

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 785 - L2 Version 5
Chandra X-Ray Center

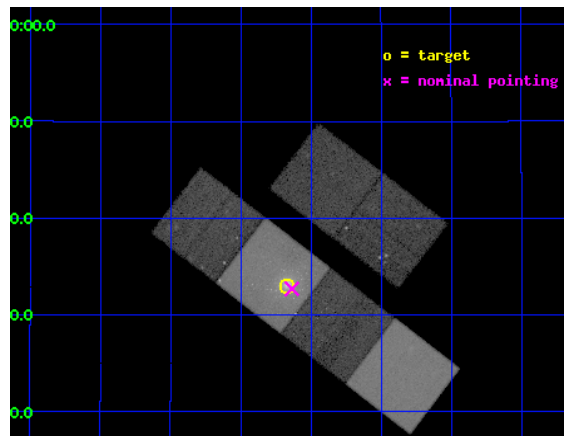
L2 Processing Date : Oct 23 2012

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1 Front

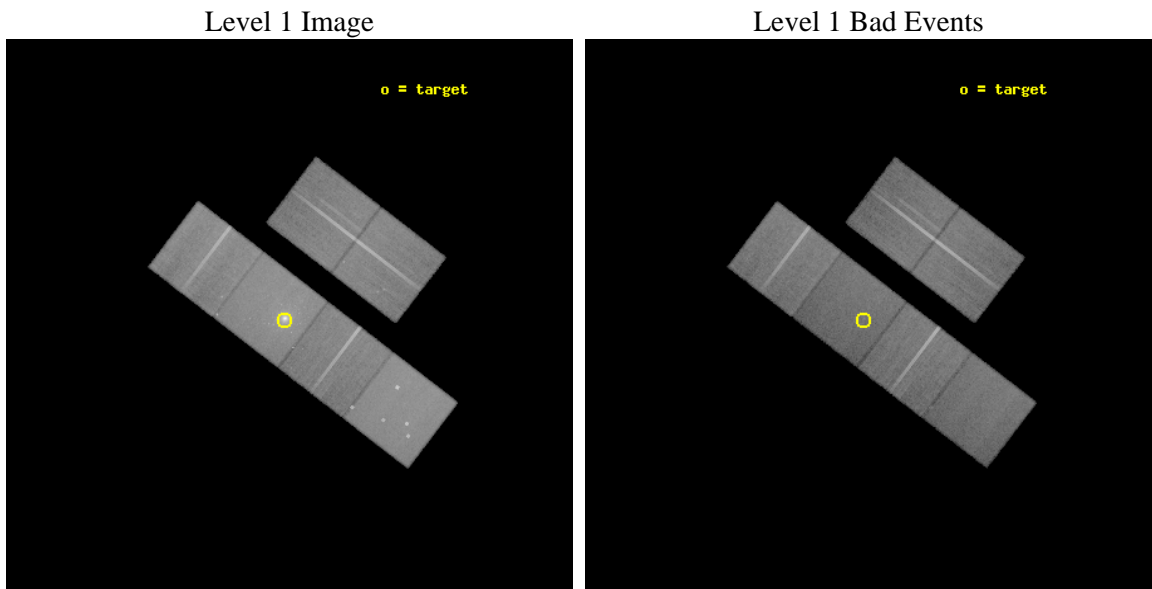
seq_num	600088	Sequence number
obs_id	785	Observation id
title	STELLAR MASS LOSS VERSUS EXTERNAL ACCRETION IN X-RAY BRIGHT ELLIPTICALS	Proposal title
observer	Dr. CRAIG SARAZIN	Principal investigator
object	NGC 4649	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	190.917917	Observer's specified target RA [deg]
dec_targ	11.549444	Observer's specified target Dec [deg]
ra_nom	190.90877773214	Nominal RA [deg]
dec_nom	11.544920260877	Nominal Dec [deg]
roll_nom	217.46395873314	Nominal Roll [deg]
revision	5	Processing version of data
ontime	38599.561003372	Sum of GTIs [s]
livetime	38110.790120082	Livetime [s]
ontime2	38620.431274071	Sum of GTIs [s]
ontime3	38633.395164877	Sum of GTIs [s]
ontime5	38607.467532814	Sum of GTIs [s]
ontime6	38643.118225127	Sum of GTIs [s]
ontime7	38599.561003372	Sum of GTIs [s]
ontime8	38636.636244819	Sum of GTIs [s]
l2events	527938	Number of level 2 events



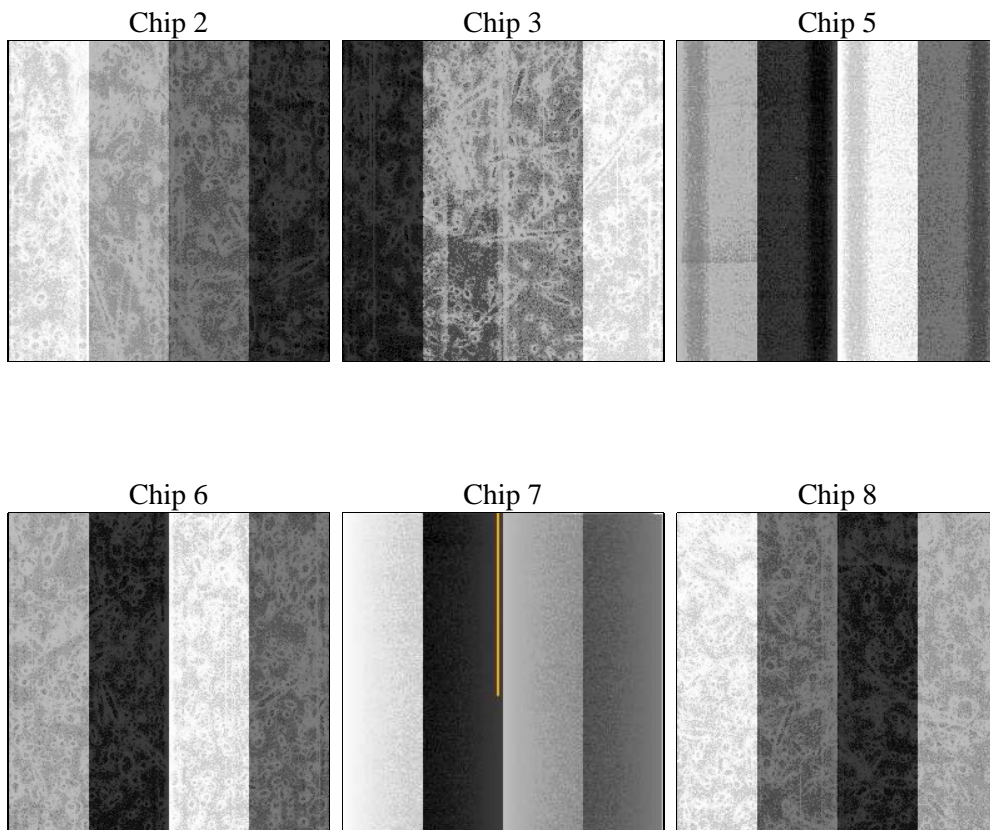
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	38599.561003372	Sum of GTIs [s]
caldbver	4.5.2	 	ontime2	38620.431274071	Sum of GTIs [s]
date	2012-10-22T23:35:53	Date and time of file creation	ontime3	38633.395164877	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	38607.467532814	Sum of GTIs [s]
			ontime6	38643.118225127	Sum of GTIs [s]
			ontime7	38599.561003372	Sum of GTIs [s]
			ontime8	38636.636244819	Sum of GTIs [s]
			l1events	2030855	Number of level 1 events

