

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 16298 - L2 Version 1
Chandra X-Ray Center

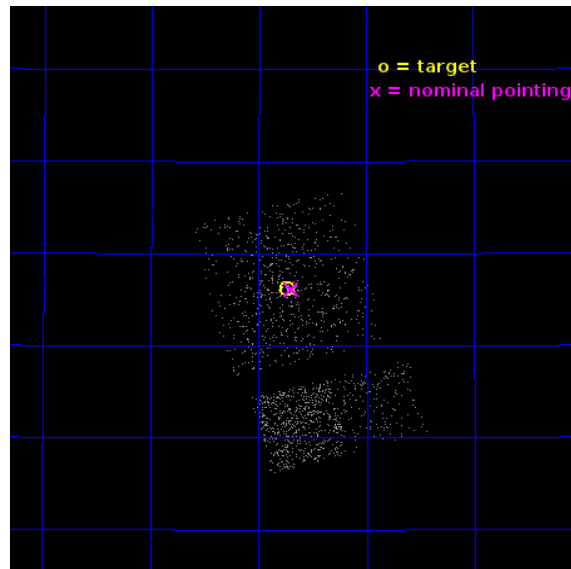
L2 Processing Date : Sep 17 2014

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1 Front

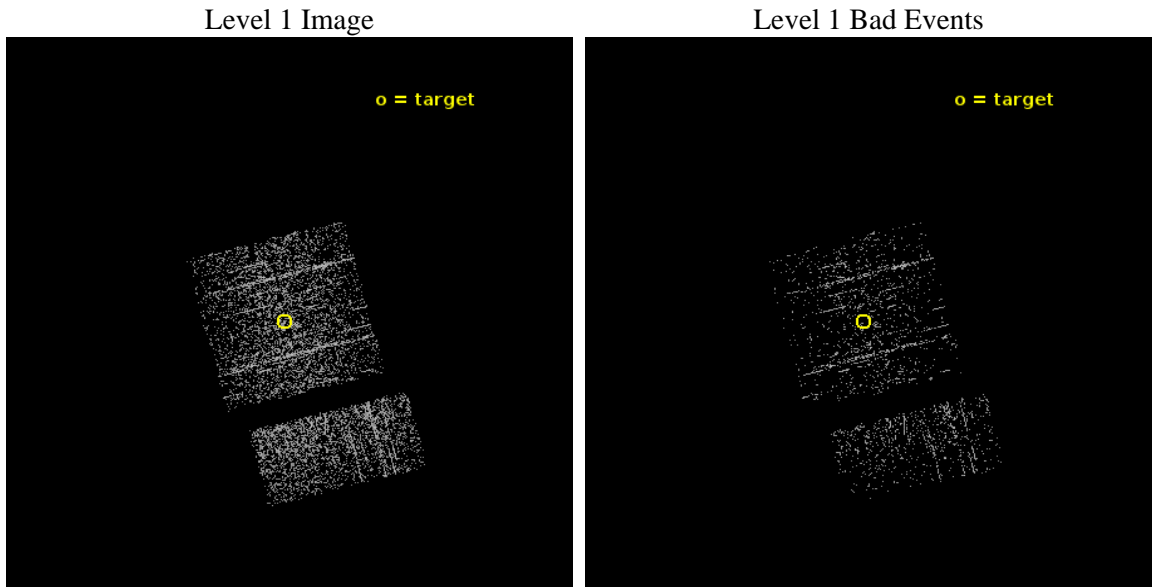
seq_num	601142	Sequence number
obs_id	16298	Observation id
title	M31 BHXNe	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31 BHXNe	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.673984942698	Nominal RA [deg]
dec_nom	41.268651245446	Nominal Dec [deg]
roll_nom	165.216018581	Nominal Roll [deg]
revision	1	Processing version of data
ontime	922.1191637516	Sum of GTIs [s]
livetime	145.16379933959	Livetime [s]
ontime0	922.1191637516	Sum of GTIs [s]
ontime1	922.1191637516	Sum of GTIs [s]
ontime2	922.1191637516	Sum of GTIs [s]
ontime3	922.1191637516	Sum of GTIs [s]
ontime6	922.14675277472	Sum of GTIs [s]
ontime7	922.1191637516	Sum of GTIs [s]
l2events	1805	Number of level 2 events



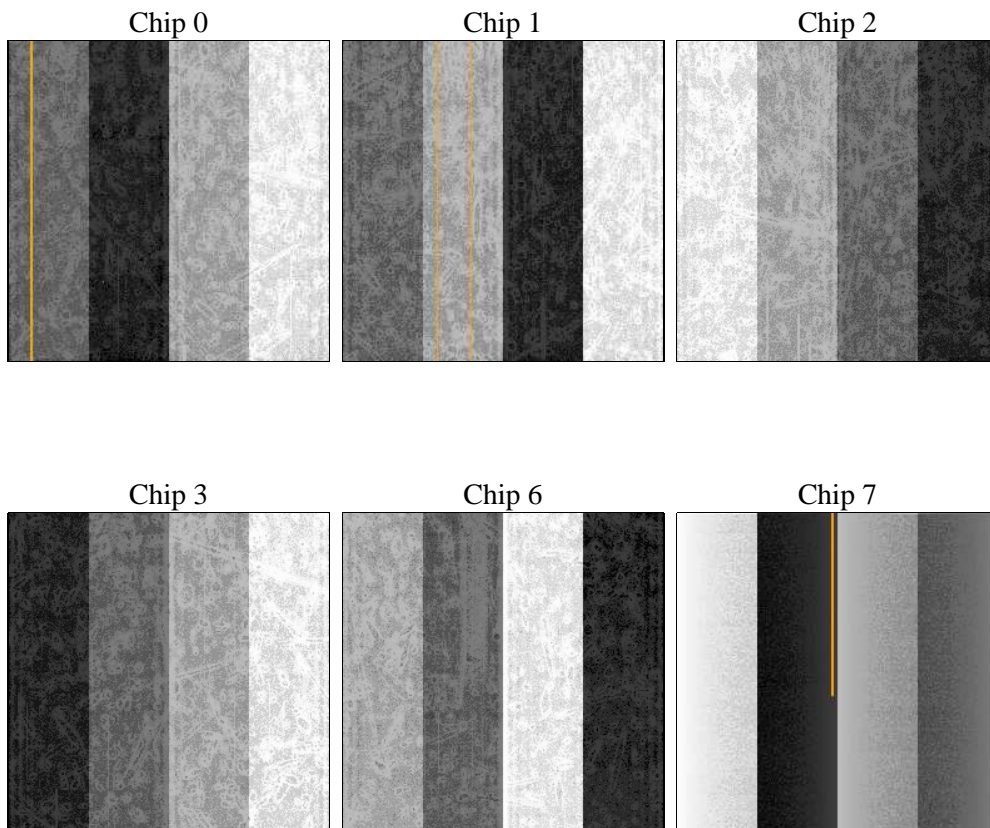
2 OBI Primary

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	10.2.4	Processing system revision	ontime	922.1191637516	Sum of GTIs [s]
caldsver	4.6.3	 	ontime0	922.1191637516	Sum of GTIs [s]
date	2014-09-17T18:26:12	Date and time of file creation	ontime1	922.1191637516	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	922.1191637516	Sum of GTIs [s]
			ontime3	922.1191637516	Sum of GTIs [s]
			ontime6	922.14675277472	Sum of GTIs [s]
			ontime7	922.1191637516	Sum of GTIs [s]
			l1events	12780	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	1932	1868	2098	2130	2334	2418
rejected events	1736	1620	1743	1805	2132	1716
rejected %	89%	86%	83%	84%	91%	70%

