

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 14521 - L2 Version 3
Chandra X-Ray Center

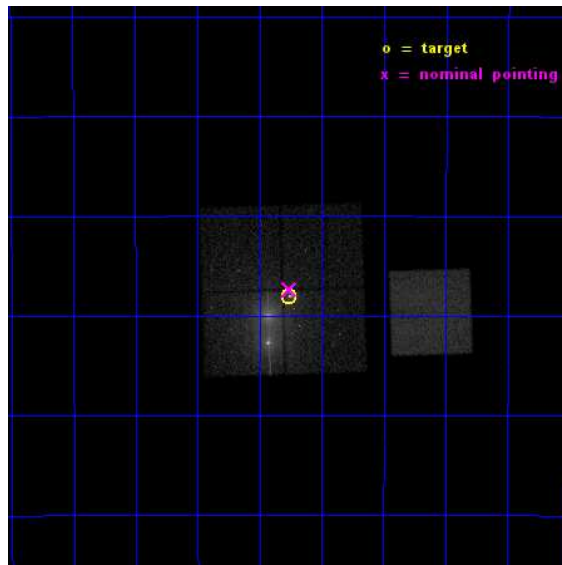
L2 Processing Date : Dec 10 2014

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1 Front

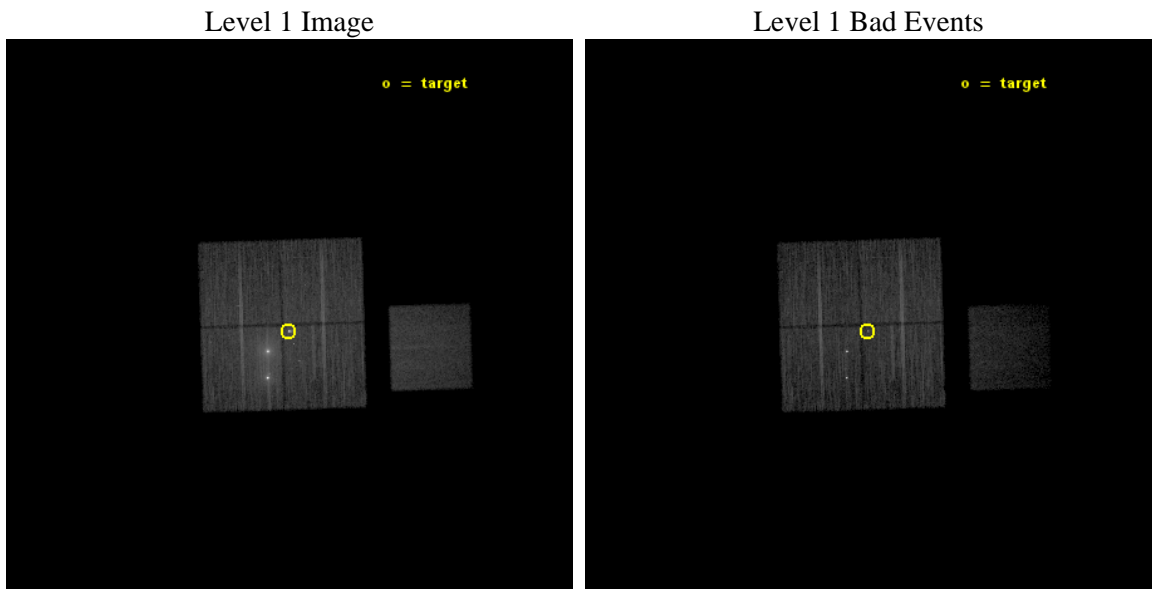
seq_num	501806	Sequence number
obs_id	14521	Observation id
title	A comparative study of two outstanding pulsar tails	Proposal title
observer	Dr Oleg Kargaltsev	Principal investigator
object	The Mouse	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.81625	Observer's specified target RA [deg]
dec_targ	-29.967222	Observer's specified target Dec [deg]
ra_nom	266.8148442543	Nominal RA [deg]
dec_nom	-29.956147425662	Nominal Dec [deg]
roll_nom	88.207985344487	Nominal Roll [deg]
revision	3	Processing version of data
ontime	28112.416374862	Sum of GTIs [s]
liveltime	27745.106958865	Livetime [s]
ontime0	28112.293254852	Sum of GTIs [s]
ontime1	28112.334294856	Sum of GTIs [s]
ontime2	28109.234344542	Sum of GTIs [s]
ontime3	28112.416374862	Sum of GTIs [s]
ontime7	28112.457414865	Sum of GTIs [s]
l2events	195709	Number of level 2 events



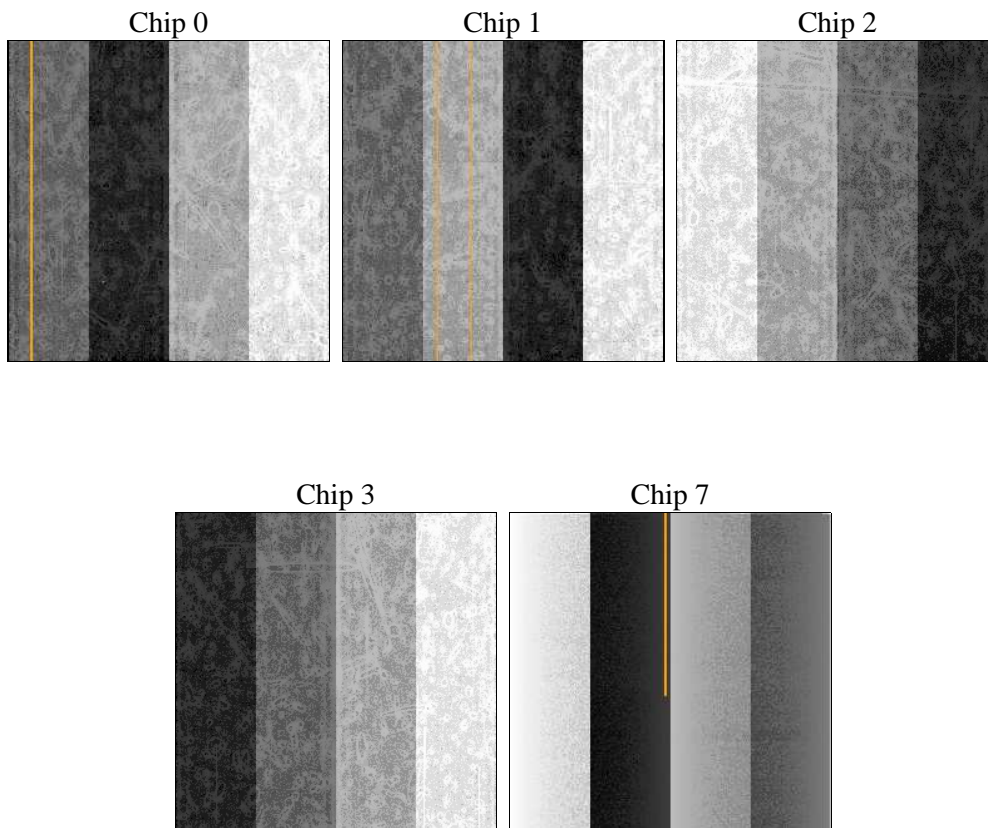
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	28112.416374862	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	28112.293254852	Sum of GTIs [s]
date	2014-12-10T21:27:44	Date and time of file creation	ontime1	28112.334294856	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	28109.234344542	Sum of GTIs [s]
			ontime3	28112.416374862	Sum of GTIs [s]
			ontime7	28112.457414865	Sum of GTIs [s]
			l1events	608397	Number of level 1 events

