

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9524 - L2 Version 2
Chandra X-Ray Center

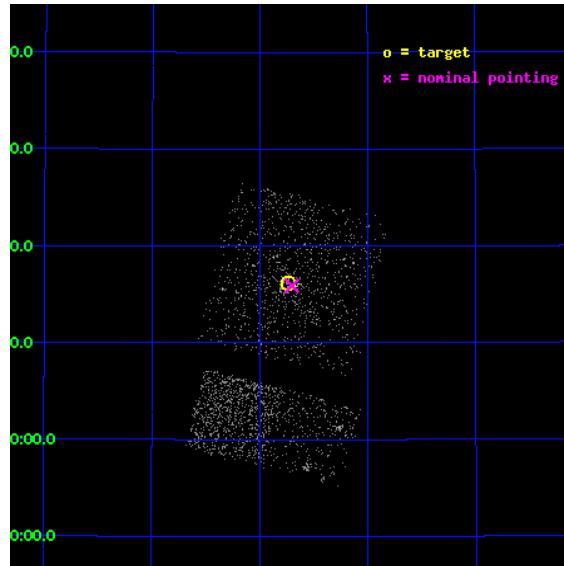
L2 Processing Date : May 22 2012

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1 Front

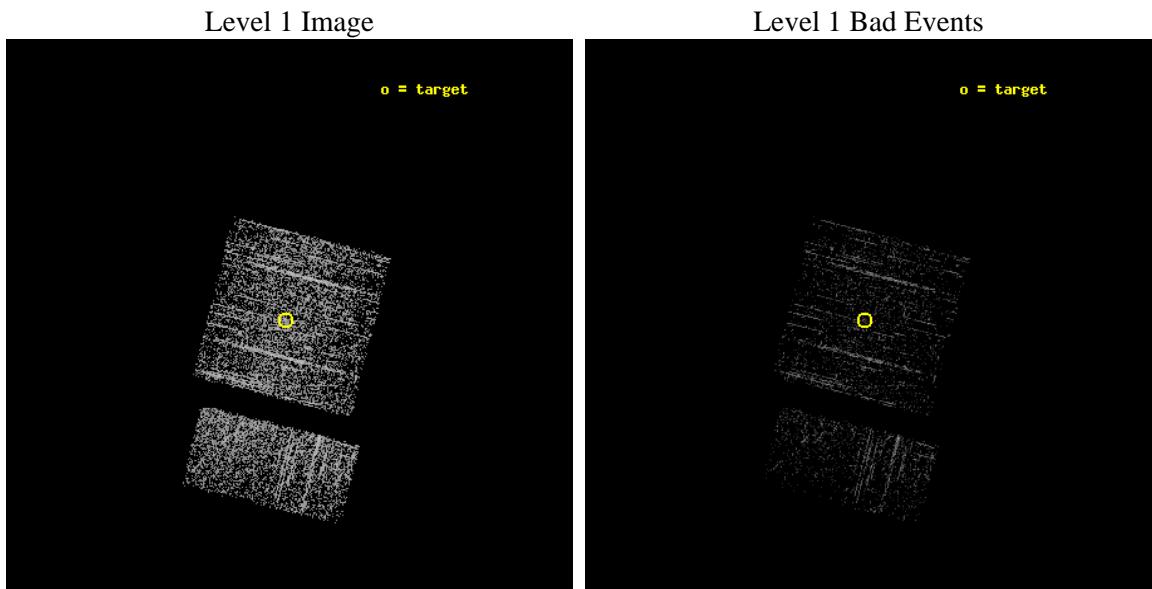
seq_num	600665	Sequence number
obs_id	9524	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[primary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.675773434677	Nominal RA [deg]
dec_nom	41.264703413838	Nominal Dec [deg]
roll_nom	194.12244320241	Nominal Roll [deg]
revision	2	Processing version of data
ontime	981.51703155041	Sum of GTIs [s]
livetime	154.51445650115	Livetime [s]
ontime0	981.51705145836	Sum of GTIs [s]
ontime1	981.51705145836	Sum of GTIs [s]
ontime2	981.51705145836	Sum of GTIs [s]
ontime3	981.51703155041	Sum of GTIs [s]
ontime6	981.51705145836	Sum of GTIs [s]
ontime7	981.51703155041	Sum of GTIs [s]
l2events	2690	Number of level 2 events



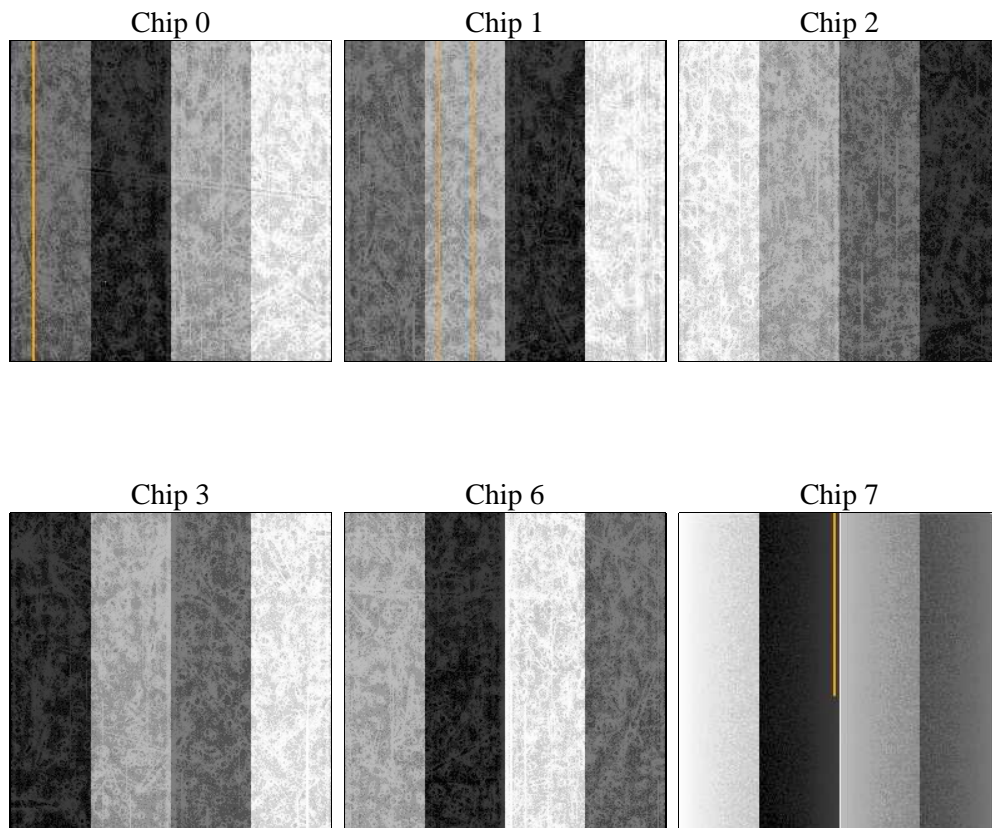
2 OBI Primary

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	8.4.4	Processing system revision	ontime	981.51703155041	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	981.51705145836	Sum of GTIs [s]
date	2012-05-22T21:35:44	Date and time of file creation	ontime1	981.51705145836	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	981.51705145836	Sum of GTIs [s]
			ontime3	981.51703155041	Sum of GTIs [s]
			ontime6	981.51705145836	Sum of GTIs [s]
			ontime7	981.51703155041	Sum of GTIs [s]
			l1events	29183	Number of level 1 events

