

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15581 - L2 Version 2
Chandra X-Ray Center

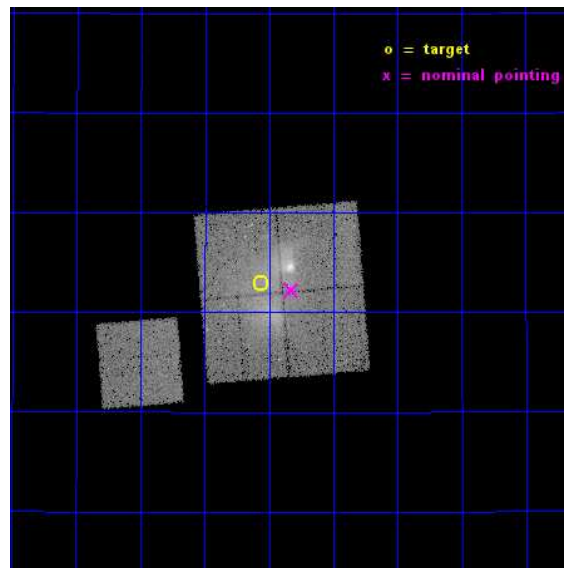
L2 Processing Date : Nov 29 2014

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1 Front

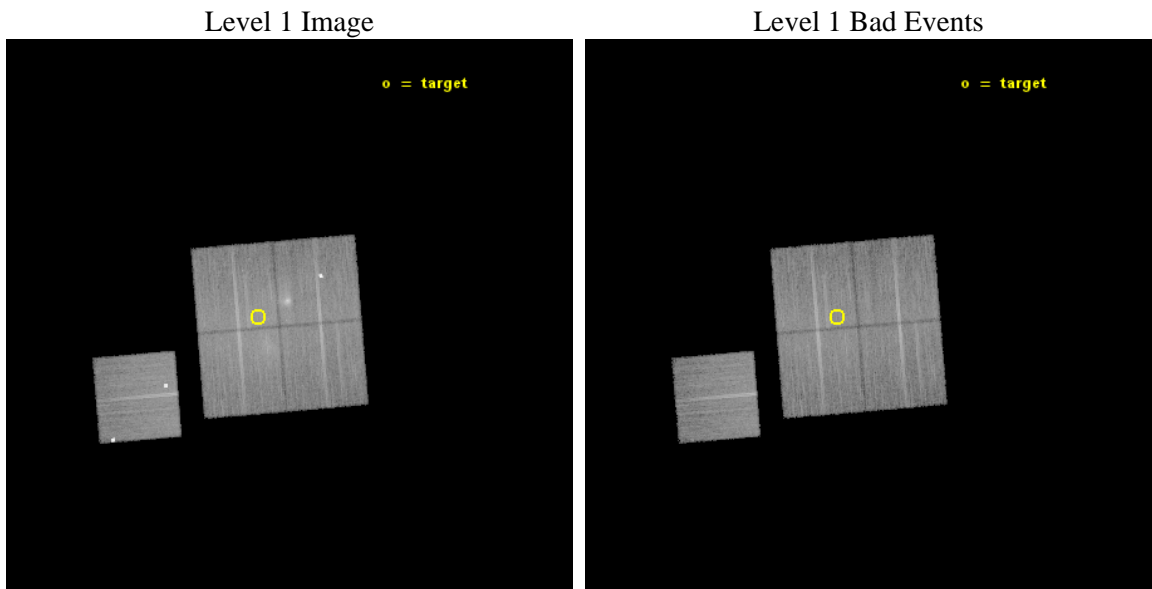
seq_num	801102	Sequence number
obs_id	15581	Observation id
title	Abell 115: It Takes Two to Tango - The interaction of Relativistic and Thermal Plasma in a Merging Subcluster	Proposal title
observer	Dr. william forman	Principal investigator
object	Abell 115	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	14.015458	Observer's specified target RA [deg]
dec_targ	26.381681	Observer's specified target Dec [deg]
ra_nom	13.956393095725	Nominal RA [deg]
dec_nom	26.370193169797	Nominal Dec [deg]
roll_nom	265.23491949537	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30081.483466089	Sum of GTIs [s]
livetime	29688.446738938	Livetime [s]
ontime0	30078.219295681	Sum of GTIs [s]
ontime1	30081.401386082	Sum of GTIs [s]
ontime2	30078.301375806	Sum of GTIs [s]
ontime3	30081.483466089	Sum of GTIs [s]
ontime6	30078.178255856	Sum of GTIs [s]
l2events	110264	Number of level 2 events



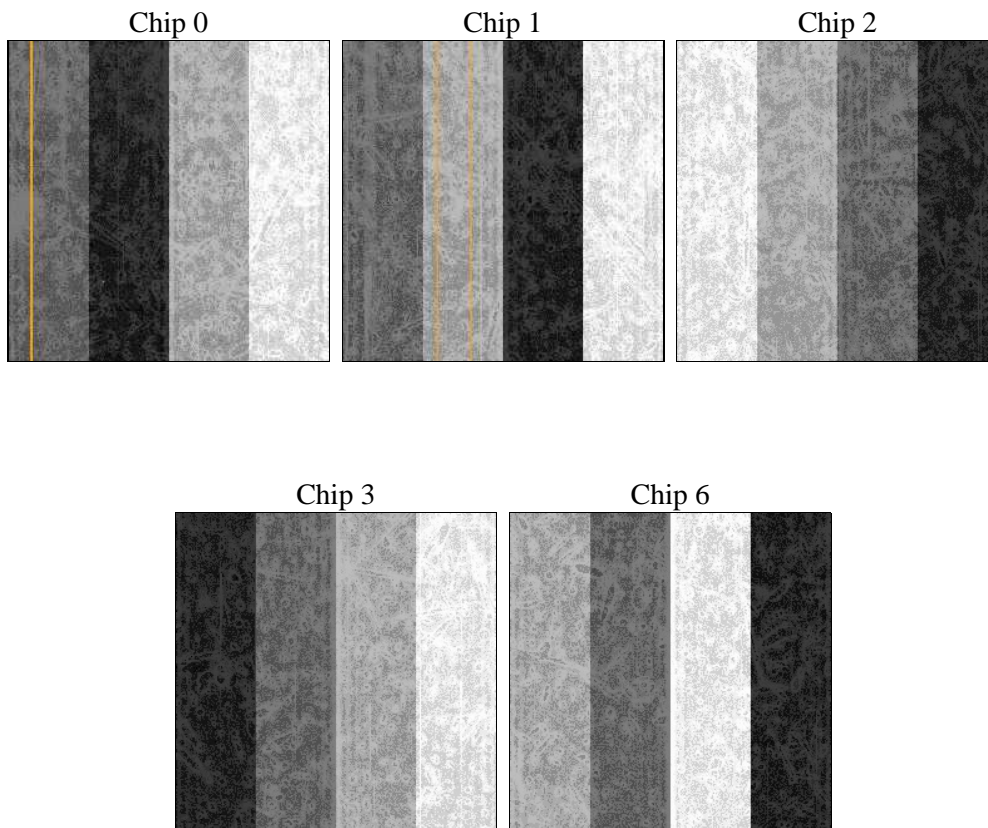
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	30081.483466089	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	30078.219295681	Sum of GTIs [s]
date	2014-11-29T15:29:51	Date and time of file creation	ontime1	30081.401386082	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30078.301375806	Sum of GTIs [s]
			ontime3	30081.483466089	Sum of GTIs [s]
			ontime6	30078.178255856	Sum of GTIs [s]
			l1events	837984	Number of level 1 events

