Chapter 3 - Orbit Geometries

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Introduction to Chapter 3

This chapter contains diagrams of various aspects of geometry for the C30 Orbit.

The figure on page 3 is a North Trajectory Pole View of the C30 Orbit from apoapsis to apoapsis.

The figure on page 4 is a North Trajectory Pole View of the C30 Orbit from +/- 5 days of Callisto closest approach.

The figure on page 5 is a North Trajectory Pole View of the C30 Orbit from +/- 2 days of Callisto closest approach.

The figure on page 6 is a North Trajectory Pole View of the C30 Orbit from +/- 1 day of Callisto closest approach.

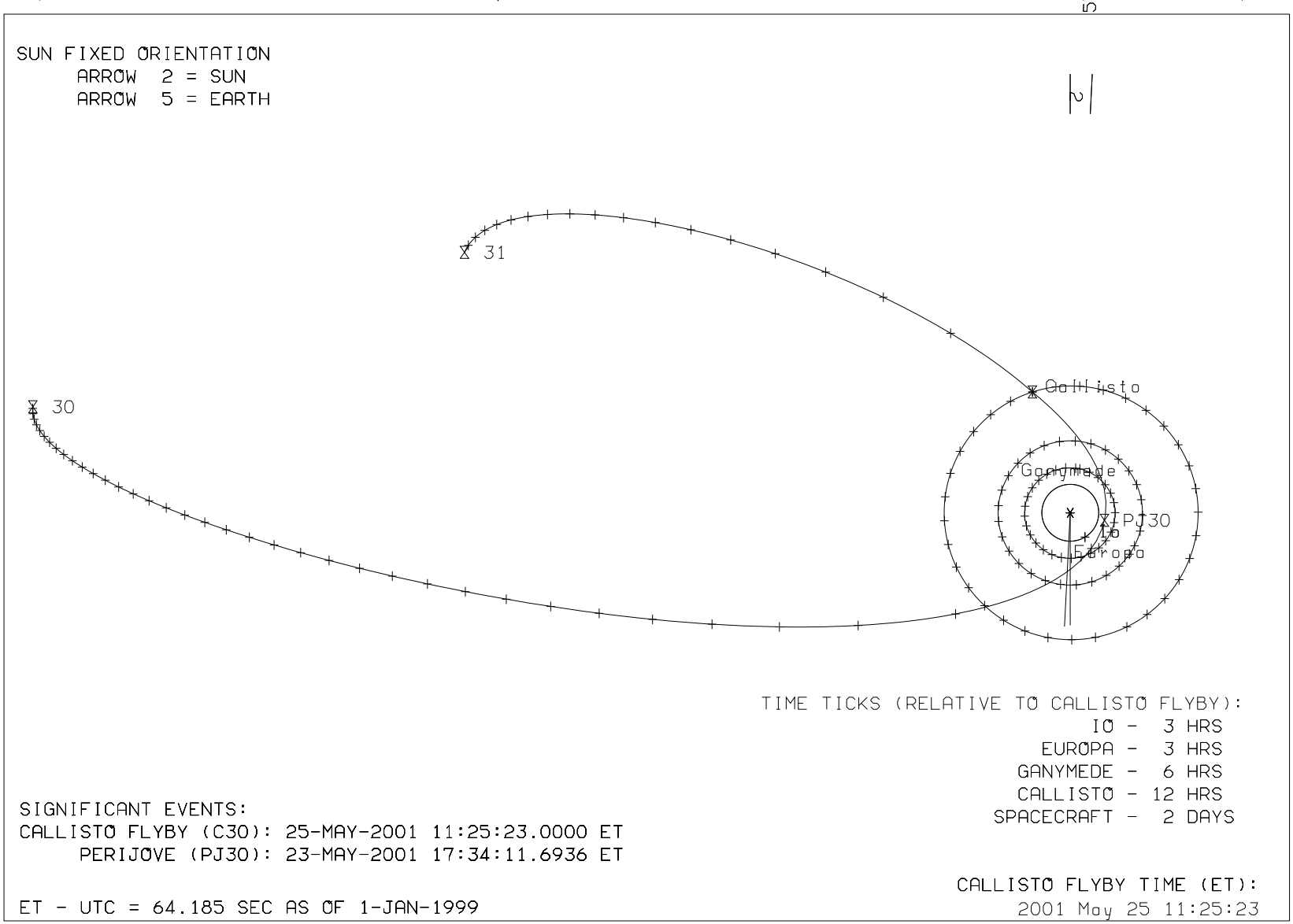
The figure on page 7 is a North Trajectory Pole View of the C30 Orbit from +/- 6 hours of Callisto closest approach.

