

Genoide - 93 Minerva

Job

Number of tries : 1644738
 Last calculated orbit : 10 Feb 2013 à 14:49:45.

Model definition

Model : Kepler
 Comments :

Orbital parameters

System : Minerva
 Nb Satellite : 1

Target : Minerva

Physical parameters

ajust	Param	valeurs	unit	1- σ	2- σ	3- σ	comment
	mass	3.374600e+18	kg	4.392760e+17	1.018756e+18	1.988424e+18	Primary mass
	density	1.765	g.cm ³	0.23	0.56	1.06	Primary density
	j2	0.000	none	0.000	0.000	0.000	Zonal coefficient J2 of primary
	j4	0.000	none	0.000	0.000	0.000	Zonal coefficient J4 of primary
	mean_radius	77.000	km	0.500	0.500	0.500	Mean radius of primary

Dynamical parameters

ajust	Param	valeurs	unit	1- σ	2- σ	3- σ	comment
	t0	2455060.00000000	day				
	pn0	0.00	deg	0.00	0.00	0.00	Position Prime Meridian
	pn1	0.00	deg/day	0.00	0.00	0.00	Position Prime Meridian Velocity
	ap0	21.00	deg	1.00	1.00	1.00	Primary Pole Coordinate C1 ECJ2000
	ap1	0.00	deg/day	0.00	0.00	0.00	Primary Pole Coordinate C1 Velocity ECJ2000
	dp0	21.00	deg	0.50	0.50	0.50	Primary Pole Coordinate C2 ECJ2000
	dp1	0.00	deg/day	0.00	0.00	0.00	Primary Pole Coordinate C2 Velocity ECJ2000

Target : Minerva-II

Physical parameters

ajust	Param	valeurs	unit	1- σ	2- σ	3- σ	comment
	mass	0.000000e+0	kg				
	mean_radius	0.000	km				

Dynamical parameters

ajust	Param	valeurs	unit	1- σ	2- σ	3- σ	comment
	t0	2455060.00000000	day				Reference time of parameters
	alpha	42.65	deg	23.67	34.45	45.04	Orbital Pole Coordinate C1 EQJ2000
	delta	-1.35	deg	24.11	29.20	40.93	Orbital Pole Coordinate C2 EQJ2000
	lambda	39.78	deg	20.58	31.96	41.96	Orbital Pole Coordinate C1 ECJ2000
	beta	-16.92	deg	28.37	32.01	44.39	Orbital Pole Coordinate C2 ECJ2000
X	a	375.410	km	16.236	37.690	69.548	Semi major axis of the orbit
X	period	1.114719	day	0.000611	0.001506	0.002151	Period of the orbit
	n	322.9515	deg/day	0.1770	0.4364	0.6232	Mean Motion
X	e	0.04972	none	0.04237	0.07159	0.09680	Excentricity of the orbit
X	tpp	2455059.29571	day	0.084	0.123	0.157	Pericenter date
X	i	91.35	deg	24.11	29.20	40.93	Inclination in Equatorial J2000
X	omega	132.65	deg	23.67	34.45	45.04	Longitude of node in Equatorial J2000
X	omegap	346.97	deg	28.71	44.65	50.14	Argument of the pericenter in Equatorial J2000

Fichier: [genoide.binast.v1.1.xml](#)

Observations - OmC - Statistiques

Fichiers: [genoide.obsdiff.Minerva-Minerva-II.xml](#)

jd	iso	ref_name	ref_system	xobs	yobs	xcalc	ycalc	xomc	yomc	xobs_err	yobs_err	timescale	cent
2455060.08069444	2009-08-16T13:56:11.999	Minerva	Minerva	-0.1480	-0.2040	-0.1551	-0.1995	0.0071	-0.0045	0.0099	0.0099	UTC	Geo
2455060.11173611	2009-08-16T14:40:53.999	Minerva	Minerva	-0.1180	-0.2160	-0.1203	-0.2186	0.0023	0.0026	0.0099	0.0099	UTC	Geo
2455081.14650463	2009-09-06T15:30:57.999	Minerva	Minerva	-0.2610	-0.0940	-0.2612	-0.1069	0.0002	0.0129	0.0099	0.0099	UTC	Geo
2455087.13248843	2009-09-12T15:10:46.999	Minerva	Minerva	0.2200	-0.1020	0.2295	-0.1155	-0.0095	0.0135	0.0099	0.0099	UTC	Geo
2455090.13319444	2009-09-15T15:11:47.999	Minerva	Minerva	-0.2140	-0.1910	-0.2148	-0.1959	0.0008	0.0049	0.0099	0.0099	UTC	Geo
2455103.06537037	2009-09-28T13:34:07.999	Minerva	Minerva	0.0260	0.2800	0.0315	0.2678	-0.0055	0.0122	0.0099	0.0099	UTC	Geo

