Doc No. :PT-HMOC-OPS-FOP-6001-OPS-OAH

Fop Issue : 3.0
Issue Date: 13/04/10

ACMS SCM Fine Pointing Functional Check (LGA)

File: H\_COP\_AOC\_0650.xls

Author: dsalt-hp





## Procedure Summary

#### Objectives

The objective of this Herschel ACMS commissioning procedure is to perform the ACMS Fine Pointing functional check slews in SCM, which requires use of the LGA.

The procedure involves the following activities:

- define/enable the necessary DTM packets, if necessary (calls H FCP AOC D3FD)
- perform 9 calibration slews to the following attitudes (calls  ${\tt H\_FCP\_AOC\_3S01})$ 
  - SAA=62deg, roll=0 and Interlacing OFF
  - pointing exactly as previous, but Interlacing ON
  - SAA=118deg, roll=0
  - SAA=90deg, roll=0
- SAA=90deg, roll=+2 - SAA=90deg, roll=-2
- SAA=90deg, roll=0
- SAA=90deg, roll=0, +120deg slew round sun vector
- SAA=90deg, roll=0, +120deg slew round sun vector
- SAA=90deg, roll=0, +120deg slew round sun vector
   disable/delete DTM (calls H\_FCP\_AOC\_D3FD)

#### Summary of Constraints

To be executed in accordance with the Herschel commissioning plan and associated timeline  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +$ 

## Spacecraft Configuration

Start of Procedure

S/C in SCM

End of Procedure

S/C in SCM

## Reference File(s)

Input Command Sequences

Output Command Sequences

### Referenced Displays

ANDS GRDS SLDS

#### Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
22/04/09	2.3	1	Created	dsalt-hp	

Status : Version 2 - Unchanged

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05/05/09	2.4	2	Slew #1 split into 2 parts and new Slew #5 added for roll=-2	dsalt-hp	
•					

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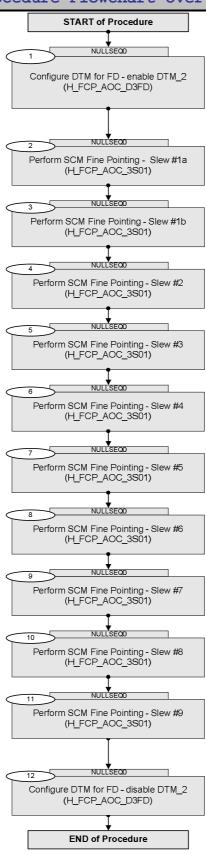
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# Procedure Flowchart Overview



: Version 2 - Unchanged

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch		
Beginning of Procedure						
		TC Seq. Name :NULLSEQ0 ( )				
		TimeTag Type: Sub Schedule ID:				
				Next Step:		
1		Configure DTM for FD - enable DTM_2 (H_FCP_AOC_D3FD)		2		
		Execute procedure H_FCP_AOC_D3FD (Configure DTM for FD) to define and enable selected DTM packets, as necessary				
		Use DTM_2 (Step 4) to define and enable diagnostic packet with STRM 18 stars data (SPID=18025109)				
		Execute Procedure: H_FCP_AOC_D3FD Configure DTM for FD				
2		Perform SCM Fine Pointing - Slew #1a (H_FCP_AOC_3S01)		Next Step:		
		Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command a Slew #1: - target at SAA=62 deg, roll=0 (select star field where interlacing is possible) and Interlacing OFF				
		Execute Procedure: H_FCP_AOC_3S01 Perform SCM Fine Pointing				
3		Perform SCM Fine Pointing - Slew #1b (H_FCP_AOC_3S01)		Next Step:		
		Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slew #2: - pointing exactly as previous, but Interlacing ON				
		Execute Procedure: H_FCP_AOC_3S01 Perform SCM Fine Pointing				
4		Perform SCM Fine Pointing - Slew #2 (H_FCP_AOC_3S01)		Next Step:		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slew #3: - target at SAA=118 deg, roll=0		
		Execute Procedure: H_FCP_AOC_3s01 Perform SCM Fine Pointing		
5		Perform SCM Fine Pointing - Slew #3 (H_FCP_AOC_3S01)		Next Step: 6
		Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slews #4: - target at SAA=90 deg, roll=0		
		Execute Procedure: H_FCP_AOC_3S01 Perform SCM Fine Pointing		
6		Perform SCM Fine Pointing - Slew #4 (H_FCP_AOC_3S01)		Next Step:
		Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slews #5: - target at SAA=90 deg, roll=+2		
		Execute Procedure: H_FCP_AOC_3S01 Perform SCM Fine Pointing		
7		Perform SCM Fine Pointing - Slew #5 (H_FCP_AOC_3S01)		Next Step: 8
		Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slews #5: - target at SAA=90 deg, roll=-2		
		Execute Procedure: H_FCP_AOC_3S01 Perform SCM Fine Pointing		
8		Perform SCM Fine Pointing - Slew #6 (H_FCP_AOC_3S01)		Next Step: 9

