

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10718 - L2 Version 2
Chandra X-Ray Center

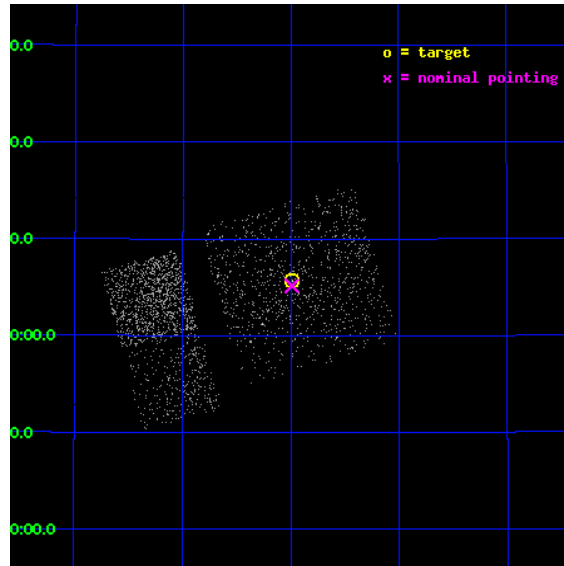
L2 Processing Date : Jun 16 2012

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1 Front

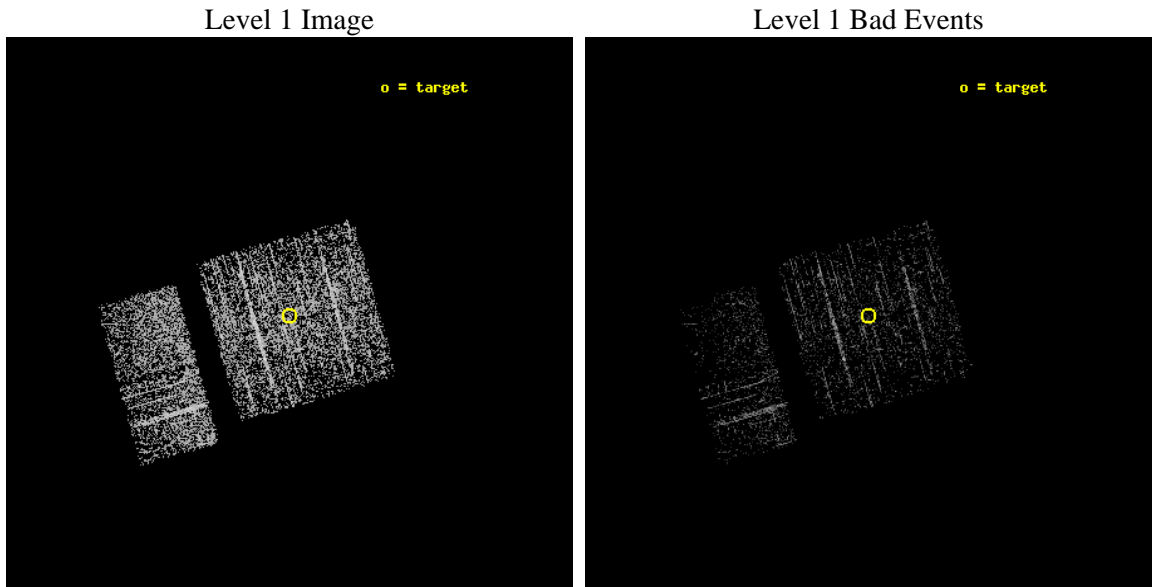
seq_num	600768	Sequence number
obs_id	10718	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[primary] S[econdar
ra_targ	10.497083	Observer's specified target RA [deg]
dec_targ	41.094167	Observer's specified target Dec [deg]
ra_nom	10.497461451802	Nominal RA [deg]
dec_nom	41.086113757081	Nominal Dec [deg]
roll_nom	254.40126542472	Nominal Roll [deg]
revision	2	Processing version of data
ontime	975.5353962183	Sum of GTIs [s]
livetime	153.57280281342	Livetime [s]
ontime0	975.41225624084	Sum of GTIs [s]
ontime1	975.4533162117	Sum of GTIs [s]
ontime2	975.49433624744	Sum of GTIs [s]
ontime3	975.5353962183	Sum of GTIs [s]
ontime6	975.61745625734	Sum of GTIs [s]
ontime7	975.57641625404	Sum of GTIs [s]
l2events	2481	Number of level 2 events



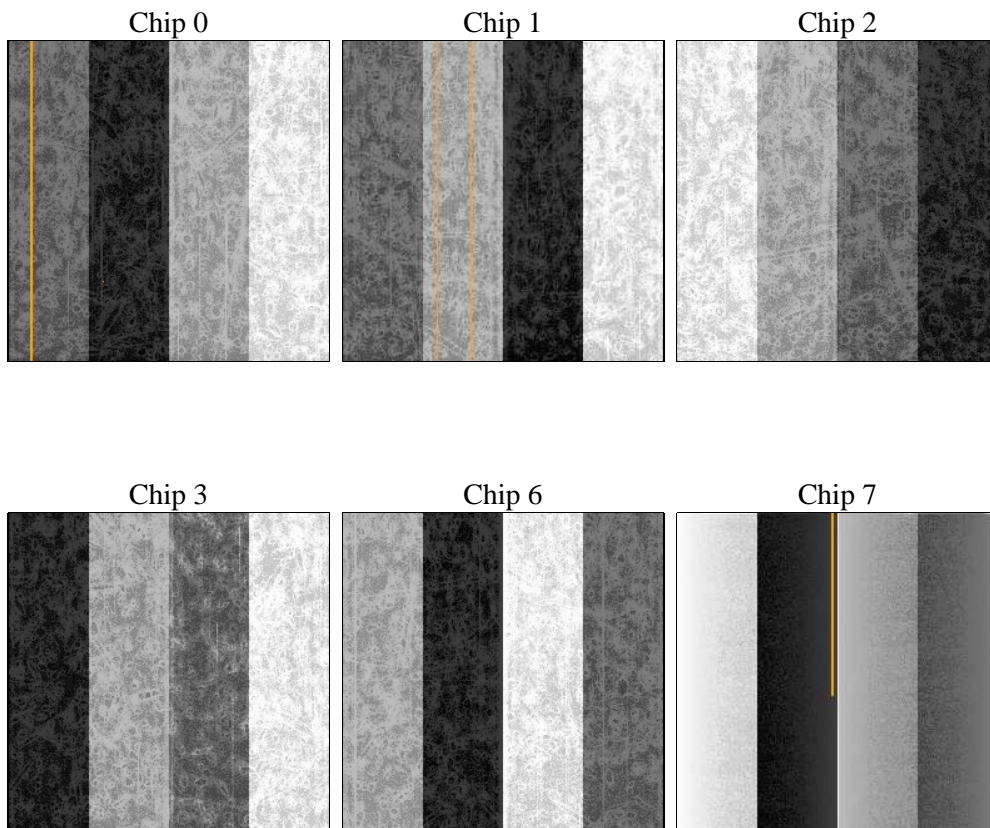
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	975.5353962183	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	975.41225624084	Sum of GTIs [s]
date	2012-06-16T16:48:04	Date and time of file creation	ontime1	975.4533162117	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	975.49433624744	Sum of GTIs [s]
			ontime3	975.5353962183	Sum of GTIs [s]
			ontime6	975.61745625734	Sum of GTIs [s]
			ontime7	975.57641625404	Sum of GTIs [s]
			l1events	25739	Number of level 1 events

