

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10717 - L2 Version 2
Chandra X-Ray Center

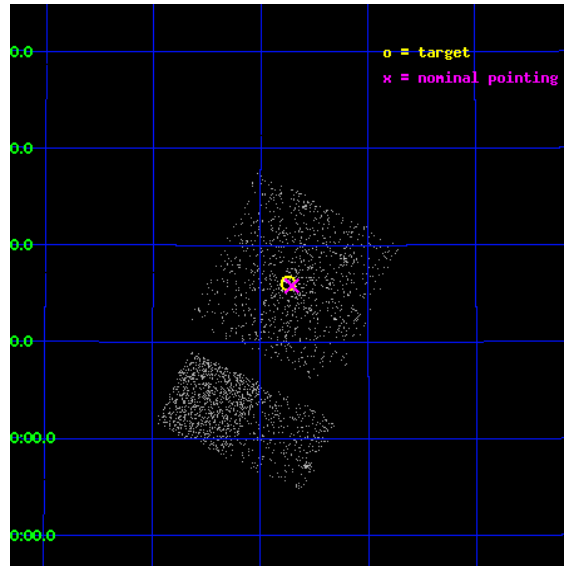
L2 Processing Date : Jun 14 2012

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1 Front

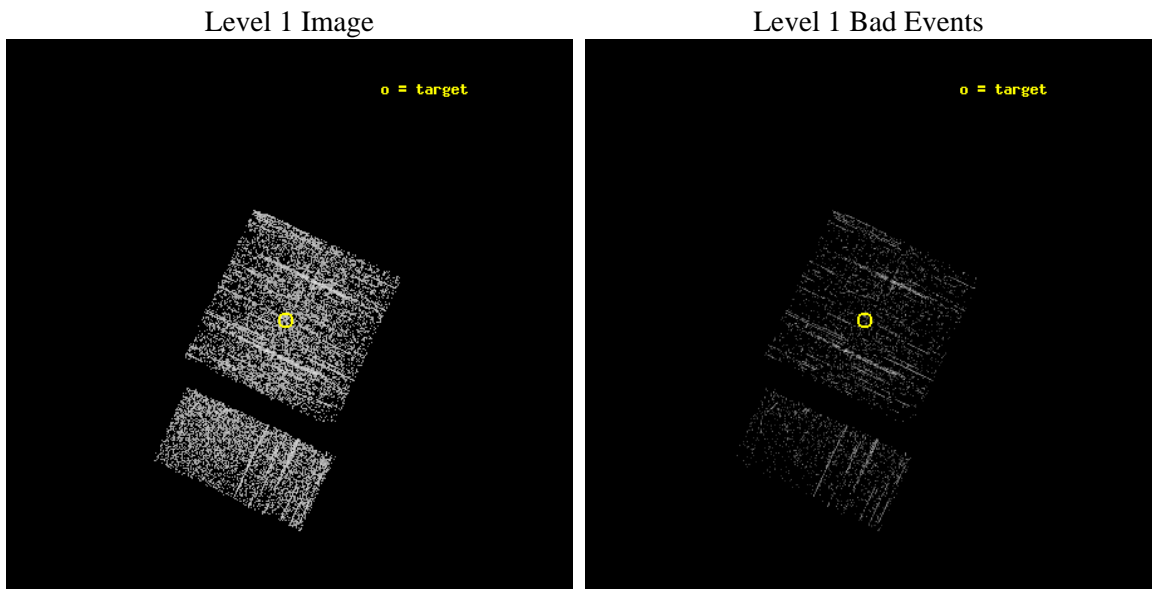
seq_num	600767	Sequence number
obs_id	10717	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.677102587166	Nominal RA [deg]
dec_nom	41.263582478695	Nominal Dec [deg]
roll_nom	205.21387999431	Nominal Roll [deg]
revision	2	Processing version of data
ontime	982.93751615286	Sum of GTIs [s]
livetime	154.7380750419	Livetime [s]
ontime0	982.81439614296	Sum of GTIs [s]
ontime1	982.85543614626	Sum of GTIs [s]
ontime2	982.89647614956	Sum of GTIs [s]
ontime3	982.93751615286	Sum of GTIs [s]
ontime6	983.01959615946	Sum of GTIs [s]
ontime7	982.97855615616	Sum of GTIs [s]
l2events	2942	Number of level 2 events



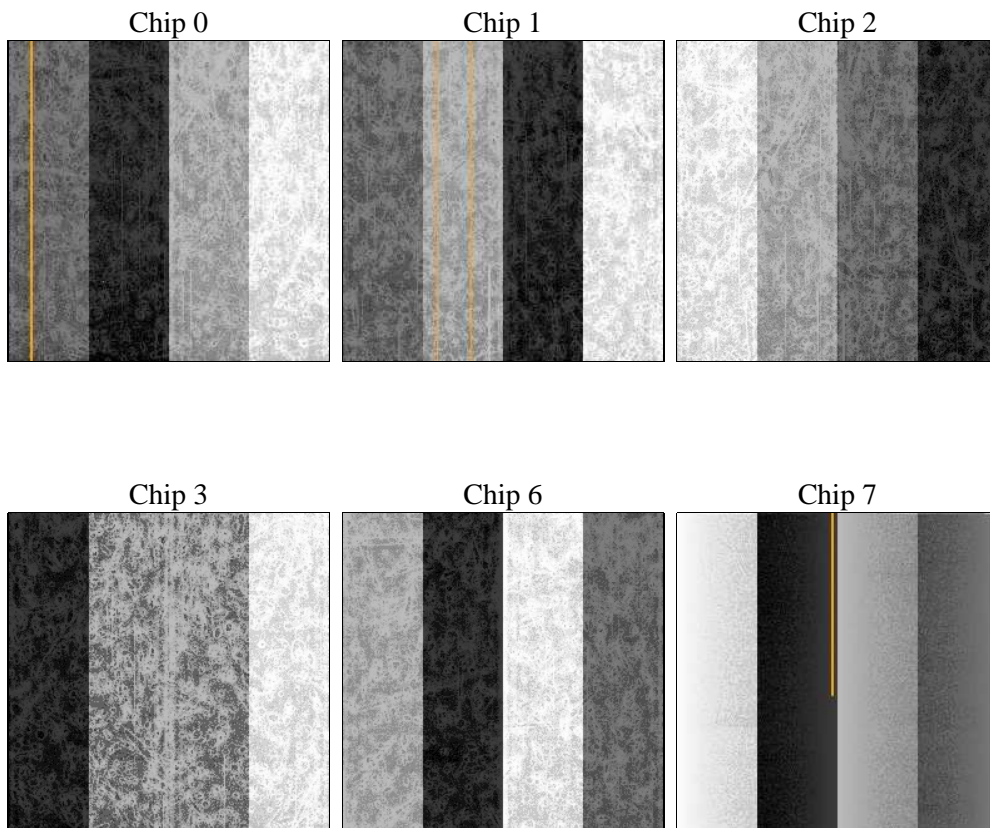
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	982.93751615286	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	982.81439614296	Sum of GTIs [s]
date	2012-06-15T00:41:46	Date and time of file creation	ontime1	982.85543614626	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	982.89647614956	Sum of GTIs [s]
			ontime3	982.93751615286	Sum of GTIs [s]
			ontime6	983.01959615946	Sum of GTIs [s]
			ontime7	982.97855615616	Sum of GTIs [s]
			l1events	30031	Number of level 1 events

