

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13211 - L2 Version 2
Chandra X-Ray Center

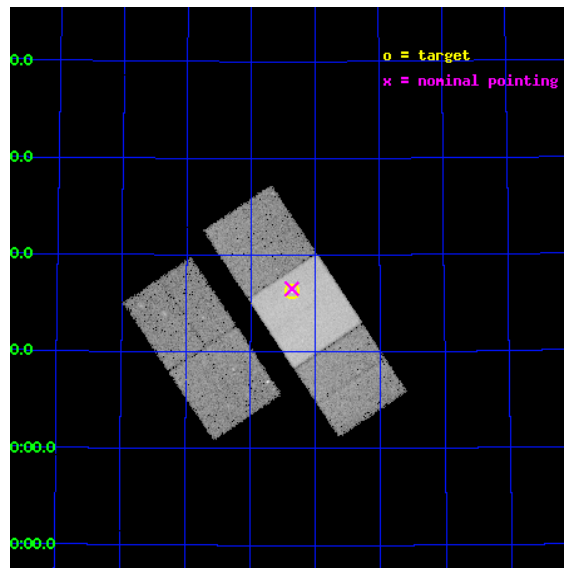
L2 Processing Date : Feb 1 2012

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1 Front

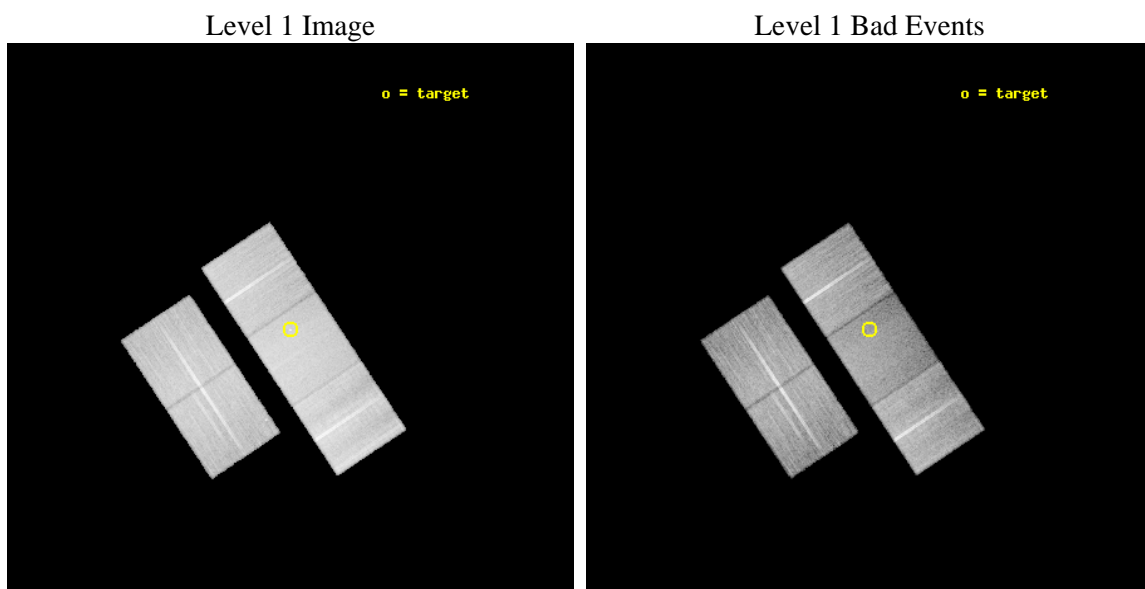
seq_num	702433	Sequence number
obs_id	13211	Observation id
title	X-rays from the extended emission-line region of 3C305: probing a massive jet-driven outflow	Proposal title
observer	Dr Martin Hardcastle	Principal investigator
object	3C305	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	222.34	Observer's specified target RA [deg]
dec_targ	63.270583	Observer's specified target Dec [deg]
ra_nom	222.34038159786	Nominal RA [deg]
dec_nom	63.275416742989	Nominal Dec [deg]
roll_nom	56.356292646992	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29040.800223351	Sum of GTIs [s]
livetime	28661.360788906	Livetime [s]
ontime2	29040.800223351	Sum of GTIs [s]
ontime3	29040.800223351	Sum of GTIs [s]
ontime6	29040.800223351	Sum of GTIs [s]
ontime7	29040.800223351	Sum of GTIs [s]
ontime8	29040.800223351	Sum of GTIs [s]
l2events	193742	Number of level 2 events



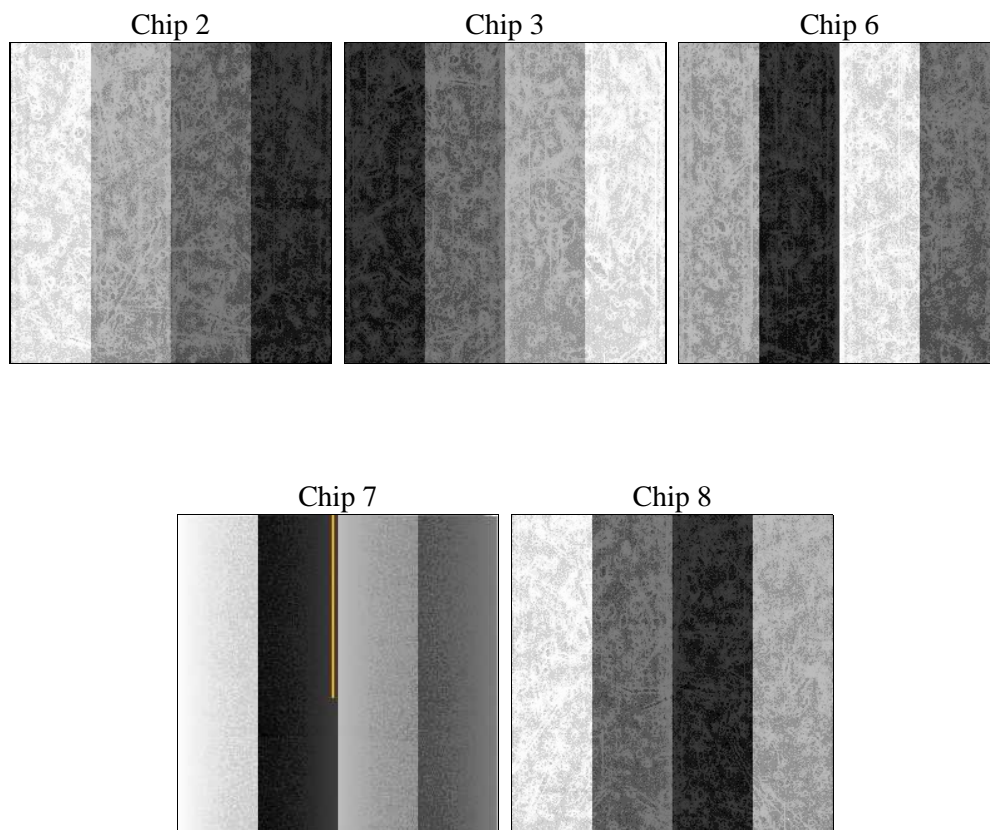
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	29040.800223351	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	29040.800223351	Sum of GTIs [s]
date	2012-02-01T08:41:06	Date and time of file creation	ontime3	29040.800223351	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	29040.800223351	Sum of GTIs [s]
			ontime7	29040.800223351	Sum of GTIs [s]
			ontime8	29040.800223351	Sum of GTIs [s]
			l1events	1150019	Number of level 1 events

