

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 62551 - L2 Version 3

Chandra X-Ray Center

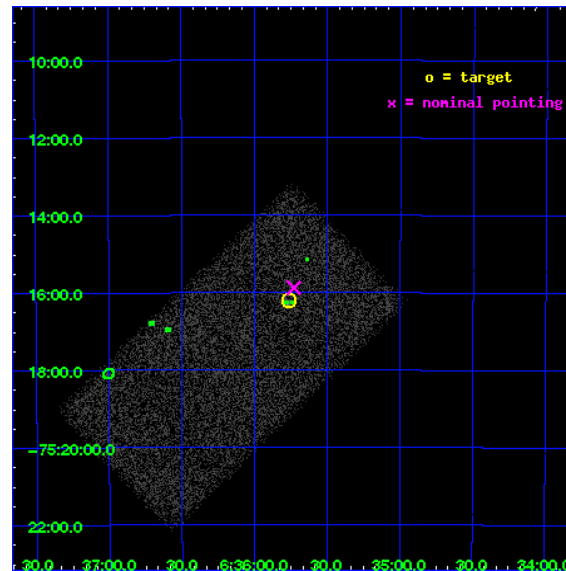
L2 Processing Date : Dec 14 2009

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1 Front

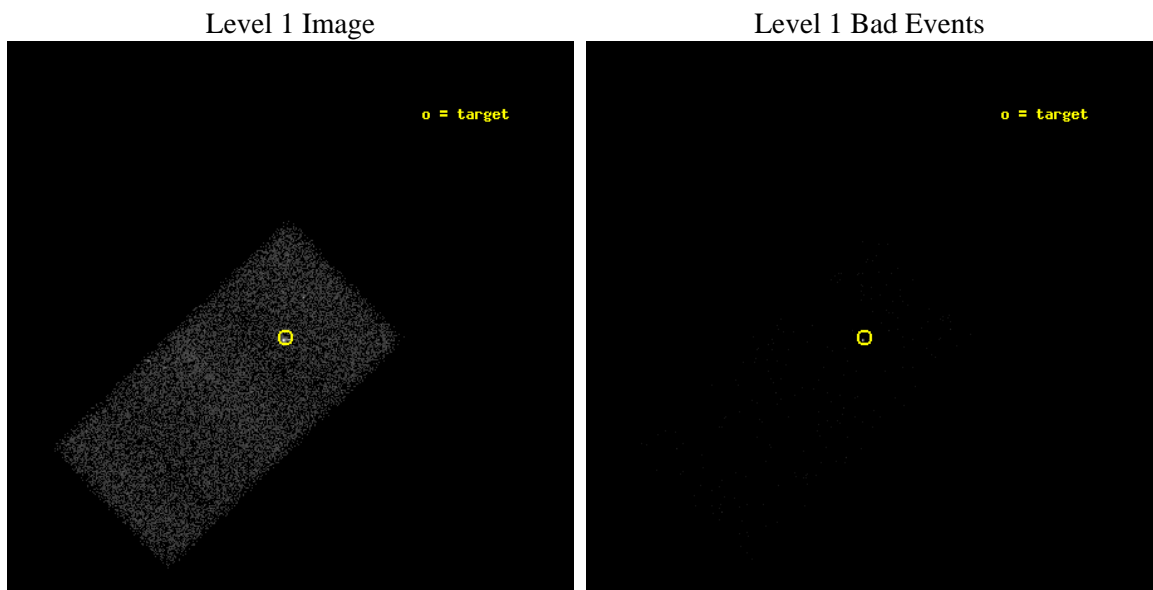
seq_num	780213	Sequence number
obs_id	62551	Observation id
title	ACIS Focus Test	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0637-752	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.94	Observer's specified target RA
dec_targ	-75.27	Observer's specified target Dec
ra_nom	98.932611029987	Nominal RA
dec_nom	-75.264680733137	Nominal Dec
roll_nom	136.05508405036	Nominal Roll
revision	3	Processing version of data
ontime	5468.5708231255	Sum of GTIs [s]
livetime	5322.9353129629	Livetime [s]
ontime7	5468.5708231255	Sum of GTIs [s]
l2events	23335	Number of level 2 events



2 OBI

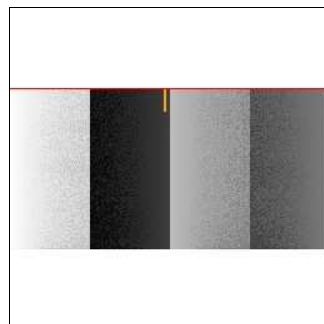
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	5468.5708231255	Sum of GTIs [s]
caldbver	4.1.4	 	ontime7	5468.5708231255	Sum of GTIs [s]
date	2009-12-14T05:48:55	Date and time of file creation	l1events	28077	Number of level 1 events
revision	4	Processing version of data			

2.1.4 Events

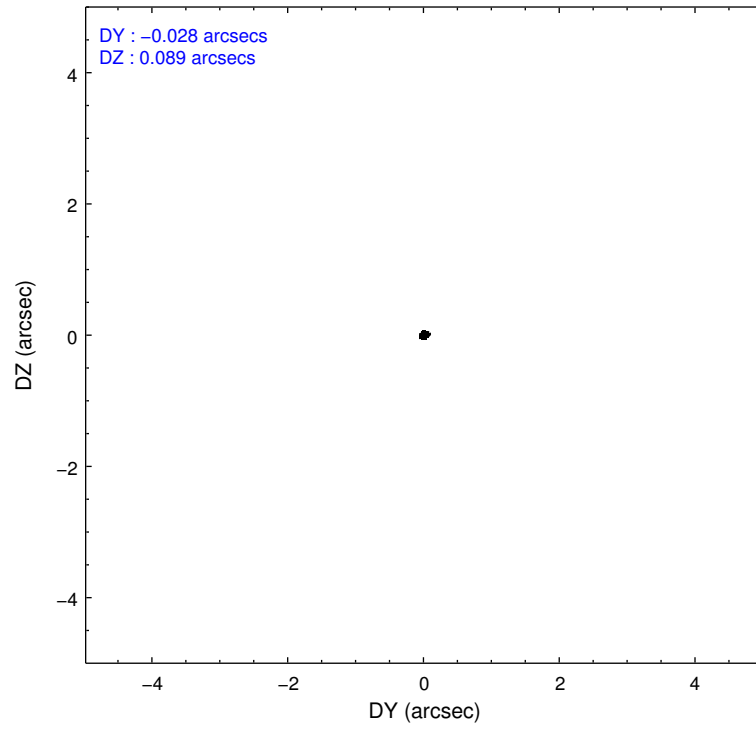
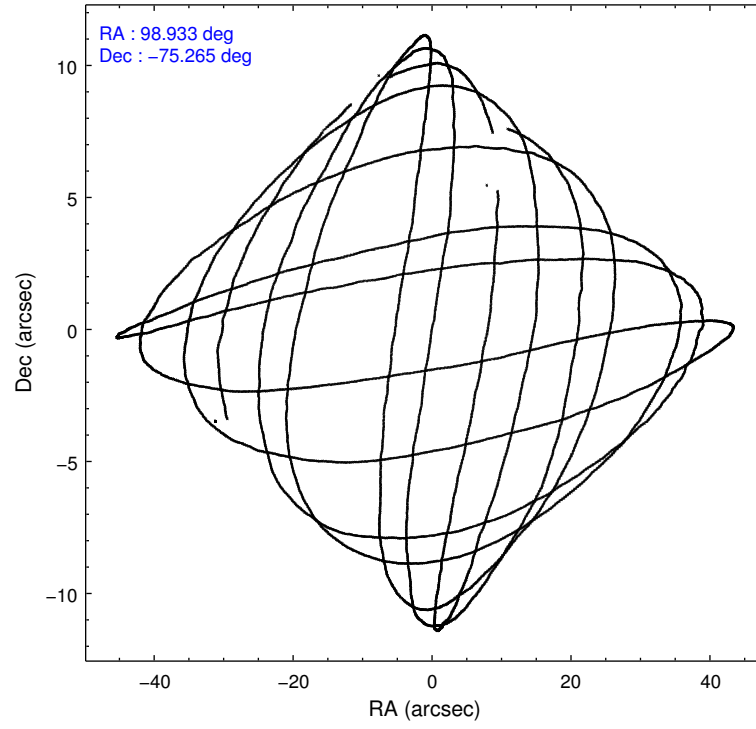
	ccd 7
level 1 events	28077
rejected events	3975
rejected %	14%