2.1.4 Events

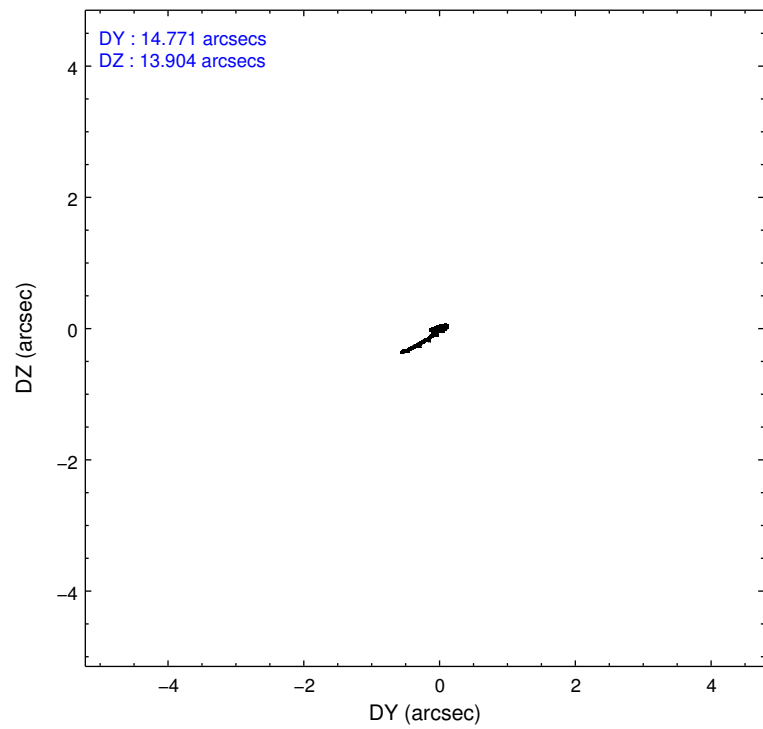
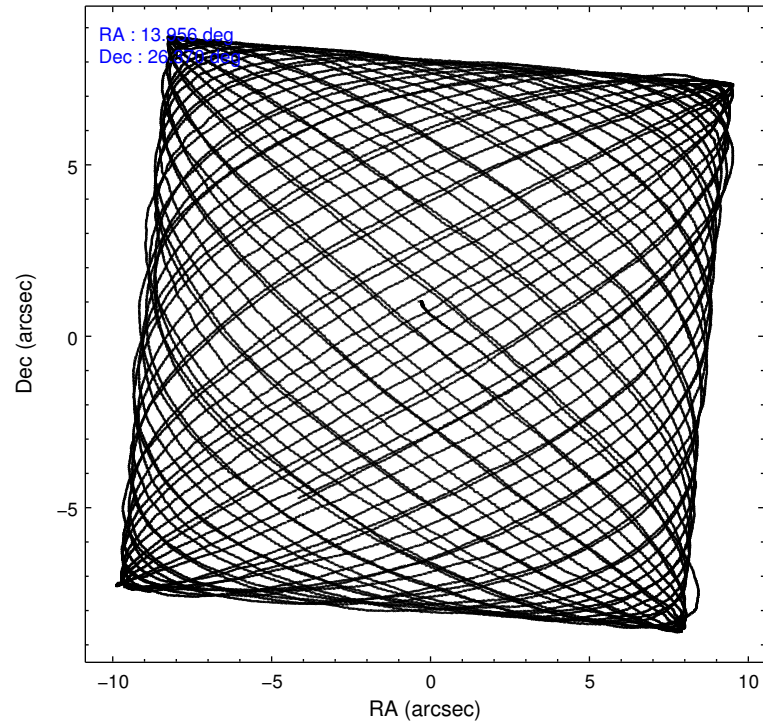
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	146550	173074	169045	169100	180215
rejected events	126623	131250	140587	142726	142926
rejected %	86%	75%	83%	84%	79%

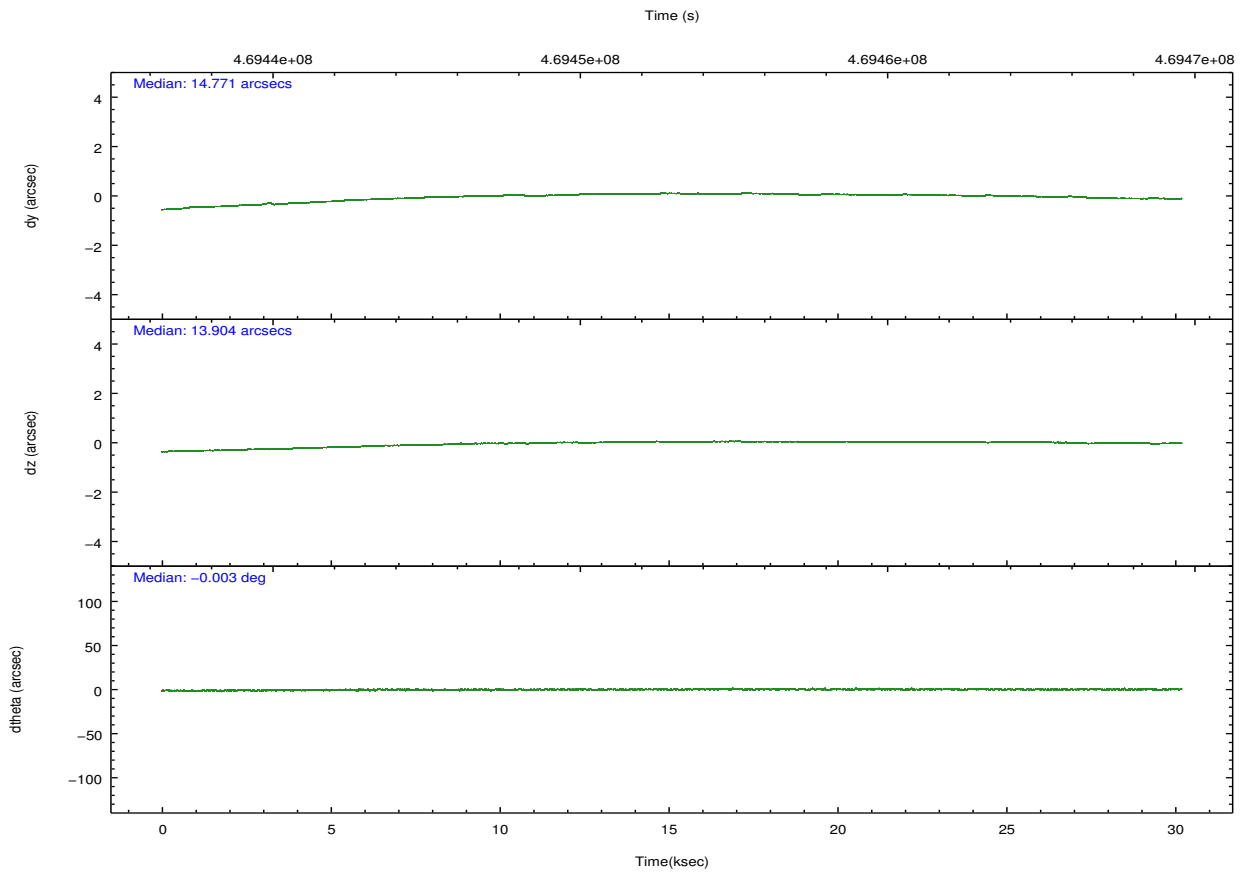
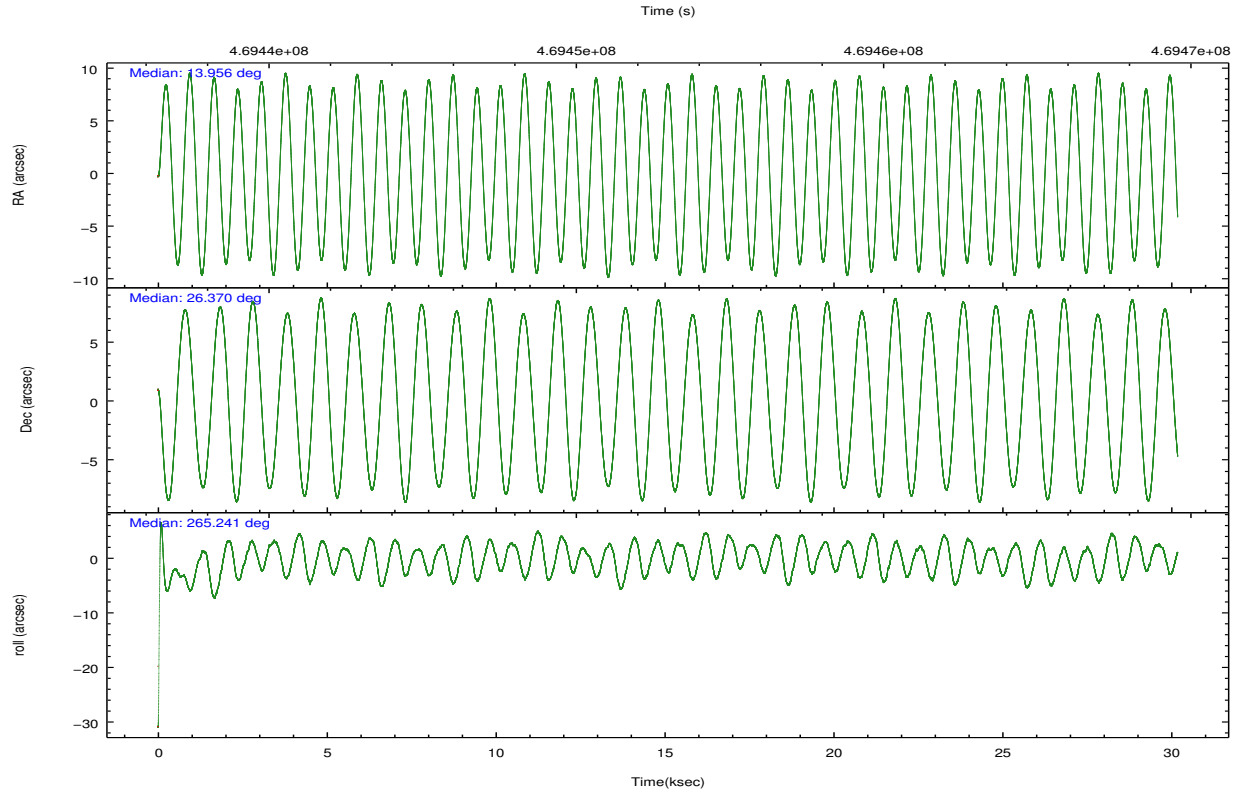
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	7711	26411	15104	13241	24749
	5%	15%	8%	7%	13%
grade 1 events	87	142	113	111	138
	0%	0%	0%	0%	0%
grade 2 events	4584	5927	5309	4883	4306
	3%	3%	3%	2%	2%
grade 3 events	1959	2333	2095	2129	1939
	1%	1%	1%	1%	1%
grade 4 events	1814	2367	2129	2181	1929
	1%	1%	1%	1%	1%
grade 5 events	7340	7818	6882	8369	7898
	5%	4%	4%	4%	4%
grade 6 events	3860	4791	3825	3942	4373
	2%	2%	2%	2%	2%
grade 7 events	119195	123285	133588	134244	134883
	81%	71%	79%	79%	74%

