

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 985 - L2 Version 4
Chandra X-Ray Center

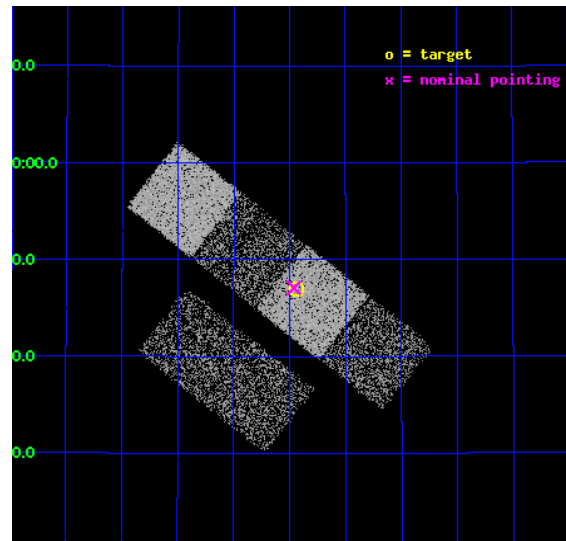
L2 Processing Date : Nov 5 2012

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1 Front

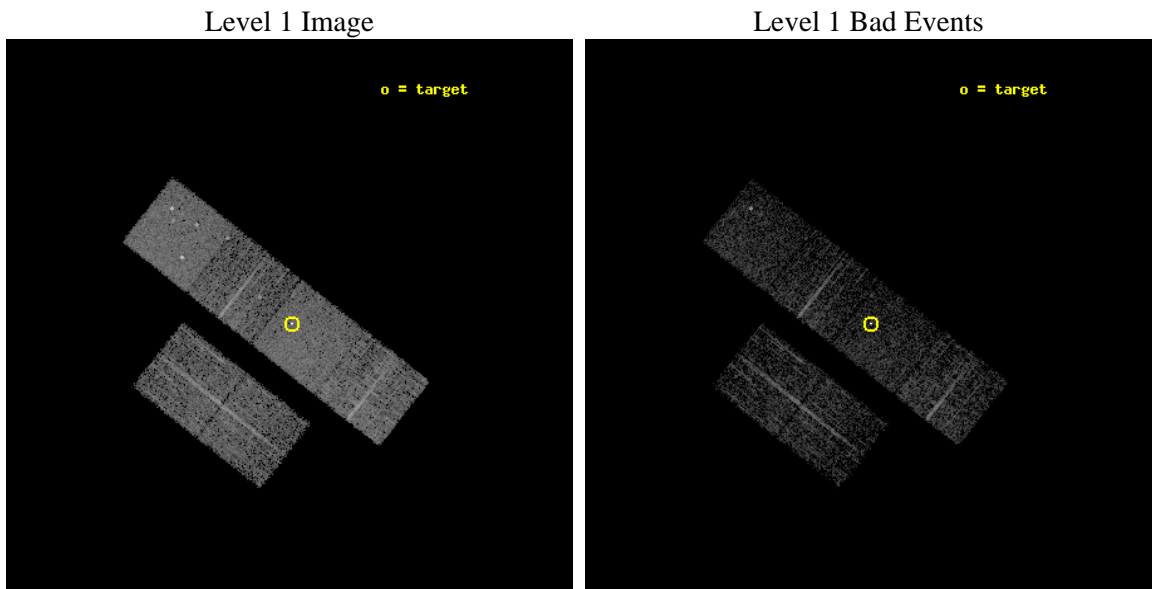
seq_num	290066	Sequence number
obs_id	985	Observation id
title	CALIBRATION OBSERVATIONS OF VEGA TO MONITOR THE TRANSMISSION OF THE OPTICAL/UV FILTERS ON ACIS AND HRC	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	VEGA, ACIS-S, AO2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	279.234792	Observer's specified target RA [deg]
dec_targ	38.783778	Observer's specified target Dec [deg]
ra_nom	279.24034605156	Nominal RA [deg]
dec_nom	38.784922717751	Nominal Dec [deg]
roll_nom	38.222418035442	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2939.5213129371	Sum of GTIs [s]
livetime	2902.2993241055	Livetime [s]
ontime2	2939.5623529404	Sum of GTIs [s]
ontime3	2939.3981929421	Sum of GTIs [s]
ontime5	2939.4802729338	Sum of GTIs [s]
ontime6	2939.4392329454	Sum of GTIs [s]
ontime7	2939.5213129371	Sum of GTIs [s]
ontime8	2939.3571529388	Sum of GTIs [s]
l2events	29117	Number of level 2 events



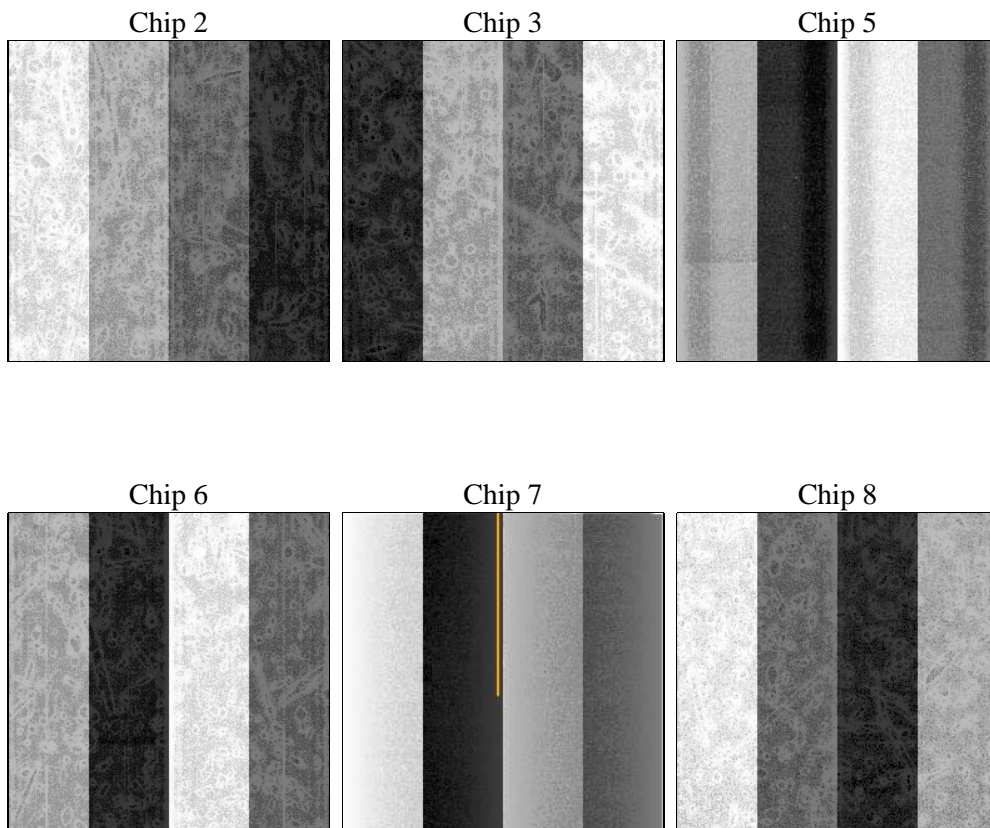
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2939.5213129371	Sum of GTIs [s]
caldsver	4.5.2	 	ontime2	2939.5623529404	Sum of GTIs [s]
date	2012-11-05T23:56:00	Date and time of file creation	ontime3	2939.3981929421	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	2939.4802729338	Sum of GTIs [s]
			ontime6	2939.4392329454	Sum of GTIs [s]
			ontime7	2939.5213129371	Sum of GTIs [s]
			ontime8	2939.3571529388	Sum of GTIs [s]
			l1events	127022	Number of level 1 events