2.1.4 Events

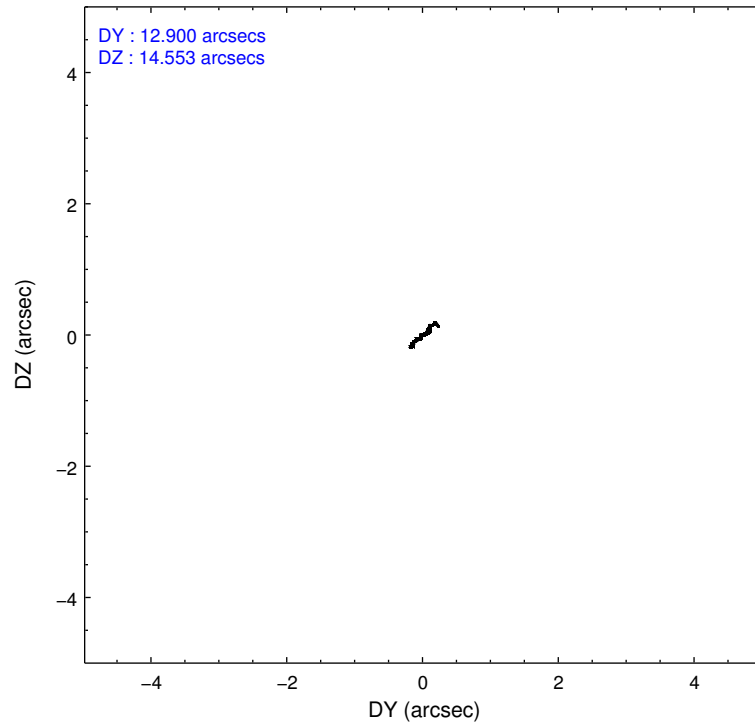
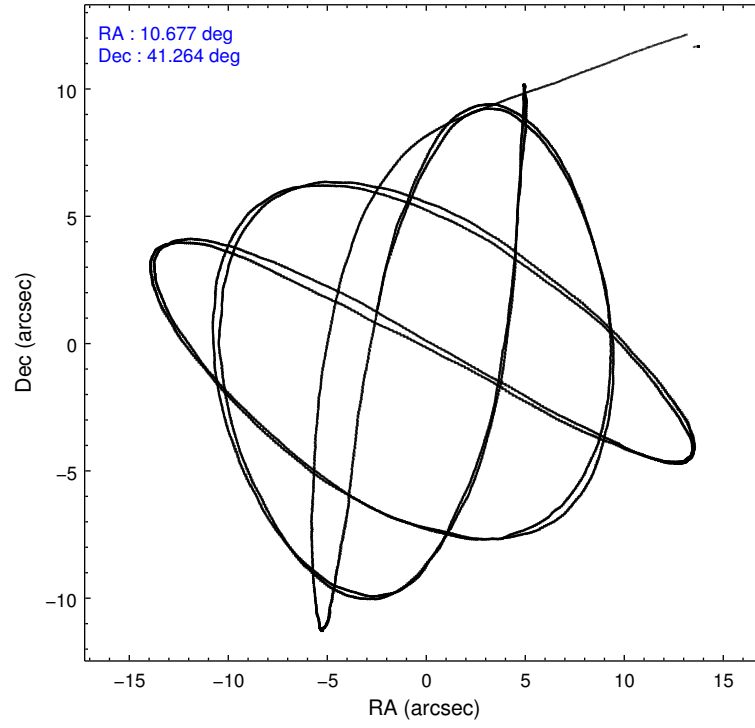
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	4619	4893	5405	5265	5396	4453
rejected events	4175	4444	4935	4797	4998	3270
rejected %	90%	90%	91%	91%	92%	73%

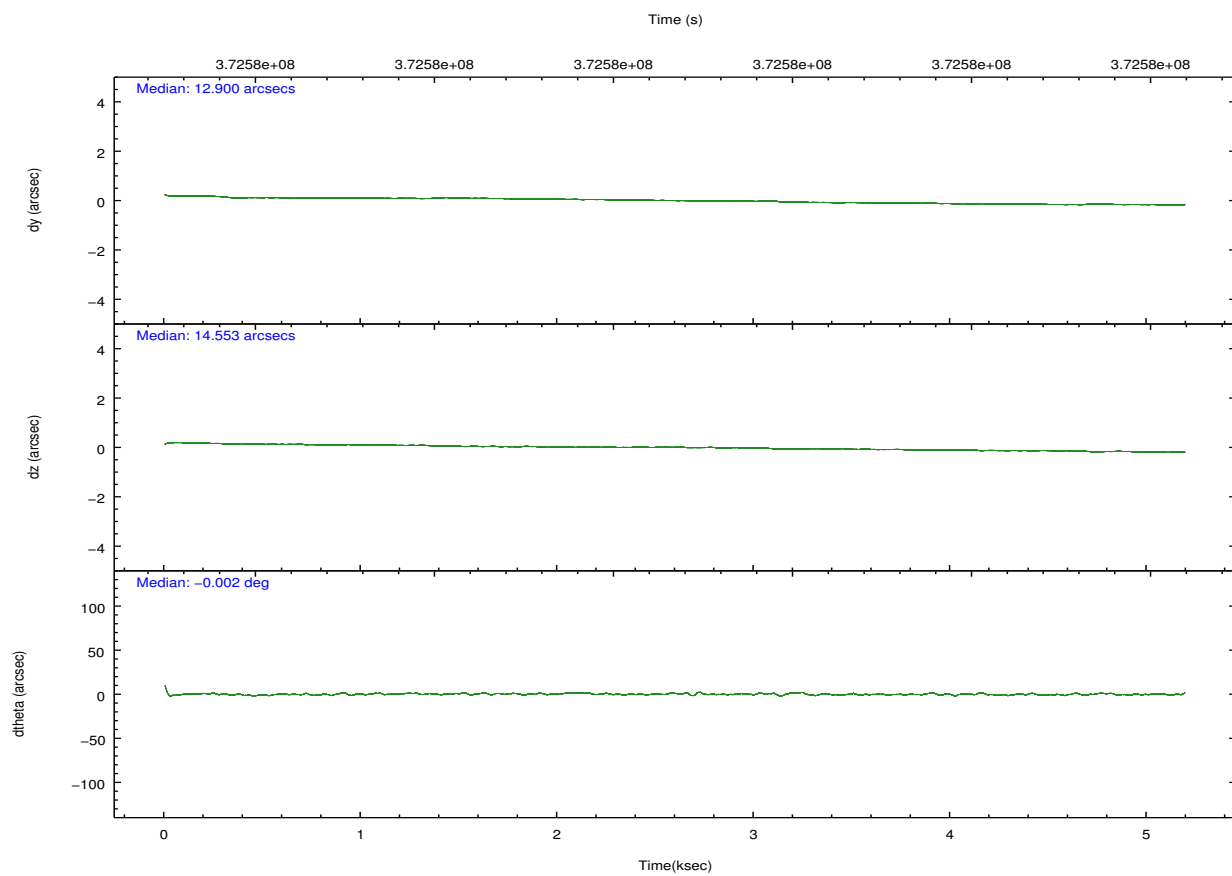
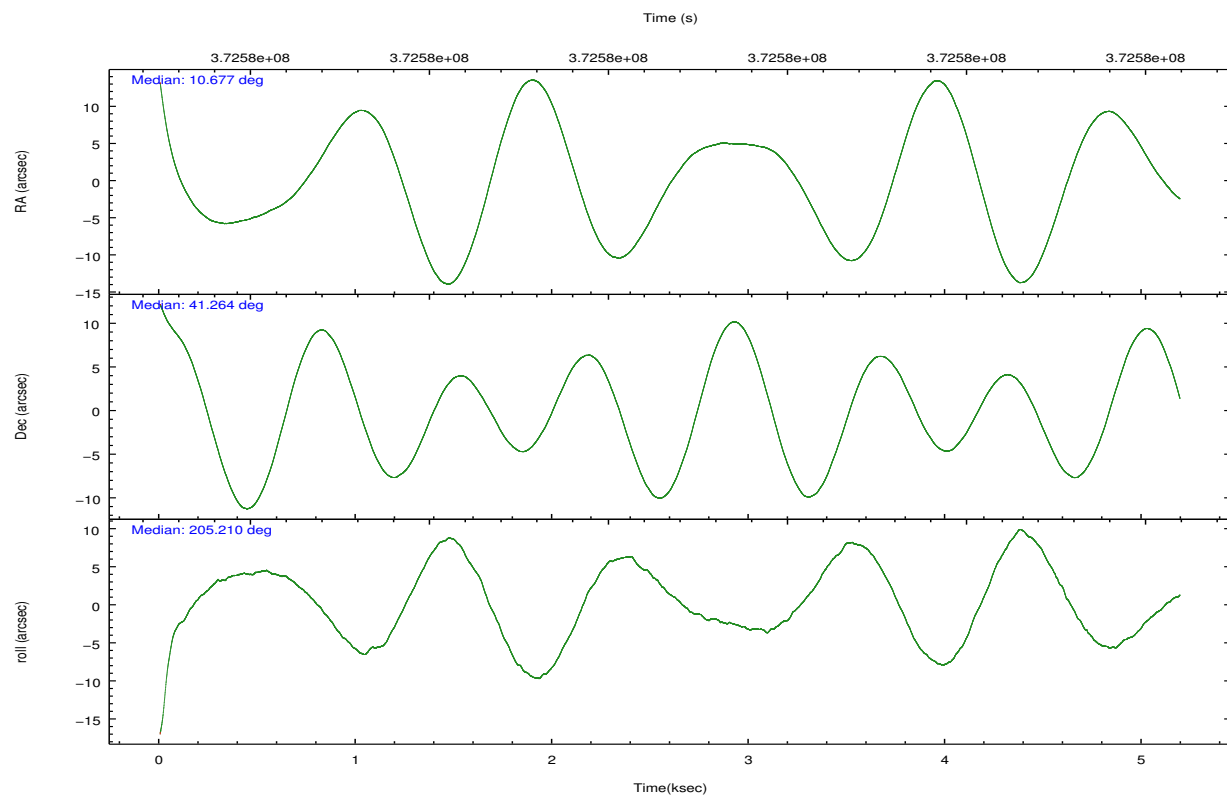
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	180	167	223	258	127	144
	3%	3%	4%	4%	2%	3%
grade 1 events	3	2	1	6	4	8
	0%	0%	0%	0%	0%	0%
grade 2 events	114	109	120	82	117	281
	2%	2%	2%	1%	2%	6%
grade 3 events	61	70	56	60	51	133
	1%	1%	1%	1%	0%	2%
grade 4 events	68	71	55	52	62	139
	1%	1%	1%	0%	1%	3%
grade 5 events	172	177	159	156	190	448
	3%	3%	2%	2%	3%	10%
grade 6 events	78	109	79	73	97	672
	1%	2%	1%	1%	1%	15%
grade 7 events	3943	4188	4712	4578	4748	2628
	85%	85%	87%	86%	87%	59%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	10.697825	10.67710258716573	CCD I2 on	Y	Y
[deg] Pointing Dec	41.286151	41.26358247869548	CCD I3 on	Y	Y
[deg] Pointing Roll	204.991540	205.2138799943081	CCD S0 on	N	N
[s] Window start time (MET)	372297666.184000	372297666.184000	CCD S1 on	N	N
[s] Window stop time (MET)	372902406.184000	372902406.184000	CCD S2 on	O2	Y
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S3 on	O1	Y
[mm] SIM defocus	0	0.001439871863259334	CCD S4 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S5 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	372574950.184000	372573390.04057	On-chip summing requested	N	N
Observation start date	2009-10-22T05:01:24	2009-10-22T04:36:30	Subarray requested	NONE	NONE
[s] Observation end time (MET)	372579950.184000	372580840.25345	Alternating exposures requested	Y	Y
Observation end date	2009-10-22T06:24:44	2009-10-22T06:40:40	[s] Primary exposure time	0.600000	0.6
Read mode	TIMED	TIMED	[s] Secondary exposure time	0.000000	3.2
			Duty cycle	5	5

