

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12489 - L2 Version 2
Chandra X-Ray Center

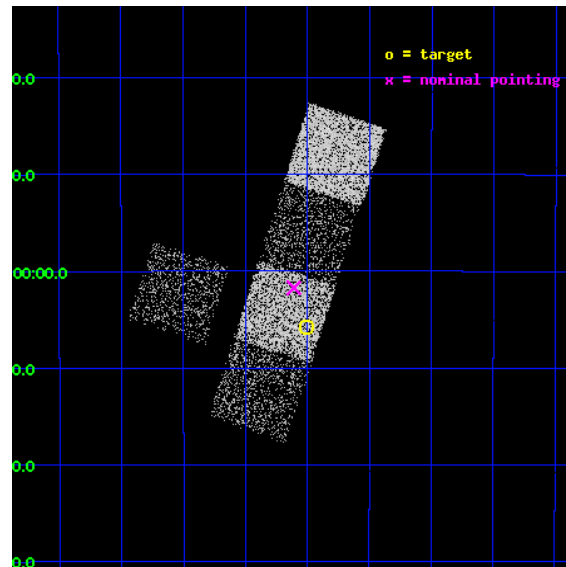
L2 Processing Date : Feb 10 2012

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1 Front

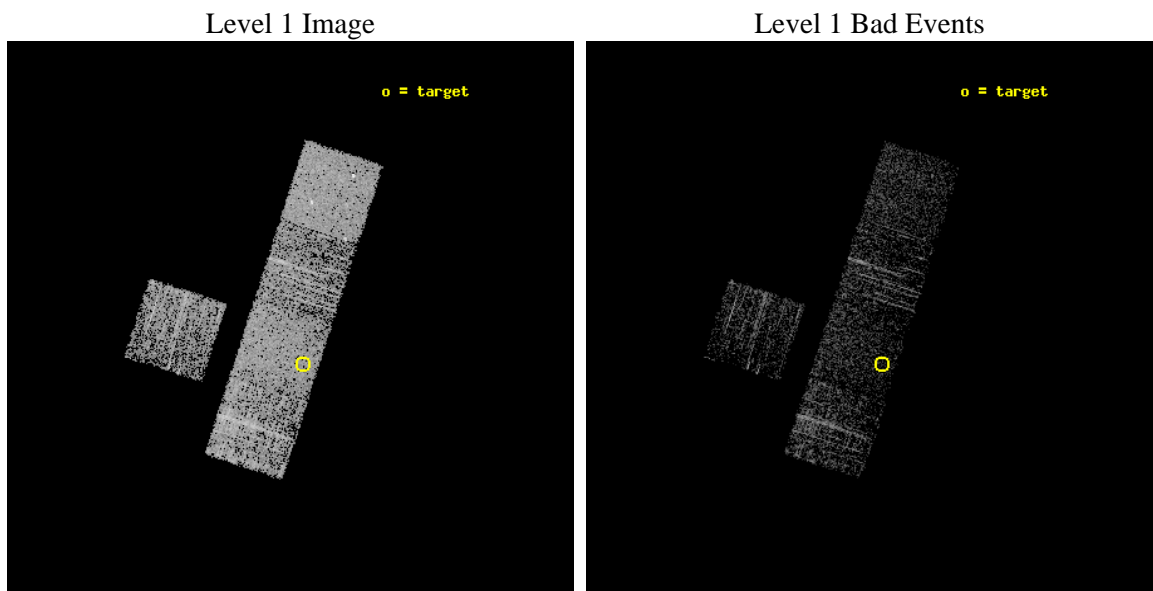
seq_num	401230	Sequence number
obs_id	12489	Observation id
title	The Nearest and Brightest Quiescent Low Mass X-ray Binaries	Propos
observer	Prof. Robert Rutledge	Principal investigator
object	1RXS J221030.3-300546	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	332.62625	Observer's specified target RA [deg]
dec_targ	-30.096111	Observer's specified target Dec [deg]
ra_nom	332.65223526197	Nominal RA [deg]
dec_nom	-30.02888462588	Nominal Dec [deg]
roll_nom	107.97606541428	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1537.6000118256	Sum of GTIs [s]
livetime	1517.5101357064	Livetime [s]
ontime3	1537.6000118256	Sum of GTIs [s]
ontime5	1537.6000118256	Sum of GTIs [s]
ontime6	1537.6000118256	Sum of GTIs [s]
ontime7	1537.6000118256	Sum of GTIs [s]
ontime8	1537.6000118256	Sum of GTIs [s]
l2events	15967	Number of level 2 events



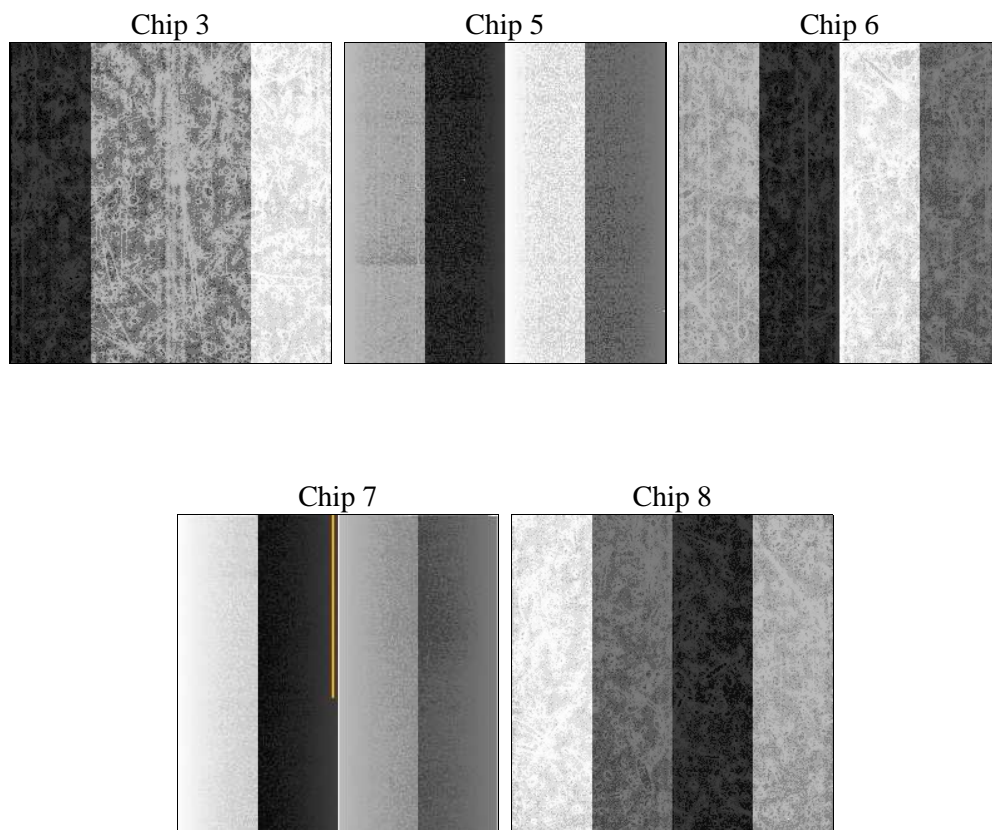
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	1537.6000118256	Sum of GTIs [s]
caldsver	4.4.7	 	ontime3	1537.6000118256	Sum of GTIs [s]
date	2012-02-11T00:37:02	Date and time of file creation	ontime5	1537.6000118256	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	1537.6000118256	Sum of GTIs [s]
			ontime7	1537.6000118256	Sum of GTIs [s]
			ontime8	1537.6000118256	Sum of GTIs [s]
			l1events	63153	Number of level 1 events

