

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13519 - L2 Version 2
Chandra X-Ray Center

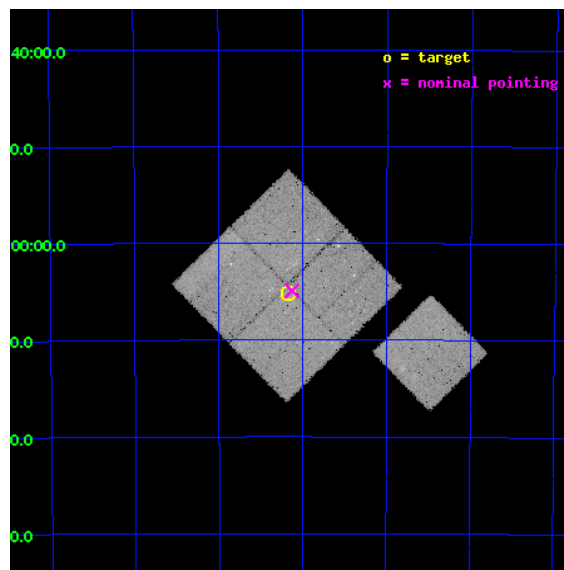
L2 Processing Date : Aug 31 2012

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1 Front

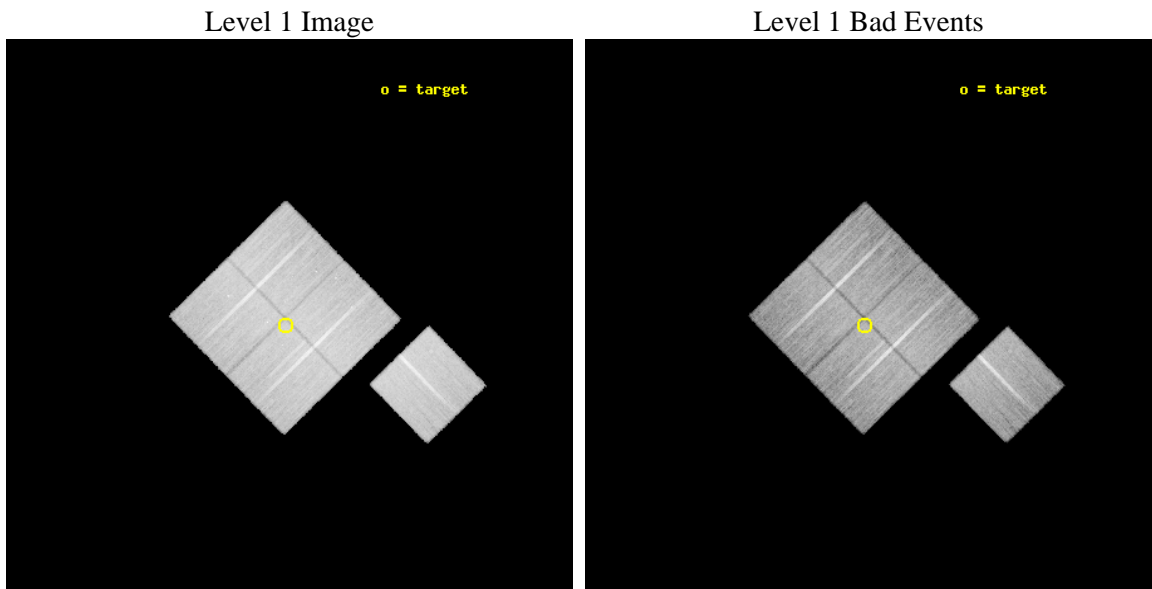
seq_num	900986	Sequence number
obs_id	13519	Observation id
title	Measuring the Temperature Structure of the A3395/A3391 Large Scale Filament in the Horologium Supercluster	Proposal title
observer	Dr. Scott Randall	Principal investigator
object	Abell 3395 Filament Center	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	96.544539	Observer's specified target RA [deg]
dec_targ	-54.085703	Observer's specified target Dec [deg]
ra_nom	96.532282639327	Nominal RA [deg]
dec_nom	-54.082024363619	Nominal Dec [deg]
roll_nom	135.60563443094	Nominal Roll [deg]
revision	2	Processing version of data
ontime	48080.389296472	Sum of GTIs [s]
livetime	47452.183614046	Livetime [s]
ontime0	48080.266126633	Sum of GTIs [s]
ontime1	48077.166266024	Sum of GTIs [s]
ontime2	48080.34823662	Sum of GTIs [s]
ontime3	48080.389296472	Sum of GTIs [s]
ontime6	48083.366106808	Sum of GTIs [s]
l2events	134681	Number of level 2 events



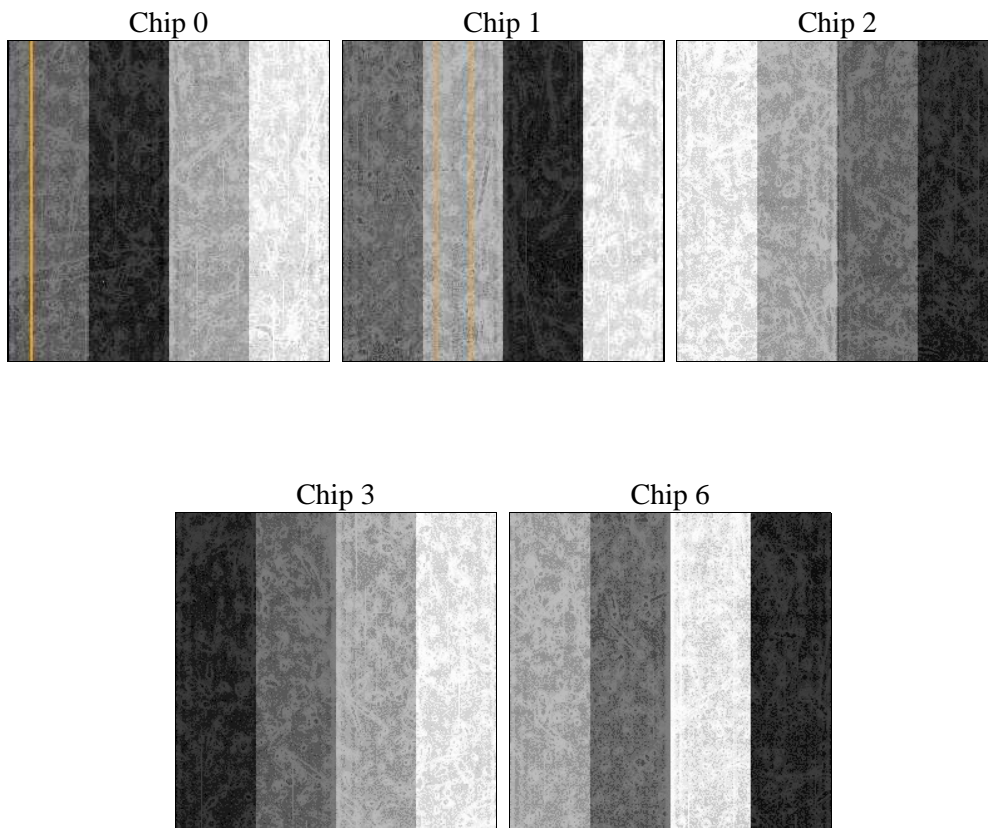
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	48000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	48080.389296472	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime0	48080.266126633	Sum of GTIs [s]
date	2012-08-31T18:57:26	Date and time of file creation	ontime1	48077.166266024	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	48080.34823662	Sum of GTIs [s]
			ontime3	48080.389296472	Sum of GTIs [s]
			ontime6	48083.366106808	Sum of GTIs [s]
			l1events	1195585	Number of level 1 events

