# STEREO/IMPACT/SIT SIT Turn On Procedure

## Ver. 2.2 11/10/04

### 1. PURPOSE

This document specifies the procedure for turning SIT ON Duration of procedure is about 10 minutes but it may be interleaved with other non-SIT procedures to save time.

#### 2. REQUIREMENTS

SIT S/C-powered thermistor must indicate SIT electronics is within its operating temperature range.

#### 3. PROCEDURE

3.1 Instrument Power On and Initialization

- a) If loading code from SEP Central EEPROM, verify EEPROM checksum before proceeding.
- b) If loading code from a file, verify correct file being used.

c) Verify SIT HV LIMIT Plug is installed on rear panel of SIT electronics box.(P8)

d) Power up SIT if necessary and boot. Verify it has properly booted. Begin login of SIT data into a dated file.

e) Verify SEP Bias supply is ON

f) Send the SIT Command "IMMED 1"

g) Verify data packets arriving in range 605-619, and that sequence counts are reasonable and that the major frame number advances.

After at least 2 minutes, verify if	icoming data:	
Hardware rates	START	0
	STOP	0
	VS	0
	SSD	<20
	VSE	0
Matrix Rates	all 0	
Beacon Rates	all 0	
Pulse Height Events	all 0	

h) After at least 2 minutes, verify incoming data:

i) After 3-5 minutes verify the following status information has been returned and matches expected values:

Software Version Number	0903
Software Checksum	927143
Software Error	0 = no error
Junk Events	0 = junk events ignored
EOnly Status	0 = ET coincidence required
HV Status	0 = off
HV Level	0
TOF Error	1 = error events processed
Limhi	500
Calibrate Gain	9-11
Calibrate Offset	-14 to -65, should settle at -15 but
	may take as much as an hour.
Calibrate Error	0x08, should settle to $0x00$ when

j) Verify Analog Housekeeping

HV	0-100v
TOF Temperature	25-35 C
SSD Temperature	20-25 C
Foil Temperature	20-25 C
+3.3v monitor	3.3v
+2.5v monitor	2.5v
+5v monitor	5v
+6v monitor	6v

End of Procedure