

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16229 - L2 Version 2
Chandra X-Ray Center

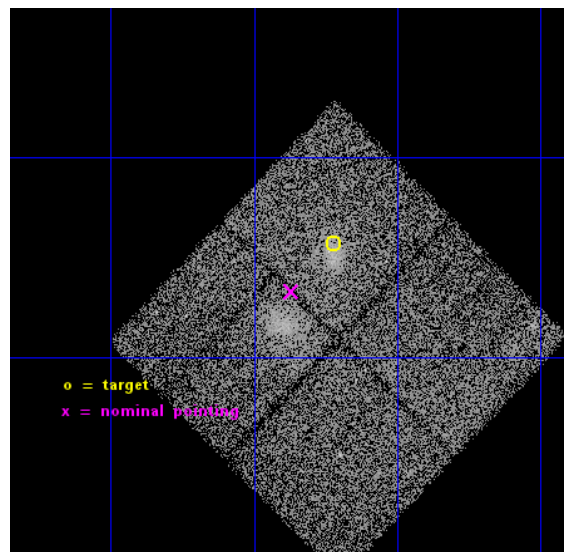
L2 Processing Date : Dec 7 2014

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1 Front

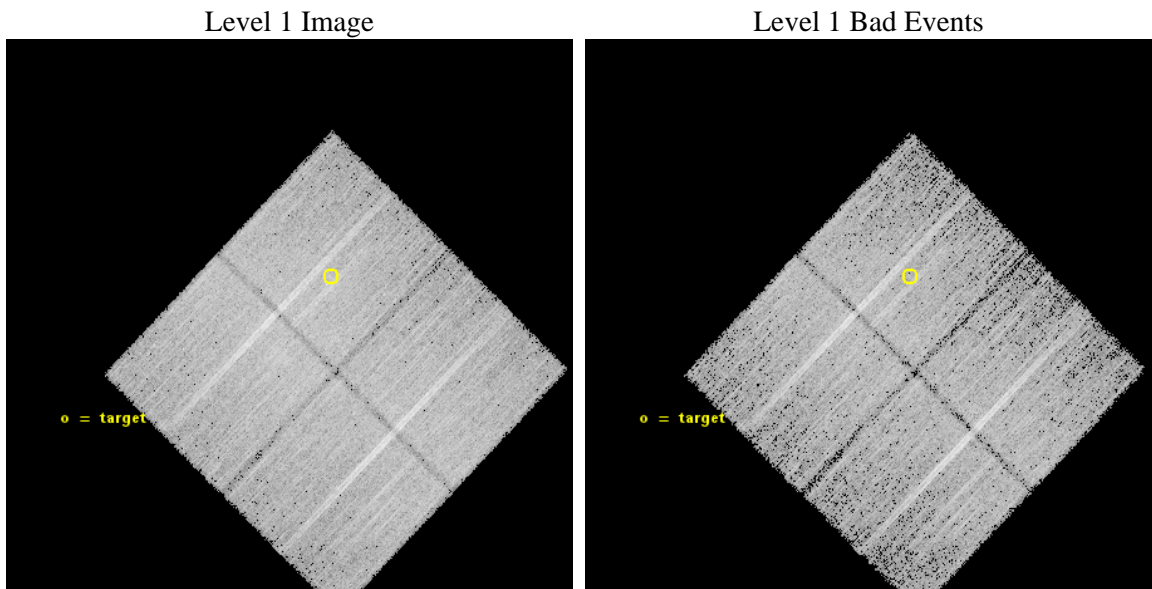
seq_num	801413	Sequence number
obs_id	16229	Observation id
title	Chandra Observations of a Complete Sample of SZE Clusters from ACT	
observer	Prof. John Hughes	Principal investigator
object	ACT-CL_J0206-0114	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	31.555833	Observer's specified target RA [deg]
dec_targ	-1.238056	Observer's specified target Dec [deg]
ra_nom	31.592412963266	Nominal RA [deg]
dec_nom	-1.27831488188	Nominal Dec [deg]
roll_nom	314.28750123939	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30088.600231409	Sum of GTIs [s]
livetime	29695.47051848	Livetime [s]
ontime0	30088.600231409	Sum of GTIs [s]
ontime1	30088.600231409	Sum of GTIs [s]
ontime2	30085.459171057	Sum of GTIs [s]
ontime3	30088.600231409	Sum of GTIs [s]
l2events	60131	Number of level 2 events



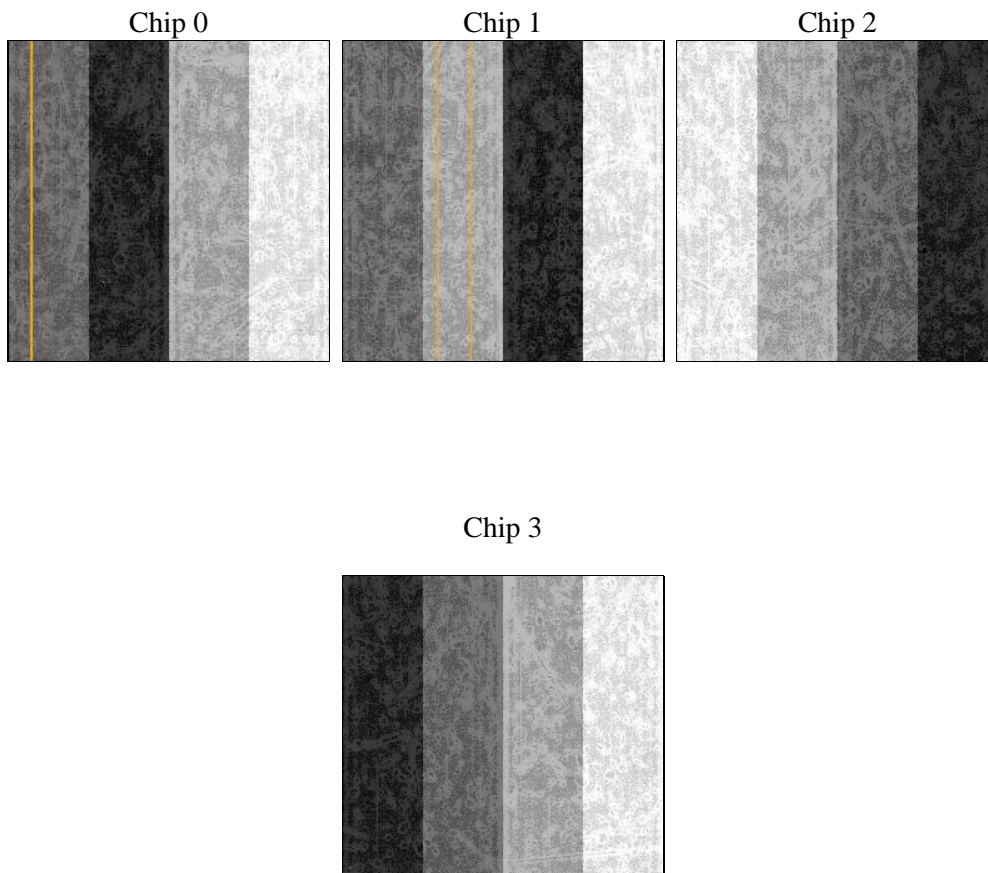
2 OBI

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	10.3.1	Processing system revision	ontime	30088.600231409	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	30088.600231409	Sum of GTIs [s]
date	2014-12-08T02:49:47	Date and time of file creation	ontime1	30088.600231409	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30085.459171057	Sum of GTIs [s]
			ontime3	30088.600231409	Sum of GTIs [s]
			l1events	563420	Number of level 1 events

