

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12387 - L2 Version 2
Chandra X-Ray Center

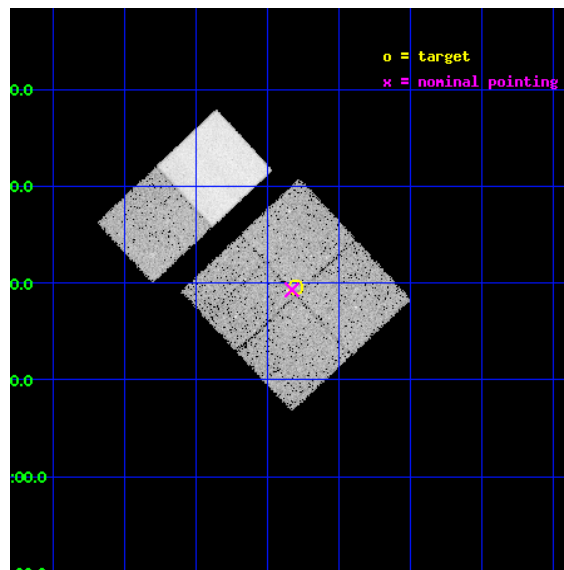
L2 Processing Date : Feb 2 2012

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1 Front

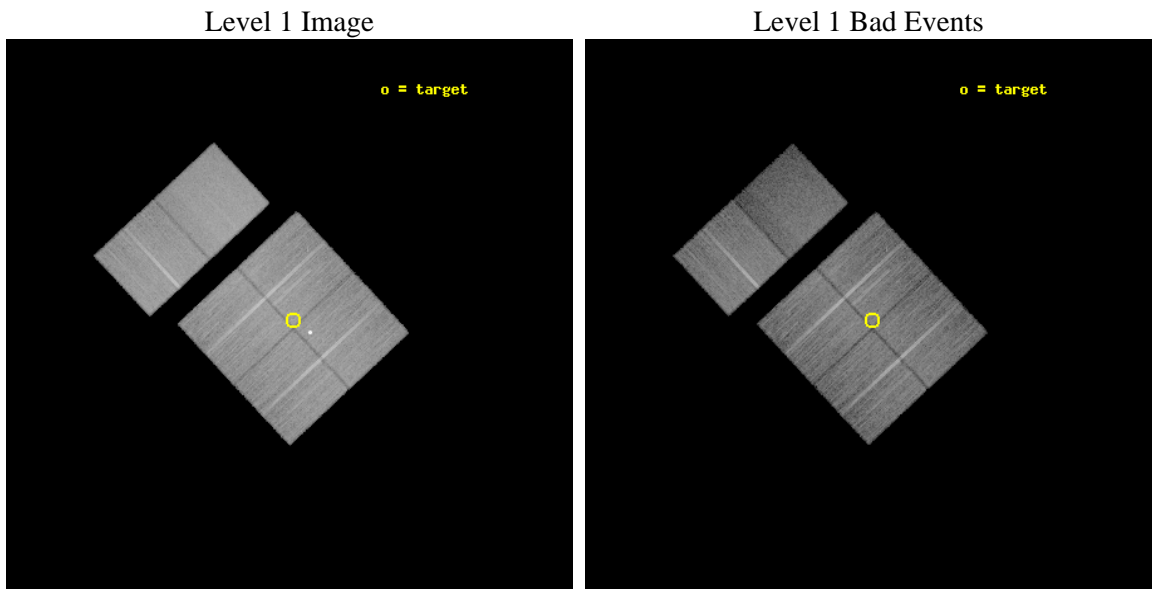
seq_num	200721	Sequence number
obs_id	12387	Observation id
title	Rosette: Understanding Star Formation in Molecular Cloud Complexes	
observer	Dr. Junfeng Wang	Principal investigator
object	RMC PL1	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	97.950417	Observer's specified target RA [deg]
dec_targ	4.325306	Observer's specified target Dec [deg]
ra_nom	97.957697694078	Nominal RA [deg]
dec_nom	4.3217987401535	Nominal Dec [deg]
roll_nom	316.95709652349	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25042.261493146	Sum of GTIs [s]
livetime	24725.161299481	Livetime [s]
ontime0	25048.620443821	Sum of GTIs [s]
ontime1	25048.661493778	Sum of GTIs [s]
ontime2	25048.702523291	Sum of GTIs [s]
ontime3	25042.261493146	Sum of GTIs [s]
ontime6	25045.584593594	Sum of GTIs [s]
ontime7	25052.025654197	Sum of GTIs [s]
l2events	152395	Number of level 2 events



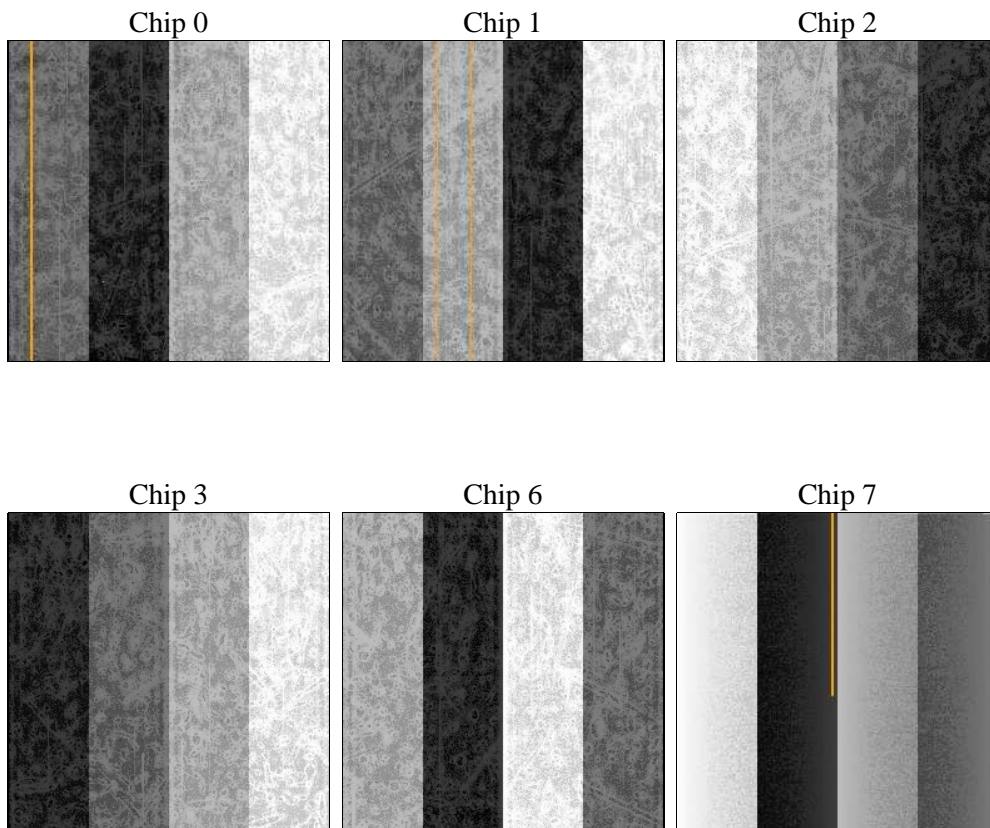
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	25042.261493146	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	25048.620443821	Sum of GTIs [s]
date	2012-02-02T04:28:08	Date and time of file creation	ontime1	25048.661493778	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	25048.702523291	Sum of GTIs [s]
			ontime3	25042.261493146	Sum of GTIs [s]
			ontime6	25045.584593594	Sum of GTIs [s]
			ontime7	25052.025654197	Sum of GTIs [s]
			l1events	966211	Number of level 1 events

