.12	0.13	0.15

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
K2-223	0	0	÷ ÷	22.6 ± 2.5	80.2 ± 8.8	228 ± 25			0	0	÷ ÷	0.16	0.37	0.75		
	0	0.11 ± 0.01	÷ 1.68 ± 0.18	÷	10.7 ± 1.2	22.6 ± 2.5	44.1 ± 4.9		0	0.005	÷ 0.028	÷	0.10	0.16	0.25	
	0	0.19 ± 0.02	÷ 1.16 ± 0.13	2.39 ± 0.26	÷	8.16 ± 0.90	13.9 ± 1.5	22.6 ± 2.5	0	0.007	÷ 0.022	0.036	÷	0.081	0.12	0.16
K2-224	0.58 ± 0.06	1.75 ± 0.19	÷ ÷	20.6 ± 2.3	39.0 ± 4.3	69.4 ± 7.6			0.013	0.028	÷ ÷	0.14	0.22	0.32		
	1.75 ± 0.19	2.86 ± 0.31	÷ 6.82 ± 0.75	÷	14.6 ± 1.6	20.6 ± 2.3	28.6 ± 3.1		0.028	0.038	÷ 0.068	÷	0.11	0.14	0.18	
	2.44 ± 0.27	3.33 ± 0.37	÷ 5.95 ± 0.65	7.79 ± 0.86	÷	12.9 ± 1.4	16.4 ± 1.8	20.6 ± 2.3	0.034	0.042	÷ 0.062	0.075	÷	0.10	0.12	0.14
K2-229	0	0	÷ ÷	52.1 ± 5.7	212 ± 23	660 ± 73			0	0	÷ ÷	0.26	0.67	1.4		
	0	0	÷ 2.55 ± 0.28	÷	22.3 ± 2.5	52.1 ± 5.7	109 ± 12		0	0	÷ 0.035	÷	0.15	0.26	0.43	
	0	0.17 ± 0.02	÷ 1.62 ± 0.18	3.88 ± 0.43	÷	16.3 ± 1.8	30.0 ± 3.3	52.1 ± 5.7	0	0.006	÷ 0.026	0.046	÷	0.12	0.18	0.26
K2-24	3.71 ± 0.41	9.37 ± 1.0	÷ ÷	79.8 ± 8.8	141 ± 16	238 ± 26			0.049	0.09	÷ ÷	0.38	0.55	0.78		
	9.37 ± 1.0	14.2 ± 1.6	÷ 30.1 ± 3.3	÷	58.6 ± 6.4	79.8 ± 8.8	107 ± 12		0.09	0.12	÷ 0.20	÷	0.31	0.38	0.46	
	12.4 ± 1.4	16.2 ± 1.8	÷ 26.7 ± 2.9	33.8 ± 3.7	÷	52.7 ± 5.8	65.1 ± 7.2	79.8 ± 8.8	0.11	0.13	÷ 0.18	0.21	÷	0.29	0.33	0.38
K2-240	0.16 ± 0.02	1.30 ± 0.14	÷ ÷	56.6 ± 6.2	135 ± 15	288 ± 32			0.005	0.018	÷ ÷	0.23	0.41	0.67		
	1.30 ± 0.14	2.94 ± 0.32	÷ 11.5 ± 1.3	÷	34.8 ± 3.8	56.6 ± 6.2	88.7 ± 9.8		0.018	0.032	÷ 0.079	÷	0.16	0.23	0.31	
	2.27 ± 0.25	3.77 ± 0.41	÷ 9.34 ± 1.0	14.0 ± 1.5	÷	29.3 ± 3.2	41.1 ± 4.5	56.6 ± 6.2	0.027	0.038	÷ 0.069	0.090	÷	0.15	0.18	0.23
K2-243	1.69 ± 0.19	4.77 ± 0.52	÷ ÷	49.4 ± 5.4	91.2 ± 10	159 ± 17			0.030	0.060	÷ ÷	0.29	0.43	0.62		
	4.77 ± 0.52	7.54 ± 0.83	÷ 17.2 ± 1.9	÷	35.4 ± 3.9	49.4 ± 5.4	67.6 ± 7.4		0.060	0.082	÷ 0.14	÷	0.23	0.29	0.35	
	6.50 ± 0.72	8.72 ± 0.96	÷ 15.1 ± 1.7	19.5 ± 2.1	÷	31.6 ± 3.5	39.7 ± 4.4	49.4 ± 5.4	0.074	0.09	÷ 0.13	0.15	÷	0.21	0.25	0.29
K2-247	0	0.62 ± 0.07	÷ ÷	15.9 ± 1.7	34.8 ± 3.8	69.4 ± 7.6			0	0.013	÷ ÷	0.11	0.19	0.30		
	0.62 ± 0.07	1.23 ± 0.14	÷ 3.91 ± 0.43	÷	10.3 ± 1.1	15.9 ± 1.7	23.8 ± 2.6		0.013	0.020	÷ 0.044	÷	0.084	0.11	0.15	
	0.99 ± 0.11	1.51 ± 0.17	÷ 3.27 ± 0.36	4.65 ± 0.51	÷	8.88 ± 0.98	12.0 ± 1.3	15.9 ± 1.7	0.018	0.023	÷ 0.039	0.049	÷	0.076	0.09	0.11
K2-254	0.20 ± 0.02	1.09 ± 0.12	÷ ÷	30.3 ± 3.3	67.3 ± 7.4	136 ± 15			0.006	0.019	÷ ÷	0.17	0.29	0.46		
	1.09 ± 0.12	2.19 ± 0.24	÷ 7.22 ± 0.79	÷	19.5 ± 2.1	30.3 ± 3.3	45.8 ± 5.0		0.019	0.030	÷ 0.065	÷	0.13	0.17	0.22	
	1.75 ± 0.19	2.72 ± 0.30	÷ 6.01 ± 0.66	8.62 ± 0.95	÷	16.7 ± 1.8	22.7 ± 2.5	30.3 ± 3.3	0.025	0.034	÷ 0.058	0.074	÷	0.11	0.14	0.17
K2-35	0.26 ± 0.03	0.87 ± 0.10	÷ ÷	12.0 ± 1.3	23.3 ± 2.6	42.6 ± 4.7			0.007	0.016	÷ ÷	0.09	0.14	0.21		
	0.87 ± 0.10	1.48 ± 0.16	÷ 3.73 ± 0.41	÷	8.31 ± 0.91	12.0 ± 1.3	16.9 ± 1.9		0.016	0.022	÷ 0.042	÷	0.071	0.09	0.11	
	1.25 ± 0.14	1.74 ± 0.19	÷ 3.22 ± 0.35	4.29 ± 0.47	÷	7.32 ± 0.81	9.41 ± 1.0	12.0 ± 1.3	0.020	0.025	÷ 0.038	0.046	÷	0.065	0.077	0.09
K2-36	0	0.26 ± 0.03	÷ ÷	15.7 ± 1.7	39.4 ± 4.3	87.2 ± 9.6			0	0.007	÷ ÷	0.11	0.21	0.36		
	0.26 ± 0.03	0.65 ± 0.07	÷ 2.86 ± 0.31	÷	9.39 ± 1.0	15.7 ± 1.7	25.3 ± 2.8		0.007	0.014	÷ 0.037	÷	0.081	0.11	0.16	
	0.49 ± 0.05	0.85 ± 0.09	÷ 2.29 ± 0.25	3.55 ± 0.39	÷	7.83 ± 0.86	11.2 ± 1.2	15.7 ± 1.7	0.011	0.016	÷ 0.032	0.042	÷	0.072	0.09	0.11
K2-38	0.30 ± 0.03	1.27 ± 0.14	÷ ÷	24.3 ± 2.7	50.4 ± 5.5	96.7 ± 11			0.009	0.023	÷ ÷	0.17	0.27	0.42		
	1.27 ± 0.14	2.32 ± 0.26	÷ 6.64 ± 0.73	÷	16.2 ± 1.8	24.3 ± 2.7	35.4 ± 3.9		0.023	0.035	÷ 0.071	÷	0.13	0.17	0.22	
	1.91 ± 0.21	2.80 ± 0.31	÷ 5.64 ± 0.62	7.78 ± 0.86	÷	14.1 ± 1.6	18.6 ± 2.0	24.3 ± 2.7	0.031	0.040	÷ 0.063	0.079	÷	0.12	0.14	0.17
K2-5	1.22 ± 0.13	2.78 ± 0.31	÷ ÷	19.6 ± 2.2	33.3 ± 3.7	54.2 ± 6.0			0.019	0.033	÷ ÷	0.12	0.17	0.24		
	2.78 ± 0.31	4.04 ± 0.44	÷ 7.99 ± 0.88	÷	14.7 ± 1.6	19.6 ± 2.2	25.7 ± 2.8		0.033	0.042	÷ 0.066	÷	0.10	0.12	0.14	
	3.58 ± 0.39	4.55 ± 0.50	÷ 7.17 ± 0.79	8.89 ± 0.98	÷	13.4 ± 1.5	16.2 ± 1.8	19.6 ± 2.2	0.039	0.046	÷ 0.062	0.071	÷	0.09	0.11	0.12
K2-59	2.71 ± 0.30	5.77 ± 0.63	÷ ÷	35.8 ± 3.9	59.2 ± 6.5	94.2 ± 10			0.035	0.058	÷ ÷	0.20	0.27	0.37		
	5.77 ± 0.63	8.15 ± 0.90	÷ 15.4 ± 1.7	÷	27.4 ± 3.0	35.8 ± 3.9	46.3 ± 5.1		0.058	0.073	÷ 0.11	÷	0.16	0.20	0.23	
	7.28 ± 0.80	9.11 ± 1.0	÷ 13.9 ± 1.5	17.0 ± 1.9	÷	25.0 ± 2.8	30.0 ± 3.3	35.8 ± 3.9	0.068	0.078	÷ 0.10	0.12	÷	0.15	0.17	0.20

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
K2-62	0.67 ± 0.07	2.36 ± 0.26	÷	÷	35.0 ± 3.9	69.4 ± 7.6	128 ± 14			0.014	0.032	÷	÷	0.19	0.30	0.46		
	2.36 ± 0.26	4.06 ± 0.45	÷	10.6 ± 1.2	÷	24.1 ± 2.7	35.0 ± 3.9	49.8 ± 5.5		0.032	0.046	÷	0.086	÷	0.15	0.19	0.24	
	3.41 ± 0.38	4.81 ± 0.53	÷	9.10 ± 1.0	12.2 ± 1.3	÷	21.2 ± 2.3	27.4 ± 3.0	35.0 ± 3.9	0.041	0.051	÷	0.078	0.10	÷	0.14	0.16	0.19
K2-75	0.88 ± 0.10	2.90 ± 0.32	÷	÷	38.6 ± 4.2	74.9 ± 8.2	136 ± 15			0.019	0.042	÷	÷	0.23	0.37	0.54		
	2.90 ± 0.32	4.86 ± 0.53	÷	12.1 ± 1.3	÷	26.9 ± 3.0	38.6 ± 4.2	54.3 ± 6.0		0.042	0.059	÷	0.11	÷	0.18	0.23	0.29	
	4.11 ± 0.45	5.71 ± 0.63	÷	10.5 ± 1.2	14.0 ± 1.5	÷	23.7 ± 2.6	30.4 ± 3.3	38.6 ± 4.2	0.053	0.066	÷	0.10	0.12	÷	0.17	0.20	0.23
K2-8	0.88 ± 0.10	2.25 ± 0.25	÷	÷	19.6 ± 2.2	34.8 ± 3.8	58.9 ± 6.5			0.017	0.031	÷	÷	0.13	0.19	0.27		
	2.25 ± 0.25	3.43 ± 0.38	÷	7.32 ± 0.81	÷	14.3 ± 1.6	19.6 ± 2.2	26.3 ± 2.9		0.031	0.041	÷	0.068	÷	0.11	0.13	0.16	
	2.99 ± 0.33	3.92 ± 0.43	÷	6.49 ± 0.71	8.23 ± 0.91	÷	12.9 ± 1.4	15.9 ± 1.7	19.6 ± 2.2	0.037	0.045	÷	0.063	0.074	÷	0.10	0.11	0.13
K2-83	0	0.53 ± 0.06	÷	÷	28.9 ± 3.2	71.3 ± 7.8	156 ± 17			0	0.010	÷	÷	0.14	0.26	0.45		
	0.53 ± 0.06	1.27 ± 0.14	÷	5.43 ± 0.60	÷	17.4 ± 1.9	28.9 ± 3.2	46.2 ± 5.1		0.010	0.018	÷	0.047	÷	0.10	0.14	0.20	
	0.96 ± 0.11	1.66 ± 0.18	÷	4.36 ± 0.48	6.70 ± 0.74	÷	14.6 ± 1.6	20.7 ± 2.3	28.9 ± 3.2	0.015	0.022	÷	0.041	0.055	÷	0.09	0.12	0.14
K2-84	0	0.92 ± 0.10	÷	÷	90.4 ± 9.9	242 ± 27	563 ± 62			0	0.018	÷	÷	0.39	0.75	1.3		
	0.92 ± 0.10	2.63 ± 0.29	÷	14.0 ± 1.5	÷	51.6 ± 5.7	90.4 ± 9.9	151 ± 17		0.018	0.037	÷	0.11	÷	0.27	0.39	0.55	
	1.89 ± 0.21	3.59 ± 0.39	÷	10.9 ± 1.2	17.8 ± 2.0	÷	42.3 ± 4.7	62.6 ± 6.9	90.4 ± 9.9	0.029	0.045	÷	0.09	0.13	÷	0.23	0.30	0.39
K2-90	0	0.34 ± 0.04	÷	÷	48.2 ± 5.3	135 ± 15	326 ± 36			0	0.008	÷	÷	0.23	0.46	0.82		
	0.34 ± 0.04	1.08 ± 0.12	÷	6.65 ± 0.73	÷	26.7 ± 2.9	48.2 ± 5.3	82.6 ± 9.1		0.008	0.018	÷	0.061	÷	0.15	0.23	0.33	
	0.75 ± 0.08	1.53 ± 0.17	÷	5.09 ± 0.56	8.58 ± 0.94	÷	21.6 ± 2.4	32.7 ± 3.6	48.2 ± 5.3	0.014	0.023	÷	0.051	0.073	÷	0.13	0.18	0.23
KELT-6	0	0	÷	÷	19255 ± 2118	123923 ± 13632	512122 ± 56333			0	0	÷	÷	14.6	50.5	130.0		
	0	0	÷	169 ± 19	÷	5771 ± 635	19255 ± 2118	52491 ± 5774		0	0	÷	0.62	÷	6.5	14.6	28.5	
	0	0.23 ± 0.03	÷	71.6 ± 7.9	359 ± 39	÷	3636 ± 400	8864 ± 975	19255 ± 2118	0	0.008	÷	0.35	1.0	÷	4.8	8.7	14.6
KOI-142	1.92 ± 0.21	4.88 ± 0.54	÷	÷	42.2 ± 4.6	75.1 ± 8.3	127 ± 14			0.030	0.056	÷	÷	0.24	0.35	0.49		
	4.88 ± 0.54	7.41 ± 0.82	÷	15.8 ± 1.7	÷	31.0 ± 3.4	42.2 ± 4.6	56.7 ± 6.2		0.056	0.074	÷	0.12	÷	0.19	0.24	0.29	
	6.47 ± 0.71	8.47 ± 0.93	÷	14.0 ± 1.5	17.8 ± 2.0	÷	27.8 ± 3.1	34.4 ± 3.8	42.2 ± 4.6	0.068	0.081	÷	0.11	0.13	÷	0.18	0.21	0.24
KOI-55	0	0.16 ± 0.02	÷	÷	0.48 ± 0.05	0.66 ± 0.07	0.89 ± 0.10			0	0.005	÷	÷	0.010	0.012	0.014		
	0.16 ± 0.02	0.20 ± 0.02	÷	0.29 ± 0.03	÷	0.41 ± 0.05	0.48 ± 0.05	0.56 ± 0.06		0.005	0.005	÷	0.007	÷	0.009	0.010	0.011	
	0.19 ± 0.02	0.21 ± 0.02	÷	0.27 ± 0.03	0.31 ± 0.03	÷	0.38 ± 0.04	0.43 ± 0.05	0.48 ± 0.05	0.005	0.006	÷	0.007	0.007	÷	0.008	0.009	0.010
Kepler-10*	0	0	÷	÷	475 ± 52	2577 ± 283	9629 ± 1059			0	0	÷	÷	1.2	3.6	8.7		
	0	0	÷	8.49 ± 0.93	÷	163 ± 18	475 ± 52	1174 ± 129		0	0	÷	0.080	÷	0.57	1.2	2.1	
	0	0	÷	4.33 ± 0.48	15.6 ± 1.7	÷	109 ± 12	238 ± 26	475 ± 52	0	0	÷	0.051	0.12	÷	0.44	0.74	1.2
Kepler-101	0.97 ± 0.11	1.90 ± 0.21	÷	÷	10.0 ± 1.1	15.9 ± 1.7	24.5 ± 2.7			0.020	0.032	÷	÷	0.10	0.13	0.17		
	1.90 ± 0.21	2.59 ± 0.28	÷	4.61 ± 0.51	÷	7.81 ± 0.86	10.0 ± 1.1	12.7 ± 1.4		0.032	0.039	÷	0.057	÷	0.081	0.10	0.11	
	2.34 ± 0.26	2.87 ± 0.32	÷	4.21 ± 0.46	5.05 ± 0.56	÷	7.18 ± 0.79	8.49 ± 0.93	10.0 ± 1.1	0.036	0.042	÷	0.054	0.061	÷	0.077	0.086	0.10
Kepler-1016*	0	0	÷	÷	1136 ± 125	6202 ± 682	23252 ± 2558			0	0	÷	÷	2.2	6.7	16.1		
	0	0	÷	19.9 ± 2.2	÷	389 ± 43	1136 ± 125	2818 ± 310		0	0	÷	0.15	÷	1.1	2.2	3.9	
	0	0.20 ± 0.02	÷	10.1 ± 1.1	36.6 ± 4.0	÷	260 ± 29	569 ± 63	1136 ± 125	0	0.007	÷	0.09	0.22	÷	0.81	1.4	2.2
Kepler-103*	0	0.26 ± 0.03	÷	÷	1003 ± 110	3811 ± 419	11350 ± 1249			0	0.008	÷	÷	2.0	4.9	10.1		
	0.26 ± 0.03	2.88 ± 0.32	÷	60.5 ± 6.7	÷	451 ± 50	1003 ± 110	2029 ± 223		0.008	0.041	÷	0.31	÷	1.2	2.0	3.2	
	1.43 ± 0.16	5.39 ± 0.59	÷	40.0 ± 4.4	88.9 ± 9.8	÷	337 ± 37	596 ± 66	1003 ± 110	0.025	0.062	÷	0.24	0.40	÷	1.0	1.4	2.0

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
Kepler-1047*	0	0	÷ ÷	388 ± 43	1671 ± 184	5400 ± 594			0	0	÷ ÷	1.0	2.8	6.1		
	0	0.35 ± 0.04	÷ 15.9 ± 1.7	÷	160 ± 18	388 ± 43	842 ± 93		0	0.010	÷ 0.12	÷	0.58	1.0	1.8	
	0.14 ± 0.02	0.81 ± 0.09	÷ 9.73 ± 1.1	24.9 ± 2.7	÷	115 ± 13	218 ± 24	388 ± 43	0.005	0.017	÷ 0.090	0.17	÷	0.46	0.71	1.0
Kepler-105*	4.15 ± 0.46	4.90 ± 0.54	÷ ÷	7.86 ± 0.86	9.13 ± 1.0	10.6 ± 1.2			0.053	0.059	÷ ÷	0.081	0.090	0.10		
	4.90 ± 0.54	5.32 ± 0.59	÷ 6.24 ± 0.69	÷	7.28 ± 0.80	7.86 ± 0.86	8.48 ± 0.93		0.059	0.063	÷ 0.070	÷	0.077	0.081	0.085	
	5.17 ± 0.57	5.46 ± 0.60	÷ 6.07 ± 0.67	6.40 ± 0.70	÷	7.10 ± 0.78	7.47 ± 0.82	7.86 ± 0.86	0.061	0.064	÷ 0.068	0.071	÷	0.076	0.079	0.081
Kepler-1050*	7.69 ± 0.85	11.0 ± 1.2	÷ ÷	28.6 ± 3.1	38.1 ± 4.2	50.2 ± 5.5			0.079	0.10	÷ ÷	0.19	0.23	0.27		
	11.0 ± 1.2	13.0 ± 1.4	÷ 18.1 ± 2.0	÷	24.6 ± 2.7	28.6 ± 3.1	33.1 ± 3.6		0.10	0.11	÷ 0.14	÷	0.17	0.19	0.21	
	12.3 ± 1.4	13.8 ± 1.5	÷ 17.1 ± 1.9	19.0 ± 2.1	÷	23.4 ± 2.6	25.9 ± 2.8	28.6 ± 3.1	0.11	0.12	÷ 0.13	0.14	÷	0.17	0.18	0.19
Kepler-1065*	0.93 ± 0.10	1.51 ± 0.17	÷ ÷	5.35 ± 0.59	7.73 ± 0.85	10.9 ± 1.2			0.018	0.026	÷ ÷	0.059	0.076	0.10		
	1.51 ± 0.17	1.90 ± 0.21	÷ 2.94 ± 0.32	÷	4.41 ± 0.49	5.35 ± 0.59	6.45 ± 0.71		0.026	0.030	÷ 0.040	÷	0.052	0.059	0.067	
	1.76 ± 0.19	2.05 ± 0.23	÷ 2.74 ± 0.30	3.15 ± 0.35	÷	4.13 ± 0.45	4.70 ± 0.52	5.35 ± 0.59	0.028	0.031	÷ 0.038	0.042	÷	0.050	0.054	0.059
Kepler-1073*	0.59 ± 0.06	1.67 ± 0.18	÷ ÷	17.1 ± 1.9	31.6 ± 3.5	55.1 ± 6.1			0.013	0.027	÷ ÷	0.13	0.19	0.28		
	1.67 ± 0.18	2.63 ± 0.29	÷ 5.98 ± 0.66	÷	12.3 ± 1.4	17.1 ± 1.9	23.5 ± 2.6		0.027	0.036	÷ 0.063	÷	0.10	0.13	0.16	
	2.27 ± 0.25	3.04 ± 0.33	÷ 5.26 ± 0.58	6.79 ± 0.75	÷	11.0 ± 1.2	13.8 ± 1.5	17.1 ± 1.9	0.033	0.040	÷ 0.058	0.068	÷	0.09	0.11	0.13
Kepler-108	0.70 ± 0.08	8.50 ± 0.94	÷ ÷	576 ± 63	1463 ± 161	3279 ± 361			0.017	0.09	÷ ÷	1.5	2.8	4.8		
	8.50 ± 0.94	21.8 ± 2.4	÷ 101 ± 11	÷	340 ± 37	576 ± 63	934 ± 103		0.09	0.17	÷ 0.47	÷	1.1	1.5	2.1	
	16.2 ± 1.8	28.9 ± 3.2	÷ 79.9 ± 8.8	125 ± 14	÷	282 ± 31	407 ± 45	576 ± 63	0.14	0.21	÷ 0.40	0.55	÷	0.9	1.2	1.5
Kepler-1086*	0	0.63 ± 0.07	÷ ÷	785 ± 86	2738 ± 301	7698 ± 847			0	0.012	÷ ÷	1.4	3.3	6.5		
	0.63 ± 0.07	4.37 ± 0.48	÷ 60.6 ± 6.7	÷	375 ± 41	785 ± 86	1514 ± 167		0.012	0.045	÷ 0.26	÷	0.87	1.4	2.2	
	2.46 ± 0.27	7.40 ± 0.81	÷ 42.1 ± 4.6	85.6 ± 9.4	÷	287 ± 32	485 ± 53	785 ± 86	0.031	0.064	÷ 0.20	0.33	÷	0.73	1.0	1.4
Kepler-109*	0.21 ± 0.02	1.48 ± 0.16	÷ ÷	57.1 ± 6.3	133 ± 15	281 ± 31			0.007	0.026	÷ ÷	0.29	0.52	0.85		
	1.48 ± 0.16	3.24 ± 0.36	÷ 12.1 ± 1.3	÷	35.5 ± 3.9	57.1 ± 6.3	88.6 ± 9.7		0.026	0.043	÷ 0.10	÷	0.21	0.29	0.39	
	2.52 ± 0.28	4.12 ± 0.45	÷ 9.88 ± 1.1	14.7 ± 1.6	÷	30.1 ± 3.3	41.8 ± 4.6	57.1 ± 6.3	0.037	0.051	÷ 0.09	0.12	÷	0.19	0.24	0.29
Kepler-1093*	0.54 ± 0.06	4.96 ± 0.55	÷ ÷	257 ± 28	627 ± 69	1365 ± 150			0.013	0.058	÷ ÷	0.81	1.5	2.5		
	4.96 ± 0.55	11.8 ± 1.3	÷ 49.1 ± 5.4	÷	155 ± 17	257 ± 28	408 ± 45		0.058	0.10	÷ 0.27	÷	0.58	0.81	1.1	
	8.95 ± 0.98	15.3 ± 1.7	÷ 39.6 ± 4.4	60.4 ± 6.6	÷	130 ± 14	184 ± 20	257 ± 28	0.086	0.12	÷ 0.23	0.31	÷	0.51	0.65	0.81
Kepler-110	1.12 ± 0.12	4.25 ± 0.47	÷ ÷	70.8 ± 7.8	143 ± 16	270 ± 30			0.021	0.052	÷ ÷	0.34	0.54	0.82		
	4.25 ± 0.47	7.51 ± 0.83	÷ 20.4 ± 2.2	÷	48.1 ± 5.3	70.8 ± 7.8	102 ± 11		0.052	0.076	÷ 0.15	÷	0.26	0.34	0.43	
	6.25 ± 0.69	8.98 ± 0.99	÷ 17.5 ± 1.9	23.8 ± 2.6	÷	42.1 ± 4.6	54.9 ± 6.0	70.8 ± 7.8	0.067	0.085	÷ 0.13	0.16	÷	0.24	0.28	0.34
Kepler-111	0	0	÷ ÷	2604 ± 286	14752 ± 1623	56553 ± 6221			0	0	÷ ÷	3.9	12.4	30.3		
	0	0	÷ 39.4 ± 4.3	÷	866 ± 95	2604 ± 286	6597 ± 726		0	0	÷ 0.24	÷	1.9	3.9	7.2	
	0	0.28 ± 0.03	÷ 19.3 ± 2.1	74.5 ± 8.2	÷	571 ± 63	1279 ± 141	2604 ± 286	0	0.009	÷ 0.15	0.36	÷	1.4	2.4	3.9
Kepler-112	0.22 ± 0.02	1.80 ± 0.20	÷ ÷	79.1 ± 8.7	189 ± 21	403 ± 44			0.007	0.027	÷ ÷	0.34	0.60	1.0		
	1.80 ± 0.20	4.08 ± 0.45	÷ 16.0 ± 1.8	÷	48.6 ± 5.3	79.1 ± 8.7	124 ± 14		0.027	0.047	÷ 0.12	÷	0.24	0.34	0.46	
	3.15 ± 0.35	5.24 ± 0.58	÷ 13.0 ± 1.4	19.5 ± 2.1	÷	40.9 ± 4.5	57.4 ± 6.3	79.1 ± 8.7	0.039	0.056	÷ 0.10	0.13	÷	0.22	0.27	0.34
Kepler-1129*	0.92 ± 0.10	5.90 ± 0.65	÷ ÷	200 ± 22	458 ± 50	949 ± 104			0.019	0.064	÷ ÷	0.67	1.2	1.9		
	5.90 ± 0.65	12.5 ± 1.4	÷ 44.4 ± 4.9	÷	126 ± 14	200 ± 22	307 ± 34		0.064	0.11	÷ 0.25	÷	0.49	0.67	0.89	
	9.83 ± 1.1	15.7 ± 1.7	÷ 36.6 ± 4.0	53.5 ± 5.9	÷	107 ± 12	148 ± 16	200 ± 22	0.09	0.12	÷ 0.22	0.28	÷	0.44	0.55	0.67

