

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12380 - L2 Version 2
Chandra X-Ray Center

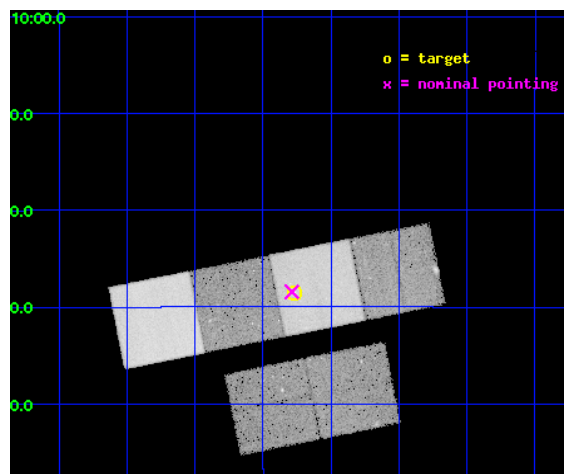
L2 Processing Date : Feb 5 2012

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1 Front

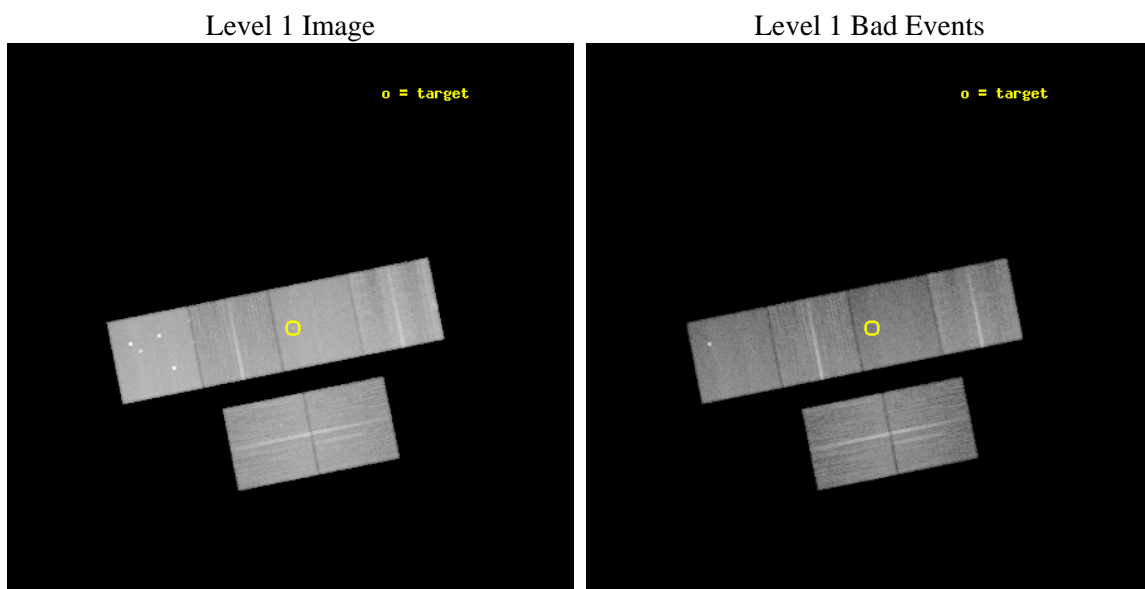
seq_num	200714	Sequence number
obs_id	12380	Observation id
title	X-rays from Planetary Nebulae: Unveiling Binarity, Magnetic Fields, and Wind Collisions	Proposal title
observer	Dr. Joel Kastner	Principal investigator
object	NGC 3242	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	156.192083	Observer's specified target RA [deg]
dec_targ	-18.642389	Observer's specified target Dec [deg]
ra_nom	156.19689638184	Nominal RA [deg]
dec_nom	-18.640702823185	Nominal Dec [deg]
roll_nom	348.66820094574	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29631.999889672	Sum of GTIs [s]
livetime	29256.781664821	Livetime [s]
ontime2	29631.999889672	Sum of GTIs [s]
ontime3	29631.999889672	Sum of GTIs [s]
ontime5	29631.999889672	Sum of GTIs [s]
ontime6	29628.758839369	Sum of GTIs [s]
ontime7	29631.999889672	Sum of GTIs [s]
ontime8	29628.758839369	Sum of GTIs [s]
l2events	349069	Number of level 2 events



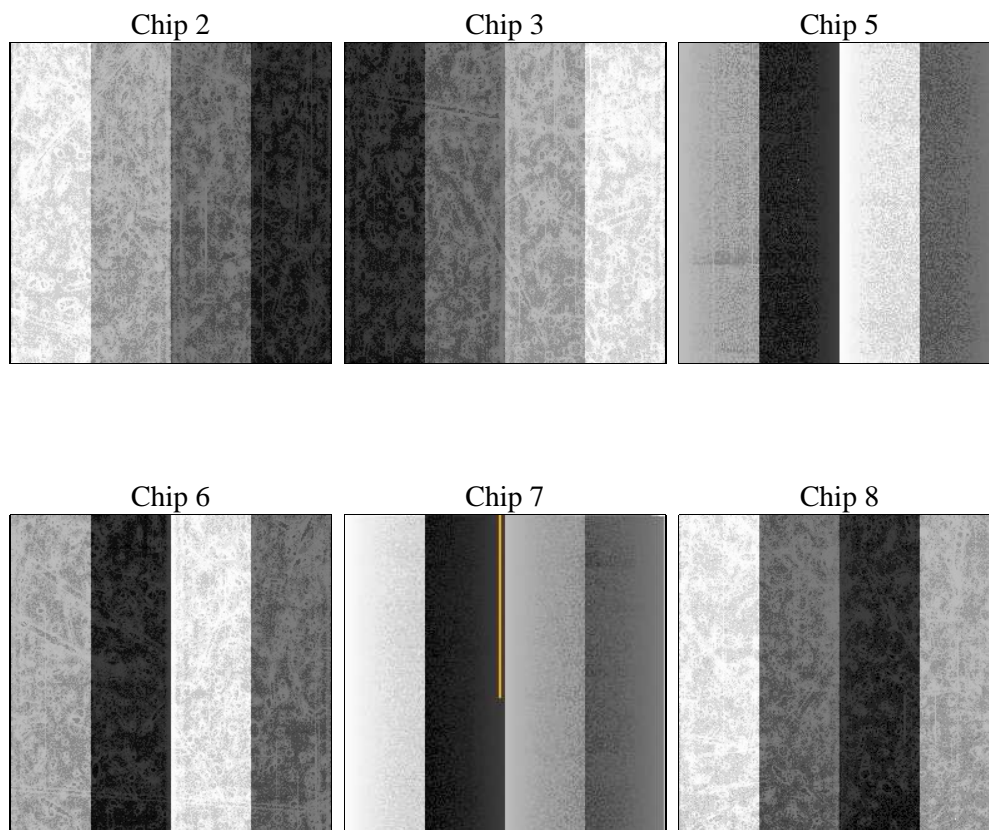
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29586.896000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	29631.999889672	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	29631.999889672	Sum of GTIs [s]
date	2012-02-05T14:39:12	Date and time of file creation	ontime3	29631.999889672	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29631.999889672	Sum of GTIs [s]
			ontime6	29628.758839369	Sum of GTIs [s]
			ontime7	29631.999889672	Sum of GTIs [s]
			ontime8	29628.758839369	Sum of GTIs [s]
			l1events	1517952	Number of level 1 events

