

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 7181 - L2 Version 4
Chandra X-Ray Center

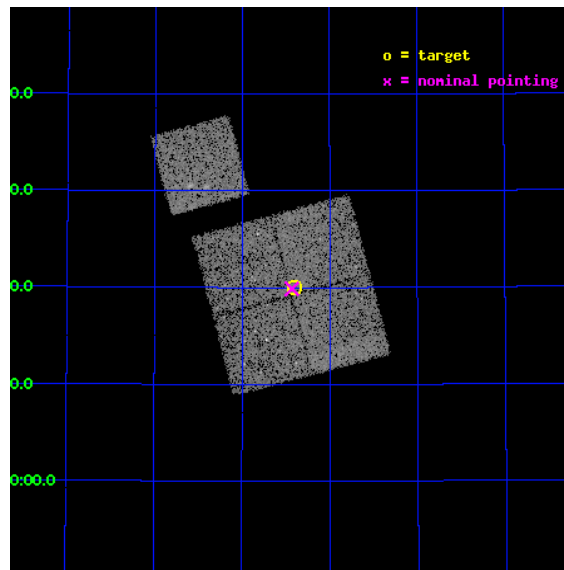
L2 Processing Date : Mar 7 2013

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1 Front

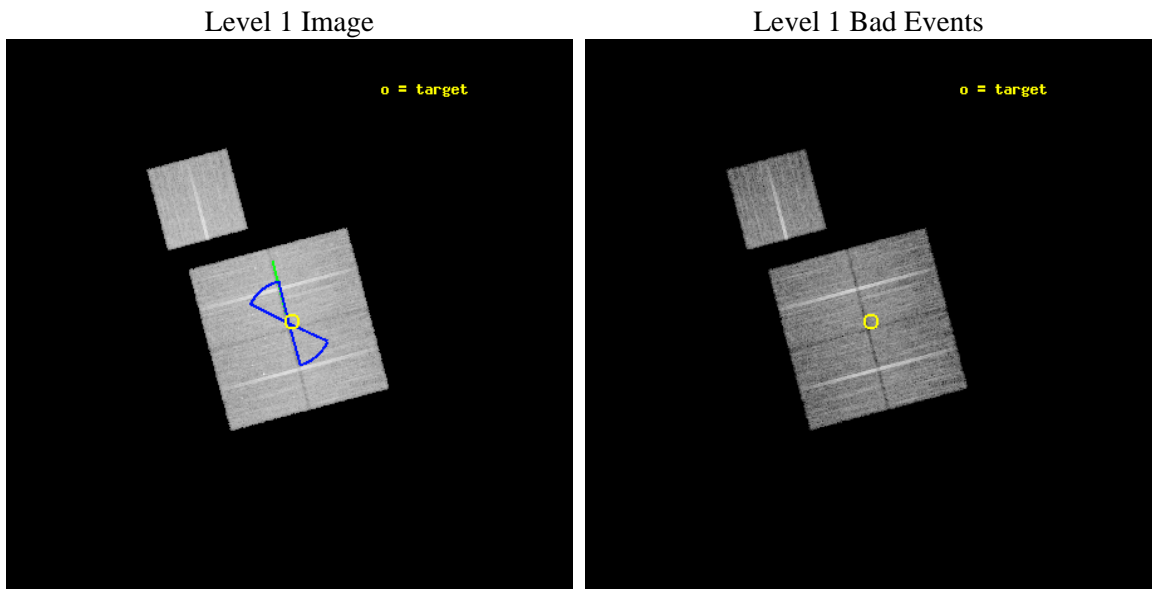
seq_num	900353	Sequence number
obs_id	7181	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	EGS-6	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.102081	Observer's specified target RA [deg]
dec_targ	52.334053	Observer's specified target Dec [deg]
ra_nom	214.10807203713	Nominal RA [deg]
dec_nom	52.331207552091	Nominal Dec [deg]
roll_nom	345.20394341543	Nominal Roll [deg]
revision	4	Processing version of data
ontime	16194.399968833	Sum of GTIs [s]
livetime	15982.808211096	Livetime [s]
ontime0	16188.117948592	Sum of GTIs [s]
ontime1	16194.399968833	Sum of GTIs [s]
ontime2	16194.399968833	Sum of GTIs [s]
ontime3	16194.399968833	Sum of GTIs [s]
ontime6	16194.399968833	Sum of GTIs [s]
l2events	44532	Number of level 2 events



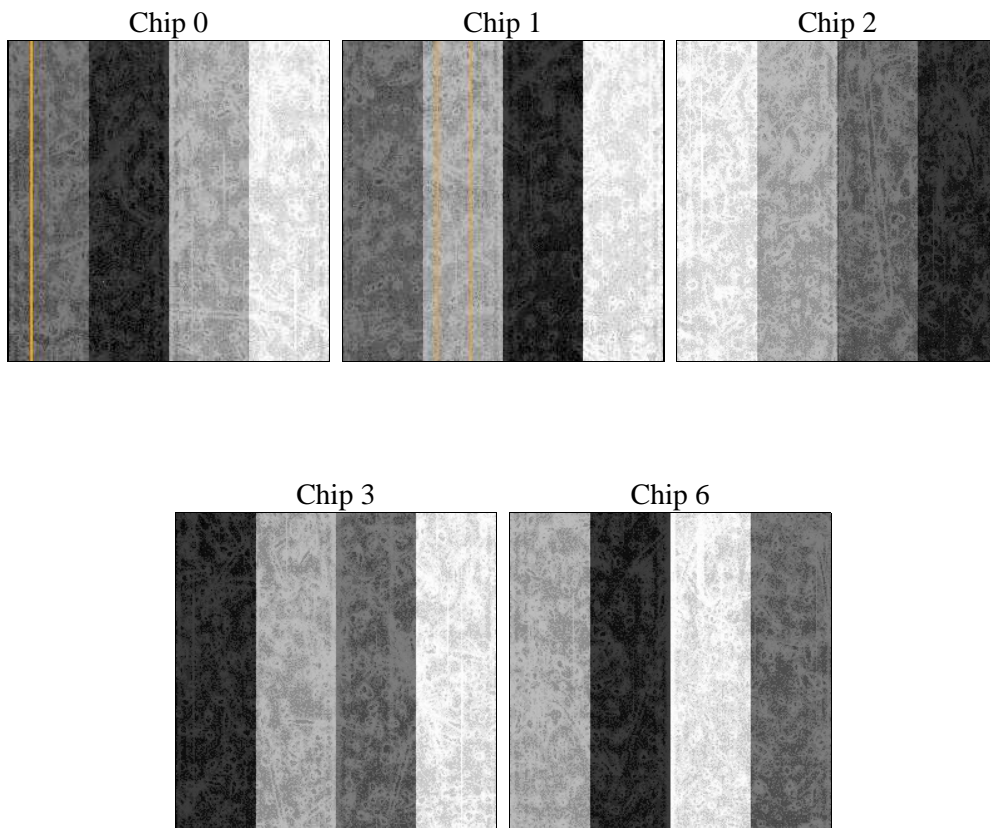
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16035.363000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	16194.399968833	Sum of GTIs [s]
caldsver	4.5.6	 	ontime0	16188.117948592	Sum of GTIs [s]
date	2013-03-08T00:36:48	Date and time of file creation	ontime1	16194.399968833	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	16194.399968833	Sum of GTIs [s]
			ontime3	16194.399968833	Sum of GTIs [s]
			ontime6	16194.399968833	Sum of GTIs [s]
			l1events	526744	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	99364	101406	114192	106308	105474
rejected events	88534	89792	103732	96647	94413
rejected %	89%	88%	90%	90%	89%

