Chapter 1 - Introduction

Contents

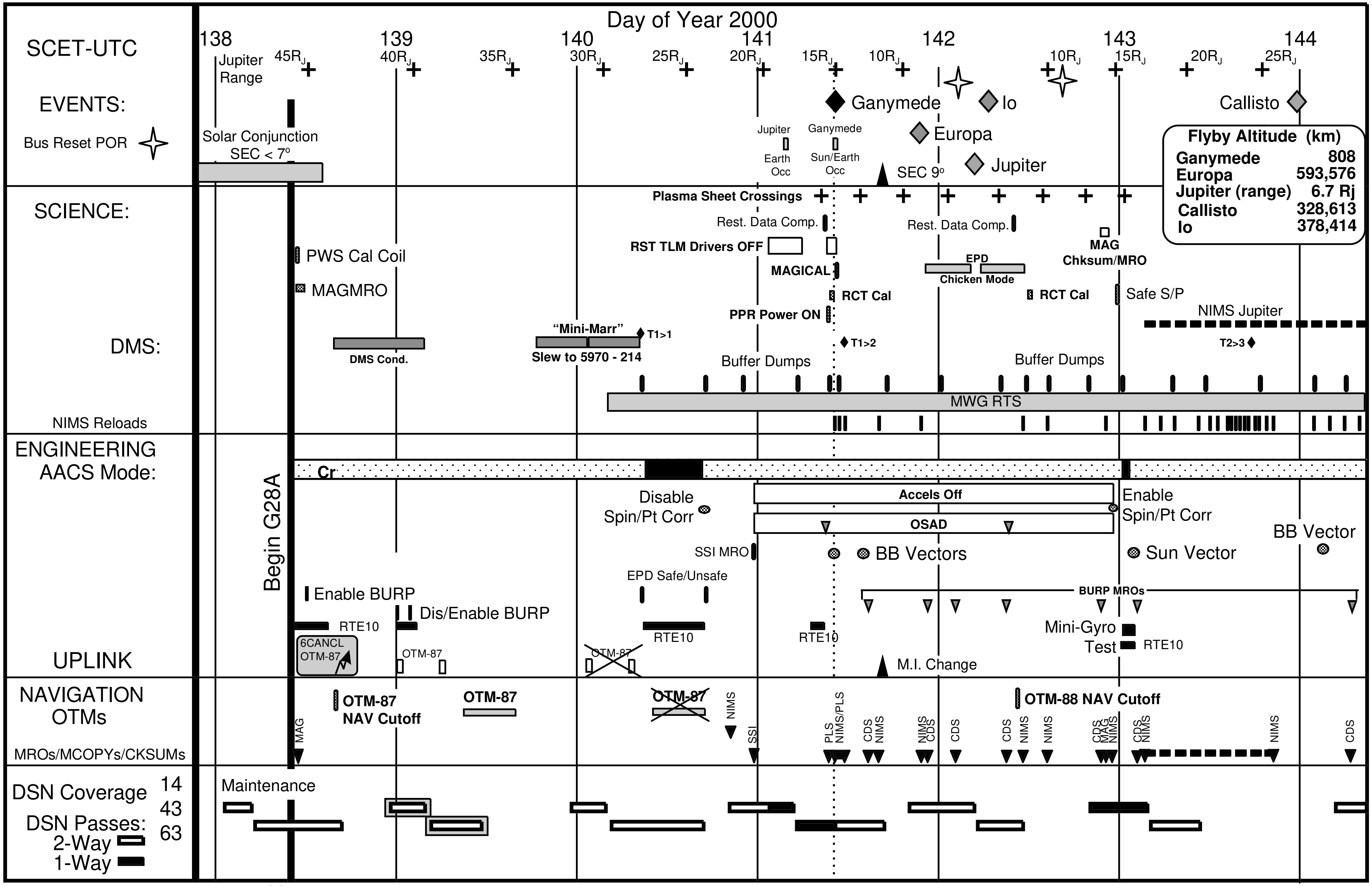
Introduction

This G28 orbit is the twenty-eighth of twenty-nine orbits in Galileo's Tour of the Jovian system and the second orbit in the Galileo Millennium Mission (GMM). G28 is a Ganymede Flyby.

There are 30 autonomous reloads of the NIMS RAM code from CDS planned during the G28A 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 G28 orbit is divided into 4 sequence loads: one Encounter Load (G28A) and three Orbital Cruise Loads (G28B, G28C and G28D). The G28A load begins on D138 (05/17/00) and ends on D165 (06/13/00). This load contains the flyby of Ganymede. The Cruise Loads G28B, G28C and G28D run from D138 to D361. Playback of the recorded data takes place during the Cruise phase, G28B, G28C and G28D. A high-level overview timeline of the G28 orbit can be found on the following eight pages.