The figure on page 8 is a North Trajectory Pole View of the C30 Orbit from +/- 1 hour of Callisto closest approach.

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

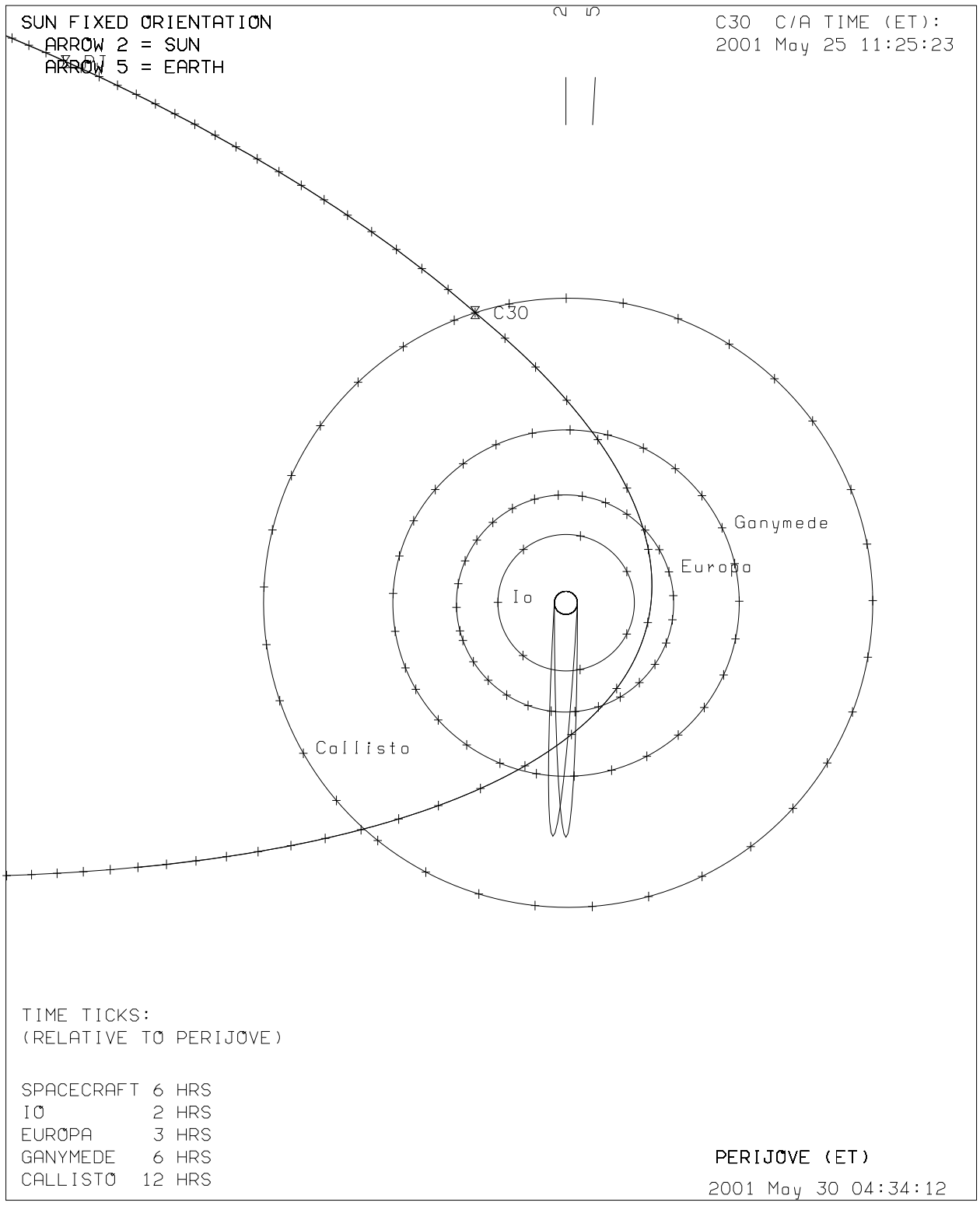
The figure on page 10 shows the spacecraft’s groundtrack on Jupiter at Jupiter closest approach.