2.1.4 Events

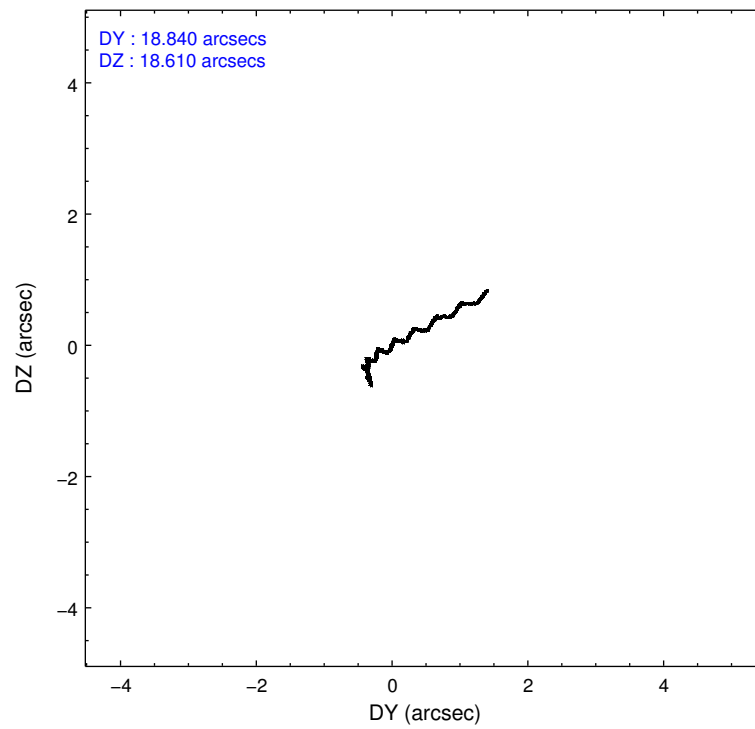
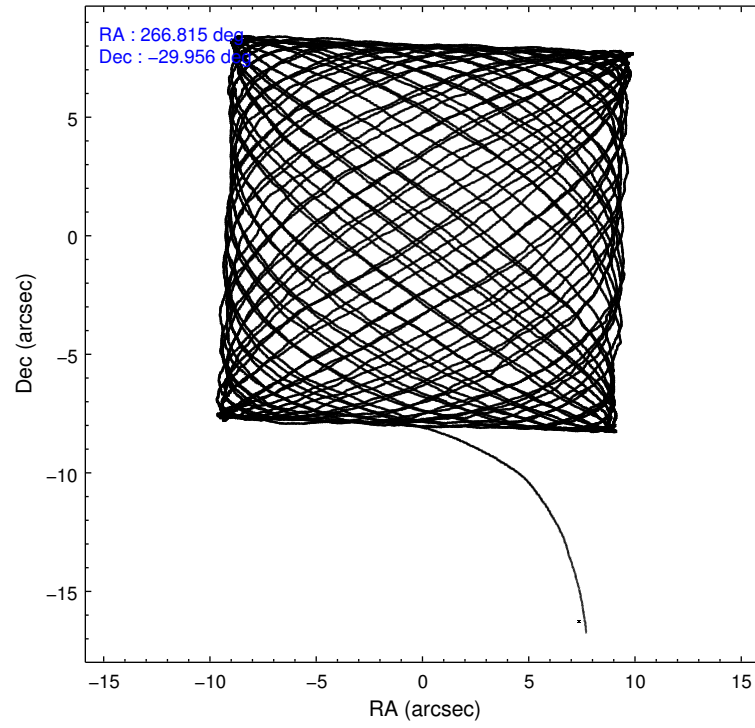
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	99708	194519	111120	120448	82602
rejected events	81821	93399	95617	89376	35795
rejected %	82%	48%	86%	74%	43%

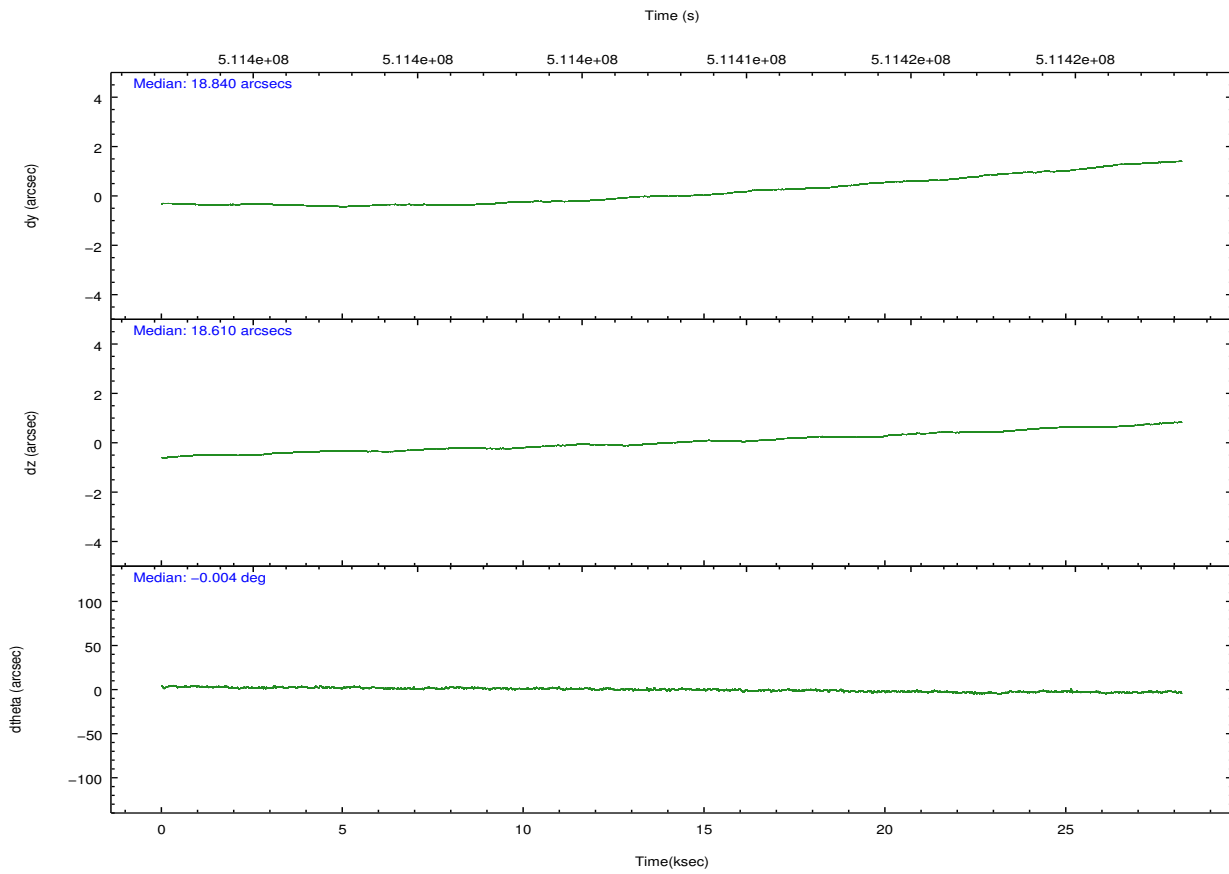
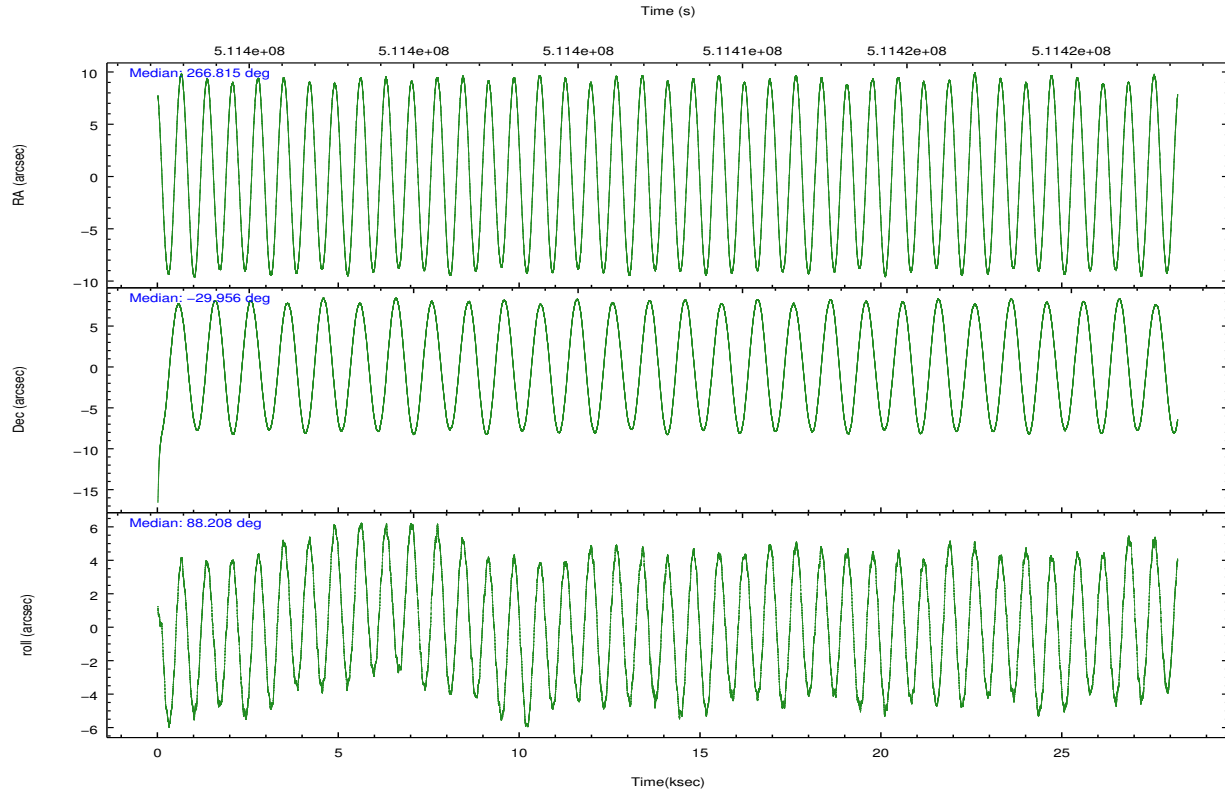
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	9446	62733	7987	19761	6044
	9%	32%	7%	16%	7%
grade 1 events	64	4215	69	238	176
	0%	2%	0%	0%	0%
grade 2 events	3709	16780	3246	4779	11343
	3%	8%	2%	3%	13%
grade 3 events	1416	6097	1209	1952	4418
	1%	3%	1%	1%	5%
grade 4 events	1270	5933	1246	1825	4394
	1%	3%	1%	1%	5%
grade 5 events	2543	6519	2320	3257	8576
	2%	3%	2%	2%	10%
grade 6 events	2052	9603	1819	2763	20620
	2%	4%	1%	2%	24%
grade 7 events	79208	82639	93224	85873	27031
	79%	42%	83%	71%	32%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	266.829965	266.8148442542994	CCD I2 on	Y	Y
[deg] Pointing Dec	-29.980311	-29.9561474256618	CCD I3 on	Y	Y
[deg] Pointing Roll	88.006852	88.20798534448711	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	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	511393836.184000	511392852.15005	CCD S5 on	N	N
Observation start date	2014-03-16T21:49:29	2014-03-16T21:34:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	511421836.184000	511422290.66417	On-chip summing requested	N	N
Observation end date	2014-03-17T05:36:09	2014-03-17T05:44:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





