

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13484 - L2 Version 2
Chandra X-Ray Center

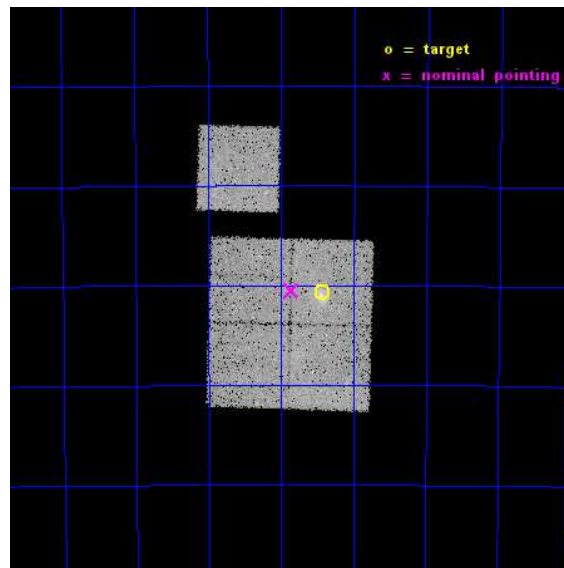
L2 Processing Date : Nov 29 2014

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1 Front

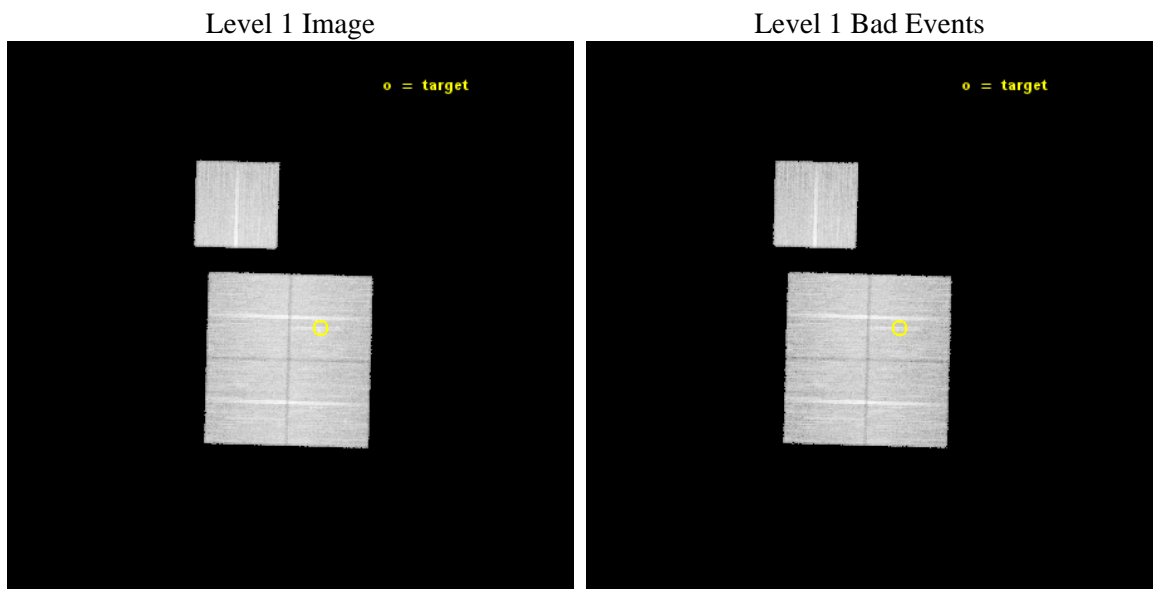
seq_num	801125	Sequence number
obs_id	13484	Observation id
title	Cosmology and Cluster Evolution from the 80 Most Massive Clusters in 2000 deg^2 from the South Pole Telescope Survey	Proposal title
observer	Dr. Bradford Benson	Principal investigator
object	SPT-CLJ0243-5930	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	40.8575	Observer's specified target RA [deg]
dec_targ	-59.512111	Observer's specified target Dec [deg]
ra_nom	40.964522526538	Nominal RA [deg]
dec_nom	-59.508390091325	Nominal Dec [deg]
roll_nom	1.6009037303353	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28479.659228683	Sum of GTIs [s]
livetime	28107.55151444	Livetime [s]
ontime0	28482.800219059	Sum of GTIs [s]
ontime1	28479.659228683	Sum of GTIs [s]
ontime2	28482.800219059	Sum of GTIs [s]
ontime3	28479.659228683	Sum of GTIs [s]
ontime6	28482.800219059	Sum of GTIs [s]
l2events	77872	Number of level 2 events



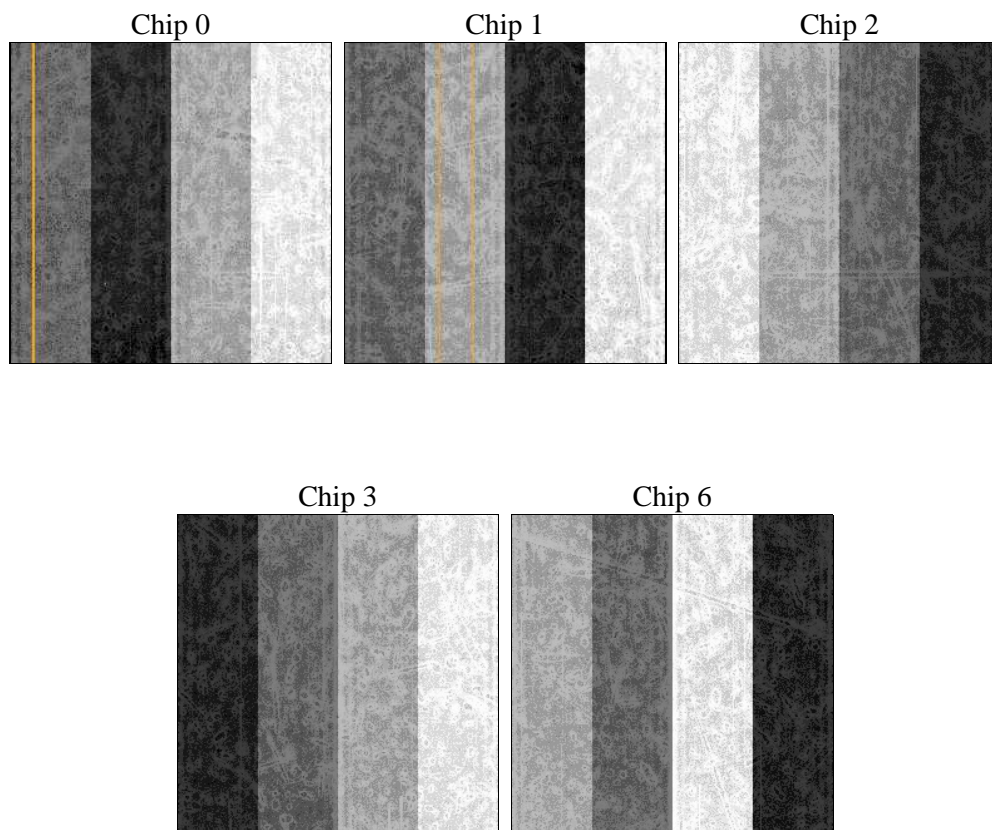
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28400.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	28479.659228683	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	28482.800219059	Sum of GTIs [s]
date	2014-11-29T04:29:47	Date and time of file creation	ontime1	28479.659228683	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	28482.800219059	Sum of GTIs [s]
			ontime3	28479.659228683	Sum of GTIs [s]
			ontime6	28482.800219059	Sum of GTIs [s]
			l1events	731492	Number of level 1 events

