

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2296 - L2 Version 4
Chandra X-Ray Center

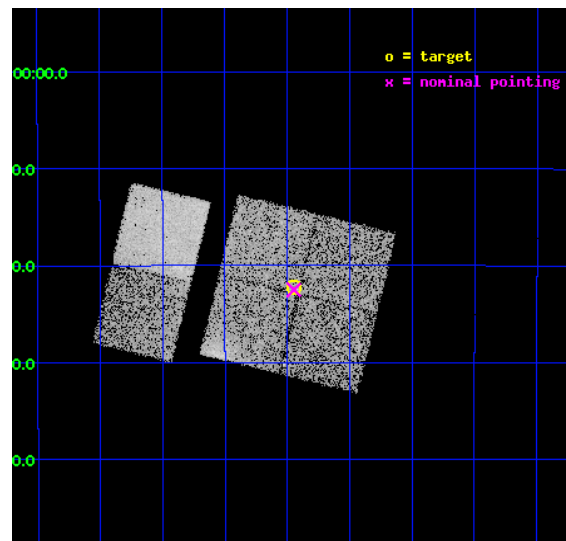
L2 Processing Date : Oct 19 2012

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1 Front

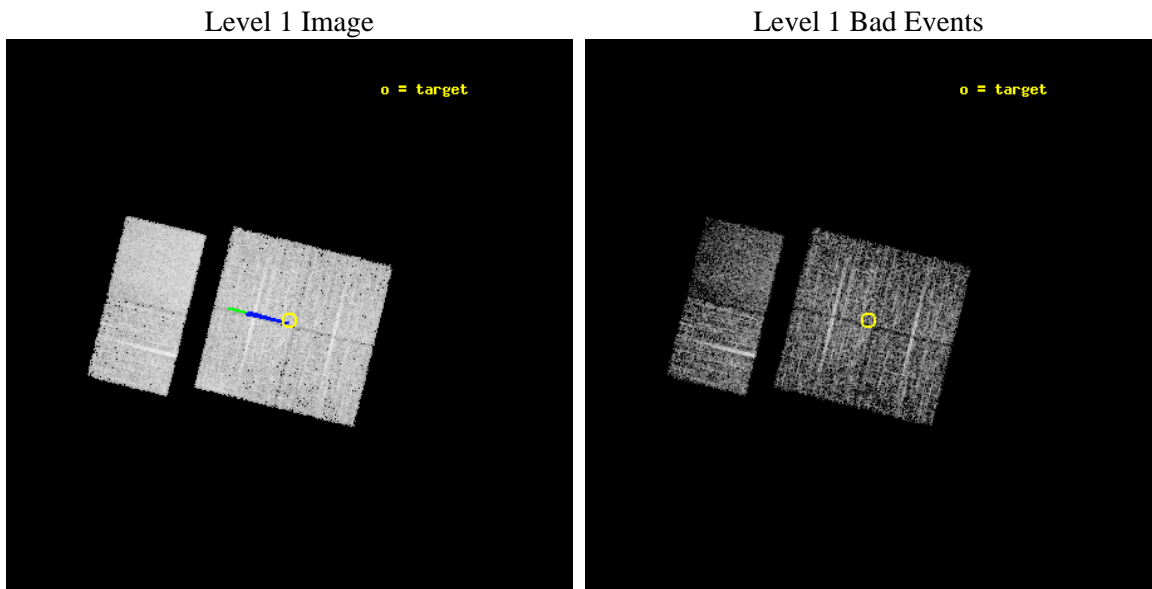
seq_num	900123	Sequence number
obs_id	2296	Observation id
title	CHANDRA SURVEY OF THE GALACTIC RIDGE AROUND THE MILKY WAY CENTER	P
observer	Prof. Q. Daniel Wang	Principal investigator
object	GCS 19	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.3628	Observer's specified target RA [deg]
dec_targ	-29.3707	Observer's specified target Dec [deg]
ra_nom	266.36198155014	Nominal RA [deg]
dec_nom	-29.375408065894	Nominal Dec [deg]
roll_nom	283.80726348344	Nominal Roll [deg]
revision	4	Processing version of data
ontime	11257.60001047	Sum of GTIs [s]
livetime	11115.049500624	Livetime [s]
ontime0	11257.60001047	Sum of GTIs [s]
ontime1	11254.358990386	Sum of GTIs [s]
ontime2	11254.359040216	Sum of GTIs [s]
ontime3	11257.60001047	Sum of GTIs [s]
ontime6	11257.60001047	Sum of GTIs [s]
ontime7	11257.60001047	Sum of GTIs [s]
l2events	56989	Number of level 2 events



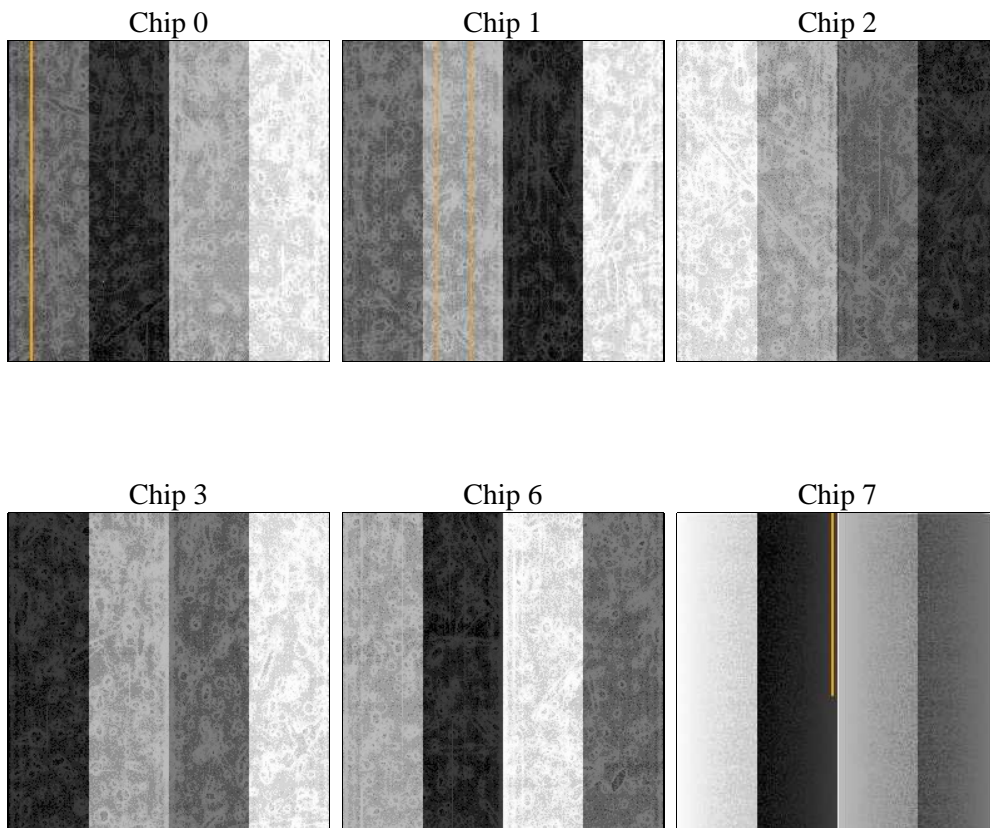
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	11257.60001047	Sum of GTIs [s]
caldsver	4.5.2	 	ontime0	11257.60001047	Sum of GTIs [s]
date	2012-10-19T18:24:56	Date and time of file creation	ontime1	11254.358990386	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	11254.359040216	Sum of GTIs [s]
			ontime3	11257.60001047	Sum of GTIs [s]
			ontime6	11257.60001047	Sum of GTIs [s]
			ontime7	11257.60001047	Sum of GTIs [s]
			l1events	200405	Number of level 1 events

