

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11842 - L2 Version 2
Chandra X-Ray Center

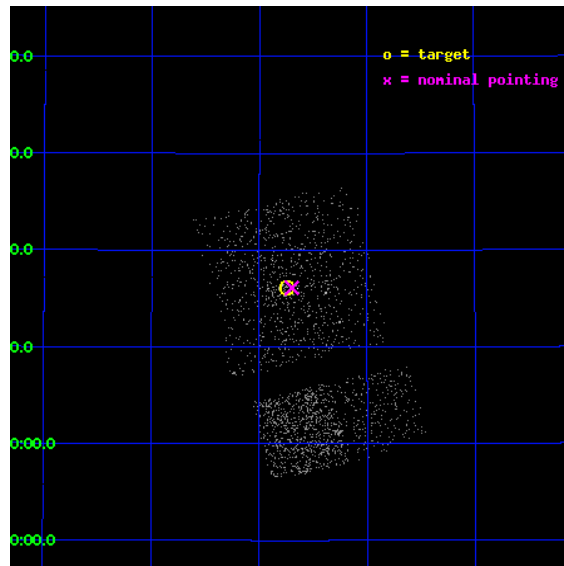
L2 Processing Date : Jul 3 2012

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1 Front

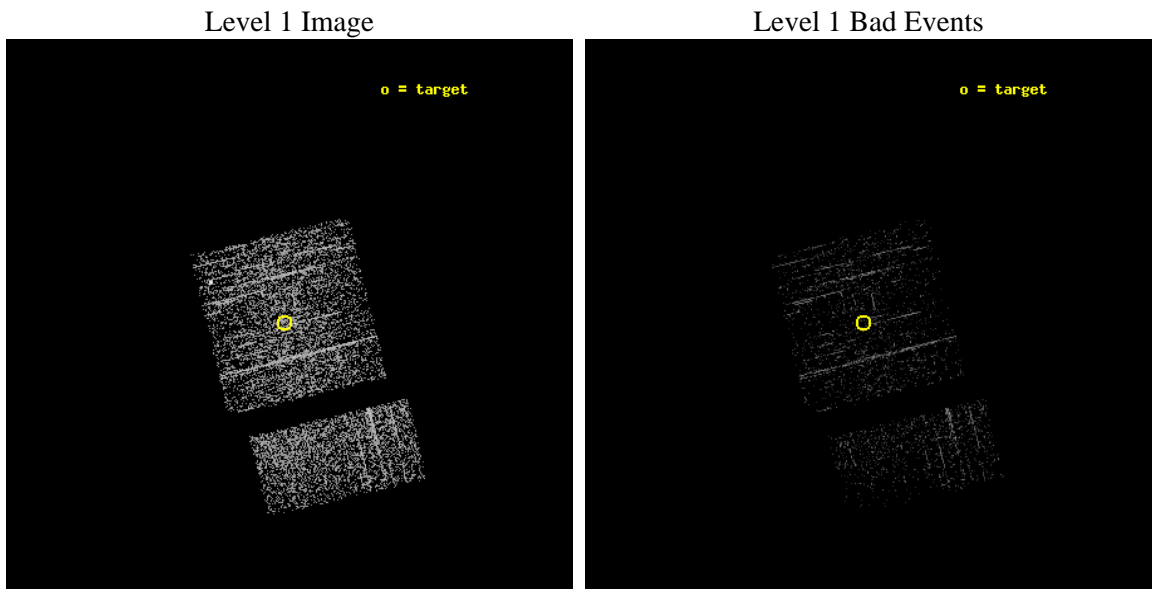
seq_num	600910	Sequence number
obs_id	11842	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.674217353715	Nominal RA [deg]
dec_nom	41.268494944932	Nominal Dec [deg]
roll_nom	166.33311549486	Nominal Roll [deg]
revision	2	Processing version of data
ontime	941.32382303476	Sum of GTIs [s]
livetime	148.18707595736	Livetime [s]
ontime0	941.32382327318	Sum of GTIs [s]
ontime1	941.32382303476	Sum of GTIs [s]
ontime2	941.32382315397	Sum of GTIs [s]
ontime3	941.32382303476	Sum of GTIs [s]
ontime6	941.32382315397	Sum of GTIs [s]
ontime7	941.32382315397	Sum of GTIs [s]
l2events	2393	Number of level 2 events



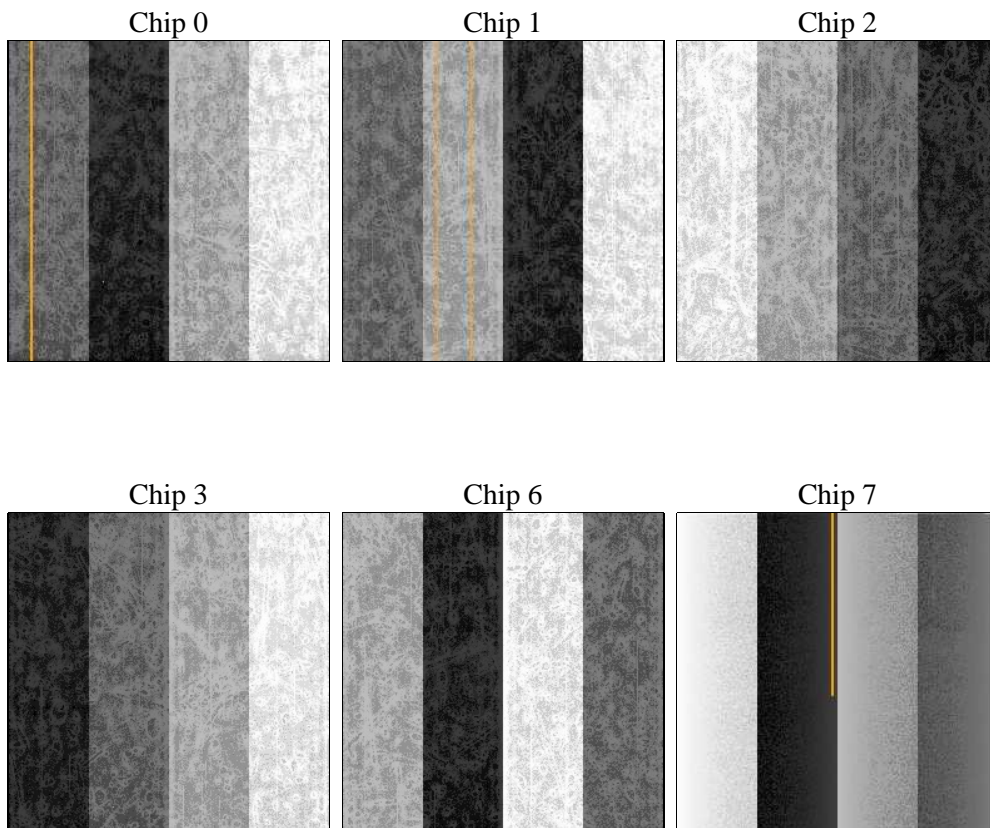
2 OBI Primary

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	941.32382303476	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	941.32382327318	Sum of GTIs [s]
date	2012-07-03T23:56:03	Date and time of file creation	ontime1	941.32382303476	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	941.32382315397	Sum of GTIs [s]
			ontime3	941.32382303476	Sum of GTIs [s]
			ontime6	941.32382315397	Sum of GTIs [s]
			ontime7	941.32382315397	Sum of GTIs [s]
			l1events	19867	Number of level 1 events