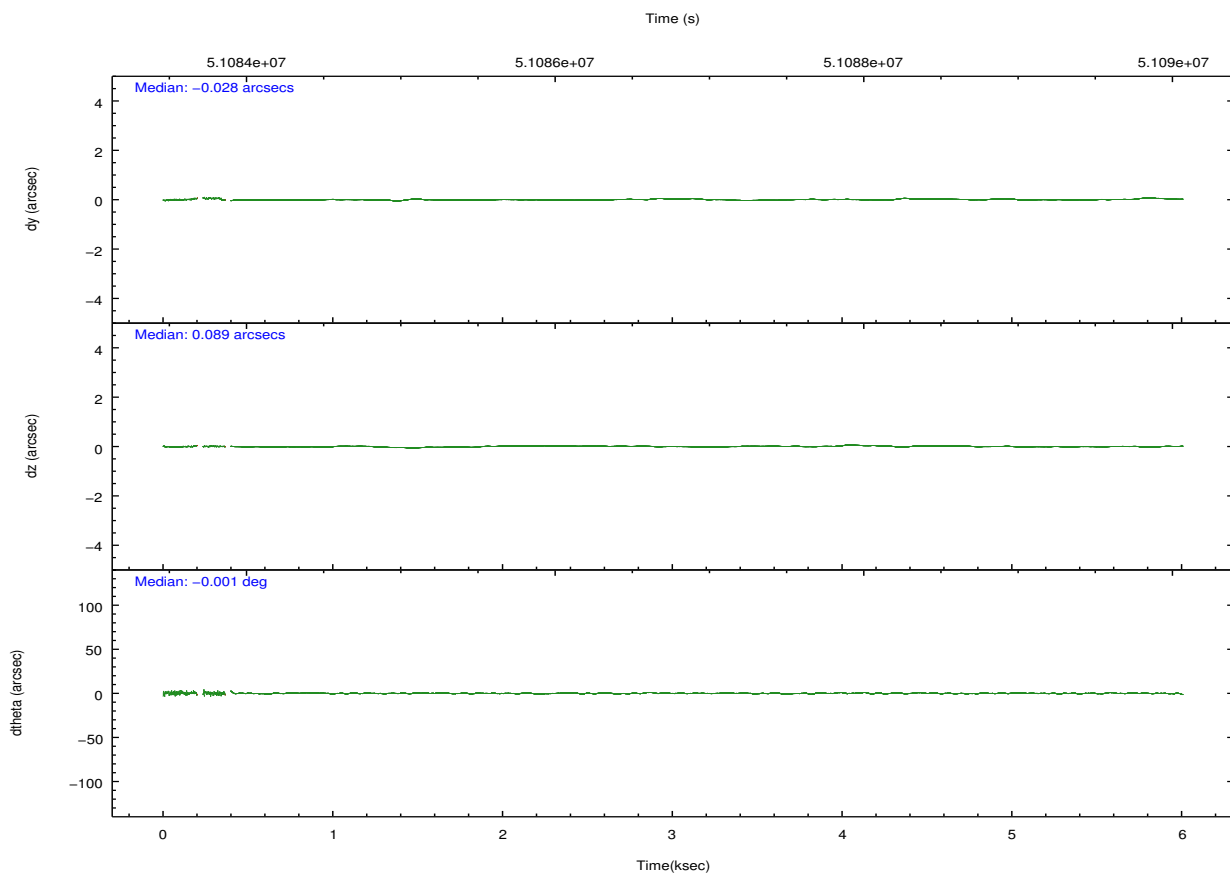
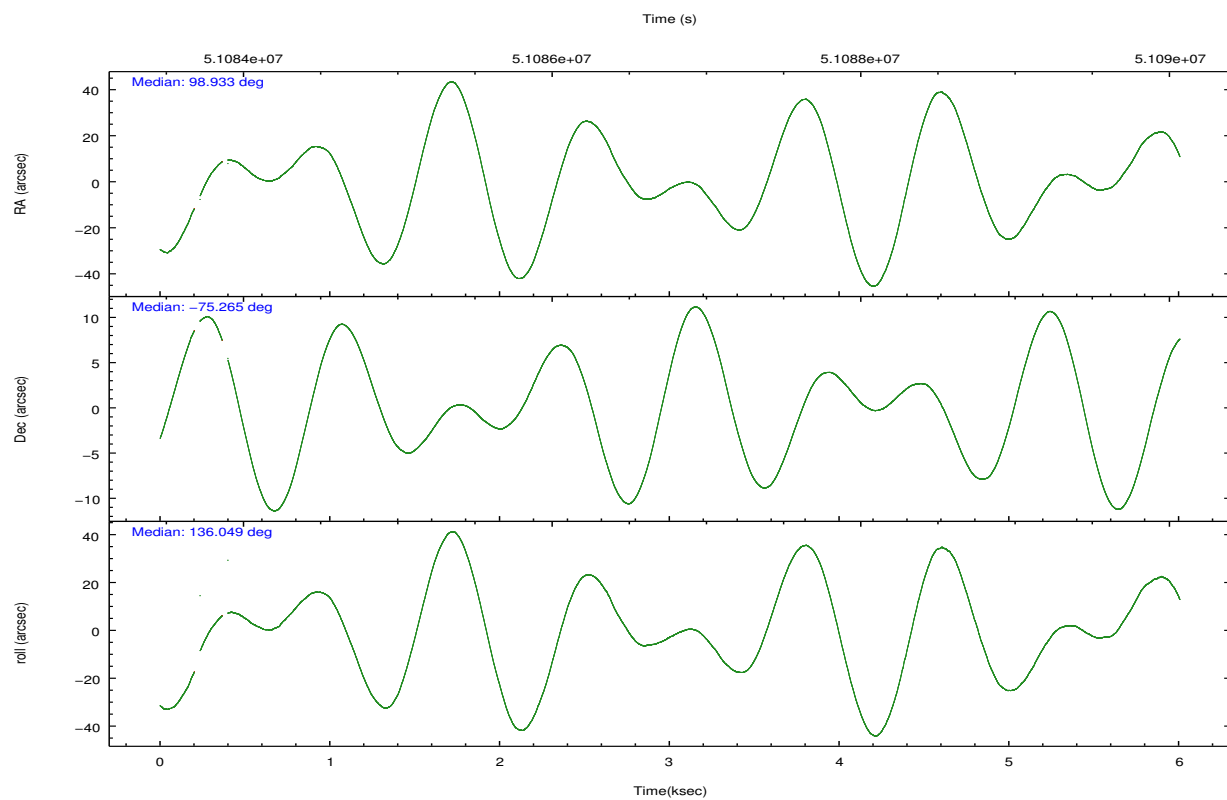
	ccd 7
grade 0 events	1611
	5%
grade 1 events	63
	0%
grade 2 events	3057
	10%
grade 3 events	2217
	7%
grade 4 events	1840
	6%
grade 5 events	3903
	13%
grade 6 events	15386
	54%
grade 7 events	0
	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	98.939995	98.93261102998737	Subarray requested	CUSTOM	1/2
Pointing Dec	-75.270027	-75.26468073313661	Subarray start row	256	256
Pointing Roll	136.213797	136.0550840503601	Subarray row count	512	512
SIM focus pos (mm)	-1.934267	-0.9774662816245603	Alternating exposures requested	N	N
SIM defocus (mm)	-1.25	-0.293198820324664	Primary exposure time	0.000000	1.5
SIM translation stage pos (mm)	-190.132523	-190.1325231039672			
SIM translation stage offset (mm)	0	5.209593894051068e-07			
Observation start time	51085864.184000	51083759.989323			
Observation start date	1999-08-15T06:30:00	1999-08-15T05:55:59			
Observation end time	51090864.184000	51089768.539535			
Observation end date	1999-08-15T07:53:20	1999-08-15T07:36:08			
Read mode	TIMED	TIMED			

