

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15980 - L2 Version 2
Chandra X-Ray Center

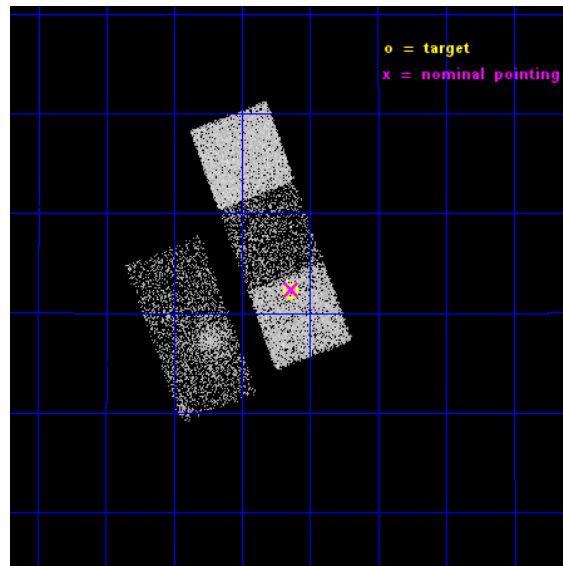
L2 Processing Date : Dec 10 2014

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1 Front

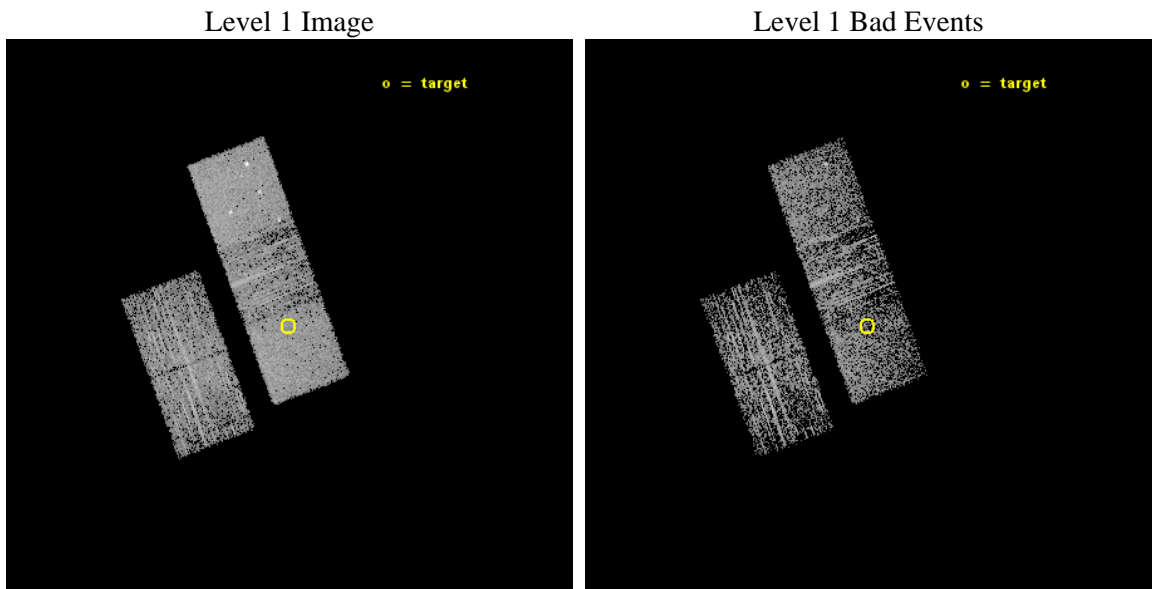
seq_num	502213	Sequence number
obs_id	15980	Observation id
title	Where Have All The Central Compact Objects Gone?	Proposal title
observer	Dr. Eric Gotthelf	Principal investigator
object	PSR J1813+1822	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	273.41125	Observer's specified target RA [deg]
dec_targ	18.370833	Observer's specified target Dec [deg]
ra_nom	273.40935314662	Nominal RA [deg]
dec_nom	18.373134234	Nominal Dec [deg]
roll_nom	69.456346560156	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3272.8272789121	Sum of GTIs [s]
livetime	3230.0653810927	Livetime [s]
ontime2	3272.6631188989	Sum of GTIs [s]
ontime3	3272.7041589022	Sum of GTIs [s]
ontime5	3272.7862389088	Sum of GTIs [s]
ontime6	3272.7451989055	Sum of GTIs [s]
ontime7	3272.8272789121	Sum of GTIs [s]
l2events	24487	Number of level 2 events



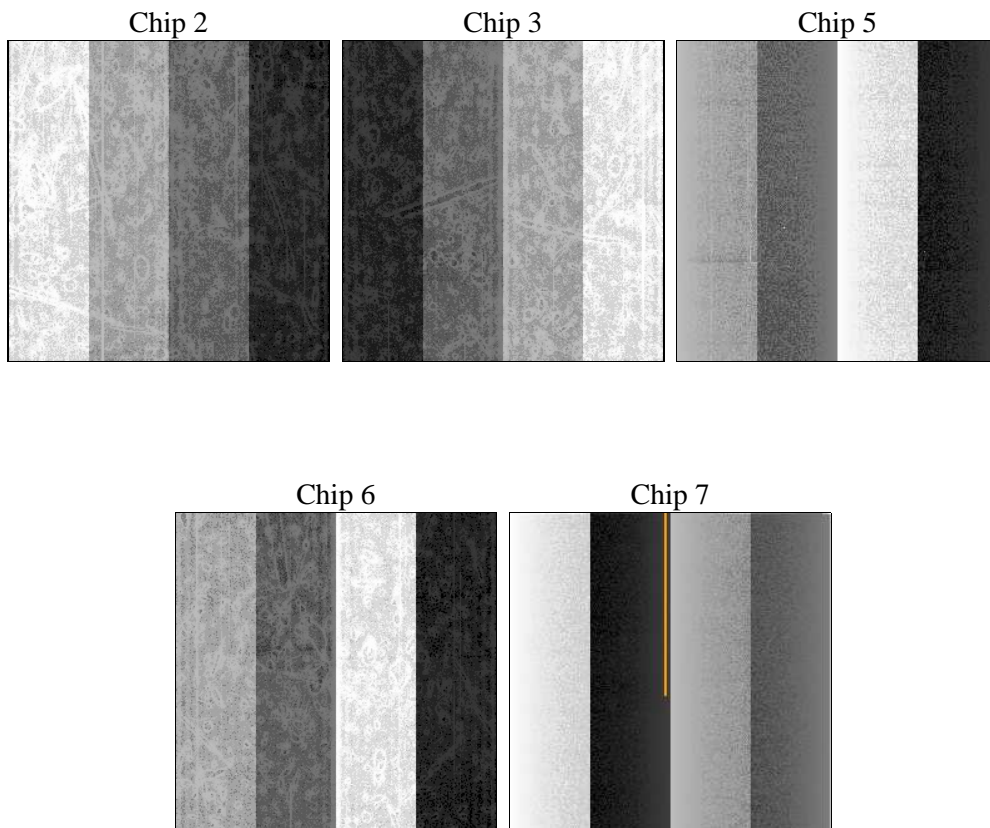
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3272.8272789121	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	3272.6631188989	Sum of GTIs [s]
date	2014-12-10T08:54:10	Date and time of file creation	ontime3	3272.7041589022	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	3272.7862389088	Sum of GTIs [s]
			ontime6	3272.7451989055	Sum of GTIs [s]
			ontime7	3272.8272789121	Sum of GTIs [s]
			l1events	89406	Number of level 1 events

