

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12494 - L2 Version 2
Chandra X-Ray Center

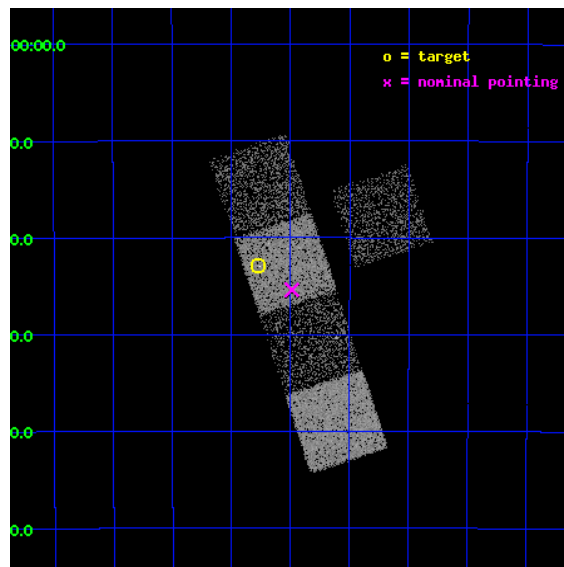
L2 Processing Date : Feb 5 2012

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

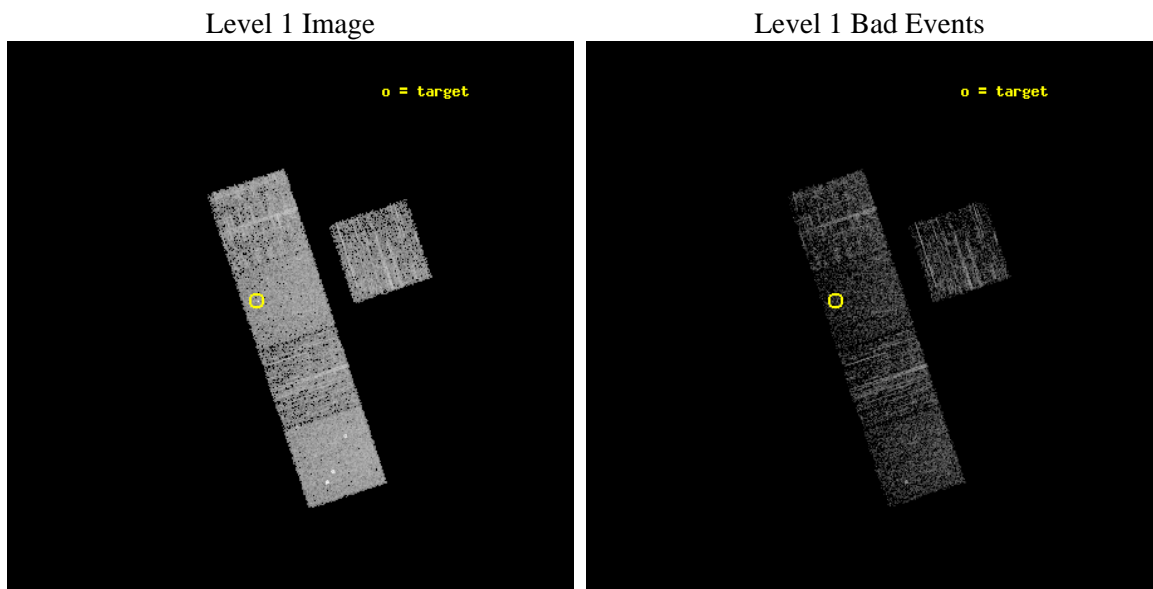
seq_num	401235	Sequence number
obs_id	12494	Observation id
title	The Nearest and Brightest Quiescent Low Mass X-ray Binaries	Propos
observer	Prof. Robert Rutledge	Principal investigator
object	1RXS J021246.2-342256	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	33.1925	Observer's specified target RA [deg]
dec_targ	-34.382222	Observer's specified target Dec [deg]
ra_nom	33.122075373278	Nominal RA [deg]
dec_nom	-34.423108615383	Nominal Dec [deg]
roll_nom	251.71657483288	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2337.4000179768	Sum of GTIs [s]
livetime	2306.860165973	Livetime [s]
ontime3	2337.4000179768	Sum of GTIs [s]
ontime5	2337.4000179768	Sum of GTIs [s]
ontime6	2337.4000179768	Sum of GTIs [s]
ontime7	2337.4000179768	Sum of GTIs [s]
ontime8	2337.4000179768	Sum of GTIs [s]
l2events	25789	Number of level 2 events



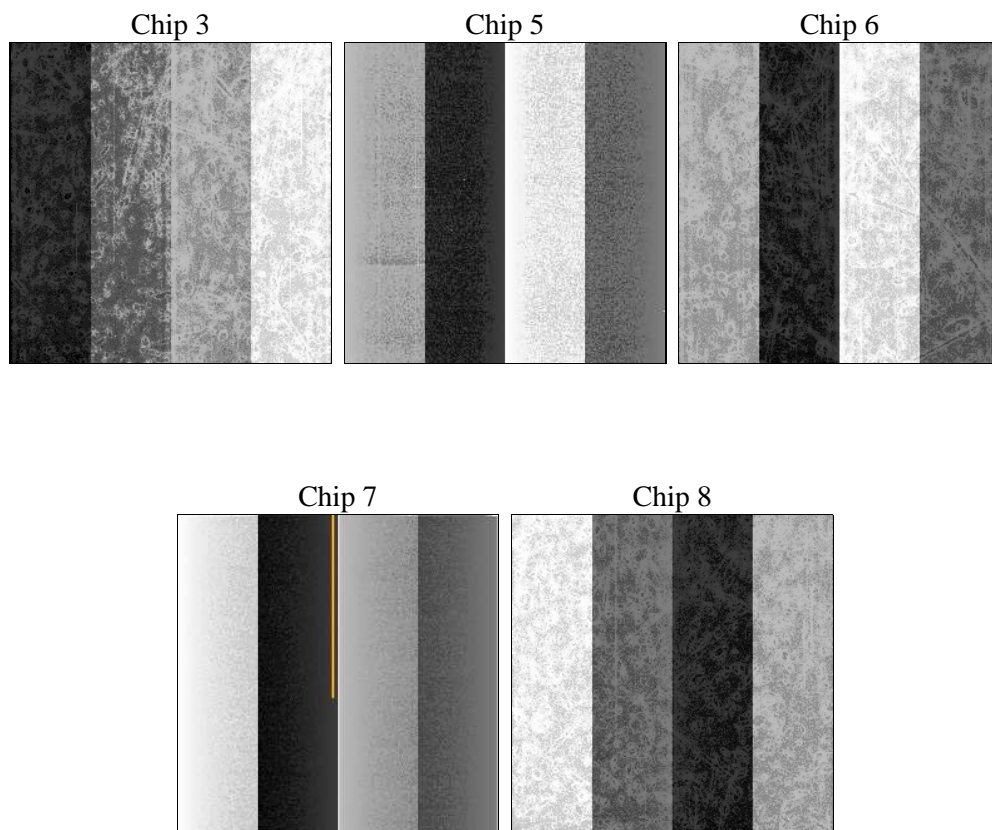
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2300.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	2337.4000179768	Sum of GTIs [s]
caldsver	4.4.7	 	ontime3	2337.4000179768	Sum of GTIs [s]
date	2012-02-05T13:59:27	Date and time of file creation	ontime5	2337.4000179768	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	2337.4000179768	Sum of GTIs [s]
			ontime7	2337.4000179768	Sum of GTIs [s]
			ontime8	2337.4000179768	Sum of GTIs [s]
			l1events	100686	Number of level 1 events

