

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 16626 - L2 Version 2
Chandra X-Ray Center

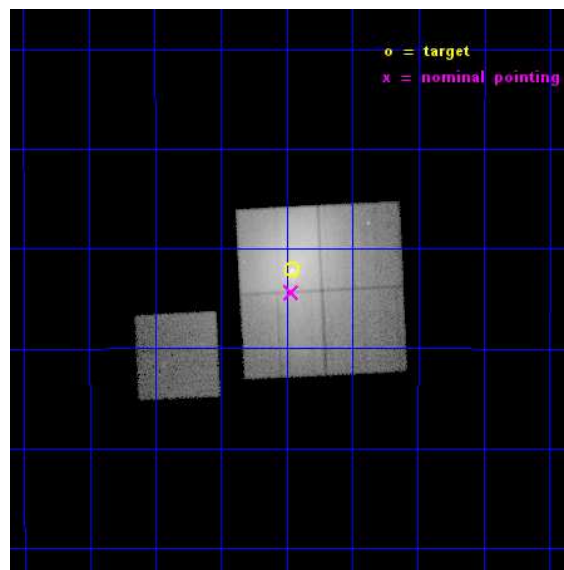
L2 Processing Date : Dec 12 2014

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1 Front

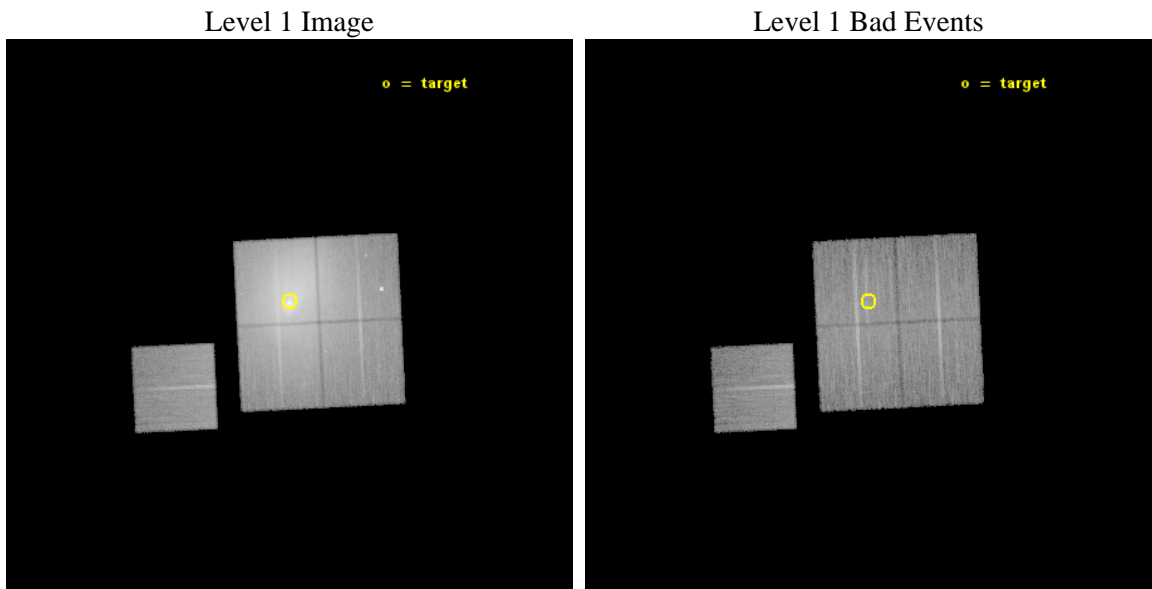
seq_num	801396	Sequence number
obs_id	16626	Observation id
title	A deep study of ram-pressure stripping, metal ridges, and AGN feedback in the Ophiuchus Cluster	Proposal title
observer	Steven Allen	Principal investigator
object	Ophiuchus Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	258.115417	Observer's specified target RA [deg]
dec_targ	-23.368611	Observer's specified target Dec [deg]
ra_nom	258.11590618501	Nominal RA [deg]
dec_nom	-23.406412560307	Nominal Dec [deg]
roll_nom	267.20888950322	Nominal Roll [deg]
revision	2	Processing version of data
ontime	31185.33862102	Sum of GTIs [s]
livetime	30777.879213624	Livetime [s]
ontime0	31185.21550101	Sum of GTIs [s]
ontime1	31185.256541014	Sum of GTIs [s]
ontime2	31185.297581017	Sum of GTIs [s]
ontime3	31185.33862102	Sum of GTIs [s]
ontime6	31185.174461007	Sum of GTIs [s]
l2events	909134	Number of level 2 events



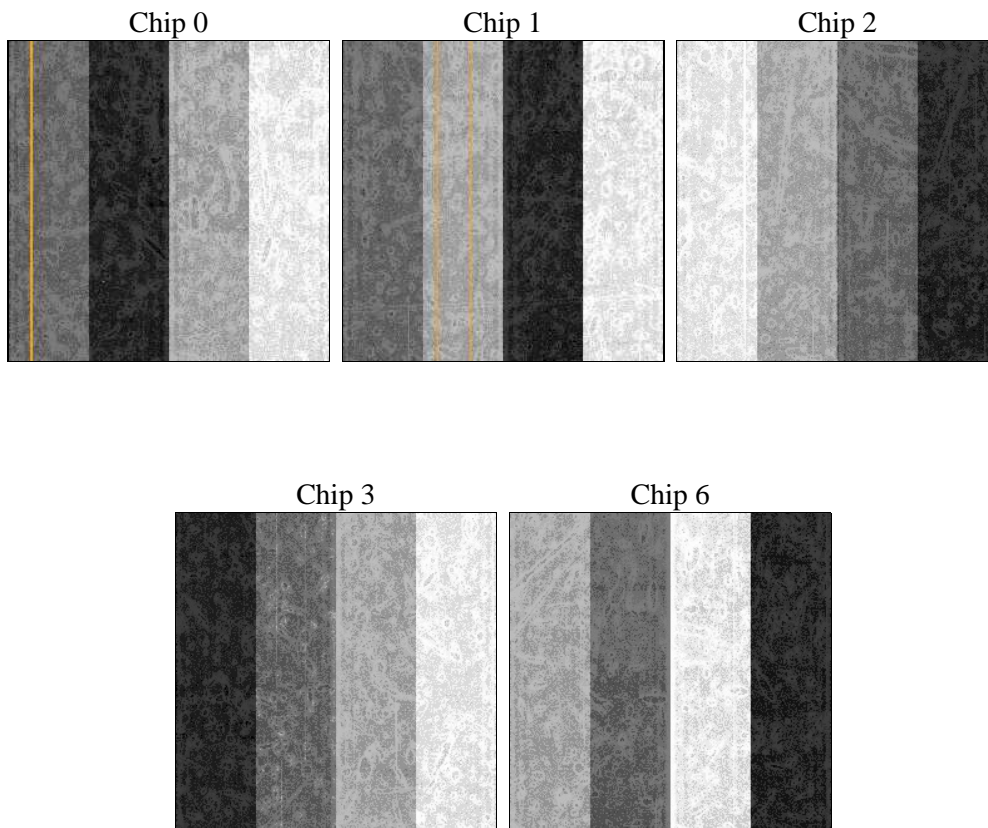
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31100.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	31185.33862102	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	31185.21550101	Sum of GTIs [s]
date	2014-12-12T06:54:40	Date and time of file creation	ontime1	31185.256541014	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	31185.297581017	Sum of GTIs [s]
			ontime3	31185.33862102	Sum of GTIs [s]
			ontime6	31185.174461007	Sum of GTIs [s]
			l1events	1587683	Number of level 1 events

