

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12493 - L2 Version 2
Chandra X-Ray Center

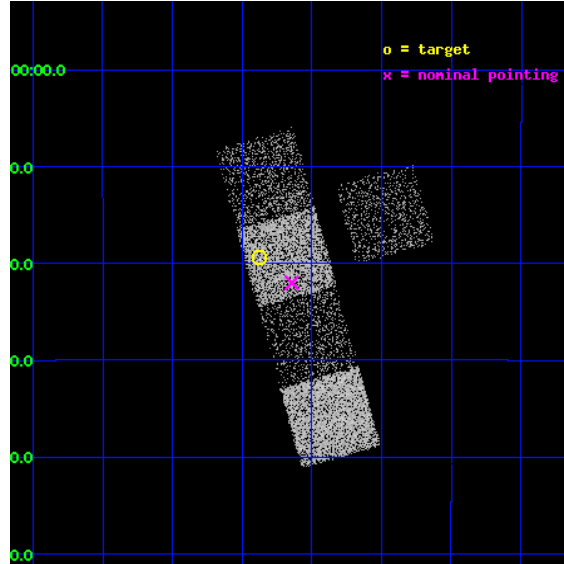
L2 Processing Date : Feb 9 2012

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1 Front

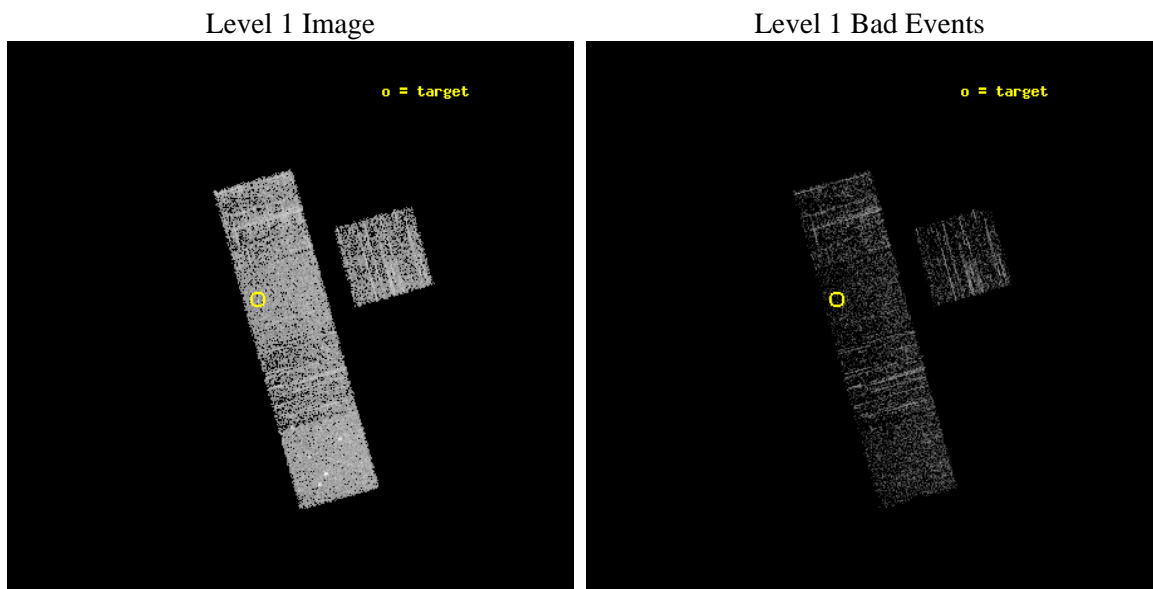
seq_num	401234	Sequence number
obs_id	12493	Observation id
title	The Nearest and Brightest Quiescent Low Mass X-ray Binaries	Propos
observer	Prof. Robert Rutledge	Principal investigator
object	1RXS J081952.4-131924	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	124.968333	Observer's specified target RA [deg]
