

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 7137 - L2 Version 2
Chandra X-Ray Center

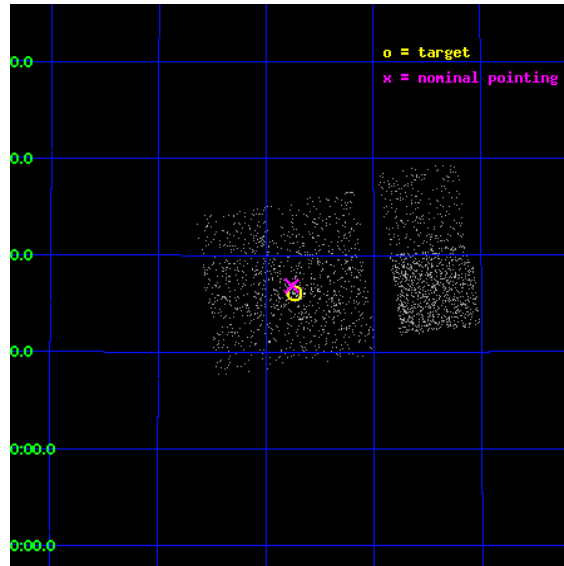
L2 Processing Date : Apr 2 2012

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1 Front

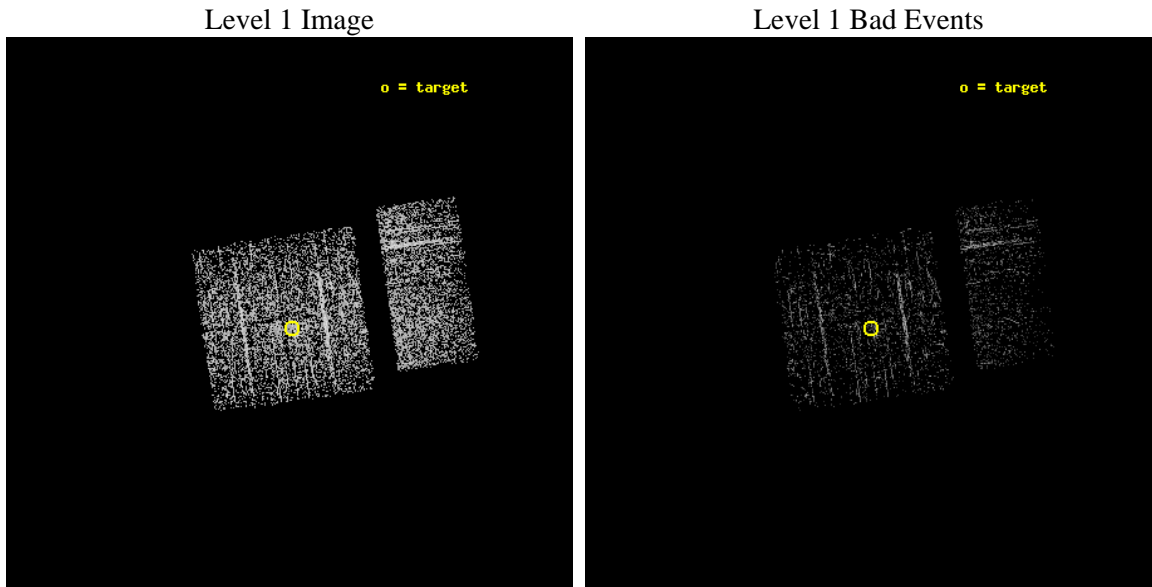
seq_num	600575	Sequence number
obs_id	7137	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Michael Garcia	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[primary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.689735392827	Nominal RA [deg]
dec_nom	41.281199351582	Nominal Dec [deg]
roll_nom	81.848961932409	Nominal Roll [deg]
revision	2	Processing version of data
ontime	909.28349417448	Sum of GTIs [s]
livetime	122.50003963163	Livetime [s]
ontime0	909.28349417448	Sum of GTIs [s]
ontime1	909.28349417448	Sum of GTIs [s]
ontime2	909.28349417448	Sum of GTIs [s]
ontime3	909.28349417448	Sum of GTIs [s]
ontime6	909.28349417448	Sum of GTIs [s]
ontime7	909.28346428275	Sum of GTIs [s]
l2events	2646	Number of level 2 events



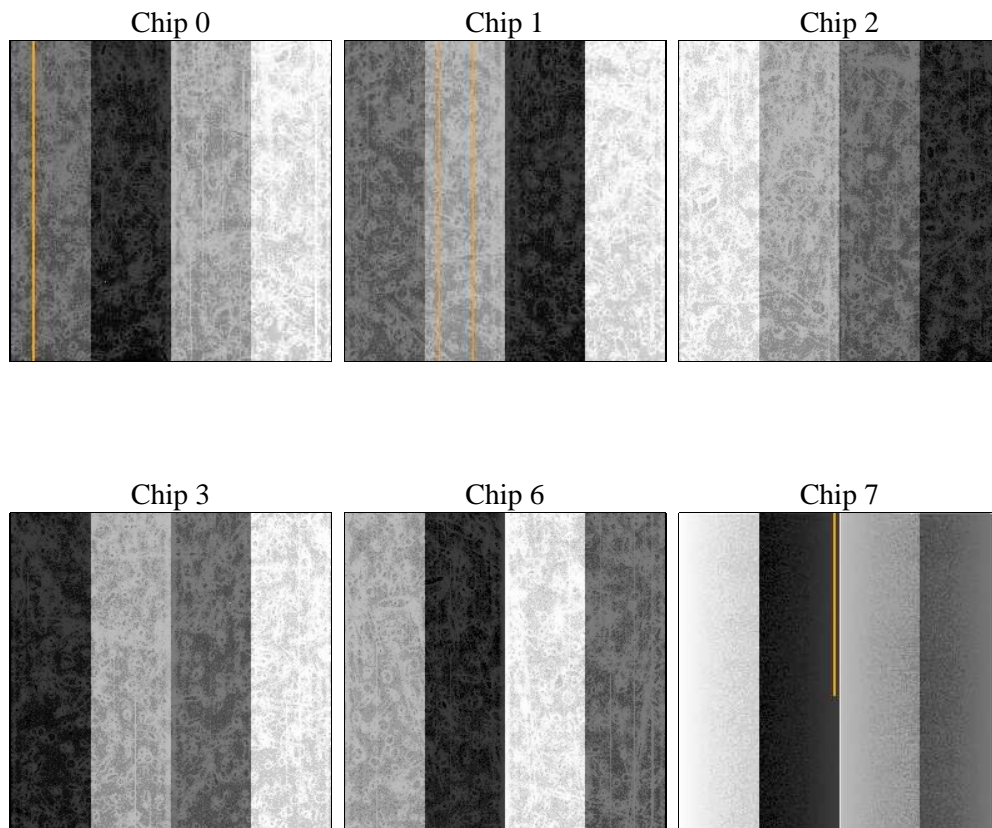
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4928.880000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	909.28349417448	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	909.28349417448	Sum of GTIs [s]
date	2012-04-02T03:41:21	Date and time of file creation	ontime1	909.28349417448	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	909.28349417448	Sum of GTIs [s]
			ontime3	909.28349417448	Sum of GTIs [s]
			ontime6	909.28349417448	Sum of GTIs [s]
			ontime7	909.28346428275	Sum of GTIs [s]
			l1events	23823	Number of level 1 events

