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1. GENERAL

1.1. Objective and scope of the document

The objective of this plan is to define the guidelines for the AGILE scientific deltacommissioning activities.

The pointing required is RA: 296.880, DEC: 34.501

1.2. Applicable and reference documents

AD [1]: AGILE Scientific Requirements, AGILE-IFC-SR-008 Issue 2

1.3. Reference documents

- **RD [1]** AGILE Commissioning Plan Engineering Phase, OPS-FSC-SAT-PLN-001-180.330 Issue 1
- **RD [1]** AGILE Commissioning Plan Scientific Phase, OPS-FSC-SAT-PLN-002-180.330 Issue 1

1.4. Acronyms

AC	Anti-Coincidence
AC-LAT	AC Lateral panel
AC-TOP	AC Top panel
BBFP	Burst Background Filtering Procedure
DC	Daisy Chain
FEE	Front-End Electronics
FTB	Front End and Trigger Board
GRID	Gamma-Ray Imaging Detector
HE	High Energy
НК	Housekeeping
MCAL	Mini-Calorimeter
LE	Low Energy
LUT	Look-Up Table
PDHU	Payload Data Handling Unit
P/L	Payload
SA	Super-AGILE
SAA	South Atlantic Anomaly
SAFEE	Super-AGILE Front End Electronics
SAIE	Super-AGILE Interface Electronics
SIT	Short Integration Time
ST	Silicon Tracker



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тс Telecommand Telemetry ТΜ

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2. AC FEE CONFIGURATION REFINING			
	2.1. AC-LAT 3.2 three	shold increasing	
Number of orbits	Description	Principal activities	
140	AC FEE tuning	 This step shall be repeated n times in order to optimize the AC-LAT 3.2 behaviour. Send T33S5 in order to update the AC-LAT 3.2 threshold AC observation in Nominal and SAA phases Check of the AC ratemeters in the TM(32,01) 	
	2.2. AC-TOP 2 threshold lowering		
Number of orbits	Description	Principal activities	
140	AC FEE tuning	 Send T33S5 in order to set the AC-TOP 2 threshold to the 236 digital value AC observation in Nominal and SAA phases Check of the AC ratemeters in the TM(32,01) 	



3. AC VETO EFFICIENCY ESTIMATION		
Number of orbits	Description	Principal activities
4	Ac veto used by GRID Obs, SA Obs. and MCAL Stand- by.	 Send T33S5 in order to update the AC thresholds GRID Observation, SA Observation, MCAL in stand-by at PDHU level and AC Observation
4	GRID AC Veto efficiency estimation.	 Send T33S5 in order to update the AC thresholds GRID Physical Observation
4	MCAL Burst AC Veto efficiency estimation.	 Send T33S5 in order to update the AC thresholds MCAL Burst Physical Observation

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4. SA FEE CONFIGURATION REFINING			
	4.1. AC Heaters three	sholds lowering *	
Number of orbits	Description	Principal activities	
14	AC heater thresholds: -28°C/-22°C.	 AC heaters thresholds updating: -28°C/-22°C AC temperatures (survival HKs) and SA temperatures monitoring 	
14	AC heater thresholds: -30°C/-25°C.	 AC heaters thresholds updating: -30°C/-25°C AC temperatures (survival HKs) and SA temperatures monitoring 	
	4.2. SA Gain Electrical Calibration		
Number of orbits	Description	Principal activities	
1	SA Gain Calibration	 Send 4 T33S12 for Electrical Calibration of the SAIE-0 and SAIE-1 with 255 pulses AC heaters thresholds updated SA Electrical Calibration performed before SAA 	

*N.B.: The task "AC heaters thresholds lowering" is not yet approved by the Mission Director.