2.1.4 Events

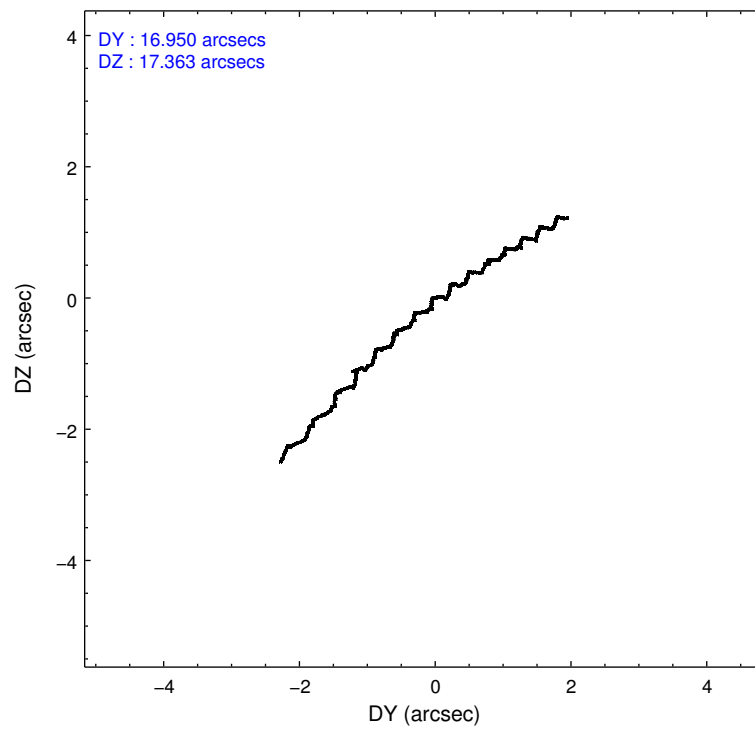
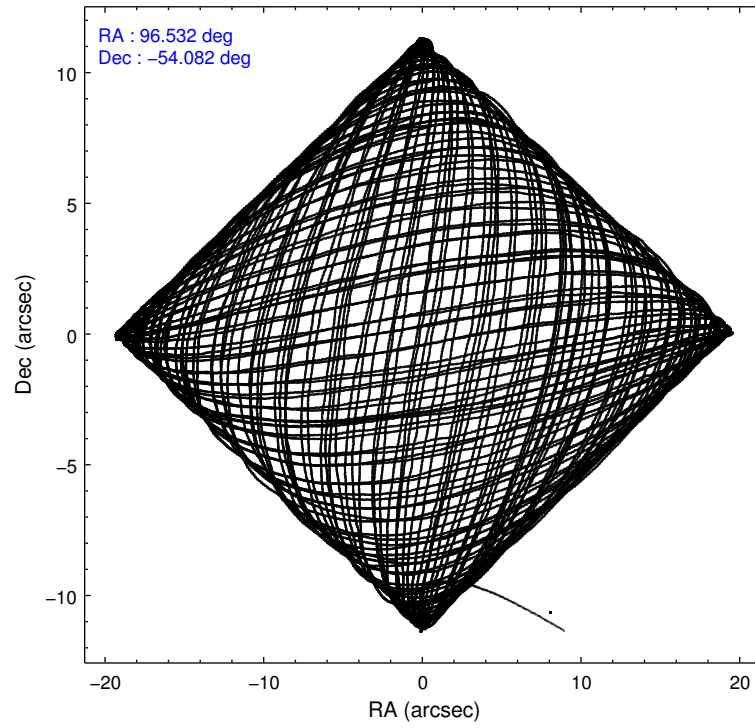
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	231245	231394	247287	241108	244551
rejected events	199766	196915	216421	210682	213509
rejected %	86%	85%	87%	87%	87%

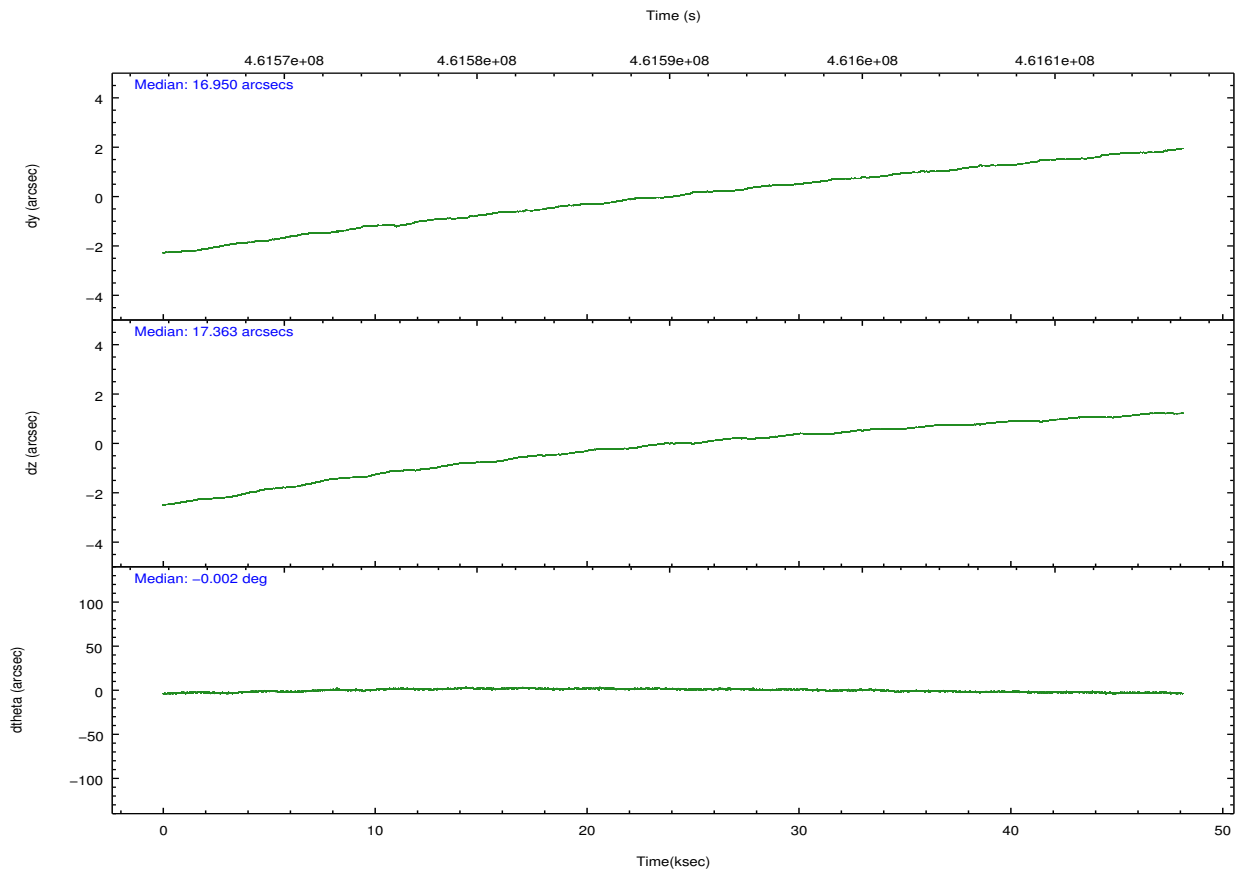
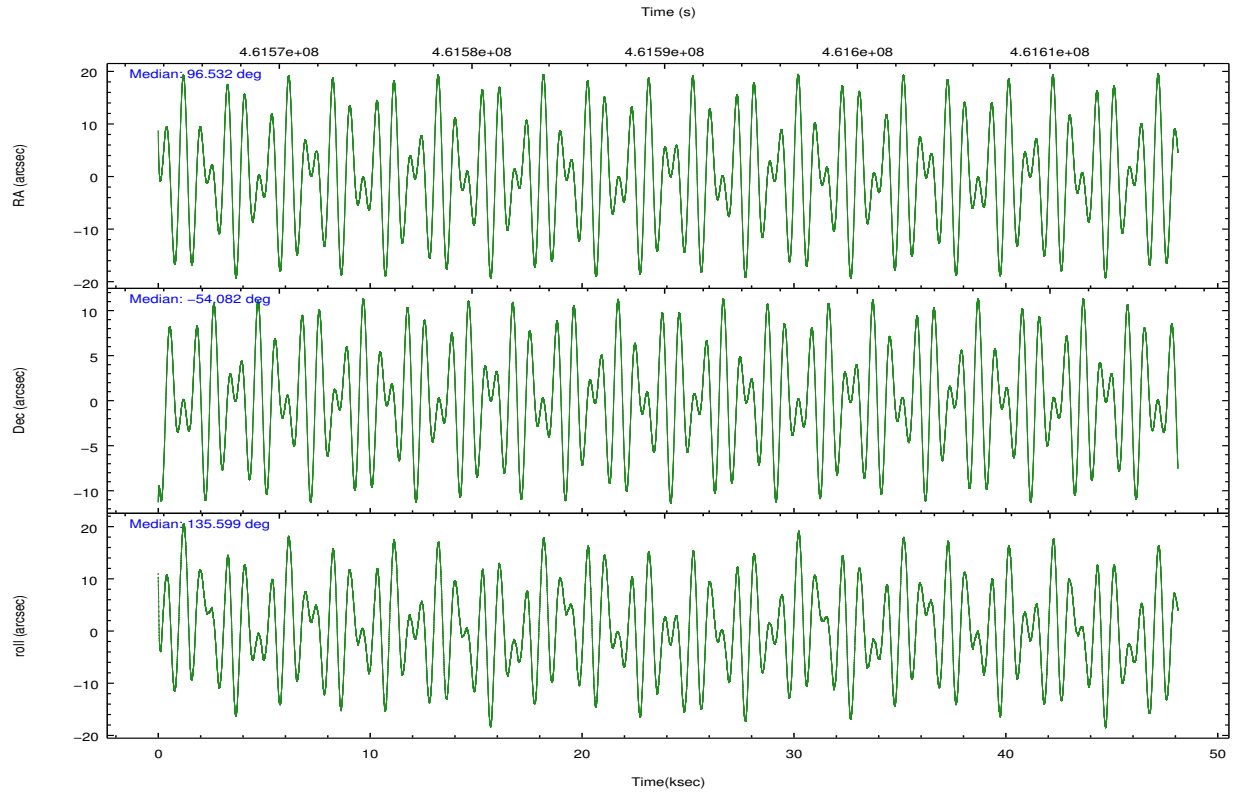
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11985	12990	12308	11928	11207
	5%	5%	4%	4%	4%
grade 1 events	134	138	165	140	161
	0%	0%	0%	0%	0%
grade 2 events	7491	7978	7267	6594	6938
	3%	3%	2%	2%	2%
grade 3 events	3077	3206	2839	2976	3095
	1%	1%	1%	1%	1%
grade 4 events	2852	3387	2937	2993	3073
	1%	1%	1%	1%	1%
grade 5 events	11512	11820	10846	12738	12349
	4%	5%	4%	5%	5%
grade 6 events	6077	6926	5523	5938	6733
	2%	2%	2%	2%	2%
grade 7 events	188117	184949	205402	197801	200995
	81%	79%	83%	82%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	96.577735	96.53228263932746	CCD I2 on	Y	Y
[deg] Pointing Dec	-54.088743	-54.08202436361926	CCD I3 on	Y	Y
[deg] Pointing Roll	135.433762	135.6056344309373	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	461566232.184000	461564842.19401	CCD S5 on	N	N
Observation start date	2012-08-17T04:49:25	2012-08-17T04:27:22	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	461614232.184000	461615035.9342	On-chip summing requested	N	N
Observation end date	2012-08-17T18:09:25	2012-08-17T18:23:55	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