2.1.4 Events

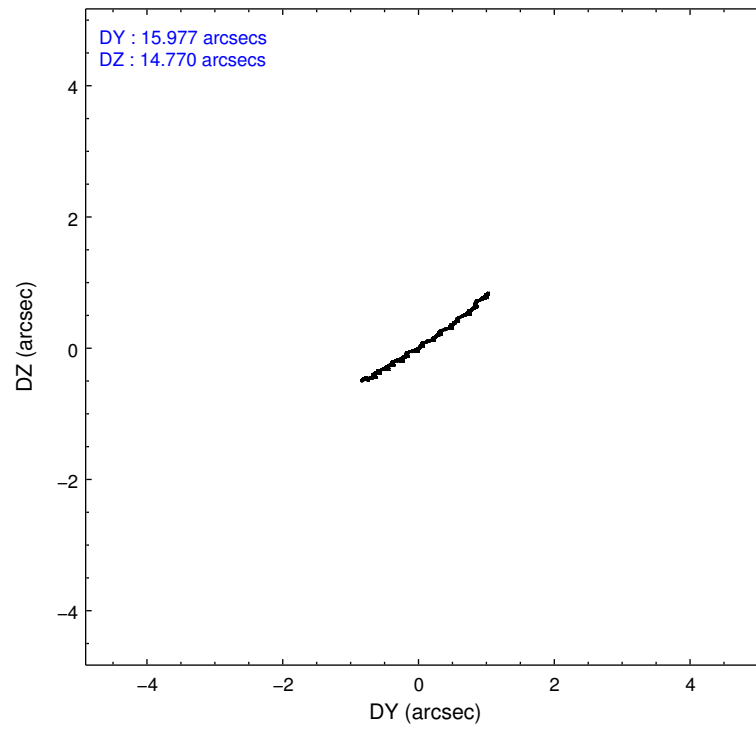
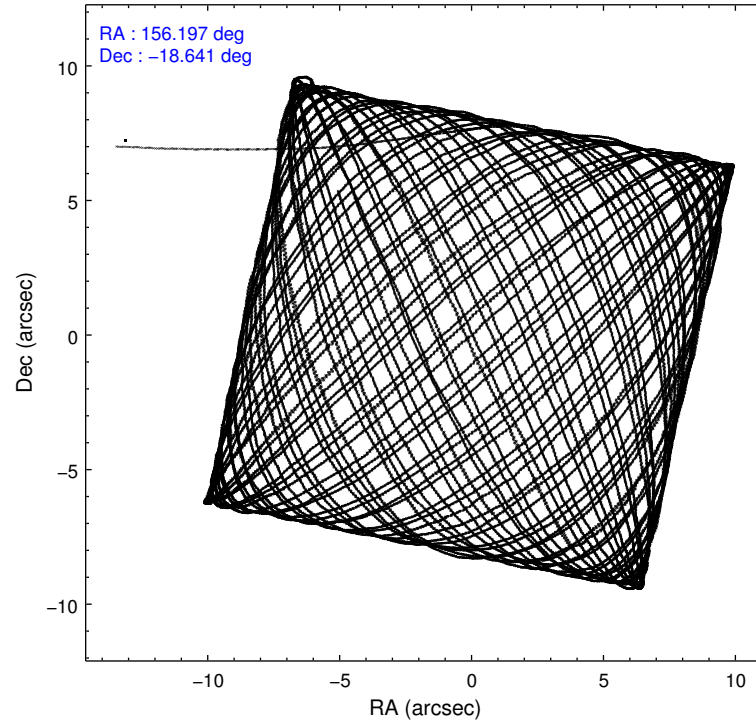
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	218134	200351	341045	215966	264387	278069	grade 0 events	8177	7946	25689	8675	10444	21110
rejected events	195046	178214	168479	191477	146869	205103		3%	3%	7%	4%	3%	7%
rejected %	89%	88%	49%	88%	55%	73%	grade 1 events	142	118	561	135	317	222
								0%	0%	0%	0%	0%	0%
							grade 2 events	5613	4927	50214	5468	23802	17398
								2%	2%	14%	2%	9%	6%
							grade 3 events	2358	2363	5972	2536	10271	7767
								1%	1%	1%	1%	3%	2%
							grade 4 events	2419	2318	5549	2545	10194	7212
								1%	1%	1%	1%	3%	2%
							grade 5 events	8591	9725	25001	10171	27396	14207
								3%	4%	7%	4%	10%	5%
							grade 6 events	4528	4589	85190	5272	62830	19485
								2%	2%	24%	2%	23%	7%
							grade 7 events	186306	168365	142869	181164	119133	190668
								85%	84%	41%	83%	45%	68%

