



<b>Publication Year</b>	2009
<b>Acceptance in OA @INAF</b>	2023-03-01T10:27:30Z
<b>Title</b>	Planck-LFI CPV:CRYO 01 functionality test
<b>Authors</b>	Planck-LFI calibration Team; BATTAGLIA, Paola Maria; Bersanelli, M.; CUTTAIA, FRANCESCO; Davis, R.; et al.
<b>Handle</b>	<a href="http://hdl.handle.net/20.500.12386/33965">http://hdl.handle.net/20.500.12386/33965</a>
<b>Number</b>	PL-LFI-PST-RP-062



**TITLE:** **Planck-LFI CPV: CRYO\_01**  
**functionality test** (P\_PVP\_LFI\_0001\_01,  
P\_PVP\_LFI\_0101\_01, P\_PVP\_LFI\_0201\_01)

**DOC. TYPE:** **Test Report**

**PROJECT REF.:** **PL-LFI-PST-RP-062**      **PAGE:** I of IV, 11

**ISSUE/REV.:** **1.0**      **DATE:** **June 24<sup>th</sup>, 2009**

<b>Prepared by</b>	<b>The Planck-LFI calibration team</b>	<b>Date:</b> June , 2008 <b>Signature:</b>
<b>Agreed by</b>	<b>C. BUTLER</b> <b>LFI Program Manager</b>	<b>Date:</b> June , 2008 <b>Signature:</b>
<b>Approved by</b>	<b>N. MANDOLESI</b> <b>LFI Principal Investigator</b>	<b>Date:</b> June , 2008 <b>Signature:</b>



## The Planck-LFI calibration team

- Paola Battaglia (SCOS/TQL operator)
- Marco Bersanelli (LFI instrument scientist, test leader)
- Francesco Cuttaia (CPV responsible, test leader)
- Richard Davis (30/44 GHz data analysis)
- Althea Wilkinson (30/44 GHz data analysis)
- Marco Frailis (Level 1 manager)
- Cristian Franceschet (SCOS/TQL operator)
- Enrico Franceschi (GSE manager)
- Samuele Galeotta (LIFE/PEGASO development)
- Anna Gregorio (Instrument Operation Manager)
- Rodrigo Leonardi (data analysis)
- Stuart Lowe (LIFE/PEGASO development)
- Michele Maris (data analysis, LIFE/PEGASO development)
- Peter Meinhold (Test leader, data analysis)
- Luis Mendes (data analysis)
- Aniello Mennella (Calibration Scientist, test leader)
- Torsti Poutanen (data analysis)
- Maura Sandri (Test leader, data analysis)
- Daniele Tavagnacco (SCOS/TQL operator)
- Luca Terenzi (Tests leader, data analysis and LIFE/PEGASO development)
- Maurizio Tomasi (Test leader, data analysis and LIFE/PEGASO development)
- Fabrizio Villa (Test leader, data analysis)
- Andrea Zacchei (LFI DPC manager)
- Andrea Zonca (SCOS/TQL operator, LIFE/PEGASO development)



## DISTRIBUTION LIST

Recipient	Company / Institute	E-mail address	Sent
M. BERSANELLI	UNIMI – Milano	<a href="mailto:marco.bersanelli@mi.infn.it">marco.bersanelli@mi.infn.it</a>	Yes
R.C. BUTLER	INAF/IASF – Bologna	<a href="mailto:butler@iasfbo.inaf.it">butler@iasfbo.inaf.it</a>	Yes
F. CUTTAIA	INAF/IASF – Bologna	<a href="mailto:cuttaia@iasfbo.inaf.it">cuttaia@iasfbo.inaf.it</a>	Yes
A. GREGORIO	UniTs – Trieste	<a href="mailto:Anna.gregorio@ts.infn.it">Anna.gregorio@ts.infn.it</a>	Yes
N. MANDOLESI	INAF/IASF – Bologna	<a href="mailto:mandolesi@iasfbo.inaf.it">mandolesi@iasfbo.inaf.it</a>	Yes
A. MENNELLA	UNIMI – Milano	<a href="mailto:aniello.mennella@fisica.unimi.it">aniello.mennella@fisica.unimi.it</a>	Yes
A. ZACCHEI	INAF/OATs – Trieste	<a href="mailto:zacchei@oats.inaf.it">zacchei@oats.inaf.it</a>	Yes
P. BATTAGLIA	TAS-I	<a href="mailto:paola.battaglia@thalesalieniaspace.com">paola.battaglia@thalesalieniaspace.com</a>	Yes
M. MICCOLIS	TAS-I	<a href="mailto:maurizio.miccolis@thalesalieniaspace.com">maurizio.miccolis@thalesalieniaspace.com</a>	Yes
P. LEUTENEGGER	TAS-I	<a href="mailto:paolo.leutenegger@thalesalieniaspace.com">paolo.leutenegger@thalesalieniaspace.com</a>	Yes
M. BALASINI	TAS-I	<a href="mailto:maurizio.balasini@thalesalieniaspace.com">maurizio.balasini@thalesalieniaspace.com</a>	Ye
LFI Core team coordinators		<a href="mailto:lfi_ctc@iasfbo.inaf.it">lfi_ctc@iasfbo.inaf.it</a>	Yes
LFI radiometer core team		<a href="mailto:planck_cta02@fisica.unimi.it">planck_cta02@fisica.unimi.it</a>	Yes
LFI calibration team			
LFI System PCC	INAF/IASF – Bologna	<a href="mailto:lfispcc@iasfbo.inaf.it">lfispcc@iasfbo.inaf.it</a>	Yes



## CHANGE RECORD

Issue	Date	Sheet	Description of Change	Release
0.1	15 June 09	All	First draft issue	0.1
1.0	24 June 09	All	First issue of document	1.0



## TABLE OF CONTENTS

<b>1</b>	<b>ACRONYMS .....</b>	<b>1</b>
<b>2</b>	<b>APPLICABLE AND REFERENCE DOCUMENTS .....</b>	<b>2</b>
2.1	APPLICABLE DOCUMENTS.....	2
2.2	REFERENCE DOCUMENTS.....	2
<b>3</b>	<b>INTRODUCTION .....</b>	<b>3</b>
<b>4</b>	<b>TEST EXECUTION .....</b>	<b>6</b>
4.1	TEST CONFIGURATION.....	6
4.2	PASS-FAIL CRITERIA, VERIFICATION MATRIX .....	6
4.3	PROCEDURE/ TEST SEQUENCE AND ENVIRONMENTAL CONDITIONS.....	7
4.3.1	<i>Test procedure</i> .....	7
4.3.2	<i>Temperatures</i> .....	8
4.3.3	<i>Results and Conclusions</i> .....	10
4.3.4	<i>Non nominal features</i> .....	10
4.4	DATA ANALYSIS .....	11
4.5	CONCLUSIONS AND RECOMMENDATIONS .....	15
<b>5</b>	<b>APPENDIX 1 – TEST PROCEDURE.....</b>	<b>16</b>



## 1 ACRONYMS

ACA	Amplifier Chain Assembly
AIV	Assembly, Integration, Verification
ASW	Application Software
BEM	Back End Module
BEU	Back End Unit
CCS	Central Check-out System
CDMU	Central Data Management Unit
CPV	Calibration Performance Verification
CSL	Centre Spatiale de Liège
DAE	Data Acquisition Electronics
DPU	Digital Processing Unit
EGSE	Electrical ground Support Equipment
FEM	Front End Module
FPU	Focal Plane Unit
I-EGSE	Instrument EGSE
ILT	Instrument-level tests
IST	Integrated Satellite Test
OBC	On Board Clock
RAA	Radiometer Array Assembly
REBA	Radiometric Electronic Box Assembly
S/C	Spacecraft
SCOE	Spacecraft Control and Operation System
SCS	Sorption Cooler System
SLT	Satellite-level tests
SPU	Signal Processing Unit
SUSW	Start- Up Software
SVM	Service Module
TBC	To Be Checked
TBW	To Be Written
TC	Telecommand
TM	Telemetry
UFT	Unit Functional Test



---

## 2 APPLICABLE AND REFERENCE DOCUMENTS

### 2.1 Applicable Documents

- [AD1] Herschel/Planck Instrument Interface document Part A, SCI-PT-IIDA-04624 Issue 3.3
- [AD2] Herschel/Planck Instrument Interface document Part B, SCI-PT-IIDB-04142 Issue 3.1
- [AD3] Herschel/Planck Instrument Interface document Part B, SCI-PT-IIDB-04142 Issue 3.1, Annex 3, ICD 750800115
- [AD4] Herschel/Planck Instrument Interface document Part A, SCI-PT-IIDA-04624 Issue 3.3 Annex 10
- [AD5] Data analysis and scientific performance of the LFI FM instrument, PL-LFI-PST-AN-006 3.0
- [AD6] Planck-LFI TV-TB test report: executive summary, PL-LFI-PST-RP-040 1.1
- [AD7] Testing plan of the LFI instrument during the Planck Commissioning and CPV phase, PL-LFI-PST-PL-043 (4.2)

### 2.2 Reference Documents

- [RD1] Planck Instrument Testing at PFM S/C levels, H-P-3-ASP-TN-0676, Issue 1.0
- [RD2] Planck LFI User Manual, PL-LFI-PST-MA-001 Issue 2.1
- [RD3] Data analysis and of LFI switch on and cryogenic functionality test (Ph-5-01-c of TV/TB tests) PL-LFI-PST-RP-036



### 3 Introduction

This document describes the activities performed during the first instrument switch on and functionality test performed during CPV.

The functionality test CRYO\_01 consists in a gradual switch on of all amplifiers, one by one, and by a series of variations of the phase switch biases and configuration. A characteristic pattern in the output voltage must be seen in real time and the monitored drain currents must correspond to the values expected from previous tests (in particular from CRYO\_01 performed in CSL, [RD3]).

Here follows the series of steps that is performed for each radiometer (refer to Fig. 1)

**Table 1 – Steps performed during CRYO\_01 for the switch on of a couple of ACAs**

Step n.	Description	Expected response	Notes
1	The first ACA is biased with amplifier and phase switch biases (Vg1, Vg2, Vd, I2, I2)	The signal rises on the pair of output diodes connected to the ACA	Drain current is recorded and compared to CSL values
2	The phase switch polarisation is changed	The signal switches tagging from sky to ref or vice versa (also the output level may change a little bit)	
3	The 4 KHz switching is activated	From each diode two output streams appear, tagged sky and ref. Sky samples may be different in voltage level from ref samples	
4	The phase switch bias current I1 is lowered	The separation of the sky and reference datastreams changes (either they converge or they diverge)	
5	The phase switch bias current I1 is returned to its nominal value and I2 is lowered	The separation changes in the opposite direction	
6	I2 is returned to its nominal value, the 4 KHz switching is turned off and the phase switch state is returned to 0	The signal returns as after step 1	Here the output voltage can be different because of drifts due to the thermal environment and amplifier



	switch state is returned to 0		stabilisation.
7	The second ACA is biased with amplifier and phase switch biases (Vg1, Vg2, Vd, I2, I2)	The signal further on both diodes on top of the previous level <sup>1</sup>	Drain current is recorded and compared to CSL values.
8	The phase switch polarisation is changed	The signal switches tagging from sky to ref or vice versa (also the output level may change a little bit)	
9	The 4 KHz switching is activated	From each diode two output streams appear, tagged sky and ref. Sky samples may be different in voltage level from ref samples	
10	The phase switch bias current I1 is lowered	The separation of the sky and reference datastreams changes (either they converge or they diverge)	
11	The phase switch bias current I1 is returned to its nominal value and I2 is lowered	The separation changes in the opposite direction	
12	I2 is returned to its nominal value, the 4 KHz switching is turned off and the phase switch state is returned to 0	The signal returns as after step 1	Here the output voltage can be different because of drifts due to the thermal environment and amplifier stabilisation.

<sup>1</sup> Note that for LFI18M the switch on of the second ACA produced a lowering of the signal in one of the detectors and a rise in the other; this was due to the strong unbalance in the amplifier biases in this particular test (one of the two drain voltages had to be reduced in order to avoid signal saturation)

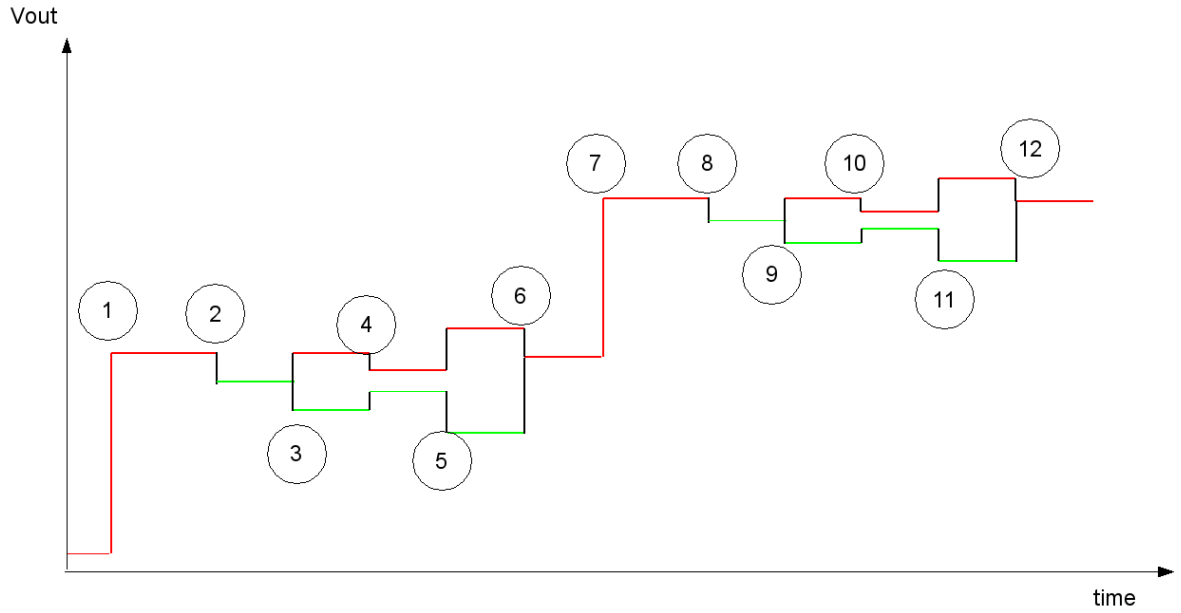


Figure 1 – Schematics of the various phases of a radiometer switch on during CRYO\_01 (see Table 1)



## 4 Test Execution

### 4.1 Test configuration

The test configuration is the following

SCOS 2K EGSE 3.1 Release 1.2  
RTSILib version 1.0  
RTSI Client version 1.2  
LEVEL1 (TMH/TQL) version 5.1  
LIFE Machine version OM 3.00  
IDIS 2.7.3.4

LFI Personnel involved during the test is:

LFI Instrument Operation Manager	Anna Gregorio (UniTs <a href="mailto:anna.gregorio@ts.infn.it">anna.gregorio@ts.infn.it</a> )
LFI Calibration Scientist	Aniello Mennella (UniMi <a href="mailto:aniello.mennella@fisica.unimi.it">aniello.mennella@fisica.unimi.it</a> )
LFI CPV Manager	Francesco Cuttaia (IASF-BO <a href="mailto:cuttaia@iasfbo.inaf.it">cuttaia@iasfbo.inaf.it</a> )
Test leader	Francesco Cuttaia
LFI IOT	Anna Gregorio, Francesco Cuttaia, Aniello Mennella, Marco Frailis, Samuele Galeotta, Andrea Zacchei, Maurizio Tomasi, Althea Wilkinson, Peter Meinhold, Richard Davis, Daniele Tavagnacco
Industry support	Paola Battaglia

### 4.2 Pass-fail criteria, verification matrix

CPV P\_PVP\_LFI\_0001\_01, P\_PVP\_LFI\_0101\_01, P\_PVP\_LFI\_0201\_01

June, 11-12-13 2009 DoY 162-163-164 OD 29-30-31

Test name: CRYO 01

This test is dedicated to the radiometer part of LFI and it will be used during flight.

Test objectives:

This procedure is basically the same procedure run during IST in the commissioning stand alone phase, apart the exercise of the memories that is out of the scope of this test, moreover this time all the power groups are switched on so

all the FEMs  
are exercised.

Verification matrix					
Check	Passed?			Recovered?	
	Yes	No	Notes	Yes	No
No unexpected events packets	Yes				
Science production telemetry as expected		No	During second part of CRYO01 there was a problem in the real time telemetry link. It was recovered by switching to the redundant real time server (CHAN-B)	Yes	
Every ACA is responding to biases stimuli as expected	Yes				
Every P/S is responding to bias stimuli as expected	Yes				
Correct cryogenic biases are applied	Yes				
No unexpected features (spikes, popcorn noise, etc)		No	There was a mistake in the procedure, so that wrong offsets were applied to LFI 21 that therefore showed a saturated signal. It was recovered by correcting the procedure and rerunning CRYO_01 on LFI21	Yes	

### 4.3 Procedure/ Test sequence and environmental conditions

#### 4.3.1 Test procedure

The test procedure (serving also as a checklist) is reported in appendix to the document

### 4.3.2 Temperatures

The test was run during three ODs, (29, 30, 31). In Figures 2, 3 and 4 we show the behaviour of the most relevant temperature stages.

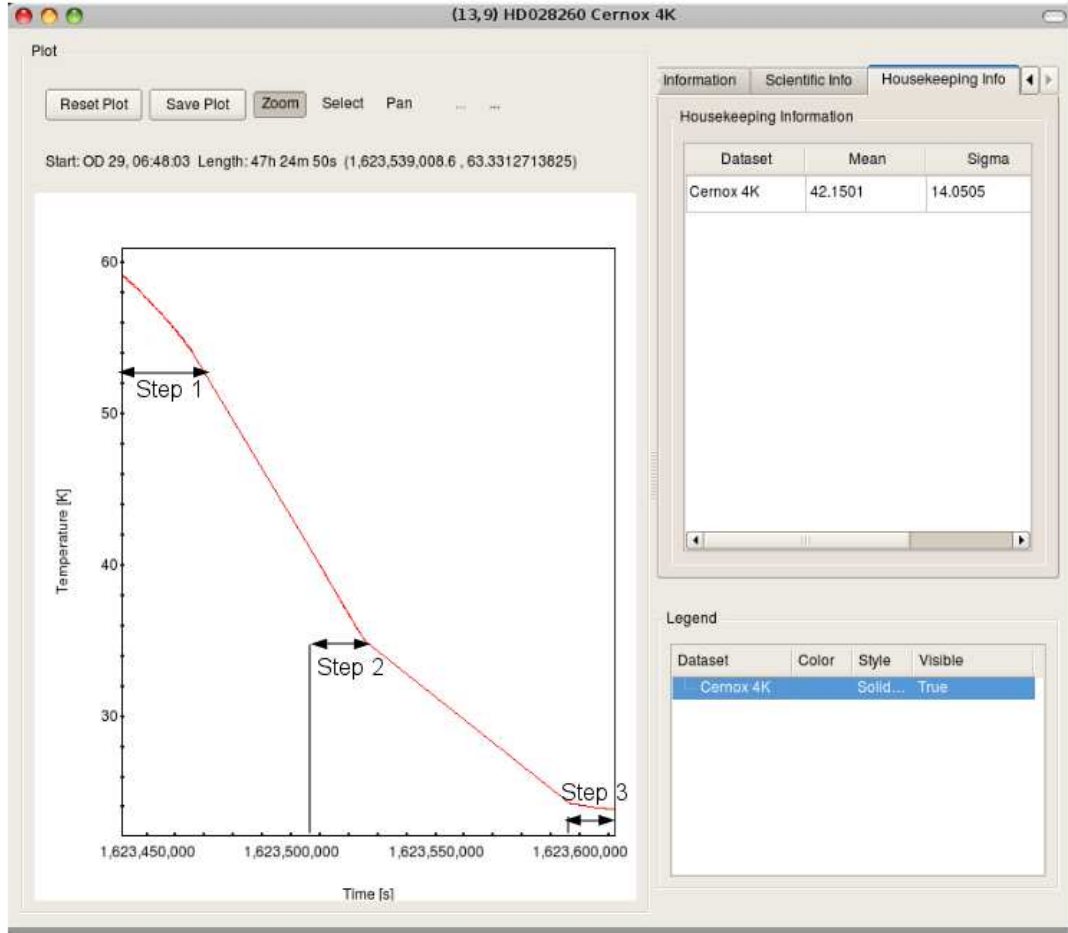


Figure 2 – 4 K temperature during the three CRYO-01 steps

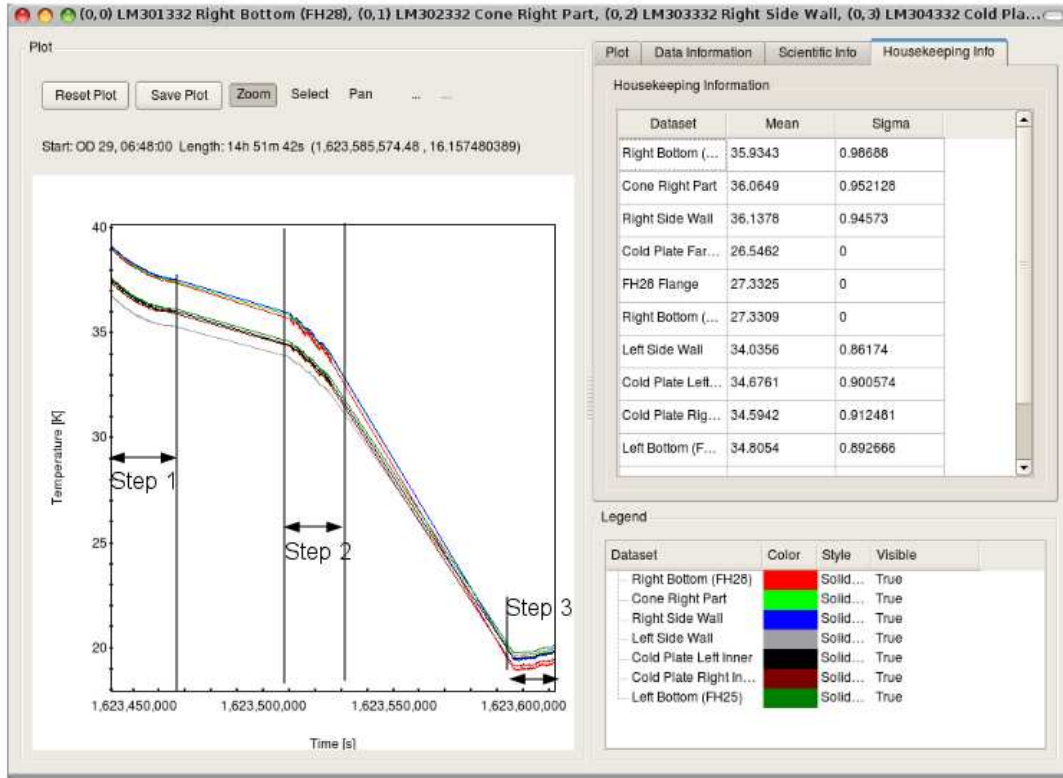


Figure 3 – LFI front-end unit temperature during the three CRYO-01 steps

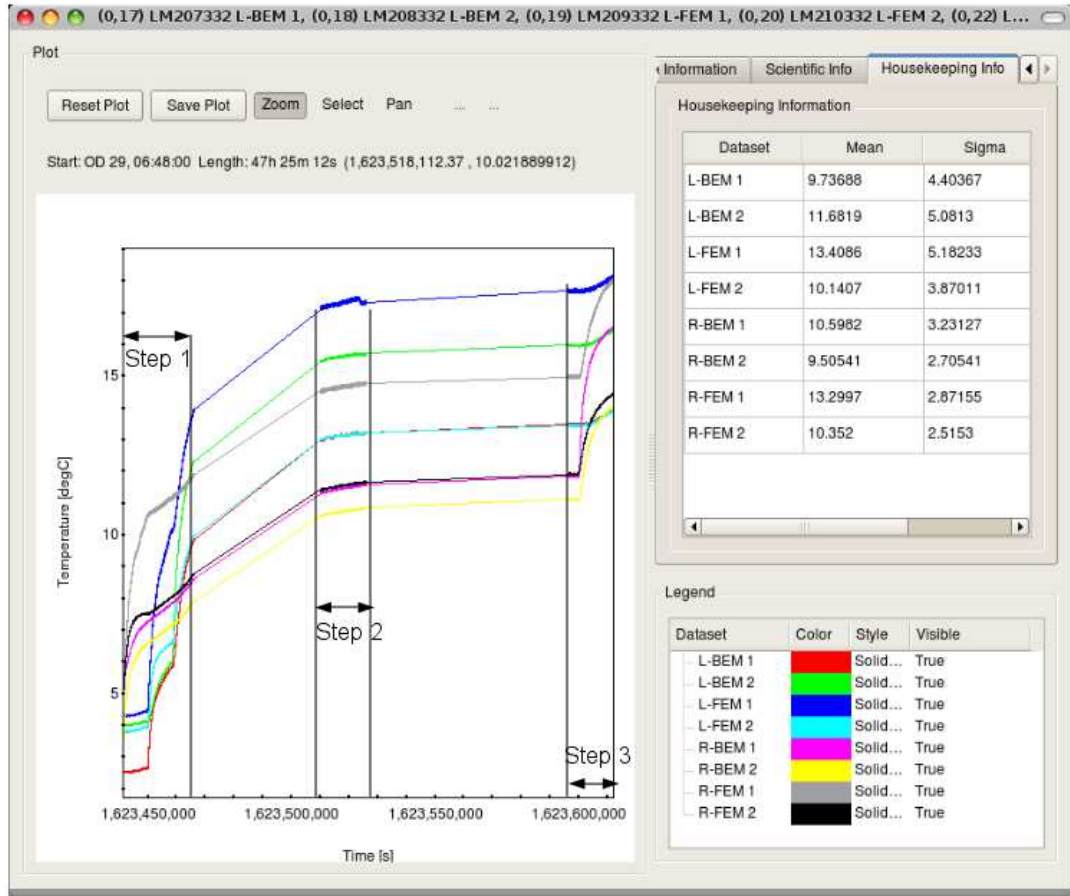


Figure 4 – BEU temperatures during the three CRYO-01 steps.

### 4.3.3 Results and Conclusions

During the three steps all LFI RCAs were tested and showed full functionality. Two anomalies, that were encountered and resolved, allowing full test recovery.

### 4.3.4 Non nominal features

- During step 1 an error in the procedure resulted in a wrong setting of the DAE offsets. This caused the signal of the RCA LFI21 to saturate. This anomaly was recovered by fixing the procedure, setting all the 44 offsets to 0 (maximum offset, about -2.5 V) and rerunning the procedure for LFI21 during the following OD.
- During the test packet loss in the real time telemetry was observed. This was caused by a problem (unidentified to date) in the “Channel A” server that routes the telemetry. The problem was solved (for this test) by switching to the redundant server “Channel B”.



### 4.3.5 Expected non idealities

RCA 28 showed the same behaviour as during ILT in THALES Milan (2006) and at SLT in CSL (2008): actually was once more clear that DAE capability to correctly tag sky and ref signal is lost when switching form the configuration A/C switching, B/D = 1, to the configuration B/D switching, A/C = 0.

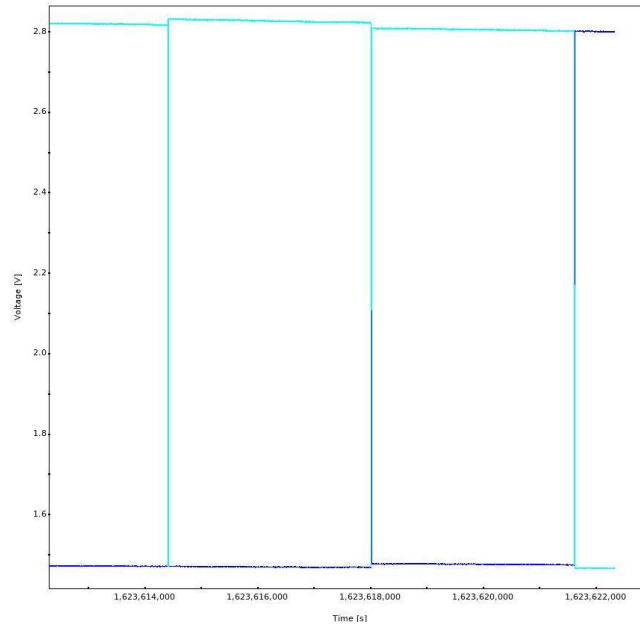


Figure 5 – signal swap in RCA28: sky and reference tags are swapped at the end of the test.

