

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 4881 - L2 Version 5
Chandra X-Ray Center

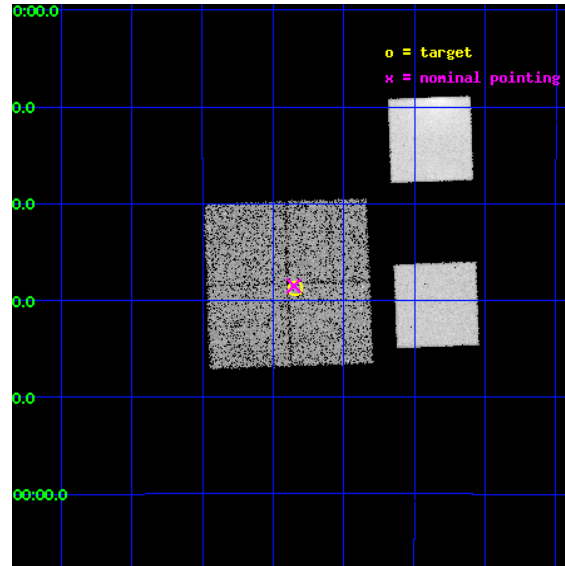
L2 Processing Date : Feb 11 2013

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

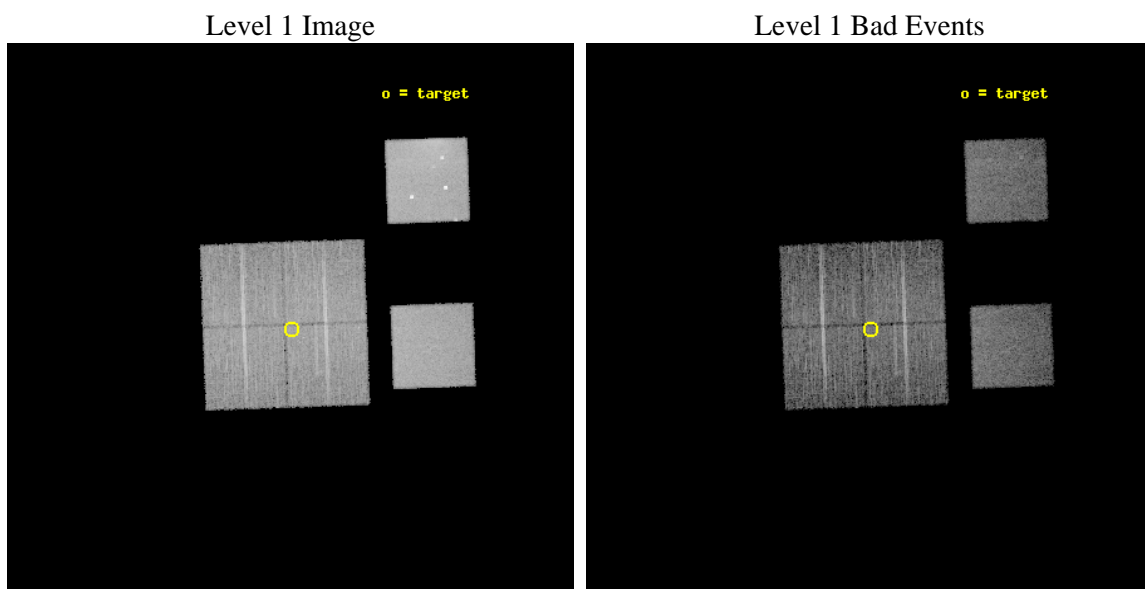
seq_num	700963	Sequence number
obs_id	4881	Observation id
title	AGN in low-redshift Clusters of Galaxies	Proposal title
observer	Prof. Paul Martini	Principal investigator
object	Abell85-P1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.71125	Observer's specified target RA [deg]
dec_targ	-9.645833	Observer's specified target Dec [deg]
ra_nom	10.713249241318	Nominal RA [deg]
dec_nom	-9.6415980842672	Nominal Dec [deg]
roll_nom	87.970089469728	Nominal Roll [deg]
revision	5	Processing version of data
ontime	9956.8584930301	Sum of GTIs [s]
livetime	9830.7787554909	Livetime [s]
ontime0	9956.98161304	Sum of GTIs [s]
ontime1	9956.7764130533	Sum of GTIs [s]
ontime2	9956.8174530268	Sum of GTIs [s]
ontime3	9956.8584930301	Sum of GTIs [s]
ontime5	9956.8995330334	Sum of GTIs [s]
ontime7	9956.9405730367	Sum of GTIs [s]
l2events	144550	Number of level 2 events



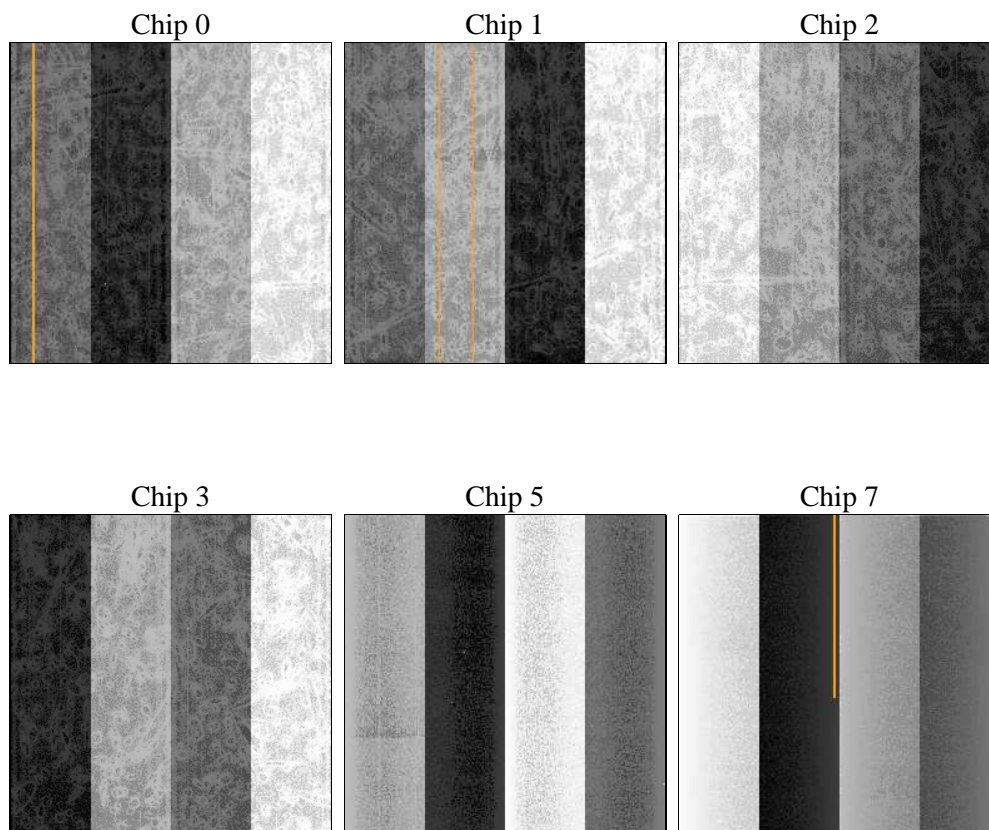
2 OBI

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	9956.8584930301	Sum of GTIs [s]
caldsver	4.5.5	 	ontime0	9956.98161304	Sum of GTIs [s]
date	2013-02-11T23:10:14	Date and time of file creation	ontime1	9956.7764130533	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	9956.8174530268	Sum of GTIs [s]
			ontime3	9956.8584930301	Sum of GTIs [s]
			ontime5	9956.8995330334	Sum of GTIs [s]
			ontime7	9956.9405730367	Sum of GTIs [s]
			l1events	534027	Number of level 1 events