2.1.4 Events

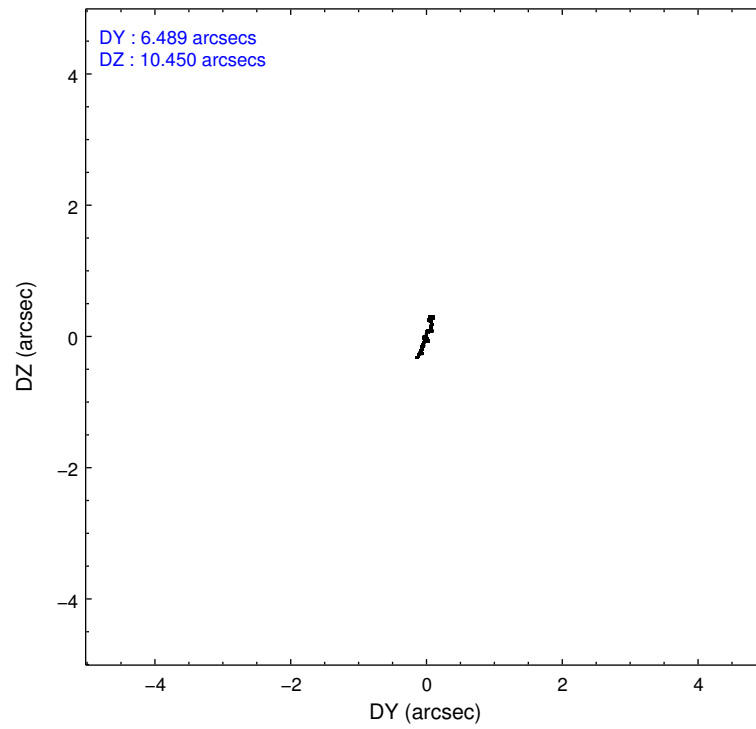
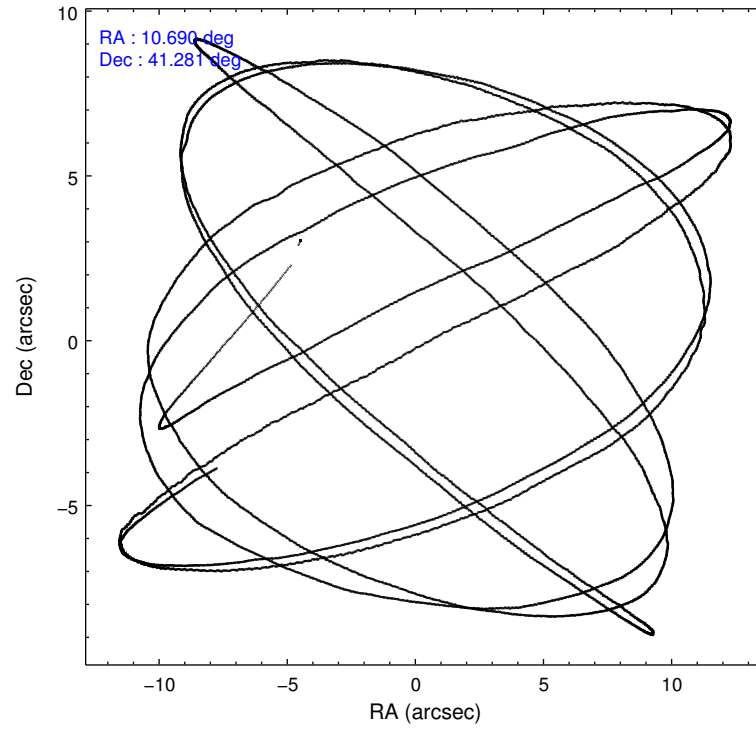
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3896	3830	3947	4330	4175	3645
rejected events	3495	3435	3552	3812	3858	2647
rejected %	89%	89%	89%	88%	92%	72%

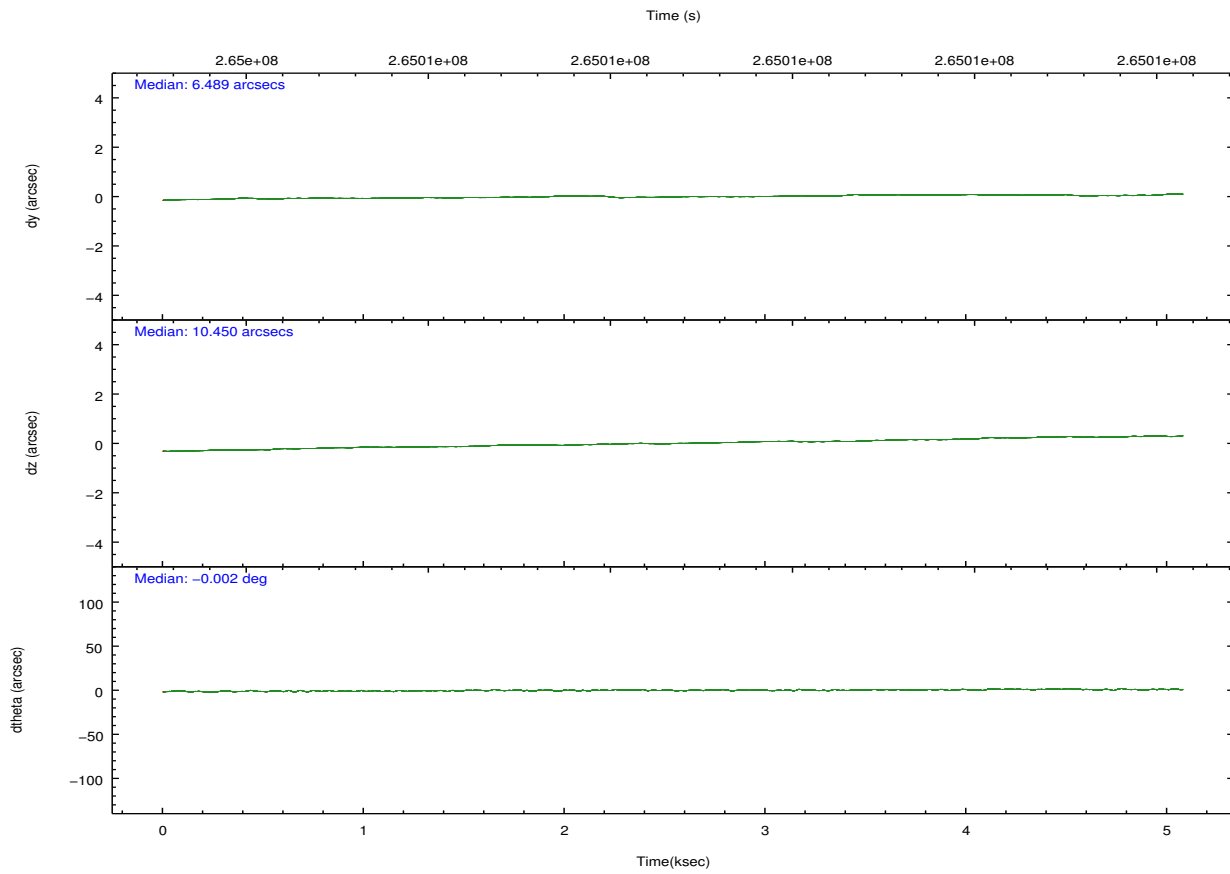
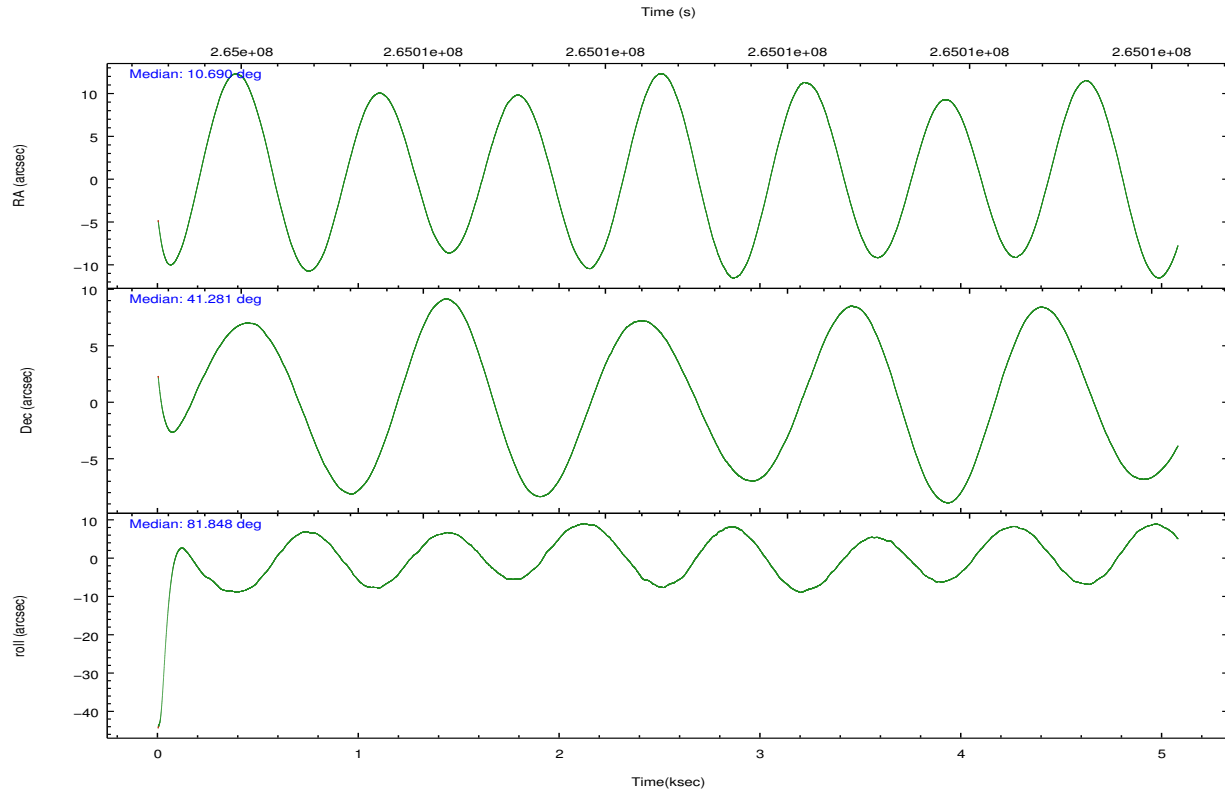
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	160	148	160	271	84	76
	4%	3%	4%	6%	2%	2%
grade 1 events	1	0	2	2	0	6
	0%	0%	0%	0%	0%	0%
grade 2 events	85	90	96	91	74	208
	2%	2%	2%	2%	1%	5%
grade 3 events	50	43	37	54	36	93
	1%	1%	0%	1%	0%	2%
grade 4 events	42	45	42	49	44	99
	1%	1%	1%	1%	1%	2%
grade 5 events	112	132	109	159	175	310
	2%	3%	2%	3%	4%	8%
grade 6 events	65	73	62	61	81	532
	1%	1%	1%	1%	1%	14%
grade 7 events	3381	3299	3439	3643	3681	2321
	86%	86%	87%	84%	88%	63%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	10.703495	10.68973539282679	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.255817	41.28119935158164	Alternating exposures requested	Y	Y
[deg] Pointing Roll	81.631322	81.84896193240866	[s] Primary exposure time	0.500000	0.5
[s] Window start time (MET)	264988865.184000	264988865.184000	[s] Secondary exposure time	0.000000	3.2
[s] Window stop time (MET)	265590065.184000	265590065.184000	Duty cycle	5	5
[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)	265004952.184000	265003932.36183			
Observation start date	2006-05-26T04:28:07	2006-05-26T04:12:12			
[s] Observation end time (MET)	265009880.184000	265010122.33712			
Observation end date	2006-05-26T05:50:15	2006-05-26T05:55:22			
Read mode	TIMED	TIMED			

