

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 14595 - L2 Version 2
Chandra X-Ray Center

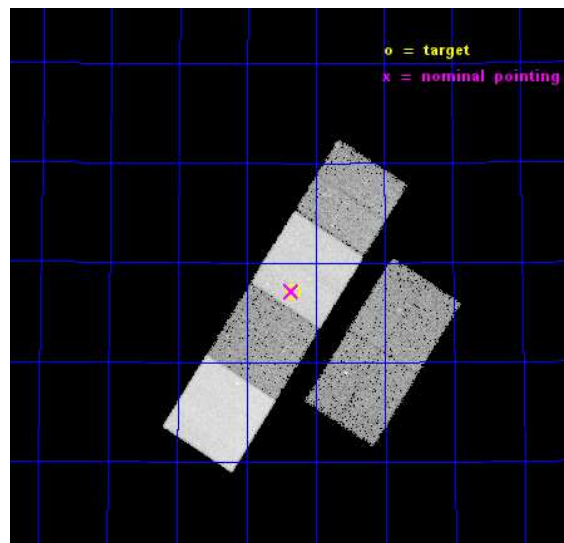
L2 Processing Date : Dec 8 2014

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1 Front

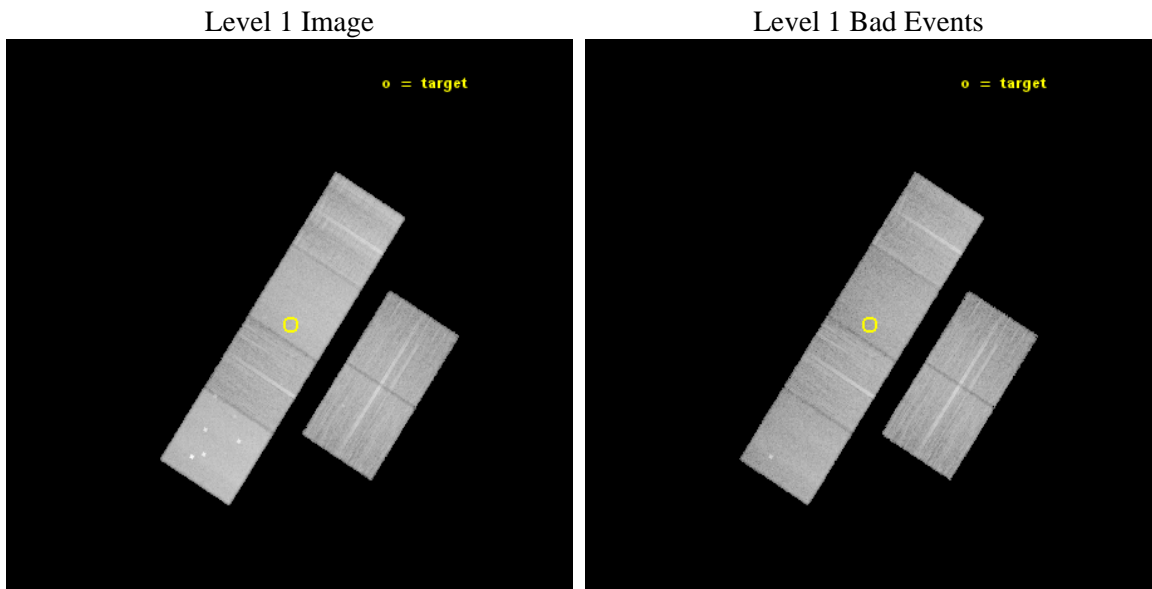
seq_num	200896	Sequence number
obs_id	14595	Observation id
title	COMPACT AND DIFFUSE X-RAY SOURCES IN THE YOUNGEST PLANETARY NEBULAE	
observer	Dr. Joel Kastner	Principal investigator
object	NGC 7354	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	340.0825	Observer's specified target RA [deg]
dec_targ	61.28575	Observer's specified target Dec [deg]
ra_nom	340.08879736762	Nominal RA [deg]
dec_nom	61.28576745707	Nominal Dec [deg]
roll_nom	302.49076893918	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29963.866455615	Sum of GTIs [s]
livetime	29584.445936479	Livetime [s]
ontime2	29963.907495618	Sum of GTIs [s]
ontime3	29960.502345264	Sum of GTIs [s]
ontime5	29963.825415611	Sum of GTIs [s]
ontime6	29963.784375608	Sum of GTIs [s]
ontime7	29963.866455615	Sum of GTIs [s]
ontime8	29963.702295601	Sum of GTIs [s]
l2events	250053	Number of level 2 events



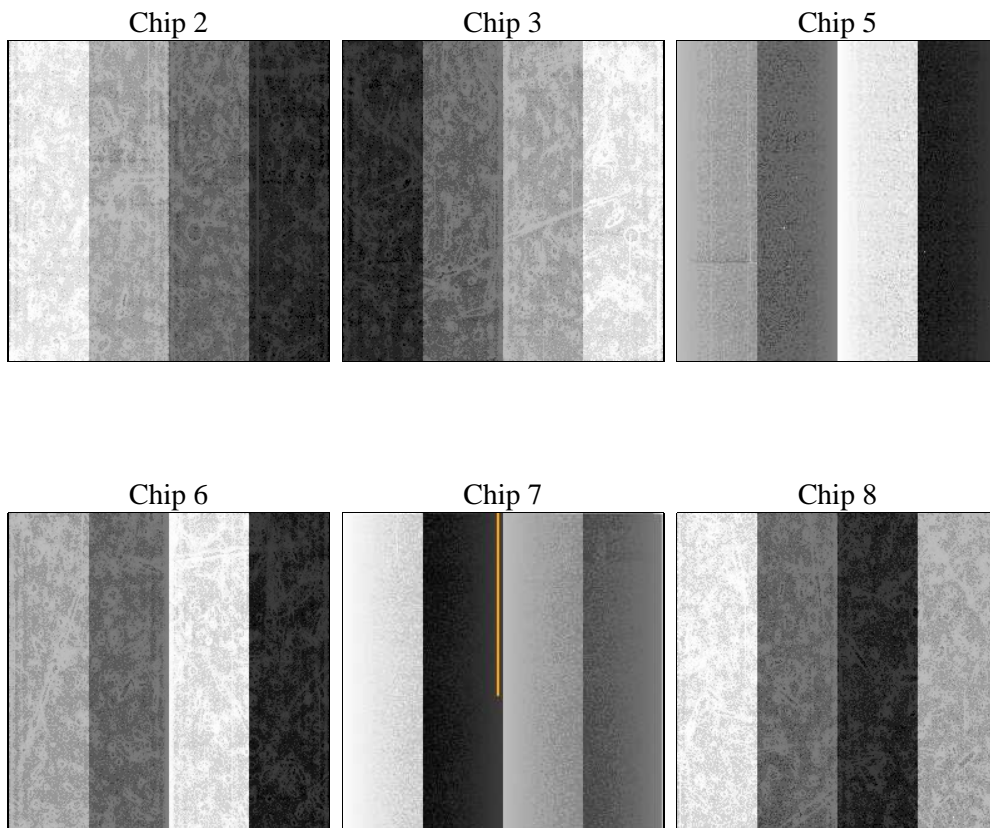
2 OBI

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	29963.866455615	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	29963.907495618	Sum of GTIs [s]
date	2014-12-08T12:15:01	Date and time of file creation	ontime3	29960.502345264	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29963.825415611	Sum of GTIs [s]
			ontime6	29963.784375608	Sum of GTIs [s]
			ontime7	29963.866455615	Sum of GTIs [s]
			ontime8	29963.702295601	Sum of GTIs [s]
			l1events	1048829	Number of level 1 events