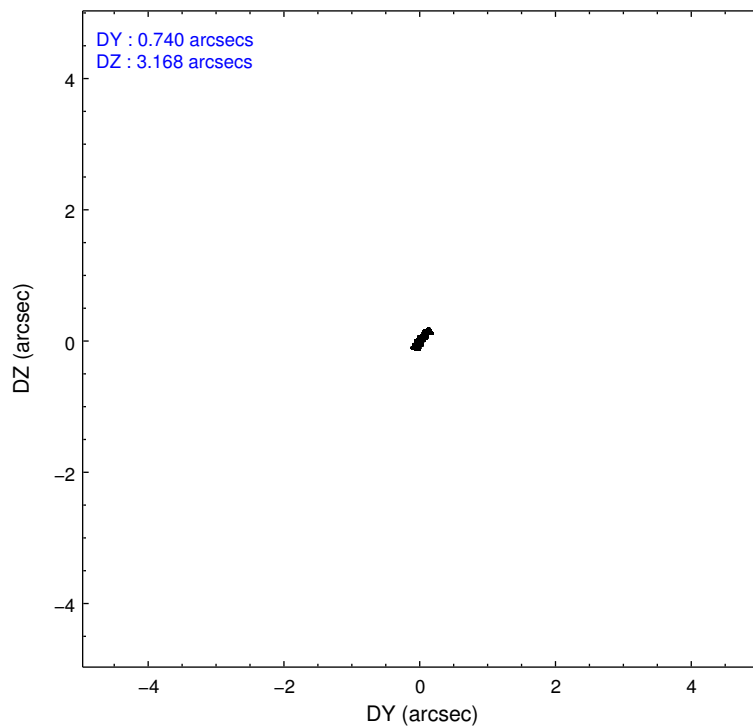
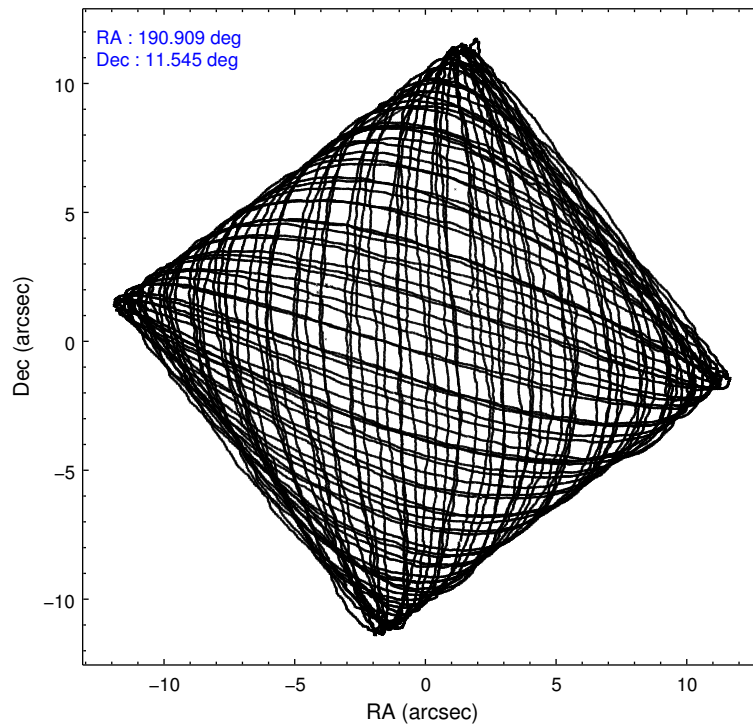
2.1.4 Events

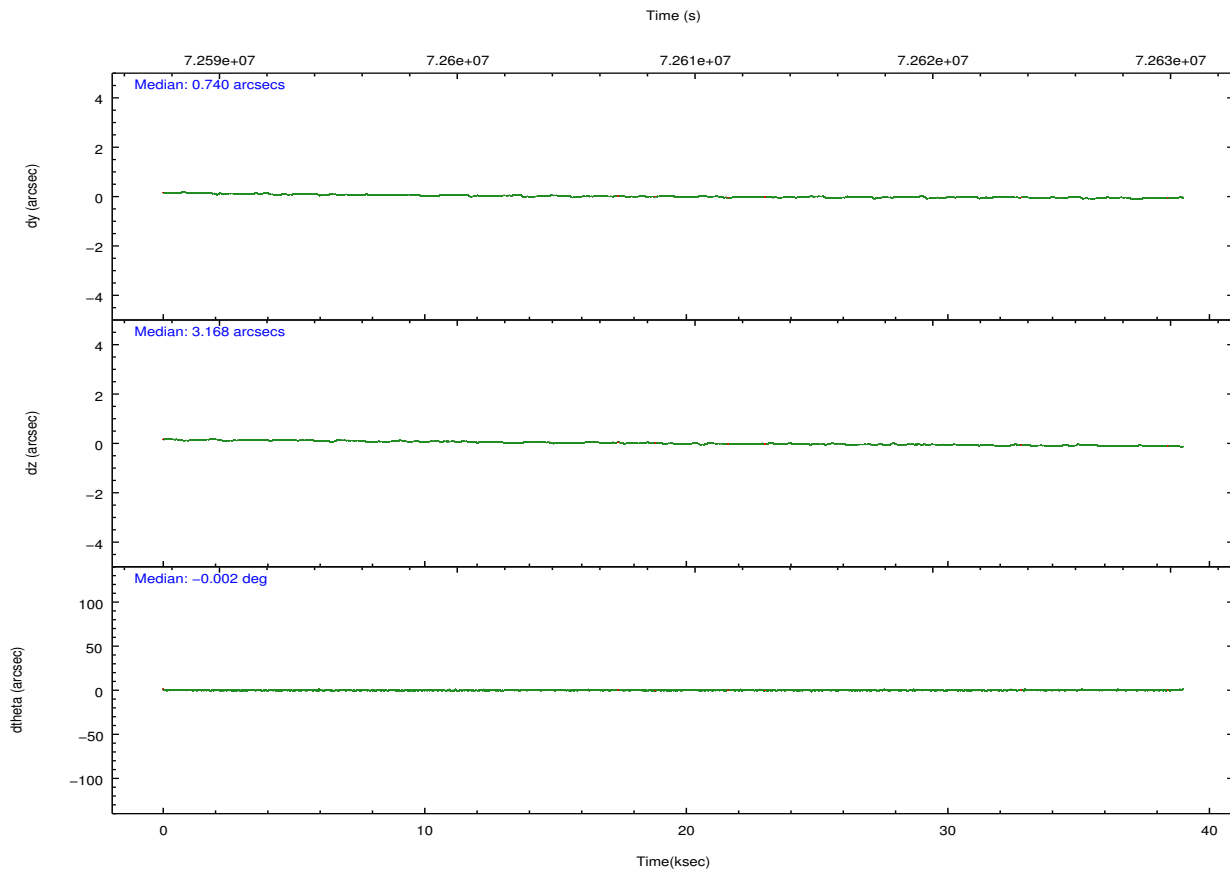
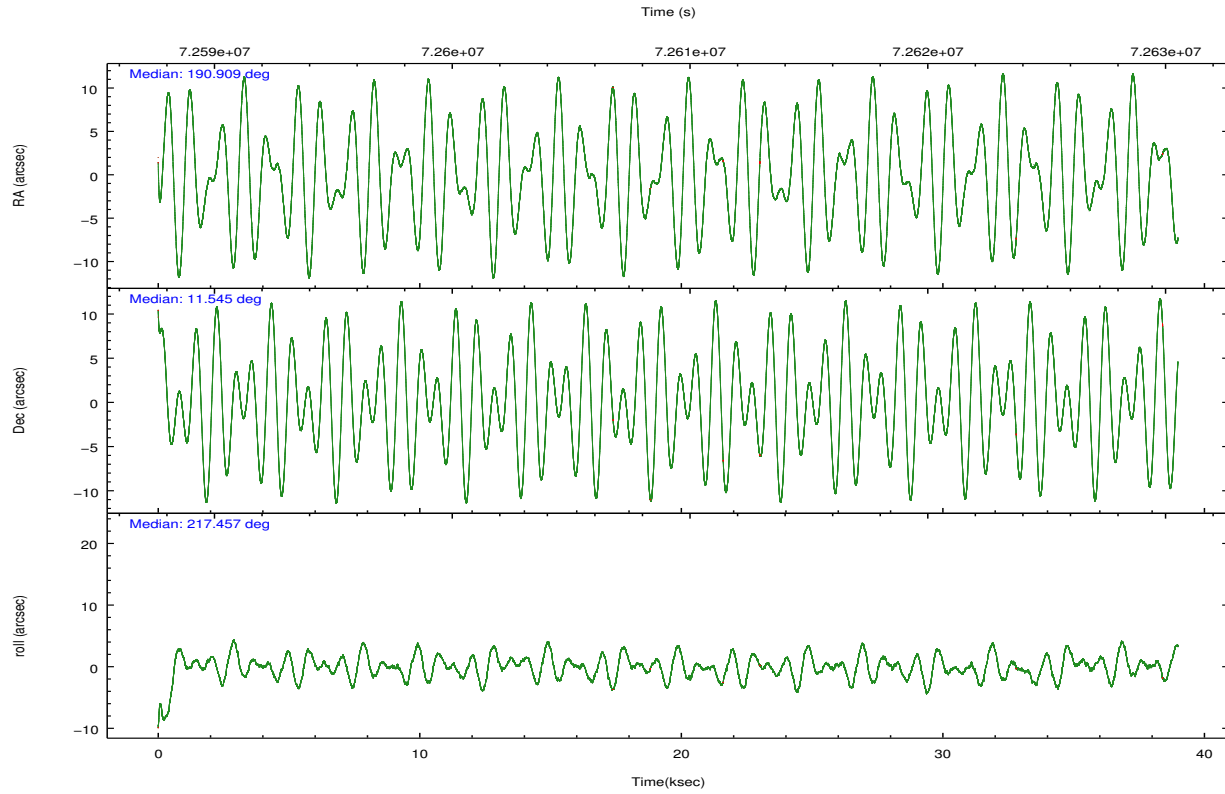
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	295634	278575	399710	285191	421241	350504	grade 0 events	13835	13137	35766	14908	40784	23028
rejected events	264741	249199	192494	252491	188443	283138		4%	4%	8%	5%	9%	6%
rejected %	89%	89%	48%	88%	44%	80%	grade 1 events	125	142	631	130	333	187
								0%	0%	0%	0%	0%	0%
							grade 2 events	6254	5532	55628	5908	49844	13868
								2%	1%	13%	2%	11%	3%
							grade 3 events	2862	2875	10109	3102	22827	7395
								0%	1%	2%	1%	5%	2%
							grade 4 events	2876	2892	9966	3088	22429	6851
								0%	1%	2%	1%	5%	1%
							grade 5 events	8667	8953	28023	10206	31833	13178
								2%	3%	7%	3%	7%	3%
							grade 6 events	5076	4951	95813	5705	96957	16236
								1%	1%	23%	2%	23%	4%
							grade 7 events	255939	240093	163774	242144	156234	269761
								86%	86%	40%	84%	37%	76%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	190.919452	190.9087777321384	Subarray requested	NONE	NONE
[deg] Pointing Dec	11.570294	11.54492026087743	Alternating exposures requested	N	N
[deg] Pointing Roll	217.305188	217.4639587331449	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	72590070.184000	72588845.023945			
Observation start date	2000-04-20T03:53:26	2000-04-20T03:34:05			
[s] Observation end time (MET)	72628570.184000	72629013.237918			
Observation end date	2000-04-20T14:35:06	2000-04-20T14:43:33			
Read mode	TIMED	TIMED			

