Chapter 1 - Introduction

Contents

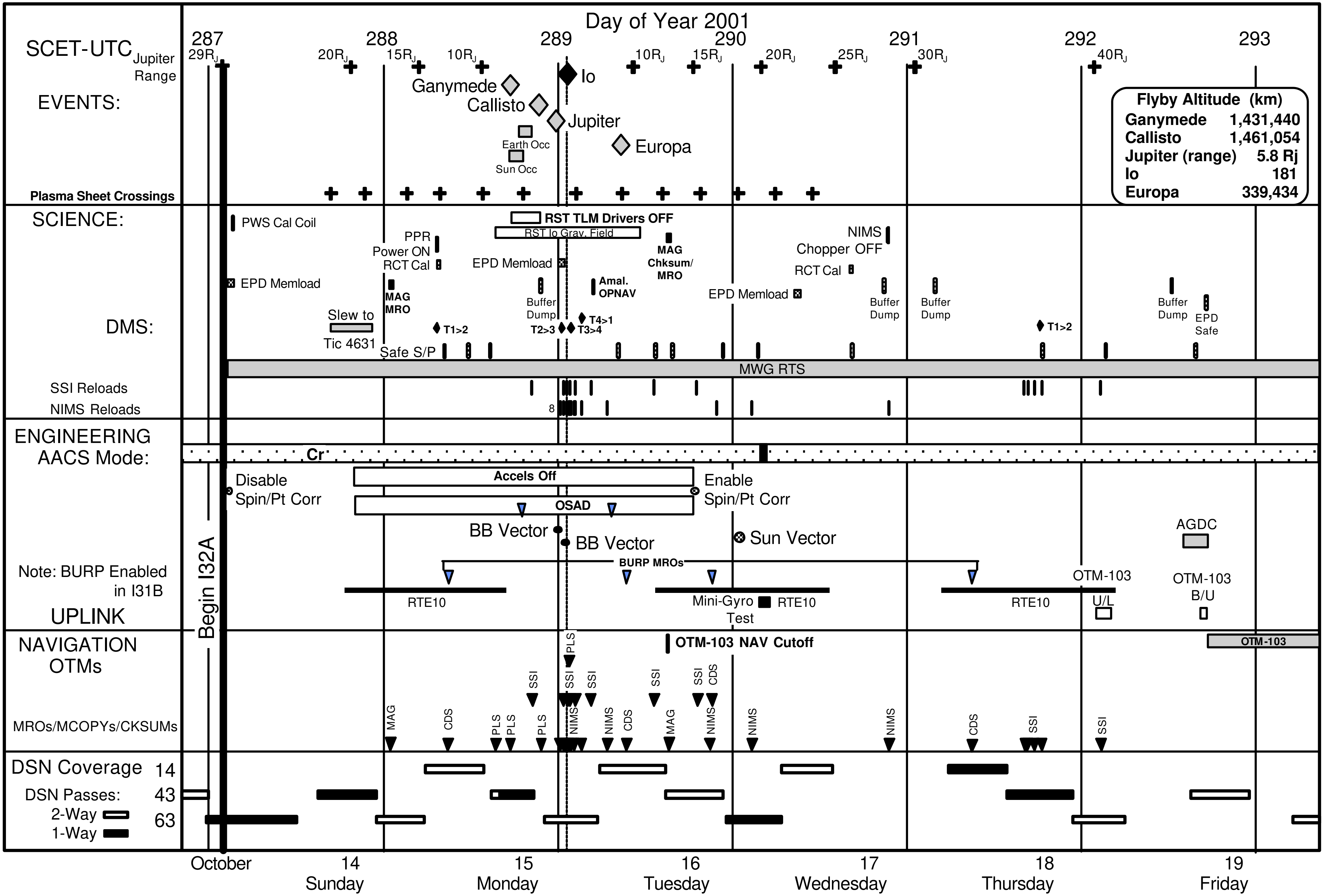
Introduction

This I32 orbit is the thirty-second of thirty-two orbits in Galileo’s Tour of the Jovian system and the sixth orbit in the Galileo Millennium Mission (GMM). I32 is an Io Flyby.

There are 14 autonomous reloads of the NIMS RAM code from CDS planned during the I32A 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.