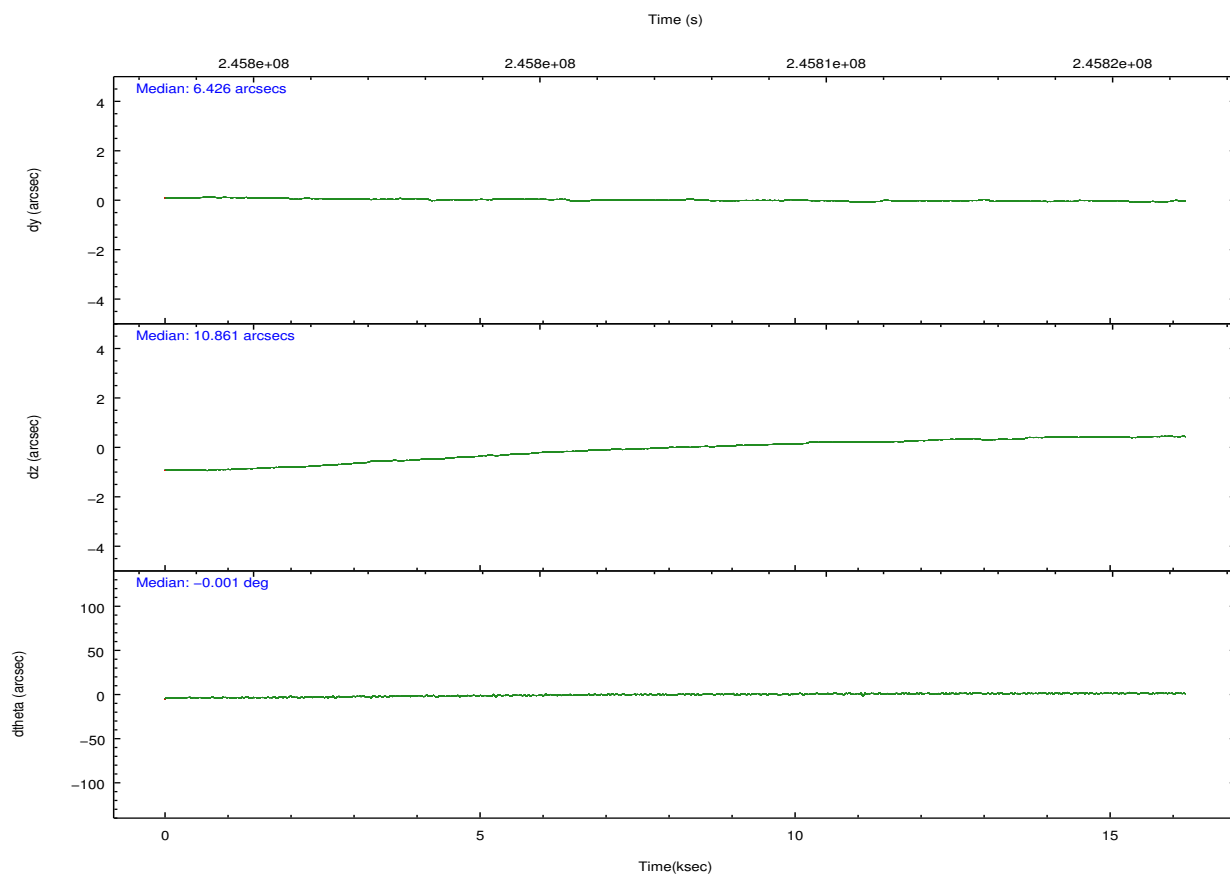
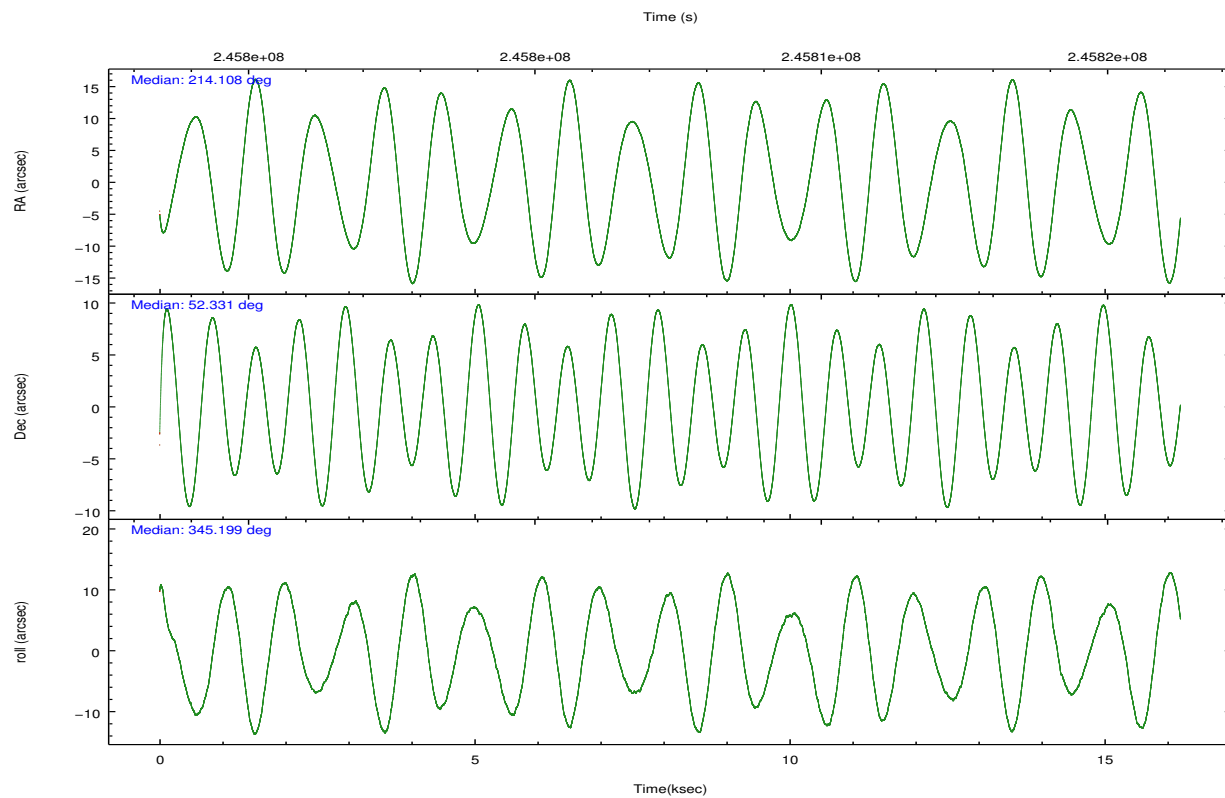
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4232	4299	4048	3493	3980
	4%	4%	3%	3%	3%
grade 1 events	59	57	62	49	47
	0%	0%	0%	0%	0%
grade 2 events	2450	2584	2434	2154	2429
	2%	2%	2%	2%	2%
grade 3 events	1249	1361	1176	1140	1214
	1%	1%	1%	1%	1%
grade 4 events	1103	1322	1154	1117	1226
	1%	1%	1%	1%	1%
grade 5 events	3599	4072	3431	4354	4310
	3%	4%	3%	4%	4%
grade 6 events	2068	2319	1882	2012	2482
	2%	2%	1%	1%	2%
grade 7 events	84604	85392	100005	91989	89786
	85%	84%	87%	86%	85%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	214.064887	214.1080720371254
[deg] Pointing Dec	52.323922	52.33120755209073
[deg] Pointing Roll	345.029437	345.2039434154339
[deg] Roll angle	50.756000	50.756000
[deg] Roll tolerance	25.000000	25.000000
Roll constraint allows 180D rotation	Y	Y
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	245799425.184000	245798241.5082
Observation start date	2005-10-15T21:36:01	2005-10-15T21:17:21
[s] Observation end time (MET)	245815461.184000	245815699.309
Observation end date	2005-10-16T02:03:17	2005-10-16T02:08:19
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect