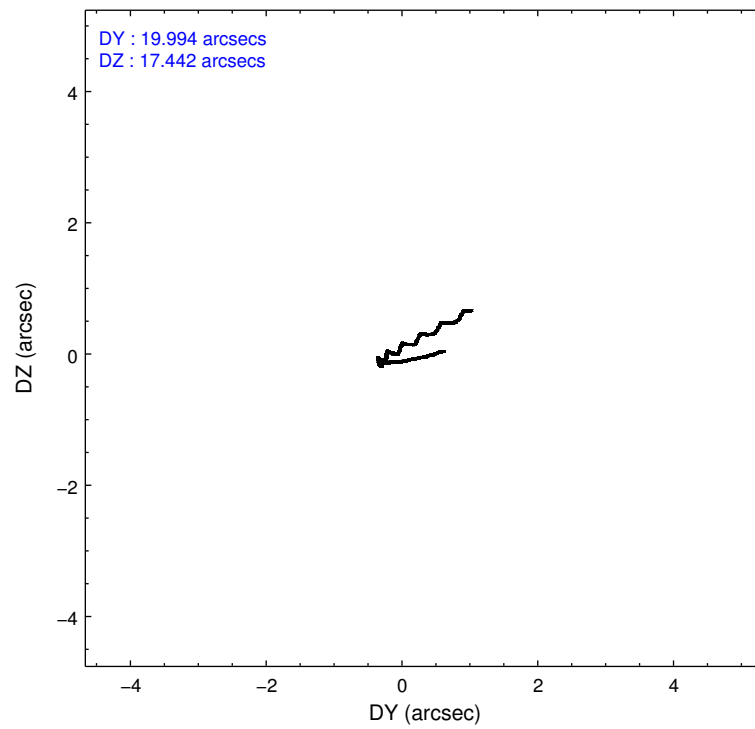
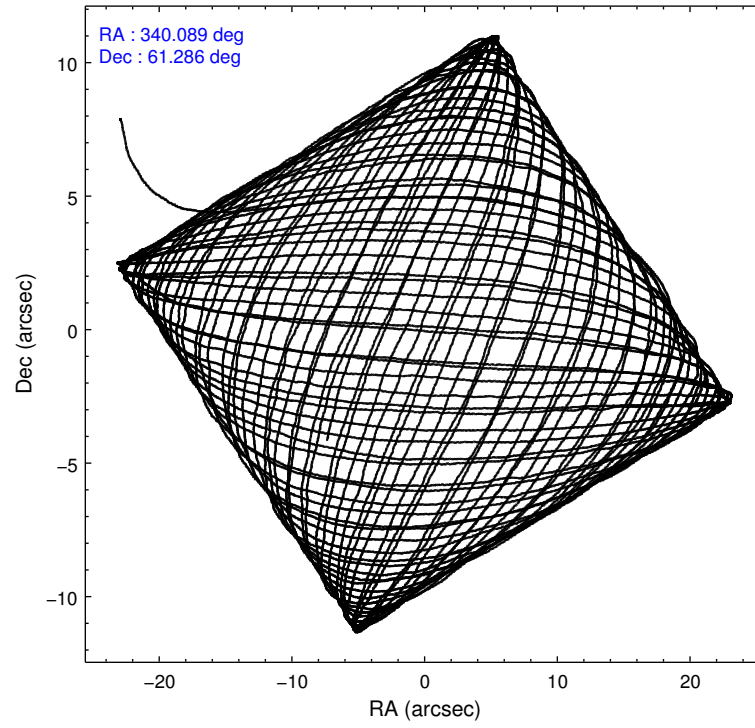
2.1.4 Events

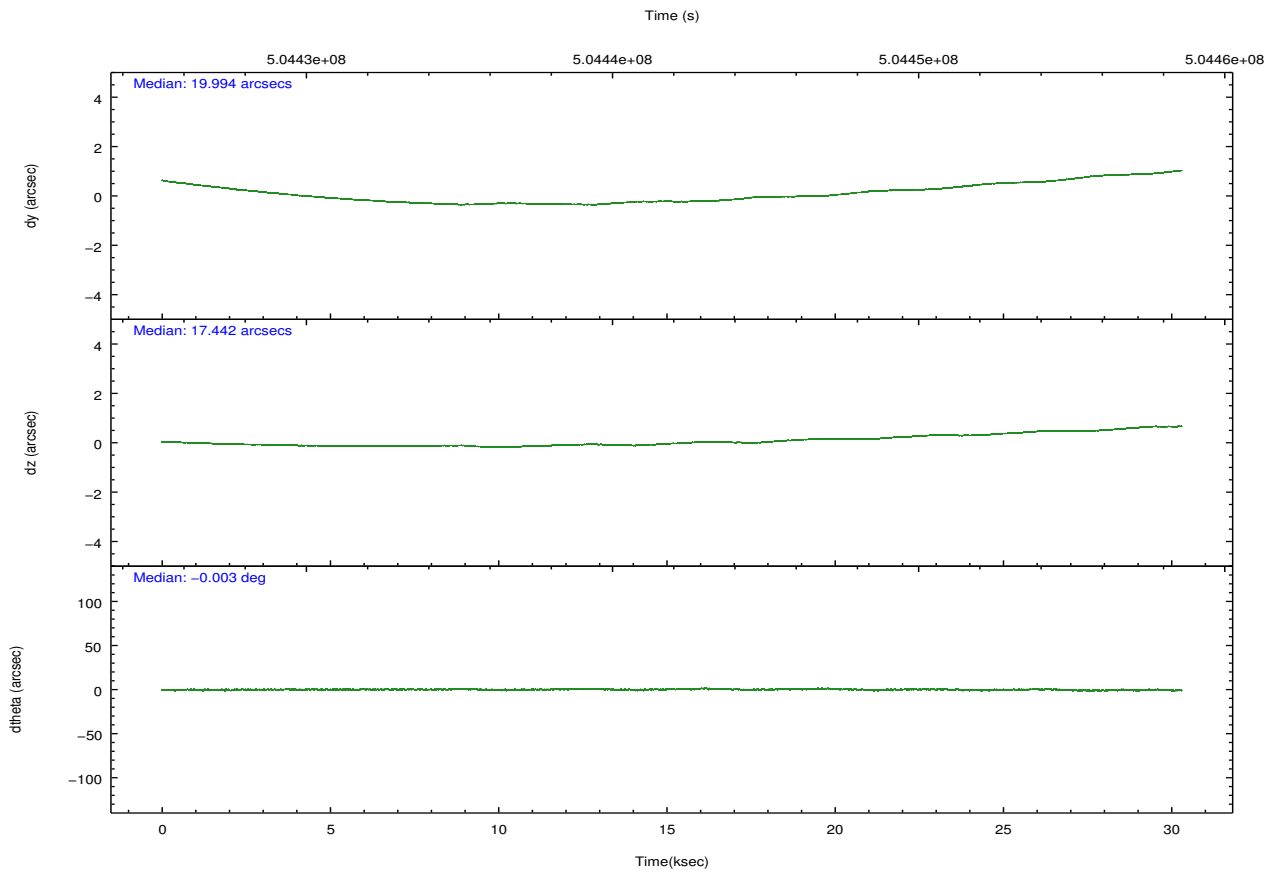
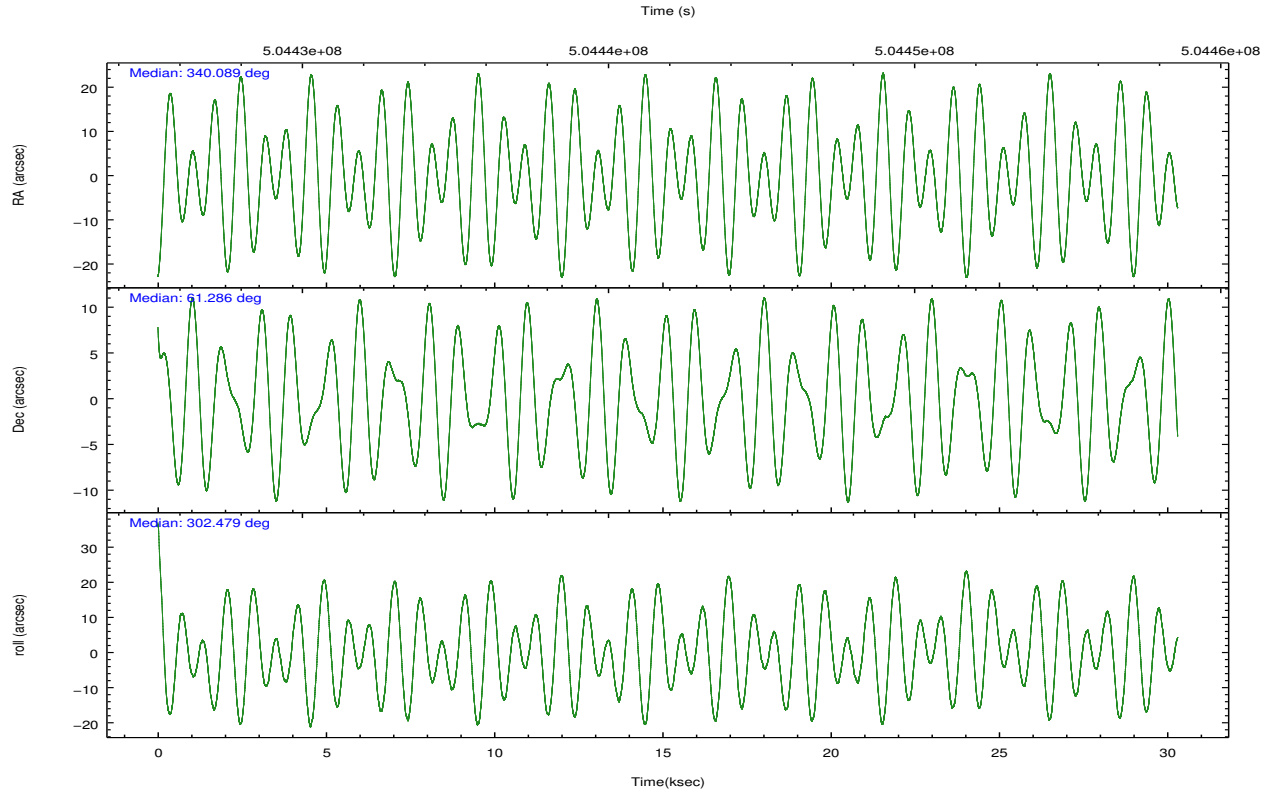
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	144903	130095	241442	147114	196287	188988	grade 0 events	5686	5279	12754	5835	7129	13754
rejected events	128325	114617	124754	129574	111886	139428		3%	4%	5%	3%	3%	7%
rejected %	88%	88%	51%	88%	57%	73%	grade 1 events	85	86	1086	71	221	117
								0%	0%	0%	0%	0%	0%
							grade 2 events	4134	3407	34636	3996	17388	12047
								2%	2%	14%	2%	8%	6%
							grade 3 events	1718	1690	3663	1794	6841	5190
								1%	1%	1%	1%	3%	2%
							grade 4 events	1693	1702	3457	1730	6895	4822
								1%	1%	1%	1%	3%	2%
							grade 5 events	6571	7433	17040	7635	20173	11021
								4%	5%	7%	5%	10%	5%
							grade 6 events	3353	3405	62200	4187	46162	13751
								2%	2%	25%	2%	23%	7%
							grade 7 events	121663	107093	106606	121866	91478	128286
								83%	82%	44%	82%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	340.037955	340.0887973676157	CCD I2 on	O3	Y
[deg] Pointing Dec	61.298038	61.28576745707	CCD I3 on	O2	Y
[deg] Pointing Roll	302.378738	302.4907689391802	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	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	504427080.184000	504425914.46677	CCD S5 on	N	N
Observation start date	2013-12-26T06:36:53	2013-12-26T06:18:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	504457080.184000	504458116.89354	On-chip summing requested	N	N
Observation end date	2013-12-26T14:56:53	2013-12-26T15:15:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





