

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 4883 - L2 Version 5
Chandra X-Ray Center

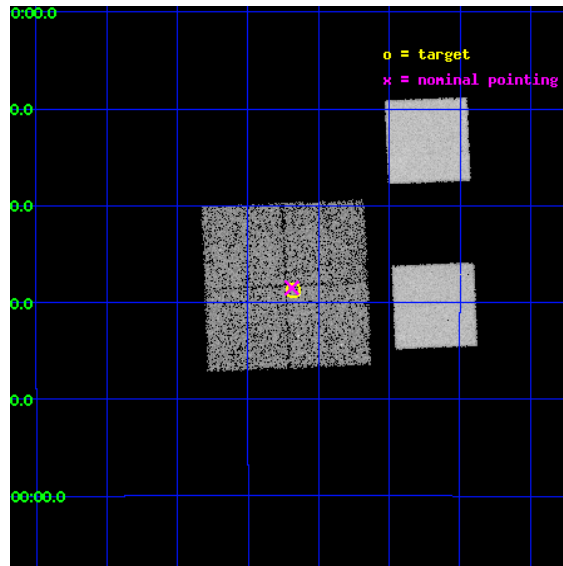
L2 Processing Date : Feb 11 2013

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
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

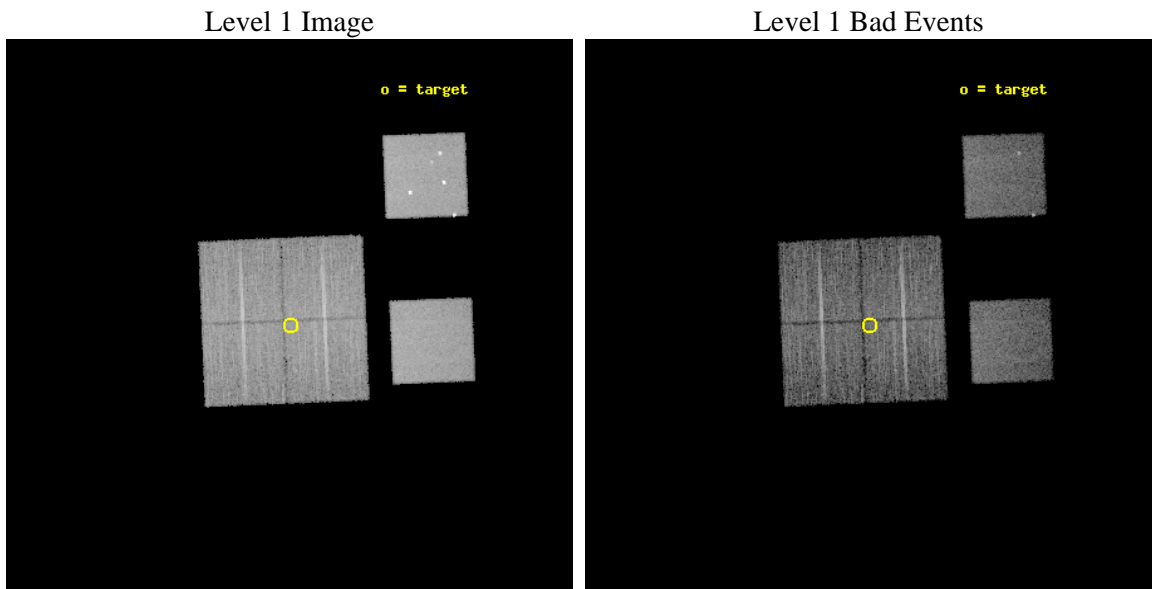
seq_num	700965	Sequence number
obs_id	4883	Observation id
title	AGN in low-redshift Clusters of Galaxies	Proposal title
observer	Prof. Paul Martini	Principal investigator
object	Abell85-P3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.170417	Observer's specified target RA [deg]
dec_targ	-9.645833	Observer's specified target Dec [deg]
ra_nom	10.17237148809	Nominal RA [deg]
dec_nom	-9.6415976904091	Nominal Dec [deg]
roll_nom	87.592332096263	Nominal Roll [deg]
revision	5	Processing version of data
ontime	9756.7589733601	Sum of GTIs [s]
livetime	9633.2130164244	Livetime [s]
ontime0	9759.9999636412	Sum of GTIs [s]
ontime1	9759.9999636412	Sum of GTIs [s]
ontime2	9759.9999636412	Sum of GTIs [s]
ontime3	9756.7589733601	Sum of GTIs [s]
ontime5	9759.9999636412	Sum of GTIs [s]
ontime7	9759.9999636412	Sum of GTIs [s]
l2events	115946	Number of level 2 events



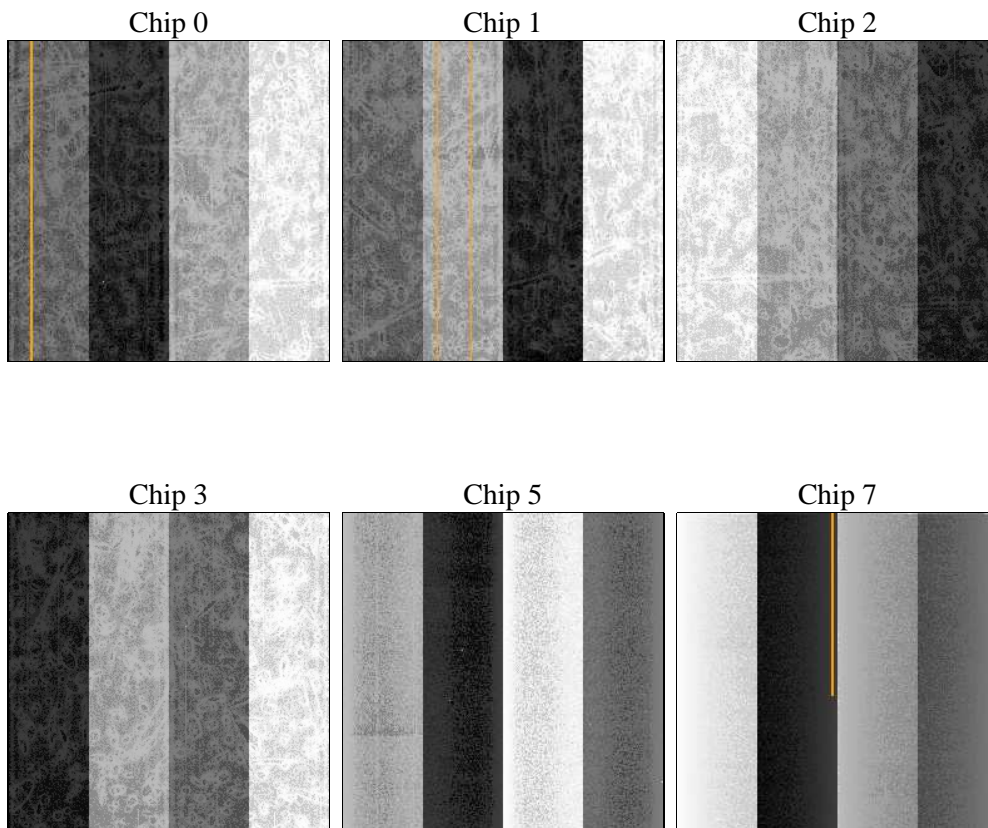
2 OBI

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	9756.7589733601	Sum of GTIs [s]
caldbver	4.5.5	 	ontime0	9759.9999636412	Sum of GTIs [s]
date	2013-02-11T22:42:00	Date and time of file creation	ontime1	9759.9999636412	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	9759.9999636412	Sum of GTIs [s]
			ontime3	9756.7589733601	Sum of GTIs [s]
			ontime5	9759.9999636412	Sum of GTIs [s]
			ontime7	9759.9999636412	Sum of GTIs [s]
			l1events	496898	Number of level 1 events