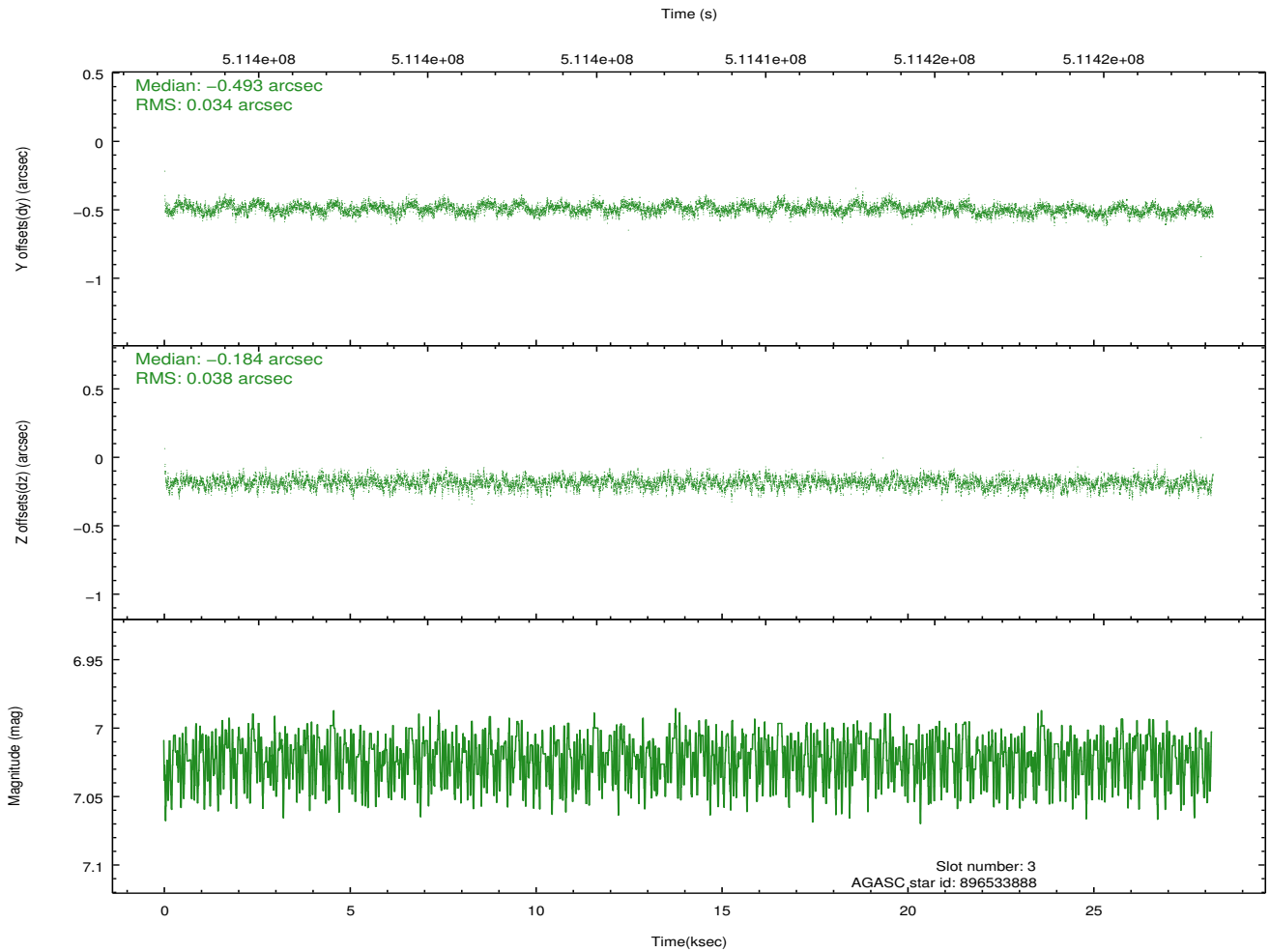
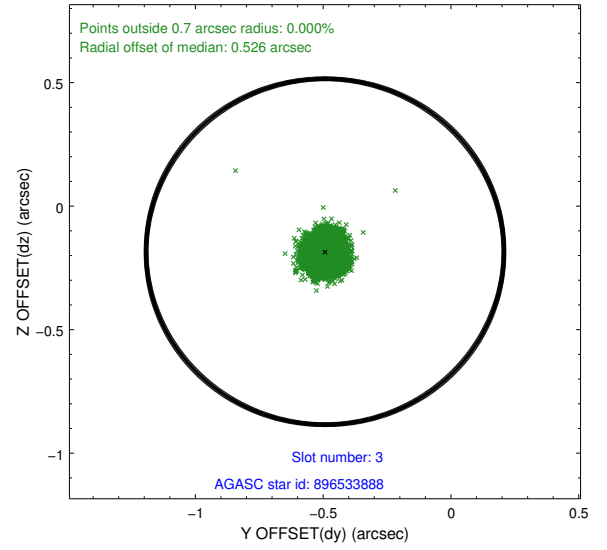
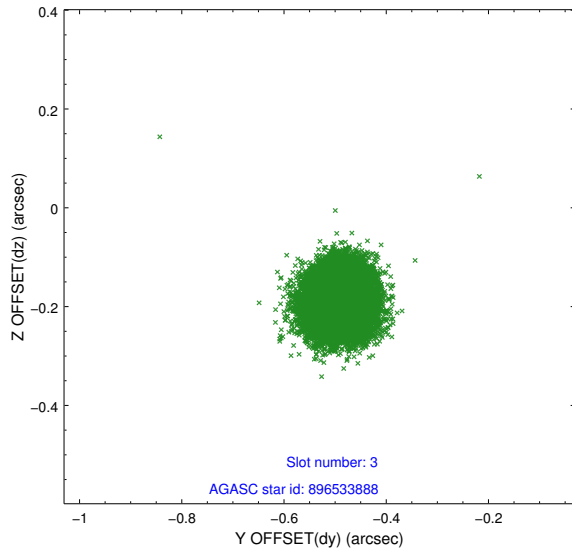
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.15	6875	-0.034	-0.005	0.015	0.026	0.000000	0.000000	920.31	-842.33
1	FID		ACIS-I-4	7.09	6874	0.266	0.044	0.023	0.048	0.000000	0.000000	2140.65	1057.51
2	FID		ACIS-I-5	7.13	6876	-0.329	0.032	0.018	0.041	0.000000	0.000000	-1827.91	1055.35
3	GUIDE	used	896533888	7.02	13751	-0.493	-0.184	0.055	0.087	266.666434	-29.392757	2095.51	586.12
4	GUIDE	used	896537776	7.50	13750	-0.207	-0.222	0.081	0.126	266.655684	-29.665673	1112.87	584.15
5	GUIDE	used	896541360	7.70	13750	-0.286	-0.122	0.062	0.100	266.684478	-29.453744	1878.43	521.75
6	GUIDE	used	966919736	6.90	13752	0.495	0.324	0.077	0.120	267.322278	-30.597445	-2170.27	-1602.51
7	GUIDE	used	966926496	8.10	13746	0.489	0.200	0.078	0.128	267.109389	-30.299474	-1118.71	-907.26