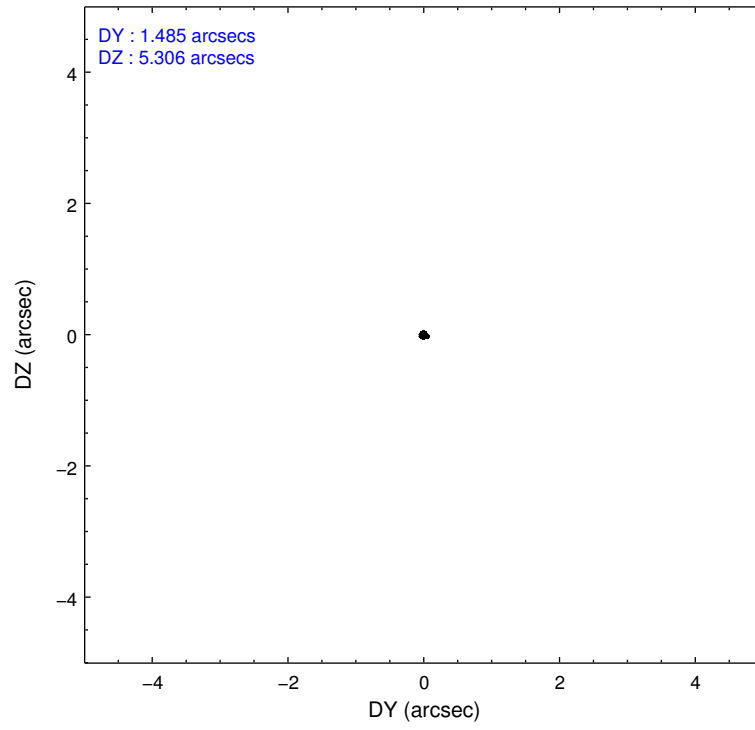
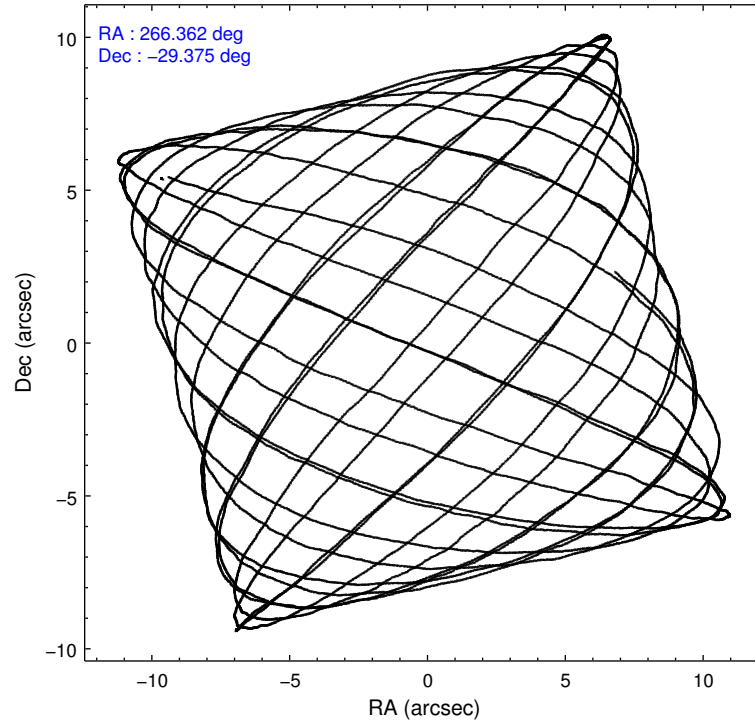
2.1.4 Events

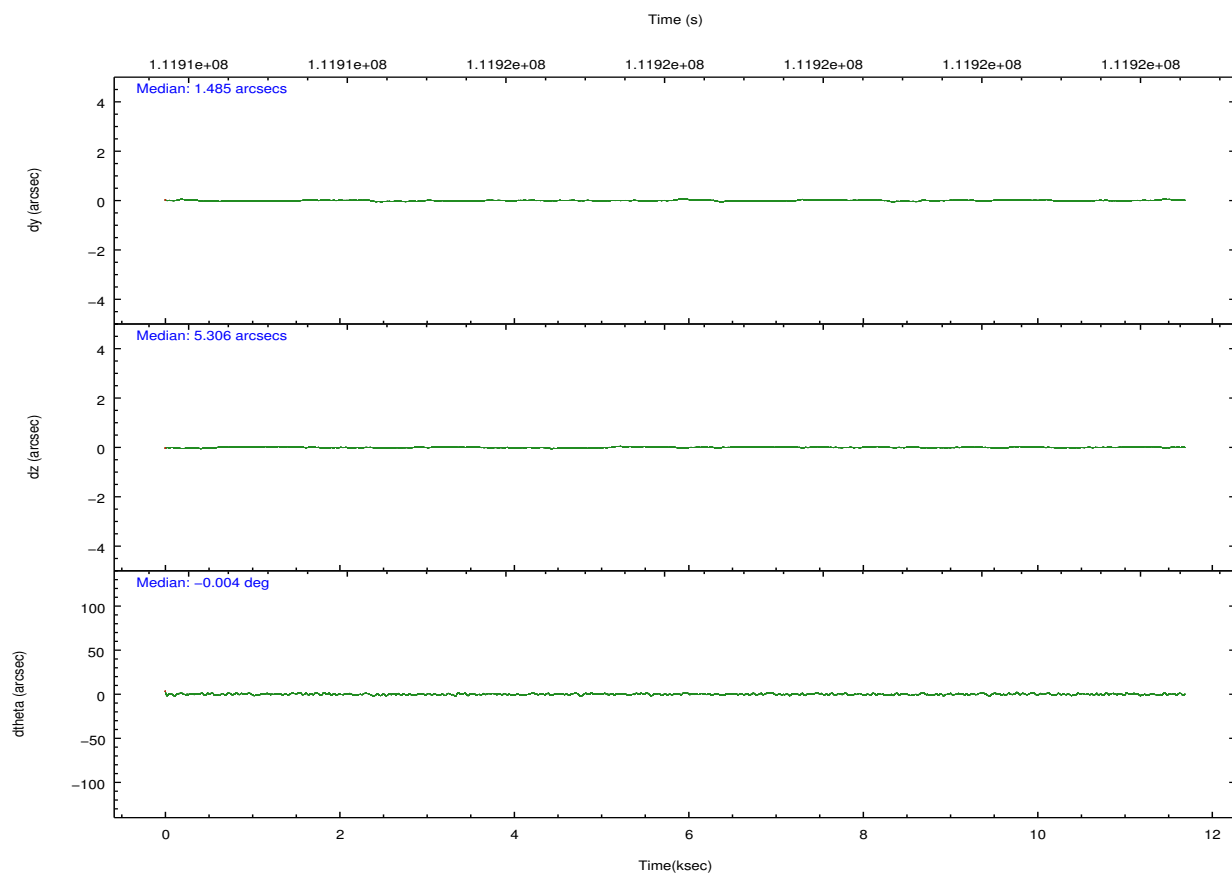
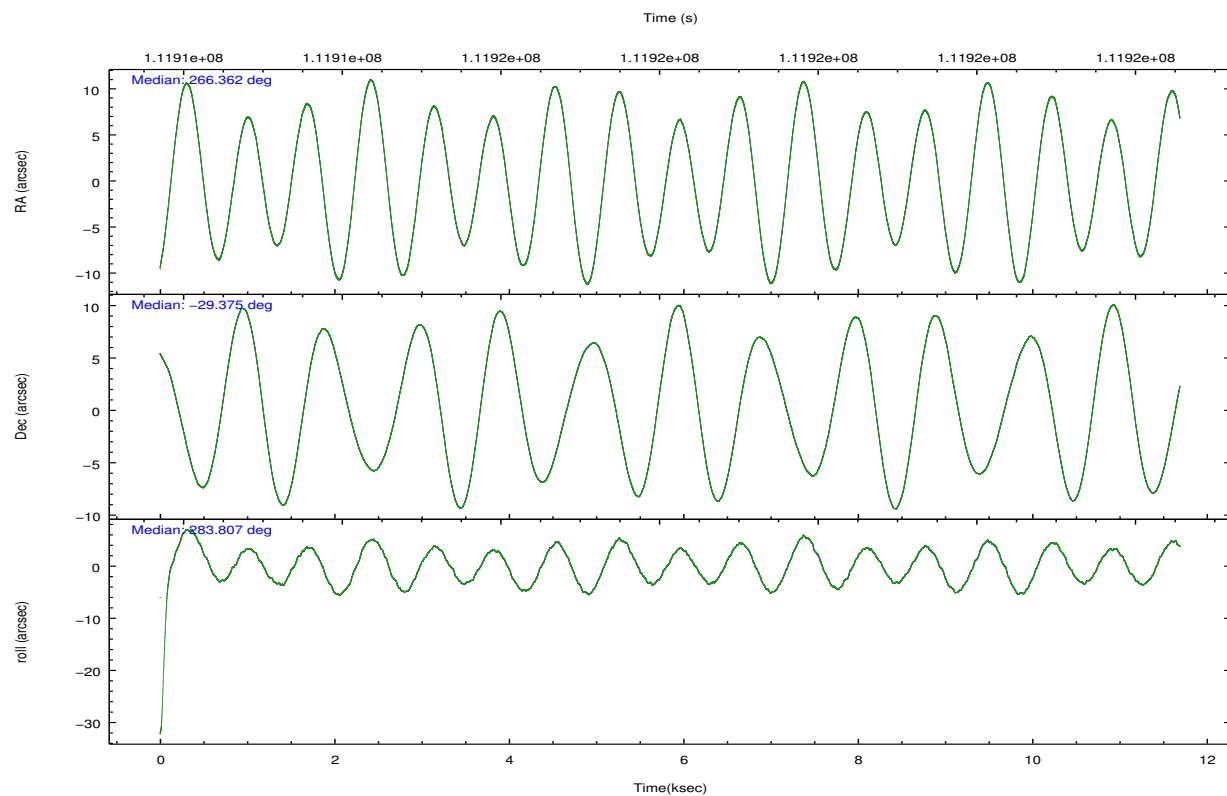
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	28270	30373	34233	34032	33736	39761	grade 0 events	3356	3653	5609	5013	3249	2444
rejected events	21735	22993	24805	25341	27249	17611		11%	12%	16%	14%	9%	6%
rejected %	76%	75%	72%	74%	80%	44%	grade 1 events	27	24	45	34	34	40
								0%	0%	0%	0%	0%	0%
							grade 2 events	1239	1400	1592	1507	1188	4686
								4%	4%	4%	4%	3%	11%
							grade 3 events	506	547	641	580	492	2138
								1%	1%	1%	1%	1%	5%
							grade 4 events	486	635	581	591	521	2165
								1%	2%	1%	1%	1%	5%
							grade 5 events	1143	1294	1080	1313	1428	4181
								4%	4%	3%	3%	4%	10%
							grade 6 events	950	1146	1008	1002	1038	10722
								3%	3%	2%	2%	3%	26%
							grade 7 events	20563	21674	23677	23992	25786	13385
								72%	71%	69%	70%	76%	33%

