

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 13724 - L2 Version 2
Chandra X-Ray Center

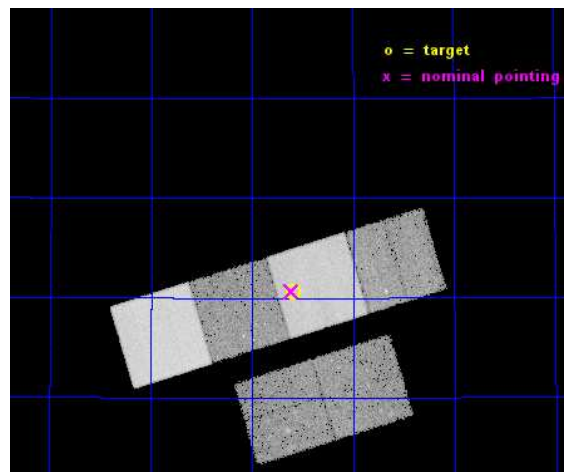
L2 Processing Date : Nov 30 2014

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1 Front

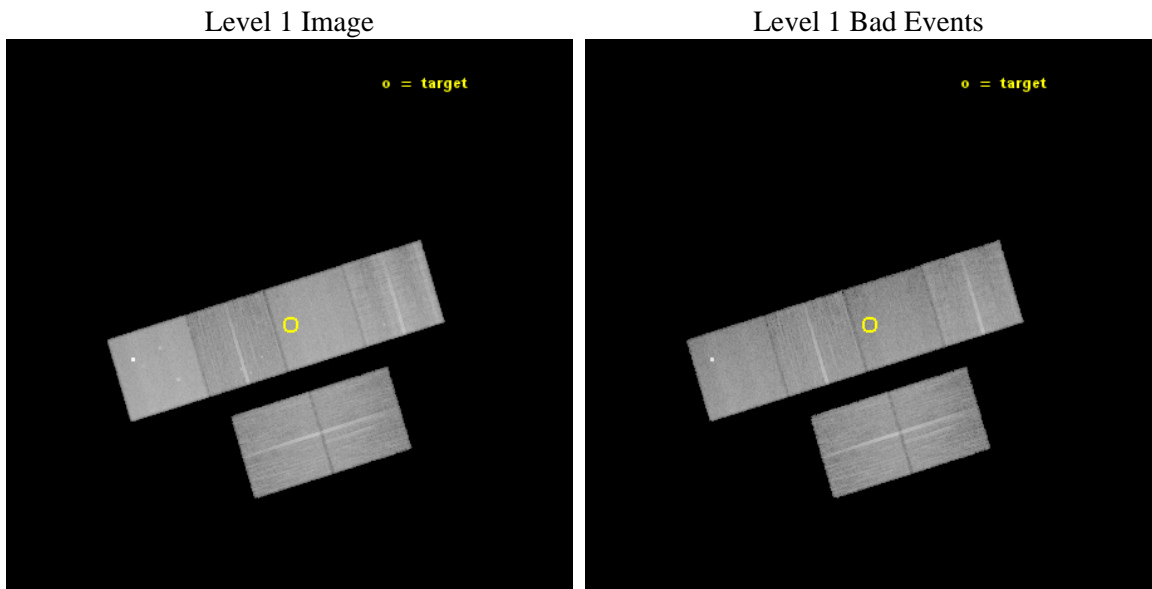
seq_num	401410	Sequence number
obs_id	13724	Observation id
title	Chandra Observations of More New Black Widows and Redbacks in the Galactic Field	Proposal title
observer	Dr. Mallory Roberts	Principal investigator
object	PSR J1816+45	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	274.149708	Observer's specified target RA [deg]
dec_targ	45.176072	Observer's specified target Dec [deg]
ra_nom	274.15296103352	Nominal RA [deg]
dec_nom	45.178044316631	Nominal Dec [deg]
roll_nom	342.9732406746	Nominal Roll [deg]
revision	2	Processing version of data
ontime	33967.999873519	Sum of GTIs [s]
livetime	33537.876606046	Livetime [s]
ontime2	33967.999873519	Sum of GTIs [s]
ontime3	33967.999873519	Sum of GTIs [s]
ontime5	33967.999873519	Sum of GTIs [s]
ontime6	33964.758903146	Sum of GTIs [s]
ontime7	33967.999873519	Sum of GTIs [s]
ontime8	33967.999873519	Sum of GTIs [s]
l2events	313269	Number of level 2 events



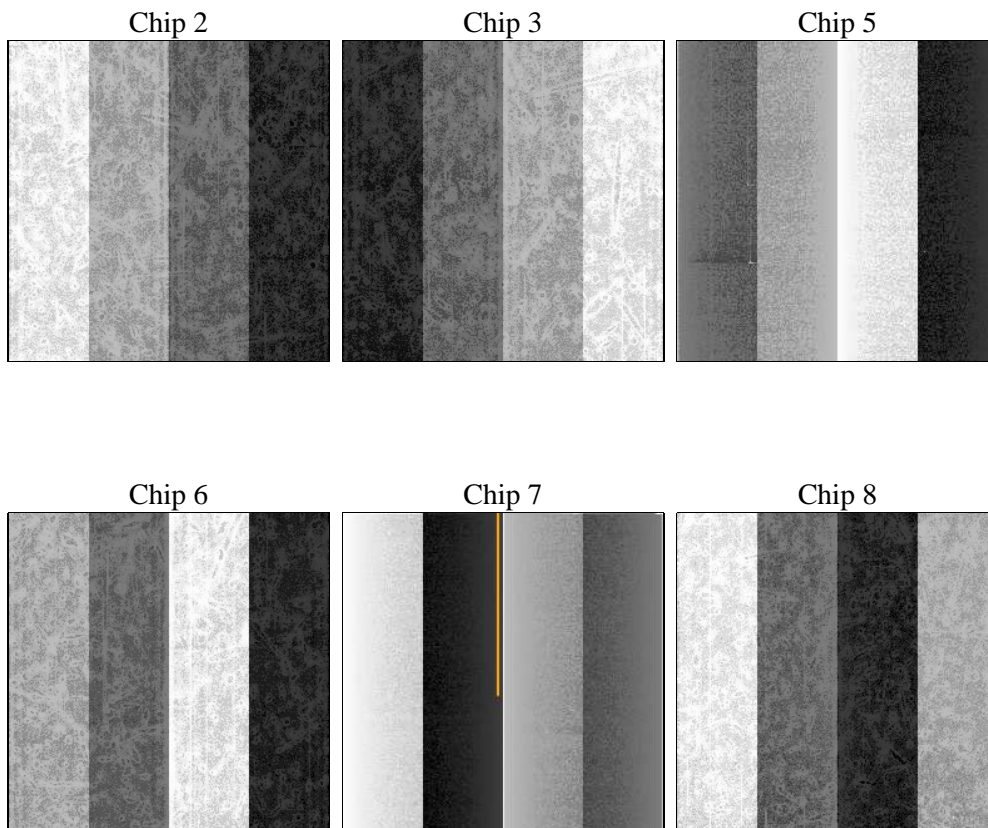
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	33967.999873519	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	33967.999873519	Sum of GTIs [s]
date	2014-11-30T05:42:53	Date and time of file creation	ontime3	33967.999873519	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	33967.999873519	Sum of GTIs [s]
			ontime6	33964.758903146	Sum of GTIs [s]
			ontime7	33967.999873519	Sum of GTIs [s]
			ontime8	33967.999873519	Sum of GTIs [s]
			l1events	1308969	Number of level 1 events