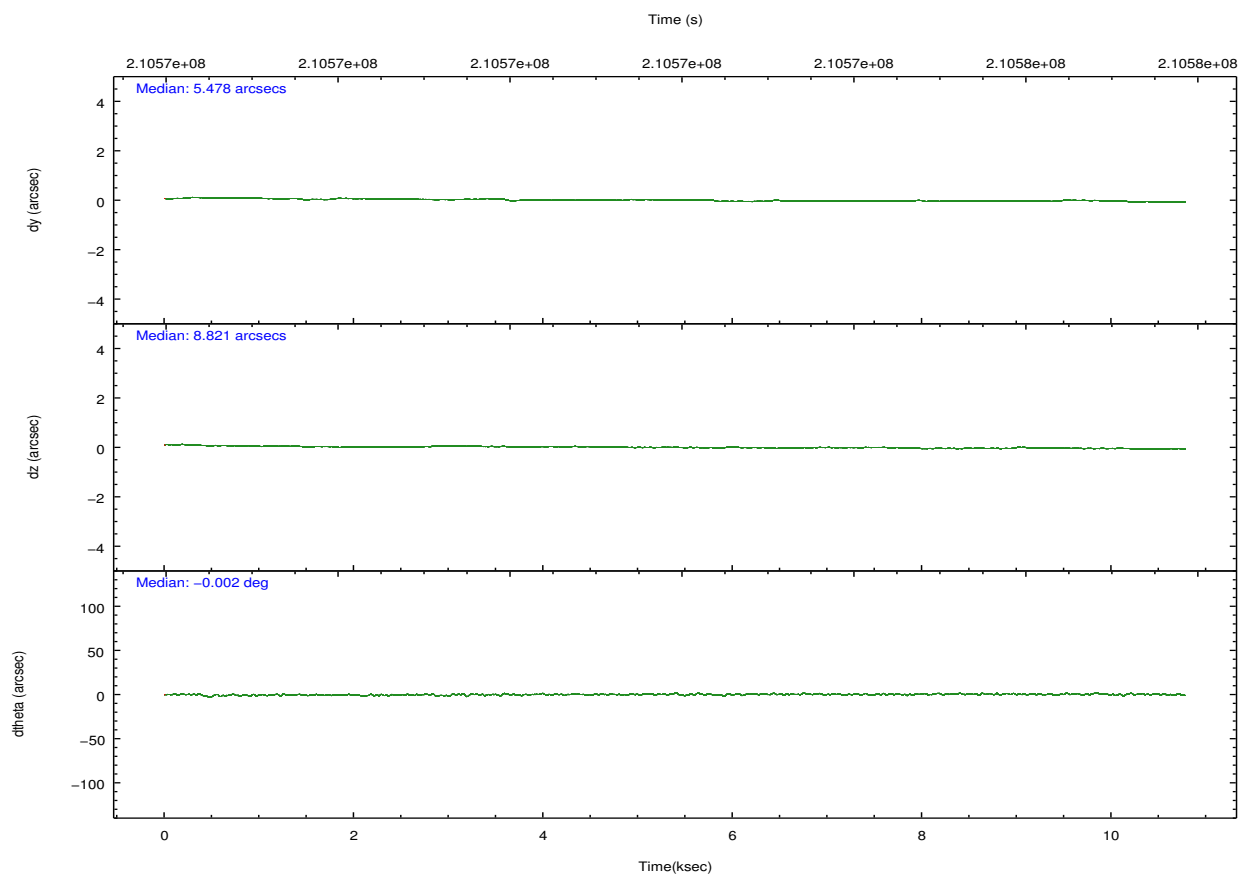
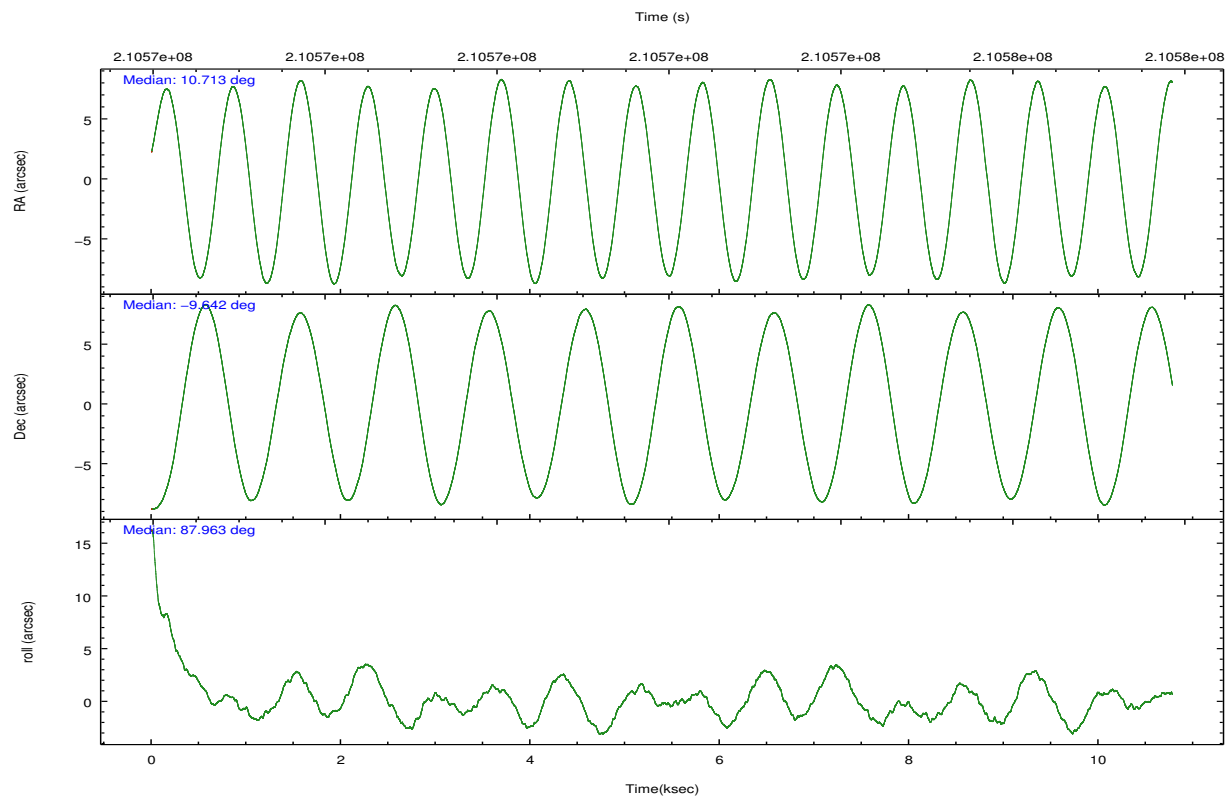
2.1.4 Events