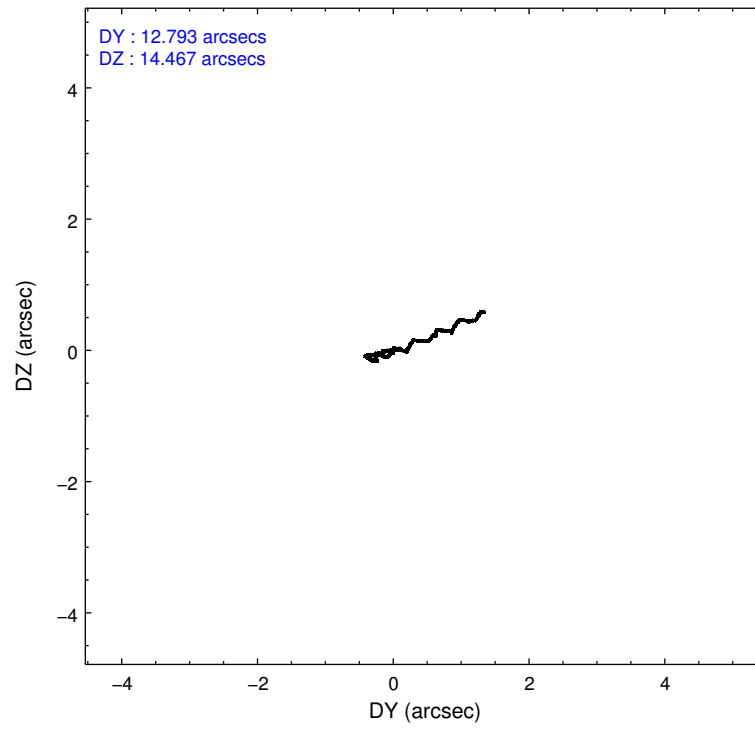
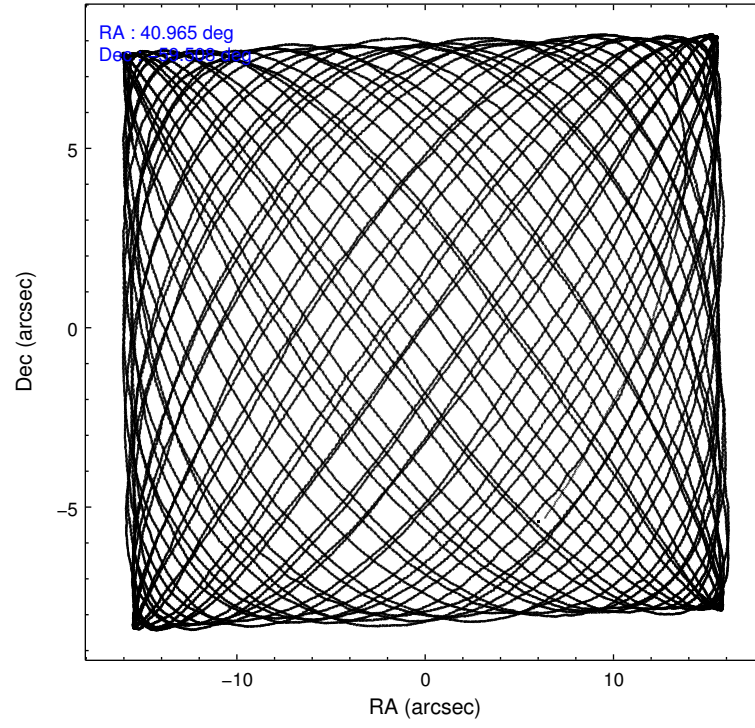
2.1.4 Events

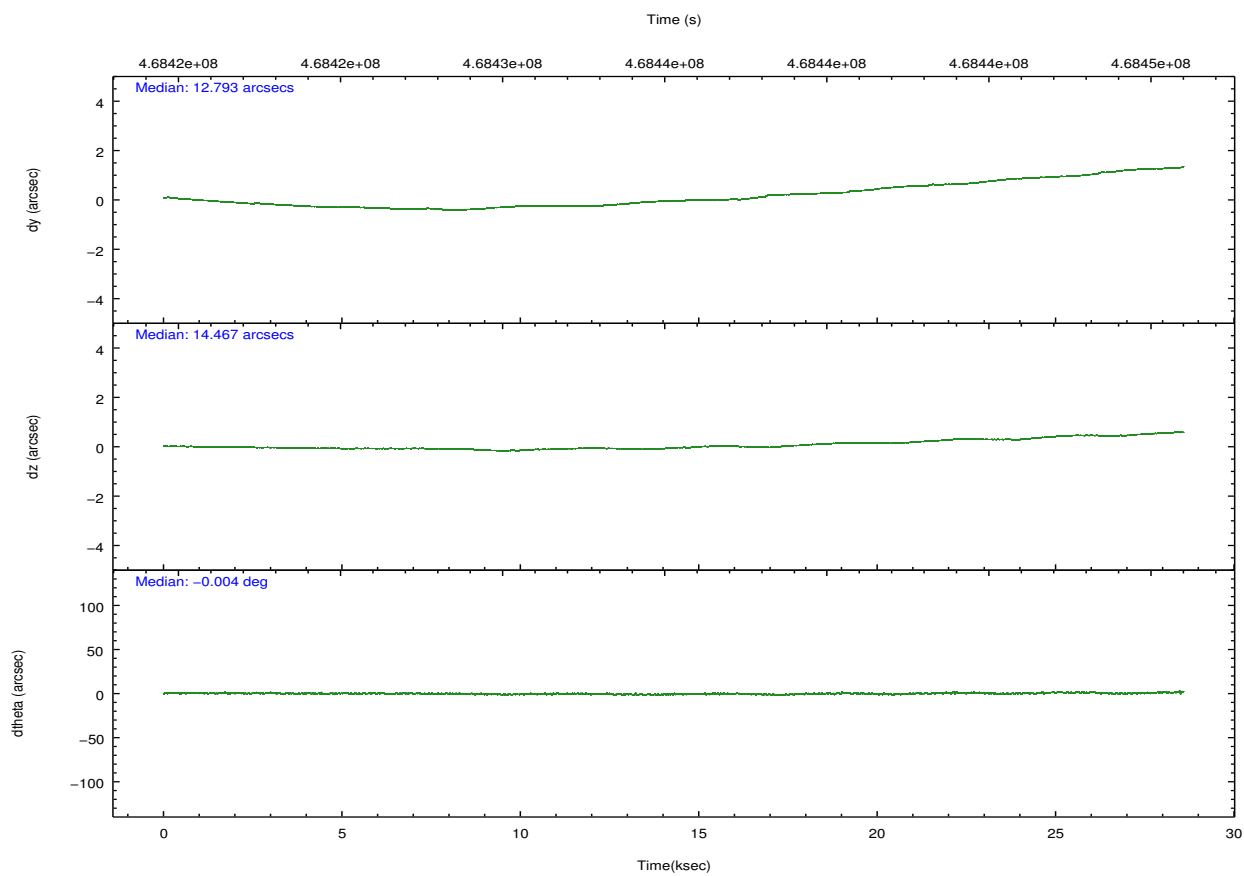
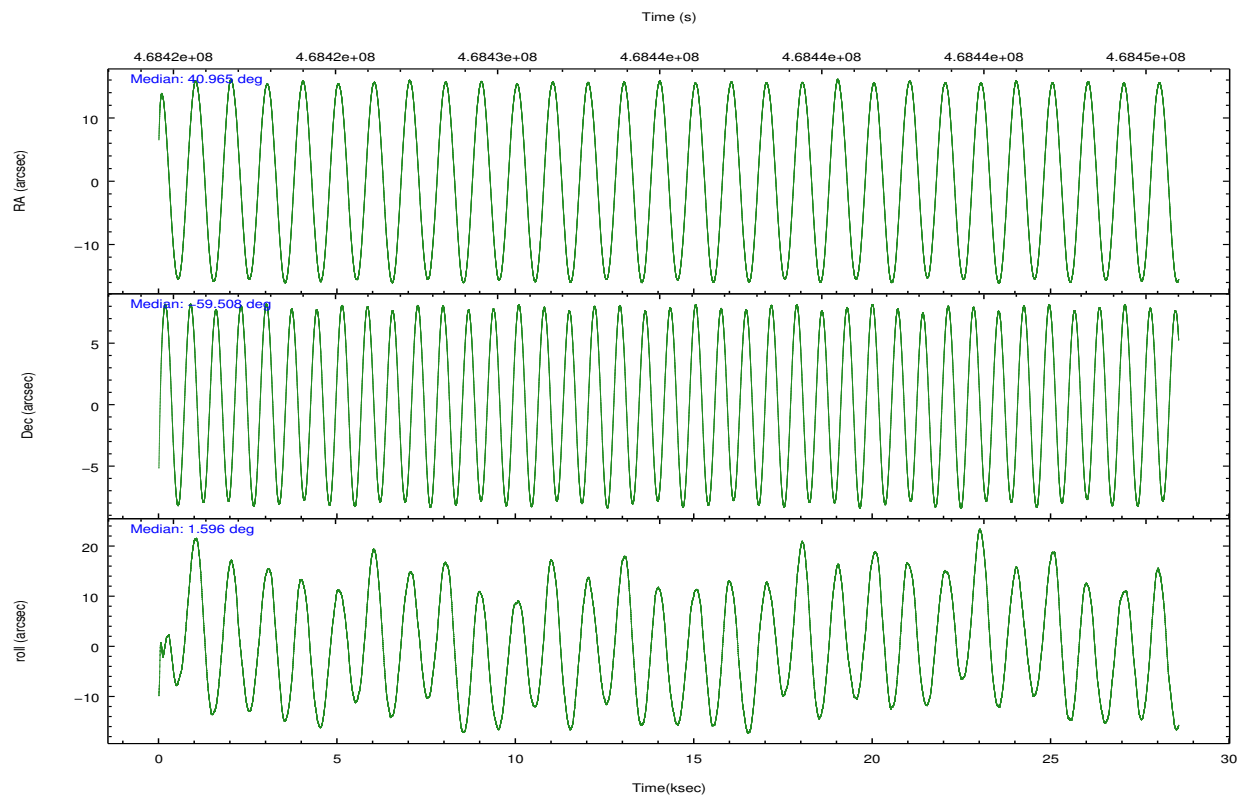
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	140830	140209	151028	145432	153993	grade 0 events	6366	7255	6191	7127	6116
rejected events	122776	120304	133730	127111	135977		4%	5%	4%	4%	3%
rejected %	87%	85%	88%	87%	88%	grade 1 events	72	86	100	98	75
							0%	0%	0%	0%	0%
						grade 2 events	4255	4524	4188	3935	4036
							3%	3%	2%	2%	2%
						grade 3 events	1844	1933	1789	1821	1860
							1%	1%	1%	1%	1%
						grade 4 events	1754	1995	1726	1873	1837
							1%	1%	1%	1%	1%
						grade 5 events	6972	7374	6611	7984	7689
							4%	5%	4%	5%	4%
						grade 6 events	3837	4203	3408	3569	4173
							2%	2%	2%	2%	2%
						grade 7 events	115730	112839	127015	119025	128207
							82%	80%	84%	81%	83%