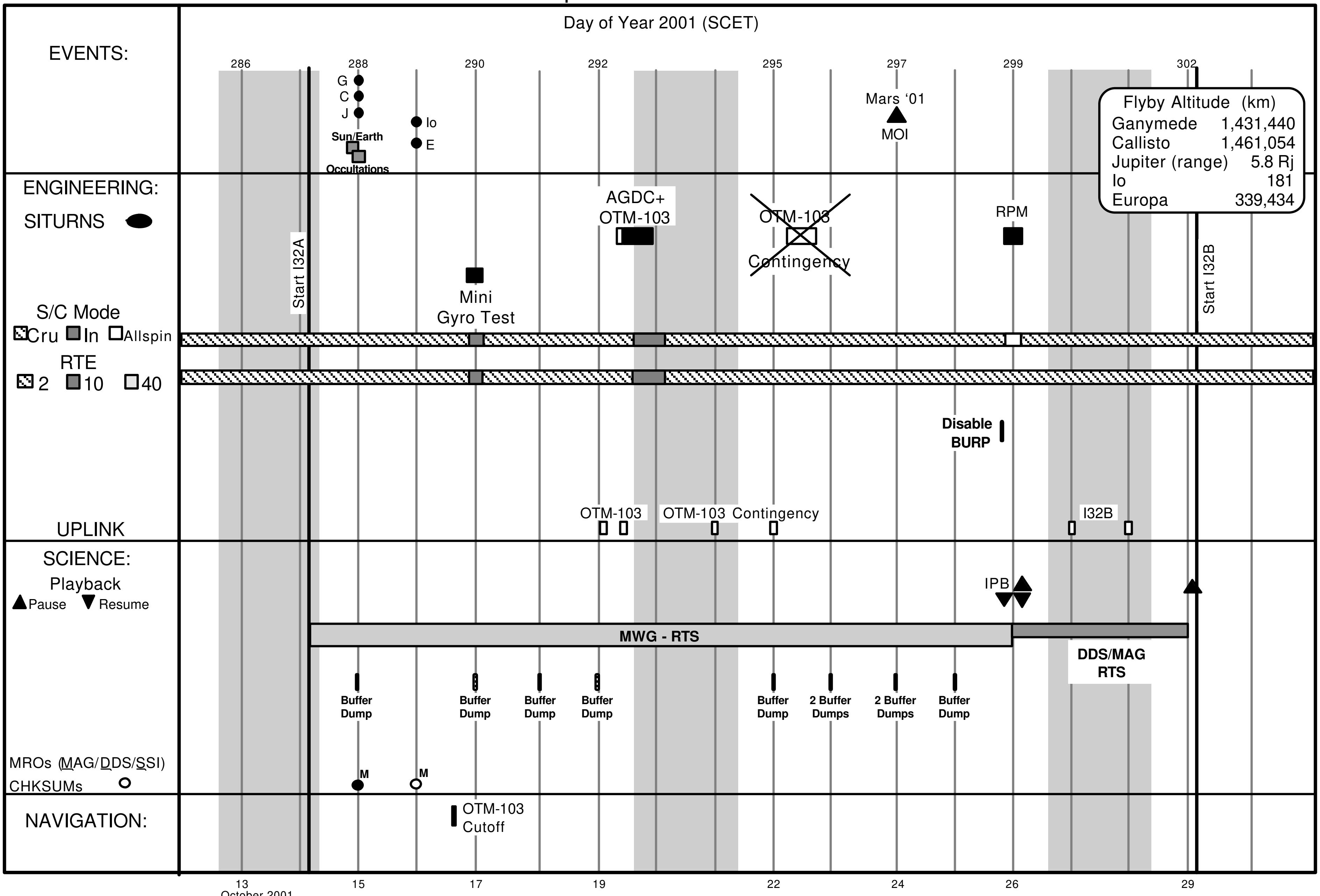
The I32 orbit is divided into 2 sequence loads: one Encounter Load (I32A) and one Orbital Cruise Loads (I32B). The I32A load begins on D287 (10/14/01) and ends on D302 (10/29/01). This load contains a flyby of Io. The Cruise Load runs from D302 to D015 of 2002. Playback of the recorded data takes place during the Cruise phase, I32B. A high-level overview timeline of the I32 orbit can be found on the following four pages.

