Chapter 1 - Introduction

Contents

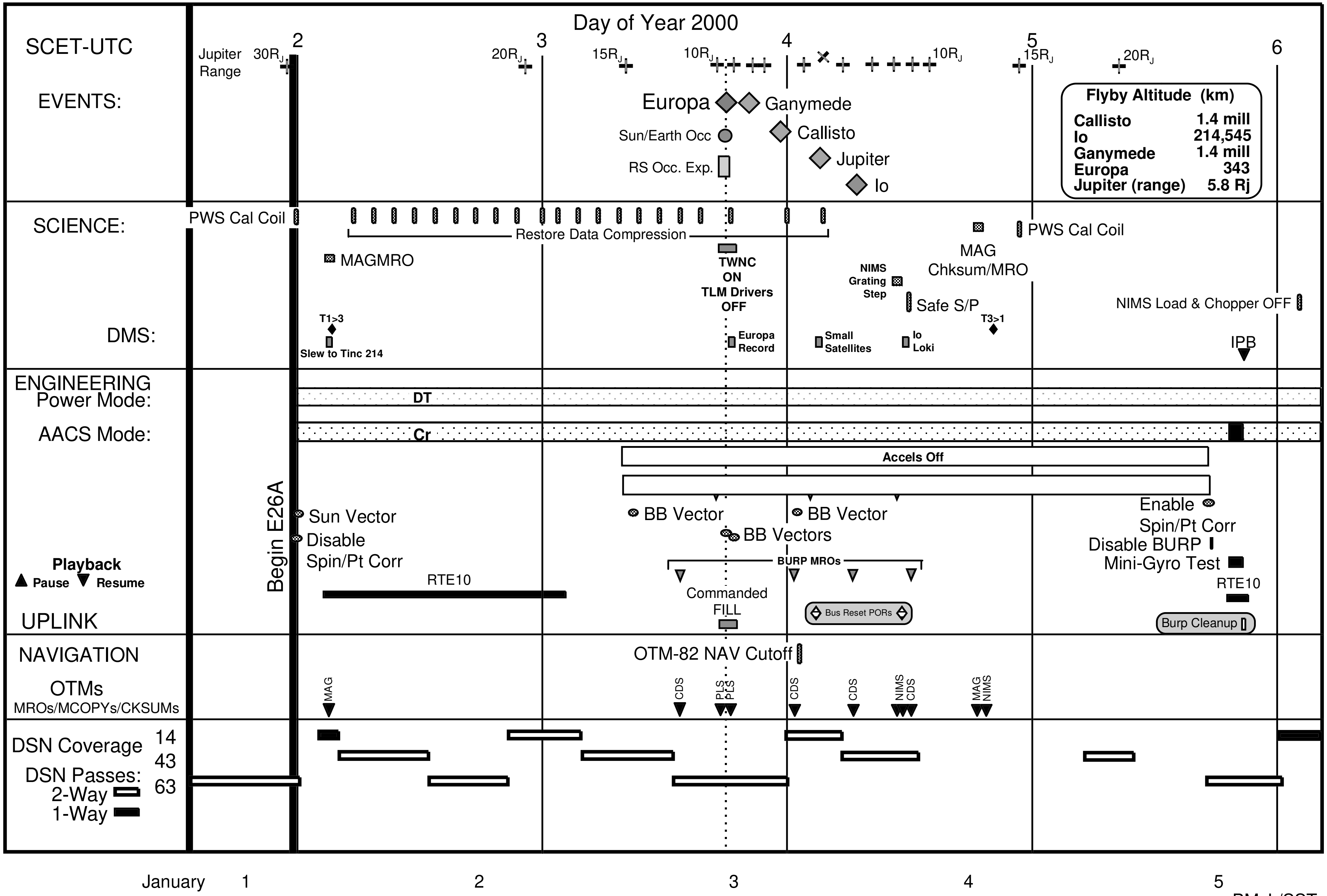
Introduction

This E26 orbit is the twenty-sixth of twenty-nine orbits in Galileo’s Tour of the Jovian system and the first orbit in the Galileo Millennium Mission (GMM). E26 is the Europa Flyby of GMM. This orbit has a targetted satellite flyby of Europa and an untargetted flyby of Io.

There are 4 autonomous reloads of the NIMS RAM code from CDS planned during the E26A encounter period, one just before each science observation. These reloads are in response to the on-going flight-anomalies where the NIMS RAM code takes some bit hits and halts the instrument during when the spacecraft is close to Jupiter. NIMS personnel will monitior the NIMS engineering telemetry data on a regular schedule to track the instrument’s status.

The E26 orbit consists of a single sequence load E26A. The Encounter and Cruise periods were combined into a single sequence. The E26A load begins on D001 (01/01/00) and ends on D051 (02/20/00). This load contains the flybys of Europa and Io. A high-level overview timeline of the I25 orbit can be found on the following two pages.