2.1.4 Events

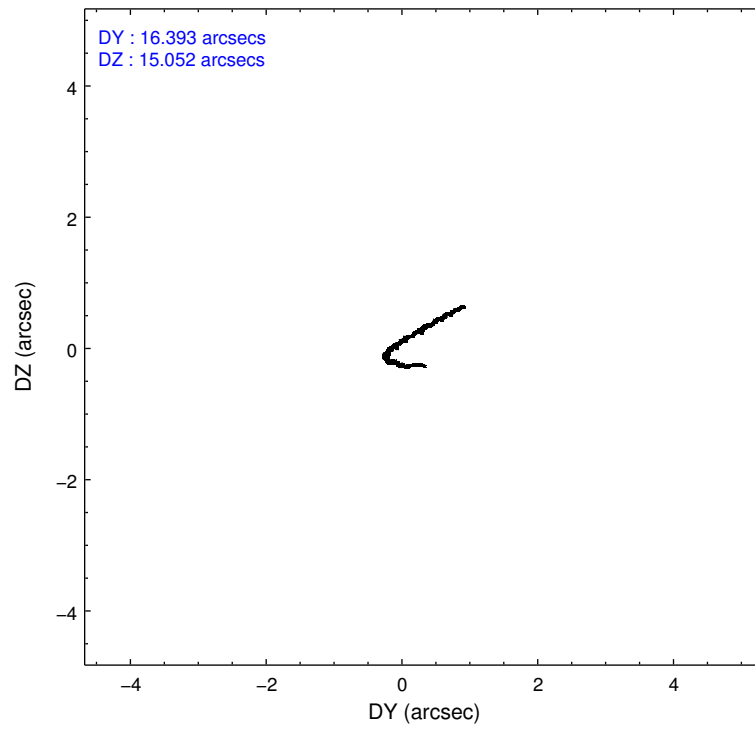
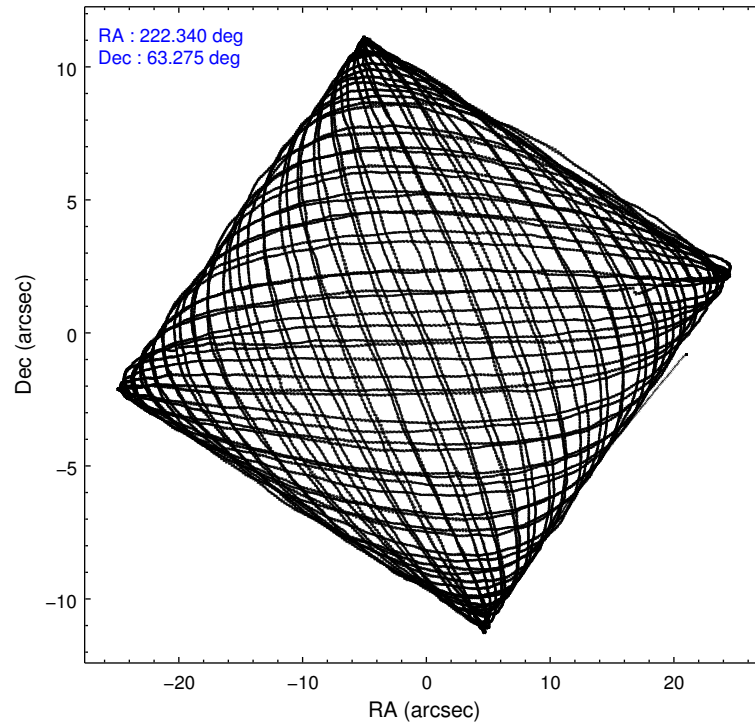
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	204813	201766	213399	255417	274624
rejected events	183027	180138	189571	140436	204500
rejected %	89%	89%	88%	54%	74%