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	40.918466	40.96452252653758	CCD I2 on	Y	Y
[deg] Pointing Dec	-59.522902	-59.50839009132507	CCD I3 on	Y	Y
[deg] Pointing Roll	1.352532	1.600903730335301	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	468421183.184000	468420239.36159	CCD S5 on	N	N
Observation start date	2012-11-04T12:58:36	2012-11-04T12:43:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	468449583.184000	468450592.17572	On-chip summing requested	N	N
Observation end date	2012-11-04T20:51:56	2012-11-04T21:09:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



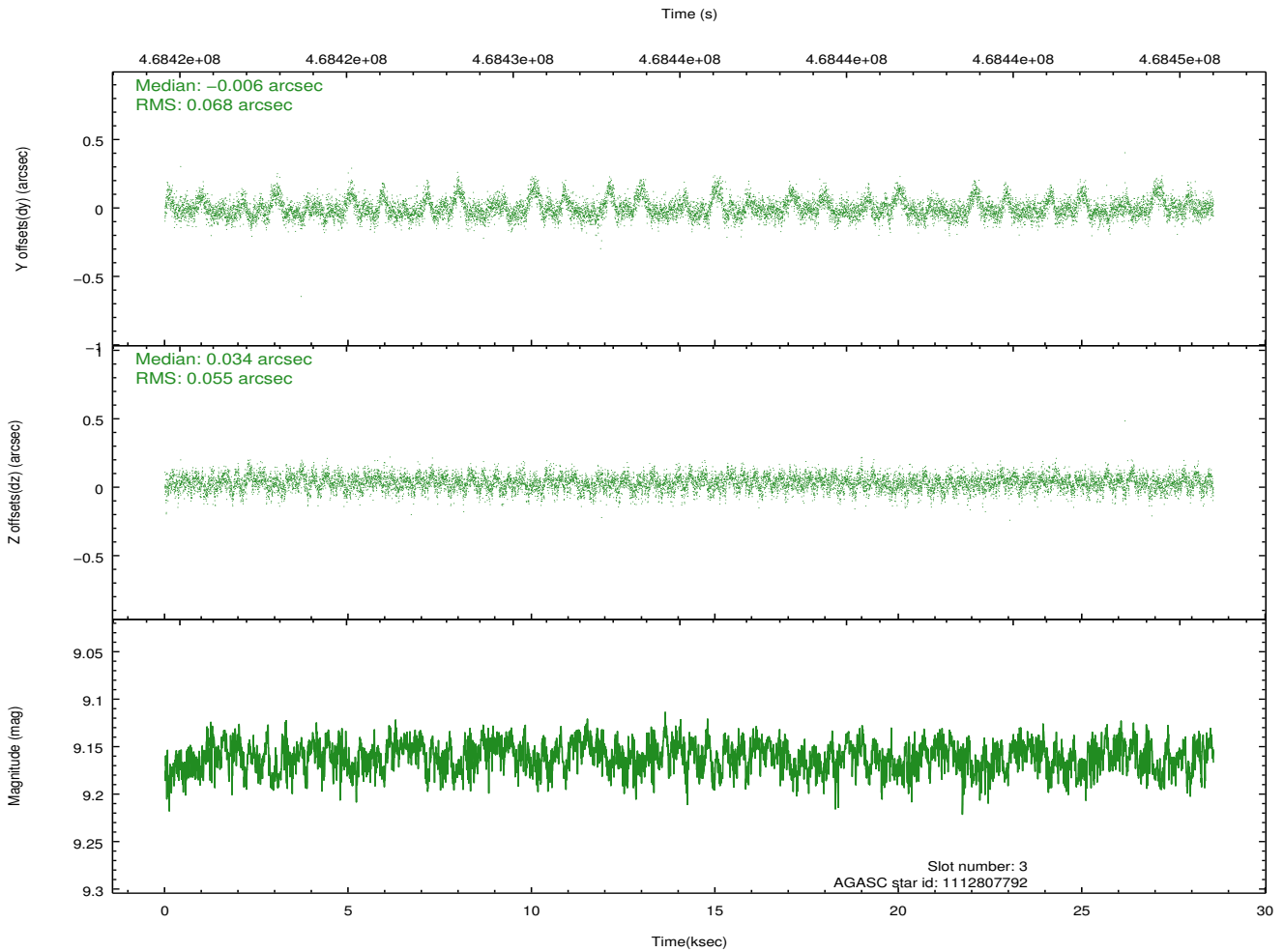
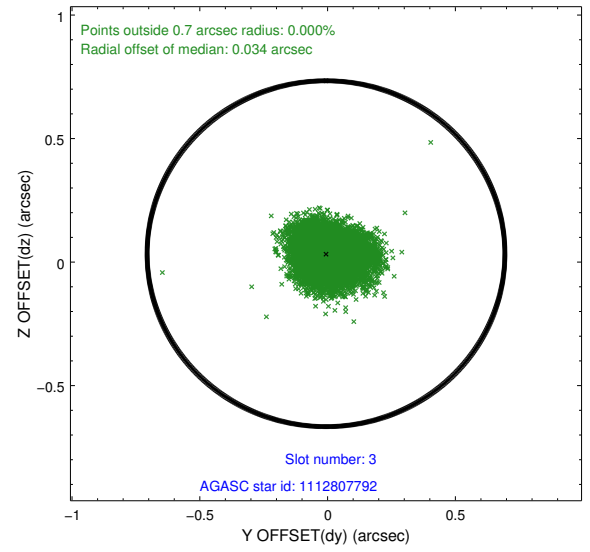
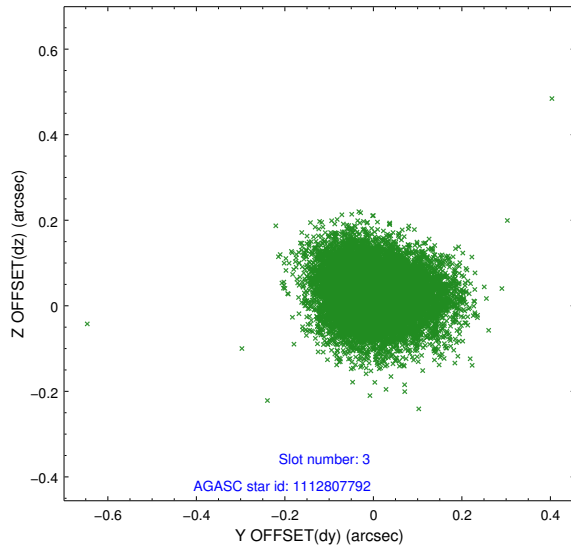