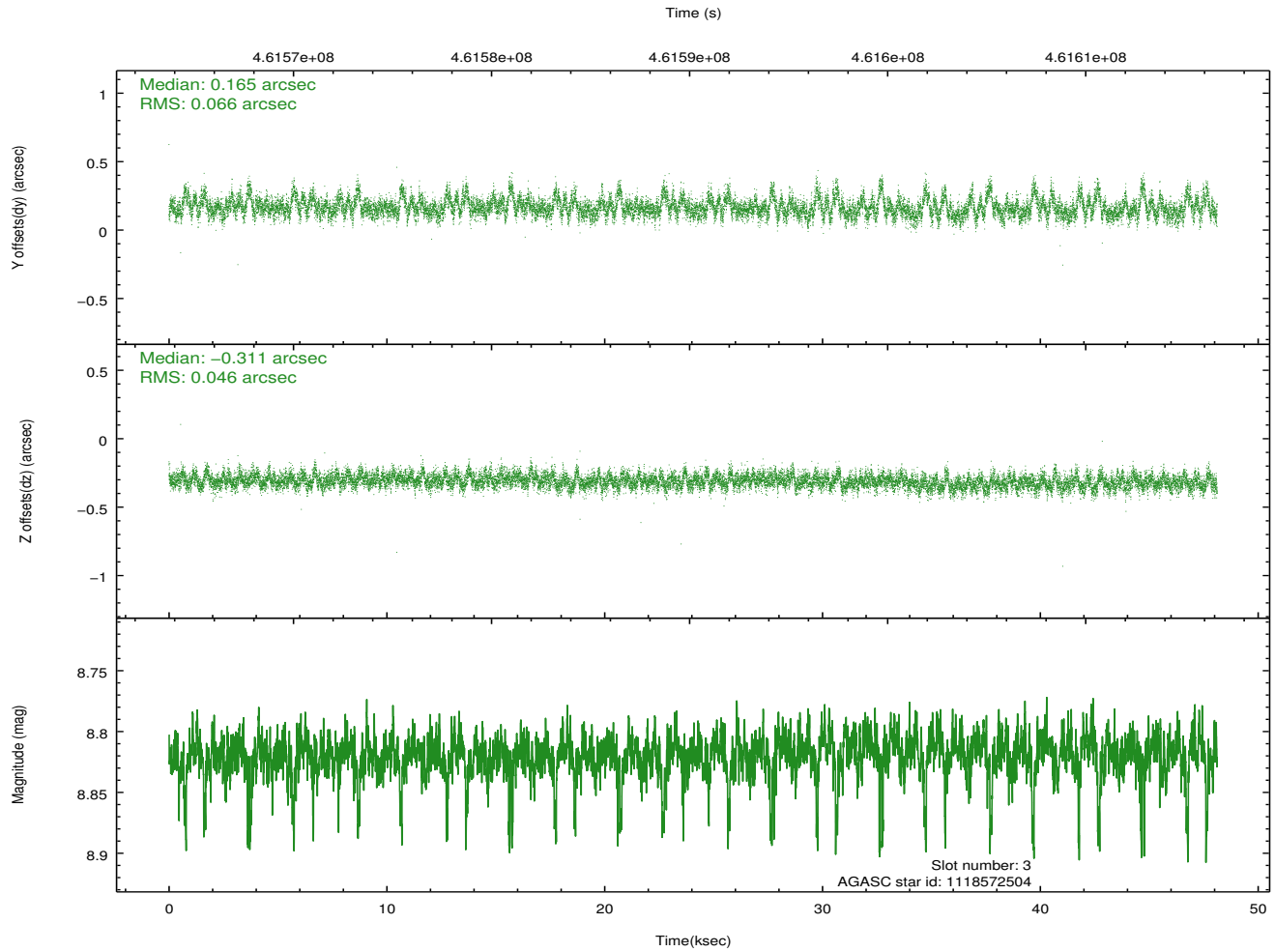
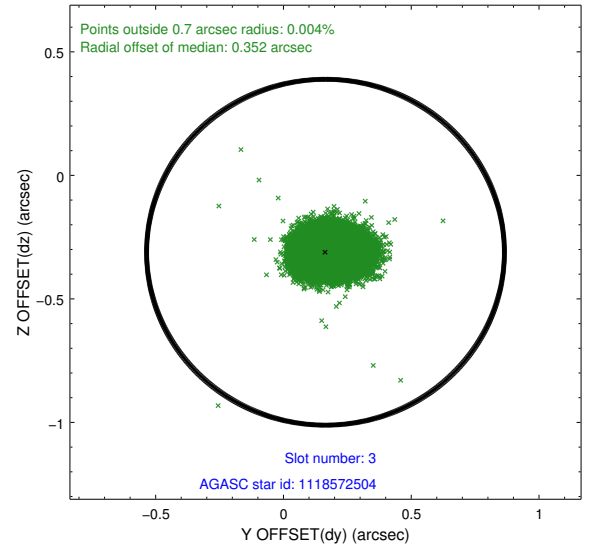
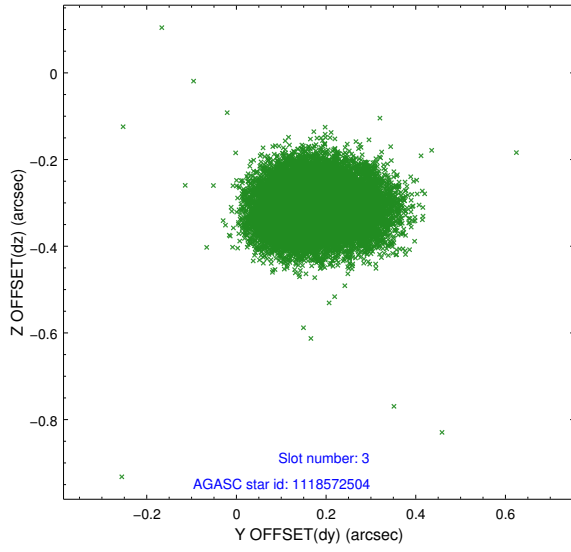


