Doc. Title.: XMM FOP

Doc. Ref.: XMM-MOC-PL-0022-SMD

Date: 28/05/98 14:56:04

Procedure. Ref.: FCP_OPM_1000 (0,1) START OF OBSERVATION

Issue : 0 Revision : 0

Procedure Title: Start of Observation

Last Date Modified: 28/05/98 14:08:42

Author: Kate Adamson

Purpose of Procedure:

OM Start of Observation procedure executes the Field Acquisition (Low Res Full Frame exposure with V Filter).

This covers defintion of full coverage image in low resolution using the V-Filter, loading of the 16 (32?) reference stars, acquisition of the field using the Acquire Field task. Priority Field Acquisition data is generated.

Initial State: OM ON in IDLE
Final State: OM ON in SCIENCE

Step	Time	Activity/Remarks	Command	TM Verification
_		ED- OM ACQUIRE FIELD		
ļ				l
1		Move Filter Wheel to V Filter		
1		Move Filter wheel to V Filter		
1 .1	00:00:00	Set Filter Wheel Number.	HS6002	
		Filter Wheel to be set to V-Filter - Filter	H7604	
		number 1	SET FW NUMBER	
ı		(Filter Wheel parameter not in Database!)	ı	'
1 .2	00:00:02	Move Filter Wheel to V-Position.	HS6002	
	00.00.02		H5600	
			MOVE FW	H2300= V-Filter
				H5265=1400
1 .3	00:02:00	Wait for Filter Wheel to Move.	HS6002	
		Check Filter Wheel move Event Report.	H7241	
		(TBC)	LOAD FILT CONF	
I		Packet ID TBC	I	ı
		Inform DPU which Filter is in use.		
2		Set up Low Res Full Frame		
I				I
2 .1	00:00:02	Set Acquisition Mode to Low Resolution	HS1110	
	00:00:02	Full Frame. This sets up the MIC for full coverage in low resolution.	H7130	
			LOAD ACQ MODE	H5215=LO RES FULL
			H0110=LO RES FULL	ID213-LO KES FULL
			HOLLO-FO KED LOFF	

28 May 1998 Page 1 of 3

Doc. Title.: XMM FOP

Doc. Ref.: XMM-MOC-PL-0022-SMD

Date: 28/05/98 14:56:07

Procedure. Ref.: FCP_OPM_1000 (0,1) START OF OBSERVATION

Issue : 0 Revision : 0

Step	Time	Activity/Remarks	Command	TM Verification
2 .2	00:00:02	Load Window parameters to set up Full	HS1110	
		Frame. 4 windows defined in CCD centroided pixels (2048 by 2048) to cover	Н7110	
		the complete detector.	LOAD WINDOW TAB	
ļļ ļ		1	H0010=ENABLED	J
			H0040=4 H0050=0	
			H0051=0	
			H0052=1023 H0053=1023	
			H0054=0	
			H0055=1024 H0056=1023	
			H0057=1024	
			H0058=1024 H0059=0	
			H0060=1024	
			H0061=1023 H0062=1024	
			H0063=1024	
			H0064=1024 H0065=1024	
2 .3	00:00:02	Start Load Window Task.	HS1110	
	00.00.02		H5110	
		Wait for Report that Window Table has been loaded.	LOAD WINDOW TAB	H7000=WIN TAB LOAD
		Packet 92100		
				,
2 .4	00:00:02	Prepare DPU for acquiring low resolution data.	HS1110	
			H7249	
		Sets the DPU to acquire detector data in 1k*1k format (detector binned by 2)	INIT EXPOSURE	
3		Load Reference Stars and set up exposure.		
		1	l	
3 .1	00:00:02	Set Exposure ID	HS1160	
			Н7238	
			SET EXPOSURE ID	
			H0530=99	
3 .2	00:00:02	Load 16 (32??) Reference Stars	HS1160	
		Reference Star position are as provided by PHS Tools.	H7240	
			LOAD REF STARS	
		(Ref Star parameters NOT defined in DATABASE)	•	•
3 .3	00:01:00	Set the DPU Frame Time.	HS1160	
		Need to defined the number of DPU cycles	Н7236	
		where 1 DPU cylce = 0.001 seconds This	SET FRAME TIME	
1 .		should be set as a defualt for the Acquire Field ED.	ı	I
		(TC parameter NOT defined in DATABASE)		
		DOES EXP TIME NEED TO BE SET HERE?		

28 May 1998 Page 2 of 3

Doc. Title.: XMM FOP

Doc. Ref.: XMM-MOC-PL-0022-SMD

Date: 28/05/98 14:56:08

Procedure. Ref.: FCP_OPM_1000 (0,1) START OF OBSERVATION

Issue : 0 Revision : 0

Step	Time	Activity/Remarks	Command	TM Verification
4		Acquire Acquisition field.		
				,
4 .1	00:00:02	Start Detector Integration	HS1100	
			Н5130	
			START DET INT	
4 .2	00:00:02	Acquire Field. Commence actual acquisition by DPU.	HS1100	
			H7250	
			ACQUIRE FIELD	
		1	'	'
4 .3	00:01:00		HS1100	
		minutes.	Н6130	
		Confirm the End of Acquire Field event has	STOP DET INT	
, ,		been received. Packet 92211.	'	'
		Priority Data DP_FAQ is received containing data on the Guide stars found.		
		Packet 97402		
			1	
5		END OF PROCEDURE		

28 May 1998 Page 3 of 3