

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2267 - L2 Version 4
Chandra X-Ray Center

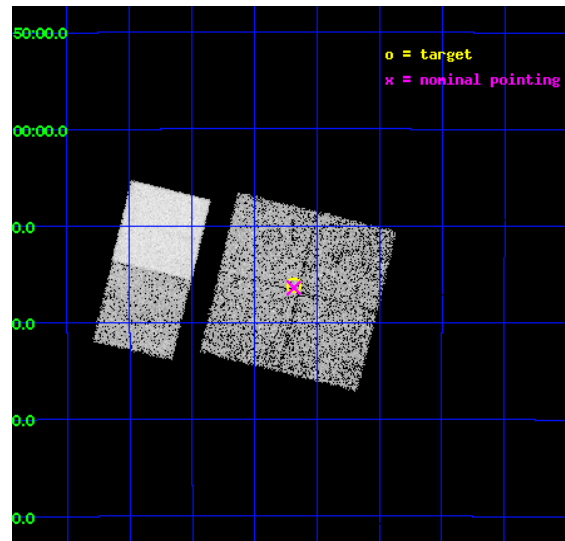
L2 Processing Date : Oct 19 2012

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1 Front

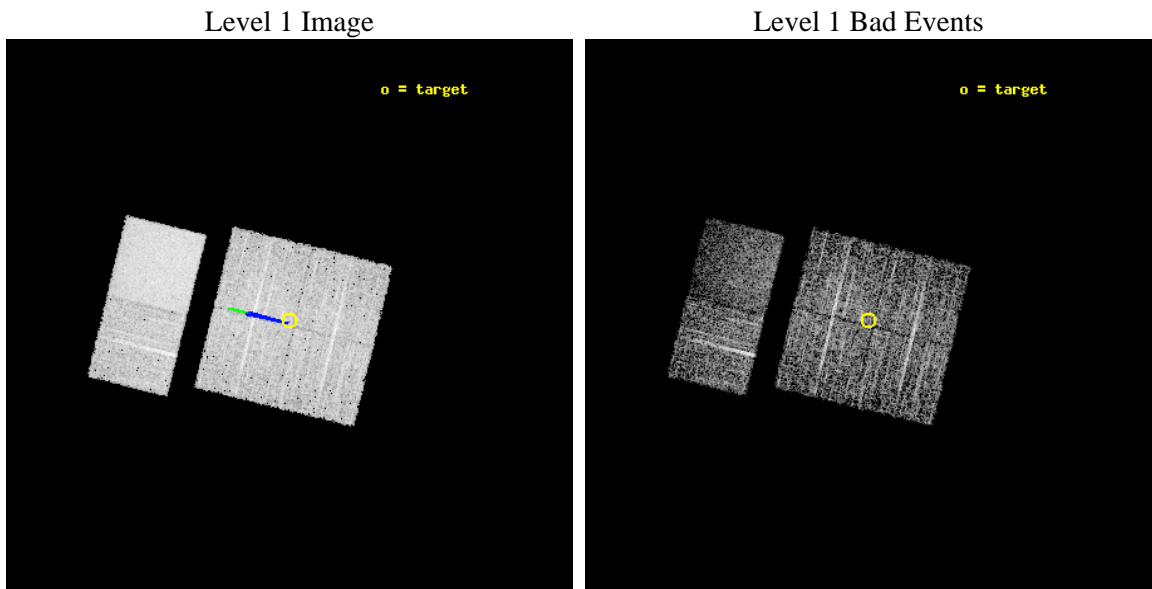
seq_num	900094	Sequence number
obs_id	2267	Observation id
title	CHANDRA SURVEY OF THE GALACTIC RIDGE AROUND THE MILKY WAY CENTER	P
observer	Prof. Q. Daniel Wang	Principal investigator
object	GCS 20	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.1721	Observer's specified target RA [deg]
dec_targ	-29.2689	Observer's specified target Dec [deg]
ra_nom	266.17123579673	Nominal RA [deg]
dec_nom	-29.27356401028	Nominal Dec [deg]
roll_nom	283.80727145279	Nominal Roll [deg]
revision	4	Processing version of data
ontime	11628.800010815	Sum of GTIs [s]
livetime	11481.549143056	Livetime [s]
ontime0	11625.559030563	Sum of GTIs [s]
ontime1	11625.559030578	Sum of GTIs [s]
ontime2	11628.800010815	Sum of GTIs [s]
ontime3	11628.800010815	Sum of GTIs [s]
ontime6	11628.800010815	Sum of GTIs [s]
ontime7	11628.800010815	Sum of GTIs [s]
l2events	78847	Number of level 2 events



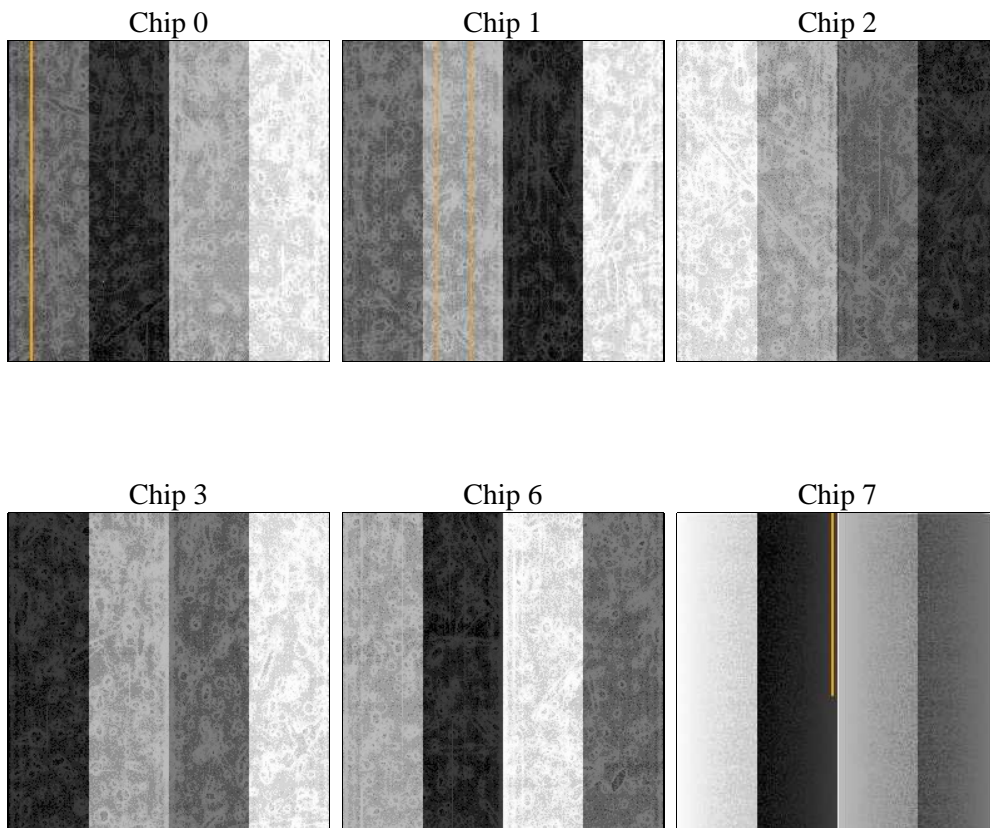
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11871.431000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	11628.800010815	Sum of GTIs [s]
caldsver	4.5.2	 	ontime0	11625.559030563	Sum of GTIs [s]
date	2012-10-19T18:08:29	Date and time of file creation	ontime1	11625.559030578	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	11628.800010815	Sum of GTIs [s]
			ontime3	11628.800010815	Sum of GTIs [s]
			ontime6	11628.800010815	Sum of GTIs [s]
			ontime7	11628.800010815	Sum of GTIs [s]
			l1events	224166	Number of level 1 events