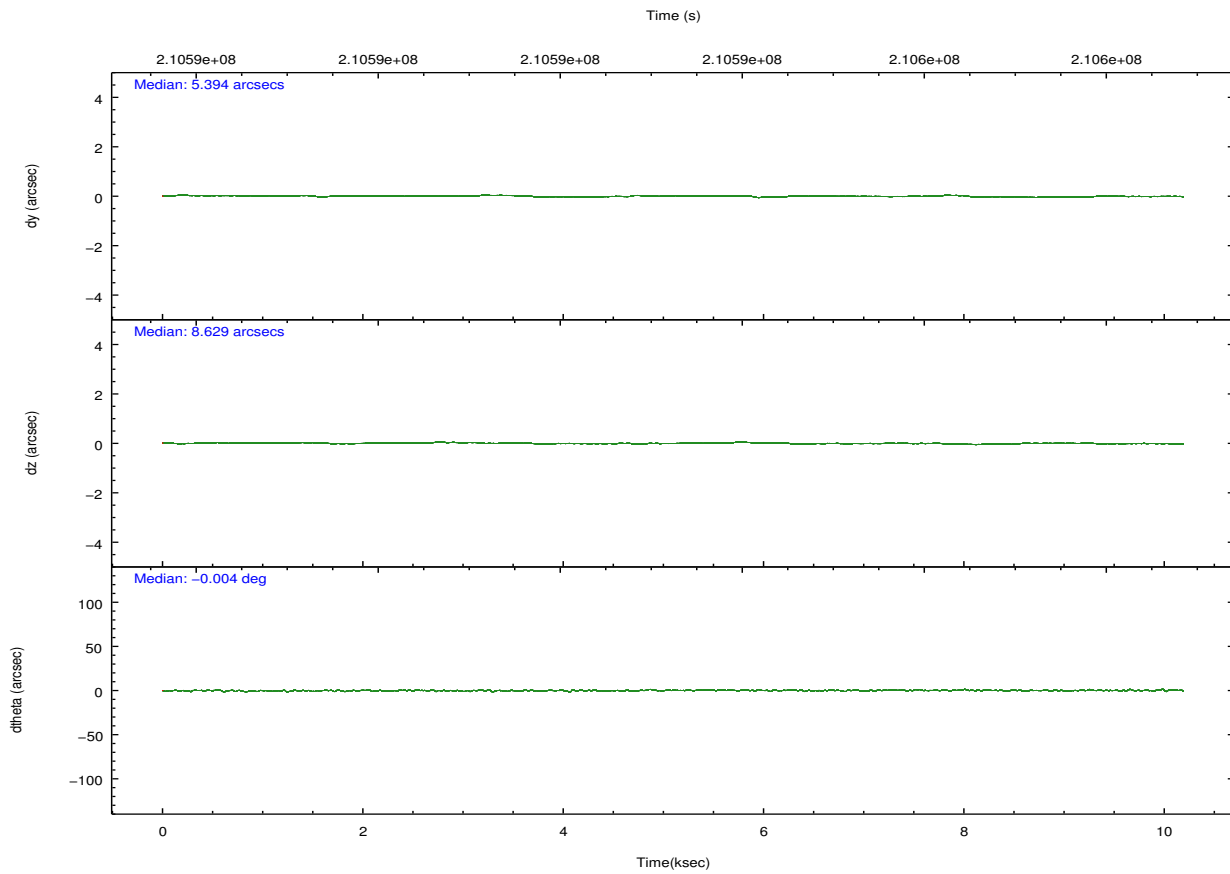
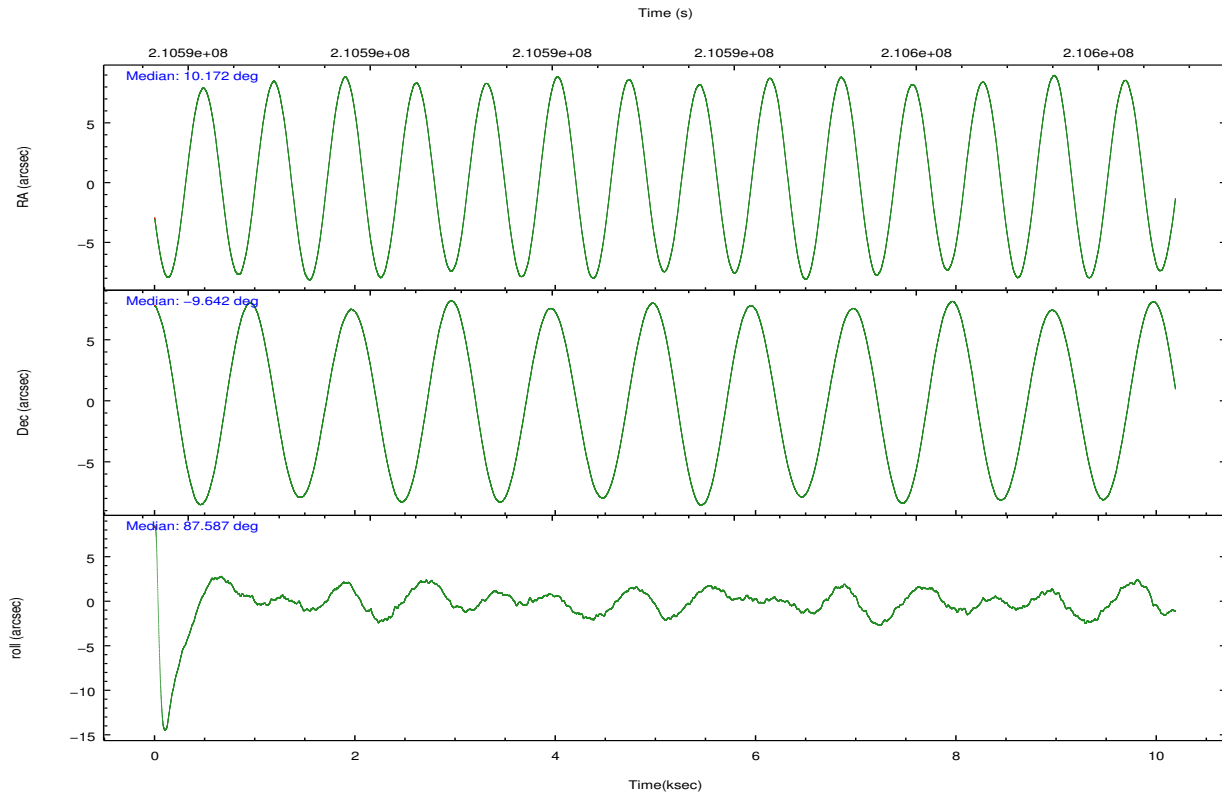
2.1.4 Events

