

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12825 - L2 Version 2
Chandra X-Ray Center

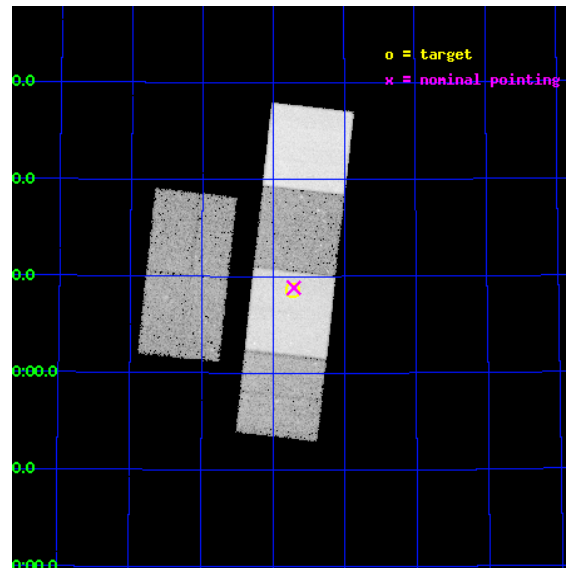
L2 Processing Date : Feb 6 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

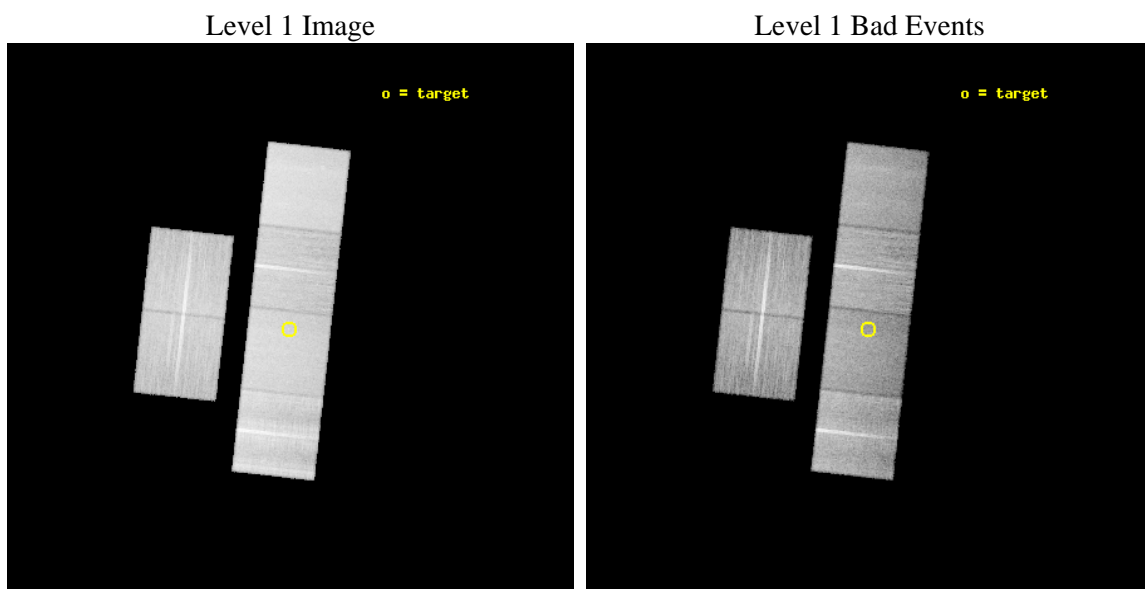
seq_num	702460	Sequence number
obs_id	12825	Observation id
title	X-ray follow-up of Seyferts with candidate dual supermassive black holes	Proposal title
observer	Dr. Brian Gerke	Principal investigator
object	SDSS J171544.05+600835.7	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	258.93375	Observer's specified target RA [deg]
dec_targ	60.14325	Observer's specified target Dec [deg]
ra_nom	258.92774248833	Nominal RA [deg]
dec_nom	60.147069432013	Nominal Dec [deg]
roll_nom	96.34253983104	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30049.804194689	Sum of GTIs [s]
livetime	29669.295480156	Livetime [s]
ontime2	30049.845234692	Sum of GTIs [s]
ontime3	30049.681074679	Sum of GTIs [s]
ontime5	30049.763154685	Sum of GTIs [s]
ontime6	30049.722114682	Sum of GTIs [s]
ontime7	30049.804194689	Sum of GTIs [s]
ontime8	30049.640034676	Sum of GTIs [s]
l2events	335715	Number of level 2 events



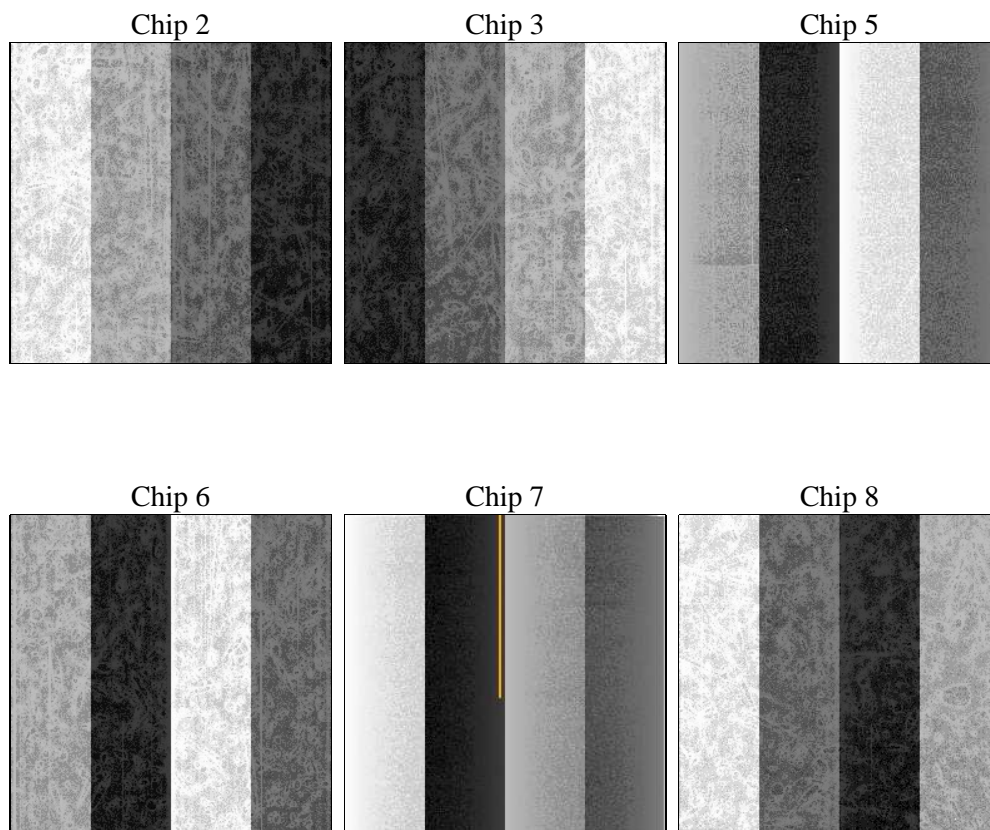
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	30049.804194689	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	30049.845234692	Sum of GTIs [s]
date	2012-02-06T08:37:54	Date and time of file creation	ontime3	30049.681074679	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	30049.763154685	Sum of GTIs [s]
			ontime6	30049.722114682	Sum of GTIs [s]
			ontime7	30049.804194689	Sum of GTIs [s]
			ontime8	30049.640034676	Sum of GTIs [s]
			l1events	1449282	Number of level 1 events