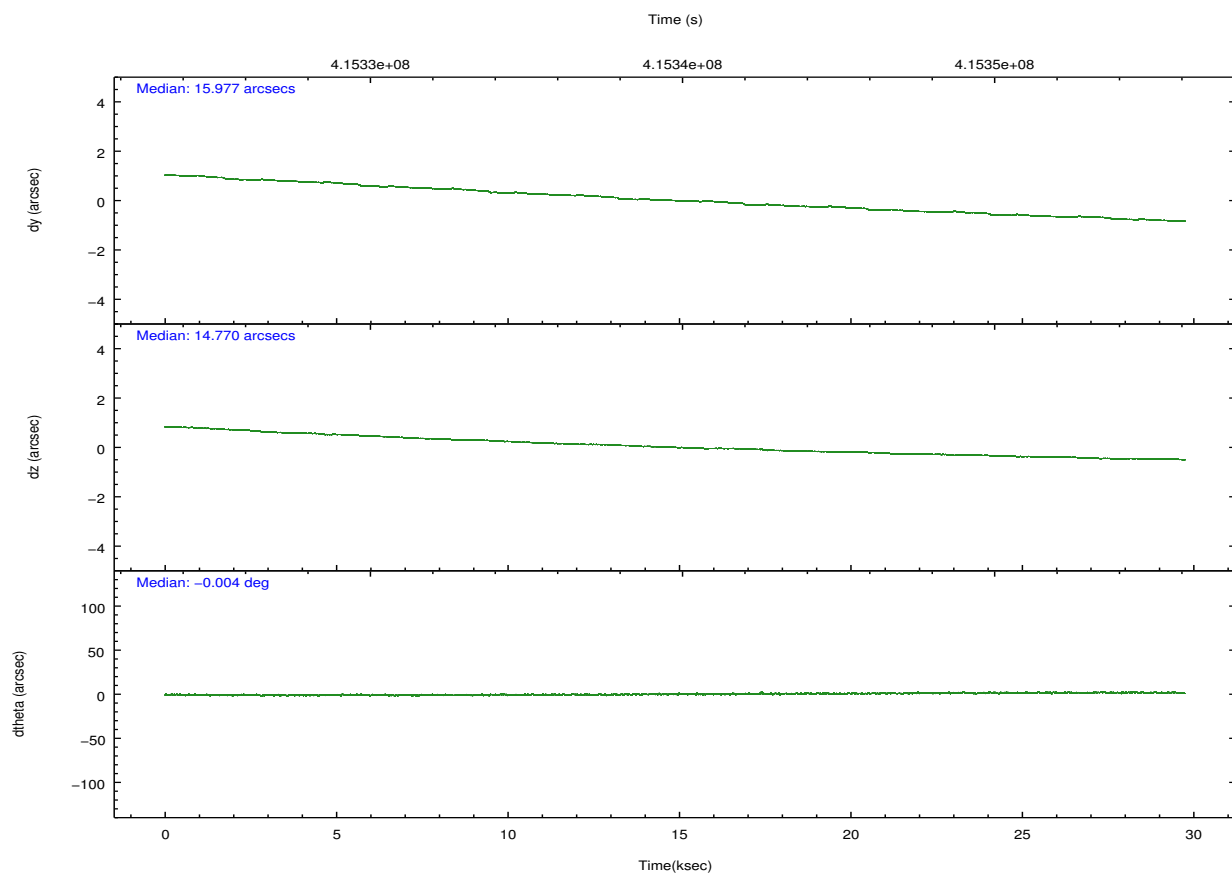
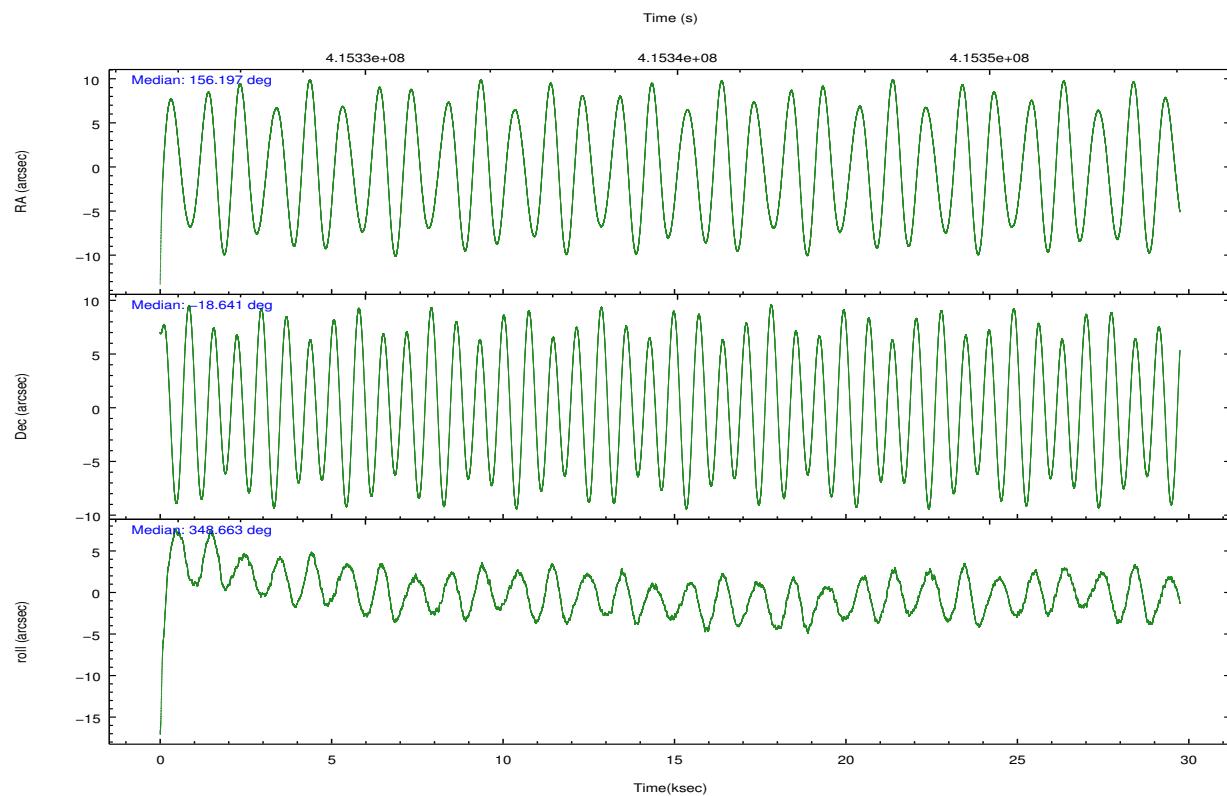
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	156.169673	156.1968963818423
[deg] Pointing Dec	-18.649811	-18.6407028231847
[deg] Pointing Roll	348.502871	348.6682009457422
[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)	415325050.184000	415323990.2362
Observation start date	2011-03-01T00:03:04	2011-02-28T23:46:30
[s] Observation end time (MET)	415354637.184000	415354862.7253
Observation end date	2011-03-01T08:16:11	2011-03-01T08:21:02
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O4	Y
CCD I3 on	O5	Y
CCD S0 on	N	N
CCD S1 on	O3	Y
CCD S2 on	O1	Y
CCD S3 on	Y	Y
CCD S4 on	O2	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