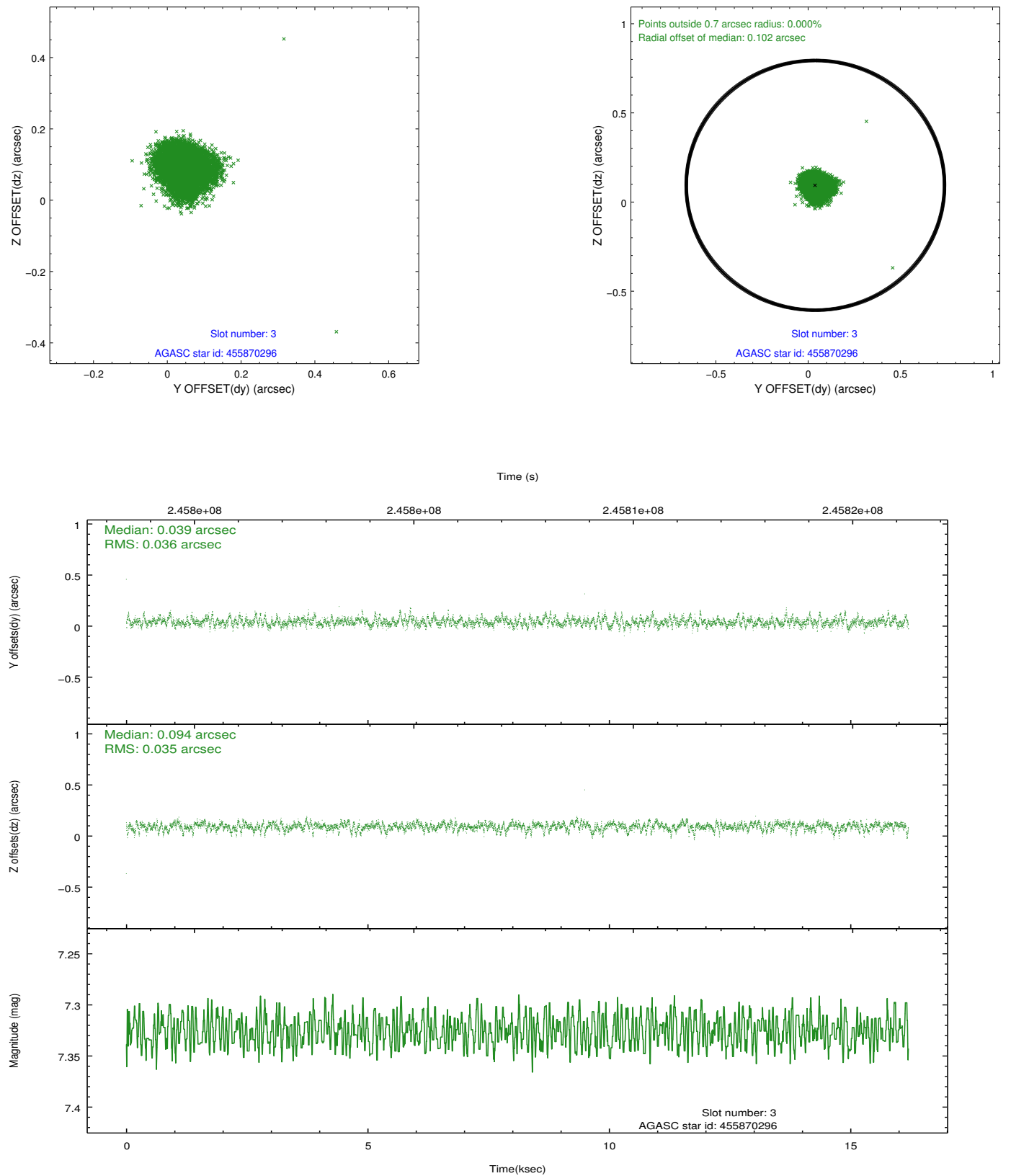


Slot Statistics

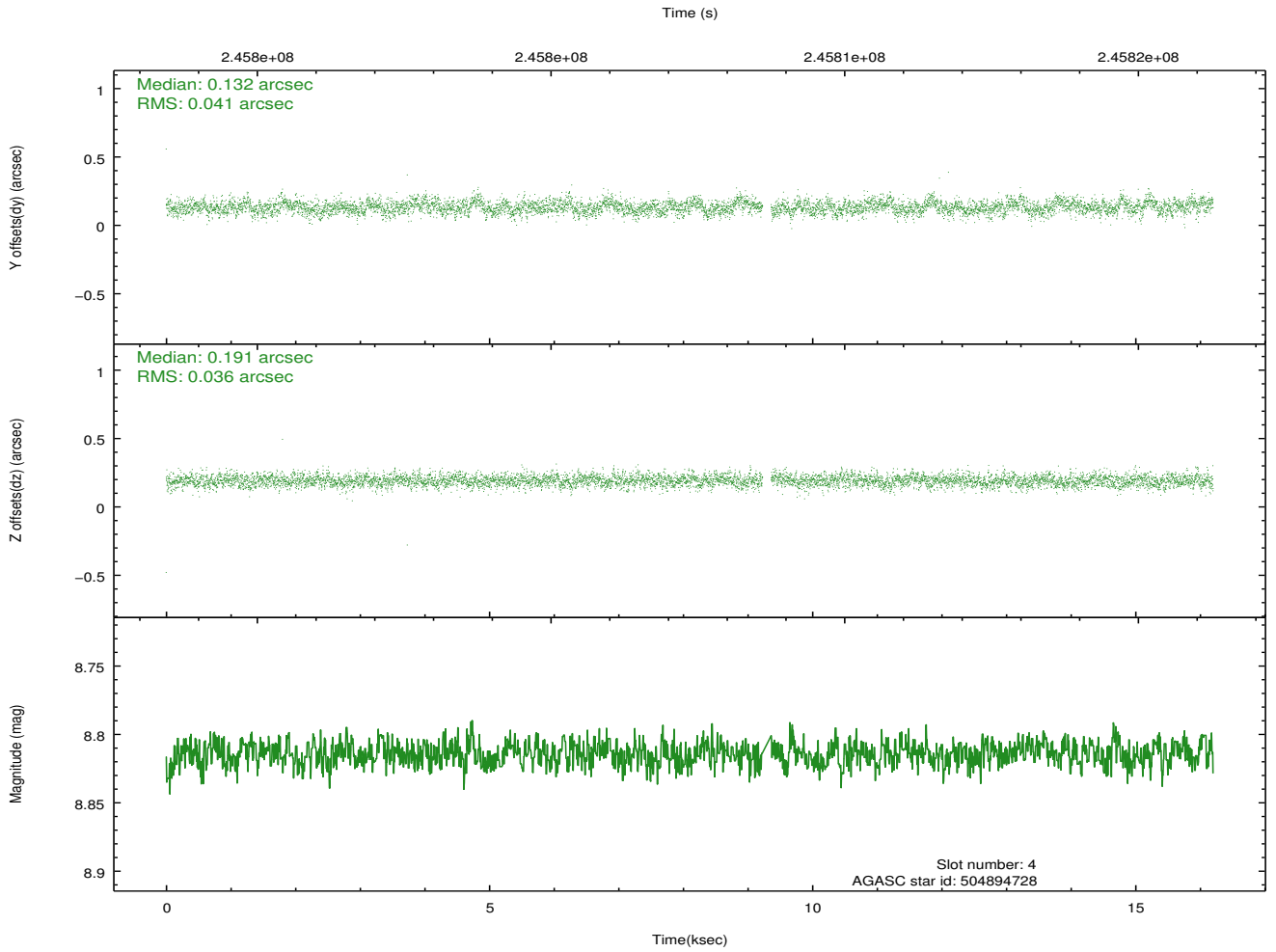
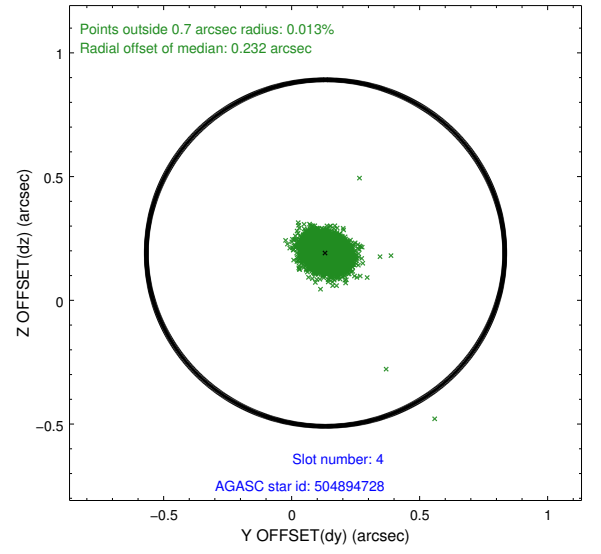
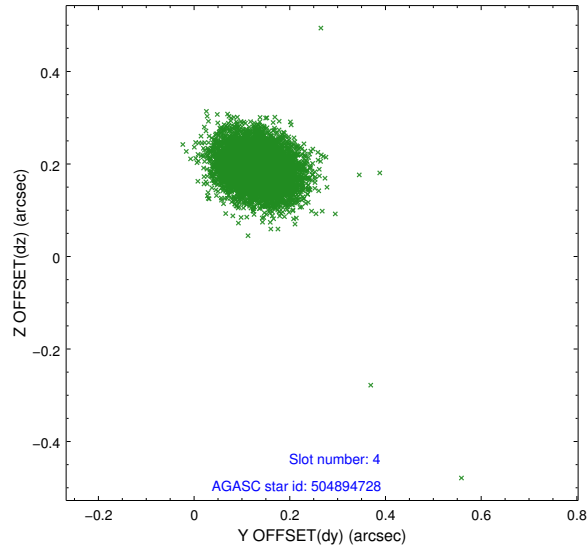
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	3952	0.035	-0.026	0.019	0.045	0.000000	0.000000	933.28	-834.27
1	FID	ACIS-I-5	7.23	3952	-0.163	0.049	0.015	0.023	0.000000	0.000000	-1814.85	1063.19
2	FID	ACIS-I-6	7.26	3952	0.037	0.044	0.013	0.025	0.000000	0.000000	398.57	1707.96
3	GUIDE	455870296	7.33	7903	0.039	0.094	0.052	0.087	214.629779	52.033323	1477.91	-682.34
