

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 16123 - L2 Version 2
Chandra X-Ray Center

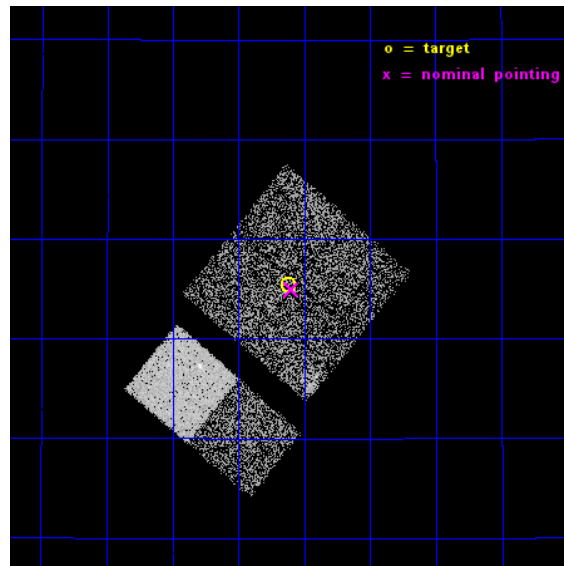
L2 Processing Date : Dec 11 2014

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1 Front

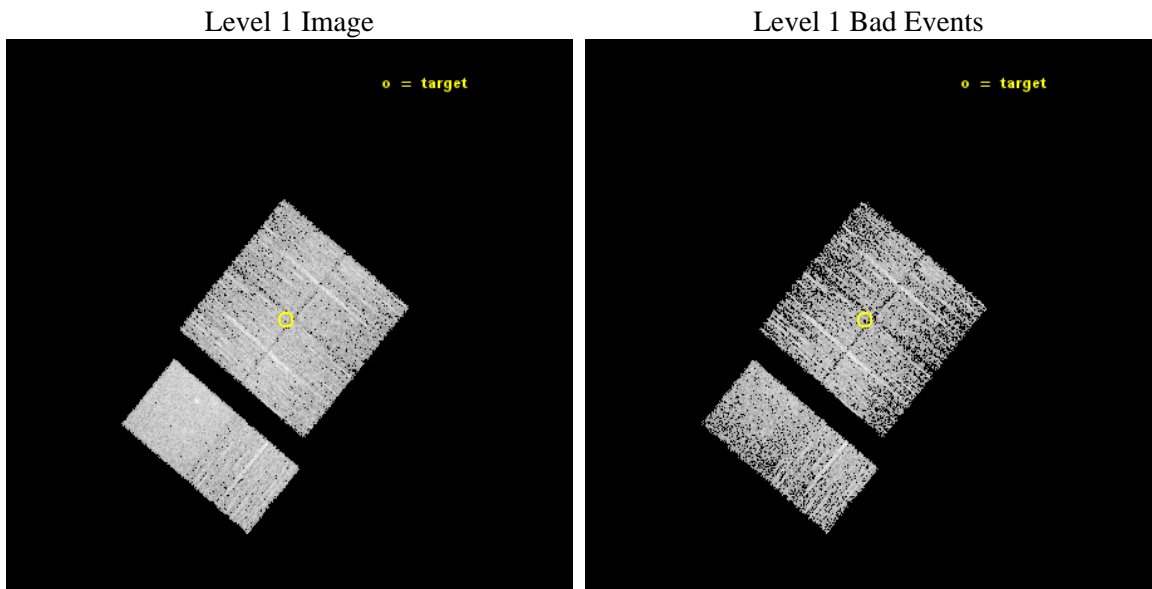
seq_num	801377	Sequence number
obs_id	16123	Observation id
title	The Massive Fossil Cluster RXJ1416.4+2315	Proposal title
observer	Dr. David Buote	Principal investigator
object	RXJ1416.4+2315 Offset 3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.154167	Observer's specified target RA [deg]
dec_targ	23.422806	Observer's specified target Dec [deg]
ra_nom	214.14943365762	Nominal RA [deg]
dec_nom	23.416028020343	Nominal Dec [deg]
roll_nom	219.84550002611	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4971.6453265548	Sum of GTIs [s]
livetime	4908.6913598645	Livetime [s]
ontime0	4971.5222065449	Sum of GTIs [s]
ontime1	4971.5632465482	Sum of GTIs [s]
ontime2	4971.6042865515	Sum of GTIs [s]
ontime3	4971.6453265548	Sum of GTIs [s]
ontime6	4971.7274065614	Sum of GTIs [s]
ontime7	4971.6863665581	Sum of GTIs [s]
l2events	26217	Number of level 2 events



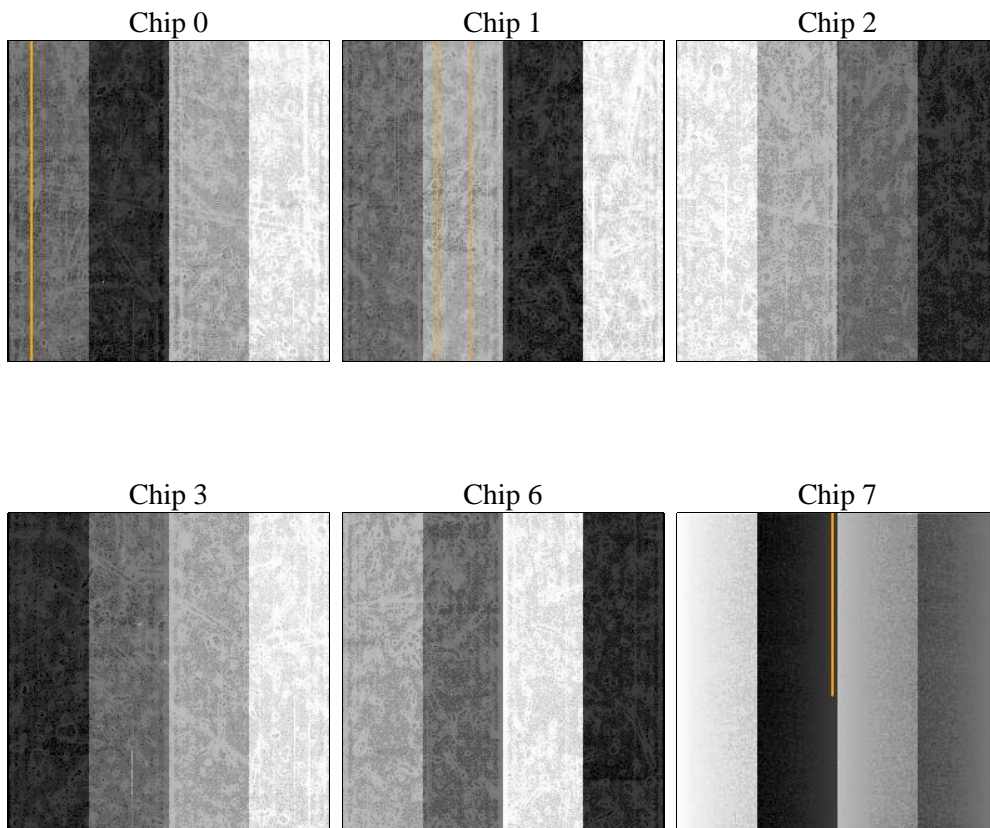
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4971.6453265548	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	4971.5222065449	Sum of GTIs [s]
date	2014-12-12T01:23:09	Date and time of file creation	ontime1	4971.5632465482	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4971.6042865515	Sum of GTIs [s]
			ontime3	4971.6453265548	Sum of GTIs [s]
			ontime6	4971.7274065614	Sum of GTIs [s]
			ontime7	4971.6863665581	Sum of GTIs [s]
			l1events	144443	Number of level 1 events