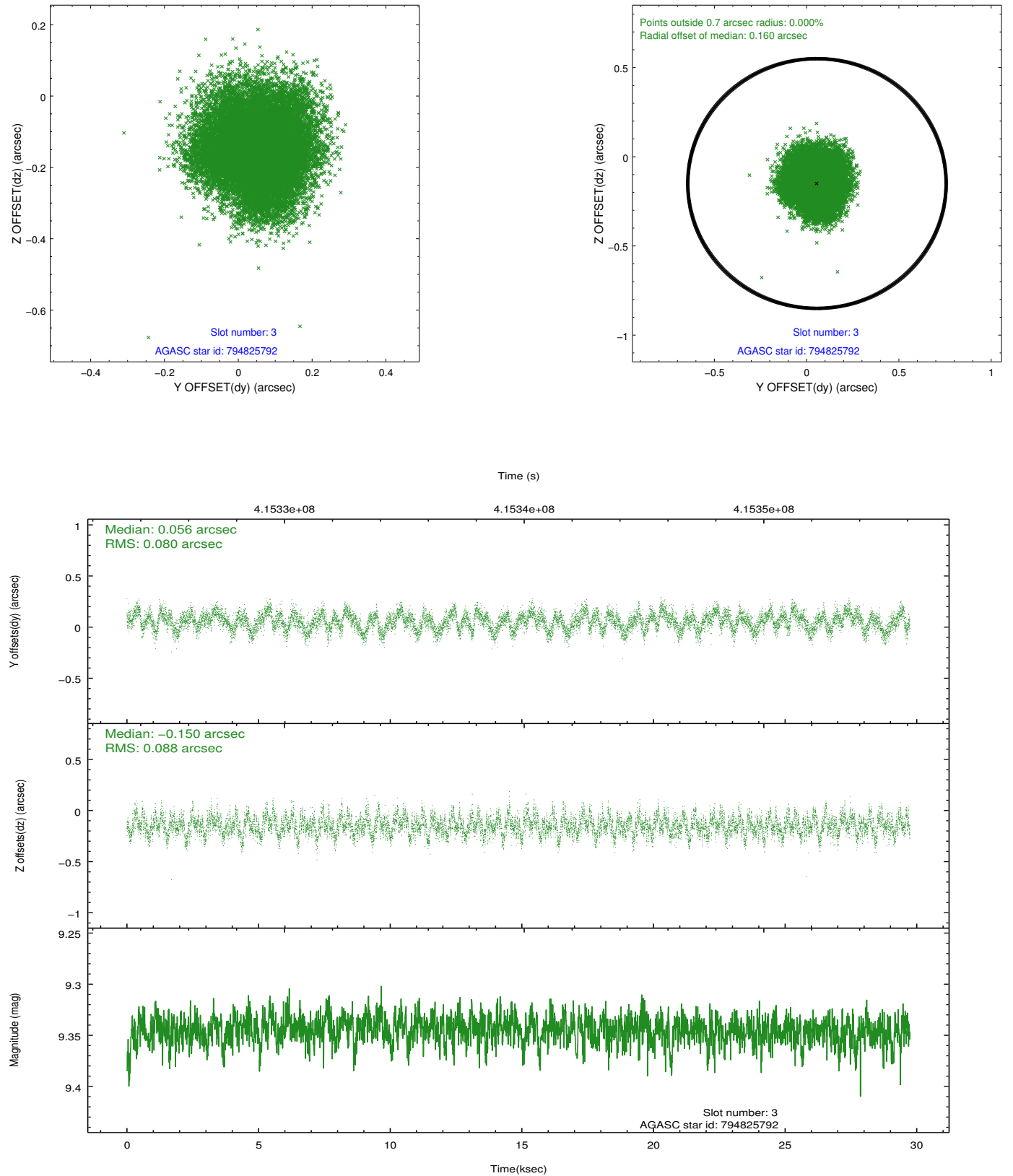


Slot Statistics

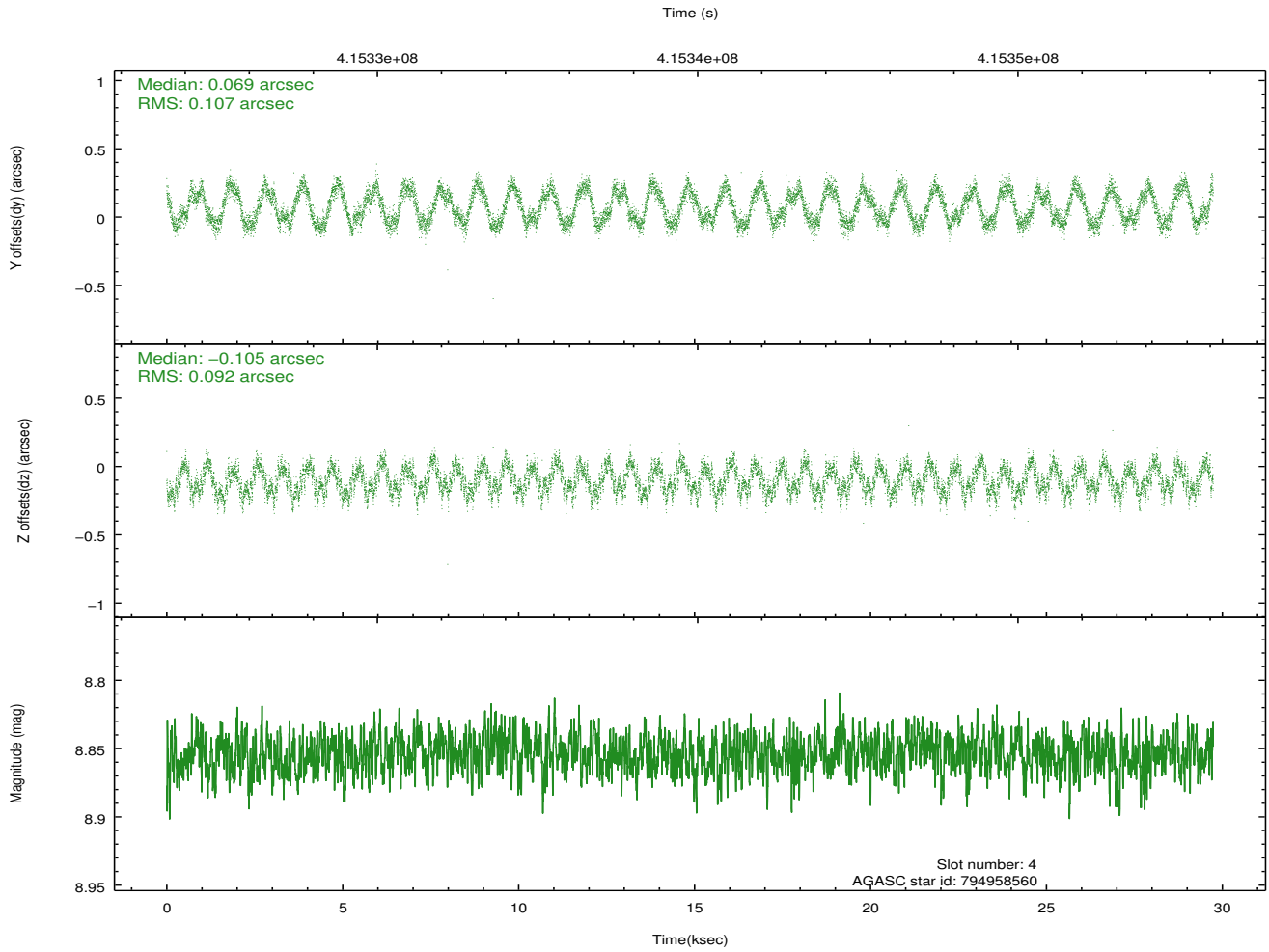
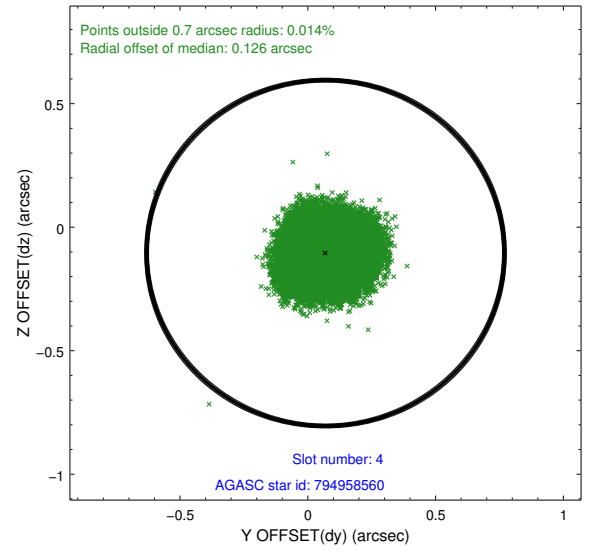
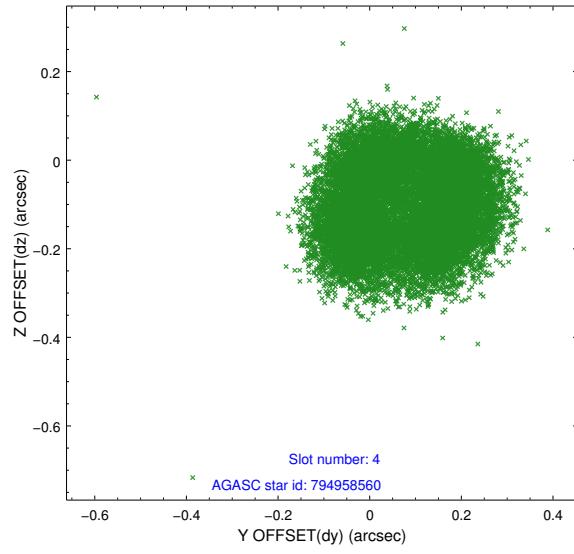
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	7254	-0.125	-0.088	0.011	0.024	0.000000	0.000000	-769.15	-1736.23
1	FID	ACIS-S-4	7.05	7254	0.159	0.053	0.016	0.023	0.000000	0.000000	2144.39	172.29
2	FID	ACIS-S-6	7.20	7253	-0.063	0.041	0.020	0.028	0.000000	0.000000	393.00	809.77
3	GUIDE	794825792	9.35	14493	0.056	-0.150	0.129	0.199	155.792459	-18.544287	-1336.73	114.24
4	GUIDE	794958560	8.85	14497	0.069	-0.105	0.155	0.210	156.447435	-18.435190	775.67	945.71
5	GUIDE	794958616	7.52	14505	-0.185	-0.125	0.071	0.109	156.783320	-18.256035	1773.34	1804.31
6	GUIDE	795485016	8.24	14503	0.044	0.088	0.143	0.188	156.153205	-19.092491	263.25	-1572.58
7	GUIDE	795345792	9.07	14497	0.010	0.299	0.123	0.195	155.744034	-19.261599	-977.68	-2448.01

