

SPIRE-CP-FUNC-DCU-11-SPEC BDA Switch On Check
 File: H_COP_SPI_DCSN.xls
 Author: L.Lucas-hp



Procedure Summary

Objectives

The purpose of this procedure is a Spectrometer BDAs switch ON check.

Based on Procedure: SPIRE-CP-FUNC-DCU-11-SPEC
 Mode_DcuFunc11_Spec
 Generated: 28/06/2009

To switch on all the chain for reading detector signals. Switch on the spectrometer LIAs and JFETs, set sampling frequency, bias amplitude bias frequency and demodulating phase to their operating values.

Summary of Constraints

Procedure MCU-01 must have been successfully passed. This procedure must be run before FUNC-DCU-08, FUNC-DCU-09 and FUNC-DCU-10.

Spacecraft Configuration

Start of Procedure

Mode: REDY

Detectors off

End of Procedure

Mode: REDY

Detectors on

Reference File(s)

Input Command Sequences

Output Command Sequences

HCSDCSN

Referenced Displays

ANDs	GRDs	SLDs
SA_6_559		
ZAZ93999		
ZAZ90999		
SA_1_559		

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
22/12/08		1	Created	L.Lucas-hp	
14/01/09		1.01	Validation : Update AND and TM checks	L.Lucas-hp	
16/01/09		2	Updates Received from SPIRE	L.Lucas-hp	

Status : Version 8 - Unchanged
 Last Checkin: 29/06/09

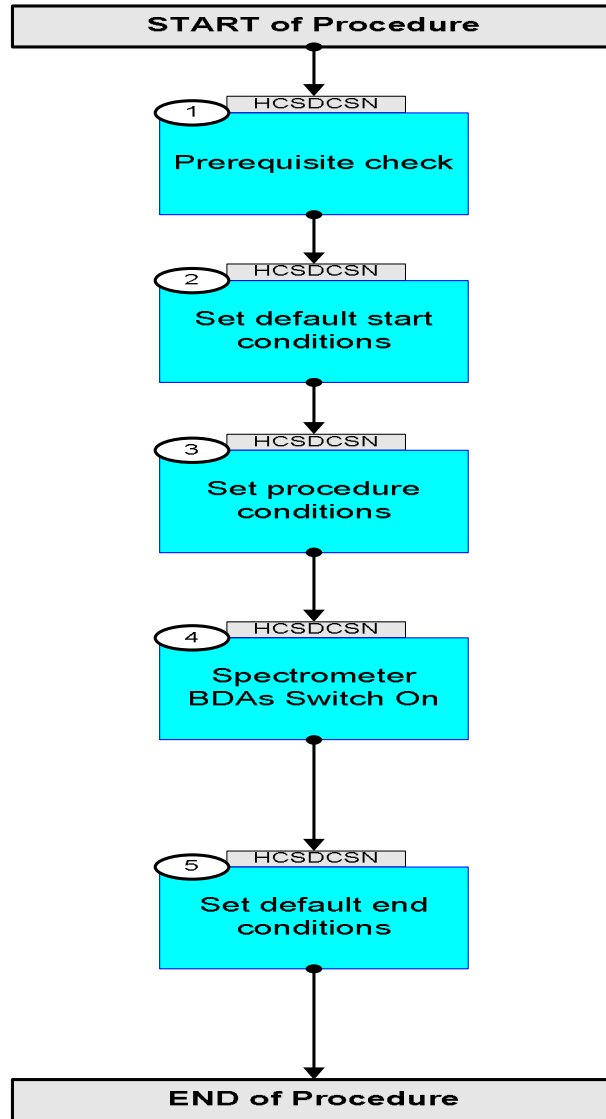
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20/01/09		2.01	Validation : AND Detail Update	L.Lucas-hp	
27/01/09	2	3	Remove ETs for ease of Loading to manual stack	L.Lucas-hp	
23/03/09	2.2	3.01	Validation : Title Updates	L.Lucas-hp	
07/04/09		4	Commanding updated in line with updates received from SPIRE	L.Lucas-hp	
07/04/09		5	Set first commands of Switch on step, to manual	L.Lucas-hp	
19/04/09	2.3	6	Updated in line with updates from ICC	L.Lucas-hp	
04/05/09	2.4	7	Remove ET	L.Lucas-hp	
29/06/09	2.5	8	Updates received from SPIRE	L.Lucas-hp	



Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
<i>TC Seq. Name : HCSDCSN (DC SpecBDAON)</i> <i>TimeTag Type: N</i> <i>Sub Schedule ID:</i> <input type="checkbox"/>				
1		<i>Prerequisite check</i>		Next Step: 2
1.1		<i>HSC/ICC input</i>		<input type="checkbox"/>
		Verify that the HSC has supplied a valid OBSID value: OBS_ID = 0xnnnn nnnn		
1.2		<i>TM Checks</i>		<input type="checkbox"/>
		Verify Telemetry SPECJFETSTAT SMF0F510 = 0 <hex>		AND=SA_6_559
		Verify Telemetry SLIAP5V SML3V510 = 0.0 V		AND=ZAZ93999
		Verify Telemetry SLIAP9V SML4V510 = 0.0 V		AND=ZAZ93999
		Verify Telemetry SLIAM9V SML5V510 = 0.0 V		AND=ZAZ93999
2		<i>Set default start conditions</i>		Next Step: 3
		Note that a TM(5,1) packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		
		SET_OBS_STEP SET_OBS_STEP <i>Command Parameter(s) :</i> OBSERVATION_STEP SP03N500 <i>Subsch. ID : 370</i> <i>Det. descr. : SET OBSERVATION STEP</i>	SC003500 0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID SET_BBID <i>Command Parameter(s) :</i> BUILDING_BLOCK_ID SP01N500 <i>Subsch. ID : 370</i> <i>Det. descr. : SET BUILDING BLOCK IDENTIFIER</i>	SC001500 80010001 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry BBFULLTYPE SM2LN500	= ClearObs	AND=ZAZ90999
		SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 1 <hex>	
	ET=+ UT=+00.00.01	SET_OBSID SET_OBSID Command Parameter(s) : OBSERVATION_ID SP00N500 Subsch. ID : 370 Det. descr. : SET OBSERVATION IDENTIFIER	SC000500 00000000 <hex>	
		Verify Telemetry OBSID SM10N500	= 00000000 <hex>	AND=ZAZ90999
		SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500 80000000 <hex>	
		Verify Telemetry BBFULLTYPE SM2LN500	= Null	AND=ZAZ90999
		SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 0 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID SP01N500 80020001 <hex>	SC001500
		Verify Telemetry BBFULLTYPE	SM2LN500	= StartObs AND=ZAZ90999
3		Set procedure conditions		Next Step: 4
		RESET_DRCU_COUNTERS TC Control Flags : Subsch. ID : 370 Det. descr. : RESET DRCU COUNTERS	RESET_DRCU_COUNTERS GBM IL DSE --Y -- ---	SCD00505
		Verify that the TRESET parameter has the same value as the THSK parameter	TRESET	SM01T500 same as THSK AND=SA_1_559
			THSK	SM00T500 any AND=SA_1_559
		Note that a TM(5,1) packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		
		SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP SP03N500 1 <hex>	SC003500
	ET=+ UT=+00.00.01	SET_OBSID Command Parameter(s) : OBSERVATION_ID Subsch. ID : 370 Det. descr. : SET OBSERVATION IDENTIFIER	SET_OBSID SP00N500 OBS_ID	SC000500
		Verify Telemetry OBSID	SM10N500	OBS_ID AND=ZAZ90999

