

SPENVIS 4.6.7.2923 29-Jan-2014 21:12:03**Orbit generator****Project: ENRIQUE****Enrique's Magic Flying Ship**

Contents

[Mission segment 1](#)

Mission overview

Orbit around: Earth
Number of mission segments: 1
Mission start: 01/05/2013 00:00:00
Mission end: 01/05/2014 00:00:00
Mission duration: 365.00 days (1.00 years)
Satellite axis: velocity vector

Mission segment 1: 2013 - Solar Max

Orbit type: general
Apogee: 563.69 km
Perigee: 547.31 km
Inclination: 31.39°
R. A. Ascending Node: 286.46°
Argument of Perigee: 90.15°
True Anomaly: 148.53°
Period: 1.59 hrs
Number of orbits: 15.06
Duration: 1.00 days
Orbit start: 01/05/2013 00:00: 0.0
Orbit end: 02/05/2013 00:00: 0.0
Segment end: 01/05/2014 00:00: 0.0

Segment length: 365.00 days

Semi latus rectum: 6926.49 km

Semi major axis: 6926.50 km

Eccentricity: 0.00

Mean motion: 94.63 rad/day

Integration step: 0.50°

Time intervals

60.0 s below 20000.0 km

240.0 s between 20000.0 km and 80000.0 km

3600.0 s above 80000.0 km

Eclipses and bowshock and magnetopause crossings

Orbit	Date	Time	Eclipse			Bowshock	Magnetopause
			Start altitude (km)	End altitude (km)	Duration (min)	Crossing altitude (km)	Crossing altitude (km)
1	01/05/2013	00:31:48		542.9	31.81		
1	01/05/2013	01:32:02	557.0				
2	01/05/2013	02:07:19		542.9	35.29		
2	01/05/2013	03:07:32	557.0				
3	01/05/2013	03:42:50		542.9	35.30		
3	01/05/2013	04:43:03	557.0				
4	01/05/2013	05:18:21		542.9	35.30		
4	01/05/2013	06:18:33	557.0				
5	01/05/2013	06:53:52		542.9	35.32		
5	01/05/2013	07:54:04	557.0				
6	01/05/2013	08:29:23		542.9	35.32		
6	01/05/2013	09:29:34	557.1				
7	01/05/2013	10:04:53		542.9	35.33		
7	01/05/2013	11:05:05	557.2				
8	01/05/2013	11:40:25		542.9	35.33		
8	01/05/2013	12:40:35	557.2				
9	01/05/2013	13:15:55		542.9	35.34		

9	01/05/2013	14:16:06	557.2				
10	01/05/2013	14:51:27		542.9	35.35		
10	01/05/2013	15:51:36	557.3				
11	01/05/2013	16:26:57		542.9	35.35		
11	01/05/2013	17:27:07	557.4				
12	01/05/2013	18:02:29		542.8	35.36		
12	01/05/2013	19:02:37	557.5				
13	01/05/2013	19:37:58		542.8	35.36		
13	01/05/2013	20:38:07	557.6				
14	01/05/2013	21:13:30		542.8	35.38		
14	01/05/2013	22:13:37	557.6				
15	01/05/2013	22:49:00		542.9	35.38		
15	01/05/2013	23:49:08	557.6				