Slot Statistics

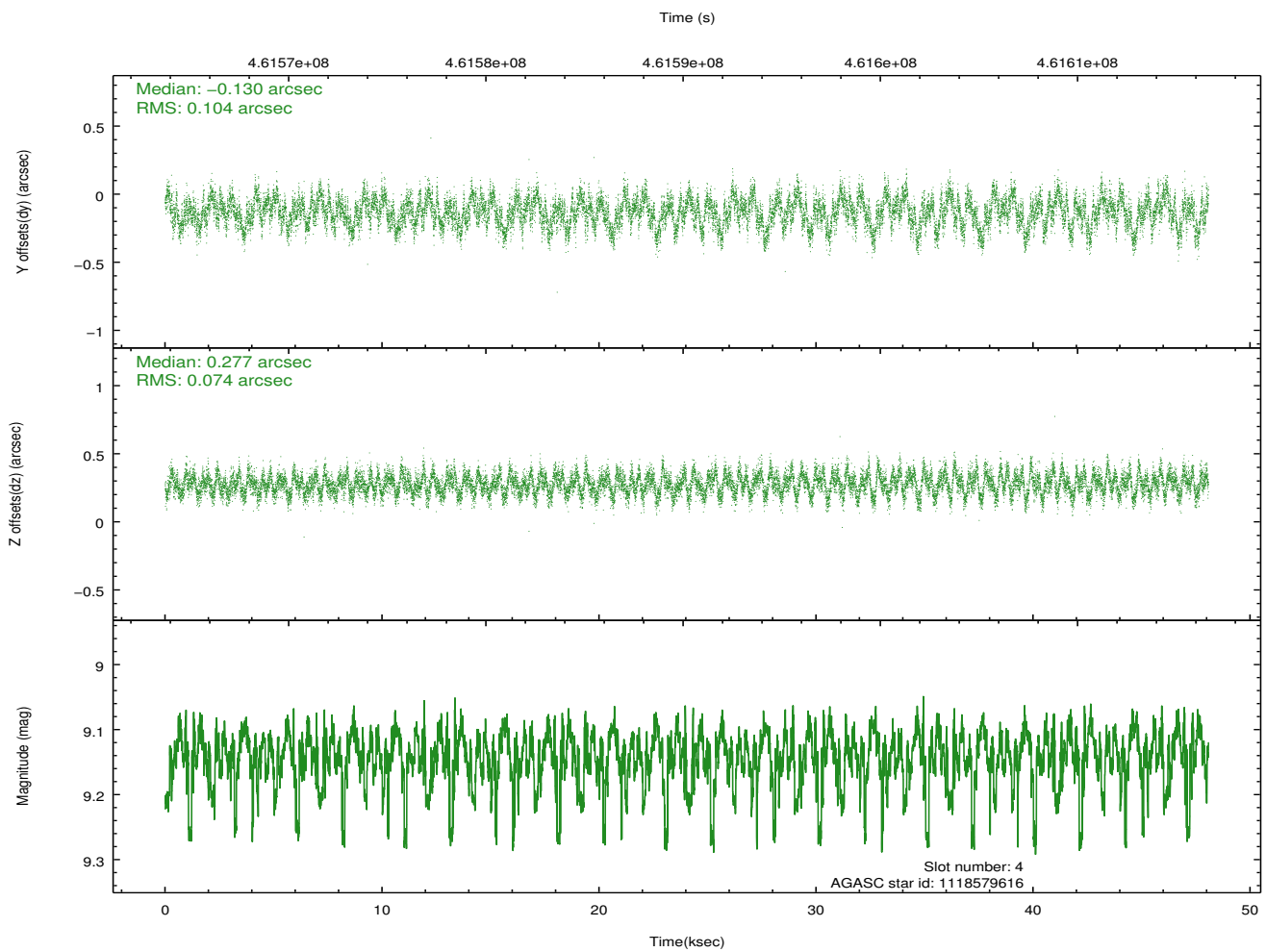
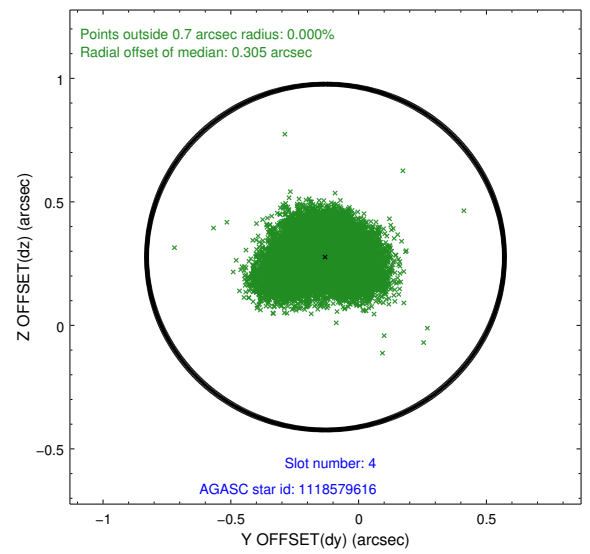
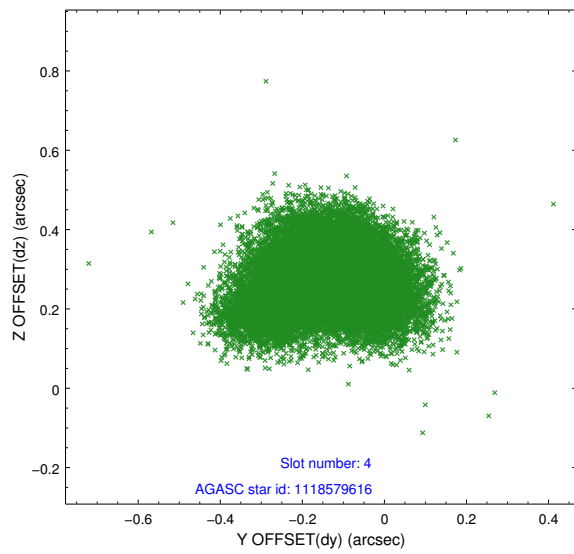
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.04	11738	0.060	-0.009	0.028	0.036	0.000000	0.000000	922.55	-840.78
1	FID	ACIS-I-5	7.04	11738	-0.244	0.058	0.023	0.034	0.000000	0.000000	-1825.88	1056.75
2	FID	ACIS-I-6	7.05	11737	0.091	0.019	0.032	0.043	0.000000	0.000000	388.12	1701.22
3	GUIDE	1118572504	8.82	23430	0.165	-0.311	0.083	0.144	95.500559	-53.969973	1913.15	1308.31
4	GUIDE	1118579616	9.14	23318	-0.130	0.277	0.135	0.221	96.071921	-53.575944	2064.14	-553.30
5	GUIDE	1118709640	8.37	23467	-0.076	0.154	0.088	0.142	96.832931	-53.566231	931.43	-1722.27
6	GUIDE	1119097968	9.80	23397	-0.032	-0.118	0.172	0.277	96.398409	-54.760570	-1431.29	1983.85
7	GUIDE	1118709864	8.77	23462	0.072	-0.013	0.102	0.163	96.723880	-53.581969	1057.95	-1518.50

