Chapter 3 - Orbit Geometries

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Introduction to Chapter 3

This chapter contains diagrams of various aspects of geometry for the I31 Orbit.

The figure on page 3 is a North Trajectory Pole View of the I31 Orbit from apoapsis to apoapsis.

The figure on page 4 is a North Trajectory Pole View of the I31 Orbit from +/- 5 days of Jupiter closest approach.

The figure on page 5 is a North Trajectory Pole View of the I31 Orbit from +/- 2 days of Jupiter closest approach.

The figure on page 6 is a North Trajectory Pole View of the I31 Orbit from +/- 1 day of Jupiter closest approach.

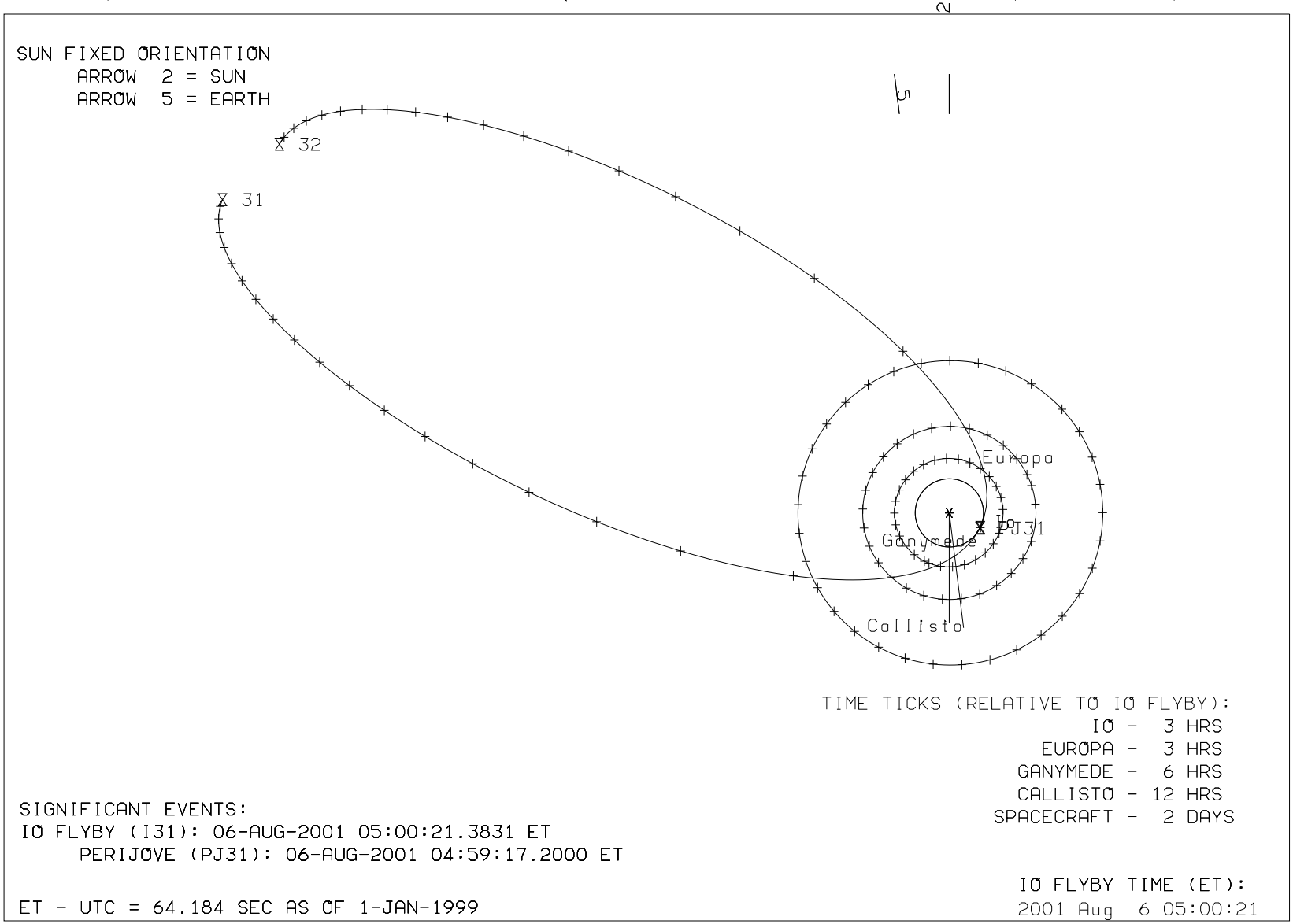
The figure on page 7 is a North Trajectory Pole View of the I31 Orbit from +/- 6 hours of Io closest approach.