2.1.4 Events

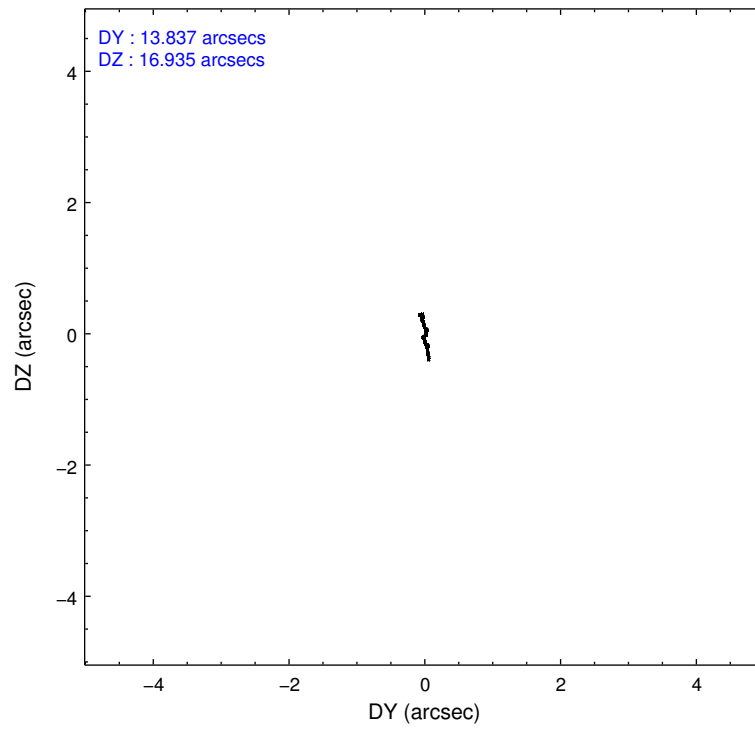
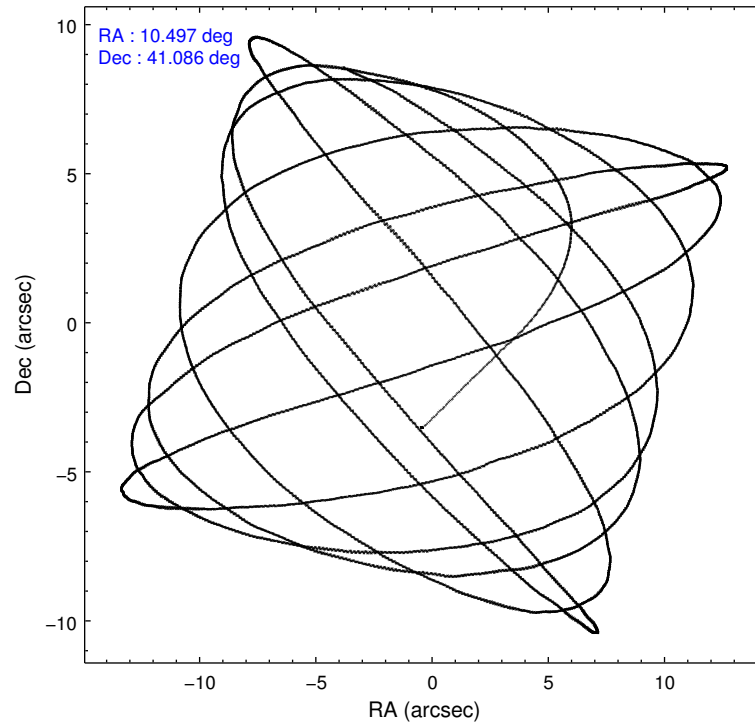
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3635	4306	4309	5026	4632	3831
rejected events	3278	3929	3985	4660	4262	2700
rejected %	90%	91%	92%	92%	92%	70%

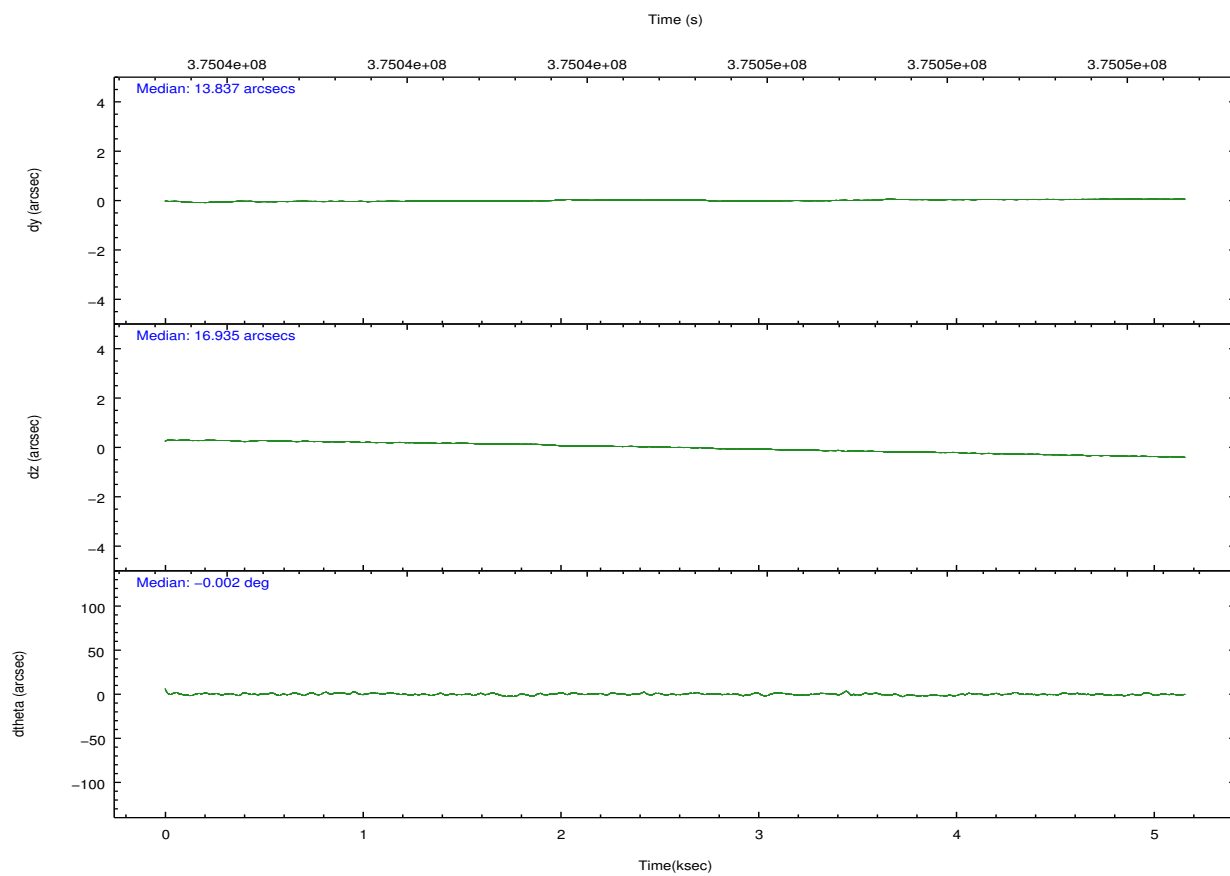
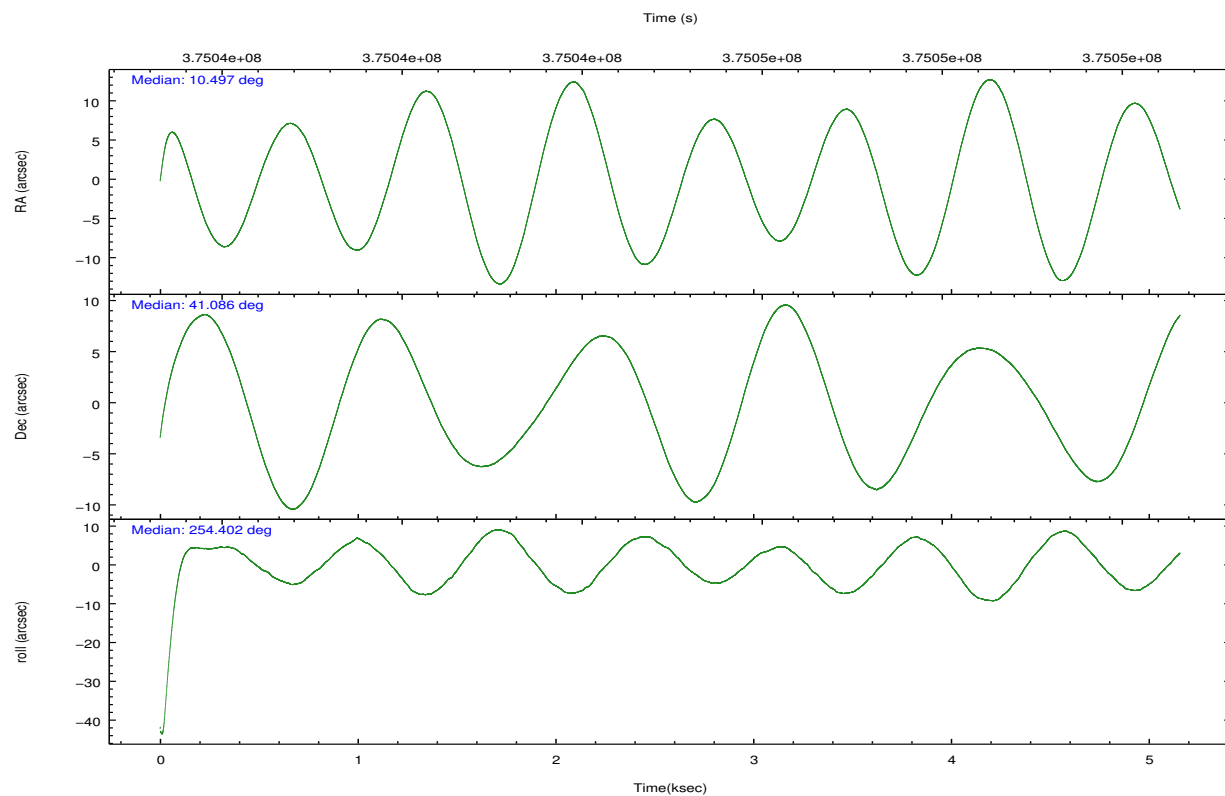
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	95	101	95	116	108	101
	2%	2%	2%	2%	2%	2%
grade 1 events	2	4	2	0	7	10
	0%	0%	0%	0%	0%	0%
grade 2 events	89	99	74	94	96	305
	2%	2%	1%	1%	2%	7%
grade 3 events	49	48	44	41	44	107
	1%	1%	1%	0%	0%	2%
grade 4 events	45	50	49	46	46	119
	1%	1%	1%	0%	0%	3%
grade 5 events	164	172	132	164	169	345
	4%	3%	3%	3%	3%	9%
grade 6 events	82	88	71	80	84	529
	2%	2%	1%	1%	1%	13%
grade 7 events	3109	3744	3842	4485	4078	2315
	85%	86%	89%	89%	88%	60%