2.1.4 Events

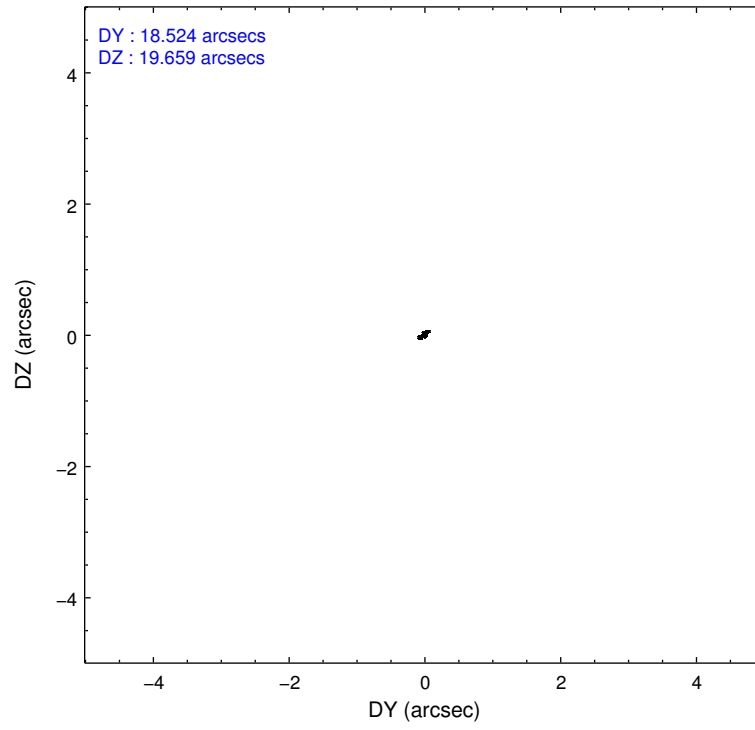
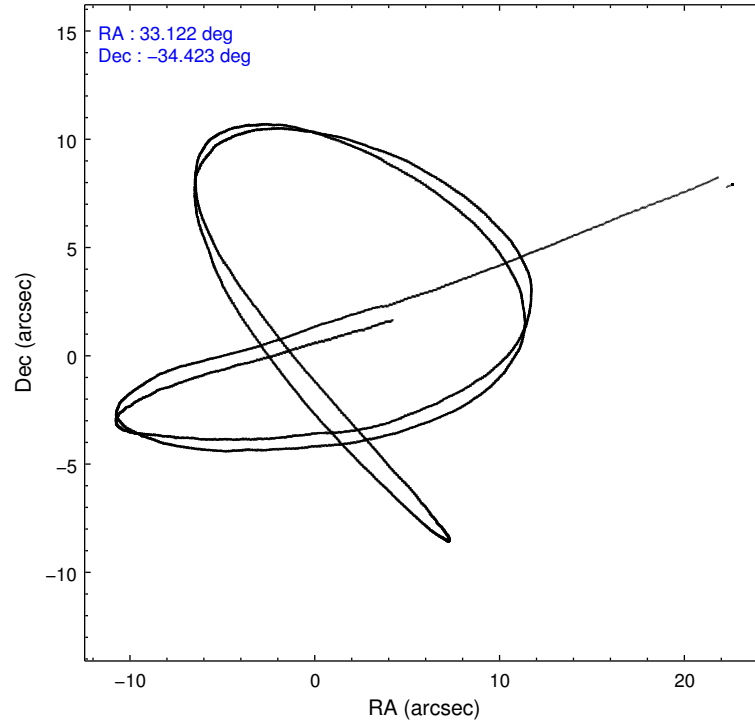
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	16041	26540	16469	20484	21152
rejected events	14395	12996	14586	11220	15527
rejected %	89%	48%	88%	54%	73%

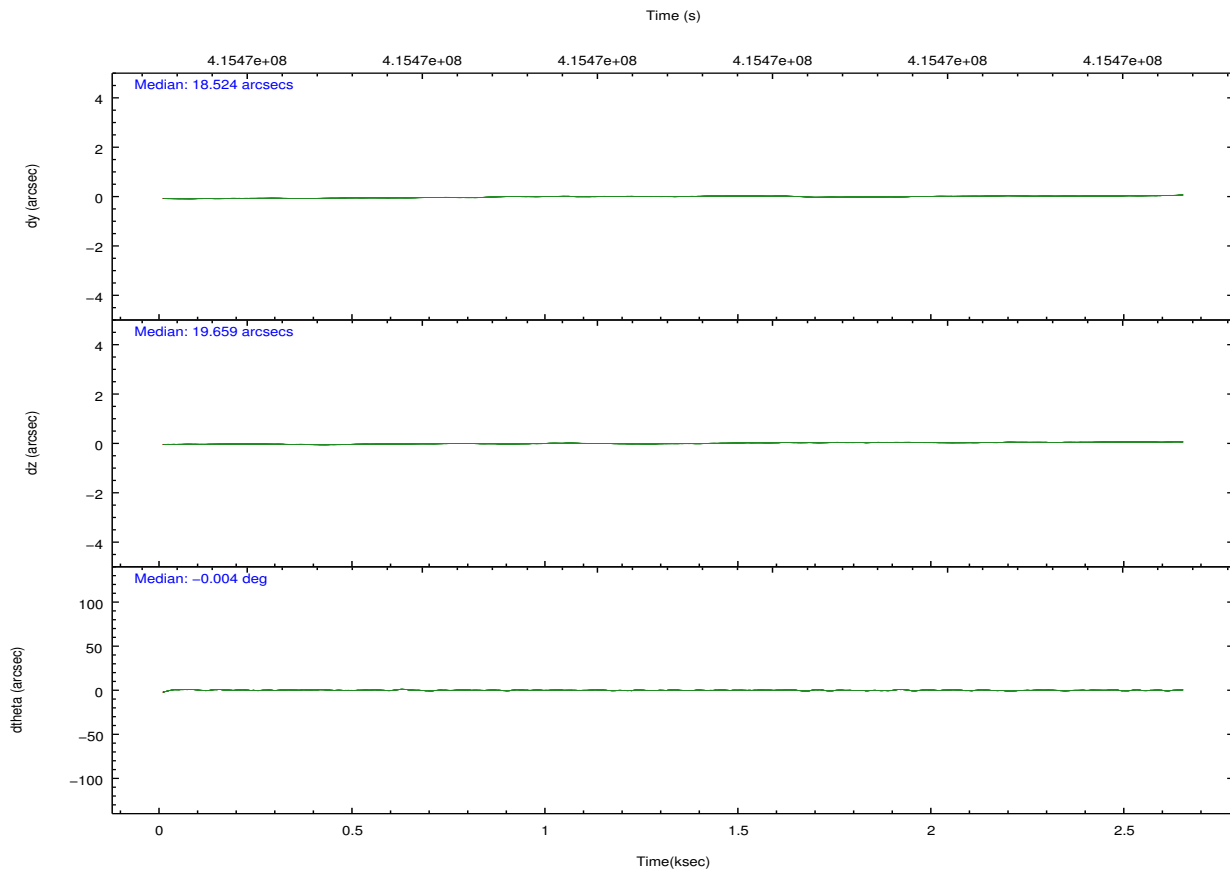
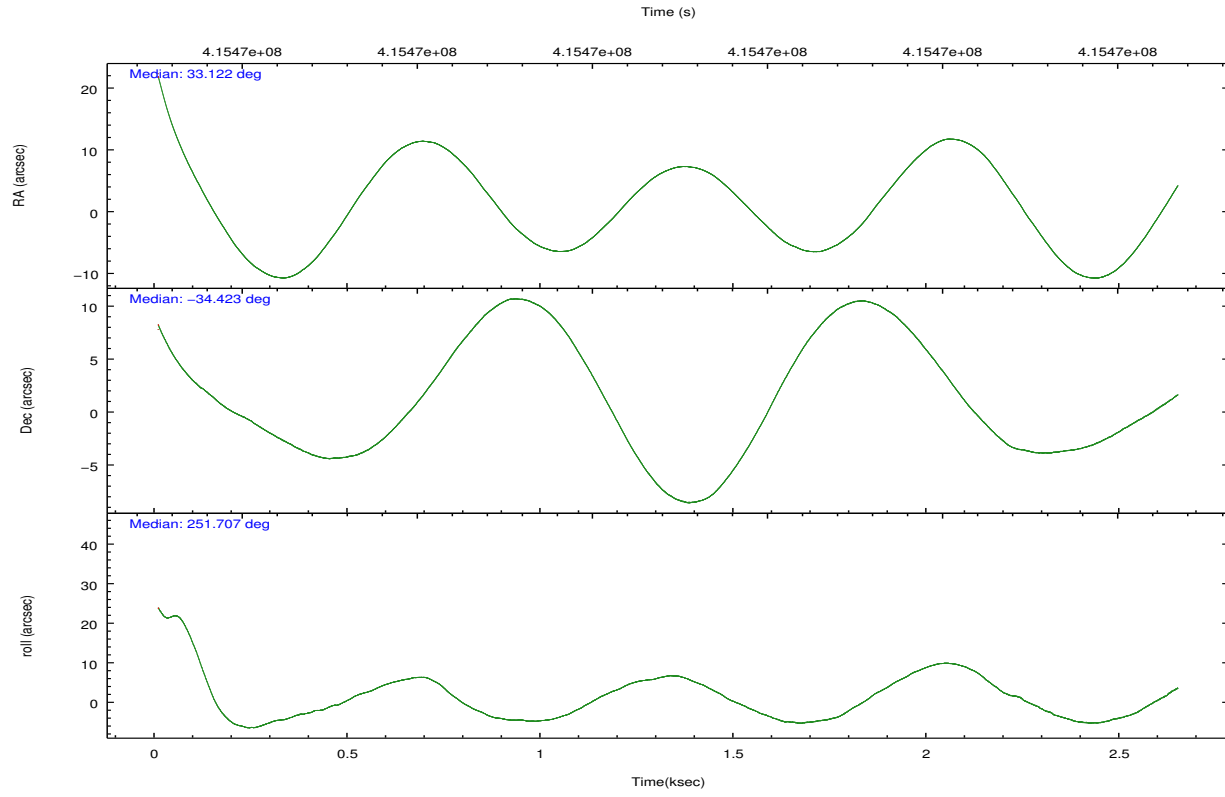
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	619	1890	677	963	1707
	3%	7%	4%	4%	8%
grade 1 events	4	137	8	28	16
	0%	0%	0%	0%	0%
grade 2 events	366	4239	389	1906	1300
	2%	15%	2%	9%	6%
grade 3 events	176	449	196	815	629
	1%	1%	1%	3%	2%
grade 4 events	164	458	207	847	579
	1%	1%	1%	4%	2%
grade 5 events	776	1876	770	2122	1070
	4%	7%	4%	10%	5%
grade 6 events	324	6525	416	4752	1415
	2%	24%	2%	23%	6%
grade 7 events	13612	10966	13806	9051	14436
	84%	41%	83%	44%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	33.115102	33.12207537327777	CCD I2 on	N	N
[deg] Pointing Dec	-34.396254	-34.42310861538252	CCD I3 on	O1	Y
[deg] Pointing Roll	251.556036	251.7165748328819	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	415466242.184000	415465236.78101	CCD S5 on	N	N
Observation start date	2011-03-02T15:16:16	2011-03-02T15:00:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	415468542.184000	415469557.66874	On-chip summing requested	N	N
Observation end date	2011-03-02T15:54:36	2011-03-02T16:12:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