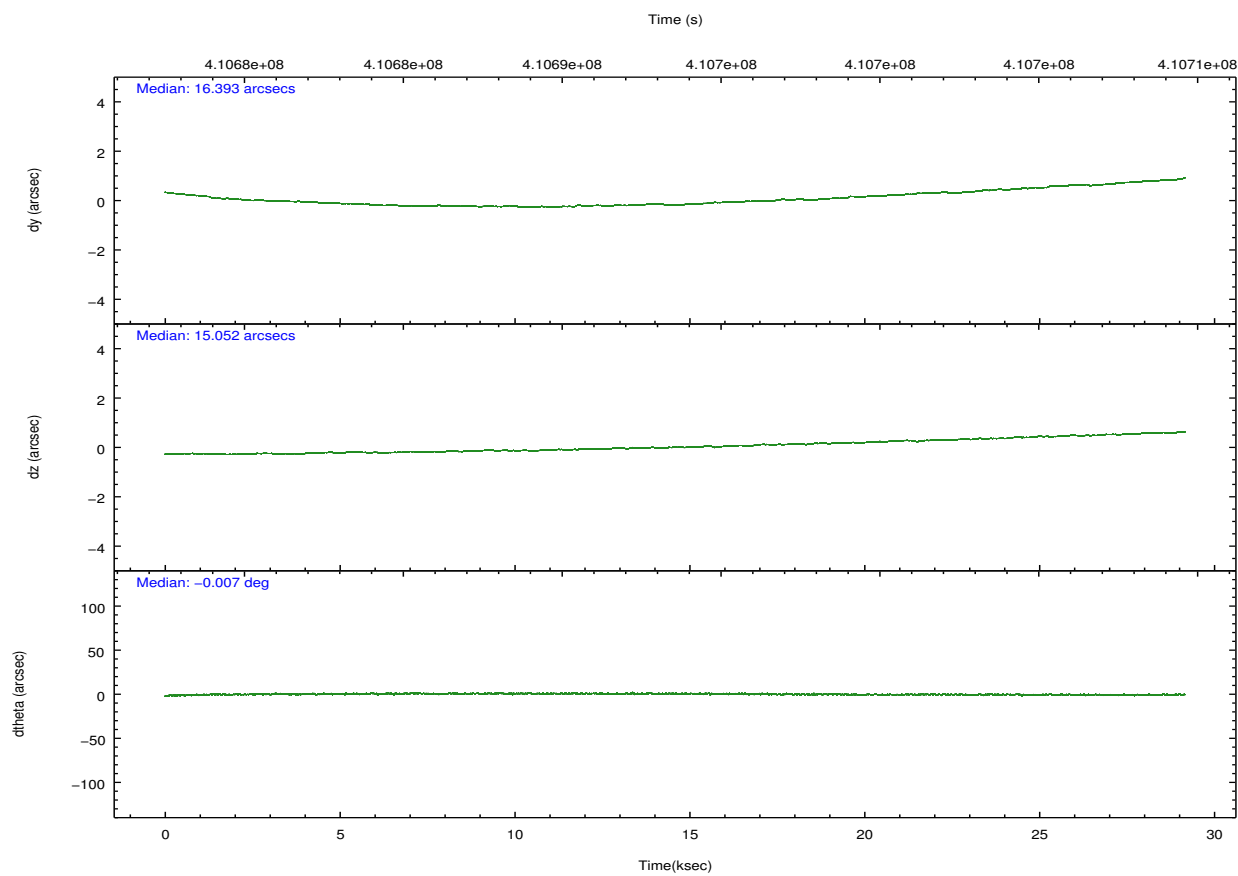
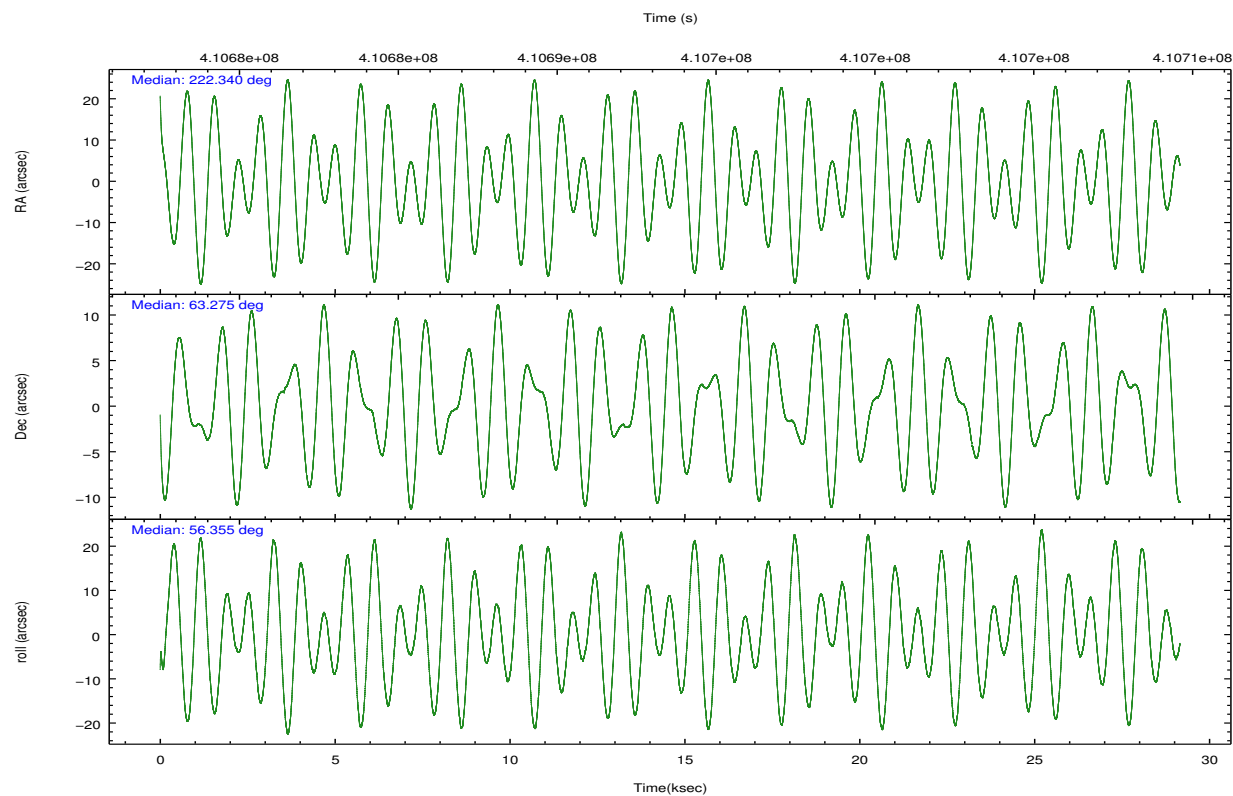
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	7884	7748	8181	10485	20010
	3%	3%	3%	4%	7%
grade 1 events	120	105	131	321	216
	0%	0%	0%	0%	0%
grade 2 events	5247	4800	5503	23639	16861
	2%	2%	2%	9%	6%
grade 3 events	2246	2471	2515	10314	7372
	1%	1%	1%	4%	2%
grade 4 events	2282	2321	2404	9955	6944
	1%	1%	1%	3%	2%
grade 5 events	7968	9549	9817	26662	14213
	3%	4%	4%	10%	5%
grade 6 events	4130	4291	5229	60594	18943
	2%	2%	2%	23%	6%
grade 7 events	174936	170481	179619	113447	190065
	85%	84%	84%	44%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	222.337341	222.3403815978627	CCD I2 on	O2	Y
[deg] Pointing Dec	63.248123	63.27541674298948	CCD I3 on	O1	Y
[deg] Pointing Roll	56.202380	56.35629264699248	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[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)	410679128.184000	410678114.97087	CCD S5 on	N	N
Observation start date	2011-01-06T05:31:02	2011-01-06T05:15:14	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	410708128.184000	410708830.12246	On-chip summing requested	N	N
Observation end date	2011-01-06T13:34:22	2011-01-06T13:47:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



