

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8110 - L2 Version 2
Chandra X-Ray Center

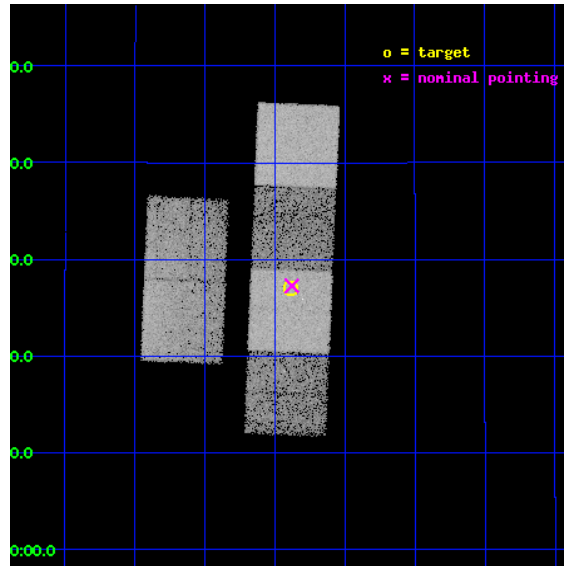
L2 Processing Date : May 10 2012

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1 Front

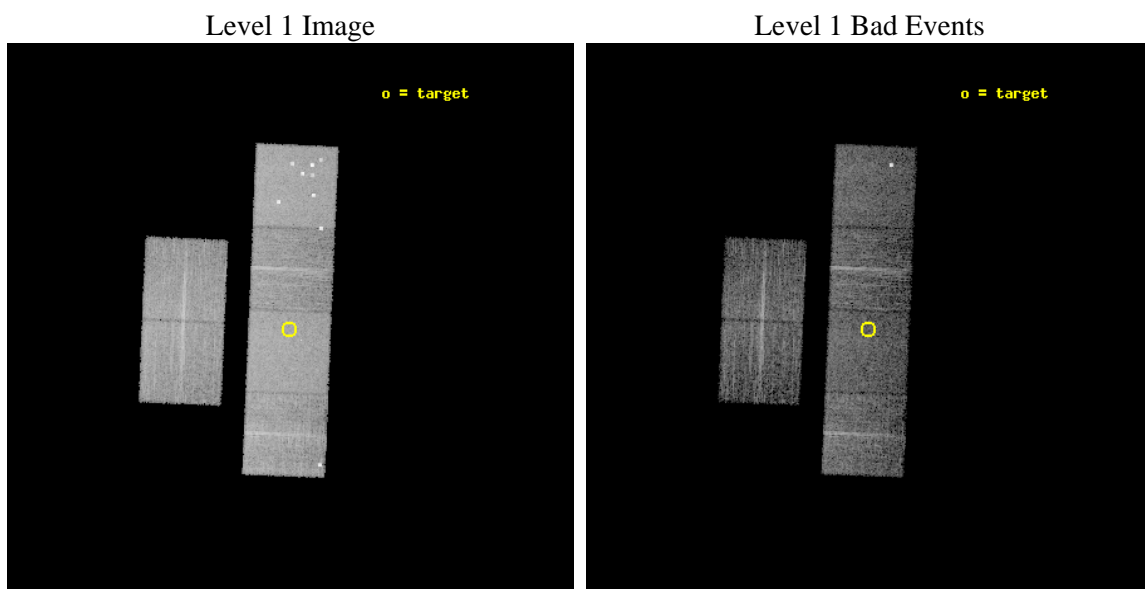
seq_num	900651	Sequence number
obs_id	8110	Observation id
title	The Duty Cycle of Supermassive Black Holes: X-raying Virgo	Proposa
observer	Prof Tommaso Treu	Principal investigator
object	1185	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.3475	Observer's specified target RA [deg]
dec_targ	12.450667	Observer's specified target Dec [deg]
ra_nom	187.34467954017	Nominal RA [deg]
dec_nom	12.45457929017	Nominal Dec [deg]
roll_nom	92.406579444135	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5157.9872334599	Sum of GTIs [s]
livetime	5092.6736933428	Livetime [s]
ontime2	5158.0282635689	Sum of GTIs [s]
ontime3	5157.8641134501	Sum of GTIs [s]
ontime5	5157.9461934566	Sum of GTIs [s]
ontime6	5157.9051534534	Sum of GTIs [s]
ontime7	5157.9872334599	Sum of GTIs [s]
ontime8	5151.340993166	Sum of GTIs [s]
l2events	117423	Number of level 2 events



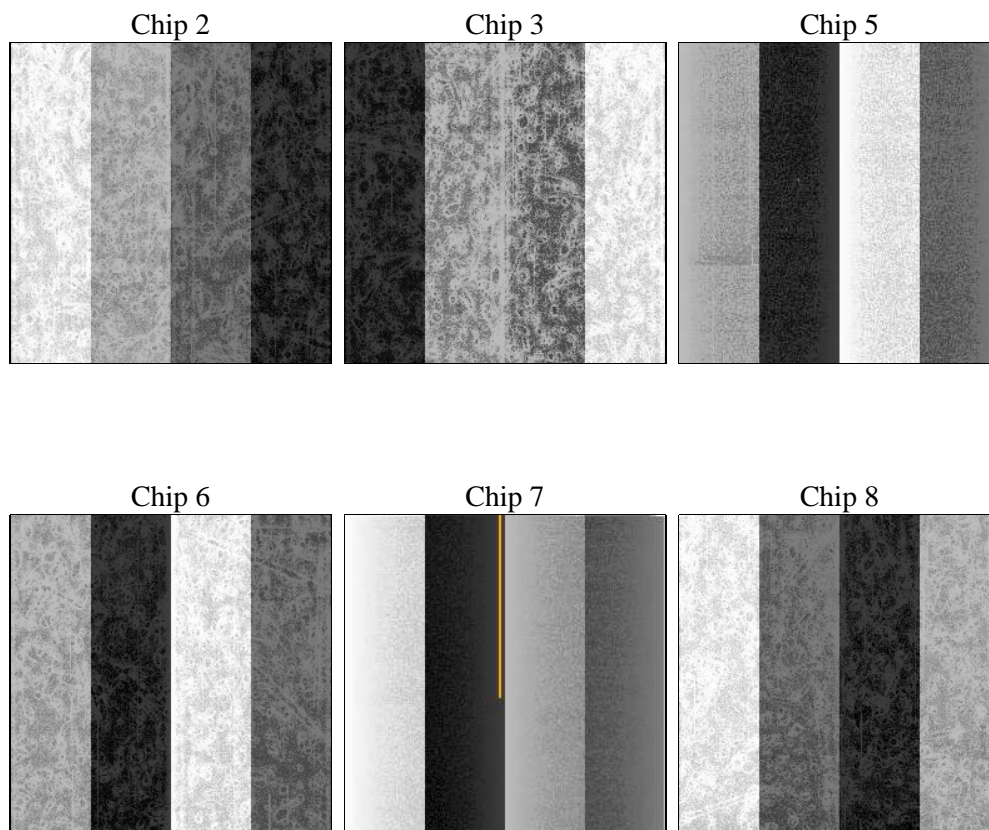
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	5157.9872334599	Sum of GTIs [s]
caldsver	4.4.9	 	ontime2	5158.0282635689	Sum of GTIs [s]
date	2012-05-10T08:37:09	Date and time of file creation	ontime3	5157.8641134501	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5157.9461934566	Sum of GTIs [s]
			ontime6	5157.9051534534	Sum of GTIs [s]
			ontime7	5157.9872334599	Sum of GTIs [s]
			ontime8	5151.340993166	Sum of GTIs [s]
			l1events	413025	Number of level 1 events