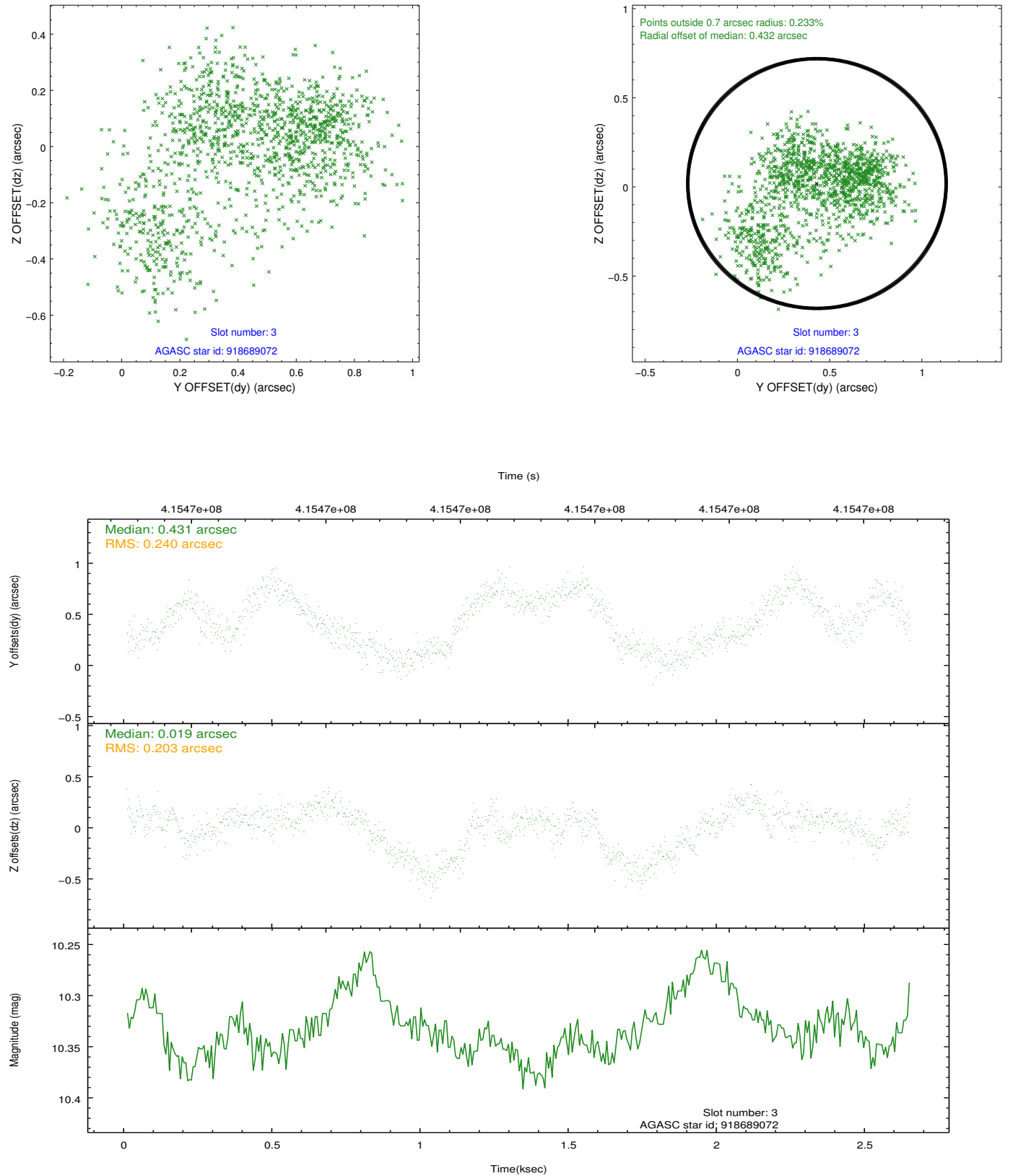


Slot Statistics

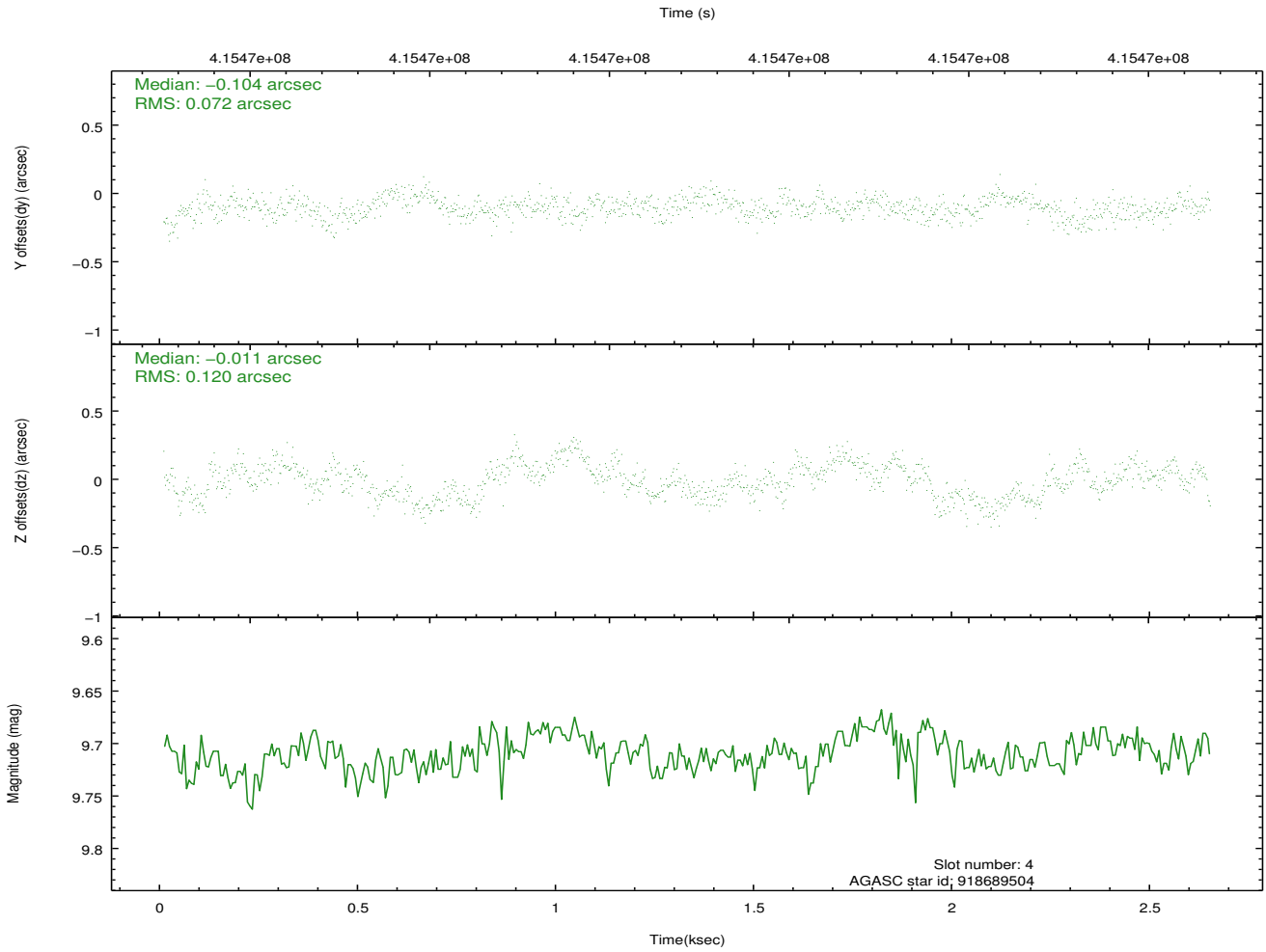
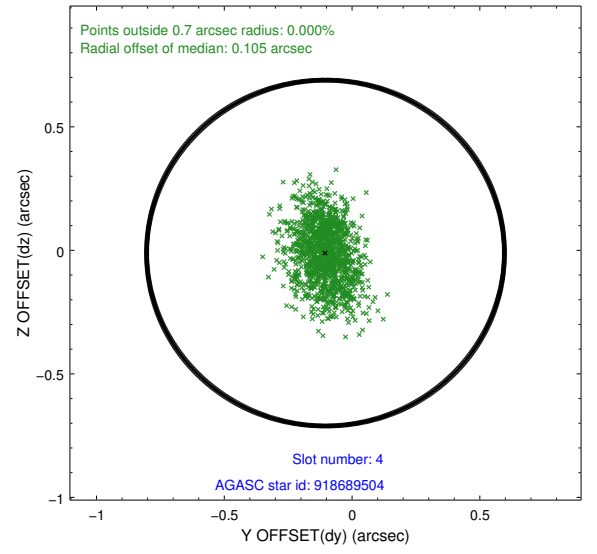
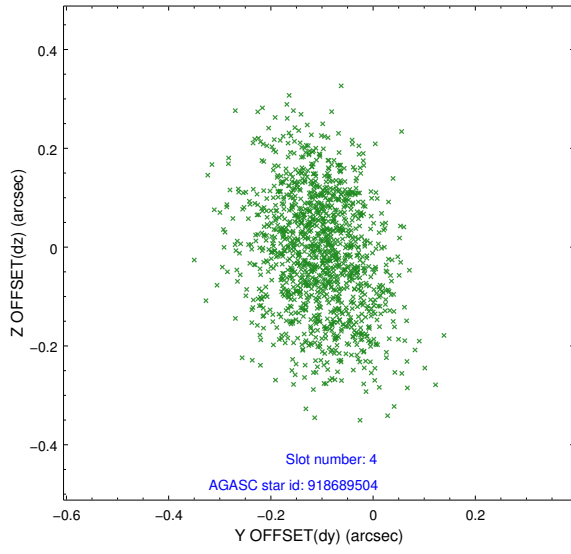
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	645	-0.095	-0.021	0.010	0.013	0.000000	0.000000	-771.66	-1741.19
1	FID	ACIS-S-4	6.97	645	0.218	0.051	0.007	0.011	0.000000	0.000000	2140.79	164.83
2	FID	ACIS-S-5	7.00	645	-0.154	-0.022	0.010	0.015	0.000000	0.000000	-1821.45	161.20
3	GUIDE	918689072	10.33	1290	0.431	0.019	0.333	0.540	33.185102	-33.901673	-1754.97	-364.44
4	GUIDE	918689504	9.71	1286	-0.104	-0.011	0.149	0.246	33.602762	-34.315127	-734.64	1284.76
5	GUIDE	918690640	6.67	1290	-0.281	-0.228	0.075	0.122	33.216544	-34.538665	389.93	449.83
6	GUIDE	918692736	8.27	1285	-0.115	0.182	0.121	0.262	32.883493	-33.943751	-1325.69	-1170.29
7	GUIDE	918698912	10.22	1287	0.041	0.073	0.237	0.344	32.656478	-33.878559	-1332.34	-1888.32