2.1.4 Events

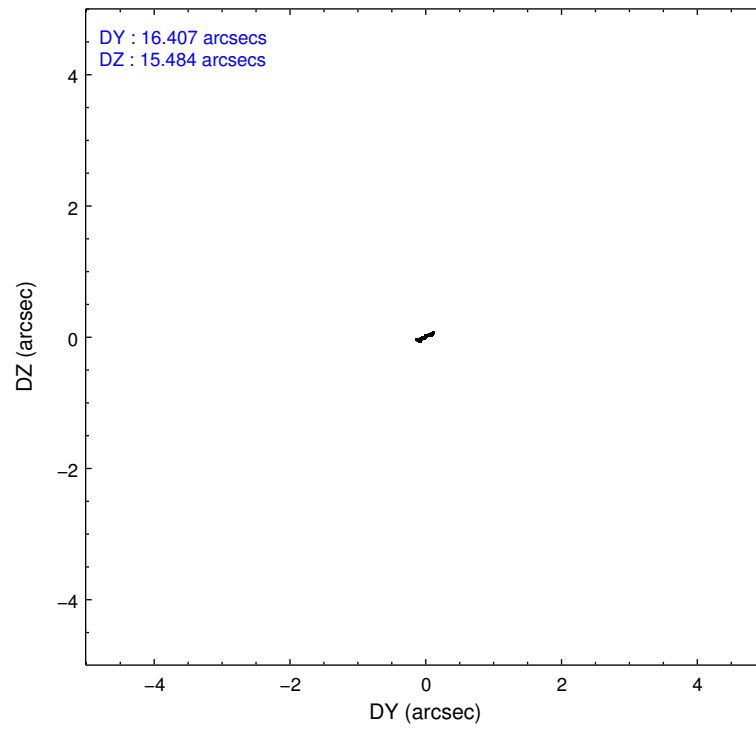
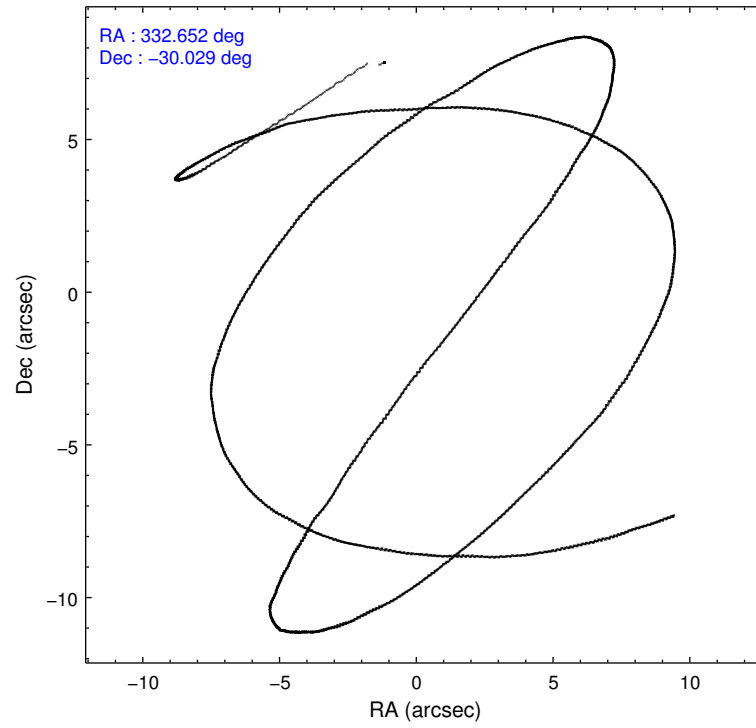
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	9416	16080	10230	12824	14603
rejected events	8326	7938	9020	7185	10802
rejected %	88%	49%	88%	56%	73%

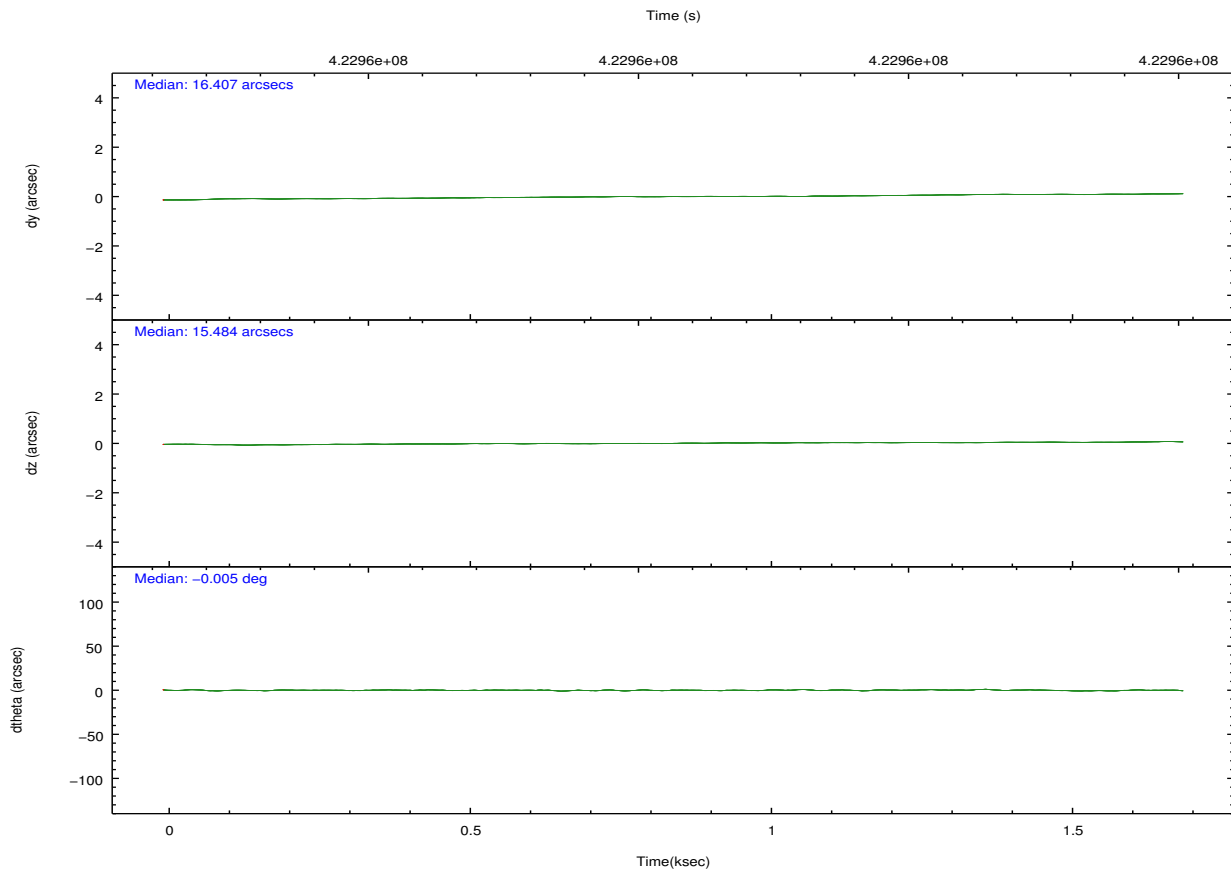
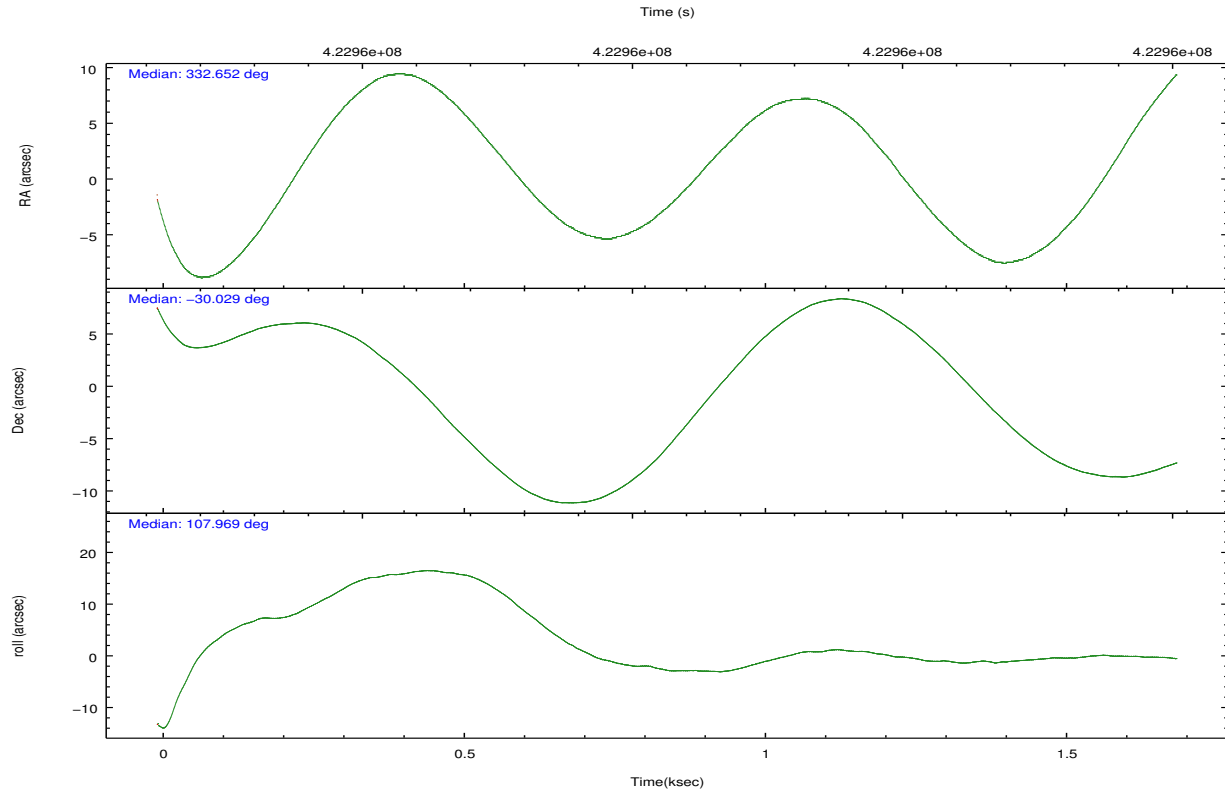
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	390	1003	428	507	1142
	4%	6%	4%	3%	7%
grade 1 events	3	67	5	18	8
	0%	0%	0%	0%	0%
grade 2 events	235	2528	269	1120	885
	2%	15%	2%	8%	6%
grade 3 events	118	258	133	493	373
	1%	1%	1%	3%	2%
grade 4 events	134	285	119	495	391
	1%	1%	1%	3%	2%
grade 5 events	469	1219	448	1266	631
	4%	7%	4%	9%	4%
grade 6 events	216	4111	265	3052	1038
	2%	25%	2%	23%	7%
grade 7 events	7851	6609	8563	5873	10135
	83%	41%	83%	45%	69%