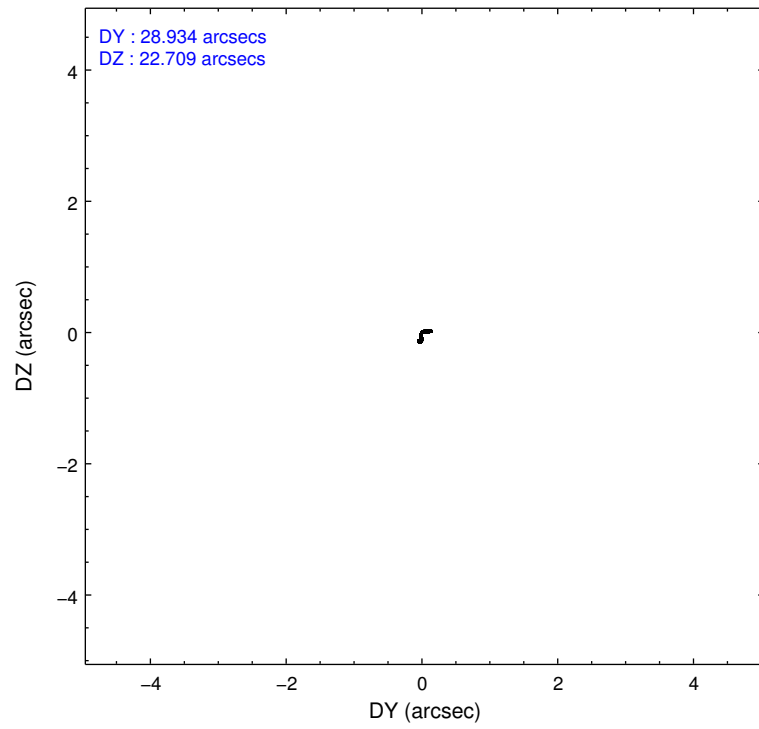
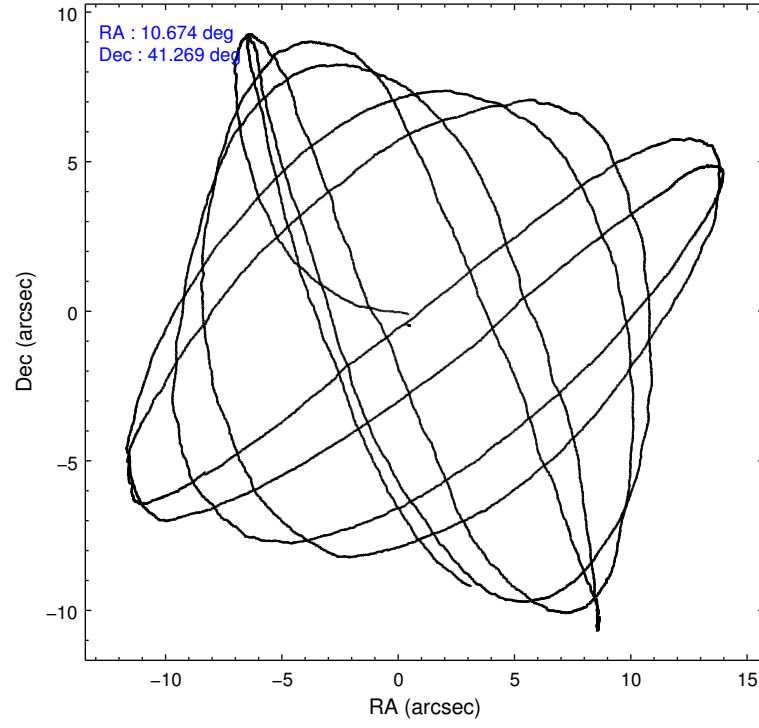
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	69	90	187	150	53	64
	3%	4%	8%	7%	2%	2%
grade 1 events	0	1	0	1	0	3
	0%	0%	0%	0%	0%	0%
grade 2 events	35	53	84	71	52	172
	1%	2%	4%	3%	2%	7%
grade 3 events	26	32	17	24	25	65
	1%	1%	0%	1%	1%	2%
grade 4 events	23	19	34	28	25	57
	1%	1%	1%	1%	1%	2%
grade 5 events	107	68	89	96	114	192
	5%	3%	4%	4%	4%	7%
grade 6 events	45	54	35	53	49	350
	2%	2%	1%	2%	2%	14%
grade 7 events	1627	1551	1652	1707	2016	1515
	84%	83%	78%	80%	86%	62%

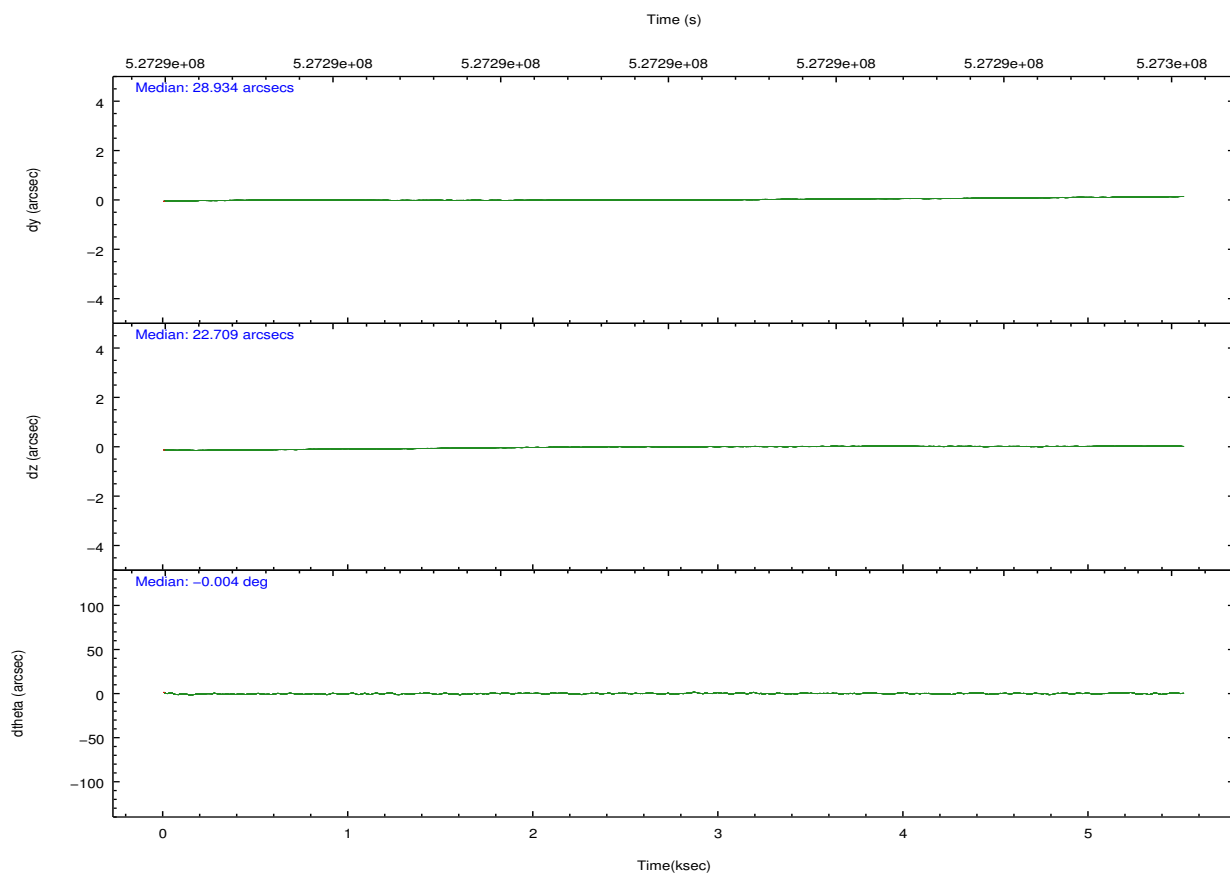
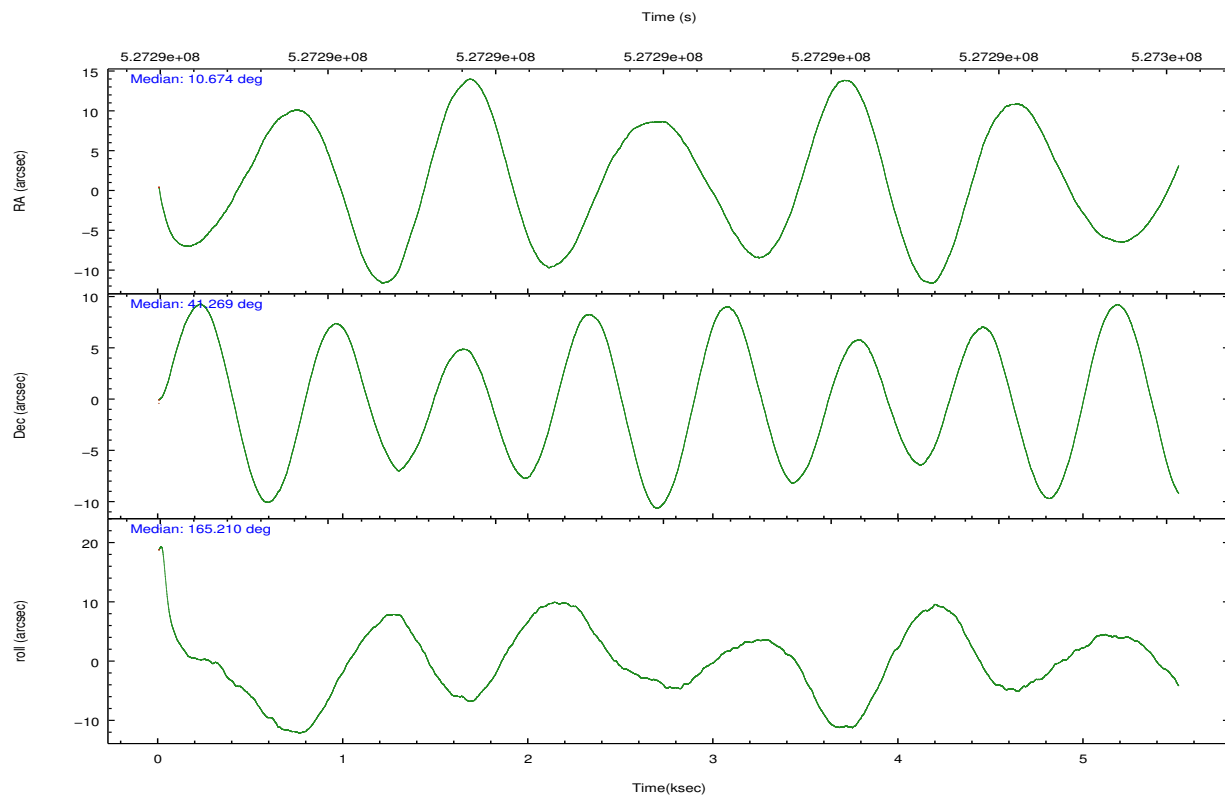
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	10.709530	10.67398494269764
[deg] Pointing Dec	41.275943	41.26865124544572
[deg] Pointing Roll	164.983814	165.2160185810023
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	527289798.184000	527288672.9543
Observation start date	2014-09-16T21:22:11	2014-09-16T21:04:32
[s] Observation end time (MET)	527294798.184000	527296130.34221
Observation end date	2014-09-16T22:45:31	2014-09-16T23:08:50
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	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	O2	Y
CCD S4 on	N	N
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	Y	Y
[s] Primary exposure time	0.600000	0.6
[s] Secondary exposure time	0.000000	3.2
Duty cycle	5	5