2.4 Star Slots

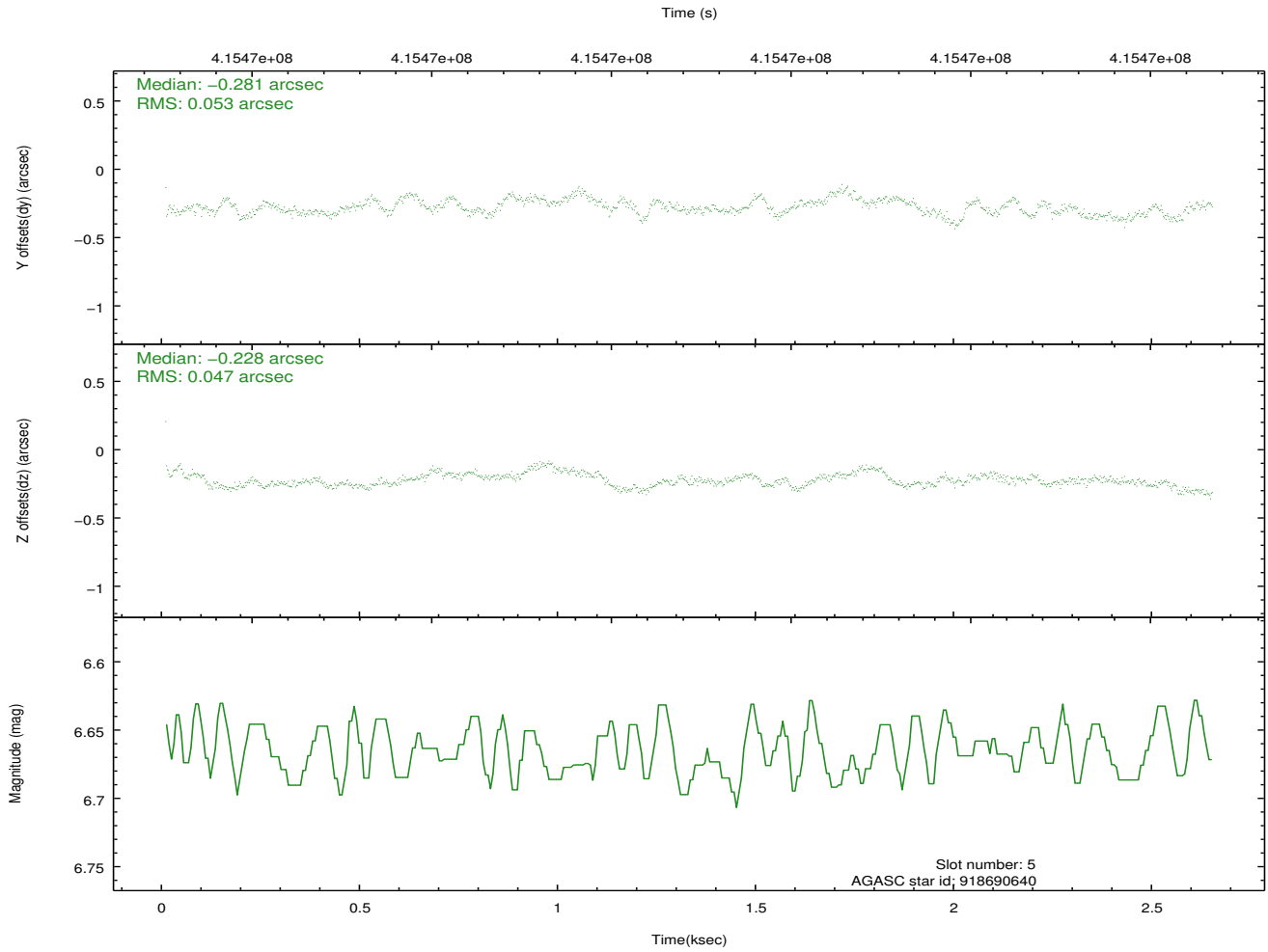
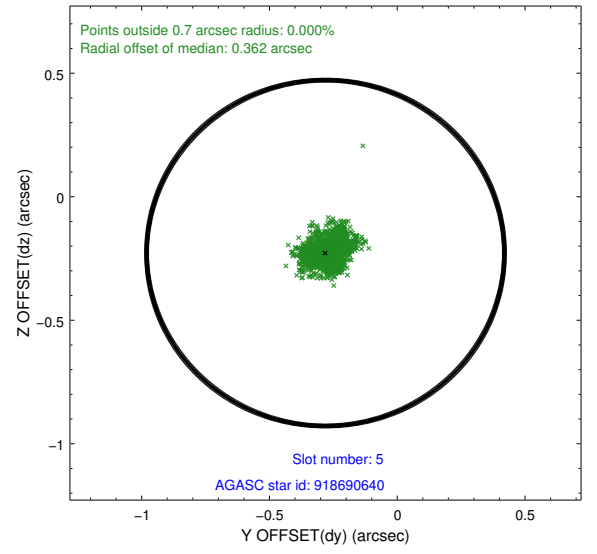
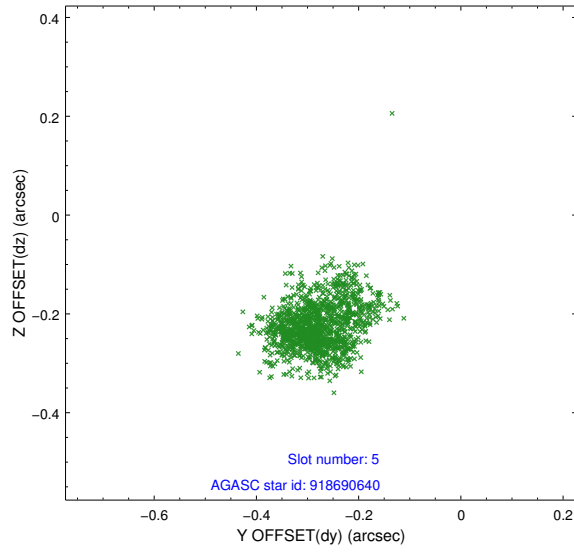
2.4.1 Slot 3