2.1.4 Events

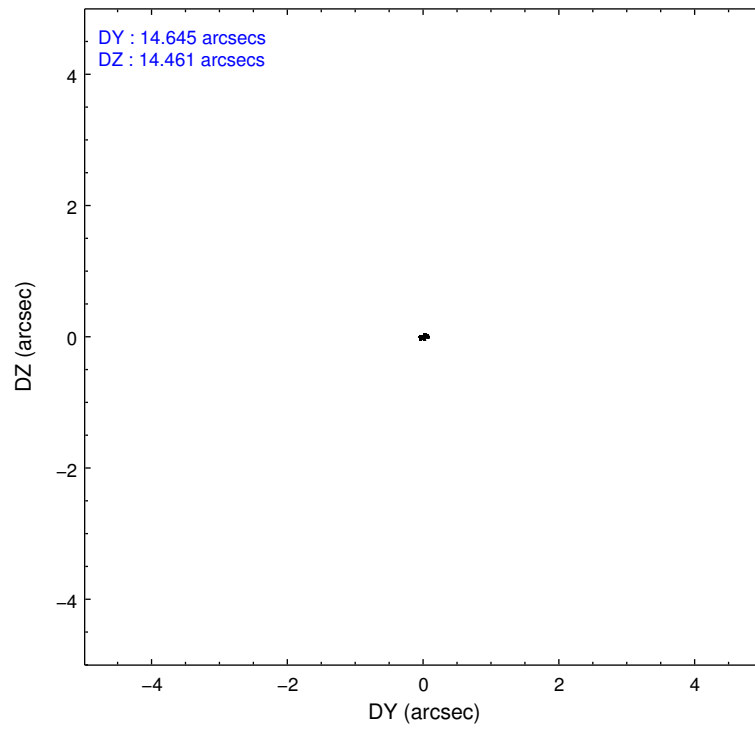
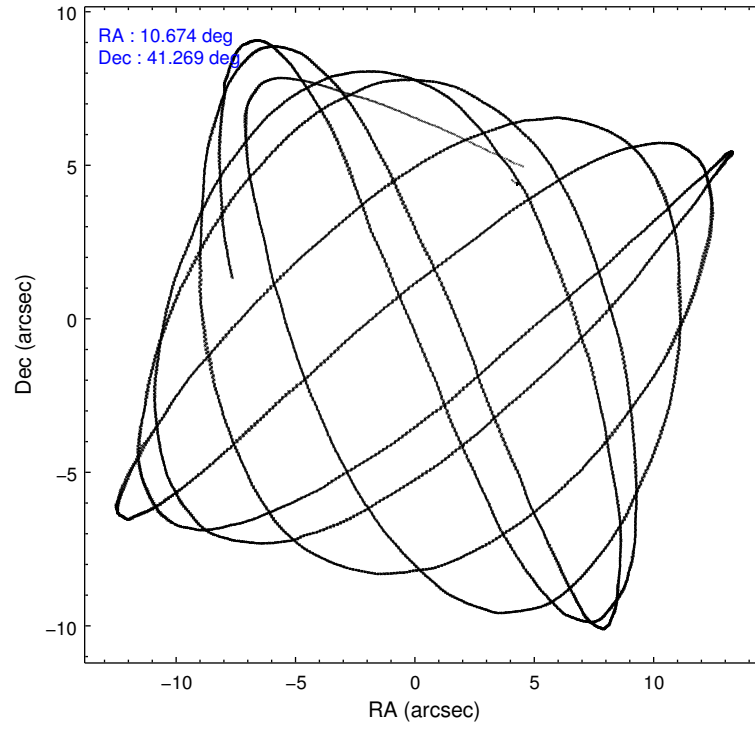
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	2934	3575	3298	3449	3542	3069
rejected events	2596	2981	2863	3033	3221	2147
rejected %	88%	83%	86%	87%	90%	69%

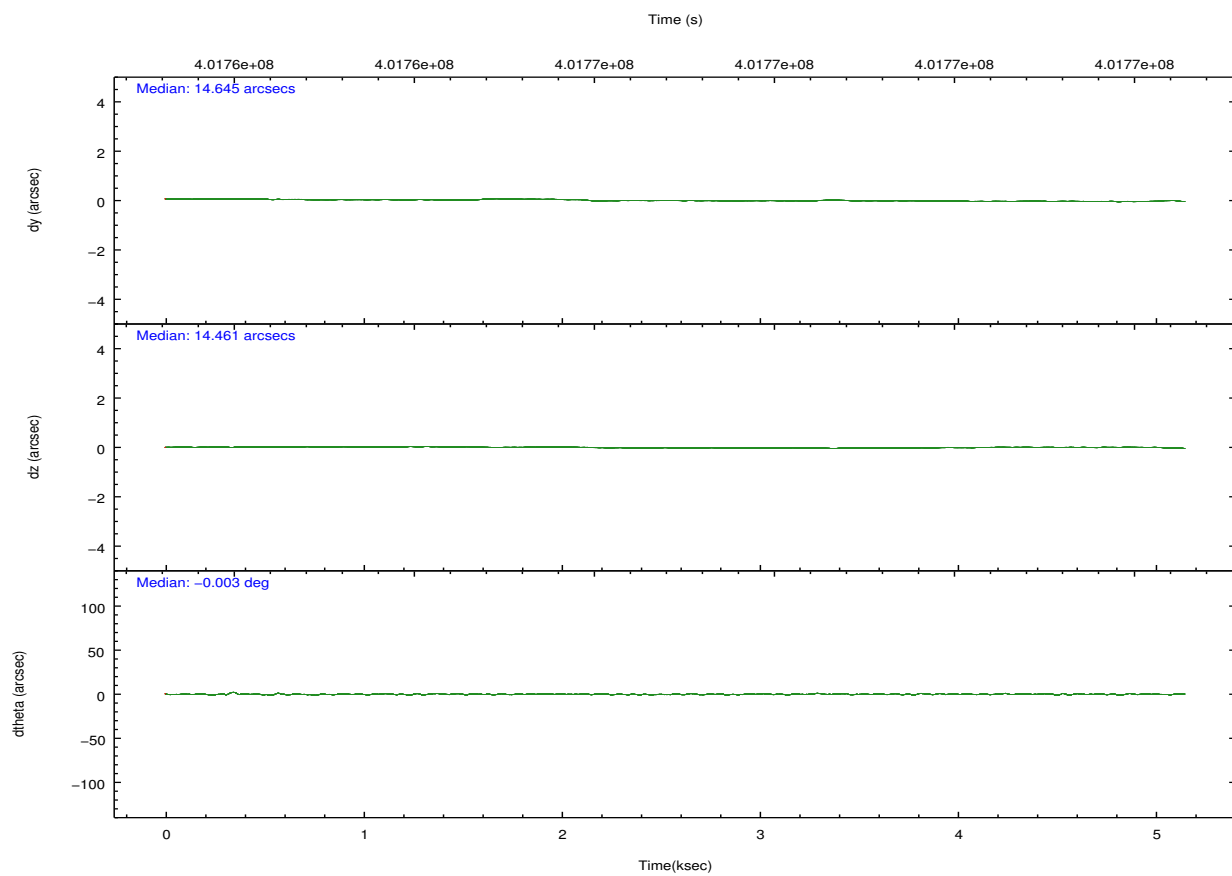
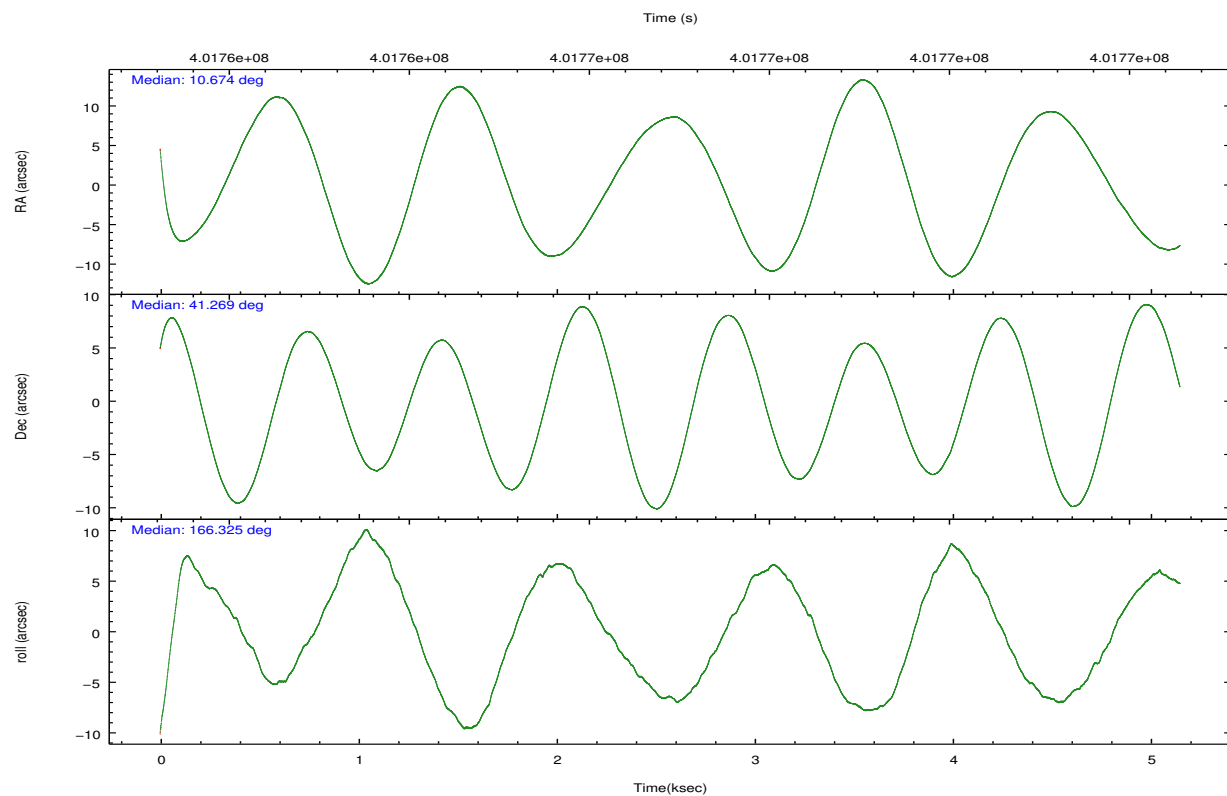
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	115	369	205	177	73	93
	3%	10%	6%	5%	2%	3%
grade 1 events	0	2	1	1	0	4
	0%	0%	0%	0%	0%	0%
grade 2 events	87	73	89	87	93	219
	2%	2%	2%	2%	2%	7%
grade 3 events	39	40	46	54	37	80
	1%	1%	1%	1%	1%	2%
grade 4 events	50	43	35	43	40	86
	1%	1%	1%	1%	1%	2%
grade 5 events	139	107	118	158	142	260
	4%	2%	3%	4%	4%	8%
grade 6 events	48	72	62	57	80	453
	1%	2%	1%	1%	2%	14%
grade 7 events	2456	2869	2742	2872	3077	1874
	83%	80%	83%	83%	86%	61%