2.1.4 Events

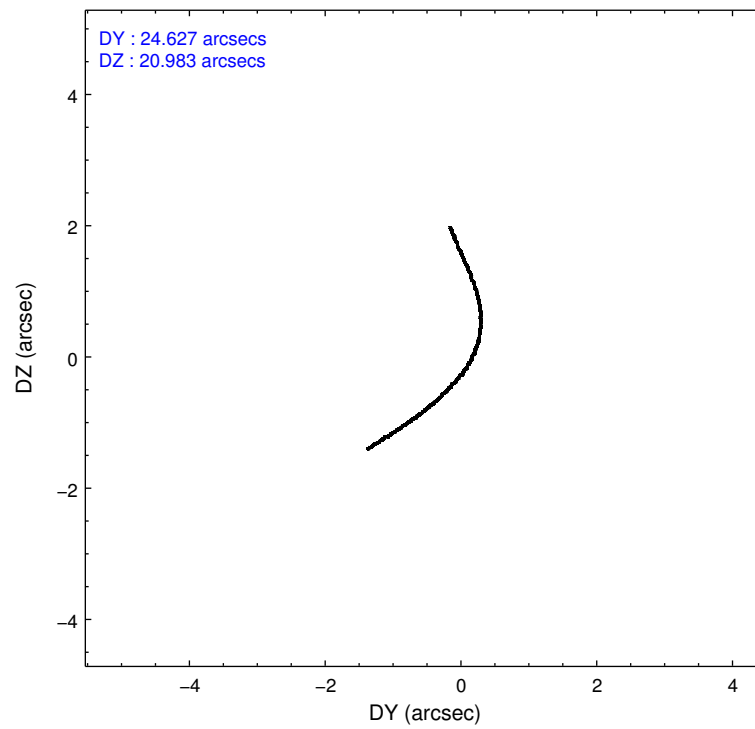
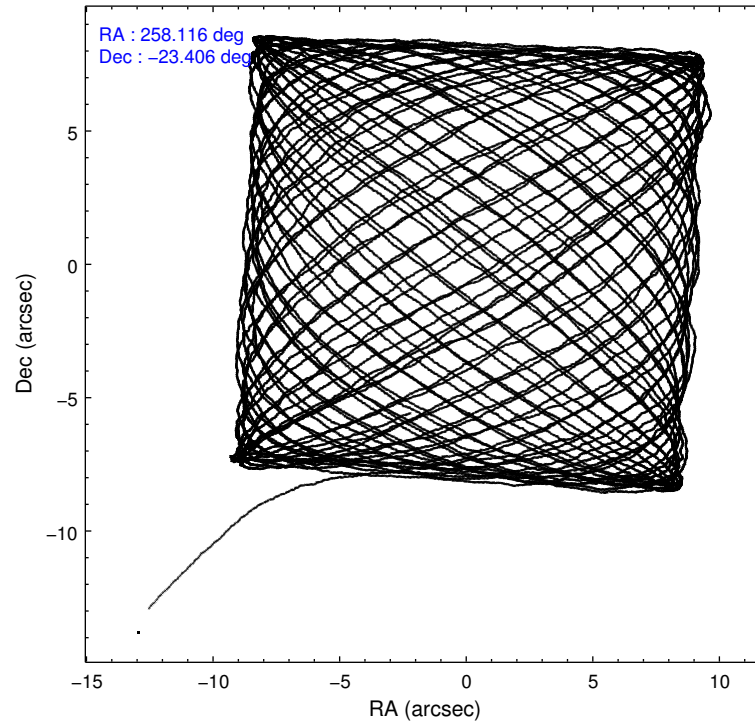
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	195024	288916	290150	657817	155776
rejected events	116683	119501	130888	134802	121426
rejected %	59%	41%	45%	20%	77%

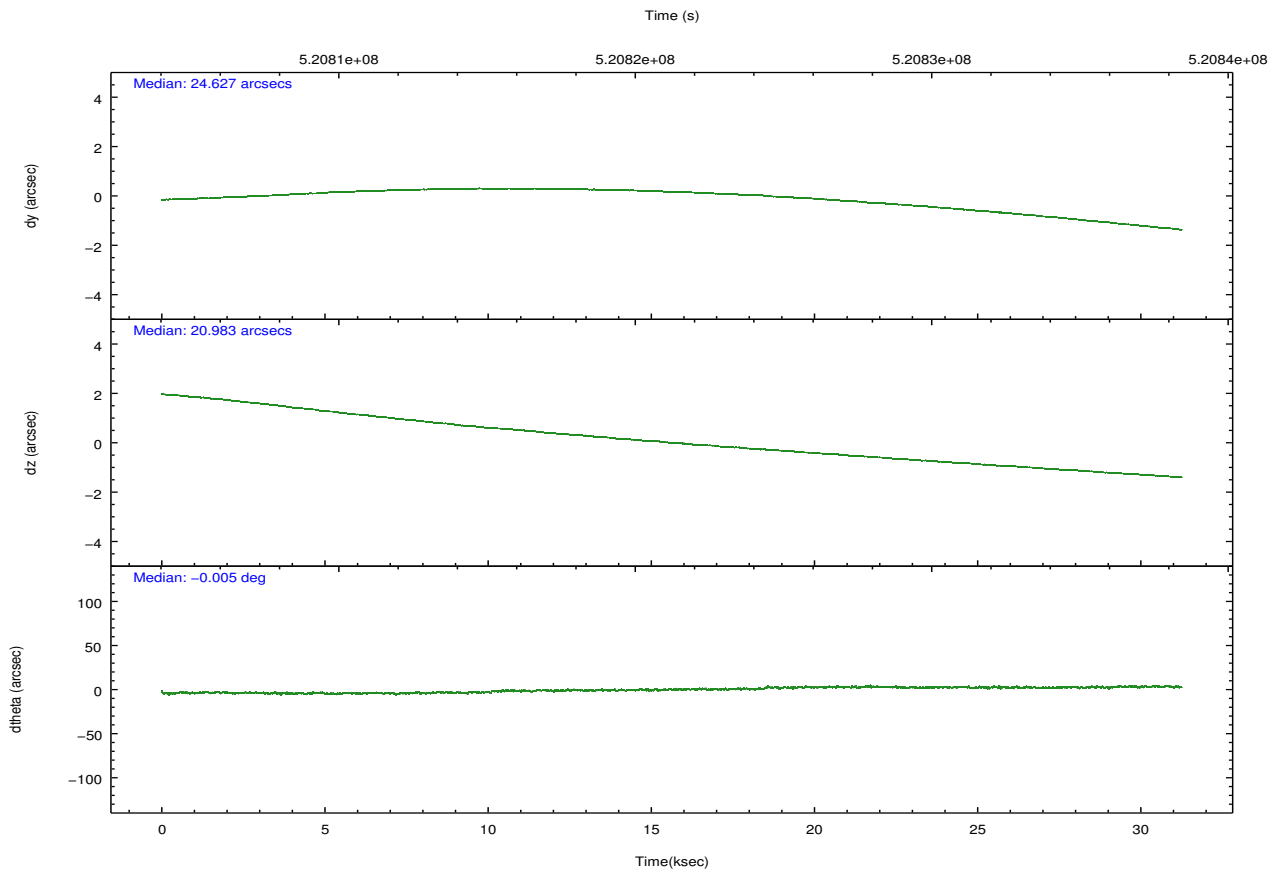
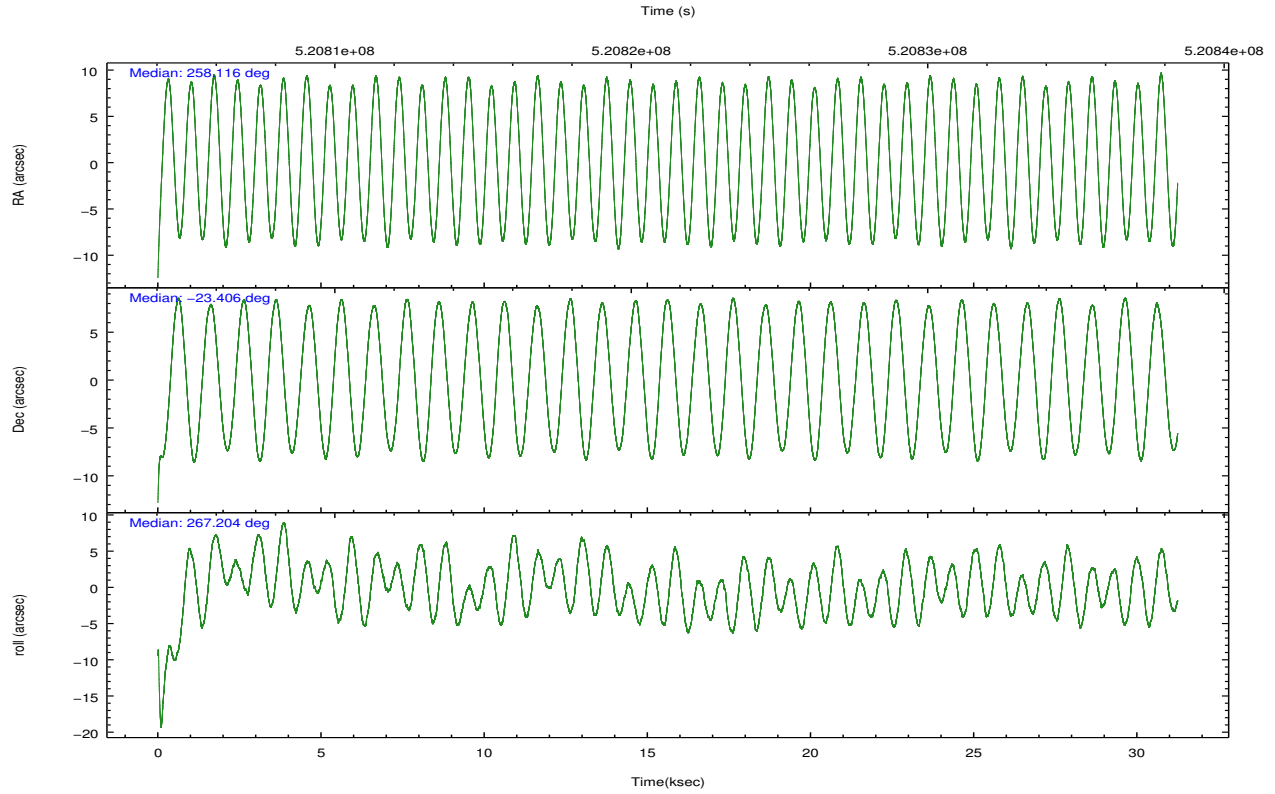
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	53440	123227	118138	401224	19213
	27%	42%	40%	60%	12%
grade 1 events	254	485	568	1745	123
	0%	0%	0%	0%	0%
grade 2 events	11362	22259	19463	60262	5705
	5%	7%	6%	9%	3%
grade 3 events	4057	7244	6686	20090	2404
	2%	2%	2%	3%	1%
grade 4 events	3806	7105	6621	19937	2332
	1%	2%	2%	3%	1%
grade 5 events	7210	7887	7094	9490	7740
	3%	2%	2%	1%	4%
grade 6 events	5690	9604	8380	21601	4703
	2%	3%	2%	3%	3%
grade 7 events	109205	111105	123200	123468	113556
	55%	38%	42%	18%	72%