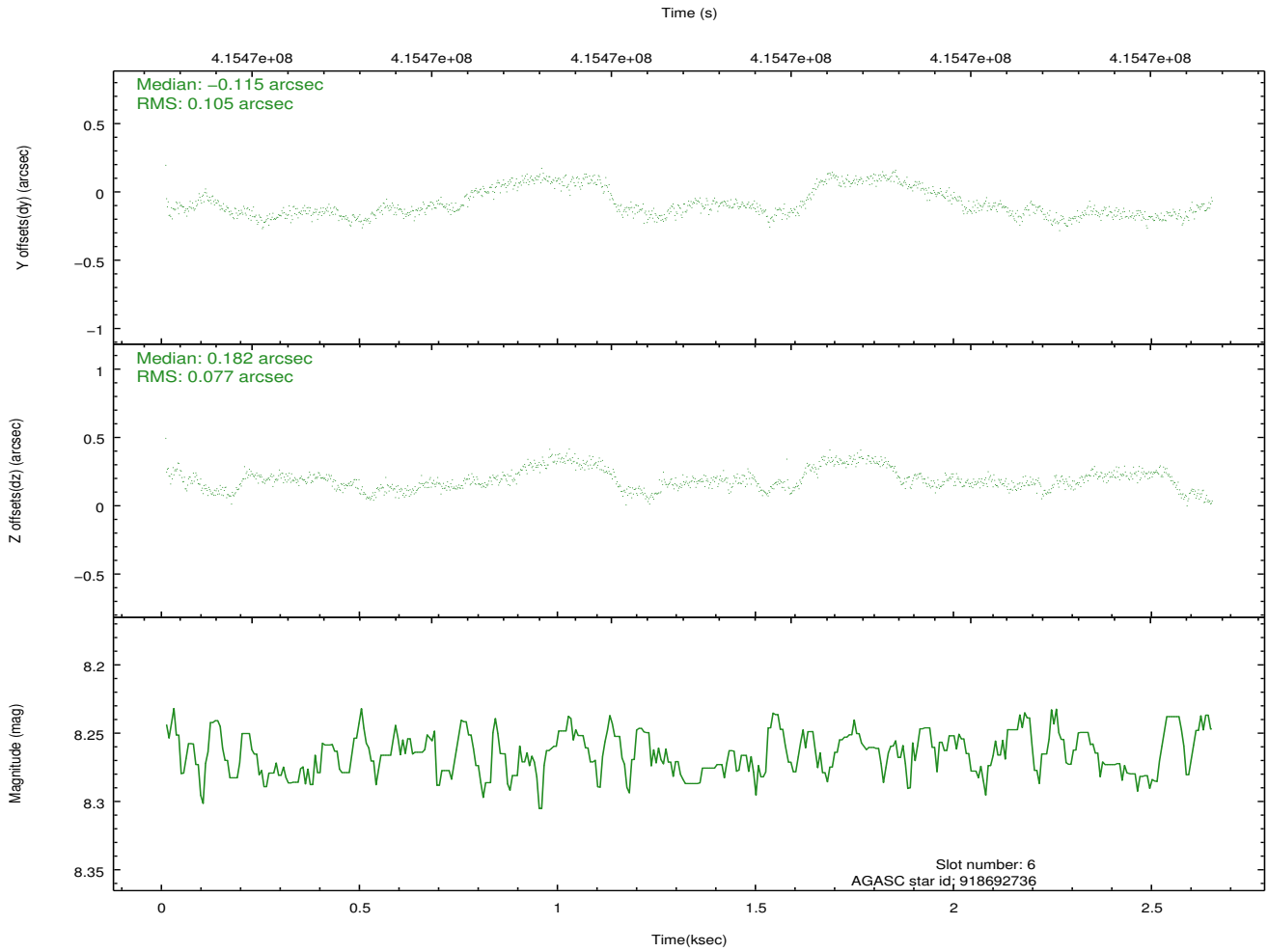
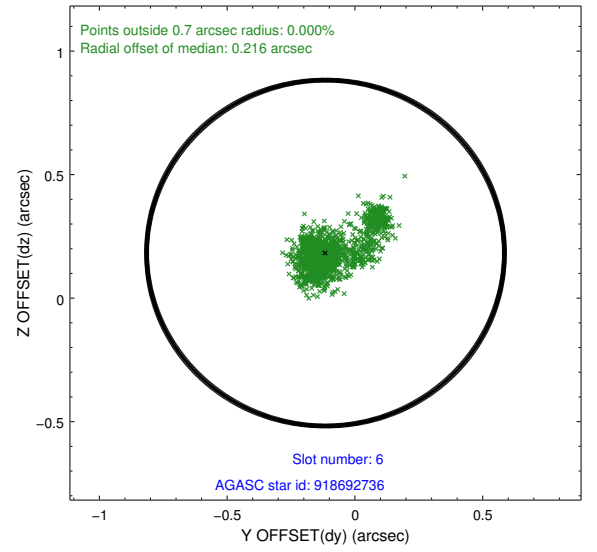
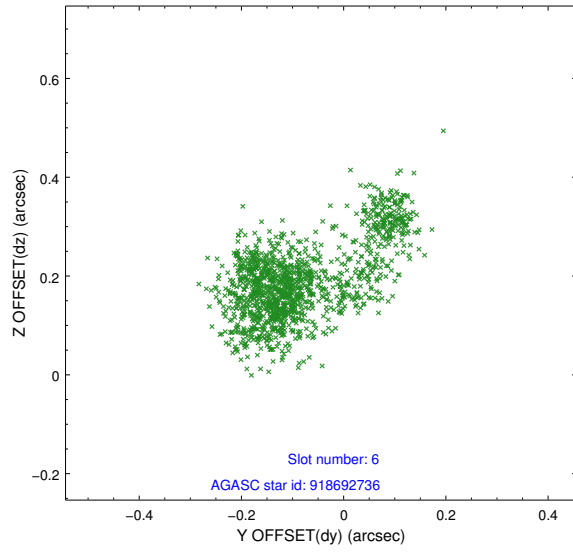
2.4.2 Slot 4