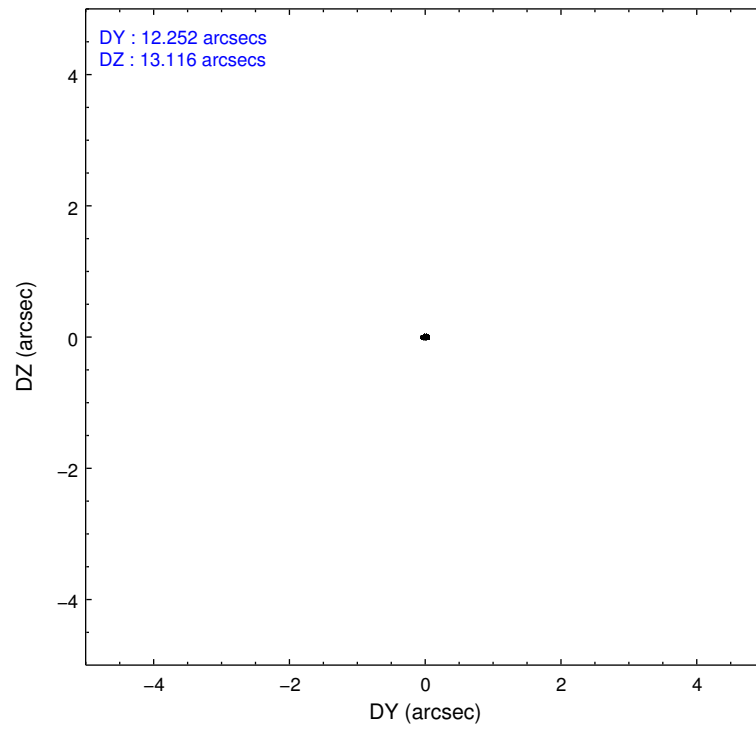
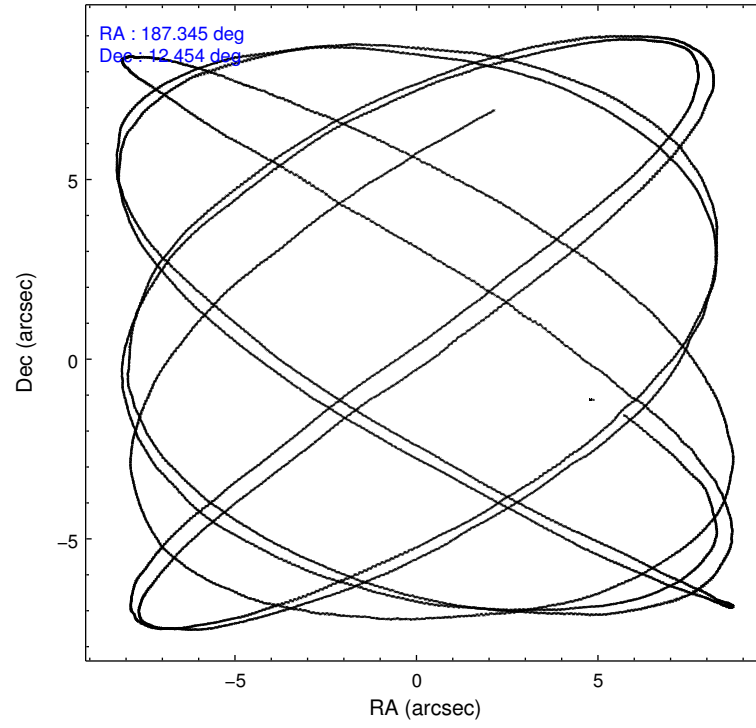
2.1.4 Events

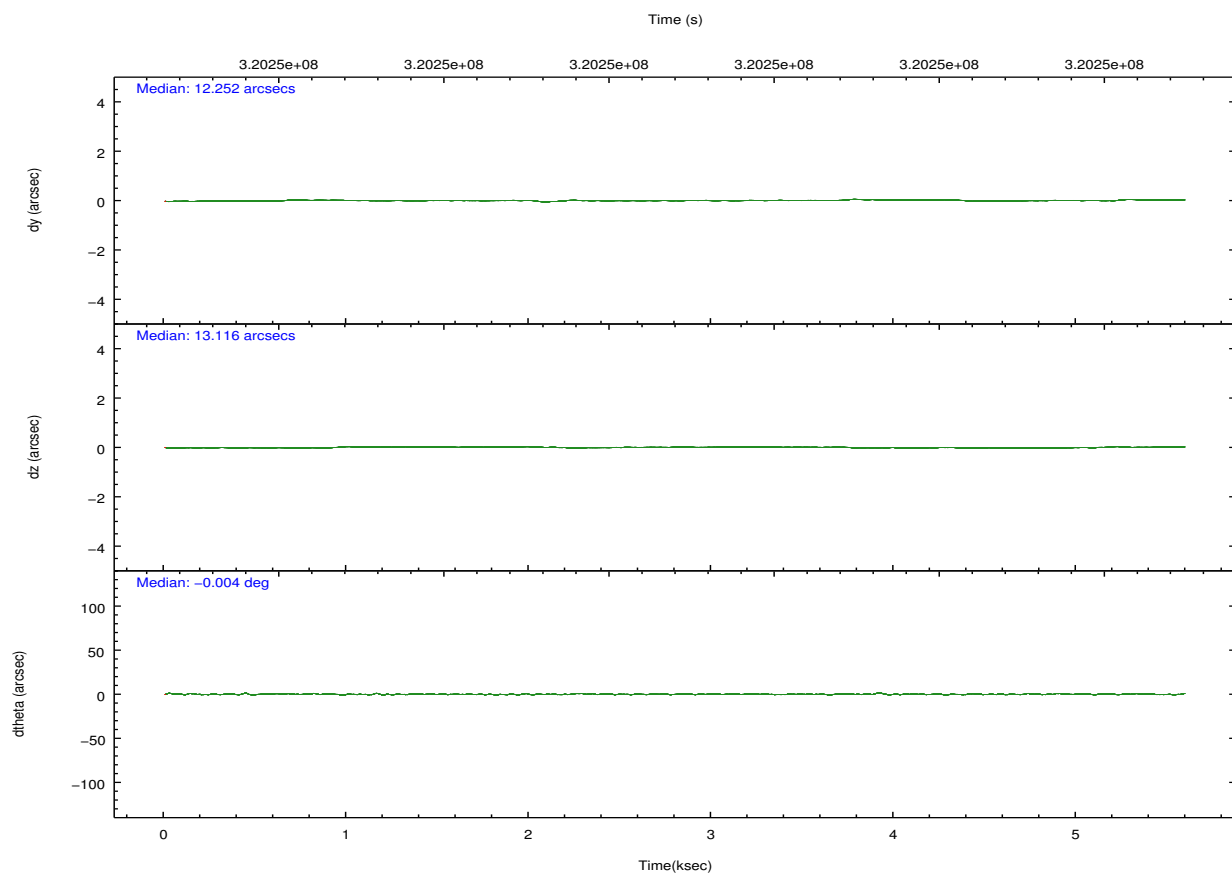
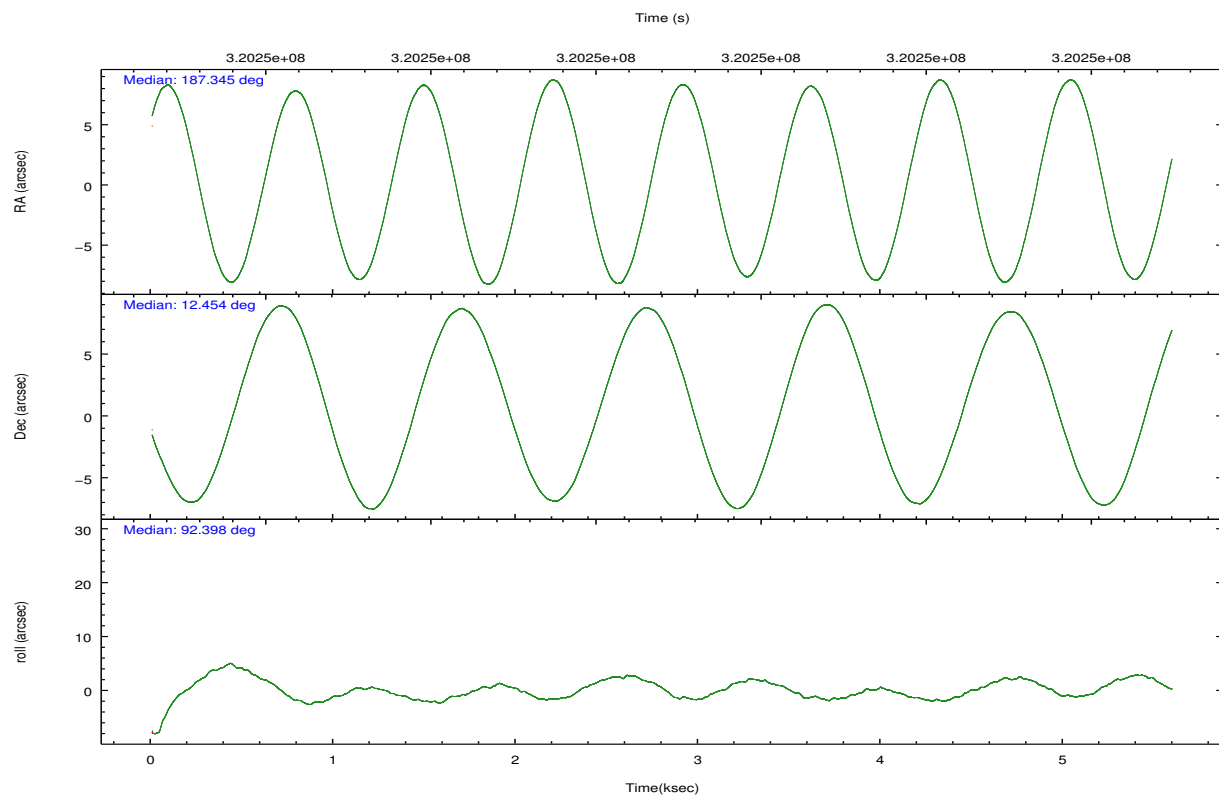
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	62047	63146	88712	53694	75124	70302	grade 0 events	10253	13517	8902	4865	4100	8452
rejected events	46964	44133	43235	44565	41157	51741		16%	21%	10%	9%	5%	12%
rejected %	75%	69%	48%	82%	54%	73%	grade 1 events	78	92	119	42	69	75
								0%	0%	0%	0%	0%	0%
							grade 2 events	2132	2368	12543	1709	7251	3570
								3%	3%	14%	3%	9%	5%
							grade 3 events	805	929	1617	633	2906	1397
								1%	1%	1%	1%	3%	1%
							grade 4 events	800	939	1433	603	2909	1338
								1%	1%	1%	1%	3%	1%
							grade 5 events	2076	2364	5165	2374	6450	3051
								3%	3%	5%	4%	8%	4%
							grade 6 events	1112	1286	21040	1328	16837	3831
								1%	2%	23%	2%	22%	5%
							grade 7 events	44791	41651	37893	42140	34602	48588
								72%	65%	42%	78%	46%	69%