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	10.709330	10.6742173537146	CCD I2 on	Y	Y
[deg] Pointing Dec	41.276291	41.26849494493246	CCD I3 on	Y	Y
[deg] Pointing Roll	166.101283	166.3331154948567	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	401764016.184000	401762677.83663	CCD S5 on	N	N
Observation start date	2010-09-25T01:05:50	2010-09-25T00:44:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	401769016.184000	401769608.88698	On-chip summing requested	N	N
Observation end date	2010-09-25T02:29:10	2010-09-25T02:40:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	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



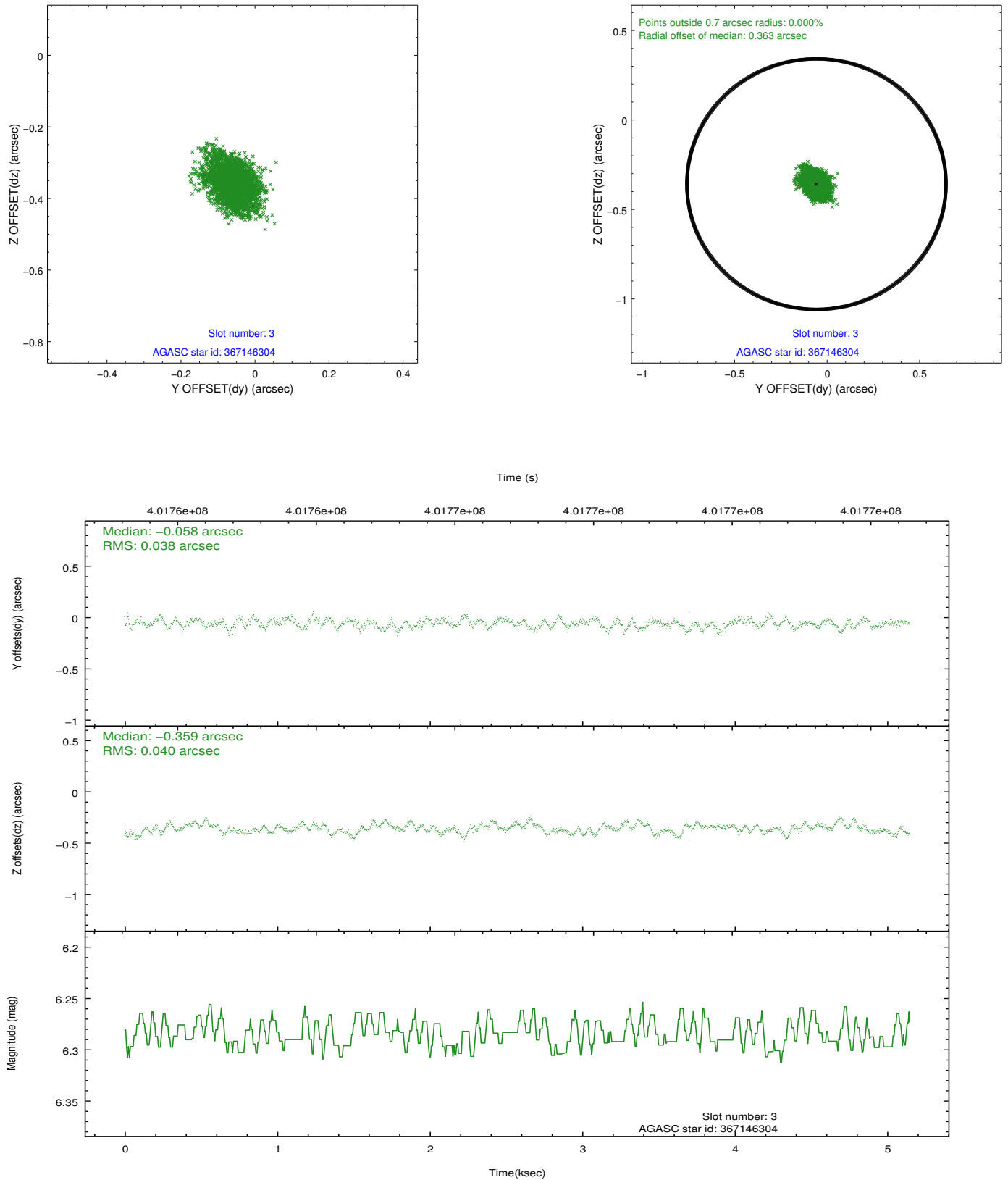


Slot Statistics

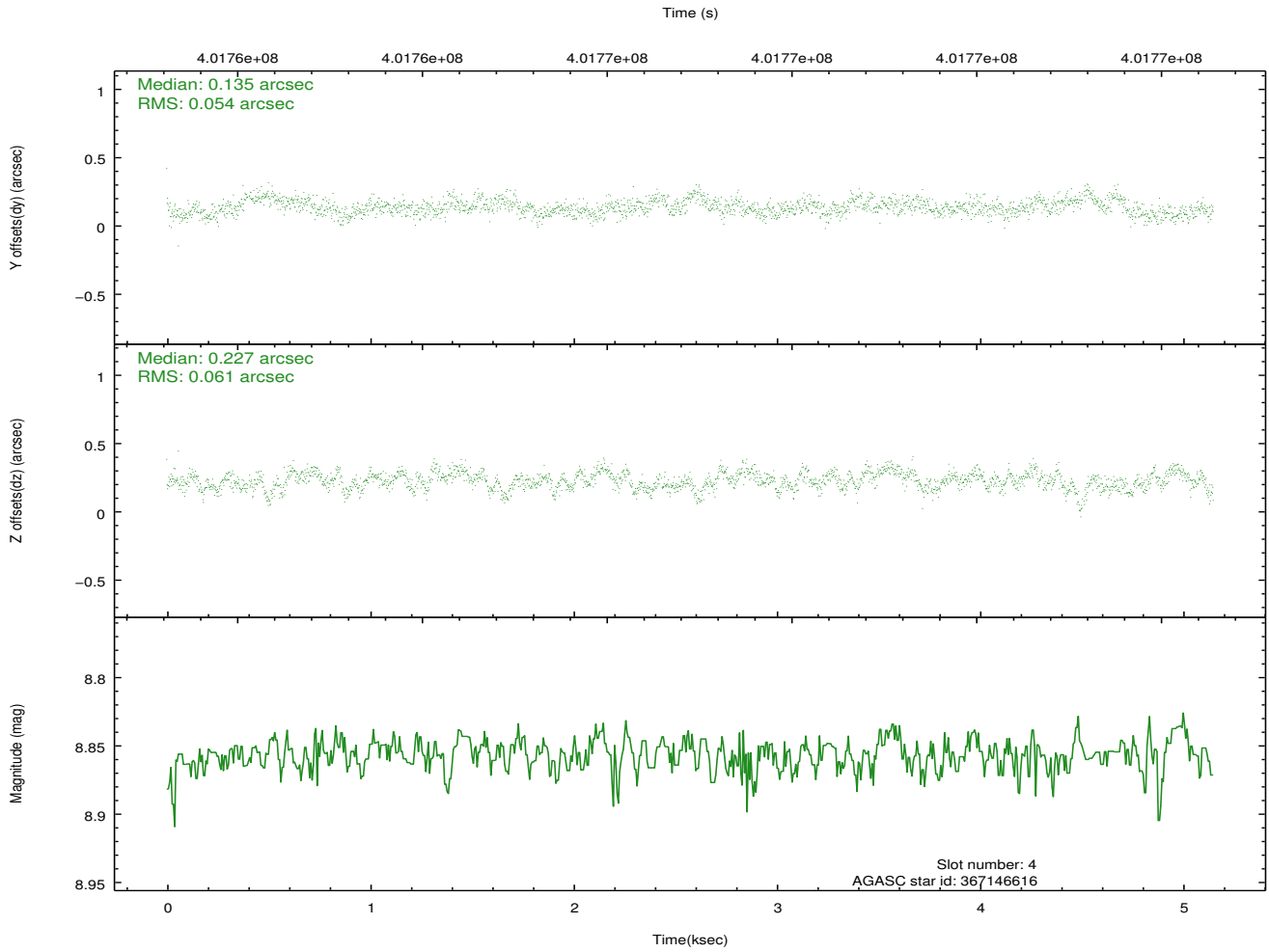
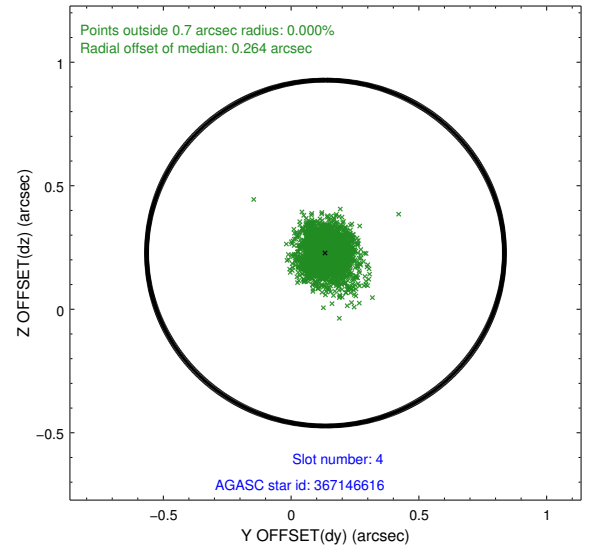
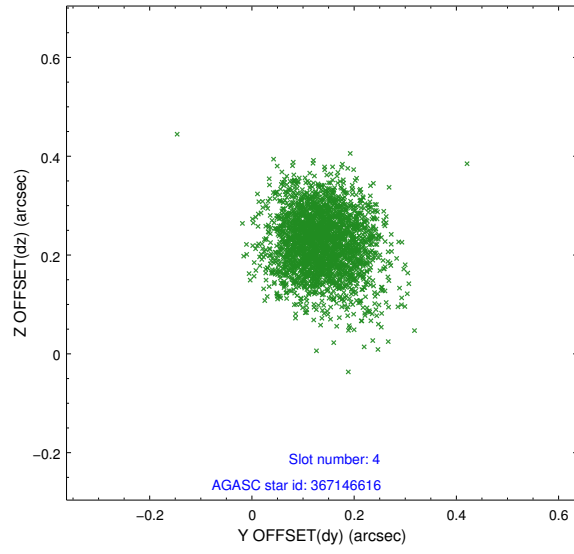