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Time	Activity/Remarks	TC/TLM	Display/ Branch
	Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slew #6: - target at SAA=90 deg, roll=0		
	Execute Procedure: H_FCP_AOC_3s01 Perform SCM Fine Pointing		
	Perform SCM Fine Pointing - Slew #7 (H_FCP_AOC_3S01)		Next Step: 10
	Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slew #7: - target at SAA=90 deg, roll=0, +120 deg slew around sun vector		
	Execute Procedure: H_FCP_AOC_3S01 Perform SCM Fine Pointing		
	Perform SCM Fine Pointing - Slew #8 (H_FCP_AOC_3S01)		Next Step:
	Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slew #8: - target at SAA=90 deg, roll=0, +120 deg slew around sun vector		
	Execute Procedure: H_FCP_AOC_3S01 Perform SCM Fine Pointing		
	Perform SCM Fine Pointing - Slew #9 (H_FCP_AOC_3S01)		Next Step:
	Execute procedure H_FCP_AOC_3S01 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slew #9: - target at SAA=90 deg, roll=0, +120 deg slew around sun vector		
	Execute Procedure: H_FCP_AOC_3s01 Perform SCM Fine Pointing		
	Time	Execute procedure H_FCP_AOC_3801 (Perform SCM Fine Pointing) using the specific instance of TFF=SFP generated by FD to command Slew #6:  - target at SAA=90 deg, roll=0  Execute Procedure:  H_FCP_AOC_3801  Perform SCM Fine Pointing - Slew #7  (H_FCP_AOC_3S01)  Execute procedure H_FCP_AOC_3801 (Perform SCM Fine Pointing) using the specific instance of TFF=SFP generated by FD to command Slew #7:  - target at SAA=90 deg, roll=0, +120 deg slew around sun vector  Execute Procedure:  H_FCP_AOC_3801  Perform SCM Fine Pointing - Slew #8  (H_FCP_AOC_3801)  Execute procedure H_FCP_AOC_3801 (Perform SCM Fine Pointing) using the specific instance of TFF=SFP generated by FD to command Slew #8:  - target at SAA=90 deg, roll=0, +120 deg slew around sun vector  Execute Procedure:  H_FCP_AOC_3801  Perform SCM Fine Pointing - Slew #9  (H_FCP_AOC_3801)  Execute Procedure:  H_FCP_AOC_3801  Perform SCM Fine Pointing - Slew #9  (H_FCP_AOC_3801)  Execute Procedure:  H_FCP_AOC_3801  Perform SCM Fine Pointing - Slew #9  (H_FCP_AOC_3801)  Execute Procedure H_FCP_AOC_3801 (Perform SCM Fine Pointing) using the specific instance of TFF=SFP generated by FD to command Slew #9:  - target at SAA=90 deg, roll=0, +120 deg slew around sun vector	Execute procedure H_FCP_AOC_3SO1 (Perform SCM Fine Pointing) using the specific instance of TPF=SFP generated by FD to command Slew #6:  - target at SAA=90 deg, roll=0  Execute Procedure: H_FCP_AOC_3SO1  Perform SCM Fine Pointing - Slew #7 (H_FCP_AOC_3SO1)  Execute procedure H_FCP_AOC_3SO1 (Perform SCM Fine Pointing) using the specific instance of TFF=SFP generated by FD to command Slew #7: - target at SAA=90 deg, roll=0, *120 deg slew around sun vector  Execute Procedure: H_FCP_AOC_3SO1  Perform SCM Fine Pointing - Slew #8 (H_FCP_AOC_3SO1)  Execute procedure H_FCP_AOC_3SO1 (Perform SCM Fine Pointing) using the specific instance of TFF=SFP generated by FD to command Slew #6: - target at SAA=90 deg, roll=0, *120 deg slew around sun vector  Execute Procedure: H_FCP_AOC_3SO1)  Ferform SCM Fine Pointing - Slew #8 (H_FCP_AOC_3SO1)  Execute Procedure: H_FCP_AOC_3SO1)  Execute Procedure: H_FCP_AOC_3SO1)  Execute Procedure: H_FCP_AOC_3SO1)  Execute Procedure: H_FCP_AOC_3SO1)  Execute procedure H_FCP_AOC_3SO1 (Perform SCM Fine Pointing) using the specific instance of TFF=SFP generated by FD to command Slew #9: - target at SAA=90 deg, roll=0, *120 deg slew around sun vector  Execute Procedure: H_FCP_AOC_3SO1)

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
12		Configure DTM for FD - disable DTM_2 (H_FCP_AOC_D3FD)		Next Step: END
		Execute procedure H_FCP_AOC_D3FD (Configure DTM for FD) to define and enable selected DTM packets, as necessary  Use DTM_2 (Step 5) to disable and delete diagnostic packet with STRM 18 stars data (SPID=18025109)		
		Execute Procedure: H_FCP_AOC_D3FD Configure DTM for FD		
	<u> </u>			<u> </u>
End of Procedure				

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