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	4.3. SA FEE parameters update		
Number of orbits	Description	Principal activities	
4	SA FEE Parameters update	 Send T33S10 to update the DC thresholds. Send 48 T33S11 updating the XAA1 Reg-in SA Observation in all phases 	
	4.4. SA Gain Electric	al Calibration	
Number of orbits	Description	Principal activities	
1	SA Gain Calibration	 Send 4 T33S12 for Electrical Calibration of the SAIE-0 and SAIE-1 with 255 pulses AC heaters thresholds updated SA Electrical Calibration performed before SAA 	



5. GRID CONFIG	URATION REFINING	
Number of orbits	Description	Principal activities
1	GRID Pedestal runs	 Send T33S2 with the Pedestal AC Veto set to "Particle 1". 10 repetitions of the GRID Pedestal observation with AC in "Off" mode.
2	ST TAA1 reg-in updating	 Send the 96 T33S8 setting the TAA1 Reg-in. Check the FTB analog HKs. GRID Observation
1	GRID trigger parameters updating	 This step shall be repeated n times in order to optimize the GRID PDHU setup. Send the T33S2, T33S3, T33S4 and the T33S37 in order to optimize the GRID trigger logic. Upload a set of the GRID LUTs in order to optimize the GRID trigger logic. GRID Observation

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6. ST PLANES A	6. ST PLANES ALIGNMENT ESTIMATION		
Number of orbits	Description	Principal activities	
130	GRID Physical Calibration	GRID Physical Calibration	
7. MCAL GENERAL VERIFICATION			
	7.1. GRID and MCAL	Physical Calibration	
Number of orbits	Description	Principal activities	
6	GRID and MCAL Ph. Calibration	 Send the T33S5 in order to set the AC veto signal with width=0 and delay=0. Send the T33S13 in order to increase the MCAL Burst FEE thresholds. GRID Physical Calibration and MCAL Physical Calibration 	
	7.2. Background estimation		
Number of orbits	Description	Principal activities	
5	MCAL Ph. Calibration	 Send the T33S5 in order to set the AC veto signal with width=0 and delay=0. Send the T33S13 in order to increase the MCAL Burst FEE thresholds. MCAL Physical Calibration 	



	7.3. MCAL Electrical Calibration		
Number of orbits	Description	Principal activities	
1	MCAL Electrical Calibration	 Send T33S13 and T33S14 for the Electrical Calibration setup I MCAL Electrical calibration (20 minutes) Send T33S13 and T33S14 for the Electrical Calibration setup II MCAL Electrical calibration (20 minutes) Send T33S13 in order to restore the MCAL FEE configuration 	
8. MCAL BURST	TRIGGER TUNING		
8.1. Scientific Ratemeters offsets updating			
Number of orbits	Description	Principal activities	
1	MCAL offsets updating	Patch the offsets used by the MCAL scientific ratemeters logic.	

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	8.2.SIT≥64ms Burst	trigger tuning
Number of orbits	Description	Principal activities
1	MCAL Burst trigger	 Send the T33S15, the T33S16 and the 4 T33S19 in order to disable the Burst search on SIT<64ms and to configure the other channels on the "dynamic trigger strategy". Send the T33S13 in order to increase the MCAL Burst FEE thresholds. MCAL Burst Observation with selection of the Trigger LUT "all rejected".
14	MCAL Burst trigger	 This step shall be repeated several times with different configurations (starting from the last setup used in the June-July commissioning phase) in order to optimize the SW Burst Search setup. Send the T33S15, the T33S16 and the 4 T33S19 in order to disable the Burst search on SIT<64ms and to configure the other channels with different settings. MCAL Burst Observation with selection of the Trigger LUT "all rejected".
2	MCAL Burst acquisition	 Send the T33S15, the T33S16 and the 4 T33S19 in order to disable the Burst search on SIT<64ms and to configure the other channels with the optimal setup. Update of a the MCAL Burst Trigger LUTs. MCAL Burst Observation with selection of a Trigger LUT enabling the Burst telemetry download.
	8.3.1ms≤SIT<64ms I	Burst trigger tuning
Number of orbits	Description	Principal activities

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14	MCAL Burst trigger	 This step shall be repeated several times with different configurations (starting from the last setup used in the June-July commissioning phase) in order to optimize the HW Burst Search setup. Send the T33S15, the T33S16 and the 4 T33S19 in order to disable the Burst search on SIT≥64ms, to disable the sub-millisecond and to configure the other channels with different settings. MCAL Burst Observation with selection of the BBFP LUTs "all rejected".
2	MCAL Burst trigger	 Send the T33S15, the T33S16 and the 4 T33S19 in order to disable the Burst search on SIT≥64ms, to disable the sub-millisecond and to configure the other channels with optimal setup. Update of a the BBFP LUTs. MCAL Burst Observation with selection of the BBFP LUTs enabling the Burst telemetry download.