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	187.360043	187.344679540167	CCD I2 on	O1	Y
[deg] Pointing Dec	12.431794	12.45457929017044	CCD I3 on	O2	Y
[deg] Pointing Roll	92.246637	92.40657944413465	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	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	O4	Y
[s] Observation start time (MET)	320245801.184000	320245411.06891	CCD S5 on	N	N
Observation start date	2008-02-24T13:08:56	2008-02-24T13:03:31	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	320251201.184000	320251458.05671	On-chip summing requested	N	N
Observation end date	2008-02-24T14:38:56	2008-02-24T14:44:18	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



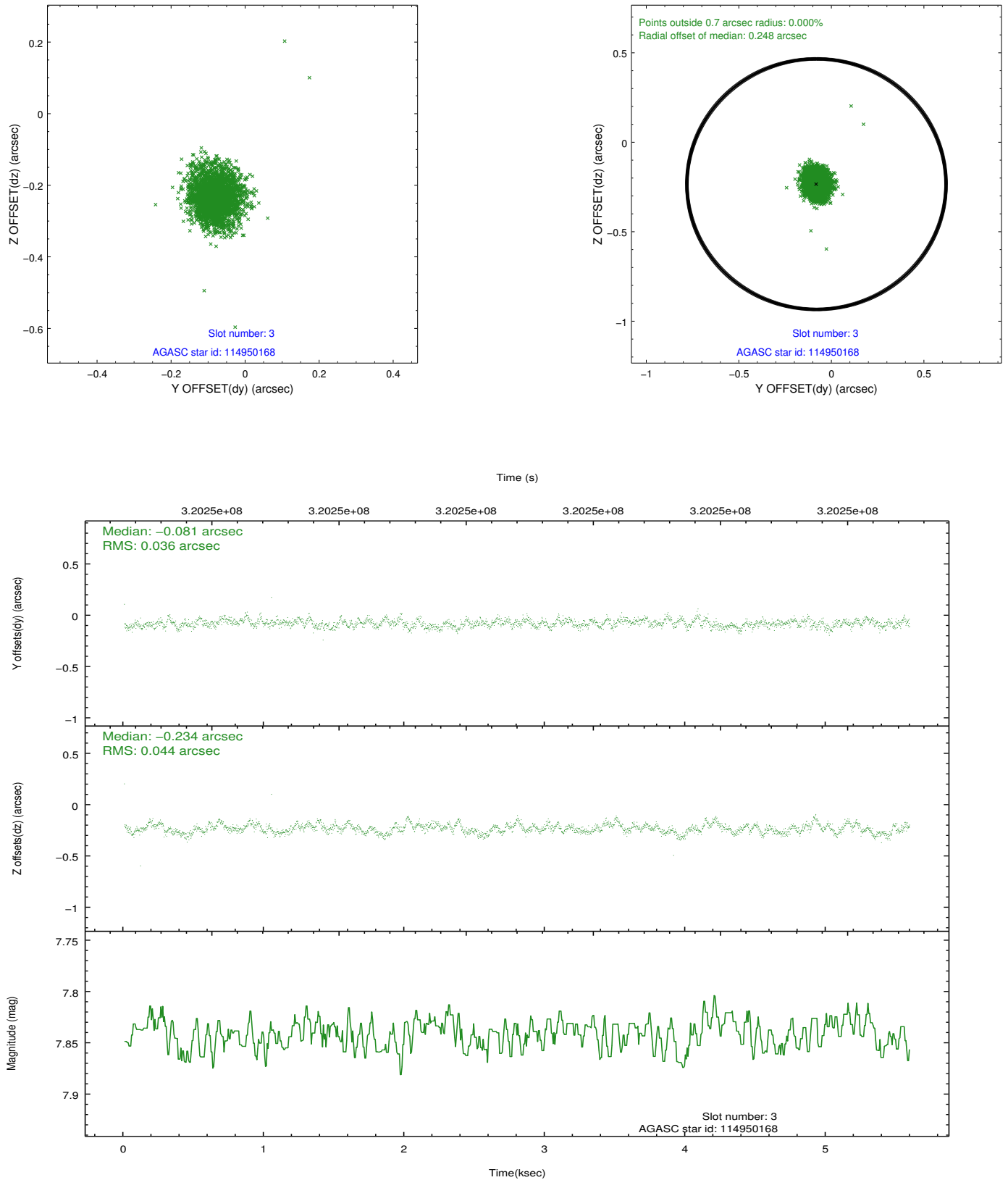


Slot Statistics

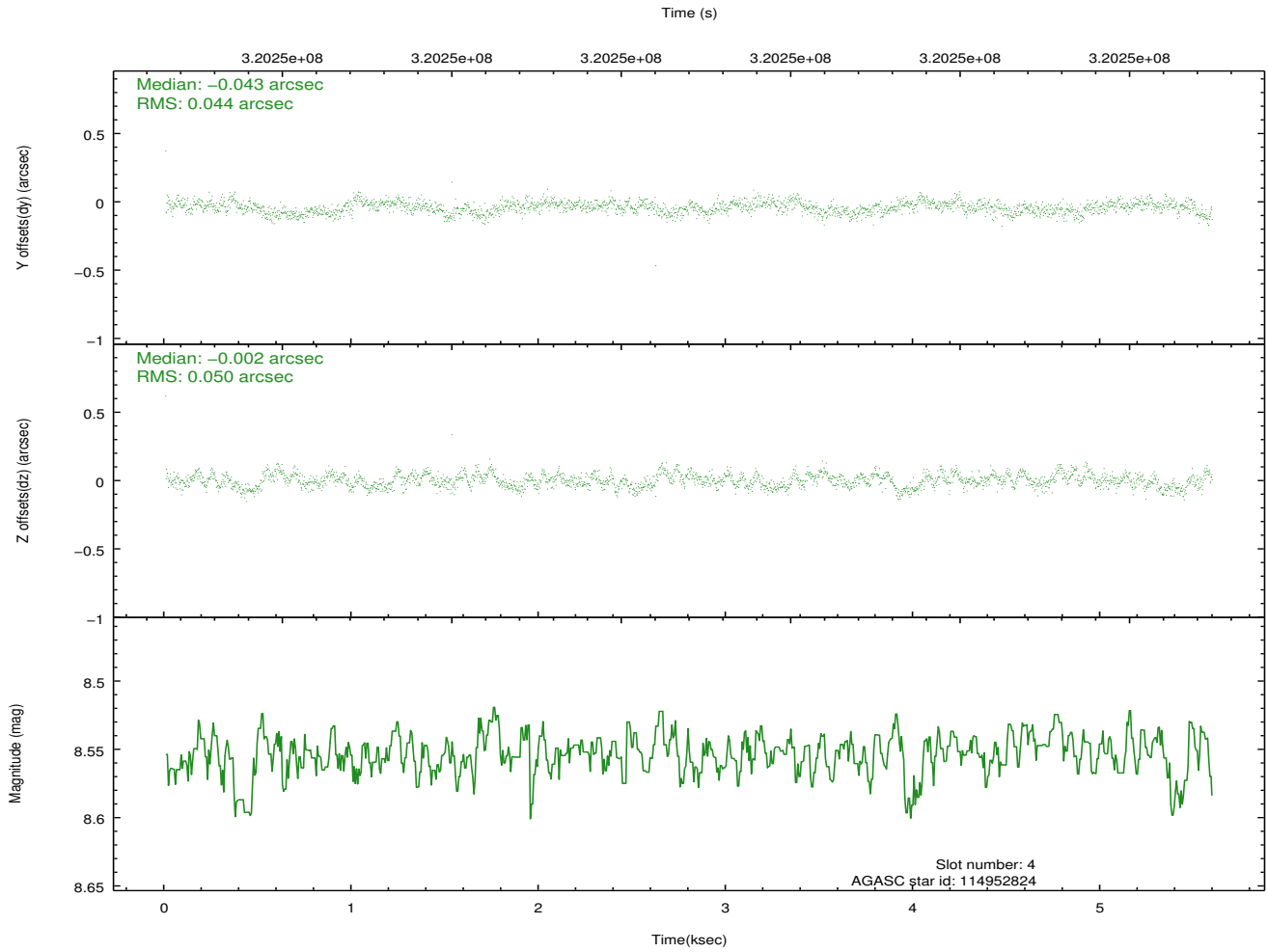
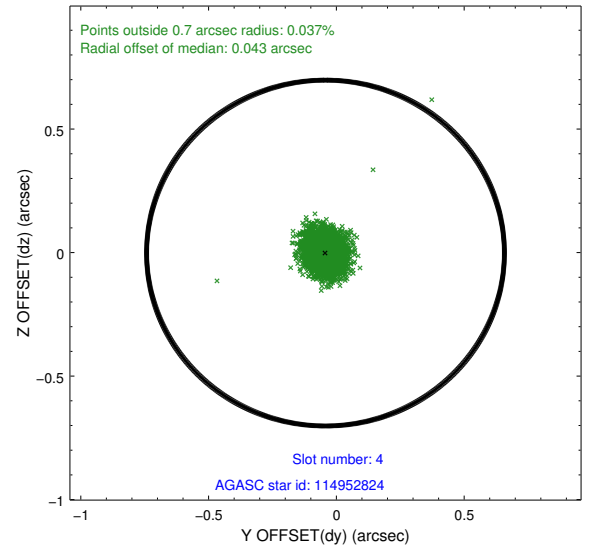
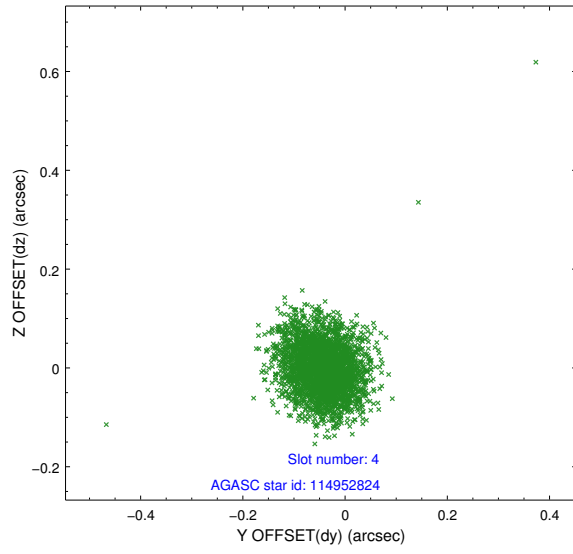
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1364	-0.022	-0.051	0.007	0.011	0.000000	0.000000	-765.17	-1734.49
1	FID	ACIS-S-4	7.20	1364	0.116	0.024	0.006	0.010	0.000000	0.000000	2147.76	172.95
2	FID	ACIS-S-5	7.24	1364	-0.126	0.035	0.007	0.011	0.000000	0.000000	-1816.74	167.86
3	GUIDE	114950168	7.84	2727	-0.081	-0.234	0.058	0.097	187.143398	12.117441	-1100.47	806.18
4	GUIDE	114952824	8.55	2726	-0.043	-0.002	0.069	0.111	187.703904	12.486727	151.20	-1214.55
5	GUIDE	114954440	9.17	2723	-0.011	-0.258	0.092	0.149	186.915066	12.219118	-702.30	1593.11
6	GUIDE	114955056	8.32	2728	0.127	0.372	0.061	0.100	187.914001	12.127854	-1167.12	-1904.28
7	GUIDE	114955568	7.50	2727	0.005	0.125	0.058	0.096	187.061916	11.826551	-2135.54	1134.61