2.3 Aspect



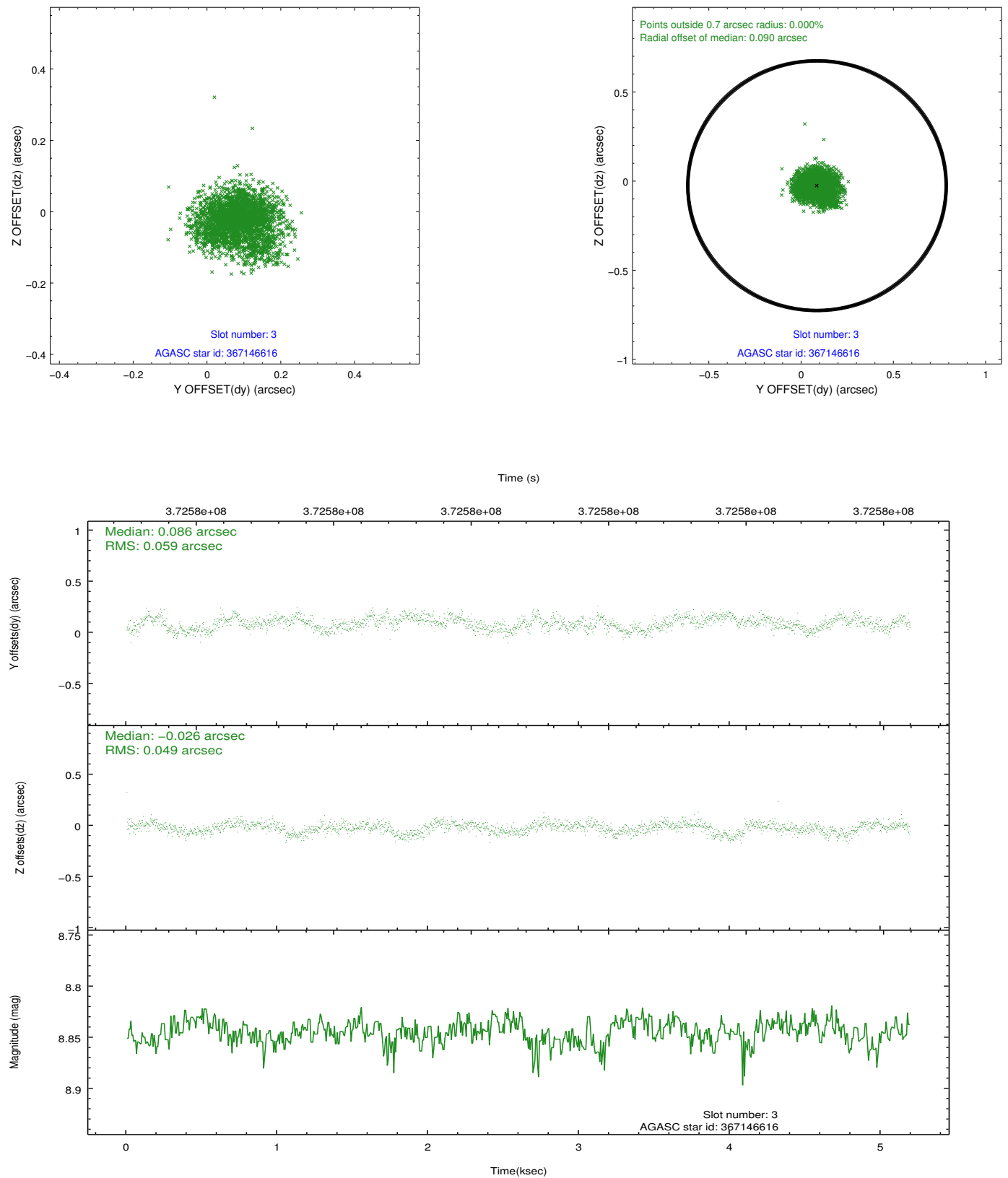


Slot Statistics

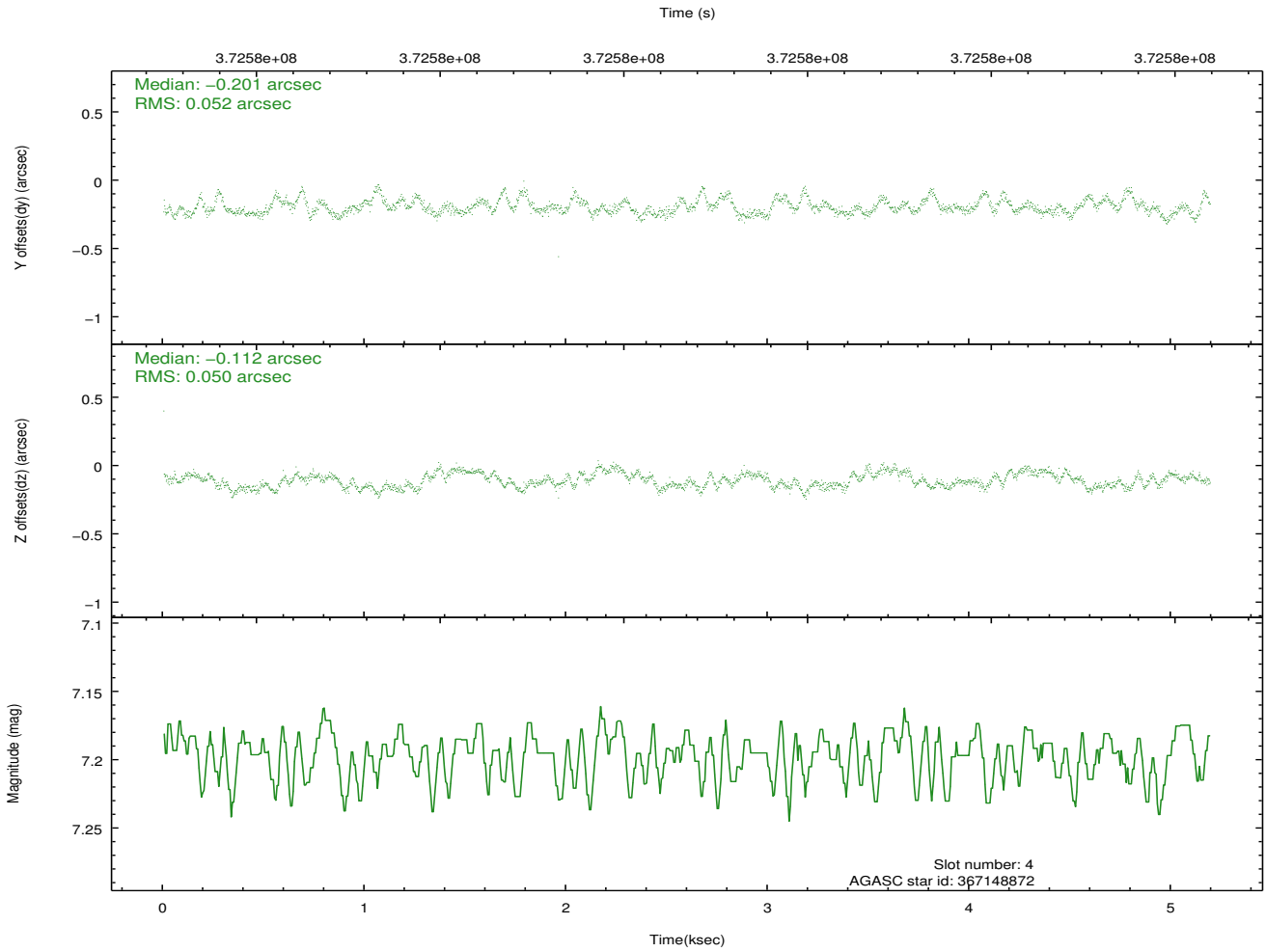
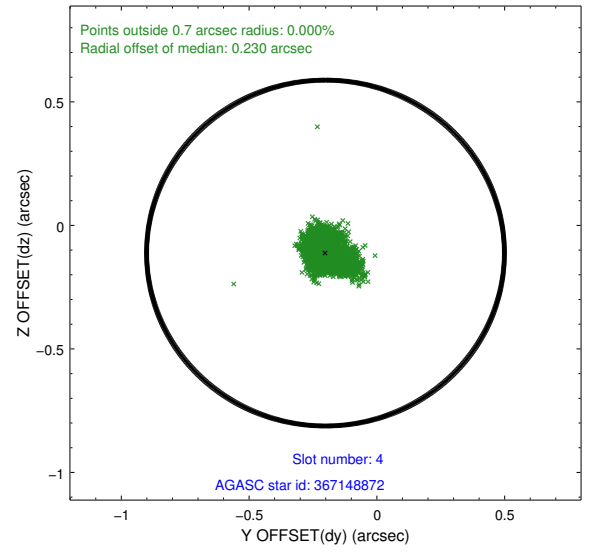
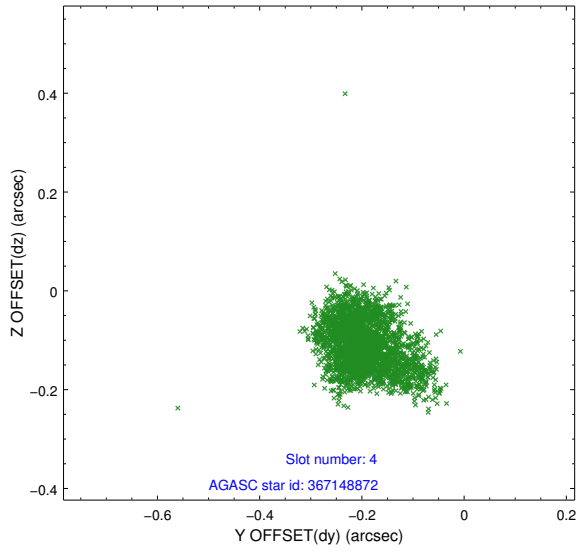
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	6.93	1267	-0.185	-0.107	0.008	0.014	0.000000	0.000000	-767.74	-844.60
1	FID	ACIS-I-4	6.95	1267	0.141	0.093	0.007	0.012	0.000000	0.000000	2146.12	1061.17
2	FID	ACIS-I-6	7.02	1266	-0.055	0.078	0.009	0.016	0.000000	0.000000	393.98	1704.68
3	GUIDE	367146616	8.85	2530	0.086	-0.026	0.082	0.130	11.418645	41.190163	-1626.93	1131.31
4	GUIDE	367148872	7.20	2533	-0.201	-0.112	0.076	0.125	10.505940	40.688258	1383.77	1730.56
5	GUIDE	367663272	9.27	2531	0.005	-0.024	0.160	0.229	10.656279	41.699429	-525.43	-1394.52
6	GUIDE	367674552	8.86	2532	0.082	0.170	0.066	0.109	11.016238	41.570845	-1210.70	-567.83
7	GUIDE	367657896	9.02	2532	0.016	-0.010	0.082	0.130	11.197765	41.313576	-1268.68	478.35