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	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	258.102108	258.1159061850147	CCD I2 on	Y	Y
[deg] Pointing Dec	-23.381982	-23.40641256030651	CCD I3 on	Y	Y
[deg] Pointing Roll	266.994716	267.2088895032167	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	-226.742463	-226.7484968405855	CCD S3 on	N	N
[mm] SIM translation stage offset	-6.85	-6.843956162344199	CCD S4 on	N	N
[s] Observation start time (MET)	520805751.184000	520804552.83229	CCD S5 on	N	N
Observation start date	2014-07-03T20:14:44	2014-07-03T19:55:52	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	520836851.184000	520837796.14663	On-chip summing requested	N	N
Observation end date	2014-07-04T04:53:04	2014-07-04T05:09:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





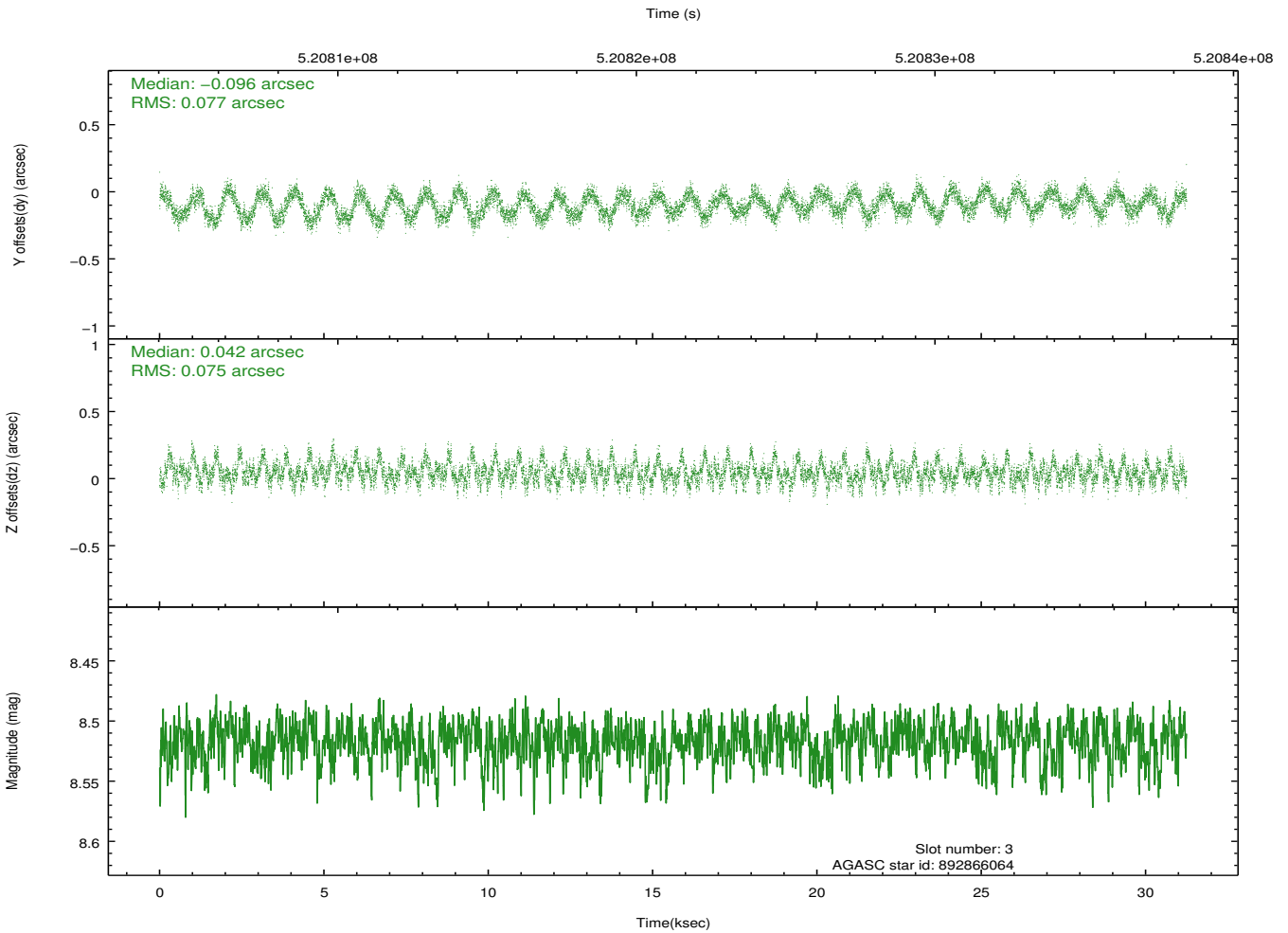
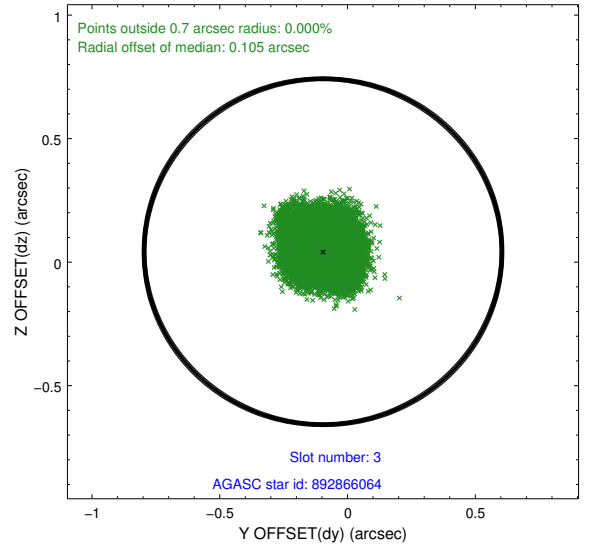
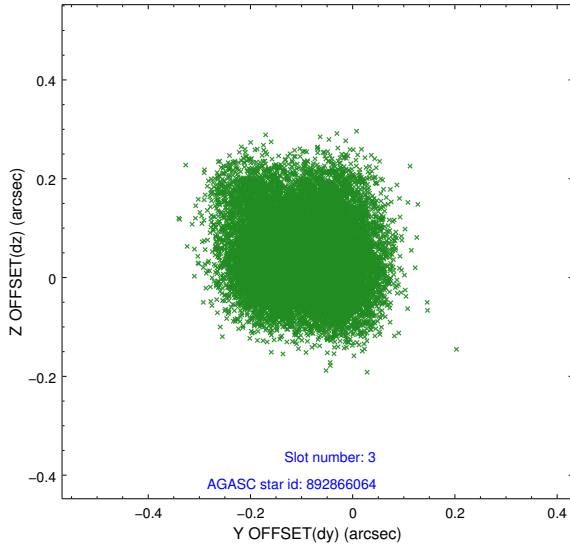
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.09	7622	0.095	-0.101	0.037	0.059	0.000000	0.000000	914.75	-985.38
1	FID		ACIS-I-4	7.00	7621	0.205	0.047	0.023	0.034	0.000000	0.000000	2134.46	915.43
2	FID		ACIS-I-5	7.08	7622	-0.399	0.124	0.031	0.045	0.000000	0.000000	-1833.75	912.37
3	GUIDE	used	892866064	8.52	15238	-0.096	0.042	0.117	0.178	258.346240	-23.232516	-578.71	778.44
4	GUIDE	used	892755168	9.26	15228	0.053	0.087	0.161	0.268	257.345207	-23.908184	2029.63	-2387.64
5	GUIDE	used	892865960	8.51	15238	-0.066	0.094	0.136	0.208	257.518652	-24.013697	2376.26	-1796.45
6	GUIDE	used	892867312	9.12	15234	0.349	-0.043	0.127	0.207	258.441623	-24.052318	2353.57	1241.41
7	GUIDE	used	892867776	8.50	15242	-0.246	-0.181	0.121	0.190	258.697515	-24.060278	2340.23	2083.11