dec_targ	-13.323333	Observer's specified target Dec [deg]
ra_nom	124.91091294076	Nominal RA [deg]
dec_nom	-13.367029349342	Nominal Dec [deg]
roll_nom	254.44597665524	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1639.9000126123	Sum of GTIs [s]
livetime	1618.4735116707	Livetime [s]
ontime3	1639.9000126123	Sum of GTIs [s]
ontime5	1639.9000126123	Sum of GTIs [s]
ontime6	1639.9000126123	Sum of GTIs [s]
ontime7	1639.9000126123	Sum of GTIs [s]
ontime8	1639.9000126123	Sum of GTIs [s]
l2events	16355	Number of level 2 events



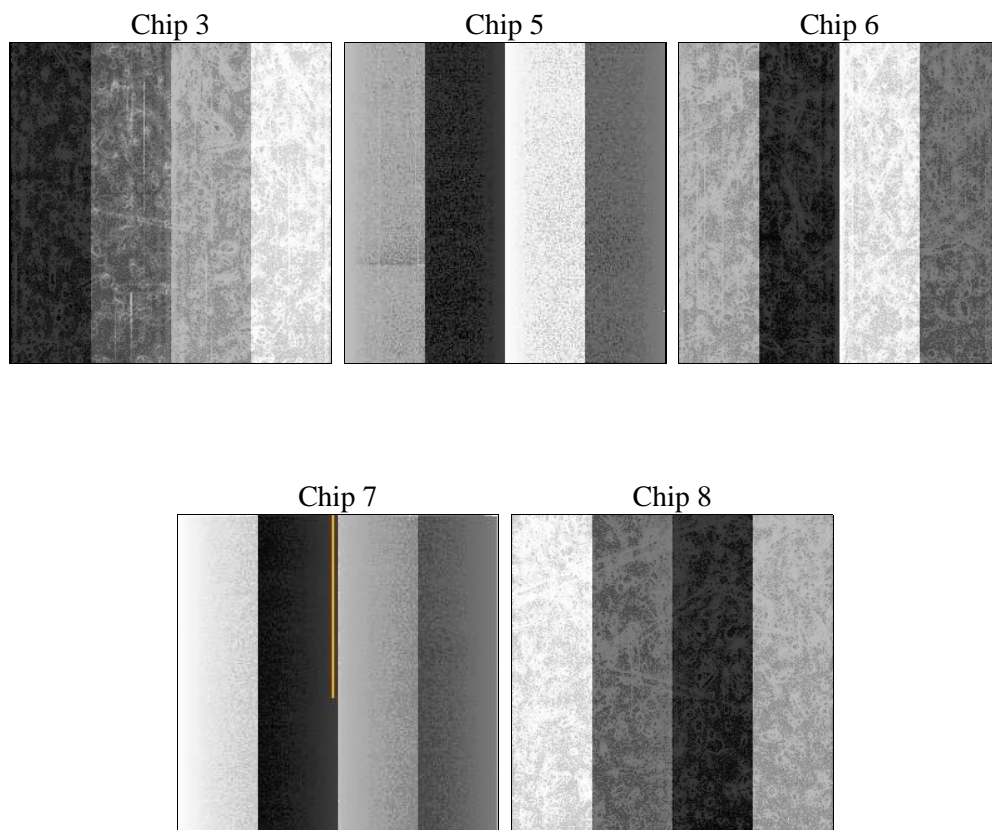
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1600.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	1639.9000126123	Sum of GTIs [s]
caldbver	4.4.7	 	ontime3	1639.9000126123	Sum of GTIs [s]
date	2012-02-09T14:05:15	Date and time of file creation	ontime5	1639.9000126123	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	1639.9000126123	Sum of GTIs [s]
			ontime7	1639.9000126123	Sum of GTIs [s]