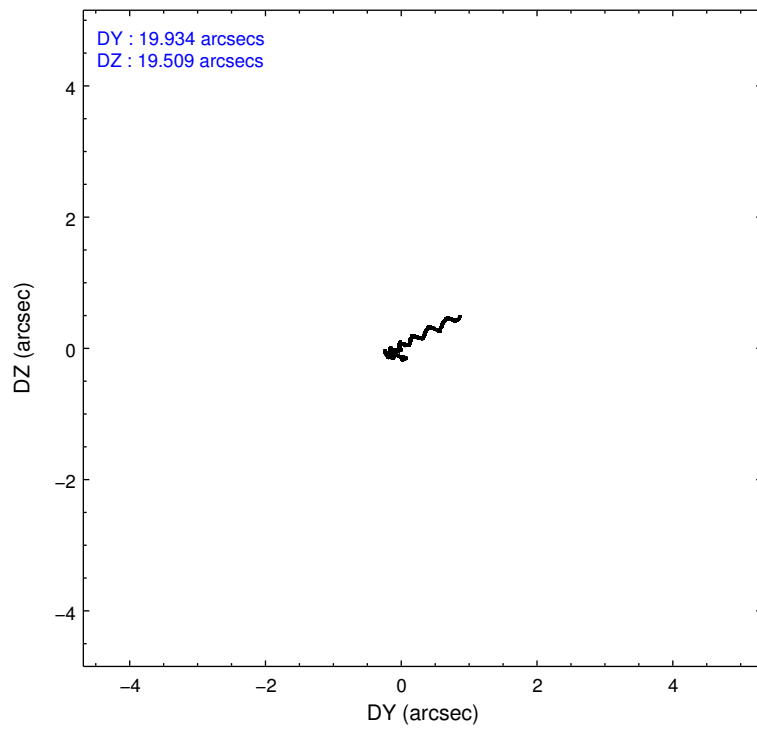
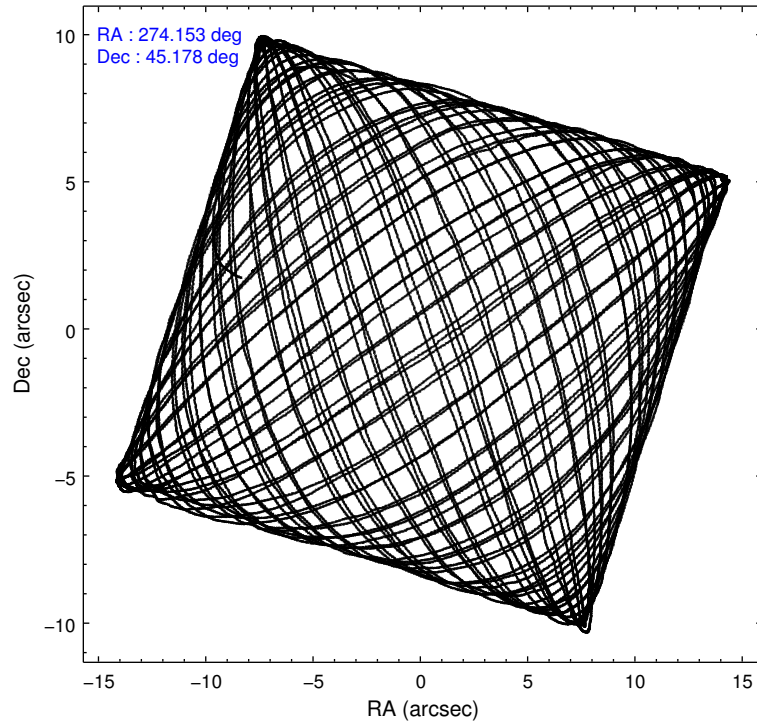
2.1.4 Events

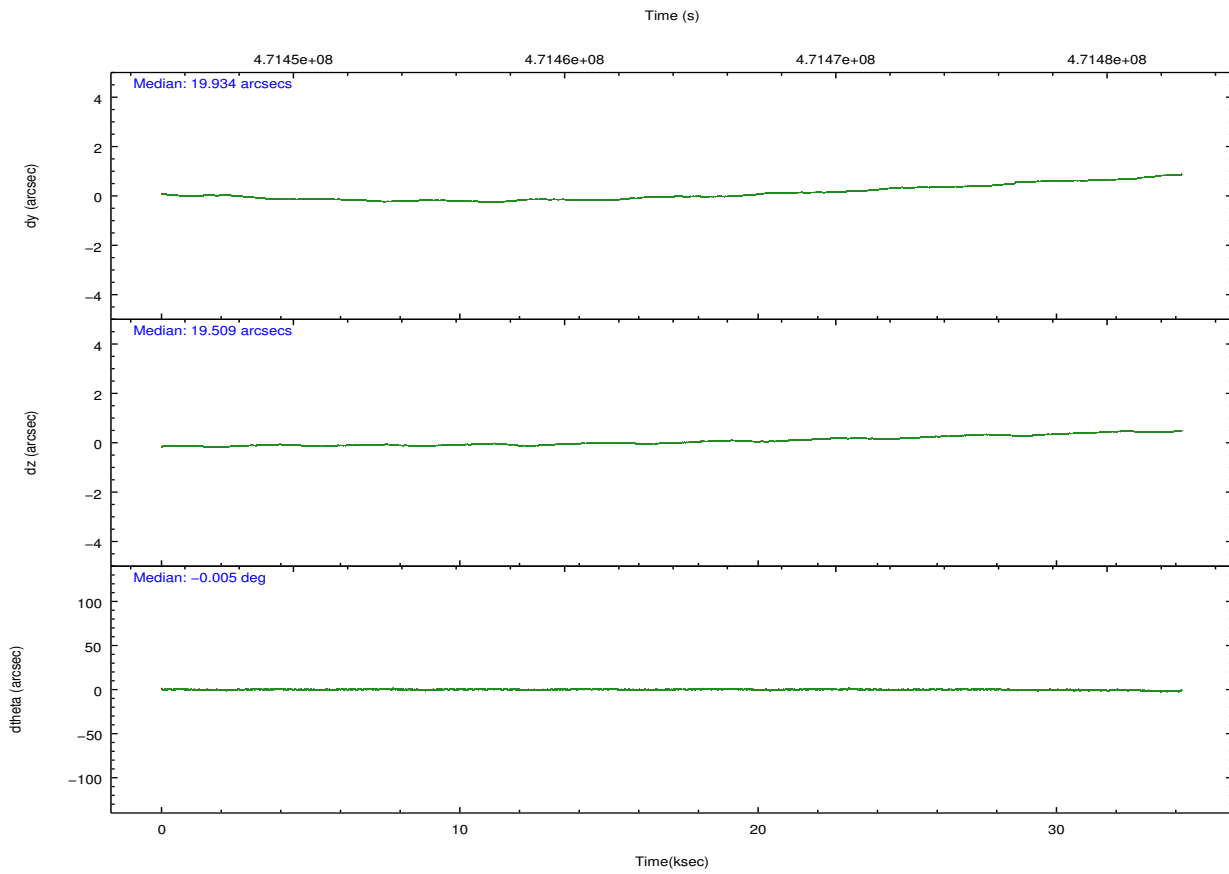
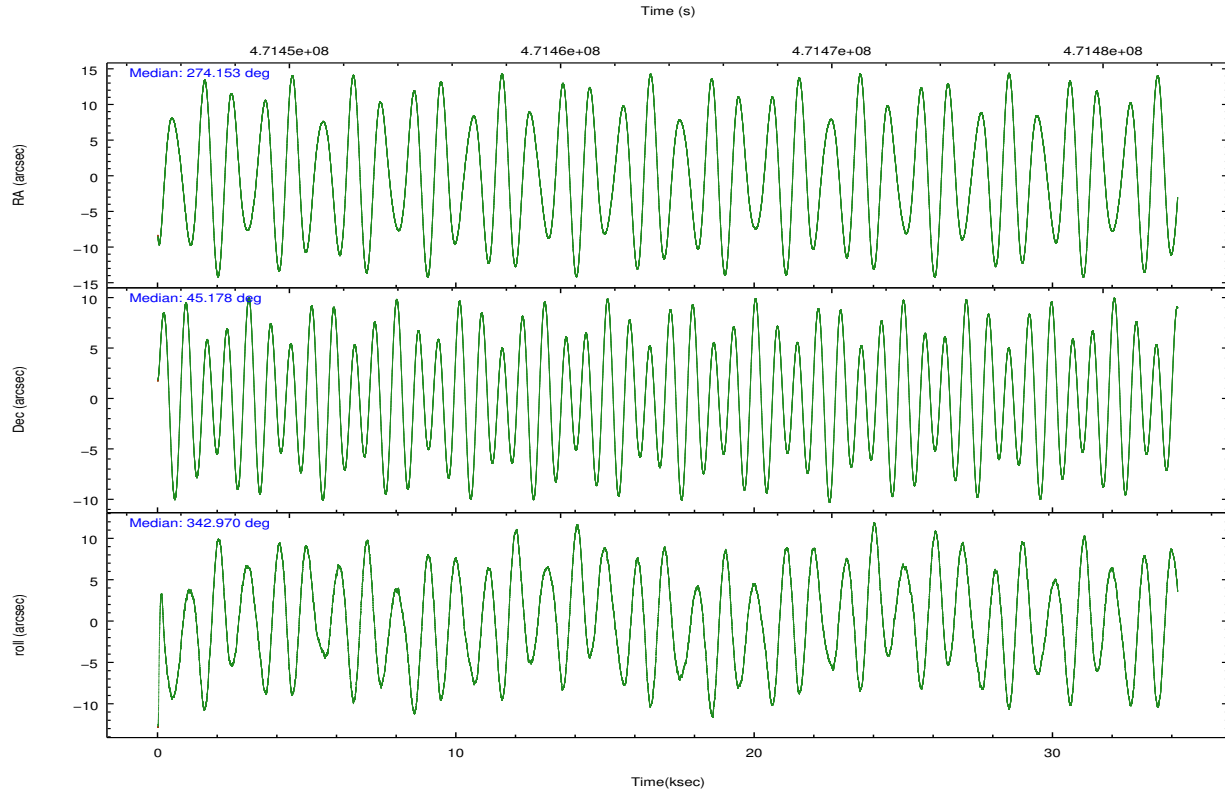
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	183407	171539	299012	178709	240077	236225	grade 0 events	7603	6889	10160	7973	9395	19866
rejected events	162289	151901	156679	156460	134491	171298		4%	4%	3%	4%	3%	8%
rejected %	88%	88%	52%	87%	56%	72%	grade 1 events	101	94	471	89	288	191
								0%	0%	0%	0%	0%	0%
							grade 2 events	5399	4412	46200	5055	21571	14787
								2%	2%	15%	2%	8%	6%
							grade 3 events	2015	2066	4895	2196	9112	6945
								1%	1%	1%	1%	3%	2%
							grade 4 events	2107	2164	4722	2169	8956	6563
								1%	1%	1%	1%	3%	2%
							grade 5 events	7776	9279	25141	9215	24761	13232
								4%	5%	8%	5%	10%	5%
							grade 6 events	3996	4109	76369	4858	56561	16775
								2%	2%	25%	2%	23%	7%
							grade 7 events	154410	142526	131054	147154	109433	157866
								84%	83%	43%	82%	45%	66%