2.1.4 Events

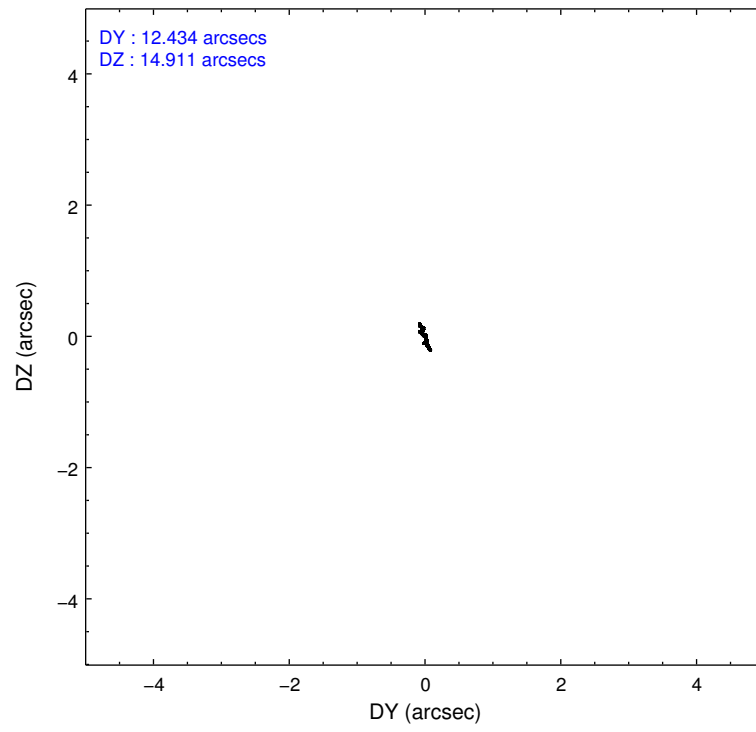
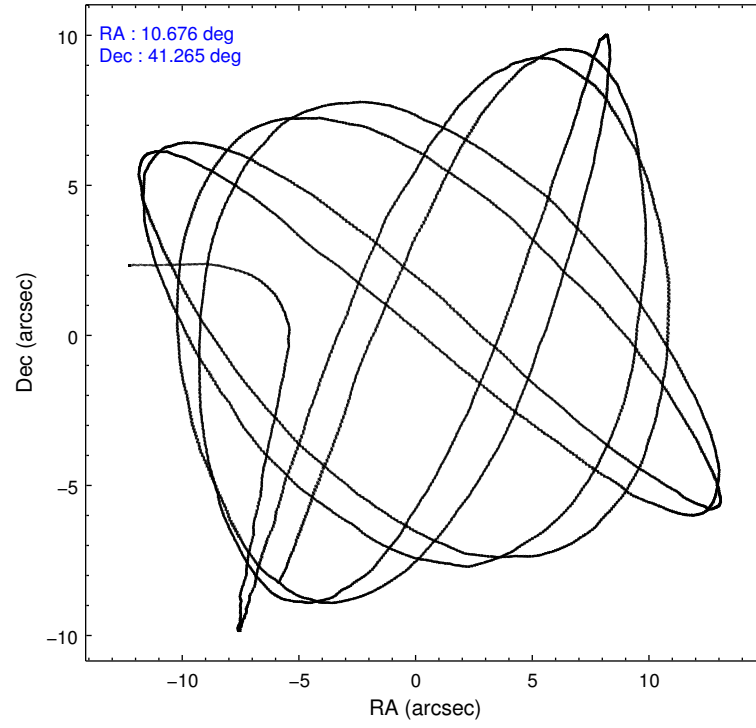
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	4559	4694	4866	5272	5506	4286
rejected events	4169	4292	4409	4791	5113	3279
rejected %	91%	91%	90%	90%	92%	76%

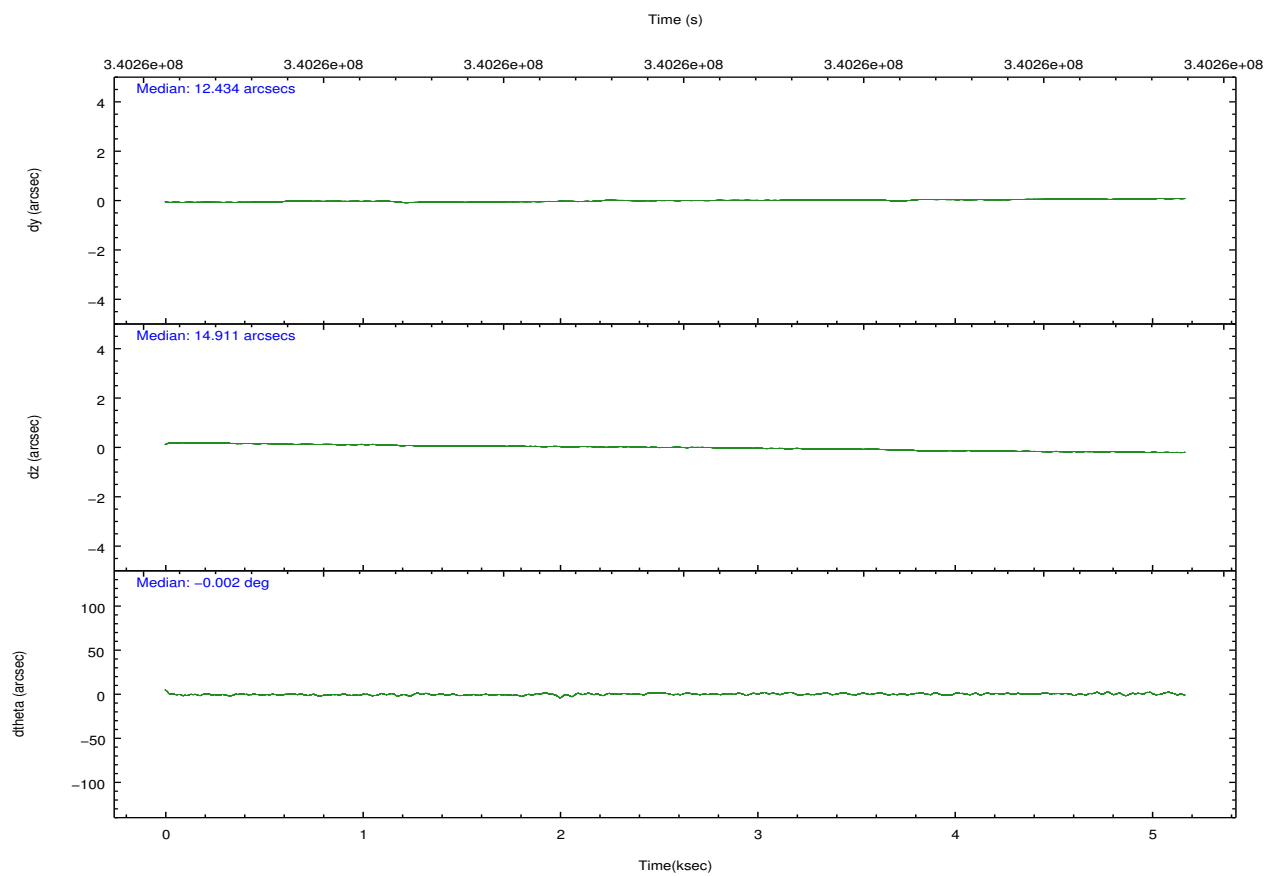
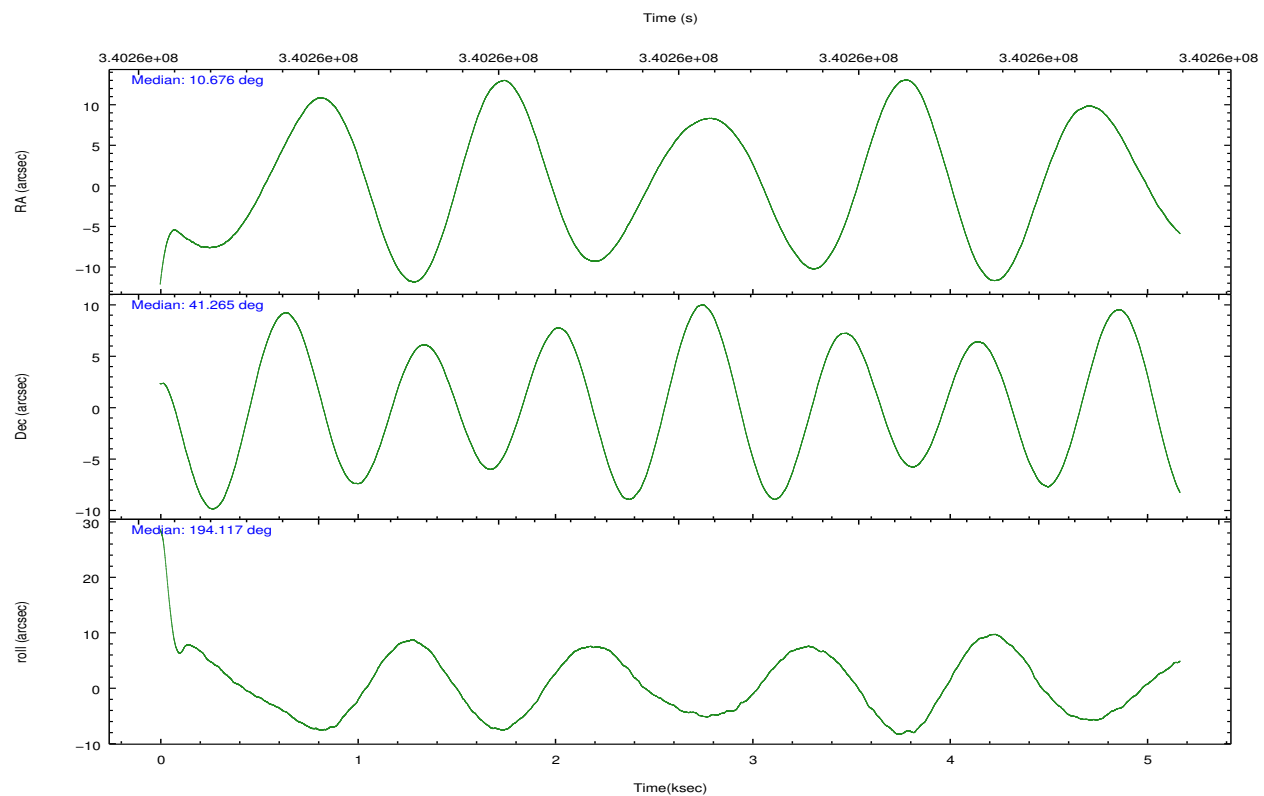
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	139	153	245	285	149	103
	3%	3%	5%	5%	2%	2%
grade 1 events	2	1	6	1	1	1
	0%	0%	0%	0%	0%	0%
grade 2 events	108	96	106	98	115	289
	2%	2%	2%	1%	2%	6%
grade 3 events	60	62	56	56	51	111
	1%	1%	1%	1%	0%	2%
grade 4 events	57	67	53	41	40	123
	1%	1%	1%	0%	0%	2%
grade 5 events	137	162	144	172	176	384
	3%	3%	2%	3%	3%	8%
grade 6 events	80	90	64	74	96	604
	1%	1%	1%	1%	1%	14%
grade 7 events	3976	4063	4192	4545	4878	2671
	87%	86%	86%	86%	88%	62%