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	13.943175	13.95639309572497	CCD I2 on	Y	Y
[deg] Pointing Dec	26.395022	26.37019316979659	CCD I3 on	Y	Y
[deg] Pointing Roll	265.032126	265.2349194953738	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	-238.592463	-238.5959505415362	CCD S3 on	N	N
[mm] SIM translation stage offset	5	5.003497538606524	CCD S4 on	N	N
[s] Observation start time (MET)	469438061.184000	469437004.56623	CCD S5 on	N	N
Observation start date	2012-11-16T07:26:34	2012-11-16T07:10:04	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	469468061.184000	469469015.83045	On-chip summing requested	N	N
Observation end date	2012-11-16T15:46:34	2012-11-16T16:03:35	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





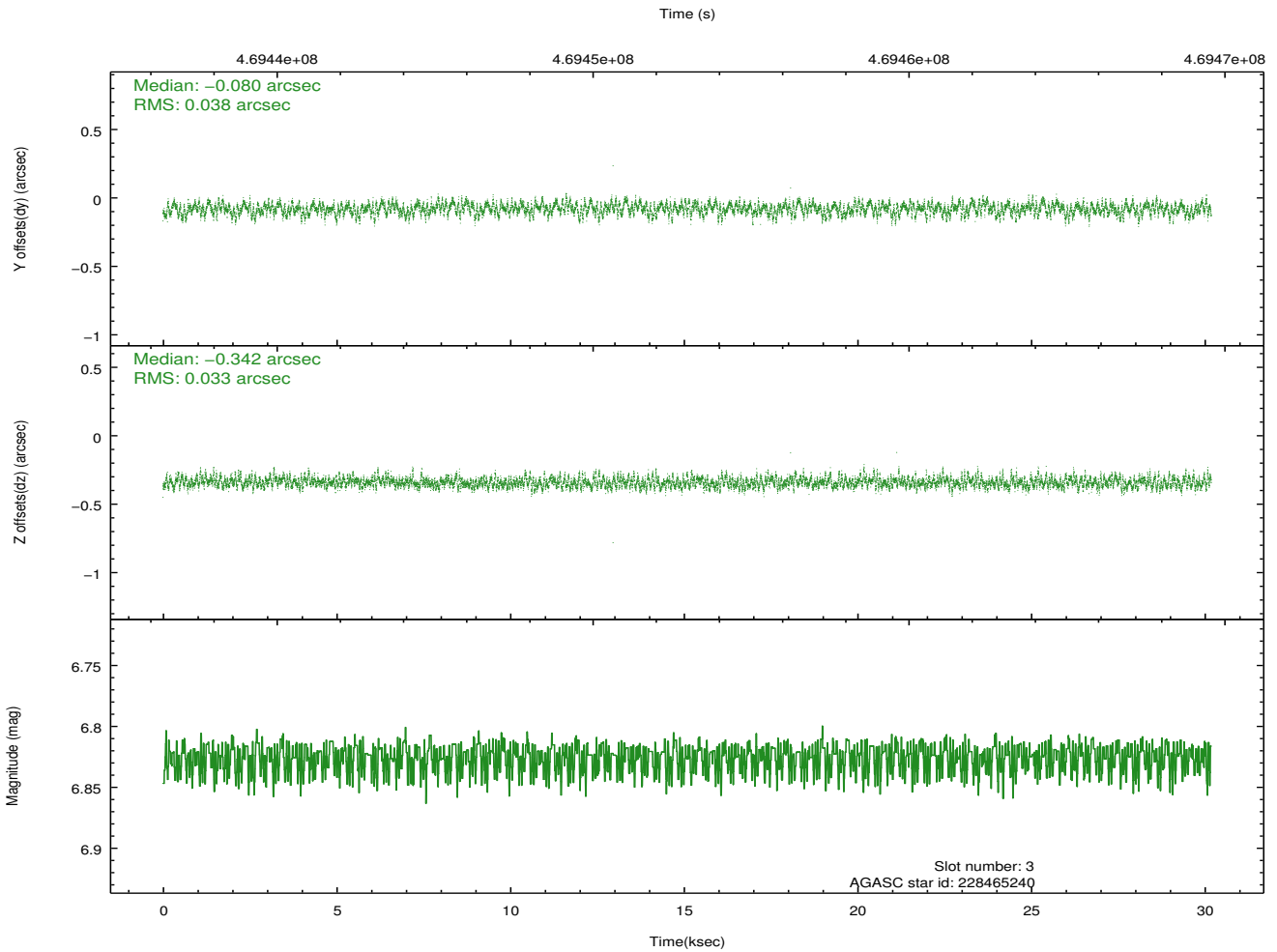
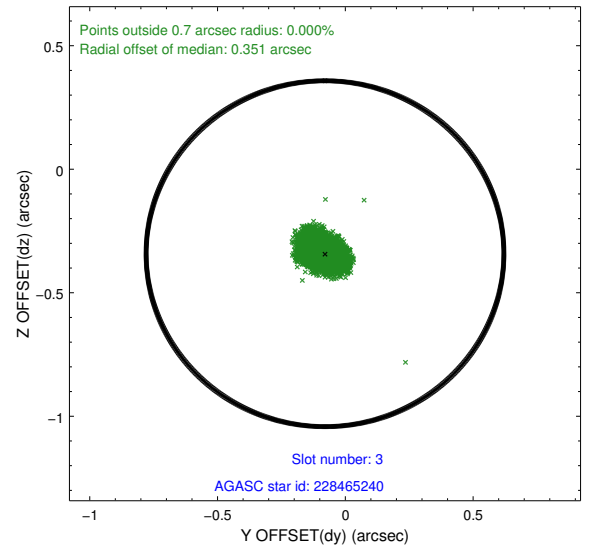
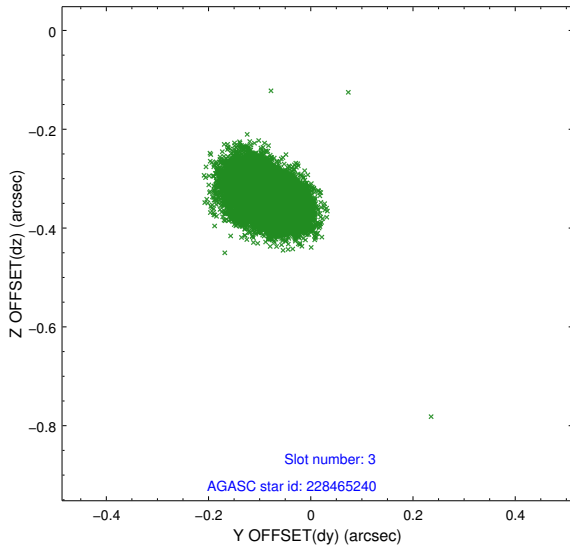
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.22	7364	0.031	0.012	0.008	0.015	0.000000	0.000000	924.90	-734.50
1	FID		ACIS-I-5	7.19	7362	-0.195	0.045	0.008	0.014	0.000000	0.000000	-1823.44	1162.93
2	FID		ACIS-I-6	7.18	7364	0.073	0.013	0.007	0.012	0.000000	0.000000	390.35	1807.53
3	GUIDE	used	228465240	6.82	14723	-0.080	-0.342	0.053	0.089	14.618559	26.785836	-1595.35	2039.83
4	GUIDE	used	228465440	9.03	14656	0.027	-0.134	0.090	0.144	14.413974	26.069950	1031.14	1617.94
5	GUIDE	used	228471216	9.39	14668	0.242	-0.055	0.094	0.148	14.297603	25.734211	2269.18	1351.90
6	GUIDE	used	228472888	6.19	14727	-0.196	0.407	0.052	0.082	14.185441	26.339999	128.75	796.44
7	GUIDE	used	228474552	8.11	14722	0.005	0.123	0.062	0.105	14.313380	26.999538	-2272.74	995.07