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	274.115297	274.1529610335229	CCD I2 on	O4	Y
[deg] Pointing Dec	45.171531	45.17804431663068	CCD I3 on	O5	Y
[deg] Pointing Roll	342.843340	342.9732406746018	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	O3	Y
[s] Observation start time (MET)	471447046.184000	471445582.88675	CCD S5 on	N	N
Observation start date	2012-12-09T13:29:39	2012-12-09T13:06:22	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	471481046.184000	471481977.56371	On-chip summing requested	N	N
Observation end date	2012-12-09T22:56:19	2012-12-09T23:12:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



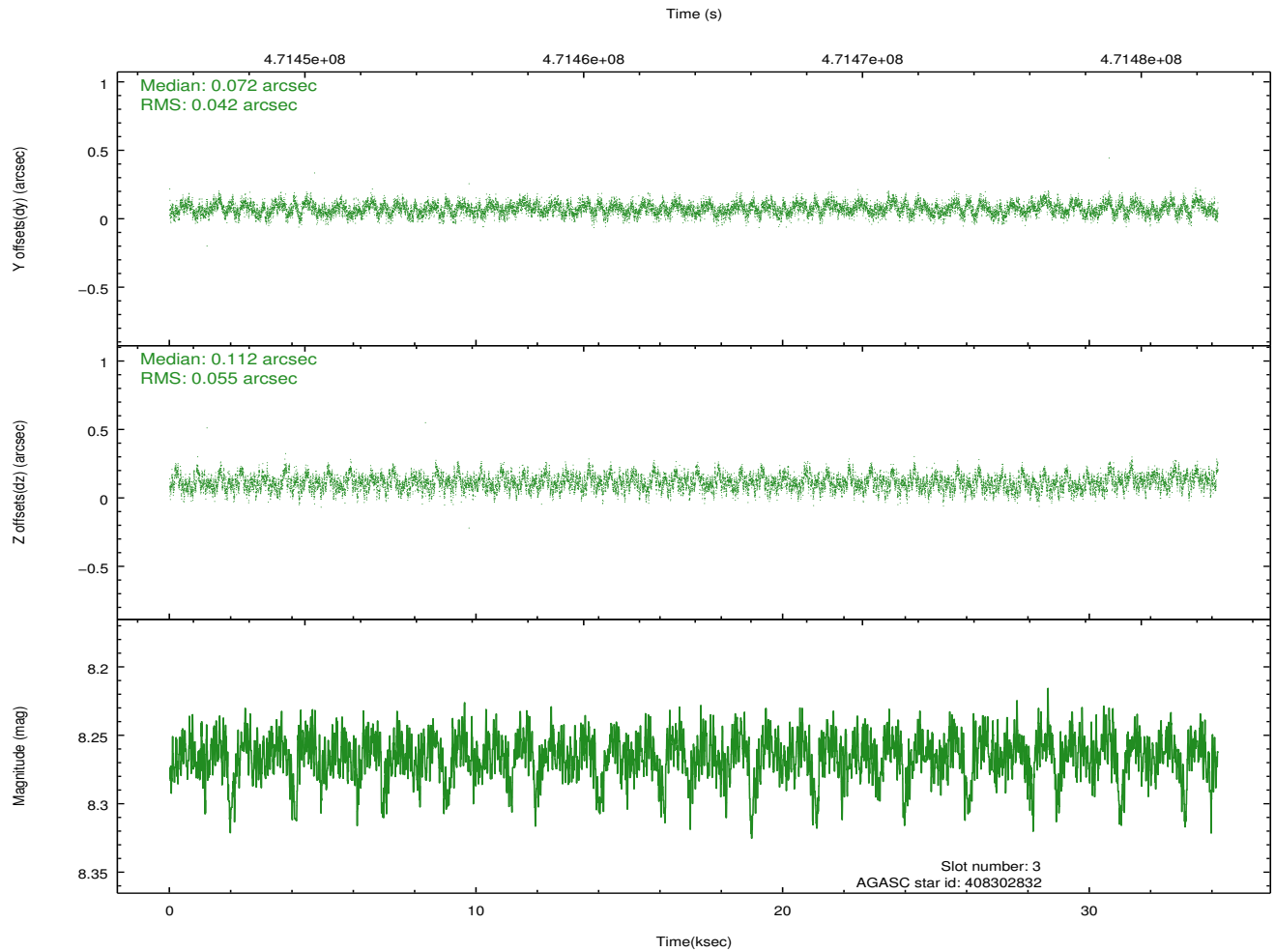
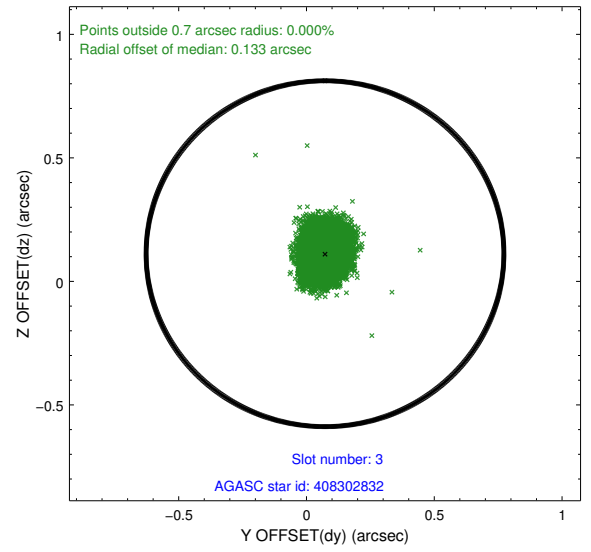
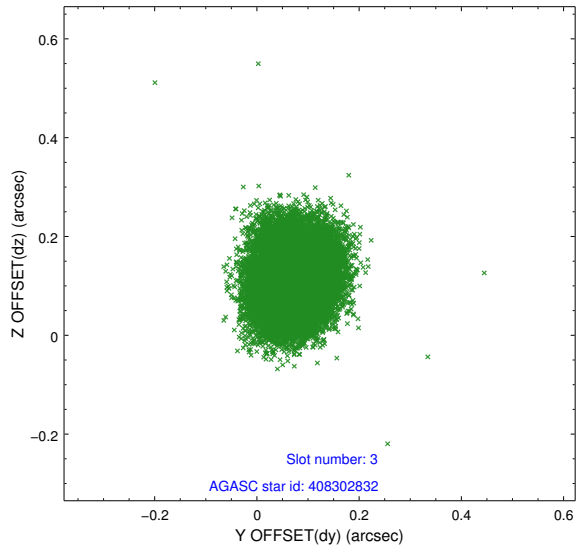