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	10.701985	10.67577343467662	CCD I2 on	Y	Y
[deg] Pointing Dec	41.283984	41.26470341383764	CCD I3 on	Y	Y
[deg] Pointing Roll	193.896411	194.122443202411	CCD S0 on	N	N
[s] Window start time (MET)	340243265.184000	340243265.184000	CCD S1 on	N	N
[s] Window stop time (MET)	340848005.184000	340848005.184000	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)	340257540.184000	340255907.69455	On-chip summing requested	N	N
Observation start date	2008-10-13T03:57:55	2008-10-13T03:31:47	Subarray requested	NONE	NONE
[s] Observation end time (MET)	340262540.184000	340263833.50744	Alternating exposures requested	Y	Y
Observation end date	2008-10-13T05:21:15	2008-10-13T05:43:53	[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



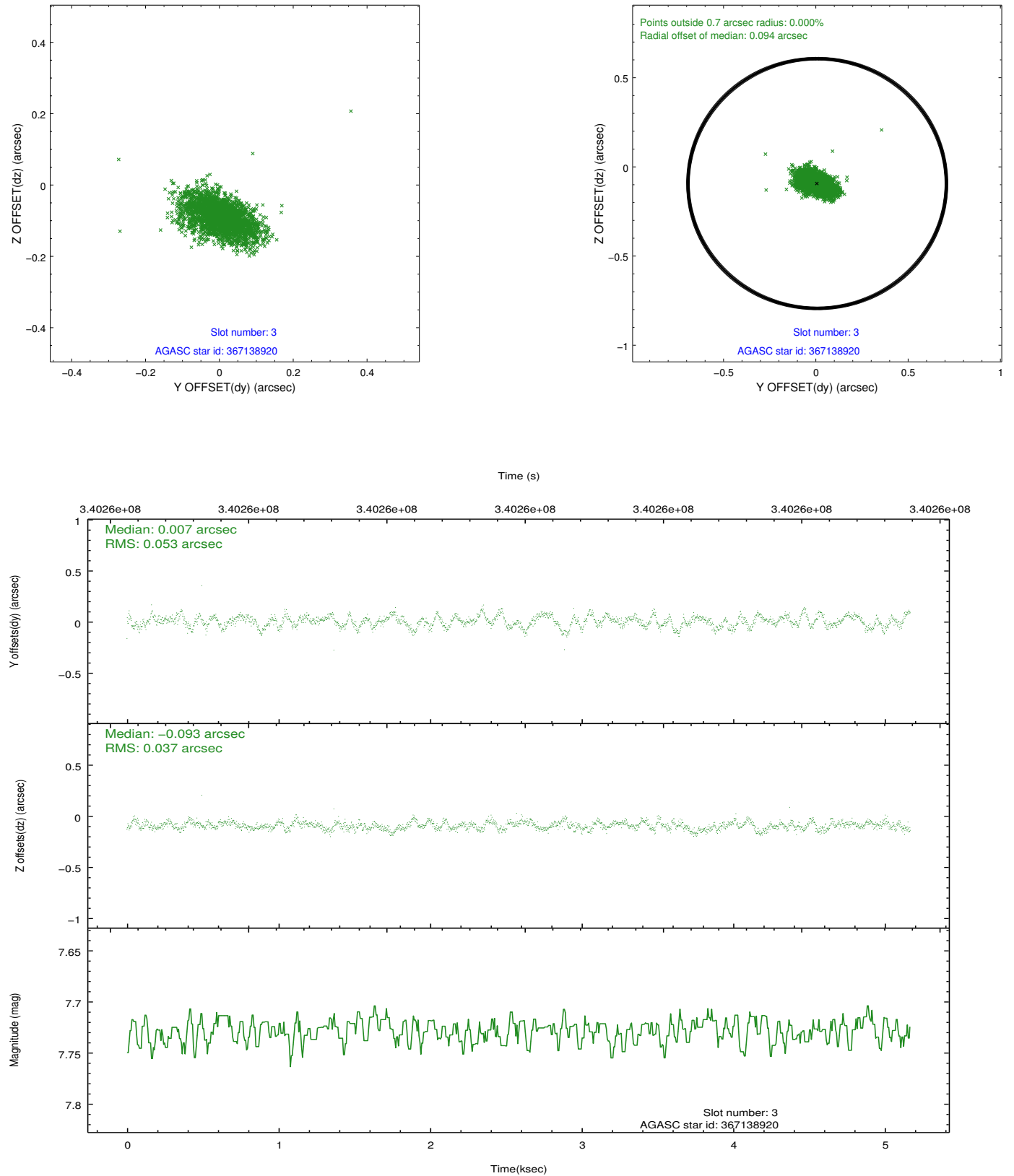


Slot Statistics

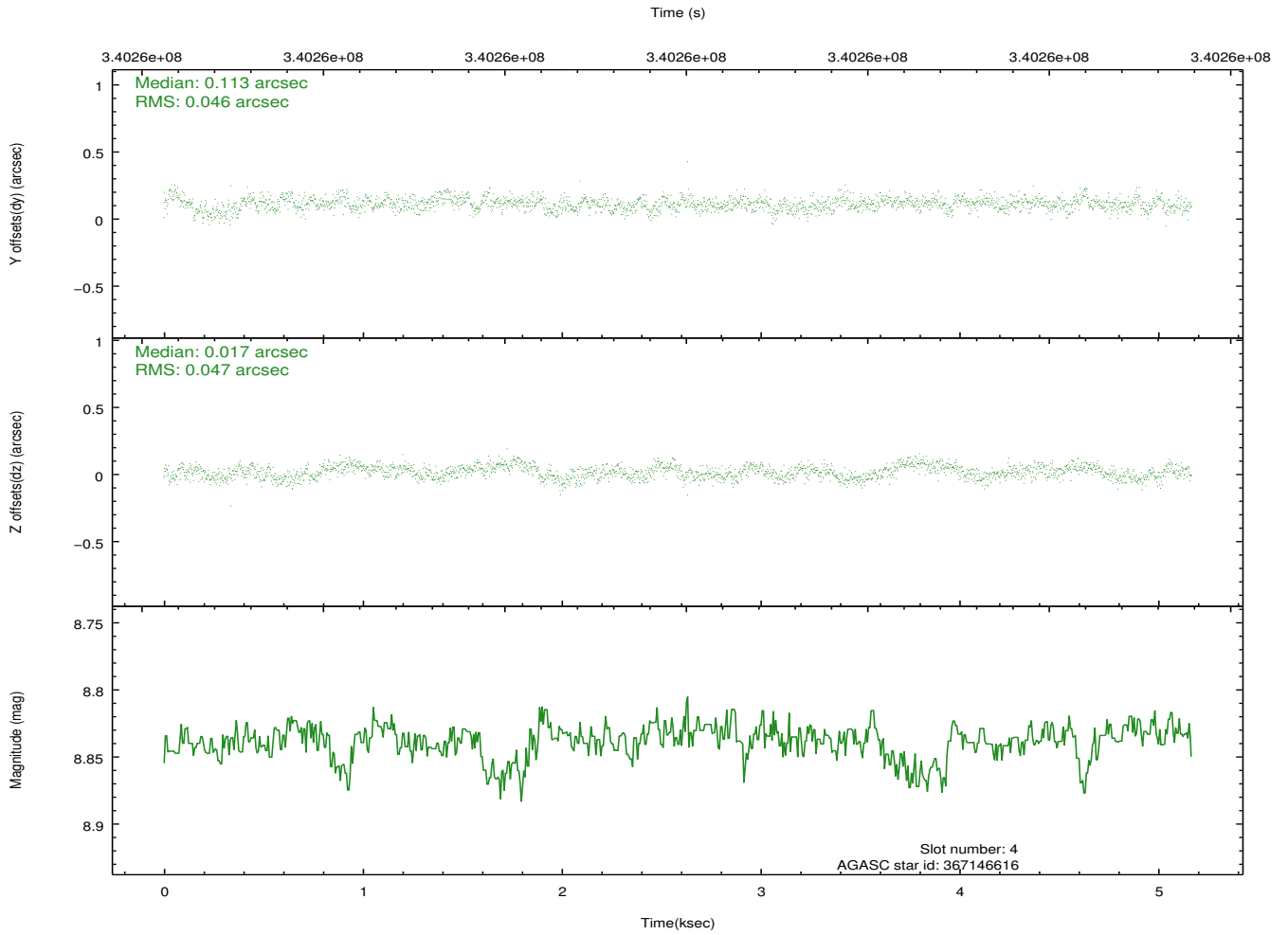
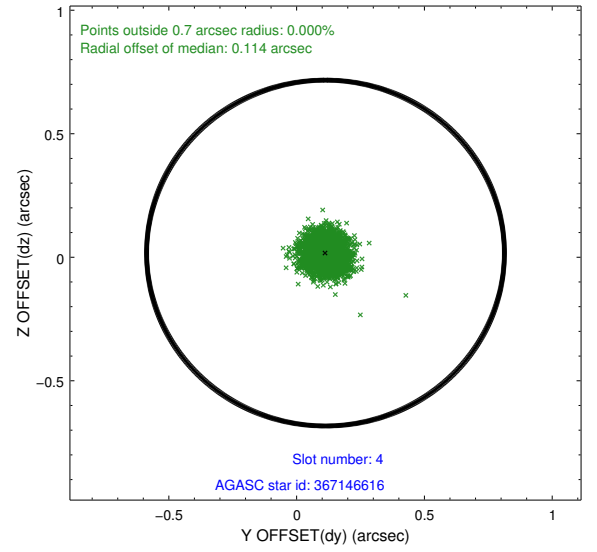