2.4 Star Slots

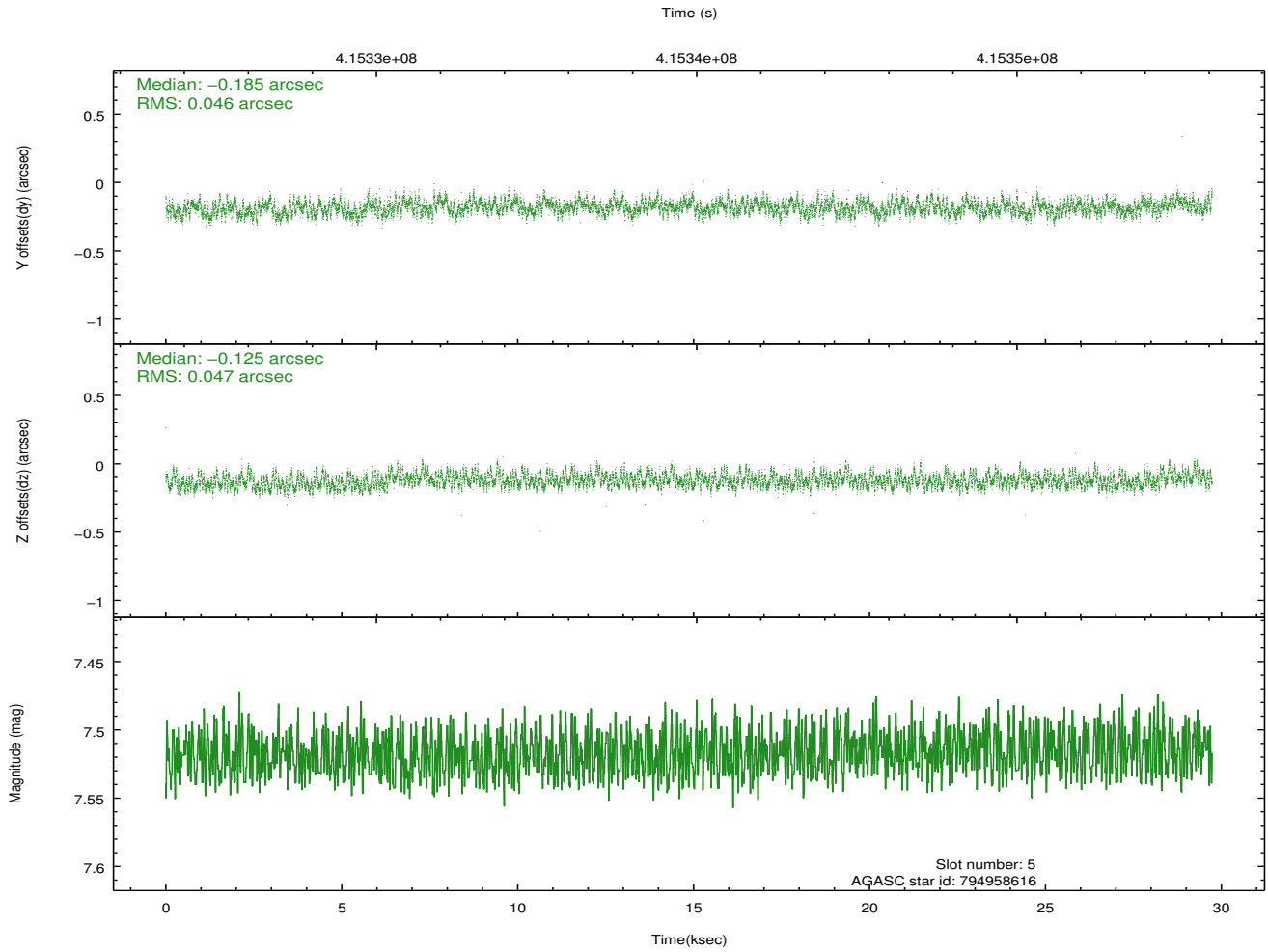
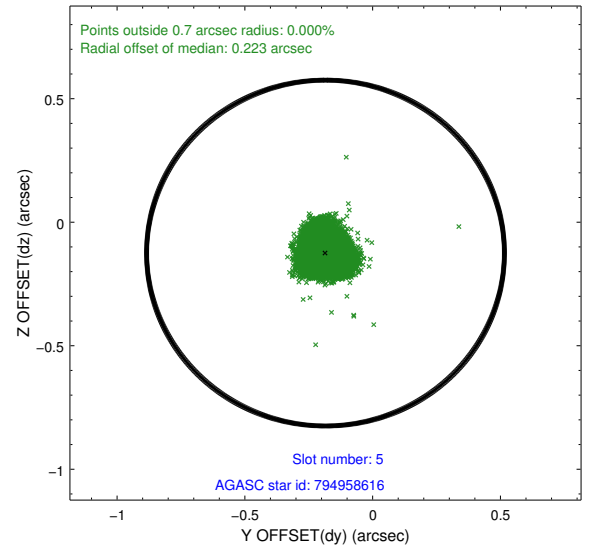
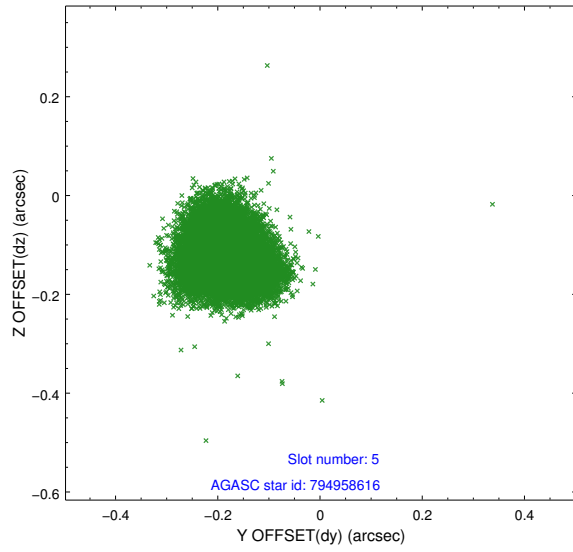
2.4.1 Slot 3



