

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15131 - L2 Version 2
Chandra X-Ray Center

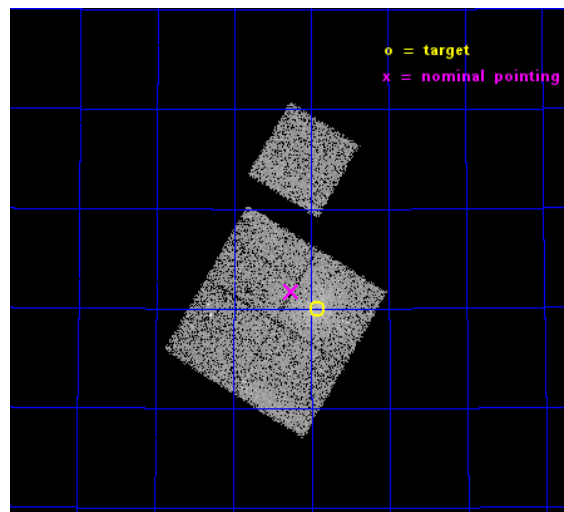
L2 Processing Date : Dec 9 2014

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1 Front

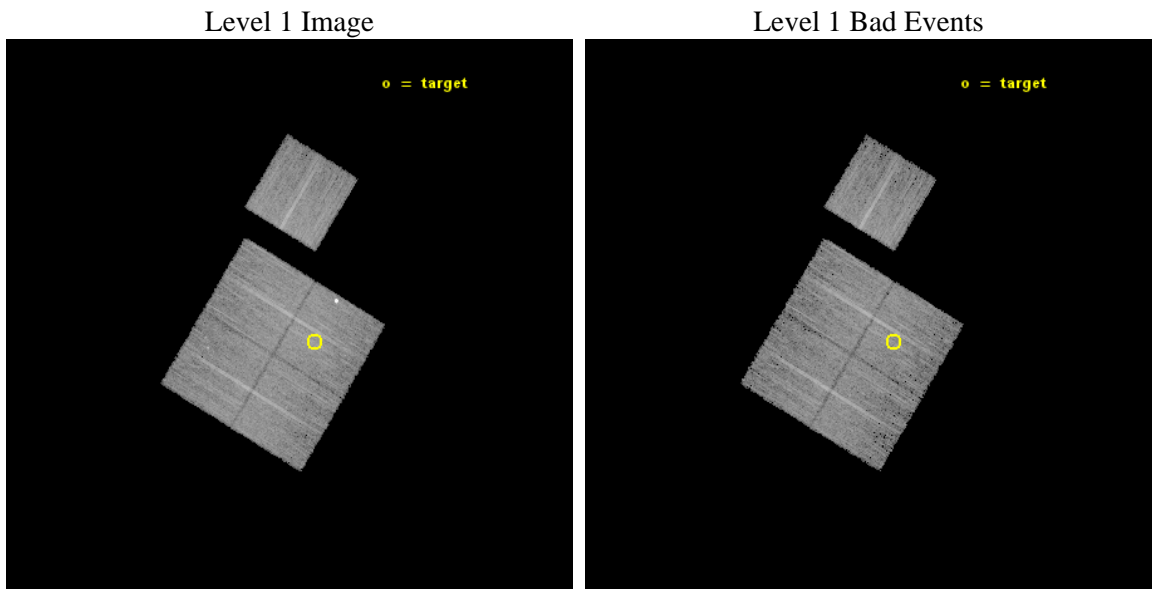
seq_num	801260	Sequence number
obs_id	15131	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G085.99+26.71	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	274.980417	Observer's specified target RA [deg]
dec_targ	57.165917	Observer's specified target Dec [deg]
ra_nom	275.06425417941	Nominal RA [deg]
dec_nom	57.195881629436	Nominal Dec [deg]
roll_nom	31.037633583672	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15261.300117373	Sum of GTIs [s]
livetime	15061.899996134	Livetime [s]
ontime0	15261.300117373	Sum of GTIs [s]
ontime1	15261.300117373	Sum of GTIs [s]
ontime2	15261.300117373	Sum of GTIs [s]
ontime3	15261.300117373	Sum of GTIs [s]
ontime6	15261.300117373	Sum of GTIs [s]
l2events	41246	Number of level 2 events



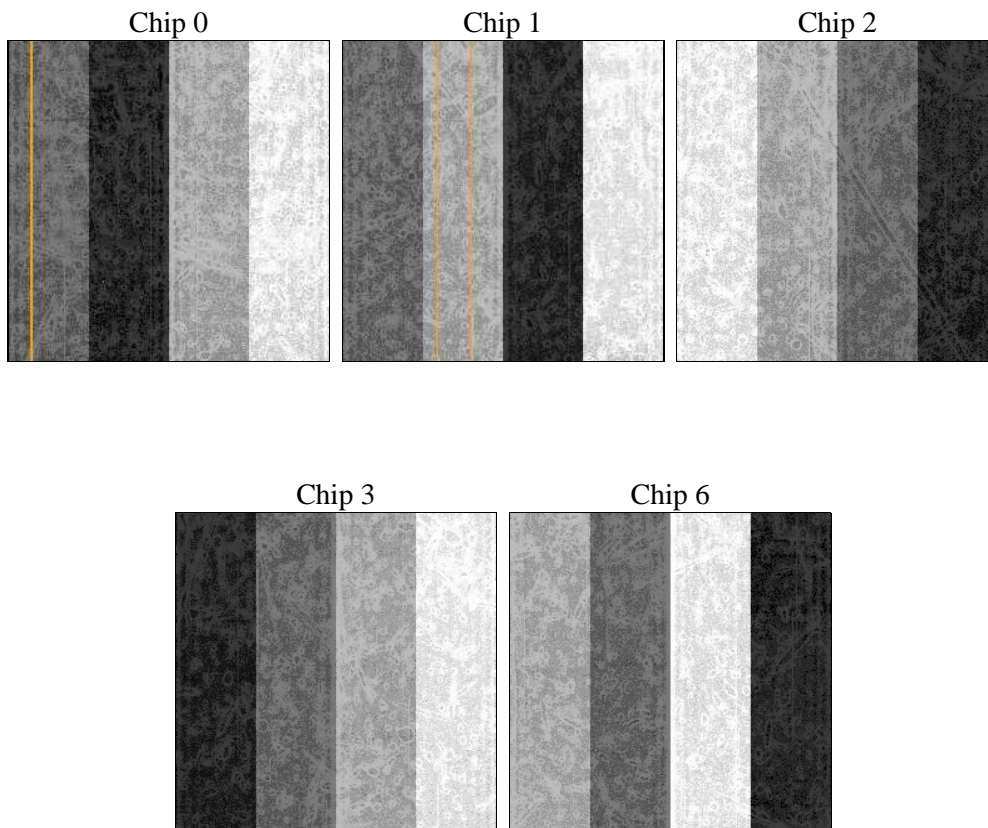
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	15261.300117373	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	15261.300117373	Sum of GTIs [s]
date	2014-12-10T03:10:57	Date and time of file creation	ontime1	15261.300117373	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15261.300117373	Sum of GTIs [s]
			ontime3	15261.300117373	Sum of GTIs [s]
			ontime6	15261.300117373	Sum of GTIs [s]
			l1events	358610	Number of level 1 events

