

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 4884 - L2 Version 6
Chandra X-Ray Center

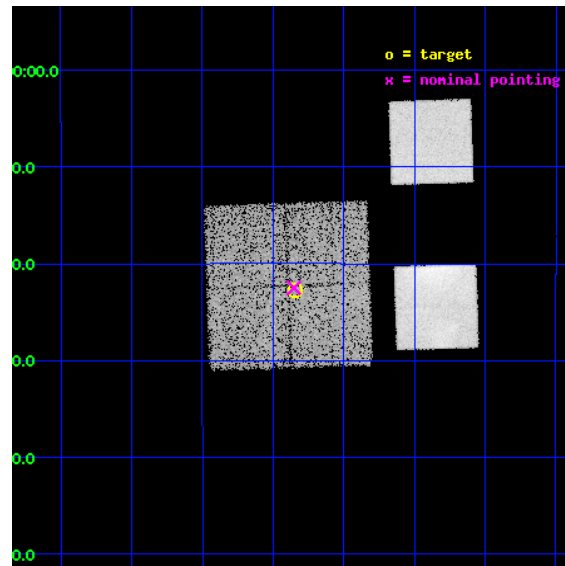
L2 Processing Date : Feb 11 2013

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1 Front

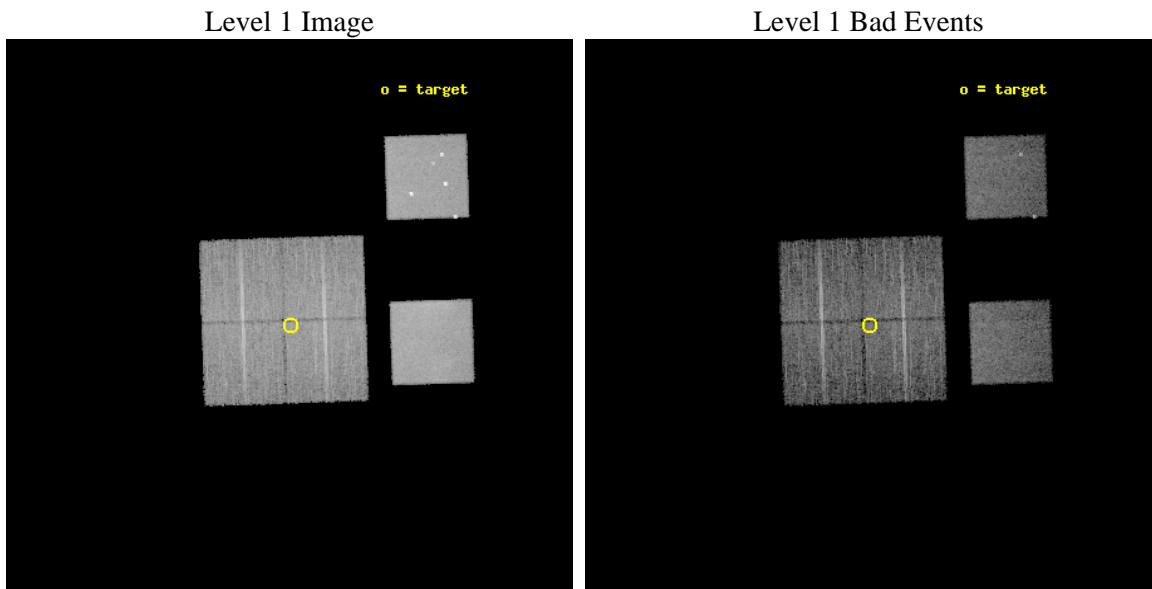
seq_num	700966	Sequence number
obs_id	4884	Observation id
title	AGN in low-redshift Clusters of Galaxies	Proposal title
observer	Prof. Paul Martini	Principal investigator
object	Abell85-P4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.71125	Observer's specified target RA [deg]
dec_targ	-9.379167	Observer's specified target Dec [deg]
ra_nom	10.713175617883	Nominal RA [deg]
dec_nom	-9.3749646511875	Nominal Dec [deg]
roll_nom	88.118830792047	Nominal Roll [deg]
revision	6	Processing version of data
ontime	9756.7999636531	Sum of GTIs [s]
livetime	9633.2534876737	Livetime [s]
ontime0	9756.7999636531	Sum of GTIs [s]
ontime1	9756.7999636531	Sum of GTIs [s]
ontime2	9756.7999636531	Sum of GTIs [s]
ontime3	9756.7999636531	Sum of GTIs [s]
ontime5	9756.7999636531	Sum of GTIs [s]
ontime7	9756.7999636531	Sum of GTIs [s]
l2events	142967	Number of level 2 events



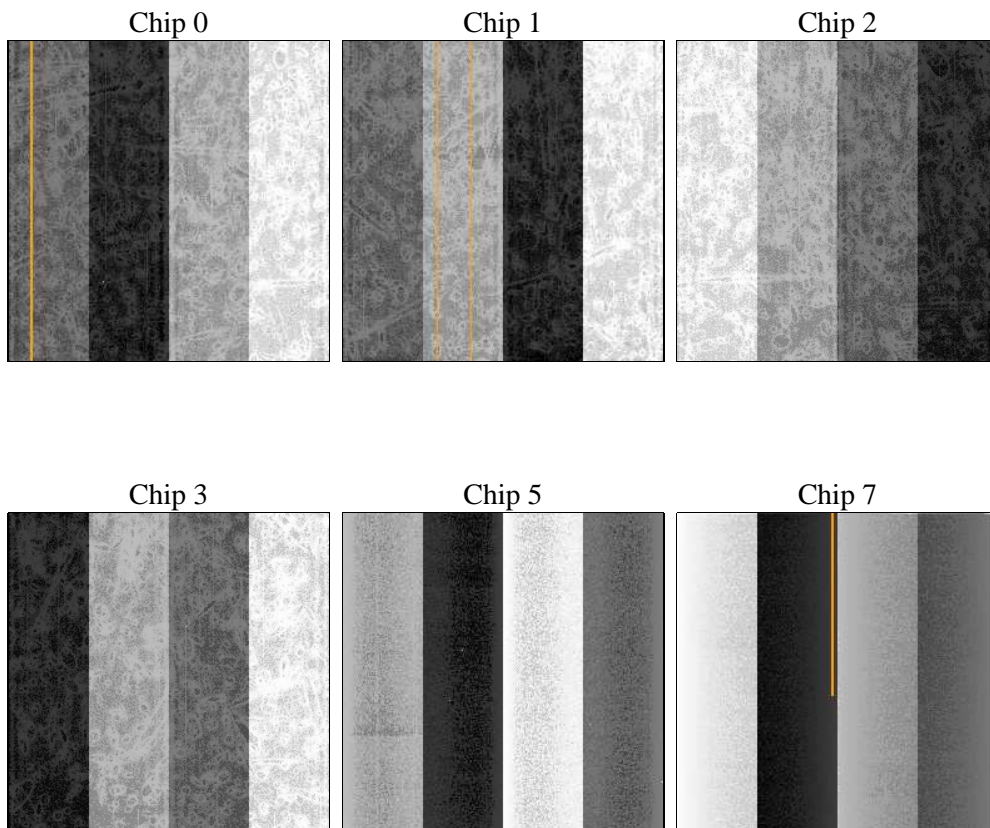
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	9756.7999636531	Sum of GTIs [s]
caldsver	4.5.5	 	ontime0	9756.7999636531	Sum of GTIs [s]
date	2013-02-11T23:09:26	Date and time of file creation	ontime1	9756.7999636531	Sum of GTIs [s]
revision	6	Processing version of data	ontime2	9756.7999636531	Sum of GTIs [s]
			ontime3	9756.7999636531	Sum of GTIs [s]
			ontime5	9756.7999636531	Sum of GTIs [s]
			ontime7	9756.7999636531	Sum of GTIs [s]
			l1events	523540	Number of level 1 events