	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	71651	68553	72309	71382	115561	97442	grade 0 events	4028	3485	3679	3811	9637	3405
rejected events	62463	59523	63975	62646	60446	57211		5%	5%	5%	5%	8%	3%
rejected %	87%	86%	88%	87%	52%	58%	grade 1 events	49	44	55	44	264	101
								0%	0%	0%	0%	0%	0%
							grade 2 events	1927	1956	1708	1696	15005	8012
								2%	2%	2%	2%	12%	8%
							grade 3 events	882	898	844	802	1983	3555
								1%	1%	1%	1%	1%	3%
							grade 4 events	810	904	817	879	1894	3536
								1%	1%	1%	1%	1%	3%
							grade 5 events	3059	3054	2763	3263	8095	9217
								4%	4%	3%	4%	7%	9%
							grade 6 events	1541	1790	1290	1550	26596	21723
								2%	2%	1%	2%	23%	22%
							grade 7 events	59355	56422	61153	59337	52087	47893
								82%	82%	84%	83%	45%	49%

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	10.185403	10.17237148808986	Subarray requested	NONE	NONE
[deg] Pointing Dec	-9.665862	-9.641597690409121	Alternating exposures requested	N	N
[deg] Pointing Roll	87.385798	87.59233209626277	[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)	210588336.184000	210587960.61114			
Observation start date	2004-09-03T08:44:32	2004-09-03T08:39:20			
[s] Observation end time (MET)	210598336.184000	210598470.96161			
Observation end date	2004-09-03T11:31:12	2004-09-03T11:34:30			
Read mode	TIMED	TIMED			

2.3 Aspect



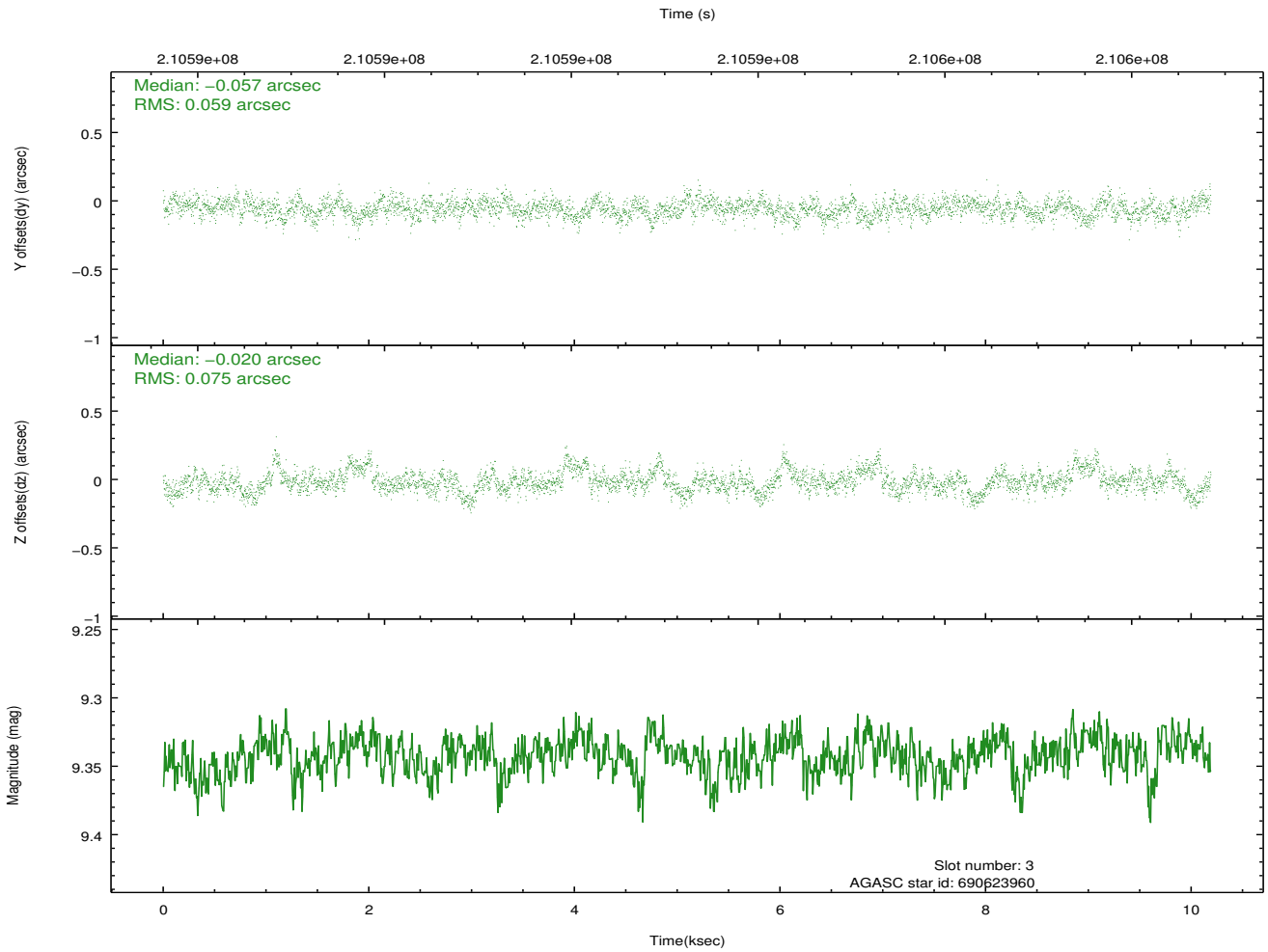
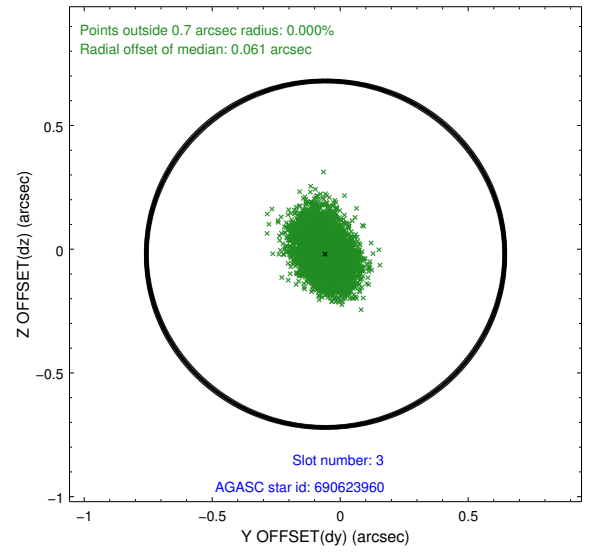
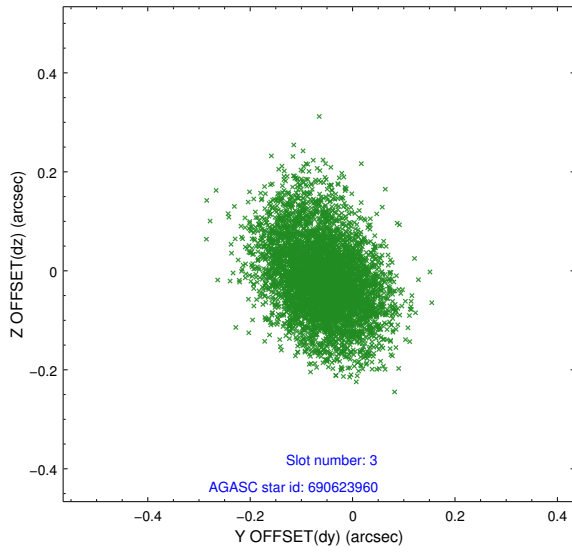
Slot Statistics