2.1.4 Events

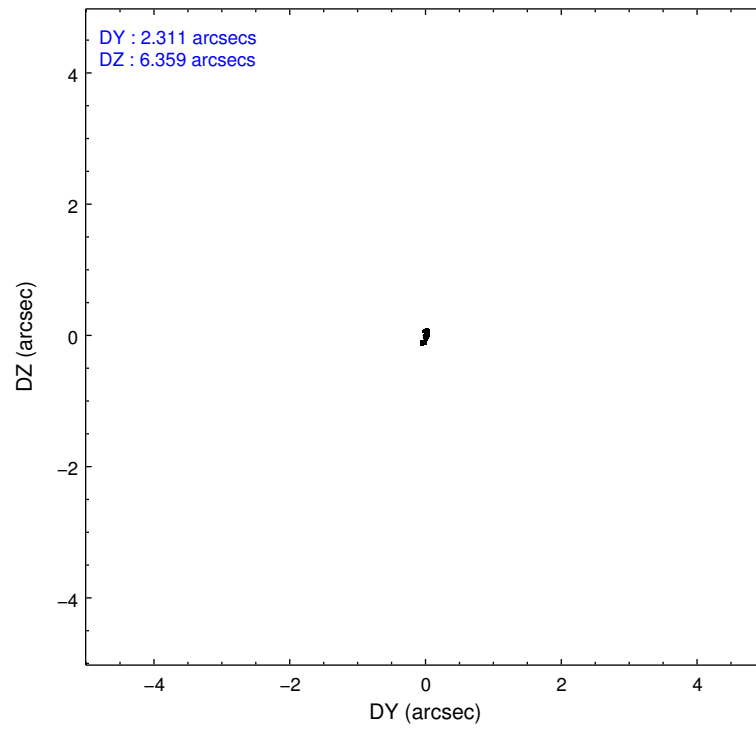
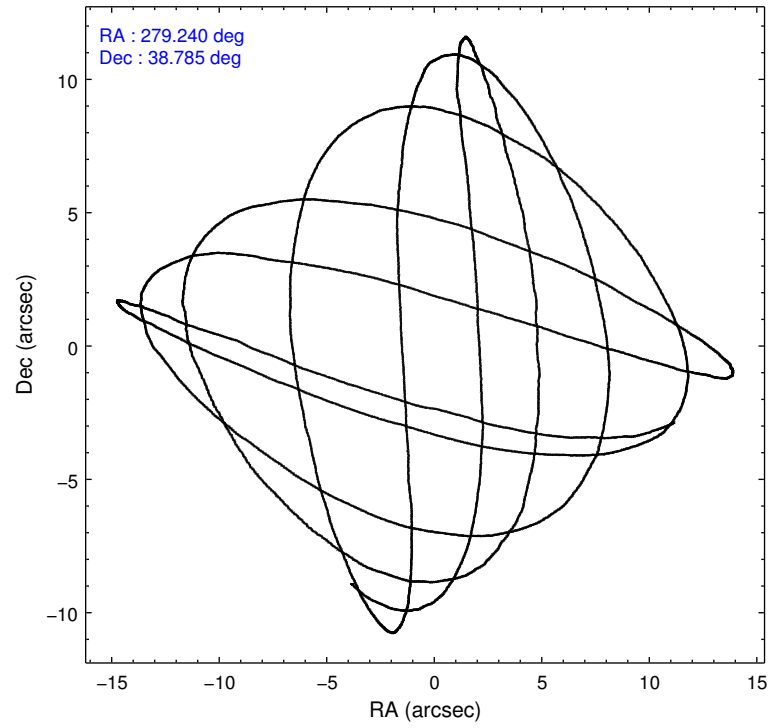
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	18104	16653	26652	17133	24827	23653	grade 0 events	1012	1002	1917	1193	1048	2040
rejected events	15745	14328	13683	14566	14935	17810		5%	6%	7%	6%	4%	8%
rejected %	86%	86%	51%	85%	60%	75%	grade 1 events	5	10	51	11	89	12
								0%	0%	0%	0%	0%	0%
							grade 2 events	557	527	4046	511	1889	1138
								3%	3%	15%	2%	7%	4%
							grade 3 events	201	194	560	197	867	749
								1%	1%	2%	1%	3%	3%
							grade 4 events	206	189	530	211	880	691
								1%	1%	1%	1%	3%	2%
							grade 5 events	601	610	2028	764	2301	953
								3%	3%	7%	4%	9%	4%
							grade 6 events	385	418	5927	460	5218	1229
								2%	2%	22%	2%	21%	5%
							grade 7 events	15137	13703	11593	13786	12535	16841
								83%	82%	43%	80%	50%	71%