2.1.4 Events

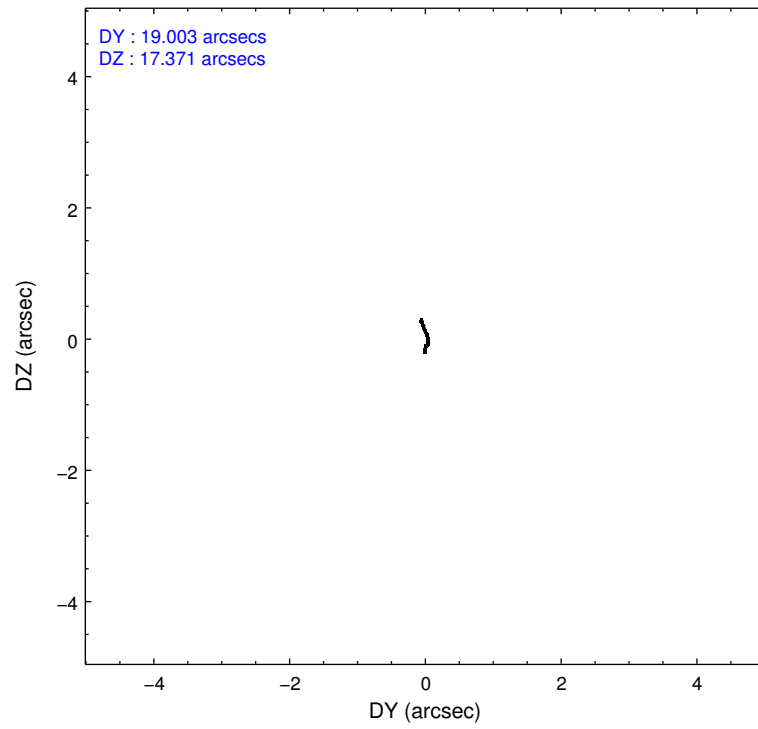
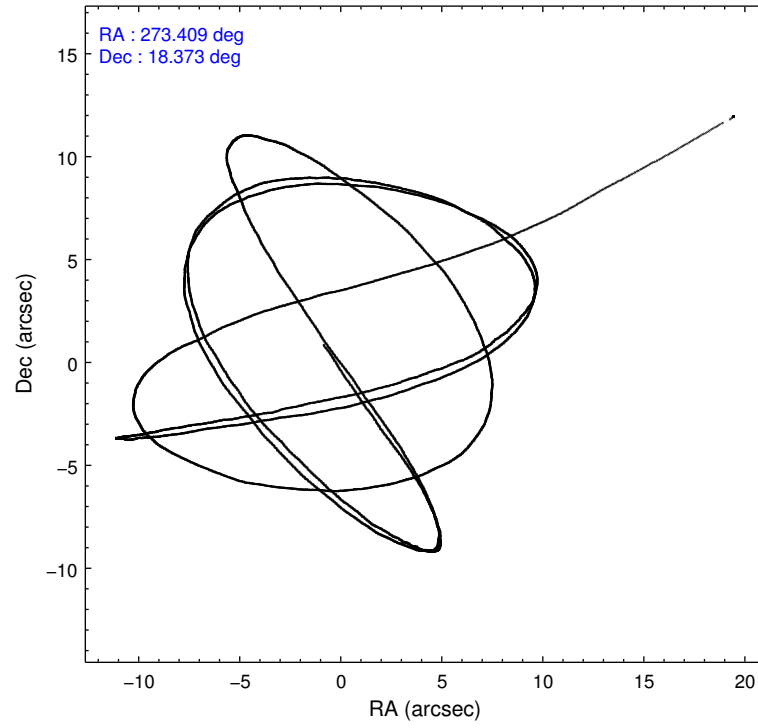
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	14107	14767	25245	15414	19873
rejected events	12319	12411	12514	13589	11321
rejected %	87%	84%	49%	88%	56%

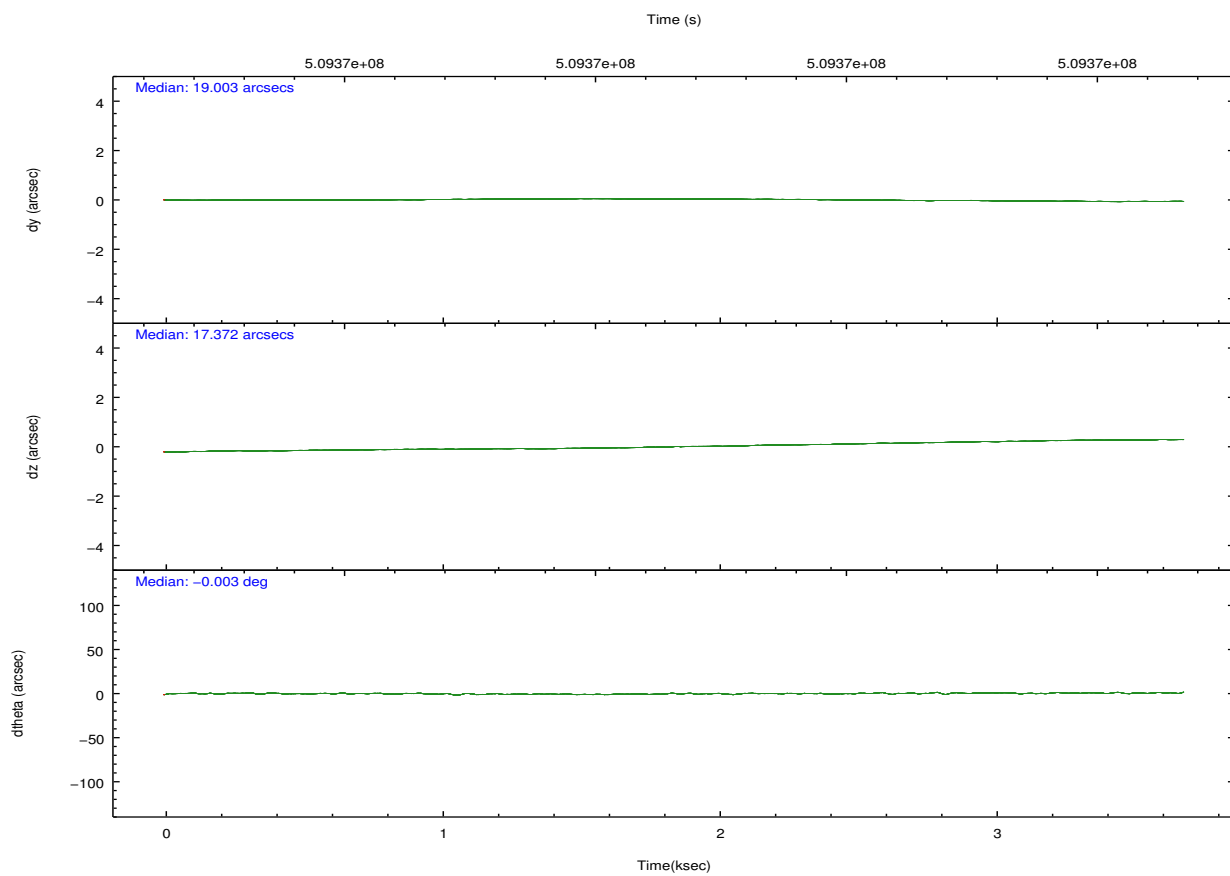
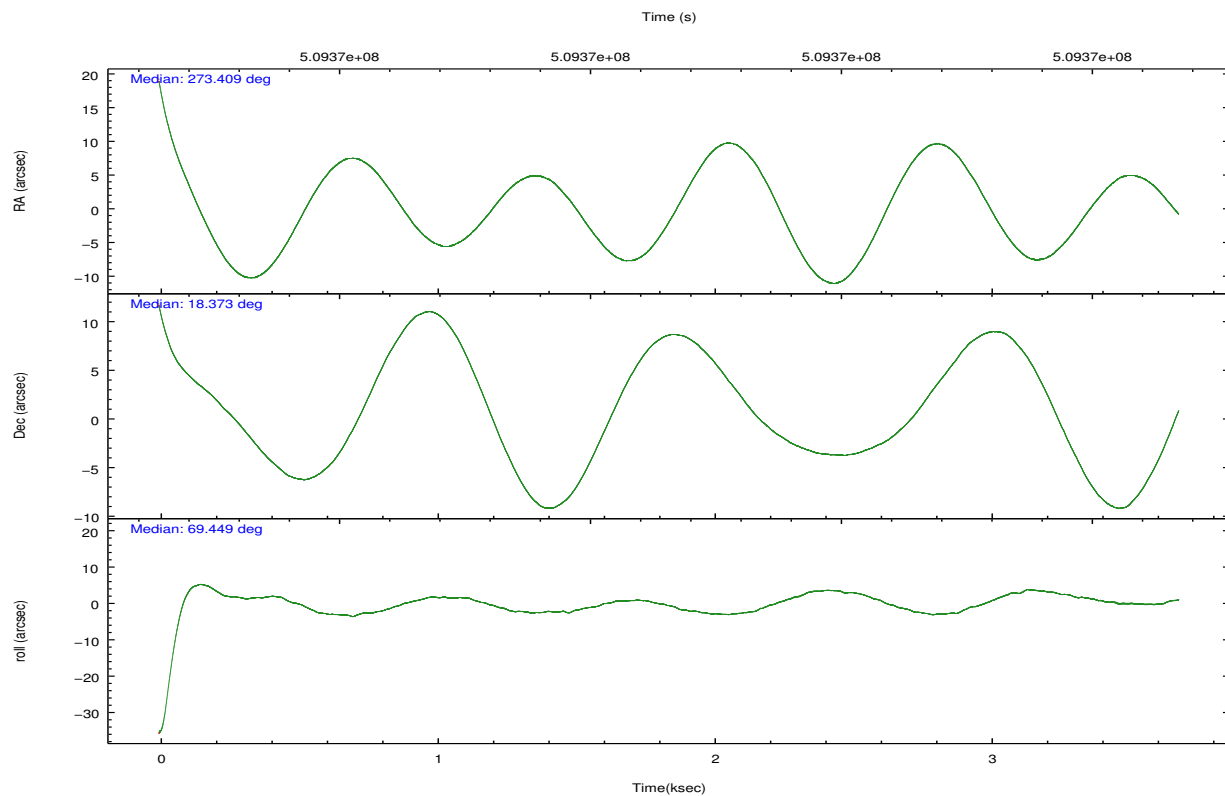
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	722	1164	1710	627	762
	5%	7%	6%	4%	3%
grade 1 events	6	10	169	2	19
	0%	0%	0%	0%	0%
grade 2 events	396	441	3802	414	1802
	2%	2%	15%	2%	9%
grade 3 events	169	194	376	170	764
	1%	1%	1%	1%	3%
grade 4 events	175	208	404	174	672
	1%	1%	1%	1%	3%
grade 5 events	605	734	1773	747	2018
	4%	4%	7%	4%	10%
grade 6 events	327	350	6453	441	4558
	2%	2%	25%	2%	22%
grade 7 events	11707	11666	10558	12839	9278
	82%	79%	41%	83%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	273.414452	273.4093531466178	CCD I2 on	O2	Y
[deg] Pointing Dec	18.346346	18.37313423399986	CCD I3 on	O3	Y
[deg] Pointing Roll	69.298256	69.45634656015635	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	509365646.184000	509364868.01334	CCD S5 on	N	N
Observation start date	2014-02-21T10:26:19	2014-02-21T10:14:28	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	509369146.184000	509369868.47611	On-chip summing requested	N	N
Observation end date	2014-02-21T11:24:39	2014-02-21T11:37:48	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