Slot Statistics

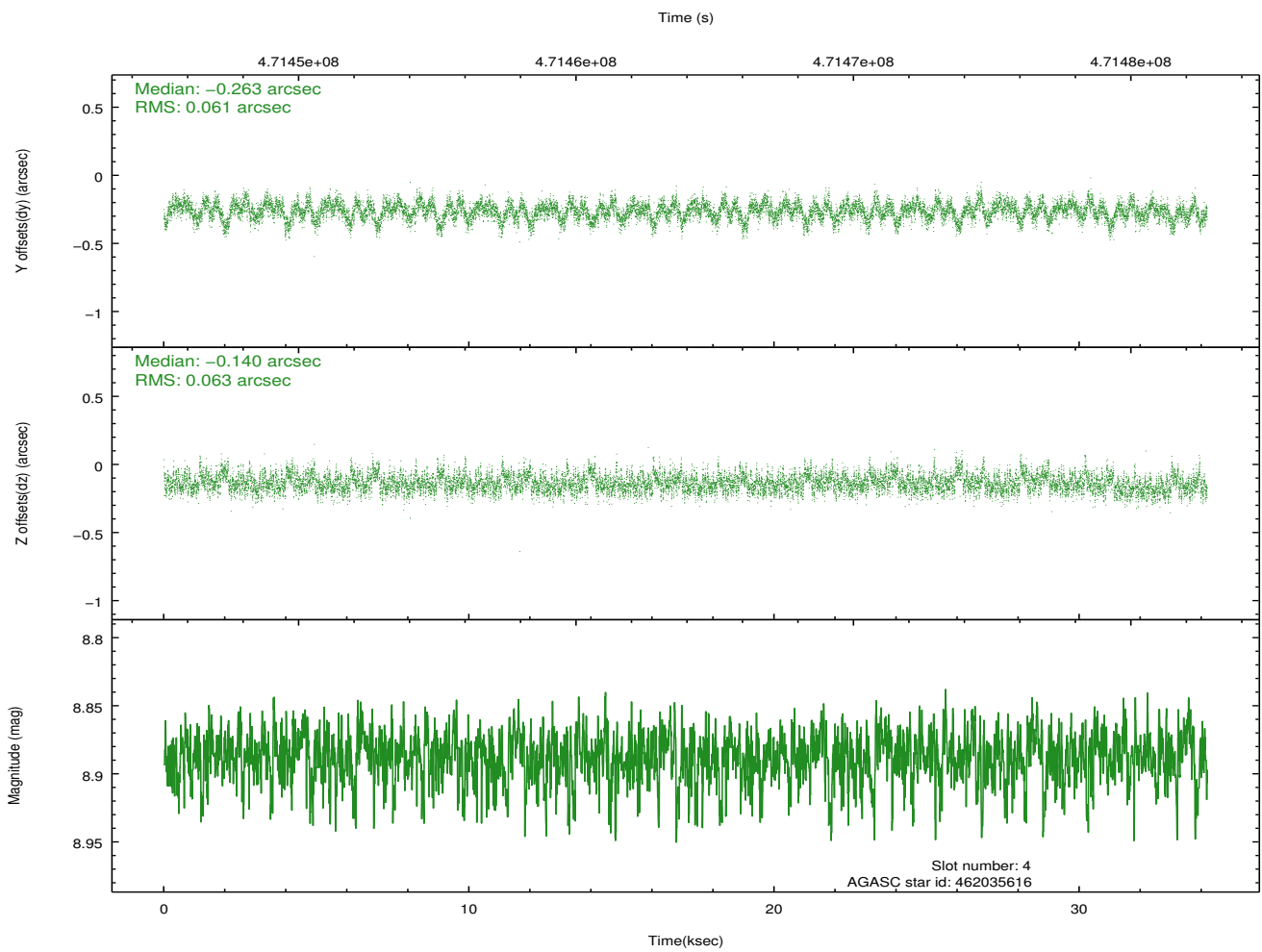
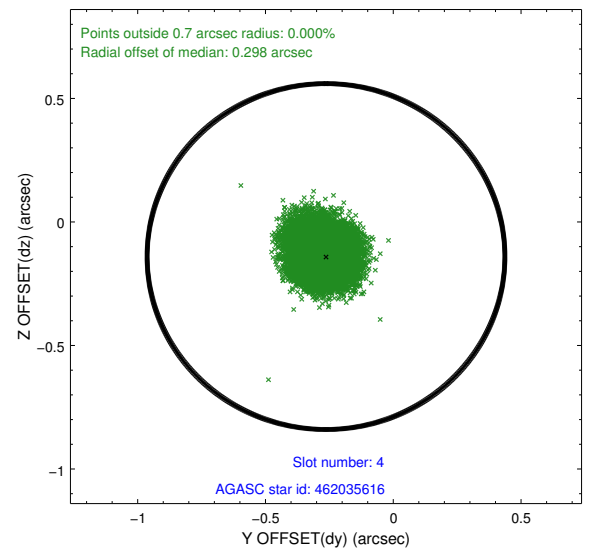
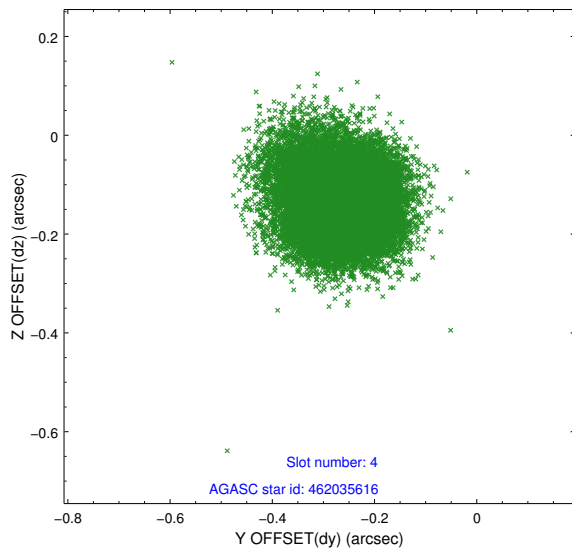
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.02	8338	0.013	0.003	0.012	0.019	0.000000	0.000000	922.89	-1736.66
1	FID		ACIS-S-4	7.03	8337	0.183	-0.005	0.011	0.021	0.000000	0.000000	2140.48	167.44
2	FID		ACIS-S-5	7.06	8336	-0.224	0.013	0.009	0.025	0.000000	0.000000	-1826.16	161.10
3	GUIDE	used	408302832	8.27	16670	0.072	0.112	0.075	0.118	273.672456	44.652466	-532.43	-2116.06
4	GUIDE	used	462035616	8.89	16667	-0.263	-0.140	0.093	0.153	274.563051	45.561500	663.06	1677.38
5	GUIDE	used	462040192	9.42	16534	0.010	-0.354	0.122	0.196	274.013625	45.823937	-936.44	2168.91
6	GUIDE	used	408293000	8.28	16672	0.114	0.323	0.066	0.104	273.090070	44.973669	-2289.15	-1434.59
7	GUIDE	used	462034744	8.79	16582	0.066	0.052	0.079	0.126	273.348382	45.590916	-2294.03	881.20