2.4 Star Slots

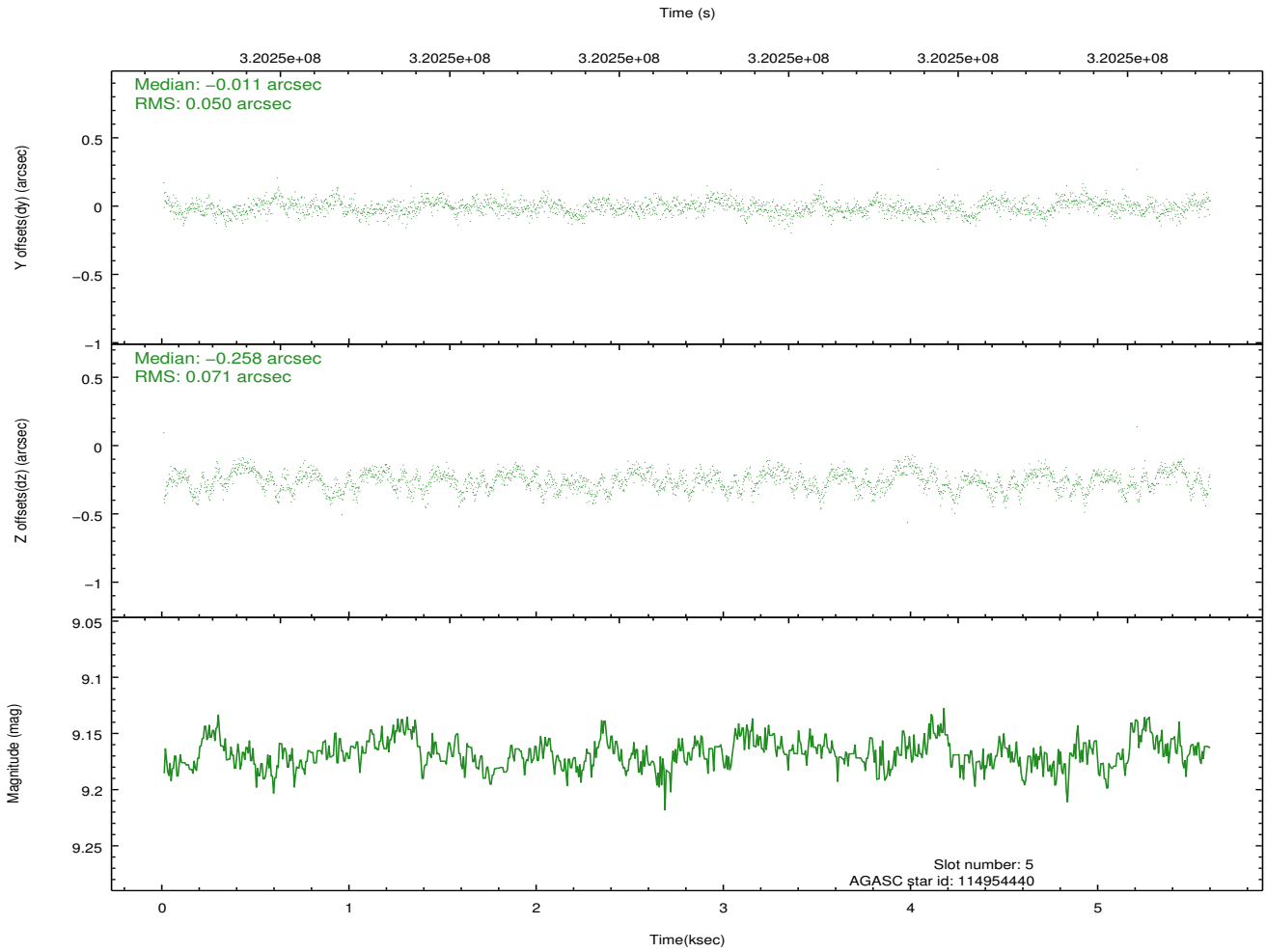
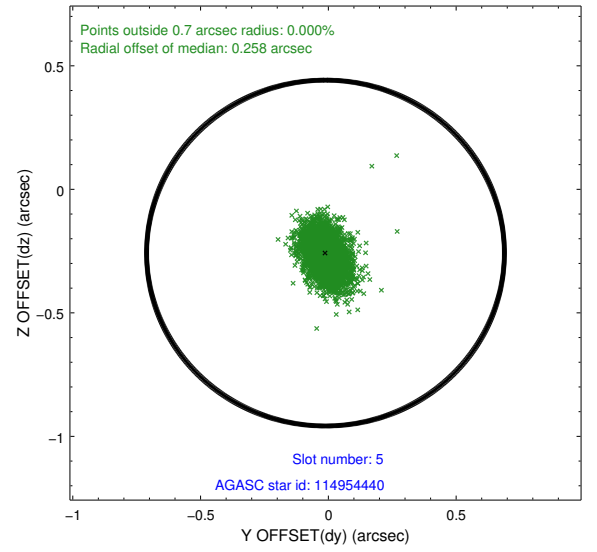
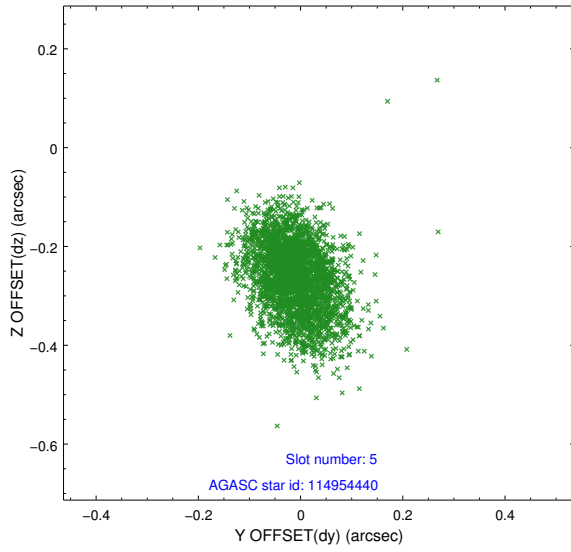
2.4.1 Slot 3