## 4.4 Data Analysis

### 4.4.1 Analysis of voltage output patterns

Analysis of the voltage output patterns during turn on revealed full functionality of all the LFI channels. The details of this analysis is reported in the following Annex documents:

- Annex 2: collection of voltage output patterns relative to the various switch on steps
- Annex 3: detailed quantitative report of drain currents and voltage outputs

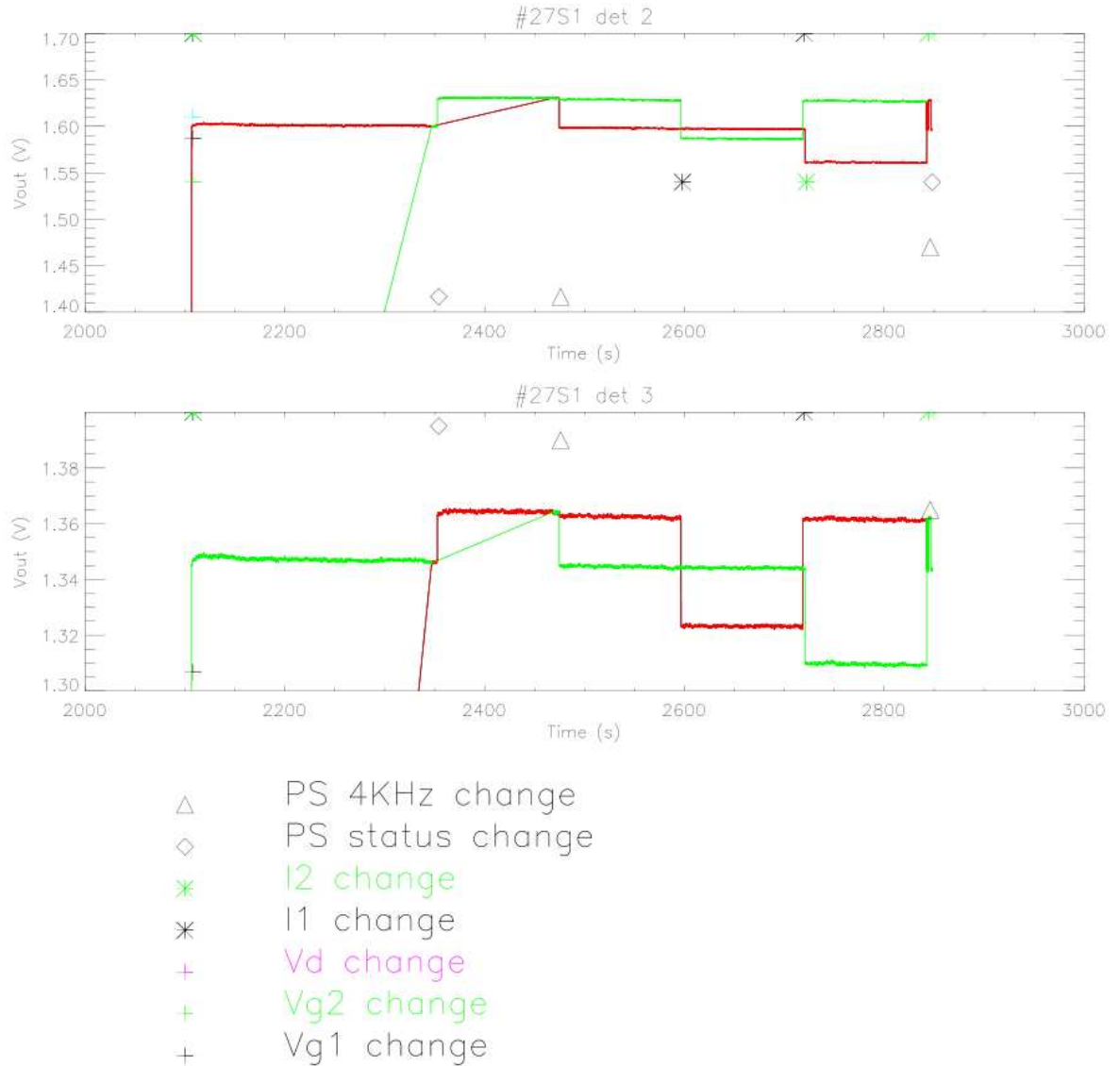


Figure 6 – Example of voltage output pattern during CRYO\_01.

#### 4.4.2 Comparison with CRYO 01 in CSL

This test was conducted in quite different conditions with respect to the same test in CSL. This is mostly because of the different duration of the test, here performed along three days instead of along 13 continuative hours as in CSL. It means that many temperatures, as the 4KRL temperature and BEM temperature were different, which makes a straight comparison of output voltages difficult.

FPU temperature, however, was similar (see Fig. 3): this allowed comparing drain currents between the two tests. Because  $I_d$  depends of the number of power groups and of ACAs that are on, they were recorded every time an ACA was biased.

A table containing drain currents for each ACA (recorded just after its switch on), for each RCA (recorded when just after the 4<sup>th</sup> ACAs was switched on) and for LFI (recorded after all 11 RCAs were on) was produced and compared with the same test performed in CSL (XXX\_0142, XXX\_0143, XXX\_0144, XXX\_0145). Comparison, reported in Table 2 shows in general a good agreement, indicating the full functionality of LNAs.

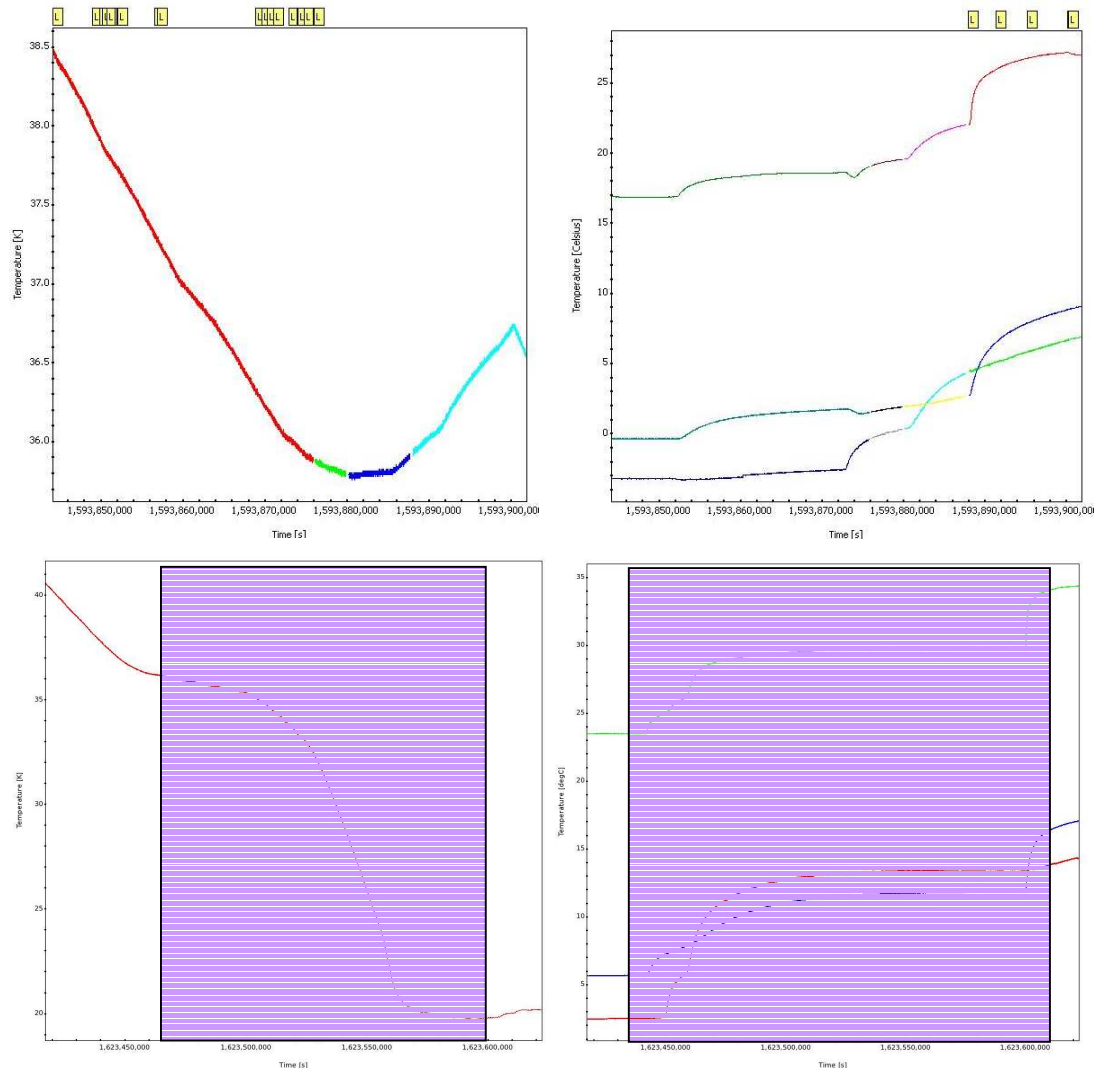


Figure 7 – CSL FPU and BEU temp against CPV



RCA #	Detector ID	SCOS Parameter	Measured ACA	MEASURED RCA	measured LFI	delta aca	delta rca	delta LFI	
CH27	00	00	LM051322	3.69	3.54	3.5	-18.45	-19.39	-20.51
	01	01	LM052322	7.84	7.8	7.8	0.13	0.00	2.60
	02	10	LM053322	8.54	8.53	8.5	0.00	0.35	2.38
	03	11	LM054322	8.66	8.69	8.7	0.00	0.35	2.33
CH24	04	00	LM055322	7.43	7.25	7.2	-0.54	2.09	2.11
	05 **	01	LM056322	10.18	10.13	10.2	<b>-77.13</b>	<b>-75.82</b>	<b>-74.85</b>
	06	10	LM057322	15.49	15.34	14.9	0.26	1.11	-0.87
	07	11	LM058322	10.71	10.7	10.5	1.03	0.94	0.00
CH21	08	00	LM059322	20	19.1	16.59	-0.15	1.05	-3.14
	09	01	LM060322	20.97	20.65	18.8	-1.23	-0.24	-4.06
	0A	10	LM061322	20.72	20.56	19.4	-0.05	0.29	2.19
	0B	11	LM062322	21.75	21.74	20.1	-1.14	-0.28	-2.31
CH22	0C	00	LM063322	15.8	15.45	15.4	-3.42	-1.54	2.30
	0D	01	LM064322	17.62	16.76	15	-2.24	-2.59	-7.69
	0E	10	LM065322	13.92	13.4	12.11	-2.90	-2.94	-7.09
	0F	11	LM066322	15.9	15.67	14.3	-0.63	-1.46	-3.44
CH23	10	00	LM067322	14.74	13.73	12.6	-2.81	0.22	-4.20
	11	01	LM068322	22.32	21.79	20.4	-0.80	0.18	-4.13
	12	10	LM069322	14.22	13.97	12.4	-3.32	-0.21	-8.12
	13	11	LM070322	11.84	11.84	11.3	-6.22	-3.00	-1.75
CH25	14	00	LM071322	12.56	12.15	12.4	-0.32	-0.41	3.28
	15	01	LM072322	10.6	9.8	10.2	5.13	0.00	5.03
	16	10	LM073322	11.3	11.2	11.4	-0.71	-0.53	2.67
	17	11	LM074322	12.1	12.1	12.1	-0.25	-0.17	1.67
CH28	18	00	LM075322	5 steps	9.45	9.4	DELTA 5steps	-0.53	-1.06
	19	01	LM076322		9.19	9.2		-0.11	0.00
	1A	10	LM077322		8.798	8.8		-0.02	0.00
	1B	11	LM078322		10.42	10.5		-0.29	0.96
CH20	1C	00	LM079322	19.64	18.14	18.1	-5.74	-9.75	-11.06
	1D	01	LM080322	14.7	14.07	13.6	-10.32	-8.38	-14.46
	1E	10	LM081322	21.56	21.18	20.8	-4.71	-4.70	-7.81
	1F	11	LM082322	20.93	20.93	20.5	-5.44	-5.44	-4.06
CH19	20	00	LM083322	20.41	19.98	17.6	-2.85	-1.59	-6.59
	21	01	LM084322	19.43	19.35	17	-5.85	-3.70	-6.82
	22	10	LM085322	18.6	18.84	16.7	-6.25	-2.93	-2.37
	23	11	LM086322	20.36	20.22	18.5	-4.04	-4.73	-6.79
CH18	24	00	LM087322	22.95	22.21	21	0.79	1.86	-3.51
	25	01	LM088322	18.66	16.01	13	20.96	11.28	-10.50
	26	10	LM089322	11.95	11.28	8.3	-24.91	30.44	-11.47
	27	11	LM090322	12.56	12.55	11.2	-5.20	4.48	-6.48
CH26	28	00	LM091322	13.12	12.74	12.8	7.35	7.83	10.70
	29	01	LM092322	11.56	11.3	11.4	-1.03	-0.88	2.67
	2A	10	LM093322	10.6	10.47	10.6	-1.78	-0.86	2.87
	2B	11	LM094322	13.41	13.4	13.6	-1.55	-1.70	1.48

Table 2 – drain current results (ACA switch on, RCA switch on, LFI switch on) from CRYO 01 test in CPV and comparison with the same test in CSL .

RCA 28 was switched on following the default ‘soft switch on’ procedure, foreseeing the gradual increasing of LNAs bias following a well defined order. Comparison with CSL, along the 5 steps of the procedure, is reported in Tab. 3

				step1	step2	step3	step5
CH28	18	00	LM075322	7.22	9.54	9.50	9.62
	19	01	LM076322	7.38	7.40	9.25	9.16
	1A	10	LM077322	0.00	0.00	0.00	9.08
	1B	11	LM078322	0.00	0.00	0.00	10.45

				step1	step2	step3	step5
DELTA 5steps	18	00	LM075322	-1.10	0.42	0.00	1.26
	19	01	LM076322	1.09	1.36	-0.54	-1.52
	1A	10	LM077322	0.00	0.00	0.00	2.00
	1B	11	LM078322	0.00	0.00	0.00	0.00

**Table 3 – Soft switch on of RCA 28 (Id) (the absolute values are reported in the top table and the comparison (percent variation w.r.t. CSL results) in the bottom table.**

Despite the different environmental conditions, acting on LNAs gain (FPU temperature) and on BEM Gain (DAE temperature), and despite no requirement was set on them, drain currents are in good agreement for almost all the ACAs, along the various phases of the test.

The only two cases showing a significant difference are ACA2 of RCA 24 and ACA1 of RCA27. This differences were expected as at the end of CRYO\_01 in CSL it was decided to change the switch-on biases of these two particular amplifiers.

#### 4.5 Conclusions and recommendations

The CRYO 01 test was successfully completed. The procedure, with the exception of a DAE offset change, corrected without any consequences for the test, was run as expected.

All the units under test show to be in good health and to respond as expected.

Results show a good agreement with the same test conducted in CSL (Summer 2008) during tests at satellite level, despite of the overall duration of the test (needed three DTCP days in CPV while in CSL it was performed continuously along 14 hrs) and the environmental conditions that were slightly different (FPU cooldown, BEU warmup, etc).

## 5 Appendix 1 – Test procedure

Step	Description	START REF.	DURATION	Time	RCA	YES	NO
5	CRYO1 (UM section 13.1.2.3)	0:00:00		6/11/2009 22:00:00			
5	RCA Activation (Power Group #1: RCA 18,26)	0:00:00	0:05:00	6/11/2009 22:05:00		yes	
	Initialise RCA 18 and 26	0:05:00	0:00:00	6/11/2009 22:10:00	18, 26		
	Set DAE Offset to 0 (FFh) (RCA18 and 26)	0:05:00	0:00:02	6/11/2009 22:10:00	18, 26	yes	
	Set DAE Gain to 1 (0h) (RCA18 and 26)	0:05:02	0:00:02	6/11/2009 22:10:02	18, 26	yes	
	Configure 5 RCA parameters (RCA18 and 26) to zero biases	0:05:04	0:00:06	6/11/2009 22:10:04	18, 26	yes	
	Disable A/C 4kHz (RCA18 and 26)	0:05:10	0:00:02	6/11/2009 22:10:10	18, 26	yes	
	Disable B/D 4kHz (RCA18 and 26)	0:05:12	0:00:02	6/11/2009 22:10:12	18, 26	yes	
	Set A/CP/S Status (0) (RCA18 and 26)	0:05:14	0:00:02	6/11/2009 22:10:14	18, 26	yes	
	Set B/DP/S Status (0) (RCA18 and 26)	0:05:16	0:00:02	6/11/2009 22:10:16	18, 26	yes	
5.01	Perform RCA 18 Activation	0:05:18	0:04:00	6/11/2009 22:10:18	18		
5.1.1	Set Cryo values on ACA1 RCA 18	0:09:18	0:00:06	6/11/2009 22:14:18	18	yes	
5.1.2	Set DAE Gain values ACA1 RCA 18	0:09:24	0:00:02	6/11/2009 22:14:24	18	yes	
5.1.3	Set DAE offset values ACA1 RCA 18	0:09:26	0:04:02	6/11/2009 22:14:26	18	yes	
5.1.5	SetPS status = 1 (A/C) RCA 18	0:13:28	0:00:02	6/11/2009 22:18:28	18	yes	
5.1.6	Acquire Data	0:13:30	0:02:00	6/11/2009 22:18:30	18		
5.1.7	Enable 4kHz (A/C) RCA 18	0:15:30	0:00:02	6/11/2009 22:20:30	18	yes	
5.1.8	Acquire Data	0:15:32	0:02:00	6/11/2009 22:20:32	18		
5.1.9	Set lswitch1 low value on ACA1 RCA 18	0:17:32	0:00:02	6/11/2009 22:22:32	18	yes	
5.1.10	Acquire Data	0:17:34	0:02:00	6/11/2009 22:22:34	18		
5.1.11	Set lswitch1 nominal value on ACA1 RCA 18	0:19:34	0:00:02	6/11/2009 22:24:34	18	yes	
5.1.12	Set lswitch2 low value on ACA1 RCA 18	0:19:36	0:00:02	6/11/2009 22:24:36	18	yes	
5.1.13	Acquire Data	0:19:38	0:02:00	6/11/2009 22:24:38	18		
5.1.14	Set lswitch2 nominal value on ACA1 RCA 18	0:21:38	0:00:02	6/11/2009 22:26:38	18	yes	
5.1.15	Disable 4kHz (A/C) RCA 18	0:21:40	0:00:02	6/11/2009 22:26:40	18	yes	
5.1.16	SetPS status = 0 (A/C) RCA 18	0:21:42	0:00:02	6/11/2009 22:26:42	18	yes	
5.1.17	Acquire Data	0:21:44	0:02:00	6/11/2009 22:26:44	18		



5.1.18	Set Cryo values on ACA2 RCA 18	0:23:44	0:00:06	6/11/2009 22:28:44	18	yes	
5.1.19	Set DAE Gain values ACA2 RCA 18	0:23:50	0:00:02	6/11/2009 22:28:50	18	yes	
5.1.20	Set DAE offset values ACA2 RCA 18	0:23:52	0:04:02	6/11/2009 22:28:52	18	yes	
5.1.21	SetPS status = 1 (B/D) RCA 18	0:27:54	0:00:02	6/11/2009 22:32:54	18	yes	
5.1.22	Acquire Data	0:27:56	0:02:00	6/11/2009 22:32:56	18		
5.1.23	Enable 4kHz (B/D) RCA 18	0:29:56	0:00:02	6/11/2009 22:34:56	18	yes	
5.1.24	Acquire Data	0:29:58	0:02:00	6/11/2009 22:34:58	18		
5.1.25	Set lswitch1 low value on ACA2 RCA 18	0:31:58	0:00:02	6/11/2009 22:36:58	18	yes	
5.1.26	Acquire Data	0:32:00	0:02:00	6/11/2009 22:37:00	18		
5.1.27	Set lswitch1 nominal value on ACA2 RCA 18	0:34:00	0:00:02	6/11/2009 22:39:00	18		
5.1.28	Set lswitch2 low value on ACA2 RCA 18	0:34:02	0:00:02	6/11/2009 22:39:02	18	yes	
5.1.29	Acquire Data	0:34:04	0:02:00	6/11/2009 22:39:04	18		
5.1.30	Set lswitch2 nominal value on ACA2 RCA 18	0:36:04	0:00:02	6/11/2009 22:41:04	18	yes	
5.1.31	Disable 4kHz (B/D) RCA 18	0:36:06	0:00:02	6/11/2009 22:41:06	18	yes	
5.1.32	SetPS status = 0 (B/D) RCA 18	0:36:08	0:00:02	6/11/2009 22:41:08	18	yes	
5.1.33	Acquire Data	0:36:10	0:02:00	6/11/2009 22:41:10	18		
5.1.34	Note: ACA1 and 2 of RCA 18 now set with Cryo values	0:38:10	0:00:00	6/11/2009 22:43:10	18		
5.1.35	Set Cryo values on ACA3 RCA 18	0:38:10	0:00:06	6/11/2009 22:43:10	18	yes	
5.1.36	Set DAE Gain values ACA3 RCA 18	0:38:16	0:00:02	6/11/2009 22:43:16	18	yes	
5.1.37	Set DAE offset values ACA3 RCA 18	0:38:18	0:04:02	6/11/2009 22:43:18	18	yes	
5.1.39	SetPS status = 1 (A/C) RCA 18	0:42:20	0:00:02	6/11/2009 22:47:20	18	yes	
5.1.40	Acquire Data	0:42:22	0:02:00	6/11/2009 22:47:22	18		
5.1.41	Enable 4kHz (A/C) RCA 18	0:44:22	0:00:02	6/11/2009 22:49:22	18	yes	
5.1.42	Acquire Data	0:44:24	0:02:00	6/11/2009 22:49:24	18		
5.1.43	Set lswitch1 low value on ACA3 RCA 18	0:46:24	0:00:02	6/11/2009 22:51:24	18	yes	
5.1.44	Acquire Data	0:46:26	0:02:00	6/11/2009 22:51:26	18		
5.1.45	Set lswitch1 nominal value on ACA3 RCA 18	0:48:26	0:00:02	6/11/2009 22:53:26	18	yes	
5.1.46	Set lswitch2 low value on ACA3 RCA 18	0:48:28	0:00:02	6/11/2009 22:53:28	18	yes	
5.1.47	Acquire Data	0:48:30	0:02:00	6/11/2009 22:53:30	18		
5.1.48	Set lswitch2 nominal value on ACA3 RCA 18	0:50:30	0:00:02	6/11/2009 22:55:30	18	yes	



5.1.49	Disable 4kHz (A/C) RCA 18	0:50:32	0:00:02	6/11/2009 22:55:32	18	yes	
5.1.50	SetPS status = 0 (A/C) RCA 18	0:50:34	0:00:02	6/11/2009 22:55:34	18	yes	
5.1.51	Acquire Data	0:50:36	0:02:00	6/11/2009 22:55:36	18		
5.1.52	Set Cryo values on ACA4 RCA 18	0:52:36	0:00:06	6/11/2009 22:57:36	18	yes	
5.1.53	Set DAE Gain values ACA4 RCA 18	0:52:42	0:00:02	6/11/2009 22:57:42	18	yes	
5.1.54	Set DAE offset values ACA4 RCA 18	0:52:44	0:04:02	6/11/2009 22:57:44	18	yes	
5.1.56	SetPS status = 1 (B/D) RCA 18	0:56:46	0:00:02	6/11/2009 23:01:46	18	yes	
5.1.57	Acquire Data	0:56:48	0:02:00	6/11/2009 23:01:48	18		
5.1.58	Enable 4kHz (B/D) RCA 18	0:58:48	0:00:02	6/11/2009 23:03:48	18	yes	
5.1.59	Acquire Data	0:58:50	0:02:00	6/11/2009 23:03:50	18		
5.1.60	Set lswitch1 low value on ACA4 RCA 18	1:00:50	0:00:02	6/11/2009 23:05:50	18	yes	
5.1.61	Acquire Data	1:00:52	0:02:00	6/11/2009 23:05:52	18		
5.1.62	Set lswitch1 nominal value on ACA4 RCA 18	1:02:52	0:00:02	6/11/2009 23:07:52	18	yes	
5.1.63	Set lswitch2 low value on ACA4 RCA 18	1:02:54	0:00:02	6/11/2009 23:07:54	18	yes	
5.1.64	Acquire Data	1:02:56	0:02:00	6/11/2009 23:07:56	18		
5.1.65	Set lswitch2 nominal value on ACA4 RCA 18	1:04:56	0:00:02	6/11/2009 23:09:56	18	yes	
5.1.66	Disable 4kHz (B/D) RCA 18	1:04:58	0:00:02	6/11/2009 23:09:58	18	yes	
5.1.67	SetPS status = 0 (B/D) RCA 18	1:05:00	0:00:02	6/11/2009 23:10:00	18	yes	
5.1.68	Acquire Data	1:05:02	0:02:00	6/11/2009 23:10:02	18		
	Completion of RCA 18 Activation - Cryo values applied	1:07:02	0:05:00	6/11/2009 23:12:02	18		
		1:12:02	0:00:00	6/11/2009 23:17:02			
	Perform RCA 26 Activation	1:12:02	0:04:00	6/11/2009 23:17:02	26		
5.2.1	Set Cryo values on ACA1 RCA 26	1:16:02	0:00:06	6/11/2009 23:21:02	26	yes	
5.2.2	Set DAE Gain values ACA1 RCA 26	1:16:08	0:00:02	6/11/2009 23:21:08	26	yes	
5.2.3	Set DAE offset values ACA1 RCA 26	1:16:10	0:04:02	6/11/2009 23:21:10	26	yes	
5.2.5	SetPS status = 1 (A/C) RCA 26	1:20:12	0:00:02	6/11/2009 23:25:12	26	yes	
5.2.6	Acquire Data	1:20:14	0:02:00	6/11/2009 23:25:14	26		
5.2.7	Enable 4kHz (A/C) RCA 26	1:22:14	0:00:02	6/11/2009 23:27:14	26	yes	
5.2.8	Acquire Data	1:22:16	0:02:00	6/11/2009 23:27:16	26		
5.2.9	Set lswitch1 low value on ACA1 RCA 26	1:24:16	0:00:02	6/11/2009 23:29:16	26	yes	





5.2.10	Acquire Data	1:24:18	0:02:00	6/11/2009 23:29:18	26		
5.2.11	Set lswitch1 nominal value on ACA1 RCA 26	1:26:18	0:00:02	6/11/2009 23:31:18	26	yes	
5.2.12	Set lswitch2 low value on ACA1 RCA 26	1:26:20	0:00:02	6/11/2009 23:31:20	26	yes	
5.2.13	Acquire Data	1:26:22	0:02:00	6/11/2009 23:31:22	26		
5.2.14	Set lswitch2 nominal value on ACA1 RCA 26	1:28:22	0:00:02	6/11/2009 23:33:22	26	yes	
5.2.15	Disable 4kHz (A/C) RCA 26	1:28:24	0:00:02	6/11/2009 23:33:24	26	yes	
5.2.16	SetPS status = 0 (A/C) RCA 26	1:28:26	0:00:02	6/11/2009 23:33:26	26	yes	
5.2.17	Acquire Data	1:28:28	0:02:00	6/11/2009 23:33:28	26		
5.2.18	Set Cryo values on ACA2 RCA 26	1:30:28	0:00:06	6/11/2009 23:35:28	26	yes	
5.2.19	Set DAE Gain values ACA2 RCA 26	1:30:34	0:00:02	6/11/2009 23:35:34	26	yes	
5.2.20	Set DAE offset values ACA2 RCA 26	1:30:36	0:04:02	6/11/2009 23:35:36	26	yes	
5.2.22	SetPS status = 1 (B/D) RCA 26	1:34:38	0:00:02	6/11/2009 23:39:38	26	yes	
5.2.23	Acquire Data	1:34:40	0:02:00	6/11/2009 23:39:40	26		
5.2.24	Enable 4kHz (B/D) RCA 26	1:36:40	0:00:02	6/11/2009 23:41:40	26	yes	
5.2.25	Acquire Data	1:36:42	0:02:00	6/11/2009 23:41:42	26		
5.2.26	Set lswitch1 low value on ACA2 RCA 26	1:38:42	0:00:02	6/11/2009 23:43:42	26	yes	
5.2.27	Acquire Data	1:38:44	0:02:00	6/11/2009 23:43:44	26		
5.2.28	Set lswitch1 nominal value on ACA2 RCA 26	1:40:44	0:00:02	6/11/2009 23:45:44	26	yes	
5.2.29	Set lswitch2 low value on ACA2 RCA 26	1:40:46	0:00:02	6/11/2009 23:45:46	26	yes	
5.2.30	Acquire Data	1:40:48	0:02:00	6/11/2009 23:45:48	26		
5.2.31	Set lswitch2 nominal value on ACA2 RCA 26	1:42:48	0:00:02	6/11/2009 23:47:48	26	yes	
5.2.32	Disable 4kHz (B/D) RCA 26	1:42:50	0:00:02	6/11/2009 23:47:50	26	yes	
5.2.33	SetPS status = 0 (B/D) RCA 26	1:42:52	0:00:02	6/11/2009 23:47:52	26	yes	
5.2.34	Acquire Data	1:42:54	0:02:00	6/11/2009 23:47:54	26		
	Note: ACA1 and 2 of RCA 26 now set with Cryo values	1:44:54	0:00:00	6/11/2009 23:49:54	26		
5.2.35	Set Cryo values on ACA3 RCA 26	1:44:54	0:00:06	6/11/2009 23:49:54	26	yes	
5.2.36	Set DAE Gain values ACA3 RCA 26	1:45:00	0:00:02	6/11/2009 23:50:00	26	yes	
5.2.37	Set DAE offset values ACA3 RCA 26	1:45:02	0:04:02	6/11/2009 23:50:02	26	yes	
5.2.39	SetPS status = 1 (A/C) RCA 26	1:49:04	0:00:02	6/11/2009 23:54:04	26	yes	
5.2.40	Acquire Data	1:49:06	0:02:00	6/11/2009 23:54:06	26		