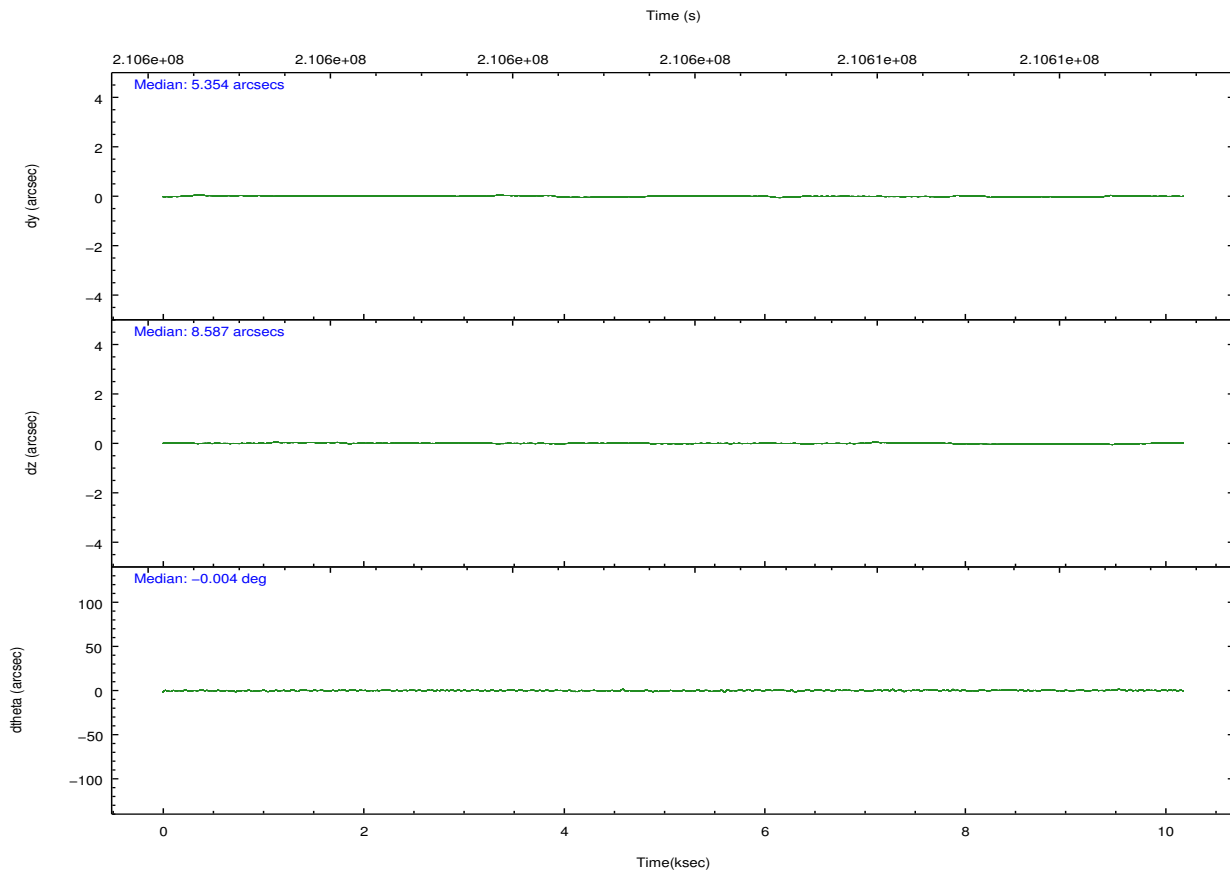
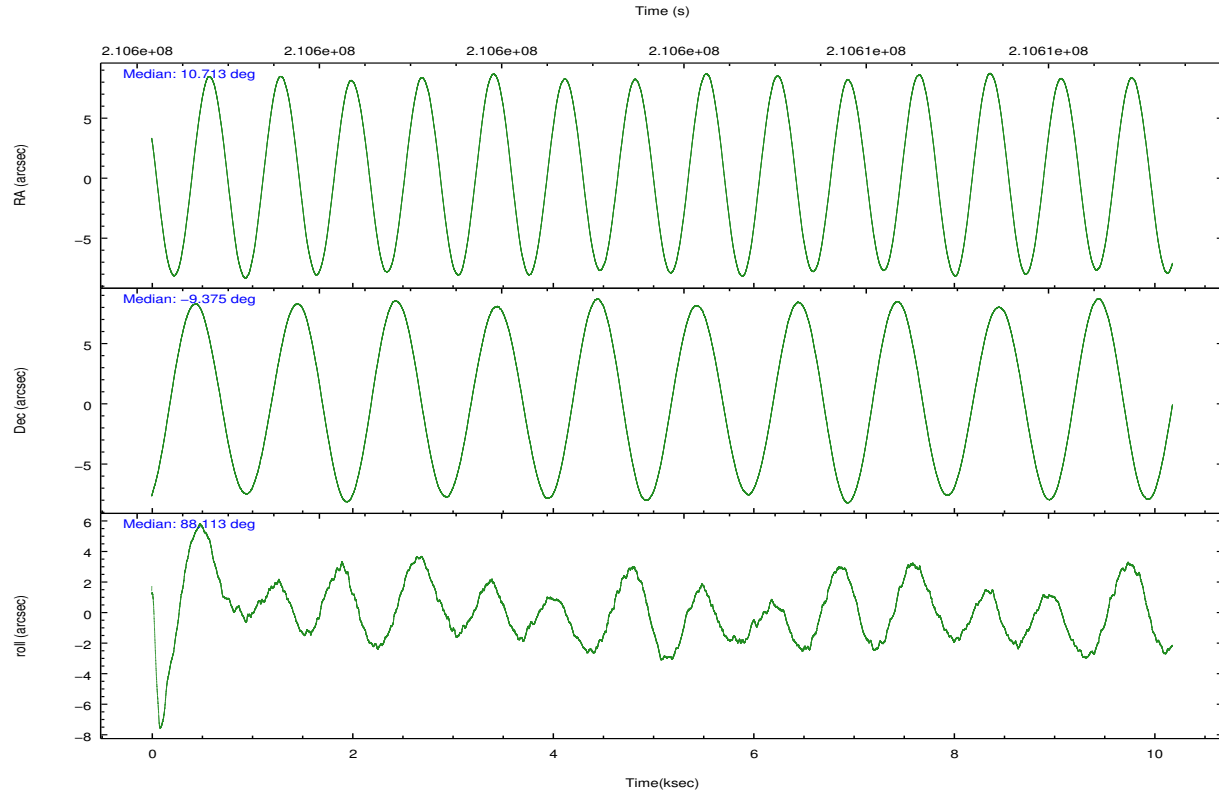
2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7
level 1 events	71754	66803	75013	71838	116996	121136	grade 0 events	3802	3993	4650	4662	10987	10159
rejected events	62729	57163	65236	62227	59457	57903		5%	5%	6%	6%	9%	8%
rejected %	87%	85%	86%	86%	50%	47%	grade 1 events	44	42	54	40	298	113
								0%	0%	0%	0%	0%	0%
							grade 2 events	1985	1950	1932	1750	15655	13924
								2%	2%	2%	2%	13%	11%
							grade 3 events	894	999	839	854	2221	6359
								1%	1%	1%	1%	1%	5%
							grade 4 events	783	873	873	860	2010	6231
								1%	1%	1%	1%	1%	5%
							grade 5 events	2989	3001	2825	3273	8061	9416
								4%	4%	3%	4%	6%	7%
							grade 6 events	1568	1833	1483	1489	26688	26584
								2%	2%	1%	2%	22%	21%
							grade 7 events	59689	54112	62357	58910	51076	48350
								83%	81%	83%	82%	43%	39%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012357	ACIS-012357	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	10.726405	10.71317561788265	Subarray requested	NONE	NONE
[deg] Pointing Dec	-9.399051	-9.37496465118749	Alternating exposures requested	N	N
[deg] Pointing Roll	87.912302	88.11883079204708	[s] Primary exposure time	0.000000	3.2
[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)	210598846.184000	210598470.96161			
Observation start date	2004-09-03T11:39:42	2004-09-03T11:34:30			
[s] Observation end time (MET)	210608846.184000	210608981.31208			
Observation end date	2004-09-03T14:26:22	2004-09-03T14:29:41			
Read mode	TIMED	TIMED			