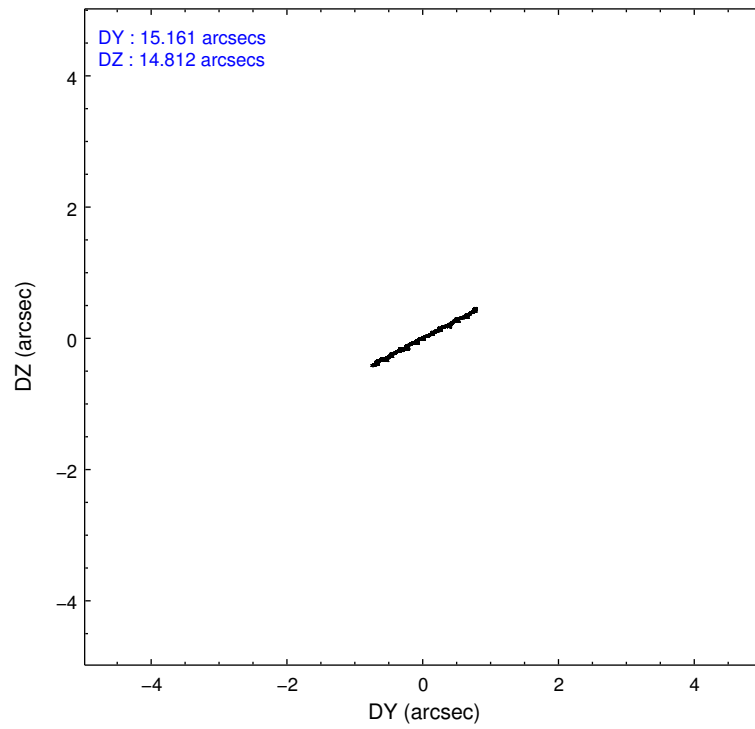
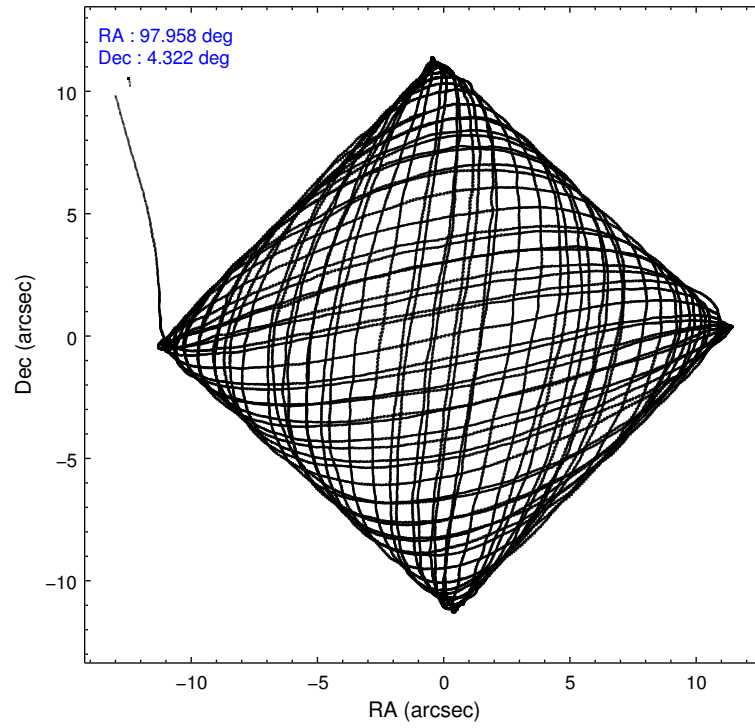
2.1.4 Events

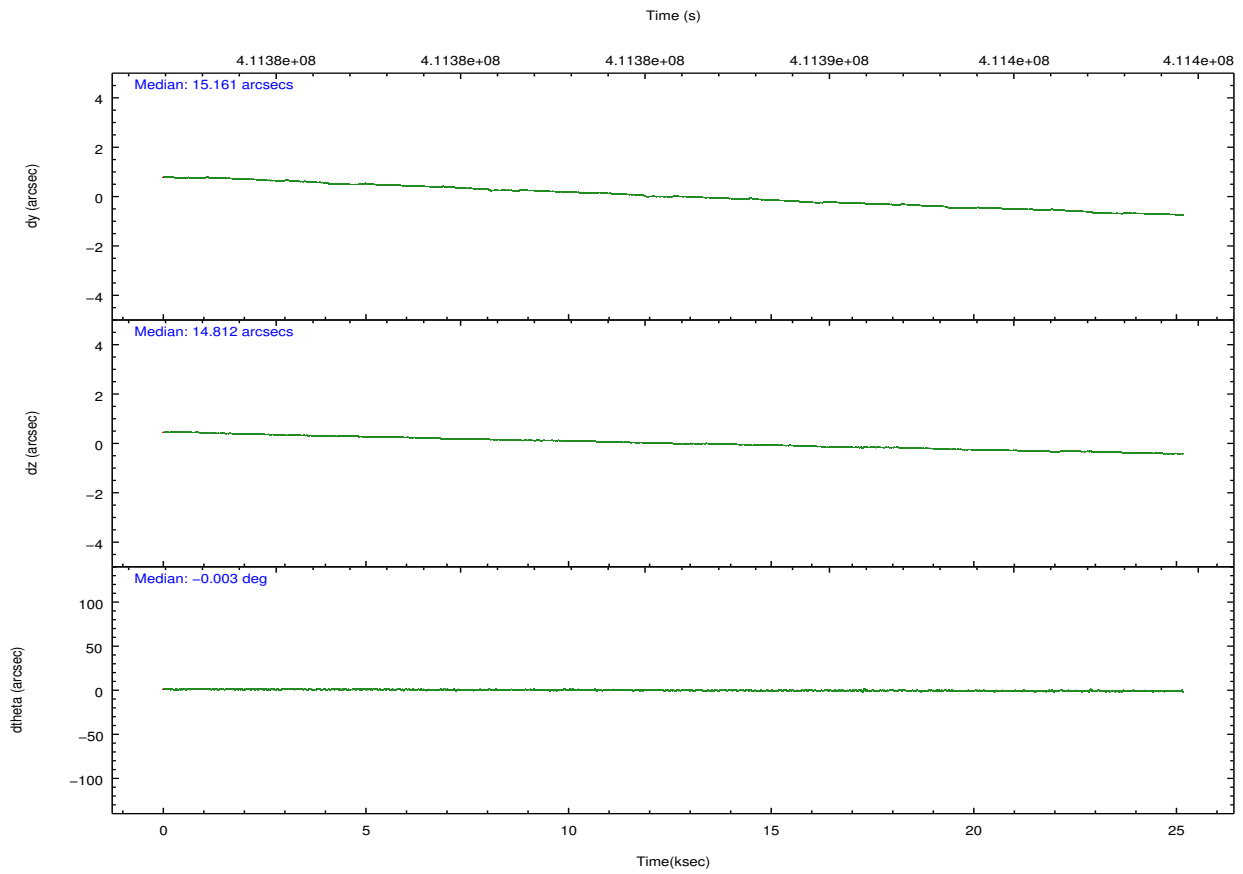
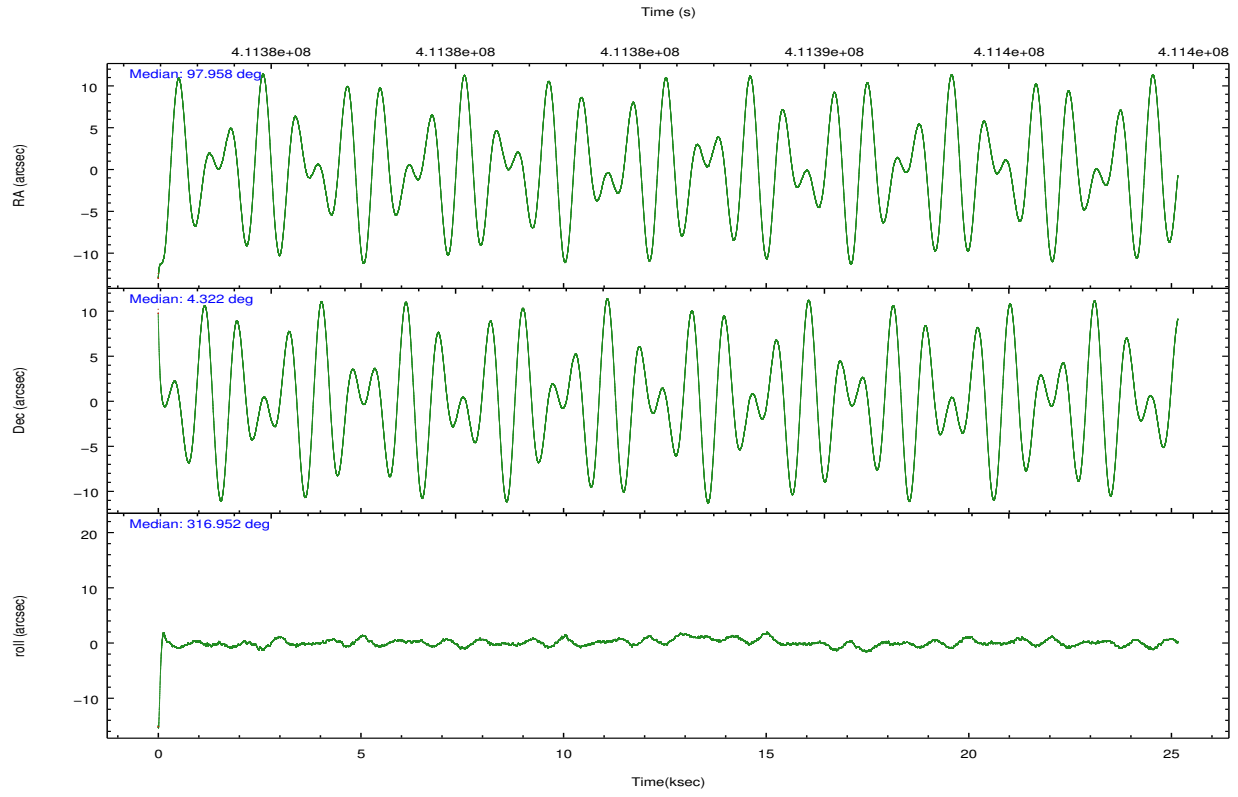
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	149919	156222	162899	156199	167628	173344	grade 0 events	6067	13304	6294	6053	6260	8046
rejected events	132684	131051	145987	139748	149610	90454		4%	8%	3%	3%	3%	4%
rejected %	88%	83%	89%	89%	89%	52%	grade 1 events	98	106	126	99	82	248
								0%	0%	0%	0%	0%	0%
							grade 2 events	4123	4046	4054	3660	4114	17650
								2%	2%	2%	2%	2%	10%
							grade 3 events	1849	1972	1719	1780	1900	7453
								1%	1%	1%	1%	1%	4%
							grade 4 events	1796	1971	1779	1767	1864	7234
								1%	1%	1%	1%	1%	4%
							grade 5 events	5866	6213	5174	6243	6707	18292
								3%	3%	3%	3%	4%	10%
							grade 6 events	3402	3880	3070	3192	3882	42516
								2%	2%	1%	2%	2%	24%
							grade 7 events	126718	124730	140683	133405	142819	71905
								84%	79%	86%	85%	85%	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	97.930822	97.95769769407799	CCD I2 on	Y	Y
[deg] Pointing Dec	4.327897	4.321798740153491	CCD I3 on	Y	Y
[deg] Pointing Roll	316.750449	316.9570965234896	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	411373345.184000	411372076.39424	CCD S5 on	N	N
Observation start date	2011-01-14T06:21:19	2011-01-14T06:01:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411398345.184000	411399115.38313	On-chip summing requested	N	N
Observation end date	2011-01-14T13:17:59	2011-01-14T13:31:55	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