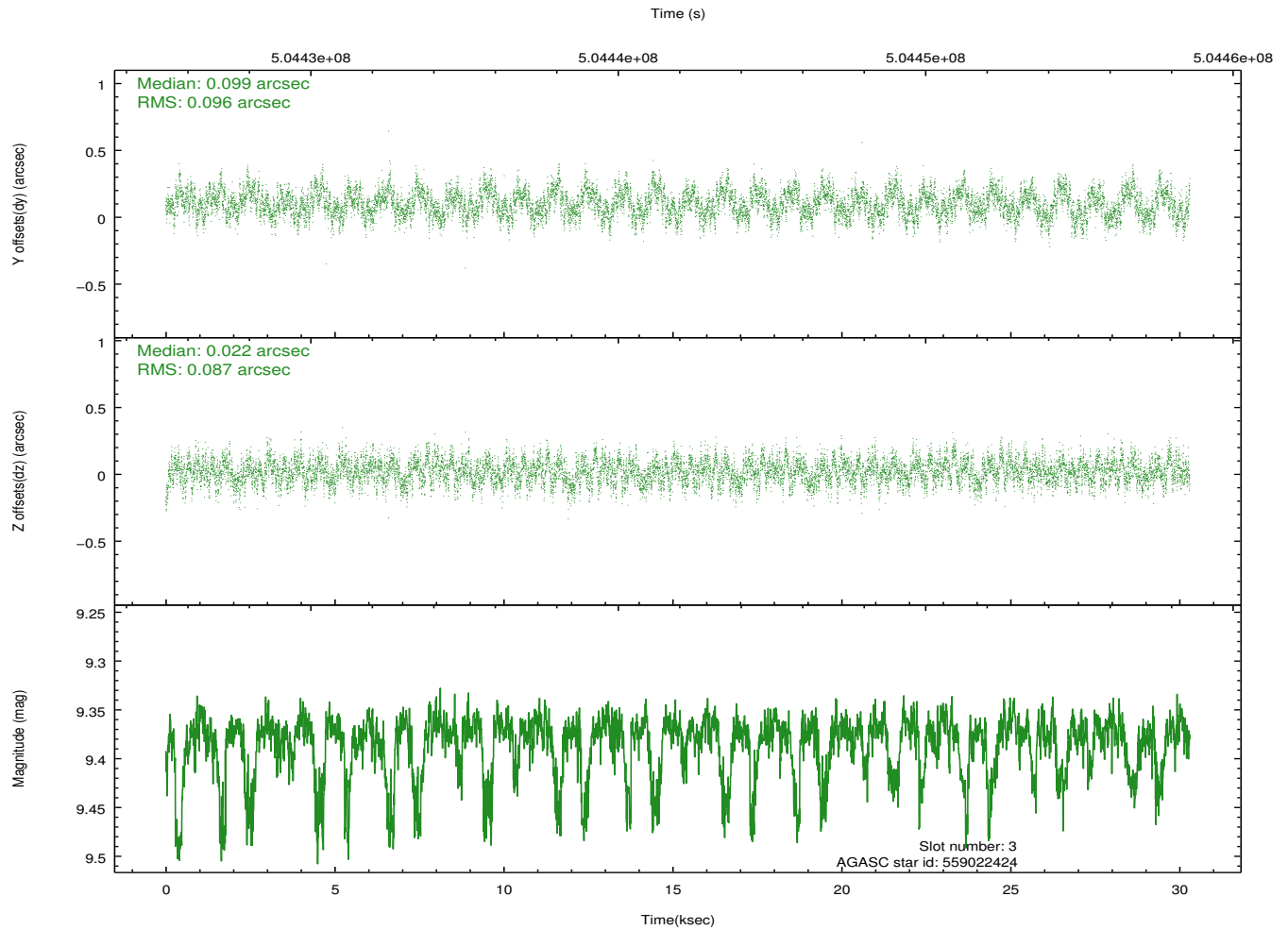
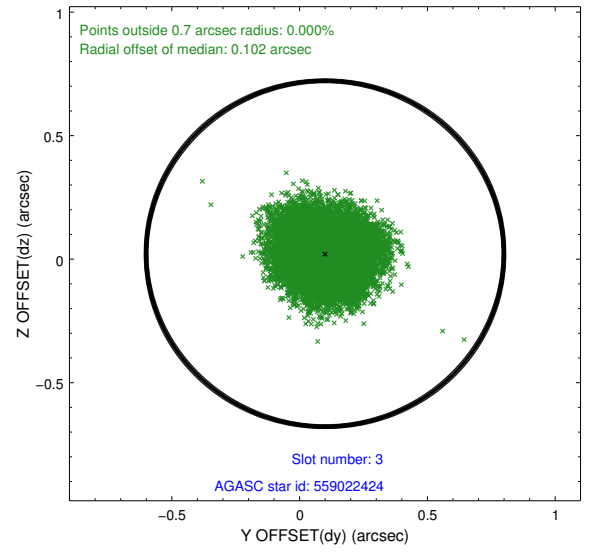
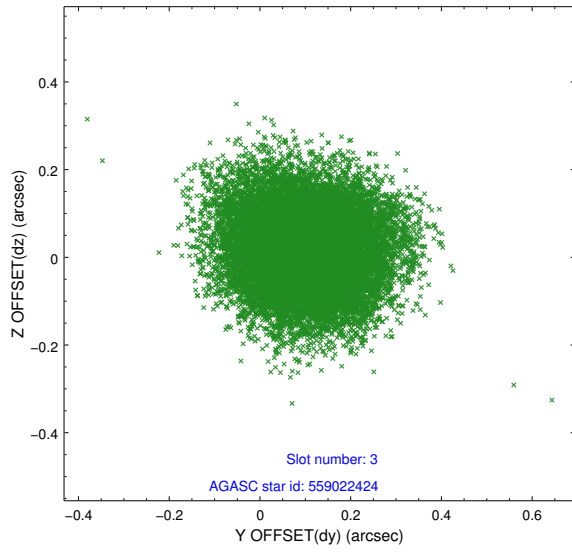
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	7392	-0.123	-0.064	0.009	0.014	0.000000	0.000000	-773.37	-1739.03
1	FID		ACIS-S-4	7.15	7392	0.285	0.076	0.012	0.022	0.000000	0.000000	2140.32	169.46
2	FID		ACIS-S-5	7.18	7392	-0.191	-0.004	0.012	0.018	0.000000	0.000000	-1826.15	163.21
3	GUIDE	used	559022424	9.38	14766	0.099	0.022	0.141	0.218	339.636921	60.769458	1228.49	-1613.10
4	GUIDE	used	559023768	8.91	14772	0.055	-0.039	0.107	0.169	339.522775	60.623859	1560.59	-2066.06
5	GUIDE	used	559025088	7.09	14782	-0.139	-0.399	0.069	0.106	341.046309	61.728487	-399.34	2288.54
6	GUIDE	used	559026808	8.89	14773	-0.010	0.049	0.100	0.165	339.478421	60.572037	1674.91	-2232.38
7	GUIDE	used	559551736	8.95	14775	-0.006	0.370	0.097	0.154	340.212878	62.048196	-2122.89	1695.72