2.3 Aspect



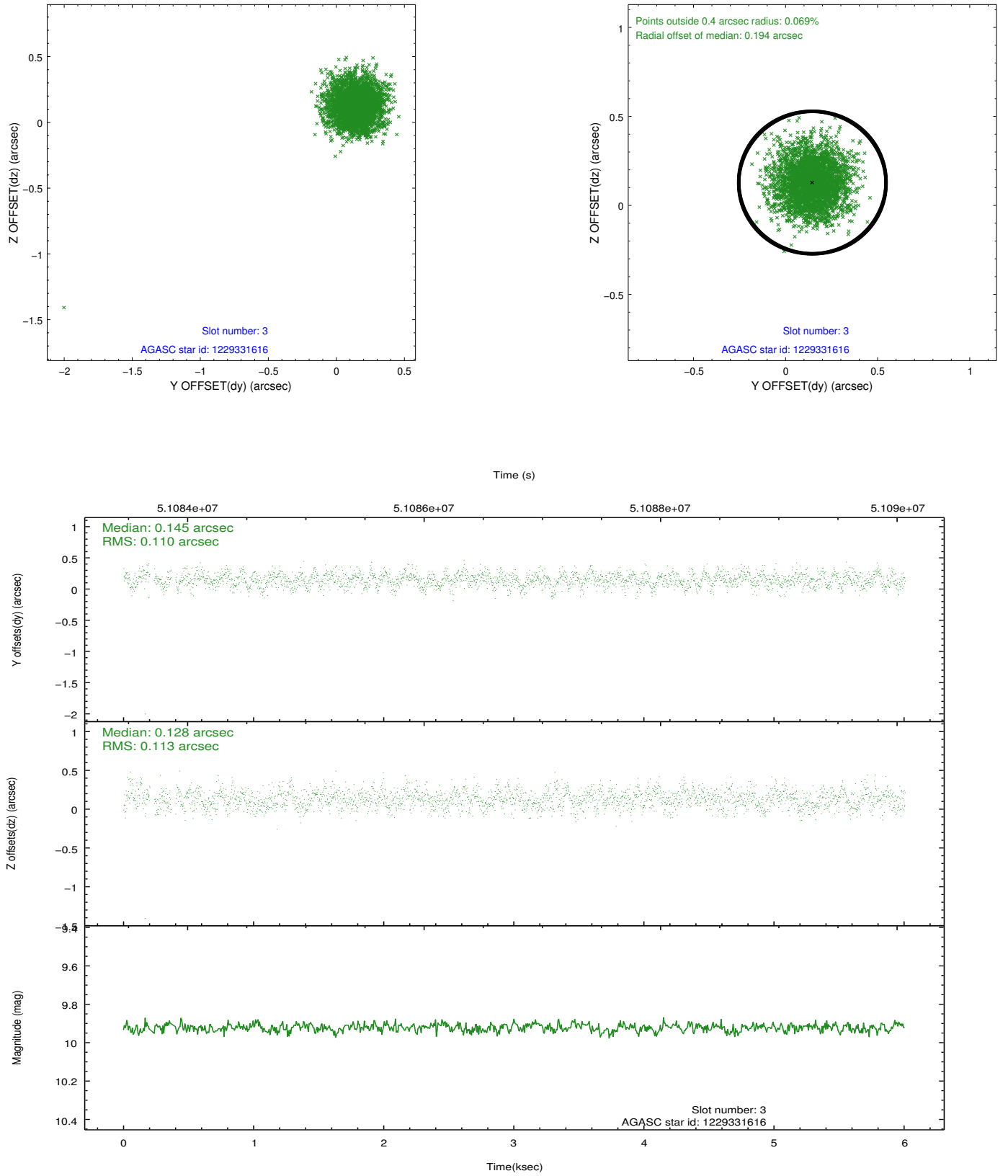


Slot Statistics

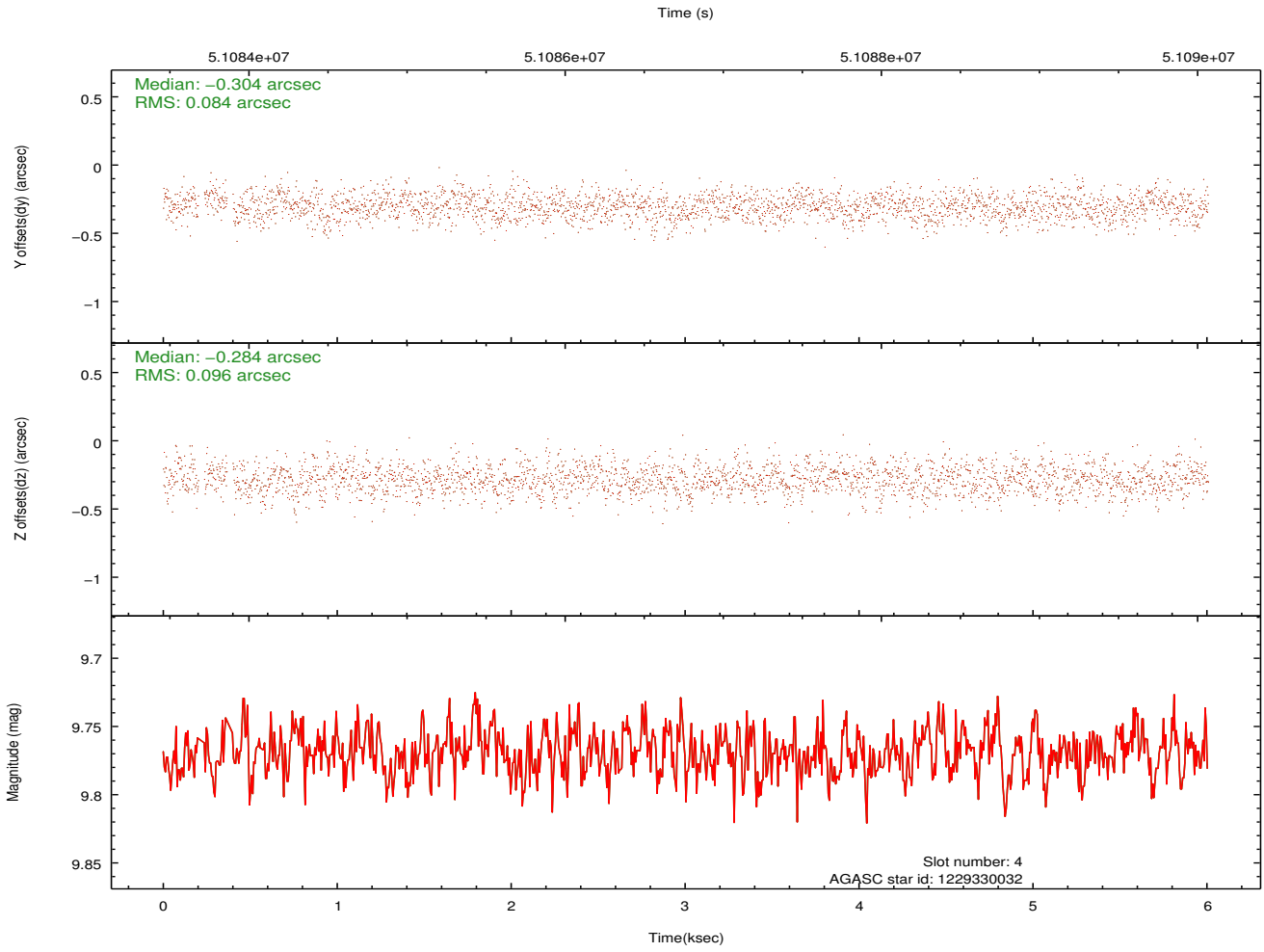
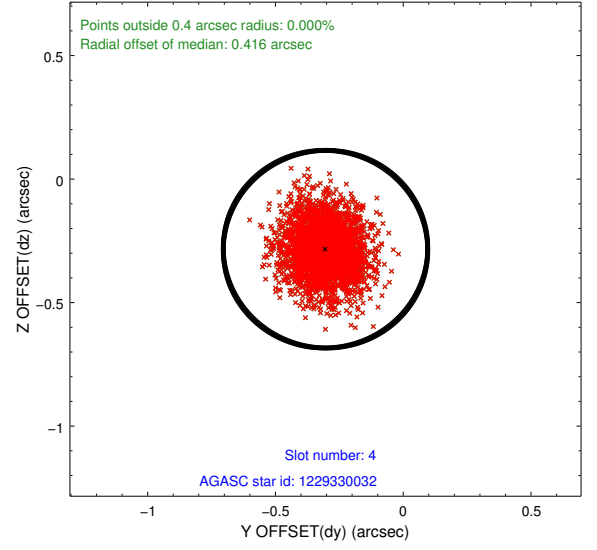
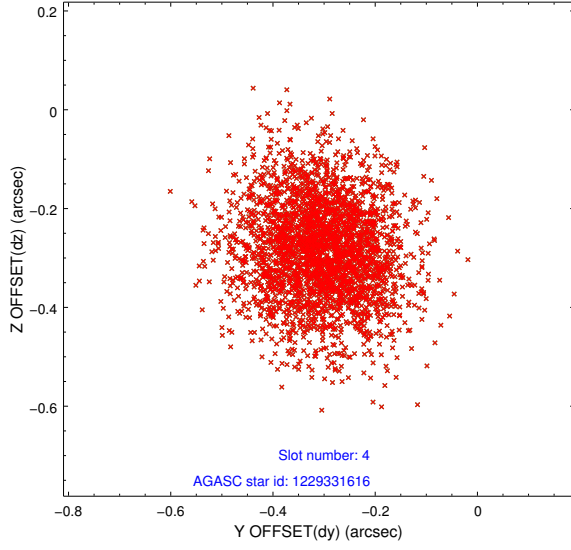
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.14	2899	-0.047	-0.121	0.005	0.014	0.000000	0.000000	-752.62	-1721.21
1	FID	ACIS-S-3	7.13	2899	-0.069	-0.017	0.005	0.017	0.000000	0.000000	60.25	-1850.79
2	FID	ACIS-S-4	7.23	2899	0.120	0.056	0.004	0.012	0.000000	0.000000	2160.85	186.74
3	GUIDE	1229331616	9.92	2898	0.145	0.128	0.158	0.257	96.182998	-75.347362	1637.27	2046.33
4	BAD	1229330032	9.77	2898	-0.304	-0.284	0.136	0.223	98.721356	-75.139571	541.46	-137.93
5	GUIDE	1204423736	8.76	2899	0.247	0.093	0.079	0.130	99.272017	-74.796122	1031.20	-1384.95
6	BAD	1229457576	9.38	2896	-0.333	-0.053	0.127	0.205	100.335360	-75.489746	-1394.78	-239.79
7	GUIDE	1229457032	9.21	2896	0.247	0.124	0.108	0.175	100.958417	-75.581890	-2032.84	-372.80