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	2485	0.032	-0.018	0.005	0.009	0.000000	0.000000	934.40	-832.05
1	FID	ACIS-I-5	7.23	2486	-0.093	0.068	0.005	0.009	0.000000	0.000000	-1813.61	1065.17
2	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	690623960	9.34	4970	-0.057	-0.020	0.100	0.171	10.570675	-9.168103	1852.19	-1285.84
4	GUIDE	690625160	8.90	4970	0.077	-0.003	0.087	0.138	10.224219	-9.960066	-1051.02	-186.09
5	GUIDE	690625736	9.25	4972	0.073	-0.028	0.108	0.171	10.556282	-9.824700	-511.71	-1340.63
6	GUIDE	690625776	9.15	4968	-0.085	0.100	0.084	0.138	10.846019	-9.315741	1364.62	-2288.55
7	GUIDE	690637960	6.79	4971	-0.008	-0.054	0.060	0.094	10.711431	-9.921690	-835.78	-1905.93

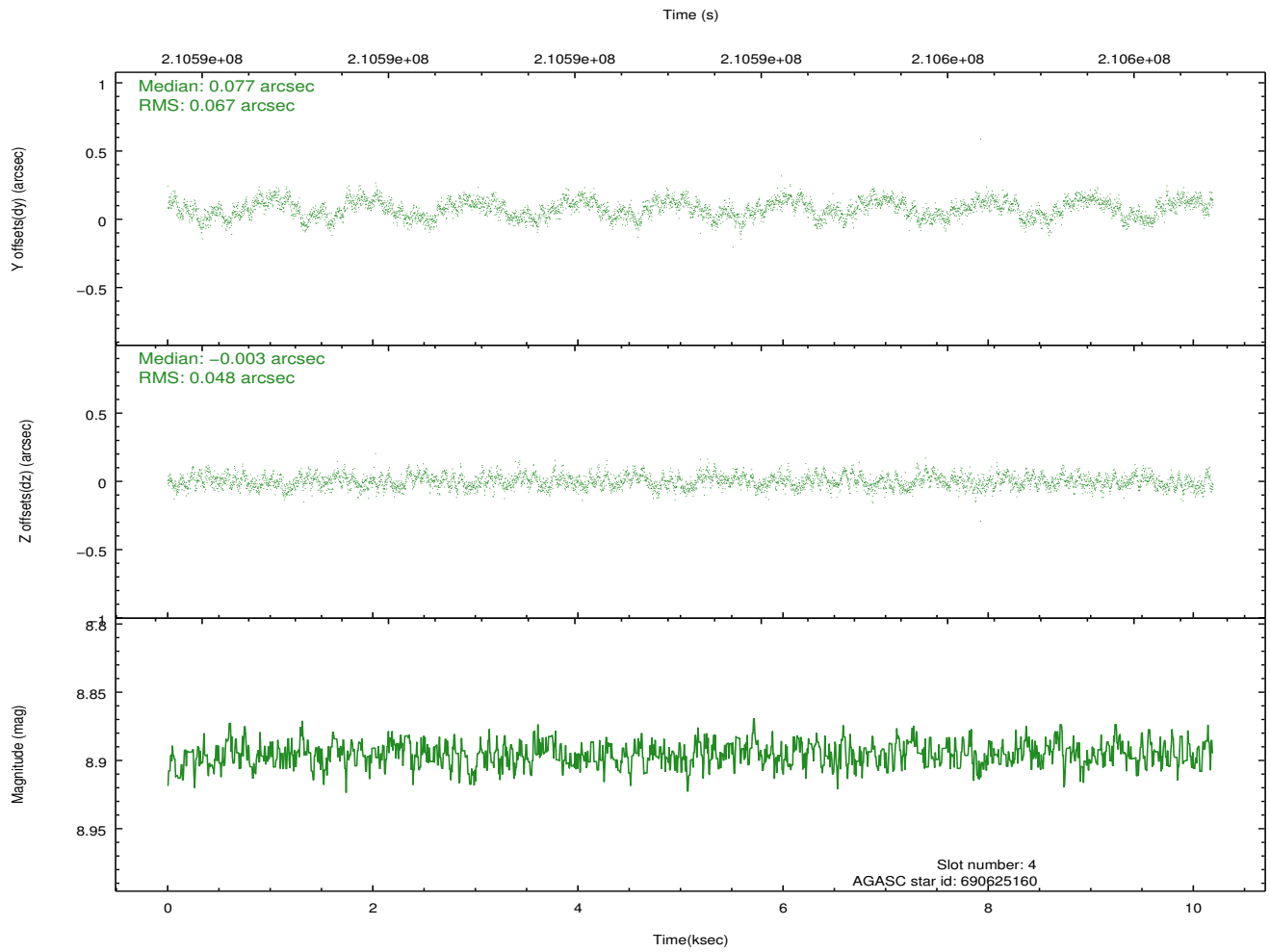
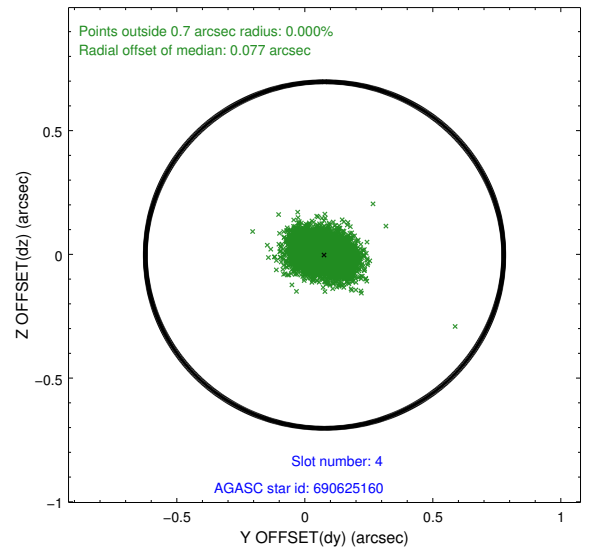
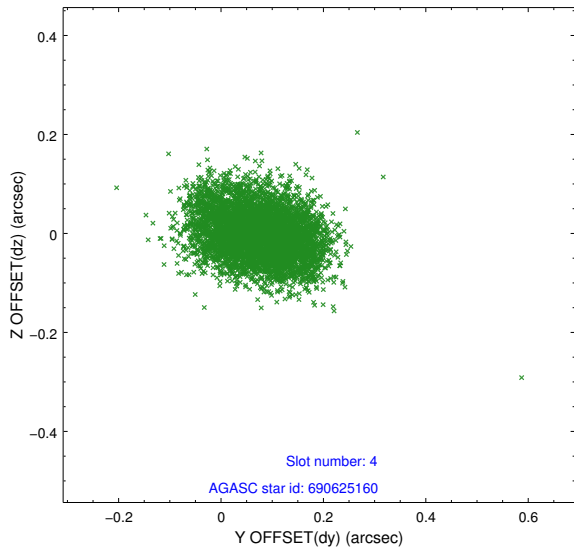
∞

