

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12477 - L2 Version 2
Chandra X-Ray Center

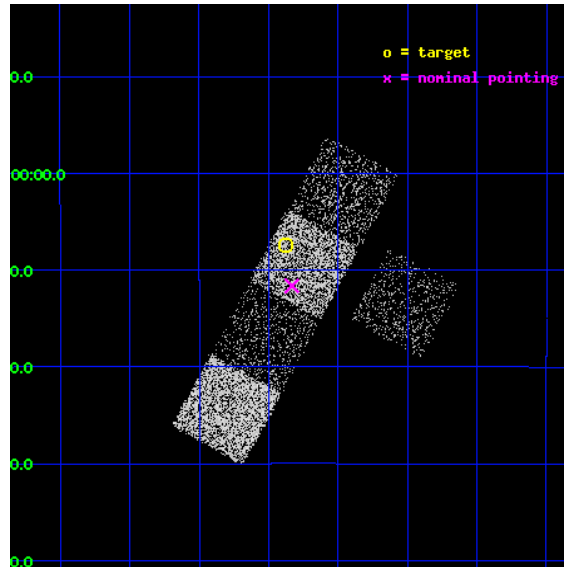
L2 Processing Date : Feb 6 2012

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1 Front

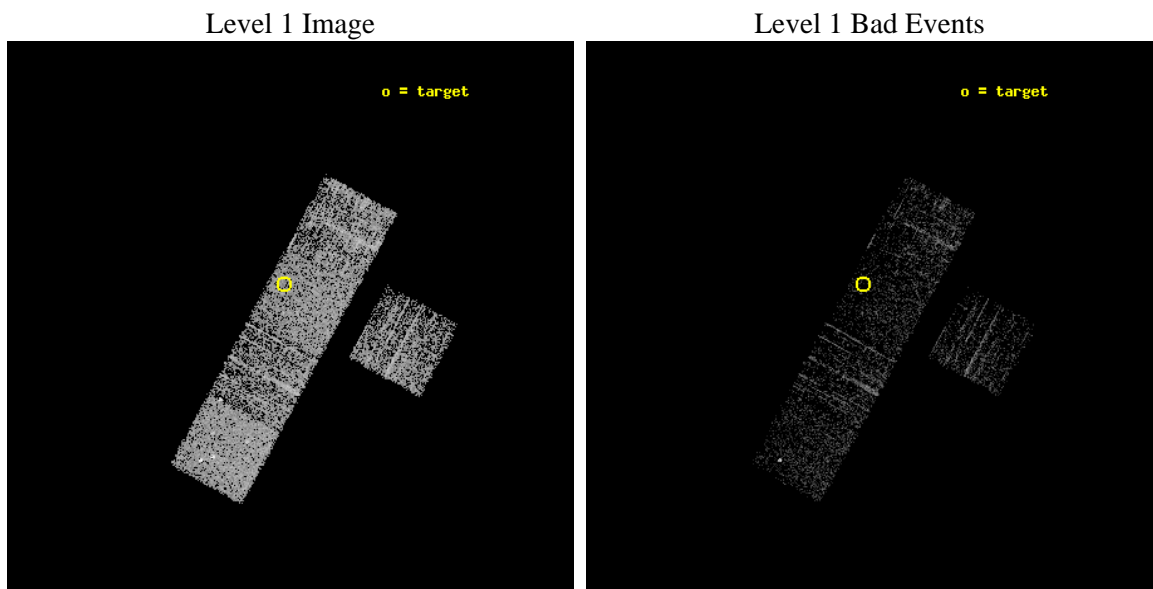
seq_num	401218	Sequence number
obs_id	12477	Observation id
title	The Nearest and Brightest Quiescent Low Mass X-ray Binaries	Propos
observer	Prof. Robert Rutledge	Principal investigator
object	1RXS J101952.4-140727	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	154.968333	Observer's specified target RA [deg]
dec_targ	-14.124167	Observer's specified target Dec [deg]
ra_nom	154.95814754452	Nominal RA [deg]
dec_nom	-14.193947205762	Nominal Dec [deg]
roll_nom	298.47841535946	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1038.500007987	Sum of GTIs [s]
livetime	1024.9312408501	Livetime [s]
ontime3	1038.4742555022	Sum of GTIs [s]
ontime5	1038.500007987	Sum of GTIs [s]
ontime6	1038.500007987	Sum of GTIs [s]
ontime7	1038.500007987	Sum of GTIs [s]
ontime8	1038.4332154989	Sum of GTIs [s]
l2events	11401	Number of level 2 events



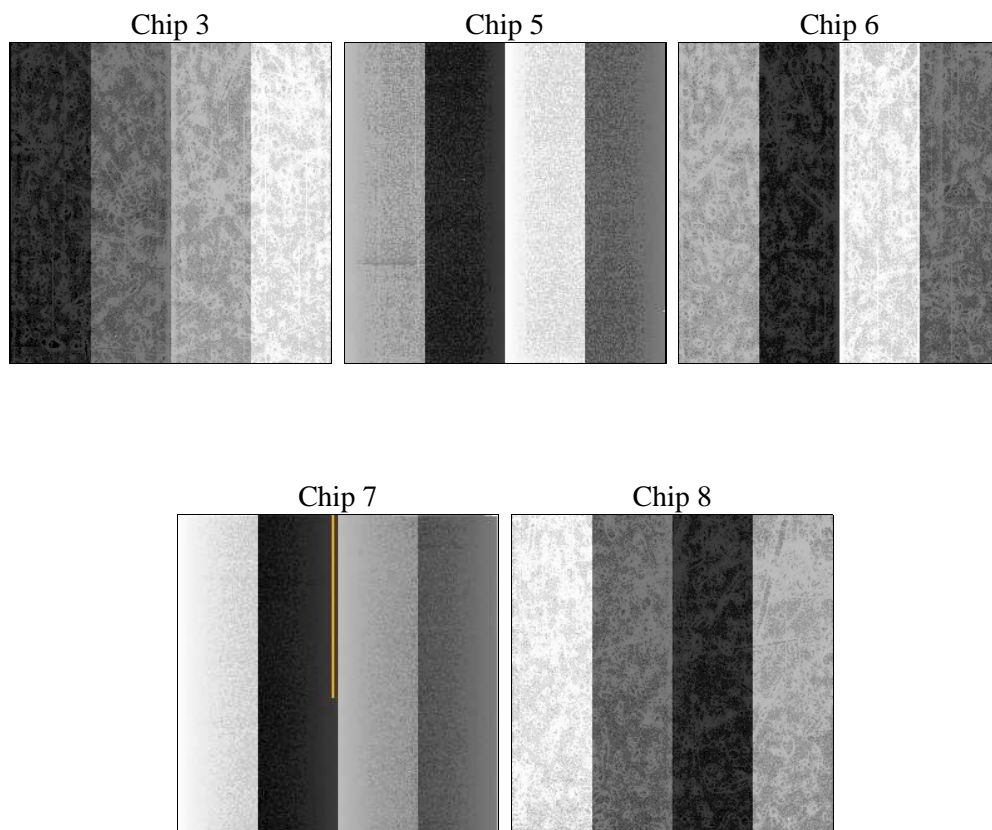
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	1038.500007987	Sum of GTIs [s]
caldsver	4.4.7	 	ontime3	1038.4742555022	Sum of GTIs [s]
date	2012-02-06T09:45:46	Date and time of file creation	ontime5	1038.500007987	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	1038.500007987	Sum of GTIs [s]
			ontime7	1038.500007987	Sum of GTIs [s]
			ontime8	1038.4332154989	Sum of GTIs [s]
			l1events	43975	Number of level 1 events