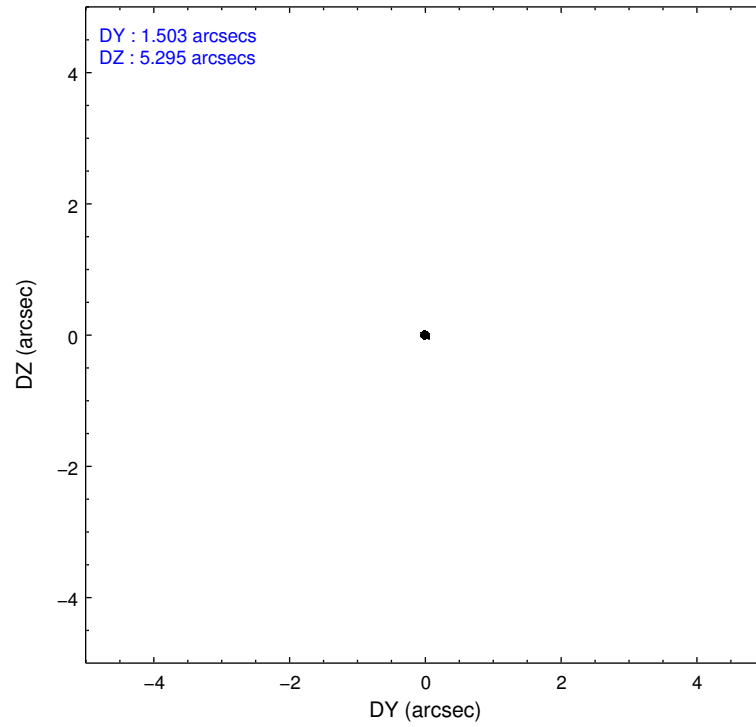
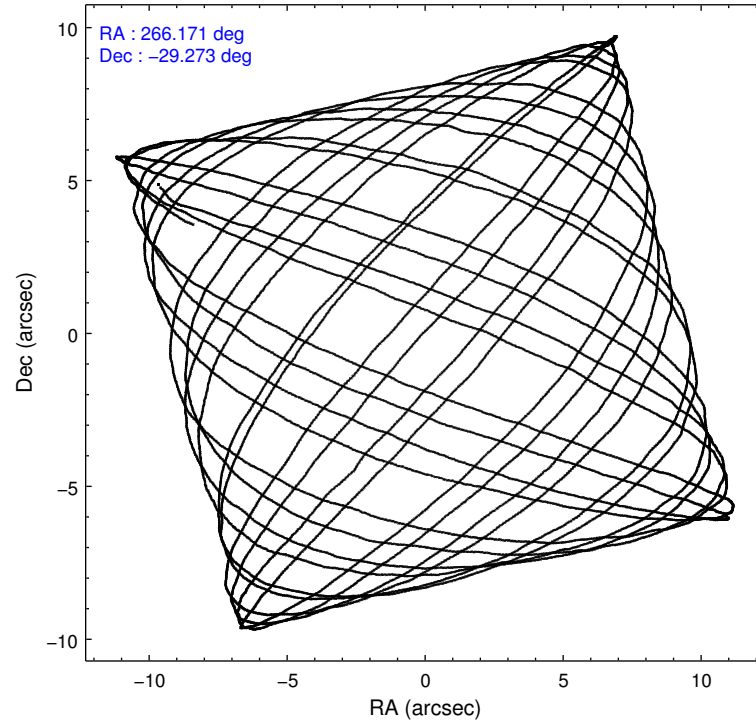
2.1.4 Events