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)								
Kepler-113*	1.06 ± 0.12	2.35 ± 0.26	÷	÷	15.8 ± 1.7	26.6 ± 2.9	42.9 ± 4.7		0.018	0.031	÷	÷	0.11	0.16	0.21		
	2.35 ± 0.26	3.38 ± 0.37	÷	6.57 ± 0.72	÷	12.0 ± 1.3	15.8 ± 1.7	20.6 ± 2.3	0.031	0.039	÷	0.061	÷	0.09	0.11	0.13	
	3.00 ± 0.33	3.79 ± 0.42	÷	5.91 ± 0.65	7.29 ± 0.80	÷	10.9 ± 1.2	13.1 ± 1.4	15.8 ± 1.7	0.036	0.043	÷	0.057	0.066	÷	0.086	0.10	0.11
Kepler-1143*	0	0	÷	÷	2502 ± 275	14357 ± 1579	55463 ± 6101		0	0	÷	÷	3.2	10.3	25.4		
	0	0	÷	35.9 ± 3.9	÷	824 ± 91	2502 ± 275	6385 ± 702	0	0	÷	0.19	÷	1.5	3.2	6.0	
	0	0.22 ± 0.02	÷	17.3 ± 1.9	68.7 ± 7.6	÷	541 ± 60	1221 ± 134	2502 ± 275	0	0.006	÷	0.12	0.29	÷	1.2	2.0	3.2
Kepler-115	0	0.44 ± 0.05	÷	÷	26.6 ± 2.9	66.7 ± 7.3	148 ± 16		0	0.012	÷	÷	0.18	0.33	0.56		
	0.44 ± 0.05	1.09 ± 0.12	÷	4.82 ± 0.53	÷	15.9 ± 1.7	26.6 ± 2.9	42.9 ± 4.7	0.012	0.021	÷	0.057	÷	0.13	0.18	0.25	
	0.82 ± 0.09	1.43 ± 0.16	÷	3.85 ± 0.42	5.98 ± 0.66	÷	13.2 ± 1.5	19.0 ± 2.1	26.6 ± 2.9	0.018	0.026	÷	0.049	0.066	÷	0.11	0.14	0.18
Kepler-1154*	1.70 ± 0.19	3.04 ± 0.33	÷	÷	13.3 ± 1.5	20.2 ± 2.2	30.0 ± 3.3		0.029	0.043	÷	÷	0.11	0.15	0.20		
	3.04 ± 0.33	4.00 ± 0.44	÷	6.66 ± 0.73	÷	10.6 ± 1.2	13.3 ± 1.5	16.5 ± 1.8	0.043	0.051	÷	0.072	÷	0.10	0.11	0.13	
	3.65 ± 0.40	4.36 ± 0.48	÷	6.13 ± 0.67	7.22 ± 0.79	÷	9.87 ± 1.1	11.5 ± 1.3	13.3 ± 1.5	0.048	0.054	÷	0.068	0.076	÷	0.09	0.10	0.11
Kepler-116	0.85 ± 0.09	2.44 ± 0.27	÷	÷	26.0 ± 2.9	48.2 ± 5.3	84.5 ± 9.3		0.019	0.038	÷	÷	0.18	0.28	0.40		
	1.48 ± 0.16	3.89 ± 0.43	÷	8.95 ± 0.98	÷	18.6 ± 2.0	26.0 ± 2.9	35.7 ± 3.9	0.027	0.052	÷	0.09	÷	0.15	0.18	0.23	
	3.34 ± 0.37	4.50 ± 0.50	÷	7.85 ± 0.86	10.2 ± 1.1	÷	16.6 ± 1.8	20.8 ± 2.3	26.0 ± 2.9	0.047	0.057	÷	0.083	0.10	÷	0.14	0.16	0.18
Kepler-117	1.29 ± 0.14	5.70 ± 0.63	÷	÷	119 ± 13	251 ± 28	488 ± 54		0.024	0.065	÷	÷	0.50	0.81	1.3		
	5.70 ± 0.63	10.7 ± 1.2	÷	31.5 ± 3.5	÷	79.0 ± 8.7	119 ± 13	175 ± 19	0.065	0.10	÷	0.20	÷	0.38	0.50	0.64	
	8.72 ± 0.96	13.0 ± 1.4	÷	26.7 ± 2.9	37.1 ± 4.1	÷	68.4 ± 7.5	90.9 ± 10	119 ± 13	0.087	0.11	÷	0.18	0.23	÷	0.34	0.41	0.50
Kepler-118	0.53 ± 0.06	2.30 ± 0.25	÷	÷	47.1 ± 5.2	99.0 ± 11	192 ± 21		0.012	0.033	÷	÷	0.25	0.41	0.63		
	2.30 ± 0.25	4.28 ± 0.47	÷	12.6 ± 1.4	÷	31.3 ± 3.4	47.1 ± 5.2	69.1 ± 7.6	0.033	0.050	÷	0.10	÷	0.19	0.25	0.32	
	3.51 ± 0.39	5.20 ± 0.57	÷	10.6 ± 1.2	14.8 ± 1.6	÷	27.1 ± 3.0	36.0 ± 4.0	47.1 ± 5.2	0.044	0.057	÷	0.09	0.11	÷	0.17	0.21	0.25
Kepler-119	0.77 ± 0.08	1.42 ± 0.16	÷	÷	6.48 ± 0.71	9.98 ± 1.1	14.9 ± 1.6		0.016	0.024	÷	÷	0.067	0.089	0.12		
	1.42 ± 0.16	1.88 ± 0.21	÷	3.18 ± 0.35	÷	5.16 ± 0.57	6.48 ± 0.71	8.08 ± 0.89	0.024	0.029	÷	0.042	÷	0.057	0.067	0.077	
	1.71 ± 0.19	2.06 ± 0.23	÷	2.92 ± 0.32	3.46 ± 0.38	÷	4.77 ± 0.52	5.57 ± 0.61	6.48 ± 0.71	0.028	0.031	÷	0.039	0.044	÷	0.054	0.060	0.067
Kepler-120	1.13 ± 0.12	2.84 ± 0.31	÷	÷	24.0 ± 2.6	42.5 ± 4.7	71.6 ± 7.9		0.017	0.032	÷	÷	0.13	0.20	0.28		
	2.84 ± 0.31	4.29 ± 0.47	÷	9.08 ± 1.00	÷	17.7 ± 1.9	24.0 ± 2.6	32.2 ± 3.5	0.032	0.043	÷	0.070	÷	0.11	0.13	0.16	
	3.75 ± 0.41	4.90 ± 0.54	÷	8.07 ± 0.89	10.2 ± 1.1	÷	15.9 ± 1.7	19.6 ± 2.2	24.0 ± 2.6	0.039	0.046	÷	0.065	0.076	÷	0.10	0.12	0.13
Kepler-121	0	0	÷	÷	247 ± 27	982 ± 108	3009 ± 331		0	0	÷	÷	0.71	1.8	3.8		
	0	0.49 ± 0.05	÷	13.1 ± 1.4	÷	108 ± 12	247 ± 27	513 ± 56	0	0.011	÷	0.10	÷	0.41	0.71	1.2	
	0.23 ± 0.03	0.98 ± 0.11	÷	8.45 ± 0.93	19.7 ± 2.2	÷	79.6 ± 8.8	144 ± 16	247 ± 27	0.007	0.018	÷	0.075	0.13	÷	0.34	0.50	0.71
Kepler-123	6.40 ± 0.70	10.7 ± 1.2	÷	÷	40.3 ± 4.4	59.1 ± 6.5	84.7 ± 9.3		0.070	0.10	÷	÷	0.24	0.31	0.39		
	10.7 ± 1.2	13.6 ± 1.5	÷	21.5 ± 2.4	÷	32.9 ± 3.6	40.3 ± 4.4	48.9 ± 5.4	0.10	0.12	÷	0.16	÷	0.21	0.24	0.27	
	12.6 ± 1.4	14.8 ± 1.6	÷	20.0 ± 2.2	23.2 ± 2.6	÷	30.7 ± 3.4	35.2 ± 3.9	40.3 ± 4.4	0.11	0.12	÷	0.15	0.16	÷	0.20	0.22	0.24
Kepler-1245*	1.22 ± 0.13	1.93 ± 0.21	÷	÷	6.30 ± 0.69	8.92 ± 0.98	12.4 ± 1.4		0.021	0.028	÷	÷	0.062	0.078	0.10		
	1.93 ± 0.21	2.39 ± 0.26	÷	3.59 ± 0.39	÷	5.25 ± 0.58	6.30 ± 0.69	7.52 ± 0.83	0.028	0.032	÷	0.043	÷	0.055	0.062	0.070	
	2.22 ± 0.24	2.56 ± 0.28	÷	3.36 ± 0.37	3.83 ± 0.42	÷	4.94 ± 0.54	5.58 ± 0.61	6.30 ± 0.69	0.031	0.034	÷	0.041	0.045	÷	0.053	0.057	0.062
Kepler-125	2.04 ± 0.22	2.94 ± 0.32	÷	÷	7.88 ± 0.87	10.6 ± 1.2	14.0 ± 1.5		0.025	0.033	÷	÷	0.063	0.076	0.09		
	2.94 ± 0.32	3.51 ± 0.39	÷	4.91 ± 0.54	÷	6.76 ± 0.74	7.88 ± 0.87	9.15 ± 1.0	0.033	0.037	÷	0.046	÷	0.057	0.063	0.069	
	3.31 ± 0.36	3.72 ± 0.41	÷	4.65 ± 0.51	5.19 ± 0.57	÷	6.42 ± 0.71	7.12 ± 0.78	7.88 ± 0.87	0.035	0.038	÷	0.044	0.047	÷	0.055	0.059	0.063

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
Kepler-128*	6.00 ± 0.66	9.69 ± 1.1	÷ ÷	33.5 ± 3.7	48.2 ± 5.3	67.9 ± 7.5			0.068	0.09	÷ ÷	0.21	0.27	0.34		
	9.69 ± 1.1	12.1 ± 1.3	÷ 18.6 ± 2.0	÷	27.7 ± 3.0	33.5 ± 3.7	40.3 ± 4.4		0.09	0.11	÷ 0.14	÷	0.19	0.21	0.24	
	11.3 ± 1.2	13.1 ± 1.4	÷ 17.4 ± 1.9	19.9 ± 2.2	÷	26.0 ± 2.9	29.6 ± 3.3	33.5 ± 3.7	0.10	0.11	÷ 0.14	0.15	÷	0.18	0.20	0.21
Kepler-129	0	1.62 ± 0.18	÷ ÷	299 ± 33	864 ± 95	2130 ± 234			0	0.029	÷ ÷	0.9	1.9	3.4		
	1.62 ± 0.18	5.63 ± 0.62	÷ 38.1 ± 4.2	÷	162 ± 18	299 ± 33	520 ± 57		0.029	0.066	÷ 0.24	÷	0.62	0.9	1.3	
	3.82 ± 0.42	8.10 ± 0.89	÷ 28.8 ± 3.2	49.8 ± 5.5	÷	130 ± 14	200 ± 22	299 ± 33	0.051	0.084	÷ 0.20	0.28	÷	0.53	0.71	0.9
Kepler-131*	5.66 ± 0.62	9.76 ± 1.1	÷ ÷	39.2 ± 4.3	58.4 ± 6.4	85.0 ± 9.4			0.063	0.09	÷ ÷	0.23	0.30	0.38		
	9.76 ± 1.1	12.6 ± 1.4	÷ 20.4 ± 2.2	÷	31.7 ± 3.5	39.2 ± 4.3	48.0 ± 5.3		0.09	0.11	÷ 0.15	÷	0.20	0.23	0.26	
	11.6 ± 1.3	13.7 ± 1.5	÷ 18.8 ± 2.1	22.0 ± 2.4	÷	29.5 ± 3.2	34.1 ± 3.8	39.2 ± 4.3	0.10	0.11	÷ 0.14	0.15	÷	0.19	0.21	0.23
Kepler-1311*	0	0.35 ± 0.04	÷ ÷	36.7 ± 4.0	99.0 ± 11	232 ± 26			0	0.010	÷ ÷	0.22	0.42	0.74		
	0.35 ± 0.04	1.02 ± 0.11	÷ 5.57 ± 0.61	÷	20.9 ± 2.3	36.7 ± 4.0	61.5 ± 6.8		0.010	0.020	÷ 0.062	÷	0.15	0.22	0.31	
	0.73 ± 0.08	1.41 ± 0.16	÷ 4.33 ± 0.48	7.09 ± 0.78	÷	17.1 ± 1.9	25.3 ± 2.8	36.7 ± 4.0	0.016	0.025	÷ 0.052	0.073	÷	0.13	0.17	0.22
Kepler-1321*	0	0.25 ± 0.03	÷ ÷	39.5 ± 4.3	113 ± 12	274 ± 30			0	0.007	÷ ÷	0.20	0.39	0.71		
	0.25 ± 0.03	0.82 ± 0.09	÷ 5.25 ± 0.58	÷	21.7 ± 2.4	39.5 ± 4.3	68.2 ± 7.5		0.007	0.015	÷ 0.051	÷	0.13	0.20	0.28	
	0.56 ± 0.06	1.16 ± 0.13	÷ 4.00 ± 0.44	6.82 ± 0.75	÷	17.5 ± 1.9	26.7 ± 2.9	39.5 ± 4.3	0.011	0.019	÷ 0.042	0.061	÷	0.11	0.15	0.20
Kepler-133	0.12 ± 0.01	1.43 ± 0.16	÷ ÷	94.5 ± 10	239 ± 26	535 ± 59			0.005	0.026	÷ ÷	0.42	0.79	1.4		
	1.43 ± 0.16	3.63 ± 0.40	÷ 16.6 ± 1.8	÷	55.9 ± 6.1	94.5 ± 10	153 ± 17		0.026	0.048	÷ 0.13	÷	0.30	0.42	0.59	
	2.70 ± 0.30	4.82 ± 0.53	÷ 13.2 ± 1.5	20.7 ± 2.3	÷	46.4 ± 5.1	66.9 ± 7.4	94.5 ± 10	0.040	0.058	÷ 0.11	0.15	÷	0.26	0.34	0.42
Kepler-1336*	0	0.94 ± 0.10	÷ ÷	71.7 ± 7.9	185 ± 20	420 ± 46			0	0.019	÷ ÷	0.34	0.63	1.1		
	0.94 ± 0.10	2.50 ± 0.28	÷ 12.1 ± 1.3	÷	41.9 ± 4.6	71.7 ± 7.9	117 ± 13		0.019	0.036	÷ 0.10	÷	0.23	0.34	0.47	
	1.84 ± 0.20	3.35 ± 0.37	÷ 9.53 ± 1.0	15.1 ± 1.7	÷	34.6 ± 3.8	50.4 ± 5.5	71.7 ± 7.9	0.029	0.043	÷ 0.087	0.12	÷	0.21	0.27	0.34
Kepler-134	1.15 ± 0.13	2.59 ± 0.28	÷ ÷	18.0 ± 2.0	30.6 ± 3.4	49.7 ± 5.5			0.022	0.037	÷ ÷	0.14	0.19	0.27		
	2.59 ± 0.28	3.76 ± 0.41	÷ 7.39 ± 0.81	÷	13.6 ± 1.5	18.0 ± 2.0	23.6 ± 2.6		0.037	0.048	÷ 0.075	÷	0.11	0.14	0.16	
	3.33 ± 0.37	4.23 ± 0.47	÷ 6.64 ± 0.73	8.22 ± 0.90	÷	12.3 ± 1.4	15.0 ± 1.7	18.0 ± 2.0	0.044	0.051	÷ 0.070	0.080	÷	0.11	0.12	0.14
Kepler-135	1.28 ± 0.14	2.91 ± 0.32	÷ ÷	20.5 ± 2.3	34.8 ± 3.8	56.7 ± 6.2			0.024	0.041	÷ ÷	0.15	0.22	0.30		
	2.91 ± 0.32	4.23 ± 0.47	÷ 8.36 ± 0.92	÷	15.4 ± 1.7	20.5 ± 2.3	26.9 ± 3.0		0.041	0.053	÷ 0.084	÷	0.13	0.15	0.18	
	3.74 ± 0.41	4.76 ± 0.52	÷ 7.50 ± 0.83	9.30 ± 1.0	÷	14.0 ± 1.5	17.0 ± 1.9	20.5 ± 2.3	0.049	0.057	÷ 0.078	0.090	÷	0.12	0.13	0.15
Kepler-1350*	0	0.58 ± 0.06	÷ ÷	10.1 ± 1.1	20.6 ± 2.3	38.9 ± 4.3			0	0.011	÷ ÷	0.071	0.11	0.17		
	0.58 ± 0.06	1.04 ± 0.11	÷ 2.87 ± 0.32	÷	6.83 ± 0.75	10.1 ± 1.1	14.6 ± 1.6		0.011	0.016	÷ 0.031	÷	0.055	0.071	0.09	
	0.86 ± 0.09	1.25 ± 0.14	÷ 2.45 ± 0.27	3.35 ± 0.37	÷	5.96 ± 0.66	7.80 ± 0.86	10.1 ± 1.1	0.014	0.018	÷ 0.028	0.034	÷	0.050	0.060	0.071
Kepler-136	5.52 ± 0.61	8.10 ± 0.89	÷ ÷	22.5 ± 2.5	30.6 ± 3.4	40.9 ± 4.5			0.065	0.083	÷ ÷	0.16	0.20	0.25		
	8.10 ± 0.89	9.73 ± 1.1	÷ 13.8 ± 1.5	÷	19.2 ± 2.1	22.5 ± 2.5	26.3 ± 2.9		0.083	0.09	÷ 0.12	÷	0.15	0.16	0.18	
	9.16 ± 1.0	10.3 ± 1.1	÷ 13.0 ± 1.4	14.6 ± 1.6	÷	18.2 ± 2.0	20.3 ± 2.2	22.5 ± 2.5	0.09	0.10	÷ 0.11	0.12	÷	0.14	0.15	0.16
Kepler-1365*	1.61 ± 0.18	2.84 ± 0.31	÷ ÷	12.0 ± 1.3	18.1 ± 2.0	26.6 ± 2.9			0.027	0.039	÷ ÷	0.10	0.13	0.17		
	2.84 ± 0.31	3.70 ± 0.41	÷ 6.09 ± 0.67	÷	9.65 ± 1.1	12.0 ± 1.3	14.8 ± 1.6		0.039	0.046	÷ 0.065	÷	0.088	0.10	0.12	
	3.40 ± 0.37	4.04 ± 0.44	÷ 5.62 ± 0.62	6.59 ± 0.72	÷	8.96 ± 0.99	10.4 ± 1.1	12.0 ± 1.3	0.044	0.049	÷ 0.061	0.068	÷	0.083	0.09	0.10
Kepler-137	1.18 ± 0.13	3.44 ± 0.38	÷ ÷	37.3 ± 4.1	69.5 ± 7.6	122 ± 13			0.021	0.042	÷ ÷	0.21	0.31	0.46		
	3.44 ± 0.38	5.49 ± 0.60	÷ 12.7 ± 1.4	÷	26.6 ± 2.9	37.3 ± 4.1	51.3 ± 5.6		0.042	0.058	÷ 0.10	÷	0.16	0.21	0.26	
	4.72 ± 0.52	6.37 ± 0.70	÷ 11.2 ± 1.2	14.5 ± 1.6	÷	23.7 ± 2.6	29.8 ± 3.3	37.3 ± 4.1	0.052	0.064	÷ 0.09	0.11	÷	0.15	0.18	0.21

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)								
Kepler-1370*	0.50 ± 0.06	2.24 ± 0.25	÷	÷	47.8 ± 5.3	101 ± 11	197 ± 22			0.013	0.035	÷	÷	0.27	0.45	0.70		
	2.24 ± 0.25	4.20 ± 0.46	÷	12.5 ± 1.4	÷	31.6 ± 3.5	47.8 ± 5.3	70.4 ± 7.7		0.035	0.054	÷	0.11	÷	0.21	0.27	0.35	
	3.43 ± 0.38	5.12 ± 0.56	÷	10.6 ± 1.2	14.8 ± 1.6	÷	27.3 ± 3.0	36.4 ± 4.0	47.8 ± 5.3	0.047	0.061	÷	0.10	0.12	÷	0.19	0.23	0.27
Kepler-1371*	0.57 ± 0.06	1.11 ± 0.12	÷	÷	5.66 ± 0.62	8.96 ± 0.99	13.7 ± 1.5			0.012	0.019	÷	÷	0.056	0.076	0.10		
	1.11 ± 0.12	1.50 ± 0.17	÷	2.64 ± 0.29	÷	4.44 ± 0.49	5.66 ± 0.62	7.15 ± 0.79		0.019	0.023	÷	0.034	÷	0.047	0.056	0.065	
	1.36 ± 0.15	1.66 ± 0.18	÷	2.42 ± 0.27	2.89 ± 0.32	÷	4.09 ± 0.45	4.82 ± 0.53	5.66 ± 0.62	0.021	0.025	÷	0.032	0.036	÷	0.045	0.050	0.056
Kepler-139	0	0.37 ± 0.04	÷	÷	820 ± 90	2998 ± 330	8697 ± 957			0	0.010	÷	÷	1.8	4.2	8.5		
	0.37 ± 0.04	3.22 ± 0.35	÷	55.5 ± 6.1	÷	380 ± 42	820 ± 90	1624 ± 179		0.010	0.044	÷	0.29	÷	1.1	1.8	2.8	
	1.70 ± 0.19	5.75 ± 0.63	÷	37.6 ± 4.1	80.1 ± 8.8	÷	287 ± 32	496 ± 55	820 ± 90	0.029	0.065	÷	0.23	0.37	÷	0.88	1.3	1.8
Kepler-1398*	1.16 ± 0.13	1.83 ± 0.20	÷	÷	5.99 ± 0.66	8.50 ± 0.94	11.8 ± 1.3			0.022	0.030	÷	÷	0.066	0.083	0.10		
	1.83 ± 0.20	2.27 ± 0.25	÷	3.41 ± 0.38	÷	4.99 ± 0.55	5.99 ± 0.66	7.15 ± 0.79		0.030	0.034	÷	0.045	÷	0.058	0.066	0.074	
	2.11 ± 0.23	2.43 ± 0.27	÷	3.19 ± 0.35	3.64 ± 0.40	÷	4.69 ± 0.52	5.31 ± 0.58	5.99 ± 0.66	0.033	0.036	÷	0.043	0.047	÷	0.056	0.060	0.066
Kepler-140	0	0	÷	÷	765 ± 84	3671 ± 404	12709 ± 1398			0	0	÷	÷	1.7	4.9	11.1		
	0	0.20 ± 0.02	÷	21.7 ± 2.4	÷	290 ± 32	765 ± 84	1764 ± 194		0	0.007	÷	0.16	÷	0.90	1.7	3.0	
	0	0.59 ± 0.06	÷	12.3 ± 1.4	36.4 ± 4.0	÷	202 ± 22	408 ± 45	765 ± 84	0	0.014	÷	0.11	0.22	÷	0.70	1.1	1.7
Kepler-141	0.40 ± 0.04	1.22 ± 0.13	÷	÷	14.3 ± 1.6	27.1 ± 3.0	48.3 ± 5.3			0.010	0.021	÷	÷	0.11	0.17	0.24		
	1.22 ± 0.13	1.98 ± 0.22	÷	4.73 ± 0.52	÷	10.1 ± 1.1	14.3 ± 1.6	19.9 ± 2.2		0.021	0.029	÷	0.052	÷	0.086	0.11	0.13	
	1.69 ± 0.19	2.31 ± 0.25	÷	4.13 ± 0.45	5.41 ± 0.60	÷	8.97 ± 0.99	11.4 ± 1.3	14.3 ± 1.6	0.026	0.032	÷	0.047	0.056	÷	0.079	0.09	0.11
Kepler-143	4.67 ± 0.51	8.91 ± 0.98	÷	÷	44.3 ± 4.9	69.5 ± 7.6	106 ± 12			0.056	0.086	÷	÷	0.25	0.34	0.45		
	8.91 ± 0.98	12.0 ± 1.3	÷	20.9 ± 2.3	÷	34.8 ± 3.8	44.3 ± 4.9	55.7 ± 6.1		0.086	0.11	÷	0.15	÷	0.21	0.25	0.29	
	10.9 ± 1.2	13.2 ± 1.5	÷	19.2 ± 2.1	22.9 ± 2.5	÷	32.1 ± 3.5	37.8 ± 4.2	44.3 ± 4.9	0.10	0.11	÷	0.14	0.16	÷	0.20	0.23	0.25
Kepler-144	1.74 ± 0.19	3.31 ± 0.36	÷	÷	16.4 ± 1.8	25.7 ± 2.8	39.1 ± 4.3			0.029	0.045	÷	÷	0.13	0.18	0.23		
	3.31 ± 0.36	4.45 ± 0.49	÷	7.76 ± 0.85	÷	12.9 ± 1.4	16.4 ± 1.8	20.6 ± 2.3		0.045	0.055	÷	0.079	÷	0.11	0.13	0.15	
	4.04 ± 0.44	4.90 ± 0.54	÷	7.10 ± 0.78	8.47 ± 0.93	÷	11.9 ± 1.3	14.0 ± 1.5	16.4 ± 1.8	0.051	0.058	÷	0.075	0.084	÷	0.11	0.12	0.13
Kepler-145*	5.18 ± 0.57	11.4 ± 1.3	÷	÷	75.6 ± 8.3	127 ± 14	204 ± 22			0.065	0.11	÷	÷	0.39	0.55	0.75		
	11.4 ± 1.3	16.4 ± 1.8	÷	31.6 ± 3.5	÷	57.3 ± 6.3	75.6 ± 8.3	98.4 ± 11		0.11	0.14	÷	0.22	÷	0.32	0.39	0.46	
	14.5 ± 1.6	18.3 ± 2.0	÷	28.5 ± 3.1	35.1 ± 3.9	÷	52.1 ± 5.7	62.9 ± 6.9	75.6 ± 8.3	0.13	0.15	÷	0.20	0.23	÷	0.30	0.34	0.39
Kepler-146	3.00 ± 0.33	10.8 ± 1.2	÷	÷	167 ± 18	334 ± 37	621 ± 68			0.042	0.10	÷	÷	0.61	1.0	1.5		
	10.8 ± 1.2	18.8 ± 2.1	÷	49.7 ± 5.5	÷	115 ± 13	167 ± 18	239 ± 26		0.10	0.14	÷	0.27	÷	0.48	0.61	0.78	
	15.8 ± 1.7	22.4 ± 2.5	÷	42.7 ± 4.7	57.6 ± 6.3	÷	101 ± 11	130 ± 14	167 ± 18	0.13	0.16	÷	0.25	0.30	÷	0.44	0.52	0.61
Kepler-1464*	0	0.41 ± 0.05	÷	÷	126 ± 14	384 ± 42	985 ± 108			0	0.010	÷	÷	0.46	1.0	1.8		
	0.41 ± 0.05	1.70 ± 0.19	÷	13.9 ± 1.5	÷	65.7 ± 7.2	126 ± 14	225 ± 25		0.010	0.026	÷	0.11	÷	0.30	0.46	0.67	
	1.10 ± 0.12	2.55 ± 0.28	÷	10.3 ± 1.1	18.5 ± 2.0	÷	52.1 ± 5.7	82.2 ± 9.0	126 ± 14	0.019	0.034	÷	0.086	0.13	÷	0.25	0.34	0.46
Kepler-1468*	0.41 ± 0.05	1.33 ± 0.15	÷	÷	17.3 ± 1.9	33.3 ± 3.7	60.3 ± 6.6			0.011	0.024	÷	÷	0.13	0.20	0.30		
	1.33 ± 0.15	2.21 ± 0.24	÷	5.49 ± 0.60	÷	12.1 ± 1.3	17.3 ± 1.9	24.2 ± 2.7		0.024	0.034	÷	0.061	÷	0.10	0.13	0.17	
	1.88 ± 0.21	2.60 ± 0.29	÷	4.76 ± 0.52	6.30 ± 0.69	÷	10.7 ± 1.2	13.6 ± 1.5	17.3 ± 1.9	0.030	0.037	÷	0.056	0.067	÷	0.10	0.11	0.13
Kepler-147	0.94 ± 0.10	3.96 ± 0.44	÷	÷	77.0 ± 8.5	160 ± 18	308 ± 34			0.020	0.052	÷	÷	0.38	0.62	1.0		
	3.96 ± 0.44	7.27 ± 0.80	÷	20.9 ± 2.3	÷	51.4 ± 5.7	77.0 ± 8.5	112 ± 12		0.052	0.078	÷	0.16	÷	0.29	0.38	0.49	
	5.98 ± 0.66	8.79 ± 0.97	÷	17.8 ± 2.0	24.6 ± 2.7	÷	44.7 ± 4.9	59.0 ± 6.5	77.0 ± 8.5	0.069	0.089	÷	0.14	0.18	÷	0.26	0.32	0.38