2.4 Star Slots

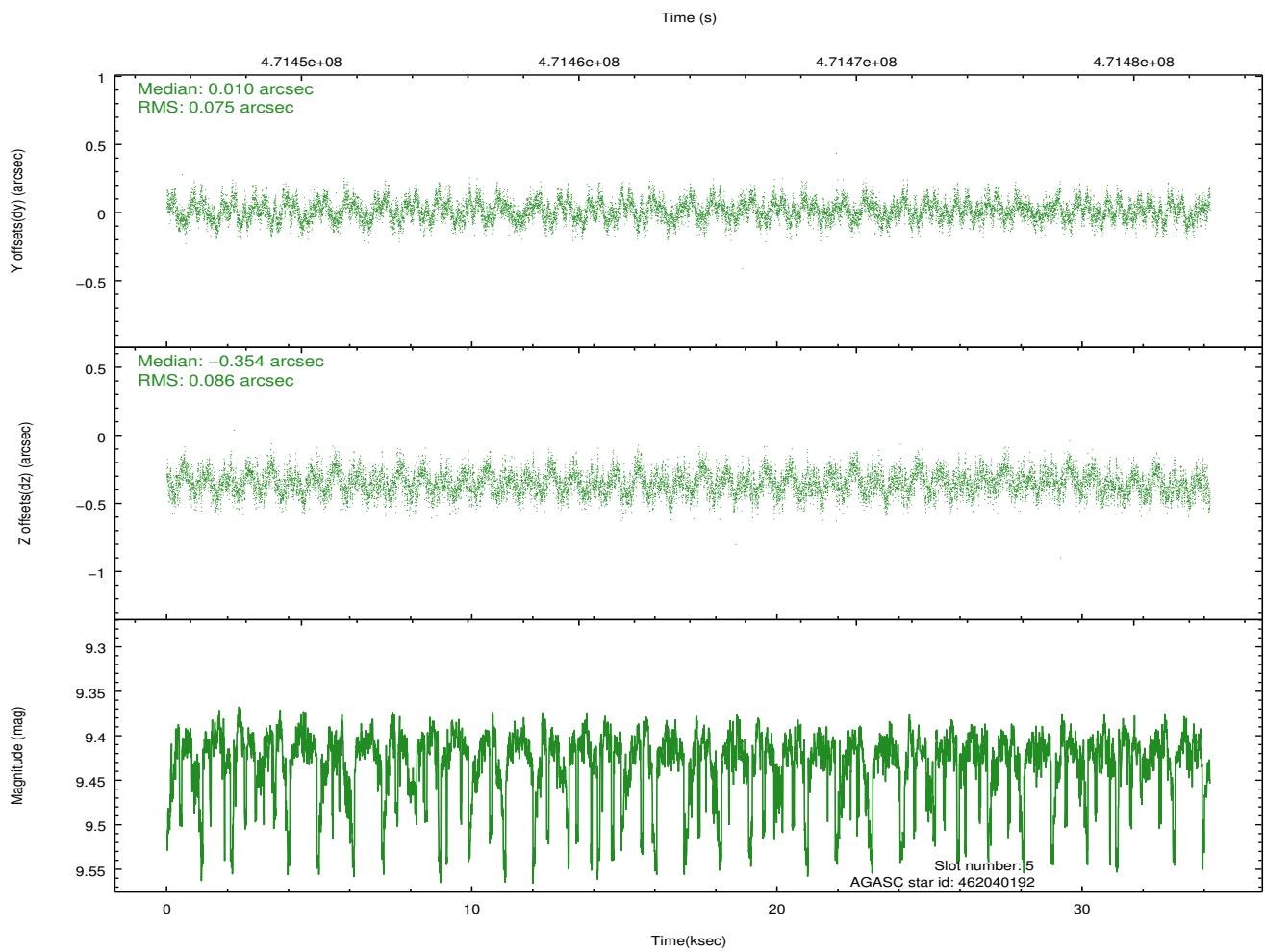
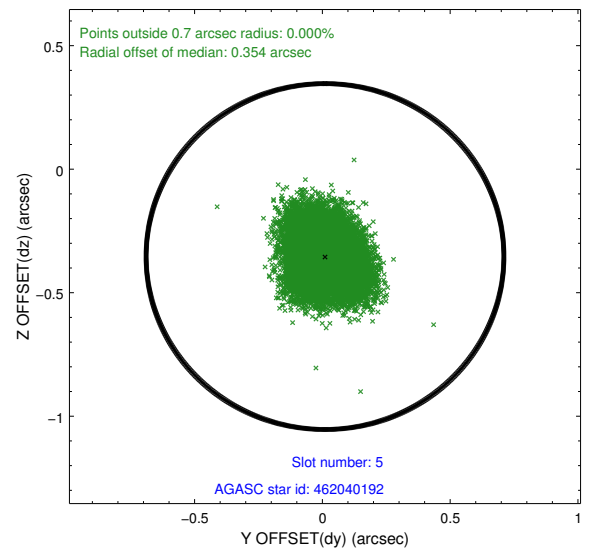
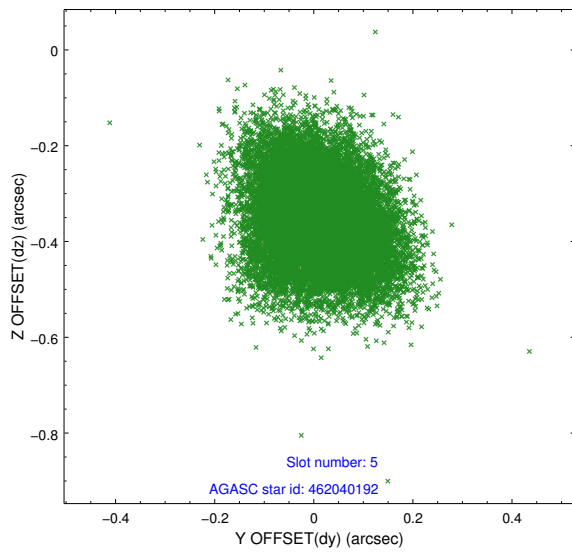
2.4.1 Slot 3



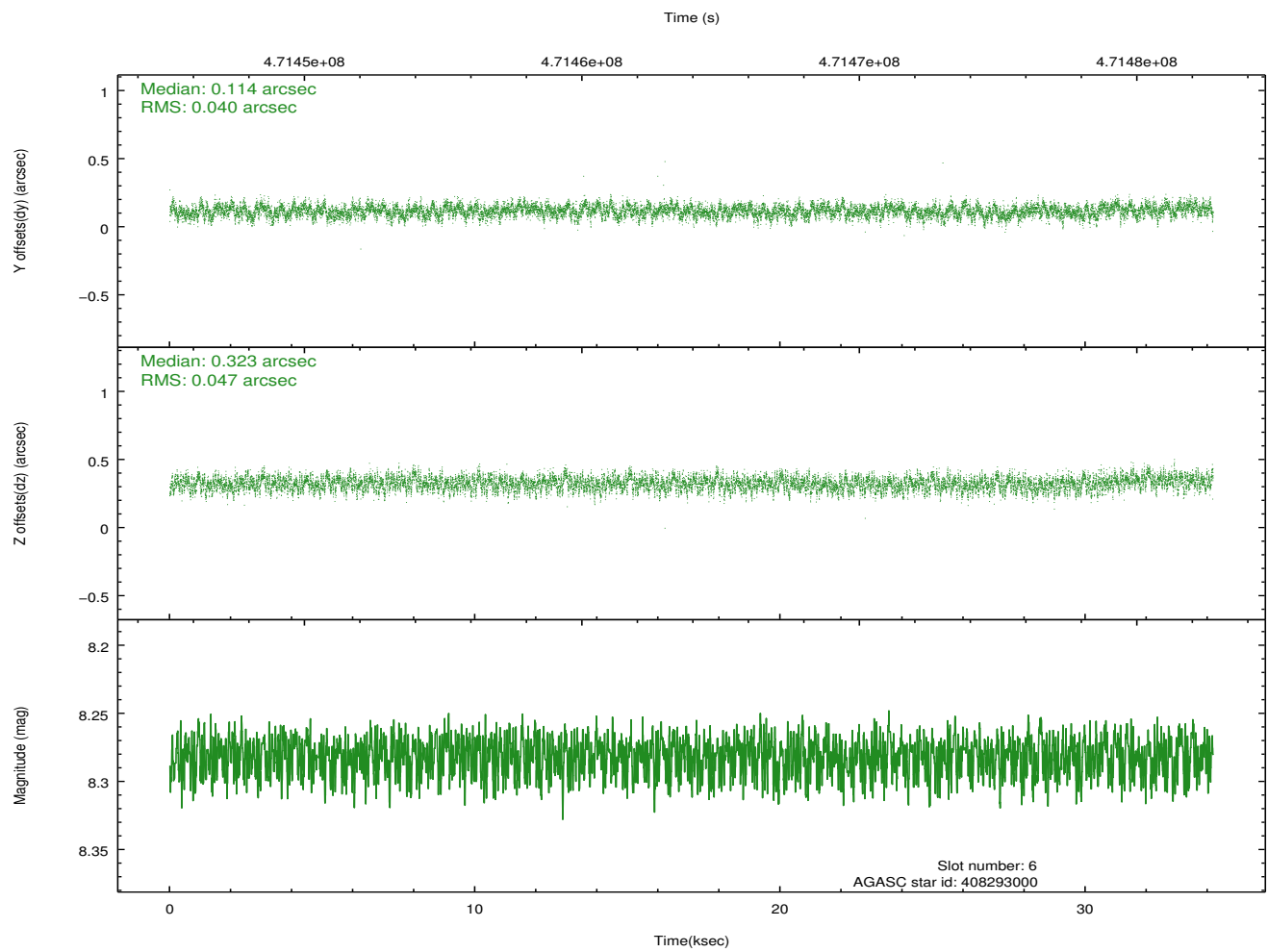
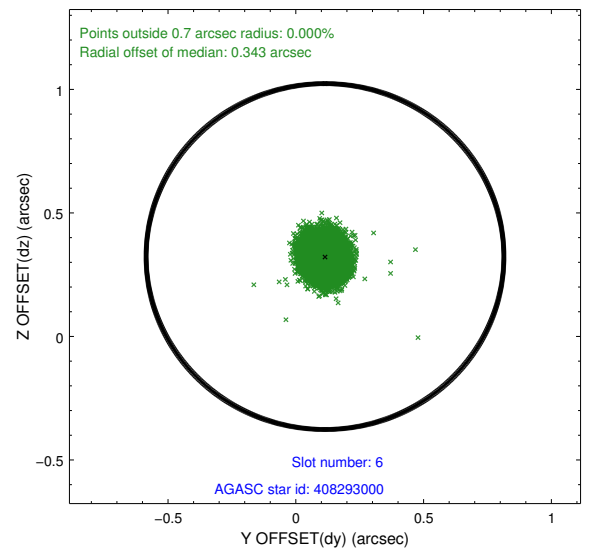
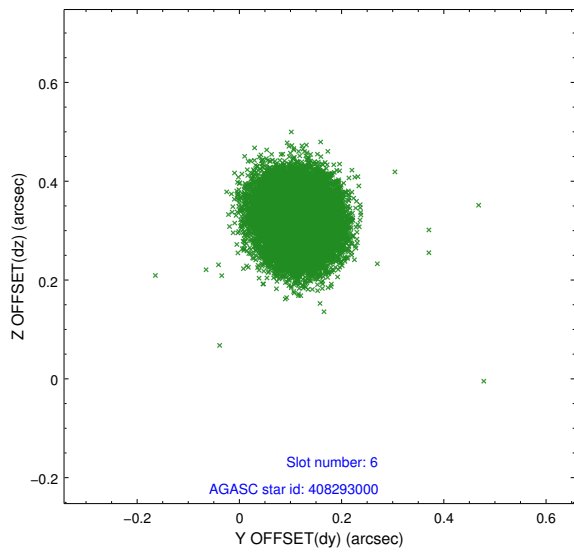
2.4.2 Slot 4