5.2.41	Enable 4kHz (A/C) RCA 26	1:51:06	0:00:02	6/11/2009 23:56:06	26	yes	
5.2.42	Acquire Data	1:51:08	0:02:00	6/11/2009 23:56:08	26		
5.2.43	Set lswitch1 low value on ACA3 RCA 26	1:53:08	0:00:02	6/11/2009 23:58:08	26	yes	
5.2.44	Acquire Data	1:53:10	0:02:00	6/11/2009 23:58:10	26		
5.2.45	Set lswitch1 nominal value on ACA3 RCA 26	1:55:10	0:00:02	6/12/2009 0:00:10	26	yes	
5.2.46	Set lswitch2 low value on ACA3 RCA 26	1:55:12	0:00:02	6/12/2009 0:00:12	26	yes	
5.2.47	Acquire Data	1:55:14	0:02:00	6/12/2009 0:00:14	26		
5.2.48	Set lswitch2 nominal value on ACA3 RCA 26	1:57:14	0:00:02	6/12/2009 0:02:14	26	yes	
5.2.49	Disable 4kHz (A/C) RCA 26	1:57:16	0:00:02	6/12/2009 0:02:16	26	yes	
5.2.50	SetPS status = 0 (A/C) RCA 26	1:57:18	0:00:02	6/12/2009 0:02:18	26	yes	
5.2.51	Acquire Data	1:57:20	0:02:00	6/12/2009 0:02:20	26		
5.2.52	Set Cryo values on ACA4 RCA 26	1:59:20	0:00:06	6/12/2009 0:04:20	26	yes	
5.2.53	Set DAE Gain values ACA4 RCA 26	1:59:26	0:00:02	6/12/2009 0:04:26	26	yes	
5.2.54	Set DAE offset values ACA4 RCA 26	1:59:28	0:04:02	6/12/2009 0:04:28	26	yes	
5.2.56	SetPS status = 1 (B/D) RCA 26	2:03:30	0:00:02	6/12/2009 0:08:30	26	yes	
5.2.57	Acquire Data	2:03:32	0:02:00	6/12/2009 0:08:32	26		
5.2.58	Enable 4kHz (B/D) RCA 26	2:05:32	0:00:02	6/12/2009 0:10:32	26	yes	
5.2.59	Acquire Data	2:05:34	0:02:00	6/12/2009 0:10:34	26		
5.2.60	Set lswitch1 low value on ACA4 RCA 26	2:07:34	0:00:02	6/12/2009 0:12:34	26	yes	
5.2.61	Acquire Data	2:07:36	0:02:00	6/12/2009 0:12:36	26		
5.2.62	Set lswitch1 nominal value on ACA4 RCA 26	2:09:36	0:00:02	6/12/2009 0:14:36	26	yes	
5.2.63	Set lswitch2 low value on ACA4 RCA 26	2:09:38	0:00:02	6/12/2009 0:14:38	26	yes	
5.2.64	Acquire Data	2:09:40	0:02:00	6/12/2009 0:14:40	26		
5.2.65	Set lswitch2 nominal value on ACA4 RCA 26	2:11:40	0:00:02	6/12/2009 0:16:40	26	yes	
5.2.66	Disable 4kHz (B/D) RCA 26	2:11:42	0:00:02	6/12/2009 0:16:42	26	yes	
5.2.67	SetPS status = 0 (B/D) RCA 26	2:11:44	0:00:02	6/12/2009 0:16:44	26	yes	
5.2.68	Acquire Data	2:11:46	0:02:00	6/12/2009 0:16:46	26		
	Completion of RCA 26 Activation - Cryo values applied	2:13:46	0:05:00	6/12/2009 0:18:46	26		
		2:18:46	0:00:00	6/12/2009 0:23:46			
5.3	RCA Activation (Power Group #4: RCA 23,25)	0:00:00	0:05:00	6/12/2009 0:23:46	23, 25	yes	



	Initialise RCA 23 and 25	0:05:00	0:00:00	6/12/2009 0:28:46	23, 25		
	Set DAE Offset to 0 (FFh) (RCA23 and 25)	0:05:00	0:00:02	6/12/2009 0:28:46	23, 25	yes	
	Set DAE Gain to 1 (0h) (RCA23 and 25)	0:05:02	0:00:02	6/12/2009 0:28:48	23, 25	yes	
	Configure 5 RCA parameters (RCA23 and 25)	0:05:04	0:00:06	6/12/2009 0:28:50	23, 25	yes	
	Disable A/C 4kHz (RCA23 and 25)	0:05:10	0:00:02	6/12/2009 0:28:56	23, 25	yes	
	Disable B/D 4kHz (RCA23 and 25)	0:05:12	0:00:02	6/12/2009 0:28:58	23, 25	yes	
	Set A/CP/S Status (0) (RCA23 and 25)	0:05:14	0:00:02	6/12/2009 0:29:00	23, 25	yes	
	Set B/DP/S Status (0) (RCA23 and 25)	0:05:16	0:00:02	6/12/2009 0:29:02	23, 25	yes	
5.3.1	Perform RCA 23 Activation	0:05:18	0:04:00	6/12/2009 0:29:04	23		
5.3.2	Set Cryo values on ACA1 RCA 23	0:09:18	0:00:06	6/12/2009 0:33:04	23	yes	
5.3.3	Set DAE Gain values ACA1 RCA 23	0:09:24	0:00:02	6/12/2009 0:33:10	23	yes	
5.3.4	Set DAE offset values ACA1 RCA 23	0:09:26	0:04:02	6/12/2009 0:33:12	23	yes	
5.3.6	SetPS status = 1 (A/C) RCA 23	0:13:28	0:00:02	6/12/2009 0:37:14	23	yes	
5.3.7	Acquire Data	0:13:30	0:02:00	6/12/2009 0:37:16	23		
5.3.8	Enable 4kHz (A/C) RCA 23	0:15:30	0:00:02	6/12/2009 0:39:16	23	yes	
5.3.9	Acquire Data	0:15:32	0:02:00	6/12/2009 0:39:18	23		
5.3.10	Set lswitch1 low value on ACA1 RCA 23	0:17:32	0:00:02	6/12/2009 0:41:18	23	yes	
5.3.11	Acquire Data	0:17:34	0:02:00	6/12/2009 0:41:20	23		
5.3.12	Set lswitch1 nominal value on ACA1 RCA 23	0:19:34	0:00:02	6/12/2009 0:43:20	23	yes	
5.3.13	Set lswitch2 low value on ACA1 RCA 23	0:19:36	0:00:02	6/12/2009 0:43:22	23	yes	
5.3.14	Acquire Data	0:19:38	0:02:00	6/12/2009 0:43:24	23		
5.3.15	Set lswitch2 nominal value on ACA1 RCA 23	0:21:38	0:00:02	6/12/2009 0:45:24	23	yes	
5.3.16	Disable 4kHz (A/C) RCA 23	0:21:40	0:00:02	6/12/2009 0:45:26	23	yes	
5.3.17	SetPS status = 0 (A/C) RCA 23	0:21:42	0:00:02	6/12/2009 0:45:28	23	yes	
5.3.18	Acquire Data	0:21:44	0:02:00	6/12/2009 0:45:30	23		
5.3.19	Set Cryo values on ACA2 RCA 23	0:23:44	0:00:06	6/12/2009 0:47:30	23	yes	
5.3.20	Set DAE Gain values ACA2 RCA 23	0:23:50	0:00:02	6/12/2009 0:47:36	23	yes	
5.3.21	Set DAE offset values ACA2 RCA 23	0:23:52	0:04:02	6/12/2009 0:47:38	23	yes	
5.3.23	SetPS status = 1 (B/D) RCA 23	0:27:54	0:00:02	6/12/2009 0:51:40	23	yes	



5.3.24	Acquire Data	0:27:56	0:02:00	6/12/2009 0:51:42	23		
5.3.25	Enable 4kHz (B/D) RCA 23	0:29:56	0:00:02	6/12/2009 0:53:42	23	yes	
5.3.26	Acquire Data	0:29:58	0:02:00	6/12/2009 0:53:44	23		
5.3.27	Set Iswitch1 low value on ACA2 RCA 23	0:31:58	0:00:02	6/12/2009 0:55:44	23	yes	
5.3.28	Acquire Data	0:32:00	0:02:00	6/12/2009 0:55:46	23		
5.3.29	Set Iswitch1 nominal value on ACA2 RCA 23	0:34:00	0:00:02	6/12/2009 0:57:46	23	yes	
5.3.30	Set Iswitch2 low value on ACA2 RCA 23	0:34:02	0:00:02	6/12/2009 0:57:48	23	yes	
5.3.31	Acquire Data	0:34:04	0:02:00	6/12/2009 0:57:50	23		
5.3.32	Set Iswitch2 nominal value on ACA2 RCA 23	0:36:04	0:00:02	6/12/2009 0:59:50	23	yes	
5.3.33	Disable 4kHz (B/D) RCA 23	0:36:06	0:00:02	6/12/2009 0:59:52	23	yes	
5.3.34	SetPS status = 0 (B/D) RCA 23	0:36:08	0:00:02	6/12/2009 0:59:54	23	yes	
5.3.35	Acquire Data	0:36:10	0:02:00	6/12/2009 0:59:56	23	yes	
	Note: ACA1 and 2 of RCA 23 now set with Cryo values	0:38:10	0:00:00	6/12/2009 1:01:56	23		
5.3.36	Set Cryo values on ACA3 RCA 23	0:38:10	0:00:06	6/12/2009 1:01:56	23	yes	
5.3.37	Set DAE Gain values ACA3 RCA 23	0:38:16	0:00:02	6/12/2009 1:02:02	23	yes	
5.3.38	Set DAE offset values ACA3 RCA 23	0:38:18	0:04:02	6/12/2009 1:02:04	23	yes	
5.3.40	SetPS status = 1 (A/C) RCA 23	0:42:20	0:00:02	6/12/2009 1:06:06	23	yes	
5.3.41	Acquire Data	0:42:22	0:02:00	6/12/2009 1:06:08	23		
5.3.42	Enable 4kHz (A/C) RCA 23	0:44:22	0:00:02	6/12/2009 1:08:08	23	yes	
5.3.43	Acquire Data	0:44:24	0:02:00	6/12/2009 1:08:10	23		
5.3.44	Set Iswitch1 low value on ACA3 RCA 23	0:46:24	0:00:02	6/12/2009 1:10:10	23	yes	
5.3.45	Acquire Data	0:46:26	0:02:00	6/12/2009 1:10:12	23		
5.3.46	Set Iswitch1 nominal value on ACA3 RCA 23	0:48:26	0:00:02	6/12/2009 1:12:12	23	yes	
5.3.47	Set Iswitch2 low value on ACA3 RCA 23	0:48:28	0:00:02	6/12/2009 1:12:14	23	yes	
5.3.48	Acquire Data	0:48:30	0:02:00	6/12/2009 1:12:16	23		
5.3.49	Set Iswitch2 nominal value on ACA3 RCA 23	0:50:30	0:00:02	6/12/2009 1:14:16	23	yes	
5.3.50	Disable 4kHz (A/C) RCA 23	0:50:32	0:00:02	6/12/2009 1:14:18	23	yes	
5.3.51	SetPS status = 0 (A/C) RCA 23	0:50:34	0:00:02	6/12/2009 1:14:20	23	yes	
5.3.52	Acquire Data	0:50:36	0:02:00	6/12/2009 1:14:22	23		
5.3.53	Set Cryo values on ACA4 RCA 23	0:52:36	0:00:06	6/12/2009 1:16:22	23	yes	



5.3.54	Set DAE Gain values ACA4 RCA 23	0:52:42	0:00:02	6/12/2009 1:16:28	23	yes	
5.3.55	Set DAE offset values ACA4 RCA 23	0:52:44	0:04:02	6/12/2009 1:16:30	23	yes	
5.3.57	SetPS status = 1 (B/D) RCA 23	0:56:46	0:00:02	6/12/2009 1:20:32	23	yes	
5.3.58	Acquire Data	0:56:48	0:02:00	6/12/2009 1:20:34	23		
5.3.59	Enable 4kHz (B/D) RCA 23	0:58:48	0:00:02	6/12/2009 1:22:34	23	yes	
5.3.60	Acquire Data	0:58:50	0:02:00	6/12/2009 1:22:36	23		
5.3.61	Set lswitch1 low value on ACA4 RCA 23	1:00:50	0:00:02	6/12/2009 1:24:36	23	yes	
5.3.62	Acquire Data	1:00:52	0:02:00	6/12/2009 1:24:38	23		
5.3.63	Set lswitch1 nominal value on ACA4 RCA 23	1:02:52	0:00:02	6/12/2009 1:26:38	23	yes	
5.3.64	Set lswitch2 low value on ACA4 RCA 23	1:02:54	0:00:02	6/12/2009 1:26:40	23	yes	
5.3.65	Acquire Data	1:02:56	0:02:00	6/12/2009 1:26:42	23		
5.3.66	Set lswitch2 nominal value on ACA4 RCA 23	1:04:56	0:00:02	6/12/2009 1:28:42	23	yes	
5.3.67	Disable 4kHz (B/D) RCA 23	1:04:58	0:00:02	6/12/2009 1:28:44	23	yes	
5.3.68	SetPS status = 0 (B/D) RCA 23	1:05:00	0:00:02	6/12/2009 1:28:46	23	yes	
5.3.69	Acquire Data	1:05:02	0:02:00	6/12/2009 1:28:48	23		
	Completion of RCA 23 Activation - Cryo values applied	1:07:02	0:05:00	6/12/2009 1:30:48	23		
		1:12:02	0:00:00	6/12/2009 1:35:48			
5.4.1	Perform RCA 25 Activation	1:12:02	0:04:00	6/12/2009 1:35:48	25		
5.4.2	Set Cryo values on ACA1 RCA 25	1:16:02	0:00:06	6/12/2009 1:39:48	25	yes	
5.4.3	Set DAE Gain values ACA1 RCA 25	1:16:08	0:00:02	6/12/2009 1:39:54	25	yes	
5.4.4	Set DAE offset values ACA1 RCA 25	1:16:10	0:04:02	6/12/2009 1:39:56	25	yes	
5.4.6	SetPS status = 1 (A/C) RCA 25	1:20:12	0:00:02	6/12/2009 1:43:58	25	yes	
5.4.7	Acquire Data	1:20:14	0:02:00	6/12/2009 1:44:00	25		
5.4.8	Enable 4kHz (A/C) RCA 25	1:22:14	0:00:02	6/12/2009 1:46:00	25	yes	
5.4.9	Acquire Data	1:22:16	0:02:00	6/12/2009 1:46:02	25		
5.4.10	Set lswitch1 low value on ACA1 RCA 25	1:24:16	0:00:02	6/12/2009 1:48:02	25	yes	
5.4.11	Acquire Data	1:24:18	0:02:00	6/12/2009 1:48:04	25		
5.4.12	Set lswitch1 nominal value on ACA1 RCA 25	1:26:18	0:00:02	6/12/2009 1:50:04	25	yes	
5.4.13	Set lswitch2 low value on ACA1 RCA 25	1:26:20	0:00:02	6/12/2009 1:50:06	25	yes	
5.4.14	Acquire Data	1:26:22	0:02:00	6/12/2009 1:50:08	25		



5.4.15	Set lswitch2 nominal value on ACA1 RCA 25	1:28:22	0:00:02	6/12/2009 1:52:08	25	yes	
5.4.16	Disable 4kHz (A/C) RCA 25	1:28:24	0:00:02	6/12/2009 1:52:10	25	yes	
5.4.17	SetPS status = 0 (A/C) RCA 25	1:28:26	0:00:02	6/12/2009 1:52:12	25	yes	
5.4.18	Acquire Data	1:28:28	0:02:00	6/12/2009 1:52:14	25		
5.4.19	Set Cryo values on ACA2 RCA 25	1:30:28	0:00:06	6/12/2009 1:54:14	25	yes	
5.4.20	Set DAE Gain values ACA2 RCA 25	1:30:34	0:00:02	6/12/2009 1:54:20	25	yes	
5.4.21	Set DAE offset values ACA2 RCA 25	1:30:36	0:04:02	6/12/2009 1:54:22	25	yes	
5.4.23	SetPS status = 1 (B/D) RCA 25	1:34:38	0:00:02	6/12/2009 1:58:24	25	yes	
5.4.24	Acquire Data	1:34:40	0:02:00	6/12/2009 1:58:26	25		
5.4.25	Enable 4kHz (B/D) RCA 25	1:36:40	0:00:02	6/12/2009 2:00:26	25	yes	
5.4.26	Acquire Data	1:36:42	0:02:00	6/12/2009 2:00:28	25		
5.4.27	Set lswitch1 low value on ACA2 RCA 25	1:38:42	0:00:02	6/12/2009 2:02:28	25	yes	
5.4.28	Acquire Data	1:38:44	0:02:00	6/12/2009 2:02:30	25		
5.4.29	Set lswitch1 nominal value on ACA2 RCA 25	1:40:44	0:00:02	6/12/2009 2:04:30	25	yes	
5.4.30	Set lswitch2 low value on ACA2 RCA 25	1:40:46	0:00:02	6/12/2009 2:04:32	25	yes	
5.4.31	Acquire Data	1:40:48	0:02:00	6/12/2009 2:04:34	25		
5.4.32	Set lswitch2 nominal value on ACA2 RCA 25	1:42:48	0:00:02	6/12/2009 2:06:34	25	yes	
5.4.33	Disable 4kHz (B/D) RCA 25	1:42:50	0:00:02	6/12/2009 2:06:36	25	yes	
5.4.34	SetPS status = 0 (B/D) RCA 25	1:42:52	0:00:02	6/12/2009 2:06:38	25	yes	
5.4.35	Acquire Data	1:42:54	0:02:00	6/12/2009 2:06:40	25		
	Note: ACA1 and 2 of RCA 25 now set with Cryo values	1:44:54	0:00:00	6/12/2009 2:08:40	25		
5.4.36	Set Cryo values on ACA3 RCA 25	1:44:54	0:00:06	6/12/2009 2:08:40	25	yes	
5.4.37	Set DAE Gain values ACA3 RCA 25	1:45:00	0:00:02	6/12/2009 2:08:46	25	yes	
5.4.38	Set DAE offset values ACA3 RCA 25	1:45:02	0:04:02	6/12/2009 2:08:48	25	yes	
5.4.40	SetPS status = 1 (A/C) RCA 25	1:49:04	0:00:02	6/12/2009 2:12:50	25	yes	
5.4.41	Acquire Data	1:49:06	0:02:00	6/12/2009 2:12:52	25		
5.4.42	Enable 4kHz (A/C) RCA 25	1:51:06	0:00:02	6/12/2009 2:14:52	25	yes	
5.4.43	Acquire Data	1:51:08	0:02:00	6/12/2009 2:14:54	25		
5.4.44	Set lswitch1 low value on ACA3 RCA 25	1:53:08	0:00:02	6/12/2009 2:16:54	25	yes	
5.4.45	Acquire Data	1:53:10	0:02:00	6/12/2009 2:16:56	25		





5.4.46	Set lswitch1 nominal value on ACA3 RCA 25	1:55:10	0:00:02	6/12/2009 2:18:56	25	yes	
5.4.47	Set lswitch2 low value on ACA3 RCA 25	1:55:12	0:00:02	6/12/2009 2:18:58	25	yes	
5.4.48	Acquire Data	1:55:14	0:02:00	6/12/2009 2:19:00	25		
5.4.49	Set lswitch2 nominal value on ACA3 RCA 25	1:57:14	0:00:02	6/12/2009 2:21:00	25	yes	
5.4.50	Disable 4kHz (A/C) RCA 25	1:57:16	0:00:02	6/12/2009 2:21:02	25	yes	
5.4.51	SetPS status = 0 (A/C) RCA 25	1:57:18	0:00:02	6/12/2009 2:21:04	25	yes	
5.4.52	Acquire Data	1:57:20	0:02:00	6/12/2009 2:21:06	25		
5.4.53	Set Cryo values on ACA4 RCA 25	1:59:20	0:00:06	6/12/2009 2:23:06	25	yes	
5.4.54	Set DAE Gain values ACA4 RCA 25	1:59:26	0:00:02	6/12/2009 2:23:12	25	yes	
5.4.55	Set DAE offset values ACA4 RCA 25	1:59:28	0:04:02	6/12/2009 2:23:14	25	yes	
5.4.57	SetPS status = 1 (B/D) RCA 25	2:03:30	0:00:02	6/12/2009 2:27:16	25		
5.4.58	Acquire Data	2:03:32	0:02:00	6/12/2009 2:27:18	25		
5.4.59	Enable 4kHz (B/D) RCA 25	2:05:32	0:00:02	6/12/2009 2:29:18	25	yes	
5.4.60	Acquire Data	2:05:34	0:02:00	6/12/2009 2:29:20	25		
5.4.61	Set lswitch1 low value on ACA4 RCA 25	2:07:34	0:00:02	6/12/2009 2:31:20	25	yes	
5.4.62	Acquire Data	2:07:36	0:02:00	6/12/2009 2:31:22	25		
5.4.63	Set lswitch1 nominal value on ACA4 RCA 25	2:09:36	0:00:02	6/12/2009 2:33:22	25	yes	
5.4.64	Set lswitch2 low value on ACA4 RCA 25	2:09:38	0:00:02	6/12/2009 2:33:24	25	yes	
5.4.65	Acquire Data	2:09:40	0:02:00	6/12/2009 2:33:26	25		
5.4.66	Set lswitch2 nominal value on ACA4 RCA 25	2:11:40	0:00:02	6/12/2009 2:35:26	25	yes	
5.4.67	Disable 4kHz (B/D) RCA 25	2:11:42	0:00:02	6/12/2009 2:35:28	25	yes	
5.4.68	SetPS status = 0 (B/D) RCA 25	2:11:44	0:00:02	6/12/2009 2:35:30	25	yes	
5.4.69	Acquire Data	2:11:46	0:02:00	6/12/2009 2:35:32	25		
	Completion of RCA 25 Activation - Cryo values applied	2:13:46	0:05:00	6/12/2009 2:37:32	25		
		2:18:46	0:00:00	6/12/2009 2:42:32			
5.5	RCA Activation (Power Group #3: RCA 21, 22, 24, 27)	0:00:00	0:05:00	6/12/2009 2:42:32	21,22,24,27	yes	
	Initialise RCA 21, 22, 24, 27	0:05:00	0:00:00	6/12/2009 2:47:32	21,22,24,27		
	Set DAE Offset to 0 (FFh) (RCA21,22,24,27)	0:05:00	0:00:02	6/12/2009 2:47:32	21,22,24,27		no
	Set DAE Gain to 1 (0h)	0:05:02	0:00:02	6/12/2009 2:47:34	21,22,24,27		no



	(RCA21,22,24,27)	0:05:04	0:00:00	6/12/2009 2:47:36	21,22,24,27		
	Configure 5 RCA parameters (RCA21,22,24,27)	0:05:04	0:00:06	6/12/2009 20:40:00	21,22,24,27	yes	
	Disable A/C 4kHz (RCA21,22,24,27)	0:05:10	0:00:02	6/12/2009 20:40:06	21,22,24,27	yes	
	Disable B/D 4kHz (RCA21,22,24,27)	0:05:12	0:00:02	6/12/2009 20:40:08	21,22,24,27	yes	
	Set A/CP/S Status (0) (RCA21,22,24,27)	0:05:14	0:00:02	6/12/2009 20:40:10	21,22,24,27	yes	
	Set B/DP/S Status (0) (RCA21,22,24,27)	0:05:16	0:00:02	6/12/2009 20:40:12	21,22,24,27	yes	
5.5.1	Perform RCA 21 Activation	0:05:18	0:04:00	6/12/2009 20:40:14	21		
5.5.2	Set Cryo values on ACA1 RCA 21	0:09:18	0:00:06	6/12/2009 20:44:14	21	yes	
5.5.3	Set DAE Gain values ACA1 RCA 21	0:09:24	0:00:02	6/12/2009 20:44:20	21		no
5.5.4	Set DAE offset values ACA1 RCA 21	0:09:26	0:04:02	6/12/2009 20:44:22	21		no
5.5.6	SetPS status = 1 (A/C) RCA 21	0:13:28	0:00:02	6/12/2009 20:48:24	21	yes	
5.5.7	Acquire Data	0:13:30	0:02:00	6/12/2009 20:48:26	21		
5.5.8	Enable 4kHz (A/C) RCA 21	0:15:30	0:00:02	6/12/2009 20:50:26	21	yes	
5.5.9	Acquire Data	0:15:32	0:02:00	6/12/2009 20:50:28	21		
5.5.10	Set lswitch1 low value on ACA1 RCA 21	0:17:32	0:00:02	6/12/2009 20:52:28	21	yes	
5.5.11	Acquire Data	0:17:34	0:02:00	6/12/2009 20:52:30	21		
5.5.12	Set lswitch1 nominal value on ACA1 RCA 21	0:19:34	0:00:02	6/12/2009 20:54:30	21	yes	
5.5.13	Set lswitch2 low value on ACA1 RCA 21	0:19:36	0:00:02	6/12/2009 20:54:32	21	yes	
5.5.14	Acquire Data	0:19:38	0:02:00	6/12/2009 20:54:34	21		
5.5.15	Set lswitch2 nominal value on ACA1 RCA 21	0:21:38	0:00:02	6/12/2009 20:56:34	21	yes	
5.5.16	Disable 4kHz (A/C) RCA 21	0:21:40	0:00:02	6/12/2009 20:56:36	21	yes	
5.5.17	SetPS status = 0 (A/C) RCA 21	0:21:42	0:00:02	6/12/2009 20:56:38	21	yes	
5.5.18	Acquire Data	0:21:44	0:02:00	6/12/2009 20:56:40	21		
5.5.19	Set Cryo values on ACA2 RCA 21	0:23:44	0:00:06	6/12/2009 20:58:40	21	yes	
5.5.20	Set DAE Gain values ACA2 RCA 21	0:23:50	0:00:02	6/12/2009 20:58:46	21		no
5.5.21	Set DAE offset values ACA2 RCA 21	0:23:52	0:04:02	6/12/2009 20:58:48	21		no
5.5.23	SetPS status = 1 (B/D) RCA 21	0:27:54	0:00:02	6/12/2009 21:02:50	21	yes	
5.5.24	Acquire Data	0:27:56	0:02:00	6/12/2009 21:02:52	21		





5.5.25	Enable 4kHz (B/D) RCA 21	0:29:56	0:00:02	6/12/2009 21:04:52	21	yes	
5.5.26	Acquire Data	0:29:58	0:02:00	6/12/2009 21:04:54	21		
5.5.27	Set lswitch1 low value on ACA2 RCA 21	0:31:58	0:00:02	6/12/2009 21:06:54	21	yes	
5.5.28	Acquire Data	0:32:00	0:02:00	6/12/2009 21:06:56	21		
5.5.29	Set lswitch1 nominal value on ACA2 RCA 21	0:34:00	0:00:02	6/12/2009 21:08:56	21	yes	
5.5.30	Set lswitch2 low value on ACA2 RCA 21	0:34:02	0:00:02	6/12/2009 21:08:58	21	yes	
5.5.31	Acquire Data	0:34:04	0:02:00	6/12/2009 21:09:00	21		
5.5.32	Set lswitch2 nominal value on ACA2 RCA 21	0:36:04	0:00:02	6/12/2009 21:11:00	21	yes	
5.5.33	Disable 4kHz (B/D) RCA 21	0:36:06	0:00:02	6/12/2009 21:11:02	21	yes	
5.5.34	SetPS status = 0 (B/D) RCA 21	0:36:08	0:00:02	6/12/2009 21:11:04	21	yes	
5.5.35	Acquire Data	0:36:10	0:02:00	6/12/2009 21:11:06	21		
	Note: ACA1 and 2 of RCA 21 now set with Cryo values	0:38:10	0:00:00	6/12/2009 21:13:06	21		
5.5.36	Set Cryo values on ACA3 RCA 21	0:38:10	0:00:06	6/12/2009 21:13:06	21	yes	
5.5.37	Set DAE Gain values ACA3 RCA 21	0:38:16	0:00:02	6/12/2009 21:13:12	21		no
5.5.38	Set DAE offset values ACA3 RCA 21	0:38:18	0:04:02	6/12/2009 21:13:14	21		no
5.5.40	SetPS status = 1 (A/C) RCA 21	0:42:20	0:00:02	6/12/2009 21:17:16	21	yes	
5.5.41	Acquire Data	0:42:22	0:02:00	6/12/2009 21:17:18	21		
5.5.42	Enable 4kHz (A/C) RCA 21	0:44:22	0:00:02	6/12/2009 21:19:18	21	yes	
5.5.43	Acquire Data	0:44:24	0:02:00	6/12/2009 21:19:20	21		
5.5.44	Set lswitch1 low value on ACA3 RCA 21	0:46:24	0:00:02	6/12/2009 21:21:20	21		
5.5.45	Acquire Data	0:46:26	0:02:00	6/12/2009 21:21:22	21		
5.5.46	Set lswitch1 nominal value on ACA3 RCA 21	0:48:26	0:00:02	6/12/2009 21:23:22	21	yes	
5.5.47	Set lswitch2 low value on ACA3 RCA 21	0:48:28	0:00:02	6/12/2009 21:23:24	21	yes	
5.5.48	Acquire Data	0:48:30	0:02:00	6/12/2009 21:23:26	21		
5.5.49	Set lswitch2 nominal value on ACA3 RCA 21	0:50:30	0:00:02	6/12/2009 21:25:26	21	yes	
5.5.50	Disable 4kHz (A/C) RCA 21	0:50:32	0:00:02	6/12/2009 21:25:28	21	yes	
5.5.51	SetPS status = 0 (A/C) RCA 21	0:50:34	0:00:02	6/12/2009 21:25:30	21	yes	
5.5.52	Acquire Data	0:50:36	0:02:00	6/12/2009 21:25:32	21		



