

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12690 - L2 Version 2
Chandra X-Ray Center

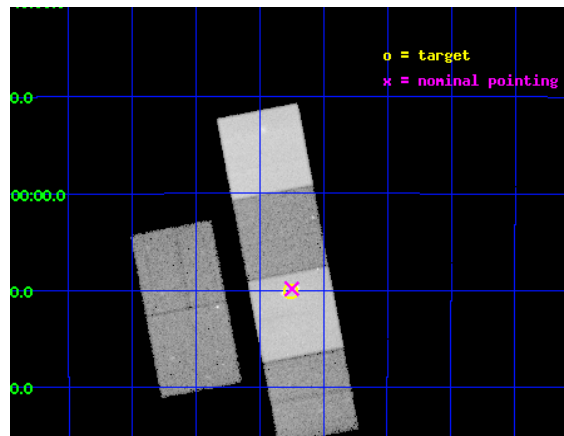
L2 Processing Date : Feb 10 2012

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1 Front

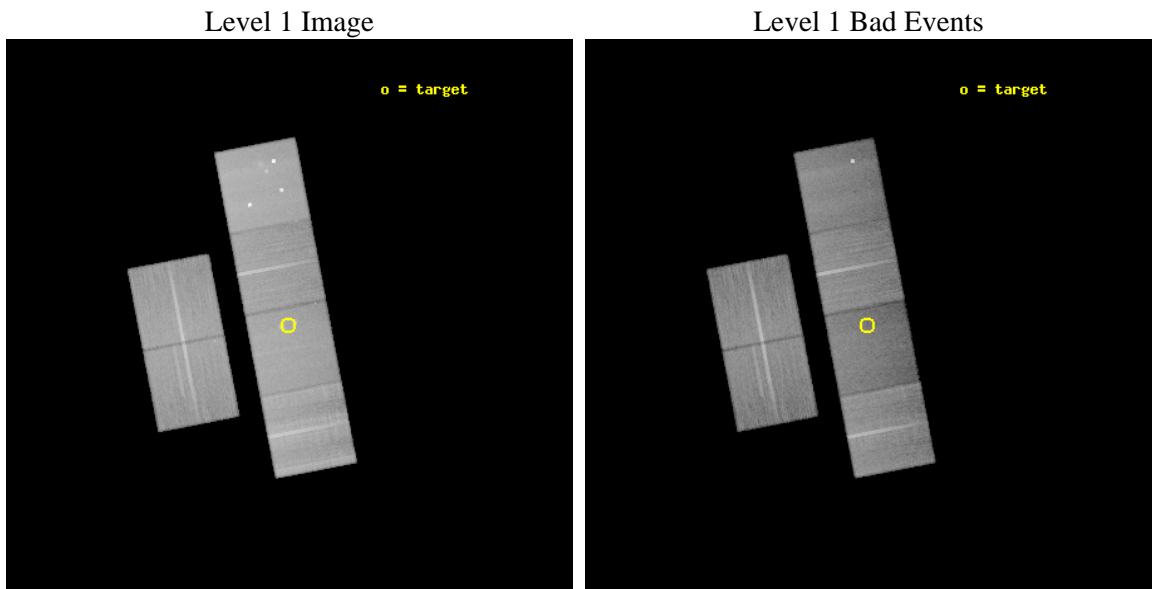
seq_num	501522	Sequence number
obs_id	12690	Observation id
title	Radioactivity, Particle Acceleration, and Supernova Ejecta in the Youngest Galactic SNR G1.9+0.3	Proposal title
observer	Dr. Kazimierz Borkowski	Principal investigator
object	G1.9+0.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.189167	Observer's specified target RA [deg]
dec_targ	-27.168889	Observer's specified target Dec [deg]
ra_nom	267.18722741563	Nominal RA [deg]
dec_nom	-27.164363609366	Nominal Dec [deg]
roll_nom	79.155744647251	Nominal Roll [deg]
revision	2	Processing version of data
ontime	48787.192704797	Sum of GTIs [s]
livetime	48169.419894648	Livetime [s]
ontime2	48780.717737675	Sum of GTIs [s]
ontime3	48783.828554571	Sum of GTIs [s]
ontime5	48787.151664793	Sum of GTIs [s]
ontime6	48783.869584441	Sum of GTIs [s]
ontime7	48787.192704797	Sum of GTIs [s]
ontime8	48787.028544784	Sum of GTIs [s]
l2events	499346	Number of level 2 events



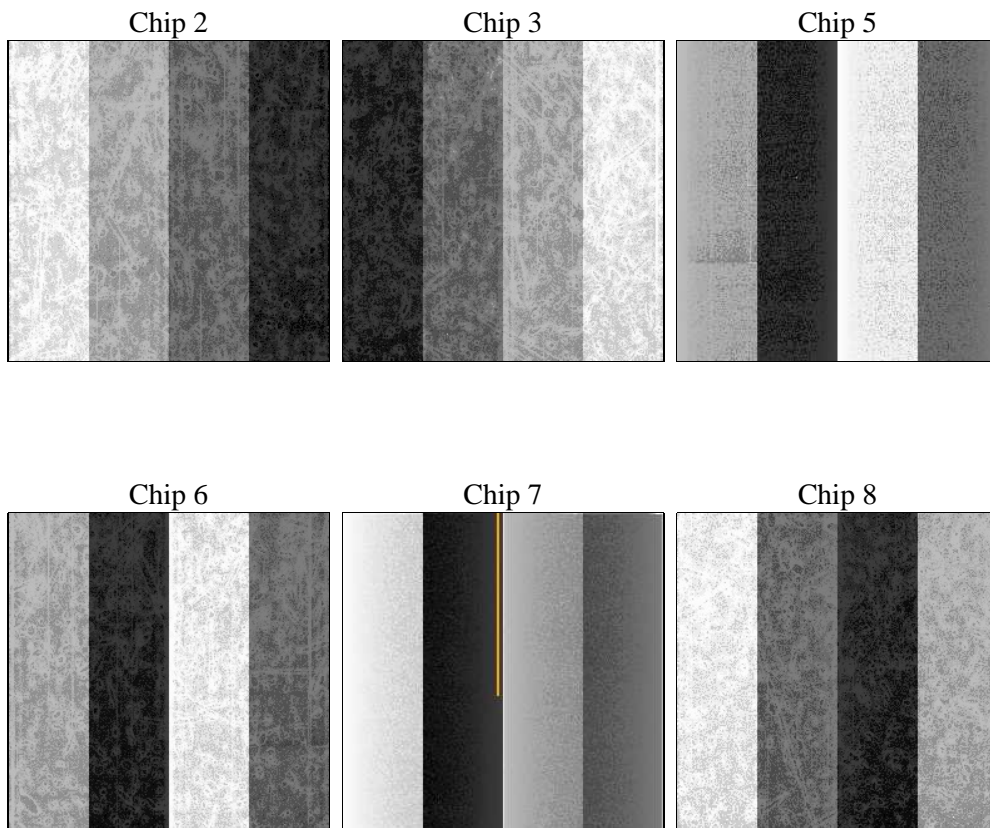
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	48732.088000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	48787.192704797	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	48780.717737675	Sum of GTIs [s]
date	2012-02-10T07:21:30	Date and time of file creation	ontime3	48783.828554571	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	48787.151664793	Sum of GTIs [s]
			ontime6	48783.869584441	Sum of GTIs [s]
			ontime7	48787.192704797	Sum of GTIs [s]
			ontime8	48787.028544784	Sum of GTIs [s]
			l1events	2038979	Number of level 1 events

