# 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.
h) After at least 2 minutes, verify incoming 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 |  |

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 |
| Calibrate Error | may take as much as an hour. |
|  | $0 x 08$, should settle to $0 x 00$ when |

j) Verify Analog Housekeeping

| HV | $0-100 \mathrm{v}$ |
| :--- | :--- |
| TOF Temperature | $25-35 \mathrm{C}$ |
| SSD Temperature | $20-25 \mathrm{C}$ |
| Foil Temperature | $20-25 \mathrm{C}$ |
| +3.3 v monitor | 3.3 v |
| +2.5 v monitor | 2.5 v |
| +5 v monitor | 5 v |
| +6 v monitor | 6 v |

End of Procedure