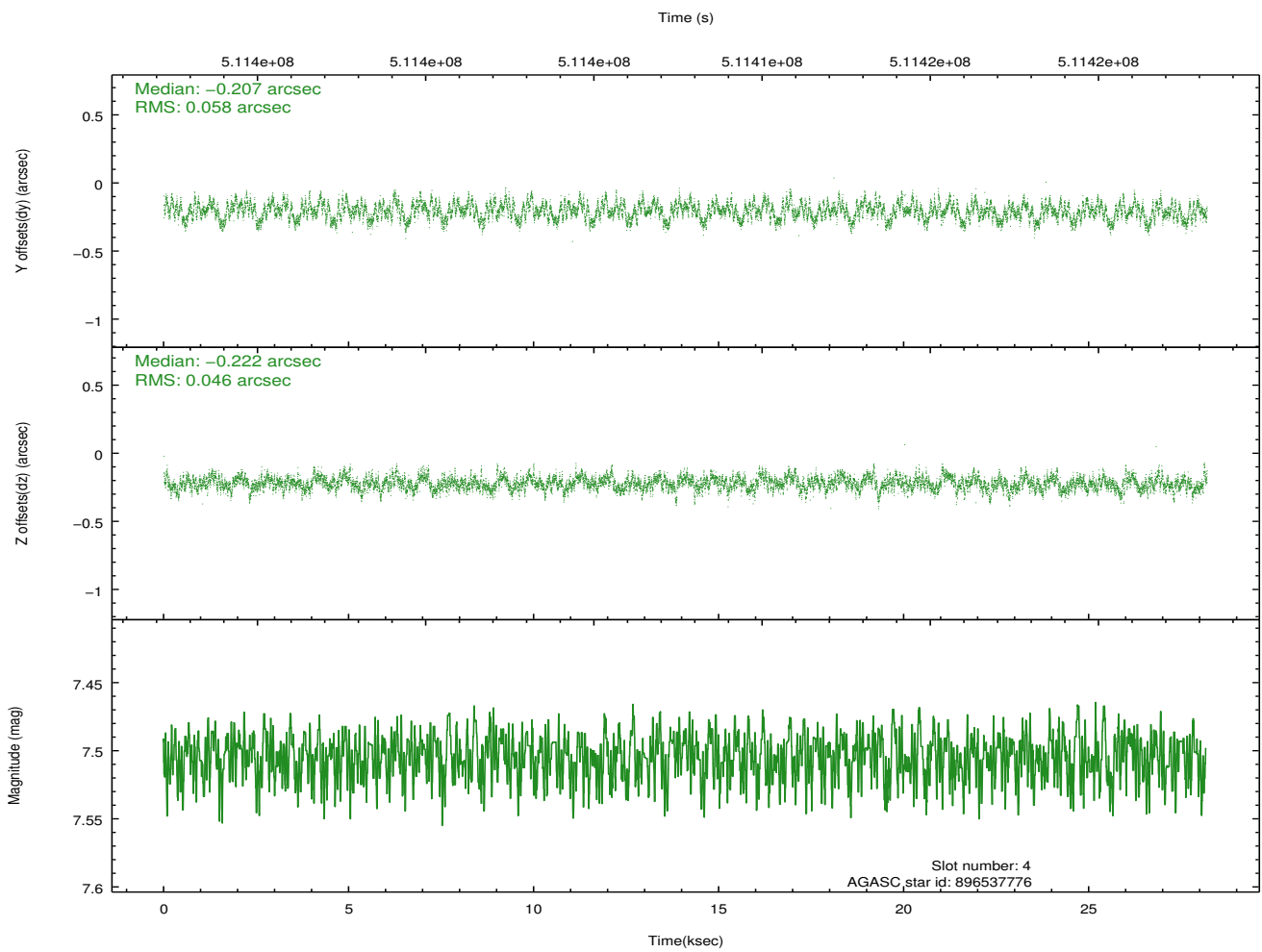
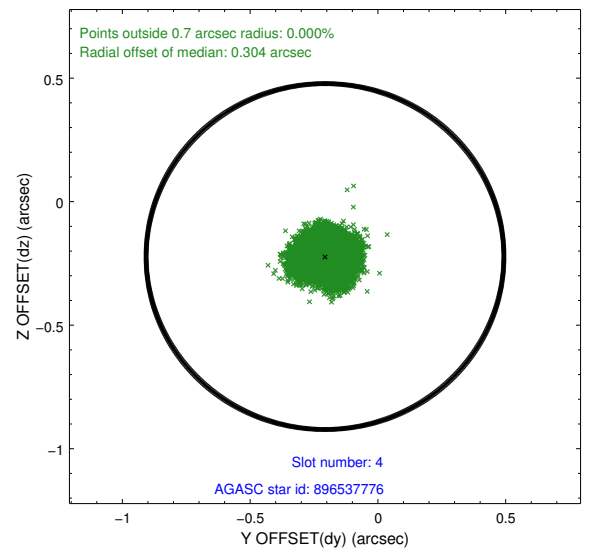
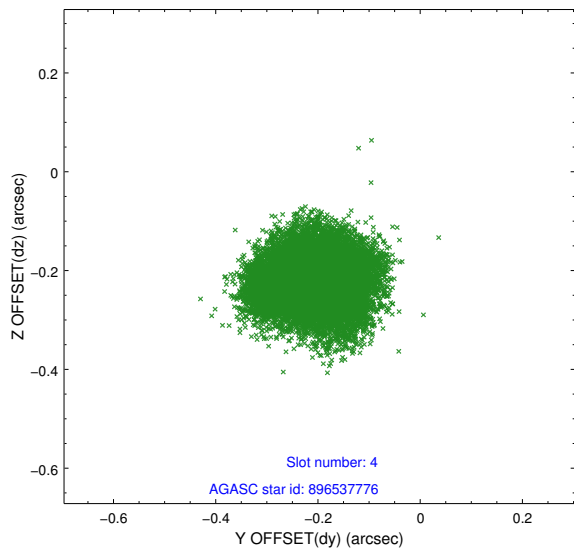
∞

