

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 14574 - L2 Version 2
Chandra X-Ray Center

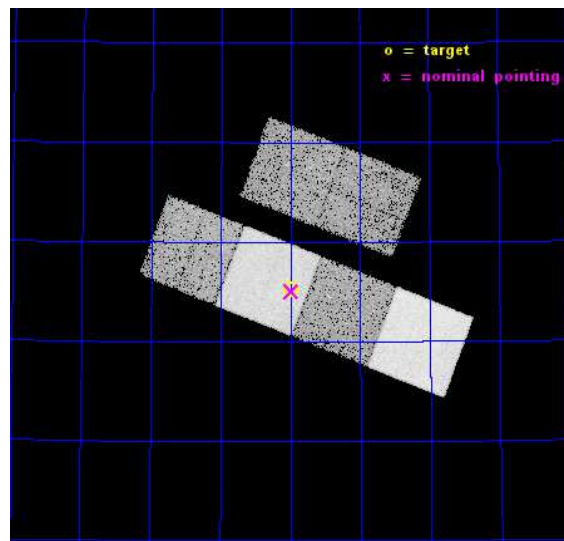
L2 Processing Date : Nov 29 2014

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1 Front

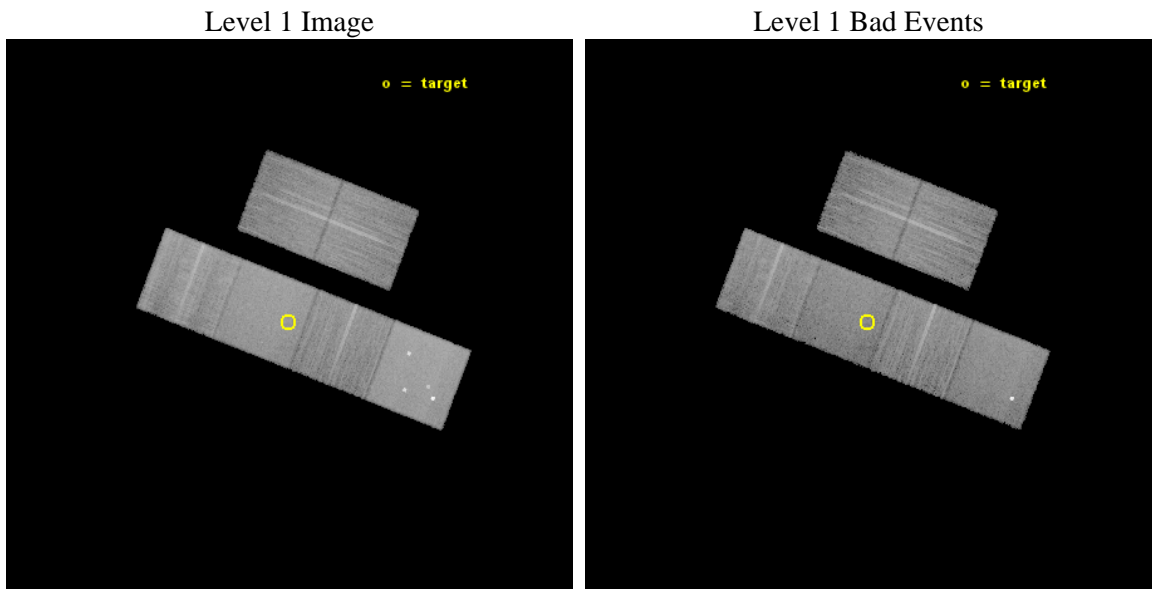
seq_num	200875	Sequence number
obs_id	14574	Observation id
title	COMPACT AND DIFFUSE X-RAY SOURCES IN THE YOUNGEST PLANETARY NEBULAE	
observer	Dr. Joel Kastner	Principal investigator
object	NGC 1501	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	61.7475	Observer's specified target RA [deg]
dec_targ	60.920667	Observer's specified target Dec [deg]
ra_nom	61.746289880587	Nominal RA [deg]
dec_nom	60.917680395006	Nominal Dec [deg]
roll_nom	201.08138142877	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19964.799925685	Sum of GTIs [s]
livetime	19711.993607667	Livetime [s]
ontime2	19961.558935344	Sum of GTIs [s]
ontime3	19961.55889535	Sum of GTIs [s]
ontime5	19964.799925685	Sum of GTIs [s]
ontime6	19964.799925685	Sum of GTIs [s]
ontime7	19964.799925685	Sum of GTIs [s]
ontime8	19951.83579433	Sum of GTIs [s]
l2events	183009	Number of level 2 events



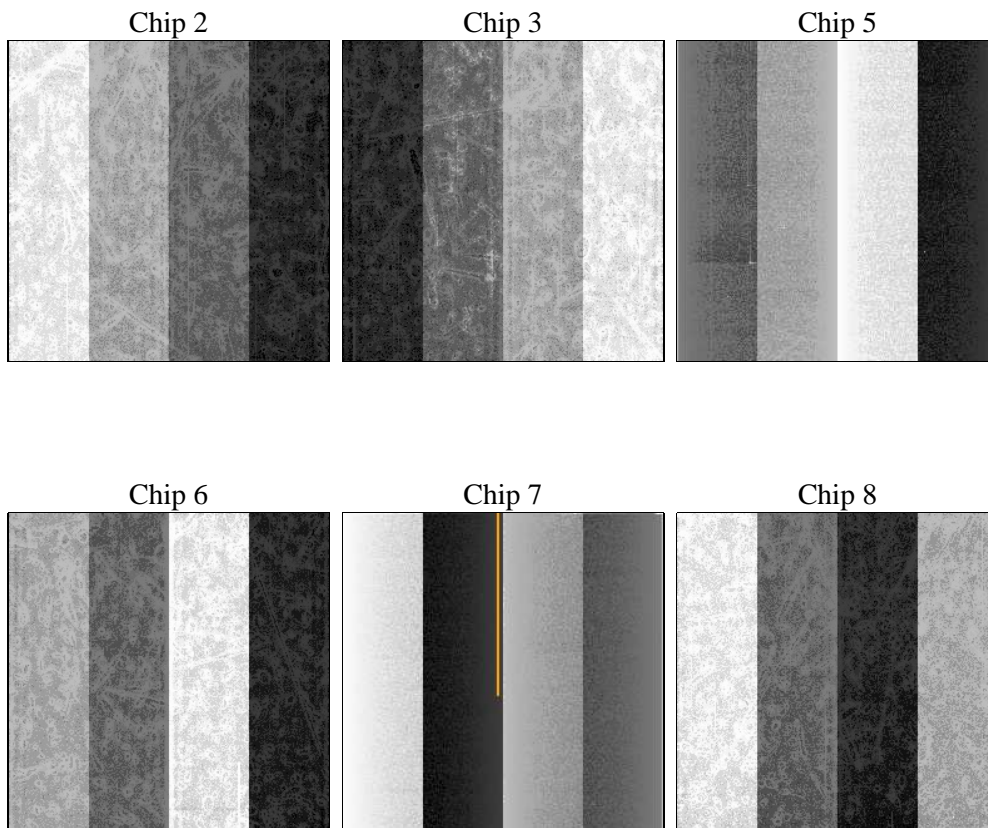
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	19964.799925685	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	19961.558935344	Sum of GTIs [s]
date	2014-11-30T07:43:56	Date and time of file creation	ontime3	19961.55889535	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	19964.799925685	Sum of GTIs [s]
			ontime6	19964.799925685	Sum of GTIs [s]
			ontime7	19964.799925685	Sum of GTIs [s]
			ontime8	19951.83579433	Sum of GTIs [s]
			l1events	778114	Number of level 1 events