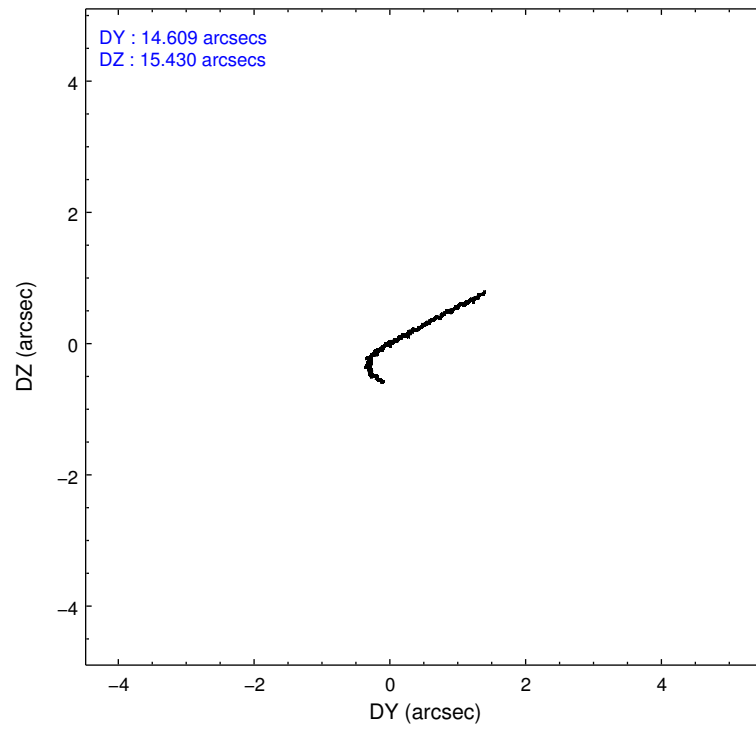
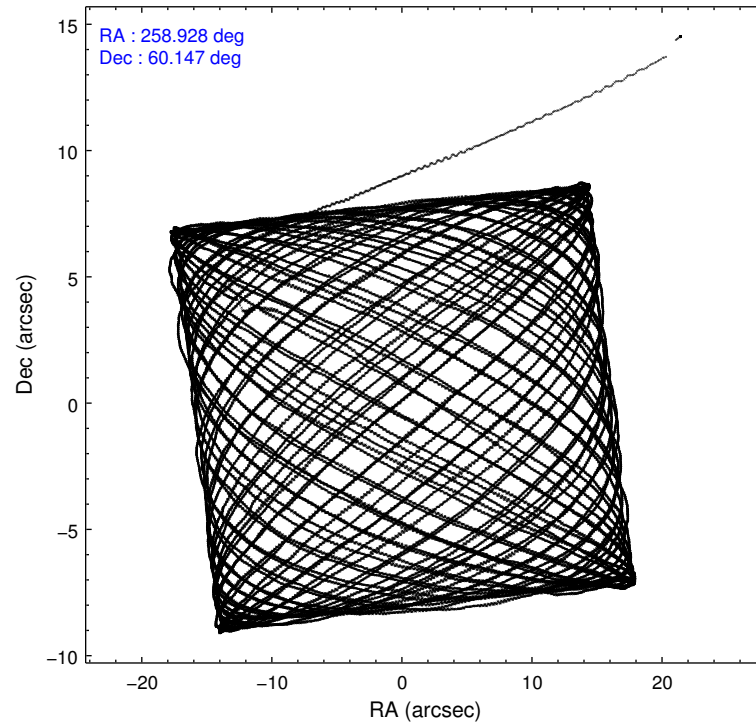
2.1.4 Events

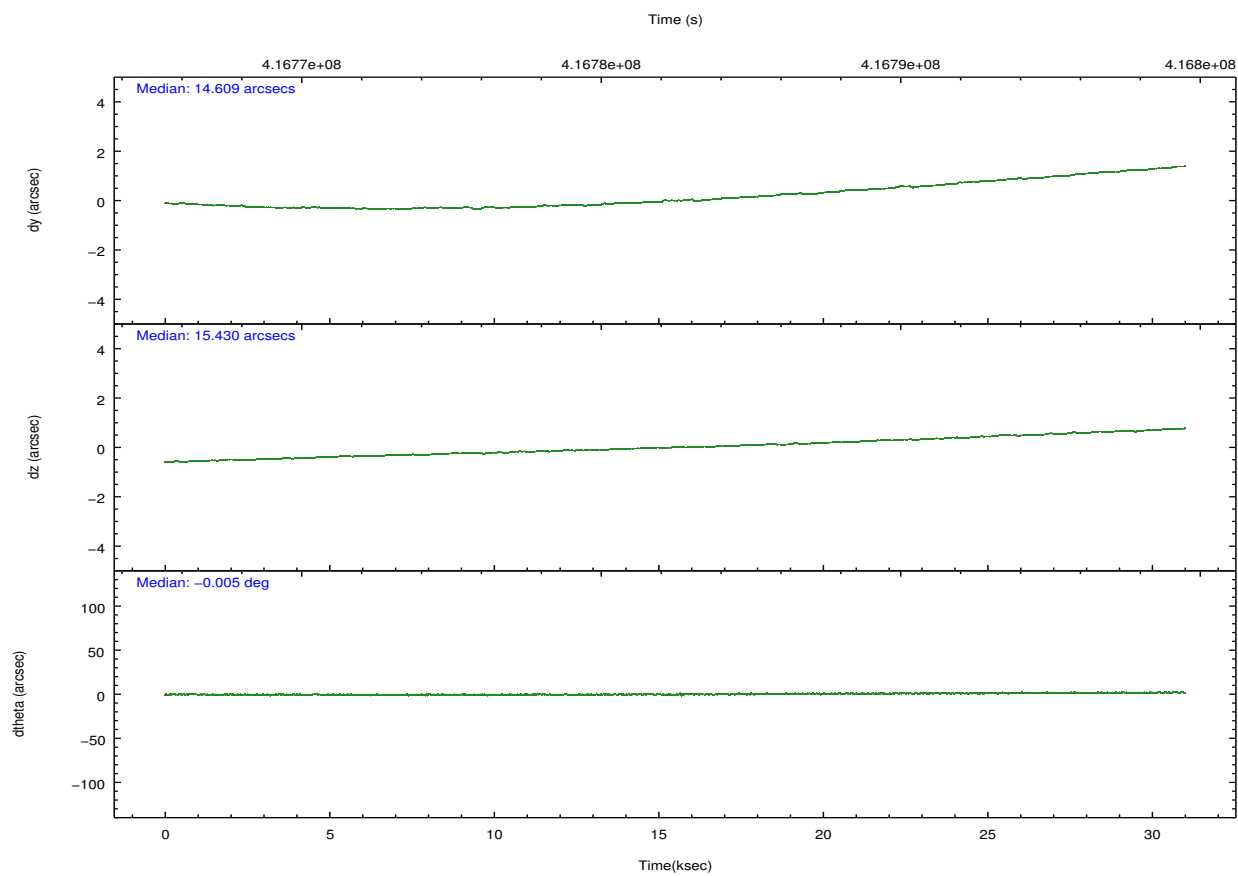
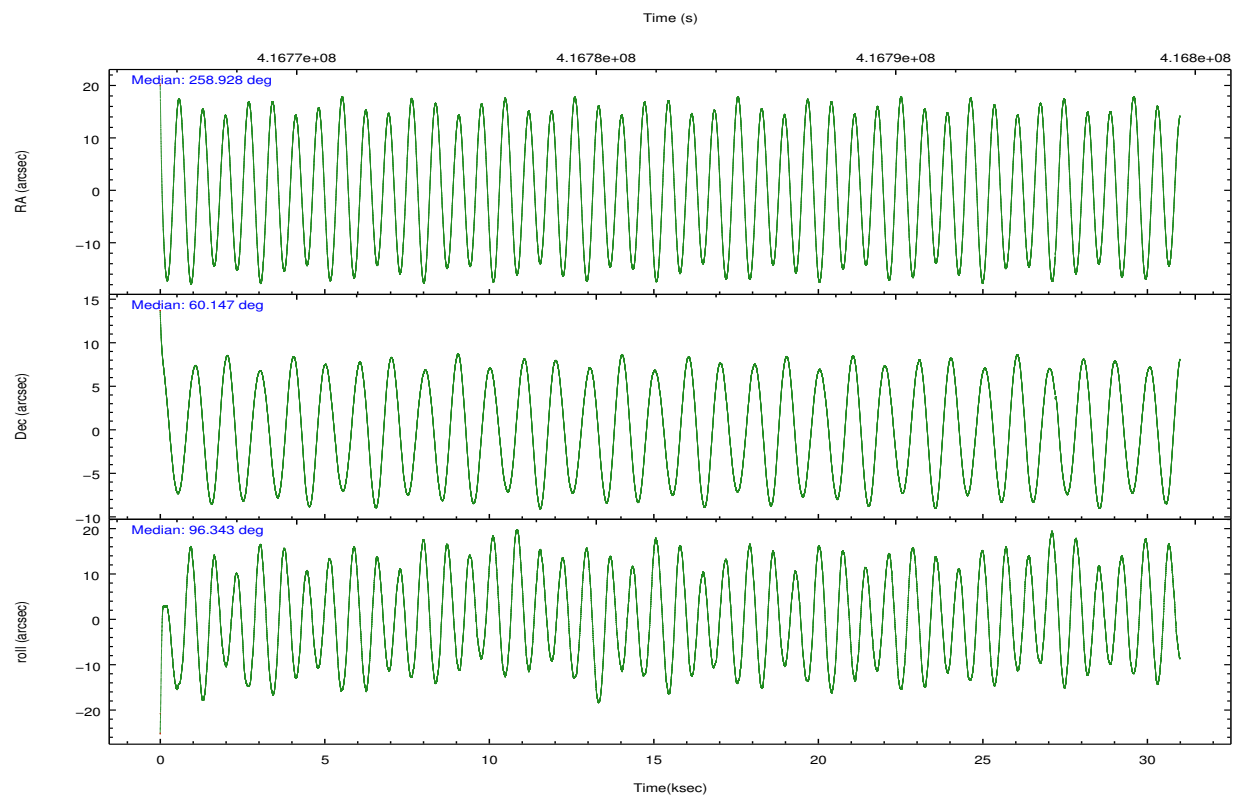
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	211898	194233	306410	209059	254252	273430	grade 0 events	8059	7348	9238	8312	10340	24800
rejected events	189258	173581	159109	185475	141111	194348		3%	3%	3%	3%	4%	9%
rejected %	89%	89%	51%	88%	55%	71%	grade 1 events	129	118	553	121	336	211
								0%	0%	0%	0%	0%	0%
							grade 2 events	5599	4531	45520	5225	23441	16530
								2%	2%	14%	2%	9%	6%
							grade 3 events	2239	2235	5709	2436	9995	9720
								1%	1%	1%	1%	3%	3%
							grade 4 events	2278	2231	5516	2371	9623	9003
								1%	1%	1%	1%	3%	3%
							grade 5 events	8550	9489	23481	9386	26471	13595
								4%	4%	7%	4%	10%	4%
							grade 6 events	4465	4309	81335	5242	59752	19030
								2%	2%	26%	2%	23%	6%
							grade 7 events	180579	163972	135058	175966	114294	180541
								85%	84%	44%	84%	44%	66%