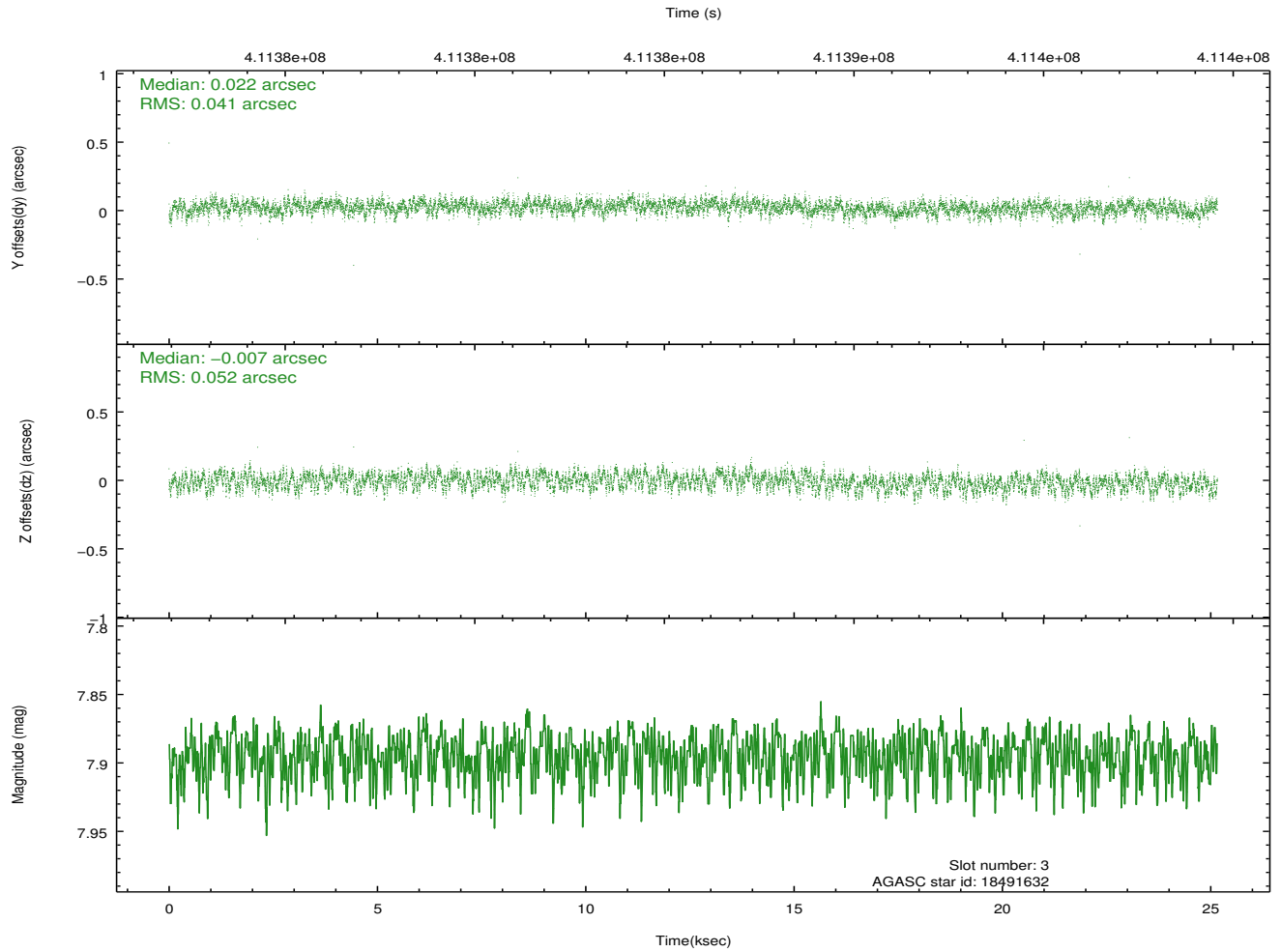
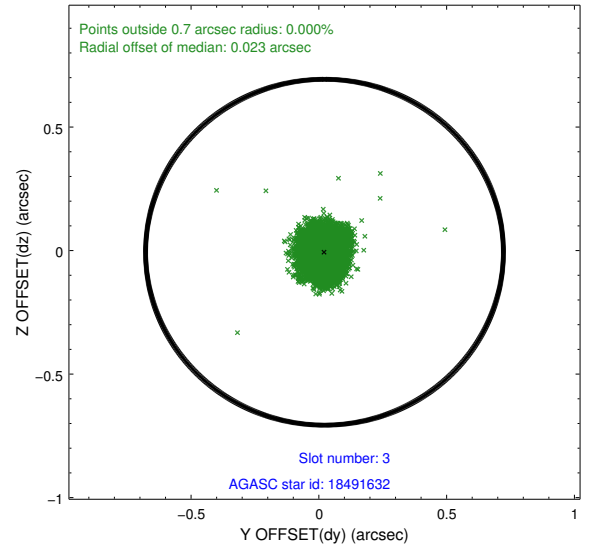
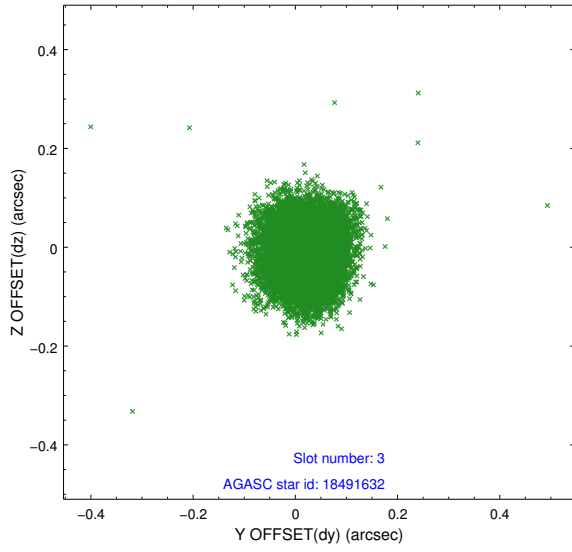