2.3 Aspect



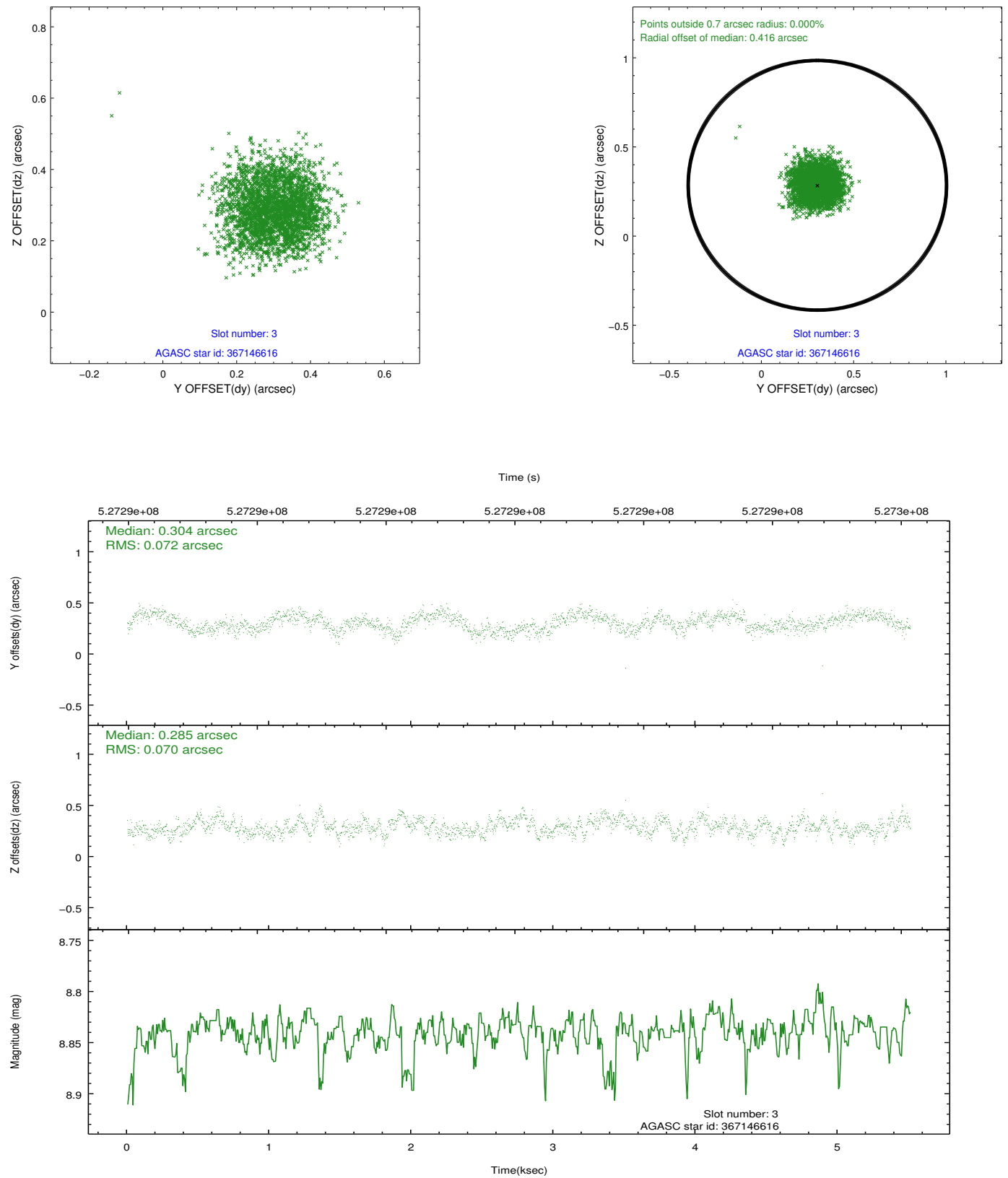


Slot Statistics

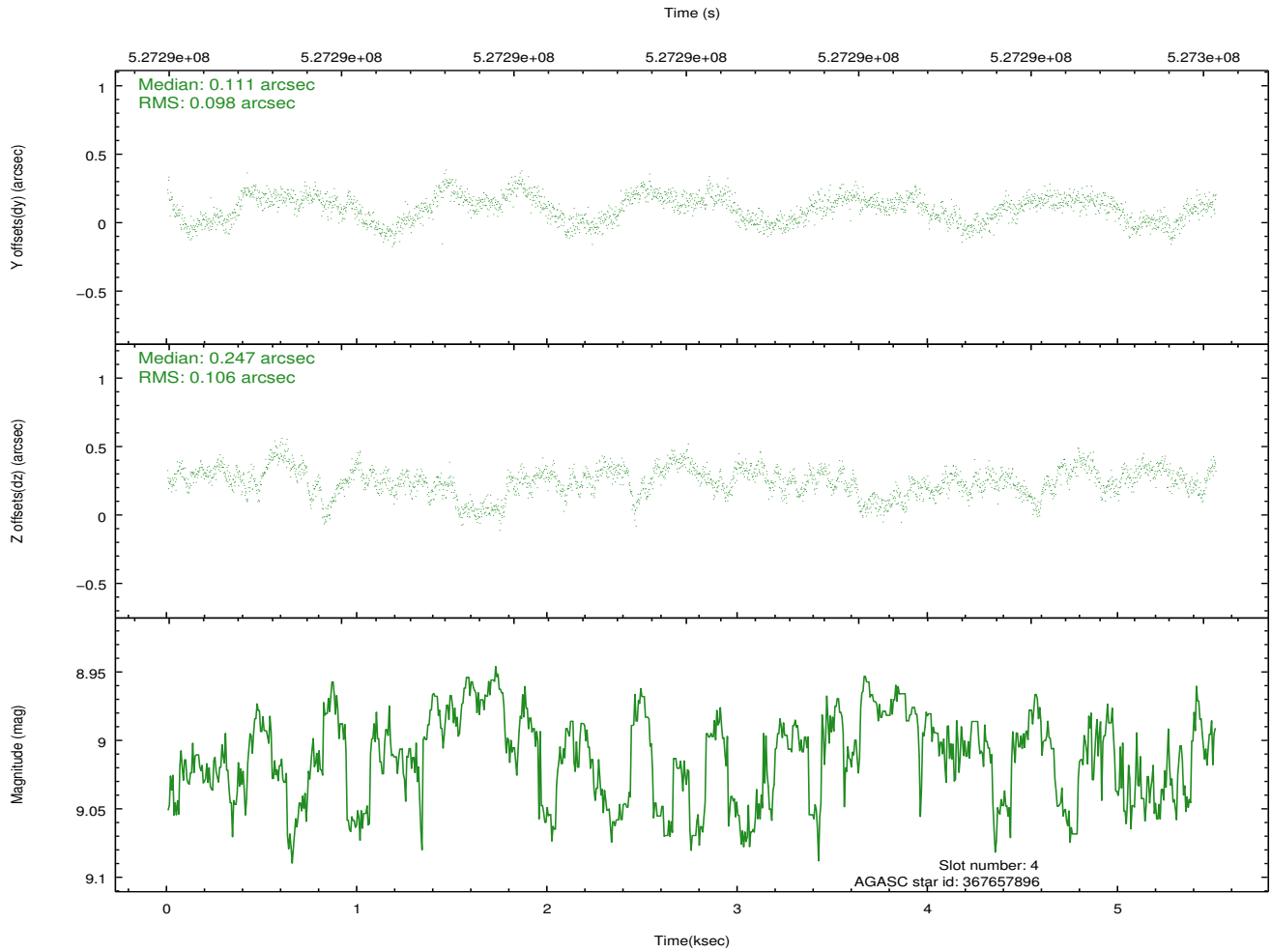
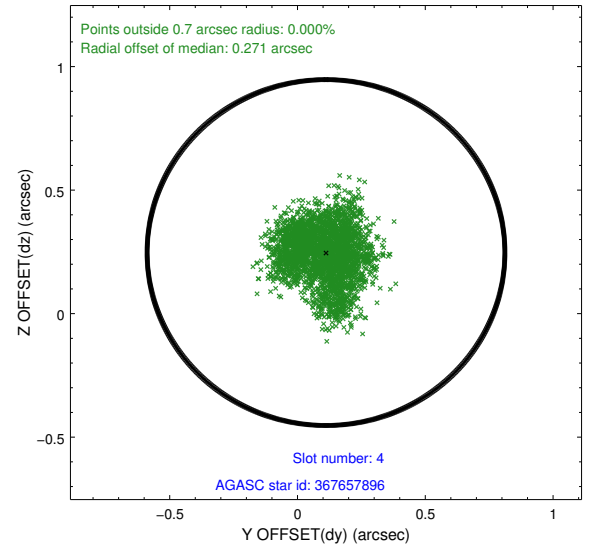
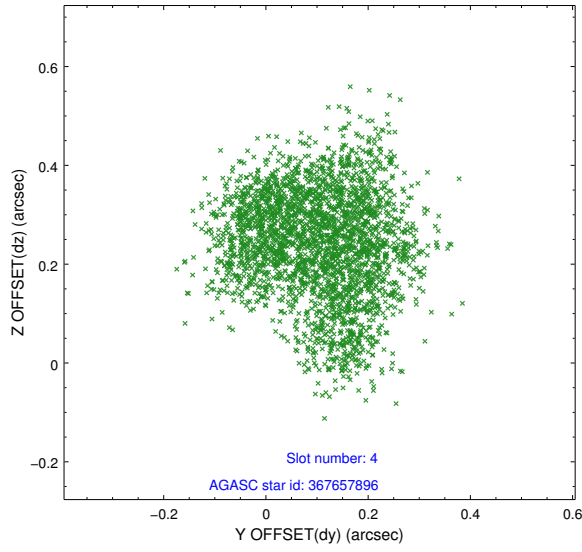
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	1345	-0.062	0.039	0.008	0.013	0.000000	0.000000	910.08	-846.41
1	FID	ACIS-I-4	7.24	1345	0.382	0.026	0.007	0.012	0.000000	0.000000	2131.11	1052.87
2	FID	ACIS-I-5	7.24	1344	-0.418	0.005	0.006	0.011	0.000000	0.000000	-1836.94	1051.82
3	GUIDE	367146616	8.84	2688	0.304	0.285	0.108	0.166	11.418645	41.190163	-1933.22	-206.54