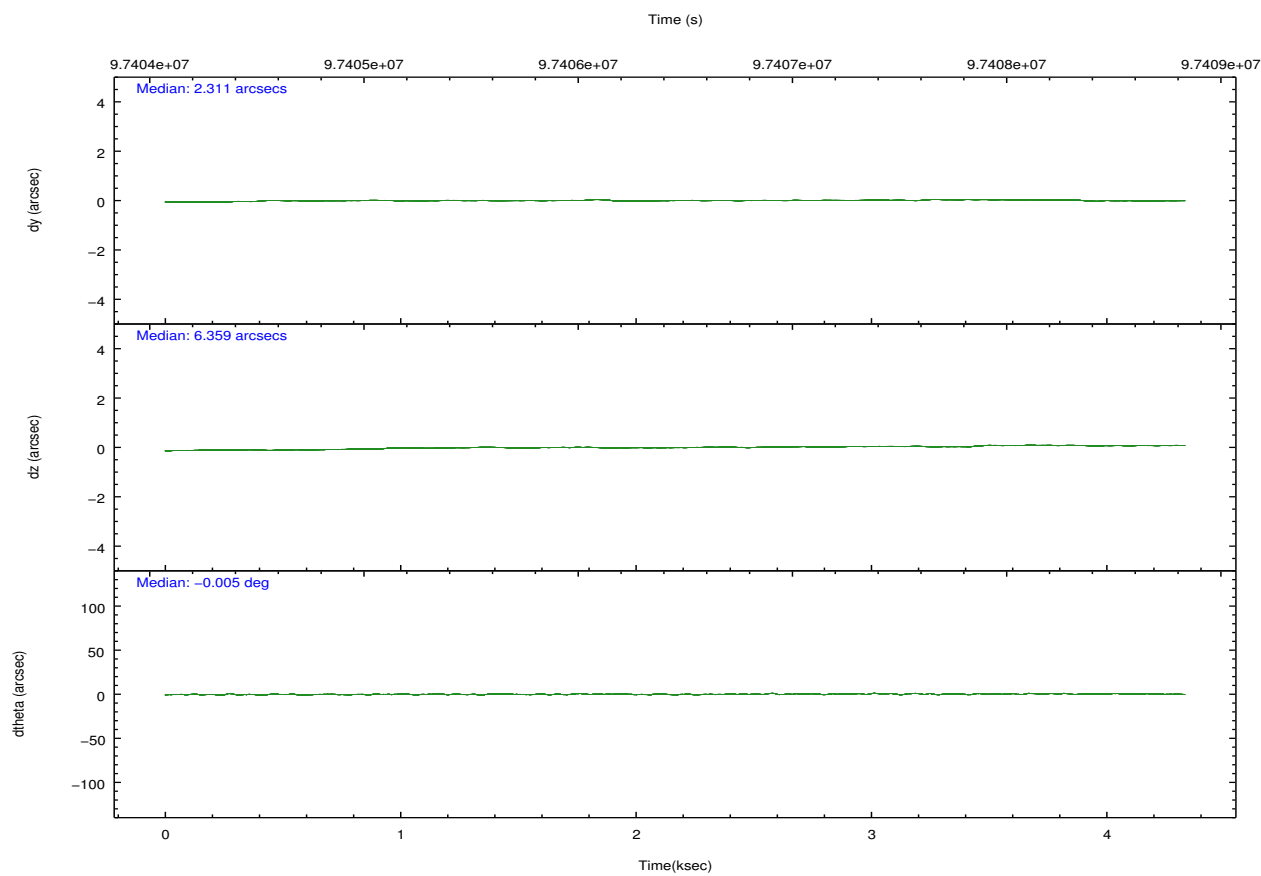
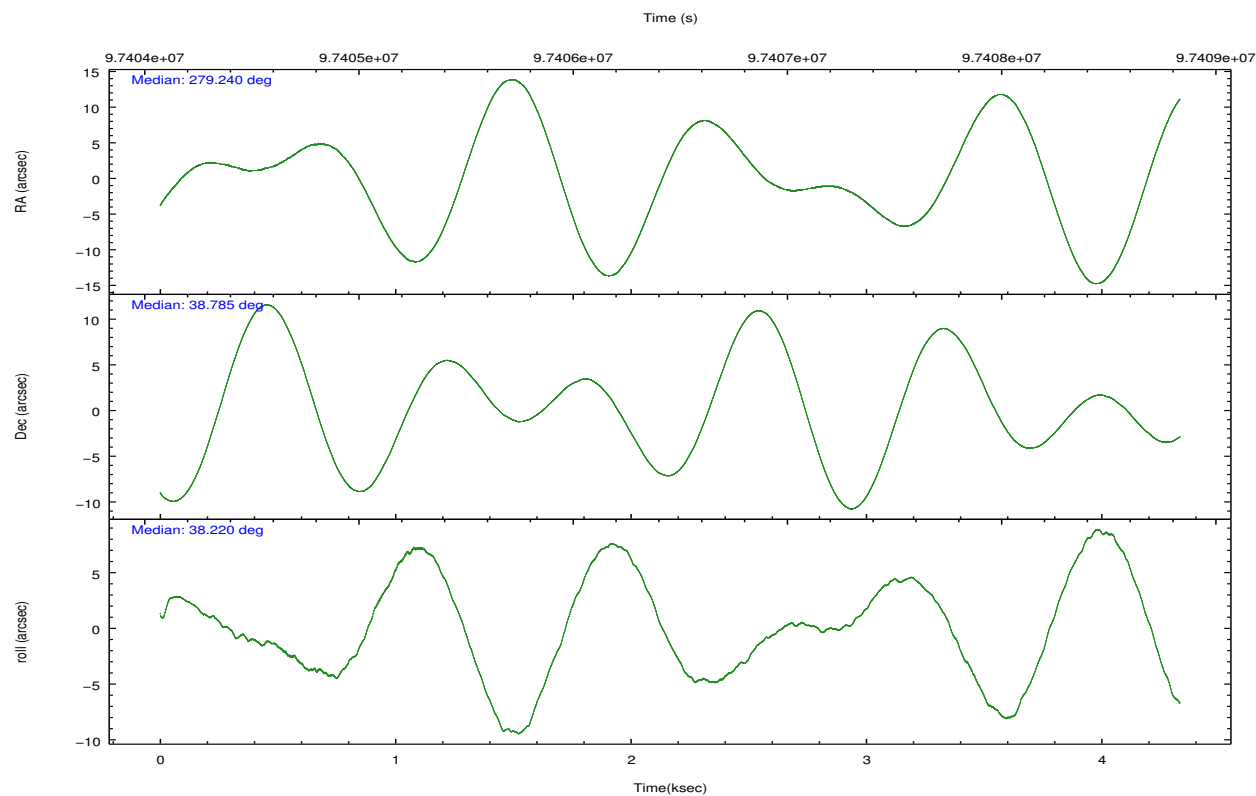
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	279.227664	279.2403460515581
[deg] Pointing Dec	38.759521	38.7849227177513
[deg] Pointing Roll	38.073735	38.2224180354421
[s] Window start time (MET)	97372864.184000	97372864.184000
[s] Window stop time (MET)	99705664.184000	99705664.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	97405619.184000	97404089.29285599
Observation start date	2001-02-01T09:05:55	2001-02-01T08:41:29
[s] Observation end time (MET)	97408619.184000	97409782.65557501
Observation end date	2001-02-01T09:55:55	2001-02-01T10:16:22
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	3.2

