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Two years of *Ulysses* dust data

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Abstract. From October 18, 1990 to February 8, 1992 the *Ulysses* spacecraft traversed interplanetary space between the Earth and Jupiter; at Jupiter the spacecraft was deflected below the ecliptic onto a highly-inclined orbit ($i \sim 80°$). Here, we report on dust impact data obtained from launch until the end of 1992, nearly a year after the Jupiter flyby. During that time (792 days), the *Ulysses* dust detector recorded 968 impacts of dust particles with masses ranging from 10^{-16} g to 10^{-8} g. The impact rate varied from as low as one impact per week during quiet times to more than one per minute during the dust stream of March 10–11, 1992. In this paper, we present and describe the complete data set including both raw and reduced data. The performance of the sensor, which has been very satisfactory so far, is discussed in detail together with the noise discrimination scheme employed. The instrument's detection threshold is given as a function of both the particle's mass and its speed relative to *Ulysses*. The derived impact rates and the distribution of particle masses, speeds and impact directions are compared to a model of the meteoroid complex.

Introduction

The *Ulysses* Dust Detector, and its twin instrument the *Galileo* Dust Detector, are highly sensitive multi-coincidence impact ionization sensors. The instruments have been described previously by Grün *et al.* (1992a, b) and a detailed description of their sensitivities is presented in a companion paper (Grün *et al.*, 1995a; henceforth Paper I). Data from the *Ulysses* dust experiment have been published during all stages of the mission. Initial measurements and instrument performance were presented by Grün *et al.* (1992c, d) and Baguhl *et al.* (1992). Measurements obtained during the Jupiter flyby are described by Grün *et al.* (1992e). The discoveries of jovian dust streams and interstellar dust are discussed by Grün *et al.* (1993). Detailed re-analysis of the full data set by Baguhl *et al.* (1993) has revealed "small" impacts that were previously ignored.

Other relevant papers consider flybys of comets or asteroids (Riemann and Grün, 1992; Hamilton and Burns, 1992). Implications of *Ulysses* data with respect to zodiacal light and other interplanetary meteoroid measurements have been discussed by Mann *et al.* (1992), Divine (1993), and Mann and Grün (1993). Further analyses of the jovian streams detected with the *Ulysses* dust detector can be found in Horanyi *et al.* (1993a, b), and in Hamilton and Burns (1993). Aspects of interstellar dust detection are discussed by Grün *et al.* (1994) and Baguhl *et al.* (1994).

The purpose of this paper is to present both raw and reduced dust data obtained by *Ulysses* from October 1990 to the end of 1992 for further analysis by researchers external to the *Galileo* and *Ulysses* Dust Science Team. The main data product is a table of all impacts (both raw and reduced data) received on the ground. Together with papers on the reduction of *Galileo* and *Ulysses* dust data (Paper I) and on the first three years of *Galileo* dust data (Grün *et al.*, 1995b, Paper II), this set represents a detailed account of dust measurements from the initial phases of

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the *Galileo* and *Ulysses* missions. The information presented in the three papers is equivalent to data which we are submitting to the various data archiving centers (Planetary Data System, NSSDC, *Ulysses* Data Center, etc.).

Mission and instrument operations

The purpose of the *Ulysses* mission is to explore the solar system within a few astronomical units (1–5.4 AU) of the Sun over a wide range of ecliptic latitudes (−80° to +80°). After launch in October 1990 *Ulysses* flew on a direct trajectory to Jupiter where it was deflected onto its out-of-ecliptic orbit (Fig. 1). Table 1 gives a set of orbital elements suitable for approximating the different portions of the trajectory. By the end of 1992, *Ulysses* had reached an ecliptic latitude of −15.6°. The spacecraft is spinning with its spin axis pointing within a few degrees of the Earth; Fig. 2 plots the deviation of the spin axis from the Earth direction during the period considered. More details of the *Ulysses* mission and spacecraft itself can be found in Wenzel *et al.* (1992).

The *Ulysses* mission provides continuous data coverage for all of its instruments. Each data record containing the full information about a single dust impact consists of 128 bits of data. During the maximum real-time data transmission rate of 1024 bits s^{-1}, dust data are transmitted at 8 bits s^{-1}. Nominally this occurs for 8 h per day; during the remaining 16 h, data from all instruments are recorded on board at half the nominal rate and are transmitted to ground along with the next real-time transmission. Sometimes, due to radio link limitations, the data transmission or recording rate dropped to as low as 128 bits s^{-1} and the dust data rate dropped correspondingly.

Significant mission and dust instrument events are listed in Table 2. The dust instrument was switched on three weeks after launch at which point dust measurements commenced. During occasional in-flight noise tests, the instrument was put into a highly sensitive state so that the noise behavior could be measured. During most of the time, however, it was kept at a state where only about ten clearly identifiable noise events occurred per day.

During the initial mission phase, the interior of the sensor was illuminated by the Sun which heated it significantly. Because of the noise produced by photoelectrons the channeltron high voltage, which determines the sensitivity of the instrument, was only gradually increased to HV = 3 (1137 V). The nominal high voltage HV = 4 (1250 V) could not be reached because of unexpected noise on the channeltron. The *Galileo* detector experienced the same noise, and it is assumed that the nearby radioactive thermal generators (RTGs) are to blame although other causes cannot be excluded. During ground tests (without RTGs) no such noise was observed.

Strong noise was also observed during sounder operation of the URAP experiment (Stone *et al.*, 1992) aboard *Ulysses*. This interference, which was not expected, caused significant dead time (about 20%) for the dust instrument. After reducing the sounder operation to a lower rate, acceptable dead times of a few percent were achieved. Other noise sources identified during the mission include direct sunlight into the dust sensor as well as energetic particles from solar flares or radiation belts (Baguhl *et al.*, 1992, 1993). Despite the high noise rates during these times, true dust impacts can still be identified. As an example, in Fig. 3 we show details of the impact and noise rates during the Jupiter flyby.

The only anomaly detected in the instrument performance was that for about 20% of all events the sector counter (SEC) did not give the correct value; instead subsequent events inherited the previous SEC value. This effect was traced to a timing error in the instrument electronics and through reprogramming of the *Ulysses* instrument in 1993, the flaw was corrected.

Impact events

During the initial 26 months of the *Ulysses* mission, complete data corresponding to 15,747 events including 968

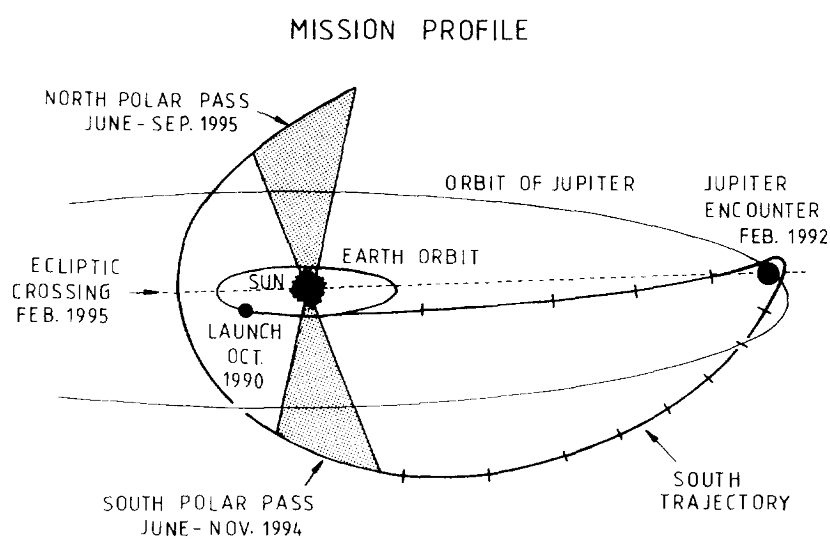

Fig. 1. A depiction of the *Ulysses* orbit showing the three major stages of the mission: the in-ecliptic trajectory to Jupiter, the Jupiter encounter and the highly inclined pass over the solar poles. The tick marks along the orbit are spaced 100 days apart. Dust data given in this paper covers the *Ulysses* orbit from launch to about the third tick mark after Jupiter

Table 1. Three sets of orbital elements that approximate different parts of the *Ulysses* trajectory—the in-ecliptic leg, the Jupiter flyby, and the out-of-ecliptic leg (AU = 149, 597, 871 km, R_J = 71,398 km)

Orbital elements		Valid time range (error < 300,000 km)
In-ecliptic orbit branch		
Epoch	1991 Jul. 18 21 : 00 : 54	
Perihelion	0.99546 AU	
Eccentricity	0.89001	1990–286 12:00
Inclination	1.9926	to
Long. of asc. node	12.688	1991–341 12:00
Arg. of perihelion	7.9595	
Mean anomaly	10.105	
True anomaly	123.10	
Jovicentric orbit		
Epoch	1992 Feb. 08 12:01:10	
Perijove	6.3050 R_J	
Eccentricity	1.6625	1991–341 12:00
Inclination	142.23	to
Long. of asc. node	316.95	1992–145 00:00
Arg. of perihelion	127.70	
Mean anomaly	0.0099	
Out-of-ecliptic orbit branch		
Epoch	1992 Dec. 30 21 : 00 : 04	
Perihelion	1.3408 AU	
Eccentricity	0.60238	1992–145 00:00
Inclination	79.184	to
Long. of asc. node	337.51	1993–001 00:00
Arg. of perihelion	358.88	
Mean anomaly	232.33	
True anomaly	196.98	

dust impacts were received on the ground. Table 3 displays the number of dust impacts detected in intervals of about 7 days. Many of the noise events were recorded during the rare times when both the sounder was operating and the dust instrument was configured to its high sensitive state for noise tests. At these times, 14 noise events were recorded in three high amplitude categories: seven events in AC21, two in AC31 and five in AC12. Here "AC*xy*"

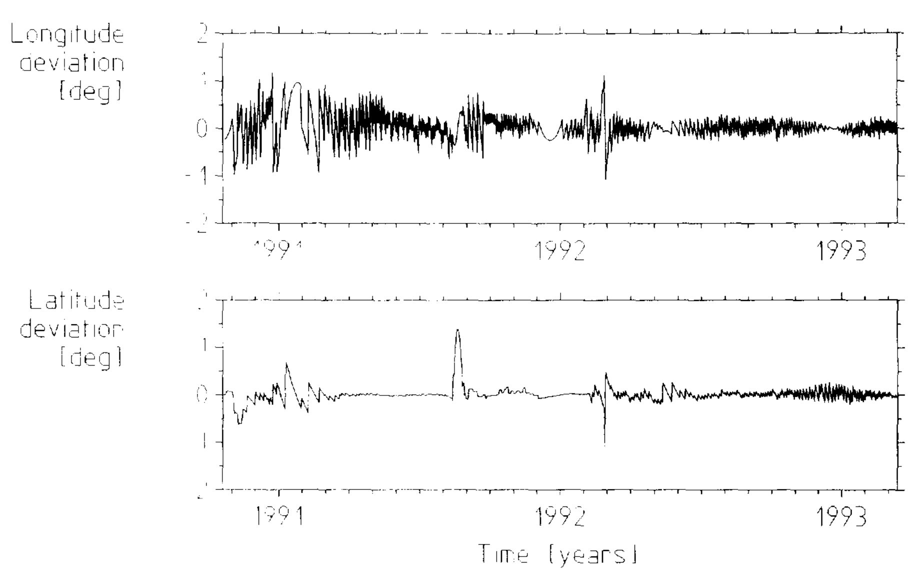

Fig. 2. The deviation of the spin axis orientation from the nominal Earth-pointing alignment both in longitude and latitude. Both angles are given in the coordinate system referred to the 1950.0 Earth mean ecliptic and equinox

Table 2. *Ulysses* mission and dust detector (DUST) configurations, tests, and other events

Yr-DOY	Date	Time	Event
90-279	(6 Oct. 1990)		*Ulysses* launch
90-292	(19 Oct. 1990)		DUST cover release
90-300	(27 Oct. 1990)	18:52	DUST on, test and configuration: HV = 0, EVD = C, I, E; SSEN = 0, 0, 0, 0, short time
90-301	(28 Oct. 1990)	00:13	DUST configuration: EVD = I, SSEN = 0, 0, 1, 1
90-303	(30 Oct. 1990)	18:04	DUST noise test, counter reset
90-304	(31 Oct. 1990)	18:09	DUST noise test
90-305	(1 Nov. 1990)	18:23	DUST noise test
90-308	(4 Nov. 1990)	07:00	DUST begin of sounder interferences
90-310	(6 Nov. 1990)	19:32	DUST noise test, configuration: HV = 1, EVD = C, I
90-311	(7 Nov. 1990)	17:45	DUST noise test, sounder interference test
90-319	(15 Nov. 1990)	19:30	DUST reduced sounder interference
90-324	(20 Nov. 1990)	19:30	DUST noise test, sounder interference test
90-344	(10 Dec. 1990)	17:54	DUST noise test, sounder interference test, configuration: HV = 2
90-354	(20 Dec. 1990)	19:22	DUST noise test, sounder interference test
91-002	(2 Jan. 1991)	18:48	DUST noise test, configuration: HV = 3, EVD = C, I, E; SSEN = 0, 0, 0, 1
91-014	(14 Jan. 1991)	21:44	DUST configuration: EVD = C, I
91-037	(6 Feb. 1991)	00:50	DUST configuration: HV = 1
91-165	(14 June 1991)	15:04	*Ulysses* anomaly, DUST off
91-169	(18 June 1991)	17:00	DUST on, configuration: HV = 1, EVD = C, I, SSEN = 0, 0, 0, 1
91-297	(24 Oct. 1991)	14:16	DUST noise test
91-330	(26 Nov. 1991)	16:00	DUST configuration: HV = 3
92-034	(3 Feb. 1992)	00:10	DUST configuration: HV = 2
92-038	(7 Feb. 1992)	18:18	DUST configuration: HV = 1, EVD = I, SSEN = 1, 0, 0, 1
92-038	(7 Feb. 1992)	19:18	DUST configuration: SSEN = 2, 0, 2, 2
92-038	(7 Feb. 1992)	20:18	DUST configuration: SSEN = 3, 1, 3, 3
92-039	(8 Feb. 1992)	12:04	*Ulysses* Jupiter closest approach
92-040	(9 Feb. 1992)	02:21	DUST configuration: SSEN = 2, 0, 2, 2
92-040	(9 Feb. 1992)	03:21	DUST configuration: SSEN = 1, 0, 1, 1
92-040	(9 Feb. 1992)	04:21	DUST configuration: HV = 2, EVD = C, I, SSEN = 0, 0, 0, 1
92-041	(10 Feb. 1992)	17:00	DUST configuration: HV = 3
92-320	(15 Nov. 1992)	11:50	DUST noise test

Abbreviations used to describe the instrument configuration: HV, channeltron high voltage step; EVD, event definition, ion- (I), channeltron- (C), or electron-channel (E); SSEN, detection thresholds ICP, CCP, ECP, and PCP.

refers to class number "*x*" and amplitude range "*y*" (for a detailed description of the accumulator categories see Paper I).

During these and other noisy periods (noise tests, initial

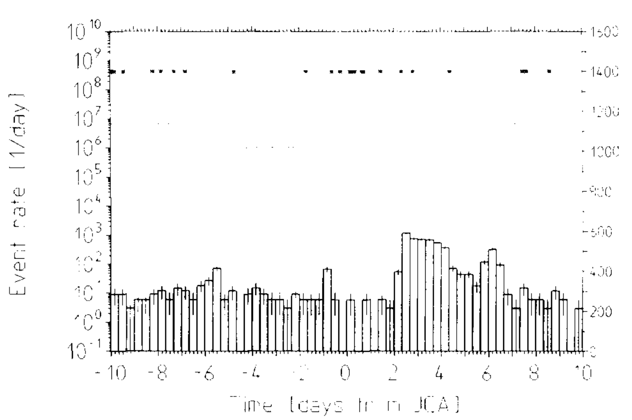

Fig. 3. Details of the measurements during Jupiter flyby. The bars in the lower part of the figure and the left scale indicate the noise rate. The voltage on the channeltron is indicated by the dotted line and the right scale; its value was lowered by ground command during the flyby to reduce noise events. Finally, dust impacts are indicated by stars in the upper part of the figure

sounder operations, solar flare events or radiation belt crossings) many events were recorded only as "counts" since their charge amplitudes and other characteristics were overwritten before the data could be transmitted to ground (see bottom of Table 3). Since the dust impact rate was low during times surrounding these periods, it is expected that no true dust impacts were lost. Only during the main dust stream on March 10 and 11, 1992, when impact rates were extremely high, were complete data from some true impacts not recorded. Approximately 190 additional stream particle impacts (Baguhl, 1993) were only counted and have to be added to the 369 stream particles for which full information was recovered. The missing stream particles all belong to the AC01, AC11 and AC02 categories. With the exception of these three categories and a single particle in the AC23 category, complete information of all true dust impacts was successfully transmitted to Earth.

A list of all 968 impacts completely received on the ground is displayed in Table 4. Dust particles are identified by a sequence number and their impact time. The event category—class (CLN) and amplitude range (AR)—are also given. Raw data as received on ground are displayed next: sector value (SEC) at time of impact, impact charge

Table 3. Overview of accumulated big impacts during the first two years of the *Ulysses* mission. Switch-on of the instrument is indicated by horizontal lines. The heliocentric distances r (AU), the lengths of the time intervals Δt (days) from the previous date, and the corresponding numbers of impacts are given for each of the 21 accumulators. These are arranged in order of six increasing signal amplitudes (AR), with four event classes for each amplitude (CLN = 0, 1, 2, 3); e.g. AC31 means counter for amplitude range 1 and class number 3. The three accumulators that usually contain noise events are marked by "*". The totals of counted impacts, of impacts with complete data, and of all events (noise plus impact events) for the entire period are given as well

Date	Time	r(AU)	Δt(d)	AC 01	AC 11	AC 21	AC 31	AC 02	AC 12	AC 22	AC 32	AC 03	AC 13	AC 23	AC 33	AC 04	AC 14	AC 24	AC 34	AC 05	AC 15	AC 25	AC 35	AC 06	AC 16	AC 26	AC 36
90/300	18:52	1.025	0.0																								
90/307	02:04	1.054	6.3	*	*	-	-	*	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
90/321	00:02	1.146	13.9	*	*	-	1	*	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
90/328	00:03	1.203	7.0	*	*	-	1	*	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
90/349	00:03	1.404	21.0	*	*	-	1	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
90/356	00:02	1.478	7.0	*	*	-	-	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/012	00:00	1.705	21.0	*	*	-	1	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/019	00:00	1.784	7.0	*	*	-	1	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/026	00:02	1.862	7.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
91/040	00:00	2.018	14.0	*	*	-	1	*	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
91/054	00:02	2.174	14.0	*	*	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
91/061	00:00	2.250	7.0	*	*	-	-	*	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
91/089	00:04	2.553	28.0	*	*	-	-	*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/111	00:00	2.785	22.0	*	*	-	-	*	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
91/119	00:05	2.868	8.0	*	*	-	-	*	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/126	00:00	2.939	7.0	*	*	-	2	*	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
91/140	00:03	3.081	14.0	*	*	-	-	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/147	00:07	3.151	7.0	*	*	-	-	*	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/165	00:04	3.328	18.0	*	*	-	-	*	1	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-
91/169	17:00	3.375	4.7																								
91/177	00:02	3.444	7.3	*	*	-	-	*	-	-	1	-	-	-	1	-	-	-	3	-	-	-	-	-	-	-	-
91/198	00:04	3.643	21.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
91/205	00:02	3.709	7.0	*	*	-	-	*	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/212	00:03	3.773	7.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-
91/226	11:07	3.905	14.5	*	*	-	-	*	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
91/240	10:58	4.031	14.0	*	*	-	-	*	1	1	2	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-
91/248	00:04	4.099	7.5	*	*	-	-	*	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
91/269	00:02	4.283	21.0	*	*	-	-	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/276	00:03	4.344	7.0	*	*	-	-	*	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/290	00:05	4.463	14.0	*	*	-	-	*	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/297	00:03	4.523	7.0	*	*	-	-	*	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
91/304	00:07	4.582	7.0	*	*	-	-	*	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
91/311	00:07	4.640	7.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
91/318	00:05	4.698	7.0	*	*	-	-	*	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
91/325	00:05	4.756	7.0	*	*	-	-	*	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/332	00:03	4.813	7.0	*	*	-	-	*	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/346	00:02	4.927	14.0	*	*	-	-	*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91/353	00:00	4.984	7.0	*	*	-	3	*	1	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
91/361	00:02	5.048	8.0	*	*	-	2	*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/003	00:02	5.103	7.0	*	*	-	-	*	-	-	2	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-

Table 3. (*Continued*)

Date	Time	r(AU)	Δt(d)	AC 01	AC 11	AC 21	AC 31	AC 02	AC 12	AC 22	AC 32	AC 03	AC 13	AC 23	AC 33	AC 04	AC 14	AC 24	AC 34	AC 05	AC 15	AC 25	AC 35	AC 06	AC 16	AC 26	AC 36
92/010	00:01	5.159	7.0	*	*	-	5	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/017	00:03	5.215	7.0	*	*	-	2	*	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/024	00:00	5.269	7.0	*	*	-	2	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/031	00:03	5.326	7.0	*	*	-	-	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/038	00:02	5.385	7.0	*	*	-	-	*	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
92/040	00:02	5.402	2.0	*	*	-	-	*	1	-	-	-	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-
92/042	00:02	5.403	2.0	*	*	-	-	*	-	-	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/049	00:00	5.403	7.0	*	*	-	-	*	2	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/056	00:04	5.402	7.0	*	*	-	1	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/070	00:00	5.400	14.0	*	*	-	1	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/077	00:01	5.398	7.0	*	*	-	110	*	1	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/084	00:00	5.397	7.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/092	00:03	5.394	8.0	*	*	-	-	*	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/099	00:03	5.392	7.0	*	*	-	4	*	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
92/106	00:05	5.389	7.0	*	*	-	5	*	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/113	00:01	5.386	7.0	*	*	-	2	*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/127	00:02	5.379	14.0	*	*	-	6	*	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/134	00:00	5.375	7.0	*	*	-	-	*	-	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/141	00:00	5.370	7.0	*	*	-	-	*	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/148	00:04	5.366	7.0	*	*	-	-	*	1	-	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
92/155	00:03	5.361	7.0	*	*	-	-	*	1	-	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
92/162	00:00	5.356	7.0	*	*	-	4	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/169	00:00	5.350	7.0	*	*	-	-	*	-	-	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
92/176	00:03	5.344	7.0	*	*	-	-	*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/190	00:00	5.332	14.0	*	*	-	2	*	-	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/204	00:07	5.318	14.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/225	00:00	5.295	21.0	*	*	-	-	*	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/232	00:03	5.287	7.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/246	00:02	5.270	14.0	*	*	-	1	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/253	00:00	5.260	7.0	*	*	-	1	*	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/260	00:00	5.251	7.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/267	00:02	5.241	7.0	*	*	-	-	*	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/288	00:05	5.210	21.0	*	*	-	-	*	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/295	00:05	5.199	7.0	*	*	-	1	*	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/302	00:05	5.187	7.0	*	*	-	2	*	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/309	00:05	5.176	7.0	*	*	-	-	*	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/316	00:00	5.164	7.0	*	*	-	-	*	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92/323	00:08	5.151	7.0	*	*	-	-	*	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/330	00:08	5.139	7.0	*	*	-	-	*	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/337	00:01	5.126	7.0	*	*	-	-	*	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/344	00:02	5.113	7.0	*	*	-	-	*	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
92/351	00:02	5.099	7.0	*	*	-	-	*	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/358	00:00	5.085	7.0	*	*	-	1	*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92/365	00:06	5.071	7.0	*	*	-	-	*	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Impacts (counted)				*	*	0	163	*	32	2	66	3	9	2	42	0	0	0	12	0	0	0	1	0	1	0	1
Impacts (complete data)				555	37	0	163	43	32	2	66	3	9	1	42	0	0	0	12	0	0	0	1	0	1	0	1
All events (complete data)				13093	2060	7	165	245	37	2	66	5	9	1	42	0	0	0	12	0	0	0	1	0	1	0	1