The figure on page 8 is a North Trajectory Pole View of the I31 Orbit from +/- 1 hour of Io closest approach.

The figure on page 9 shows the spacecraft’s groundtrack on Io at Io closest approach.

The figure on page 10 shows the spacecraft’s groundtrack on Jupiter at Jupiter closest approach.

Jupiter 31: North Traj Pole View (Io 31 Apo to Apo)



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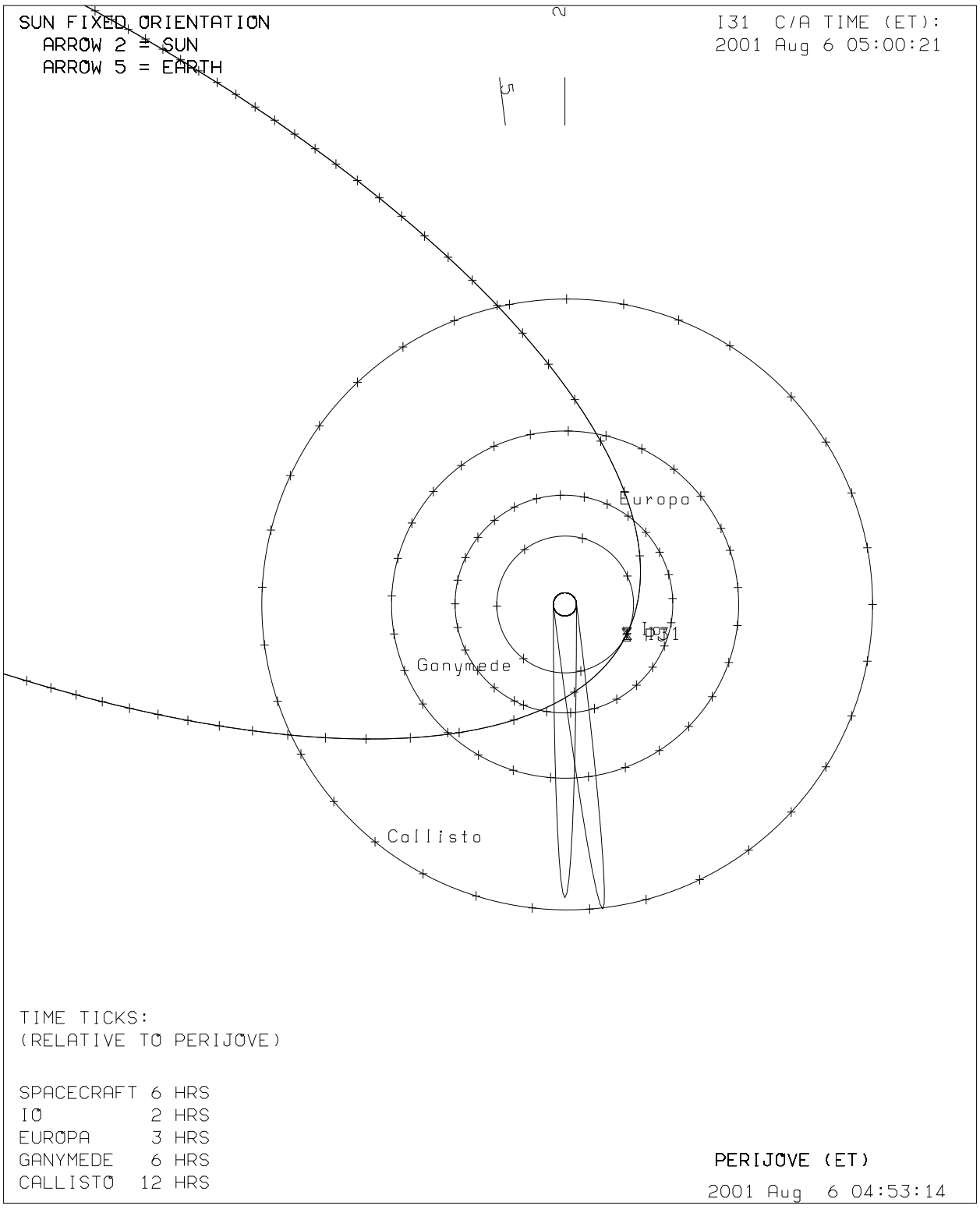
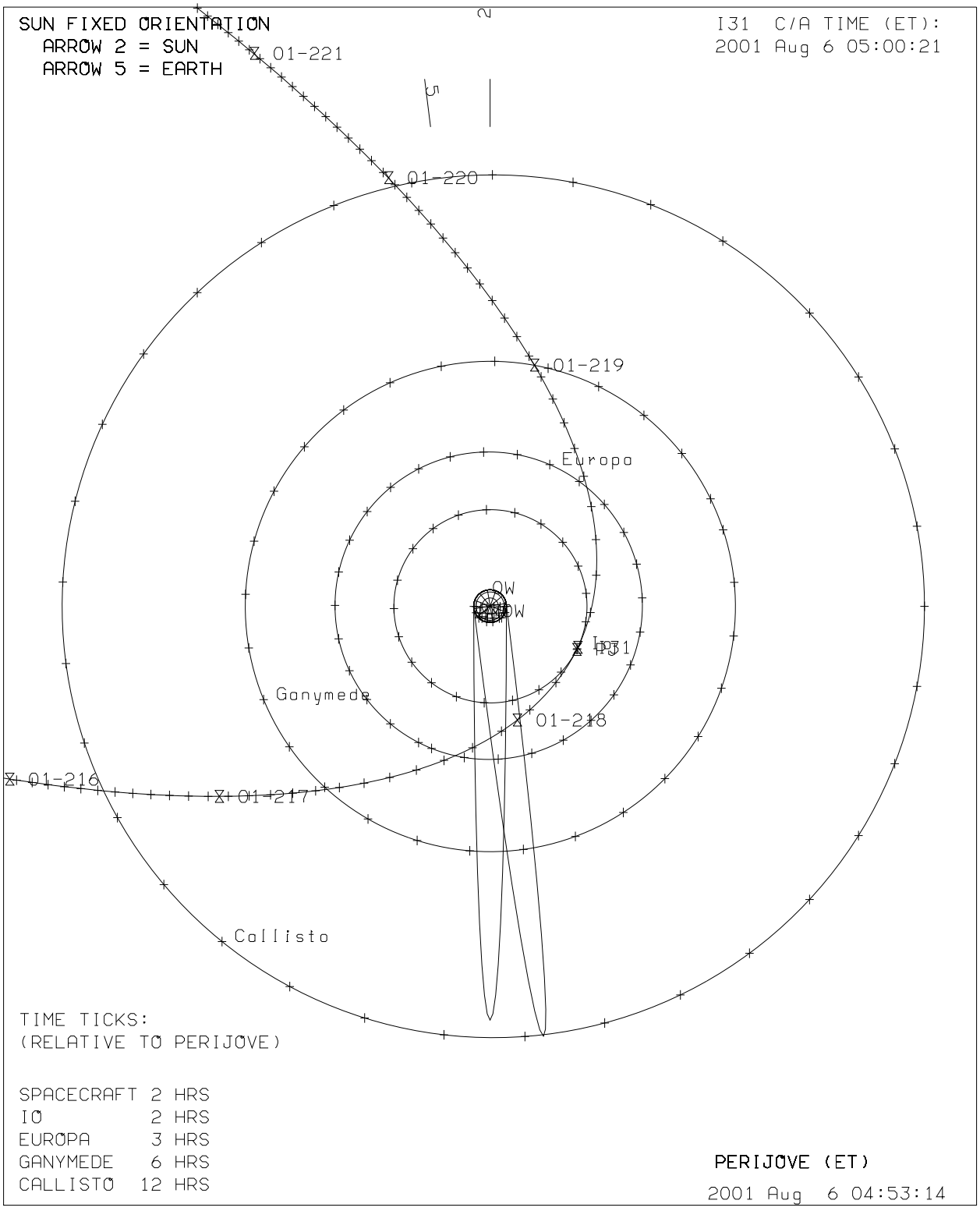
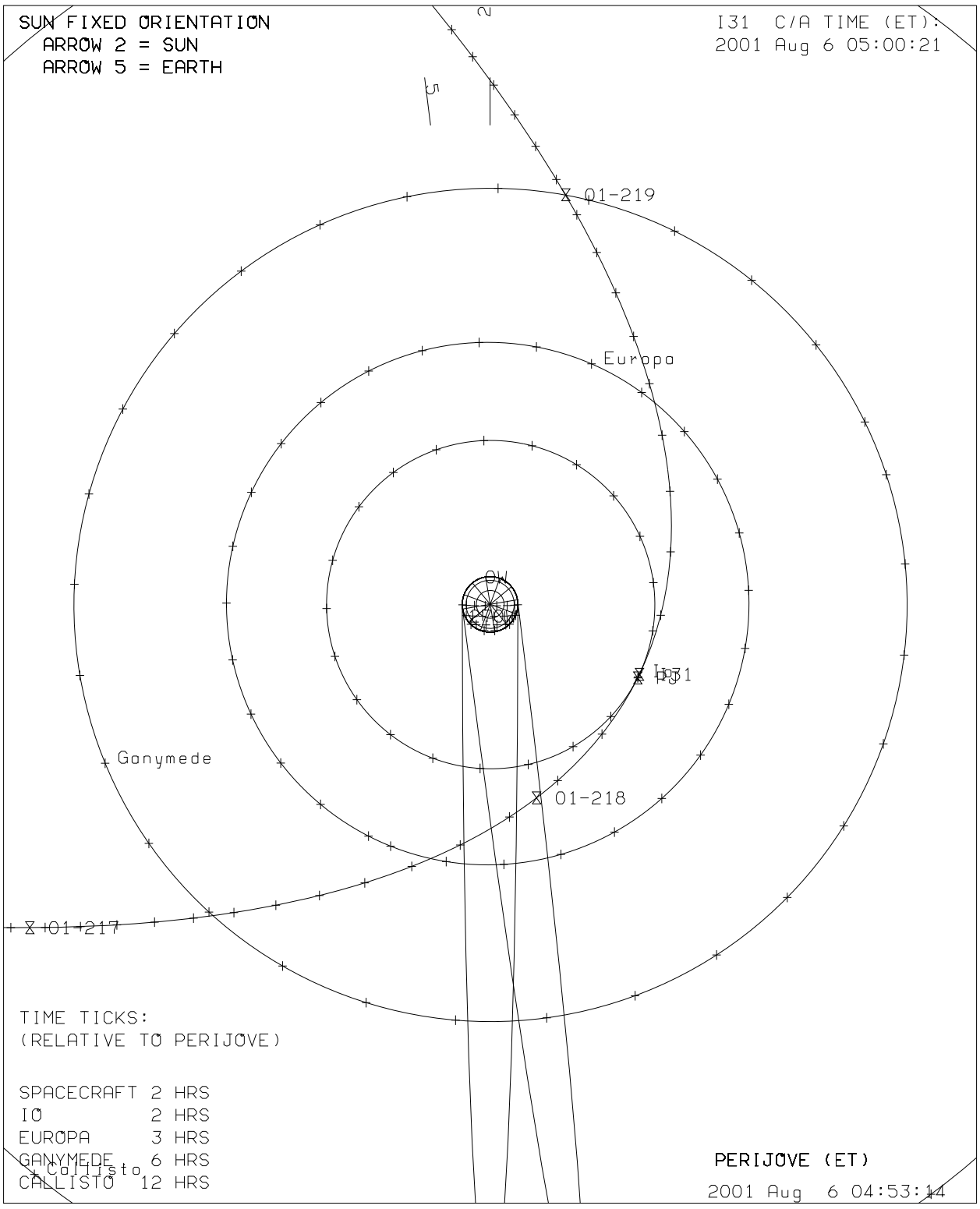
JUPITER 31: N. TRAJ. POLE VIEW (+/- 5 DAYS)