Slot Statistics

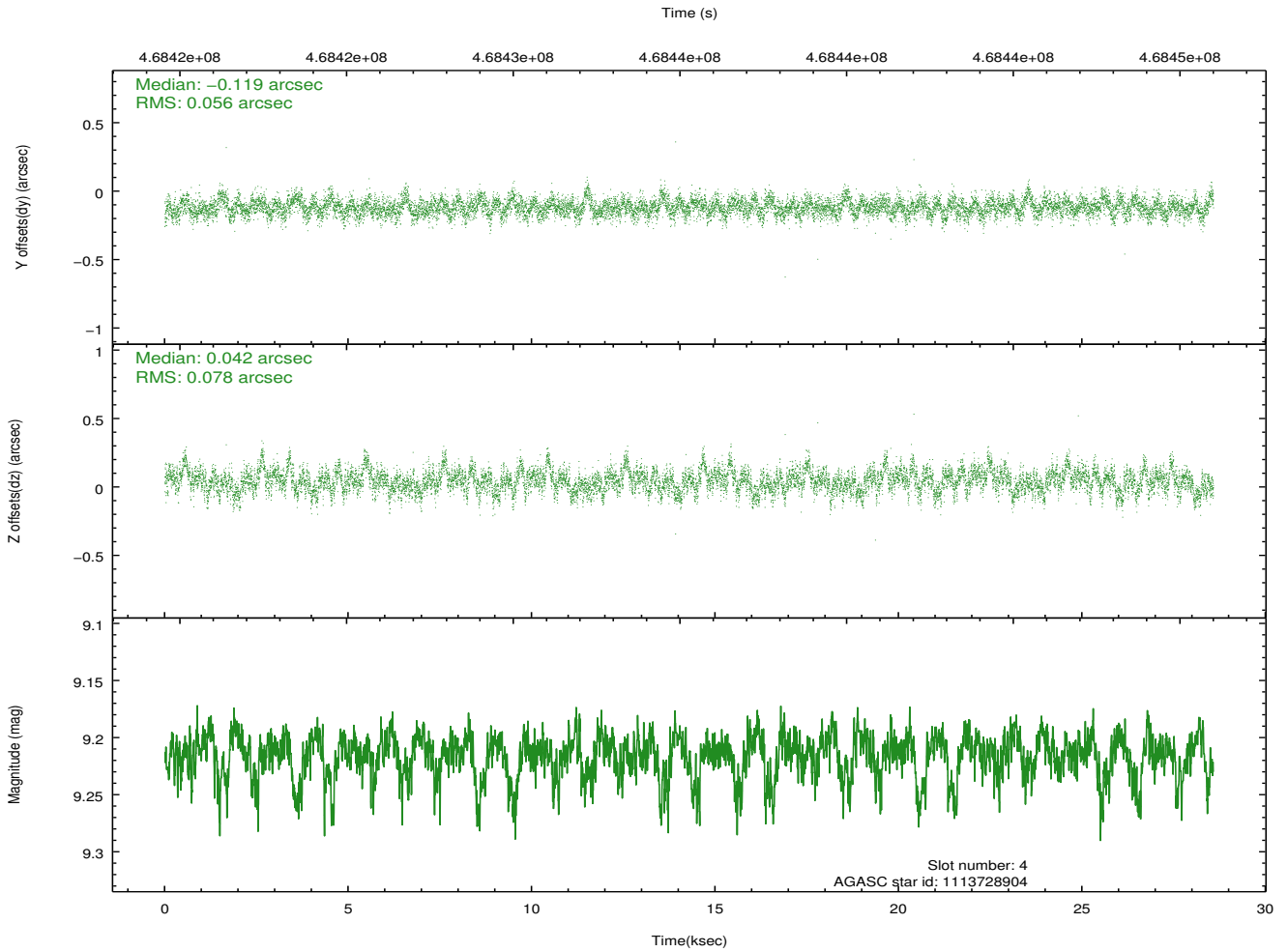
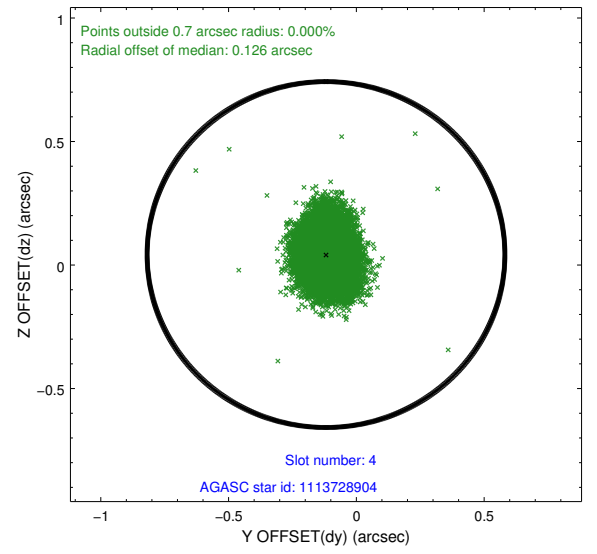
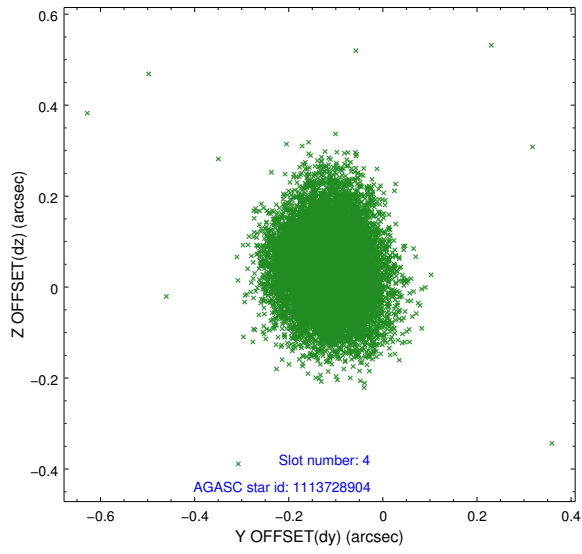
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.13	6971	0.110	-0.084	0.010	0.020	0.000000	0.000000	926.53	-997.28
1	FID		ACIS-I-5	7.12	6970	-0.281	0.086	0.016	0.035	0.000000	0.000000	-1821.98	900.24
2	FID		ACIS-I-6	7.14	6971	0.081	0.069	0.014	0.024	0.000000	0.000000	391.88	1544.89
3	GUIDE	used	1112807792	9.16	13936	-0.006	0.034	0.092	0.156	39.800256	-59.380095	-2037.96	545.22
4	GUIDE	used	1113728904	9.22	13923	-0.119	0.042	0.101	0.168	41.398463	-59.182124	914.06	1202.54
5	GUIDE	used	1113729200	9.41	13926	0.134	0.117	0.178	0.270	40.392030	-59.985347	-986.36	-1645.35
6	GUIDE	used	1113729248	8.24	13937	-0.004	-0.186	0.072	0.113	41.472965	-59.394470	1027.25	433.69
7	GUIDE	used	1161176640	10.23	13683	-0.013	-0.009	0.261	0.407	41.416403	-60.165244	837.54	-2335.89