2.4 Star Slots

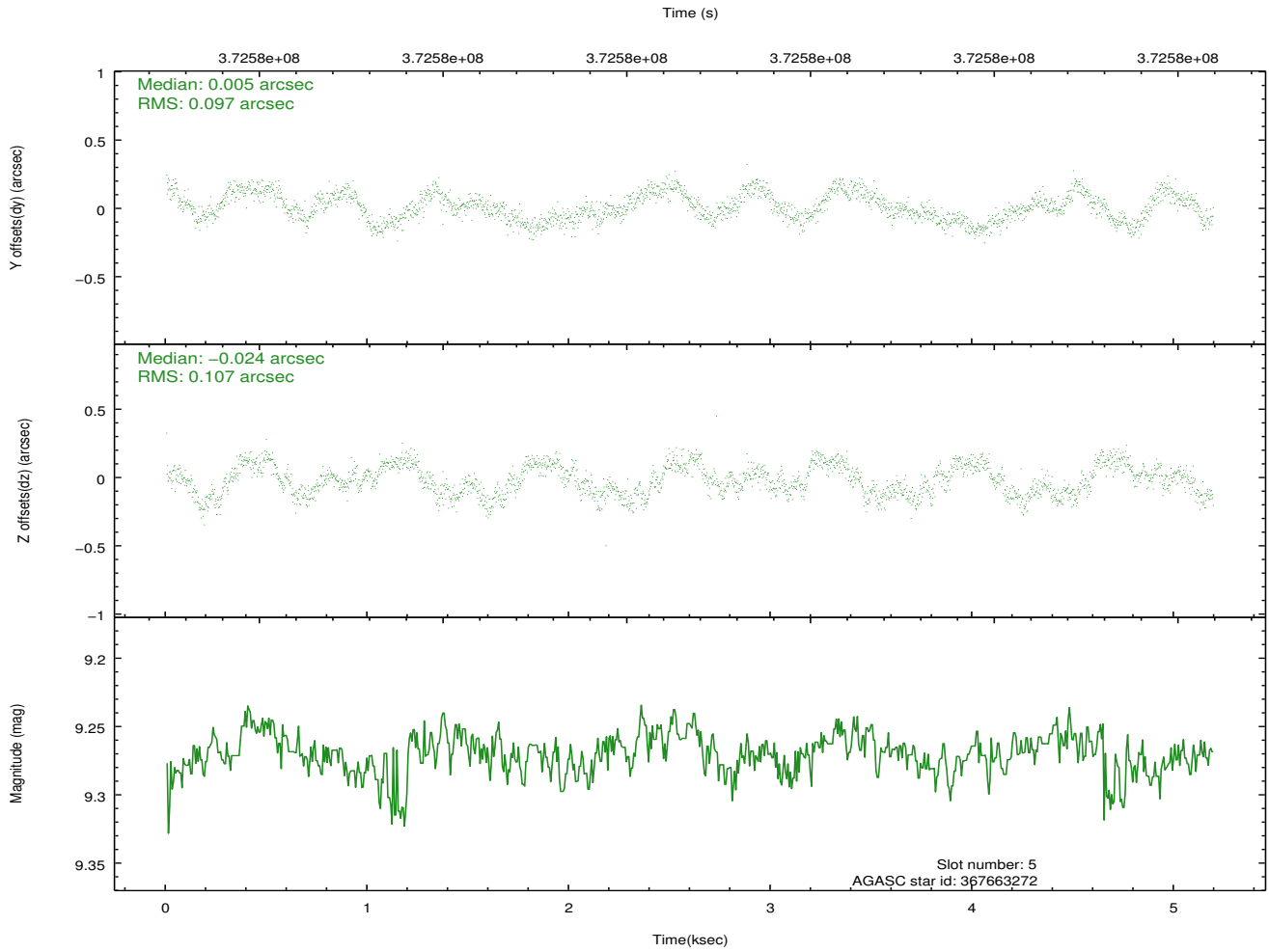
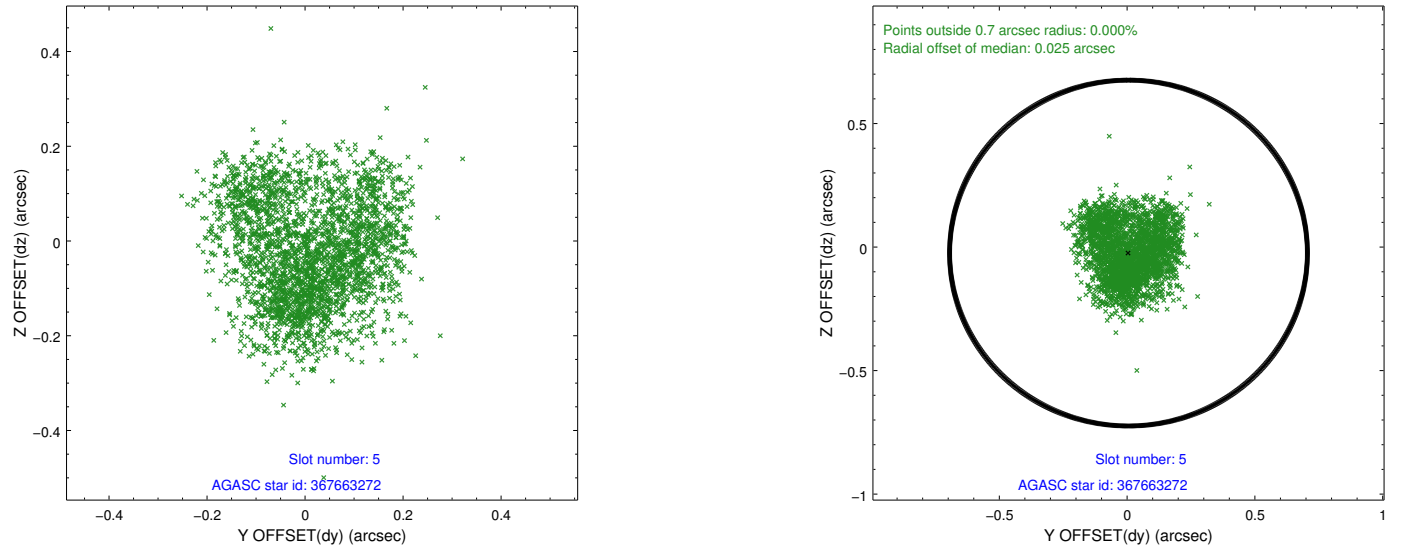
2.4.1 Slot 3