	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	71872	71255	76480	72451	140863	101106	grade 0 events	3883	3611	4207	4200	17839	3959
rejected events	62723	61937	67286	63362	61613	59255		5%	5%	5%	5%	12%	3%
rejected %	87%	86%	87%	87%	43%	58%	grade 1 events	57	46	47	49	194	96
								0%	0%	0%	0%	0%	0%
							grade 2 events	1917	2000	1860	1720	22402	8268
								2%	2%	2%	2%	15%	8%
							grade 3 events	898	926	828	849	4420	3669
								1%	1%	1%	1%	3%	3%
							grade 4 events	838	945	864	837	4184	3681
								1%	1%	1%	1%	2%	3%
							grade 5 events	3076	3105	2894	3349	8354	9622
								4%	4%	3%	4%	5%	9%
							grade 6 events	1619	1836	1441	1487	30458	22304
								2%	2%	1%	2%	21%	22%
							grade 7 events	59584	58786	64339	59960	53012	49507
								82%	82%	84%	82%	37%	48%

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	10.726370	10.71324924131777	Subarray requested	NONE	NONE
[deg] Pointing Dec	-9.665765	-9.641598084267176	Alternating exposures requested	N	N
[deg] Pointing Roll	87.763600	87.97008946972774	[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)	210567316.184000	210566057.89767			
Observation start date	2004-09-03T02:54:12	2004-09-03T02:34:17			
[s] Observation end time (MET)	210577316.184000	210577450.77318			
Observation end date	2004-09-03T05:40:52	2004-09-03T05:44:10			
Read mode	TIMED	TIMED			