Period of observations = 43.0 days or 43.0 revolutions

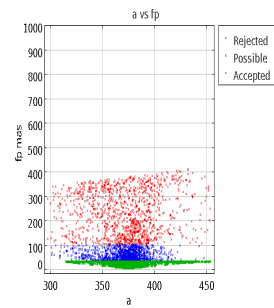
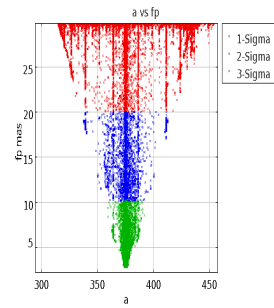
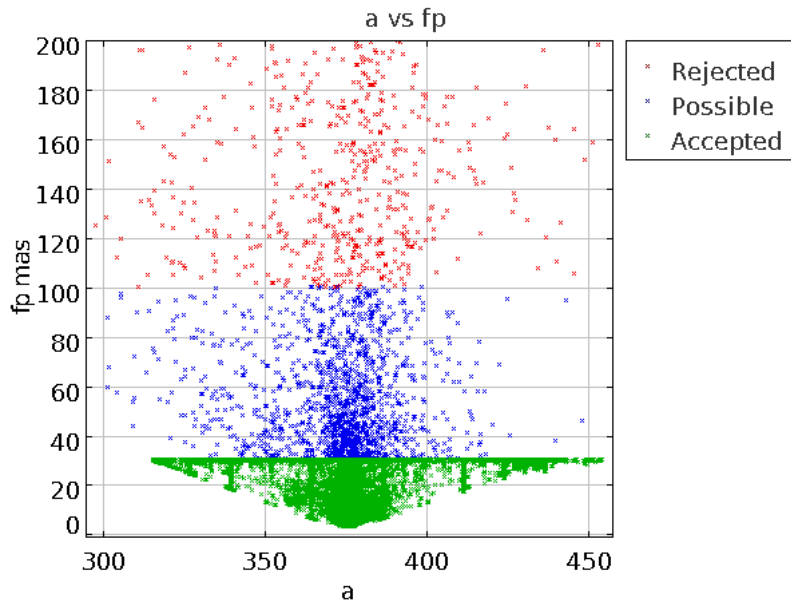
Mean StDev

Xomc (arcsec) -0.0008 0.0054
Yomc (arcsec) 0.0069 0.0066
R (arcsec) 0.0070 0.0033

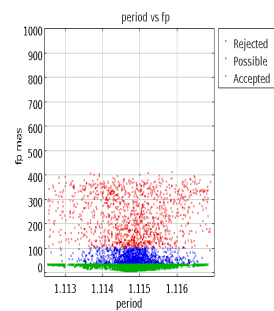
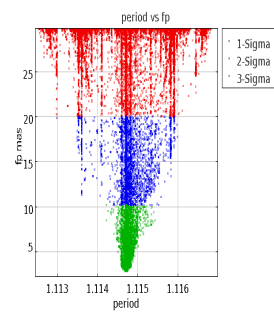
Optimal fp = 2.75 mas