5.5.53	Set Cryo values on ACA4 RCA 21	0:52:36	0:00:06	6/12/2009 21:27:32	21	yes	
5.5.54	Set DAE Gain values ACA4 RCA 21	0:52:42	0:00:02	6/12/2009 21:27:38	21		no
5.5.55	Set DAE offset values ACA4 RCA 21	0:52:44	0:04:02	6/12/2009 21:27:40	21		no
5.5.57	SetPS status = 1 (B/D) RCA 21	0:56:46	0:00:02	6/12/2009 21:31:42	21		
5.5.58	Acquire Data	0:56:48	0:02:00	6/12/2009 21:31:44	21		
5.5.59	Enable 4kHz (B/D) RCA 21	0:58:48	0:00:02	6/12/2009 21:33:44	21	yes	
5.5.60	Acquire Data	0:58:50	0:02:00	6/12/2009 21:33:46	21		
5.5.61	Set lswitch1 low value on ACA4 RCA 21	1:00:50	0:00:02	6/12/2009 21:35:46	21	yes	
5.5.62	Acquire Data	1:00:52	0:02:00	6/12/2009 21:35:48	21		
5.5.63	Set lswitch1 nominal value on ACA4 RCA 21	1:02:52	0:00:02	6/12/2009 21:37:48	21	yes	
5.5.64	Set lswitch2 low value on ACA4 RCA 21	1:02:54	0:00:02	6/12/2009 21:37:50	21	yes	
5.5.65	Acquire Data	1:02:56	0:02:00	6/12/2009 21:37:52	21		
5.5.66	Set lswitch2 nominal value on ACA4 RCA 21	1:04:56	0:00:02	6/12/2009 21:39:52	21	yes	
5.5.67	Disable 4kHz (B/D) RCA 21	1:04:58	0:00:02	6/12/2009 21:39:54	21	yes	
5.5.68	SetPS status = 0 (B/D) RCA 21	1:05:00	0:00:02	6/12/2009 21:39:56	21	yes	
5.5.69	Acquire Data	1:05:02	0:02:00	6/12/2009 21:39:58	21		
	Completion of RCA 21 Activation - Cryo values applied	1:07:02	0:05:00	6/12/2009 21:41:58	21		
		1:12:02	0:00:00	6/12/2009 21:46:58			
	Perform RCA 22 Activation	1:12:02	0:04:00	6/12/2009 21:46:58	22		
5.6.1	Set Cryo values on ACA1 RCA 22	1:16:02	0:00:06	6/12/2009 3:54:00	22	yes	
5.6.2	Set DAE Gain values ACA1 RCA 22	1:16:08	0:00:02	6/12/2009 3:54:06	22		no
5.6.3	Set DAE offset values ACA1 RCA 22	1:16:10	0:04:02	6/12/2009 3:54:08	22		no
5.6.4	SetPS status = 1 (A/C) RCA 22	1:20:12	0:00:02	6/12/2009 3:58:10	22	yes	
5.6.6	Acquire Data	1:20:14	0:02:00	6/12/2009 3:58:12	22		
5.6.7	Enable 4kHz (A/C) RCA 22	1:22:14	0:00:02	6/12/2009 4:00:12	22	yes	
5.6.8	Acquire Data	1:22:16	0:02:00	6/12/2009 4:00:14	22		
5.6.9	Set lswitch1 low value on ACA1 RCA 22	1:24:16	0:00:02	6/12/2009 4:02:14	22	yes	
5.6.10	Acquire Data	1:24:18	0:02:00	6/12/2009 4:02:16	22		
5.6.11	Set lswitch1 nominal value on ACA1 RCA 22	1:26:18	0:00:02	6/12/2009 4:04:16	22	yes	
5.6.12	Set lswitch2 low value on ACA1 RCA 22	1:26:20	0:00:02	6/12/2009 4:04:18	22	yes	



5.6.13	Acquire Data	1:26:22	0:02:00	6/12/2009 4:04:20	22		
5.6.14	Set lswitch2 nominal value on ACA1 RCA 22	1:28:22	0:00:02	6/12/2009 4:06:20	22	yes	
5.6.15	Disable 4kHz (A/C) RCA 22	1:28:24	0:00:02	6/12/2009 4:06:22	22	yes	
5.6.16	SetPS status = 0 (A/C) RCA 22	1:28:26	0:00:02	6/12/2009 4:06:24	22	yes	
5.6.17	Acquire Data	1:28:28	0:02:00	6/12/2009 4:06:26	22		
5.6.18	Set Cryo values on ACA2 RCA 22	1:30:28	0:00:06	6/12/2009 4:08:26	22	yes	
5.6.19	Set DAE Gain values ACA2 RCA 22	1:30:34	0:00:02	6/12/2009 4:08:32	22		no
5.6.20	Set DAE offset values ACA2 RCA 22	1:30:36	0:04:02	6/12/2009 4:08:34	22		no
5.6.21	SetPS status = 1 (B/D) RCA 22	1:34:38	0:00:02	6/12/2009 4:12:36	22	yes	
5.6.23	Acquire Data	1:34:40	0:02:00	6/12/2009 4:12:38	22		
5.6.24	Enable 4kHz (B/D) RCA 22	1:36:40	0:00:02	6/12/2009 4:14:38	22	yes	
5.6.25	Acquire Data	1:36:42	0:02:00	6/12/2009 4:14:40	22		
5.6.26	Set lswitch1 low value on ACA2 RCA 22	1:38:42	0:00:02	6/12/2009 4:16:40	22	yes	
5.6.27	Acquire Data	1:38:44	0:02:00	6/12/2009 4:16:42	22		
5.6.28	Set lswitch1 nominal value on ACA2 RCA 22	1:40:44	0:00:02	6/12/2009 4:18:42	22	yes	
5.6.29	Set lswitch2 low value on ACA2 RCA 22	1:40:46	0:00:02	6/12/2009 4:18:44	22	yes	
5.6.30	Acquire Data	1:40:48	0:02:00	6/12/2009 4:18:46	22		
5.6.31	Set lswitch2 nominal value on ACA2 RCA 22	1:42:48	0:00:02	6/12/2009 4:20:46	22	yes	
5.6.32	Disable 4kHz (B/D) RCA 22	1:42:50	0:00:02	6/12/2009 4:20:48	22	yes	
5.6.33	SetPS status = 0 (B/D) RCA 22	1:42:52	0:00:02	6/12/2009 4:20:50	22	yes	
5.6.34	Acquire Data	1:42:54	0:02:00	6/12/2009 4:20:52	22		
	Note: ACA1 and 2 of RCA 22 now set with Cryo values	1:44:54	0:00:00	6/12/2009 4:22:52	22		
5.6.35	Set Cryo values on ACA3 RCA 22	1:44:54	0:00:06	6/12/2009 4:22:52	22	yes	
5.6.36	Set DAE Gain values ACA3 RCA 22	1:45:00	0:00:02	6/12/2009 4:22:58	22		no
5.6.37	Set DAE offset values ACA3 RCA 22	1:45:02	0:04:02	6/12/2009 4:23:00	22		no
5.6.39	SetPS status = 1 (A/C) RCA 22	1:49:04	0:00:02	6/12/2009 4:27:02	22	yes	
5.6.40	Acquire Data	1:49:06	0:02:00	6/12/2009 4:27:04	22		
5.6.41	Enable 4kHz (A/C) RCA 22	1:51:06	0:00:02	6/12/2009 4:29:04	22	yes	
5.6.42	Acquire Data	1:51:08	0:02:00	6/12/2009 4:29:06	22		
5.6.43	Set lswitch1 low value on ACA3 RCA 22	1:53:08	0:00:02	6/12/2009	22	yes	



				4:31:06			
5.6.44	Acquire Data	1:53:10	0:02:00	6/12/2009 4:31:08	22		
5.6.45	Set lswitch1 nominal value on ACA3 RCA 22	1:55:10	0:00:02	6/12/2009 4:33:08	22	yes	
5.6.46	Set lswitch2 low value on ACA3 RCA 22	1:55:12	0:00:02	6/12/2009 4:33:10	22	yes	
5.6.47	Acquire Data	1:55:14	0:02:00	6/12/2009 4:33:12	22		
5.6.48	Set lswitch2 nominal value on ACA3 RCA 22	1:57:14	0:00:02	6/12/2009 4:35:12	22	yes	
5.6.49	Disable 4kHz (A/C) RCA 22	1:57:16	0:00:02	6/12/2009 4:35:14	22	yes	
5.6.50	SetPS status = 0 (A/C) RCA 22	1:57:18	0:00:02	6/12/2009 4:35:16	22	yes	
5.6.51	Acquire Data	1:57:20	0:02:00	6/12/2009 4:35:18	22		
5.6.52	Set Cryo values on ACA4 RCA 22	1:59:20	0:00:06	6/12/2009 4:37:18	22	yes	
5.6.53	Set DAE Gain values ACA4 RCA 22	1:59:26	0:00:02	6/12/2009 4:37:24	22		no
5.6.54	Set DAE offset values ACA4 RCA 22	1:59:28	0:04:02	6/12/2009 4:37:26	22		no
5.6.56	SetPS status = 1 (B/D) RCA 22	2:03:30	0:00:02	6/12/2009 4:41:28	22		
5.6.57	Acquire Data	2:03:32	0:02:00	6/12/2009 4:41:30	22		
5.6.58	Enable 4kHz (B/D) RCA 22	2:05:32	0:00:02	6/12/2009 4:43:30	22	yes	
5.6.59	Acquire Data	2:05:34	0:02:00	6/12/2009 4:43:32	22		
5.6.60	Set lswitch1 low value on ACA4 RCA 22	2:07:34	0:00:02	6/12/2009 4:45:32	22	yes	
5.6.61	Acquire Data	2:07:36	0:02:00	6/12/2009 4:45:34	22		
5.6.62	Set lswitch1 nominal value on ACA4 RCA 22	2:09:36	0:00:02	6/12/2009 4:47:34	22	yes	
5.6.63	Set lswitch2 low value on ACA4 RCA 22	2:09:38	0:00:02	6/12/2009 4:47:36	22	yes	
5.6.64	Acquire Data	2:09:40	0:02:00	6/12/2009 4:47:38	22		
5.6.65	Set lswitch2 nominal value on ACA4 RCA 22	2:11:40	0:00:02	6/12/2009 4:49:38	22	yes	
5.6.66	Disable 4kHz (B/D) RCA 22	2:11:42	0:00:02	6/12/2009 4:49:40	22	yes	
5.6.67	SetPS status = 0 (B/D) RCA 22	2:11:44	0:00:02	6/12/2009 4:49:42	22	yes	
5.6.68	Acquire Data	2:11:46	0:02:00	6/12/2009 4:49:44	22		
	Completion of RCA 22 Activation - Cryo values applied	2:13:46	0:05:00	6/12/2009 4:51:44	22		
		2:18:46	0:00:00	6/12/2009 4:56:44			
	Perform RCA 24 Activation	2:18:46	0:04:00	6/12/2009 17:45:00	24		
5.7.1	Set Cryo values on ACA1 RCA 24	2:22:46	0:00:06	6/12/2009 17:49:00	24	yes	
5.7.2	Set DAE Gain values ACA1 RCA 24	2:22:52	0:00:02	6/12/2009 17:49:06	24		no



5.7.3	Set DAE offset values ACA1 RCA 24	2:22:54	0:04:02	6/12/2009 17:49:08	24		no
5.7.5	SetPS status = 1 (A/C) RCA 24	2:26:56	0:00:02	6/12/2009 17:53:10	24	yes	
5.7.6	Acquire Data	2:26:58	0:02:00	6/12/2009 17:53:12	24		
5.7.7	Enable 4kHz (A/C) RCA 24	2:28:58	0:00:02	6/12/2009 17:55:12	24	yes	
5.7.8	Acquire Data	2:29:00	0:02:00	6/12/2009 17:55:14	24		
5.7.9	Set lswitch1 low value on ACA1 RCA 24	2:31:00	0:00:02	6/12/2009 17:57:14	24	yes	
5.7.10	Acquire Data	2:31:02	0:02:00	6/12/2009 17:57:16	24		
5.7.11	Set lswitch1 nominal value on ACA1 RCA 24	2:33:02	0:00:02	6/12/2009 18:35:00	24	yes	
5.7.12	Set lswitch2 low value on ACA1 RCA 24	2:33:04	0:00:02	6/12/2009 18:35:02	24	yes	
5.7.13	Acquire Data	2:33:06	0:02:00	6/12/2009 18:35:04	24		
5.7.14	Set lswitch2 nominal value on ACA1 RCA 24	2:35:06	0:00:02	6/12/2009 18:37:04	24	yes	
5.7.15	Disable 4kHz (A/C) RCA 24	2:35:08	0:00:02	6/12/2009 18:37:06	24	yes	
5.7.16	SetPS status = 0 (A/C) RCA 24	2:35:10	0:00:02	6/12/2009 18:37:08	24	yes	
5.7.17	Acquire Data	2:35:12	0:02:00	6/12/2009 18:37:10	24		
5.7.18	Set Cryo values on ACA2 RCA 24	2:37:12	0:00:06	6/12/2009 18:39:10	24		
5.7.19	Set DAE Gain values ACA2 RCA 24	2:37:18	0:00:02	6/12/2009 18:39:16	24		no
5.7.20	Set DAE offset values ACA2 RCA 24	2:37:20	0:04:02	6/12/2009 18:39:18	24		no
5.7.22	SetPS status = 1 (B/D) RCA 24	2:41:22	0:00:02	6/12/2009 18:43:20	24	yes	
5.7.23	Acquire Data	2:41:24	0:02:00	6/12/2009 18:43:22	24		
5.7.24	Enable 4kHz (B/D) RCA 24	2:43:24	0:00:02	6/12/2009 18:45:22	24	yes	
5.7.25	Acquire Data	2:43:26	0:02:00	6/12/2009 18:45:24	24		
5.7.26	Set lswitch1 low value on ACA2 RCA 24	2:45:26	0:00:02	6/12/2009 18:47:24	24	yes	
5.7.27	Acquire Data	2:45:28	0:02:00	6/12/2009 18:47:26	24		
5.7.28	Set lswitch1 nominal value on ACA2 RCA 24	2:47:28	0:00:02	6/12/2009 18:49:26	24	yes	
5.7.29	Set lswitch2 low value on ACA2 RCA 24	2:47:30	0:00:02	6/12/2009 18:49:28	24	yes	
5.7.30	Acquire Data	2:47:32	0:02:00	6/12/2009 18:49:30	24		
5.7.31	Set lswitch2 nominal value on ACA2 RCA 24	2:49:32	0:00:02	6/12/2009 18:51:30	24	yes	
5.7.32	Disable 4kHz (B/D) RCA 24	2:49:34	0:00:02	6/12/2009 18:51:32	24	yes	
5.7.33	SetPS status = 0 (B/D) RCA 24	2:49:36	0:00:02	6/12/2009	24	yes	



5.7.34	Acquire Data	2:49:38	0:02:00	6/12/2009 18:51:34	24		
	Note: ACA1 and 2 of RCA 24 now set with Cryo values	2:51:38	0:00:00	6/12/2009 18:53:36	24		
5.7.35	Set Cryo values on ACA3 RCA 24	2:51:38	0:00:06	6/12/2009 18:53:36	24	yes	
5.7.36	Set DAE Gain values ACA3 RCA 24	2:51:44	0:00:02	6/12/2009 18:53:42	24	yes	
5.7.37	Set DAE offset values ACA3 RCA 24	2:51:46	0:04:02	6/12/2009 18:53:44	24	yes	
5.7.39	SetPS status = 1 (A/C) RCA 24	2:55:48	0:00:02	6/12/2009 18:57:46	24	yes	
5.7.40	Acquire Data	2:55:50	0:02:00	6/12/2009 18:57:48	24		
5.7.41	Enable 4kHz (A/C) RCA 24	2:57:50	0:00:02	6/12/2009 18:59:48	24	yes	
5.7.42	Acquire Data	2:57:52	0:02:00	6/12/2009 18:59:50	24		
5.7.43	Set lswitch1 low value on ACA3 RCA 24	2:59:52	0:00:02	6/12/2009 19:01:50	24	yes	
5.7.44	Acquire Data	2:59:54	0:02:00	6/12/2009 19:01:52	24		
5.7.45	Set lswitch1 nominal value on ACA3 RCA 24	3:01:54	0:00:02	6/12/2009 19:03:52	24	yes	
5.7.46	Set lswitch2 low value on ACA3 RCA 24	3:01:56	0:00:02	6/12/2009 19:03:54	24	yes	
5.7.47	Acquire Data	3:01:58	0:02:00	6/12/2009 19:03:56	24		
5.7.48	Set lswitch2 nominal value on ACA3 RCA 24	3:03:58	0:00:02	6/12/2009 19:05:56	24	yes	
5.7.49	Disable 4kHz (A/C) RCA 24	3:04:00	0:00:02	6/12/2009 19:05:58	24	yes	
5.7.50	SetPS status = 0 (A/C) RCA 24	3:04:02	0:00:02	6/12/2009 19:06:00	24	yes	
5.7.51	Acquire Data	3:04:04	0:02:00	6/12/2009 19:06:02	24		
	Set Cryo values on ACA4 RCA 24 (Special ordering)	3:06:04	0:00:00	6/12/2009 19:08:02	24		
5.7.52	Set Vg2 on ACA4 of RCA 24	3:06:04	0:00:02	6/12/2009 19:08:02	24	yes	
5.7.53	Set Vdrain on ACA4 of RCA 24	3:06:06	0:00:02	6/12/2009 19:08:04	24	yes	
5.7.54	Set Vg1 on ACA4 of RCA 24	3:06:08	0:00:02	6/12/2009 19:08:06	24	yes	
5.7.55	Set lswitch1 on ACA4 of RCA 24	3:06:10	0:00:02	6/12/2009 19:08:08	24	yes	
5.7.56	Set lswitch2 on ACA4 of RCA 24	3:06:12	0:00:02	6/12/2009 19:08:10	24	yes	
5.7.57	Set DAE Gain values ACA4 RCA 24	3:06:14	0:00:02	6/12/2009 19:08:12	24		no
5.7.58	Set DAE offset values ACA4 RCA 24	3:06:16	0:04:02	6/12/2009 19:08:14	24		no
5.7.60	SetPS status = 1 (B/D) RCA 24	3:10:18	0:00:02	6/12/2009 19:12:16	24	yes	
5.7.61	Acquire Data	3:10:20	0:02:00	6/12/2009 19:12:18	24		
5.7.62	Enable 4kHz (B/D) RCA 24	3:12:20	0:00:02	6/12/2009 19:14:18	24	yes	



5.7.63	Acquire Data	3:12:22	0:02:00	6/12/2009 19:14:20	24		
5.7.64	Set lswitch1 low value on ACA4 RCA 24	3:14:22	0:00:02	6/12/2009 19:16:20	24	yes	
5.7.65	Acquire Data	3:14:24	0:02:00	6/12/2009 19:16:22	24		
5.7.66	Set lswitch1 nominal value on ACA4 RCA 24	3:16:24	0:00:02	6/12/2009 19:18:22	24	yes	
5.7.67	Set lswitch2 low value on ACA4 RCA 24	3:16:26	0:00:02	6/12/2009 19:18:24	24	yes	
5.7.68	Acquire Data	3:16:28	0:02:00	6/12/2009 19:18:26	24		
5.7.69	Set lswitch2 nominal value on ACA4 RCA 24	3:18:28	0:00:02	6/12/2009 19:20:26	24	yes	
5.7.70	Disable 4kHz (B/D) RCA 24	3:18:30	0:00:02	6/12/2009 19:20:28	24	yes	
5.7.71	SetPS status = 0 (B/D)RCA 24	3:18:32	0:00:02	6/12/2009 19:20:30	24	yes	
5.7.72	Acquire Data	3:18:34	0:02:00	6/12/2009 19:20:32	24		
	Completion of RCA 24 Activation - Cryo values applied	3:20:34	0:05:00	6/12/2009 19:22:32	24		
		3:25:34	0:00:00	6/12/2009 19:27:32			
	Perform RCA 27 Activation	3:25:34	0:04:00	6/12/2009 19:27:32	27		
5.8.1	Set Cryo values on ACA1 RCA 27	3:29:34	0:00:06	6/12/2009 19:31:32	27	yes	
5.8.2	Set DAE Gain values ACA1 RCA 27	3:29:40	0:00:02	6/12/2009 19:31:38	27		no
5.8.3	Set DAE offset values ACA1 RCA 27	3:29:42	0:04:02	6/12/2009 19:31:40	27		no
5.8.5	SetPS status = 1 (A/C) RCA 27	3:33:44	0:00:02	6/12/2009 19:35:42	27	yes	
5.8.6	Acquire Data	3:33:46	0:02:00	6/12/2009 19:35:44	27		
5.8.7	Enable 4kHz (A/C) RCA 27	3:35:46	0:00:02	6/12/2009 19:37:44	27	yes	
5.8.8	Acquire Data	3:35:48	0:02:00	6/12/2009 19:37:46	27		
5.8.9	Set lswitch1 low value on ACA1 RCA 27	3:37:48	0:00:02	6/12/2009 19:39:46	27	yes	
5.8.10	Acquire Data	3:37:50	0:02:00	6/12/2009 19:39:48	27		
5.8.11	Set lswitch1 nominal value on ACA1 RCA 27	3:39:50	0:00:02	6/12/2009 19:41:48	27	yes	
5.8.12	Set lswitch2 low value on ACA1 RCA 27	3:39:52	0:00:02	6/12/2009 19:41:50	27	yes	
5.8.13	Acquire Data	3:39:54	0:02:00	6/12/2009 19:41:52	27		
5.8.14	Set lswitch2 nominal value on ACA1 RCA 27	3:41:54	0:00:02	6/12/2009 19:43:52	27	yes	
5.8.15	Disable 4kHz (A/C) RCA 27	3:41:56	0:00:02	6/12/2009 19:43:54	27	yes	
5.8.16	SetPS status = 0 (A/C) RCA 27	3:41:58	0:00:02	6/12/2009 19:43:56	27	yes	
5.8.17	Acquire Data	3:42:00	0:02:00	6/12/2009 19:43:58	27		
5.8.18	Set Cryo values on ACA2 RCA 27	3:44:00	0:00:06	6/12/2009 19:45:58	27	yes	





5.8.19	Set DAE Gain values ACA2 RCA 27	3:44:06	0:00:02	6/12/2009 19:46:04	27		no
5.8.20	Set DAE offset values ACA2 RCA 27	3:44:08	0:04:02	6/12/2009 19:46:06	27		no
5.8.22	SetPS status = 1 (B/D) RCA 27	3:48:10	0:00:02	6/12/2009 19:50:08	27	yes	
5.8.23	Acquire Data	3:48:12	0:02:00	6/12/2009 19:50:10	27		
5.8.24	Enable 4kHz (B/D) RCA 27	3:50:12	0:00:02	6/12/2009 19:52:10	27	yes	
5.8.25	Acquire Data	3:50:14	0:02:00	6/12/2009 19:52:12	27		
5.8.26	Set lswitch1 low value on ACA2 RCA 27	3:52:14	0:00:02	6/12/2009 19:54:12	27	yes	
5.8.27	Acquire Data	3:52:16	0:02:00	6/12/2009 19:54:14	27		
5.8.28	Set lswitch1 nominal value on ACA2 RCA 27	3:54:16	0:00:02	6/12/2009 19:56:14	27	yes	
5.8.29	Set lswitch2 low value on ACA2 RCA 27	3:54:18	0:00:02	6/12/2009 19:56:16	27	yes	
5.8.30	Acquire Data	3:54:20	0:02:00	6/12/2009 19:56:18	27		
5.8.31	Set lswitch2 nominal value on ACA2 RCA 27	3:56:20	0:00:02	6/12/2009 19:58:18	27	yes	
5.8.32	Disable 4kHz (B/D) RCA 27	3:56:22	0:00:02	6/12/2009 19:58:20	27	yes	
5.8.33	SetPS status = 0 (B/D) RCA 27	3:56:24	0:00:02	6/12/2009 19:58:22	27	yes	
5.8.34	Acquire Data	3:56:26	0:02:00	6/12/2009 19:58:24	27		
	Note: ACA1 and 2 of RCA 27 now set with Cryo values	3:58:26	0:00:00	6/12/2009 20:00:24	27		
5.8.35	Set Cryo values on ACA3 RCA 27	3:58:26	0:00:06	6/12/2009 20:00:24	27	yes	
5.8.36	Set DAE Gain values ACA3 RCA 27	3:58:32	0:00:02	6/12/2009 20:00:30	27		no
5.8.37	Set DAE offset values ACA3 RCA 27	3:58:34	0:04:02	6/12/2009 20:00:32	27		no
5.8.39	SetPS status = 1 (A/C) RCA 27	4:02:36	0:00:02	6/12/2009 20:04:34	27	yes	
5.8.40	Acquire Data	4:02:38	0:02:00	6/12/2009 20:04:36	27		
5.8.41	Enable 4kHz (A/C) RCA 27	4:04:38	0:00:02	6/12/2009 20:06:36	27	yes	
5.8.42	Acquire Data	4:04:40	0:02:00	6/12/2009 20:06:38	27		
5.8.43	Set lswitch1 low value on ACA3 RCA 27	4:06:40	0:00:02	6/12/2009 20:08:38	27	yes	
5.8.44	Acquire Data	4:06:42	0:02:00	6/12/2009 20:08:40	27		
5.8.45	Set lswitch1 nominal value on ACA3 RCA 27	4:08:42	0:00:02	6/12/2009 20:10:40	27	yes	
5.8.46	Set lswitch2 low value on ACA3 RCA 27	4:08:44	0:00:02	6/12/2009 20:10:42	27	yes	
5.8.47	Acquire Data	4:08:46	0:02:00	6/12/2009 20:10:44	27		
5.8.48	Set lswitch2 nominal value on ACA3 RCA 27	4:10:46	0:00:02	6/12/2009 20:12:44	27	yes	
5.8.49	Disable 4kHz (A/C) RCA 27	4:10:48	0:00:02	6/12/2009	27	yes	





				20:12:46			
5.8.50	SetPS status = 0 (A/C) RCA 27	4:10:50	0:00:02	6/12/2009 20:12:48	27	yes	
5.8.51	Acquire Data	4:10:52	0:02:00	6/12/2009 20:12:50	27		
5.8.52	Set Cryo values on ACA4 RCA 27	4:12:52	0:00:06	6/12/2009 20:14:50	27	yes	
5.8.53	Set DAE Gain values ACA4 RCA 27	4:12:58	0:00:02	6/12/2009 20:14:56	27		no
5.8.54	Set DAE offset values ACA4 RCA 27	4:13:00	0:04:02	6/12/2009 20:14:58	27		no
5.8.56	SetPS status = 1 (B/D) RCA 27	4:17:02	0:00:02	6/12/2009 20:19:00	27	yes	
5.8.57	Acquire Data	4:17:04	0:02:00	6/12/2009 20:19:02	27		
5.8.58	Enable 4kHz (B/D) RCA 27	4:19:04	0:00:02	6/12/2009 20:21:02	27	yes	
5.8.59	Acquire Data	4:19:06	0:02:00	6/12/2009 20:21:04	27		
5.8.60	Set lswitch1 low value on ACA4 RCA 27	4:21:06	0:00:02	6/12/2009 20:23:04	27	yes	
5.8.61	Acquire Data	4:21:08	0:02:00	6/12/2009 20:23:06	27		
5.8.62	Set lswitch1 nominal value on ACA4 RCA 27	4:23:08	0:00:02	6/12/2009 20:25:06	27	yes	
5.8.63	Set lswitch2 low value on ACA4 RCA 27	4:23:10	0:00:02	6/12/2009 20:25:08	27	yes	
5.8.64	Acquire Data	4:23:12	0:02:00	6/12/2009 20:25:10	27		
5.8.65	Set lswitch2 nominal value on ACA4 RCA 27	4:25:12	0:00:02	6/12/2009 20:27:10	27	yes	
5.8.66	Disable 4kHz (B/D) RCA 27	4:25:14	0:00:02	6/12/2009 20:27:12	27	yes	
5.8.67	SetPS status = 0 (B/D) RCA 27	4:25:16	0:00:02	6/12/2009 20:27:14	27	yes	
5.8.68	Acquire Data	4:25:18	0:02:00	6/12/2009 20:27:16	27		
	Completion of RCA 27 Activation - Cryo values applied	4:27:18	0:05:00	6/12/2009 20:29:16	27		
		4:32:18	0:00:00	6/12/2009 20:34:16			
		4:32:18	0:00:00	6/12/2009 20:34:16			
5.9	RCA Activation (Power Group #2: RCA 19, 20, 28)	0:00:00	0:05:00	6/13/2009 18:00:00	19,20,28	yes	
	Initialise RCA 19, 20, 28	0:05:00	0:00:00	6/13/2009 18:05:00	19,20,28		
	Set DAE Offset to 0 (FFh) (RCA19,20,28)	0:05:00	0:00:02	6/13/2009 18:05:00	19,20,28	yes	
	Set DAE Gain to 1 (0h)	0:05:02	0:00:02	6/13/2009 18:05:02	19,20,28	yes	
	(RCA19,20,28)	0:05:04	0:00:00	6/13/2009 18:05:04	19,20,28	yes	
	Configure 5 RCA parameters (RCA19,20,28)	0:05:04	0:00:06	6/13/2009 18:05:04	19,20,28	yes	
	Disable A/C 4kHz (RCA19,20,28)	0:05:10	0:00:02	6/13/2009 18:05:10	19,20,28	yes	
	Disable B/D 4kHz (RCA19,20,28)	0:05:12	0:00:02	6/13/2009 18:05:12	19,20,28	yes	



