

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13244 - L2 Version 2
Chandra X-Ray Center

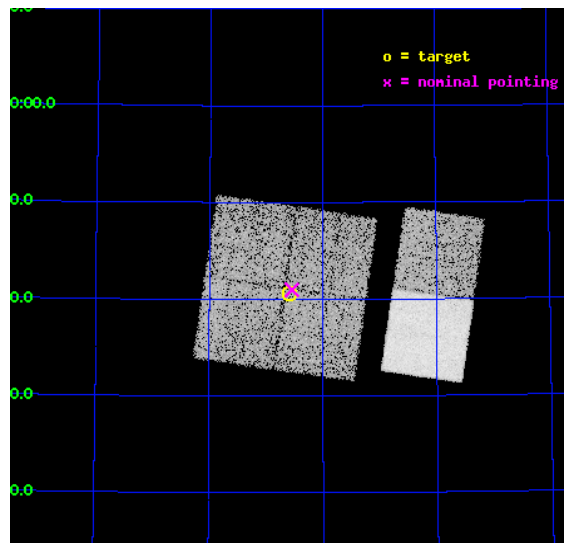
L2 Processing Date : Feb 7 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

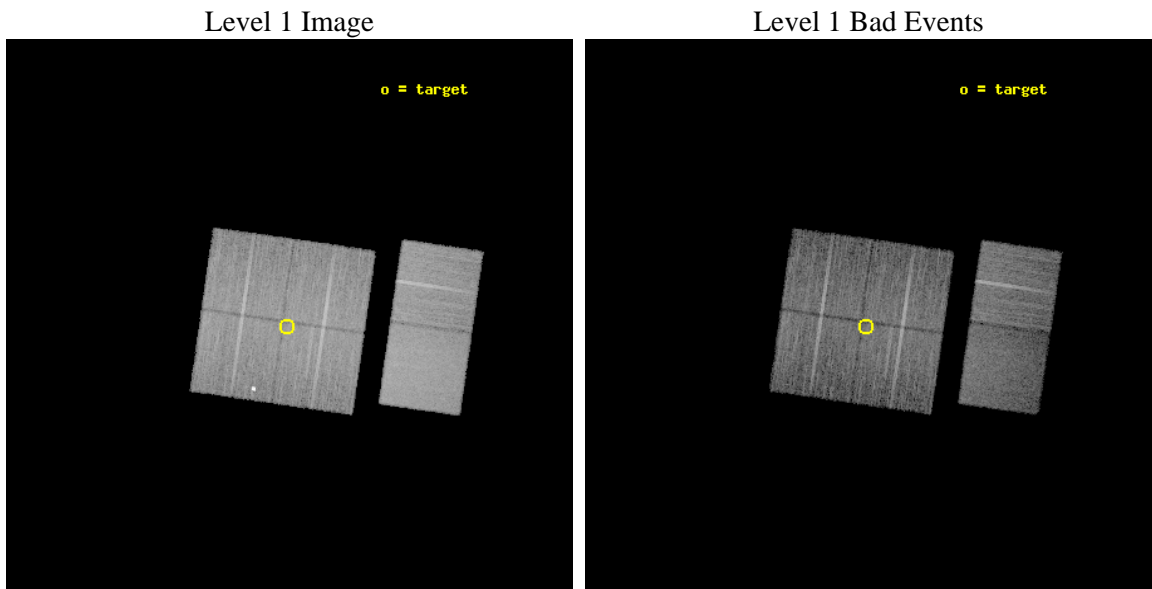
seq_num	900985	Sequence number
obs_id	13244	Observation id
title	Filling the 15 micron Gap: Search for Compton-thick Accretion with Chandra and AKARI in the NEP Deep Field	Proposal title
observer	Dr. Mirko Krumpke	Principal investigator
object	AKARI-NEP-Deep Field	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	269.14583	Observer's specified target RA [deg]
dec_targ	66.675833	Observer's specified target Dec [deg]
ra_nom	269.13695873693	Nominal RA [deg]
dec_nom	66.683143719168	Nominal Dec [deg]
roll_nom	98.2168470034	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15054.809375465	Sum of GTIs [s]
livetime	14864.176314235	Livetime [s]
ontime0	15054.686255455	Sum of GTIs [s]
ontime1	15054.727295458	Sum of GTIs [s]
ontime2	15051.527335107	Sum of GTIs [s]
ontime3	15054.809375465	Sum of GTIs [s]
ontime6	15054.891455472	Sum of GTIs [s]
ontime7	15054.850415468	Sum of GTIs [s]
l2events	97165	Number of level 2 events



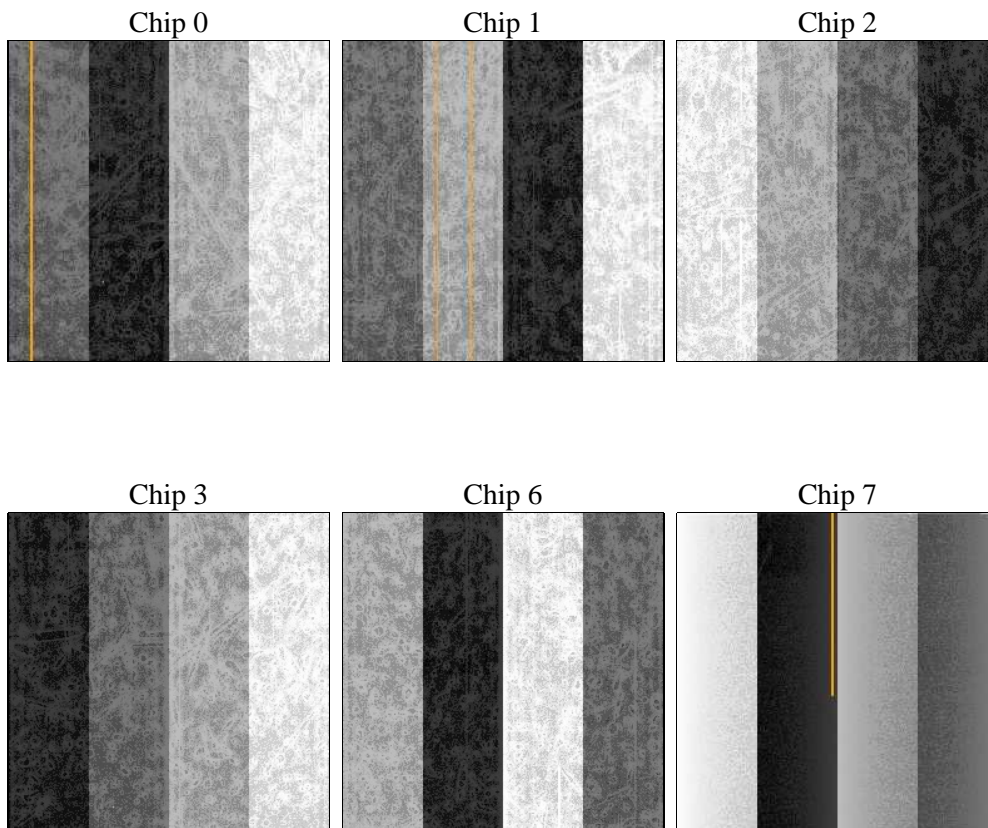
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	15054.809375465	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	15054.686255455	Sum of GTIs [s]
date	2012-02-07T13:45:14	Date and time of file creation	ontime1	15054.727295458	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15051.527335107	Sum of GTIs [s]
			ontime3	15054.809375465	Sum of GTIs [s]
			ontime6	15054.891455472	Sum of GTIs [s]
			ontime7	15054.850415468	Sum of GTIs [s]
			l1events	589378	Number of level 1 events

