

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 11311 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Feb 1 2012

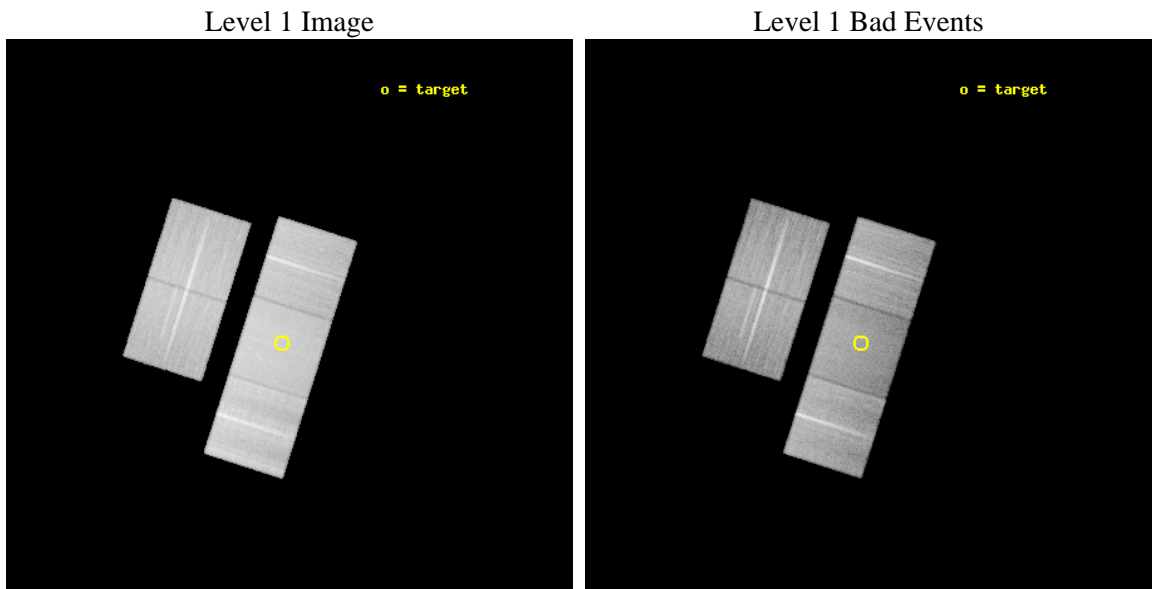
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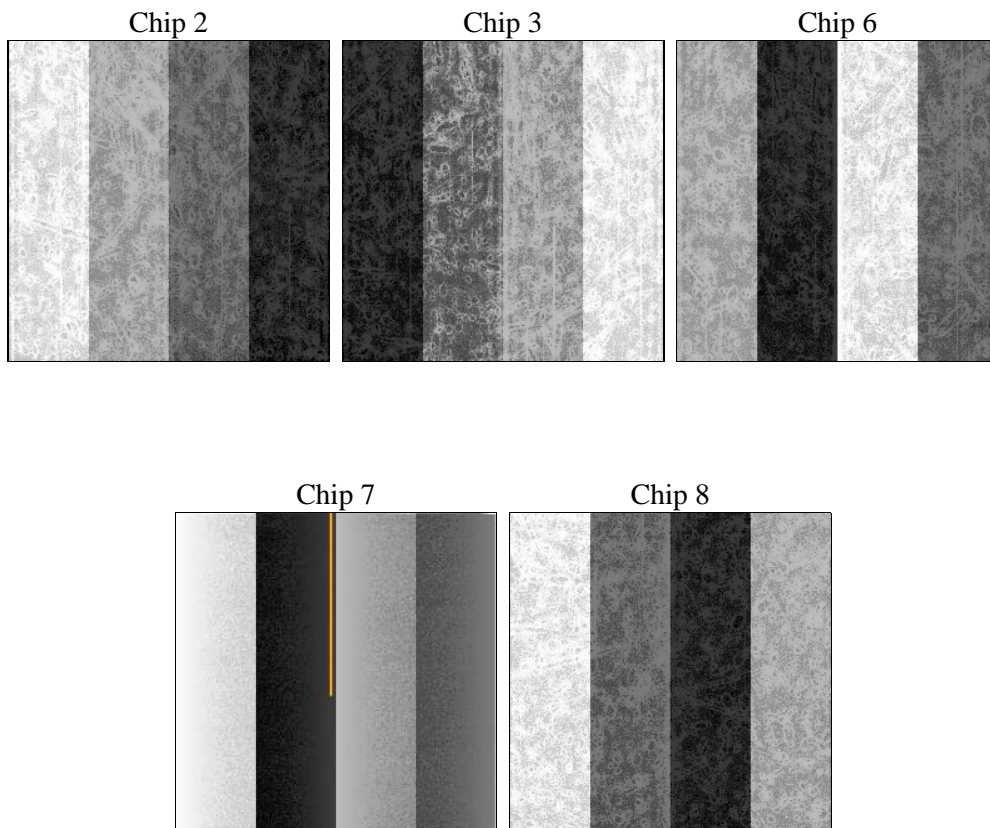
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	39038.300300241	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	39038.300300241	Sum of GTIs [s]
date	2012-02-01T10:20:06	Date and time of file creation	ontime3	39038.300300241	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	39035.159289837	Sum of GTIs [s]
			ontime7	39038.300300241	Sum of GTIs [s]
			ontime8	39035.159269869	Sum of GTIs [s]
			l1events	1579186	Number of level 1 events

2.1.4 Events

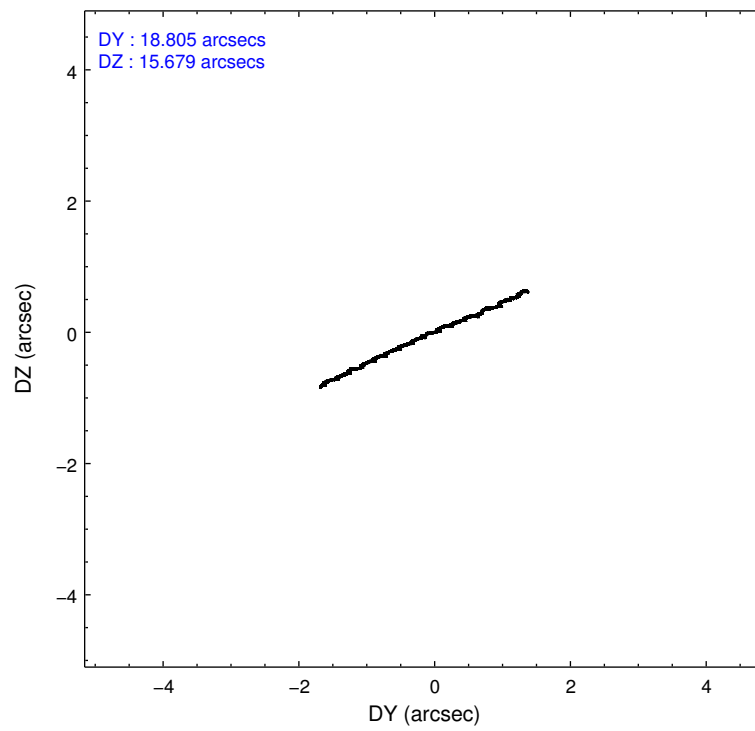
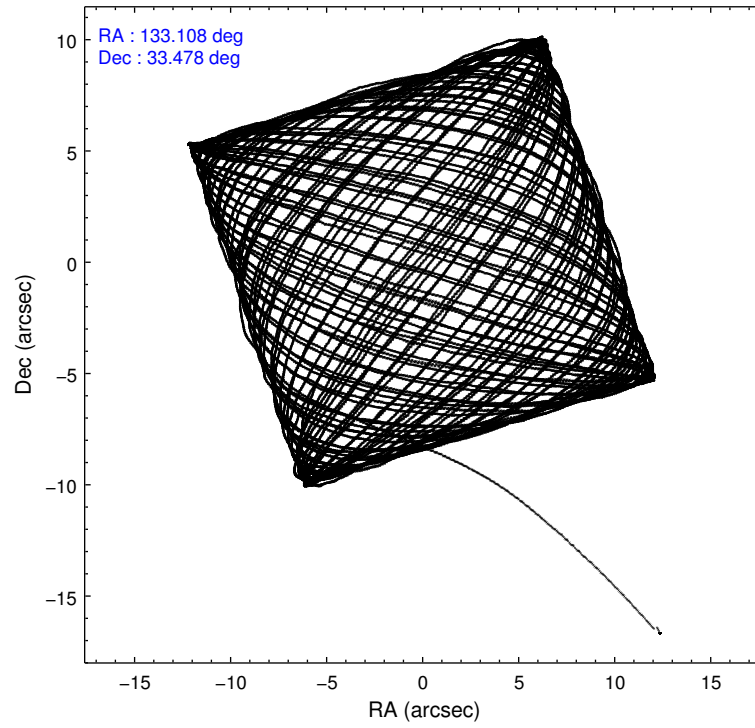
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	286736	276252	291283	354736	370179
rejected events	256881	247145	259387	196540	275343
rejected %	89%	89%	89%	55%	74%