2.1.4 Events

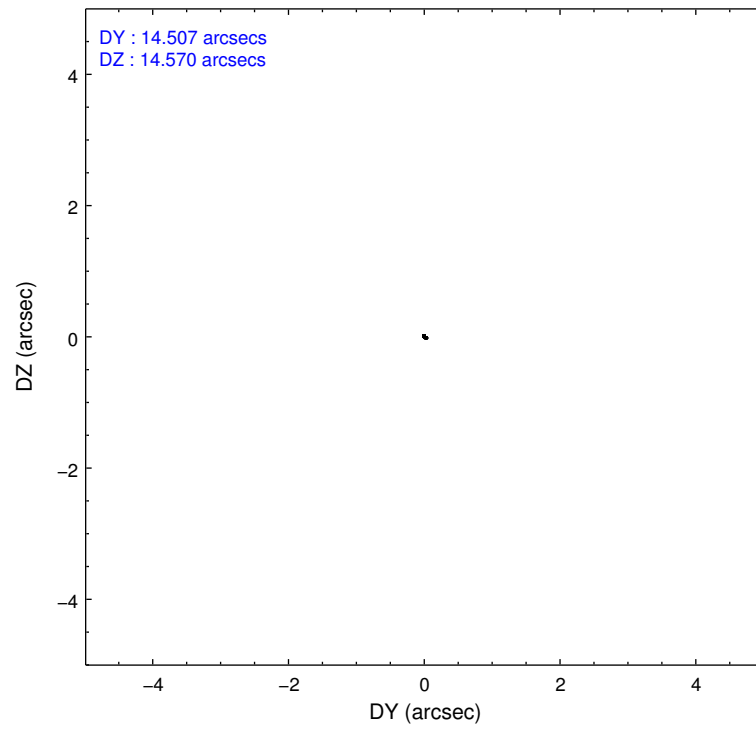
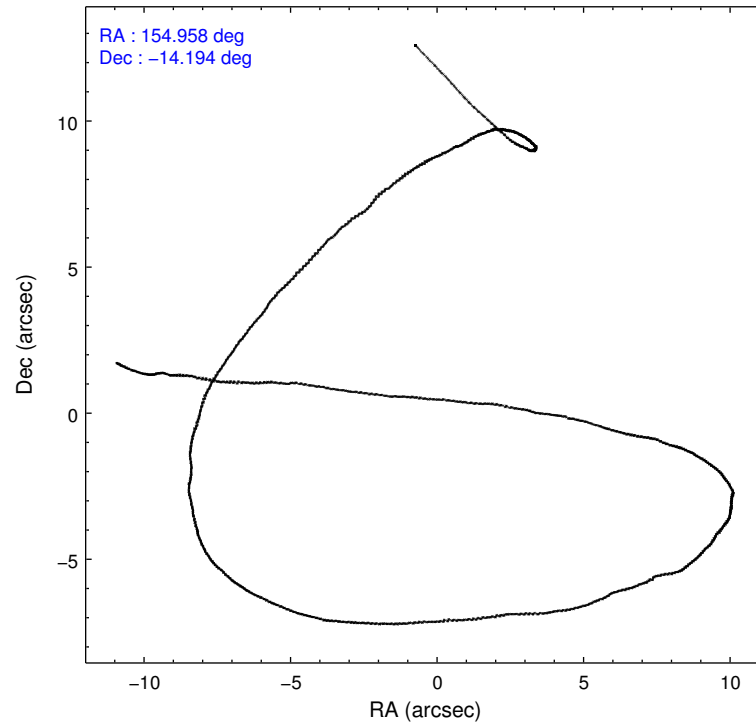
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	6578	11798	7661	8736	9202
rejected events	5871	5904	6833	4760	6637
rejected %	89%	50%	89%	54%	72%

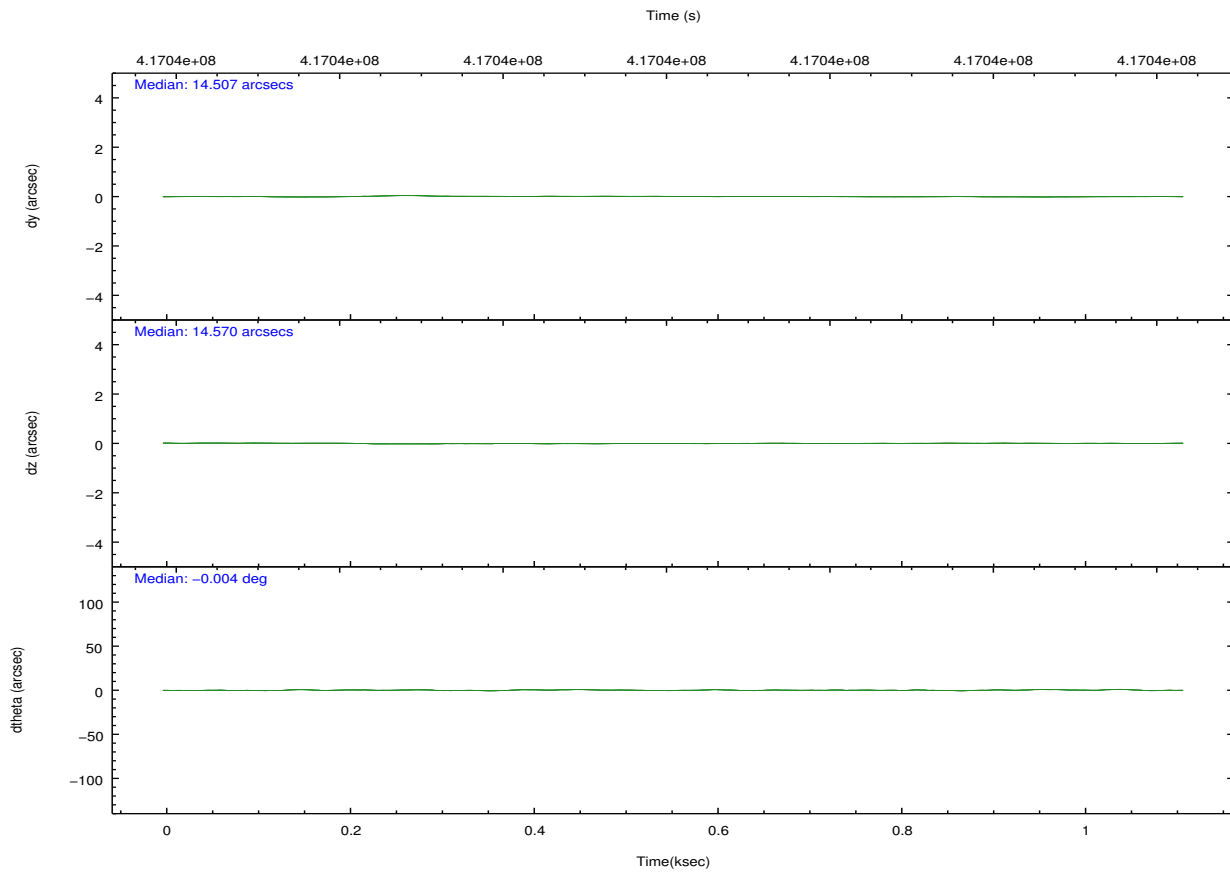
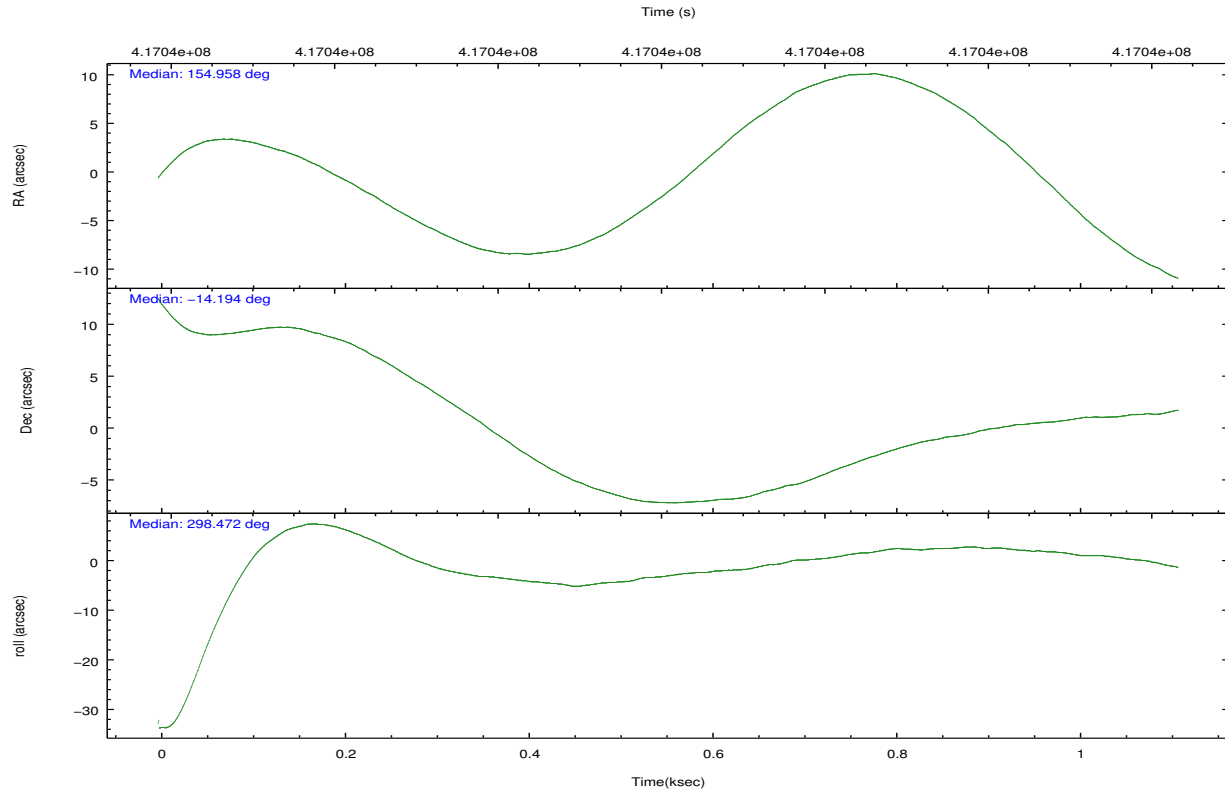
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	252	839	279	326	784
	3%	7%	3%	3%	8%
grade 1 events	6	38	5	10	5
	0%	0%	0%	0%	0%
grade 2 events	142	1735	203	820	623
	2%	14%	2%	9%	6%
grade 3 events	76	245	107	323	282
	1%	2%	1%	3%	3%
grade 4 events	84	242	81	382	261
	1%	2%	1%	4%	2%
grade 5 events	311	908	358	889	503
	4%	7%	4%	10%	5%
grade 6 events	156	2849	160	2138	621
	2%	24%	2%	24%	6%
grade 7 events	5551	4942	6468	3848	6123
	84%	41%	84%	44%	66%