2.3 Aspect

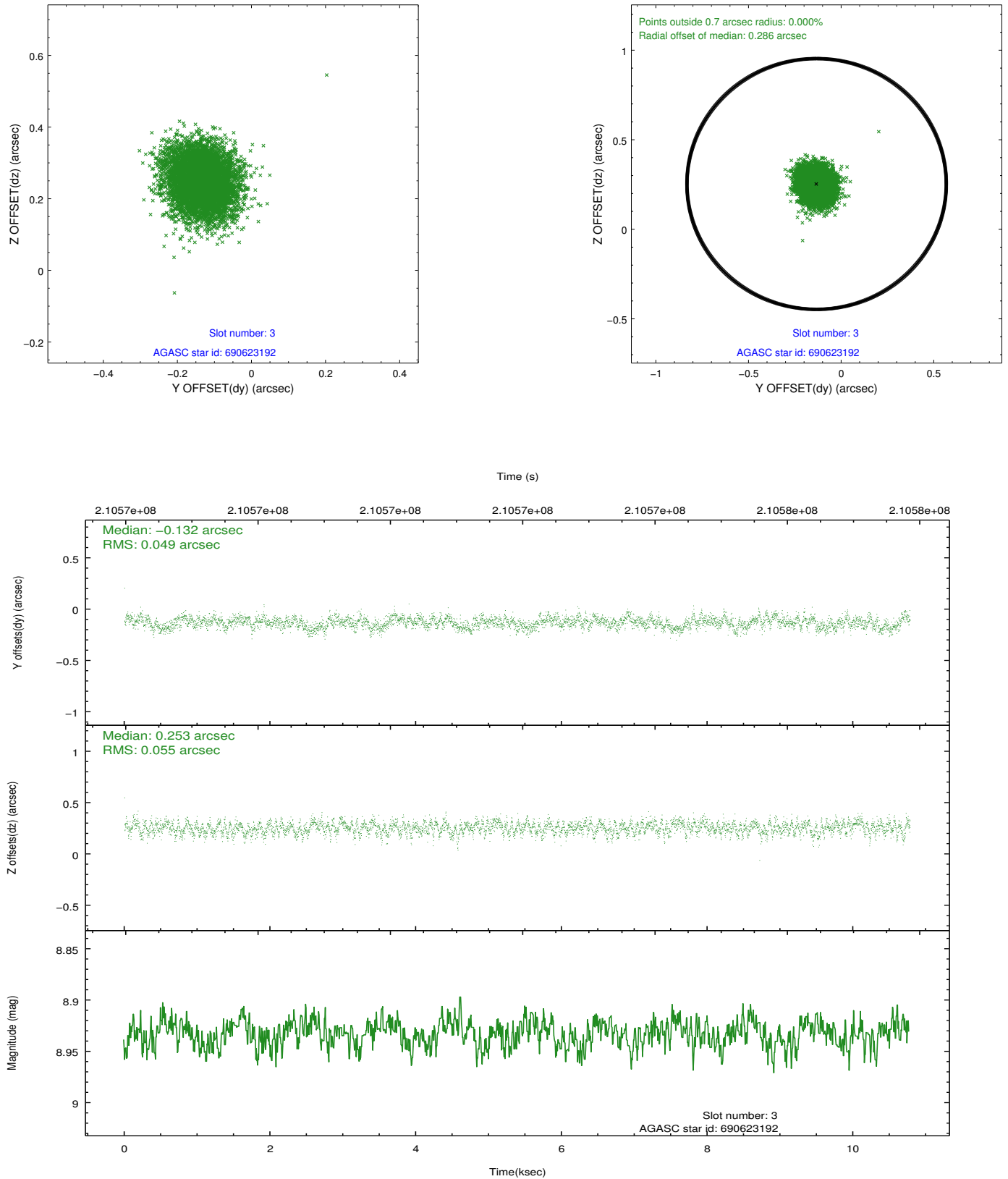


Slot Statistics

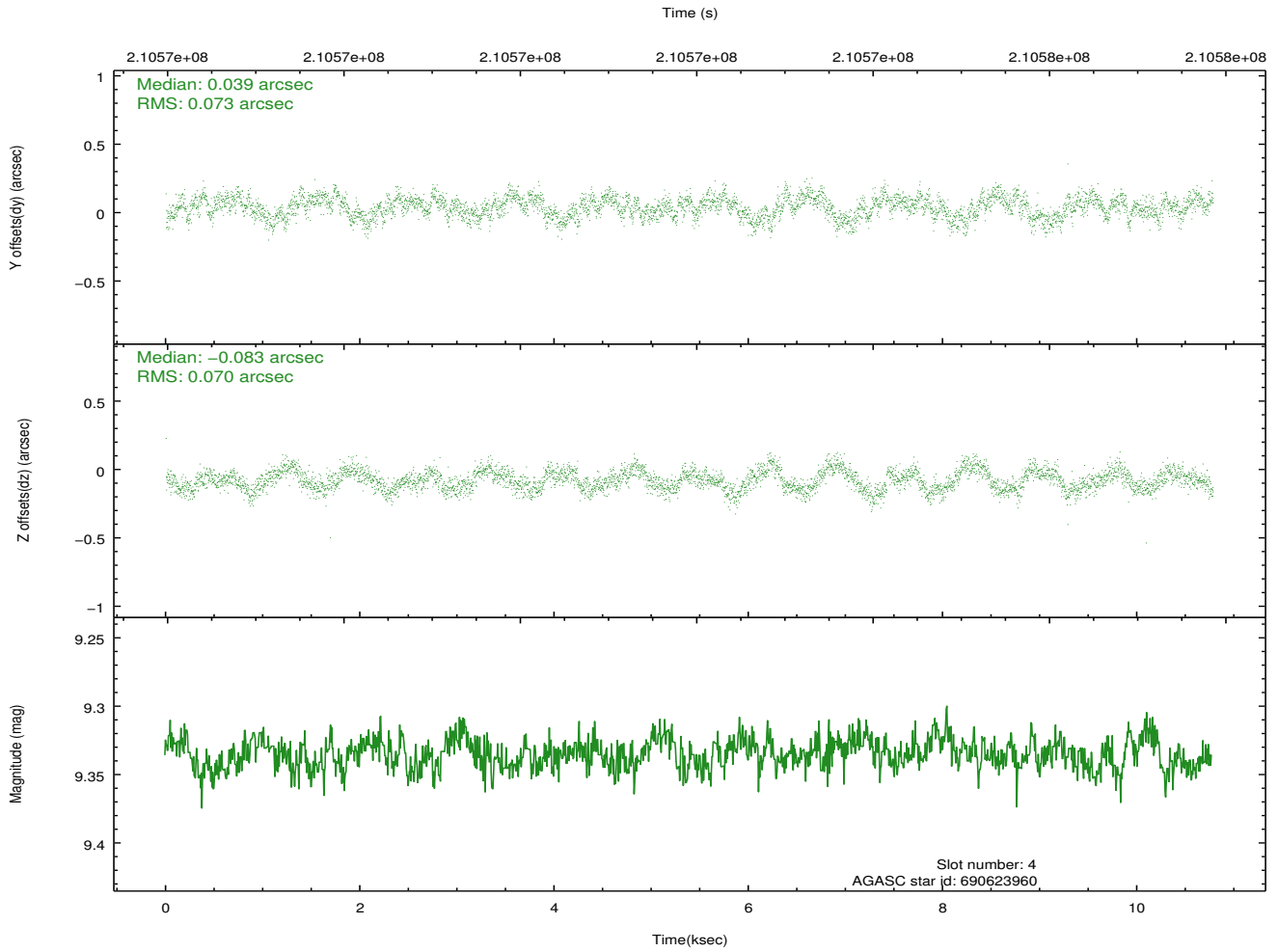
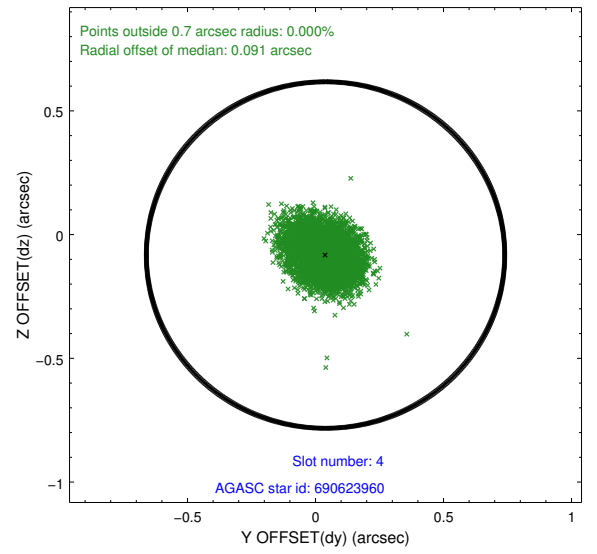
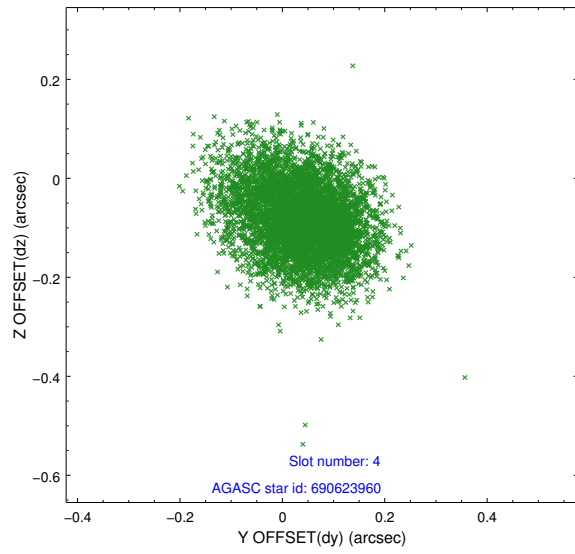
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.13	2629	-0.062	-0.062	0.008	0.015	0.000000	0.000000	-759.99	-838.69
1	FID	ACIS-I-4	7.19	2629	0.131	0.058	0.006	0.010	0.000000	0.000000	2154.04	1067.35
2	FID	ACIS-I-5	7.22	2630	-0.170	0.073	0.008	0.014	0.000000	0.000000	-1813.31	1065.78
3	GUIDE	690623192	8.93	5260	-0.132	0.253	0.078	0.126	11.363175	-9.544394	523.17	-2241.83
4	GUIDE	690623960	9.34	5251	0.039	-0.083	0.108	0.171	10.570675	-9.168103	1768.78	622.89
5	GUIDE	690625160	8.91	5258	0.074	-0.107	0.122	0.185	10.224219	-9.960066	-1129.16	1737.85
6	GUIDE	690625776	9.14	5256	0.054	0.124	0.073	0.114	10.846019	-9.315741	1276.01	-376.27
7	GUIDE	690637960	6.80	5259	-0.043	-0.192	0.072	0.118	10.711431	-9.921690	-922.43	16.93