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	258.960872	258.9277424883343	CCD I2 on	O2	Y
[deg] Pointing Dec	60.125258	60.14706943201313	CCD I3 on	O1	Y
[deg] Pointing Roll	96.157183	96.34253983104033	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O4	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	O3	Y
[s] Observation start time (MET)	416767964.184000	416766176.58591	CCD S5 on	N	N
Observation start date	2011-03-17T16:51:38	2011-03-17T16:22:56	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	416797964.184000	416798261.65007	On-chip summing requested	N	N
Observation end date	2011-03-18T01:11:38	2011-03-18T01:17:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



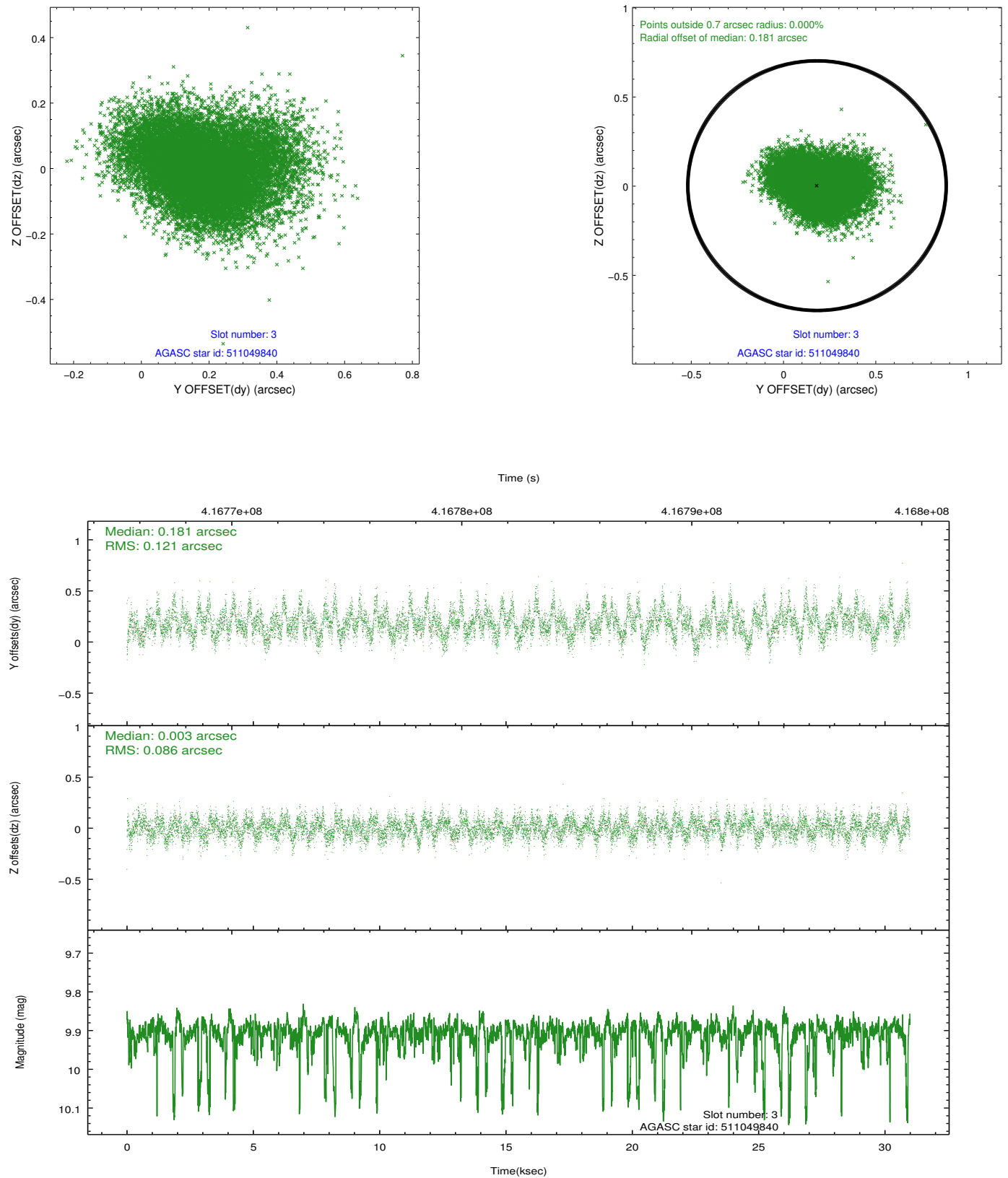


Slot Statistics

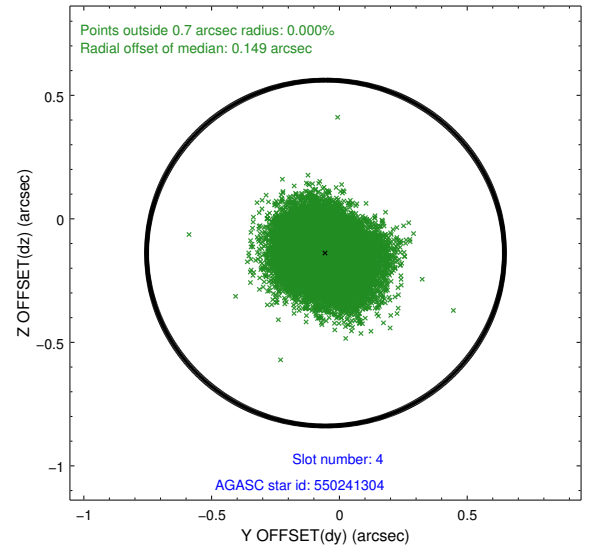
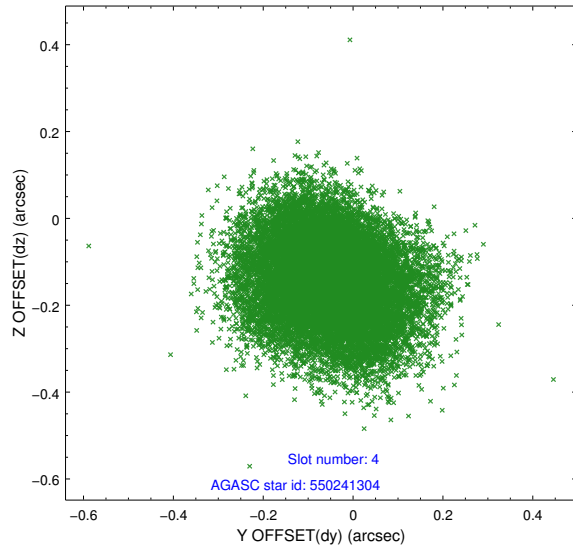
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	7560	-0.088	-0.017	0.011	0.017	0.000000	0.000000	-767.85	-1736.88
1	FID	ACIS-S-4	7.02	7560	0.199	0.047	0.008	0.032	0.000000	0.000000	2145.66	171.62
2	FID	ACIS-S-5	7.04	7560	-0.143	-0.022	0.015	0.040	0.000000	0.000000	-1820.67	165.27
3	GUIDE	511049840	9.90	15001	0.181	0.003	0.156	0.262	258.982478	59.506756	-2217.62	199.79
4	GUIDE	550241304	9.67	15096	-0.054	-0.139	0.147	0.229	258.006646	60.460453	1393.69	1553.30
5	GUIDE	550246584	9.21	15074	0.042	-0.085	0.111	0.208	259.250299	60.778821	2286.10	-758.03
6	GUIDE	550254760	6.19	15119	-0.031	0.078	0.070	0.125	259.122492	60.670614	1922.24	-493.33
7	GUIDE	550249320	8.38	15112	-0.136	0.142	0.065	0.111	259.166381	60.646604	1827.85	-561.68