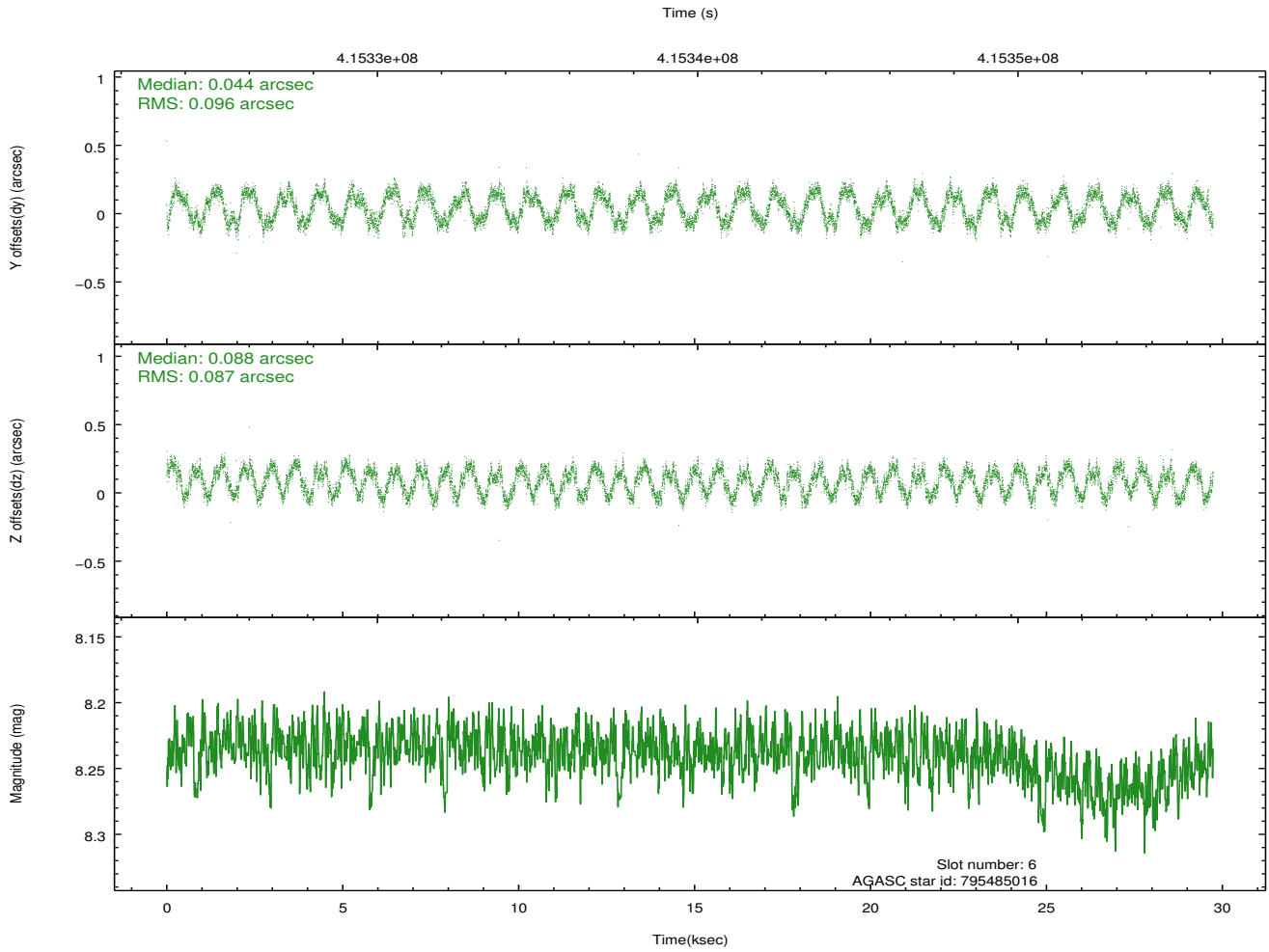
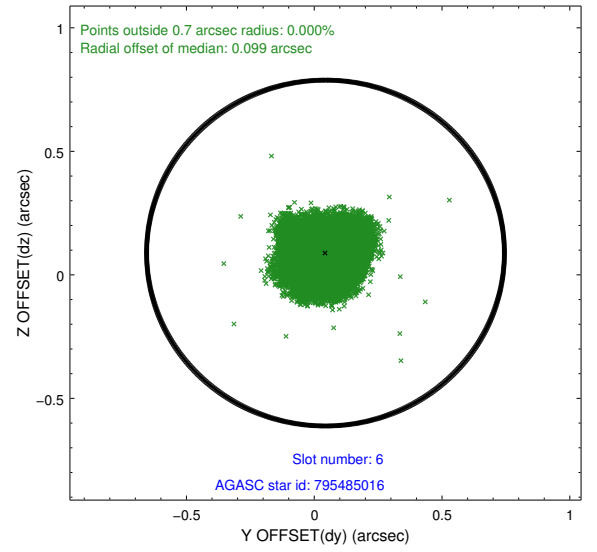
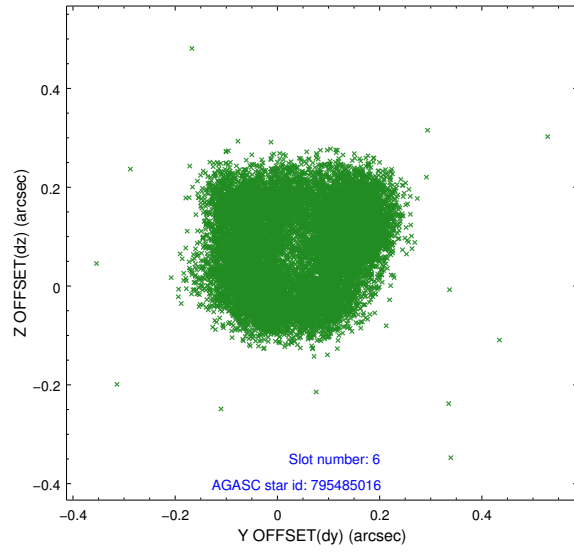
2.4.2 Slot 4



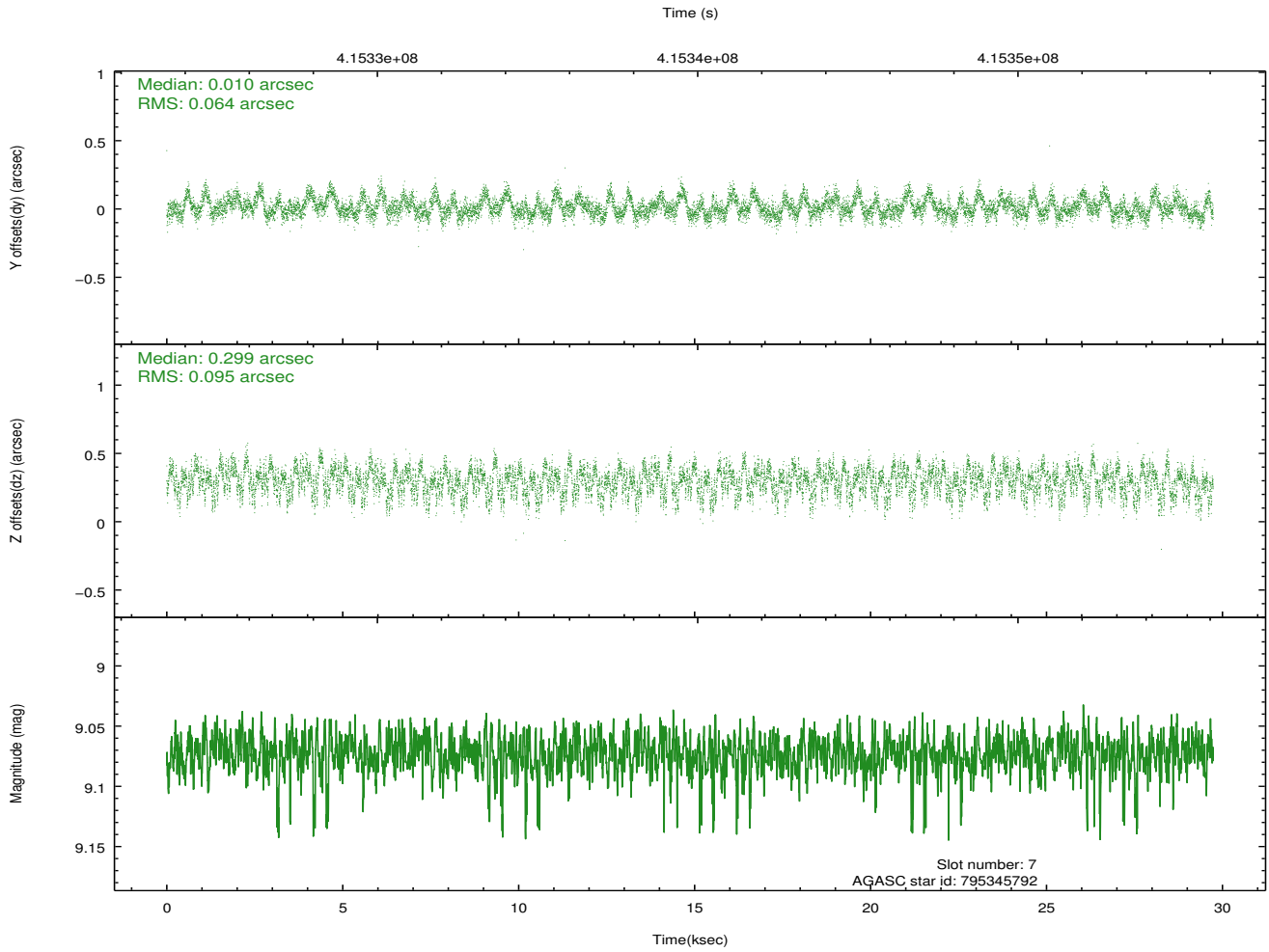
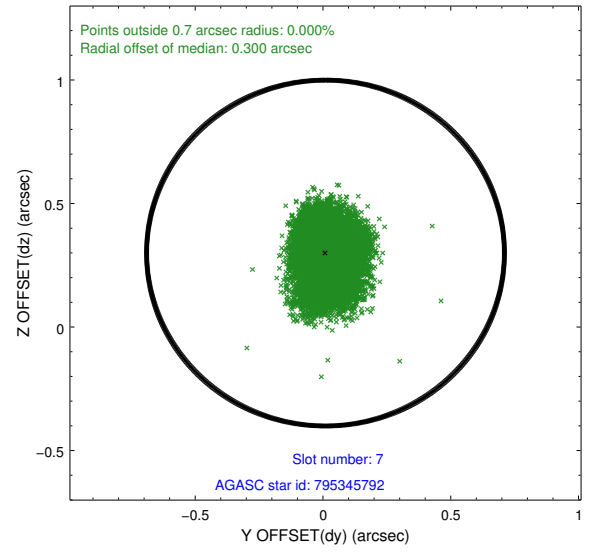
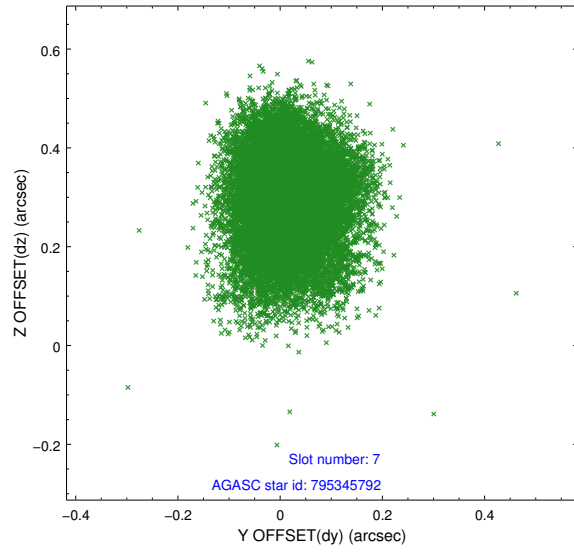
2.4.3 Slot 5