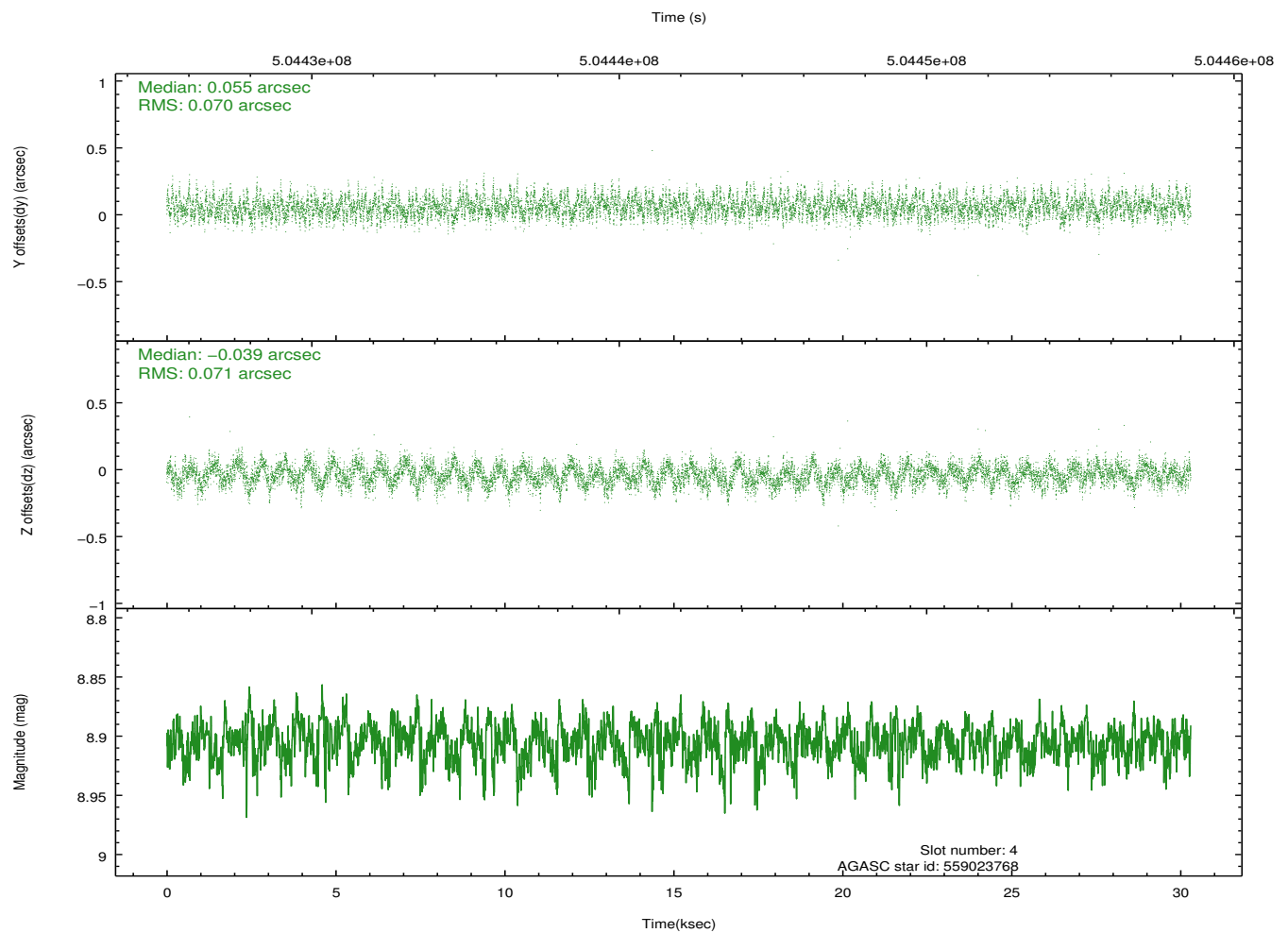
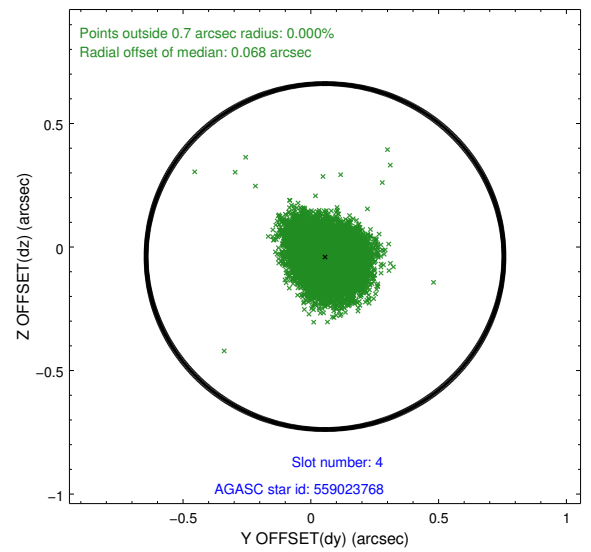
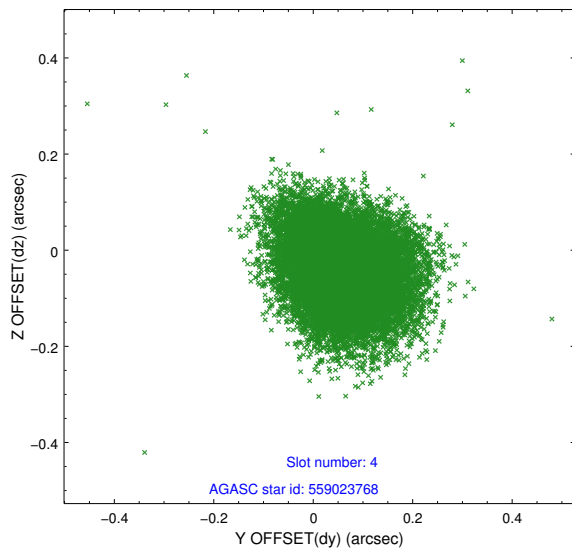
∞