Jupiter 30: North Traj Pole View (Callisto 30 Apo to Apo)

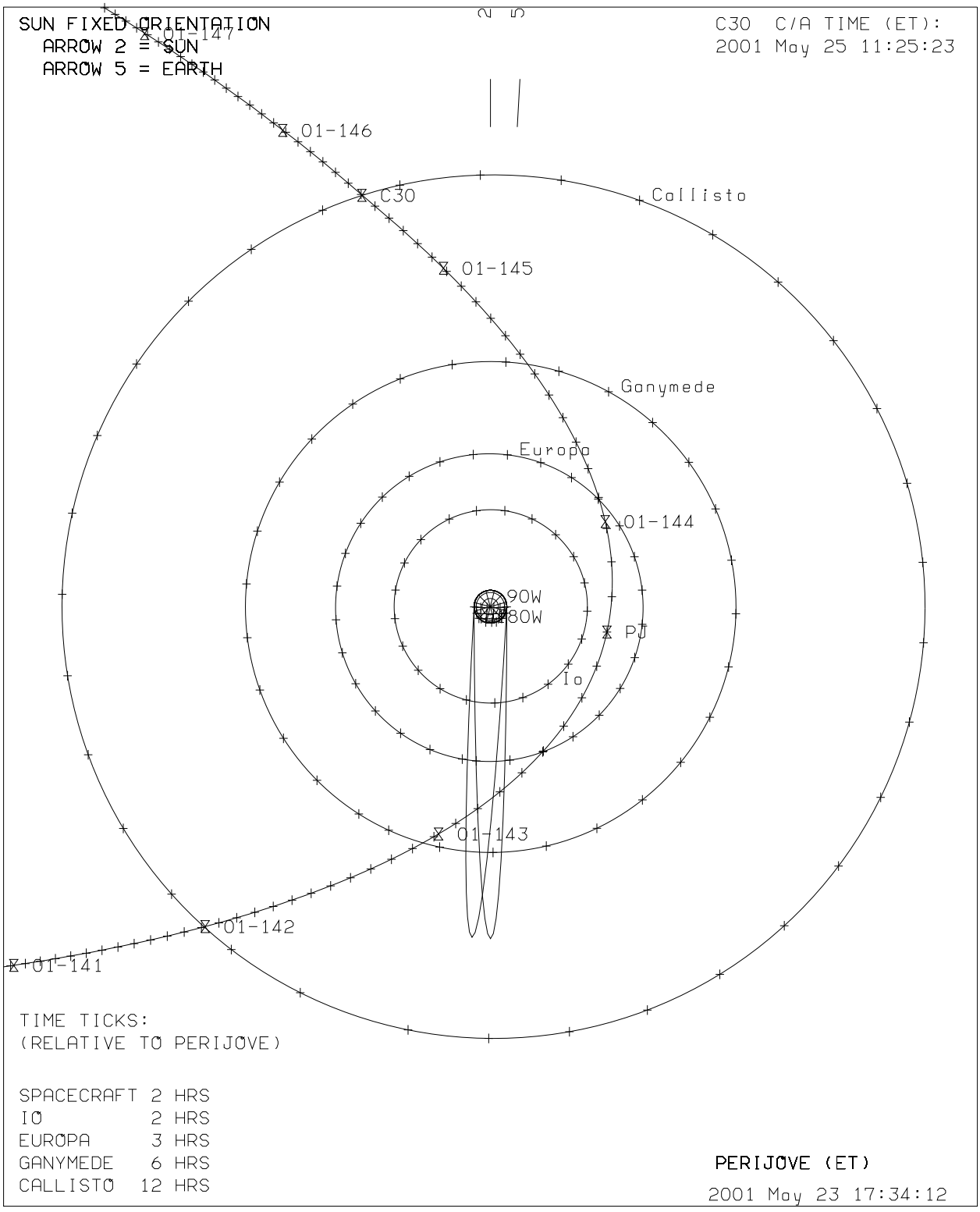