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)								
Kepler-151	5.07 ± 0.56	9.01 ± 0.99	÷	÷	38.6 ± 4.2	58.4 ± 6.4	86.2 ± 9.5			0.056	0.082	÷	÷	0.22	0.28	0.37		
	9.01 ± 0.99	11.8 ± 1.3	÷	19.5 ± 2.1	÷	31.0 ± 3.4	38.6 ± 4.2	47.6 ± 5.2		0.082	0.10	÷	0.14	÷	0.19	0.22	0.25	
	10.8 ± 1.2	12.9 ± 1.4	÷	18.0 ± 2.0	21.1 ± 2.3	÷	28.7 ± 3.2	33.3 ± 3.7	38.6 ± 4.2	0.09	0.10	÷	0.13	0.14	÷	0.18	0.20	0.22
Kepler-152	0	2.11 ± 0.23	÷	÷	309 ± 34	869 ± 96	2099 ± 231			0	0.029	÷	÷	0.82	1.6	2.9		
	2.11 ± 0.23	6.81 ± 0.75	÷	42.2 ± 4.6	÷	171 ± 19	309 ± 34	530 ± 58		0.029	0.064	÷	0.22	÷	0.55	0.82	1.2	
	4.72 ± 0.52	9.62 ± 1.1	÷	32.3 ± 3.6	54.6 ± 6.0	÷	138 ± 15	209 ± 23	309 ± 34	0.051	0.081	÷	0.18	0.26	÷	0.48	0.63	0.82
Kepler-153	1.73 ± 0.19	6.43 ± 0.71	÷	÷	104 ± 11	209 ± 23	390 ± 43			0.026	0.063	÷	÷	0.40	0.64	1.0		
	6.43 ± 0.71	11.3 ± 1.2	÷	30.3 ± 3.3	÷	70.7 ± 7.8	104 ± 11	149 ± 16		0.063	0.09	÷	0.18	÷	0.31	0.40	0.51	
	9.40 ± 1.0	13.4 ± 1.5	÷	26.0 ± 2.9	35.2 ± 3.9	÷	61.8 ± 6.8	80.5 ± 8.9	104 ± 11	0.081	0.10	÷	0.16	0.20	÷	0.28	0.34	0.40
Kepler-1530*	0.44 ± 0.05	1.14 ± 0.13	÷	÷	10.1 ± 1.1	18.1 ± 2.0	30.7 ± 3.4			0.011	0.022	÷	÷	0.09	0.14	0.19		
	1.14 ± 0.13	1.74 ± 0.19	÷	3.75 ± 0.41	÷	7.40 ± 0.81	10.1 ± 1.1	13.6 ± 1.5		0.022	0.029	÷	0.048	÷	0.075	0.09	0.11	
	1.52 ± 0.17	2.00 ± 0.22	÷	3.33 ± 0.37	4.23 ± 0.47	÷	6.65 ± 0.73	8.23 ± 0.91	10.1 ± 1.1	0.026	0.031	÷	0.044	0.052	÷	0.070	0.081	0.09
Kepler-155	0	0.18 ± 0.02	÷	÷	263 ± 29	932 ± 103	2648 ± 291			0	0.005	÷	÷	0.70	1.6	3.3		
	0.18 ± 0.02	1.32 ± 0.15	÷	19.5 ± 2.1	÷	125 ± 14	263 ± 29	512 ± 56		0.005	0.021	÷	0.12	÷	0.43	0.70	1.1	
	0.73 ± 0.08	2.27 ± 0.25	÷	13.4 ± 1.5	27.8 ± 3.1	÷	94.9 ± 10	162 ± 18	263 ± 29	0.014	0.030	÷	0.10	0.16	÷	0.36	0.51	0.70
Kepler-156	0.18 ± 0.02	1.18 ± 0.13	÷	÷	42.0 ± 4.6	96.8 ± 11	202 ± 22			0.006	0.021	÷	÷	0.22	0.39	0.64		
	1.18 ± 0.13	2.53 ± 0.28	÷	9.15 ± 1.0	÷	26.3 ± 2.9	42.0 ± 4.6	64.7 ± 7.1		0.021	0.034	÷	0.081	÷	0.16	0.22	0.30	
	1.98 ± 0.22	3.20 ± 0.35	÷	7.52 ± 0.83	11.1 ± 1.2	÷	22.4 ± 2.5	30.9 ± 3.4	42.0 ± 4.6	0.029	0.040	÷	0.071	0.09	÷	0.15	0.18	0.22
Kepler-158	4.93 ± 0.54	9.38 ± 1.0	÷	÷	46.3 ± 5.1	72.6 ± 8.0	110 ± 12			0.049	0.075	÷	÷	0.22	0.30	0.39		
	9.38 ± 1.0	12.6 ± 1.4	÷	22.0 ± 2.4	÷	36.5 ± 4.0	46.3 ± 5.1	58.2 ± 6.4		0.075	0.09	÷	0.13	÷	0.19	0.22	0.25	
	11.5 ± 1.3	13.9 ± 1.5	÷	20.1 ± 2.2	24.0 ± 2.6	÷	33.6 ± 3.7	39.5 ± 4.3	46.3 ± 5.1	0.086	0.10	÷	0.13	0.14	÷	0.18	0.20	0.22
Kepler-159	0	1.44 ± 0.16	÷	÷	142 ± 16	380 ± 42	885 ± 97			0	0.022	÷	÷	0.48	0.9	1.6		
	1.44 ± 0.16	4.13 ± 0.45	÷	22.0 ± 2.4	÷	81.2 ± 8.9	142 ± 16	237 ± 26		0.022	0.045	÷	0.14	÷	0.33	0.48	0.67	
	2.97 ± 0.33	5.65 ± 0.62	÷	17.2 ± 1.9	27.9 ± 3.1	÷	66.5 ± 7.3	98.4 ± 11	142 ± 16	0.036	0.056	÷	0.12	0.16	÷	0.29	0.37	0.48
Kepler-160	0.15 ± 0.02	1.00 ± 0.11	÷	÷	36.7 ± 4.0	85.0 ± 9.4	178 ± 20			0.005	0.019	÷	÷	0.21	0.37	0.60		
	1.00 ± 0.11	2.16 ± 0.24	÷	7.91 ± 0.87	÷	22.9 ± 2.5	36.7 ± 4.0	56.6 ± 6.2		0.019	0.032	÷	0.075	÷	0.15	0.21	0.28	
	1.69 ± 0.19	2.74 ± 0.30	÷	6.49 ± 0.71	9.57 ± 1.1	÷	19.4 ± 2.1	26.9 ± 3.0	36.7 ± 4.0	0.027	0.037	÷	0.066	0.085	÷	0.14	0.17	0.21
Kepler-161	2.32 ± 0.26	3.44 ± 0.38	÷	÷	9.72 ± 1.1	13.3 ± 1.5	17.8 ± 2.0			0.033	0.042	÷	÷	0.085	0.10	0.13		
	3.44 ± 0.38	4.14 ± 0.46	÷	5.91 ± 0.65	÷	8.27 ± 0.91	9.72 ± 1.1	11.4 ± 1.3		0.042	0.048	÷	0.061	÷	0.076	0.085	0.09	
	3.89 ± 0.43	4.40 ± 0.48	÷	5.58 ± 0.61	6.26 ± 0.69	÷	7.83 ± 0.86	8.73 ± 0.96	9.72 ± 1.1	0.046	0.050	÷	0.058	0.063	÷	0.073	0.079	0.085
Kepler-162	0.42 ± 0.05	2.00 ± 0.22	÷	÷	46.7 ± 5.1	100 ± 11	198 ± 22			0.011	0.030	÷	÷	0.25	0.41	0.64		
	2.00 ± 0.22	3.85 ± 0.42	÷	11.9 ± 1.3	÷	30.6 ± 3.4	46.7 ± 5.1	69.3 ± 7.6		0.030	0.047	÷	0.10	÷	0.19	0.25	0.32	
	3.12 ± 0.34	4.71 ± 0.52	÷	9.97 ± 1.1	14.0 ± 1.5	÷	26.4 ± 2.9	35.3 ± 3.9	46.7 ± 5.1	0.041	0.053	÷	0.088	0.11	÷	0.17	0.20	0.25
Kepler-163	0.52 ± 0.06	2.35 ± 0.26	÷	÷	50.2 ± 5.5	106 ± 12	207 ± 23			0.013	0.035	÷	÷	0.27	0.44	0.69		
	2.35 ± 0.26	4.42 ± 0.49	÷	13.2 ± 1.5	÷	33.2 ± 3.7	50.2 ± 5.5	73.9 ± 8.1		0.035	0.053	÷	0.11	÷	0.20	0.27	0.35	
	3.61 ± 0.40	5.38 ± 0.59	÷	11.1 ± 1.2	15.5 ± 1.7	÷	28.7 ± 3.2	38.2 ± 4.2	50.2 ± 5.5	0.047	0.061	÷	0.10	0.12	÷	0.19	0.22	0.27
Kepler-1641*	6.15 ± 0.68	11.3 ± 1.2	÷	÷	52.1 ± 5.7	80.4 ± 8.8	120 ± 13			0.068	0.10	÷	÷	0.28	0.38	0.49		
	11.3 ± 1.2	15.0 ± 1.7	÷	25.5 ± 2.8	÷	41.4 ± 4.6	52.1 ± 5.7	65.0 ± 7.2		0.10	0.12	÷	0.18	÷	0.24	0.28	0.33	
	13.7 ± 1.5	16.5 ± 1.8	÷	23.4 ± 2.6	27.7 ± 3.0	÷	38.3 ± 4.2	44.8 ± 4.9	52.1 ± 5.7	0.12	0.13	÷	0.17	0.19	÷	0.23	0.25	0.28

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
Kepler-1642*	1.58 ± 0.17	3.38 ± 0.37	÷ ÷	21.2 ± 2.3	35.1 ± 3.9	55.9 ± 6.1			0.026	0.043	÷ ÷	0.15	0.21	0.28		
	3.38 ± 0.37	4.79 ± 0.53	÷ 9.08 ± 1.00	÷	16.2 ± 1.8	21.2 ± 2.3	27.4 ± 3.0		0.043	0.054	÷ 0.083	÷	0.12	0.15	0.17	
	4.27 ± 0.47	5.35 ± 0.59	÷ 8.20 ± 0.90	10.0 ± 1.1	÷	14.8 ± 1.6	17.7 ± 1.9	21.2 ± 2.3	0.050	0.059	÷ 0.078	0.089	÷	0.12	0.13	0.15
Kepler-165	1.78 ± 0.20	4.00 ± 0.44	÷ ÷	27.3 ± 3.0	46.2 ± 5.1	74.8 ± 8.2			0.026	0.045	÷ ÷	0.16	0.23	0.32		
	4.00 ± 0.44	5.77 ± 0.63	÷ 11.3 ± 1.2	÷	20.6 ± 2.3	27.3 ± 3.0	35.7 ± 3.9		0.045	0.057	÷ 0.089	÷	0.13	0.16	0.19	
	5.12 ± 0.56	6.49 ± 0.71	÷ 10.1 ± 1.1	12.5 ± 1.4	÷	18.7 ± 2.1	22.7 ± 2.5	27.3 ± 3.0	0.053	0.062	÷ 0.083	0.10	÷	0.13	0.14	0.16
Kepler-168	0.21 ± 0.02	1.16 ± 0.13	÷ ÷	33.2 ± 3.7	74.0 ± 8.1	150 ± 17			0.007	0.023	÷ ÷	0.21	0.37	0.59		
	1.16 ± 0.13	2.35 ± 0.26	÷ 7.83 ± 0.86	÷	21.3 ± 2.3	33.2 ± 3.7	50.2 ± 5.5		0.023	0.037	÷ 0.082	÷	0.16	0.21	0.28	
	1.88 ± 0.21	2.93 ± 0.32	÷ 6.51 ± 0.72	9.37 ± 1.0	÷	18.2 ± 2.0	24.8 ± 2.7	33.2 ± 3.7	0.032	0.043	÷ 0.072	0.09	÷	0.14	0.18	0.21
Kepler-170	1.28 ± 0.14	3.42 ± 0.38	÷ ÷	32.1 ± 3.5	58.2 ± 6.4	99.8 ± 11			0.024	0.046	÷ ÷	0.20	0.30	0.43		
	3.42 ± 0.38	5.29 ± 0.58	÷ 11.6 ± 1.3	÷	23.3 ± 2.6	32.1 ± 3.5	43.6 ± 4.8		0.046	0.061	÷ 0.10	÷	0.16	0.20	0.25	
	4.59 ± 0.50	6.07 ± 0.67	÷ 10.3 ± 1.1	13.1 ± 1.4	÷	20.9 ± 2.3	26.0 ± 2.9	32.1 ± 3.5	0.055	0.067	÷ 0.09	0.11	÷	0.15	0.18	0.20
Kepler-173	0.89 ± 0.10	2.04 ± 0.22	÷ ÷	14.5 ± 1.6	24.8 ± 2.7	40.4 ± 4.4			0.017	0.030	÷ ÷	0.11	0.16	0.22		
	2.04 ± 0.22	2.97 ± 0.33	÷ 5.89 ± 0.65	÷	10.9 ± 1.2	14.5 ± 1.6	19.1 ± 2.1		0.030	0.038	÷ 0.060	÷	0.09	0.11	0.13	
	2.63 ± 0.29	3.35 ± 0.37	÷ 5.29 ± 0.58	6.56 ± 0.72	÷	9.89 ± 1.1	12.0 ± 1.3	14.5 ± 1.6	0.035	0.041	÷ 0.056	0.064	÷	0.085	0.10	0.11
Kepler-175	0.63 ± 0.07	3.26 ± 0.36	÷ ÷	84.3 ± 9.3	184 ± 20	369 ± 41			0.015	0.044	÷ ÷	0.39	0.65	1.0		
	3.26 ± 0.36	6.43 ± 0.71	÷ 20.6 ± 2.3	÷	54.6 ± 6.0	84.3 ± 9.3	126 ± 14		0.044	0.070	÷ 0.15	÷	0.29	0.39	0.51	
	5.17 ± 0.57	7.94 ± 0.87	÷ 17.2 ± 1.9	24.5 ± 2.7	÷	46.9 ± 5.2	63.3 ± 7.0	84.3 ± 9.3	0.060	0.080	÷ 0.13	0.17	÷	0.26	0.32	0.39
Kepler-177*	19.6 ± 2.2	27.1 ± 3.0	÷ ÷	65.3 ± 7.2	85.3 ± 9.4	110 ± 12			0.15	0.18	÷ ÷	0.32	0.39	0.46		
	27.1 ± 3.0	31.7 ± 3.5	÷ 42.8 ± 4.7	÷	56.9 ± 6.3	65.3 ± 7.2	74.8 ± 8.2		0.18	0.20	÷ 0.24	÷	0.30	0.32	0.35	
	30.1 ± 3.3	33.3 ± 3.7	÷ 40.7 ± 4.5	44.9 ± 4.9	÷	54.3 ± 6.0	59.6 ± 6.6	65.3 ± 7.2	0.19	0.21	÷ 0.24	0.25	÷	0.29	0.31	0.32
Kepler-179	0.29 ± 0.03	0.99 ± 0.11	÷ ÷	13.7 ± 1.5	26.8 ± 2.9	48.9 ± 5.4			0.008	0.018	÷ ÷	0.11	0.17	0.25		
	0.99 ± 0.11	1.68 ± 0.18	÷ 4.25 ± 0.47	÷	9.51 ± 1.0	13.7 ± 1.5	19.3 ± 2.1		0.018	0.026	÷ 0.048	÷	0.083	0.11	0.13	
	1.41 ± 0.16	1.98 ± 0.22	÷ 3.68 ± 0.40	4.90 ± 0.54	÷	8.37 ± 0.92	10.8 ± 1.2	13.7 ± 1.5	0.023	0.029	÷ 0.044	0.053	÷	0.076	0.09	0.11
Kepler-180	0.59 ± 0.06	3.51 ± 0.39	÷ ÷	107 ± 12	242 ± 27	494 ± 54			0.013	0.044	÷ ÷	0.43	0.74	1.2		
	3.51 ± 0.39	7.23 ± 0.80	÷ 24.7 ± 2.7	÷	68.4 ± 7.5	107 ± 12	163 ± 18		0.044	0.071	÷ 0.16	÷	0.32	0.43	0.57	
	5.74 ± 0.63	9.04 ± 0.99	÷ 20.5 ± 2.3	29.6 ± 3.3	÷	58.4 ± 6.4	79.8 ± 8.8	107 ± 12	0.061	0.082	÷ 0.14	0.18	÷	0.29	0.35	0.43
Kepler-181	1.63 ± 0.18	2.29 ± 0.25	÷ ÷	5.72 ± 0.63	7.54 ± 0.83	9.81 ± 1.1			0.026	0.032	÷ ÷	0.059	0.071	0.085		
	2.29 ± 0.25	2.69 ± 0.30	÷ 3.68 ± 0.40	÷	4.95 ± 0.54	5.72 ± 0.63	6.57 ± 0.72		0.032	0.036	÷ 0.044	÷	0.054	0.059	0.065	
	2.55 ± 0.28	2.84 ± 0.31	÷ 3.50 ± 0.39	3.87 ± 0.43	÷	4.72 ± 0.52	5.20 ± 0.57	5.72 ± 0.63	0.035	0.037	÷ 0.043	0.046	÷	0.052	0.056	0.059
Kepler-182	1.60 ± 0.18	4.25 ± 0.47	÷ ÷	39.8 ± 4.4	71.9 ± 7.9	123 ± 14			0.029	0.055	÷ ÷	0.24	0.36	0.52		
	4.25 ± 0.47	6.57 ± 0.72	÷ 14.4 ± 1.6	÷	28.9 ± 3.2	39.8 ± 4.4	53.9 ± 5.9		0.055	0.073	÷ 0.12	÷	0.20	0.24	0.30	
	5.70 ± 0.63	7.54 ± 0.83	÷ 12.7 ± 1.4	16.3 ± 1.8	÷	25.9 ± 2.8	32.2 ± 3.5	39.8 ± 4.4	0.067	0.080	÷ 0.11	0.13	÷	0.18	0.21	0.24
Kepler-183	0.99 ± 0.11	2.53 ± 0.28	÷ ÷	22.0 ± 2.4	39.2 ± 4.3	66.2 ± 7.3			0.020	0.037	÷ ÷	0.16	0.23	0.33		
	2.53 ± 0.28	3.85 ± 0.42	÷ 8.22 ± 0.90	÷	16.1 ± 1.8	22.0 ± 2.4	29.6 ± 3.3		0.037	0.049	÷ 0.082	÷	0.13	0.16	0.19	
	3.36 ± 0.37	4.40 ± 0.48	÷ 7.29 ± 0.80	9.25 ± 1.0	÷	14.5 ± 1.6	17.9 ± 2.0	22.0 ± 2.4	0.045	0.054	÷ 0.075	0.088	÷	0.12	0.14	0.16
Kepler-185	0	0	÷ ÷	120 ± 13	468 ± 51	1419 ± 156			0	0	÷ ÷	0.45	1.1	2.3		
	0	0.27 ± 0.03	÷ 6.63 ± 0.73	÷	52.8 ± 5.8	120 ± 13	246 ± 27		0	0.008	÷ 0.066	÷	0.26	0.45	0.73	
	0.13 ± 0.01	0.53 ± 0.06	÷ 4.32 ± 0.48	9.89 ± 1.1	÷	39.1 ± 4.3	70.2 ± 7.7	120 ± 13	0.005	0.012	÷ 0.049	0.086	÷	0.21	0.32	0.45

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
Kepler-187	0.71 ± 0.08	2.02 ± 0.22	÷	÷	21.3 ± 2.3	39.4 ± 4.3	68.9 ± 7.6			0.016	0.033	÷	÷	0.16	0.24	0.34		
	2.02 ± 0.22	3.20 ± 0.35	÷	7.34 ± 0.81	÷	15.2 ± 1.7	21.3 ± 2.3	29.2 ± 3.2		0.033	0.044	÷	0.077	÷	0.13	0.16	0.19	
	2.75 ± 0.30	3.71 ± 0.41	÷	6.44 ± 0.71	8.34 ± 0.92	÷	13.6 ± 1.5	17.0 ± 1.9	21.3 ± 2.3	0.040	0.049	÷	0.071	0.084	÷	0.12	0.14	0.16
Kepler-188	0	0.54 ± 0.06	÷	÷	15.2 ± 1.7	33.7 ± 3.7	68.0 ± 7.5			0	0.013	÷	÷	0.12	0.21	0.33		
	0.54 ± 0.06	1.09 ± 0.12	÷	3.60 ± 0.40	÷	9.75 ± 1.1	15.2 ± 1.7	22.9 ± 2.5		0.013	0.021	÷	0.047	÷	0.09	0.12	0.16	
	0.87 ± 0.10	1.36 ± 0.15	÷	3.00 ± 0.33	4.31 ± 0.47	÷	8.35 ± 0.92	11.3 ± 1.2	15.2 ± 1.7	0.018	0.024	÷	0.041	0.053	÷	0.082	0.10	0.12
Kepler-189	2.10 ± 0.23	4.92 ± 0.54	÷	÷	36.7 ± 4.0	63.1 ± 6.9	104 ± 11			0.030	0.053	÷	÷	0.20	0.29	0.41		
	4.92 ± 0.54	7.23 ± 0.80	÷	14.6 ± 1.6	÷	27.4 ± 3.0	36.7 ± 4.0	48.4 ± 5.3		0.053	0.069	÷	0.11	÷	0.17	0.20	0.25	
	6.38 ± 0.70	8.18 ± 0.90	÷	13.1 ± 1.4	16.3 ± 1.8	÷	24.8 ± 2.7	30.2 ± 3.3	36.7 ± 4.0	0.064	0.075	÷	0.10	0.12	÷	0.16	0.18	0.20
Kepler-190	0.48 ± 0.05	1.03 ± 0.11	÷	÷	6.49 ± 0.71	10.8 ± 1.2	17.2 ± 1.9			0.011	0.019	÷	÷	0.065	0.09	0.12		
	1.03 ± 0.11	1.46 ± 0.16	÷	2.78 ± 0.31	÷	4.96 ± 0.55	6.49 ± 0.71	8.40 ± 0.92		0.019	0.024	÷	0.037	÷	0.054	0.065	0.077	
	1.31 ± 0.14	1.64 ± 0.18	÷	2.51 ± 0.28	3.07 ± 0.34	÷	4.52 ± 0.50	5.43 ± 0.60	6.49 ± 0.71	0.022	0.026	÷	0.035	0.039	÷	0.051	0.058	0.065
Kepler-193	0	1.57 ± 0.17	÷	÷	167 ± 18	450 ± 50	1056 ± 116			0	0.028	÷	÷	0.63	1.2	2.2		
	1.57 ± 0.17	4.59 ± 0.50	÷	25.2 ± 2.8	÷	94.6 ± 10	167 ± 18	280 ± 31		0.028	0.058	÷	0.18	÷	0.43	0.63	0.89	
	3.28 ± 0.36	6.32 ± 0.70	÷	19.6 ± 2.2	32.0 ± 3.5	÷	77.3 ± 8.5	115 ± 13	167 ± 18	0.046	0.071	÷	0.15	0.21	÷	0.38	0.49	0.63
Kepler-195	0	1.31 ± 0.14	÷	÷	106 ± 12	278 ± 31	634 ± 70			0	0.023	÷	÷	0.42	0.80	1.4		
	1.31 ± 0.14	3.55 ± 0.39	÷	17.5 ± 1.9	÷	61.9 ± 6.8	106 ± 12	175 ± 19		0.023	0.044	÷	0.13	÷	0.29	0.42	0.59	
	2.60 ± 0.29	4.78 ± 0.53	÷	13.8 ± 1.5	22.1 ± 2.4	÷	51.0 ± 5.6	74.6 ± 8.2	106 ± 12	0.035	0.053	÷	0.11	0.15	÷	0.26	0.33	0.42
Kepler-196	2.51 ± 0.28	7.90 ± 0.87	÷	÷	98.5 ± 11	189 ± 21	339 ± 37			0.034	0.073	÷	÷	0.39	0.60	0.89		
	7.90 ± 0.87	13.0 ± 1.4	÷	31.8 ± 3.5	÷	69.1 ± 7.6	98.5 ± 11	137 ± 15		0.073	0.10	÷	0.18	÷	0.31	0.39	0.49	
	11.1 ± 1.2	15.3 ± 1.7	÷	27.7 ± 3.0	36.5 ± 4.0	÷	61.2 ± 6.7	78.0 ± 8.6	98.5 ± 11	0.09	0.11	÷	0.17	0.20	÷	0.28	0.33	0.39
Kepler-199	1.37 ± 0.15	6.73 ± 0.74	÷	÷	162 ± 18	351 ± 39	696 ± 77			0.024	0.068	÷	÷	0.57	1.0	1.5		
	6.73 ± 0.74	13.0 ± 1.4	÷	40.7 ± 4.5	÷	106 ± 12	162 ± 18	242 ± 27		0.068	0.11	÷	0.23	÷	0.43	0.57	0.74	
	10.5 ± 1.2	16.0 ± 1.8	÷	34.2 ± 3.8	48.3 ± 5.3	÷	91.3 ± 10	123 ± 14	162 ± 18	0.09	0.12	÷	0.20	0.25	÷	0.39	0.47	0.57
Kepler-200	5.93 ± 0.65	7.15 ± 0.79	÷	÷	12.2 ± 1.3	14.4 ± 1.6	16.9 ± 1.9			0.063	0.071	÷	÷	0.10	0.11	0.13		
	7.15 ± 0.79	7.84 ± 0.86	÷	9.38 ± 1.0	÷	11.2 ± 1.2	12.2 ± 1.3	13.2 ± 1.5		0.071	0.075	÷	0.085	÷	0.10	0.10	0.11	
	7.60 ± 0.84	8.08 ± 0.89	÷	9.11 ± 1.0	9.66 ± 1.1	÷	10.8 ± 1.2	11.5 ± 1.3	12.2 ± 1.3	0.074	0.077	÷	0.083	0.087	÷	0.09	0.10	0.10
Kepler-201	0	2.02 ± 0.22	÷	÷	598 ± 66	1825 ± 201	4671 ± 514			0	0.032	÷	÷	1.4	3.0	5.6		
	2.02 ± 0.22	8.23 ± 0.91	÷	66.7 ± 7.3	÷	314 ± 35	598 ± 66	1072 ± 118		0.032	0.082	÷	0.33	÷	0.9	1.4	2.1	
	5.34 ± 0.59	12.3 ± 1.4	÷	49.3 ± 5.4	88.9 ± 9.8	÷	249 ± 27	392 ± 43	598 ± 66	0.061	0.11	÷	0.27	0.40	÷	0.80	1.1	1.4
Kepler-202	0	0.68 ± 0.07	÷	÷	49.9 ± 5.5	128 ± 14	290 ± 32			0	0.014	÷	÷	0.24	0.45	0.77		
	0.68 ± 0.07	1.78 ± 0.20	÷	8.47 ± 0.93	÷	29.2 ± 3.2	49.9 ± 5.5	81.5 ± 9.0		0.014	0.026	÷	0.073	÷	0.17	0.24	0.33	
	1.31 ± 0.14	2.37 ± 0.26	÷	6.70 ± 0.74	10.6 ± 1.2	÷	24.2 ± 2.7	35.1 ± 3.9	49.9 ± 5.5	0.021	0.031	÷	0.063	0.085	÷	0.15	0.19	0.24
Kepler-204	3.61 ± 0.40	7.48 ± 0.82	÷	÷	44.0 ± 4.8	71.8 ± 7.9	113 ± 12			0.047	0.076	÷	÷	0.25	0.34	0.46		
	7.48 ± 0.82	10.4 ± 1.1	÷	19.4 ± 2.1	÷	33.9 ± 3.7	44.0 ± 4.8	56.5 ± 6.2		0.076	0.09	÷	0.14	÷	0.21	0.25	0.29	
	9.37 ± 1.0	11.6 ± 1.3	÷	17.5 ± 1.9	21.3 ± 2.3	÷	31.0 ± 3.4	37.0 ± 4.1	44.0 ± 4.8	0.088	0.10	÷	0.13	0.15	÷	0.20	0.22	0.25
Kepler-205	0	0	÷	÷	91.6 ± 10	304 ± 33	826 ± 91			0	0	÷	÷	0.33	0.74	1.4		
	0	0.73 ± 0.08	÷	8.13 ± 0.89	÷	45.3 ± 5.0	91.6 ± 10	172 ± 19		0	0.013	÷	0.066	÷	0.21	0.33	0.51	
	0.43 ± 0.05	1.17 ± 0.13	÷	5.78 ± 0.64	11.2 ± 1.2	÷	35.1 ± 3.9	57.8 ± 6.4	91.6 ± 10	0.009	0.018	÷	0.053	0.082	÷	0.18	0.24	0.33