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	10.488189	10.49746145180205	CCD I2 on	Y	Y
[deg] Pointing Dec	41.112688	41.08611375708069	CCD I3 on	Y	Y
[deg] Pointing Roll	254.198789	254.4012654247196	CCD S0 on	N	N
[s] Window start time (MET)	374716866.184000	374716866.184000	CCD S1 on	N	N
[s] Window stop time (MET)	375321606.184000	375321606.184000	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)	375043067.184000	375041916.62747	On-chip summing requested	N	N
Observation start date	2009-11-19T18:36:41	2009-11-19T18:18:36	Subarray requested	NONE	NONE
[s] Observation end time (MET)	375048067.184000	375048958.89032	Alternating exposures requested	Y	Y
Observation end date	2009-11-19T20:00:01	2009-11-19T20:15:58	[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



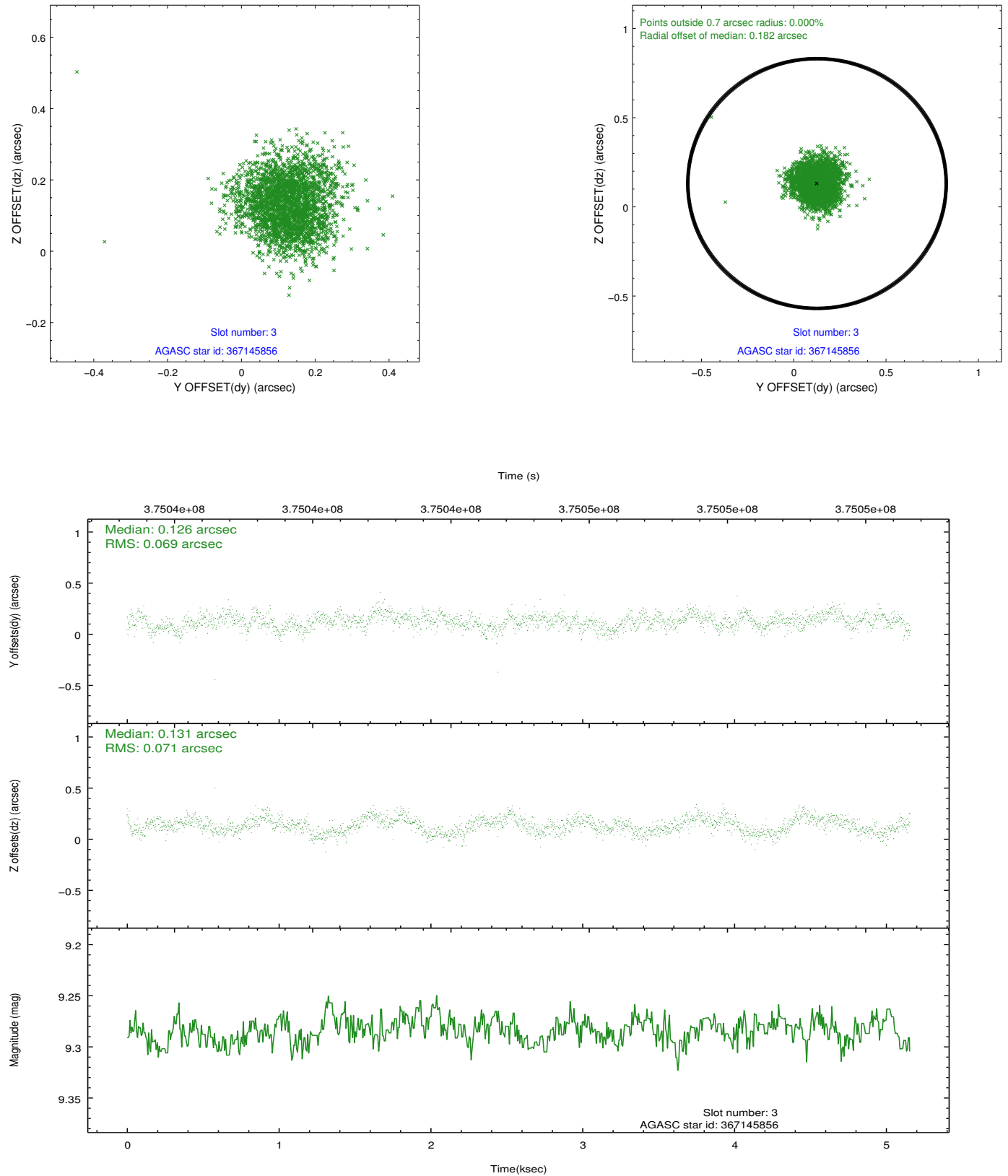


Slot Statistics

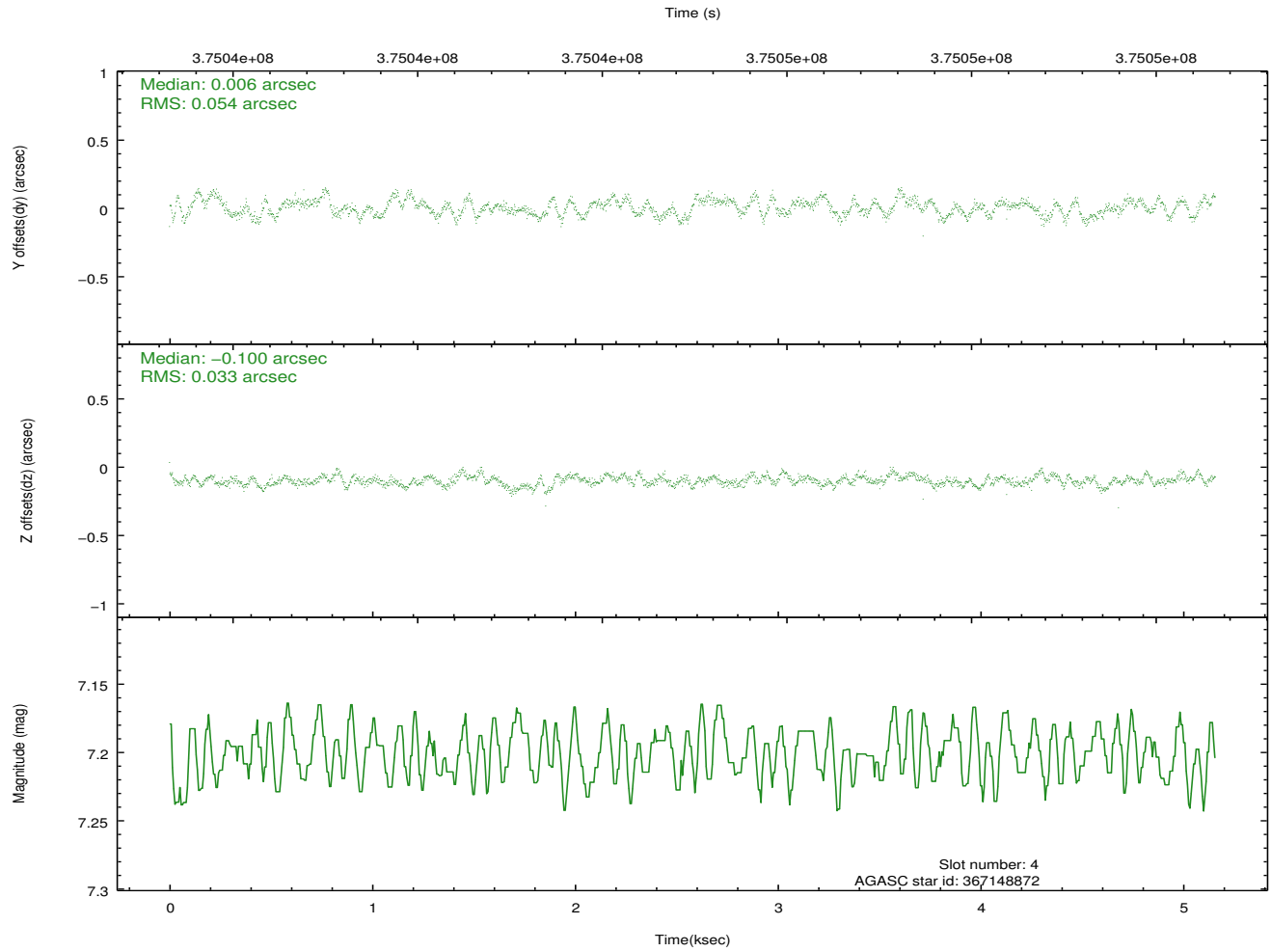
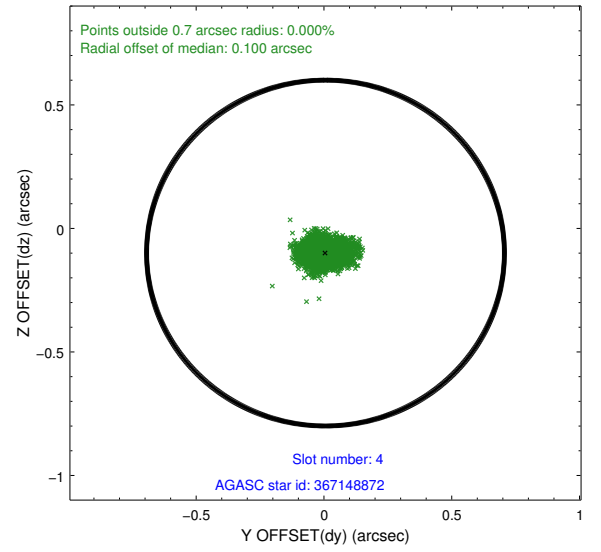
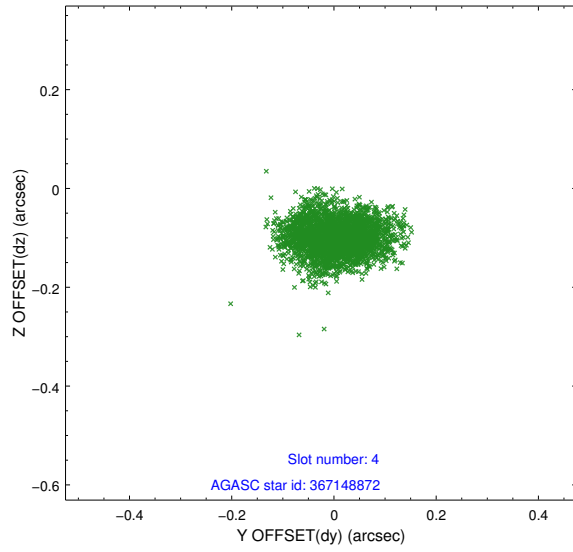
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.01	1258	-0.035	-0.053	0.008	0.014	0.000000	0.000000	925.62	-840.62
1	FID	ACIS-I-2	6.94	1258	-0.185	-0.050	0.007	0.011	0.000000	0.000000	-767.97	-847.65
2	FID	ACIS-I-4	6.93	1258	0.122	0.170	0.006	0.010	0.000000	0.000000	2145.11	1058.82
3	GUIDE	367145856	9.28	2515	0.126	0.131	0.104	0.166	10.744946	40.402085	2269.36	1373.63
4	GUIDE	367148872	7.20	2517	0.006	-0.100	0.069	0.108	10.505940	40.688258	1458.75	463.21
5	GUIDE	367663272	9.30	2514	-0.009	0.217	0.087	0.143	10.656279	41.699429	-2154.54	-140.78
6	GUIDE	367674552	8.84	2514	-0.025	0.003	0.068	0.111	11.016238	41.570845	-1979.09	918.30
7	GUIDE	367146616	8.86	2516	-0.096	-0.252	0.081	0.130	11.418645	41.190163	-968.43	2345.94

