Chapter 3 - Orbit Geometries

Contents

Introduction to Chapter 3

This chapter contains diagrams of various aspects of geometry for the C10 Orbit.

The figure on page 3 is a North Trajectory Pole View of the C10 Orbit from apoapsis to apoapsis.

The figure on page 4 is a North Trajectory Pole View of the C10 Orbit from +/- 5 days of Callisto closest approach.

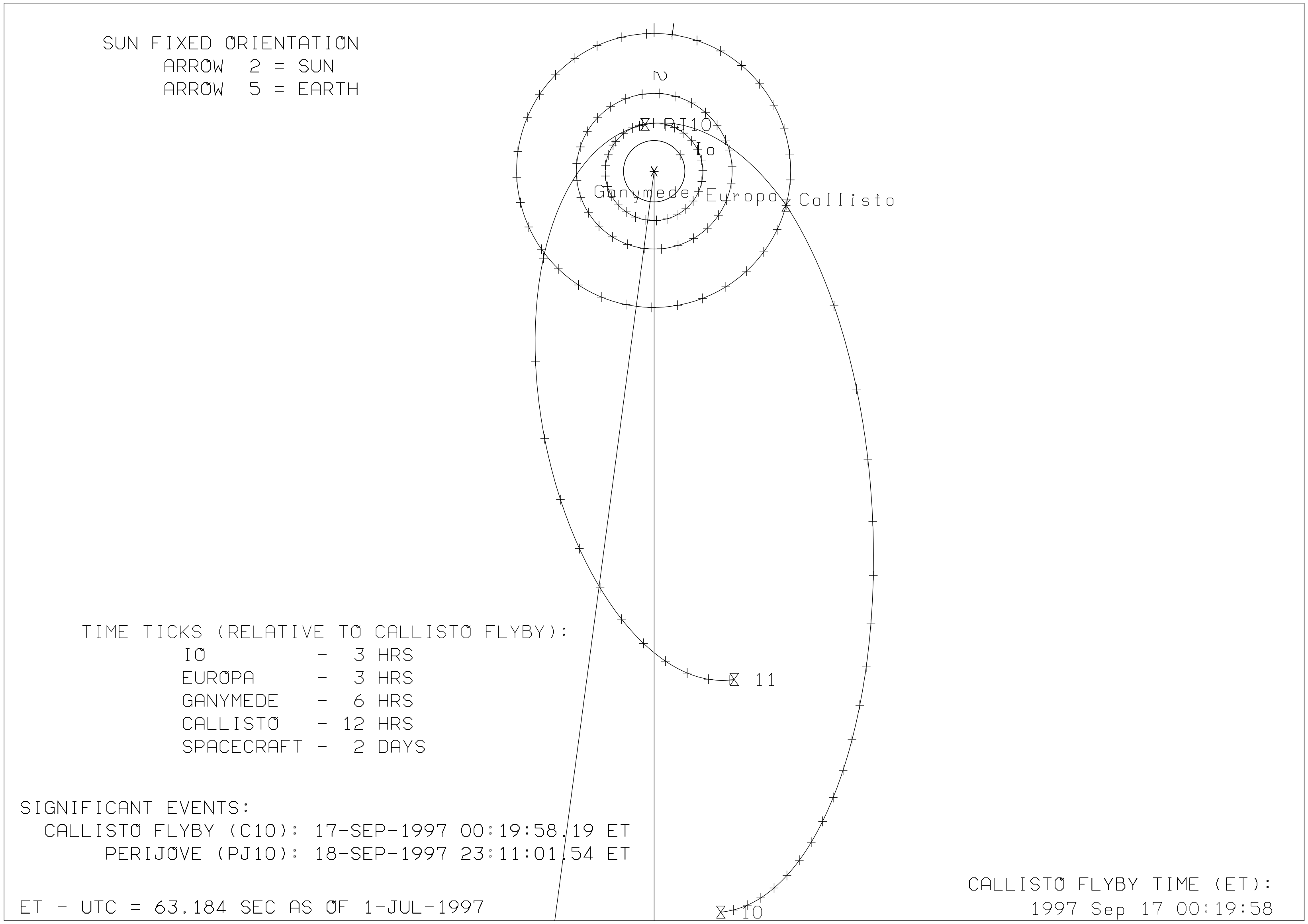
The figure on page 5 is a North Trajectory Pole View of the C10 Orbit from +/- 1 day of Callisto closest approach.