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
Kepler-209	1.26 ± 0.14	5.14 ± 0.57	÷	÷	95.5 ± 11	197 ± 22	377 ± 41			0.022	0.057	÷	÷	0.40	0.65	1.0		
	5.14 ± 0.57	9.33 ± 1.0	÷	26.4 ± 2.9	÷	64.1 ± 7.1	95.5 ± 11	139 ± 15		0.057	0.085	÷	0.17	÷	0.31	0.40	0.51	
	7.70 ± 0.85	11.2 ± 1.2	÷	22.5 ± 2.5	30.9 ± 3.4	÷	55.8 ± 6.1	73.4 ± 8.1	95.5 ± 11	0.075	0.10	÷	0.15	0.19	÷	0.28	0.34	0.40
Kepler-210	0	0.57 ± 0.06	÷	÷	21.2 ± 2.3	49.3 ± 5.4	103 ± 11			0	0.012	÷	÷	0.13	0.24	0.39		
	0.57 ± 0.06	1.24 ± 0.14	÷	4.55 ± 0.50	÷	13.3 ± 1.5	21.2 ± 2.3	32.8 ± 3.6		0.012	0.020	÷	0.048	÷	0.10	0.13	0.18	
	0.97 ± 0.11	1.57 ± 0.17	÷	3.73 ± 0.41	5.51 ± 0.61	÷	11.2 ± 1.2	15.6 ± 1.7	21.2 ± 2.3	0.017	0.024	÷	0.042	0.055	÷	0.088	0.11	0.13
Kepler-211	1.76 ± 0.19	2.74 ± 0.30	÷	÷	8.69 ± 0.96	12.2 ± 1.3	16.9 ± 1.9			0.027	0.037	÷	÷	0.079	0.10	0.12		
	2.74 ± 0.30	3.37 ± 0.37	÷	5.02 ± 0.55	÷	7.28 ± 0.80	8.69 ± 0.96	10.3 ± 1.1		0.037	0.042	÷	0.055	÷	0.070	0.079	0.088	
	3.15 ± 0.35	3.61 ± 0.40	÷	4.70 ± 0.52	5.34 ± 0.59	÷	6.85 ± 0.75	7.72 ± 0.85	8.69 ± 0.96	0.040	0.044	÷	0.052	0.057	÷	0.067	0.073	0.079
Kepler-212	3.30 ± 0.36	7.74 ± 0.85	÷	÷	57.6 ± 6.3	99.1 ± 11	163 ± 18			0.046	0.081	÷	÷	0.31	0.44	0.62		
	7.74 ± 0.85	11.4 ± 1.3	÷	22.9 ± 2.5	÷	43.0 ± 4.7	57.6 ± 6.3	76.0 ± 8.4		0.081	0.10	÷	0.17	÷	0.25	0.31	0.37	
	10.0 ± 1.1	12.9 ± 1.4	÷	20.5 ± 2.3	25.6 ± 2.8	÷	38.9 ± 4.3	47.5 ± 5.2	57.6 ± 6.3	0.10	0.11	÷	0.15	0.18	÷	0.24	0.27	0.31
Kepler-213	0.46 ± 0.05	1.12 ± 0.12	÷	÷	9.03 ± 0.99	15.8 ± 1.7	26.4 ± 2.9			0.012	0.021	÷	÷	0.086	0.13	0.18		
	1.12 ± 0.12	1.68 ± 0.18	÷	3.48 ± 0.38	÷	6.68 ± 0.73	9.03 ± 0.99	12.0 ± 1.3		0.021	0.028	÷	0.046	÷	0.070	0.086	0.10	
	1.47 ± 0.16	1.90 ± 0.21	÷	3.10 ± 0.34	3.90 ± 0.43	÷	6.02 ± 0.66	7.40 ± 0.81	9.03 ± 0.99	0.026	0.031	÷	0.042	0.049	÷	0.066	0.075	0.086
Kepler-214	3.81 ± 0.42	8.07 ± 0.89	÷	÷	49.5 ± 5.4	81.6 ± 9.0	129 ± 14			0.051	0.083	÷	÷	0.28	0.39	0.53		
	8.07 ± 0.89	11.4 ± 1.3	÷	21.4 ± 2.4	÷	37.9 ± 4.2	49.5 ± 5.4	63.9 ± 7.0		0.083	0.10	÷	0.16	÷	0.23	0.28	0.33	
	10.2 ± 1.1	12.7 ± 1.4	÷	19.3 ± 2.1	23.6 ± 2.6	÷	34.6 ± 3.8	41.5 ± 4.6	49.5 ± 5.4	0.10	0.11	÷	0.15	0.17	÷	0.22	0.25	0.28
Kepler-216	0.98 ± 0.11	3.00 ± 0.33	÷	÷	35.6 ± 3.9	67.6 ± 7.4	121 ± 13			0.020	0.042	÷	÷	0.22	0.34	0.49		
	3.00 ± 0.33	4.89 ± 0.54	÷	11.7 ± 1.3	÷	25.2 ± 2.8	35.6 ± 3.9	49.5 ± 5.4		0.042	0.058	÷	0.10	÷	0.17	0.22	0.27	
	4.18 ± 0.46	5.71 ± 0.63	÷	10.2 ± 1.1	13.4 ± 1.5	÷	22.3 ± 2.5	28.3 ± 3.1	35.6 ± 3.9	0.053	0.065	÷	0.10	0.11	÷	0.16	0.19	0.22
Kepler-225	0.41 ± 0.05	1.95 ± 0.21	÷	÷	45.1 ± 5.0	97.0 ± 11	191 ± 21			0.009	0.025	÷	÷	0.20	0.33	0.52		
	1.95 ± 0.21	3.74 ± 0.41	÷	11.5 ± 1.3	÷	29.6 ± 3.3	45.1 ± 5.0	67.0 ± 7.4		0.025	0.038	÷	0.080	÷	0.15	0.20	0.26	
	3.04 ± 0.33	4.58 ± 0.50	÷	9.67 ± 1.1	13.6 ± 1.5	÷	25.5 ± 2.8	34.2 ± 3.8	45.1 ± 5.0	0.033	0.043	÷	0.071	0.089	÷	0.14	0.17	0.20
Kepler-227	0	0.78 ± 0.09	÷	÷	212 ± 23	641 ± 71	1629 ± 179			0	0.017	÷	÷	0.72	1.5	2.8		
	0.78 ± 0.09	3.09 ± 0.34	÷	24.2 ± 2.7	÷	112 ± 12	212 ± 23	378 ± 42		0.017	0.043	÷	0.17	÷	0.47	0.72	1.1	
	2.02 ± 0.22	4.59 ± 0.50	÷	18.0 ± 2.0	32.2 ± 3.5	÷	88.9 ± 9.8	140 ± 15	212 ± 23	0.032	0.056	÷	0.14	0.20	÷	0.40	0.54	0.72
Kepler-230	1.94 ± 0.21	9.39 ± 1.0	÷	÷	221 ± 24	476 ± 52	940 ± 103			0.029	0.083	÷	÷	0.68	1.1	1.8		
	9.39 ± 1.0	18.1 ± 2.0	÷	55.9 ± 6.1	÷	145 ± 16	221 ± 24	328 ± 36		0.083	0.13	÷	0.27	÷	0.52	0.68	0.89	
	14.6 ± 1.6	22.2 ± 2.4	÷	47.0 ± 5.2	66.3 ± 7.3	÷	125 ± 14	167 ± 18	221 ± 24	0.11	0.15	÷	0.24	0.31	÷	0.47	0.57	0.68
Kepler-231	2.13 ± 0.23	4.87 ± 0.54	÷	÷	34.6 ± 3.8	58.9 ± 6.5	96.1 ± 11			0.026	0.046	÷	÷	0.17	0.24	0.33		
	4.87 ± 0.54	7.08 ± 0.78	÷	14.0 ± 1.5	÷	26.0 ± 2.9	34.6 ± 3.8	45.4 ± 5.0		0.046	0.059	÷	0.09	÷	0.14	0.17	0.20	
	6.27 ± 0.69	7.98 ± 0.88	÷	12.6 ± 1.4	15.6 ± 1.7	÷	23.6 ± 2.6	28.6 ± 3.1	34.6 ± 3.8	0.054	0.063	÷	0.086	0.10	÷	0.13	0.15	0.17
Kepler-232	0.37 ± 0.04	1.46 ± 0.16	÷	÷	25.6 ± 2.8	52.3 ± 5.8	99.0 ± 11			0.010	0.026	÷	÷	0.17	0.28	0.43		
	1.46 ± 0.16	2.61 ± 0.29	÷	7.23 ± 0.80	÷	17.3 ± 1.9	25.6 ± 2.8	37.0 ± 4.1		0.026	0.038	÷	0.075	÷	0.13	0.17	0.22	
	2.16 ± 0.24	3.13 ± 0.34	÷	6.17 ± 0.68	8.44 ± 0.93	÷	15.1 ± 1.7	19.7 ± 2.2	25.6 ± 2.8	0.033	0.043	÷	0.067	0.083	÷	0.12	0.15	0.17
Kepler-233	0	0.44 ± 0.05	÷	÷	267 ± 29	877 ± 96	2362 ± 260			0	0.011	÷	÷	0.77	1.7	3.3		
	0.44 ± 0.05	2.30 ± 0.25	÷	24.5 ± 2.7	÷	133 ± 15	267 ± 29	499 ± 55		0.011	0.032	÷	0.16	÷	0.48	0.77	1.2	
	1.39 ± 0.15	3.66 ± 0.40	÷	17.5 ± 1.9	33.7 ± 3.7	÷	104 ± 11	170 ± 19	267 ± 29	0.023	0.044	÷	0.13	0.19	÷	0.41	0.57	0.77

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
Kepler-234	0.19 ± 0.02	0.84 ± 0.09	÷	÷	16.8 ± 1.8	35.2 ± 3.9	68.0 ± 7.5			0.007	0.018	÷	÷	0.14	0.22	0.34		
	0.84 ± 0.09	1.55 ± 0.17	÷	4.51 ± 0.50	÷	11.2 ± 1.2	16.8 ± 1.8	24.6 ± 2.7		0.018	0.028	÷	0.056	÷	0.10	0.14	0.17	
	1.27 ± 0.14	1.88 ± 0.21	÷	3.82 ± 0.42	5.30 ± 0.58	÷	9.70 ± 1.1	12.9 ± 1.4	16.8 ± 1.8	0.024	0.031	÷	0.050	0.063	÷	0.09	0.11	0.14
Kepler-236	0.44 ± 0.05	2.28 ± 0.25	÷	÷	59.1 ± 6.5	130 ± 14	259 ± 28			0.009	0.027	÷	÷	0.24	0.41	0.65		
	2.28 ± 0.25	4.50 ± 0.50	÷	14.4 ± 1.6	÷	38.3 ± 4.2	59.1 ± 6.5	88.7 ± 9.8		0.027	0.043	÷	0.09	÷	0.18	0.24	0.32	
	3.61 ± 0.40	5.55 ± 0.61	÷	12.1 ± 1.3	17.2 ± 1.9	÷	32.9 ± 3.6	44.4 ± 4.9	59.1 ± 6.5	0.037	0.050	÷	0.083	0.11	÷	0.16	0.20	0.24
Kepler-237	1.41 ± 0.16	2.67 ± 0.29	÷	÷	13.0 ± 1.4	20.4 ± 2.2	30.9 ± 3.4			0.022	0.034	÷	÷	0.10	0.13	0.17		
	2.67 ± 0.29	3.59 ± 0.39	÷	6.22 ± 0.68	÷	10.3 ± 1.1	13.0 ± 1.4	16.4 ± 1.8		0.034	0.041	÷	0.060	÷	0.084	0.10	0.11	
	3.26 ± 0.36	3.95 ± 0.43	÷	5.69 ± 0.63	6.78 ± 0.75	÷	9.49 ± 1.0	11.1 ± 1.2	13.0 ± 1.4	0.039	0.044	÷	0.056	0.063	÷	0.079	0.088	0.10
Kepler-239	0	1.44 ± 0.16	÷	÷	192 ± 21	535 ± 59	1282 ± 141			0	0.023	÷	÷	0.61	1.2	2.2		
	1.44 ± 0.16	4.52 ± 0.50	÷	27.0 ± 3.0	÷	107 ± 12	192 ± 21	328 ± 36		0.023	0.050	÷	0.17	÷	0.41	0.61	0.87	
	3.16 ± 0.35	6.34 ± 0.70	÷	20.8 ± 2.3	34.8 ± 3.8	÷	86.9 ± 9.6	131 ± 14	192 ± 21	0.039	0.063	÷	0.14	0.20	÷	0.36	0.47	0.61
Kepler-240	0.87 ± 0.10	2.00 ± 0.22	÷	÷	14.3 ± 1.6	24.3 ± 2.7	39.7 ± 4.4			0.017	0.030	÷	÷	0.11	0.16	0.22		
	2.00 ± 0.22	2.92 ± 0.32	÷	5.79 ± 0.64	÷	10.7 ± 1.2	14.3 ± 1.6	18.7 ± 2.1		0.030	0.038	÷	0.060	÷	0.09	0.11	0.13	
	2.58 ± 0.28	3.29 ± 0.36	÷	5.19 ± 0.57	6.45 ± 0.71	÷	9.72 ± 1.1	11.8 ± 1.3	14.3 ± 1.6	0.035	0.041	÷	0.056	0.064	÷	0.085	0.10	0.11
Kepler-241	0.71 ± 0.08	3.56 ± 0.39	÷	÷	88.2 ± 9.7	192 ± 21	381 ± 42			0.014	0.040	÷	÷	0.34	0.57	0.9		
	3.56 ± 0.39	6.95 ± 0.76	÷	21.9 ± 2.4	÷	57.4 ± 6.3	88.2 ± 9.7	132 ± 15		0.040	0.063	÷	0.14	÷	0.26	0.34	0.45	
	5.61 ± 0.62	8.55 ± 0.94	÷	18.4 ± 2.0	26.0 ± 2.9	÷	49.4 ± 5.4	66.5 ± 7.3	88.2 ± 9.7	0.055	0.072	÷	0.12	0.15	÷	0.23	0.28	0.34
Kepler-242	2.23 ± 0.25	4.44 ± 0.49	÷	÷	24.1 ± 2.7	38.7 ± 4.3	59.9 ± 6.6			0.031	0.050	÷	÷	0.15	0.21	0.28		
	4.44 ± 0.49	6.10 ± 0.67	÷	11.0 ± 1.2	÷	18.8 ± 2.1	24.1 ± 2.7	30.7 ± 3.4		0.050	0.061	÷	0.09	÷	0.13	0.15	0.18	
	5.49 ± 0.60	6.75 ± 0.74	÷	10.0 ± 1.1	12.0 ± 1.3	÷	17.2 ± 1.9	20.4 ± 2.2	24.1 ± 2.7	0.057	0.066	÷	0.085	0.10	÷	0.12	0.14	0.15
Kepler-243	0.14 ± 0.02	1.20 ± 0.13	÷	÷	55.7 ± 6.1	134 ± 15	289 ± 32			0.005	0.022	÷	÷	0.28	0.51	0.84		
	1.20 ± 0.13	2.76 ± 0.30	÷	11.0 ± 1.2	÷	34.1 ± 3.8	55.7 ± 6.1	87.9 ± 9.7		0.022	0.038	÷	0.10	÷	0.20	0.28	0.38	
	2.11 ± 0.23	3.56 ± 0.39	÷	8.95 ± 0.98	13.5 ± 1.5	÷	28.6 ± 3.1	40.3 ± 4.4	55.7 ± 6.1	0.032	0.045	÷	0.083	0.11	÷	0.18	0.23	0.28
Kepler-246	0.43 ± 0.05	1.57 ± 0.17	÷	÷	24.7 ± 2.7	49.5 ± 5.4	92.3 ± 10			0.011	0.026	÷	÷	0.16	0.25	0.39		
	1.57 ± 0.17	2.75 ± 0.30	÷	7.30 ± 0.80	÷	16.9 ± 1.9	24.7 ± 2.7	35.4 ± 3.9		0.026	0.037	÷	0.071	÷	0.12	0.16	0.20	
	2.29 ± 0.25	3.27 ± 0.36	÷	6.27 ± 0.69	8.47 ± 0.93	÷	14.8 ± 1.6	19.3 ± 2.1	24.7 ± 2.7	0.033	0.042	÷	0.064	0.078	÷	0.11	0.14	0.16
Kepler-248	0.54 ± 0.06	2.10 ± 0.23	÷	÷	36.2 ± 4.0	73.8 ± 8.1	139 ± 15			0.013	0.032	÷	÷	0.21	0.34	0.52		
	2.10 ± 0.23	3.74 ± 0.41	÷	10.3 ± 1.1	÷	24.5 ± 2.7	36.2 ± 4.0	52.2 ± 5.7		0.032	0.046	÷	0.09	÷	0.16	0.21	0.27	
	3.11 ± 0.34	4.49 ± 0.49	÷	8.81 ± 0.97	12.0 ± 1.3	÷	21.4 ± 2.4	28.0 ± 3.1	36.2 ± 4.0	0.041	0.052	÷	0.082	0.10	÷	0.15	0.18	0.21
Kepler-252	2.23 ± 0.25	3.95 ± 0.43	÷	÷	16.9 ± 1.9	25.6 ± 2.8	37.8 ± 4.2			0.028	0.041	÷	÷	0.11	0.14	0.18		
	3.95 ± 0.43	5.17 ± 0.57	÷	8.55 ± 0.94	÷	13.6 ± 1.5	16.9 ± 1.9	20.9 ± 2.3		0.041	0.049	÷	0.068	÷	0.09	0.11	0.12	
	4.73 ± 0.52	5.64 ± 0.62	÷	7.88 ± 0.87	9.26 ± 1.0	÷	12.6 ± 1.4	14.6 ± 1.6	16.9 ± 1.9	0.046	0.052	÷	0.065	0.072	÷	0.089	0.10	0.11
Kepler-258	1.09 ± 0.12	4.30 ± 0.47	÷	÷	76.2 ± 8.4	156 ± 17	296 ± 33			0.020	0.049	÷	÷	0.33	0.54	0.82		
	4.30 ± 0.47	7.72 ± 0.85	÷	21.5 ± 2.4	÷	51.4 ± 5.7	76.2 ± 8.4	110 ± 12		0.049	0.072	÷	0.14	÷	0.26	0.33	0.42	
	6.39 ± 0.70	9.27 ± 1.0	÷	18.3 ± 2.0	25.1 ± 2.8	÷	44.8 ± 4.9	58.8 ± 6.5	76.2 ± 8.4	0.064	0.082	÷	0.13	0.16	÷	0.23	0.28	0.33
Kepler-259	0	1.06 ± 0.12	÷	÷	124 ± 14	338 ± 37	800 ± 88			0	0.020	÷	÷	0.49	0.9	1.7		
	1.06 ± 0.12	3.20 ± 0.35	÷	18.2 ± 2.0	÷	69.7 ± 7.7	124 ± 14	209 ± 23		0.020	0.042	÷	0.14	÷	0.33	0.49	0.69	
	2.26 ± 0.25	4.43 ± 0.49	÷	14.0 ± 1.5	23.2 ± 2.6	÷	56.8 ± 6.2	84.9 ± 9.3	124 ± 14	0.034	0.053	÷	0.11	0.16	÷	0.29	0.38	0.49

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)								
Kepler-260	0	0.23 ± 0.03	÷	÷	386 ± 42	1382 ± 152	3957 ± 435			0	0.007	÷	÷	1.0	2.3	4.6		
	0.23 ± 0.03	1.77 ± 0.19	÷	27.7 ± 3.0	÷	181 ± 20	386 ± 42	756 ± 83		0.007	0.027	÷	0.17	÷	0.59	1.0	1.5	
	0.96 ± 0.11	3.08 ± 0.34	÷	18.9 ± 2.1	39.5 ± 4.3	÷	138 ± 15	236 ± 26	386 ± 42	0.018	0.039	÷	0.13	0.21	÷	0.49	0.70	1.0
Kepler-261	1.14 ± 0.13	3.81 ± 0.42	÷	÷	52.0 ± 5.7	101 ± 11	185 ± 20			0.020	0.045	÷	÷	0.26	0.40	0.60		
	3.81 ± 0.42	6.43 ± 0.71	÷	16.2 ± 1.8	÷	36.1 ± 4.0	52.0 ± 5.7	73.3 ± 8.1		0.045	0.064	÷	0.12	÷	0.20	0.26	0.32	
	5.43 ± 0.60	7.58 ± 0.83	÷	14.0 ± 1.5	18.7 ± 2.1	÷	31.9 ± 3.5	40.9 ± 4.5	52.0 ± 5.7	0.057	0.071	÷	0.11	0.13	÷	0.19	0.22	0.26
Kepler-262	4.02 ± 0.44	7.46 ± 0.82	÷	÷	35.0 ± 3.9	54.2 ± 6.0	81.6 ± 9.0			0.049	0.074	÷	÷	0.21	0.28	0.37		
	7.46 ± 0.82	9.94 ± 1.1	÷	17.0 ± 1.9	÷	27.8 ± 3.1	35.0 ± 3.9	43.7 ± 4.8		0.074	0.090	÷	0.13	÷	0.18	0.21	0.24	
	9.05 ± 1.00	10.9 ± 1.2	÷	15.6 ± 1.7	18.5 ± 2.0	÷	25.7 ± 2.8	30.0 ± 3.3	35.0 ± 3.9	0.085	0.10	÷	0.12	0.14	÷	0.17	0.19	0.21
Kepler-263	0.91 ± 0.10	4.62 ± 0.51	÷	÷	116 ± 13	253 ± 28	503 ± 55			0.017	0.051	÷	÷	0.44	0.74	1.2		
	4.62 ± 0.51	9.04 ± 0.99	÷	28.7 ± 3.2	÷	75.4 ± 8.3	116 ± 13	173 ± 19		0.051	0.080	÷	0.17	÷	0.33	0.44	0.57	
	7.29 ± 0.80	11.1 ± 1.2	÷	24.0 ± 2.6	34.0 ± 3.7	÷	64.8 ± 7.1	87.3 ± 9.6	116 ± 13	0.069	0.09	÷	0.15	0.19	÷	0.30	0.36	0.44
Kepler-264	1.06 ± 0.12	8.65 ± 0.95	÷	÷	389 ± 43	930 ± 102	1992 ± 219			0.022	0.089	÷	÷	1.1	2.0	3.3		
	8.65 ± 0.95	19.8 ± 2.2	÷	78.0 ± 8.6	÷	238 ± 26	389 ± 43	611 ± 67		0.089	0.15	÷	0.38	÷	0.81	1.1	1.5	
	15.2 ± 1.7	25.4 ± 2.8	÷	63.4 ± 7.0	95.4 ± 10	÷	201 ± 22	282 ± 31	389 ± 43	0.13	0.18	÷	0.33	0.44	÷	0.72	0.9	1.1
Kepler-266	0	0	÷	÷	720 ± 79	3040 ± 334	9700 ± 1067			0	0	÷	÷	1.6	4.2	9.2		
	0	0.80 ± 0.09	÷	31.4 ± 3.5	÷	300 ± 33	720 ± 79	1545 ± 170		0	0.017	÷	0.20	÷	0.9	1.6	2.7	
	0.32 ± 0.04	1.76 ± 0.19	÷	19.5 ± 2.1	48.7 ± 5.4	÷	218 ± 24	408 ± 45	720 ± 79	0.009	0.029	÷	0.15	0.27	÷	0.73	1.1	1.6
Kepler-268	0.91 ± 0.10	6.13 ± 0.67	÷	÷	221 ± 24	510 ± 56	1063 ± 117			0.019	0.069	÷	÷	0.75	1.3	2.1		
	6.13 ± 0.67	13.2 ± 1.5	÷	47.8 ± 5.3	÷	138 ± 15	221 ± 24	340 ± 37		0.069	0.11	÷	0.27	÷	0.55	0.75	1.0	
	10.3 ± 1.1	16.7 ± 1.8	÷	39.3 ± 4.3	57.9 ± 6.4	÷	117 ± 13	162 ± 18	221 ± 24	0.10	0.13	÷	0.24	0.31	÷	0.49	0.61	0.75
Kepler-269	2.05 ± 0.23	3.37 ± 0.37	÷	÷	12.1 ± 1.3	17.6 ± 1.9	25.0 ± 2.8			0.032	0.045	÷	÷	0.11	0.14	0.17		
	3.37 ± 0.37	4.25 ± 0.47	÷	6.60 ± 0.73	÷	9.96 ± 1.1	12.1 ± 1.3	14.6 ± 1.6		0.045	0.053	÷	0.070	÷	0.09	0.11	0.12	
	3.94 ± 0.43	4.58 ± 0.50	÷	6.15 ± 0.68	7.09 ± 0.78	÷	9.32 ± 1.0	10.6 ± 1.2	12.1 ± 1.3	0.050	0.055	÷	0.067	0.074	÷	0.089	0.10	0.11
Kepler-27	2.59 ± 0.28	6.72 ± 0.74	÷	÷	59.9 ± 6.6	107 ± 12	182 ± 20			0.036	0.068	÷	÷	0.29	0.43	0.62		
	6.72 ± 0.74	10.3 ± 1.1	÷	22.2 ± 2.4	÷	43.8 ± 4.8	59.9 ± 6.6	80.7 ± 8.9		0.068	0.09	÷	0.15	÷	0.24	0.29	0.36	
	8.95 ± 0.98	11.8 ± 1.3	÷	19.6 ± 2.2	25.0 ± 2.8	÷	39.3 ± 4.3	48.7 ± 5.4	59.9 ± 6.6	0.083	0.10	÷	0.14	0.16	÷	0.22	0.26	0.29
Kepler-270	1.64 ± 0.18	4.70 ± 0.52	÷	÷	50.2 ± 5.5	93.2 ± 10	163 ± 18			0.029	0.059	÷	÷	0.29	0.43	0.63		
	4.70 ± 0.52	7.49 ± 0.82	÷	17.2 ± 1.9	÷	35.9 ± 3.9	50.2 ± 5.5	68.9 ± 7.6		0.059	0.080	÷	0.14	÷	0.23	0.29	0.35	
	6.44 ± 0.71	8.67 ± 0.95	÷	15.1 ± 1.7	19.6 ± 2.2	÷	31.9 ± 3.5	40.2 ± 4.4	50.2 ± 5.5	0.073	0.089	÷	0.13	0.15	÷	0.21	0.25	0.29
Kepler-273	0.18 ± 0.02	0.85 ± 0.09	÷	÷	19.3 ± 2.1	41.3 ± 4.5	81.1 ± 8.9			0.006	0.016	÷	÷	0.13	0.22	0.34		
	0.85 ± 0.09	1.63 ± 0.18	÷	4.96 ± 0.55	÷	12.7 ± 1.4	19.3 ± 2.1	28.6 ± 3.1		0.016	0.025	÷	0.053	÷	0.10	0.13	0.17	
	1.32 ± 0.15	1.99 ± 0.22	÷	4.17 ± 0.46	5.86 ± 0.64	÷	11.0 ± 1.2	14.6 ± 1.6	19.3 ± 2.1	0.022	0.029	÷	0.047	0.059	÷	0.089	0.11	0.13
Kepler-274	0.63 ± 0.07	3.22 ± 0.35	÷	÷	81.6 ± 9.0	178 ± 20	355 ± 39			0.015	0.043	÷	÷	0.37	0.62	1.0		
	3.22 ± 0.35	6.33 ± 0.70	÷	20.1 ± 2.2	÷	53.0 ± 5.8	81.6 ± 9.0	122 ± 13		0.043	0.067	÷	0.15	÷	0.28	0.37	0.49	
	5.10 ± 0.56	7.80 ± 0.86	÷	16.8 ± 1.8	23.9 ± 2.6	÷	45.6 ± 5.0	61.4 ± 6.8	81.6 ± 9.0	0.058	0.078	÷	0.13	0.16	÷	0.25	0.31	0.37
Kepler-278	8.95 ± 0.98	16.9 ± 1.9	÷	÷	82.8 ± 9.1	130 ± 14	197 ± 22			0.09	0.14	÷	÷	0.41	0.55	0.72		
	16.9 ± 1.9	22.8 ± 2.5	÷	39.5 ± 4.3	÷	65.4 ± 7.2	82.8 ± 9.1	104 ± 11		0.14	0.17	÷	0.25	÷	0.35	0.41	0.47	
	20.7 ± 2.3	25.0 ± 2.8	÷	36.1 ± 4.0	43.1 ± 4.7	÷	60.3 ± 6.6	70.8 ± 7.8	82.8 ± 9.1	0.16	0.18	÷	0.23	0.26	÷	0.33	0.37	0.41