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	332.676196	332.6522352619666	CCD I2 on	N	N
[deg] Pointing Dec	-30.047032	-30.02888462588004	CCD I3 on	O1	Y
[deg] Pointing Roll	107.831529	107.9760654142789	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)	422957398.184000	422956453.25712	CCD S5 on	N	N
Observation start date	2011-05-28T08:08:52	2011-05-28T07:54:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	422958898.184000	422959637.93229	On-chip summing requested	N	N
Observation end date	2011-05-28T08:33:52	2011-05-28T08:47:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



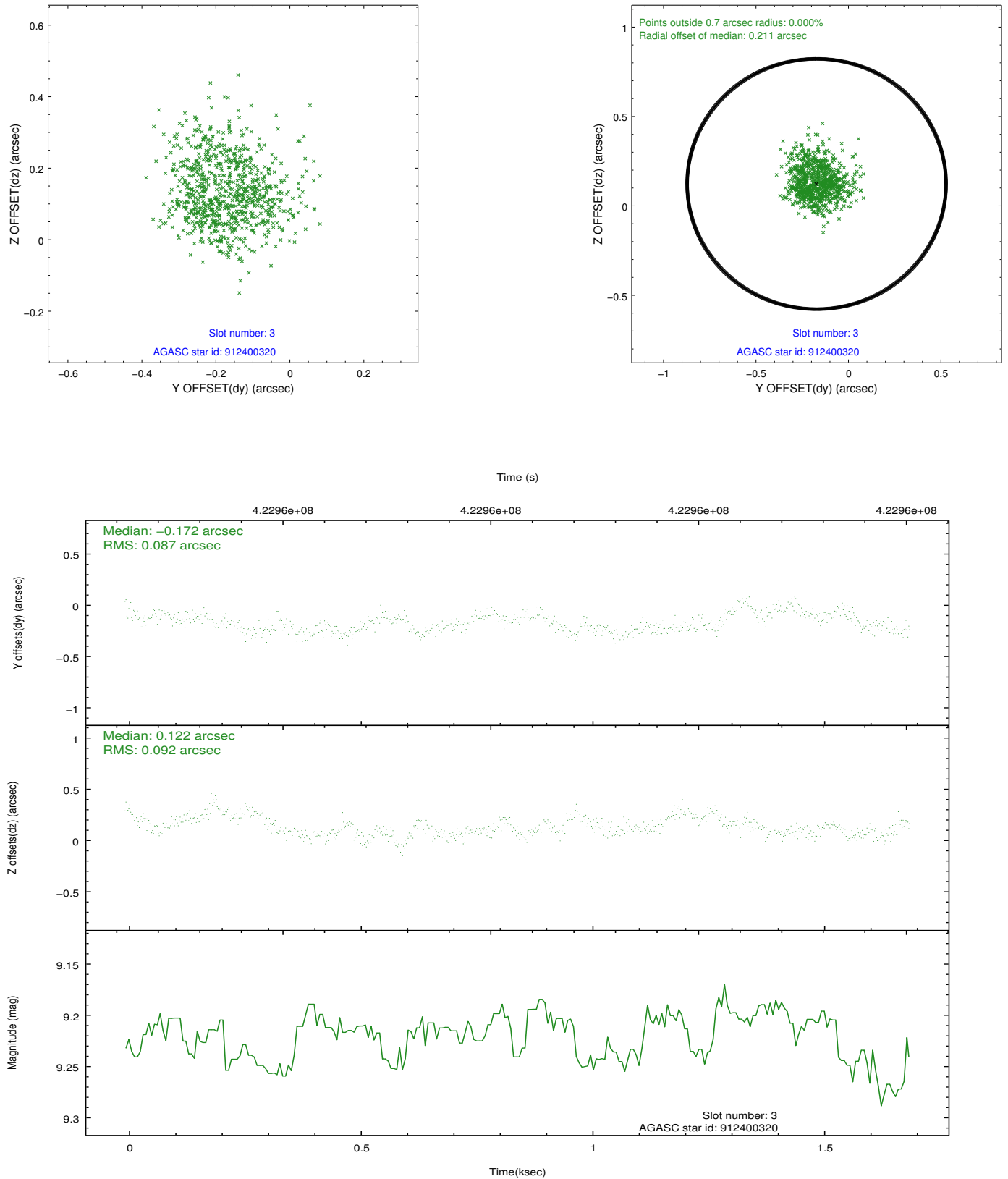


Slot Statistics

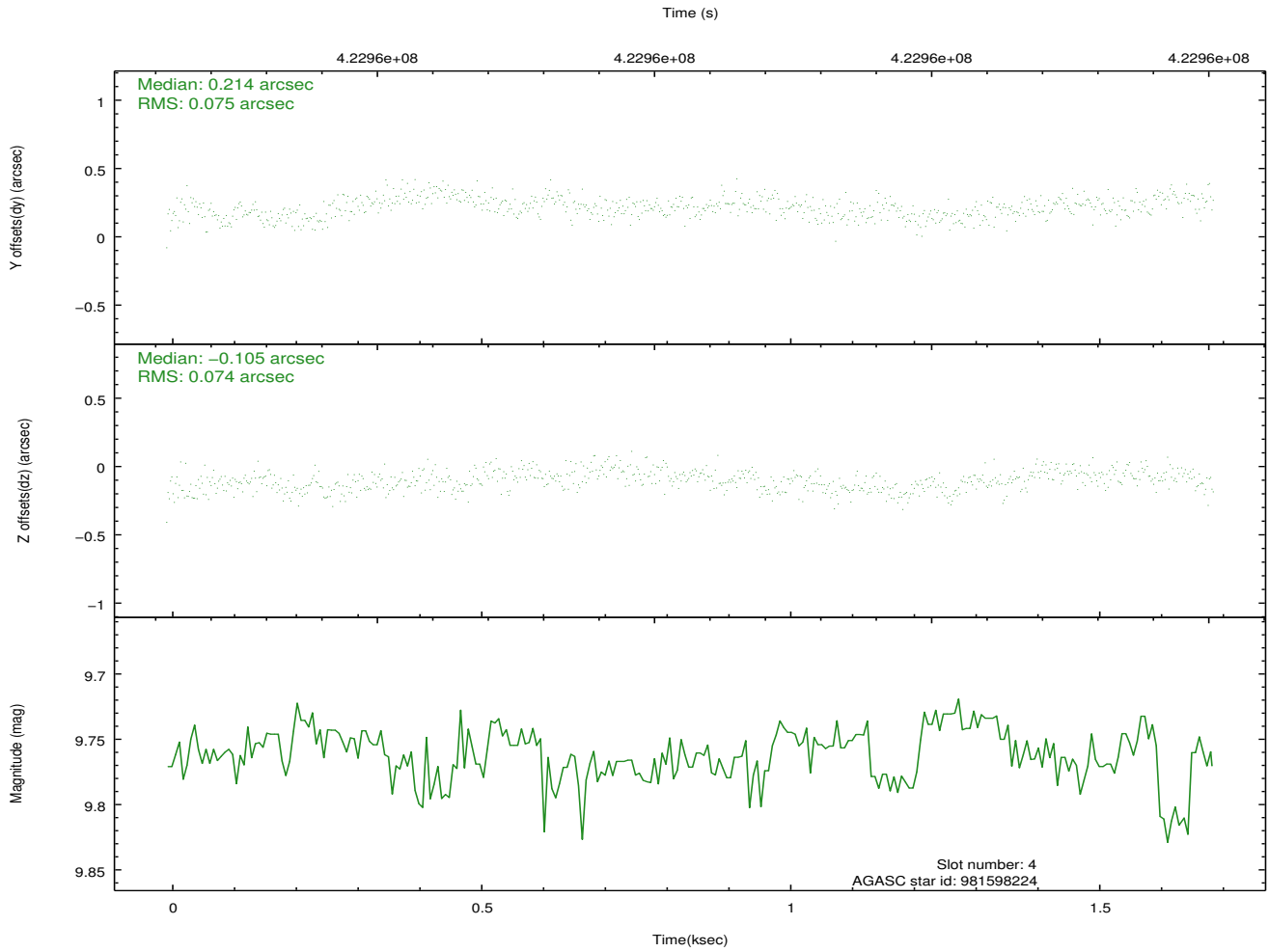
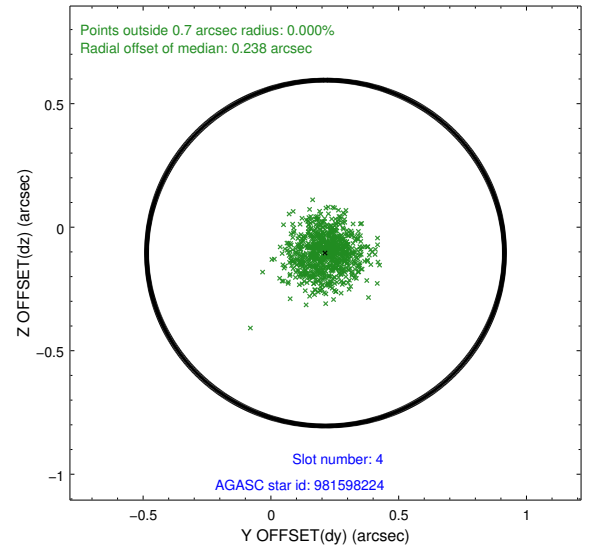
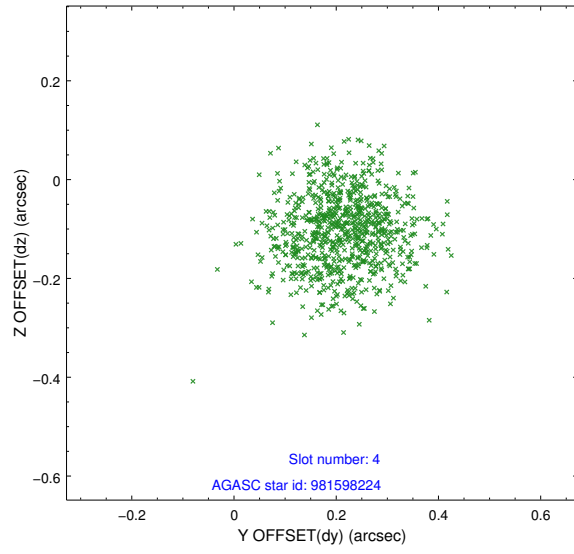
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	414	-0.092	-0.009	0.005	0.010	0.000000	0.000000	-769.48	-1736.90
1	FID	ACIS-S-4	6.97	414	0.180	0.047	0.004	0.007	0.000000	0.000000	2142.26	167.64
2	FID	ACIS-S-5	7.00	414	-0.119	-0.029	0.005	0.011	0.000000	0.000000	-1817.40	165.61
3	GUIDE	912400320	9.22	827	-0.172	0.122	0.131	0.218	332.959525	-29.528372	1504.09	-1416.49
4	GUIDE	981598224	9.76	826	0.214	-0.105	0.114	0.175	332.581144	-30.313093	-819.94	572.73
5	GUIDE	981599368	9.95	827	-0.070	-0.189	0.157	0.295	332.250043	-30.783457	-2124.26	2067.59
6	GUIDE	981601104	10.18	826	-0.097	-0.367	0.202	0.313	332.076489	-30.157592	184.41	1902.33
7	GUIDE	982522104	9.34	826	0.132	0.508	0.159	0.253	333.573868	-30.303190	-1742.49	-2367.79