	Set A/CP/S Status (0) (RCA19,20,28)	0:05:14	0:00:02	6/13/2009 18:05:14	19,20,28	yes	
	Set B/DP/S Status (0) (RCA19,20,28)	0:05:16	0:00:02	6/13/2009 18:05:16	19,20,28	yes	
5.9.1	Perform RCA 19 Activation	0:05:18	0:04:00	6/13/2009 18:05:18	19		
5.9.2	Set Cryo values on ACA1 RCA 19	0:09:18	0:00:06	6/13/2009 18:09:18	19	yes	
5.9.3	Set DAE Gain values ACA1 RCA 19	0:09:24	0:00:02	6/13/2009 18:09:24	19		no
5.9.4	Set DAE offset values ACA1 RCA 19	0:09:26	0:04:02	6/13/2009 18:09:26	19		no
5.9.6	SetPS status = 1 (A/C) RCA 19	0:13:28	0:00:02	6/13/2009 18:13:28	19	yes	
5.9.7	Acquire Data	0:13:30	0:02:00	6/13/2009 18:13:30	19		
5.9.8	Enable 4kHz (A/C) RCA 19	0:15:30	0:00:02	6/13/2009 18:15:30	19	yes	
5.9.9	Acquire Data	0:15:32	0:02:00	6/13/2009 18:15:32	19		
5.9.10	Set lswitch1 low value on ACA1 RCA 19	0:17:32	0:00:02	6/13/2009 18:17:32	19	yes	
5.9.11	Acquire Data	0:17:34	0:02:00	6/13/2009 18:17:34	19		
5.9.12	Set lswitch1 nominal value on ACA1 RCA 19	0:19:34	0:00:02	6/13/2009 18:19:34	19	yes	
5.9.13	Set lswitch2 low value on ACA1 RCA 19	0:19:36	0:00:02	6/13/2009 18:19:36	19	yes	
5.9.14	Acquire Data	0:19:38	0:02:00	6/13/2009 18:19:38	19		
5.9.15	Set lswitch2 nominal value on ACA1 RCA 19	0:21:38	0:00:02	6/13/2009 18:21:38	19	yes	
5.9.16	Disable 4kHz (A/C) RCA 19	0:21:40	0:00:02	6/13/2009 18:21:40	19	yes	
5.9.17	SetPS status = 0 (A/C) RCA 19	0:21:42	0:00:02	6/13/2009 18:21:42	19	yes	
5.9.18	Acquire Data	0:21:44	0:02:00	6/13/2009 18:21:44	19		
5.9.19	Set Cryo values on ACA2 RCA 19	0:23:44	0:00:06	6/13/2009 18:23:44	19	yes	
5.9.20	Set DAE Gain values ACA2 RCA 19	0:23:50	0:00:02	6/13/2009 18:23:50	19		no
5.9.21	Set DAE offset values ACA2 RCA 19	0:23:52	0:04:02	6/13/2009 18:23:52	19		no
5.9.23	SetPS status = 1 (B/D) RCA 19	0:27:54	0:00:02	6/13/2009 18:27:54	19	yes	
5.9.24	Acquire Data	0:27:56	0:02:00	6/13/2009 18:27:56	19		
5.9.25	Enable 4kHz (B/D) RCA 19	0:29:56	0:00:02	6/13/2009 18:29:56	19	yes	
5.9.26	Acquire Data	0:29:58	0:02:00	6/13/2009 18:29:58	19		
5.9.27	Set lswitch1 low value on ACA2 RCA 19	0:31:58	0:00:02	6/13/2009 18:31:58	19	yes	
5.9.28	Acquire Data	0:32:00	0:02:00	6/13/2009 18:32:00	19		
5.9.29	Set lswitch1 nominal value on ACA2 RCA 19	0:34:00	0:00:02	6/13/2009 18:34:00	19	yes	
5.9.30	Set lswitch2 low value on ACA2 RCA 19	0:34:02	0:00:02	6/13/2009	19	yes	



5.9.31	Acquire Data	0:34:04	0:02:00	6/13/2009 18:34:02	19		
5.9.32	Set lswitch2 nominal value on ACA2 RCA 19	0:36:04	0:00:02	6/13/2009 18:36:04	19	yes	
5.9.33	Disable 4kHz (B/D) RCA 19	0:36:06	0:00:02	6/13/2009 18:36:06	19	yes	
5.9.34	SetPS status = 0 (B/D) RCA 19	0:36:08	0:00:02	6/13/2009 18:36:08	19	yes	
5.9.35	Acquire Data	0:36:10	0:02:00	6/13/2009 18:36:10	19		
	Note: ACA1 and 2 of RCA 19 now set with Cryo values	0:38:10	0:00:00	6/13/2009 18:38:10	19		
5.9.36	Set Cryo values on ACA3 RCA 19	0:38:10	0:00:06	6/13/2009 18:38:10	19	yes	
5.9.37	Set DAE Gain values ACA3 RCA 19	0:38:16	0:00:02	6/13/2009 18:38:16	19		no
5.9.38	Set DAE offset values ACA3 RCA 19	0:38:18	0:04:02	6/13/2009 18:38:18	19		no
5.9.40	SetPS status = 1 (A/C) RCA 19	0:42:20	0:00:02	6/13/2009 18:42:20	19	yes	
5.9.41	Acquire Data	0:42:22	0:02:00	6/13/2009 18:42:22	19		
5.9.42	Enable 4kHz (A/C) RCA 19	0:44:22	0:00:02	6/13/2009 18:44:22	19	yes	
5.9.43	Acquire Data	0:44:24	0:02:00	6/13/2009 18:44:24	19		
5.9.44	Set lswitch1 low value on ACA3 RCA 19	0:46:24	0:00:02	6/13/2009 18:46:24	19	yes	
5.9.45	Acquire Data	0:46:26	0:02:00	6/13/2009 18:46:26	19		
5.9.46	Set lswitch1 nominal value on ACA3 RCA 19	0:48:26	0:00:02	6/13/2009 18:48:26	19	yes	
5.9.47	Set lswitch2 low value on ACA3 RCA 19	0:48:28	0:00:02	6/13/2009 18:48:28	19	yes	
5.9.48	Acquire Data	0:48:30	0:02:00	6/13/2009 18:48:30	19		
5.9.49	Set lswitch2 nominal value on ACA3 RCA 19	0:50:30	0:00:02	6/13/2009 18:50:30	19	yes	
5.9.50	Disable 4kHz (A/C) RCA 19	0:50:32	0:00:02	6/13/2009 18:50:32	19	yes	
5.9.51	SetPS status = 0 (A/C) RCA 19	0:50:34	0:00:02	6/13/2009 18:50:34	19	yes	
5.9.52	Acquire Data	0:50:36	0:02:00	6/13/2009 18:50:36	19		
5.9.53	Set Cryo values on ACA4 RCA 19	0:52:36	0:00:06	6/13/2009 18:52:36	19	yes	
5.9.54	Set DAE Gain values ACA4 RCA 19	0:52:42	0:00:02	6/13/2009 18:52:42	19		no
5.9.55	Set DAE offset values ACA4 RCA 19	0:52:44	0:04:02	6/13/2009 18:52:44	19		no
5.9.57	SetPS status = 1 (B/D) RCA 19	0:56:46	0:00:02	6/13/2009 18:56:46	19	yes	
5.9.58	Acquire Data	0:56:48	0:02:00	6/13/2009 18:56:48	19		
5.9.59	Enable 4kHz (B/D) RCA 19	0:58:48	0:00:02	6/13/2009 18:58:48	19	yes	
5.9.60	Acquire Data	0:58:50	0:02:00	6/13/2009 18:58:50	19		



5.9.61	Set lswitch1 low value on ACA4 RCA 19	1:00:50	0:00:02	6/13/2009 19:00:50	19	yes	
5.9.62	Acquire Data	1:00:52	0:02:00	6/13/2009 19:00:52	19		
5.9.63	Set lswitch1 nominal value on ACA4 RCA 19	1:02:52	0:00:02	6/13/2009 19:02:52	19	yes	
5.9.64	Set lswitch2 low value on ACA4 RCA 19	1:02:54	0:00:02	6/13/2009 19:02:54	19	yes	
5.9.65	Acquire Data	1:02:56	0:02:00	6/13/2009 19:02:56	19		
5.9.66	Set lswitch2 nominal value on ACA4 RCA 19	1:04:56	0:00:02	6/13/2009 19:04:56	19	yes	
5.9.67	Disable 4kHz (B/D) RCA 19	1:04:58	0:00:02	6/13/2009 19:04:58	19	yes	
5.9.68	SetPS status = 0 (B/D) RCA 19	1:05:00	0:00:02	6/13/2009 19:05:00	19	yes	
5.9.69	Acquire Data	1:05:02	0:02:00	6/13/2009 19:05:02	19		
	Completion of RCA 19 Activation - Cryo values applied	1:07:02	0:05:00	6/13/2009 19:07:02	19		
		1:12:02	0:00:00	6/13/2009 19:12:02			
	Perform RCA 20 Activation	1:12:02	0:04:00	6/13/2009 19:12:02	20		
5.10.1	Set Cryo values on ACA1 RCA 20	1:16:02	0:00:06	6/13/2009 19:16:02	20	yes	
5.10.2	Set DAE Gain values ACA1 RCA 20	1:16:08	0:00:02	6/13/2009 19:16:08	20		no
5.10.3	Set DAE offset values ACA1 RCA 20	1:16:10	0:04:02	6/13/2009 19:16:10	20		no
5.10.5	SetPS status = 1 (A/C) RCA 20	1:20:12	0:00:02	6/13/2009 19:20:12	20	yes	
5.10.6	Acquire Data	1:20:14	0:02:00	6/13/2009 19:20:14	20		
5.10.7	Enable 4kHz (A/C) RCA 20	1:22:14	0:00:02	6/13/2009 19:22:14	20	yes	
5.10.8	Acquire Data	1:22:16	0:02:00	6/13/2009 19:22:16	20		
5.10.9	Set lswitch1 low value on ACA1 RCA 20	1:24:16	0:00:02	6/13/2009 19:24:16	20	yes	
5.10.10	Acquire Data	1:24:18	0:02:00	6/13/2009 19:24:18	20		
5.10.11	Set lswitch1 nominal value on ACA1 RCA 20	1:26:18	0:00:02	6/13/2009 19:26:18	20	yes	
5.10.12	Set lswitch2 low value on ACA1 RCA 20	1:26:20	0:00:02	6/13/2009 19:26:20	20	yes	
5.10.13	Acquire Data	1:26:22	0:02:00	6/13/2009 19:26:22	20		
5.10.14	Set lswitch2 nominal value on ACA1 RCA 20	1:28:22	0:00:02	6/13/2009 19:28:22	20	yes	
5.10.15	Disable 4kHz (A/C) RCA 20	1:28:24	0:00:02	6/13/2009 19:28:24	20	yes	
5.10.16	SetPS status = 0 (A/C) RCA 20	1:28:26	0:00:02	6/13/2009 19:28:26	20	yes	
5.10.17	Acquire Data	1:28:28	0:02:00	6/13/2009 19:28:28	20		
5.10.18	Set Cryo values on ACA2 RCA 20	1:30:28	0:00:06	6/13/2009 19:30:28	20	yes	



5.10.19	Set DAE Gain values ACA2 RCA 20	1:30:34	0:00:02	6/13/2009 19:30:34	20		no
5.10.20	Set DAE offset values ACA2 RCA 20	1:30:36	0:04:02	6/13/2009 19:30:36	20		no
5.10.22	SetPS status = 1 (B/D) RCA 20	1:34:38	0:00:02	6/13/2009 19:34:38	20	yes	
5.10.23	Acquire Data	1:34:40	0:02:00	6/13/2009 19:34:40	20		
5.10.24	Enable 4kHz (B/D) RCA 20	1:36:40	0:00:02	6/13/2009 19:36:40	20	yes	
5.10.25	Acquire Data	1:36:42	0:02:00	6/13/2009 19:36:42	20		
5.10.26	Set lswitch1 low value on ACA2 RCA 20	1:38:42	0:00:02	6/13/2009 19:38:42	20	yes	
5.10.27	Acquire Data	1:38:44	0:02:00	6/13/2009 19:38:44	20		
5.10.28	Set lswitch1 nominal value on ACA2 RCA 20	1:40:44	0:00:02	6/13/2009 19:40:44	20	yes	
5.10.29	Set lswitch2 low value on ACA2 RCA 20	1:40:46	0:00:02	6/13/2009 19:40:46	20	yes	
5.10.30	Acquire Data	1:40:48	0:02:00	6/13/2009 19:40:48	20		
5.10.31	Set lswitch2 nominal value on ACA2 RCA 20	1:42:48	0:00:02	6/13/2009 19:42:48	20	yes	
5.10.32	Disable 4kHz (B/D) RCA 20	1:42:50	0:00:02	6/13/2009 19:42:50	20	yes	
5.10.33	SetPS status = 0 (B/D) RCA 20	1:42:52	0:00:02	6/13/2009 19:42:52	20	yes	
5.10.34	Acquire Data	1:42:54	0:02:00	6/13/2009 19:42:54	20		
	Note: ACA1 and 2 of RCA 20 now set with Cryo values	1:44:54	0:00:00	6/13/2009 19:44:54	20		
5.10.35	Set Cryo values on ACA3 RCA 20	1:44:54	0:00:06	6/13/2009 19:44:54	20	yes	
5.10.36	Set DAE Gain values ACA3 RCA 20	1:45:00	0:00:02	6/13/2009 19:45:00	20		no
5.10.37	Set DAE offset values ACA3 RCA 20	1:45:02	0:04:02	6/13/2009 19:45:02	20		no
5.10.38	SetPS status = 1 (A/C) RCA 20	1:49:04	0:00:02	6/13/2009 19:49:04	20	yes	
5.10.40	Acquire Data	1:49:06	0:02:00	6/13/2009 19:49:06	20		
5.10.41	Enable 4kHz (A/C) RCA 20	1:51:06	0:00:02	6/13/2009 19:51:06	20	yes	
5.10.42	Acquire Data	1:51:08	0:02:00	6/13/2009 19:51:08	20		
5.10.43	Set lswitch1 low value on ACA3 RCA 20	1:53:08	0:00:02	6/13/2009 19:53:08	20	yes	
5.10.44	Acquire Data	1:53:10	0:02:00	6/13/2009 19:53:10	20		
5.10.45	Set lswitch1 nominal value on ACA3 RCA 20	1:55:10	0:00:02	6/13/2009 19:55:10	20	yes	
5.10.46	Set lswitch2 low value on ACA3 RCA 20	1:55:12	0:00:02	6/13/2009 19:55:12	20	yes	
5.10.47	Acquire Data	1:55:14	0:02:00	6/13/2009 19:55:14	20		
5.10.48	Set lswitch2 nominal value on ACA3 RCA 20	1:57:14	0:00:02	6/13/2009 19:57:14	20	yes	
5.10.49	Disable 4kHz (A/C) RCA 20	1:57:16	0:00:02	6/13/2009	20	yes	



				19:57:16			
5.10.50	SetPS status = 0 (A/C) RCA 20	1:57:18	0:00:02	6/13/2009 19:57:18	20	yes	
5.10.51	Acquire Data	1:57:20	0:02:00	6/13/2009 19:57:20	20		
5.10.52	Set Cryo values on ACA4 RCA 20	1:59:20	0:00:06	6/13/2009 19:59:20	20	yes	
5.10.53	Set DAE Gain values ACA4 RCA 20	1:59:26	0:00:02	6/13/2009 19:59:26	20		no
5.10.54	Set DAE offset values ACA4 RCA 20	1:59:28	0:04:02	6/13/2009 19:59:28	20		no
5.10.55	SetPS status = 1 (B/D) RCA 20	2:03:30	0:00:02	6/13/2009 20:03:30	20	yes	
5.10.57	Acquire Data	2:03:32	0:02:00	6/13/2009 20:03:32	20		
5.10.58	Enable 4kHz (B/D) RCA 20	2:05:32	0:00:02	6/13/2009 20:05:32	20	yes	
5.10.59	Acquire Data	2:05:34	0:02:00	6/13/2009 20:05:34	20		
5.10.60	Set Iswitch1 low value on ACA4 RCA 20	2:07:34	0:00:02	6/13/2009 20:07:34	20	yes	
5.10.61	Acquire Data	2:07:36	0:02:00	6/13/2009 20:07:36	20		
5.10.62	Set Iswitch1 nominal value on ACA4 RCA 20	2:09:36	0:00:02	6/13/2009 20:09:36	20	yes	
5.10.63	Set Iswitch2 low value on ACA4 RCA 20	2:09:38	0:00:02	6/13/2009 20:09:38	20	yes	
5.10.64	Acquire Data	2:09:40	0:02:00	6/13/2009 20:09:40	20		
5.10.65	Set Iswitch2 nominal value on ACA4 RCA 20	2:11:40	0:00:02	6/13/2009 20:11:40	20	yes	
5.10.66	Disable 4kHz (B/D) RCA 20	2:11:42	0:00:02	6/13/2009 20:11:42	20	yes	
5.10.67	SetPS status = 0 (B/D) RCA 20	2:11:44	0:00:02	6/13/2009 20:11:44	20	yes	
5.10.68	Acquire Data	2:11:46	0:02:00	6/13/2009 20:11:46	20		
	Completion of RCA 20 Activation - Cryo values applied	2:13:46	0:05:00	6/13/2009 20:13:46	20		
		2:18:46	0:00:00	6/13/2009 20:18:46			
	Perform RCA 28 Activation	2:18:46	0:04:00	6/13/2009 20:18:46	28		
5.11.1	Power on ACA1 and ACA2 with Soft Switch-On procedure	2:22:46	0:00:06	6/13/2009 20:22:46	28	yes	
5.11.1	Power on ACA1 and ACA2 with Soft Switch-On procedure	2:22:52	0:00:06	6/13/2009 20:22:52	28	yes	
5.11.1	Power on ACA1 and ACA2 with Soft Switch-On procedure	2:22:58	0:00:06	6/13/2009 20:22:58	28	yes	
5.11.1	Power on ACA1 and ACA2 with Soft Switch-On procedure	2:23:04	0:00:06	6/13/2009 20:23:04	28	yes	
5.11.2	Set zero bias on ACA2	2:23:10	0:00:06	6/13/2009 20:23:10	28	yes	
5.11.3	Set DAE Gain values ACA1 RCA 28	2:23:16	0:00:02	6/13/2009 20:23:16	28		no
5.11.4	Set DAE offset values ACA1 RCA 28	2:23:18	0:04:02	6/13/2009 20:23:18	28		no
5.11.6	SetPS status = 1 (A/C) RCA 28	2:27:20	0:00:02	6/13/2009 20:27:20	28	yes	





5.11.7	Acquire Data	2:27:22	0:02:00	6/13/2009 20:27:22	28		
5.11.8	Enable 4kHz (A/C) RCA 28	2:29:22	0:00:02	6/13/2009 20:29:22	28	yes	
5.11.9	Acquire Data	2:29:24	0:02:00	6/13/2009 20:29:24	28		
5.11.10	Set lswitch1 low value on ACA1 RCA 28	2:31:24	0:00:02	6/13/2009 20:31:24	28	yes	
5.11.11	Acquire Data	2:31:26	0:02:00	6/13/2009 20:31:26	28		
5.11.12	Set lswitch1 nominal value on ACA1 RCA 28	2:33:26	0:00:02	6/13/2009 20:33:26	28	yes	
5.11.13	Set lswitch2 low value on ACA1 RCA 28	2:33:28	0:00:02	6/13/2009 20:33:28	28	yes	
5.11.14	Acquire Data	2:33:30	0:02:00	6/13/2009 20:33:30	28		
5.11.15	Set lswitch2 nominal value on ACA1 RCA 28	2:35:30	0:00:02	6/13/2009 20:35:30	28	yes	
5.11.16	Disable 4kHz (A/C) RCA 28	2:35:32	0:00:02	6/13/2009 20:35:32	28	yes	
5.11.17	SetPS status = 0 (A/C) RCA 28	2:35:34	0:00:02	6/13/2009 20:35:34	28	yes	
5.11.18	Acquire Data	2:35:36	0:02:00	6/13/2009 20:35:36	28		
5.11.19	Set zero bias on ACA1	2:37:36	0:00:06	6/13/2009 20:37:36	28	yes	
5.11.20	Power on ACA1 and ACA2 with Soft Switch-On procedure	2:37:42	0:00:06	6/13/2009 20:37:42	28	yes	
5.11.20	Power on ACA1 and ACA2 with Soft Switch-On procedure	2:37:48	0:00:06	6/13/2009 20:37:48	28	yes	
5.11.20	Power on ACA1 and ACA2 with Soft Switch-On procedure	2:37:54	0:00:06	6/13/2009 20:37:54	28	yes	
5.11.20	Power on ACA1 and ACA2 with Soft Switch-On procedure	2:38:00	0:00:06	6/13/2009 20:38:00	28	yes	
5.11.21	Set DAE Gain values ACA2 RCA 28	2:38:06	0:00:02	6/13/2009 20:38:06	28		
5.11.22	Set DAE offset values ACA2 RCA 28	2:38:08	0:04:02	6/13/2009 20:38:08	28		
5.11.24	SetPS status = 1 (B/D) RCA 28	2:42:10	0:00:02	6/13/2009 20:42:10	28	yes	
5.11.25	Acquire Data	2:42:12	0:02:00	6/13/2009 20:42:12	28		
5.11.26	Enable 4kHz (B/D) RCA 28	2:44:12	0:00:02	6/13/2009 20:44:12	28	yes	
5.11.27	Acquire Data	2:44:14	0:02:00	6/13/2009 20:44:14	28		
5.11.28	Set lswitch1 low value on ACA2 RCA 28	2:46:14	0:00:02	6/13/2009 20:46:14	28	yes	
5.11.29	Acquire Data	2:46:16	0:02:00	6/13/2009 20:46:16	28		
5.11.30	Set lswitch1 nominal value on ACA2 RCA 28	2:48:16	0:00:02	6/13/2009 20:48:16	28	yes	
5.11.31	Set lswitch2 low value on ACA2 RCA 28	2:48:18	0:00:02	6/13/2009 20:48:18	28	yes	
5.11.32	Acquire Data	2:48:20	0:02:00	6/13/2009 20:48:20	28		
5.11.33	Set lswitch2 nominal value on ACA2 RCA 28	2:50:20	0:00:02	6/13/2009 20:50:20	28	yes	
5.11.34	Disable 4kHz (B/D) RCA 28	2:50:22	0:00:02	6/13/2009 20:50:22	28	yes	



5.11.35	SetPS status = 0 (B/D) RCA 28	2:50:24	0:00:02	6/13/2009 20:50:24	28	yes	
5.11.36	Acquire Data	2:50:26	0:02:00	6/13/2009 20:50:26	28		
	Note: ACA1 and 2 of RCA 28 now set with Cryo values	2:52:26	0:00:00	6/13/2009 20:52:26	28		
5.11.37	Set Cryo values on ACA3 RCA 28	2:52:26	0:00:06	6/13/2009 20:52:26	28	yes	
5.11.38	Set DAE Gain values ACA3 RCA 28	2:52:32	0:00:02	6/13/2009 20:52:32	28		no
5.11.39	Set DAE offset values ACA3 RCA 28	2:52:34	0:04:02	6/13/2009 20:52:34	28		no
5.11.41	SetPS status = 1 (A/C) RCA 28	2:56:36	0:00:02	6/13/2009 20:56:36	28	yes	
5.11.42	Acquire Data	2:56:38	0:02:00	6/13/2009 20:56:38	28		
5.11.43	Enable 4kHz (A/C) RCA 28	2:58:38	0:00:02	6/13/2009 20:58:38	28	yes	
5.11.44	Acquire Data	2:58:40	0:02:00	6/13/2009 20:58:40	28		
5.11.45	Set lswitch1 low value on ACA3 RCA 28	3:00:40	0:00:02	6/13/2009 21:00:40	28	yes	
5.11.46	Acquire Data	3:00:42	0:02:00	6/13/2009 21:00:42	28		
5.11.47	Set lswitch1 nominal value on ACA3 RCA 28	3:02:42	0:00:02	6/13/2009 21:02:42	28	yes	
5.11.48	Set lswitch2 low value on ACA3 RCA 28	3:02:44	0:00:02	6/13/2009 21:02:44	28	yes	
5.11.49	Acquire Data	3:02:46	0:02:00	6/13/2009 21:02:46	28		
5.11.50	Set lswitch2 nominal value on ACA3 RCA 28	3:04:46	0:00:02	6/13/2009 21:04:46	28	yes	
5.11.51	Disable 4kHz (A/C) RCA 28	3:04:48	0:00:02	6/13/2009 21:04:48	28	yes	
5.11.52	SetPS status = 0 (A/C) RCA 28	3:04:50	0:00:02	6/13/2009 21:04:50	28	yes	
5.11.53	Acquire Data	3:04:52	0:02:00	6/13/2009 21:04:52	28		
5.11.54	Set Cryo values on ACA4 RCA 28	3:06:52	0:00:06	6/13/2009 21:06:52	28	yes	
5.11.55	Set DAE Gain values ACA4 RCA 28	3:06:58	0:00:02	6/13/2009 21:06:58	28		no
5.11.56	Set DAE offset values ACA4 RCA 28	3:07:00	0:04:02	6/13/2009 21:07:00	28		no
5.11.58	SetPS status = 1 (B/D) RCA 28	3:11:02	0:00:02	6/13/2009 21:11:02	28	yes	
5.11.59	Acquire Data	3:11:04	0:02:00	6/13/2009 21:11:04	28		
5.11.60	Enable 4kHz (B/D) RCA 28	3:13:04	0:00:02	6/13/2009 21:13:04	28	yes	
5.11.61	Acquire Data	3:13:06	0:02:00	6/13/2009 21:13:06	28		
5.11.62	Set lswitch1 low value on ACA4 RCA 28	3:15:06	0:00:02	6/13/2009 21:15:06	28	yes	
5.11.63	Acquire Data	3:15:08	0:02:00	6/13/2009 21:15:08	28		
5.11.64	Set lswitch1 nominal value on ACA4 RCA 28	3:17:08	0:00:02	6/13/2009 21:17:08	28	yes	
5.11.65	Set lswitch2 low value on ACA4 RCA 28	3:17:10	0:00:02	6/13/2009	28	yes	





				21:17:10			
5.11.66	Acquire Data	3:17:12	0:02:00	6/13/2009 21:17:12	28		
5.11.67	Set lswitch2 nominal value on ACA4 RCA 28	3:19:12	0:00:02	6/13/2009 21:19:12	28	yes	
5.11.68	Disable 4kHz (B/D) RCA 28	3:19:14	0:00:02	6/13/2009 21:19:14	28	yes	
5.11.69	SetPS status = 0 (B/D) RCA 28	3:19:16	0:00:02	6/13/2009 21:19:16	28	yes	
5.11.70	Acquire Data	3:19:18	0:02:00	6/13/2009 21:19:18	28		
	Completion of RCA 28 Activation - Cryo values applied	3:21:18	0:05:00	6/13/2009 21:21:18	28		
		3:26:18	0:00:00	6/13/2009 21:26:18			
5.12	Set CRYO values and set DAE Gain and Offset to avoid saturation	3:26:18	0:00:00	6/13/2009 21:26:18	All		
5.12.1	Set Cryo values on all	3:26:18	0:00:06	6/13/2009 21:26:18	All	yes	
5.12.2	SetPS status = 1 (A/C)	3:26:24	0:00:02	6/13/2009 21:26:24	All	yes	
5.12.3	SetPS status = 0 (B/D)	3:26:26	0:00:02	6/13/2009 21:26:26	All	yes	
5.12.4	Enable 4kHz (A/C) RCA23	3:26:28	0:00:02	6/13/2009 21:26:28	All	yes	
5.12.5	Enable 4kHz (B/D) all but RCA 23	3:26:30	0:00:02	6/13/2009 21:26:30	All	yes	
5.12.6	Set DAE Gain values	3:26:32	0:00:02	6/13/2009 21:26:32	All	yes	
5.12.7	Set DAE offset values	3:26:34	0:00:02	6/13/2009 21:26:34	All	yes	
5.12.8	Save as default configuration	3:26:36	0:00:02	6/13/2009 21:26:36	All		
	end of the test	3:26:38		6/13/2009 21:26:38			

# Annex 2

## Report

Pegaso 0.9.0  
(release date: 2009-04-10 09:55:48)

Tue Jun 16 16:02:31 2009

# Chapter 1

## Pegaso-bscope

1.1 pegaso\_bscope\_mini\_report\_00001

Bscope\_00001

### 1.1.1.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

### 1.1.2 Test PEGASO, Feed Horn 18

#### Channel S2

Results for feed horn 18, channel S2 (test PEGASO). The analysis has been done in the range [1623441986., 1623446039.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 20:07:28	0	0	0	0	0	0	0	0	0	-0.2	0.000	0.016	0.019	0.000	0.000	0.017	0.024	0.000
2009/06/11 20:09:22	201	205	115	255	255					24.0	0.000	-0.020	0.021	0.000	0.000	2.364	1.782	0.000
2009/06/11 20:09:26										23.2	0.011	0.011	0.021	0.021	2.492	2.486	1.882	1.892
2009/06/11 20:13:28						1				22.9	0.011	0.011	0.021	0.021	2.547	2.547	1.921	1.919
2009/06/11 20:15:30							1			22.9	0.011	0.011	0.021	0.021	2.583	2.469	1.879	1.911
2009/06/11 20:17:32				170						22.8	0.011	0.011	0.021	0.021	2.482	2.465	1.878	1.886
2009/06/11 20:19:34				255						22.8	0.011	0.011	0.021	0.021	2.524	2.437	1.863	1.907
2009/06/11 20:19:36					170					22.8	0.011	0.011	0.021	0.021	2.528	2.422	1.856	1.911
2009/06/11 20:21:38					255					22.8	0.000	0.011	0.021	0.000	0.000	2.518	1.908	0.000
2009/06/11 20:21:40							0			22.8	0.000	0.011	0.021	0.000	0.000	2.506	1.904	0.000
2009/06/11 20:21:42						0				22.5	0.011	0.064	0.080	0.011	2.307	2.084	1.776	1.638
2009/06/11 20:42:20						1				22.4	0.179	0.000	0.000	0.236	2.154	0.000	0.000	1.561
2009/06/11 20:44:22							1			22.4	0.178	0.175	0.231	0.234	2.147	1.933	1.654	1.560
2009/06/11 20:50:32							0			22.4	0.000	0.178	0.236	0.000	0.000	2.040	1.617	0.000
2009/06/11 20:50:34						0				22.2	1.331	1.094	1.621	1.613	1.919	1.812	1.549	1.441