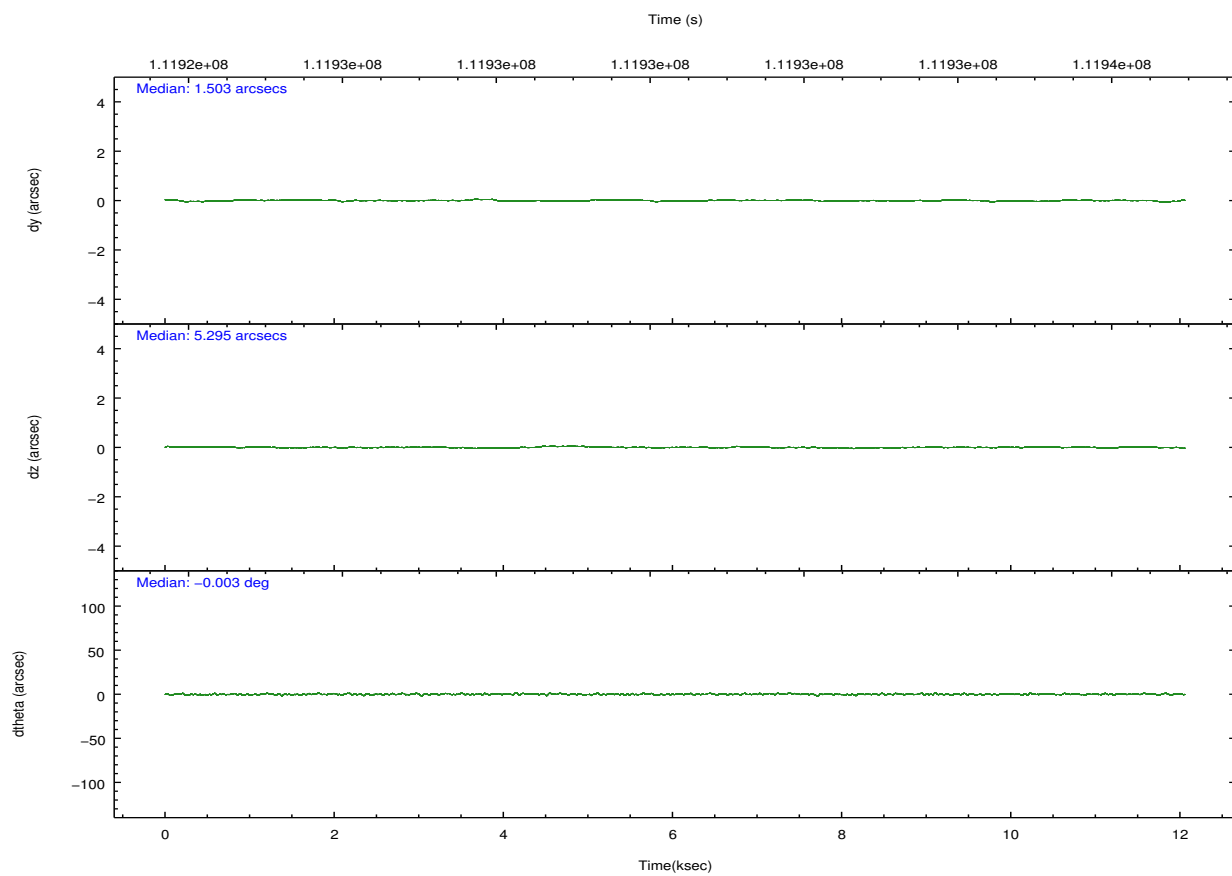
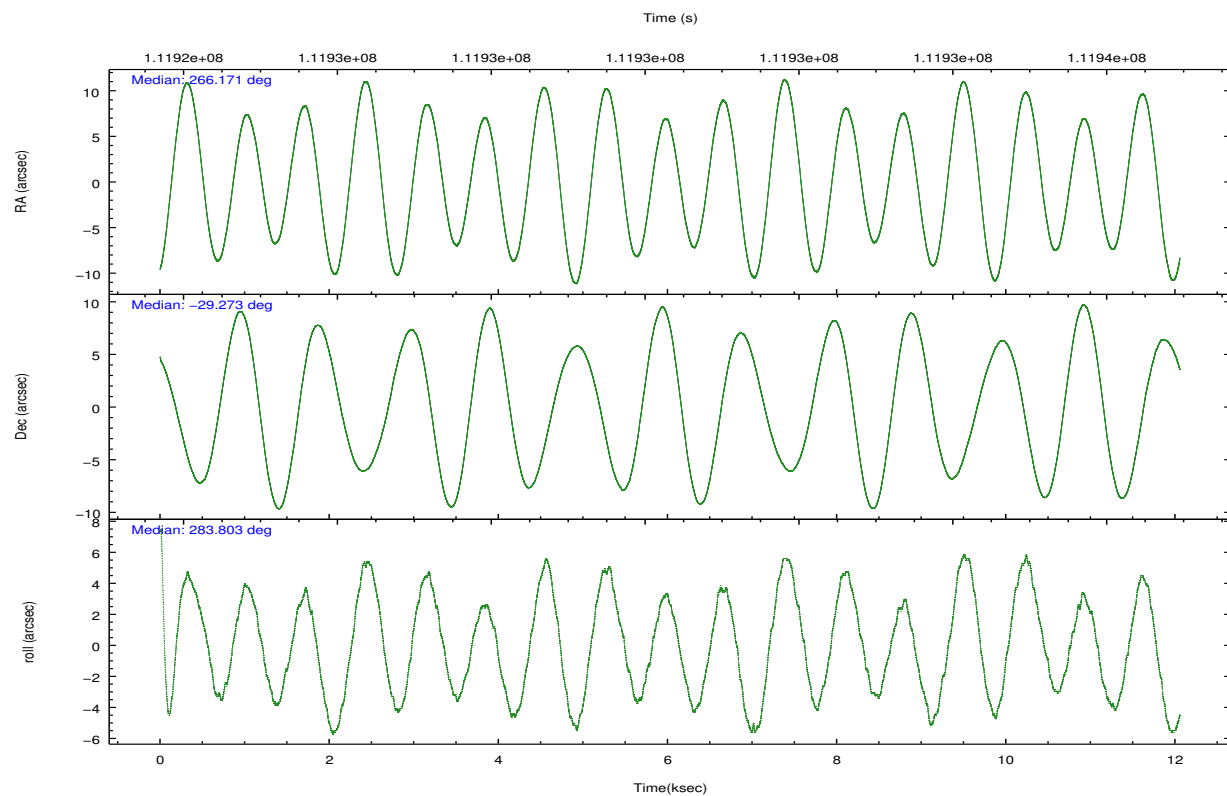
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	31659	31105	33142	34649	35274	58337	grade 0 events	4062	4107	4465	4958	6103	3926
rejected events	24059	23386	25020	25754	25204	17965		12%	13%	13%	14%	17%	6%
rejected %	75%	75%	75%	74%	71%	30%	grade 1 events	35	31	30	38	45	36
								0%	0%	0%	0%	0%	0%
							grade 2 events	1371	1353	1414	1526	1538	7986
								4%	4%	4%	4%	4%	13%
							grade 3 events	562	598	572	628	650	3696
								1%	1%	1%	1%	1%	6%
							grade 4 events	536	589	593	659	629	3638
								1%	1%	1%	1%	1%	6%
							grade 5 events	1172	1331	1084	1357	1448	4386
								3%	4%	3%	3%	4%	7%
							grade 6 events	1070	1076	1083	1131	1153	21139
								3%	3%	3%	3%	3%	36%
							grade 7 events	22851	22020	23901	24352	23708	13530
								72%	70%	72%	70%	67%	23%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.149429	266.1712357967286	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.253795	-29.27356401027958	Alternating exposures requested	N	N
[deg] Pointing Roll	283.587920	283.8072714527862	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	283.600000	283.600000			
[deg] Roll tolerance	2.000000	2.000000			
Roll constraint allows 180D rotation	N	N			
[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)	111924484.184000	111924108.14389			
Observation start date	2001-07-19T10:07:00	2001-07-19T10:01:48			
[s] Observation end time (MET)	111936356.184000	111936670.54438			
Observation end date	2001-07-19T13:24:52	2001-07-19T13:31:10			
Read mode	TIMED	TIMED			