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.10	1257	0.048	-0.009	0.006	0.010	0.000000	0.000000	924.88	-838.03
1	FID	ACIS-I-5	7.09	1257	-0.245	0.045	0.006	0.010	0.000000	0.000000	-1822.91	1058.86
2	FID	ACIS-I-6	7.09	1257	0.105	0.035	0.006	0.011	0.000000	0.000000	389.15	1704.73
3	GUIDE	367146304	6.28	2512	-0.058	-0.359	0.058	0.096	11.154952	40.679362	-1696.96	1790.84
4	GUIDE	367146616	8.86	2504	0.135	0.227	0.085	0.140	11.418645	41.190163	-1938.46	-167.03
5	GUIDE	367657896	9.02	2506	0.007	0.107	0.097	0.155	11.197765	41.313576	-1249.62	-450.77
6	GUIDE	367663272	9.28	2510	-0.179	-0.014	0.111	0.174	10.656279	41.699429	504.63	-1443.49
7	GUIDE	367674552	8.86	2511	0.093	0.046	0.081	0.128	11.016238	41.570845	-547.01	-1229.36

2.4 Star Slots

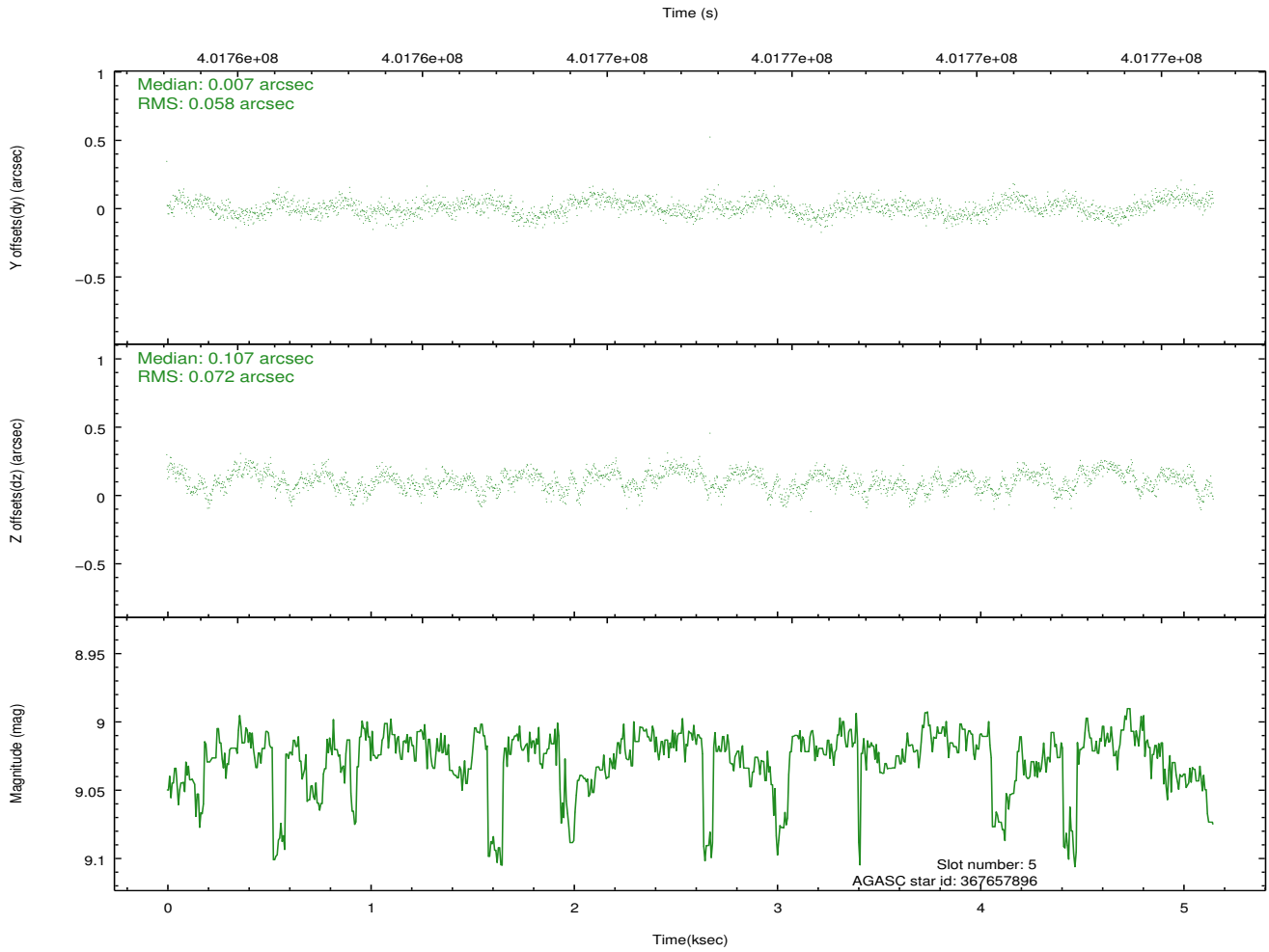
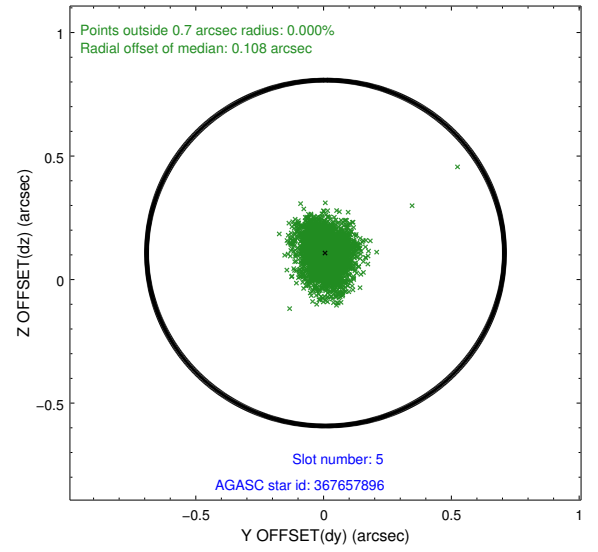
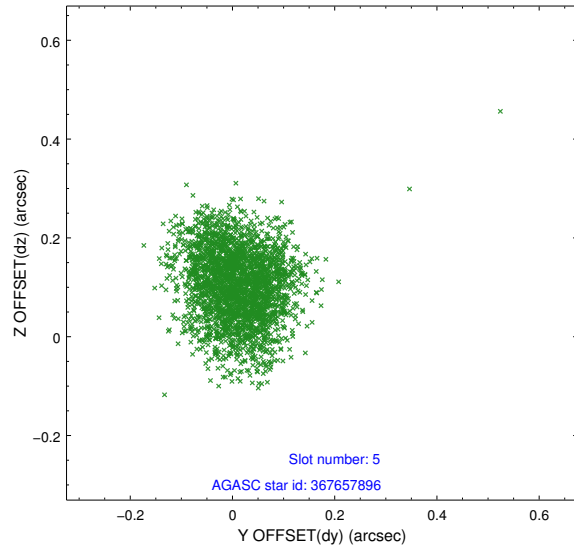
2.4.1 Slot 3