The figure on page 6 shows the spacecraft’s groundtrack on Callisto at Callisto closest approach.

The figure on page 7 shows the spacecraft’s groundtrack on Jupiter at Jupiter closest approach.

The figure on page 8 is a North Trajectory Pole View of the C10 Orbit from +/- 1 hour of Callisto closest approach.

Jupiter 10: North Traj Pole View (C10 Apo to Apo)



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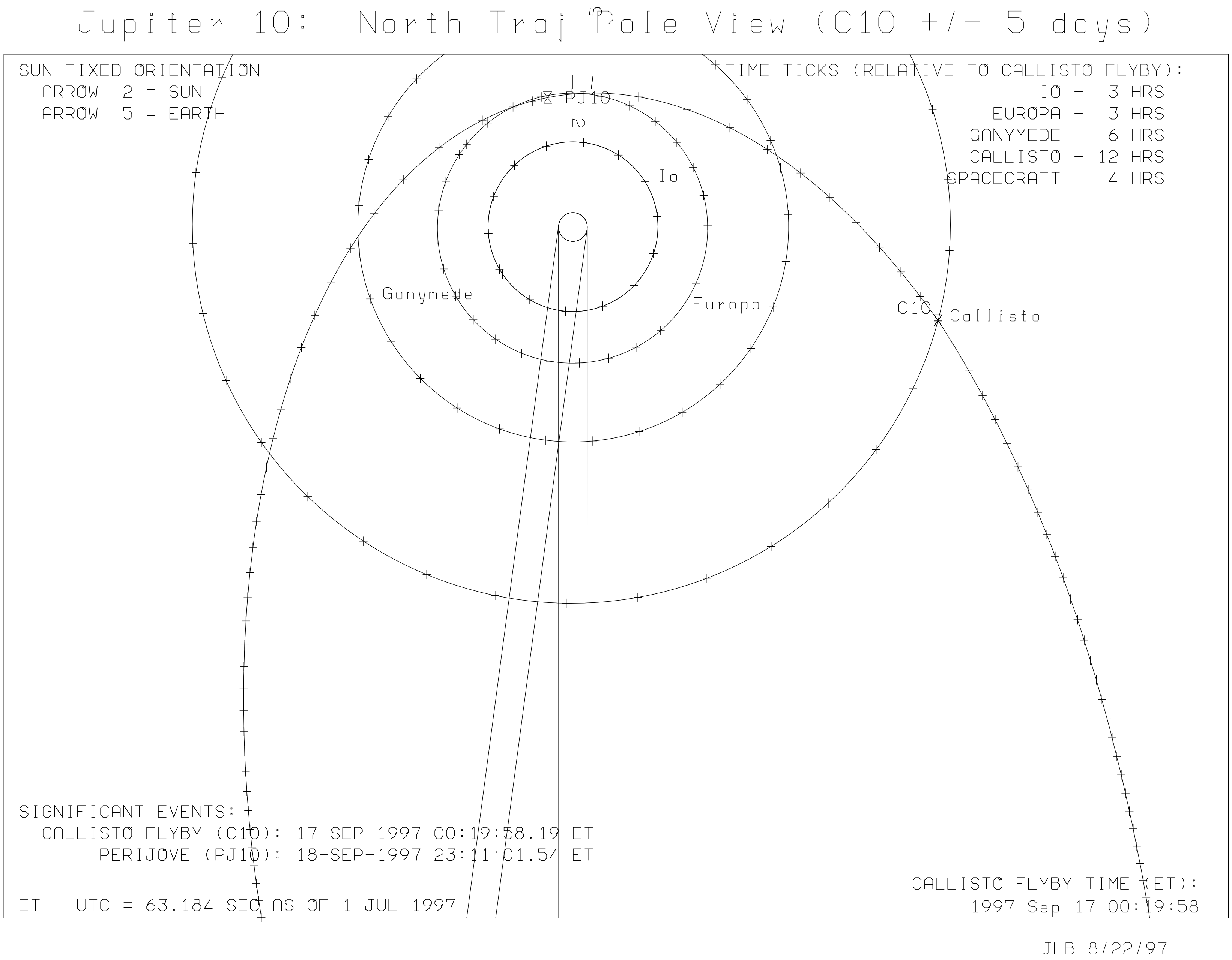
Jupiter 10: North Traj Pole View (C10 +/- 5 days)
SUN FIXED ORIENTATION