			ontime8	1639.9000126123	Sum of GTIs [s]
			l1events	64041	Number of level 1 events

2.1.4 Events

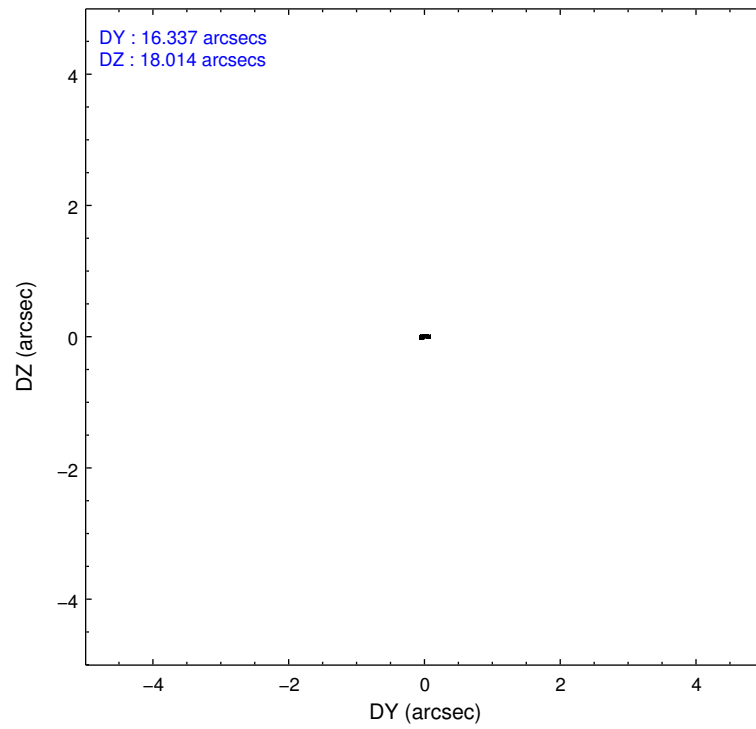
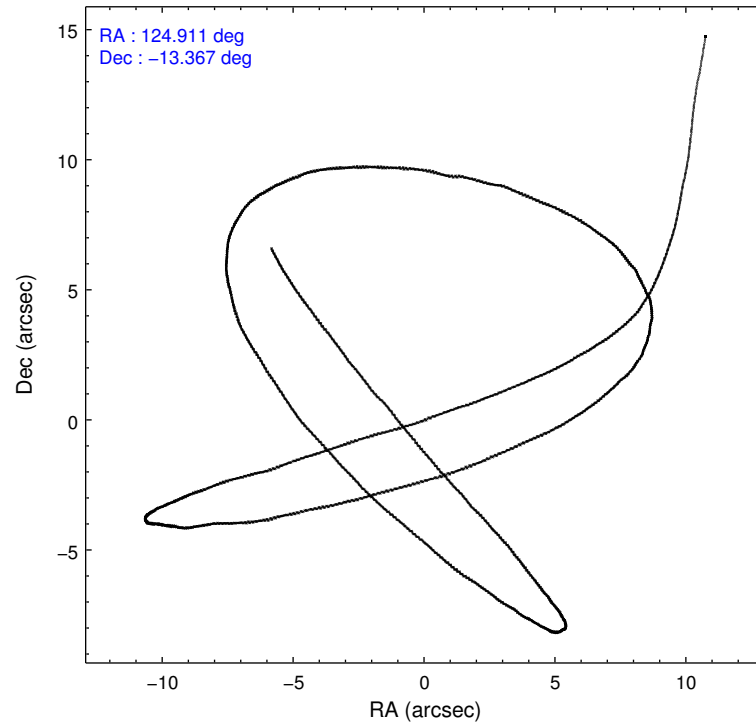
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	10116	16758	10770	12938	13459
rejected events	9060	8369	9613	7047	9757
rejected %	89%	49%	89%	54%	72%

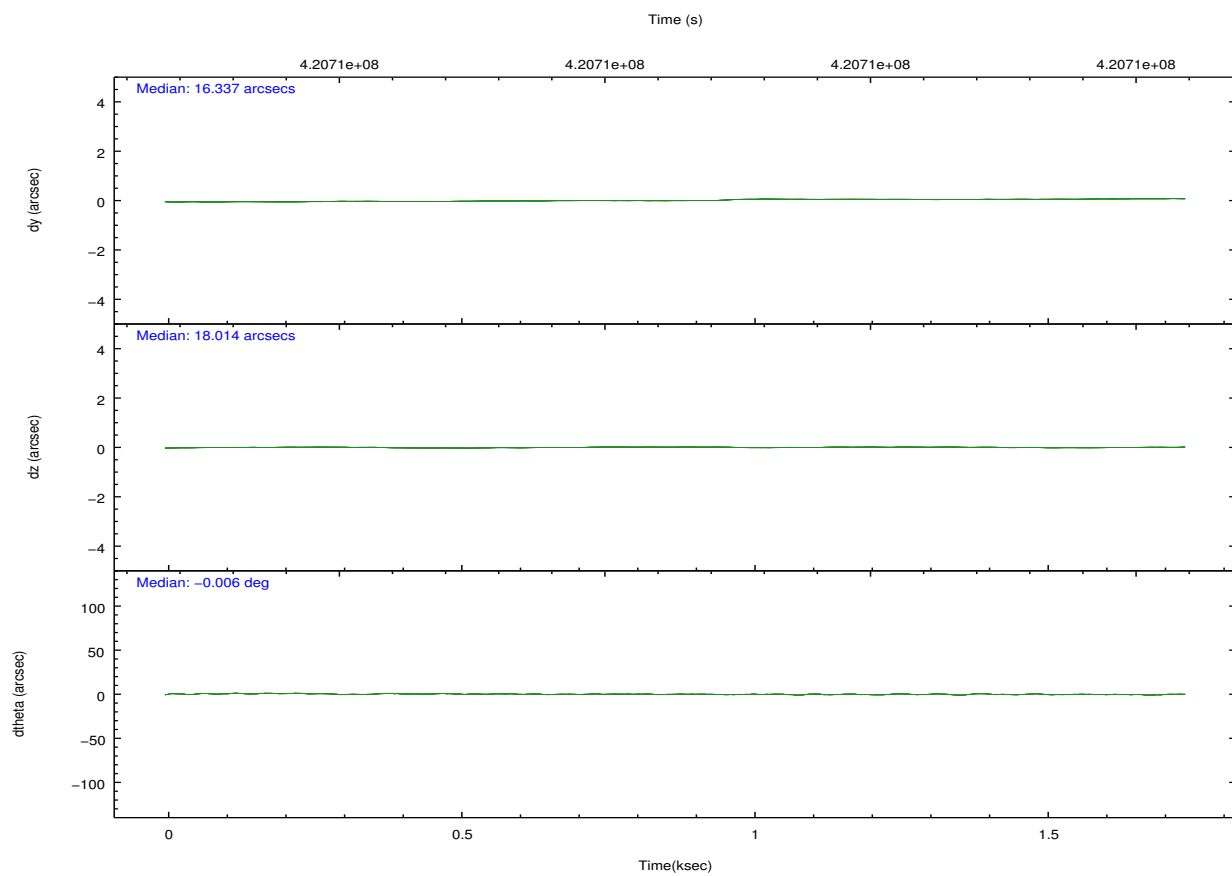
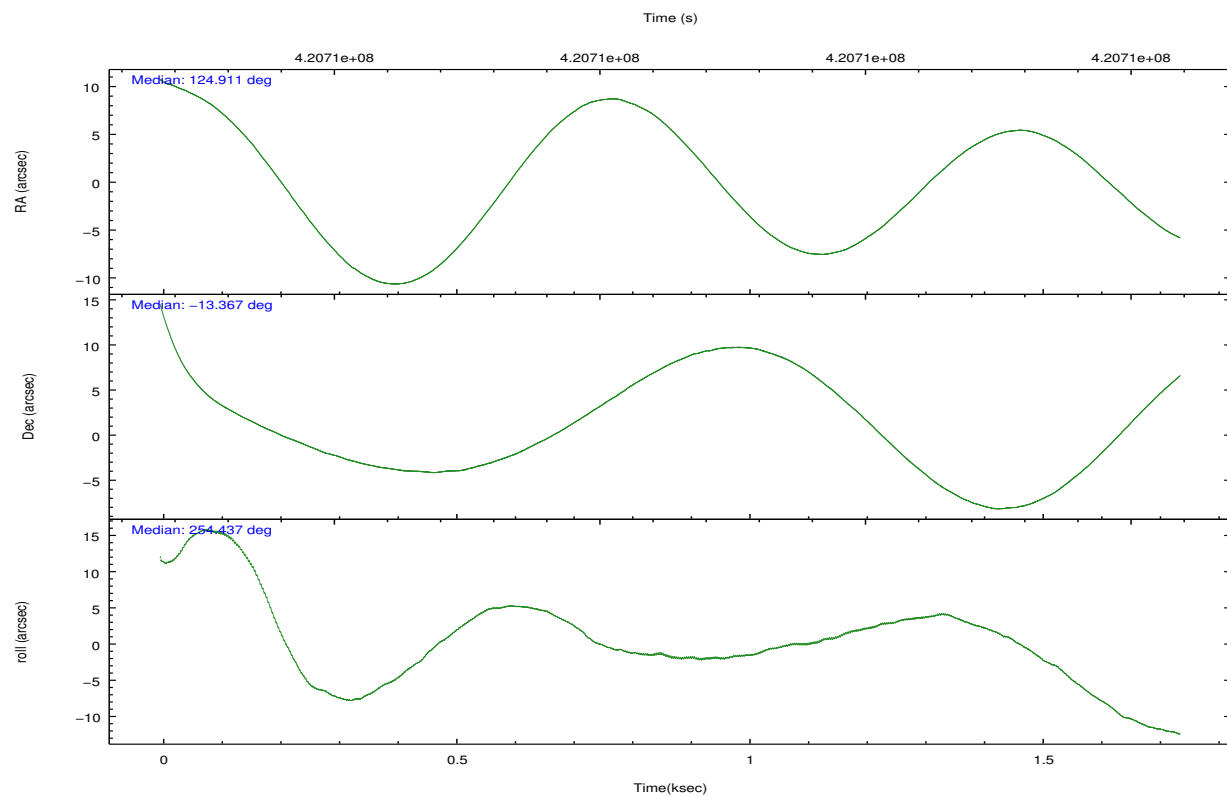
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	371	1306	403	588	1085
	3%	7%	3%	4%	8%
grade 1 events	3	58	7	17	18