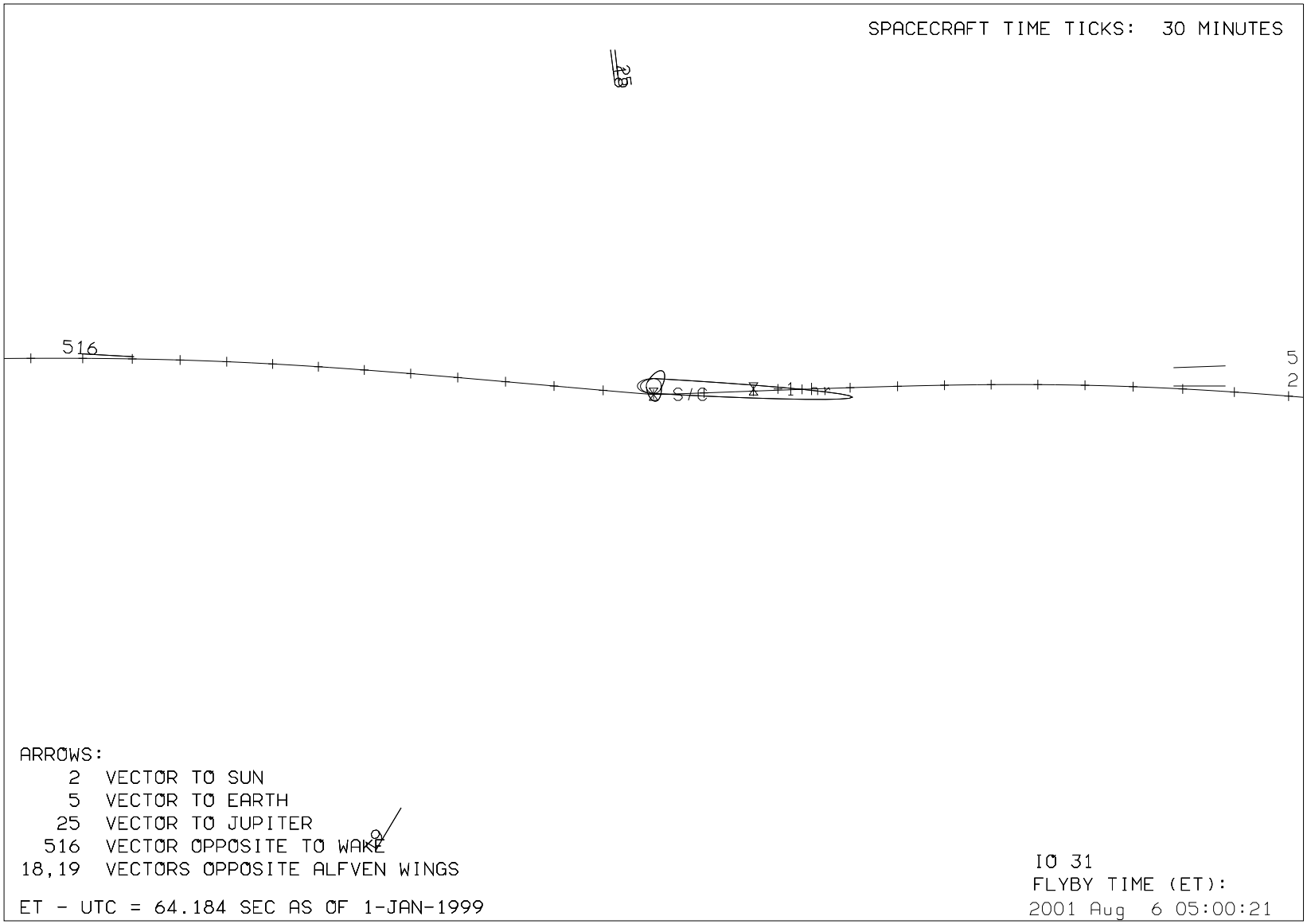
JUPITER 31: N. TRAJ. POLE VIEW (+/- 2 DAYS)