2.4 Star Slots

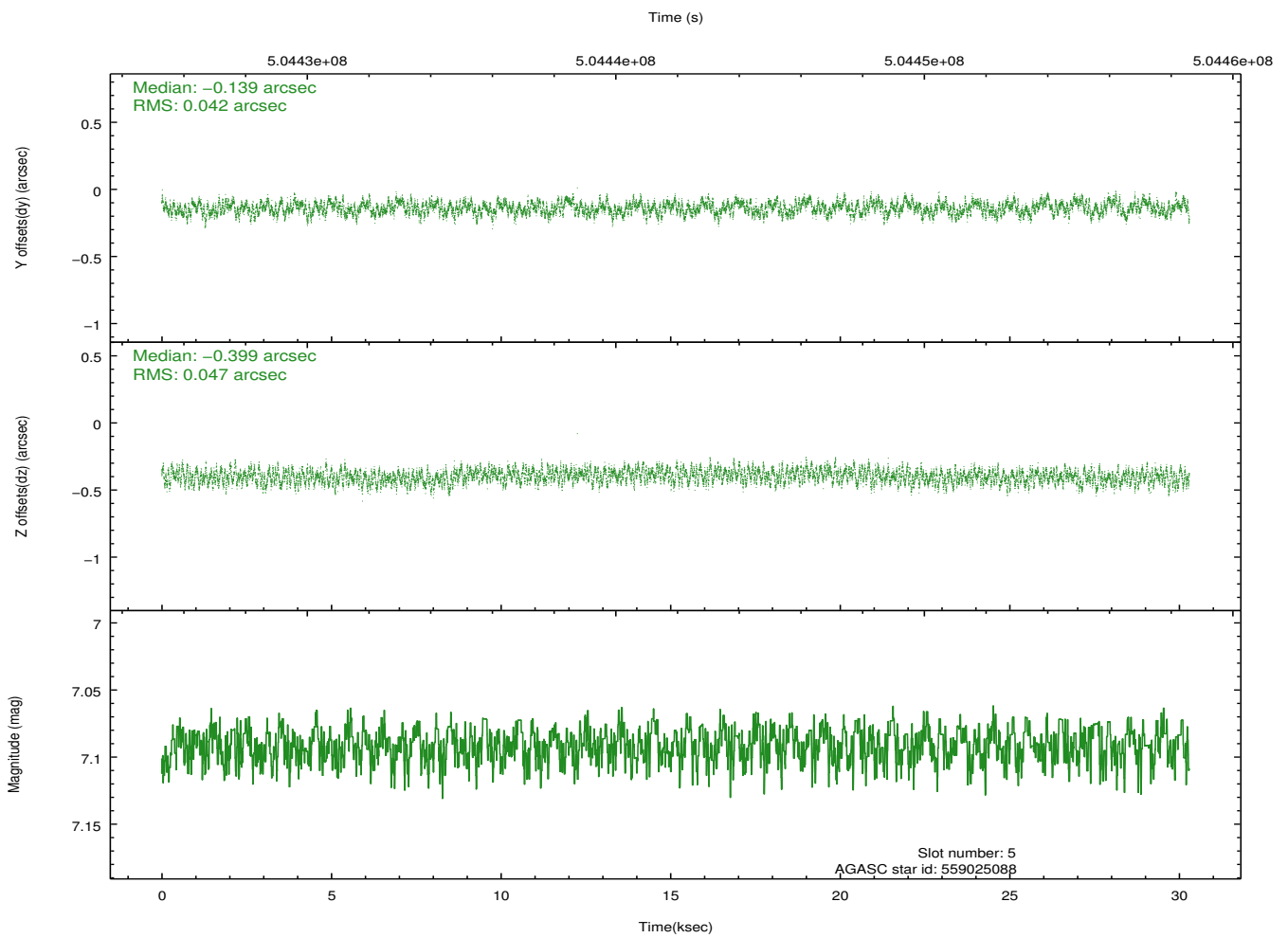
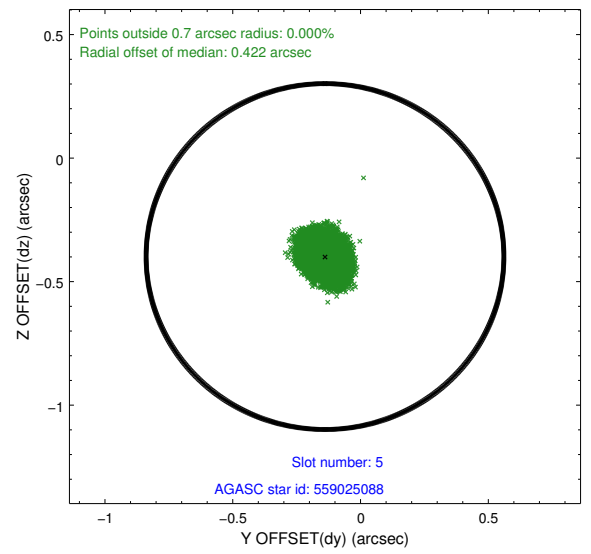
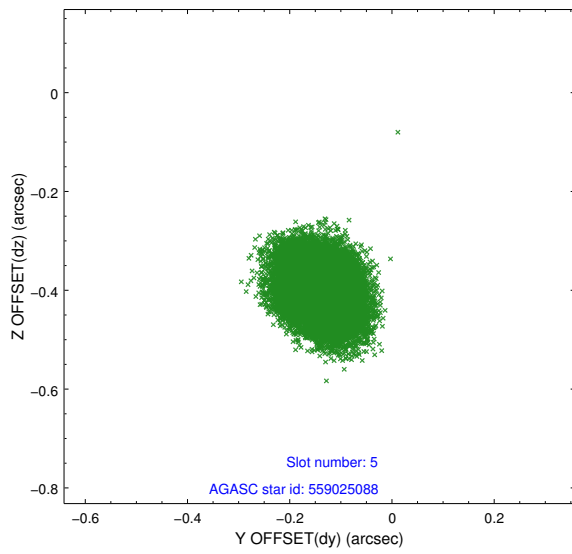
2.4.1 Slot 3



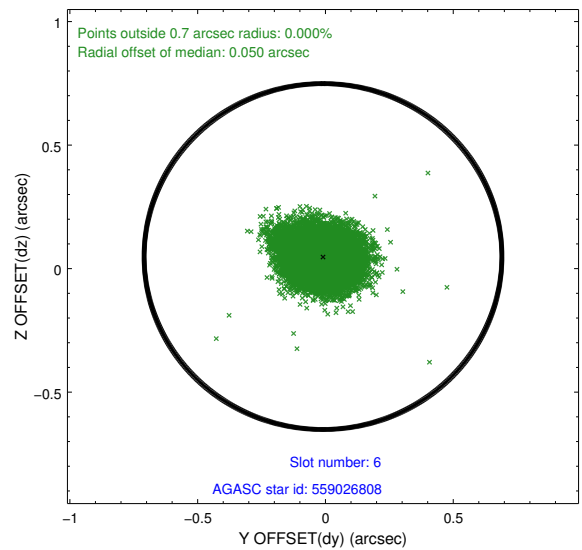
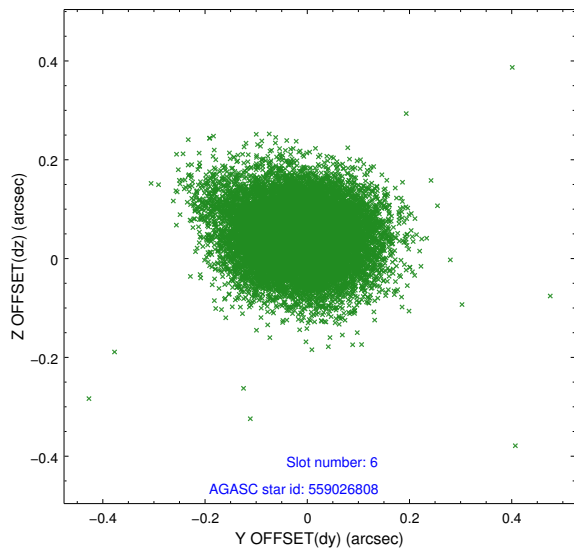
2.4.2 Slot 4