2.3 Aspect



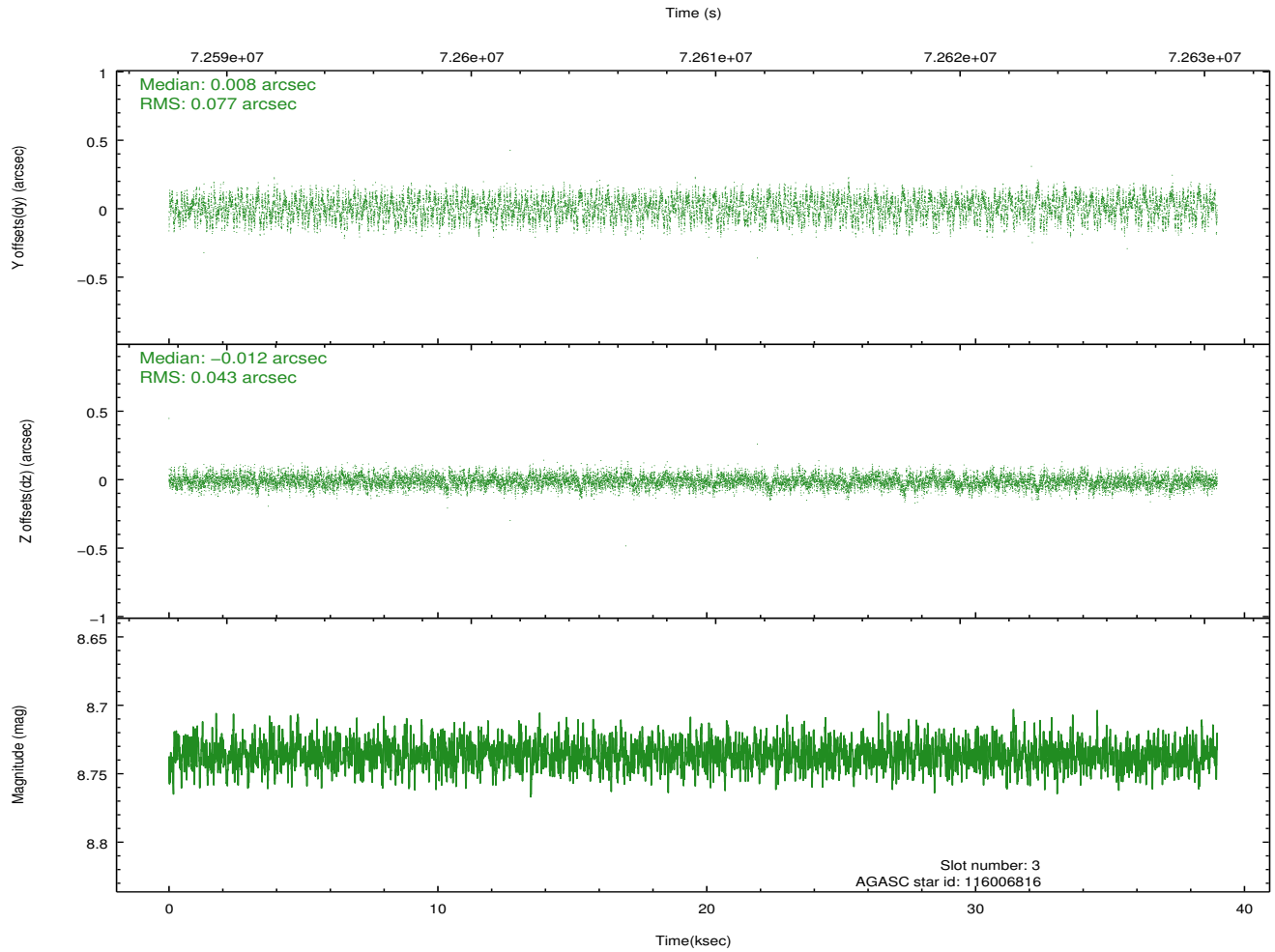
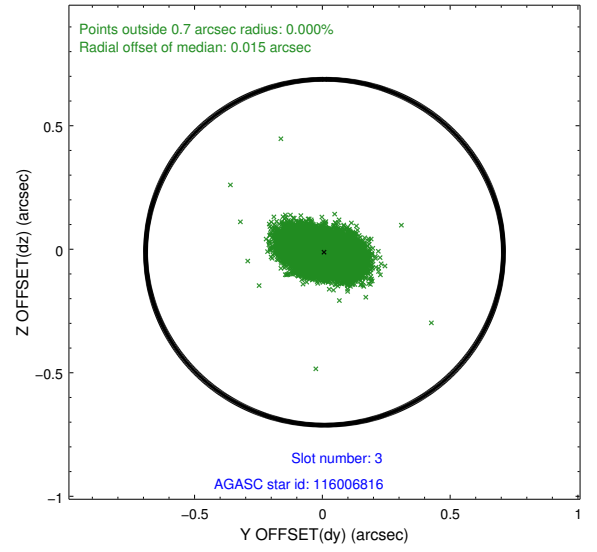
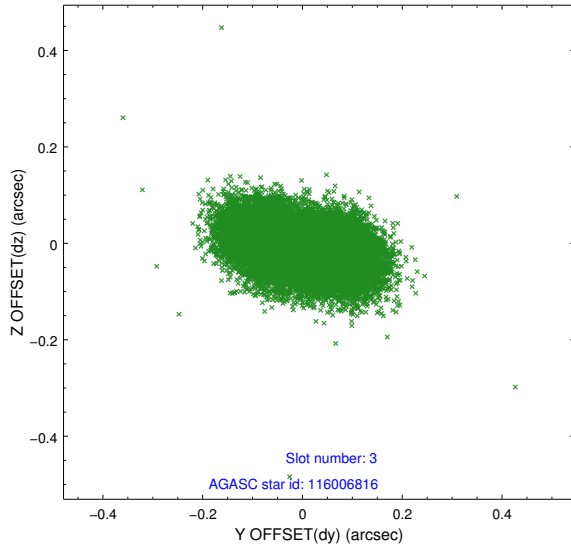


