

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 1561 - L2 Version 7
Chandra X-Ray Center

L2 Processing Date : Jan 28 2013

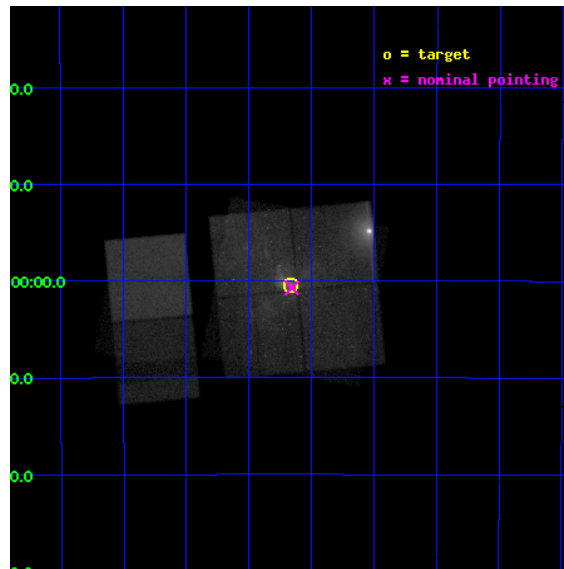
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1 Front

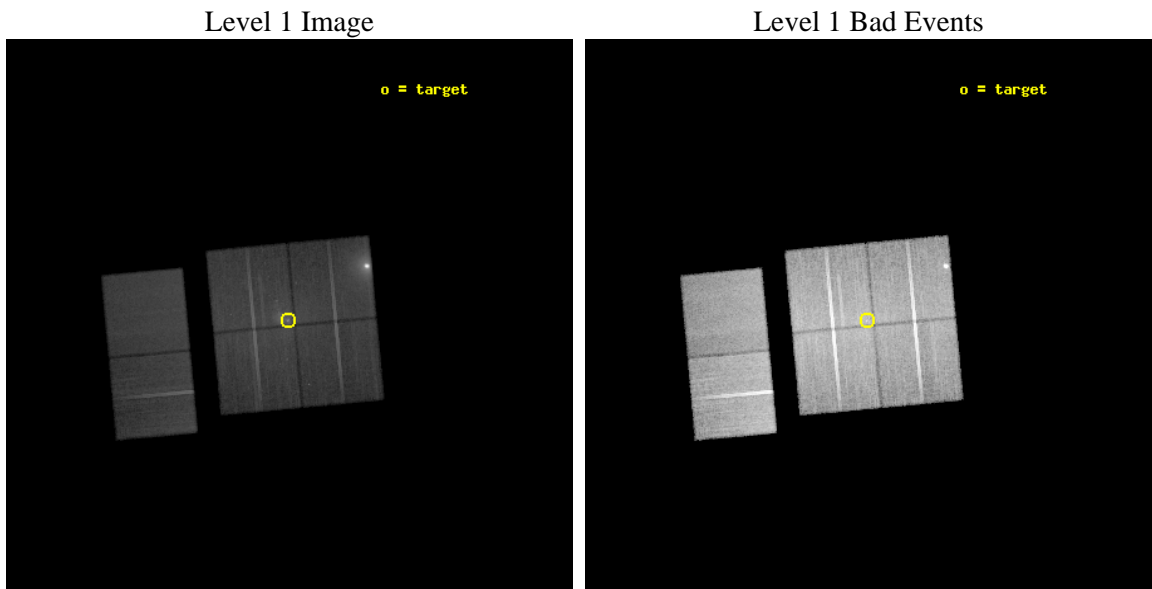
seq_num	600118	Sequence number
obs_id	1561	Observation id
title	CHANDRA IMAGING OF SGR A* AND THE GALACTIC CENTER	Proposal title
observer	Merged	Principal investigator
object	SGR A*	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007778	Observer's specified target Dec [deg]
ra_nom	266.41402507289	Nominal RA [deg]
dec_nom	-29.012062425209	Nominal Dec [deg]
revision	7	Processing version of data
ontime	49932.759076238	Sum of GTIs [s]
livetime	49300.480414916	Livetime [s]
ontime0	49935.882572398	Sum of GTIs [s]
ontime1	49935.923612386	Sum of GTIs [s]
ontime2	49932.723682135	Sum of GTIs [s]
ontime3	49932.759076238	Sum of GTIs [s]
ontime6	49935.841532394	Sum of GTIs [s]
ontime7	36256.000033751	Sum of GTIs [s]
l2events	862572	Number of level 2 events



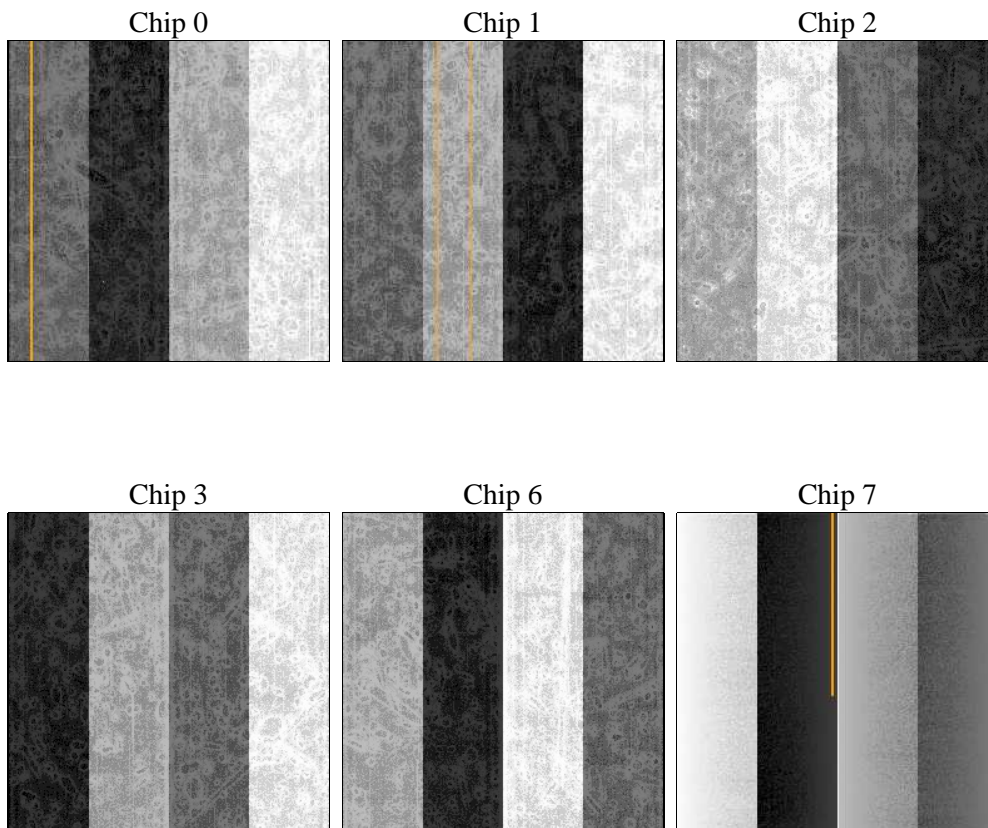
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50750.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	36256.000033751	Sum of GTIs [s]
caldbver	4.5.5	 	ontime0	36256.000033751	Sum of GTIs [s]
date	2013-01-24T23:52:07	Date and time of file creation	ontime1	36256.000033751	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	36256.000033751	Sum of GTIs [s]
			ontime3	36256.000033751	Sum of GTIs [s]
			ontime6	36256.000033751	Sum of GTIs [s]
			ontime7	36256.000033751	Sum of GTIs [s]
			l1events	2206302	Number of level 1 events

2.1.4 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	284886	620988	320136	367440	297980	314872	grade 0 events	36237	219721	40688	66527	24050	15735
rejected events	212504	249194	243271	249413	244209	170990		12%	35%	12%	18%	8%	4%
rejected %	74%	40%	75%	67%	81%	54%	grade 1 events	245	9991	274	433	167	357
								0%	1%	0%	0%	0%	0%
							grade 2 events	16395	65353	15726	22847	13191	29787
								5%	10%	4%	6%	4%	9%
							grade 3 events	4029	21840	3931	6129	3293	13533
								1%	3%	1%	1%	1%	4%
							grade 4 events	4267	22005	5031	6528	3282	13717
								1%	3%	1%	1%	1%	4%
							grade 5 events	8149	17681	7699	9244	9191	28263
								2%	2%	2%	2%	3%	8%
							grade 6 events	11527	43242	11566	16108	10016	71225
								4%	6%	3%	4%	3%	22%
							grade 7 events	204037	221155	235221	239624	234790	142255
								71%	35%	73%	65%	78%	45%

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	OVERRIDE	OVERRIDE
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.4140250728881	266.4140250728881	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.01206242520855	-29.01206242520855	Alternating exposures requested	N	N
[deg] Pointing Roll	264.6704015264343	264.6704015264343	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-0.78090834371673	-0.78090834371673			
[mm] SIM defocus	0.001439854621703041	0.001439854621703041			
[mm] SIM translation stage pos	-233.5874344608	-233.5874344608			
[mm] SIM translation stage offset	-0.005028630631784381	-0.005028630631784381			
[s] Observation start time (MET)	88974484	88974484			
Observation start date	2000-10-26T18:16:28	2000-10-26T19:08:03			
[s] Observation end time (MET)	89022203.747302	89022203.747302			
Observation end date	2000-10-27T08:22:18	2000-10-27T08:23:23			
Read mode	TIMED	TIMED			

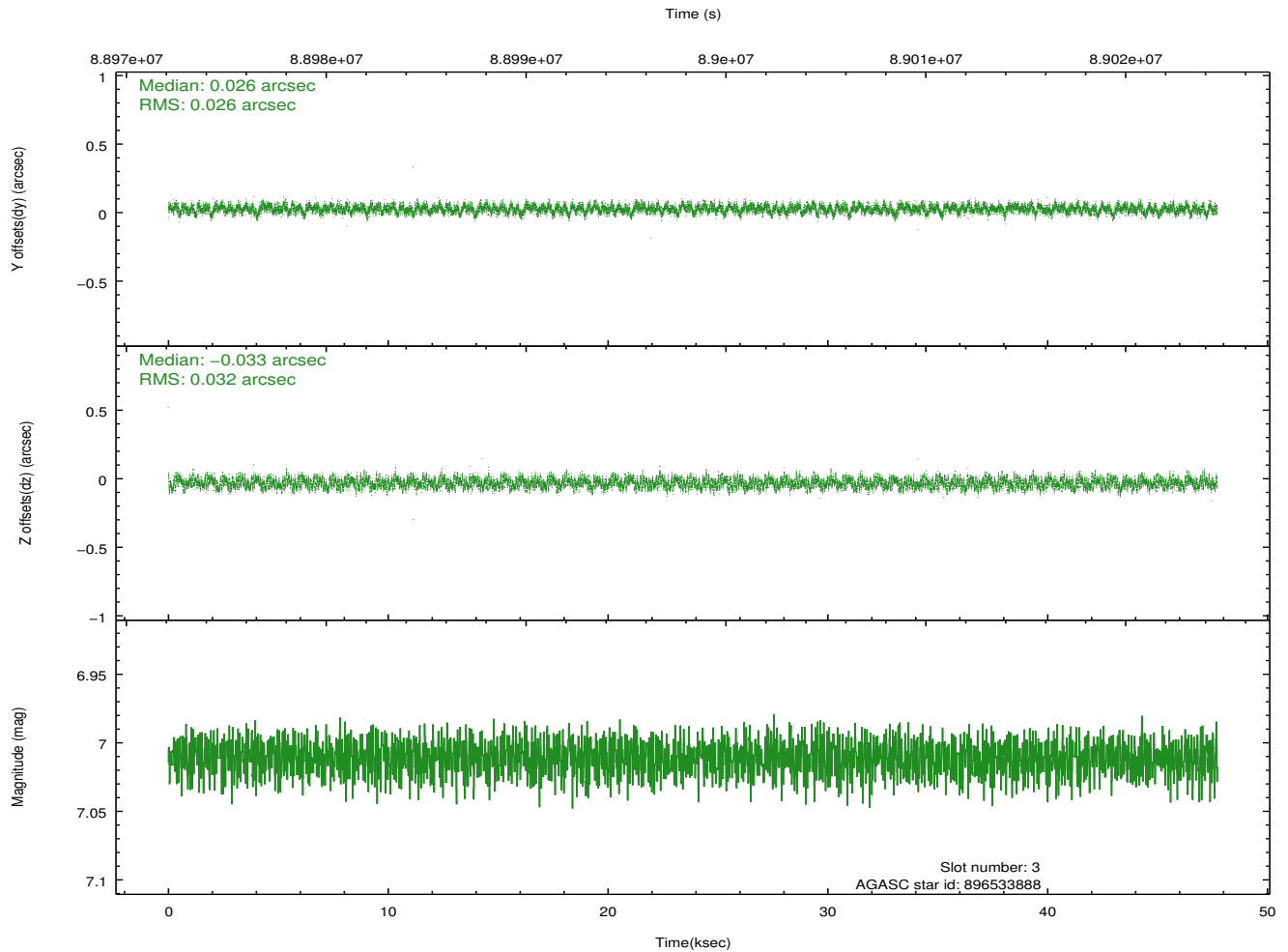
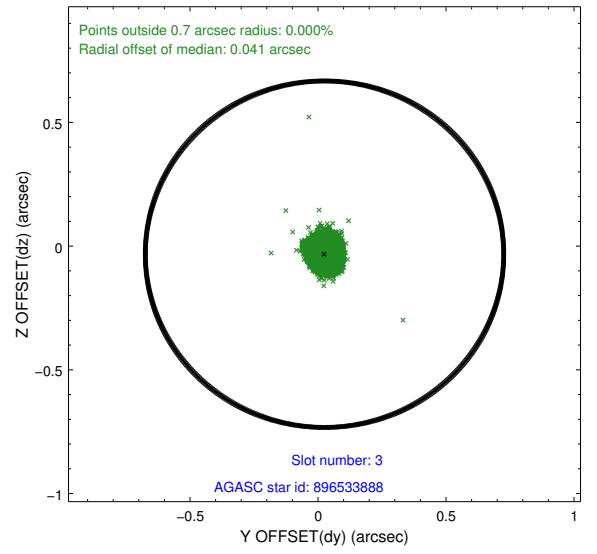
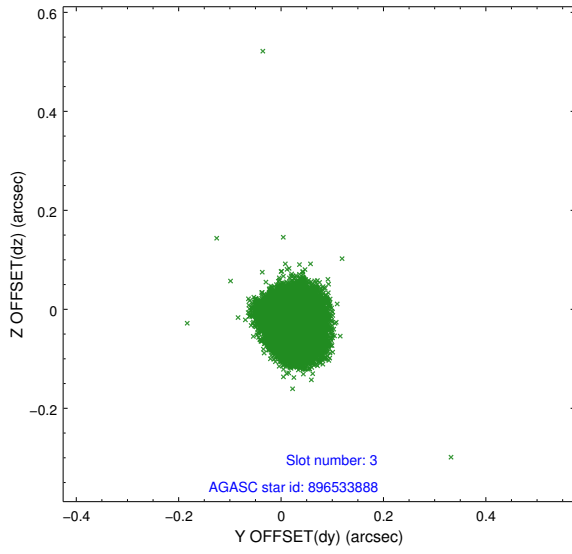
2.3 Aspect