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
Kepler-28	2.44 ± 0.27	3.88 ± 0.43	÷	÷	13.0 ± 1.4	18.5 ± 2.0	25.8 ± 2.8			0.034	0.047	÷	÷	0.10	0.13	0.16		
	3.88 ± 0.43	4.83 ± 0.53	÷	7.31 ± 0.80	÷	10.8 ± 1.2	13.0 ± 1.4	15.5 ± 1.7		0.047	0.054	÷	0.071	÷	0.09	0.10	0.12	
	4.49 ± 0.49	5.19 ± 0.57	÷	6.84 ± 0.75	7.82 ± 0.86	÷	10.1 ± 1.1	11.5 ± 1.3	13.0 ± 1.4	0.051	0.056	÷	0.068	0.074	÷	0.088	0.10	0.10
Kepler-280	0.25 ± 0.03	0.79 ± 0.09	÷	÷	10.2 ± 1.1	19.6 ± 2.2	35.5 ± 3.9			0.008	0.017	÷	÷	0.09	0.14	0.21		
	0.79 ± 0.09	1.32 ± 0.15	÷	3.26 ± 0.36	÷	7.13 ± 0.78	10.2 ± 1.1	14.3 ± 1.6		0.017	0.023	÷	0.043	÷	0.072	0.09	0.11	
	1.12 ± 0.12	1.55 ± 0.17	÷	2.83 ± 0.31	3.74 ± 0.41	÷	6.30 ± 0.69	8.05 ± 0.89	10.2 ± 1.1	0.021	0.026	÷	0.039	0.047	÷	0.066	0.078	0.09
Kepler-281	1.34 ± 0.15	4.98 ± 0.55	÷	÷	80.4 ± 8.8	162 ± 18	303 ± 33			0.024	0.057	÷	÷	0.36	0.58	0.88		
	4.98 ± 0.55	8.74 ± 0.96	÷	23.5 ± 2.6	÷	54.8 ± 6.0	80.4 ± 8.8	115 ± 13		0.057	0.083	÷	0.16	÷	0.28	0.36	0.46	
	7.29 ± 0.80	10.4 ± 1.1	÷	20.1 ± 2.2	27.3 ± 3.0	÷	48.0 ± 5.3	62.4 ± 6.9	80.4 ± 8.8	0.074	0.09	÷	0.14	0.18	÷	0.26	0.31	0.36
Kepler-283	0	0.38 ± 0.04	÷	÷	449 ± 49	1558 ± 171	4366 ± 480			0	0.009	÷	÷	1.0	2.2	4.4		
	0.38 ± 0.04	2.59 ± 0.28	÷	35.1 ± 3.9	÷	215 ± 24	449 ± 49	863 ± 95		0.009	0.031	÷	0.18	÷	0.60	1.0	1.5	
	1.46 ± 0.16	4.36 ± 0.48	÷	24.4 ± 2.7	49.5 ± 5.4	÷	165 ± 18	278 ± 31	449 ± 49	0.021	0.044	÷	0.14	0.22	÷	0.50	0.71	1.0
Kepler-284	0.64 ± 0.07	3.44 ± 0.38	÷	÷	93.0 ± 10	205 ± 23	413 ± 45			0.014	0.043	÷	÷	0.39	0.66	1.1		
	3.44 ± 0.38	6.86 ± 0.75	÷	22.4 ± 2.5	÷	60.0 ± 6.6	93.0 ± 10	140 ± 15		0.043	0.069	÷	0.15	÷	0.29	0.39	0.51	
	5.50 ± 0.61	8.49 ± 0.93	÷	18.6 ± 2.0	26.7 ± 2.9	÷	51.4 ± 5.7	69.7 ± 7.7	93.0 ± 10	0.059	0.079	÷	0.13	0.17	÷	0.26	0.32	0.39
Kepler-285	0.28 ± 0.03	0.96 ± 0.11	÷	÷	13.2 ± 1.5	25.8 ± 2.8	47.2 ± 5.2			0.008	0.018	÷	÷	0.11	0.17	0.25		
	0.96 ± 0.11	1.62 ± 0.18	÷	4.10 ± 0.45	÷	9.17 ± 1.0	13.2 ± 1.5	18.6 ± 2.0		0.018	0.026	÷	0.048	÷	0.083	0.11	0.13	
	1.36 ± 0.15	1.91 ± 0.21	÷	3.55 ± 0.39	4.72 ± 0.52	÷	8.08 ± 0.89	10.4 ± 1.1	13.2 ± 1.5	0.023	0.029	÷	0.044	0.053	÷	0.076	0.09	0.11
Kepler-287	2.77 ± 0.30	8.15 ± 0.90	÷	÷	90.4 ± 9.9	169 ± 19	299 ± 33			0.038	0.079	÷	÷	0.39	0.60	0.87		
	8.15 ± 0.90	13.1 ± 1.4	÷	30.6 ± 3.4	÷	64.4 ± 7.1	90.4 ± 9.9	125 ± 14		0.079	0.11	÷	0.19	÷	0.31	0.39	0.49	
	11.2 ± 1.2	15.2 ± 1.7	÷	26.8 ± 2.9	34.9 ± 3.8	÷	57.2 ± 6.3	72.3 ± 8.0	90.4 ± 9.9	0.10	0.12	÷	0.17	0.21	÷	0.29	0.34	0.39
Kepler-29*	6.06 ± 0.67	7.96 ± 0.88	÷	÷	16.9 ± 1.9	21.3 ± 2.3	26.6 ± 2.9			0.065	0.078	÷	÷	0.13	0.15	0.17		
	7.96 ± 0.88	9.09 ± 1.0	÷	11.7 ± 1.3	÷	15.0 ± 1.7	16.9 ± 1.9	19.0 ± 2.1		0.078	0.085	÷	0.10	÷	0.12	0.13	0.14	
	8.70 ± 0.96	9.49 ± 1.0	÷	11.3 ± 1.2	12.2 ± 1.3	÷	14.4 ± 1.6	15.6 ± 1.7	16.9 ± 1.9	0.082	0.087	÷	0.10	0.10	÷	0.12	0.12	0.13
Kepler-290	1.24 ± 0.14	4.80 ± 0.53	÷	÷	82.9 ± 9.1	169 ± 19	319 ± 35			0.021	0.053	÷	÷	0.35	0.56	0.86		
	4.80 ± 0.53	8.57 ± 0.94	÷	23.6 ± 2.6	÷	56.1 ± 6.2	82.9 ± 9.1	120 ± 13		0.053	0.077	÷	0.15	÷	0.27	0.35	0.45	
	7.11 ± 0.78	10.3 ± 1.1	÷	20.2 ± 2.2	27.5 ± 3.0	÷	49.0 ± 5.4	64.1 ± 7.1	82.9 ± 9.1	0.068	0.087	÷	0.14	0.17	÷	0.25	0.30	0.35
Kepler-291	1.16 ± 0.13	2.08 ± 0.23	÷	÷	8.99 ± 0.99	13.7 ± 1.5	20.2 ± 2.2			0.022	0.033	÷	÷	0.088	0.12	0.15		
	2.08 ± 0.23	2.72 ± 0.30	÷	4.52 ± 0.50	÷	7.21 ± 0.79	8.99 ± 0.99	11.1 ± 1.2		0.033	0.040	÷	0.055	÷	0.076	0.088	0.10	
	2.49 ± 0.27	2.97 ± 0.33	÷	4.16 ± 0.46	4.90 ± 0.54	÷	6.69 ± 0.74	7.77 ± 0.85	8.99 ± 0.99	0.037	0.042	÷	0.053	0.059	÷	0.072	0.080	0.088
Kepler-293	1.16 ± 0.13	5.57 ± 0.61	÷	÷	130 ± 14	280 ± 31	552 ± 61			0.022	0.063	÷	÷	0.51	0.86	1.3		
	5.57 ± 0.61	10.7 ± 1.2	÷	33.0 ± 3.6	÷	85.2 ± 9.4	130 ± 14	193 ± 21		0.063	0.10	÷	0.21	÷	0.39	0.51	0.67	
	8.68 ± 0.95	13.1 ± 1.4	÷	27.7 ± 3.0	39.1 ± 4.3	÷	73.5 ± 8.1	98.4 ± 11	130 ± 14	0.085	0.11	÷	0.18	0.23	÷	0.35	0.43	0.51
Kepler-294	0.93 ± 0.10	1.93 ± 0.21	÷	÷	11.3 ± 1.2	18.5 ± 2.0	29.2 ± 3.2			0.019	0.031	÷	÷	0.10	0.14	0.19		
	1.93 ± 0.21	2.69 ± 0.30	÷	4.99 ± 0.55	÷	8.73 ± 0.96	11.3 ± 1.2	14.6 ± 1.6		0.031	0.039	÷	0.059	÷	0.085	0.10	0.12	
	2.41 ± 0.27	3.00 ± 0.33	÷	4.52 ± 0.50	5.50 ± 0.61	÷	7.98 ± 0.88	9.54 ± 1.0	11.3 ± 1.2	0.036	0.042	÷	0.055	0.063	÷	0.080	0.09	0.10
Kepler-297	8.04 ± 0.88	18.6 ± 2.0	÷	÷	135 ± 15	232 ± 26	380 ± 42			0.076	0.13	÷	÷	0.50	0.71	1.0		
	18.6 ± 2.0	27.2 ± 3.0	÷	54.5 ± 6.0	÷	101 ± 11	135 ± 15	178 ± 20		0.13	0.17	÷	0.27	÷	0.41	0.50	0.60	
	24.0 ± 2.6	30.7 ± 3.4	÷	48.8 ± 5.4	60.7 ± 6.7	÷	91.8 ± 10	112 ± 12	135 ± 15	0.16	0.19	÷	0.25	0.29	÷	0.38	0.44	0.50

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)								
Kepler-300	0.15 ± 0.02	1.81 ± 0.20	÷	÷	123 ± 14	312 ± 34	698 ± 77			0.006	0.029	÷	÷	0.48	0.9	1.5		
	1.81 ± 0.20	4.65 ± 0.51	÷	21.4 ± 2.4	÷	72.4 ± 8.0	123 ± 14	199 ± 22		0.029	0.055	÷	0.15	÷	0.34	0.48	0.67	
	3.45 ± 0.38	6.17 ± 0.68	÷	17.0 ± 1.9	26.7 ± 2.9	÷	60.1 ± 6.6	86.7 ± 9.5	123 ± 14	0.045	0.066	÷	0.13	0.18	÷	0.30	0.38	0.48
Kepler-302	0.28 ± 0.03	4.55 ± 0.50	÷	÷	405 ± 45	1069 ± 118	2464 ± 271			0.009	0.055	÷	÷	1.1	2.1	3.6		
	4.55 ± 0.50	12.6 ± 1.4	÷	64.7 ± 7.1	÷	233 ± 26	405 ± 45	671 ± 74		0.055	0.11	÷	0.32	÷	0.75	1.1	1.5	
	9.16 ± 1.0	17.1 ± 1.9	÷	50.7 ± 5.6	81.7 ± 9.0	÷	192 ± 21	282 ± 31	405 ± 45	0.087	0.13	÷	0.27	0.37	÷	0.66	0.86	1.1
Kepler-303	0	0.37 ± 0.04	÷	÷	20.5 ± 2.3	50.8 ± 5.6	112 ± 12			0	0.008	÷	÷	0.12	0.21	0.36		
	0.37 ± 0.04	0.89 ± 0.10	÷	3.83 ± 0.42	÷	12.3 ± 1.4	20.5 ± 2.3	32.9 ± 3.6		0.008	0.014	÷	0.038	÷	0.083	0.12	0.16	
	0.67 ± 0.07	1.17 ± 0.13	÷	3.08 ± 0.34	4.73 ± 0.52	÷	10.3 ± 1.1	14.7 ± 1.6	20.5 ± 2.3	0.012	0.017	÷	0.033	0.044	÷	0.073	0.09	0.12
Kepler-307*	6.41 ± 0.71	8.21 ± 0.90	÷	÷	16.3 ± 1.8	20.2 ± 2.2	24.7 ± 2.7			0.066	0.078	÷	÷	0.12	0.14	0.16		
	8.21 ± 0.90	9.26 ± 1.0	÷	11.7 ± 1.3	÷	14.6 ± 1.6	16.3 ± 1.8	18.1 ± 2.0		0.078	0.084	÷	0.10	÷	0.11	0.12	0.13	
	8.90 ± 0.98	9.63 ± 1.1	÷	11.2 ± 1.2	12.1 ± 1.3	÷	14.1 ± 1.6	15.2 ± 1.7	16.3 ± 1.8	0.082	0.087	÷	0.10	0.10	÷	0.11	0.12	0.12
Kepler-308	3.34 ± 0.37	5.81 ± 0.64	÷	÷	23.8 ± 2.6	35.8 ± 3.9	52.3 ± 5.8			0.044	0.064	÷	÷	0.16	0.22	0.28		
	5.81 ± 0.64	7.53 ± 0.83	÷	12.3 ± 1.4	÷	19.3 ± 2.1	23.8 ± 2.6	29.3 ± 3.2		0.064	0.076	÷	0.11	÷	0.14	0.16	0.19	
	6.92 ± 0.76	8.19 ± 0.90	÷	11.3 ± 1.2	13.3 ± 1.5	÷	17.9 ± 2.0	20.7 ± 2.3	23.8 ± 2.6	0.072	0.081	÷	0.10	0.11	÷	0.14	0.15	0.16
Kepler-309	0	0	÷	÷	728 ± 80	3140 ± 345	10157 ± 1117			0	0	÷	÷	1.5	3.9	8.4		
	0	0.66 ± 0.07	÷	29.6 ± 3.3	÷	299 ± 33	728 ± 80	1581 ± 174		0	0.014	÷	0.17	÷	0.81	1.5	2.4	
	0.25 ± 0.03	1.50 ± 0.17	÷	18.2 ± 2.0	46.6 ± 5.1	÷	215 ± 24	408 ± 45	728 ± 80	0.007	0.024	÷	0.12	0.23	÷	0.65	1.0	1.5
Kepler-311	1.36 ± 0.15	3.81 ± 0.42	÷	÷	38.9 ± 4.3	71.7 ± 7.9	125 ± 14			0.024	0.048	÷	÷	0.23	0.34	0.50		
	3.81 ± 0.42	6.01 ± 0.66	÷	13.6 ± 1.5	÷	28.0 ± 3.1	38.9 ± 4.3	53.2 ± 5.9		0.048	0.066	÷	0.11	÷	0.18	0.23	0.28	
	5.18 ± 0.57	6.94 ± 0.76	÷	12.0 ± 1.3	15.5 ± 1.7	÷	25.0 ± 2.8	31.3 ± 3.4	38.9 ± 4.3	0.059	0.072	÷	0.10	0.12	÷	0.17	0.20	0.23
Kepler-312	0	0	÷	÷	108 ± 12	407 ± 45	1207 ± 133			0	0	÷	÷	0.48	1.2	2.4		
	0	0.33 ± 0.04	÷	6.66 ± 0.73	÷	48.9 ± 5.4	108 ± 12	218 ± 24		0	0.010	÷	0.075	÷	0.28	0.48	0.76	
	0.17 ± 0.02	0.61 ± 0.07	÷	4.43 ± 0.49	9.76 ± 1.1	÷	36.6 ± 4.0	64.4 ± 7.1	108 ± 12	0.006	0.015	÷	0.057	0.10	÷	0.23	0.34	0.48
Kepler-313	2.24 ± 0.25	6.25 ± 0.69	÷	÷	63.4 ± 7.0	117 ± 13	203 ± 22			0.035	0.070	÷	÷	0.33	0.49	0.71		
	6.25 ± 0.69	9.84 ± 1.1	÷	22.2 ± 2.4	÷	45.6 ± 5.0	63.4 ± 7.0	86.6 ± 9.5		0.070	0.09	÷	0.16	÷	0.26	0.33	0.40	
	8.49 ± 0.93	11.4 ± 1.3	÷	19.6 ± 2.2	25.2 ± 2.8	÷	40.7 ± 4.5	51.0 ± 5.6	63.4 ± 7.0	0.086	0.10	÷	0.15	0.18	÷	0.24	0.28	0.33
Kepler-314	0.23 ± 0.03	0.84 ± 0.09	÷	÷	13.2 ± 1.5	26.5 ± 2.9	49.4 ± 5.4			0.007	0.017	÷	÷	0.11	0.17	0.26		
	0.84 ± 0.09	1.46 ± 0.16	÷	3.90 ± 0.43	÷	9.04 ± 0.99	13.2 ± 1.5	18.9 ± 2.1		0.017	0.025	÷	0.048	÷	0.084	0.11	0.14	
	1.22 ± 0.13	1.74 ± 0.19	÷	3.35 ± 0.37	4.52 ± 0.50	÷	7.92 ± 0.87	10.3 ± 1.1	13.2 ± 1.5	0.022	0.028	÷	0.043	0.053	÷	0.077	0.09	0.11
Kepler-315	6.08 ± 0.67	28.3 ± 3.1	÷	÷	632 ± 70	1349 ± 148	2645 ± 291			0.064	0.18	÷	÷	1.4	2.3	3.7		
	28.3 ± 3.1	53.8 ± 5.9	÷	163 ± 18	÷	416 ± 46	632 ± 70	935 ± 103		0.18	0.27	÷	0.57	÷	1.1	1.4	1.8	
	43.8 ± 4.8	65.7 ± 7.2	÷	138 ± 15	193 ± 21	÷	359 ± 39	480 ± 53	632 ± 70	0.24	0.31	÷	0.51	0.64	÷	1.0	1.2	1.4
Kepler-316	0	0.53 ± 0.06	÷	÷	18.2 ± 2.0	41.6 ± 4.6	86.3 ± 9.5			0	0.010	÷	÷	0.11	0.19	0.31		
	0.53 ± 0.06	1.13 ± 0.12	÷	4.02 ± 0.44	÷	11.5 ± 1.3	18.2 ± 2.0	27.9 ± 3.1		0.010	0.017	÷	0.040	÷	0.081	0.11	0.15	
	0.89 ± 0.10	1.42 ± 0.16	÷	3.31 ± 0.36	4.85 ± 0.53	÷	9.74 ± 1.1	13.4 ± 1.5	18.2 ± 2.0	0.015	0.020	÷	0.035	0.046	÷	0.073	0.090	0.11
Kepler-317	1.94 ± 0.21	3.35 ± 0.37	÷	÷	13.5 ± 1.5	20.1 ± 2.2	29.3 ± 3.2			0.030	0.044	÷	÷	0.11	0.14	0.19		
	3.35 ± 0.37	4.33 ± 0.48	÷	6.99 ± 0.77	÷	10.9 ± 1.2	13.5 ± 1.5	16.5 ± 1.8		0.044	0.052	÷	0.071	÷	0.10	0.11	0.13	
	3.98 ± 0.44	4.70 ± 0.52	÷	6.47 ± 0.71	7.55 ± 0.83	÷	10.2 ± 1.1	11.7 ± 1.3	13.5 ± 1.5	0.049	0.055	÷	0.068	0.075	÷	0.09	0.10	0.11

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
Kepler-318	0.38 ± 0.04	1.51 ± 0.17	÷	÷	26.9 ± 3.0	55.0 ± 6.1	104 ± 11			0.011	0.027	÷	÷	0.18	0.29	0.45		
	1.51 ± 0.17	2.72 ± 0.30	÷	7.56 ± 0.83	÷	18.1 ± 2.0	26.9 ± 3.0	38.9 ± 4.3		0.027	0.039	÷	0.078	÷	0.14	0.18	0.23	
	2.25 ± 0.25	3.26 ± 0.36	÷	6.45 ± 0.71	8.83 ± 0.97	÷	15.8 ± 1.7	20.7 ± 2.3	26.9 ± 3.0	0.035	0.044	÷	0.070	0.086	÷	0.13	0.15	0.18
Kepler-320	1.22 ± 0.13	3.45 ± 0.38	÷	÷	35.6 ± 3.9	65.7 ± 7.2	115 ± 13			0.024	0.047	÷	÷	0.22	0.34	0.49		
	3.45 ± 0.38	5.45 ± 0.60	÷	12.4 ± 1.4	÷	25.6 ± 2.8	35.6 ± 3.9	48.8 ± 5.4		0.047	0.064	÷	0.11	÷	0.18	0.22	0.28	
	4.70 ± 0.52	6.30 ± 0.69	÷	10.9 ± 1.2	14.1 ± 1.6	÷	22.8 ± 2.5	28.6 ± 3.1	35.6 ± 3.9	0.058	0.071	÷	0.10	0.12	÷	0.17	0.19	0.22
Kepler-321	0.35 ± 0.04	1.50 ± 0.17	÷	÷	30.6 ± 3.4	64.3 ± 7.1	124 ± 14			0.010	0.026	÷	÷	0.19	0.32	0.49		
	1.50 ± 0.17	2.79 ± 0.31	÷	8.19 ± 0.90	÷	20.4 ± 2.2	30.6 ± 3.4	44.9 ± 4.9		0.026	0.039	÷	0.080	÷	0.15	0.19	0.25	
	2.29 ± 0.25	3.39 ± 0.37	÷	6.93 ± 0.76	9.62 ± 1.1	÷	17.7 ± 1.9	23.4 ± 2.6	30.6 ± 3.4	0.034	0.045	÷	0.072	0.089	÷	0.13	0.16	0.19
Kepler-322	0.13 ± 0.01	0.53 ± 0.06	÷	÷	9.83 ± 1.1	20.3 ± 2.2	38.6 ± 4.2			0.005	0.013	÷	÷	0.088	0.14	0.22		
	0.53 ± 0.06	0.97 ± 0.11	÷	2.73 ± 0.30	÷	6.60 ± 0.73	9.83 ± 1.1	14.3 ± 1.6		0.013	0.019	÷	0.038	÷	0.068	0.088	0.11	
	0.80 ± 0.09	1.17 ± 0.13	÷	2.32 ± 0.26	3.19 ± 0.35	÷	5.75 ± 0.63	7.56 ± 0.83	9.83 ± 1.1	0.017	0.021	÷	0.034	0.042	÷	0.062	0.074	0.088
Kepler-323	0.27 ± 0.03	0.72 ± 0.08	÷	÷	6.87 ± 0.76	12.5 ± 1.4	21.5 ± 2.4			0.008	0.016	÷	÷	0.072	0.11	0.15		
	0.72 ± 0.08	1.12 ± 0.12	÷	2.47 ± 0.27	÷	4.98 ± 0.55	6.87 ± 0.76	9.33 ± 1.0		0.016	0.021	÷	0.036	÷	0.058	0.072	0.088	
	0.97 ± 0.11	1.28 ± 0.14	÷	2.18 ± 0.24	2.79 ± 0.31	÷	4.46 ± 0.49	5.56 ± 0.61	6.87 ± 0.76	0.019	0.023	÷	0.033	0.039	÷	0.054	0.062	0.072
Kepler-324	0	0	÷	÷	298 ± 33	1149 ± 126	3457 ± 380			0	0	÷	÷	0.83	2.0	4.3		
	0	0.75 ± 0.08	÷	17.1 ± 1.9	÷	132 ± 15	298 ± 33	607 ± 67		0	0.015	÷	0.12	÷	0.49	0.83	1.3	
	0.36 ± 0.04	1.43 ± 0.16	÷	11.2 ± 1.2	25.3 ± 2.8	÷	98.4 ± 11	176 ± 19	298 ± 33	0.009	0.024	÷	0.09	0.16	÷	0.40	0.59	0.83
Kepler-328*	6.08 ± 0.67	15.5 ± 1.7	÷	÷	135 ± 15	240 ± 26	407 ± 45			0.068	0.13	÷	÷	0.54	0.79	1.1		
	15.5 ± 1.7	23.6 ± 2.6	÷	50.4 ± 5.5	÷	98.9 ± 11	135 ± 15	181 ± 20		0.13	0.17	÷	0.28	÷	0.44	0.54	0.65	
	20.6 ± 2.3	27.0 ± 3.0	÷	44.7 ± 4.9	56.7 ± 6.2	÷	88.9 ± 9.8	110 ± 12	135 ± 15	0.15	0.18	÷	0.26	0.30	÷	0.41	0.47	0.54
Kepler-329	0.65 ± 0.07	2.48 ± 0.27	÷	÷	41.6 ± 4.6	84.4 ± 9.3	159 ± 17			0.012	0.029	÷	÷	0.19	0.31	0.47		
	2.48 ± 0.27	4.40 ± 0.48	÷	12.0 ± 1.3	÷	28.3 ± 3.1	41.6 ± 4.6	59.9 ± 6.6		0.029	0.043	÷	0.084	÷	0.15	0.19	0.25	
	3.66 ± 0.40	5.26 ± 0.58	÷	10.3 ± 1.1	13.9 ± 1.5	÷	24.7 ± 2.7	32.3 ± 3.6	41.6 ± 4.6	0.038	0.049	÷	0.076	0.09	÷	0.14	0.16	0.19
Kepler-330	1.72 ± 0.19	3.97 ± 0.44	÷	÷	28.7 ± 3.2	49.1 ± 5.4	80.4 ± 8.8			0.026	0.046	÷	÷	0.17	0.25	0.34		
	3.97 ± 0.44	5.80 ± 0.64	÷	11.6 ± 1.3	÷	21.5 ± 2.4	28.7 ± 3.2	37.8 ± 4.2		0.046	0.059	÷	0.09	÷	0.14	0.17	0.21	
	5.12 ± 0.56	6.54 ± 0.72	÷	10.4 ± 1.1	12.9 ± 1.4	÷	19.5 ± 2.1	23.7 ± 2.6	28.7 ± 3.2	0.054	0.064	÷	0.087	0.10	÷	0.13	0.15	0.17
Kepler-333	2.56 ± 0.28	5.96 ± 0.66	÷	÷	43.8 ± 4.8	75.1 ± 8.3	123 ± 14			0.030	0.053	÷	÷	0.20	0.29	0.40		
	5.96 ± 0.66	8.74 ± 0.96	÷	17.5 ± 1.9	÷	32.8 ± 3.6	43.8 ± 4.8	57.7 ± 6.3		0.053	0.068	÷	0.11	÷	0.17	0.20	0.24	
	7.71 ± 0.85	9.87 ± 1.1	÷	15.7 ± 1.7	19.6 ± 2.2	÷	29.7 ± 3.3	36.1 ± 4.0	43.8 ± 4.8	0.063	0.074	÷	0.10	0.12	÷	0.15	0.18	0.20
Kepler-335	0	0.14 ± 0.02	÷	÷	363 ± 40	1345 ± 148	3936 ± 433			0	0.006	÷	÷	1.1	2.6	5.3		
	0.14 ± 0.02	1.28 ± 0.14	÷	23.6 ± 2.6	÷	166 ± 18	363 ± 40	724 ± 80		0.006	0.025	÷	0.18	÷	0.65	1.1	1.7	
	0.66 ± 0.07	2.33 ± 0.26	÷	15.9 ± 1.7	34.3 ± 3.8	÷	125 ± 14	218 ± 24	363 ± 40	0.016	0.038	÷	0.14	0.23	÷	0.54	0.78	1.1
Kepler-337	0.16 ± 0.02	0.87 ± 0.10	÷	÷	24.5 ± 2.7	54.4 ± 6.0	110 ± 12			0.006	0.019	÷	÷	0.17	0.29	0.47		
	0.87 ± 0.10	1.75 ± 0.19	÷	5.79 ± 0.64	÷	15.7 ± 1.7	24.5 ± 2.7	37.0 ± 4.1		0.019	0.030	÷	0.066	÷	0.13	0.17	0.23	
	1.40 ± 0.15	2.17 ± 0.24	÷	4.82 ± 0.53	6.92 ± 0.76	÷	13.5 ± 1.5	18.3 ± 2.0	24.5 ± 2.7	0.025	0.034	÷	0.058	0.074	÷	0.12	0.14	0.17
Kepler-340	5.73 ± 0.63	9.41 ± 1.0	÷	÷	33.9 ± 3.7	49.2 ± 5.4	69.9 ± 7.7			0.071	0.10	÷	÷	0.23	0.30	0.38		
	9.41 ± 1.0	11.9 ± 1.3	÷	18.5 ± 2.0	÷	27.9 ± 3.1	33.9 ± 3.7	41.0 ± 4.5		0.10	0.12	÷	0.15	÷	0.20	0.23	0.26	
	11.0 ± 1.2	12.8 ± 1.4	÷	17.2 ± 1.9	19.8 ± 2.2	÷	26.1 ± 2.9	29.8 ± 3.3	33.9 ± 3.7	0.11	0.12	÷	0.15	0.16	÷	0.19	0.21	0.23