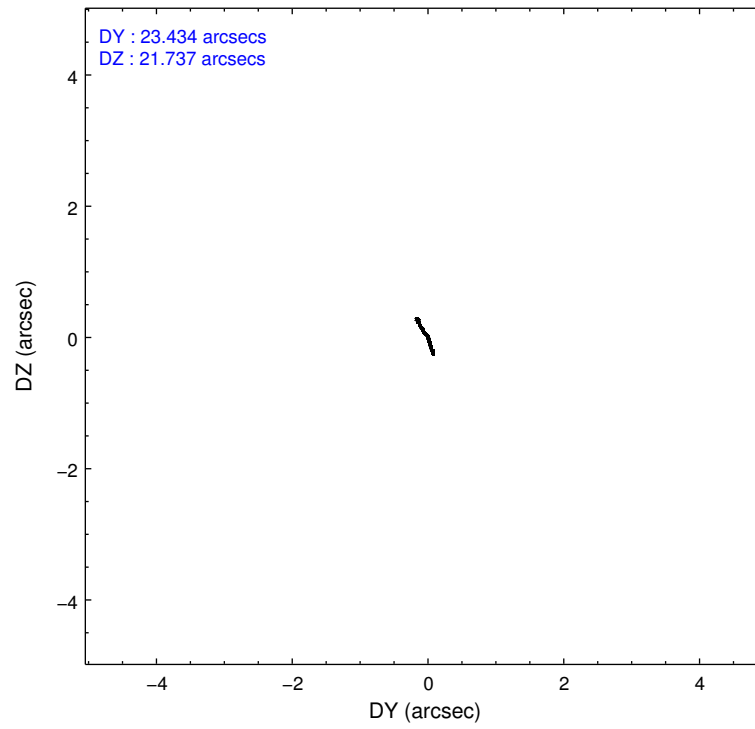
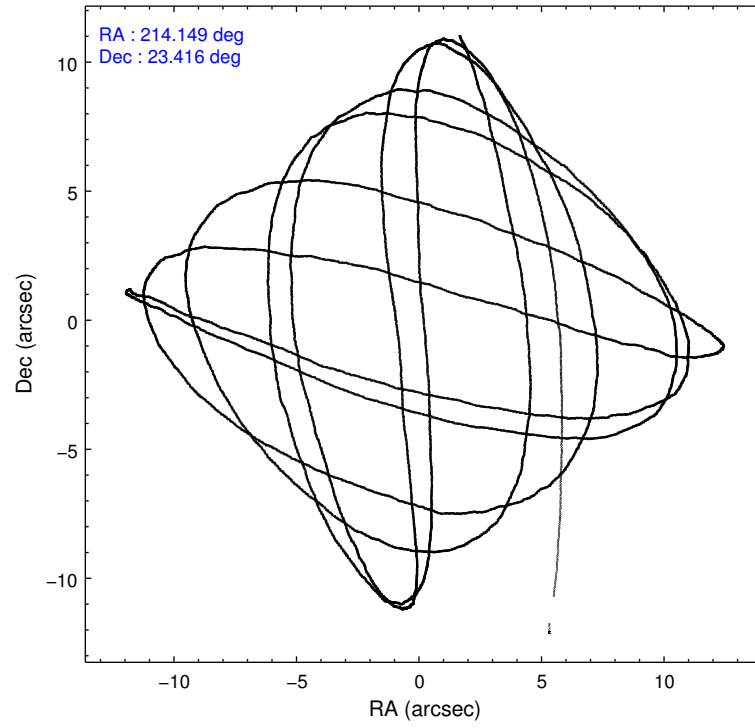
2.1.4 Events

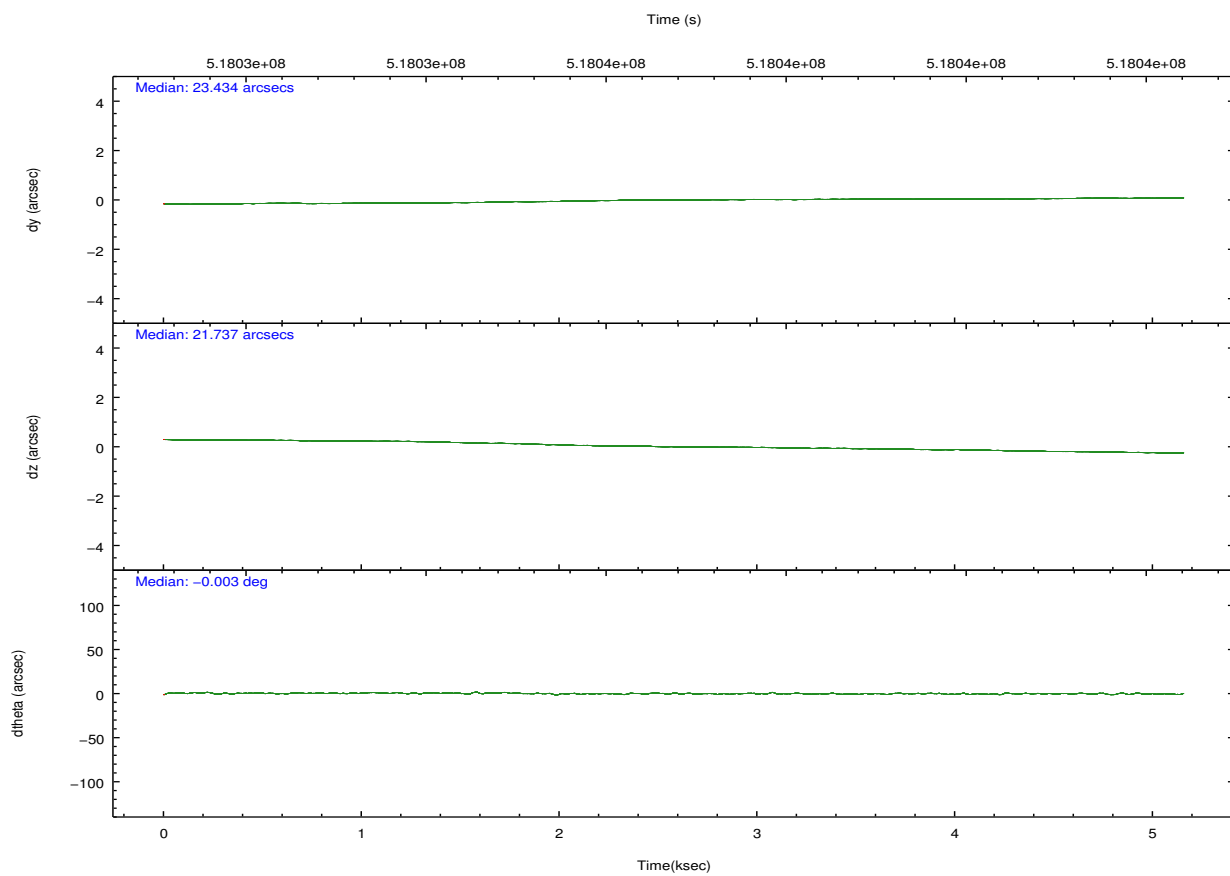
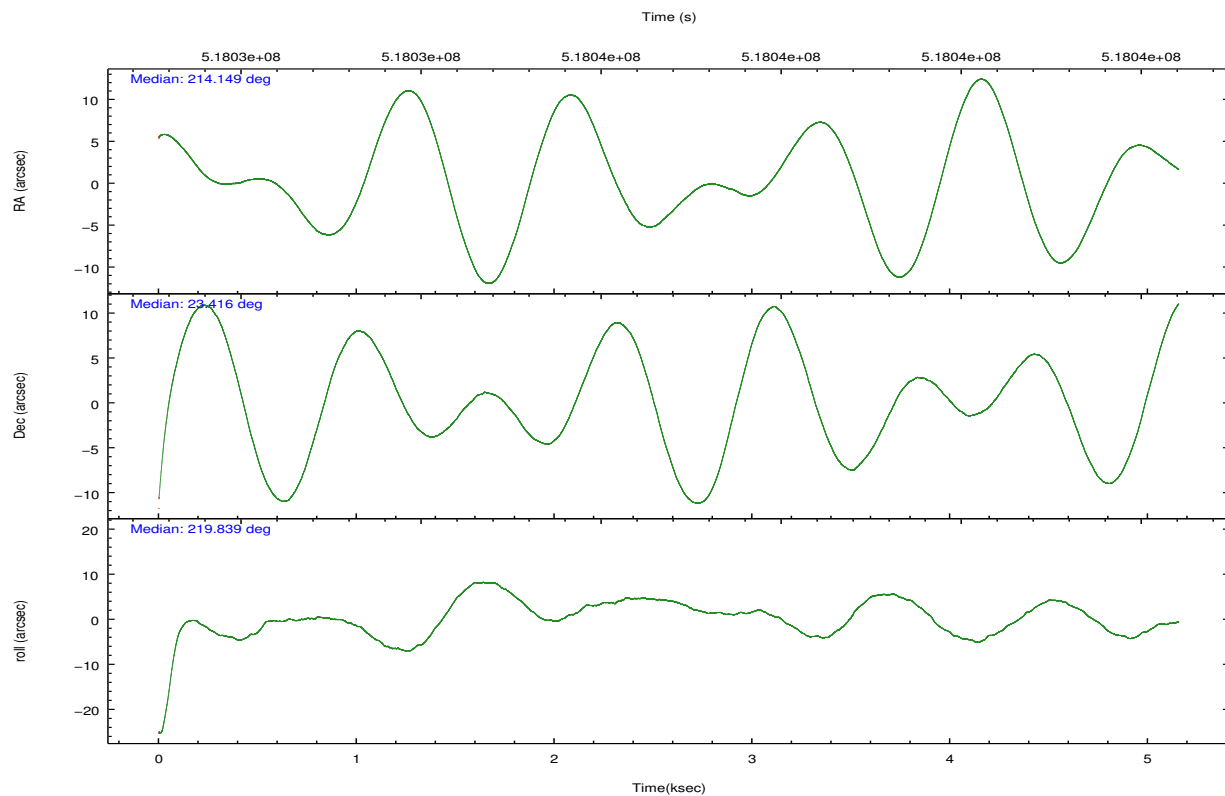
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	19942	20433	24504	22667	24359	32538	grade 0 events	917	1039	1474	905	972	1287
rejected events	17152	17425	21170	20066	21471	18321		4%	5%	6%	3%	3%	3%
rejected %	86%	85%	86%	88%	88%	56%	grade 1 events	13	11	13	12	10	38
								0%	0%	0%	0%	0%	0%
							grade 2 events	733	718	773	604	669	2943
								3%	3%	3%	2%	2%	9%
							grade 3 events	297	273	300	259	292	1208
								1%	1%	1%	1%	1%	3%
							grade 4 events	284	301	284	301	295	1262
								1%	1%	1%	1%	1%	3%
							grade 5 events	1120	1174	983	1229	1298	3458
								5%	5%	4%	5%	5%	10%
							grade 6 events	563	677	506	533	665	7521
								2%	3%	2%	2%	2%	23%
							grade 7 events	16015	16240	20171	18824	20158	14821
								80%	79%	82%	83%	82%	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	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	214.159599	214.1494336576198	CCD I2 on	Y	Y
[deg] Pointing Dec	23.441862	23.41602802034297	CCD I3 on	Y	Y
[deg] Pointing Roll	219.632826	219.8455000261142	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)	518032958.184000	518031926.1414	CCD S5 on	N	N
Observation start date	2014-06-01T18:01:31	2014-06-01T17:45:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	518037958.184000	518038556.86677	On-chip summing requested	N	N
Observation end date	2014-06-01T19:24:51	2014-06-01T19:35:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