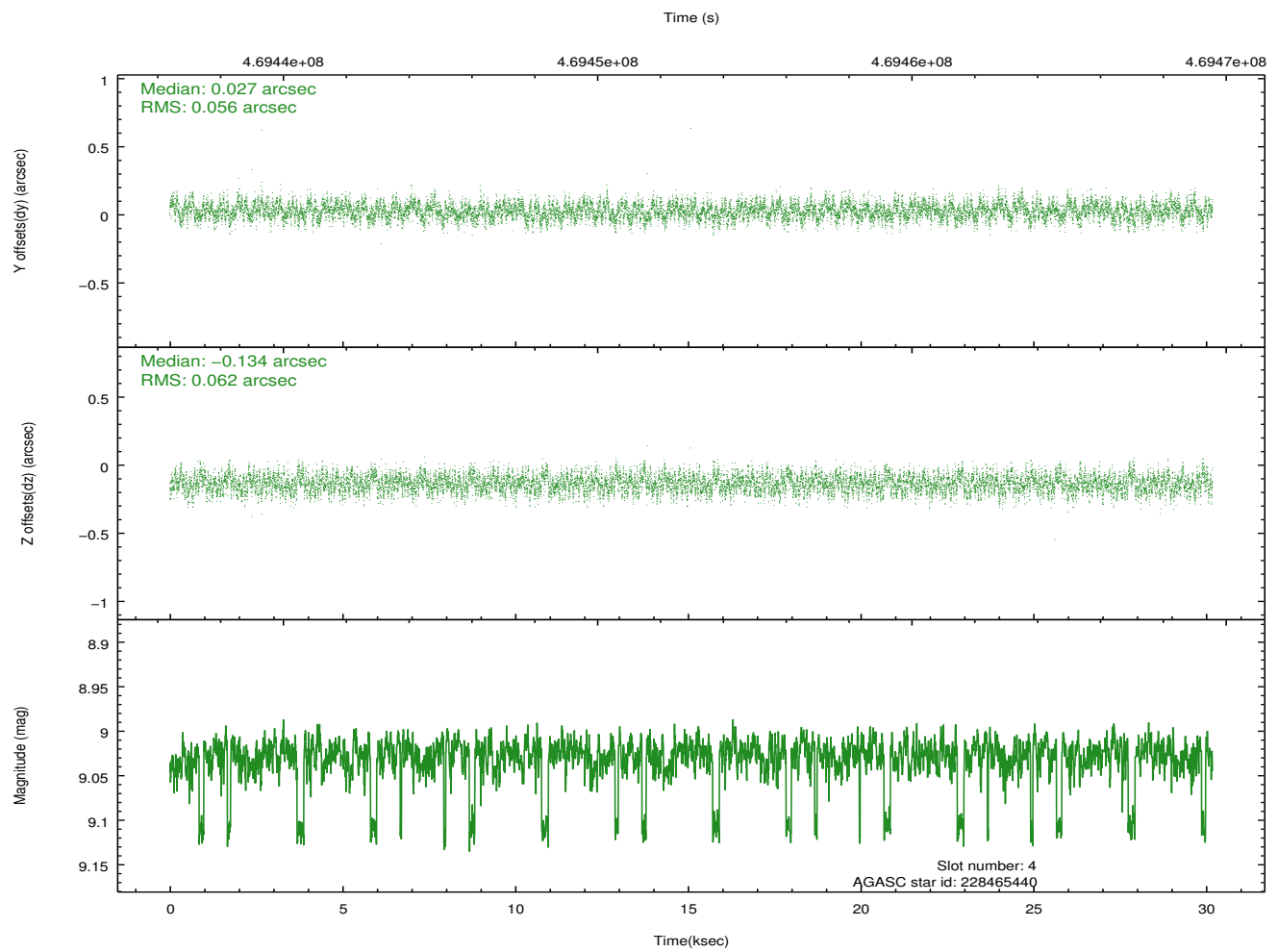
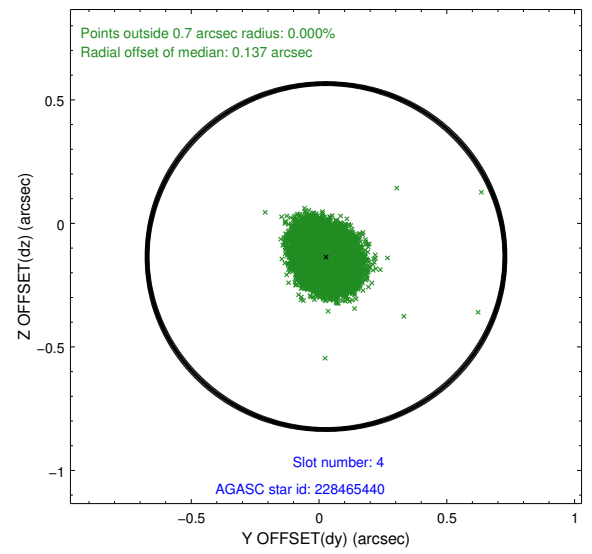
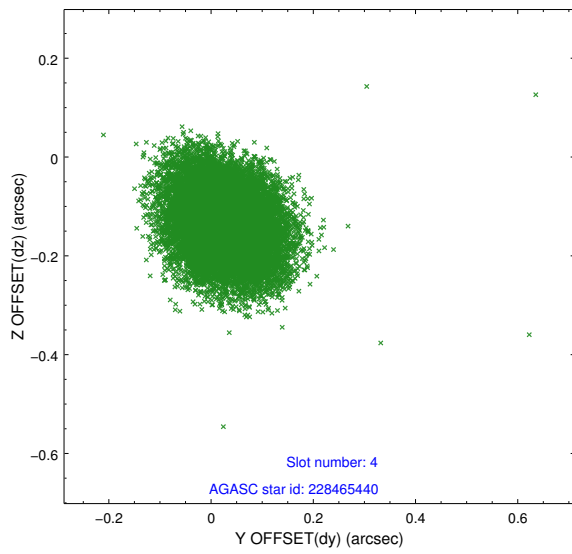
∞