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	266.340112	266.361981550143	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.355594	-29.37540806589409	Alternating exposures requested	N	N
[deg] Pointing Roll	283.587872	283.807263483437	[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)	111912474.184000	111912098.21842			
Observation start date	2001-07-19T06:46:50	2001-07-19T06:41:38			
[s] Observation end time (MET)	111923974.184000	111924108.14389			
Observation end date	2001-07-19T09:58:30	2001-07-19T10:01:48			
Read mode	TIMED	TIMED			

2.3 Aspect



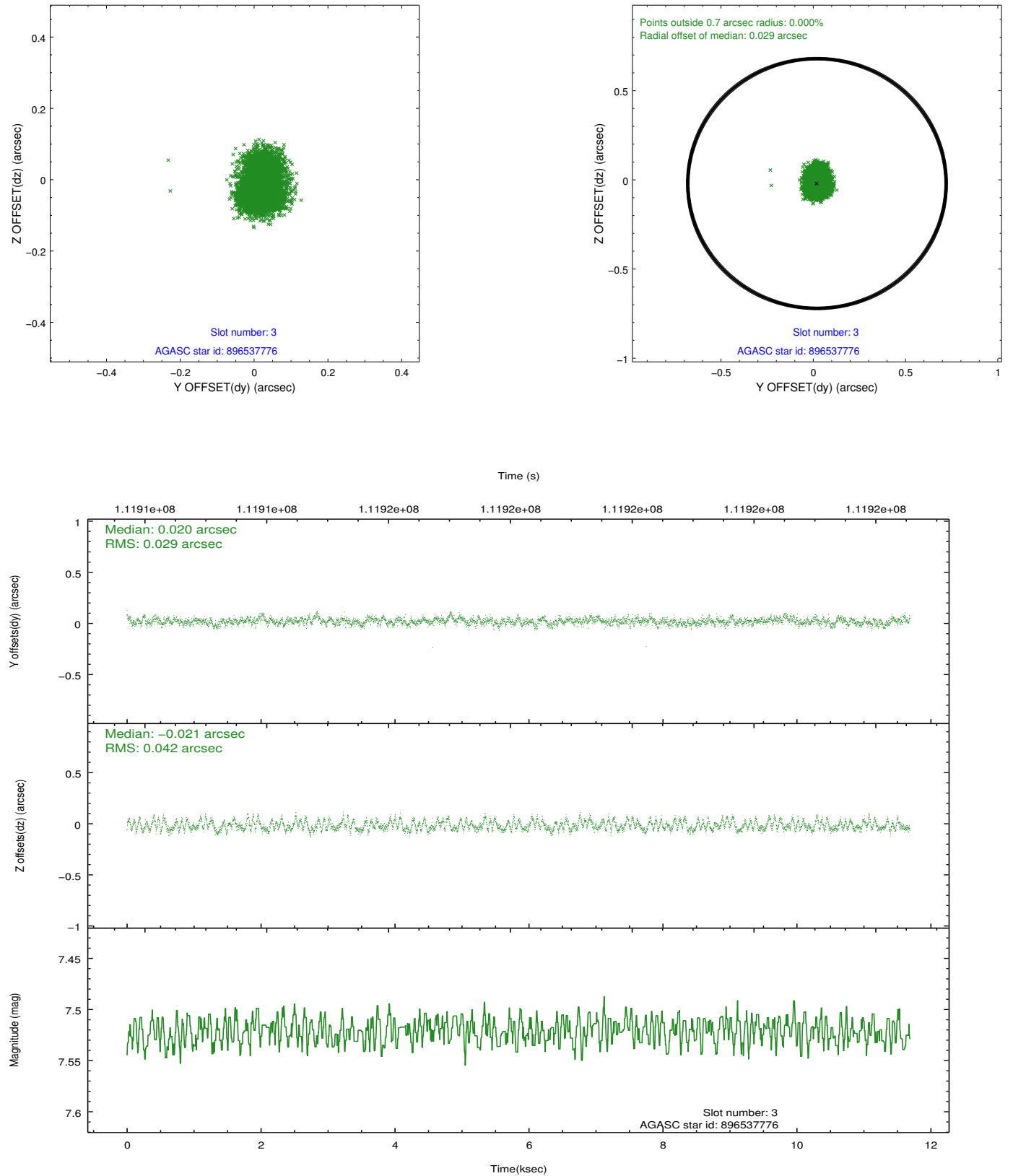


Slot Statistics

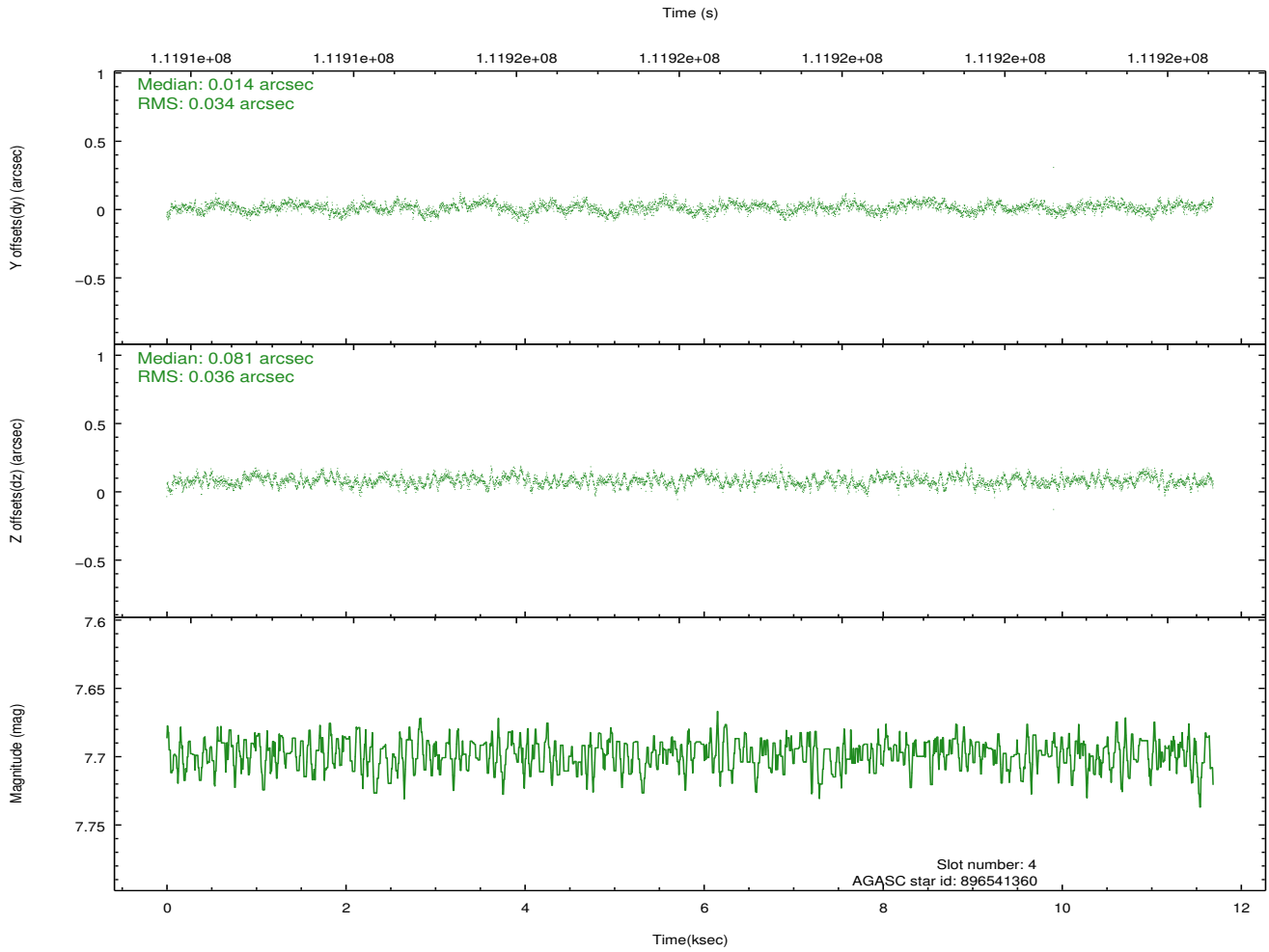
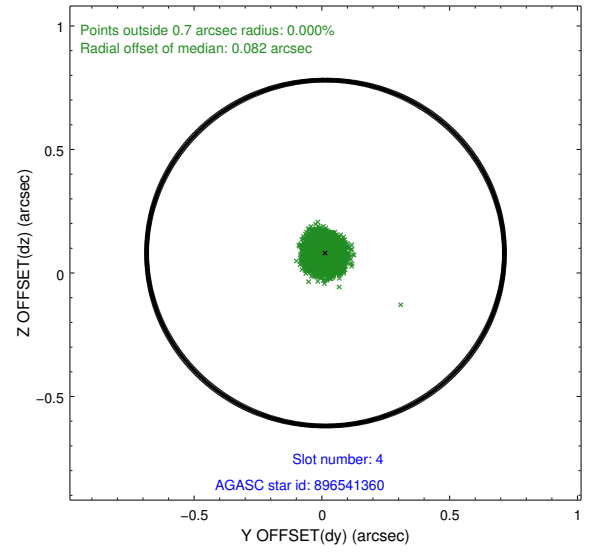
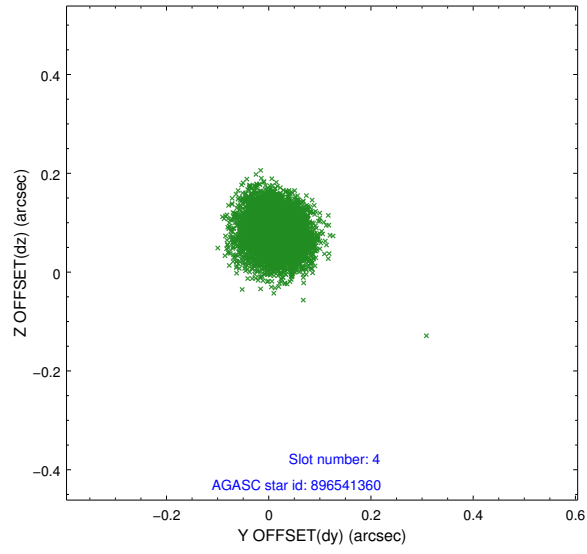
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	2850	-0.055	-0.017	0.007	0.012	0.000000	0.000000	-755.86	-835.05
1	FID	ACIS-I-4	7.19	2852	-0.030	0.026	0.007	0.012	0.000000	0.000000	2157.99	1071.02
2	FID	ACIS-I-6	7.27	2852	-0.014	0.054	0.009	0.015	0.000000	0.000000	404.76	1713.68
3	GUIDE	896537776	7.52	5703	0.020	-0.021	0.055	0.088	266.655684	-29.665673	1319.25	696.79
4	GUIDE	896541360	7.70	5703	0.014	0.081	0.053	0.085	266.684478	-29.453744	599.83	965.93
5	GUIDE	896537176	8.02	5703	-0.090	0.039	0.050	0.082	266.498272	-28.678259	-2251.50	1058.44
6	GUIDE	896540808	7.50	5702	-0.018	-0.009	0.044	0.072	265.985401	-29.308604	-423.84	-1042.98
7	GUIDE	896536320	8.97	5701	0.076	-0.093	0.067	0.111	266.369048	-29.307026	-147.63	128.93