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
Kepler-343	0.69 ± 0.08	2.84 ± 0.31	÷	÷	53.4 ± 5.9	111 ± 12	212 ± 23			0.016	0.041	÷	÷	0.29	0.47	0.73		
	2.84 ± 0.31	5.17 ± 0.57	÷	14.7 ± 1.6	÷	35.8 ± 3.9	53.4 ± 5.9	77.7 ± 8.5		0.041	0.061	÷	0.12	÷	0.22	0.29	0.37	
	4.27 ± 0.47	6.24 ± 0.69	÷	12.5 ± 1.4	17.2 ± 1.9	÷	31.2 ± 3.4	41.0 ± 4.5	53.4 ± 5.9	0.054	0.069	÷	0.11	0.14	÷	0.20	0.24	0.29
Kepler-344	0	1.88 ± 0.21	÷	÷	482 ± 53	1448 ± 159	3664 ± 403			0	0.030	÷	÷	1.2	2.5	4.6		
	1.88 ± 0.21	7.29 ± 0.80	÷	55.9 ± 6.1	÷	255 ± 28	482 ± 53	857 ± 94		0.030	0.073	÷	0.28	÷	0.78	1.2	1.8	
	4.80 ± 0.53	10.8 ± 1.2	÷	41.6 ± 4.6	74.1 ± 8.2	÷	203 ± 22	318 ± 35	482 ± 53	0.055	0.10	÷	0.23	0.34	÷	0.67	0.9	1.2
Kepler-345	4.55 ± 0.50	5.84 ± 0.64	÷	÷	11.7 ± 1.3	14.5 ± 1.6	17.8 ± 2.0			0.048	0.056	÷	÷	0.089	0.10	0.12		
	5.84 ± 0.64	6.60 ± 0.73	÷	8.35 ± 0.92	÷	10.5 ± 1.2	11.7 ± 1.3	13.0 ± 1.4		0.056	0.061	÷	0.071	÷	0.083	0.089	0.10	
	6.34 ± 0.70	6.87 ± 0.76	÷	8.04 ± 0.88	8.68 ± 0.95	÷	10.1 ± 1.1	10.9 ± 1.2	11.7 ± 1.3	0.059	0.063	÷	0.070	0.073	÷	0.081	0.085	0.089
Kepler-346	0.13 ± 0.01	1.26 ± 0.14	÷	÷	68.8 ± 7.6	170 ± 19	372 ± 41			0.005	0.024	÷	÷	0.34	0.62	1.1		
	1.26 ± 0.14	3.03 ± 0.33	÷	12.9 ± 1.4	÷	41.4 ± 4.6	68.8 ± 7.6	110 ± 12		0.024	0.043	÷	0.11	÷	0.24	0.34	0.47	
	2.29 ± 0.25	3.96 ± 0.44	÷	10.4 ± 1.1	15.9 ± 1.7	÷	34.6 ± 3.8	49.3 ± 5.4	68.8 ± 7.6	0.035	0.051	÷	0.10	0.13	÷	0.22	0.27	0.34
Kepler-347	1.91 ± 0.21	5.32 ± 0.59	÷	÷	53.9 ± 5.9	99.1 ± 11	172 ± 19			0.031	0.061	÷	÷	0.29	0.43	0.62		
	5.32 ± 0.59	8.37 ± 0.92	÷	18.9 ± 2.1	÷	38.8 ± 4.3	53.9 ± 5.9	73.7 ± 8.1		0.061	0.083	÷	0.14	÷	0.23	0.29	0.35	
	7.23 ± 0.80	9.67 ± 1.1	÷	16.6 ± 1.8	21.5 ± 2.4	÷	34.6 ± 3.8	43.4 ± 4.8	53.9 ± 5.9	0.075	0.09	÷	0.13	0.16	÷	0.21	0.25	0.29
Kepler-348	0.69 ± 0.08	2.46 ± 0.27	÷	÷	37.6 ± 4.1	74.9 ± 8.2	139 ± 15			0.016	0.038	÷	÷	0.23	0.37	0.55		
	2.46 ± 0.27	4.27 ± 0.47	÷	11.2 ± 1.2	÷	25.8 ± 2.8	37.6 ± 4.1	53.6 ± 5.9		0.038	0.054	÷	0.10	÷	0.18	0.23	0.29	
	3.57 ± 0.39	5.07 ± 0.56	÷	9.65 ± 1.1	13.0 ± 1.4	÷	22.6 ± 2.5	29.3 ± 3.2	37.6 ± 4.1	0.048	0.061	÷	0.09	0.11	÷	0.17	0.20	0.23
Kepler-349	1.02 ± 0.11	2.63 ± 0.29	÷	÷	23.2 ± 2.6	41.5 ± 4.6	70.4 ± 7.7			0.020	0.038	÷	÷	0.16	0.24	0.34		
	2.63 ± 0.29	4.01 ± 0.44	÷	8.61 ± 0.95	÷	17.0 ± 1.9	23.2 ± 2.6	31.2 ± 3.4		0.038	0.050	÷	0.083	÷	0.13	0.16	0.20	
	3.49 ± 0.38	4.58 ± 0.50	÷	7.63 ± 0.84	9.70 ± 1.1	÷	15.2 ± 1.7	18.9 ± 2.1	23.2 ± 2.6	0.046	0.055	÷	0.077	0.09	÷	0.12	0.14	0.16
Kepler-352	3.25 ± 0.36	5.86 ± 0.64	÷	÷	25.8 ± 2.8	39.4 ± 4.3	58.5 ± 6.4			0.040	0.059	÷	÷	0.16	0.21	0.28		
	5.86 ± 0.64	7.71 ± 0.85	÷	12.9 ± 1.4	÷	20.7 ± 2.3	25.8 ± 2.8	32.0 ± 3.5		0.059	0.071	÷	0.10	÷	0.14	0.16	0.18	
	7.05 ± 0.78	8.43 ± 0.93	÷	11.9 ± 1.3	14.0 ± 1.5	÷	19.1 ± 2.1	22.3 ± 2.5	25.8 ± 2.8	0.067	0.076	÷	0.10	0.11	÷	0.13	0.14	0.16
Kepler-353	2.61 ± 0.29	3.95 ± 0.43	÷	÷	11.8 ± 1.3	16.3 ± 1.8	22.2 ± 2.4			0.030	0.039	÷	÷	0.082	0.10	0.12		
	3.95 ± 0.43	4.81 ± 0.53	÷	7.00 ± 0.77	÷	9.97 ± 1.1	11.8 ± 1.3	13.9 ± 1.5		0.039	0.045	÷	0.058	÷	0.073	0.082	0.09	
	4.51 ± 0.50	5.13 ± 0.56	÷	6.59 ± 0.72	7.44 ± 0.82	÷	9.41 ± 1.0	10.5 ± 1.2	11.8 ± 1.3	0.043	0.047	÷	0.055	0.060	÷	0.070	0.076	0.082
Kepler-355	1.28 ± 0.14	4.14 ± 0.46	÷	÷	53.8 ± 5.9	104 ± 11	188 ± 21			0.024	0.053	÷	÷	0.29	0.45	0.67		
	4.14 ± 0.46	6.90 ± 0.76	÷	17.1 ± 1.9	÷	37.6 ± 4.1	53.8 ± 5.9	75.5 ± 8.3		0.053	0.075	÷	0.14	÷	0.23	0.29	0.37	
	5.85 ± 0.64	8.11 ± 0.89	÷	14.8 ± 1.6	19.7 ± 2.2	÷	33.2 ± 3.7	42.5 ± 4.7	53.8 ± 5.9	0.067	0.083	÷	0.12	0.15	÷	0.21	0.25	0.29
Kepler-356	0.25 ± 0.03	1.28 ± 0.14	÷	÷	32.2 ± 3.5	70.3 ± 7.7	140 ± 15			0.008	0.024	÷	÷	0.21	0.35	0.56		
	1.28 ± 0.14	2.51 ± 0.28	÷	7.96 ± 0.88	÷	21.0 ± 2.3	32.2 ± 3.5	48.2 ± 5.3		0.024	0.038	÷	0.082	÷	0.16	0.21	0.27	
	2.02 ± 0.22	3.09 ± 0.34	÷	6.67 ± 0.73	9.46 ± 1.0	÷	18.0 ± 2.0	24.3 ± 2.7	32.2 ± 3.5	0.033	0.044	÷	0.073	0.09	÷	0.14	0.17	0.21
Kepler-358	3.34 ± 0.37	11.9 ± 1.3	÷	÷	181 ± 20	361 ± 40	669 ± 74			0.045	0.10	÷	÷	0.64	1.0	1.5		
	11.9 ± 1.3	20.6 ± 2.3	÷	54.2 ± 6.0	÷	125 ± 14	181 ± 20	258 ± 28		0.10	0.15	÷	0.29	÷	0.50	0.64	0.81	
	17.3 ± 1.9	24.5 ± 2.7	÷	46.6 ± 5.1	62.8 ± 6.9	÷	109 ± 12	142 ± 16	181 ± 20	0.13	0.17	÷	0.26	0.32	÷	0.46	0.54	0.64
Kepler-36	9.91 ± 1.1	11.7 ± 1.3	÷	÷	19.0 ± 2.1	22.1 ± 2.4	25.6 ± 2.8			0.09	0.10	÷	÷	0.14	0.16	0.17		
	11.7 ± 1.3	12.8 ± 1.4	÷	15.0 ± 1.7	÷	17.6 ± 1.9	19.0 ± 2.1	20.5 ± 2.3		0.10	0.11	÷	0.12	÷	0.14	0.14	0.15	
	12.4 ± 1.4	13.1 ± 1.4	÷	14.6 ± 1.6	15.4 ± 1.7	÷	17.1 ± 1.9	18.0 ± 2.0	19.0 ± 2.1	0.11	0.11	÷	0.12	0.12	÷	0.13	0.14	0.14

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)									Semi-major axis a_n (AU)								
Kepler-360	0.43 ± 0.05	1.29 ± 0.14	÷	÷	14.7 ± 1.6	27.6 ± 3.0	48.9 ± 5.4			0.011	0.024	÷	÷	0.12	0.18	0.27		
	1.29 ± 0.14	2.09 ± 0.23	÷	4.93 ± 0.54	÷	10.4 ± 1.1	14.7 ± 1.6	20.3 ± 2.2		0.024	0.033	÷	0.058	÷	0.10	0.12	0.15	
	1.79 ± 0.20	2.43 ± 0.27	÷	4.31 ± 0.47	5.62 ± 0.62	÷	9.26 ± 1.0	11.7 ± 1.3	14.7 ± 1.6	0.030	0.036	÷	0.053	0.063	÷	0.088	0.10	0.12
Kepler-361	0	0.55 ± 0.06	÷	÷	230 ± 25	727 ± 80	1909 ± 210			0	0.014	÷	÷	0.78	1.7	3.2		
	0.55 ± 0.06	2.52 ± 0.28	÷	23.3 ± 2.6	÷	118 ± 13	230 ± 25	420 ± 46		0.014	0.038	÷	0.17	÷	0.50	0.78	1.2	
	1.58 ± 0.17	3.88 ± 0.43	÷	16.9 ± 1.9	31.5 ± 3.5	÷	92.4 ± 10	148 ± 16	230 ± 25	0.028	0.051	÷	0.14	0.21	÷	0.42	0.58	0.78
Kepler-362	0.19 ± 0.02	1.96 ± 0.22	÷	÷	110 ± 12	273 ± 30	600 ± 66			0.006	0.029	÷	÷	0.42	0.77	1.3		
	1.96 ± 0.22	4.76 ± 0.52	÷	20.5 ± 2.3	÷	66.2 ± 7.3	110 ± 12	176 ± 19		0.029	0.052	÷	0.14	÷	0.30	0.42	0.58	
	3.59 ± 0.39	6.23 ± 0.69	÷	16.4 ± 1.8	25.3 ± 2.8	÷	55.3 ± 6.1	78.8 ± 8.7	110 ± 12	0.043	0.062	÷	0.12	0.16	÷	0.27	0.34	0.42
Kepler-364	3.00 ± 0.33	9.69 ± 1.1	÷	÷	125 ± 14	242 ± 27	437 ± 48			0.042	0.09	÷	÷	0.51	0.79	1.2		
	9.69 ± 1.1	16.1 ± 1.8	÷	39.9 ± 4.4	÷	87.6 ± 9.6	125 ± 14	176 ± 19		0.09	0.13	÷	0.24	÷	0.40	0.51	0.64	
	13.7 ± 1.5	18.9 ± 2.1	÷	34.6 ± 3.8	45.8 ± 5.0	÷	77.3 ± 8.5	98.9 ± 11	125 ± 14	0.12	0.14	÷	0.22	0.26	÷	0.37	0.44	0.51
Kepler-365	3.38 ± 0.37	6.19 ± 0.68	÷	÷	28.2 ± 3.1	43.3 ± 4.8	64.7 ± 7.1			0.045	0.068	÷	÷	0.19	0.25	0.32		
	6.19 ± 0.68	8.19 ± 0.90	÷	13.8 ± 1.5	÷	22.4 ± 2.5	28.2 ± 3.1	35.0 ± 3.9		0.068	0.082	÷	0.12	÷	0.16	0.19	0.22	
	7.47 ± 0.82	8.97 ± 0.99	÷	12.7 ± 1.4	15.0 ± 1.7	÷	20.7 ± 2.3	24.2 ± 2.7	28.2 ± 3.1	0.077	0.087	÷	0.11	0.12	÷	0.15	0.17	0.19
Kepler-366	0	0.58 ± 0.06	÷	÷	37.5 ± 4.1	94.5 ± 10	211 ± 23			0	0.014	÷	÷	0.23	0.42	0.72		
	0.58 ± 0.06	1.47 ± 0.16	÷	6.65 ± 0.73	÷	22.2 ± 2.4	37.5 ± 4.1	60.6 ± 6.7		0.014	0.026	÷	0.072	÷	0.16	0.23	0.31	
	1.10 ± 0.12	1.94 ± 0.21	÷	5.30 ± 0.58	8.28 ± 0.91	÷	18.5 ± 2.0	26.6 ± 2.9	37.5 ± 4.1	0.022	0.032	÷	0.062	0.083	÷	0.14	0.18	0.23
Kepler-367	17.8 ± 2.0	26.3 ± 2.9	÷	÷	74.1 ± 8.2	101 ± 11	136 ± 15			0.12	0.16	÷	÷	0.31	0.39	0.47		
	26.3 ± 2.9	31.6 ± 3.5	÷	45.1 ± 5.0	÷	63.1 ± 6.9	74.1 ± 8.2	86.7 ± 9.5		0.16	0.18	÷	0.23	÷	0.28	0.31	0.35	
	29.7 ± 3.3	33.6 ± 3.7	÷	42.6 ± 4.7	47.8 ± 5.3	÷	59.8 ± 6.6	66.6 ± 7.3	74.1 ± 8.2	0.17	0.19	÷	0.22	0.23	÷	0.27	0.29	0.31
Kepler-368	1.86 ± 0.20	8.20 ± 0.90	÷	÷	169 ± 19	356 ± 39	691 ± 76			0.031	0.084	÷	÷	0.63	1.0	1.6		
	8.20 ± 0.90	15.3 ± 1.7	÷	45.0 ± 5.0	÷	112 ± 12	169 ± 19	248 ± 27		0.084	0.13	÷	0.26	÷	0.48	0.63	0.82	
	12.5 ± 1.4	18.6 ± 2.0	÷	38.1 ± 4.2	52.9 ± 5.8	÷	97.3 ± 11	129 ± 14	169 ± 19	0.11	0.15	÷	0.23	0.29	÷	0.44	0.53	0.63
Kepler-369	0	0.24 ± 0.03	÷	÷	56.8 ± 6.2	169 ± 19	424 ± 47			0	0.006	÷	÷	0.23	0.47	0.87		
	0.24 ± 0.03	0.92 ± 0.10	÷	6.78 ± 0.75	÷	30.3 ± 3.3	56.8 ± 6.2	100 ± 11		0.006	0.015	÷	0.055	÷	0.15	0.23	0.33	
	0.61 ± 0.07	1.34 ± 0.15	÷	5.07 ± 0.56	8.94 ± 0.98	÷	24.2 ± 2.7	37.7 ± 4.1	56.8 ± 6.2	0.011	0.019	÷	0.046	0.067	÷	0.13	0.17	0.23
Kepler-370	0	0.70 ± 0.08	÷	÷	60.4 ± 6.6	159 ± 17	365 ± 40			0	0.015	÷	÷	0.30	0.58	1.0		
	0.70 ± 0.08	1.92 ± 0.21	÷	9.74 ± 1.1	÷	34.9 ± 3.8	60.4 ± 6.6	100 ± 11		0.015	0.030	÷	0.089	÷	0.21	0.30	0.42	
	1.40 ± 0.15	2.60 ± 0.29	÷	7.65 ± 0.84	12.3 ± 1.4	÷	28.7 ± 3.2	42.1 ± 4.6	60.4 ± 6.6	0.025	0.037	÷	0.076	0.10	÷	0.18	0.24	0.30
Kepler-371	6.86 ± 0.75	16.3 ± 1.8	÷	÷	124 ± 14	215 ± 24	356 ± 39			0.068	0.12	÷	÷	0.47	0.68	0.9		
	16.3 ± 1.8	24.1 ± 2.7	÷	49.1 ± 5.4	÷	92.7 ± 10	124 ± 14	165 ± 18		0.12	0.16	÷	0.25	÷	0.38	0.47	0.56	
	21.2 ± 2.3	27.3 ± 3.0	÷	43.8 ± 4.8	54.8 ± 6.0	÷	83.8 ± 9.2	102 ± 11	124 ± 14	0.14	0.17	÷	0.23	0.27	÷	0.36	0.41	0.47
Kepler-373	0.24 ± 0.03	1.41 ± 0.16	÷	÷	42.9 ± 4.7	96.6 ± 11	197 ± 22			0.007	0.024	÷	÷	0.24	0.40	0.65		
	1.41 ± 0.16	2.89 ± 0.32	÷	9.87 ± 1.1	÷	27.3 ± 3.0	42.9 ± 4.7	65.3 ± 7.2		0.024	0.039	÷	0.088	÷	0.17	0.24	0.31	
	2.30 ± 0.25	3.62 ± 0.40	÷	8.18 ± 0.90	11.8 ± 1.3	÷	23.3 ± 2.6	31.9 ± 3.5	42.9 ± 4.7	0.033	0.045	÷	0.078	0.10	÷	0.16	0.19	0.24
Kepler-375	3.85 ± 0.42	7.02 ± 0.77	÷	÷	31.7 ± 3.5	48.7 ± 5.4	72.7 ± 8.0			0.047	0.070	÷	÷	0.19	0.26	0.33		
	7.02 ± 0.77	9.28 ± 1.0	÷	15.6 ± 1.7	÷	25.3 ± 2.8	31.7 ± 3.5	39.5 ± 4.3		0.070	0.085	÷	0.12	÷	0.16	0.19	0.22	
	8.47 ± 0.93	10.2 ± 1.1	÷	14.4 ± 1.6	17.0 ± 1.9	÷	23.4 ± 2.6	27.3 ± 3.0	31.7 ± 3.5	0.080	0.090	÷	0.11	0.13	÷	0.16	0.17	0.19

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
Kepler-376	0.27 ± 0.03	1.37 ± 0.15	÷	÷	34.6 ± 3.8	75.4 ± 8.3	150 ± 17		0.008	0.024	÷	÷	0.21	0.35	0.56	
	1.37 ± 0.15	2.69 ± 0.30	÷	8.55 ± 0.94	÷	22.5 ± 2.5	34.6 ± 3.8	51.7 ± 5.7	0.024	0.038	÷	0.082	÷	0.16	0.21	0.27
	2.17 ± 0.24	3.32 ± 0.37	÷	7.15 ± 0.79	10.2 ± 1.1	÷	19.3 ± 2.1	26.1 ± 2.9	34.6 ± 3.8	0.033	0.044	÷	0.073	0.09	÷	0.14	0.17	0.21
Kepler-377	1.84 ± 0.20	5.18 ± 0.57	÷	÷	53.4 ± 5.9	98.4 ± 11	172 ± 19		0.030	0.061	÷	÷	0.29	0.43	0.62	
	5.18 ± 0.57	8.18 ± 0.90	÷	18.6 ± 2.0	÷	38.3 ± 4.2	53.4 ± 5.9	73.1 ± 8.0	0.061	0.082	÷	0.14	÷	0.23	0.29	0.35
	7.05 ± 0.78	9.46 ± 1.0	÷	16.4 ± 1.8	21.1 ± 2.3	÷	34.2 ± 3.8	42.9 ± 4.7	53.4 ± 5.9	0.074	0.09	÷	0.13	0.15	÷	0.21	0.25	0.29
Kepler-378	4.00 ± 0.44	8.34 ± 0.92	÷	÷	49.6 ± 5.5	81.2 ± 8.9	128 ± 14		0.044	0.072	÷	÷	0.24	0.33	0.45	
	8.34 ± 0.92	11.7 ± 1.3	÷	21.7 ± 2.4	÷	38.1 ± 4.2	49.6 ± 5.5	63.8 ± 7.0	0.072	0.09	÷	0.14	÷	0.20	0.24	0.28
	10.5 ± 1.2	13.0 ± 1.4	÷	19.7 ± 2.2	23.9 ± 2.6	÷	34.8 ± 3.8	41.7 ± 4.6	49.6 ± 5.5	0.084	0.10	÷	0.13	0.15	÷	0.19	0.21	0.24
Kepler-379	0.76 ± 0.08	4.87 ± 0.54	÷	÷	165 ± 18	377 ± 41	779 ± 86		0.017	0.059	÷	÷	0.62	1.1	1.7	
	4.87 ± 0.54	10.3 ± 1.1	÷	36.5 ± 4.0	÷	104 ± 11	165 ± 18	253 ± 28	0.059	0.10	÷	0.23	÷	0.45	0.62	0.82
	8.10 ± 0.89	13.0 ± 1.4	÷	30.1 ± 3.3	44.0 ± 4.8	÷	88.2 ± 9.7	121 ± 13	165 ± 18	0.083	0.11	÷	0.20	0.26	÷	0.41	0.51	0.62
Kepler-380	0.79 ± 0.09	1.85 ± 0.20	÷	÷	13.9 ± 1.5	24.0 ± 2.6	39.6 ± 4.4		0.017	0.030	÷	÷	0.12	0.17	0.23	
	1.85 ± 0.20	2.73 ± 0.30	÷	5.53 ± 0.61	÷	10.4 ± 1.1	13.9 ± 1.5	18.4 ± 2.0	0.030	0.039	÷	0.063	÷	0.10	0.12	0.14
	2.40 ± 0.26	3.09 ± 0.34	÷	4.94 ± 0.54	6.17 ± 0.68	÷	9.40 ± 1.0	11.5 ± 1.3	13.9 ± 1.5	0.036	0.043	÷	0.058	0.068	÷	0.090	0.10	0.12
Kepler-381	0.62 ± 0.07	2.07 ± 0.23	÷	÷	28.3 ± 3.1	55.1 ± 6.1	100 ± 11		0.015	0.034	÷	÷	0.19	0.30	0.45	
	2.07 ± 0.23	3.50 ± 0.39	÷	8.82 ± 0.97	÷	19.6 ± 2.2	28.3 ± 3.1	39.8 ± 4.4	0.034	0.048	÷	0.089	÷	0.15	0.19	0.24
	2.95 ± 0.32	4.12 ± 0.45	÷	7.63 ± 0.84	10.2 ± 1.1	÷	17.3 ± 1.9	22.2 ± 2.4	28.3 ± 3.1	0.043	0.053	÷	0.081	0.10	÷	0.14	0.16	0.19
Kepler-382	0.59 ± 0.06	1.94 ± 0.21	÷	÷	25.8 ± 2.8	50.1 ± 5.5	90.9 ± 10		0.013	0.028	÷	÷	0.16	0.25	0.37	
	1.94 ± 0.21	3.25 ± 0.36	÷	8.12 ± 0.89	÷	18.0 ± 2.0	25.8 ± 2.8	36.3 ± 4.0	0.028	0.040	÷	0.074	÷	0.13	0.16	0.20
	2.75 ± 0.30	3.82 ± 0.42	÷	7.04 ± 0.77	9.34 ± 1.0	÷	15.9 ± 1.7	20.3 ± 2.2	25.8 ± 2.8	0.036	0.045	÷	0.067	0.081	÷	0.12	0.14	0.16
Kepler-383	1.27 ± 0.14	4.52 ± 0.50	÷	÷	68.0 ± 7.5	135 ± 15	250 ± 28		0.020	0.047	÷	÷	0.29	0.46	0.69	
	4.52 ± 0.50	7.80 ± 0.86	÷	20.4 ± 2.2	÷	46.7 ± 5.1	68.0 ± 7.5	96.8 ± 11	0.047	0.068	÷	0.13	÷	0.22	0.29	0.36
	6.53 ± 0.72	9.25 ± 1.0	÷	17.6 ± 1.9	23.6 ± 2.6	÷	41.0 ± 4.5	53.1 ± 5.8	68.0 ± 7.5	0.061	0.076	÷	0.12	0.14	÷	0.21	0.24	0.29
Kepler-384	4.10 ± 0.45	10.2 ± 1.1	÷	÷	85.0 ± 9.4	150 ± 17	252 ± 28		0.047	0.087	÷	÷	0.36	0.52	0.74	
	10.2 ± 1.1	15.4 ± 1.7	÷	32.3 ± 3.6	÷	62.7 ± 6.9	85.0 ± 9.4	114 ± 13	0.087	0.11	÷	0.19	÷	0.29	0.36	0.43
	13.5 ± 1.5	17.5 ± 1.9	÷	28.7 ± 3.2	36.3 ± 4.0	÷	56.4 ± 6.2	69.5 ± 7.6	85.0 ± 9.4	0.10	0.13	÷	0.17	0.20	÷	0.27	0.31	0.36
Kepler-385	4.10 ± 0.45	6.54 ± 0.72	÷	÷	22.1 ± 2.4	31.5 ± 3.5	44.1 ± 4.9		0.053	0.073	÷	÷	0.16	0.21	0.26	
	6.54 ± 0.72	8.15 ± 0.90	÷	12.4 ± 1.4	÷	18.3 ± 2.0	22.1 ± 2.4	26.4 ± 2.9	0.073	0.084	÷	0.11	÷	0.14	0.16	0.18
	7.58 ± 0.83	8.76 ± 0.96	÷	11.6 ± 1.3	13.2 ± 1.5	÷	17.2 ± 1.9	19.5 ± 2.1	22.1 ± 2.4	0.080	0.088	÷	0.11	0.12	÷	0.14	0.15	0.16
Kepler-386	2.11 ± 0.23	5.43 ± 0.60	÷	÷	47.9 ± 5.3	85.6 ± 9.4	145 ± 16		0.030	0.056	÷	÷	0.24	0.35	0.50	
	5.43 ± 0.60	8.29 ± 0.91	÷	17.8 ± 2.0	÷	35.1 ± 3.9	47.9 ± 5.3	64.5 ± 7.1	0.056	0.074	÷	0.12	÷	0.19	0.24	0.29
	7.22 ± 0.79	9.48 ± 1.0	÷	15.8 ± 1.7	20.0 ± 2.2	÷	31.5 ± 3.5	39.0 ± 4.3	47.9 ± 5.3	0.067	0.081	÷	0.11	0.13	÷	0.18	0.21	0.24
Kepler-387	1.91 ± 0.21	3.73 ± 0.41	÷	÷	19.5 ± 2.1	31.0 ± 3.4	47.6 ± 5.2		0.029	0.045	÷	÷	0.14	0.19	0.25	
	3.73 ± 0.41	5.08 ± 0.56	÷	9.02 ± 0.99	÷	15.2 ± 1.7	19.5 ± 2.1	24.7 ± 2.7	0.045	0.056	÷	0.082	÷	0.12	0.14	0.16
	4.59 ± 0.50	5.61 ± 0.62	÷	8.23 ± 0.91	9.88 ± 1.1	÷	14.0 ± 1.5	16.6 ± 1.8	19.5 ± 2.1	0.052	0.060	÷	0.077	0.087	÷	0.11	0.12	0.14
Kepler-388	0	0.49 ± 0.05	÷	÷	41.8 ± 4.6	110 ± 12	252 ± 28		0	0.010	÷	÷	0.20	0.38	0.66	
	0.49 ± 0.05	1.35 ± 0.15	÷	6.78 ± 0.75	÷	24.2 ± 2.7	41.8 ± 4.6	69.0 ± 7.6	0.010	0.020	÷	0.060	÷	0.14	0.20	0.28
	0.98 ± 0.11	1.82 ± 0.20	÷	5.32 ± 0.59	8.54 ± 0.94	÷	19.9 ± 2.2	29.2 ± 3.2	41.8 ± 4.6	0.016	0.025	÷	0.051	0.069	÷	0.12	0.16	0.20