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	154.933734	154.9581475445201	CCD I2 on	N	N
[deg] Pointing Dec	-14.180307	-14.19394720576205	CCD I3 on	O1	Y
[deg] Pointing Roll	298.316318	298.4784153594589	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)	417038153.184000	417036443.98741	CCD S5 on	N	N
Observation start date	2011-03-20T19:54:47	2011-03-20T19:27:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	417039153.184000	417040027.90009	On-chip summing requested	N	N
Observation end date	2011-03-20T20:11:27	2011-03-20T20:27:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



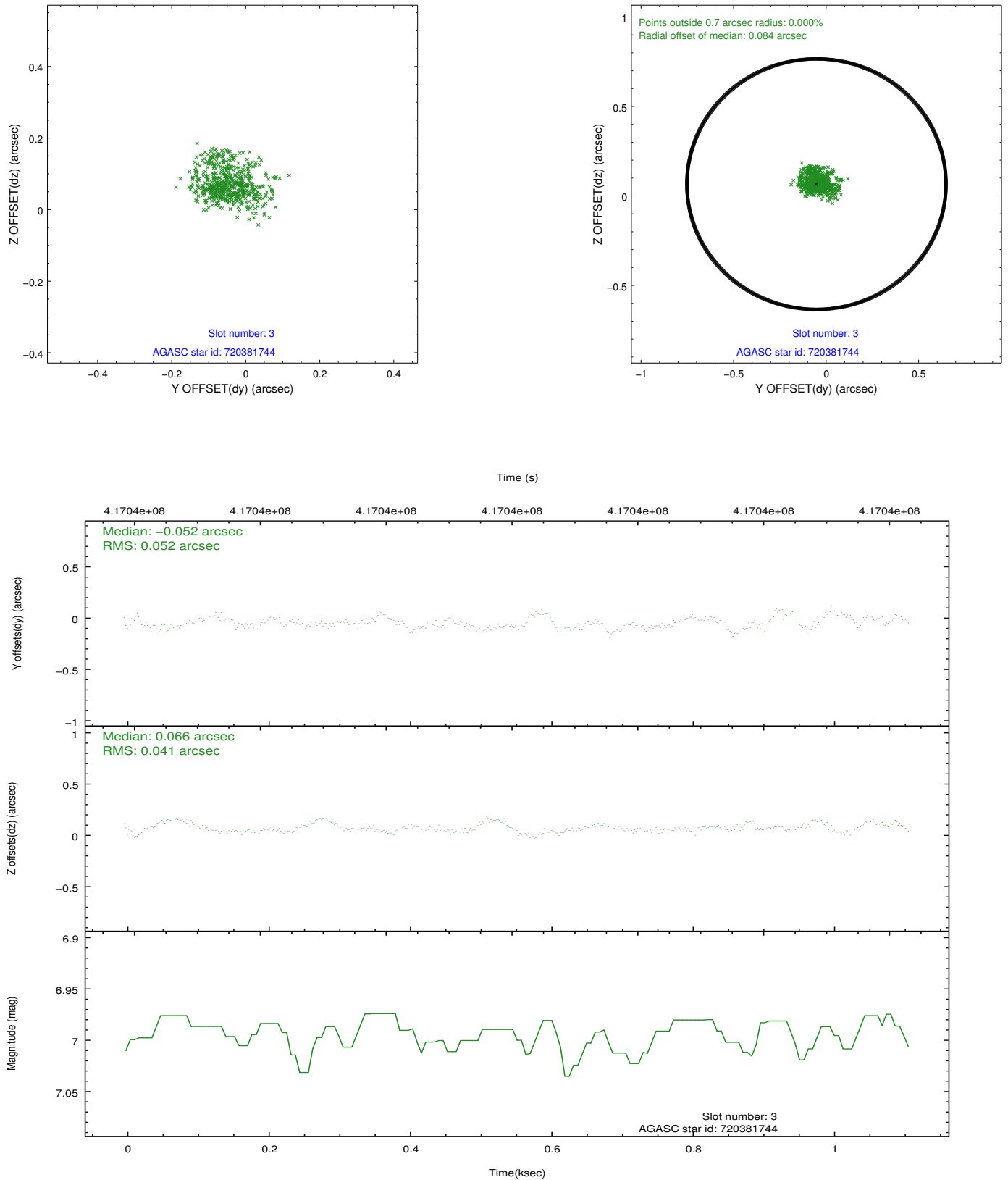


Slot Statistics

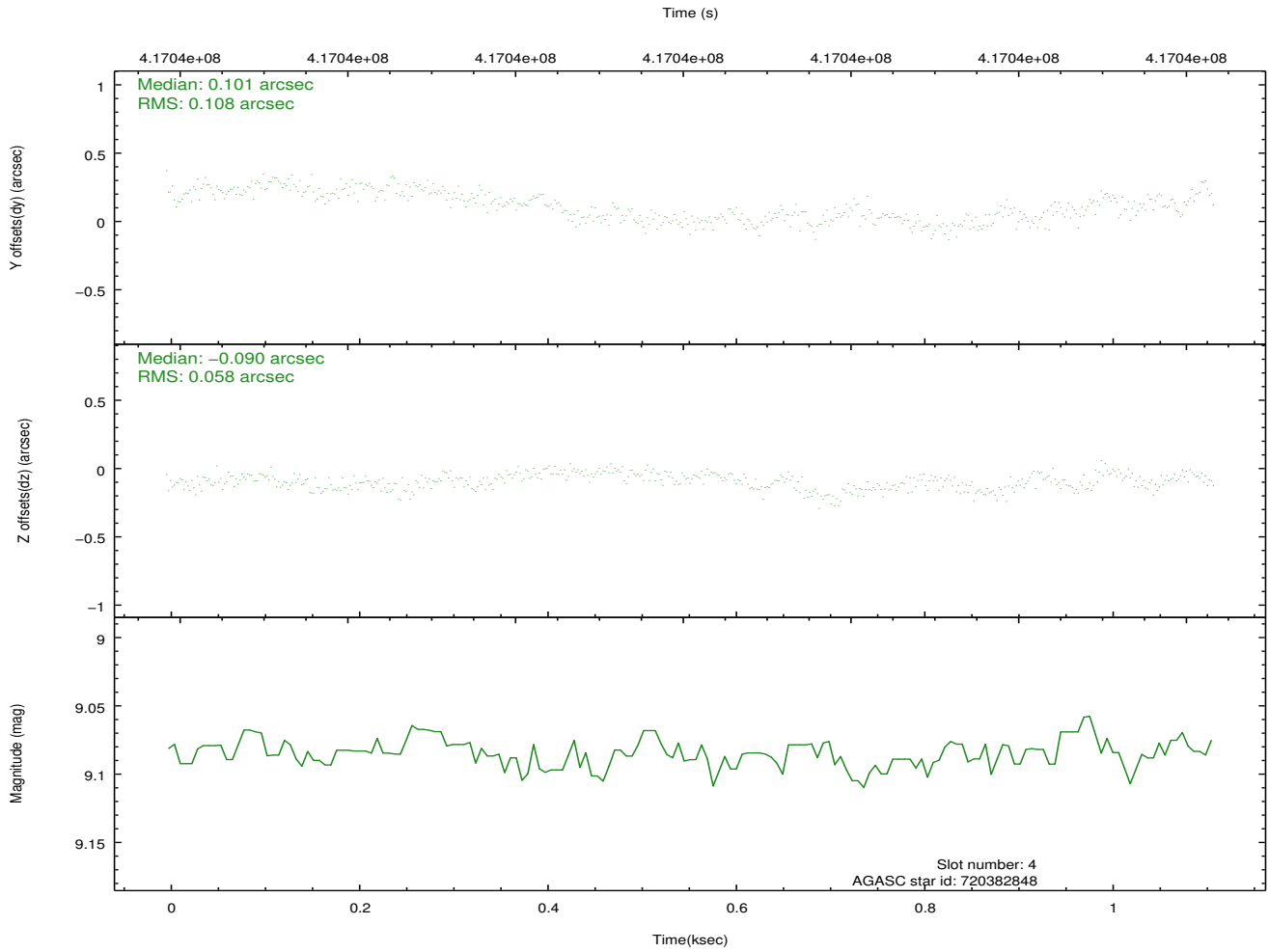
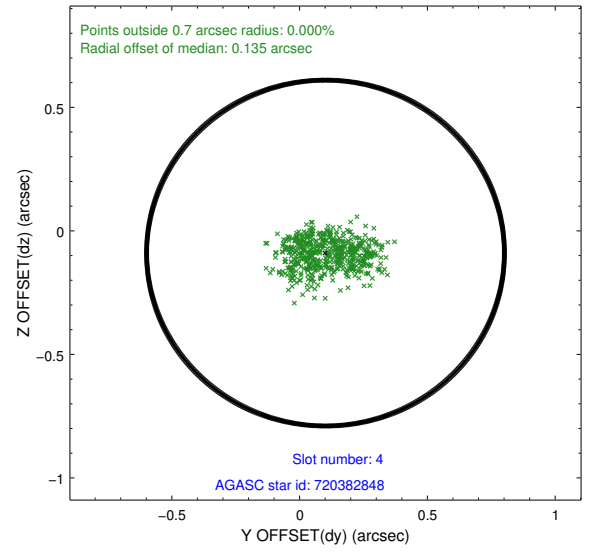
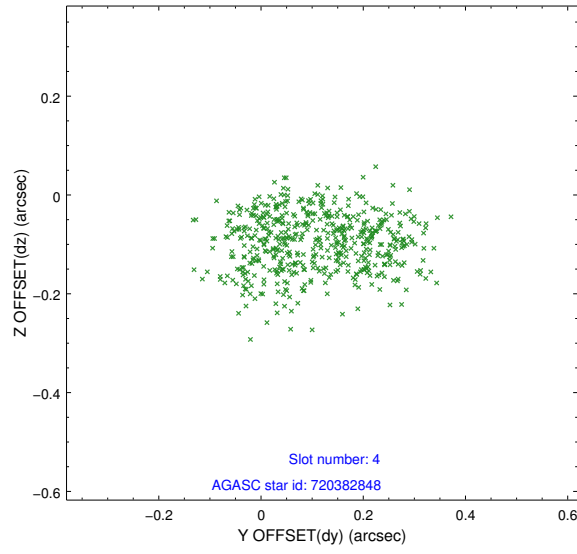
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.99	271	-0.089	-0.054	0.007	0.016	0.000000	0.000000	-767.55	-1735.99
1	FID	ACIS-S-4	7.07	271	0.228	0.057	0.006	0.014	0.000000	0.000000	2143.28	166.37
2	FID	ACIS-S-5	7.10	271	-0.169	0.005	0.006	0.011	0.000000	0.000000	-1812.77	166.81
3	GUIDE	720381744	6.99	543	-0.052	0.066	0.072	0.114	155.310593	-13.786531	-621.49	1830.44
4	GUIDE	720382848	9.09	543	0.101	-0.090	0.133	0.201	155.188458	-14.598111	1745.88	69.36
5	GUIDE	720383432	9.24	543	0.097	0.102	0.102	0.164	155.042207	-13.473022	-2057.22	1541.11
6	GUIDE	720383528	9.72	541	0.100	0.126	0.180	0.280	154.874003	-14.882959	2125.86	-1380.59
7	GUIDE	720384728	9.77	541	-0.255	-0.190	0.166	0.249	155.384614	-14.279329	1065.87	1211.44

