

SPENVIS 4.6.7.2923 29-Jan-2014 18:22:03**Orbit generator****Project: RODRIGO****Rodrigo's Magic Flying Ship**

Contents

[Mission segment 1](#)

Mission overview

Orbit around: Earth

Number of mission segments: 1

Mission start: 04/12/2008 00:00:00

Mission end: 04/12/2009 00:00:00

Mission duration: 365.00 days (1.00 years)

Satellite axis: velocity vector

Mission segment 1: 2008 - Solar Min

Orbit type: general

Apogee: 577.91 km

Perigee: 561.41 km

Inclination: 31.41°

R. A. Ascending Node: 65.39°

Argument of Perigee: 107.19°

True Anomaly: 179.44°

Period: 1.60 hrs

Number of orbits: 15.01

Duration: 1.00 days

Orbit start: 04/12/2008 00:00: 0.0

Orbit end: 05/12/2008 00:00: 0.0

Segment end: 04/12/2009 00:00: 0.0

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|---|
| Segment length: 365.00 days |
| Semi latus rectum: 6940.65 km |
| Semi major axis: 6940.66 km |
| Eccentricity: 0.00 |
| Mean motion: 94.34 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 | 04/12/2008 | 00:06:25 | 573.2 | | | | |
| 1 | 04/12/2008 | 00:41:30 | | 553.2 | 35.08 | | |
| 2 | 04/12/2008 | 01:42:14 | 573.1 | | | | |
| 2 | 04/12/2008 | 02:17:19 | | 553.3 | 35.09 | | |
| 3 | 04/12/2008 | 03:18:02 | 573.0 | | | | |
| 3 | 04/12/2008 | 03:53:07 | | 553.3 | 35.09 | | |
| 4 | 04/12/2008 | 04:53:50 | 573.0 | | | | |
| 4 | 04/12/2008 | 05:28:56 | | 553.3 | 35.11 | | |
| 5 | 04/12/2008 | 06:29:38 | 573.0 | | | | |
| 5 | 04/12/2008 | 07:04:46 | | 553.3 | 35.14 | | |
| 6 | 04/12/2008 | 08:05:26 | 573.0 | | | | |
| 6 | 04/12/2008 | 08:40:35 | | 553.3 | 35.16 | | |
| 7 | 04/12/2008 | 09:41:14 | 573.0 | | | | |
| 7 | 04/12/2008 | 10:16:24 | | 553.2 | 35.17 | | |
| 8 | 04/12/2008 | 11:17:03 | 573.0 | | | | |
| 8 | 04/12/2008 | 11:52:13 | | 553.2 | 35.17 | | |
| 9 | 04/12/2008 | 12:52:51 | 572.9 | | | | |

| | | | | | | | |
|----|------------|----------|-------|-------|-------|--|--|
| 9 | 04/12/2008 | 13:28:01 | | 553.2 | 35.18 | | |
| 10 | 04/12/2008 | 14:28:39 | 573.0 | | | | |
| 10 | 04/12/2008 | 15:03:51 | | 553.1 | 35.21 | | |
| 11 | 04/12/2008 | 16:04:27 | 573.0 | | | | |
| 11 | 04/12/2008 | 16:39:40 | | 553.1 | 35.23 | | |
| 12 | 04/12/2008 | 17:40:15 | 573.0 | | | | |
| 12 | 04/12/2008 | 18:15:29 | | 553.2 | 35.24 | | |
| 13 | 04/12/2008 | 19:16:04 | 572.9 | | | | |
| 13 | 04/12/2008 | 19:51:18 | | 553.2 | 35.24 | | |
| 14 | 04/12/2008 | 20:51:52 | 572.8 | | | | |
| 14 | 04/12/2008 | 21:27:07 | | 553.3 | 35.25 | | |
| 15 | 04/12/2008 | 22:27:40 | 572.7 | | | | |
| 15 | 04/12/2008 | 23:02:56 | | 553.4 | 35.27 | | |