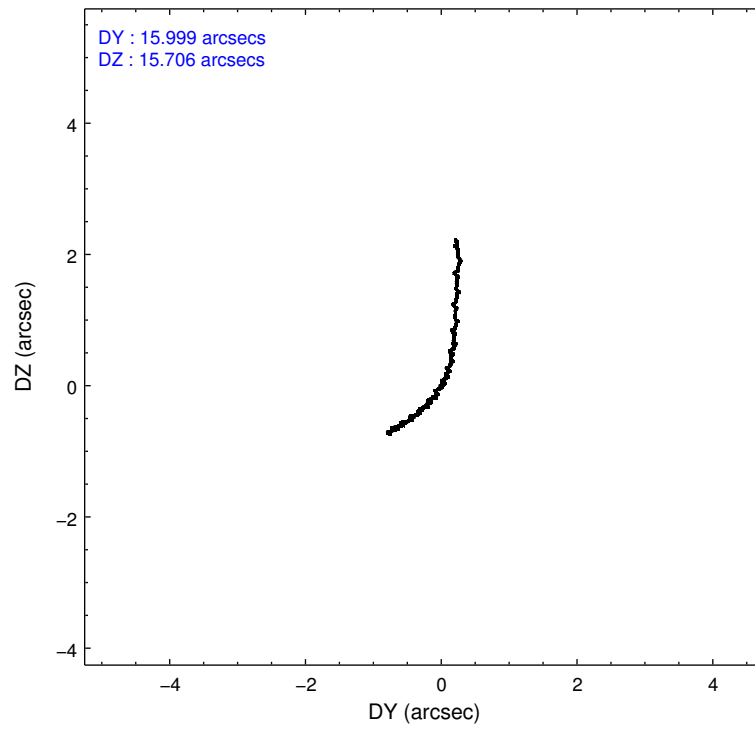
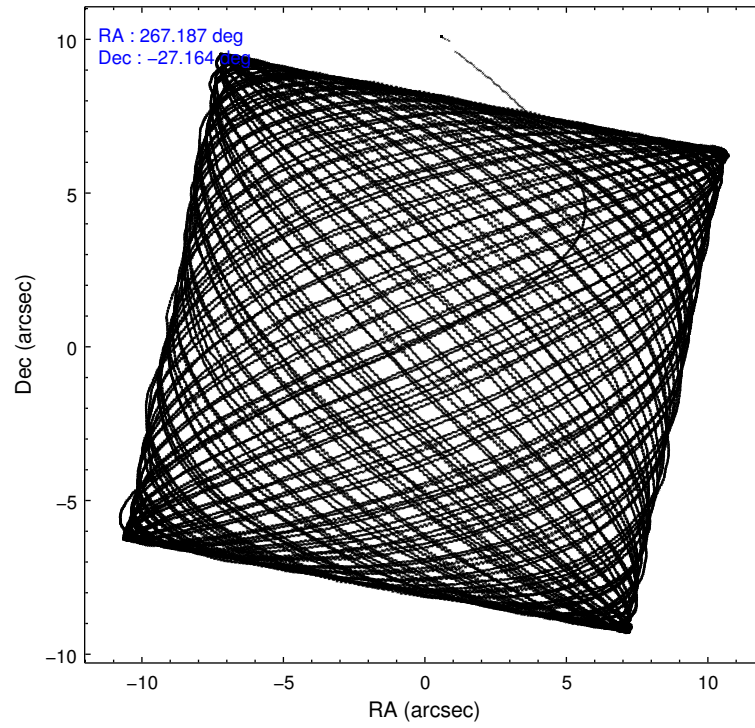
2.1.4 Events

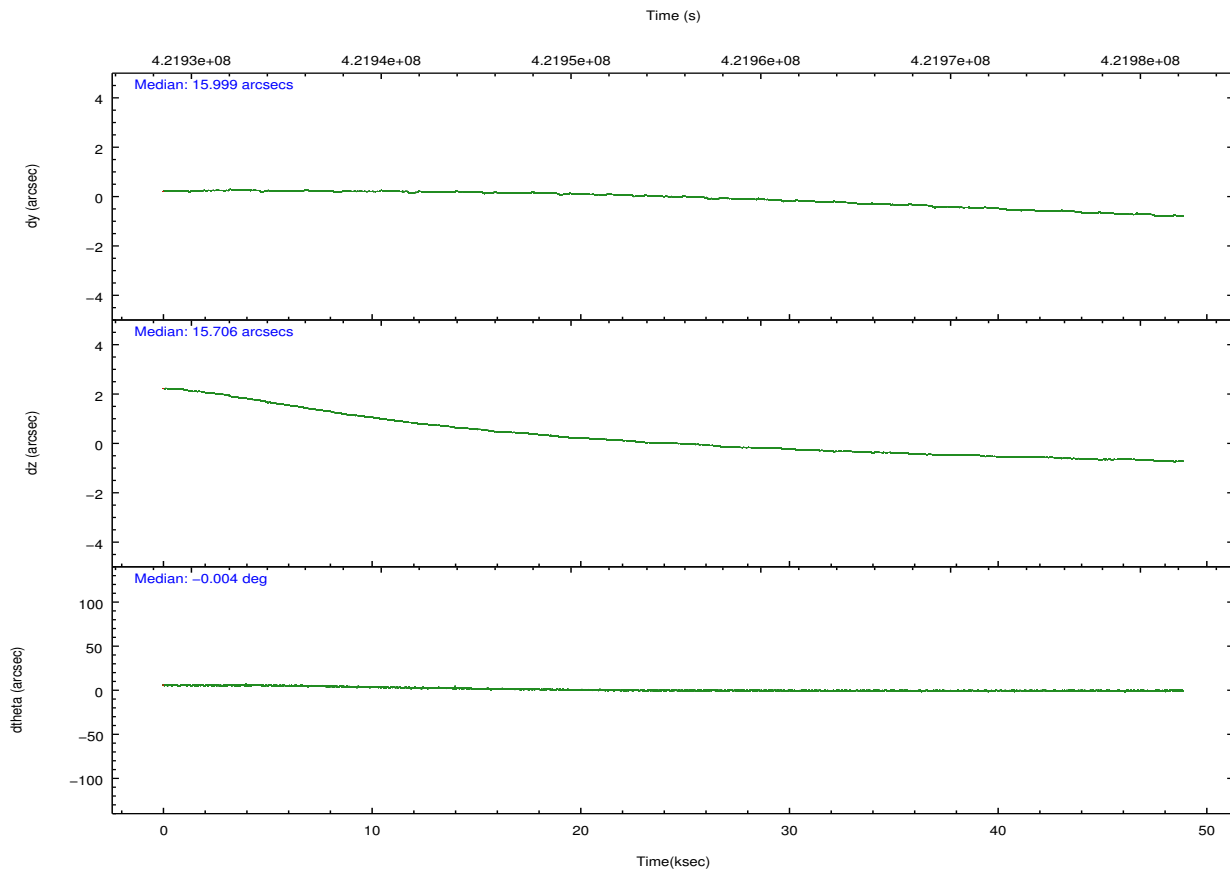
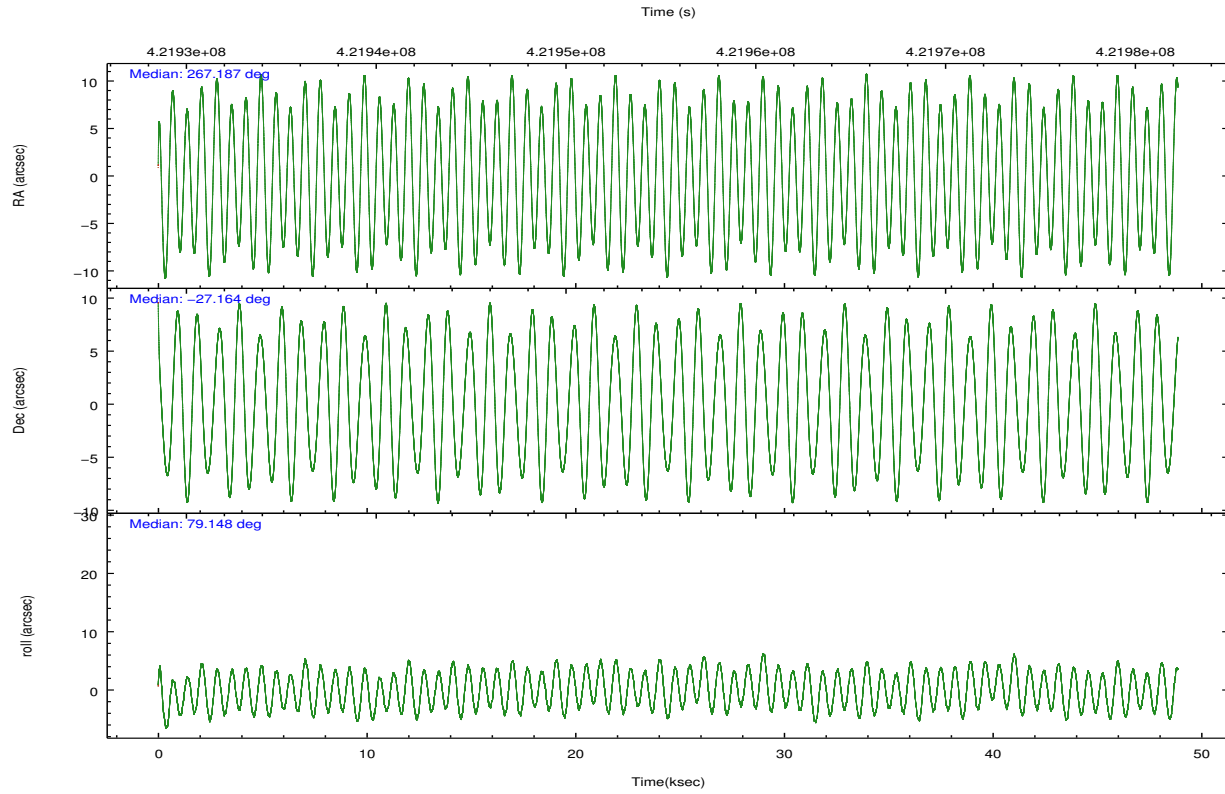
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	304014	284823	443611	294726	333242	378563	grade 0 events	14024	13298	33260	15877	17880	30849
rejected events	269283	251704	203972	256331	165264	273192		4%	4%	7%	5%	5%	8%
rejected %	88%	88%	45%	86%	49%	72%	grade 1 events	194	175	775	168	469	337
								0%	0%	0%	0%	0%	0%
							grade 2 events	8286	7006	74428	8040	36017	25296
								2%	2%	16%	2%	10%	6%
							grade 3 events	3305	3508	9268	3695	15444	11267
								1%	1%	2%	1%	4%	2%
							grade 4 events	3328	3273	9080	3622	15372	10349
								1%	1%	2%	1%	4%	2%
							grade 5 events	10023	11822	34098	11878	34577	18224
								3%	4%	7%	4%	10%	4%
							grade 6 events	5790	6035	113627	7161	83278	27615
								1%	2%	25%	2%	24%	7%
							grade 7 events	259064	239706	169075	244285	130205	254626
								85%	84%	38%	82%	39%	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	267.197705	267.187227415634	CCD I2 on	O1	Y
[deg] Pointing Dec	-27.190063	-27.16436360936575	CCD I3 on	Y	Y
[deg] Pointing Roll	79.003903	79.15574464725084	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	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)	421931066.184000	421929815.7663	CCD S5 on	N	N
Observation start date	2011-05-16T11:03:20	2011-05-16T10:43:35	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	421979798.184000	421980023.85641	On-chip summing requested	N	N
Observation end date	2011-05-17T00:35:32	2011-05-17T00:40:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