2.4 Star Slots

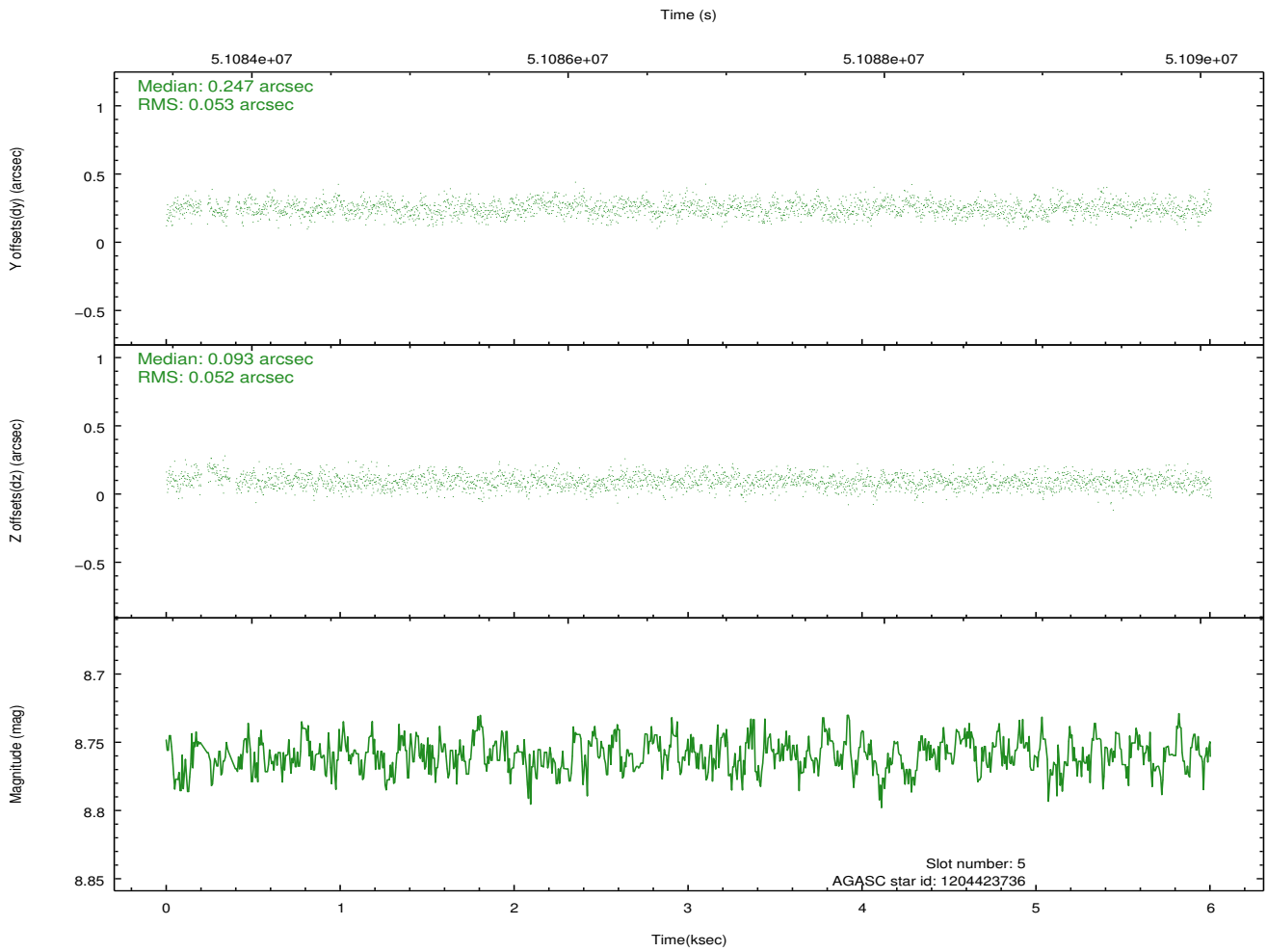
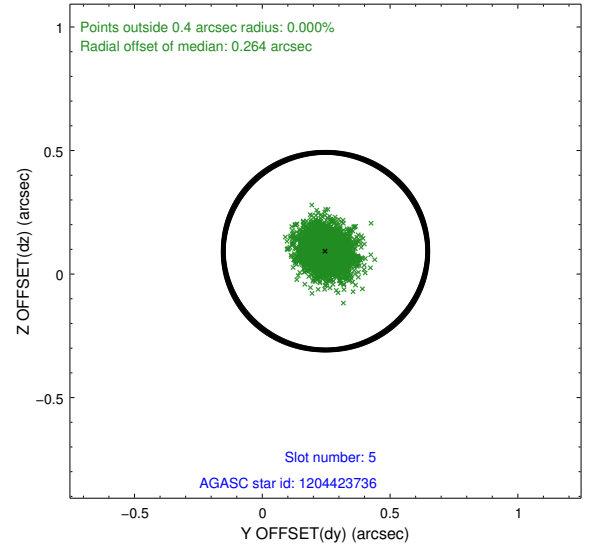
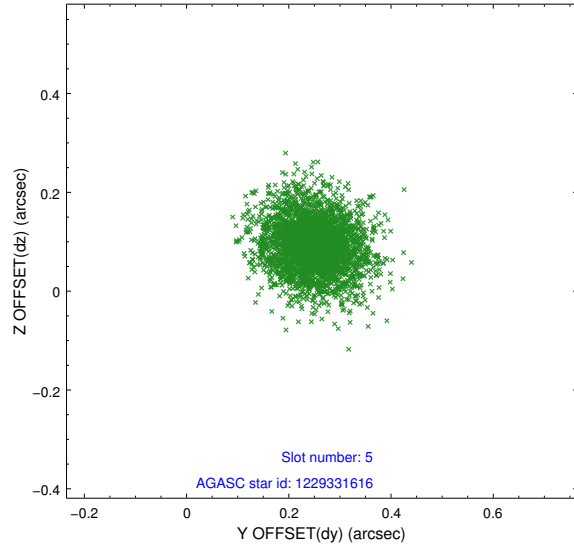
2.4.1 Slot 3