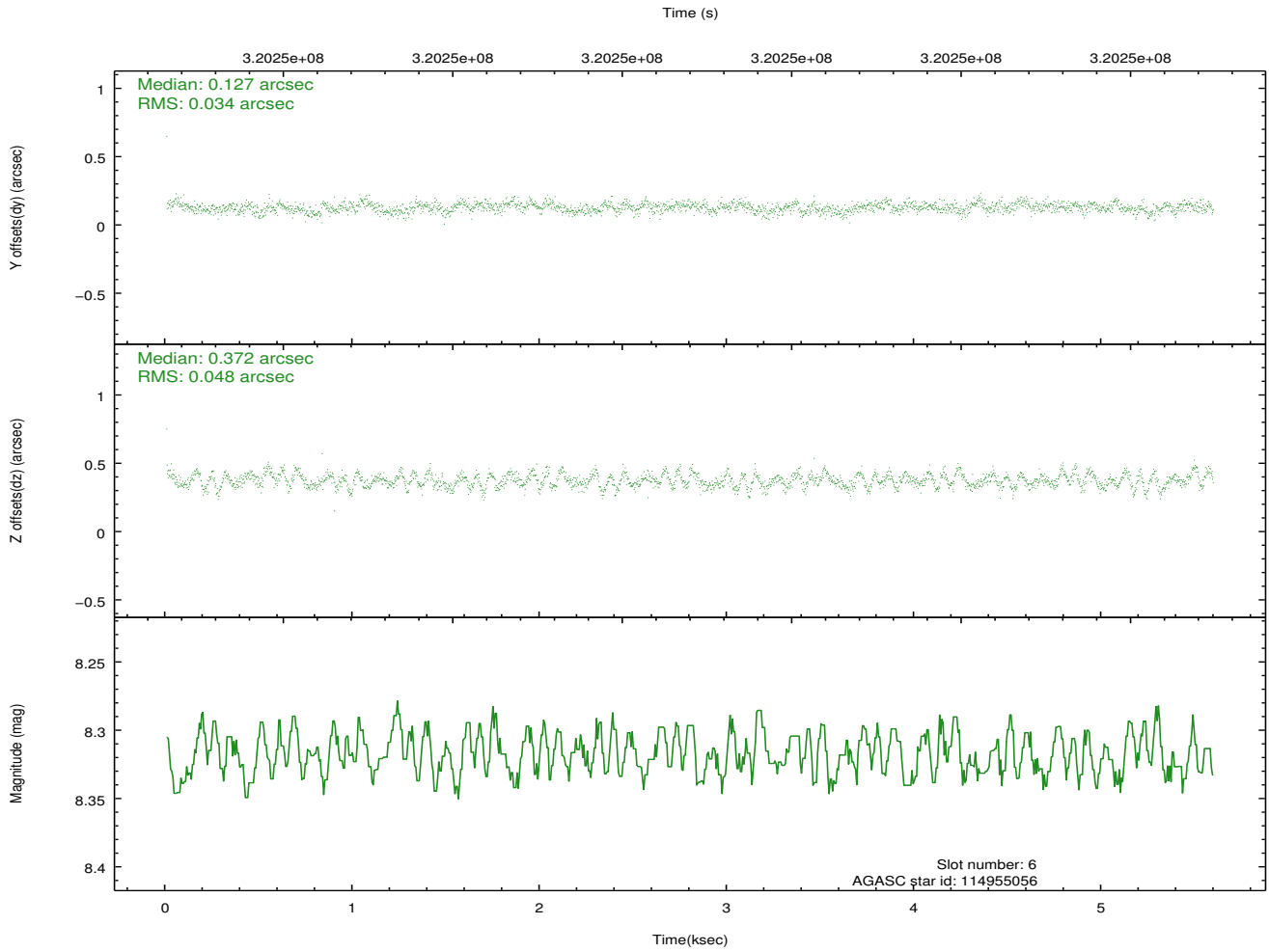
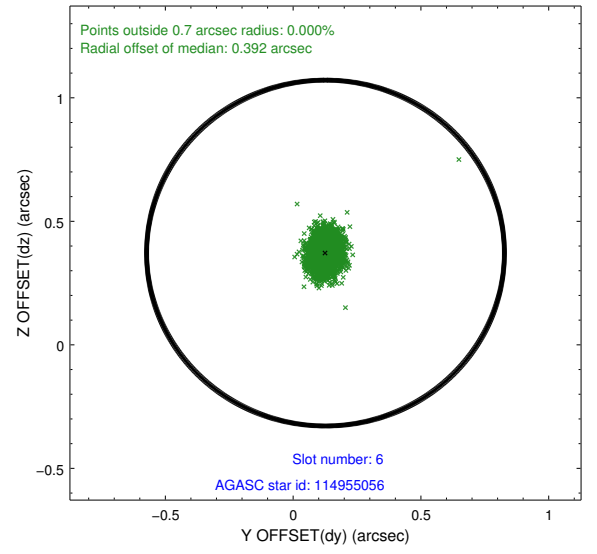
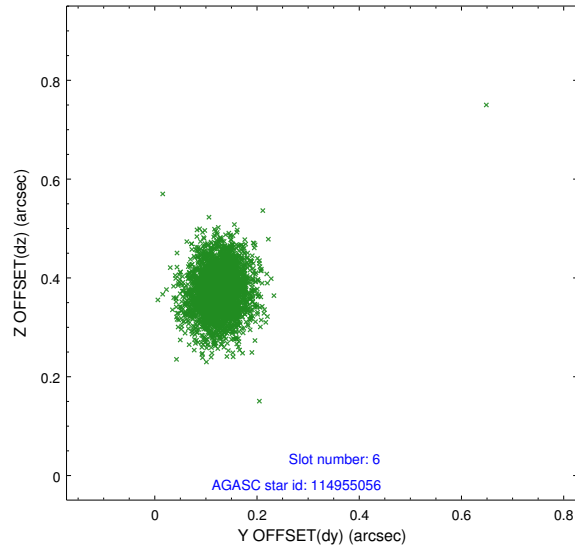
2.4.2 Slot 4