2.1.4 Events

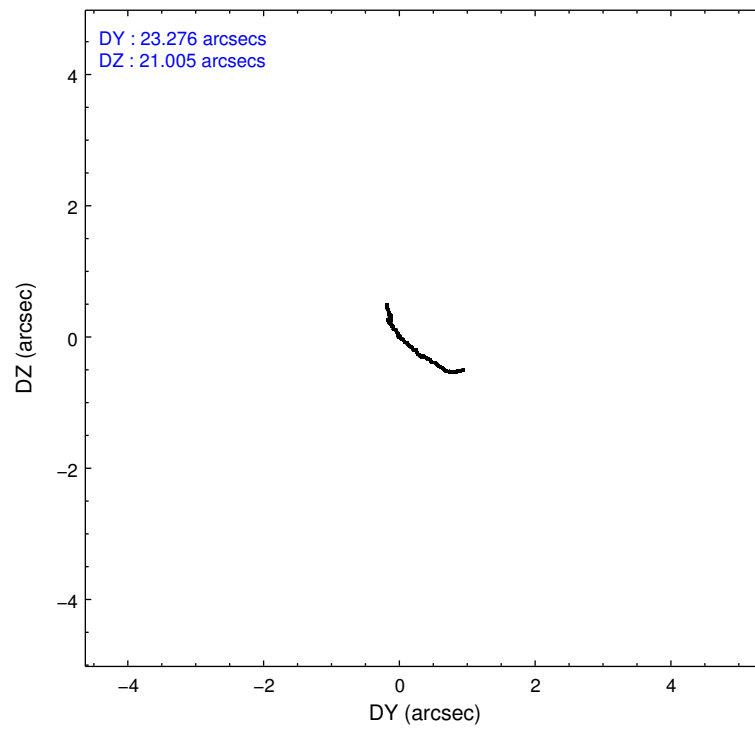
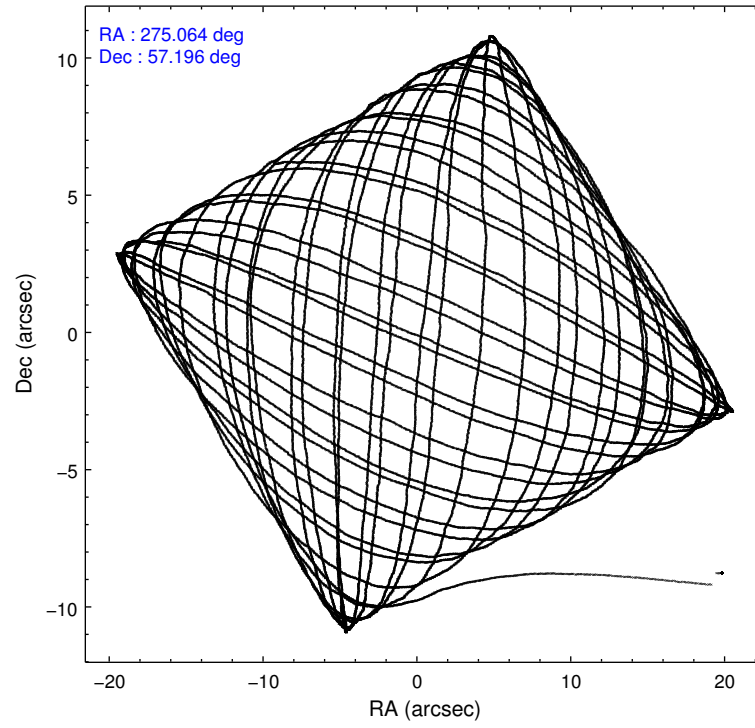
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	66442	68505	73979	76692	72992
rejected events	57743	58645	64730	60521	64279
rejected %	86%	85%	87%	78%	88%

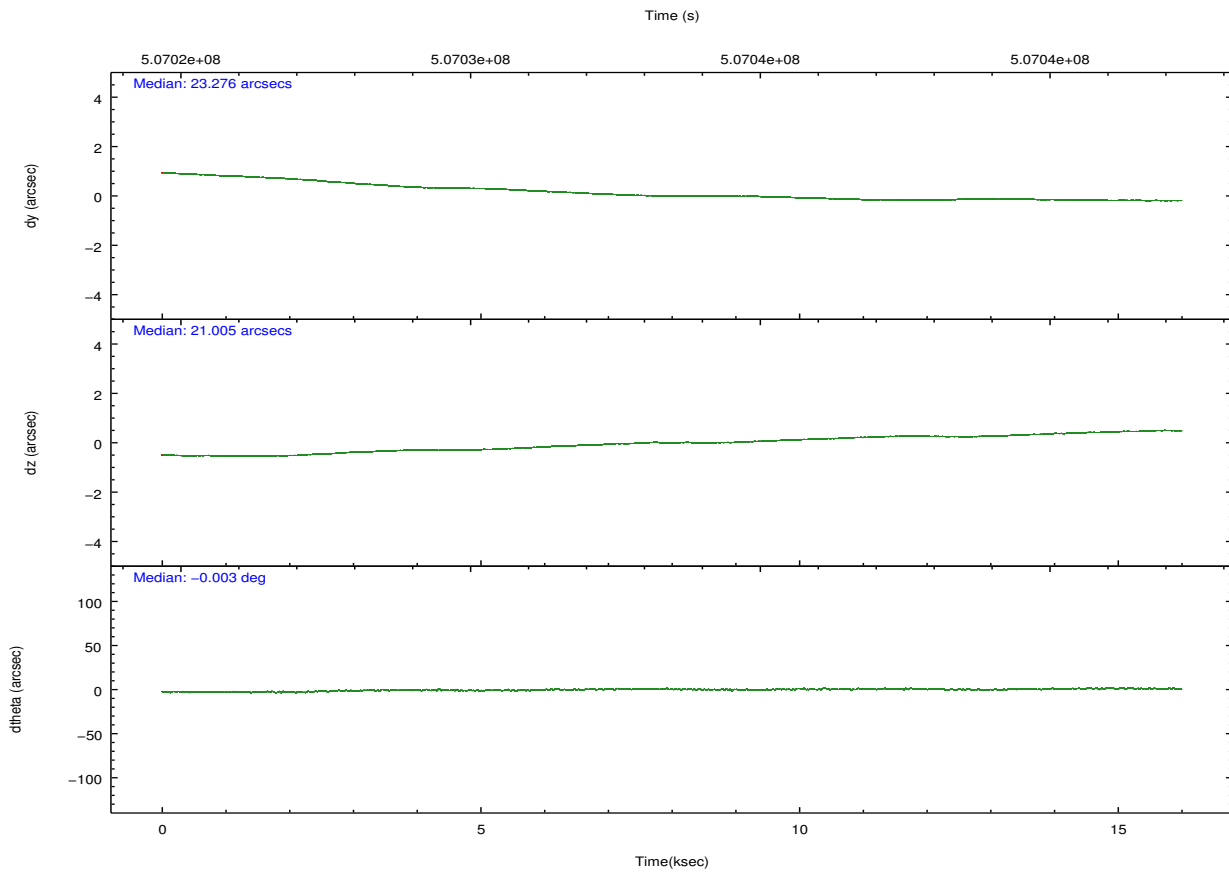
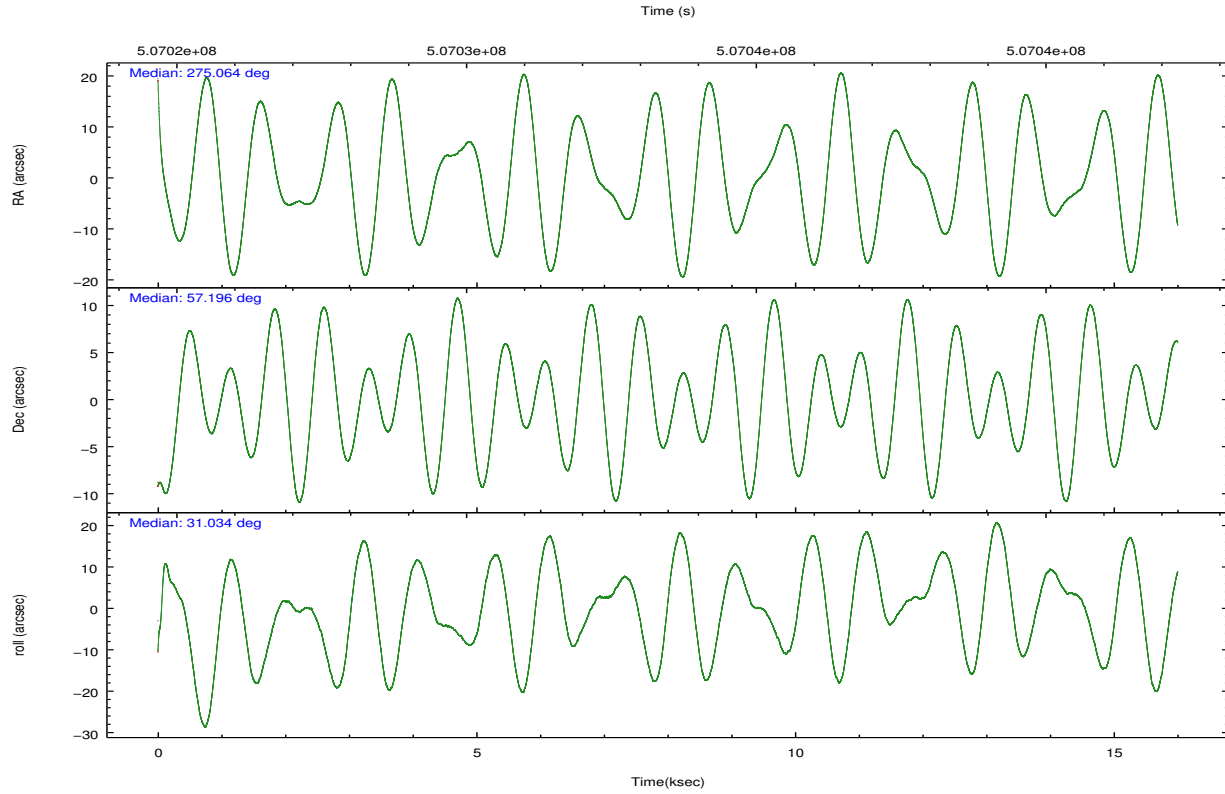
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3086	3494	3621	10271	2944
	4%	5%	4%	13%	4%
grade 1 events	33	37	38	65	37
	0%	0%	0%	0%	0%
grade 2 events	2103	2371	2135	2170	2035
	3%	3%	2%	2%	2%
grade 3 events	949	926	877	943	873
	1%	1%	1%	1%	1%
grade 4 events	827	917	860	996	804
	1%	1%	1%	1%	1%
grade 5 events	3558	3631	3324	4053	3806
	5%	5%	4%	5%	5%
grade 6 events	1740	2158	1759	1799	2059
	2%	3%	2%	2%	2%
grade 7 events	54146	54971	61365	56395	60434
	81%	80%	82%	73%	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	275.039839	275.0642541794093	CCD I2 on	Y	Y
[deg] Pointing Dec	57.171780	57.195881629436	CCD I3 on	Y	Y
[deg] Pointing Roll	30.849471	31.03763358367219	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)	507026289.184000	507024524.3346	CCD S5 on	N	N
Observation start date	2014-01-25T08:37:02	2014-01-25T08:08:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	507061289.184000	507042389.57309	On-chip summing requested	N	N
Observation end date	2014-01-25T18:20:22	2014-01-25T13:06:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