2.3 Aspect

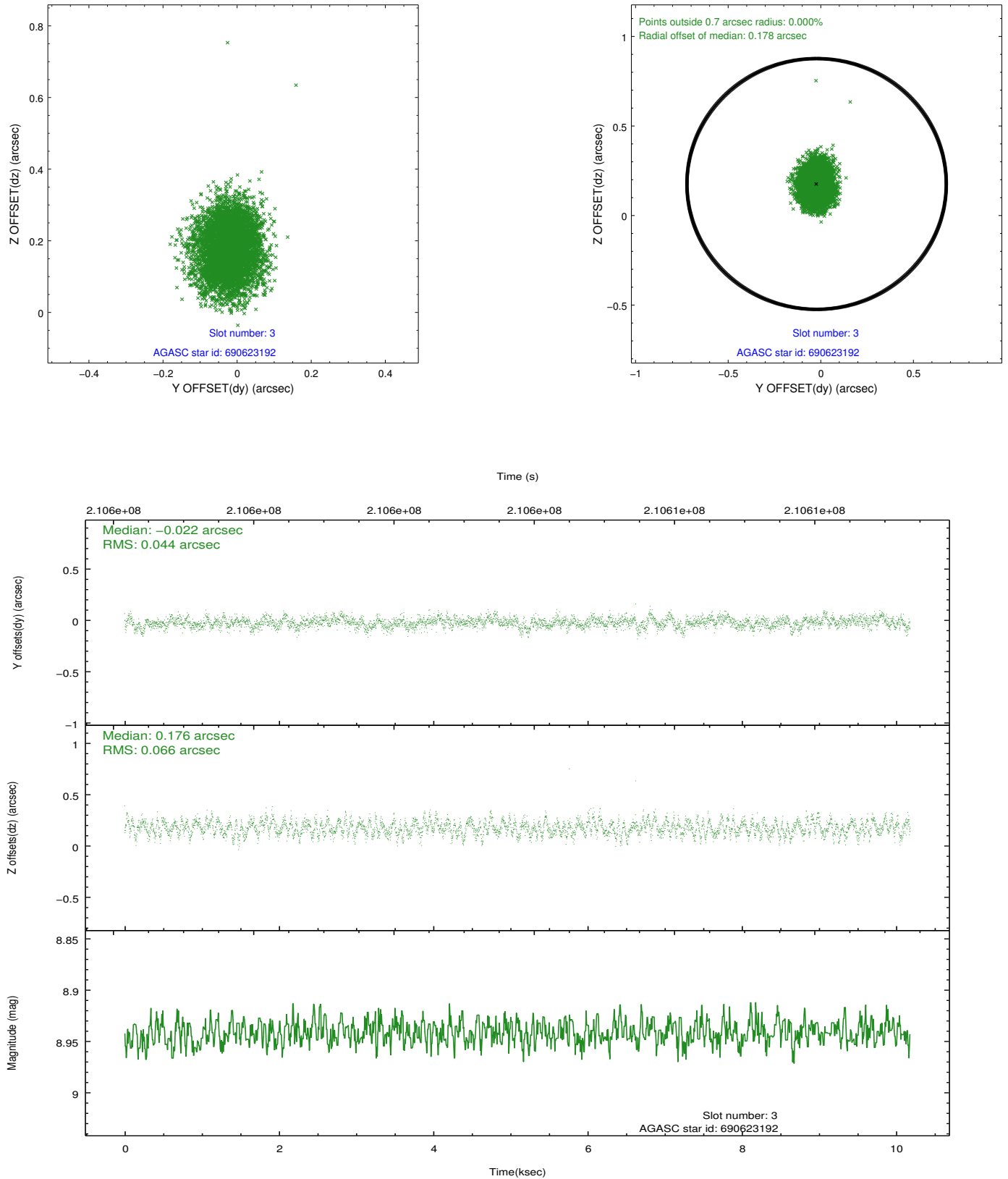


Slot Statistics

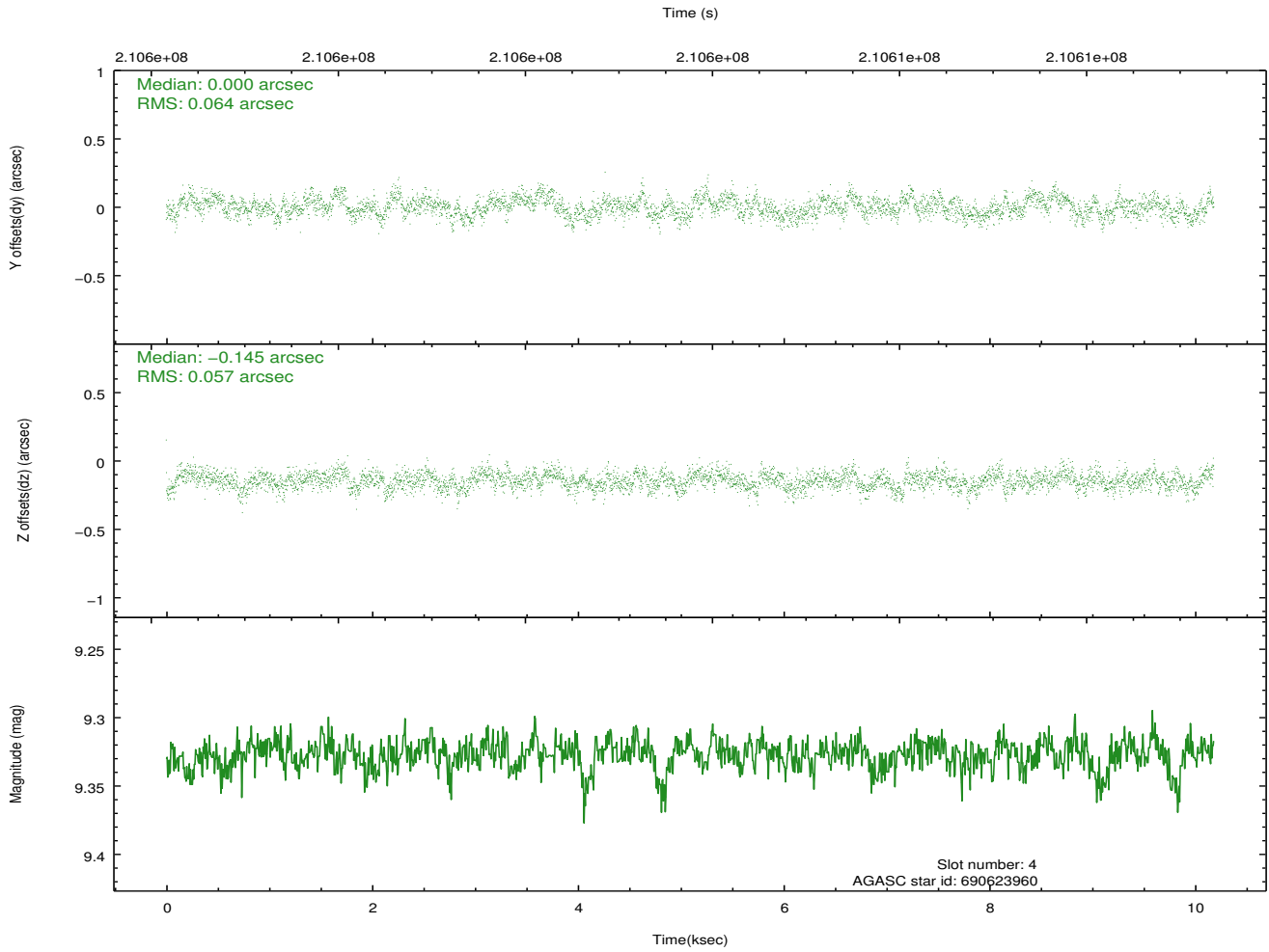
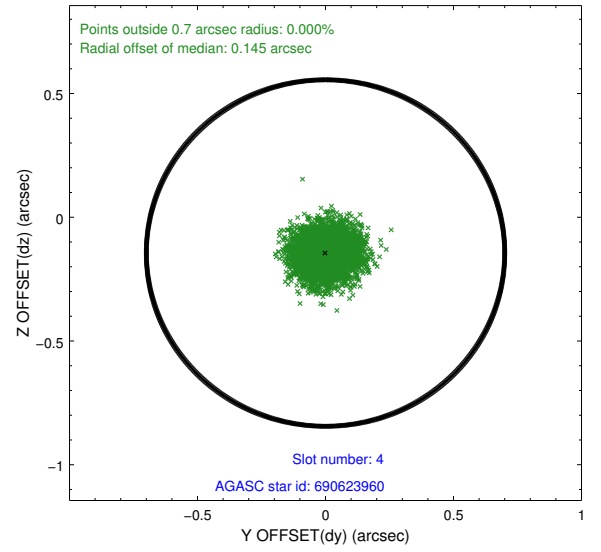
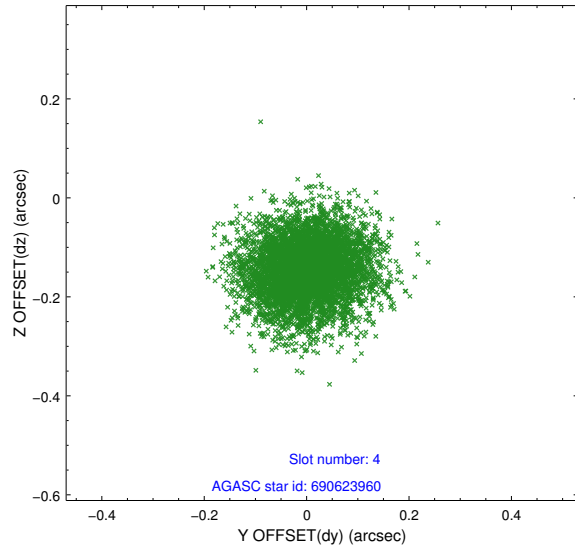
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	2484	0.033	-0.019	0.005	0.009	0.000000	0.000000	934.44	-832.01
1	FID	ACIS-I-5	7.23	2484	-0.094	0.069	0.005	0.009	0.000000	0.000000	-1813.57	1065.21
2	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	690623192	8.94	4966	-0.022	0.176	0.085	0.137	11.363175	-9.544394	-441.98	-2278.38
4	GUIDE	690623960	9.33	4967	0.000	-0.145	0.092	0.148	10.570675	-9.168103	810.79	583.03
5	GUIDE	690625160	8.90	4967	0.028	-0.117	0.098	0.157	10.224219	-9.960066	-2084.22	1705.73
6	GUIDE	690625776	9.14	4965	-0.008	0.108	0.085	0.145	10.846019	-9.315741	315.35	-414.70
7	GUIDE	690632656	9.26	4964	0.001	-0.027	0.084	0.134	10.397747	-9.674983	-1035.61	1129.25