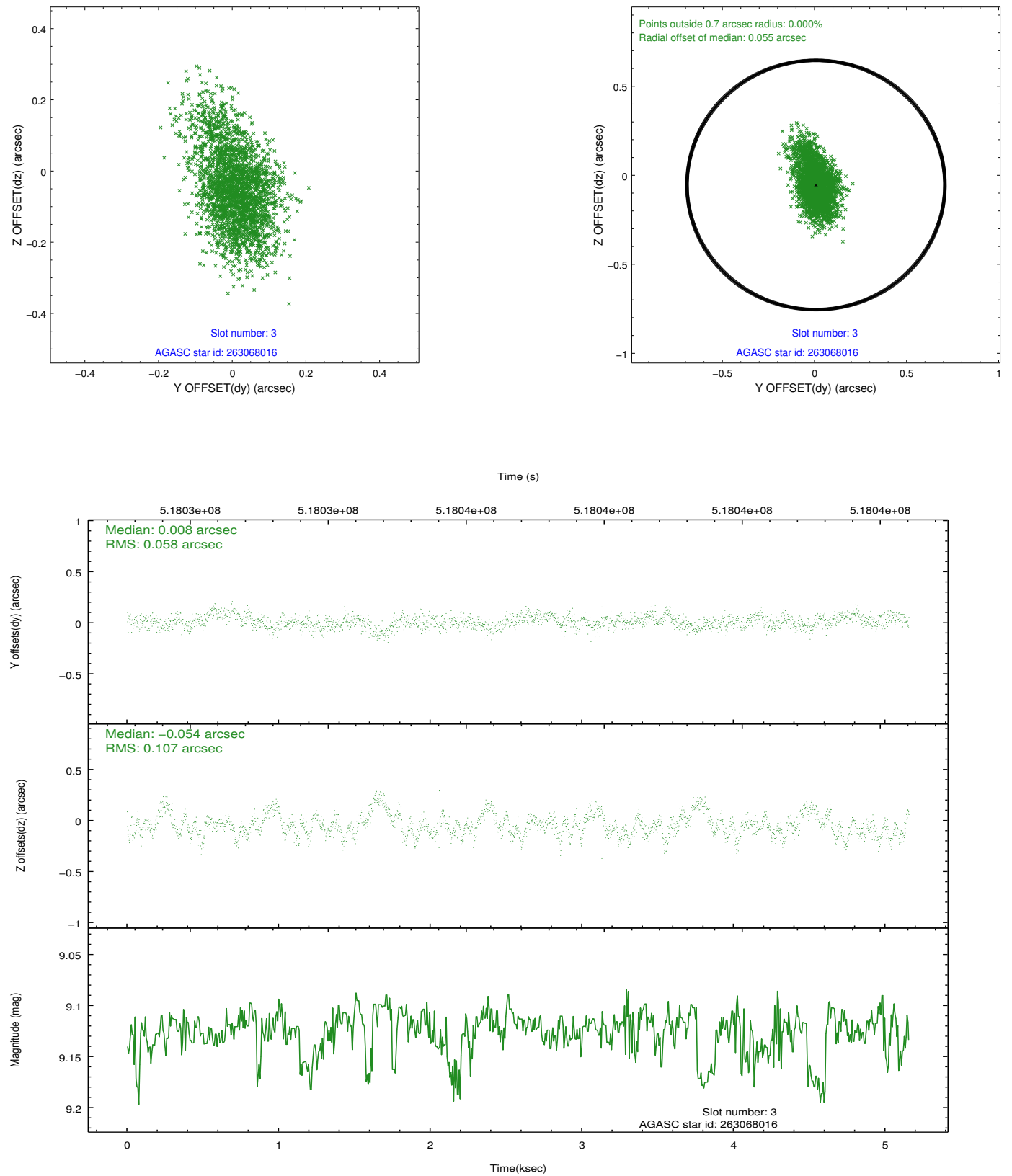


Slot Statistics

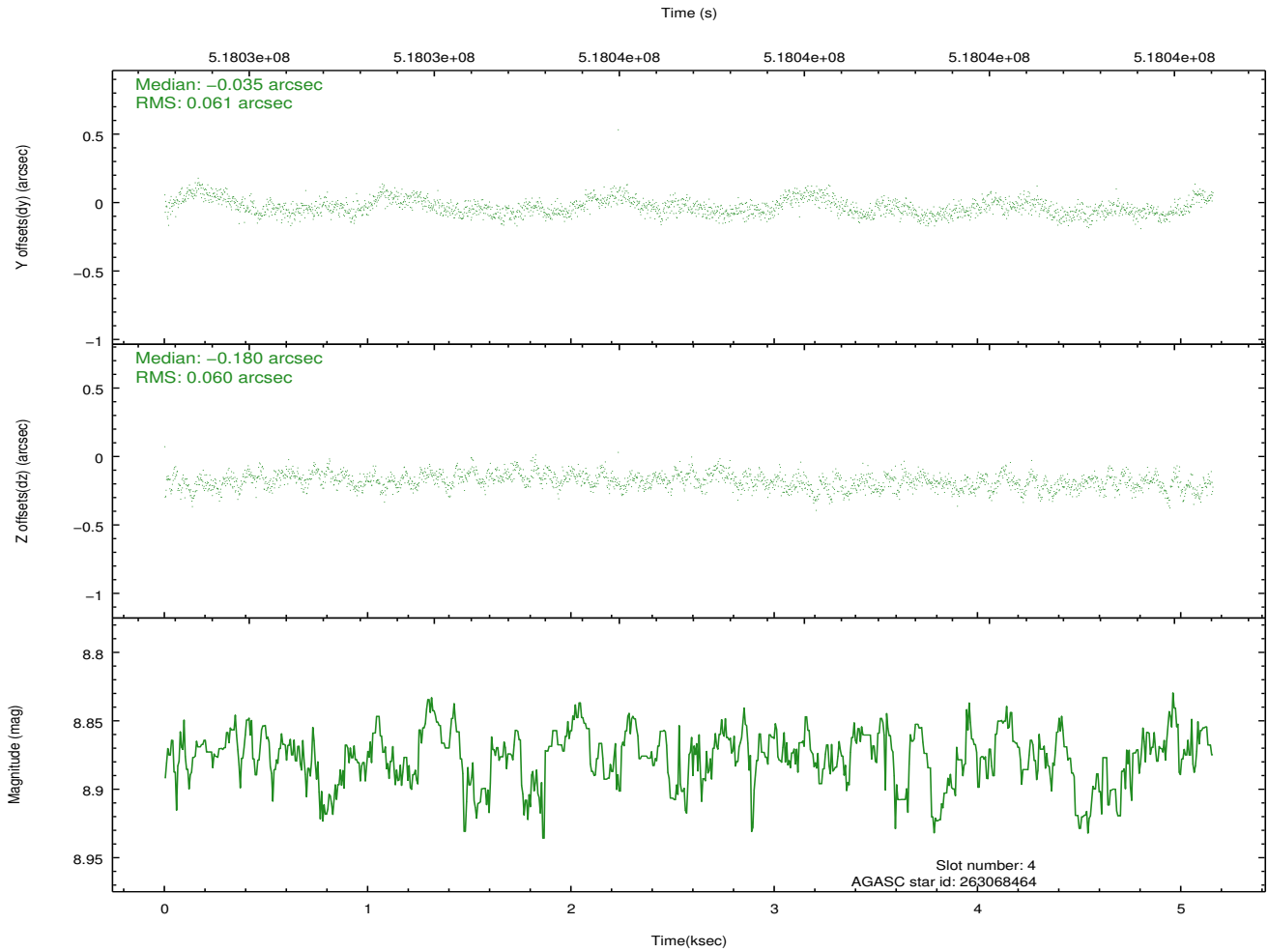
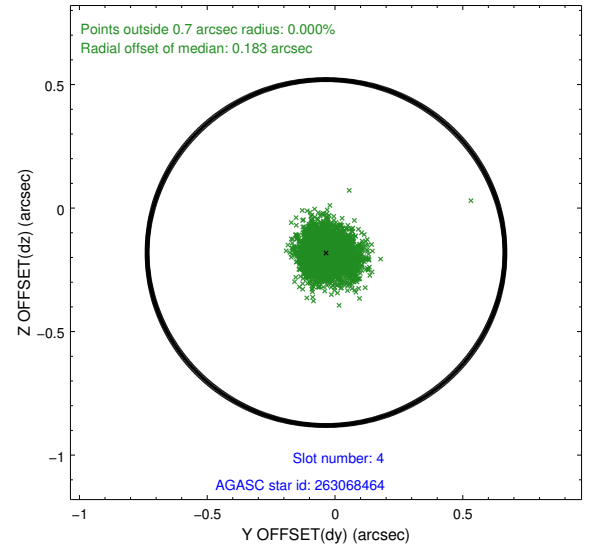
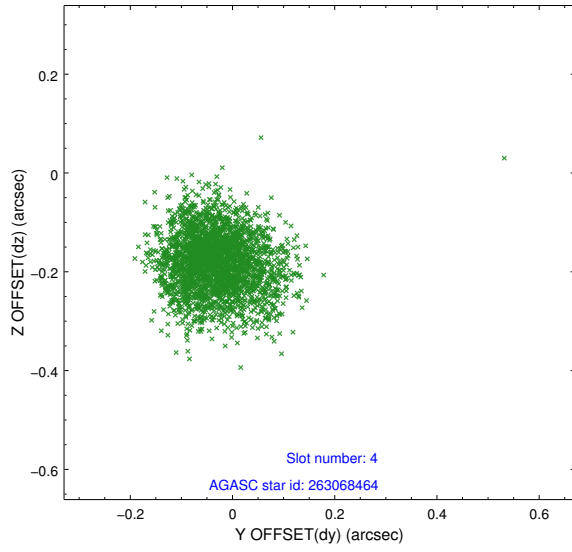
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	1258	0.070	-0.014	0.008	0.013	0.000000	0.000000	915.90	-845.54
1	FID		ACIS-I-5	7.06	1258	-0.270	0.061	0.008	0.013	0.000000	0.000000	-1831.92	1051.40
2	FID		ACIS-I-6	7.06	1258	0.109	0.025	0.009	0.015	0.000000	0.000000	380.17	1697.22
3	GUIDE	used	263068016	9.12	2513	0.008	-0.054	0.123	0.226	214.662709	23.066822	-423.40	2101.43
4	GUIDE	used	263068464	8.87	2516	-0.035	-0.180	0.091	0.145	214.145675	22.675072	1796.74	2098.06
5	GUIDE	used	263068552	9.63	2513	0.200	0.013	0.164	0.264	213.268886	23.490114	2150.06	-2015.43
6	GUIDE	used	263068776	8.87	2513	-0.088	0.095	0.097	0.155	214.499885	23.608632	-1246.96	252.03
7	GUIDE	used	263070912	7.06	2515	-0.093	0.116	0.093	0.149	213.756514	23.686063	461.89	-1525.69