G28A Encounter Overview

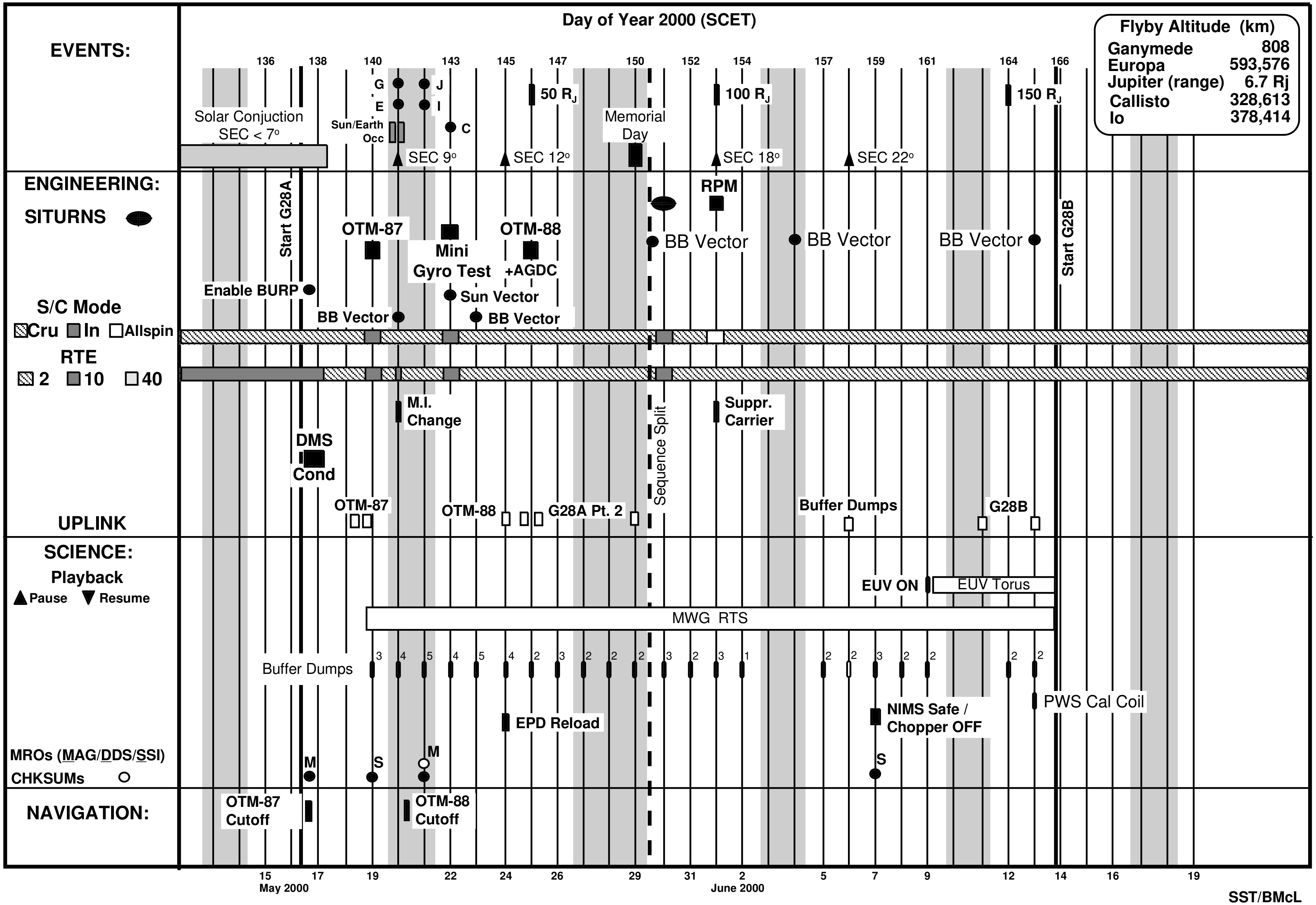


Note: DSS-14 is unavailable until DOY 00-172 (June 20)