I32A Encounter Period Overview



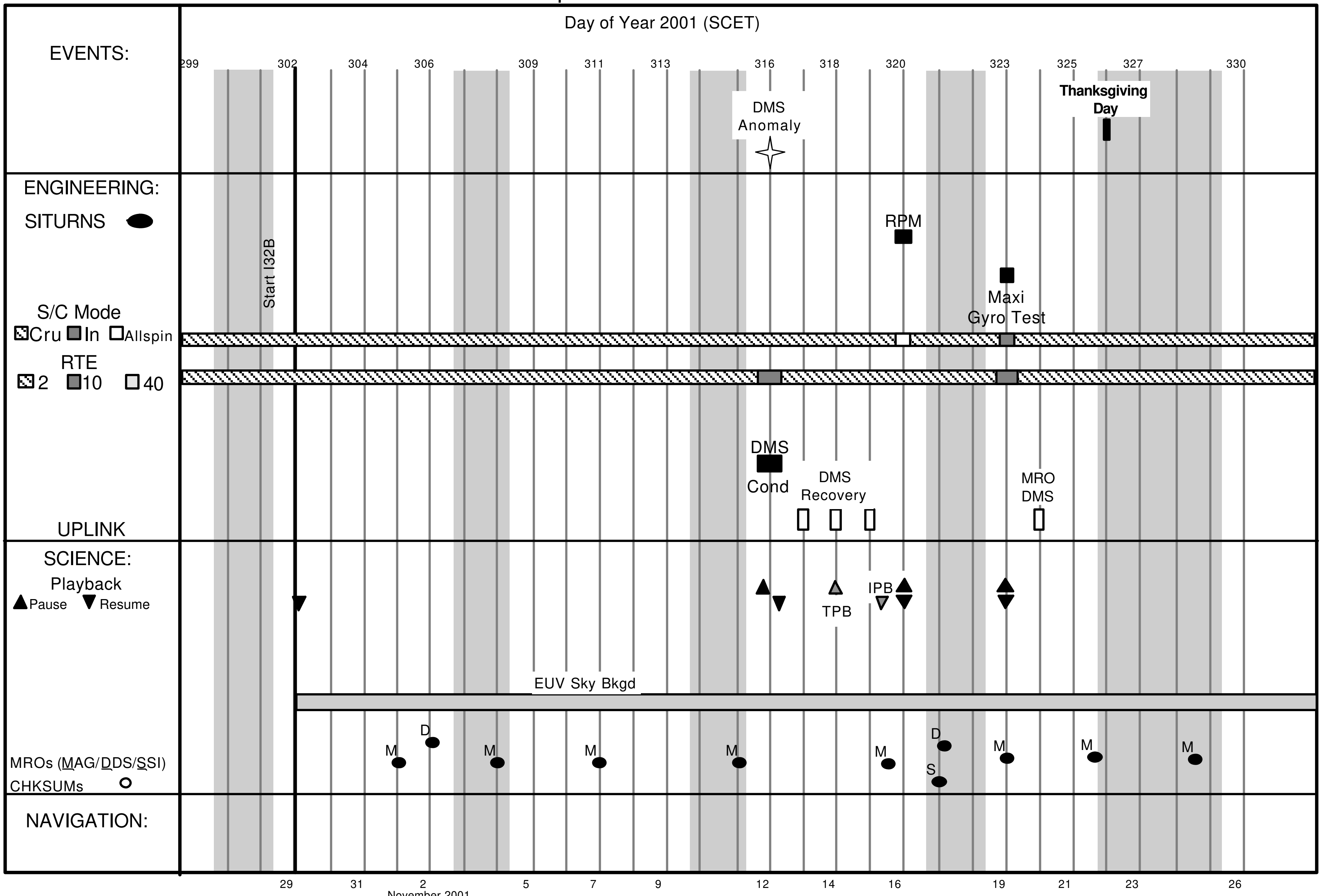
BMcL/SST
09/27/01

I32A Sequence Overview - Part 2



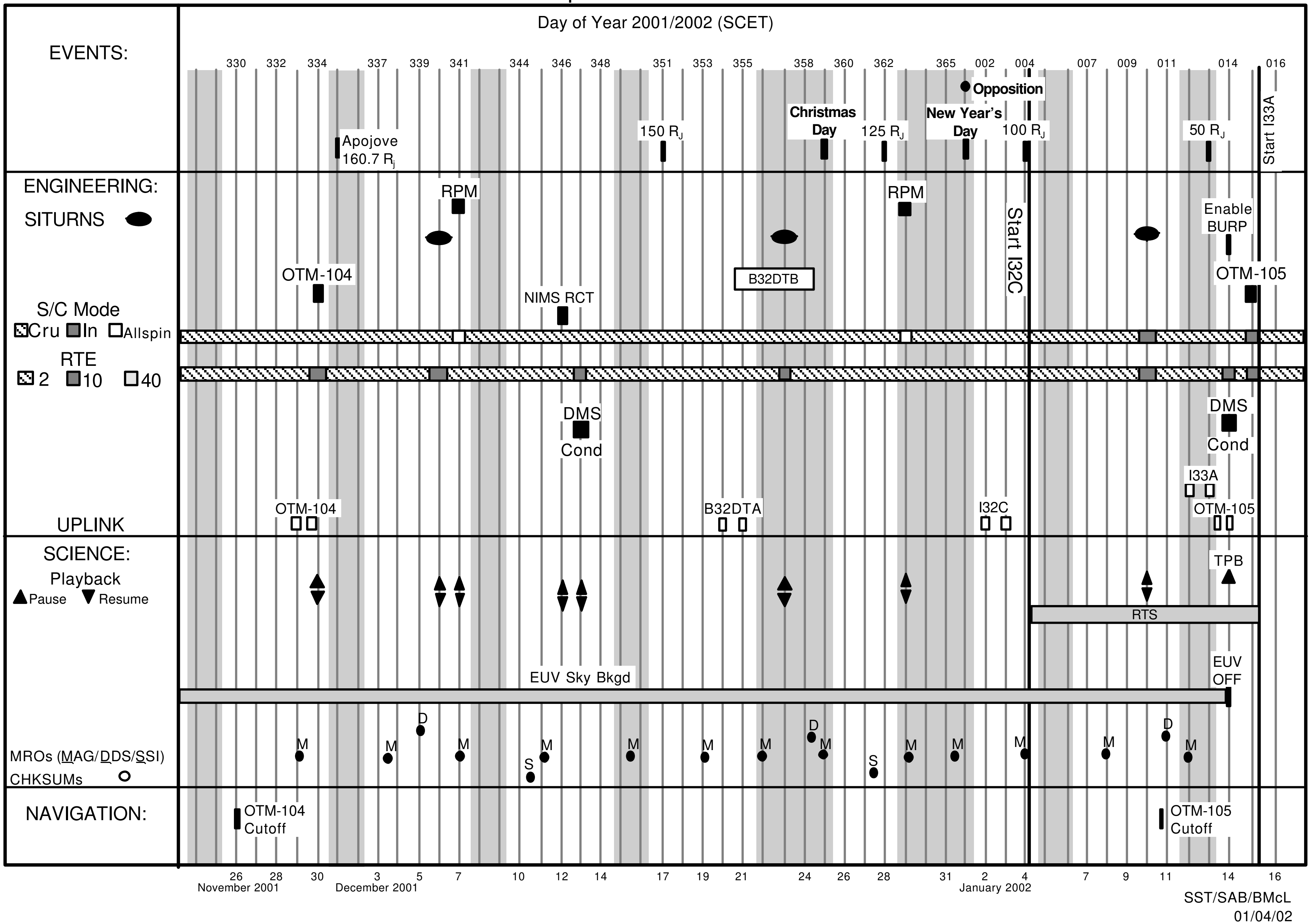
SST/BMcL
10/31/01

I32B Sequence Overview - Part 1



SST/SAB/BMcL
01/04/02

I32B/C Sequence Overview - Part 2



Introduction

The following table lists the major events during I32, including NIMS Real Time observations, in UTC.

10/14/01	01-287/02:00:00	I32 Encounter Start
10/15/01	01-288/23:57:03	PJ-32 Jupiter Closest Approach
10/16/01	01-289/00:17:20	NIMS RAM Reload 01
10/16/01	01-289/00:47:40	NIMS RAM Reload 02
10/16/01	01-289/01:04:45	NIMS RAM Reload 03
10/16/01	01-289/01:24:10	NIMS RAM Reload 04
10/16/01	01-289/01:24:24	I32 Io Closest Approach
10/16/01	01-289/01:39:20	NIMS RAM Reload 05
10/16/01	01-289/01:55:31	NIMS RAM Reload 06
10/16/01	01-289/02:07:39	NIMS RAM Reload 07
10/16/01	01-289/02:21:48	NIMS RAM Reload 08
10/16/01	01-289/03:04:03	NIMS RAM Reload 09
10/16/01	01-289/06:56:53	NIMS RAM Reload 10
10/16/01	01-289/21:00:09	NIMS RAM Reload 11
10/16/01	01-290/02:43:56	NIMS RAM Reload 12
10/16/01	01-290/21:28:34	NIMS RAM Reload 13
10/25/01	01-299/03:14:17	Start I32 Playback
12/13/01	01-347/03:13:45	NIMS RAM Reload 14
12/13/01	01-347/03:32:20	NIMS R/T RCT CAL
01/14/02	01-286/01:49:13	End I32 Playback