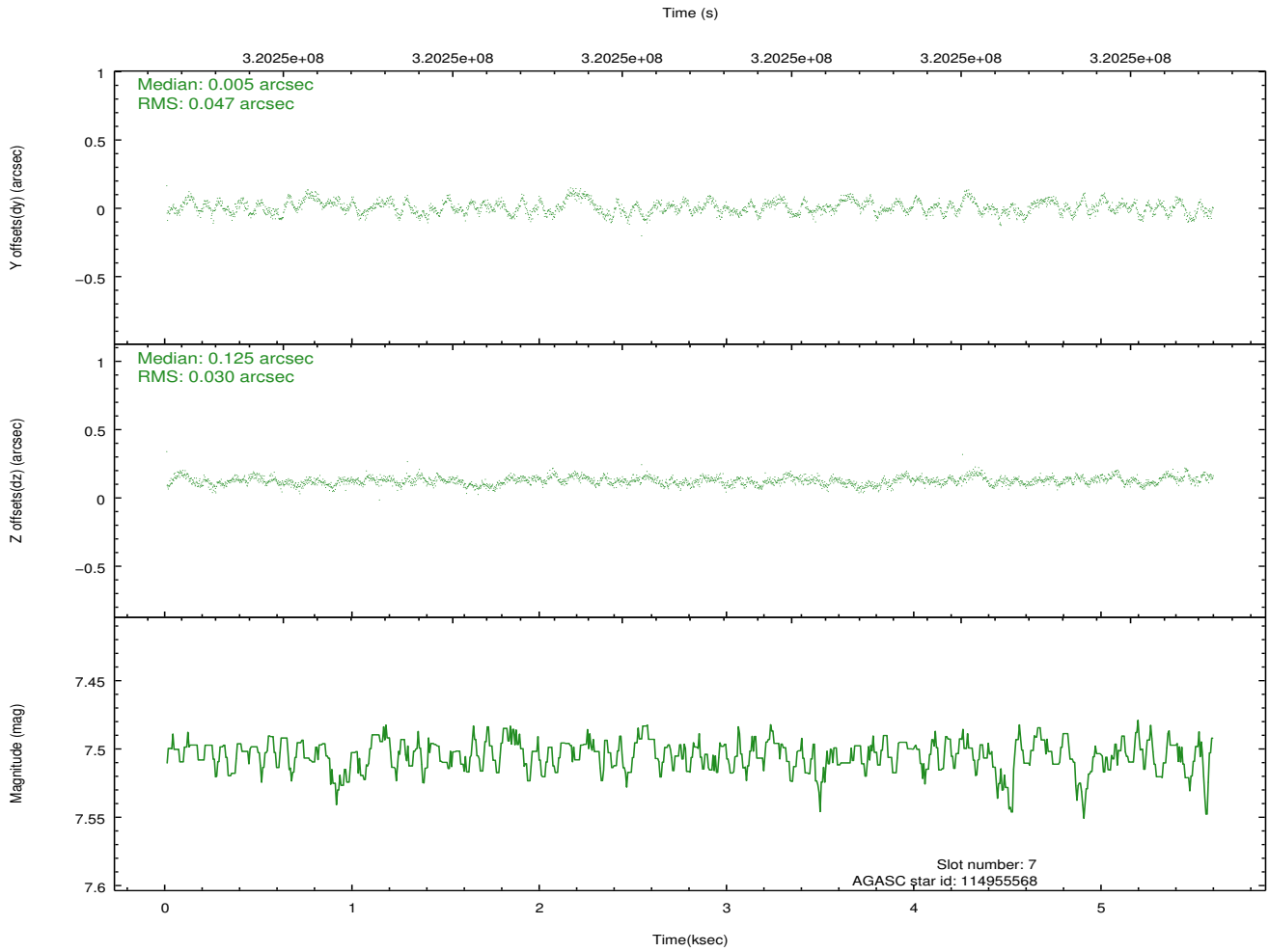
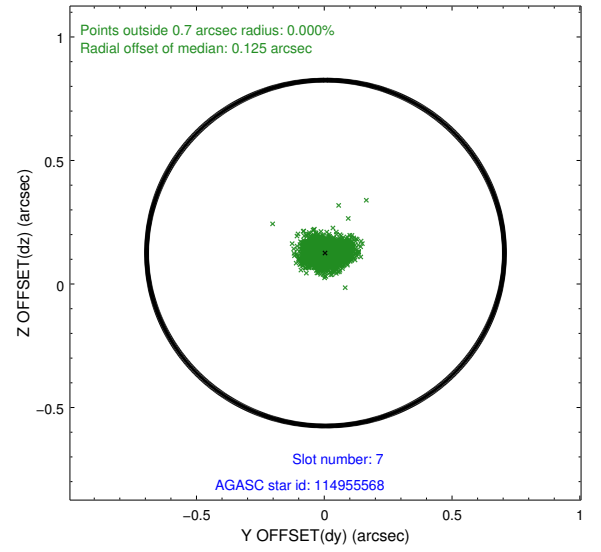
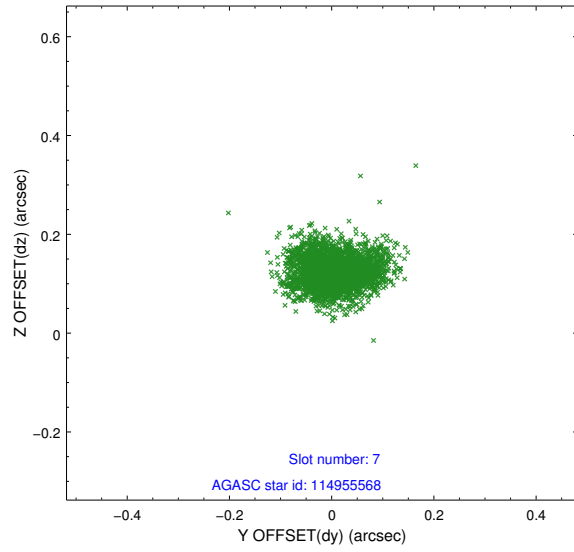
2.4.3 Slot 5



