Chapter 1 - Introduction

Contents

	Sub-Section	Page
1.0	Contents	1
1.1	Introduction	2
1.2	I24A Overview Timeline	3
1.3	I24B Overview Timeline	4
1.4	I24 Major Events list	5

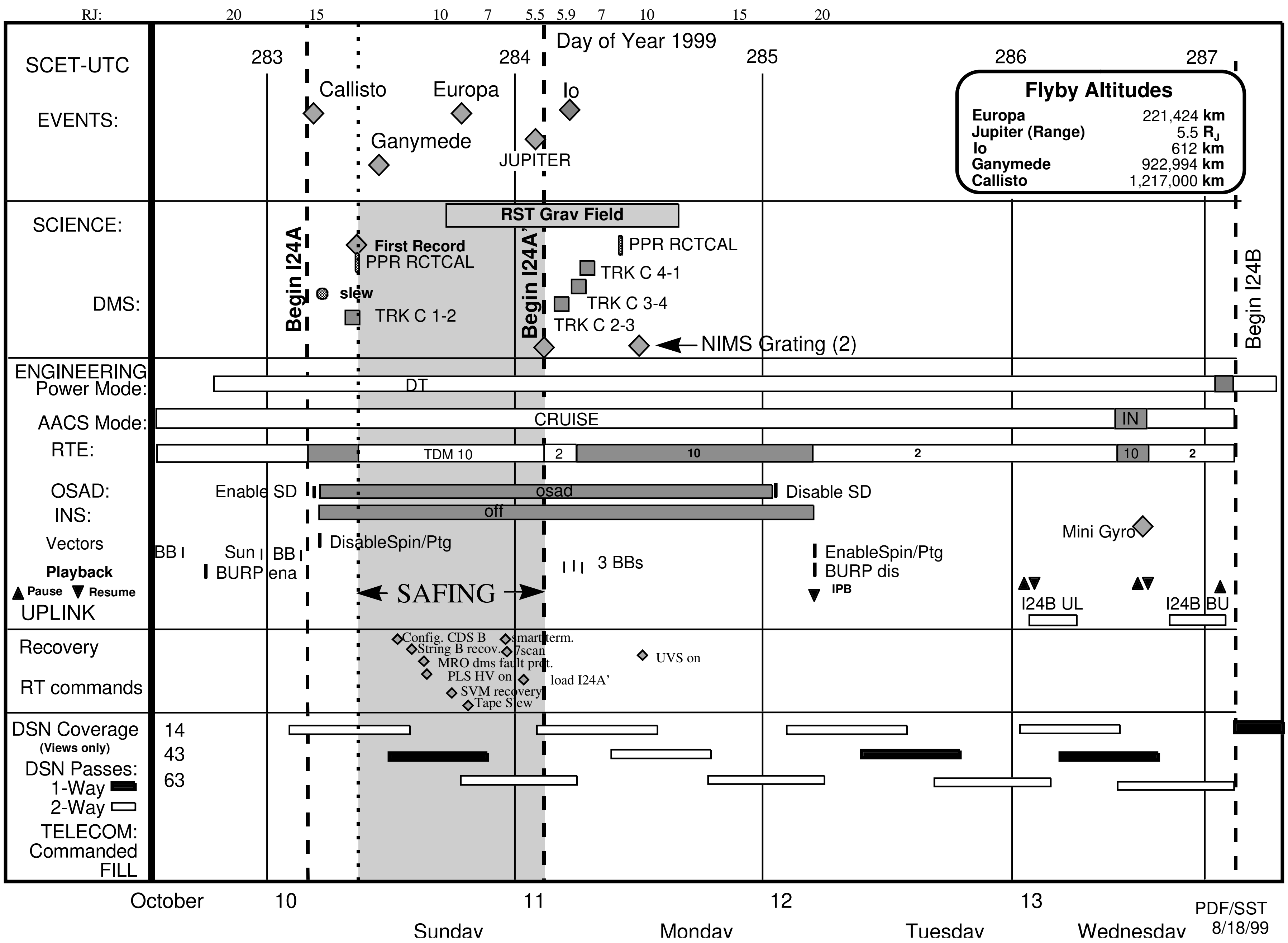
Introduction

This I24 orbit is the twenty-fourth of twenty-five orbits in Galileo’s Tour of the Jovian system and the thirteenth orbit in the Galileo Europa Mission (GEM). I24 starts the Io Flyby phase of the GEM. This orbit has a targetted satellite flyby of Io.