Table 4. Raw data: No., impact time, CLN, AR, SEC, IA, EA, CA, IT, ET, EIT, EIC, IIC, PA, PET, EVD, ICP, ECP, CCP, PCP, HV; and evaluated data: R, LON, LAT, D_{Jup}, rotation angle (ROT), instr. pointing (S_{LON}, S_{LAT}), speed (v), speed error factor (VEF), mass (m) and mass error factor (MEF)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
1	90-301 13:51	0	1	200	5	12	0	6	7	7	0	0	35	0	5	0	1	0	1	0	1.02835	41.8	1.0	10806.8	171	191	-80	43.5	1.9	$2.4 \cdot 10^{-15}$	10.5
2	90-301 18:46	0	1	149	2	13	0	15	14	0	1	0	47	31	5	0	1	0	1	0	1.02937	42.1	1.0	10795.8	99	207	-9	11.8	11.8	$1.7 \cdot 10^{-13}$	5858.3
3	90-302 03:12	0	3	173	23	28	0	13	6	6	0	0	31	1	5	0	1	0	1	0	1.03092	42.6	1.0	10779.2	133	204	-42	8.6	5.2	$6.9 \cdot 10^{-11}$	343.5
4	90-302 21:34	0	1	158	2	8	0	15	7	6	0	0	3	31	5	0	1	0	1	0	1.03412	43.6	1.0	10746.0	112	206	-21	56.0	2.0	$2.6 \cdot 10^{-16}$	12.5
5	90-302 22:04	0	1	161	3	10	0	8	7	8	0	0	3	31	5	0	1	0	1	0	1.03412	43.6	1.0	10746.0	116	205	-25	21.4	1.9	$1.7 \cdot 10^{-14}$	10.5
6	90-303 04:24	0	1	130	2	7	0	8	8	6	0	0	3	31	5	0	1	0	1	0	1.03521	43.9	1.0	10734.9	72	211	17	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
7	90-303 13:09	0	2	46	9	14	0	7	7	5	0	0	3	31	5	0	1	0	1	0	1.03688	44.3	1.0	10718.3	999	999	999	43.7	1.6	$6.4 \cdot 10^{-15}$	6.0
8	90-303 23:09	0	1	140	4	9	0	7	7	6	0	0	4	31	4	0	1	0	1	0	1.03858	44.8	1.1	10701.8	86	209	3	43.7	1.6	$1.2 \cdot 10^{-15}$	6.0
9	90-304 13:30	0	2	188	8	8	0	6	15	0	1	0	42	30	5	0	1	0	1	0	1.04148	45.6	1.1	10674.2	154	200	-63	43.5	1.9	$2.1 \cdot 10^{-15}$	10.5
10	90-304 13:38	0	1	32	1	13	0	15	15	0	1	0	4	31	5	0	1	0	1	0	1.04148	45.6	1.1	10674.2	294	15	23	11.8	11.8	$1.4 \cdot 10^{-13}$	5858.3
11	90-305 07:39	0	1	149	6	9	0	6	15	0	1	0	43	30	5	0	1	0	1	0	1.04508	46.5	1.1	10641.1	99	207	-8	10.0	5.4	$2.5 \cdot 10^{-13}$	377.1
12	90-305 13:46	0	2	50	12	20	0	7	8	5	0	0	33	31	5	0	1	0	1	0	1.04631	46.8	1.1	10630.0	999	999	999	34.1	1.9	$5.2 \cdot 10^{-14}$	10.5
13	90-306 06:18	0	2	187	8	15	0	7	0	6	0	0	4	31	5	0	1	0	1	0	1.05007	47.8	1.1	10597.0	152	201	-61	34.1	1.9	$1.7 \cdot 10^{-14}$	10.5
14	90-306 10:04	0	1	68	1	7	0	15	7	11	0	0	3	30	5	0	1	0	1	0	1.05070	47.9	1.1	10591.5	345	345	70	56.0	2.0	$1.8 \cdot 10^{-16}$	12.5
15	90-306 10:42	0	2	105	8	15	0	6	0	0	1	0	4	31	5	0	1	0	1	0	1.05070	47.9	1.1	10591.5	37	221	51	43.5	1.9	$6.2 \cdot 10^{-15}$	10.5
16	90-306 11:51	0	1	105	3	10	0	8	6	8	0	0	3	0	5	0	1	0	1	0	1.05070	47.9	1.1	10591.5	37	221	51	21.4	1.9	$1.7 \cdot 10^{-14}$	10.5
17	90-306 13:25	0	1	105	2	9	0	9	6	7	0	0	3	31	5	0	1	0	1	0	1.05135	48.1	1.2	10586.0	999	999	999	11.8	11.8	$8.8 \cdot 10^{-14}$	5858.3
18	90-307 21:40	0	1	127	4	4	0	7	15	0	1	0	3	31	5	0	1	0	1	0	1.05862	49.7	1.2	10525.5	67	211	22	34.1	1.9	$1.4 \cdot 10^{-15}$	10.5
19	90-308 00:43	0	1	165	3	9	0	8	6	8	0	0	5	31	5	0	1	0	1	0	1.05930	49.9	1.2	10520.1	120	203	-30	38.7	1.6	$1.7 \cdot 10^{-15}$	6.0
20	90-308 19:50	0	3	149	19	25	0	7	5	6	0	0	45	0	5	0	1	0	1	0	1.06344	50.8	1.2	10487.2	98	206	-7	28.1	1.6	$4.4 \cdot 10^{-13}$	6.0
21	90-308 20:24	0	2	68	11	14	0	14	15	0	1	0	2	30	5	0	1	0	1	0	1.06344	50.8	1.2	10487.2	344	345	70	2.1	1.6	$2.0 \cdot 10^{-10}$	6.0
22	90-310 01:00	0	1	48	3	13	0	8	15	0	1	0	47	31	5	0	1	0	1	0	1.07061	52.3	1.3	10432.5	999	999	999	21.4	1.9	$2.8 \cdot 10^{-14}$	10.5
23	90-310 02:09	0	1	88	3	17	0	7	15	11	0	0	33	0	5	0	1	0	1	0	1.07061	52.3	1.3	10432.5	12	249	73	34.1	1.9	$7.2 \cdot 10^{-15}$	10.5
24	90-310 13:24	0	1	56	4	17	0	8	15	10	0	0	33	0	5	0	1	0	1	0	1.07356	52.9	1.3	10410.6	327	2	55	21.4	1.9	$4.3 \cdot 10^{-14}$	10.5
25	90-311 03:12	0	1	111	1	15	0	15	0	0	1	0	47	31	1	0	1	0	1	1	1.07732	53.6	1.3	10383.4	44	217	44	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
26	90-311 07:15	0	1	15	4	10	0	7	6	7	0	0	3	31	1	0	1	0	1	1	1.07808	53.7	1.3	10377.9	999	999	999	48.9	1.6	$9.0 \cdot 10^{-16}$	6.0
27	90-311 13:43	0	1	153	3	9	0	8	7	8	0	0	2	31	1	0	1	0	1	1	1.07961	54.0	1.3	10367.0	999	999	999	34.6	1.6	$2.7 \cdot 10^{-15}$	6.0
28	90-312 21:22	0	1	8	3	19	0	6	15	0	1	0	47	31	1	0	1	0	1	1	1.08823	55.6	1.4	10307.3	259	19	-11	43.5	1.9	$3.3 \cdot 10^{-15}$	10.5
29	90-312 22:30	0	1	145	1	5	0	15	7	6	0	0	3	31	1	0	1	0	1	1	1.08823	55.6	1.4	10307.3	92	208	-1	56.0	2.0	$1.3 \cdot 10^{-16}$	12.5
30	90-313 05:36	0	1	201	3	13	0	8	15	0	1	0	47	31	1	0	1	0	1	1	1.08984	55.9	1.4	10296.4	999	999	999	21.4	1.9	$2.8 \cdot 10^{-14}$	10.5
31	90-314 06:34	3	1	130	7	11	5	6	6	5	0	1	3	31	1	0	1	0	1	1	1.09720	57.2	1.4	10247.8	70	210	19	55.2	1.6	$1.1 \cdot 10^{-15}$	6.0
32	90-314 23:36	1	1	1	1	21	1	15	14	0	1	1	41	31	1	0	1	0	1	1	1.10138	57.9	1.4	10220.8	999	999	999	11.8	11.8	$3.5 \cdot 10^{-13}$	5858.3
33	90-315 08:32	0	1	144	3	15	0	8	0	0	1	0	3	30	1	0	1	0	1	1	1.10393	58.3	1.4	10204.6	90	207	0	21.4	1.9	$3.7 \cdot 10^{-14}$	10.5
34	90-315 17:38	0	1	139	2	7	0	9	6	6	0	0	3	31	1	0	1	0	1	1	1.10650	58.7	1.4	10188.5	83	208	7	70.0	2.0	$9.1 \cdot 10^{-17}$	12.5
35	90-316 13:36	0	1	153	6	13	0	6	6	7	0	0	36	0	1	0	1	0	1	1	1.11258	59.6	1.5	10150.9	102	206	-12	43.5	1.9	$3.3 \cdot 10^{-15}$	10.5
36	90-317 12:17	0	1	160	5	10	0	7	6	7	0	0	4	31	1	0	1	0	1	1	1.11969	60.7	1.5	10108.1	112	204	-21	48.9	1.6	$1.1 \cdot 10^{-15}$	6.0
37	90-318 17:23	0	1	182	4	1	0	7	15	10	0	0	45	20	1	0	1	0	1	1	1.12788	61.9	1.5	10060.2	142	199	-52	34.1	1.9	$8.9 \cdot 10^{-16}$	10.5
38	90-318 23:21	0	1	149	1	6	0	15	6	9	0	0	3	31	1	0	1	0	1	1	1.12973	62.2	1.5	10049.5	96	205	-6	70.0	2.0	$6.3 \cdot 10^{-17}$	12.5
39	90-319 16:24	0	1	88	1	14	0	15	15	0	1	0	47	31	1	0	1	0	1	1	1.13532	63.0	1.5	10017.7	10	251	74	11.8	11.8	$1.6 \cdot 10^{-13}$	5858.3
40	90-321 01:06	0	1	232	2	7	0	15	8	7	0	0	3	31	1	0	1	0	1	1	1.14581	64.4	1.6	9959.5	212	23	-57	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
41	90-321 07:34	3	4	17	25	26	10	11	9	15	0	1	30	0	1	0	1	0	1	1	1.14774	64.7	1.6	9949.0	270	16	0	2.5	1.9	$3.7 \cdot 10^{-09}$	10.5
42	90-321 17:03	0	1	240	1	12	0	15	8	0	1	0	47	30	1	0	1	0	1	1	1.15066	65.1	1.6	9933.2	223	21	-46	11.8	11.8	$1.2 \cdot 10^{-13}$	5858.3
43	90-322 09:37	0	1	148	4	8	0	8	7	7	0	0	3	31	1	0	1	0	1	1	1.15656	65.8	1.6	9901.7	94	205	-4	34.6	1.6	$2.7 \cdot 10^{-15}$	6.0
44	90-322 09:37	0	2	195	10	19	0	7	5	6	0	0	38	0	1	0	1	0	1	1	1.15656	65.8	1.6	9901.7	160	195	-69	34.1	1.9	$2.9 \cdot 10^{-14}$	10.5
45	90-322 22:08	0	1	94	1	6	0	15	7	9	0	0	3	29	1	0	1	0	1	1	1.16054	66.3	1.6	9880.7	18	235	68	56.0	2.0	$1.5 \cdot 10^{-16}$	12.5
46	90-323 02:53	0	1	198	3	6	0	9	5	10	1	0	14	20	1	0	1	0	1	1	1.16154	66.5	1.6	9875.5	164	193	-73	31.4	1.8	$2.2 \cdot 10^{-15}$	9.5
47	90-323 07:13	0	1	4	2	7	0	9	6	7	0	0	4	31	1	0	1	0	1	1	1.16354	66.7	1.6	9865.1	251	18	-18	70.0	2.0	$9.1 \cdot 10^{-17}$	12.5
48	90-323 16:41	0	1	149	3	7	0	7	7	6	0	0	3	31	1	0	1	0	1	1	1.16657	67.1	1.6	9849.4	95	205	-5	43.7	1.6	$7.2 \cdot 10^{-16}$	6.0
49	90-323 18:28	3	1	138	4	9	8	7	6	5	0	1	3	31	1	0	1	0	1	1	1.16758	67.2	1.6	9844.2	80	207	10	48.9	1.6	$7.5 \cdot 10^{-16}$	6.0
50	90-324 02:19	0	1	105	3	7	0	8	7	8	0	0	3	30	1	0	1	0	1	1	1.16961	67.5	1.6	9833.8	33	220	55	34.6	1.6	$1.9 \cdot 10^{-15}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
51	90-324 23:19	0	1	59	4	11	0	6	10	0	1	0	47	29	1	0	1	0	1	1	1.17678	68.3	1.6	9797.4	328	359	56	43.5	1.9	$1.7 \cdot 10^{-15}$	10.5
52	90-325 16:45	0	1	205	4	8	0	7	7	7	0	0	4	29	1	0	1	0	1	1	1.18300	69.0	1.7	9766.3	173	182	-82	43.7	1.6	$1.0 \cdot 10^{-15}$	6.0
53	90-326 12:50	1	6	107	60	9	31	3	0	4	1	1	31	0	1	0	1	0	1	1	1.19035	69.9	1.7	9730.2	999	999	999	11.8	11.8	$6.4 \cdot 10^{-11}$	5858.3
54	90-326 22:23	0	1	197	1	15	0	15	0	0	1	0	46	31	1	0	1	0	1	1	1.19353	70.2	1.7	9714.8	999	999	999	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
55	90-327 12:24	0	1	193	7	5	0	9	11	0	1	0	44	20	1	0	1	0	1	1	1.19887	70.8	1.7	9689.1	156	195	-65	14.1	1.9	$6.4 \cdot 10^{-14}$	10.5
56	90-327 16:44	0	1	95	3	8	0	7	8	8	0	0	3	30	1	0	1	0	1	1	1.19994	70.9	1.7	9684.0	18	232	68	35.4	1.6	$2.1 \cdot 10^{-15}$	6.0
57	90-327 19:05	0	3	141	19	24	0	6	6	5	0	0	44	0	1	0	1	0	1	1	1.20101	71.1	1.7	9678.8	83	205	6	28.0	1.6	$3.8 \cdot 10^{-13}$	6.0
58	90-328 13:55	0	1	112	3	6	0	9	15	0	1	0	45	30	1	0	1	0	1	1	1.20750	71.8	1.7	9648.2	42	214	46	5.7	2.1	$4.8 \cdot 10^{-13}$	15.7
59	90-330 04:37	0	1	160	2	6	0	15	6	8	0	0	3	30	1	0	1	0	1	1	1.22176	73.3	1.7	9582.1	109	202	-19	70.0	2.0	$7.6 \cdot 10^{-17}$	12.5
60	90-331 19:04	0	1	145	3	21	0	8	14	0	1	0	47	31	1	0	1	0	1	1	1.23631	74.7	1.8	9516.5	87	203	2	21.4	1.9	$7.0 \cdot 10^{-14}$	10.5
61	90-331 20:20	0	1	154	5	10	0	7	7	6	0	0	2	29	1	0	1	0	1	1	1.23631	74.7	1.8	9516.5	100	201	-9	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
62	90-332 13:21	0	1	243	1	11	0	15	3	10	0	0	39	30	1	0	1	0	1	1	1.24312	75.4	1.8	9486.4	225	17	-44	11.8	11.8	$1.0 \cdot 10^{-13}$	5858.3
63	90-332 13:45	0	1	127	3	12	0	9	15	15	1	0	47	31	1	0	1	0	1	1	1.24312	75.4	1.8	9486.4	62	207	27	14.1	1.9	$1.1 \cdot 10^{-13}$	10.5
64	90-333 22:00	0	1	44	3	13	0	6	15	0	1	0	47	31	1	0	1	0	1	1	1.25573	76.6	1.8	9431.5	305	7	33	43.5	1.9	$2.0 \cdot 10^{-15}$	10.5
65	90-334 06:38	0	1	129	4	12	0	8	15	0	1	0	47	31	1	0	1	0	1	1	1.25921	76.9	1.8	9416.6	64	206	25	21.4	1.9	$2.8 \cdot 10^{-14}$	10.5
66	90-334 08:03	0	1	180	4	11	0	8	15	0	1	0	47	31	1	0	1	0	1	1	1.25921	76.9	1.8	9416.6	136	197	-45	21.4	1.9	$2.4 \cdot 10^{-14}$	10.5
67	90-335 15:04	1	1	209	1	22	2	15	7	0	1	1	63	29	1	0	1	0	1	1	1.27205	78.0	1.8	9362.2	999	999	999	11.8	11.8	$4.1 \cdot 10^{-13}$	5858.3
68	90-336 04:05	0	1	181	5	14	0	9	15	15	1	0	59	29	1	0	1	0	1	1	1.27676	78.5	1.8	9342.5	137	196	-46	14.1	1.9	$2.1 \cdot 10^{-13}$	10.5
69	90-336 17:18	0	1	98	3	12	0	9	15	0	1	0	47	31	1	0	1	0	1	1	1.28149	78.9	1.8	9322.8	20	226	67	14.1	1.9	$1.1 \cdot 10^{-13}$	10.5
70	90-336 18:31	0	1	109	3	12	0	9	15	0	1	0	47	31	1	0	1	0	1	1	1.28268	79.0	1.8	9317.9	35	213	53	14.1	1.9	$1.1 \cdot 10^{-13}$	10.5
71	90-336 22:00	0	1	108	7	4	0	13	15	0	1	0	42	30	1	0	1	0	1	1	1.28387	79.1	1.8	9313.0	999	999	999	2.5	1.9	$1.0 \cdot 10^{-11}$	10.5
72	90-337 02:50	0	2	148	8	13	0	7	7	6	0	0	36	0	1	0	1	0	1	1	1.28506	79.2	1.8	9308.1	90	201	0	43.7	1.6	$4.7 \cdot 10^{-15}$	6.0
73	90-337 09:09	0	1	173	3	12	0	9	15	0	1	0	47	31	1	0	1	0	1	1	1.28863	79.5	1.8	9293.4	125	197	-34	14.1	1.9	$1.1 \cdot 10^{-13}$	10.5
74	90-338 17:48	0	1	172	7	4	0	6	15	0	1	0	0	0	1	0	1	0	1	1	1.30063	80.5	1.8	9244.7	123	197	-32	43.5	1.9	$8.5 \cdot 10^{-16}$	10.5
75	90-338 22:08	0	1	182	3	12	0	9	15	0	1	0	47	31	1	0	1	0	1	1	1.30305	80.7	1.8	9235.0	137	196	-46	14.1	1.9	$1.1 \cdot 10^{-13}$	10.5
76	90-338 23:17	0	1	158	2	6	0	15	6	9	0	0	0	0	1	0	1	0	1	1	1.30305	80.7	1.8	9235.0	103	199	-13	70.0	2.0	$7.6 \cdot 10^{-17}$	12.5
77	90-339 04:06	0	2	139	10	19	0	8	6	6	0	0	38	0	1	0	1	0	1	1	1.30547	80.9	1.8	9225.3	77	202	13	21.4	1.9	$1.5 \cdot 10^{-13}$	10.5
78	90-339 06:04	0	2	90	8	13	0	7	7	6	0	0	36	0	1	0	1	0	1	1	1.30668	81.0	1.8	9220.5	999	999	999	43.7	1.6	$4.7 \cdot 10^{-15}$	6.0
79	90-340 15:02	0	1	149	4	17	0	8	15	9	0	0	11	27	1	0	1	0	1	1	1.32008	82.1	1.9	9167.4	90	201	0	21.4	1.9	$4.3 \cdot 10^{-14}$	10.5
80	90-340 18:28	0	1	142	3	6	0	8	6	6	0	0	0	0	1	0	1	0	1	1	1.32131	82.2	1.9	9162.6	80	202	9	38.7	1.6	$1.0 \cdot 10^{-15}$	6.0
81	90-342 18:38	1	1	133	3	24	7	0	14	0	1	1	63	27	1	0	1	0	1	1	1.34106	83.7	1.9	9086.2	66	202	23	11.8	11.8	$7.9 \cdot 10^{-13}$	5858.3
82	90-343 17:47	0	1	109	6	11	0	7	7	6	0	0	5	31	1	0	1	0	1	1	1.34979	84.3	1.9	9053.0	32	213	56	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
83	90-345 04:00	0	1	152	4	13	0	6	15	0	1	0	47	31	1	0	1	0	1	2	1.36487	85.4	1.9	8996.5	91	198	-1	43.5	1.9	$2.4 \cdot 10^{-15}$	10.5
84	90-345 13:07	0	1	152	1	7	0	15	14	0	1	0	47	31	1	0	1	0	1	2	1.36866	85.7	1.9	8982.4	91	199	-1	3.2	2.0	$2.5 \cdot 10^{-12}$	12.5
85	90-346 01:31	0	1	210	1	5	0	15	7	11	0	0	0	0	1	0	1	0	1	2	1.37372	86.1	1.9	8963.7	999	999	999	56.0	2.0	$1.3 \cdot 10^{-16}$	12.5
86	90-347 01:14	3	1	137	4	8	11	7	7	7	0	1	0	0	1	0	1	0	1	2	1.38390	86.8	1.9	8926.4	69	200	20	43.7	1.6	$1.0 \cdot 10^{-15}$	6.0
87	90-348 17:08	0	1	132	3	11	0	10	15	15	1	0	19	31	1	0	1	0	1	2	1.40056	87.9	1.9	8866.3	61	202	29	10.4	1.9	$2.0 \cdot 10^{-13}$	10.5
88	90-349 18:59	0	1	233	5	9	0	7	7	6	0	0	0	0	1	0	1	0	1	2	1.41217	88.7	1.9	8825.0	201	14	-68	43.7	1.6	$1.4 \cdot 10^{-15}$	6.0
89	90-353 03:23	1	2	128	8	6	23	0	15	4	1	1	47	0	1	0	1	0	1	2	1.44736	90.9	1.9	8702.5	49	203	40	11.8	11.8	$1.4 \cdot 10^{-13}$	5858.3
90	90-356 16:29	0	1	216	2	13	0	15	15	0	1	0	47	31	1	0	1	0	1	2	1.48437	93.1	2.0	8577.7	166	187	-75	11.8	11.8	$1.7 \cdot 10^{-13}$	5858.3
91	90-360 10:53	0	2	254	10	22	0	7	6	14	0	0	24	0	1	0	1	0	1	2	1.52450	95.4	2.0	8446.6	194	9	-76	34.1	1.9	$5.2 \cdot 10^{-14}$	10.5
92	90-361 01:28	0	1	122	3	15	0	6	0	0	1	0	47	31	1	0	1	0	1	2	1.53124	95.7	2.0	8425.0	4	258	79	43.5	1.9	$2.6 \cdot 10^{-15}$	10.5
93	90-363 01:46	0	1	202	4	6	0	11	12	0	1	0	23	21	1	0	1	0	1	2	1.55285	96.9	2.0	8356.4	100	192	-10	9.6	1.6	$1.2 \cdot 10^{-13}$	6.0
94	90-365 17:48	0	1	226	3	7	0	7	7	8	0	0	3	28	1	0	1	0	1	2	1.58138	98.3	2.0	8267.4	89	192	1	43.7	1.6	$7.2 \cdot 10^{-16}$	6.0
95	91-001 04:15	0	1	99	2	7	0	9	6	9	0	0	3	27	1	0	1	0	1	2	1.58684	98.6	2.0	8250.6	266	2	-3	70.0	2.0	$9.1 \cdot 10^{-17}$	12.5
96	91-004 02:40	0	1	118	1	11	0	15	15	0	1	0	47	31	0	0	0	0	1	3	1.61829	100.1	2.0	8154.8	278	1	7	11.8	11.8	$1.0 \cdot 10^{-13}$	5858.3
97	91-004 07:31	0	1	8	1	2	0	15	15	0	1	0	37	13	0	0	0	0	1	3	1.62103	100.2	2.0	8146.5	122	189	-31	11.8	11.8	$2.3 \cdot 10^{-14}$	5858.3
98	91-005 06:13	0	1	89	7	12	0	7	7	6	0	0	0	0	0	0	0	0	1	3	1.63201	100.7	2.0	8113.5	232	4	-37	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
99	91-005 13:56	3	1	190	6	11	4	7	7	6	0	1	0	0	0	0	0	0	1	3	1.63476	100.9	2.0	8105.3	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
100	91-010 14:17	0	1	200	6	11	0	7	7	7	0	0	0	0	0	0	0	0	1	3	1.68992	103.3	2.0	7943.3	6	240	79	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
101	91-011 20:54	0	1	129	1	5	0	15	8	12	0	0	0	0	0	0	0	0	1	3	1.70376	103.9	2.0	7903.4	266	1	-4	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
102	91-014 16:42	0	1	23	7	4	0	13	14	15	1	0	55	30	0	0	0	0	1	3	1.73565	105.2	2.0	7812.6	115	189	-24	2.5	1.9	$1.0 \cdot 10^{-11}$	10.5
103	91-015 11:42	1	1	205	6	3	6	15	15	4	1	1	47	0	1	0	0	0	1	3	1.74398	105.6	2.0	7789.1	999	999	999	2.0	1.9	$1.9 \cdot 10^{-11}$	10.5
104	91-015 13:24	3	1	55	3	7	6	9	7	9	0	1	4	2	1	0	0	0	1	3	1.74537	105.6	2.0	7785.2	159	189	-68	28.1	1.6	$3.7 \cdot 10^{-15}$	6.0
105	91-019 23:53	0	2	249	9	7	0	12	15	0	1	0	47	30	1	0	0	0	1	3	1.79405	107.5	2.0	7650.1	70	192	19	5.0	1.9	$2.3 \cdot 10^{-12}$	10.5

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
106	91-025 16:49	3	3	28	19	23	5	6	7	6	0	1	42	0	1	0	0	0	1	3	1.85816	109.8	2.0	7476.7	118	189	-27	25.9	1.6	$4.3 \cdot 10^{-13}$	6.0
107	91-026 09:08	0	1	133	4	9	0	7	8	8	0	0	0	0	1	0	0	0	1	3	1.86652	110.1	2.0	7454.5	999	999	999	35.4	1.6	$2.9 \cdot 10^{-15}$	6.0
108	91-033 09:24	3	1	63	5	10	6	6	7	7	0	1	0	0	1	0	0	0	1	3	1.94460	112.7	2.0	7250.3	165	190	-74	49.4	1.6	$1.0 \cdot 10^{-15}$	6.0
109	91-033 18:34	3	2	29	10	13	9	8	10	10	0	1	0	0	1	0	0	0	1	3	1.94878	112.9	2.0	7239.5	117	188	-26	23.8	1.6	$5.8 \cdot 10^{-14}$	6.0
110	91-038 05:22	0	1	122	2	6	0	8	8	9	0	0	0	0	1	0	0	0	1	2	1.99752	114.4	2.0	7115.3	247	1	-22	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
111	91-038 08:47	3	4	1	29	49	17	6	8	5	0	1	47	0	1	0	0	0	1	2	1.99891	114.4	2.0	7111.8	77	190	13	21.4	1.9	$2.7 \cdot 10^{-11}$	10.5
112	91-040 15:09	0	1	134	3	7	0	9	8	10	0	0	5	31	1	0	0	0	1	2	2.02534	115.2	1.9	7045.4	262	1	-7	22.7	1.6	$7.8 \cdot 10^{-15}$	6.0
113	91-041 00:11	0	1	214	2	14	0	15	15	0	1	0	63	31	1	0	0	0	1	2	2.02951	115.3	1.9	7035.0	15	215	73	11.8	11.8	$2.0 \cdot 10^{-13}$	5858.3
114	91-048 00:34	0	1	176	7	3	0	7	15	15	1	0	0	0	1	0	0	0	1	2	2.10719	117.6	1.9	6843.4	321	354	50	34.1	1.9	$2.0 \cdot 10^{-15}$	10.5
115	91-049 11:47	0	1	179	3	9	0	8	13	15	1	0	47	31	1	0	0	0	1	2	2.12241	118.0	1.9	6806.4	325	353	54	12.8	1.6	$8.5 \cdot 10^{-14}$	6.0
116	91-052 01:13	0	1	73	1	4	0	15	3	7	1	0	45	16	1	0	0	0	1	2	2.15143	118.8	1.9	6736.3	176	212	-85	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
117	91-052 03:25	3	6	3	56	51	28	6	14	5	0	1	31	0	1	0	0	0	1	2	2.15281	118.8	1.9	6733.0	78	192	12	21.4	1.9	$2.3 \cdot 10^{-10}$	10.5
118	91-053 10:51	0	2	122	8	5	0	7	15	15	1	0	36	31	1	0	0	0	1	2	2.16661	119.2	1.9	6699.9	244	4	-25	34.1	1.9	$3.3 \cdot 10^{-15}$	10.5
119	91-056 01:15	1	3	235	18	20	13	14	7	15	1	1	43	15	1	0	0	0	1	2	2.19554	119.9	1.9	6631.0	999	999	999	7.9	4.6	$8.3 \cdot 10^{-12}$	211.2
120	91-058 00:00	3	5	18	49	53	27	15	6	5	0	1	47	0	1	0	0	0	1	2	2.21755	120.5	1.9	6578.9	98	193	-7	36.7	2.0	$1.4 \cdot 10^{-11}$	12.5
121	91-063 00:36	0	1	189	3	1	0	9	15	15	1	0	0	0	1	0	0	0	1	2	2.27239	121.8	1.9	6450.4	338	350	67	14.1	1.9	$1.8 \cdot 10^{-14}$	10.5
122	91-066 04:37	1	1	51	2	3	1	11	13	15	1	1	6	26	1	0	0	0	1	2	2.30655	122.6	1.9	6371.3	144	194	-53	11.8	11.8	$3.2 \cdot 10^{-14}$	5858.3
123	91-067 21:02	0	1	158	1	5	0	15	8	12	0	0	3	26	1	0	0	0	1	2	2.32564	123.0	1.9	6327.4	294	4	24	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
124	91-068 08:53	0	1	137	2	6	0	15	8	10	0	0	0	0	1	0	0	0	1	2	2.32972	123.1	1.9	6318.0	265	6	-4	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
125	91-071 06:17	0	2	41	9	5	0	7	15	15	1	0	49	30	1	0	0	0	1	2	2.36235	123.9	1.9	6243.5	130	195	-39	34.1	1.9	$3.8 \cdot 10^{-15}$	10.5
126	91-072 23:33	0	2	160	12	20	0	7	6	6	0	0	40	0	1	0	0	0	1	2	2.37998	124.3	1.9	6203.4	297	3	27	34.1	1.9	$5.2 \cdot 10^{-14}$	10.5
127	91-073 08:59	0	1	247	5	10	0	9	14	15	1	0	47	31	1	0	0	0	1	2	2.38540	124.4	1.9	6191.2	59	199	30	6.7	1.7	$7.9 \cdot 10^{-13}$	7.3
128	91-073 12:41	0	1	53	3	1	0	6	0	0	1	0	46	1	1	0	0	0	1	2	2.38676	124.4	1.9	6188.1	146	197	-55	43.5	1.9	$2.8 \cdot 10^{-16}$	10.5
129	91-077 18:52	0	1	132	4	3	0	8	15	15	1	0	41	31	1	0	0	0	1	2	2.43271	125.4	1.8	6084.6	257	7	-12	21.4	1.9	$6.1 \cdot 10^{-15}$	10.5
130	91-079 10:39	0	1	116	2	6	0	8	9	9	0	0	4	31	1	0	0	0	1	2	2.45023	125.8	1.8	6045.4	235	9	-34	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
131	91-082 20:54	0	1	172	3	6	0	8	8	10	0	0	6	31	1	0	0	0	1	2	2.48651	126.5	1.8	5964.7	313	5	43	28.0	1.6	$3.1 \cdot 10^{-15}$	6.0
132	91-085 01:35	0	1	191	3	7	0	8	7	8	0	0	1	26	1	0	0	0	1	2	2.51062	127.0	1.8	5911.4	340	354	69	34.6	1.6	$1.9 \cdot 10^{-15}$	6.0
133	91-086 16:23	0	1	146	6	11	0	7	7	8	0	0	0	0	1	0	0	0	1	2	2.52800	127.4	1.8	5873.1	277	9	6	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
134	91-086 23:27	3	2	53	12	20	3	9	8	7	0	1	39	0	1	0	0	0	1	2	2.53067	127.4	1.8	5867.3	146	200	-55	14.1	1.9	$1.2 \cdot 10^{-12}$	10.5
135	91-087 04:33	0	1	118	3	1	0	8	15	12	0	0	5	26	1	0	0	0	1	2	2.53335	127.5	1.8	5861.4	999	999	999	21.4	1.9	$3.9 \cdot 10^{-15}$	10.5
136	91-088 00:33	0	2	13	9	3	0	0	15	12	0	0	4	25	1	0	0	0	1	2	2.54269	127.6	1.8	5840.9	89	200	0	11.8	11.8	$1.0 \cdot 10^{-13}$	5858.3
137	91-091 14:28	0	2	110	10	19	0	7	5	6	0	0	37	0	1	0	0	0	1	2	2.57996	128.4	1.8	5759.5	999	999	999	34.1	1.9	$2.9 \cdot 10^{-14}$	10.5
138	91-092 01:23	0	2	130	12	20	0	13	4	13	0	0	26	1	1	0	0	0	1	2	2.58527	128.5	1.8	5747.9	999	999	999	2.5	1.9	$2.3 \cdot 10^{-10}$	10.5
139	91-096 23:37	0	1	175	6	5	0	8	15	0	1	0	37	30	1	0	0	0	1	2	2.63690	129.4	1.8	5636.1	317	8	47	21.4	1.9	$1.1 \cdot 10^{-14}$	10.5
140	91-099 03:44	0	2	226	11	19	0	7	5	7	0	0	38	0	1	0	0	0	1	2	2.66064	129.9	1.8	5585.0	29	211	60	34.1	1.9	$3.3 \cdot 10^{-14}$	10.5
141	91-104 12:43	0	1	120	4	9	0	7	7	8	0	0	0	0	1	0	0	0	1	2	2.71709	130.9	1.8	5464.3	240	14	-29	43.7	1.6	$1.2 \cdot 10^{-15}$	6.0
142	91-105 01:57	2	3	10	19	23	5	8	6	6	0	1	42	0	1	0	0	0	1	2	2.72232	131.0	1.8	5453.1	85	204	5	19.5	1.6	$1.3 \cdot 10^{-12}$	6.0
143	91-111 05:16	0	1	102	2	2	0	15	15	12	0	0	4	25	1	0	0	0	1	2	2.78618	132.1	1.7	5317.9	999	999	999	11.8	11.8	$2.8 \cdot 10^{-14}$	5858.3
144	91-111 20:12	0	1	26	7	12	0	8	7	9	0	0	35	0	1	0	0	0	1	2	2.79267	132.2	1.7	5304.3	107	206	-16	34.6	1.6	$8.8 \cdot 10^{-15}$	6.0
145	91-112 00:17	3	2	21	13	20	9	9	12	9	0	1	37	0	1	0	0	0	1	2	2.79526	132.2	1.7	5298.8	100	206	-9	14.1	1.9	$1.4 \cdot 10^{-12}$	10.5
146	91-113 00:58	3	2	11	10	14	2	8	9	9	0	1	0	0	1	0	0	0	1	2	2.80563	132.4	1.7	5277.0	86	207	4	25.9	1.6	$5.2 \cdot 10^{-14}$	6.0
147	91-118 16:37	3	2	237	8	12	9	10	11	8	0	1	0	0	1	0	0	0	1	2	2.86373	133.3	1.7	5155.3	44	212	46	14.5	1.6	$2.4 \cdot 10^{-13}$	6.0
148	91-120 13:31	0	1	194	5	10	0	7	7	8	0	0	0	0	1	0	0	0	1	2	2.88301	133.6	1.7	5115.1	343	3	72	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
149	91-121 11:42	3	1	214	6	10	1	7	7	7	0	1	6	25	1	0	0	0	1	2	2.89200	133.8	1.7	5096.4	11	235	77	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
150	91-121 13:20	3	2	223	9	14	7	7	7	6	0	1	36	0	1	0	0	0	1	2	2.89328	133.8	1.7	5093.8	24	220	65	43.7	1.6	$6.4 \cdot 10^{-15}$	6.0
151	91-122 06:41	3	4	248	27	49	20	6	4	5	0	1	47	0	1	0	0	0	1	2	2.90097	133.9	1.7	5077.8	59	211	30	21.4	1.9	$2.0 \cdot 10^{-11}$	10.5
152	91-122 11:57	3	1	199	6	11	3	7	7	6	0	1	0	0	1	0	0	0	1	2	2.90353	134.0	1.7	5072.5	350	350	78	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
153	91-134 08:08	1	2	205	13	11	13	10	15	0	1	1	9	31	1	0	0	0	1	2	3.02309	135.8	1.7	4825.9	359	309	83	10.4	1.9	$1.0 \cdot 10^{-12}$	10.5
154	91-138 06:25	0	1	149	7	11	0	7	7	6	0	0	0	0	1	0	0	0	1	2	3.06340	136.4	1.7	4743.4	280	24	10	43.7	1.6	$2.9 \cdot 10^{-15}$	6.0
155	91-140 04:27	1	3	28	20	21	12	13	14	0	1	1	41	9	1	0	0	0	1	2	3.08223	136.6	1.7	4705.0	110	214	-19	2.0	1.9	$1.9 \cdot 10^{-09}$	10.5
156	91-145 11:24	0	1	75	7	2	0	8	15	0	1	0	2	26	1	0	0	0	1	2	3.13473	137.4	1.6	4598.3	999	999	999	21.4	1.9	$9.1 \cdot 10^{-15}$	10.5
157	91-146 01:13	0	1	116	5	10	0	7	7	6	0	0	10	31	1	0	0	0	1	2	3.14096	137.4	1.6	4585.6	233	26	-36	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
158	91-157 14:36	3	2	16	11	20	4	7	6	6	0	1	38	0	1	0	0	0	1	2	3.25473	139.0	1.6	4356.0	92	220	-1	34.1	1.9	$4.4 \cdot 10^{-14}$	10.5
159	91-158 11:05	3	4	240	24	30	12	7	4	5	0	1	47	0	1	0	0	0	1	2	3.26332	139.1	1.6	4338.7	47	223	42	31.4	1.8	$1.8 \cdot 10^{-12}$	9.5
160	91-159 05:40	1	2	33	14	9	6	9	15	15	1	1	7	31	1	0	0	0	1	2	3.27068	139.2	1.6	4323.9	116	221	-25	14.1	1.9	$4.1 \cdot 10^{-13}$	10.5