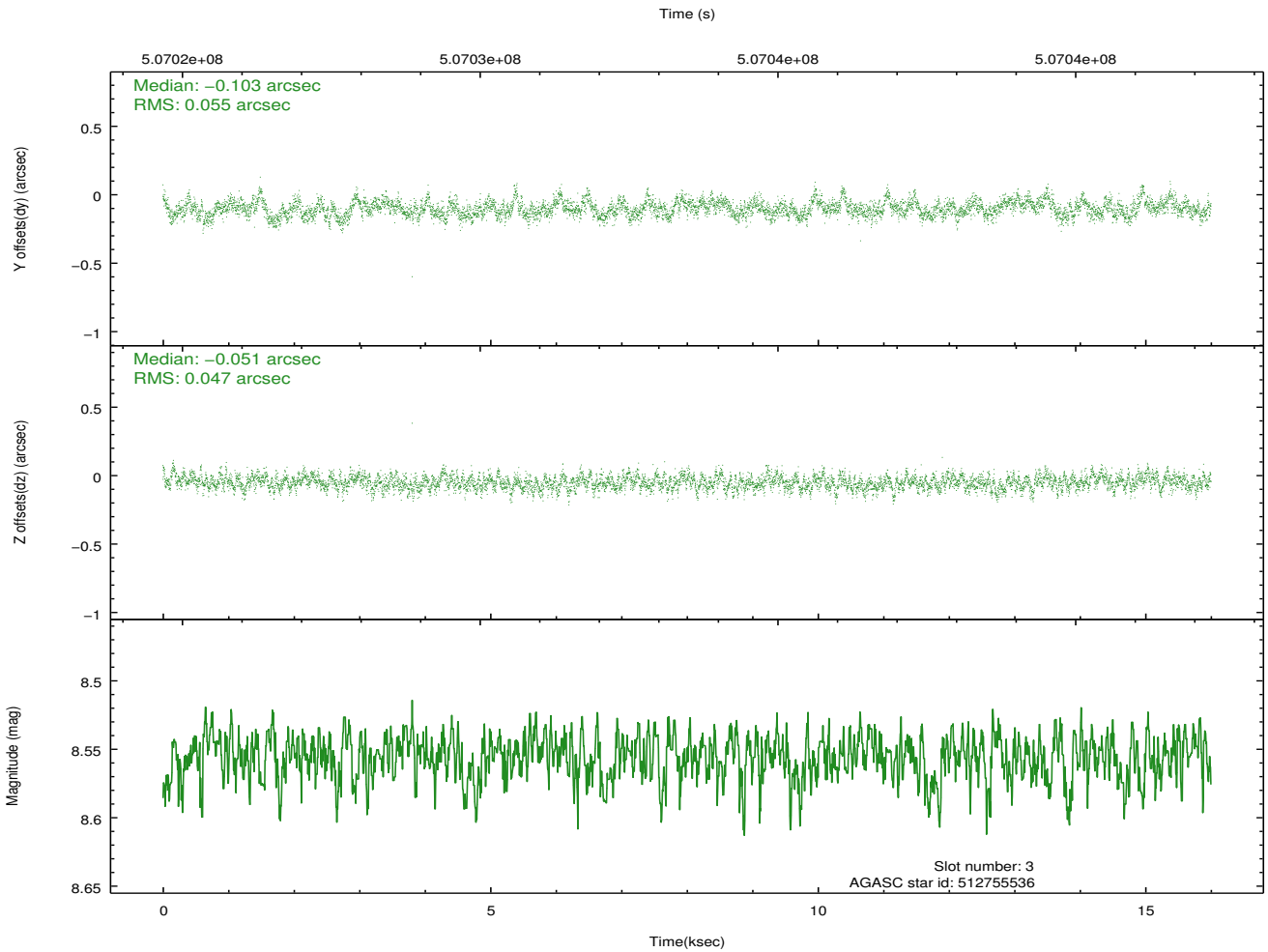
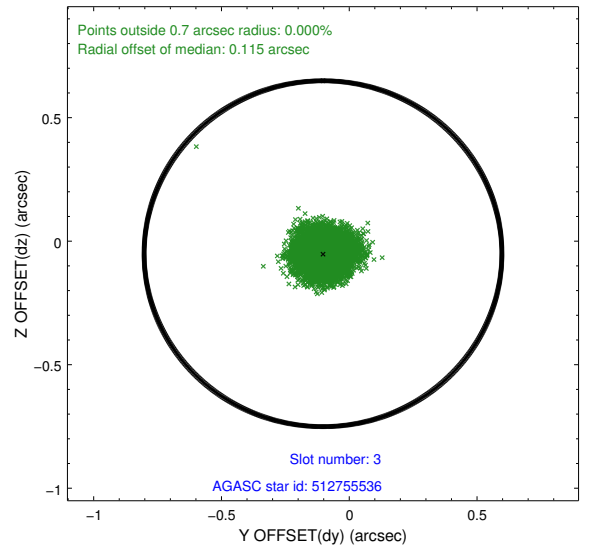
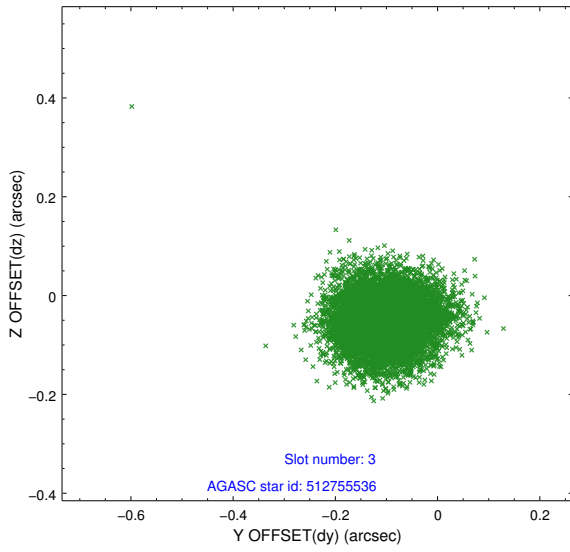
Slot Statistics

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	3902	0.143	-0.116	0.010	0.015	0.000000	0.000000	915.81	-1003.90
1	FID		ACIS-I-5	7.12	3903	-0.368	0.092	0.013	0.020	0.000000	0.000000	-1832.69	893.56
2	FID		ACIS-I-6	7.13	3903	0.132	0.097	0.019	0.029	0.000000	0.000000	381.00	1538.43
3	GUIDE	used	512755536	8.56	7803	-0.103	-0.051	0.077	0.124	274.324346	56.855002	-1789.76	-250.61
4	GUIDE	used	512756048	9.21	7804	-0.183	-0.225	0.102	0.160	275.641784	57.476552	1565.43	348.92
5	GUIDE	used	512760416	9.17	7796	0.044	-0.098	0.123	0.195	275.133434	57.251662	304.63	153.63
6	GUIDE	used	512763696	7.94	7806	-0.006	0.049	0.070	0.111	275.893875	57.284361	1640.17	-494.88
7	GUIDE	used	512765600	8.89	7796	0.239	0.323	0.091	0.149	275.182953	56.711103	-606.57	-1568.22