#### Channel S1

Results for feed horn 18, channel S1 (test PEGASO). The analysis has been done in the range [1623441986., 1623446039.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 20:07:28	0	0	0	0	0	0	0	0	0	-0.2	0.011	0.008	0.021	0.021	2.527	2.065	1.572	1.909
2009/06/11 20:23:48	201	197	60	255	255					20.1	0.000	0.011	-0.017	0.000	0.000	2.052	1.810	0.000
2009/06/11 20:23:52										19.8	0.011	0.011	0.011	0.011	2.066	2.058	1.806	1.805
2009/06/11 20:27:54						1				19.3	0.011	0.011	0.011	0.011	2.314	2.314	1.629	1.628
2009/06/11 20:29:56							1			19.0	0.011	0.011	0.011	0.011	2.312	2.071	1.802	1.632
2009/06/11 20:31:58				170						18.7	0.011	0.011	0.011	0.011	2.310	2.078	1.802	1.638
2009/06/11 20:34:00				255						18.7	0.011	0.011	0.011	0.011	2.313	2.084	1.803	1.642
2009/06/11 20:34:02					170					18.5	0.011	0.011	0.011	0.011	2.304	2.087	1.803	1.649
2009/06/11 20:36:04					255					18.5	0.011	0.011	0.011	0.011	2.226	2.308	1.648	1.704
2009/06/11 20:36:06							0			18.5	0.000	0.011	0.011	0.000	0.000	2.192	1.729	0.000
2009/06/11 20:36:08						0				17.0	0.188	0.487	0.693	0.250	2.146	1.912	1.642	1.560
2009/06/11 20:56:46						1				16.2	1.373	1.355	1.642	1.667	1.921	1.918	1.438	1.438
2009/06/11 20:58:48							1			16.1	1.304	1.179	1.763	1.570	1.922	1.791	1.538	1.441
2009/06/11 21:04:58							0			16.1	0.000	1.211	1.640	0.000	0.000	1.855	1.494	0.000
2009/06/11 21:05:00						0				15.9	0.000	1.128	1.691	0.000	0.000	1.799	1.540	0.000

### Channel M1

Results for feed horn 18, channel M1 (test PEGASO). The analysis has been done in the range [1623441986., 1623446039.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 20:07:28	0	0	0	0	0	0	0	0	0	-0.2	0.011	0.005	0.020	0.021	2.492	1.705	1.294	1.892
2009/06/11 20:13:28						1				-0.2	0.011	0.011	0.021	0.021	2.547	2.547	1.921	1.919
2009/06/11 20:15:30							1			-0.2	0.011	0.011	0.021	0.021	2.514	2.452	1.871	1.903
2009/06/11 20:21:40							0			-0.2	0.000	0.011	0.021	0.000	0.000	2.506	1.904	0.000
2009/06/11 20:21:42						0				-0.2	0.011	0.011	0.009	0.011	2.307	2.146	1.818	1.638
2009/06/11 20:38:14	193	193	60	255	255					14.7	0.000	0.257	0.340	0.000	0.000	1.863	1.648	0.000
2009/06/11 20:38:18										13.0	0.000	0.207	0.273	0.000	0.000	1.925	1.663	0.000
2009/06/11 20:42:20						1				12.1	0.179	0.000	0.000	0.236	2.154	0.000	0.000	1.561
2009/06/11 20:44:22							1			12.0	0.179	0.176	0.232	0.235	2.148	1.929	1.655	1.558
2009/06/11 20:46:24				170						12.0	0.177	0.176	0.232	0.233	2.147	1.932	1.655	1.561
2009/06/11 20:48:26				255						12.0	0.180	0.176	0.232	0.237	2.147	1.934	1.655	1.562
2009/06/11 20:48:28					170					11.9	0.179	0.175	0.230	0.236	2.146	1.934	1.653	1.562
2009/06/11 20:50:30					255					11.9	0.000	0.179	0.236	0.000	0.000	2.102	1.586	0.000
2009/06/11 20:50:32							0			11.9	0.000	0.178	0.236	0.000	0.000	2.040	1.617	0.000
2009/06/11 20:50:34						0				11.4	1.331	1.094	1.621	1.613	1.919	1.812	1.549	1.441

### Channel M2

Results for feed horn 18, channel M2 (test PEGASO). The analysis has been done in the range [1623441986., 1623446039.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 20:07:28	0	0	0	0	0	0	0	0	0	-0.2	0.011	0.009	0.015	0.021	2.524	2.064	1.635	1.908
2009/06/11 20:27:54						1	0	0	0	-0.2	0.011	0.011	0.011	0.011	2.314	2.311	1.629	1.628
2009/06/11 20:29:56						0	1	0	0	-0.2	0.011	0.011	0.011	0.011	2.308	2.078	1.803	1.641
2009/06/11 20:36:06						0	0	0	0	-0.2	0.000	0.011	0.011	0.000	0.000	2.192	1.729	0.000
2009/06/11 20:36:08						0	0	0	0	-0.2	0.179	0.158	0.208	0.235	2.149	1.958	1.684	1.561
2009/06/11 20:52:40	187	195	120	255	255			0	0	14.3	0.000	1.903	2.646	0.000	0.000	1.771	1.381	0.000
2009/06/11 20:52:44								2	2	13.1	1.284	1.399	2.046	1.903	1.789	1.785	1.536	1.538
2009/06/11 20:56:46						1		2	2	12.7	1.373	1.355	1.642	1.667	1.921	1.918	1.438	1.438
2009/06/11 20:58:48						0	1	2	2	12.6	1.335	1.211	1.808	1.611	1.922	1.790	1.538	1.440
2009/06/11 21:00:50				170				2	2	12.6	1.293	1.183	1.770	1.554	1.922	1.791	1.538	1.441
2009/06/11 21:02:52				255				2	2	12.6	1.296	1.162	1.739	1.560	1.920	1.790	1.537	1.440
2009/06/11 21:02:54					170			2	2	12.5	1.285	1.145	1.712	1.546	1.922	1.793	1.538	1.442
2009/06/11 21:04:56				255				2	2	12.5	0.000	1.251	1.577	0.000	0.000	1.897	1.463	0.000
2009/06/11 21:04:58					255			2	2	12.5	0.000	1.211	1.640	0.000	0.000	1.855	1.494	0.000
2009/06/11 21:05:00						0		2	2	12.4	0.000	1.128	1.691	0.000	0.000	1.799	1.540	0.000

## **1.2 pegaso\_bscope\_mini\_report\_00002**

### **Bscope\_00002**

### 1.2.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

#### 1.2.2 Test PEGASO, Feed Horn 26

##### Channel M2

Results for feed horn 26, channel M2 (test PEGASO). The analysis has been done in the range [1623444486., 1623450208.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	SKY10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 20:48:26	171	171	0	0	0	0	0	0	0	-0.3	0.003	0.000	0.000	0.006	0.004	0.000	0.000	0.006
2009/06/11 21:16:06	232	219	171	152	253	0	0	0	0	13.1	0.099	0.000	0.000	0.201	0.004	0.000	0.000	0.006
2009/06/11 21:16:10										13.1	0.122	0.000	0.000	0.202	0.004	0.000	0.000	0.006
2009/06/11 21:20:12						1		2		13.1	0.137	0.137	0.200	0.200	0.004	0.004	0.006	0.006
2009/06/11 21:22:14							1	2		13.1	0.138	0.137	0.199	0.201	0.004	0.004	0.006	0.006
2009/06/11 21:24:16				101				2		13.1	0.138	0.135	0.197	0.201	0.004	0.004	0.006	0.006
2009/06/11 21:26:18				152				2		13.1	0.137	0.137	0.199	0.200	0.004	0.004	0.006	0.006
2009/06/11 21:26:20					168			2		13.1	0.136	0.137	0.199	0.199	0.004	0.004	0.006	0.006
2009/06/11 21:28:22					253			2		13.1	0.137	0.000	0.000	0.200	0.004	0.000	0.006	0.006
2009/06/11 21:28:24							0	2		13.1	0.138	0.000	0.000	0.201	0.004	0.000	0.006	0.006
2009/06/11 21:28:26						0		2		13.0	0.169	0.420	0.211	0.411	0.055	0.004	0.006	0.062
2009/06/11 21:49:04						1		2		12.9	0.000	0.418	0.203	0.000	0.000	0.211	0.220	0.000
2009/06/11 21:51:06							1	2		12.9	0.174	0.418	0.202	0.444	0.204	0.209	0.219	0.214
2009/06/11 21:57:16							0	2		12.9	0.288	0.000	0.000	0.331	0.208	0.000	0.000	0.217
2009/06/11 21:57:18						0		2		12.7	0.171	0.413	0.209	0.441	0.198	0.495	0.211	0.447

##### Channel M1

Results for feed horn 26, channel M1 (test PEGASO). The analysis has been done in the range [1623444486., 1623450208.] s. The format for the time values (first column) is 'utc'.



Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 20:48:26	171	171	0	0	0	0	0	0	0	-0.3	0.031	0.137	0.199	0.056	0.004	0.004	0.006	0.006
2009/06/11 21:30:32	232	221	170	178	230					11.6	0.173	0.000	0.000	0.402	0.000	0.000	0.000	0.006
2009/06/11 21:30:36										11.6	0.174	0.174	0.449	0.448	0.004	0.004	0.006	0.006
2009/06/11 21:34:38						1				11.6	0.425	0.425	0.210	0.210	0.004	0.004	0.006	0.006
2009/06/11 21:36:40							1			11.6	0.172	0.424	0.207	0.448	0.004	0.004	0.006	0.006
2009/06/11 21:38:42				118						11.6	0.172	0.421	0.206	0.448	0.004	0.004	0.006	0.006
2009/06/11 21:40:44				178						11.6	0.171	0.424	0.207	0.448	0.004	0.004	0.006	0.006
2009/06/11 21:40:46					153					11.6	0.170	0.424	0.207	0.447	0.004	0.004	0.006	0.006
2009/06/11 21:42:48					230					11.6	0.369	0.000	0.000	0.261	0.004	0.000	0.000	0.006
2009/06/11 21:42:50							0			11.6	0.292	0.000	0.000	0.335	0.004	0.000	0.000	0.006
2009/06/11 21:42:52						0				11.4	0.173	0.174	0.206	0.444	0.174	0.210	0.222	0.253
2009/06/11 22:03:30						1				11.3	0.418	0.418	0.206	0.206	0.501	0.501	0.209	0.209
2009/06/11 22:05:32							1			11.3	0.168	0.417	0.204	0.442	0.193	0.500	0.205	0.476
2009/06/11 22:11:42							0			11.3	0.287	0.000	0.000	0.330	0.339	0.000	0.000	0.349
2009/06/11 22:11:44						0				11.3	0.170	0.000	0.000	0.442	0.196	0.000	0.000	0.476

### Channel S2

Results for feed horn 26, channel S2 (test PEGASO). The analysis has been done in the range [1623444486., 1623450208.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 20:48:26	171	171	0	0	0	0	0	0	0	-0.3	0.013	0.000	0.000	0.031	0.004	0.000	0.000	0.006
2009/06/11 21:20:12						1				-0.3	0.137	0.137	0.200	0.200	0.004	0.004	0.006	0.006
2009/06/11 21:22:14							1			-0.3	0.137	0.136	0.199	0.200	0.004	0.004	0.006	0.006
2009/06/11 21:28:24							0			-0.3	0.138	0.000	0.000	0.201	0.004	0.000	0.000	0.006
2009/06/11 21:28:26						0				-0.3	0.168	0.420	0.211	0.398	0.004	0.004	0.006	0.006
2009/06/11 21:44:58	232	217	170	153	249					10.6	0.172	0.000	0.000	0.446	0.168	0.000	0.000	0.215
2009/06/11 21:45:02										10.6	0.172	0.000	0.000	0.446	0.207	0.000	0.000	0.216
2009/06/11 21:49:04						1				10.6	0.000	0.418	0.203	0.000	0.000	0.211	0.220	0.000
2009/06/11 21:51:06							1			10.6	0.172	0.418	0.202	0.446	0.205	0.210	0.219	0.214
2009/06/11 21:53:08				102						10.6	0.172	0.418	0.202	0.446	0.205	0.207	0.217	0.214
2009/06/11 21:55:10				153						10.6	0.172	0.418	0.202	0.446	0.204	0.210	0.219	0.213
2009/06/11 21:55:12					166					10.6	0.174	0.418	0.202	0.444	0.203	0.210	0.219	0.213
2009/06/11 21:57:14					249					10.6	0.364	0.000	0.000	0.257	0.209	0.000	0.000	0.218
2009/06/11 21:57:16							0			10.6	0.288	0.000	0.000	0.331	0.208	0.000	0.000	0.217
2009/06/11 21:57:18						0				10.5	0.171	0.413	0.209	0.441	0.198	0.495	0.211	0.447

### Channel S1

Results for feed horn 26, channel S1 (test PEGASO). The analysis has been done in the range [1623444486., 1623450208.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 20:48:26	171	171	0	0	0	0	0	0	0	-0.3	0.045	0.137	0.201	0.093	0.004	0.004	0.006	0.006
2009/06/11 21:34:38						1	0	0	0	-0.3	0.425	0.425	0.210	0.210	0.004	0.004	0.006	0.006
2009/06/11 21:36:40							1	0	0	-0.3	0.171	0.423	0.207	0.448	0.004	0.004	0.006	0.006
2009/06/11 21:42:50							0	0	0	-0.3	0.292	0.000	0.000	0.335	0.004	0.000	0.000	0.006
2009/06/11 21:42:52						0	0	0	0	-0.3	0.174	0.417	0.204	0.444	0.166	0.210	0.219	0.178
2009/06/11 21:59:24	228	226	173	179	252			0	0	13.4	0.170	0.000	0.000	0.442	0.196	0.000	0.000	0.473
2009/06/11 21:59:28								2	0	13.4	0.170	0.170	0.442	0.442	0.196	0.196	0.476	0.476
2009/06/11 22:03:30						1		2	0	13.4	0.418	0.418	0.206	0.206	0.501	0.501	0.209	0.209
2009/06/11 22:05:32							1	2	0	13.5	0.168	0.417	0.204	0.442	0.193	0.501	0.206	0.476
2009/06/11 22:07:34				119				2	0	13.5	0.169	0.417	0.204	0.442	0.193	0.498	0.205	0.476
2009/06/11 22:09:36				179				2	0	13.5	0.168	0.417	0.204	0.442	0.193	0.501	0.206	0.475
2009/06/11 22:09:38					168			2	0	13.5	0.168	0.417	0.203	0.442	0.192	0.501	0.206	0.475
2009/06/11 22:11:40					252			2	0	13.5	0.362	0.000	0.000	0.257	0.432	0.000	0.000	0.266
2009/06/11 22:11:42						0		2	0	13.5	0.287	0.000	0.000	0.330	0.339	0.000	0.000	0.349
2009/06/11 22:11:44						0		2	0	13.5	0.170	0.000	0.000	0.442	0.196	0.000	0.000	0.476

### **1.3 pegaso\_bscope\_mini\_report\_00003**

#### **Bscope\_00003**

### 1.3.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

### 1.3.2 Test PEGASO, Feed Horn 23

#### Channel S2

Results for feed horn 23, channel S2 (test PEGASO). The analysis has been done in the range [1623450278., 1623454388.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 22:25:04	0	0	0	0	0	0	0	0	0	-0.2	0.000	0.019	0.023	0.000	0.000	0.029	0.014	0.000
2009/06/11 22:28:07	186	193	122	255	255					16.1	0.000	-0.018	0.024	0.000	0.000	1.823	0.970	0.000
2009/06/11 22:28:11										15.1	0.020	0.020	0.024	0.024	1.277	1.395	0.732	0.666
2009/06/11 22:32:13						1				14.7	0.020	0.020	0.024	0.024	1.232	1.212	0.630	0.641
2009/06/11 22:34:15							1			14.7	0.020	0.020	0.024	0.024	1.189	1.207	0.628	0.618
2009/06/11 22:36:17				170						14.6	0.020	0.020	0.025	0.025	1.142	1.178	0.612	0.594
2009/06/11 22:38:19				255						14.6	0.020	0.020	0.025	0.025	1.149	1.157	0.602	0.596
2009/06/11 22:38:21					170					14.6	0.020	0.020	0.025	0.025	1.138	1.138	0.592	0.589
2009/06/11 22:40:23					255					14.6	0.000	0.020	0.025	0.000	0.000	1.135	0.587	0.000
2009/06/11 22:40:25							0			14.6	0.000	0.020	0.025	0.000	0.000	1.141	0.590	0.000
2009/06/11 22:40:27						0				14.1	0.031	0.252	0.290	0.034	1.169	2.305	0.603	1.418
2009/06/11 23:01:05						1				13.9	0.811	0.800	0.935	0.948	0.984	0.984	1.222	1.222
2009/06/11 23:03:07							1			13.9	0.774	0.749	0.885	0.907	0.976	2.229	0.525	1.227
2009/06/11 23:09:17							0			13.9	0.000	0.755	0.888	0.000	0.000	1.646	0.858	0.000
2009/06/11 23:09:19						0				13.7	0.777	1.692	0.967	2.316	0.933	2.051	0.488	1.099

#### Channel S1

Results for feed horn 23, channel S1 (test PEGASO). The analysis has been done in the range [1623450278., 1623454388.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 22:25:04	0	0	0	0	0	0	0	0	0	-0.2	0.020	0.016	0.024	0.025	1.188	1.089	0.568	0.617
2009/06/11 22:42:33	197	166	118	255	255					23.2	0.000	0.020	-0.013	0.000	0.000	2.697	0.899	0.000
2009/06/11 22:42:37										22.5	0.020	0.020	0.021	0.020	2.661	2.694	0.682	0.631
2009/06/11 22:46:39						1				22.3	0.020	0.020	0.020	0.021	1.156	1.146	1.455	1.471
2009/06/11 22:48:41							1			22.3	0.020	0.020	0.021	0.021	1.125	2.587	0.605	1.444
2009/06/11 22:50:43				170						22.2	0.020	0.020	0.021	0.021	1.110	2.560	0.598	1.421
2009/06/11 22:52:45				255						22.2	0.020	0.020	0.021	0.021	1.111	2.543	0.595	1.423
2009/06/11 22:52:47					170					22.2	0.020	0.020	0.021	0.021	1.131	2.522	0.590	1.399
2009/06/11 22:54:49					255					22.2	0.020	0.000	0.000	0.021	1.424	0.000	0.000	1.228
2009/06/11 22:54:51							0			22.2	0.020	0.020	0.021	0.021	1.114	1.941	0.935	1.408
2009/06/11 22:54:53						0				21.9	0.793	1.039	0.866	0.924	1.009	2.195	0.524	1.208
2009/06/11 23:15:31						1				21.8	0.768	0.760	2.371	2.406	0.914	0.915	1.113	1.111
2009/06/11 23:17:33							1			21.8	0.759	1.767	0.948	2.287	0.922	2.035	0.480	1.105
2009/06/11 23:23:43						0				21.8	0.000	1.267	1.567	0.000	0.000	1.507	0.782	0.000
2009/06/11 23:23:45						0				21.8	0.000	1.722	0.935	0.000	0.000	2.039	0.487	0.000

### Channel M1

Results for feed horn 23, channel M1 (test PEGASO). The analysis has been done in the range [1623450278., 1623454388.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 22:25:04	0	0	0	0	0	0	0	0	0	-0.2	0.020	0.012	0.024	0.024	1.277	1.019	0.535	0.666
2009/06/11 22:32:13						1				-0.2	0.020	0.020	0.024	0.024	1.232	1.212	0.630	0.641
2009/06/11 22:34:15							1			-0.2	0.020	0.020	0.025	0.025	1.156	1.174	0.611	0.600
2009/06/11 22:40:25							0			-0.2	0.000	0.020	0.025	0.000	0.000	1.141	0.590	0.000
2009/06/11 22:40:27						0				15.7	0.000	1.228	1.411	0.021	1.154	2.342	0.631	1.430
2009/06/11 22:56:59	193	187	121	255	255					14.6	0.805	0.895	1.047	0.947	2.224	2.216	0.525	0.527
2009/06/11 22:57:03						1				14.3	0.811	0.800	0.935	0.948	0.984	0.984	1.222	1.222
2009/06/11 23:03:07							1			14.3	0.788	0.763	0.900	0.923	0.974	2.228	0.523	1.225
2009/06/11 23:05:09				170						14.2	0.768	0.751	0.887	0.900	0.976	2.232	0.524	1.227
2009/06/11 23:07:11				255						14.2	0.771	0.742	0.877	0.903	0.976	2.231	0.523	1.226
2009/06/11 23:07:13					170					14.2	0.767	0.735	0.868	0.898	0.977	2.234	0.524	1.228
2009/06/11 23:09:15					255					14.2	0.000	0.760	0.891	0.000	0.000	1.262	1.073	0.000
2009/06/11 23:09:17						0				14.2	0.000	0.755	0.888	0.000	0.000	1.646	0.858	0.000
2009/06/11 23:09:19						0				14.0	0.777	1.692	0.967	2.316	0.933	2.051	0.488	1.099

### Channel M2

Results for feed horn 23, channel M2 (test PEGASO). The analysis has been done in the range [1623450278., 1623454388.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 22:25:04	0	0	0	0	0	0	0	0	0	-0.2	0.020	0.017	0.020	0.025	1.188	1.526	0.601	0.617
2009/06/11 22:46:39						1	0	0	0	-0.2	0.020	0.020	0.020	0.021	1.156	1.146	1.455	1.471
2009/06/11 22:48:41							1	0	0	-0.2	0.020	0.020	0.021	0.021	1.129	2.557	0.598	1.417
2009/06/11 22:54:51							0	0	0	-0.2	0.020	0.020	0.021	0.021	1.114	1.941	0.935	1.408
2009/06/11 22:54:53						0	0	0	0	-0.2	0.789	0.673	0.790	0.924	1.005	2.262	0.545	1.210
2009/06/11 23:11:25	196	190	120	255	255			0	0	13.7	0.000	2.860	1.477	0.000	0.000	1.972	0.433	0.000
2009/06/11 23:11:29								2	2	12.1	1.870	2.034	1.065	0.992	2.025	2.011	0.479	0.482
2009/06/11 23:15:31						1		2	2	11.9	0.768	0.760	2.371	2.406	0.914	0.915	1.113	1.111
2009/06/11 23:17:33							1	2	2	11.9	0.752	1.795	0.959	2.345	0.905	2.033	0.480	1.113
2009/06/11 23:19:35				170				2	2	11.8	0.743	1.768	0.948	2.295	0.906	2.035	0.480	1.114
2009/06/11 23:21:37				255				2	2	11.8	0.741	1.747	0.940	2.287	0.906	2.035	0.480	1.113
2009/06/11 23:21:39					170			2	2	11.8	0.767	1.737	0.936	2.243	0.937	2.037	0.481	1.098
2009/06/11 23:23:41					255			2	2	11.8	0.968	0.743	2.273	1.968	1.169	0.916	1.113	0.970
2009/06/11 23:23:43						0		2	2	11.9	0.000	1.267	1.567	0.000	0.000	1.507	0.782	0.000
2009/06/11 23:23:45						0		2	2	11.9	0.000	1.722	0.935	0.000	0.000	2.039	0.487	0.000

## 1.4 pegaso\_bscope\_mini\_report\_00004

### Bscope\_00004

### 1.4.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

### 1.4.2 Test PEGASO, Feed Horn 25

#### Channel M1

Results for feed horn 25, channel M1 (test PEGASO). The analysis has been done in the range [1623453671., 1623458877.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	SKY10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 23:21:36	171	171	0	0	0	0	0	0	0	-0.2	0.006	0.000	0.000	0.007	0.004	0.000	0.000	0.003
2009/06/11 23:34:51	222	221	184	152	252	0	0	0	0	12.5	0.198	0.000	0.000	0.249	0.004	0.000	0.000	0.003
2009/06/11 23:34:55										12.5	0.238	0.238	0.250	0.250	0.004	0.004	0.003	0.003
2009/06/11 23:38:57						1		2		12.6	0.238	0.238	0.250	0.250	0.004	0.004	0.003	0.003
2009/06/11 23:40:59							1	2		12.6	0.237	0.237	0.249	0.249	0.004	0.004	0.004	0.004
2009/06/11 23:43:01				101				2		12.6	0.237	0.235	0.246	0.249	0.004	0.004	0.004	0.004
2009/06/11 23:45:03				152				2		12.6	0.236	0.237	0.249	0.248	0.004	0.004	0.004	0.004
2009/06/11 23:45:05					168			2		12.5	0.235	0.237	0.249	0.247	0.004	0.004	0.004	0.004
2009/06/11 23:47:07					252			2		12.5	0.237	0.000	0.000	0.249	0.004	0.000	0.004	0.004
2009/06/11 23:47:09						0	0	2		12.5	0.238	0.000	0.000	0.250	0.004	0.000	0.000	0.003
2009/06/11 23:47:11								2		12.4	0.235	0.495	0.240	0.461	0.064	0.009	0.007	0.059
2009/06/12 00:07:49						1		2		12.3	0.492	0.492	0.226	0.226	0.253	0.253	0.220	0.220
2009/06/12 00:09:51							1	2		12.3	0.231	0.494	0.224	0.496	0.252	0.252	0.219	0.213
2009/06/12 00:16:00						0	0	2		12.3	0.444	0.000	0.000	0.276	0.251	0.000	0.000	0.219
2009/06/12 00:16:03						0	0	2		12.2	0.231	0.495	0.230	0.491	0.226	0.544	0.205	0.448

#### Channel M2

Results for feed horn 25, channel M2 (test PEGASO). The analysis has been done in the range [1623453671., 1623458877.] s. The format for the time values (first column) is 'utc'.



Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 23:21:36	171	171	0	0	0	0	0	0	0	-0.2	0.100	0.237	0.249	0.107	0.004	0.004	0.004	0.003
2009/06/11 23:49:17	224	212	185	153	249					9.9	0.233	0.000	0.000	0.459	0.004	0.000	0.000	0.004
2009/06/11 23:49:21										10.0	0.234	0.234	0.498	0.498	0.004	0.004	0.004	0.004
2009/06/11 23:53:23						1				10.0	0.504	0.504	0.231	0.231	0.004	0.004	0.004	0.004
2009/06/11 23:55:25							1			10.0	0.233	0.506	0.230	0.501	0.005	0.005	0.004	0.004
2009/06/11 23:57:27				102						10.1	0.233	0.504	0.228	0.501	0.005	0.005	0.004	0.004
2009/06/11 23:59:29				153						10.1	0.232	0.506	0.230	0.500	0.005	0.005	0.004	0.004
2009/06/11 23:59:31					166					10.1	0.232	0.499	0.236	0.499	0.005	0.005	0.004	0.004
2009/06/12 00:01:33					249					10.1	0.000	0.445	0.291	0.000	0.000	0.005	0.004	0.000
2009/06/12 00:01:35							0			10.1	0.362	0.000	0.000	0.372	0.004	0.000	0.000	0.004
2009/06/12 00:01:37						0				9.9	0.234	0.485	0.233	0.493	0.204	0.252	0.221	0.251
2009/06/12 00:22:15						1				9.8	0.498	0.498	0.228	0.228	0.548	0.548	0.203	0.203
2009/06/12 00:24:17							1			9.8	0.229	0.500	0.226	0.494	0.221	0.548	0.201	0.472
2009/06/12 00:30:27							0			9.8	0.356	0.000	0.000	0.367	0.376	0.000	0.000	0.345
2009/06/12 00:30:29						0				9.8	0.231	0.000	0.000	0.491	0.224	0.000	0.000	0.470

### Channel S1

Results for feed horn 25, channel S1 (test PEGASO). The analysis has been done in the range [1623453671., 1623458877.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 23:21:36	171	171	0	0	0	0	0	0	0	-0.2	0.058	0.238	0.250	0.063	0.004	0.004	0.003	0.003
2009/06/11 23:38:57						1				-0.2	0.238	0.238	0.250	0.250	0.004	0.004	0.003	0.003
2009/06/11 23:40:59							1			-0.2	0.236	0.236	0.248	0.248	0.004	0.004	0.004	0.004
2009/06/11 23:47:09							0			-0.2	0.238	0.000	0.000	0.250	0.004	0.000	0.000	0.003
2009/06/12 00:03:43										11.3	0.233	0.499	0.235	0.449	0.004	0.005	0.004	0.004
2009/06/12 00:03:47	226	216	167	153	180					11.3	0.233	0.000	0.000	0.495	0.206	0.000	0.000	0.213
2009/06/12 00:07:49						1				11.3	0.492	0.492	0.226	0.226	0.244	0.245	0.214	0.214
2009/06/12 00:09:51							1			11.4	0.231	0.494	0.224	0.497	0.253	0.253	0.220	0.220
2009/06/12 00:11:53				102						11.4	0.231	0.494	0.224	0.497	0.244	0.252	0.220	0.213
2009/06/12 00:13:55				153						11.4	0.231	0.494	0.224	0.497	0.244	0.252	0.220	0.212
2009/06/12 00:13:57					120					11.3	0.231	0.494	0.224	0.497	0.241	0.253	0.220	0.211
2009/06/12 00:15:59					180					11.3	0.362	0.000	0.000	0.360	0.248	0.000	0.000	0.217
2009/06/12 00:16:00							0			11.4	0.444	0.000	0.000	0.276	0.251	0.000	0.000	0.219
2009/06/12 00:16:03						0				11.2	0.231	0.495	0.230	0.491	0.226	0.544	0.205	0.448

### Channel S2

Results for feed horn 25, channel S2 (test PEGASO). The analysis has been done in the range [1623453671., 1623458877.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/11 23:21:36	171	171	0	0	0	0	0	0	0	-0.2	0.120	0.237	0.249	0.165	0.004	0.004	0.004	0.003
2009/06/11 23:53:23						1	0	0	0	-0.2	0.504	0.504	0.231	0.231	0.004	0.004	0.004	0.004
2009/06/11 23:55:25							1	0	0	-0.2	0.232	0.502	0.233	0.500	0.005	0.005	0.004	0.004
2009/06/12 00:01:35							0	0	0	-0.2	0.362	0.000	0.000	0.372	0.004	0.000	0.000	0.004
2009/06/12 00:01:37							0	0	0	-0.2	0.235	0.487	0.231	0.493	0.197	0.252	0.219	0.176
2009/06/12 00:18:08	219	220	166	126	178			0	0	12.1	0.231	0.000	0.000	0.492	0.224	0.000	0.000	0.469
2009/06/12 00:18:13								2	0	12.1	0.231	0.231	0.491	0.491	0.224	0.224	0.471	0.471
2009/06/12 00:22:15						1		2	2	12.1	0.498	0.498	0.228	0.228	0.548	0.548	0.203	0.203
2009/06/12 00:24:17							1	2	2	12.1	0.229	0.500	0.226	0.494	0.222	0.550	0.202	0.473
2009/06/12 00:26:19				84				2	2	12.1	0.229	0.500	0.226	0.494	0.222	0.545	0.199	0.473
2009/06/12 00:28:21				126				2	2	12.1	0.229	0.500	0.226	0.494	0.221	0.550	0.202	0.471
2009/06/12 00:28:23					118			2	2	12.1	0.229	0.499	0.226	0.483	0.220	0.550	0.202	0.470
2009/06/12 00:30:25					178			2	2	12.1	0.435	0.499	0.226	0.290	0.472	0.550	0.202	0.266
2009/06/12 00:30:27							0	2	2	12.1	0.356	0.000	0.000	0.367	0.376	0.000	0.000	0.345
2009/06/12 00:30:29						0		2	2	12.1	0.231	0.000	0.000	0.491	0.224	0.000	0.000	0.470

## **1.5 pegaso\_bscope\_mini\_report\_00005**

### **Bscope\_00005**

### 1.5.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

### 1.5.2 Test PEGASO, Feed Horn 22

#### Channel S2

Results for feed horn 22, channel S2 (test PEGASO). The analysis has been done in the range [1623461897., 1623466233.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 01:38:20	0	0	0	0	0	0	0	0	0	-0.1	0.000	0.009	0.008	0.000	0.000	0.007	0.009	0.000
2009/06/12 01:53:36	220	199	123	255	255		0	0	0	17.4	0.000	-0.140	0.008	0.000	0.000	0.858	1.107	0.000
2009/06/12 01:53:40								2	0	16.1	-0.004	-0.004	-0.103	-0.013	0.583	0.530	0.728	0.770
2009/06/12 01:57:42						1		2		15.9	-0.004	-0.004	-0.013	-0.013	0.572	0.564	0.762	0.771
2009/06/12 01:59:44							1	2		15.9	-0.004	-0.004	-0.013	-0.013	0.559	0.558	0.736	0.753
2009/06/12 02:01:46				170				2		15.8	-0.003	-0.003	-0.012	-0.012	0.542	0.547	0.723	0.728
2009/06/12 02:03:48				255				2		15.8	-0.003	-0.003	-0.012	-0.012	0.544	0.539	0.711	0.734
2009/06/12 02:03:50					170			2		15.8	-0.003	-0.003	-0.012	-0.012	0.539	0.532	0.700	0.728
2009/06/12 02:05:52					255			2		15.8	0.000	-0.003	-0.012	0.000	0.000	0.535	0.721	0.000
2009/06/12 02:05:54							0	2		15.8	0.000	-0.003	-0.012	0.000	0.000	0.535	0.717	0.000
2009/06/12 02:05:56						0		2		15.7	0.002	0.111	0.118	-0.006	0.764	1.535	0.902	2.069
2009/06/12 02:26:34						1		2		15.6	0.421	0.418	0.476	0.479	0.694	0.693	1.953	1.955
2009/06/12 02:28:36							1	2		15.6	0.410	0.396	0.447	0.467	0.690	1.583	0.872	1.950
2009/06/12 02:34:46						0		2		15.6	0.000	0.403	0.458	0.000	0.000	1.164	1.384	0.000
2009/06/12 02:34:48						0		2		15.5	0.510	0.986	0.539	1.310	0.681	1.520	0.848	1.847

#### Channel S1

Results for feed horn 22, channel S1 (test PEGASO). The analysis has been done in the range [1623461897., 1623466233.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 01:38:20	0	0	0	0	0	0	0	0	0	-0.1	0.000	0.005	-0.007	0.000	0.000	0.055	0.077	0.000
2009/06/12 01:55:12								2		-0.1	-0.003	-0.003	-0.013	-0.013	0.557	0.559	0.739	0.751
2009/06/12 02:08:00	204	184	122	255	255			2		-0.1	0.000	-0.003	-0.012	0.000	0.000	1.427	0.910	0.000
2009/06/12 02:08:02						1		2		17.9	0.000	-0.003	-0.012	0.000	0.000	1.810	0.980	0.000
2009/06/12 02:12:08							1	2		17.4	-0.003	0.000	0.000	-0.012	0.762	0.000	0.000	2.120
2009/06/12 02:14:10								2		17.3	-0.003	-0.003	-0.012	-0.012	0.749	1.715	0.930	2.093
2009/06/12 02:16:12				170				2		17.2	-0.003	-0.003	-0.012	-0.012	0.736	1.694	0.921	2.053
2009/06/12 02:18:14				255				2		17.2	-0.003	-0.003	-0.012	-0.012	0.738	1.680	0.914	2.063
2009/06/12 02:18:16					170			2		17.2	-0.003	-0.003	-0.012	-0.012	0.735	1.656	0.922	2.055
2009/06/12 02:20:18				255				2		17.2	0.000	-0.003	-0.012	0.000	0.943	1.803	1.803	0.000
2009/06/12 02:20:20							0	2		17.2	0.000	-0.003	-0.012	0.000	0.000	1.232	1.453	0.000
2009/06/12 02:20:22						0		2		16.9	0.416	0.575	0.432	0.472	0.710	1.566	0.875	1.930
2009/06/12 02:41:00						1		2		16.8	0.505	0.504	1.320	1.324	0.671	0.672	1.865	1.861
2009/06/12 02:43:02							1	2		16.8	0.494	1.166	0.543	1.313	0.668	1.508	0.836	1.859

### Channel M1

Results for feed horn 22, channel M1 (test PEGASO). The analysis has been done in the range [1623461897., 1623466233.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 01:38:20	0	0	0	0	0	0	0	0	0	-0.1	0.000	0.005	-0.007	0.000	0.000	0.055	0.077	0.000
2009/06/12 01:55:12								2		-0.1	-0.004	-0.004	-0.013	-0.013	0.583	0.599	0.790	0.770
2009/06/12 01:57:42						1		2		-0.1	-0.004	-0.004	-0.013	-0.013	0.572	0.564	0.762	0.771
2009/06/12 01:59:44							1	2		-0.1	-0.003	-0.003	-0.012	-0.012	0.547	0.545	0.720	0.736
2009/06/12 02:05:54							0	2		-0.1	0.000	-0.003	-0.012	0.000	0.000	0.535	0.717	0.000
2009/06/12 02:05:56						0		2		-0.1	-0.003	-0.003	-0.012	-0.012	0.753	1.518	0.912	2.083
2009/06/12 02:22:28								2		14.4	0.416	0.434	0.485	0.468	1.585	1.583	0.873	0.875
2009/06/12 02:26:34	179	204	118	255	255			2		13.7	0.421	0.476	0.479	0.694	0.693	1.953	1.955	0.000
2009/06/12 02:28:36						1		2		13.7	0.415	0.401	0.453	0.473	0.690	1.583	0.871	1.950
2009/06/12 02:30:38				170				2		13.6	0.406	0.398	0.450	0.462	0.691	1.584	0.872	1.950
2009/06/12 02:32:40				255				2		13.6	0.410	0.393	0.444	0.468	0.691	1.584	0.872	1.951
2009/06/12 02:32:42					170			2		13.6	0.409	0.389	0.439	0.466	0.691	1.584	0.872	1.951
2009/06/12 02:34:44					255			2		13.6	0.000	0.405	0.462	0.000	0.000	1.715	0.000	0.000
2009/06/12 02:34:46							0	2		13.6	0.000	0.403	0.458	0.000	0.000	1.164	1.384	0.000
2009/06/12 02:34:48						0		2		13.4	0.510	0.986	0.539	1.310	0.681	1.520	0.848	1.847

### Channel M2

Results for feed horn 22, channel M2 (test PEGASO). The analysis has been done in the range [1623461897., 1623466233.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 01:38:20	0	0	0	0	0	0	0	0	0	-0.1	0.000	0.005	-0.007	0.000	0.000	0.055	0.077	0.000
2009/06/12 01:55:12								2	0	-0.1	-0.003	-0.003	-0.012	-0.013	0.557	0.996	0.823	0.751
2009/06/12 02:12:08						1	1	2	0	-0.1	-0.003	0.000	0.000	-0.012	0.762	0.000	0.000	2.120
2009/06/12 02:14:10							0	2	0	-0.1	-0.003	-0.003	-0.012	-0.012	0.740	1.683	0.930	2.067
2009/06/12 02:20:20								2	0	-0.1	0.000	-0.003	-0.012	0.000	0.000	1.232	1.453	0.000
2009/06/12 02:20:22						0		2	0	-0.1	0.414	0.339	0.380	0.472	0.708	1.592	0.890	1.932
2009/06/12 02:36:54	178	176	125	255	255			2	2	16.0	1.177	1.227	0.575	0.553	1.502	1.497	0.834	0.836
2009/06/12 02:41:00						1		2	2	15.7	0.505	0.504	1.320	1.324	0.671	0.672	1.865	1.861
2009/06/12 02:43:02							1	2	2	15.7	0.494	1.166	0.543	1.314	0.668	1.508	0.836	1.859
2009/06/12 02:45:04				170				2	2	15.7	0.490	1.163	0.542	1.301	0.669	1.509	0.837	1.860

## **1.6 pegaso\_bscope\_mini\_report\_00006**

### **Bscope\_00006**

### 1.6.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

### 1.6.2 Test PEGASO, Feed Horn 24

#### Channel M2

Results for feed horn 24, channel M2 (test PEGASO). The analysis has been done in the range [1623512700., 1623518552.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 15:45:06	227	204	183	126	253	0	0	2	0	7.4	0.057	0.058	0.066	0.065	-0.001	-0.001	-0.001	-0.001
2009/06/12 15:49:21						1		2		7.4	0.058	0.059	0.067	0.067	-0.001	-0.001	-0.001	-0.001
2009/06/12 15:51:12							1	2		7.4	0.057	0.058	0.067	0.065	-0.001	-0.001	-0.001	-0.001
2009/06/12 15:53:14				84				2		7.5	0.057	0.058	0.066	0.065	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:35:00				126				2		7.5	0.057	0.059	0.067	0.064	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:35:02					168			2		7.5	0.056	0.059	0.067	0.064	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:37:04					253			2		7.5	0.058	0.000	0.000	0.066	-0.001	0.000	0.000	-0.001
2009/06/12 16:37:06							0	2		7.5	0.058	0.000	0.000	0.066	-0.001	0.000	0.000	-0.001
2009/06/12 16:37:08						0		2		7.4	0.070	0.152	0.077	0.146	0.041	-0.001	-0.001	0.042
2009/06/12 16:57:46						1		2		7.3	0.000	0.152	0.075	0.000	0.000	0.160	0.166	0.000
2009/06/12 16:59:48							1	2		7.3	0.072	0.152	0.075	0.157	0.156	0.159	0.165	0.160
2009/06/12 17:05:58							0	2		7.3	0.108	0.000	0.000	0.120	0.158	0.000	0.000	0.163
2009/06/12 17:06:00						0		2		7.3	0.072	0.149	0.075	0.155	0.144	0.283	0.152	0.274

#### Channel M1

Results for feed horn 24, channel M1 (test PEGASO). The analysis has been done in the range [1623512700., 1623518552.] s. The format for the time values (first column) is 'utc'.



Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]	
2009/06/12 15:45:06	171	171	0	0	0	0	0	2	0	-0.2	0.057	0.058	0.066	0.065	-0.001	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:39:14	226	204	200	152	252	1	0	2		10.2	0.072	0.072	0.160	0.160	-0.001	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:43:20							1	2		10.3	0.154	0.154	0.076	0.076	-0.001	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:45:22							1	2		10.3	0.072	0.153	0.075	0.159	-0.001	-0.001	-0.001	-0.001	-0.001

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 16:47:24				101				2		10.3	0.072	0.152	0.075	0.159	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:49:26				152				2		10.3	0.072	0.153	0.075	0.159	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:49:28					168			2		10.3	0.072	0.153	0.075	0.158	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:51:30					252			2		10.3	0.134	0.153	0.075	0.095	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:51:32							0	2		10.3	0.111	0.000	0.000	0.120	-0.001	0.000	0.000	-0.001
2009/06/12 16:51:34								2		10.2	0.072	0.152	0.075	0.157	0.131	0.159	0.165	0.177
2009/06/12 17:12:16						1		2		10.1	0.000	0.150	0.074	0.000	0.000	0.284	0.152	0.000
2009/06/12 17:14:18							1	2		10.1	0.071	0.149	0.074	0.154	0.140	0.284	0.151	0.301
2009/06/12 17:20:28							0	2		10.1	0.108	0.000	0.000	0.117	0.207	0.000	0.000	0.231
2009/06/12 17:20:30						0		2		10.1	0.071	0.000	0.000	0.155	0.140	0.000	0.000	0.302

### Channel S2

Results for feed horn 24, channel S2 (test PEGASO). The analysis has been done in the range [1623512700., 1623518552.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 15:45:06	171	171	0	0	0	0	0	2	0	-0.2	0.057	0.058	0.066	0.065	-0.001	-0.001	-0.001	-0.001
2009/06/12 15:49:21						1		2		-0.2	0.058	0.059	0.067	0.067	-0.001	-0.001	-0.001	-0.001
2009/06/12 15:51:12							1	2		-0.2	0.057	0.058	0.066	0.065	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:37:06							0	2		-0.2	0.058	0.000	0.000	0.066	-0.001	0.000	0.000	-0.001
2009/06/12 16:37:08								2		-0.2	0.070	0.152	0.077	0.142	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:53:40	219	225	152	126	249			2		15.5	0.072	0.000	0.000	0.158	0.157	0.000	0.161	0.161
2009/06/12 16:57:46						1		2		15.5	0.000	0.152	0.075	0.000	0.000	0.160	0.166	0.000
2009/06/12 16:59:48							1	2		15.5	0.071	0.152	0.075	0.157	0.156	0.160	0.166	0.161
2009/06/12 17:01:50				84				2		15.5	0.072	0.152	0.075	0.157	0.156	0.157	0.163	0.161
2009/06/12 17:03:52				126				2		15.5	0.072	0.152	0.075	0.157	0.155	0.160	0.166	0.160
2009/06/12 17:03:54					166			2		15.5	0.072	0.152	0.075	0.157	0.155	0.160	0.166	0.159
2009/06/12 17:05:56					249			2		15.5	0.134	0.000	0.000	0.093	0.159	0.000	0.000	0.165
2009/06/12 17:05:58							0	2		15.5	0.108	0.000	0.000	0.120	0.158	0.000	0.000	0.163
2009/06/12 17:06:00						0		2		15.4	0.072	0.149	0.075	0.155	0.144	0.283	0.152	0.274

### Channel S1

Results for feed horn 24, channel S1 (test PEGASO). The analysis has been done in the range [1623512700., 1623518552.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 15:45:06	171		0	0	0	0	0	2	0	-0.2	0.059	0.058	0.066	0.079	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:43:20		171				1		2		-0.2	0.154	0.154	0.076	0.076	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:45:22							1	2		-0.2	0.072	0.153	0.075	0.159	-0.001	-0.001	-0.001	-0.001
2009/06/12 16:51:32							0	2		-0.2	0.111	0.000	0.000	0.120	-0.001	0.000	0.000	-0.001
2009/06/12 16:51:34						0		2		-0.2	0.072	0.152	0.075	0.157	0.128	0.159	0.165	0.132
2009/06/12 17:08:02		213						2		-0.2	0.072	0.000	0.000	0.157	0.156	0.000	0.000	0.162
2009/06/12 17:08:04			157					2		-0.2	0.071	0.000	0.000	0.156	0.154	0.000	0.000	0.165
2009/06/12 17:08:06								2		-0.2	0.071	0.000	0.000	0.156	0.152	0.000	0.000	0.168
2009/06/12 17:08:08		219						2		-0.2	0.071	0.000	0.000	0.156	0.145	0.000	0.000	0.239
2009/06/12 17:08:10				127	252			2		10.7	0.071	0.000	0.000	0.156	0.139	0.000	0.000	0.302
2009/06/12 17:12:16						1		2		10.7	0.000	0.150	0.074	0.000	0.000	0.284	0.152	0.000
2009/06/12 17:14:18							1	2		10.7	0.071	0.149	0.074	0.155	0.139	0.284	0.151	0.303
2009/06/12 17:16:20				84				2		10.7	0.071	0.149	0.074	0.155	0.139	0.283	0.151	0.303
2009/06/12 17:18:22				127				2		10.7	0.071	0.149	0.074	0.155	0.139	0.284	0.151	0.302
2009/06/12 17:18:24					168			2		10.7	0.072	0.149	0.074	0.153	0.141	0.284	0.151	0.299
2009/06/12 17:20:26					252			2		10.7	0.132	0.000	0.000	0.092	0.252	0.000	0.000	0.185
2009/06/12 17:20:28							0	2		10.7	0.108	0.000	0.000	0.117	0.207	0.000	0.000	0.231
2009/06/12 17:20:30						0		2		10.7	0.071	0.000	0.000	0.155	0.140	0.000	0.000	0.302

## 1.7 pegaso\_bscope\_mini\_report\_00007

### Bscope\_00007

### 1.7.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

#### 1.7.2 Test PEGASO, Feed Horn 27

##### Channel M1

Results for feed horn 27, channel M1 (test PEGASO). The analysis has been done in the range [1623518852., 1623522556.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 17:28:33	171	171	0	0	0	0	0	2	0	-0.1	0.005	0.000	0.000	0.008	0.022	0.000	0.000	0.026
2009/06/12 17:31:36	240	108	100	153	205	0	0	2	0	4.2	0.611	0.578	0.662	0.699	0.022	0.022	0.026	0.026
2009/06/12 17:35:42						1	1	2		3.8	0.570	0.576	0.657	0.650	0.022	0.022	0.026	0.026
2009/06/12 17:37:44								2		3.7	0.558	0.564	0.643	0.639	0.022	0.022	0.026	0.026
2009/06/12 17:39:46				102				2		3.7	0.550	0.544	0.620	0.630	0.022	0.022	0.026	0.026
2009/06/12 17:41:48				153				2		3.7	0.543	0.553	0.631	0.621	0.022	0.022	0.026	0.026
2009/06/12 17:41:50					136			2		3.7	0.536	0.550	0.627	0.613	0.022	0.022	0.026	0.026
2009/06/12 17:43:52					205			2		3.7	0.546	0.000	0.000	0.624	0.022	0.000	0.000	0.026
2009/06/12 17:43:54							0	2		3.7	0.545	0.000	0.000	0.623	0.022	0.000	0.000	0.026
2009/06/12 17:43:56						0		2		3.6	1.226	2.540	1.370	2.383	0.436	0.041	0.041	0.373
2009/06/12 18:04:34						1		2		3.6	2.525	2.526	1.336	1.335	1.630	1.631	1.364	1.364
2009/06/12 18:06:36							1	2		3.6	1.322	2.521	1.335	2.634	1.585	1.614	1.349	1.333
2009/06/12 18:12:46							0	2		3.6	1.885	0.000	0.000	2.020	1.611	0.000	0.000	1.352
2009/06/12 18:12:48						0		2		3.5	1.319	2.485	1.364	2.609	1.598	3.555	1.336	2.723

##### Channel M2

Results for feed horn 27, channel M2 (test PEGASO). The analysis has been done in the range [1623518852., 1623522556.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 17:28:33	171	171	0	0	0	0	0	2	0	-0.2	0.436	0.562	0.641	0.499	0.022	0.022	0.026	0.026
2009/06/12 17:46:02	245	108	157	178	204	1		2		7.8	1.326	0.000	0.000	2.684	0.022	0.000	0.000	0.026
2009/06/12 17:50:08							1	2		7.8	0.000	2.573	1.355	0.000	0.000	0.022	0.026	0.000
2009/06/12 17:52:10				118				2		7.9	1.323	2.563	1.353	2.667	0.022	0.022	0.026	0.026
2009/06/12 17:54:12				178				2		7.9	1.324	2.532	1.331	2.664	0.022	0.022	0.026	0.026
2009/06/12 17:56:14								2		7.9	1.312	2.557	1.353	2.647	0.022	0.022	0.026	0.026
2009/06/12 17:56:16					136			2		7.9	1.317	2.557	1.353	2.621	0.022	0.022	0.026	0.026
2009/06/12 17:58:18					204			2		7.9	2.285	0.000	0.000	1.640	0.022	0.000	0.000	0.026
2009/06/12 17:58:20							0	2		7.9	1.907	0.000	0.000	2.045	0.022	0.000	0.000	0.026
2009/06/12 17:58:22						0		2		7.8	1.328	2.499	1.361	2.627	1.398	1.620	1.357	1.640
2009/06/12 18:19:00						1		2		7.8	2.512	2.512	1.343	1.343	3.599	3.600	1.307	1.307
2009/06/12 18:21:02							1	2		7.8	1.312	2.489	1.355	2.603	1.587	3.560	1.324	3.066
2009/06/12 18:27:12							0	2		7.8	1.874	0.000	0.000	2.007	2.537	0.000	0.000	2.241
2009/06/12 18:27:14						0		2		7.8	1.314	0.000	0.000	2.604	1.593	0.000	0.000	3.075

### Channel S1

Results for feed horn 27, channel S1 (test PEGASO). The analysis has been done in the range [1623518852., 1623522556.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 17:28:33	171	171	0	0	0	0	0	2	0	-0.2	0.354	0.578	0.662	0.406	0.022	0.022	0.026	0.026
2009/06/12 17:35:42						1		2		-0.2	0.570	0.576	0.657	0.650	0.022	0.022	0.026	0.026
2009/06/12 17:37:44							1	2		-0.2	0.548	0.553	0.630	0.627	0.022	0.022	0.026	0.026
2009/06/12 17:43:54							0	2		-0.2	0.545	0.000	0.000	0.623	0.022	0.000	0.000	0.026
2009/06/12 17:43:56						0		2		-0.2	1.191	2.555	1.355	2.288	0.022	0.022	0.026	0.026
2009/06/12 18:00:28								2		8.6	1.322	1.322	2.643	2.646	1.601	1.600	1.346	1.347
2009/06/12 18:04:34						1		2		8.6	2.525	2.526	1.335	1.335	1.631	1.631	1.364	1.364
2009/06/12 18:06:36								2		8.6	1.322	2.523	1.336	2.637	1.598	1.629	1.363	1.345
2009/06/12 18:08:38		86	157	151	179			2		8.6	1.322	2.520	1.335	2.634	1.597	1.587	1.323	1.344
2009/06/12 18:10:40								2		8.6	1.322	2.520	1.336	2.634	1.577	1.627	1.362	1.325
2009/06/12 18:10:42					119			2		8.6	1.321	2.519	1.335	2.632	1.561	1.627	1.362	1.310
2009/06/12 18:12:44					179			2		8.6	2.254	0.000	0.000	1.621	0.000	0.000	0.000	1.358
2009/06/12 18:12:46							0	2		8.6	1.885	0.000	0.000	2.020	1.611	0.000	0.000	1.352
2009/06/12 18:12:48						0		2		8.5	1.319	2.485	1.364	2.609	1.598	3.555	1.336	2.723

### Channel S2

Results for feed horn 27, channel S2 (test PEGASO). The analysis has been done in the range [1623518852., 1623522556.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 17:28:33	171	171	0	0	0	0	0	2	0	-0.2	0.658	0.562	0.641	1.043	0.022	0.022	0.026	0.026
2009/06/12 17:50:08						1		2		-0.1	0.000	2.573	1.355	0.000	0.000	0.022	0.026	0.000
2009/06/12 17:52:10							1	2		-0.1	1.328	2.551	1.345	2.644	0.022	0.022	0.026	0.026
2009/06/12 17:58:20							0	2		-0.1	1.907	0.000	0.000	2.045	0.022	0.000	0.000	0.026
2009/06/12 17:58:22						0		2		-0.2	1.333	2.501	1.359	2.631	1.327	1.620	1.355	1.117
2009/06/12 18:14:54	250	126	156	153	179			2		8.7	1.316	1.315	2.613	2.615	1.592	1.592	3.080	3.081
2009/06/12 18:19:00						1		2		8.7	2.512	2.512	1.343	1.343	3.599	3.600	1.307	1.307
2009/06/12 18:21:02							1	2		8.7	1.312	2.505	1.340	2.605	1.592	3.597	1.308	3.076
2009/06/12 18:23:04				102				2		8.7	1.312	2.503	1.340	2.603	1.592	3.560	1.292	3.075
2009/06/12 18:25:06				153				2		8.7	1.311	2.502	1.340	2.601	1.584	3.595	1.308	3.059
2009/06/12 18:25:08					119			2		8.7	1.311	2.477	1.366	2.601	1.577	3.553	1.344	3.045
2009/06/12 18:27:10					179			2		8.7	0.000	2.239	1.617	0.000	0.000	3.154	1.697	0.000
2009/06/12 18:27:12							0	2		8.7	1.874	0.000	0.000	2.007	2.537	0.000	0.000	2.241
2009/06/12 18:27:14						0		2		8.7	1.314	0.000	0.000	2.604	1.583	0.000	0.000	3.075

## **1.8 pegaso\_bscope\_mini\_report\_00008**

### **Bscope\_00008**



### 1.8.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

#### 1.8.2 Test PEGASO, Feed Horn 21

##### Channel S2

Results for feed horn 21, channel S2 (test PEGASO). The analysis has been done in the range [1623523214., 1623526918.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 18:40:14	201	213	132	255	255	0	0	2	0	17.8	0.000	0.001	0.000	0.000	0.000	0.910	0.925	0.000
2009/06/12 18:44:16						1		2		17.8	0.001	0.000	0.000	0.000	0.921	0.000	0.000	0.932
2009/06/12 18:46:18							1	2		17.8	0.001	0.001	0.000	0.000	0.915	0.905	0.917	0.923
2009/06/12 18:48:20				170				2		17.8	0.001	0.001	0.000	0.001	0.900	0.904	0.916	0.907
2009/06/12 18:50:22				255				2		17.8	0.001	0.001	0.001	0.000	0.914	0.896	0.907	0.923
2009/06/12 18:50:24					170			2		17.8	0.001	0.001	0.000	0.000	0.914	0.889	0.899	0.922
2009/06/12 18:52:26					255			2		17.8	0.000	0.001	0.000	0.000	0.000	0.913	0.924	0.000
2009/06/12 18:52:28						0	0	2		17.8	0.000	0.001	0.000	0.000	0.000	0.913	0.926	0.000
2009/06/12 18:52:30								2		17.5	0.001	0.001	0.000	0.000	1.004	1.528	0.966	1.563
2009/06/12 19:13:08						1		2		17.3	0.616	0.617	0.631	0.629	0.928	0.927	1.477	1.478
2009/06/12 19:15:10							1	2		17.3	0.612	0.602	0.612	0.626	0.933	1.550	0.893	1.464
2009/06/12 19:21:20							0	2		17.3	0.000	0.612	0.624	0.000	0.000	1.258	1.170	0.000
2009/06/12 19:21:22						0		2		17.1	0.000	1.249	0.770	0.000	0.000	1.511	0.876	0.000

##### Channel S1

Results for feed horn 21, channel S1 (test PEGASO). The analysis has been done in the range [1623523214., 1623526918.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 18:40:14	0	0	0	0	0	0	0	2	0	-0.1	0.001	0.001	0.000	0.000	0.914	0.906	0.920	0.923
2009/06/12 18:54:36	196	197	136	255	255	1	2	2	0	20.0	0.001	0.001	0.000	0.000	1.675	1.703	0.980	0.968
2009/06/12 18:58:42							2	2		19.9	0.001	0.001	0.001	0.000	0.994	0.993	1.579	1.581
2009/06/12 19:00:44							2	2		19.9	0.001	0.001	0.000	0.000	0.993	1.664	0.961	1.576