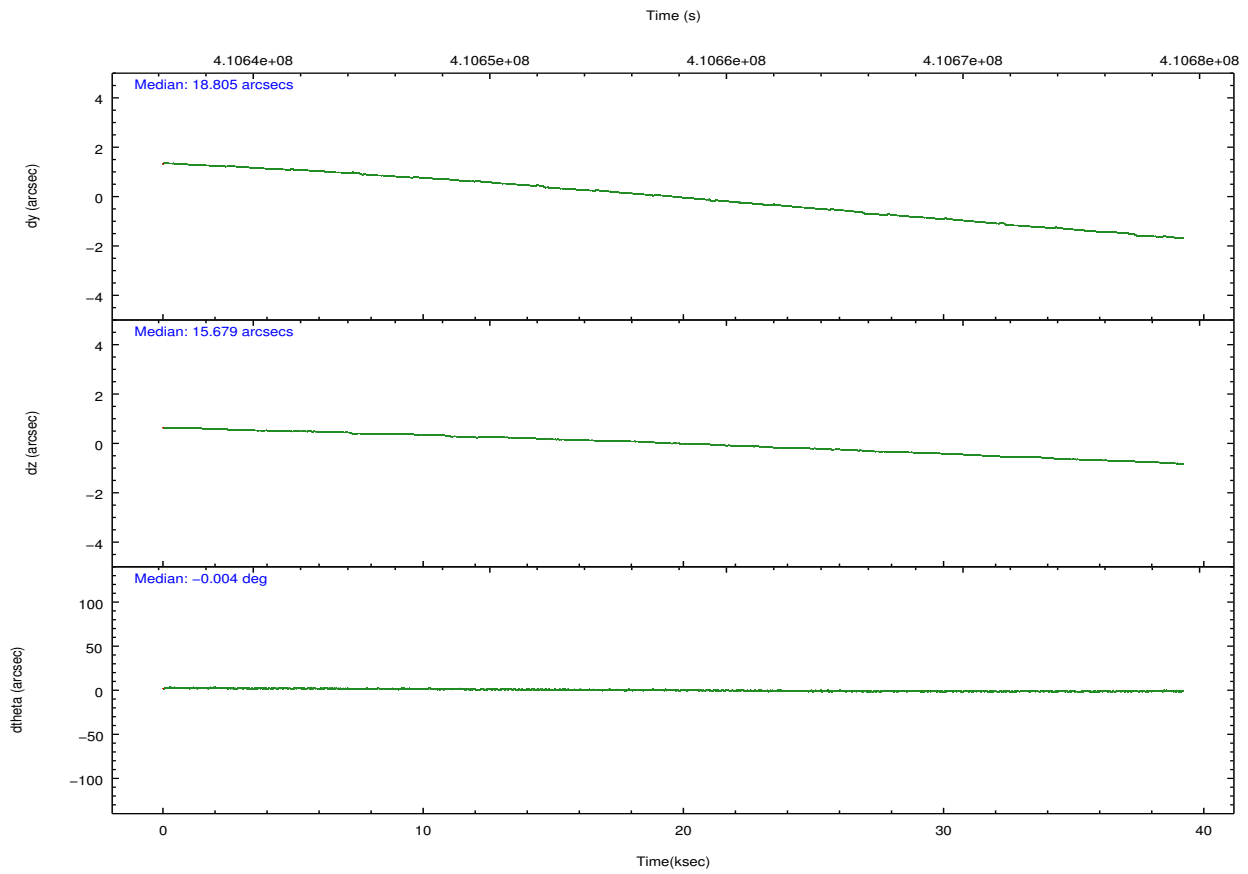
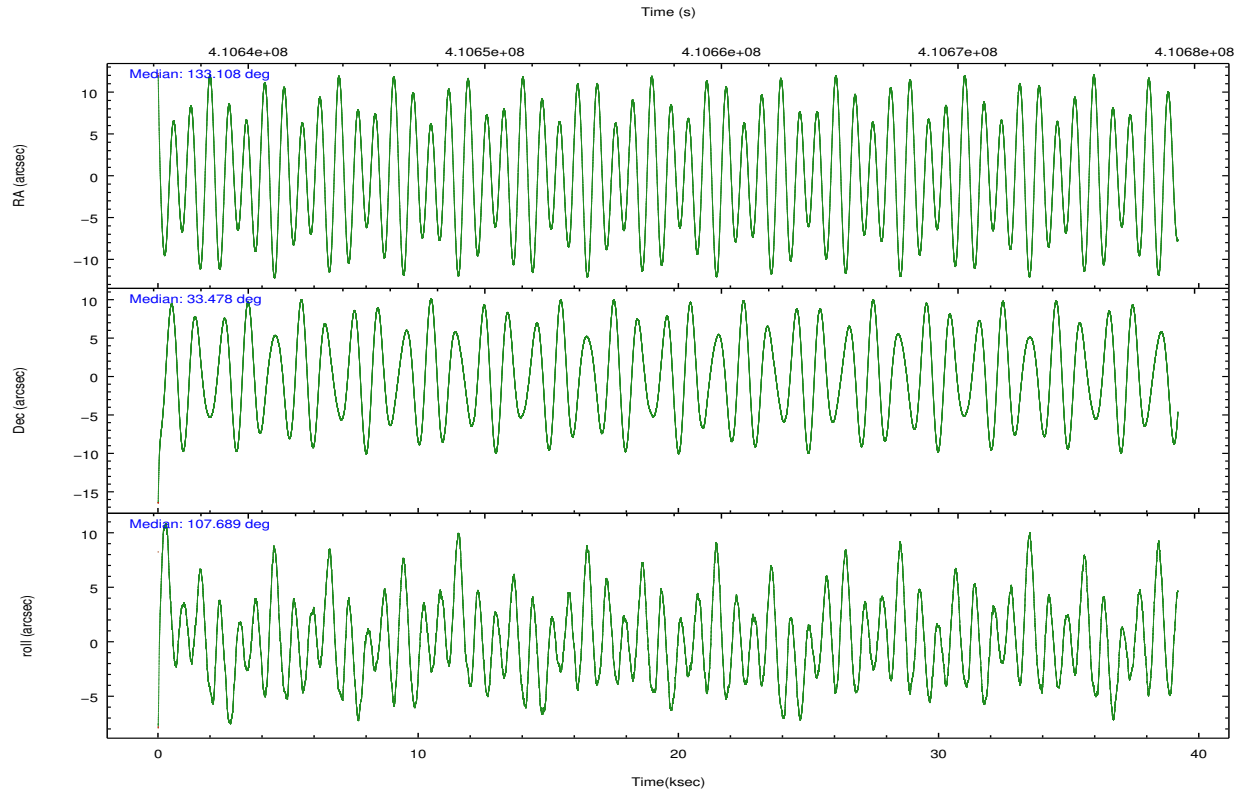
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	10455	10030	10804	14494	27735
	3%	3%	3%	4%	7%
grade 1 events	165	184	158	433	294
	0%	0%	0%	0%	0%
grade 2 events	7098	6594	7268	32466	22516
	2%	2%	2%	9%	6%
grade 3 events	3186	3085	3357	14029	10024
	1%	1%	1%	3%	2%
grade 4 events	3208	3213	3348	13793	9284
	1%	1%	1%	3%	2%
grade 5 events	10851	13201	13290	36841	18927
	3%	4%	4%	10%	5%
grade 6 events	5914	6186	7122	83429	25280
	2%	2%	2%	23%	6%
grade 7 events	245859	233759	245936	159251	256119
	85%	84%	84%	44%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	133.132789	133.1082433310758	CCD I2 on	O4	Y
[deg] Pointing Dec	33.460040	33.47816045425733	CCD I3 on	O2	Y
[deg] Pointing Roll	107.522644	107.6928003436655	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	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	O1	Y
[s] Observation start time (MET)	410638343.184000	410636889.98124	CCD S5 on	N	N
Observation start date	2011-01-05T18:11:17	2011-01-05T17:48:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	410677343.184000	410678114.97087	On-chip summing requested	N	N
Observation end date	2011-01-06T05:01:17	2011-01-06T05:15:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