4	GUIDE	367657896	9.01	2689	0.111	0.247	0.157	0.237	11.197765	41.313576	-1239.71	-476.04
5	GUIDE	367663272	9.26	2687	-0.218	0.013	0.147	0.251	10.656279	41.699429	533.63	-1434.29
6	GUIDE	367674552	8.85	2689	0.212	0.216	0.095	0.155	11.016238	41.570845	-522.19	-1240.70
7	GUIDE	367148872	7.23	2687	-0.406	-0.767	0.122	0.180	10.505940	40.688258	-12.21	2186.92

2.4 Star Slots

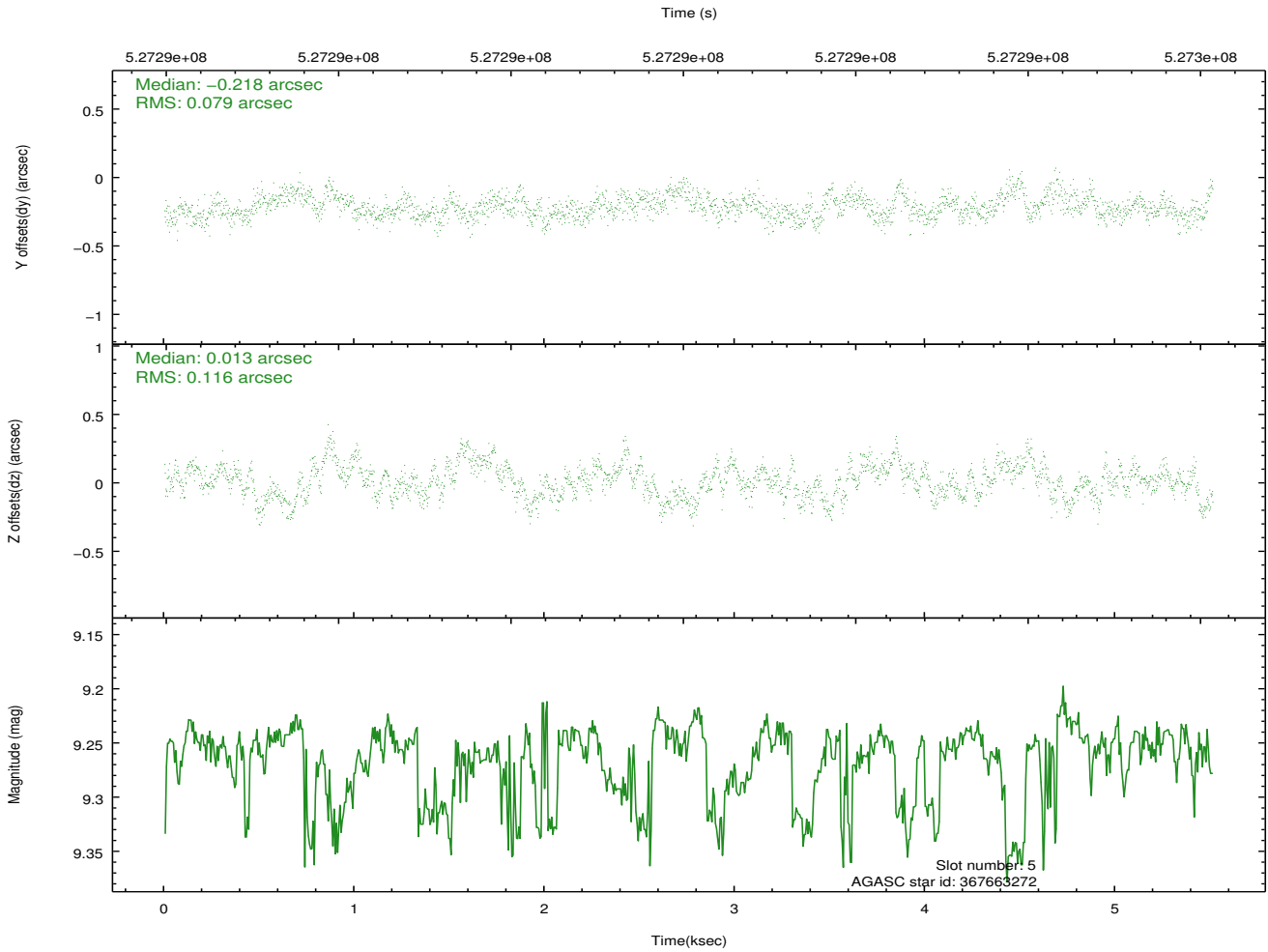
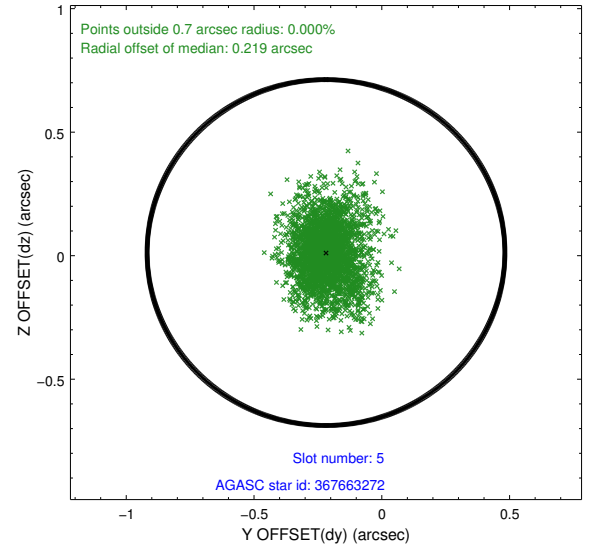
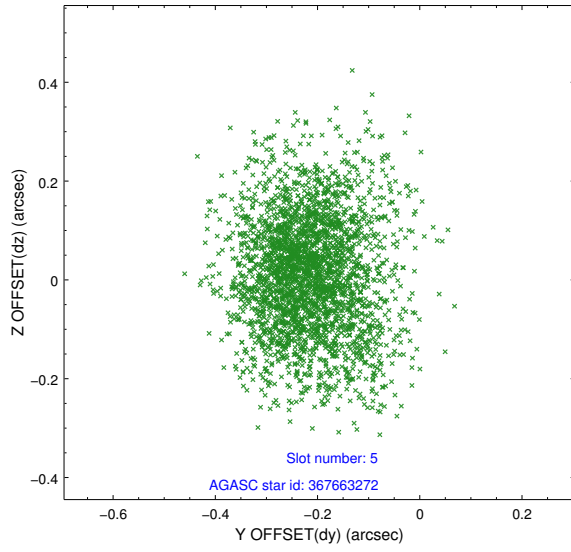
2.4.1 Slot 3