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	8.4. Sub-millisecond	Burst trigger tuning
Number of orbits	Description	Principal activities
5	MCAL Burst trigger	 This step shall be repeated several times with different configurations (starting from the last setup used in the June-July commissioning phase) in order to optimize the Sub-millisecond Burst Search. Send the T33S15, the T33S16 and the 4 T33S19 in order to disable the Burst search on SIT≥1ms and to enable the sub-millisecond configured with different settings. MCAL Burst Observation.
8.5. MCAL Burst acquisition		
Number of orbits	Description	Principal activities
4	MCAL Burst trigger	 Send the T33S15, the T33S16 and the 4 T33S19 with optimal setup. MCAL Burst Observation with selection of the optimal LUTs.

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	8.6. MCAL Burst trigger fake inhibition		
Number of orbits	Description	Principal activities	
4	MCAL Burst trigger	 Send the T33S15, the T33S16 and the 4 T33S19 with optimal setup. Send Earth Occ. phase transition TCs time-tagged respect to the eclipse exit with special delay/width. MCAL Burst Observation with selection of the optimal LUTs. 	

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9. SA BURST TR		
	9.1.SIT≥64ms Burst	trigger tuning
Number of orbits	Description	Principal activities
4	SA Burst trigger SIT=64ms	 This step shall be repeated 4 times with different trigger configurations in order to optimize the Burst Search setup. Send the T33S15, the T33S16 in order to disable the Burst search on SIT<64ms and to configure the SA Burst Search Energy channels. Send 4 T33S17 in order to configure the Burst Search of the D0-LE channel on the 64ms and disabling the other channels and the other SITs. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D0-LE channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D0-LE channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D0-HE channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D1-LE channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D1-LE channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D1-HE channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D1-HE channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D1-HE channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to configure the Burst Search of the D1-HE channel on and disabling the other channels.

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4 SA Burst trigge SIT=256ms	 SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=64ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) This step shall be repeated 4 times with different the Burst Search setup. Send the T33S15, the T33S16 in order to dia and to configure the SA Burst Search Energy concerns setup. Send 4 T33S17 in order to configure the Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to conchannel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in ord	nfigure the Burst nfigure the Burst nfigure the Burst trigger configurat sable the Burst s hannels. rst Search of the e other SITs. onfigure the Burs onfigure the Burs	Search of the D2-HE Search of the D3-LE Search of the D3-HE cions in order to optimize earch on SIT<256ms D0-LE channel on the t Search of the D0-LE t Search of the D0-HE

- SA Burst Observation (10 minutes TBC)
 - Send T33S17 with SIT=256ms in order to configure the Burst Search of the D1-HE

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4	SA Burst trigger SIT=1024ms	 channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=256ms in order to co channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) 	nfigure the Burst nfigure the Burst nfigure the Burst nfigure the Burst rigger configurati sable the Burst se annels. st Search of the I the other SITs.	Search of the D2-LE Search of the D2-HE Search of the D3-LE Search of the D3-HE ons in order to optimize earch on SIT<1024ms D0-LE channel on the
		 Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) 	onfigure the Burs onfigure the Burs	at Search of the D0-LE

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		 Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. SA Burst Observation (10 minutes TBC) Send T33S17 with SIT=1024ms in order to c channel on and disabling the other channels. 	configure the Burs configure the Burs configure the Burs configure the Burs configure the Burs	at Search of the D1-LE at Search of the D1-HE at Search of the D2-LE at Search of the D2-HE at Search of the D3-LE at Search of the D3-LE
4	SA Burst trigger SIT=8192ms	 SA Burst Observation (10 minutes TBC) This step shall be repeated 4 times with different t the Burst Search setup. Send the T33S15, the T33S16 in order to dis and to configure the SA Burst Search Energy ch Send 4 T33S17 in order to configure the Bur 8192ms and disabling the other channels and th SA Burst Observation (10 minutes TBC) 	rigger configurati sable the Burst se nannels. st Search of the I ne other SITs.	ons in order to optimize earch on SIT<8192ms D0-LE channel on the

	AGILE	Ref: Page: Issue: Date:	AGILE-AST-PL-008 20 01 31/10/2007
	 SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch SA Burst Observation (10 minutes Send T33S17 with SIT=8192ms in channel on and disabling the other ch 	Date: Date	31/10/2007 rst Search of the D0-HE rst Search of the D1-LE rst Search of the D1-HE rst Search of the D2-LE rst Search of the D2-HE rst Search of the D2-HE
	 Send T33S17 with SIT=8192ms in channel on and disabling the other channel on an and disabling the other channel on an an	n order to configure the Bui nannels.	rst Search of the D3-HE
Í Í	● SA BUIST ODSERVATION (10 MINUTES		