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
Kepler-389	0	0.46 ± 0.05	÷ ÷	47.1 ± 5.2	127 ± 14	297 ± 33			0	0.011	÷ ÷	0.24	0.47	0.83		
	0.46 ± 0.05	1.33 ± 0.15	÷ 7.18 ± 0.79	÷	26.8 ± 2.9	47.1 ± 5.2	78.9 ± 8.7		0.011	0.022	÷ 0.069	÷	0.17	0.24	0.34	
	0.95 ± 0.10	1.82 ± 0.20	÷ 5.59 ± 0.61	9.13 ± 1.0	÷	21.9 ± 2.4	32.5 ± 3.6	47.1 ± 5.2	0.018	0.028	÷ 0.059	0.081	÷	0.15	0.19	0.24
Kepler-390	1.37 ± 0.15	3.21 ± 0.35	÷ ÷	23.7 ± 2.6	40.7 ± 4.5	66.9 ± 7.4			0.022	0.040	÷ ÷	0.15	0.22	0.30		
	3.21 ± 0.35	4.70 ± 0.52	÷ 9.47 ± 1.0	÷	17.7 ± 1.9	23.7 ± 2.6	31.2 ± 3.4		0.040	0.051	÷ 0.082	÷	0.12	0.15	0.18	
	4.15 ± 0.46	5.31 ± 0.58	÷ 8.47 ± 0.93	10.6 ± 1.2	÷	16.0 ± 1.8	19.5 ± 2.1	23.7 ± 2.6	0.047	0.055	÷ 0.076	0.088	÷	0.12	0.13	0.15
Kepler-391	0.48 ± 0.05	2.20 ± 0.24	÷ ÷	48.6 ± 5.3	104 ± 11	203 ± 22			0.013	0.036	÷ ÷	0.29	0.47	0.74		
	2.20 ± 0.24	4.17 ± 0.46	÷ 12.6 ± 1.4	÷	32.0 ± 3.5	48.6 ± 5.3	71.8 ± 7.9		0.036	0.056	÷ 0.12	÷	0.22	0.29	0.37	
	3.39 ± 0.37	5.09 ± 0.56	÷ 10.6 ± 1.2	14.9 ± 1.6	÷	27.7 ± 3.0	36.9 ± 4.1	48.6 ± 5.3	0.049	0.064	÷ 0.10	0.13	÷	0.20	0.24	0.29
Kepler-392	1.01 ± 0.11	2.46 ± 0.27	÷ ÷	19.4 ± 2.1	33.8 ± 3.7	56.2 ± 6.2			0.020	0.035	÷ ÷	0.14	0.20	0.28		
	2.46 ± 0.27	3.65 ± 0.40	÷ 7.53 ± 0.83	÷	14.4 ± 1.6	19.4 ± 2.1	25.7 ± 2.8		0.035	0.046	÷ 0.075	÷	0.11	0.14	0.17	
	3.21 ± 0.35	4.15 ± 0.46	÷ 6.72 ± 0.74	8.43 ± 0.93	÷	13.0 ± 1.4	15.9 ± 1.7	19.4 ± 2.1	0.042	0.050	÷ 0.069	0.080	÷	0.11	0.12	0.14
Kepler-393	3.21 ± 0.35	5.55 ± 0.61	÷ ÷	22.5 ± 2.5	33.6 ± 3.7	49.0 ± 5.4			0.045	0.065	÷ ÷	0.17	0.22	0.28		
	5.55 ± 0.61	7.18 ± 0.79	÷ 11.6 ± 1.3	÷	18.2 ± 2.0	22.5 ± 2.5	27.6 ± 3.0		0.065	0.077	÷ 0.11	÷	0.14	0.17	0.19	
	6.60 ± 0.73	7.80 ± 0.86	÷ 10.8 ± 1.2	12.6 ± 1.4	÷	16.9 ± 1.9	19.5 ± 2.1	22.5 ± 2.5	0.073	0.082	÷ 0.10	0.11	÷	0.14	0.15	0.17
Kepler-394	3.10 ± 0.34	5.06 ± 0.56	÷ ÷	18.1 ± 2.0	26.2 ± 2.9	37.1 ± 4.1			0.044	0.061	÷ ÷	0.14	0.18	0.23		
	5.06 ± 0.56	6.38 ± 0.70	÷ 9.89 ± 1.1	÷	14.9 ± 1.6	18.1 ± 2.0	21.8 ± 2.4		0.061	0.072	÷ 0.10	÷	0.13	0.14	0.16	
	5.92 ± 0.65	6.88 ± 0.76	÷ 9.22 ± 1.0	10.6 ± 1.2	÷	13.9 ± 1.5	15.9 ± 1.7	18.1 ± 2.0	0.068	0.075	÷ 0.09	0.10	÷	0.12	0.13	0.14
Kepler-395	0	0.80 ± 0.09	÷ ÷	123 ± 14	349 ± 38	847 ± 93			0	0.014	÷ ÷	0.41	0.82	1.5		
	0.80 ± 0.09	2.62 ± 0.29	÷ 16.6 ± 1.8	÷	67.8 ± 7.5	123 ± 14	212 ± 23		0.014	0.031	÷ 0.11	÷	0.28	0.41	0.59	
	1.81 ± 0.20	3.71 ± 0.41	÷ 12.6 ± 1.4	21.5 ± 2.4	÷	54.8 ± 6.0	83.3 ± 9.2	123 ± 14	0.025	0.040	÷ 0.090	0.13	÷	0.24	0.32	0.41
Kepler-396*	7.31 ± 0.80	18.9 ± 2.1	÷ ÷	169 ± 19	302 ± 33	513 ± 56			0.071	0.13	÷ ÷	0.57	0.85	1.2		
	18.9 ± 2.1	28.9 ± 3.2	÷ 62.4 ± 6.9	÷	123 ± 14	169 ± 19	227 ± 25		0.13	0.18	÷ 0.30	÷	0.47	0.57	0.70	
	25.2 ± 2.8	33.1 ± 3.6	÷ 55.2 ± 6.1	70.2 ± 7.7	÷	111 ± 12	137 ± 15	169 ± 19	0.16	0.19	÷ 0.27	0.32	÷	0.43	0.50	0.57
Kepler-397	0	1.66 ± 0.18	÷ ÷	542 ± 60	1669 ± 184	4305 ± 474			0	0.026	÷ ÷	1.2	2.6	4.8		
	1.66 ± 0.18	6.99 ± 0.77	÷ 58.8 ± 6.5	÷	282 ± 31	542 ± 60	976 ± 107		0.026	0.067	÷ 0.28	÷	0.78	1.2	1.8	
	4.49 ± 0.49	10.5 ± 1.2	÷ 43.2 ± 4.8	78.6 ± 8.6	÷	223 ± 25	353 ± 39	542 ± 60	0.050	0.088	÷ 0.22	0.33	÷	0.67	0.9	1.2
Kepler-400	1.91 ± 0.21	4.38 ± 0.48	÷ ÷	31.0 ± 3.4	52.9 ± 5.8	86.2 ± 9.5			0.031	0.054	÷ ÷	0.20	0.28	0.39		
	4.38 ± 0.48	6.36 ± 0.70	÷ 12.6 ± 1.4	÷	23.3 ± 2.6	31.0 ± 3.4	40.7 ± 4.5		0.054	0.069	÷ 0.11	÷	0.16	0.20	0.24	
	5.63 ± 0.62	7.17 ± 0.79	÷ 11.3 ± 1.2	14.0 ± 1.5	÷	21.2 ± 2.3	25.7 ± 2.8	31.0 ± 3.4	0.063	0.075	÷ 0.10	0.12	÷	0.15	0.17	0.20
Kepler-404	7.46 ± 0.82	9.44 ± 1.0	÷ ÷	18.2 ± 2.0	22.3 ± 2.5	27.2 ± 3.0			0.075	0.088	÷ ÷	0.14	0.16	0.18		
	9.44 ± 1.0	10.6 ± 1.2	÷ 13.2 ± 1.5	÷	16.4 ± 1.8	18.2 ± 2.0	20.2 ± 2.2		0.088	0.09	÷ 0.11	÷	0.13	0.14	0.15	
	10.2 ± 1.1	11.0 ± 1.2	÷ 12.7 ± 1.4	13.7 ± 1.5	÷	15.8 ± 1.7	17.0 ± 1.9	18.2 ± 2.0	0.09	0.10	÷ 0.11	0.11	÷	0.12	0.13	0.14
Kepler-405	0.65 ± 0.07	3.10 ± 0.34	÷ ÷	71.0 ± 7.8	152 ± 17	300 ± 33			0.015	0.042	÷ ÷	0.34	0.56	0.88		
	3.10 ± 0.34	5.93 ± 0.65	÷ 18.2 ± 2.0	÷	46.6 ± 5.1	71.0 ± 7.8	105 ± 12		0.042	0.064	÷ 0.14	÷	0.25	0.34	0.44	
	4.81 ± 0.53	7.25 ± 0.80	÷ 15.3 ± 1.7	21.5 ± 2.4	÷	40.2 ± 4.4	53.8 ± 5.9	71.0 ± 7.8	0.056	0.074	÷ 0.12	0.15	÷	0.23	0.28	0.34
Kepler-406*	0.52 ± 0.06	1.18 ± 0.13	÷ ÷	8.27 ± 0.91	14.1 ± 1.6	22.9 ± 2.5			0.013	0.022	÷ ÷	0.081	0.11	0.16		
	1.18 ± 0.13	1.71 ± 0.19	÷ 3.38 ± 0.37	÷	6.23 ± 0.69	8.27 ± 0.91	10.9 ± 1.2		0.022	0.028	÷ 0.044	÷	0.067	0.081	0.10	
	1.51 ± 0.17	1.93 ± 0.21	÷ 3.03 ± 0.33	3.76 ± 0.41	÷	5.65 ± 0.62	6.86 ± 0.75	8.27 ± 0.91	0.026	0.030	÷ 0.041	0.048	÷	0.062	0.071	0.081

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
Kepler-411*	0.22 ± 0.02	0.94 ± 0.10	÷	÷	18.2 ± 2.0	37.9 ± 4.2	72.9 ± 8.0		0.007	0.018	÷	÷	0.13	0.21	0.32	
	0.94 ± 0.10	1.72 ± 0.19	÷	4.95 ± 0.54	÷	12.2 ± 1.3	18.2 ± 2.0	26.6 ± 2.9	0.018	0.026	÷	0.053	÷	0.10	0.13	0.16
	1.41 ± 0.16	2.08 ± 0.23	÷	4.20 ± 0.46	5.80 ± 0.64	÷	10.6 ± 1.2	14.0 ± 1.5	18.2 ± 2.0	0.023	0.030	÷	0.048	0.059	÷	0.088	0.11	0.13
Kepler-414*	1.82 ± 0.20	2.98 ± 0.33	÷	÷	10.6 ± 1.2	15.4 ± 1.7	21.8 ± 2.4		0.028	0.039	÷	÷	0.09	0.12	0.15	
	2.98 ± 0.33	3.76 ± 0.41	÷	5.83 ± 0.64	÷	8.76 ± 0.96	10.6 ± 1.2	12.8 ± 1.4	0.039	0.045	÷	0.061	÷	0.080	0.09	0.10
	3.48 ± 0.38	4.05 ± 0.45	÷	5.43 ± 0.60	6.25 ± 0.69	÷	8.20 ± 0.90	9.36 ± 1.0	10.6 ± 1.2	0.043	0.048	÷	0.058	0.064	÷	0.076	0.083	0.09
Kepler-415*	0.68 ± 0.07	1.81 ± 0.20	÷	÷	16.8 ± 1.8	30.2 ± 3.3	51.7 ± 5.7		0.013	0.025	÷	÷	0.11	0.16	0.23	
	1.81 ± 0.20	2.79 ± 0.31	÷	6.10 ± 0.67	÷	12.2 ± 1.3	16.8 ± 1.8	22.7 ± 2.5	0.025	0.034	÷	0.056	÷	0.090	0.11	0.14
	2.42 ± 0.27	3.20 ± 0.35	÷	5.39 ± 0.59	6.88 ± 0.76	÷	10.9 ± 1.2	13.6 ± 1.5	16.8 ± 1.8	0.030	0.037	÷	0.052	0.061	÷	0.083	0.10	0.11
Kepler-416*	1.30 ± 0.14	3.02 ± 0.33	÷	÷	22.1 ± 2.4	37.9 ± 4.2	62.2 ± 6.8		0.023	0.041	÷	÷	0.15	0.22	0.31	
	3.02 ± 0.33	4.42 ± 0.49	÷	8.86 ± 0.97	÷	16.5 ± 1.8	22.1 ± 2.4	29.1 ± 3.2	0.041	0.053	÷	0.084	÷	0.13	0.15	0.18
	3.90 ± 0.43	4.99 ± 0.55	÷	7.93 ± 0.87	9.88 ± 1.1	÷	15.0 ± 1.7	18.2 ± 2.0	22.1 ± 2.4	0.048	0.057	÷	0.078	0.090	÷	0.12	0.14	0.15
Kepler-417*	7.12 ± 0.78	9.43 ± 1.0	÷	÷	20.4 ± 2.2	25.8 ± 2.8	32.4 ± 3.6		0.070	0.085	÷	÷	0.14	0.17	0.19	
	9.43 ± 1.0	10.8 ± 1.2	÷	14.0 ± 1.5	÷	18.1 ± 2.0	20.4 ± 2.2	23.0 ± 2.5	0.085	0.09	÷	0.11	÷	0.13	0.14	0.15
	10.3 ± 1.1	11.3 ± 1.2	÷	13.5 ± 1.5	14.7 ± 1.6	÷	17.3 ± 1.9	18.8 ± 2.1	20.4 ± 2.2	0.090	0.10	÷	0.11	0.11	÷	0.13	0.13	0.14
Kepler-419	0	1.74 ± 0.19	÷	÷	3490 ± 384	12658 ± 1392	36537 ± 4019		0	0.032	÷	÷	5.0	11.9	24.0	
	1.74 ± 0.19	14.6 ± 1.6	÷	242 ± 27	÷	1624 ± 179	3490 ± 384	6880 ± 757	0.032	0.13	÷	0.85	÷	3.0	5.0	7.9
	7.76 ± 0.85	25.7 ± 2.8	÷	164 ± 18	347 ± 38	÷	1229 ± 135	2119 ± 233	3490 ± 384	0.086	0.19	÷	0.65	1.1	÷	2.5	3.6	5.0
Kepler-424	4.10 ± 0.45	0	÷	÷	2593 ± 285	14699 ± 1617	56376 ± 6201		0.051	0	÷	÷	3.7	11.9	29.1	
	0	0	÷	39.1 ± 4.3	÷	862 ± 95	2593 ± 285	6572 ± 723	0	0	÷	0.23	÷	1.8	3.7	7.0
	0	0.27 ± 0.03	÷	19.1 ± 2.1	74.1 ± 8.2	÷	568 ± 62	1273 ± 140	2593 ± 285	0	0.008	÷	0.14	0.35	÷	1.4	2.3	3.7
Kepler-430	1.47 ± 0.16	8.97 ± 0.99	÷	÷	287 ± 32	650 ± 72	1336 ± 147		0.027	0.089	÷	÷	0.90	1.5	2.5	
	8.97 ± 0.99	18.7 ± 2.1	÷	64.9 ± 7.1	÷	182 ± 20	287 ± 32	438 ± 48	0.089	0.15	÷	0.33	÷	0.66	0.90	1.2
	14.8 ± 1.6	23.4 ± 2.6	÷	53.6 ± 5.9	78.0 ± 8.6	÷	155 ± 17	212 ± 23	287 ± 32	0.12	0.17	÷	0.29	0.38	÷	0.59	0.73	0.90
Kepler-432	0	2.30 ± 0.25	÷	÷	1863 ± 205	6269 ± 690	17194 ± 1891		0	0.037	÷	÷	3.2	7.3	14.3	
	2.30 ± 0.25	13.4 ± 1.5	÷	159 ± 17	÷	913 ± 100	1863 ± 205	3523 ± 388	0.037	0.12	÷	0.63	÷	2.0	3.2	5.0
	7.89 ± 0.87	21.9 ± 2.4	÷	113 ± 12	221 ± 24	÷	705 ± 78	1169 ± 129	1863 ± 205	0.085	0.17	÷	0.50	0.79	÷	1.7	2.4	3.2
Kepler-436	0.26 ± 0.03	3.00 ± 0.33	÷	÷	191 ± 21	481 ± 53	1072 ± 118		0.009	0.044	÷	÷	0.70	1.3	2.2	
	3.00 ± 0.33	7.54 ± 0.83	÷	34.0 ± 3.7	÷	113 ± 12	191 ± 21	309 ± 34	0.044	0.082	÷	0.22	÷	0.50	0.70	1.0
	5.63 ± 0.62	9.97 ± 1.1	÷	27.1 ± 3.0	42.3 ± 4.7	÷	94.2 ± 10	136 ± 15	191 ± 21	0.067	0.10	÷	0.19	0.26	÷	0.44	0.56	0.70
Kepler-449*	0.89 ± 0.10	3.87 ± 0.43	÷	÷	78.4 ± 8.6	165 ± 18	318 ± 35		0.018	0.048	÷	÷	0.35	0.58	0.9	
	3.87 ± 0.43	7.18 ± 0.79	÷	21.0 ± 2.3	÷	52.2 ± 5.7	78.4 ± 8.6	115 ± 13	0.048	0.072	÷	0.15	÷	0.27	0.35	0.46
	5.89 ± 0.65	8.71 ± 0.96	÷	17.8 ± 2.0	24.7 ± 2.7	÷	45.2 ± 5.0	59.9 ± 6.6	78.4 ± 8.6	0.063	0.082	÷	0.13	0.16	÷	0.25	0.30	0.35
Kepler-466*	0	0	÷	÷	315 ± 35	1269 ± 140	3930 ± 432		0	0	÷	÷	0.9	2.3	4.9	
	0	0.54 ± 0.06	÷	15.9 ± 1.7	÷	136 ± 15	315 ± 35	658 ± 72	0	0.013	÷	0.12	÷	0.51	0.9	1.5
	0.24 ± 0.03	1.11 ± 0.12	÷	10.2 ± 1.1	24.0 ± 2.6	÷	99.8 ± 11	182 ± 20	315 ± 35	0.008	0.021	÷	0.09	0.16	÷	0.42	0.63	0.9
Kepler-47	0	3.65 ± 0.40	÷	÷	1216 ± 134	3756 ± 413	9701 ± 1067		0	0.052	÷	÷	2.5	5.3	10.0	
	3.65 ± 0.40	15.5 ± 1.7	÷	131 ± 14	÷	632 ± 70	1216 ± 134	2195 ± 241	0.052	0.14	÷	0.57	÷	1.6	2.5	3.7
	9.93 ± 1.1	23.4 ± 2.6	÷	96.5 ± 11	176 ± 19	÷	500 ± 55	793 ± 87	1216 ± 134	0.10	0.18	÷	0.46	0.69	÷	1.4	1.9	2.5

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
Kepler-487*	1.36 ± 0.15	5.16 ± 0.57	÷	÷	86.0 ± 9.5	174 ± 19	327 ± 36		0.023	0.056	÷	÷	0.37	0.59	0.90	
	5.16 ± 0.57	9.12 ± 1.0	÷	24.8 ± 2.7	÷	58.4 ± 6.4	86.0 ± 9.5	124 ± 14	0.056	0.082	÷	0.16	÷	0.28	0.37	0.47
	7.59 ± 0.83	10.9 ± 1.2	÷	21.2 ± 2.3	28.9 ± 3.2	÷	51.1 ± 5.6	66.6 ± 7.3	86.0 ± 9.5	0.073	0.09	÷	0.14	0.18	÷	0.26	0.31	0.37
Kepler-50	5.32 ± 0.59	6.47 ± 0.71	÷	÷	11.2 ± 1.2	13.3 ± 1.5	15.7 ± 1.7		0.060	0.068	÷	÷	0.10	0.11	0.12	
	6.47 ± 0.71	7.11 ± 0.78	÷	8.56 ± 0.94	÷	10.3 ± 1.1	11.2 ± 1.2	12.2 ± 1.3	0.068	0.072	÷	0.082	÷	0.09	0.10	0.10
	6.89 ± 0.76	7.34 ± 0.81	÷	8.31 ± 0.91	8.83 ± 0.97	÷	9.96 ± 1.1	10.6 ± 1.2	11.2 ± 1.2	0.071	0.074	÷	0.080	0.084	÷	0.09	0.09	0.10
Kepler-520*	0	0.94 ± 0.10	÷	÷	58.3 ± 6.4	146 ± 16	325 ± 36		0	0.019	÷	÷	0.30	0.56	0.9	
	0.94 ± 0.10	2.36 ± 0.26	÷	10.5 ± 1.2	÷	34.7 ± 3.8	58.3 ± 6.4	94.0 ± 10	0.019	0.036	÷	0.10	÷	0.21	0.30	0.42
	1.76 ± 0.19	3.11 ± 0.34	÷	8.39 ± 0.92	13.0 ± 1.4	÷	28.9 ± 3.2	41.5 ± 4.6	58.3 ± 6.4	0.029	0.043	÷	0.083	0.11	÷	0.19	0.24	0.30
Kepler-524*	0	0.28 ± 0.03	÷	÷	25.5 ± 2.8	67.3 ± 7.4	155 ± 17		0	0.009	÷	÷	0.17	0.33	0.57	
	0.28 ± 0.03	0.79 ± 0.09	÷	4.05 ± 0.45	÷	14.7 ± 1.6	25.5 ± 2.8	42.2 ± 4.6	0.009	0.017	÷	0.050	÷	0.12	0.17	0.24
	0.57 ± 0.06	1.07 ± 0.12	÷	3.18 ± 0.35	5.12 ± 0.56	÷	12.0 ± 1.3	17.7 ± 1.9	25.5 ± 2.8	0.014	0.021	÷	0.043	0.059	÷	0.10	0.13	0.17
Kepler-529*	0	0.13 ± 0.01	÷	÷	53.2 ± 5.9	168 ± 18	441 ± 49		0	0.005	÷	÷	0.28	0.60	1.1	
	0.13 ± 0.01	0.59 ± 0.06	÷	5.42 ± 0.60	÷	27.3 ± 3.0	53.2 ± 5.9	97.2 ± 11	0.005	0.014	÷	0.061	÷	0.18	0.28	0.42
	0.37 ± 0.04	0.91 ± 0.10	÷	3.95 ± 0.43	7.33 ± 0.81	÷	21.4 ± 2.4	34.4 ± 3.8	53.2 ± 5.9	0.010	0.019	÷	0.049	0.075	÷	0.15	0.21	0.28
Kepler-539	0	2.09 ± 0.23	÷	÷	6441 ± 709	24097 ± 2651	71027 ± 7813		0	0.035	÷	÷	7.5	18.0	37.1	
	2.09 ± 0.23	21.0 ± 2.3	÷	407 ± 45	÷	2931 ± 322	6441 ± 709	12917 ± 1421	0.035	0.16	÷	1.2	÷	4.4	7.5	11.9
	10.7 ± 1.2	38.5 ± 4.2	÷	272 ± 30	593 ± 65	÷	2199 ± 242	3855 ± 424	6441 ± 709	0.10	0.25	÷	0.9	1.5	÷	3.7	5.3	7.5
Kepler-549*	2.85 ± 0.31	12.9 ± 1.4	÷	÷	276 ± 30	585 ± 64	1141 ± 126		0.037	0.10	÷	÷	0.78	1.3	2.0	
	12.9 ± 1.4	24.2 ± 2.7	÷	72.4 ± 8.0	÷	183 ± 20	276 ± 30	407 ± 45	0.10	0.16	÷	0.32	÷	0.60	0.78	1.0
	19.8 ± 2.2	29.5 ± 3.2	÷	61.1 ± 6.7	85.3 ± 9.4	÷	158 ± 17	210 ± 23	276 ± 30	0.14	0.18	÷	0.29	0.36	÷	0.54	0.65	0.78
Kepler-561*	0	0	÷	÷	321 ± 35	1208 ± 133	3575 ± 393		0	0	÷	÷	0.90	2.2	4.5	
	0	0.99 ± 0.11	÷	19.9 ± 2.2	÷	145 ± 16	321 ± 35	646 ± 71	0	0.019	÷	0.14	÷	0.53	0.90	1.4
	0.50 ± 0.06	1.84 ± 0.20	÷	13.2 ± 1.5	29.1 ± 3.2	÷	109 ± 12	191 ± 21	321 ± 35	0.012	0.029	÷	0.11	0.18	÷	0.44	0.64	0.90
Kepler-57*	1.02 ± 0.11	2.57 ± 0.28	÷	÷	21.8 ± 2.4	38.7 ± 4.3	65.2 ± 7.2		0.019	0.035	÷	÷	0.15	0.21	0.30	
	2.57 ± 0.28	3.89 ± 0.43	÷	8.24 ± 0.91	÷	16.1 ± 1.8	21.8 ± 2.4	29.3 ± 3.2	0.035	0.046	÷	0.076	÷	0.12	0.15	0.18
	3.40 ± 0.37	4.44 ± 0.49	÷	7.32 ± 0.81	9.26 ± 1.0	÷	14.4 ± 1.6	17.8 ± 2.0	21.8 ± 2.4	0.042	0.050	÷	0.070	0.082	÷	0.11	0.13	0.15
Kepler-59*	4.69 ± 0.52	7.60 ± 0.84	÷	÷	26.5 ± 2.9	38.2 ± 4.2	53.8 ± 5.9		0.056	0.078	÷	÷	0.18	0.23	0.29	
	7.60 ± 0.84	9.54 ± 1.0	÷	14.7 ± 1.6	÷	21.9 ± 2.4	26.5 ± 2.9	31.9 ± 3.5	0.078	0.09	÷	0.12	÷	0.16	0.18	0.20
	8.85 ± 0.97	10.3 ± 1.1	÷	13.7 ± 1.5	15.7 ± 1.7	÷	20.5 ± 2.3	23.4 ± 2.6	26.5 ± 2.9	0.086	0.10	÷	0.12	0.13	÷	0.15	0.16	0.18
Kepler-605*	1.07 ± 0.12	1.61 ± 0.18	÷	÷	4.76 ± 0.52	6.56 ± 0.72	8.91 ± 0.98		0.020	0.026	÷	÷	0.053	0.066	0.081	
	1.61 ± 0.18	1.95 ± 0.21	÷	2.83 ± 0.31	÷	4.02 ± 0.44	4.76 ± 0.52	5.60 ± 0.62	0.026	0.029	÷	0.038	÷	0.048	0.053	0.059
	1.83 ± 0.20	2.08 ± 0.23	÷	2.67 ± 0.29	3.01 ± 0.33	÷	3.80 ± 0.42	4.25 ± 0.47	4.76 ± 0.52	0.028	0.031	÷	0.036	0.039	÷	0.046	0.049	0.053
Kepler-610*	0	0	÷	÷	1150 ± 127	5208 ± 573	17394 ± 1913		0	0	÷	÷	2.1	5.9	13.1	
	0	0.60 ± 0.07	÷	39.6 ± 4.4	÷	455 ± 50	1150 ± 127	2566 ± 282	0	0.014	÷	0.23	÷	1.2	2.1	3.7
	0.20 ± 0.02	1.54 ± 0.17	÷	23.5 ± 2.6	64.2 ± 7.1	÷	323 ± 36	630 ± 69	1150 ± 127	0.007	0.026	÷	0.16	0.31	÷	0.9	1.4	2.1
Kepler-616*	0	0.30 ± 0.03	÷	÷	451 ± 50	1601 ± 176	4552 ± 501		0	0.009	÷	÷	1.2	2.7	5.5	
	0.30 ± 0.03	2.22 ± 0.24	÷	33.2 ± 3.7	÷	213 ± 23	451 ± 50	879 ± 97	0.009	0.034	÷	0.21	÷	0.71	1.2	1.8
	1.22 ± 0.13	3.83 ± 0.42	÷	22.9 ± 2.5	47.3 ± 5.2	÷	162 ± 18	277 ± 30	451 ± 50	0.023	0.049	÷	0.16	0.26	÷	0.59	0.84	1.2