Slot Statistics

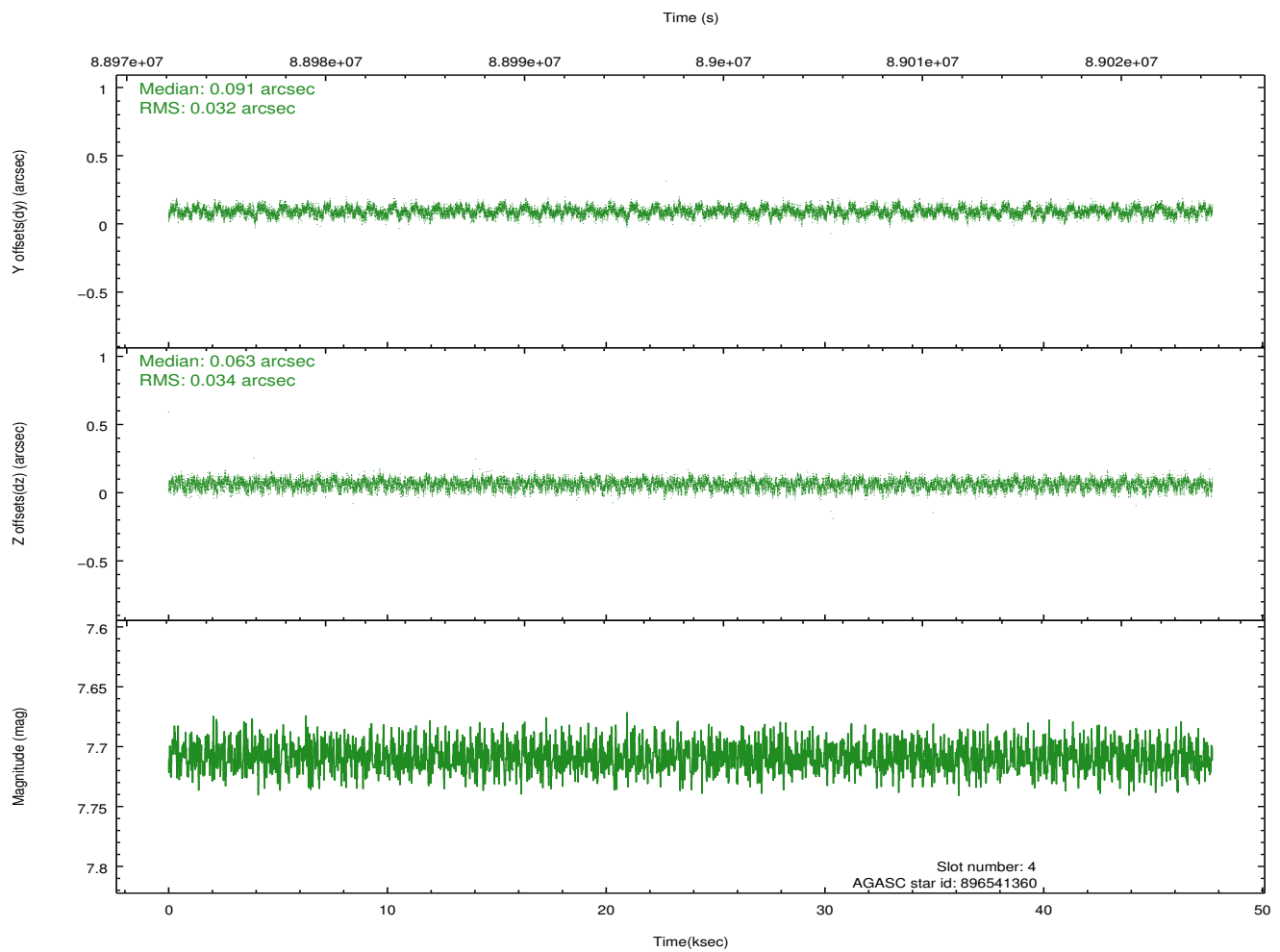
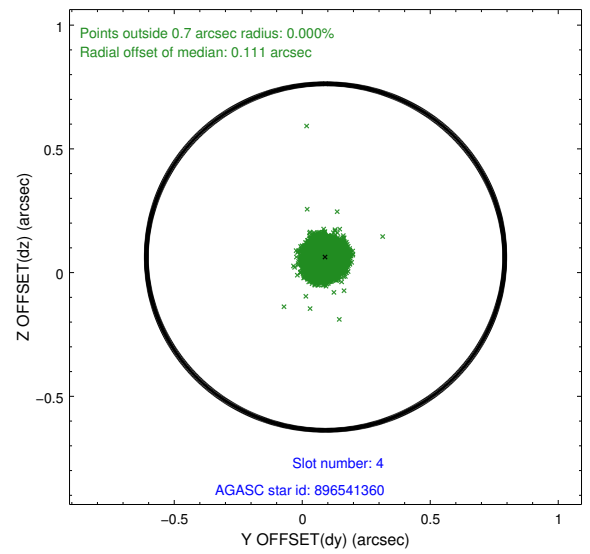
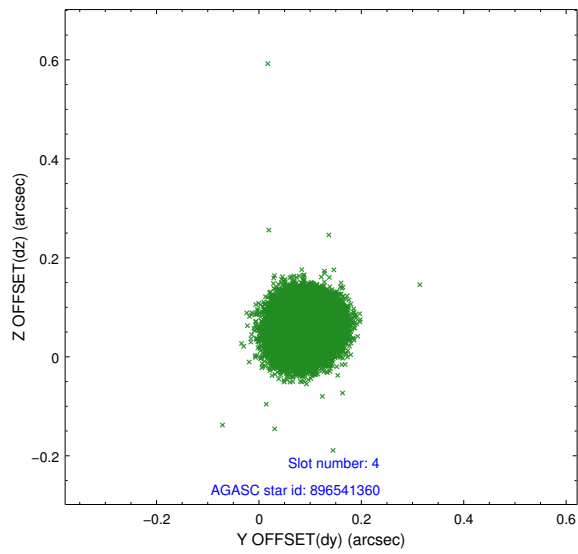
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	11636	-0.052	-0.076	0.013	0.020	0.000000	0.000000	-756.29	-836.61
1	FID	ACIS-I-4	7.18	11635	-0.030	0.056	0.017	0.025	0.000000	0.000000	2157.79	1069.71
2	FID	ACIS-I-5	7.23	11637	-0.020	0.089	0.015	0.023	0.000000	0.000000	-1810.10	1067.57
3	GUIDE	896533888	7.01	23271	0.026	-0.033	0.045	0.069	266.666434	-29.392757	1374.51	970.57
4	GUIDE	896541360	7.71	23270	0.091	0.063	0.050	0.078	266.684478	-29.453744	1587.87	1047.75
5	GUIDE	896537176	8.01	23268	-0.090	-0.101	0.069	0.113	266.498272	-28.678259	-1135.74	198.99
6	GUIDE	896540808	7.48	23270	0.038	-0.011	0.043	0.071	265.985401	-29.308604	1280.85	-1185.78
7	GUIDE	896535464	9.33	23253	-0.060	0.082	0.097	0.157	266.962550	-28.408631	-2239.99	1569.77

2.4 Star Slots

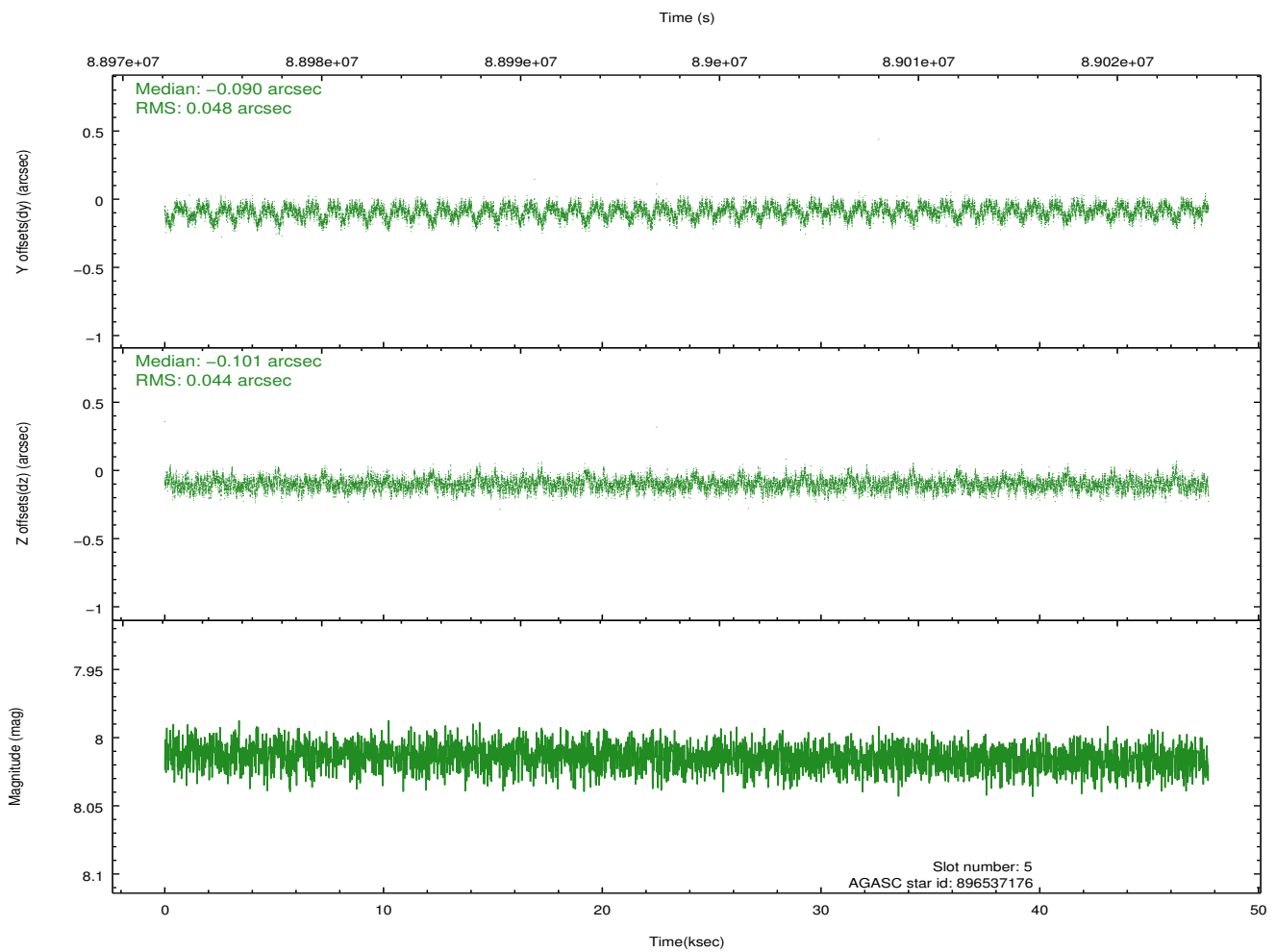
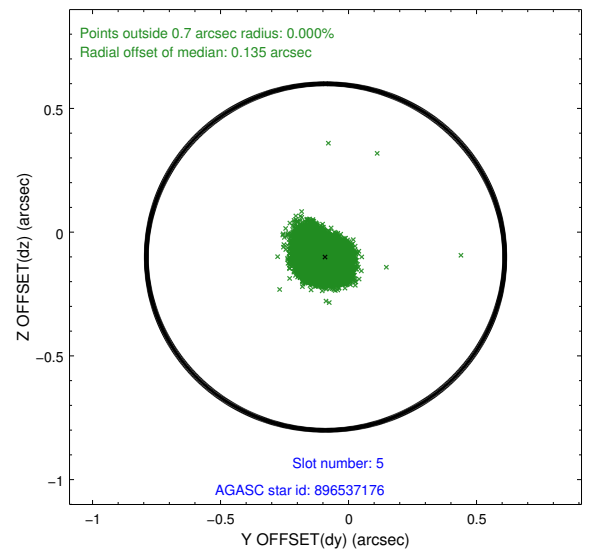
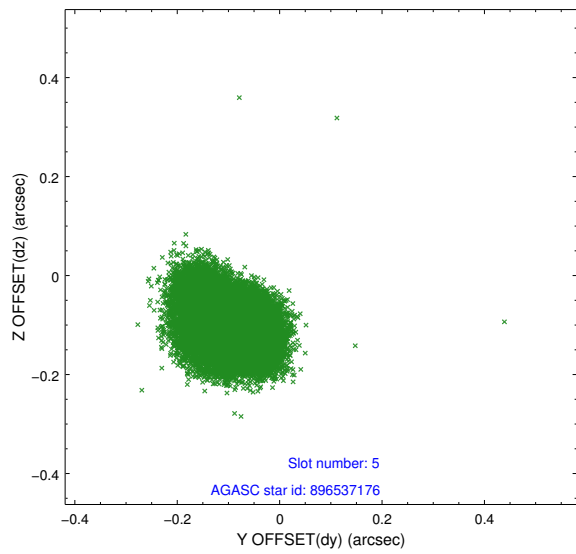
2.4.1 Slot 3