2.3 Aspect



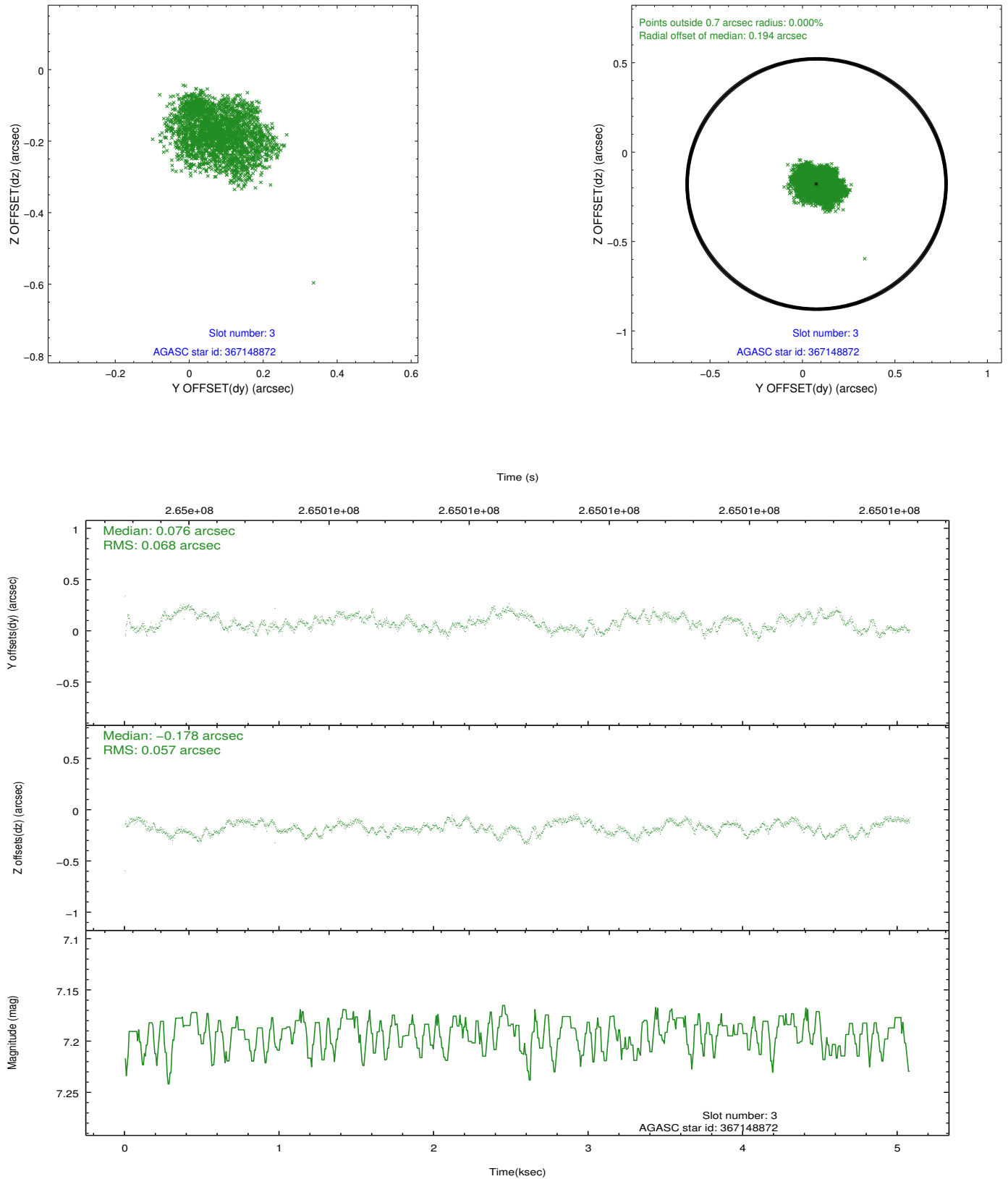


Slot Statistics

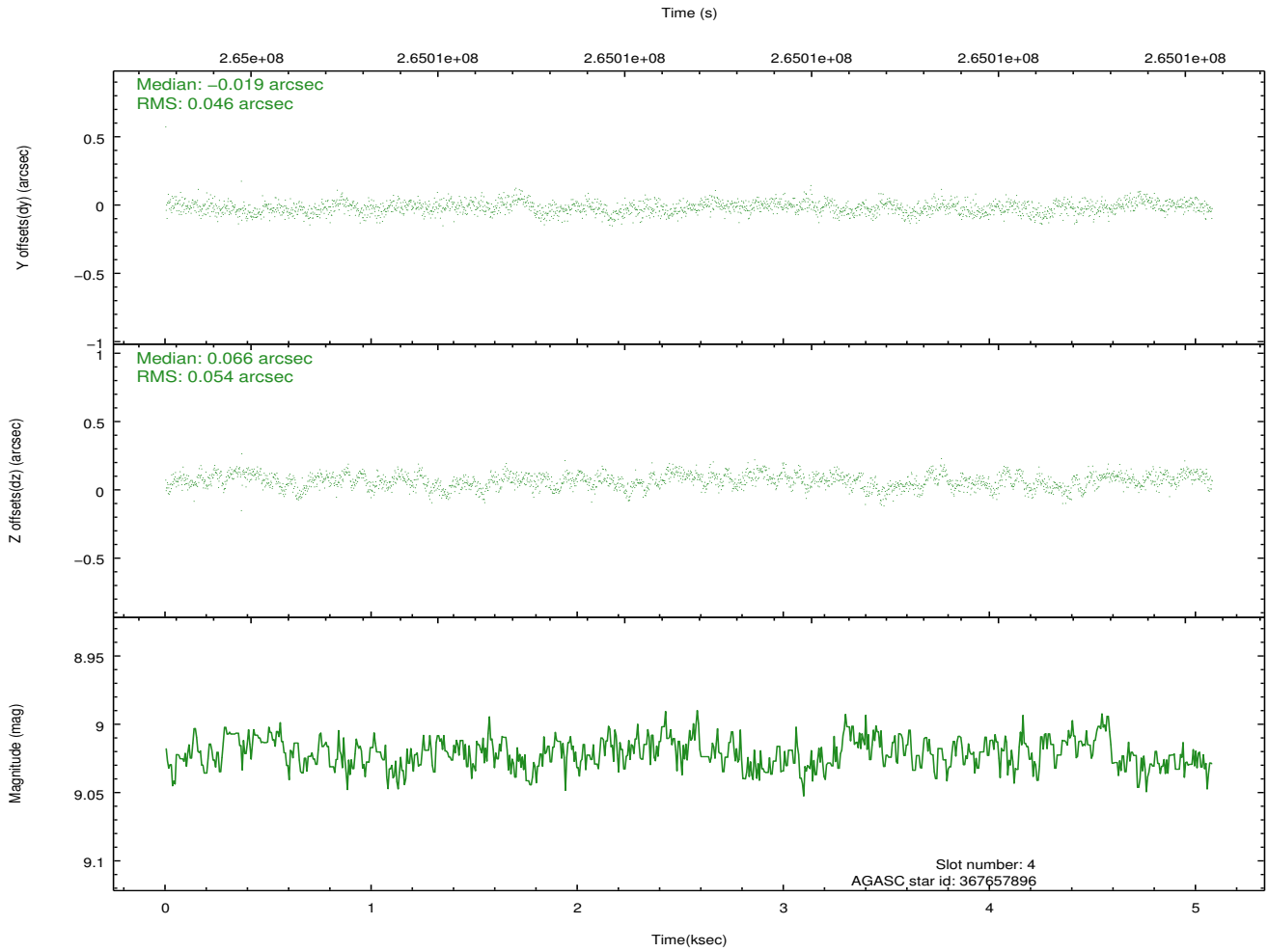
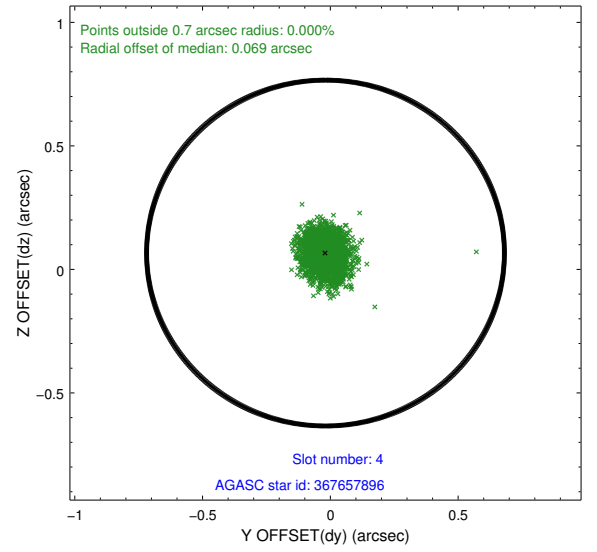
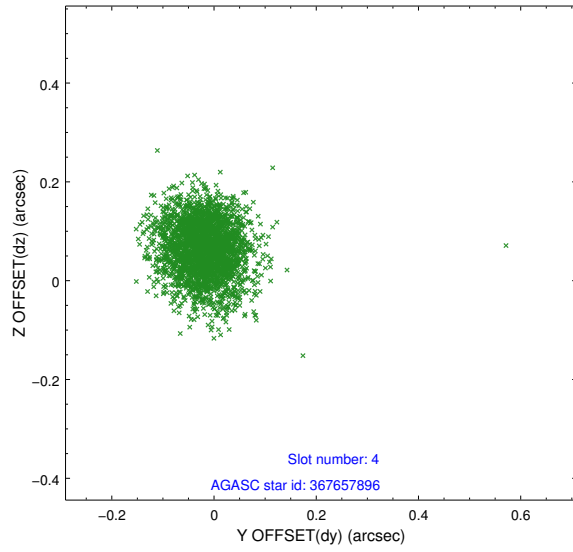
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1239	0.023	-0.029	0.014	0.023	0.000000	0.000000	933.23	-833.97
1	FID	ACIS-I-5	7.23	1239	-0.154	0.038	0.008	0.013	0.000000	0.000000	-1814.38	1063.00
2	FID	ACIS-I-6	7.25	1239	0.039	0.062	0.009	0.016	0.000000	0.000000	397.50	1708.87
3	GUIDE	367148872	7.19	2478	0.076	-0.178	0.098	0.142	10.505940	40.688258	-2099.24	236.07