2.4 Star Slots

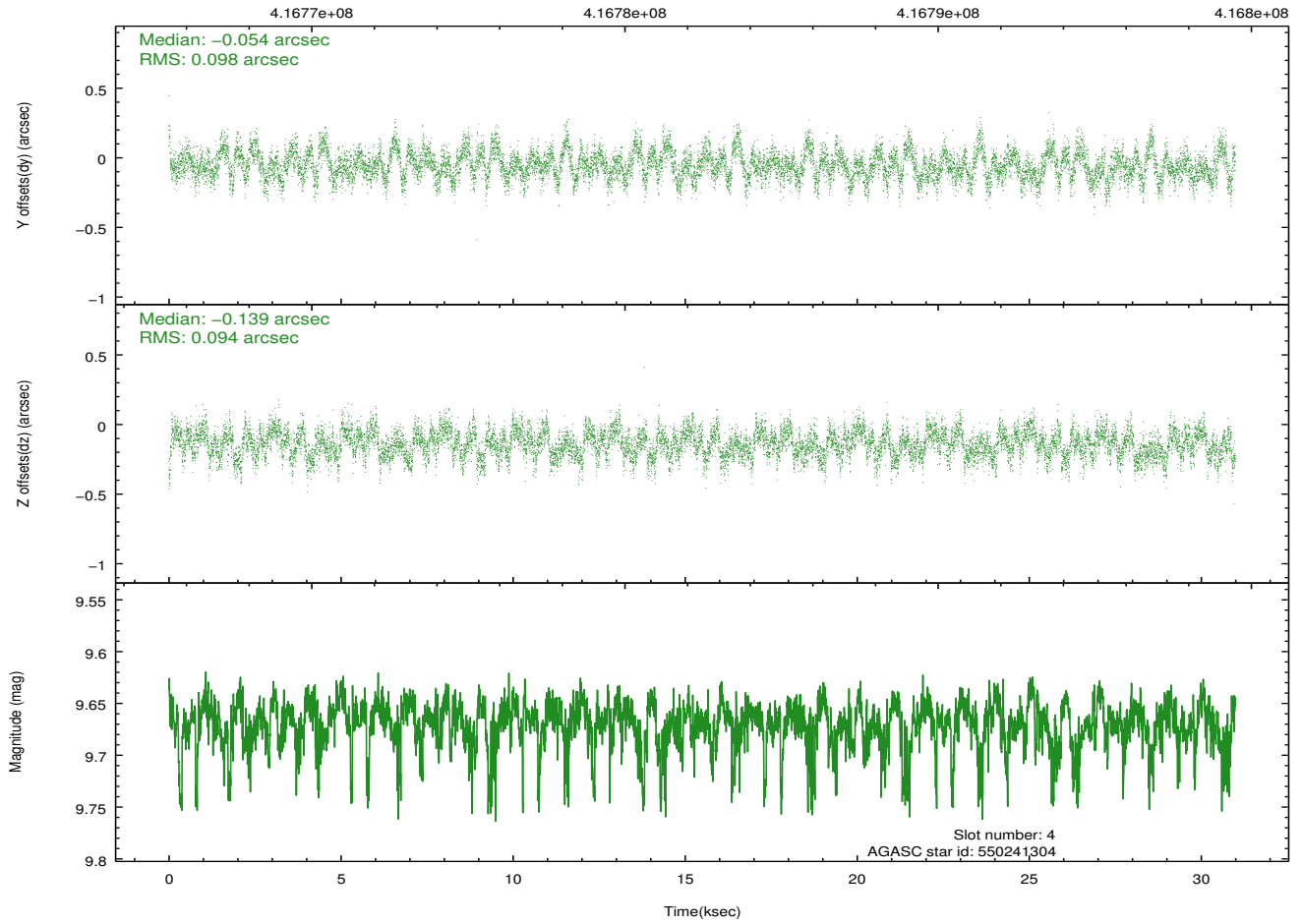
2.4.1 Slot 3



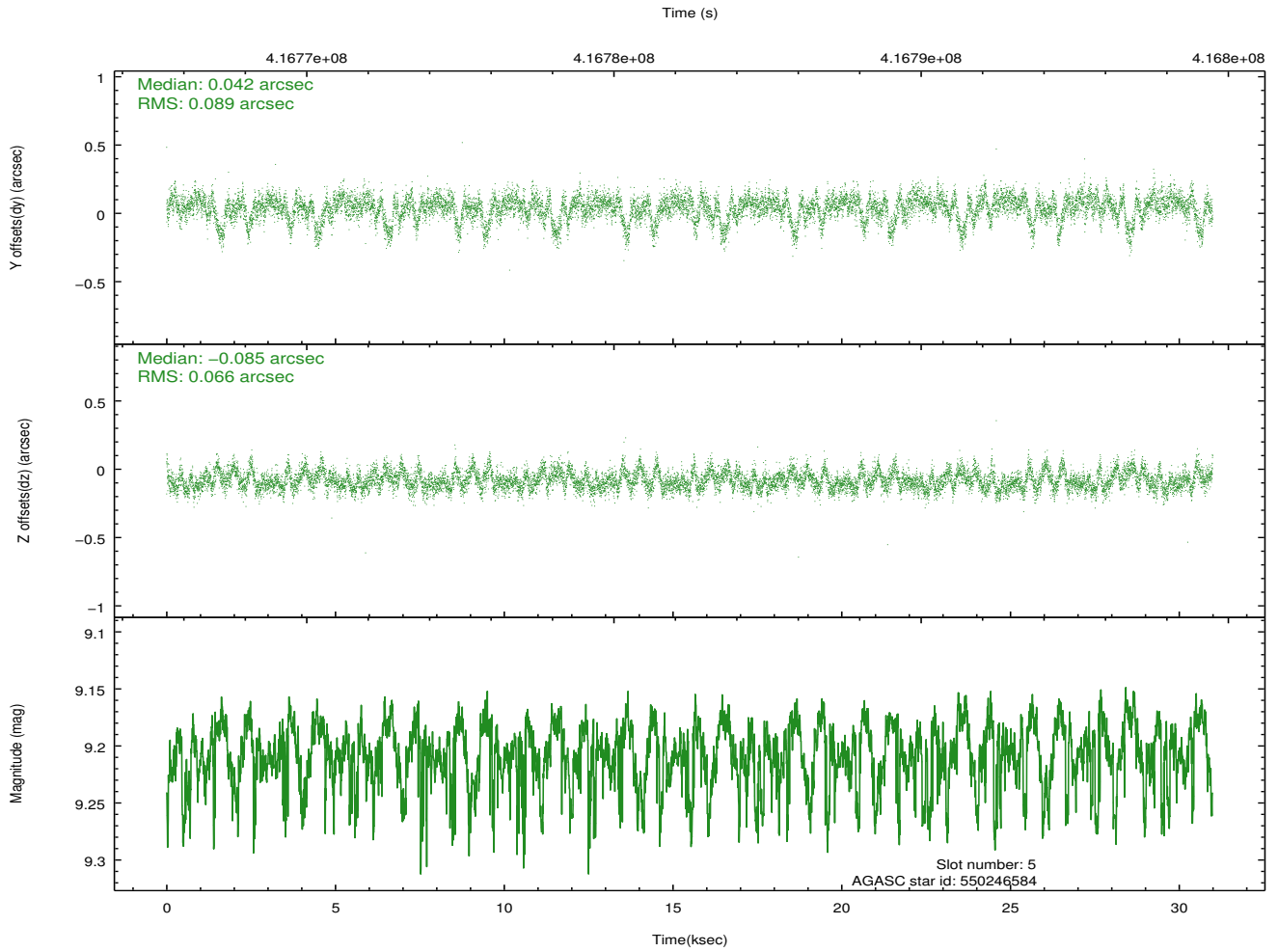
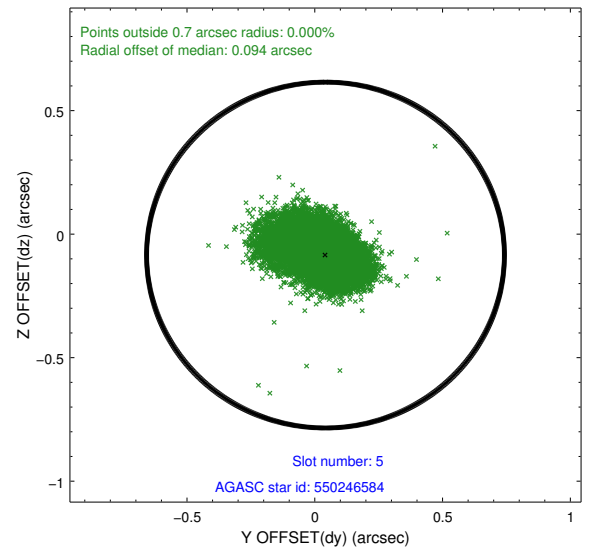
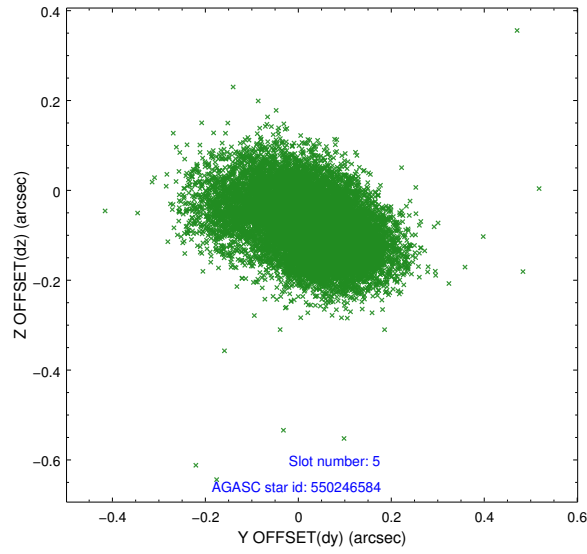
2.4.2 Slot 4