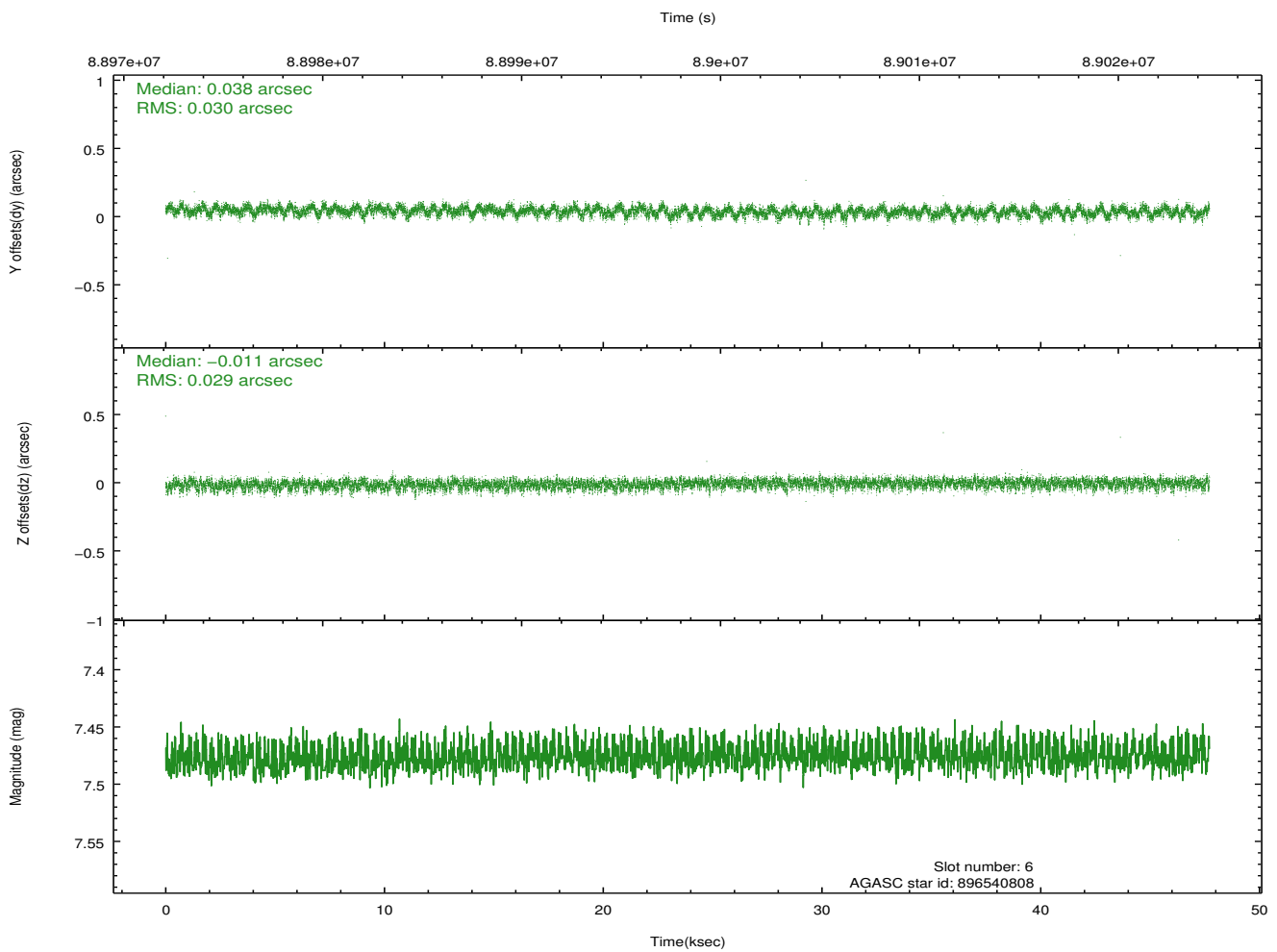
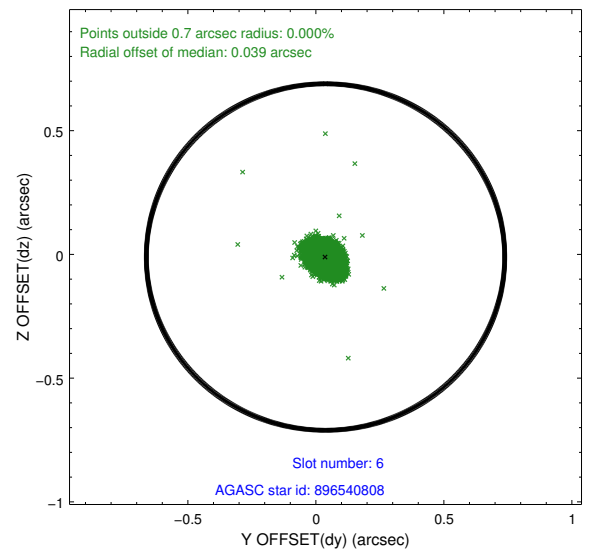
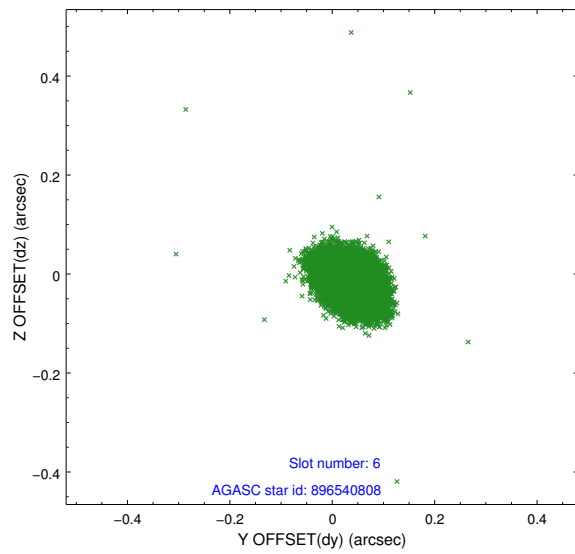
2.4.2 Slot 4



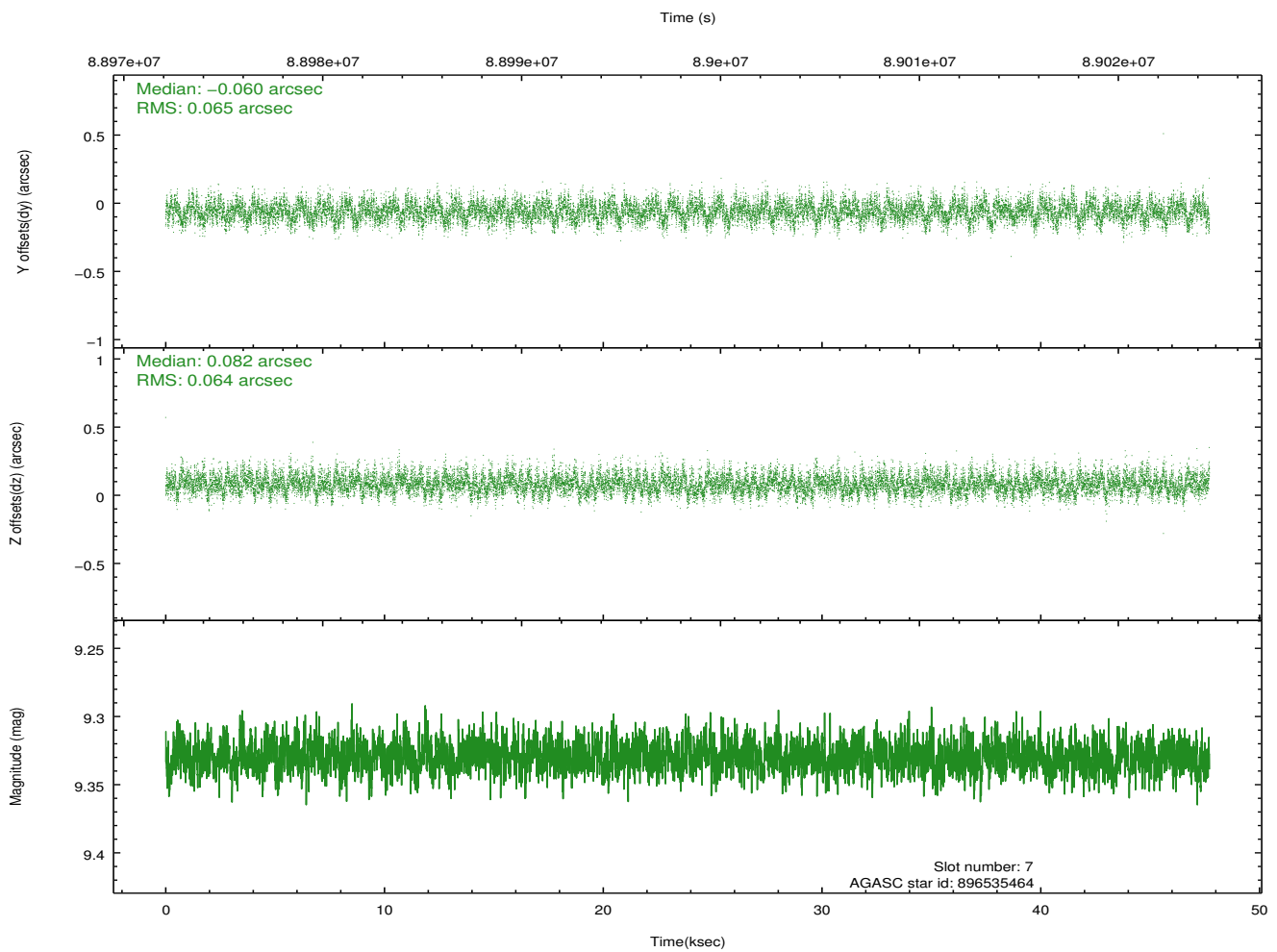
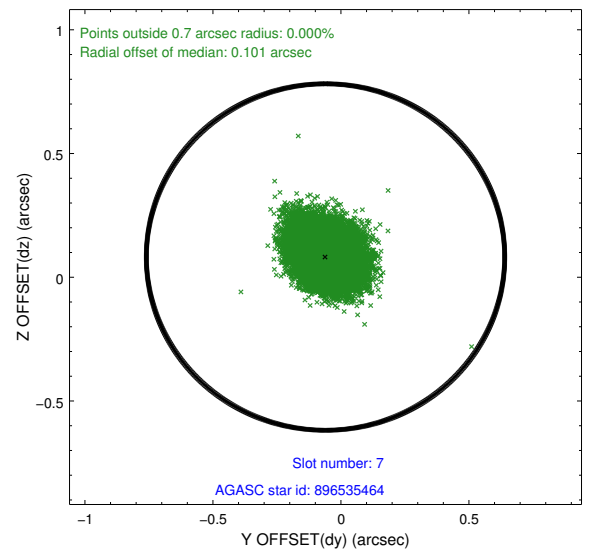
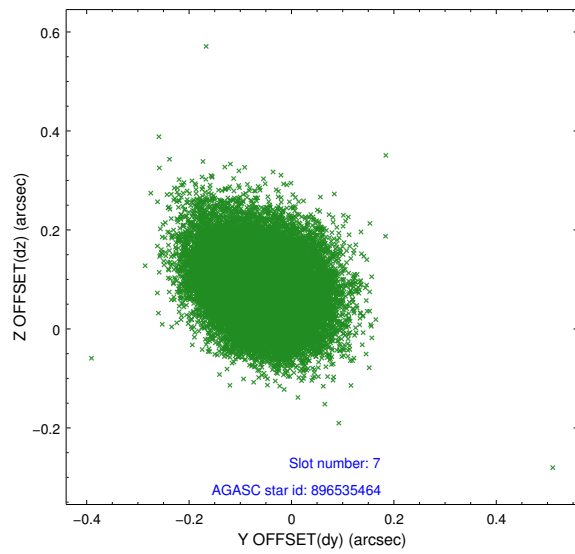
2.4.3 Slot 5