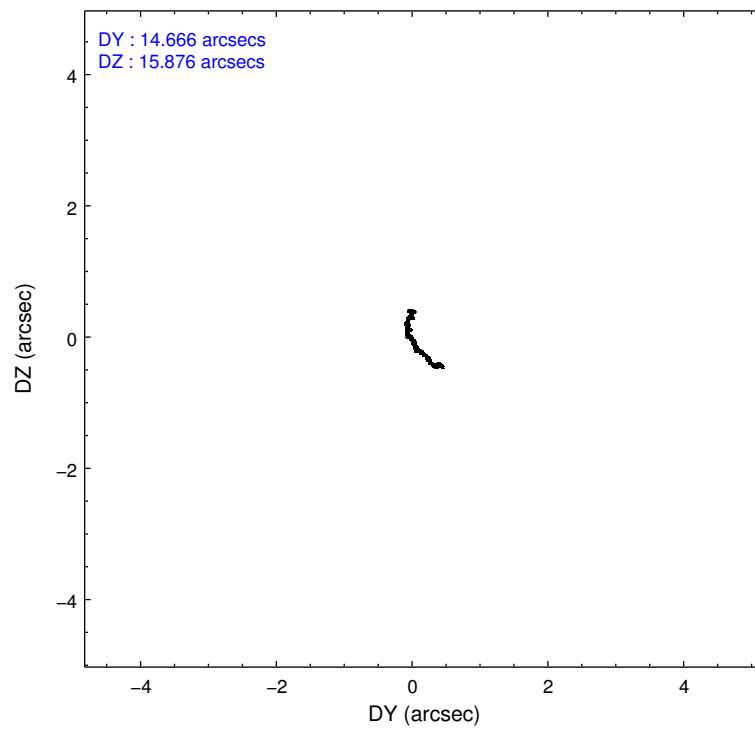
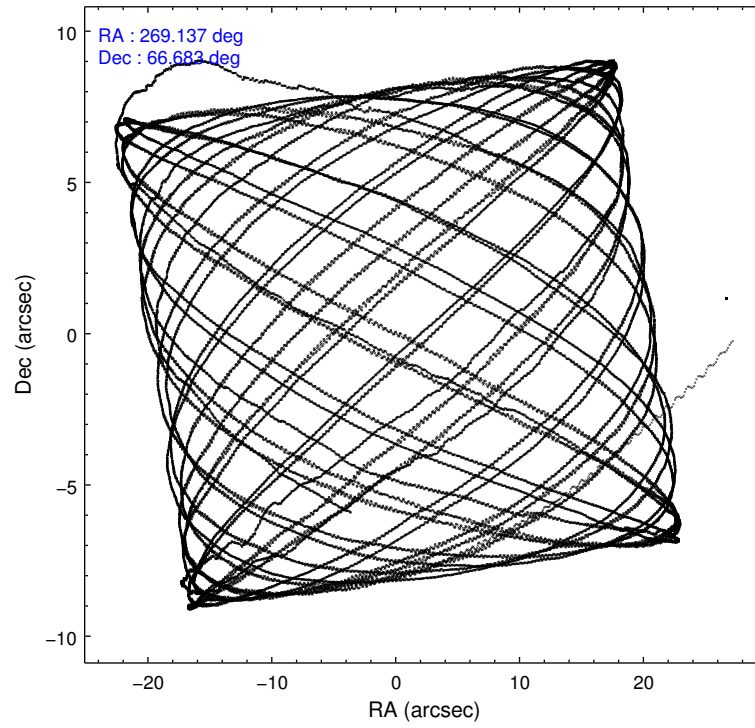
2.1.4 Events

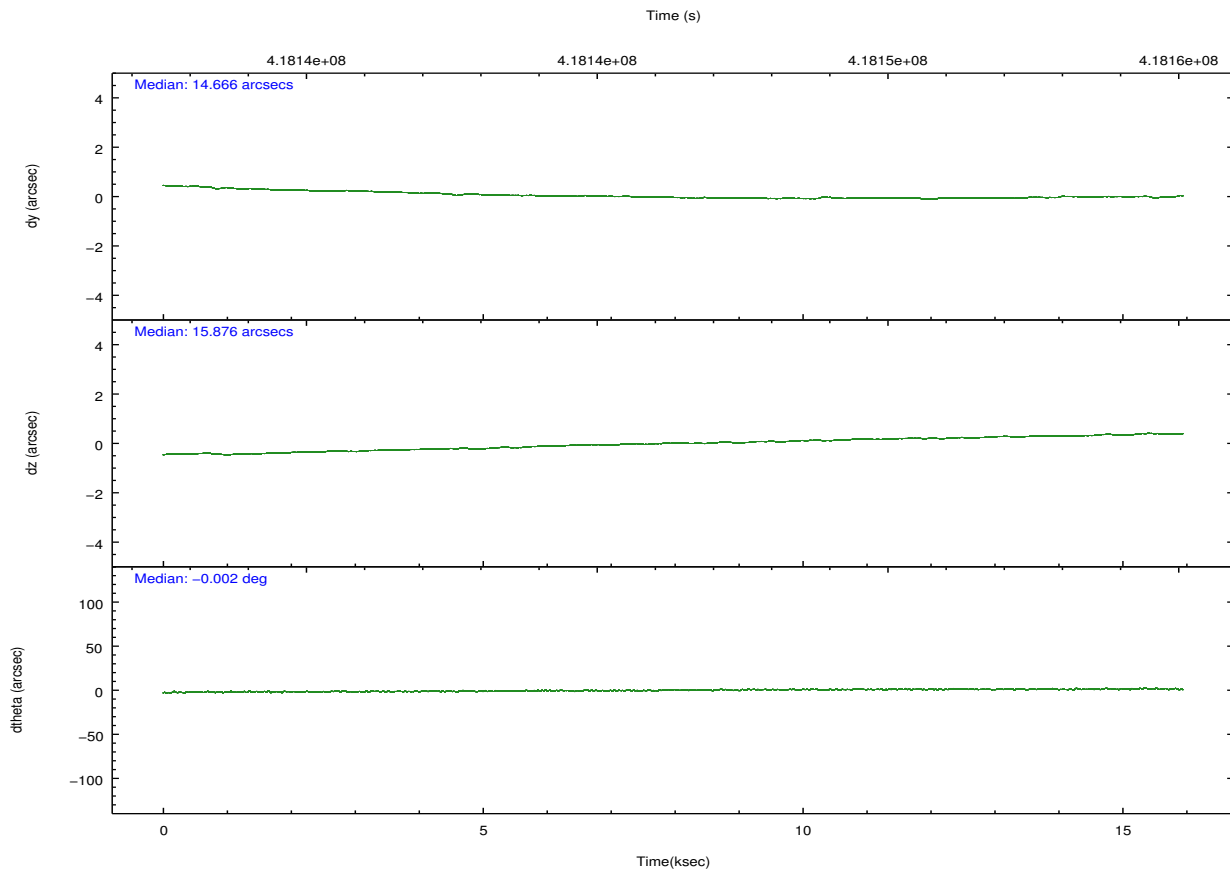
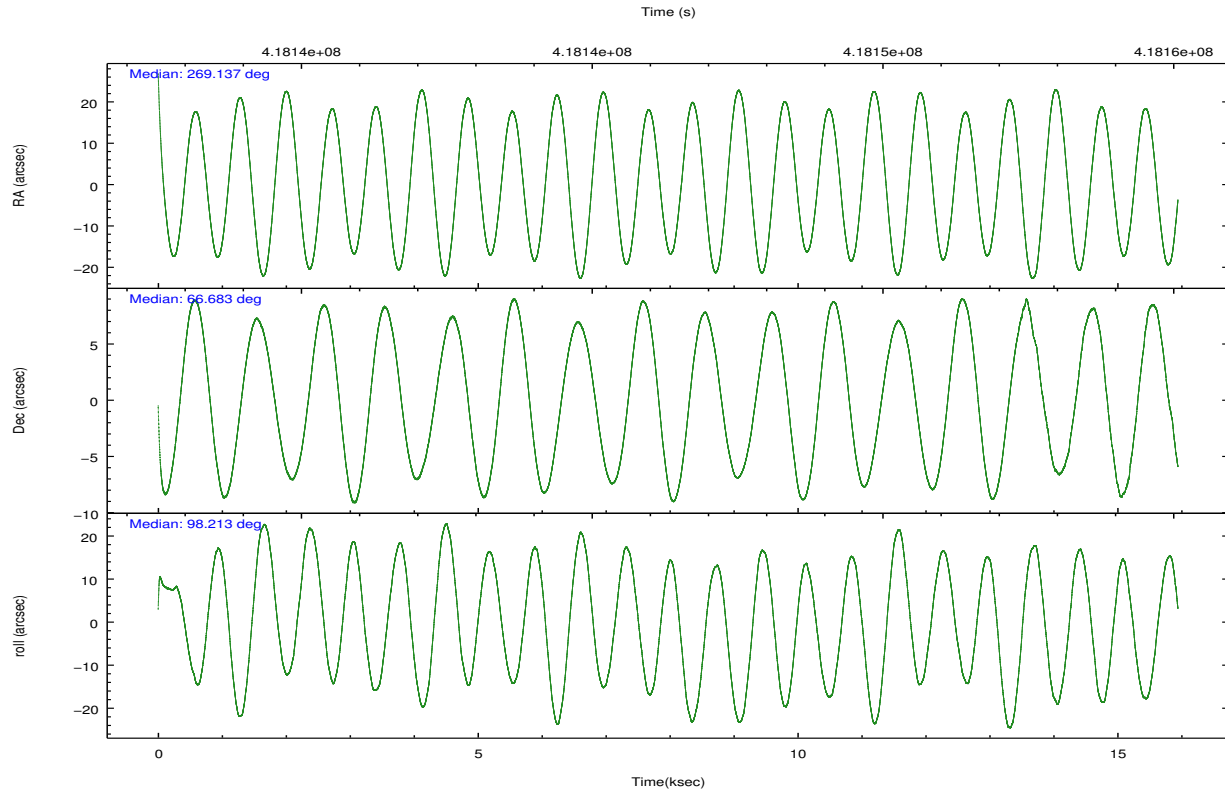
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	88735	93078	95970	92348	99298	119949	grade 0 events	3804	8465	3763	3490	3771	4832
rejected events	78041	77178	85461	82332	88254	66393		4%	9%	3%	3%	3%	4%
rejected %	87%	82%	89%	89%	88%	55%	grade 1 events	63	60	69	54	44	138
								0%	0%	0%	0%	0%	0%
							grade 2 events	2588	2749	2562	2290	2526	10798
								2%	2%	2%	2%	2%	9%
							grade 3 events	1130	1091	1067	1083	1128	4680
								1%	1%	1%	1%	1%	3%
							grade 4 events	1025	1199	1098	1053	1107	4629
								1%	1%	1%	1%	1%	3%
							grade 5 events	4071	4240	3754	4596	4687	12394
								4%	4%	3%	4%	4%	10%
							grade 6 events	2155	2403	2025	2100	2522	28645
								2%	2%	2%	2%	2%	23%
							grade 7 events	73899	72871	81632	77682	83513	53833
								83%	78%	85%	84%	84%	44%