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500 80000000 <hex>	
		Verify Telemetry BBFULLTYPE SM2LN500	= Null	AND=ZAZ90999
	ET=+ UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 0 <hex>	
	ET=+ UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500 86000001 <hex>	
		Verify Telemetry BBFULLTYPE SM2LN500	= SF_BDA_On	AND=ZAZ90999
4		Spectrometer BDAs Switch On		Next Step: 5
		The next set of TCs to switch on the detectors should be executed as <u>quickly as possible</u> The interval between TCs should not exceed the values given in the procedure No TM parameter checks from the MCS are necessary during the detector switch on		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 0 <hex>	
	ET=+ UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500 86000001 <hex>	
	ET=+ UT=+00.00.03	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 1 <hex>	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 a0870006 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843000ff <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84390079 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84380001 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84310002 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84320002 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843a0084 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843b0086 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843c0014 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0001 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.02	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0000 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843c001c <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0001 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.03	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0000 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	FLUSH_FIFO FLUSH_FIFO <i>Command Parameter(s) :</i> FIFOFLAGS SPD0N505 <i>TC Control Flags :</i> GBM IL DSE --- -- --- <i>Subsch. ID : 370</i> <i>Det. descr. : FORCE DPU TO READ SCIENCE DATA FROM FIFOS AND FLUSH CONTENTS</i>	SCD01505 1000 <hex>	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND <i>Command Parameter(s) :</i> DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 <i>TC Control Flags :</i> GBM IL DSE --- -- --- <i>Subsch. ID : 370</i> <i>Det. descr. : SEND A SINGLE COMMAND TO THE DRCU</i>	SCD06505 843c0004 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND <i>Command Parameter(s) :</i> DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 <i>TC Control Flags :</i> GBM IL DSE --- -- --- <i>Subsch. ID : 370</i> <i>Det. descr. : SEND A SINGLE COMMAND TO THE DRCU</i>	SCD06505 843d0000 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND <i>Command Parameter(s) :</i> DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 <i>TC Control Flags :</i> GBM IL DSE --- -- --- <i>Subsch. ID : 370</i> <i>Det. descr. : SEND A SINGLE COMMAND TO THE DRCU</i>	SCD06505 843e0001 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.04	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84350086 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84370002 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.30	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84360086 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84370006 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.30	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 8434004c <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84370007 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.30	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 8431002d <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 8432002d <hex> 0 <hex> (Def)	

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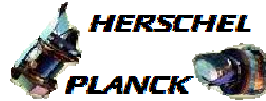
Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- -- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0000 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	FLUSH_FIFO FLUSH_FIFO Command Parameter(s) : FIFOFLAGS SPD0N505 TC Control Flags : GBM IL DSE --- -- -- Subsch. ID : 370 Det. descr. : FORCE DPU TO READ SCIENCE DATA FROM FIFOS AND FLUSH CONTENTS	SCD01505 1000 <hex>	
	ET=+ UT=+00.00.03	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- -- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843c0014 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- -- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0001 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.02	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0000 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843c001c <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0001 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.03	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 843e0000 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	<p>FLUSH_FIFO</p> <p style="text-align: right;">FLUSH_FIFO</p> <p>Command Parameter(s) :</p> <p style="text-align: right;">FIFOFLAGS SPD0N505</p> <p>TC Control Flags :</p> <p style="text-align: right;"> GBM IL DSE --- -- ---</p> <p>Subsch. ID : 370 Det. descr. : FORCE DPU TO READ SCIENCE DATA FROM FIFOS AND FLUSH CONTENTS</p>	<p>SCD01505</p> <p>1000 <hex></p>	
	ET=+ UT=+00.00.01	<p>SEND_DRCU_COMMAND</p> <p style="text-align: right;">SEND_DRCU_COMMAND</p> <p>Command Parameter(s) :</p> <p style="text-align: right;">DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505</p> <p>TC Control Flags :</p> <p style="text-align: right;"> GBM IL DSE --- -- ---</p> <p>Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU</p>	<p>SCD06505</p> <p>843c0004 <hex> 0 <hex> (Def)</p>	
	ET=+ UT=+00.00.00	<p>SEND_DRCU_COMMAND</p> <p style="text-align: right;">SEND_DRCU_COMMAND</p> <p>Command Parameter(s) :</p> <p style="text-align: right;">DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505</p> <p>TC Control Flags :</p> <p style="text-align: right;"> GBM IL DSE --- -- ---</p> <p>Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU</p>	<p>SCD06505</p> <p>843d0000 <hex> 0 <hex> (Def)</p>	
	ET=+ UT=+00.00.01	<p>SEND_DRCU_COMMAND</p> <p style="text-align: right;">SEND_DRCU_COMMAND</p> <p>Command Parameter(s) :</p> <p style="text-align: right;">DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505</p> <p>TC Control Flags :</p> <p style="text-align: right;"> GBM IL DSE --- -- ---</p> <p>Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU</p>	<p>SCD06505</p> <p>843e0001 <hex> 0 <hex> (Def)</p>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.30	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84350066 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84360052 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505 84340052 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 0 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	
	ET=+ UT=+00.00.00	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID TC Control Flags : Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID SP01N500 GBM IL DSE --- -- --	SC001500 80000000 <hex>	
	ET=+ UT=+00.01.02	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP TC Control Flags : Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP SP03N500 GBM IL DSE --- -- --	SC003500 0 <hex>	
	ET=+ UT=+00.00.00	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID TC Control Flags : Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID SP01N500 GBM IL DSE --- -- --	SC001500 88360001 <hex>	
	ET=+ UT=+00.00.02	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP TC Control Flags : Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP SP03N500 GBM IL DSE --- -- --	SC003500 1 <hex>	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND Command Parameter(s) : DRCUCOMMAND OVERRIDE TC Control Flags : Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SEND_DRCU_COMMAND SPD4N505 SPD9N505 GBM IL DSE --- -- --	SCD06505 843e0000 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	FLUSH_FIFO Command Parameter(s) : FIFOFLAGS TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : FORCE DPU TO READ SCIENCE DATA FROM FIFOS AND FLUSH CONTENTS	FLUSH_FIFO SPD0N505 1000 <hex>	SCD01505
	ET=+ UT=+00.00.03	RESET_FIFOS Command Parameter(s) : RESETFLAGS TC Control Flags : GBM IL DSE --- -- --- Subsch. ID : 370 Det. descr. : RESET FIFOS	RESET_FIFOS SPDDN505 7000 <hex>	SCD07505
4.1		TM Checks		<input type="checkbox"/>
		Verify Telemetry SPECJFETSTAT SMF0F510	= 7 <hex>	AND=SA_6_559
		Verify Telemetry SLIABITSTAT SM_1X520	= ON	AND=SA_6_559
		Verify Telemetry is +/- 0.1V SLIAP5V SML3V510	= 5.23 V	AND=ZAZ93999
		Verify Telemetry is +/- 0.1V SLIAP9V SML4V510	= 11.57 V	AND=ZAZ93999
		Verify Telemetry is set to +/- 0.1V SLIAM9V SML5V510	= -11.54 V	AND=ZAZ93999
5		Set default end conditions		Next Step: END
		Note that a TM(5,1) packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		
		SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP SP03N500 0 <hex>	SC003500