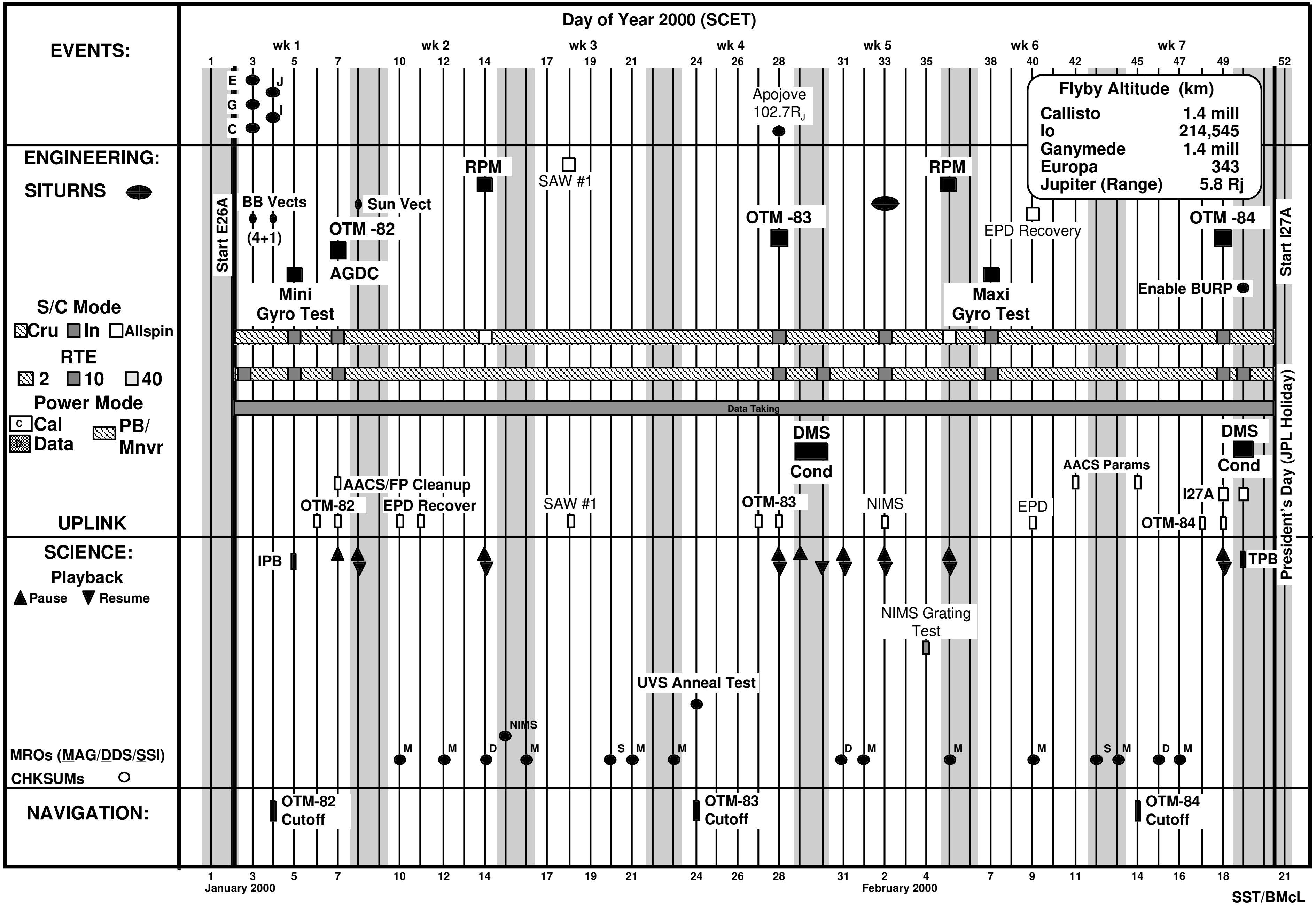
E26A Encounter Overview



BMcL/SST
1/6/00

Note: Two Bus Reset PORs occurred during the encounter time period, both of which were properly handled by the on-board recovery routine.
The times were: 00-004/02:51:51 SCET and 00-004/11:10:40 SCET.

E-26 Overview



SST/BMcL
2/15/00

Introduction

The following table lists the major events during E26, including NIMS Real Time observations, in UTC.

01/01/00	00-001/23:30:00	E26 Encounter Start
01/03/00	00-003/18:00:59	E26 Europa Closest Approach
01/04/00	00-004/03:34:02	PJ-26 Jupiter Closest Approach
01/04/00	00-004/06:56:31	Io Closest Approach
01/04/00	00-004/10:44:02	NIMS RAM Reload 01
01/04/00	00-004/10:50:05	NIMS Grating Test 01
01/04/00	00-004/11:15:25	NIMS RAM Reload 02
01/04/00	00-004/11:39:41	NIMS RAM Reload 03
01/04/00	00-004/11:45:41	NIMS Grating Test 02
01/05/00	00-005/20:54:29	Start E26 Playback
01/06/00	00-006/02:30:51	NIMS RAM Reload 04
02/04/00	00-035/11:02:00	NIMS Grating Tickle Test
02/06/00	00-037/11:01:10	NIMS RAM Reload 05
02/19/00	00-050/03:54:19	End E26 Playback