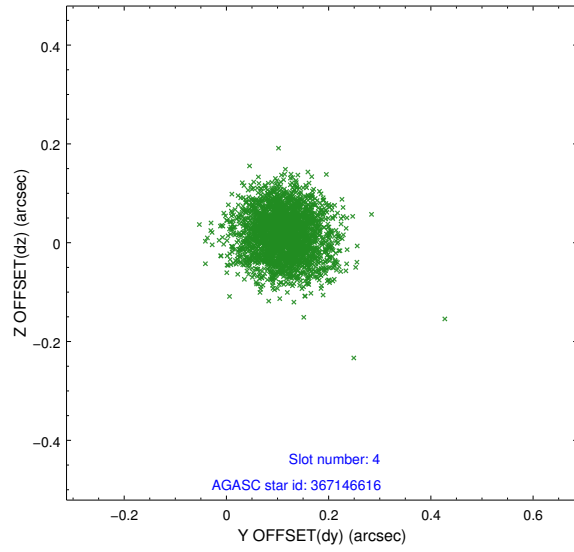
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	1261	-0.069	0.073	0.009	0.014	0.000000	0.000000	927.03	-838.42
1	FID	ACIS-I-2	6.92	1261	-0.120	-0.082	0.006	0.011	0.000000	0.000000	-766.46	-845.60
2	FID	ACIS-I-4	6.93	1261	0.091	0.076	0.006	0.010	0.000000	0.000000	2146.55	1060.79
3	GUIDE	367138920	7.73	2522	0.007	-0.093	0.067	0.115	11.513485	40.808909	-1739.10	2181.92
4	GUIDE	367146616	8.84	2522	0.113	0.017	0.070	0.111	11.418645	41.190163	-1806.13	787.28
5	GUIDE	367148872	7.19	2522	-0.158	-0.167	0.060	0.091	10.505940	40.688258	1033.63	1953.68
6	GUIDE	367663272	9.29	2521	0.013	0.063	0.099	0.157	10.656279	41.699429	-238.62	-1480.21
7	GUIDE	367674552	8.85	2517	0.026	0.180	0.079	0.127	11.016238	41.570845	-1070.08	-800.92

2.4 Star Slots

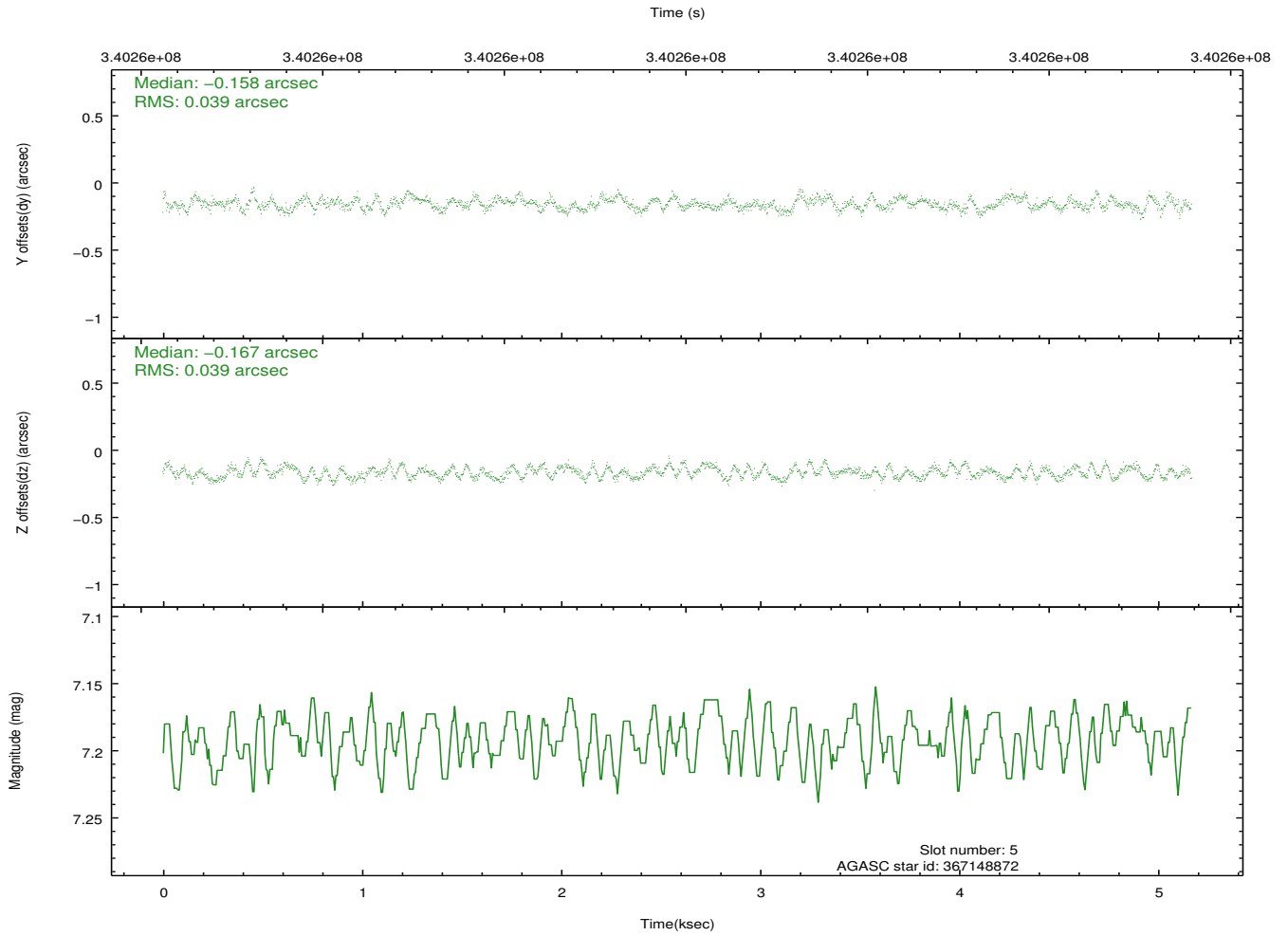
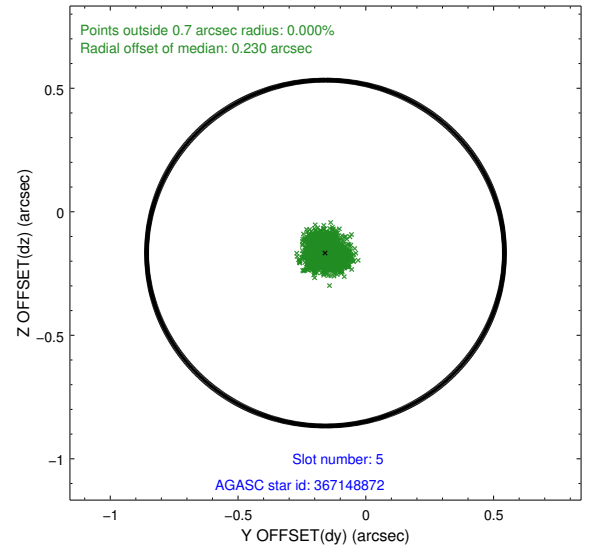
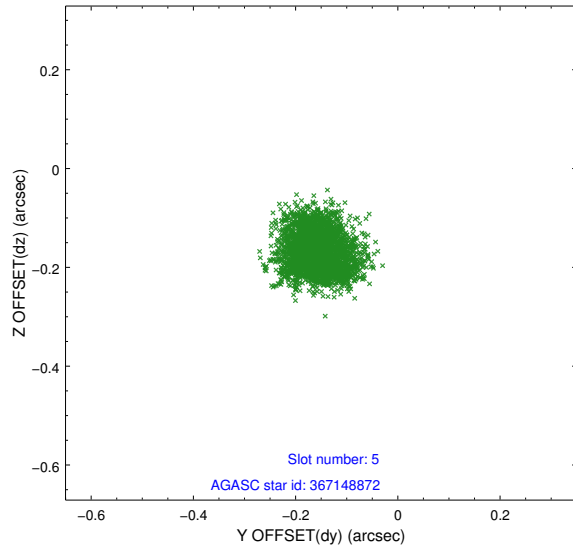
2.4.1 Slot 3