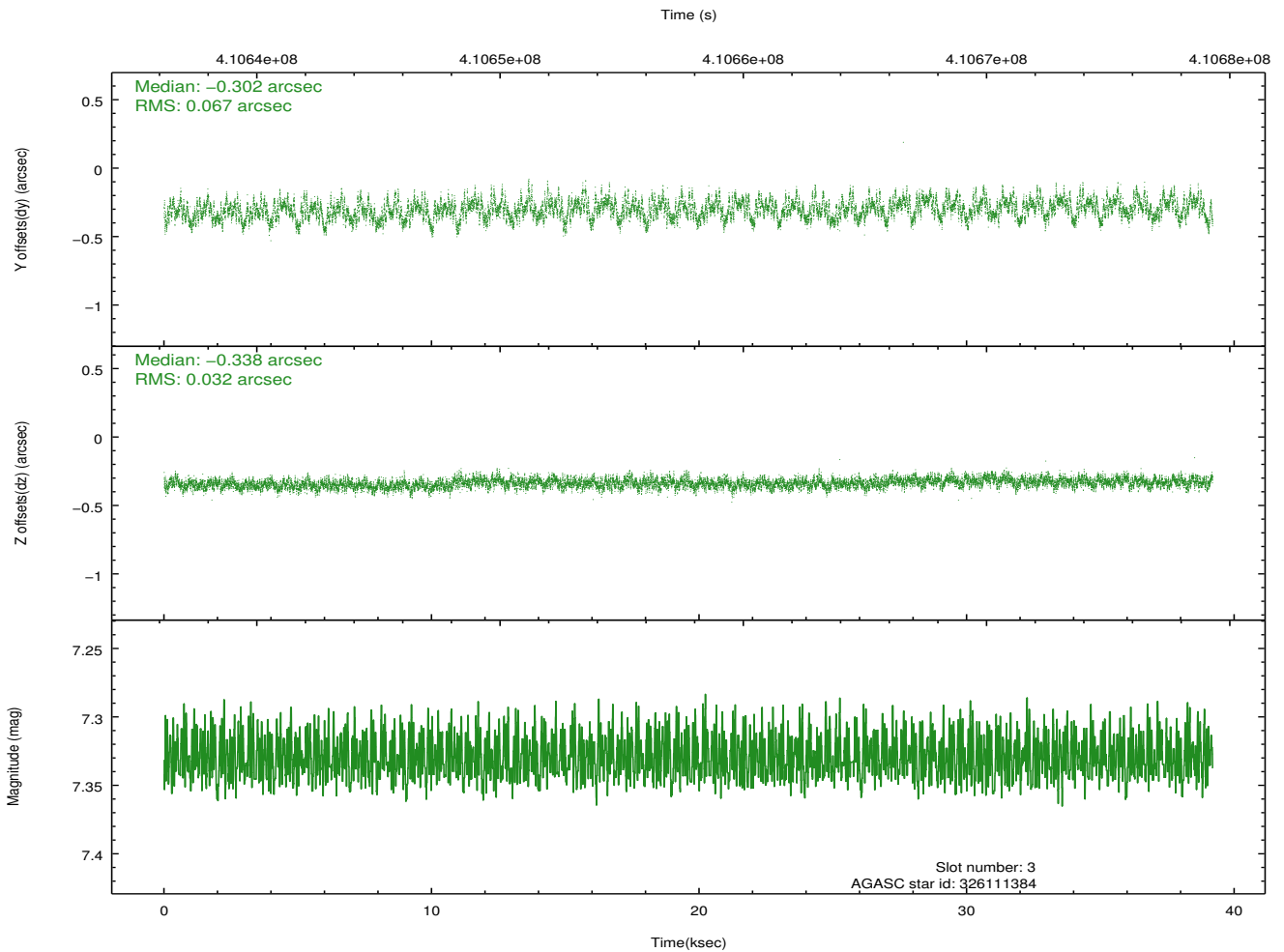
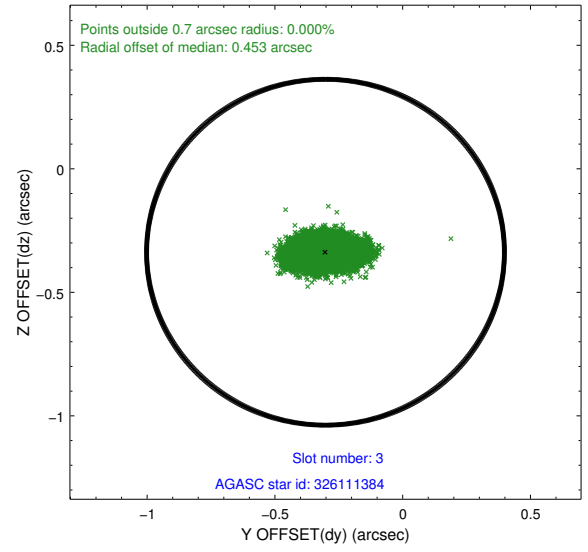
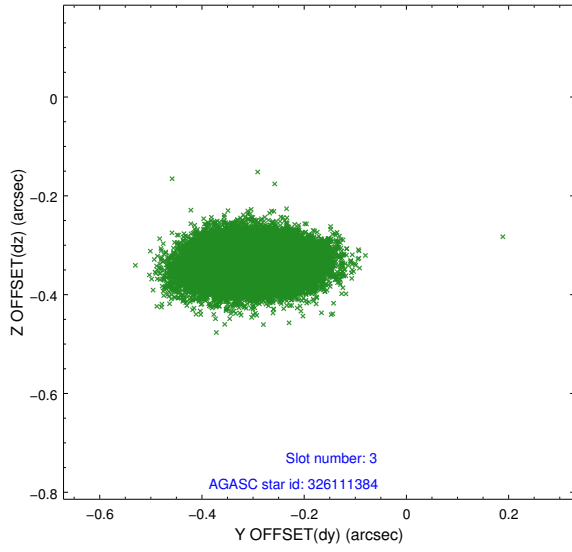