4	GUIDE	504894728	8.81	7835	0.132	0.191	0.056	0.094	213.220892	52.722550	-2150.83	921.59
5	GUIDE	505806936	7.01	7903	-0.007	-0.019	0.074	0.113	213.820815	52.535927	-713.83	600.38
6	GUIDE	505812376	7.66	7904	-0.201	-0.183	0.046	0.075	214.039537	52.937930	-624.43	2121.27
7	GUIDE	455871352	8.13	7902	0.030	-0.079	0.055	0.093	215.099961	52.172669	2344.21	80.66

2.4 Star Slots

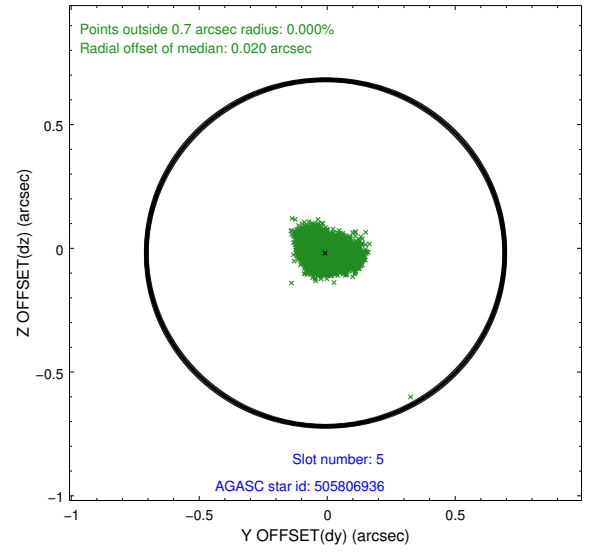
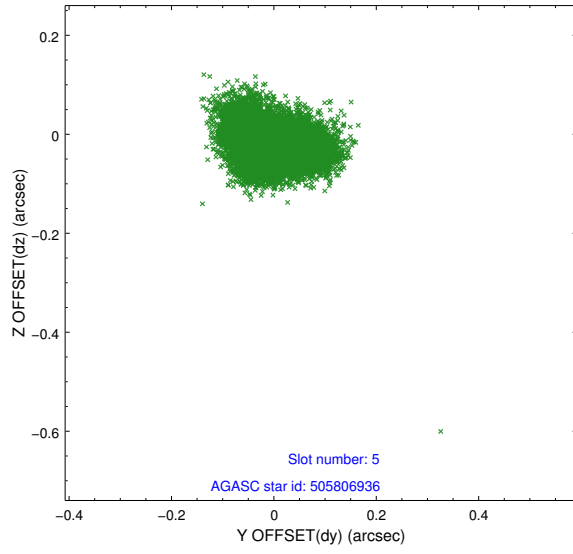
2.4.1 Slot 3