2.3 Aspect



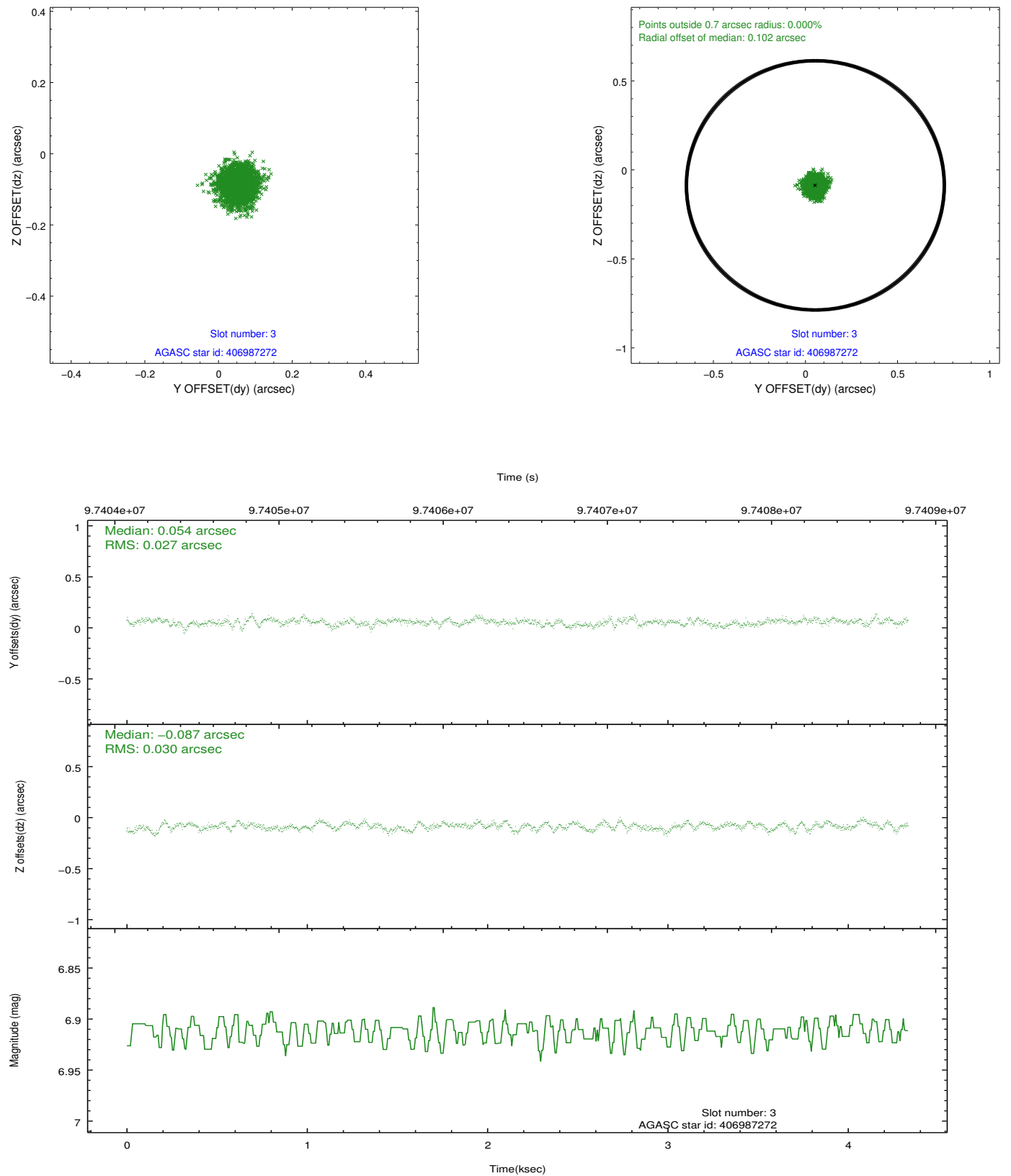


Slot Statistics

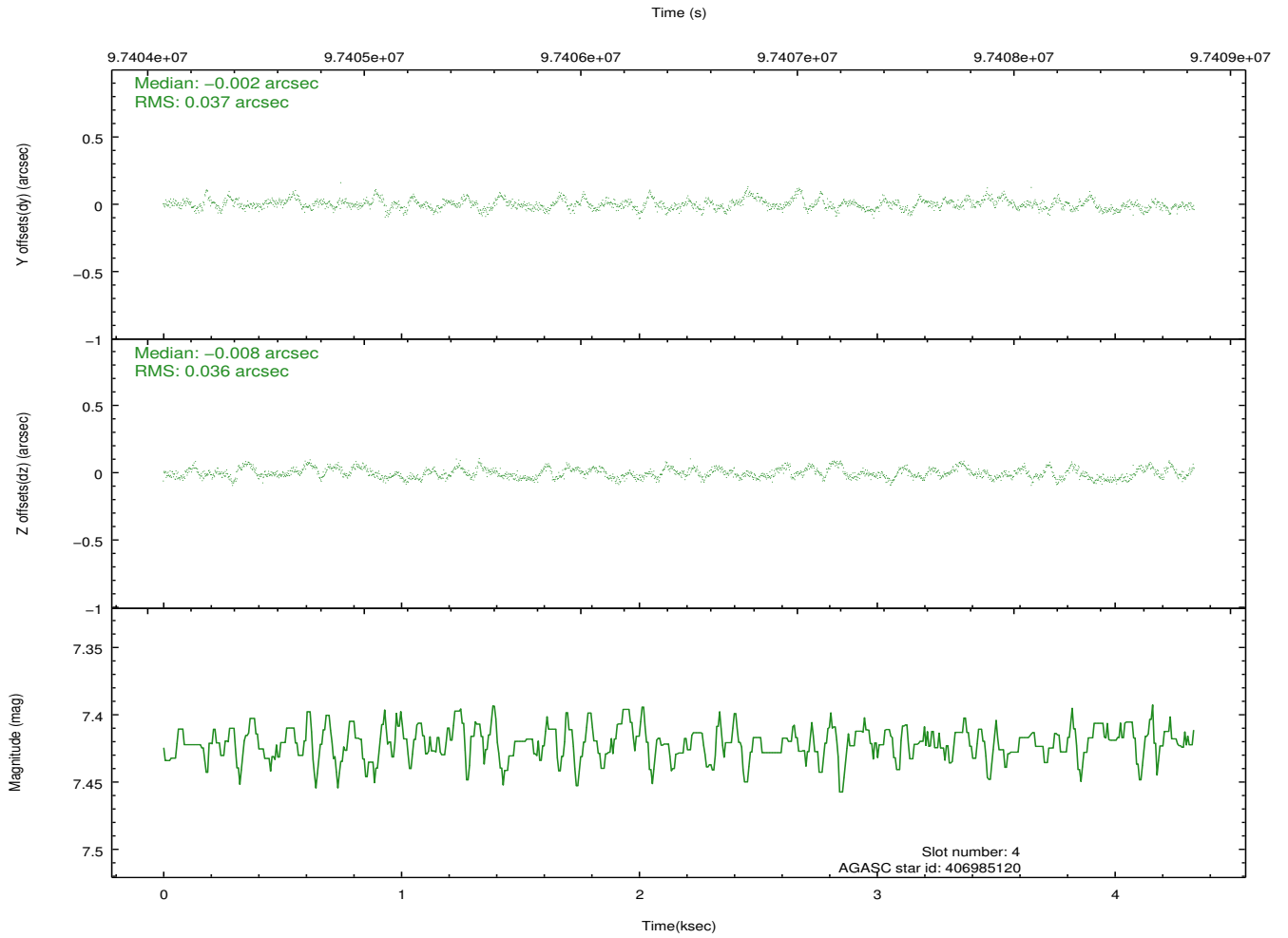
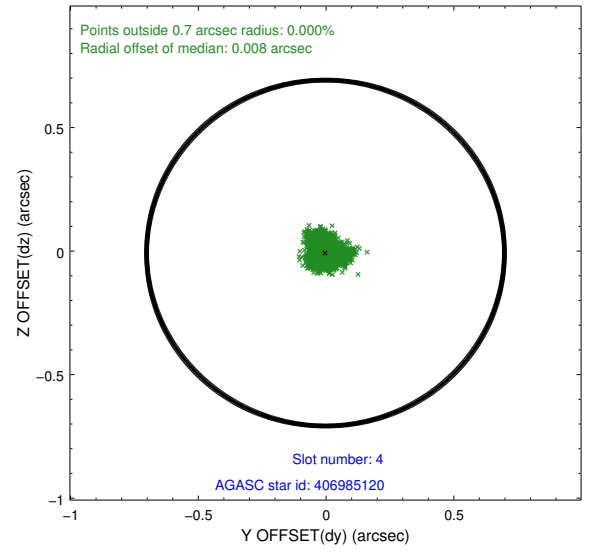
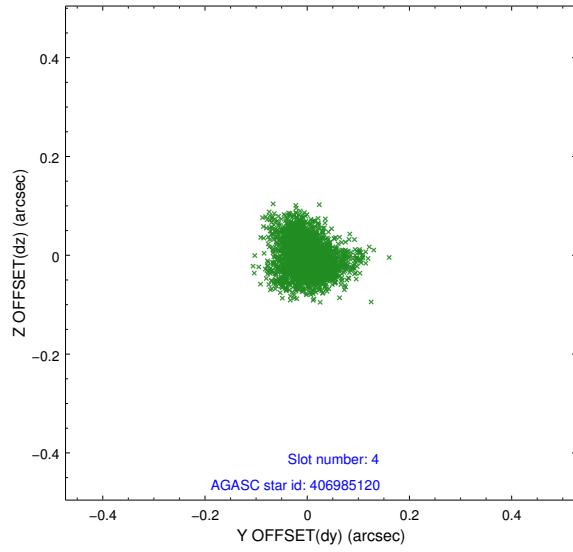
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1057	-0.028	0.008	0.006	0.010	0.000000	0.000000	-754.94	-1727.45
1	FID	ACIS-S-4	7.20	1057	-0.042	0.011	0.005	0.010	0.000000	0.000000	2157.65	179.60
2	FID	ACIS-S-5	7.23	1057	0.039	-0.010	0.006	0.011	0.000000	0.000000	-1805.90	174.82
3	GUIDE	406987272	6.91	2115	0.054	-0.087	0.044	0.069	278.536588	38.437504	-2244.03	294.52
4	GUIDE	406985120	7.42	2115	-0.002	-0.008	0.055	0.089	278.839732	38.894839	-554.59	1055.41
5	GUIDE	406993992	7.62	2115	-0.057	0.070	0.059	0.090	279.053714	38.034587	-1997.33	-1749.81
6	GUIDE	406989616	8.23	2115	0.046	0.026	0.064	0.103	279.202881	38.520843	-585.36	-634.48
7	GUIDE	407521232	8.66	2114	-0.040	0.000	0.071	0.111	279.628883	39.431715	2372.06	1218.47