Slot Statistics

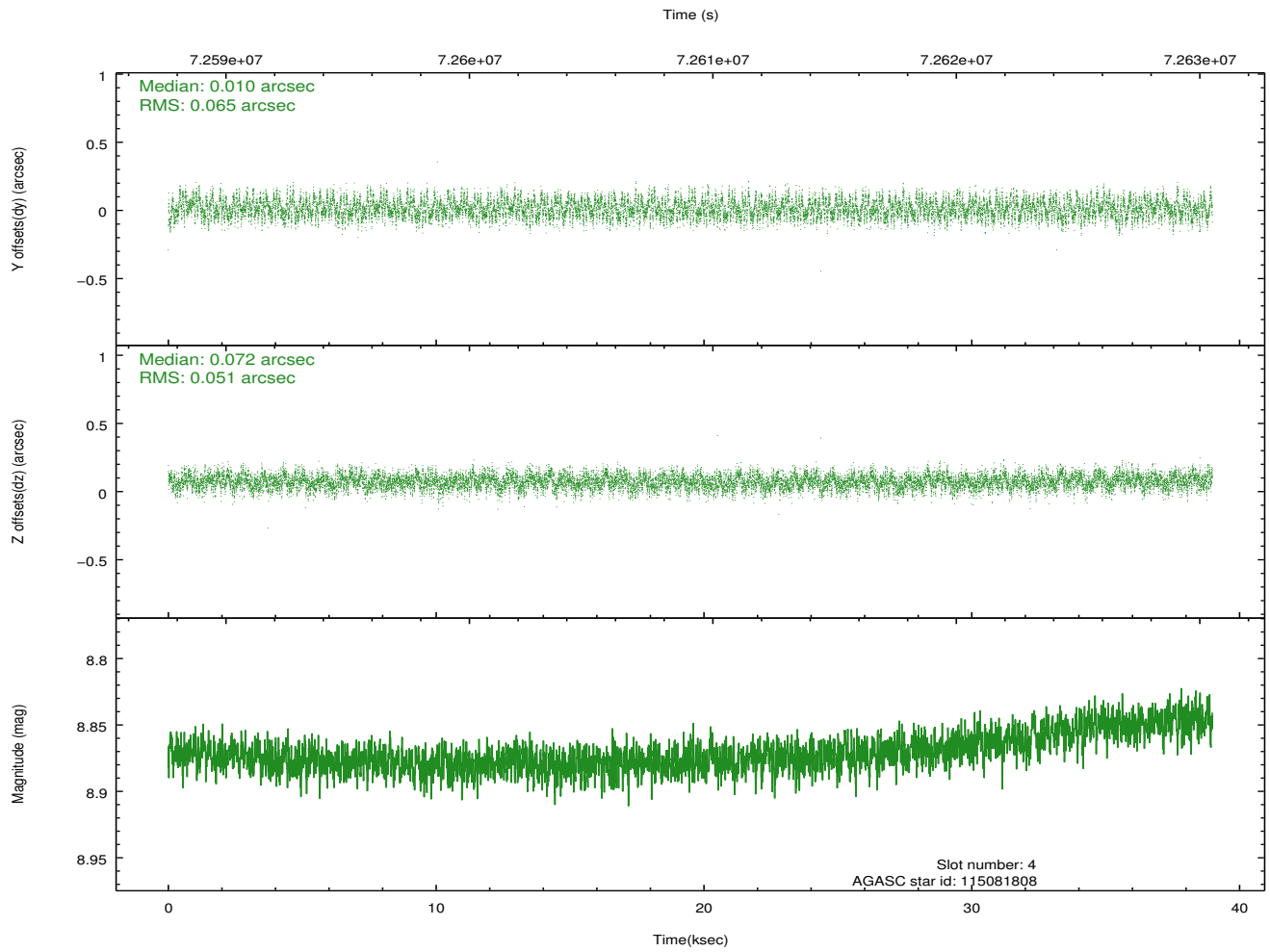
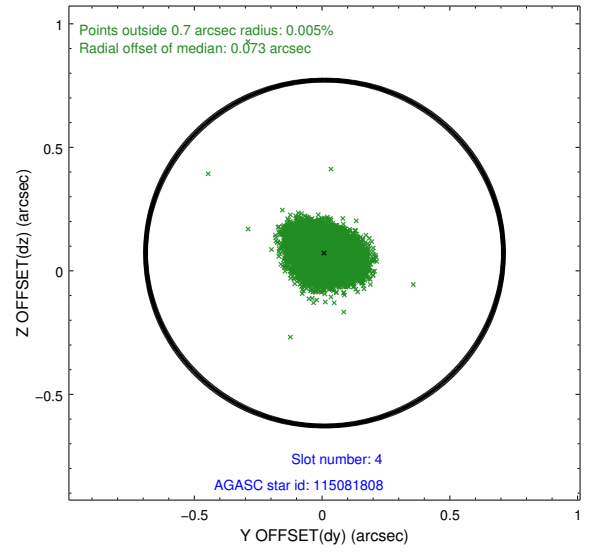
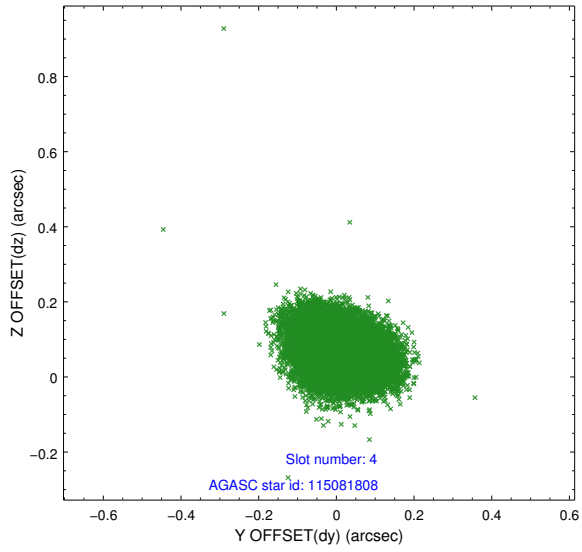
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	9449	-0.001	-0.012	0.007	0.012	0.000000	0.000000	-753.39	-1724.18
1	FID	ACIS-S-4	7.21	9345	0.002	0.004	0.006	0.010	0.000000	0.000000	2159.94	184.21
2	FID	ACIS-S-5	7.24	9374	-0.032	0.017	0.007	0.011	0.000000	0.000000	-1806.18	178.04
3	GUIDE	116006816	8.74	18740	0.008	-0.012	0.095	0.153	191.642439	11.378493	-1612.46	2093.11
4	GUIDE	115081808	8.87	18832	0.010	0.072	0.088	0.139	191.005561	10.921316	1174.44	2043.30
5	GUIDE	115083432	9.75	18656	-0.096	0.007	0.095	0.154	190.888504	12.192141	-1269.10	-1846.54
6	GUIDE	115084280	10.15	18822	0.023	-0.045	0.108	0.175	190.781448	11.930338	-397.97	-1325.70
7	GUIDE	115089400	9.88	18821	0.053	-0.023	0.109	0.179	190.425194	11.760272	971.30	-1600.75