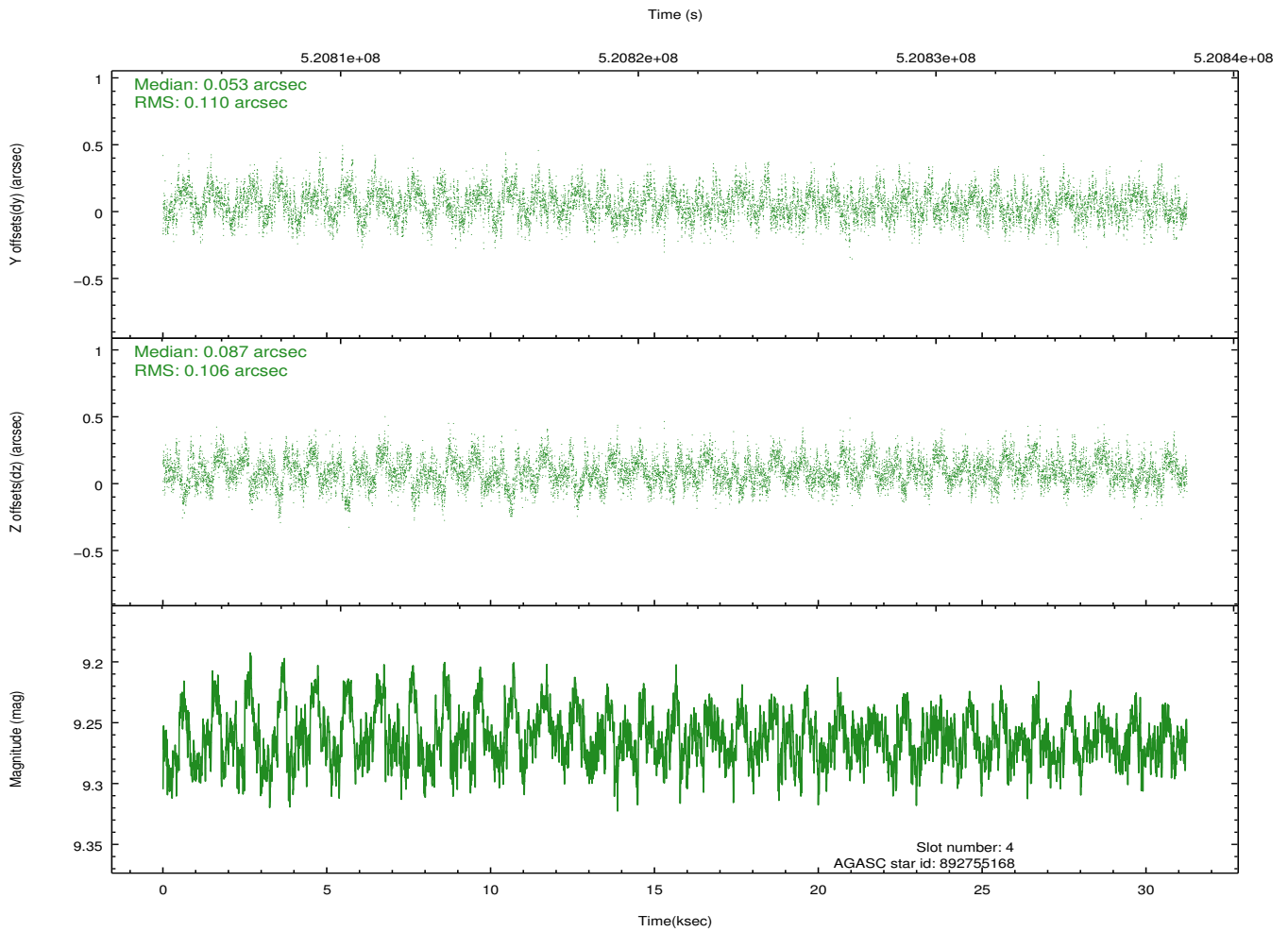
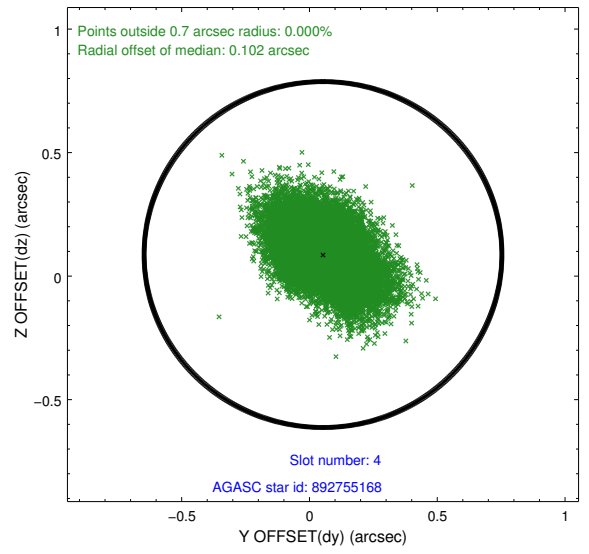
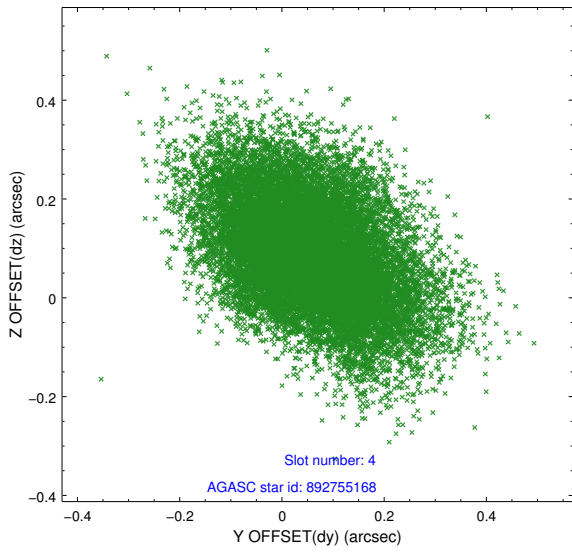
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2.4 Star Slots