2.4 Star Slots

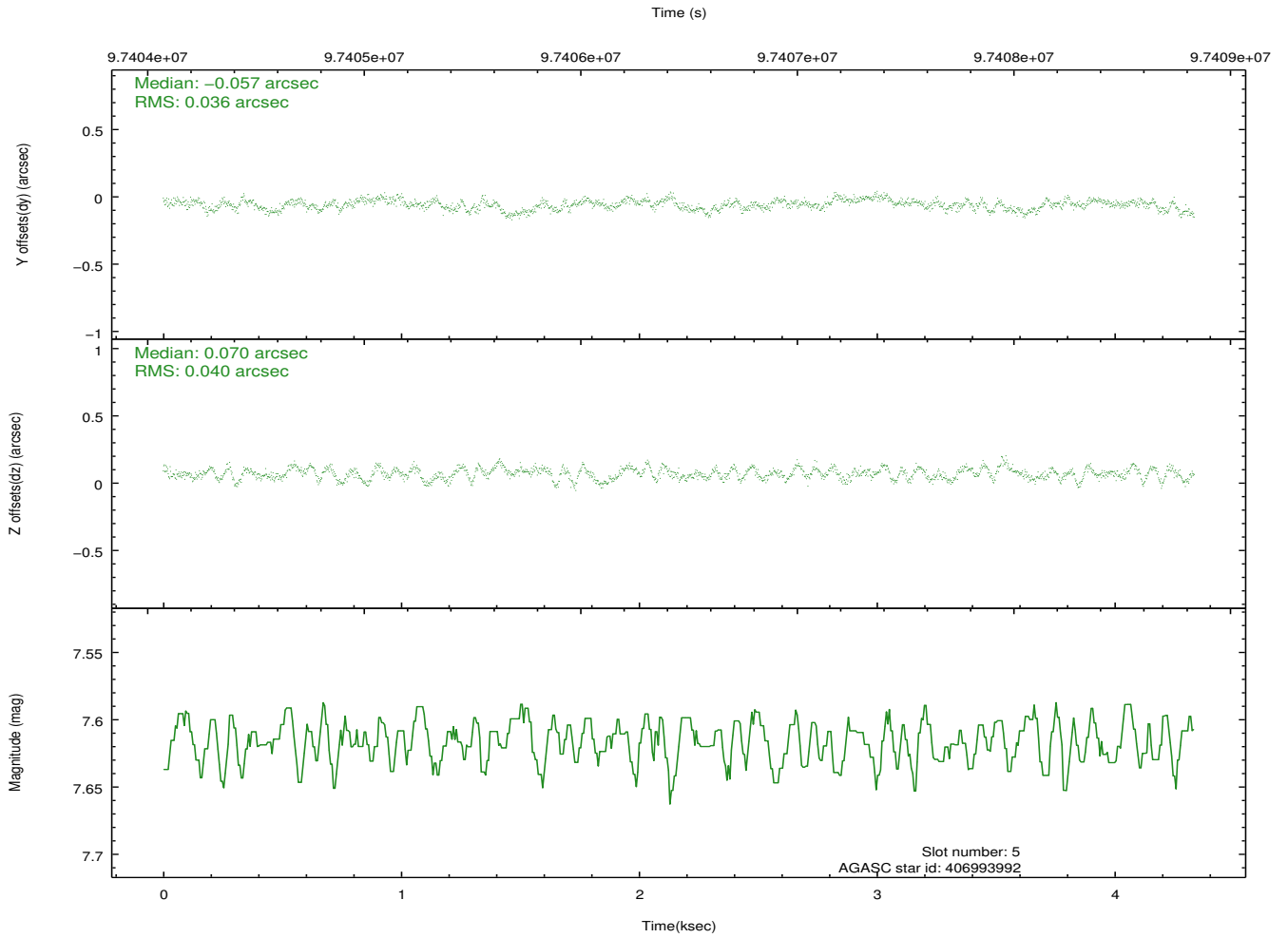
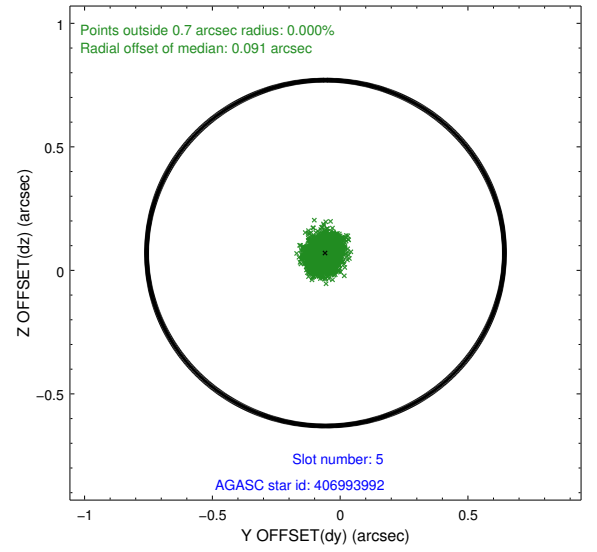
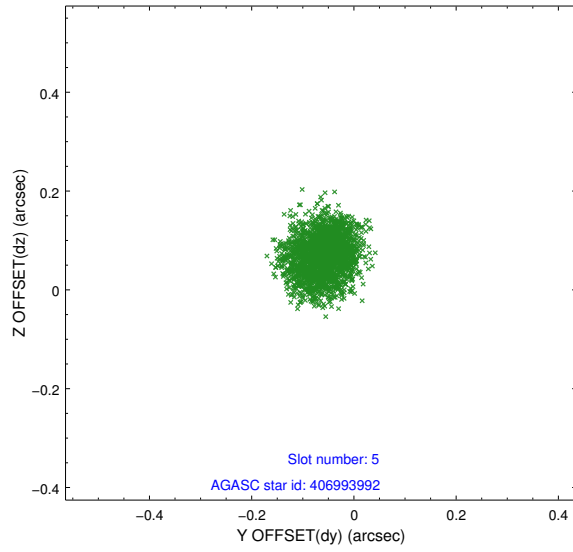
2.4.1 Slot 3