2.4.4 Slot 6

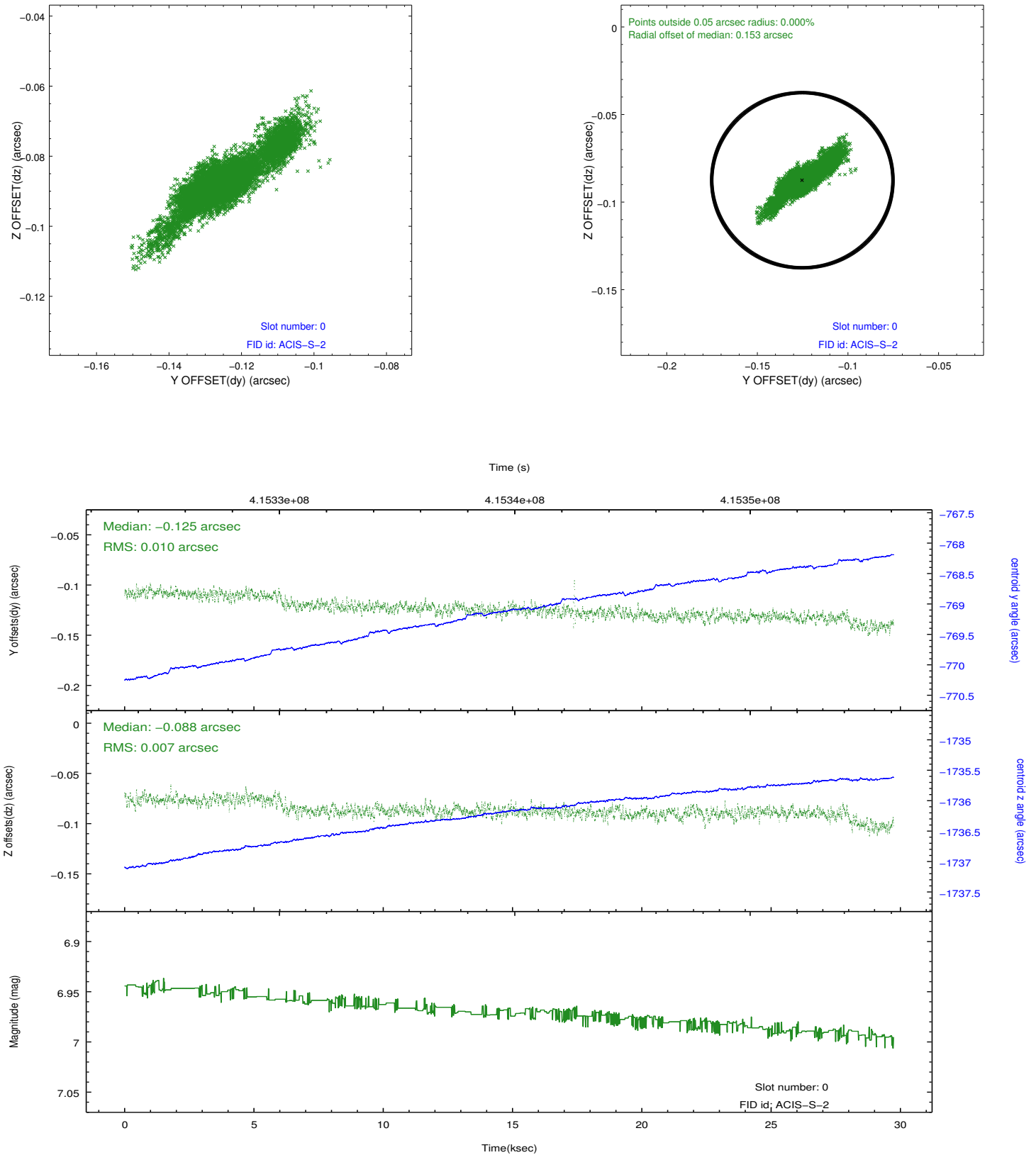


2.4.5 Slot 7

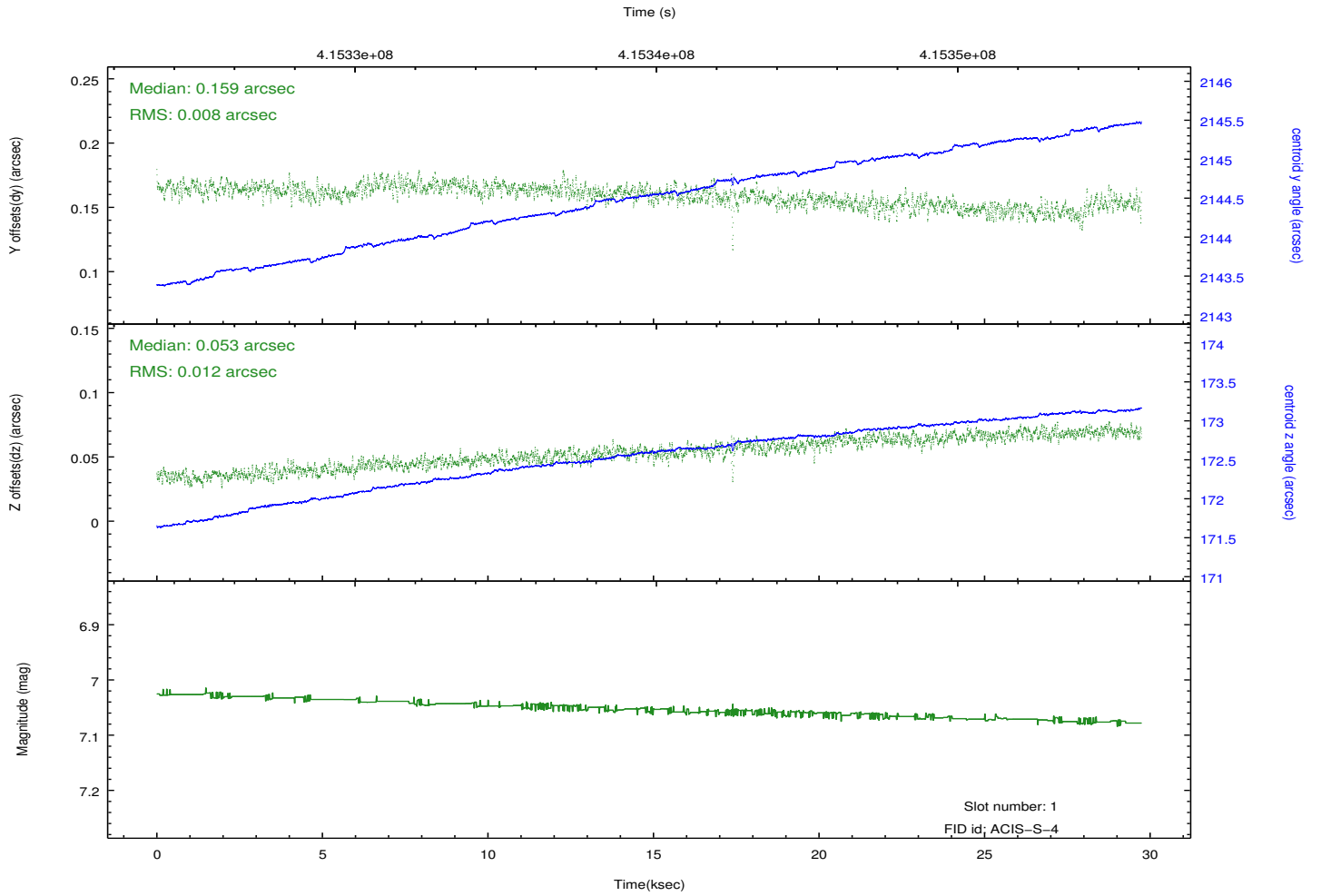
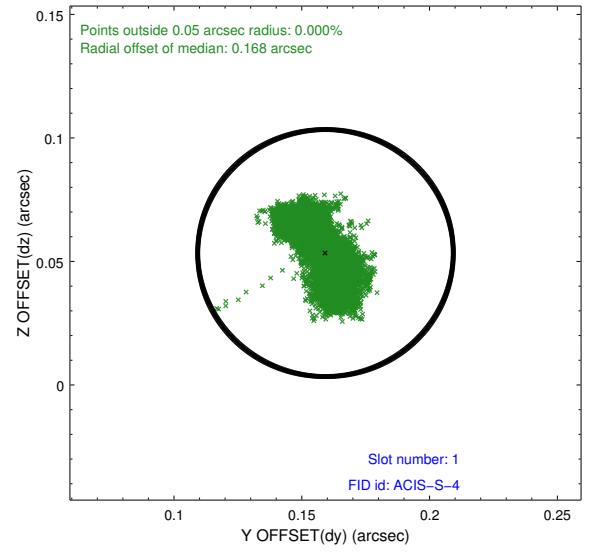
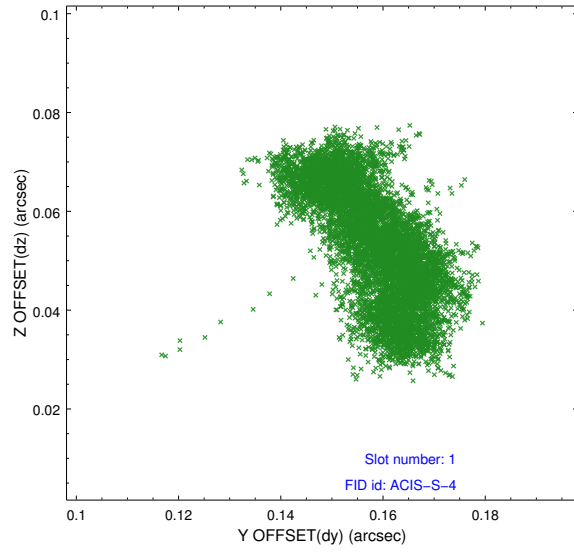


2.5 FID Slots