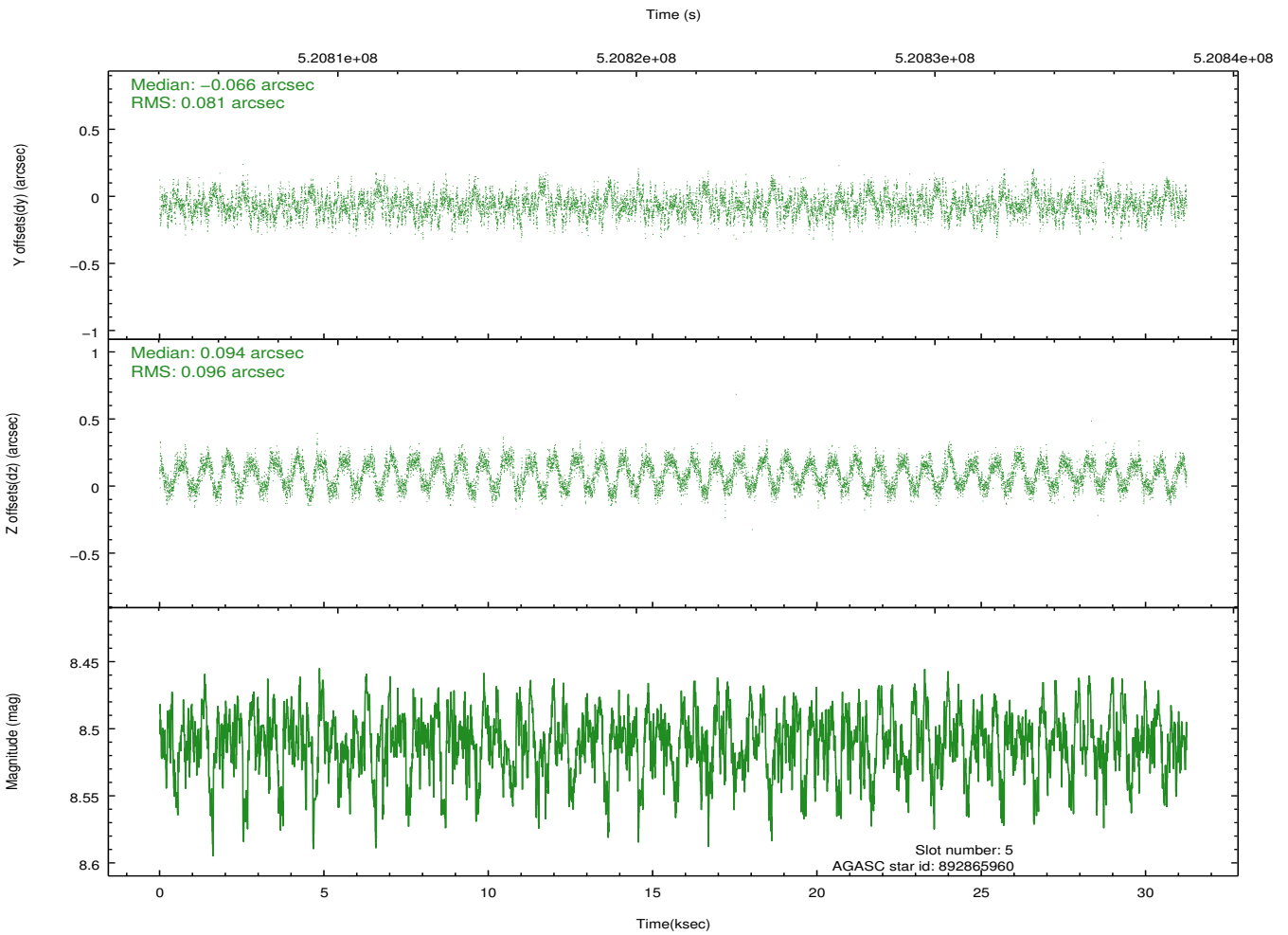
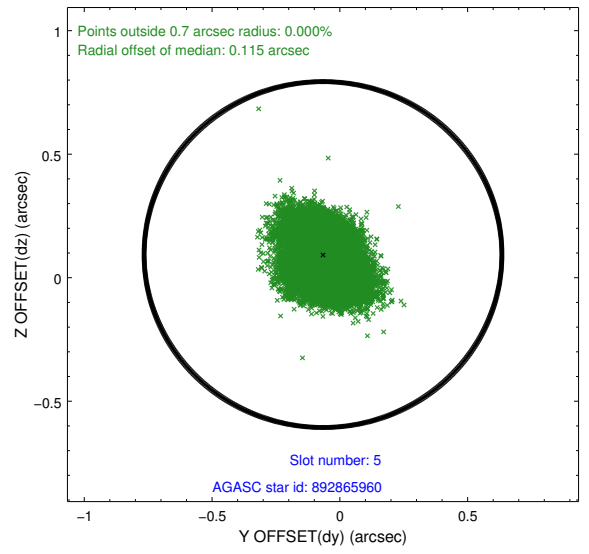
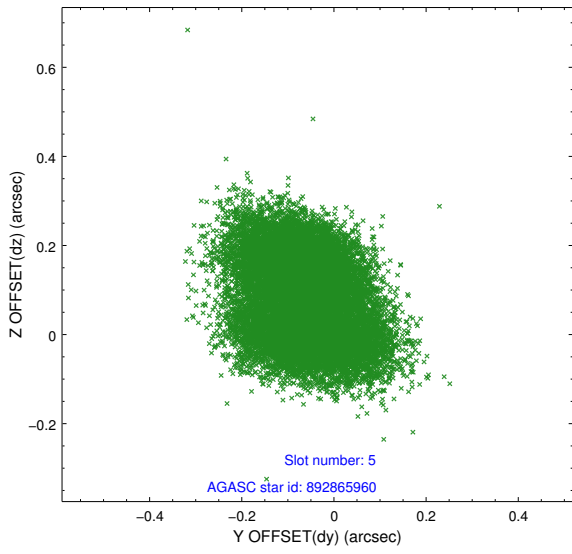
2.4.1 Slot 3



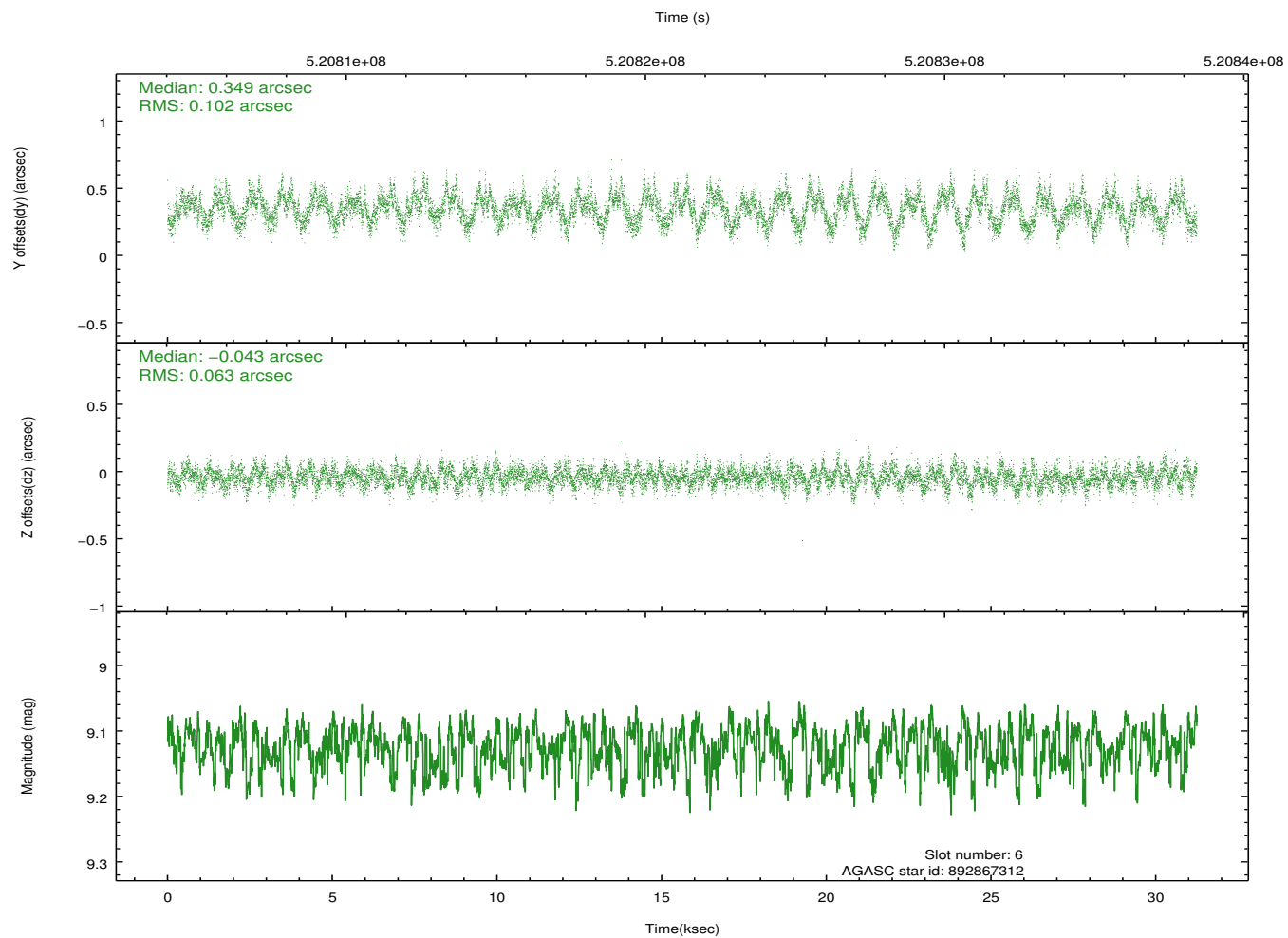
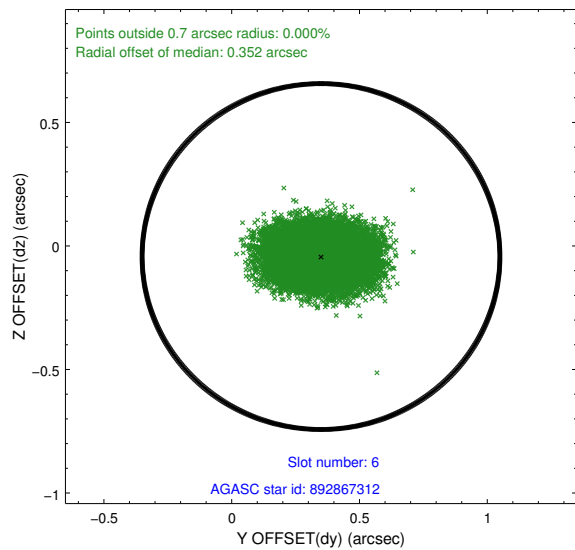
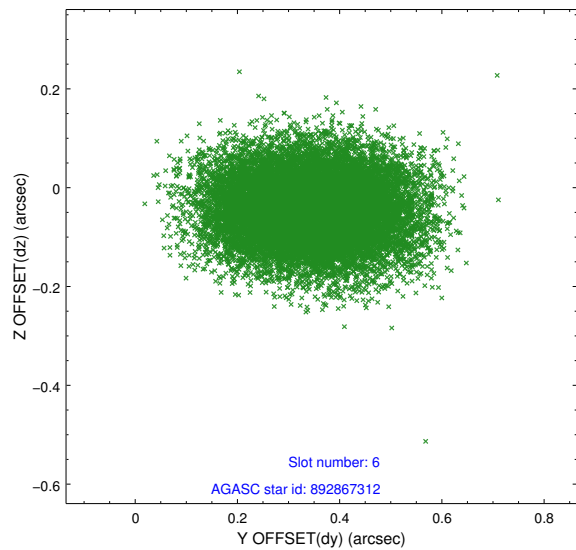
2.4.2 Slot 4