Slot Statistics

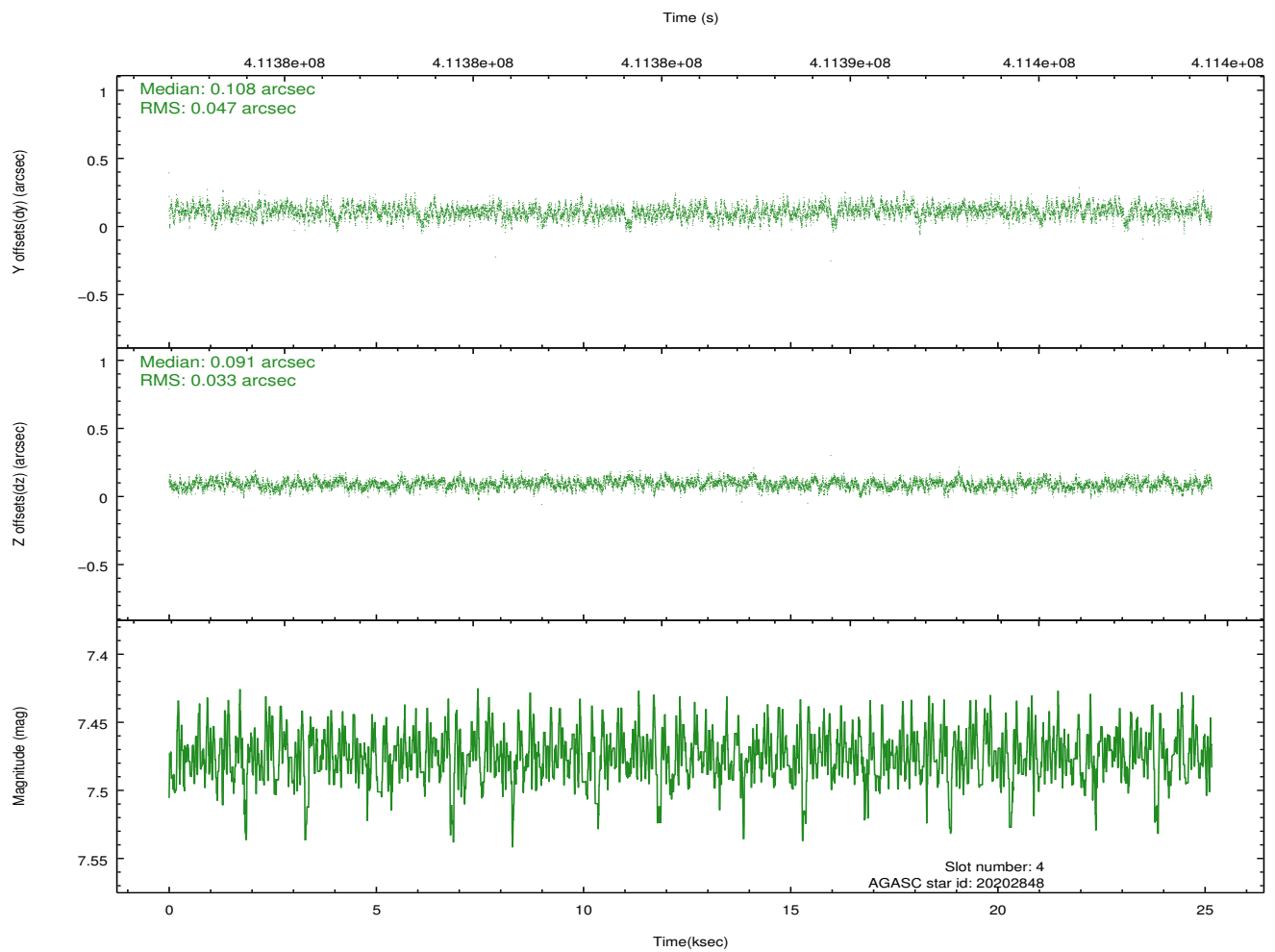
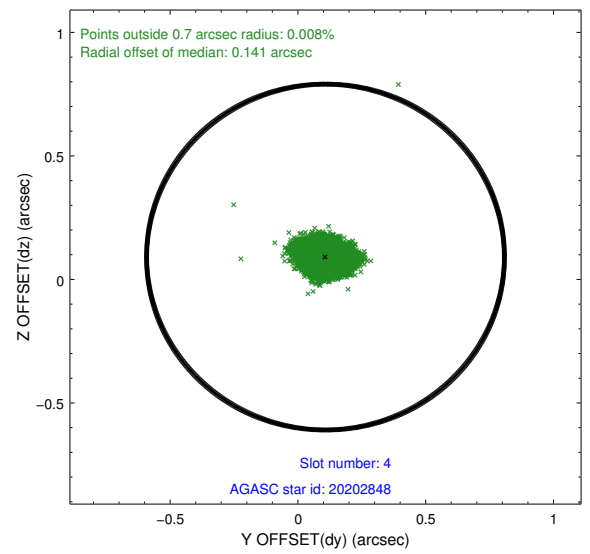
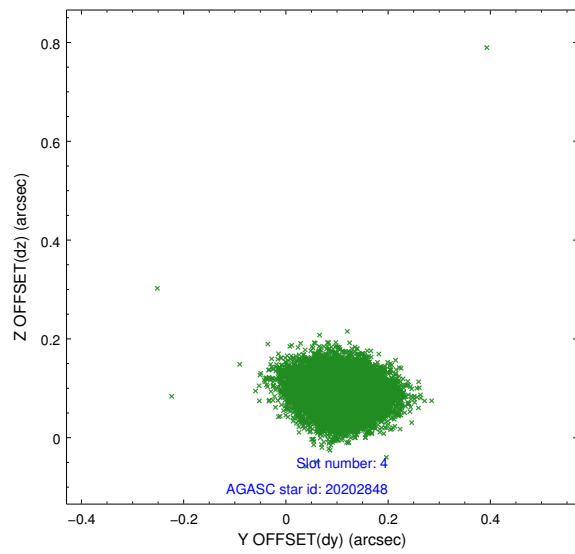
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.13	6138	0.029	0.002	0.012	0.021	0.000000	0.000000	924.31	-838.40
1	FID	ACIS-I-5	7.12	6138	-0.213	0.033	0.010	0.017	0.000000	0.000000	-1824.00	1059.03
2	FID	ACIS-I-6	7.12	6138	0.095	0.035	0.013	0.022	0.000000	0.000000	389.76	1703.69
3	GUIDE	18491632	7.89	12272	0.022	-0.007	0.071	0.111	97.068000	4.279247	-2136.94	-2248.71
4	GUIDE	20202848	7.48	12275	0.108	0.091	0.060	0.098	98.177906	3.814518	1912.95	-737.64
5	GUIDE	20203472	7.86	12270	-0.059	-0.194	0.063	0.101	98.653479	4.344261	1848.47	1821.41
6	GUIDE	20192040	8.29	12271	-0.029	0.095	0.071	0.113	97.909981	5.026773	-1778.16	1781.69
7	GUIDE	20204256	7.95	12273	-0.040	0.016	0.070	0.116	97.968888	5.033108	-1640.25	1942.97