BMcL/SST
05/22/00

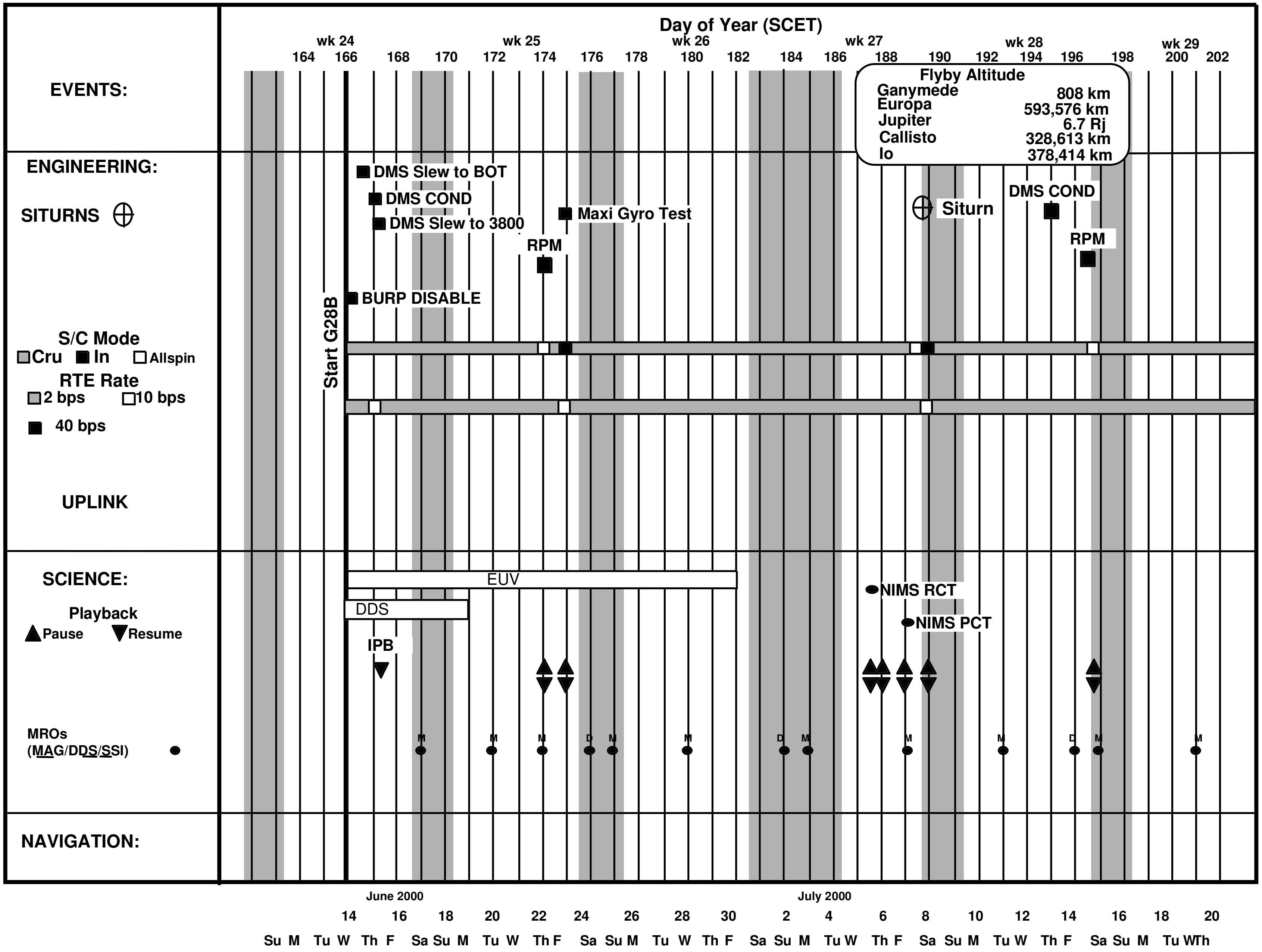
Note 2: Two Bus Reset PORs occurred during the encounter time period, both of which were properly handled by the on-board recovery routine.
The times were: 00-142/02:45:19 SCET and 00-142/16:23:47 SCET.