2.4 Star Slots

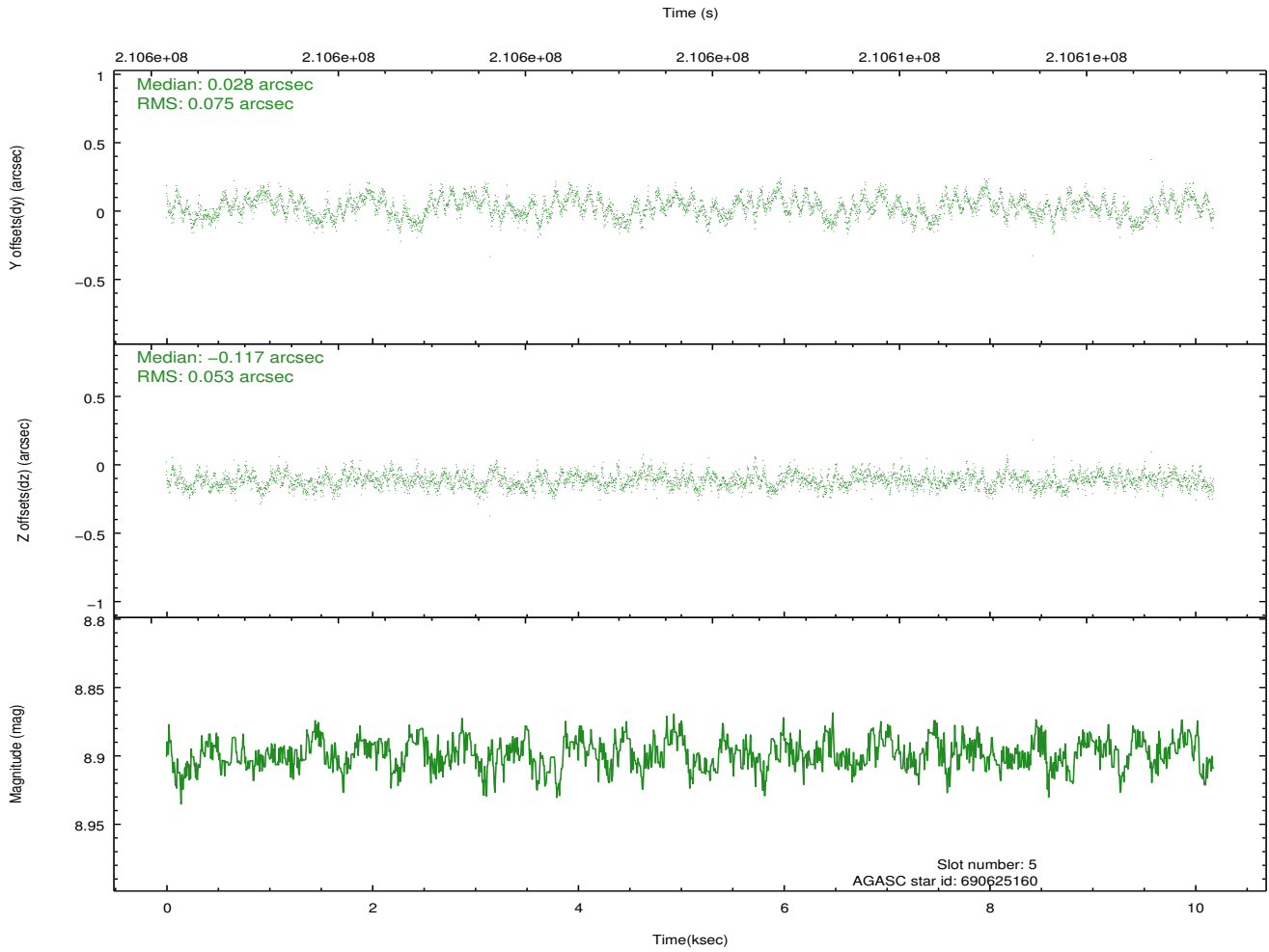
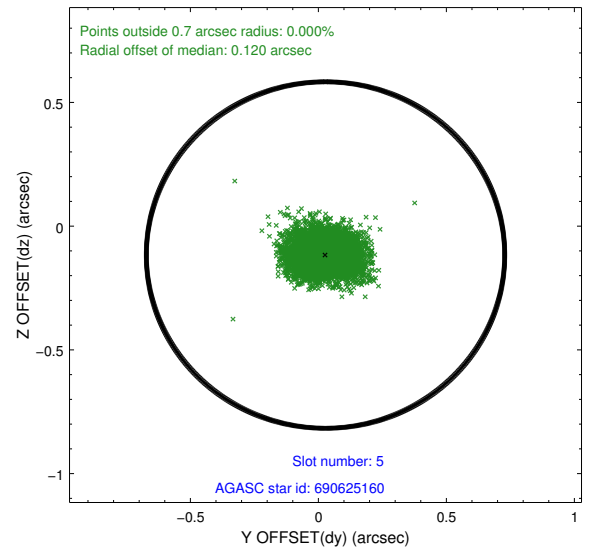
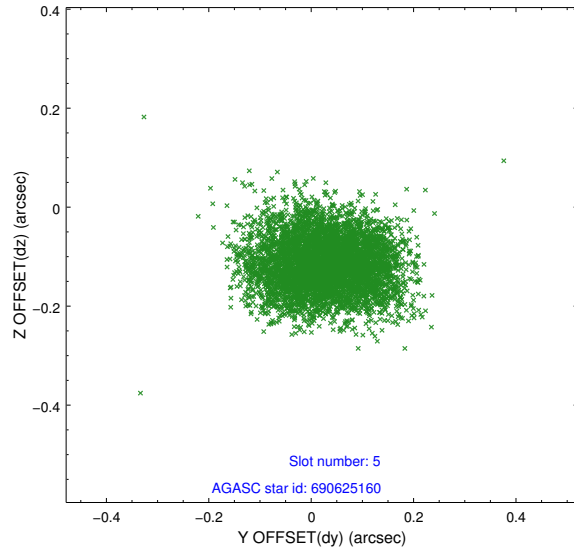
2.4.1 Slot 3