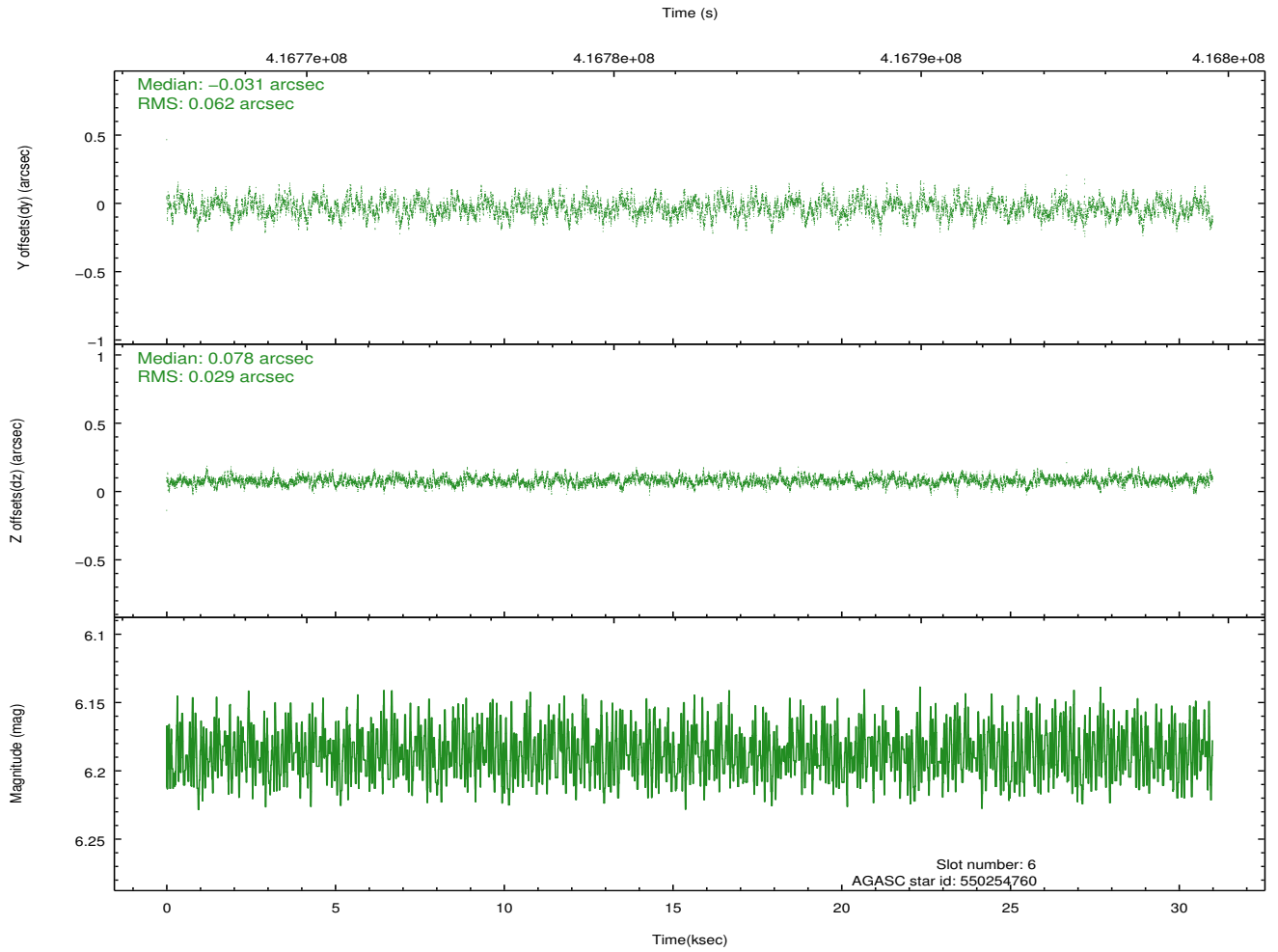
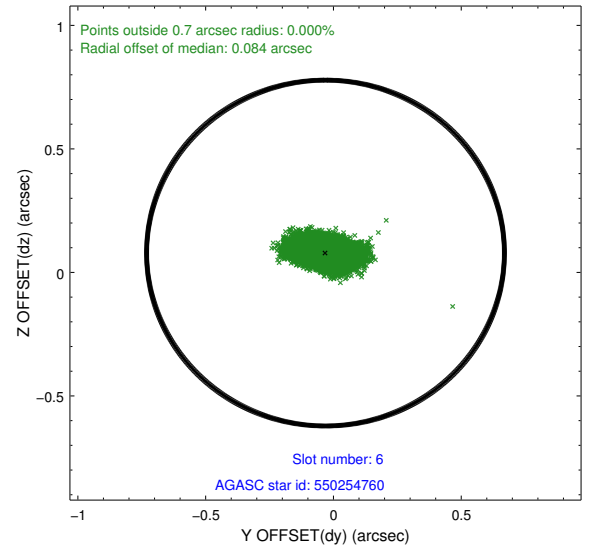
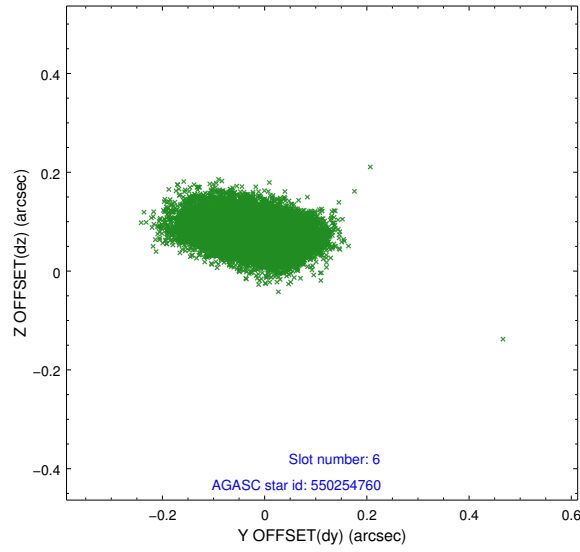
Time (s)