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	269.180214	269.1369587369294	CCD I2 on	Y	Y
[deg] Pointing Dec	66.661590	66.68314371916809	CCD I3 on	Y	Y
[deg] Pointing Roll	97.968431	98.21684700339978	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)	418139274.184000	418137473.41945	CCD S5 on	N	N
Observation start date	2011-04-02T13:46:48	2011-04-02T13:17:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	418154274.184000	418155300.73288	On-chip summing requested	N	N
Observation end date	2011-04-02T17:56:48	2011-04-02T18:15:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



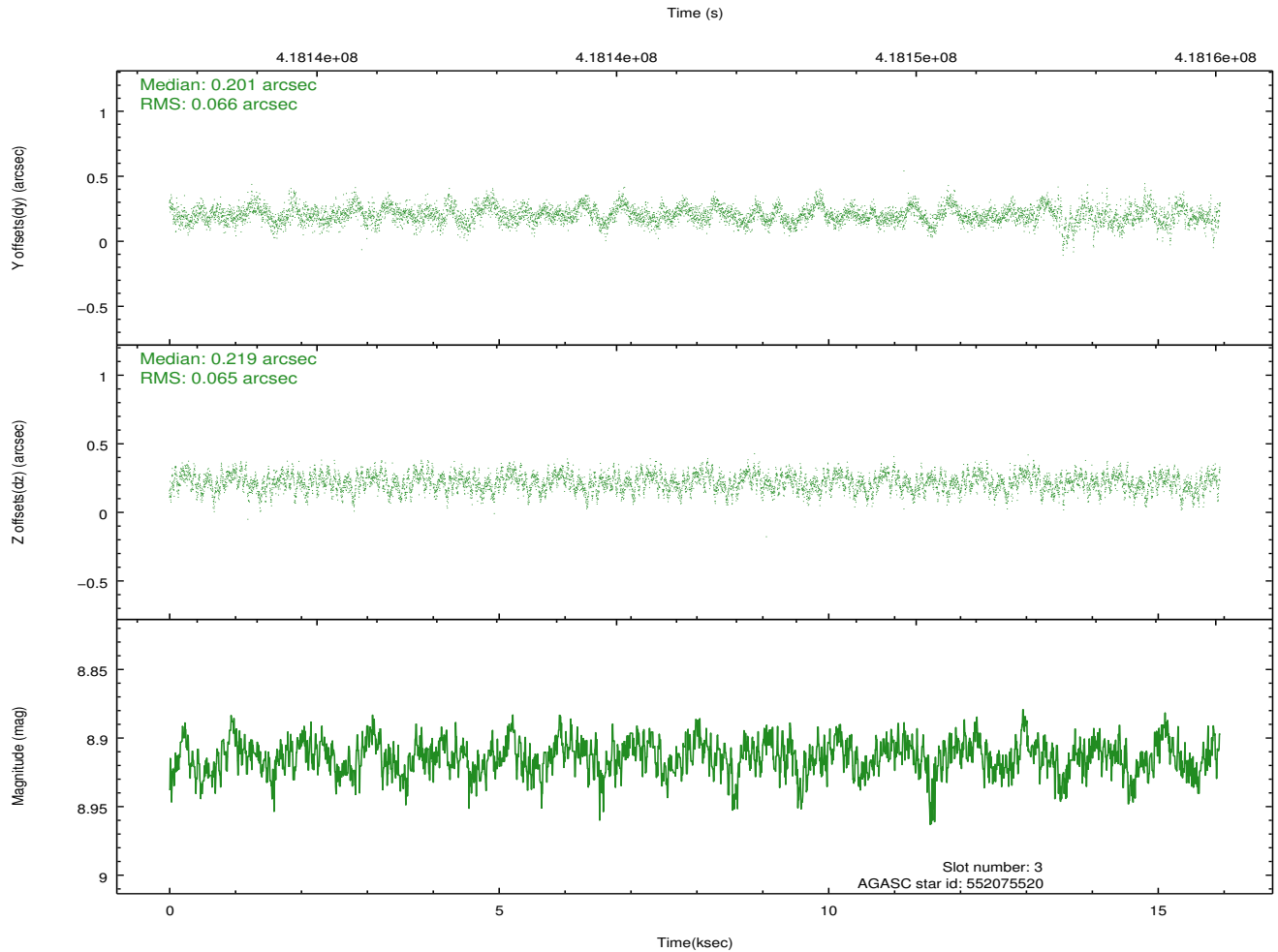
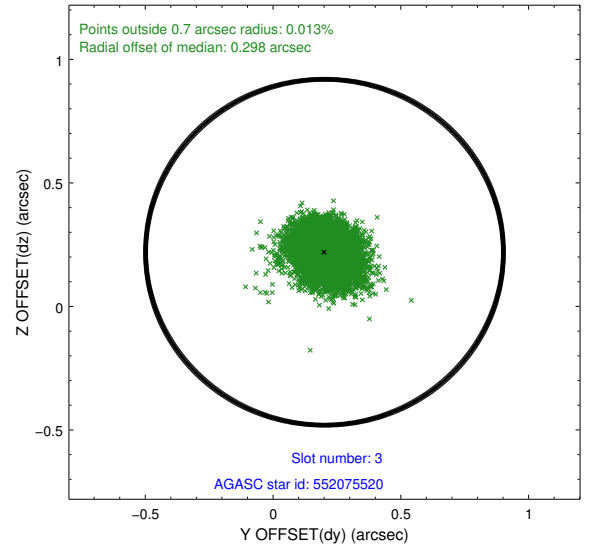
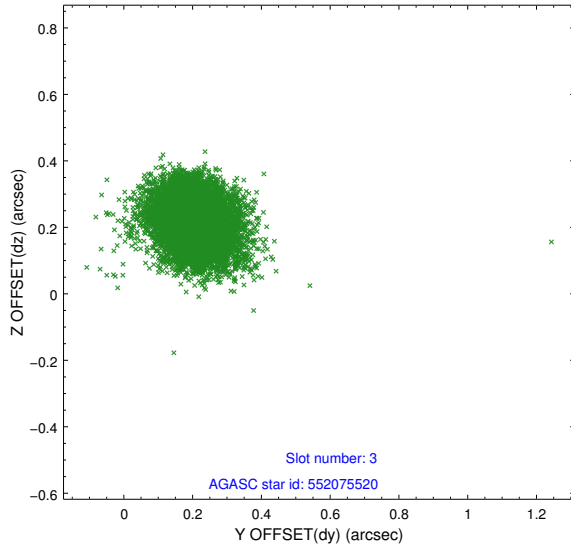