2.4.4 Slot 6

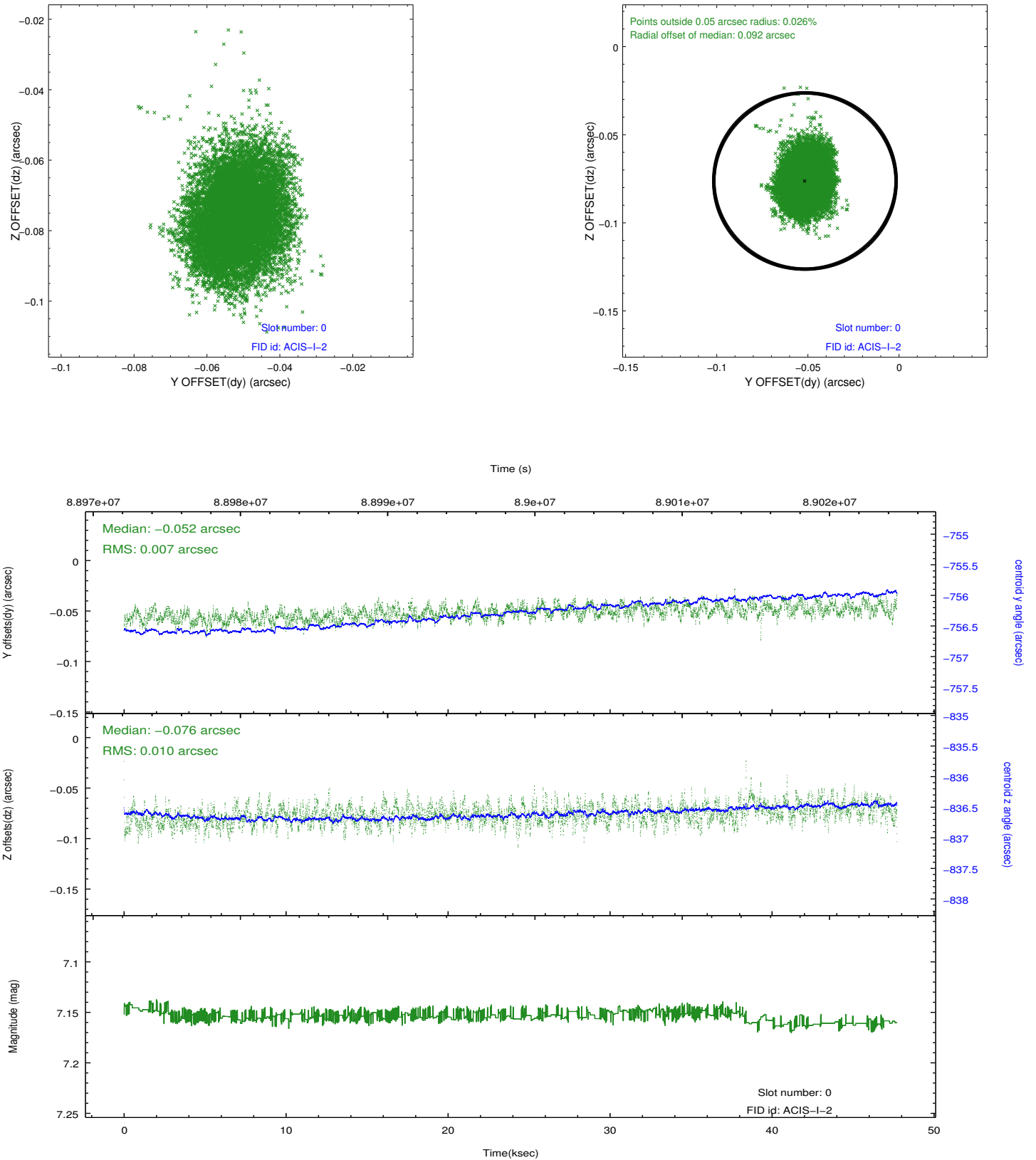


2.4.5 Slot 7

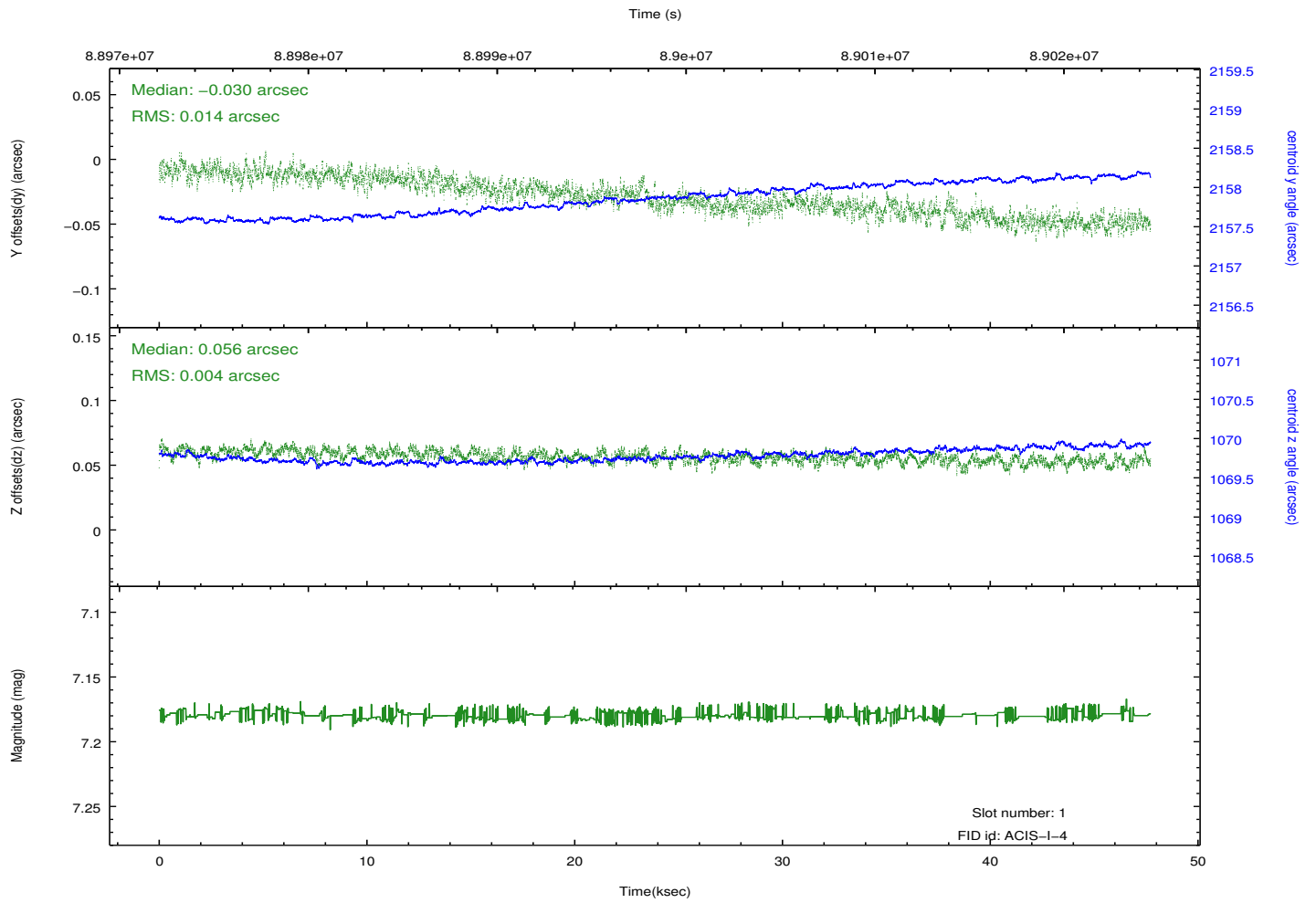
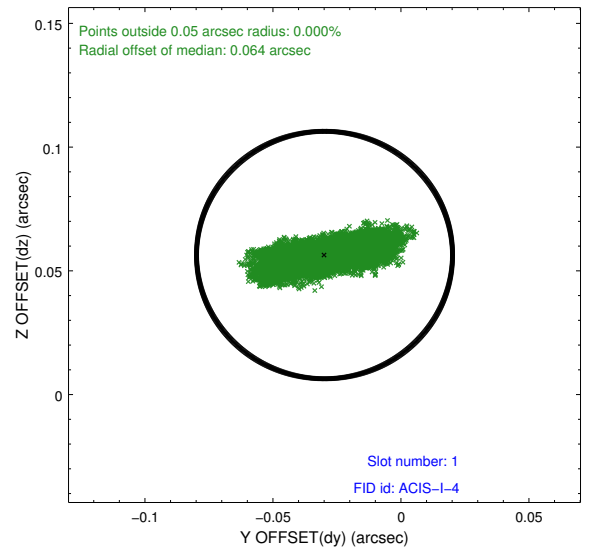
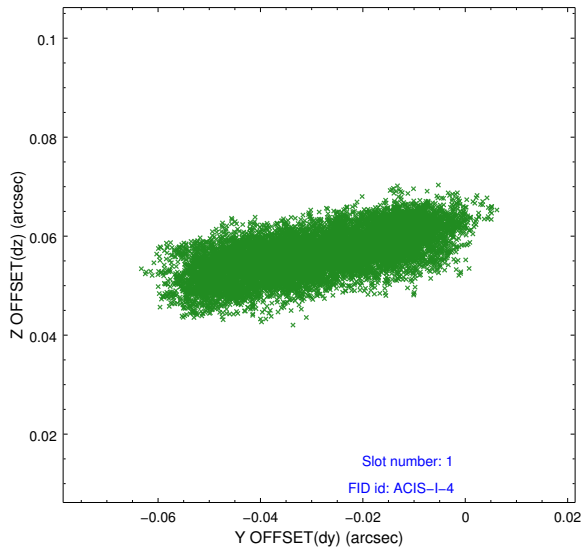


2.5 FID Slots

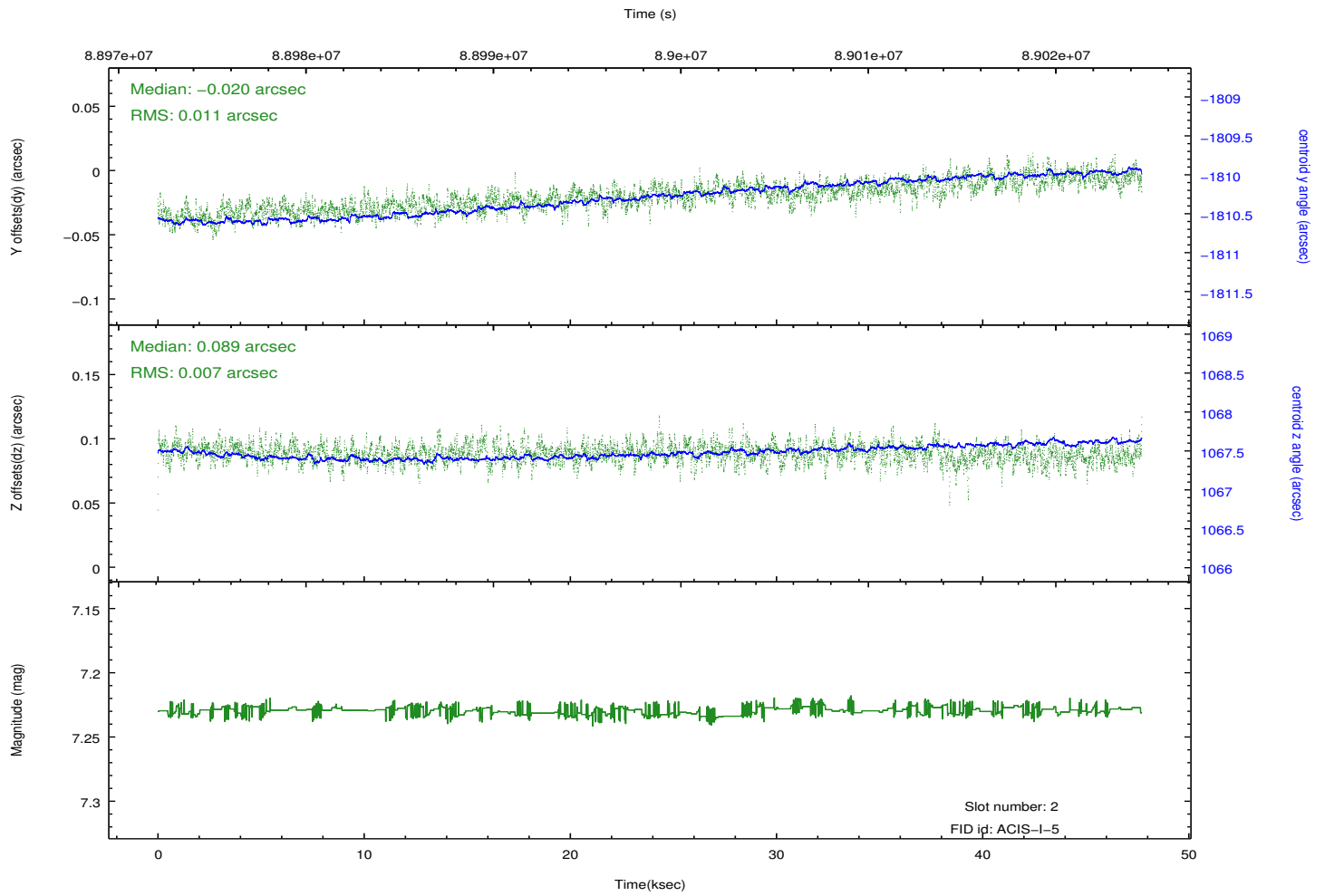
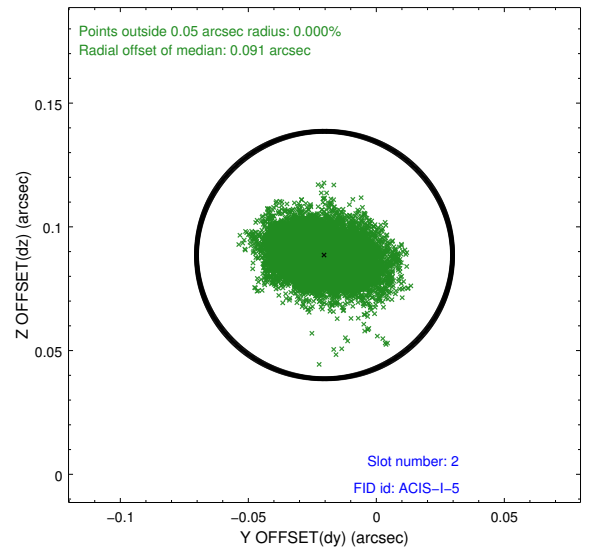
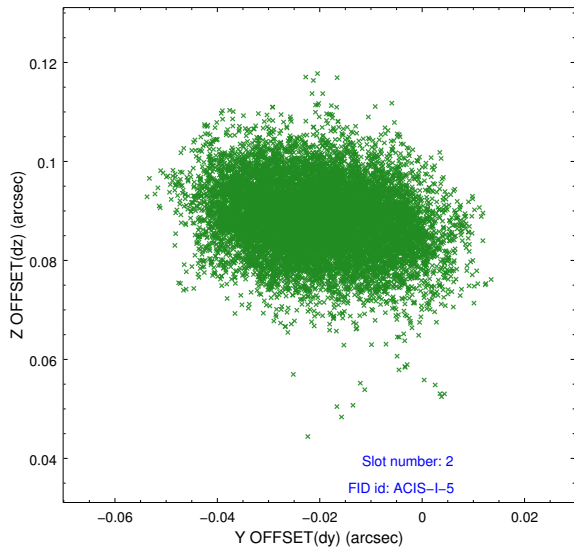
2.5.1 Slot 0



2.5.2 Slot 1



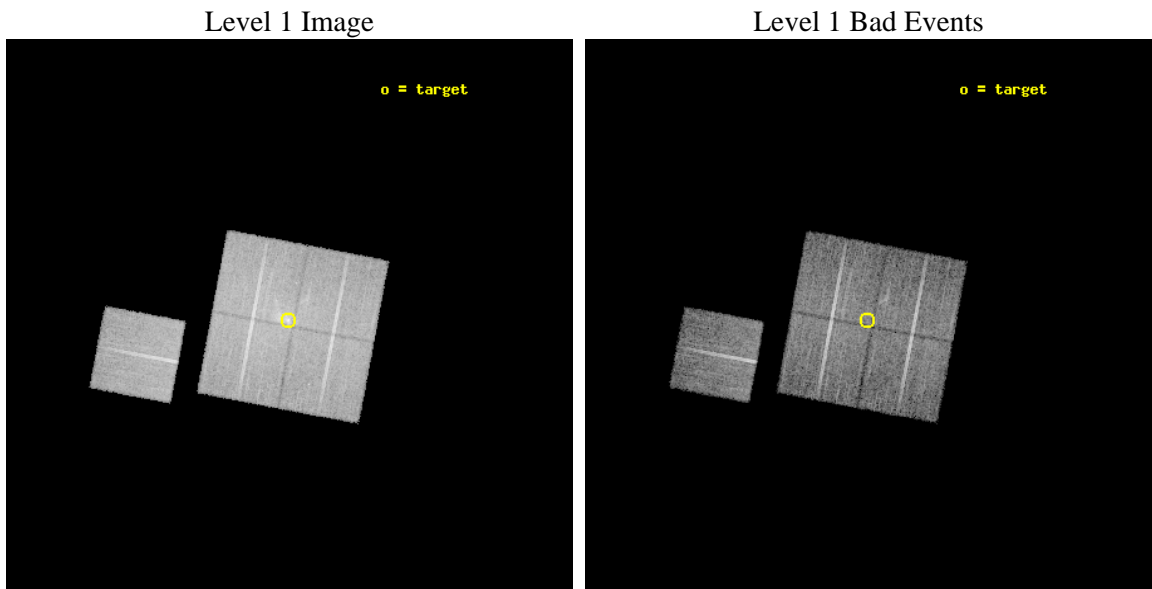
2.5.3 Slot 2



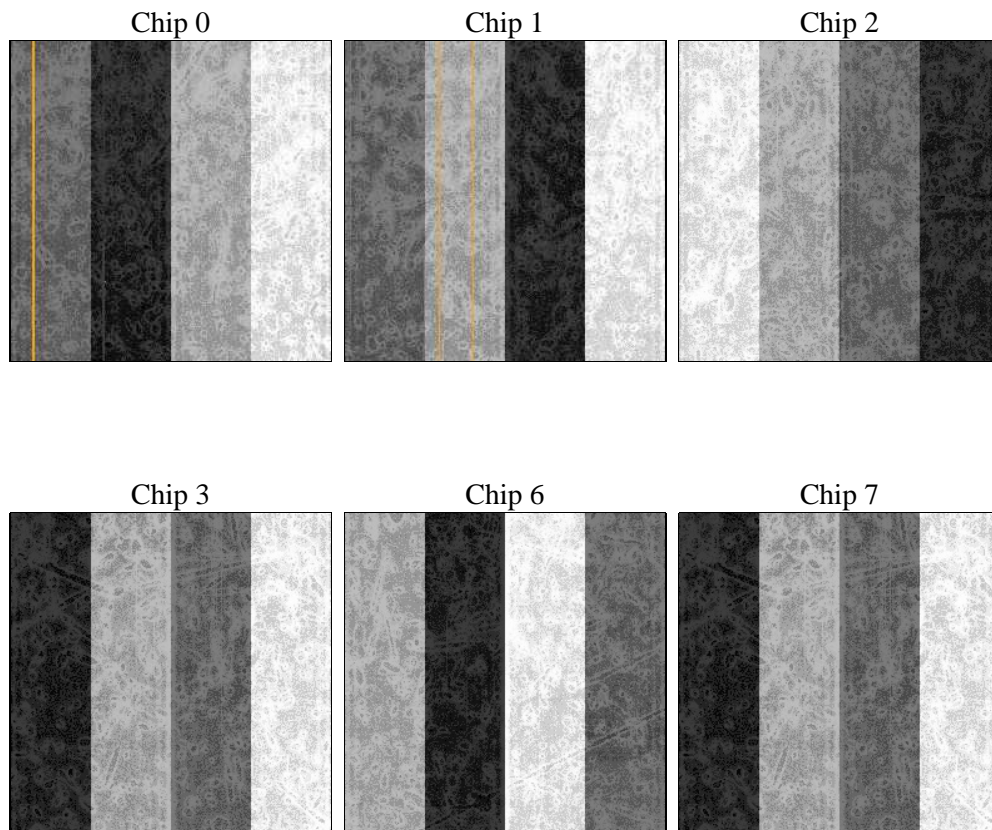
3 OBI

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	13563.030000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	13676.759042487	Sum of GTIs [s]
caldbver	4.5.5	 	ontime0	13679.882538646	Sum of GTIs [s]
date	2013-01-28T17:38:38	Date and time of file creation	ontime1	13679.923578635	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	13676.723648384	Sum of GTIs [s]
			ontime3	13676.759042487	Sum of GTIs [s]
			ontime6	13679.841498643	Sum of GTIs [s]
			ontime7	3.2353940755129	Sum of GTIs [s]
			l1events	507725	Number of level 1 events