Slot Statistics

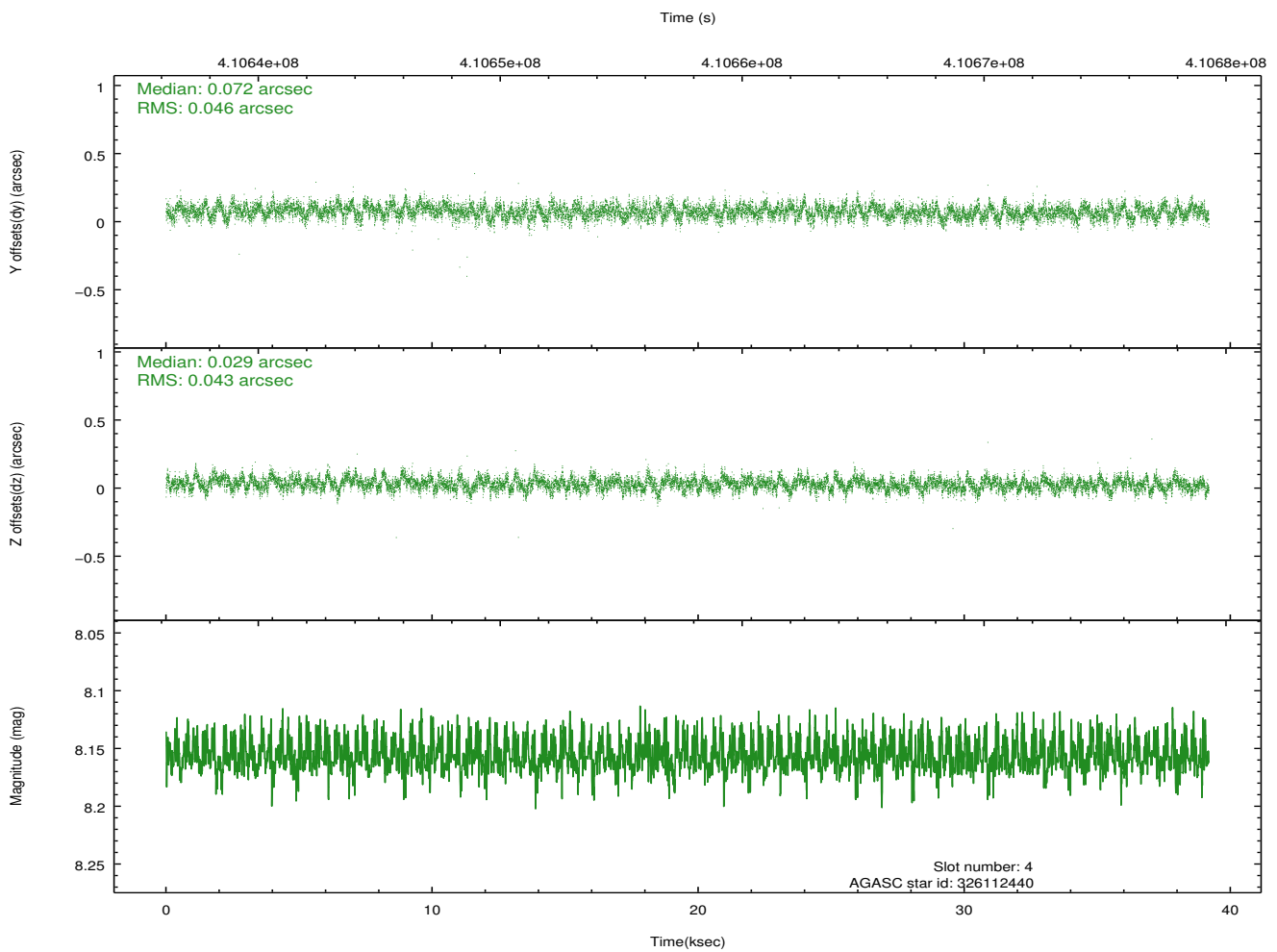
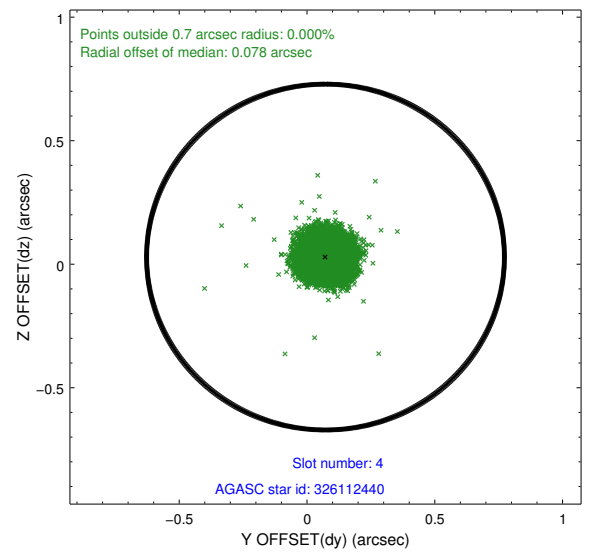
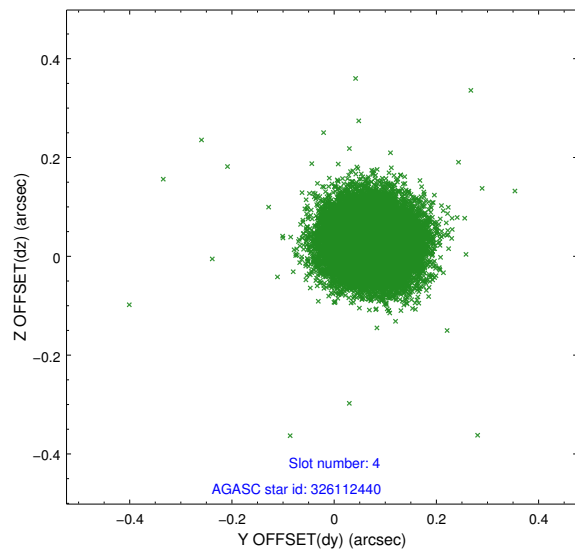
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	9559	-0.105	-0.021	0.013	0.018	0.000000	0.000000	-771.91	-1737.07
1	FID	ACIS-S-4	7.02	9557	0.242	0.056	0.019	0.047	0.000000	0.000000	2141.69	171.49
2	FID	ACIS-S-5	7.05	9559	-0.166	-0.027	0.018	0.036	0.000000	0.000000	-1824.80	165.08
3	GUIDE	326111384	7.33	19111	-0.302	-0.338	0.078	0.132	132.467098	33.720034	1498.52	1617.11
4	GUIDE	326112440	8.16	19113	0.072	0.029	0.066	0.108	133.461686	33.056810	-1681.21	-508.63
5	GUIDE	326119496	9.07	18957	0.071	0.246	0.113	0.178	133.781099	32.975868	-2245.63	-1344.10
6	GUIDE	326119712	8.95	19106	0.074	-0.136	0.102	0.159	132.831789	33.224884	-533.08	1118.68
7	GUIDE	326119984	9.40	18953	0.063	0.194	0.177	0.297	133.071124	34.102725	2261.95	-520.90