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	9.2.1ms≤SIT<64ms Burst trigger tuning		
Number of orbits	Description	Principal activities	
14	SA Burst trigger 1ms≤SIT<64ms	 This step shall be repeated several times with different configurations (starting from the last setup used in the June-July commissioning phase) in order to optimize the HW Burst Search setup. Send the T33S15, the T33S16 and the 4 T33S19 in order to disable the Burst search on SIT≥64ms, to disable the sub-millisecond and to configure the other channels with different settings. SA Burst Observation. 	
	9.3. Sub-millisecond	Burst Trigger tuning	
Number of orbits	Description	Principal activities	
5	SA Burst trigger SIT<1ms	 This step shall be repeated several times with different configurations (starting from the last setup used in the June-July commissioning phase) in order to optimize the Sub-millisecond Burst Search. Send the T33S15, the T33S16 and the 4 T33S19 in order to disable the Burst search on SIT≥1ms, to enable the sub-millisecond configured with different settings and to enable the OR between the MCAL and the SA Burst trigger. MCAL Burst Observation and SA Burst Observation. 	

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10 SA RAW IMAGING TUNING		

TU. SA KAW IWAG			
	10.1. Integration time and detector images verification		
Number of orbits	Description	Principal activities	
1	SA photon-by photon and raw imaging	 Send the T33S18 in order to set the imaging integration time to 128s and the attitude correction X and Z parameters to 0. SA photon-by-photon and raw imaging activation (no standard configuration) 	

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	10.2. X attitude cor	rection parameter scan
Number of orbits	Description	Principal activities
1	SA photon-by photon and raw imaging	 Send T33S18 with the X attitude corr. parameter set to 1.00 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.05 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.10 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.10 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.15 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.20 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.20 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.25 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.30 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.30 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.30 and the Z parameter set to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parameter set to 1.30 and the Z parameter set to 0.

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	10.3. Z attitude cor	 SA Burst Observation (7 minutes TBC) Send T33S18 with the X attitude corr. parate to 0. SA Burst Observation (7 minutes TBC) 	meter set to 1.40 a	and the Z parameter set
Number of orbits	Description	Principal activities		
1	SA photon-by photon and raw imaging	 Send T33S18 with the Z attitude corr. parar to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. parar to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. parar to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. parar to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. parar to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. parar to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. parar to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. parar to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. parar 	meter set to 1.00 a meter set to 1.05 a meter set to 1.10 a meter set to 1.15 a meter set to 1.20 a meter set to 1.25 a	and the X parameter set and the X parameter set

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 Send T33S18 with the Z attitude corr. to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. to 0. SA Burst Observation (7 minutes TBC) Send T33S18 with the Z attitude corr. to 0. SA Burst Observation (7 minutes TBC) SA Burst Observation (7 minutes TBC) 	parameter set to 1.30 a) parameter set to 1.35 a) parameter set to 1.40 a)	and the X parameter set and the X parameter set and the X parameter set

10.4. Co-adding parameters tuning									
Number of orbits	Description	Principal activities							
1	SA photon-by photon and raw imaging	 Send the T33S18 in order to set the imaging integration time to 128s, the attitude correction X and Z parameters to the optimal values determined above and the X and Z. SA photon-by-photon and raw imaging activation (no standard configuration) 							



11. SA BURST IMAGING TUNING								
	11.1. T_Stop logic tuning							
Number of orbits	Description	Principal activities						
1	SA Burst Observation	 Send T33S17 with SIT=8192s containing the trigger static logic enabled and the threshold set to 1. Send the T33S18 in order to set the imaging integration time to 128s, the T_stop calculation enabled and the X and Z imaging thresholds set to 0. SA Burst Observation. 						
	11.2. Reconstructed	d Burst pixel test						
Number of orbits	Description	Principal activities						
1	SA Burst Observation	 The task hereafter shall be performed with the Payload in Test mode. Send T33S10 with all the SA DCs disabled. Send T33S17 with SIT=8192s containing the trigger static logic enabled and the threshold set to 1. Upload special X and Z Skycoord. LUTs. Send the T33S18 in order to set the imaging integration time to 128s and the T_stop calculation disabled (T_stop fixed value set to 200s TBC). Enter Observation mode Enter Test mode After 4 minutes send T33S10 with all the SA DCs enabled. 						