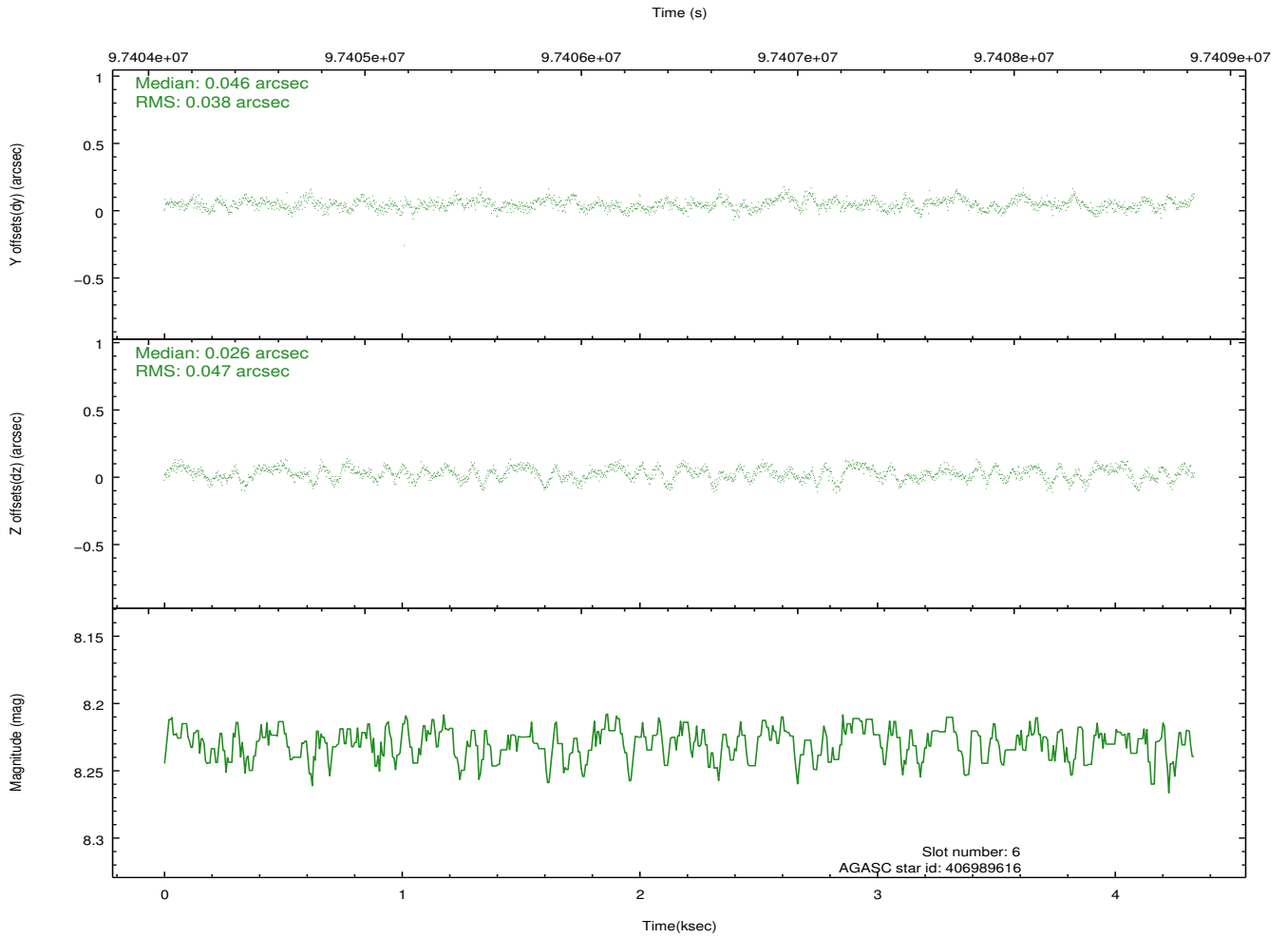
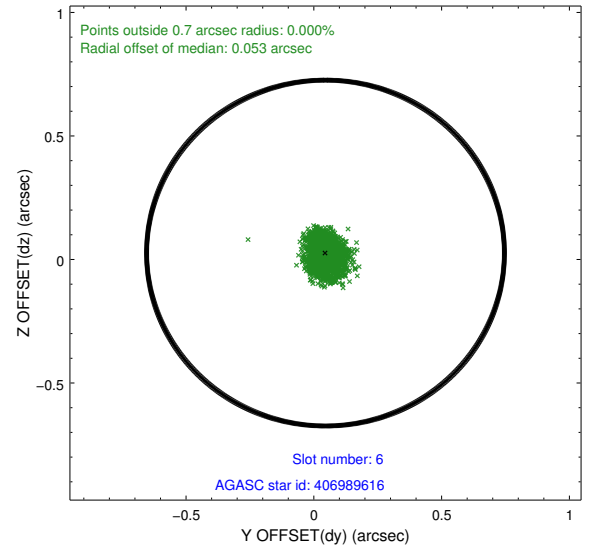
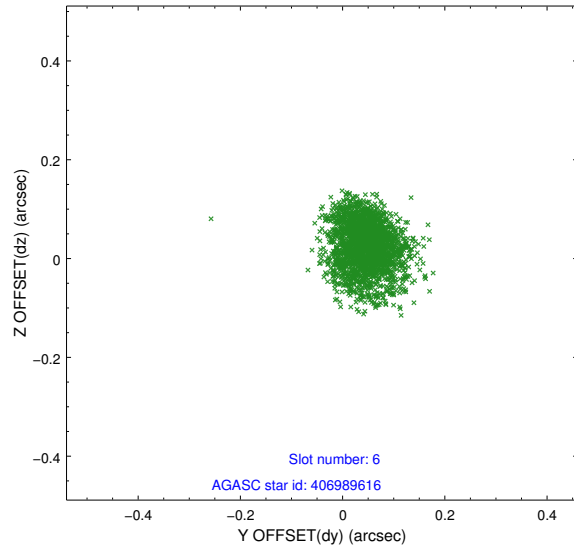
2.4.2 Slot 4