2.4 Star Slots

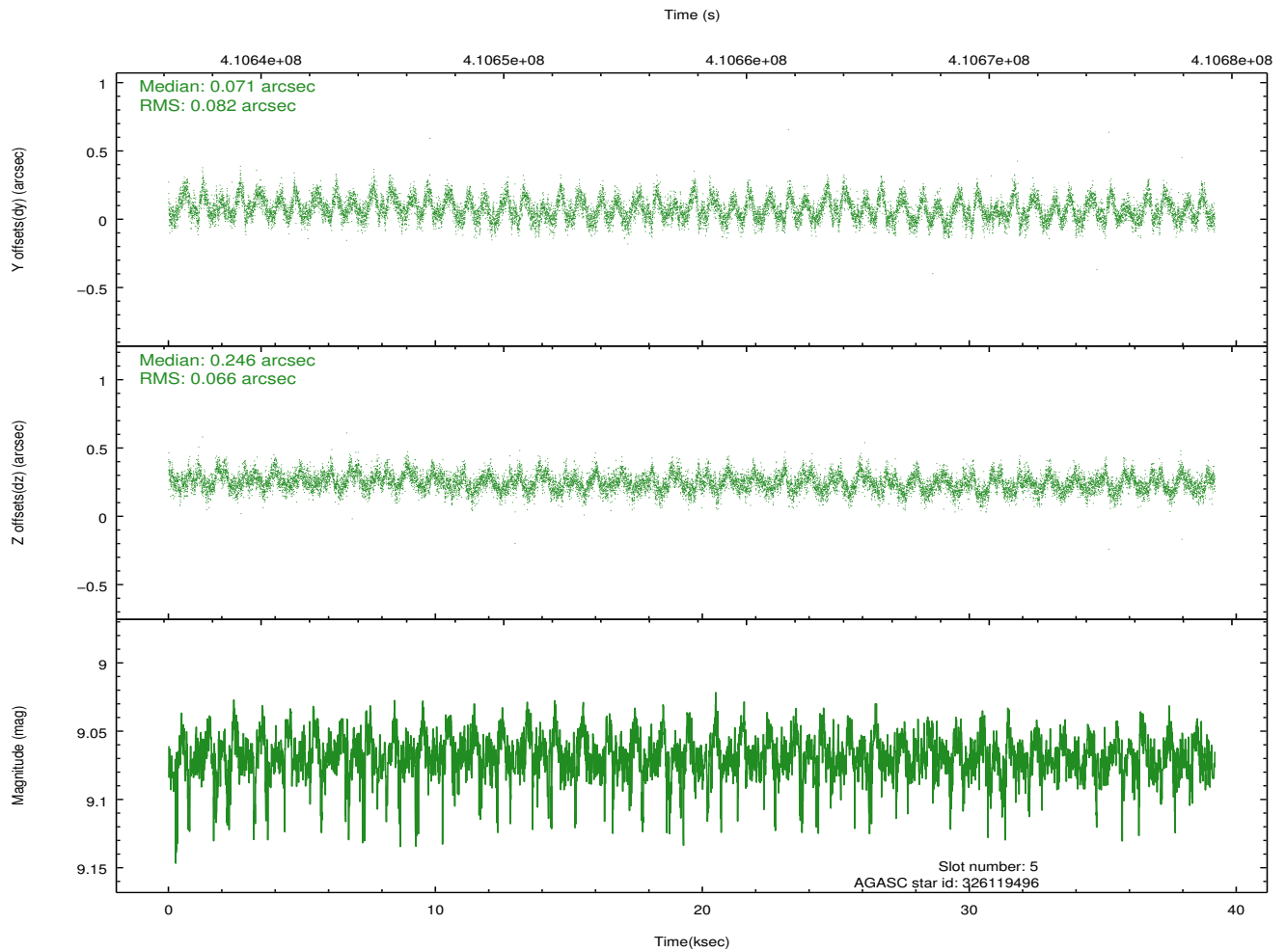
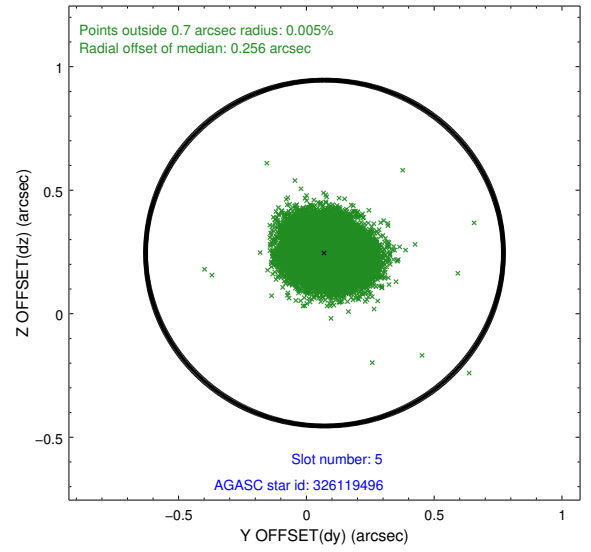
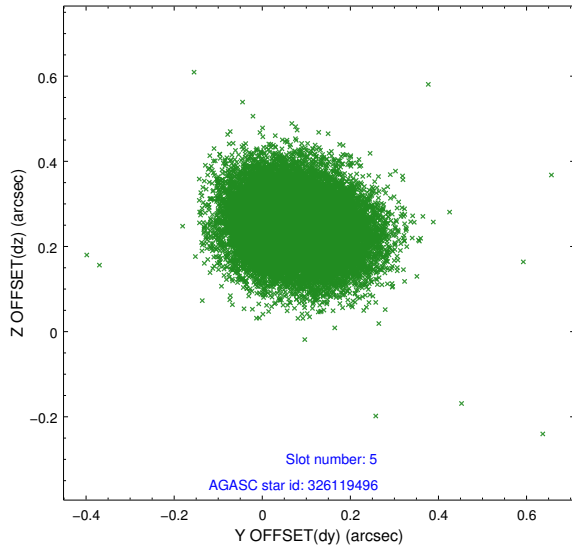
2.4.1 Slot 3



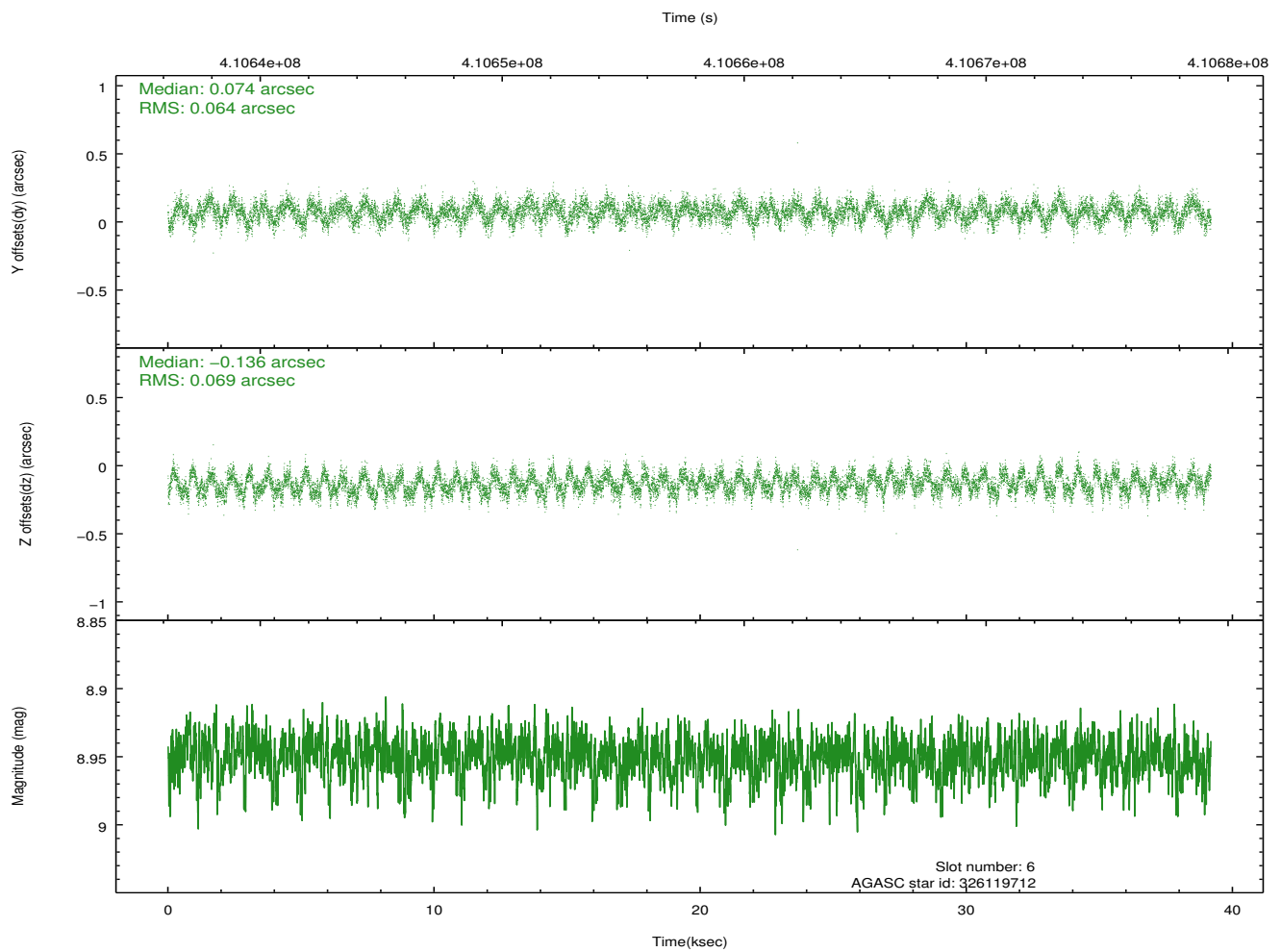
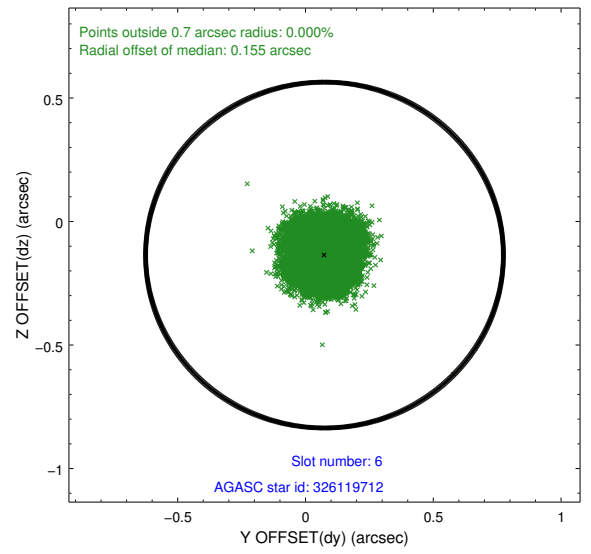
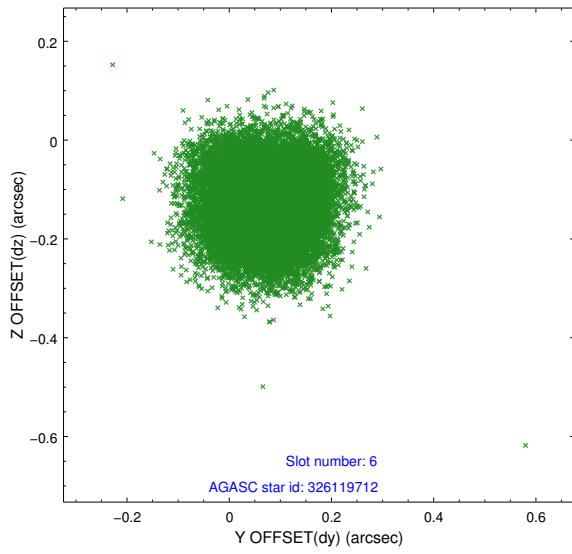
2.4.2 Slot 4