2.4 Star Slots

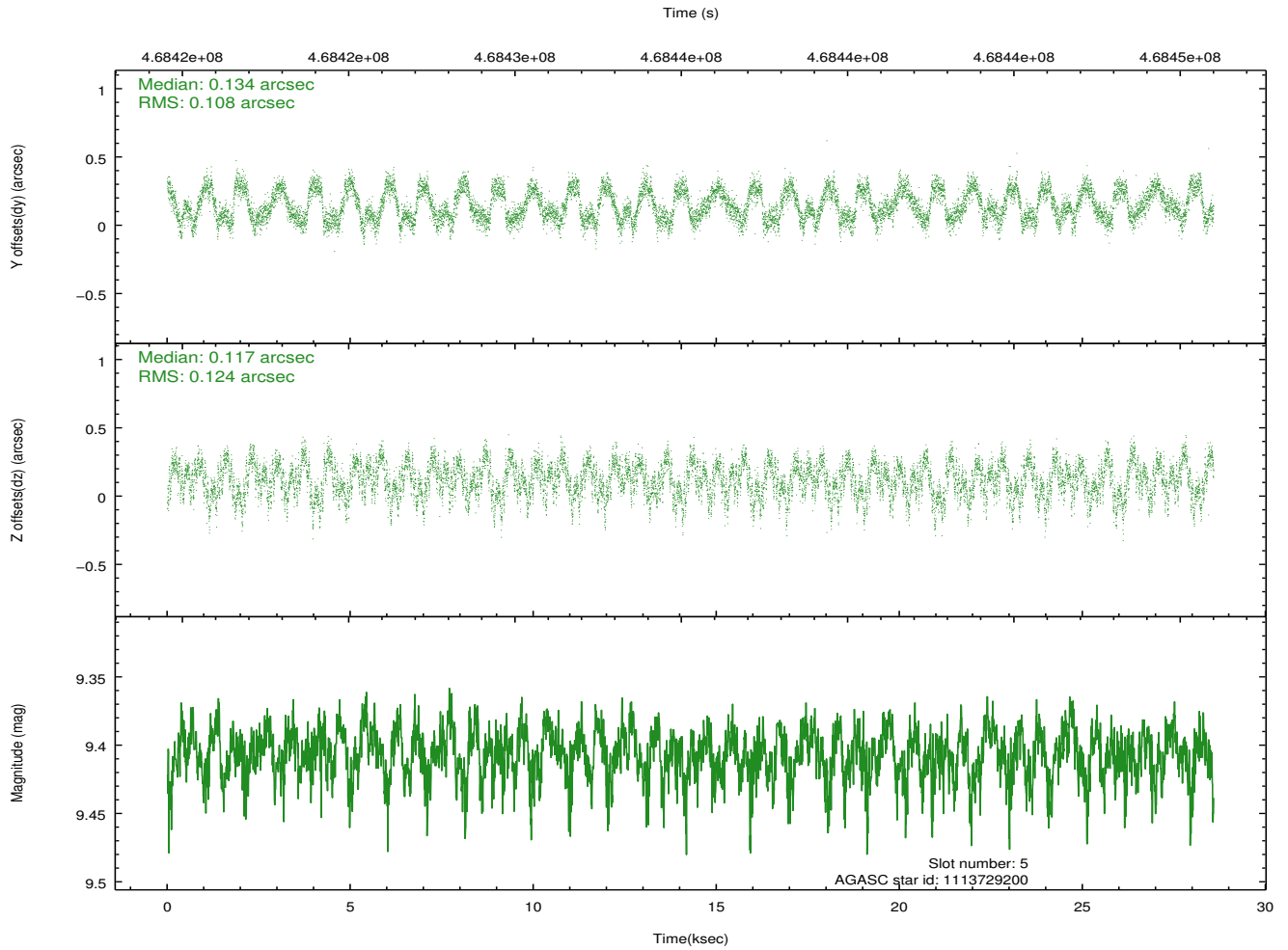
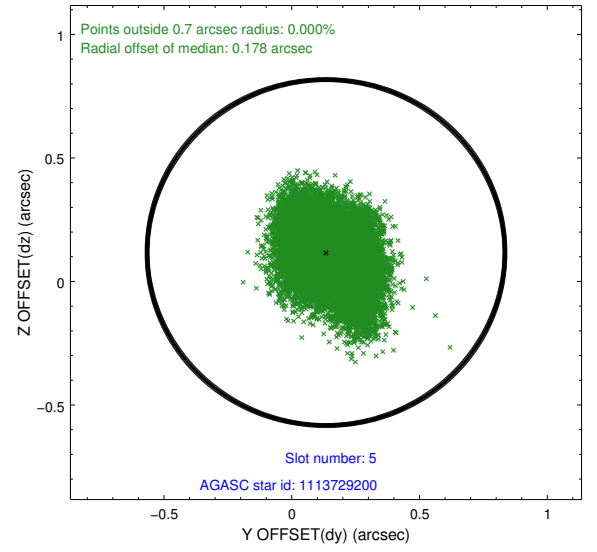
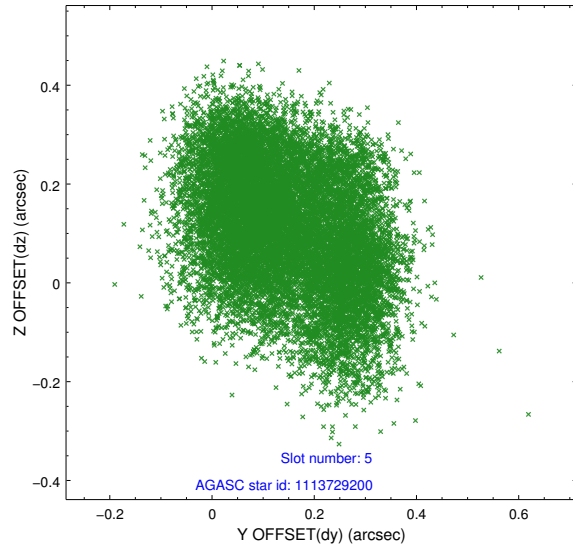
2.4.1 Slot 3