Slot Statistics

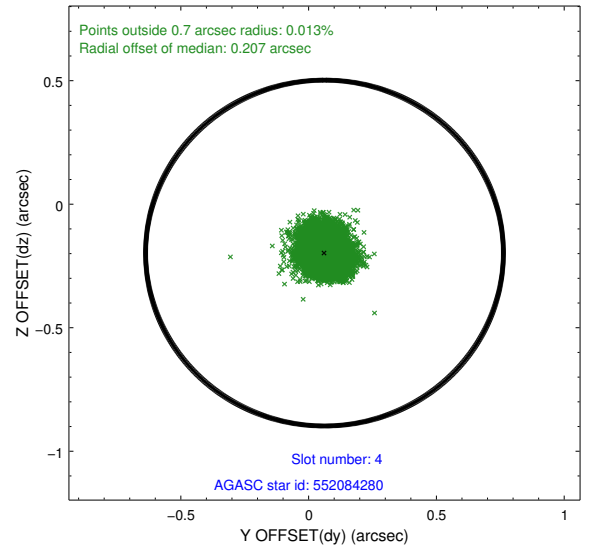
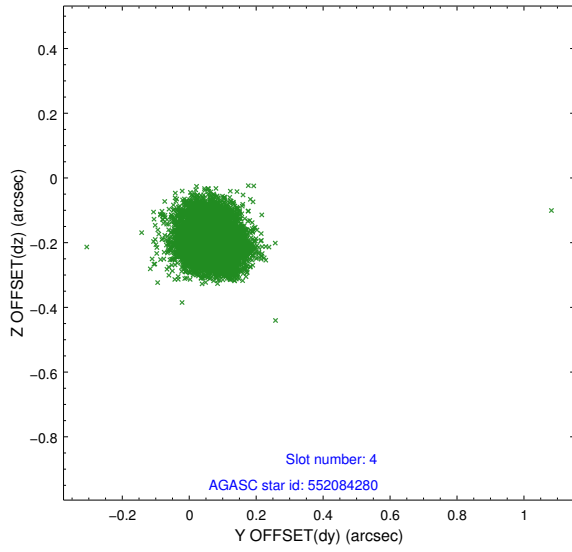
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.05	3887	0.050	-0.031	0.023	0.035	0.000000	0.000000	924.79	-839.51
1	FID	ACIS-I-5	7.05	3888	-0.216	0.050	0.015	0.023	0.000000	0.000000	-1823.43	1057.93
2	FID	ACIS-I-6	7.05	3889	0.075	0.049	0.012	0.017	0.000000	0.000000	390.07	1702.74
3	GUIDE	552075520	8.91	7774	0.201	0.219	0.098	0.159	269.430358	66.310622	-1300.49	-183.03
4	GUIDE	552084280	7.64	7778	0.062	-0.198	0.076	0.122	268.233478	66.419076	-665.46	1469.76
5	GUIDE	552213664	8.84	7772	0.046	0.170	0.098	0.159	270.812461	66.341359	-1437.83	-2179.03
6	GUIDE	552216648	9.75	7741	0.019	-0.001	0.169	0.263	270.130141	67.075369	1300.42	-1526.82
7	GUIDE	552082392	9.74	7768	-0.326	-0.202	0.138	0.218	267.761612	66.950878	1330.95	1832.39

