Chapter 1 - Introduction

Contents

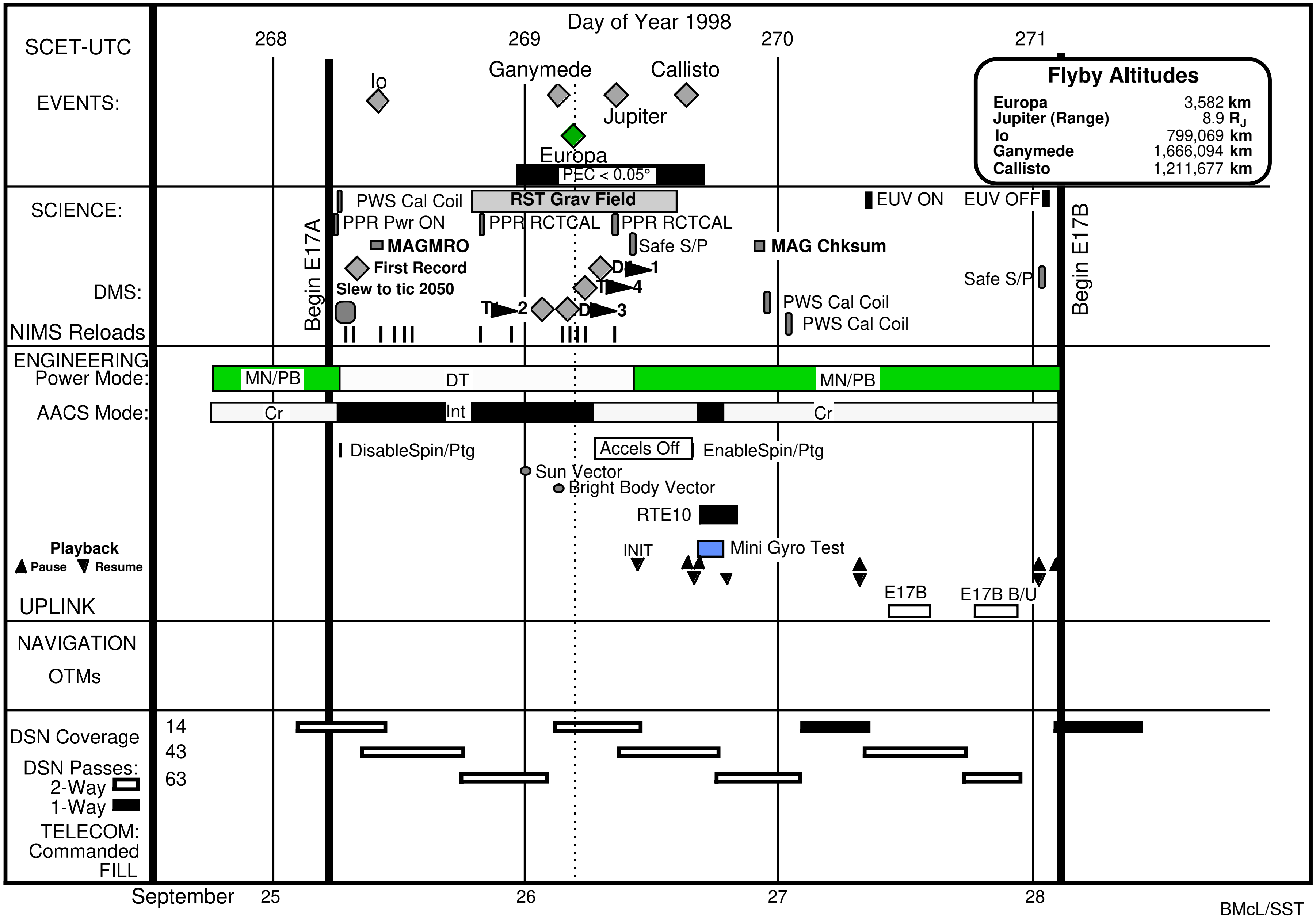
Introduction

This E17 orbit is the seventeenth of twenty-five orbits in Galileo's Tour of the Jovian system and the sixth orbit in the Galileo Europa Mission (GEM). This orbit has a targetted satellite flyby of Europa. NIMS will make observations of Jupiter in this orbit.

There are 13 autonomous reloads of the NIMS RAM code from CDS planned during the E17A 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.