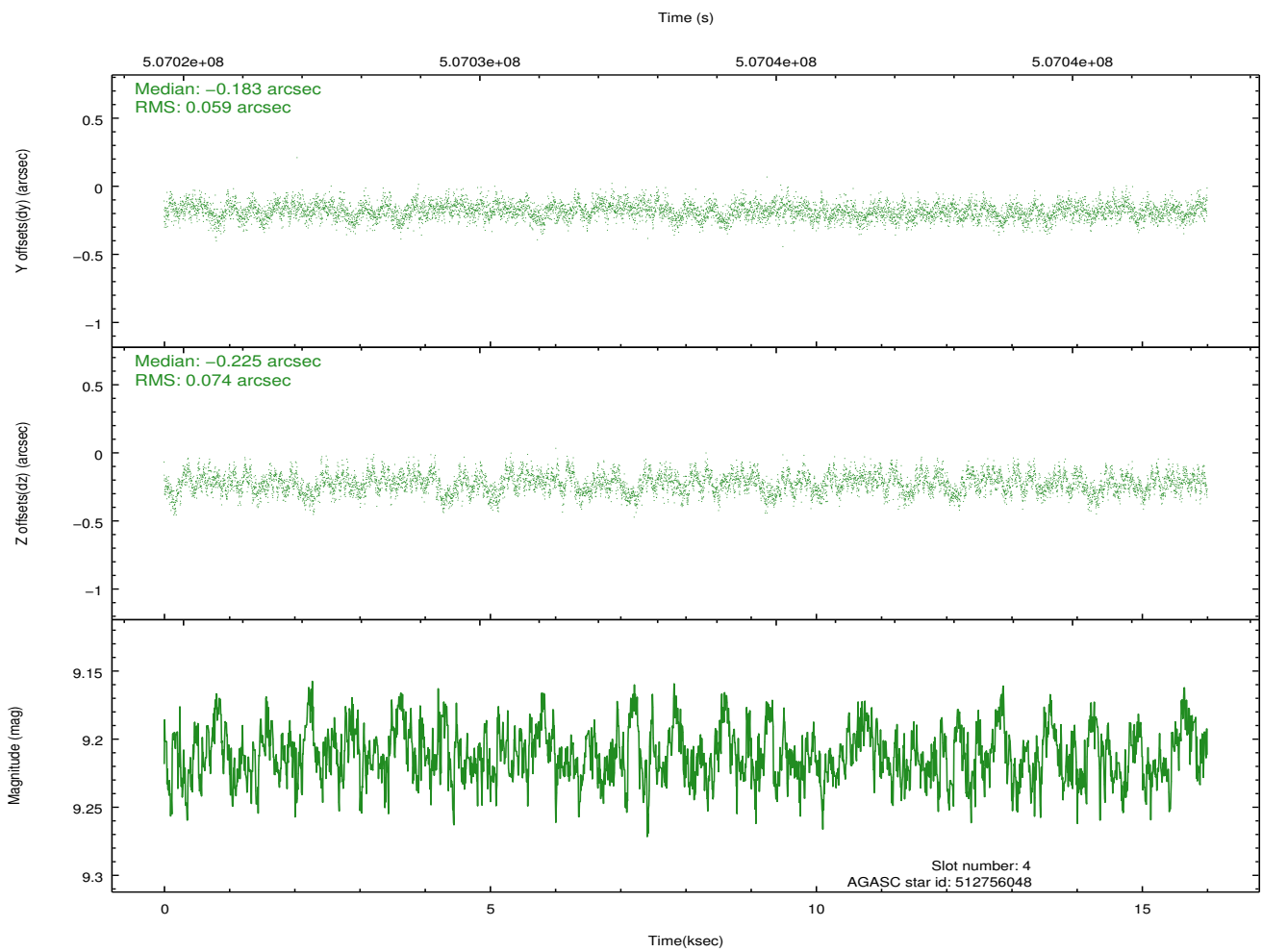
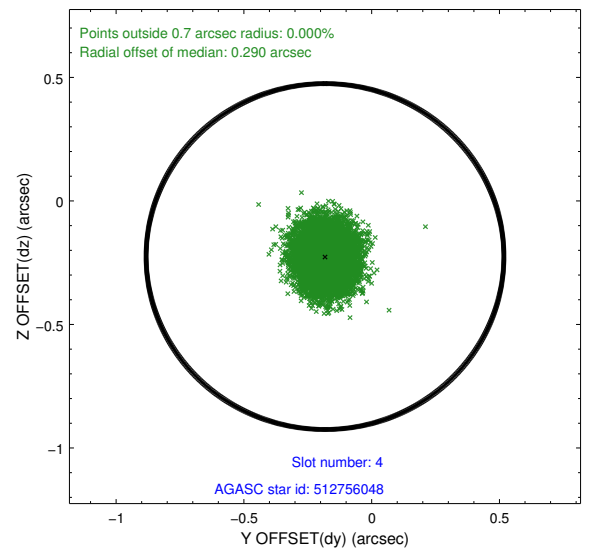
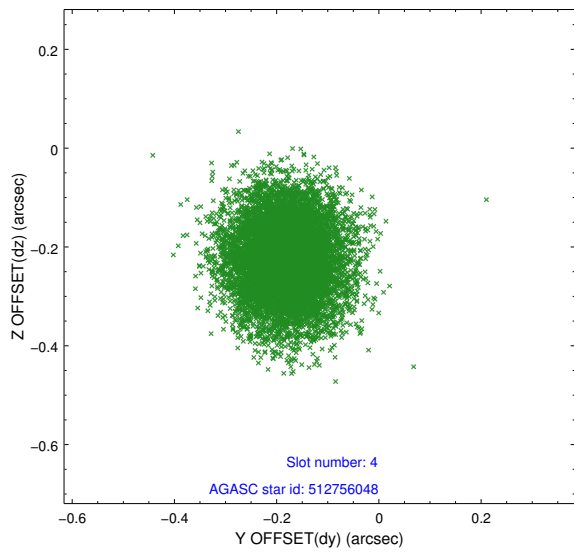
∞