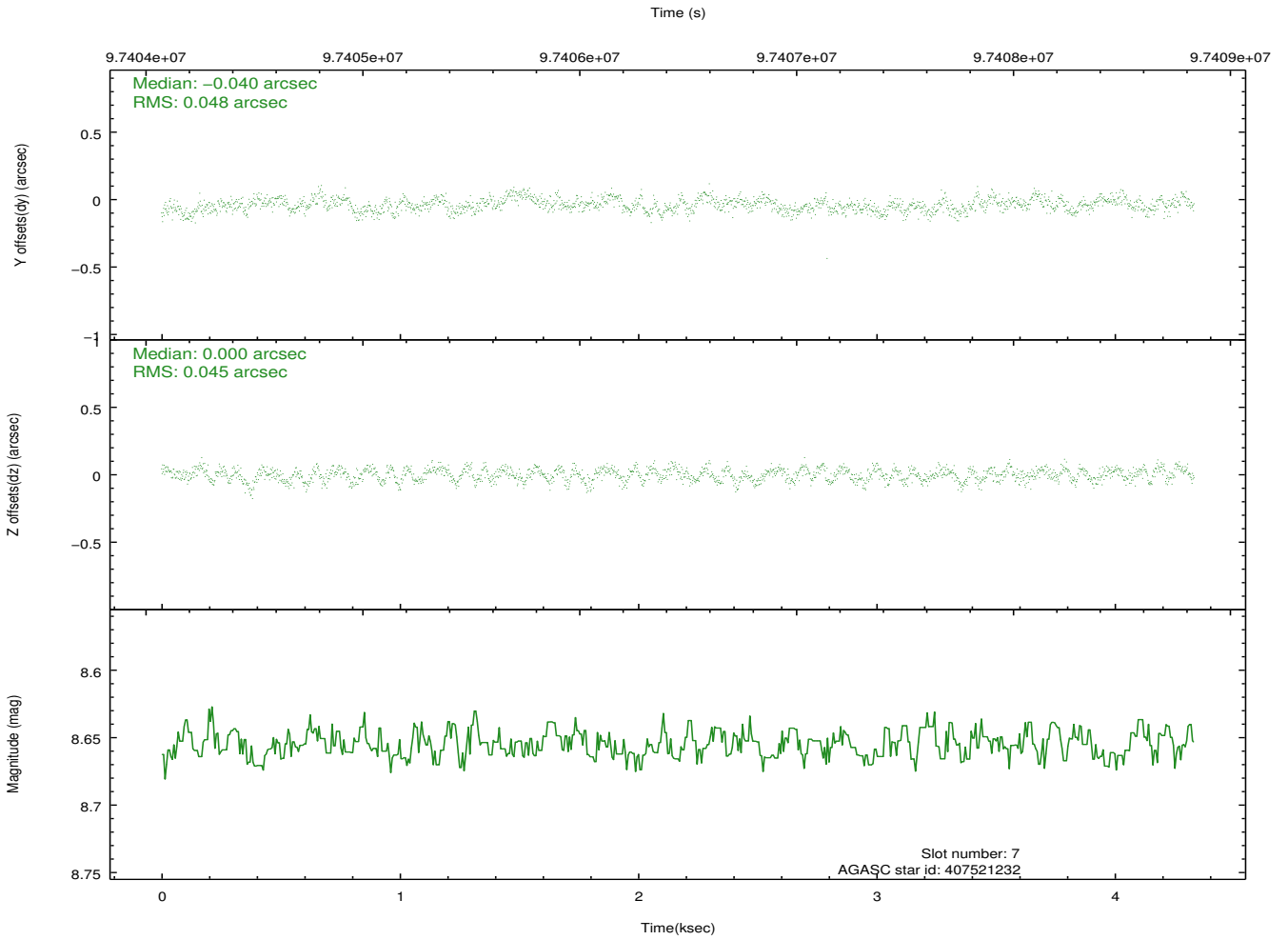
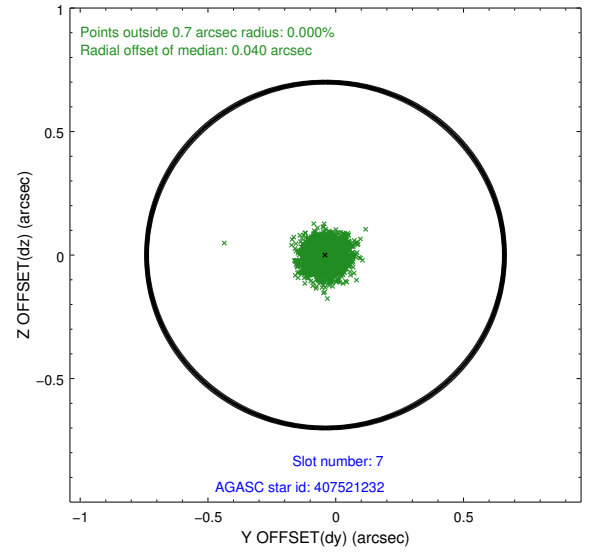
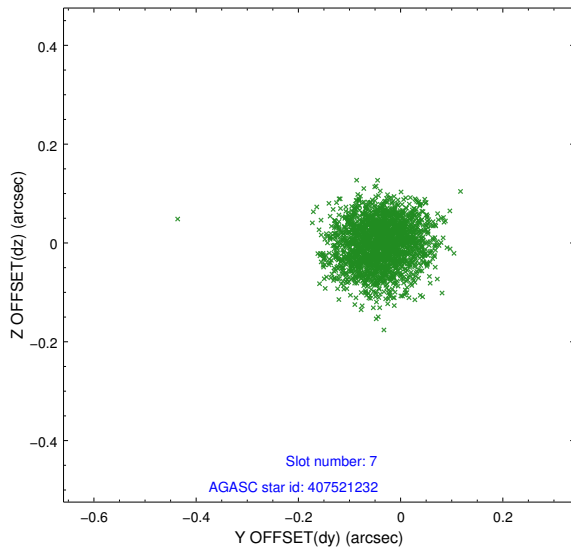
2.4.3 Slot 5