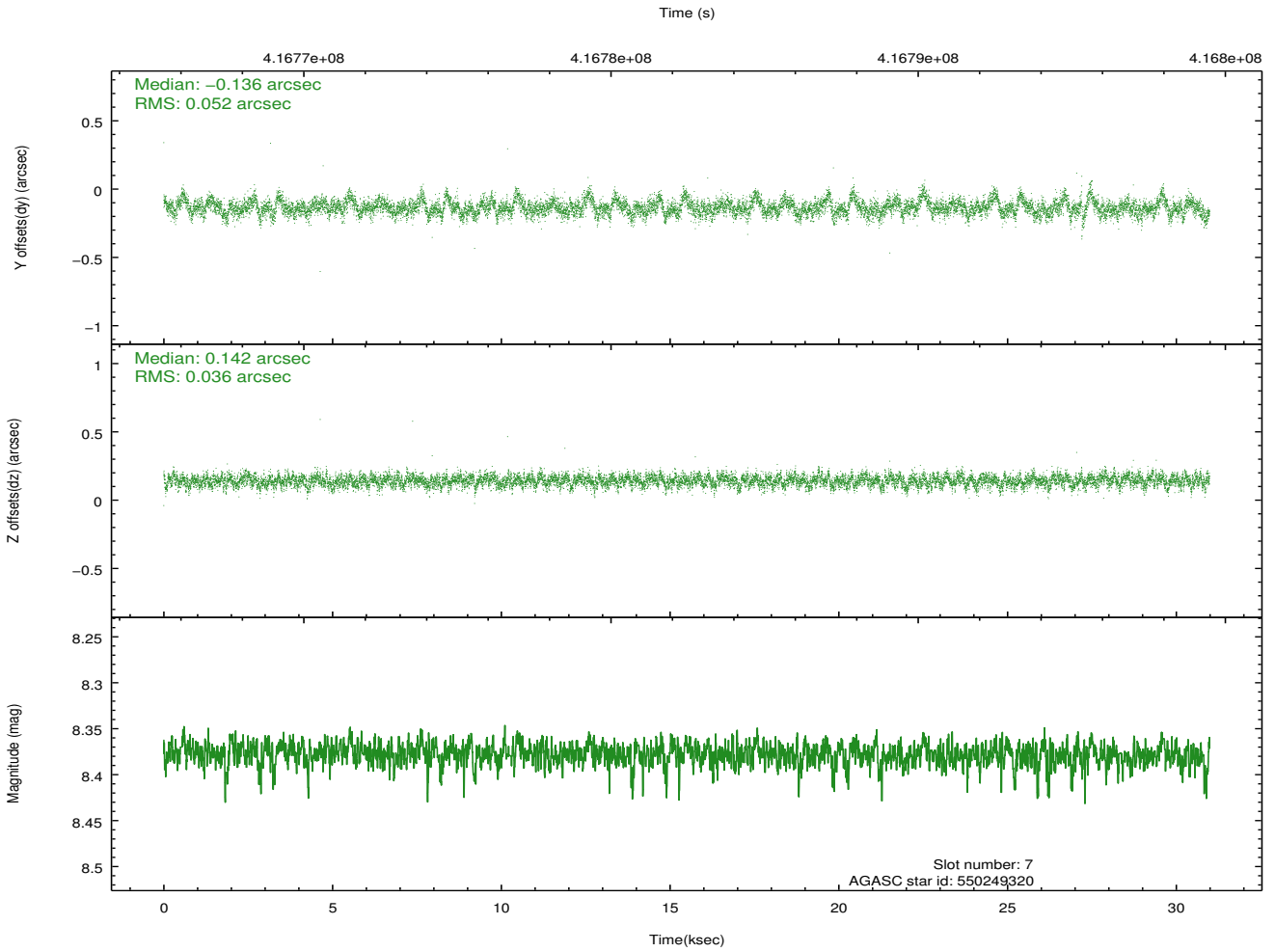
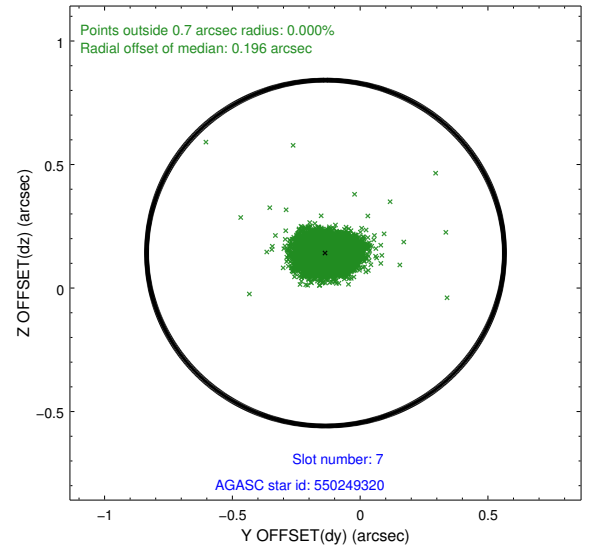
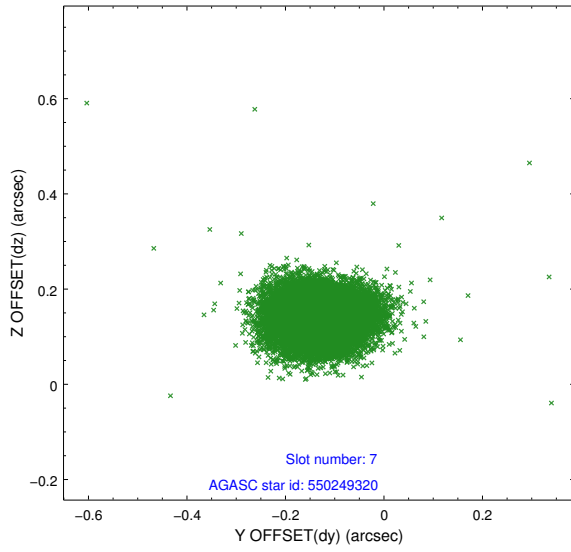
2.4.3 Slot 5