JUPITER 31: N. TRAJ. POLE VIEW (+/- 1 DAY)



IO 31: N. TRAJ POLE VIEW (+/- 6 HRS)



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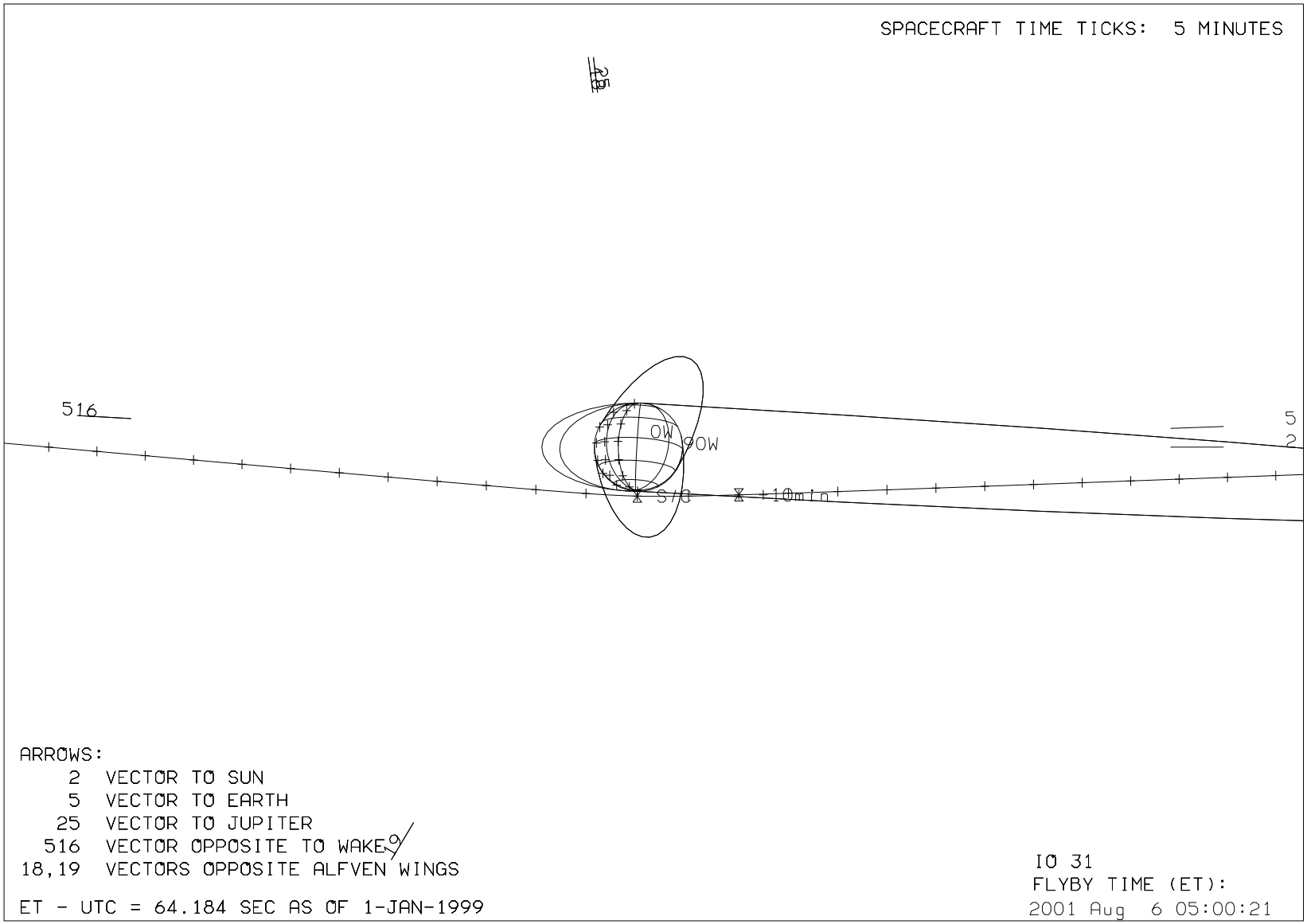
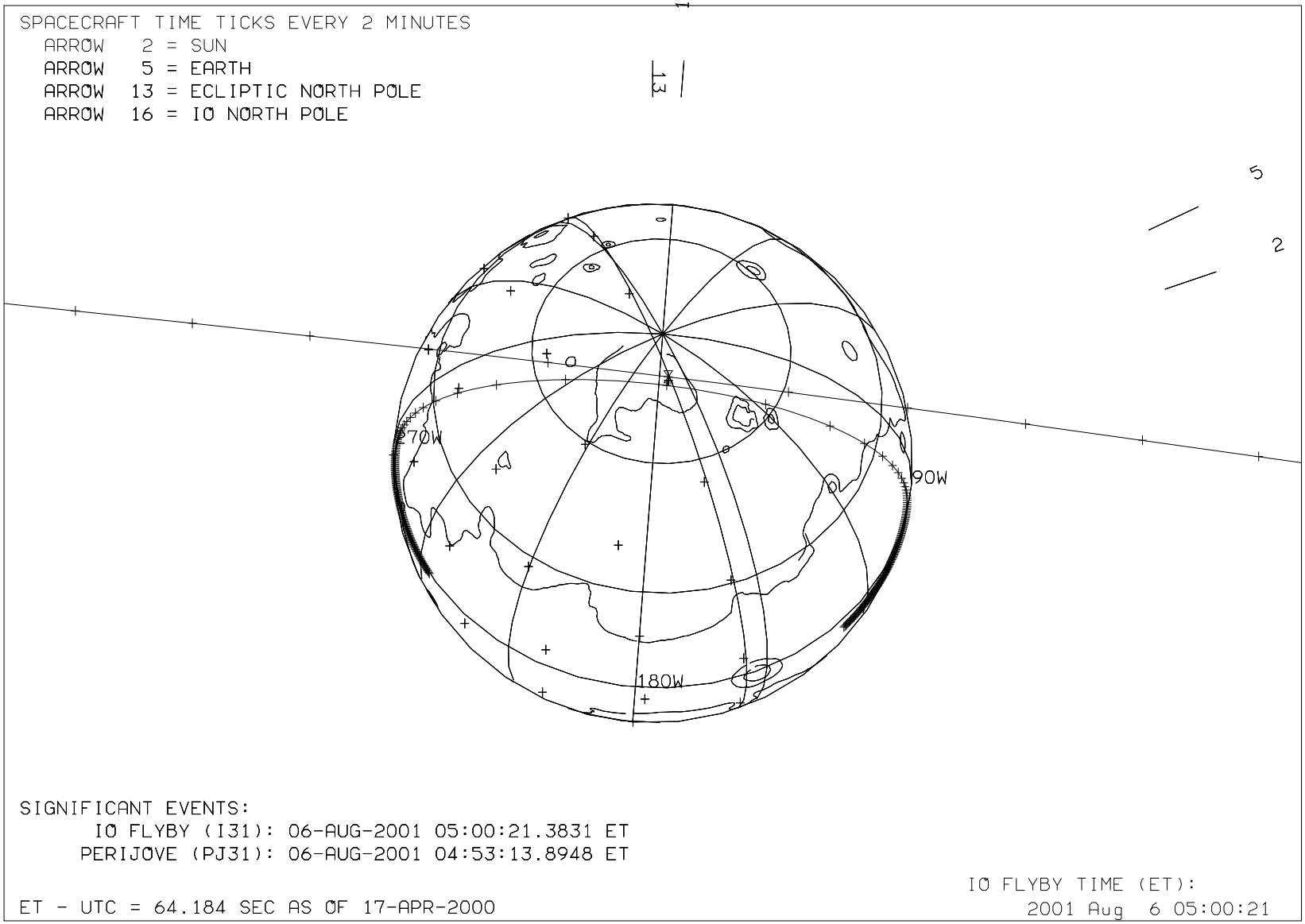
IO 31: N. TRAJ POLE VIEW (+/- 1 HR)