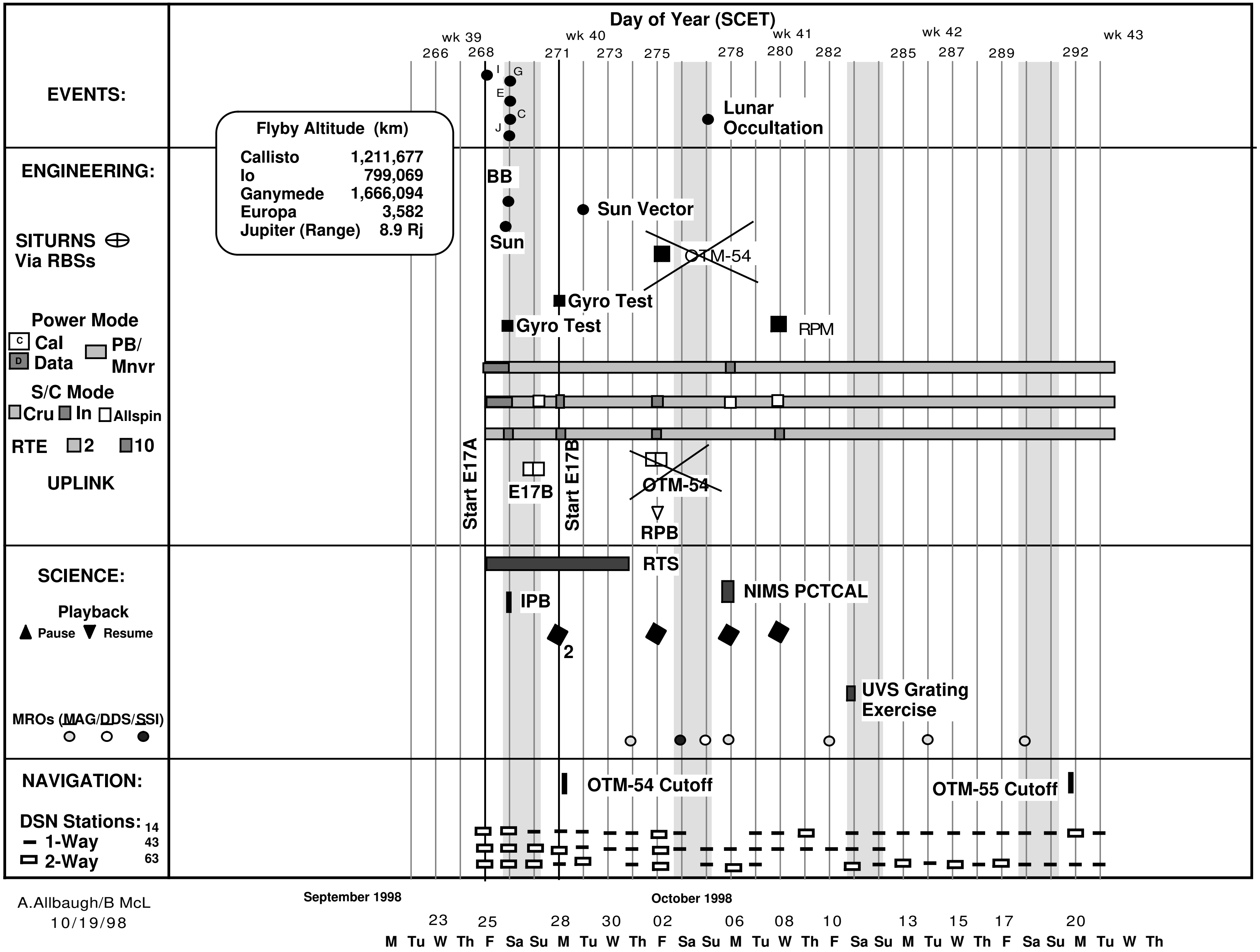
The E17 orbit is divided into 2 sequence loads: one Encounter Load (E17A) and one Orbital Cruise Load (E17B). The E17A load begins on D268 (09/25/98) and ends on D271 (09/28/98). This load contains the flybys of Jupiter and Europa. The Cruise Load E17B runs from D271 to D325. Playback of the recorded data takes place during the Cruise phase, E17B. A high-level overview timeline of the E17 orbit can be found on the following three pages.