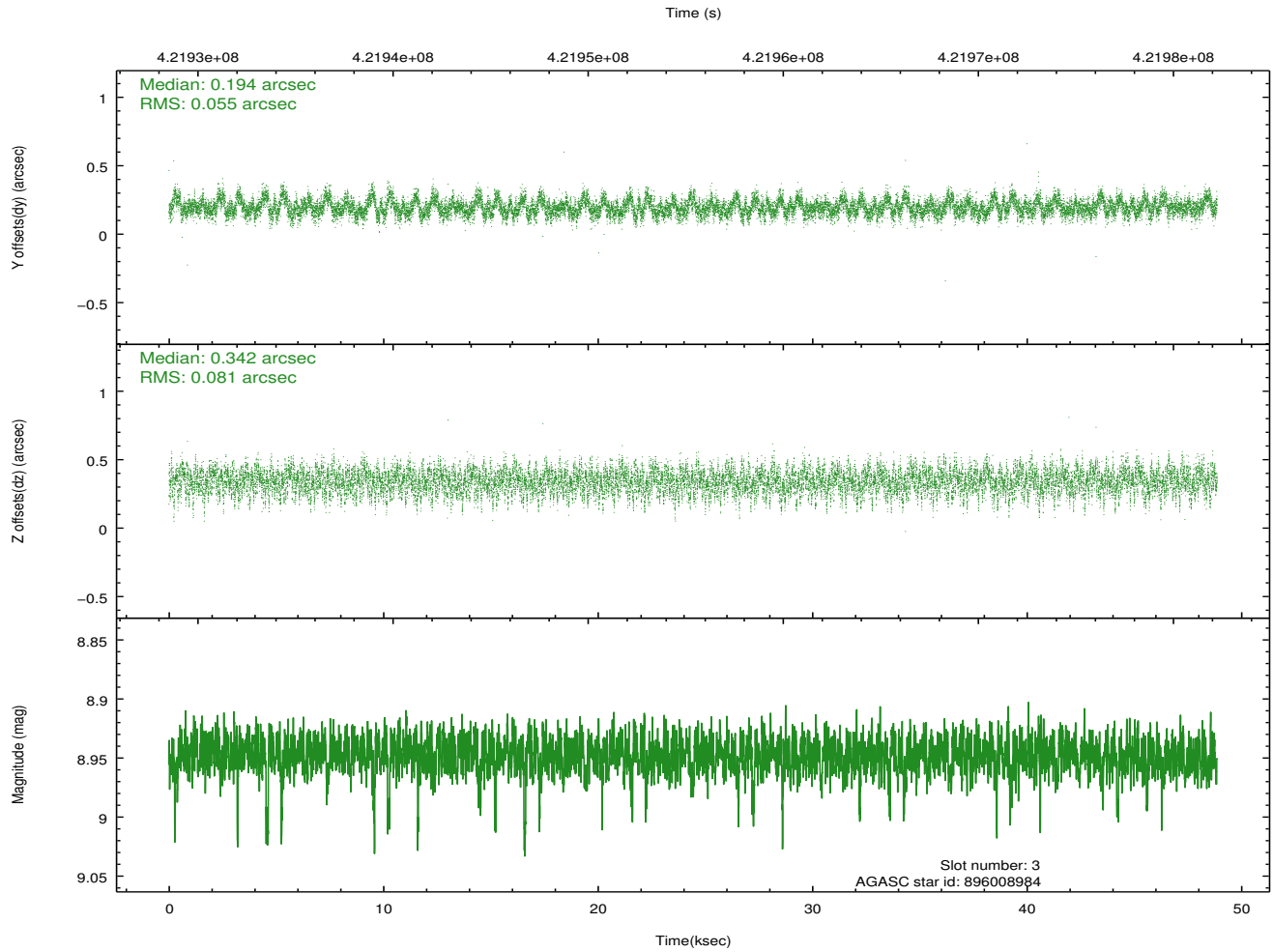
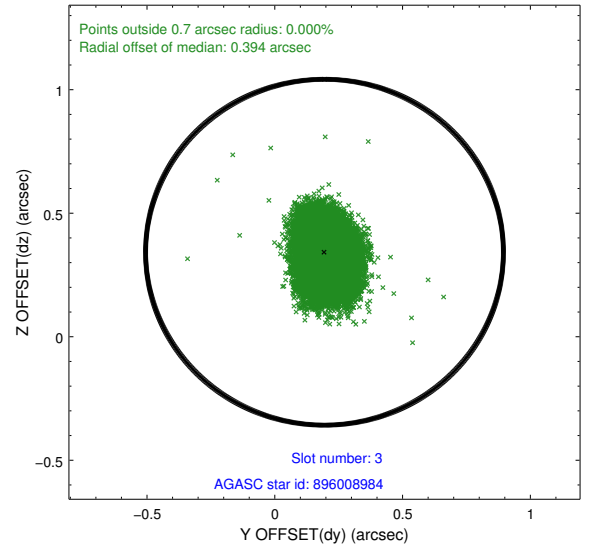
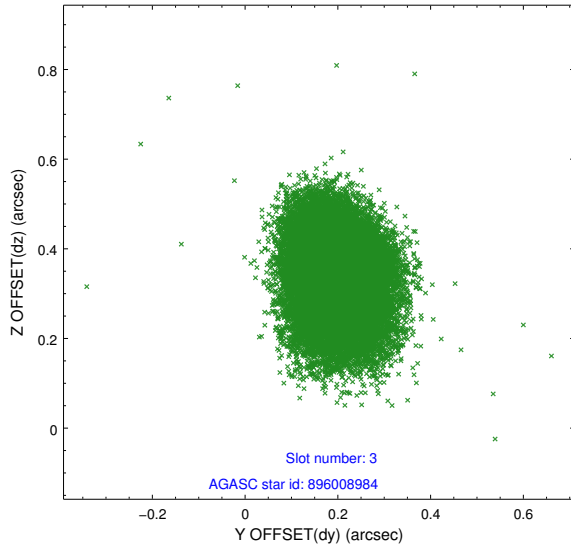


