Chapter 2 - Encounter Overview

Contents

Overview

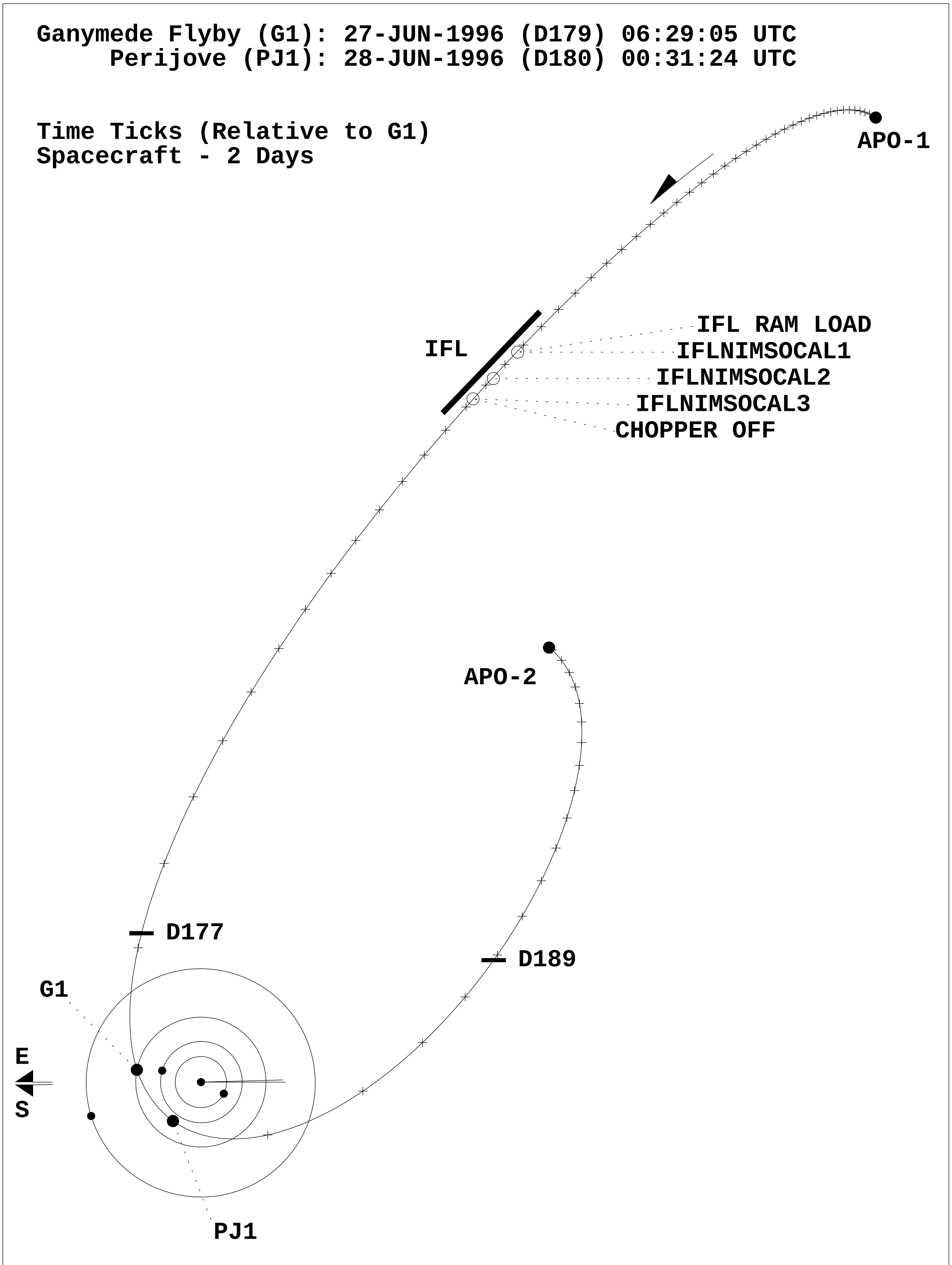
The In-Flight Load (IFL) presents an opportunity to test the NIMS Phase 2 software as well as the CDS Phase 2 software and the new Real Time capabilities of NIMS. A simple OPCAL (Optics Calibration) test was designed to test the NIMS software. This test does not require the commanding of the scan platform nor the use of the DMS tape recorder. It only requires the commanding of the NIMS instrument and the Select and Deselect of NIMS in the Real Time data stream.

The NIMS Phase 2 software has some new features, including wavelength editing and mirror blocking, which will be tested at this time. Wavelength editing will be used to select only detectors 1 and 2 for all Long Map grating positions. Mirror blocking will be used to select only mirror positions 8-11 (of 0-19). The data will then be returned using the new real-time capabilities of the spacecraft. Only the first 12 minor frames per Rim are returned in Real Time.

There are three OPCAL sequences in total, separated by 3 and 2 days. Each OPCAL sequence turns on the OPCAL lamp twice while NIMS is Selected in Real Time for 4 Rims. The OPCAL lamp is only visible to Detectors 1 and 2, so only those detectors' data are returned.

These OPCALs will be used to calibrate the NIMS grating and also monitor any changes to Detector 1 and 2 prior to the start of G1 at the end of June, 1996. This will be the first NIMS data returned since the SL9 Encounter of July, 1994.

NIMS IN-FLIGHT LOAD (IFL)



G1 North Trajectory Pole View, Apoapsis to Apoapsis

NIMS - FEL - 10/16/98