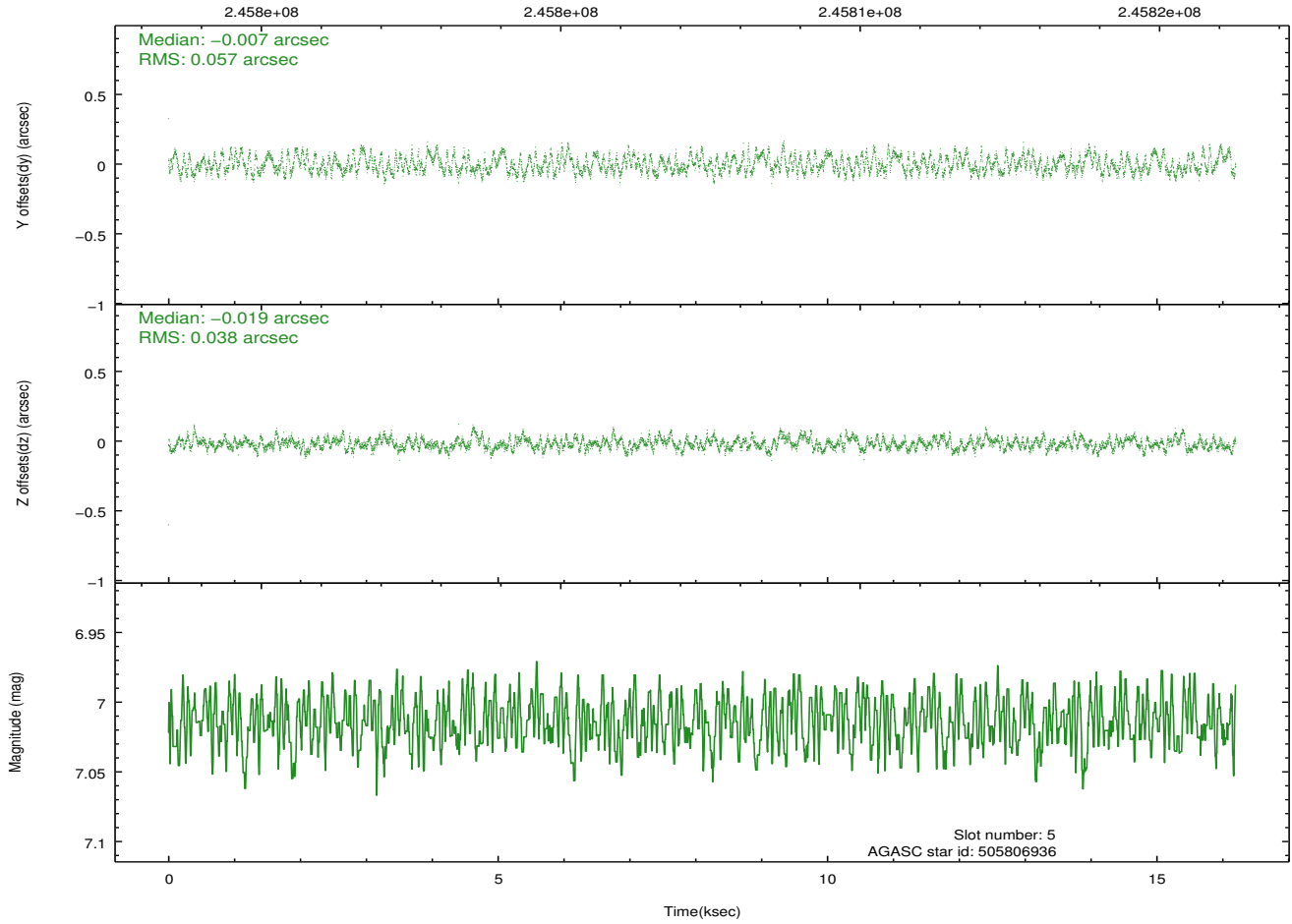
2.4.2 Slot 4



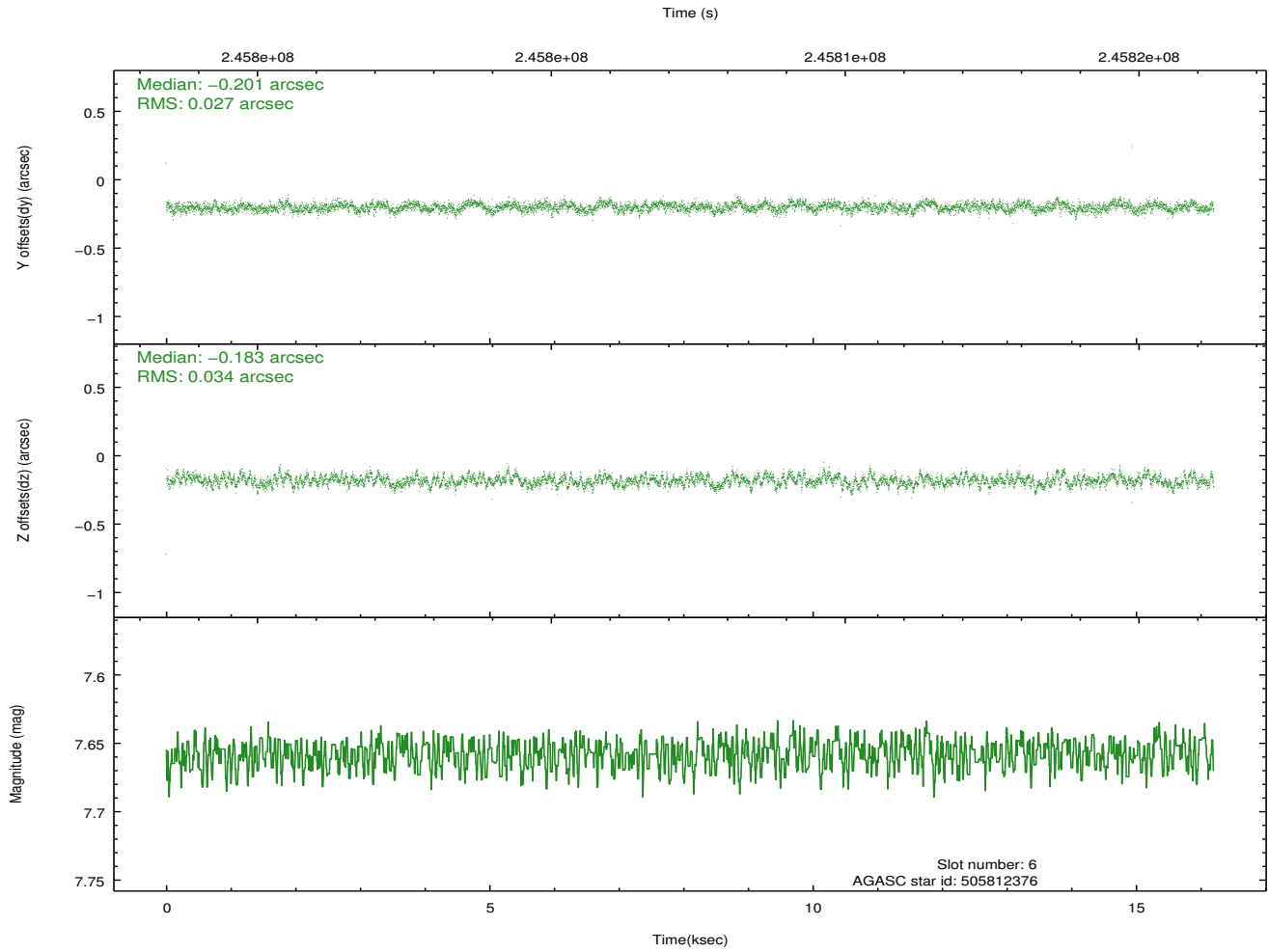
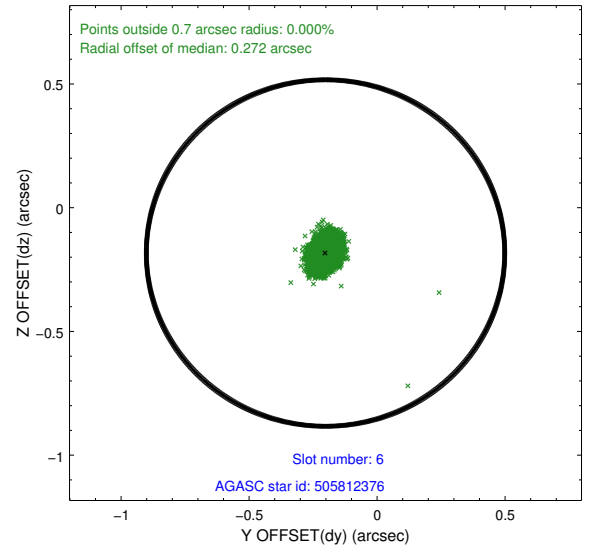
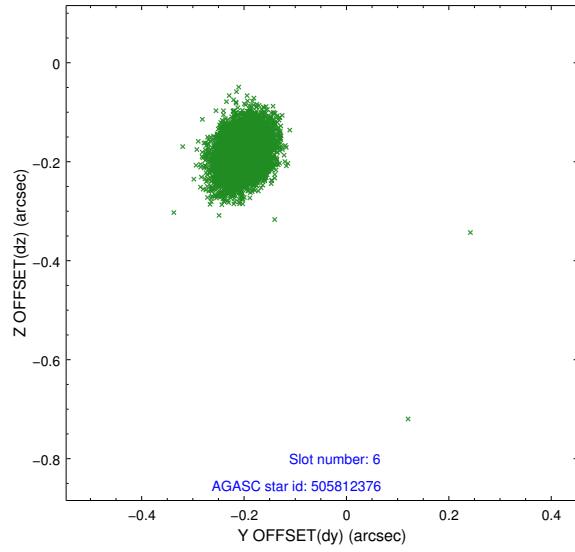