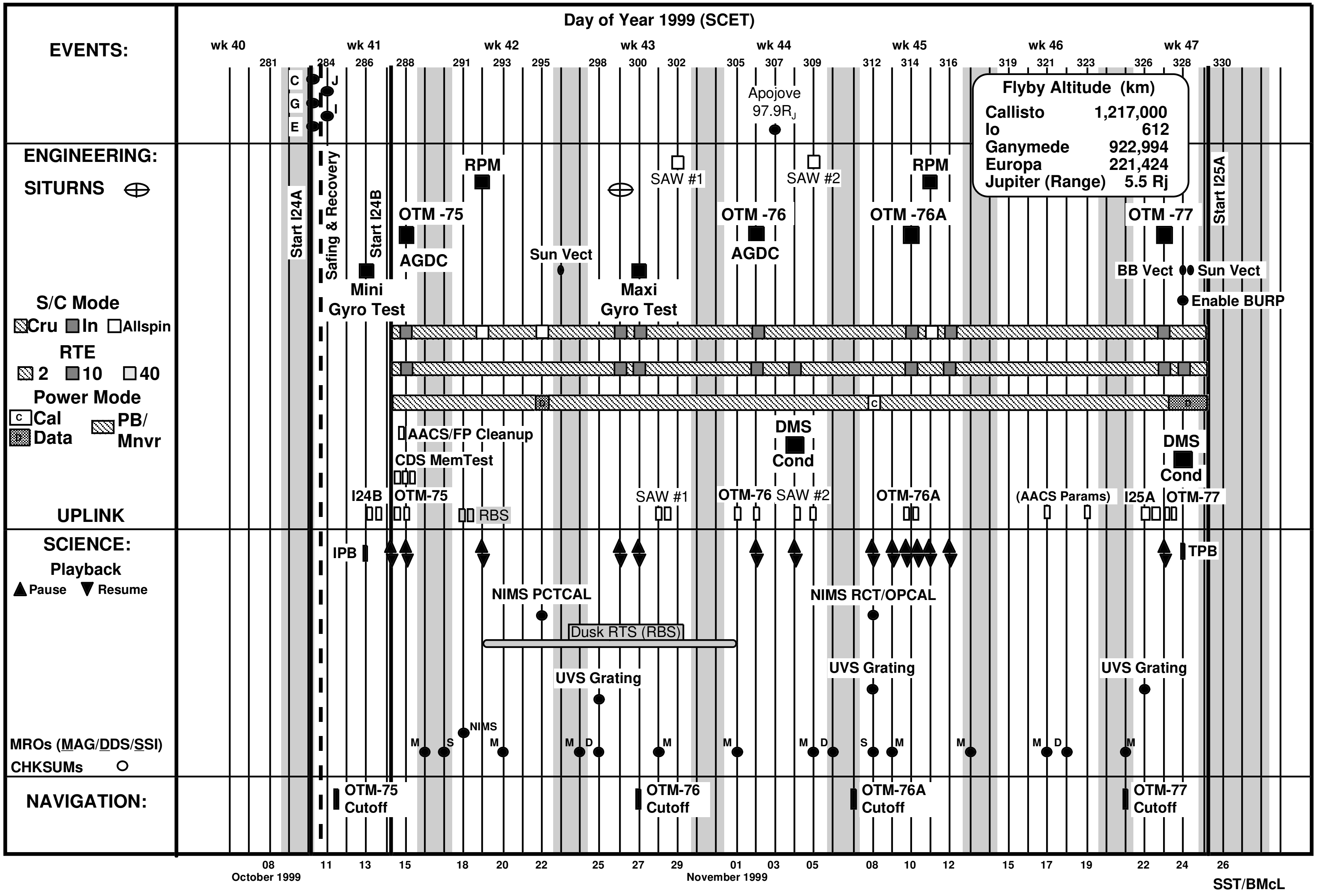
There are 16 autonomous reloads of the NIMS RAM code from CDS planned during the I24A encounter period, one just before each science observation. These reloads are in response to the on-going flight-anomalies where the NIMS RAM code takes some bit hits and halts the instrument during when the spacecraft is close to Jupiter. NIMS personnel will monitior the NIMS engineering telemetry data on a regular schedule to track the instrument’s status.

The I24 orbit is divided into 2 sequence loads: one Encounter Load (I24A) and one Orbital Cruise Load (I24B). The I24A load begins on D283 (10/10/99) and ends on D287 (10/14/99). This load contains the flyby of Io. The Cruise Load I24B runs from D287 to D329. Playback of the recorded data takes place during the Cruise phase, I24B. A high-level overview timeline of the I24 orbit can be found on the following two pages.

I24A Sequence Overview



I-24 Overview



SST/BMcL
10/18/99

Introduction

The following table lists the major events during I24, including NIMS Real Time observations, in UTC.

10/10/99	99-283/04:00:00	I24 Encounter Start
10/10/99	99-283/09:00:00	S/C Safed
10/11/99	99-284/00:30:00	NIMS Grating Test 01
10/11/99	99-284/00:50:00	NIMS Grating Test 02
10/11/99	99-284/02:03:35	PJ-24 Jupiter Closest Approach
10/11/99	99-284/03:00:00	S/C Restart
10/11/99	99-284/03:21:38	NIMS Power On
10/11/99	99-284/03:24:03	NIMS RAM Reload
10/11/99	99-284/04:15:56	NIMS RAM Reload 01
10/11/99	99-284/04:33:50	Io Closest Approach
10/11/99	99-284/04:29:18	NIMS RAM Reload 02
10/11/99	99-284/04:37:16	NIMS RAM Reload 03
10/11/99	99-284/04:45:22	NIMS RAM Reload 04
10/11/99	99-284/04:49:24	NIMS RAM Reload 05
10/11/99	99-284/04:53:30	NIMS RAM Reload 06
10/11/99	99-284/05:02:36	NIMS RAM Reload 07
10/11/99	99-284/05:14:44	NIMS RAM Reload 08
10/11/99	99-284/05:21:05	NIMS RAM Reload 09
10/11/99	99-284/05:27:09	NIMS RAM Reload 10
10/11/99	99-284/05:33:13	NIMS RAM Reload 11
10/11/99	99-284/06:06:35	NIMS RAM Reload 12
10/11/99	99-284/06:42:59	NIMS RAM Reload 13
10/11/99	99-284/08:02:52	NIMS RAM Reload 14
10/11/99	99-284/10:40:36	NIMS RAM Reload 15
10/11/99	99-284/11:17:24	NIMS Grating Test 03
10/12/99	99-285/04:19:14	NIMS RAM Reload 16
10/12/99	99-285/05:59:40	Start I24 Playback
10/22/99	99-295/15:28:28	NIMS R/T PCT CAL
11/08/99	99-312/06:34:25	NIMS R/T RCT CAL
11/24/99	99-328/03:54:41	End I24 Playback