2.4 Star Slots

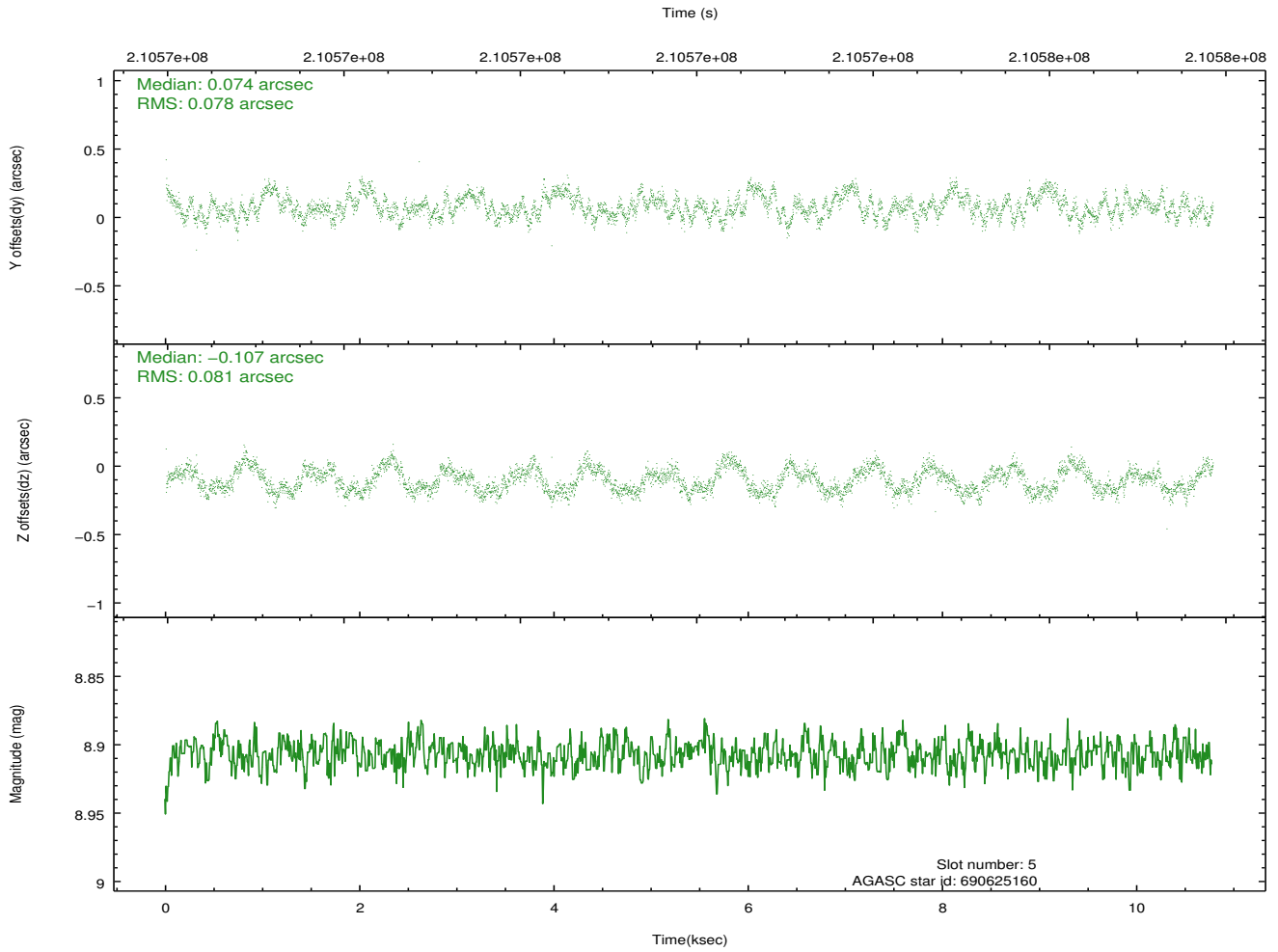
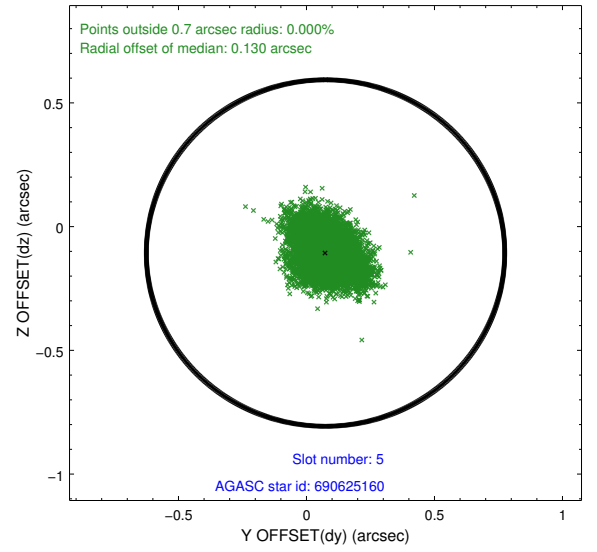
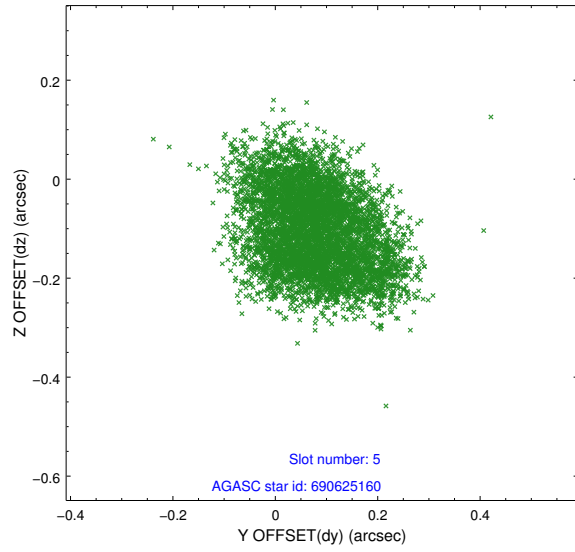
2.4.1 Slot 3