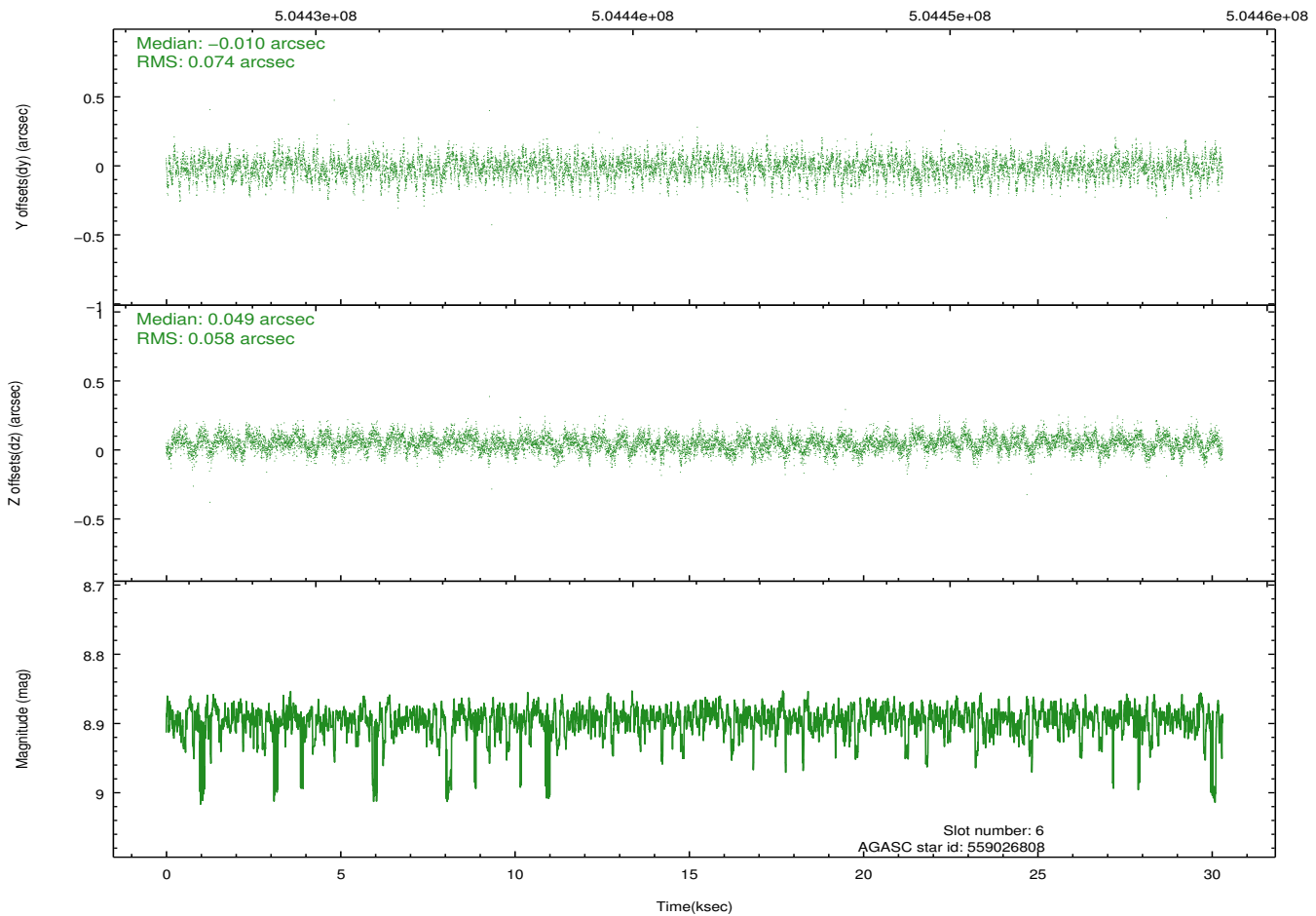
2.4.3 Slot 5



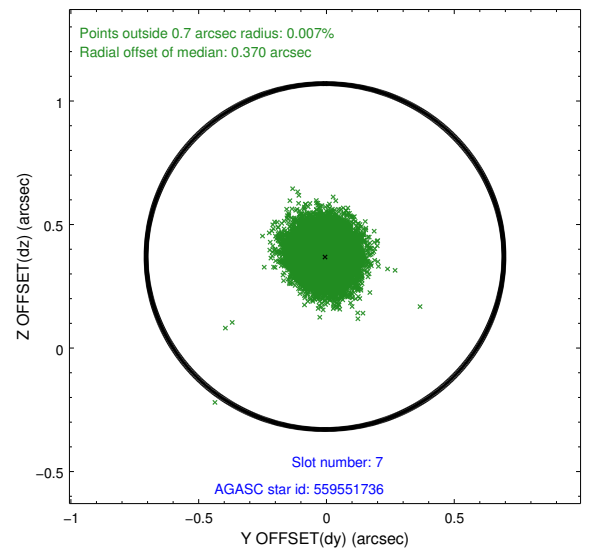
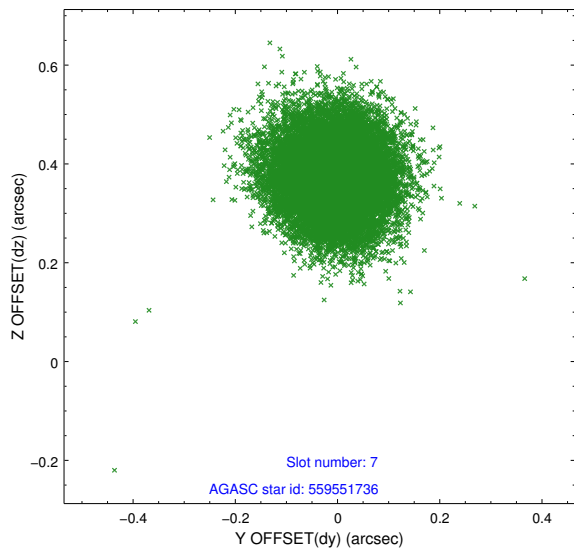
2.4.4 Slot 6



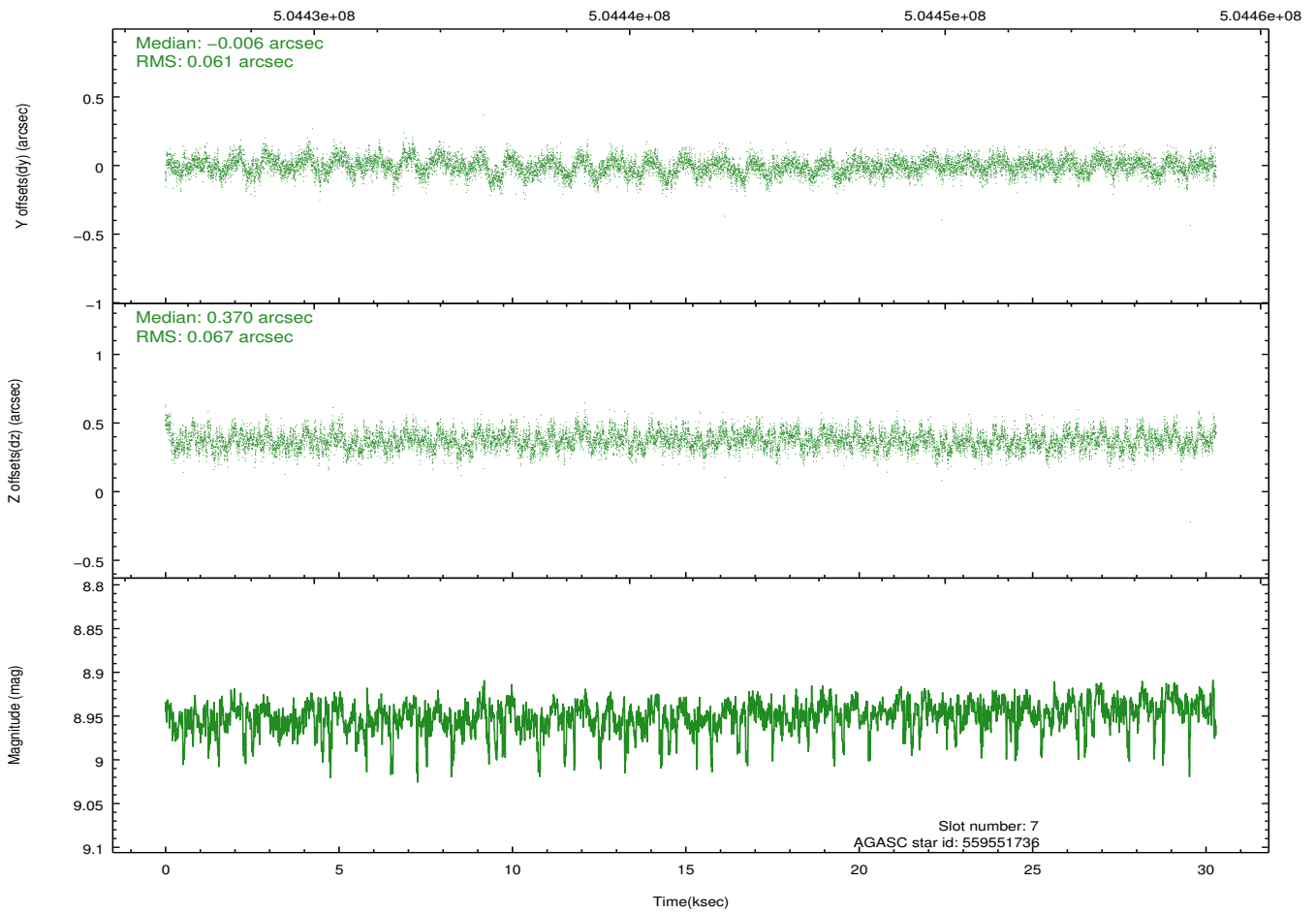
Time (s)