Slot Statistics

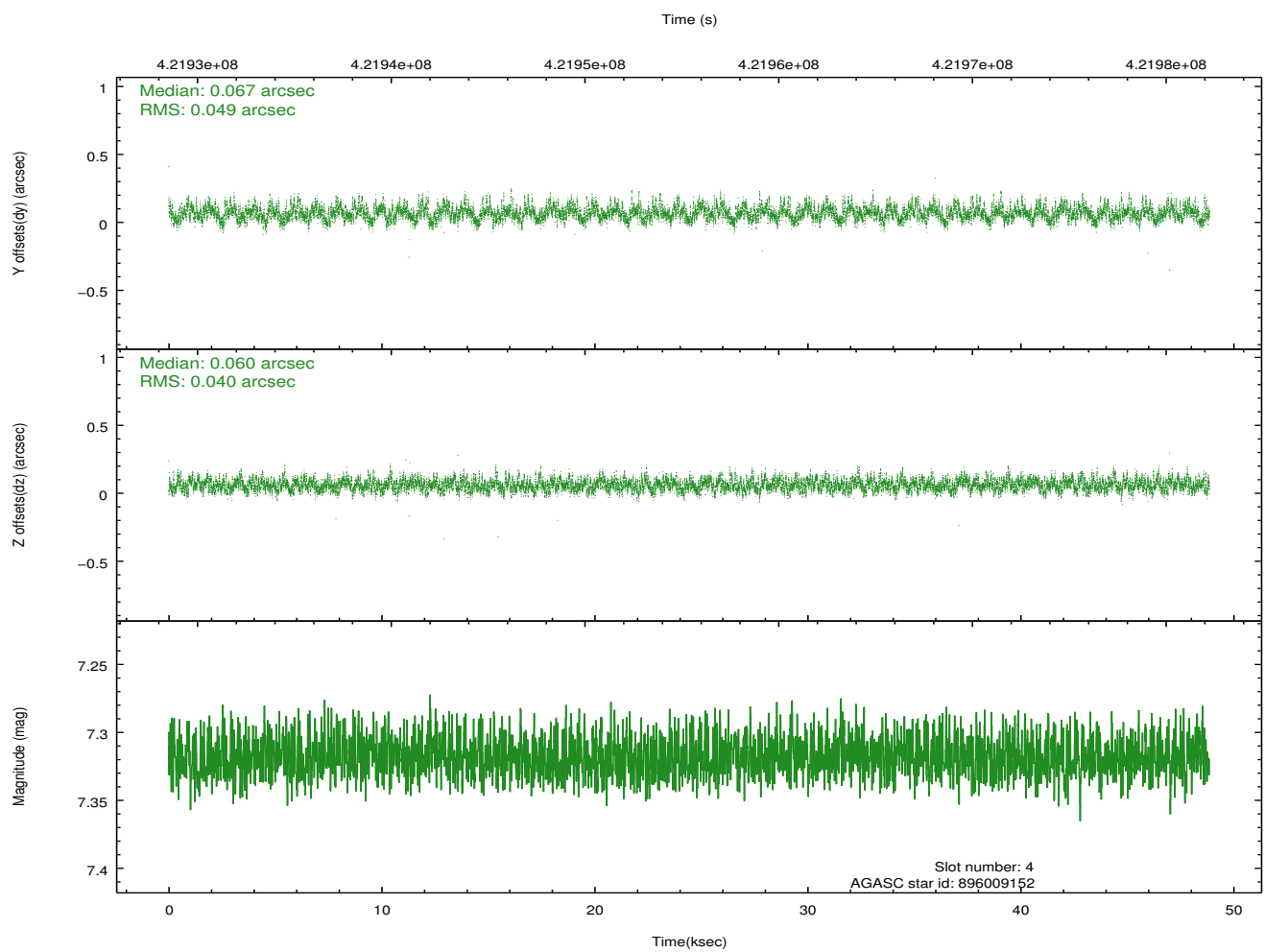
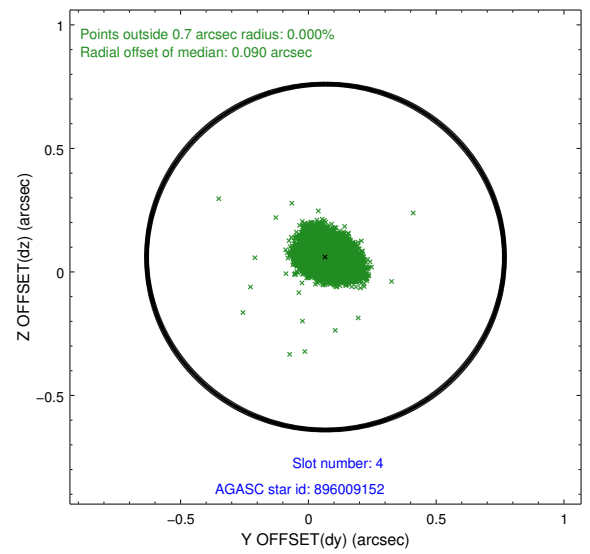
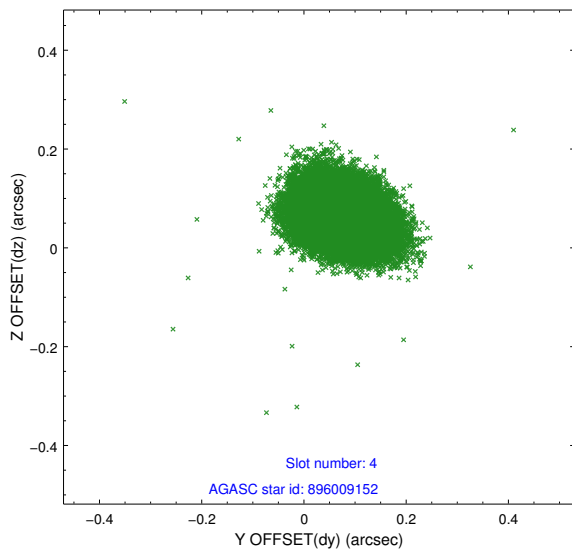
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	11919	-0.102	-0.023	0.013	0.041	0.000000	0.000000	-768.99	-1737.40
1	FID	ACIS-S-4	7.03	11919	0.194	0.054	0.012	0.021	0.000000	0.000000	2144.59	171.17
2	FID	ACIS-S-5	7.05	11916	-0.126	-0.025	0.012	0.037	0.000000	0.000000	-1821.87	164.76
3	GUIDE	896008984	8.95	23815	0.194	0.342	0.104	0.172	267.790868	-27.829489	-1903.24	-2293.48
4	GUIDE	896009152	7.32	23833	0.067	0.060	0.067	0.110	267.588100	-27.061669	690.38	-1140.43
5	GUIDE	897717296	8.26	23833	-0.250	0.235	0.062	0.102	267.921819	-26.875322	1549.54	-2067.16
6	GUIDE	896013040	7.34	23837	-0.095	-0.423	0.063	0.109	266.506589	-26.972299	340.50	2324.79
7	GUIDE	896014528	7.68	23837	0.077	-0.216	0.063	0.110	266.628858	-27.438607	-1229.00	1612.59