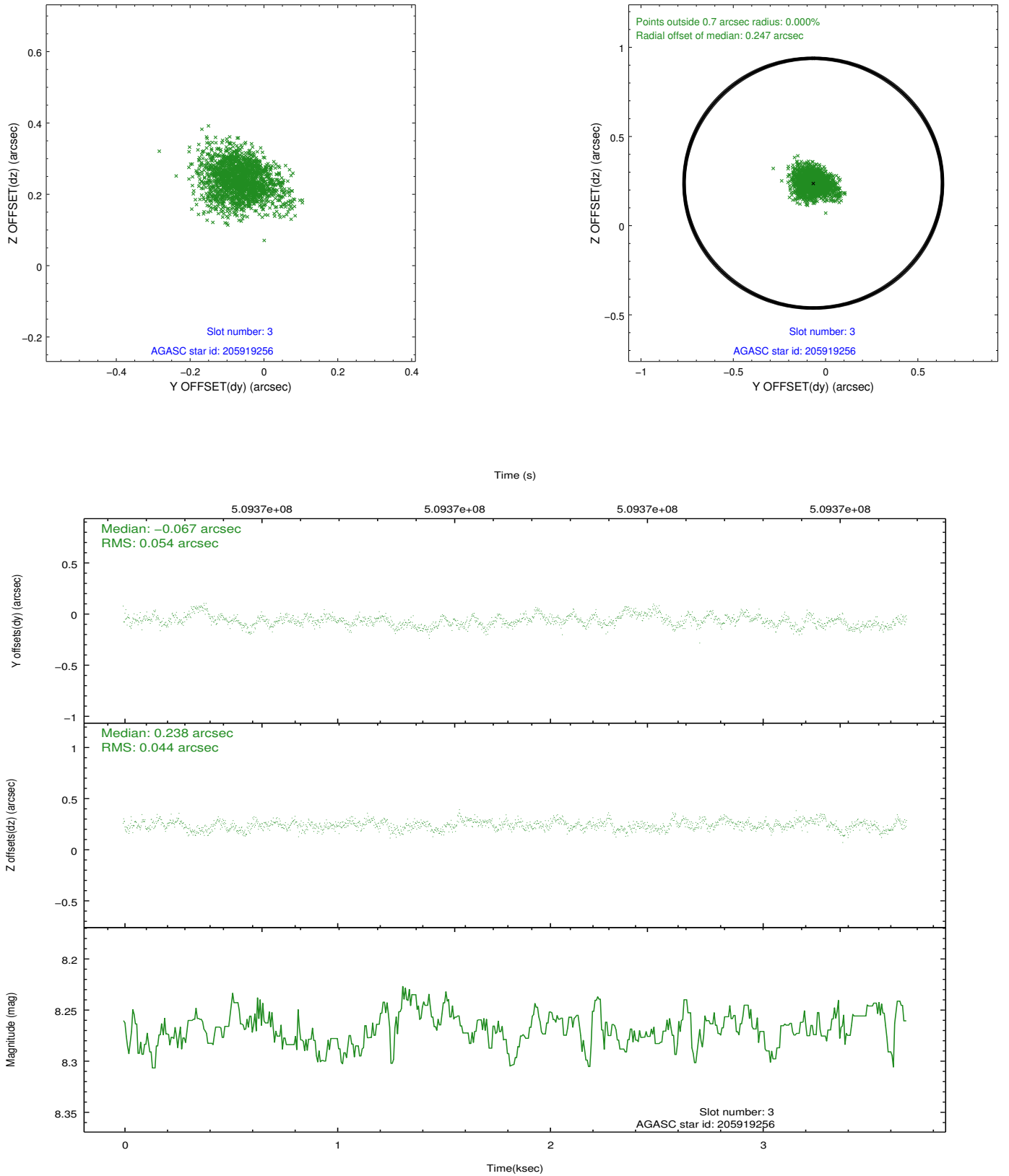


Slot Statistics

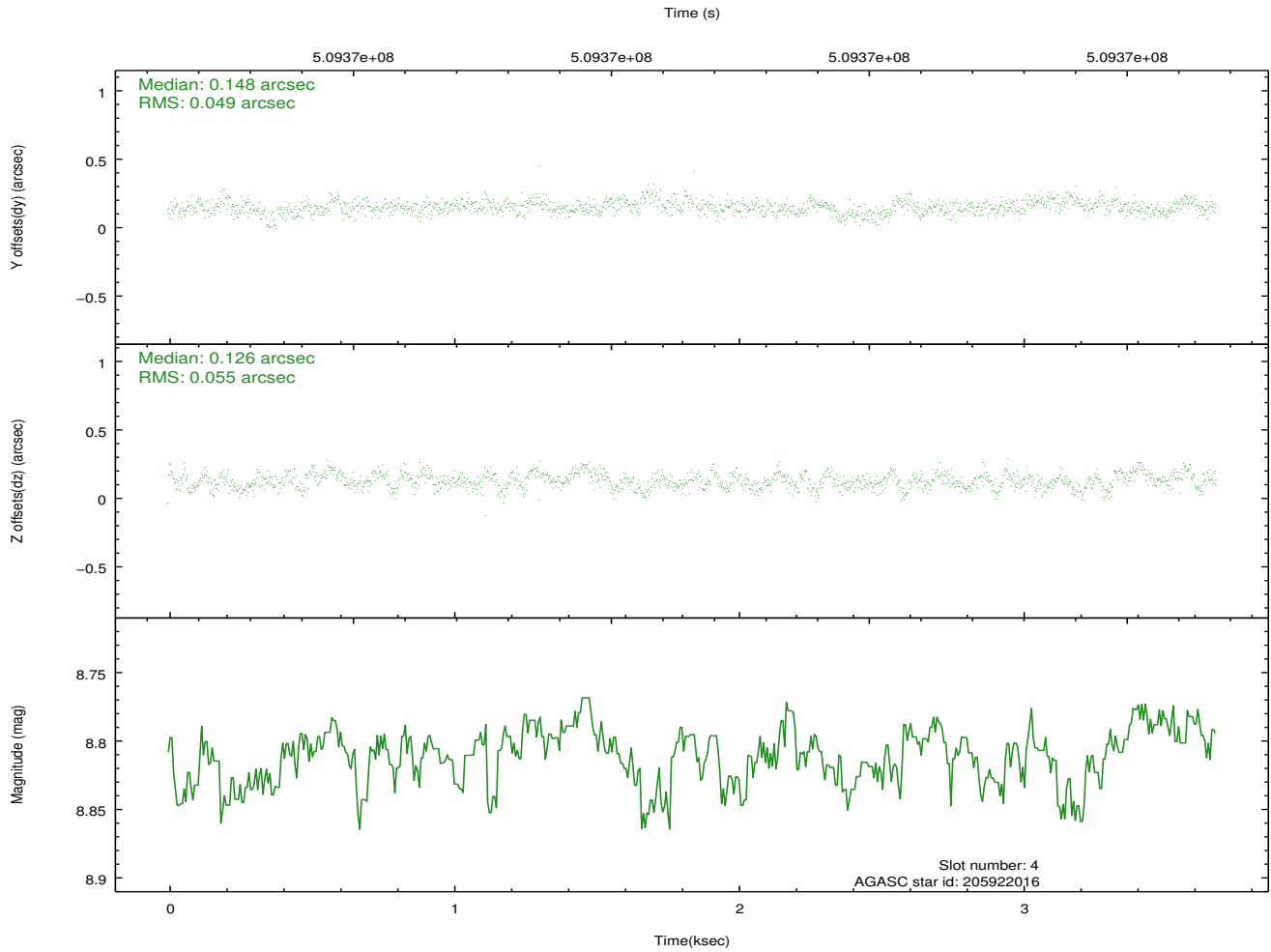
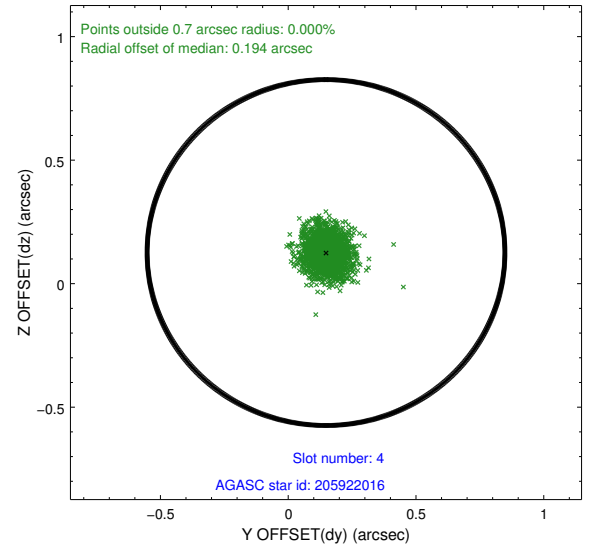
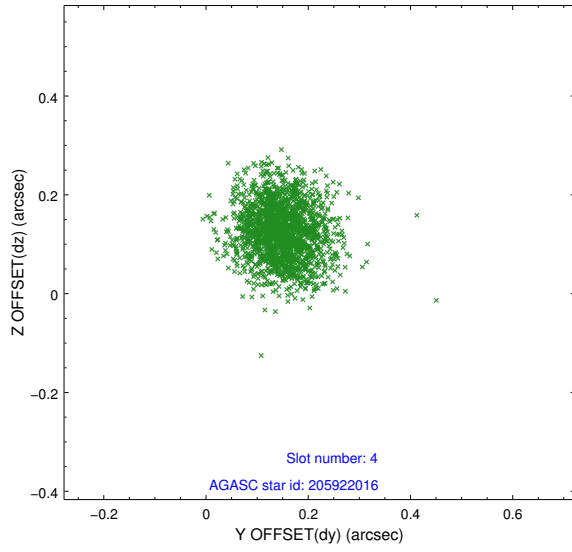
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	899	-0.115	-0.060	0.008	0.012	0.000000	0.000000	-772.23	-1738.83
1	FID		ACIS-S-4	7.12	899	0.305	0.072	0.011	0.018	0.000000	0.000000	2140.72	167.95
2	FID		ACIS-S-5	7.15	899	-0.222	-0.004	0.010	0.015	0.000000	0.000000	-1822.96	163.57
3	GUIDE	used	205919256	8.27	1796	-0.067	0.238	0.072	0.124	273.739647	18.474556	825.52	-874.39
4	GUIDE	used	205922016	8.81	1794	0.148	0.126	0.077	0.127	273.105297	17.969978	-1639.87	511.27
5	GUIDE	used	205924584	8.91	1797	0.149	0.296	0.108	0.171	273.495858	18.252607	-217.70	-378.61
6	GUIDE	used	206440272	8.54	1794	-0.268	-0.336	0.105	0.166	273.045499	19.093692	2074.17	2125.88
7	GUIDE	used	205922264	8.18	1795	0.032	-0.321	0.072	0.121	272.652392	18.288762	-1107.81	2366.43