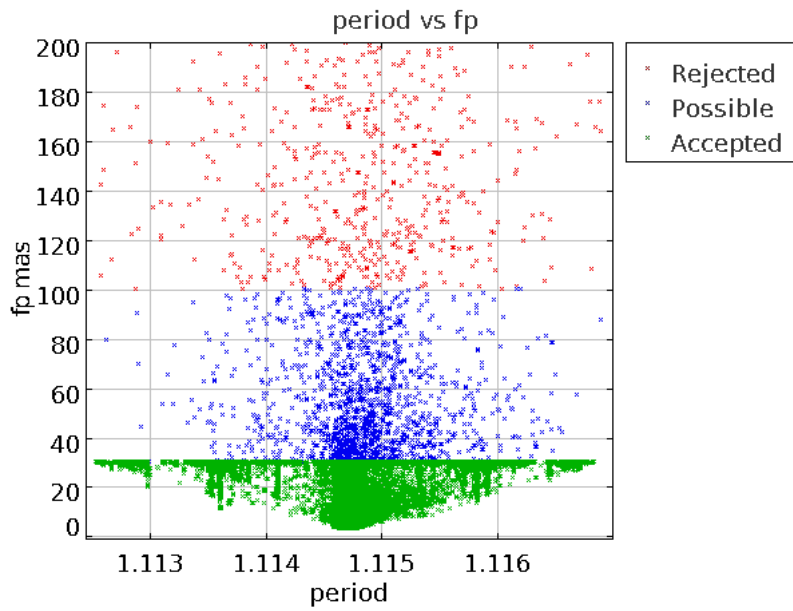
⇒ [Graphique XY des O-C](#)

a vs. Fp

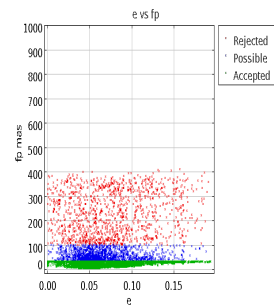
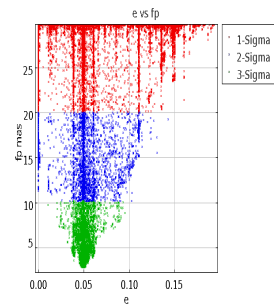
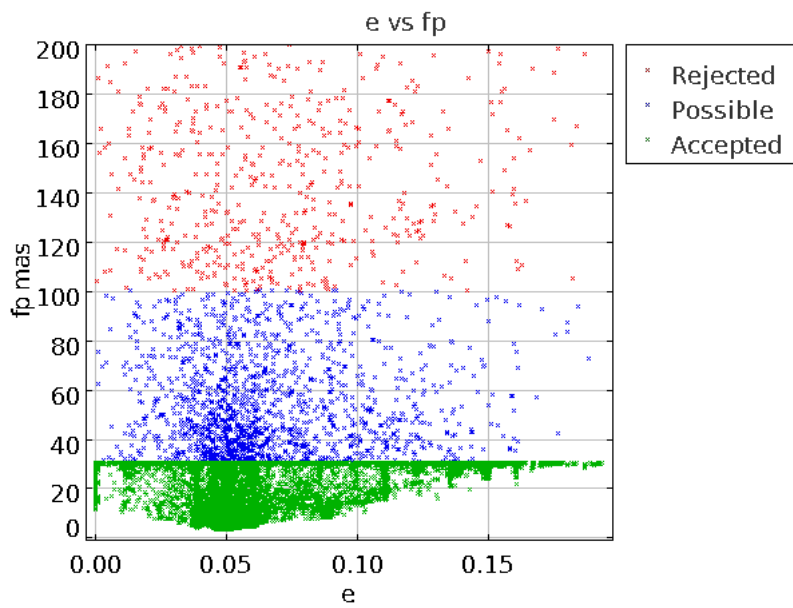