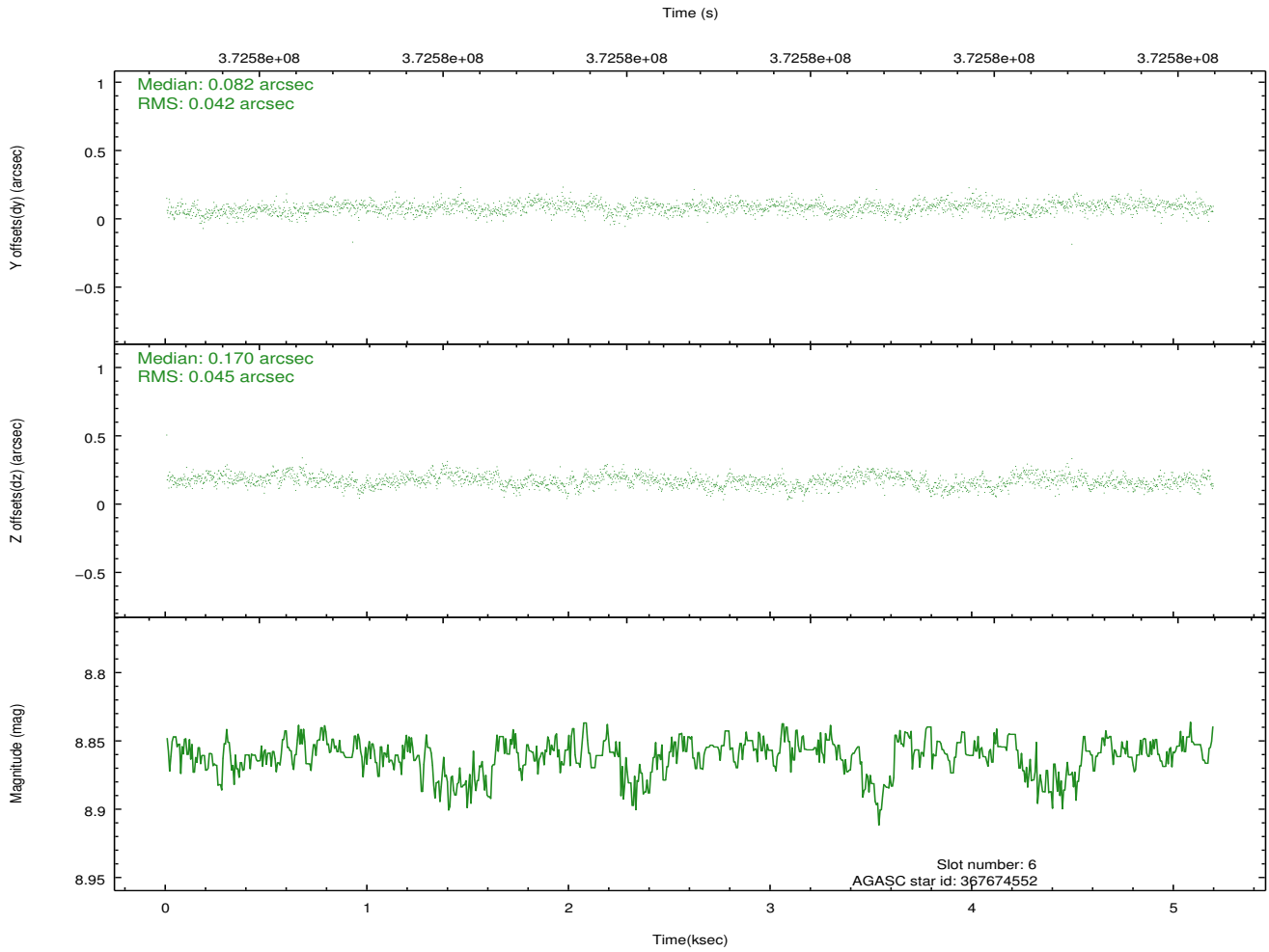
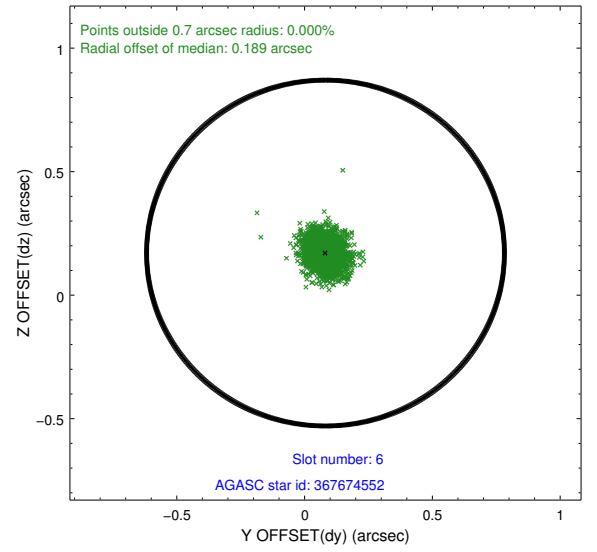
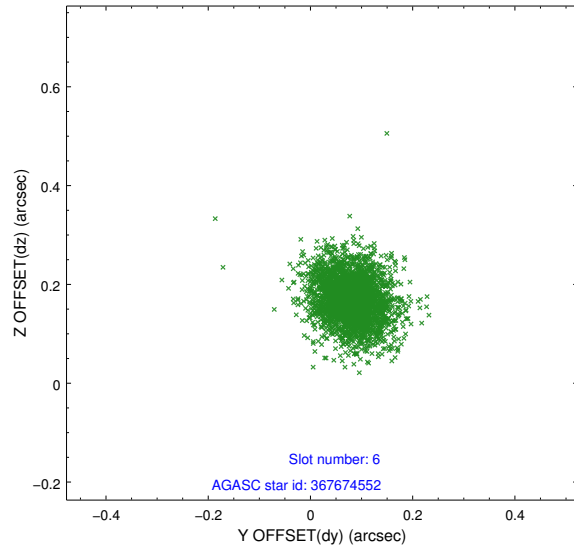
2.4.2 Slot 4