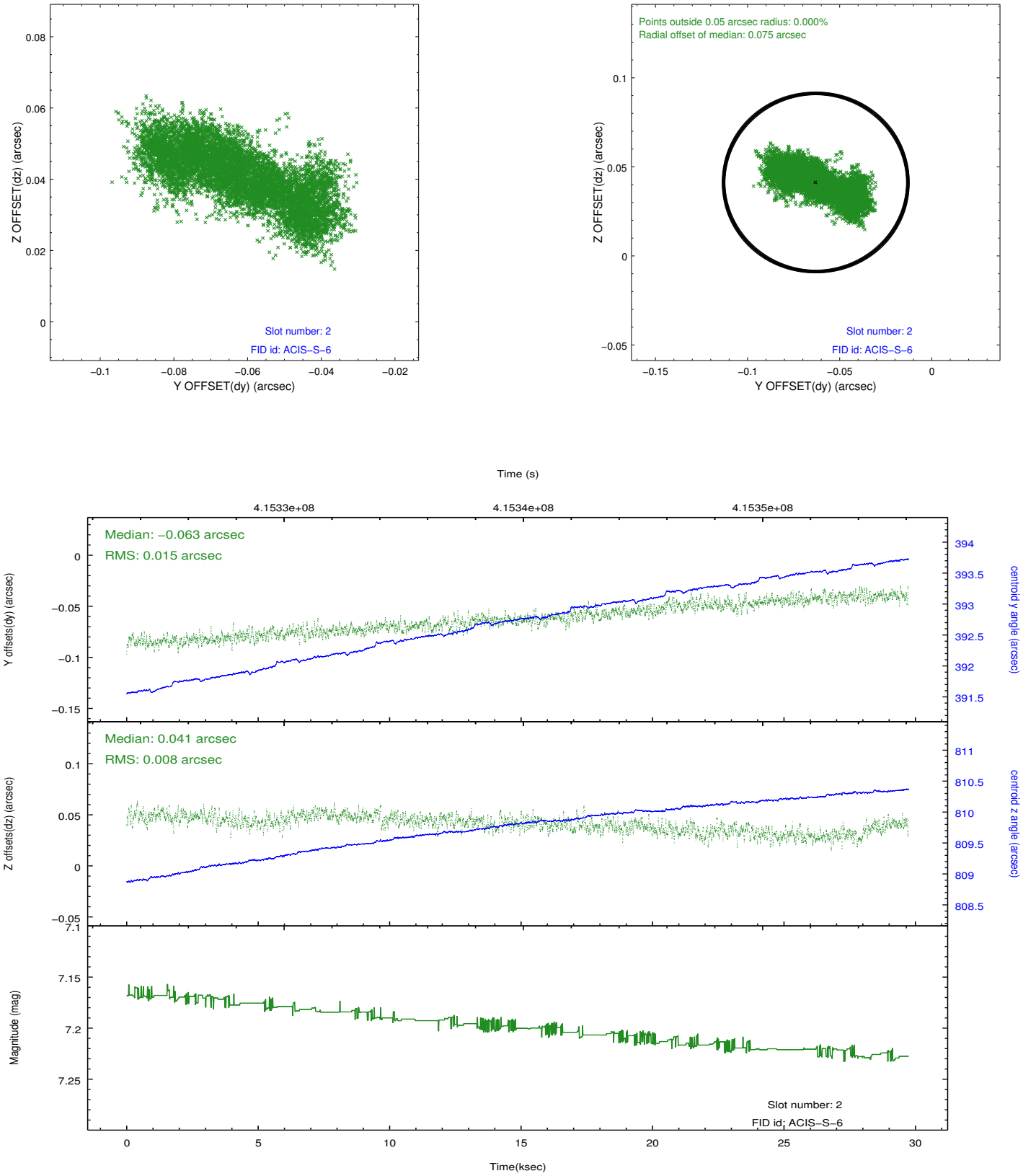
2.5.1 Slot 0



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)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.631999889672

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.