G28A Sequence Overview



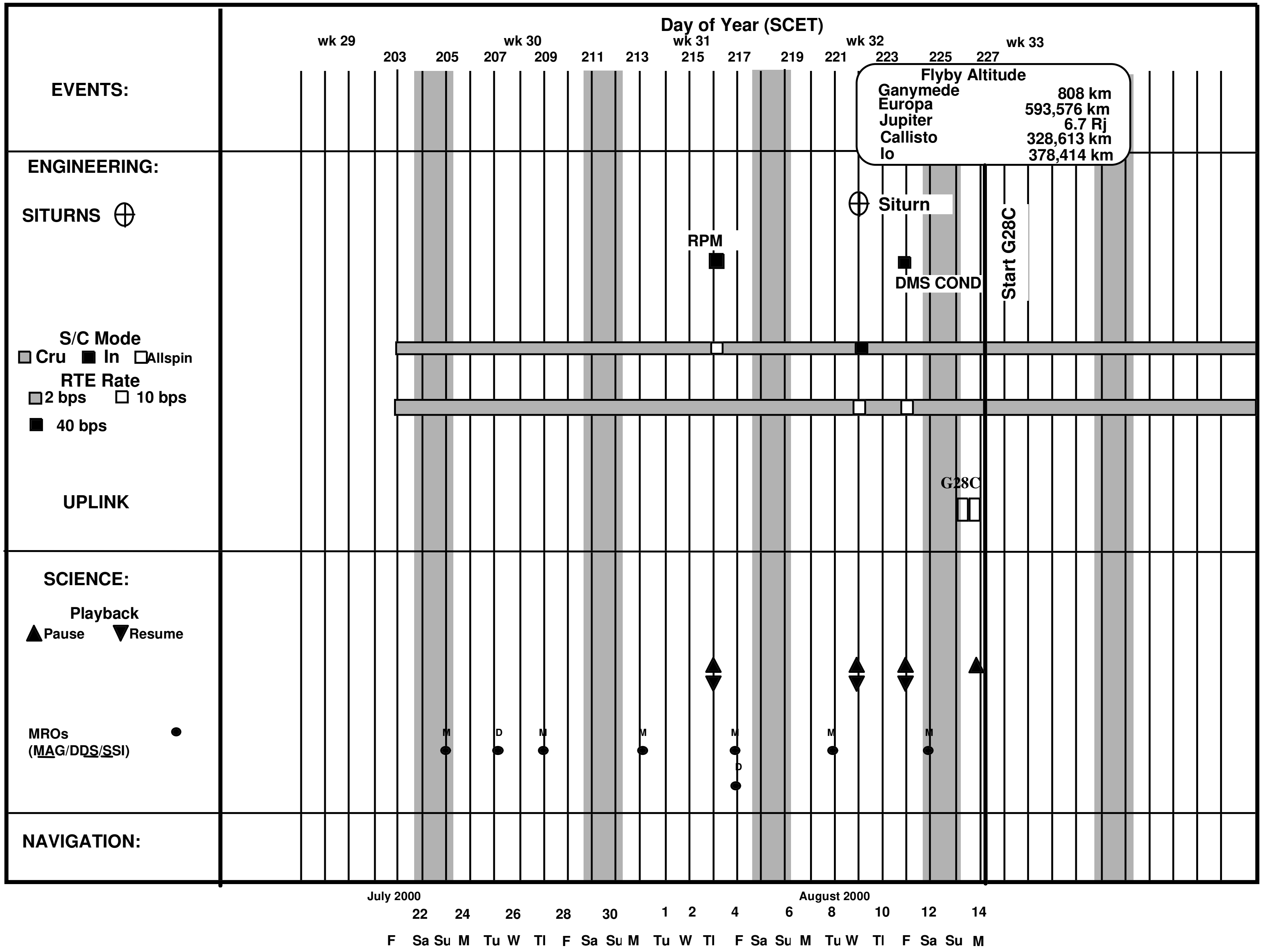
SST/BMcL
06/15/00

G28B Overview - Part 1



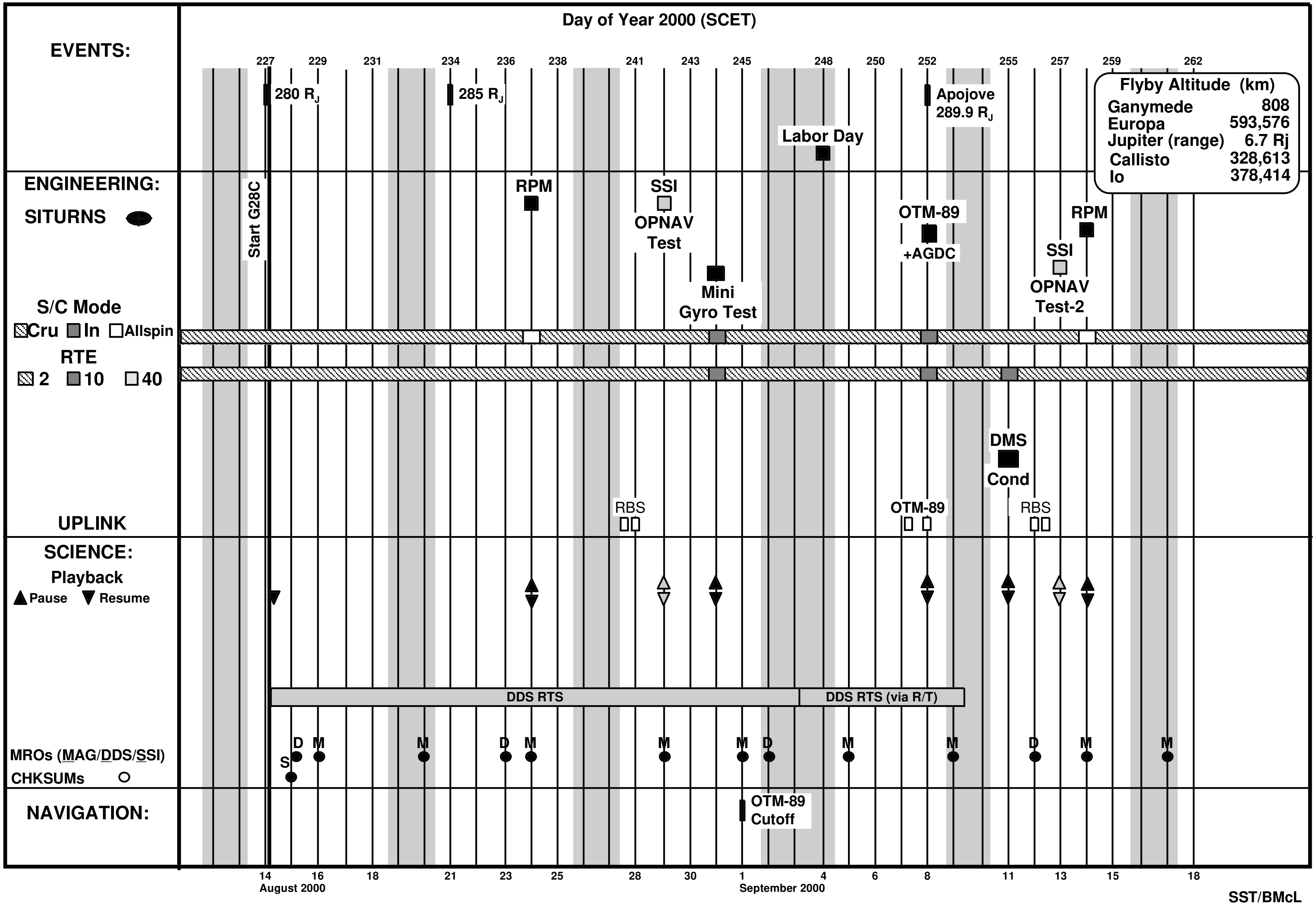
PDF/BMcL