2.4 Star Slots

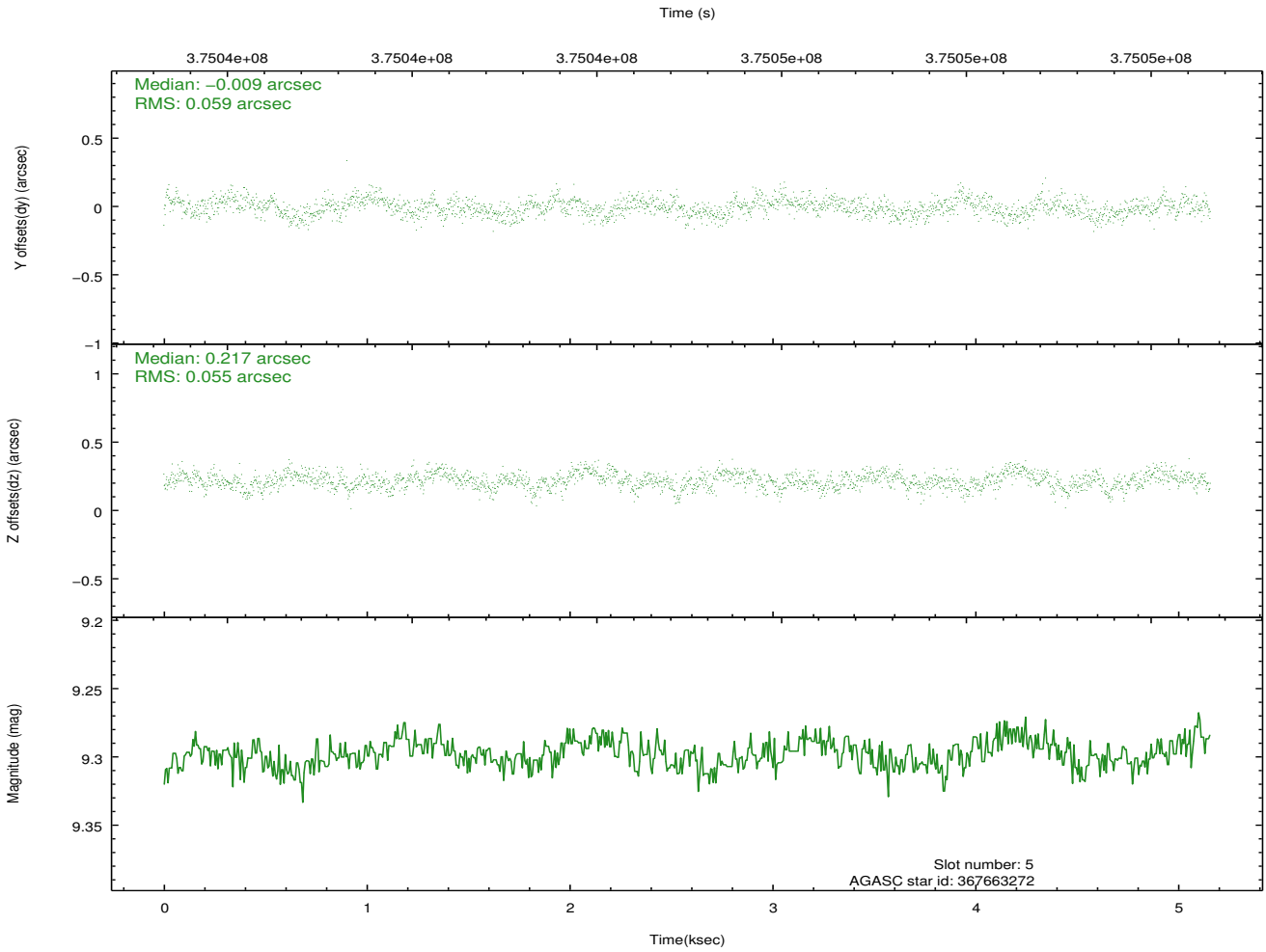
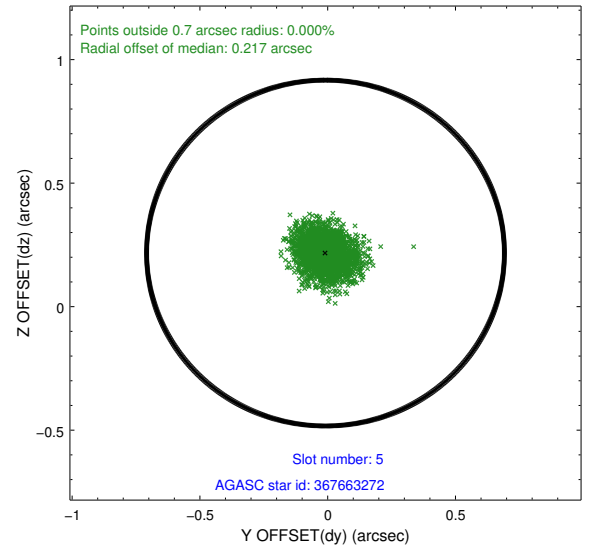
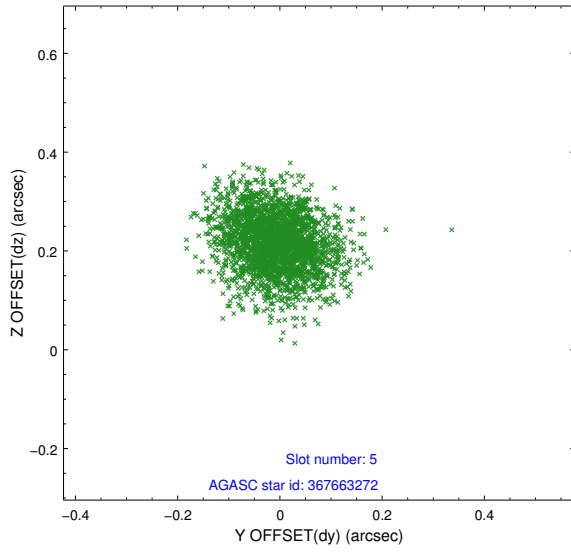