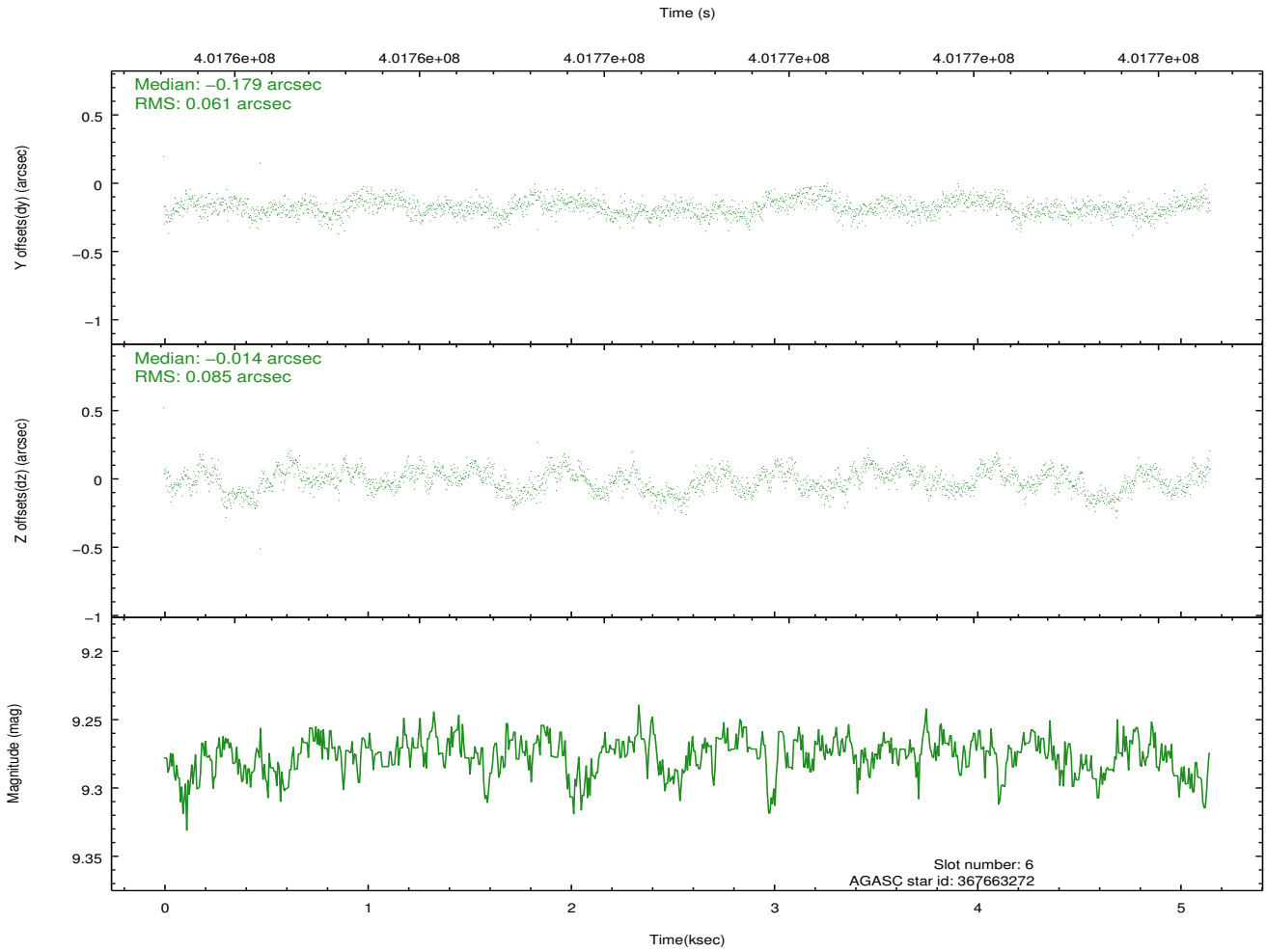
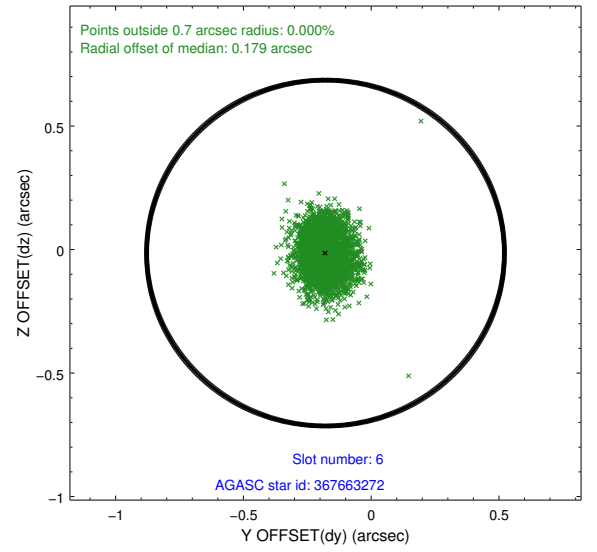
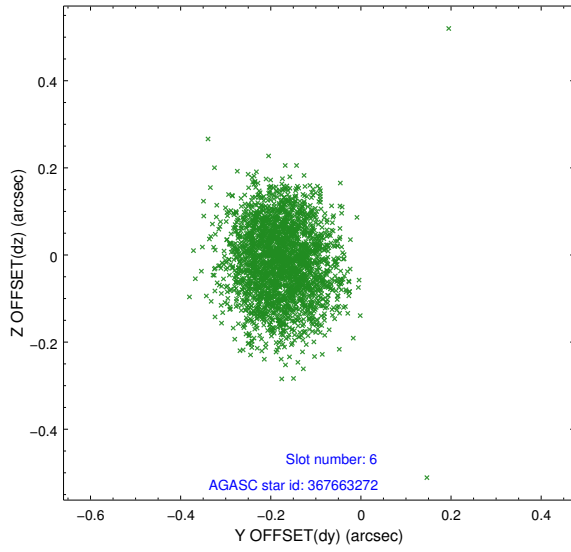
2.4.2 Slot 4