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)								
Kepler-619*	0	0.16 ± 0.02	÷	÷	17.9 ± 2.0	48.6 ± 5.3	114 ± 13			0	0.006	÷	÷	0.14	0.26	0.47		
	0.16 ± 0.02	0.48 ± 0.05	÷	2.68 ± 0.29	÷	10.1 ± 1.1	17.9 ± 2.0	30.1 ± 3.3		0.006	0.012	÷	0.038	÷	0.09	0.14	0.19	
	0.34 ± 0.04	0.67 ± 0.07	÷	2.08 ± 0.23	3.42 ± 0.38	÷	8.28 ± 0.91	12.3 ± 1.4	17.9 ± 2.0	0.010	0.015	÷	0.032	0.045	÷	0.081	0.11	0.14
Kepler-625*	0.95 ± 0.10	2.08 ± 0.23	÷	÷	13.6 ± 1.5	22.8 ± 2.5	36.6 ± 4.0			0.019	0.033	÷	÷	0.11	0.16	0.22		
	2.08 ± 0.23	2.98 ± 0.33	÷	5.73 ± 0.63	÷	10.3 ± 1.1	13.6 ± 1.5	17.7 ± 1.9		0.033	0.041	÷	0.064	÷	0.09	0.11	0.14	
	2.65 ± 0.29	3.34 ± 0.37	÷	5.16 ± 0.57	6.35 ± 0.70	÷	9.41 ± 1.0	11.3 ± 1.2	13.6 ± 1.5	0.038	0.045	÷	0.060	0.068	÷	0.089	0.10	0.11
Kepler-653*	0	0	÷	÷	98.9 ± 11	418 ± 46	1336 ± 147			0	0	÷	÷	0.42	1.1	2.4		
	0	0	÷	4.28 ± 0.47	÷	41.2 ± 4.5	98.9 ± 11	212 ± 23		0	0	÷	0.052	÷	0.23	0.42	0.70	
	0	0.24 ± 0.03	÷	2.66 ± 0.29	6.66 ± 0.73	÷	29.8 ± 3.3	56.0 ± 6.2	98.9 ± 11	0	0.008	÷	0.038	0.070	÷	0.19	0.29	0.42
Kepler-69	0	0	÷	÷	1686 ± 185	7272 ± 800	23535 ± 2589			0	0	÷	÷	2.3	6.2	13.5		
	0	1.51 ± 0.17	÷	68.4 ± 7.5	÷	692 ± 76	1686 ± 185	3661 ± 403		0	0.022	÷	0.27	÷	1.3	2.3	3.9	
	0.58 ± 0.06	3.45 ± 0.38	÷	41.9 ± 4.6	108 ± 12	÷	498 ± 55	945 ± 104	1686 ± 185	0.011	0.038	÷	0.20	0.37	÷	1.0	1.6	2.3
Kepler-712*	0	0.38 ± 0.04	÷	÷	1241 ± 137	4657 ± 512	13755 ± 1513			0	0.010	÷	÷	2.1	5.0	10.4		
	0.38 ± 0.04	3.95 ± 0.43	÷	77.6 ± 8.5	÷	563 ± 62	1241 ± 137	2493 ± 274		0.010	0.045	÷	0.33	÷	1.2	2.1	3.3	
	2.00 ± 0.22	7.27 ± 0.80	÷	51.8 ± 5.7	113 ± 12	÷	422 ± 46	742 ± 82	1241 ± 137	0.029	0.068	÷	0.25	0.42	÷	1.0	1.5	2.1
Kepler-722*	0	0	÷	÷	854 ± 94	4024 ± 443	13772 ± 1515			0	0	÷	÷	1.8	5.1	11.5		
	0	0.28 ± 0.03	÷	25.8 ± 2.8	÷	328 ± 36	854 ± 94	1949 ± 214		0	0.009	÷	0.17	÷	1.0	1.8	3.1	
	0	0.79 ± 0.09	÷	14.8 ± 1.6	42.8 ± 4.7	÷	230 ± 25	459 ± 50	854 ± 94	0	0.017	÷	0.12	0.24	÷	0.75	1.2	1.8
Kepler-732*	0	0	÷	÷	51.3 ± 5.6	191 ± 21	563 ± 62			0	0	÷	÷	0.21	0.51	1.0		
	0	0.17 ± 0.02	÷	3.26 ± 0.36	÷	23.4 ± 2.6	51.3 ± 5.6	103 ± 11		0	0.005	÷	0.034	÷	0.13	0.21	0.34	
	0	0.31 ± 0.03	÷	2.18 ± 0.24	4.76 ± 0.52	÷	17.6 ± 1.9	30.7 ± 3.4	51.3 ± 5.6	0	0.007	÷	0.026	0.043	÷	0.10	0.15	0.21
Kepler-750*	0.49 ± 0.05	1.55 ± 0.17	÷	÷	19.6 ± 2.2	37.7 ± 4.1	68.0 ± 7.5			0.013	0.028	÷	÷	0.15	0.23	0.34		
	1.55 ± 0.17	2.57 ± 0.28	÷	6.30 ± 0.69	÷	13.8 ± 1.5	19.6 ± 2.2	27.5 ± 3.0		0.028	0.039	÷	0.070	÷	0.12	0.15	0.19	
	2.18 ± 0.24	3.01 ± 0.33	÷	5.47 ± 0.60	7.23 ± 0.80	÷	12.2 ± 1.3	15.5 ± 1.7	19.6 ± 2.2	0.035	0.043	÷	0.064	0.077	÷	0.11	0.13	0.15
Kepler-755*	0.16 ± 0.02	0.50 ± 0.06	÷	÷	5.82 ± 0.64	11.0 ± 1.2	19.6 ± 2.2			0.005	0.011	÷	÷	0.058	0.089	0.13		
	0.50 ± 0.06	0.81 ± 0.09	÷	1.93 ± 0.21	÷	4.12 ± 0.45	5.82 ± 0.64	8.08 ± 0.89		0.011	0.016	÷	0.028	÷	0.046	0.058	0.072	
	0.69 ± 0.08	0.94 ± 0.10	÷	1.68 ± 0.18	2.20 ± 0.24	÷	3.65 ± 0.40	4.63 ± 0.51	5.82 ± 0.64	0.014	0.017	÷	0.025	0.030	÷	0.043	0.050	0.058
Kepler-760*	0	0.50 ± 0.06	÷	÷	24.7 ± 2.7	59.9 ± 6.6	130 ± 14			0	0.012	÷	÷	0.16	0.29	0.49		
	0.50 ± 0.06	1.17 ± 0.13	÷	4.79 ± 0.53	÷	15.0 ± 1.7	24.7 ± 2.7	39.1 ± 4.3		0.012	0.021	÷	0.054	÷	0.12	0.16	0.22	
	0.89 ± 0.10	1.52 ± 0.17	÷	3.87 ± 0.43	5.88 ± 0.65	÷	12.6 ± 1.4	17.8 ± 2.0	24.7 ± 2.7	0.018	0.025	÷	0.047	0.062	÷	0.10	0.13	0.16
Kepler-769*	1.10 ± 0.12	3.09 ± 0.34	÷	÷	31.5 ± 3.5	58.0 ± 6.4	101 ± 11			0.022	0.043	÷	÷	0.20	0.30	0.44		
	3.09 ± 0.34	4.87 ± 0.54	÷	11.0 ± 1.2	÷	22.7 ± 2.5	31.5 ± 3.5	43.1 ± 4.7		0.043	0.058	÷	0.10	÷	0.16	0.20	0.25	
	4.20 ± 0.46	5.62 ± 0.62	÷	9.70 ± 1.1	12.5 ± 1.4	÷	20.2 ± 2.2	25.3 ± 2.8	31.5 ± 3.5	0.053	0.064	÷	0.09	0.11	÷	0.15	0.17	0.20
Kepler-804*	3.98 ± 0.44	6.30 ± 0.69	÷	÷	20.9 ± 2.3	29.7 ± 3.3	41.3 ± 4.5			0.048	0.066	÷	÷	0.15	0.18	0.23		
	6.30 ± 0.69	7.83 ± 0.86	÷	11.8 ± 1.3	÷	17.4 ± 1.9	20.9 ± 2.3	24.9 ± 2.7		0.066	0.076	÷	0.10	÷	0.13	0.15	0.16	
	7.29 ± 0.80	8.40 ± 0.92	÷	11.1 ± 1.2	12.6 ± 1.4	÷	16.3 ± 1.8	18.5 ± 2.0	20.9 ± 2.3	0.073	0.080	÷	0.10	0.10	÷	0.12	0.13	0.15
Kepler-825*	0.55 ± 0.06	1.55 ± 0.17	÷	÷	16.2 ± 1.8	30.0 ± 3.3	52.5 ± 5.8			0.013	0.026	÷	÷	0.12	0.18	0.27		
	1.55 ± 0.17	2.46 ± 0.27	÷	5.63 ± 0.62	÷	11.6 ± 1.3	16.2 ± 1.8	22.3 ± 2.5		0.026	0.035	÷	0.060	÷	0.10	0.12	0.15	
	2.12 ± 0.23	2.85 ± 0.31	÷	4.94 ± 0.54	6.39 ± 0.70	÷	10.4 ± 1.1	13.0 ± 1.4	16.2 ± 1.8	0.031	0.038	÷	0.055	0.066	÷	0.09	0.11	0.12

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)							
Kepler-87	35.5 ± 3.9	65.7 ± 7.2	÷ ÷	306 ± 34	473 ± 52	711 ± 78			0.22	0.33	÷ ÷	0.9	1.2	1.6		
	65.7 ± 7.2	87.4 ± 9.6	÷ 149 ± 16	÷	243 ± 27	306 ± 34	382 ± 42		0.33	0.40	÷ 0.57	÷	0.79	0.9	1.1	
	79.6 ± 8.8	95.8 ± 11	÷ 137 ± 15	162 ± 18	÷	225 ± 25	263 ± 29	306 ± 34	0.38	0.43	÷ 0.54	0.61	÷	0.75	0.84	0.9
Kepler-887*	0.54 ± 0.06	2.36 ± 0.26	÷ ÷	47.5 ± 5.2	99.6 ± 11	193 ± 21			0.014	0.036	÷ ÷	0.27	0.44	0.69		
	2.36 ± 0.26	4.37 ± 0.48	÷ 12.7 ± 1.4	÷	31.6 ± 3.5	47.5 ± 5.2	69.6 ± 7.7		0.036	0.055	÷ 0.11	÷	0.21	0.27	0.35	
	3.58 ± 0.39	5.29 ± 0.58	÷ 10.8 ± 1.2	15.0 ± 1.7	÷	27.4 ± 3.0	36.3 ± 4.0	47.5 ± 5.2	0.048	0.063	÷ 0.10	0.13	÷	0.19	0.23	0.27
Kepler-903*	0	0.77 ± 0.08	÷ ÷	251 ± 28	775 ± 85	1997 ± 220			0	0.016	÷ ÷	0.76	1.6	3.0		
	0.77 ± 0.08	3.25 ± 0.36	÷ 27.3 ± 3.0	÷	131 ± 14	251 ± 28	453 ± 50		0.016	0.042	÷ 0.17	÷	0.49	0.76	1.1	
	2.09 ± 0.23	4.91 ± 0.54	÷ 20.1 ± 2.2	36.5 ± 4.0	÷	104 ± 11	164 ± 18	251 ± 28	0.031	0.055	÷ 0.14	0.21	÷	0.42	0.58	0.76
Kepler-920*	0	0	÷ ÷	656 ± 72	2726 ± 300	8616 ± 948			0	0	÷ ÷	1.5	3.8	8.1		
	0	0.84 ± 0.09	÷ 30.0 ± 3.3	÷	277 ± 30	656 ± 72	1395 ± 153		0	0.017	÷ 0.19	÷	0.82	1.5	2.4	
	0.35 ± 0.04	1.81 ± 0.20	÷ 18.8 ± 2.1	46.2 ± 5.1	÷	201 ± 22	374 ± 41	656 ± 72	0.010	0.029	÷ 0.14	0.25	÷	0.66	1.0	1.5
Kepler-93	0	0	÷ ÷	0	0	0			0	0	÷ ÷	0	0	0		
	0	0	÷ 0	÷	0	0	0		0	0	÷ 0	÷	0	0	0	
	0	0	÷ 0	0	÷	0	0	0	0	0	÷ 0	0	÷	0	0	0
Kepler-937*	8.51 ± 0.94	26.2 ± 2.9	÷ ÷	315 ± 35	599 ± 66	1070 ± 118			0.081	0.17	÷ ÷	0.9	1.4	2.0		
	26.2 ± 2.9	42.9 ± 4.7	÷ 103 ± 11	÷	222 ± 24	315 ± 35	438 ± 48		0.17	0.24	÷ 0.43	÷	0.72	0.9	1.1	
	36.6 ± 4.0	50.2 ± 5.5	÷ 90.0 ± 9.9	118 ± 13	÷	197 ± 22	250 ± 28	315 ± 35	0.21	0.27	÷ 0.39	0.47	÷	0.66	0.77	0.9
Kepler-94	0	0	÷ ÷	0	0	0			0	0	÷ ÷	0	0	0		
	0	0	÷ 0	÷	0	0	0		0	0	÷ 0	÷	0	0	0	
	0	0	÷ 0	0	÷	0	0	0	0	0	÷ 0	0	÷	0	0	0
Kepler-953*	0	0.22 ± 0.02	÷ ÷	458 ± 50	1662 ± 183	4799 ± 528			0	0.007	÷ ÷	1.2	2.7	5.5		
	0.22 ± 0.02	1.90 ± 0.21	÷ 31.6 ± 3.5	÷	213 ± 23	458 ± 50	903 ± 99		0.007	0.030	÷ 0.19	÷	0.69	1.2	1.8	
	1.01 ± 0.11	3.35 ± 0.37	÷ 21.5 ± 2.4	45.4 ± 5.0	÷	161 ± 18	278 ± 31	458 ± 50	0.020	0.044	÷ 0.15	0.25	÷	0.58	0.83	1.2
Kepler-967*	0	0	÷ ÷	1276 ± 140	5266 ± 579	16561 ± 1822			0	0	÷ ÷	2.1	5.4	11.6		
	0	1.76 ± 0.19	÷ 59.7 ± 6.6	÷	541 ± 60	1276 ± 140	2702 ± 297		0	0.026	÷ 0.27	÷	1.2	2.1	3.5	
	0.75 ± 0.08	3.73 ± 0.41	÷ 37.6 ± 4.1	91.6 ± 10	÷	395 ± 43	730 ± 80	1276 ± 140	0.015	0.043	÷ 0.20	0.36	÷	1.0	1.4	2.1
Kepler-968*	1.39 ± 0.15	2.31 ± 0.25	÷ ÷	8.57 ± 0.94	12.5 ± 1.4	17.9 ± 2.0			0.020	0.029	÷ ÷	0.069	0.088	0.11		
	2.31 ± 0.25	2.93 ± 0.32	÷ 4.61 ± 0.51	÷	7.02 ± 0.77	8.57 ± 0.94	10.4 ± 1.1		0.029	0.034	÷ 0.045	÷	0.060	0.069	0.078	
	2.71 ± 0.30	3.17 ± 0.35	÷ 4.29 ± 0.47	4.95 ± 0.54	÷	6.56 ± 0.72	7.51 ± 0.83	8.57 ± 0.94	0.032	0.035	÷ 0.043	0.048	÷	0.057	0.063	0.069
Kepler-969*	0	0	÷ ÷	251 ± 28	1121 ± 123	3706 ± 408			0	0	÷ ÷	0.75	2.0	4.5		
	0	0.16 ± 0.02	÷ 9.14 ± 1.0	÷	101 ± 11	251 ± 28	556 ± 61		0	0.005	÷ 0.082	÷	0.41	0.75	1.3	
	0	0.39 ± 0.04	÷ 5.47 ± 0.60	14.7 ± 1.6	÷	71.7 ± 7.9	139 ± 15	251 ± 28	0	0.010	÷ 0.058	0.11	÷	0.32	0.50	0.75
Kepler-990*	0	0	÷ ÷	69.9 ± 7.7	304 ± 33	990 ± 109			0	0	÷ ÷	0.33	0.87	1.9		
	0	0	÷ 2.75 ± 0.30	÷	28.5 ± 3.1	69.9 ± 7.7	153 ± 17		0	0	÷ 0.038	÷	0.18	0.33	0.55	
	0	0.13 ± 0.01	÷ 1.68 ± 0.18	4.35 ± 0.48	÷	20.5 ± 2.3	39.0 ± 4.3	69.9 ± 7.7	0	0.005	÷ 0.027	0.052	÷	0.14	0.22	0.33
NN Ser	575 ± 63	1356 ± 149	÷ ÷	10196 ± 1122	17592 ± 1935	29004 ± 3190			1.2	2.1	÷ ÷	8.0	11.5	16.0		
	1356 ± 149	1997 ± 220	÷ 4046 ± 445	÷	7610 ± 837	10196 ± 1122	13476 ± 1482		2.1	2.7	÷ 4.3	÷	6.6	8.0	9.6	
	1760 ± 194	2260 ± 249	÷ 3617 ± 398	4517 ± 497	÷	6881 ± 757	8403 ± 924	10196 ± 1122	2.5	2.9	÷ 4.0	4.6	÷	6.1	7.0	8.0

Table A5. (Continued) Predictions of planets for systems with two confirmed planets (three variants for each system)

System	Period P_n (days)								Semi-major axis a_n (AU)								
OGLE-2006-BLG-109L	117 ± 13	535 ± 59	÷	÷	11627 ± 1279	24700 ± 2717	48236 ± 5306			0.37	1.0	÷	÷	8.0	13.2	20.6		
	535 ± 59	1010 ± 111	÷	3032 ± 334	÷	7674 ± 844	11627 ± 1279	17148 ± 1886		1.0	1.6	÷	3.3	÷	6.1	8.0	10.4	
	823 ± 91	1231 ± 135	÷	2559 ± 281	3576 ± 393	÷	6638 ± 730	8843 ± 973	11627 ± 1279	1.4	1.8	÷	2.9	3.6	÷	5.5	6.7	8.0
TYC 1422-614-1	12.0 ± 1.3	57.5 ± 6.3	÷	÷	1341 ± 148	2883 ± 317	5685 ± 625			0.11	0.30	÷	÷	2.5	4.1	6.4		
	57.5 ± 6.3	110 ± 12	÷	341 ± 38	÷	878 ± 97	1341 ± 148	1990 ± 219		0.30	0.47	÷	1.0	÷	1.9	2.5	3.2	
	89.6 ± 9.9	135 ± 15	÷	286 ± 31	403 ± 44	÷	758 ± 83	1015 ± 112	1341 ± 148	0.41	0.53	÷	0.88	1.1	÷	1.7	2.0	2.5
UZ For	81.0 ± 8.9	484 ± 53	÷	÷	15008 ± 1651	33872 ± 3726	69356 ± 7629			0.34	1.1	÷	÷	11.1	19.0	30.7		
	484 ± 53	1000 ± 110	÷	3433 ± 378	÷	9545 ± 1050	15008 ± 1651	22860 ± 2515		1.1	1.8	÷	4.1	÷	8.2	11.1	14.6	
	793 ± 87	1251 ± 138	÷	2843 ± 313	4123 ± 454	÷	8144 ± 896	11142 ± 1226	15008 ± 1651	1.6	2.1	÷	3.6	4.7	÷	7.4	9.1	11.1
XO-2 S	0	0.98 ± 0.11	÷	÷	537 ± 59	1745 ± 192	4668 ± 513			0	0.019	÷	÷	1.3	2.8	5.3		
	0.98 ± 0.11	4.95 ± 0.54	÷	50.7 ± 5.6	÷	270 ± 30	537 ± 59	997 ± 110		0.019	0.056	÷	0.26	÷	0.80	1.3	1.9	
	3.02 ± 0.33	7.81 ± 0.86	÷	36.4 ± 4.0	69.3 ± 7.6	÷	211 ± 23	343 ± 38	537 ± 59	0.040	0.075	÷	0.21	0.32	÷	0.68	0.9	1.3
gam Lib	48.8 ± 5.4	157 ± 17	÷	÷	2011 ± 221	3874 ± 426	6995 ± 769			0.30	0.65	÷	÷	3.5	5.5	8.1		
	157 ± 17	260 ± 29	÷	642 ± 71	÷	1407 ± 155	2011 ± 221	2816 ± 310		0.65	0.9	÷	1.7	÷	2.8	3.5	4.4	
	221 ± 24	306 ± 34	÷	558 ± 61	737 ± 81	÷	1243 ± 137	1589 ± 175	2011 ± 221	0.81	1.0	÷	1.5	1.8	÷	2.6	3.0	3.5
nu Oph	0.61 ± 0.07	45.4 ± 5.0	÷	÷	12067 ± 1327	36372 ± 4001	92332 ± 10157			0.021	0.36	÷	÷	15.0	31.4	58.4		
	45.4 ± 5.0	178 ± 20	÷	1386 ± 152	÷	6373 ± 701	12067 ± 1327	21488 ± 2364		0.36	0.9	÷	3.6	÷	9.8	15.0	22.1	
	117 ± 13	264 ± 29	÷	1030 ± 113	1839 ± 202	÷	5069 ± 558	7945 ± 874	12067 ± 1327	0.68	1.2	÷	2.9	4.3	÷	8.4	11.4	15.0
rho CrB	3.26 ± 0.36	13.0 ± 1.4	÷	÷	232 ± 26	476 ± 52	903 ± 99			0.041	0.10	÷	÷	0.71	1.1	1.8		
	13.0 ± 1.4	23.3 ± 2.6	÷	65.1 ± 7.2	÷	156 ± 17	232 ± 26	336 ± 37		0.10	0.15	÷	0.30	÷	0.55	0.71	0.9	
	19.3 ± 2.1	28.0 ± 3.1	÷	55.5 ± 6.1	76.0 ± 8.4	÷	136 ± 15	179 ± 20	232 ± 26	0.14	0.17	÷	0.27	0.34	÷	0.50	0.60	0.71

÷confirmed planet

*one or more values for a_n are obtained from the TCE catalogue[18] or calculated by Kepler's third law.

APPENDIX B

Table B1. Advanced predictions of planets (in parentheses the values from the TCE catalogue[18]).

System	Confirmed planets	Period P_n (days) Semi-major axis a_n (AU)														
Kepler-154_b*	5	1.26 ± 0.14 0.022	2.26 ± 0.25 0.033	÷	6.24 ± 0.69 0.065	÷	14.9 ± 1.6 0.12	÷	÷	44.8 ± 4.9 0.24	÷	84.8 ± 9.3 0.37	114 ± 13 0.45	151 ± 17 0.54	197 ± 22 (202.95) 0.65 (0.65365)	
Kepler-224_a	4	0.65 ± 0.07 0.013	1.50 ± 0.17 0.023	÷	÷	÷	÷	30.8 ± 3.4 0.17	48.7 ± 5.4 0.24	74.5 ± 8.2 0.31	111 ± 12 0.41	161 ± 18 0.52	228 ± 25 (246.335) 0.66 (0.7031)			
Kepler-282*	4	4.35 ± 0.48 0.050	6.47 ± 0.71 0.065	÷	÷	18.6 ± 2.0 0.13	÷	34.3 ± 3.8 0.20	÷	59.8 ± 6.6 0.28	77.5 ± 8.5 0.34	99.4 ± 11 0.40	126 ± 14 0.47	159 ± 17 0.55	198 ± 22 (203.258) 0.63 (0.6258)	
Kepler-164_b	3	2.10 ± 0.23 0.032	3.31 ± 0.36 0.044	÷	7.49 ± 0.82 0.076	÷	15.4 ± 1.7 0.12	21.4 ± 2.3 0.15	÷	39.3 ± 4.3 0.23	52.1 ± 5.7 0.28	68.3 ± 7.5 0.33	88.4 ± 9.7 (94.885) 0.39 (0.412425)			
Kepler-279_b*	3	5.07 ± 0.56 0.062	7.97 ± 0.88 0.084	÷	18.0 ± 2.0 0.14	26.0 ± 2.9 0.18	÷	÷	69.6 ± 7.7 0.36	93.6 ± 10 0.43	124 ± 14 0.52	162 ± 18 0.63	210 ± 23 (217.709) 0.74 (0.7454)			
Kepler-289_b	3	15.4 ± 1.7 0.12	23.3 ± 2.6 0.16	÷	49.2 ± 5.4 0.27	÷	95.5 ± 11 0.41	÷	174 ± 19 0.62	229 ± 25 0.74	299 ± 33 0.89	386 ± 42 1.0	493 ± 54 (459.269) 1.2 (1.164)			
Kepler-450_b*	3	3.33 ± 0.37 0.047	5.05 ± 0.56 0.063	÷	10.7 ± 1.2 0.10	÷	21.0 ± 2.3 0.16	÷	38.5 ± 4.2 0.24	50.9 ± 5.6 0.29	66.5 ± 7.3 0.35	86.0 ± 9.5 0.41	110 ± 12 0.49	139 ± 15 0.57	175 ± 19 0.66	218 ± 24 0.77	269 ± 30 (261.39) 0.89 (0.8787)
Kepler-770*	3	0.11 ± 0.01 0.005	0.48 ± 0.05 0.012	÷	÷	9.20 ± 1.0 0.087	÷	36.7 ± 4.0 0.22	66.0 ± 7.3 0.32	113 ± 12 0.46	184 ± 20 0.64	290 ± 32 0.87	443 ± 49 (412.312) 1.2 (1.321)			
Kepler-105*	2	3.50 ± 0.39 (3.43591) 0.047 (0.04367)	4.15 ± 0.46 0.053	4.90 ± 0.54 0.059	÷	÷	7.86 ± 0.86 0.081	9.13 ± 1.0 0.09	10.6±1.2 0.099							
Kepler-136	2	1.47 ± 0.16 (1.37202) 0.027 (0.02562)	2.36 ± 0.26 0.037	3.66 ± 0.40 0.049	5.52 ± 0.61 0.065	8.10 ± 0.89 0.083	÷	÷	22.5 ± 2.5 0.16	30.6 ± 3.4 0.2	40.9 ± 4.5 0.25					
Kepler-1468*	2	2.21 ± 0.24 0.034	2.82 ± 0.31 0.039	÷	4.43 ± 0.49 0.053	5.49 ± 0.60 0.061	6.75 ± 0.74 0.071	÷	10.0 ± 1.1 0.092	12.1 ± 1.3 0.1	14.5 ± 1.6 0.12	17.3 ± 1.9 0.13	20.5 ± 2.3 (19.59) 0.15 (0.14365)			
Kepler-1641*	2	7.58 ± 0.83 (7.314087) 0.078 (0.07614)	9.29 ± 1.0 0.089	11.3 ± 1.2 0.1	13.7 ± 1.5 0.12	16.5 ± 1.8 0.13	÷	23.4 ± 2.6 0.17	27.7 ± 3.0 0.19	÷	38.3 ± 4.2 0.23	44.8 ± 4.9 0.25	52.1 ± 5.7 0.28			
Kepler-196	2	11.1 ± 1.2 0.091	15.3 ± 1.7 0.11	÷	27.7 ± 3.0 0.17	36.5 ± 4.0 0.2	÷	61.2 ± 6.7 0.28	78.0 ± 8.6 0.33	98.5 ± 11 0.39	123 ± 14 (122.07975) 0.45 (0.45225)					
Kepler-209	2	0.54 ± 0.06 (0.566808) 0.013 (0.013037)	1.26 ± 0.14 0.022	2.65 ± 0.29 0.037	5.14 ± 0.57 0.057	9.33 ± 1.0 0.085	÷	26.4 ± 2.9 0.17	÷	64.1 ± 7.1 0.31	95.5 ± 11 0.4	139 ± 15 0.51				
Kepler-225	2	0.41 ± 0.05 0.009	1.95 ± 0.21 0.025	÷	÷	45.1 ± 5.0 0.20	97.0 ± 11 0.33	191 ± 21 0.52	351 ± 39 (352.521) 0.78 (0.7878)							
Kepler-232	2	0.61 ± 0.07 (0.589365) 0.014 (0.013783)	0.96 ± 0.11 0.019	1.46 ± 0.16 0.026	2.16 ± 0.24 0.033	3.13 ± 0.34 0.043	÷	6.17 ± 0.68 0.067	8.44 ± 0.93 0.083	÷	15.1 ± 1.7 0.12	19.7 ± 2.2 0.15	25.6 ± 2.8 0.17			
Kepler-269	2	2.87 ± 0.32 (2.836725) 0.040 (0.03945)	3.37 ± 0.37 0.045	3.94 ± 0.43 0.050	4.58 ± 0.50 0.055	÷	6.15 ± 0.68 0.067	7.09 ± 0.78 0.074	÷	9.32 ± 1.0 0.089	10.6 ± 1.2 0.097	12.1 ± 1.3 0.11				
Kepler-320	2	2.49 ± 0.27 (2.404525) 0.038 (0.036637)	3.45 ± 0.38 0.047	4.70 ± 0.52 0.058	6.30 ± 0.69 0.071	÷	10.9 ± 1.2 0.10	14.1 ± 1.6 0.12	÷	22.8 ± 2.5 0.17	28.6 ± 3.1 0.19	35.6 ± 3.9 0.22				

Table B1. (Continued) Advanced predictions of planets (in parentheses the values from the TCE catalogue[18]).

System	Confirmed planets	**Period P_n (days)** **Semi-major axis a_n (AU)**										
Kepler-347	2	7.23 ± 0.80 0.075	9.67 ± 1.1 0.091	÷	16.6 ± 1.8 0.13	21.5 ± 2.4 0.16	÷	34.6 ± 3.8 0.21	43.4 ± 4.8 0.25	53.9 ± 5.9 0.29	66.5 ± 7.3 0.33	81.4 ± 9.0 0.38
Kepler-352	2	4.85 ± 0.53 (4.788455) 0.052 (0.051858)	5.86 ± 0.64 0.059	7.05 ± 0.78 0.067	8.43 ± 0.93 0.076	÷	11.9 ± 1.3 0.095	14.0 ± 1.5 0.11	÷	19.1 ± 2.1 0.13	22.3 ± 2.5 0.14	25.8 ± 2.8 0.16
Kepler-385	2	4.10 ± 0.45 0.053	6.54 ± 0.72 0.073	÷	÷	22.1 ± 2.4 0.16	31.5 ± 3.5 0.21	44.1 ± 4.9 0.26	60.6 ± 6.7 (56.415975) 0.32 (0.2983)		82.0 ± 9.0 (86.43305) 0.39 (0.39795)	
Kepler-411*	2	0.94 ± 0.10 0.018	1.72 ± 0.19 0.026	÷	4.95 ± 0.54 0.053	÷	12.2 ± 1.3 0.097	18.2 ± 2.0 0.13	26.6 ± 2.9 0.16	37.9 ± 4.2 0.21	53.0 ± 5.8 (58.01995) 0.26 (0.275975)	
Kepler-87	2	8.25 ± 0.91 (8.976945) 0.083 (0.08361)	17.9 ± 2.0 0.14	35.5 ± 3.9 0.22	65.7 ± 7.2 0.33	÷	÷	306 ± 34 0.93	473 ± 52 1.2	711 ± 78 1.6		

÷confirmed planet

*one or more values for a_n are obtained from the TCE catalogue[18] or calculated by Kepler's third law.