2.4 Star Slots

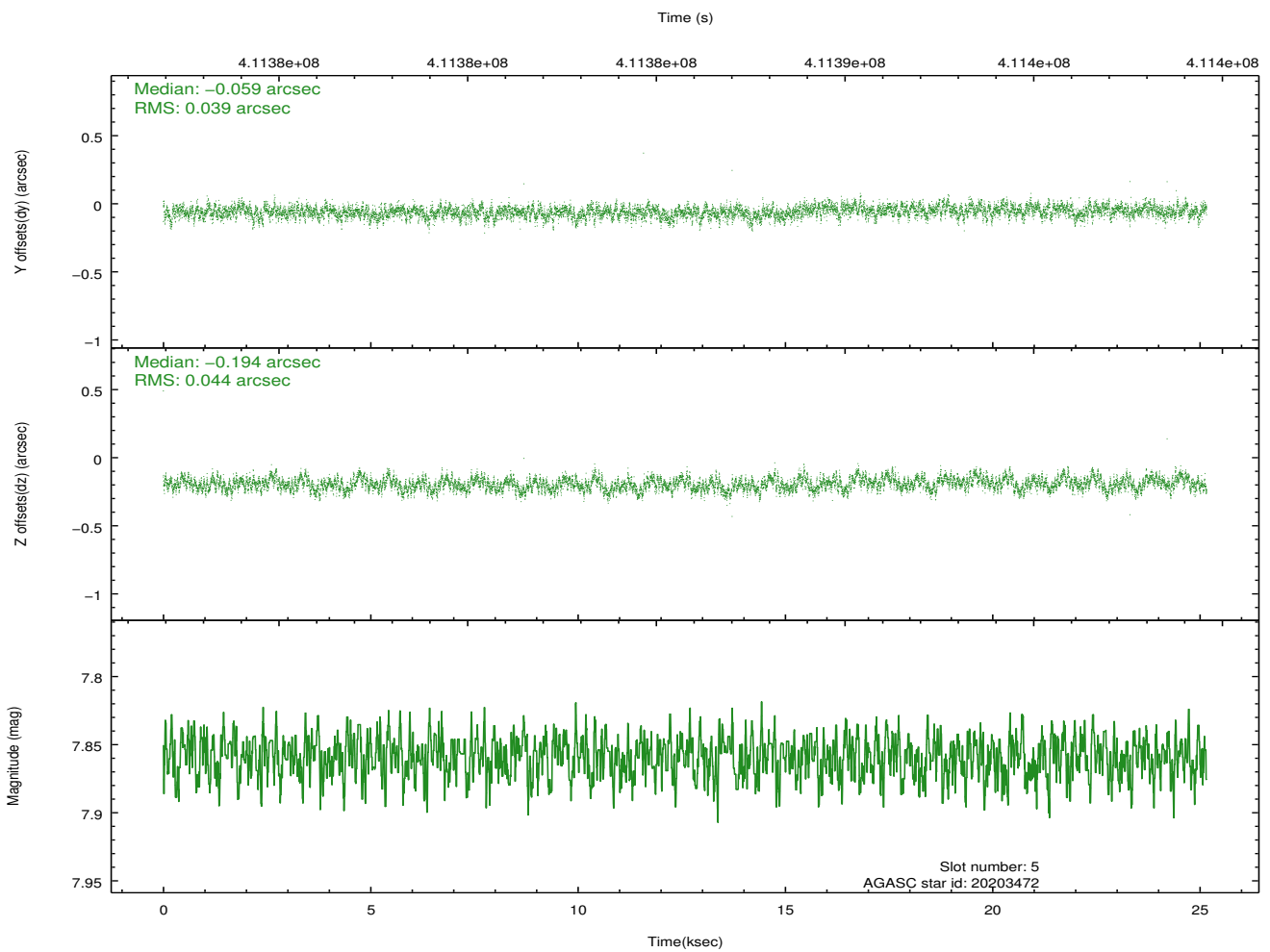
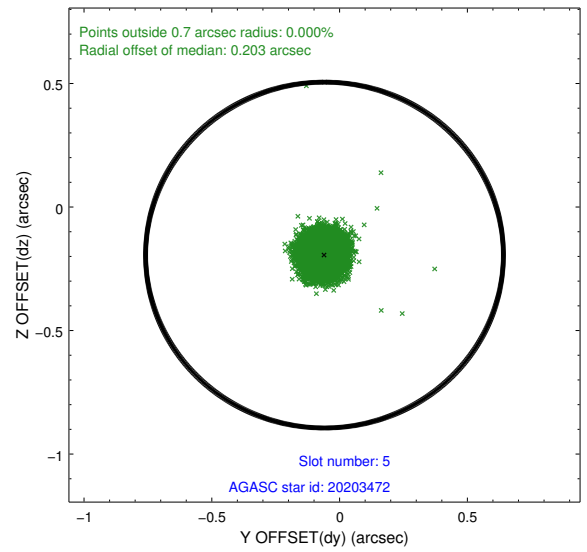
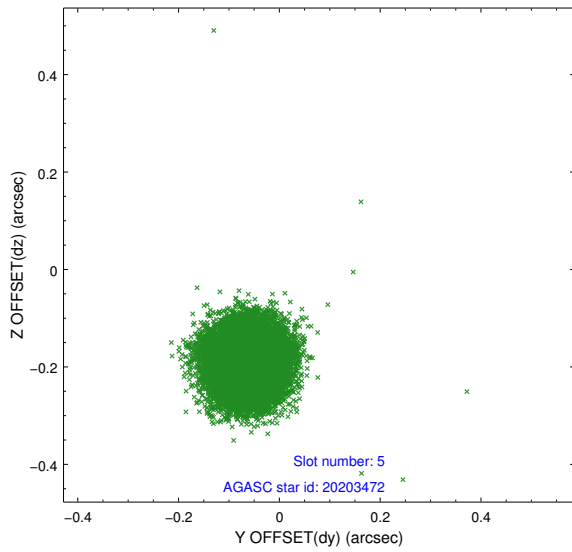
2.4.1 Slot 3