4	GUIDE	367657896	9.02	2477	-0.019	0.066	0.074	0.123	11.197765	41.313576	403.59	-1291.30
5	GUIDE	367663272	9.28	2477	-0.003	-0.118	0.091	0.147	10.656279	41.699429	1561.84	357.85
6	GUIDE	367674552	8.85	2477	-0.026	0.085	0.068	0.112	11.016238	41.570845	1247.13	-667.92
7	GUIDE	367138920	7.73	2477	-0.029	0.146	0.071	0.109	11.513485	40.808909	-1259.77	-2417.03

2.4 Star Slots

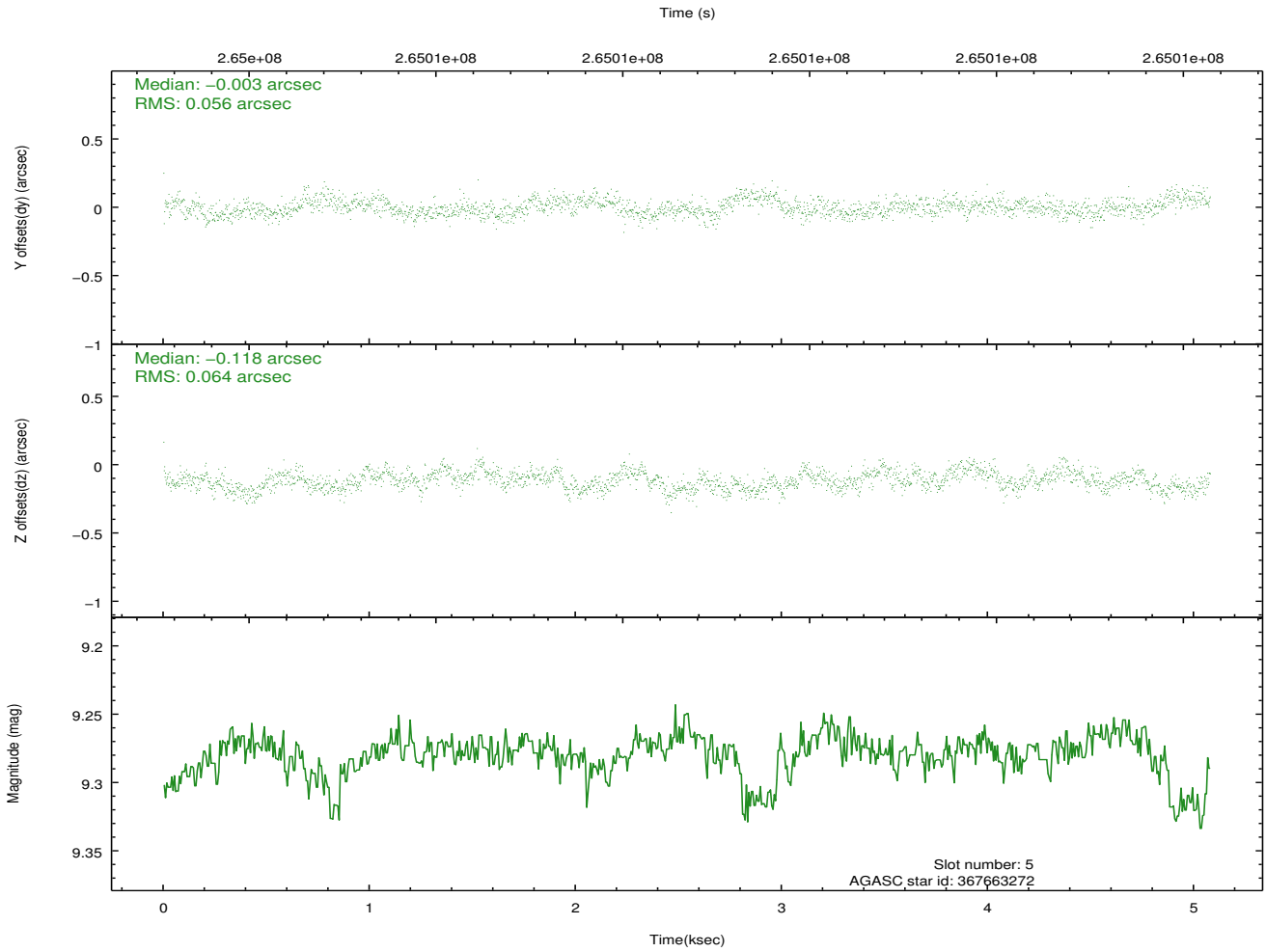
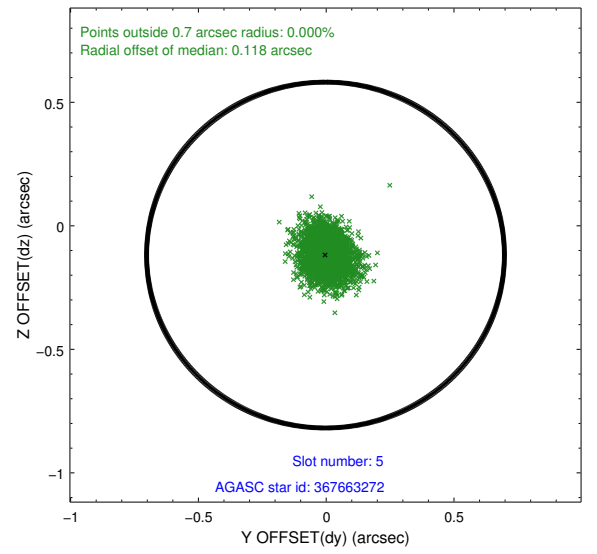
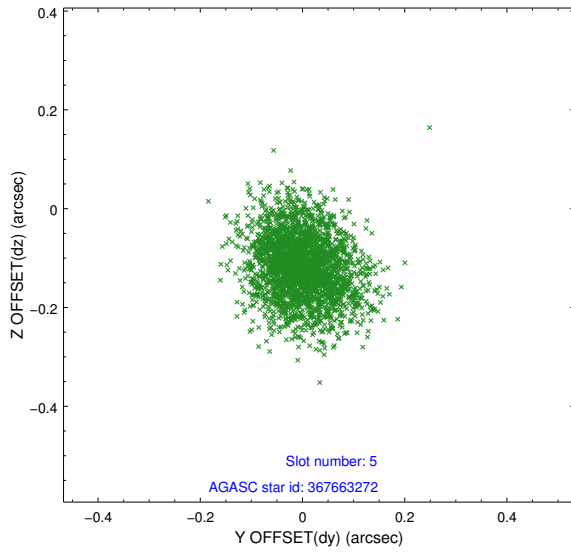
2.4.1 Slot 3