ARROW 2 = SUN
ARROW 5 = EARTH
TIME TICKS (RELATIVE TO CALLISTO FLYBY):
IO - 3 HRS
EUROPA - 3 HRS
GANYMEDE - 6 HRS
CALLISTO - 12 HRS
SPACECRAFT - 4 HRS
PJ10
2
Io
Ganymede
Europa
C10
Callisto
SIGNIFICANT EVENTS:
CALLISTO FLYBY (C10): 17-SEP-1997 00:19:58.19 ET
PERIJOVE (PJ10): 18-SEP-1997 23:11:01.54 ET
ET - UTC = 63.184 SEC AS OF 1-JUL-1997
CALLISTO FLYBY TIME (ET):
1997 Sep 17 00:19:58
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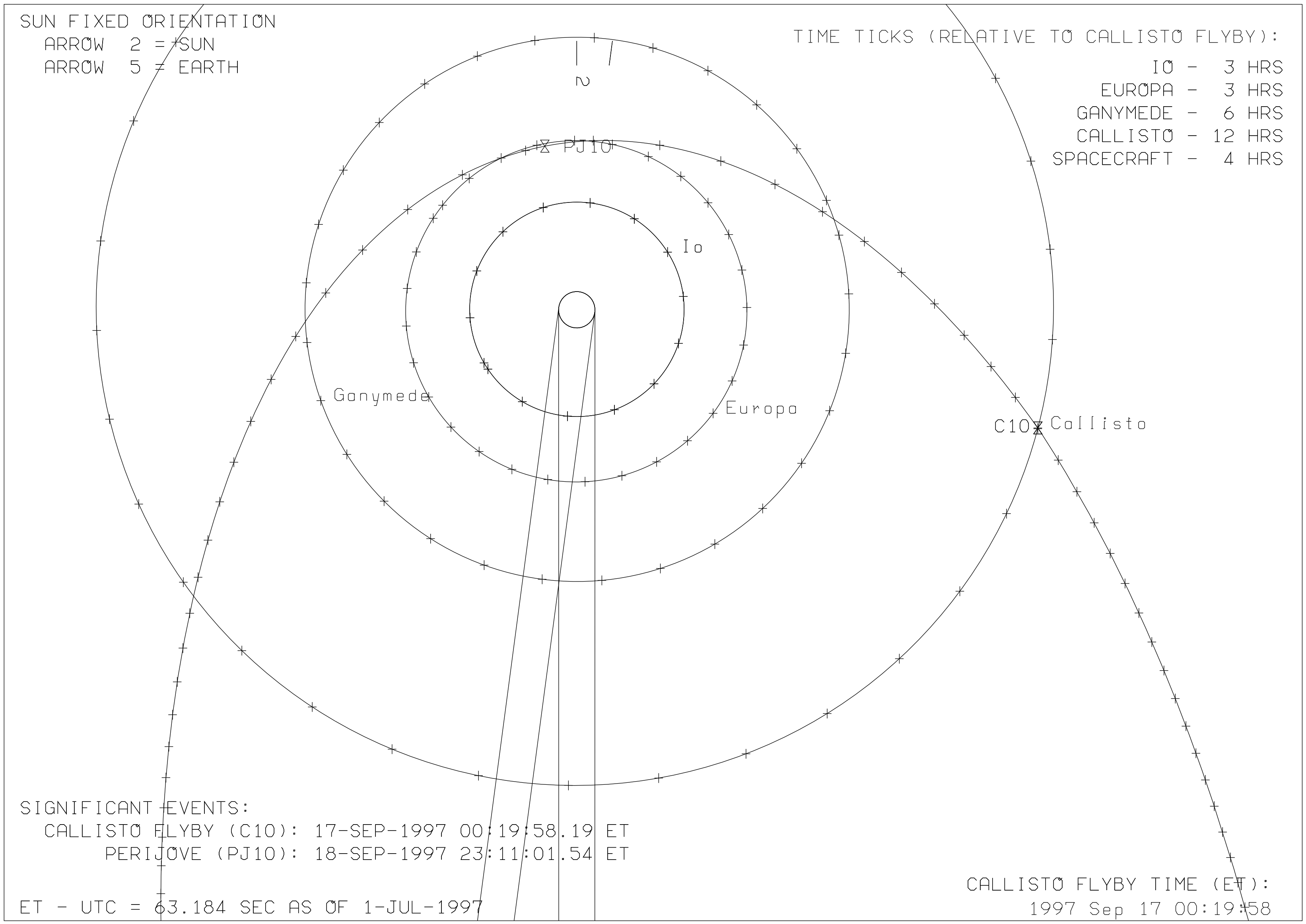
Jupiter 10: North Traj Pole View (C10 +/- 1 day)