2.4 Star Slots

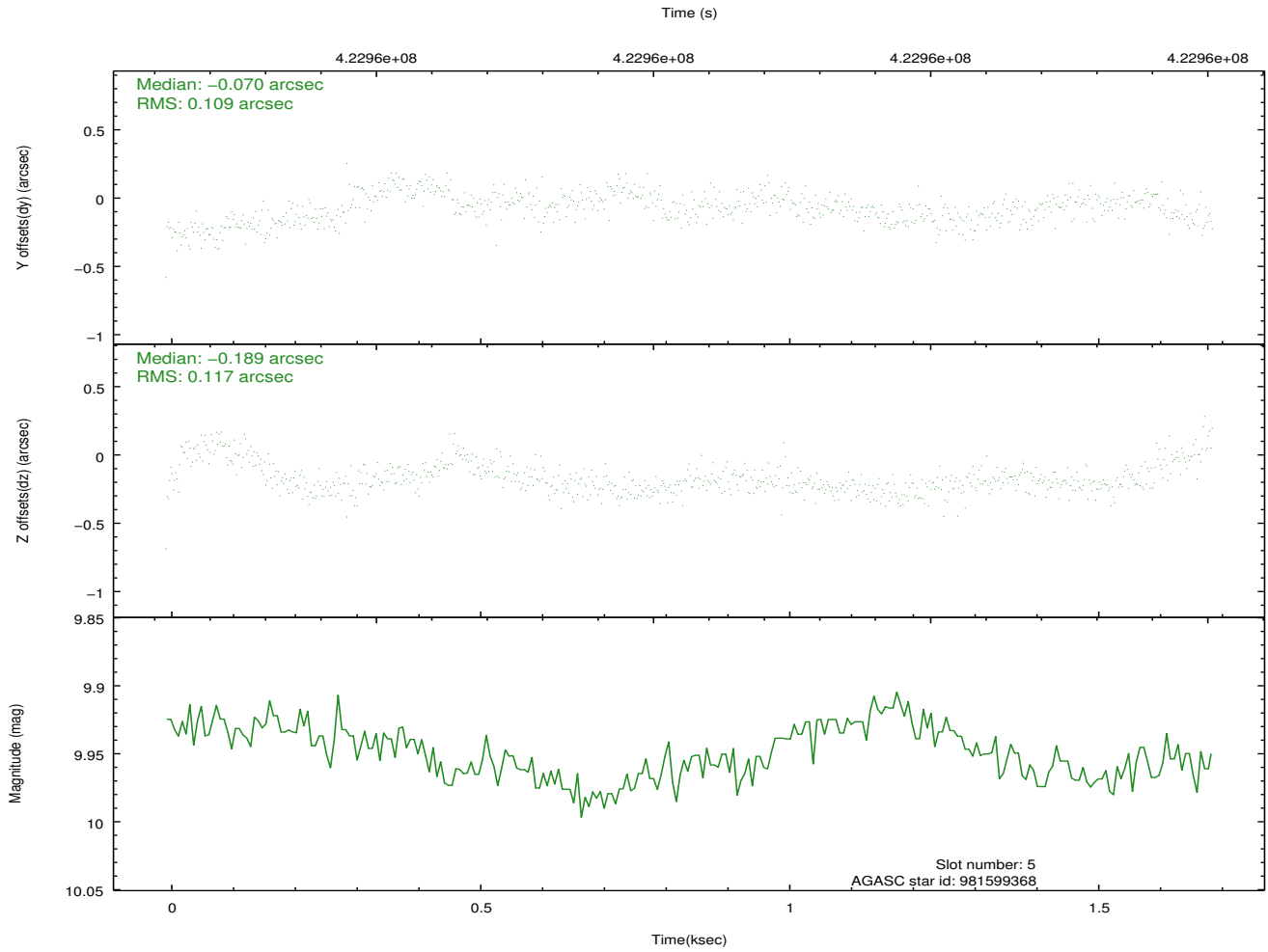
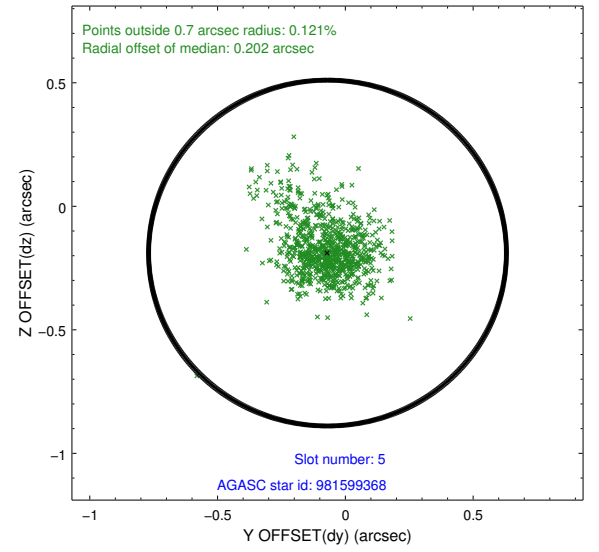
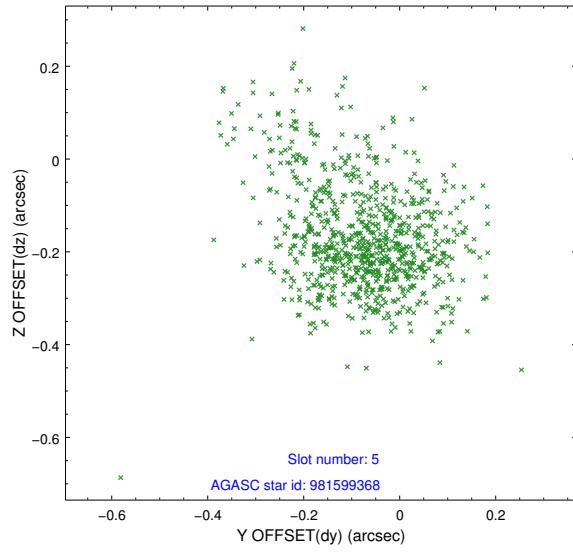
2.4.1 Slot 3