2.4 Star Slots

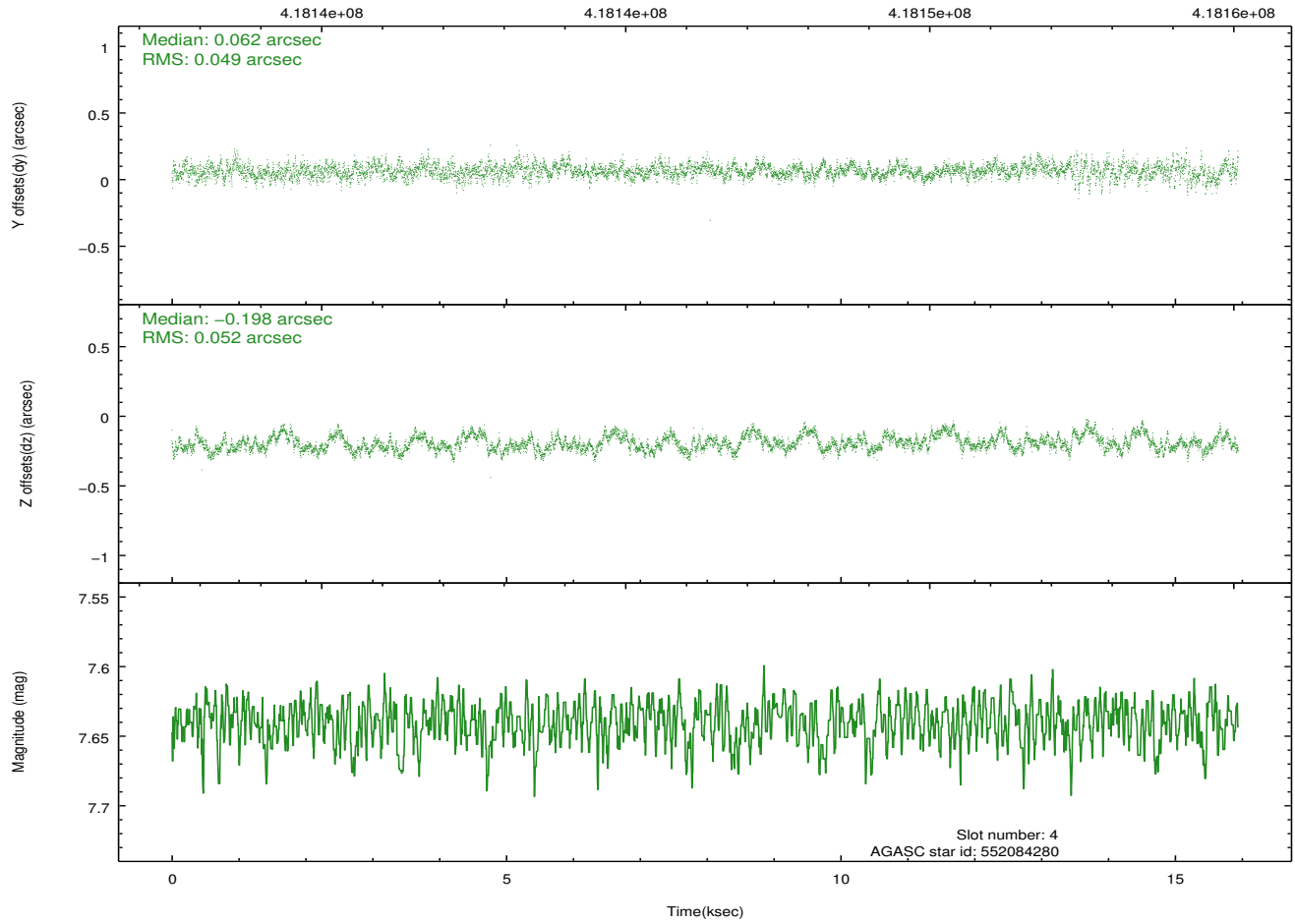
2.4.1 Slot 3



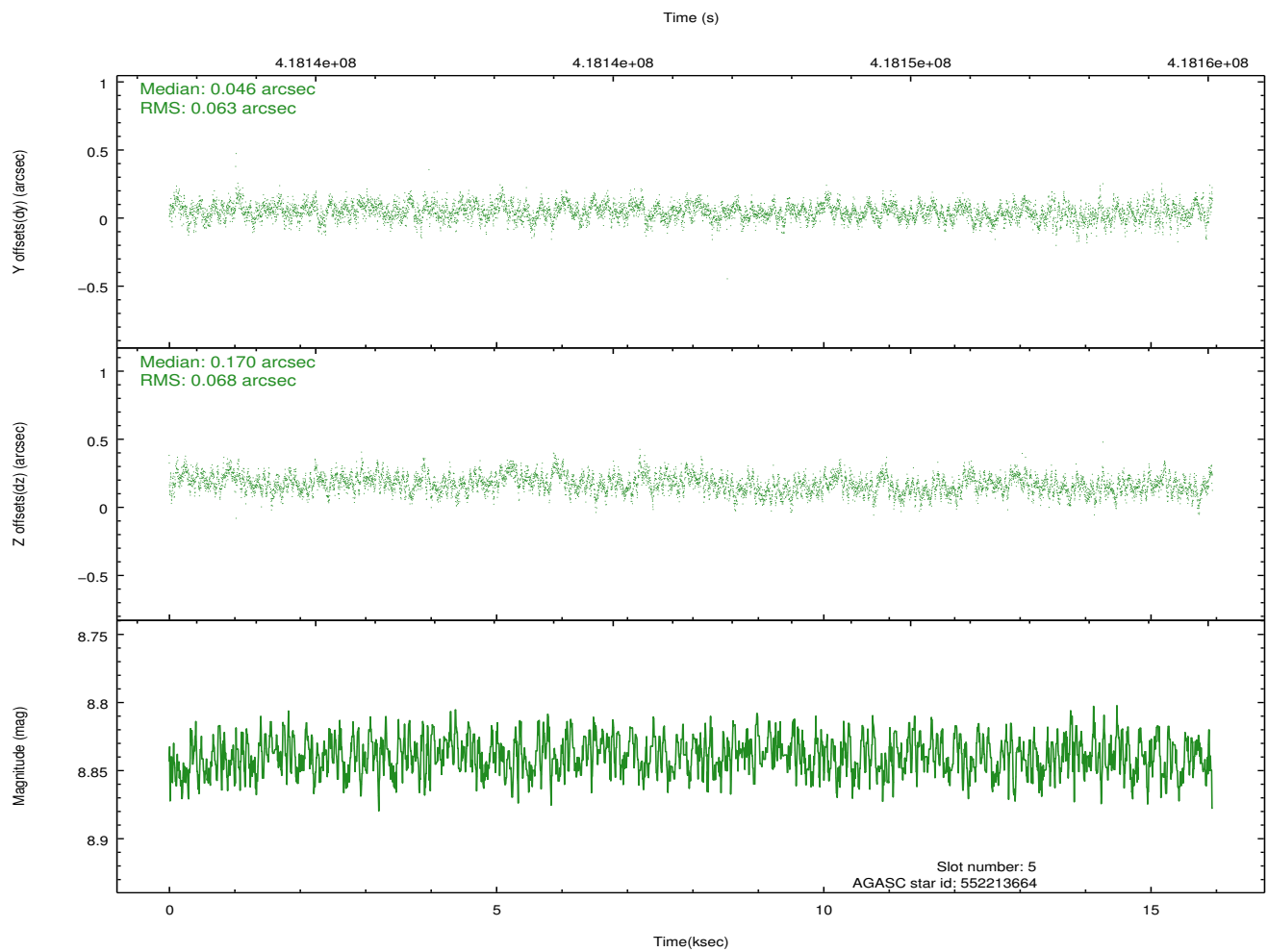
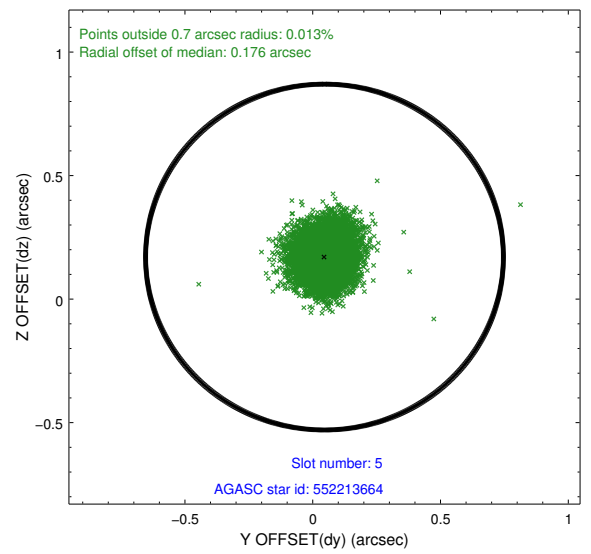
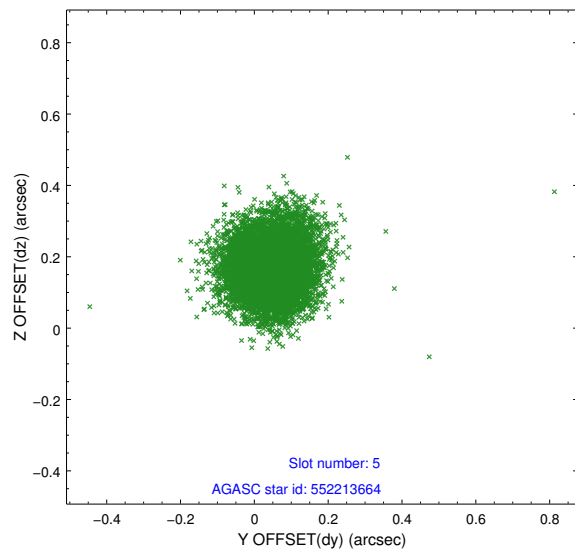
2.4.2 Slot 4



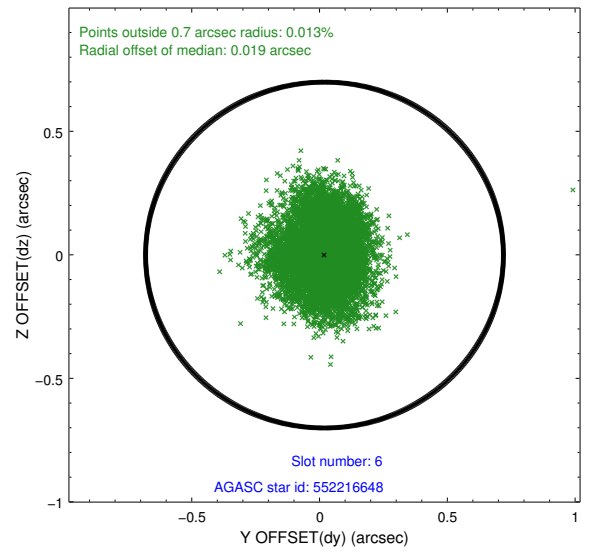
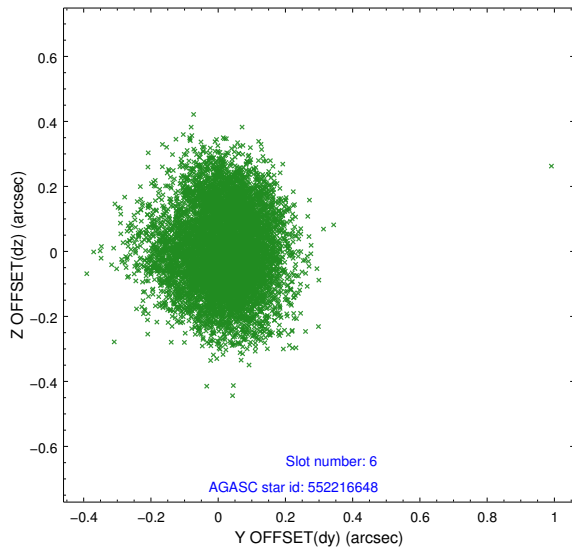
Time (s)