NAV Jun 29, 2000

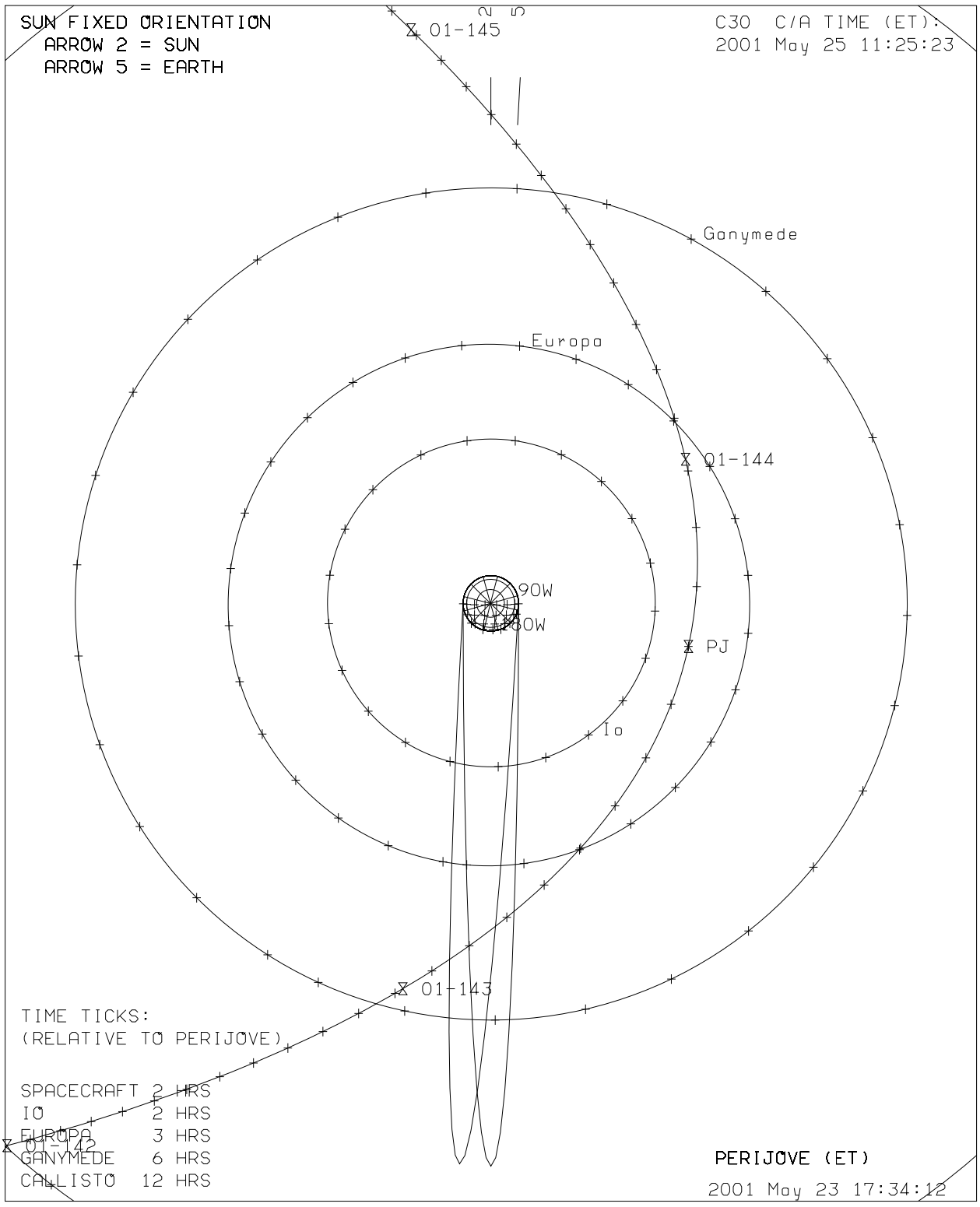
JUPITER 30: N. TRAJ. POLE VIEW (+/- 5 DAYS)