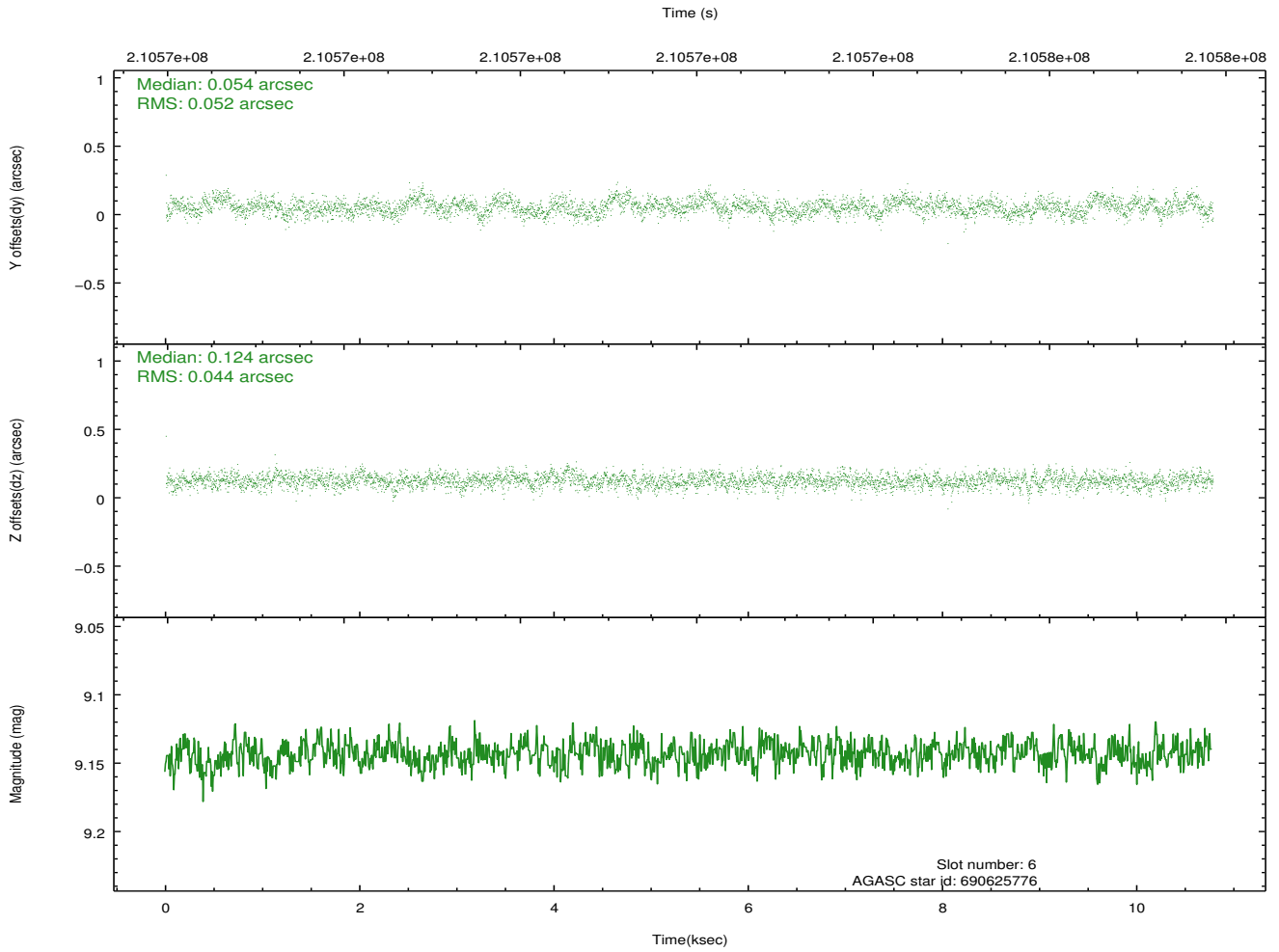
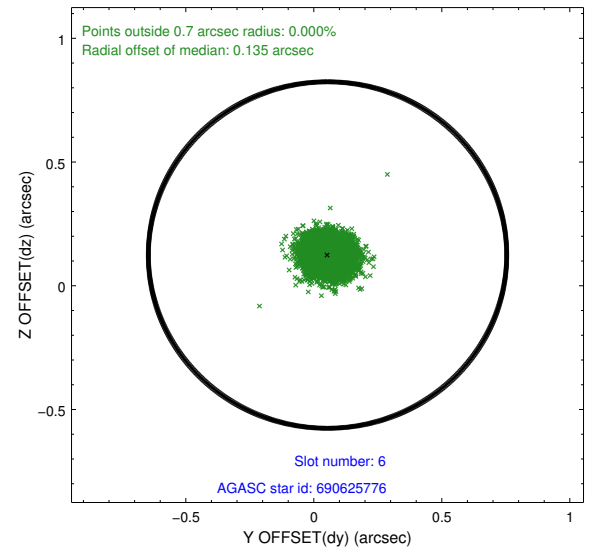
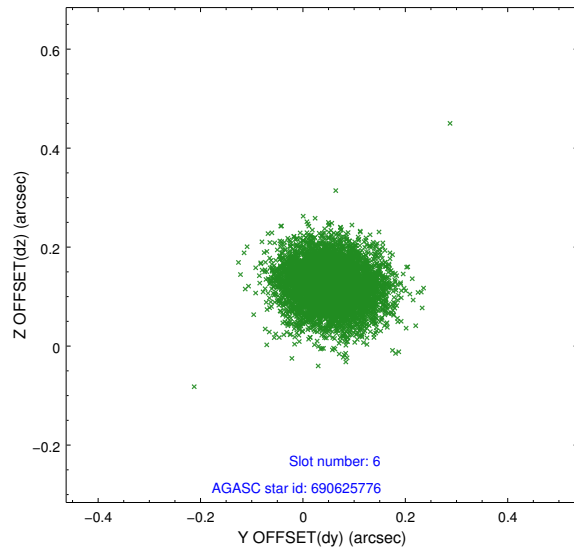
2.4.2 Slot 4