2.4 Star Slots

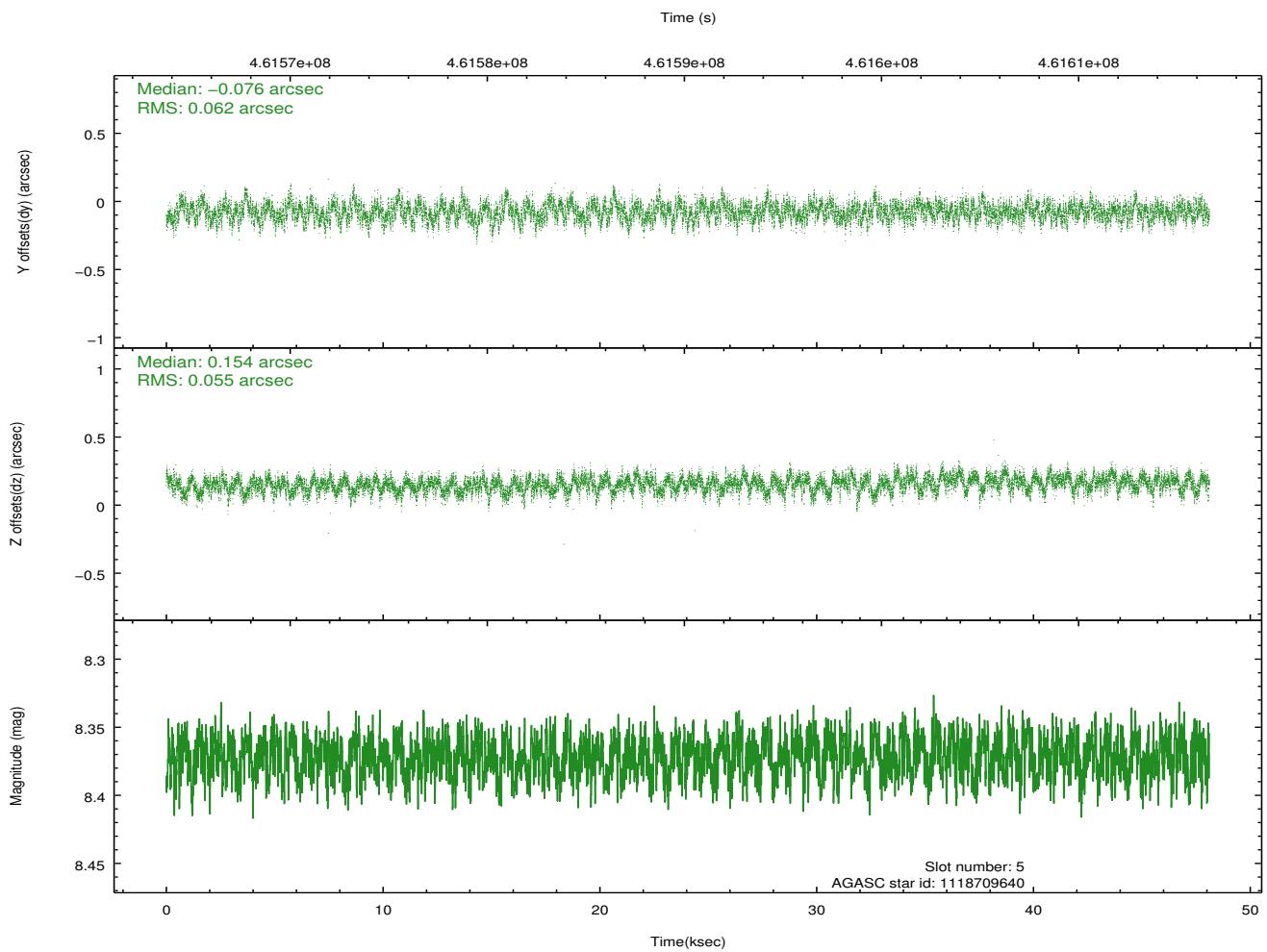
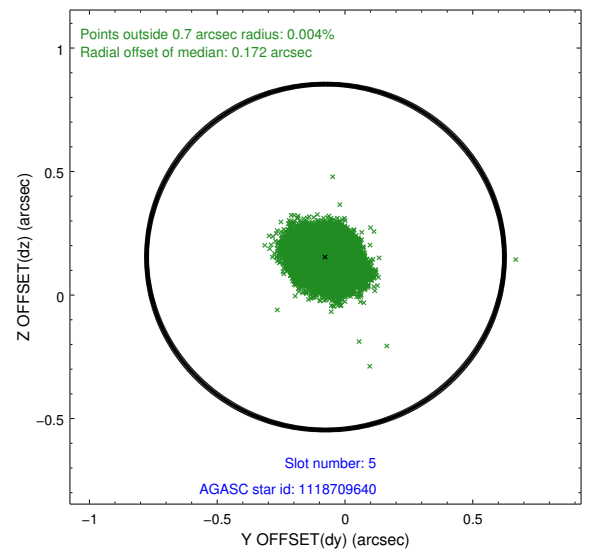
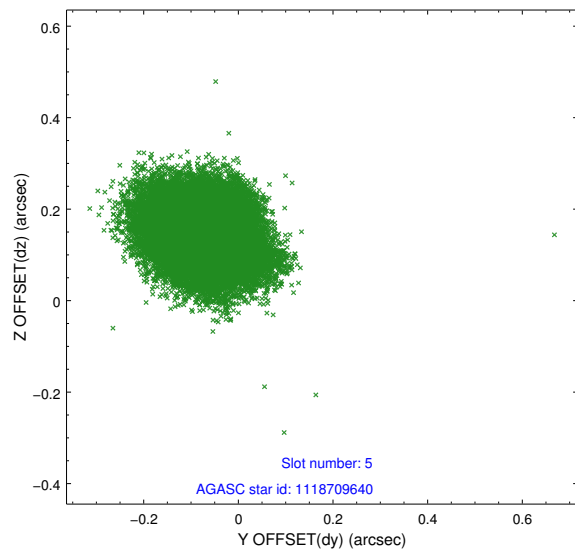
2.4.1 Slot 3



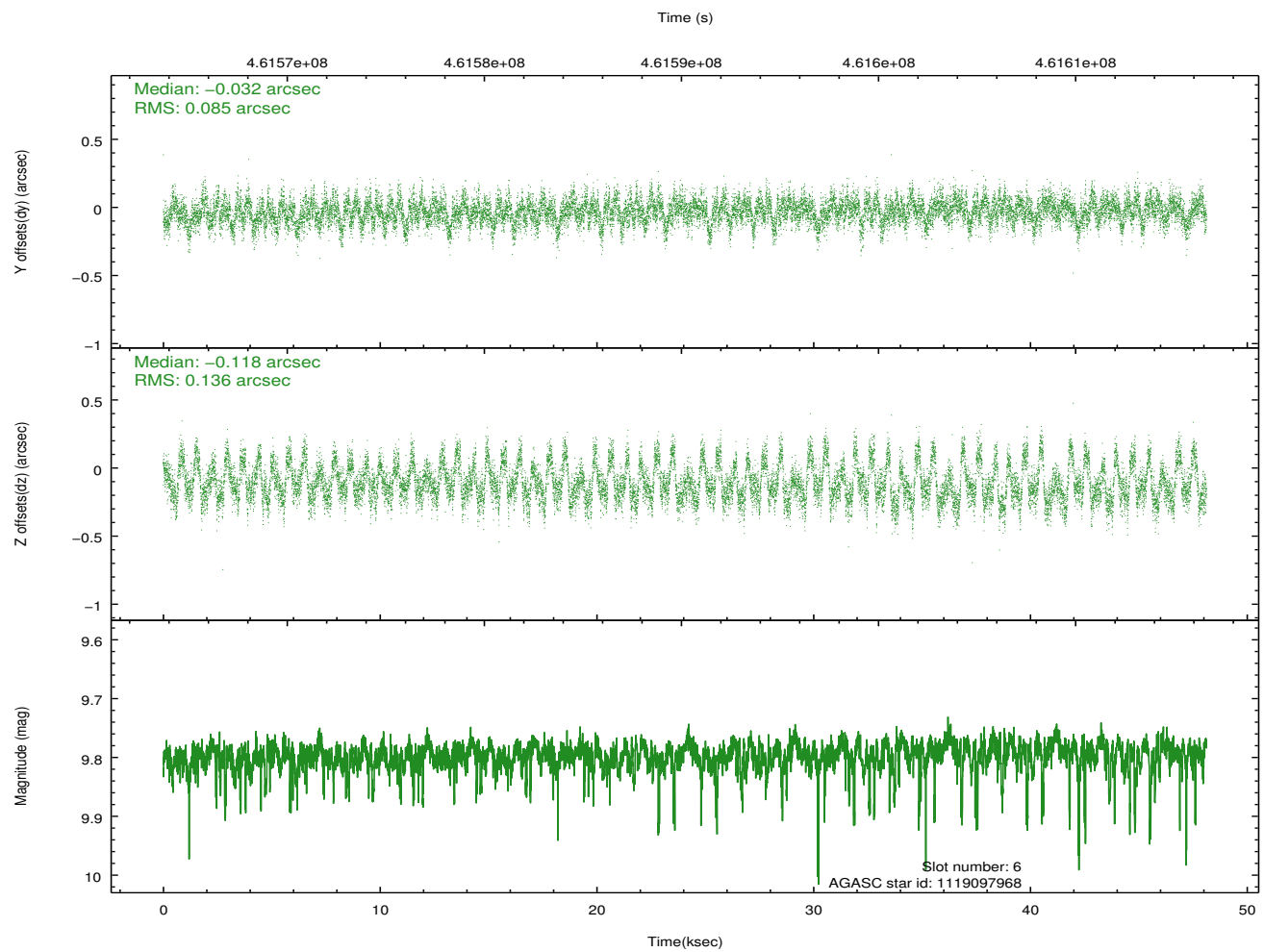
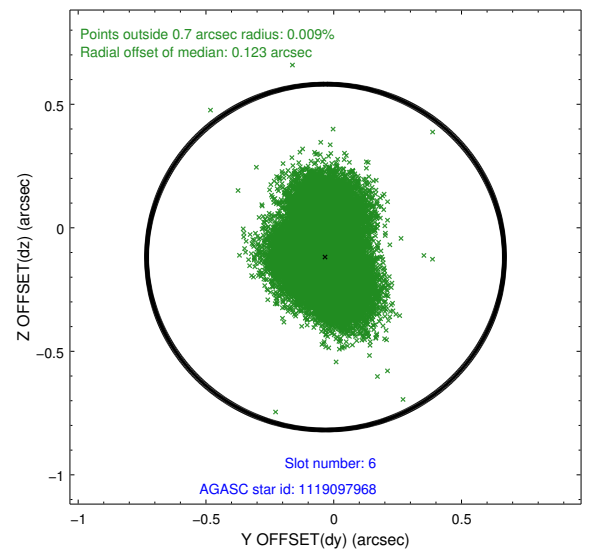
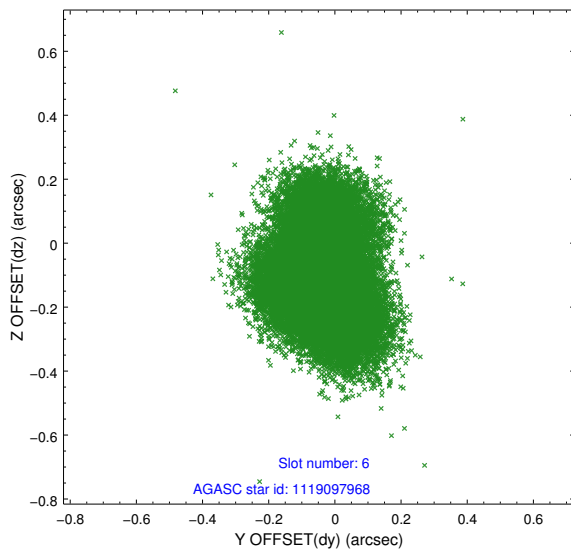
2.4.2 Slot 4