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	11.3. X and Z Skyc	coord LUTs updating
Number of orbits	Description	Principal activities
1	SA Burst Observation	 The task hereafter shall be performed with the Payload in Test mode. Send T33S10 with all the SA DCs disabled. Send T33S17 with SIT=8192s containing the trigger static logic enabled and the threshold set to 1. Upload updated X and Z Skycoord. LUTs. Send the T33S18 in order to set the imaging integration time to 128s and the T_stop calculation disabled (T_stop fixed value set to 200s TBC). Enter Observation mode Enter Test mode After 4 minutes send T33S10 with all the SA DCs enabled.
	11.4. ORBCOMM	Burst Alert verification
Number of orbits	Description	Principal activities
1	SA Burst Observation	 The task hereafter shall be performed with the Payload in Test mode. Send T33S10 with all the SA DCs disabled. Send T33S17 with SIT=8192s containing the trigger static logic enabled and the threshold set to 1. Send the T33S18 in order to set the imaging integration time to 128s and the T_stop calculation disabled (T_stop fixed value set to 600s TBC). Enter Observation mode Enter Test mode



		 After 4 minutes send T33S10 with all the SA DCs enabled. ORBCOMM messages verification
12. FINAL OBSER	VATION	
Number of orbits	Description	Principal activities
60	Final Observation	 Set ST, SA, AC and MCAL FEEs with final configuration. Set SA and MCAL Burst with final configuration (OR between SA and MCA Burst trigger enabled) Ac Observation, GRID Observation, SA Observation, SA Burst Observation and MCAL Burst Observation

13. DATA EEPR	OM UPDATE	
Number of orbits	Description	Principal activities
	DATA EEPROM configuration	 Send T33S2 with MID='DATA EEPROM'. Send T33S3 with MID='DATA EEPROM'. Send T33S4 with MID='DATA EEPROM'. Send T33S5 with MID='DATA EEPROM'. Send T33S6 with MID='DATA EEPROM'. Send T33S7 with MID='DATA EEPROM'. Send 96 T33S8 with MID='DATA EEPROM'. Send T33S9 with MID='DATA EEPROM'. Send T33S10 with MID='DATA EEPROM'. Send T33S10 with MID='DATA EEPROM'. Send 48 T33S11 with MID='DATA EEPROM'. Send 4 T33S12 with MID='DATA EEPROM'. Send T33S13 with MID='DATA EEPROM'. Send T33S13 with MID='DATA EEPROM'. Send T33S13 with MID='DATA EEPROM'. Send T33S15 with MID='DATA EEPROM'. Send T33S16 with MID='DATA EEPROM'. Send T33S16 with MID='DATA EEPROM'. Send T33S16 with MID='DATA EEPROM'. Send T33S17 with MID='DATA EEPROM'. Send T33S18 with MID='DATA EEPROM'. Send T33S17 with MID='DATA EEPROM'. Send T33S18 with MID='DATA EEPROM'. Send T33S17 with MID='DATA EEPROM'. Send T33S18 with MID='DATA EEPROM'. Send T33S17 with MID='DATA EEPROM'. Send T33S18 with MID='DATA EEPROM'. Send T33S17 with MID='DATA EEPROM'.

14. DELTA-COMMISSIONING PLANNING

ID	0	Task Name	Duration	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
1		AC FEE configuration	9 days										h				
2		ST FEE configuration	1 day														
3		ST planes alignment	8 days	1									H				
4		MCAL general verification	2 days			L.											
5		MCAL Burst trigger tuning	7 days	1									H				
6		SA FEE configuration	2 days			<u>L</u>											
7	11	SA Burst trigger tuning	3 days	1													
8		SA Raw Imaging tuning	1 day	1						L.							
9	11	SA Burst Imaging tuning	3 days	1									E.				
10	11	ACVeto efficiency estimation	1 day	1										Ł			
11	11	Final observation	3 days	1													Ł
12		DATA EEPROM update	1 day														

N.B.: The duration of the task "AC heaters thresholds lowering" (see section 4.1) is not considered in this planning.