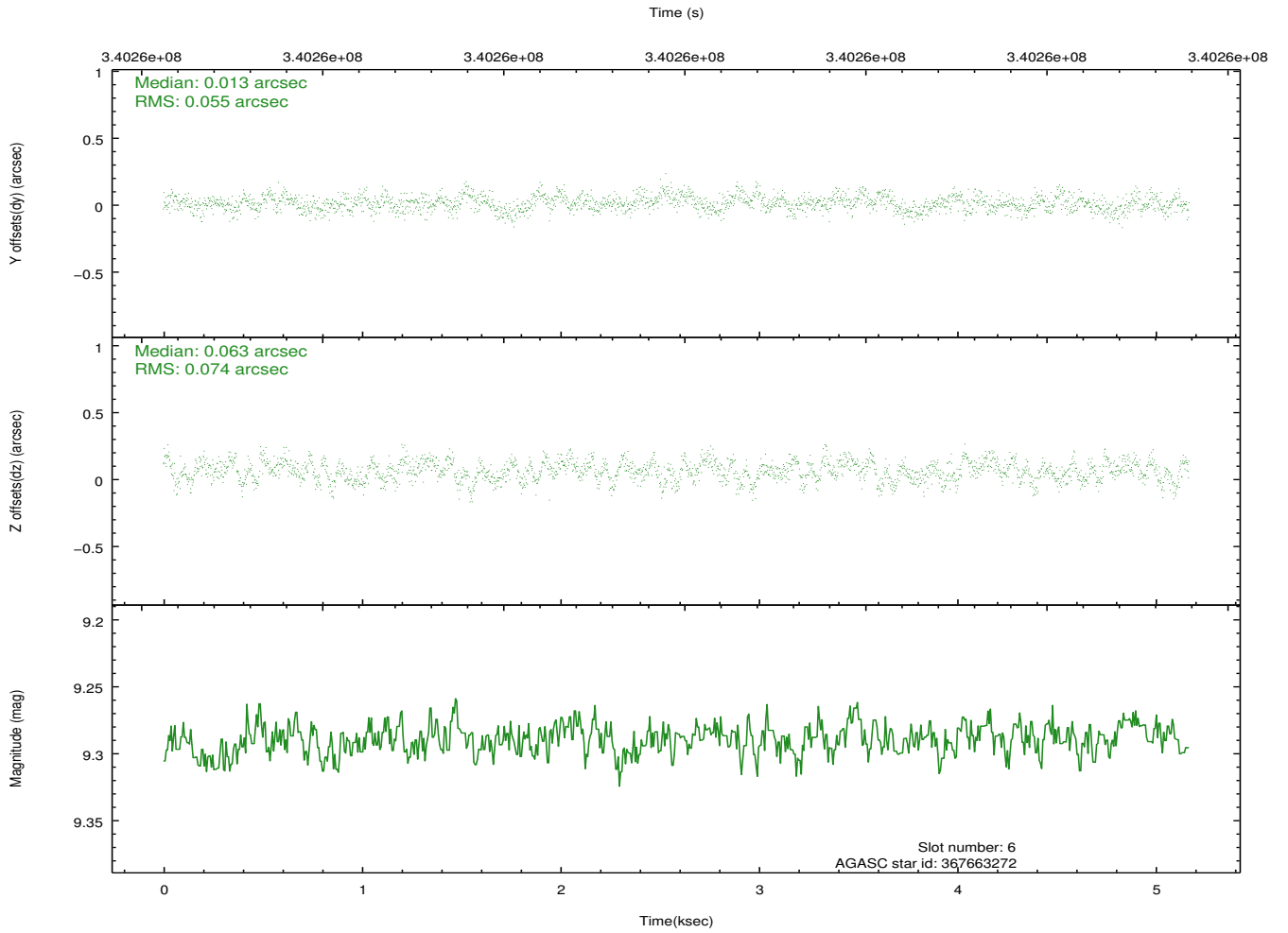
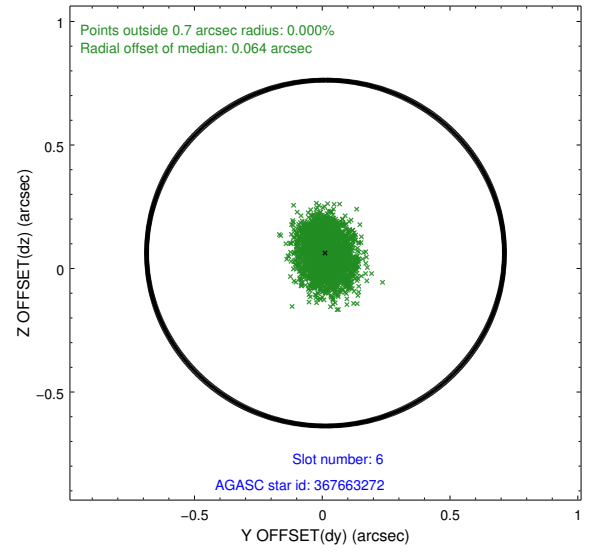
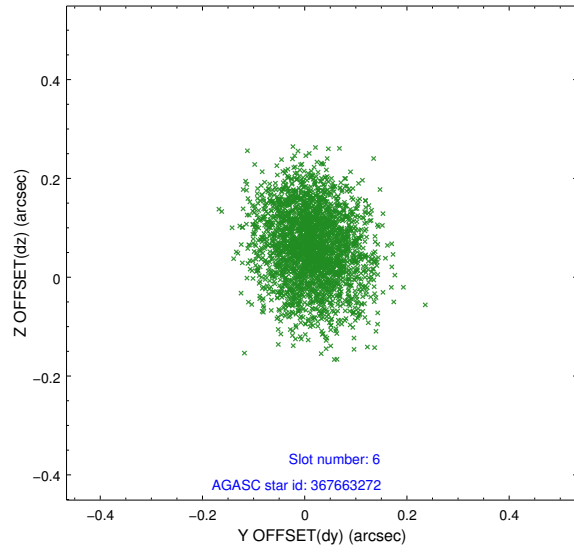
2.4.2 Slot 4