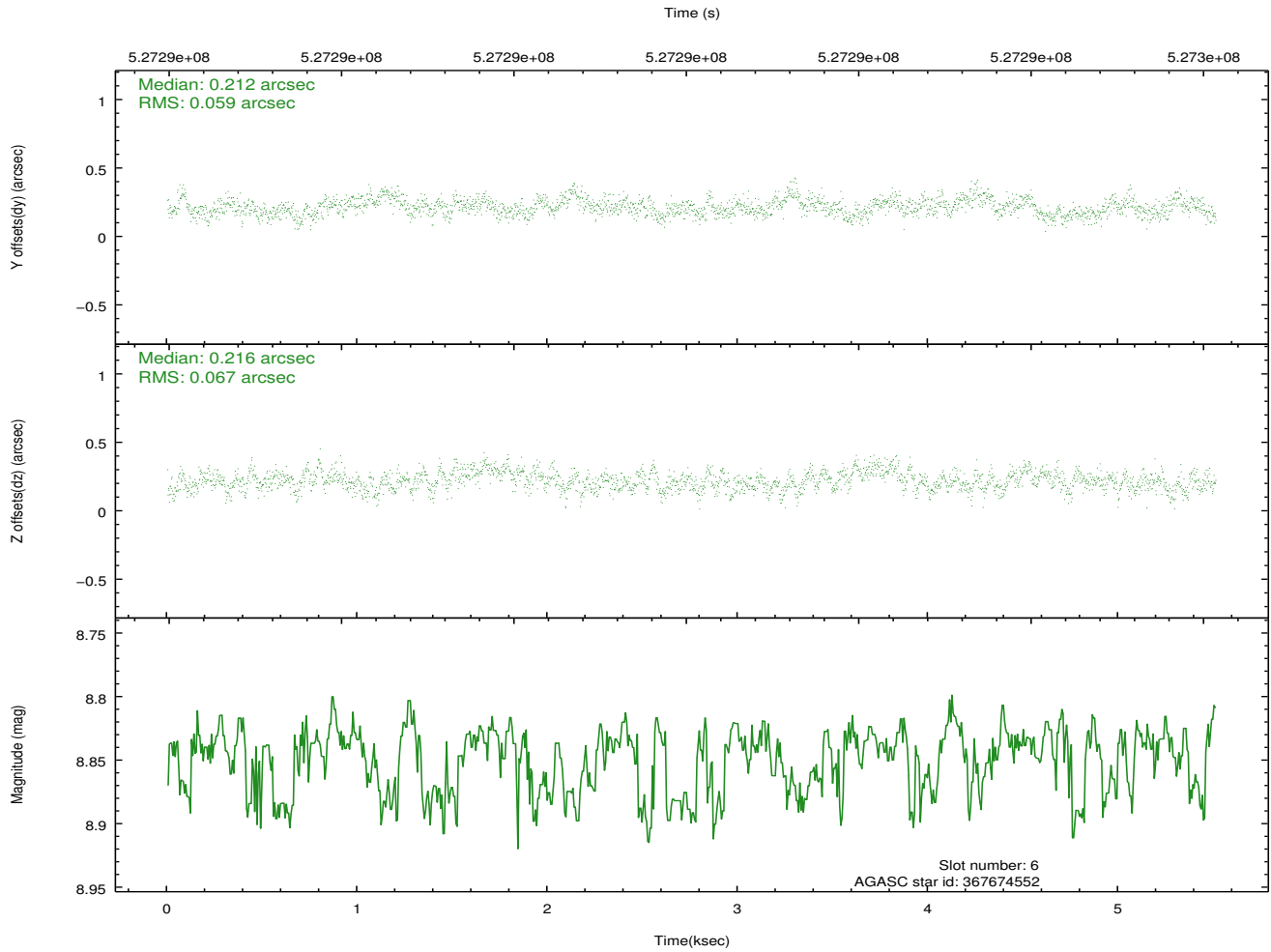
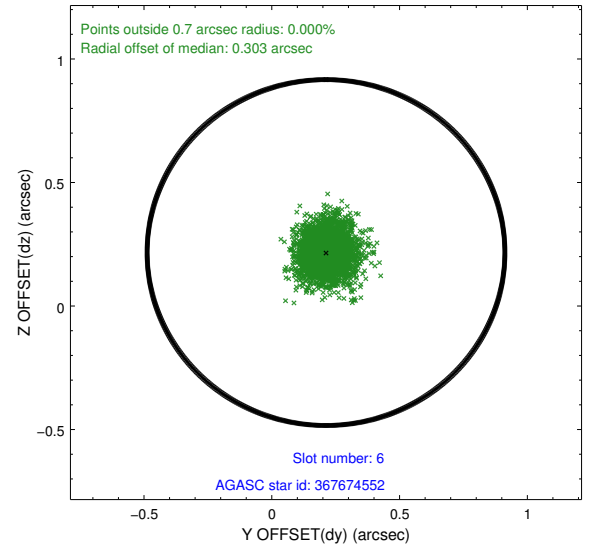
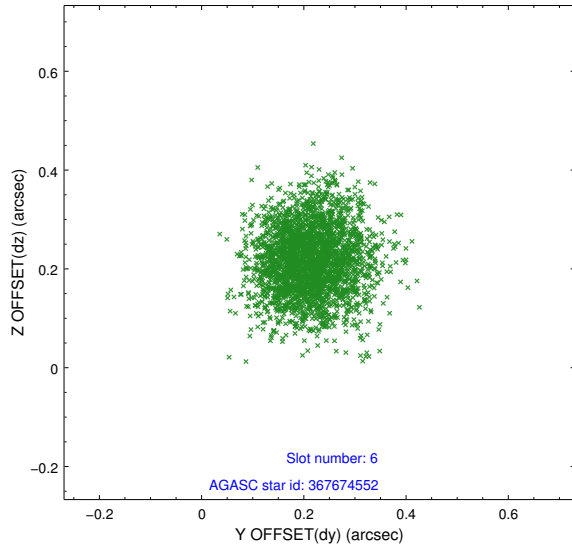
2.4.2 Slot 4



