

1.28_V2.0 SET FOCAL PLANE TEMPERATURE TO -121 C

Last Revised: August 1,1999

Filename: setfp_m121

BRIEF FUNCTIONAL DESCRIPTION:

This is an “atomic” procedure which simply sets the focal plane temperature to -121 C. IT DOES NOT DISABLE THE FOCAL PLANE BAKEOUT.

The sequence of actions will be:

1. load the ACIS SW command packet which sets the temperature and dump the system configuration.

ASSUMED INSTRUMENT STATE:

Assumes that at least one side of the DPA and DEA A are on and the flight SW is running.

SPECIAL INITIAL CONDITIONS:

Assumes that the contamination environment allows the focal plane to be cooled to -121 C.

OPERATIONAL CONSTRAINTS/CAUTIONS:

THIS PROCEDURE DOES NOT DISABLE THE FOCAL PLANE BAKEOUT HEATER.

The focal plane must not be cooled below the dewpoint of water if the CCD are powered on.

The focal plane should not be cooled if the spacecraft is still outgassing significantly and there is a path for the contaminants to flow to the focal plane.

REFERENCES:

CHANGE HISTORY:

V2.0

- Initial version.

Table 1: **SET THE FOCAL PLANE TEMPERATURE TO -121 C**

Step #	Title (Revision 1.28_V2.0)	Time Req (m)	Command Description	Command Mnemonic	Telemetry Description	Telemetry Mnemonic	Expected Value	Units
1.0	Drop FP to -121 C							
1.1	set FP temp to -121 C	2	ChangeConfigSetting	WSFTNEG121				
1.2	dump system config.	0.1	dumpSysConfig	RS_0000001				
1.3	Monitor FP temp	30						
	Total Time	32.1						

Table 2: (CONT) **SET THE FOCAL PLANE TEMPERATURE TO -121 C**

Step #	Telemetry EGSE	Other Verifier	Crit	Description	Notes	RT Con	Tlm Fmt	Min Alt	SIM Pos
1.0									
1.1	Check cmdResult == OK commandEcho 1220		1			Y	1or2		
1.2	Check cmdResult == OK	commandEcho 66	B			Y	1or2		
1.3	deaHousekeepingData		A	time depends on starting temp		P	1or2		