2.4 Star Slots

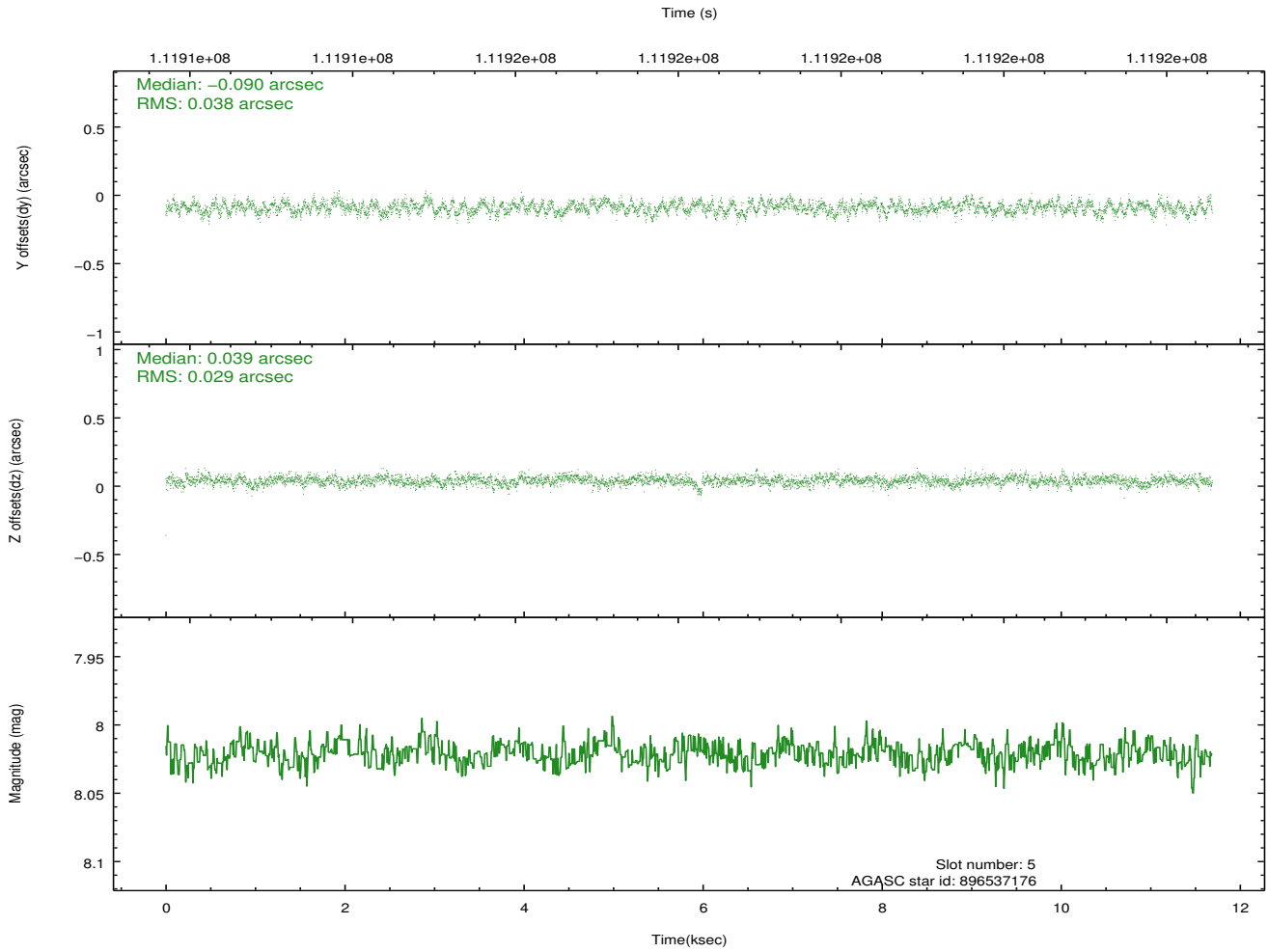
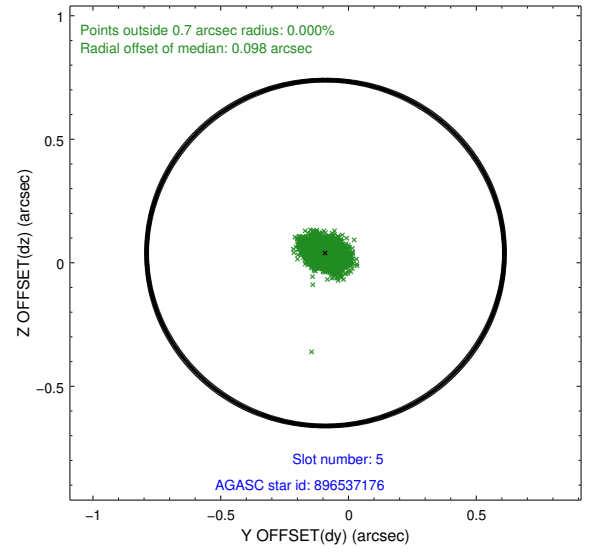
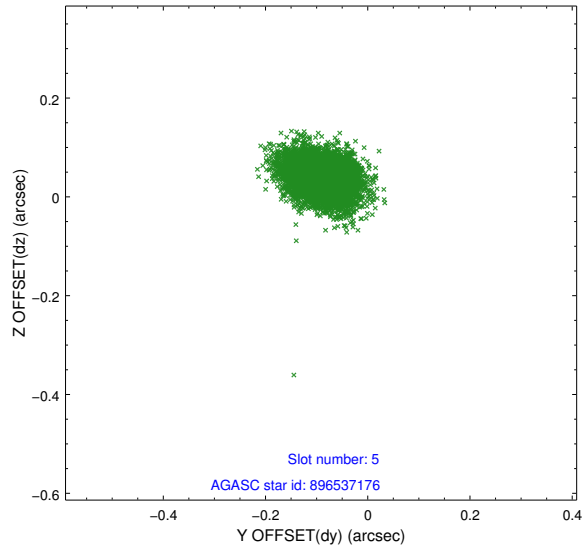
2.4.1 Slot 3