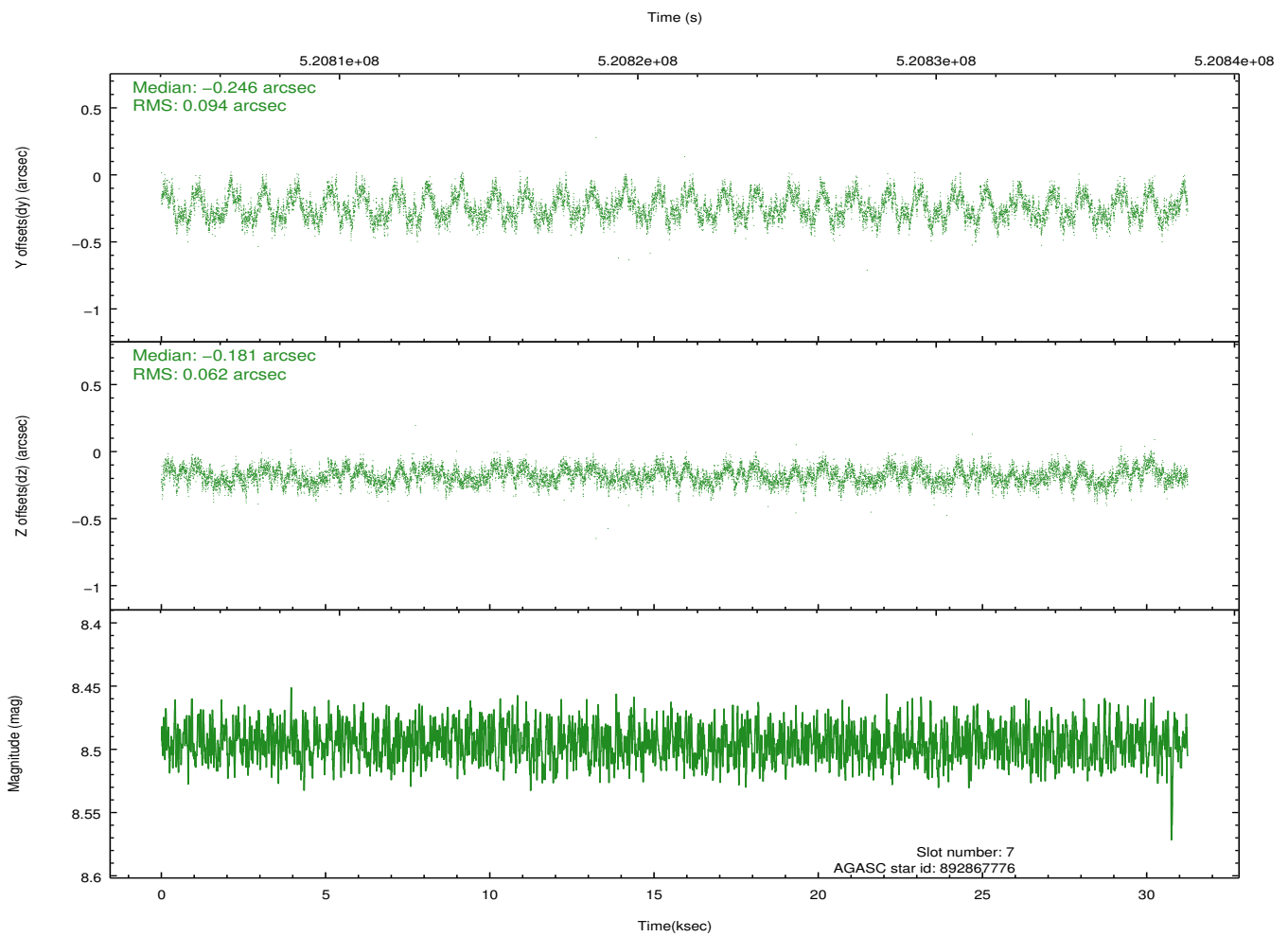
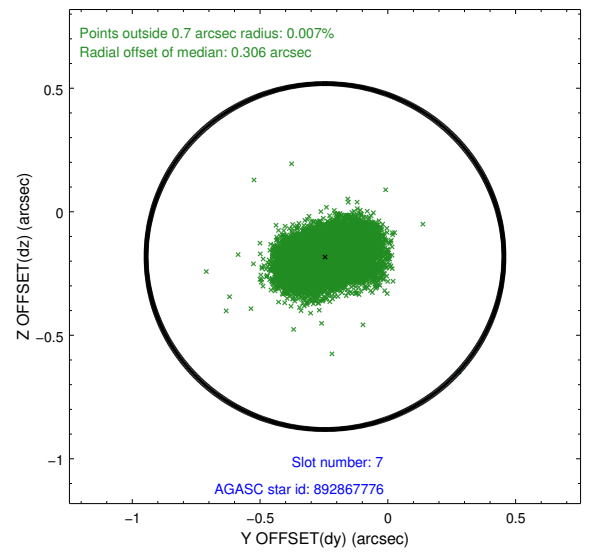
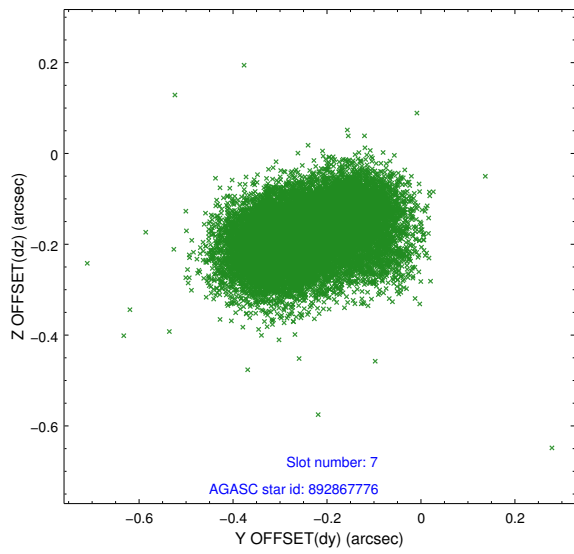
2.4.3 Slot 5