2.4.4 Slot 6

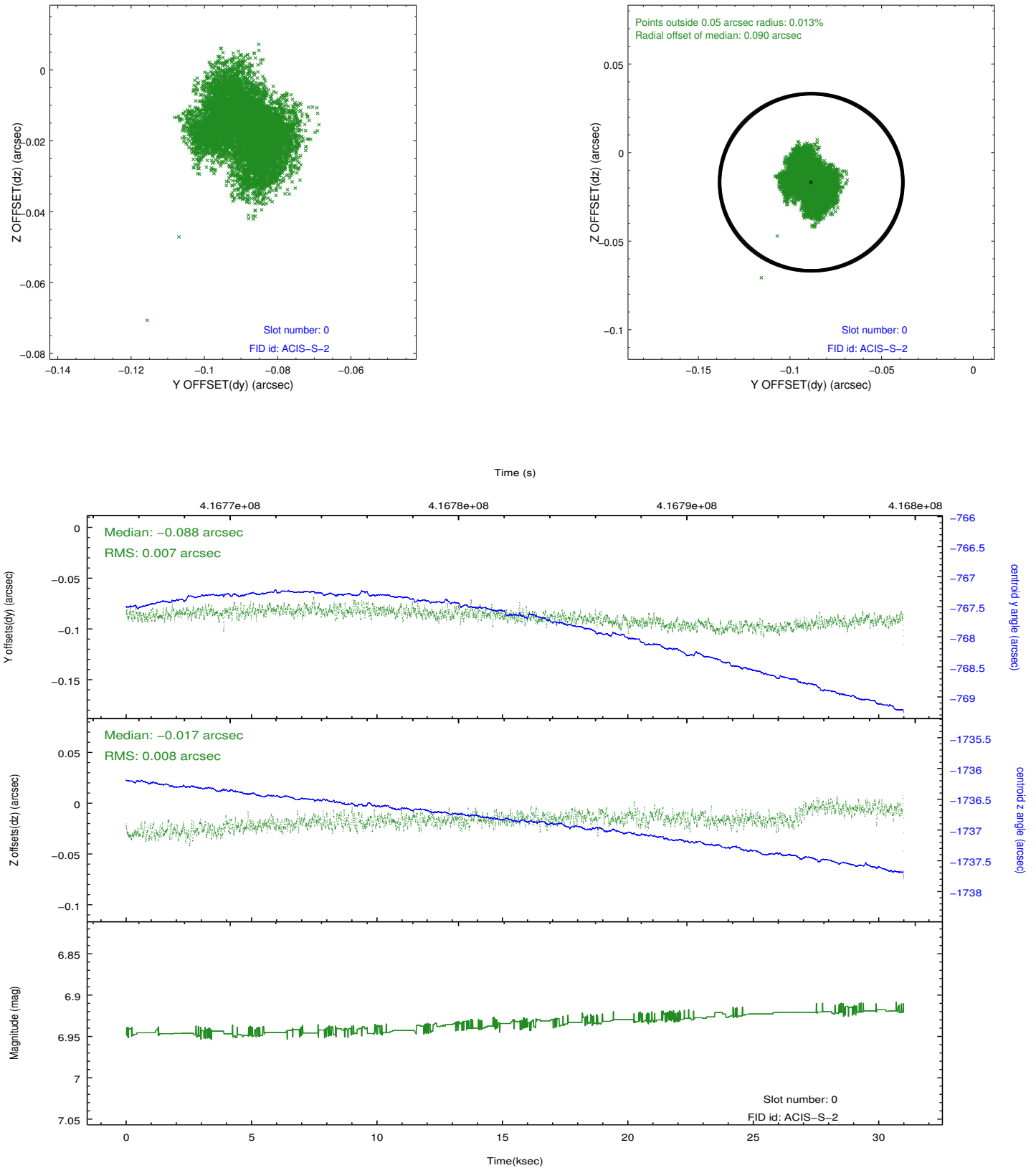


2.4.5 Slot 7

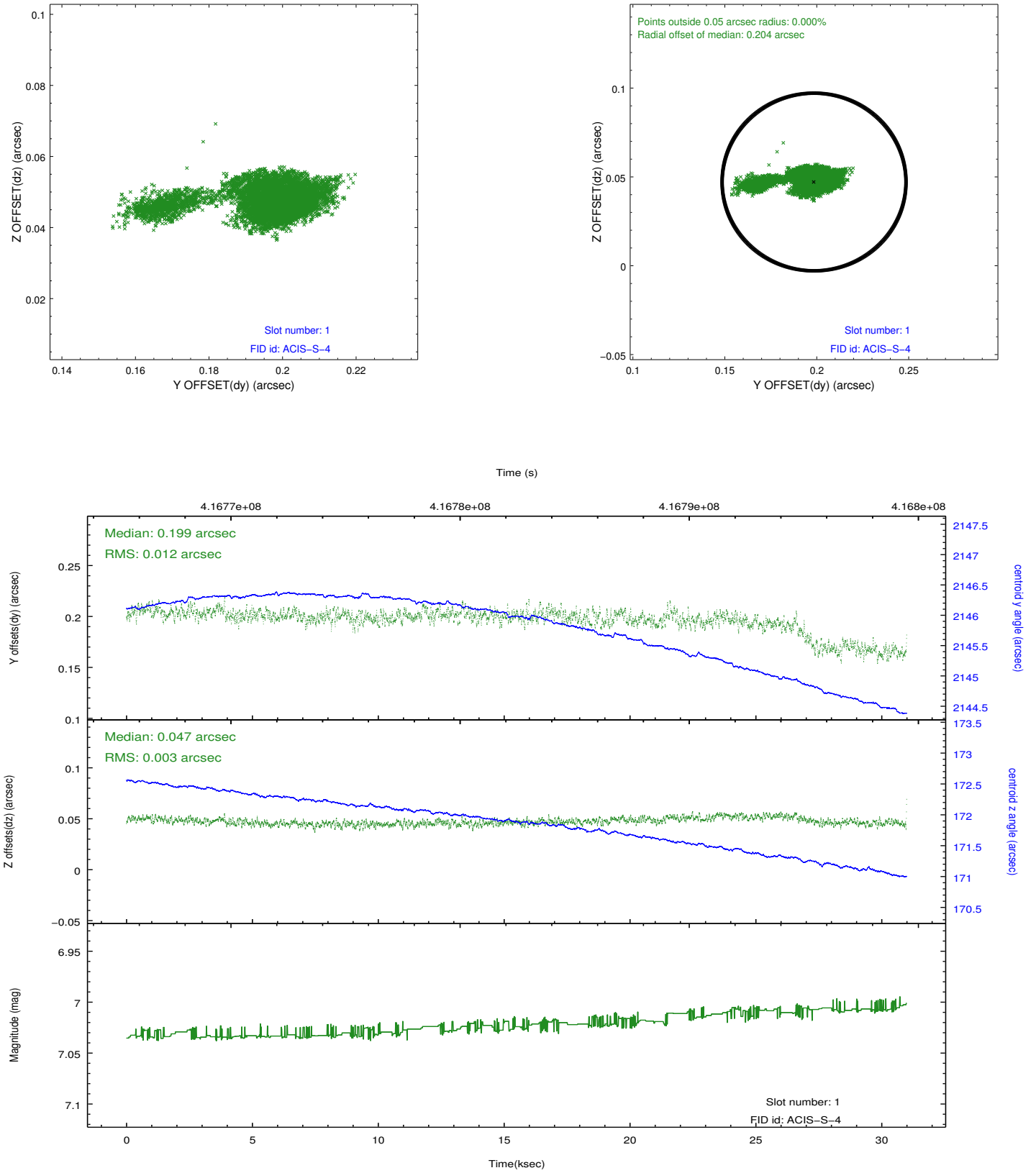


2.5 FID Slots

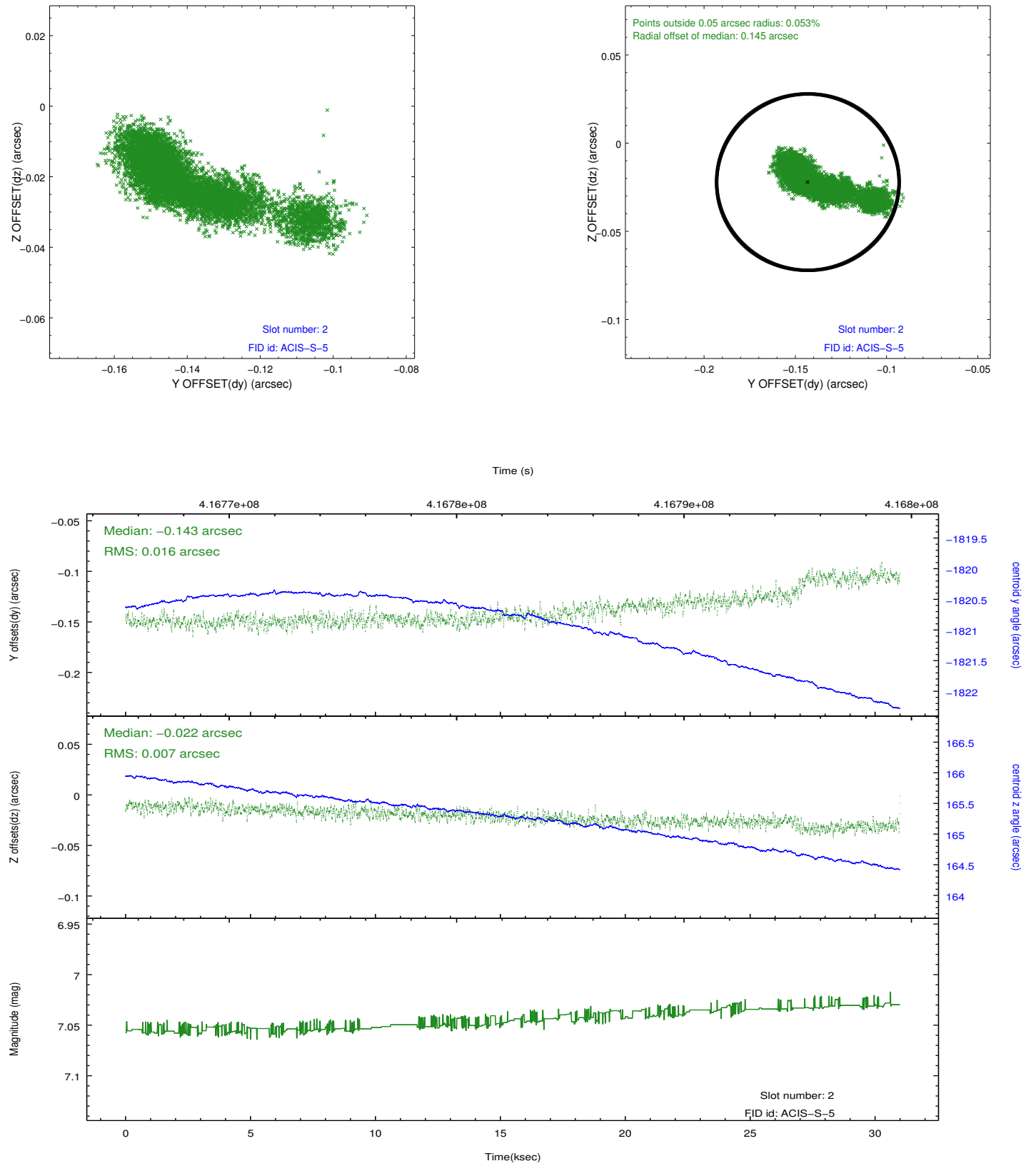
2.5.1 Slot 0



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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.049804196119

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.