2.4 Star Slots

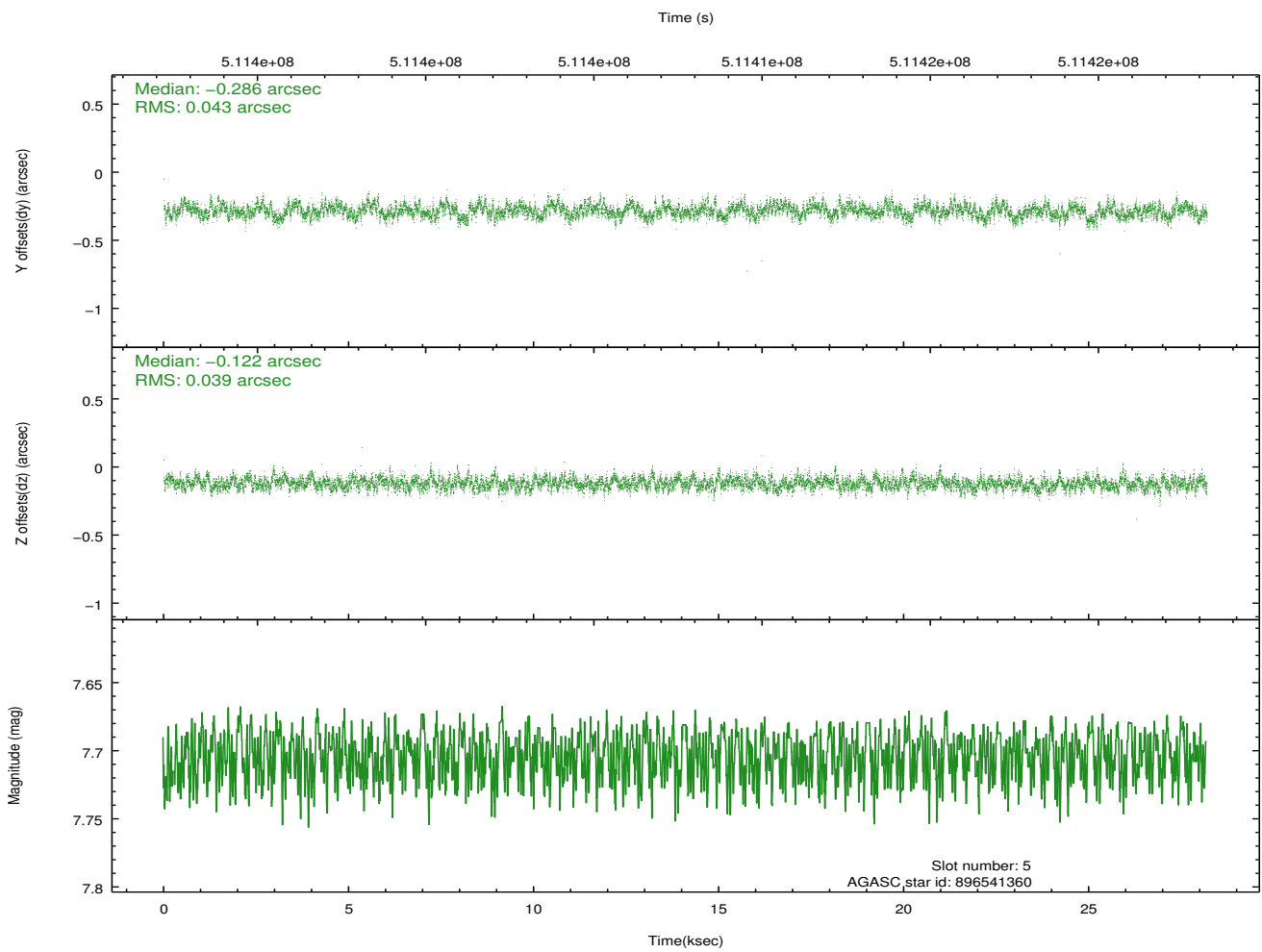
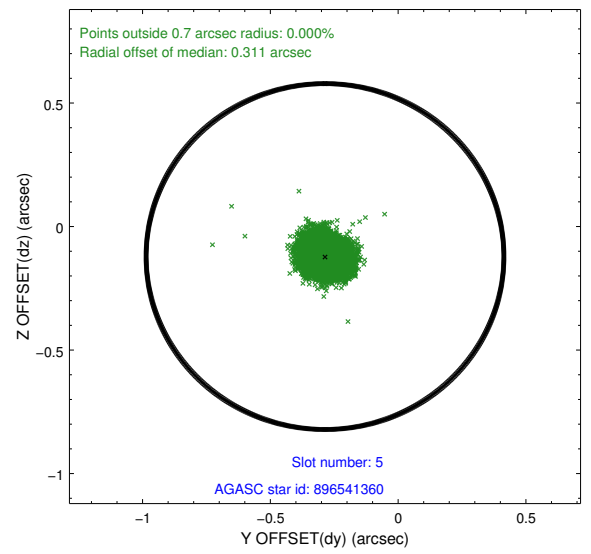
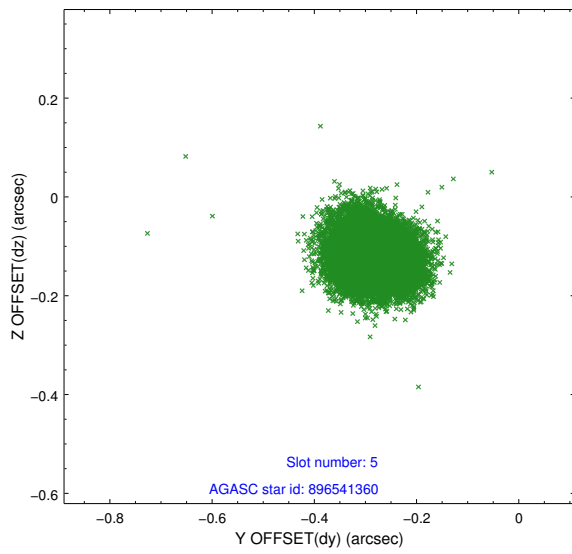
2.4.1 Slot 3



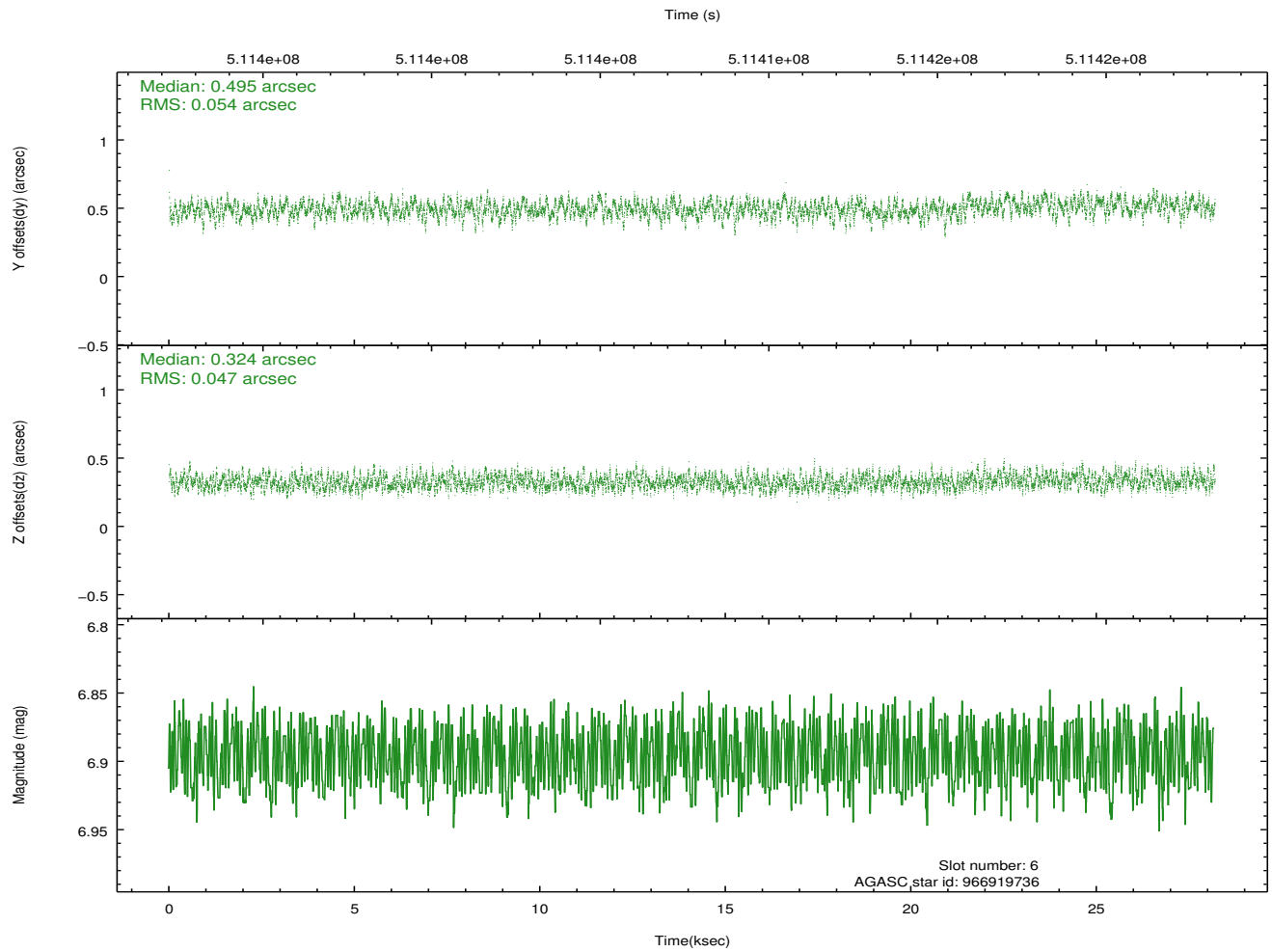
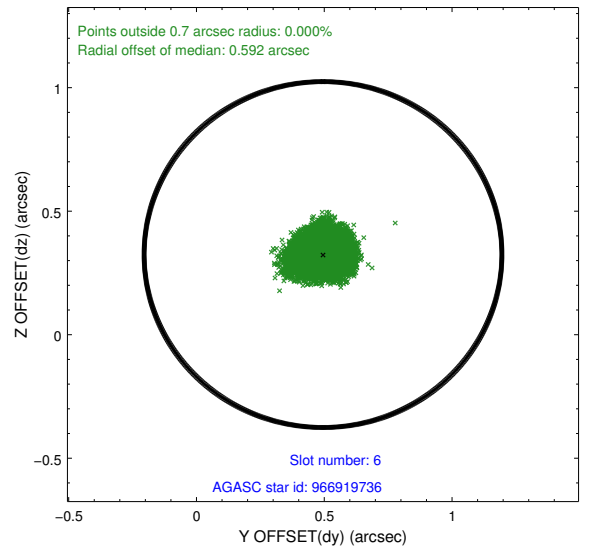
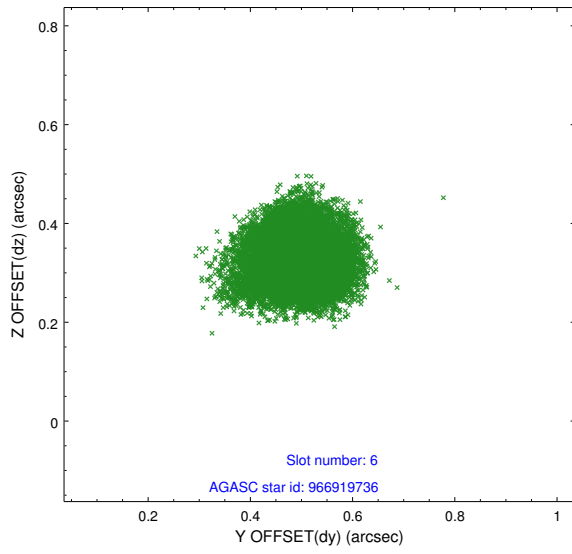
2.4.2 Slot 4