2.4.4 Slot 6

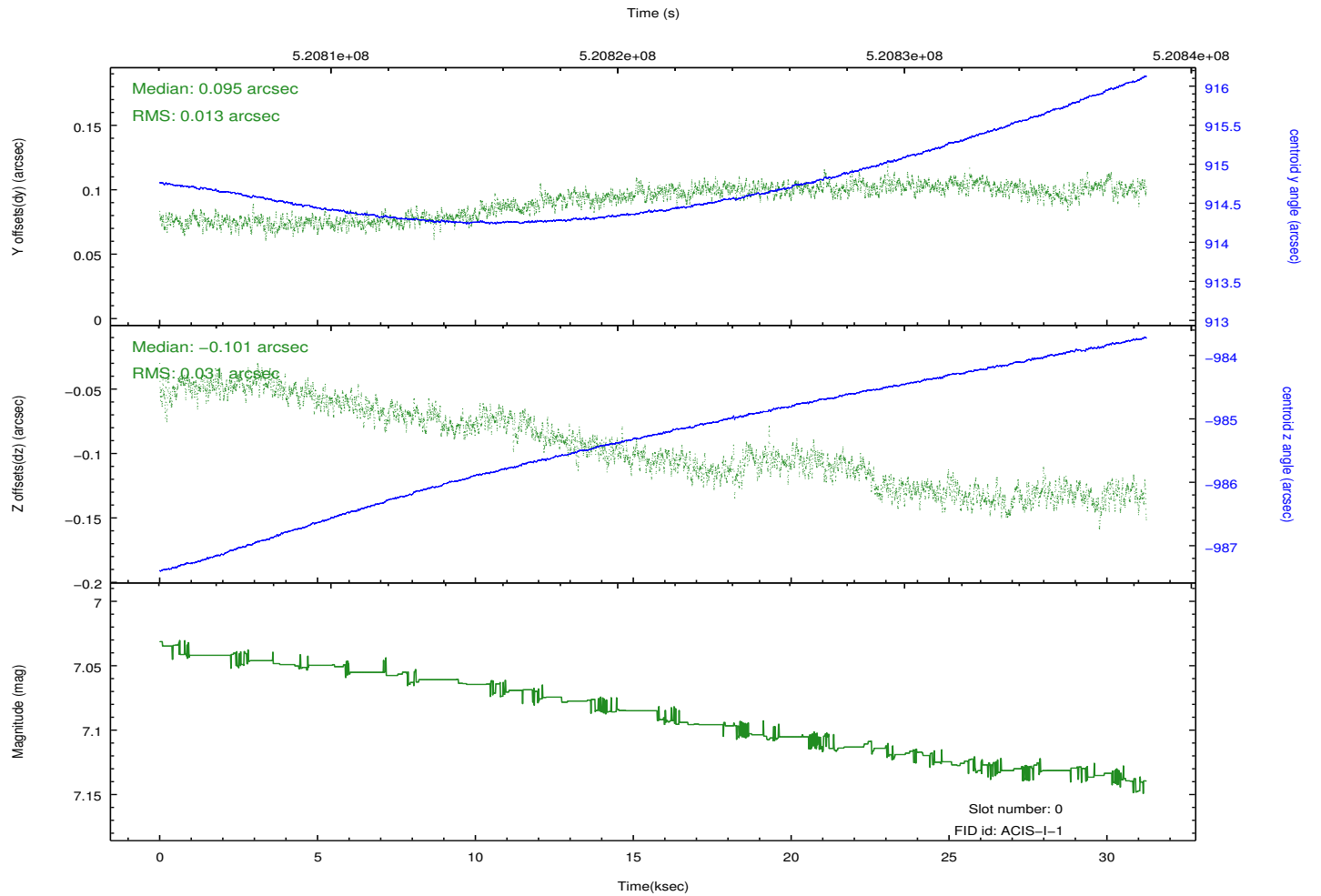
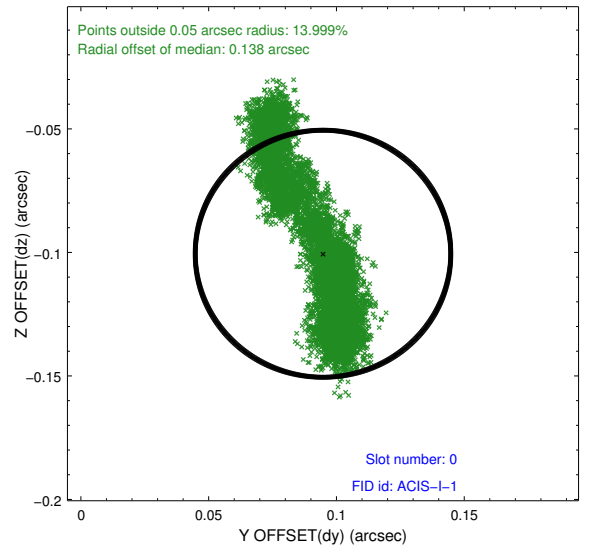
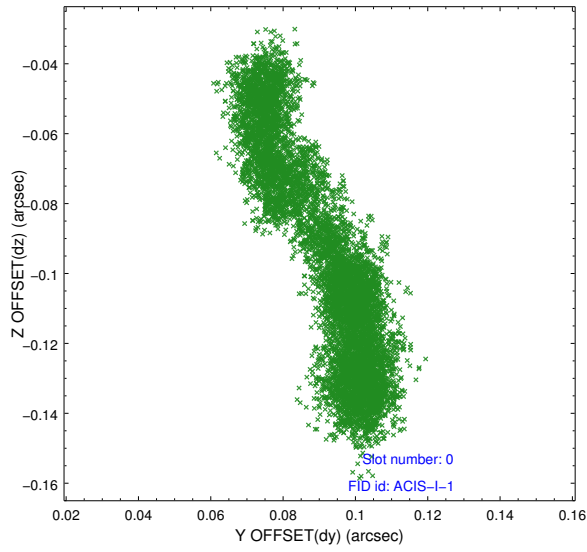


2.4.5 Slot 7

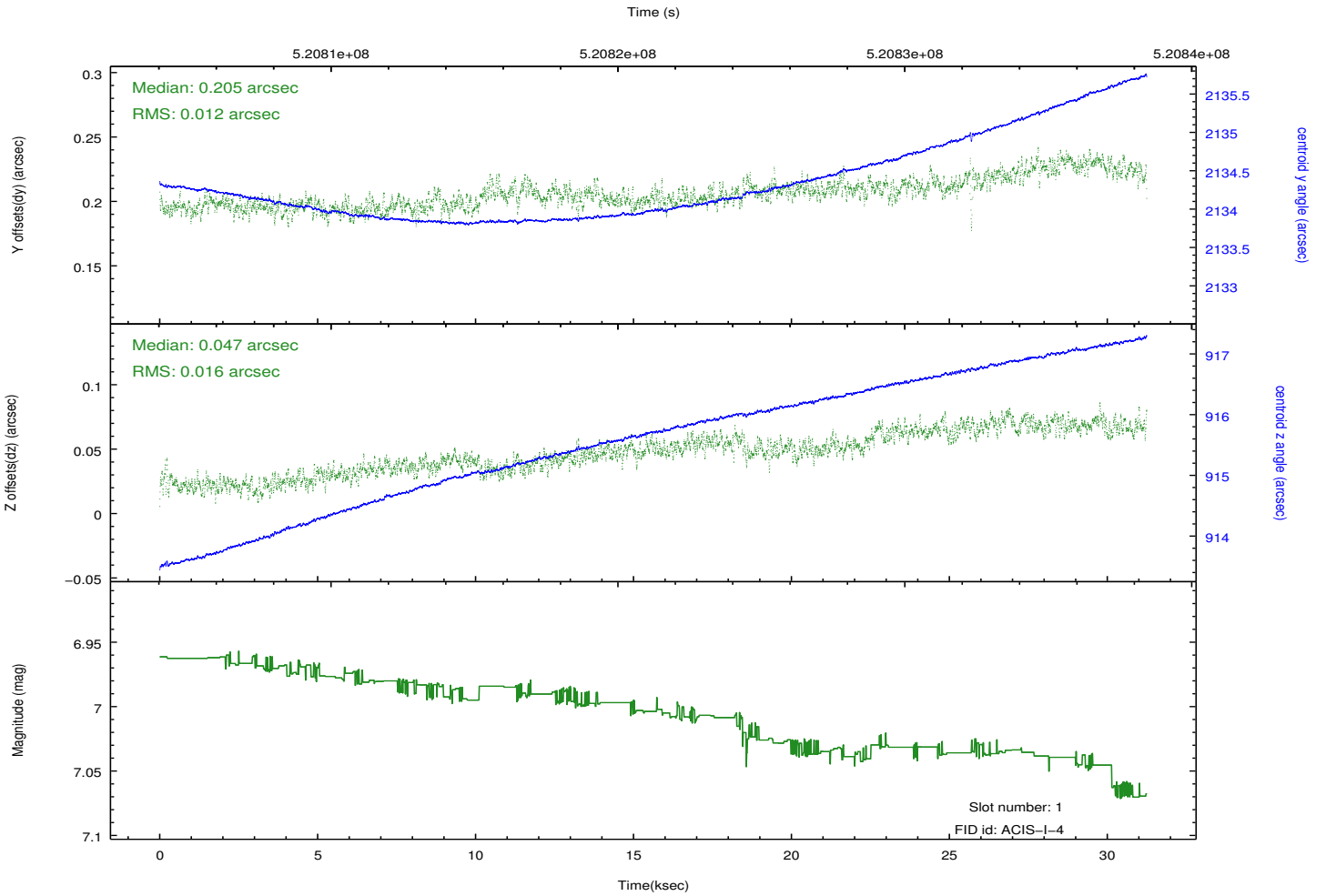
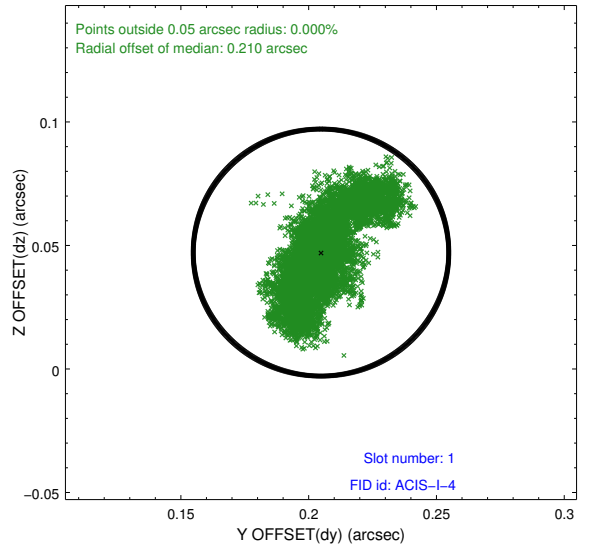
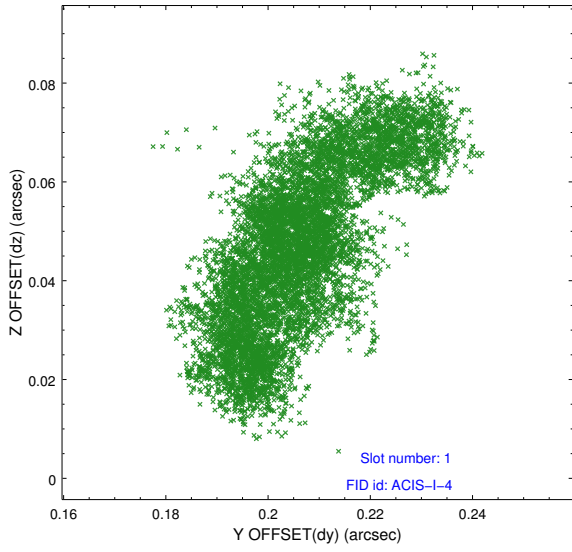