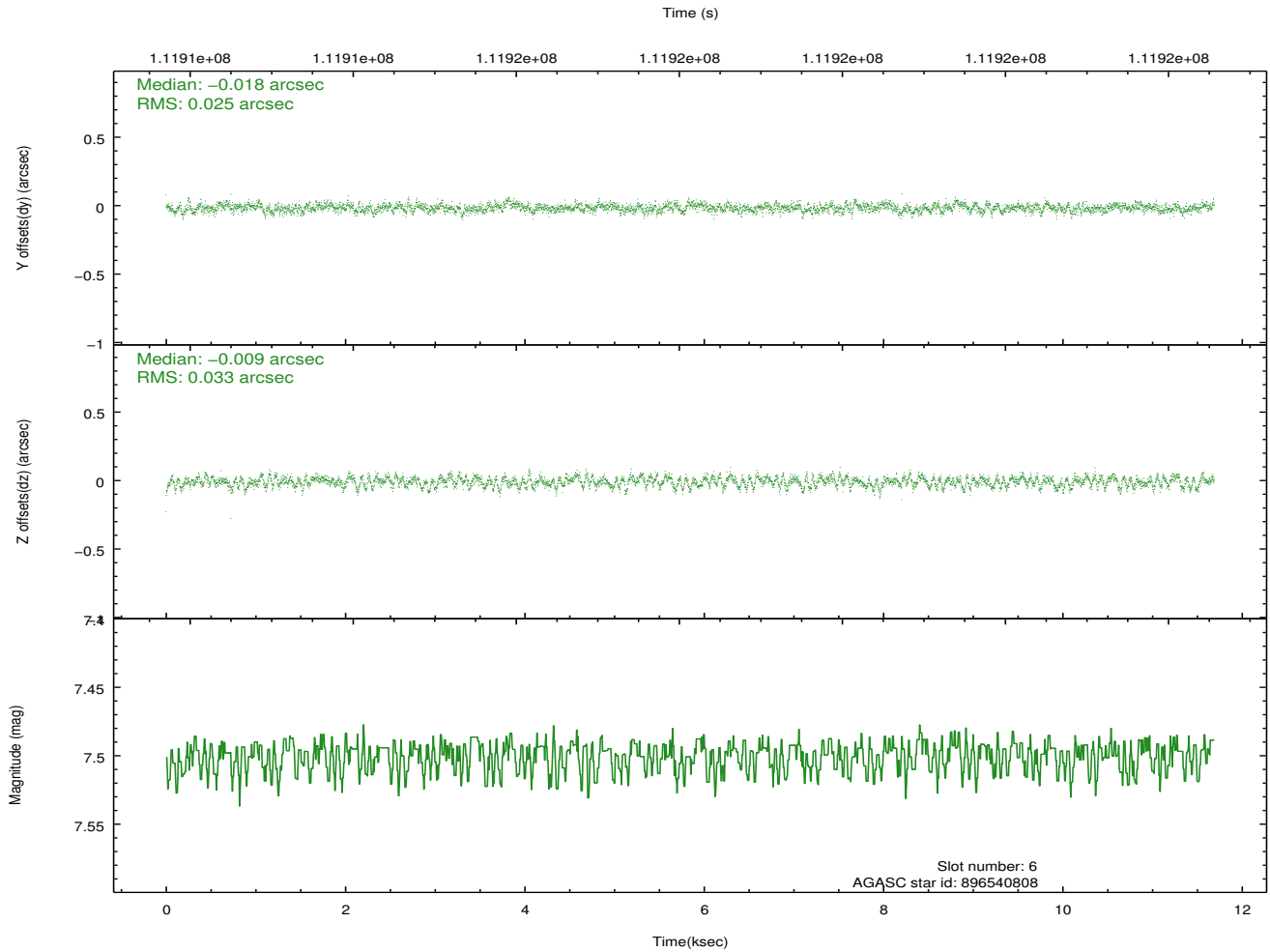
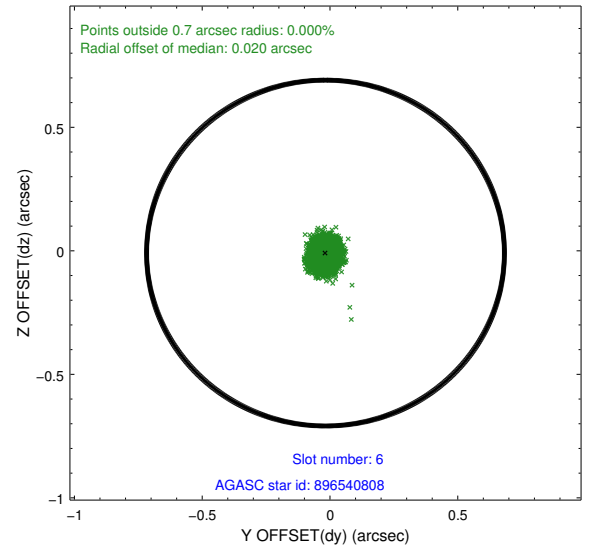
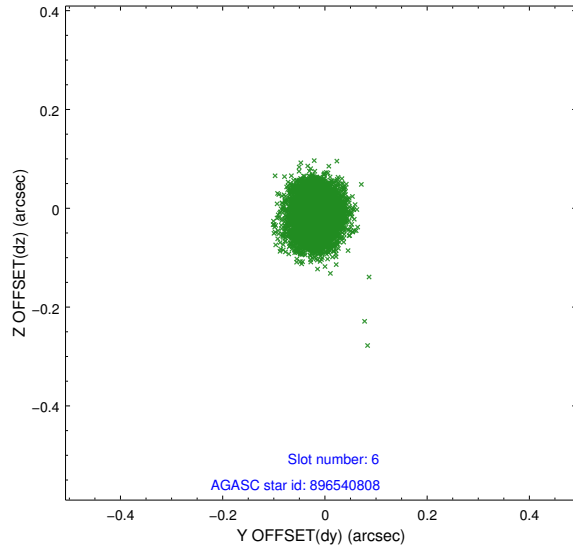
2.4.2 Slot 4