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
161	91-160 18:30	3	3	145	21	26	2	5	5	6	0	1	46	0	1	0	0	0	1	2	3.28659	139.4	1.6	4292.0	999	999	999	43.7	1.6	$1.6 \cdot 10^{-13}$	6.0
162	91-170 19:05	3	4	31	24	31	14	7	5	5	0	1	47	0	1	0	0	0	1	2	3.38388	140.6	1.6	4097.3	113	224	-22	14.1	1.9	$3.6 \cdot 10^{-11}$	10.5
163	91-171 00:21	0	1	43	6	11	0	8	7	7	0	0	4	25	1	0	0	0	1	2	3.38630	140.6	1.6	4092.5	130	225	-39	34.6	1.6	$6.2 \cdot 10^{-15}$	6.0
164	91-172 09:57	3	3	103	22	27	6	7	6	6	0	1	47	0	1	0	0	0	1	2	3.39958	140.8	1.6	4066.0	999	999	999	22.7	1.6	$2.4 \cdot 10^{-12}$	6.0
165	91-172 19:07	0	1	50	3	4	0	13	12	0	1	0	0	0	1	0	0	0	1	2	3.40320	140.8	1.6	4058.8	140	226	-49	2.5	1.9	$5.3 \cdot 10^{-12}$	10.5
166	91-172 22:30	3	2	24	10	19	7	7	6	7	0	1	37	0	1	0	0	0	1	2	3.40441	140.8	1.6	4056.4	103	225	-12	34.1	1.9	$2.9 \cdot 10^{-14}$	10.5
167	91-173 07:10	3	4	39	28	30	18	9	9	5	0	1	47	0	1	0	0	0	1	2	3.40802	140.9	1.6	4049.2	124	225	-33	12.6	1.6	$8.1 \cdot 10^{-11}$	6.0
168	91-174 16:50	3	4	248	25	49	13	6	6	5	0	1	47	0	1	0	0	0	1	2	3.42127	141.0	1.6	4022.8	999	999	999	21.4	1.9	$1.4 \cdot 10^{-11}$	10.5
169	91-179 19:56	0	1	20	2	4	0	15	6	11	0	0	27	1	1	0	0	0	1	2	3.47046	141.6	1.6	3924.9	97	227	-6	11.8	11.8	$3.6 \cdot 10^{-14}$	5858.3
170	91-187 12:34	0	1	36	4	7	0	8	8	9	0	0	8	31	1	0	0	0	1	2	3.54430	142.5	1.5	3778.4	119	229	-28	28.0	1.6	$4.3 \cdot 10^{-15}$	6.0
171	91-189 07:40	0	1	162	1	19	0	15	7	14	0	0	45	31	1	0	0	0	1	2	3.56087	142.7	1.5	3745.5	297	38	26	11.8	11.8	$2.3 \cdot 10^{-13}$	5858.3
172	91-189 09:03	1	1	46	7	9	5	9	11	1	1	1	0	0	1	0	0	0	1	2	3.56206	142.7	1.5	3743.2	133	230	-42	16.9	1.6	$7.5 \cdot 10^{-14}$	6.0
173	91-192 19:50	3	3	6	22	28	2	7	5	5	0	1	47	0	1	0	0	0	1	2	3.59393	143.0	1.5	3680.0	77	231	13	28.1	1.6	$1.4 \cdot 10^{-12}$	6.0
174	91-193 09:36	1	1	235	5	3	8	9	12	0	1	1	0	0	1	0	0	0	1	2	3.59982	143.1	1.5	3668.4	39	235	51	14.1	1.9	$3.3 \cdot 10^{-14}$	10.5
175	91-194 07:59	0	1	35	1	6	0	15	15	0	1	0	0	0	1	0	0	0	1	2	3.60806	143.2	1.5	3652.1	118	231	-27	2.3	2.0	$7.3 \cdot 10^{-12}$	12.5
176	91-195 10:38	1	1	216	4	5	4	12	15	0	1	1	37	31	1	0	0	0	1	2	3.61864	143.3	1.5	3631.1	12	254	76	5.0	1.9	$7.0 \cdot 10^{-13}$	10.5
177	91-196 04:40	0	1	41	2	6	0	15	8	10	0	0	3	25	1	0	0	0	1	2	3.62569	143.4	1.5	3617.2	999	999	999	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
178	91-198 02:21	0	1	46	4	7	0	10	15	15	1	0	13	31	1	0	0	0	1	2	3.64327	143.6	1.5	3582.4	133	233	-42	4.9	1.7	$1.1 \cdot 10^{-12}$	7.7
179	91-201 04:09	0	1	99	3	8	0	7	15	0	1	0	57	31	1	0	0	0	1	2	3.67250	143.9	1.5	3524.6	999	999	999	8.9	4.3	$1.8 \cdot 10^{-13}$	179.4
180	91-201 22:02	0	2	238	8	12	0	7	7	7	0	0	0	0	1	0	0	0	1	2	3.67950	144.0	1.5	3510.8	43	237	47	43.7	1.6	$4.0 \cdot 10^{-15}$	6.0
181	91-203 16:11	1	3	14	19	22	13	7	8	10	1	1	28	20	1	0	0	0	1	2	3.69581	144.1	1.5	3478.6	87	234	3	19.3	1.6	$1.2 \cdot 10^{-12}$	6.0
182	91-204 16:47	1	2	162	9	13	1	13	15	0	1	1	3	31	1	0	0	0	1	2	3.70512	144.2	1.5	3460.2	999	999	999	2.4	1.6	$7.9 \cdot 10^{-11}$	6.0
183	91-206 20:59	0	1	226	5	6	0	6	12	12	0	0	5	25	1	0	0	0	1	2	3.72602	144.5	1.5	3418.9	999	999	999	43.5	1.9	$8.5 \cdot 10^{-16}$	10.5
184	91-208 06:05	0	2	23	12	9	0	9	15	0	1	0	41	31	1	0	0	0	1	2	3.73876	144.6	1.5	3393.7	99	235	-9	14.1	1.9	$2.9 \cdot 10^{-13}$	10.5
185	91-209 15:33	3	4	11	24	29	24	6	4	5	0	1	47	0	1	0	0	0	1	2	3.75148	144.7	1.5	3368.6	82	236	8	38.7	1.6	$7.2 \cdot 10^{-13}$	6.0
186	91-209 18:06	3	3	204	19	24	1	7	7	6	0	1	43	0	1	0	0	0	1	2	3.75264	144.7	1.5	3366.3	999	999	999	21.0	1.6	$1.1 \cdot 10^{-12}$	6.0
187	91-211 13:14	0	1	73	2	2	0	11	15	0	1	0	3	31	1	0	0	0	1	2	3.76880	144.9	1.5	3334.4	169	251	-78	11.8	11.8	$2.8 \cdot 10^{-14}$	5858.3
188	91-214 23:30	0	2	28	11	10	0	6	15	15	1	0	25	31	1	0	0	0	1	2	3.79989	145.2	1.5	3273.1	106	237	-15	43.5	1.9	$4.7 \cdot 10^{-15}$	10.5
189	91-219 23:49	3	3	116	19	22	12	7	6	5	0	1	41	0	1	0	0	0	1	2	3.84573	145.7	1.5	3182.6	228	47	-41	22.7	1.6	$5.8 \cdot 10^{-13}$	6.0
190	91-220 03:45	0	1	143	5	2	0	7	15	0	1	0	0	0	1	0	0	0	1	2	3.84802	145.7	1.5	3178.1	266	48	-3	34.1	1.9	$1.3 \cdot 10^{-15}$	10.5
191	91-221 00:23	3	3	10	21	27	15	7	6	5	0	1	46	0	1	0	0	0	1	2	3.85601	145.8	1.5	3162.3	80	238	10	22.7	1.6	$2.1 \cdot 10^{-12}$	6.0
192	91-225 13:24	0	1	211	4	3	0	12	15	0	1	0	11	30	1	0	0	0	1	2	3.89700	146.2	1.4	3081.4	1	313	84	5.0	1.9	$5.2 \cdot 10^{-13}$	10.5
193	91-226 21:33	3	3	1	19	24	5	6	7	6	0	1	43	0	1	0	0	0	1	2	3.90948	146.3	1.4	3056.7	999	999	999	25.9	1.6	$5.0 \cdot 10^{-13}$	6.0
194	91-227 18:02	3	4	13	24	29	20	5	4	5	0	1	47	0	1	0	0	0	1	2	3.91741	146.4	1.4	3041.1	54	242	35	48.9	1.6	$2.7 \cdot 10^{-13}$	6.0
195	91-228 11:09	0	1	232	4	7	0	8	8	8	0	0	0	25	1	0	0	0	1	2	3.92308	146.4	1.4	3029.9	4	293	83	28.0	1.6	$4.3 \cdot 10^{-15}$	6.0
196	91-228 11:09	3	2	4	13	20	5	10	12	7	0	1	39	0	1	0	0	0	1	2	3.92308	146.4	1.4	3029.9	43	243	47	10.4	1.9	$3.0 \cdot 10^{-12}$	10.5
197	91-235 15:54	3	2	91	11	14	4	9	10	9	0	1	35	0	1	0	0	0	1	2	3.98848	147.1	1.4	2900.7	91	243	0	19.3	1.6	$1.9 \cdot 10^{-13}$	6.0
198	91-238 08:15	2	2	104	14	21	3	7	6	6	0	1	40	0	1	0	0	0	1	2	4.01204	147.3	1.4	2854.1	72	244	18	34.1	1.9	$8.3 \cdot 10^{-14}$	10.5
199	91-239 10:50	0	1	81	6	10	0	12	15	15	1	0	46	31	1	0	0	0	1	2	4.02212	147.4	1.4	2834.2	22	255	68	3.4	1.6	$8.0 \cdot 10^{-12}$	6.0
200	91-239 12:11	1	2	182	10	7	1	8	15	15	1	1	2	31	1	0	0	0	1	2	4.02323	147.4	1.4	2832.0	999	999	999	21.4	1.9	$3.3 \cdot 10^{-14}$	10.5
201	91-241 23:14	3	3	180	22	13	11	13	1	12	0	1	30	0	1	0	0	0	1	2	4.04446	147.6	1.4	2790.0	154	248	-63	2.0	1.9	$1.1 \cdot 10^{-09}$	10.5
202	91-242 01:22	1	2	24	10	21	5	11	14	0	1	1	57	31	1	0	0	0	1	2	4.04558	147.6	1.4	2787.8	999	999	999	7.8	1.9	$4.6 \cdot 10^{-12}$	10.5
203	91-245 12:28	0	1	156	1	1	0	15	15	12	0	0	3	25	1	0	0	0	1	2	4.07676	147.9	1.4	2726.1	116	245	-25	11.8	11.8	$1.9 \cdot 10^{-14}$	5858.3
204	91-251 04:00	0	1	44	3	7	0	7	7	9	0	0	0	0	1	0	0	0	1	2	4.12663	148.3	1.4	2627.3	321	52	50	43.7	1.6	$7.2 \cdot 10^{-16}$	6.0
205	91-251 14:15	0	1	95	3	6	0	9	9	8	0	0	0	0	1	0	0	0	1	2	4.12994	148.4	1.4	2620.7	33	252	57	21.0	1.6	$9.3 \cdot 10^{-16}$	6.0
206	91-266 06:11	0	1	213	3	7	0	9	7	9	0	0	0	0	1	0	0	0	1	2	4.25927	149.5	1.4	2363.7	193	49	-76	28.1	1.6	$3.7 \cdot 10^{-15}$	6.0
207	91-266 15:27	0	1	196	4	15	0	7	0	7	0	0	6	31	1	0	0	0	1	2	4.26253	149.5	1.4	2357.2	169	265	-77	34.1	1.9	$8.4 \cdot 10^{-16}$	10.5
208	91-267 07:13	0	1	198	3	7	0	8	8	8	0	0	0	0	1	0	0	0	1	2	4.26797	149.6	1.4	2346.4	172	271	-80	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
209	91-267 12:29	1	2	211	13	10	13	10	15	0	1	1	40	31	1	0	0	0	1	2	4.27014	149.6	1.4	2342.1	999	999	999	10.4	1.9	$8.5 \cdot 10^{-13}$	10.5
210	91-267 19:52	0	1	229	3	7	0	8	9	9	0	0	0	0	1	0	0	0	1	2	4.27231	149.6	1.4	2337.7	215	59	-53	25.9	1.6	$4.9 \cdot 10^{-15}$	6.0
211	91-268 05:18	0	1	191	2	5	0	8	9	10	0	0	0	0	1	0	0	0	1	2	4.27557	149.6	1.4	2331.2	162	258	-71	31.3	2.0	$1.6 \cdot 10^{-16}$	12.5
212	91-269 10:14	0	1	218	6	10	0	7	7	6	0	0	0	0	1	0	0	0	1	2	4.28642	149.7	1.4	2309.6	199	54	-70	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
213	91-269 14:58	1	2	89	8	5	6	9	15	15	1	1	17	31	1	0	0	0	1	2	4.28859	149.8	1.4	2305.3	18	265	71	14.1	1.9	$7.7 \cdot 10^{-14}$	10.5
214	91-270 05:30	3	2	143	9	14	5	7	8	7	0	1	35	0	1	0	0	0	1	2	4.29292	149.8	1.4	2296.6	94	251	-3	35.4	1.6	$1.6 \cdot 10^{-14}$	6.0
215	91-272 06:52	0	1	10	7	12	0	7	7	7	0	0	0	0	1	0	0	0	1	2	4.31132	150.0	1.4	2259.9	999	999	999	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
216	91-274 19:34	0	1	131	1	4	0	15	15	0	1	0	10	31	1	0	0	0	1	2	4.33292	150.1	1.3	2216.8	77	253	13	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
217	91-284 22:13	3	2	136	11	19	5	8	6	7	0	1	37	0	1	0	0	0	1	2	4.41982	150.8	1.3	2042.8	84	254	6	21.4	1.9	$1.7 \cdot 10^{-13}$	10.5
218	91-289 02:02	3	2	122	8	12	1	7	7	6	0	1	0	0	1	0	0	0	1	2	4.45498	151.1	1.3	1972.2	65	255	25	43.7	1.6	$4.0 \cdot 10^{-15}$	6.0
219	91-289 03:02	1	2	144	11	15	1	7	0	6	0	1	38	0	1	0	0	0	1	2	4.45604	151.1	1.3	1970.0	96	254	-5	34.1	1.9	$2.7 \cdot 10^{-14}$	10.5
220	91-291 12:34	3	4	129	26	49	29	6	6	5	0	1	47	0	1	0	0	0	1	2	4.47622	151.3	1.3	1929.4	74	256	16	21.4	1.9	$1.7 \cdot 10^{-11}$	10.5
221	91-292 19:35	0	1	167	7	7	0	10	15	15	1	0	41	31	1	0	0	0	1	2	4.48682	151.4	1.3	1908.1	128	256	-37	10.4	1.9	$1.9 \cdot 10^{-13}$	10.5
222	91-293 16:43	0	1	144	1	15	0	15	0	6	0	0	13	31	1	0	0	0	1	2	4.49423	151.4	1.3	1893.2	95	256	-4	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
223	91-295 17:34	1	1	100	4	1	1	10	15	0	1	1	37	31	1	0	0	0	1	2	4.51115	151.6	1.3	1859.0	33	261	56	10.4	1.9	$4.3 \cdot 10^{-14}$	10.5
224	91-301 01:11	3	4	211	28	49	20	6	6	5	0	1	47	0	1	0	0	0	1	2	4.55646	151.9	1.3	1767.5	999	999	999	21.4	1.9	$2.3 \cdot 10^{-11}$	10.5
225	91-304 22:57	0	1	85	3	5	0	13	15	0	1	0	17	30	1	0	0	0	1	2	4.58898	152.2	1.3	1701.7	12	280	77	2.4	1.6	$7.4 \cdot 10^{-12}$	6.0
226	91-309 05:31	3	3	94	23	30	1	7	3	5	0	1	47	0	1	0	0	0	1	2	4.62451	152.4	1.3	1629.6	24	268	65	14.1	1.9	$2.8 \cdot 10^{-11}$	10.5
227	91-313 16:26	0	1	44	1	15	0	15	0	11	0	0	11	31	1	0	0	0	1	2	4.66198	152.7	1.3	1553.3	314	65	44	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
228	91-313 18:22	3	3	116	23	29	9	7	5	5	0	1	47	0	1	0	0	0	1	2	4.66302	152.7	1.3	1551.2	55	261	35	28.1	1.6	$1.9 \cdot 10^{-12}$	6.0
229	91-315 18:01	1	2	97	10	5	1	9	15	15	1	1	6	31	1	0	0	0	1	2	4.67962	152.9	1.3	1517.3	999	999	999	14.1	1.9	$1.1 \cdot 10^{-13}$	10.5
230	91-316 19:30	0	1	103	7	4	0	10	15	0	1	0	37	30	1	0	0	0	1	2	4.68790	152.9	1.3	1500.4	37	264	53	10.4	1.9	$1.1 \cdot 10^{-13}$	10.5
231	91-317 21:57	1	2	12	8	15	3	8	0	9	0	1	11	31	1	0	0	0	1	2	4.69722	153.0	1.3	1481.4	999	999	999	21.4	1.9	$8.6 \cdot 10^{-14}$	10.5
232	91-321 01:24	3	2	122	11	19	9	8	6	8	0	1	37	0	1	0	0	0	1	2	4.72305	153.2	1.3	1428.6	64	260	26	21.4	1.9	$1.7 \cdot 10^{-13}$	10.5
233	91-322 00:59	0	1	106	6	15	0	7	0	7	0	0	11	31	1	0	0	0	1	2	4.73130	153.2	1.3	1411.7	999	999	999	34.1	1.9	$1.2 \cdot 10^{-14}$	10.5
234	91-323 07:30	1	2	182	9	15	4	9	0	0	1	1	10	31	1	0	0	0	1	2	4.74160	153.3	1.3	1390.6	148	262	-56	14.1	1.9	$4.6 \cdot 10^{-13}$	10.5
235	91-327 09:40	1	2	155	12	15	10	8	0	7	0	1	38	0	1	0	0	0	1	3	4.77551	153.6	1.3	1321.0	109	260	-18	21.4	1.9	$1.6 \cdot 10^{-13}$	10.5
236	91-327 13:09	0	1	133	6	15	0	7	0	7	0	0	4	25	1	0	0	0	1	3	4.77654	153.6	1.3	1318.9	79	261	11	34.1	1.9	$1.2 \cdot 10^{-14}$	10.5
237	91-329 13:59	0	1	113	6	15	0	12	0	0	1	0	14	31	1	0	0	0	1	3	4.79294	153.7	1.3	1285.2	50	263	39	5.0	1.9	$5.0 \cdot 10^{-12}$	10.5
238	91-330 01:12	0	1	82	4	8	0	8	8	8	0	0	0	0	1	0	0	0	1	3	4.79703	153.7	1.3	1276.7	7	298	81	28.0	1.6	$5.2 \cdot 10^{-15}$	6.0
239	91-330 09:52	1	2	175	9	15	6	9	0	0	1	1	11	31	1	0	0	0	1	3	4.80010	153.7	1.3	1270.4	138	261	-46	14.1	1.9	$4.6 \cdot 10^{-13}$	10.5
240	91-337 08:40	1	1	173	3	4	2	9	11	0	1	1	0	0	1	0	0	0	1	3	4.85621	154.1	1.2	1154.6	134	261	-43	14.1	1.9	$2.8 \cdot 10^{-14}$	10.5
241	91-343 08:49	0	1	22	1	6	0	15	10	11	0	0	0	0	1	0	0	0	1	3	4.90491	154.5	1.2	1053.6	282	71	11	26.5	2.0	$2.7 \cdot 10^{-15}$	12.5
242	91-343 13:30	3	2	162	11	20	22	7	6	6	0	1	39	0	1	0	0	0	1	3	4.90693	154.5	1.2	1049.4	119	261	-28	34.1	1.9	$4.4 \cdot 10^{-14}$	10.5
243	91-344 17:20	0	1	13	1	5	0	15	9	10	0	0	0	0	1	0	0	0	1	3	4.91604	154.6	1.2	1030.5	269	71	0	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
244	91-345 05:47	0	1	13	1	6	0	15	9	11	0	0	6	25	1	0	0	0	1	3	4.92008	154.6	1.2	1022.1	269	71	0	31.3	2.0	$1.5 \cdot 10^{-15}$	12.5
245	91-346 10:52	0	1	112	1	5	0	15	8	10	0	0	0	0	1	0	0	0	1	3	4.93018	154.7	1.2	1001.1	999	999	999	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
246	91-346 12:52	0	1	224	2	6	0	9	8	9	0	0	4	25	1	0	0	0	1	3	4.93119	154.7	1.2	999.0	206	67	-63	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
247	91-346 15:17	0	1	246	1	15	0	15	0	11	0	0	7	31	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	237	71	-32	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
248	91-346 15:25	0	1	249	4	8	0	8	7	8	0	0	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	241	71	-28	34.6	1.6	$2.7 \cdot 10^{-15}$	6.0
249	91-346 15:30	0	1	226	2	6	0	8	9	10	0	0	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	208	68	-60	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
250	91-346 15:34	0	1	215	3	6	0	9	8	8	0	0	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	193	60	-76	22.7	1.6	$6.6 \cdot 10^{-15}$	6.0
251	91-346 15:47	3	1	225	2	6	10	9	8	8	0	1	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	207	68	-62	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
252	91-346 16:12	0	1	207	1	5	0	15	9	12	0	0	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	182	11	-85	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
253	91-346 16:17	0	1	207	3	7	0	8	8	9	0	0	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	999	999	999	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
254	91-346 16:29	0	1	215	2	5	0	15	9	12	0	0	13	31	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	193	60	-76	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
255	91-346 17:16	0	1	227	2	15	0	9	0	9	0	0	1	31	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	210	68	-59	11.8	11.8	$2.2 \cdot 10^{-13}$	5858.3
256	91-346 17:33	3	1	225	3	7	1	9	7	9	0	1	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	207	68	-62	28.1	1.6	$3.7 \cdot 10^{-15}$	6.0
257	91-346 17:38	0	1	209	1	4	0	15	9	11	0	0	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	185	37	-83	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
258	91-346 17:50	0	1	188	1	5	0	15	9	10	0	0	0	0	1	0	0	0	1	3	4.93220	154.7	1.2	996.9	155	265	-64	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
259	91-346 18:03	0	1	229	3	15	0	9	0	9	0	0	11	31	1	0	0	0	1	3	4.93321	154.7	1.2	994.8	213	69	-56	14.1	1.9	$1.7 \cdot 10^{-13}$	10.5
260	91-346 18:38	0	1	222	3	7	0	8	7	8	0	0	0	0	1	0	0	0	1	3	4.93321	154.7	1.2	994.8	203	66	-66	34.6	1.6	$1.9 \cdot 10^{-15}$	6.0
261	91-346 19:44	0	1	208	1	5	0	15	9	11	0	0	0	0	1	0	0	0	1	3	4.93321	154.7	1.2	994.8	183	26	-84	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
262	91-346 20:01	0	1	252	3	6	0	9	8	8	0	0	5	25	1	0	0	0	1	3	4.93321	154.7	1.2	994.8	245	71	-24	22.7	1.6	$6.6 \cdot 10^{-15}$	6.0
263	91-346 20:26	3	1	212	2	6	5	8	9	9	0	1	0	0	1	0	0	0	1	3	4.93321	154.7	1.2	994.8	189	53	-79	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
264	91-346 21:00	0	1	231	4	15	0	8	0	8	0	0	11	31	1	0	0	0	1	3	4.93422	154.7	1.2	992.7	216	69	-53	21.4	1.9	$4.3 \cdot 10^{-14}$	10.5
265	91-346 21:17	0	1	214	3	6	0	8	9	9	0	0	0	0	1	0	0	0	1	3	4.93422	154.7	1.2	992.7	192	58	-77	25.9	1.6	$4.1 \cdot 10^{-15}$	6.0
266	91-347 00:17	0	1	171	4	7	0	8	8	9	0	0	1	31	1	0	0	0	1	3	4.93523	154.7	1.2	990.6	131	261	-40	28.0	1.6	$4.3 \cdot 10^{-15}$	6.0
267	91-347 01:25	3	3	171	20	26	10	5	5	6	0	1	46	0	1	0	0	0	1	3	4.93523	154.7	1.2	990.6	999	999	999	43.7	1.6	$1.4 \cdot 10^{-13}$	6.0
268	91-347 05:58	1	1	203	1	5	6	15	10	12	0	0	3	26	1	0	0	0	1	3	4.93624	154.7	1.2	988.5	176	300	-84	26.5	2.0	$2.2 \cdot 10^{-15}$	12.5
269	91-347 07:40	0	1	184	1	5	0	15	8	11	0	0	5	25	1	0	0	0	1	3	4.93725	154.7	1.2	986.4	149	264	-58	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
270	91-347 10:37	3	3	108	22	27	17	5	4	5	0	1	47	0	1	0	0	0	1	3	4.93826	154.7	1.2	984.3	43	265	47	48.9	1.6	$1.4 \cdot 10^{-13}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
271	91-347 13:11	0	1	221	2	5	0	15	9	10	0	0	3	25	1	0	0	0	1	3	4.93926	154.7	1.2	982.2	201	66	-67	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
272	91-347 14:19	1	2	137	9	6	7	10	15	0	1	1	37	31	1	0	0	0	1	3	4.93926	154.7	1.2	982.2	83	261	7	10.4	1.9	$2.2 \cdot 10^{-13}$	10.5
273	91-348 02:35	1	1	162	7	6	8	8	13	0	1	1	0	0	1	0	0	0	1	3	4.94330	154.7	1.2	973.8	118	261	-27	21.4	1.9	$1.7 \cdot 10^{-14}$	10.5
274	91-349 04:25	0	1	133	4	15	0	8	0	8	0	0	10	31	1	0	0	0	1	3	4.95237	154.8	1.2	954.8	78	261	12	21.4	1.9	$4.3 \cdot 10^{-14}$	10.5
275	91-352 10:43	1	1	106	5	15	8	9	0	10	0	1	10	31	1	0	0	0	1	3	4.97853	155.0	1.2	900.2	40	265	50	14.1	1.9	$2.3 \cdot 10^{-13}$	10.5
276	91-354 05:30	0	1	244	1	5	0	15	7	12	0	0	0	0	1	0	0	0	1	3	4.99259	155.1	1.2	870.8	234	71	-35	56.0	2.0	$1.3 \cdot 10^{-16}$	12.5
277	91-355 05:40	0	1	4	1	6	0	15	8	12	0	0	0	0	1	0	0	0	1	3	5.00061	155.1	1.2	854.0	256	71	-13	36.7	2.0	$8.9 \cdot 10^{-16}$	12.5
278	91-357 01:11	0	1	94	7	7	0	8	15	15	1	0	0	0	1	0	0	0	1	3	5.01565	155.2	1.2	822.4	23	272	66	21.4	1.9	$2.0 \cdot 10^{-14}$	10.5
279	91-357 13:54	3	2	176	13	20	1	7	6	7	0	1	40	0	1	0	0	0	1	3	5.01965	155.3	1.2	814.0	138	262	-47	34.1	1.9	$6.1 \cdot 10^{-14}$	10.5
280	91-357 22:00	0	1	25	2	5	0	15	8	11	0	0	3	0	1	0	0	0	1	3	5.02266	155.3	1.2	807.7	286	70	16	36.7	2.0	$9.0 \cdot 10^{-16}$	12.5
281	91-358 01:20	0	1	66	2	5	0	15	7	10	0	0	0	0	1	0	0	0	1	3	5.02366	155.3	1.2	805.6	343	55	72	56.0	2.0	$1.5 \cdot 10^{-16}$	12.5
282	91-358 02:28	0	1	25	1	5	0	15	8	13	0	0	3	25	1	0	0	0	1	3	5.02366	155.3	1.2	805.6	286	70	16	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
283	91-358 12:08	0	1	9	3	7	0	8	9	8	0	0	0	0	1	0	0	0	1	3	5.02766	155.3	1.2	797.2	263	71	-6	25.9	1.6	$4.9 \cdot 10^{-15}$	6.0
284	91-358 13:04	3	1	18	2	5	3	15	9	9	0	1	0	0	1	0	0	0	1	3	5.02766	155.3	1.2	797.2	276	71	6	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
285	91-358 15:03	3	1	192	3	6	13	8	8	9	0	1	0	0	1	0	0	0	1	3	5.02866	155.3	1.2	795.1	999	999	999	28.0	1.6	$3.1 \cdot 10^{-15}$	6.0
286	91-358 15:59	0	1	46	3	8	0	9	8	9	0	0	0	0	1	0	0	0	1	3	5.02866	155.3	1.2	795.1	315	68	45	22.7	1.6	$9.4 \cdot 10^{-15}$	6.0
287	91-361 14:02	0	2	197	10	15	0	8	0	6	0	0	36	0	1	0	0	0	1	3	5.05165	155.5	1.2	746.8	999	999	999	21.4	1.9	$1.2 \cdot 10^{-13}$	10.5
288	91-363 16:51	3	2	166	8	13	17	8	8	8	0	1	36	0	1	0	0	0	1	3	5.06861	155.6	1.2	711.0	124	261	-33	28.0	1.6	$2.4 \cdot 10^{-14}$	6.0
289	91-363 20:07	0	1	35	3	7	0	7	8	9	0	0	5	25	1	0	0	0	1	3	5.06961	155.6	1.2	708.9	300	69	29	35.4	1.6	$1.8 \cdot 10^{-15}$	6.0
290	91-364 13:57	0	1	91	2	1	0	9	15	0	1	0	0	0	1	0	0	0	1	3	5.07559	155.6	1.2	696.3	18	275	71	11.8	11.8	$2.4 \cdot 10^{-14}$	5858.3
291	91-365 00:19	0	1	24	1	6	0	15	7	11	0	0	0	0	1	0	0	0	1	3	5.07957	155.7	1.2	687.9	284	70	14	56.0	2.0	$1.5 \cdot 10^{-16}$	12.5
292	92-001 00:00	1	3	139	19	11	17	11	15	0	1	1	39	31	1	0	0	0	1	3	5.08754	155.7	1.2	671.0	86	261	4	2.5	1.9	$1.7 \cdot 10^{-10}$	10.5
293	92-001 19:24	1	1	19	4	1	4	7	15	0	1	1	0	0	1	0	0	0	1	3	5.09351	155.7	1.2	658.4	277	71	7	34.1	1.9	$8.9 \cdot 10^{-16}$	10.5
294	92-001 20:32	3	2	153	9	13	7	9	9	9	0	1	0	0	1	0	0	0	1	3	5.09351	155.7	1.2	658.4	106	261	-15	21.0	1.6	$8.3 \cdot 10^{-14}$	6.0
295	92-002 04:36	3	3	182	21	27	9	6	5	6	0	1	47	0	1	0	0	0	1	3	5.09650	155.8	1.2	652.1	146	263	-55	34.6	1.6	$5.0 \cdot 10^{-13}$	6.0
296	92-003 11:48	1	1	33	7	6	3	10	15	15	1	1	43	31	1	0	0	0	1	3	5.10645	155.8	1.2	631.1	999	999	999	10.4	1.9	$1.6 \cdot 10^{-13}$	10.5
297	92-005 16:17	1	2	102	13	6	9	8	15	15	1	1	37	31	1	0	0	0	1	3	5.12433	155.9	1.2	593.2	34	266	56	21.4	1.9	$4.4 \cdot 10^{-14}$	10.5
298	92-005 23:32	0	1	244	1	6	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.12632	156.0	1.2	588.9	233	70	-35	31.3	2.0	$1.5 \cdot 10^{-15}$	12.5
299	92-006 14:31	0	1	224	2	6	0	15	8	10	0	0	9	25	1	0	0	0	1	3	5.13129	156.0	1.2	578.4	205	67	-63	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
300	92-006 18:12	0	1	238	2	6	0	15	8	10	0	0	0	0	1	0	0	0	1	3	5.13327	156.0	1.2	574.2	225	70	-44	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
301	92-006 19:04	3	1	55	1	5	5	15	8	11	0	1	10	25	1	0	0	0	1	3	5.13327	156.0	1.2	574.2	999	999	999	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
302	92-006 22:37	0	1	218	1	5	0	15	9	12	0	0	0	0	1	0	0	0	1	3	5.13426	156.0	1.2	572.1	197	63	-72	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
303	92-007 00:23	0	1	232	1	5	0	15	7	12	0	0	4	25	1	0	0	0	1	3	5.13526	156.0	1.2	570.0	217	69	-52	56.0	2.0	$1.3 \cdot 10^{-16}$	12.5
304	92-007 02:56	0	1	95	1	5	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.13526	156.0	1.2	570.0	24	270	65	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
305	92-007 03:18	0	1	5	2	7	0	9	7	9	0	0	0	0	1	0	0	0	1	3	5.13625	156.0	1.2	567.9	999	999	999	56.0	2.0	$2.2 \cdot 10^{-16}$	12.5
306	92-007 03:43	0	1	254	1	5	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.13625	156.0	1.2	567.9	248	71	-21	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
307	92-007 05:47	0	1	5	1	5	0	15	9	12	0	0	0	0	1	0	0	0	1	3	5.13625	156.0	1.2	567.9	257	71	-12	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
308	92-007 06:00	3	1	241	1	5	1	15	7	11	0	1	1	31	1	0	0	0	1	3	5.13724	156.0	1.2	565.8	229	70	-40	56.0	2.0	$1.3 \cdot 10^{-16}$	12.5
309	92-007 06:39	0	1	221	1	6	0	15	7	11	0	0	7	25	1	0	0	0	1	3	5.13724	156.0	1.2	565.8	201	65	-68	56.0	2.0	$1.5 \cdot 10^{-16}$	12.5
310	92-007 06:43	3	1	214	2	5	8	15	10	10	0	1	0	0	1	0	0	0	1	3	5.13724	156.0	1.2	565.8	191	57	-77	26.5	2.0	$2.7 \cdot 10^{-15}$	12.5
311	92-007 08:22	0	1	235	1	5	0	15	8	10	0	0	0	0	1	0	0	0	1	3	5.13724	156.0	1.2	565.8	221	69	-48	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
312	92-007 09:30	3	1	218	2	6	10	15	9	10	0	1	6	25	1	0	0	0	1	3	5.13823	156.0	1.2	563.7	197	63	-72	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
313	92-007 09:38	0	1	223	1	6	0	15	9	12	0	0	0	0	1	0	0	0	1	3	5.13823	156.0	1.2	563.7	204	66	-65	31.3	2.0	$1.5 \cdot 10^{-15}$	12.5
314	92-007 09:55	0	1	213	2	6	0	15	8	10	0	0	0	0	1	0	0	0	1	3	5.13823	156.0	1.2	563.7	190	55	-78	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
315	92-007 11:42	0	1	215	2	6	0	15	9	9	0	0	6	25	1	0	0	0	1	3	5.13823	156.0	1.2	563.7	999	999	999	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
316	92-007 11:59	3	1	239	2	7	5	9	8	9	0	1	6	31	1	0	0	0	1	3	5.13923	156.0	1.2	561.5	226	70	-43	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
317	92-007 12:16	0	1	242	1	15	0	15	0	12	0	0	12	25	1	0	0	0	1	3	5.13923	156.0	1.2	561.5	231	70	-38	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
318	92-007 14:46	0	1	18	1	5	0	15	7	10	0	0	0	0	1	0	0	0	1	3	5.13923	156.0	1.2	561.5	276	70	6	56.0	2.0	$1.3 \cdot 10^{-16}$	12.5
319	92-007 17:40	1	1	253	1	15	11	15	0	11	0	0	10	31	1	0	0	0	1	3	5.14022	156.0	1.2	559.4	246	71	-23	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
320	92-010 02:22	0	1	185	7	11	0	7	7	6	0	0	4	25	1	0	0	0	1	3	5.15906	156.2	1.2	519.4	150	263	-59	43.7	1.6	$2.9 \cdot 10^{-15}$	6.0
321	92-010 04:22	0	1	174	2	15	0	15	0	10	0	0	10	31	1	0	0	0	1	3	5.16005	156.2	1.2	517.3	135	261	-44	11.8	11.8	$2.2 \cdot 10^{-13}$	5858.3
322	92-010 04:47	1	1	145	7	9	2	8	15	0	1	1	44	31	1	0	0	0	1	3	5.16005	156.2	1.2	517.3	94	260	-3	7.0	2.9	$8.2 \cdot 10^{-13}$	46.7
323	92-010 06:41	0	1	152	1	6	0	15	8	12	0	0	0	0	1	0	0	0	1	3	5.16104	156.2	1.2	515.2	104	260	-13	36.7	2.0	$8.9 \cdot 10^{-16}$	12.5
324	92-013 15:50	3	1	60	1	6	1	15	8	11	0	1	4	25	1	0	0	0	1	3	5.18779	156.3	1.2	458.1	999	999	999	36.7	2.0	$8.9 \cdot 10^{-16}$	12.5
325	92-014 21:14	3	1	163	6	9	9	8	10	11	0	1	3	31	1	0	0	0	1	3	5.19770	156.4	1.2	437.0	119	260	-28	23.8	1.6	$1.5 \cdot 10^{-14}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
326	92-015 09:45	3	3	171	19	25	4	6	6	6	0	1	44	0	1	0	0	0	1	3	5.20166	156.4	1.2	428.5	131	260	-40	28.0	1.6	$4.4 \cdot 10^{-13}$	6.0
327	92-016 09:11	3	2	128	15	23	15	7	5	6	0	1	42	0	1	0	0	0	1	3	5.20958	156.5	1.2	411.6	70	260	20	34.1	1.9	$1.3 \cdot 10^{-13}$	10.5
328	92-016 23:50	0	1	25	1	5	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.21354	156.5	1.2	403.1	285	69	15	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
329	92-017 03:06	3	1	143	7	11	4	7	8	8	0	1	0	0	1	0	0	0	1	3	5.21552	156.5	1.2	398.9	91	259	0	35.4	1.6	$6.9 \cdot 10^{-15}$	6.0
330	92-017 22:40	0	1	4	1	6	0	15	7	11	0	0	0	0	1	0	0	0	1	3	5.22146	156.6	1.2	386.1	256	70	-14	56.0	2.0	$1.5 \cdot 10^{-16}$	12.5
331	92-018 15:09	0	1	24	1	5	0	15	8	13	0	0	0	0	1	0	0	0	1	3	5.22740	156.6	1.2	373.4	284	69	13	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
332	92-018 16:18	0	1	15	1	6	0	15	8	10	0	0	4	25	1	0	0	0	1	3	5.22740	156.6	1.2	373.4	271	69	1	36.7	2.0	$8.9 \cdot 10^{-16}$	12.5
333	92-018 18:08	0	1	2	1	5	0	15	9	12	0	0	5	25	1	0	0	0	1	3	5.22839	156.6	1.2	371.3	253	70	-16	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
334	92-019 01:41	0	1	2	1	5	0	15	8	11	0	0	4	25	1	0	0	0	1	3	5.23037	156.6	1.2	367.0	253	70	-16	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
335	92-019 03:02	1	1	235	4	1	1	7	0	15	0	1	12	25	1	0	0	0	1	3	5.23136	156.6	1.2	364.9	220	68	-49	34.1	1.9	$8.9 \cdot 10^{-16}$	10.5
336	92-019 07:14	1	1	81	7	10	3	15	15	0	1	1	44	13	1	0	0	0	1	3	5.23235	156.6	1.2	362.8	999	999	999	2.1	1.6	$5.6 \cdot 10^{-11}$	6.0
337	92-019 13:18	0	1	140	2	6	0	15	9	10	0	0	0	0	1	0	0	0	1	3	5.23433	156.6	1.2	358.6	999	999	999	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
338	92-019 13:27	0	1	7	2	6	0	9	8	9	0	0	0	0	1	0	0	0	1	3	5.23433	156.6	1.2	358.6	260	70	-9	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
339	92-020 00:13	0	1	216	1	6	0	15	8	11	0	0	5	25	1	0	0	0	1	3	5.23829	156.7	1.2	350.1	999	999	999	36.7	2.0	$8.9 \cdot 10^{-16}$	12.5
340	92-020 07:48	0	1	16	2	7	0	15	9	10	0	0	0	0	1	0	0	0	1	3	5.24027	156.7	1.2	345.8	272	69	2	31.3	2.0	$2.3 \cdot 10^{-15}$	12.5
341	92-020 09:56	0	1	92	4	9	0	8	7	9	0	0	0	0	1	0	0	0	1	3	5.24126	156.7	1.2	343.7	19	273	70	34.6	1.6	$3.2 \cdot 10^{-15}$	6.0
342	92-021 20:21	1	2	121	15	15	10	8	0	6	0	1	41	0	1	0	0	0	1	3	5.25216	156.7	1.2	320.3	60	261	30	21.4	1.9	$2.4 \cdot 10^{-13}$	10.5
343	92-021 21:29	1	1	100	3	9	5	11	15	0	1	1	18	31	1	0	0	0	1	3	5.25315	156.8	1.2	318.1	30	266	59	4.2	1.6	$2.1 \cdot 10^{-12}$	6.0
344	92-021 23:56	0	1	68	2	6	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.25414	156.8	1.2	316.0	345	51	74	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
345	92-022 14:57	3	1	86	2	6	2	15	9	10	0	1	4	25	1	0	0	0	1	3	5.25811	156.8	1.2	307.5	11	285	78	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
346	92-022 15:46	0	1	94	1	4	0	15	8	13	0	0	10	31	1	0	0	0	1	3	5.25910	156.8	1.2	305.3	22	270	67	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
347	92-025 10:53	0	1	242	4	5	0	7	7	5	0	0	6	31	1	0	0	0	1	3	5.28094	156.9	1.2	258.3	230	68	-39	34.1	1.9	$1.6 \cdot 10^{-15}$	10.5
348	92-028 14:52	1	2	146	13	12	13	10	9	0	1	1	36	2	1	0	0	0	1	3	5.30586	157.1	1.2	204.6	95	258	-4	10.4	1.9	$1.2 \cdot 10^{-12}$	10.5
349	92-029 12:55	0	1	94	5	6	0	14	5	13	0	0	24	1	1	0	0	0	1	3	5.31387	157.1	1.2	187.2	21	270	68	2.0	1.9	$2.6 \cdot 10^{-11}$	10.5
350	92-029 15:37	1	1	133	4	4	3	7	10	4	1	1	6	31	1	0	0	0	1	3	5.31487	157.1	1.2	185.1	999	999	999	34.1	1.9	$1.4 \cdot 10^{-15}$	10.5
351	92-030 01:19	0	1	206	2	5	0	15	9	9	0	0	0	0	1	0	0	0	1	3	5.31788	157.1	1.2	178.6	179	325	-85	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
352	92-031 07:15	0	1	235	2	6	0	15	8	11	0	0	4	25	1	0	0	0	1	3	5.32795	157.2	1.2	156.8	220	67	-49	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
353	92-031 15:38	0	1	241	3	1	0	8	15	0	1	0	0	0	1	0	0	0	1	3	5.33098	157.2	1.2	150.2	228	67	-41	21.4	1.9	$3.9 \cdot 10^{-15}$	10.5
354	92-032 04:46	0	1	121	1	15	0	15	0	12	0	0	11	25	1	0	0	0	1	3	5.33563	157.2	1.2	140.1	999	999	999	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
355	92-032 16:21	3	3	116	19	23	1	6	5	6	0	1	44	0	1	0	0	0	1	3	5.33956	157.3	1.2	131.6	52	260	38	34.6	1.6	$1.7 \cdot 10^{-13}$	6.0
356	92-034 17:55	0	1	89	6	20	0	7	4	8	0	0	37	0	1	0	0	0	1	2	5.35654	157.4	1.1	94.9	14	277	75	34.1	1.9	$1.9 \cdot 10^{-14}$	10.5
357	92-037 18:51	3	3	165	20	26	1	5	5	6	0	1	45	0	1	0	0	0	1	2	5.38272	157.5	1.1	38.4	120	257	-29	43.7	1.6	$1.4 \cdot 10^{-13}$	6.0
358	92-038 21:09	0	2	239	9	14	0	15	7	13	0	0	0	0	5	3	3	1	3	1	5.39338	157.5	1.1	16.3	224	66	-44	10.6	7.7	$8.2 \cdot 10^{-13}$	1303.9
359	92-039 05:50	3	3	148	21	26	4	4	5	6	0	1	45	0	5	3	3	1	3	1	5.39738	157.5	1.1	9.1	96	256	-5	49.4	1.6	$9.6 \cdot 10^{-14}$	6.0
360	92-039 15:51	1	2	59	14	11	1	15	10	0	1	0	43	29	5	3	3	1	3	1	5.40133	157.5	1.1	7.6	999	999	999	2.0	1.9	$2.8 \cdot 10^{-10}$	10.5
361	92-039 17:00	3	4	244	27	25	19	9	4	15	0	1	47	0	5	3	3	1	3	1	5.40156	157.5	1.1	8.3	231	66	-38	7.8	1.9	$1.0 \cdot 10^{-10}$	10.5
362	92-039 20:33	1	3	223	20	22	5	6	7	0	1	1	8	27	5	3	3	1	3	1	5.40201	157.5	1.1	11.0	201	61	-67	25.9	1.6	$4.9 \cdot 10^{-13}$	6.0
363	92-040 03:52	3	2	185	9	13	1	6	8	10	0	1	11	23	5	2	2	0	2	1	5.40248	157.5	1.1	17.2	148	259	-56	40.0	1.6	$7.9 \cdot 10^{-15}$	6.0
364	92-040 06:00	1	3	96	19	21	18	8	13	0	1	1	4	6	1	0	0	0	1	2	5.40256	157.5	1.1	19.1	999	999	999	5.8	1.6	$3.5 \cdot 10^{-11}$	6.0
365	92-040 23:04	3	2	149	10	14	5	9	9	8	0	1	35	0	1	0	0	0	1	2	5.40288	157.5	1.0	33.5	96	256	-5	21.0	1.6	$1.2 \cdot 10^{-13}$	6.0
366	92-041 19:55	3	2	163	8	13	6	8	9	8	0	1	0	0	1	0	0	0	1	3	5.40302	157.5	1.0	50.2	115	256	-24	25.9	1.6	$3.2 \cdot 10^{-14}$	6.0
367	92-042 07:30	1	2	237	8	9	5	11	15	0	1	1	45	31	1	0	0	0	1	3	5.40305	157.5	0.9	59.4	999	999	999	7.8	1.9	$7.1 \cdot 10^{-13}$	10.5
368	92-043 21:21	3	2	168	10	14	4	7	8	6	0	1	36	0	1	0	0	0	1	3	5.40307	157.5	0.9	88.3	125	256	-34	35.4	1.6	$1.8 \cdot 10^{-14}$	6.0
369	92-046 23:16	3	3	115	19	23	5	6	5	6	0	1	42	0	1	0	0	0	1	3	5.40296	157.5	0.7	143.1	53	256	37	34.6	1.6	$1.7 \cdot 10^{-13}$	6.0
370	92-047 03:41	1	1	111	6	2	11	9	15	15	1	1	7	29	1	0	0	0	1	3	5.40295	157.5	0.7	146.3	47	257	42	14.1	1.9	$3.4 \cdot 10^{-14}$	10.5
371	92-048 02:43	1	2	114	8	9	6	7	15	15	1	1	60	31	1	0	0	0	1	3	5.40290	157.5	0.6	162.6	50	257	39	34.1	1.9	$6.8 \cdot 10^{-15}$	10.5
372	92-051 07:40	3	1	89	4	9	9	7	7	7	0	1	0	0	1	0	0	0	1	3	5.40266	157.5	0.5	218.2	16	268	73	43.7	1.6	$1.2 \cdot 10^{-15}$	6.0
373	92-054 16:21	1	2	74	9	9	8	8	10	0	1	1	0	0	1	0	0	0	1	3	5.40233	157.5	0.3	276.1	999	999	999	21.4	1.9	$4.0 \cdot 10^{-14}$	10.5
374	92-057 12:18	0	1	114	5	9	0	8	8	8	0	0	7	31	1	0	0	0	1	3	5.40200	157.6	0.2	324.4	37	258	53	28.0	1.6	$7.4 \cdot 10^{-15}$	6.0
375	92-057 17:00	0	1	132	2	6	0	8	9	10	0	0	11	23	1	0	0	0	1	3	5.40198	157.6	0.1	328.0	62	255	28	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
376	92-059 11:36	1	1	24	6	2	11	9	13	0	1	1	10	23	1	0	0	0	1	3	5.40175	157.6	0.1	357.7	85	251	5	14.1	1.9	$3.4 \cdot 10^{-14}$	10.5
377	92-060 02:01	0	1	23	3	8	0	9	7	9	0	0	4	23	1	0	0	0	1	3	5.40166	157.6	0.0	368.3	85	251	5	28.1	1.6	$4.4 \cdot 10^{-15}$	6.0
378	92-063 11:37	3	1	246	4	8	1	7	7	6	0	1	0	0	1	0	0	0	1	3	5.40116	157.6	-0.1	424.1	45	253	45	43.7	1.6	$1.0 \cdot 10^{-15}$	6.0
379	92-065 21:43	1	2	89	9	9	8	12	15	0	1	1	18	31	1	0	0	0	1	3	5.40074	157.6	-0.3	466.3	189	35	-79	5.0	1.9	$3.4 \cdot 10^{-12}$	10.5
380	92-068 23:19	0	1	21	3	7	0	9	8	9	0	0	0	0	1	0	0	0	1	3	5.40019	157.6	-0.4	516.9	96	250	-5	22.7	1.6	$7.8 \cdot 10^{-15}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
381	92-069 00:27	0	1	217	1	5	0	15	9	10	0	0	8	31	1	0	0	0	1	3	5.40016	157.6	-0.4	519.0	12	266	77	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
382	92-069 00:57	0	1	243	1	4	0	15	10	11	0	0	0	0	1	0	0	0	1	3	5.40016	157.6	-0.4	519.0	49	251	41	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
383	92-070 01:55	0	1	15	5	9	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.39996	157.7	-0.5	535.8	89	250	1	28.0	1.6	$7.4 \cdot 10^{-15}$	6.0
384	92-070 03:37	0	1	230	4	8	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39994	157.7	-0.5	537.9	32	254	58	34.6	1.6	$2.7 \cdot 10^{-15}$	6.0
385	92-070 05:41	0	1	254	1	4	0	15	9	12	0	0	11	31	1	0	0	0	1	3	5.39994	157.7	-0.5	537.9	65	250	25	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
386	92-070 06:36	0	1	192	3	7	0	9	7	9	0	0	0	0	1	0	0	0	1	3	5.39991	157.7	-0.5	540.0	338	53	68	28.1	1.6	$3.7 \cdot 10^{-15}$	6.0
387	92-070 07:02	0	1	221	4	8	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.39991	157.7	-0.5	540.0	19	259	70	28.0	1.6	$5.2 \cdot 10^{-15}$	6.0
388	92-070 09:19	3	1	249	5	9	1	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39989	157.7	-0.5	542.1	59	251	31	43.7	1.6	$1.4 \cdot 10^{-15}$	6.0
389	92-070 09:23	0	1	221	2	5	0	15	9	9	0	0	0	0	1	0	0	0	1	3	5.39989	157.7	-0.5	542.1	19	259	70	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
390	92-070 10:35	0	1	41	4	8	0	8	9	8	0	0	12	31	1	0	0	0	1	3	5.39989	157.7	-0.5	542.1	999	999	999	25.9	1.6	$6.9 \cdot 10^{-15}$	6.0
391	92-070 10:48	3	1	232	4	7	17	8	8	8	0	1	0	0	1	0	0	0	1	3	5.39989	157.7	-0.5	542.1	35	253	55	28.0	1.6	$4.3 \cdot 10^{-15}$	6.0
392	92-070 11:05	3	1	232	4	8	4	8	8	8	0	1	2	23	1	0	0	0	1	3	5.39989	157.7	-0.5	542.1	999	999	999	28.0	1.6	$5.2 \cdot 10^{-15}$	6.0
393	92-070 11:14	3	1	238	5	8	1	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39989	157.7	-0.5	542.1	43	252	47	43.7	1.6	$1.2 \cdot 10^{-15}$	6.0
394	92-070 13:17	3	1	218	6	10	1	8	8	6	0	1	0	0	1	0	0	0	1	3	5.39986	157.7	-0.5	544.2	15	262	74	28.0	1.6	$1.0 \cdot 10^{-14}$	6.0
395	92-070 13:35	3	1	219	5	9	3	7	8	7	0	1	0	0	1	0	0	0	1	3	5.39986	157.7	-0.5	544.2	17	260	73	35.4	1.6	$3.5 \cdot 10^{-15}$	6.0
396	92-070 13:43	0	1	247	3	2	0	8	15	0	1	0	0	0	1	0	0	0	1	3	5.39986	157.7	-0.5	544.2	56	251	34	21.4	1.9	$4.6 \cdot 10^{-15}$	10.5
397	92-070 13:56	0	1	247	3	2	0	9	15	15	1	0	0	0	1	0	0	0	1	3	5.39986	157.7	-0.5	544.2	999	999	999	14.1	1.9	$2.1 \cdot 10^{-14}$	10.5
398	92-070 14:26	3	1	230	3	7	1	8	8	8	0	1	0	0	1	0	0	0	1	3	5.39986	157.7	-0.5	544.2	32	254	58	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
399	92-070 14:26	3	1	255	4	8	9	8	8	6	0	1	0	0	1	0	0	0	1	3	5.39986	157.7	-0.5	544.2	67	250	23	28.0	1.6	$5.2 \cdot 10^{-15}$	6.0
400	92-070 15:00	3	1	14	7	11	14	7	8	6	0	1	5	31	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	89	250	2	35.4	1.6	$6.9 \cdot 10^{-15}$	6.0
401	92-070 15:04	0	1	6	4	9	0	8	8	8	0	0	5	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	77	250	13	28.0	1.6	$6.2 \cdot 10^{-15}$	6.0
402	92-070 15:17	0	1	13	4	9	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	999	999	999	34.6	1.6	$3.2 \cdot 10^{-15}$	6.0
403	92-070 15:21	0	1	239	5	10	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	45	252	45	34.6	1.6	$4.5 \cdot 10^{-15}$	6.0
404	92-070 15:25	0	1	21	4	8	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	98	250	-7	28.0	1.6	$5.2 \cdot 10^{-15}$	6.0
405	92-070 15:47	3	1	4	6	11	10	7	7	6	0	1	4	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	74	250	16	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
406	92-070 15:51	0	1	27	5	10	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	107	251	-16	28.0	1.6	$8.8 \cdot 10^{-15}$	6.0
407	92-070 16:17	3	1	245	6	10	6	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	53	251	37	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
408	92-070 16:21	0	1	245	5	9	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	999	999	999	43.7	1.6	$1.4 \cdot 10^{-15}$	6.0
409	92-070 16:21	0	1	225	6	11	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	25	256	64	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
410	92-070 16:55	0	1	254	4	8	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	66	250	24	28.0	1.6	$5.2 \cdot 10^{-15}$	6.0
411	92-070 16:59	0	1	13	5	9	0	8	7	8	0	0	8	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	87	250	3	34.6	1.6	$3.8 \cdot 10^{-15}$	6.0
412	92-070 17:04	0	1	4	5	10	0	7	8	8	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	74	250	16	35.4	1.6	$4.1 \cdot 10^{-15}$	6.0
413	92-070 17:08	0	1	4	5	10	0	7	8	7	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	999	999	999	35.4	1.6	$4.1 \cdot 10^{-15}$	6.0
414	92-070 17:16	0	1	206	6	10	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	359	354	85	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
415	92-070 17:16	0	1	16	4	1	0	8	15	0	1	0	5	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	91	250	0	21.4	1.9	$4.5 \cdot 10^{-15}$	10.5
416	92-070 17:21	0	1	14	5	10	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	89	250	2	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
417	92-070 17:25	0	1	222	3	5	0	8	8	9	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	21	258	69	28.0	1.6	$2.6 \cdot 10^{-15}$	6.0
418	92-070 17:33	0	1	200	6	11	0	7	7	7	0	0	4	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	350	41	79	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
419	92-070 17:33	0	1	5	4	3	0	7	15	15	1	0	4	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	76	250	14	34.1	1.9	$1.2 \cdot 10^{-15}$	10.5
420	92-070 17:38	0	1	11	4	1	0	8	15	15	1	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	84	250	6	21.4	1.9	$4.5 \cdot 10^{-15}$	10.5
421	92-070 17:38	3	1	214	5	10	6	7	7	6	0	1	9	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	10	270	79	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
422	92-070 17:46	0	1	253	6	11	0	7	7	6	0	0	4	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	65	251	25	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
423	92-070 17:46	0	1	253	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
424	92-070 17:51	0	1	218	1	1	0	15	15	0	1	0	3	31	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	15	262	74	11.8	11.8	$1.9 \cdot 10^{-14}$	5858.3
425	92-070 17:55	0	1	218	6	11	0	7	7	7	0	0	4	23	1	0	0	0	1	3	5.39984	157.7	-0.5	546.3	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
426	92-070 17:59	0	1	251	5	10	0	8	7	8	0	0	5	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	62	251	28	34.6	1.6	$4.5 \cdot 10^{-15}$	6.0
427	92-070 18:03	0	1	251	6	11	0	7	7	7	0	0	10	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
428	92-070 18:08	0	1	29	3	1	0	9	15	0	1	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	110	251	-19	14.1	1.9	$1.8 \cdot 10^{-14}$	10.5
429	92-070 18:08	0	1	247	5	10	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	56	251	34	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
430	92-070 18:12	0	1	224	5	11	0	8	7	8	0	0	9	31	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	24	256	66	34.6	1.6	$5.3 \cdot 10^{-15}$	6.0
431	92-070 18:16	3	1	2	6	11	5	7	7	8	0	1	7	31	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	72	250	18	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
432	92-070 18:16	3	1	237	6	10	1	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	42	252	48	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
433	92-070 18:20	0	1	239	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	45	252	45	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
434	92-070 18:25	0	1	220	7	11	0	7	7	6	0	0	9	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	18	259	71	43.7	1.6	$2.9 \cdot 10^{-15}$	6.0
435	92-070 18:29	0	1	8	5	10	0	7	8	7	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	80	250	10	35.4	1.6	$4.1 \cdot 10^{-15}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
436	92-070 18:29	3	1	220	7	11	2	7	7	6	0	1	3	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	18	259	71	43.7	1.6	$2.9 \cdot 10^{-15}$	6.0
437	92-070 18:33	0	1	0	7	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	69	250	21	43.7	1.6	$2.9 \cdot 10^{-15}$	6.0
438	92-070 18:42	3	1	6	6	11	6	7	7	6	0	1	5	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	77	250	13	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
439	92-070 18:46	0	1	249	5	9	0	8	7	8	0	0	9	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	59	251	31	34.6	1.6	$3.8 \cdot 10^{-15}$	6.0
440	92-070 18:50	0	1	6	5	10	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	77	250	13	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
441	92-070 18:50	0	1	15	5	10	0	8	7	7	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	90	250	0	34.6	1.6	$4.5 \cdot 10^{-15}$	6.0
442	92-070 18:50	0	1	24	6	11	0	7	7	7	0	0	3	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	103	251	-12	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
443	92-070 18:55	3	1	225	7	12	1	7	7	6	0	1	7	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	25	256	64	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
444	92-070 18:59	0	1	245	5	10	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	53	251	36	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
445	92-070 19:03	0	1	245	2	10	0	15	6	11	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	11.8	11.8	$1.1 \cdot 10^{-13}$	5858.3
446	92-070 19:07	0	1	198	3	2	0	8	15	15	1	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	347	46	77	21.4	1.9	$4.6 \cdot 10^{-15}$	10.5
447	92-070 19:12	0	1	198	6	11	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	34.6	1.6	$6.2 \cdot 10^{-15}$	6.0
448	92-070 19:16	0	1	198	3	1	0	9	15	0	1	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	14.1	1.9	$1.8 \cdot 10^{-14}$	10.5
449	92-070 19:16	3	1	9	6	11	8	7	7	6	0	1	7	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	82	250	8	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
450	92-070 19:20	3	1	18	6	11	2	7	7	6	0	1	0	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	94	250	-3	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
451	92-070 19:20	3	1	14	6	11	4	8	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	89	250	1	34.6	1.6	$6.2 \cdot 10^{-15}$	6.0
452	92-070 19:24	0	1	14	6	11	0	7	7	7	0	0	3	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
453	92-070 19:24	3	1	247	7	11	4	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	56	251	34	43.7	1.6	$2.9 \cdot 10^{-15}$	6.0
454	92-070 19:29	3	1	236	7	12	17	7	7	6	0	1	6	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	41	252	49	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
455	92-070 19:29	0	1	252	3	2	0	8	15	0	1	0	4	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	63	251	27	21.4	1.9	$4.6 \cdot 10^{-15}$	10.5
456	92-070 19:33	3	1	1	6	11	15	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	70	250	20	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
457	92-070 19:33	0	1	244	5	10	0	8	7	7	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	52	251	38	34.6	1.6	$4.5 \cdot 10^{-15}$	6.0
458	92-070 19:33	3	1	212	6	11	1	8	8	6	0	1	11	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	7	277	82	28.0	1.6	$1.2 \cdot 10^{-14}$	6.0
459	92-070 19:37	0	1	209	4	15	0	8	0	8	0	0	12	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	3	302	85	21.4	1.9	$4.3 \cdot 10^{-14}$	10.5
460	92-070 19:37	3	1	244	6	11	19	8	8	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	52	251	38	28.0	1.6	$1.2 \cdot 10^{-14}$	6.0
461	92-070 19:41	3	1	209	7	11	8	7	8	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	3	302	85	35.4	1.6	$6.9 \cdot 10^{-15}$	6.0
462	92-070 19:41	0	1	229	5	9	0	7	8	8	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	31	254	59	35.4	1.6	$3.5 \cdot 10^{-15}$	6.0
463	92-070 19:50	0	1	10	6	12	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	83	250	7	34.6	1.6	$7.3 \cdot 10^{-15}$	6.0
464	92-070 19:50	0	1	216	6	12	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	13	265	77	34.6	1.6	$7.3 \cdot 10^{-15}$	6.0
465	92-070 19:50	3	1	227	7	11	1	7	8	6	0	1	8	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	28	255	62	35.4	1.6	$6.9 \cdot 10^{-15}$	6.0
466	92-070 19:54	3	1	251	6	11	10	7	7	6	0	1	3	31	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	62	251	28	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
467	92-070 19:54	3	1	253	7	12	3	7	7	6	0	1	9	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	65	251	25	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
468	92-070 20:03	3	1	2	6	11	3	7	8	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	72	250	18	35.4	1.6	$5.7 \cdot 10^{-15}$	6.0
469	92-070 20:03	3	1	212	6	11	4	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	7	277	82	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
470	92-070 20:03	3	1	218	7	12	9	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	16	261	74	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
471	92-070 20:07	0	1	245	5	10	0	8	7	8	0	0	5	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	53	251	36	34.6	1.6	$4.5 \cdot 10^{-15}$	6.0
472	92-070 20:07	3	1	235	6	11	9	7	8	7	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	39	252	50	35.4	1.6	$5.7 \cdot 10^{-15}$	6.0
473	92-070 20:07	0	1	201	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	352	37	81	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
474	92-070 20:11	3	1	250	6	10	5	7	7	6	0	1	5	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	61	251	29	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
475	92-070 20:11	0	1	211	5	11	0	7	7	7	0	0	4	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	6	283	83	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
476	92-070 20:16	3	1	246	7	12	5	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	55	251	35	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
477	92-070 20:20	3	1	0	5	10	3	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	69	250	21	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
478	92-070 20:20	0	1	12	6	12	0	7	8	7	0	0	3	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	86	250	4	35.4	1.6	$6.7 \cdot 10^{-15}$	6.0
479	92-070 20:20	3	2	12	8	12	2	7	7	6	0	1	7	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	43.7	1.6	$4.0 \cdot 10^{-15}$	6.0
480	92-070 20:24	0	1	245	7	11	0	7	8	6	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	53	251	36	35.4	1.6	$6.9 \cdot 10^{-15}$	6.0
481	92-070 20:24	3	1	14	7	12	1	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	89	250	1	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
482	92-070 20:28	0	1	1	5	10	0	8	7	8	0	0	8	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	70	250	20	34.6	1.6	$4.5 \cdot 10^{-15}$	6.0
483	92-070 20:33	3	1	238	6	11	3	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	44	252	46	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
484	92-070 20:33	3	1	255	5	10	1	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	68	250	22	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
485	92-070 20:33	0	1	25	5	10	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	104	251	-13	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
486	92-070 20:37	3	1	233	6	12	4	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	37	253	53	43.7	1.6	$2.7 \cdot 10^{-15}$	6.0
487	92-070 20:37	3	1	233	5	9	1	7	7	8	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	43.7	1.6	$1.4 \cdot 10^{-15}$	6.0
488	92-070 20:41	3	1	1	7	12	18	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	70	250	20	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
489	92-070 20:41	3	1	255	7	12	12	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	68	250	22	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
490	92-070 20:45	3	1	255	7	12	3	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
491	92-070 20:45	3	1	247	5	10	5	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	56	251	34	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
492	92-070 20:45	0	1	255	5	11	0	7	8	8	0	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	999	999	999	35.4	1.6	$4.9 \cdot 10^{-15}$	6.0
493	92-070 20:50	3	1	240	6	12	1	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	46	252	43	43.7	1.6	$2.7 \cdot 10^{-15}$	6.0
494	92-070 20:50	3	1	233	6	11	1	7	7	7	0	1	7	23	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	37	253	53	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
495	92-070 20:50	0	1	18	4	2	0	8	15	15	1	0	0	0	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	94	250	-3	21.4	1.9	$5.4 \cdot 10^{-15}$	10.5
496	92-070 20:54	3	2	249	8	12	19	6	8	6	0	1	5	31	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	59	251	31	40.0	1.6	$5.8 \cdot 10^{-15}$	6.0
497	92-070 20:58	0	1	248	4	10	0	7	8	8	0	0	7	31	1	0	0	0	1	3	5.39981	157.7	-0.5	548.4	58	251	32	35.4	1.6	$3.5 \cdot 10^{-15}$	6.0
498	92-070 20:58	0	1	228	6	11	0	7	7	8	0	0	10	31	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	30	254	60	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
499	92-070 20:58	0	2	10	8	12	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	83	250	7	43.7	1.6	$4.0 \cdot 10^{-15}$	6.0
500	92-070 21:03	3	1	220	7	12	9	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	18	259	71	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
501	92-070 21:07	0	1	235	6	11	0	8	7	7	0	0	4	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	40	252	50	34.6	1.6	$6.2 \cdot 10^{-15}$	6.0
502	92-070 21:07	0	1	250	6	11	0	7	8	8	0	0	10	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	61	251	29	35.4	1.6	$5.7 \cdot 10^{-15}$	6.0
503	92-070 21:11	3	1	223	7	12	1	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	23	257	67	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
504	92-070 21:11	0	1	210	5	2	0	8	15	15	1	0	4	31	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	4	290	84	21.4	1.9	$6.4 \cdot 10^{-15}$	10.5
505	92-070 21:15	0	1	238	6	11	0	7	7	6	0	0	7	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	44	252	46	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
506	92-070 21:20	0	1	246	5	10	0	8	7	7	0	0	5	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	55	251	35	34.6	1.6	$4.5 \cdot 10^{-15}$	6.0
507	92-070 21:20	0	1	6	2	5	0	15	10	11	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	78	250	12	26.5	2.0	$2.7 \cdot 10^{-15}$	12.5
508	92-070 21:20	3	1	0	6	11	7	7	7	6	0	1	3	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	69	250	21	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
509	92-070 21:24	0	1	254	5	10	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	66	250	24	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
510	92-070 21:28	0	1	9	7	12	0	7	7	7	0	0	35	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	82	250	8	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
511	92-070 21:28	0	1	12	3	2	0	9	15	0	1	0	0	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	86	250	4	14.1	1.9	$2.1 \cdot 10^{-14}$	10.5
512	92-070 21:32	0	1	212	3	12	0	8	6	10	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	7	277	82	21.4	1.9	$2.4 \cdot 10^{-14}$	10.5
513	92-070 21:32	0	1	234	5	10	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	38	253	52	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
514	92-070 21:32	3	1	243	7	11	3	7	8	6	0	1	7	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	51	251	39	35.4	1.6	$6.9 \cdot 10^{-15}$	6.0
515	92-070 21:37	3	1	219	7	12	9	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	17	260	72	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
516	92-070 21:45	3	1	11	7	12	6	7	7	6	0	1	5	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	85	250	5	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
517	92-070 21:49	3	1	11	6	11	9	7	7	6	0	1	4	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
518	92-070 21:49	0	1	248	7	12	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	58	251	32	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
519	92-070 21:54	0	1	192	5	11	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	339	53	69	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
520	92-070 21:54	3	1	205	5	9	15	8	8	7	0	1	4	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	357	6	85	28.0	1.6	$7.4 \cdot 10^{-15}$	6.0
521	92-070 21:58	0	1	12	7	12	0	7	7	7	0	0	35	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	86	250	4	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
522	92-070 21:58	3	1	6	5	10	3	7	7	8	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	78	250	12	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
523	92-070 22:02	3	1	6	6	11	3	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
524	92-070 22:02	3	1	6	7	12	4	7	7	6	0	1	3	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
525	92-070 22:02	0	1	8	5	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	80	250	10	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
526	92-070 22:02	0	1	31	4	1	0	8	15	0	1	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	113	251	-22	21.4	1.9	$4.5 \cdot 10^{-15}$	10.5
527	92-070 22:07	0	1	234	6	13	0	6	7	8	0	0	35	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	38	253	52	43.5	1.9	$3.3 \cdot 10^{-15}$	10.5
528	92-070 22:11	0	1	30	2	2	0	15	15	0	1	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	111	251	-20	11.8	11.8	$2.8 \cdot 10^{-14}$	5858.3
529	92-070 22:11	3	1	205	6	11	1	7	7	7	0	1	5	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	357	6	85	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
530	92-070 22:15	3	1	30	6	10	4	7	7	7	0	1	5	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
531	92-070 22:15	0	1	238	6	10	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	44	252	46	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
532	92-070 22:19	0	1	2	4	2	0	8	15	0	1	0	3	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	72	250	18	21.4	1.9	$5.4 \cdot 10^{-15}$	10.5
533	92-070 22:19	3	1	250	6	11	6	7	7	6	0	1	4	31	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	61	251	29	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
534	92-070 22:19	3	1	3	6	11	14	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	73	250	17	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
535	92-070 22:24	3	1	205	7	11	2	7	7	6	0	1	5	31	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	357	6	85	43.7	1.6	$2.9 \cdot 10^{-15}$	6.0
536	92-070 22:28	0	1	221	6	10	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	20	258	70	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
537	92-070 22:28	0	1	221	5	1	0	8	15	0	1	0	3	31	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	21.4	1.9	$5.4 \cdot 10^{-15}$	10.5
538	92-070 22:32	3	1	221	6	11	7	7	7	6	0	1	6	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
539	92-070 22:32	0	1	238	6	11	0	7	7	6	0	0	9	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	44	252	46	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
540	92-070 22:32	0	1	14	4	2	0	8	15	15	1	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	89	250	1	21.4	1.9	$5.4 \cdot 10^{-15}$	10.5
541	92-070 22:36	0	1	14	6	11	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
542	92-070 22:36	0	1	214	5	10	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	10	269	79	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
543	92-070 22:41	0	1	212	7	12	0	7	7	7	0	0	11	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	7	277	82	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
544	92-070 22:45	3	1	201	6	11	7	7	7	6	0	1	0	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	352	37	81	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
545	92-070 22:45	3	2	248	8	12	3	7	7	6	0	1	7	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	58	251	32	43.7	1.6	$4.0 \cdot 10^{-15}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
546	92-070 22:49	3	2	252	8	12	20	7	7	6	0	1	34	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	63	251	26	43.7	1.6	$4.0\cdot10^{-15}$	6.0
547	92-070 22:53	0	1	238	7	12	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	44	252	46	43.7	1.6	$3.3\cdot10^{-15}$	6.0
548	92-070 22:53	0	1	29	7	11	0	7	7	6	0	0	3	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	110	251	-19	43.7	1.6	$2.9\cdot10^{-15}$	6.0
549	92-070 22:58	0	1	212	6	12	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	7	277	82	43.7	1.6	$2.7\cdot10^{-15}$	6.0
550	92-070 22:58	3	1	23	6	11	4	7	8	7	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	101	250	-10	35.4	1.6	$5.7\cdot10^{-15}$	6.0
551	92-070 23:02	0	1	252	3	7	0	8	8	8	0	0	5	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	63	251	26	28.0	1.6	$3.7\cdot10^{-15}$	6.0
552	92-070 23:02	0	1	219	1	3	0	15	15	15	1	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	17	260	72	11.8	11.8	$2.6\cdot10^{-14}$	5858.3
553	92-070 23:06	0	1	229	5	10	0	7	7	7	0	0	4	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	31	254	59	43.7	1.6	$1.7\cdot10^{-15}$	6.0
554	92-070 23:06	0	1	196	4	9	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	345	49	74	34.6	1.6	$3.2\cdot10^{-15}$	6.0
555	92-070 23:11	0	1	247	7	13	0	7	7	7	0	0	36	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	56	251	33	43.7	1.6	$3.9\cdot10^{-15}$	6.0
556	92-070 23:11	0	1	0	2	12	0	15	6	10	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	69	250	21	11.8	11.8	$1.5\cdot10^{-13}$	5858.3
557	92-070 23:15	0	1	217	1	4	0	15	11	11	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	14	263	75	11.8	11.8	$3.0\cdot10^{-14}$	5858.3
558	92-070 23:19	0	1	232	7	12	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	35	253	54	43.7	1.6	$3.3\cdot10^{-15}$	6.0
559	92-070 23:19	0	1	232	7	12	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$3.3\cdot10^{-15}$	6.0
560	92-070 23:23	0	1	232	7	12	0	7	7	6	0	0	6	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$3.3\cdot10^{-15}$	6.0
561	92-070 23:23	3	2	232	8	12	5	7	7	6	0	1	5	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$4.0\cdot10^{-15}$	6.0
562	92-070 23:28	3	1	230	7	11	19	7	8	6	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	33	254	57	35.4	1.6	$6.9\cdot10^{-15}$	6.0
563	92-070 23:28	0	1	228	7	12	0	8	8	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	30	254	60	28.0	1.6	$1.7\cdot10^{-14}$	6.0
564	92-070 23:32	0	1	246	6	11	0	7	7	7	0	0	8	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	55	251	35	43.7	1.6	$2.3\cdot10^{-15}$	6.0
565	92-070 23:32	3	1	248	6	11	6	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	58	251	32	43.7	1.6	$2.3\cdot10^{-15}$	6.0
566	92-070 23:32	0	2	12	8	13	0	7	7	7	0	0	35	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	86	250	4	43.7	1.6	$4.7\cdot10^{-15}$	6.0
567	92-070 23:32	0	1	12	6	12	0	7	7	8	0	0	35	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$2.7\cdot10^{-15}$	6.0
568	92-070 23:36	3	1	13	7	12	1	7	7	6	0	1	34	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	87	250	3	43.7	1.6	$3.3\cdot10^{-15}$	6.0
569	92-070 23:40	3	1	230	6	10	15	7	8	6	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	33	254	57	35.4	1.6	$4.8\cdot10^{-15}$	6.0
570	92-070 23:40	3	1	20	7	12	11	7	7	6	0	1	5	23	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	97	250	-6	43.7	1.6	$3.3\cdot10^{-15}$	6.0
571	92-070 23:45	3	1	211	6	11	1	7	7	7	0	1	5	31	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	6	283	83	43.7	1.6	$2.3\cdot10^{-15}$	6.0
572	92-070 23:49	3	1	245	7	11	1	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	54	251	36	43.7	1.6	$2.9\cdot10^{-15}$	6.0
573	92-070 23:49	0	1	7	7	12	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	79	250	11	43.7	1.6	$3.3\cdot10^{-15}$	6.0
574	92-070 23:49	3	1	223	7	12	17	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	23	257	67	43.7	1.6	$3.3\cdot10^{-15}$	6.0
575	92-070 23:53	0	1	253	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	65	251	25	43.7	1.6	$2.3\cdot10^{-15}$	6.0
576	92-070 23:53	0	1	253	7	13	0	7	7	6	0	0	35	0	1	0	0	0	1	3	5.39979	157.7	-0.5	550.5	999	999	999	43.7	1.6	$3.9\cdot10^{-15}$	6.0
577	92-070 23:57	0	1	0	5	2	0	8	15	0	1	0	6	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	69	250	21	21.4	1.9	$6.4\cdot10^{-15}$	10.5
578	92-071 00:02	0	1	222	5	11	0	7	7	7	0	0	4	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	21	257	68	43.7	1.6	$2.0\cdot10^{-15}$	6.0
579	92-071 00:02	0	1	222	6	11	0	7	7	7	0	0	5	31	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	43.7	1.6	$2.3\cdot10^{-15}$	6.0
580	92-071 00:02	0	1	222	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	43.7	1.6	$2.3\cdot10^{-15}$	6.0
581	92-071 00:06	0	1	227	5	10	0	7	8	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	28	255	61	35.4	1.6	$4.1\cdot10^{-15}$	6.0
582	92-071 00:10	0	1	226	4	3	0	8	15	0	1	0	4	31	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	27	255	63	21.4	1.9	$6.1\cdot10^{-15}$	10.5
583	92-071 00:15	1	1	224	7	15	3	7	0	6	0	1	11	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	24	256	65	34.1	1.9	$1.4\cdot10^{-14}$	10.5
584	92-071 00:19	0	1	224	6	15	0	7	0	7	0	0	3	31	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	34.1	1.9	$1.2\cdot10^{-14}$	10.5
585	92-071 00:19	3	1	239	7	11	4	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	45	252	45	43.7	1.6	$2.9\cdot10^{-15}$	6.0
586	92-071 00:23	0	1	124	6	11	0	8	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	34.6	1.6	$6.2\cdot10^{-15}$	6.0
587	92-071 00:23	3	1	255	6	11	9	7	7	6	0	1	2	31	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	68	250	22	43.7	1.6	$2.3\cdot10^{-15}$	6.0
588	92-071 00:23	3	2	1	8	13	14	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	71	250	19	43.7	1.6	$4.7\cdot10^{-15}$	6.0
589	92-071 00:32	0	1	15	6	11	0	8	7	7	0	0	3	31	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	90	250	0	34.6	1.6	$6.2\cdot10^{-15}$	6.0
590	92-071 00:32	0	1	230	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	33	254	57	43.7	1.6	$2.3\cdot10^{-15}$	6.0
591	92-071 00:32	0	1	231	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	34	253	56	43.7	1.6	$2.3\cdot10^{-15}$	6.0
592	92-071 00:36	3	1	4	7	12	2	7	7	6	0	1	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	75	250	15	43.7	1.6	$3.3\cdot10^{-15}$	6.0
593	92-071 00:40	3	1	244	7	11	1	7	7	6	0	1	4	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	52	251	38	43.7	1.6	$2.9\cdot10^{-15}$	6.0
594	92-071 00:40	0	1	8	7	13	0	7	7	7	0	0	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	81	250	10	43.7	1.6	$3.9\cdot10^{-15}$	6.0
595	92-071 00:44	3	1	232	7	11	1	7	7	6	0	1	0	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	36	253	54	43.7	1.6	$2.9\cdot10^{-15}$	6.0
596	92-071 00:44	3	2	15	9	14	12	7	7	6	0	1	36	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	90	250	0	43.7	1.6	$6.4\cdot10^{-15}$	6.0
597	92-071 00:44	3	1	15	5	10	2	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	43.7	1.6	$1.7\cdot10^{-15}$	6.0
598	92-071 00:49	3	1	3	7	12	9	7	7	6	0	1	4	31	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	73	250	17	43.7	1.6	$3.3\cdot10^{-15}$	6.0
599	92-071 00:53	3	1	3	7	12	5	7	7	6	0	1	7	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	43.7	1.6	$3.3\cdot10^{-15}$	6.0
600	92-071 00:53	0	1	3	6	11	0	8	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	34.6	1.6	$6.2\cdot10^{-15}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
601	92-071 00:57	0	1	236	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	41	252	49	43.7	1.6	$2.3\cdot10^{-15}$	6.0
602	92-071 01:01	3	1	236	6	11	8	7	7	7	0	1	7	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	43.7	1.6	$2.3\cdot10^{-15}$	6.0
603	92-071 01:01	0	1	244	7	12	0	7	7	7	0	0	34	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	52	251	38	43.7	1.6	$3.3\cdot10^{-15}$	6.0
604	92-071 01:06	0	1	17	5	10	0	8	7	9	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	93	250	-2	34.6	1.6	$4.5\cdot10^{-15}$	6.0
605	92-071 01:10	0	1	245	5	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	54	251	36	43.7	1.6	$2.0\cdot10^{-15}$	6.0
606	92-071 01:10	0	2	203	8	12	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	355	25	83	43.7	1.6	$4.0\cdot10^{-15}$	6.0
607	92-071 01:14	3	1	3	6	11	3	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	73	250	17	43.7	1.6	$2.3\cdot10^{-15}$	6.0
608	92-071 01:19	3	1	222	7	12	18	7	7	6	0	1	7	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	21	257	68	43.7	1.6	$3.3\cdot10^{-15}$	6.0
609	92-071 01:19	0	1	208	7	12	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	2	314	85	43.7	1.6	$3.3\cdot10^{-15}$	6.0
610	92-071 01:23	0	1	225	6	11	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	26	255	64	43.7	1.6	$2.3\cdot10^{-15}$	6.0
611	92-071 01:27	0	1	197	6	11	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	346	47	76	43.7	1.6	$2.3\cdot10^{-15}$	6.0
612	92-071 01:31	3	1	245	6	10	3	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	54	251	36	43.7	1.6	$2.0\cdot10^{-15}$	6.0
613	92-071 01:31	3	2	232	8	13	2	7	7	6	0	1	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	36	253	54	43.7	1.6	$4.7\cdot10^{-15}$	6.0
614	92-071 01:31	0	1	5	6	11	0	7	7	7	0	0	6	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	76	250	14	43.7	1.6	$2.3\cdot10^{-15}$	6.0
615	92-071 01:36	3	2	12	8	13	15	7	8	6	0	1	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	86	250	4	35.4	1.6	$1.1\cdot10^{-14}$	6.0
616	92-071 01:36	0	1	5	6	11	0	7	8	6	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	76	250	14	35.4	1.6	$5.7\cdot10^{-15}$	6.0
617	92-071 01:36	0	1	200	5	10	0	7	8	8	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	351	40	80	35.4	1.6	$4.1\cdot10^{-15}$	6.0
618	92-071 01:36	0	2	249	8	12	0	7	7	6	0	0	10	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	59	251	31	43.7	1.6	$4.0\cdot10^{-15}$	6.0
619	92-071 01:40	0	1	199	5	3	0	8	15	0	1	0	5	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	349	43	78	21.4	1.9	$7.3\cdot10^{-15}$	10.5
620	92-071 01:44	3	1	252	7	12	6	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	64	251	26	43.7	1.6	$3.3\cdot10^{-15}$	6.0
621	92-071 01:44	0	1	21	5	11	0	8	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	99	250	-8	34.6	1.6	$5.3\cdot10^{-15}$	6.0
622	92-071 01:48	0	2	246	8	13	0	7	7	6	0	0	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	55	251	35	43.7	1.6	$4.7\cdot10^{-15}$	6.0
623	92-071 01:48	3	1	254	7	12	9	7	7	6	0	1	4	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	66	250	24	43.7	1.6	$3.3\cdot10^{-15}$	6.0
624	92-071 01:53	3	1	6	7	12	19	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	78	250	12	43.7	1.6	$3.3\cdot10^{-15}$	6.0
625	92-071 01:53	0	1	12	6	11	0	7	7	7	0	0	3	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	86	250	4	43.7	1.6	$2.3\cdot10^{-15}$	6.0
626	92-071 01:57	0	1	17	7	12	0	7	7	6	0	0	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	93	250	-2	43.7	1.6	$3.3\cdot10^{-15}$	6.0
627	92-071 02:01	0	1	253	5	10	0	7	7	7	0	0	5	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	65	250	25	43.7	1.6	$1.7\cdot10^{-15}$	6.0
628	92-071 02:01	3	1	223	7	12	18	7	8	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	23	257	67	35.4	1.6	$8.1\cdot10^{-15}$	6.0
629	92-071 02:05	3	1	253	6	11	4	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	65	250	25	43.7	1.6	$2.3\cdot10^{-15}$	6.0
630	92-071 02:05	0	1	243	6	12	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	51	251	39	43.7	1.6	$2.7\cdot10^{-15}$	6.0
631	92-071 02:10	3	1	252	7	12	6	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	64	251	26	43.7	1.6	$3.3\cdot10^{-15}$	6.0
632	92-071 02:10	3	1	235	6	11	1	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	40	252	50	43.7	1.6	$2.3\cdot10^{-15}$	6.0
633	92-071 02:14	0	1	5	6	12	0	7	7	7	0	0	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	76	250	14	43.7	1.6	$2.7\cdot10^{-15}$	6.0
634	92-071 02:14	0	1	242	7	13	0	7	7	7	0	0	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	50	251	40	43.7	1.6	$3.9\cdot10^{-15}$	6.0
635	92-071 02:18	0	1	221	6	11	0	7	7	7	0	0	8	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	20	258	70	43.7	1.6	$2.3\cdot10^{-15}$	6.0
636	92-071 02:18	0	1	221	2	2	0	15	15	0	1	0	5	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	11.8	11.8	$2.8\cdot10^{-14}$	5858.3
637	92-071 02:18	0	1	235	7	12	0	7	7	7	0	0	10	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	40	252	50	43.7	1.6	$3.3\cdot10^{-15}$	6.0
638	92-071 02:23	0	1	237	7	11	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	43	252	47	43.7	1.6	$2.9\cdot10^{-15}$	6.0
639	92-071 02:23	0	1	7	5	3	0	7	15	0	1	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	79	250	11	34.1	1.9	$1.4\cdot10^{-15}$	10.5
640	92-071 02:27	3	1	248	7	12	8	7	7	6	0	1	7	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	58	251	32	43.7	1.6	$3.3\cdot10^{-15}$	6.0
641	92-071 02:27	3	1	219	7	11	5	7	7	6	0	1	8	24	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	17	260	72	43.7	1.6	$2.9\cdot10^{-15}$	6.0
642	92-071 02:31	0	1	249	6	12	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	59	251	31	43.7	1.6	$2.7\cdot10^{-15}$	6.0
643	92-071 02:35	3	2	249	8	12	4	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	43.7	1.6	$4.0\cdot10^{-15}$	6.0
644	92-071 02:44	0	1	212	4	2	0	7	15	0	1	0	5	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	34.1	1.9	$1.1\cdot10^{-15}$	10.5
645	92-071 02:48	3	1	212	7	12	4	7	7	7	0	1	3	23	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	999	999	999	43.7	1.6	$3.3\cdot10^{-15}$	6.0
646	92-071 02:48	3	1	234	7	12	3	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	38	253	51	43.7	1.6	$3.3\cdot10^{-15}$	6.0
647	92-071 02:57	3	1	210	7	12	1	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	5	289	84	43.7	1.6	$3.3\cdot10^{-15}$	6.0
648	92-071 02:57	0	2	0	8	13	0	7	7	6	0	0	35	0	1	0	0	0	1	3	5.39976	157.7	-0.5	552.6	69	250	21	43.7	1.6	$4.7\cdot10^{-15}$	6.0
649	92-071 03:01	3	1	230	7	12	17	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	31	253	59	43.7	1.6	$3.3\cdot10^{-15}$	6.0
650	92-071 03:01	0	1	191	4	2	0	7	15	0	1	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	336	54	65	34.1	1.9	$1.1\cdot10^{-15}$	10.5
651	92-071 03:01	0	1	1	5	11	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	69	250	21	43.7	1.6	$2.0\cdot10^{-15}$	6.0
652	92-071 03:05	3	2	243	8	13	12	7	7	6	0	1	34	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	49	250	41	43.7	1.6	$4.7\cdot10^{-15}$	6.0
653	92-071 03:05	0	1	225	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	24	255	66	43.7	1.6	$2.3\cdot10^{-15}$	6.0
654	92-071 03:09	0	1	4	6	11	0	7	7	7	0	0	6	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	73	249	17	43.7	1.6	$2.3\cdot10^{-15}$	6.0
655	92-071 03:14	3	1	217	7	12	9	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	12	264	77	43.7	1.6	$3.3\cdot10^{-15}$	6.0