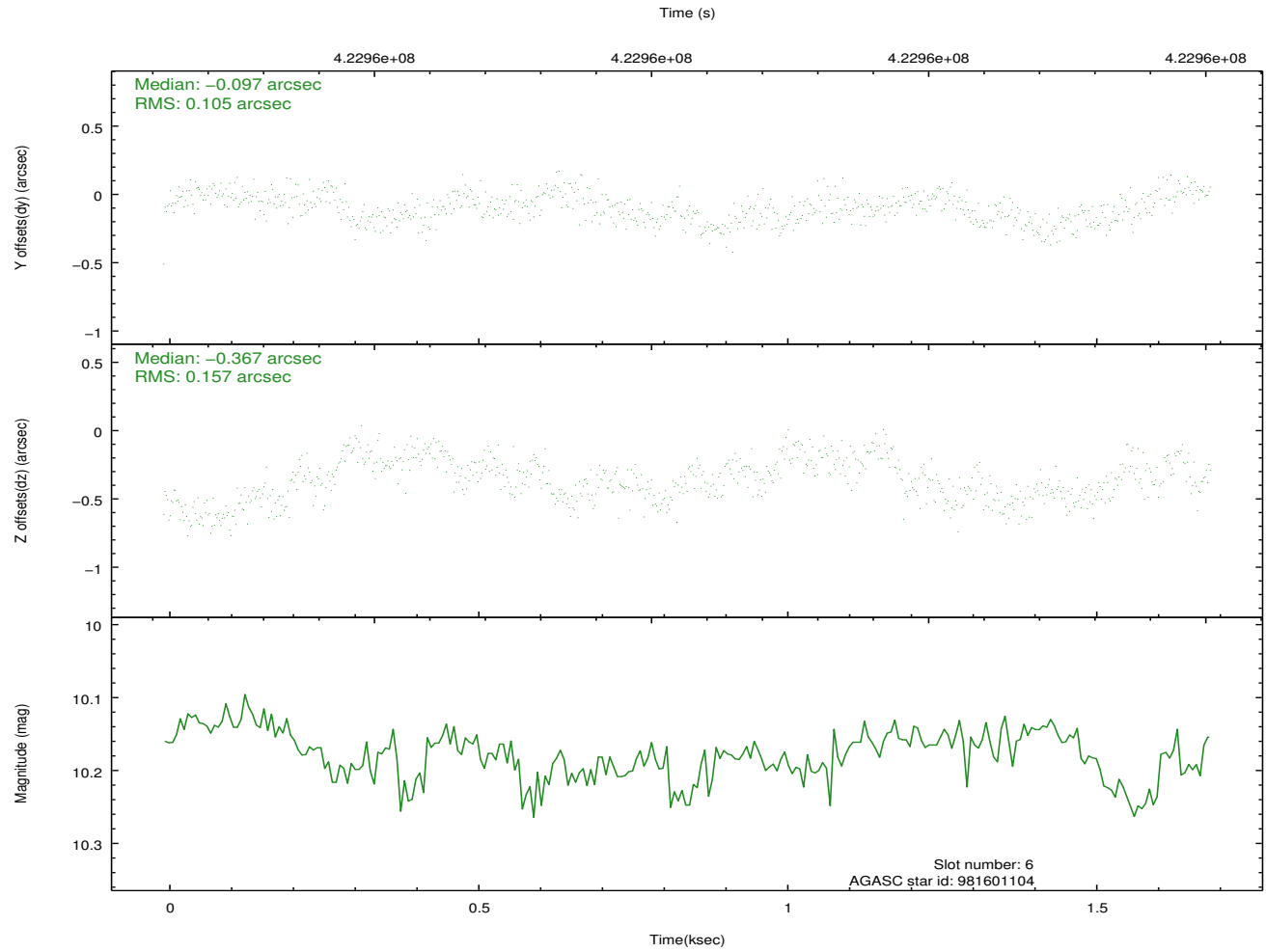
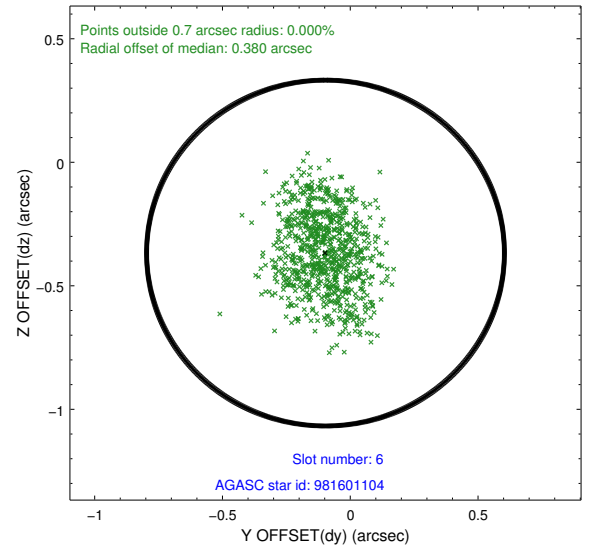
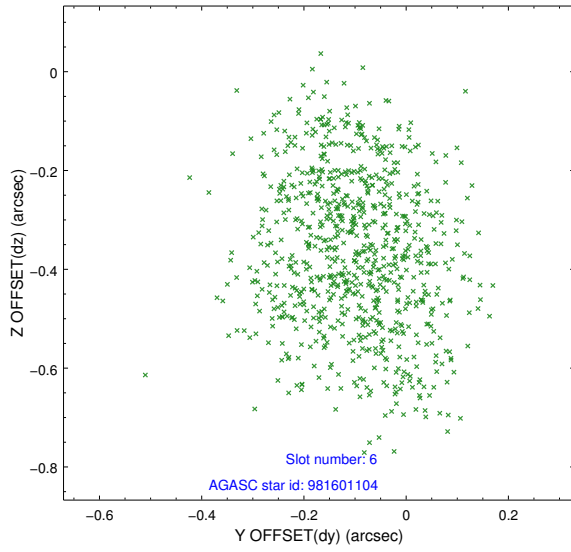
2.4.2 Slot 4