2.4.1 Slot 3



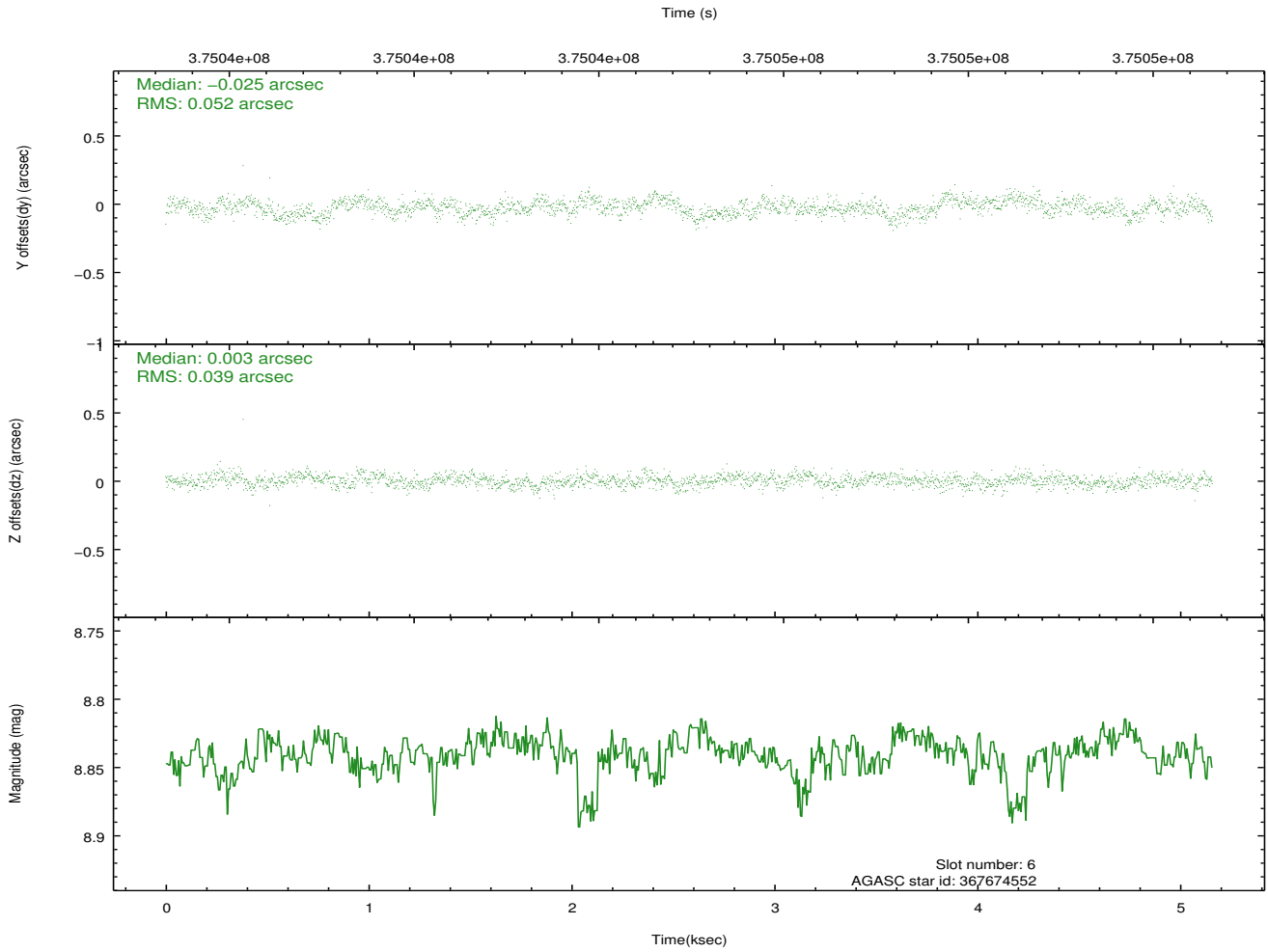
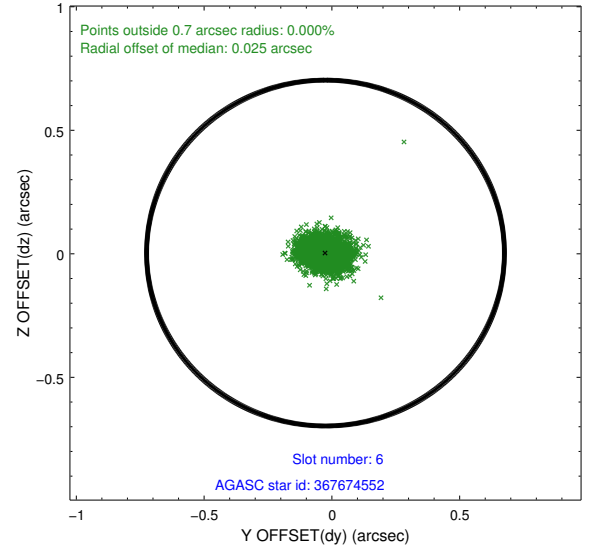
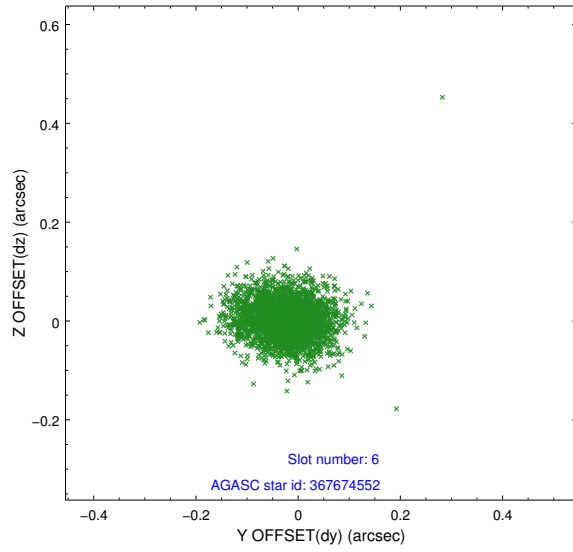
2.4.2 Slot 4