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
656	92-071 03:14	0	1	231	5	11	0	7	7	8	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	32	253	58	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
657	92-071 03:18	3	2	218	8	13	7	7	7	6	0	1	4	31	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	14	262	76	43.7	1.6	$4.7 \cdot 10^{-15}$	6.0
658	92-071 03:18	0	1	204	7	12	0	7	7	7	0	0	4	31	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	354	29	83	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
659	92-071 03:22	0	1	232	6	11	0	7	7	7	0	0	3	31	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	33	252	56	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
660	92-071 03:27	3	1	244	2	5	1	15	9	9	0	1	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	50	250	40	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
661	92-071 03:27	0	1	244	4	2	0	8	15	0	1	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	999	999	999	21.4	1.9	$5.4 \cdot 10^{-15}$	10.5
662	92-071 03:31	3	1	210	7	12	2	7	7	6	0	1	35	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	2	304	85	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
663	92-071 03:31	0	2	235	8	12	0	7	7	6	0	0	34	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	38	252	52	43.7	1.6	$4.0 \cdot 10^{-15}$	6.0
664	92-071 03:35	0	1	13	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	85	249	5	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
665	92-071 03:39	3	1	244	7	12	1	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	50	250	40	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
666	92-071 03:39	3	1	229	6	11	18	7	7	6	0	1	0	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	29	253	61	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
667	92-071 03:48	3	1	8	7	12	2	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	78	249	12	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
668	92-071 03:48	3	2	8	8	12	21	7	7	6	0	1	4	31	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	999	999	999	43.7	1.6	$4.0 \cdot 10^{-15}$	6.0
669	92-071 03:52	0	1	234	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	36	252	54	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
670	92-071 03:56	0	1	241	6	11	0	7	7	6	0	0	0	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	46	251	44	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
671	92-071 04:01	0	1	216	4	2	0	7	15	0	1	0	4	31	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	11	266	78	34.1	1.9	$1.1 \cdot 10^{-15}$	10.5
672	92-071 04:01	0	1	216	6	11	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	999	999	999	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
673	92-071 04:05	0	1	233	5	11	0	7	8	7	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	35	252	55	35.4	1.6	$4.9 \cdot 10^{-15}$	6.0
674	92-071 04:05	0	1	238	6	11	0	7	7	6	0	0	6	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	42	251	48	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
675	92-071 04:18	0	1	238	5	2	0	7	15	15	1	0	4	29	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	999	999	999	34.1	1.9	$1.3 \cdot 10^{-15}$	10.5
676	92-071 04:18	0	1	215	6	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	10	269	80	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
677	92-071 04:18	0	1	227	5	11	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	26	254	63	34.6	1.6	$5.3 \cdot 10^{-15}$	6.0
678	92-071 04:22	0	1	16	6	12	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	90	249	0	43.7	1.6	$2.7 \cdot 10^{-15}$	6.0
679	92-071 04:39	0	1	212	5	11	0	7	7	8	0	0	3	22	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	5	284	83	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
680	92-071 04:43	3	1	237	7	12	3	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	40	251	49	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
681	92-071 04:43	3	1	207	6	11	1	7	7	6	0	1	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	358	357	85	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
682	92-071 04:52	3	1	223	7	12	3	7	7	6	0	1	5	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	21	257	69	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
683	92-071 04:56	3	2	20	8	13	4	7	7	6	0	1	34	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	95	250	-4	43.7	1.6	$4.7 \cdot 10^{-15}$	6.0
684	92-071 05:05	0	1	245	6	11	0	7	7	7	0	0	0	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	52	250	38	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
685	92-071 05:05	0	1	238	6	11	0	7	7	7	0	0	9	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	42	251	48	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
686	92-071 05:13	0	1	224	7	12	0	7	7	6	0	0	0	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	22	256	67	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
687	92-071 05:17	0	1	26	7	13	0	7	7	7	0	0	35	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	104	250	-13	43.7	1.6	$3.9 \cdot 10^{-15}$	6.0
688	92-071 05:17	0	1	26	4	2	0	7	15	0	1	0	3	31	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	999	999	999	34.1	1.9	$1.1 \cdot 10^{-15}$	10.5
689	92-071 05:26	0	1	26	7	12	0	7	7	6	0	0	35	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	999	999	999	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
690	92-071 05:26	0	1	255	6	11	0	7	7	7	0	0	0	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	66	250	24	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
691	92-071 05:30	0	2	6	8	13	0	7	7	6	0	0	34	0	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	76	249	14	43.7	1.6	$4.7 \cdot 10^{-15}$	6.0
692	92-071 05:30	0	1	6	6	10	0	7	8	7	0	0	0	23	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	999	999	999	35.4	1.6	$4.8 \cdot 10^{-15}$	6.0
693	92-071 05:52	0	1	212	6	12	0	7	7	7	0	0	8	30	1	0	0	0	1	3	5.39973	157.7	-0.5	554.7	5	284	83	43.7	1.6	$2.7 \cdot 10^{-15}$	6.0
694	92-071 06:00	0	1	232	7	11	0	7	8	6	0	0	3	23	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	34	252	56	35.4	1.6	$6.9 \cdot 10^{-15}$	6.0
695	92-071 06:09	0	1	23	5	3	0	7	15	0	1	0	0	0	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	100	250	-9	34.1	1.9	$1.4 \cdot 10^{-15}$	10.5
696	92-071 06:13	0	1	235	3	3	0	8	15	0	1	0	10	23	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	38	252	52	21.4	1.9	$5.3 \cdot 10^{-15}$	10.5
697	92-071 06:26	0	1	225	2	12	0	15	6	11	0	0	0	0	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	24	255	66	11.8	11.8	$1.5 \cdot 10^{-13}$	5858.3
698	92-071 06:43	0	1	244	6	15	0	7	0	7	0	0	4	23	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	50	250	40	34.1	1.9	$1.2 \cdot 10^{-14}$	10.5
699	92-071 06:47	0	1	204	6	12	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	354	28	83	43.7	1.6	$2.7 \cdot 10^{-15}$	6.0
700	92-071 06:56	0	1	232	7	12	0	7	7	7	0	0	35	0	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	34	252	56	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
701	92-071 06:56	0	1	250	7	12	0	7	7	6	0	0	0	23	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	59	250	31	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
702	92-071 07:04	0	1	238	5	3	0	7	15	0	1	0	0	0	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	42	251	48	34.1	1.9	$1.4 \cdot 10^{-15}$	10.5
703	92-071 07:25	3	1	255	7	12	4	7	7	6	0	1	35	0	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	66	250	24	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
704	92-071 07:30	3	1	21	7	12	8	7	7	6	0	1	35	0	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	97	250	-6	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
705	92-071 08:25	0	1	216	5	3	0	7	15	0	1	0	0	0	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	11	266	78	34.1	1.9	$1.4 \cdot 10^{-15}$	10.5
706	92-071 08:55	0	1	34	5	2	0	8	15	0	1	0	4	23	1	0	0	0	1	3	5.39971	157.7	-0.5	556.8	115	250	-24	21.4	1.9	$6.4 \cdot 10^{-15}$	10.5
707	92-071 10:12	3	2	250	8	13	21	7	7	6	0	1	35	0	1	0	0	0	1	3	5.39968	157.7	-0.5	558.9	59	250	31	43.7	1.6	$4.7 \cdot 10^{-15}$	6.0
708	92-071 10:20	3	2	5	8	13	4	7	7	6	0	1	35	0	1	0	0	0	1	3	5.39968	157.7	-0.5	558.9	74	249	16	43.7	1.6	$4.7 \cdot 10^{-15}$	6.0
709	92-071 10:25	0	1	5	7	12	0	7	7	7	0	0	0	23	1	0	0	0	1	3	5.39968	157.7	-0.5	558.9	999	999	999	43.7	1.6	$3.3 \cdot 10^{-15}$	6.0
710	92-072 04:12	1	2	218	8	15	1	7	0	6	0	1	35	0	1	0	0	0	1	3	5.39952	157.7	-0.6	571.5	15	261	75	34.1	1.9	$1.7 \cdot 10^{-14}$	10.5