2.4 Star Slots

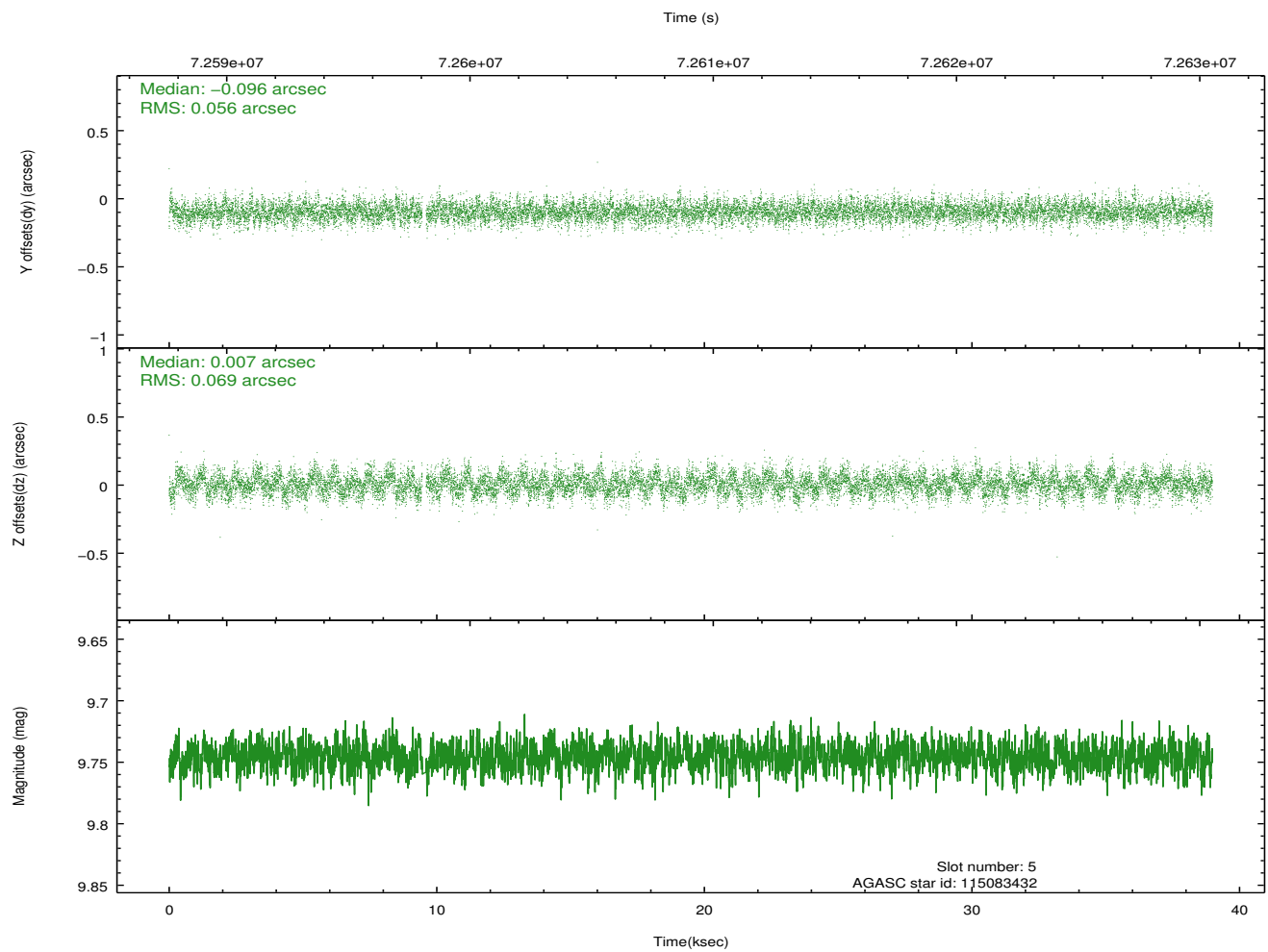
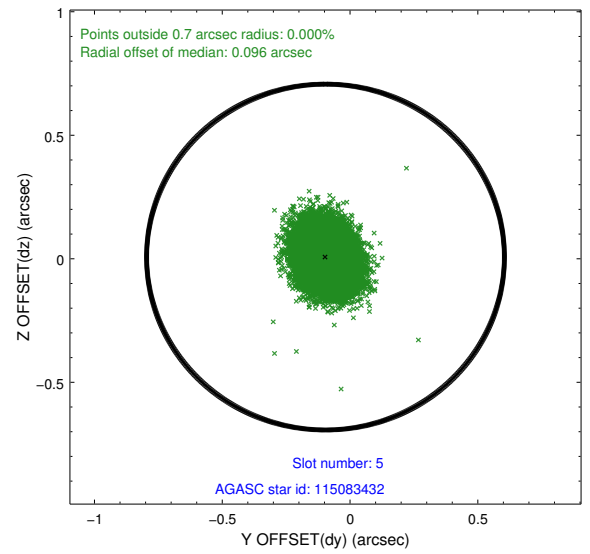
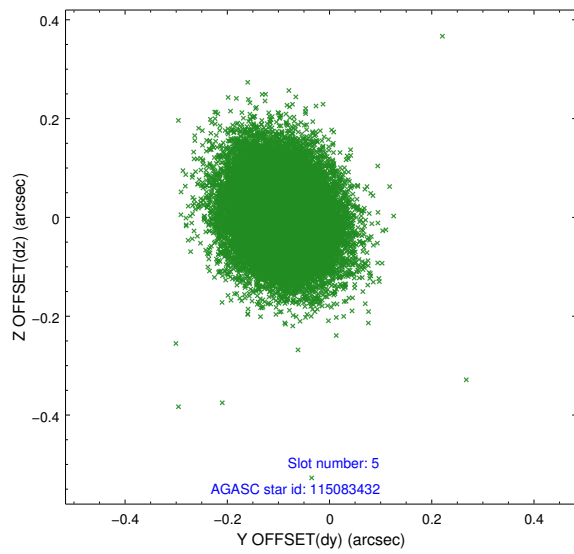
2.4.1 Slot 3



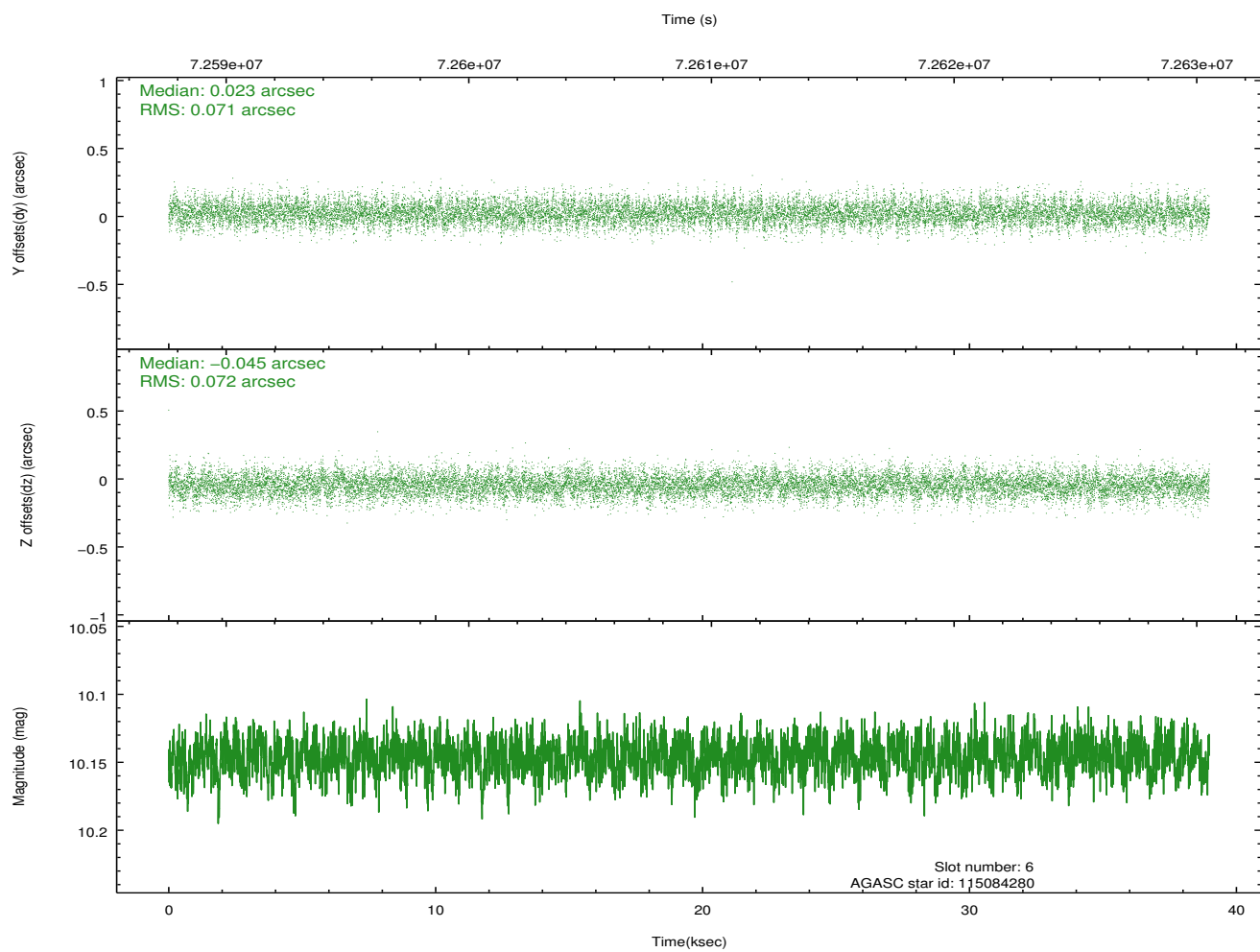
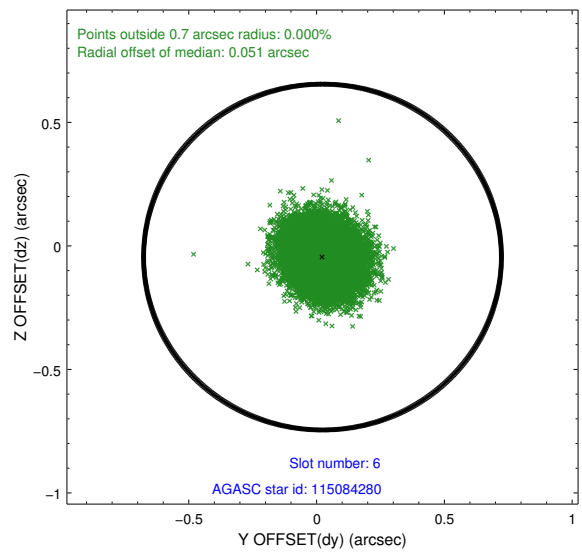
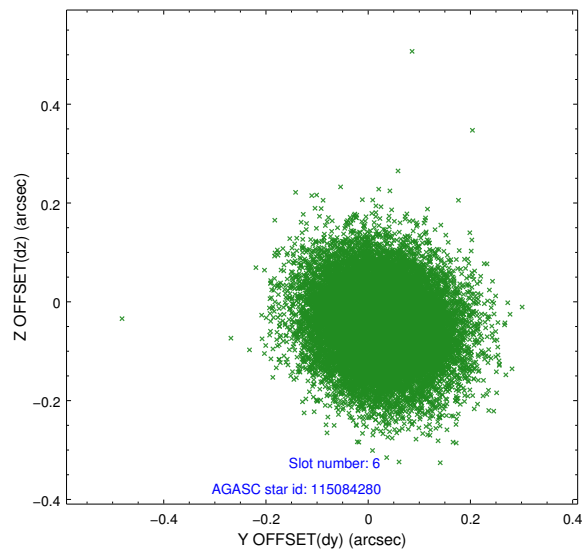
2.4.2 Slot 4