2.4 Star Slots

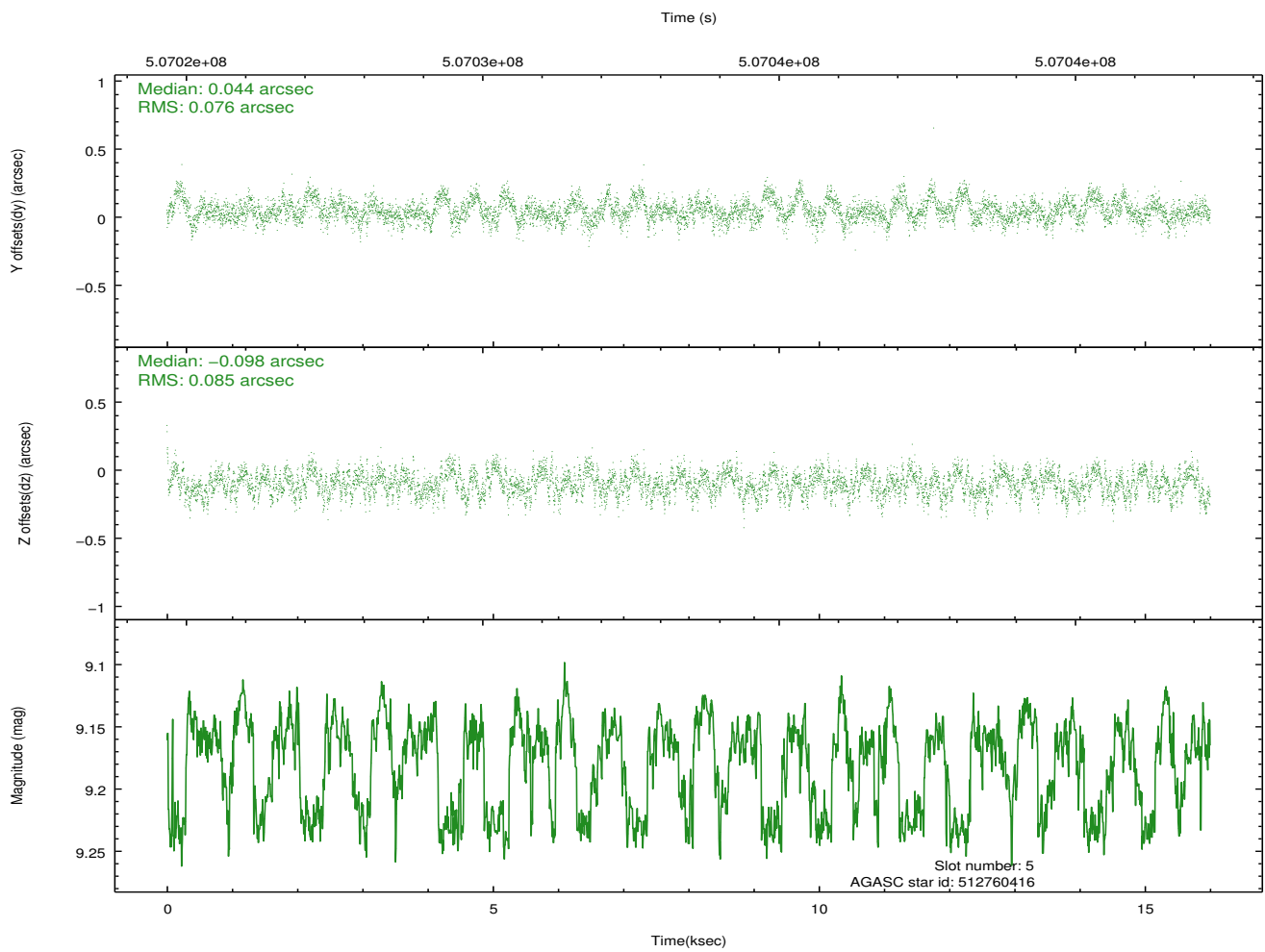
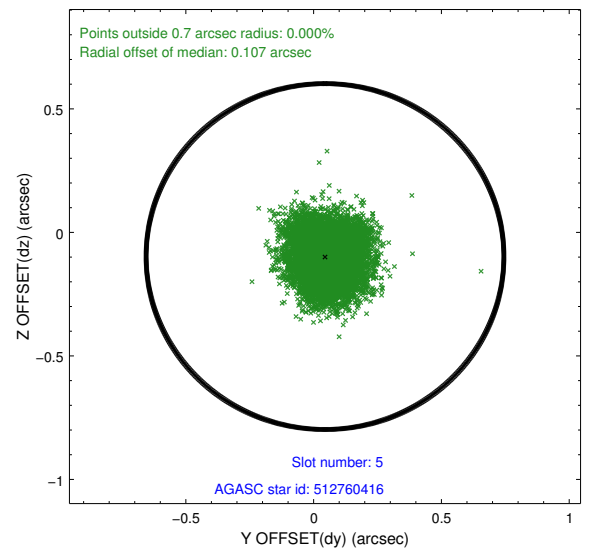
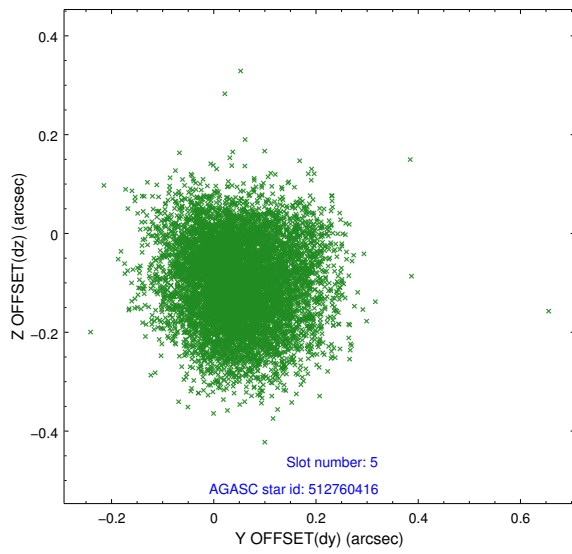
2.4.1 Slot 3



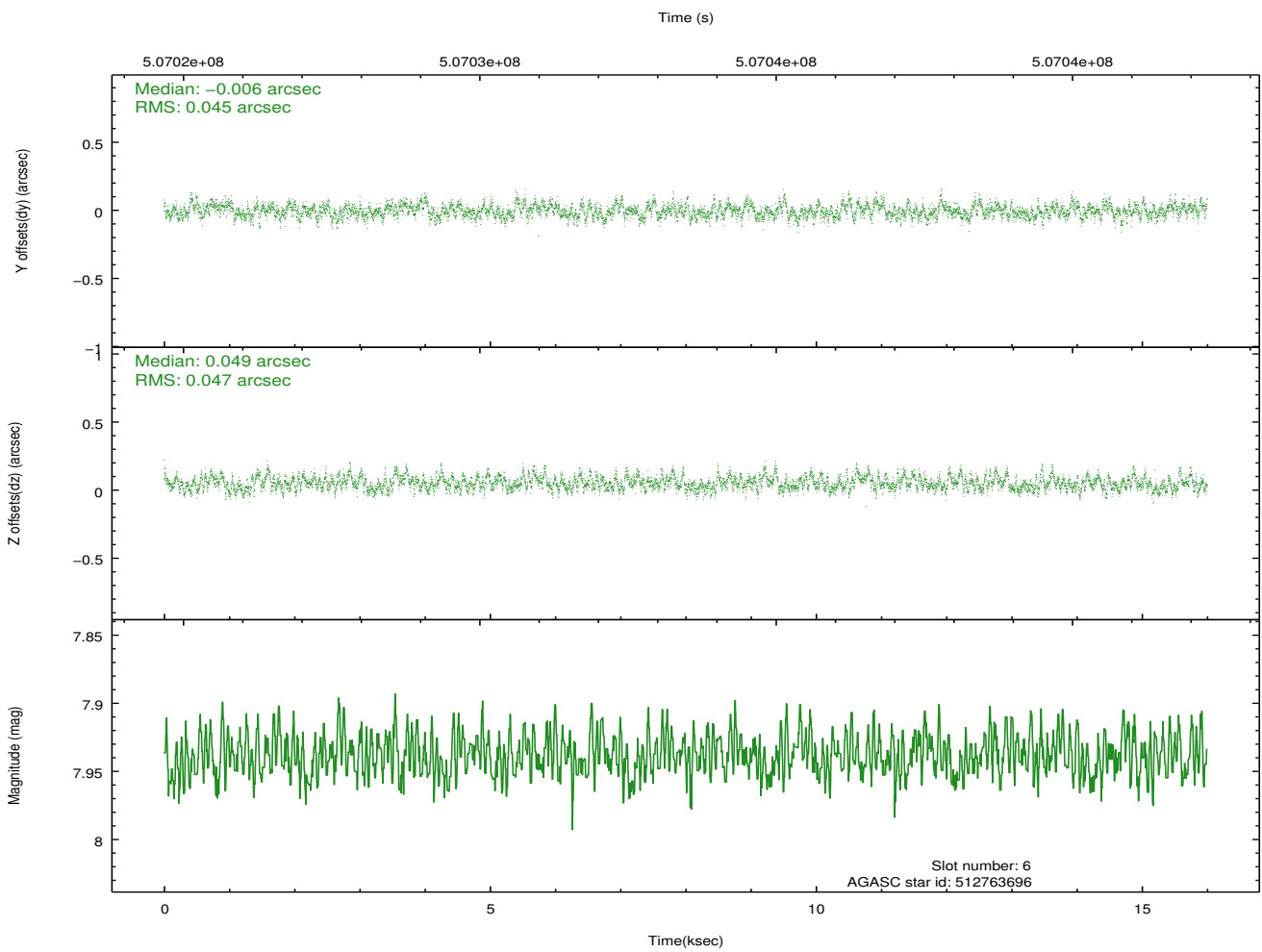
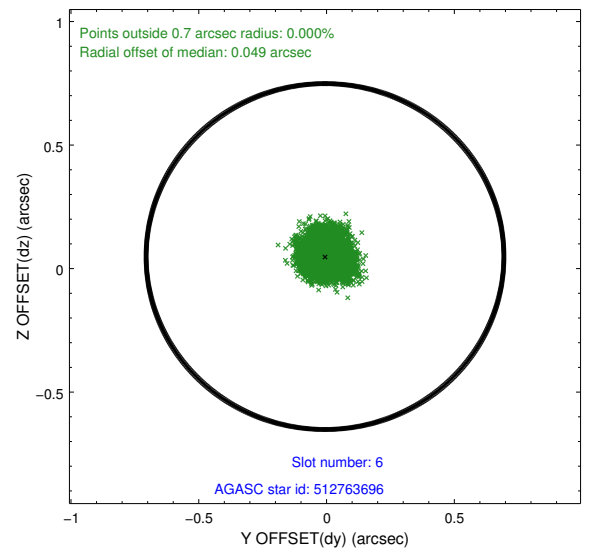
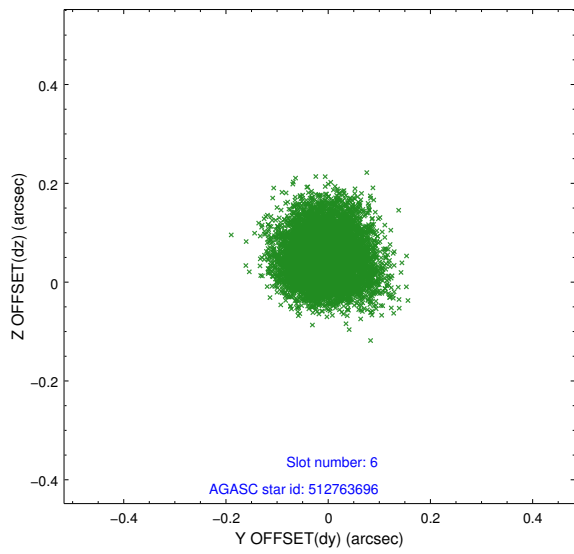
2.4.2 Slot 4