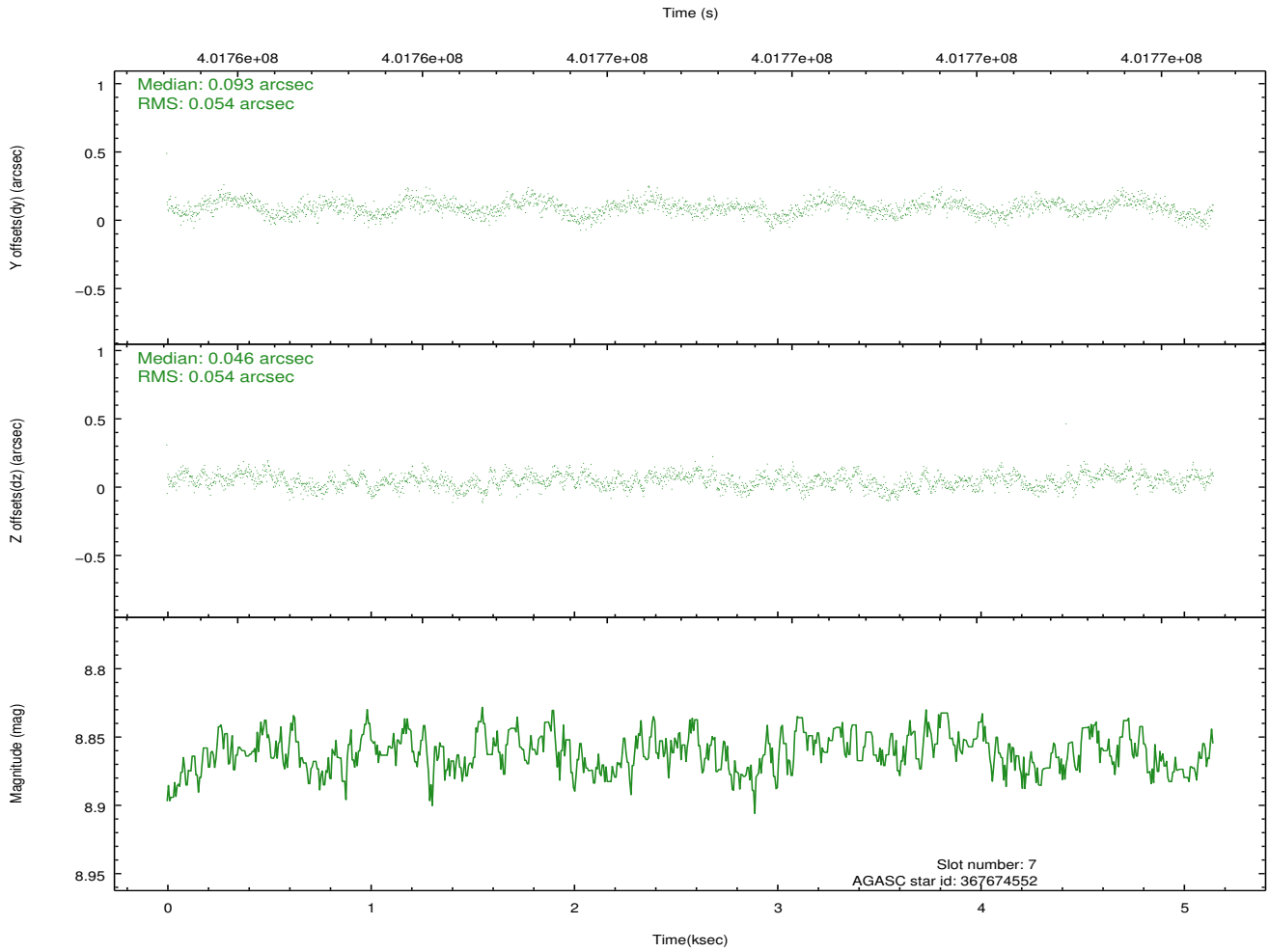
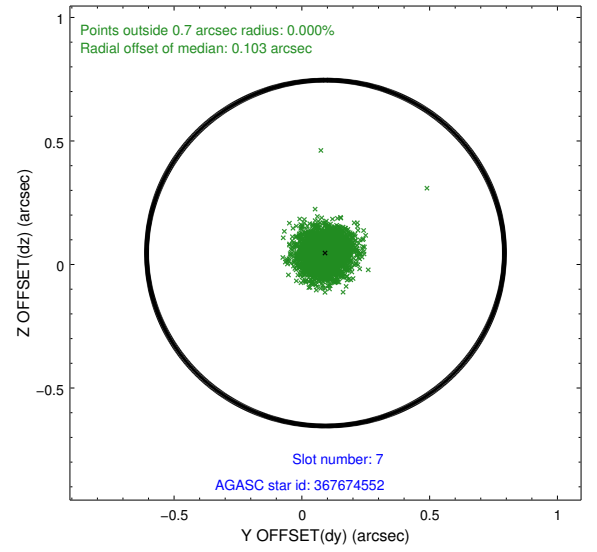
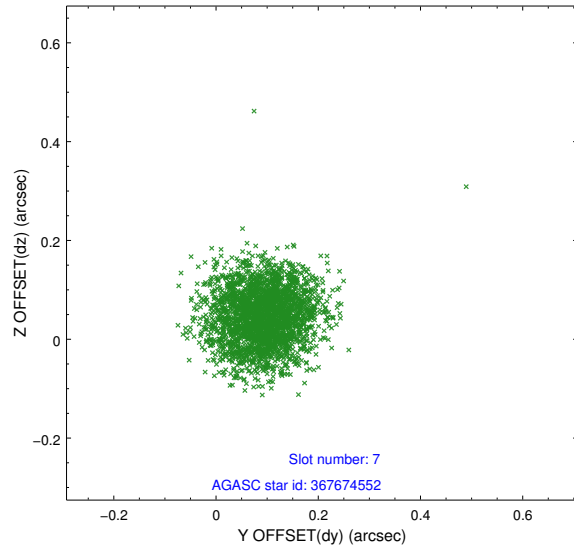
2.4.3 Slot 5