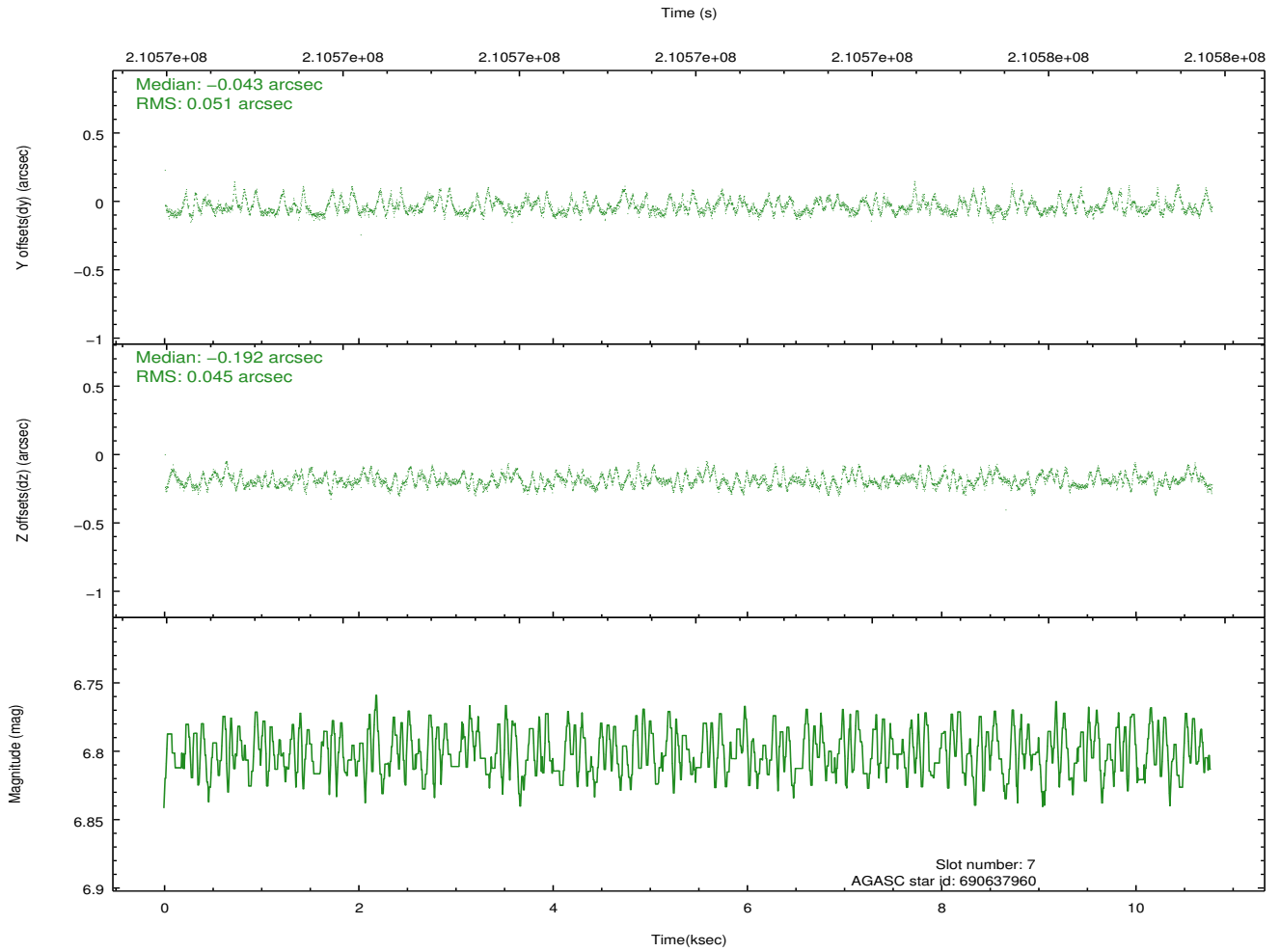
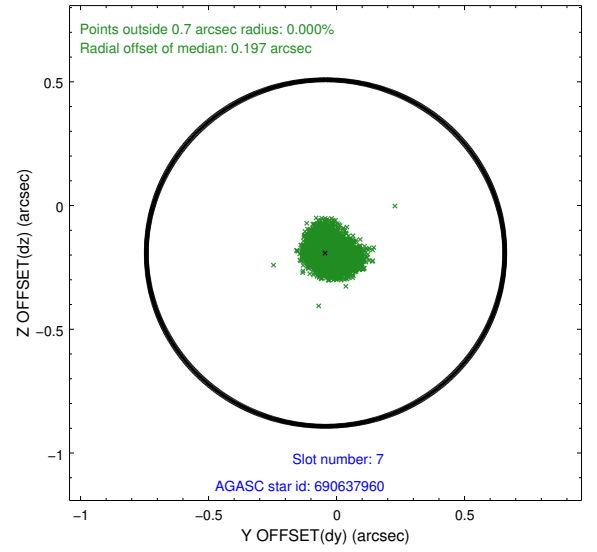
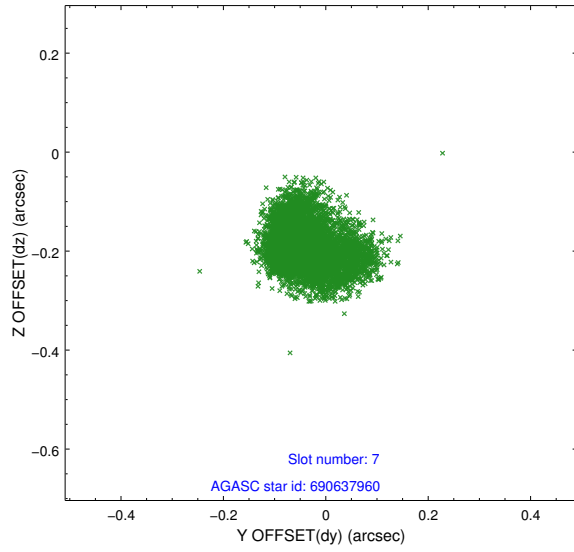
2.4.3 Slot 5