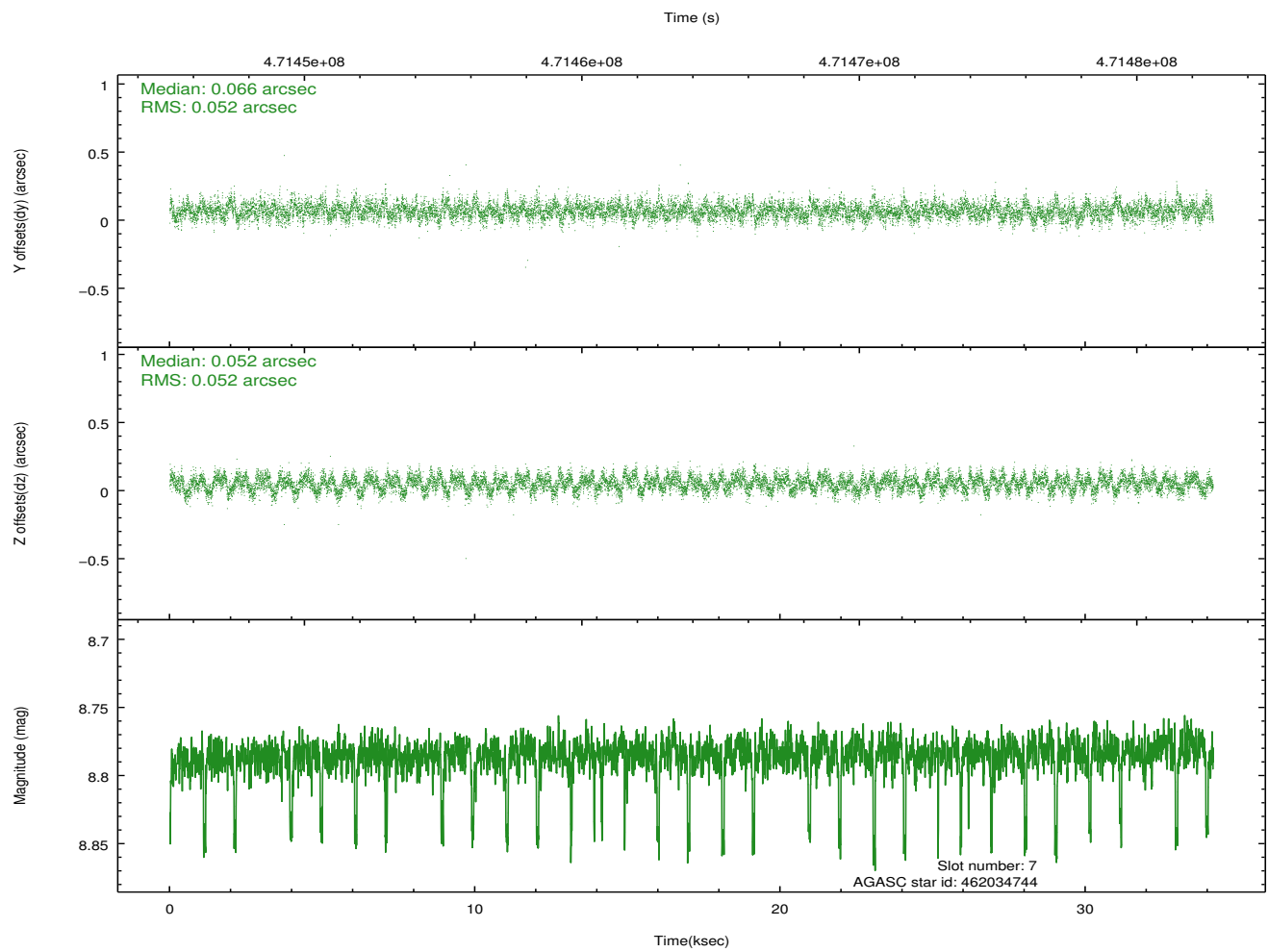
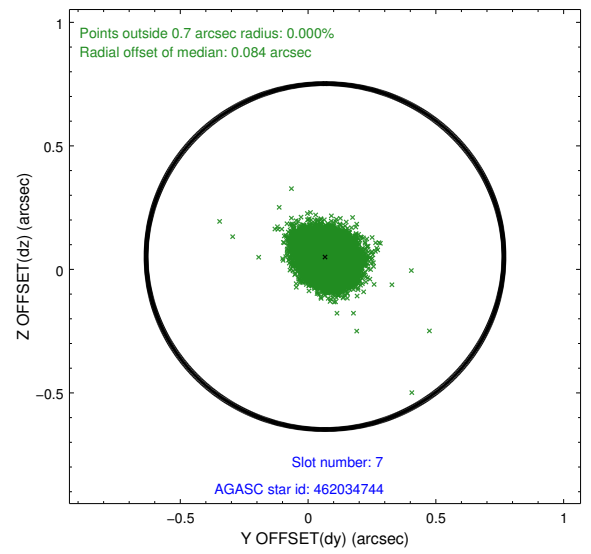
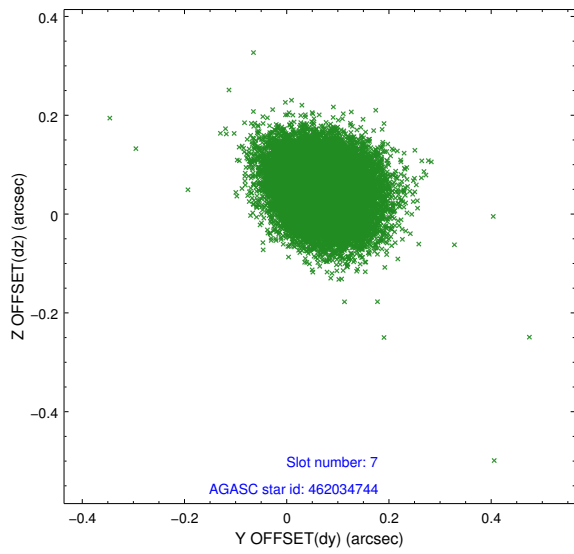
2.4.3 Slot 5