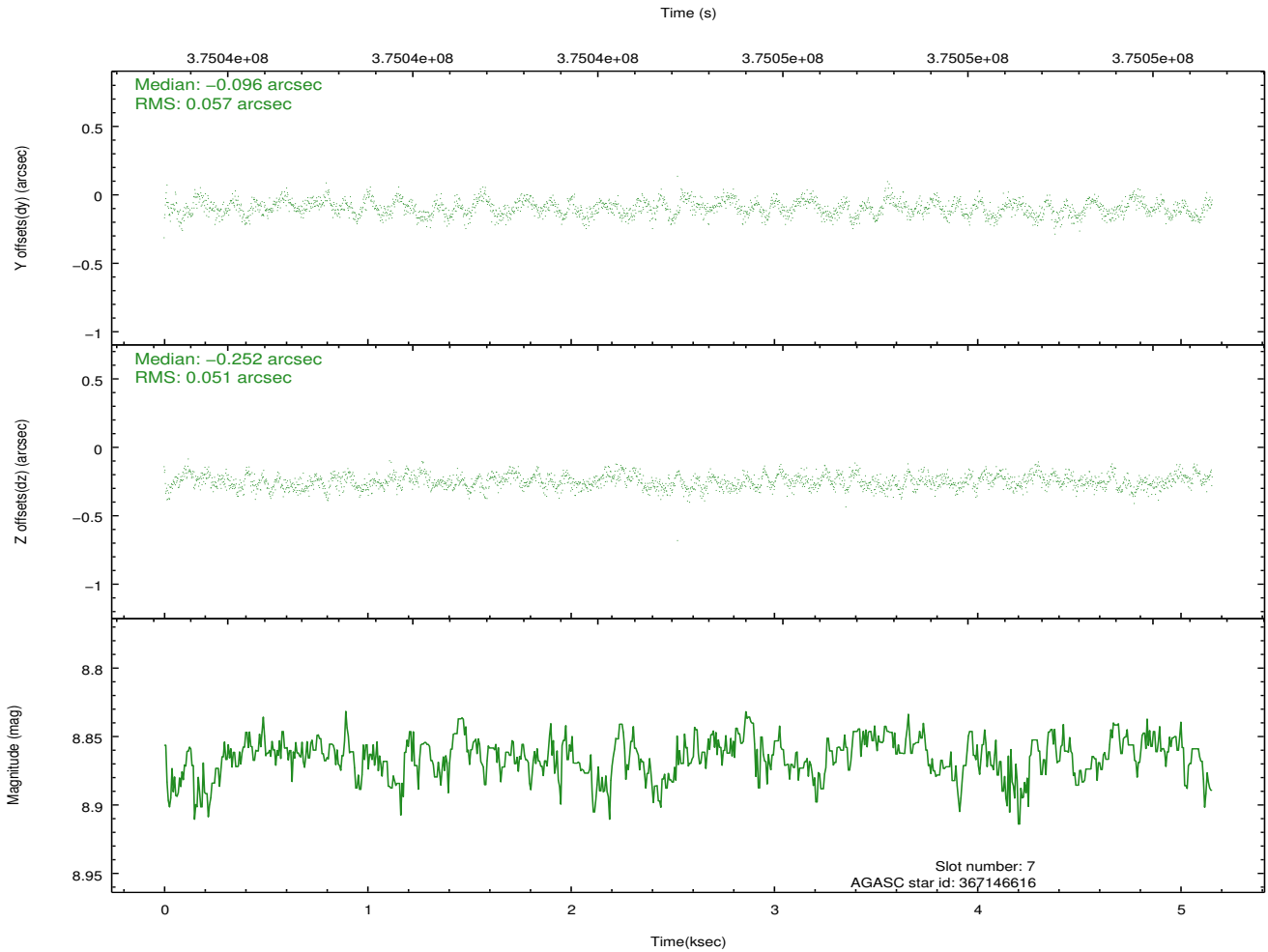
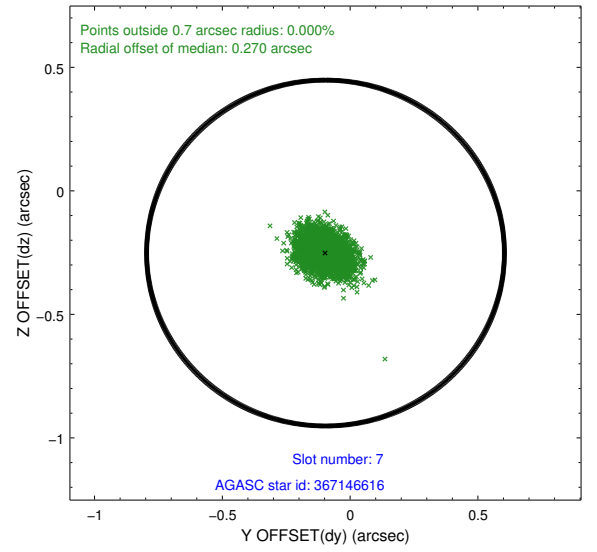
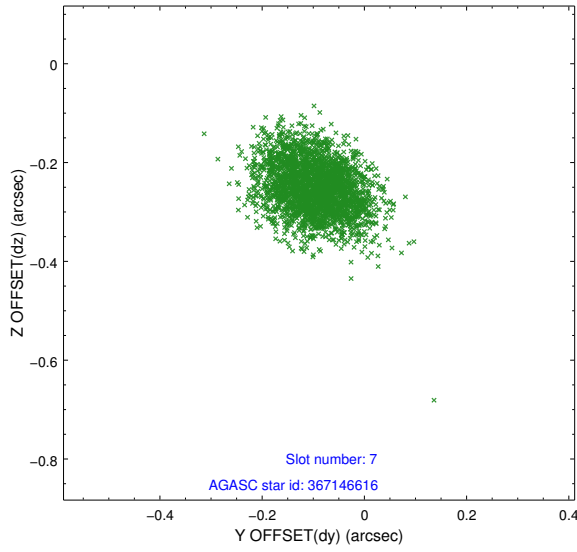
2.4.3 Slot 5