2.4 Star Slots

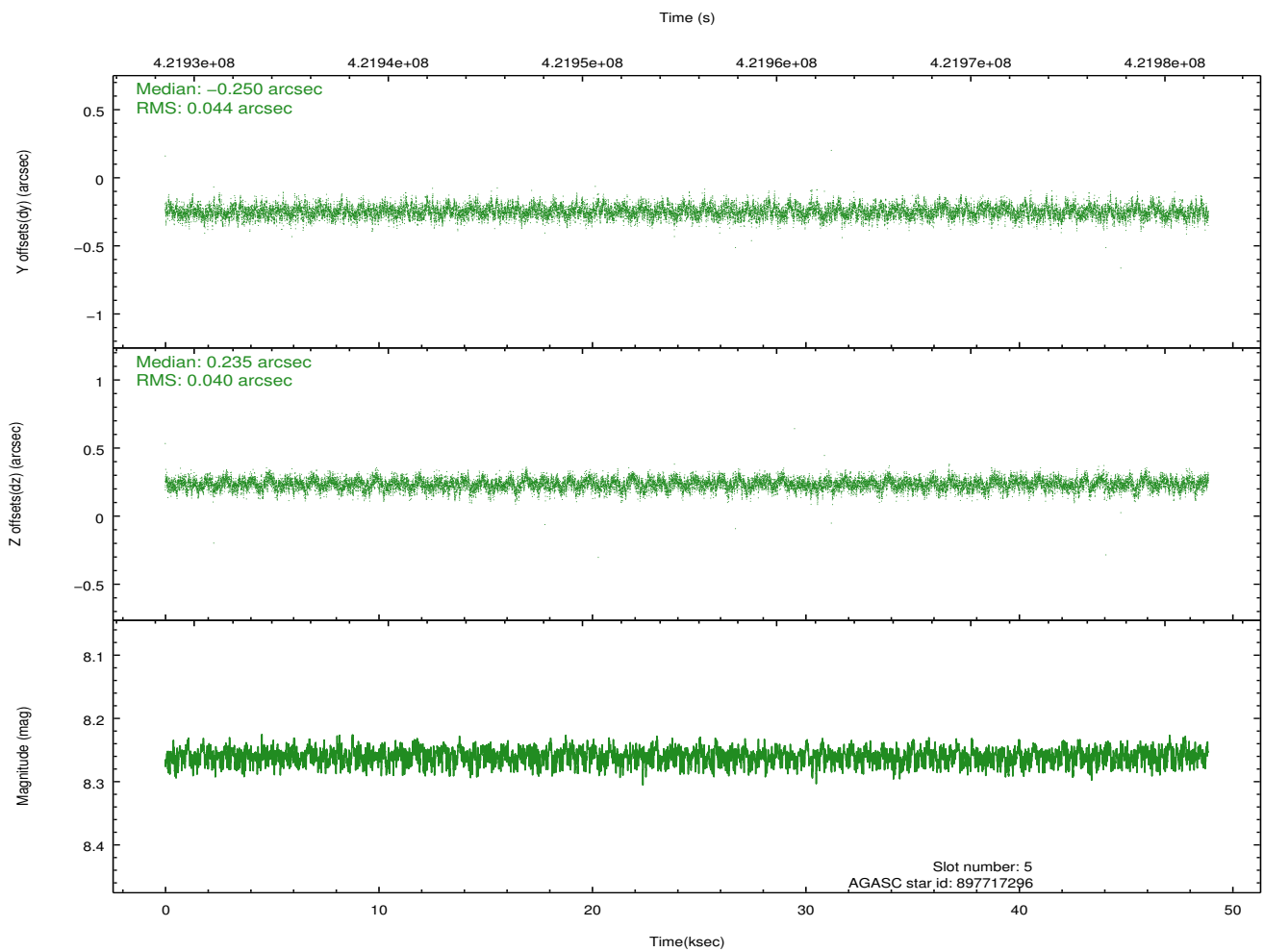
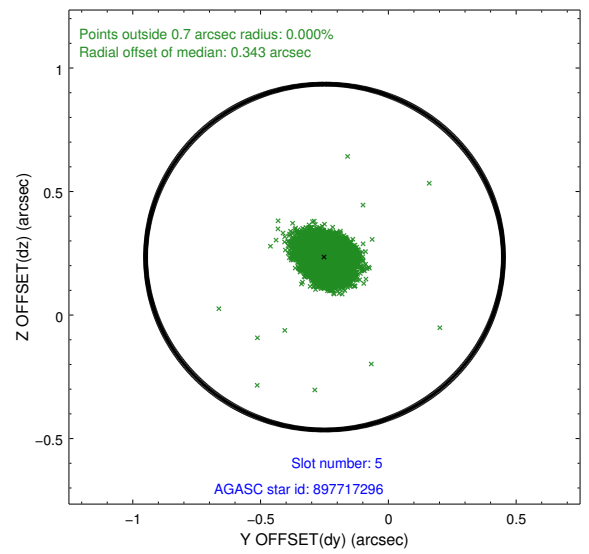
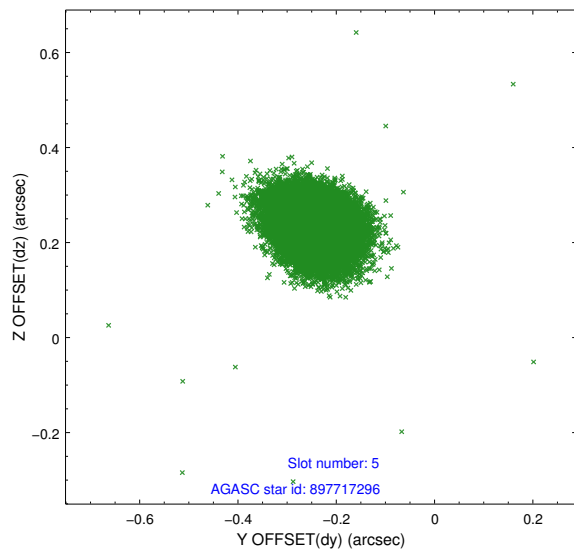
2.4.1 Slot 3



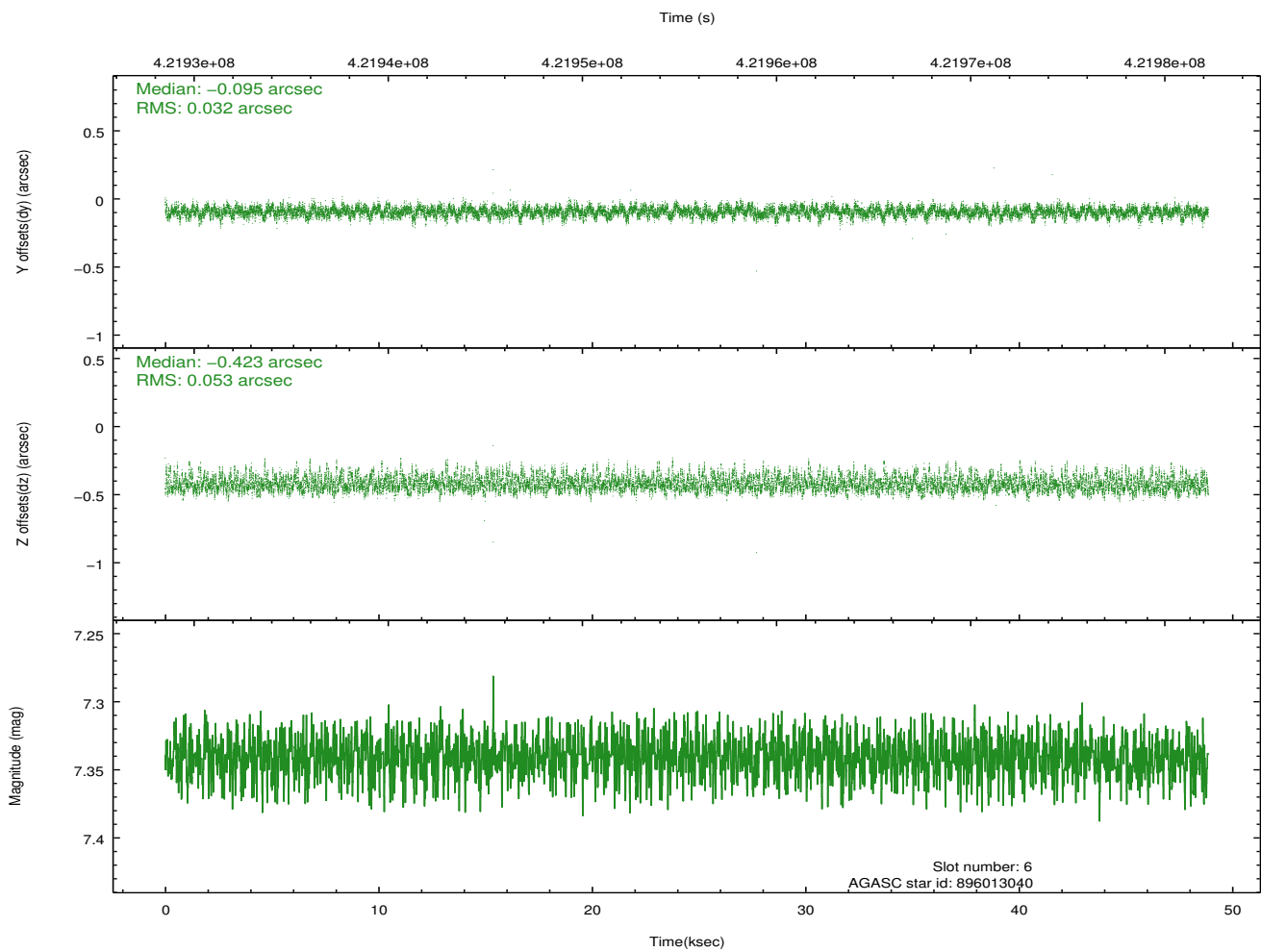
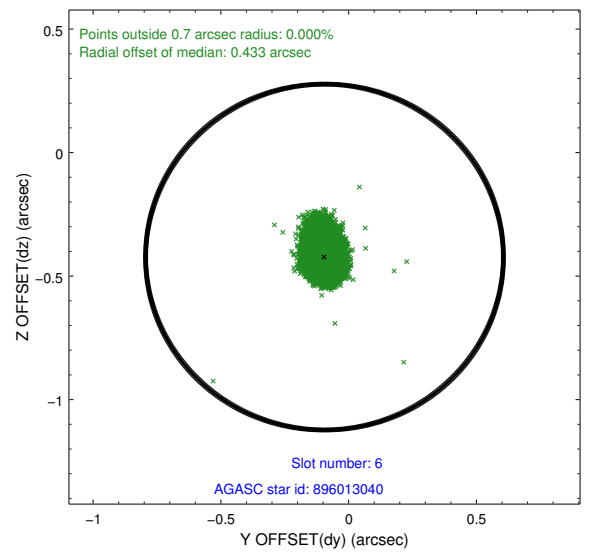
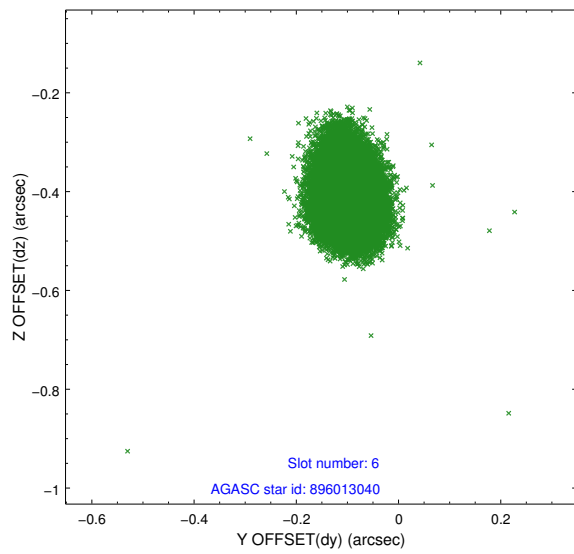
2.4.2 Slot 4