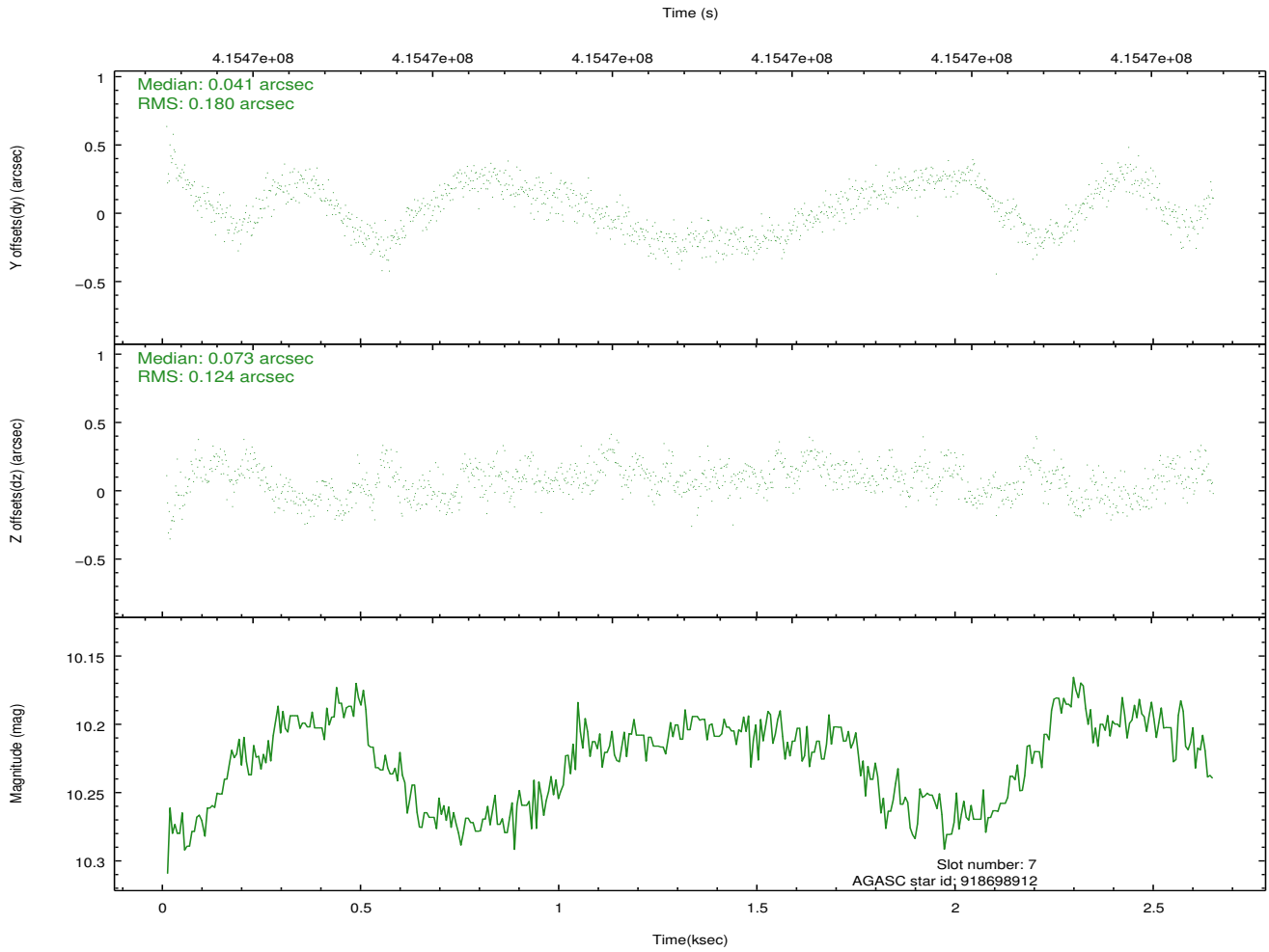
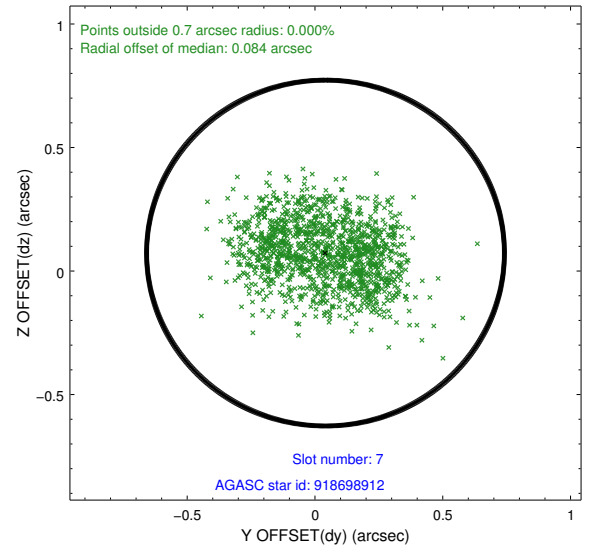
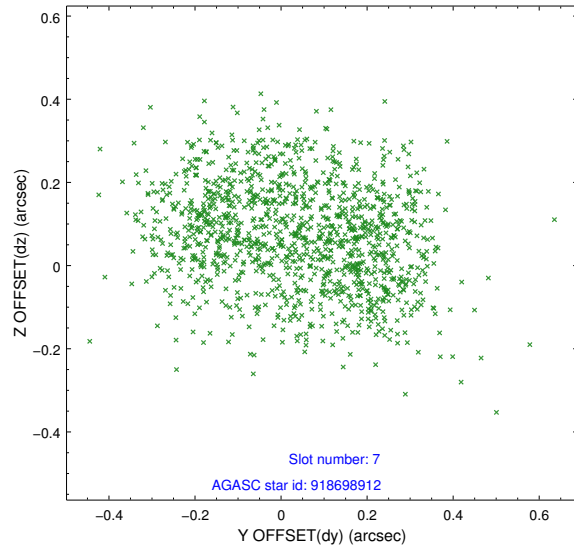
2.4.3 Slot 5