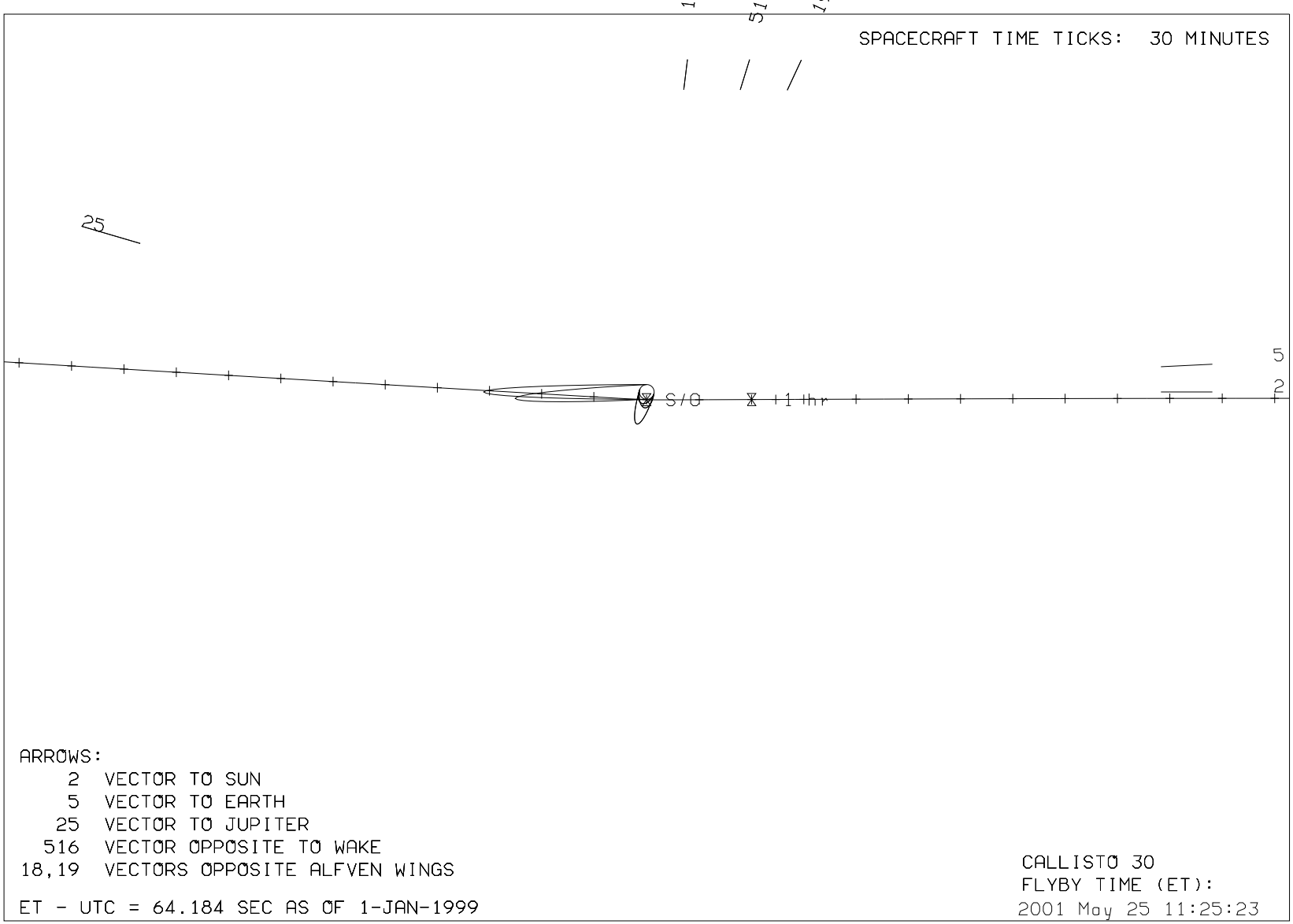
JUPITER 30: N. TRAJ. POLE VIEW (+/- 2 DAYS)



JUPITER 30: N. TRAJ. POLE VIEW (+/- 1 DAY)