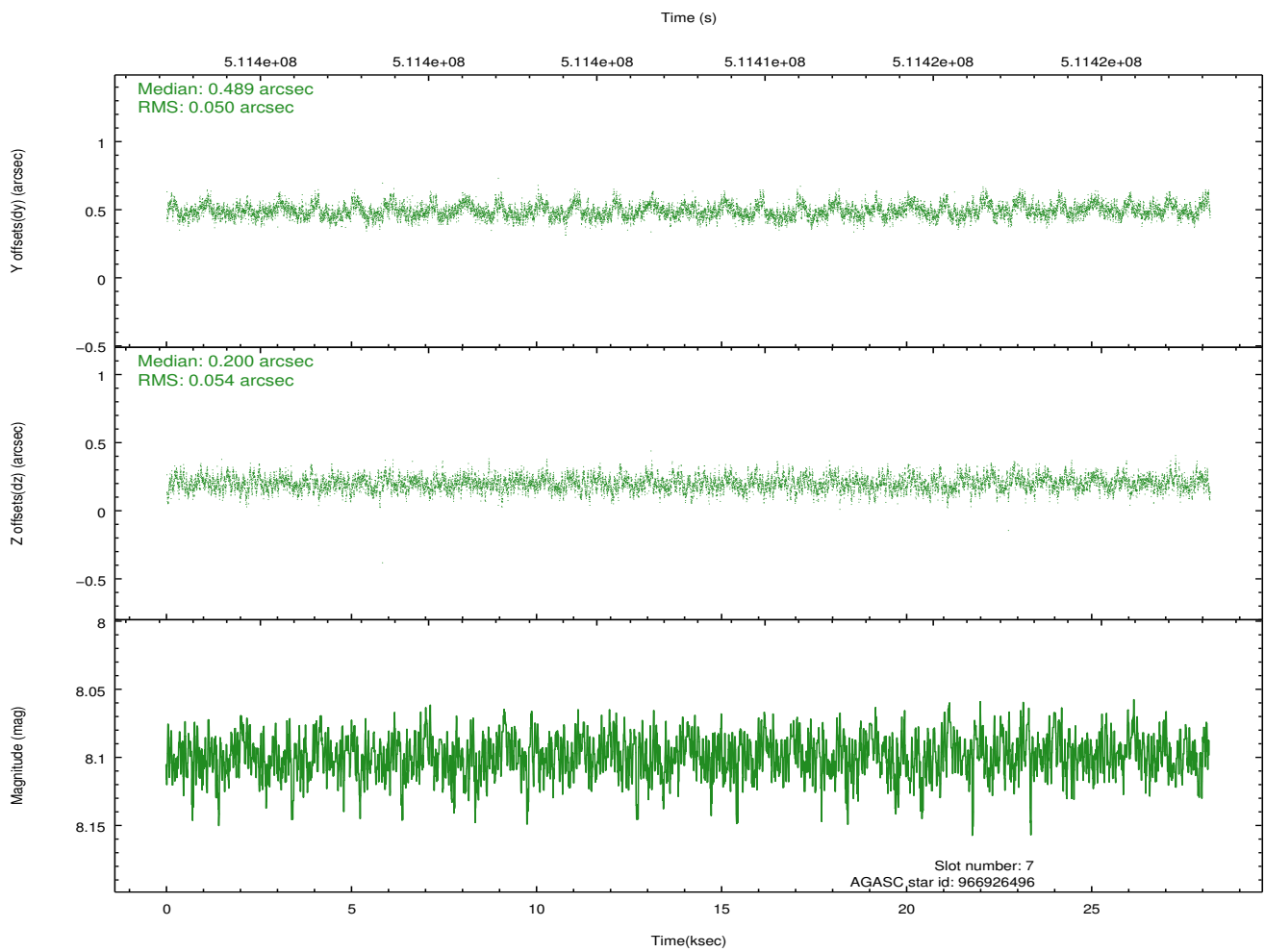
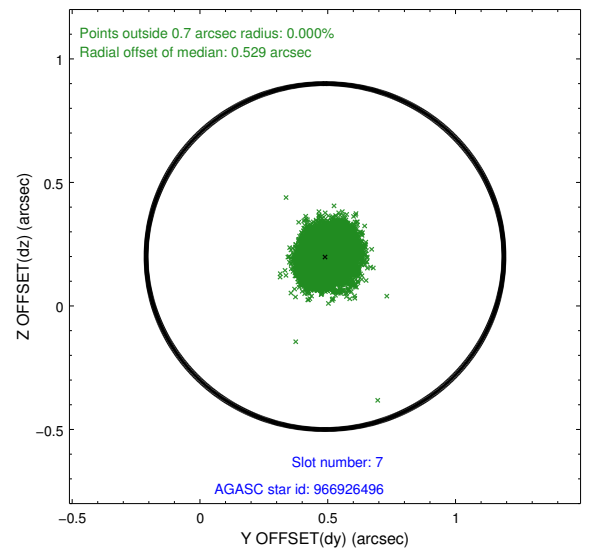
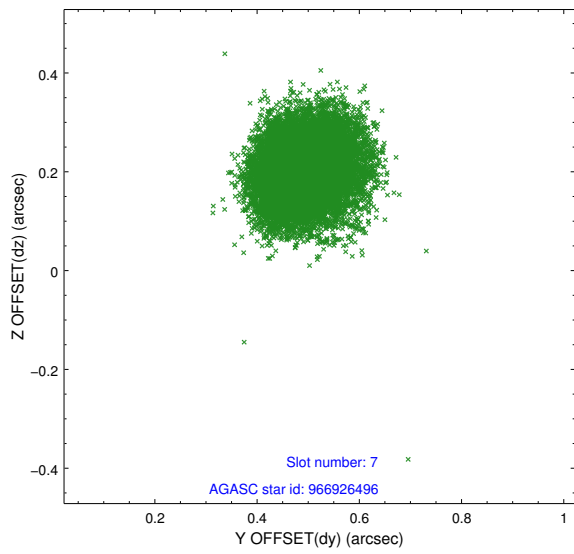
2.4.3 Slot 5