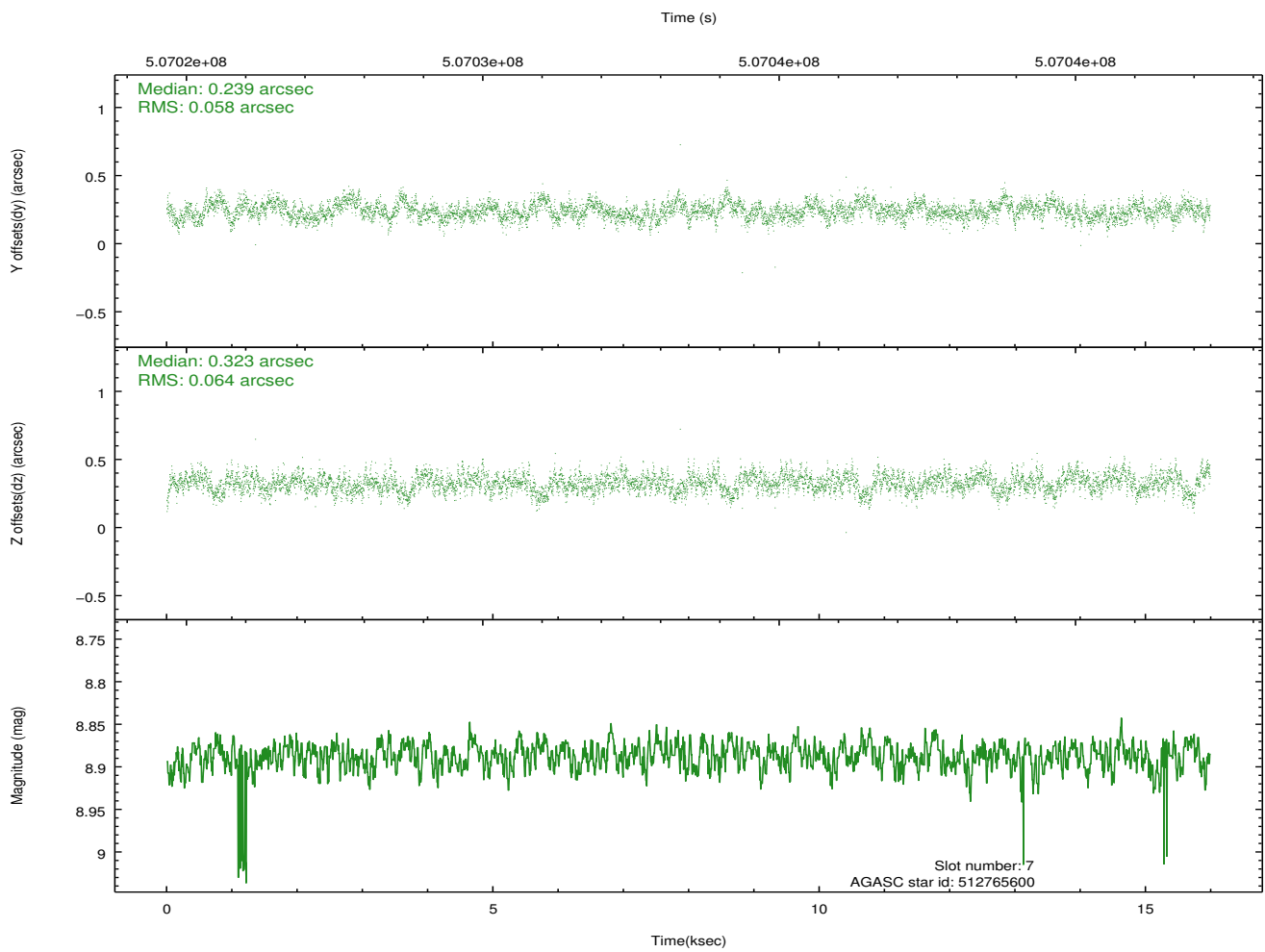
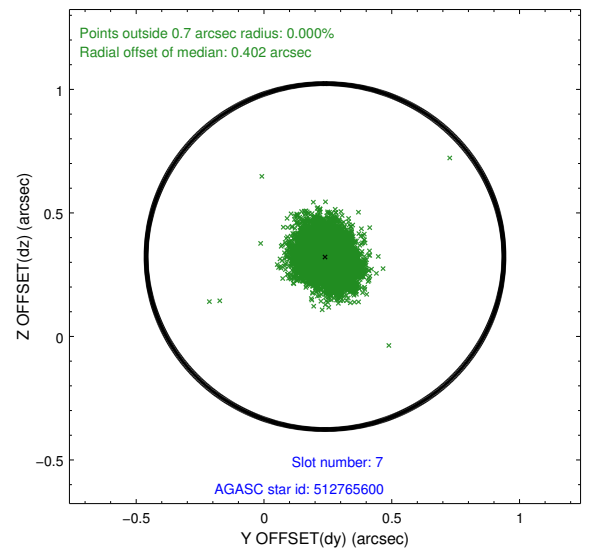
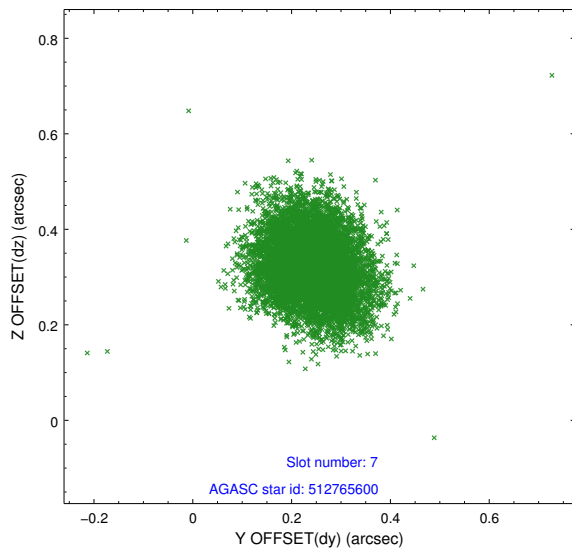
2.4.3 Slot 5