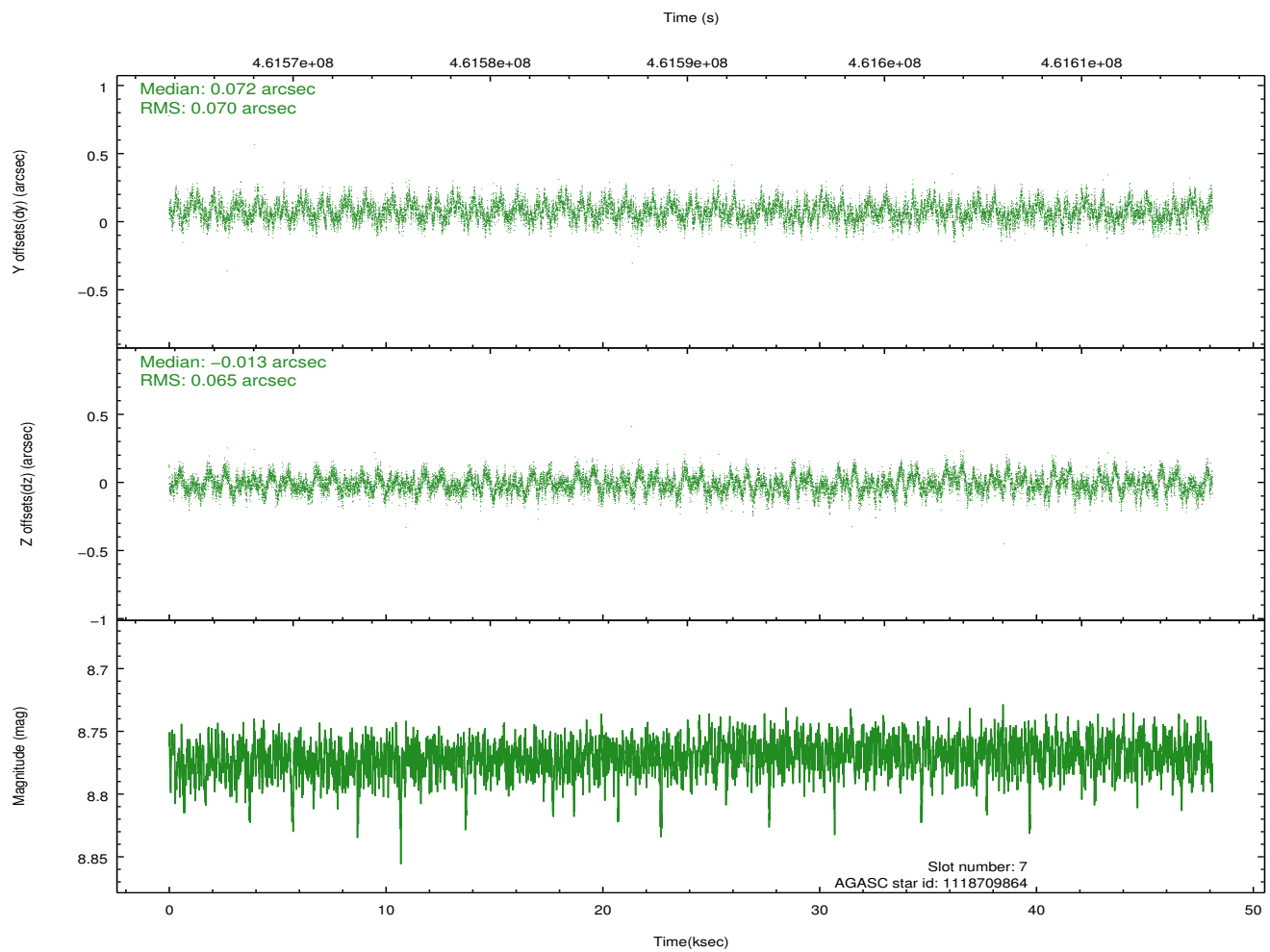
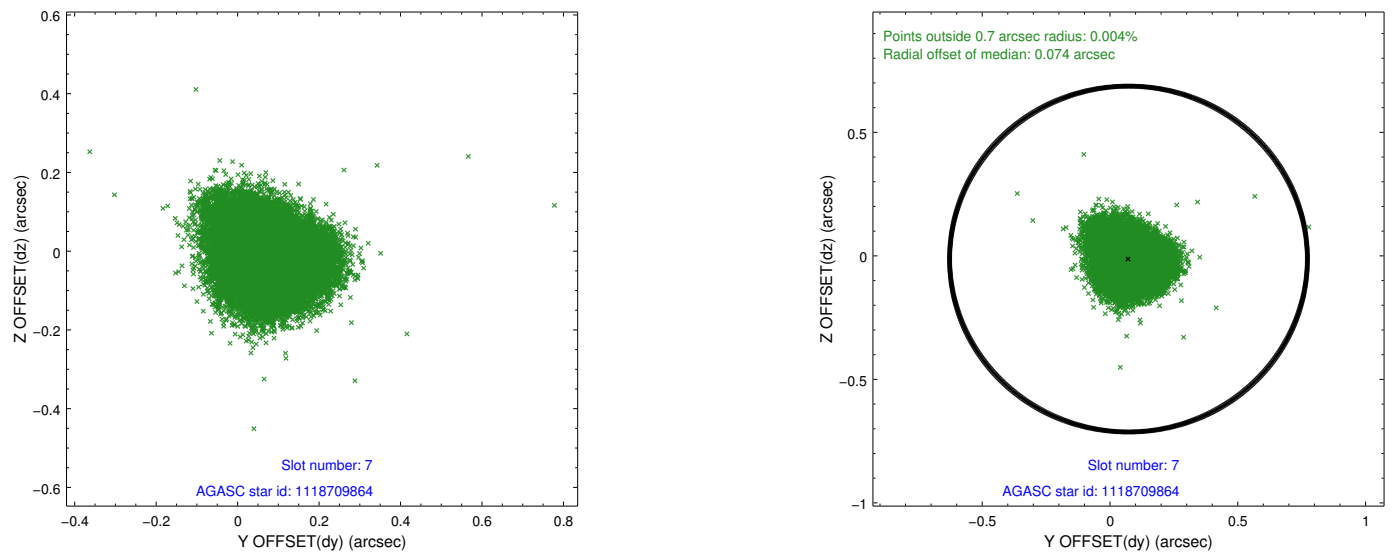
2.4.3 Slot 5