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID SP01N500 80000000 <hex>	SC001500
		Verify Telemetry BBFULLTYPE	SM2LN500 = Null	AND=ZAZ90999
		SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP SP03N500 0 <hex>	SC003500
	ET=+ UT=+00.00.01	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID SP01N500 80030001 <hex>	SC001500
		Verify Telemetry BBFULLTYPE	SM2LN500 = EndObs	AND=ZAZ90999
		SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP SP03N500 1 <hex>	SC003500
	ET=+ UT=+00.00.01	SET_OBSID Command Parameter(s) : OBSERVATION_ID Subsch. ID : 370 Det. descr. : SET OBSERVATION IDENTIFIER	SET_OBSID SP00N500 00000000 <hex>	SC000500
		Verify Telemetry OBSID	SM10N500 = 00000000 <hex>	AND=ZAZ90999

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		SET_OBS_STEP <p style="text-align: right;">SET_OBS_STEP</p> Command Parameter(s) : OBSERVATION_STEP SP03N500 Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500 0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID <p style="text-align: right;">SET_BBID</p> Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500 80000000 <hex>	
		Verify Telemetry <p style="text-align: right;">BBFULLTYPE SM2LN500</p>	= Null	AND=ZAZ90999
		Verify Telemetry <p style="text-align: right;">SPECJFETSTAT SMF0F510</p>	= 7 <hex>	AND=SA_6_559
		Verify Telemetry <p style="text-align: right;">SLIABITSTAT SM_1X520</p>	= <hex>	AND=SA_6_559
		Verify Telemetry is set to +5.23V +/- 0.1V (original value should have been 0) <p style="text-align: right;">SLIAP5V SML3V510</p>		AND=ZAZ93999
		Verify Telemetry is set to +11.57V +/- 0.1V (original value should have been 0) <p style="text-align: right;">SLIAP9V SML4V510</p>		AND=ZAZ93999
		Verify Telemetry is set to -11.54V +/- 0.1V (original value should have been 0) <p style="text-align: right;">SLIAM9V SML5V510</p>		AND=ZAZ93999
End of Procedure				