2.4 Star Slots

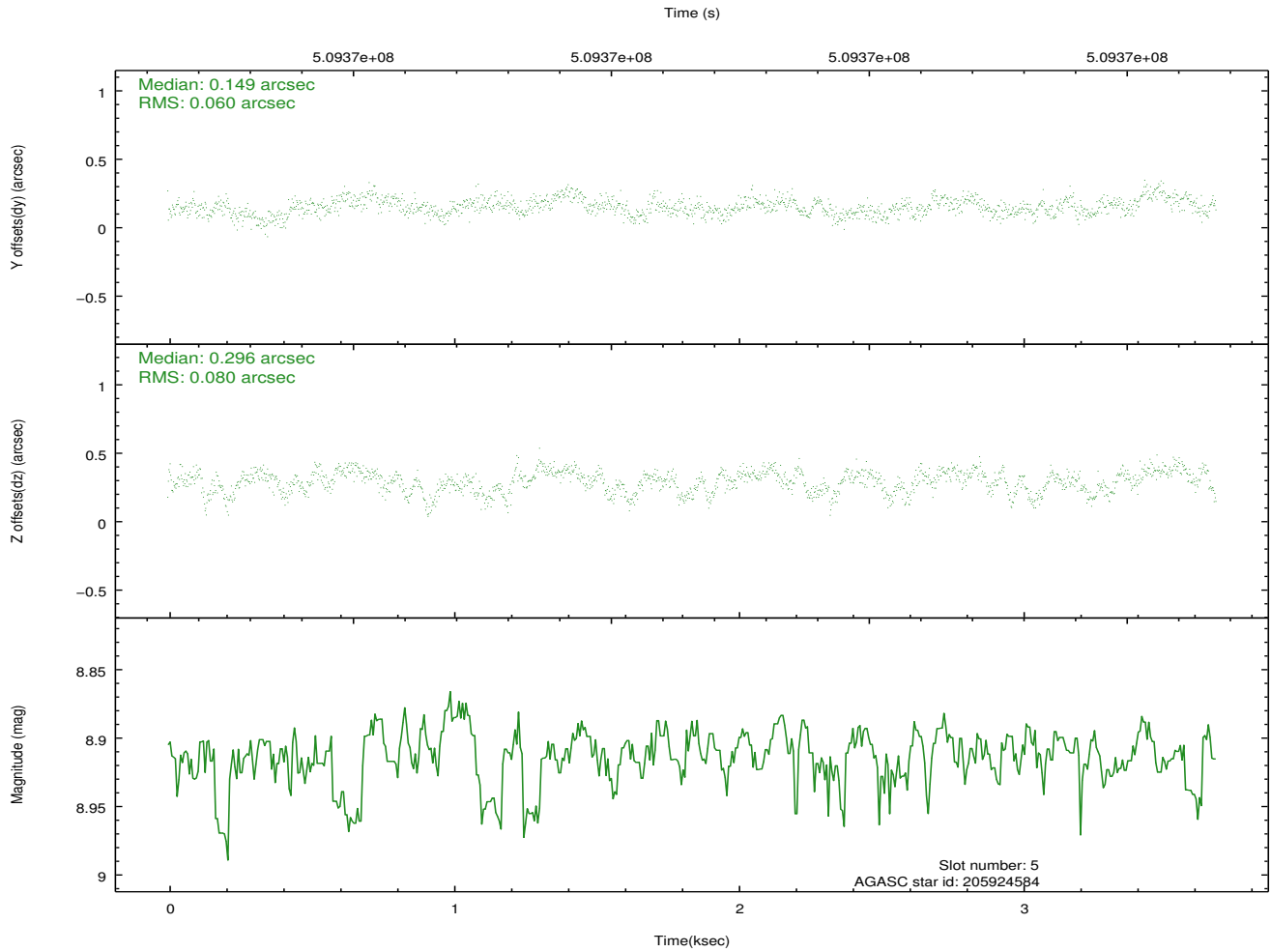
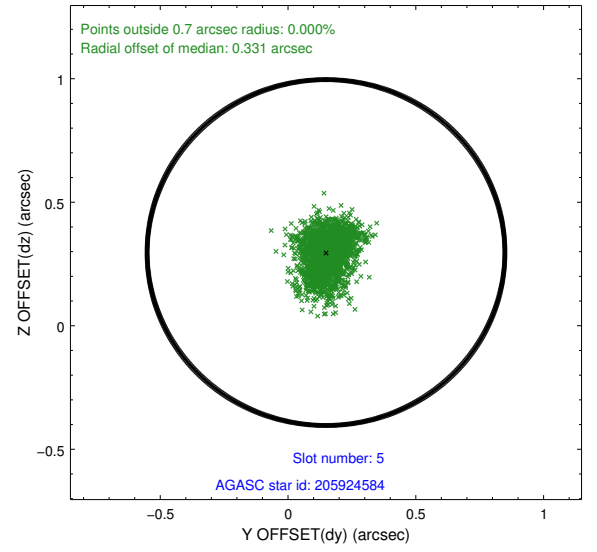
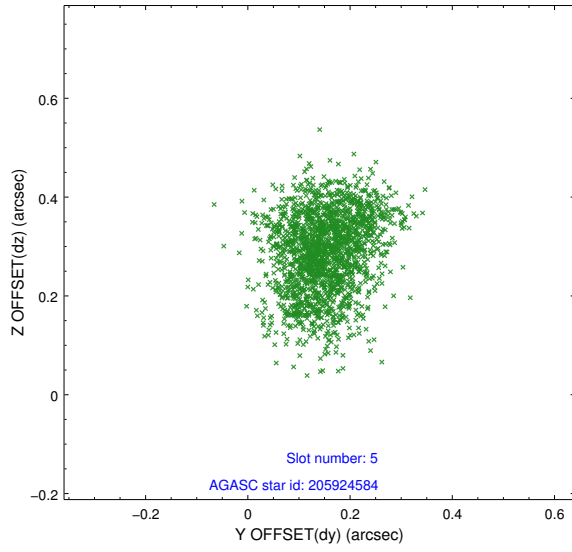