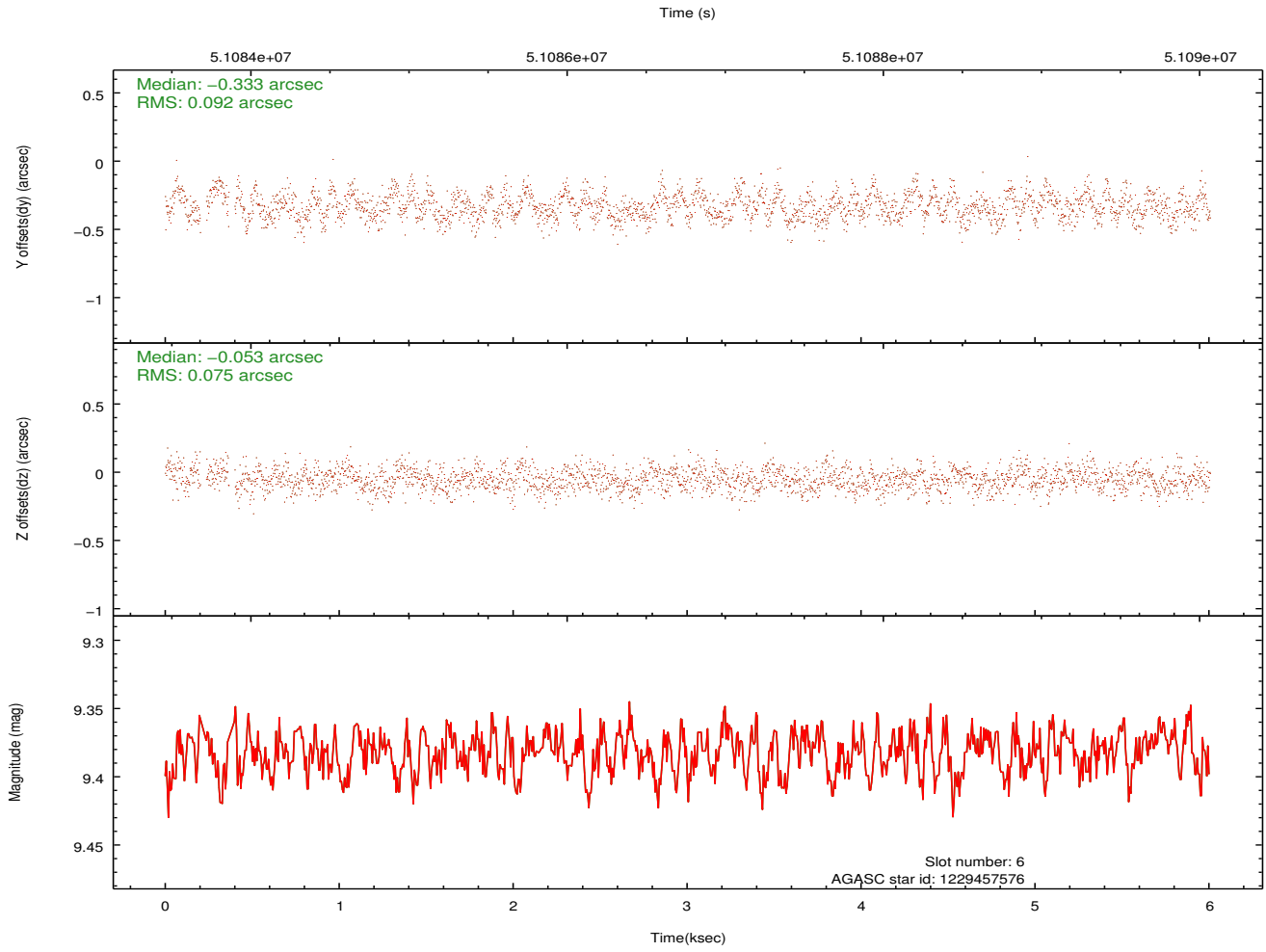
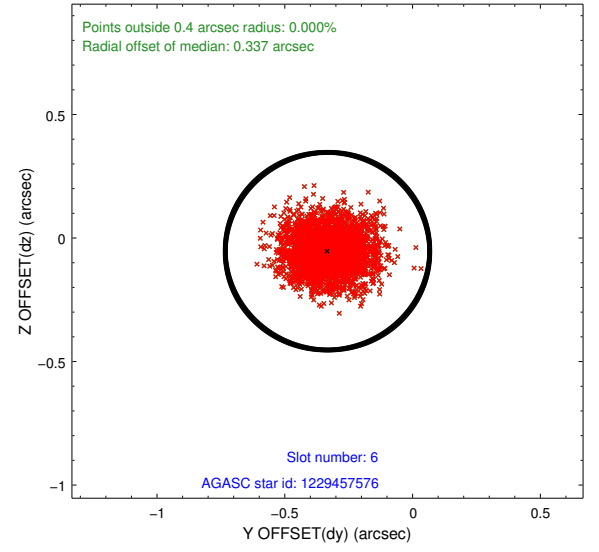
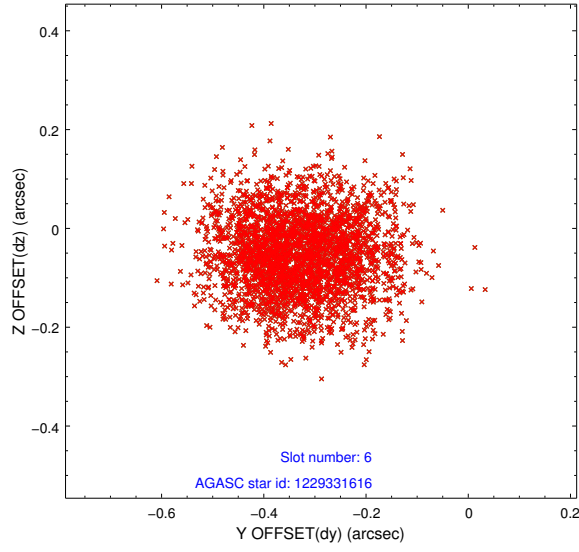
2.4.2 Slot 4