2.4 Star Slots

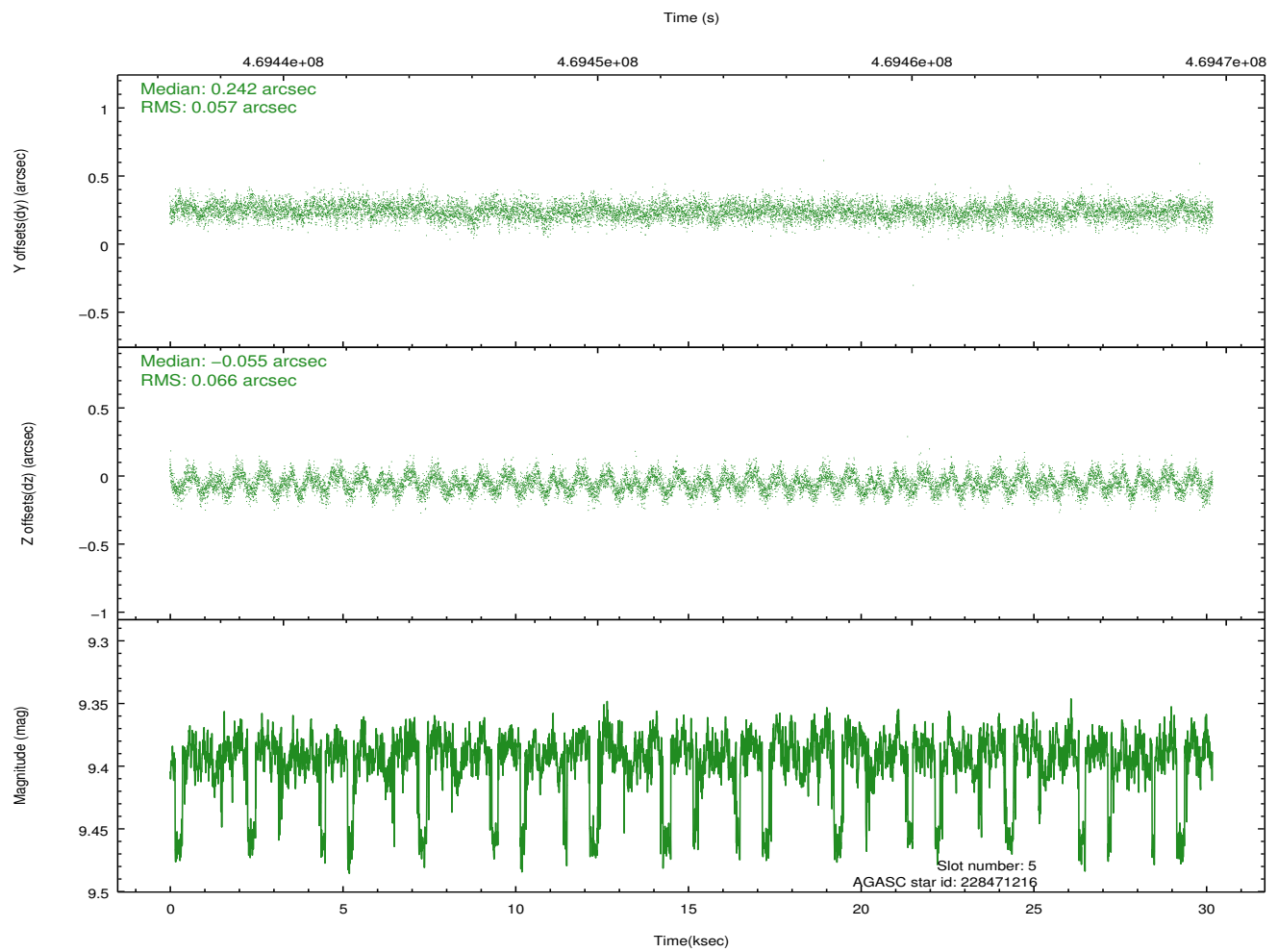
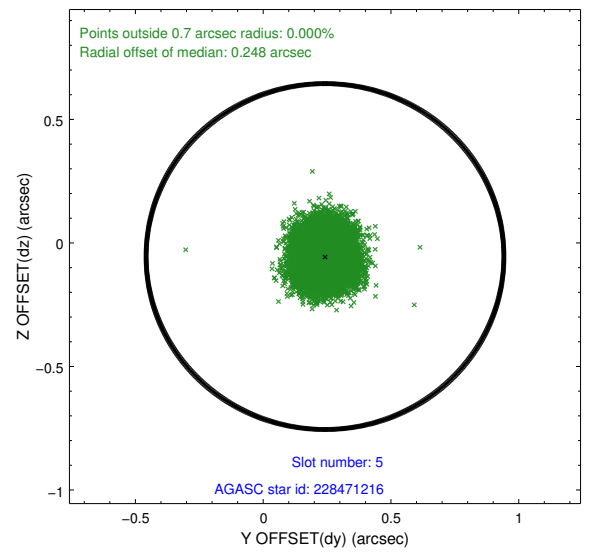
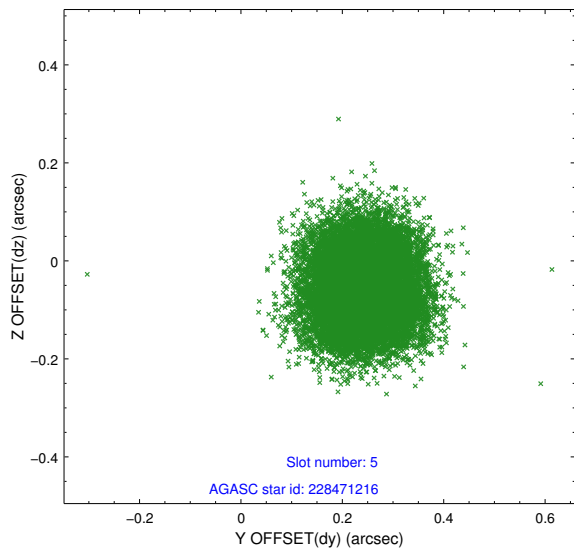
2.4.1 Slot 3



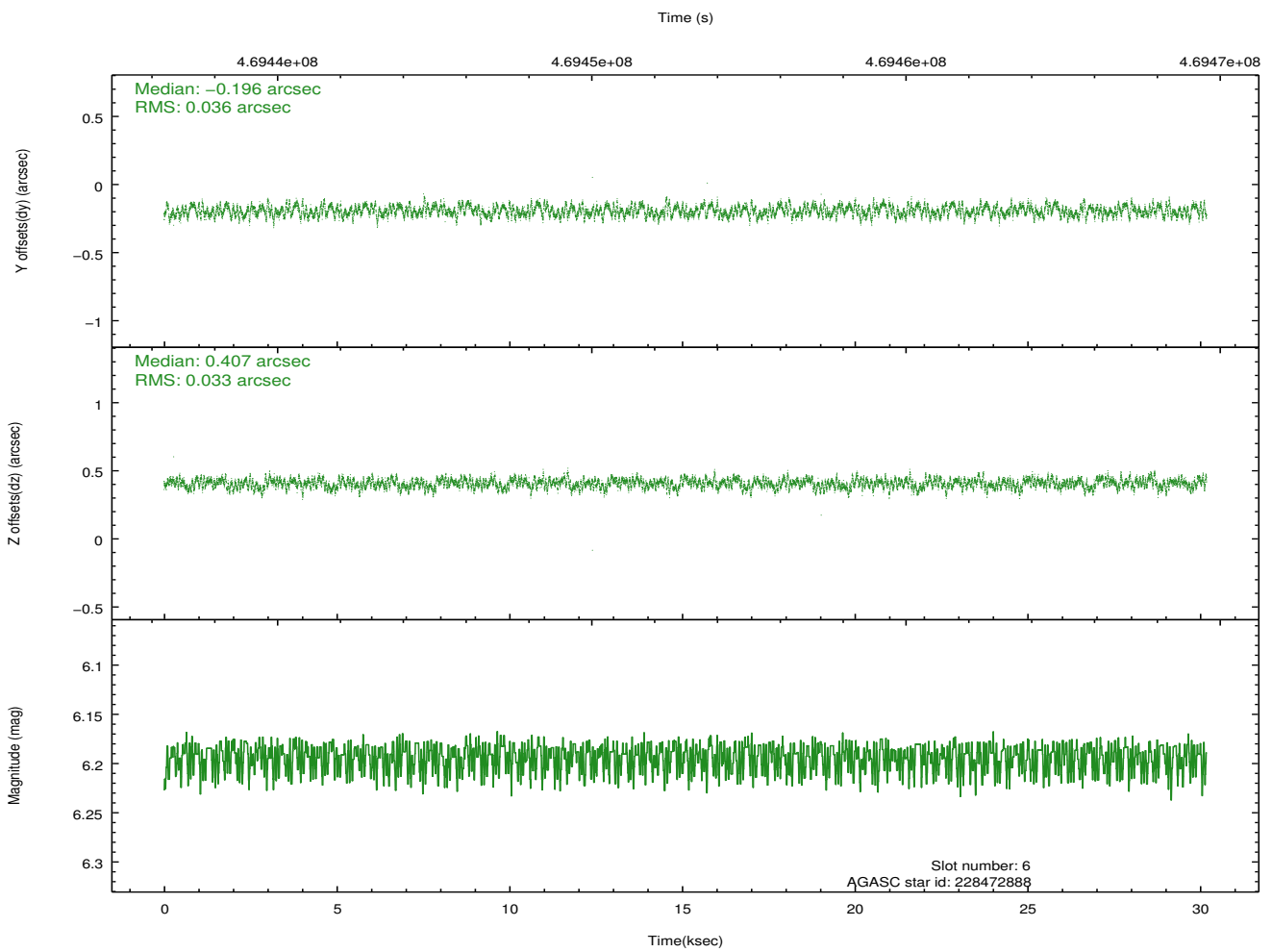
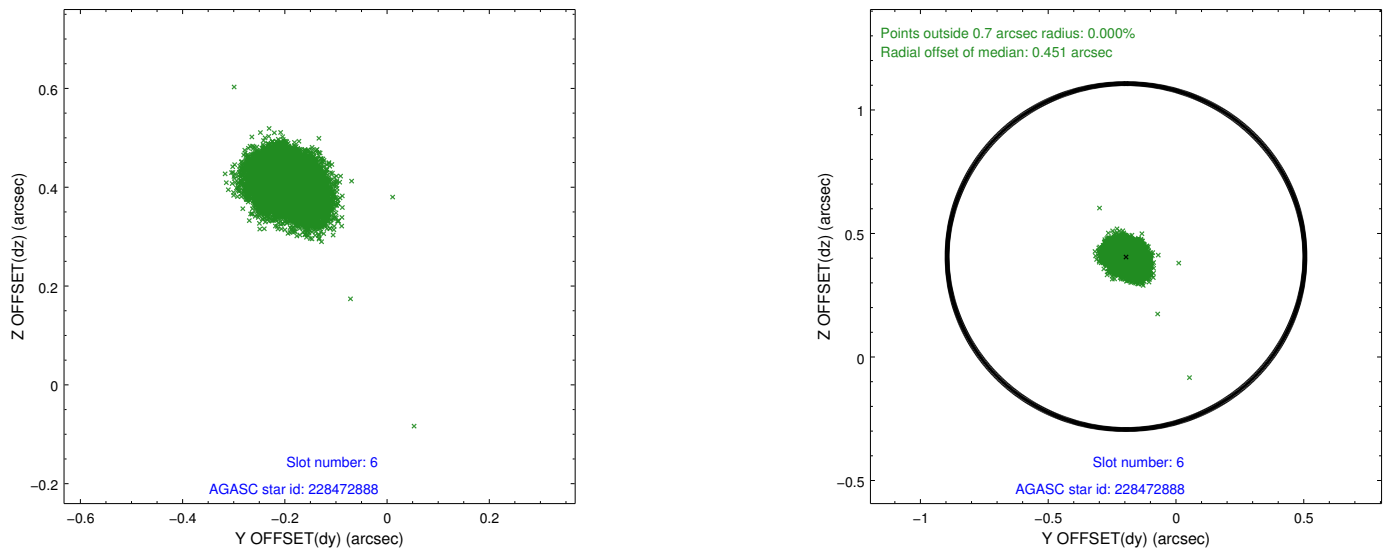
2.4.2 Slot 4