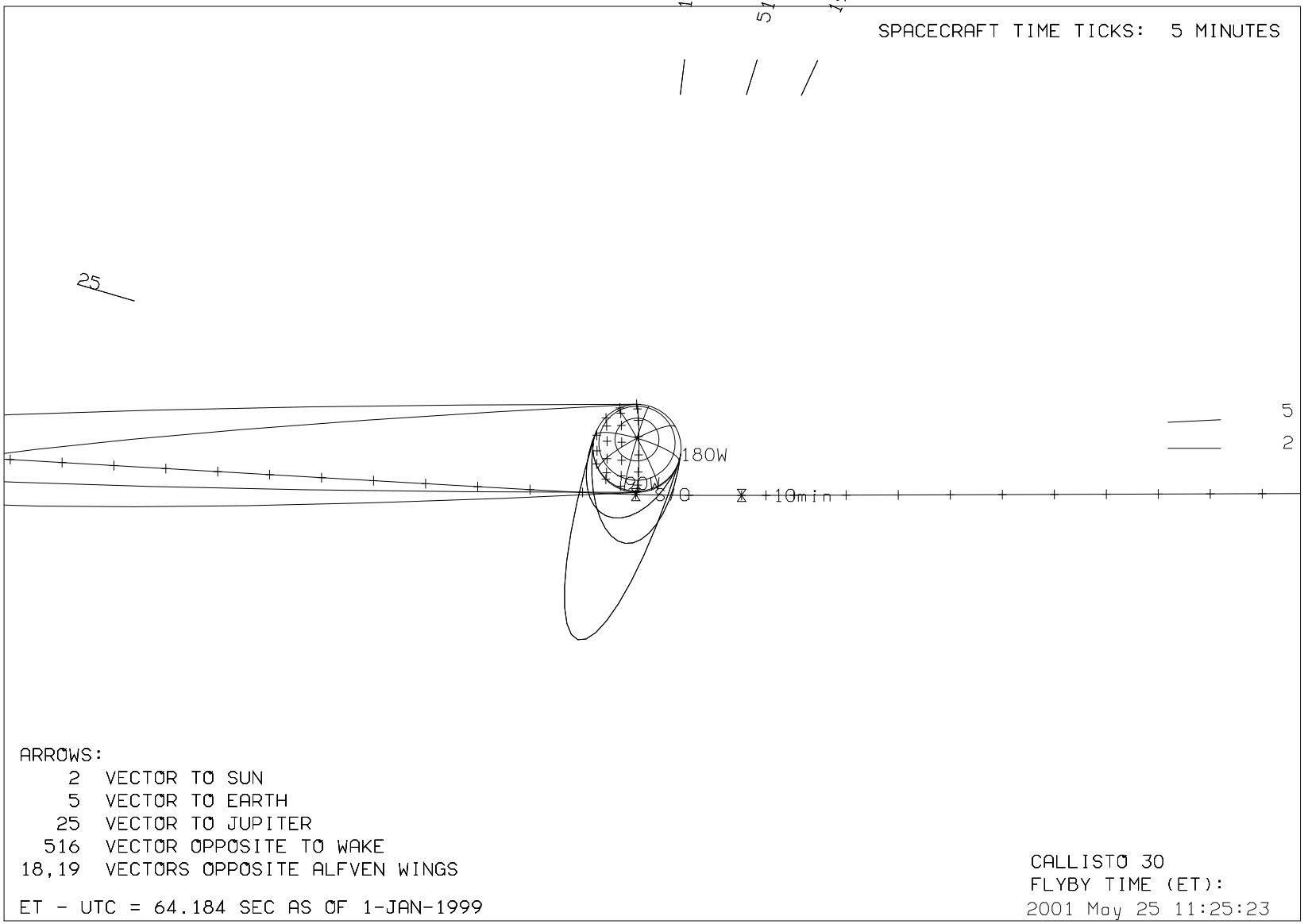


CALLISTO 30: N. TRAJ POLE VIEW (+/- 6 HRS)