2.4.4 Slot 6

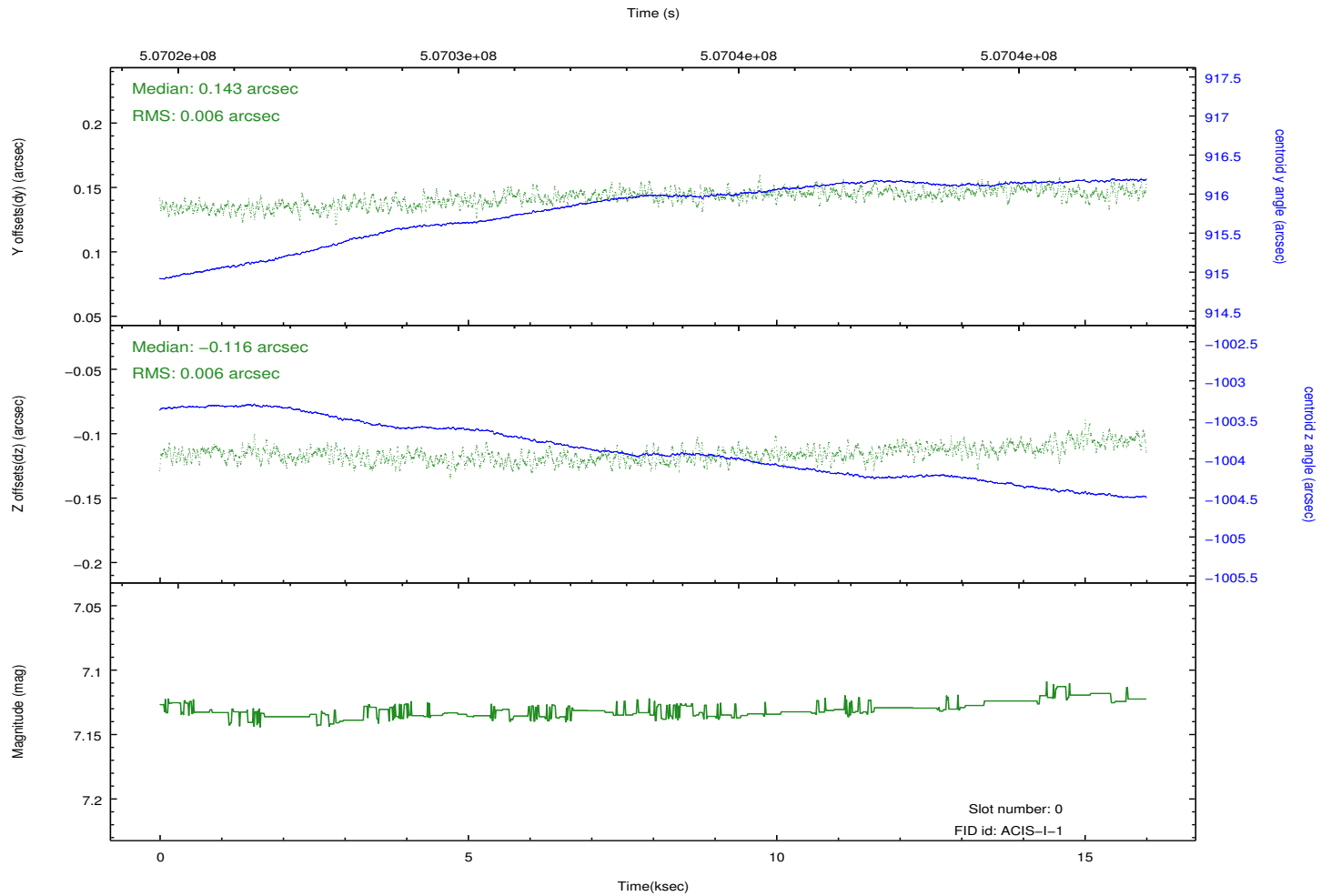
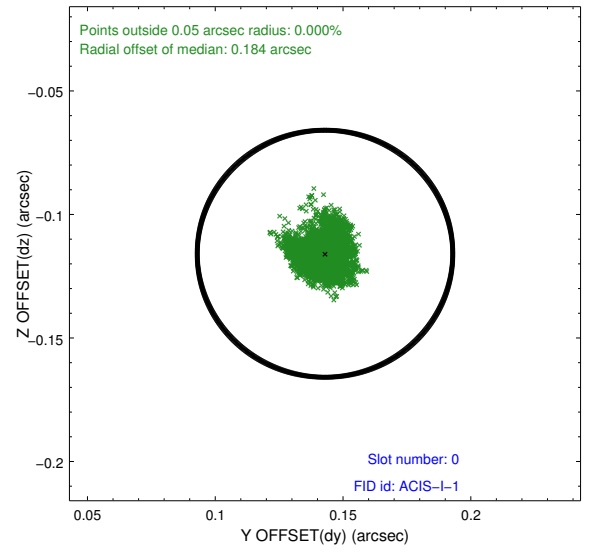
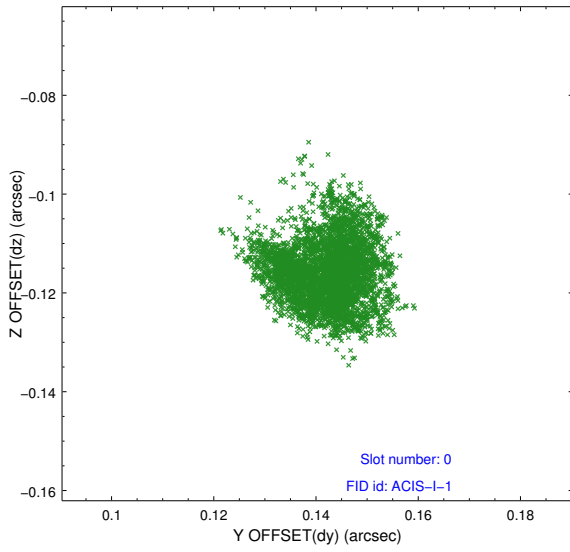


2.4.5 Slot 7

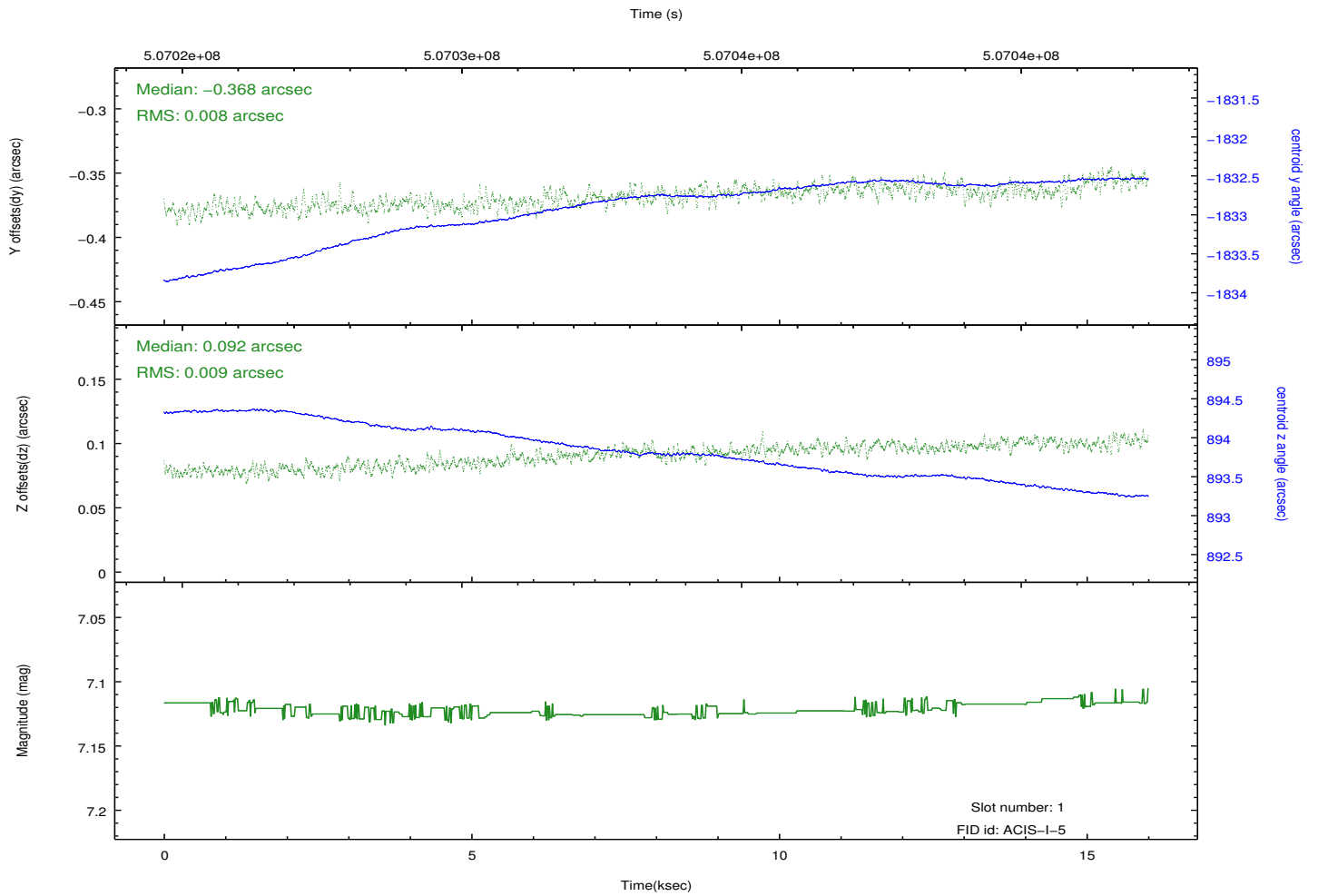
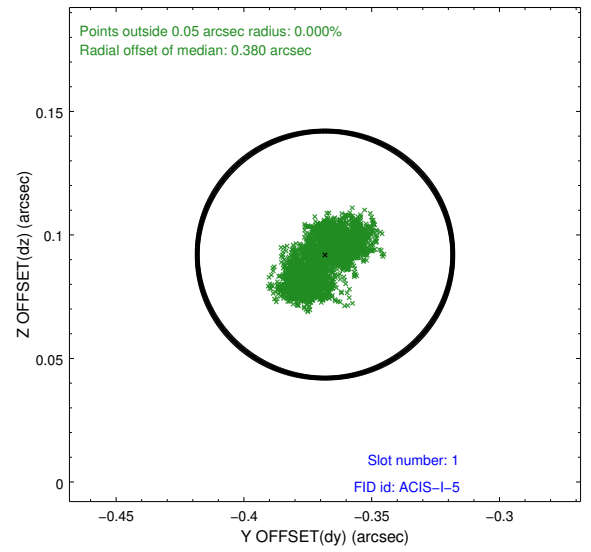
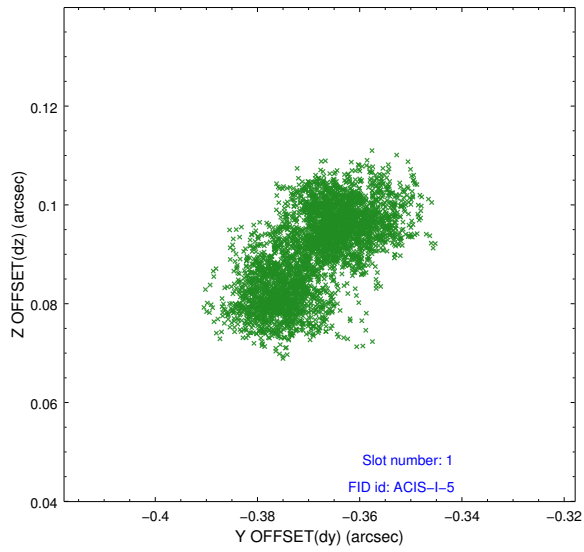