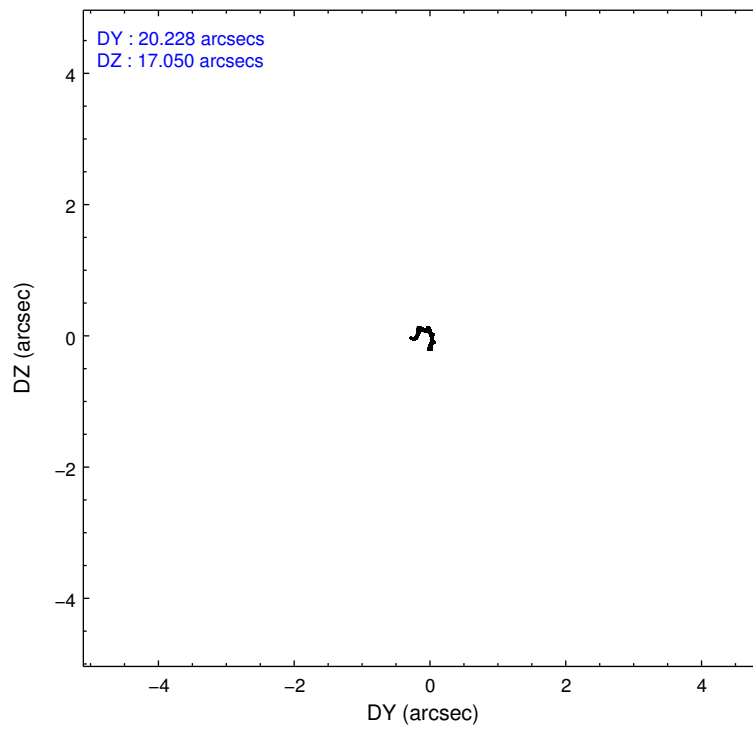
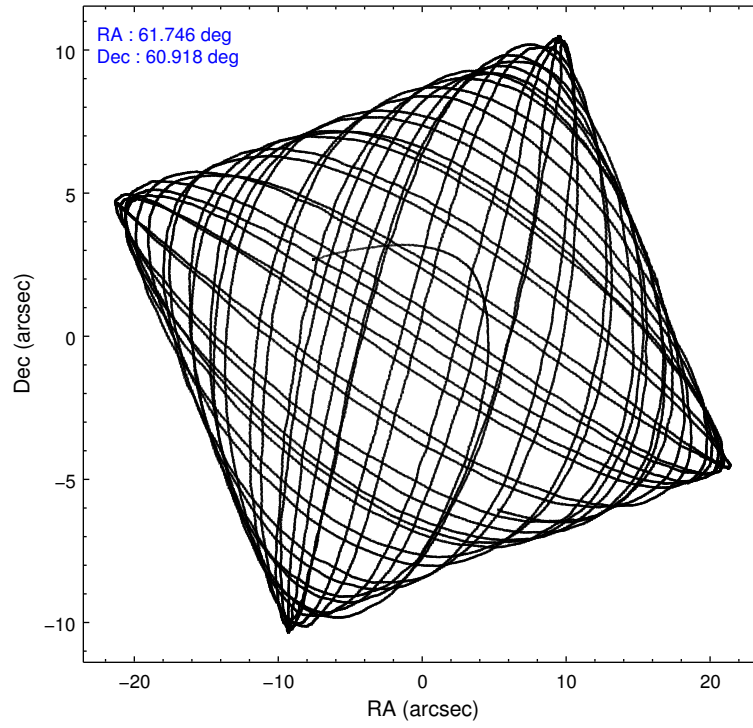
2.1.4 Events

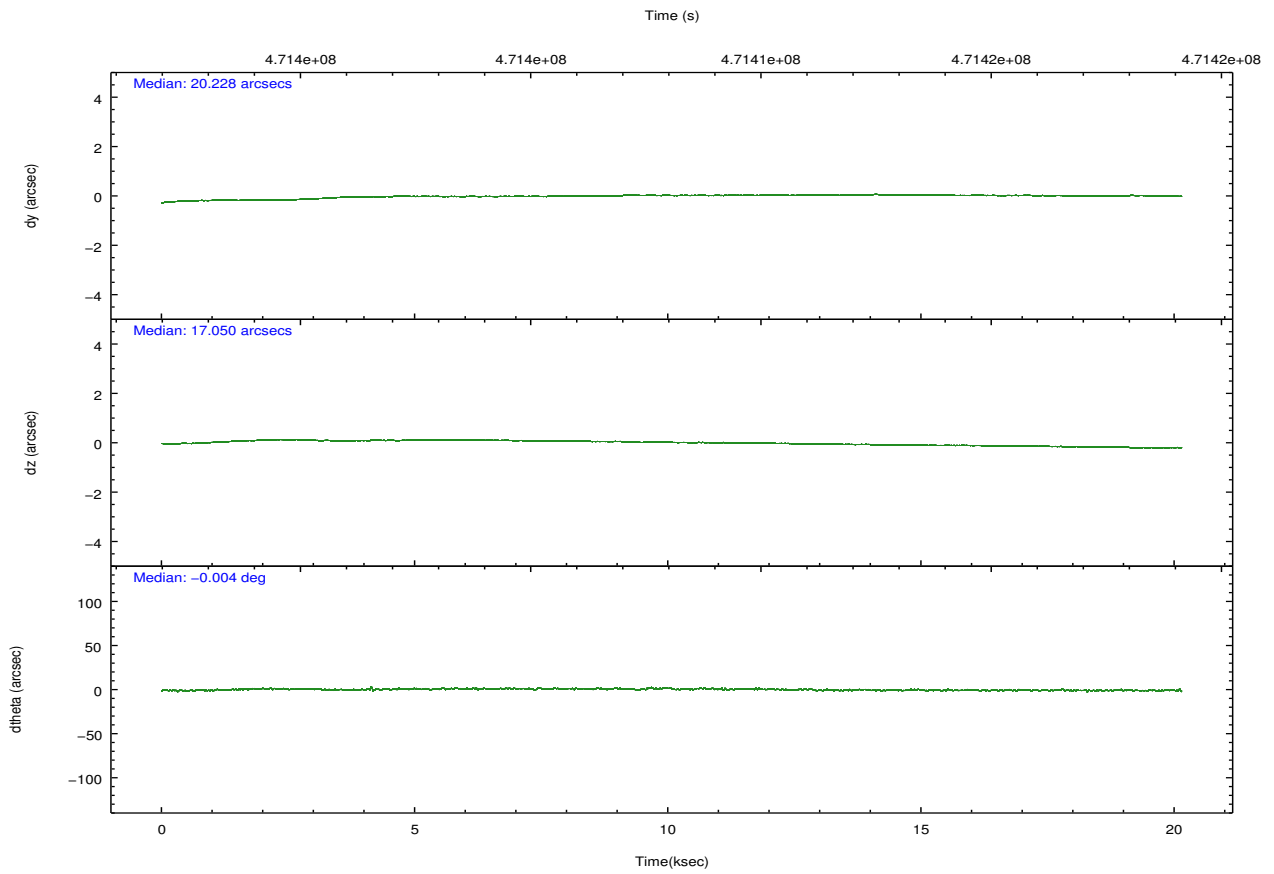
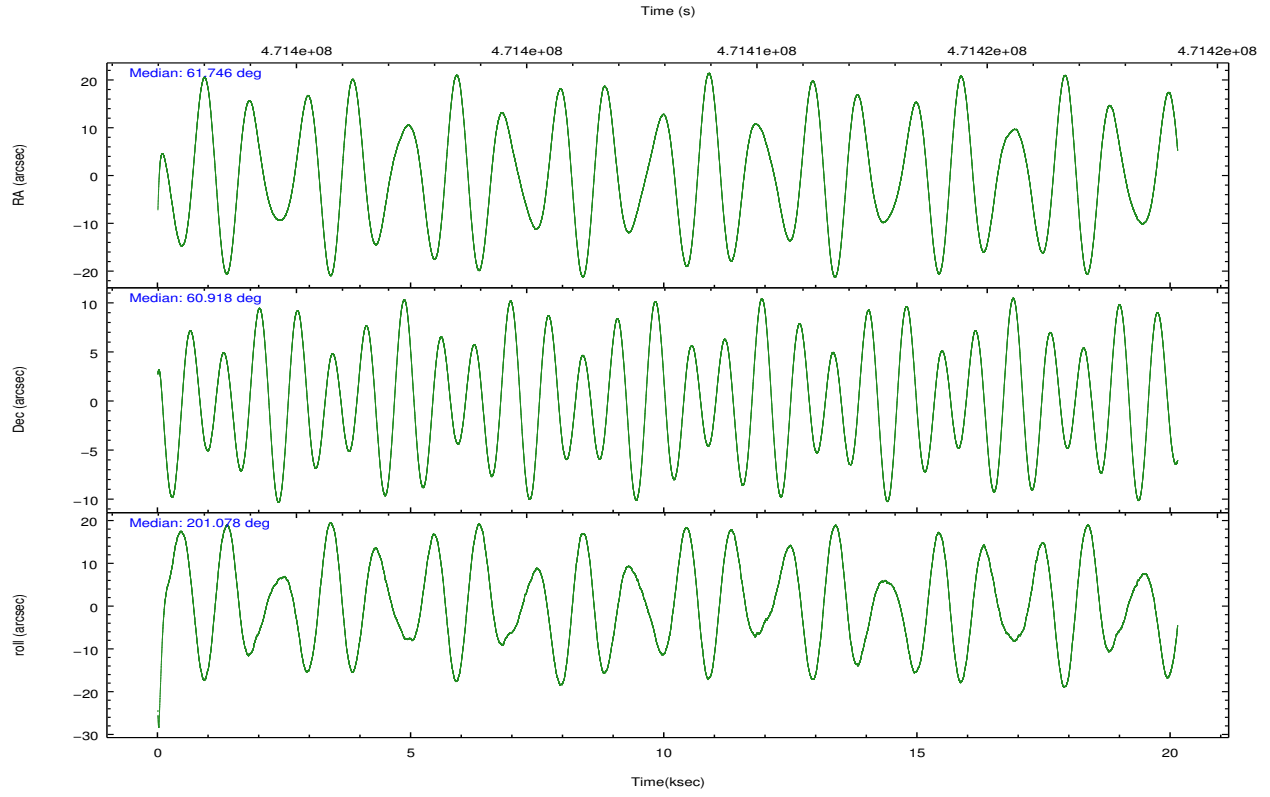
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	107568	100557	183063	105397	142462	139067	grade 0 events	4164	3950	10784	4319	5410	10414
rejected events	95692	89093	96056	92685	80447	101582		3%	3%	5%	4%	3%	7%
rejected %	88%	88%	52%	87%	56%	73%	grade 1 events	70	57	311	60	170	97
								0%	0%	0%	0%	0%	0%
							grade 2 events	2864	2628	25822	2839	12506	9142
								2%	2%	14%	2%	8%	6%
							grade 3 events	1217	1265	2752	1273	5269	3888
								1%	1%	1%	1%	3%	2%
							grade 4 events	1251	1287	2760	1337	5351	3720
								1%	1%	1%	1%	3%	2%
							grade 5 events	4537	5440	13593	5437	14884	7840
								4%	5%	7%	5%	10%	5%
							grade 6 events	2383	2335	44920	2951	33497	10326
								2%	2%	24%	2%	23%	7%
							grade 7 events	91082	83595	82121	87181	65375	93640
								84%	83%	44%	82%	45%	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	61.781037	61.7462898805866	CCD I2 on	O3	Y
[deg] Pointing Dec	60.939212	60.9176803950065	CCD I3 on	O2	Y
[deg] Pointing Roll	200.894410	201.0813814287733	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	471398134.184000	471397019.92164	CCD S5 on	N	N
Observation start date	2012-12-08T23:54:27	2012-12-08T23:36:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	471418134.184000	471418792.97281	On-chip summing requested	N	N
Observation end date	2012-12-09T05:27:47	2012-12-09T05:39:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