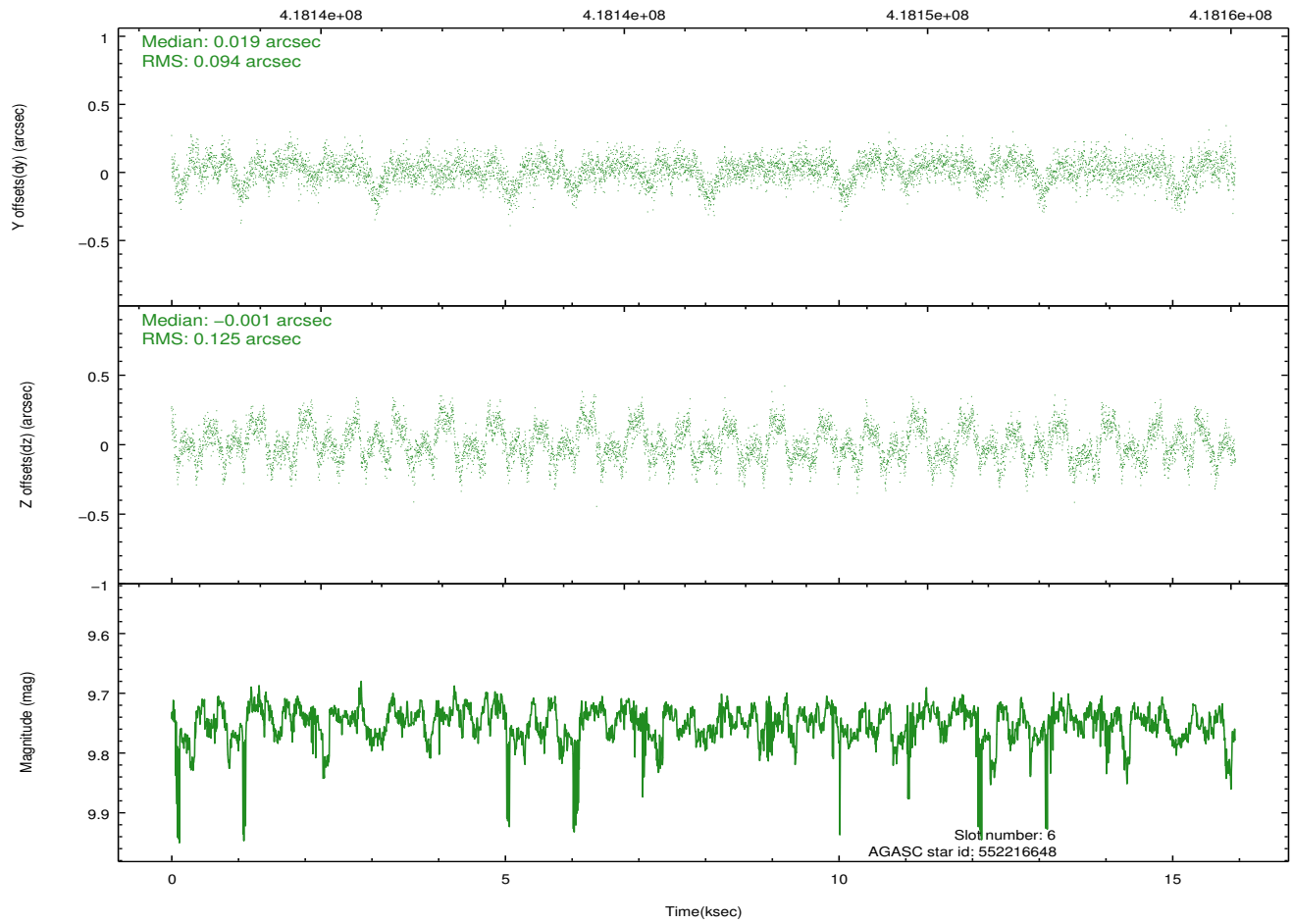
2.4.3 Slot 5



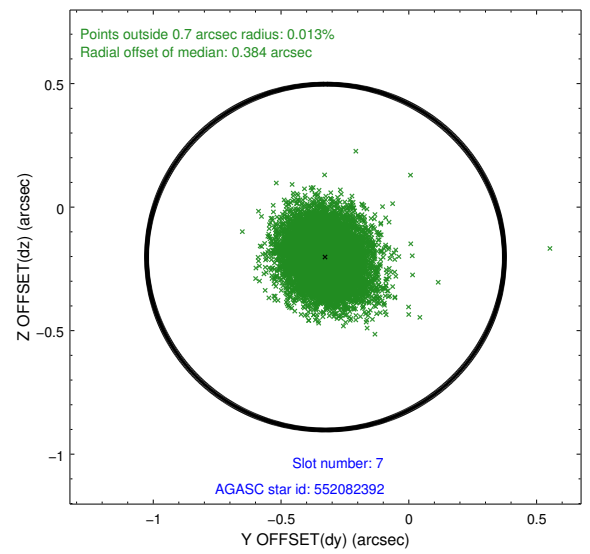
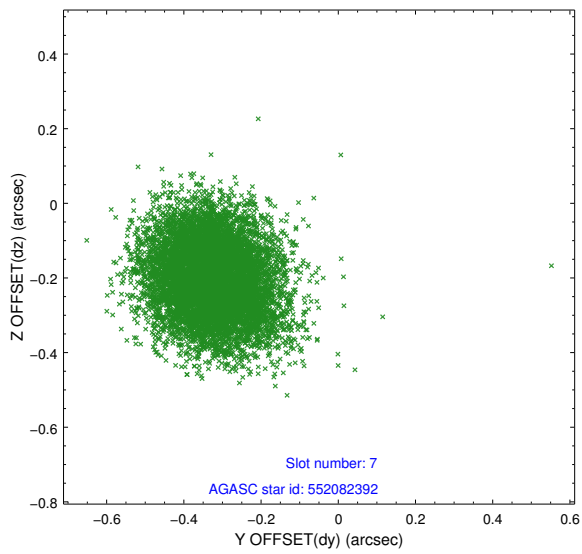
2.4.4 Slot 6



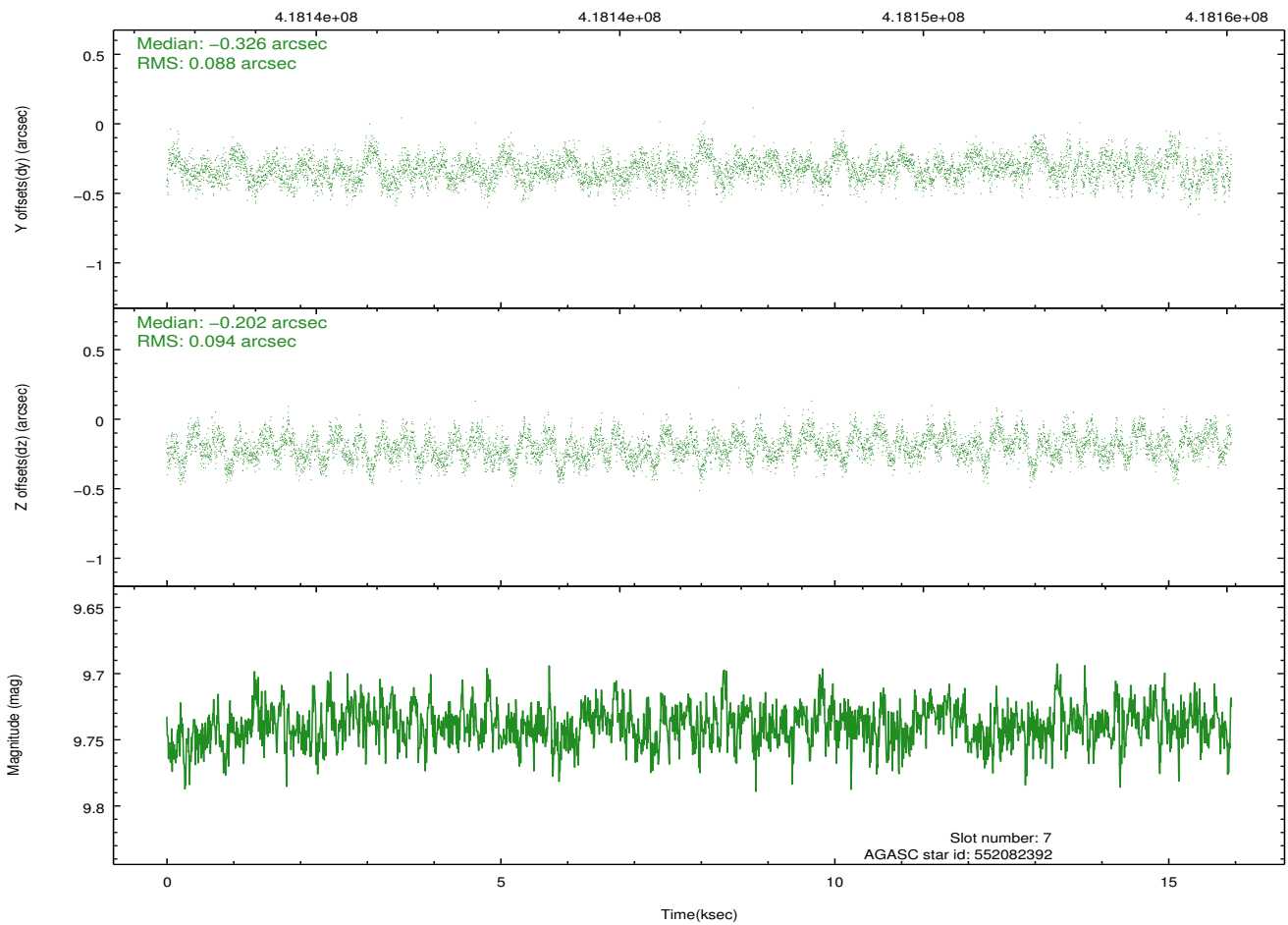
Time (s)