2.1.4 Events

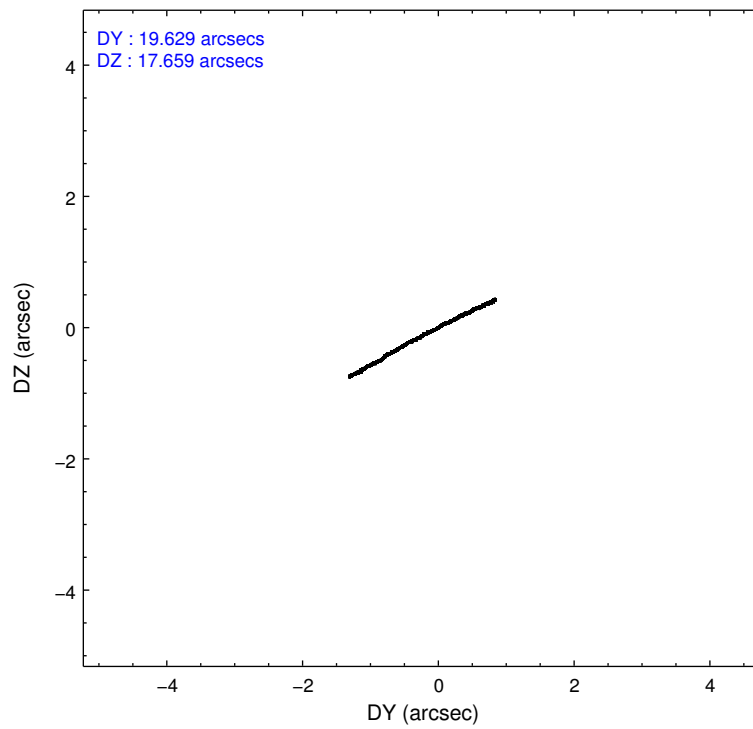
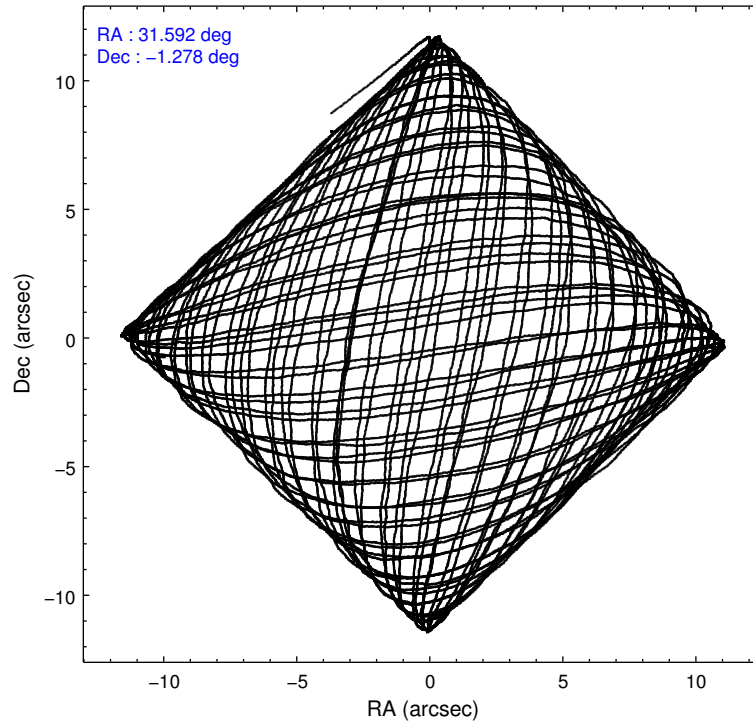
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	133442	138051	147589	144338
rejected events	116618	120471	129285	126333
rejected %	87%	87%	87%	87%

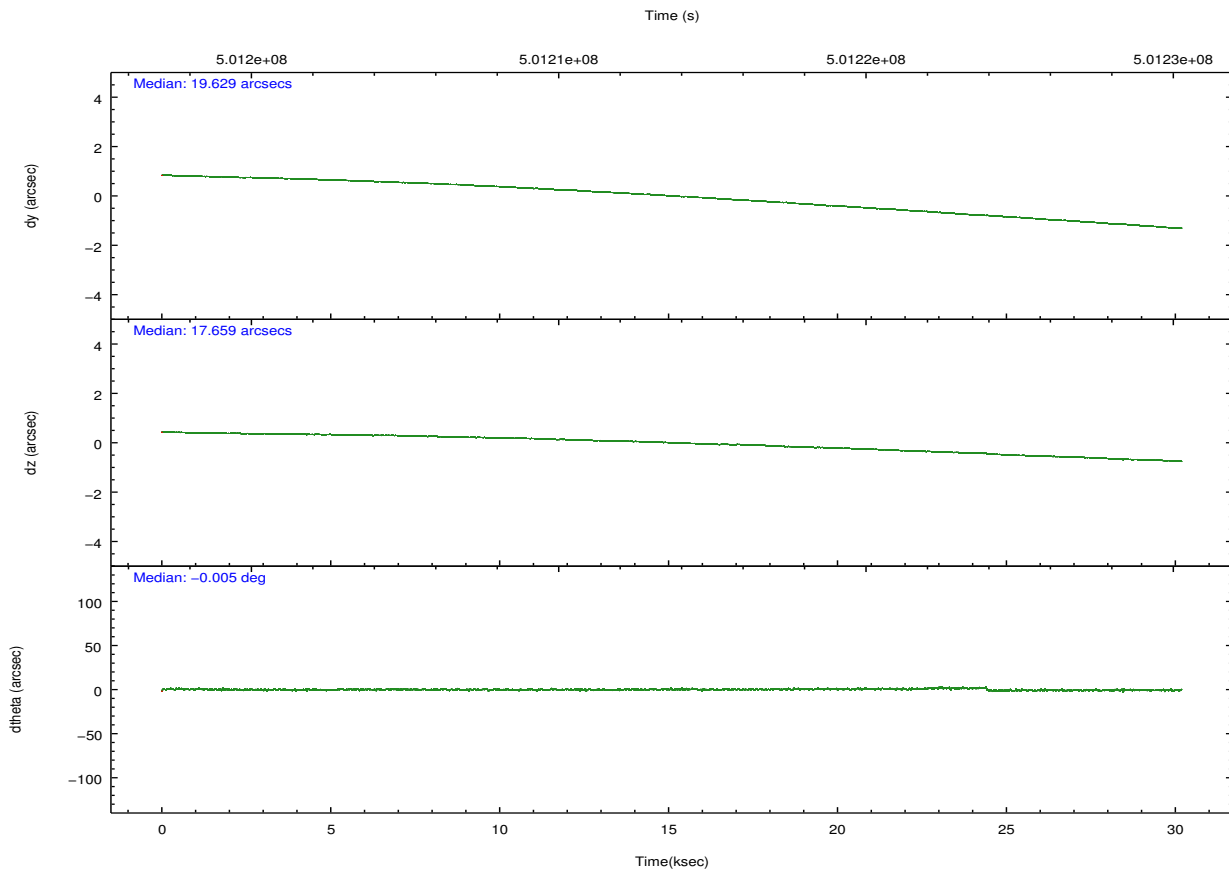
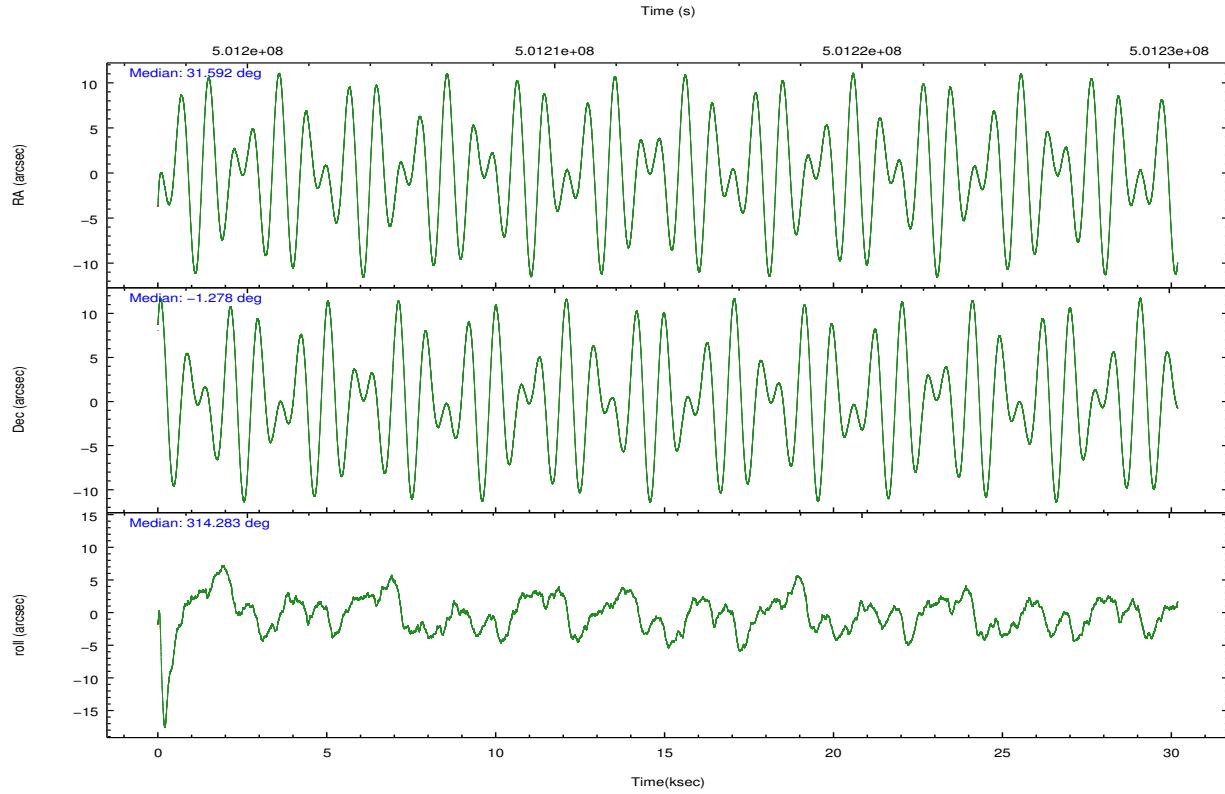
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5772	5768	7583	7030
	4%	4%	5%	4%
grade 1 events	64	56	83	90
	0%	0%	0%	0%
grade 2 events	4038	4124	4008	3737
	3%	2%	2%	2%
grade 3 events	1845	1811	1737	1753
	1%	1%	1%	1%
grade 4 events	1594	1662	1735	1774
	1%	1%	1%	1%
grade 5 events	6646	7039	6228	7785
	4%	5%	4%	5%
grade 6 events	3578	4222	3245	3716
	2%	3%	2%	2%
grade 7 events	109905	113369	122970	118453
	82%	82%	83%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	31.565914	31.59241296326591	CCD I2 on	Y	Y
[deg] Pointing Dec	-1.270986	-1.278314881879964	CCD I3 on	Y	Y
[deg] Pointing Roll	314.078229	314.2875012393863	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	N
[mm] SIM translation stage pos	-225.792463	-225.7880283953896	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.8	-7.804424607540113	CCD S4 on	N	N
[s] Observation start time (MET)	501198779.184000	501197730.08974	CCD S5 on	N	N
Observation start date	2013-11-18T21:51:52	2013-11-18T21:35:30	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	501228779.184000	501229297.01647	On-chip summing requested	N	N
Observation end date	2013-11-19T06:11:52	2013-11-19T06:21:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