2.4.3 Slot 5



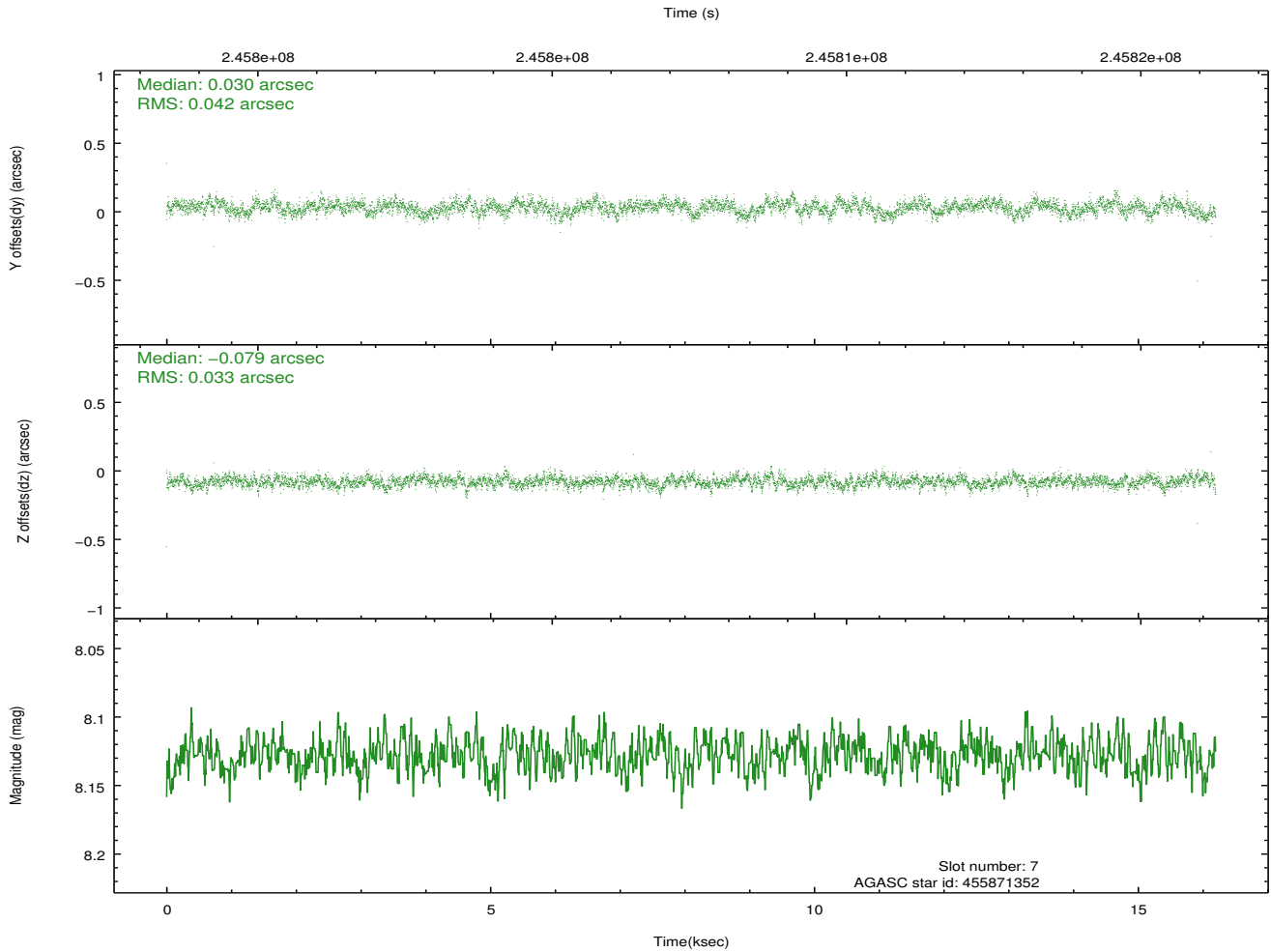
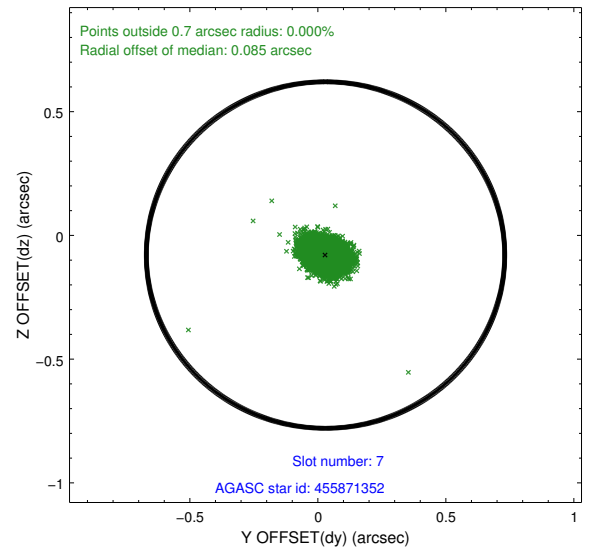
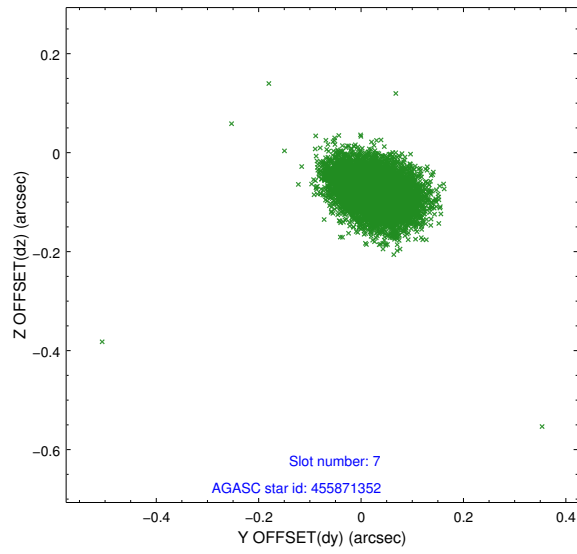
Time (s)