2.4.5 Slot 7

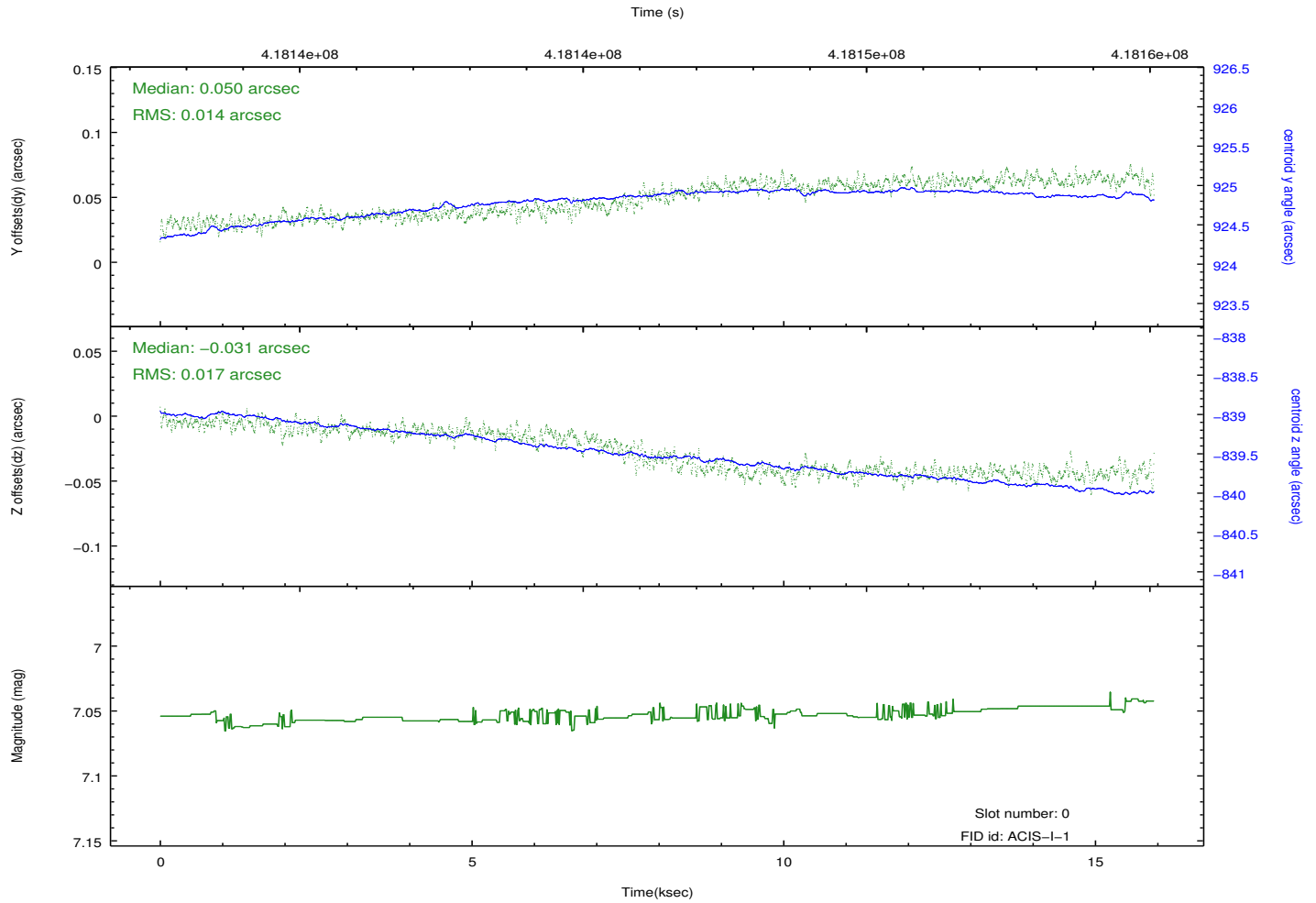
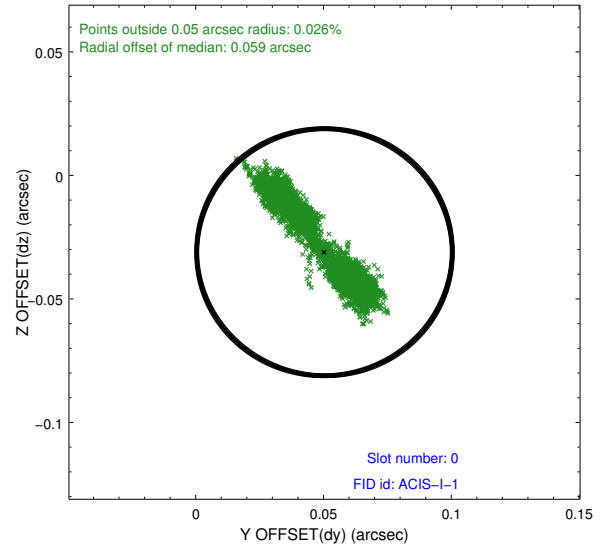
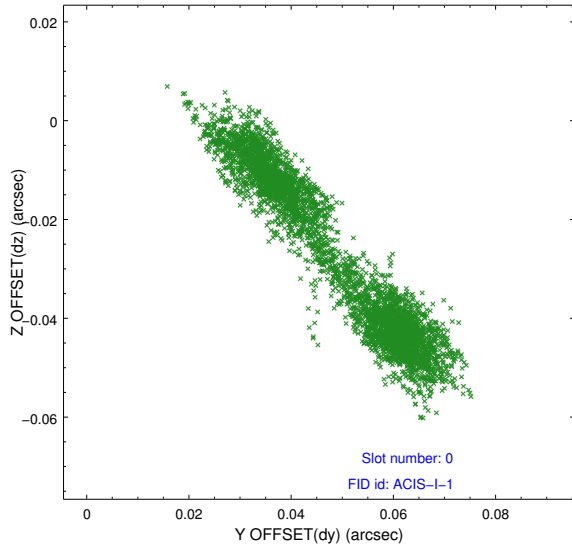


Time (s)