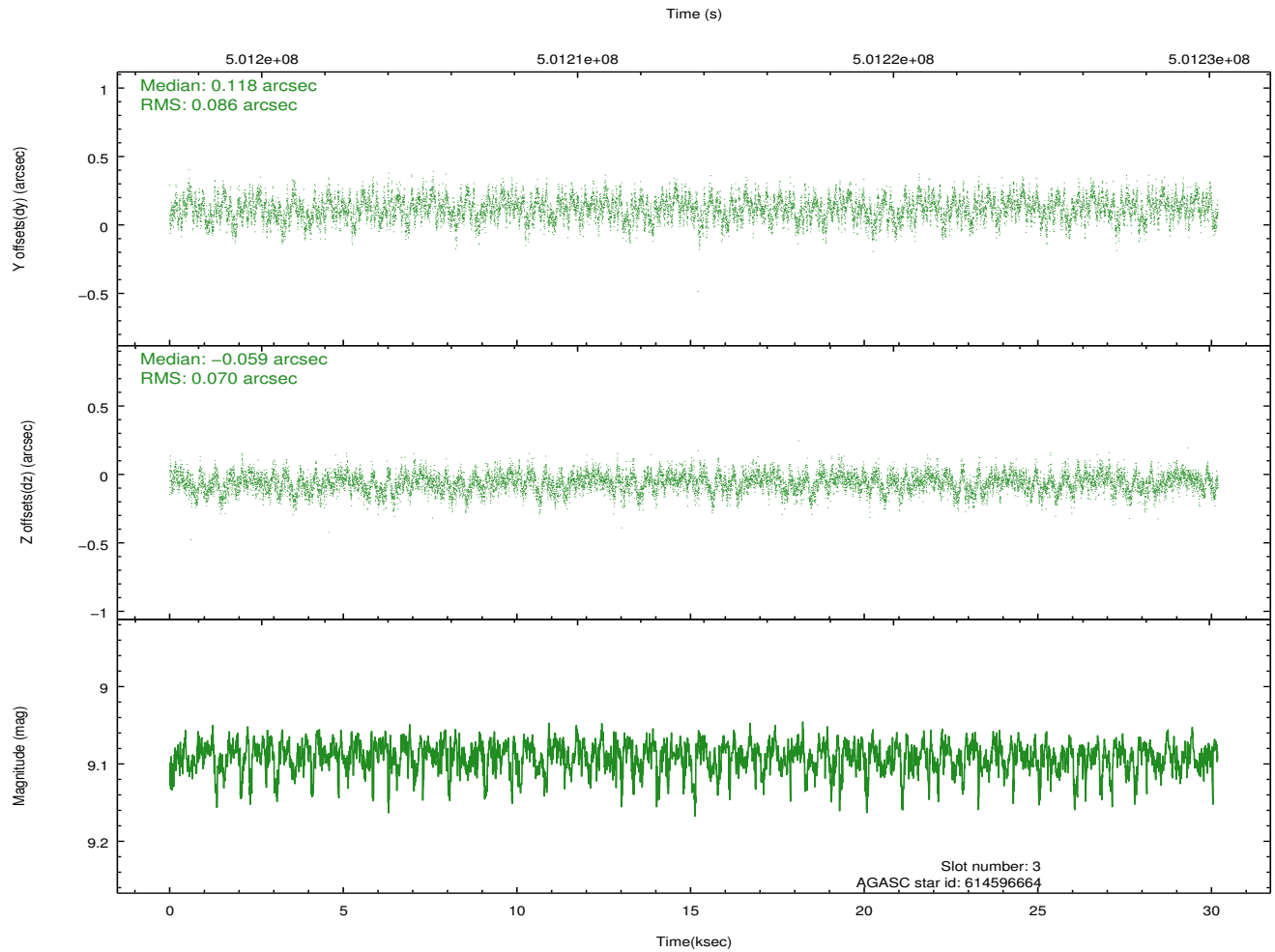
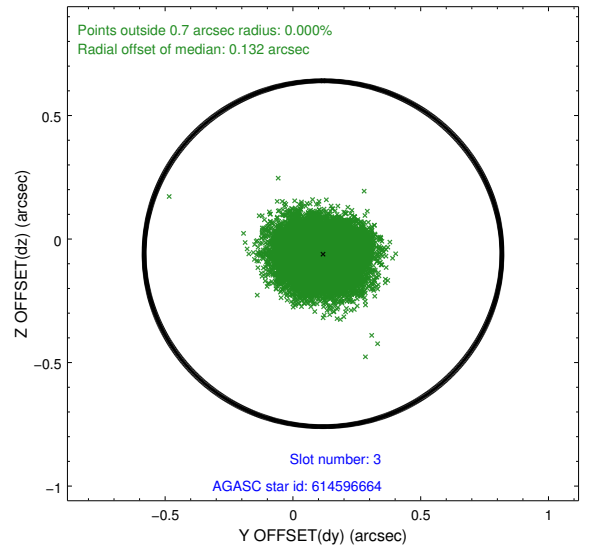
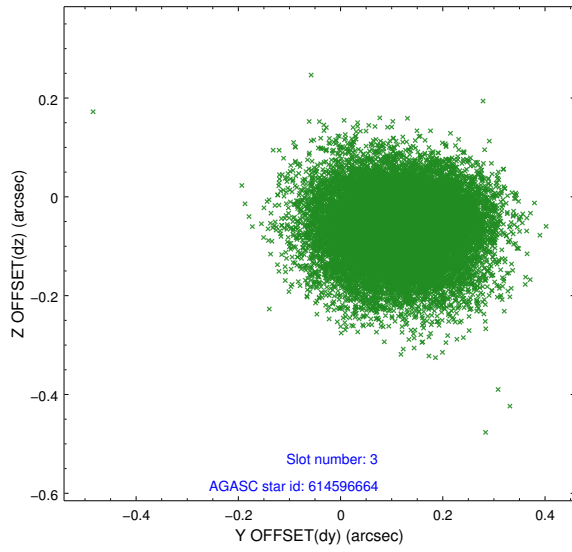
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	7362	0.103	-0.129	0.015	0.049	0.000000	0.000000	919.80	-1001.57
1	FID		ACIS-I-4	7.13	7362	0.190	0.063	0.013	0.041	0.000000	0.000000	2139.42	899.43
2	FID		ACIS-I-5	7.22	7363	-0.392	0.138	0.011	0.021	0.000000	0.000000	-1828.70	896.23
3	GUIDE	used	614596664	9.09	14717	0.118	-0.059	0.120	0.187	31.700746	-1.933754	2052.87	-1310.59
4	GUIDE	used	614600088	7.41	14722	-0.066	0.047	0.061	0.104	31.733594	-1.823682	1849.68	-950.54
5	GUIDE	used	614603896	9.75	14708	0.056	0.227	0.144	0.229	30.907071	-1.060423	-2193.14	-1176.63
6	GUIDE	used	614605160	9.42	14711	0.075	0.105	0.142	0.224	30.837411	-1.085977	-2298.94	-1420.20
7	GUIDE	used	614602096	10.22	14695	-0.185	-0.312	0.185	0.290	31.883711	-0.788283	-452.38	2030.58