2.4.1 Slot 3



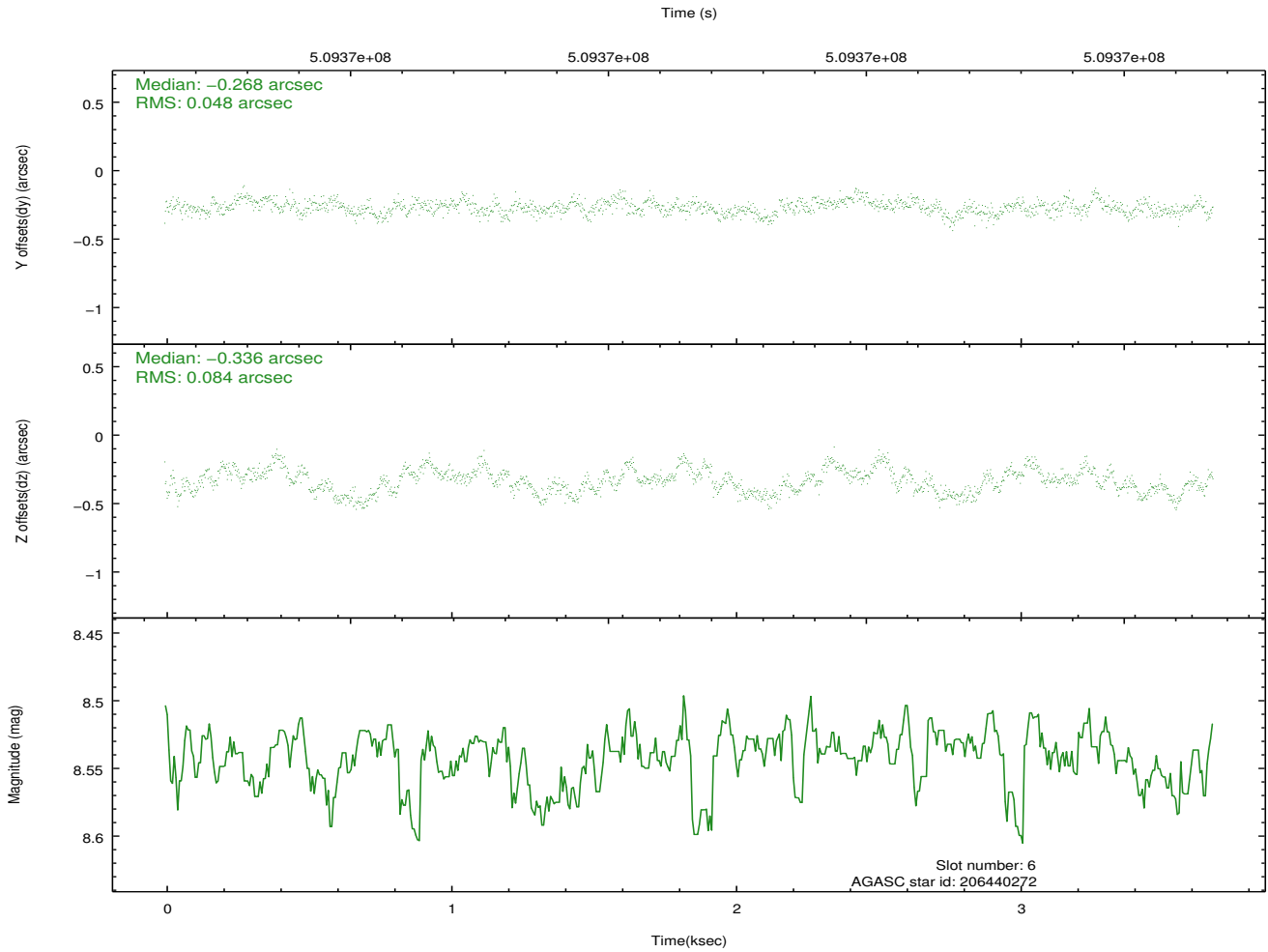
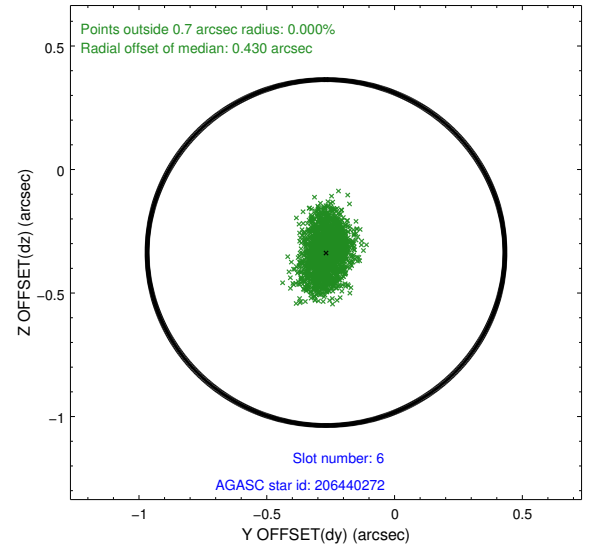
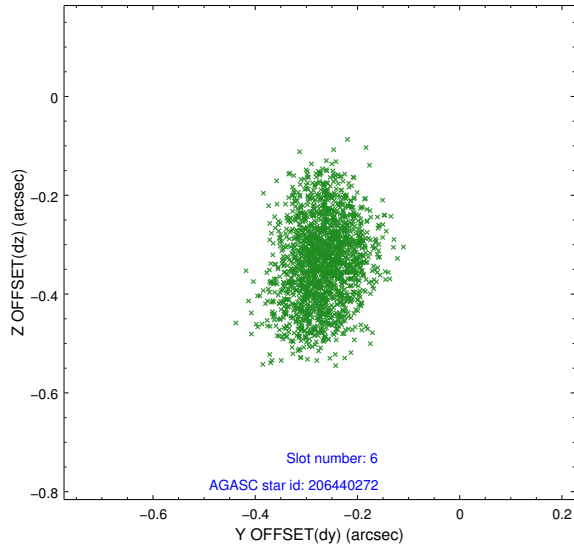
2.4.2 Slot 4