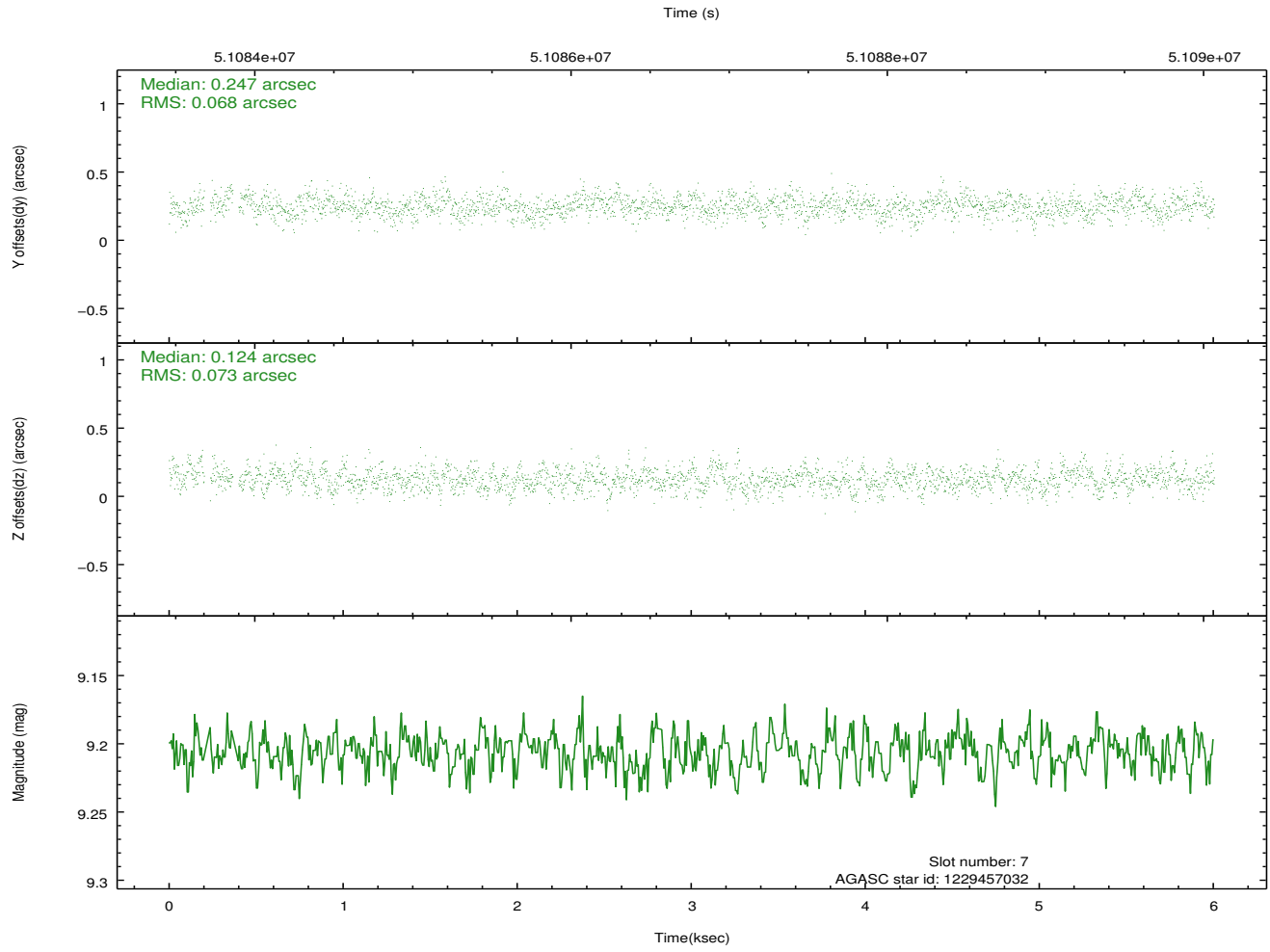
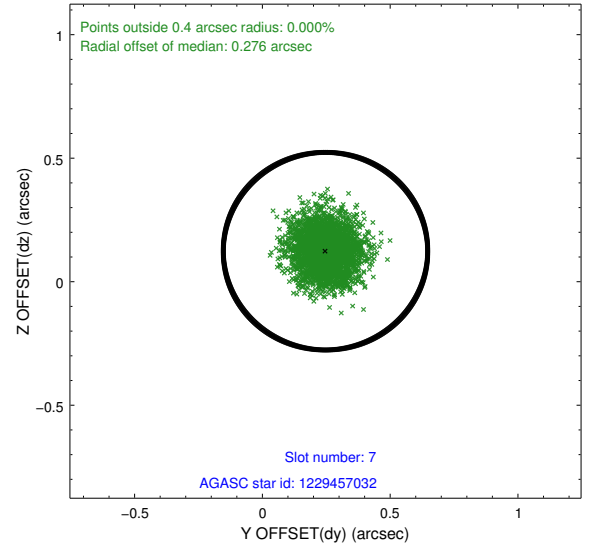
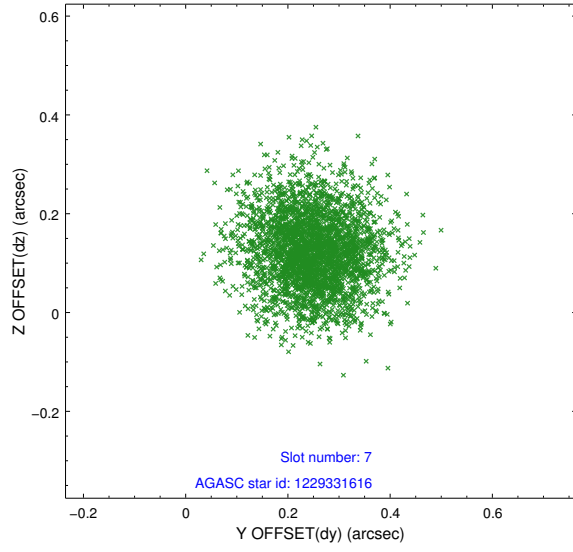
2.4.3 Slot 5