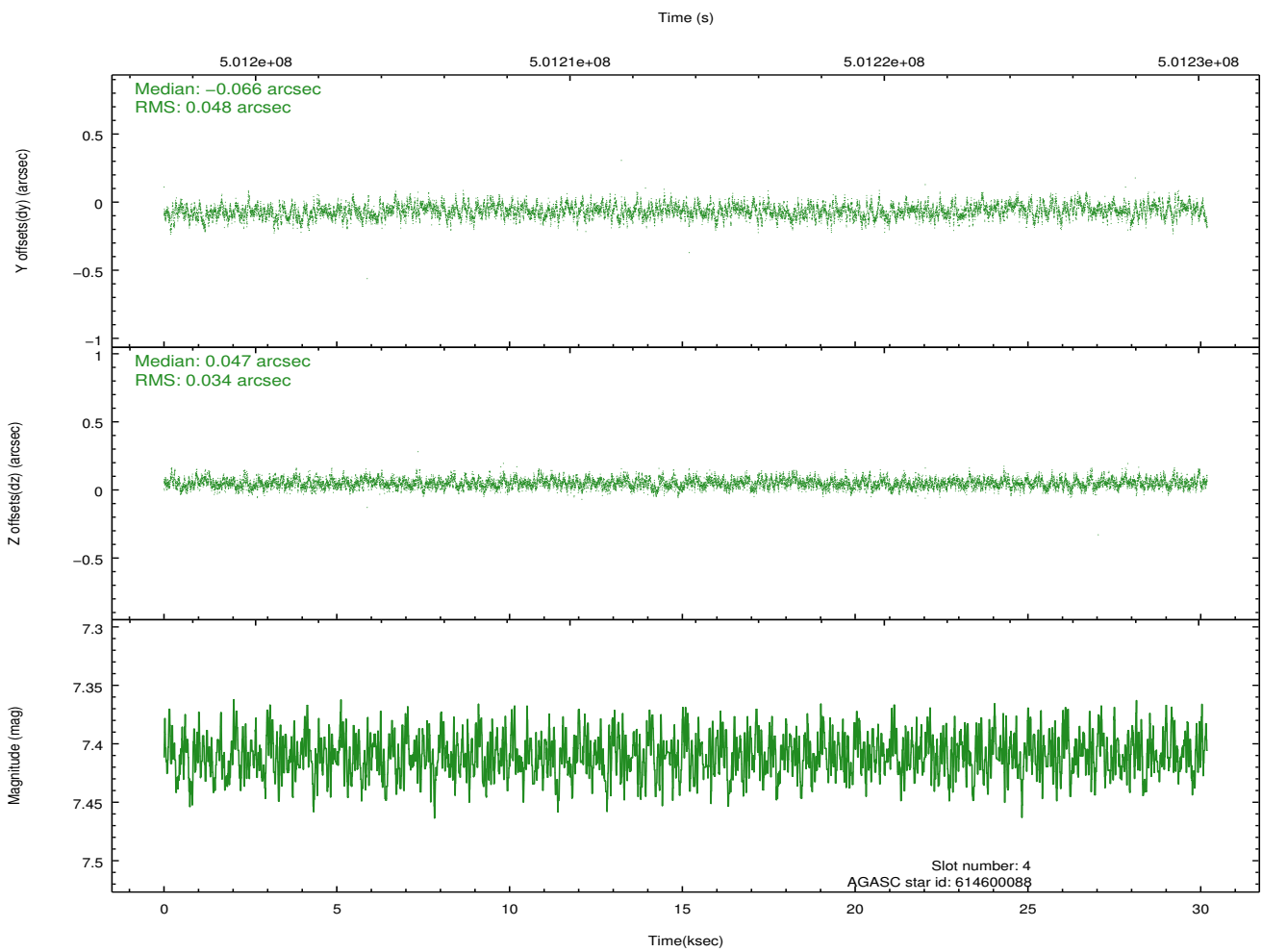
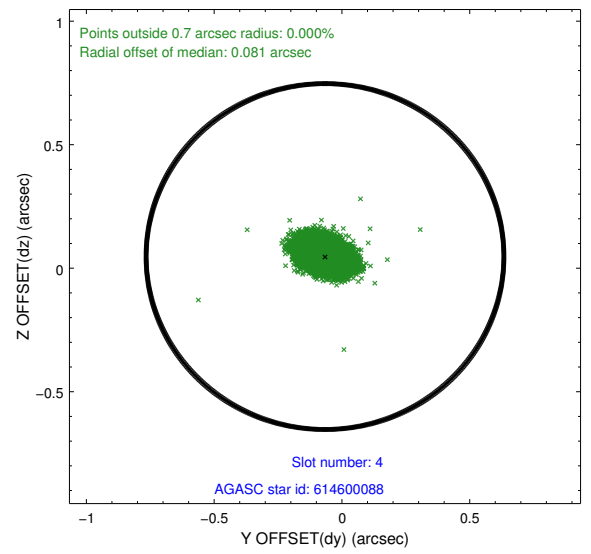
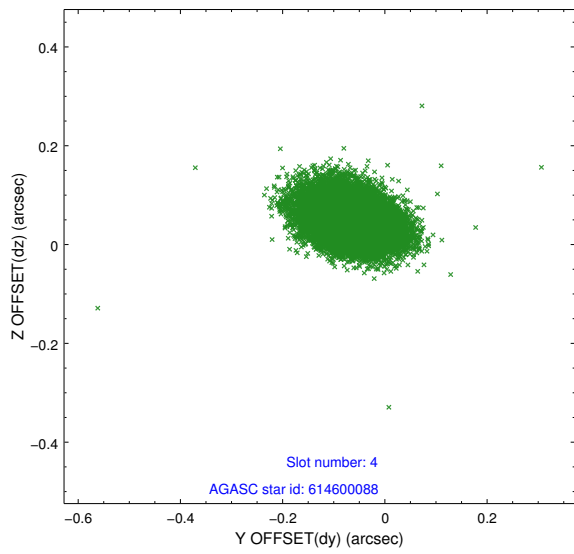
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2.4 Star Slots