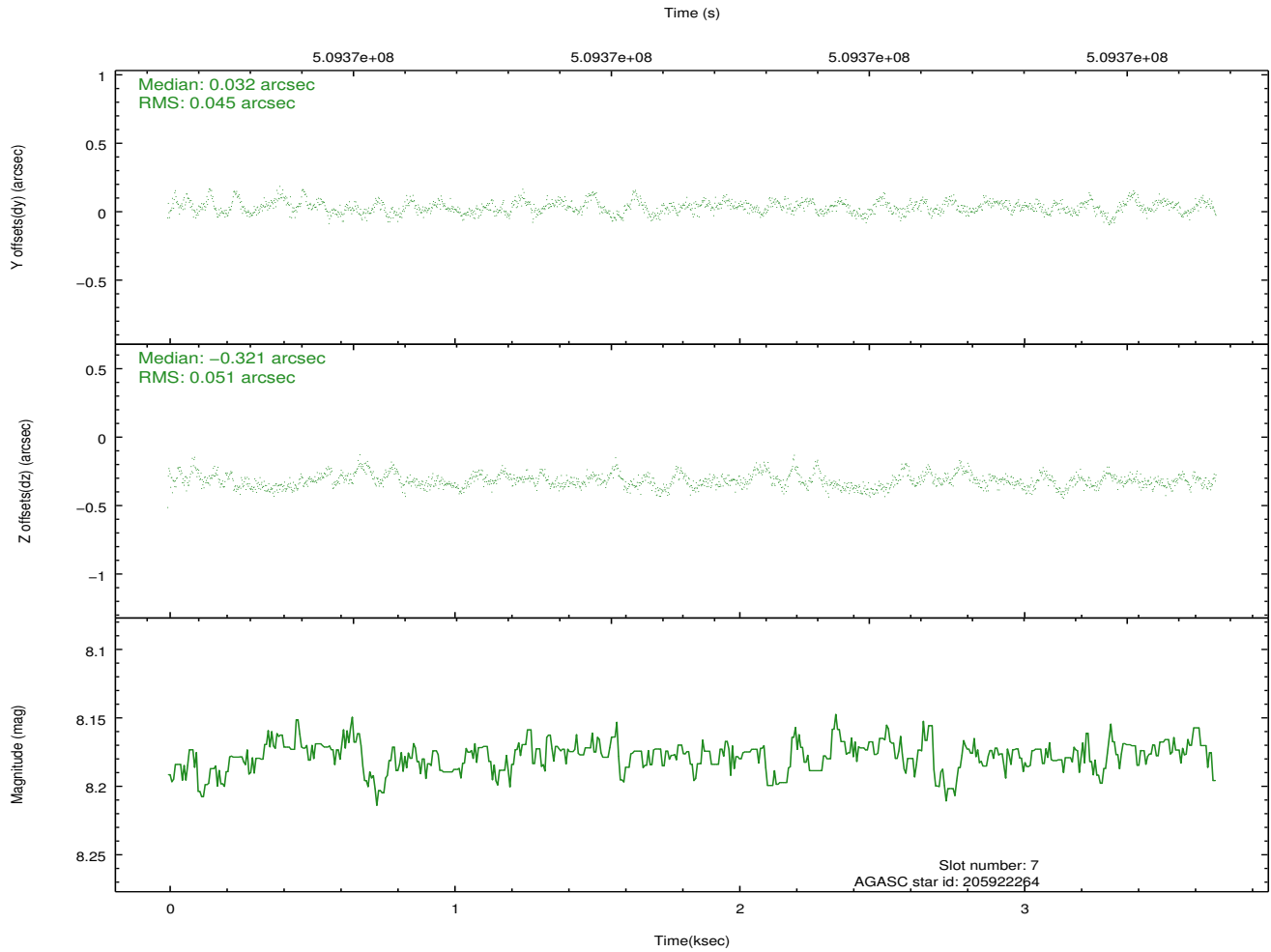
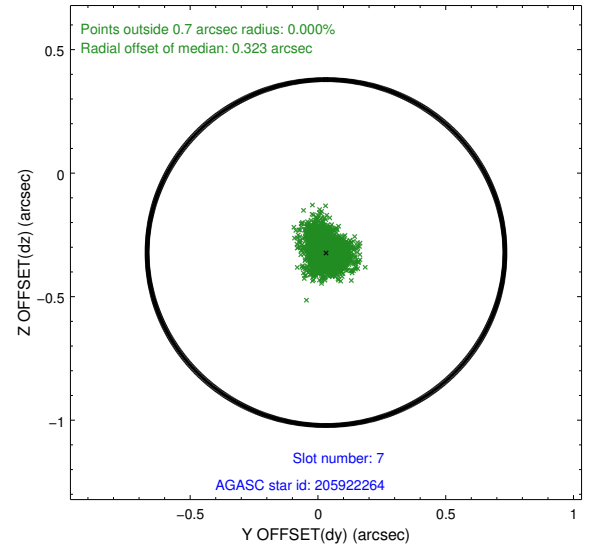
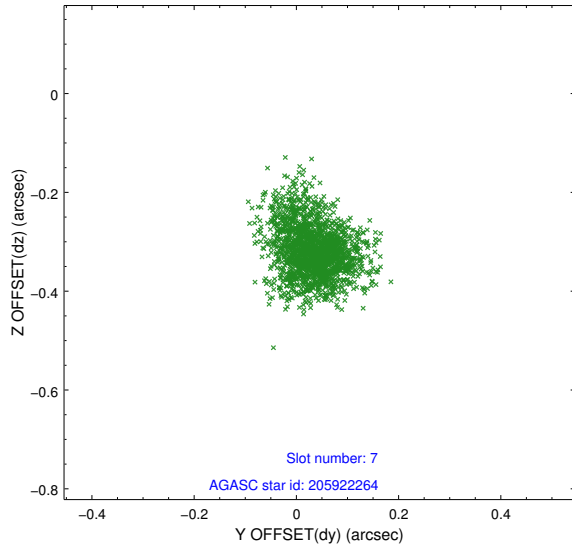
2.4.3 Slot 5