2.4.4 Slot 6

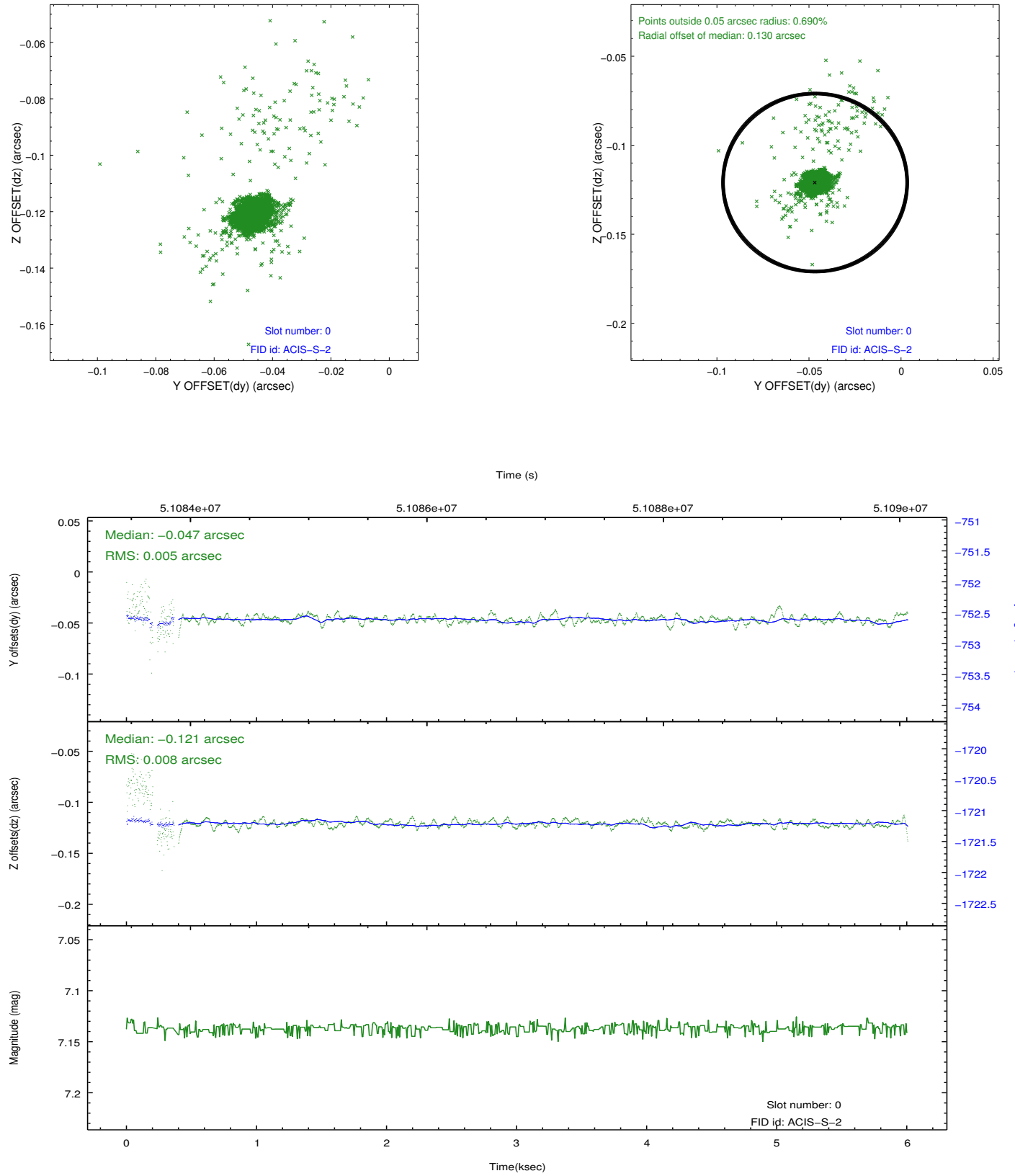


2.4.5 Slot 7

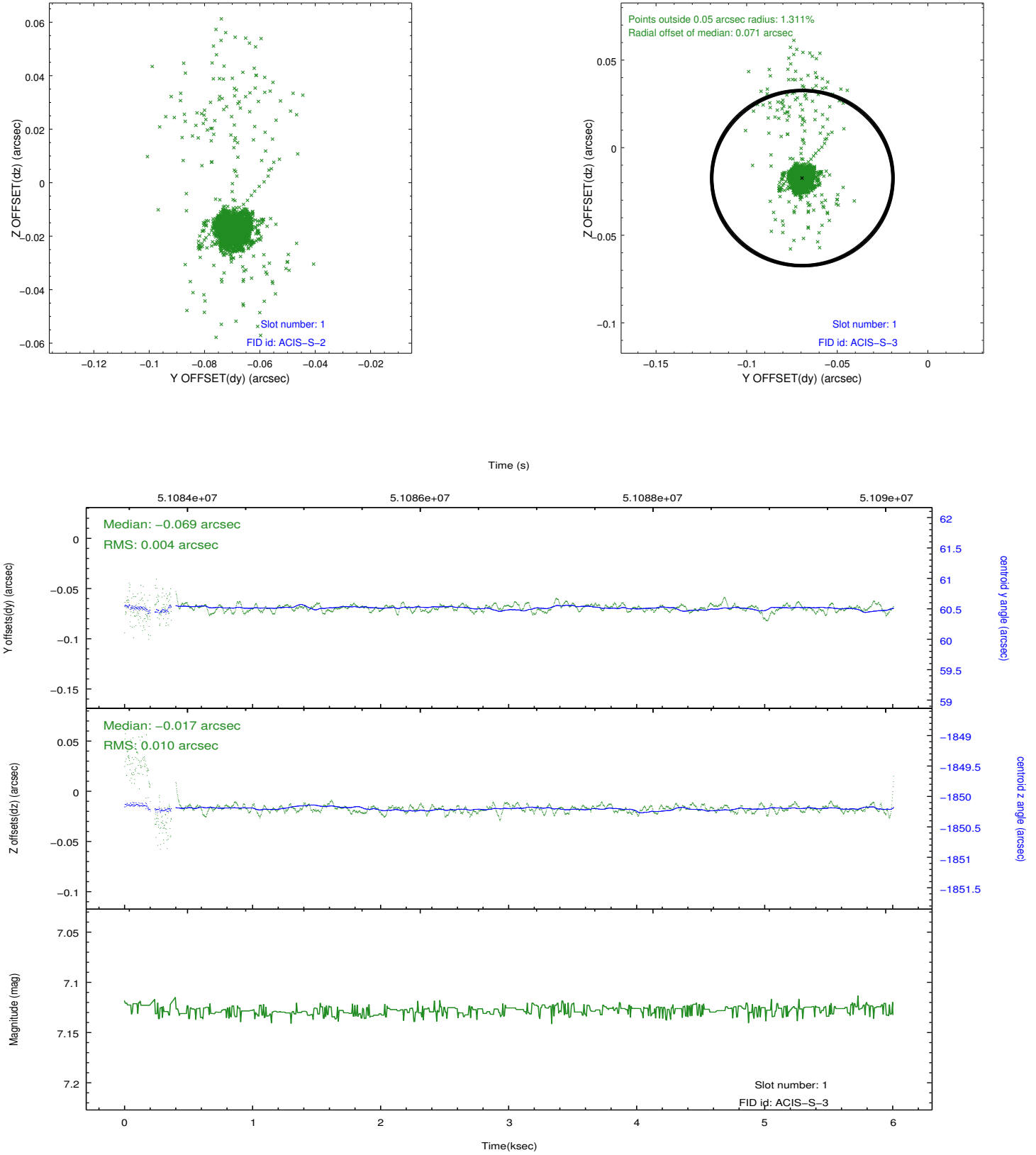


2.5 FID Slots

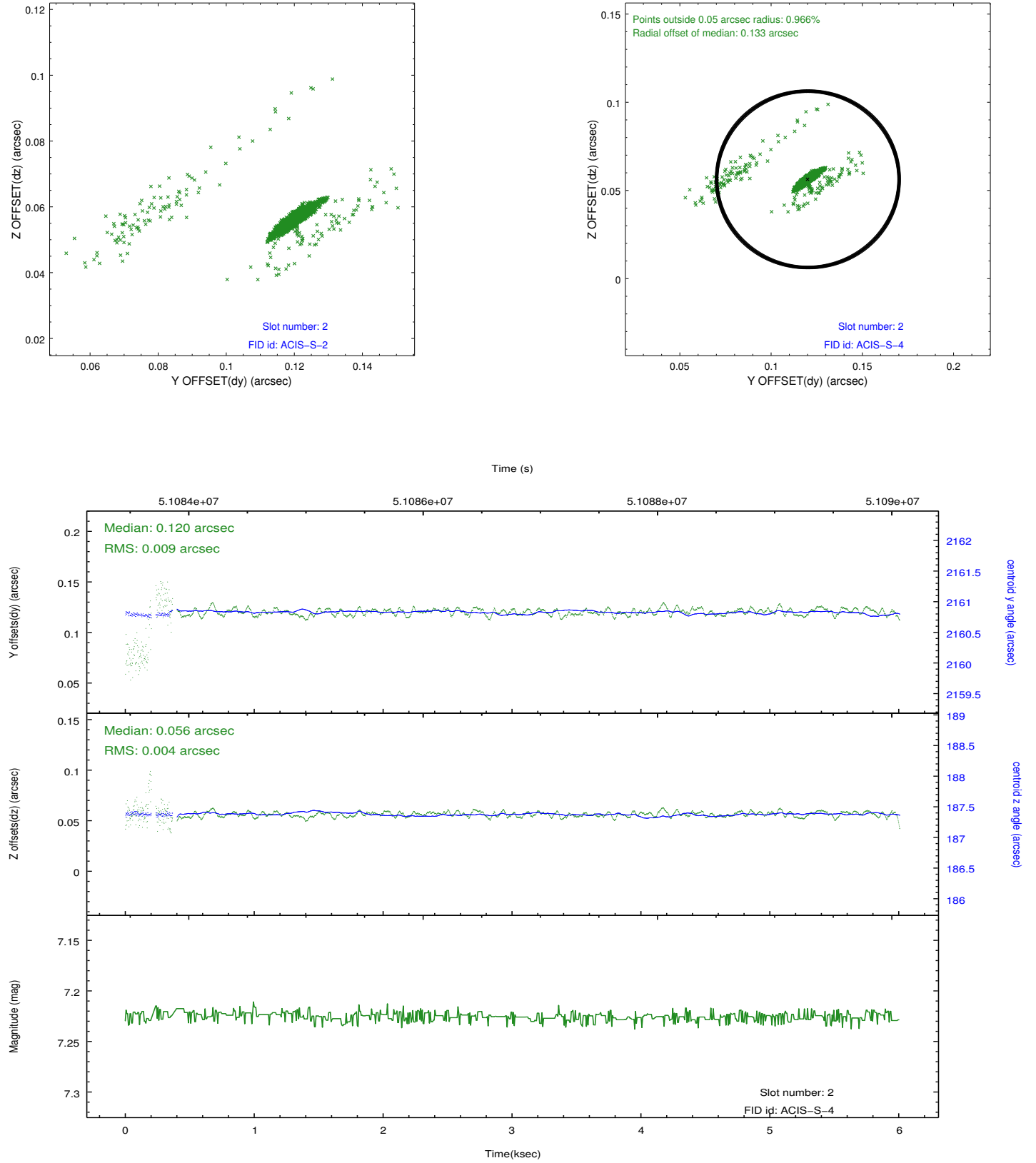
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources

3.81 arcmin



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.467

A.2 Comments

ACIS focus measurement. Moved SIM to -1.25 mm from nominal focus.

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Slots 4 and 6 were removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing these guide stars from the solution.

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The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.