2.5 FID Slots

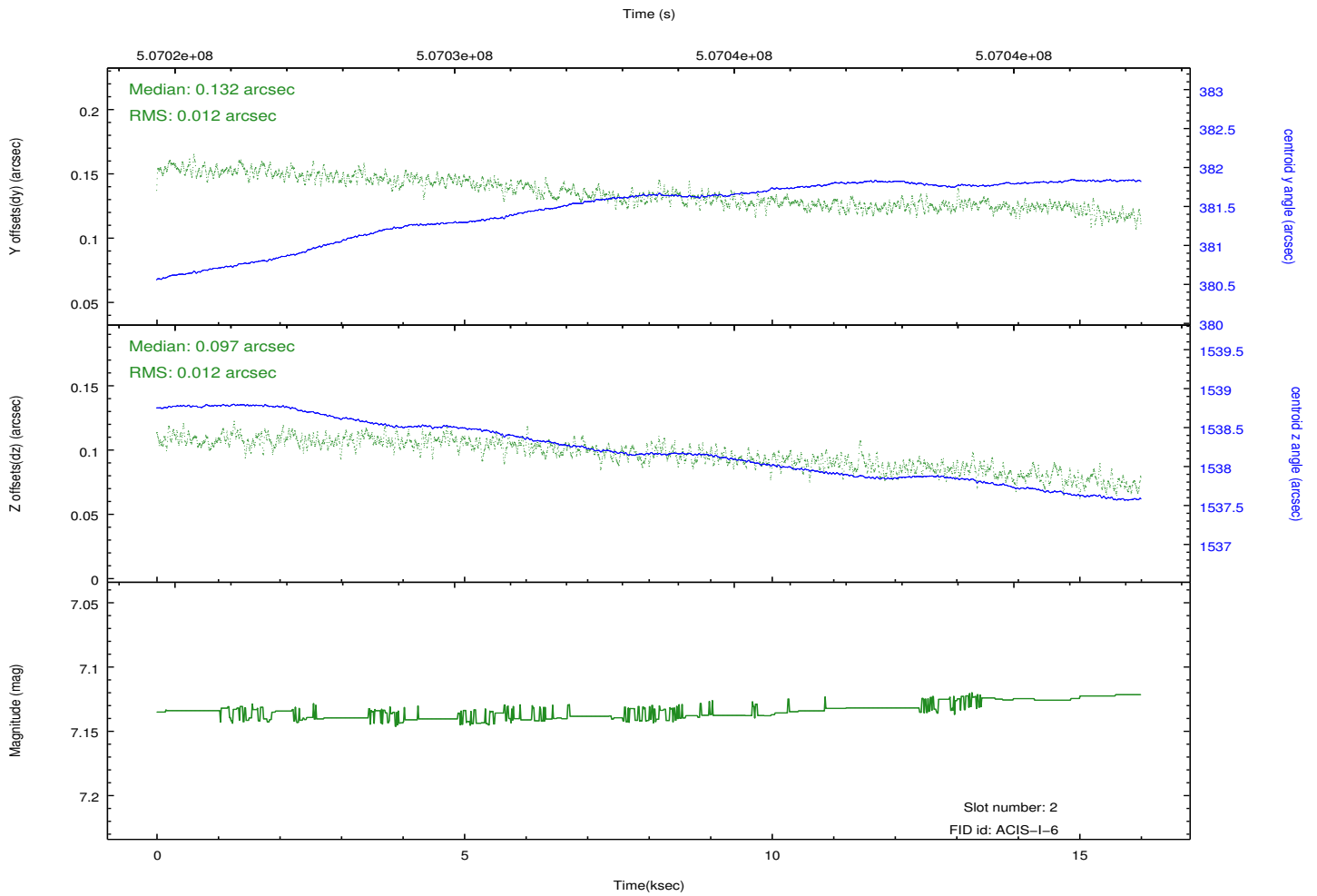
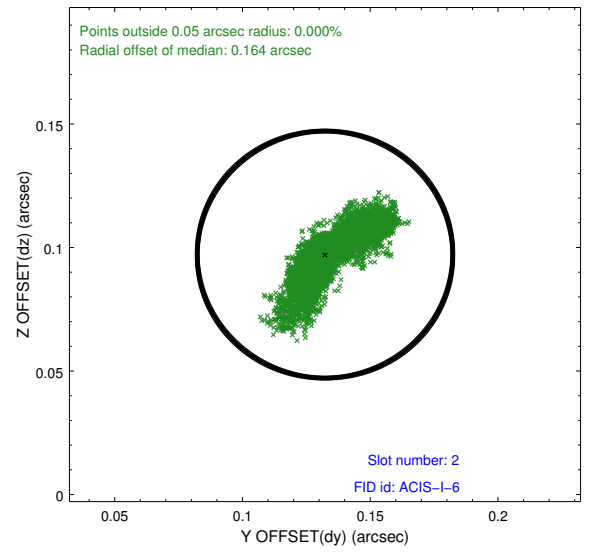
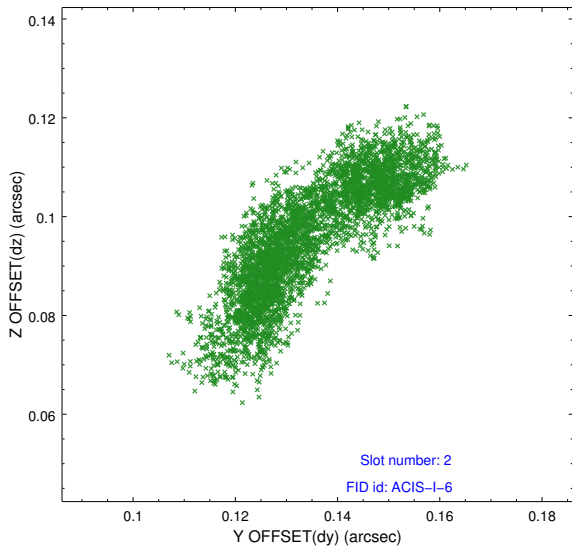
2.5.1 Slot 0



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)	2014.12.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.261300117373

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.