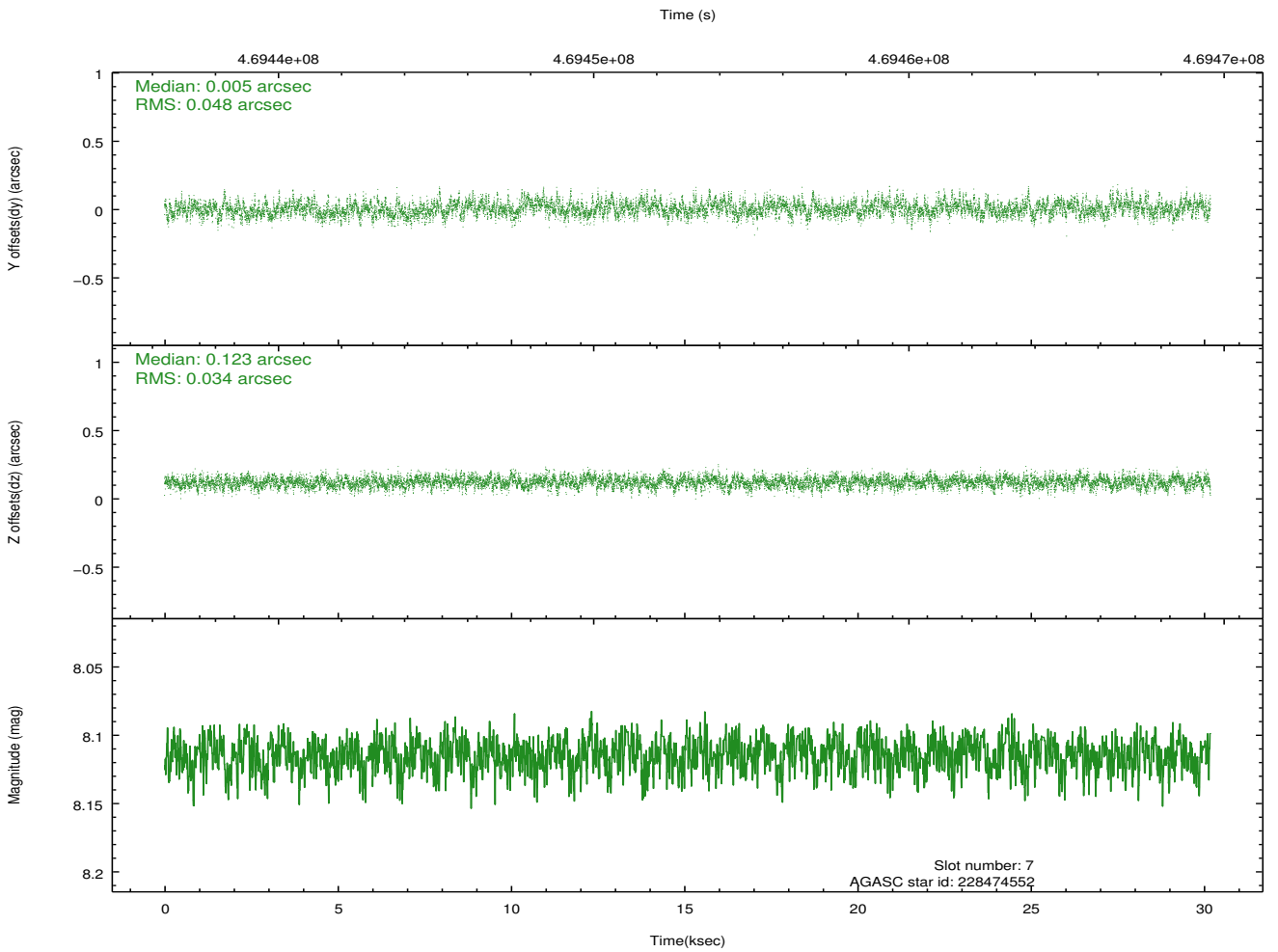
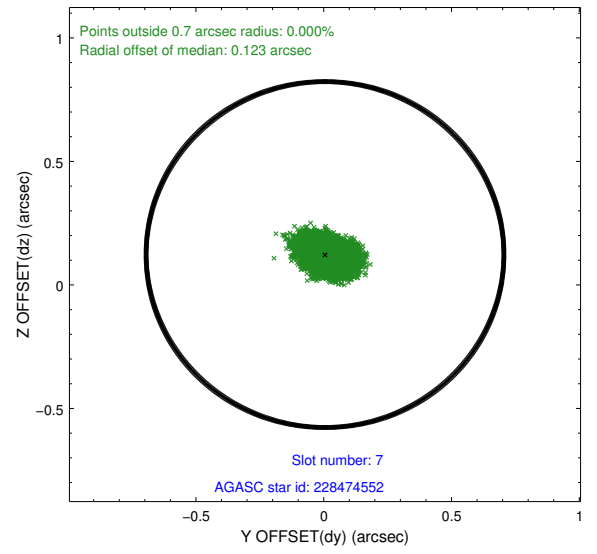
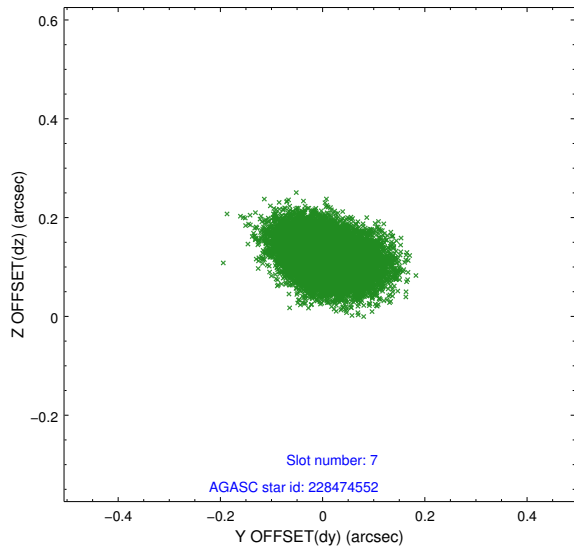
2.4.3 Slot 5