2.5 FID Slots

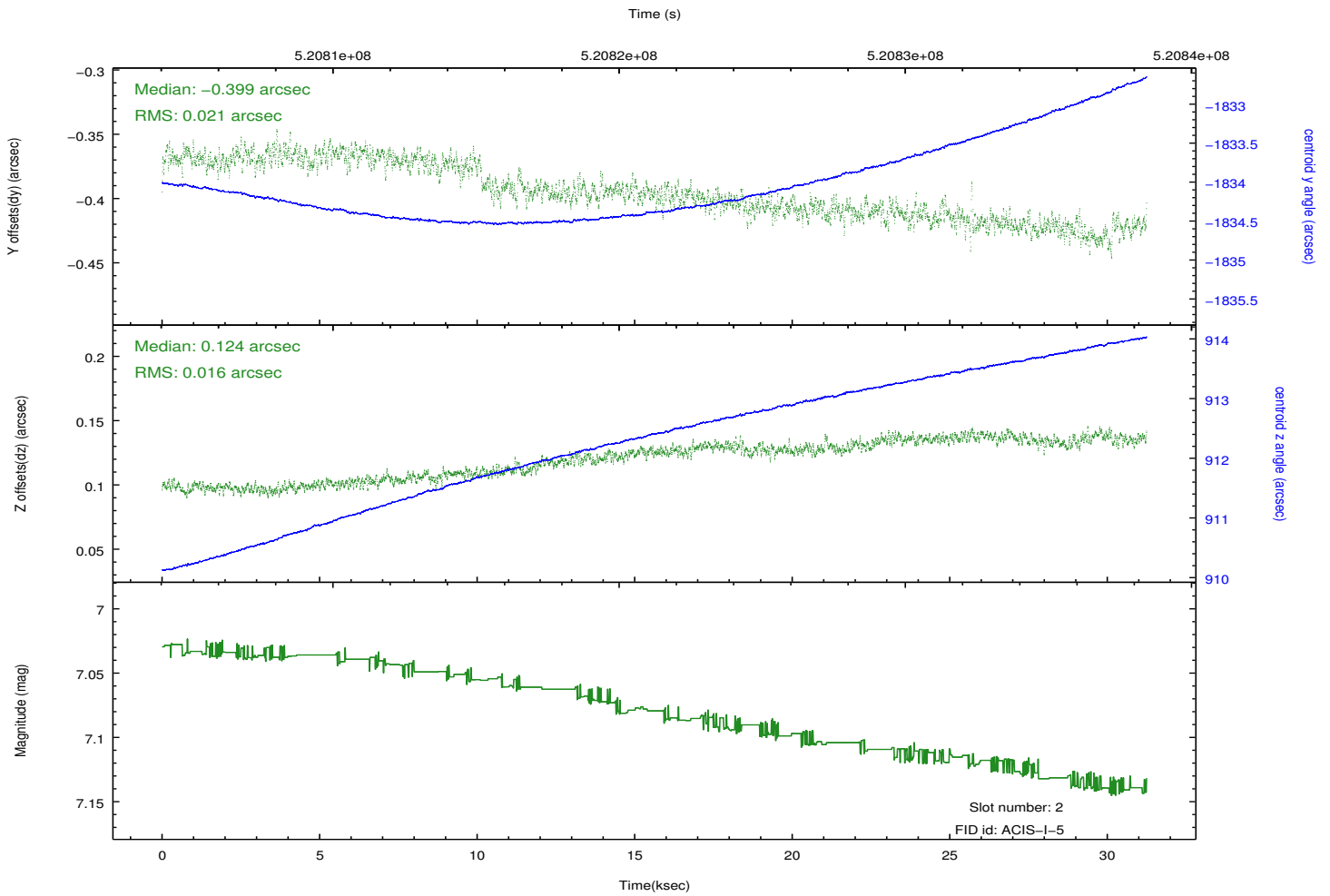
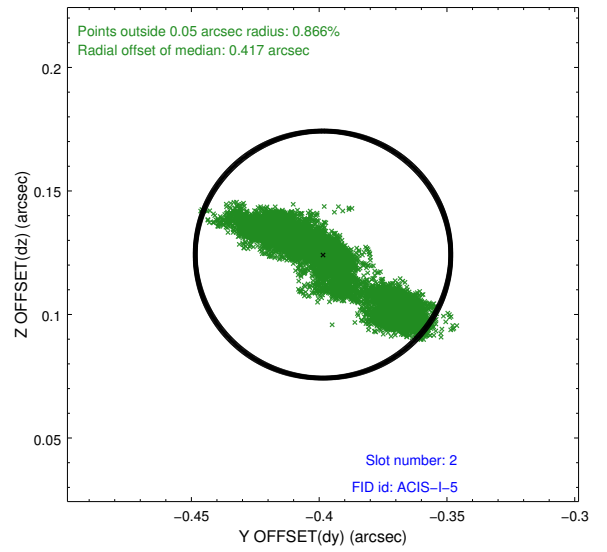
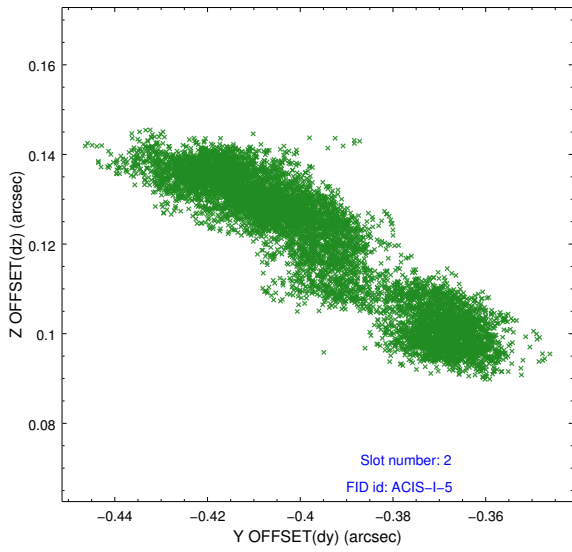
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.18533862102

A.2 Comments

Joint proposal with NRAO.

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.