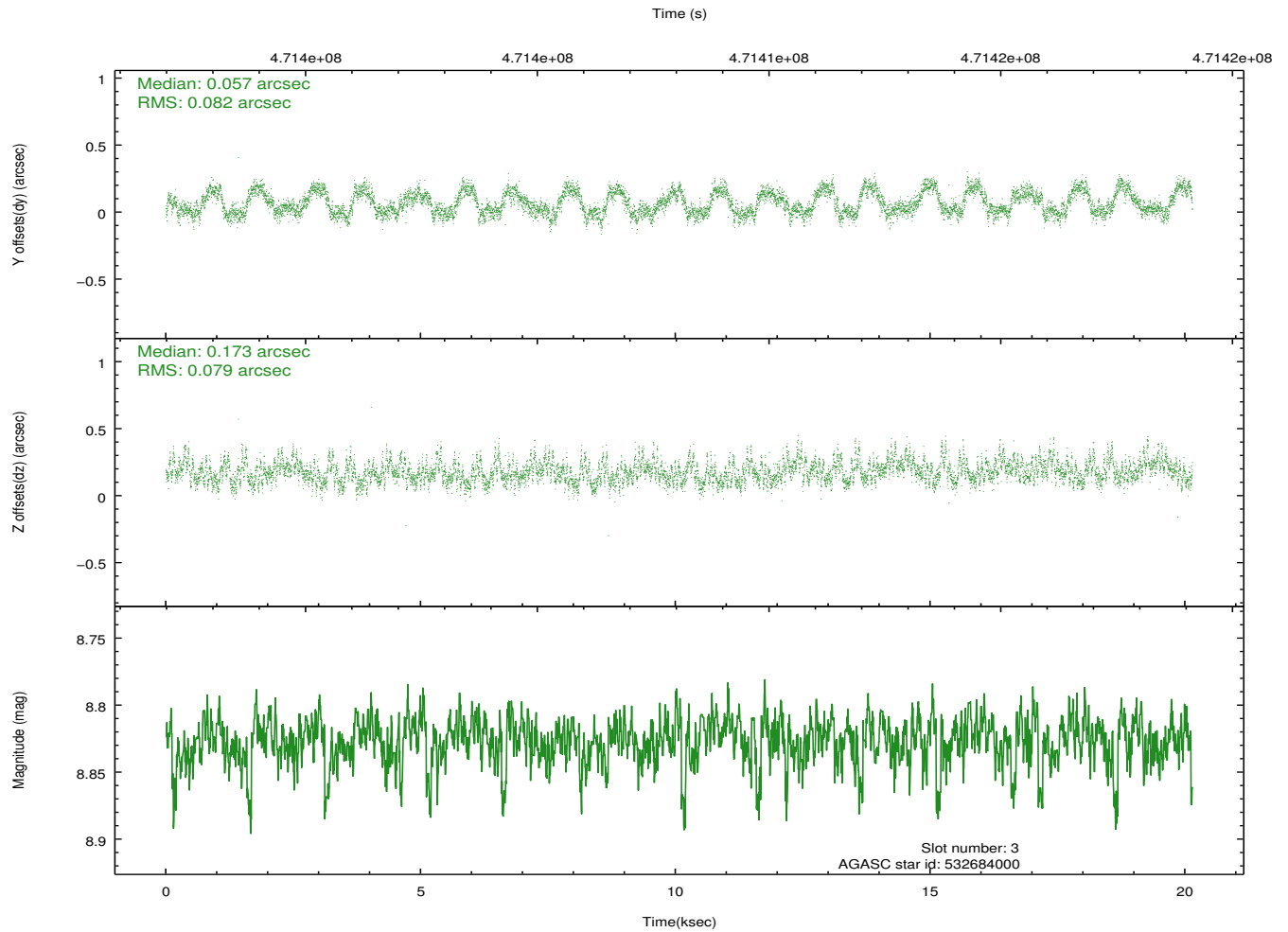
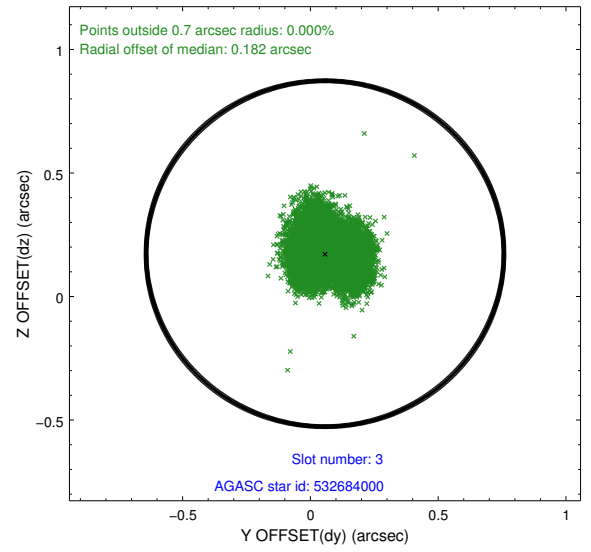
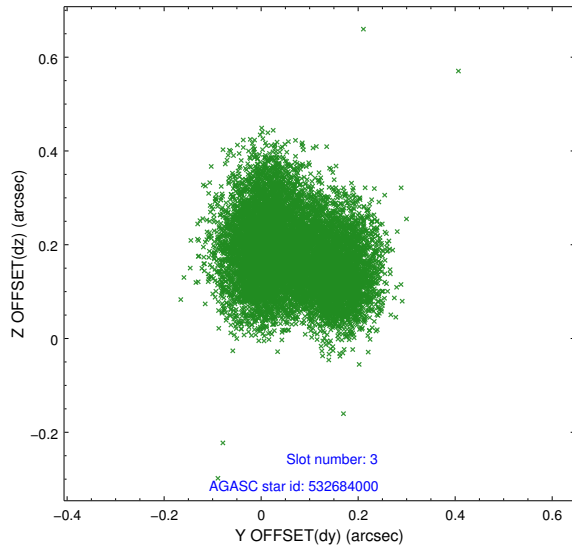
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-4	7.04	4912	0.197	-0.004	0.007	0.012	0.000000	0.000000	2140.23	170.23
1	FID		ACIS-S-5	7.07	4912	-0.226	-0.004	0.007	0.012	0.000000	0.000000	-1826.15	163.74
2	FID		ACIS-S-6	7.17	4912	0.000	0.022	0.008	0.013	0.000000	0.000000	388.09	807.50
3	GUIDE	used	532684000	8.83	9774	0.057	0.173	0.125	0.186	61.718277	61.599979	-747.44	-2260.68
4	GUIDE	used	532684360	7.86	9826	0.030	-0.079	0.093	0.150	62.100900	60.876677	-443.56	408.64
5	GUIDE	used	532684512	9.22	9816	-0.140	-0.081	0.173	0.248	61.075494	60.522790	1699.94	948.65
6	GUIDE	used	532686600	8.49	9825	0.142	0.177	0.107	0.163	61.825581	61.517674	-813.46	-1918.01
7	GUIDE	used	532687232	9.15	9795	-0.101	-0.186	0.111	0.177	61.077226	60.146612	2193.56	2209.49