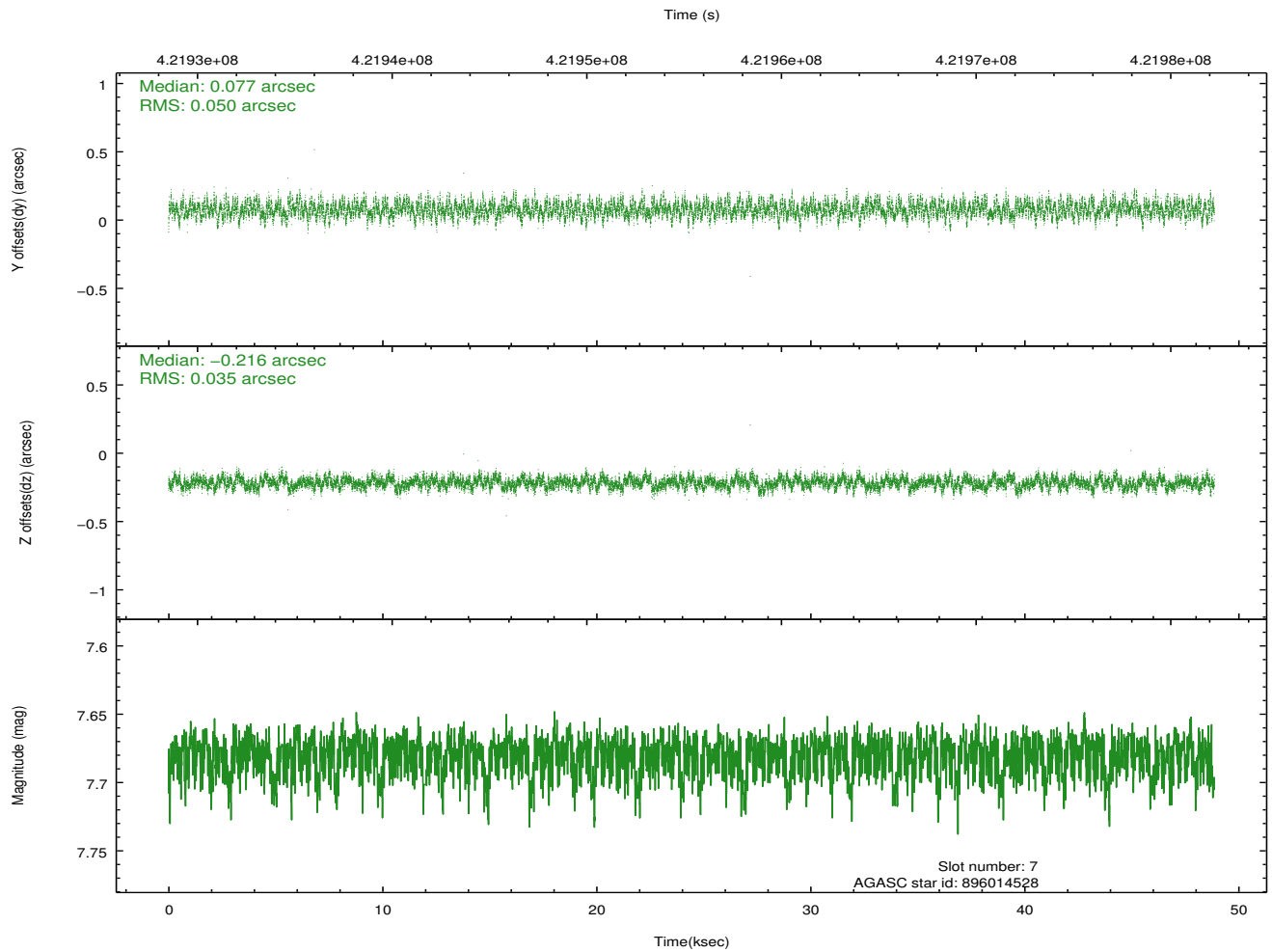
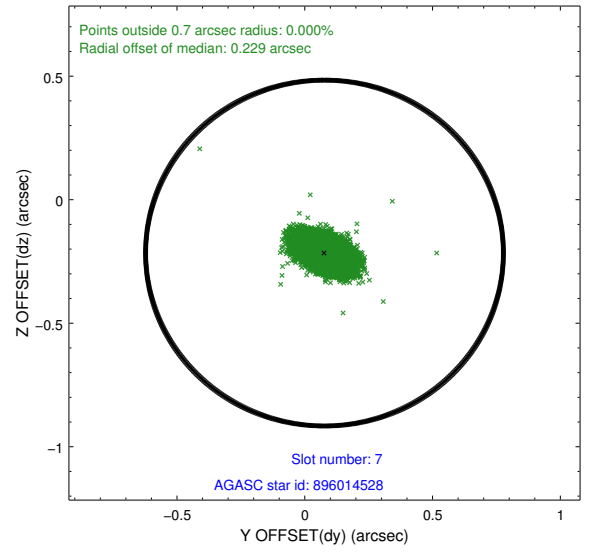
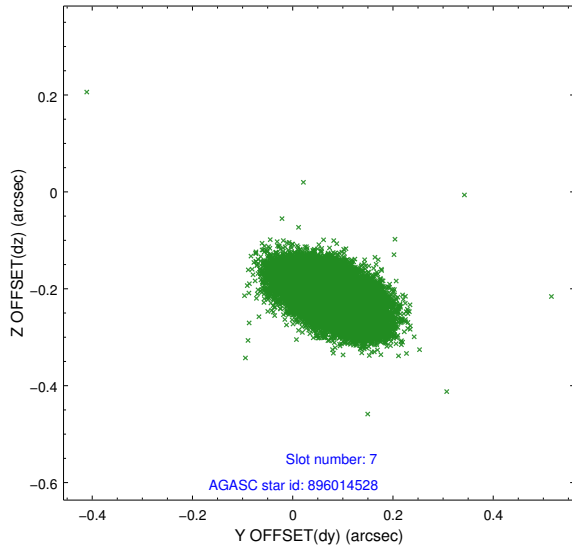
2.4.3 Slot 5