2.4.5 Slot 7

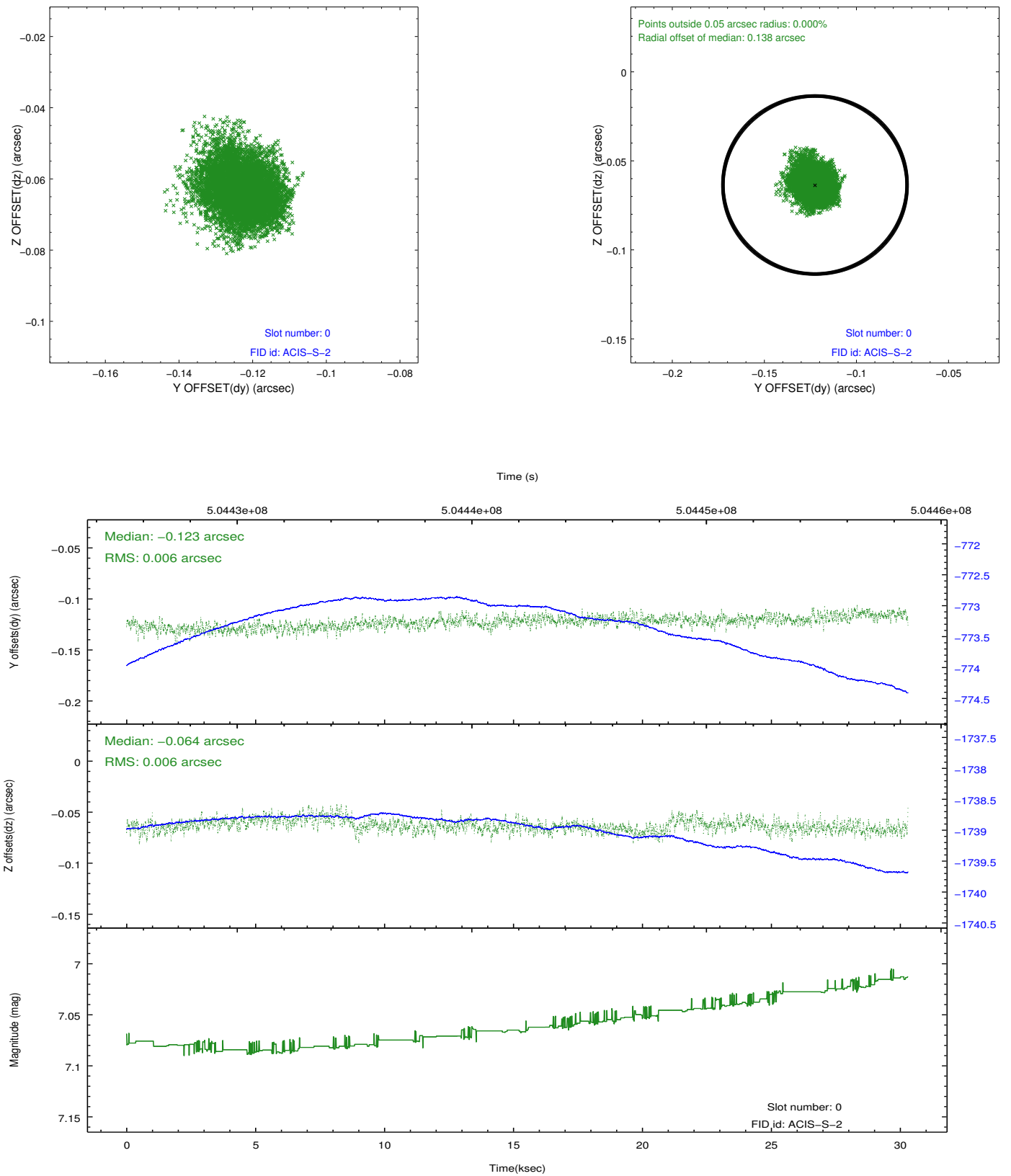


Time (s)

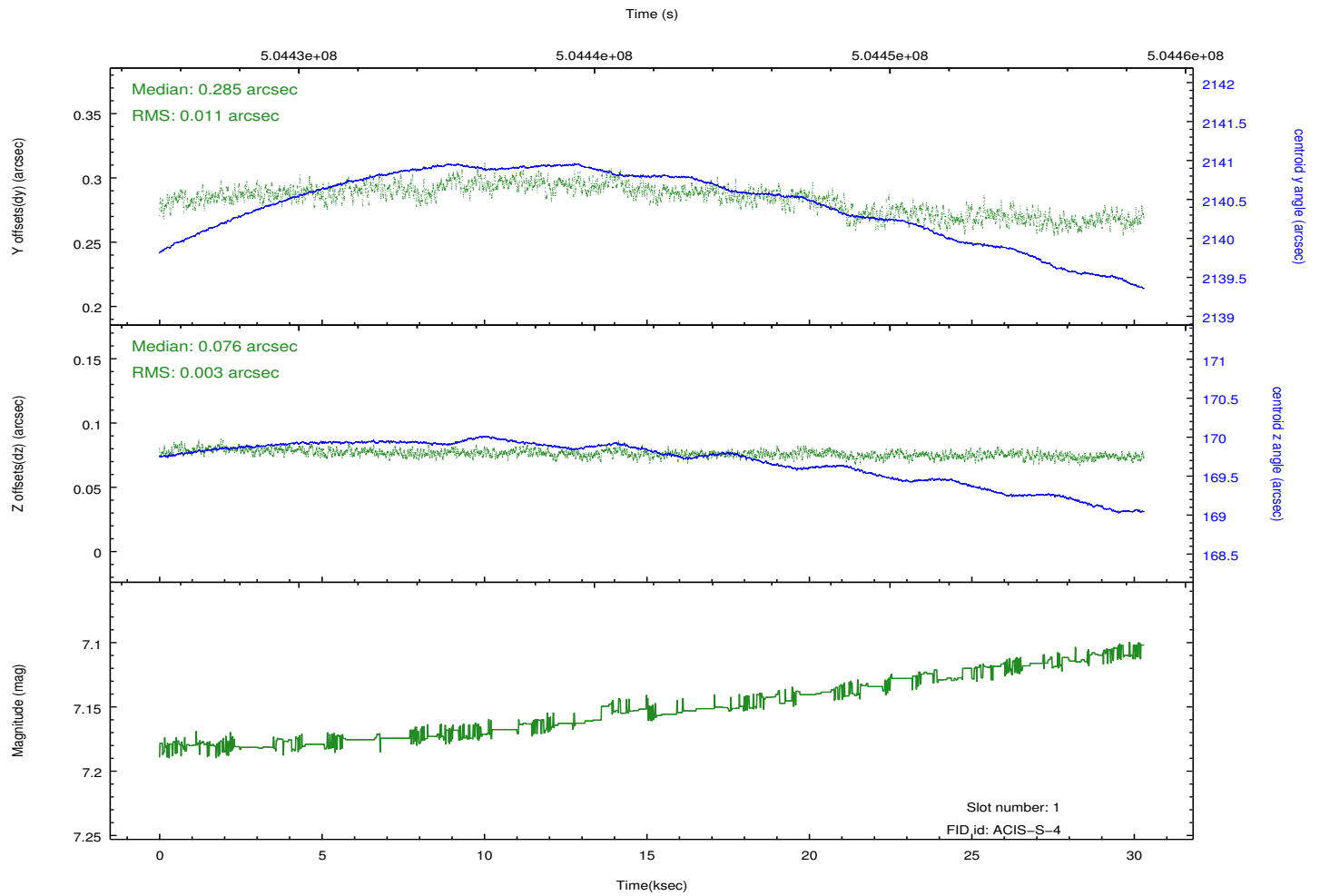
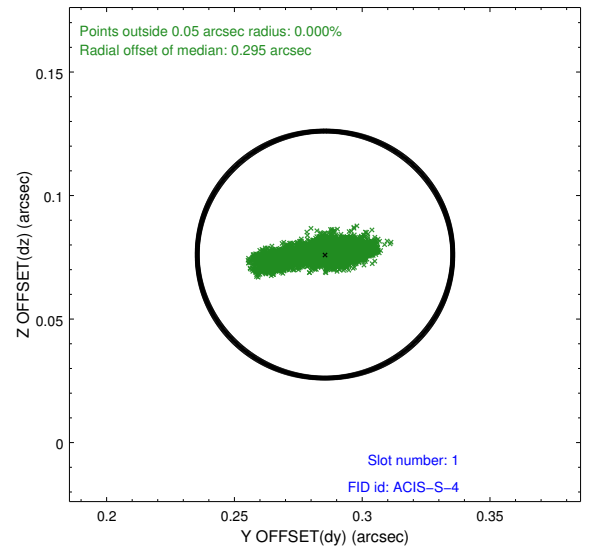
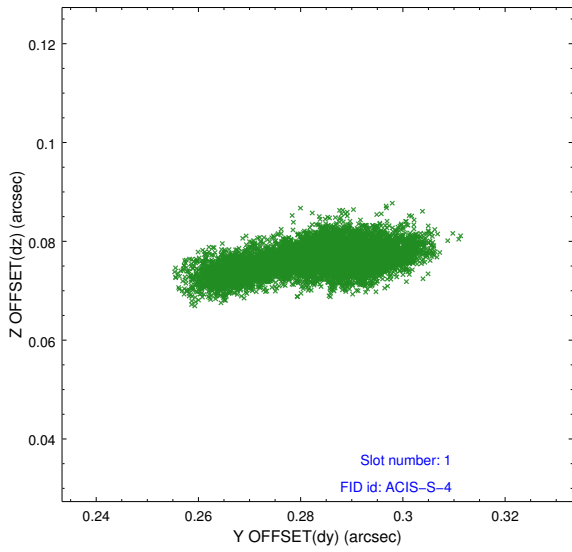