2.4.4 Slot 6

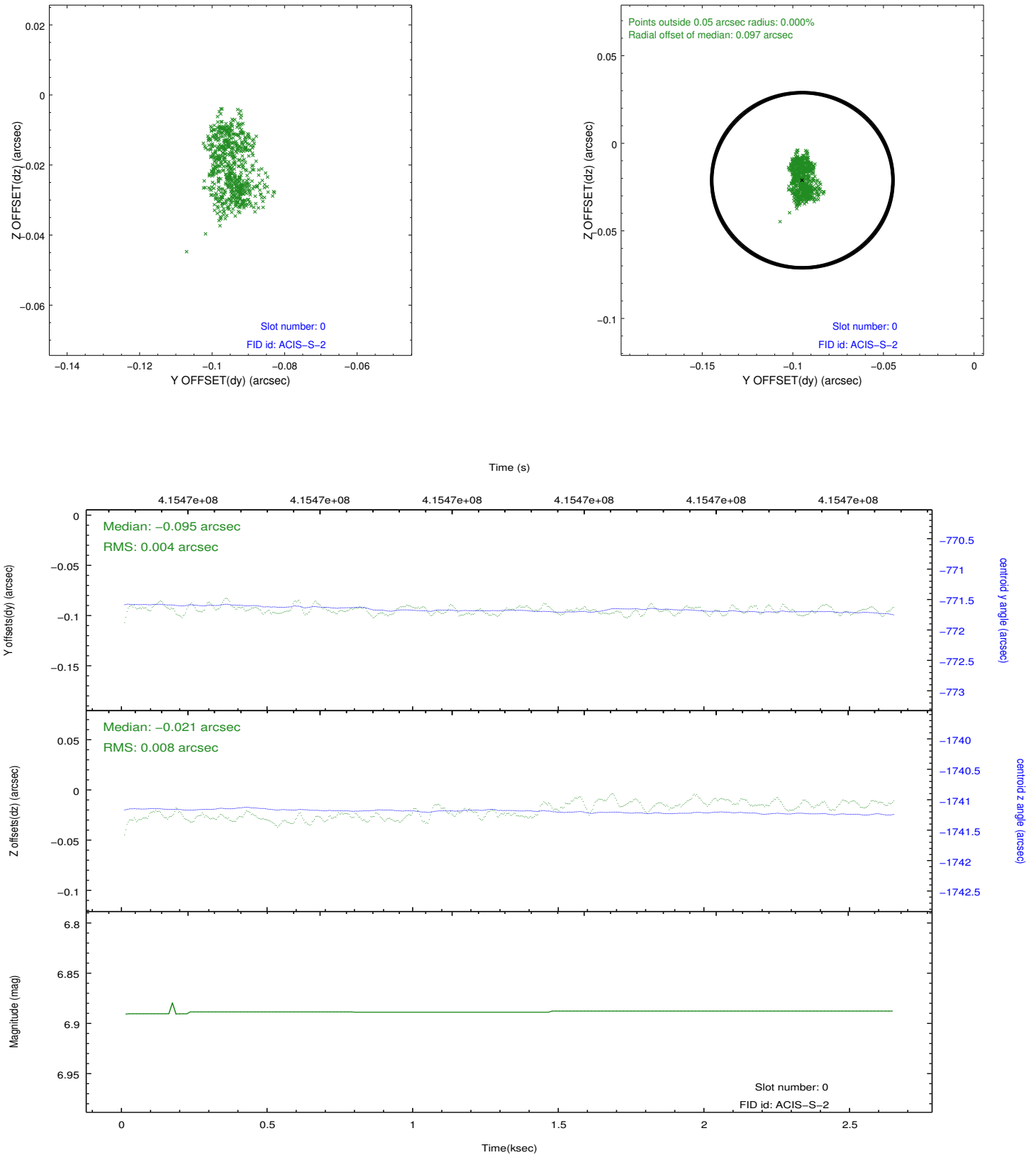


2.4.5 Slot 7

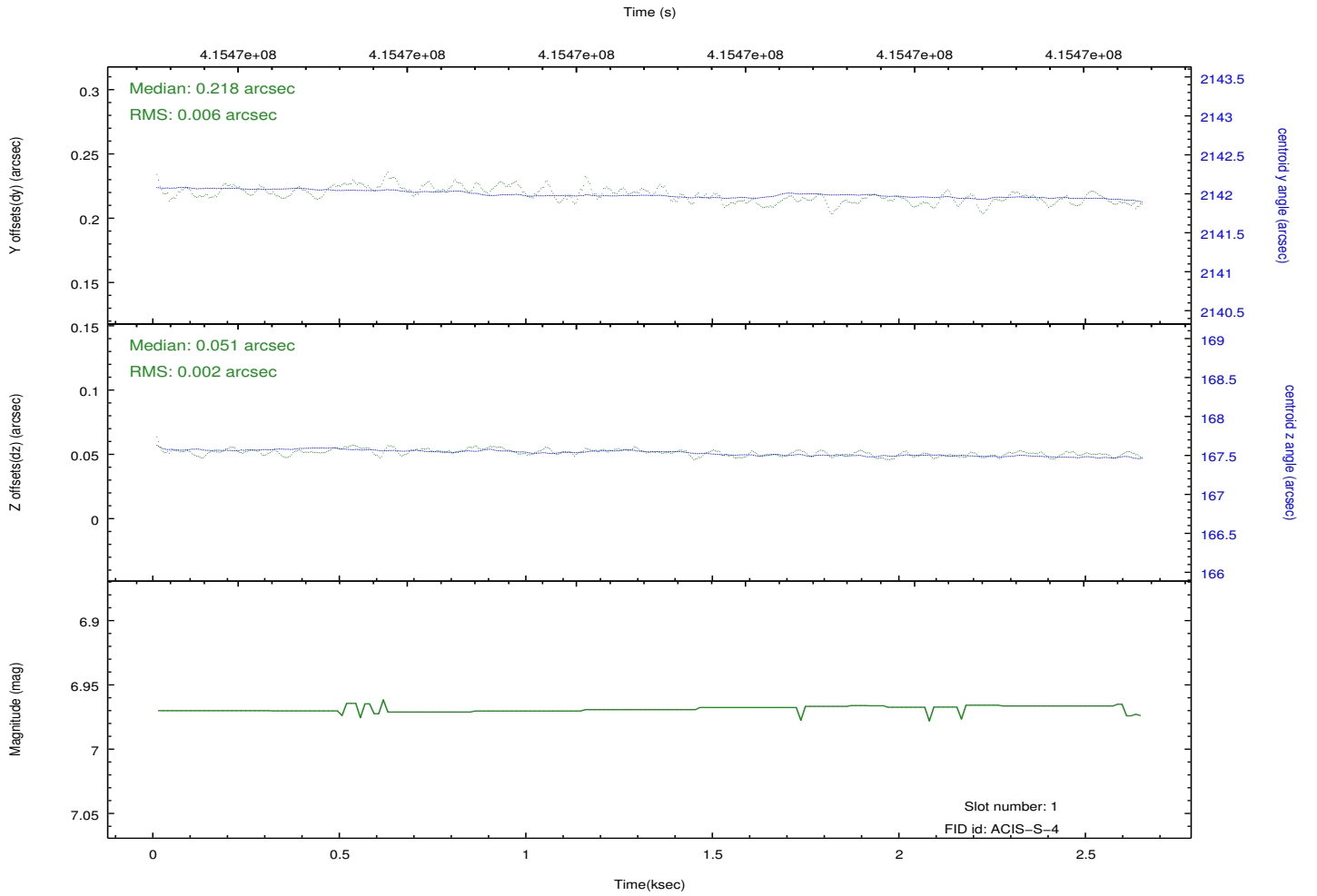
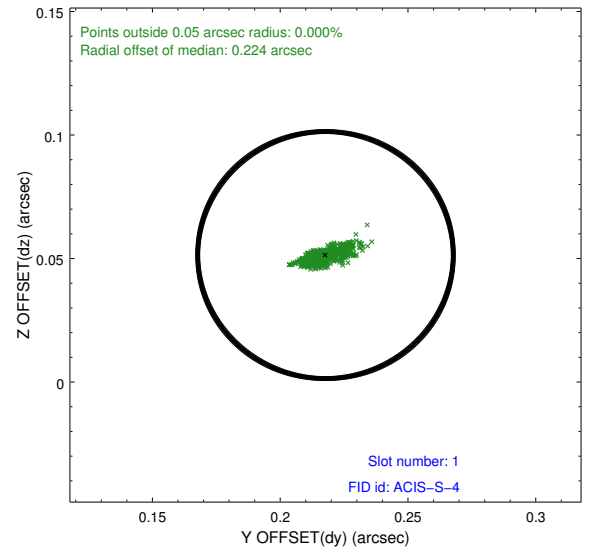
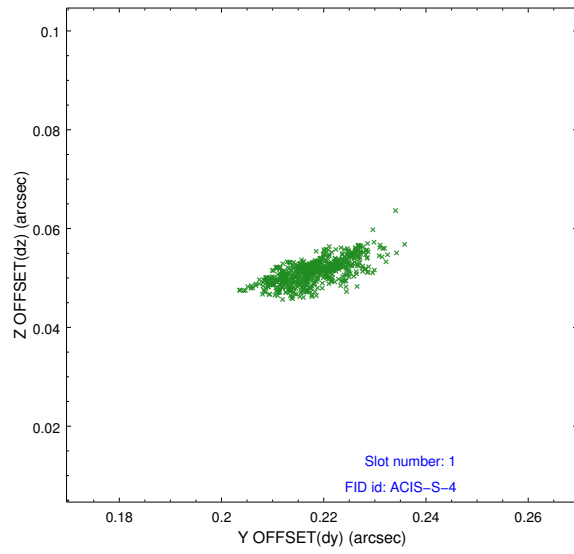