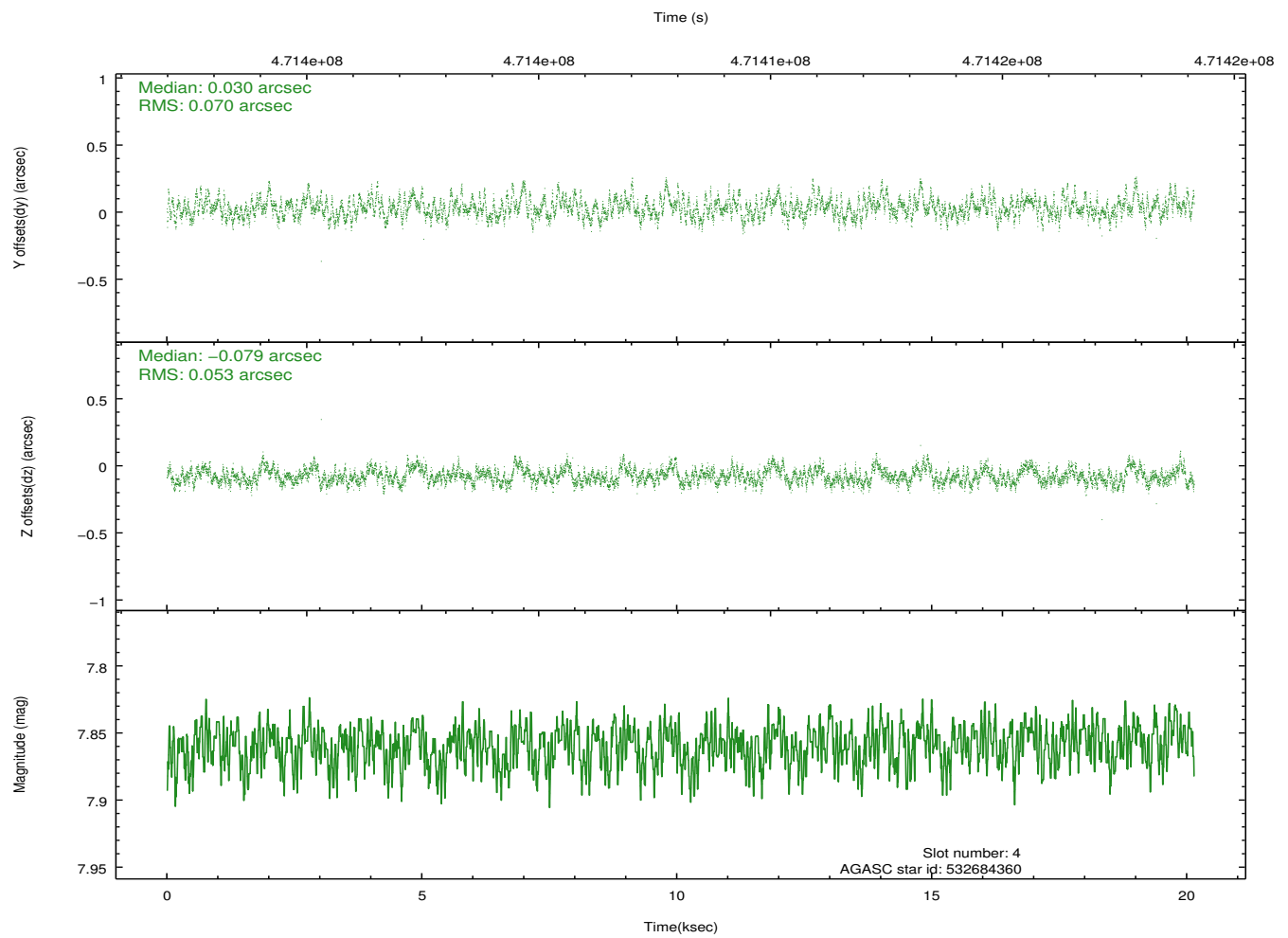
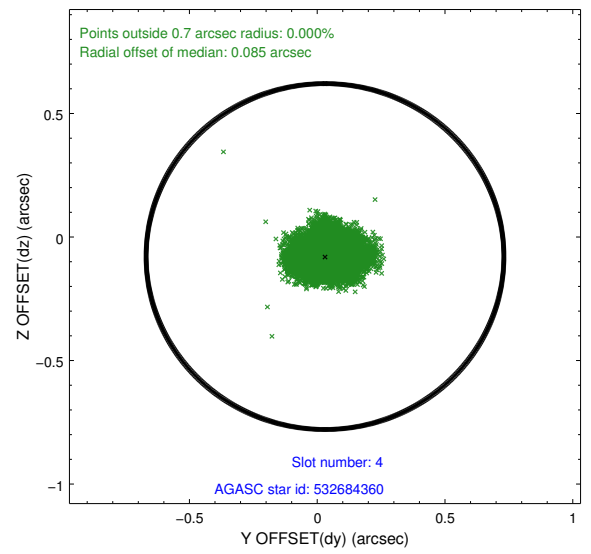
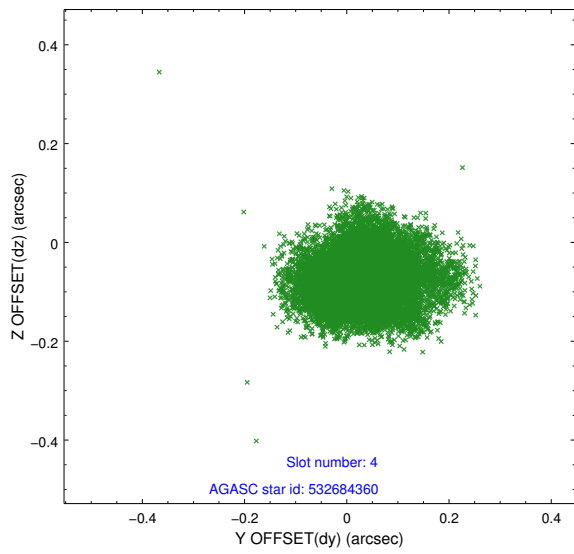
∞

2.4 Star Slots

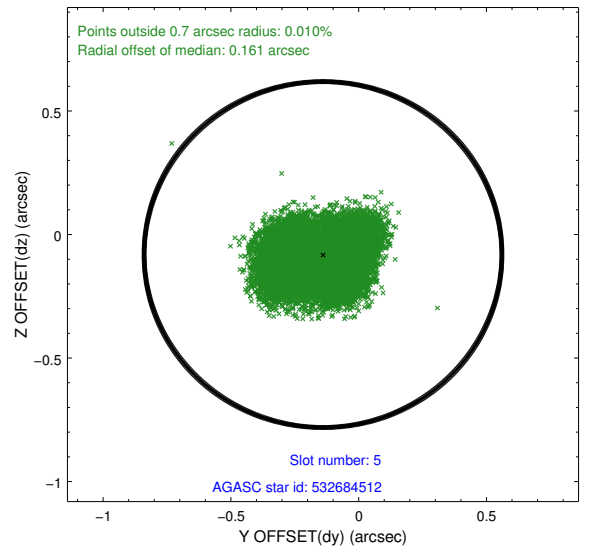
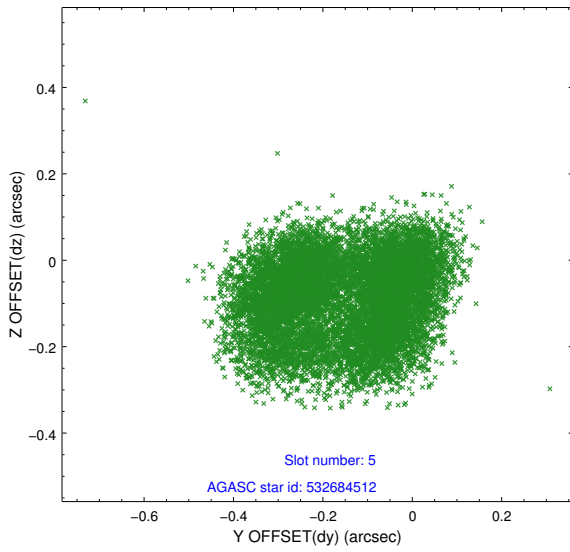
2.4.1 Slot 3