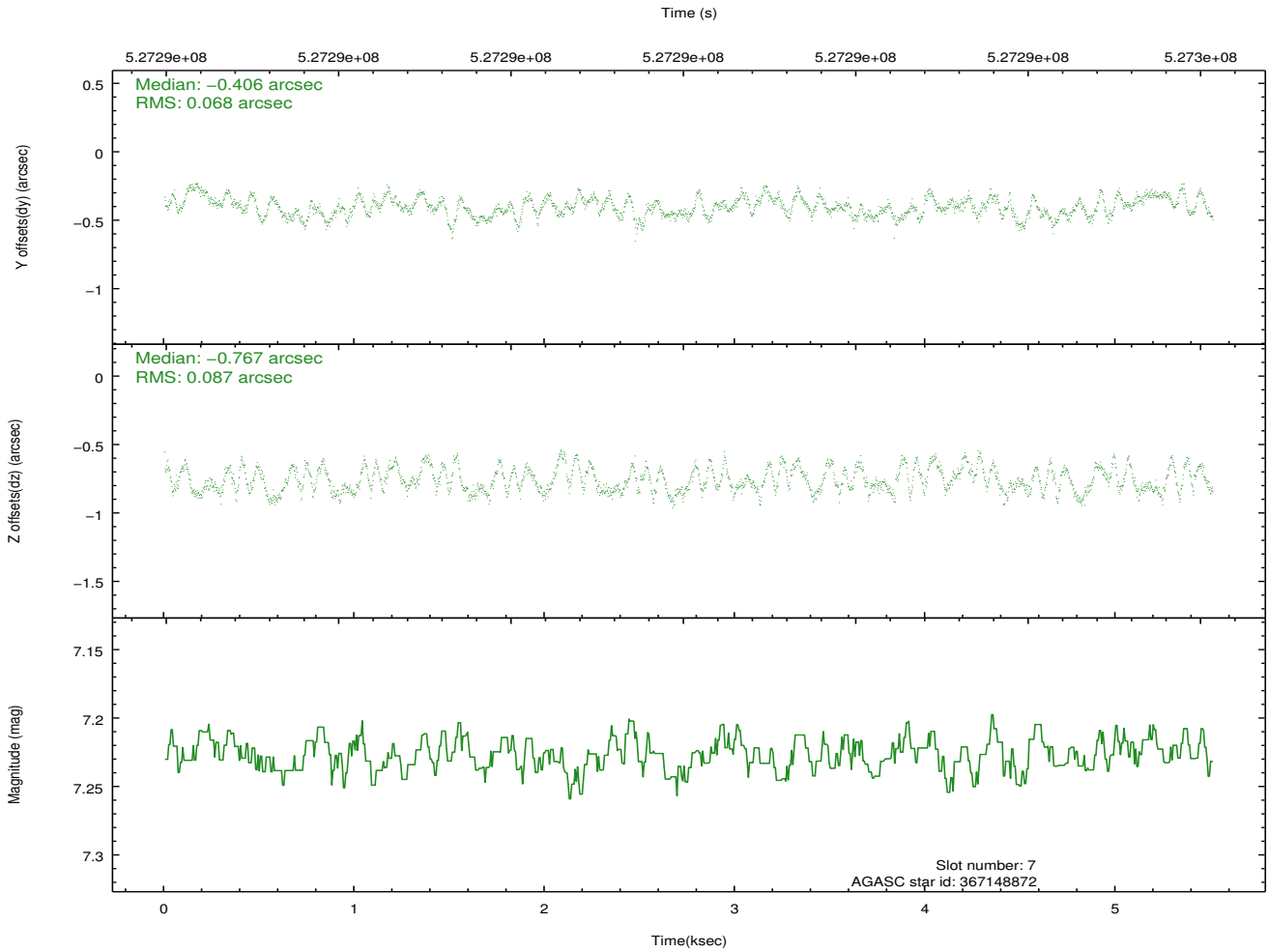
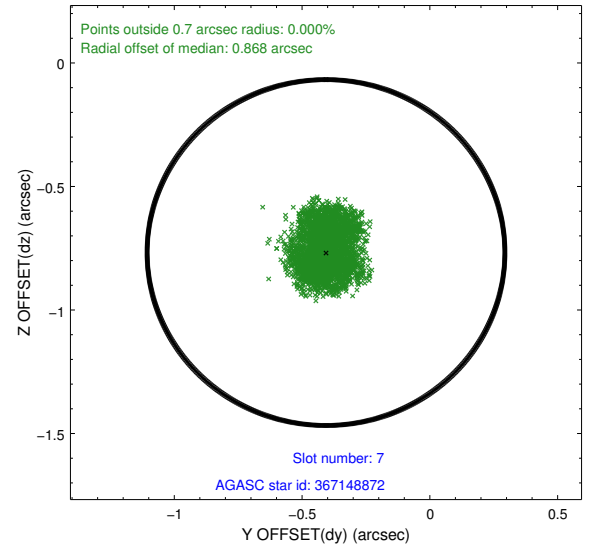
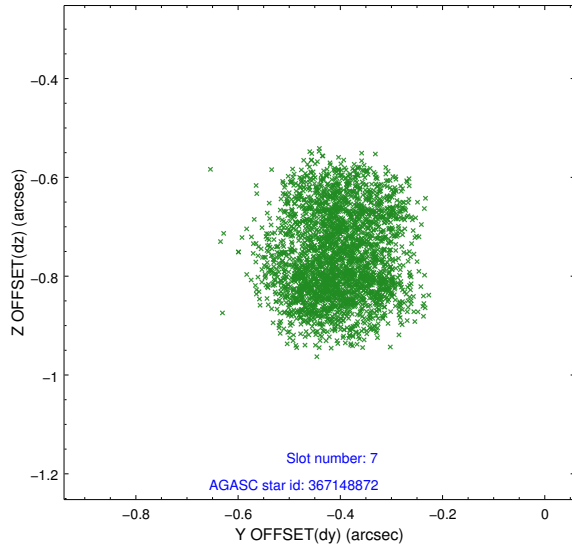
2.4.3 Slot 5