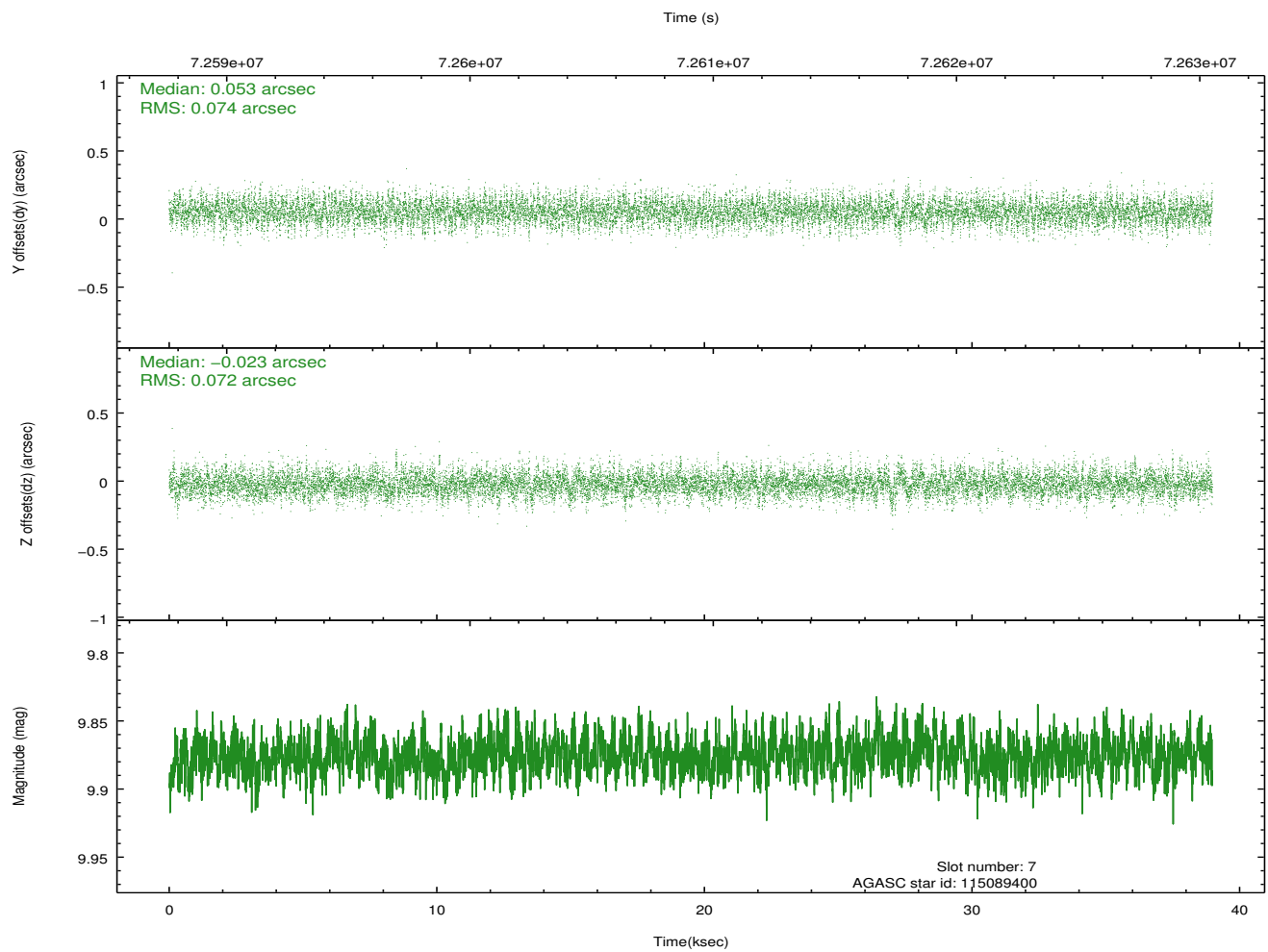
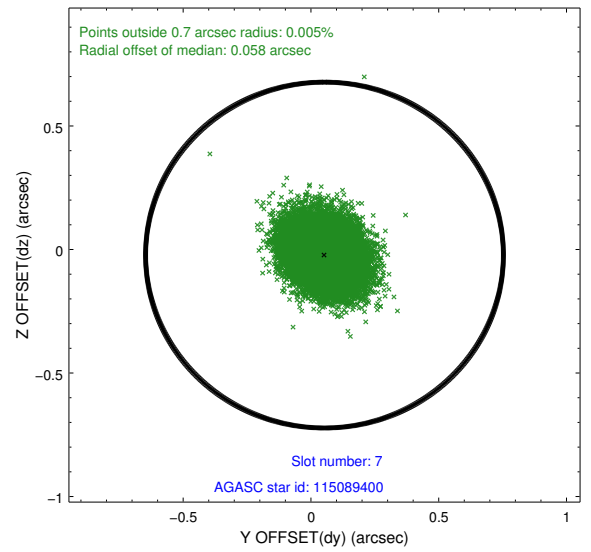
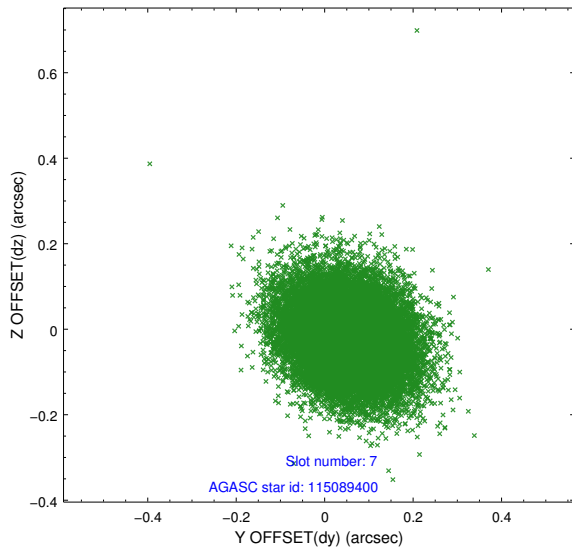
2.4.3 Slot 5