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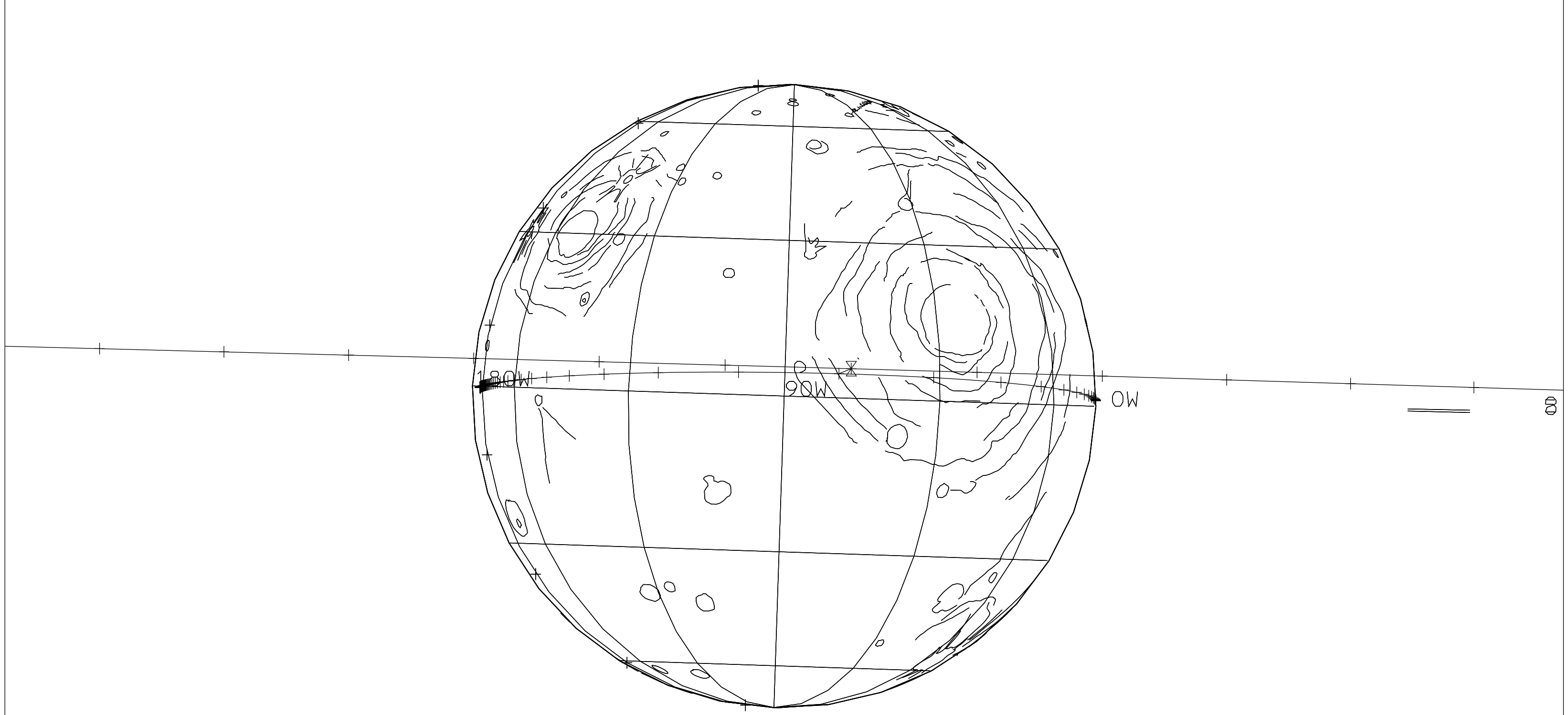
CALLISTO 10: GROUNDTRACK AT CLOSEST APPROACH