NAV 6/29/00

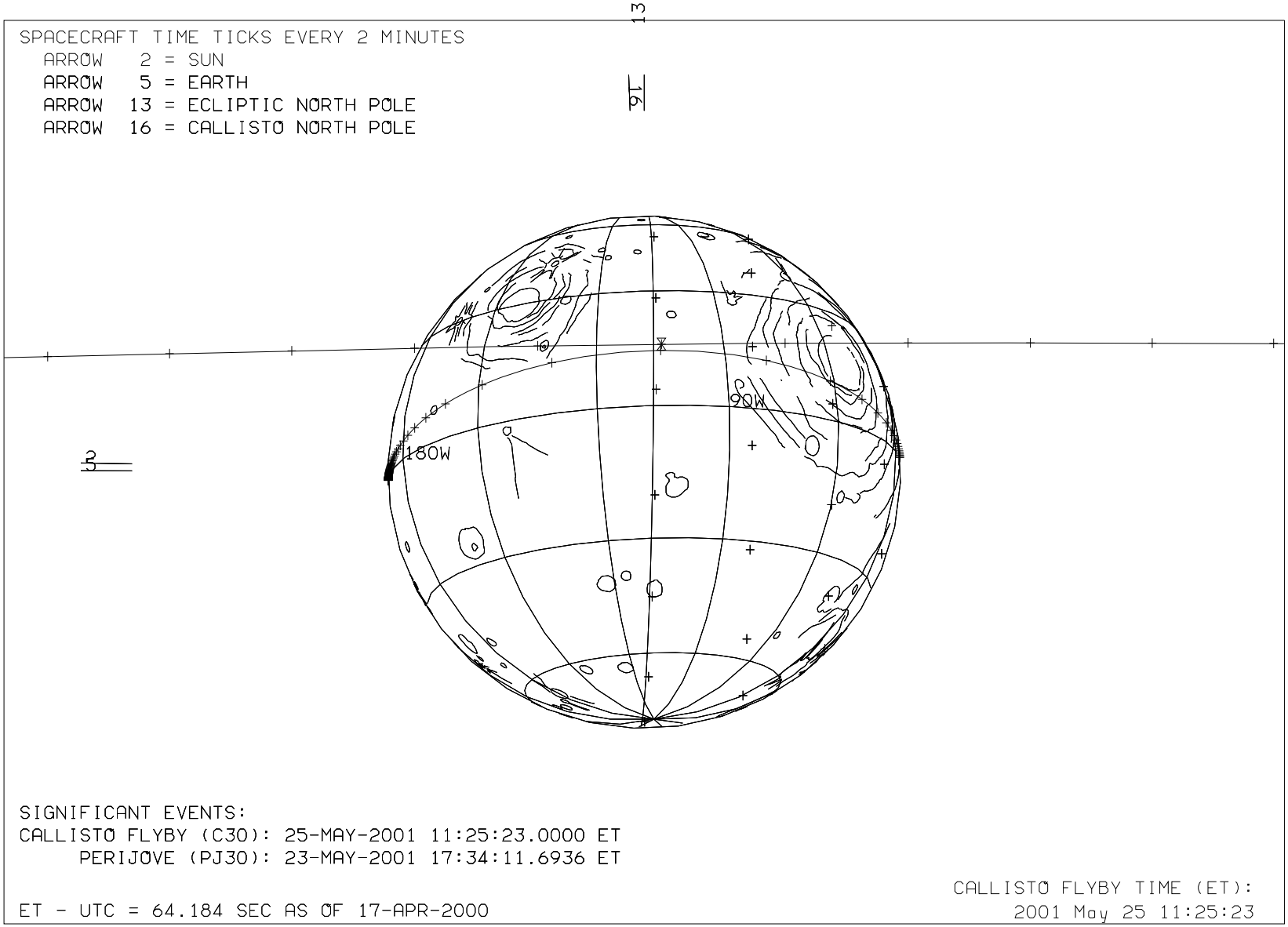
CALLISTO 30: N. TRAJ POLE VIEW (+/- 1 HR)



NAV 6/29/00

CALLISTO 30: GROUNDTRACK AT CLOSEST APPROACH

SPACECRAFT TIME TICKS EVERY 2 MINUTES
ARROW 2 = SUN
ARROW 5 = EARTH
ARROW 13 = ECLIPTIC NORTH POLE
ARROW 16 = CALLISTO NORTH POLE