2.4.4 Slot 6

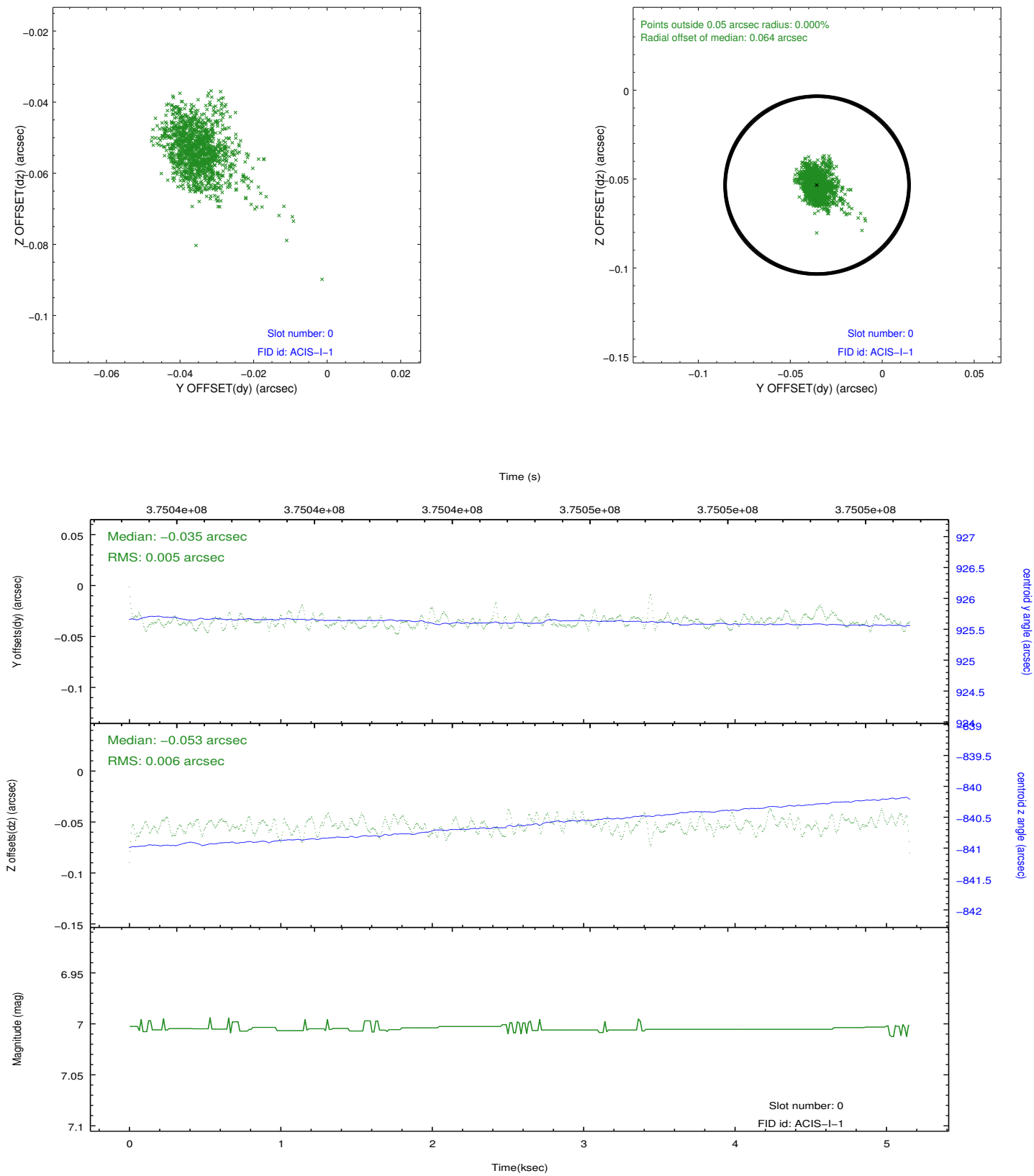


2.4.5 Slot 7

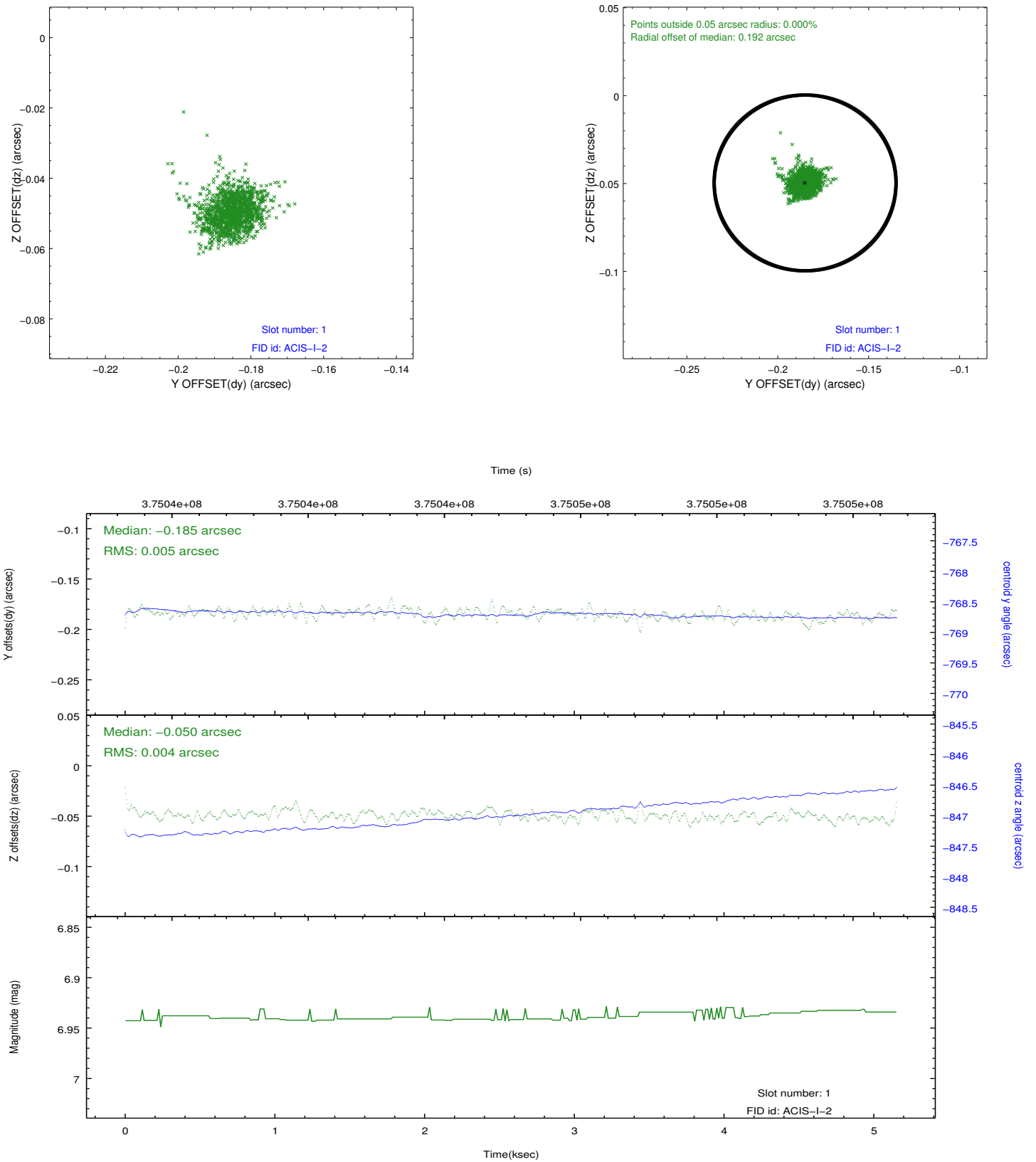


2.5 FID Slots

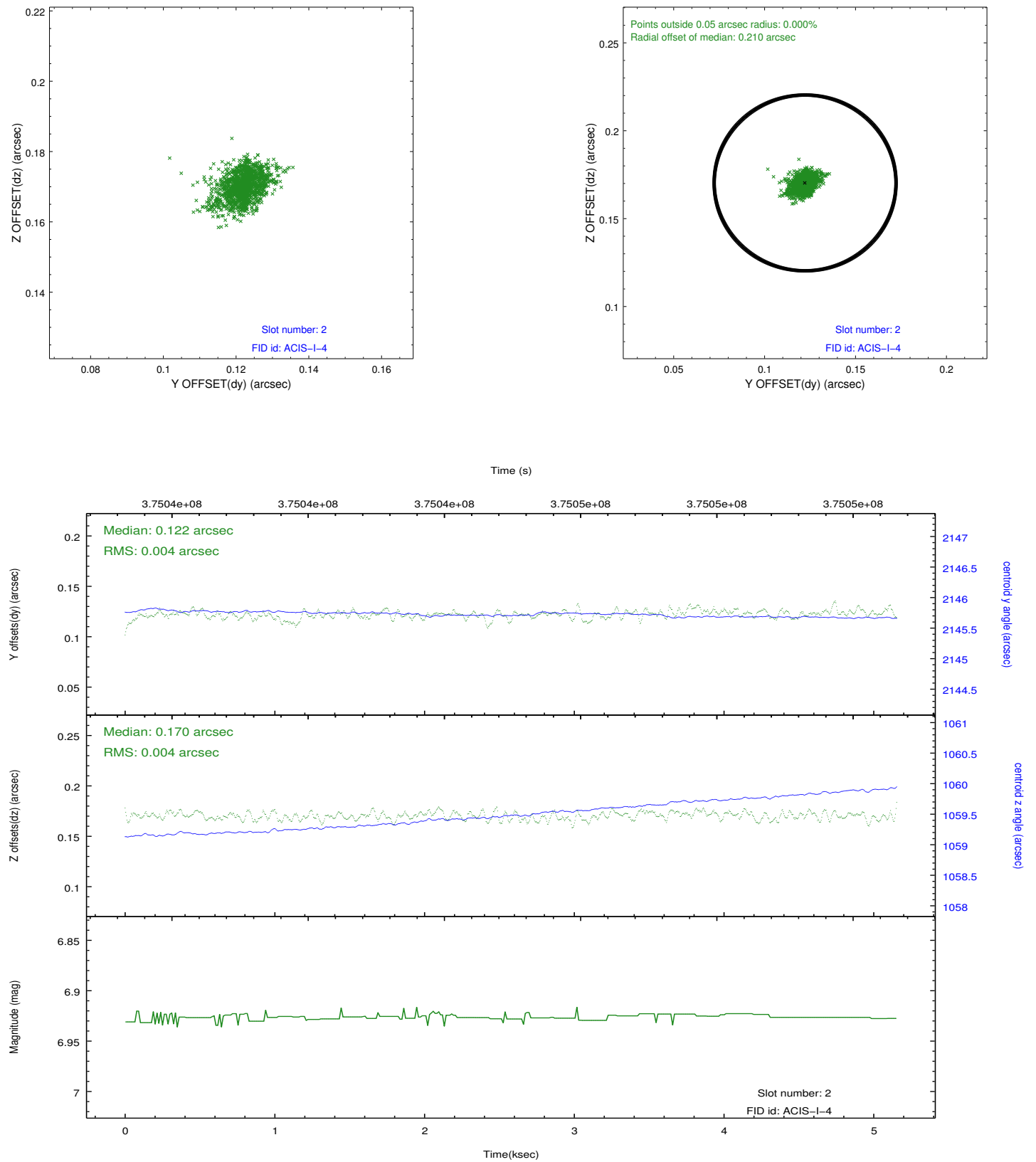
2.5.1 Slot 0



2.5.2 Slot 1



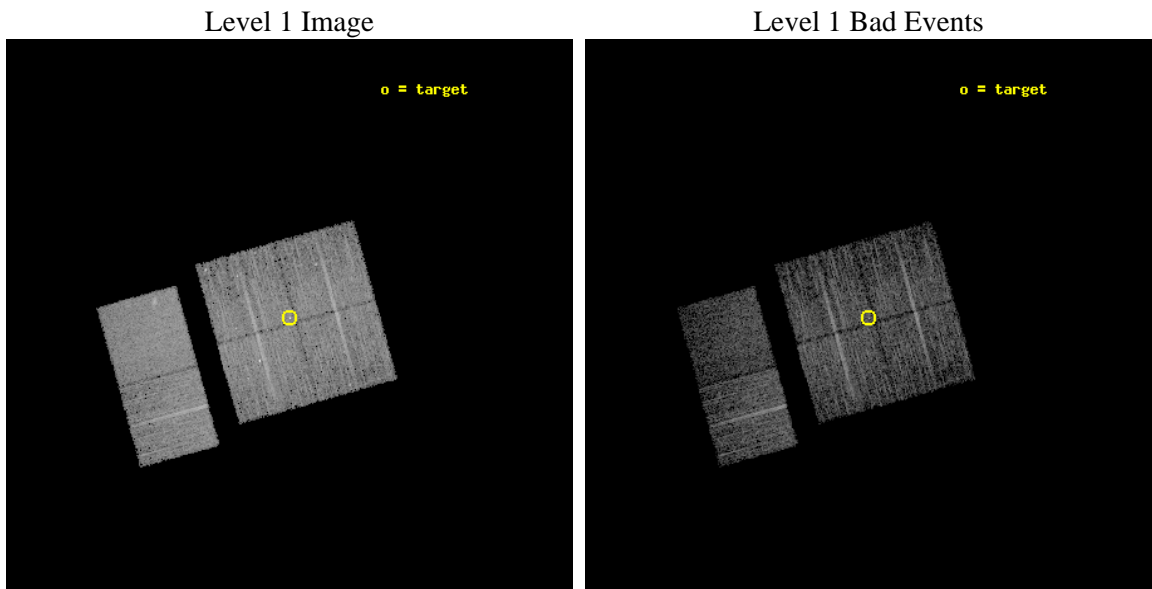
2.5.3 Slot 2



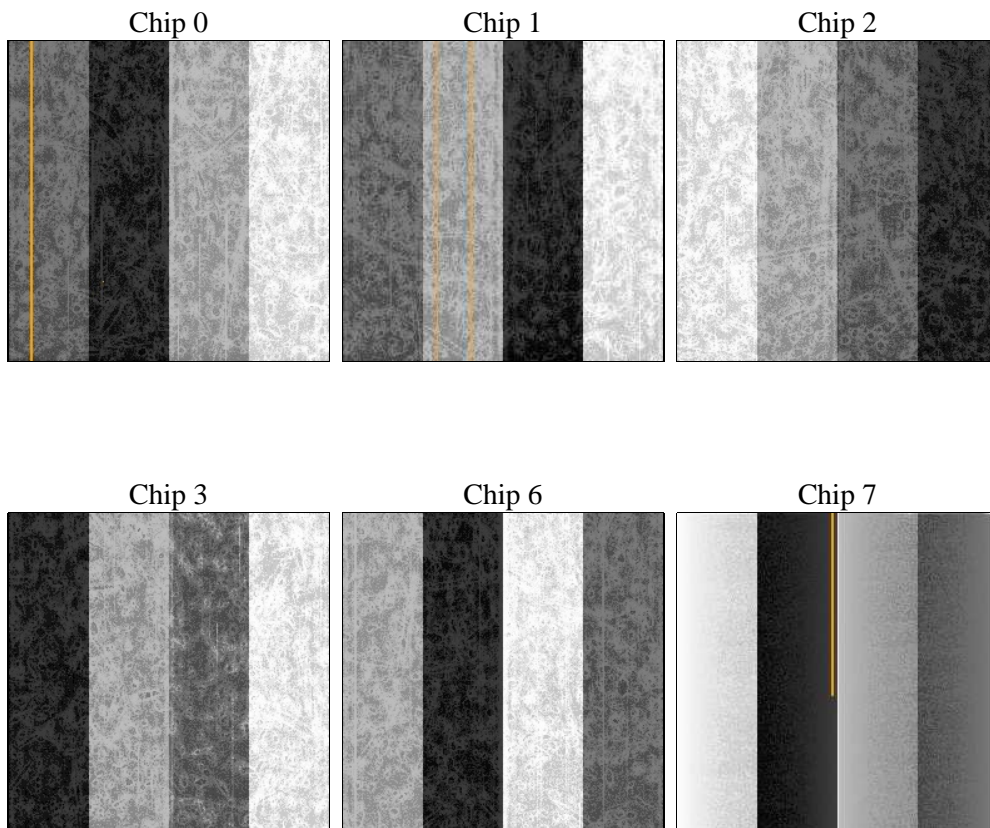
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4173.2992712259	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	4173.2991914749	Sum of GTIs [s]
date	2012-06-16T16:49:22	Date and time of file creation	ontime1	4173.2996003628	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4173.299649477	Sum of GTIs [s]
			ontime3	4173.2992712259	Sum of GTIs [s]
			ontime6	4173.2995699048	Sum of GTIs [s]
			ontime7	4173.2994508743	Sum of GTIs [s]
			l1events	227159	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	34062	34909	39861	37170	38467	42690	grade 0 events	1515	1776	2085	2429	1408	1875
rejected events	30153	30435	35233	32264	34487	23378		4%	5%	5%	6%	3%	4%
rejected %	88%	87%	88%	86%	89%	54%	grade 1 events	23	21	41	68	18	57
								0%	0%	0%	0%	0%	0%
							grade 2 events	952	1026	1053	933	898	4019
								2%	2%	2%	2%	2%	9%
							grade 3 events	410	466	419	426	411	1755
								1%	1%	1%	1%	1%	4%
							grade 4 events	397	434	432	451	430	1772
								1%	1%	1%	1%	1%	4%
							grade 5 events	1355	1448	1309	1565	1638	4403
								3%	4%	3%	4%	4%	10%
							grade 6 events	724	863	723	762	901	10262
								2%	2%	1%	2%	2%	24%
							grade 7 events	28686	28875	33799	30536	32763	18547
								84%	82%	84%	82%	85%	43%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.14883466804027

A.2 Comments

Window constraint satisfied.