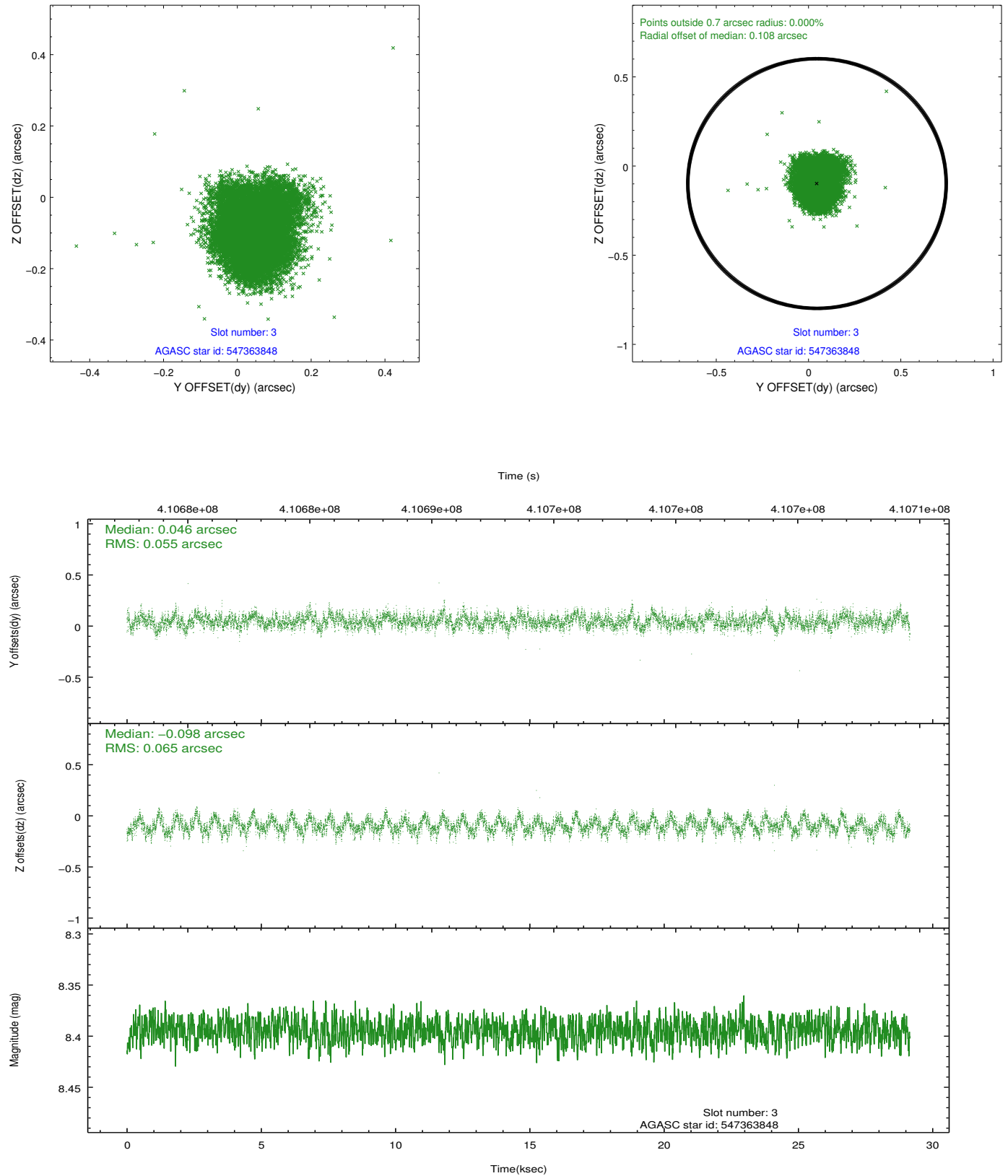


Slot Statistics

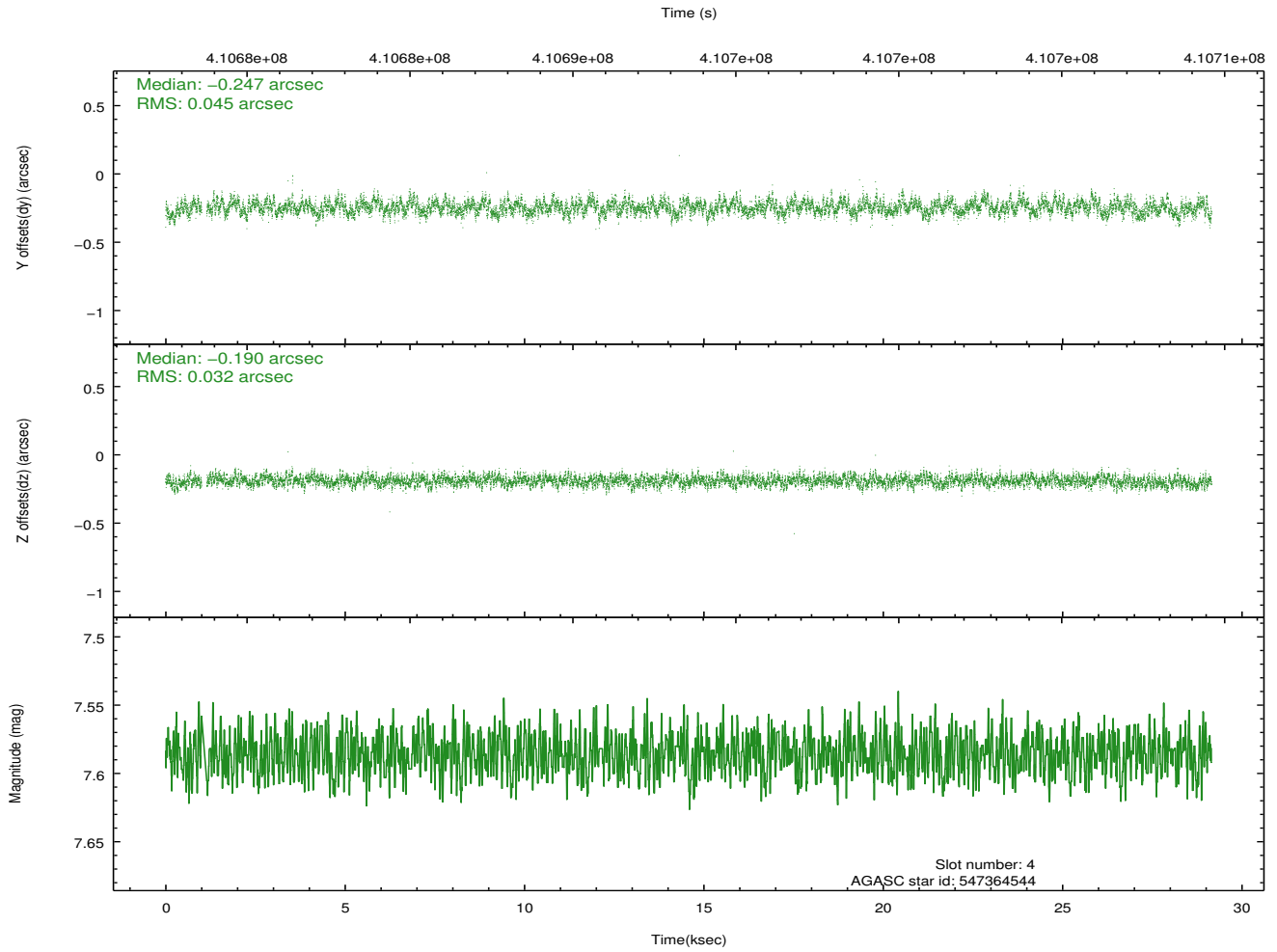
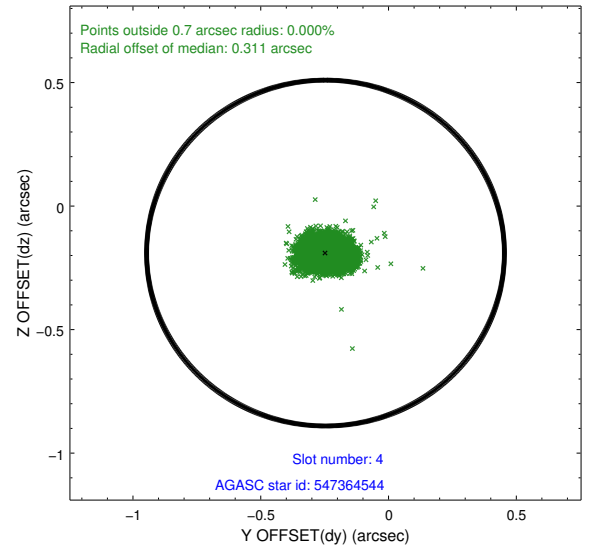
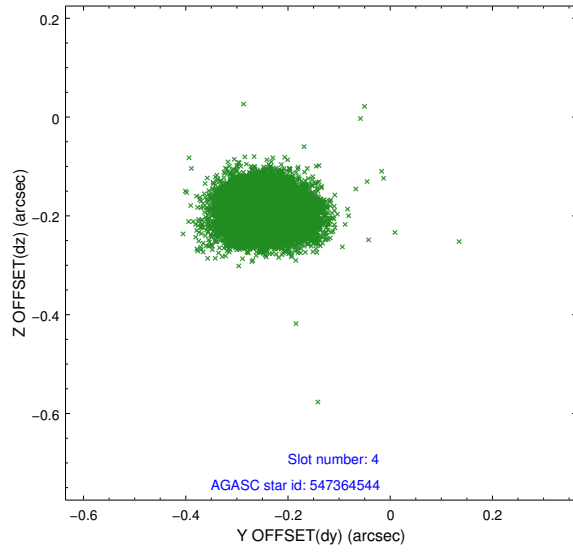
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.02	7111	0.073	-0.078	0.020	0.043	0.000000	0.000000	926.67	-1732.18
1	FID	ACIS-S-5	7.08	7111	-0.113	0.046	0.009	0.015	0.000000	0.000000	-1822.53	165.34
2	FID	ACIS-S-6	7.18	7112	0.017	0.048	0.017	0.027	0.000000	0.000000	392.00	809.46
3	GUIDE	547363848	8.39	14218	0.046	-0.098	0.091	0.145	221.091689	63.102076	-1548.48	1404.74
4	GUIDE	547364544	7.59	14153	-0.247	-0.190	0.058	0.094	222.089344	63.725067	1207.32	1284.11
5	GUIDE	547365904	7.64	14221	0.041	0.066	0.086	0.126	222.728028	62.780448	-1039.21	-1469.85
6	GUIDE	547368288	9.33	14209	0.113	0.160	0.095	0.157	221.848926	62.701954	-2079.61	-421.81
7	GUIDE	548283296	8.92	14205	0.039	0.061	0.089	0.146	223.056937	63.646142	1835.95	-154.84