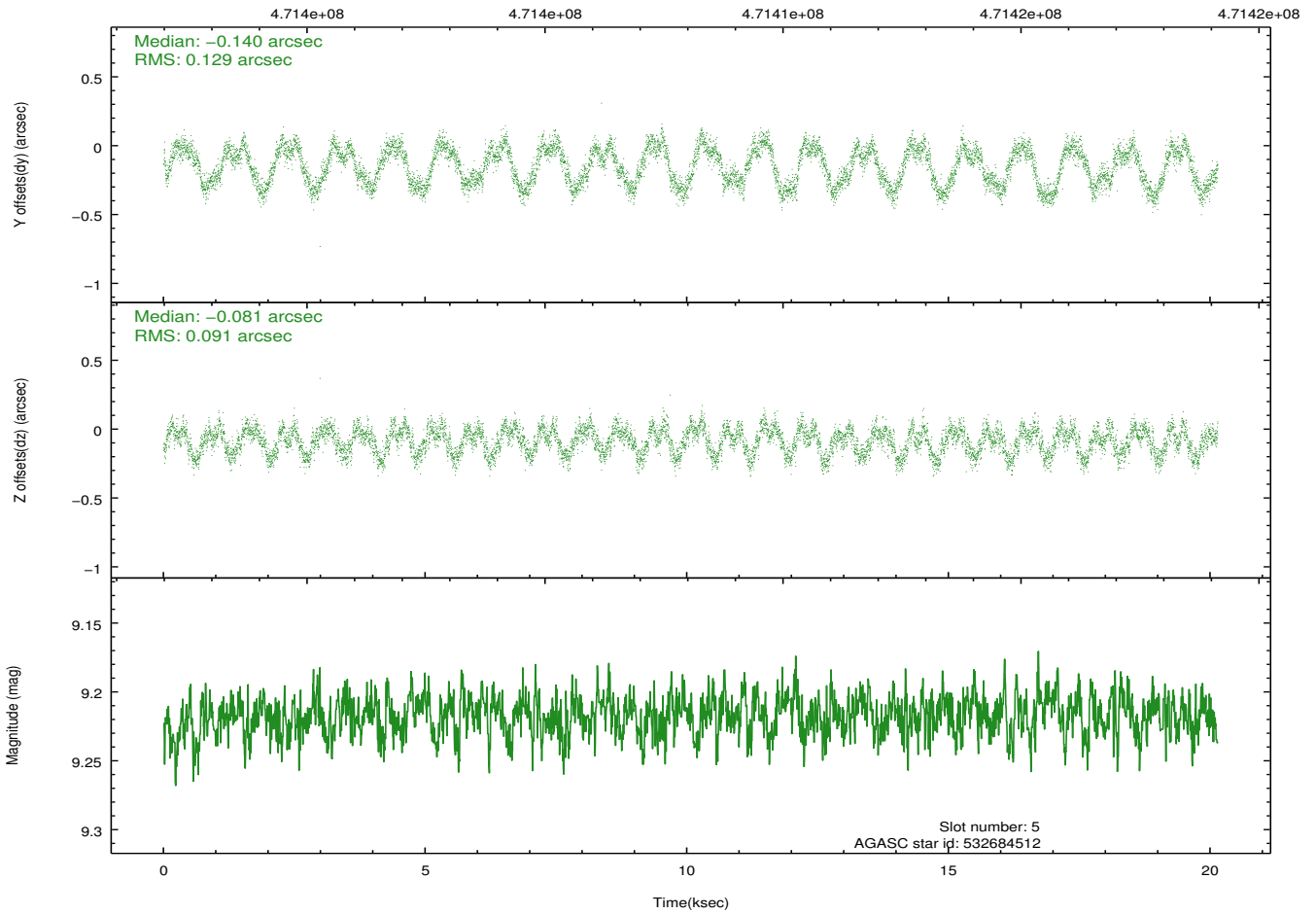
2.4.2 Slot 4



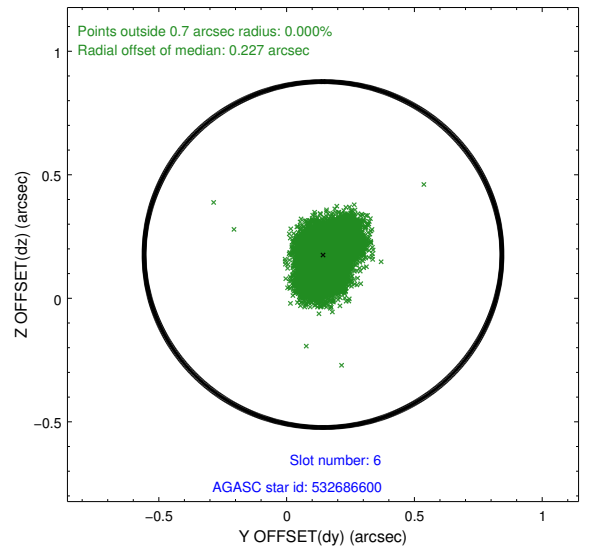
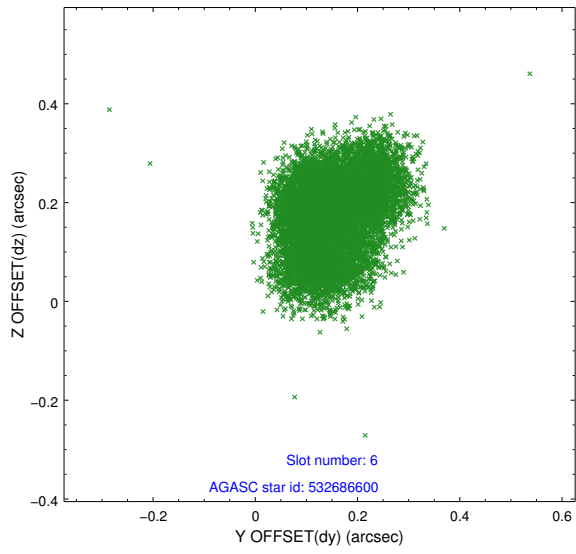
2.4.3 Slot 5



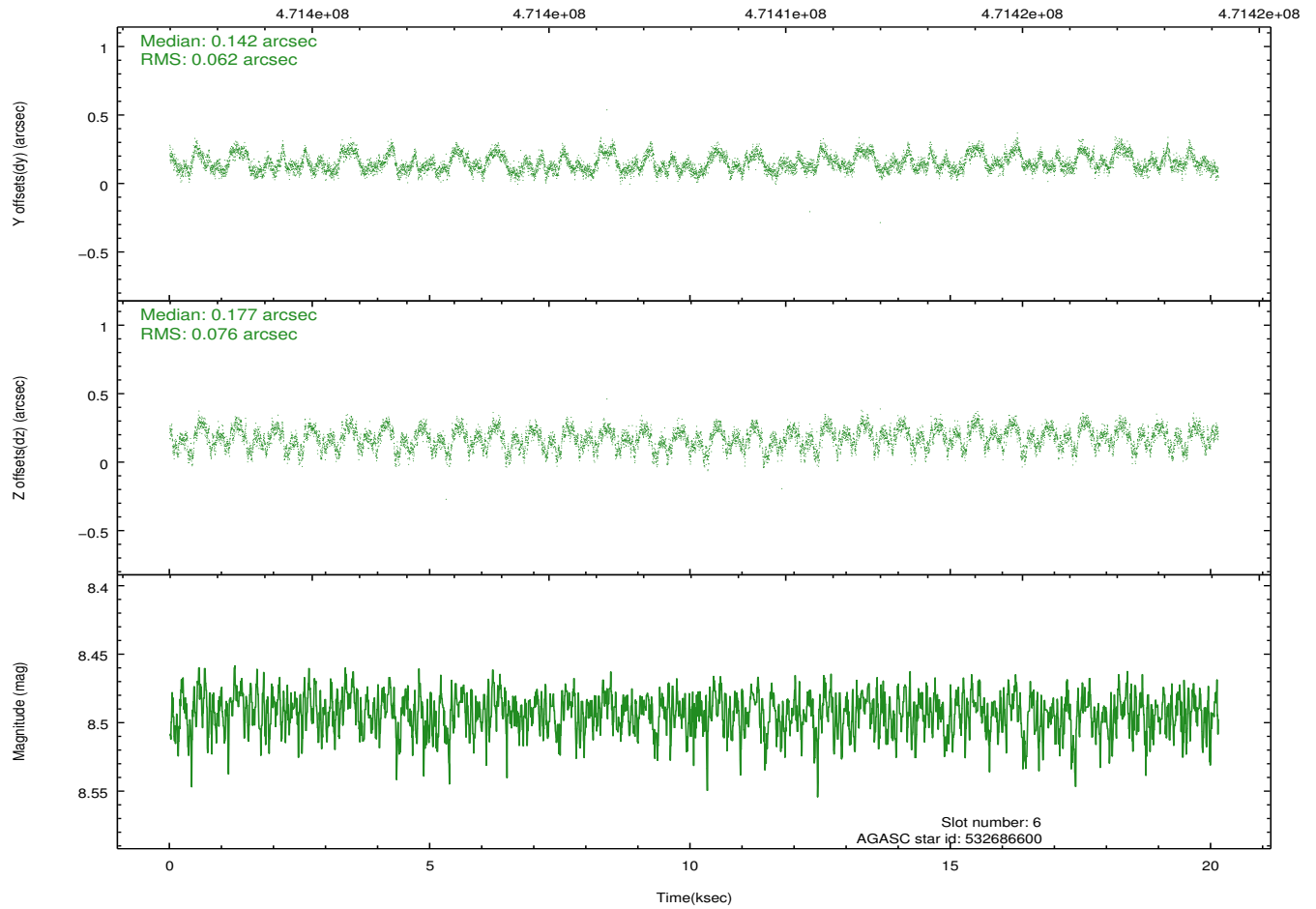
Time (s)