E17A Sequence Overview



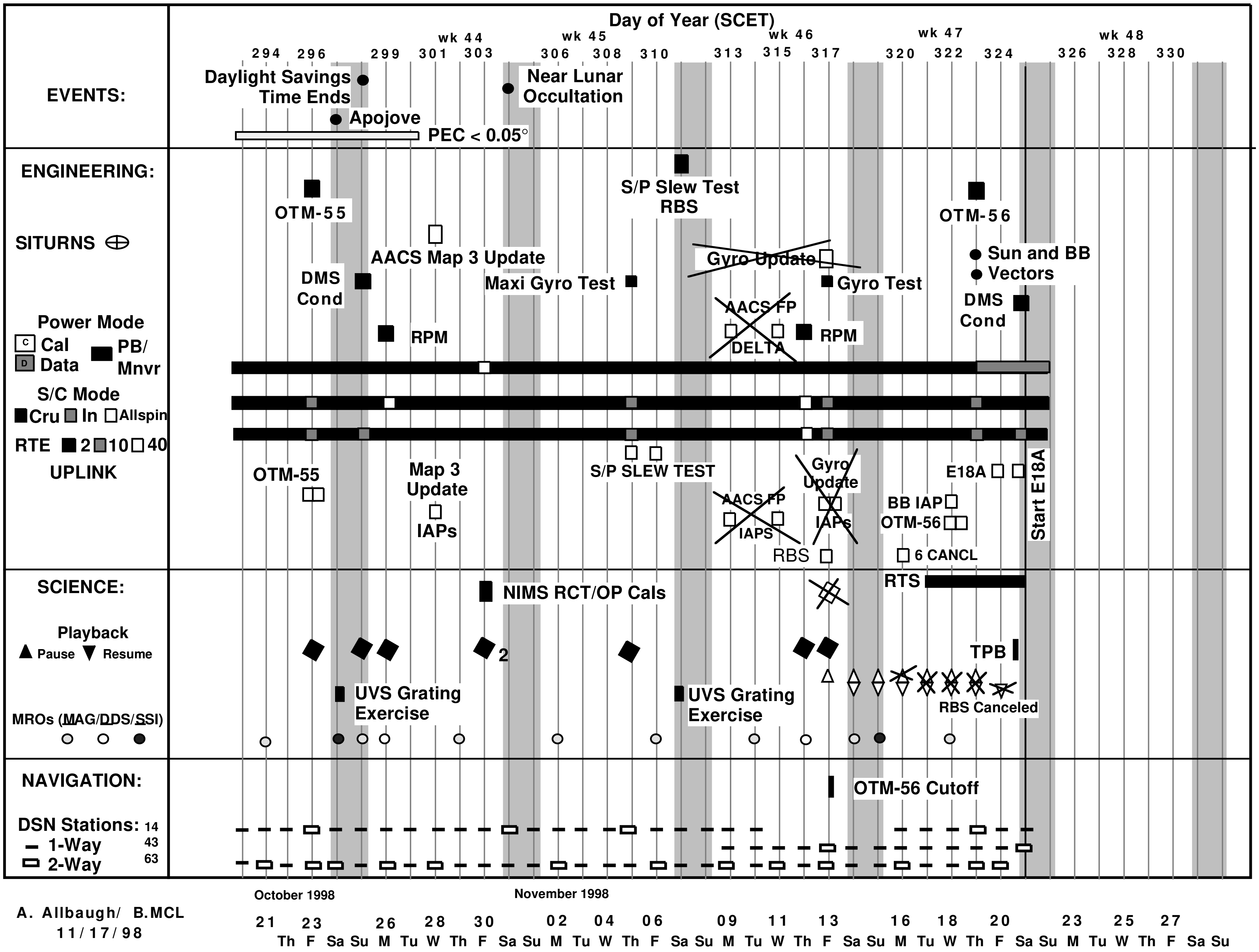
BMcL/SST
9/11/98

E17 Overview (Part 1)



A.Allbaugh/B McL
10/19/98

E17 Overview (Part 2)



A. Allbaugh/ B.MCL
11/17/98

Introduction

The following table lists the major events during E17, including NIMS Real Time observations, in UTC.

09/25/98	98-268/04:00:00	E17 Encounter Start
09/25/98	98-268/06:26:00	NIMS RAM Reload 01
09/25/98	98-268/06:32:00	NIMS R/T Jupiter 01
09/25/98	98-268/06:48:00	NIMS RAM Reload 02
09/25/98	98-268/10:32:00	NIMS RAM Reload 03
09/25/98	98-268/11:50:00	NIMS RAM Reload 04
09/25/98	98-268/12:10:00	NIMS RAM Reload 05
09/25/98	98-268/12:16:00	NIMS R/T Jupiter 02
09/25/98	98-268/12:27:00	NIMS RAM Reload 06
09/25/98	98-268/14:18:00	NIMS RAM Reload 07
09/25/98	98-268/14:24:00	NIMS R/T Jupiter 03
09/25/98	98-268/22:49:00	NIMS RAM Reload 08
09/26/98	98-269/03:04:00	NIMS RAM Reload 09
09/26/98	98-269/03:51:10	E17 - Europa Closest Approach
09/26/98	98-269/03:52:00	NIMS RAM Reload 10
09/26/98	98-269/04:17:00	NIMS RAM Reload 11
09/26/98	98-269/04:42:00	NIMS RAM Reload 12
09/26/98	98-269/08:26:11	PJ-17 - Jupiter Closest Approach
09/26/98	98-269/09:07:00	NIMS RAM Reload 13
09/28/98	98-271/02:00:00	Start E17 Playback
10/05/98	98-278/21:28:00	NIMS R/T PCT CAL
10/30/98	98-303/18:34:00	NIMS R/T RCT CAL
11/20/98	98-324/23:15:00	End E16 Playback