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 (C10): 17-SEP-1997 00:19:58.19 ET
PERIJOVE (PJ10): 18-SEP-1997 23:11:01.54 ET

ET - UTC = 63.184 SEC AS OF 1-JUL-1997

CALLISTO FLYBY TIME (ET):
1997 Sep 17 00:19:58

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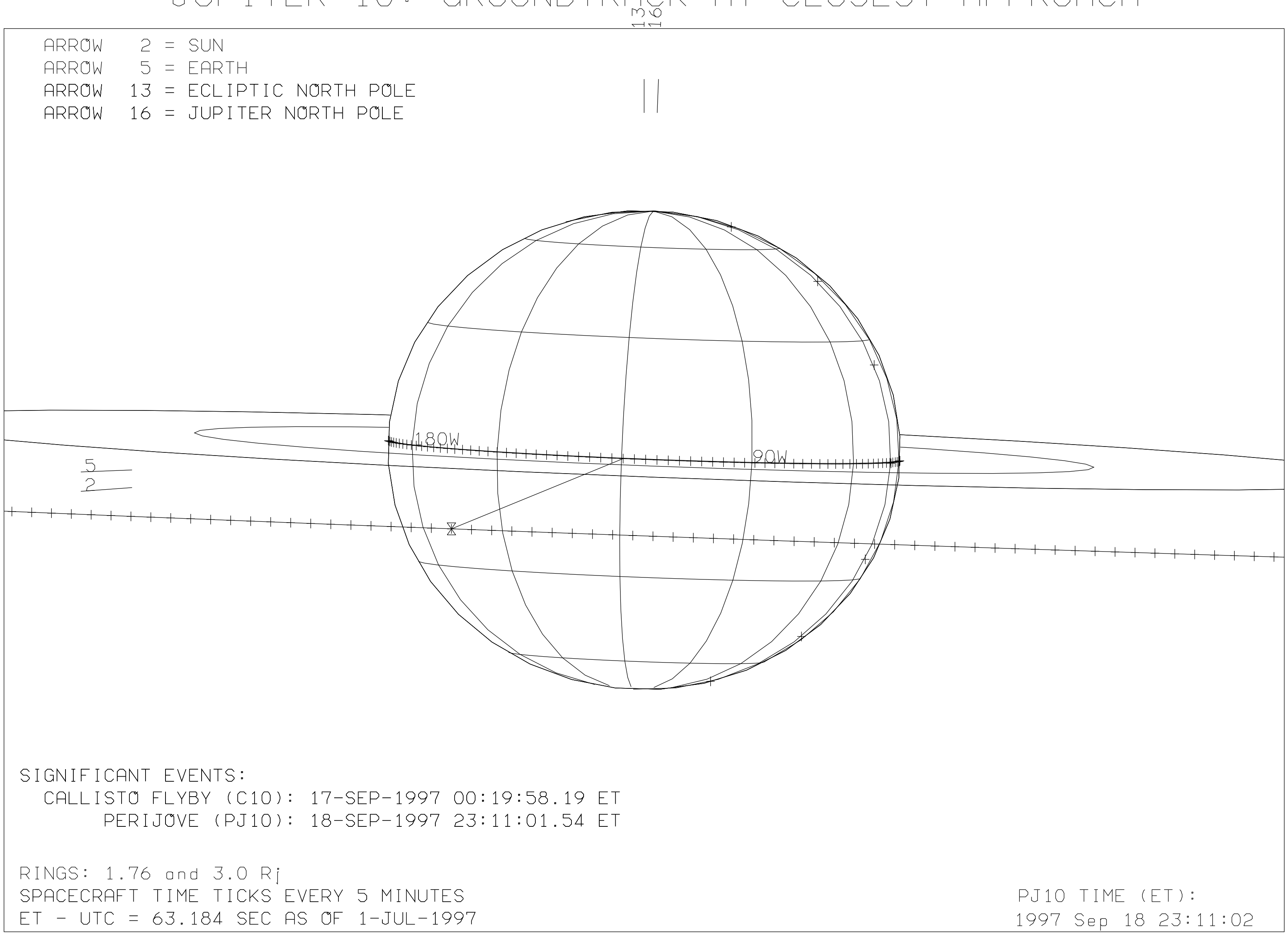
JUPITER 10: GROUNDTRACK AT CLOSEST APPROACH