2.4 Star Slots

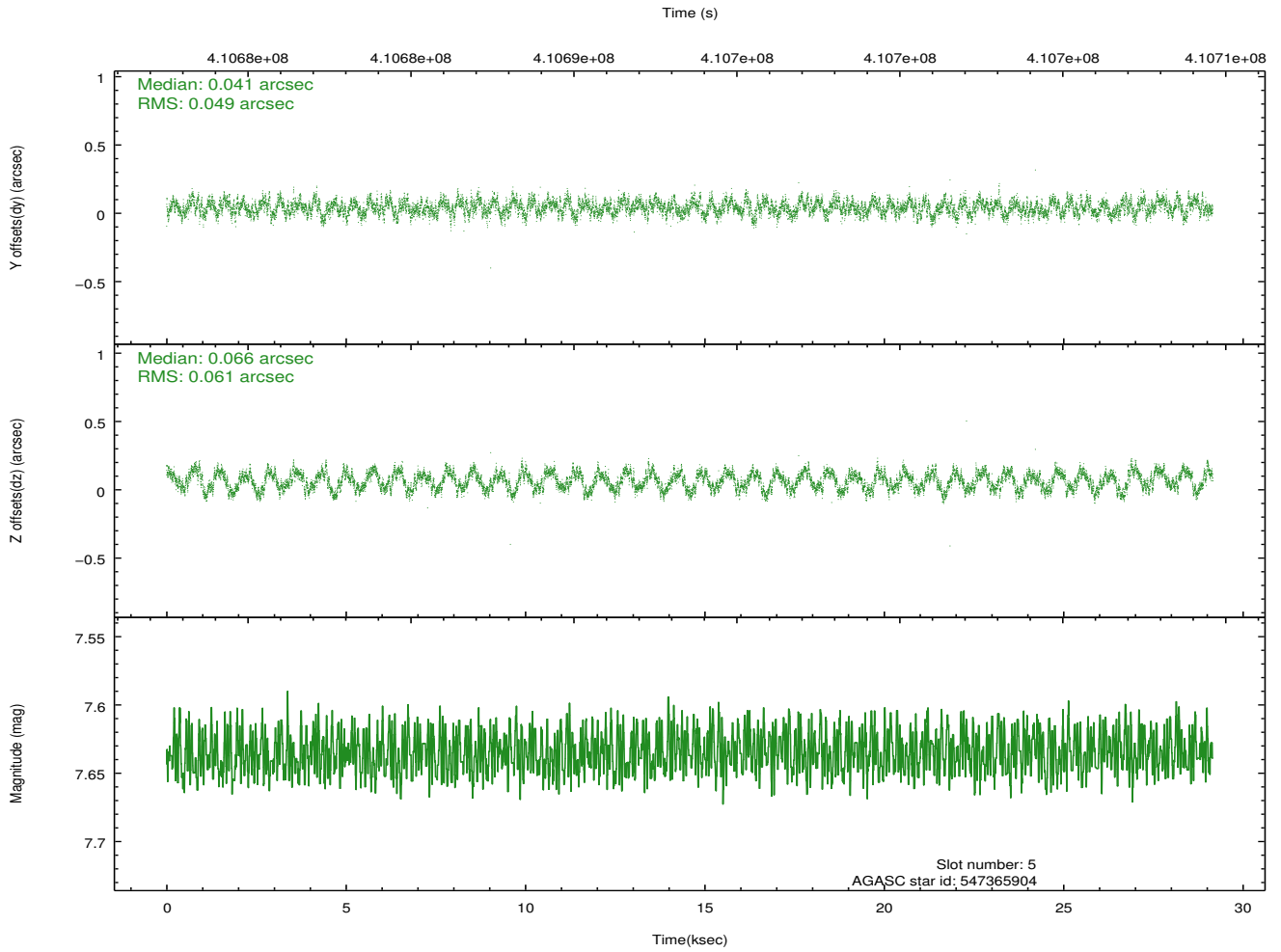
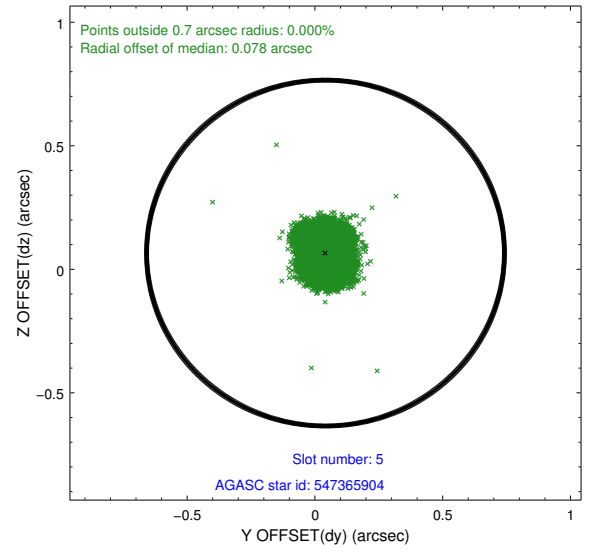
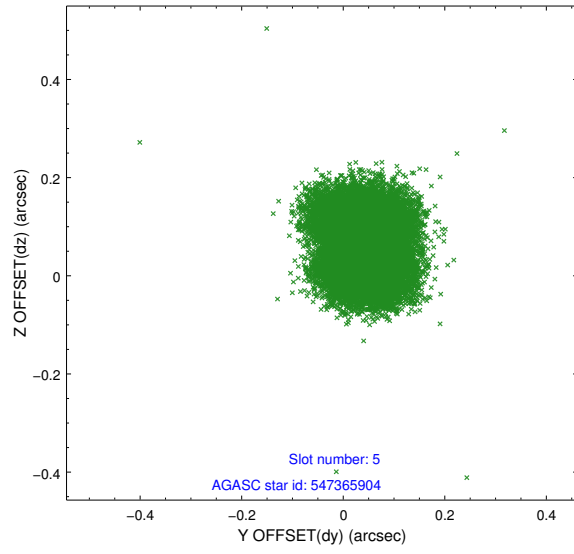
2.4.1 Slot 3