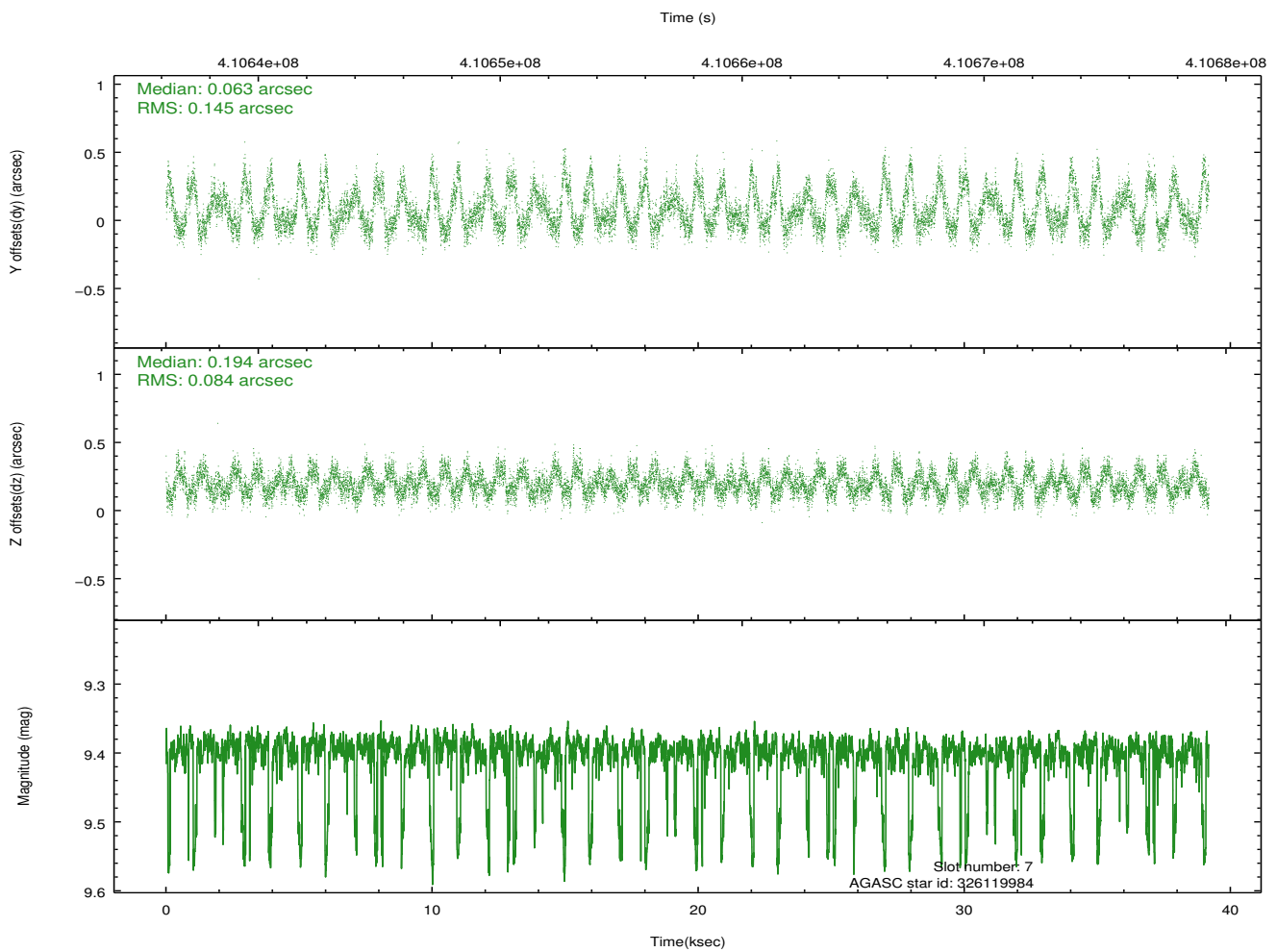
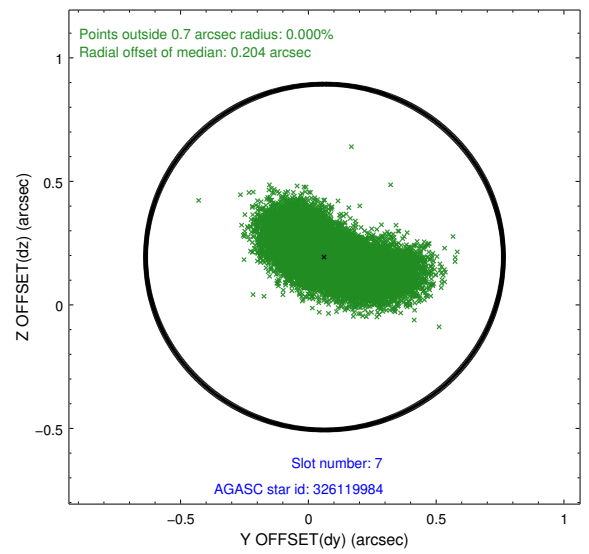
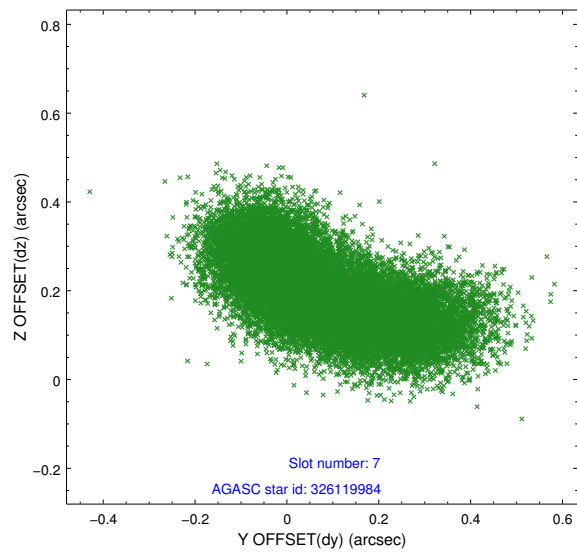
2.4.3 Slot 5