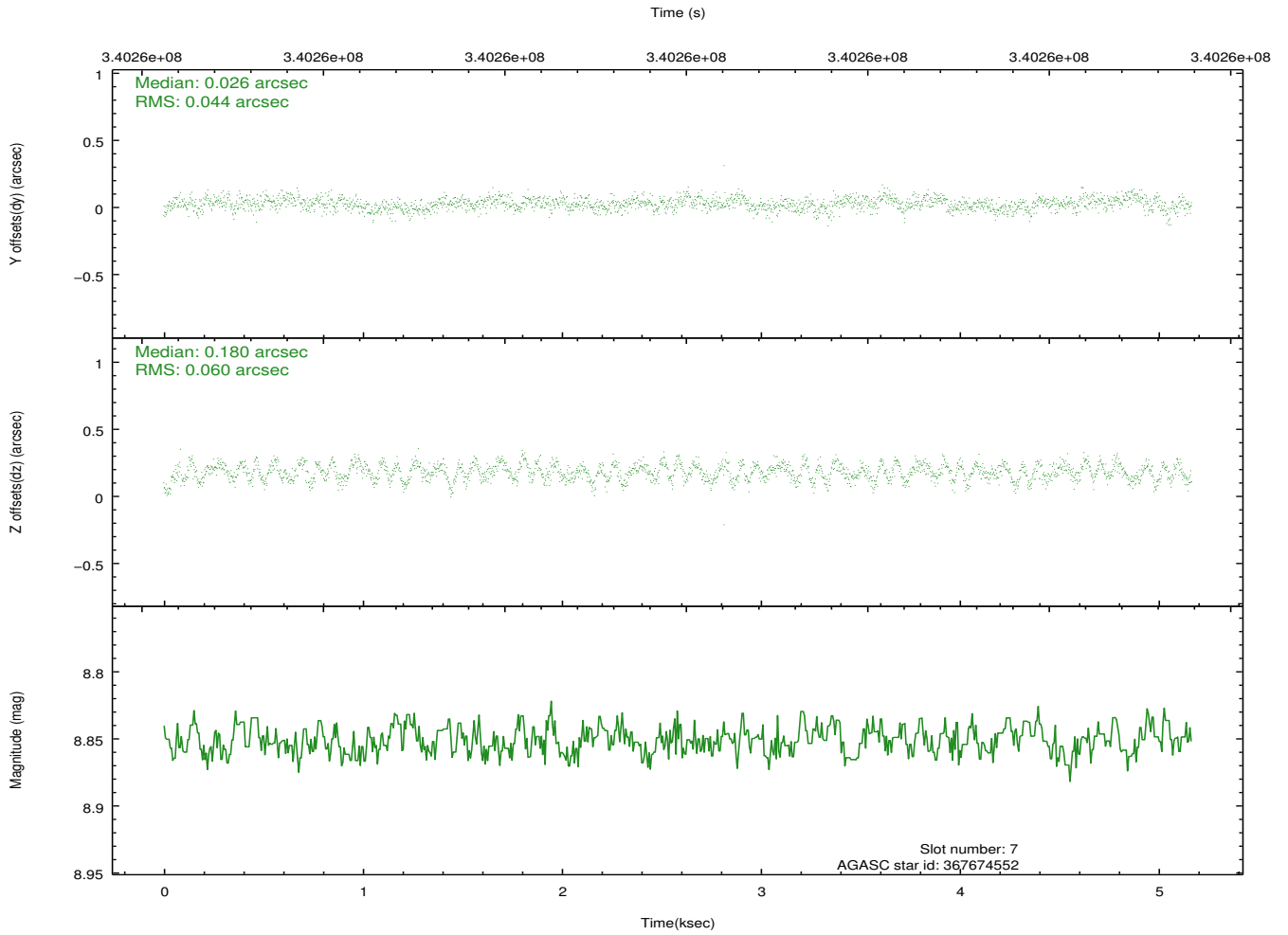
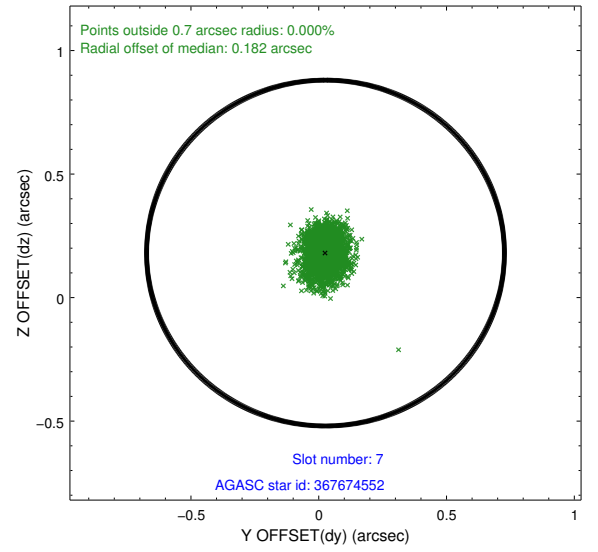
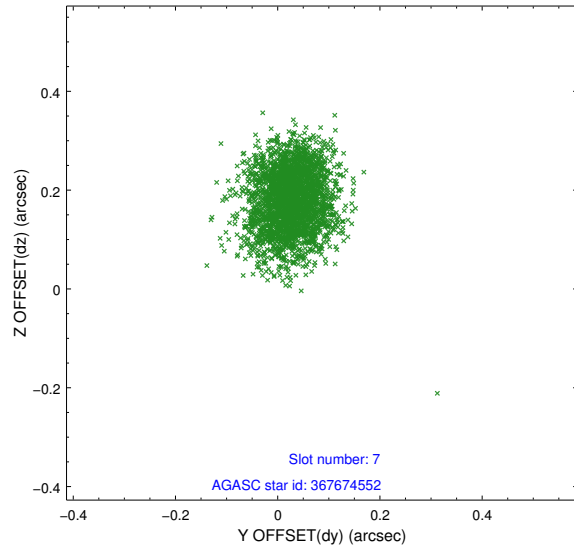
2.4.3 Slot 5