	0%	0%	0%	0%	0%
grade 2 events	215	2312	269	1218	856
	2%	13%	2%	9%	6%
grade 3 events	123	324	110	490	386
	1%	1%	1%	3%	2%
grade 4 events	136	310	118	496	377
	1%	1%	1%	3%	2%
grade 5 events	460	1212	502	1397	725
	4%	7%	4%	10%	5%
grade 6 events	217	4165	259	3123	1005
	2%	24%	2%	24%	7%
grade 7 events	8591	7071	9102	5609	9007
	84%	42%	84%	43%	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	124.903446	124.9109129407615	CCD I2 on	N	N
[deg] Pointing Dec	-13.340382	-13.36702934934229	CCD I3 on	O1	Y
[deg] Pointing Roll	254.287587	254.4459766552447	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)	420708901.184000	420707715.89032	CCD S5 on	N	N
Observation start date	2011-05-02T07:33:55	2011-05-02T07:15:15	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	420710501.184000	420711312.61551	On-chip summing requested	N	N
Observation end date	2011-05-02T08:00:35	2011-05-02T08:15:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



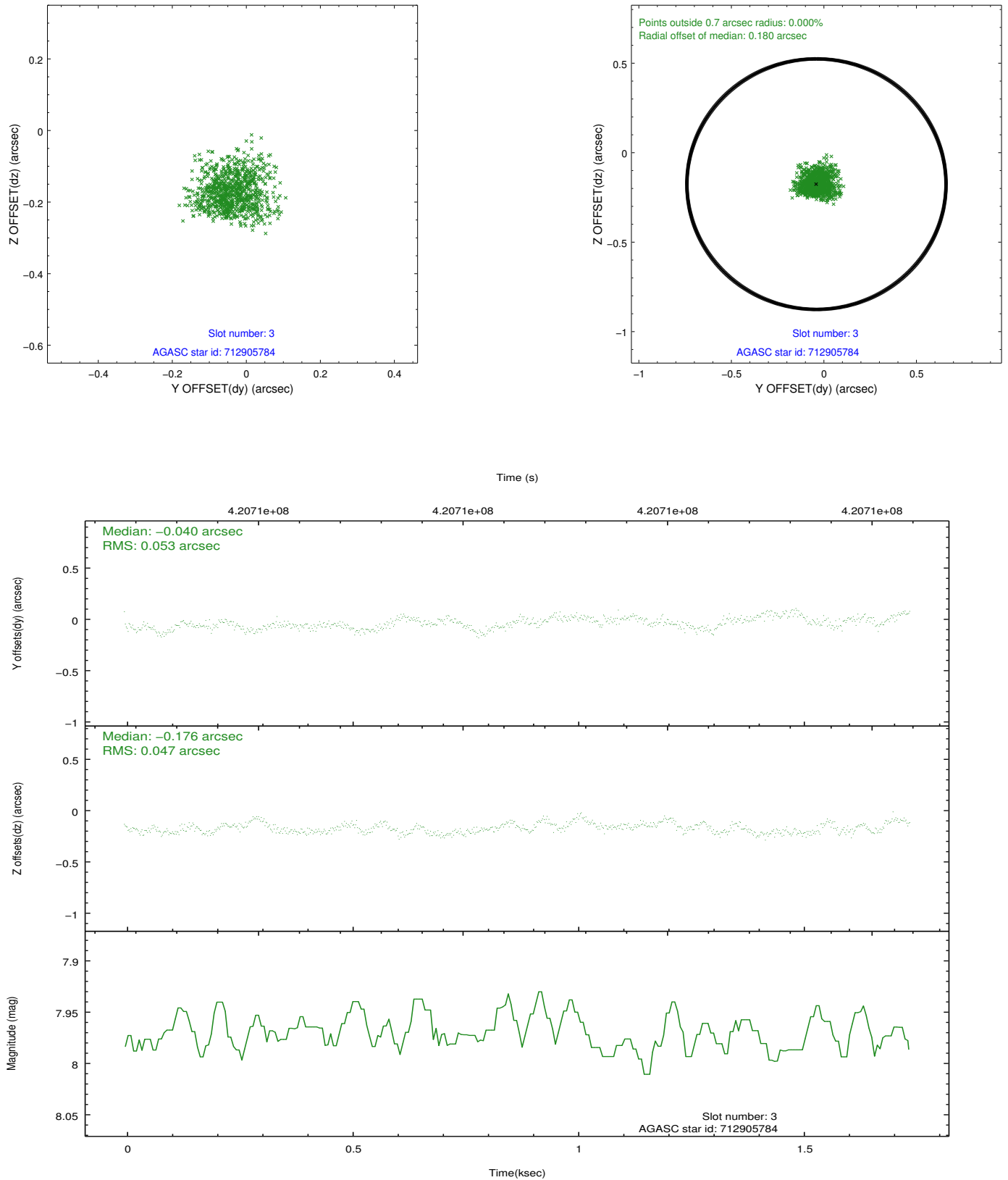


Slot Statistics

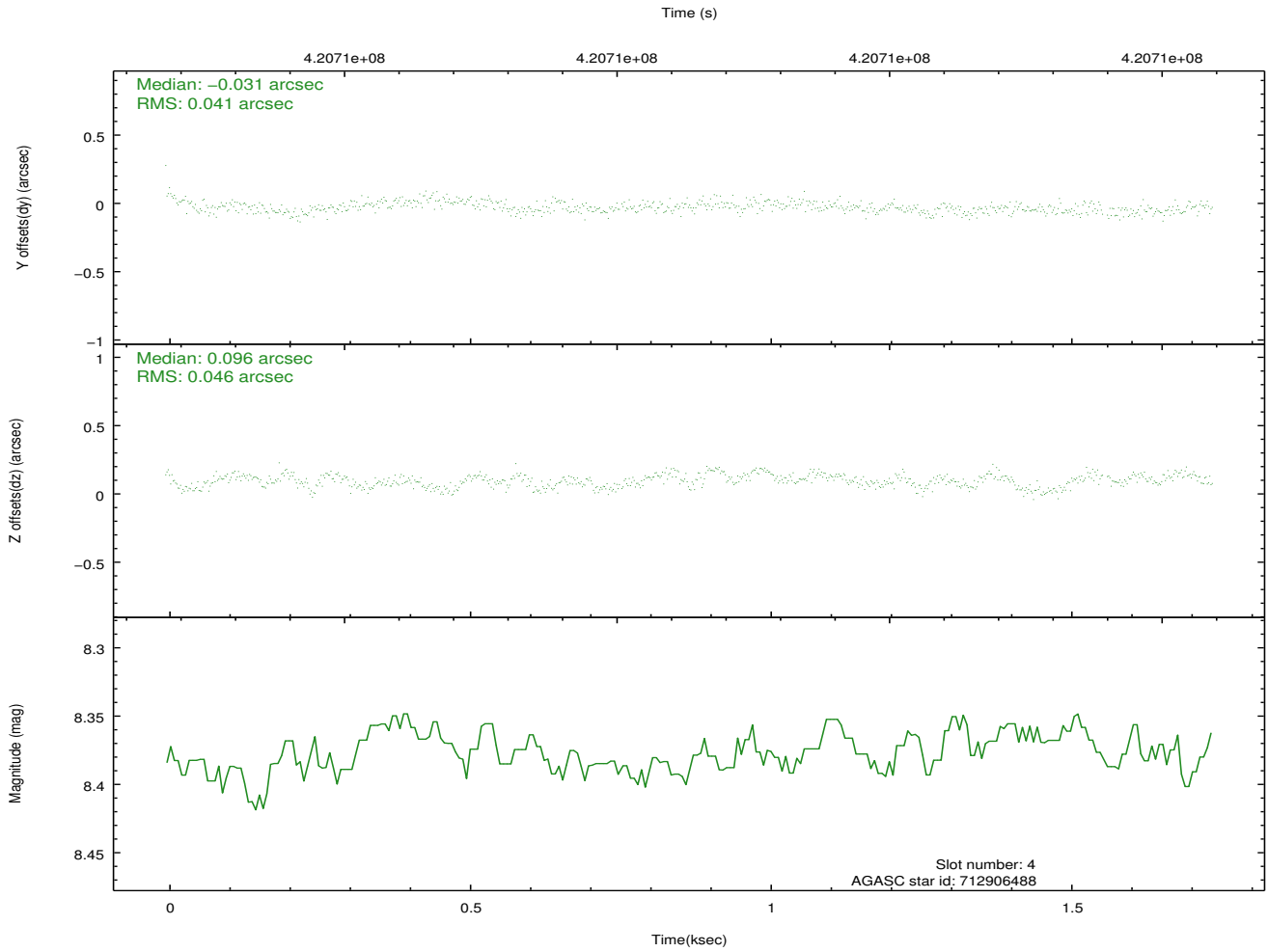