2.4.4 Slot 6

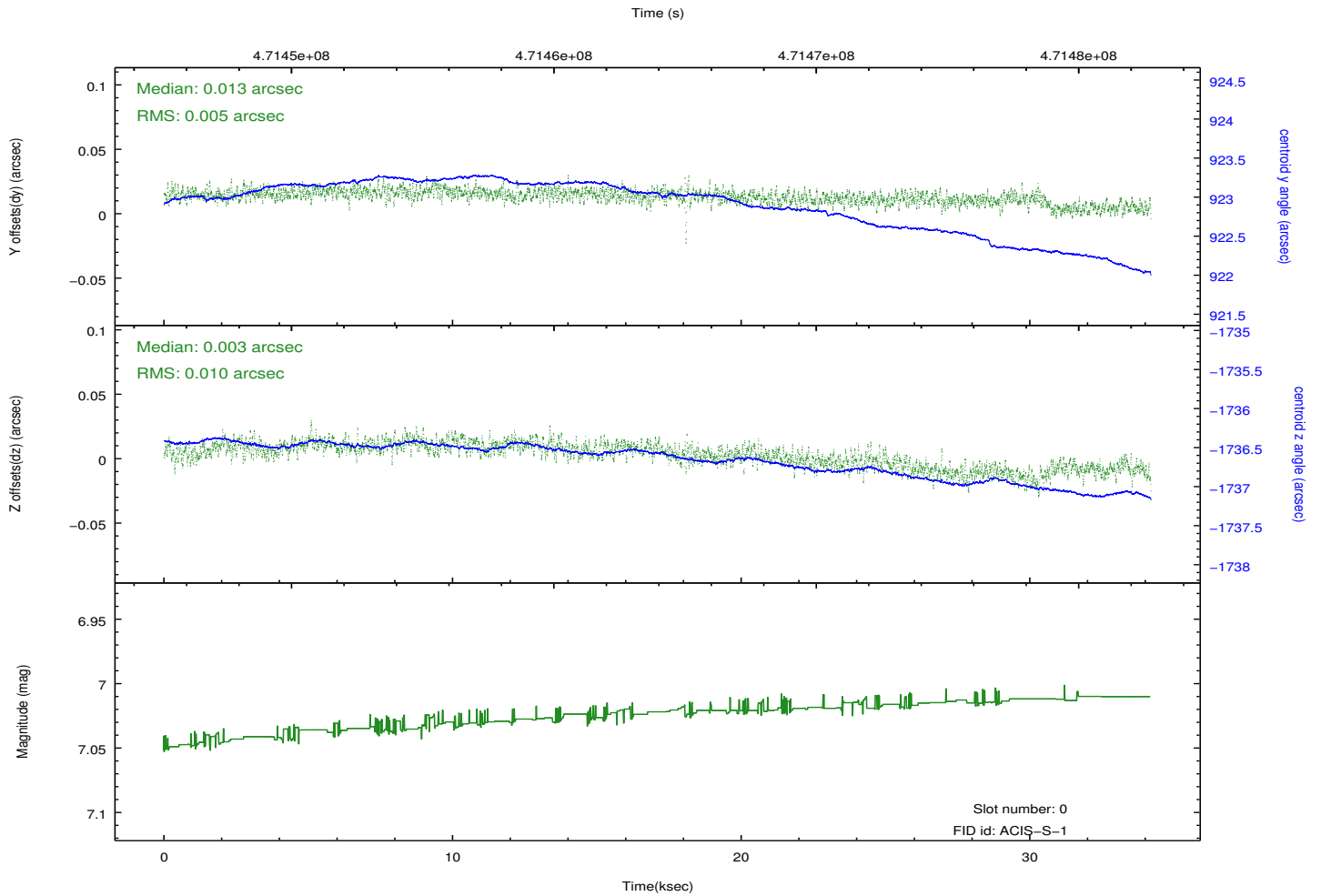
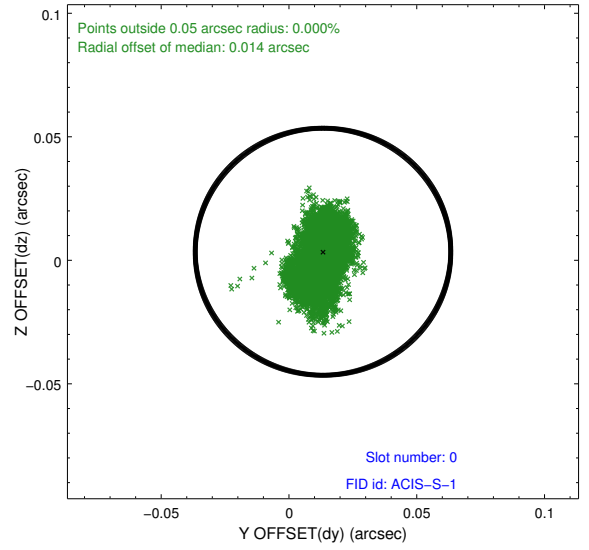
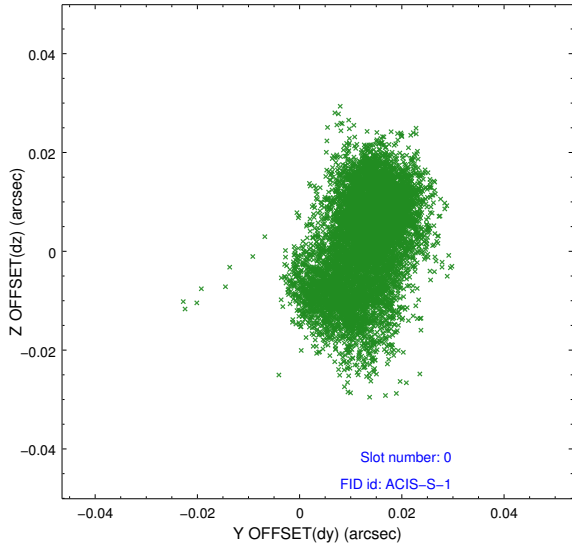


2.4.5 Slot 7

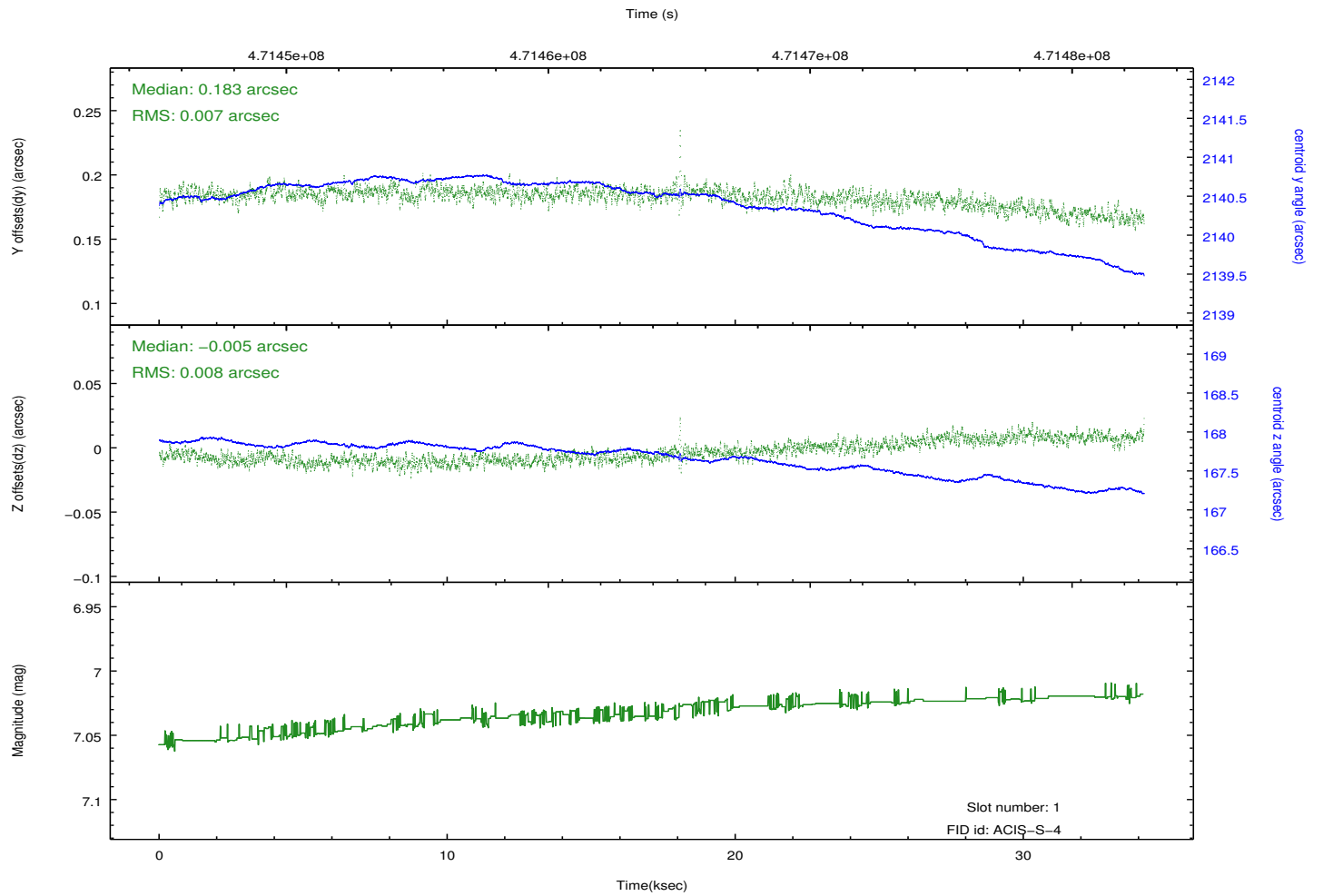
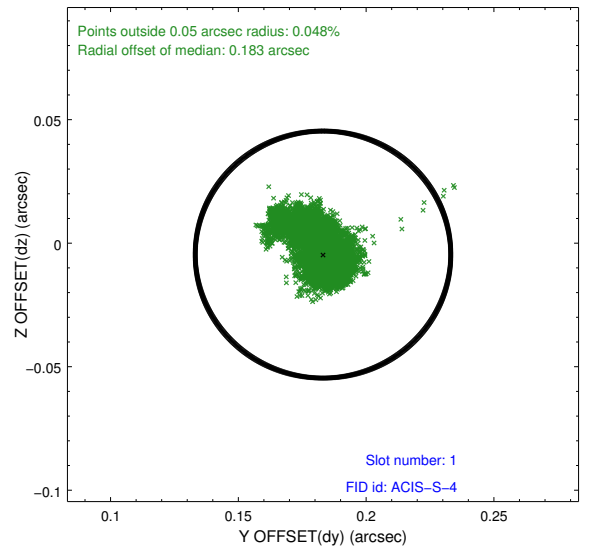
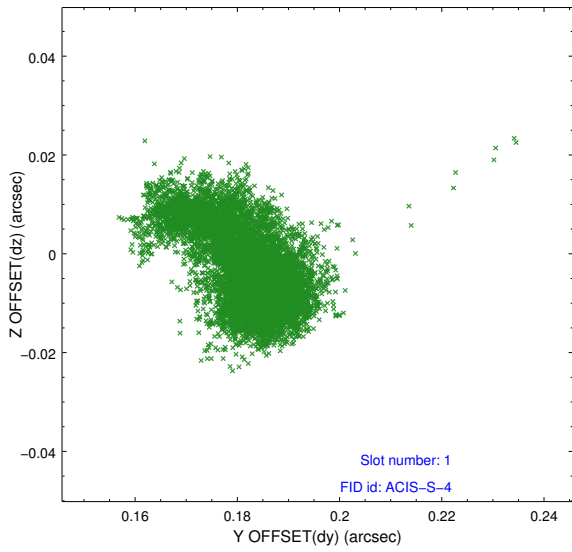