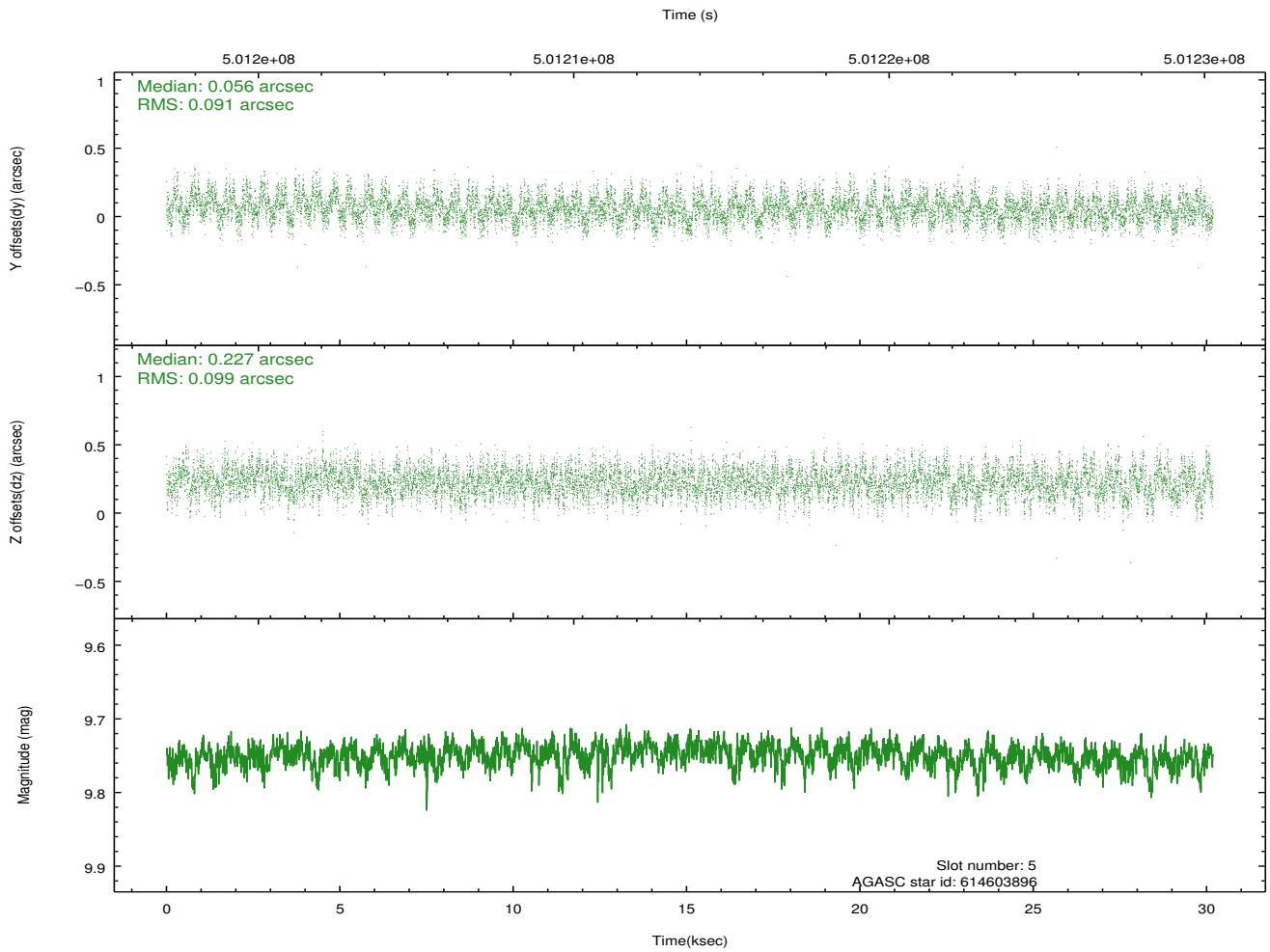
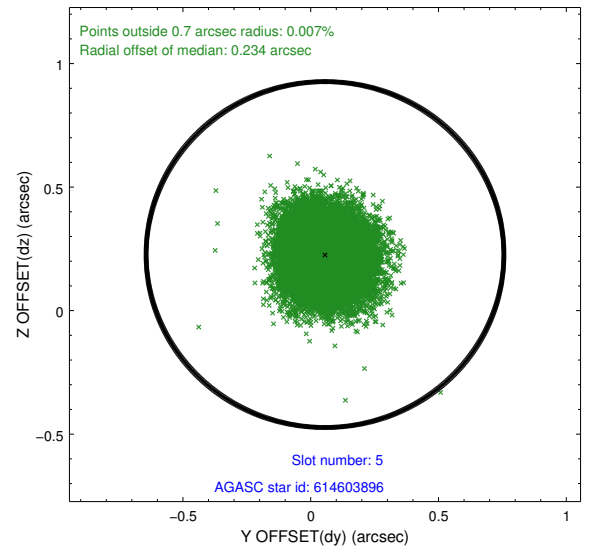
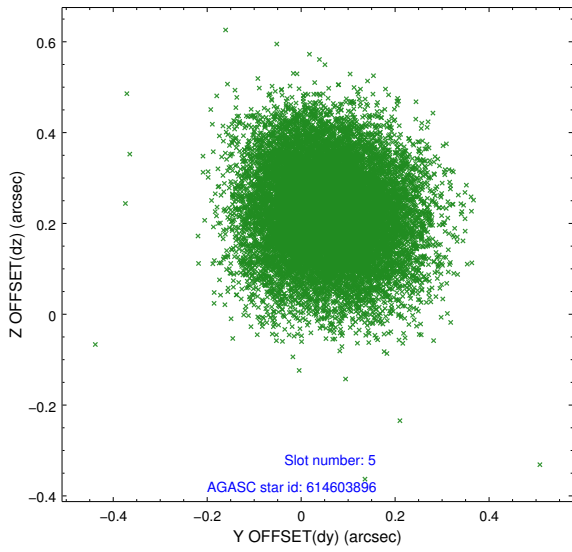
2.4.1 Slot 3



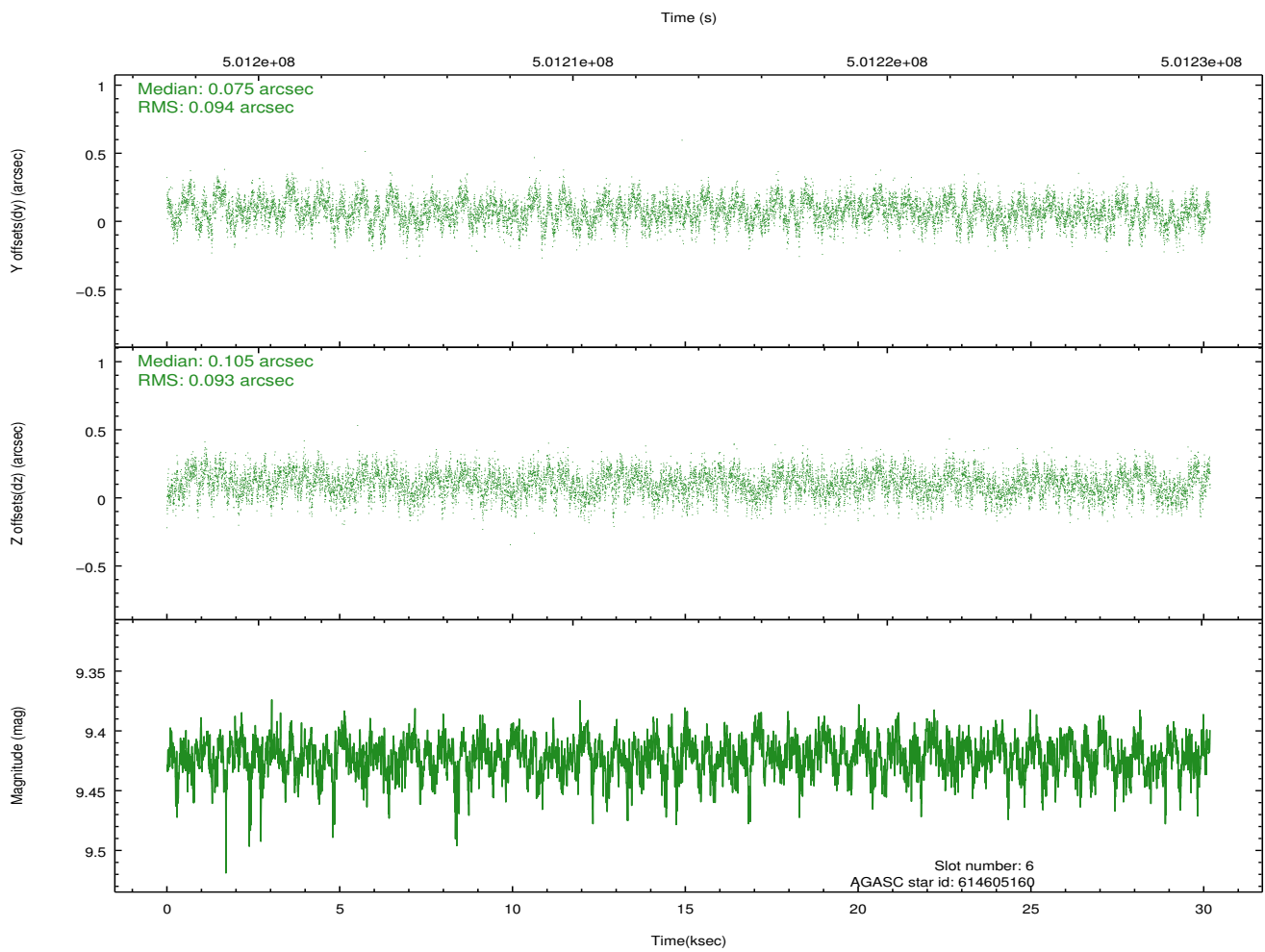
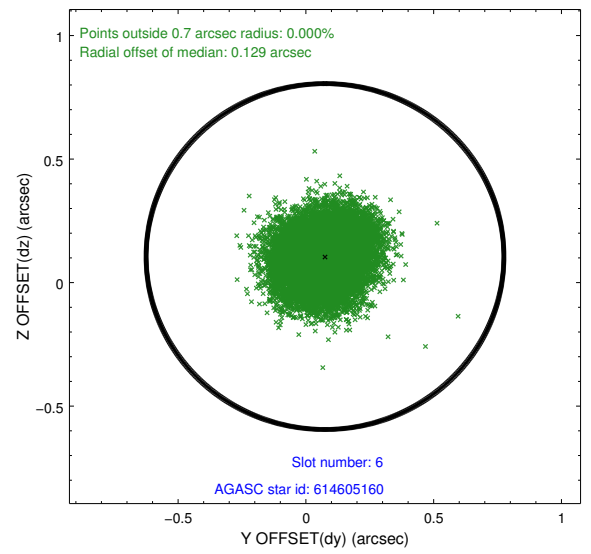
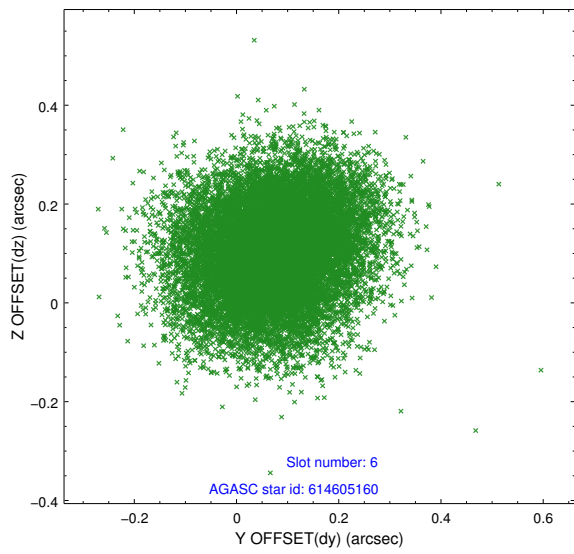
2.4.2 Slot 4