2.4.4 Slot 6

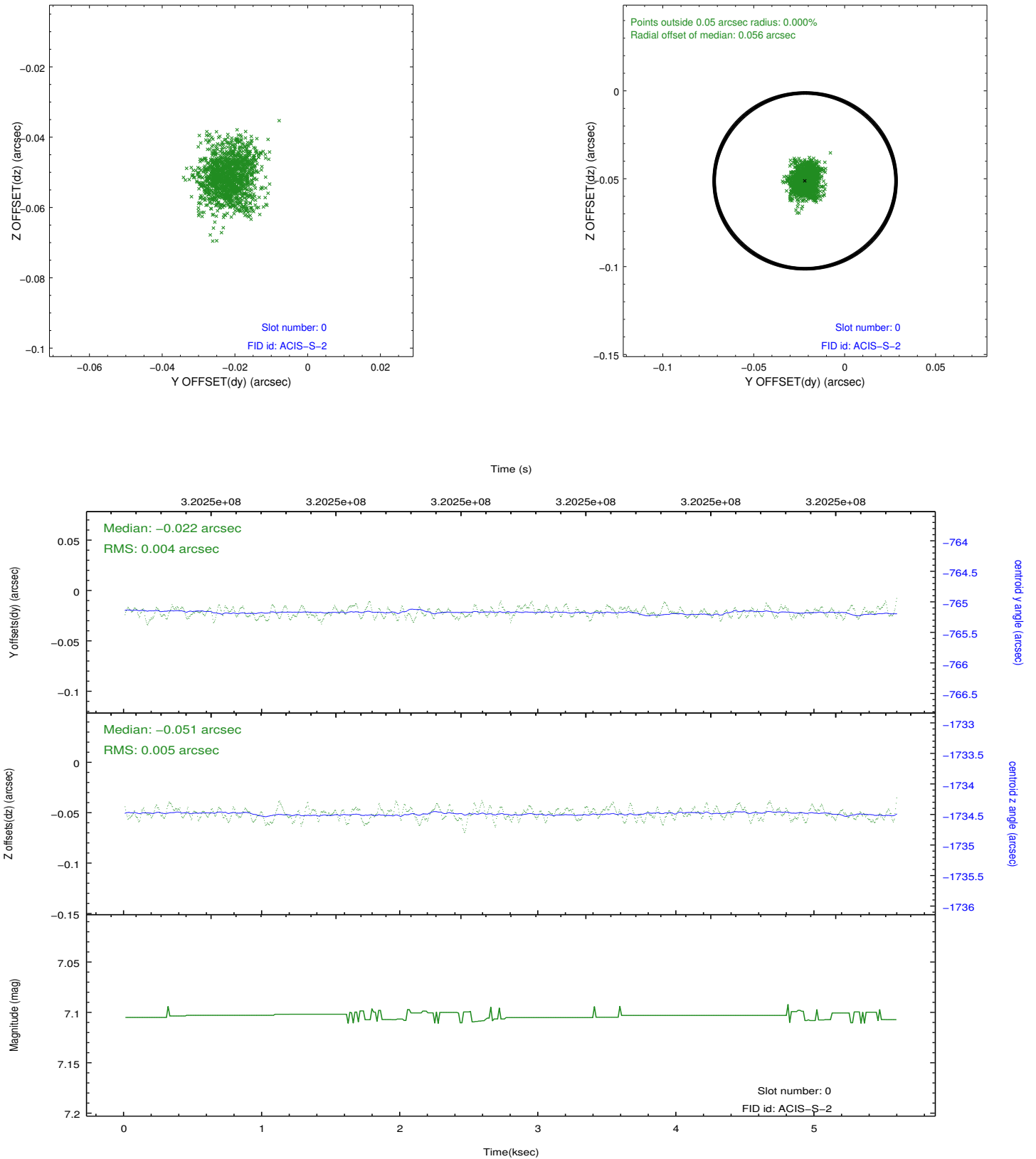


2.4.5 Slot 7

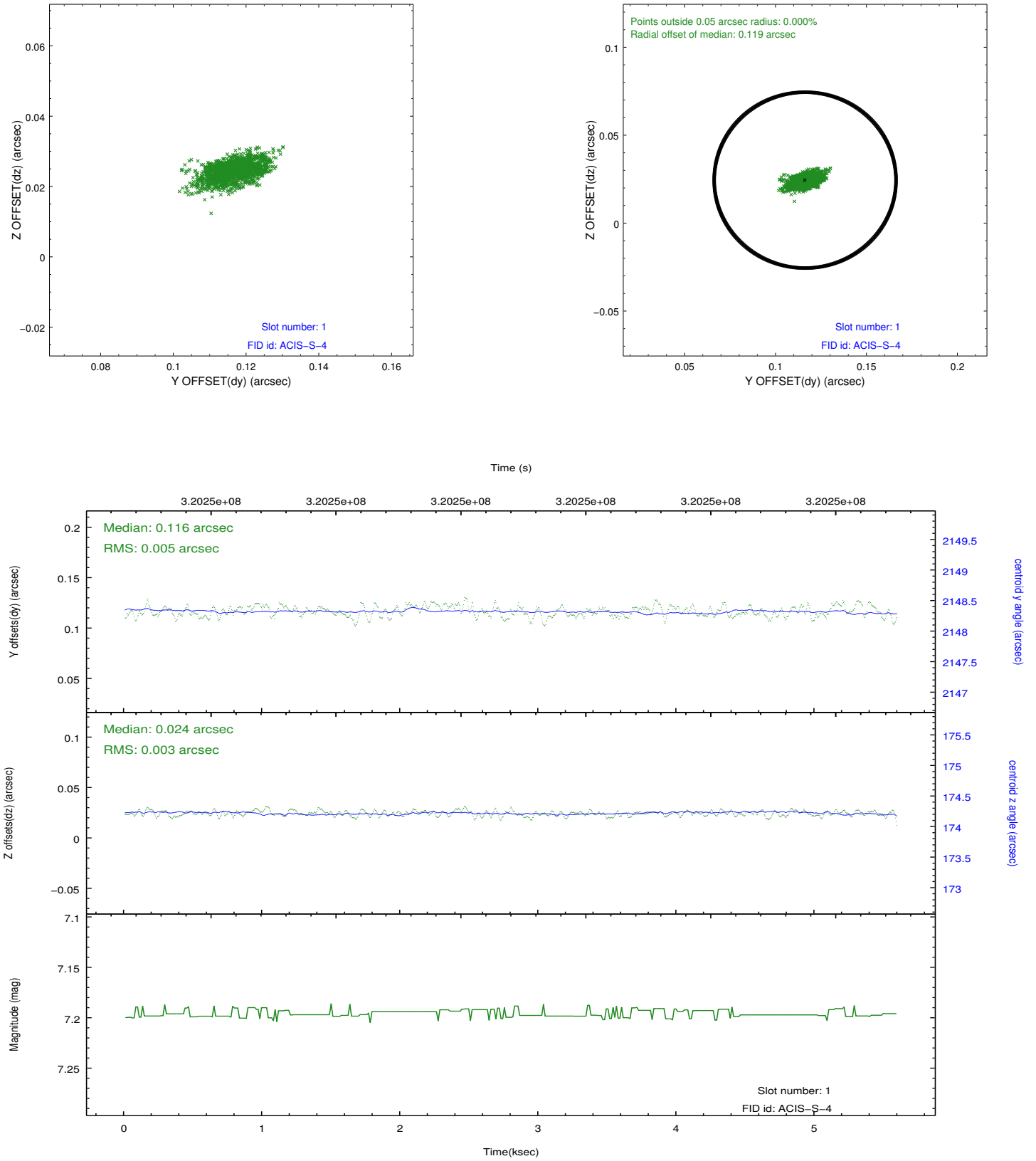


2.5 FID Slots

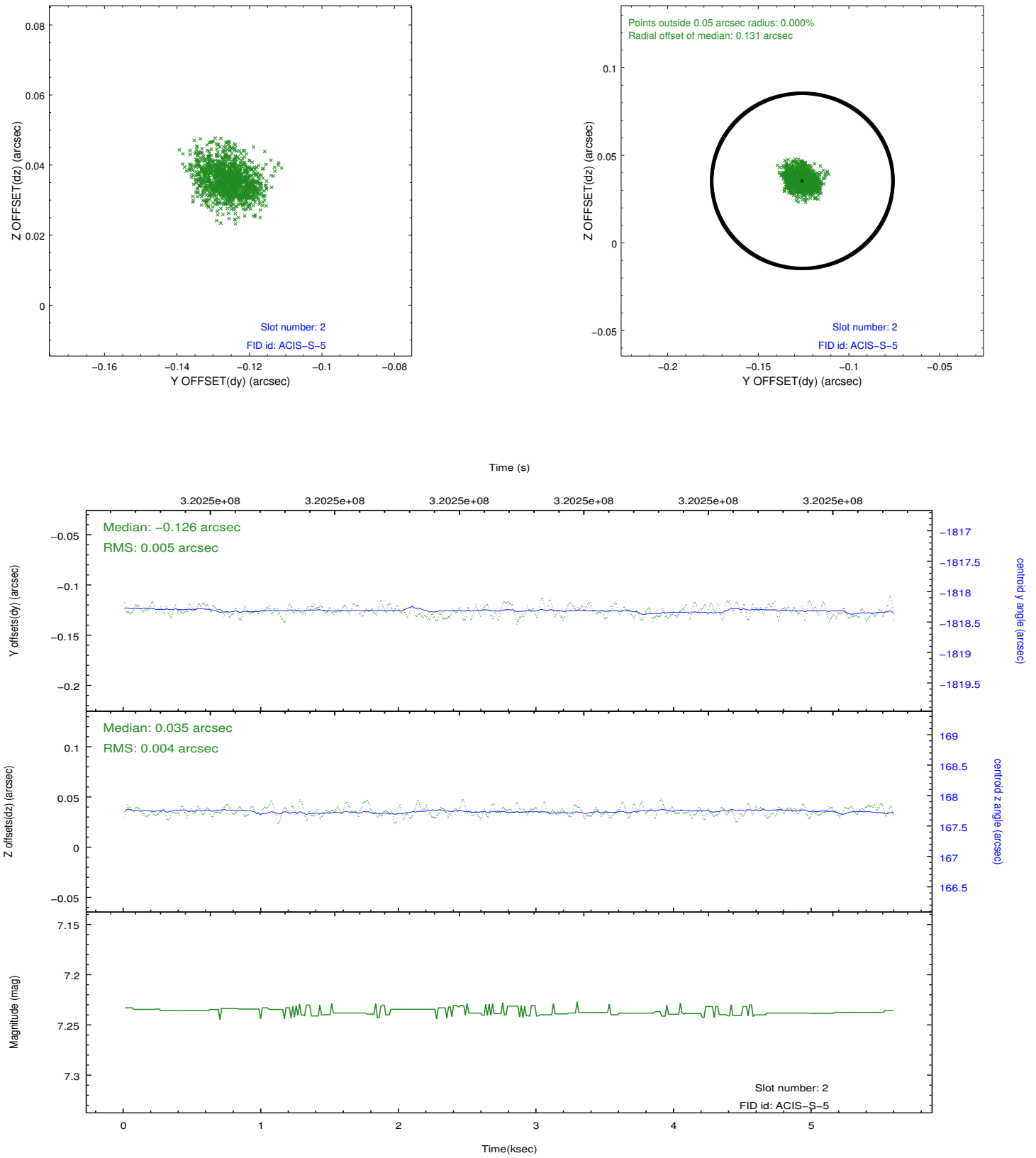
2.5.1 Slot 0



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)	2012.05.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.15839998

A.2 Comments

Joint Proposal: Spitzer