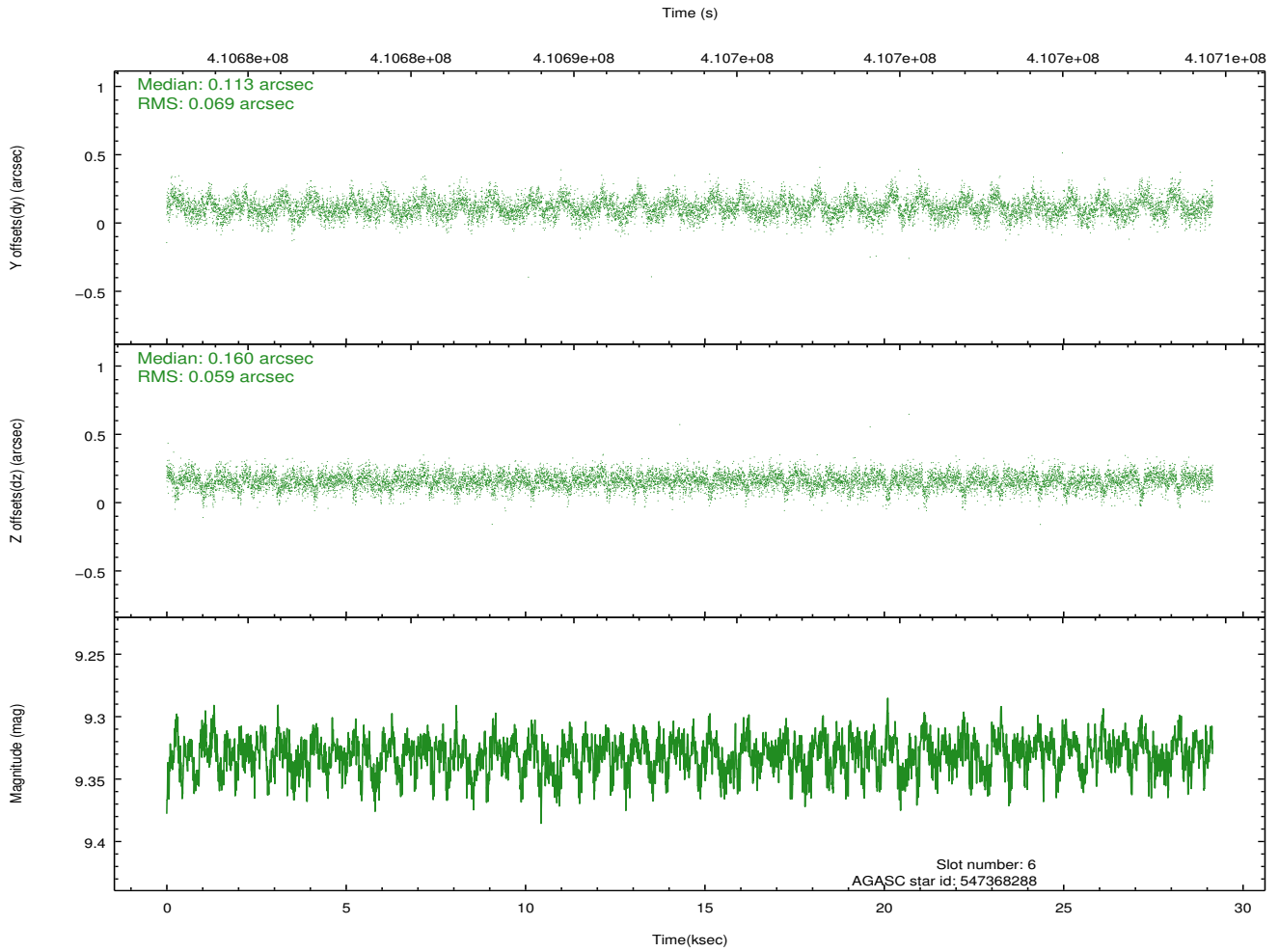
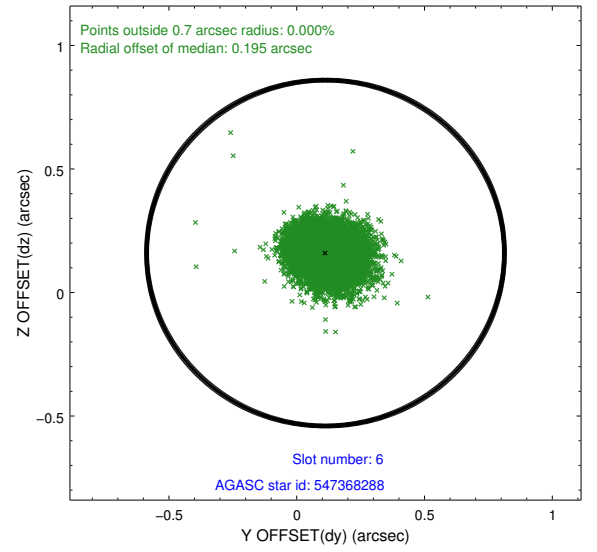
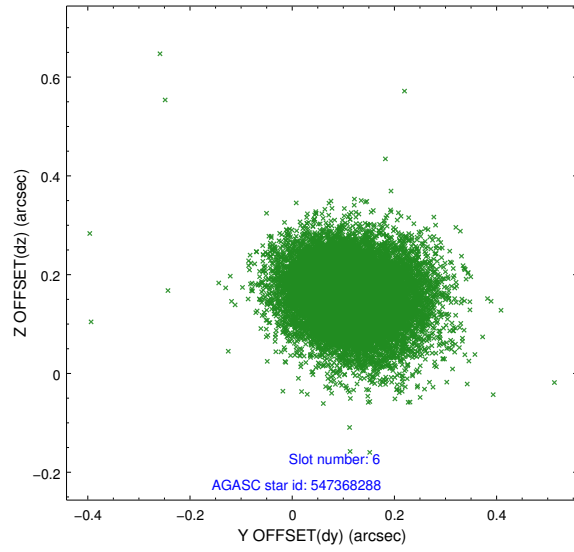
2.4.2 Slot 4