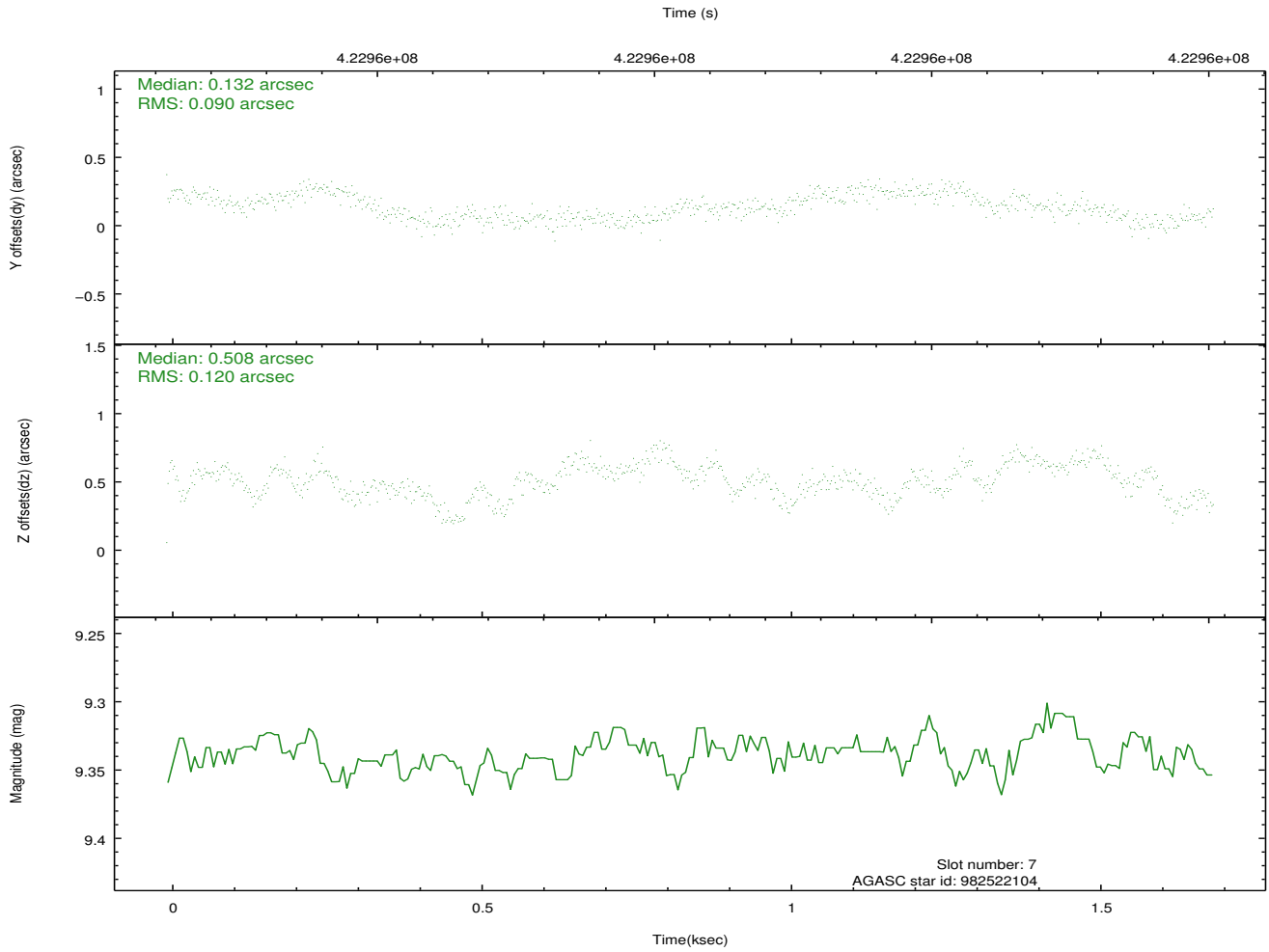
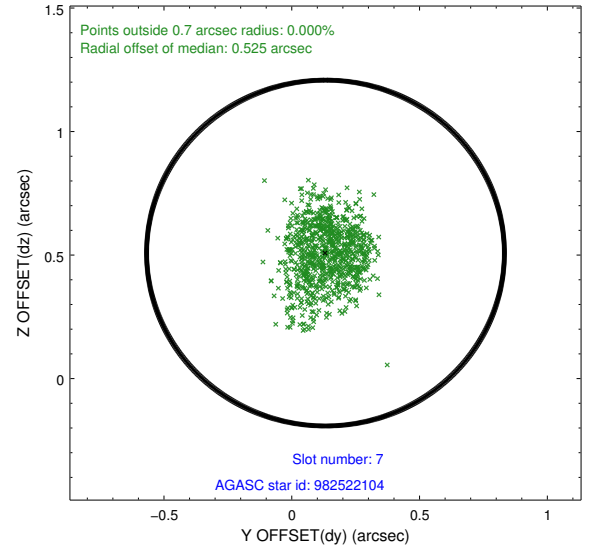
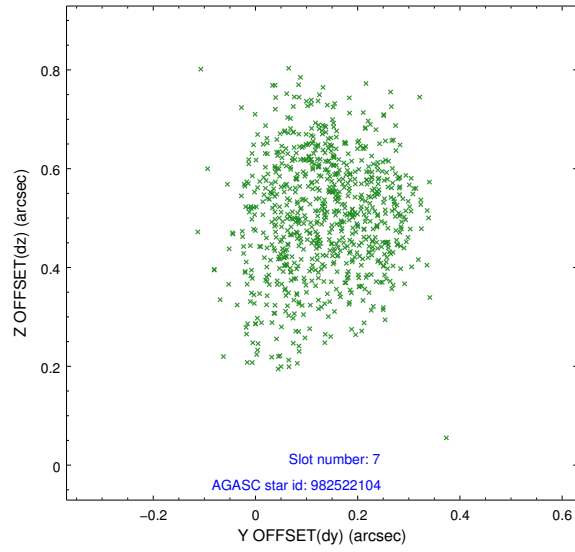
2.4.3 Slot 5