2.4 Star Slots

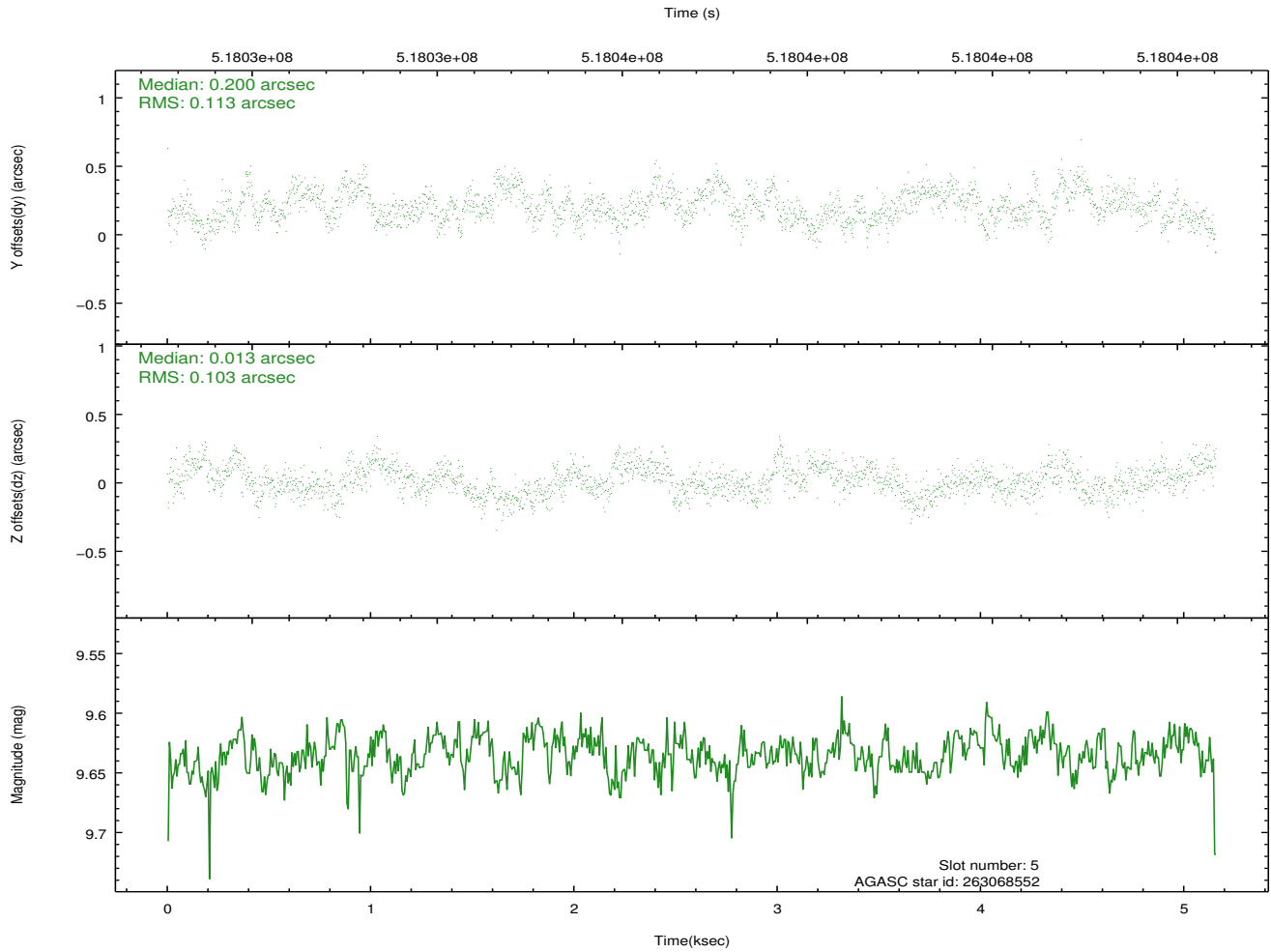
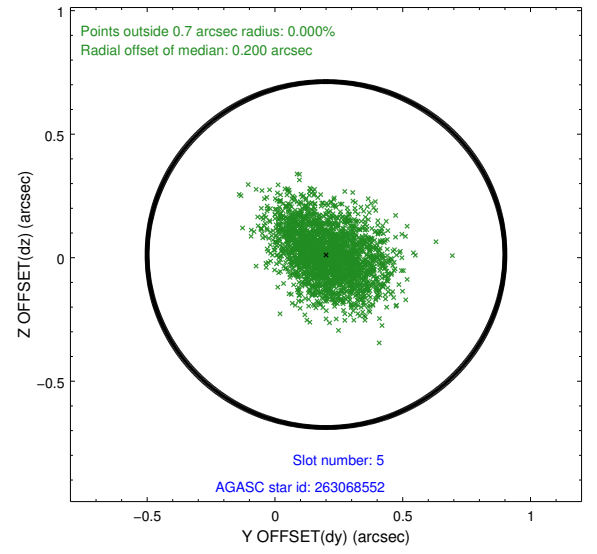
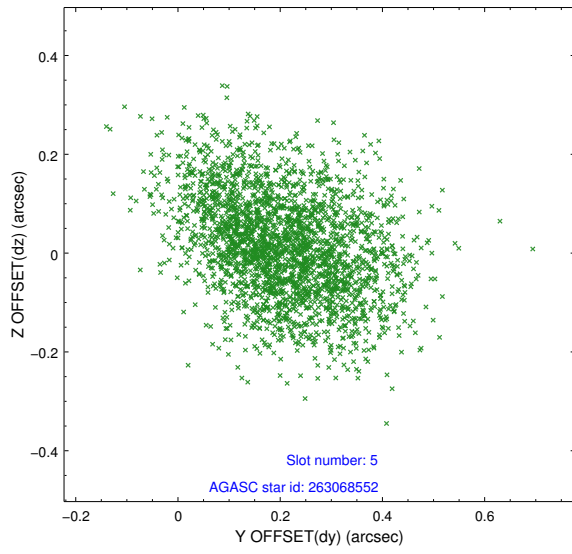
2.4.1 Slot 3