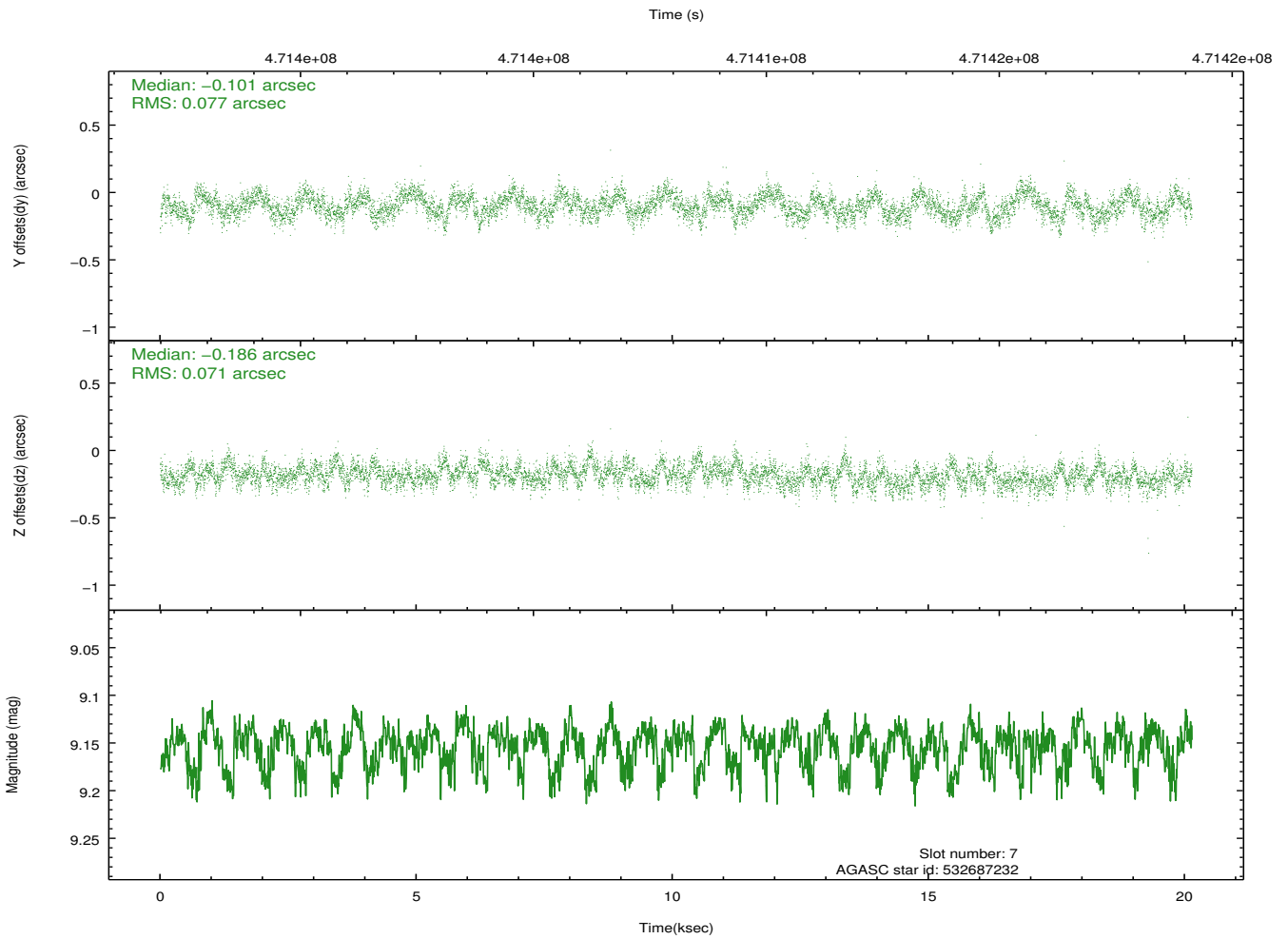
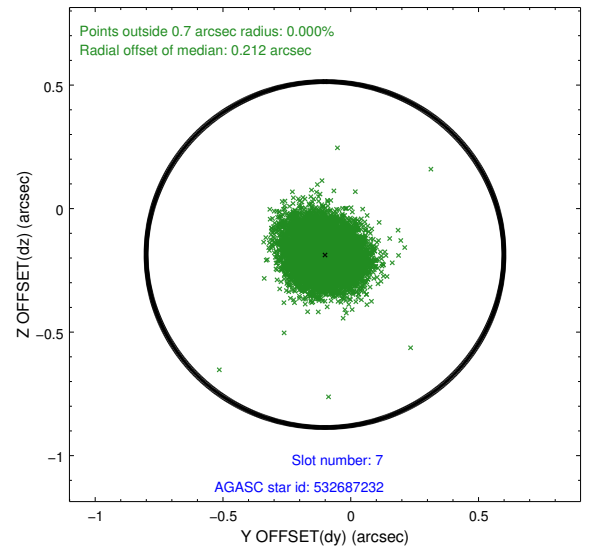
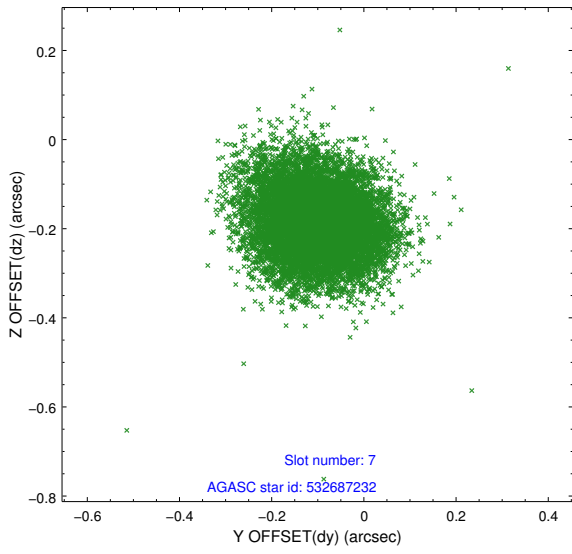
2.4.4 Slot 6



Time (s)