2.5 FID Slots

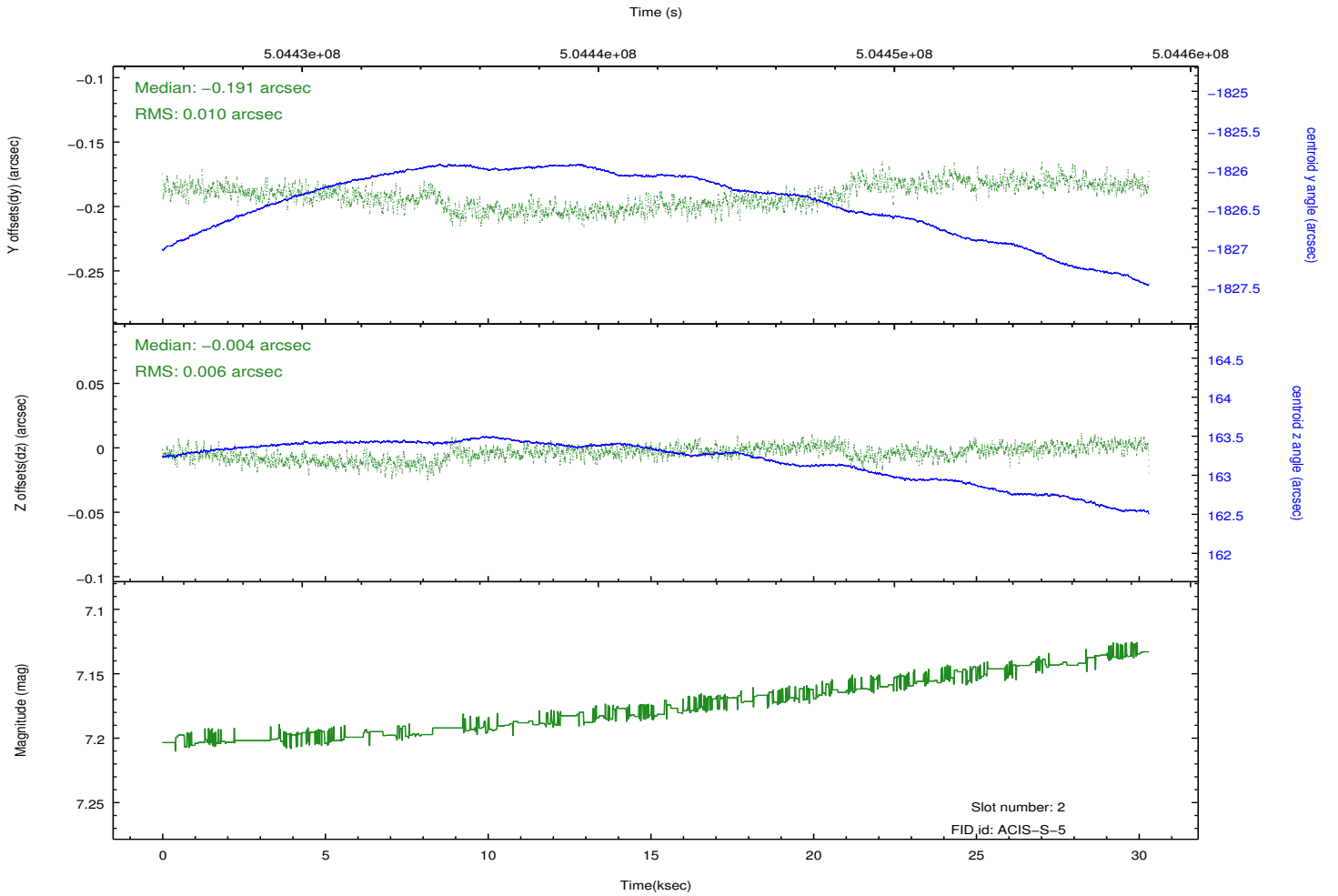
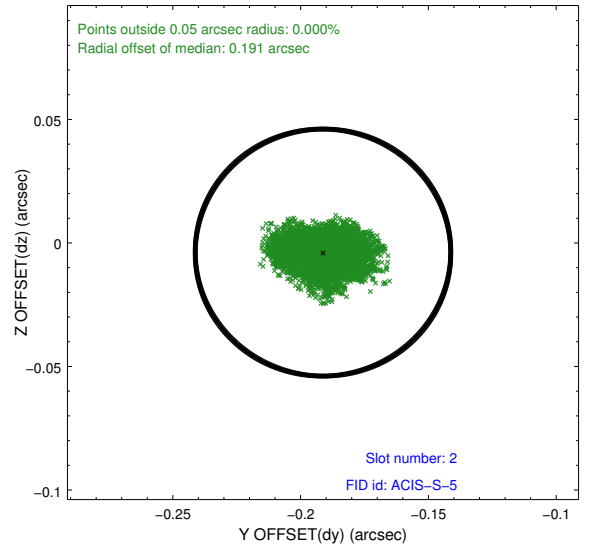
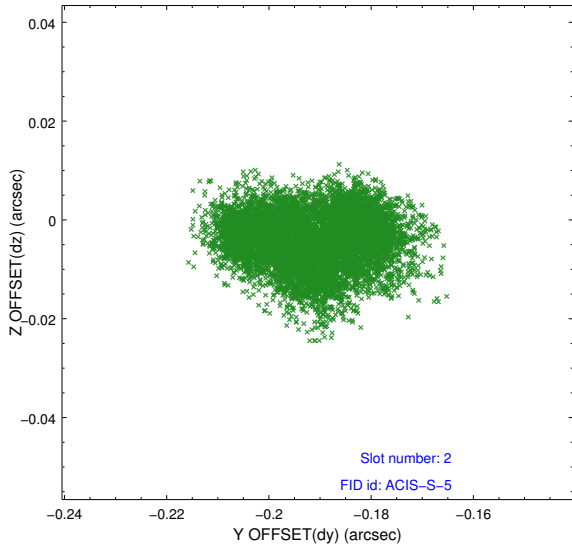
2.5.1 Slot 0



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	29.963866455615

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.