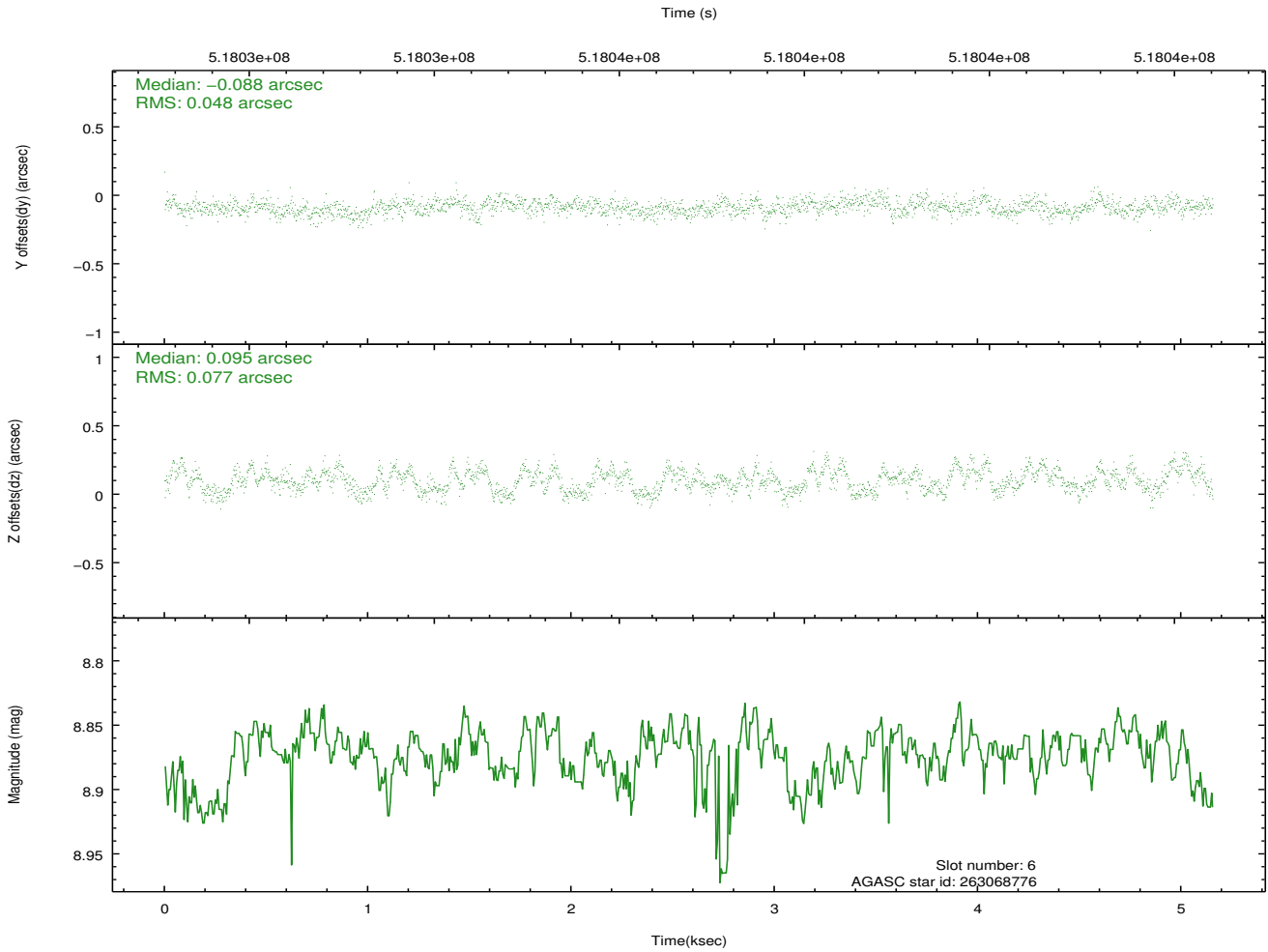
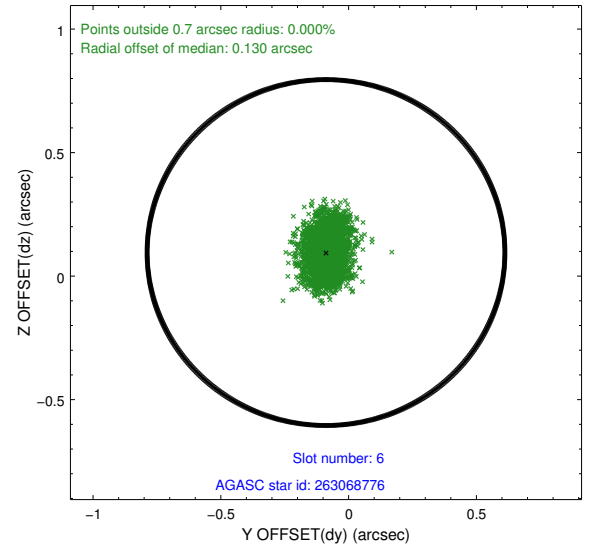
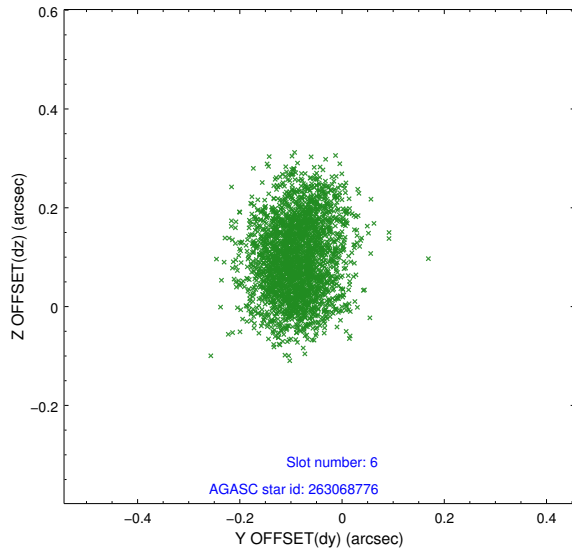
2.4.2 Slot 4