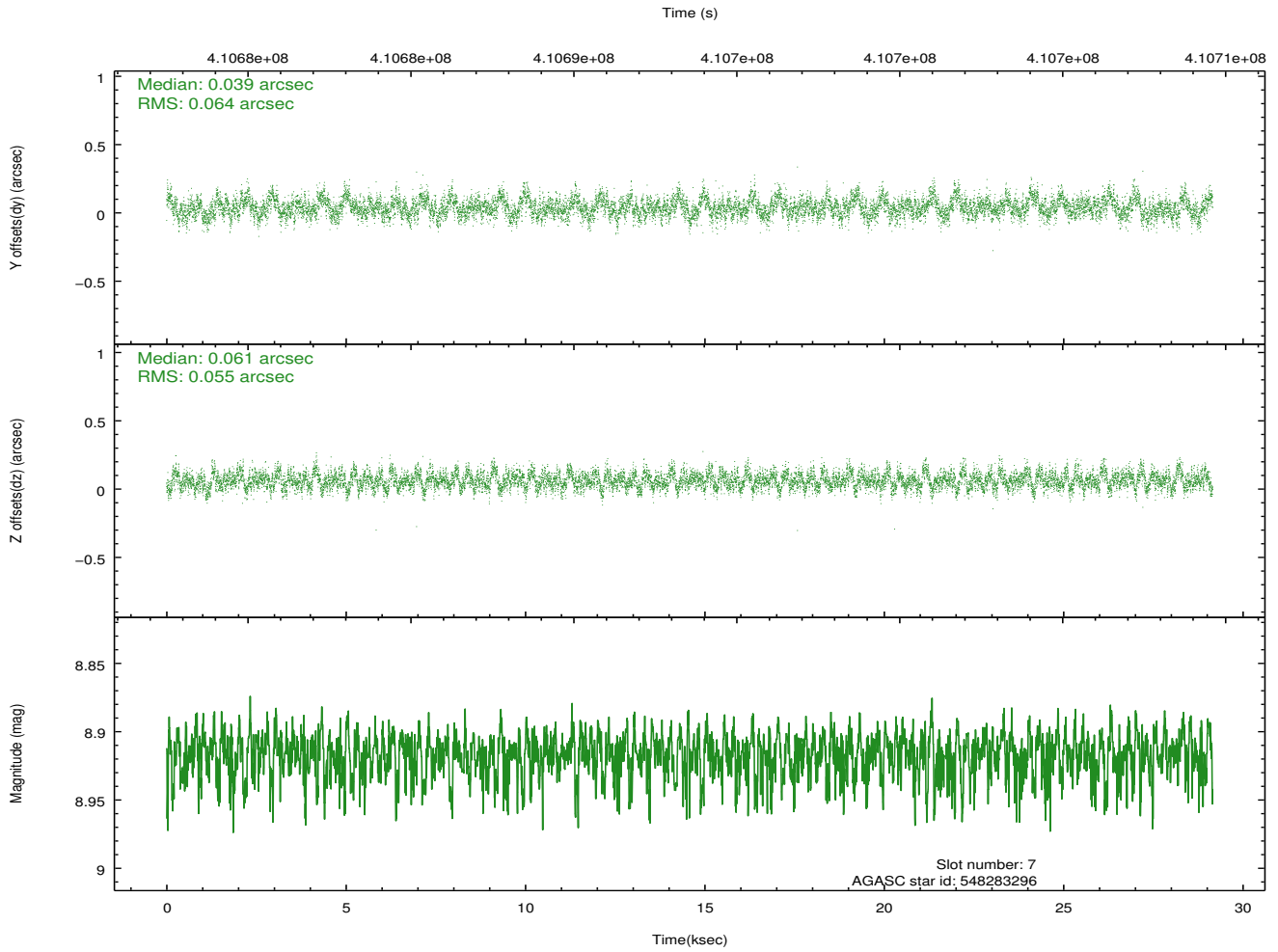
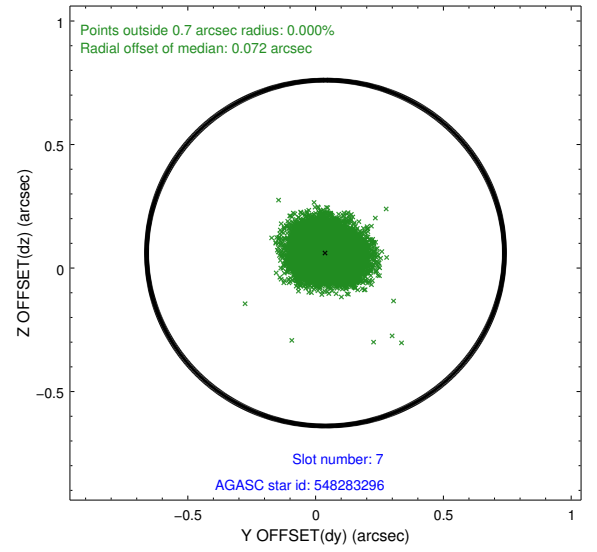
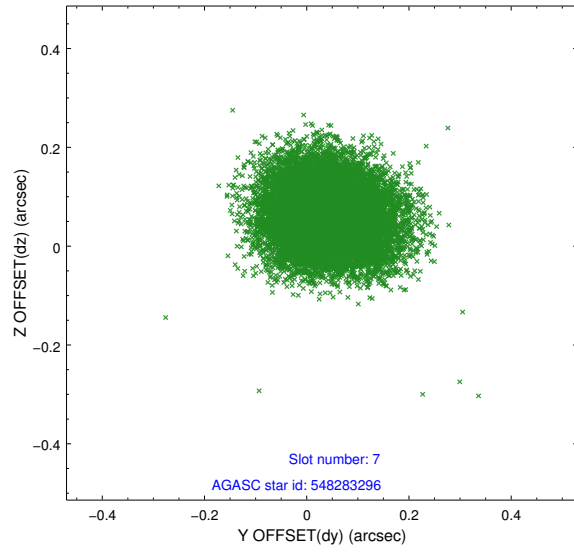
2.4.3 Slot 5