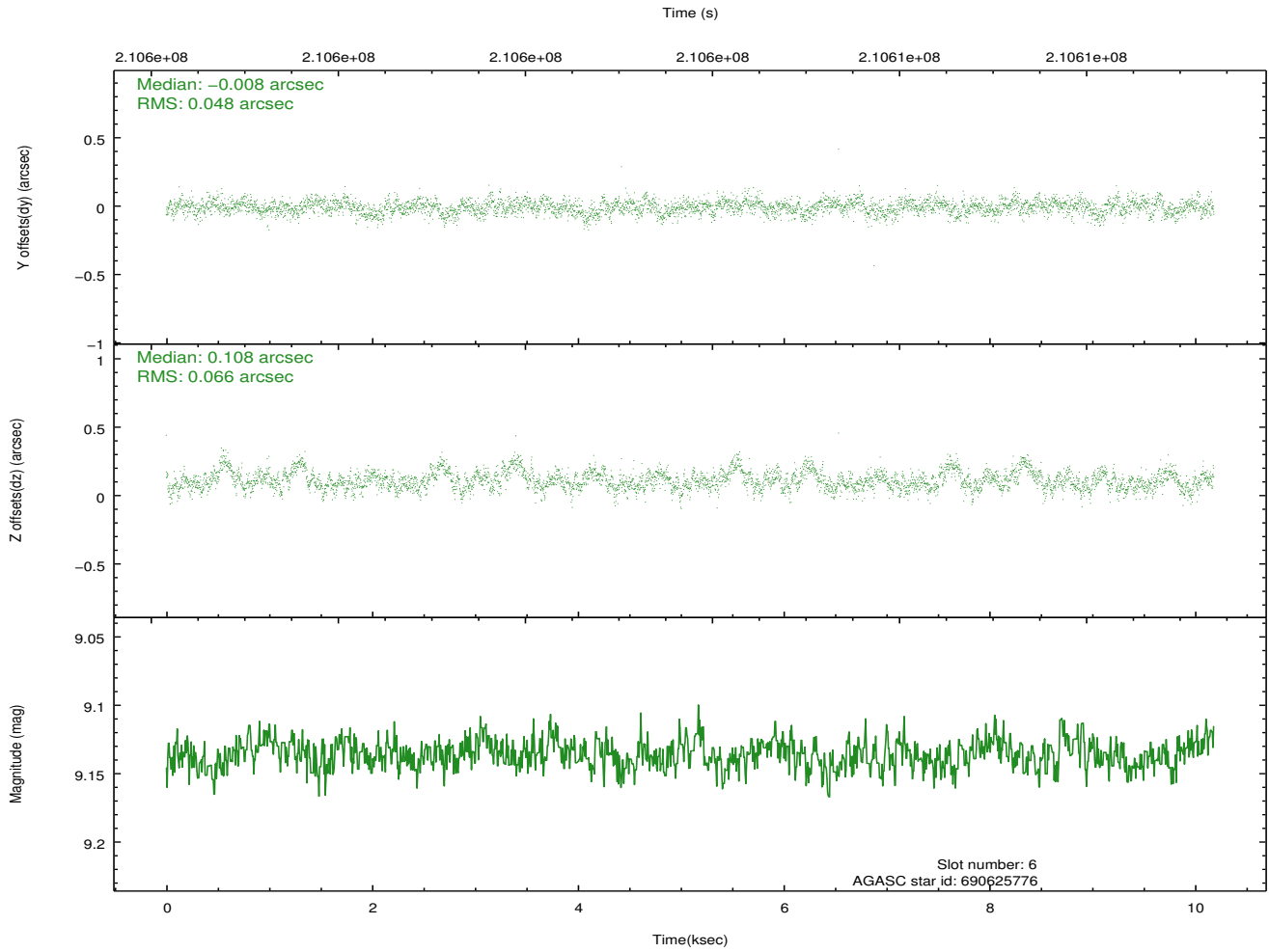
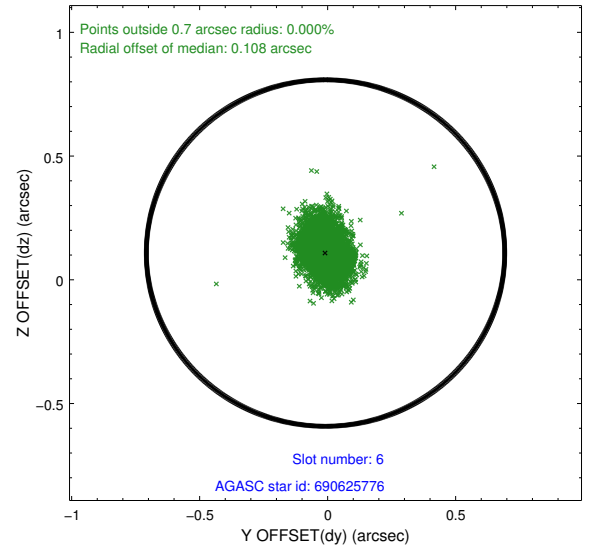
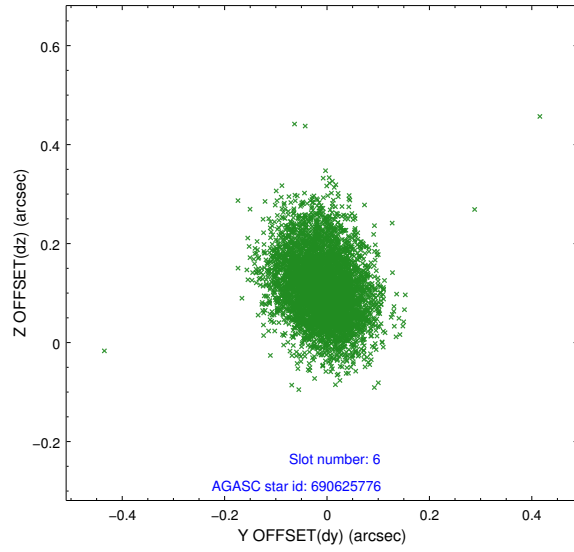
2.4.2 Slot 4