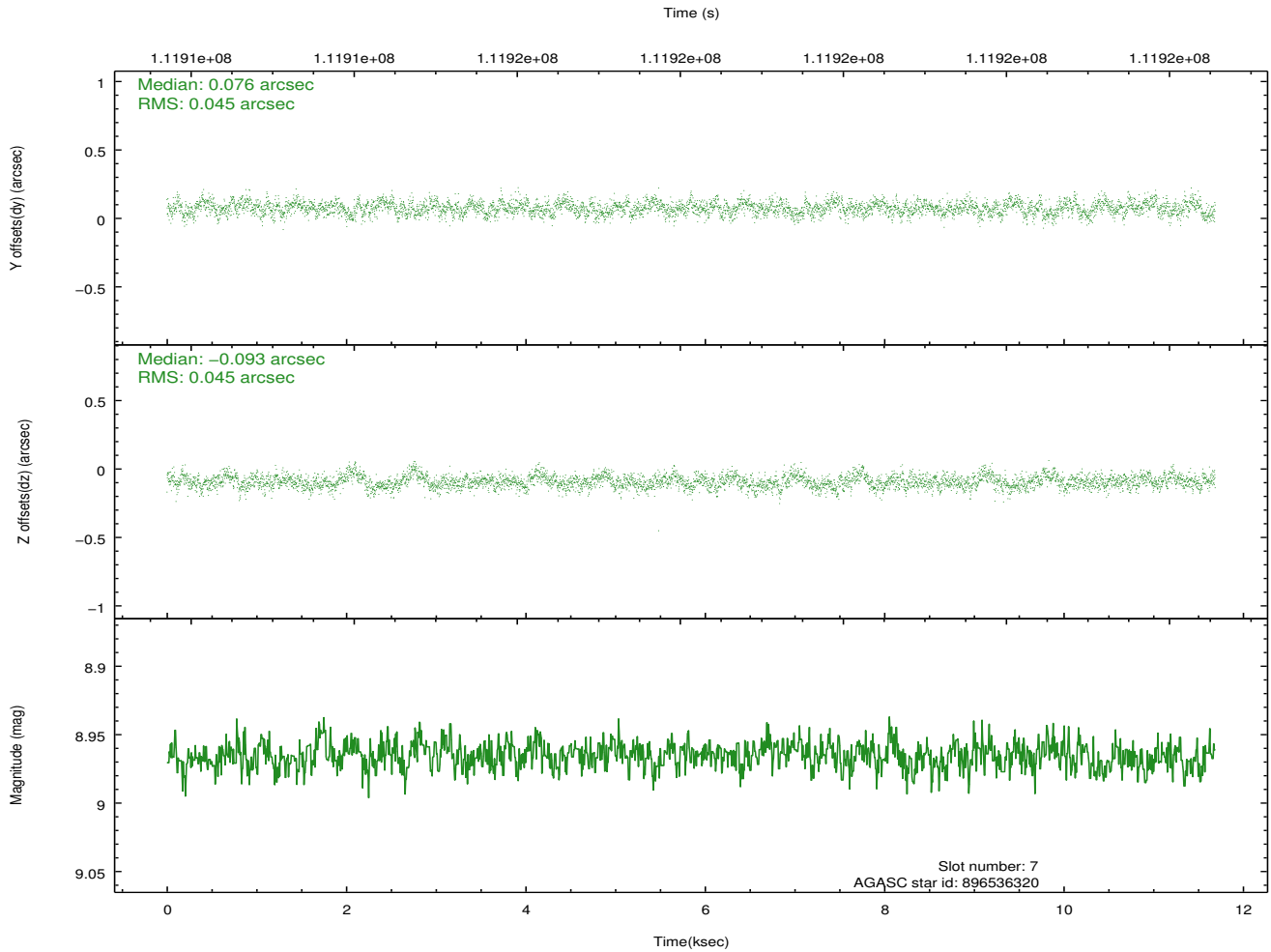
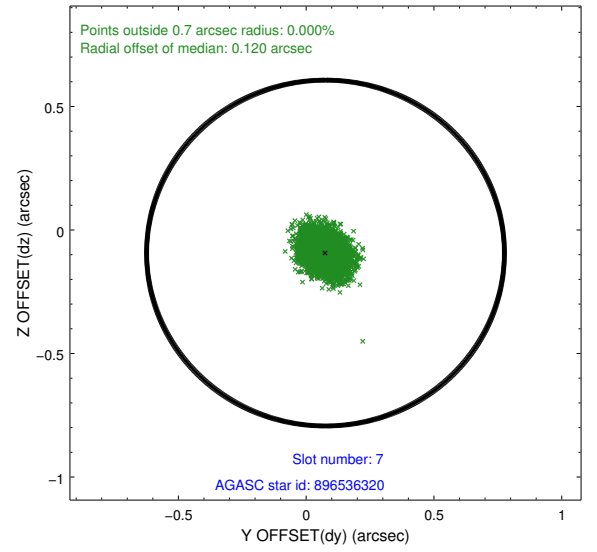
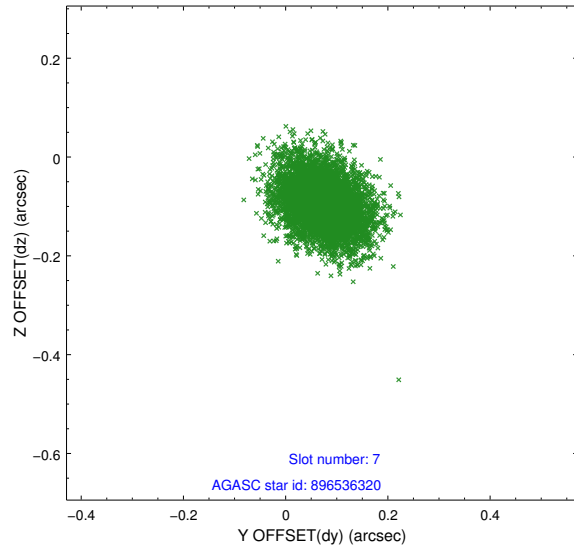
2.4.3 Slot 5