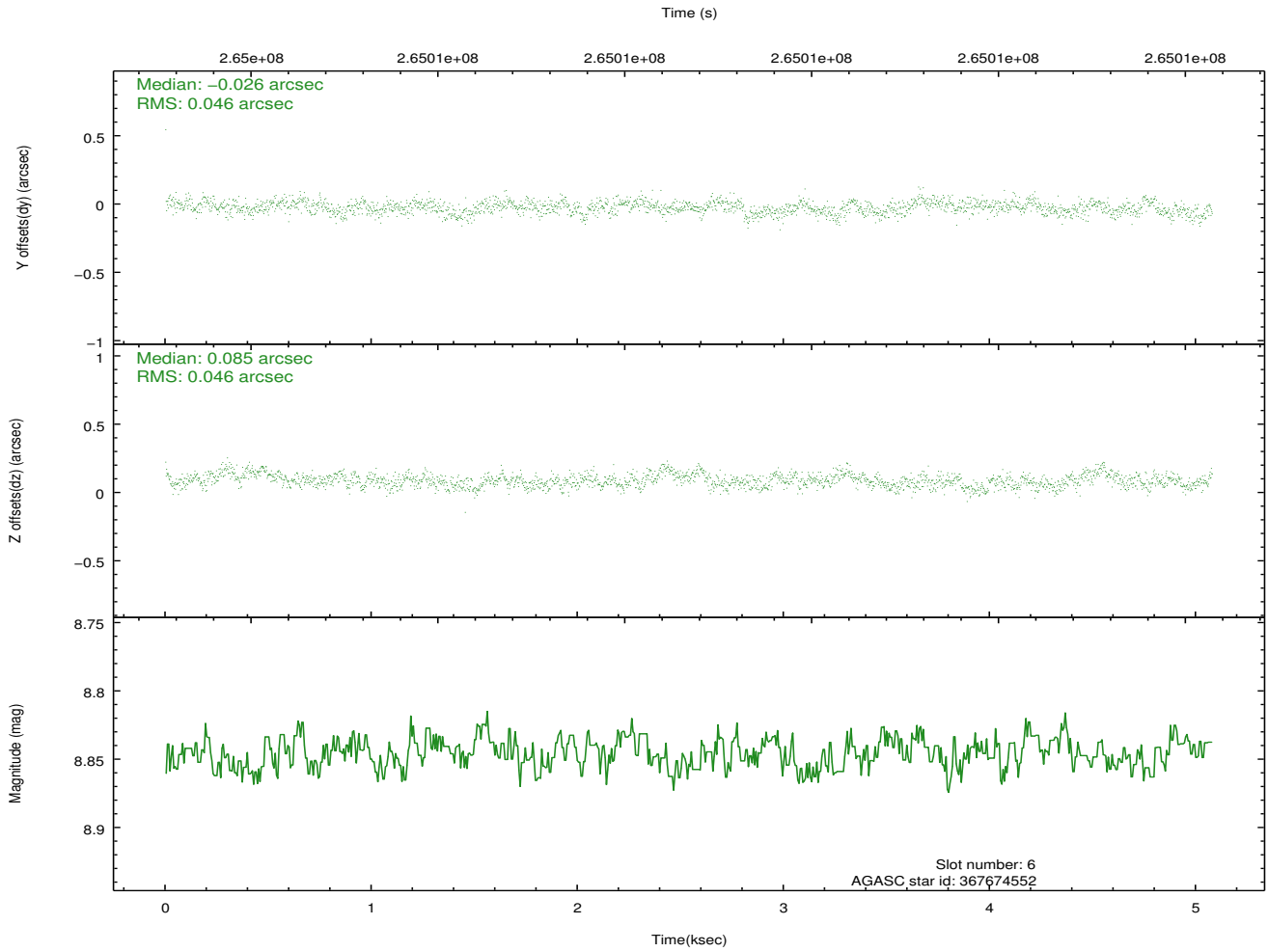
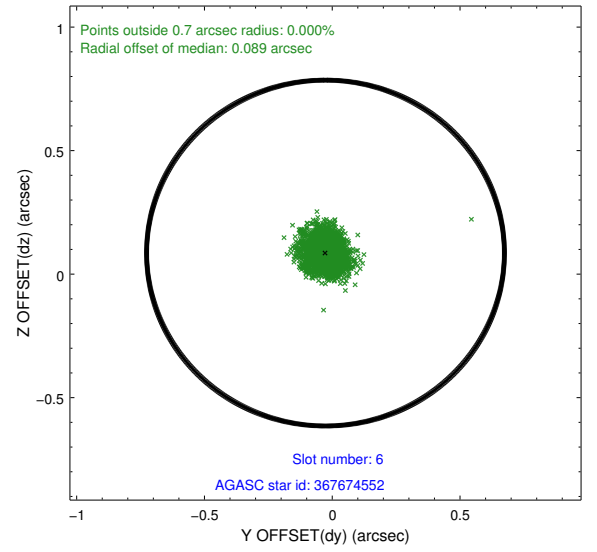
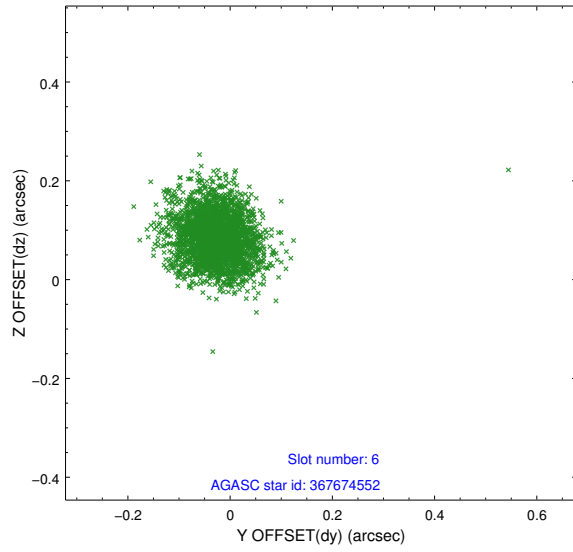
2.4.2 Slot 4