2.4.4 Slot 6

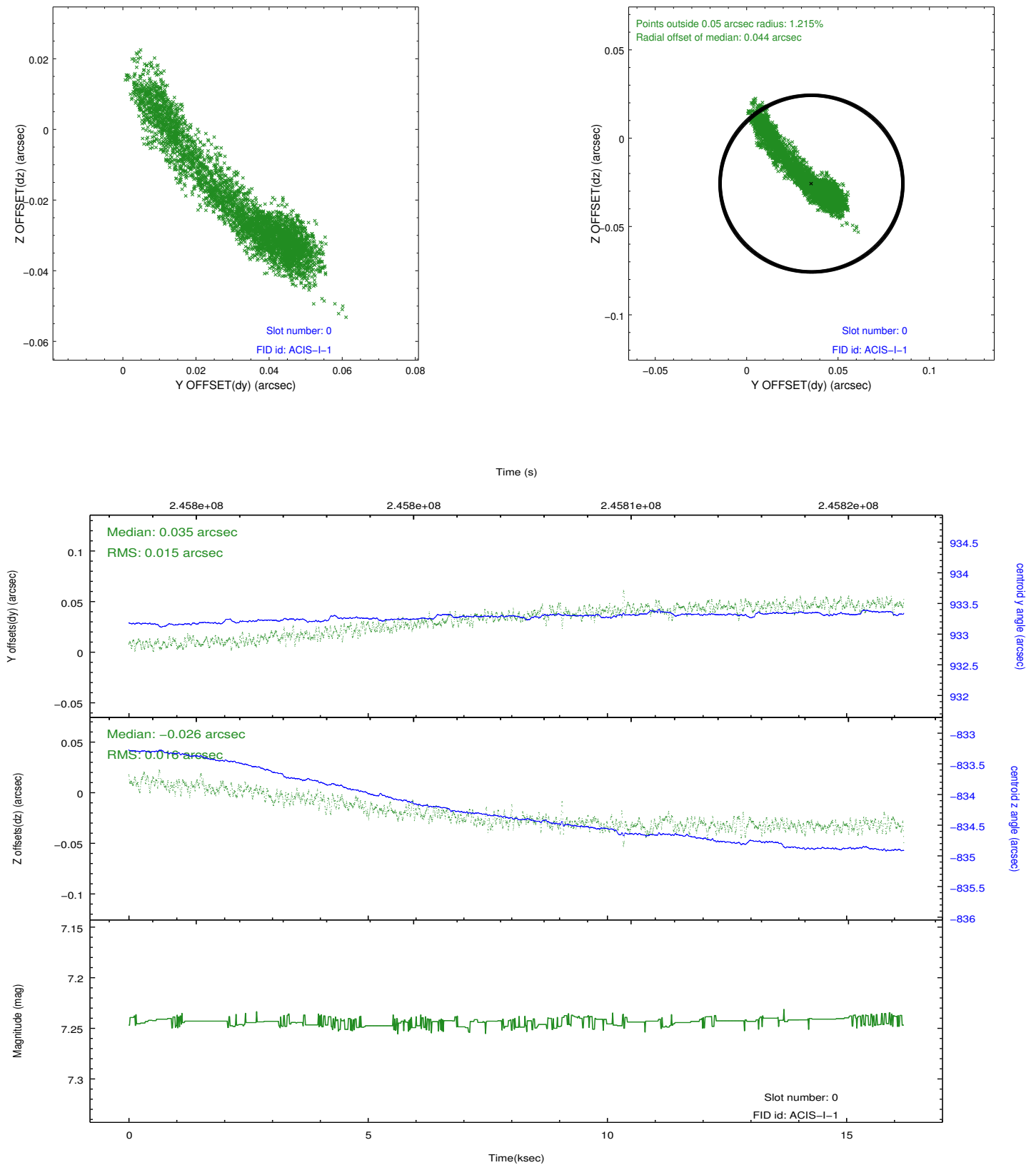


2.4.5 Slot 7

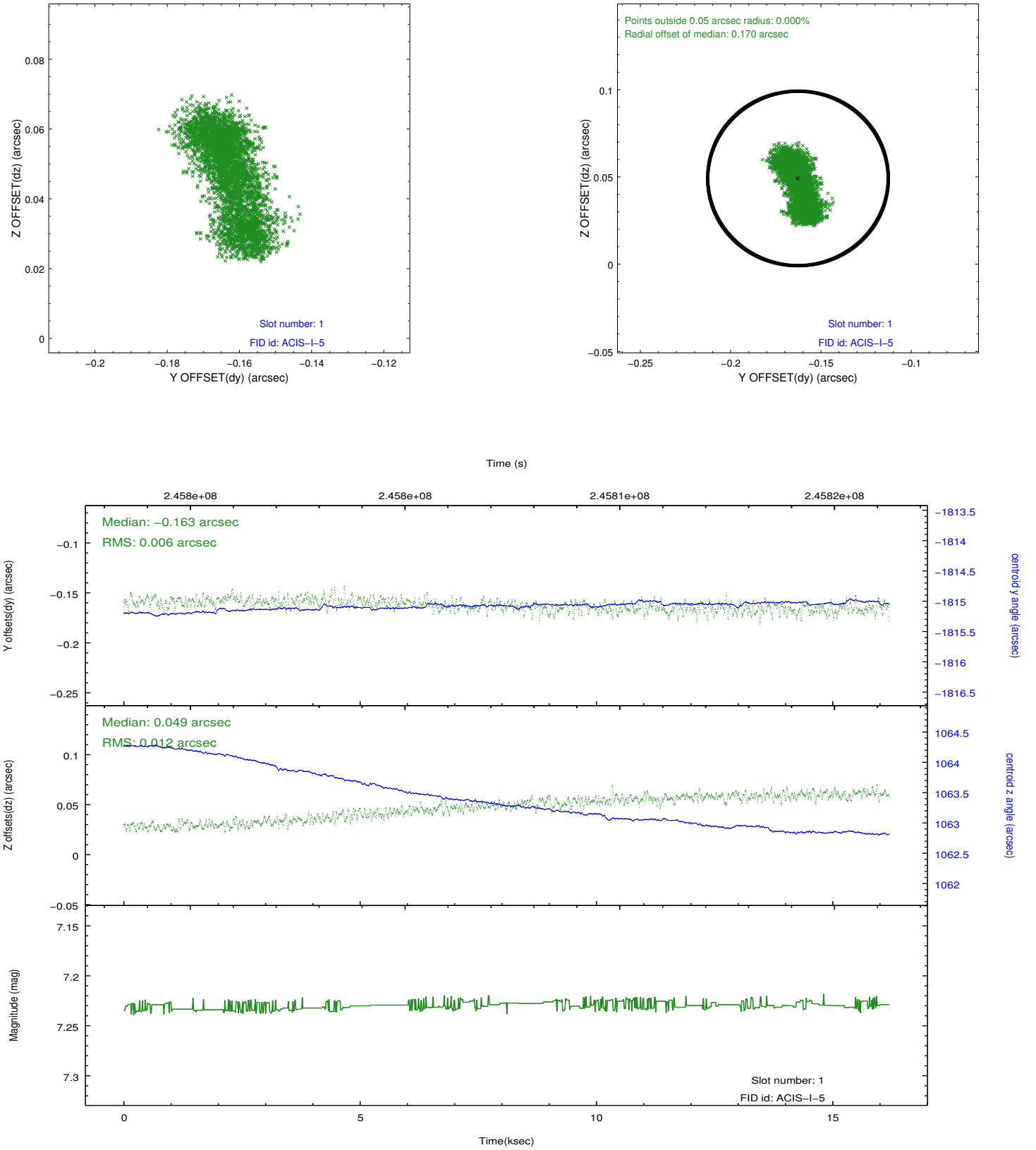


2.5 FID Slots

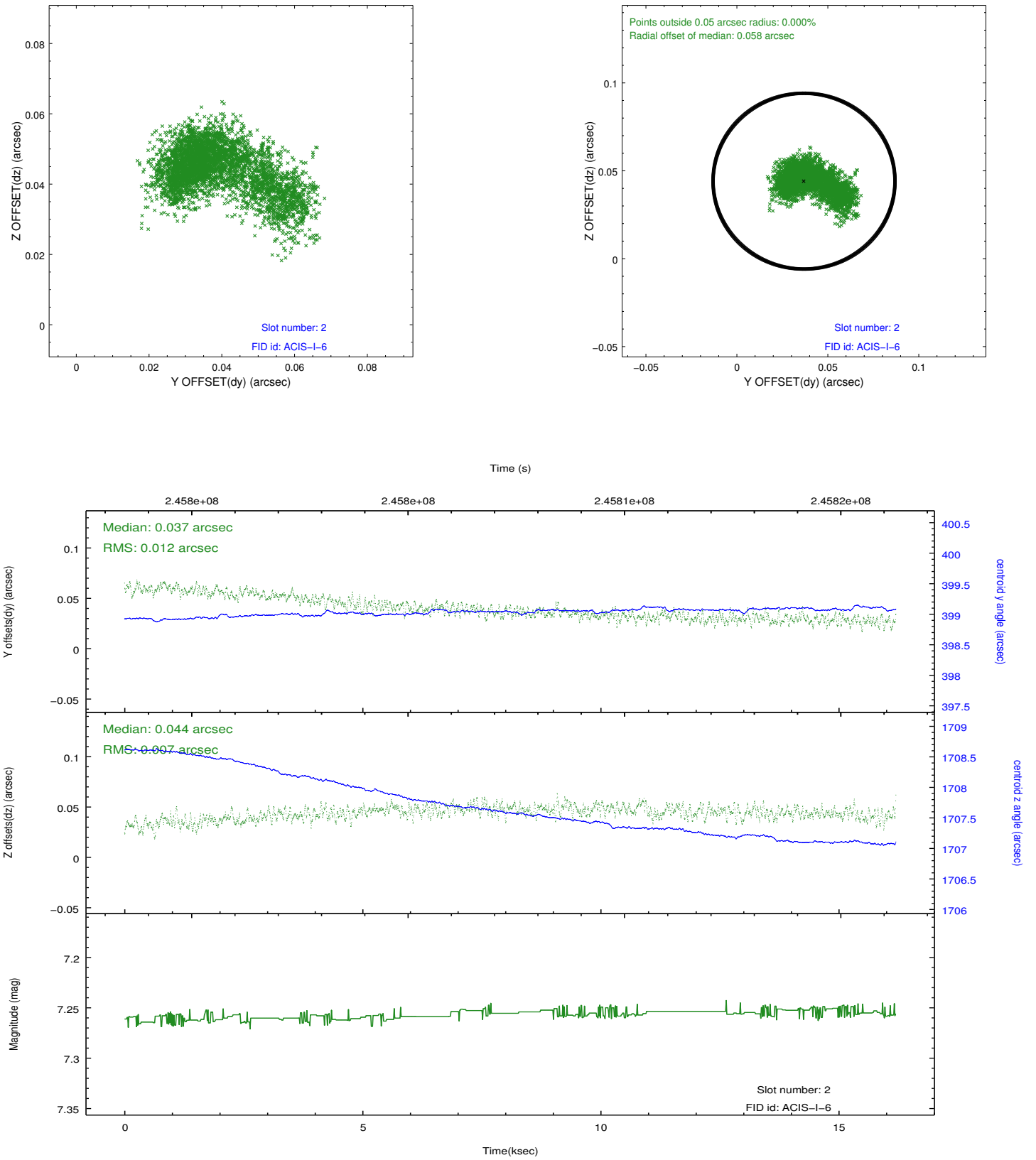
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.03.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.19439

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files are incorrect by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct. If using the FP temp values in the headers of data files (some CIAO tools require this information), investigators should subtract 1.3 degrees from the reported temperature to determine the true temperature.

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Roll constraint met.