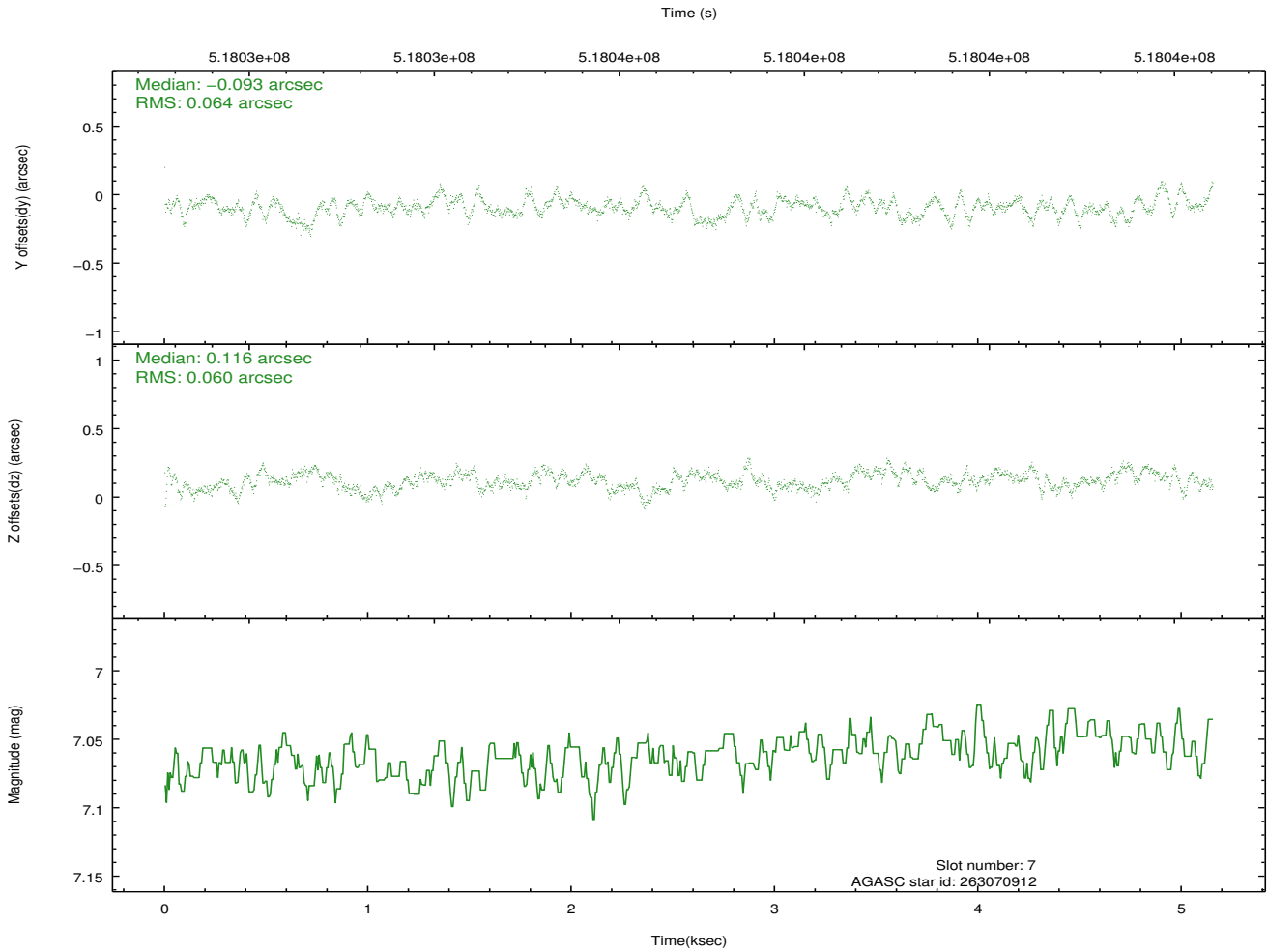
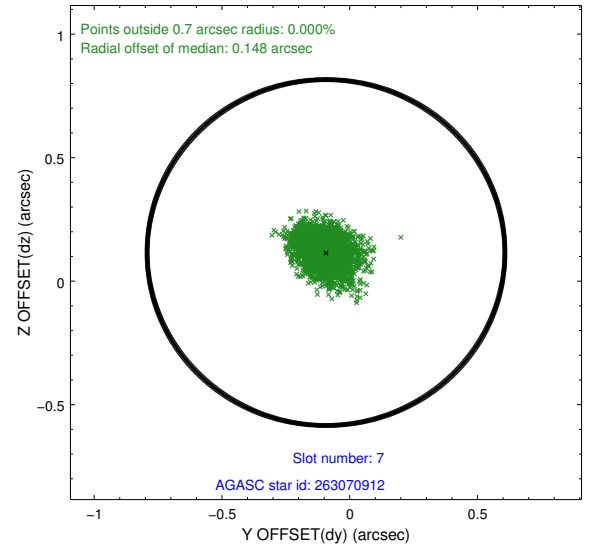
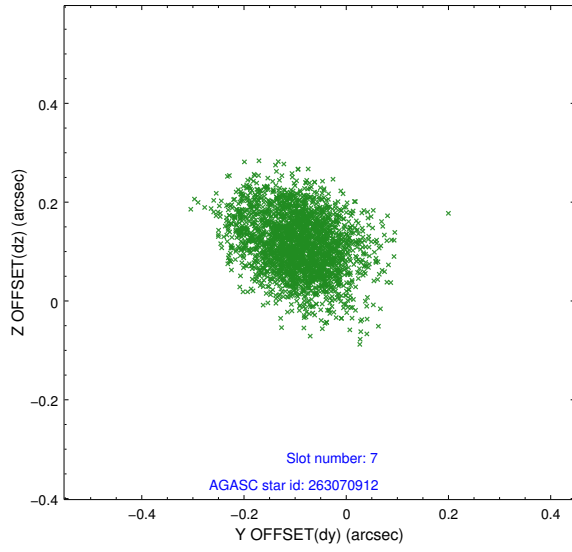
2.4.3 Slot 5