08/08/00

G28B Overview - Part 2



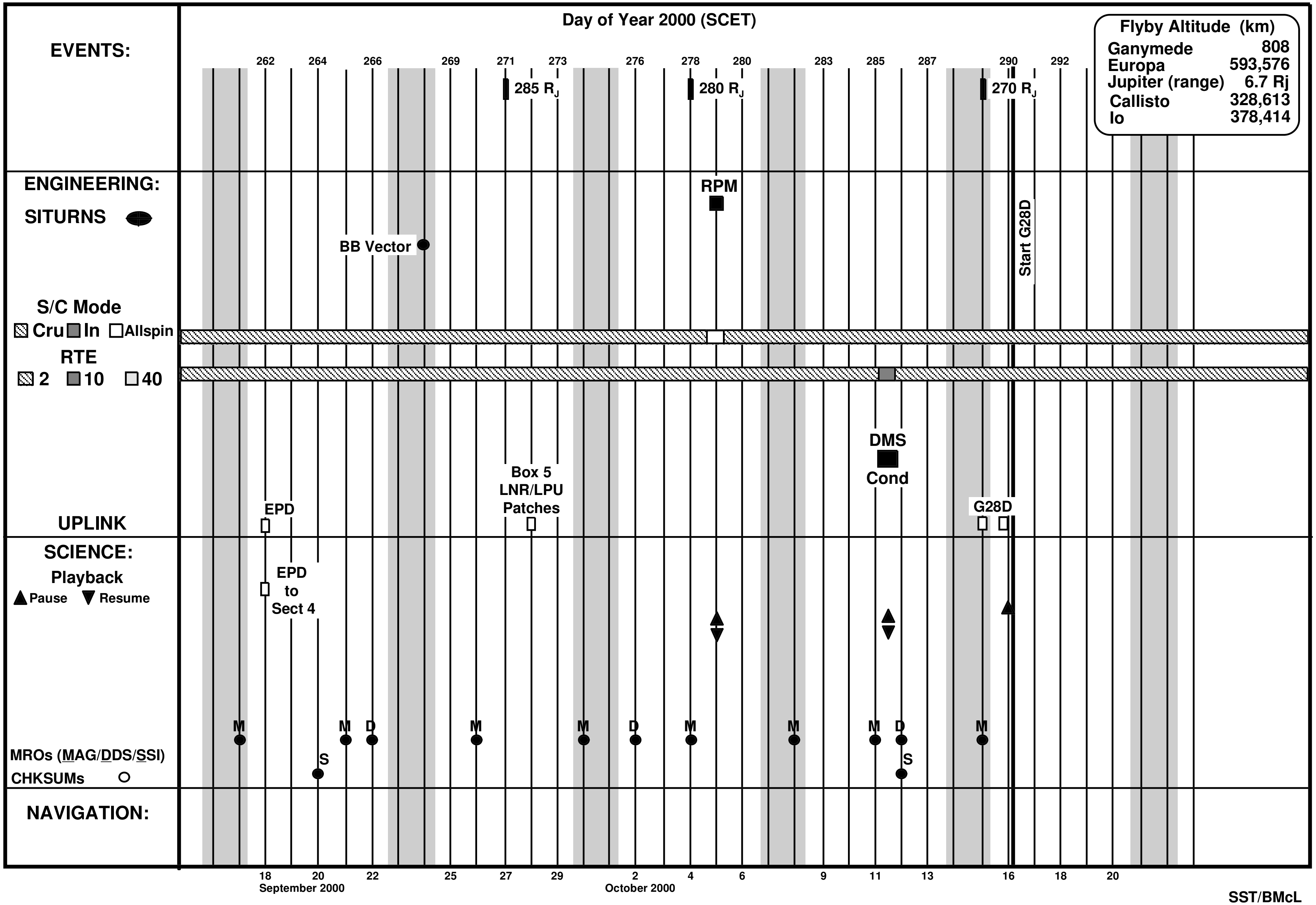
PDF
6/19/00

G28C Sequence Overview - Part 1



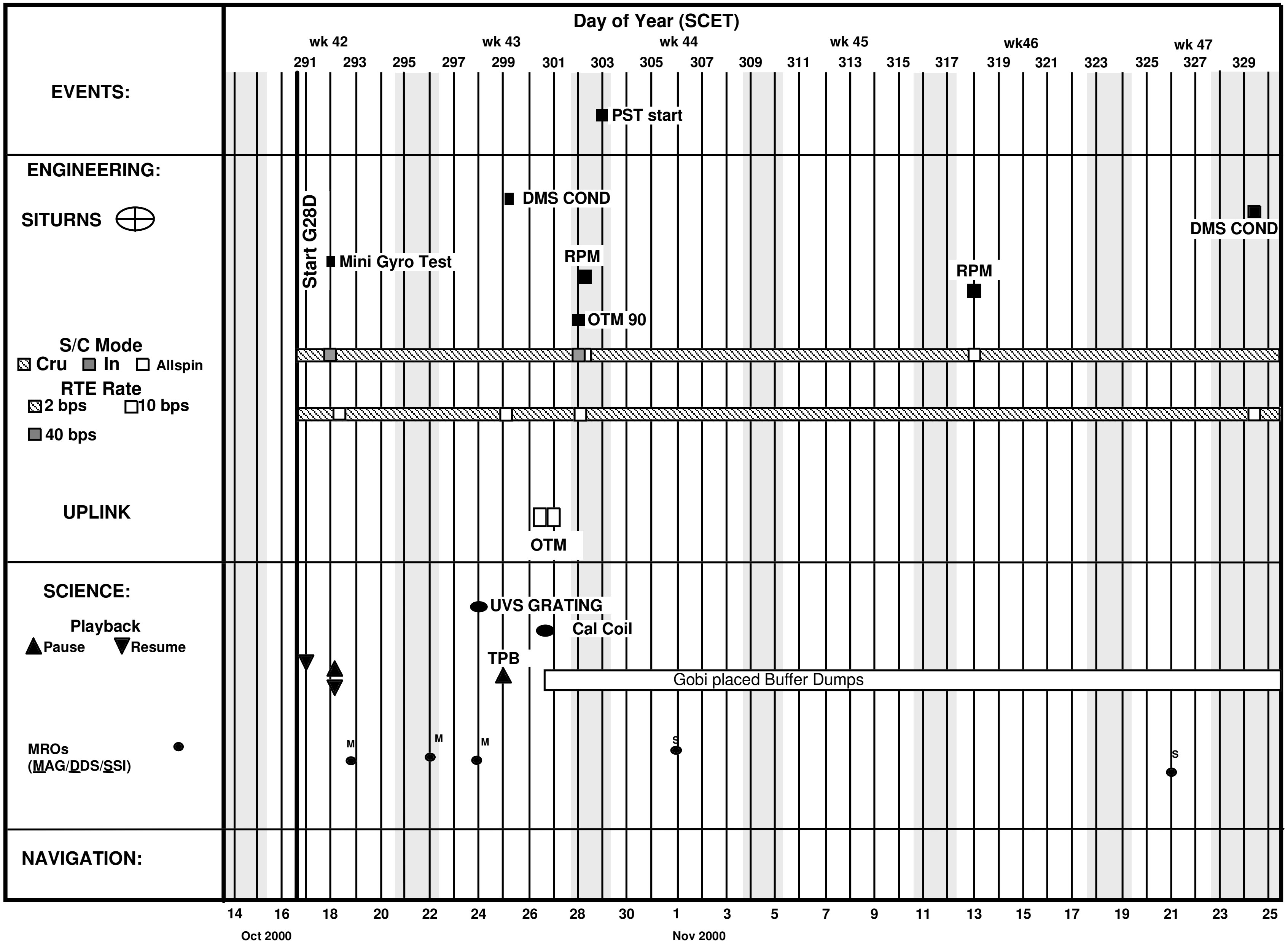