2.4.4 Slot 6

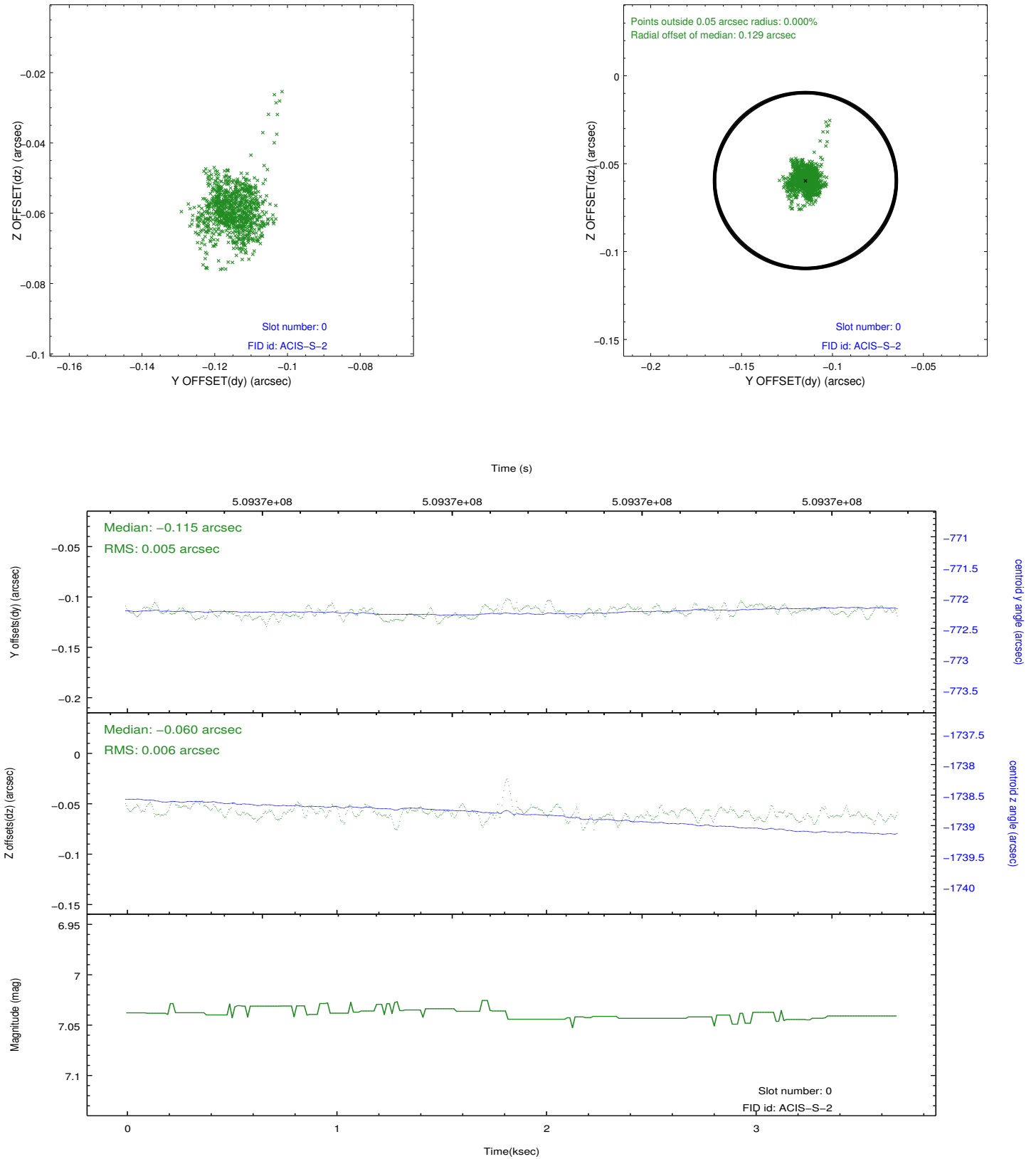


2.4.5 Slot 7

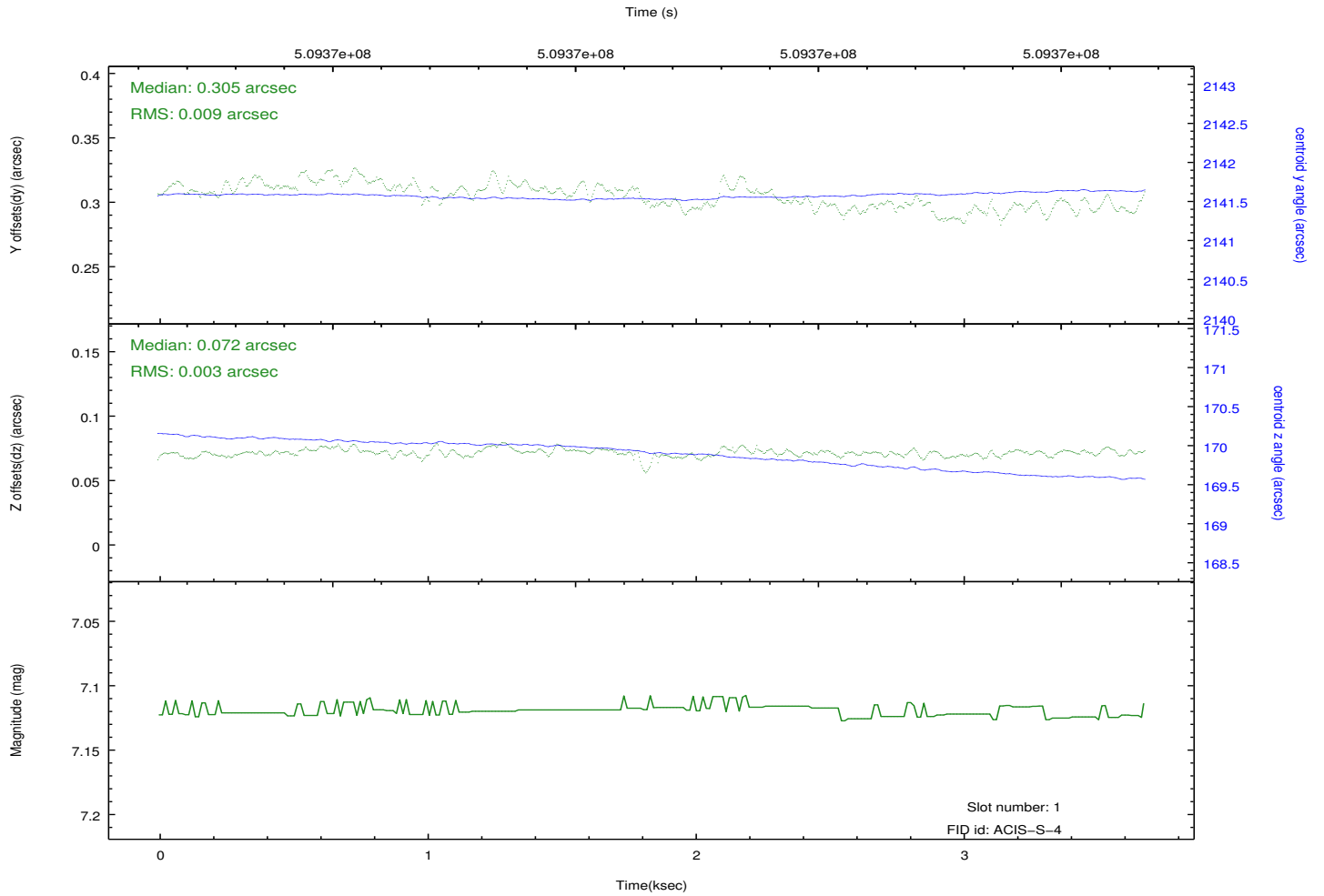
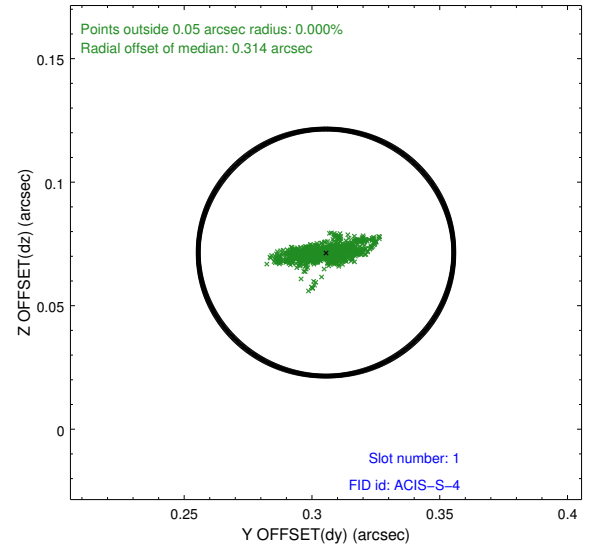
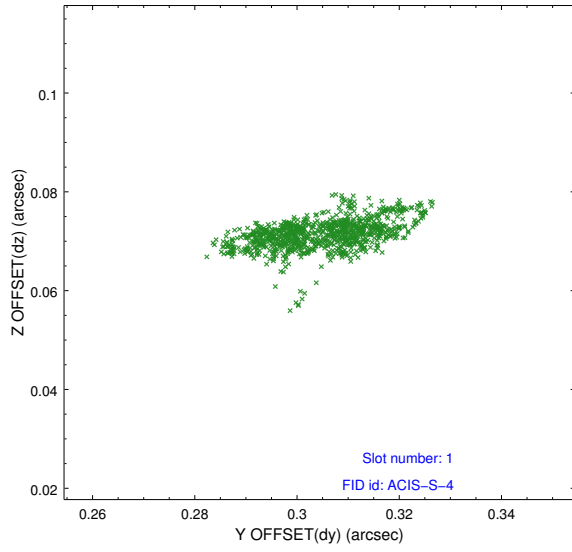