2.4.4 Slot 6

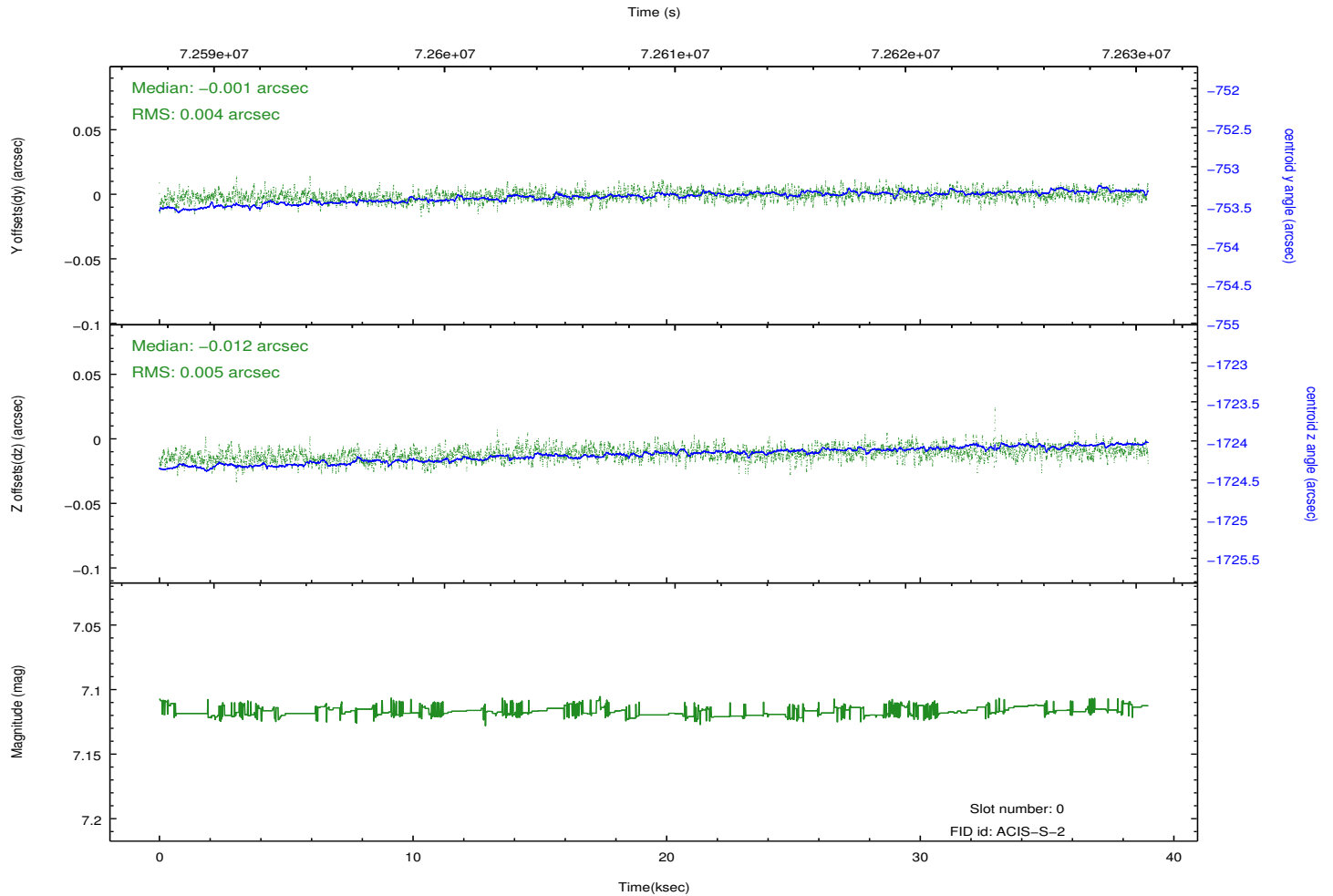
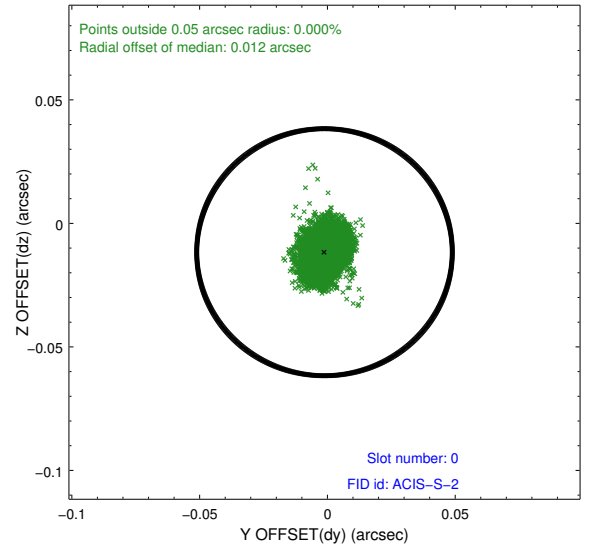
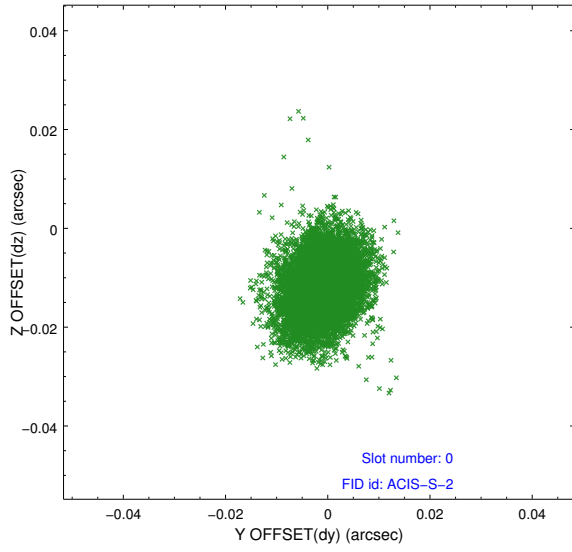


2.4.5 Slot 7

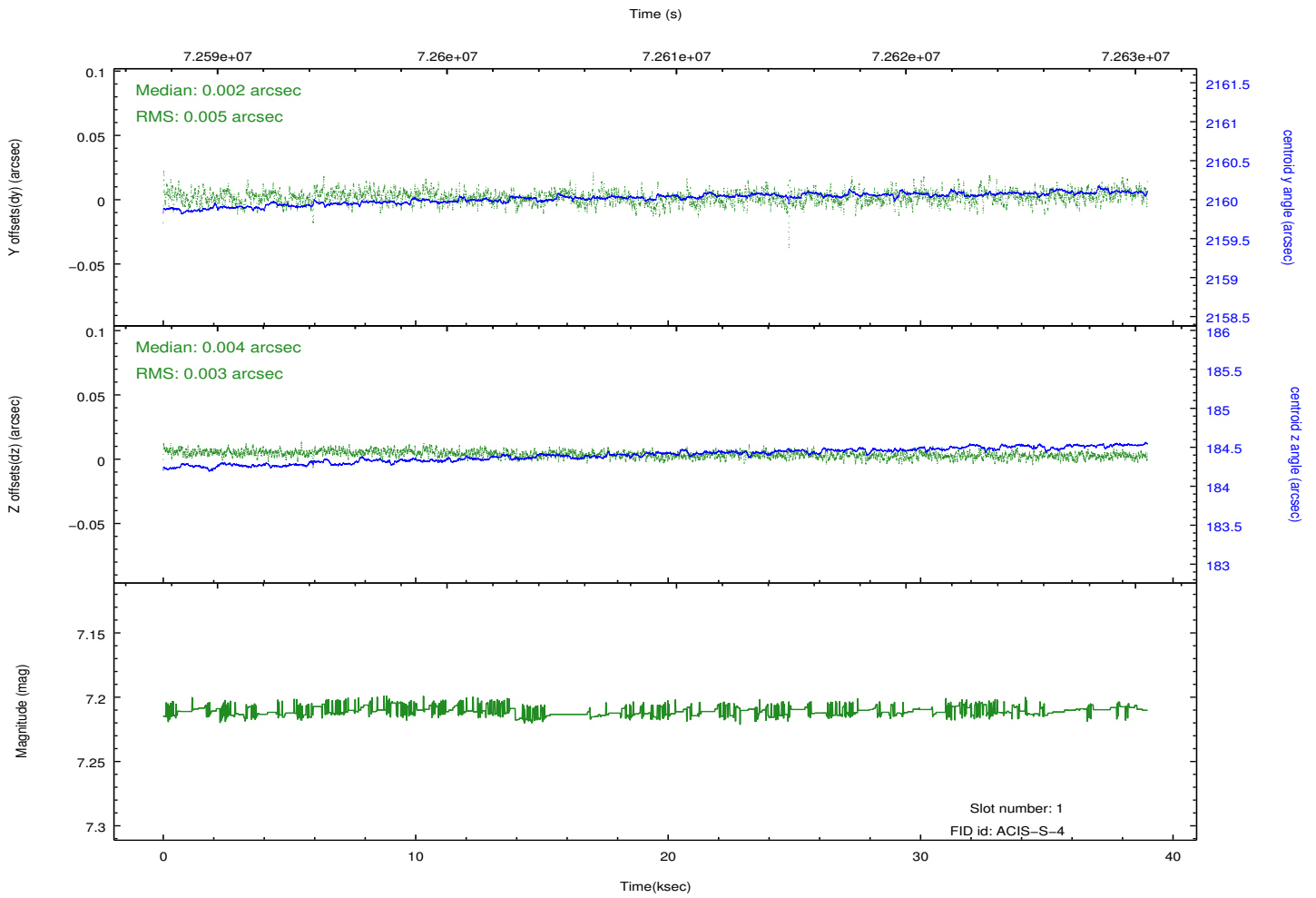
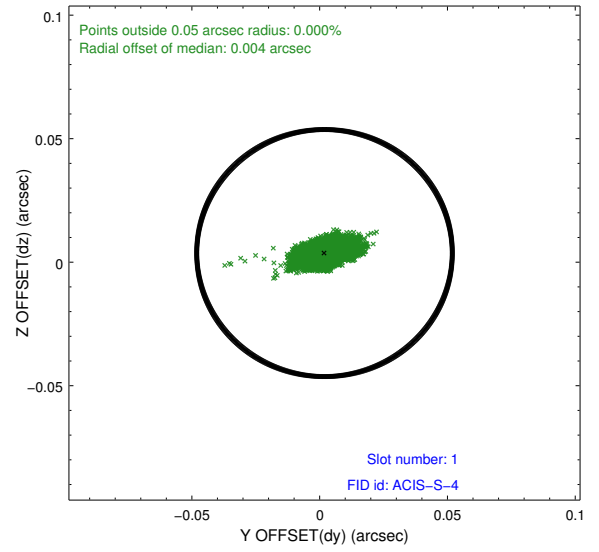
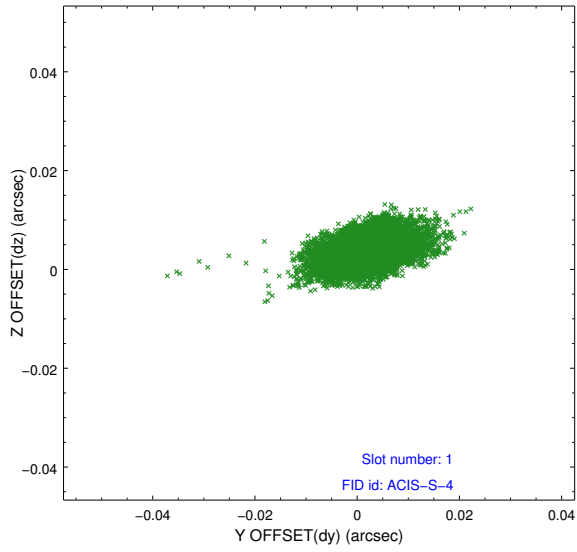