SST/BMcL
09/18/00

G28C Sequence Overview - Part 2



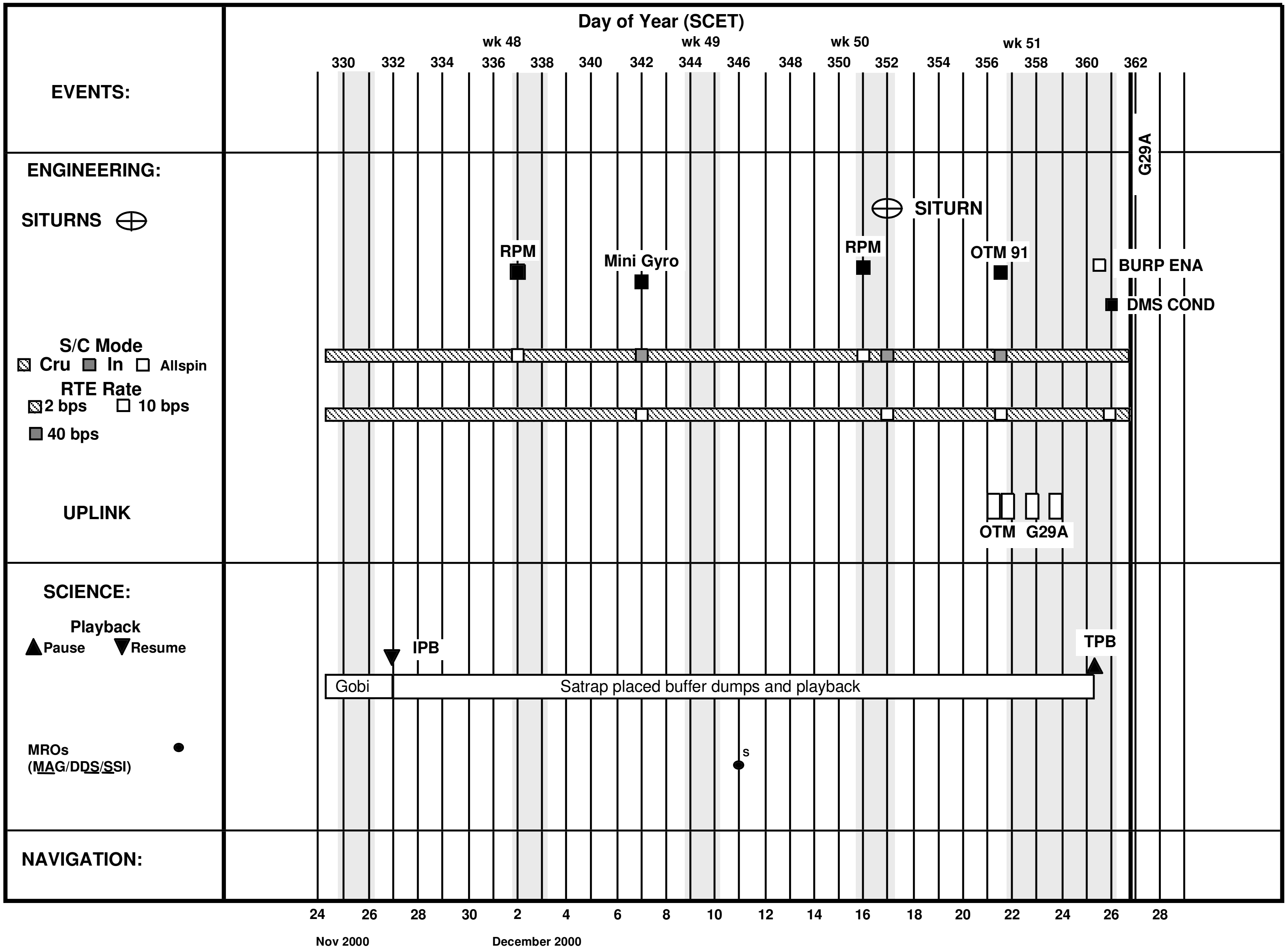
SST/BMcL
10/12/00

G28D Overview - Part 1



PDF/BMcL
10/16/00

G28D Overview - Part 2



PDF/BMcL
10/16/00

Introduction

The following table lists the major events during G28, including NIMS Real Time observations, in UTC.