2.4.4 Slot 6

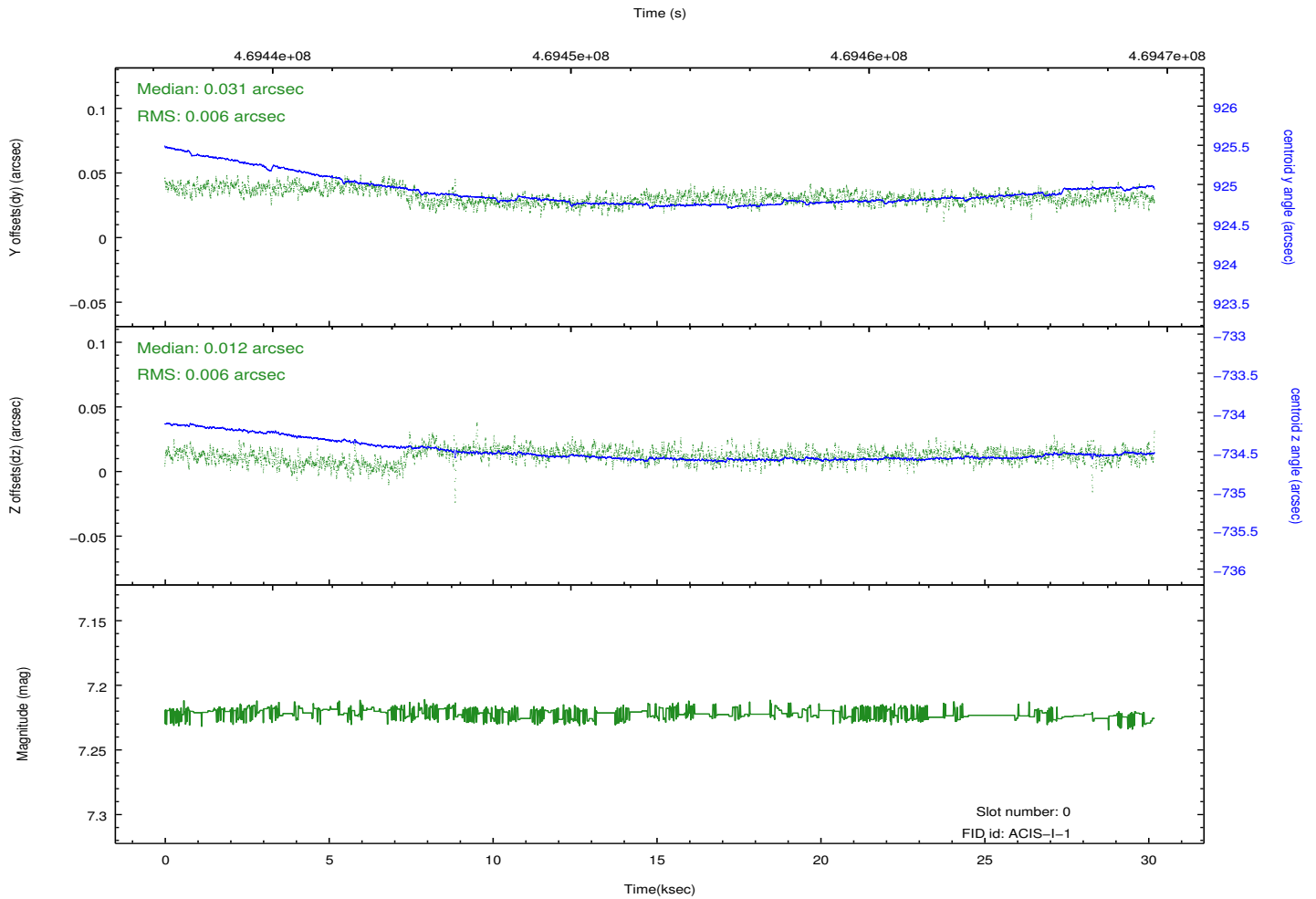
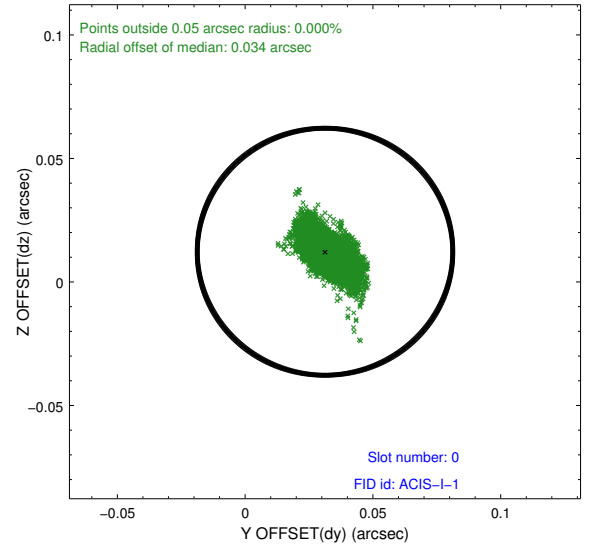
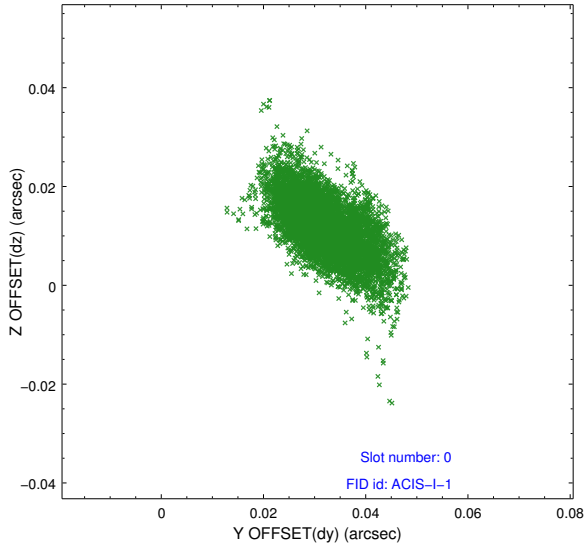


2.4.5 Slot 7

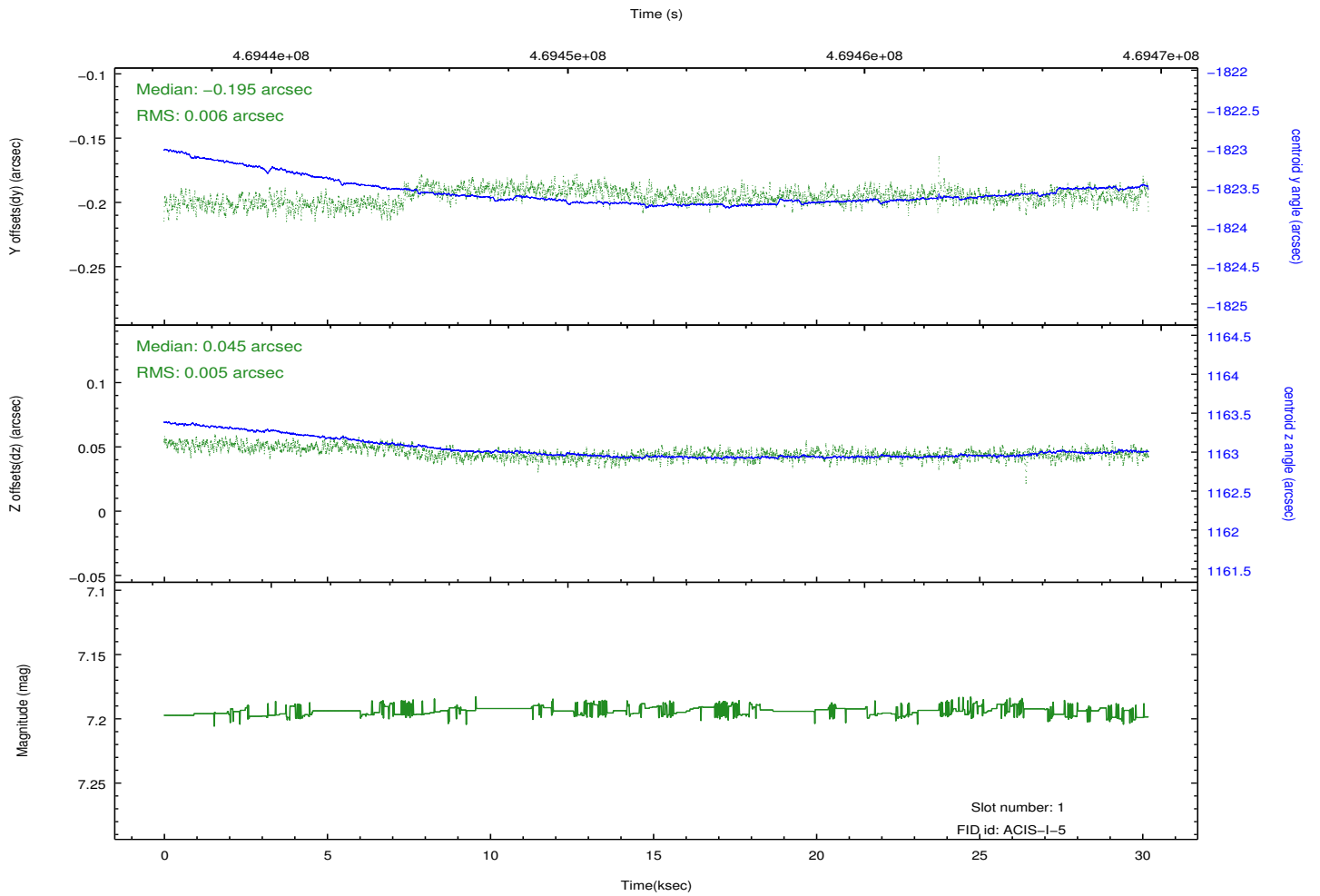
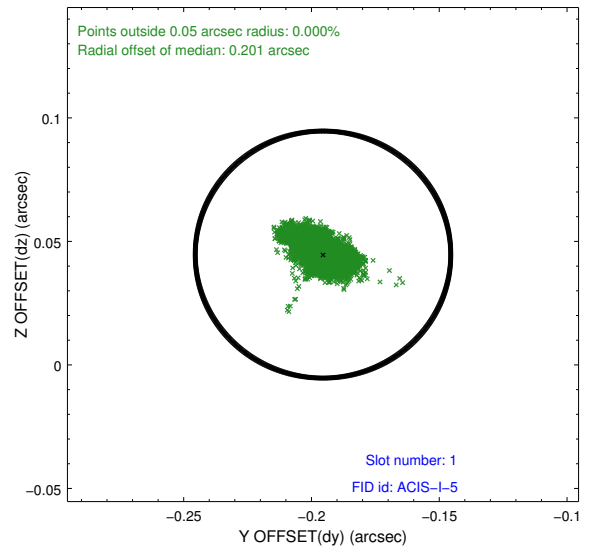
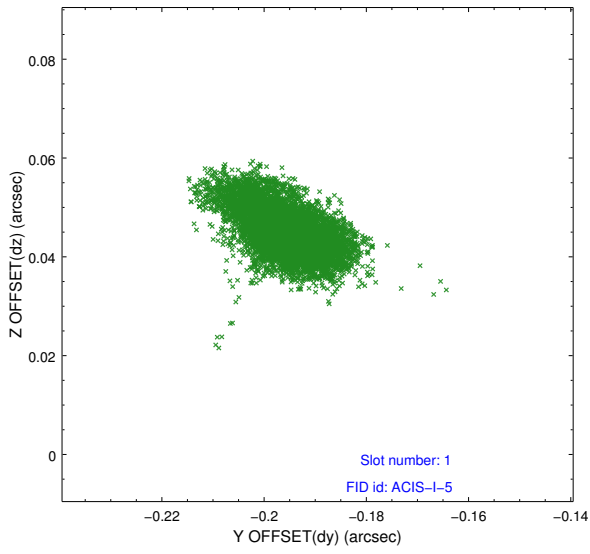