period vs. Fp

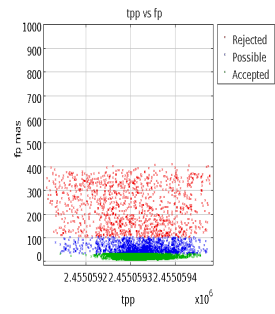
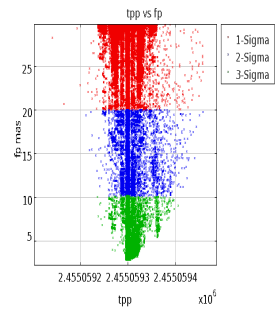
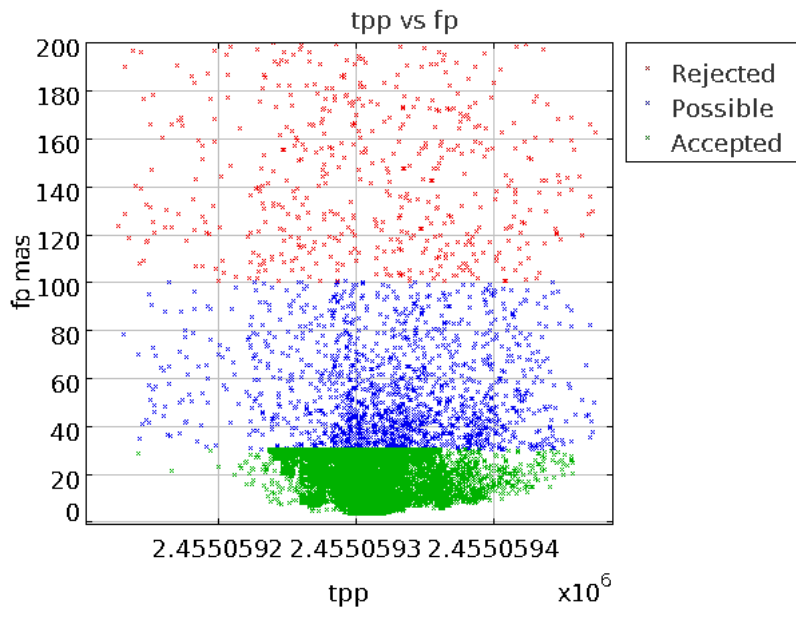




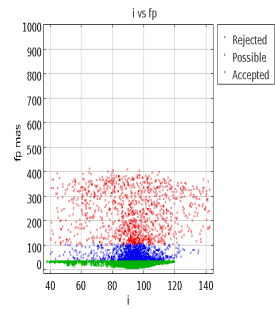
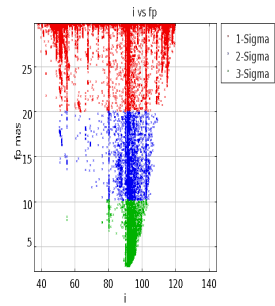
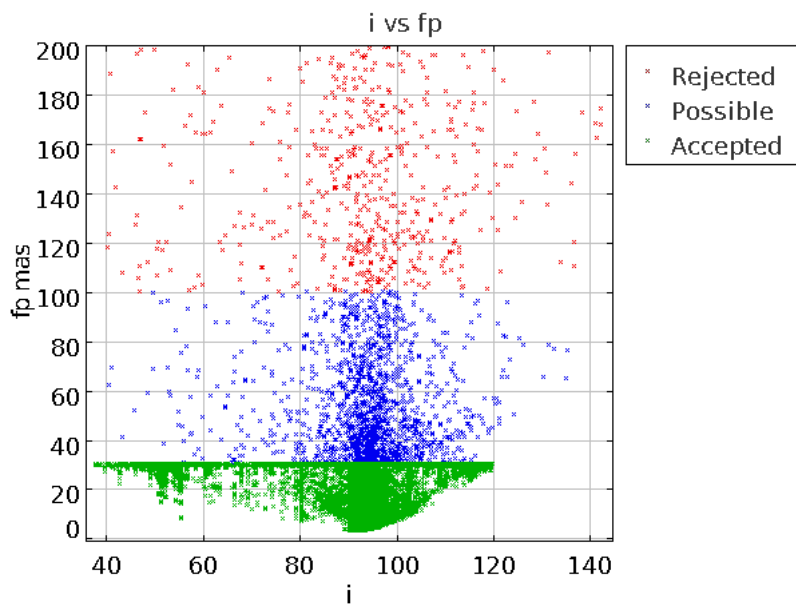
e vs. Fp