2.4.4 Slot 6

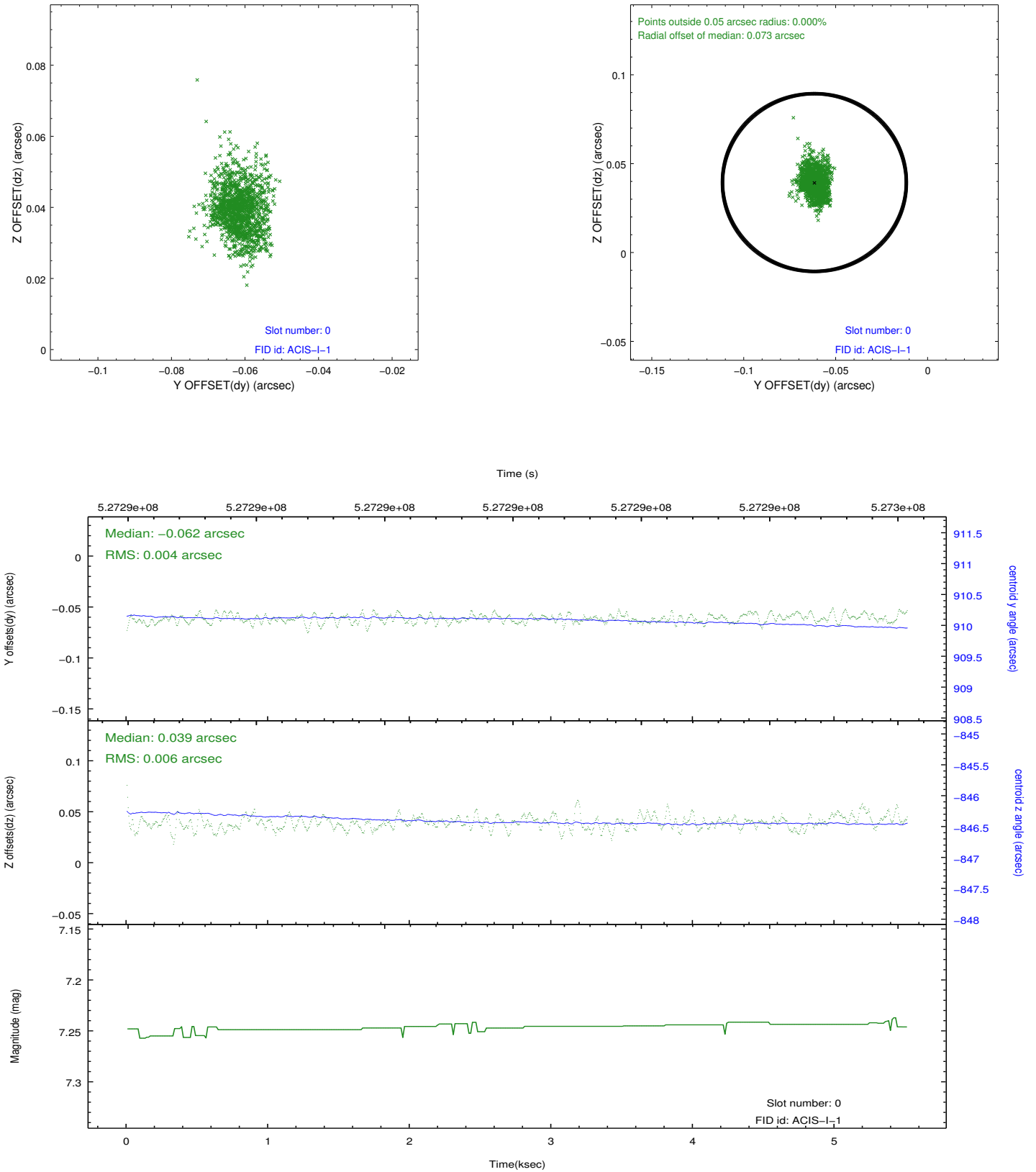


2.4.5 Slot 7

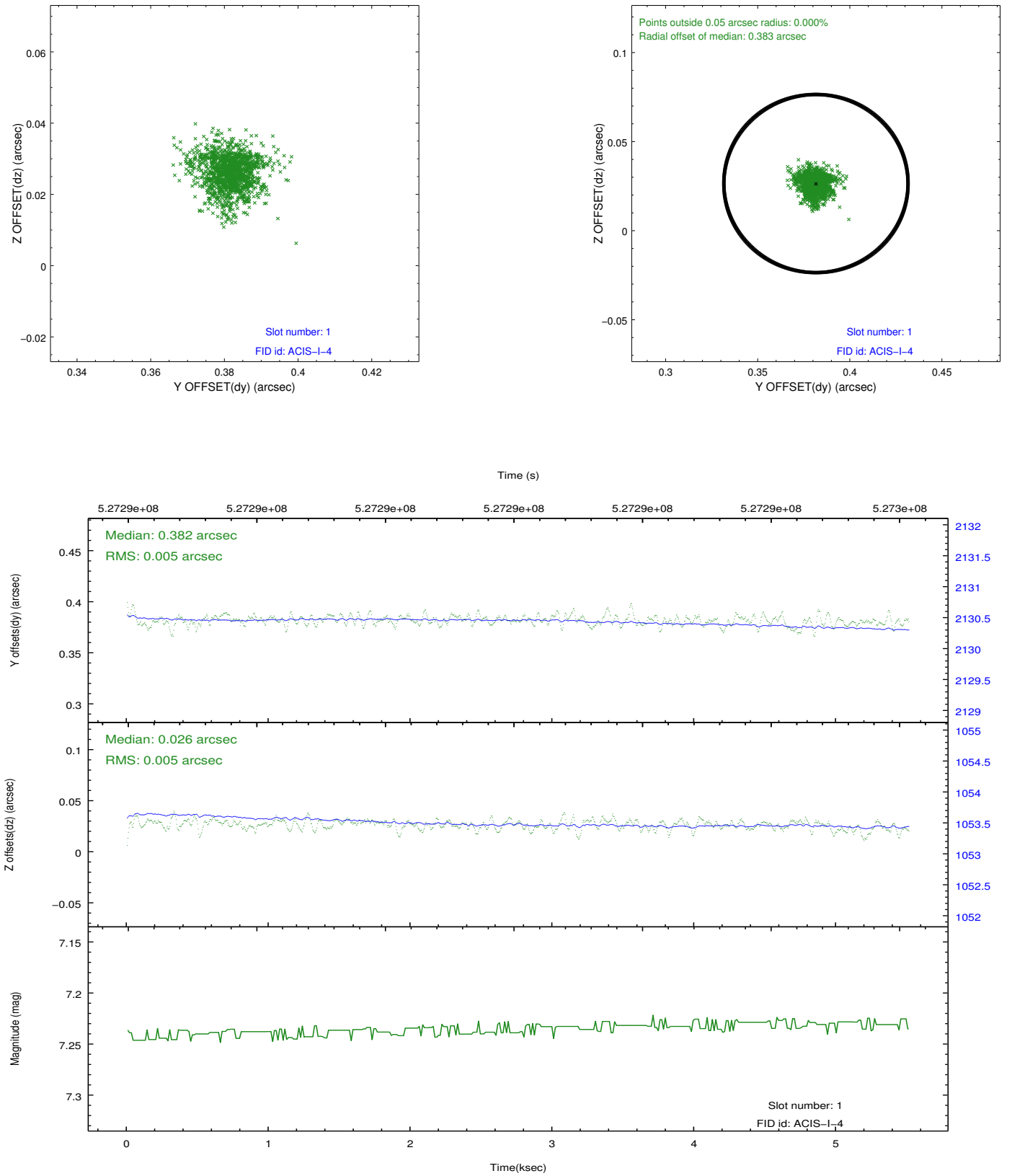


2.5 FID Slots

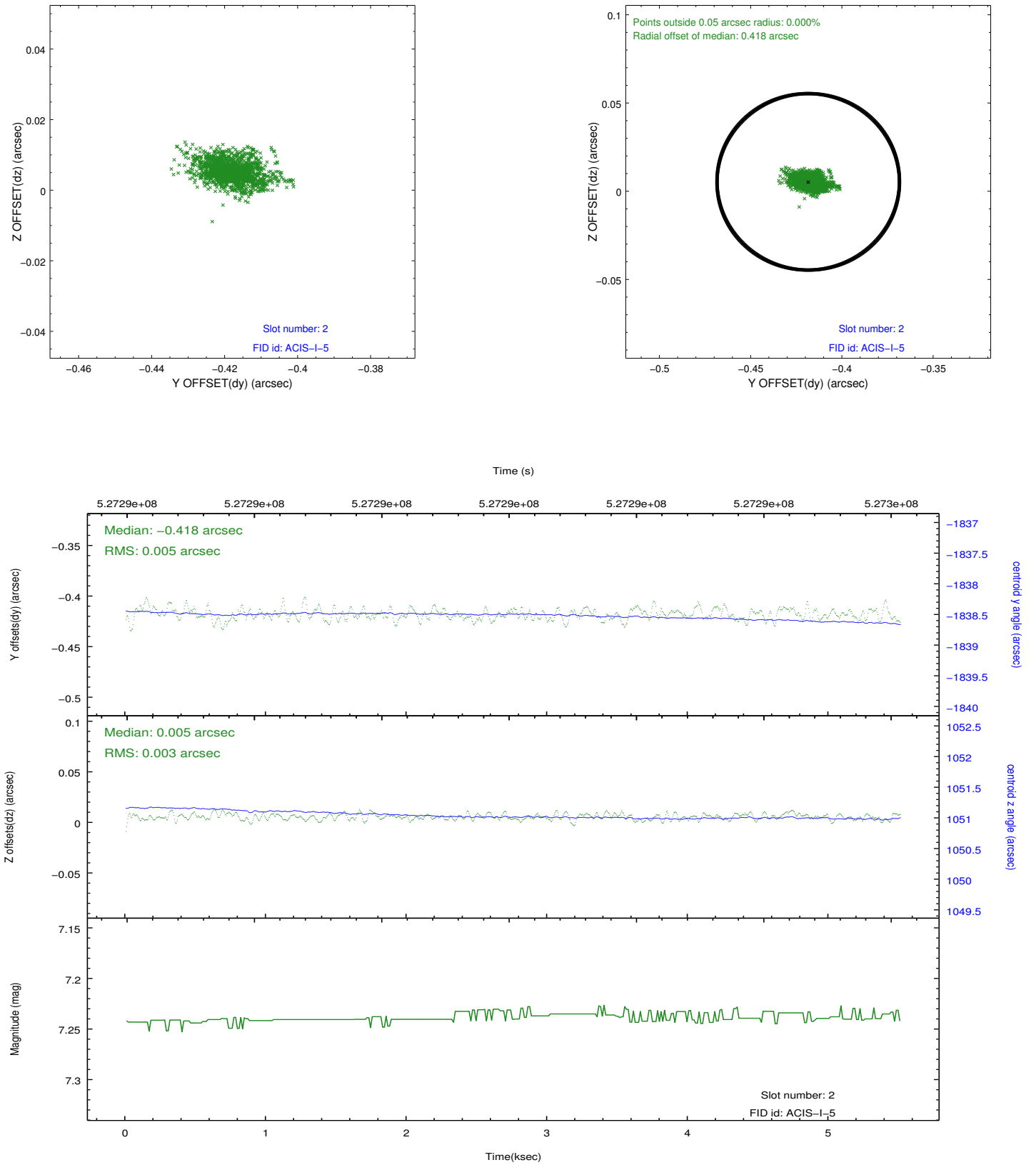
2.5.1 Slot 0



2.5.2 Slot 1



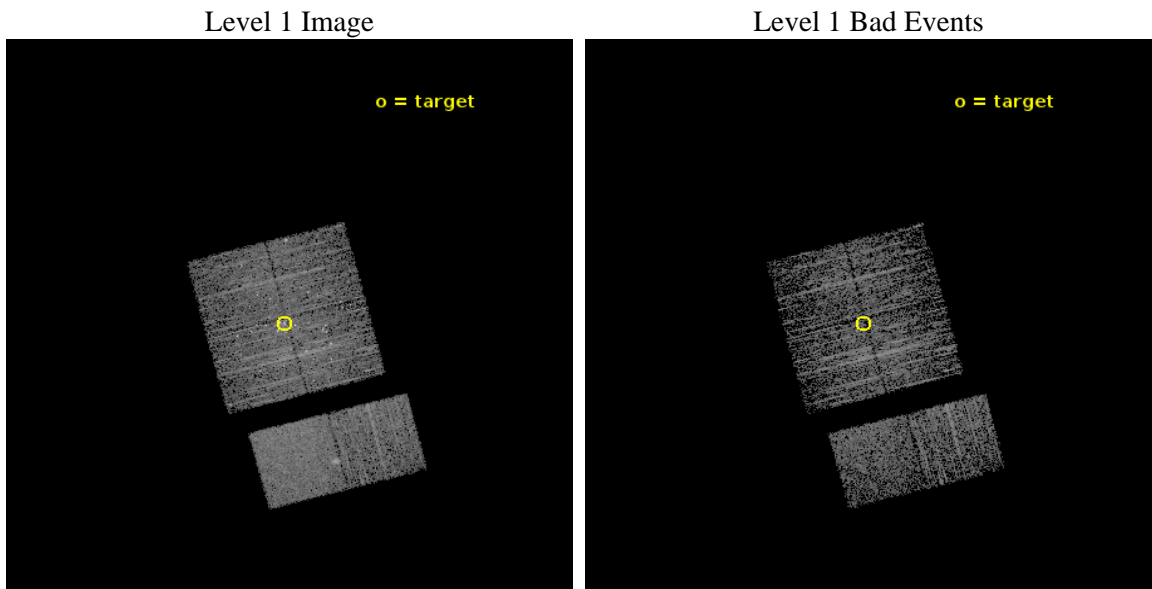
2.5.3 Slot 2



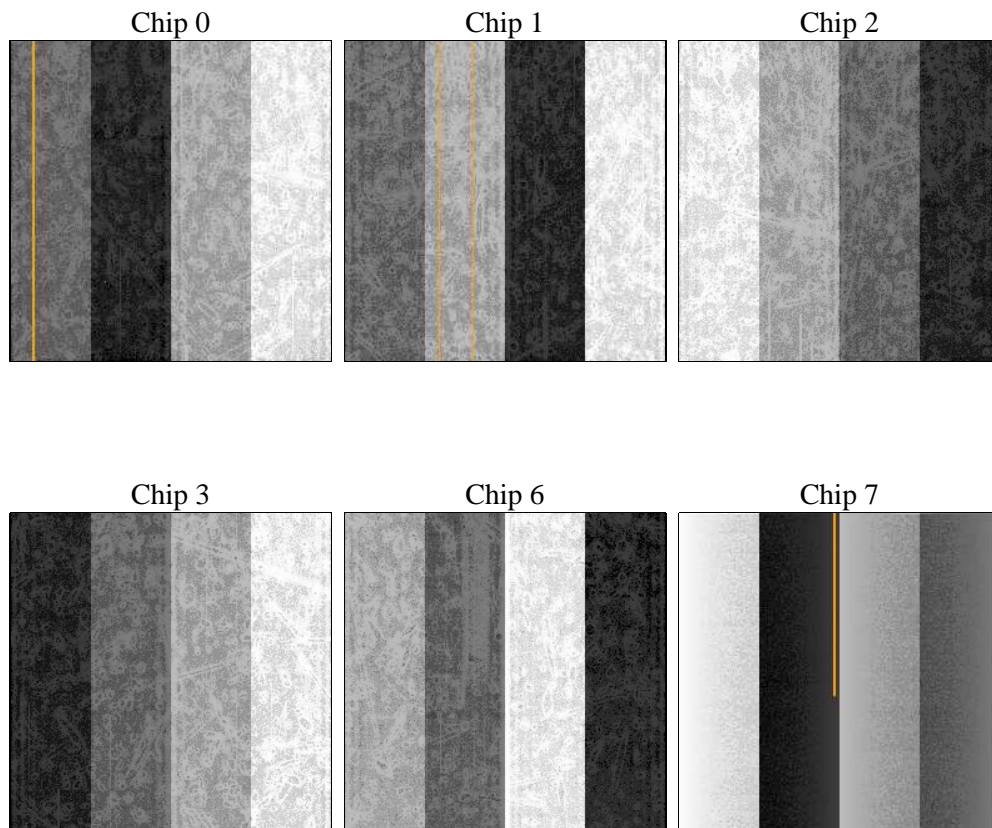
3 OBI Secondary

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	10.2.4	Processing system revision	ontime	3957.6202162504	Sum of GTIs [s]
caldsver	4.6.3	 	ontime0	3957.6202059984	Sum of GTIs [s]
date	2014-09-17T18:26:14	Date and time of file creation	ontime1	3957.6202061176	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	3957.6201862097	Sum of GTIs [s]
			ontime3	3957.6202162504	Sum of GTIs [s]
			ontime6	3957.6202970743	Sum of GTIs [s]
			ontime7	3957.6201754212	Sum of GTIs [s]
			l1events	129807	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	17993	17592	23751	23202	20195	27074	grade 0 events	1514	1983	3409	3602	1056	1090
rejected events	14823	13832	18130	17555	17573	15203		8%	11%	14%	15%	5%	4%
rejected %	82%	78%	76%	75%	87%	56%	grade 1 events	9	21	113	43	7	30
								0%	0%	0%	0%	0%	0%
							grade 2 events	636	685	938	800	590	2433
								3%	3%	3%	3%	2%	8%
							grade 3 events	275	244	343	359	221	963
								1%	1%	1%	1%	1%	3%
							grade 4 events	254	256	363	340	199	954
								1%	1%	1%	1%	0%	3%
							grade 5 events	939	924	915	1067	1070	2635
								5%	5%	3%	4%	5%	9%
							grade 6 events	494	595	570	551	556	6441
								2%	3%	2%	2%	2%	23%
							grade 7 events	13872	12884	17100	16440	16496	12528
								77%	73%	71%	70%	81%	46%

A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.10.03
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	4.879739380002

A.2 Comments