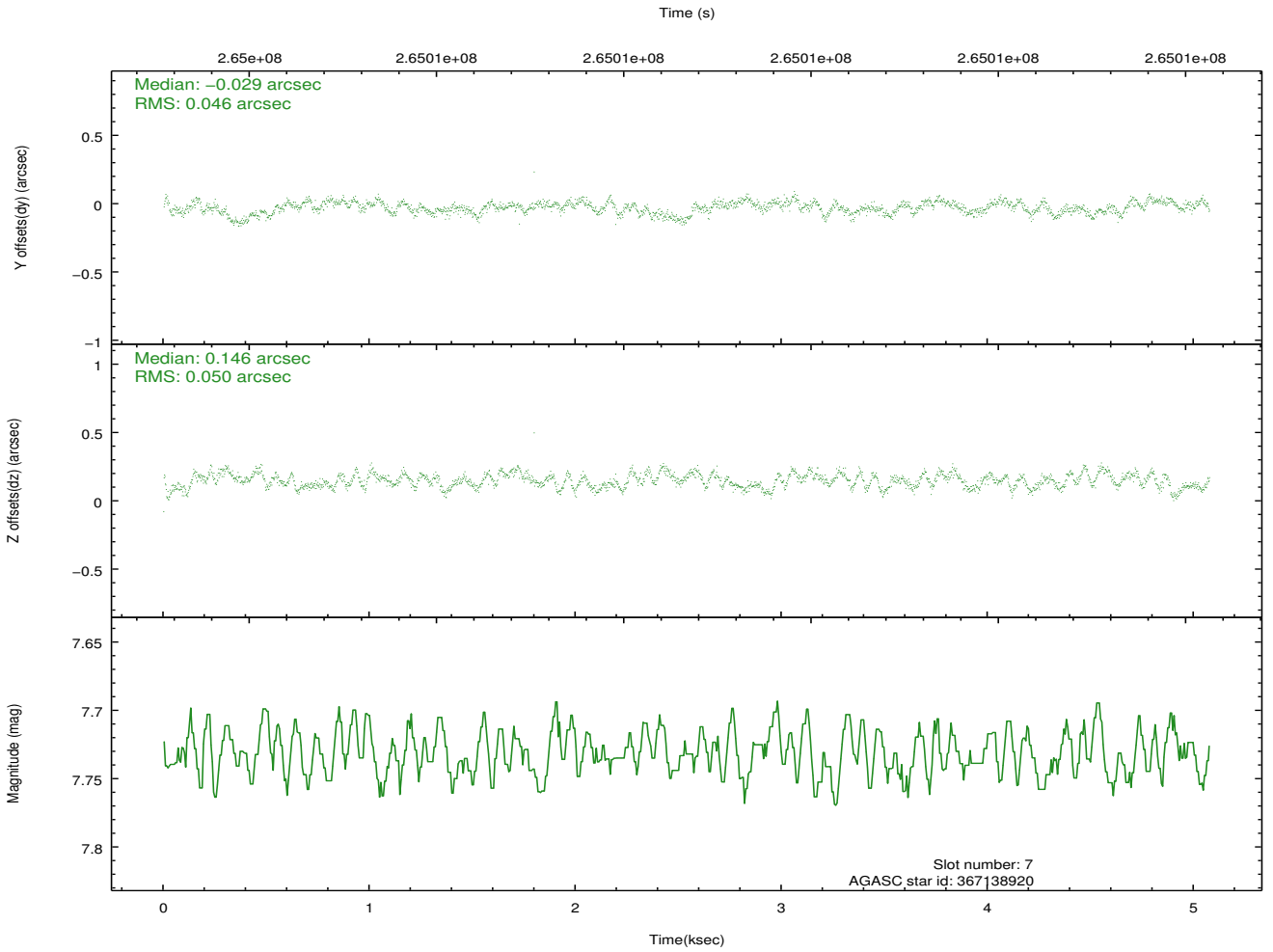
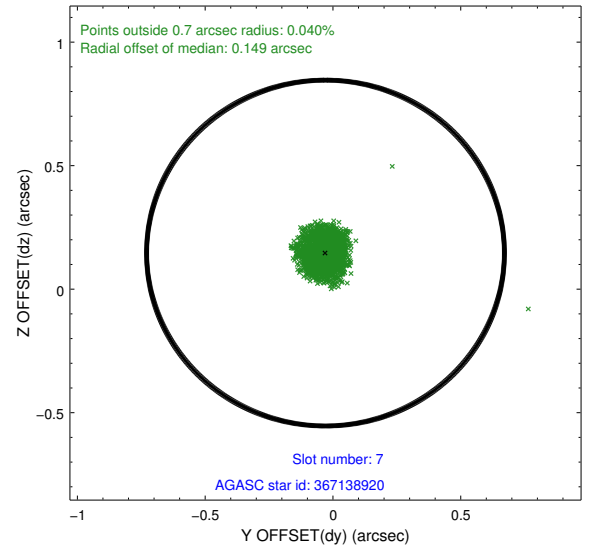
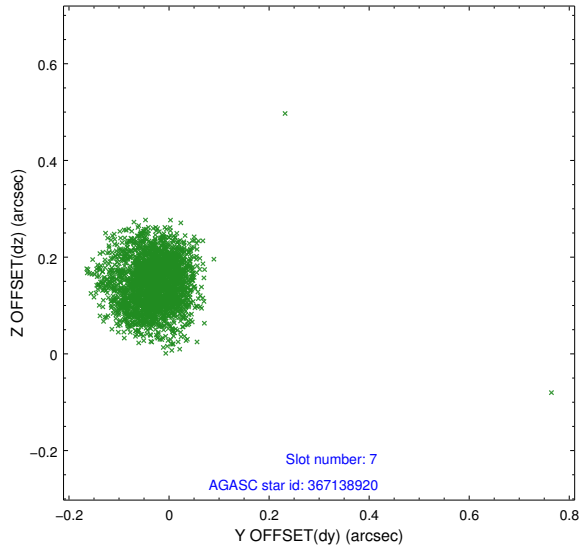
2.4.3 Slot 5