3.1.4 Events

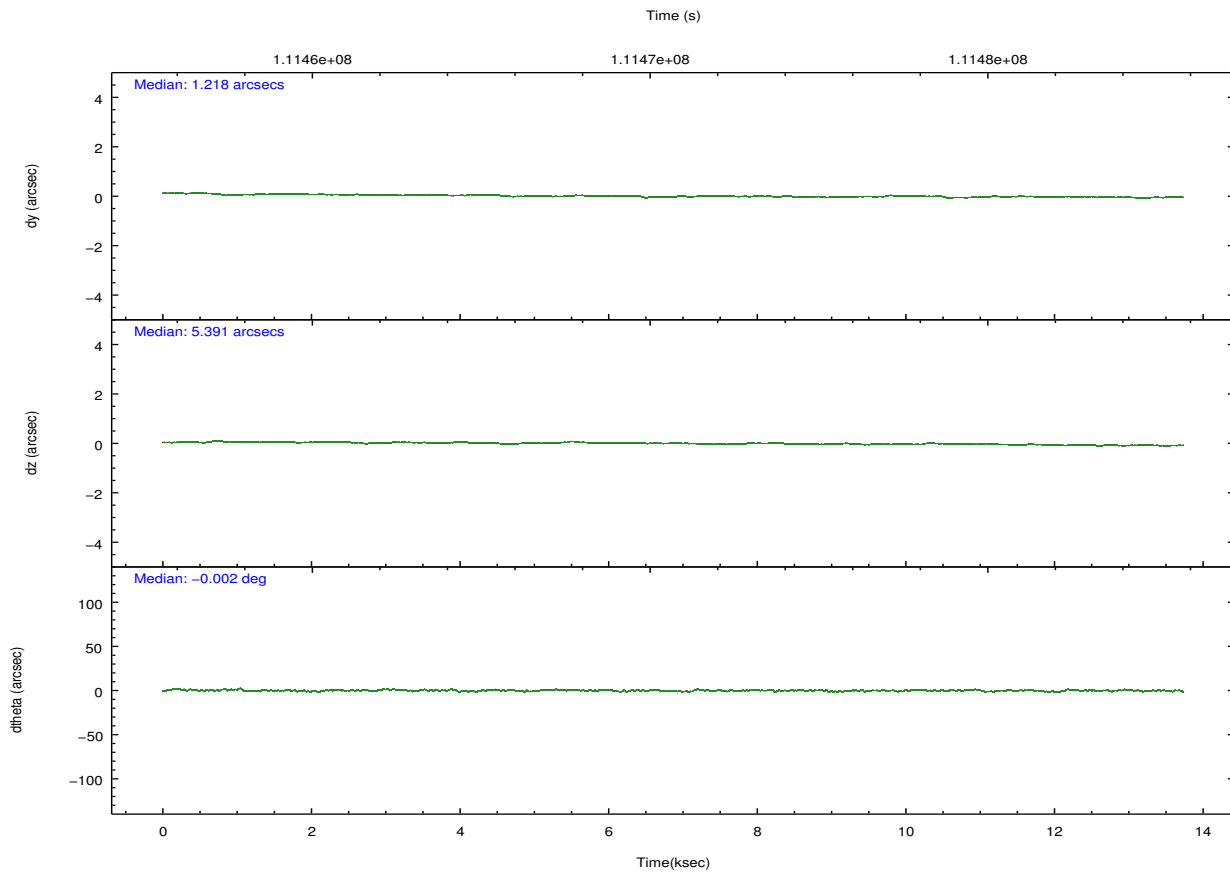
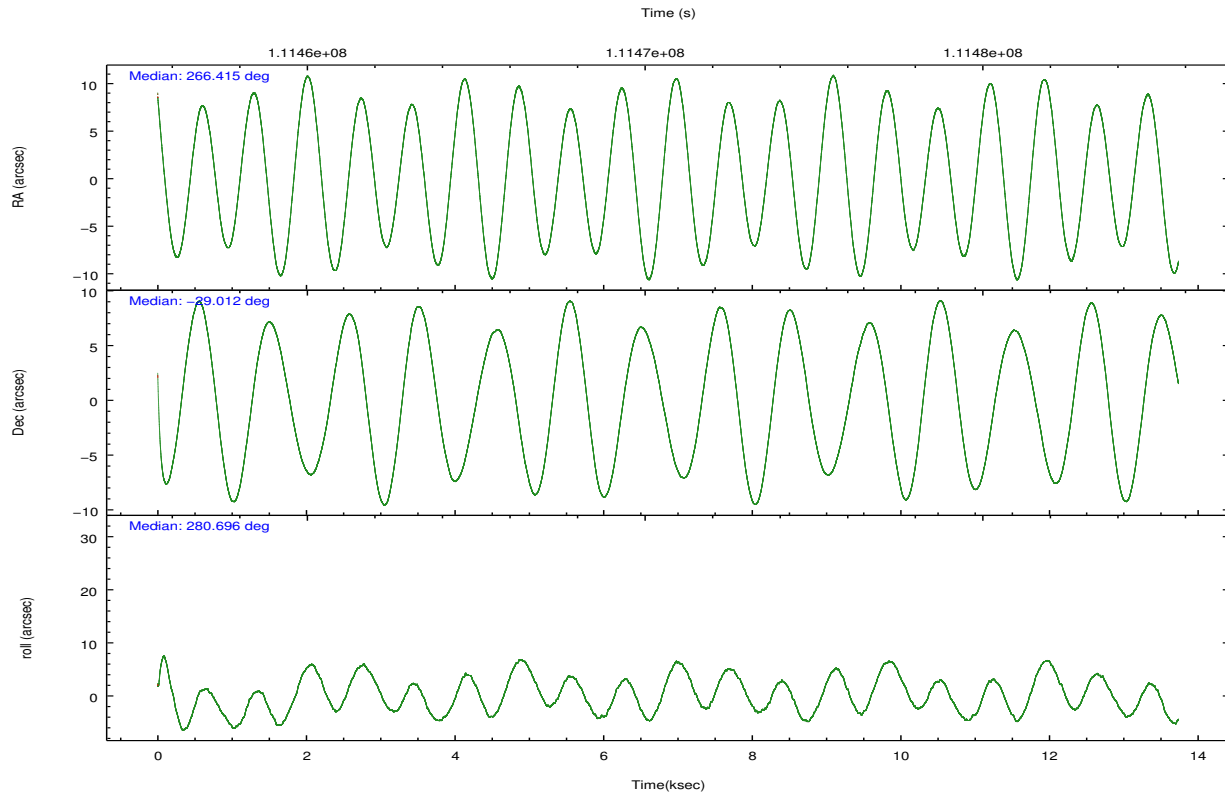
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	92749	97771	104699	118656	93850	0
rejected events	72885	76551	81690	82034	79927	0
rejected %	78%	78%	78%	69%	85%	0%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	10940	11437	13312	22483	6863	0
	11%	11%	12%	18%	7%	0%
grade 1 events	58	80	84	136	48	0
	0%	0%	0%	0%	0%	0%
grade 2 events	3644	3736	3992	5893	2545	0
	3%	3%	3%	4%	2%	0%
grade 3 events	1452	1614	1565	2232	1156	0
	1%	1%	1%	1%	1%	0%
grade 4 events	1395	1588	1525	2195	1160	0
	1%	1%	1%	1%	1%	0%
grade 5 events	3465	3580	3201	3737	3764	0
	3%	3%	3%	3%	4%	0%
grade 6 events	2435	2851	2622	3830	2201	0
	2%	2%	2%	3%	2%	0%
grade 7 events	69360	72885	78398	78150	76113	0
	74%	74%	74%	65%	81%	0%

3.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	266.395034	266.4154949193148	CCD I2 on	Y	Y
[deg] Pointing Dec	-28.991626	-29.0123836997054	CCD I3 on	Y	Y
[deg] Pointing Roll	280.485311	280.7039106341653	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	Y	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	111463644.184000	111462670.03835	CCD S5 on	N	N
Observation start date	2001-07-14T02:06:20	2001-07-14T01:51:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	111477207.184000	111477521.77643	On-chip summing requested	N	N
Observation end date	2001-07-14T05:52:23	2001-07-14T05:58:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

3.3 Aspect

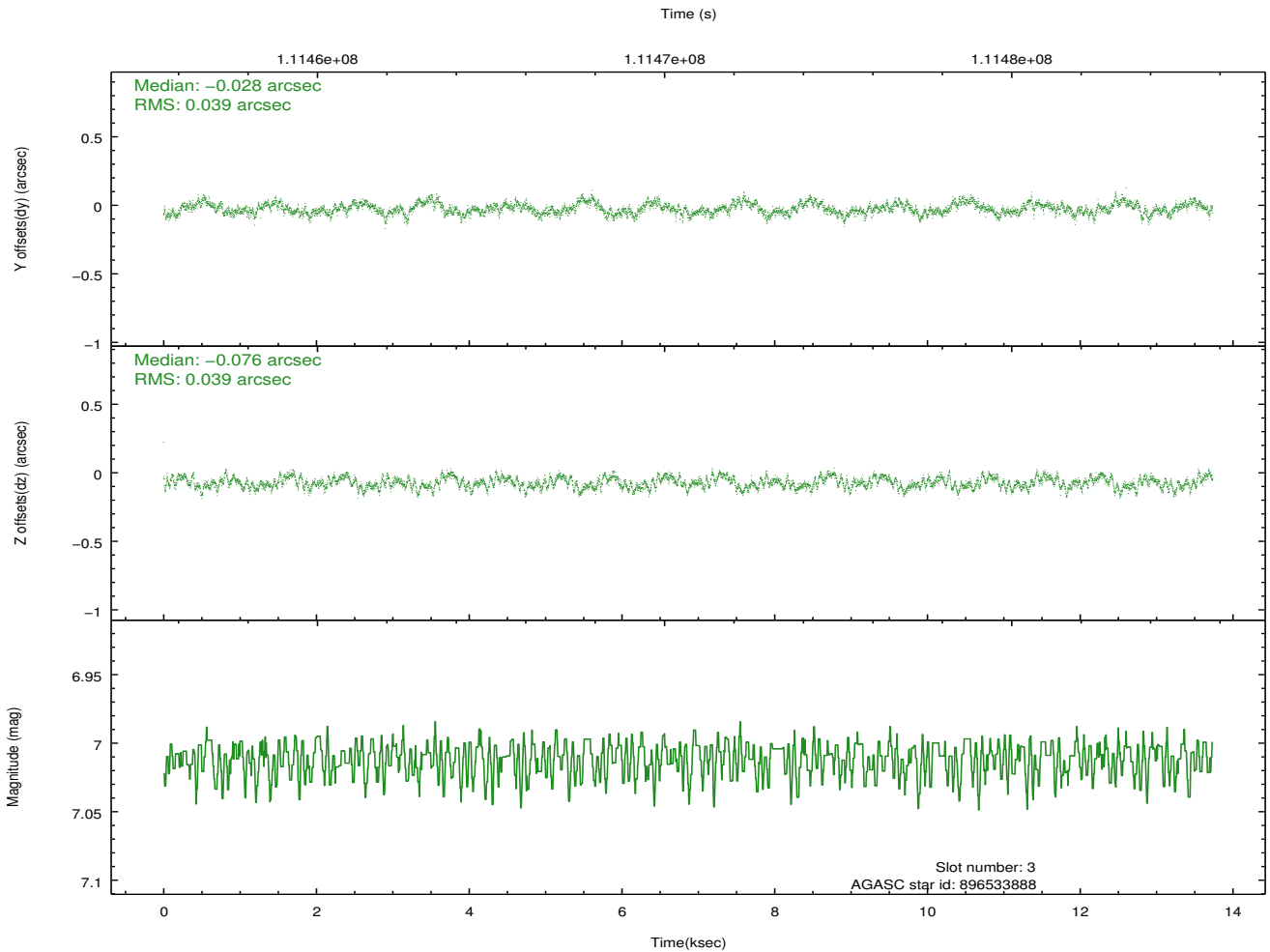
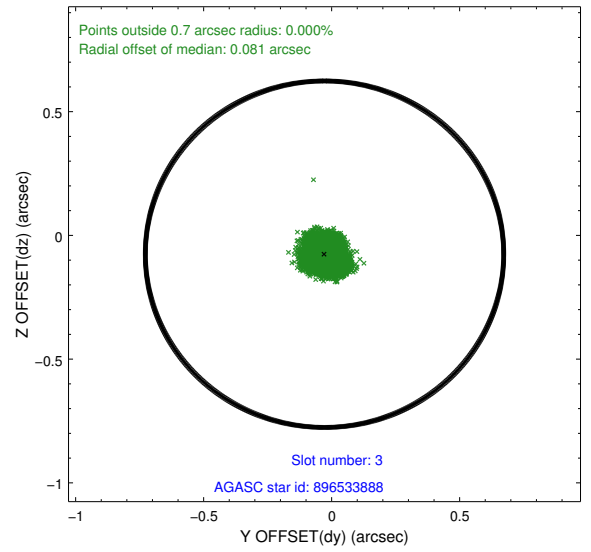
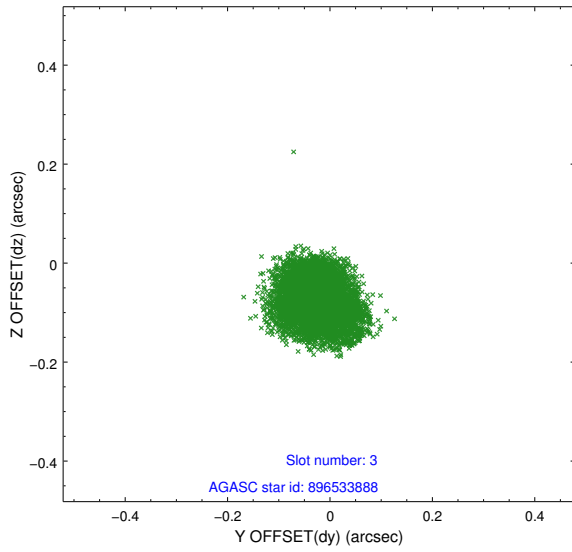