2.4.4 Slot 6

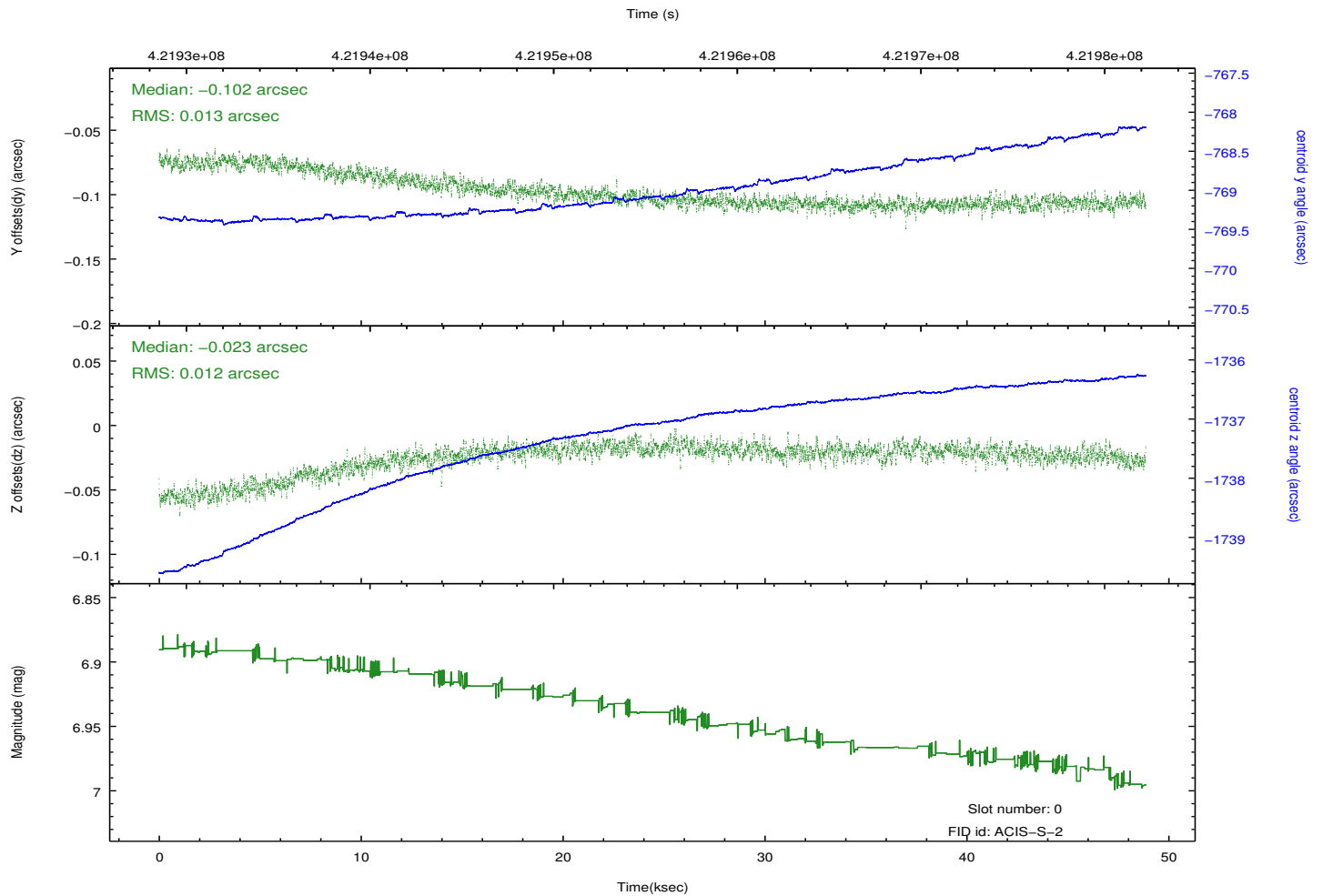
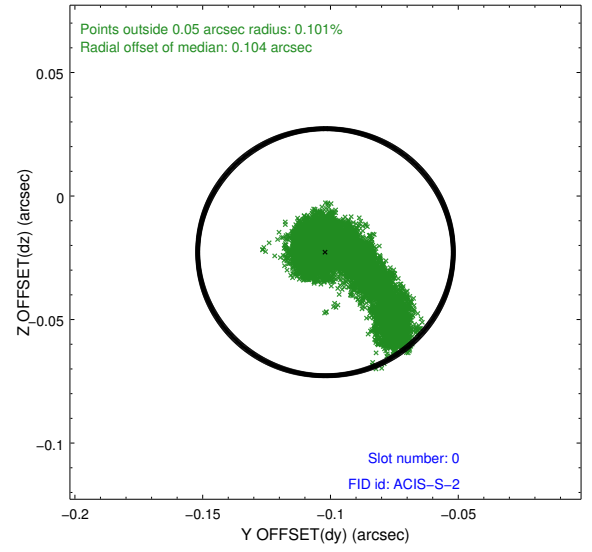
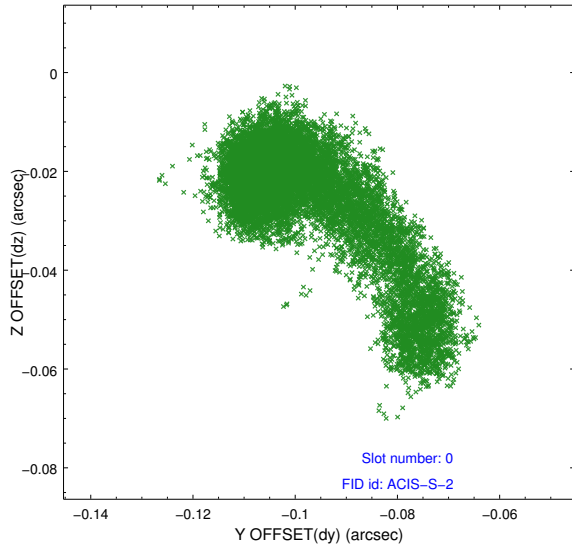


2.4.5 Slot 7

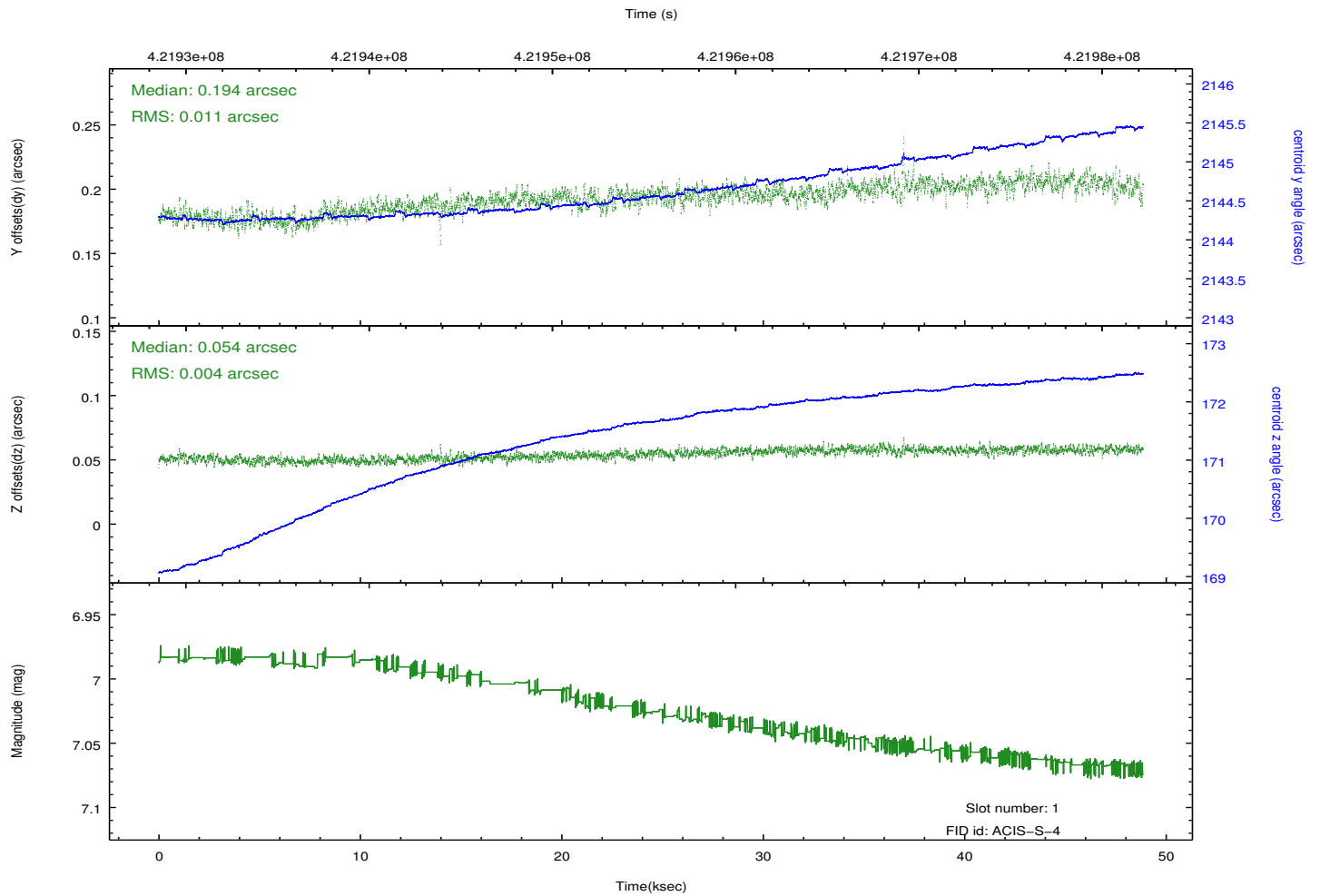
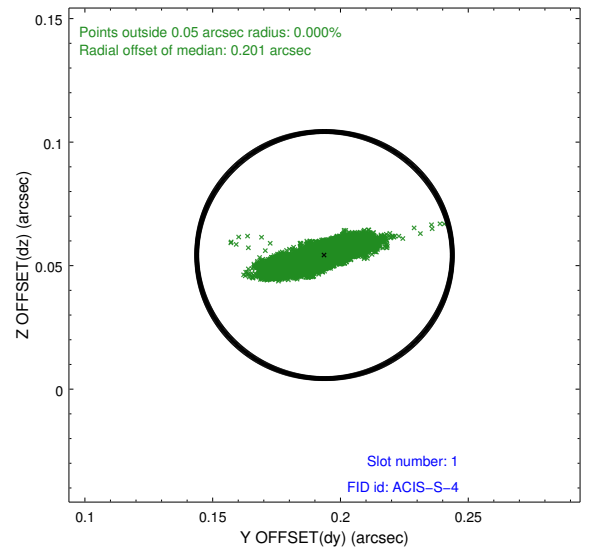
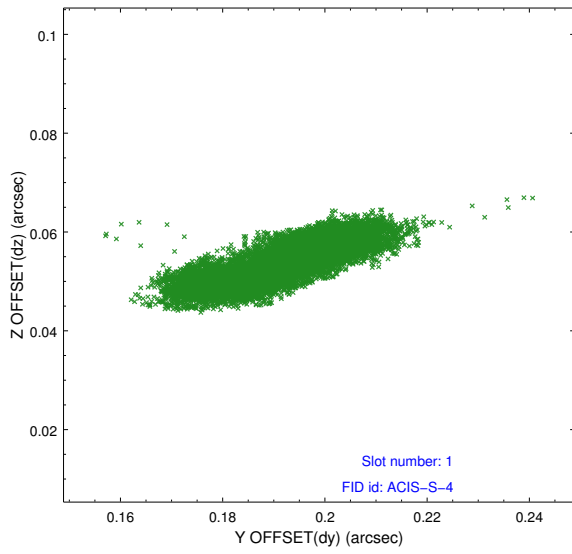