2.4.4 Slot 6

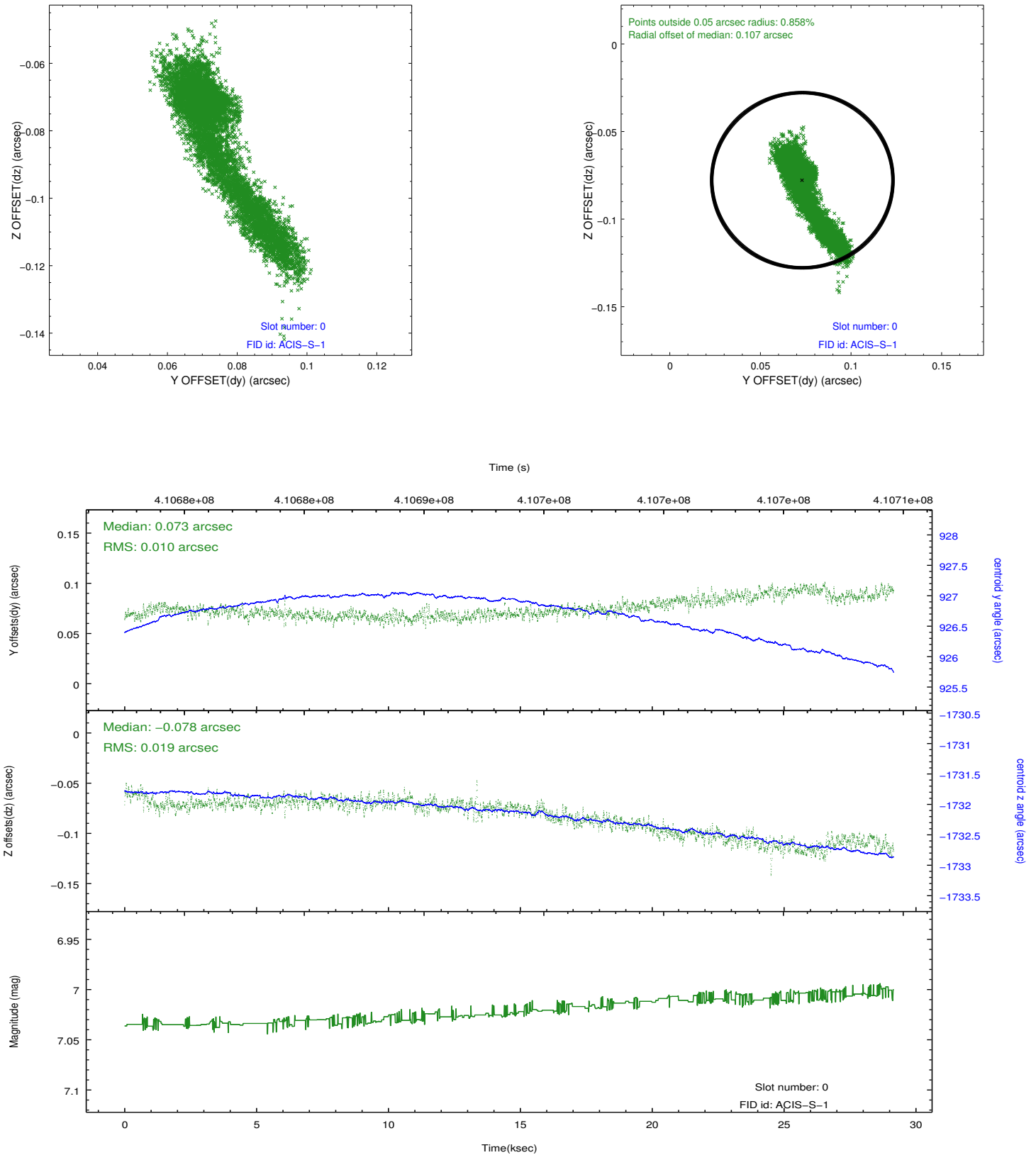


2.4.5 Slot 7

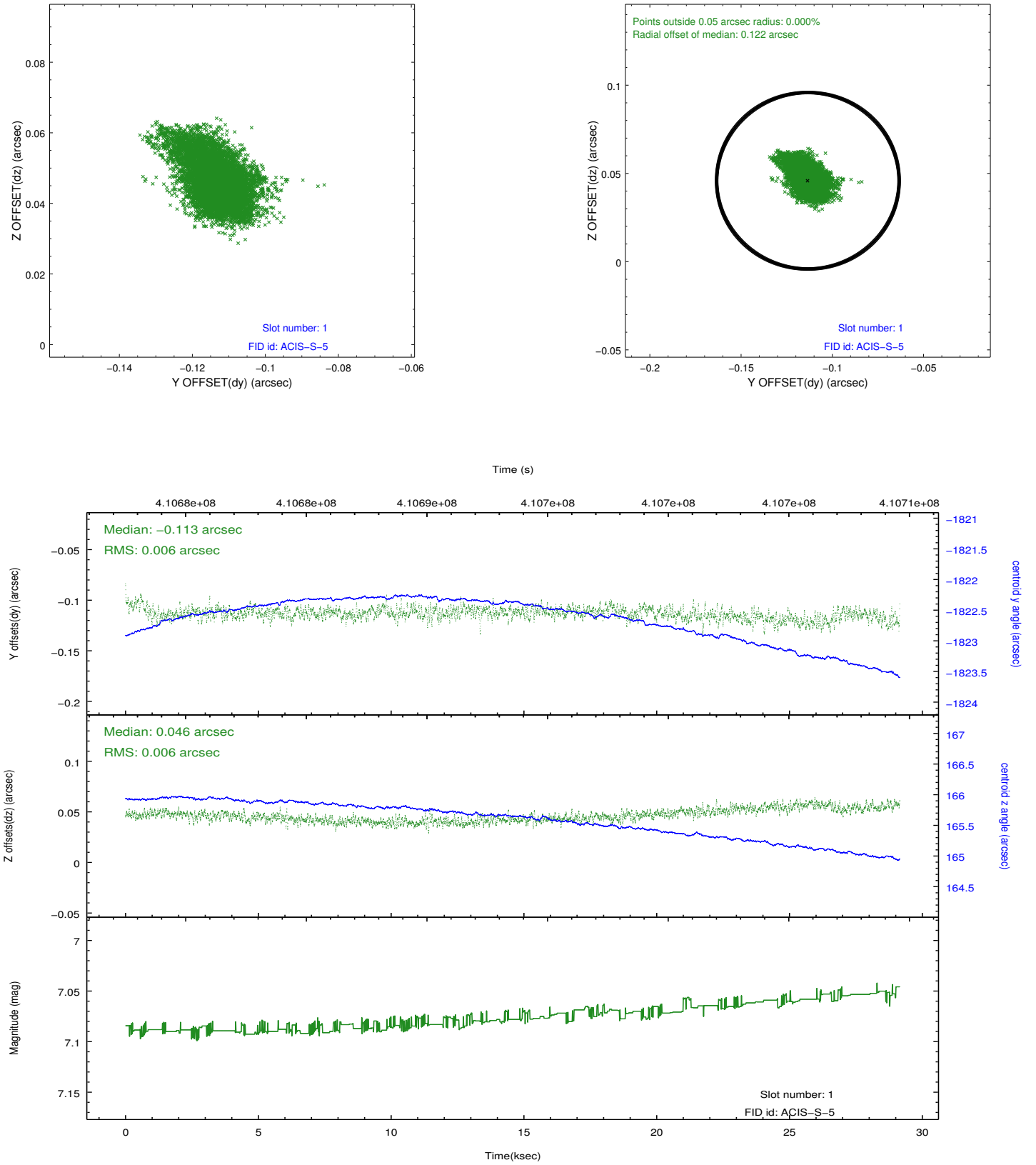


2.5 FID Slots

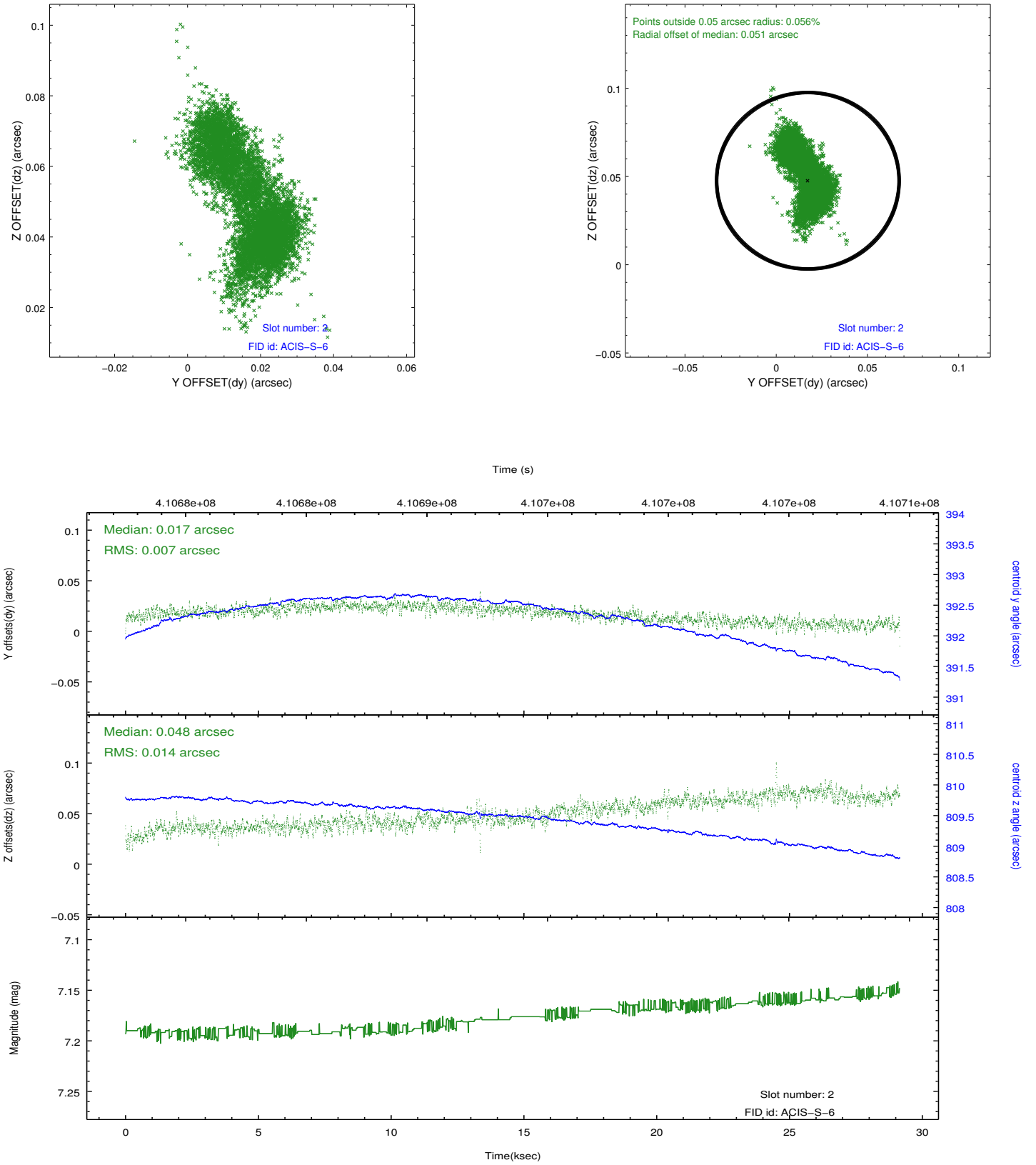
2.5.1 Slot 0



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)	2012.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.040800223351

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.