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
711	92-072 13:53	0	1	4	4	7	0	9	8	8	0	0	11	23	1	0	0	0	1	3	5.39944	157.7	-0.6	577.8	74	249	16	22.7	1.6	$9.1 \cdot 10^{-15}$	6.0
712	92-072 19:51	0	1	35	2	15	0	15	0	10	0	0	11	23	1	0	0	0	1	3	5.39939	157.7	-0.6	582.0	118	251	-27	11.8	11.8	$2.2 \cdot 10^{-13}$	5858.3
713	92-073 09:22	0	1	11	2	6	0	15	9	10	0	0	0	0	1	0	0	0	1	3	5.39925	157.7	-0.6	592.5	85	249	5	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
714	92-073 21:19	0	1	70	3	2	0	10	15	0	1	0	35	31	1	0	0	0	1	3	5.39914	157.7	-0.7	600.9	168	270	-76	10.4	1.9	$4.4 \cdot 10^{-14}$	10.5
715	92-074 12:19	0	2	49	12	13	0	8	2	8	0	0	27	0	1	0	0	0	1	3	5.39900	157.7	-0.7	611.4	139	253	-48	21.4	1.9	$1.2 \cdot 10^{-13}$	10.5
716	92-076 17:07	0	1	240	4	1	0	8	15	0	1	0	0	0	1	0	0	0	1	3	5.39850	157.7	-0.8	647.1	46	250	44	21.4	1.9	$4.5 \cdot 10^{-15}$	10.5
717	92-079 14:13	3	3	62	23	30	12	8	4	5	0	1	47	0	1	0	0	0	1	3	5.39778	157.7	-0.9	695.3	155	257	-63	10.4	1.9	$5.8 \cdot 10^{-11}$	10.5
718	92-080 09:07	0	1	247	3	15	0	8	0	0	1	0	11	24	1	0	0	0	1	3	5.39755	157.7	-1.0	710.0	56	248	34	21.4	1.9	$3.7 \cdot 10^{-14}$	10.5
719	92-080 19:42	1	1	1	3	5	2	12	15	0	1	1	12	31	1	0	0	0	1	3	5.39746	157.7	-1.0	716.2	70	248	20	3.4	1.6	$2.0 \cdot 10^{-12}$	6.0
720	92-084 21:09	1	1	246	4	3	6	9	15	0	1	1	0	0	1	0	0	0	1	3	5.39630	157.8	-1.2	785.3	55	247	35	14.1	1.9	$2.8 \cdot 10^{-14}$	10.5
721	92-086 11:29	1	1	183	6	8	3	8	15	0	1	1	33	31	1	0	0	0	1	3	5.39586	157.8	-1.3	810.3	325	55	55	7.0	2.9	$5.6 \cdot 10^{-13}$	46.7
722	92-087 09:06	3	3	12	19	22	12	6	6	5	0	1	41	0	1	0	0	0	1	3	5.39556	157.8	-1.3	827.1	85	247	5	28.0	1.6	$2.8 \cdot 10^{-13}$	6.0
723	92-087 23:22	3	2	249	13	21	3	7	7	7	0	1	40	0	1	0	0	0	1	3	5.39540	157.8	-1.3	835.4	59	247	31	34.1	1.9	$7.1 \cdot 10^{-14}$	10.5
724	92-093 02:17	0	1	55	5	5	0	9	15	15	1	0	20	30	1	0	0	0	1	3	5.39374	157.9	-1.6	921.0	147	252	-55	14.1	1.9	$4.5 \cdot 10^{-14}$	10.5
725	92-093 03:44	0	2	69	9	13	0	7	8	7	0	0	35	0	1	0	0	0	1	3	5.39370	157.9	-1.6	923.0	999	999	999	35.4	1.6	$1.3 \cdot 10^{-14}$	6.0
726	92-094 01:53	1	1	48	4	0	2	9	0	0	0	1	0	0	1	0	0	0	1	3	5.39339	157.9	-1.6	937.6	136	250	-45	14.1	1.9	$7.0 \cdot 10^{-14}$	10.5
727	92-094 15:30	0	1	10	4	3	0	7	5	12	0	0	6	31	1	0	0	0	1	3	5.39318	157.9	-1.7	948.1	83	245	7	34.1	1.9	$1.2 \cdot 10^{-15}$	10.5
728	92-095 10:55	3	3	79	21	1	17	4	15	6	0	1	30	0	1	0	0	0	1	3	5.39291	157.9	-1.7	960.6	181	335	-82	43.5	1.9	$4.1 \cdot 10^{-15}$	10.5
729	92-097 16:07	0	1	252	1	5	0	15	10	12	0	0	11	24	1	0	0	0	1	3	5.39210	157.9	-1.8	998.1	63	244	27	26.5	2.0	$2.2 \cdot 10^{-15}$	12.5
730	92-097 18:37	3	1	51	2	5	1	15	8	10	0	1	0	0	1	0	0	0	1	3	5.39205	157.9	-1.8	1000.1	999	999	999	36.7	2.0	$9.0 \cdot 10^{-16}$	12.5
731	92-098 01:52	0	1	238	3	7	0	9	8	9	0	0	7	24	1	0	0	0	1	3	5.39196	157.9	-1.8	1004.3	43	245	47	22.7	1.6	$7.8 \cdot 10^{-15}$	6.0
732	92-098 02:47	3	3	84	22	25	24	8	7	8	0	1	44	0	1	0	0	0	1	3	5.39196	157.9	-1.8	1004.3	187	13	-79	18.0	1.6	$4.6 \cdot 10^{-12}$	6.0
733	92-098 03:29	0	1	250	3	15	0	8	0	9	0	0	11	24	1	0	0	0	1	3	5.39191	157.9	-1.8	1006.4	60	244	30	21.4	1.9	$3.7 \cdot 10^{-14}$	10.5
734	92-098 05:03	0	1	252	2	6	0	15	10	11	0	0	0	0	1	0	0	0	1	3	5.39191	157.9	-1.8	1006.4	63	244	27	26.5	2.0	$3.3 \cdot 10^{-15}$	12.5
735	92-098 05:20	0	1	244	1	5	0	15	9	12	0	0	0	0	1	0	0	0	1	3	5.39191	157.9	-1.8	1006.4	52	245	38	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
736	92-098 06:20	0	1	10	1	5	0	15	10	12	0	0	0	0	1	0	0	0	1	3	5.39187	157.9	-1.9	1008.5	83	245	7	26.5	2.0	$2.2 \cdot 10^{-15}$	12.5
737	92-098 06:37	0	1	222	2	7	0	15	8	10	0	0	0	0	1	0	0	0	1	3	5.39187	157.9	-1.9	1008.5	21	248	69	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
738	92-098 06:46	0	1	214	3	8	0	8	8	10	0	0	0	0	1	0	0	0	1	3	5.39187	157.9	-1.9	1008.5	10	256	80	28.0	1.6	$4.5 \cdot 10^{-15}$	6.0
739	92-098 07:37	0	1	6	3	8	0	9	8	10	0	0	5	24	1	0	0	0	1	3	5.39187	157.9	-1.9	1008.5	77	245	13	22.7	1.6	$9.4 \cdot 10^{-15}$	6.0
740	92-098 09:36	3	1	238	1	6	5	15	9	11	0	1	10	24	1	0	0	0	1	3	5.39182	157.9	-1.9	1010.5	43	245	47	31.3	2.0	$1.5 \cdot 10^{-15}$	12.5
741	92-098 09:45	3	1	247	2	6	13	15	9	10	0	1	0	0	1	0	0	0	1	3	5.39182	157.9	-1.9	1010.5	56	245	34	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
742	92-098 11:36	3	1	243	3	7	14	7	9	8	0	1	0	0	1	0	0	0	1	3	5.39182	157.9	-1.9	1010.5	51	245	40	32.7	1.6	$2.3 \cdot 10^{-15}$	6.0
743	92-098 11:44	0	1	217	1	6	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.39182	157.9	-1.9	1010.5	14	252	76	31.3	2.0	$1.5 \cdot 10^{-15}$	12.5
744	92-098 11:53	0	1	244	1	7	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.39182	157.9	-1.9	1010.5	52	245	38	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
745	92-098 13:18	0	1	234	3	7	0	9	8	8	0	0	2	24	1	0	0	0	1	3	5.39177	157.9	-1.9	1012.6	38	245	52	22.7	1.6	$7.8 \cdot 10^{-15}$	6.0
746	92-098 15:01	0	1	199	5	9	0	7	8	8	0	0	0	0	1	0	0	0	1	3	5.39173	157.9	-1.9	1014.7	349	46	78	35.4	1.6	$3.5 \cdot 10^{-15}$	6.0
747	92-098 18:21	0	1	229	2	7	0	15	7	10	0	0	9	31	1	0	0	0	1	3	5.39168	157.9	-1.9	1016.8	31	246	59	56.0	2.0	$2.2 \cdot 10^{-16}$	12.5
748	92-098 18:30	0	1	229	2	7	0	15	8	10	0	0	0	0	1	0	0	0	1	3	5.39168	157.9	-1.9	1016.8	999	999	999	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
749	92-099 02:30	0	1	217	4	9	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39159	157.9	-1.9	1021.0	14	252	76	34.6	1.6	$3.2 \cdot 10^{-15}$	6.0
750	92-099 02:38	0	1	232	4	9	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.39159	157.9	-1.9	1021.0	35	246	55	34.6	1.6	$3.2 \cdot 10^{-15}$	6.0
751	92-099 08:37	3	1	237	5	10	10	7	7	7	0	1	0	0	1	0	0	0	1	3	5.39149	157.9	-1.9	1025.1	999	999	999	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
752	92-099 09:02	3	1	251	4	9	5	8	8	7	0	1	0	0	1	0	0	0	1	3	5.39144	157.9	-1.9	1027.2	62	244	28	28.0	1.6	$6.2 \cdot 10^{-15}$	6.0
753	92-099 09:19	0	1	251	3	8	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.39144	157.9	-1.9	1027.2	999	999	999	28.0	1.6	$4.5 \cdot 10^{-15}$	6.0
754	92-099 14:26	3	1	240	6	10	9	7	7	6	0	1	12	24	1	0	0	0	1	3	5.39140	157.9	-1.9	1029.3	47	245	43	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
755	92-099 16:45	0	1	28	3	1	0	8	0	0	1	0	3	24	1	0	0	0	1	3	5.39135	157.9	-1.9	1031.4	109	246	-17	21.4	1.9	$3.9 \cdot 10^{-15}$	10.5
756	92-099 23:34	0	1	231	3	8	0	9	8	9	0	0	10	31	1	0	0	0	1	3	5.39125	157.9	-1.9	1035.5	34	246	56	22.7	1.6	$9.4 \cdot 10^{-15}$	6.0
757	92-100 04:59	3	1	7	3	7	6	8	8	8	0	1	0	0	1	0	0	0	1	3	5.39116	157.9	-1.9	1039.7	79	245	11	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
758	92-100 15:48	3	1	22	7	12	14	9	9	9	0	1	4	30	1	0	0	0	1	3	5.39097	157.9	-2.0	1048.0	101	245	-9	21.0	1.6	$5.1 \cdot 10^{-14}$	6.0
759	92-102 09:47	0	1	230	3	5	0	11	15	0	1	0	41	31	1	0	0	0	1	3	5.39028	157.9	-2.1	1077.1	33	245	57	4.2	1.6	$1.0 \cdot 10^{-12}$	6.0
760	92-103 03:10	1	3	54	20	15	13	8	0	0	1	1	46	31	1	0	0	0	1	3	5.38998	157.9	-2.1	1089.6	999	999	999	10.4	1.9	$4.3 \cdot 10^{-12}$	10.5
761	92-105 05:31	3	2	12	10	14	3	7	7	6	0	1	35	0	1	0	0	0	1	3	5.38916	158.0	-2.2	1122.9	85	244	5	43.7	1.6	$7.5 \cdot 10^{-15}$	6.0
762	92-105 12:55	0	2	51	9	15	0	8	0	8	0	0	35	0	1	0	0	0	1	3	5.38901	158.0	-2.2	1129.1	140	250	-49	21.4	1.9	$9.9 \cdot 10^{-14}$	10.5
763	92-106 07:09	3	1	5	1	6	1	15	7	12	0	1	0	0	1	0	0	0	1	3	5.38869	158.0	-2.2	1141.6	76	243	14	56.0	2.0	$1.5 \cdot 10^{-16}$	12.5
764	92-109 14:29	3	1	53	4	1	7	10	15	15	0	1	9	24	1	0	0	0	1	3	5.38729	158.0	-2.4	1195.6	145	251	-53	10.4	1.9	$4.3 \cdot 10^{-14}$	10.5
765	92-112 16:17	3	2	28	11	19	5	7	5	6	0	1	37	0	1	0	0	0	1	3	5.38588	158.0	-2.6	1247.5	109	245	-17	34.1	1.9	$3.3 \cdot 10^{-14}$	10.5