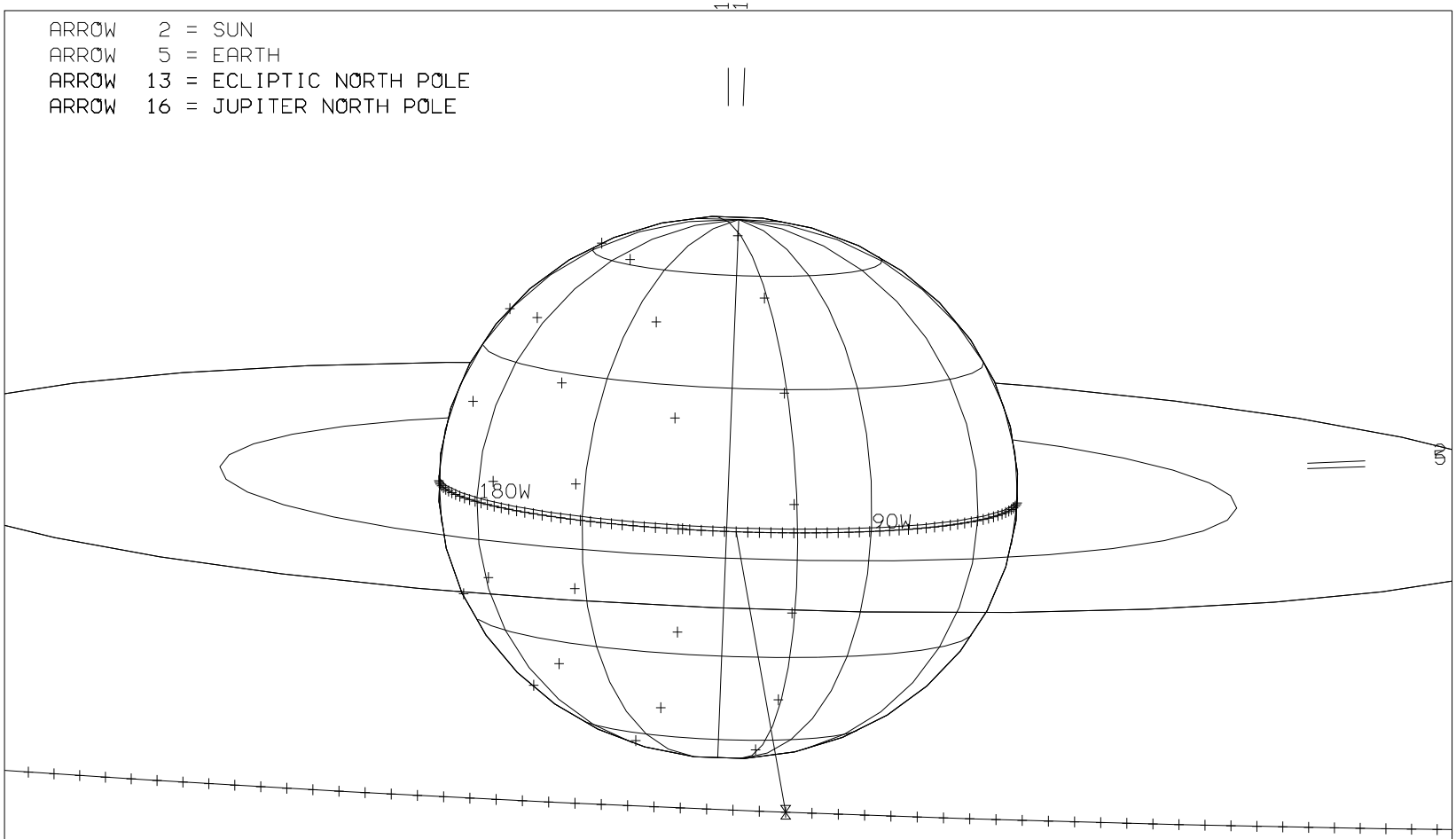
SIGNIFICANT EVENTS:
CALLISTO FLYBY (C30): 25-MAY-2001 11:25:23.0000 ET
PERIJOVE (PJ30): 23-MAY-2001 17:34:11.6936 ET

ET - UTC = 64.184 SEC AS OF 17-APR-2000

CALLISTO FLYBY TIME (ET):
2001 May 25 11:25:23

NAV Jun 28, 2000

JUPITER 30: GROUNDTRACK AT CLOSEST APPROACH



SIGNIFICANT EVENTS:
CALLISTO FLYBY (C30): 25-MAY-2001 11:25:23.0000 ET
PERIJOVE (PJ30): 23-MAY-2001 17:34:11.6936 ET

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

PJ30 TIME (ET):
2001 May 23 17:34:12

NAV Jun 28, 2000