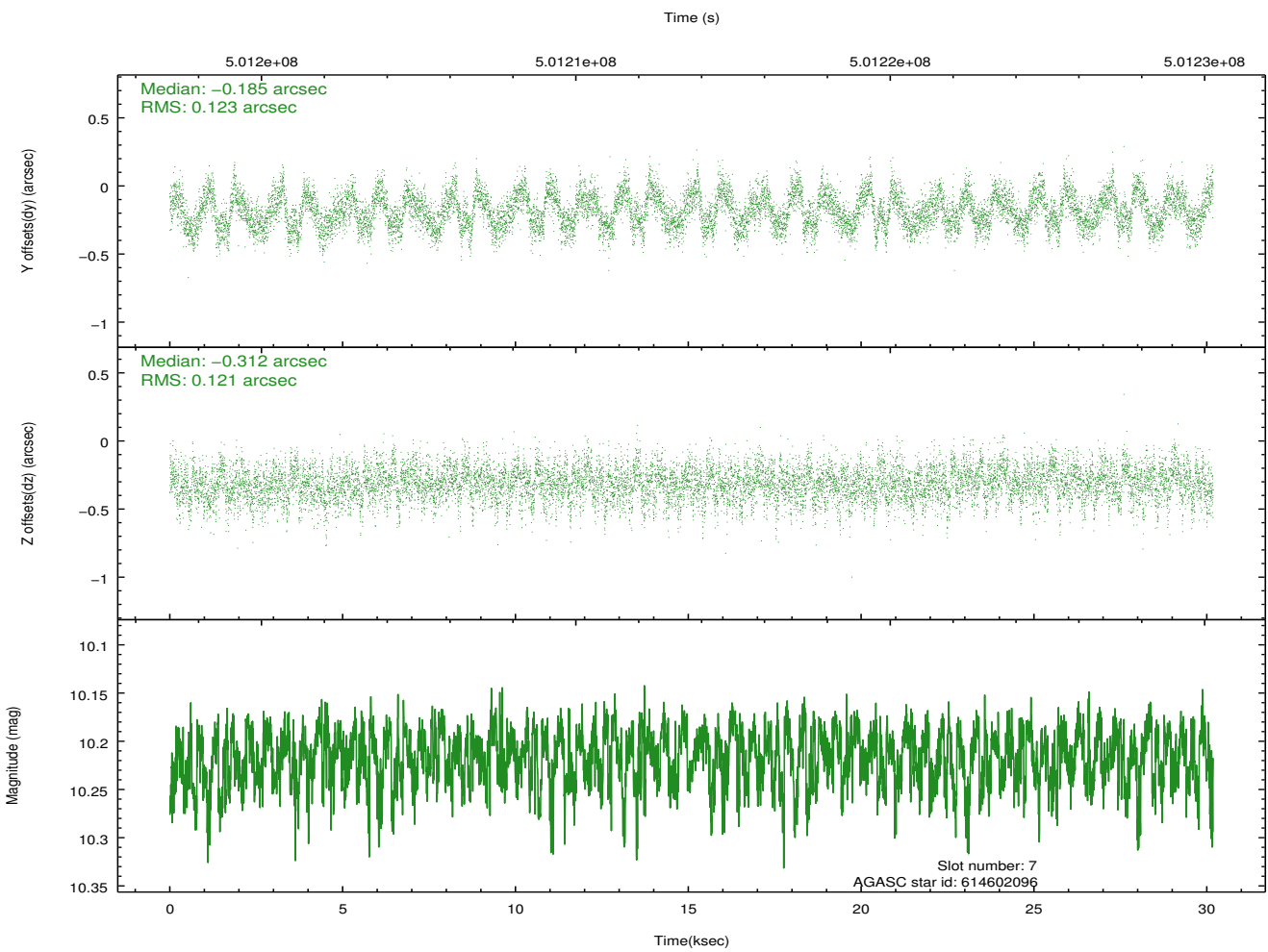
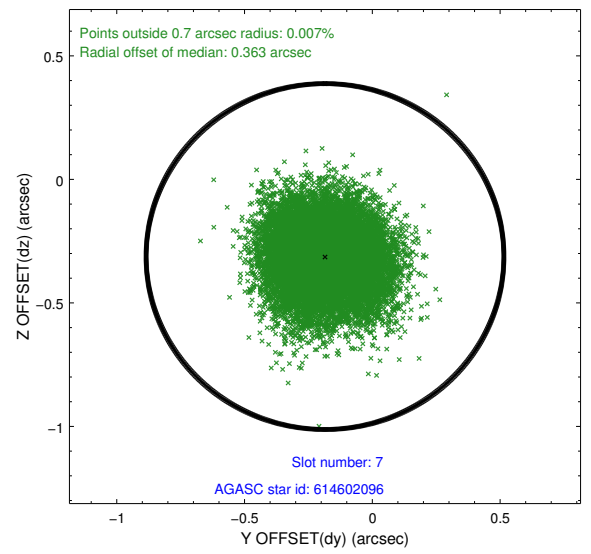
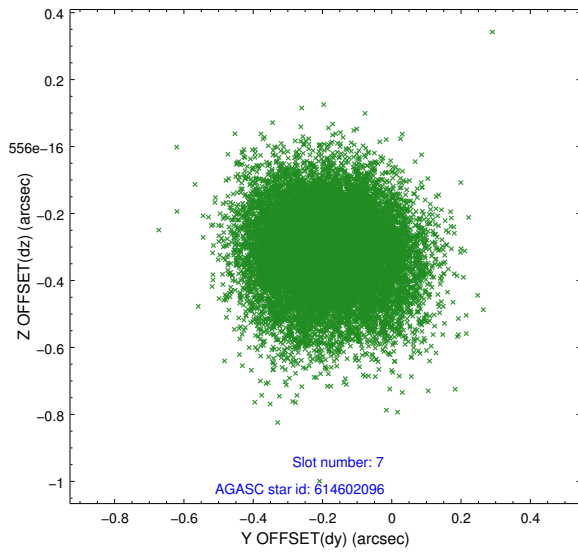
2.4.3 Slot 5