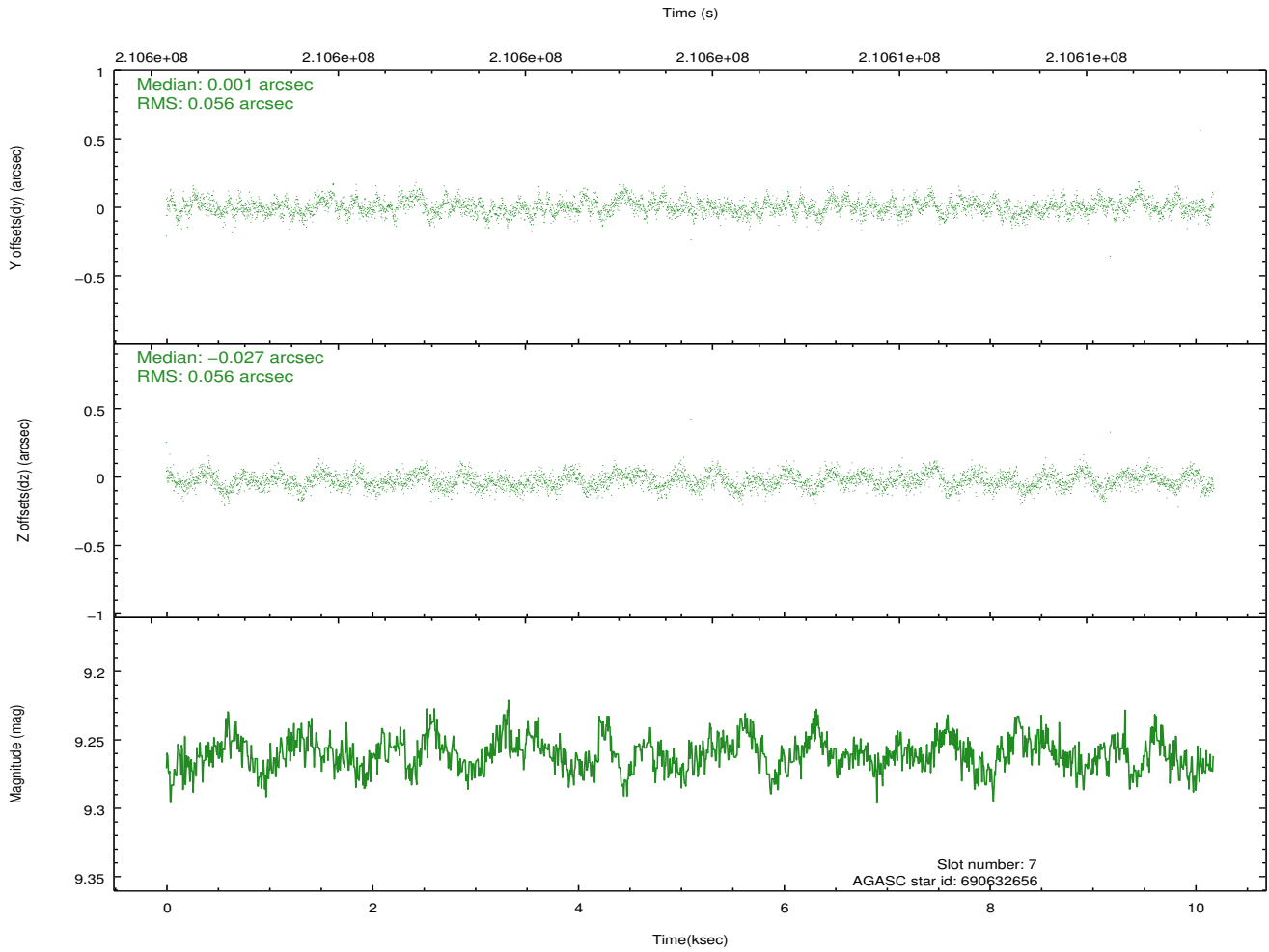
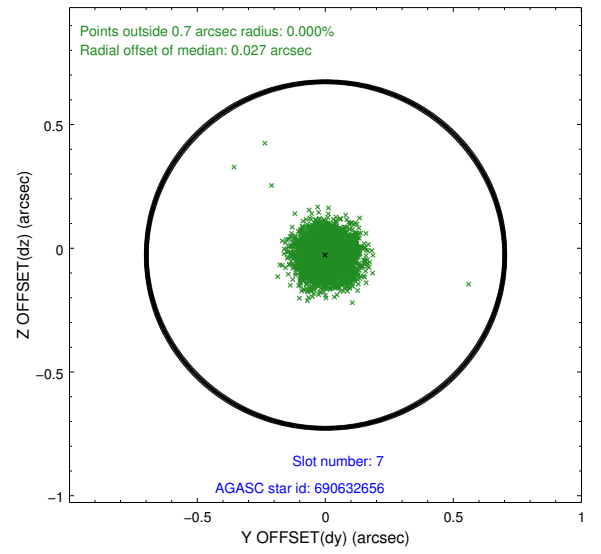
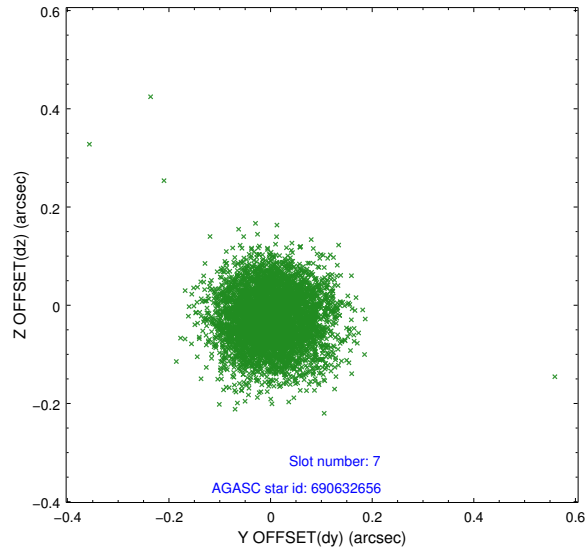
2.4.3 Slot 5