2.5 FID Slots

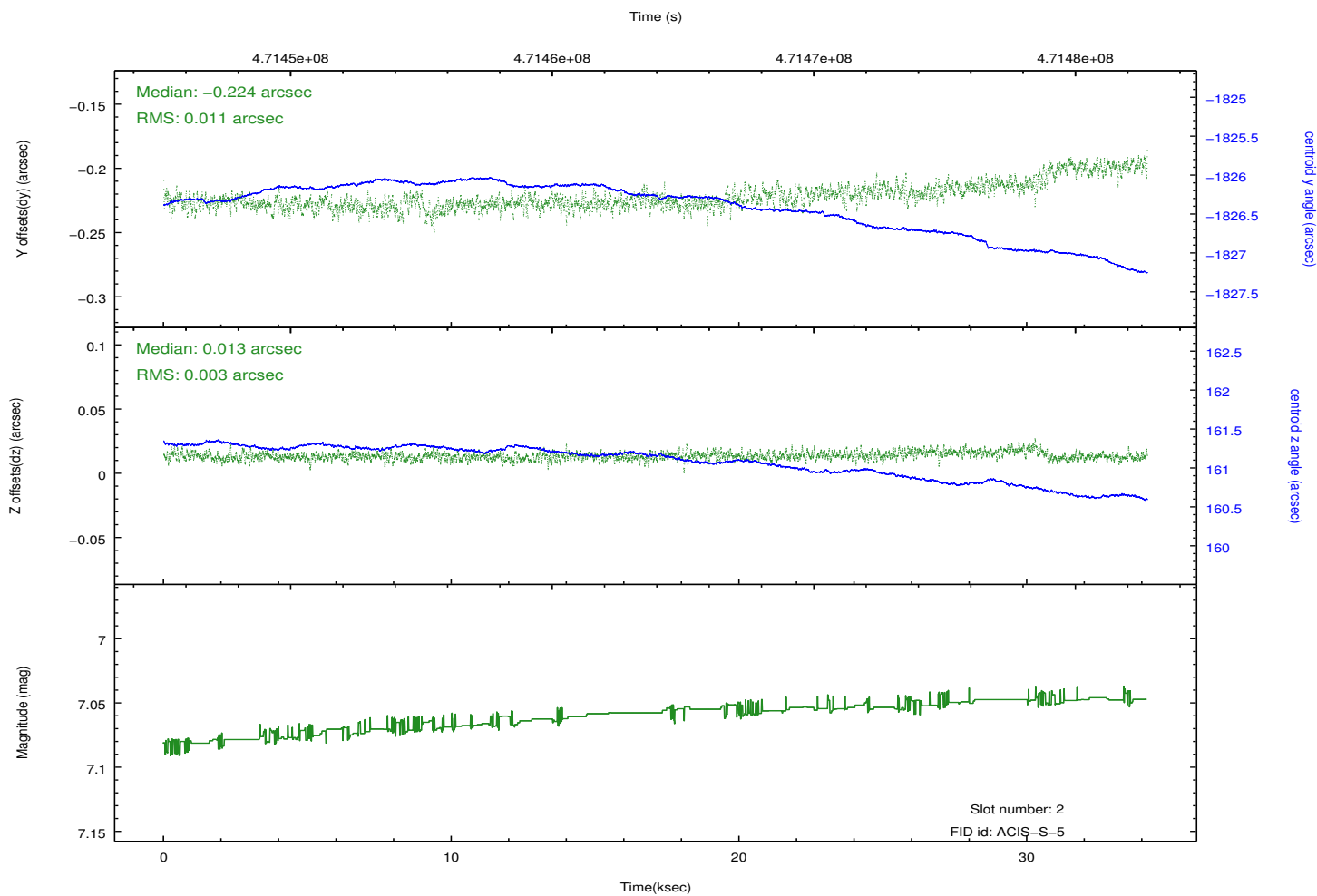
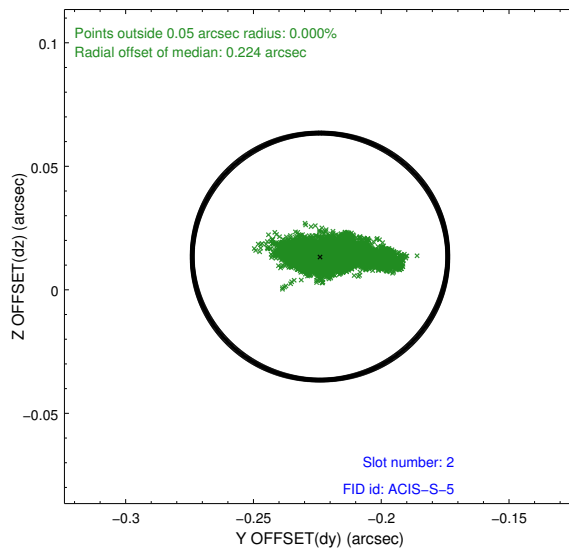
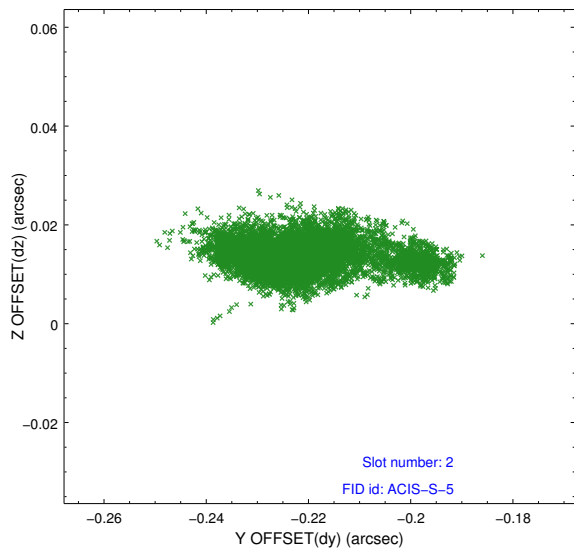
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.967999873519

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.