2.4.4 Slot 6

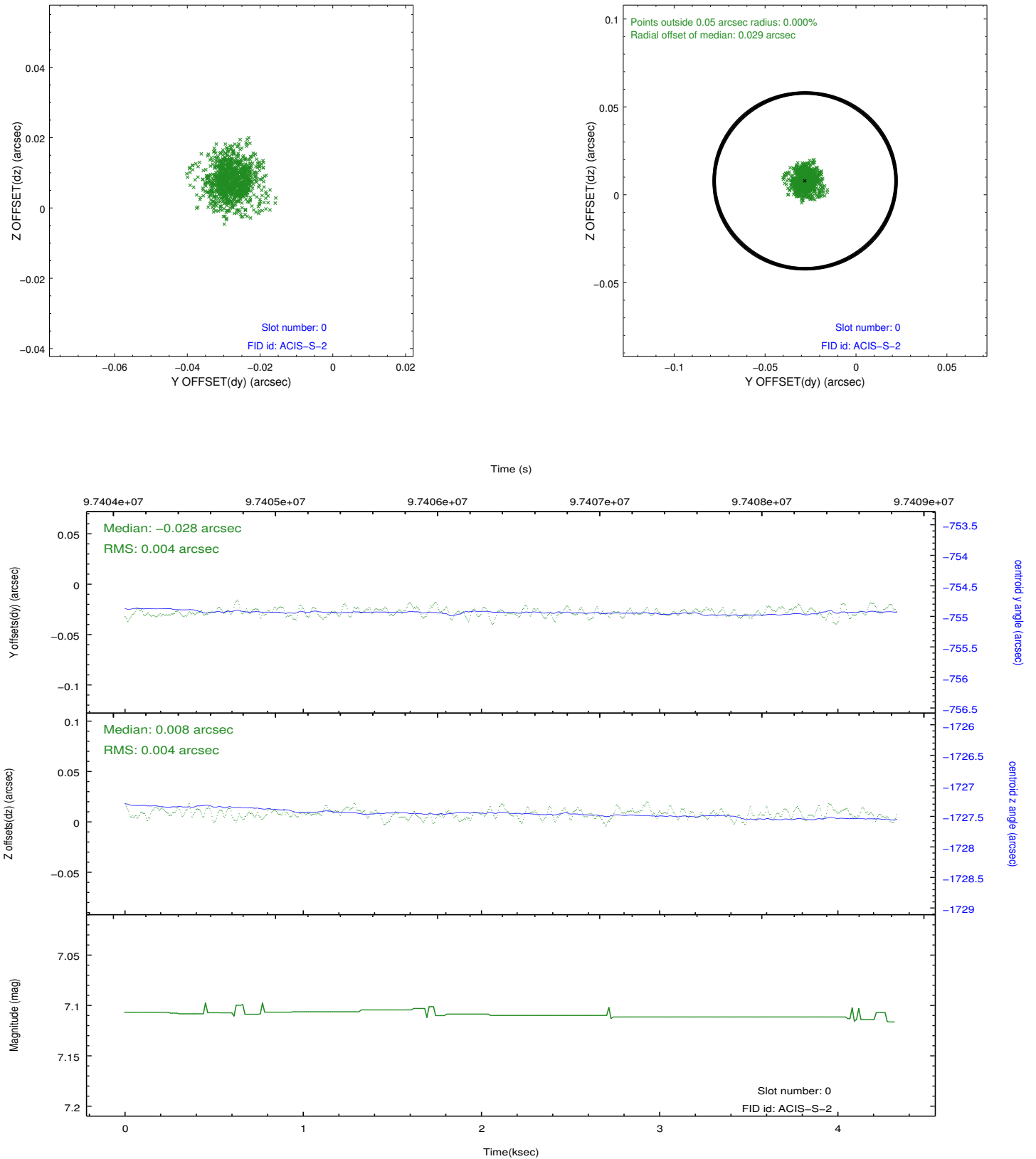


2.4.5 Slot 7

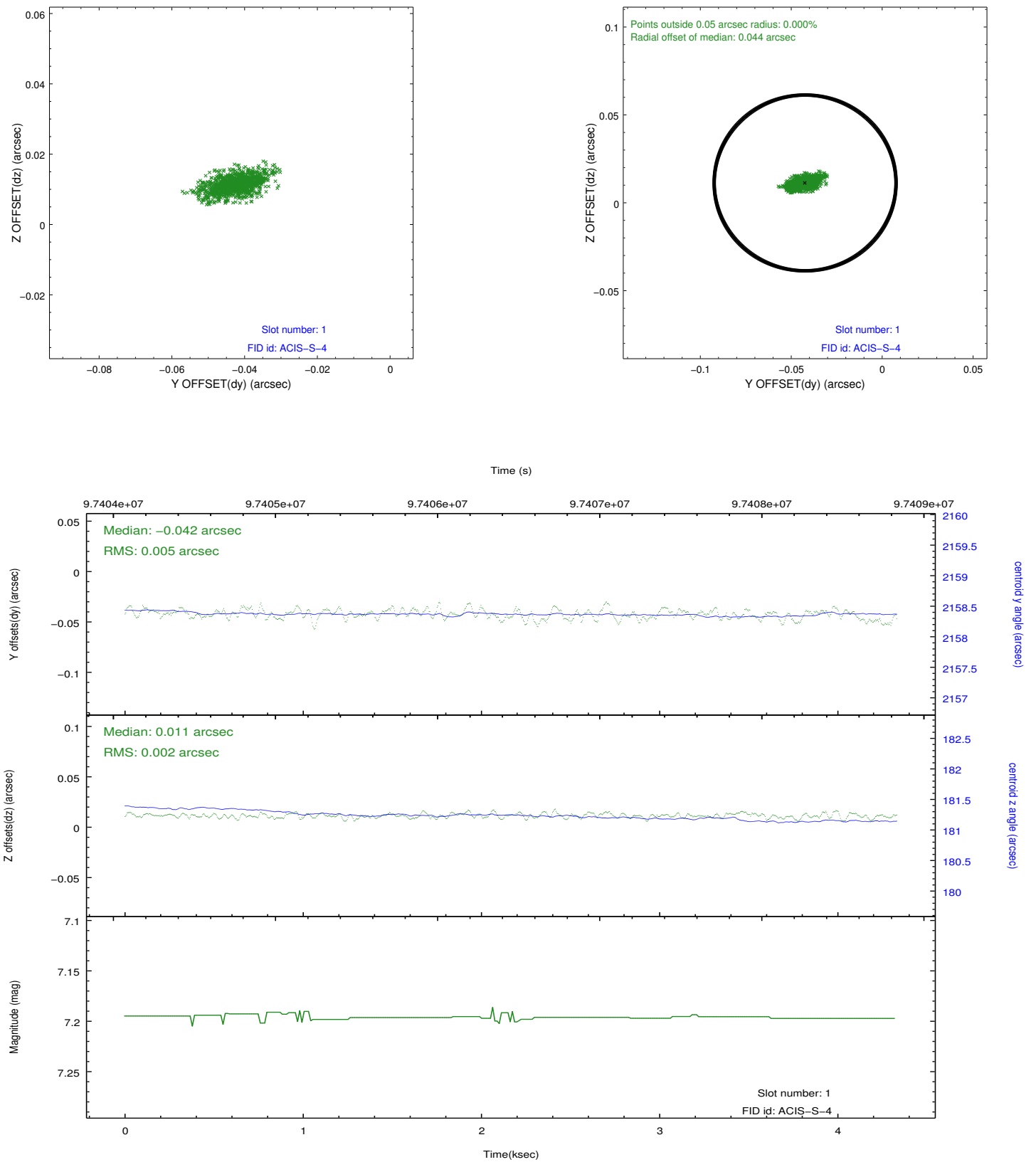


2.5 FID Slots

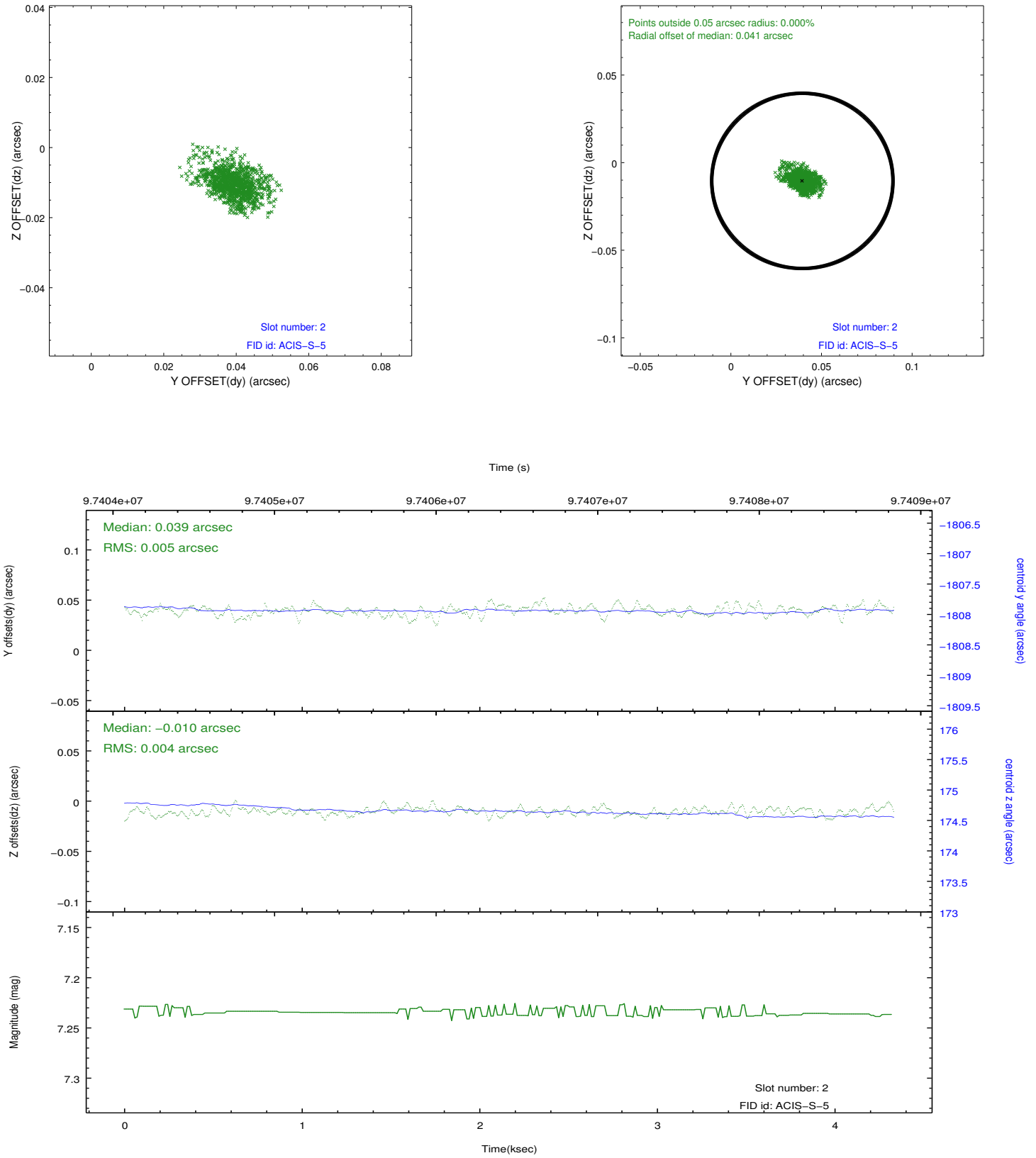
2.5.1 Slot 0



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)	2012.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.94

A.2 Comments

Window constraint met.

=====

A spatial region of the original bias map for CCD = 7 suffered from anomalously high data values due to corruption from the source. 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 = 7 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:

(279.23492,38.78784), (279.22681,38.78285), (279.23364,38.77610), (279.24175,38.78109)