2.4 Star Slots

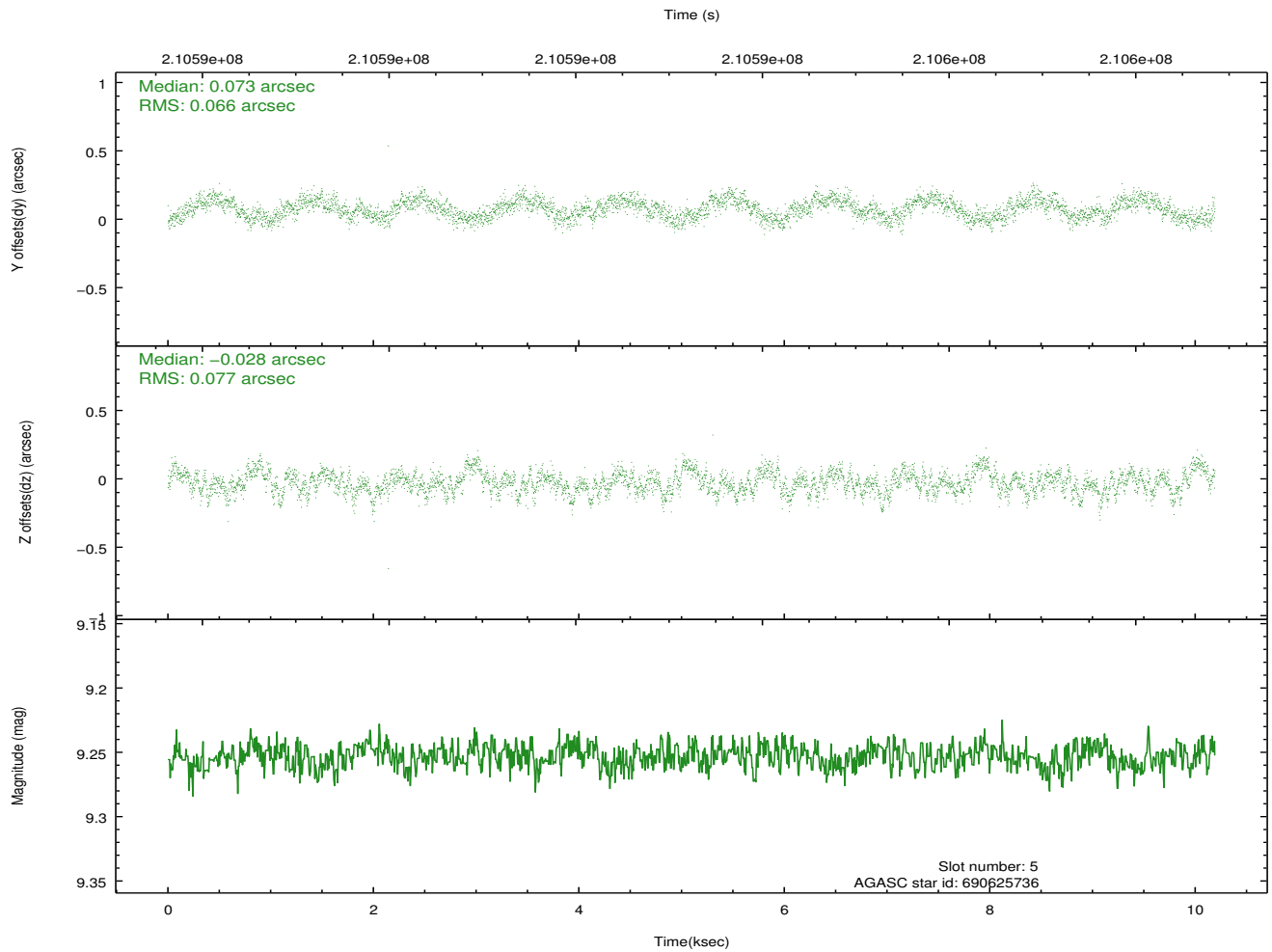
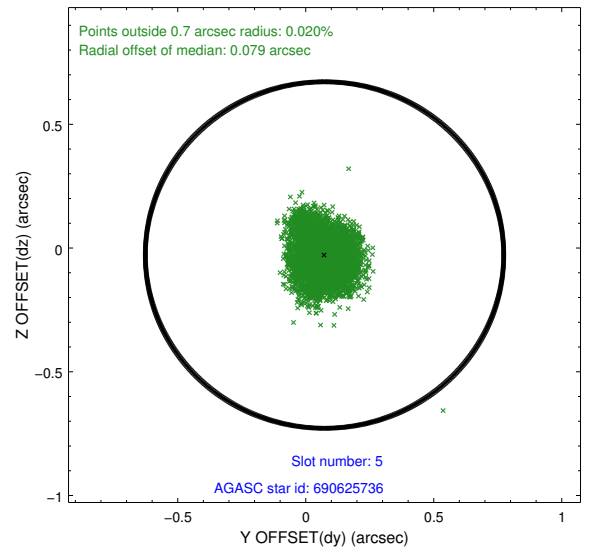
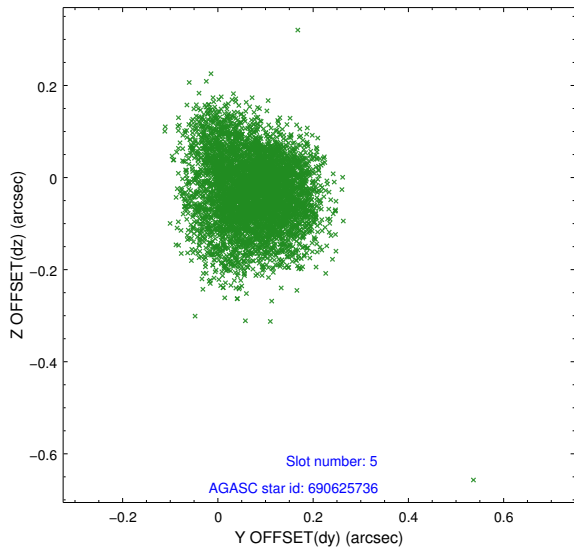
2.4.1 Slot 3