Slot Statistics

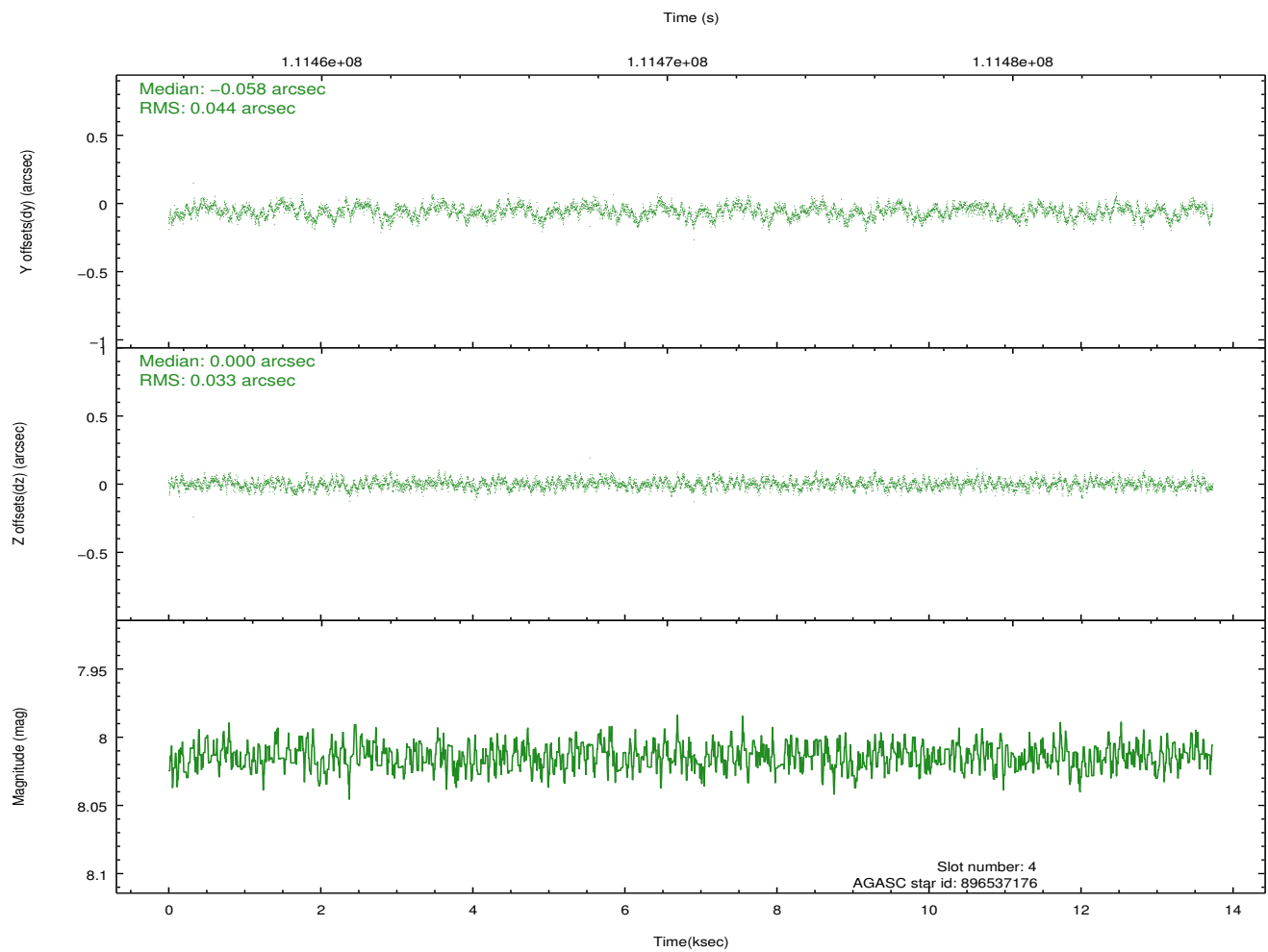
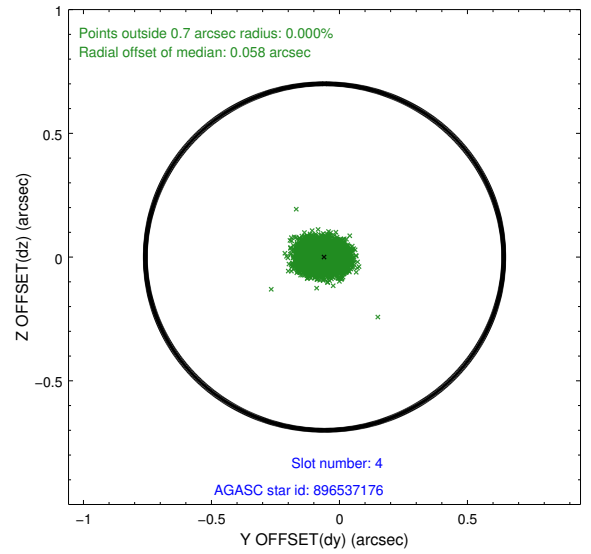
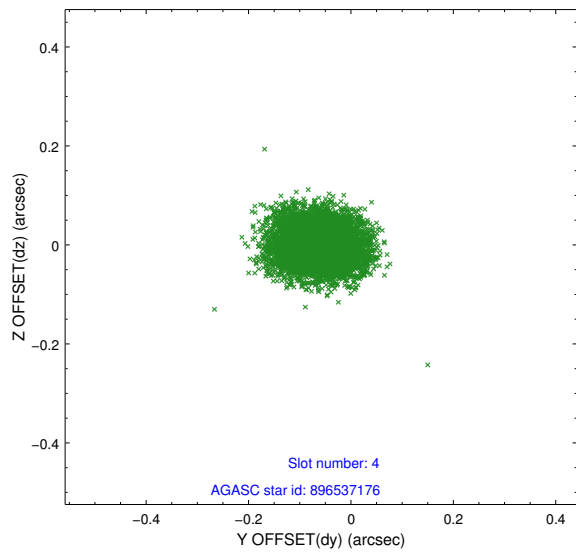
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	11636	-0.052	-0.076	0.013	0.020	0.000000	0.000000	-756.29	-836.61
1	FID	ACIS-I-4	7.18	11635	-0.030	0.056	0.017	0.025	0.000000	0.000000	2157.79	1069.71
2	FID	ACIS-I-5	7.23	11637	-0.020	0.089	0.015	0.023	0.000000	0.000000	-1810.10	1067.57
3	GUIDE	896533888	7.01	23271	0.026	-0.033	0.045	0.069	266.666434	-29.392757	1374.51	970.57
4	GUIDE	896541360	7.71	23270	0.091	0.063	0.050	0.078	266.684478	-29.453744	1587.87	1047.75
5	GUIDE	896537176	8.01	23268	-0.090	-0.101	0.069	0.113	266.498272	-28.678259	-1135.74	198.99
6	GUIDE	896540808	7.48	23270	0.038	-0.011	0.043	0.071	265.985401	-29.308604	1280.85	-1185.78
7	GUIDE	896535464	9.33	23253	-0.060	0.082	0.097	0.157	266.962550	-28.408631	-2239.99	1569.77

3.4 Star Slots

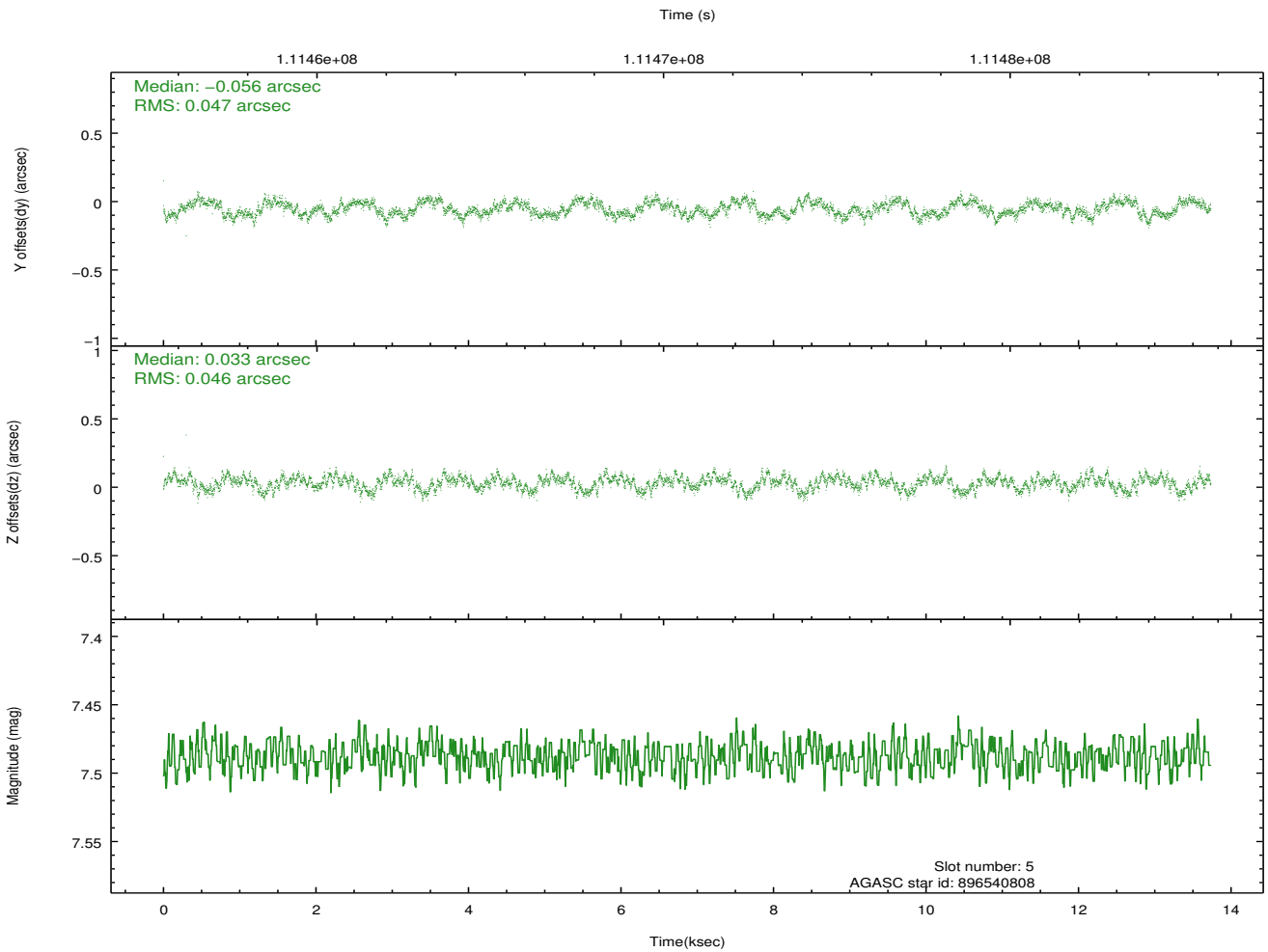
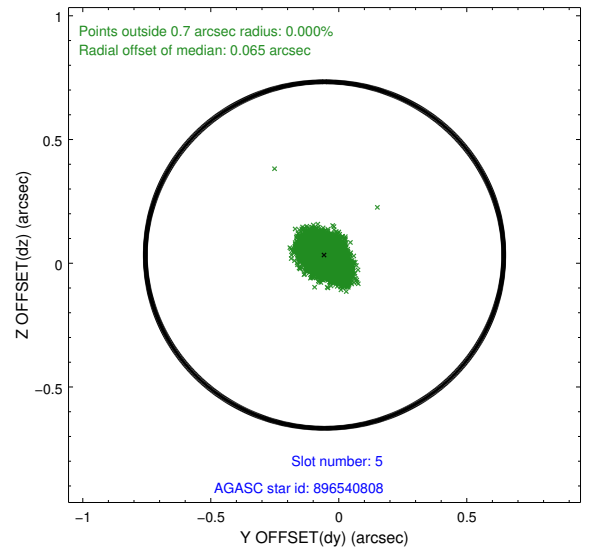
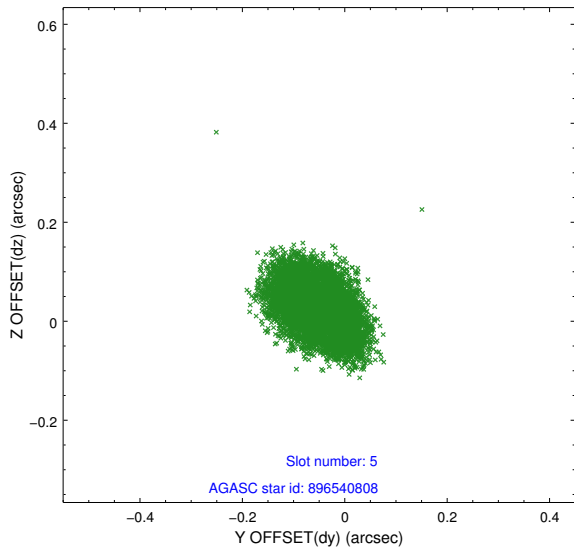
3.4.1 Slot 3