2.4.4 Slot 6

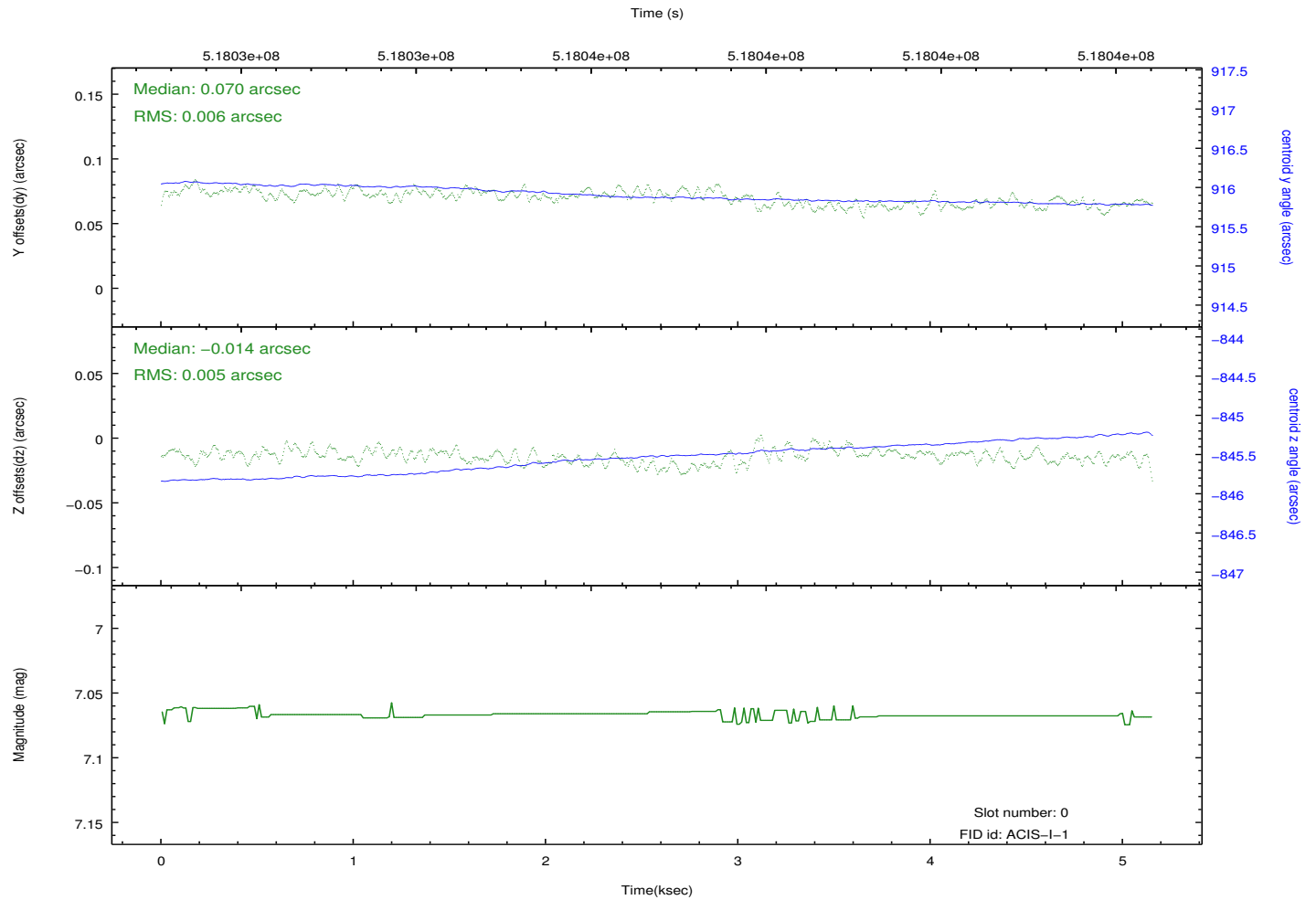
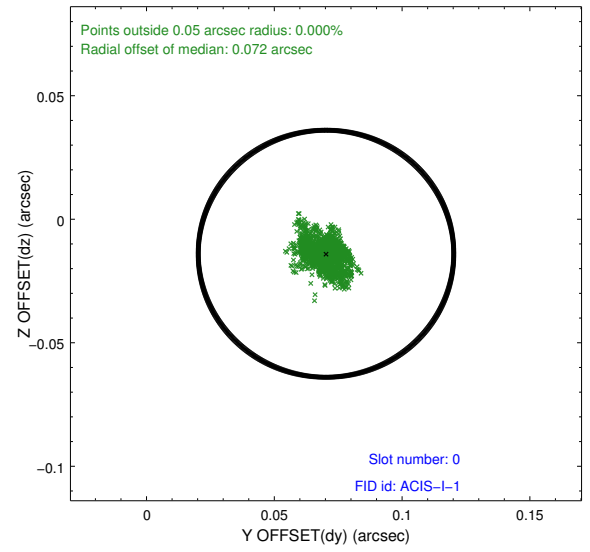
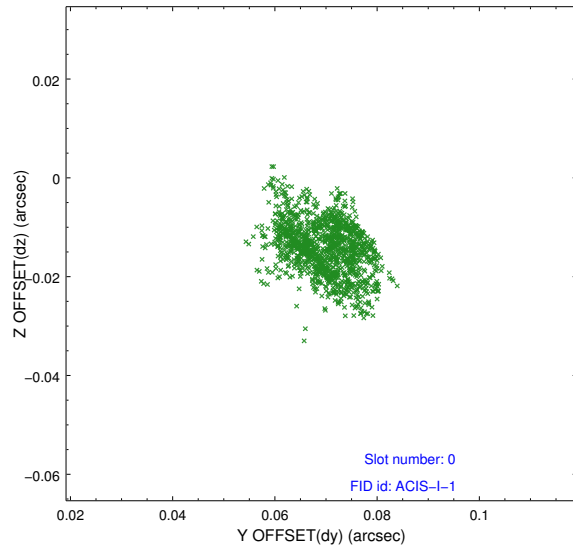