2.4.4 Slot 6

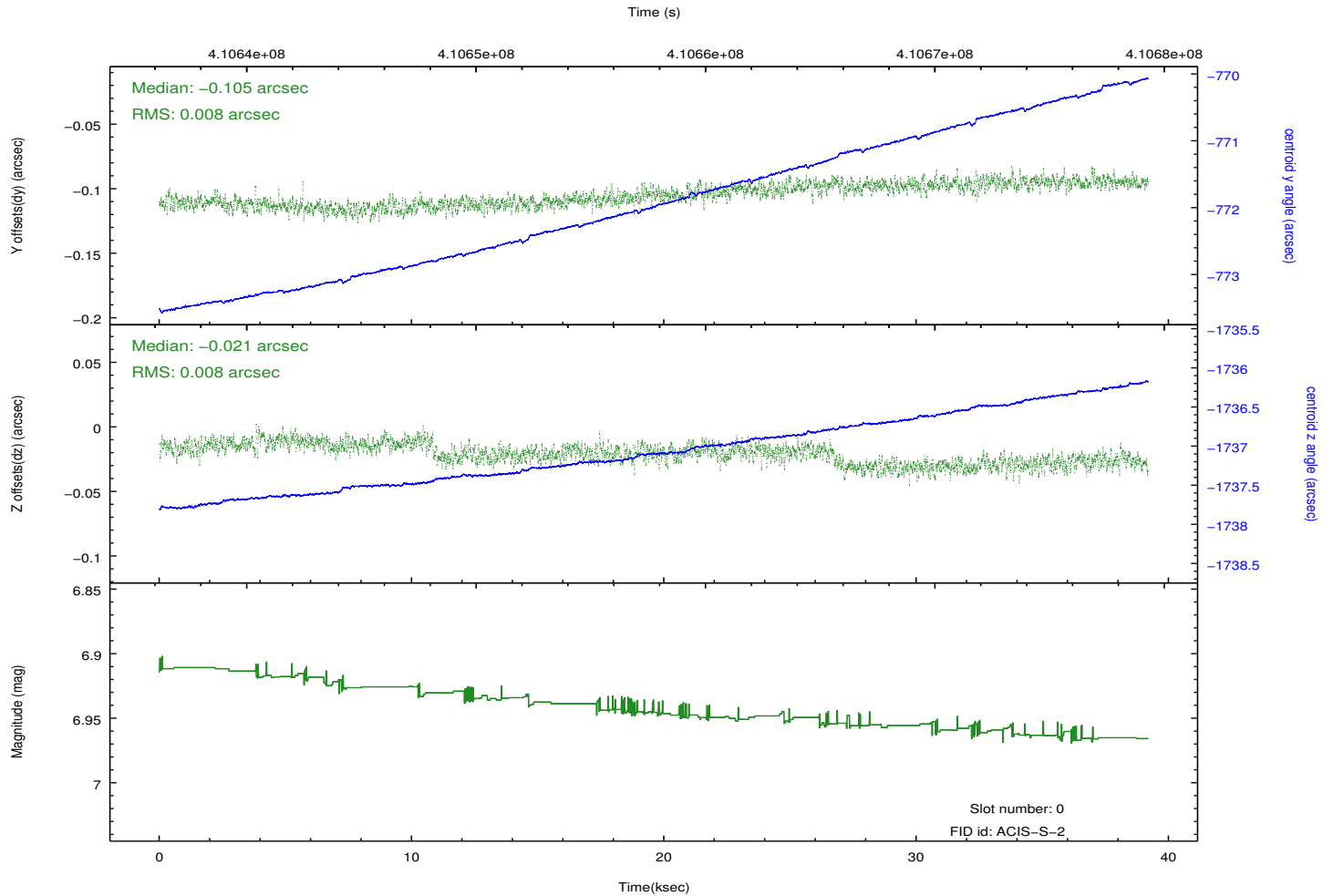
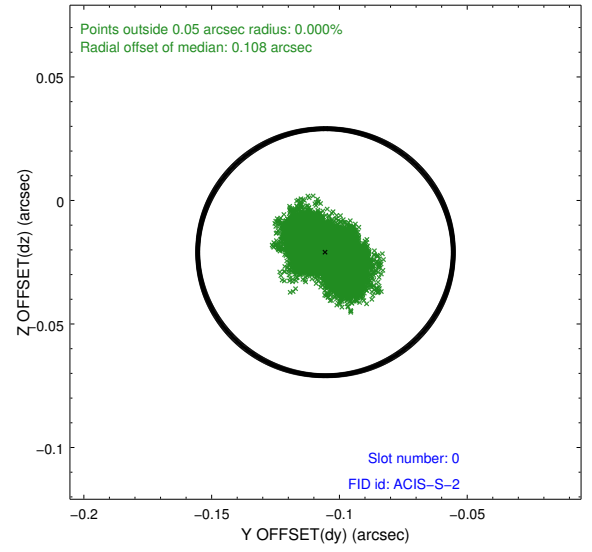
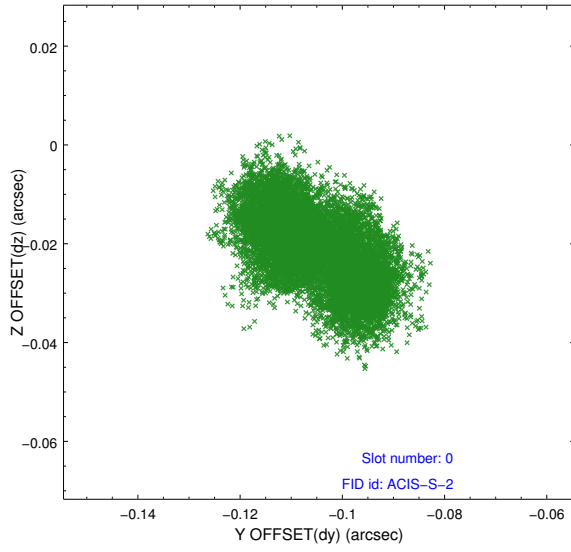


2.4.5 Slot 7

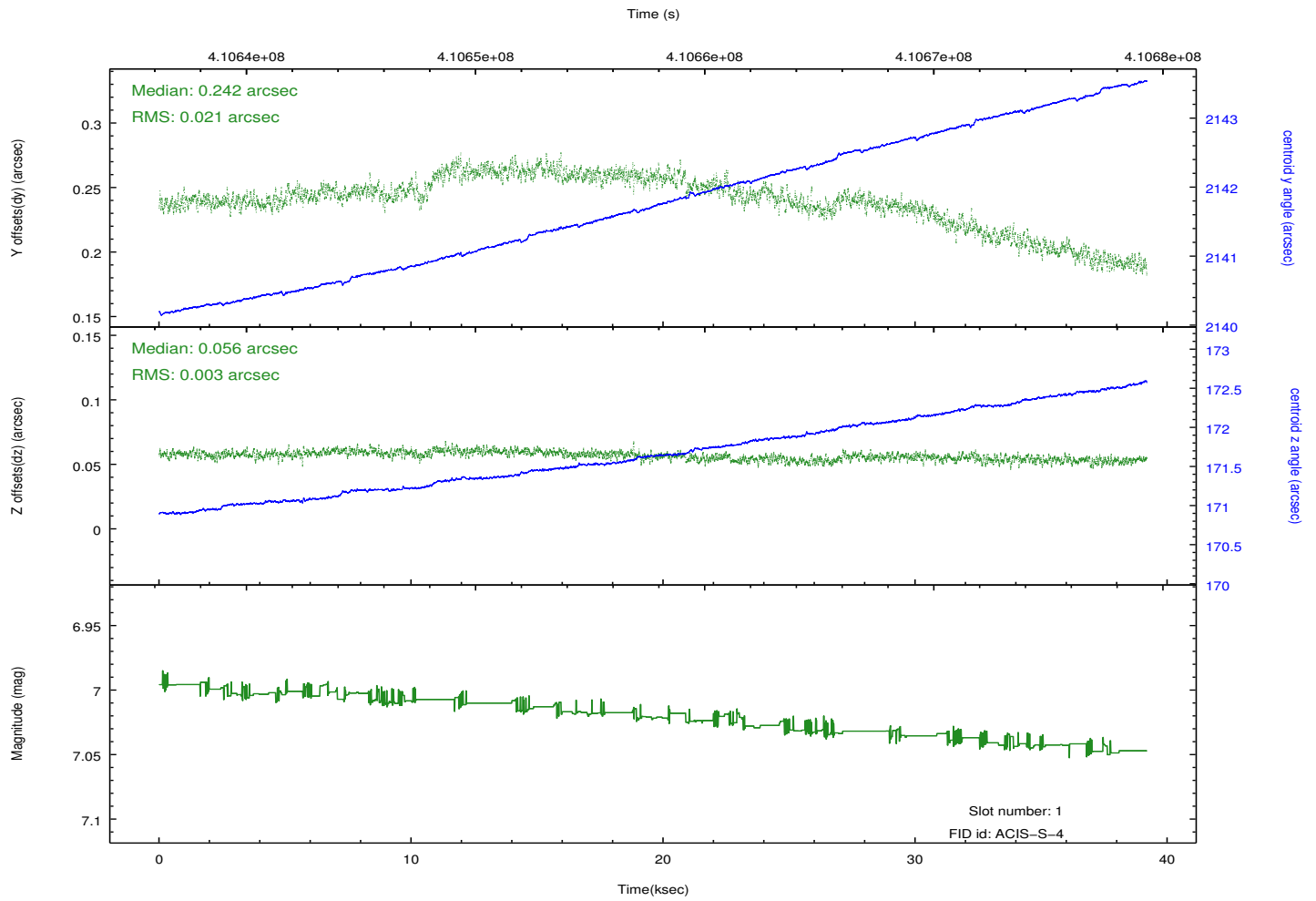
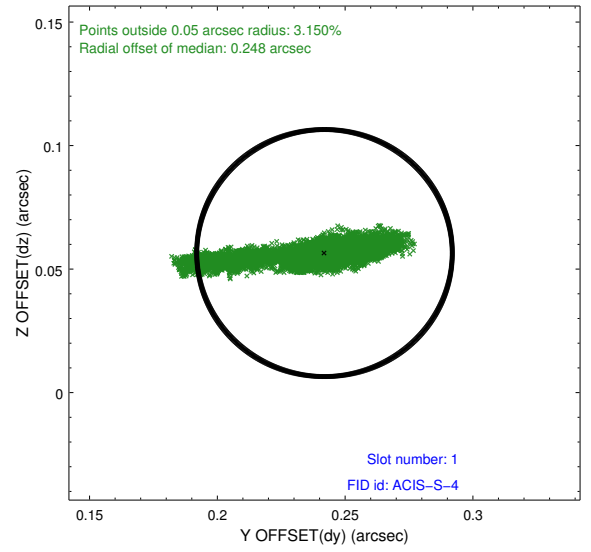
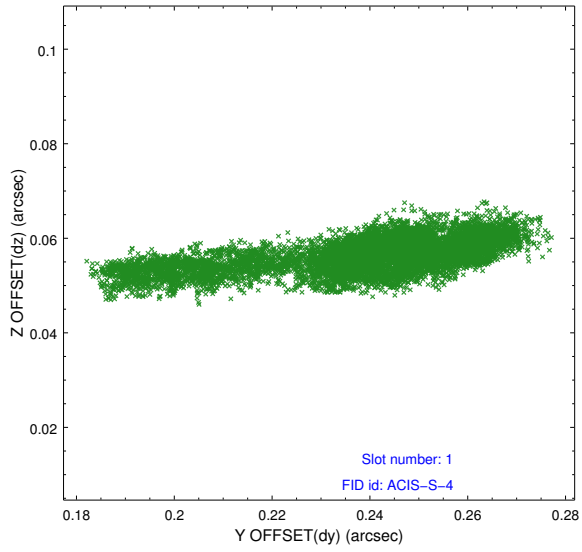