2.4.4 Slot 6

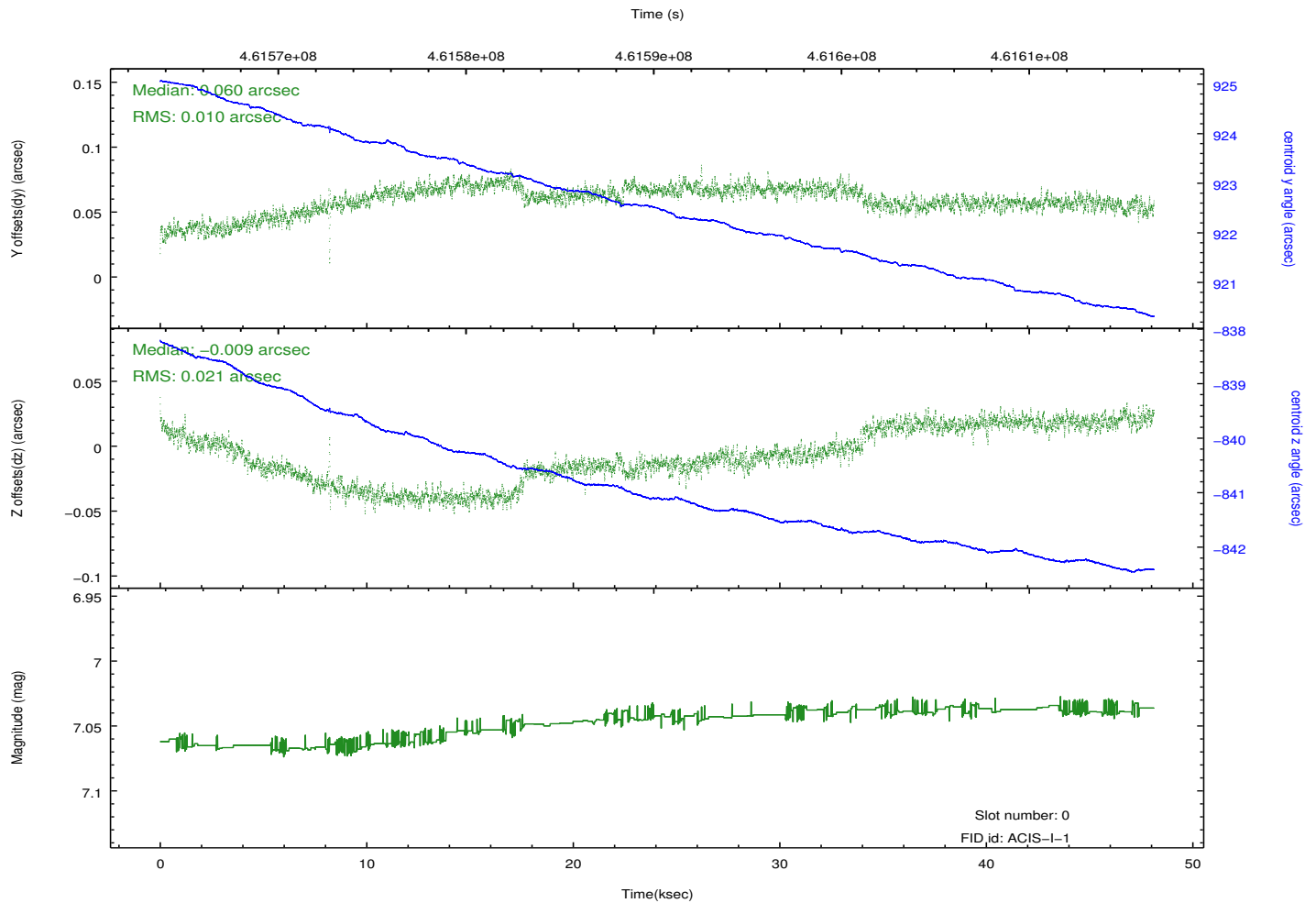
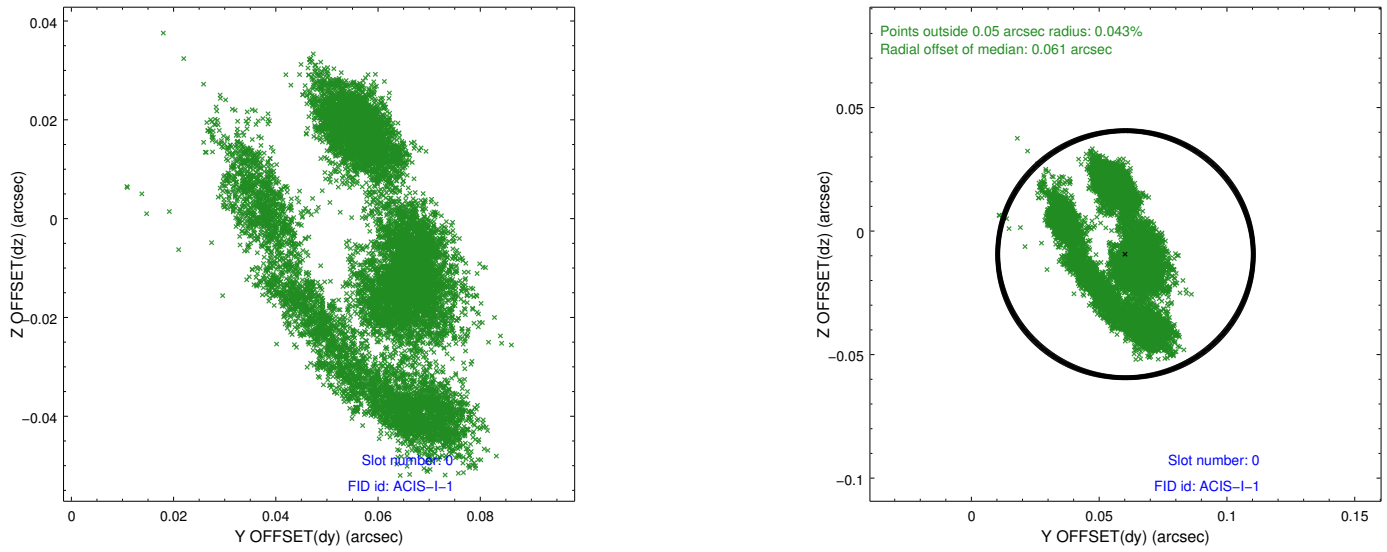