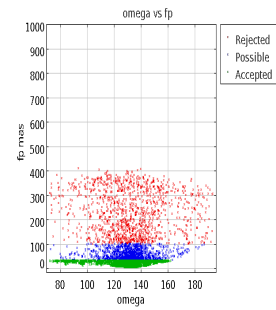
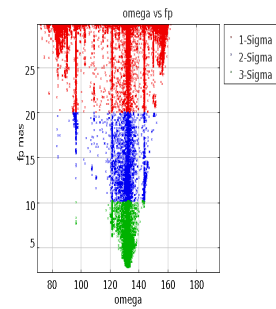
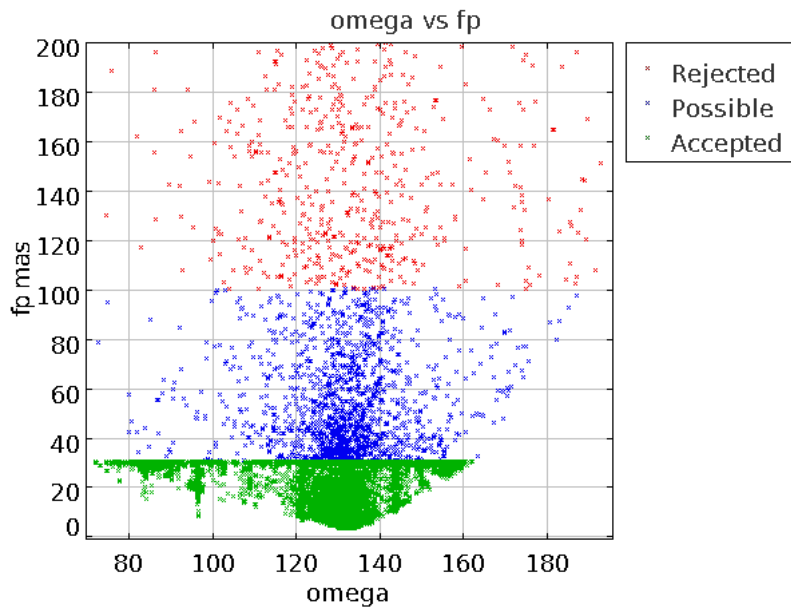
tpp vs. Fp



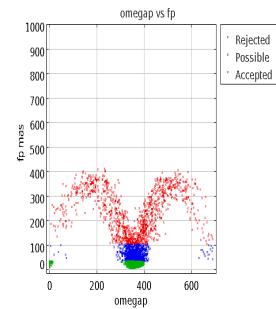
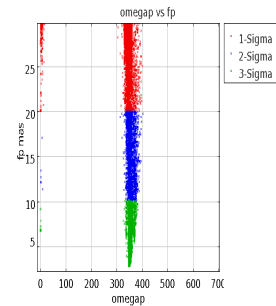
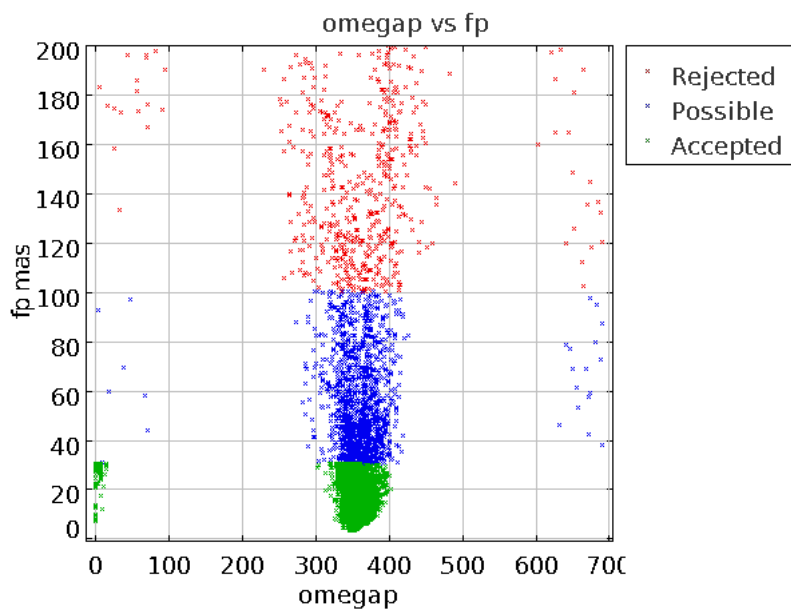
i vs. Fp



omega vs. Fp



omegap vs. Fp



Additional Information

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** Calcul des FP limit
Limit FP a 1-sigma : 10.1 mas
Limit FP a 2-sigma : 19.900753754569 mas
Limit FP a 3-sigma : 29.767263898451 mas
chi2min      : 0.040812162024283
fpsol       : 2.74749496114006 mas
sigma observation : 9.9 mas
** Calcul des Barres d'erreur
Difference between Primary Pole (ap0,dp0) and Orbital Pole (lambda,beta) : 42.15 deg
1 2 3 sigma      : 22.50deg 26.69 deg 33.54 deg
Primary Pole (ap0,dp0)      : 21.00deg 21.00 deg
Orbital Pole (lambda,beta)  : 39.78deg -16.92 deg

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