2.4.4 Slot 6

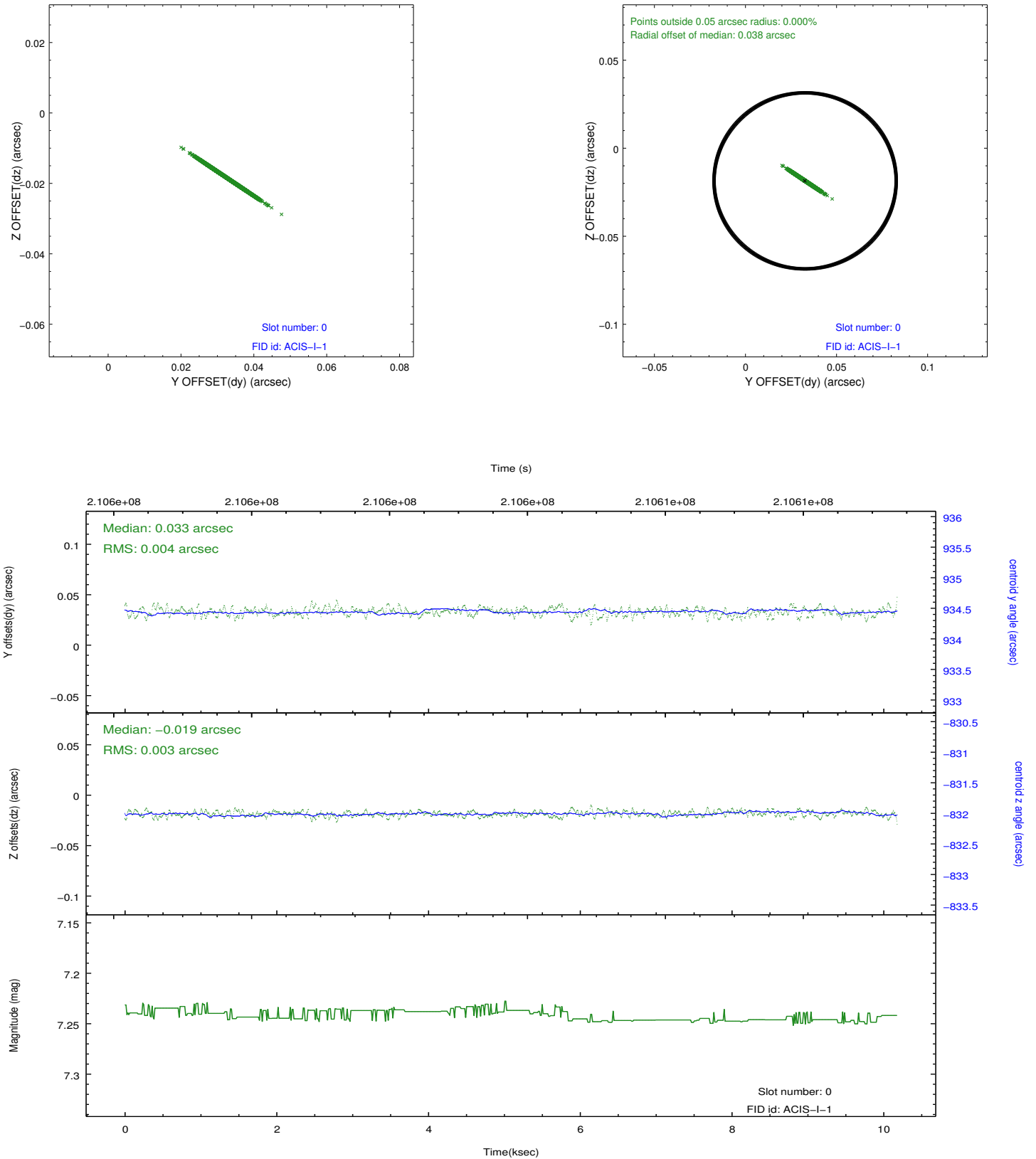


2.4.5 Slot 7

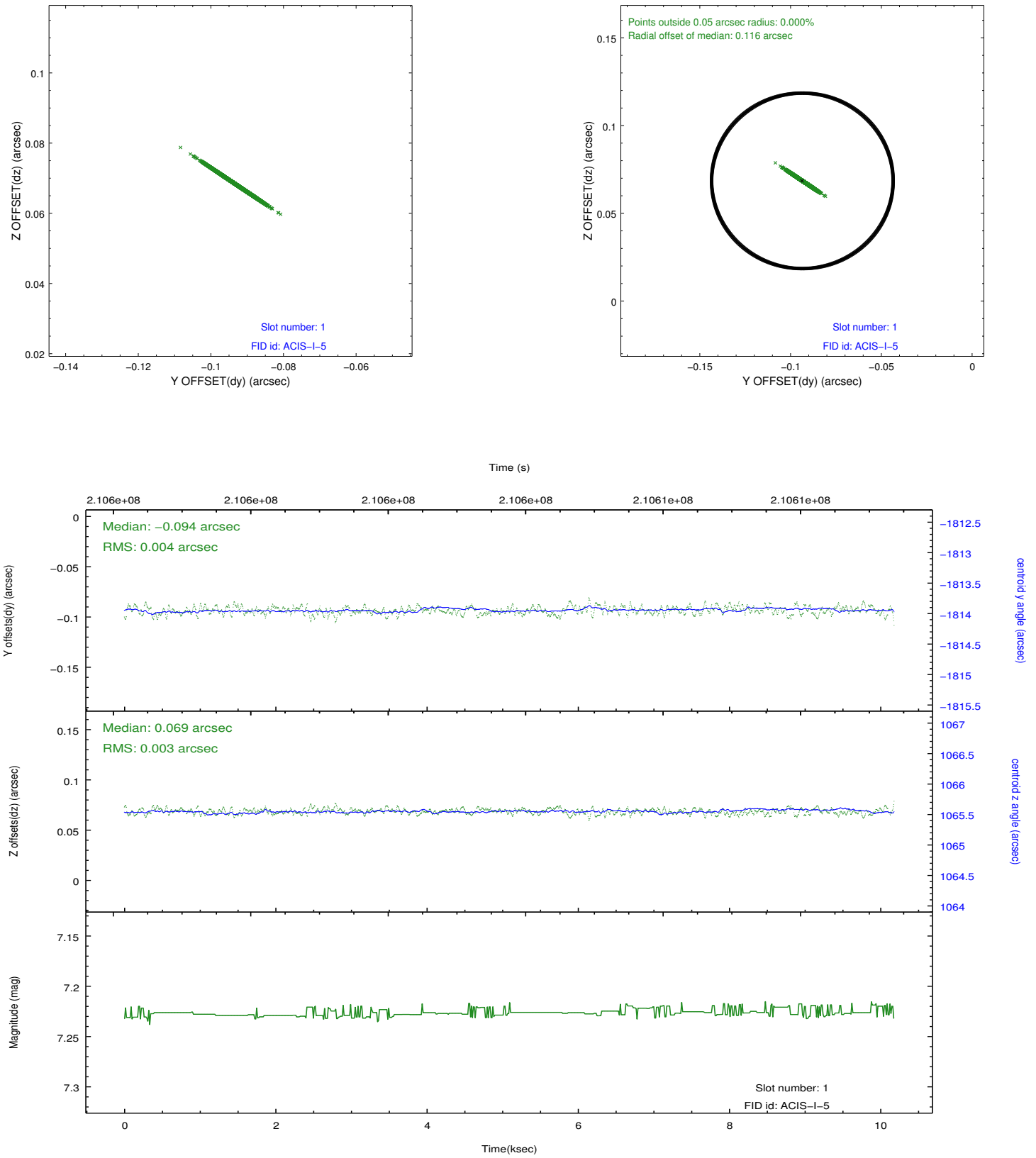


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.02.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.756

A.2 Comments

The fid light in slot 2 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this fid light from the solution.

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A spatial region of the original bias map for CCD = 1 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 1 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:

(10.81070,-9.51500),(10.81499,-9.51513),(10.81620,-9.47820),(10.81192,-9.47807)