2.3 Aspect



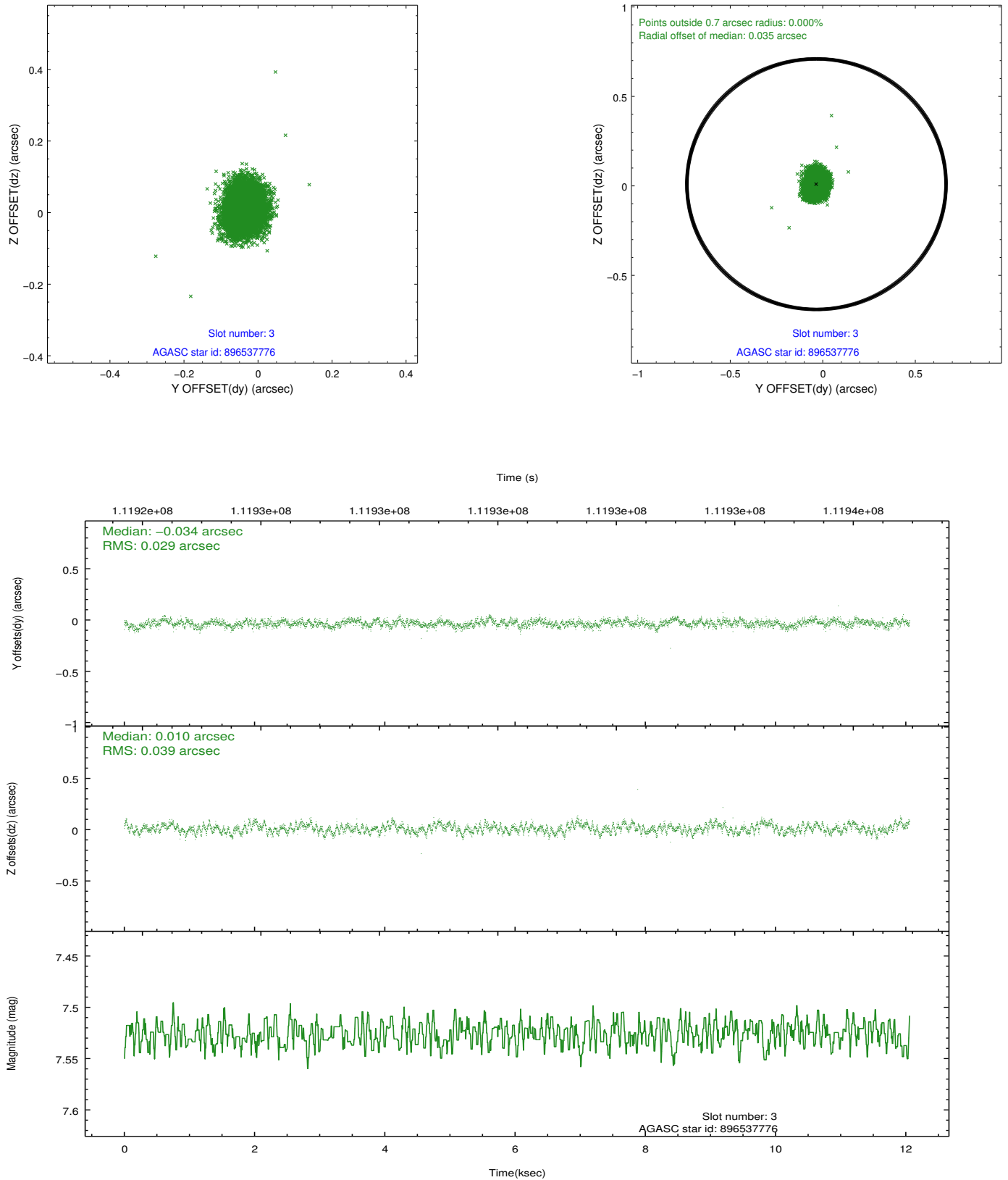


Slot Statistics

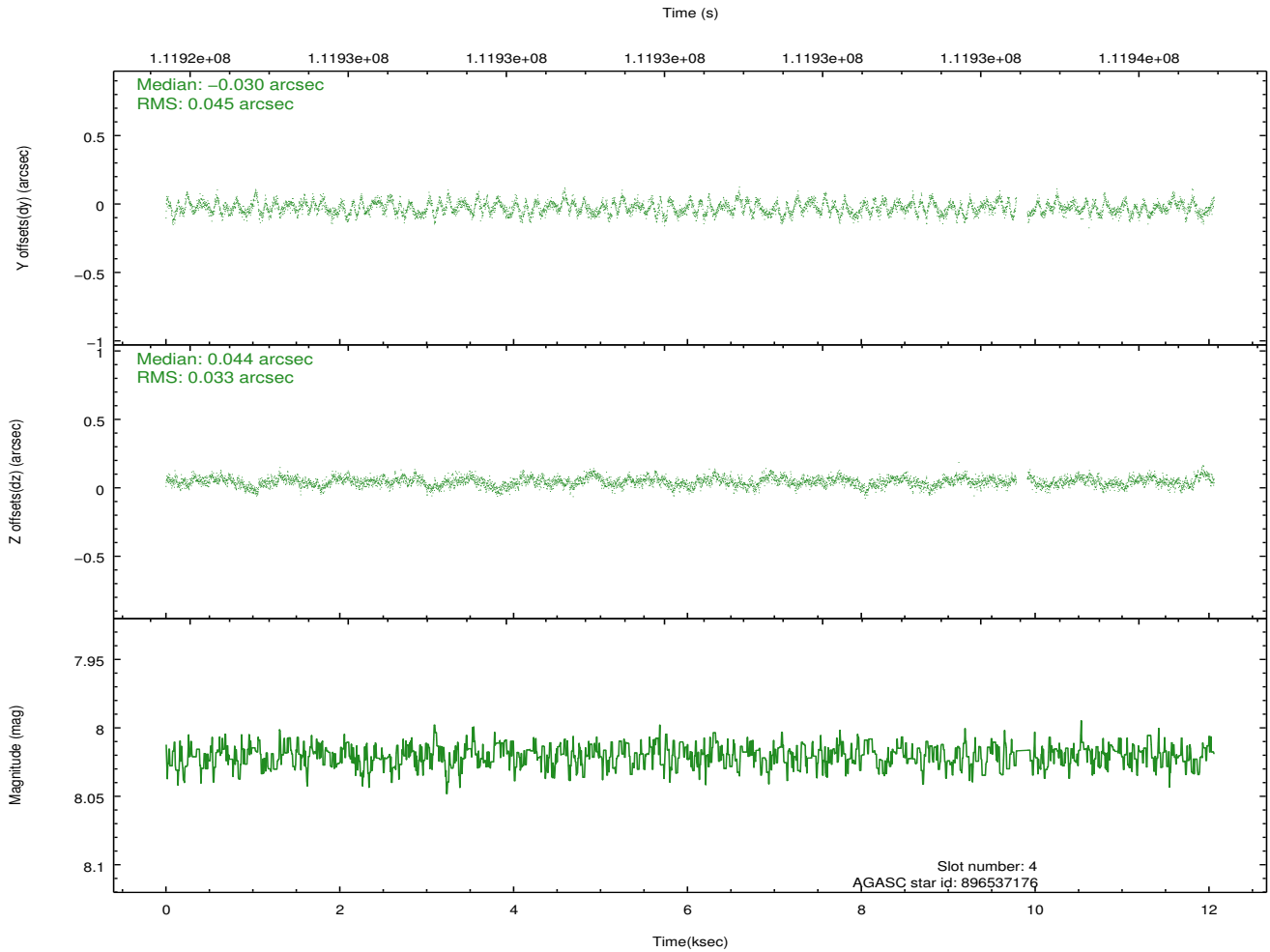
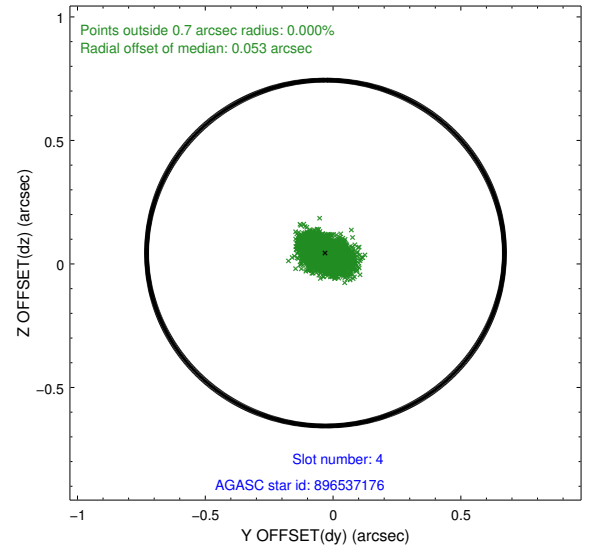
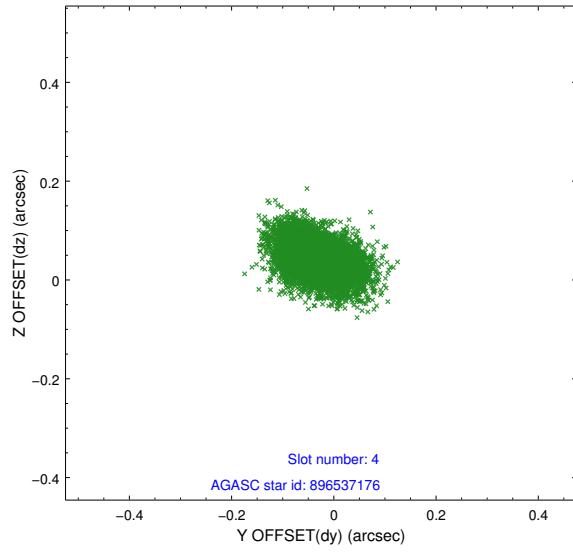
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	2941	-0.025	-0.047	0.008	0.015	0.000000	0.000000	-755.85	-835.06
1	FID	ACIS-I-4	7.19	2941	-0.030	0.036	0.006	0.011	0.000000	0.000000	2157.99	1071.02
2	FID	ACIS-I-5	7.23	2939	-0.047	0.080	0.009	0.015	0.000000	0.000000	-1809.19	1069.34
3	GUIDE	896537776	7.53	5883	-0.034	0.010	0.051	0.082	266.655684	-29.665673	1817.91	1190.01
4	GUIDE	896537176	8.02	5820	-0.030	0.044	0.059	0.098	266.498272	-28.678259	-1752.08	1557.11
5	GUIDE	896536320	8.97	5883	0.035	-0.022	0.069	0.112	266.369048	-29.307026	349.92	624.91
6	GUIDE	896403224	8.27	5882	0.049	-0.052	0.062	0.100	265.612825	-29.438915	257.92	-1792.98
7	GUIDE	896405288	9.46	5876	-0.019	0.024	0.092	0.145	265.652078	-28.763879	-2078.41	-1112.83