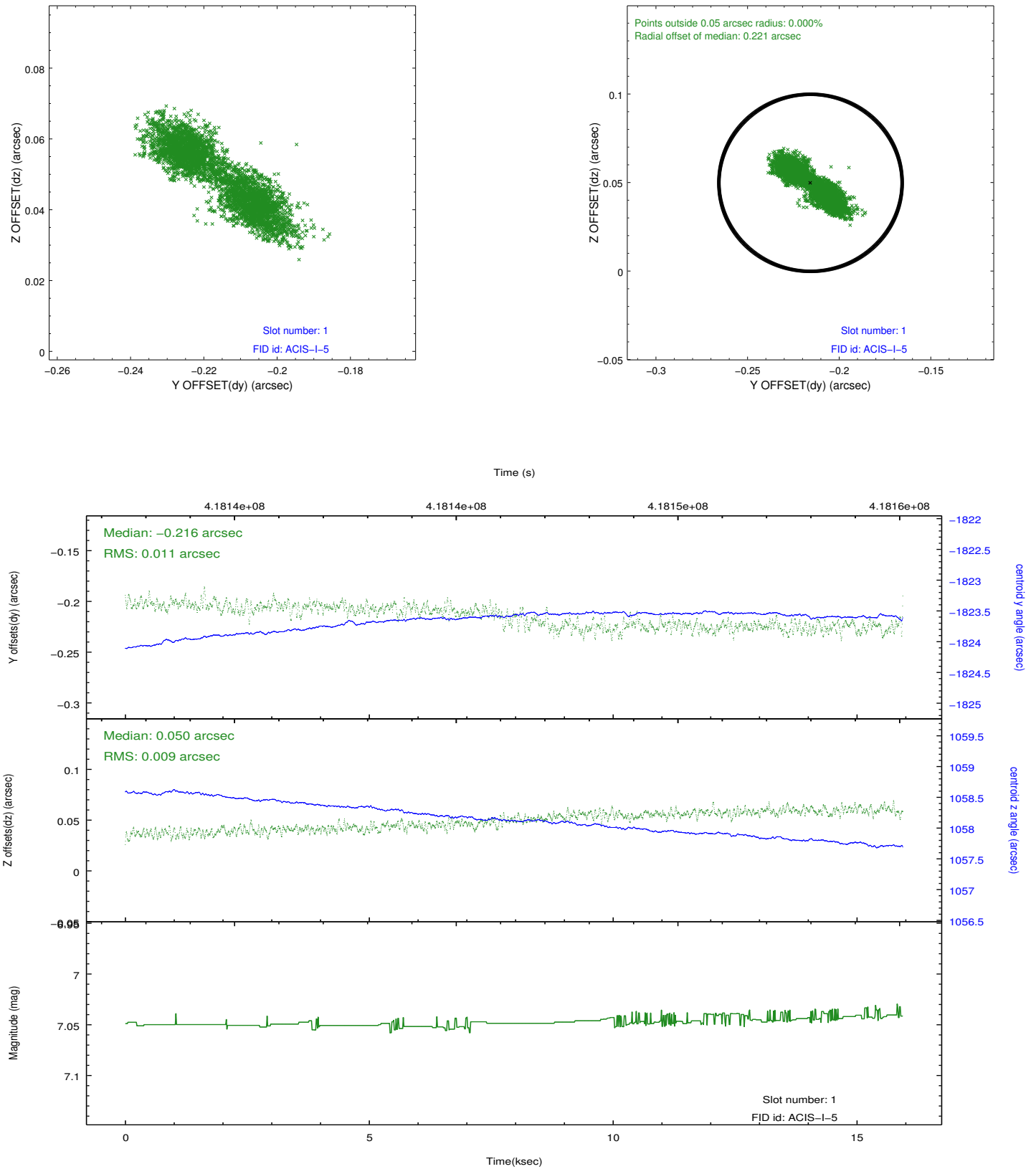


2.5 FID Slots

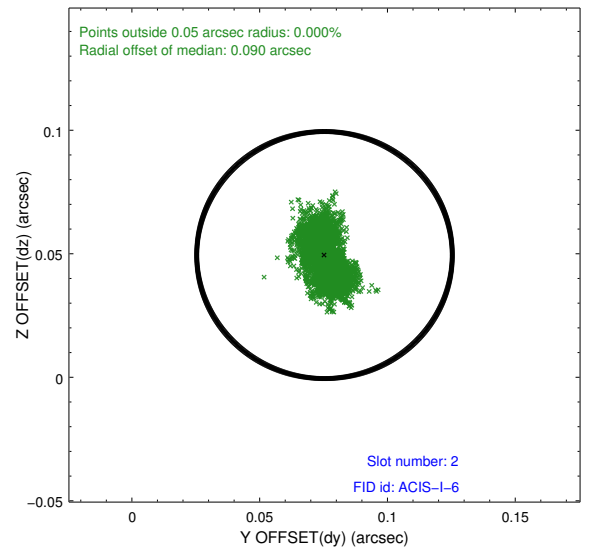
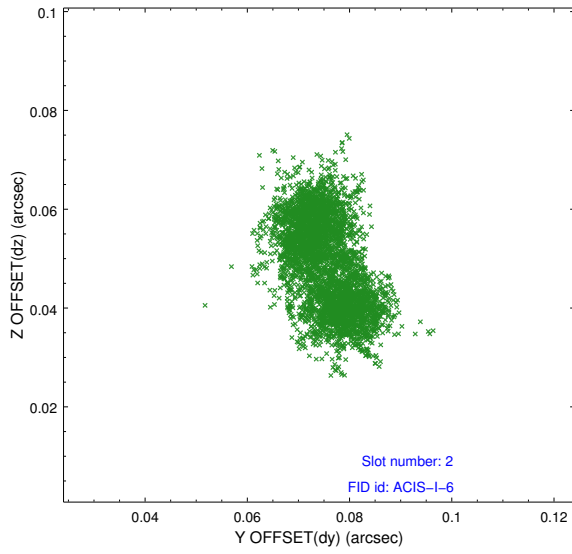
2.5.1 Slot 0



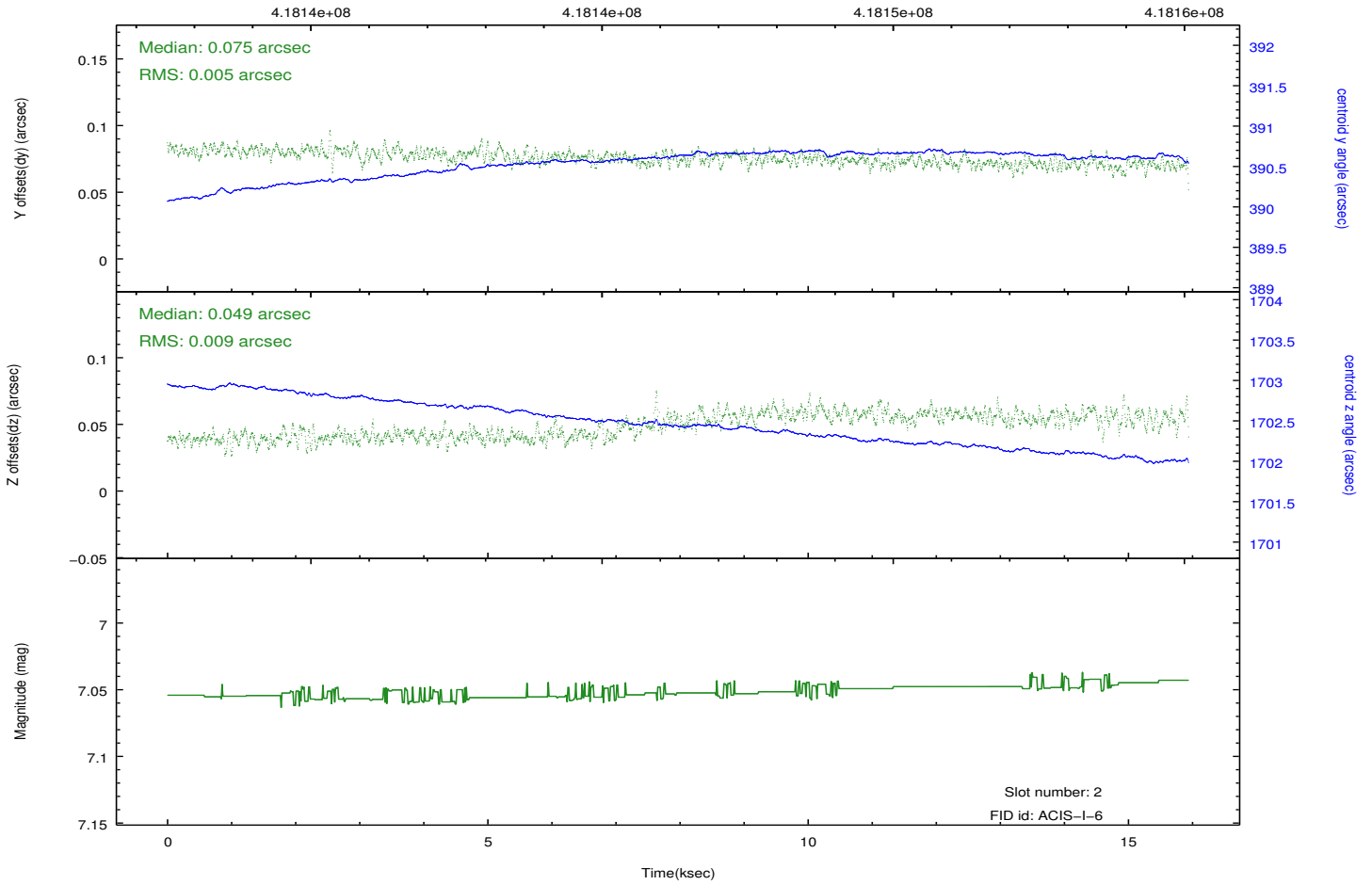
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.054809381962

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.

=====

Roll preference met.