2.5 FID Slots

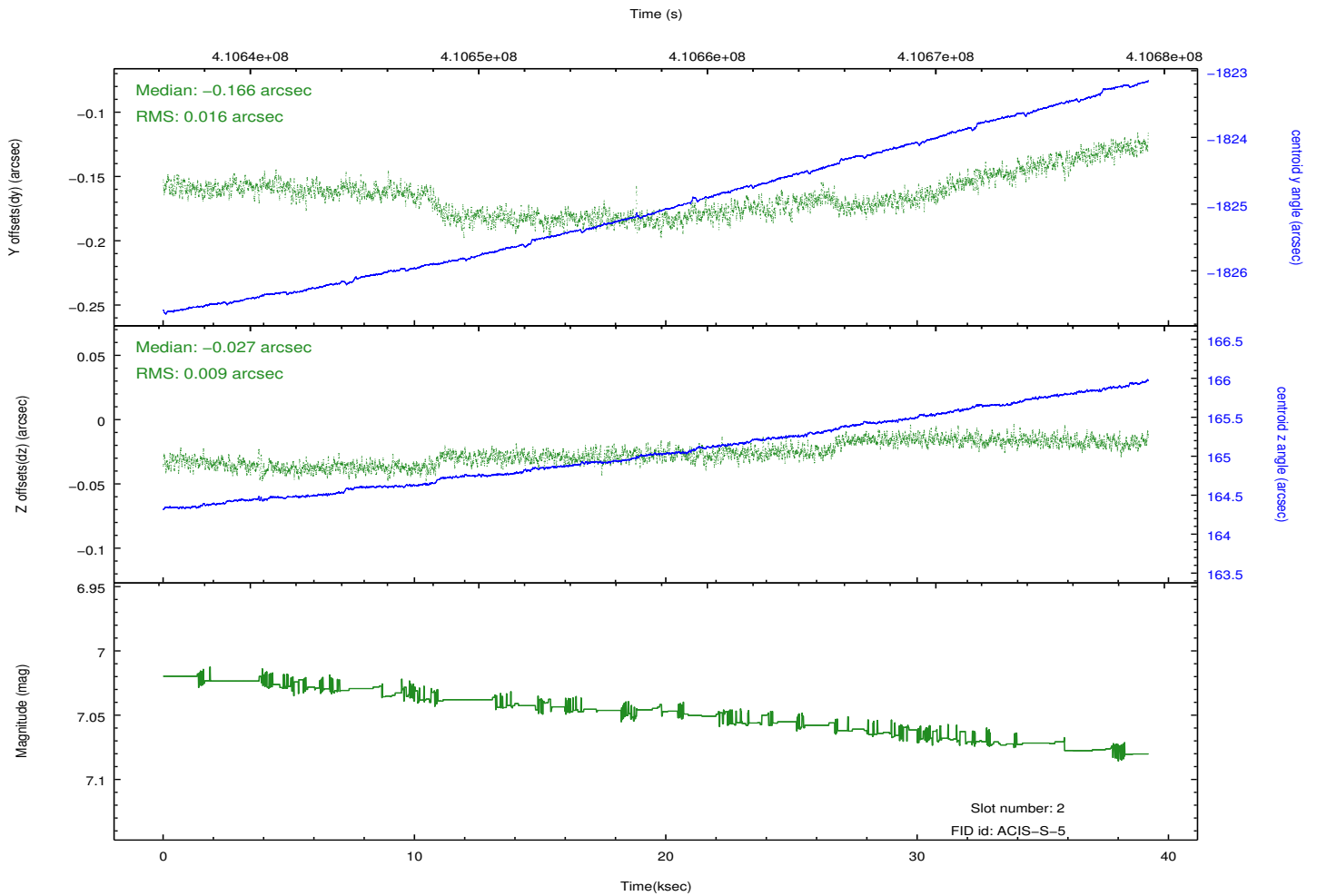
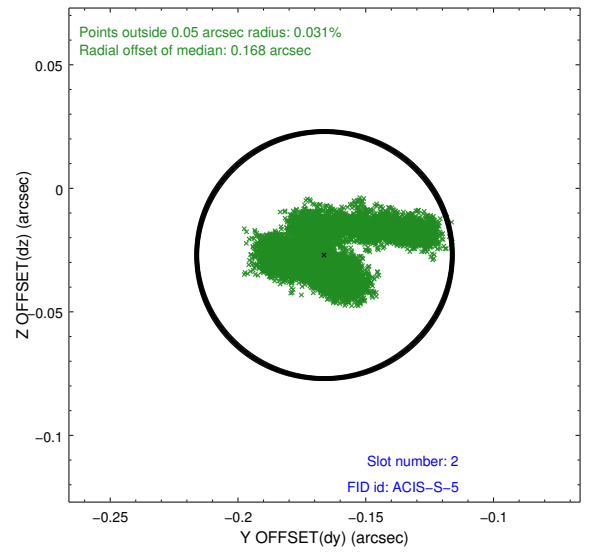
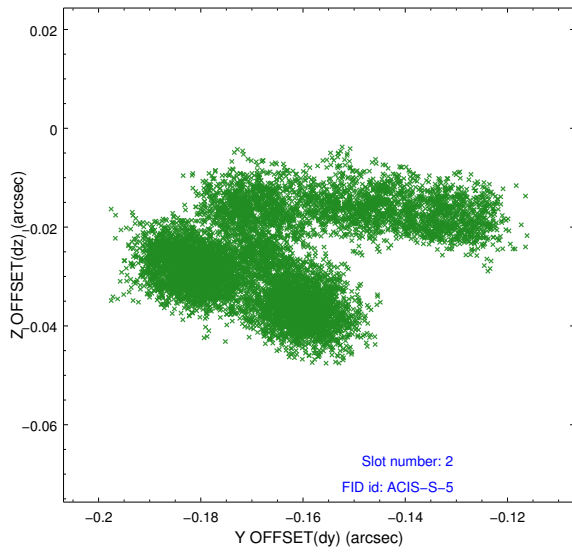
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.038300300241

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.