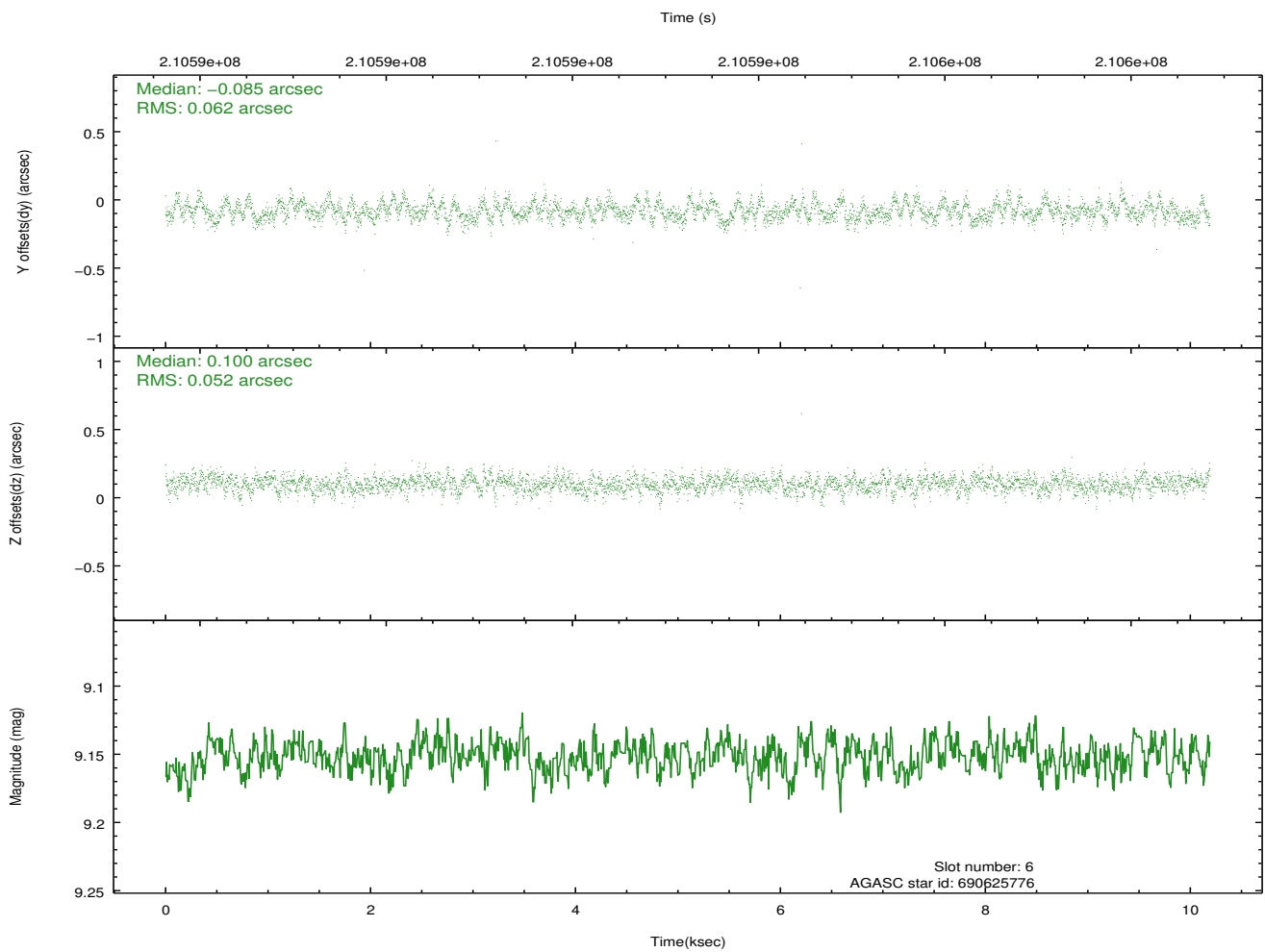
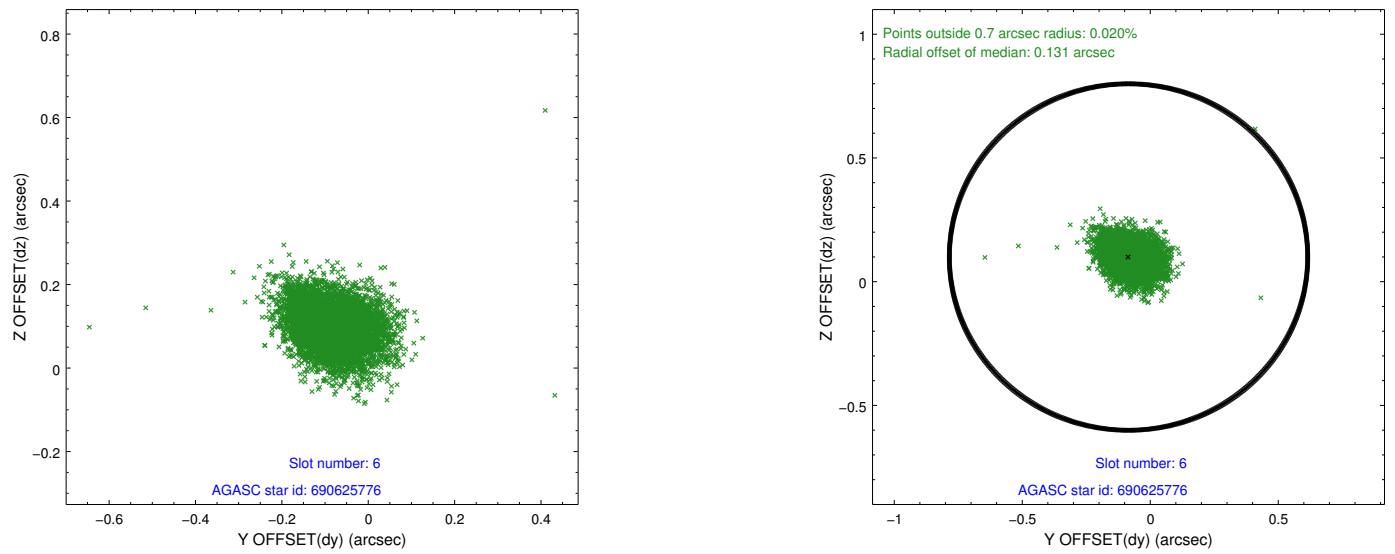
2.4.2 Slot 4



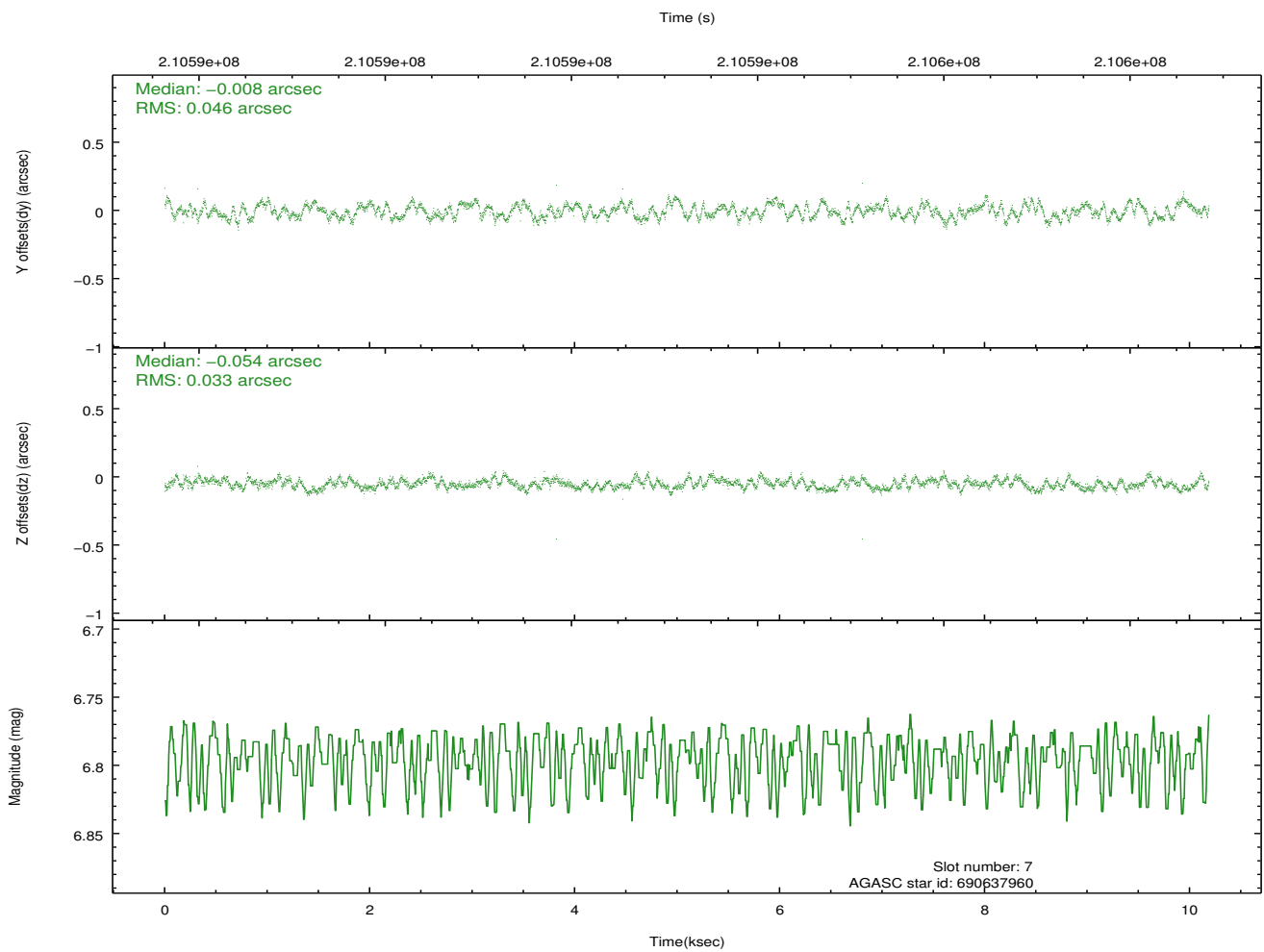
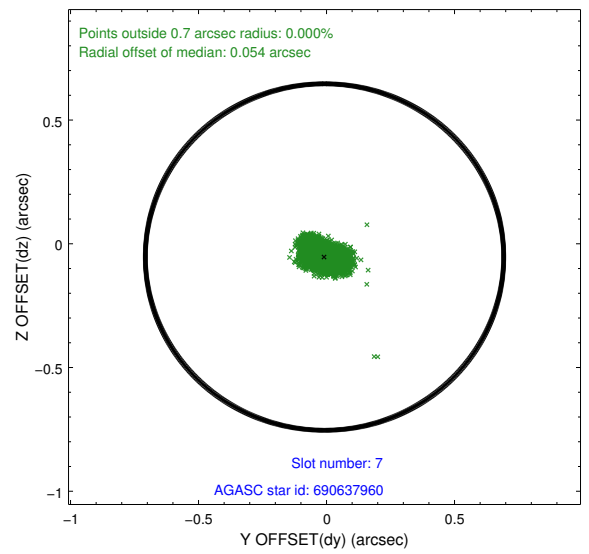
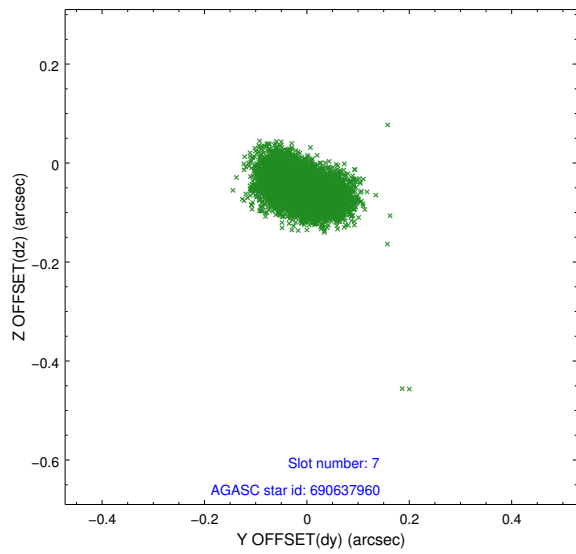
2.4.3 Slot 5