2.4.5 Slot 7

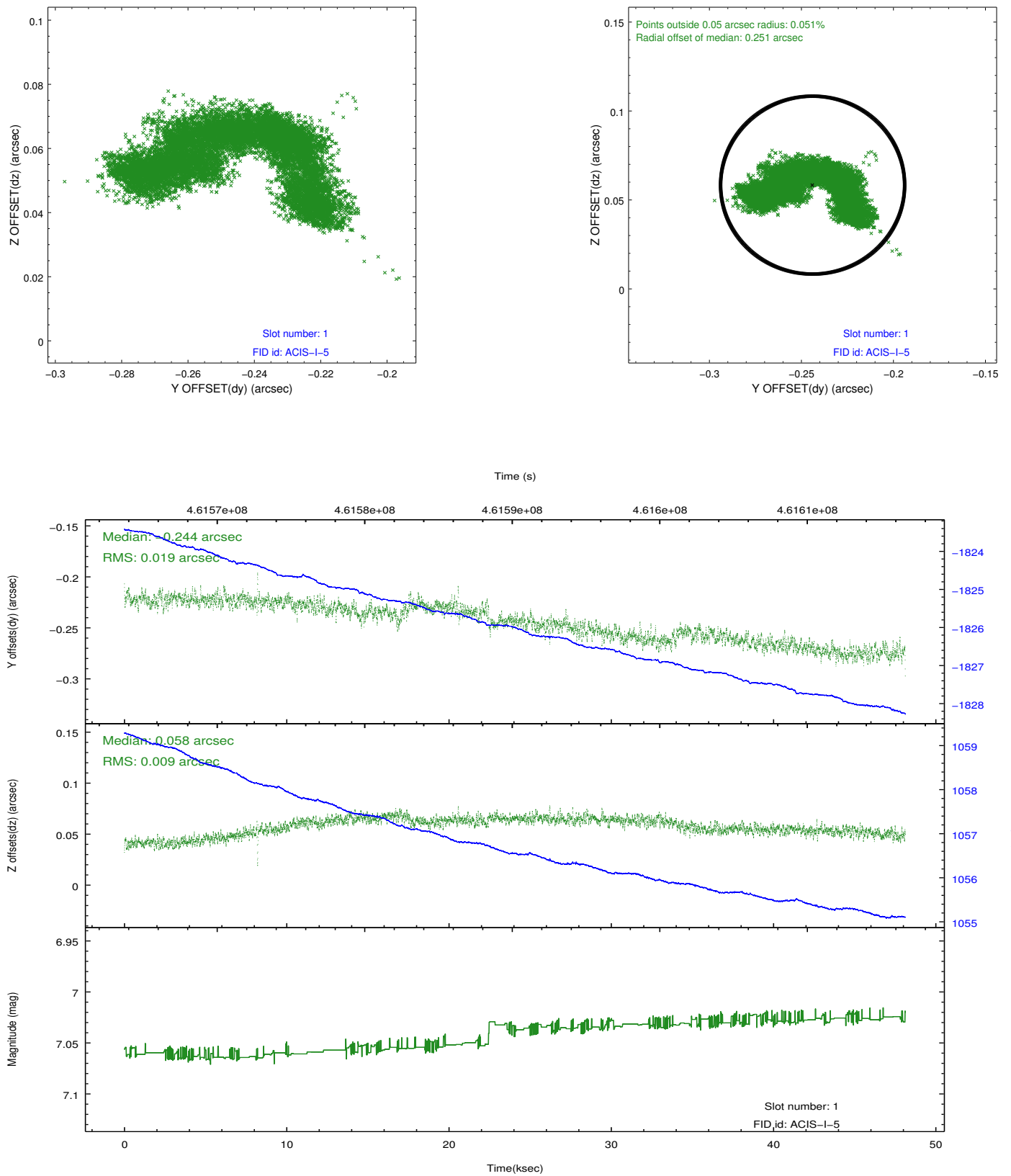


2.5 FID Slots

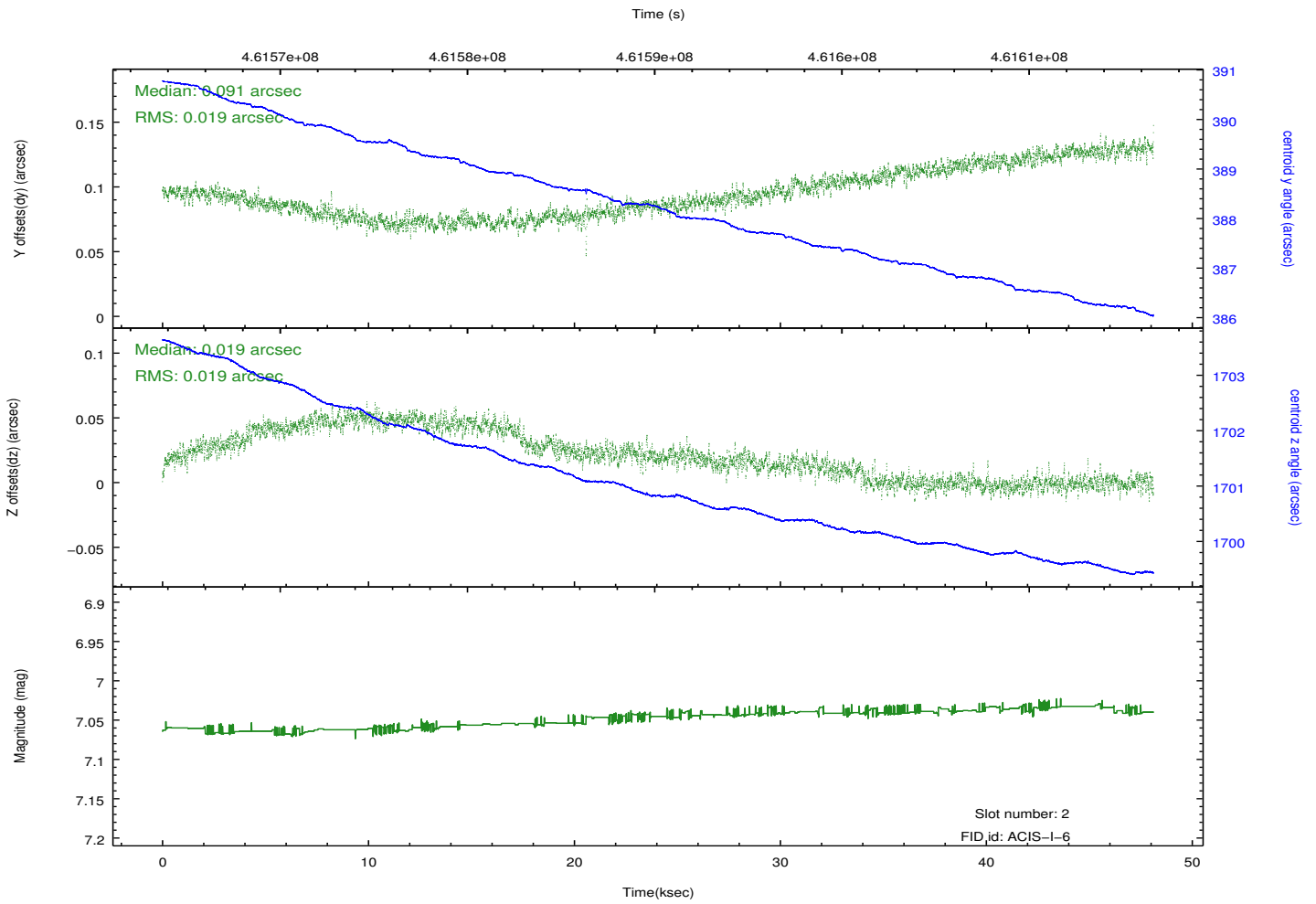
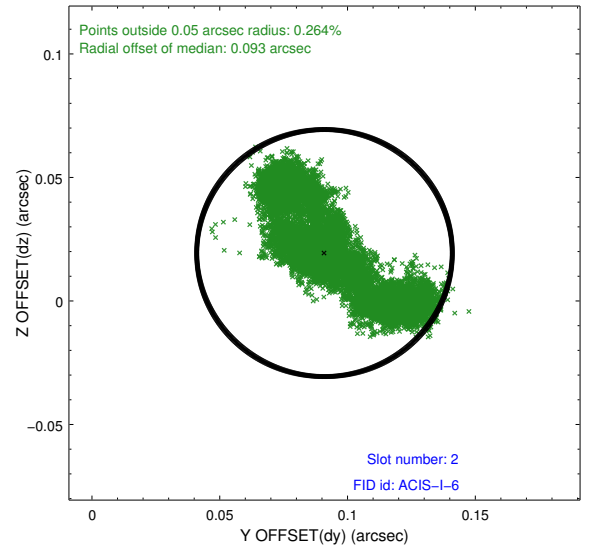
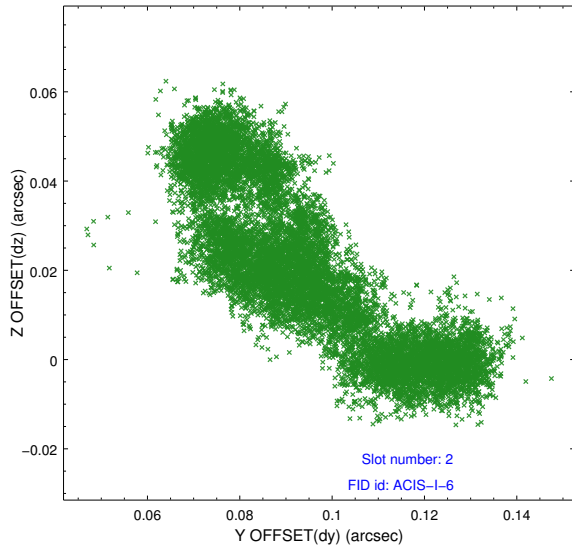
2.5.1 Slot 0



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)	2012.09.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.080389296472

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:
(96.76534, -54.14283), (96.77618, -54.13626), (96.74899, -54.12077), (96.75115, -54.13475)