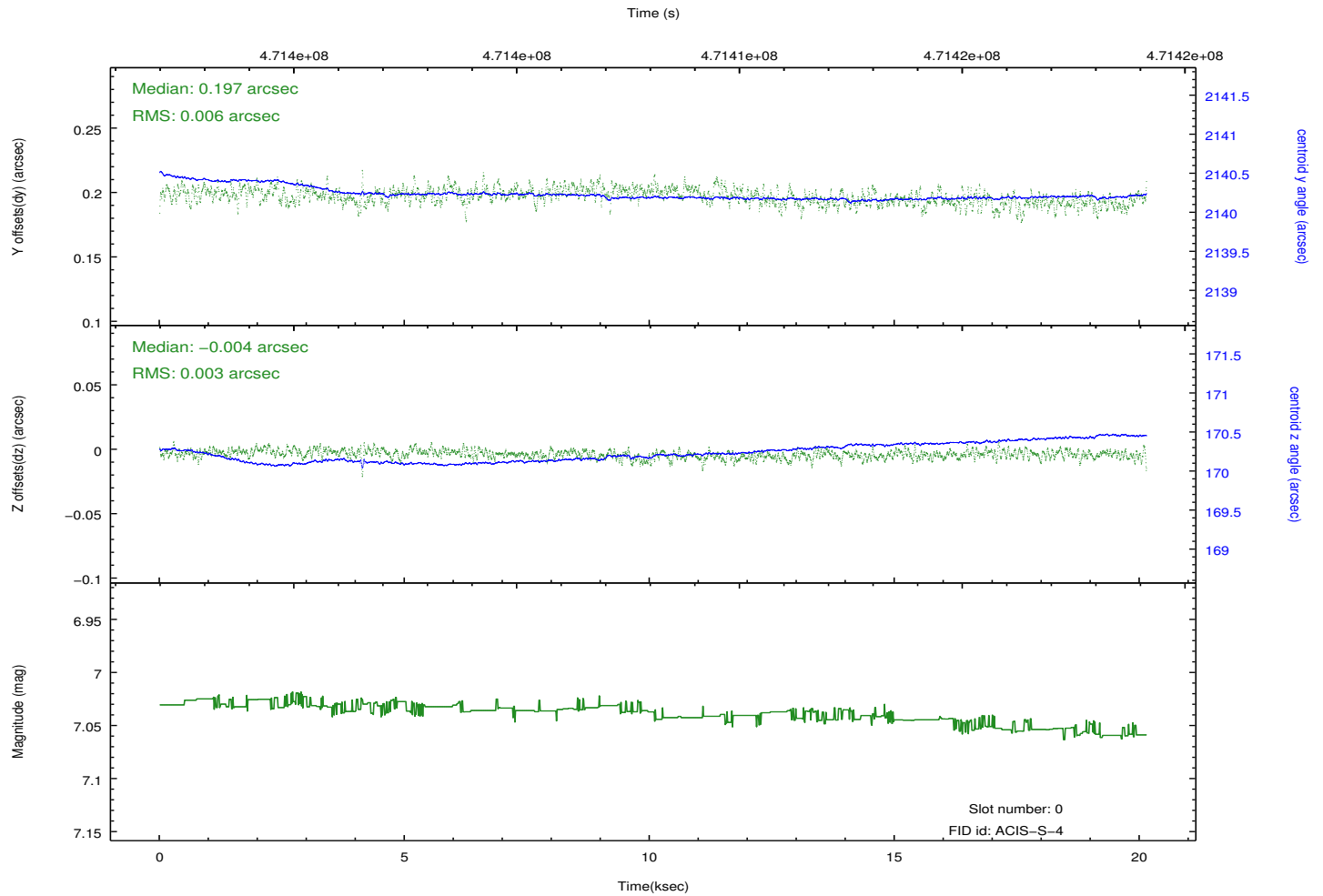
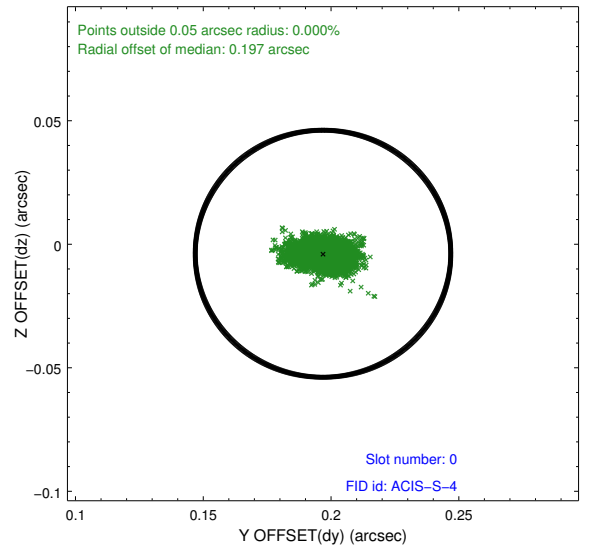
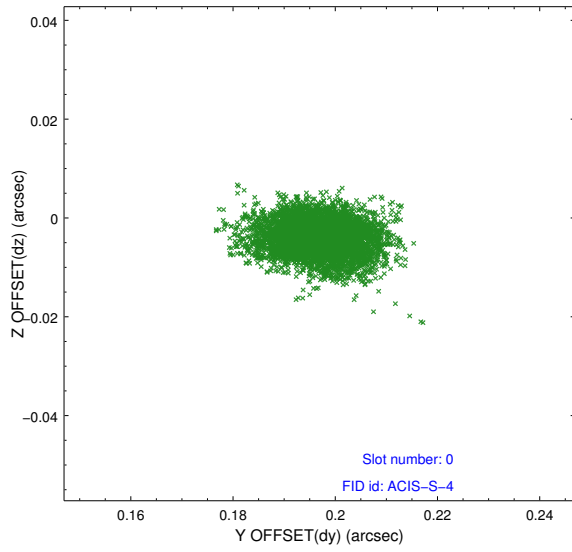


2.4.5 Slot 7

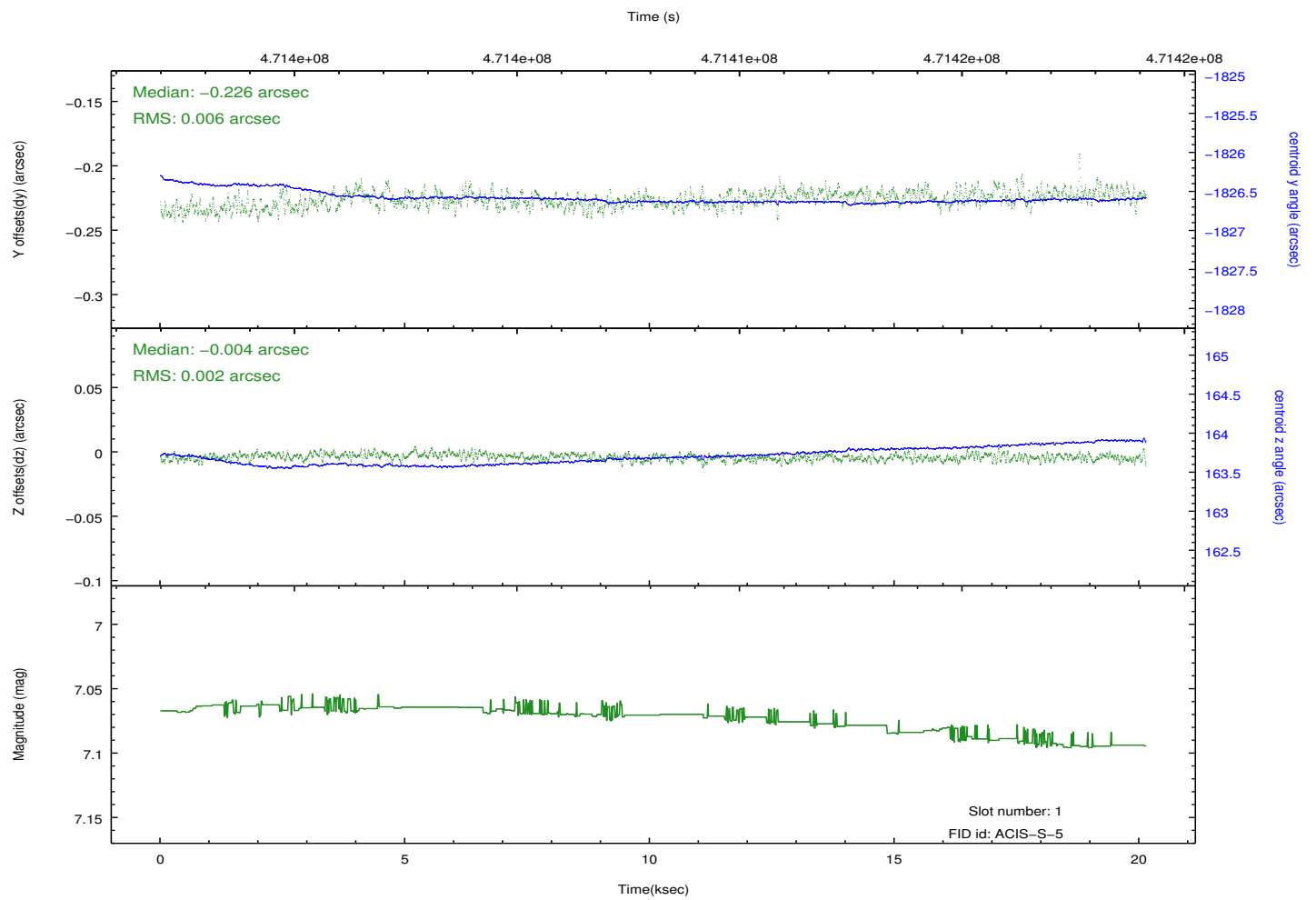
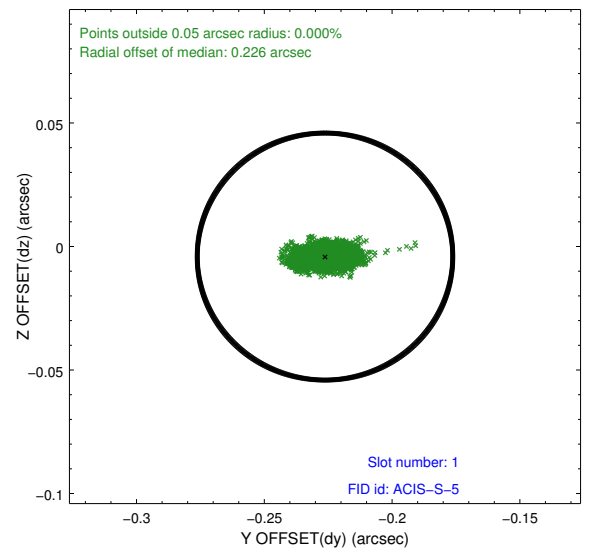
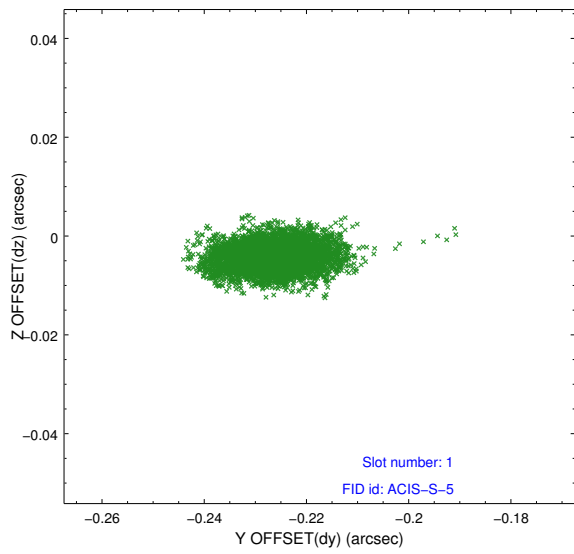