2.4.4 Slot 6

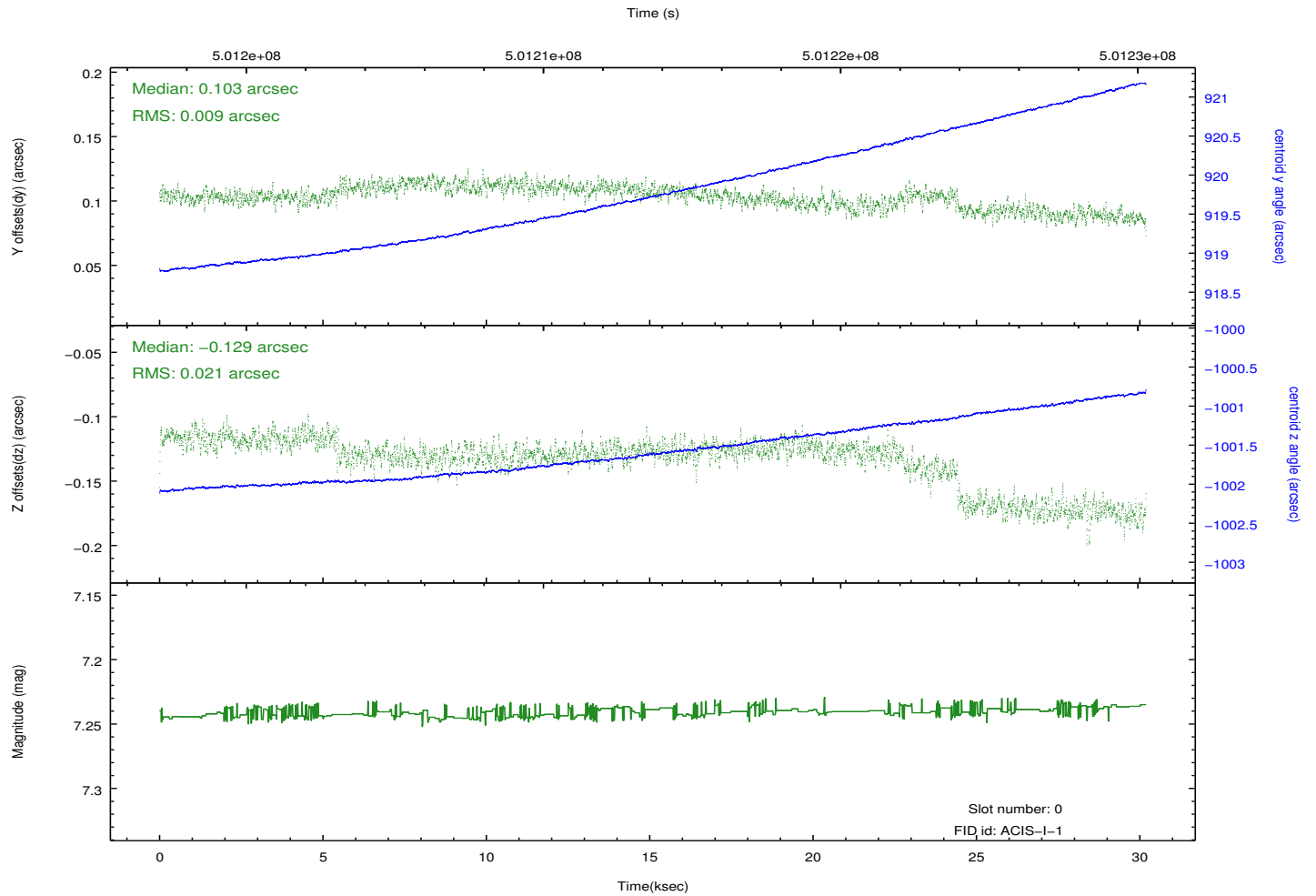
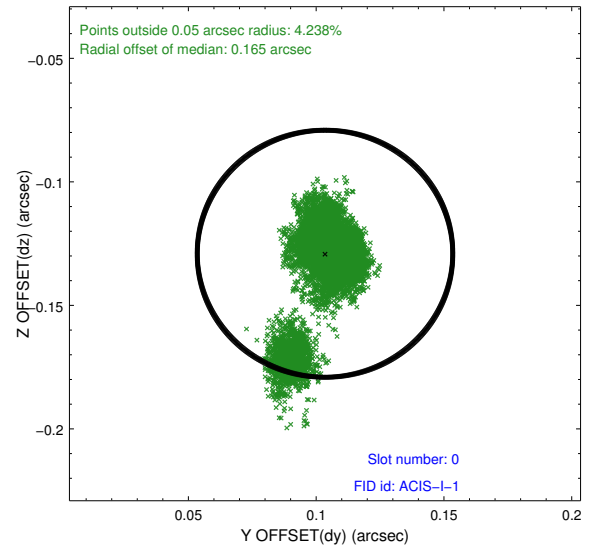
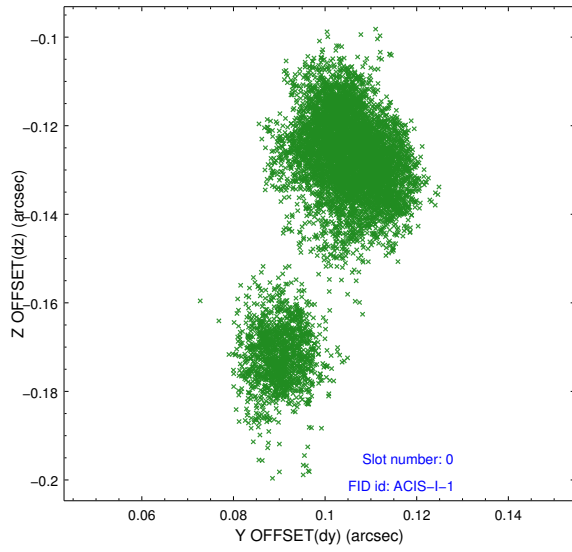


2.4.5 Slot 7

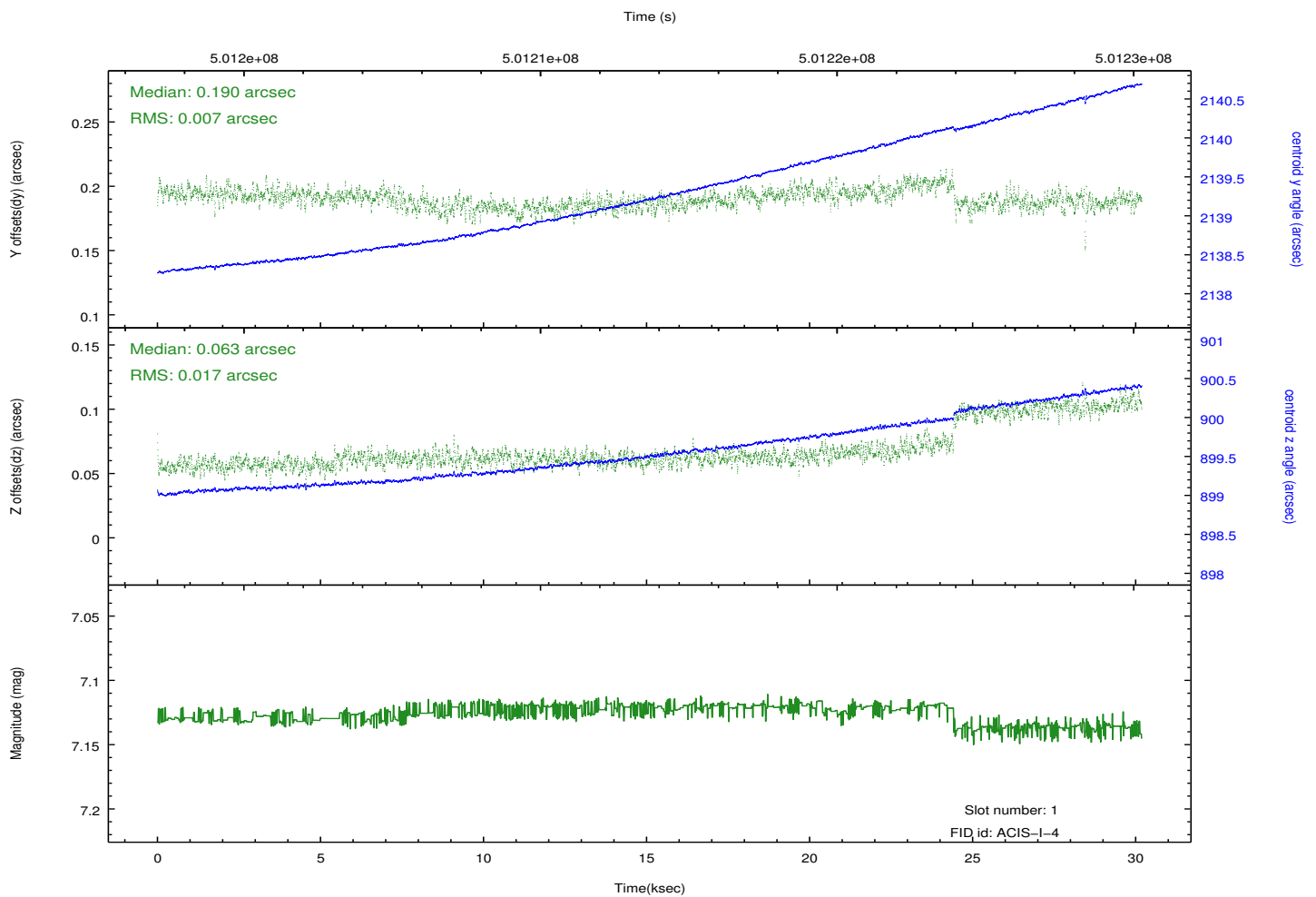
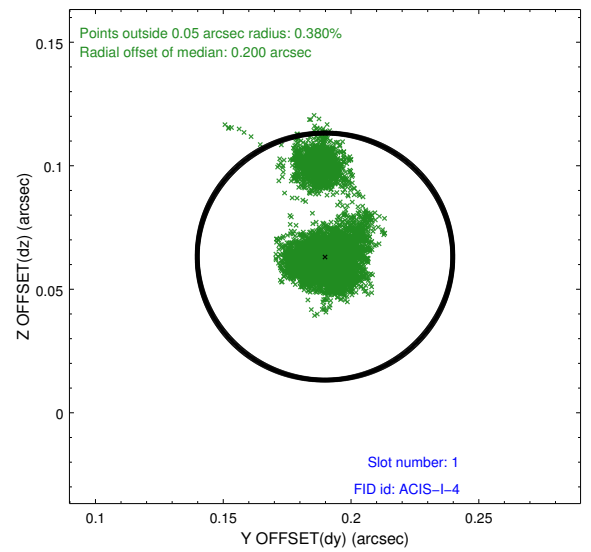
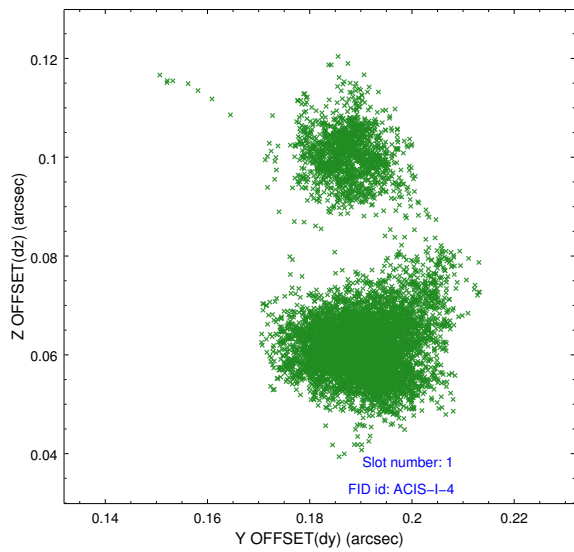