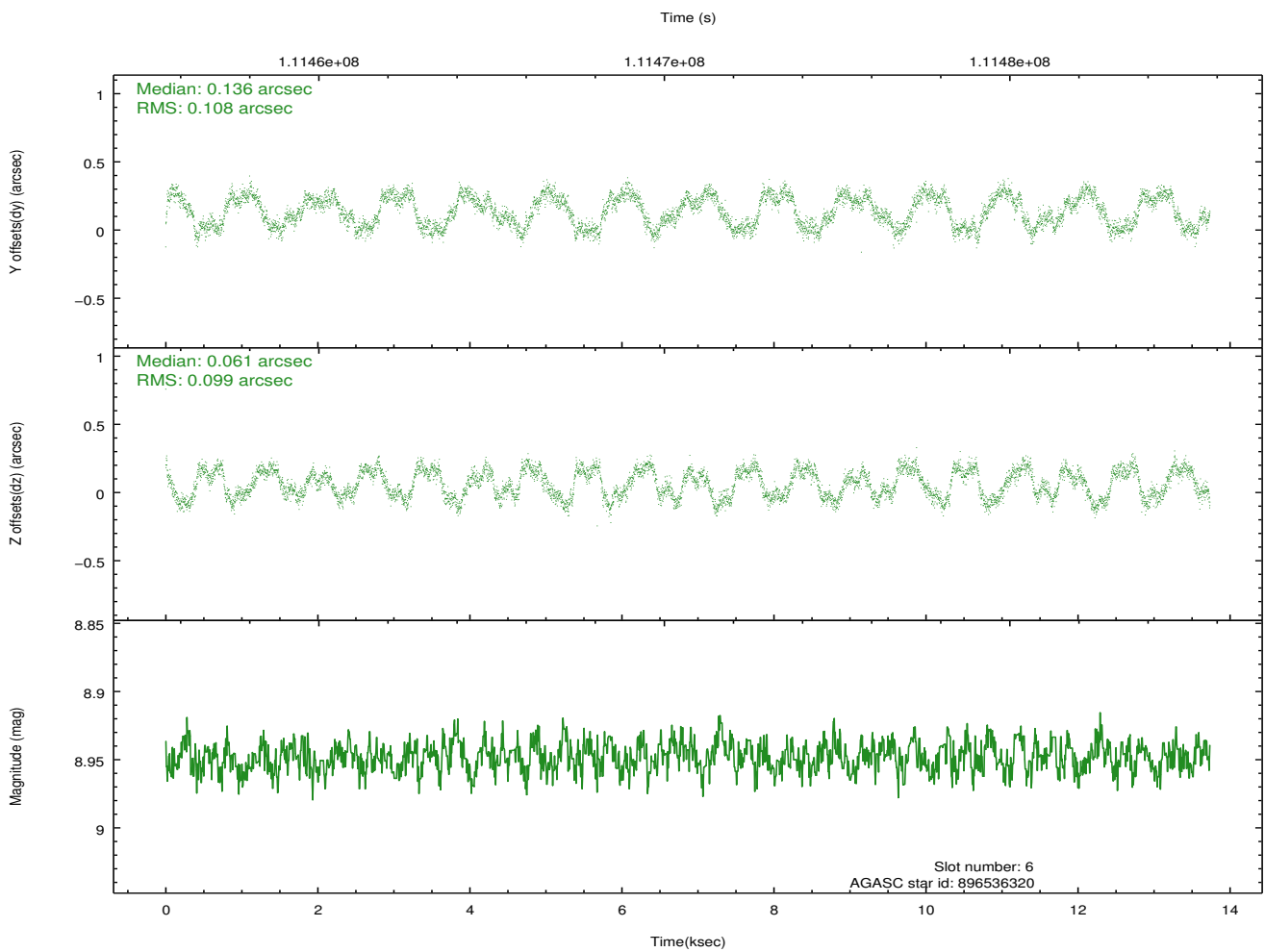
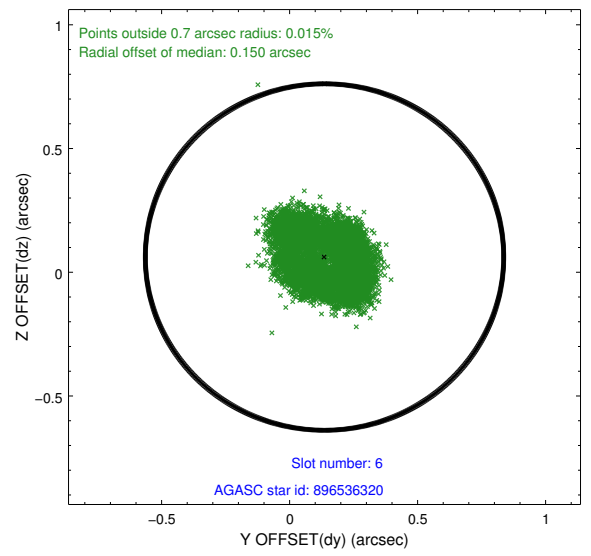
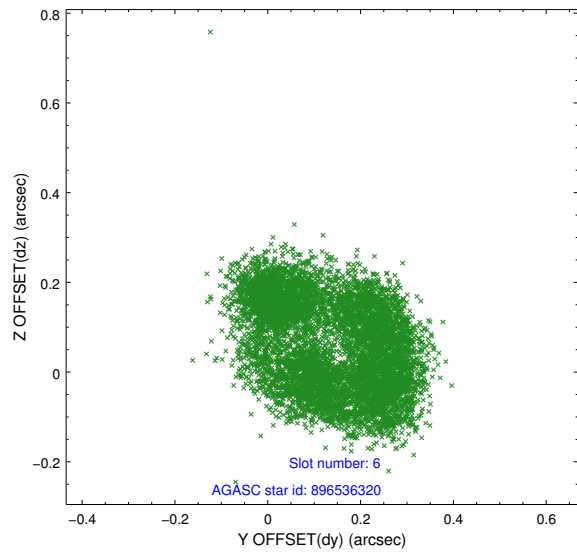
3.4.2 Slot 4



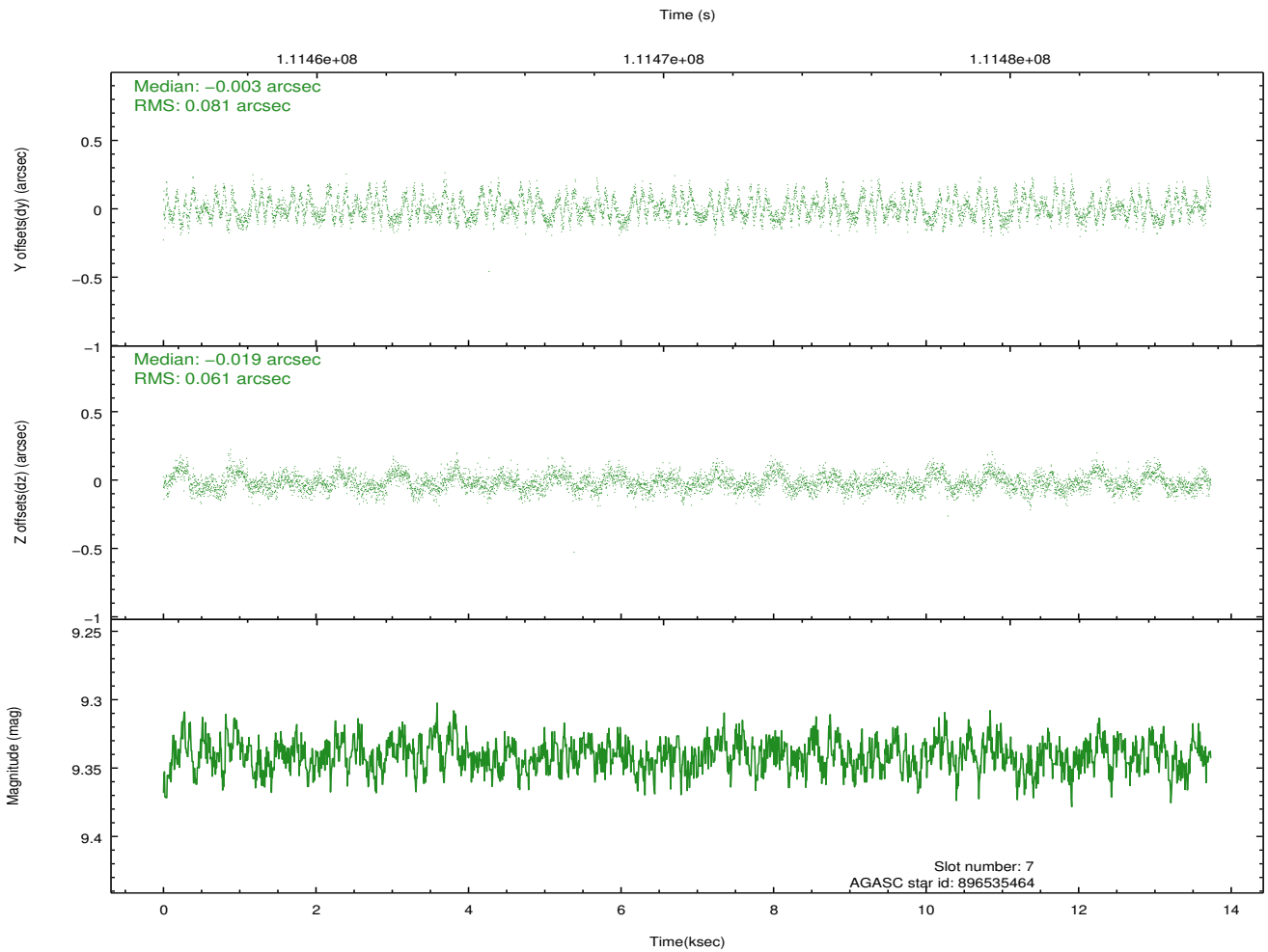
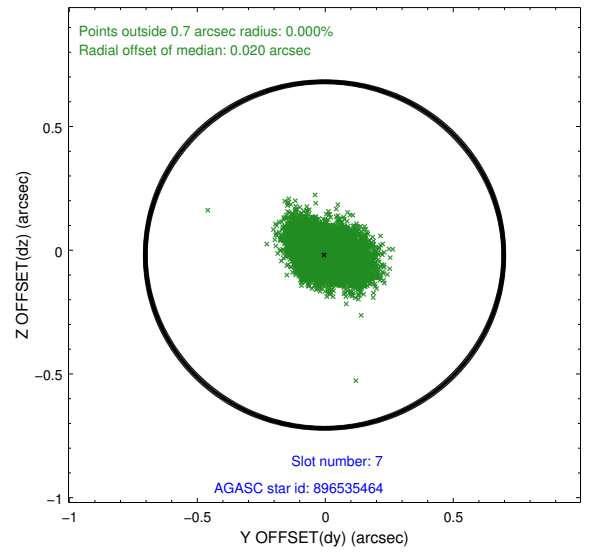
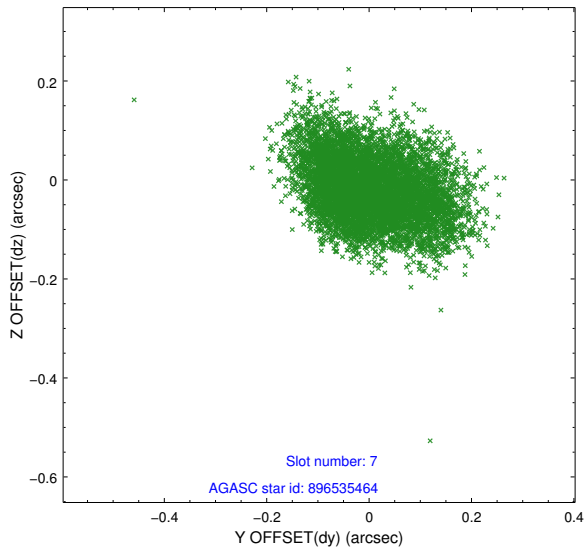
3.4.3 Slot 5



3.4.4 Slot 6

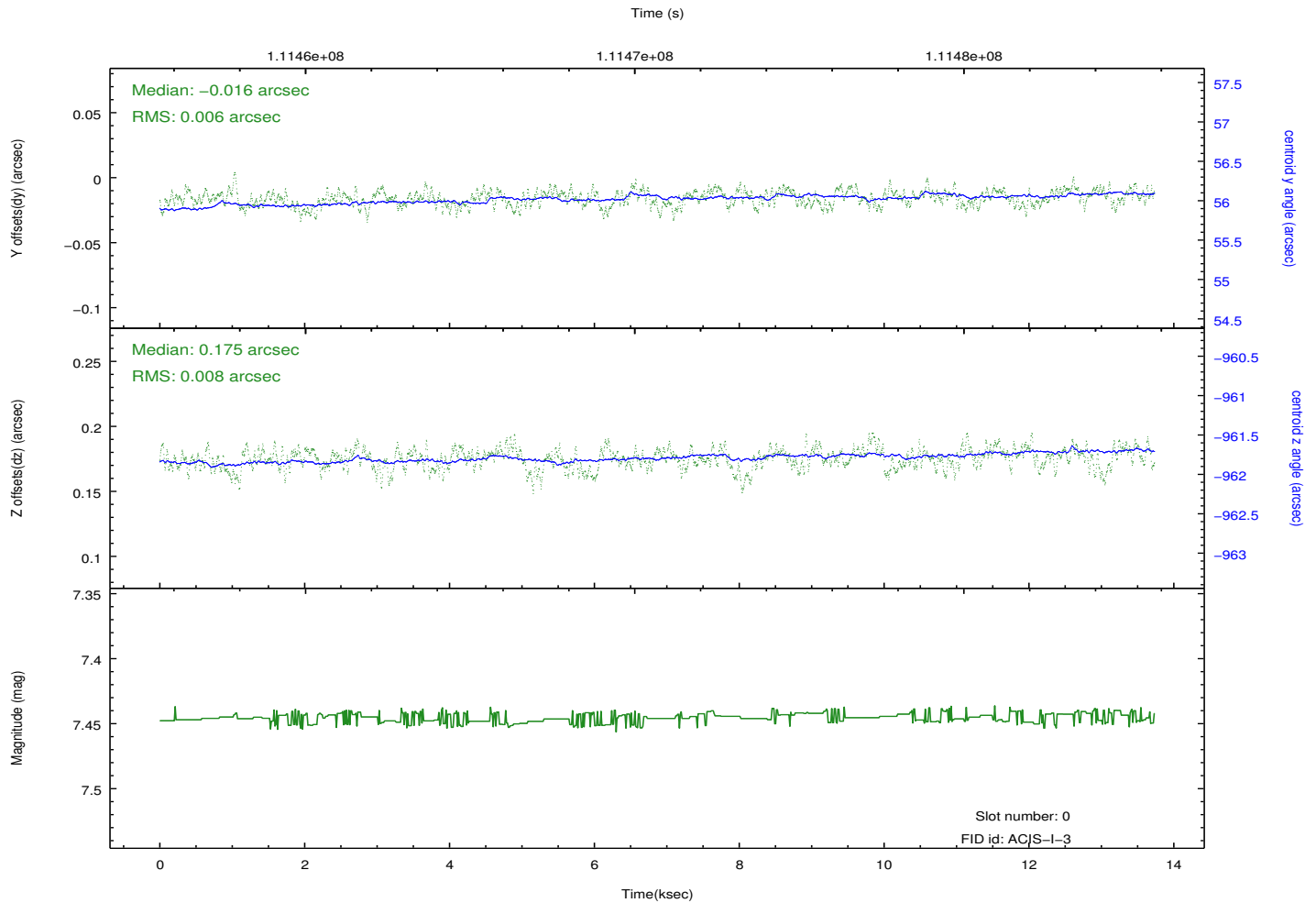
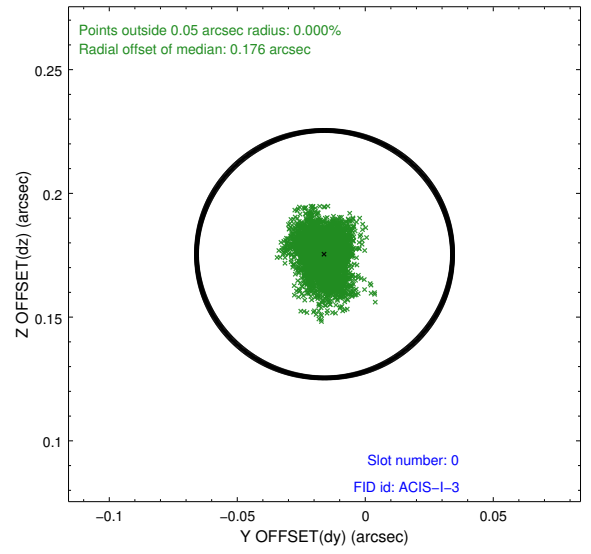
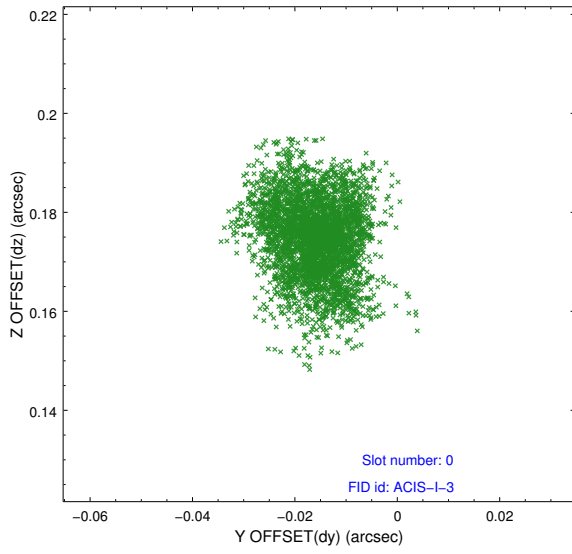