2.4 Star Slots

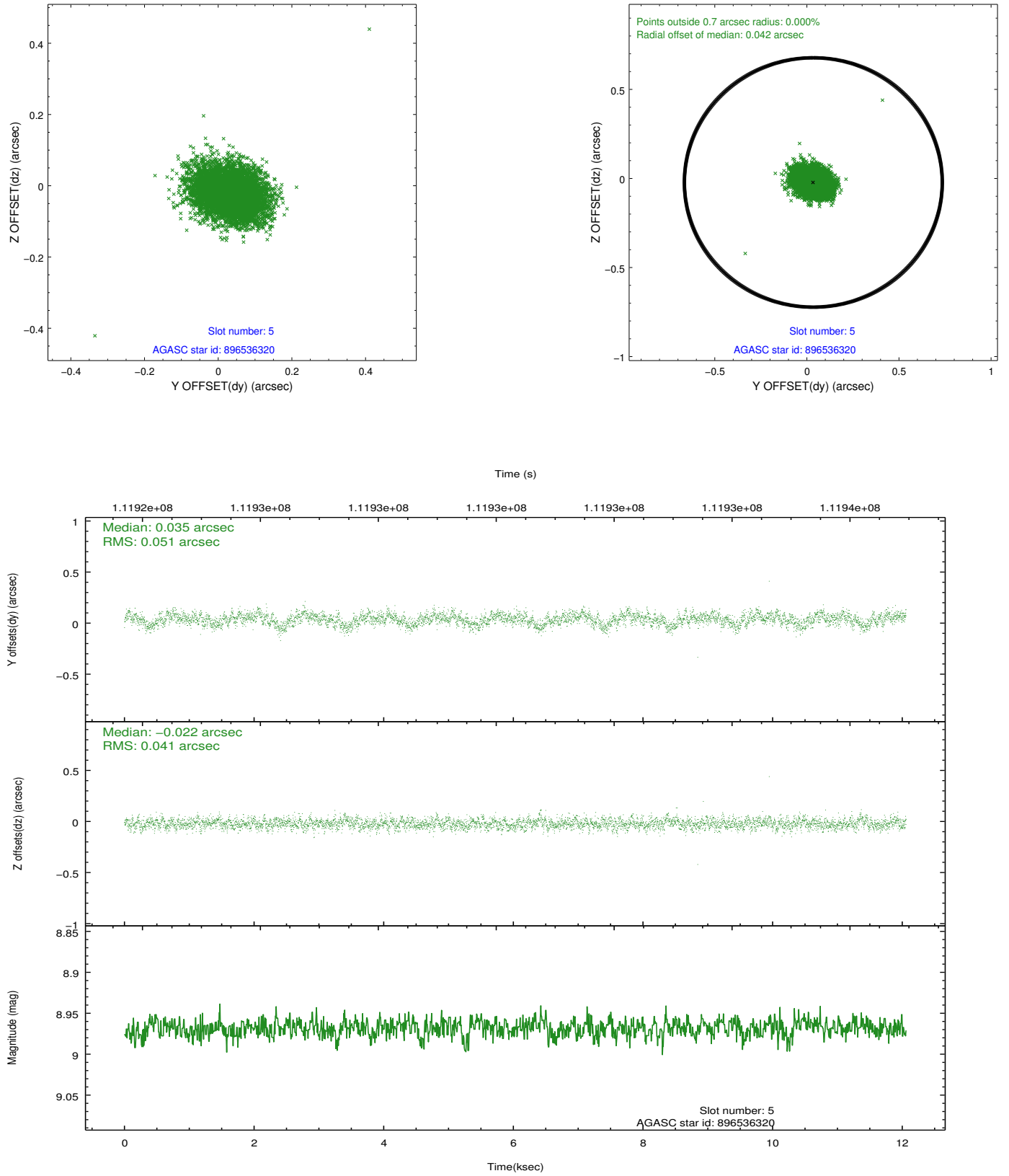
2.4.1 Slot 3



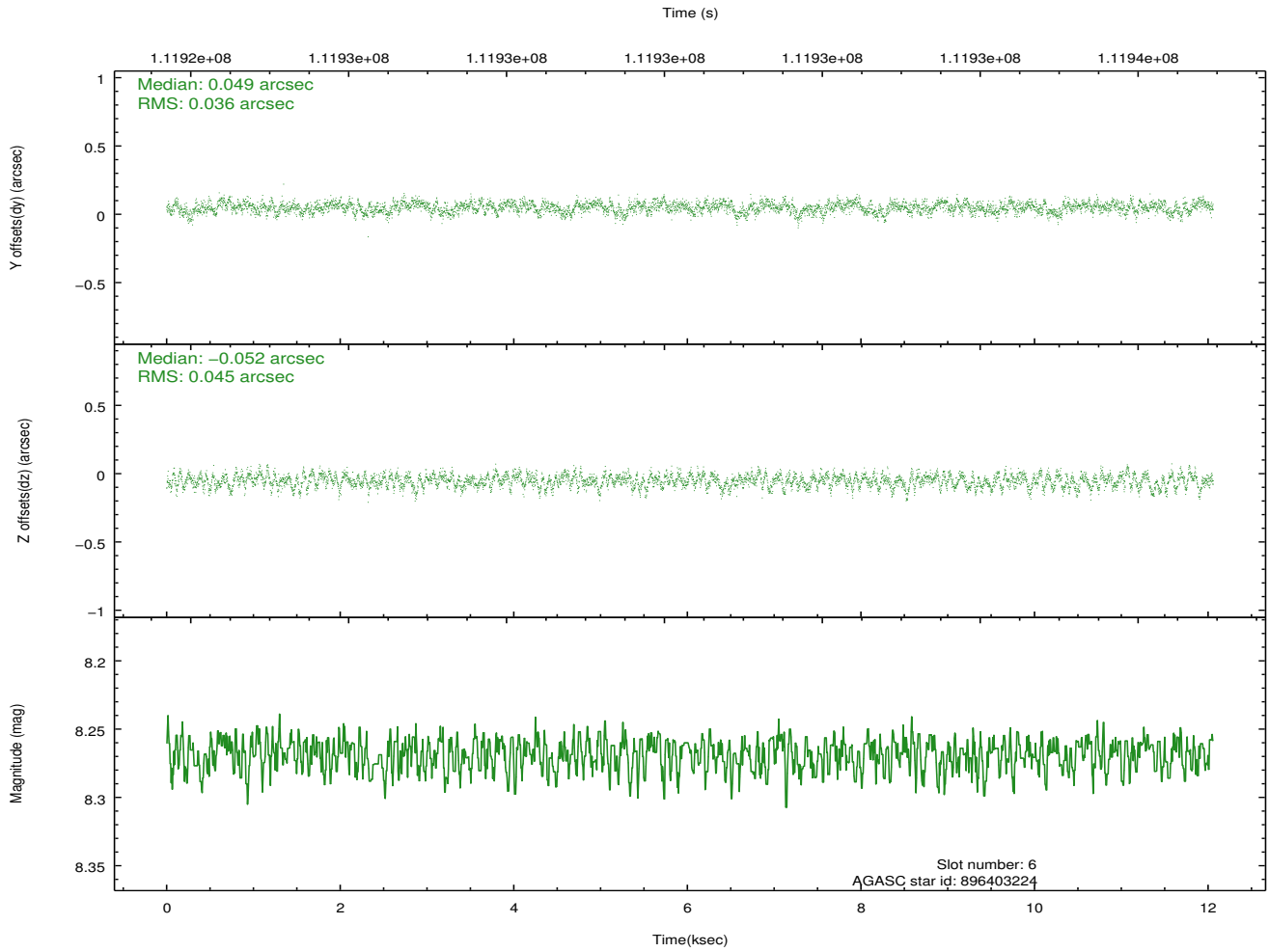
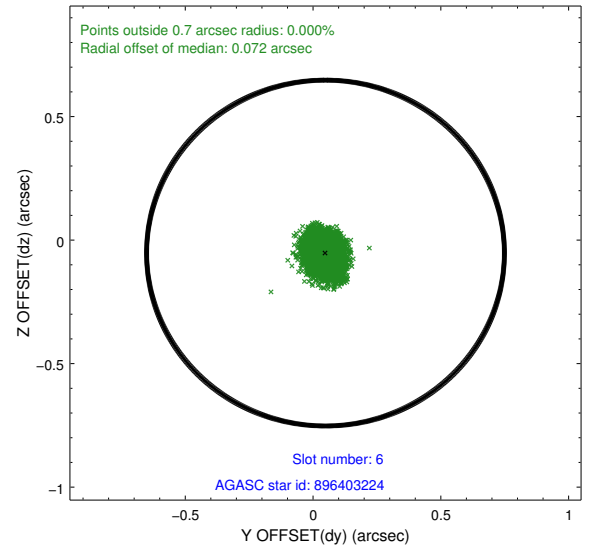