2.4 Star Slots

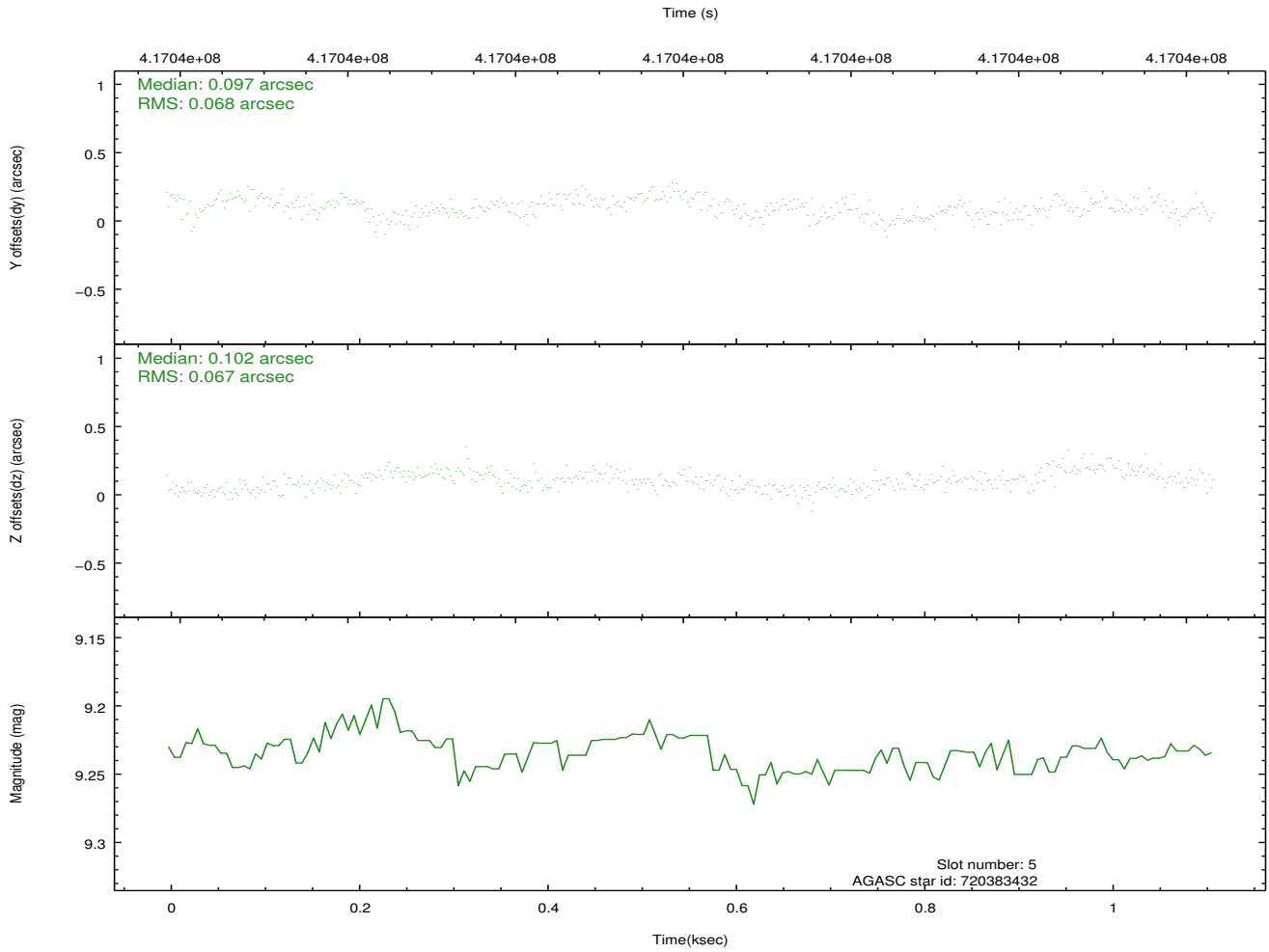
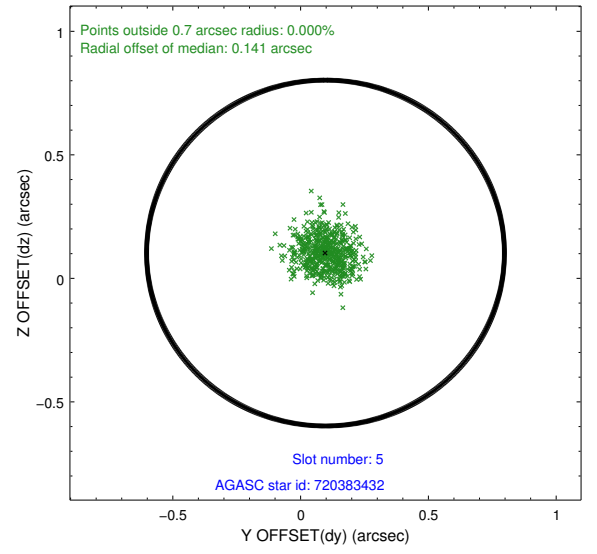
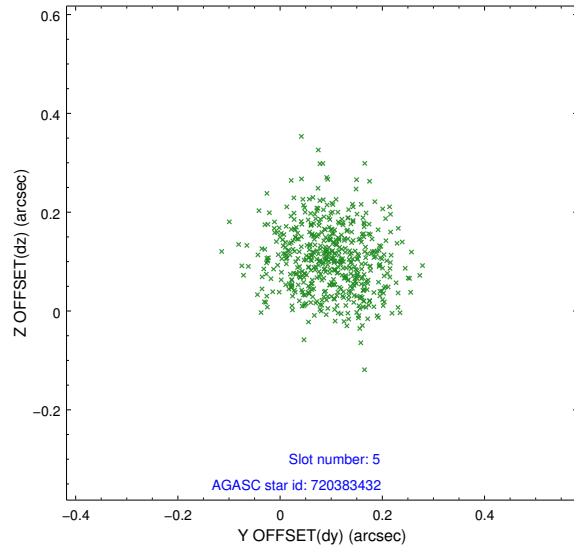
2.4.1 Slot 3