2.4.4 Slot 6

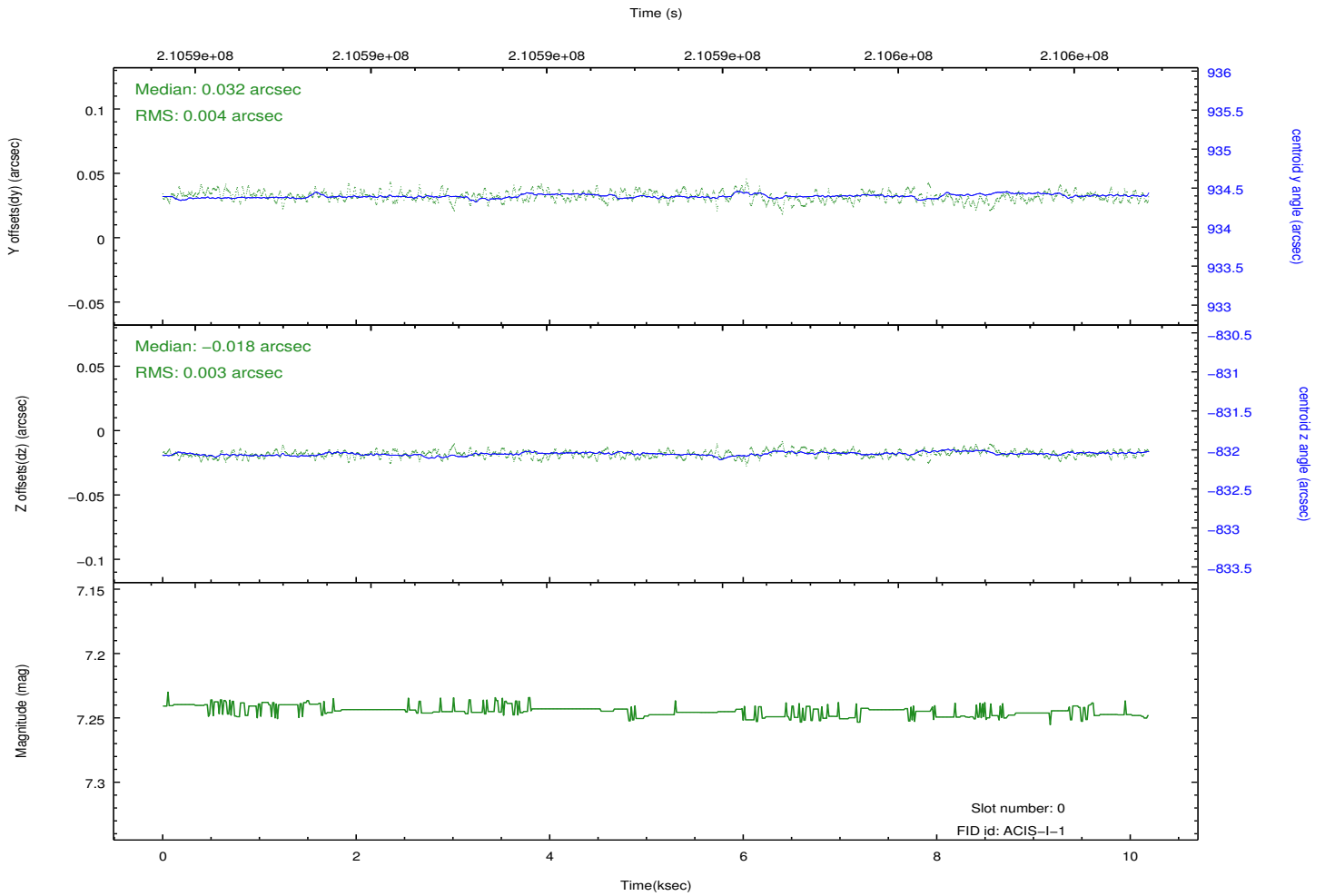
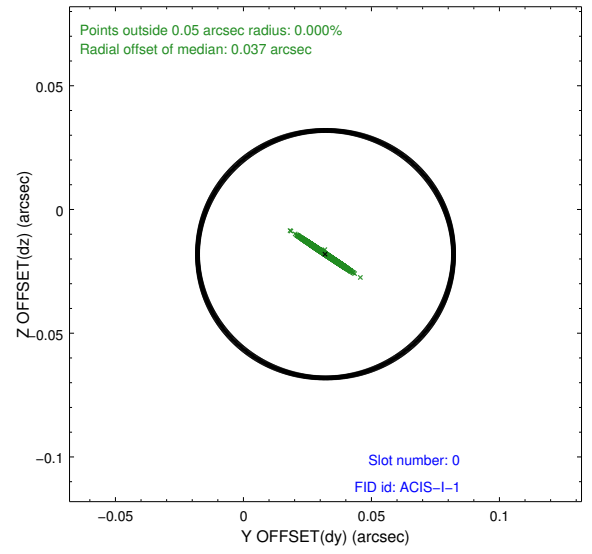
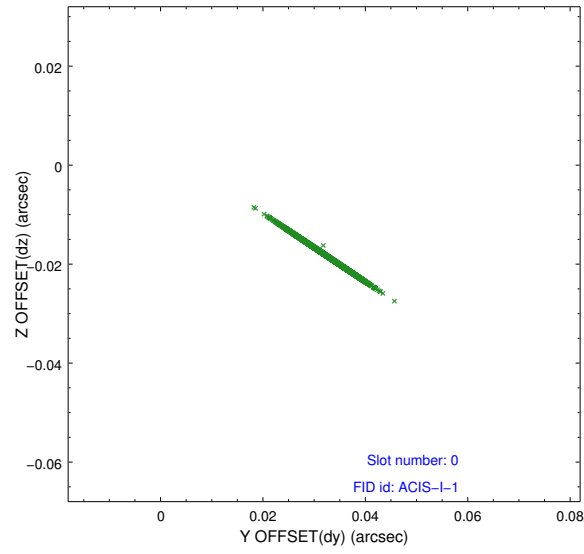