2.4.4 Slot 6

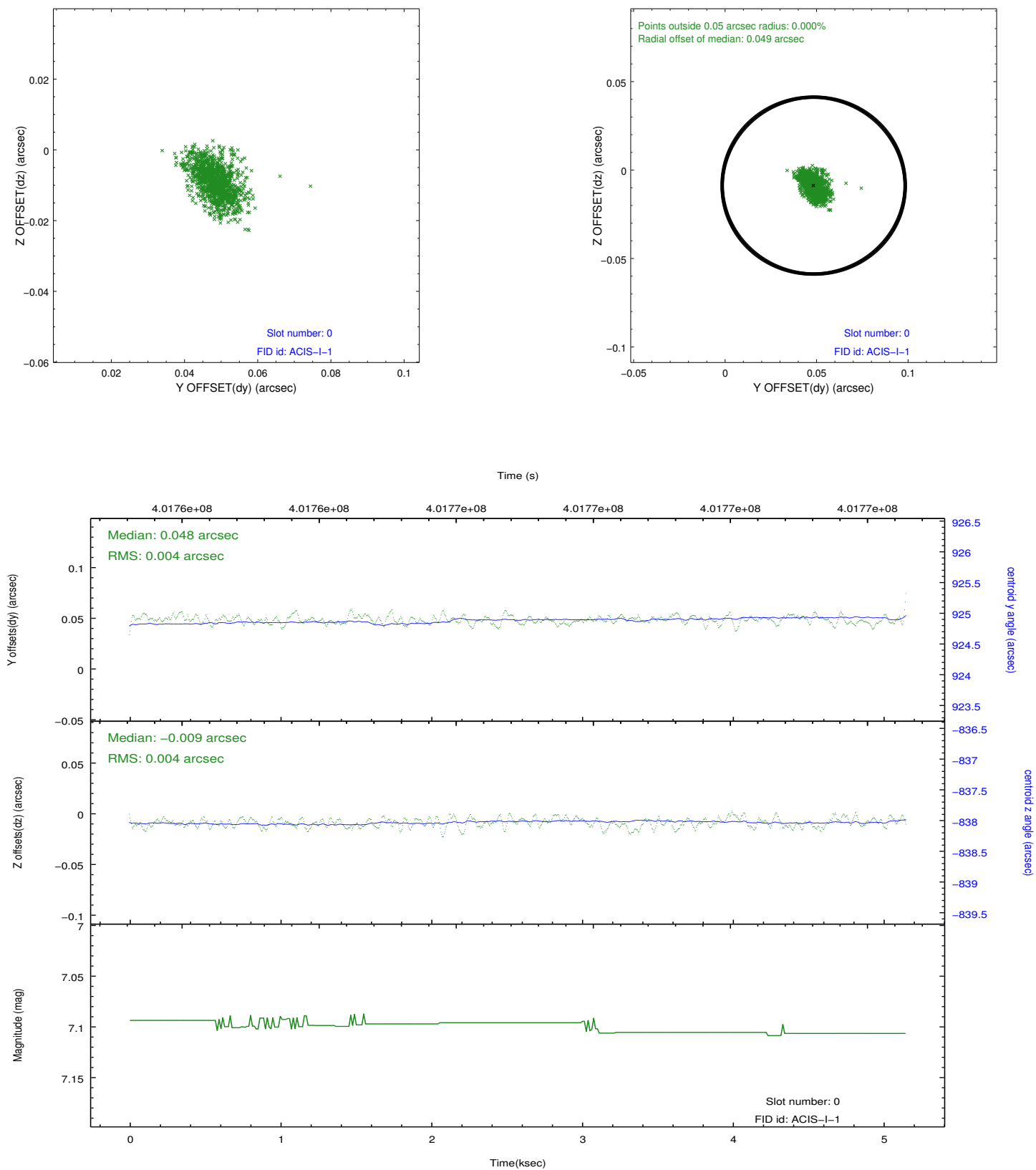


2.4.5 Slot 7

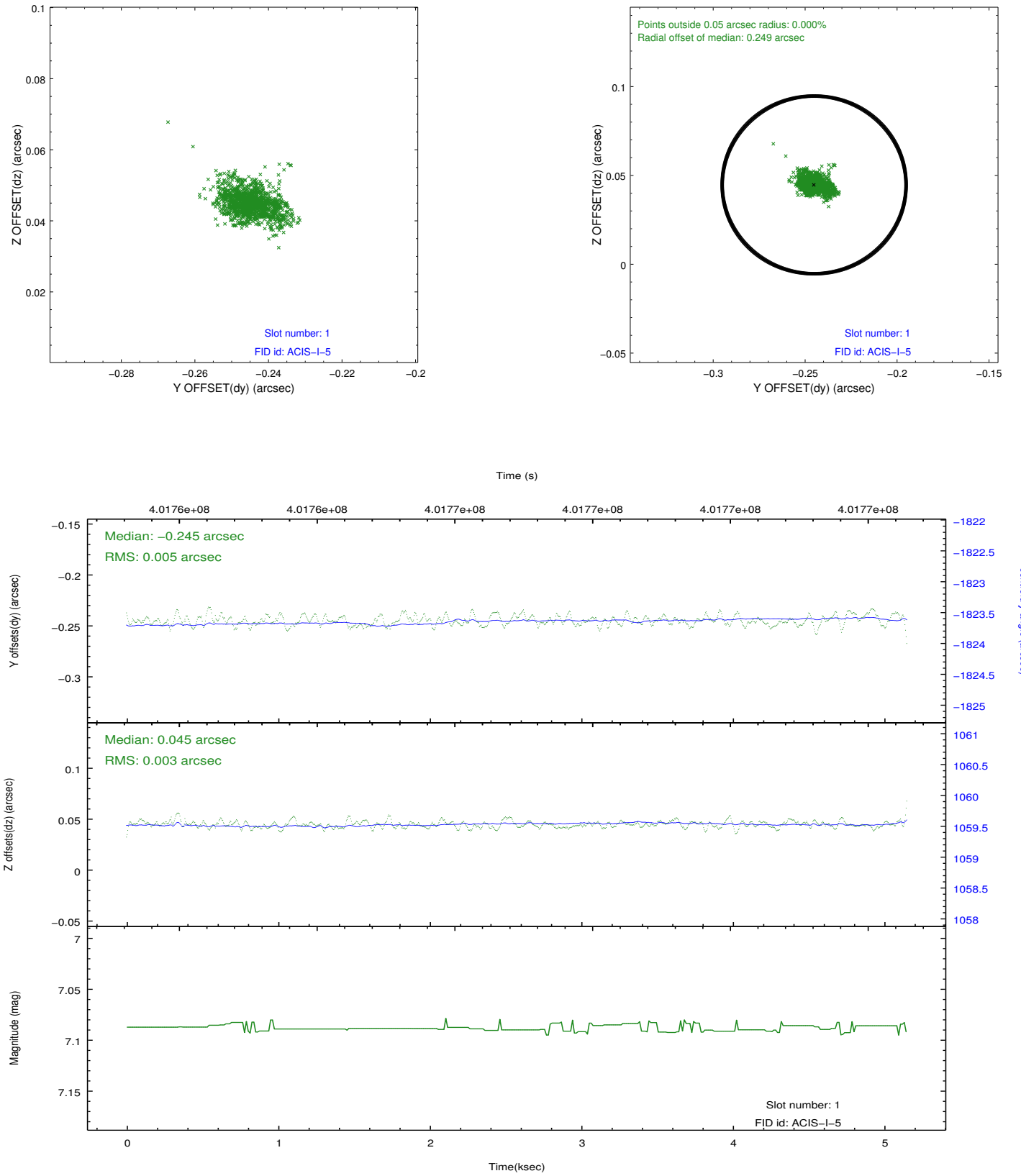


2.5 FID Slots

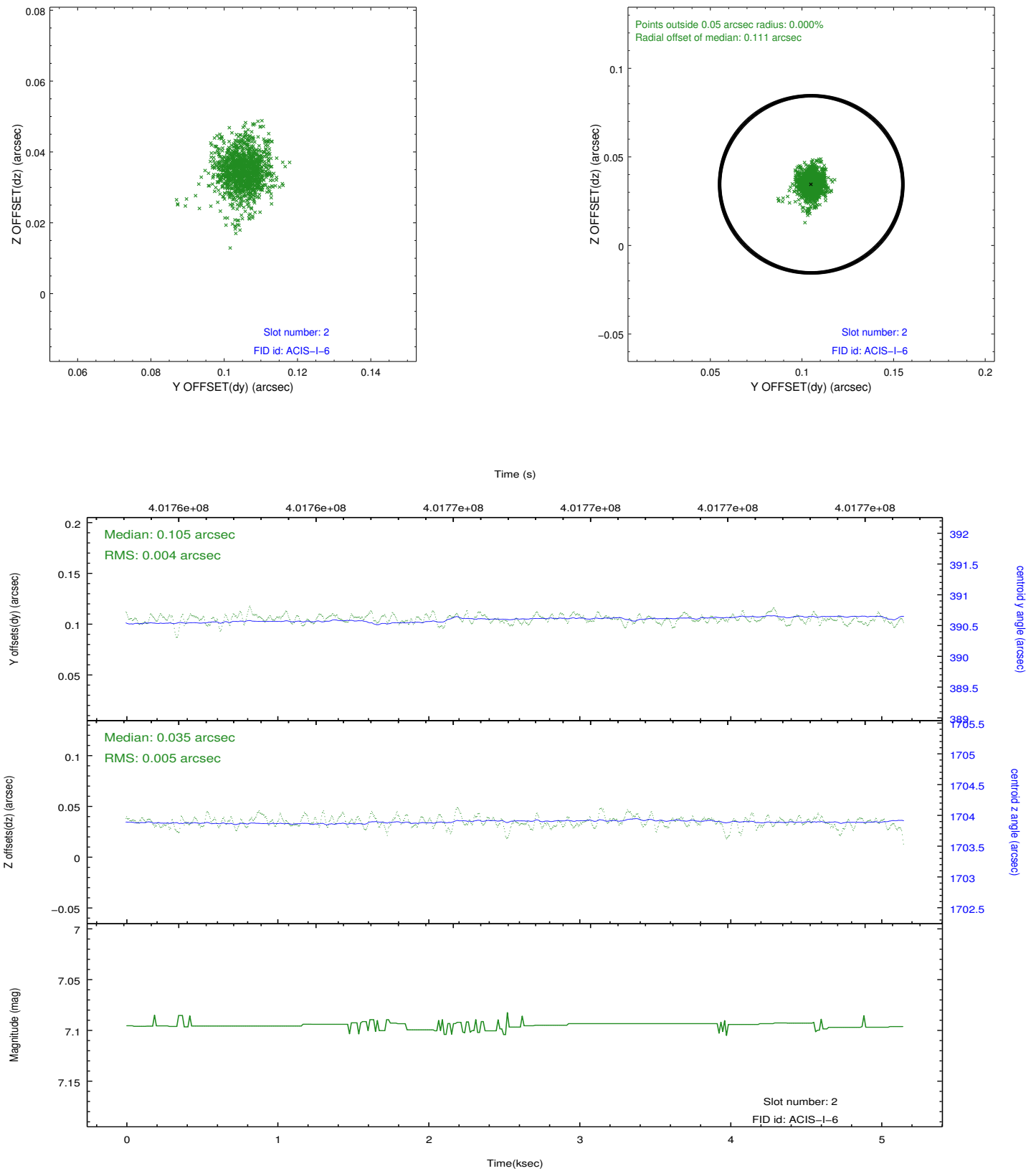
2.5.1 Slot 0



2.5.2 Slot 1



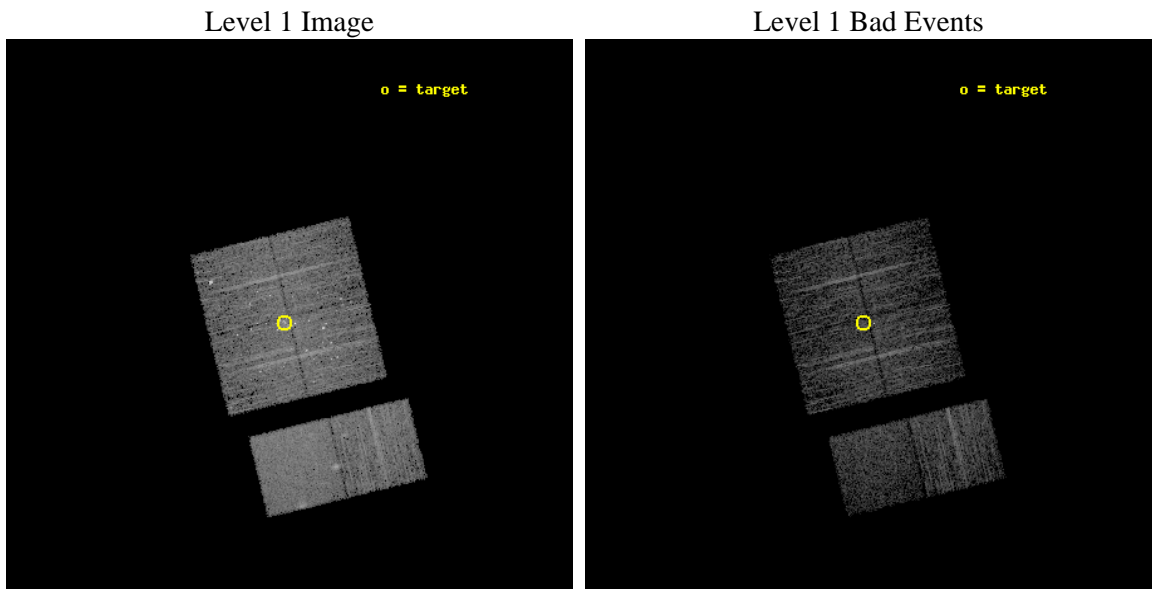
2.5.3 Slot 2



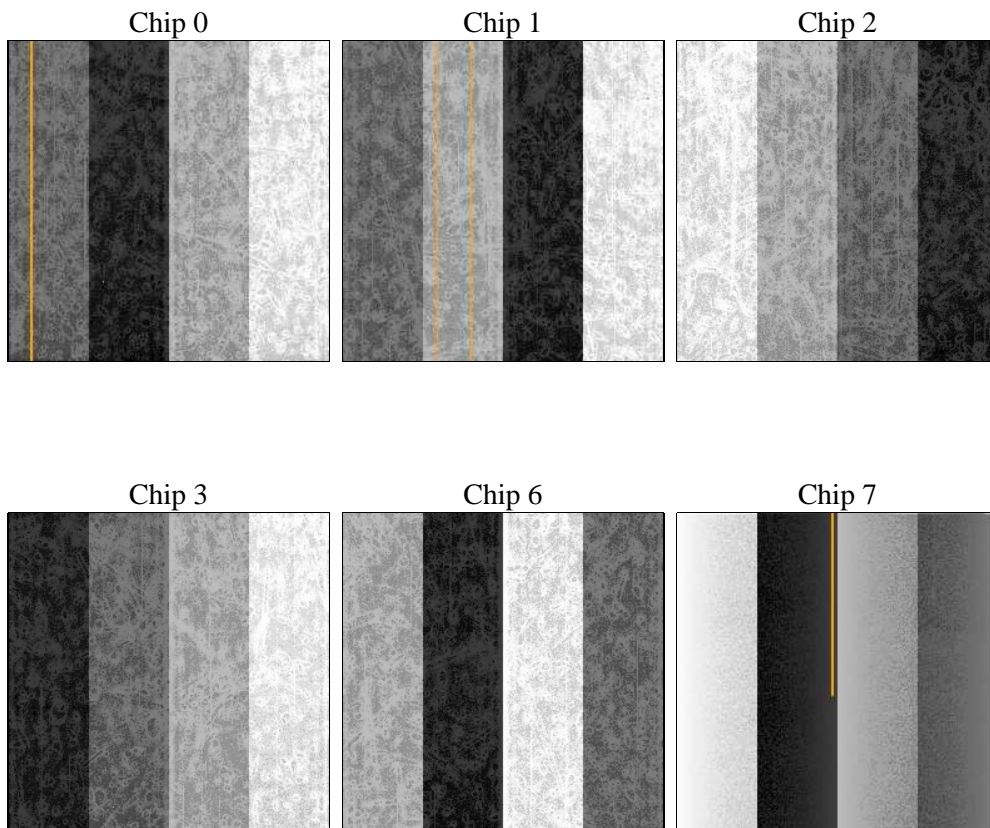
3 OBI Secondary

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	4022.785646975	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	4019.5446748137	Sum of GTIs [s]
date	2012-07-03T23:57:26	Date and time of file creation	ontime1	4022.7856255174	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4022.7857143879	Sum of GTIs [s]
			ontime3	4022.785646975	Sum of GTIs [s]
			ontime6	4022.7857254148	Sum of GTIs [s]
			ontime7	4022.7857570648	Sum of GTIs [s]
			l1events	186502	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	25520	29236	32951	31562	30633	36600	grade 0 events	1812	3780	4255	4157	1391	1700
rejected events	21525	22964	25732	24854	26990	19607		7%	12%	12%	13%	4%	4%
rejected %	84%	78%	78%	78%	88%	53%	grade 1 events	21	28	182	67	18	37
								0%	0%	0%	0%	0%	0%
							grade 2 events	895	939	1291	1059	786	3461
								3%	3%	3%	3%	2%	9%
							grade 3 events	357	416	474	410	363	1511
								1%	1%	1%	1%	1%	4%
							grade 4 events	312	387	498	421	352	1500
								1%	1%	1%	1%	1%	4%
							grade 5 events	1120	1335	1187	1373	1342	3624
								4%	4%	3%	4%	4%	9%
							grade 6 events	620	754	710	668	755	8829
								2%	2%	2%	2%	2%	24%
							grade 7 events	20383	21597	24354	23407	25626	15938
								79%	73%	73%	74%	83%	43%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.07.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.96410947108267

A.2 Comments