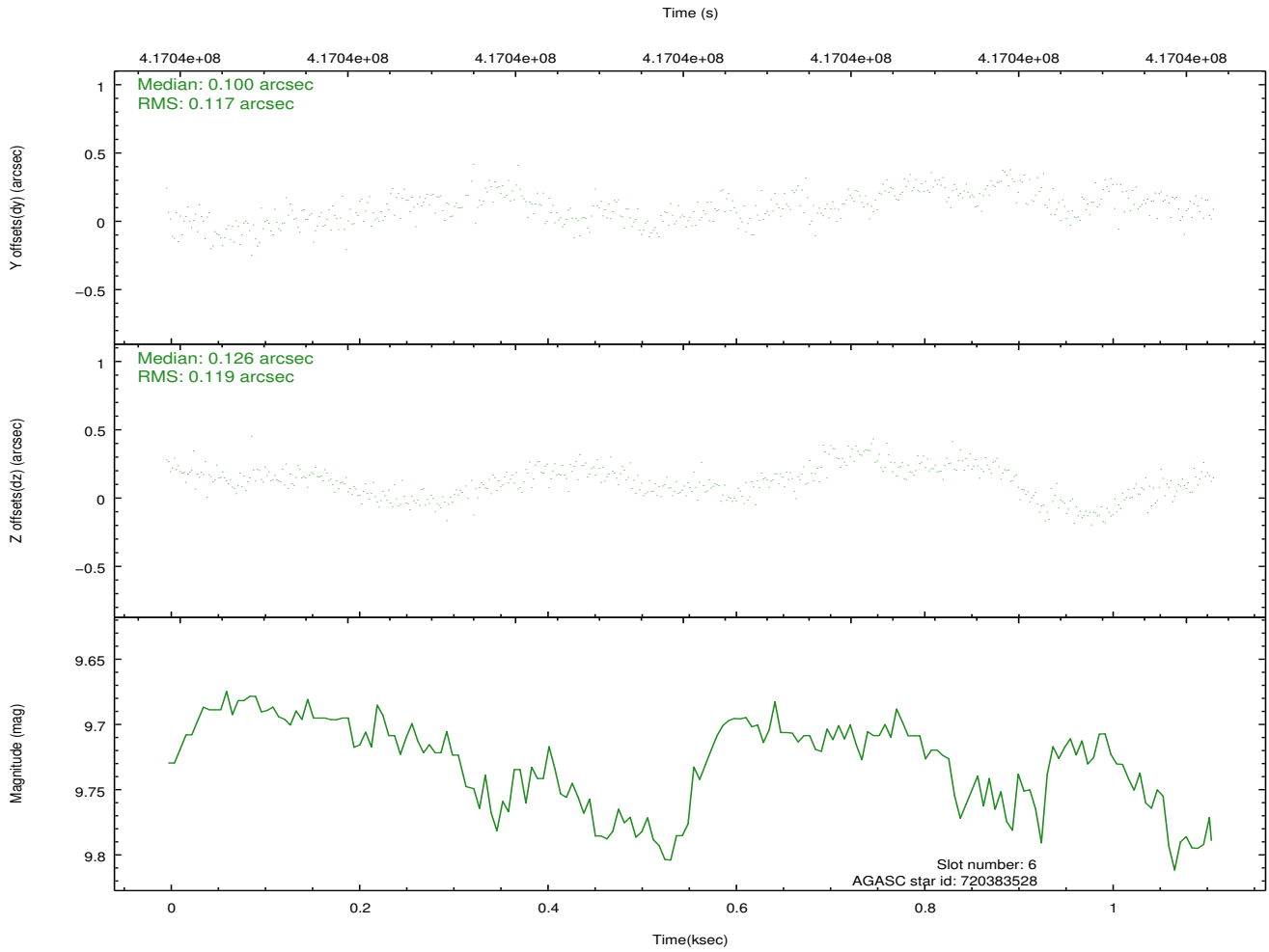
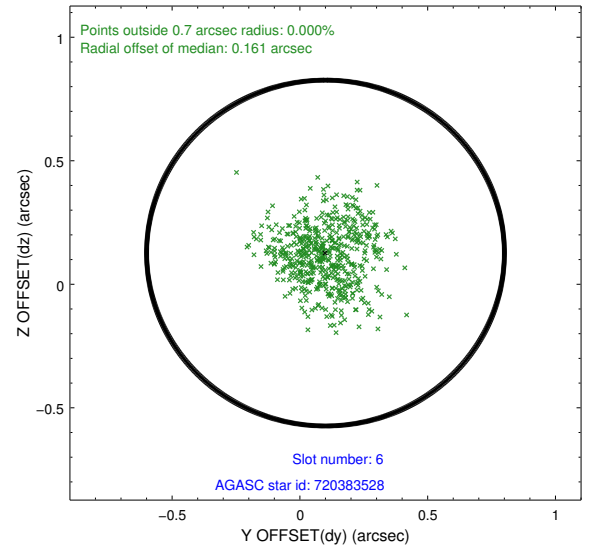
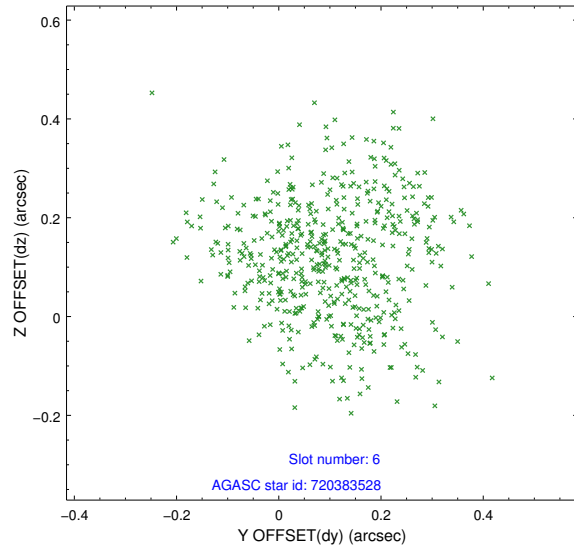
2.4.2 Slot 4