2.5 FID Slots

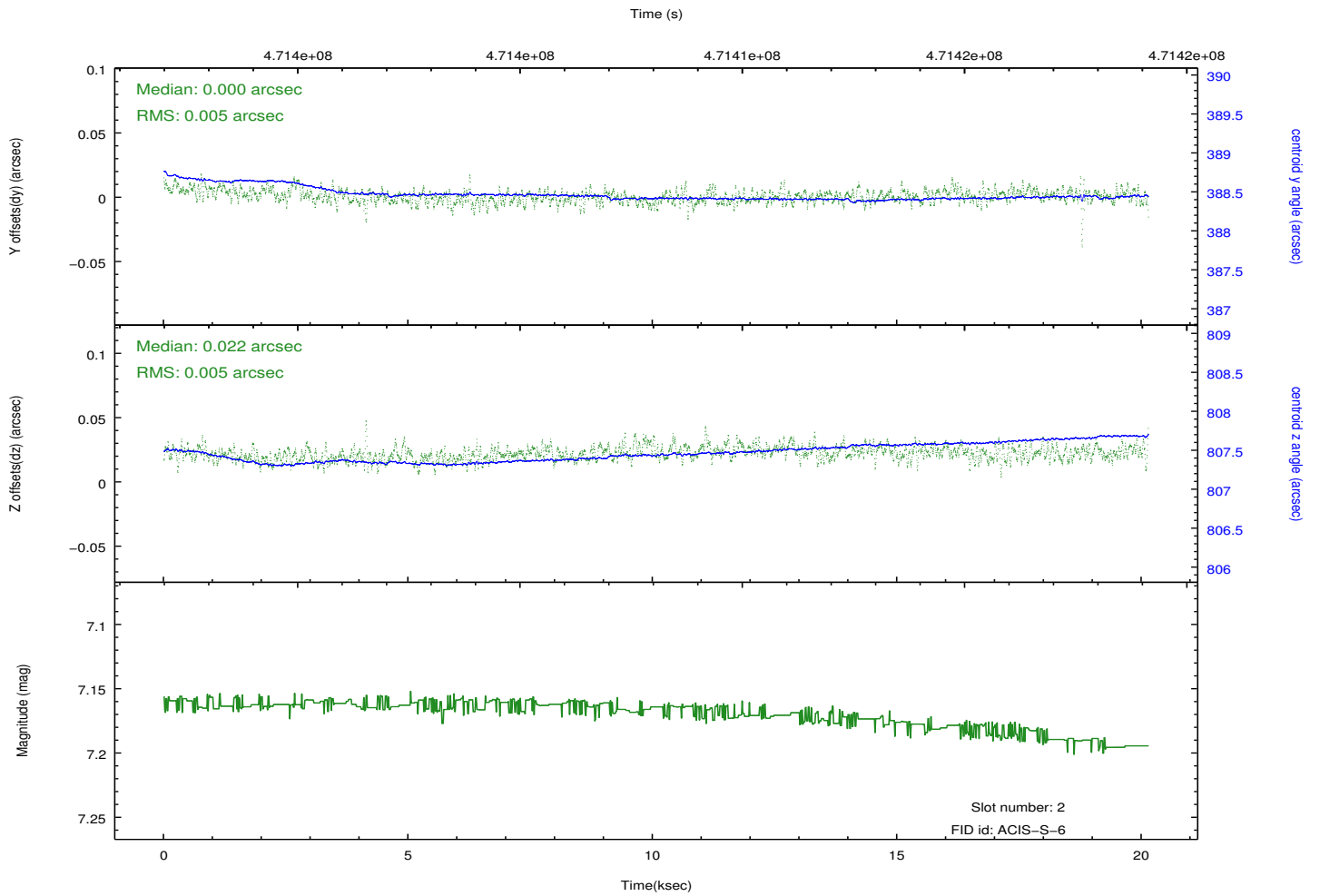
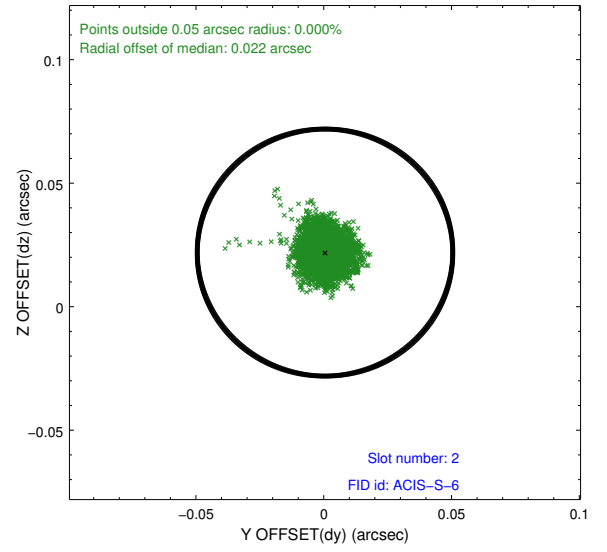
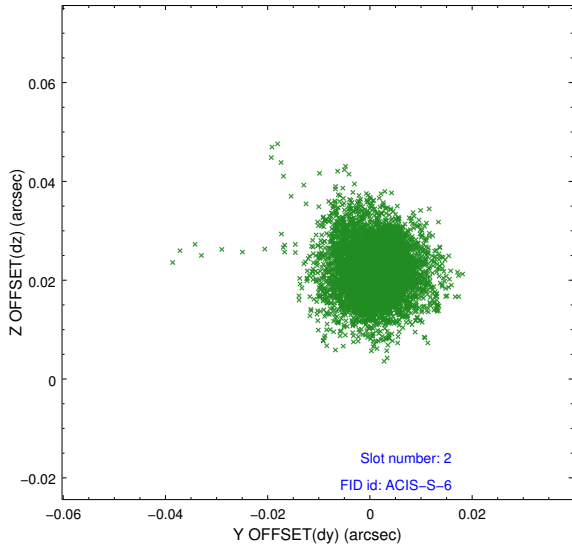
2.5.1 Slot 0



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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.964799925685

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.