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
766	92-112 17:21	0	1	28	5	14	0	10	7	12	0	0	4	0	1	0	0	0	1	3	5.38588	158.0	-2.6	1247.5	999	999	999	10.4	1.9	$4.3 \cdot 10^{-13}$	10.5
767	92-114 22:05	0	1	195	2	6	0	15	8	10	0	0	11	24	1	0	0	0	1	3	5.38483	158.0	-2.7	1284.8	999	999	999	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
768	92-120 00:09	0	2	5	12	15	0	7	0	8	0	0	39	0	1	0	0	0	1	3	5.38232	158.1	-2.9	1369.8	77	242	13	34.1	1.9	$3.1 \cdot 10^{-14}$	10.5
769	92-121 00:52	3	2	8	11	15	7	7	8	7	0	1	36	0	1	0	0	0	1	3	5.38181	158.1	-3.0	1386.3	82	243	8	34.1	1.9	$2.7 \cdot 10^{-14}$	10.5
770	92-122 12:32	3	2	30	12	19	7	7	5	7	0	1	37	0	1	0	0	0	1	3	5.38104	158.1	-3.0	1411.2	113	245	-21	34.1	1.9	$3.9 \cdot 10^{-14}$	10.5
771	92-123 20:17	3	1	113	7	11	3	8	9	8	0	1	0	0	1	0	0	0	1	3	5.38038	158.1	-3.1	1431.9	999	999	999	25.9	1.6	$2.0 \cdot 10^{-14}$	6.0
772	92-125 00:44	0	1	221	2	6	0	15	9	10	0	0	0	0	1	0	0	0	1	3	5.37972	158.1	-3.2	1452.6	22	243	68	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
773	92-125 04:17	0	1	203	1	5	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.37965	158.1	-3.2	1454.6	356	31	86	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
774	92-125 04:25	0	1	215	1	4	0	15	9	13	0	0	0	0	1	0	0	0	1	3	5.37965	158.1	-3.2	1454.6	13	246	77	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
775	92-125 05:25	0	1	239	1	15	0	15	0	13	0	0	13	24	1	0	0	0	1	3	5.37965	158.1	-3.2	1454.6	47	242	43	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
776	92-125 09:19	0	1	225	1	5	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.37952	158.1	-3.2	1458.8	27	242	63	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
777	92-125 11:57	0	1	212	1	4	0	15	10	11	0	0	9	31	1	0	0	0	1	3	5.37945	158.1	-3.2	1460.8	9	249	81	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
778	92-125 13:29	0	1	18	1	5	0	15	8	10	0	0	4	24	1	0	0	0	1	3	5.37945	158.1	-3.2	1460.8	999	999	999	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
779	92-125 18:20	0	1	236	2	5	0	15	8	9	0	0	6	31	1	0	0	0	1	3	5.37931	158.1	-3.2	1465.0	43	242	47	36.7	2.0	$9.0 \cdot 10^{-16}$	12.5
780	92-125 20:36	0	1	255	2	15	0	8	0	10	0	0	10	24	1	0	0	0	1	3	5.37931	158.1	-3.2	1465.0	70	242	20	11.8	11.8	$2.2 \cdot 10^{-13}$	5858.3
781	92-125 21:10	3	1	95	2	5	1	15	10	10	0	1	0	0	1	0	0	0	1	3	5.37924	158.1	-3.2	1467.0	999	999	999	26.5	2.0	$2.7 \cdot 10^{-15}$	12.5
782	92-125 22:22	0	1	234	1	5	0	15	9	13	0	0	0	0	1	0	0	0	1	3	5.37924	158.1	-3.2	1467.0	40	242	50	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
783	92-125 22:26	0	1	208	3	15	0	9	0	9	0	0	12	24	1	0	0	0	1	3	5.37924	158.1	-3.2	1467.0	4	264	86	14.1	1.9	$1.7 \cdot 10^{-13}$	10.5
784	92-125 22:39	3	1	242	2	5	1	15	8	11	0	1	10	24	1	0	0	0	1	3	5.37924	158.1	-3.2	1467.0	51	242	39	36.7	2.0	$9.0 \cdot 10^{-16}$	12.5
785	92-125 23:32	0	1	214	2	5	0	15	10	9	0	0	0	0	1	0	0	0	1	3	5.37924	158.1	-3.2	1467.0	12	246	78	26.5	2.0	$2.7 \cdot 10^{-15}$	12.5
786	92-126 05:13	0	1	188	4	7	0	9	8	8	0	0	0	0	1	0	0	0	1	3	5.37911	158.1	-3.2	1471.2	336	53	66	22.7	1.6	$9.1 \cdot 10^{-15}$	6.0
787	92-126 06:00	0	1	251	1	5	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.37904	158.1	-3.2	1473.2	64	242	26	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
788	92-126 06:13	0	1	227	3	7	0	8	8	9	0	0	0	0	1	0	0	0	1	3	5.37904	158.1	-3.2	1473.2	30	242	60	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
789	92-126 06:43	0	1	237	2	6	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.37904	158.1	-3.2	1473.2	45	242	46	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
790	92-126 08:14	3	1	217	1	5	11	15	11	11	0	1	0	0	1	0	0	0	1	3	5.37904	158.1	-3.2	1473.2	16	244	74	20.2	2.0	$6.5 \cdot 10^{-15}$	12.5
791	92-126 08:39	0	1	218	1	5	0	15	10	11	0	0	13	24	1	0	0	0	1	3	5.37904	158.1	-3.2	1473.2	18	244	72	26.5	2.0	$2.2 \cdot 10^{-15}$	12.5
792	92-126 09:22	0	1	196	3	7	0	8	8	9	0	0	0	0	1	0	0	0	1	3	5.37897	158.2	-3.2	1475.3	347	50	77	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
793	92-126 10:39	0	1	216	1	4	0	15	7	11	0	0	0	0	1	0	0	0	1	3	5.37897	158.2	-3.2	1475.3	15	245	75	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
794	92-126 14:38	0	1	234	2	7	0	9	8	10	0	0	4	24	1	0	0	0	1	3	5.37891	158.2	-3.2	1477.4	40	242	50	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
795	92-126 15:55	3	1	238	4	8	1	7	8	7	0	1	0	0	1	0	0	0	1	3	5.37884	158.2	-3.2	1479.4	46	242	44	35.4	1.6	$2.4 \cdot 10^{-15}$	6.0
796	92-126 16:03	0	1	238	2	5	0	15	9	10	0	0	0	0	1	0	0	0	1	3	5.37884	158.2	-3.2	1479.4	999	999	999	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
797	92-126 17:20	0	1	251	1	5	0	15	9	12	0	0	0	0	1	0	0	0	1	3	5.37884	158.2	-3.2	1479.4	64	242	26	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
798	92-126 18:28	3	1	251	3	7	14	8	9	9	0	1	10	24	1	0	0	0	1	3	5.37877	158.2	-3.3	1481.5	999	999	999	25.9	1.6	$4.9 \cdot 10^{-15}$	6.0
799	92-126 19:11	0	1	235	1	8	0	15	7	12	0	0	0	0	1	0	0	0	1	3	5.37877	158.2	-3.3	1481.5	42	242	48	11.8	11.8	$6.1 \cdot 10^{-14}$	5858.3
800	92-126 22:54	0	1	211	4	7	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.37870	158.2	-3.3	1483.6	7	250	83	28.0	1.6	$4.3 \cdot 10^{-15}$	6.0
801	92-126 23:32	0	1	213	4	7	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.37870	158.2	-3.3	1483.6	10	247	80	28.0	1.6	$4.3 \cdot 10^{-15}$	6.0
802	92-127 01:23	0	1	212	4	7	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.37863	158.2	-3.3	1485.6	9	248	81	28.0	1.6	$4.3 \cdot 10^{-15}$	6.0
803	92-127 06:05	0	1	7	2	6	0	9	9	10	0	0	0	0	1	0	0	0	1	3	5.37849	158.2	-3.3	1489.8	81	242	10	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
804	92-127 08:18	0	1	249	5	9	0	7	8	8	0	0	0	0	1	0	0	0	1	3	5.37849	158.2	-3.3	1489.8	61	241	29	35.4	1.6	$3.5 \cdot 10^{-15}$	6.0
805	92-127 17:41	0	1	38	4	13	0	9	6	13	0	0	35	0	1	0	0	0	1	3	5.37829	158.2	-3.3	1496.0	124	246	-33	14.1	1.9	$1.5 \cdot 10^{-13}$	10.5
806	92-128 03:18	0	1	219	6	10	0	7	7	7	0	0	6	31	1	0	0	0	1	3	5.37801	158.2	-3.3	1504.3	19	243	71	43.7	1.6	$2.0 \cdot 10^{-15}$	6.0
807	92-129 07:27	3	3	63	19	25	8	6	6	6	0	1	44	0	1	0	0	0	1	3	5.37738	158.2	-3.4	1522.8	160	260	-67	28.0	1.6	$4.4 \cdot 10^{-13}$	6.0
808	92-130 13:21	1	3	252	19	15	18	6	0	5	0	1	42	0	1	0	0	0	1	3	5.37668	158.2	-3.4	1543.5	65	241	25	21.4	1.9	$3.4 \cdot 10^{-13}$	10.5
809	92-131 07:59	3	2	24	14	22	12	9	9	6	0	1	40	0	1	0	0	0	1	3	5.37625	158.2	-3.5	1555.9	105	244	-13	14.1	1.9	$2.3 \cdot 10^{-12}$	10.5
810	92-135 08:10	0	2	38	11	19	0	7	5	8	0	0	38	0	1	0	0	0	1	3	5.37390	158.2	-3.7	1622.0	123	246	-31	34.1	1.9	$3.3 \cdot 10^{-14}$	10.5
811	92-136 15:53	1	2	1	13	15	8	8	0	7	0	1	38	0	1	0	0	0	1	3	5.37307	158.2	-3.7	1644.7	71	241	19	21.4	1.9	$1.9 \cdot 10^{-13}$	10.5
812	92-137 16:40	0	1	10	7	15	0	7	0	6	0	0	12	24	1	0	0	0	1	3	5.37246	158.3	-3.8	1661.2	84	242	6	34.1	1.9	$1.4 \cdot 10^{-14}$	10.5
813	92-139 21:58	3	3	68	19	24	10	6	6	6	0	1	43	0	1	0	0	0	1	3	5.37106	158.3	-3.9	1698.3	166	271	-73	28.0	1.6	$3.8 \cdot 10^{-13}$	6.0
814	92-142 02:06	3	3	46	20	25	24	6	7	6	0	1	44	0	1	0	0	0	1	3	5.36972	158.3	-4.0	1733.3	136	249	-44	25.9	1.6	$7.8 \cdot 10^{-13}$	6.0
815	92-142 08:50	0	2	22	9	14	0	8	8	8	0	0	36	0	1	0	0	0	1	3	5.36956	158.3	-4.0	1737.4	999	999	999	28.0	1.6	$3.3 \cdot 10^{-14}$	6.0
816	92-143 09:42	3	3	32	20	25	21	8	7	6	0	1	44	0	1	0	0	0	1	3	5.36883	158.3	-4.1	1756.0	117	245	-25	18.0	1.6	$3.3 \cdot 10^{-12}$	6.0
817	92-143 22:54	0	1	61	7	11	0	7	7	7	0	0	0	0	1	0	0	0	1	3	5.36851	158.3	-4.1	1764.2	158	259	-65	43.7	1.6	$2.9 \cdot 10^{-15}$	6.0
818	92-146 14:42	3	2	62	12	20	9	7	6	6	0	1	39	0	1	0	0	0	1	3	5.36677	158.3	-4.2	1807.4	157	260	-65	34.1	1.9	$5.2 \cdot 10^{-14}$	10.5
819	92-146 20:09	1	2	89	11	11	13	9	9	0	1	1	0	0	1	0	0	0	1	3	5.36660	158.3	-4.2	1811.5	195	26	-71	14.1	1.9	$3.5 \cdot 10^{-13}$	10.5
820	92-146 20:34	0	1	247	1	1	0	15	0	12	0	0	11	24	1	0	0	0	1	3	5.36660	158.3	-4.2	1811.5	58	241	33	11.8	11.8	$1.9 \cdot 10^{-14}$	5858.3