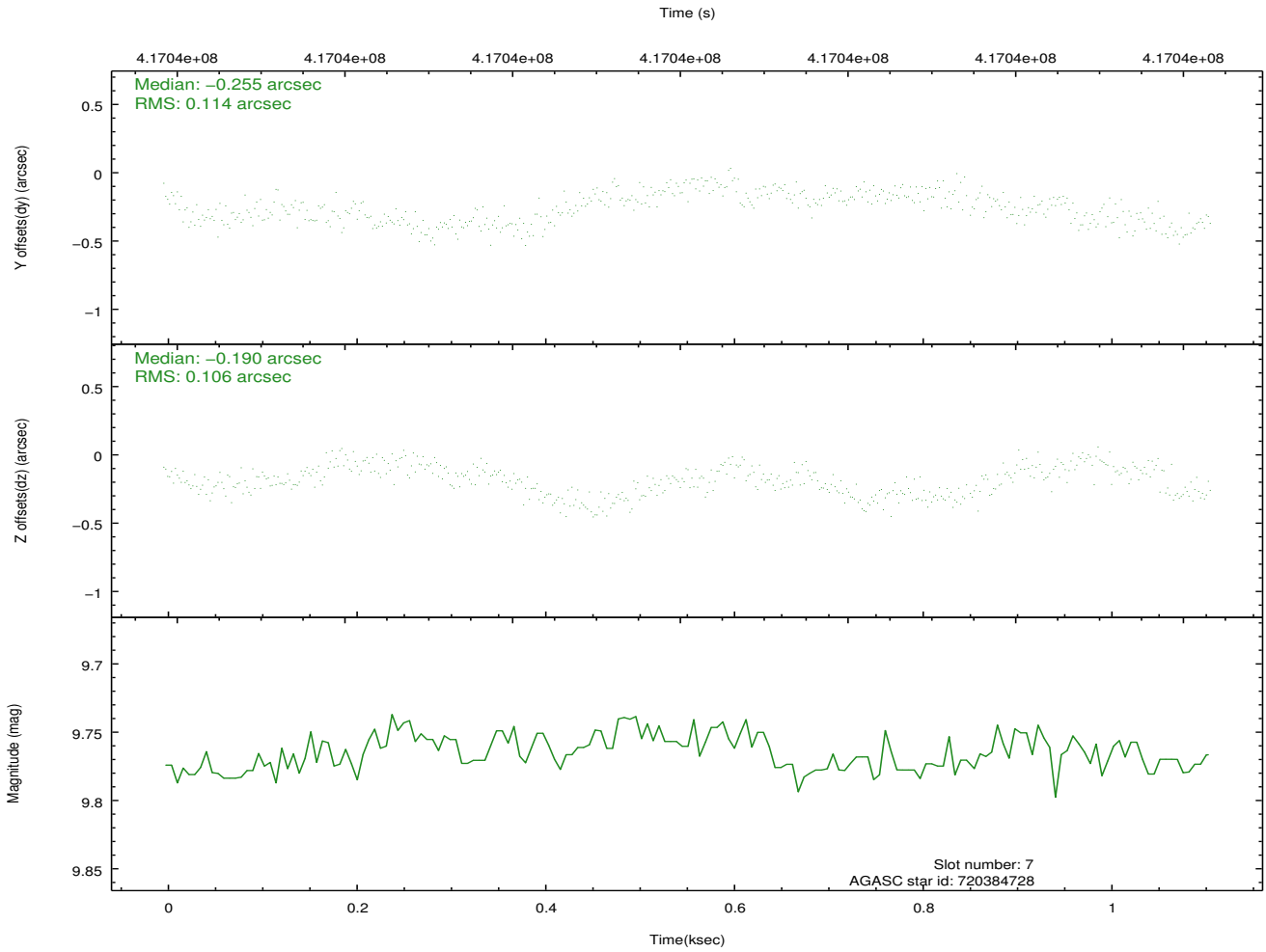
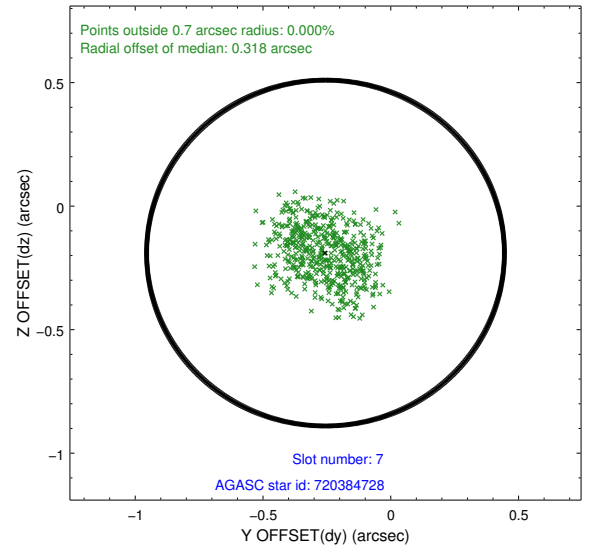
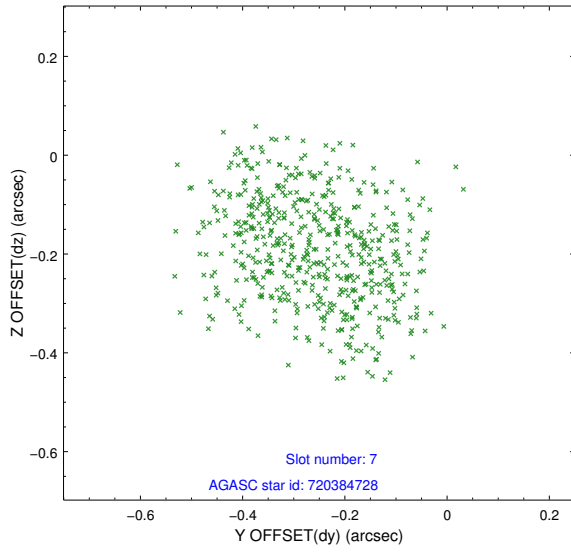
2.4.3 Slot 5