2.5 FID Slots

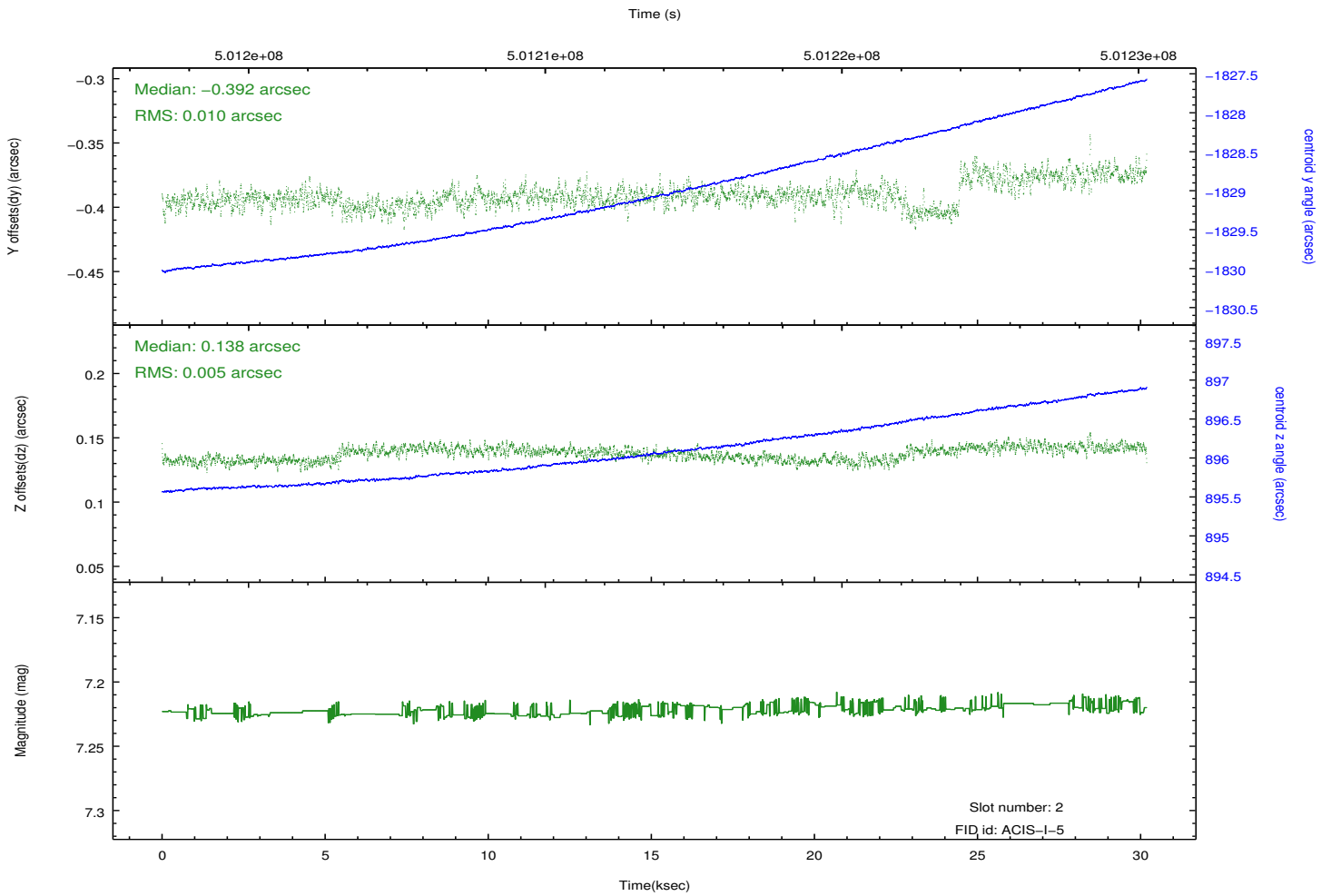
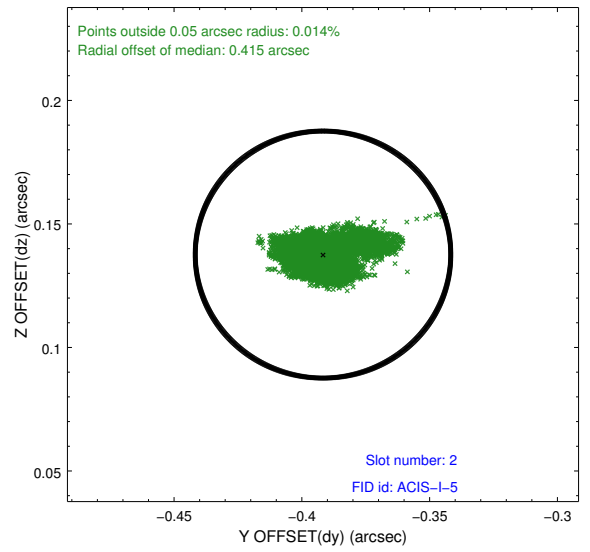
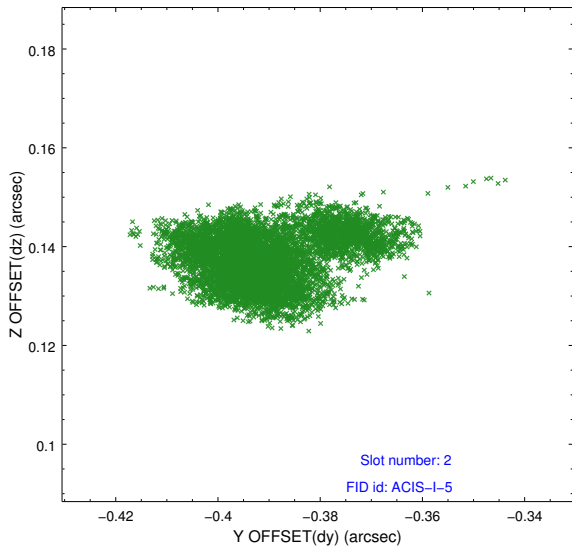
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.088600231409

A.2 Comments

High radial offset in slot 2 is acceptable per aspect review.

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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.