2.4.4 Slot 6

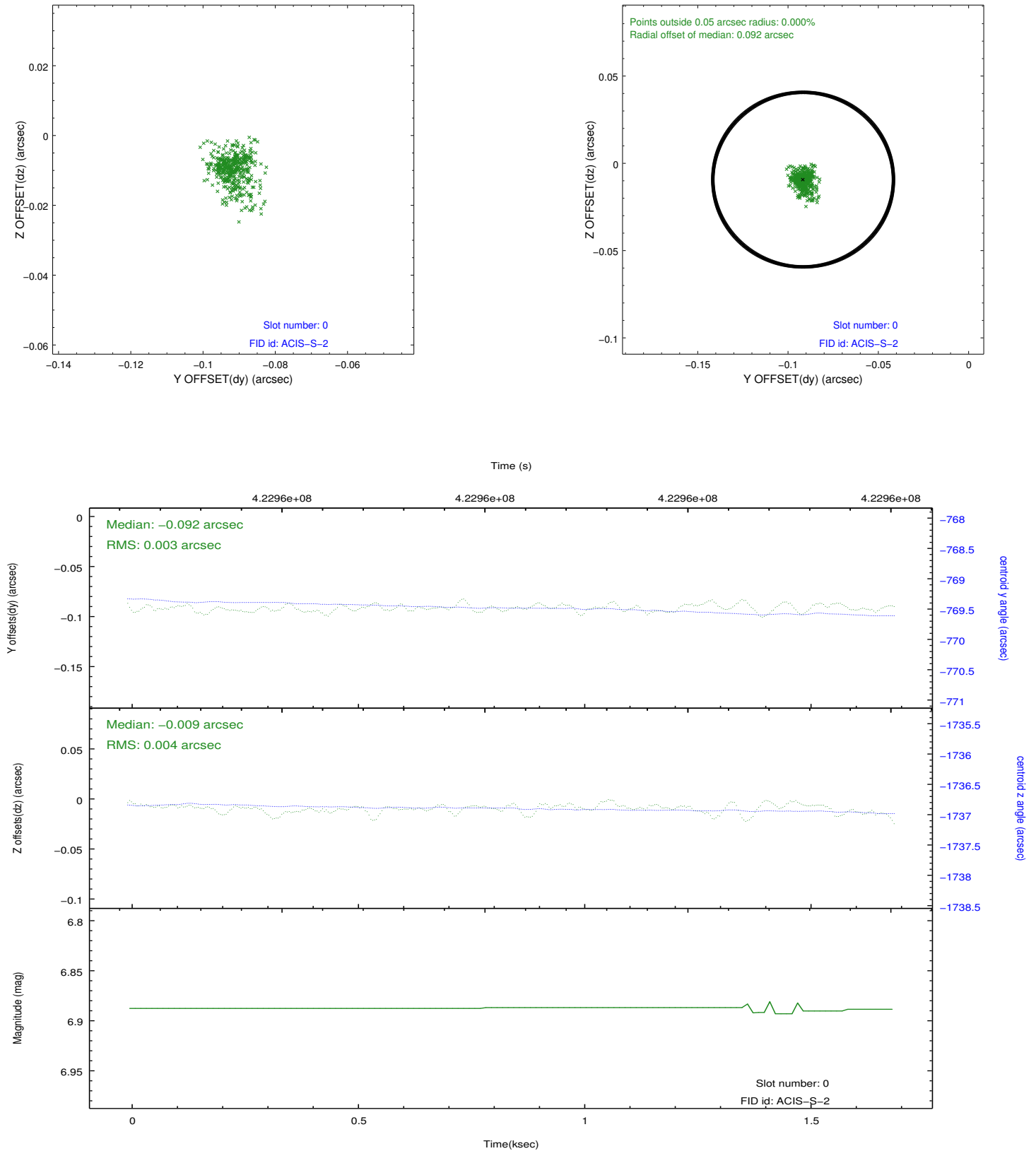


2.4.5 Slot 7

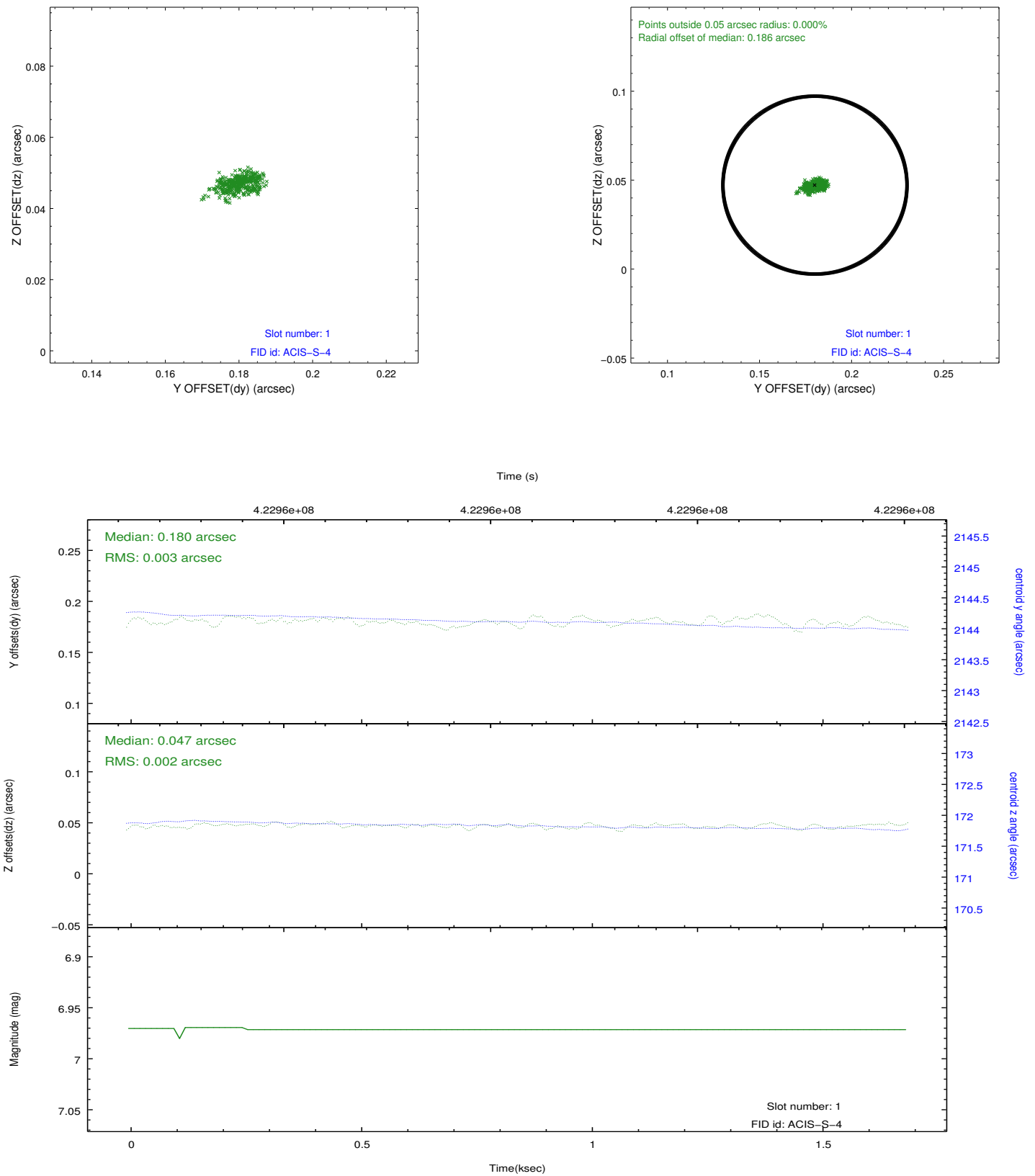


2.5 FID Slots

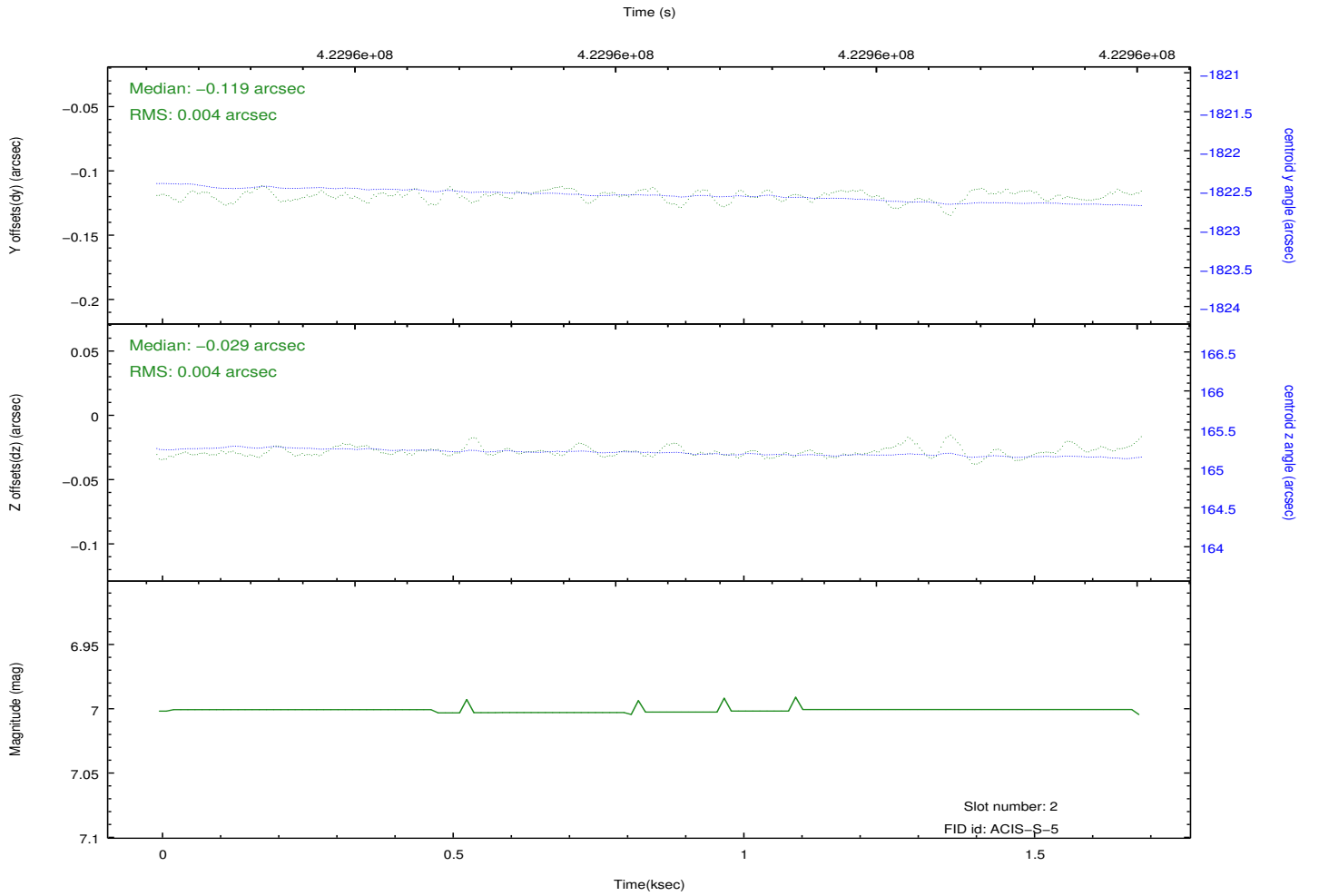
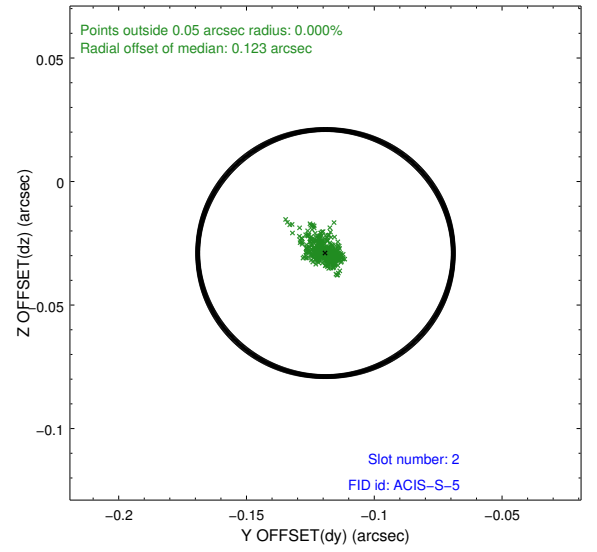
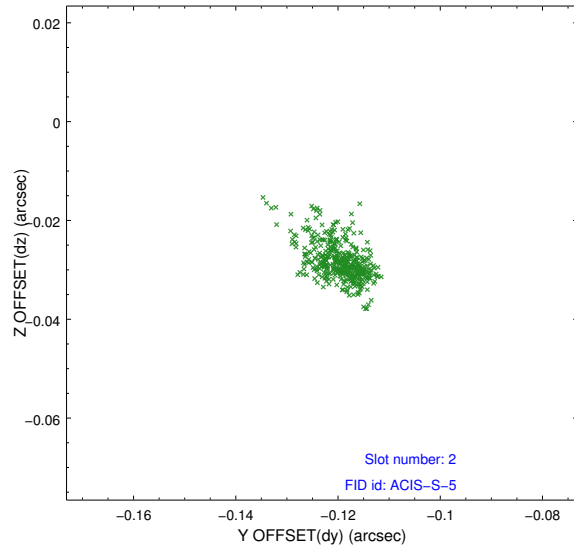
2.5.1 Slot 0



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)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.5376000118256

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.