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 19:02:46				170			2			19.9	0.001	0.001	0.000	0.000	0.987	1.660	0.959	1.563
2009/06/12 19:04:48				255			2			19.9	0.001	0.001	0.001	0.000	0.991	1.654	0.958	1.573
2009/06/12 19:04:50					170		2			19.9	0.001	0.001	0.000	0.000	0.991	1.650	0.956	1.571
2009/06/12 19:06:52					255		2			19.9	0.000	0.001	0.000	0.000	0.000	1.138	1.438	0.000
2009/06/12 19:06:54						0	2			19.9	0.000	0.001	0.000	0.000	0.000	1.346	1.251	0.000
2009/06/12 19:06:56						0	2			19.6	0.613	0.771	0.571	0.627	0.933	1.552	0.900	1.467

### Channel M1

Results for feed horn 21, channel M1 (test PEGASO). The analysis has been done in the range [1623523214., 1623526918.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 18:40:14	0	0	0	0	0	0	0	2	0	-0.1	0.000	0.001	0.000	0.000	0.000	0.910	0.925	0.000
2009/06/12 18:44:16						1	2			-0.1	0.001	0.000	0.000	0.000	0.921	0.000	0.000	0.932
2009/06/12 18:46:18							1	2		-0.1	0.001	0.001	0.000	0.000	0.909	0.899	0.911	0.918
2009/06/12 18:52:28							0	2		-0.1	0.000	0.001	0.000	0.000	0.000	0.913	0.926	0.000
2009/06/12 18:52:30						0	2			-0.1	0.001	0.001	0.000	0.000	1.004	1.528	0.966	1.563
2009/06/12 19:09:02	201	207	141	255	255		2			19.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/06/12 19:13:08						1	2			19.5	0.616	0.617	0.631	0.629	0.928	0.927	1.477	1.478
2009/06/12 19:15:10							2			19.4	0.613	0.604	0.614	0.627	0.926	1.550	0.893	1.470
2009/06/12 19:17:12				170			2			19.5	0.608	0.605	0.615	0.622	0.927	1.551	0.894	1.472
2009/06/12 19:19:14				255			2			19.5	0.614	0.600	0.610	0.628	0.926	1.551	0.894	1.471
2009/06/12 19:19:16					170		2			19.4	0.614	0.597	0.607	0.628	0.937	1.549	0.893	1.459
2009/06/12 19:21:18					255		2			19.4	0.614	0.000	0.000	0.627	1.063	0.000	0.000	1.344
2009/06/12 19:21:20							2			19.4	0.000	0.612	0.624	0.000	0.000	0.000	1.170	0.000
2009/06/12 19:21:22						0	2			19.2	0.000	1.249	0.770	0.000	0.000	1.511	0.876	0.000

### Channel M2

Results for feed horn 21, channel M2 (test PEGASO). The analysis has been done in the range [1623523214., 1623526918.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 18:40:14	0	0	0	0	0	0	0	2	0	-0.1	0.001	0.001	0.000	0.000	0.922	1.148	0.938	0.924
2009/06/12 18:58:42						1		2		-0.1	0.001	0.001	0.001	0.000	0.994	0.993	1.579	1.581
2009/06/12 19:00:44							1	2		-0.1	0.001	0.001	0.000	0.000	0.990	1.658	0.958	1.570
2009/06/12 19:06:54							0	2		-0.1	0.000	0.001	0.000	0.000	0.000	1.346	1.251	0.000

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/12 19:06:56						0		2		-0.1	0.613	0.476	0.484	0.627	0.933	1.574	0.913	1.467
2009/06/12 19:23:28	210	187	136	255	255			2		20.6	0.000	2.237	1.003	0.000	0.000	1.445	0.838	0.000

## **1.9 pegaso\_bscope\_mini\_report\_00009**

### **Bscope\_00009**

### 1.9.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

### 1.9.2 Test PEGASO, Feed Horn 19

#### Channel S2

Results for feed horn 19, channel S2 (test PEGASO). The analysis has been done in the range [1623600318., 1623604022.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 16:05:22	0	0	0	0	0	0	0	2	0	-0.2	0.000	0.004	0.010	0.000	0.000	-0.016	0.008	0.000
2009/06/13 16:09:22	220	201	125	255	255	0	0	2	0	20.3	0.004	0.004	0.010	0.010	0.706	0.750	0.925	0.867
2009/06/13 16:13:28						1	1	2	0	20.0	0.004	0.004	0.010	0.010	0.699	0.693	0.838	0.846
2009/06/13 16:15:30								2	0	20.0	0.004	0.004	0.010	0.010	0.683	0.672	0.824	0.825
2009/06/13 16:17:32				170				2	0	20.0	0.005	0.005	0.010	0.010	0.665	0.664	0.812	0.803
2009/06/13 16:19:34				255				2	0	20.0	0.005	0.005	0.010	0.010	0.672	0.655	0.801	0.810
2009/06/13 16:19:36					170			2	0	20.0	0.005	0.005	0.010	0.010	0.669	0.647	0.792	0.806
2009/06/13 16:21:38					255			2	0	20.0	0.000	0.005	0.010	0.000	0.000	0.666	0.805	0.000
2009/06/13 16:21:40							0	2	0	20.0	0.000	0.005	0.010	0.000	0.000	0.667	0.809	0.000
2009/06/13 16:21:42						0		2	0	19.7	0.018	0.294	0.333	0.026	1.081	1.606	1.292	2.230
2009/06/13 16:42:20						1		2	0	19.4	1.059	1.056	1.165	1.168	0.985	0.986	2.070	2.068
2009/06/13 16:44:22							1	2	0	19.5	1.049	1.034	1.159	1.157	0.980	1.633	1.267	2.063
2009/06/13 16:50:32							0	2	0	19.5	0.000	1.053	1.170	0.000	0.000	1.332	1.649	0.000
2009/06/13 16:50:34						0		2	0	19.2	1.397	2.085	1.481	2.518	0.938	1.547	1.200	1.908

#### Channel S1

Results for feed horn 19, channel S1 (test PEGASO). The analysis has been done in the range [1623600318., 1623604022.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 16:05:22	0	0	0	0	0	0	0	2	0	-0.2	0.004	0.004	0.010	0.010	0.684	0.488	0.607	0.826
2009/06/13 16:23:48	215	204	120	255	255			2	0	19.7	0.000	0.005	0.010	0.000	0.000	1.861	1.457	0.000
2009/06/13 16:27:54						1		2		19.4	0.005	0.000	0.000	0.010	1.077	0.000	0.000	2.285
2009/06/13 16:29:56				170			1	2		19.4	0.005	0.005	0.010	0.010	1.062	1.774	1.380	2.257
2009/06/13 16:31:58				255				2		19.4	0.005	0.005	0.010	0.010	1.049	1.762	1.370	2.224
2009/06/13 16:34:00								2		19.4	0.005	0.005	0.010	0.010	1.054	1.752	1.362	2.235
2009/06/13 16:34:02					170			2		19.4	0.005	0.005	0.010	0.010	1.062	1.743	1.355	2.215
2009/06/13 16:36:04					255			2		19.4	0.005	0.000	0.000	0.010	1.209	0.000	0.000	2.041
2009/06/13 16:36:06							0	2		19.4	0.005	0.005	0.010	0.010	1.057	1.586	1.570	2.233
2009/06/13 16:36:08						0		2		19.0	1.057	1.285	1.147	1.163	0.997	1.615	1.260	2.046
2009/06/13 16:56:46						1		2		18.8	1.388	1.884	2.550	2.560	0.927	0.928	1.925	1.924
2009/06/13 16:58:48							1	2		18.8	1.384	2.273	1.504	2.511	0.932	1.534	1.182	1.912
2009/06/13 17:04:58							0	2		18.8	0.000	1.848	1.987	0.000	0.000	1.248	1.534	0.000
2009/06/13 17:05:00						0		2		18.8	0.000	2.274	1.508	0.000	0.000	1.535	1.184	0.000

### Channel M1

Results for feed horn 19, channel M1 (test PEGASO). The analysis has been done in the range [1623600318., 1623604022.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 16:05:22	0	0	0	0	0	0	0	2	0	-0.2	0.004	0.004	0.010	0.010	0.706	0.373	0.473	0.867
2009/06/13 16:13:28						1		2		-0.2	0.004	0.004	0.010	0.010	0.699	0.693	0.838	0.846
2009/06/13 16:15:30							1	2		-0.2	0.005	0.005	0.010	0.010	0.672	0.661	0.809	0.812
2009/06/13 16:21:40							0	2		-0.2	0.000	0.005	0.010	0.000	0.000	0.667	0.809	0.000
2009/06/13 16:21:42						0		2		-0.2	0.005	0.005	0.010	0.010	1.074	1.598	1.302	2.243
2009/06/13 16:38:14					255			2		18.9	1.058	1.103	1.236	1.183	1.637	1.631	1.263	1.269
2009/06/13 16:42:20						1		2		18.7	1.059	1.056	1.165	1.168	0.985	0.986	2.070	2.068
2009/06/13 16:44:22							1	2		18.7	1.054	1.040	1.165	1.163	0.979	1.633	1.265	2.062
2009/06/13 16:46:24		198	124	255				2		18.8	1.038	1.040	1.165	1.145	0.980	1.634	1.266	2.062
2009/06/13 16:48:26					170			2		18.8	1.055	1.031	1.155	1.165	0.981	1.634	1.267	2.063
2009/06/13 16:48:28					255			2		18.8	1.055	1.023	1.145	1.164	0.981	1.635	1.267	2.064
2009/06/13 16:50:30						255		2		18.8	0.000	1.054	1.166	0.000	0.000	1.128	1.891	0.000
2009/06/13 16:50:32							0	2		18.8	0.000	1.053	1.170	0.000	0.000	1.332	1.649	0.000
2009/06/13 16:50:34						0		2		18.6	1.397	2.085	1.481	2.518	0.938	1.547	1.200	1.908



### Channel M2

Results for feed horn 19, channel M2 (test PEGASO). The analysis has been done in the range [1623600318., 1623604022.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 16:05:22	0	0	0	0	0	0	0	2	0	-0.2	0.004	0.004	0.010	0.010	0.684	0.812	0.808	0.826
2009/06/13 16:27:54						1	0	2	0	-0.2	0.005	0.000	0.000	0.010	1.077	0.000	0.000	2.285
2009/06/13 16:29:56							1	2	0	-0.2	0.005	0.005	0.010	0.010	1.061	1.760	1.369	2.227
2009/06/13 16:36:06							0	2	0	-0.2	0.005	0.005	0.010	0.010	1.057	1.586	1.570	2.233
2009/06/13 16:36:08						0		2	0	-0.2	1.053	0.879	0.985	1.162	0.995	1.650	1.291	2.049
2009/06/13 16:52:40	220	196	126	255	255			2	0	20.5	2.323	2.413	1.595	1.536	1.529	1.521	1.174	1.179
2009/06/13 16:56:46						1		2	0	20.2	1.388	1.384	2.550	2.560	0.927	0.928	1.925	1.924
2009/06/13 16:58:48							1	2	0	20.2	1.380	2.287	1.513	2.540	0.923	1.533	1.181	1.920
2009/06/13 17:00:50				170				2	0	20.2	1.366	2.276	1.506	2.512	0.924	1.534	1.182	1.922
2009/06/13 17:02:52				255				2	0	20.2	1.373	2.264	1.500	2.525	0.924	1.534	1.182	1.922
2009/06/13 17:02:54					170			2	0	20.2	1.393	2.254	1.494	2.497	0.940	1.534	1.183	1.904
2009/06/13 17:04:56					255			2	0	20.2	1.568	0.000	0.000	2.288	1.062	0.000	0.000	1.763
2009/06/13 17:04:58							0	2	0	20.2	0.000	1.848	1.987	0.000	0.000	1.248	1.534	0.000
2009/06/13 17:05:00						0		2	0	20.2	0.000	2.274	1.508	0.000	0.000	1.535	1.184	0.000

## **1.10 pegaso\_bscope\_mini\_report\_00010**

### **Bscope\_00010**

### 1.10.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

#### 1.10.2 Test PEGASO, Feed Horn 20

##### Channel S2

Results for feed horn 20, channel S2 (test PEGASO). The analysis has been done in the range [1623604322., 1623611626.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 17:12:34	0	0	0	0	0	0	0	2	0	-0.1	0.000	0.010	0.011	0.000	0.000	0.012	0.006	0.000
2009/06/13 17:16:06	189	201	123	255	255	1	0	2	0	20.0	0.011	0.011	0.011	0.011	1.129	1.264	1.275	1.143
2009/06/13 17:20:12							1	2		19.7	0.011	0.011	0.011	0.011	1.149	1.147	1.161	1.164
2009/06/13 17:22:14								2		19.7	0.011	0.011	0.011	0.011	1.139	1.112	1.126	1.154
2009/06/13 17:24:16				170				2		19.6	0.011	0.011	0.011	0.011	1.118	1.104	1.117	1.132
2009/06/13 17:26:18				255				2		19.6	0.011	0.011	0.011	0.011	1.128	1.094	1.107	1.142
2009/06/13 17:26:20					170			2		19.6	0.011	0.011	0.011	0.011	1.125	1.086	1.098	1.140
2009/06/13 17:28:22					255			2		19.6	0.000	0.011	0.011	0.000	0.000	1.120	1.134	0.000
2009/06/13 17:28:24							0	2		19.6	0.000	0.011	0.011	0.000	0.000	1.113	1.128	0.000
2009/06/13 17:28:26						0		2		19.3	0.025	0.226	0.221	0.025	1.133	1.488	1.121	1.583
2009/06/13 17:49:04						1		2		19.1	0.811	0.794	0.768	0.785	1.021	1.022	1.444	1.443
2009/06/13 17:51:06							1	2		19.1	0.751	0.735	0.715	0.728	1.020	1.394	1.027	1.443
2009/06/13 17:57:16							0	2		19.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/06/13 17:57:18						0		2		18.5	1.169	1.642	0.995	1.814	0.922	1.196	0.897	1.284

##### Channel S1

Results for feed horn 20, channel S1 (test PEGASO). The analysis has been done in the range [1623604322., 1623611626.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 17:12:34	0	0	0	0	0	0	0	2	0	-0.2	0.011	0.011	0.011	0.011	1.136	0.855	0.862	1.151
2009/06/13 17:30:32	189	201	129	255	255	1		2		15.2	0.011	0.011	0.011	0.011	1.608	1.665	1.175	1.154
2009/06/13 17:34:38								2		14.8	0.011	0.011	0.011	0.011	1.124	1.123	1.610	1.616
2009/06/13 17:36:40				170			1	2		14.7	0.011	0.011	0.011	0.011	1.119	1.586	1.147	1.603
2009/06/13 17:38:42				255				2		14.7	0.011	0.011	0.011	0.011	1.113	1.576	1.143	1.587
2009/06/13 17:40:44								2		14.7	0.011	0.011	0.011	0.011	1.115	1.570	1.142	1.591
2009/06/13 17:40:46					170			2		14.7	0.011	0.011	0.011	0.011	1.125	1.563	1.139	1.574
2009/06/13 17:42:48					255			2		14.7	0.011	0.000	0.000	0.011	1.206	0.000	0.000	1.490
2009/06/13 17:42:50							0	2		14.7	0.000	0.011	0.011	0.000	0.000	1.383	1.318	0.000
2009/06/13 17:42:52						0		2		14.3	0.813	0.798	0.813	0.813	1.028	1.378	1.020	1.419
2009/06/13 18:03:46						1		2		14.0	1.180	0.000	0.000	1.862	0.916	0.000	0.000	1.287
2009/06/13 18:05:32							1	2		14.1	1.142	1.839	1.107	1.797	0.918	1.269	0.945	1.291
2009/06/13 18:11:44						0	0	2		13.8	0.000	1.635	0.983	0.000	0.000	1.184	0.889	0.000

### Channel M1

Results for feed horn 20, channel M1 (test PEGASO). The analysis has been done in the range [1623604322., 1623611626.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 17:12:34	0	0	0	0	0	0	0	2	0	-0.2	0.011	0.010	0.011	0.011	1.129	0.688	0.691	1.143
2009/06/13 17:20:12						1		2		-0.2	0.011	0.011	0.011	0.011	1.149	1.147	1.161	1.164
2009/06/13 17:22:14							1	2		-0.2	0.011	0.011	0.011	0.011	1.128	1.101	1.114	1.142
2009/06/13 17:28:24							0	2		-0.2	0.000	0.011	0.011	0.000	0.000	1.113	1.128	0.000
2009/06/13 17:28:26						0		2		-0.2	0.011	0.011	0.011	0.011	1.129	1.521	1.153	1.593
2009/06/13 17:44:58								2		22.1	0.821	0.885	0.862	0.799	1.395	1.390	1.025	1.029
2009/06/13 17:49:04						1		2		21.7	0.811	0.794	0.768	0.785	1.021	1.022	1.444	1.443
2009/06/13 17:51:06	225	204	121	255	255			2		21.6	0.778	0.761	0.740	0.753	1.019	1.394	1.027	1.442
2009/06/13 17:53:08								2		21.6	0.744	0.737	0.716	0.721	1.020	1.394	1.027	1.442
2009/06/13 17:55:10								2		21.6	0.742	0.721	0.701	0.718	1.021	1.395	1.028	1.443
2009/06/13 17:55:12					170			2		21.5	0.733	0.709	0.690	0.710	1.022	1.395	1.028	1.444
2009/06/13 17:57:14					255			2		21.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/06/13 17:57:16							0	2		21.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/06/13 17:57:18						0		2		21.0	1.169	1.642	0.995	1.814	0.922	1.196	0.897	1.284

### Channel M2

Results for feed horn 20, channel M2 (test PEGASO). The analysis has been done in the range [1623604322., 1623611626.] s. The format for the time values (first column) is 'utc'.



Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 17:12:34	0	0	0	0	0	0	0	2	0	-0.2	0.011	0.011	0.011	0.011	1.137	1.050	0.938	1.151
2009/06/13 17:34:38						1		2		-0.2	0.011	0.011	0.011	0.011	1.124	1.123	1.610	1.616
2009/06/13 17:36:40							1	2		-0.2	0.011	0.011	0.011	0.011	1.122	1.575	1.143	1.585
2009/06/13 17:42:50							0	2		-0.2	0.000	0.011	0.011	0.000	0.000	1.383	1.318	0.000
2009/06/13 17:42:52						0		2		-0.2	0.778	0.662	0.638	0.753	1.030	1.420	1.049	1.432
2009/06/13 17:59:30	231	206	127	255	255			2		21.2	1.358	2.078	1.253	1.736	0.989	1.256	0.936	1.211
2009/06/13 18:03:46						1		2		21.0	1.180	0.000	0.000	1.862	0.916	0.000	0.000	1.287
2009/06/13 18:05:32							1	2		21.0	1.160	1.868	1.123	1.824	0.916	1.267	0.943	1.288
2009/06/13 18:07:34				170				2		21.0	1.136	1.840	1.106	1.787	0.918	1.270	0.946	1.292
2009/06/13 18:09:36				255				2		21.0	1.136	1.823	1.097	1.786	0.918	1.270	0.945	1.292
2009/06/13 18:09:38					170			2		21.0	1.130	1.807	1.089	1.775	0.919	1.271	0.947	1.293
2009/06/13 18:11:44					255	0	0	2		20.8	0.000	1.635	0.983	0.000	0.000	1.184	0.889	0.000

## **1.11 pegaso\_bscope\_mini\_report\_00011**

### **Bscope\_00011**

### 1.1.1.1 Bias status for PEGASO

This section provides an overall view of the bias settings used in a number of tests. It is used as an useful way to check the set up used during a tuning/calibration test.

### 1.1.1.2 Test PEGASO, Feed Horn 28

#### Channel M1

Results for feed horn 28, channel M1 (test PEGASO). The analysis has been done in the range [1623608326., 1623612078.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Skv00 [V]	Ref00 [V]	Skv01 [V]	Ref01 [V]	Skv10 [V]	Ref10 [V]	Skv11 [V]	Ref11 [V]
2009/06/13 18:19:46	171	171	0	0	0	0	0	2	0	-0.2	0.010	0.000	0.000	0.004	0.008	0.000	0.000	0.017
2009/06/13 18:22:50	193	89	155	127	181			2		7.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/06/13 18:23:56								2		9.5	1.487	0.000	0.000	1.085	0.008	0.000	0.000	0.017
2009/06/13 18:23:08	243					1		2		9.6	1.185	0.000	0.000	1.572	0.008	0.000	0.000	0.017
2009/06/13 18:27:20							1	2		9.6	0.000	1.186	1.574	0.000	0.000	0.008	0.017	0.000
2009/06/13 18:29:22								2		9.6	1.193	1.186	1.574	1.601	0.008	0.008	0.017	0.017
2009/06/13 18:31:24				84				2		9.6	1.194	1.110	1.470	1.601	0.008	0.008	0.017	0.017
2009/06/13 18:33:26				127				2		9.6	1.174	1.187	1.575	1.575	0.008	0.008	0.017	0.017
2009/06/13 18:33:28					120			2		9.6	1.158	1.186	1.575	1.552	0.008	0.008	0.017	0.017
2009/06/13 18:35:30					181			2		9.6	1.188	0.000	0.000	1.580	0.008	0.000	0.000	0.017
2009/06/13 18:35:32								2		9.6	1.190	0.000	0.000	1.589	0.008	0.000	0.000	0.017
2009/06/13 18:35:34							0	2		9.6	1.176	0.000	0.000	1.578	0.008	0.000	0.000	0.017
2009/06/13 18:37:40	171	171	0	0	0	0		2		9.6	0.010	0.000	0.000	0.005	0.008	0.000	0.000	0.017
2009/06/13 18:37:46	193	89	155	127	181			2		9.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/06/13 18:37:52								2		7.3	0.831	0.000	0.000	1.889	0.008	0.000	0.000	0.017
2009/06/13 18:38:04	243							2		9.5	1.901	1.151	2.810	1.878	0.262	0.010	0.019	0.230
2009/06/13 18:56:36						1		2		9.5	2.225	2.225	1.454	1.454	0.839	0.838	0.713	0.713
2009/06/13 18:58:38							1	2		9.5	1.149	2.211	1.471	2.834	0.838	0.826	0.702	0.716
2009/06/13 19:04:48							0	2		9.5	1.656	0.000	0.000	2.183	0.841	0.000	0.000	0.718
2009/06/13 19:04:50						0		2		9.5	1.589	1.144	2.800	2.255	1.487	1.079	1.941	1.305

#### Channel M2

Results for feed horn 28, channel M2 (test PEGASO). The analysis has been done in the range [1623608326., 1623612078.] s. The format for the time values (first column) is 'utc'.





Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 18:19:46	171	171	0	0	0	0	0	2	0	-0.2	0.010	0.000	0.000	0.004	0.008	0.000	0.000	0.017
2009/06/13 18:22:50	112	156	128	180	180			2		-0.2	0.725	0.000	0.000	0.755	0.008	0.000	0.000	0.017
2009/06/13 18:22:58	192							2		7.6	1.653	0.000	0.000	1.167	0.008	0.000	0.000	0.017
2009/06/13 18:23:08	240							2		7.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009/06/13 18:23:14	171	171	0	0	0			2		-0.2	1.170	1.171	1.553	1.561	0.008	0.008	0.017	0.017
2009/06/13 18:37:46	112	156	128	180	180			2		-0.2	0.524	0.000	0.000	0.907	0.008	0.000	0.000	0.017
2009/06/13 18:37:54	192							2		7.6	0.904	0.000	0.000	2.106	0.008	0.000	0.000	0.017
2009/06/13 18:38:04	240							2		9.2	1.153	1.153	2.845	2.845	0.008	0.008	0.017	0.017
2009/06/13 18:42:10						1		2		9.3	1.151	1.151	2.821	2.822	0.008	0.008	0.017	0.017
2009/06/13 18:44:12							1	2		9.2	2.233	1.151	2.821	1.458	0.008	0.008	0.017	0.017
2009/06/13 18:46:14				85				2		9.3	2.233	1.138	2.777	1.458	0.008	0.008	0.017	0.017
2009/06/13 18:48:16				128				2		9.3	2.219	1.151	2.820	1.453	0.008	0.008	0.017	0.017
2009/06/13 18:48:18					120			2		9.3	2.208	1.152	2.821	1.449	0.008	0.008	0.017	0.017
2009/06/13 18:50:20					180			2		9.3	1.390	0.000	0.000	2.521	0.008	0.000	0.000	0.017
2009/06/13 18:50:22							0	2		9.3	1.723	0.000	0.000	2.101	0.008	0.000	0.000	0.017
2009/06/13 18:50:24						0		2		9.2	1.582	2.197	1.489	2.277	0.794	0.835	0.726	0.951
2009/06/13 19:11:02						1		2		9.2	1.144	1.144	2.800	2.800	1.084	1.083	1.949	1.949
2009/06/13 19:13:04							1	2		9.2	2.210	1.144	2.799	1.454	2.157	1.076	1.935	0.951
2009/06/13 19:19:14							0	2		9.2	1.710	0.000	0.000	2.086	1.656	0.000	0.000	1.423
2009/06/13 19:19:16						0		2		9.2	2.214	0.000	0.000	1.449	2.168	0.000	0.000	0.952

### Channel S1

Results for feed horn 28, channel S1 (test PEGASO). The analysis has been done in the range [1623608326., 1623612078.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 18:19:46	171	171	0	0	0	0	0	2	0	-0.2	0.713	0.000	0.000	0.911	0.008	0.000	0.000	0.017
2009/06/13 18:27:20						1		2		-0.2	0.000	1.186	1.574	0.000	0.000	0.008	0.017	0.000
2009/06/13 18:29:22							1	2		-0.2	1.182	1.161	1.539	1.585	0.008	0.008	0.017	0.017
2009/06/13 18:35:32						0		2		-0.2	1.190	0.000	0.000	1.589	0.008	0.000	0.000	0.017
2009/06/13 18:35:34								2		-0.2	1.604	1.149	2.813	1.945	0.008	0.008	0.017	0.017
2009/06/13 18:52:30								2		8.8	2.226	2.225	1.454	1.454	0.836	0.838	0.713	0.711
2009/06/13 18:56:36	235	88	157	127	255	1		2		8.8	2.225	1.454	1.454	1.454	0.839	0.838	0.713	0.713
2009/06/13 18:58:38							1	2		8.8	1.149	2.224	1.454	2.835	0.843	0.838	0.713	0.721
2009/06/13 19:00:40				84				2		8.8	1.149	2.224	1.454	2.834	0.843	0.801	0.679	0.721
2009/06/13 19:02:42				127				2		8.8	1.149	2.224	1.454	2.834	0.834	0.838	0.713	0.713
2009/06/13 19:02:44					170			2		8.8	1.149	2.201	1.484	2.834	0.828	0.838	0.713	0.707
2009/06/13 19:04:46					255			2		8.8	0.000	1.987	1.757	0.000	0.000	0.840	0.715	0.000
2009/06/13 19:04:48							0	2		8.8	1.656	0.000	0.000	2.183	0.000	0.000	0.000	0.718
2009/06/13 19:04:50						0		2		8.8	1.589	1.144	2.800	2.255	1.487	1.079	1.941	1.305

### Channel S2

Results for feed horn 28, channel S2 (test PEGASO). The analysis has been done in the range [1623608326., 1623612078.] s. The format for the time values (first column) is 'utc'.

Time [s]	Vg1	Vg2	Vd	I1	I2	PS pos	4kHz	DAE ofs	DAE gain	Id [mA]	Sky00 [V]	Ref00 [V]	Sky01 [V]	Ref01 [V]	Sky10 [V]	Ref10 [V]	Sky11 [V]	Ref11 [V]
2009/06/13 18:19:46	171	171	0	0	0	0	0	2	0	-0.2	0.951	1.171	1.568	1.569	0.008	0.008	0.017	0.017
2009/06/13 18:42:10						1	0	2		-0.2	1.151	1.151	2.821	2.822	0.008	0.008	0.017	0.017
2009/06/13 18:44:12							1	2		-0.2	2.224	1.147	2.806	1.455	0.008	0.008	0.017	0.017
2009/06/13 18:50:22							0	2		-0.2	1.738	0.000	0.000	2.101	0.008	0.000	0.000	0.017
2009/06/13 18:50:24						0		2		-0.2	1.738	2.213	1.468	2.082	0.689	0.831	0.706	0.590
2009/06/13 19:06:56	245	121	158	128	255			2		10.4	1.146	1.146	2.823	2.824	1.090	1.090	1.972	1.971
2009/06/13 19:11:02						1		2		10.5	1.144	1.144	2.800	2.800	1.084	1.083	1.949	1.949
2009/06/13 19:13:04							1	2		10.5	2.214	1.145	2.799	1.449	2.167	1.084	1.948	0.951
2009/06/13 19:15:06				85				2		10.5	2.214	1.144	2.799	1.449	2.167	1.059	1.908	0.952
2009/06/13 19:17:08				128				2		10.5	2.214	1.145	2.799	1.449	2.156	1.084	1.948	0.944
2009/06/13 19:17:10					170			2		10.5	2.214	1.144	2.799	1.449	2.148	1.084	1.949	0.939
2009/06/13 19:19:12					255			2		10.5	1.380	0.000	0.000	2.502	1.323	0.000	0.000	1.730
2009/06/13 19:19:14							0	2		10.5	1.710	0.000	0.000	2.086	1.656	0.000	0.000	1.423
2009/06/13 19:19:16						0		2		10.5	2.214	0.000	0.000	1.449	2.168	0.000	0.000	0.952