2.4.4 Slot 6

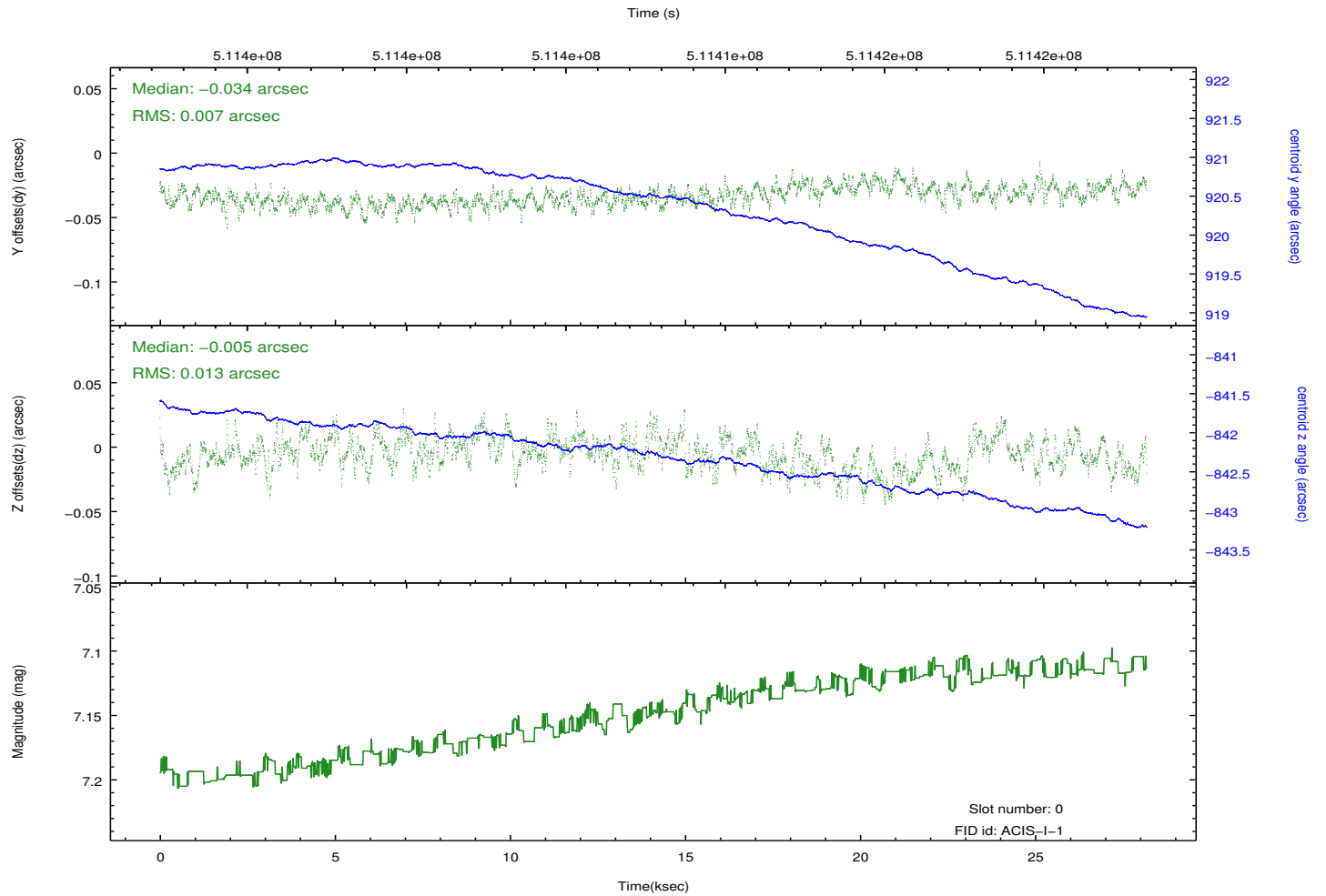
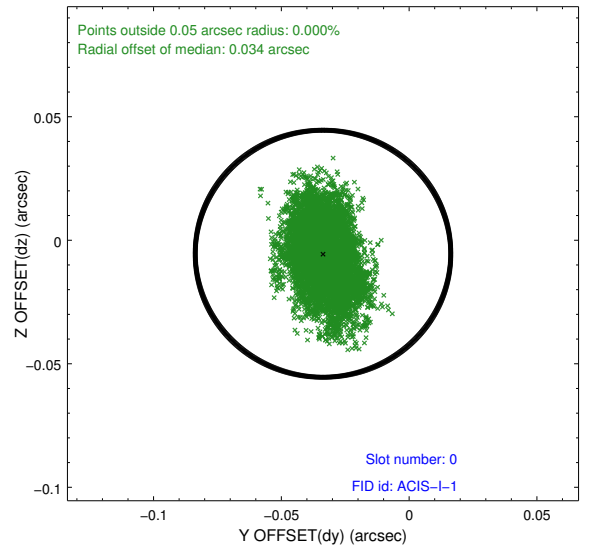
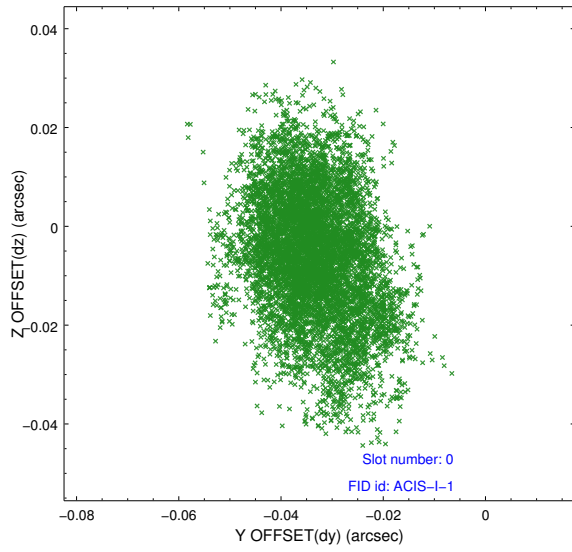


2.4.5 Slot 7

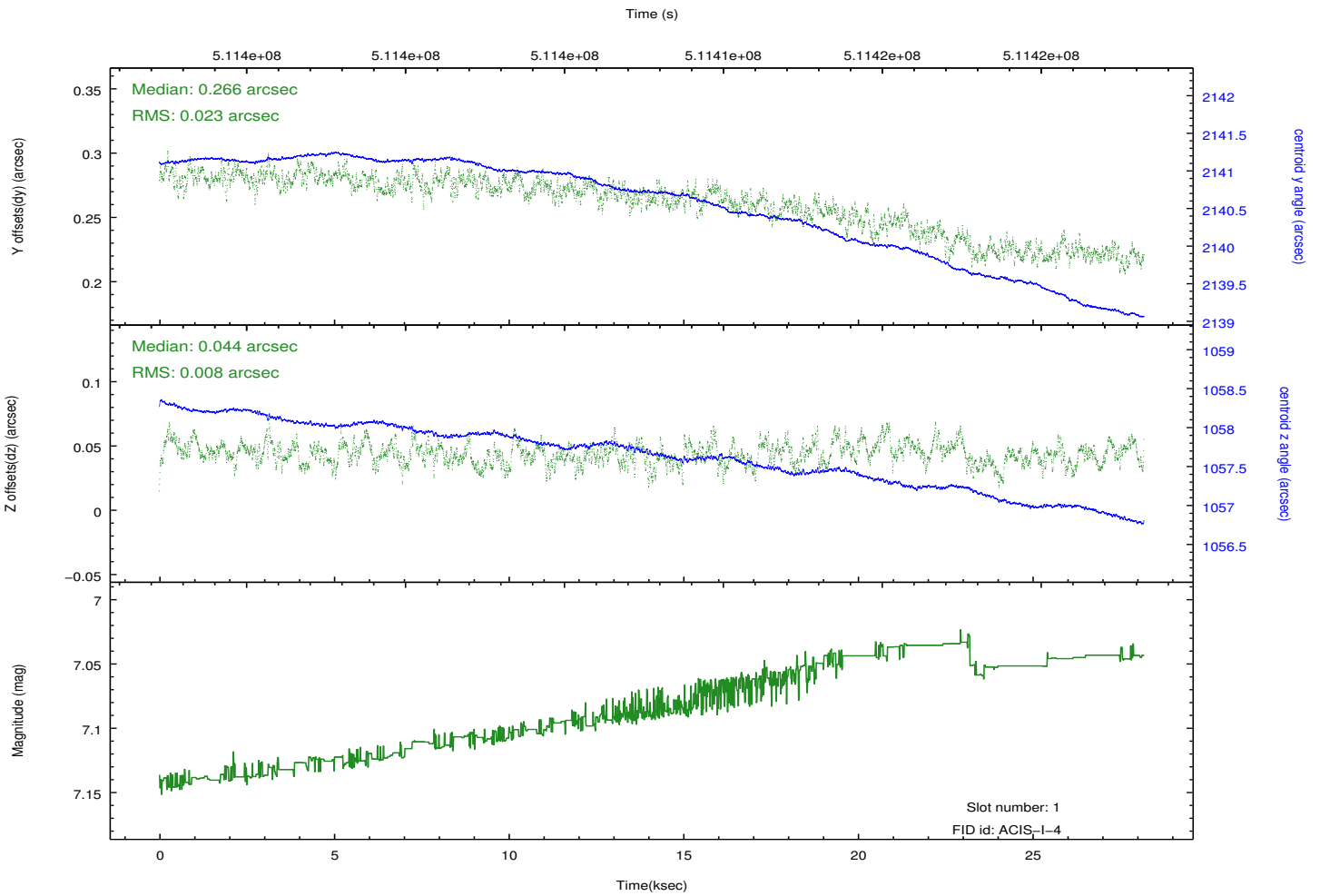
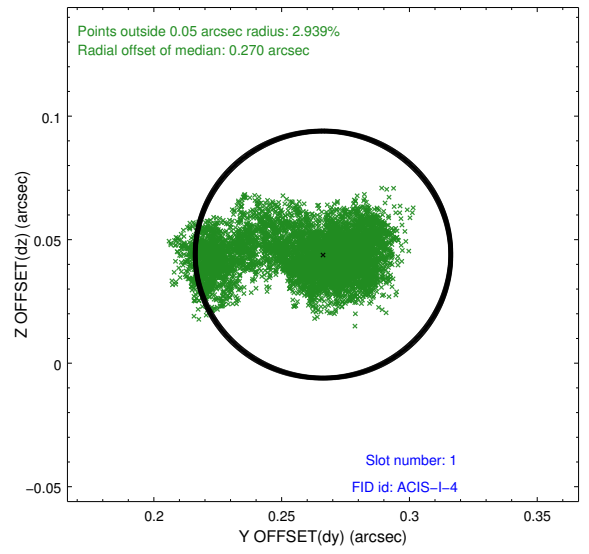
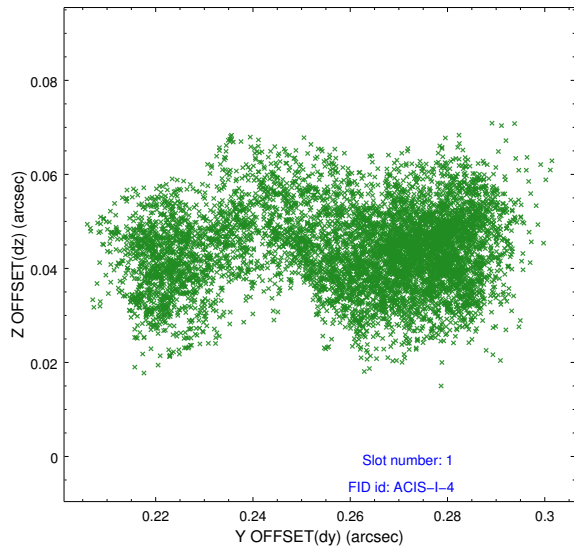