2.4.4 Slot 6

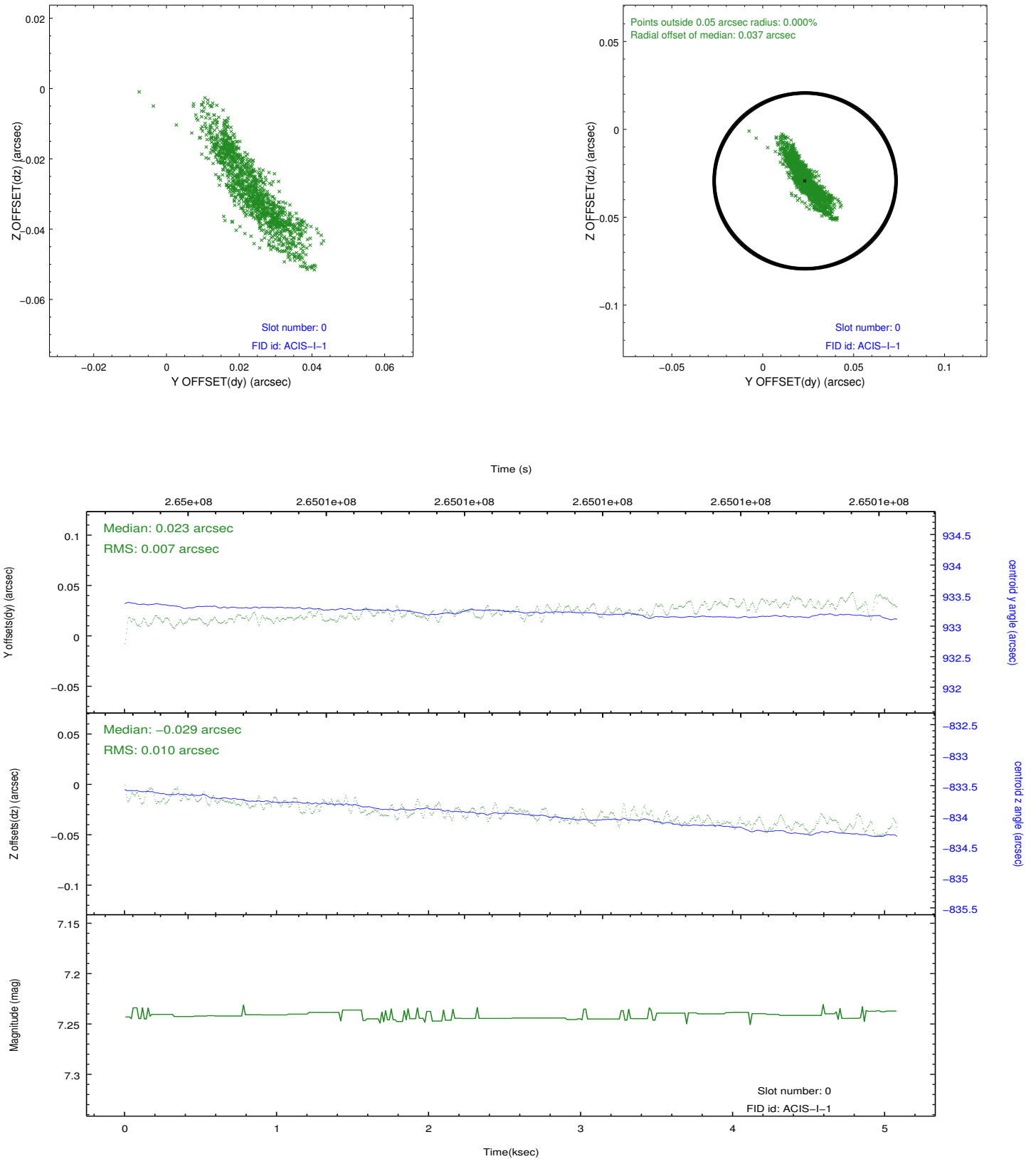


2.4.5 Slot 7

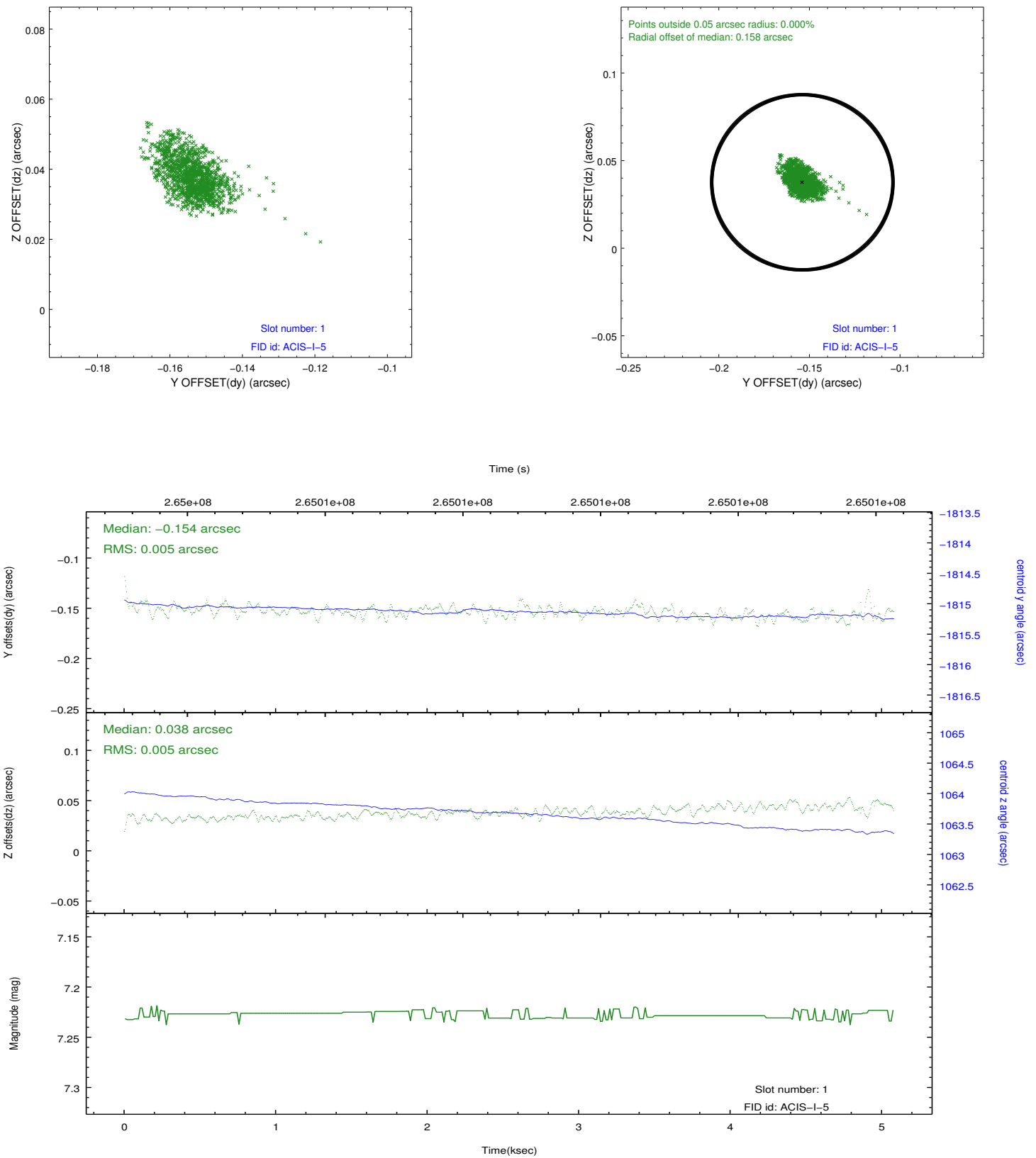


2.5 FID Slots

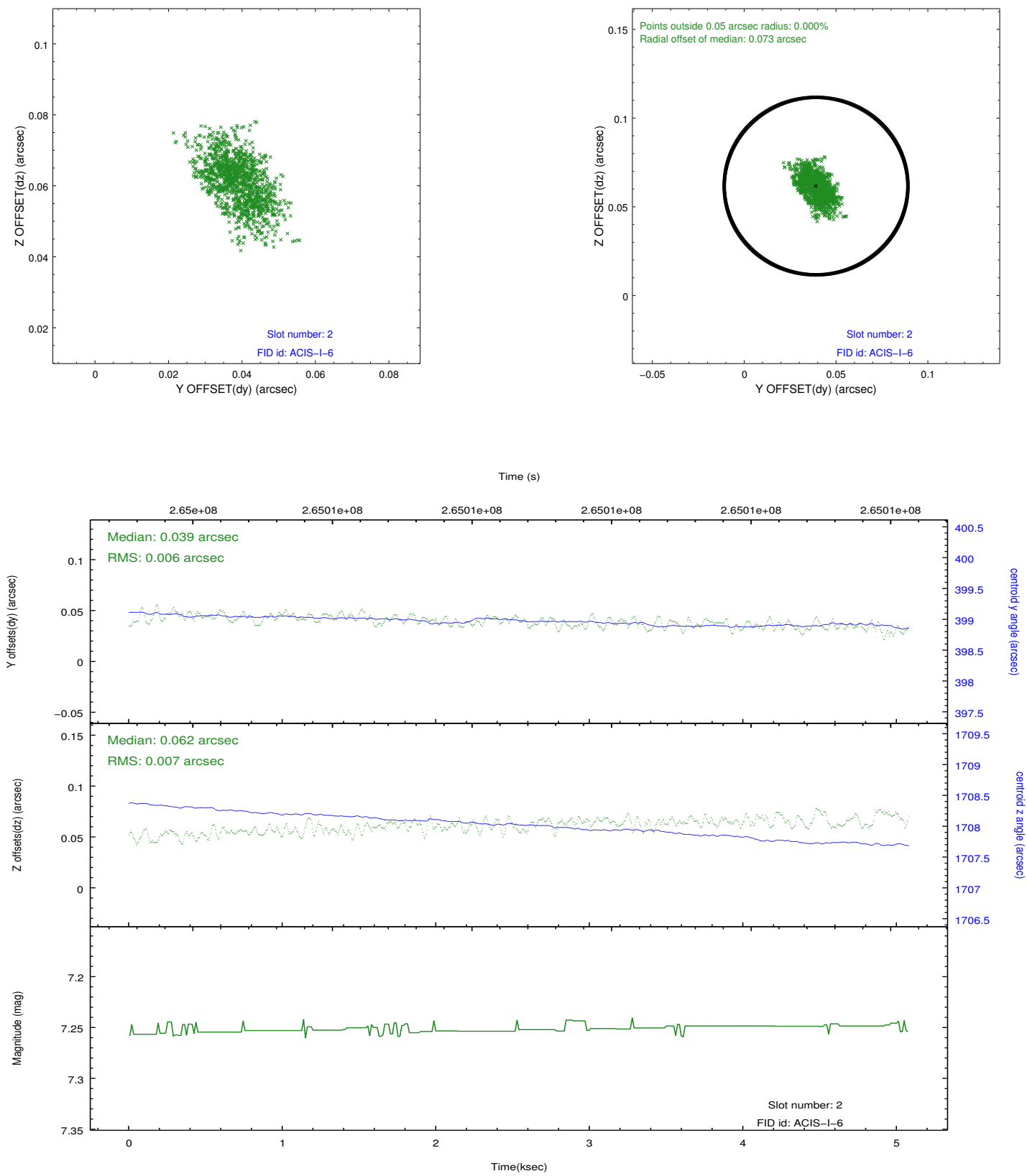
2.5.1 Slot 0



2.5.2 Slot 1



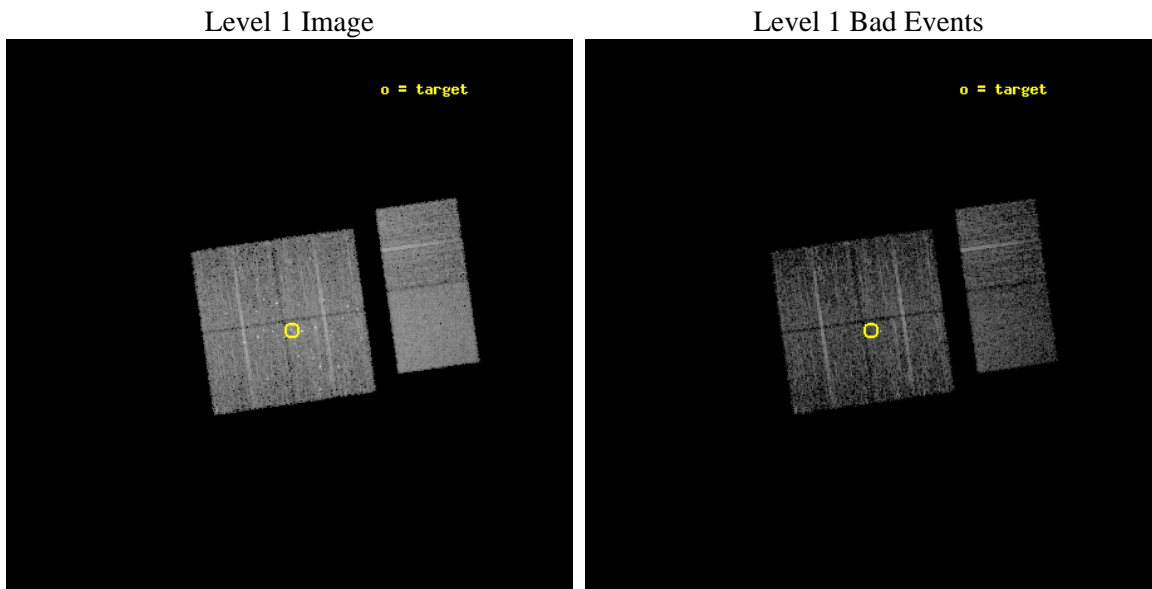
2.5.3 Slot 2



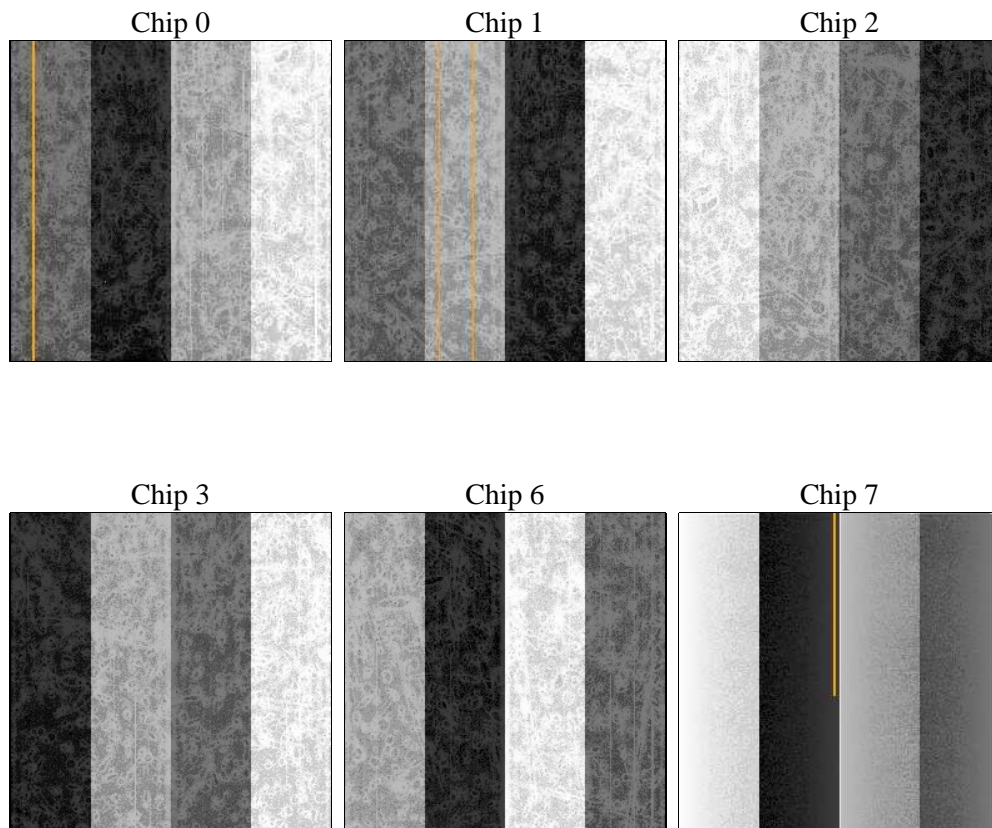
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4928.880000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	4002.8149248362	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	4002.8142976761	Sum of GTIs [s]
date	2012-04-02T03:44:02	Date and time of file creation	ontime1	4002.8146559894	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4002.8150443137	Sum of GTIs [s]
			ontime3	4002.8149248362	Sum of GTIs [s]
			ontime6	4002.814815551	Sum of GTIs [s]
			ontime7	4002.8141880631	Sum of GTIs [s]
			l1events	232570	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	33819	34988	36826	42217	36787	47933	grade 0 events	3045	3612	3186	6389	1788	1744
rejected events	27973	28222	31082	32304	32343	28157		9%	10%	8%	15%	4%	3%
rejected %	82%	80%	84%	76%	87%	58%	grade 1 events	37	40	30	170	25	52
								0%	0%	0%	0%	0%	0%
							grade 2 events	1105	1235	983	1405	958	3948
								3%	3%	2%	3%	2%	8%
							grade 3 events	502	487	458	622	430	1759
								1%	1%	1%	1%	1%	3%
							grade 4 events	431	512	425	601	390	1680
								1%	1%	1%	1%	1%	3%
							grade 5 events	1420	1603	1356	1677	1648	4514
								4%	4%	3%	3%	4%	9%
							grade 6 events	777	929	701	902	879	10667
								2%	2%	1%	2%	2%	22%
							grade 7 events	26502	26570	29687	30451	30669	23569
								78%	75%	80%	72%	83%	49%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.04.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.91209841

A.2 Comments

Interleave mode. Window constraint met.