2.4.5 Slot 7

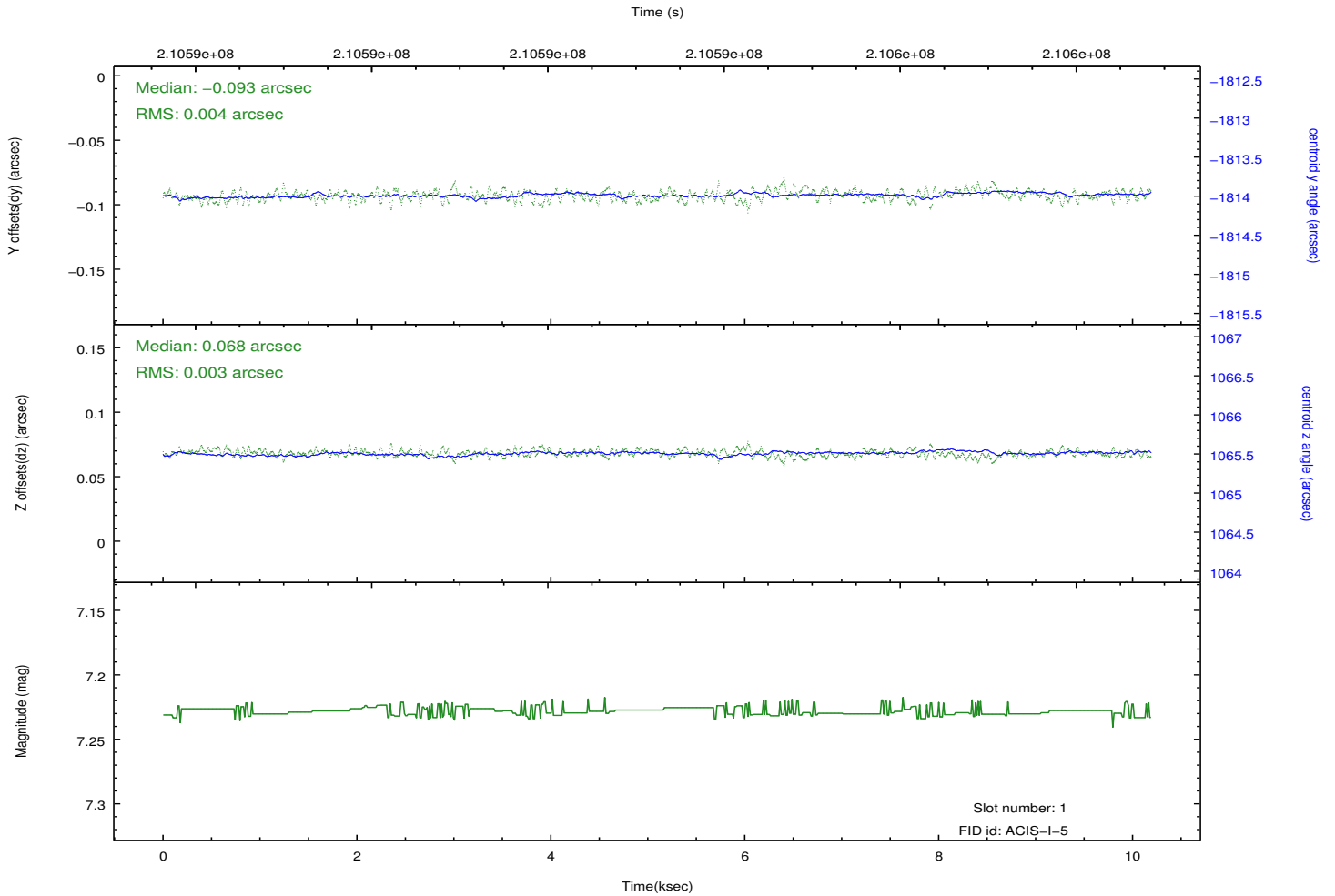
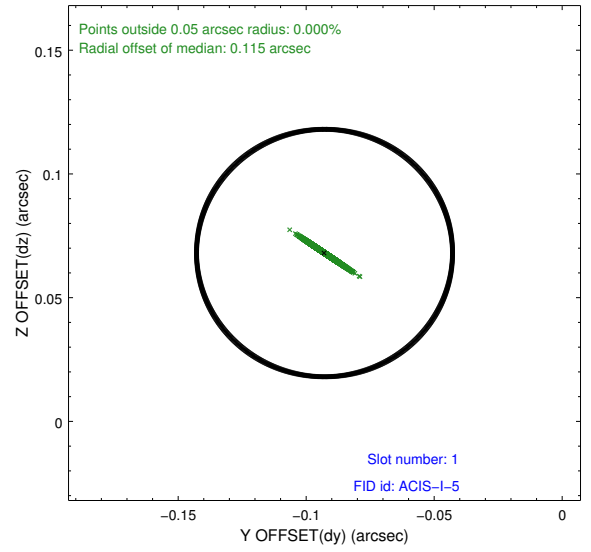
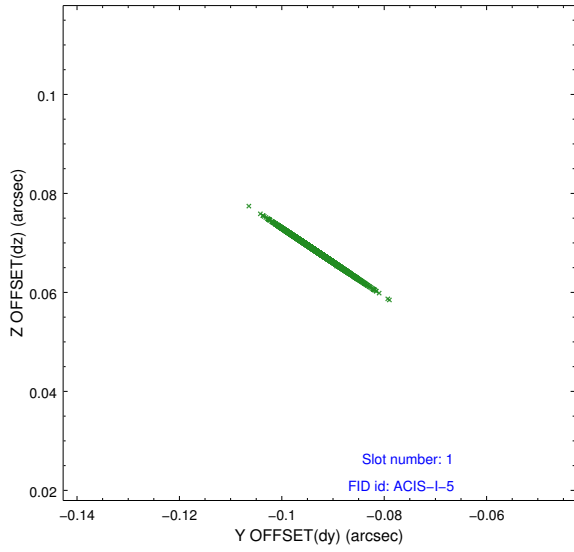


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 1



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.

=====

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:
(10.26868,-9.78253),(10.27297,-9.78269),(10.27452,-9.74578),(10.27024,-9.74561)