2.4.5 Slot 7

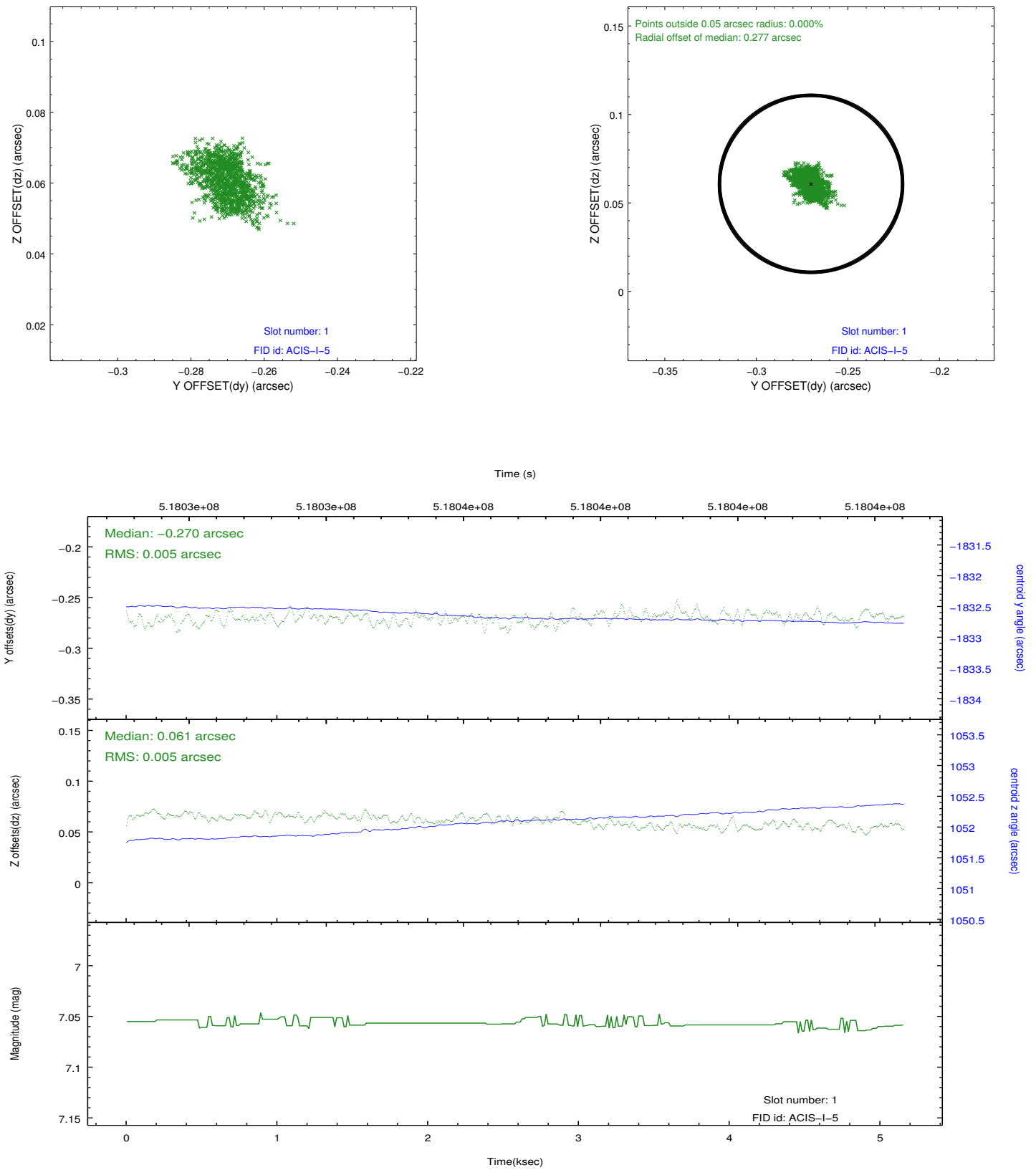


2.5 FID Slots

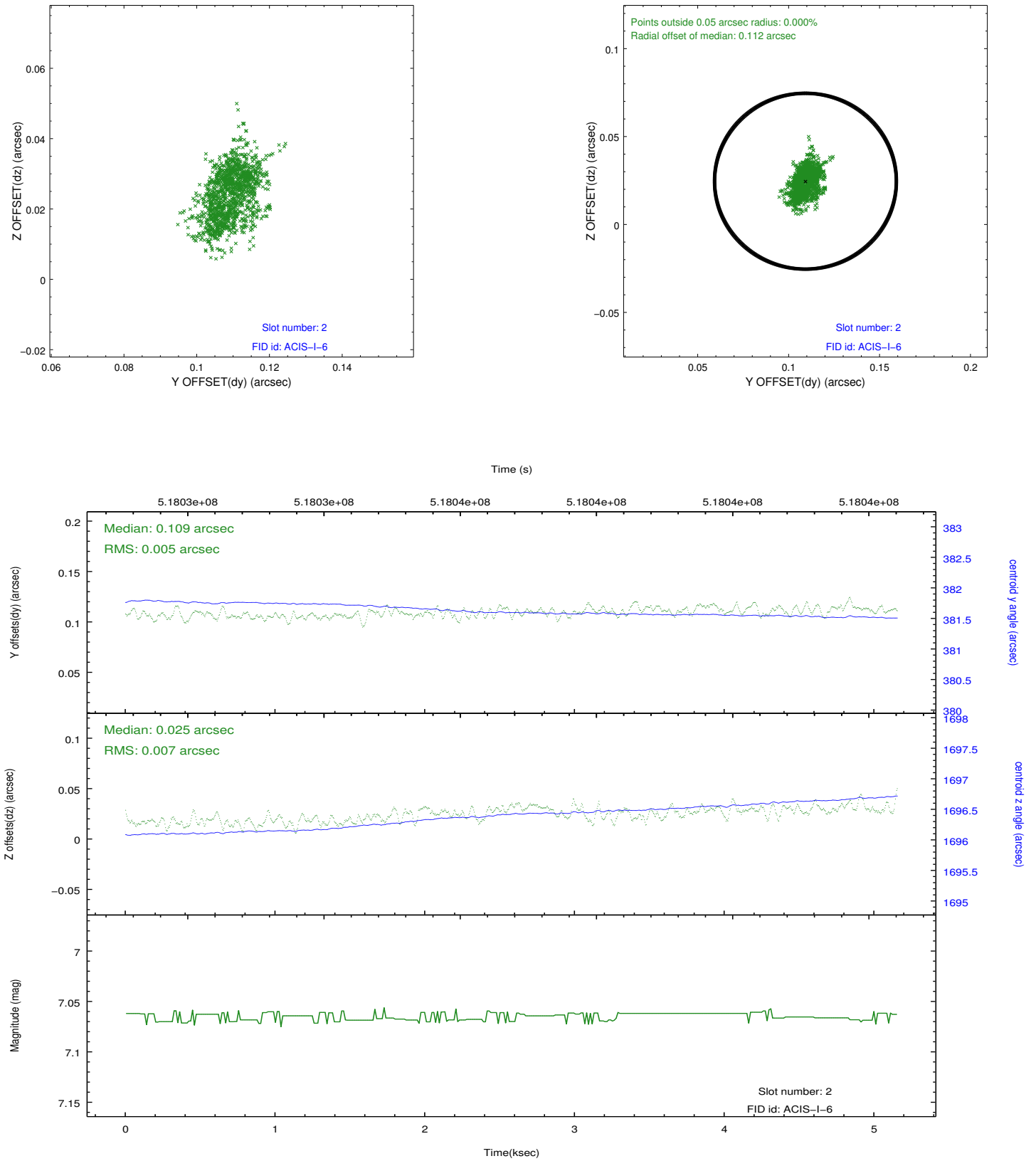
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9716453265548

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.