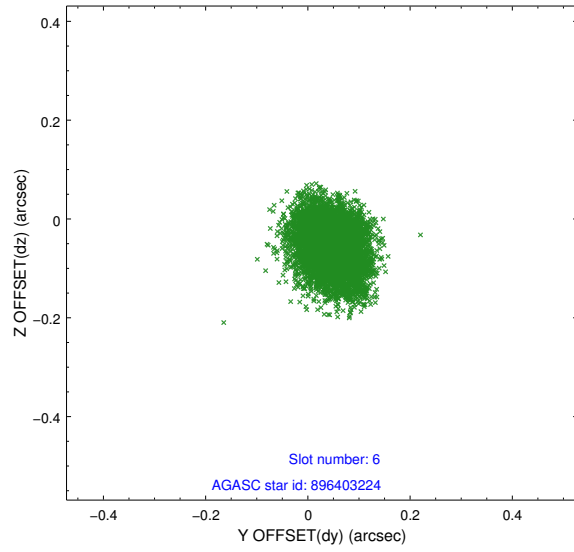
2.4.2 Slot 4



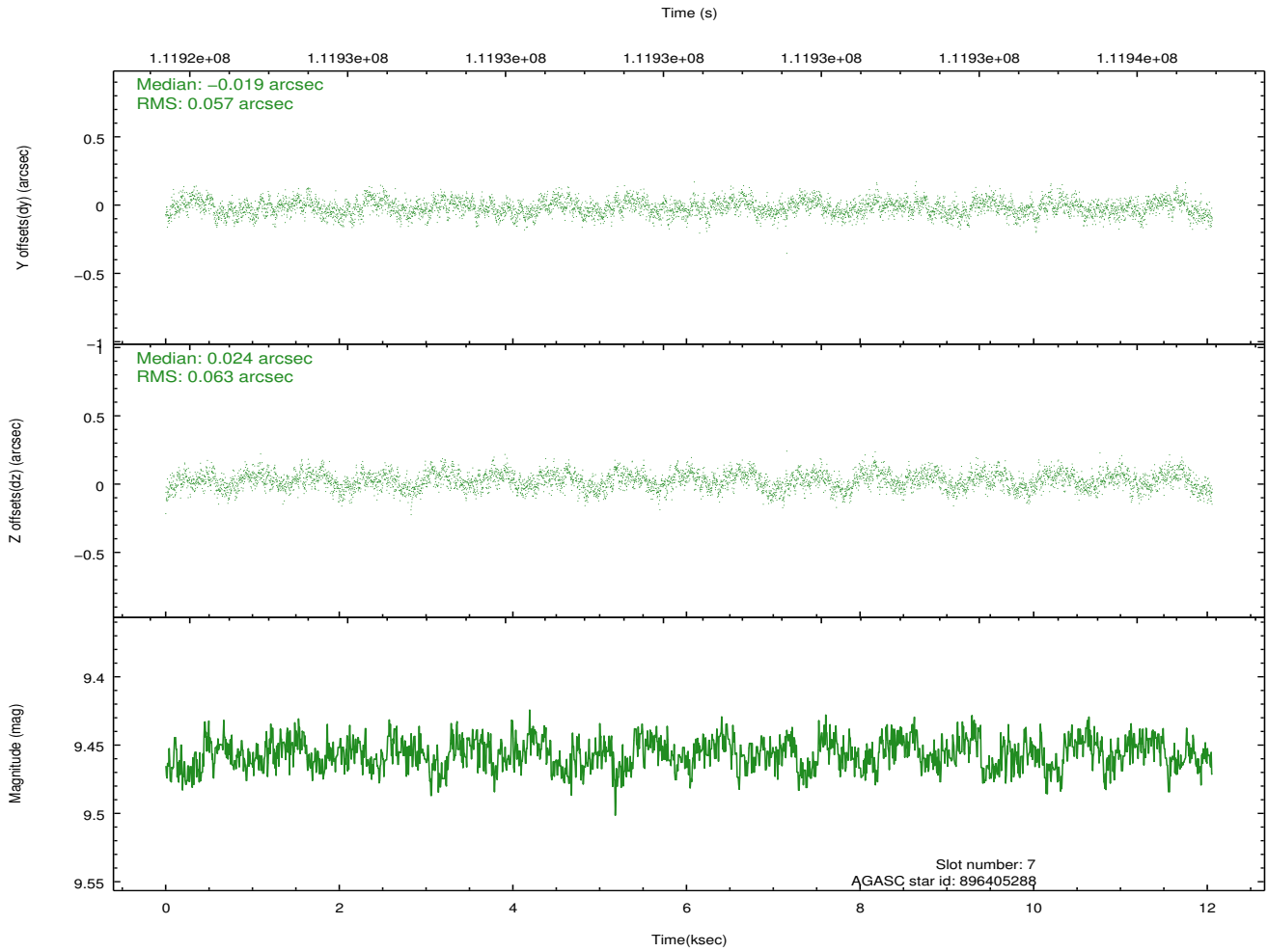
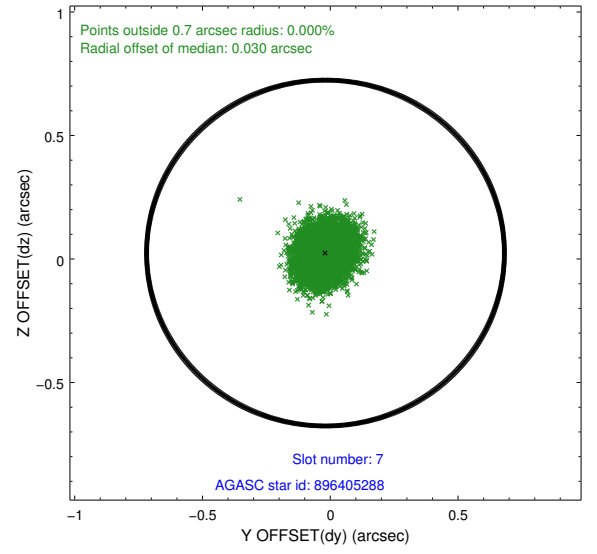
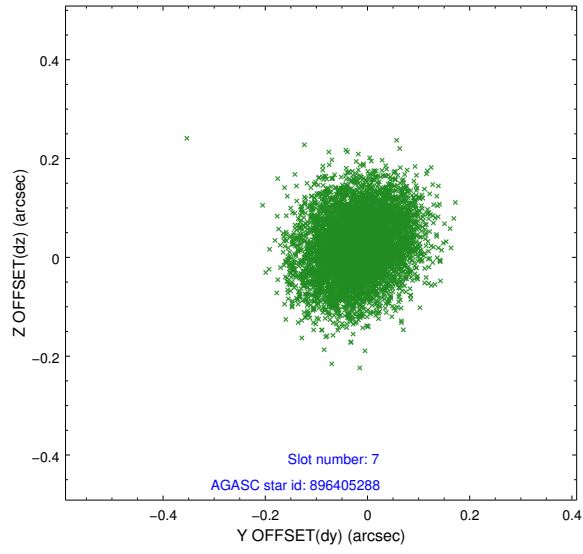
2.4.3 Slot 5