2.5 FID Slots

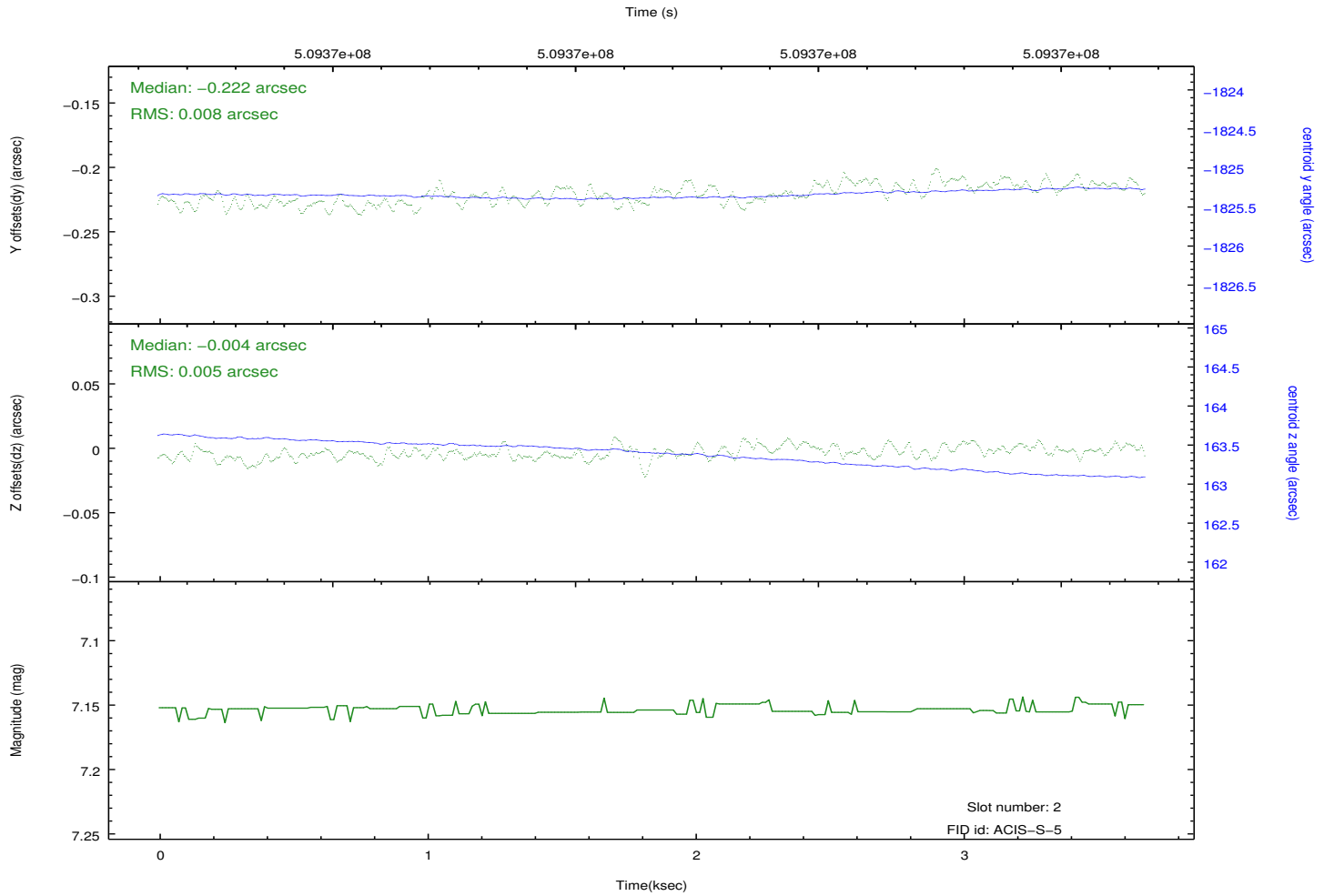
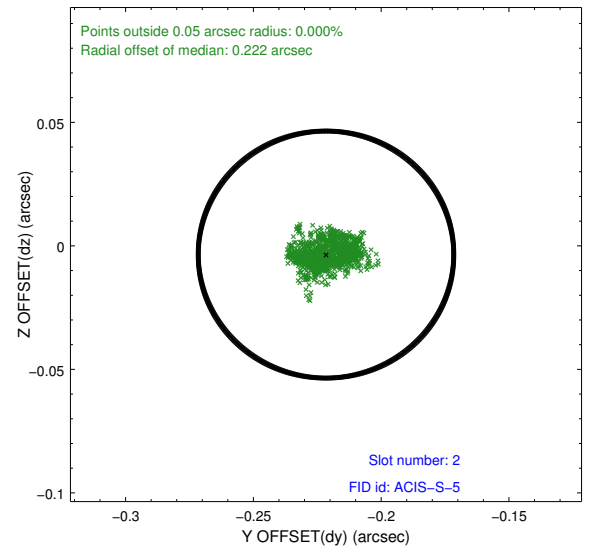
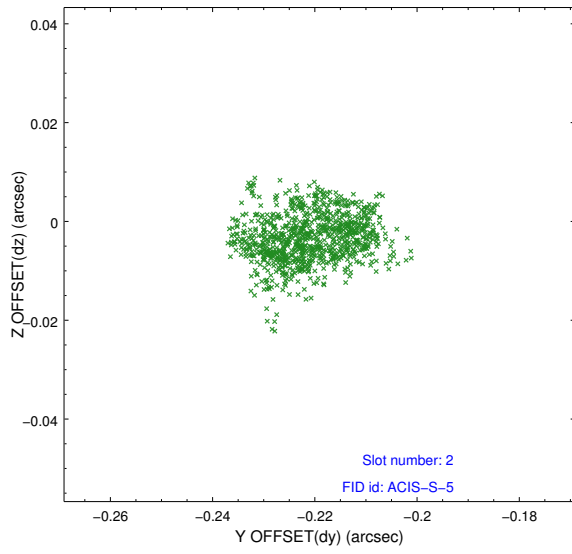
2.5.1 Slot 0



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)	2014.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.2728272789121

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.