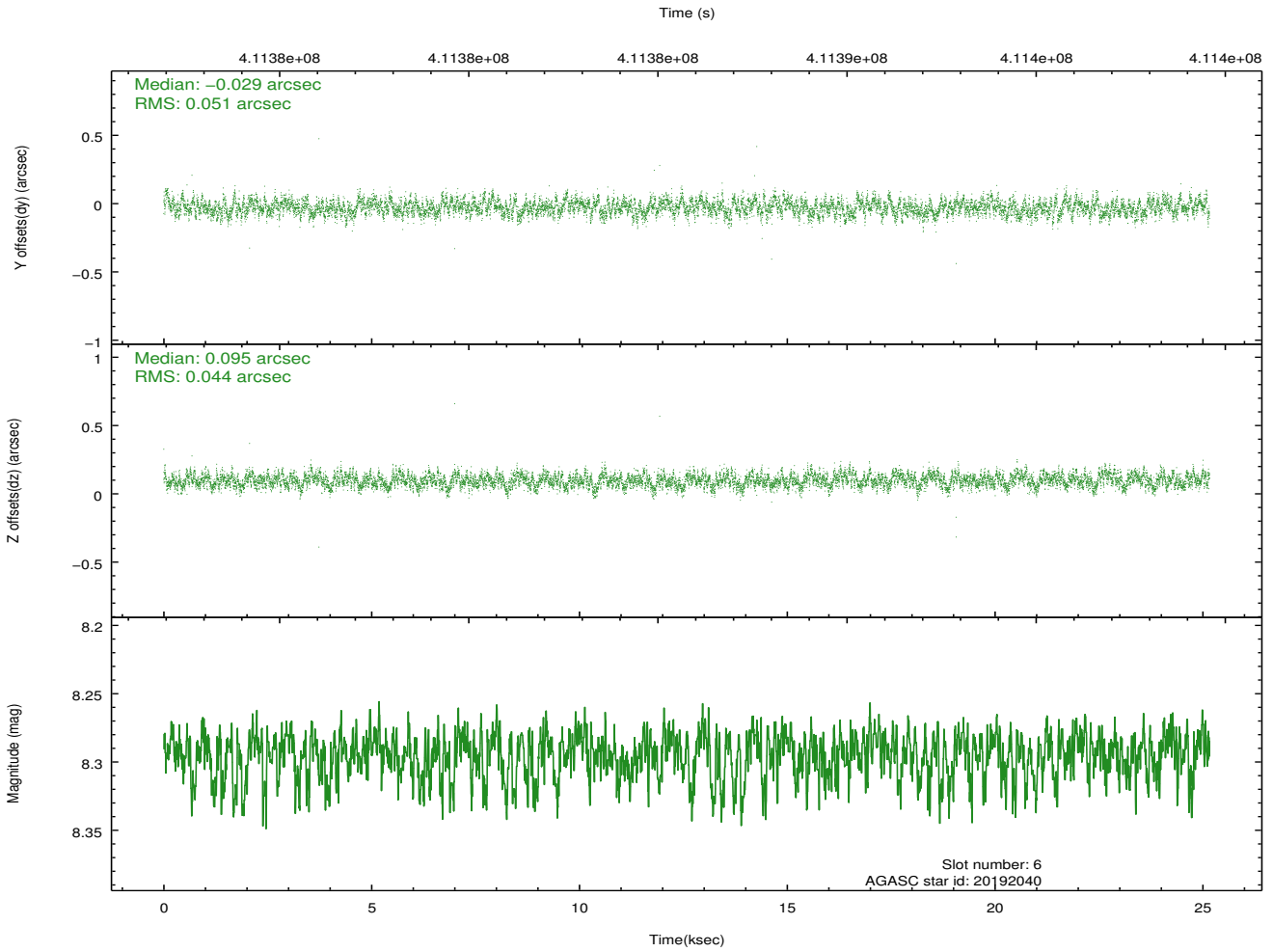
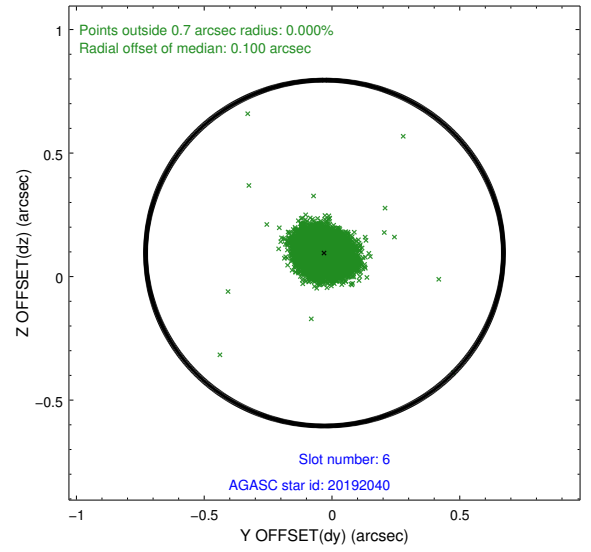
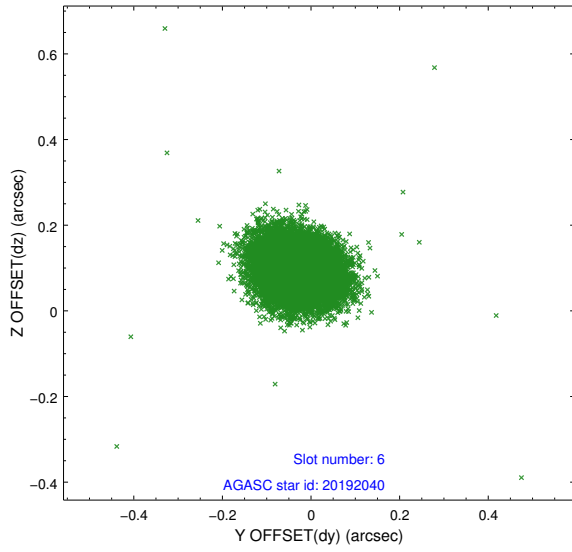
2.4.2 Slot 4



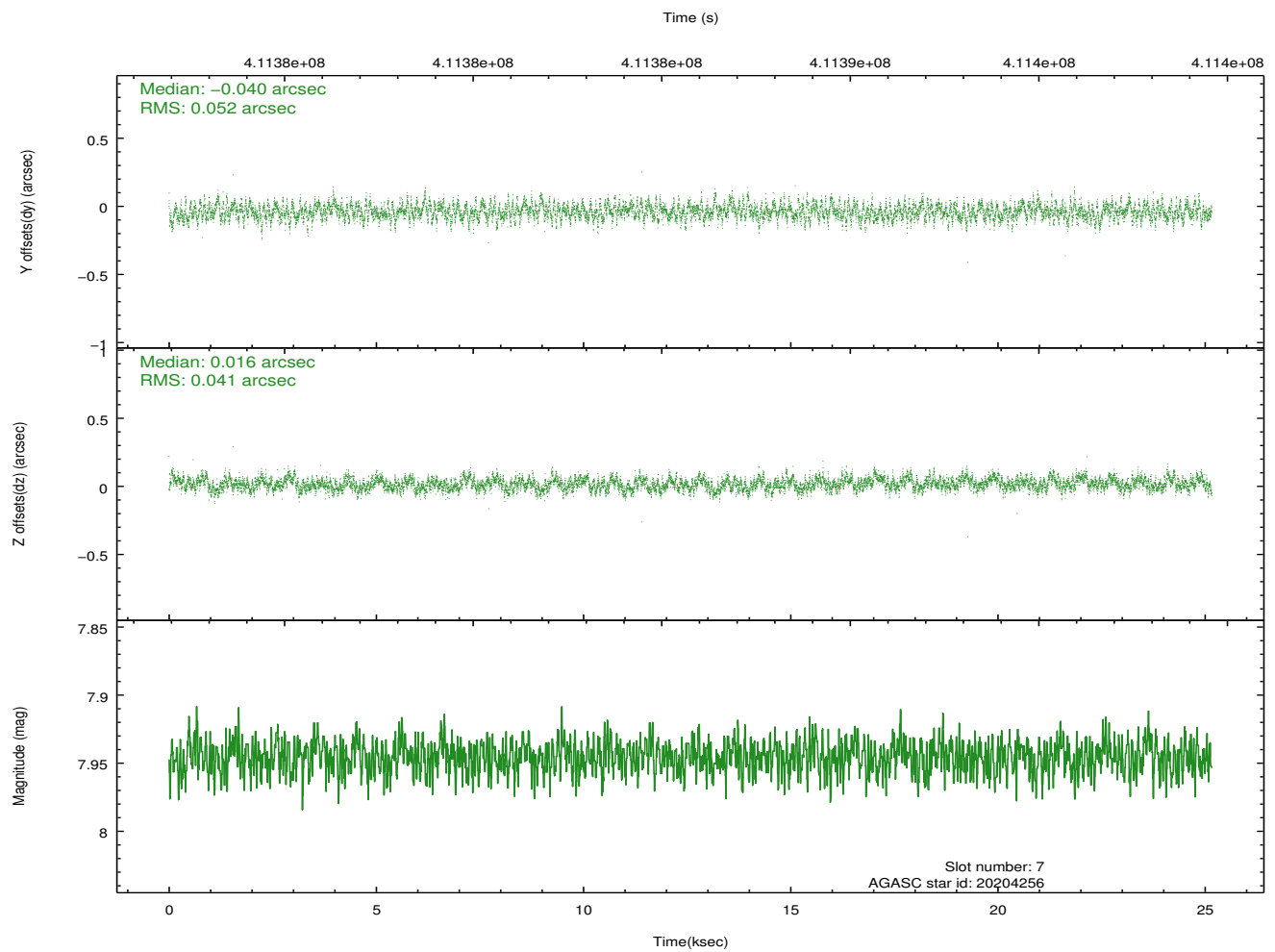
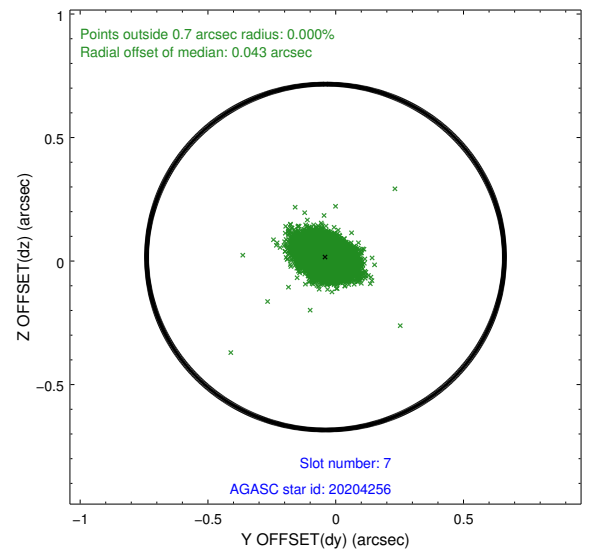
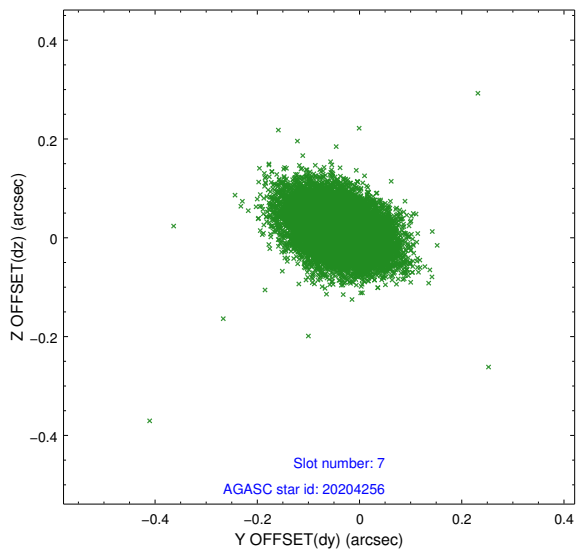
2.4.3 Slot 5