NAV 6/04/01

IO 31: GROUNDTRACK AT CLOSEST APPROACH



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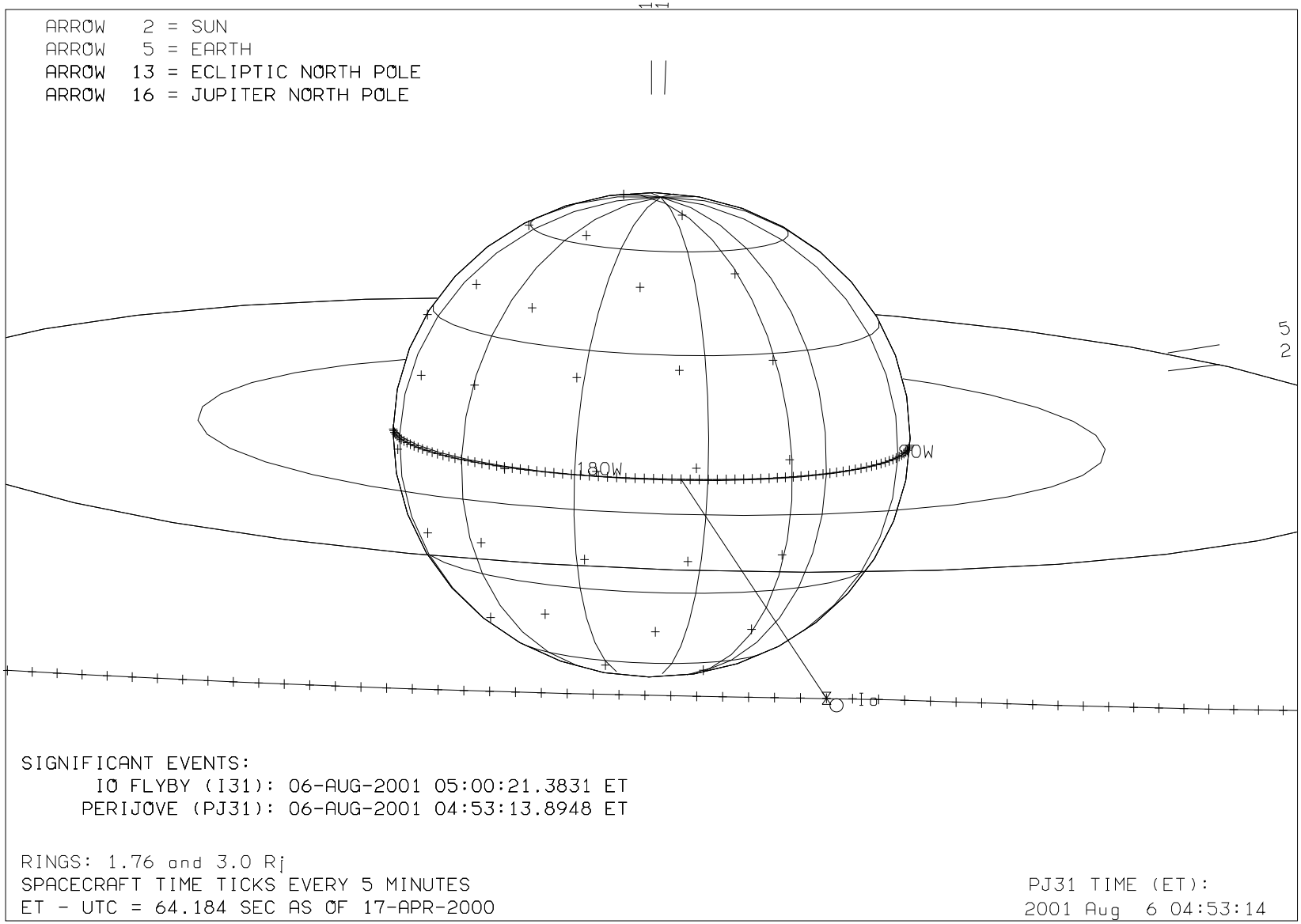
JUPITER 31: GROUNDTRACK AT CLOSEST APPROACH



SIGNIFICANT EVENTS:
IO FLYBY (I31): 06-AUG-2001 05:00:21.3831 ET
PERIJOVE (PJ31): 06-AUG-2001 04:53:13.8948 ET

RINGS: 1.76 and 3.0 Rj
SPACECRAFT TIME TICKS EVERY 5 MINUTES
ET - UTC = 64.184 SEC AS OF 17-APR-2000

PJ31 TIME (ET):
2001 Aug 6 04:53:14

NAV Jun 04, 2001