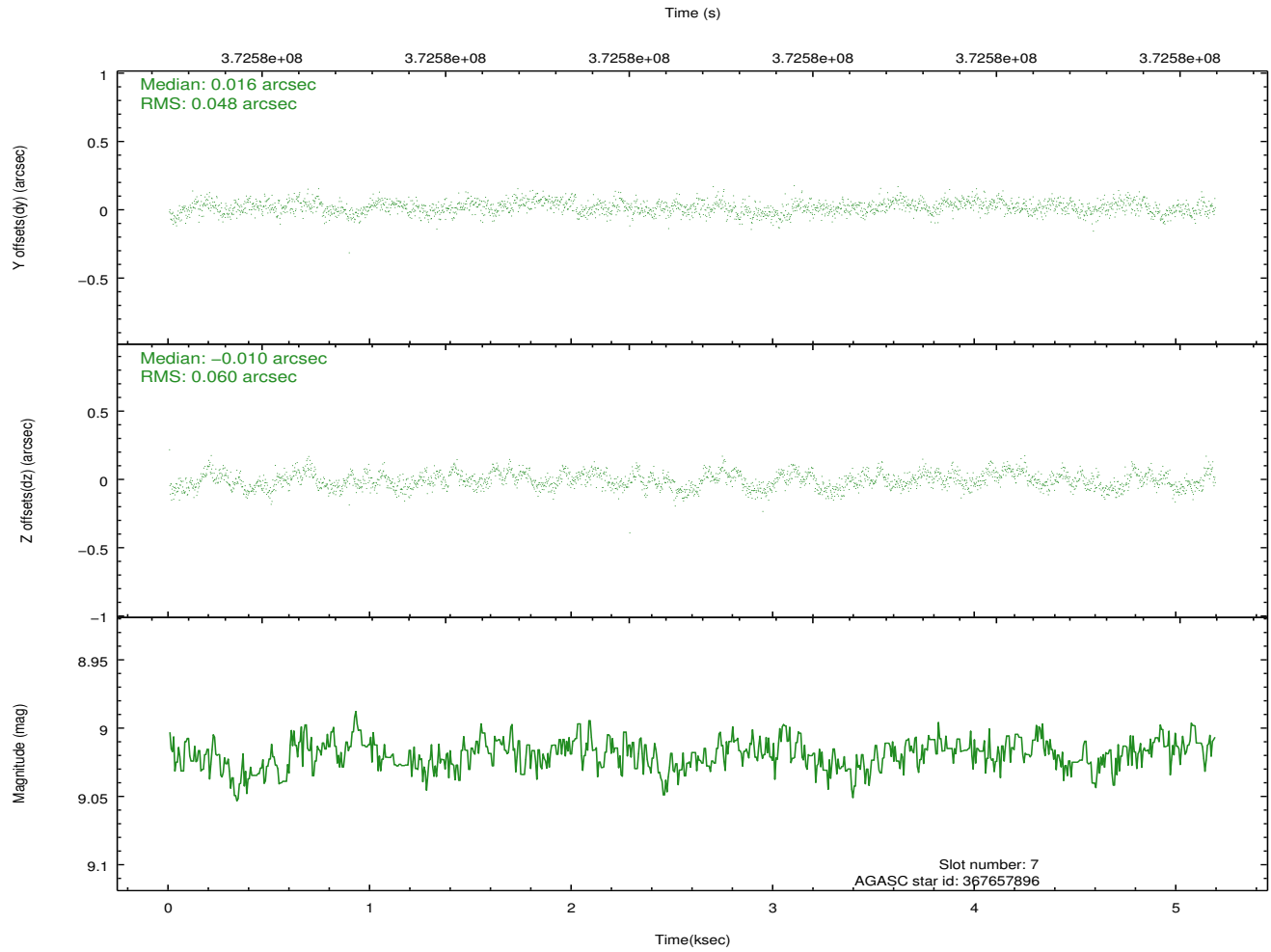
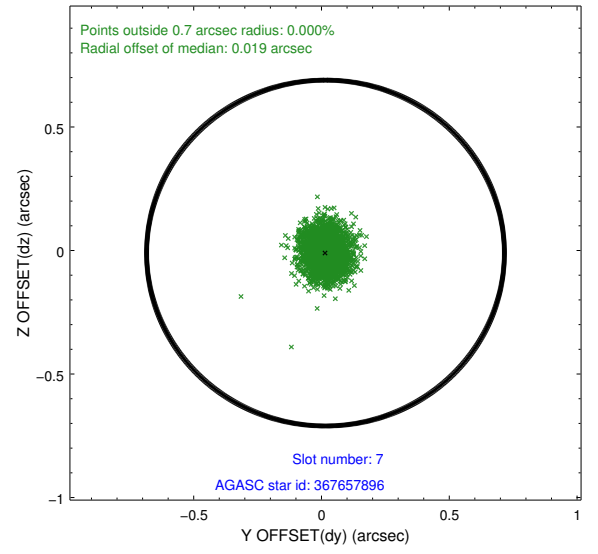
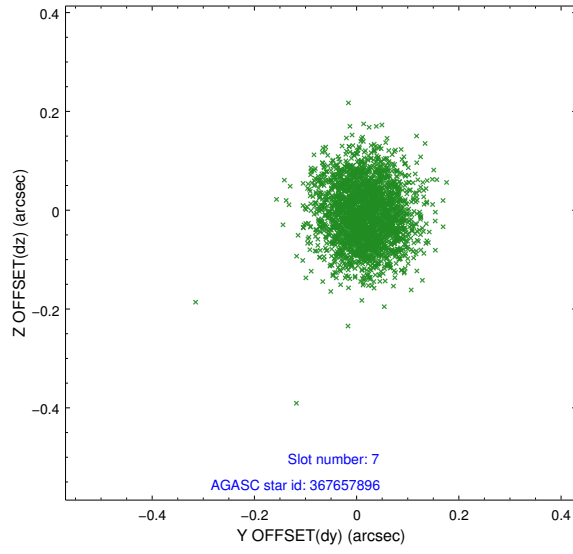
2.4.3 Slot 5