3.4.5 Slot 7

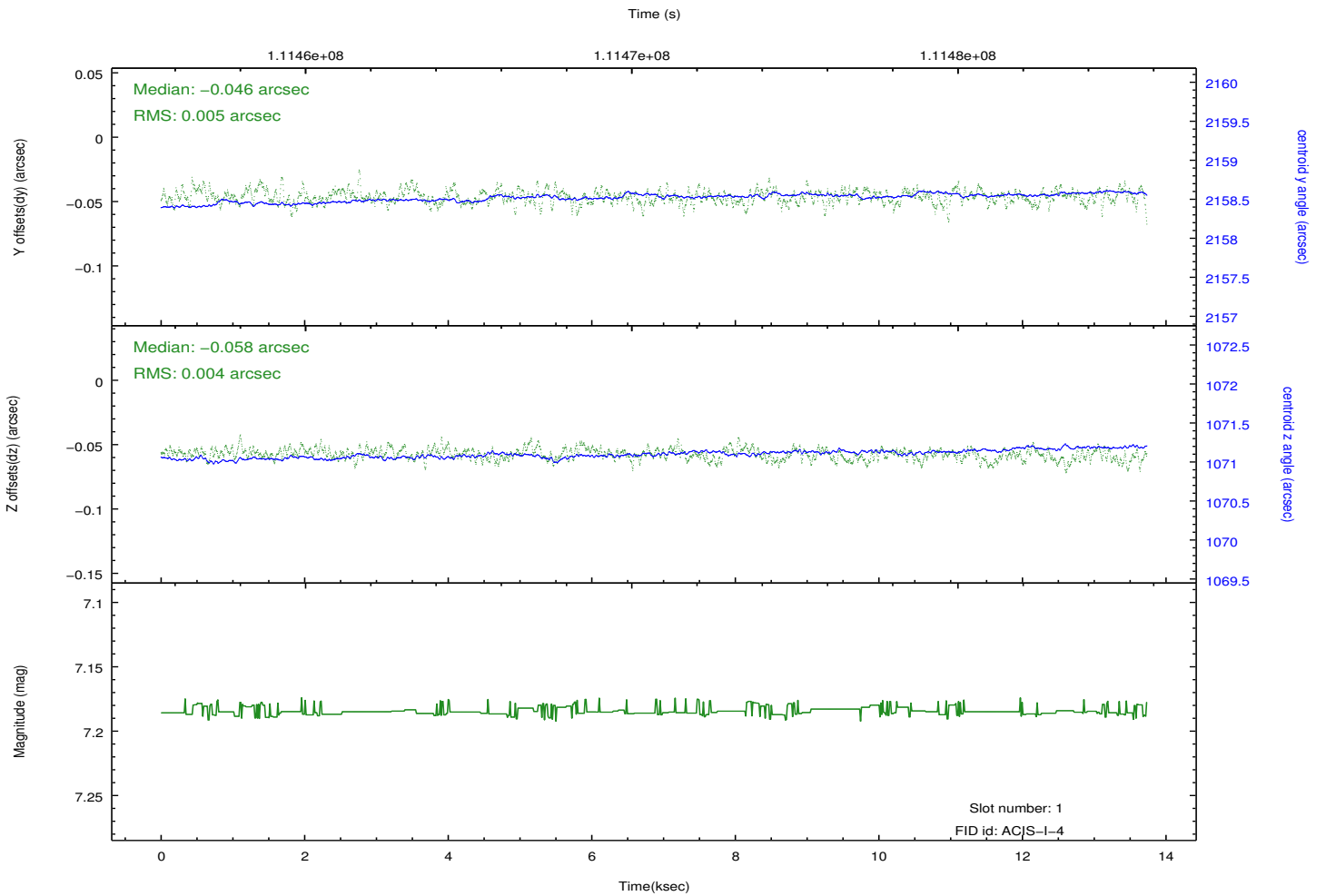
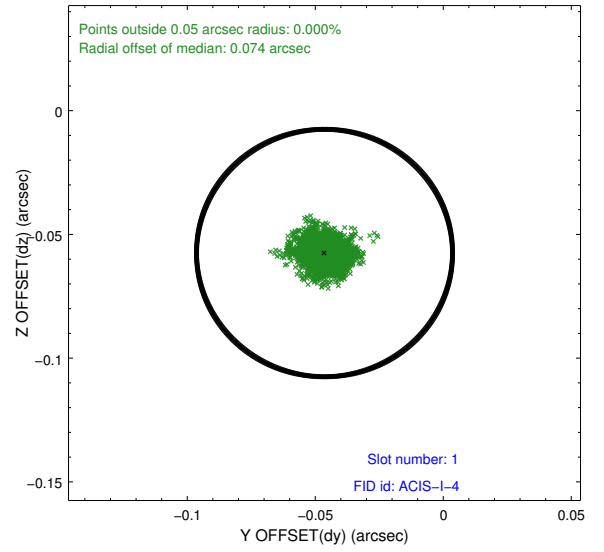
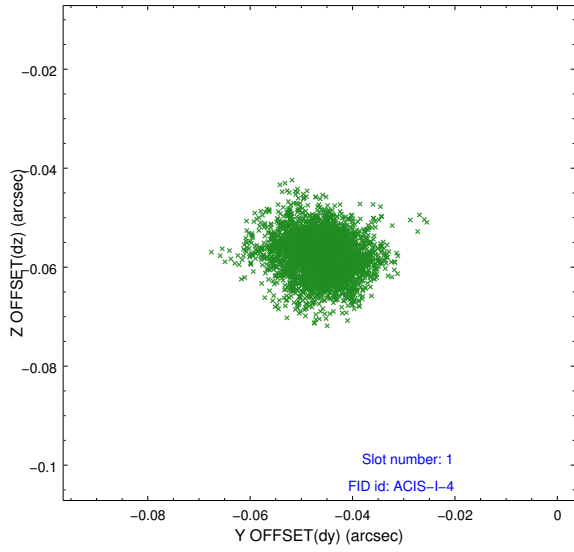


3.5 FID Slots

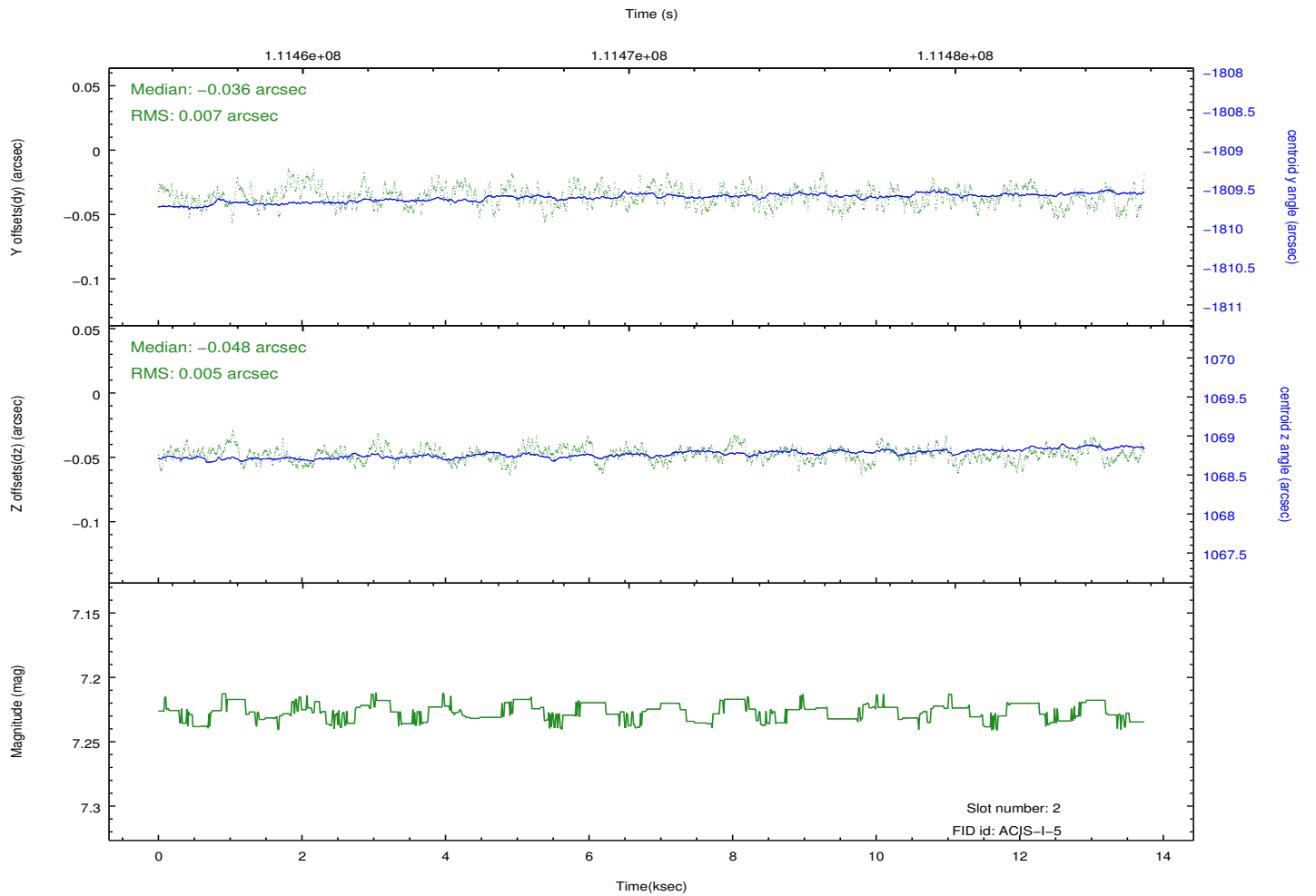
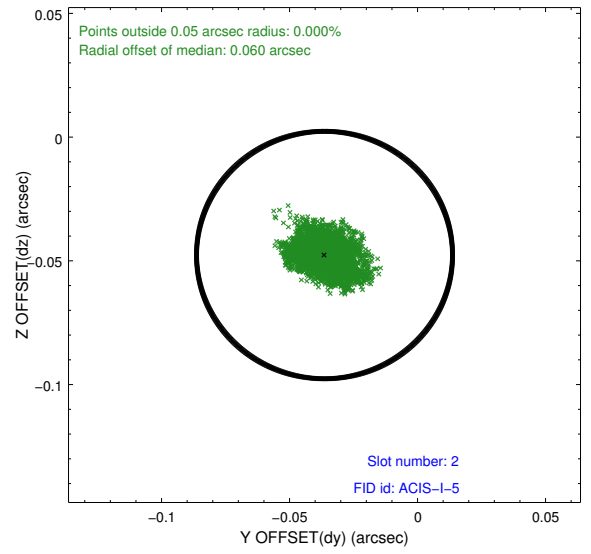
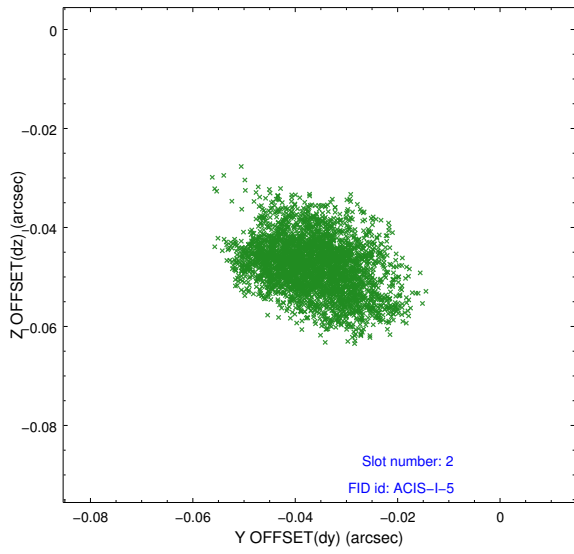
3.5.1 Slot 0



3.5.2 Slot 1



3.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.84

A.2 Comments

Charge time for this ObsId remains at previous value of 49.84 ks, although with the current processing the charge time would be 49.933 ks. For obi=1, dummy information for chip 7 was input into the processing to allow a successful completion.

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The ACIS DPA anomaly affected this observation. During the first part of the observation, the 5kv voltage was turned off. It was turned on again with a realtime command at 300:21:51. In addition, the mode of the observation was changed to CTI-type, which resulted in the use of 6 CCD chips.