05/17/00	00-138/10:00:00	G28 Encounter Start
05/20/00	00-141/10:11:42	G28 Ganymede Closest Approach
05/20/00	00-141/10:16:13	NIMS RAM Reload 01
05/20/00	00-141/10:34:24	NIMS RAM Reload 02
05/20/00	00-141/11:45:11	NIMS RAM Reload 03
05/20/00	00-141/16:03:01	NIMS RAM Reload 04
05/20/00	00-141/21:52:52	NIMS RAM Reload 05
05/21/00	00-142/04:53:55	PJ-28 Jupiter Closest Approach
05/21/00	00-142/11:11:03	NIMS RAM Reload 06
05/21/00	00-142/11:17:00	NIMS R/T Jupiter 01
05/21/00	00-142/11:39:15	NIMS R/T Jupiter 02
05/21/00	00-142/14:25:11	NIMS RAM Reload 07
05/21/00	00-142/14:34:10	NIMS R/T Jupiter 03
05/21/00	00-142/14:49:20	NIMS R/T Jupiter 04
05/21/00	00-142/22:10:18	NIMS RAM Reload 08
05/21/00	00-142/22:19:17	NIMS R/T Jupiter 05
05/21/00	00-142/22:39:30	NIMS R/T Jupiter 06
05/22/00	00-143/03:17:40	NIMS RAM Reload 09
05/22/00	00-143/03:24:38	NIMS R/T Jupiter 07
05/22/00	00-143/05:37:12	NIMS RAM Reload 10
05/22/00	00-143/05:44:10	NIMS R/T Jupiter 08
05/22/00	00-143/07:18:19	NIMS RAM Reload 11
05/22/00	00-143/07:24:16	NIMS R/T Jupiter 09
05/22/00	00-143/09:43:48	NIMS R/T Jupiter 10
05/22/00	00-143/10:37:30	NIMS RAM Reload 12
05/22/00	00-143/10:44:28	NIMS R/T Jupiter 11
05/22/00	00-143/12:04:02	NIMS RAM Reload 13
05/22/00	00-143/13:03:42	NIMS RAM Reload 14
05/22/00	00-143/14:24:35	NIMS RAM Reload 15
05/22/00	00-143/14:48:51	NIMS RAM Reload 16
05/22/00	00-143/15:15:08	NIMS RAM Reload 17
05/22/00	00-143/16:05:42	NIMS RAM Reload 18
05/22/00	00-143/16:39:04	NIMS RAM Reload 19
05/22/00	00-143/17:04:20	NIMS RAM Reload 20
05/22/00	00-143/18:05:00	NIMS RAM Reload 21
05/22/00	00-143/18:21:11	NIMS RAM Reload 22
05/22/00	00-143/19:25:54	NIMS RAM Reload 23
05/22/00	00-143/20:25:33	NIMS RAM Reload 24
05/23/00	00-144/01:57:37	NIMS RAM Reload 25
05/23/00	00-144/02:03:34	NIMS R/T Jupiter 12
05/23/00	00-144/03:57:56	NIMS RAM Reload 26
05/23/00	00-144/04:03:54	NIMS R/T Jupiter 13
05/23/00	00-144/05:58:16	NIMS RAM Reload 27
05/23/00	00-144/06:04:13	NIMS R/T Jupiter 14
05/23/00	00-144/07:57:34	NIMS RAM Reload 28
05/23/00	00-144/08:03:32	NIMS R/T Jupiter 15
05/23/00	00-144/09:57:54	NIMS RAM Reload 29
05/23/00	00-144/10:03:51	NIMS R/T Jupiter 16
06/07/00	00-159/01:27:08	NIMS RAM Reload 30
06/15/00	00-167/03:29:23	Start G28 Playback
07/05/00	00-187/23:09:30	NIMS RAM Reload 31
07/05/00	00-187/23:35:26	NIMS R/T RCT CAL
07/07/00	00-189/00:59:11	NIMS R/T PCT CAL
12/25/00	00-360/06:29:17	End G28 Playback