2.5 FID Slots

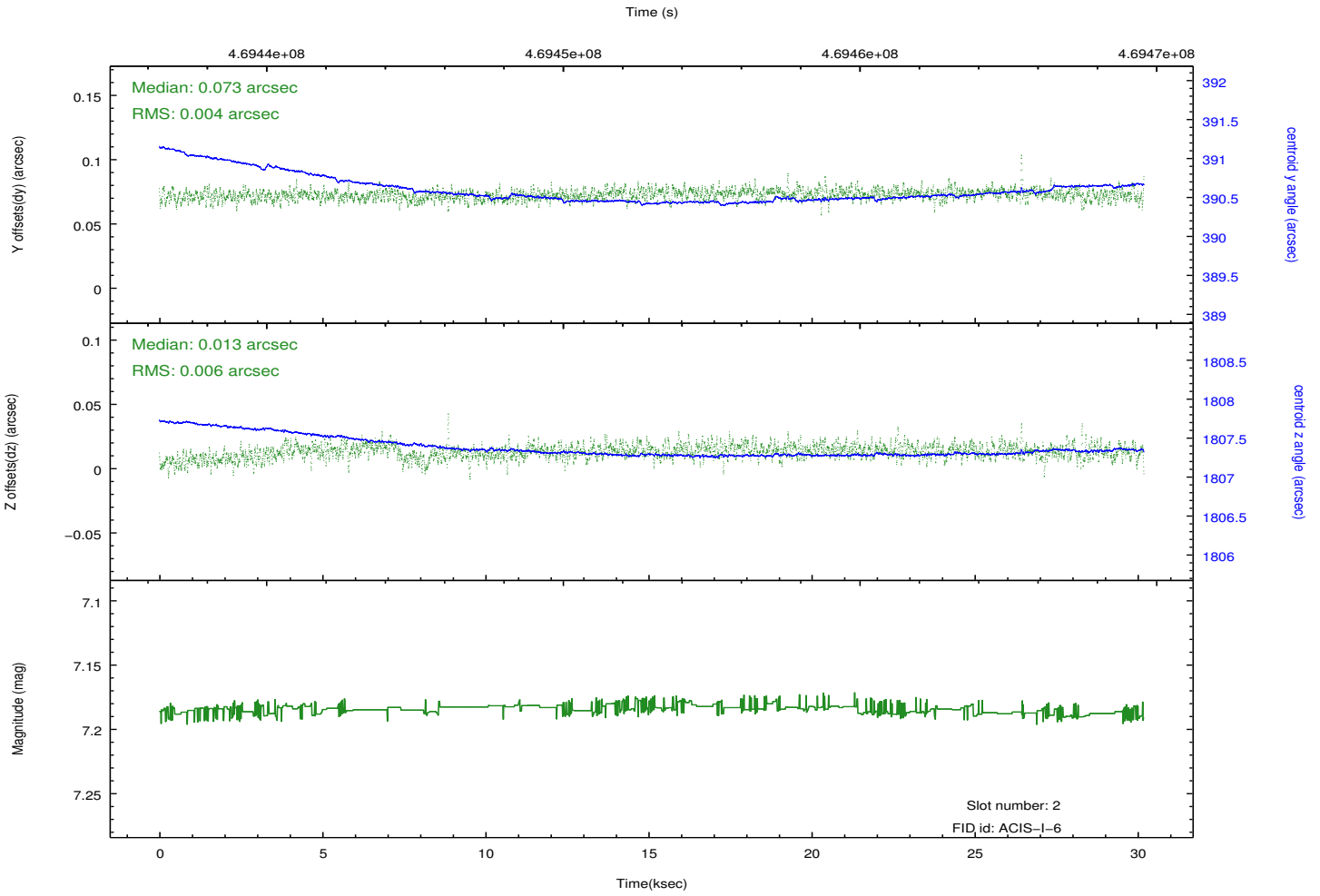
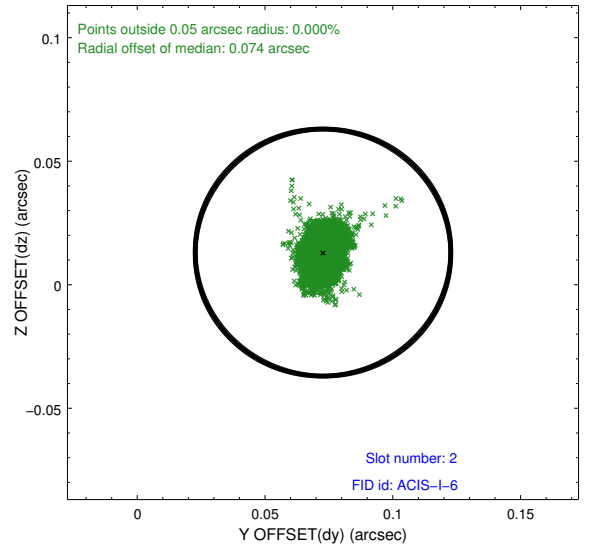
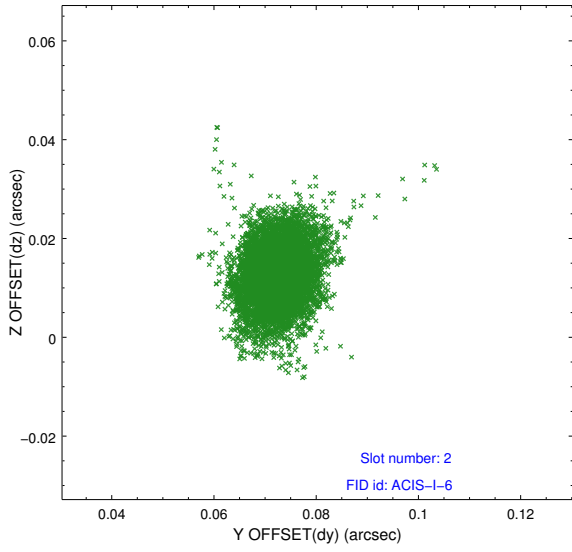
2.5.1 Slot 0



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	30.081483466089

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.