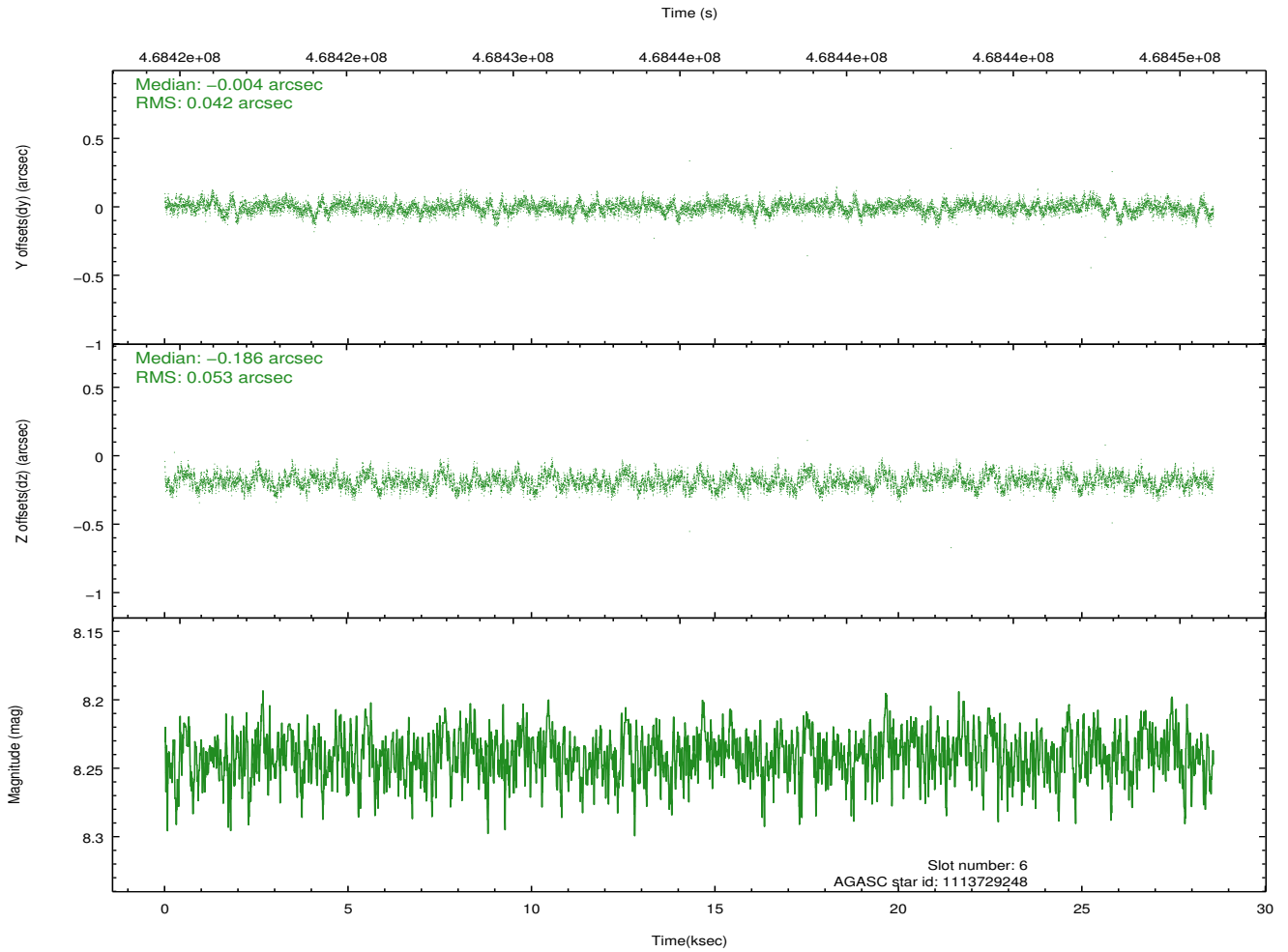
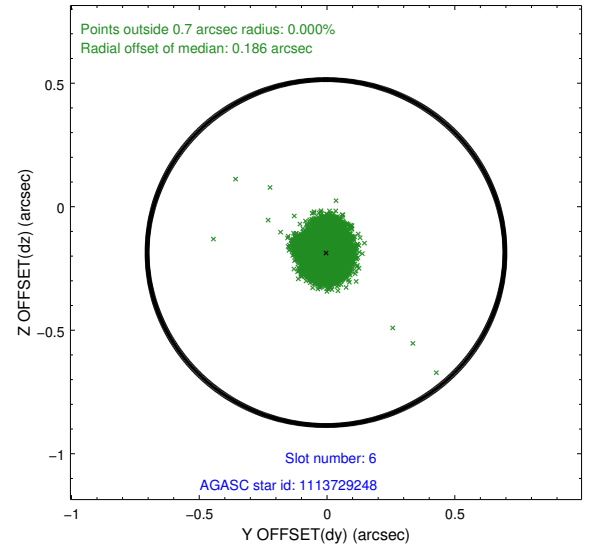
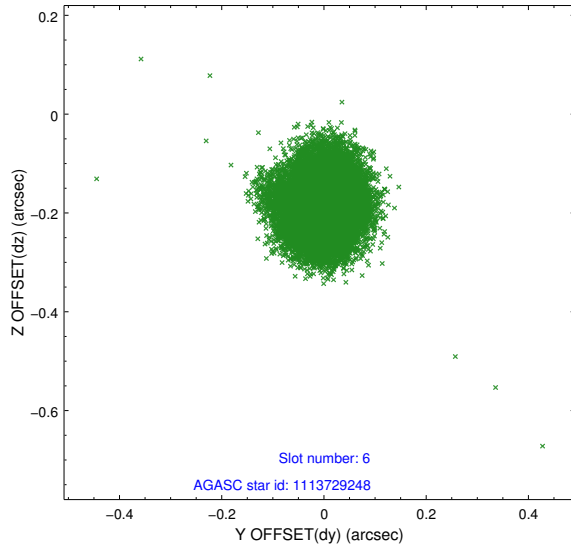
2.4.2 Slot 4



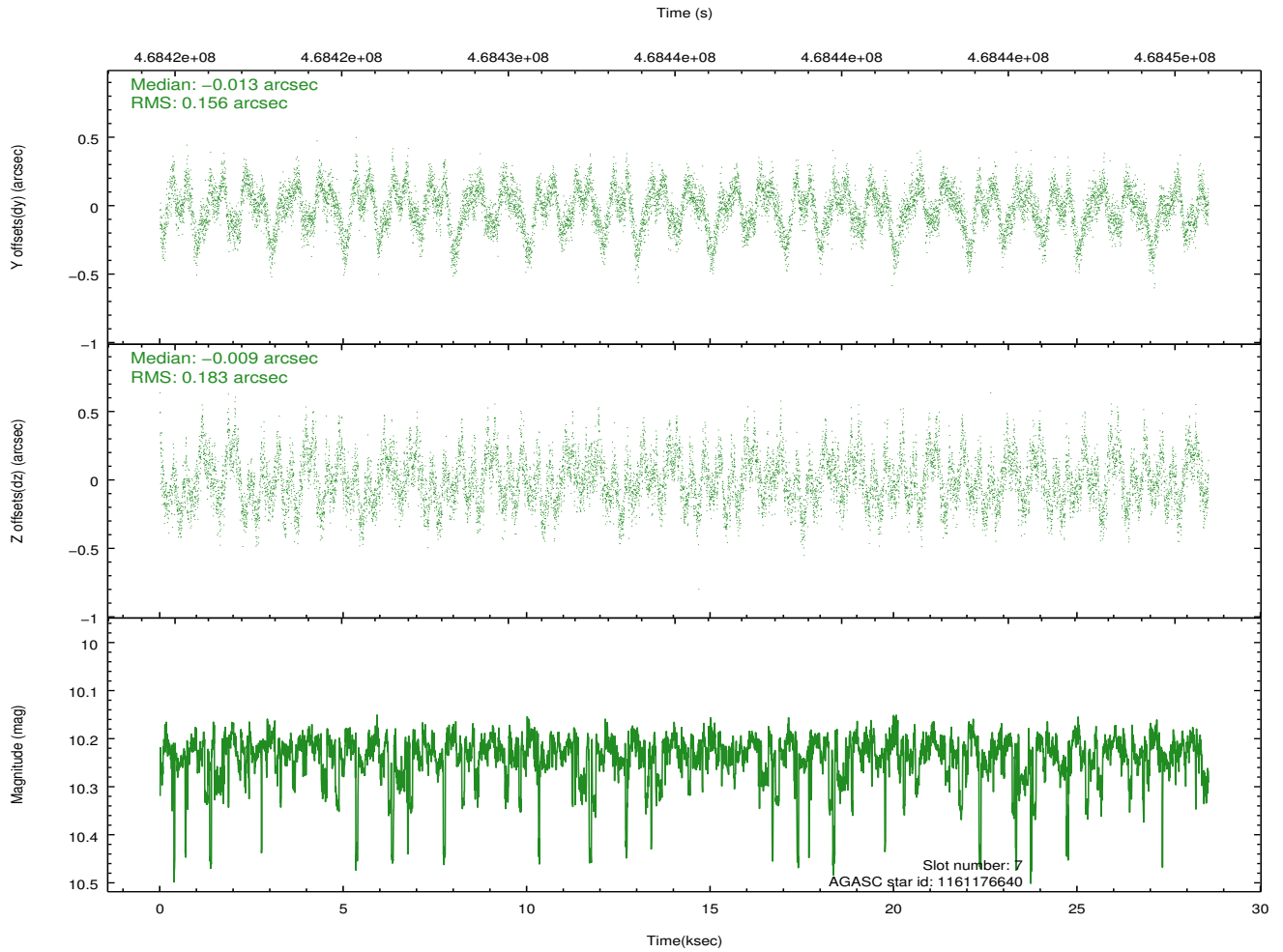
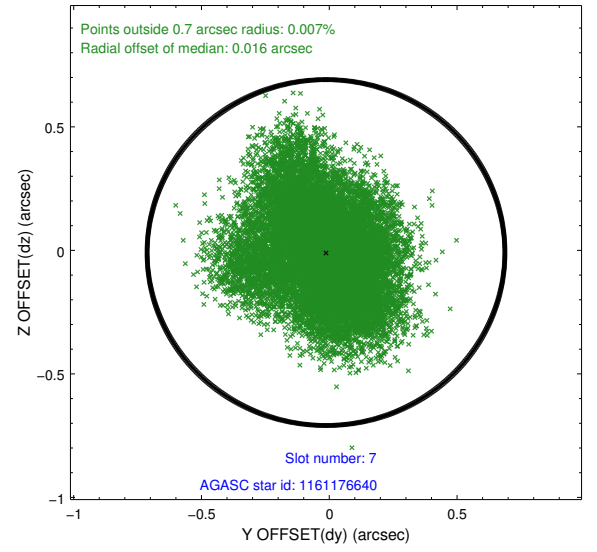
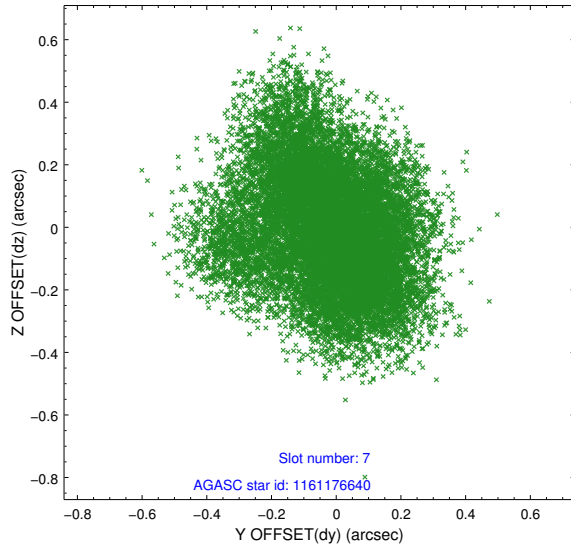
2.4.3 Slot 5