2.4.4 Slot 6

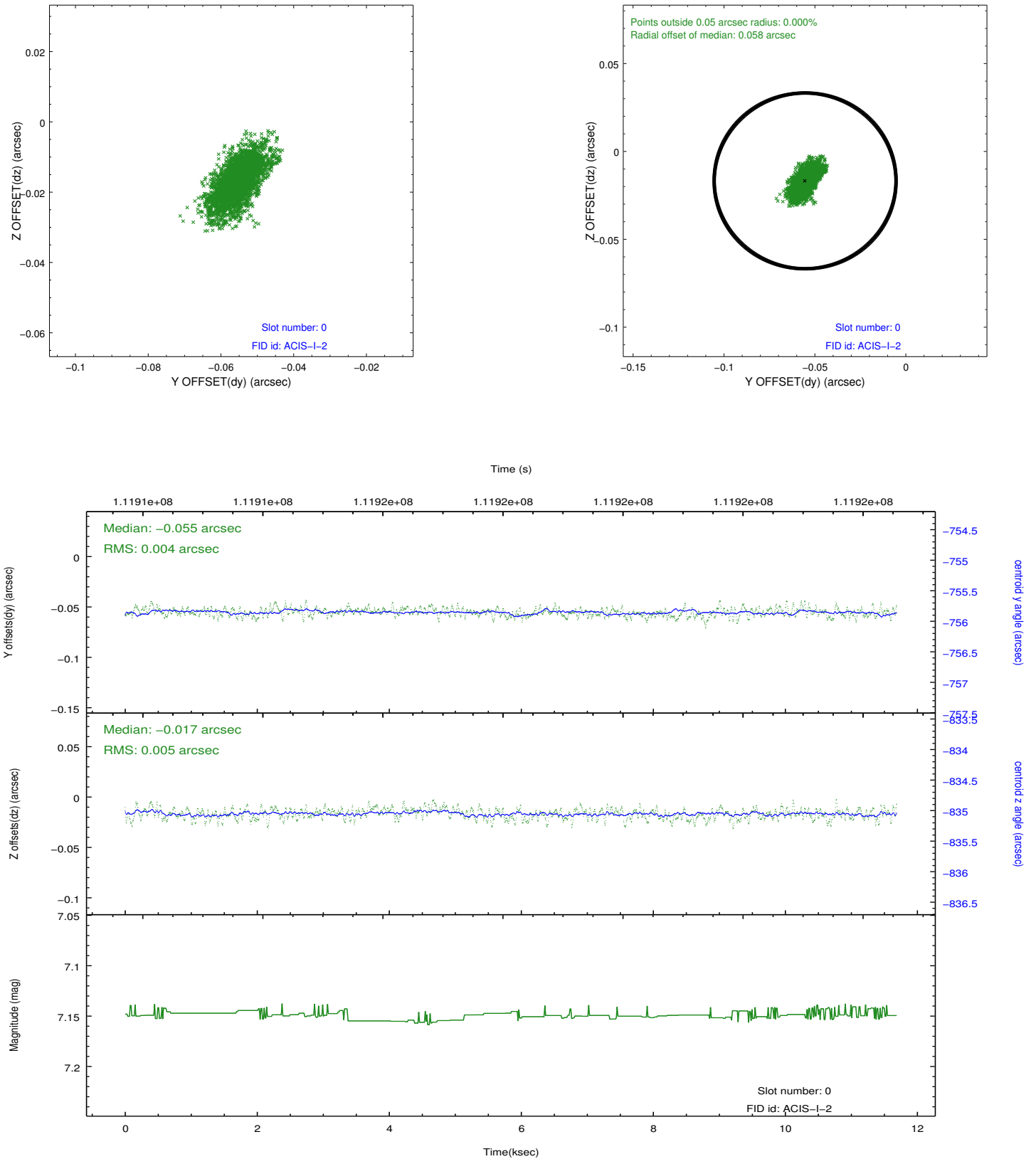


2.4.5 Slot 7

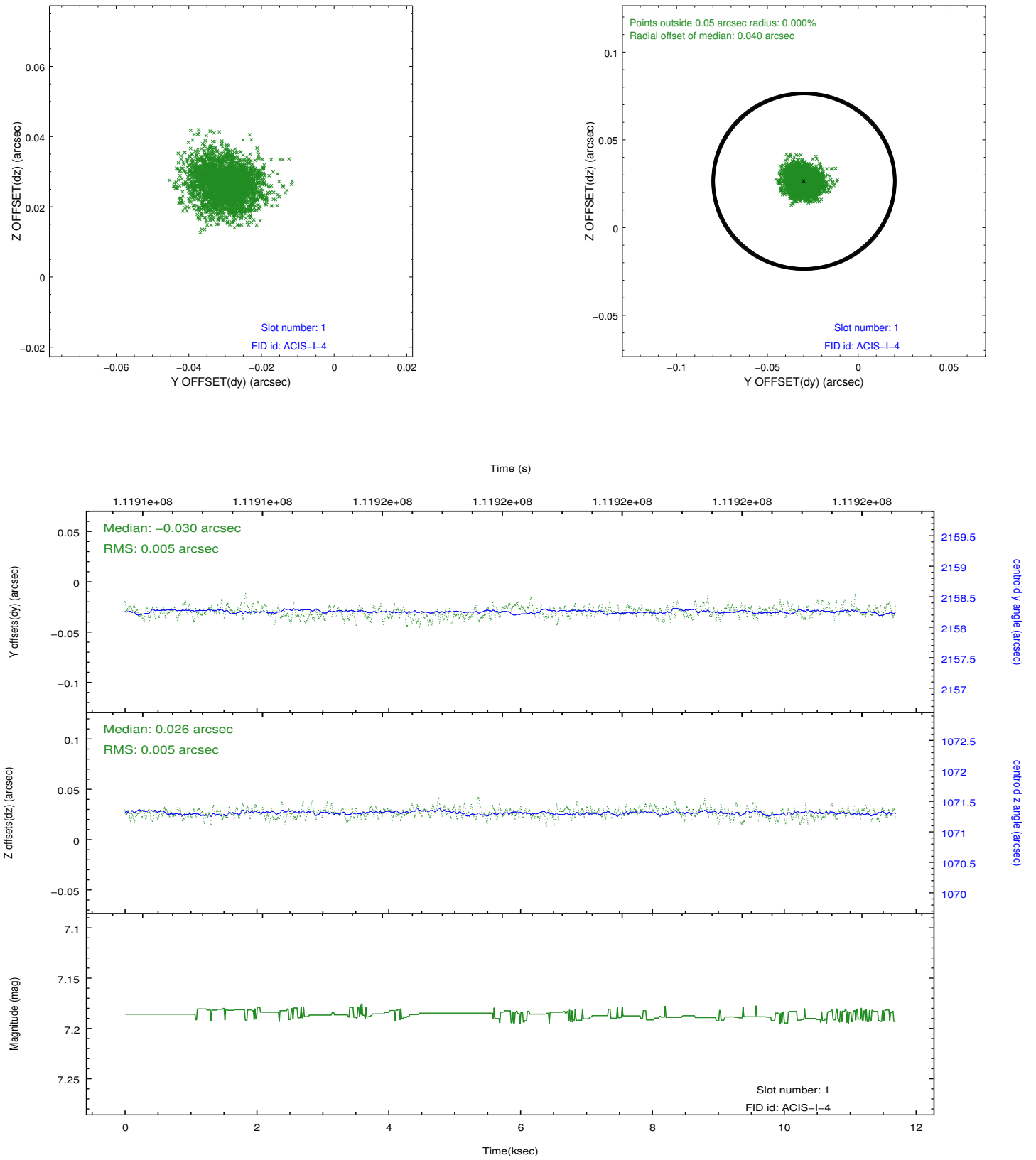


2.5 FID Slots

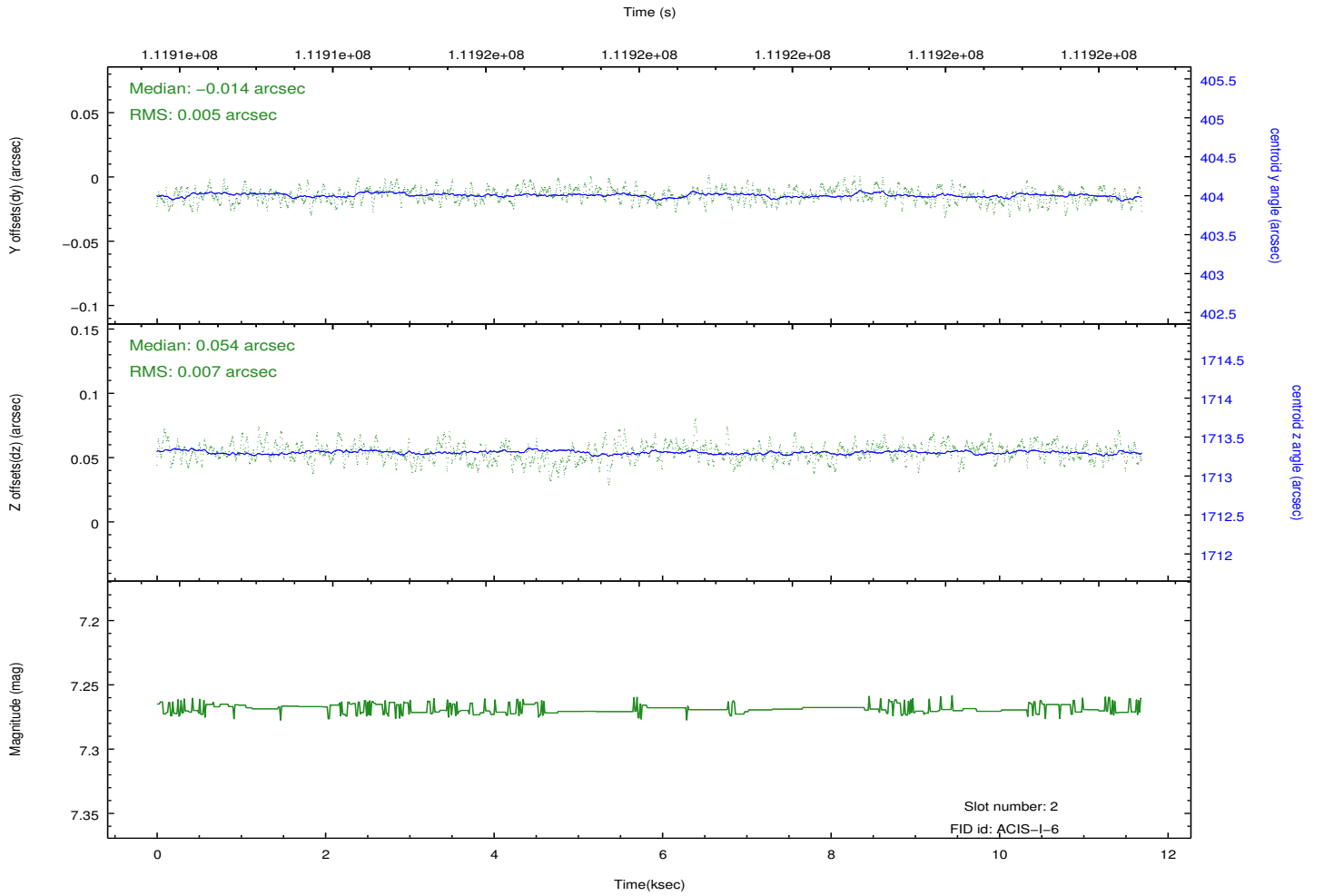
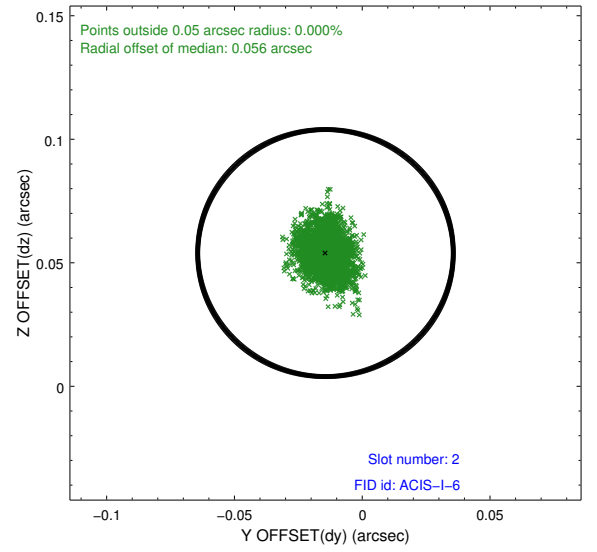
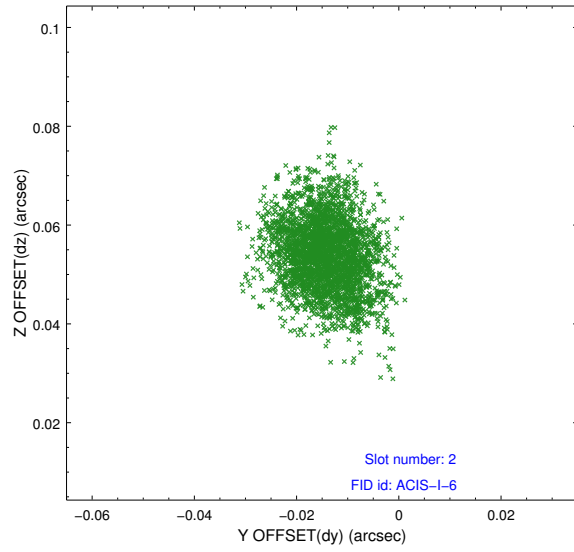
2.5.1 Slot 0



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)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.26

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:
(266.25093,-29.25933),(266.24668,-29.26024),(266.25110,-29.27600),(266.25535,-29.27509)