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
821	92-148 14:15	3	2	50	11	19	9	9	7	8	0	1	36	0	1	0	0	0	1	3	5.36542	158.4	-4.3	1840.3	141	251	-49	14.1	1.9	$7.7 \cdot 10^{-13}$	10.5
822	92-148 18:05	3	3	16	19	24	5	5	6	6	0	1	44	0	1	0	0	0	1	3	5.36525	158.4	-4.3	1844.5	93	243	-2	35.4	1.6	$1.8 \cdot 10^{-13}$	6.0
823	92-152 15:42	0	1	232	1	5	0	15	8	12	0	0	3	24	1	0	0	0	1	3	5.36257	158.4	-4.5	1908.2	38	240	52	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
824	92-152 18:07	0	1	213	1	6	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.36248	158.4	-4.5	1910.2	999	999	999	31.3	2.0	$1.5 \cdot 10^{-15}$	12.5
825	92-152 20:09	0	1	222	1	5	0	15	9	11	0	0	6	30	1	0	0	0	1	3	5.36248	158.4	-4.5	1910.2	24	240	66	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
826	92-152 20:25	0	1	232	1	5	0	15	10	11	0	0	0	0	1	0	0	0	1	3	5.36248	158.4	-4.5	1910.2	38	240	52	26.5	2.0	$2.2 \cdot 10^{-15}$	12.5
827	92-152 21:12	1	1	80	1	5	14	15	11	12	0	0	0	0	1	0	0	0	1	3	5.36230	158.4	-4.6	1914.3	999	999	999	20.2	2.0	$6.5 \cdot 10^{-15}$	12.5
828	92-152 21:33	0	1	237	2	5	0	15	9	11	0	0	9	31	1	0	0	0	1	3	5.36230	158.4	-4.6	1914.3	45	240	45	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
829	92-152 23:41	0	1	219	2	6	0	15	9	10	0	0	9	31	1	0	0	0	1	3	5.36230	158.4	-4.6	1914.3	20	240	70	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
830	92-153 05:54	0	1	70	2	7	0	9	8	10	0	0	13	24	1	0	0	0	1	3	5.36221	158.4	-4.6	1916.4	999	999	999	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
831	92-153 06:36	0	1	65	1	1	0	15	15	0	1	0	6	30	1	0	0	0	1	3	5.36212	158.4	-4.6	1918.4	163	267	-70	11.8	11.8	$1.9 \cdot 10^{-14}$	5858.3
832	92-153 09:18	0	1	236	2	6	0	9	8	10	0	0	0	0	1	0	0	0	1	3	5.36203	158.4	-4.6	1920.5	44	240	46	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
833	92-153 14:34	0	1	188	2	15	0	15	0	10	0	0	10	31	1	0	0	0	1	3	5.36195	158.4	-4.6	1922.6	336	55	67	11.8	11.8	$2.2 \cdot 10^{-13}$	5858.3
834	92-153 16:18	0	1	226	3	7	0	9	8	9	0	0	0	0	1	0	0	0	1	3	5.36186	158.4	-4.6	1924.6	30	240	60	22.7	1.6	$7.8 \cdot 10^{-15}$	6.0
835	92-153 20:43	3	3	62	20	26	17	6	6	5	0	1	45	0	1	0	0	0	1	3	5.36177	158.4	-4.6	1926.7	159	262	-66	28.0	1.6	$7.0 \cdot 10^{-13}$	6.0
836	92-154 01:16	0	1	197	1	5	0	15	10	11	0	0	0	0	1	0	0	0	1	3	5.36159	158.4	-4.6	1930.8	349	54	79	26.5	2.0	$2.2 \cdot 10^{-15}$	12.5
837	92-154 03:46	1	1	222	3	15	14	8	0	8	0	1	9	31	1	0	0	0	1	3	5.36150	158.4	-4.6	1932.8	24	240	66	21.4	1.9	$3.7 \cdot 10^{-14}$	10.5
838	92-154 06:15	0	1	175	1	5	0	15	7	12	0	0	0	0	1	0	0	0	1	3	5.36141	158.4	-4.6	1934.9	318	55	48	56.0	2.0	$1.3 \cdot 10^{-16}$	12.5
839	92-154 08:31	0	1	227	3	15	0	8	0	9	0	0	13	24	1	0	0	0	1	3	5.36141	158.4	-4.6	1934.9	31	240	59	21.4	1.9	$3.7 \cdot 10^{-14}$	10.5
840	92-154 10:14	1	2	10	9	4	9	9	15	0	1	1	3	24	1	0	0	0	1	3	5.36132	158.4	-4.6	1936.9	86	242	4	14.1	1.9	$7.5 \cdot 10^{-14}$	10.5
841	92-154 10:39	0	1	235	2	6	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.36132	158.4	-4.6	1936.9	43	240	47	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
842	92-154 17:21	0	1	244	2	6	0	15	9	11	0	0	7	31	1	0	0	0	1	3	5.36114	158.4	-4.6	1941.0	55	241	35	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
843	92-155 02:41	0	1	211	1	5	0	15	10	10	0	0	0	0	1	0	0	0	1	3	5.36087	158.4	-4.7	1947.2	9	241	81	26.5	2.0	$2.2 \cdot 10^{-15}$	12.5
844	92-155 11:07	0	1	182	3	7	0	8	8	9	0	0	0	0	1	0	0	0	1	3	5.36060	158.4	-4.7	1953.4	327	56	58	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
845	92-155 15:10	0	1	213	1	7	0	15	7	13	0	0	9	31	1	0	0	0	1	3	5.36042	158.4	-4.7	1957.5	11	240	79	56.0	2.0	$1.8 \cdot 10^{-16}$	12.5
846	92-156 01:33	0	1	224	2	7	0	15	8	10	0	0	0	0	1	0	0	0	1	3	5.36015	158.4	-4.7	1963.6	27	240	63	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
847	92-156 08:44	0	1	234	1	15	0	15	0	12	0	0	10	31	1	0	0	0	1	3	5.35997	158.4	-4.7	1967.7	41	240	49	11.8	11.8	$1.8 \cdot 10^{-13}$	5858.3
848	92-156 11:35	0	1	179	2	6	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.35988	158.4	-4.7	1969.8	999	999	999	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
849	92-156 12:43	3	1	247	3	7	7	8	8	9	0	1	6	29	1	0	0	0	1	3	5.35978	158.4	-4.7	1971.8	59	241	31	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
850	92-156 14:00	0	1	200	4	8	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.35978	158.4	-4.7	1971.8	353	55	83	28.0	1.6	$5.2 \cdot 10^{-15}$	6.0
851	92-156 15:17	0	1	239	2	6	0	15	8	10	0	0	0	0	1	0	0	0	1	3	5.35969	158.4	-4.7	1973.9	999	999	999	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
852	92-156 22:36	3	1	232	3	7	10	8	8	9	0	1	0	0	1	0	0	0	1	3	5.35951	158.4	-4.7	1978.0	38	240	52	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
853	92-157 03:18	3	1	209	3	7	9	8	8	9	0	1	5	24	1	0	0	0	1	3	5.35933	158.4	-4.8	1982.1	6	242	84	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
854	92-157 05:00	3	1	222	1	5	1	15	8	10	0	1	0	0	1	0	0	0	1	3	5.35933	158.4	-4.8	1982.1	24	240	66	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
855	92-157 05:13	0	1	188	4	8	0	8	8	9	0	0	0	0	1	0	0	0	1	3	5.35933	158.4	-4.8	1982.1	336	56	66	28.0	1.6	$5.2 \cdot 10^{-15}$	6.0
856	92-157 13:13	0	1	232	2	6	0	15	7	10	0	0	0	0	1	0	0	0	1	3	5.35905	158.4	-4.8	1988.2	38	240	52	56.0	2.0	$1.8 \cdot 10^{-16}$	12.5
857	92-157 16:12	0	1	210	2	8	0	9	8	10	0	0	0	0	1	0	0	0	1	3	5.35896	158.4	-4.8	1990.3	7	241	83	36.7	2.0	$1.5 \cdot 10^{-15}$	12.5
858	92-157 18:03	0	1	244	3	7	0	8	7	9	0	0	0	0	1	0	0	0	1	3	5.35887	158.4	-4.8	1992.3	55	241	35	34.6	1.6	$1.9 \cdot 10^{-15}$	6.0
859	92-158 02:47	0	1	46	2	5	0	15	10	9	0	0	12	24	1	0	0	0	1	3	5.35868	158.4	-4.8	1996.5	999	999	999	26.5	2.0	$2.7 \cdot 10^{-15}$	12.5
860	92-158 05:30	0	1	242	2	7	0	15	9	10	0	0	0	0	1	0	0	0	1	3	5.35859	158.4	-4.8	1998.5	53	241	38	31.3	2.0	$2.3 \cdot 10^{-15}$	12.5
861	92-158 05:56	0	1	208	2	6	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.35850	158.4	-4.8	2000.6	5	242	85	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
862	92-158 08:04	0	1	20	1	5	0	15	9	12	0	0	0	0	1	0	0	0	1	3	5.35850	158.4	-4.8	2000.6	100	244	-9	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
863	92-158 12:03	0	1	228	3	7	0	8	8	8	0	0	0	0	1	0	0	0	1	3	5.35831	158.4	-4.8	2004.7	33	240	57	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
864	92-160 00:53	0	2	253	10	14	0	7	8	6	0	0	36	0	1	0	0	0	1	3	5.35719	158.5	-4.9	2029.3	69	242	22	35.4	1.6	$1.8 \cdot 10^{-14}$	6.0
865	92-163 14:15	3	3	39	19	24	25	5	6	5	0	1	43	0	1	0	0	0	1	3	5.35452	158.5	-5.1	2086.7	127	248	-35	35.4	1.6	$1.8 \cdot 10^{-13}$	6.0
866	92-167 02:01	3	3	64	21	26	17	4	4	5	0	1	46	0	1	0	0	0	1	3	5.35178	158.5	-5.2	2144.0	163	269	-70	55.2	1.6	$6.0 \cdot 10^{-14}$	6.0
867	92-167 10:01	1	1	69	4	2	5	9	15	0	1	1	0	0	1	0	0	0	1	3	5.35148	158.5	-5.3	2150.1	170	284	-75	14.1	1.9	$2.5 \cdot 10^{-14}$	10.5
868	92-168 15:36	3	2	148	13	20	9	8	9	8	0	1	39	0	1	0	0	0	1	3	5.35048	158.5	-5.3	2170.6	999	999	999	21.4	1.9	$3.1 \cdot 10^{-13}$	10.5
869	92-171 06:11	3	2	22	12	20	24	7	8	6	0	1	39	0	1	0	0	0	1	3	5.34835	158.6	-5.5	2213.5	105	245	-13	34.1	1.9	$5.2 \cdot 10^{-14}$	10.5
870	92-183 04:10	3	1	220	2	5	13	15	10	9	0	1	0	0	1	0	0	0	1	3	5.33816	158.7	-6.0	2407.4	999	999	999	26.5	2.0	$2.7 \cdot 10^{-15}$	12.5
871	92-183 17:59	0	1	240	3	7	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.33760	158.7	-6.1	2417.6	53	242	37	34.6	1.6	$1.9 \cdot 10^{-15}$	6.0
872	92-183 21:00	3	1	146	3	7	1	8	8	9	0	1	0	0	1	0	0	0	1	3	5.33749	158.7	-6.1	2419.6	999	999	999	28.0	1.6	$3.7 \cdot 10^{-15}$	6.0
873	92-186 03:38	1	3	2	19	12	3	6	15	0	1	1	28	31	1	0	0	0	1	3	5.33545	158.7	-6.2	2456.3	79	244	11	21.4	1.9	$2.2 \cdot 10^{-13}$	10.5
874	92-187 13:45	3	2	34	9	13	4	7	8	8	0	1	35	0	1	0	0	0	1	3	5.33419	158.7	-6.3	2478.6	124	251	-32	35.4	1.6	$1.3 \cdot 10^{-14}$	6.0
875	92-188 12:31	1	1	244	6	6	12	9	13	0	1	1	0	0	1	0	0	0	1	3	5.33326	158.7	-6.3	2494.9	59	243	31	14.1	1.9	$6.3 \cdot 10^{-14}$	10.5

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
876	92-189 16:26	3	3	48	21	26	4	5	5	6	0	1	46	0	1	0	0	0	1	3	5.33222	158.7	-6.4	2513.2	144	257	-52	43.7	1.6	$1.6 \cdot 10^{-13}$	6.0
877	92-194 03:25	0	1	250	1	6	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.32795	158.8	-6.6	2586.3	69	244	21	36.7	2.0	$8.9 \cdot 10^{-16}$	12.5
878	92-196 23:54	0	1	82	1	2	0	15	6	12	0	0	5	31	1	0	0	0	1	3	5.32527	158.8	-6.7	2631.0	193	23	-72	11.8	11.8	$2.3 \cdot 10^{-14}$	5858.3
879	92-199 12:04	3	3	238	20	25	7	5	5	5	0	1	45	0	1	0	0	0	1	3	5.32268	158.8	-6.9	2673.6	53	244	37	43.7	1.6	$1.1 \cdot 10^{-13}$	6.0
880	92-207 06:21	0	1	25	6	15	0	8	0	0	1	0	25	31	1	0	0	0	1	3	5.31477	158.9	-7.3	2799.0	116	252	-25	21.4	1.9	$5.9 \cdot 10^{-14}$	10.5
881	92-209 19:59	0	2	227	10	19	0	9	6	7	0	0	37	0	1	0	0	0	1	3	5.31214	158.9	-7.4	2839.4	999	999	999	14.1	1.9	$6.7 \cdot 10^{-13}$	10.5
882	92-210 20:07	0	1	95	1	4	0	15	12	12	0	0	12	24	1	0	0	0	1	3	5.31107	158.9	-7.4	2855.6	216	47	-52	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
883	92-220 03:19	0	1	46	4	3	0	8	6	12	0	0	11	24	1	0	0	0	1	3	5.30080	159.0	-7.9	3006.8	153	267	-59	21.4	1.9	$6.1 \cdot 10^{-15}$	10.5
884	92-220 21:06	3	2	1	13	20	3	7	5	6	0	1	39	0	1	0	0	0	1	3	5.29995	159.0	-7.9	3018.8	90	250	1	34.1	1.9	$6.1 \cdot 10^{-14}$	10.5
885	92-222 14:07	0	1	87	3	3	0	8	13	12	0	0	12	24	1	0	0	0	1	3	5.29811	159.1	-8.0	3045.0	212	46	-55	21.4	1.9	$5.3 \cdot 10^{-15}$	10.5
886	92-222 15:45	0	1	187	4	3	0	0	12	12	0	0	10	19	1	0	0	0	1	3	5.29797	159.1	-8.0	3047.0	353	79	82	11.8	11.8	$4.3 \cdot 10^{-14}$	5858.3
887	92-222 16:28	1	2	117	13	11	15	11	15	0	1	1	37	31	1	0	0	0	1	3	5.29797	159.1	-8.0	3047.0	999	999	999	7.8	1.9	$2.2 \cdot 10^{-12}$	10.5
888	92-223 05:34	0	1	247	5	5	0	7	14	12	0	0	9	24	1	0	0	0	1	3	5.29739	159.1	-8.1	3055.0	77	249	13	34.1	1.9	$1.9 \cdot 10^{-15}$	10.5
889	92-227 00:10	1	1	7	5	6	12	13	13	0	1	1	0	0	1	0	0	0	1	3	5.29291	159.1	-8.3	3117.3	105	253	-14	2.5	1.9	$1.0 \cdot 10^{-11}$	10.5
890	92-229 04:40	3	3	24	22	28	17	6	5	5	0	1	47	0	1	0	0	0	1	3	5.29042	159.1	-8.4	3151.4	131	259	-39	34.6	1.6	$7.0 \cdot 10^{-13}$	6.0
891	92-230 23:51	0	1	11	7	5	0	8	15	0	1	0	10	24	1	0	0	0	1	3	5.28834	159.1	-8.5	3179.4	115	256	-23	21.4	1.9	$1.4 \cdot 10^{-14}$	10.5
892	92-231 03:52	0	1	249	1	2	0	15	6	12	0	0	11	24	1	0	0	0	1	3	5.28804	159.1	-8.5	3183.5	90	252	1	11.8	11.8	$2.3 \cdot 10^{-14}$	5858.3
893	92-234 08:32	0	1	34	1	4	0	15	14	12	0	0	10	24	1	0	0	0	1	3	5.28428	159.2	-8.6	3233.5	157	275	-63	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
894	92-240 11:05	1	1	25	2	2	2	12	15	15	1	1	5	31	1	0	0	0	1	3	5.27672	159.2	-8.9	3331.5	166	289	-70	11.8	11.8	$2.8 \cdot 10^{-14}$	5858.3
895	92-241 10:46	0	1	143	7	2	0	0	6	12	0	0	10	24	1	0	0	0	1	3	5.27546	159.2	-9.0	3347.4	332	72	62	11.8	11.8	$6.4 \cdot 10^{-14}$	5858.3
896	92-242 09:35	0	1	165	2	7	0	9	7	10	0	0	0	0	1	0	0	0	1	3	5.27420	159.3	-9.0	3363.4	21	243	69	56.0	2.0	$2.2 \cdot 10^{-16}$	12.5
897	92-243 08:41	0	1	191	2	5	0	15	9	10	0	0	9	31	1	0	0	0	1	3	5.27309	159.3	-9.1	3377.3	58	250	33	31.3	2.0	$1.6 \cdot 10^{-15}$	12.5
898	92-243 20:41	0	1	104	1	5	0	15	8	13	0	0	0	0	1	0	0	0	1	3	5.27246	159.3	-9.1	3385.3	999	999	999	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
899	92-245 17:46	3	1	166	2	6	1	15	8	9	0	1	5	31	1	0	0	0	1	3	5.27006	159.3	-9.2	3415.2	23	244	67	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
900	92-245 22:06	0	1	151	2	7	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.26974	159.3	-9.2	3419.2	22	244	68	36.7	2.0	$1.3 \cdot 10^{-15}$	12.5
901	92-246 22:53	3	3	202	19	23	9	6	7	6	0	1	42	0	1	0	0	0	1	3	5.26844	159.3	-9.3	3435.1	93	255	-1	25.9	1.6	$4.3 \cdot 10^{-13}$	6.0
902	92-247 22:09	0	1	162	1	6	0	15	9	11	0	0	0	0	1	0	0	0	1	3	5.26715	159.3	-9.3	3451.1	36	247	54	31.3	2.0	$1.5 \cdot 10^{-15}$	12.5
903	92-248 03:43	0	1	182	1	5	0	15	9	12	0	0	0	0	1	0	0	0	1	3	5.26682	159.3	-9.3	3455.0	64	251	26	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
904	92-248 15:34	3	1	154	1	5	1	15	9	12	0	1	4	24	1	0	0	0	1	3	5.26617	159.3	-9.4	3463.0	999	999	999	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
905	92-249 09:47	0	1	237	1	3	0	15	12	12	0	0	11	24	1	0	0	0	1	3	5.26519	159.3	-9.4	3474.9	156	278	-62	11.8	11.8	$2.6 \cdot 10^{-14}$	5858.3
906	92-249 10:04	0	1	146	1	6	0	15	7	13	0	0	0	0	1	0	0	0	1	3	5.26519	159.3	-9.4	3474.9	28	246	62	56.0	2.0	$1.5 \cdot 10^{-16}$	12.5
907	92-249 13:24	3	2	247	11	19	6	8	6	6	0	1	37	0	1	0	0	0	1	3	5.26503	159.3	-9.4	3476.9	999	999	999	21.4	1.9	$1.7 \cdot 10^{-13}$	10.5
908	92-252 16:08	0	1	138	3	2	0	8	7	12	0	0	10	24	1	0	0	0	1	3	5.26090	159.4	-9.6	3526.6	31	247	59	21.4	1.9	$4.6 \cdot 10^{-15}$	10.5
909	92-257 13:27	3	3	181	21	26	19	5	5	5	0	1	45	0	1	0	0	0	1	3	5.25434	159.4	-9.8	3604.0	108	259	-16	43.7	1.6	$1.6 \cdot 10^{-13}$	6.0
910	92-259 13:19	0	1	116	4	8	0	8	7	8	0	0	0	0	1	0	0	0	1	3	5.25161	159.4	-9.9	3635.7	15	240	75	34.6	1.6	$2.7 \cdot 10^{-15}$	6.0
911	92-260 02:50	1	2	230	13	10	3	8	15	0	1	1	27	31	1	0	0	0	1	3	5.25092	159.4	-9.9	3643.6	175	319	-75	21.4	1.9	$9.0 \cdot 10^{-14}$	10.5
912	92-261 13:27	3	2	167	13	22	5	8	7	6	0	1	42	0	1	0	0	0	1	3	5.24885	159.4	-10.0	3667.4	93	257	-2	21.4	1.9	$4.2 \cdot 10^{-13}$	10.5
913	92-264 09:27	0	1	224	2	2	0	10	5	12	0	0	12	24	1	0	0	0	1	3	5.24483	159.5	-10.2	3712.8	999	999	999	11.8	11.8	$2.8 \cdot 10^{-14}$	5858.3
914	92-265 01:42	0	1	18	1	4	0	15	13	12	0	0	11	24	1	0	0	0	1	3	5.24395	159.5	-10.2	3722.7	247	63	-21	11.8	11.8	$3.0 \cdot 10^{-14}$	5858.3
915	92-265 11:33	3	2	172	11	20	1	8	6	6	0	1	38	0	1	0	0	0	1	3	5.24342	159.5	-10.2	3728.6	104	260	-12	21.4	1.9	$2.2 \cdot 10^{-13}$	10.5
916	92-266 00:23	0	1	88	3	7	0	9	8	8	0	0	10	24	1	0	0	0	1	3	5.24254	159.5	-10.2	3738.5	345	85	75	22.7	1.6	$7.8 \cdot 10^{-15}$	6.0
917	92-267 07:51	0	1	60	1	5	0	15	9	12	0	0	4	31	1	0	0	0	1	3	5.24077	159.5	-10.3	3758.2	311	74	41	31.3	2.0	$1.3 \cdot 10^{-15}$	12.5
918	92-271 09:33	0	1	117	1	5	0	15	8	12	0	0	0	0	1	0	0	0	1	3	5.23484	159.5	-10.5	3823.3	33	249	57	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5
919	92-273 04:46	0	1	109	3	6	0	9	8	9	0	0	4	31	1	0	0	0	1	3	5.23230	159.6	-10.6	3850.9	999	999	999	22.7	1.6	$6.6 \cdot 10^{-15}$	6.0
920	92-274 05:31	0	1	121	2	6	0	15	9	10	0	0	0	0	1	0	0	0	1	3	5.23083	159.6	-10.7	3866.6	999	999	999	31.3	2.0	$1.9 \cdot 10^{-15}$	12.5
921	92-276 04:12	0	1	140	3	2	0	12	15	0	1	0	41	31	1	0	0	0	1	3	5.22789	159.6	-10.8	3898.1	71	256	20	5.0	1.9	$3.9 \cdot 10^{-13}$	10.5
922	92-284 09:17	3	3	177	19	23	17	7	8	6	0	1	42	0	1	0	0	0	1	3	5.21546	159.7	-11.2	4027.5	124	268	-31	19.3	1.6	$1.4 \cdot 10^{-12}$	6.0
923	92-288 12:17	0	1	250	5	4	0	0	5	12	0	0	13	24	1	0	0	0	1	3	5.20908	159.7	-11.4	4092.0	230	62	-37	11.8	11.8	$5.8 \cdot 10^{-14}$	5858.3
924	92-290 23:02	0	2	133	8	11	0	9	10	9	0	0	6	31	1	0	0	0	1	3	5.20536	159.7	-11.5	4129.1	64	257	26	19.3	1.6	$7.5 \cdot 10^{-14}$	6.0
925	92-291 15:09	1	2	169	10	4	5	8	15	0	1	1	7	31	1	0	0	0	1	3	5.20418	159.8	-11.6	4140.8	117	267	-24	21.4	1.9	$1.9 \cdot 10^{-14}$	10.5
926	92-291 15:26	0	1	98	2	6	0	9	8	9	0	0	0	0	1	0	0	0	1	3	5.20418	159.8	-11.6	4140.8	17	241	73	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
927	92-291 19:23	0	1	101	3	7	0	8	7	9	0	0	4	24	1	0	0	0	1	3	5.20398	159.8	-11.6	4142.8	21	244	69	34.6	1.6	$1.9 \cdot 10^{-15}$	6.0
928	92-292 00:39	3	3	167	21	26	10	5	7	6	0	1	45	0	1	0	0	0	1	3	5.20359	159.8	-11.6	4146.7	114	266	-21	32.7	1.6	$5.1 \cdot 10^{-13}$	6.0
929	92-292 06:41	0	1	97	4	7	0	8	9	8	0	0	2	24	1	0	0	0	1	3	5.20319	159.8	-11.6	4150.6	15	239	74	25.9	1.6	$5.7 \cdot 10^{-15}$	6.0
930	92-292 10:06	0	1	7	1	5	0	15	8	11	0	0	0	0	1	0	0	0	1	3	5.20299	159.8	-11.6	4152.5	999	999	999	36.7	2.0	$7.4 \cdot 10^{-16}$	12.5

Table 4. (*Continued*)