2.4.4 Slot 6

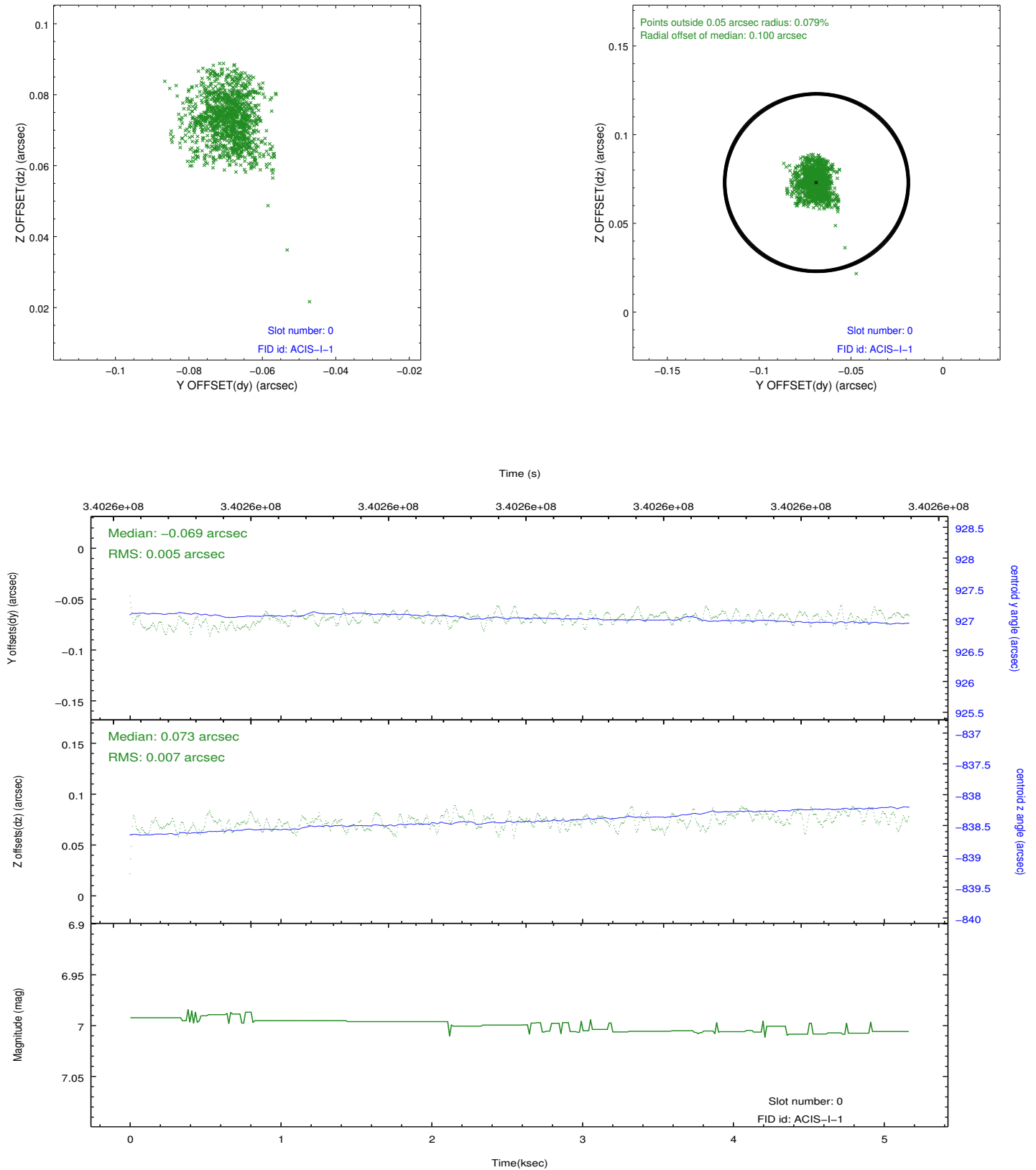


2.4.5 Slot 7

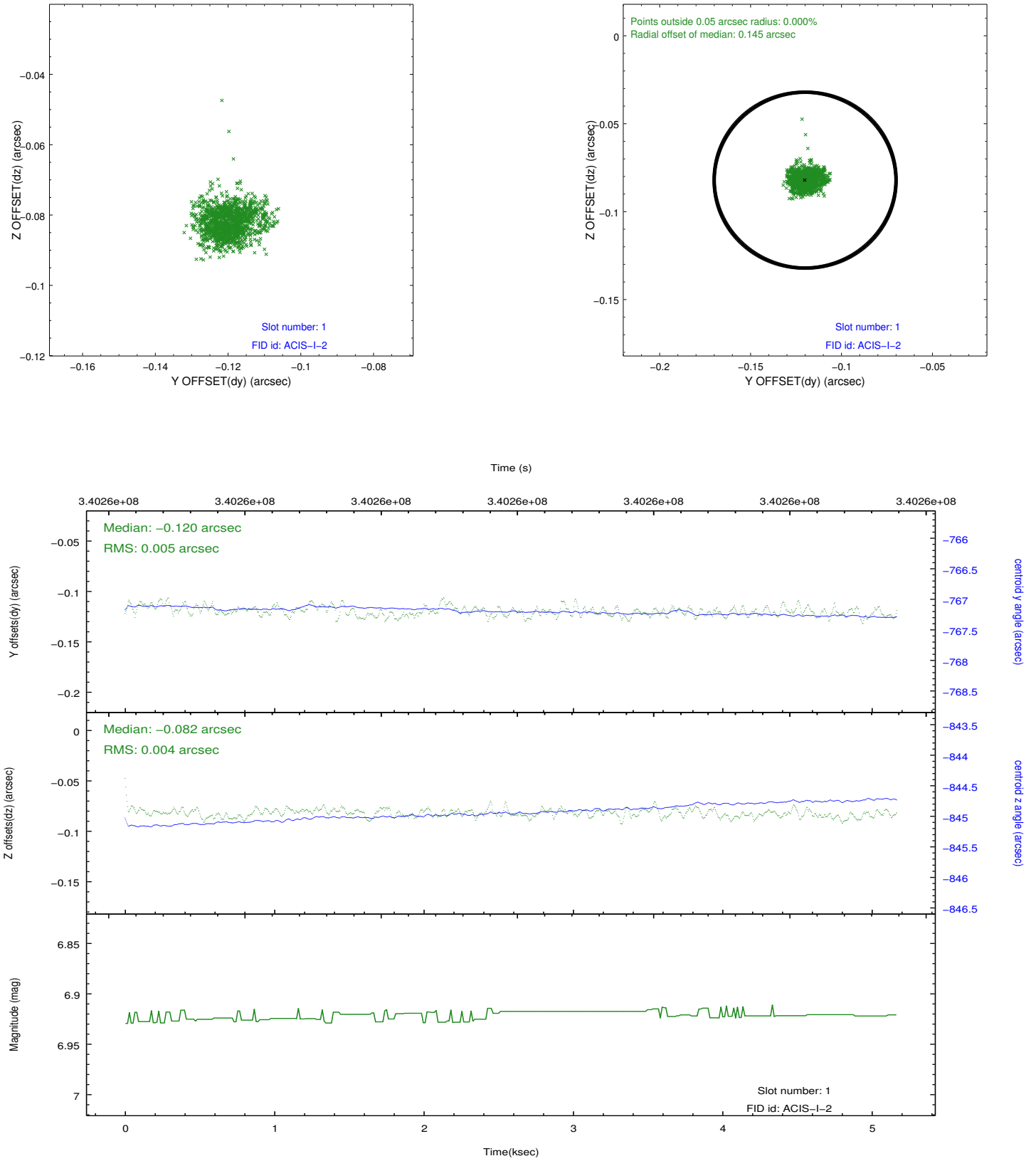


2.5 FID Slots

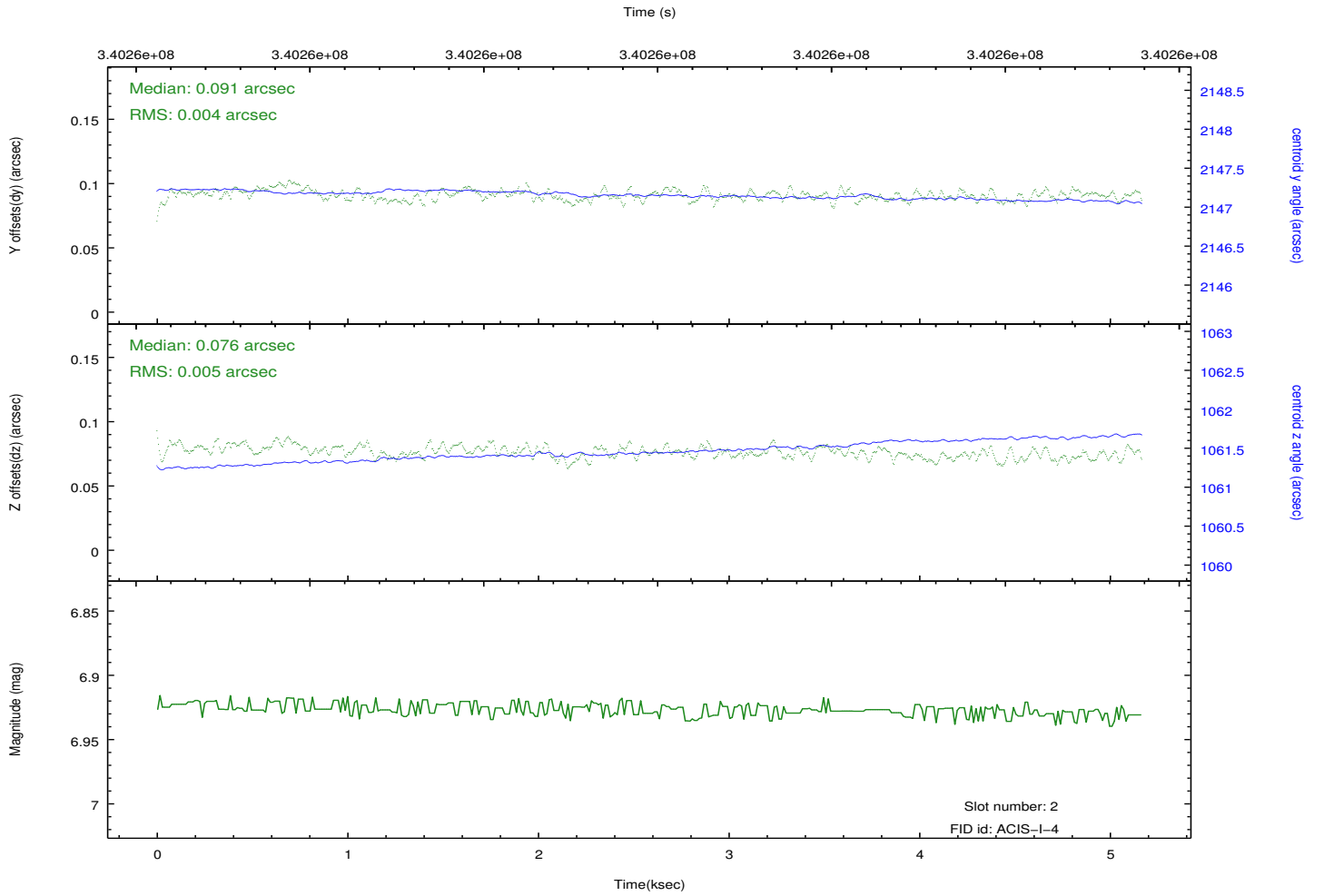
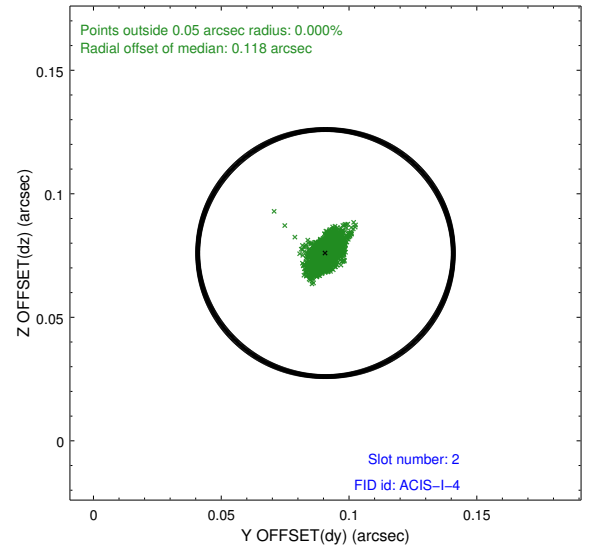
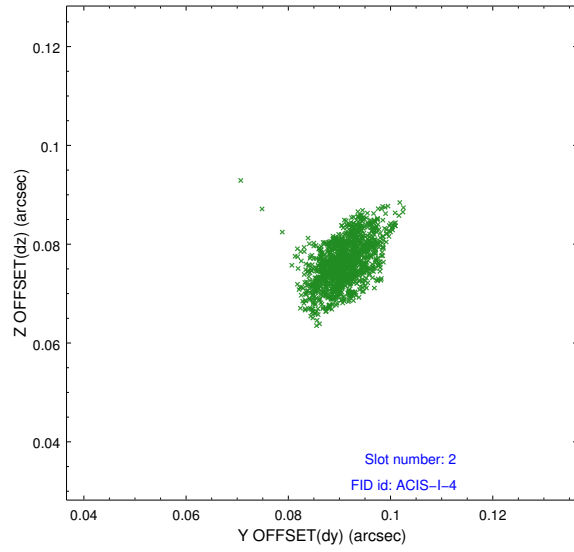
2.5.1 Slot 0