2.5 FID Slots

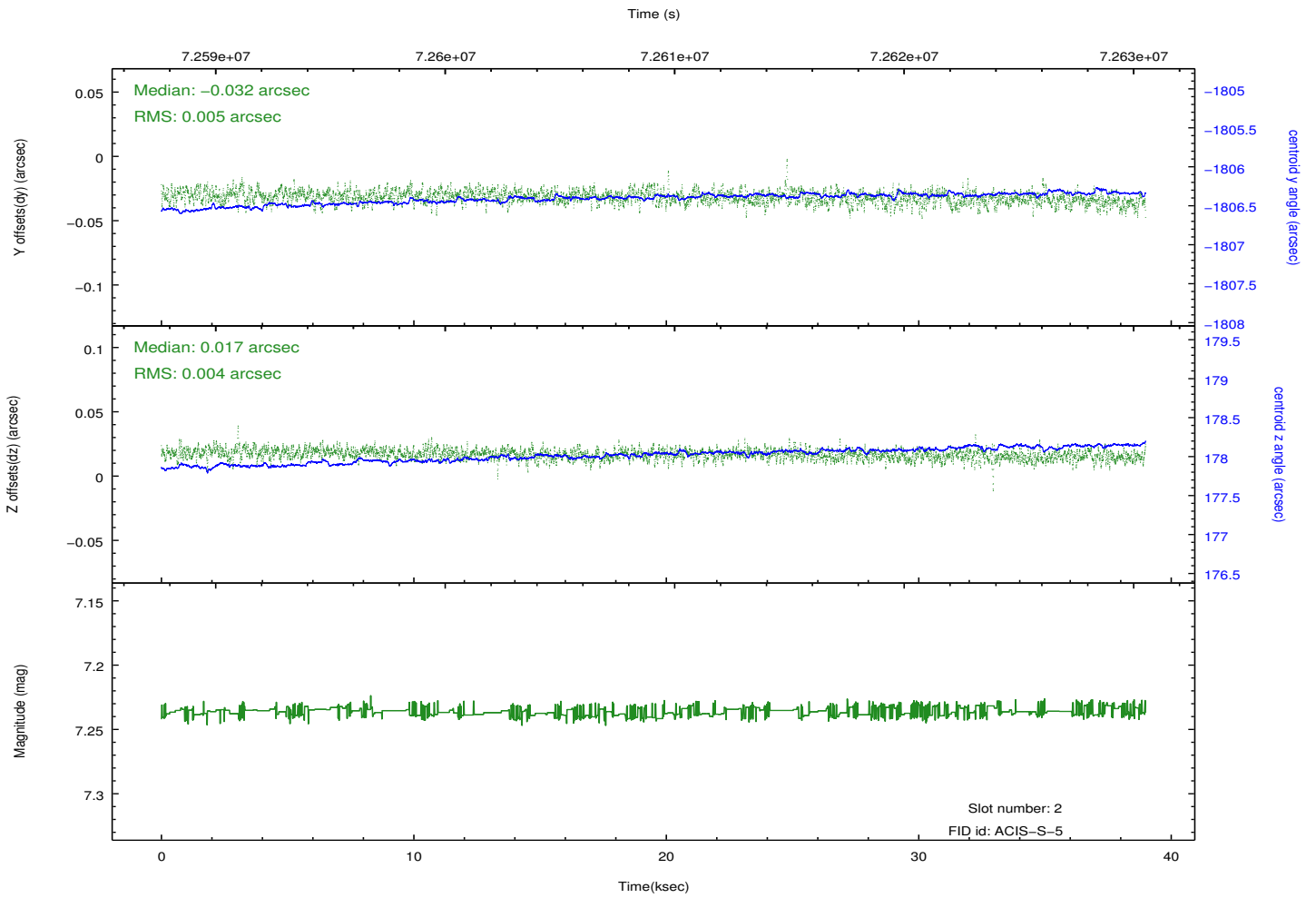
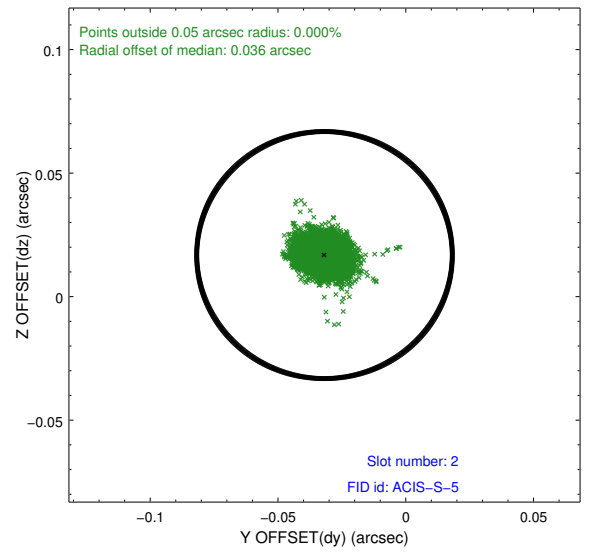
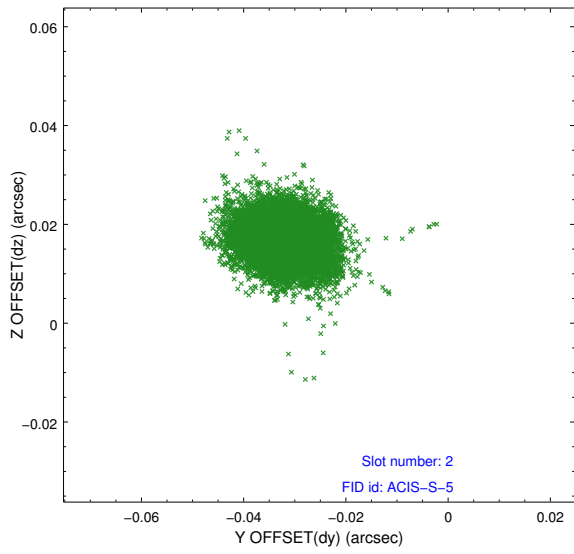
2.5.1 Slot 0



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)	2012.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.35

A.2 Comments

Charge time for this ObsId remains at previous value of 37.35 ks although with the current processing the charge time would have been 38.60 ksec.

=====

Spatial regions on the original bias map for CCD = 2 and 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias maps for CCDs 2 and 3 have been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:

CCD 2:

(190.72198,11.68756), (190.73107,11.67602), (190.77073,11.70580), (190.75003,11.70864)

CCD 3:

(190.85952,11.70752), (190.84238,11.72952), (190.79543,11.69426), (190.83488,11.68902)