No.	IMP. DATE	CLN	AR	SEC	IA	EA	CA	IT	ET	EIT	EIC	IIC	PA	PET	EVD	ICP	ECP	CCP	PCP	HV	R	LON	LAT	D_{Jup}	ROT	S_{LON}	S_{LAT}	V	VEF	M	MEF
931	92-292 20:42	0	1	123	2	6	0	15	8	10	0	0	0	0	1	0	0	0	1	3	5.20240	159.8	-11.6	4158.4	51	255	39	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
932	92-292 23:41	0	1	138	6	11	0	7	7	6	0	0	6	31	1	0	0	0	1	3	5.20220	159.8	-11.6	4160.3	73	259	18	43.7	1.6	$2.3 \cdot 10^{-15}$	6.0
933	92-293 01:58	0	1	138	2	3	0	15	5	12	0	0	12	24	1	0	0	0	1	3	5.20200	159.8	-11.7	4162.3	999	999	999	11.8	11.8	$3.2 \cdot 10^{-14}$	5858.3
934	92-293 05:53	0	1	149	3	6	0	9	9	9	0	0	0	0	1	0	0	0	1	3	5.20181	159.8	-11.7	4164.2	88	261	3	21.0	1.6	$9.3 \cdot 10^{-15}$	6.0
935	92-294 08:12	0	1	58	4	7	0	9	8	8	0	0	4	24	1	0	0	0	1	3	5.20001	159.8	-11.7	4181.8	319	81	49	22.7	1.6	$9.1 \cdot 10^{-15}$	6.0
936	92-294 16:49	3	1	114	2	6	1	9	8	9	0	1	0	0	1	0	0	0	1	3	5.19942	159.8	-11.7	4187.6	41	253	49	36.7	2.0	$1.1 \cdot 10^{-15}$	12.5
937	92-295 20:48	0	1	115	3	6	0	8	8	8	0	0	4	24	1	0	0	0	1	3	5.19761	159.8	-11.8	4205.1	42	253	48	28.0	1.6	$3.1 \cdot 10^{-15}$	6.0
938	92-295 22:34	3	1	202	5	9	3	7	7	7	0	1	33	31	1	0	0	0	1	3	5.19741	159.8	-11.8	4207.1	999	999	999	43.7	1.6	$1.4 \cdot 10^{-15}$	6.0
939	92-296 06:50	1	2	148	13	13	11	10	9	0	1	1	6	31	1	0	0	0	1	3	5.19681	159.8	-11.8	4212.9	88	262	3	10.4	1.9	$1.4 \cdot 10^{-12}$	10.5
940	92-296 16:11	0	2	188	8	9	0	11	15	0	1	0	8	31	1	0	0	0	1	3	5.19621	159.8	-11.8	4218.7	144	279	-50	7.8	1.9	$7.1 \cdot 10^{-13}$	10.5
941	92-301 07:01	3	1	142	5	10	2	7	7	7	0	1	0	0	1	0	0	0	1	3	5.18869	159.9	-12.1	4290.6	81	261	10	43.7	1.6	$1.7 \cdot 10^{-15}$	6.0
942	92-302 09:09	3	2	180	10	19	14	8	8	9	0	1	36	0	1	0	0	0	1	3	5.18684	159.9	-12.1	4308.1	134	275	-41	21.4	1.9	$1.5 \cdot 10^{-13}$	10.5
943	92-304 19:13	3	3	149	20	25	4	6	6	6	0	1	44	0	1	0	0	0	1	3	5.18290	159.9	-12.3	4344.9	92	264	0	28.0	1.6	$5.9 \cdot 10^{-13}$	6.0
944	92-309 13:17	0	1	111	3	2	0	11	13	0	1	0	35	21	1	0	0	0	1	3	5.17493	159.9	-12.5	4418.4	39	253	51	7.8	1.9	$9.5 \cdot 10^{-14}$	10.5
945	92-310 17:52	3	3	124	20	26	17	5	5	5	0	1	46	0	1	0	0	0	1	3	5.17302	160.0	-12.6	4435.8	57	257	34	43.7	1.6	$1.4 \cdot 10^{-13}$	6.0
946	92-310 18:43	3	2	150	14	21	11	8	9	6	0	1	39	0	1	0	0	0	1	3	5.17280	160.0	-12.6	4437.7	93	264	-1	21.4	1.9	$4.2 \cdot 10^{-13}$	10.5
947	92-311 13:21	1	1	129	3	2	3	10	11	0	1	1	0	0	1	0	0	0	1	3	5.17153	160.0	-12.6	4449.3	65	259	25	10.4	1.9	$4.4 \cdot 10^{-14}$	10.5
948	92-312 13:10	0	1	204	2	4	0	12	11	0	1	0	0	0	1	0	0	0	1	3	5.16982	160.0	-12.7	4464.8	171	319	-70	11.8	11.8	$3.6 \cdot 10^{-14}$	5858.3
949	92-318 07:13	1	2	134	9	6	10	9	15	0	1	1	12	24	1	0	0	0	1	3	5.15985	160.0	-13.0	4553.3	72	261	18	14.1	1.9	$1.1 \cdot 10^{-13}$	10.5
950	92-319 17:28	3	2	106	14	22	12	8	6	6	0	1	40	0	1	0	0	0	1	3	5.15744	160.0	-13.1	4574.5	35	251	55	21.4	1.9	$5.0 \cdot 10^{-13}$	10.5
951	92-320 10:50	1	1	173	5	1	8	9	8	0	1	1	4	24	1	0	0	0	1	3	5.15612	160.1	-13.1	4586.0	129	276	-35	14.1	1.9	$2.5 \cdot 10^{-14}$	10.5
952	92-321 15:48	3	2	15	9	14	21	8	9	7	0	1	0	0	1	0	0	0	1	3	5.15391	160.1	-13.2	4605.2	999	999	999	25.9	1.6	$4.4 \cdot 10^{-14}$	6.0
953	92-326 07:48	3	2	125	9	14	1	8	8	9	0	1	38	0	1	0	0	0	1	3	5.14564	160.1	-13.4	4676.1	999	999	999	28.0	1.6	$3.3 \cdot 10^{-14}$	6.0
954	92-328 20:44	3	2	100	12	20	6	8	7	7	0	1	38	0	1	0	0	0	1	3	5.14111	160.1	-13.5	4714.3	27	247	62	21.4	1.9	$2.6 \cdot 10^{-13}$	10.5
955	92-330 02:45	0	1	192	2	1	0	15	15	0	1	0	14	31	1	0	0	0	1	3	5.13883	160.2	-13.6	4733.4	156	297	-59	11.8	11.8	$2.4 \cdot 10^{-14}$	5858.3
956	92-330 14:51	3	2	164	11	20	7	8	5	7	0	1	38	0	1	0	0	0	1	3	5.13792	160.2	-13.6	4741.1	117	273	-24	21.4	1.9	$2.2 \cdot 10^{-13}$	10.5
957	92-335 07:39	3	2	48	14	22	27	7	6	6	0	1	41	0	1	0	0	0	1	3	5.12915	160.2	-13.9	4813.5	999	999	999	34.1	1.9	$9.7 \cdot 10^{-14}$	10.5
958	92-338 10:45	3	3	86	19	22	13	7	6	6	0	1	41	0	1	0	0	0	1	3	5.12330	160.3	-14.1	4861.0	999	999	999	22.7	1.6	$5.8 \cdot 10^{-13}$	6.0
959	92-339 15:03	3	3	222	19	22	7	6	6	5	0	1	41	0	1	0	0	0	1	3	5.12094	160.3	-14.1	4880.0	201	40	-61	28.0	1.6	$2.8 \cdot 10^{-13}$	6.0
960	92-346 04:56	1	1	127	7	15	7	8	0	10	0	1	6	31	1	0	0	0	1	3	5.10851	160.3	-14.5	4978.6	69	262	21	21.4	1.9	$7.2 \cdot 10^{-14}$	10.5
961	92-347 14:34	0	2	222	9	13	0	7	8	6	0	0	35	0	1	0	0	0	1	3	5.10584	160.4	-14.6	4999.3	203	42	-59	35.4	1.6	$1.3 \cdot 10^{-14}$	6.0
962	92-348 06:44	2	2	120	10	19	11	8	6	6	0	1	37	0	1	0	0	0	1	3	5.10439	160.4	-14.6	5010.7	59	259	31	21.4	1.9	$1.5 \cdot 10^{-13}$	10.5
963	92-349 21:47	3	2	185	12	19	11	11	9	8	0	1	10	31	1	0	0	0	1	3	5.10121	160.4	-14.7	5035.2	153	297	-55	7.8	1.9	$4.1 \cdot 10^{-12}$	10.5
964	92-354 19:18	3	1	88	1	2	1	15	15	4	0	1	6	31	1	0	0	0	1	3	5.09159	160.4	-15.0	5108.7	17	231	70	11.8	11.8	$2.3 \cdot 10^{-14}$	5858.3
965	92-357 07:47	3	2	187	8	12	7	9	10	10	0	1	0	0	1	0	0	0	1	3	5.08659	160.5	-15.1	5146.2	999	999	999	19.3	1.6	$8.8 \cdot 10^{-14}$	6.0
966	92-362 18:38	0	1	165	5	22	0	10	4	13	0	0	5	24	1	0	0	0	1	3	5.07546	160.5	-15.4	5228.7	128	280	-34	10.4	1.9	$1.1 \cdot 10^{-12}$	10.5
967	92-363 16:34	3	2	176	11	20	4	8	5	7	0	1	38	0	1	0	0	0	1	3	5.07367	160.5	-15.4	5241.8	144	290	-47	21.4	1.9	$2.2 \cdot 10^{-13}$	10.5
968	92-364 01:06	3	2	142	14	21	13	7	6	6	0	1	40	0	1	0	0	0	1	3	5.07290	160.5	-15.5	5247.4	96	268	-3	34.1	1.9	$8.3 \cdot 10^{-14}$	10.5

numbers (IA, EA, CA) and rise times (IT, ET), time difference and coincidence of electron and ion signals (EIT, EIC), coincidence of ion and channeltron signal (IIC), and charge reading at the entrance grid (PA) as well as time (PET) between this signal and the impact. This is followed by instrument status information such as event definition (EVD), charge sensing thresholds (ICP, ECP, CCP, PCP) and channeltron high voltage level (HV, see Paper I for further explanations).

Information about the orbit of the spacecraft follows next: heliocentric distance (R) in AU, ecliptic longitude and latitude (LON, LAT) and distance to Jupiter (R_J). The coordinate system used throughout is the ecliptic system with the Earth mean ecliptic and equinox of 1950.0. The rotation angle (ROT) specifies the angular orientation of the spacecraft about its spin axis at the time of each impact. It is measured in the plane perpendicular to the spin axis of *Ulysses* which points roughly toward the Earth. The angle ROT is defined to be zero when the dust sensor looks closest to the ecliptic north and it increases as *Ulysses* rotates positively about its spin axis. Whenever the SEC is not valid, a value of 999 is given (this occurs 147 times). Ecliptic longitude and latitude (S_{LON}, S_{LAT}) of the sensor axis at time of impact are displayed next. (If ROT is not valid, then S_LON and S_LAT are not either.) Mean impact speed (v) and speed error factor (VEF) as well as mean particle mass (m) and mass error factor (MEF) are presented last. We suggest that whenever VEF > 6, both speed and mass values should be discarded (this occurs for 86 impacts).

The *Ulysses* dust instrument is also capable of measuring the charge of a dust grain just before it strikes the sensor. No values are given here because the frequency and amplitude of noise events on the induced charge grid are very high (see Paper I). We hope to obtain reliable dust charge values for at least some of the dust impacts after careful study of the noise environment.

Analysis

In this section we discuss important technical aspects of the *Ulysses* detector. We present simple expressions for the detection threshold of impacting particles and for the boundary between what we call "big" and "small" impacts. These considerations are useful for understanding the completeness of both the *Ulysses* and *Galileo* dust data sets and for comparing them.

Because of its relative insensitivity to noise, the signal arising from positively charged ions created during the impact Q_I, is the most important impact parameter determined by the *Ulysses* dust detector. Figure 4 shows the differential distribution of impact charges measured up to the end of 1992. Impact-generated ions are observed over the entire calibrated range, and only a few impacts are close to the saturation limit of $Q_I \sim 10^{-8}$ C. Since the number of impacts with large Q_I values drops off rapidly (roughly a power law with index about $-1/2$), it appears that there are no severe saturation effects. The curve may flatten out somewhat at the lowest Q_I values, possibly indicating that the sensitivity threshold is smeared out

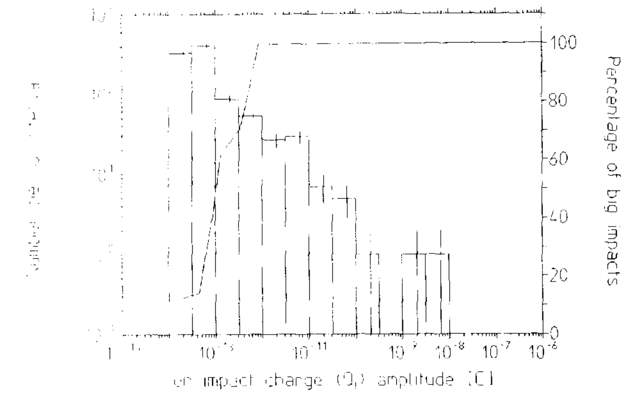

Fig. 4. Distribution of the ion signal amplitude. The dashed histogram gives the distribution of "big" impacts and the solid histogram gives all impacts. The curve shows the contribution of "big" impacts, defined in the text, to the total number of impacts

rather than sharp. If this is the case, then the number of the smallest impact charges is not complete.

The channeltron picks up a portion of the ions generated by a dust impact and amplifies the resulting signal. Coincident detections of Q_I and channeltron pulses provide a strong criterion for separating true dust impacts from noise events; this separates class 0 events (mostly noise) from the higher classes (mostly impacts)—see Paper I. After launch of both *Galileo* and *Ulysses*, it was found that the channeltron was much more sensitive to noise than expected from preflight laboratory tests. It is important, therefore, to characterize its in-flight performance. A good measure of the channeltron amplification A is the ratio of the channeltron charge Q_C to the ion charge Q_I. This ratio is displayed in Fig. 5 as a function of the ion charge Q_I (at channeltron high voltage step HV = 3, i.e. 1140 V). The sensitivity threshold and saturation limits of the channeltron charge can be approximated by 1.0×10^{-13} and 1.7×10^{-9} C, respectively. The mean amplification at this high voltage setting is $A \sim 2.2$. As can be seen in Fig. 5, however, the ion charge and the

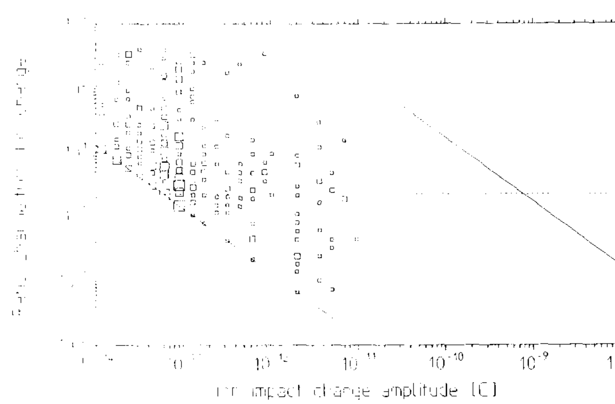

Fig. 5. Channeltron amplification $A = Q_C/Q_I$, i.e. ratio of the channeltron charge amplitude to the ion grid charge for a channeltron high voltage of 1140 V (HV = 3). The solid lines denote the sensitivity threshold and saturation limit of the channeltron. The dotted line shows the mean value of the channeltron amplification $A = 2.2$ for ion impact charges 10^{-12} C $< Q_I < 10^{-11}$ C. Boxes indicate dust particle impacts; the area of each box is proportional to the number of impacts included

channeltron output are not tightly correlated due to the statistics of impacting particles. It can be seen that for ion grid charges less than about 10^{-12} C, impacts with no measurable channeltron charge can be expected. In these cases, other signal criteria have to be used to decide whether an event is a true dust impact. Note that no impacts with $Q_I > 10^{-11}$ C were recorded while HV was set to step 3.

The impact charge, Q_I, characterizes the amplitude range of a recorded event. Together with the class number, which indicates how "impact-like" an event is, the category of an event is determined. Events classified in all other categories except AC01, AC11 and AC02 have been found almost exclusively to be true dust impacts—we will call them "big" impacts. "Small" impacts are more difficult to identify as they must be carefully separated from noise events (Baguhl *et al.*, 1994). It must be emphasized that "big" and "small" impacts are *not* classified according to their masses, but according to the amplitude of the ion grid signal (AR) and a set of conditions imposed on the signal parameters (described by the CLN number)—see Paper I. Masses and speeds of "big" impacts recorded until the end of 1992 are displayed in Fig. 6a; the same is shown for "small" impacts in Fig. 6b. "Small" impacts are restricted to a band of width a factor one hundred in mass above the sensitivity threshold. About 80% of all "big" impacts are found there as well. Speeds have been found over the entire calibrated range from 2 to 70 km s^{-1} and the masses vary over 8 orders of magnitude from 6×10^{-17} to 6×10^{-9} g.

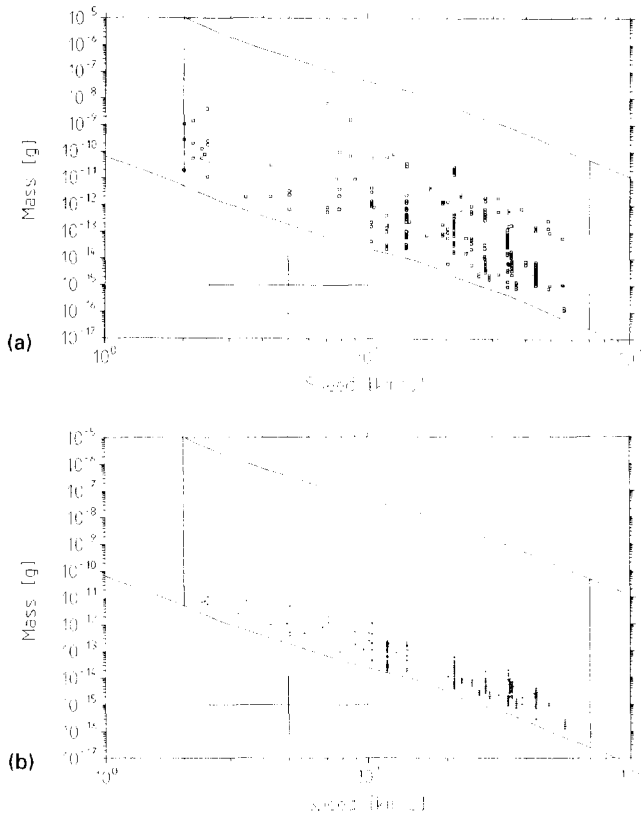

Fig. 6. Particle masses and speeds of "big" impacts (a) and "small" impacts (b). The solid line encloses the sensor's sensitivity region. A sample error bar indicating typical errors of plus or minus a factor of two in velocity and a factor of ten in mass is shown. The clustering of the speed values stems from the discrete steps in the ion and electron signal rise times, but these errors are much smaller than the nominal factor of two speed errors. The broken line shows the effective division between "big" and "small" impacts (cf. Fig. 7)

First, we determine the effective threshold for the detection of an impact. The smallest impact charge Q_I detectable is about 10^{-14} C which corresponds to a mass and speed dependent threshold that can be approximated by a power law:

$$\frac{m_{th}}{1\,\text{g}} = 1.2 \times 10^{-10} \left(\frac{v}{1\,\text{km s}^{-1}} \right)^{-3.4} \tag{1}$$

where m_{th} is the particle mass and v the impact speed. This is simply an analytic approximation to the lower limit shown in Figs 6a and b, which may deviate from the actual values by up to a factor of 2. In order to calculate a mass threshold which is independent of speed, the speed distribution of the impacting particles has to be known or assumed. For example, if we ignore particles which strike *Ulysses* at speeds below 6 km s^{-1} ($\sim$5% of all particles), then a meaningful mass threshold of $> 2 \times 10^{-13}$ g (as obtained from equation (1) or Fig. 6) can be used. At this mass, all particles except the slowest (< 6 km s^{-1}) can be detected and hence for rapidly-moving particles the data set is complete.

Now, we determine the division between "big" and "small" impacts. There exists no sharp boundary in Fig. 6 between "big" and "small" impacts, because these names are defined in terms of ion and channeltron signals. This can also be seen in Fig. 4, which shows the contribution of "big" impacts to the total number of impacts as a function of impact charge. "Big" impacts (solid line), which constitute about 35% of all impacts, persist at even the smallest impact charges. Nevertheless, a sensible division between big and small impacts can be defined at a given impact speed: we choose the mass at which the *number* of all impacts ("big" or "small") with greater masses equals the total *number* of "big" impacts. This guarantees that an impact rate calculated from only the "big" impacts will give the correct impact rate for all particles detected by the sensor above that threshold mass. The resulting threshold, which is a function of speed, is plotted in Fig. 7 for a channeltron high voltage of 1140 V (HV 3). The best fit for the separation between "big" and "small" impacts can be approximated by

$$\frac{m_{bs}}{1\,\text{g}} = k \left(\frac{v}{1\,\text{km s}^{-1}} \right)^{-3.4} \tag{2}$$

where m_{bs} is the velocity dependent mass separating "big" and "small" impacts, v is the impact speed and k a constant of 8.9×10^{-10} for 1140 V (HV 3) and 1.1×10^{-9} for 1020 V (HV 2). Although this calculation helps us to understand the *Ulysses* measurements, it is especially important for the *Galileo* experiment which could only register "big" impacts during most of its mission.

Discussion

The impact rate measured by the *Ulysses* dust detector through 1992 is displayed in Fig. 8. Impact rates for both

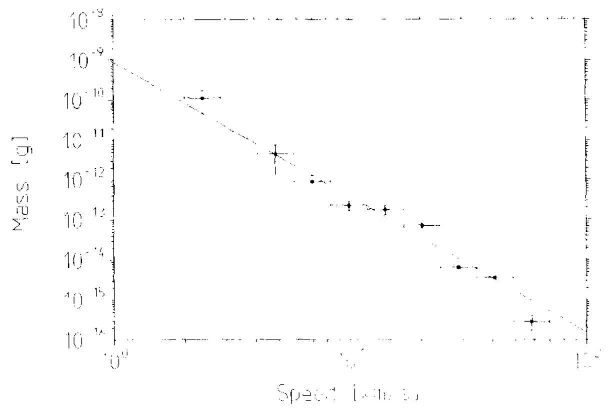

Fig. 7. Speed dependent mass threshold dividing "big" and "small" impacts for a high voltage of 1140 V. The data points are plotted so at a given velocity, the total number of "big" dust impacts equals the number of all impacts, "big" and "small", above the point. The solid line is a best fit of the form $m = av^b$ in which the exponent b has been set to -3.4. This choice of exponent corresponds to a constant impact charge Q_I (cf. equation (1))

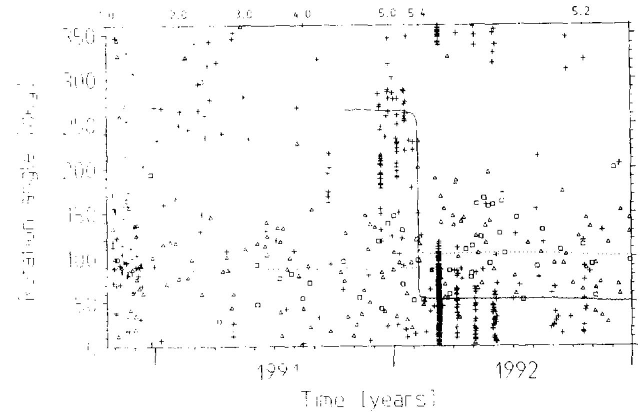

Fig. 9. Rotation angle vs time. Symbols are chosen according to different combinations of masses and speeds. Squares denote speeds larger than 26 km s^{-1} and triangles indicate slower particles: both symbols refer to particles with masses above 2.5×10^{-14} g. Plus signs mark particles with masses $\leq 2.5 \times 10^{-14}$ g. The direction to Jupiter (solid line) and to the upstream direction of the interstellar gas flow (dashed line) are shown. The heliocentric distance of *Ulysses* from the Sun is given in the upper scale

"big" impacts identified by the speed dependent mass threshold just derived, and all particles are shown. These data are believed to contain no noise events (cf. Baguhl *et al.*, 1993). Except for the Jupiter flyby and some of the dust streams, the flux of "big" impacts varies only slowly and remains low (~ 0.5 impacts per day).

During the initial 2 months of the *Ulysses* mission, the impact of all dust particles decreased by about one order of magnitude (Fig. 8). This may be due to high speed and low angular momentum β-meteoroids which could enter the sensor only during this period. Alternatively, the effect may arise from interstellar particles, the flux of which should be strongly enhanced over this part of the *Ulysses* orbit due to gravitational focusing by the Sun. These particles, however, would have to reach *Ulysses*' position at about 1.2 AU without sublimating. During about six months around Jupiter flyby, the rate of "small" impacts fluctuated dramatically and periodically. Periods of about 15 and 28 days between flux peaks were observed prior to and after Jupiter flyby, respectively. The increases are attributed to dust streams originating from the jovian system (Grün *et al.*, 1993; Baguhl *et al.*, 1994).

The rotation angle of dust impacts versus time is displayed in Fig. 9. For comparison, the direction to Jupiter

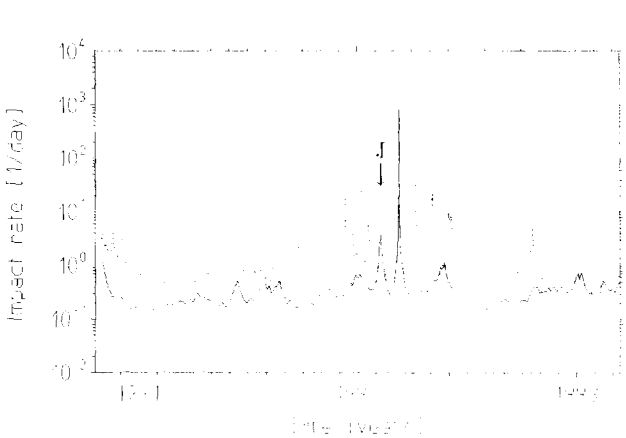

Fig. 8. Dust impact rate vs time. The dashed line gives the rate of all particles while the solid line shows only "big" impacts with masses greater than that defined by equation (2). A sliding mean over eight impacts was applied to the data. The "J" indicates the time of the Jupiter flyby

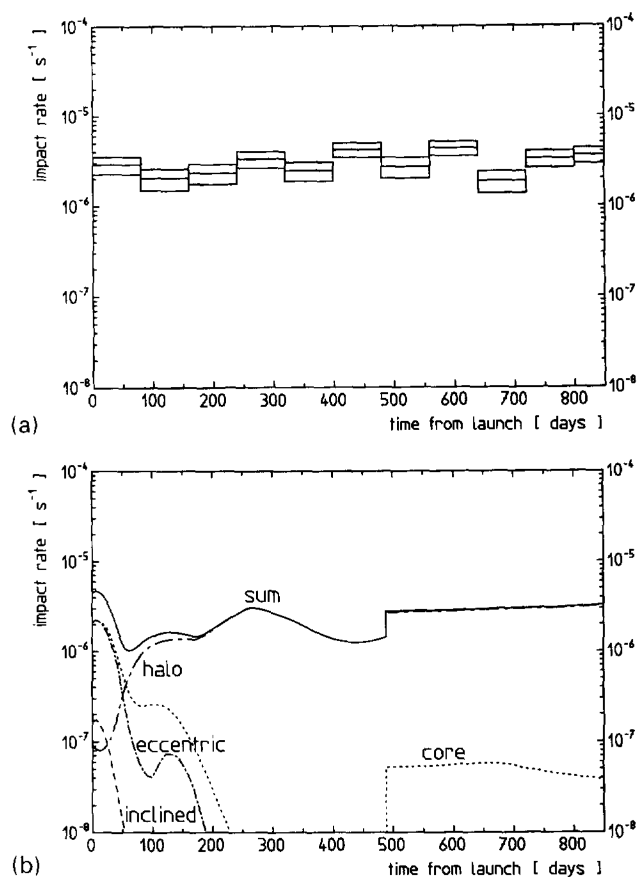

Fig. 10. Comparison of (a) the measured impact rate ("big" impacts only) with (b) the dust model of Divine (1993). Jupiter flyby and stream particles were removed from the data set since these are not considered by the model. The different populations and their sum are shown separately

and the upstream direction of the local interstellar medium are shown too. A discussion of this data can be found in Baguhl *et al.* (1993) and Grün *et al.* (1994).

Divine's (1993) "Five populations of interplanetary meteoroids" is based on a variety of interplanetary dust observations including initial *Ulysses* data from the first year of the mission. This empirical model allows us to predict the impact rate for a dust detector of known characteristics (geometry, mass and speed sensitivity). It is of interest to compare the measured impact rates (Fig. 10a) with the model values (Fig. 10b). Except for the first 50 days of the mission, the impact rates are dominated by Divine's halo population which had been specifically constructed to fit the *Pioneer* 10 and 11 penetration data (Humes, 1980). This population is assumed to have orbits of random inclinations and moderate eccentricities. While the general magnitude of the flux is well represented, specific features of the model (like the factor of two increase in the flux after Jupiter) are not found in the data. In addition, *Ulysses* data (Grün *et al.*, 1992d, 1993) clearly shows that the dust flux at Jupiter's distance is not compatible with random inclinations—at the position of *Ulysses* the measured flux is predominantly retrograde. It has been concluded (Grün *et al.*, 1993, 1994; Baguhl *et al.*, 1994) that this flux is due primarily to interstellar particles penetrating the solar system to within at least 3 AU of the Sun. To match the findings of *Ulysses*, the halo population in Divine's model must be significantly altered and perhaps eliminated altogether in favor of an interstellar population.

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