2.5 FID Slots

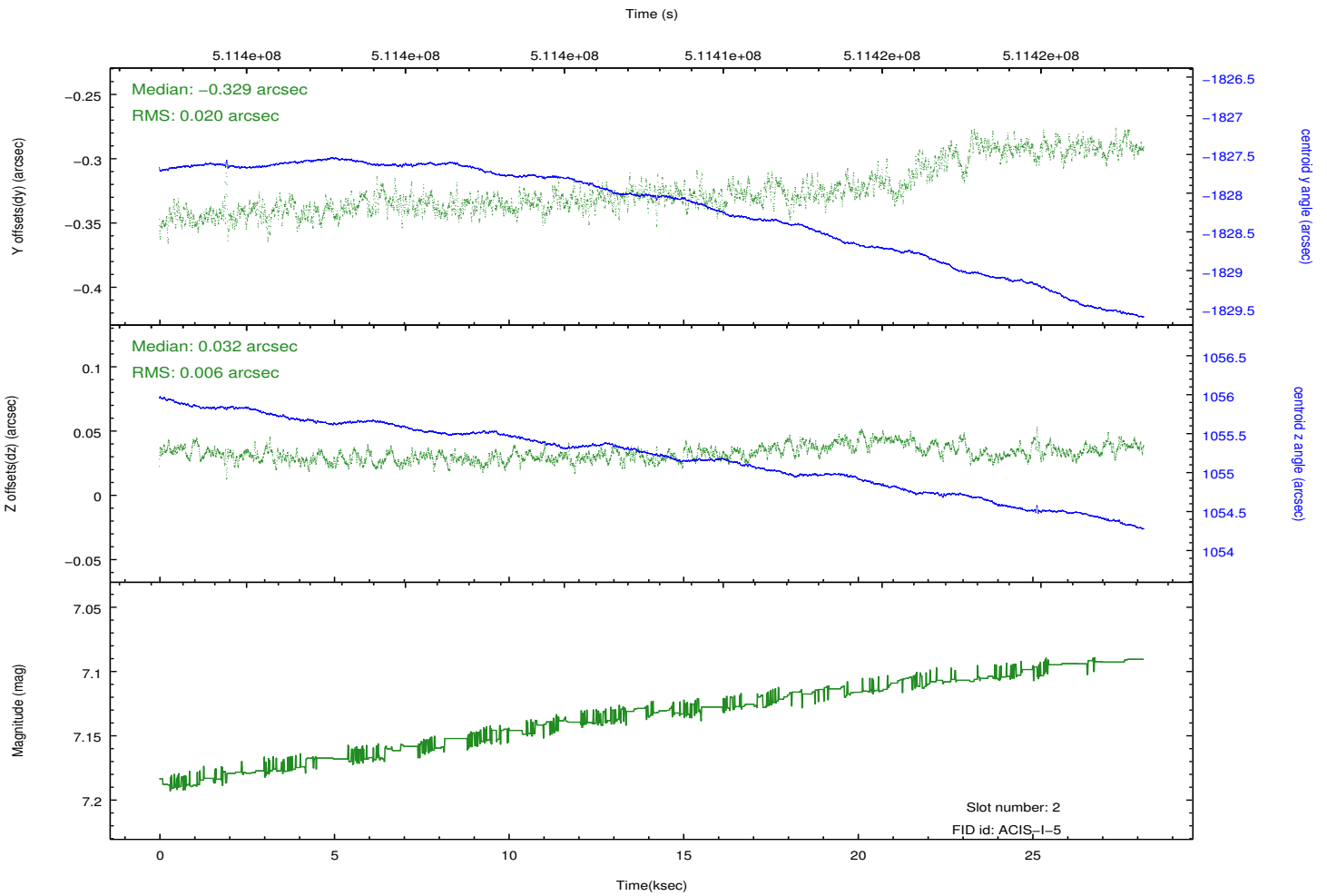
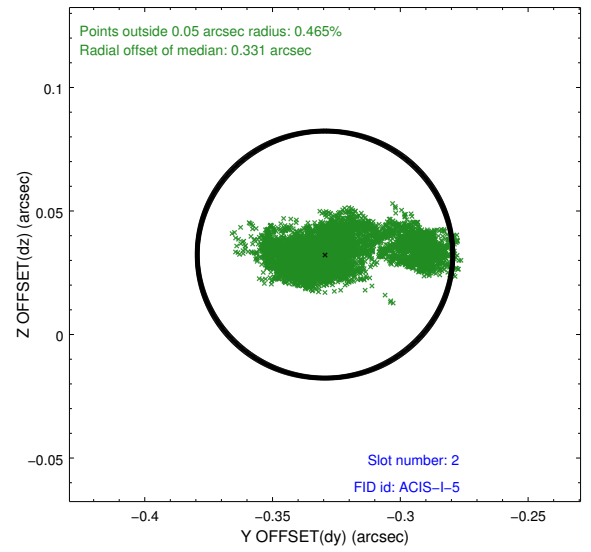
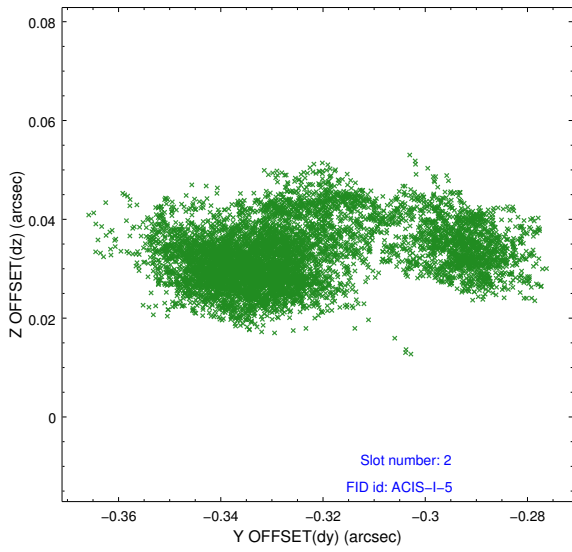
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.112416374862

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.