2.4.4 Slot 6

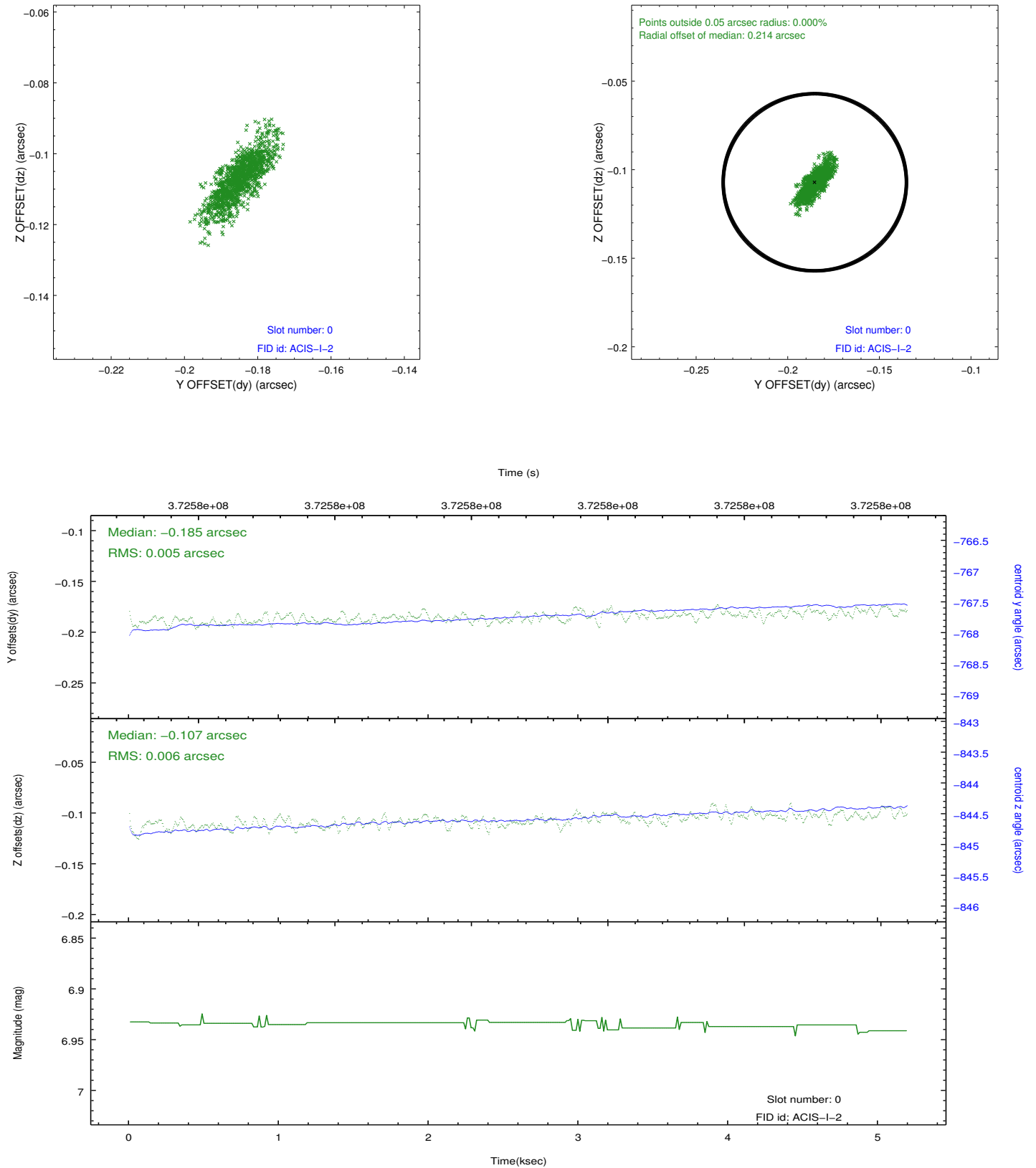


2.4.5 Slot 7

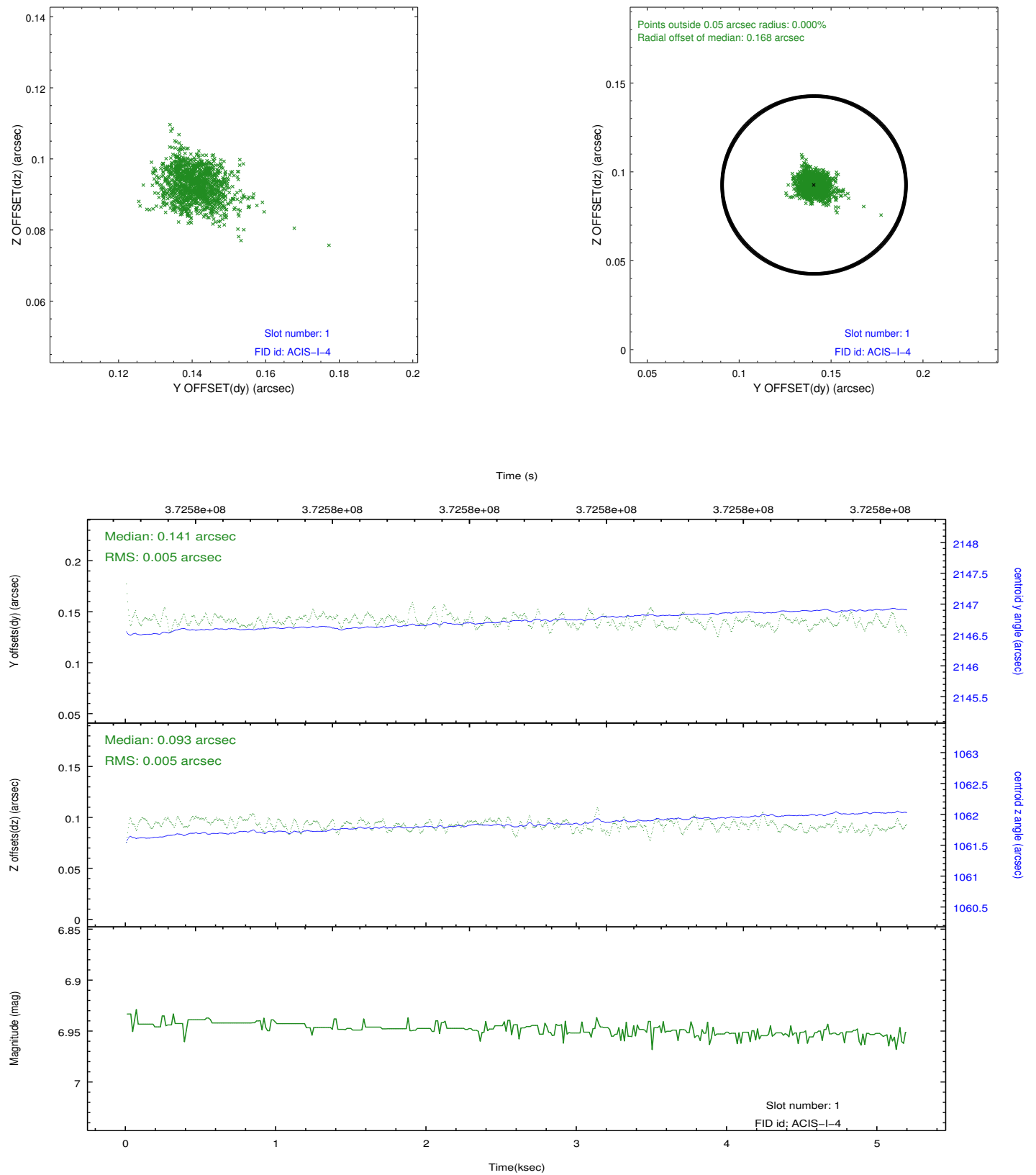


2.5 FID Slots

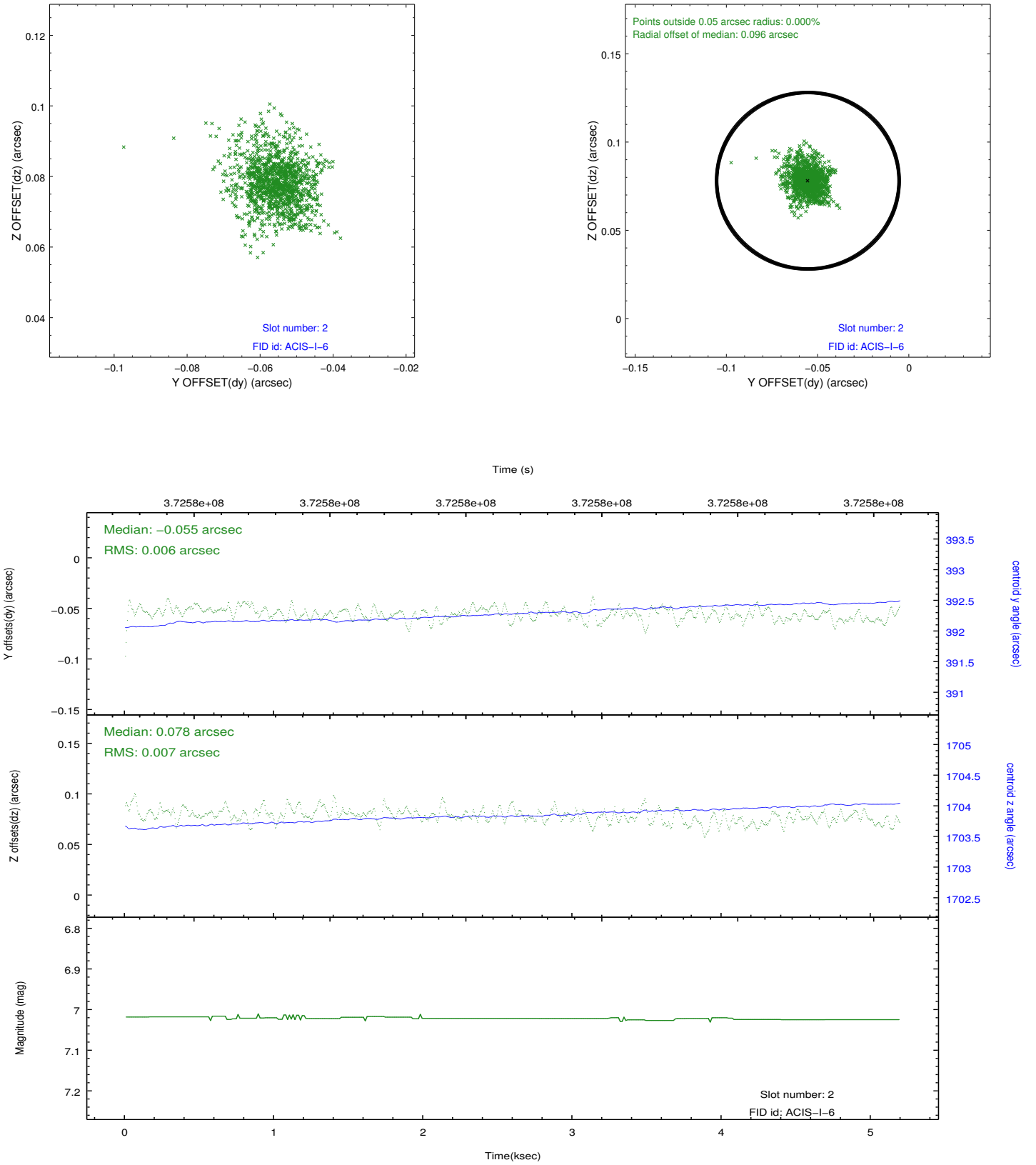
2.5.1 Slot 0



2.5.2 Slot 1



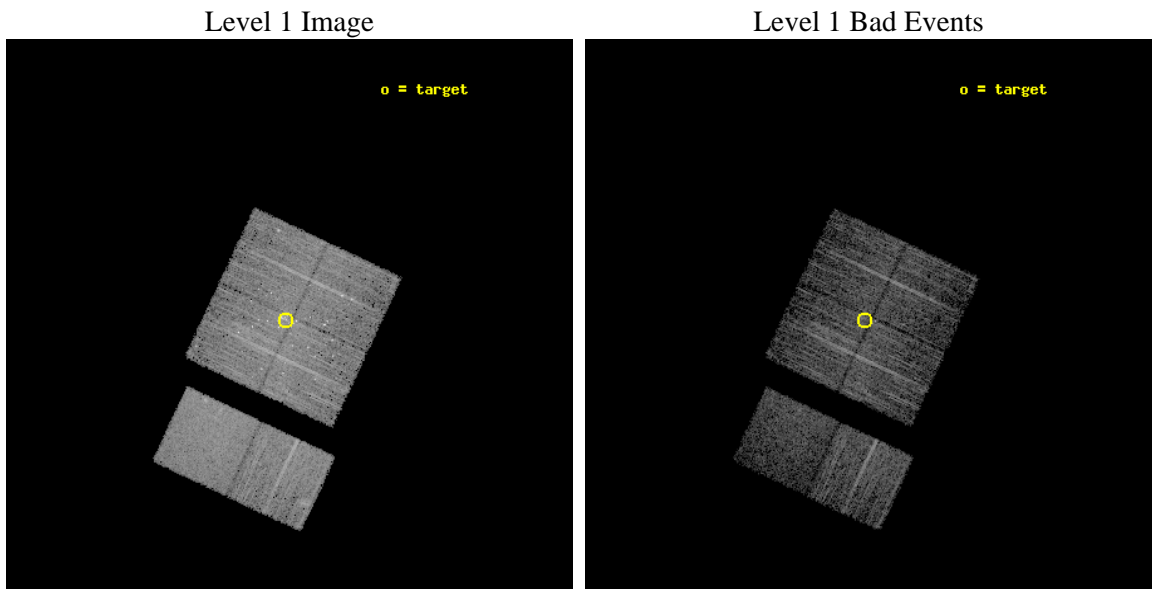
2.5.3 Slot 2



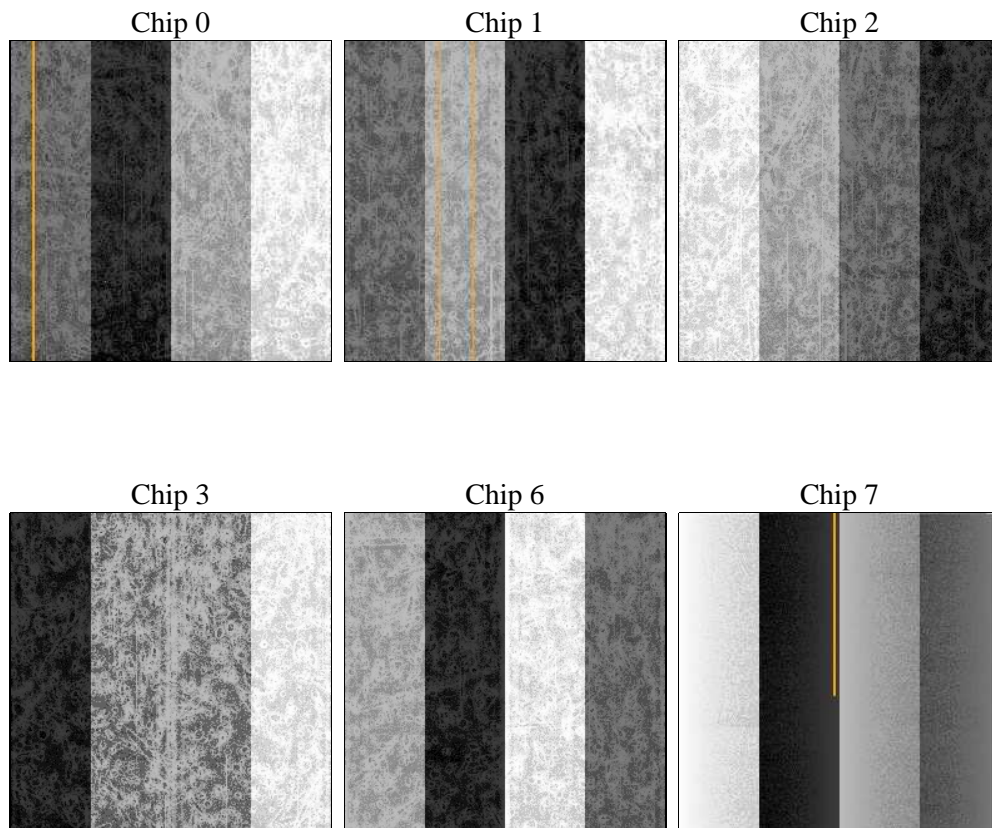
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4197.4697428942	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	4197.4698218107	Sum of GTIs [s]
date	2012-06-15T00:44:19	Date and time of file creation	ontime1	4197.4696624279	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4197.4698309302	Sum of GTIs [s]
			ontime3	4197.4697428942	Sum of GTIs [s]
			ontime6	4197.4697424173	Sum of GTIs [s]
			ontime7	4197.4696823359	Sum of GTIs [s]
			l1events	272225	Number of level 1 events

3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	40445	40886	49794	46969	44276	49855	grade 0 events	3628	3234	3967	5784	2051	2140
rejected events	34079	34976	43250	38374	39735	30302		8%	7%	7%	12%	4%	4%
rejected %	84%	85%	86%	81%	89%	60%	grade 1 events	60	39	115	85	23	53
								0%	0%	0%	0%	0%	0%
							grade 2 events	1391	1311	1341	1414	1154	4641
								3%	3%	2%	3%	2%	9%
							grade 3 events	582	573	503	604	472	2037
								1%	1%	1%	1%	1%	4%
							grade 4 events	549	530	570	654	550	2022
								1%	1%	1%	1%	1%	4%
							grade 5 events	1540	1707	1507	1766	1852	5259
								3%	4%	3%	3%	4%	10%
							grade 6 events	937	1081	925	963	1006	12031
								2%	2%	1%	2%	2%	24%
							grade 7 events	31758	32411	40866	35699	37168	21672
								78%	79%	82%	76%	83%	43%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.18040726840499

A.2 Comments

Window constraint met.