2.4.4 Slot 6

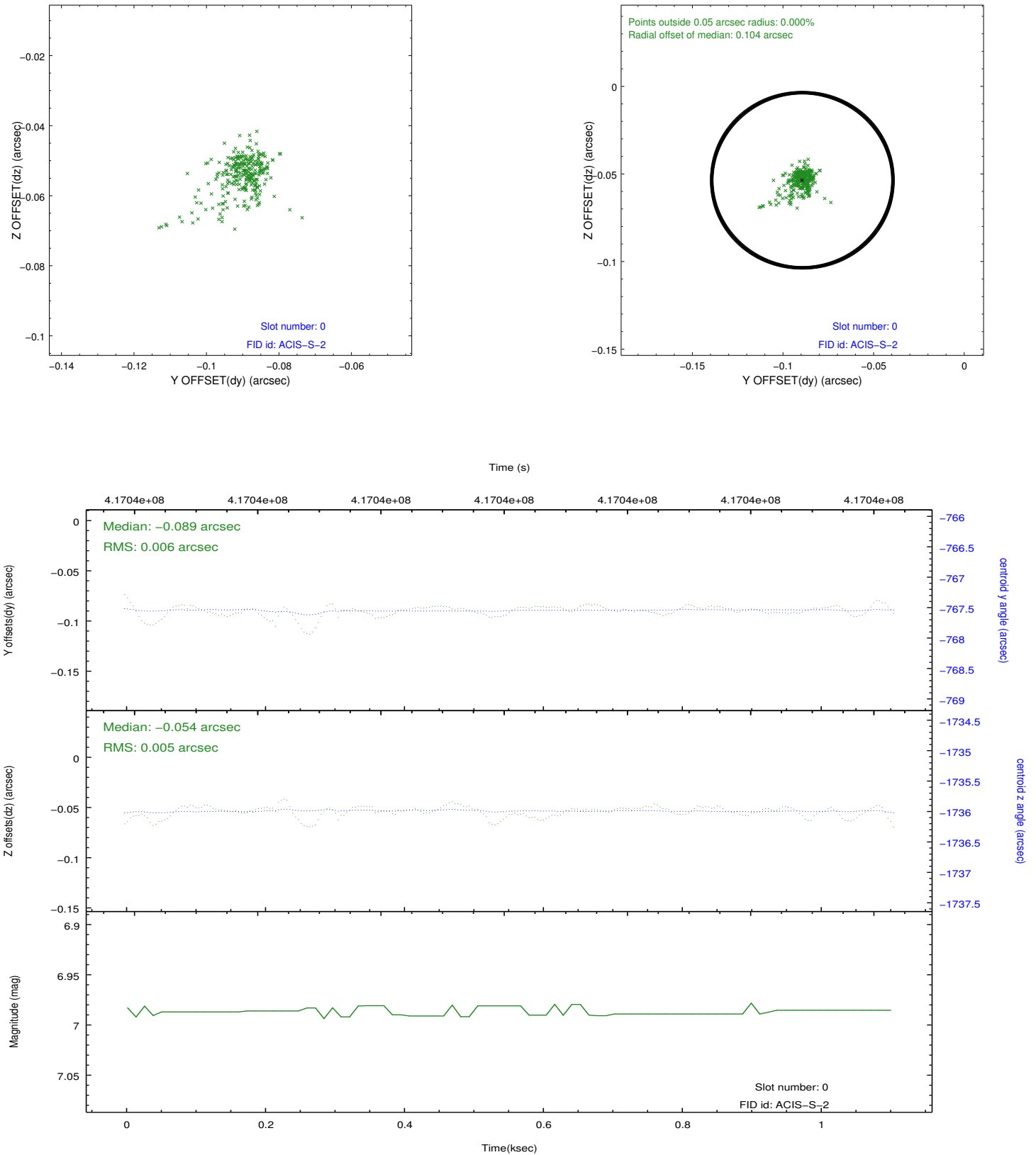


2.4.5 Slot 7

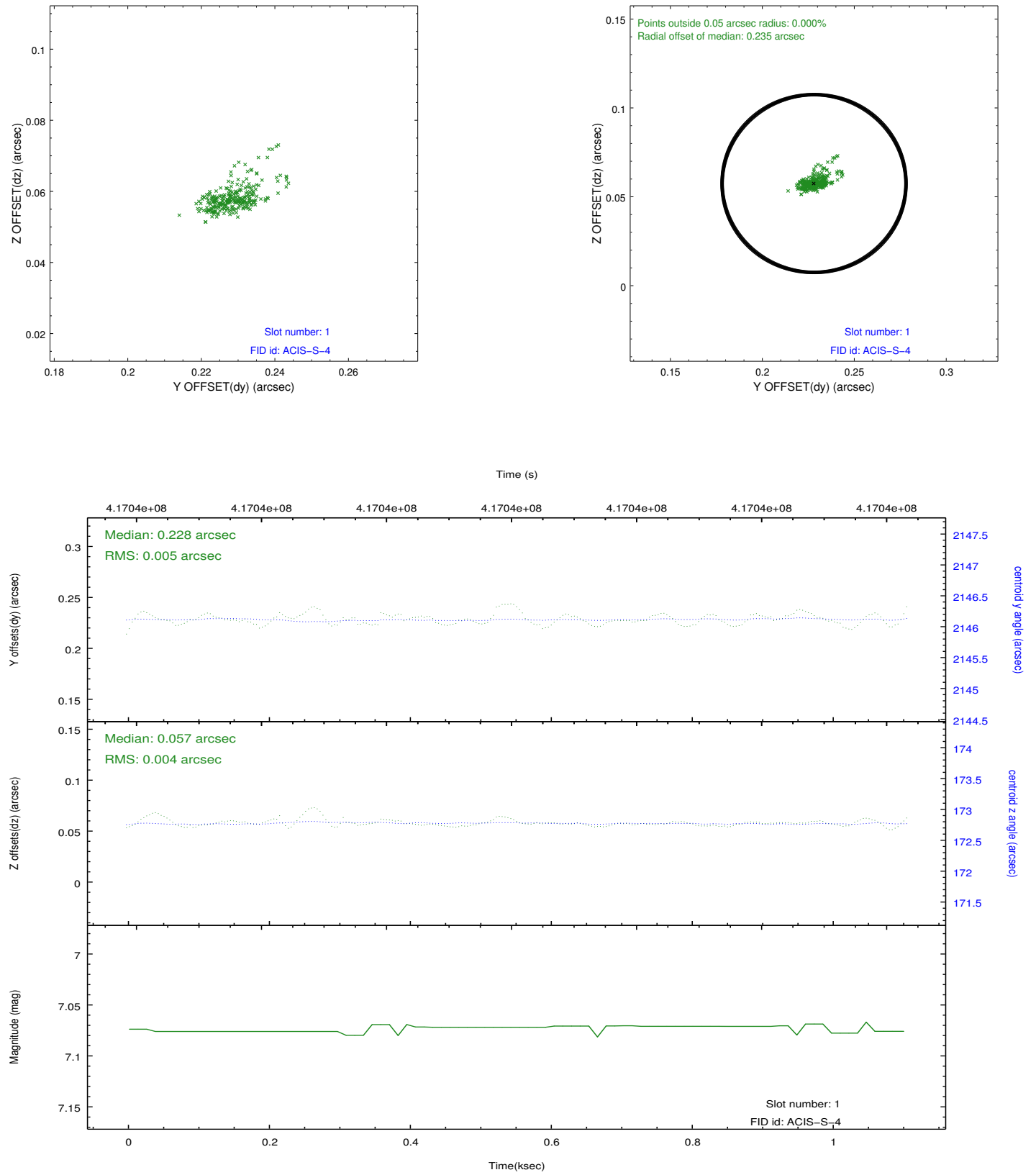


2.5 FID Slots

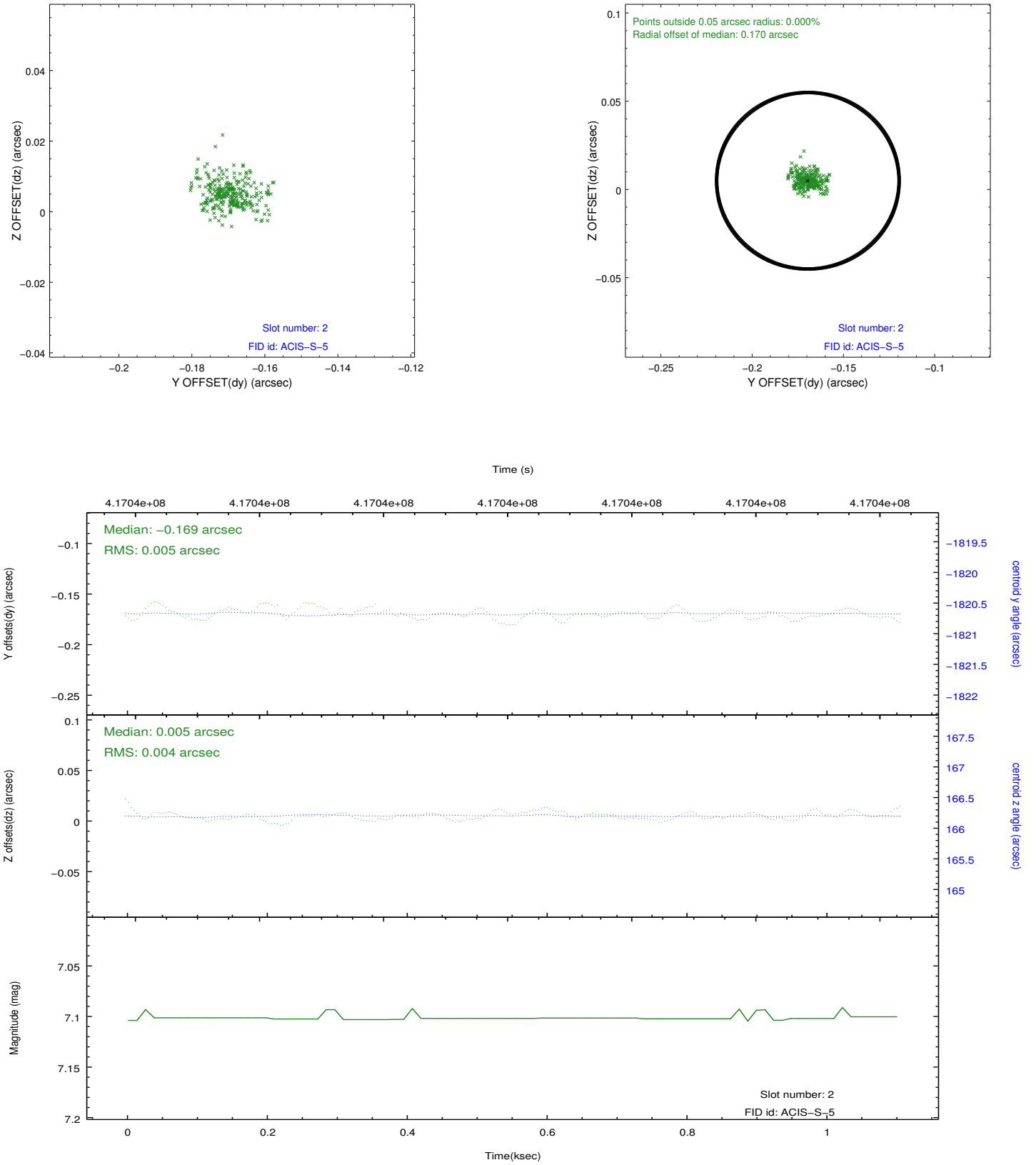
2.5.1 Slot 0



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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.038500007987

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.