2.4.4 Slot 6

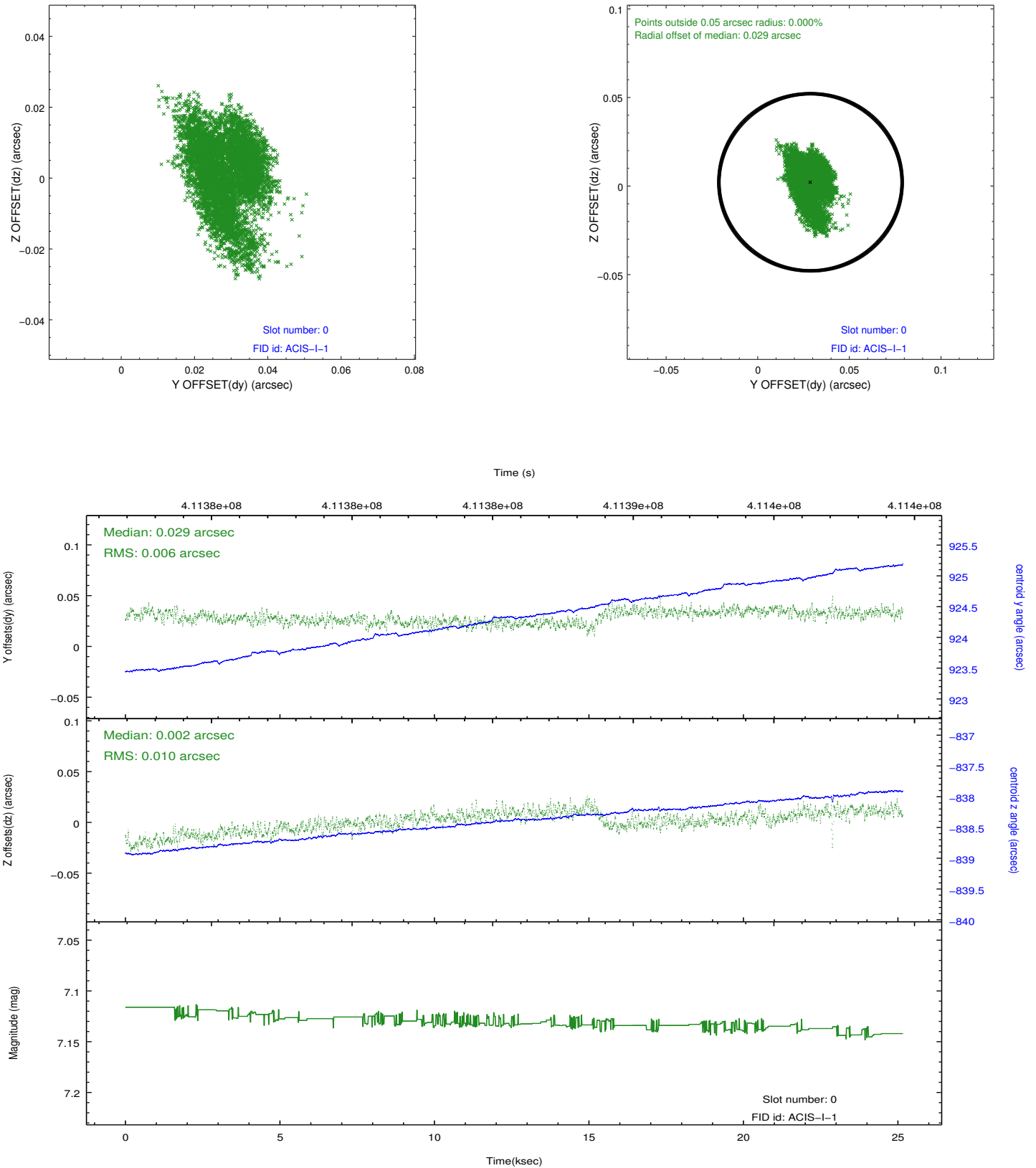


2.4.5 Slot 7

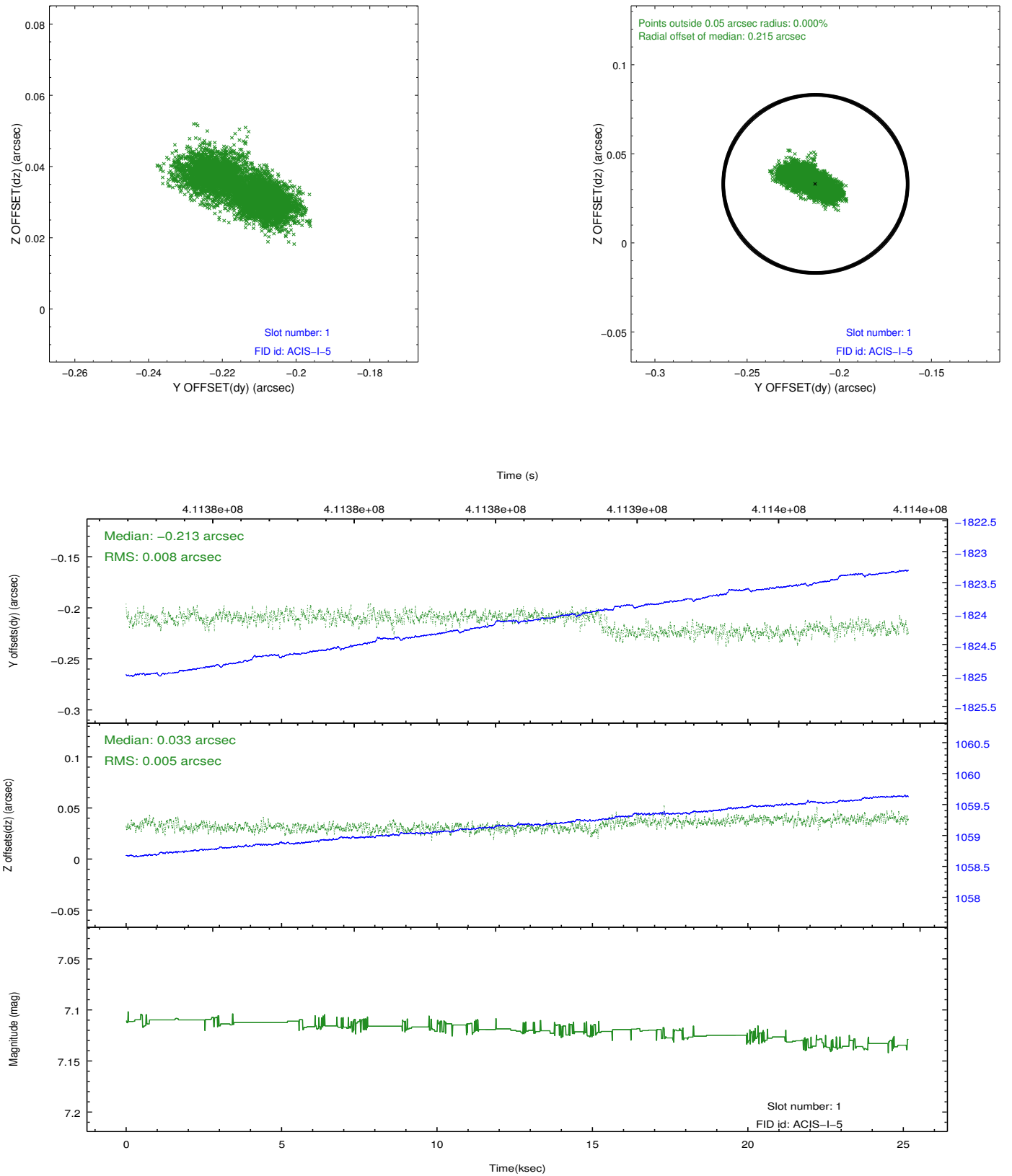


2.5 FID Slots

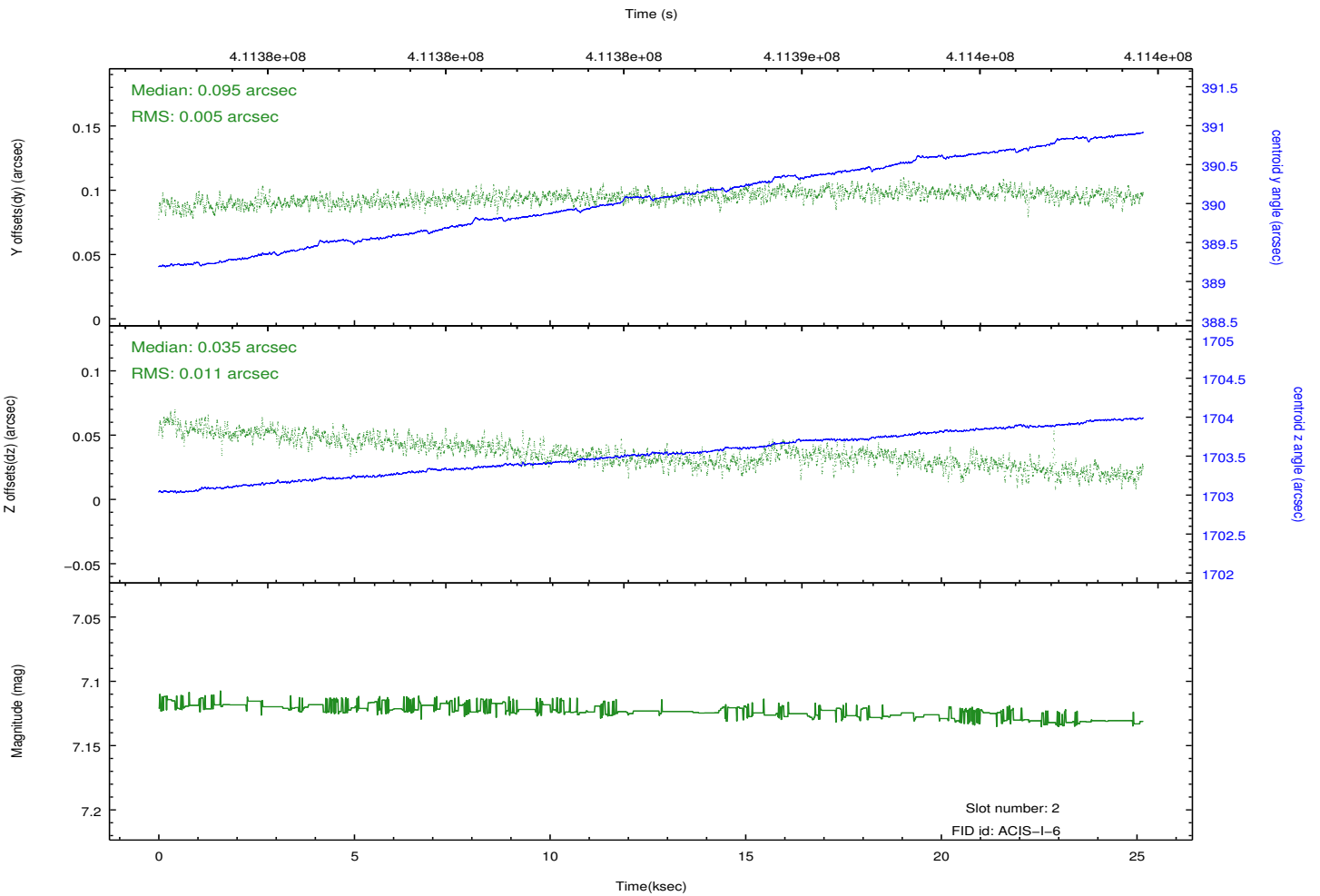
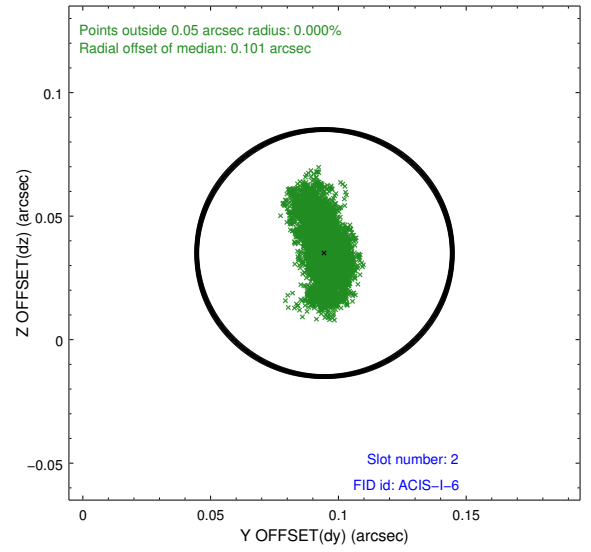
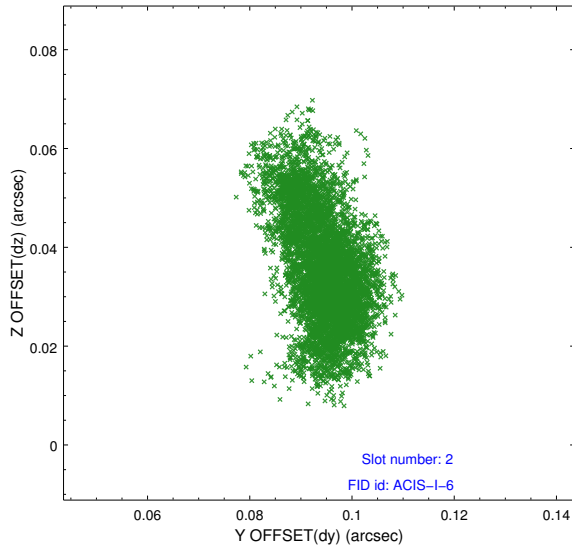
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	John Houck
V&V Date (YYYY-MM-DD)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.04226148355

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.