2.5.2 Slot 1



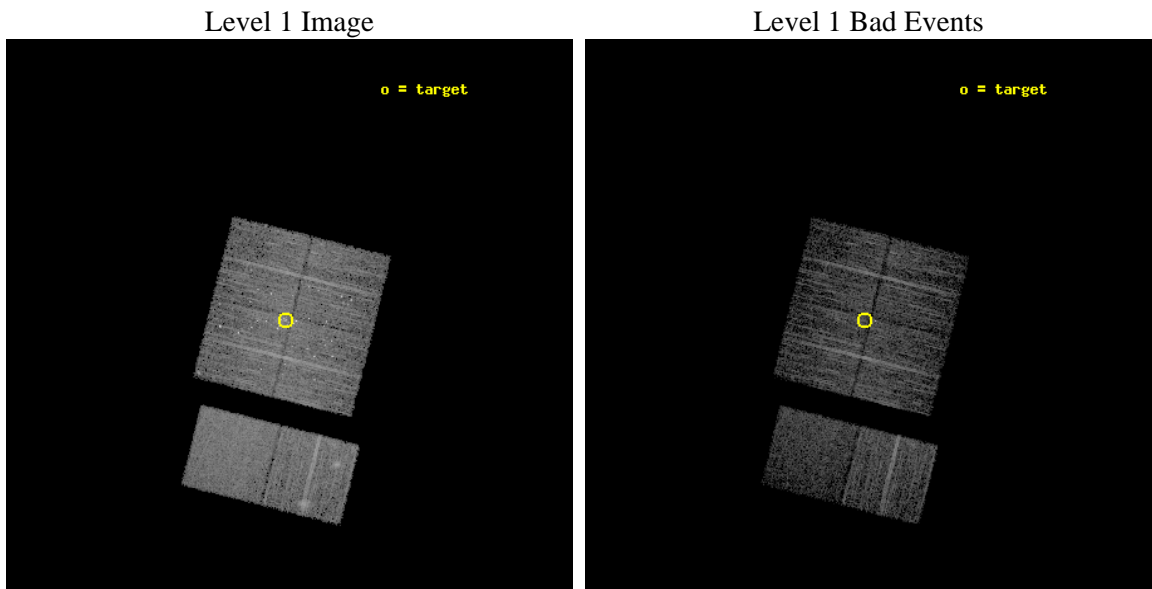
2.5.3 Slot 2



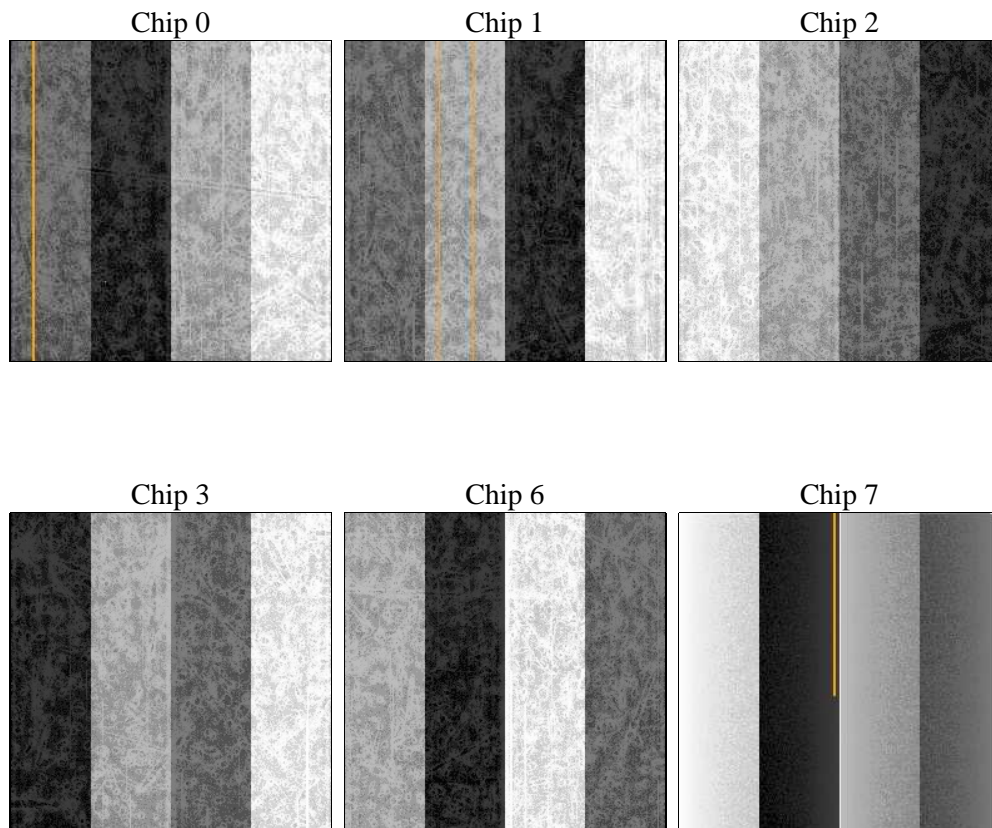
3 OBI Secondary

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	8.4.4	Processing system revision	ontime	4176.1942712069	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	4176.0713195801	Sum of GTIs [s]
date	2012-05-22T21:36:58	Date and time of file creation	ontime1	4172.8715186119	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4176.153488934	Sum of GTIs [s]
			ontime3	4176.1942712069	Sum of GTIs [s]
			ontime6	4176.277127564	Sum of GTIs [s]
			ontime7	4176.235629499	Sum of GTIs [s]
			l1events	264861	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	39644	39223	47019	45809	46229	46937	grade 0 events	2982	3048	4371	5828	2823	1943
rejected events	34360	33767	40001	37325	41097	29266		7%	7%	9%	12%	6%	4%
rejected %	86%	86%	85%	81%	88%	62%	grade 1 events	52	34	201	97	28	70
								0%	0%	0%	0%	0%	0%
							grade 2 events	1198	1187	1453	1371	1126	4301
								3%	3%	3%	2%	2%	9%
							grade 3 events	461	547	580	582	494	2031
								1%	1%	1%	1%	1%	4%
							grade 4 events	512	542	555	572	509	1860
								1%	1%	1%	1%	1%	3%
							grade 5 events	1438	1517	1560	1716	1823	4918
								3%	3%	3%	3%	3%	10%
							grade 6 events	873	991	948	960	987	11053
								2%	2%	2%	2%	2%	23%
							grade 7 events	32128	31357	37351	34683	38439	20761
								81%	79%	79%	75%	83%	44%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1580113

A.2 Comments

Window constraint met.