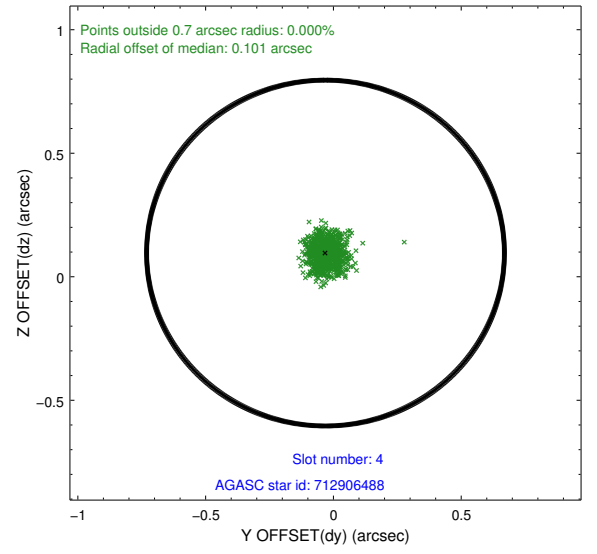
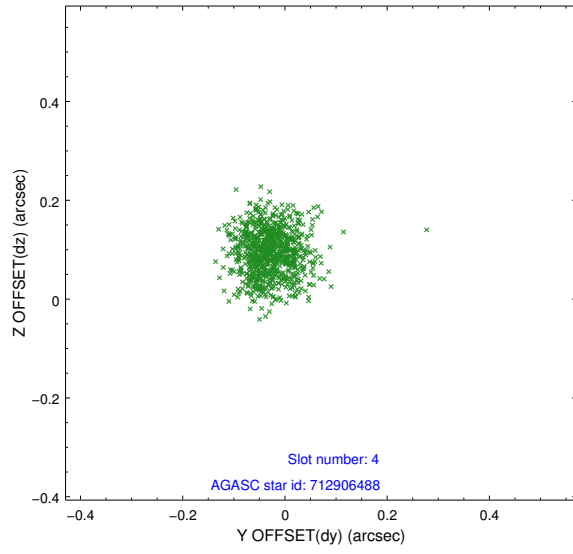
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.96	425	0.095	-0.031	0.006	0.010	0.000000	0.000000	926.78	-1735.13
1	FID	ACIS-S-5	7.00	425	-0.105	0.084	0.006	0.010	0.000000	0.000000	-1820.32	158.61
2	FID	ACIS-S-6	7.11	425	-0.011	-0.041	0.006	0.010	0.000000	0.000000	388.12	806.73
3	GUIDE	712905784	7.97	850	-0.040	-0.176	0.076	0.124	125.145554	-13.633442	786.03	1100.70
4	GUIDE	712906488	8.38	846	-0.031	0.096	0.065	0.104	124.801227	-13.607968	1024.88	-82.33