2.5 FID Slots

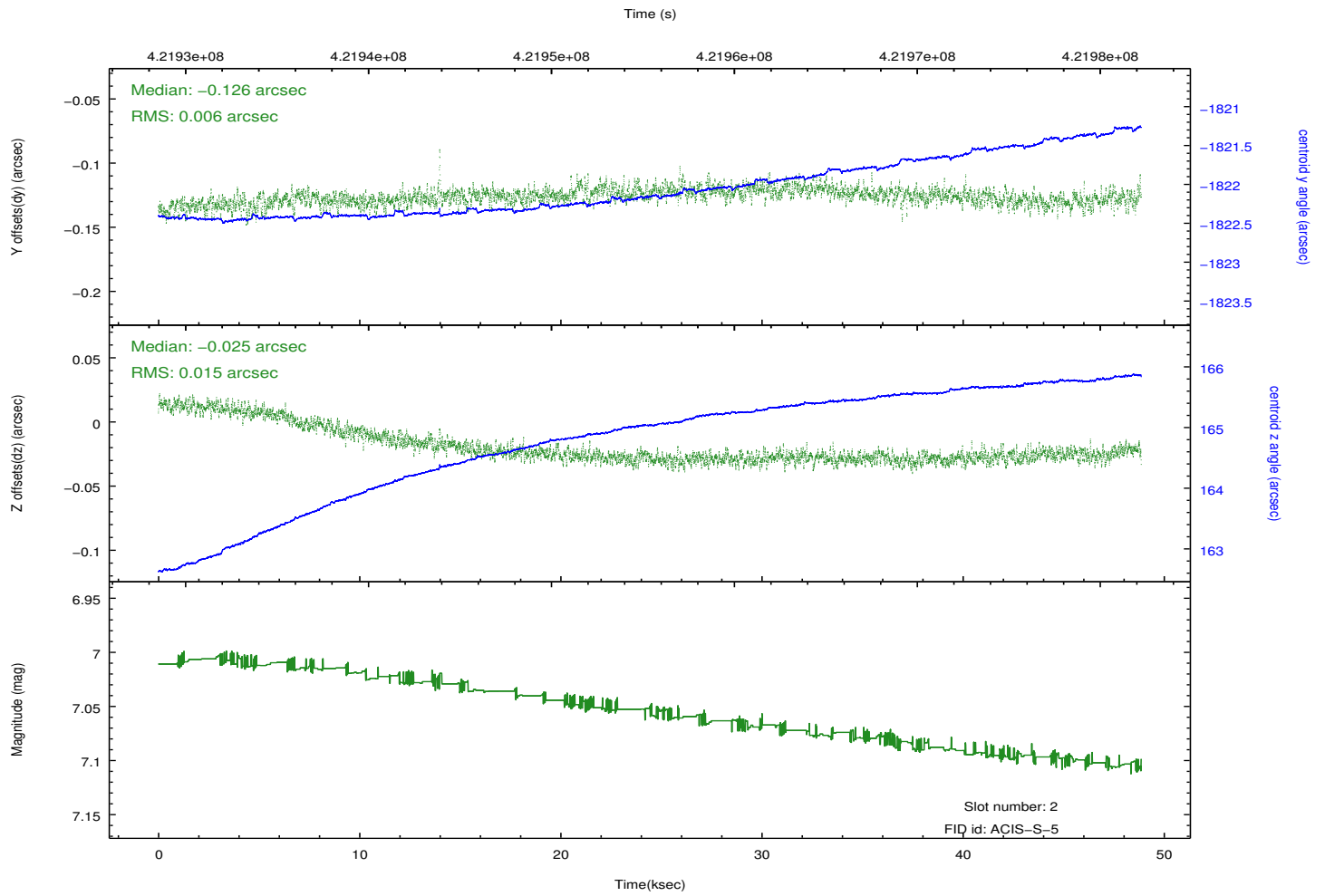
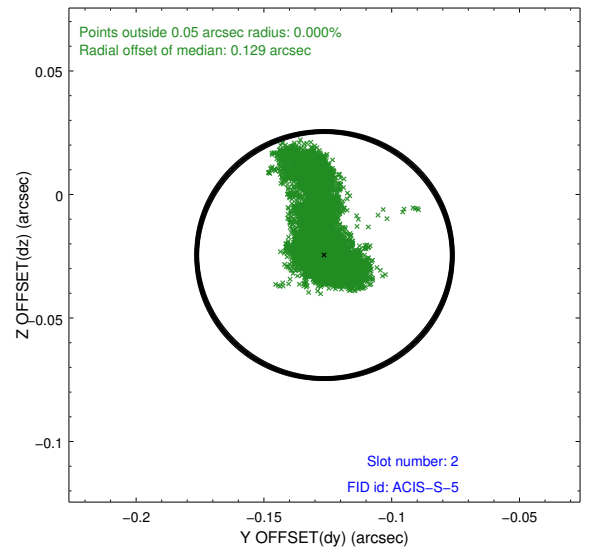
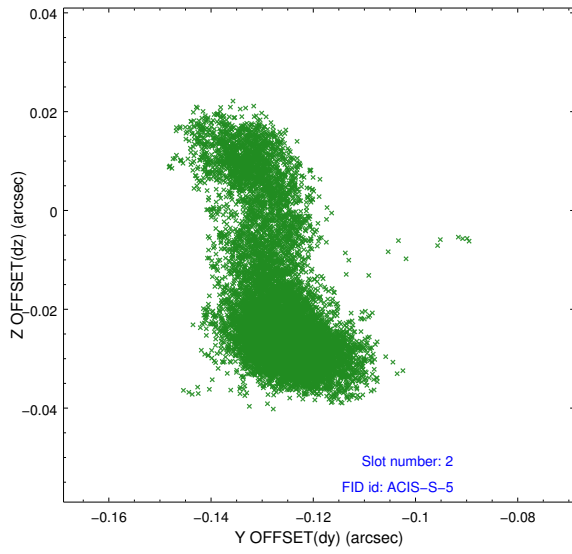
2.5.1 Slot 0



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)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.787192703962

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.