2.4.4 Slot 6

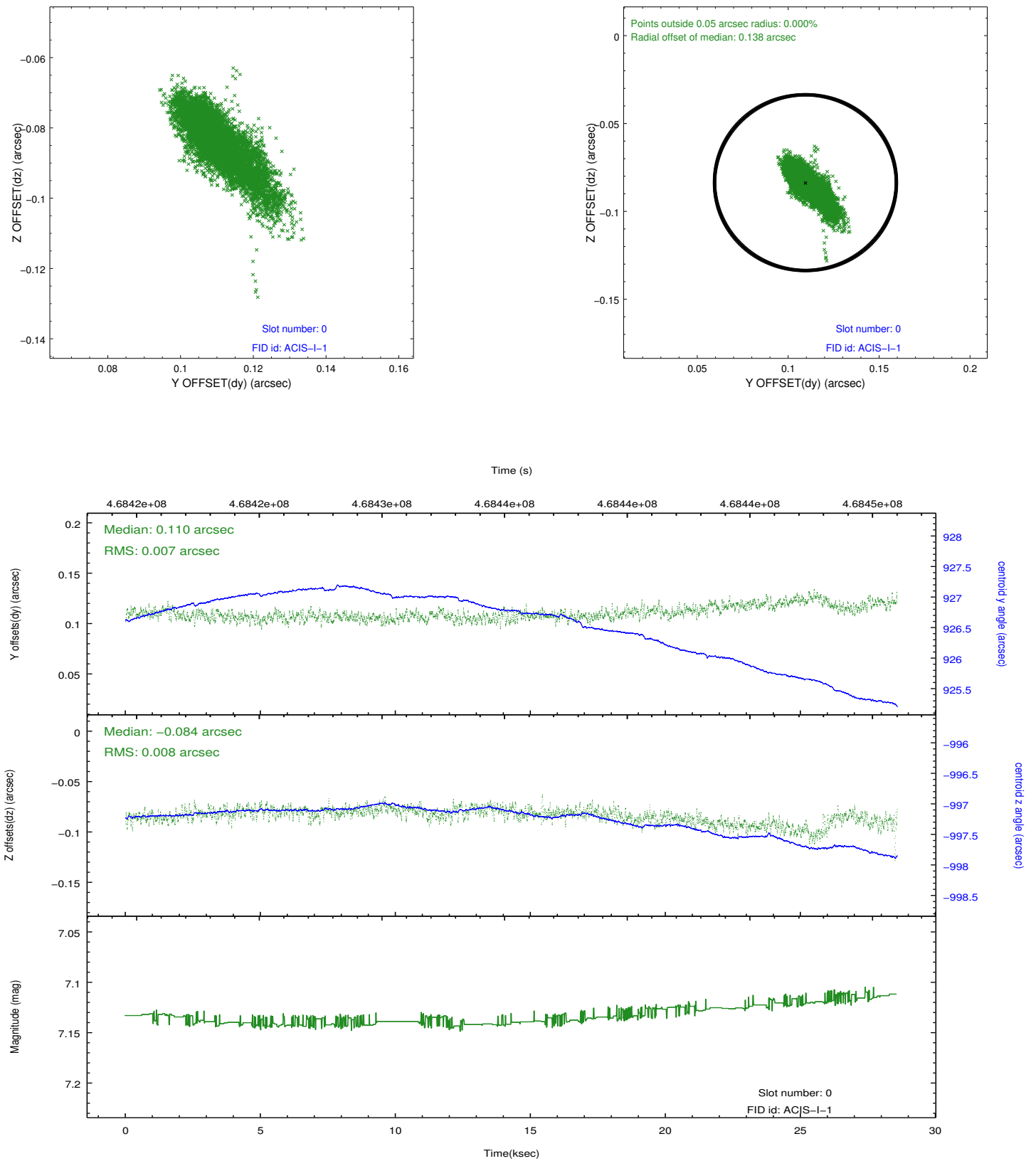


2.4.5 Slot 7

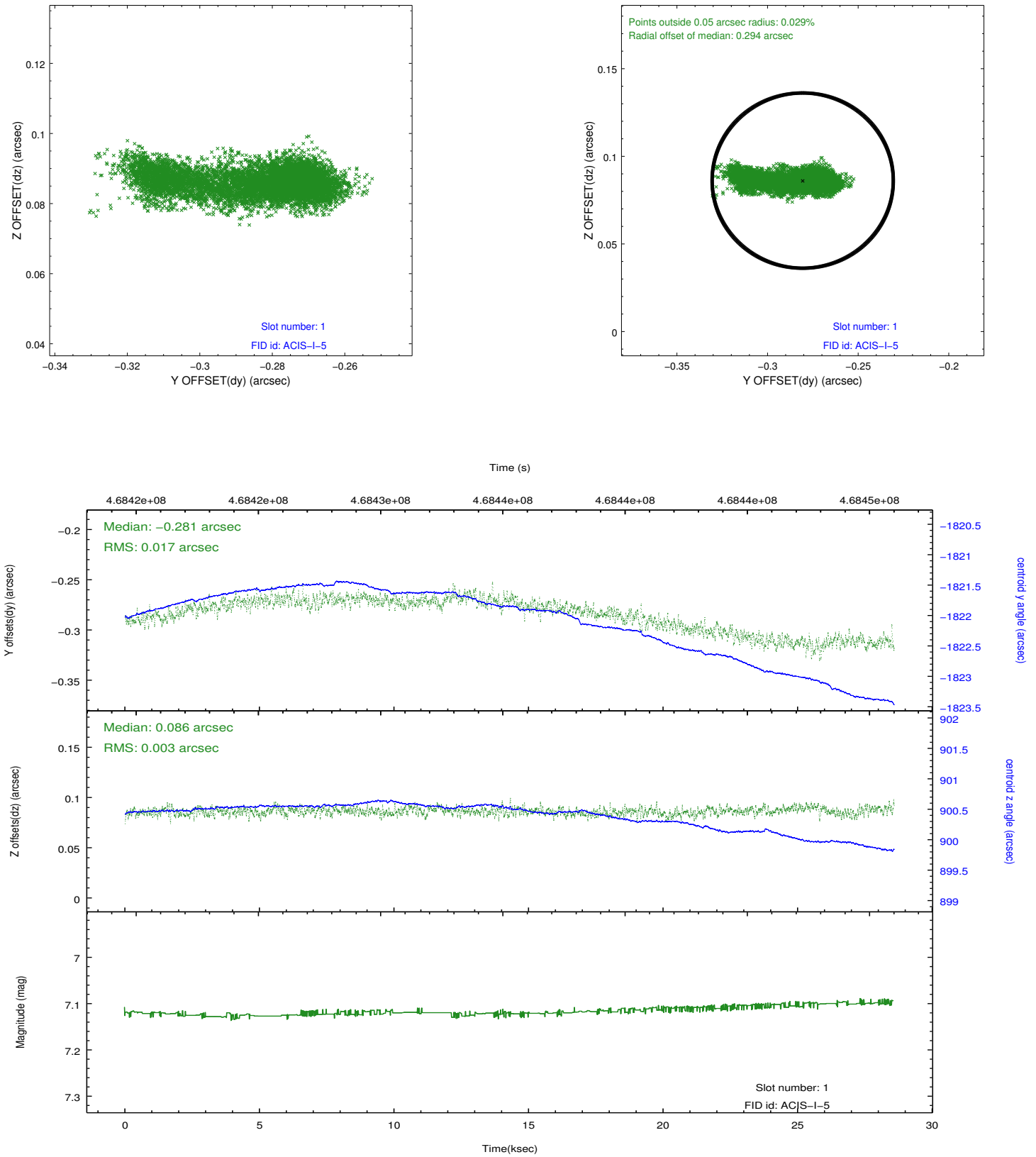


2.5 FID Slots

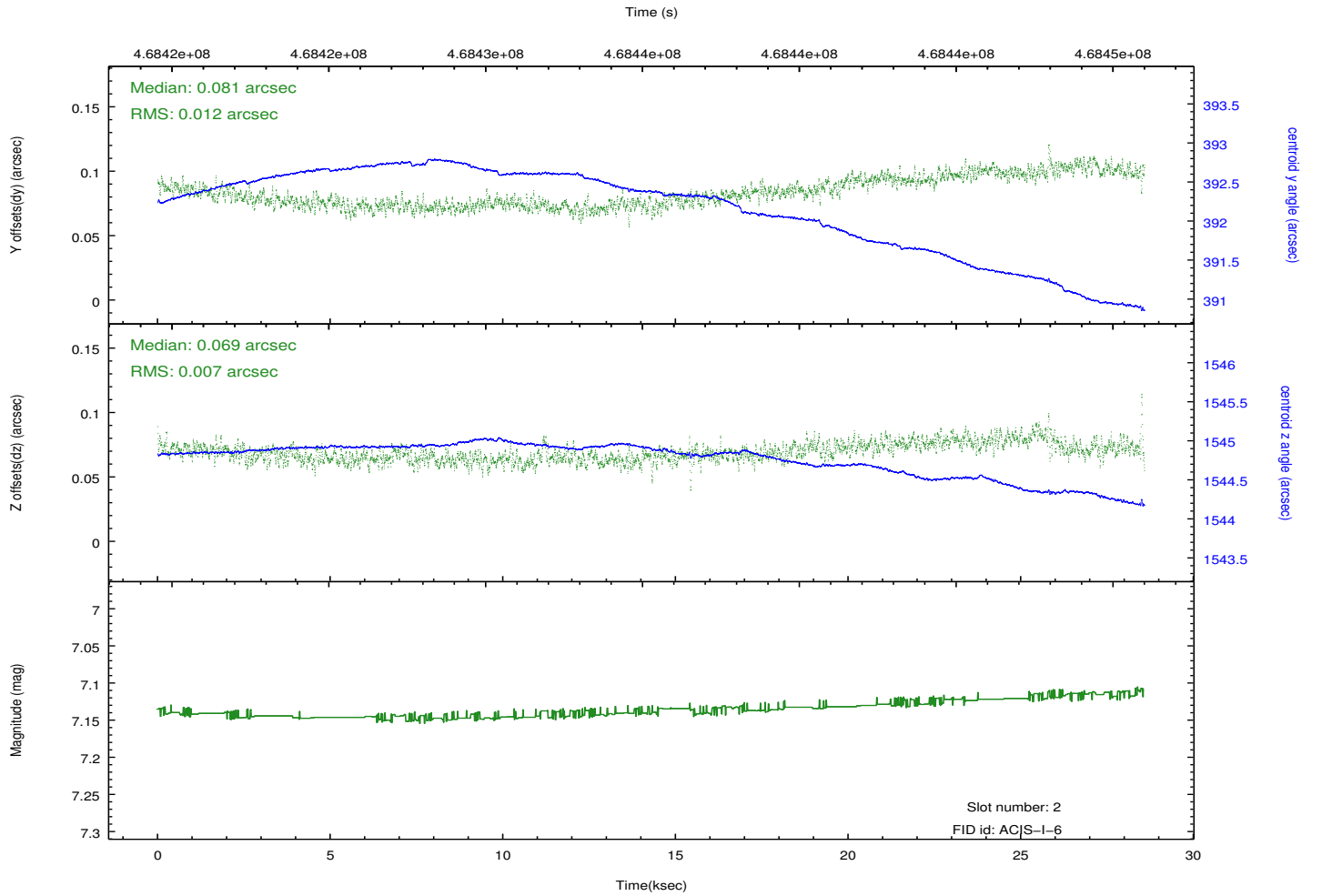
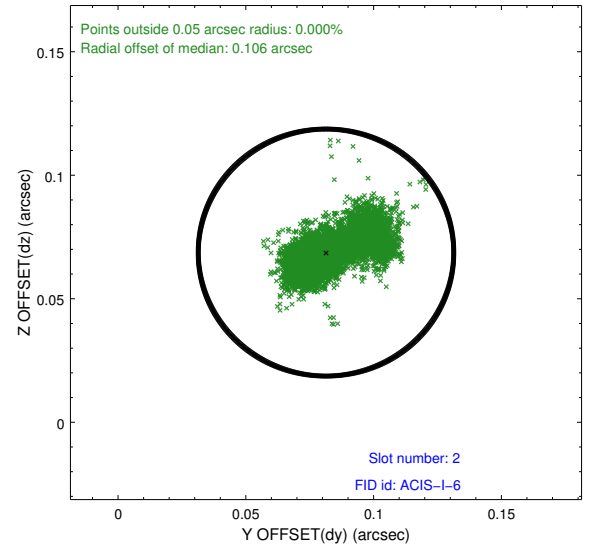
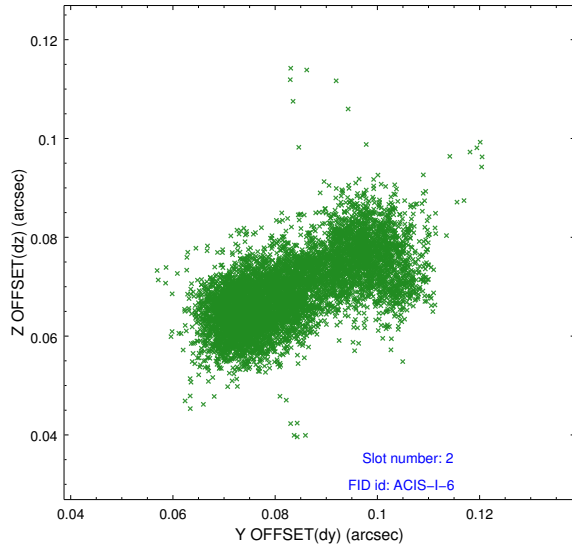
2.5.1 Slot 0



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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.479659228683

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.