2.4.4 Slot 6

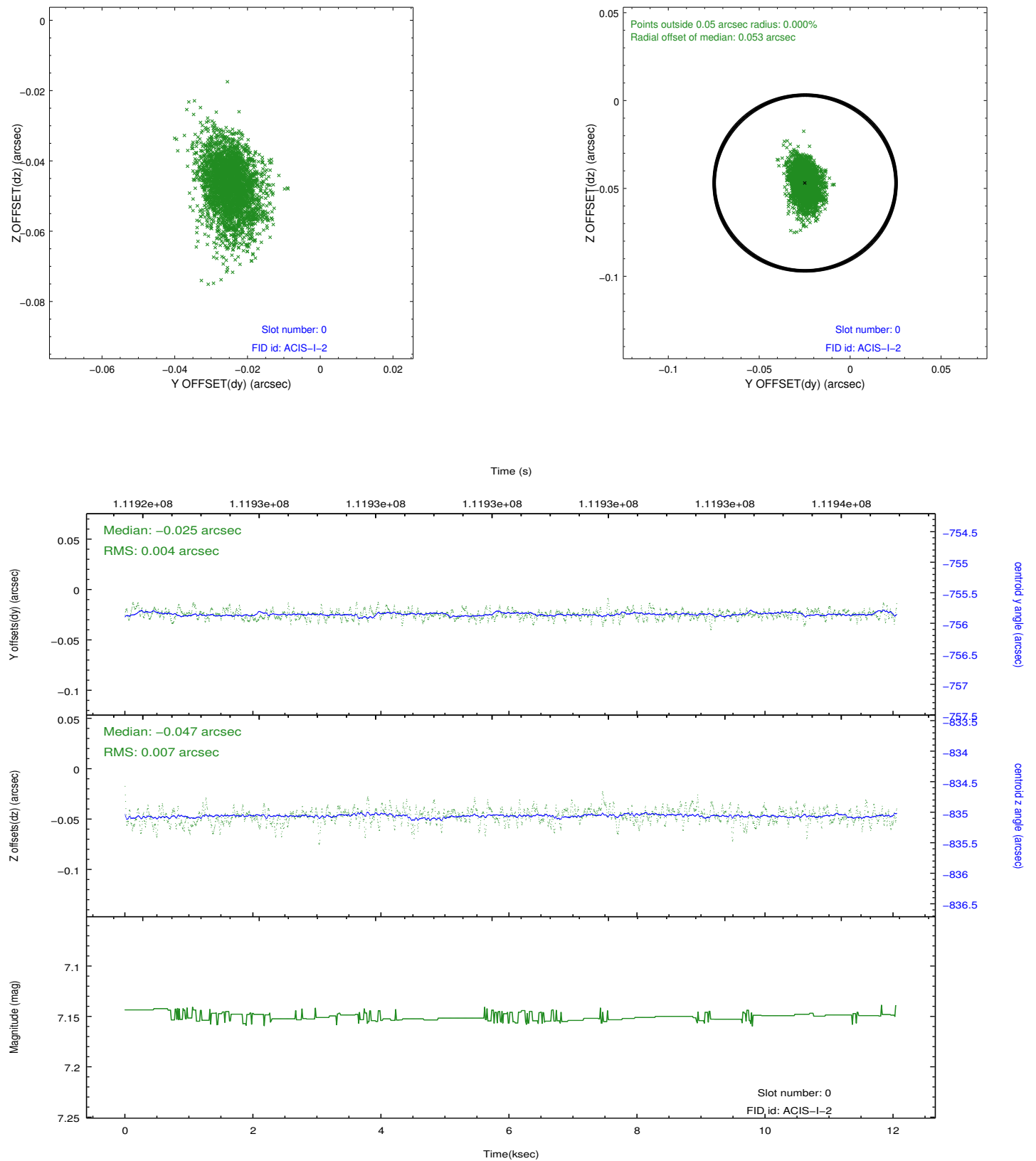


2.4.5 Slot 7

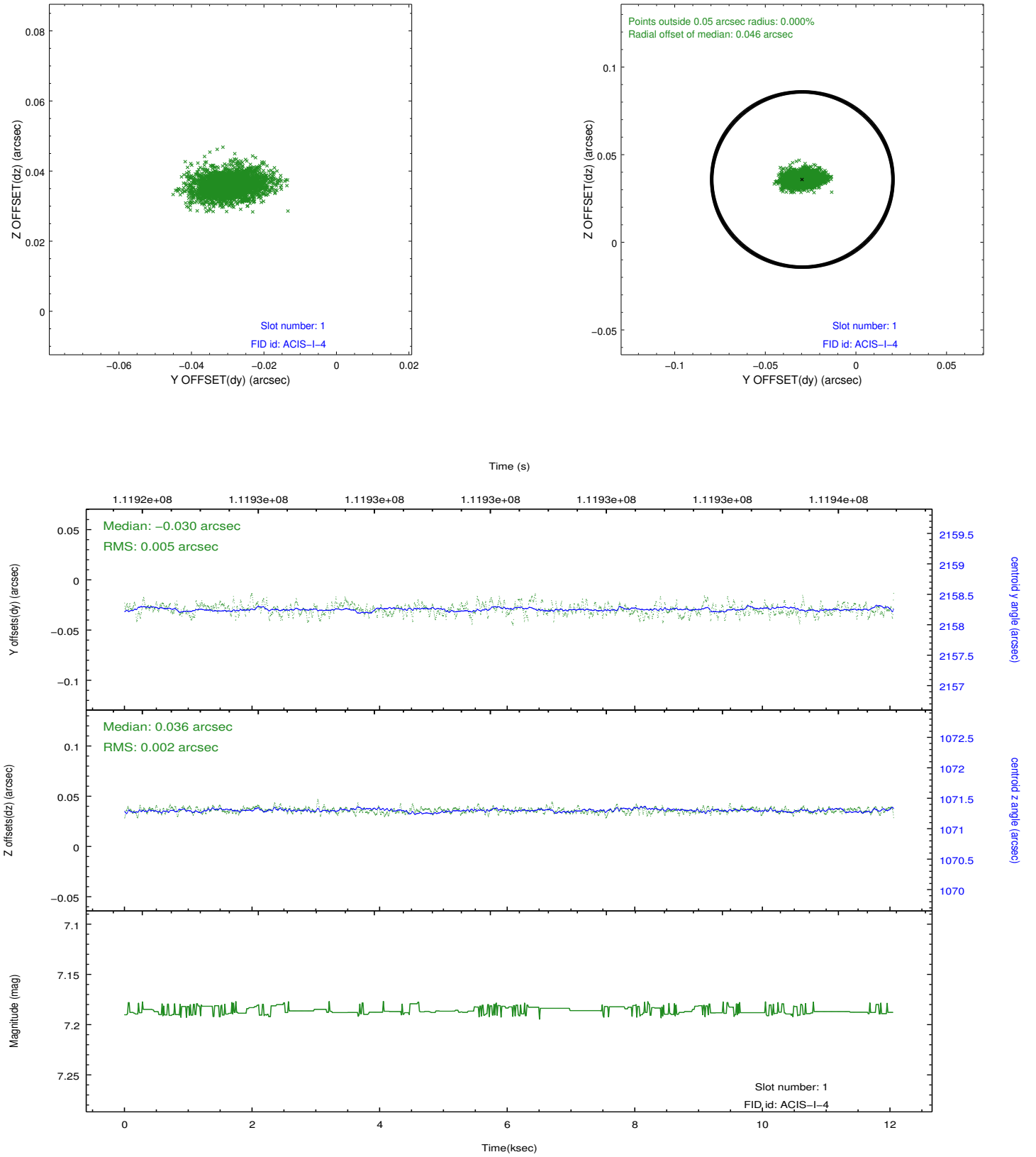


2.5 FID Slots

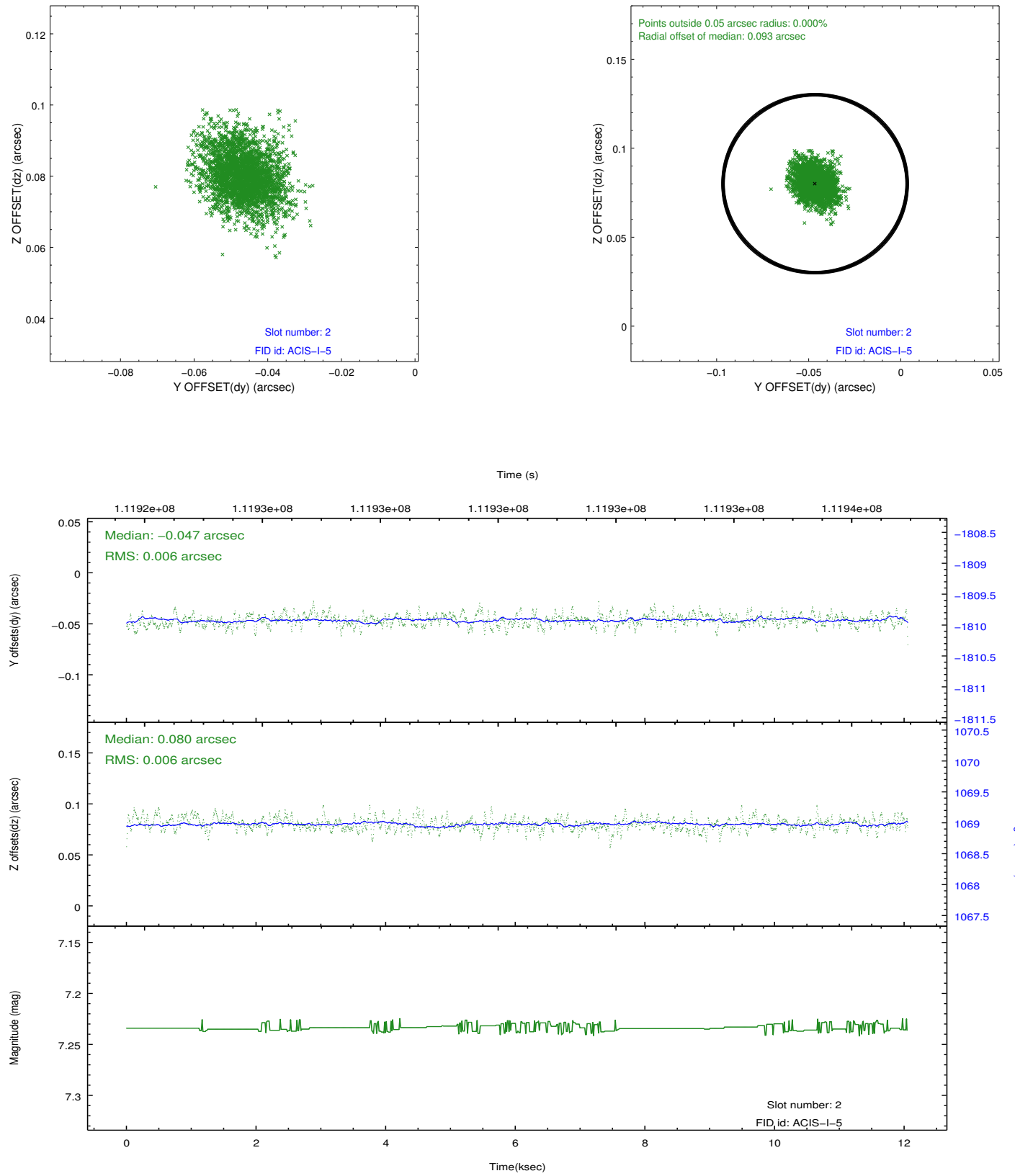
2.5.1 Slot 0



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)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.632

A.2 Comments

Roll constraint met.

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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:
(266.06029,-29.15748),(266.05605,-29.15839),(266.06047,-29.17415),(266.06471,-29.17324)