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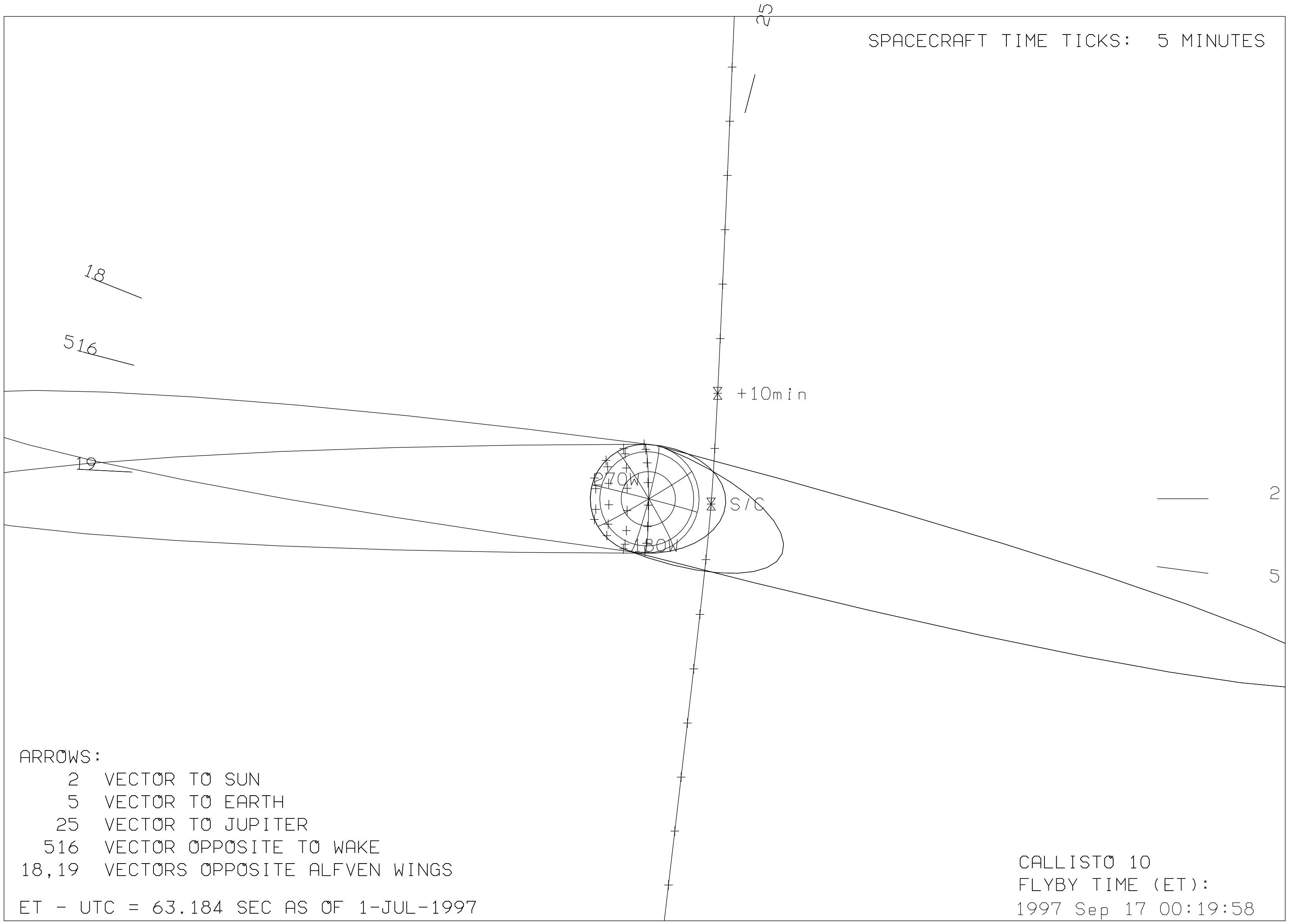
CALLISTO 10: CLOSEST APPROACH (N TRAJ POLE VIEW)



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