2.4.4 Slot 6

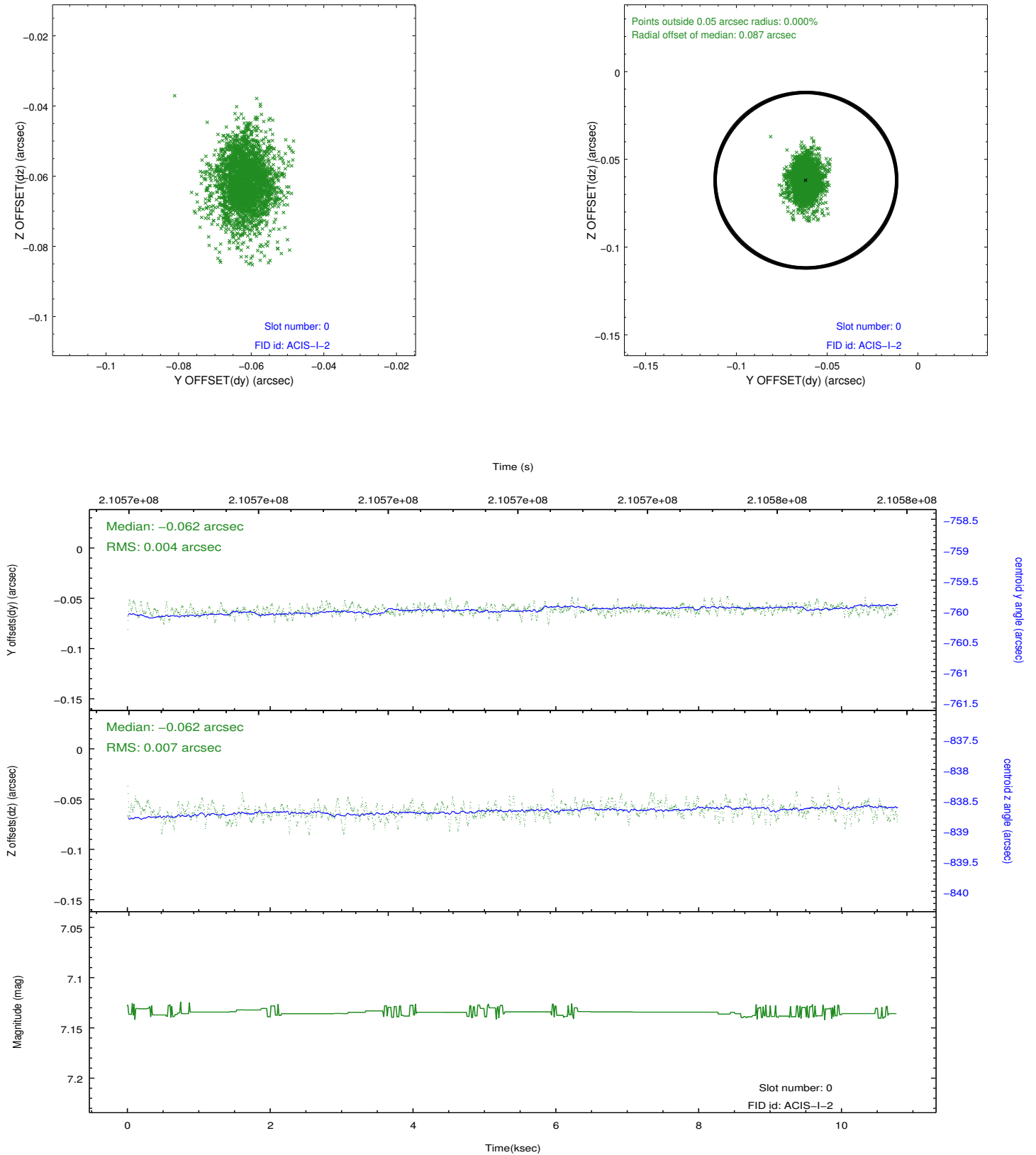


2.4.5 Slot 7

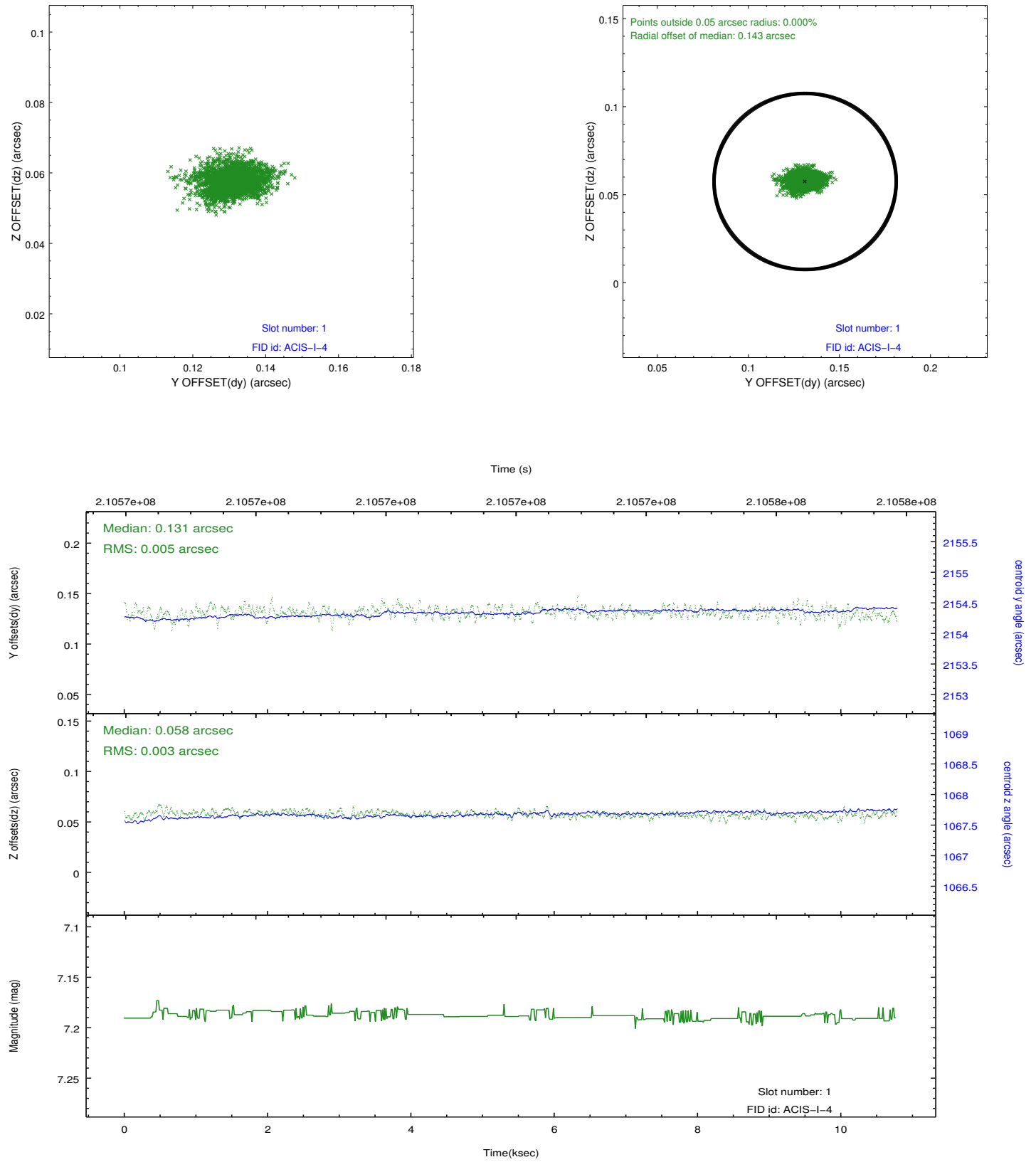


2.5 FID Slots

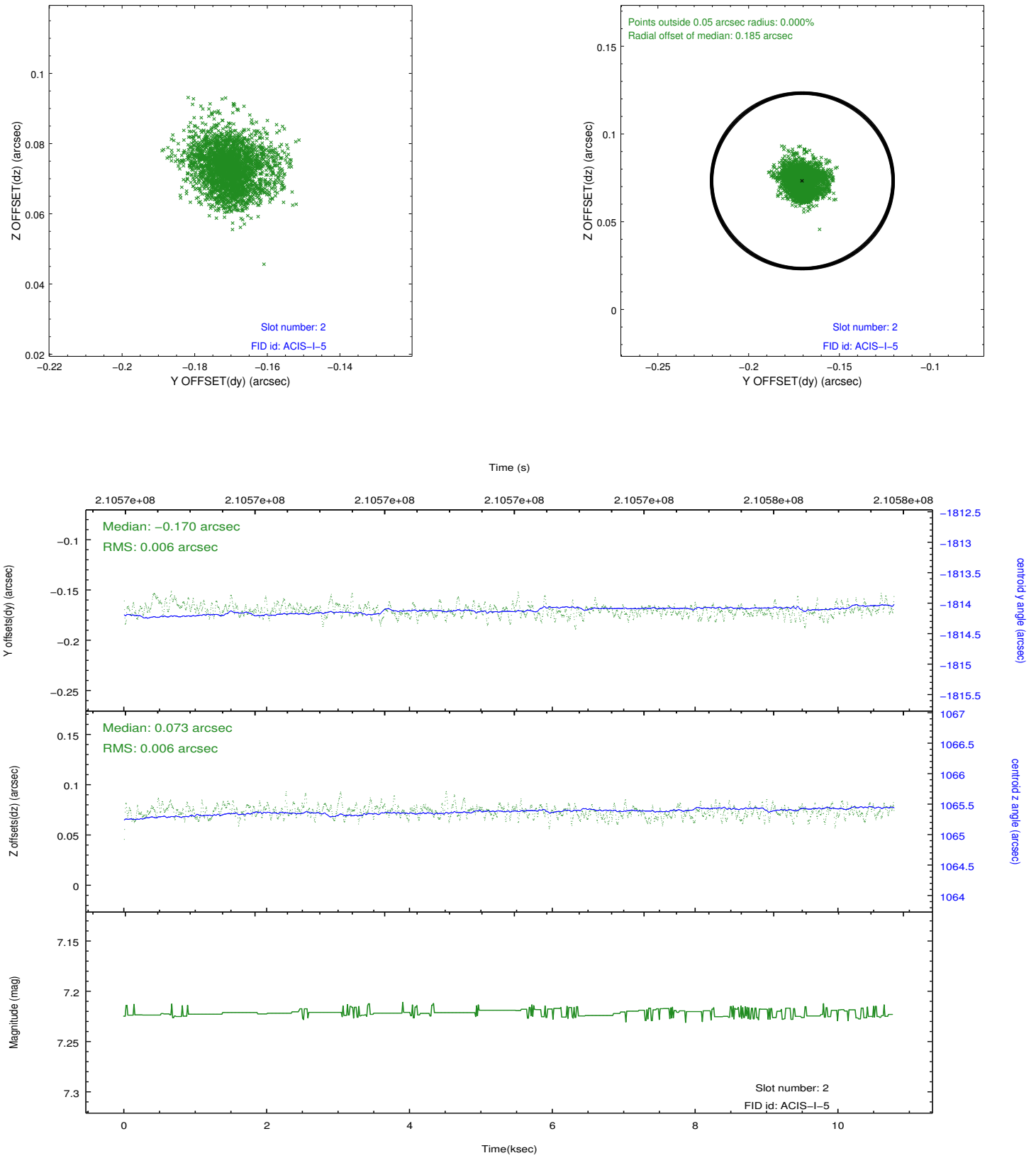
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



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	9.958

A.2 Comments

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:
(10.81055,-9.78193),(10.81484,-9.78207),(10.81615,-9.74514),(10.81186,-9.74500)