2.5 FID Slots

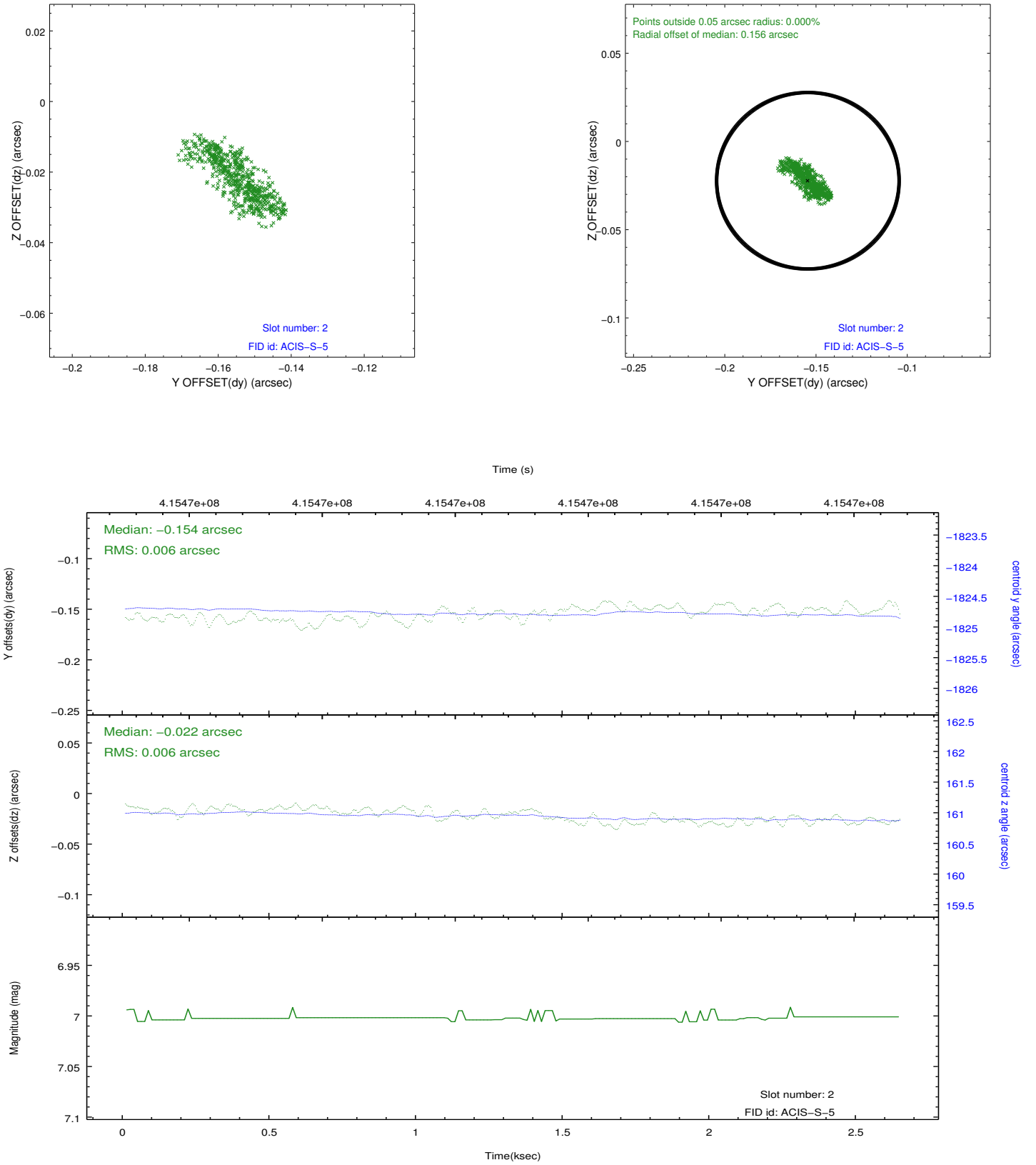
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.3374000179768

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.