5	GUIDE	712908312	9.31	849	0.236	-0.020	0.116	0.189	125.084482	-13.928798	1868.97	1182.05
6	GUIDE	712400000	9.82	849	0.042	0.050	0.179	0.286	124.709956	-12.985126	-1044.90	-998.94
7	GUIDE	712917472	8.97	846	-0.188	0.053	0.110	0.172	125.318779	-13.589167	467.72	1640.39

2.4 Star Slots

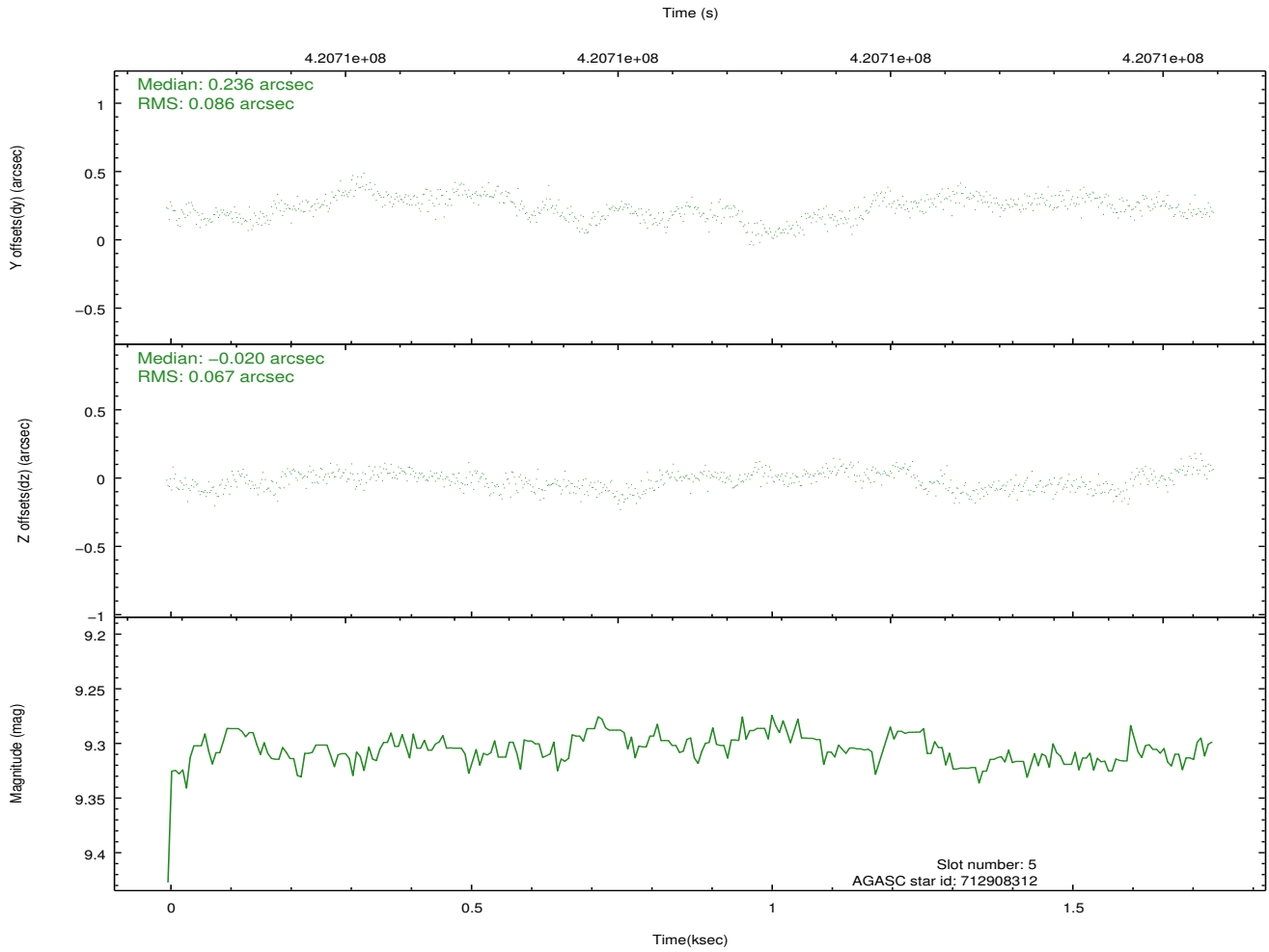
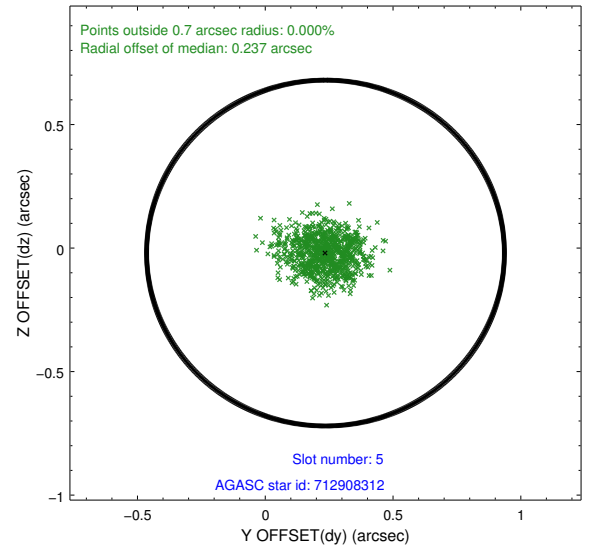
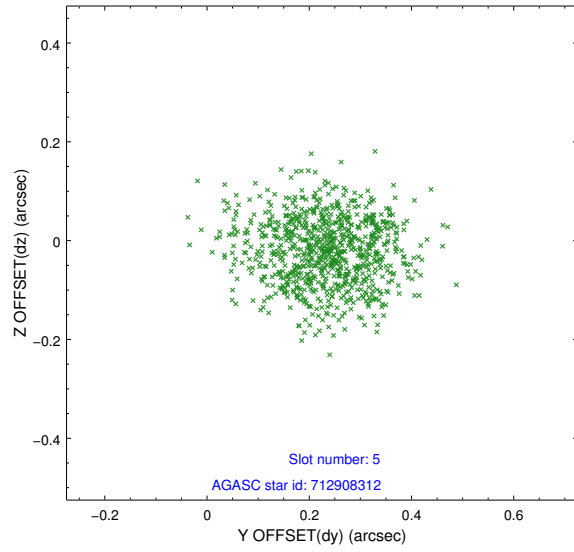
2.4.1 Slot 3



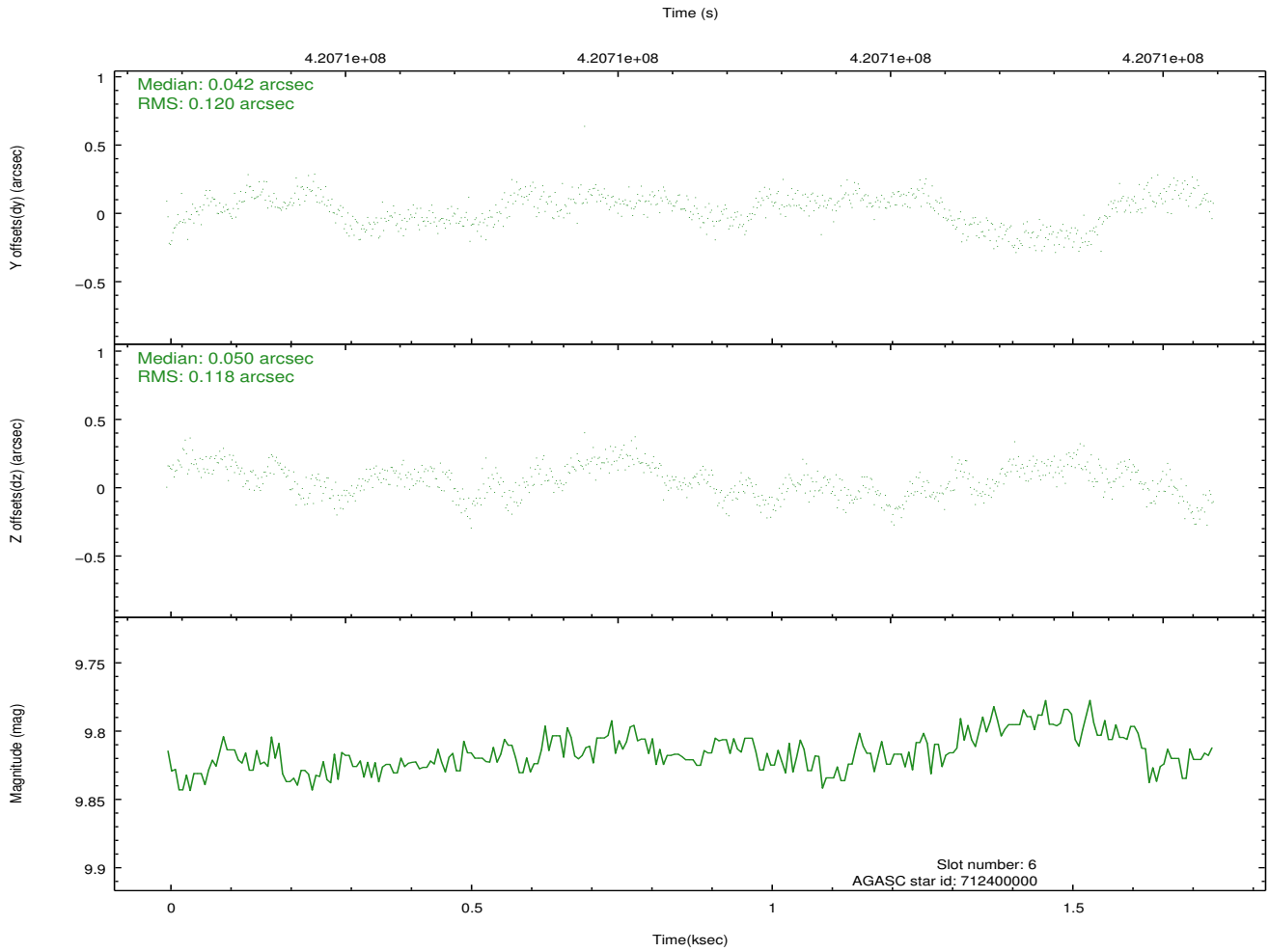
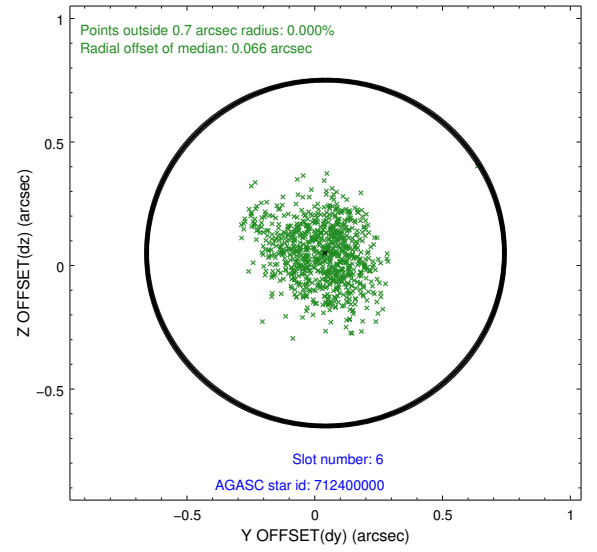
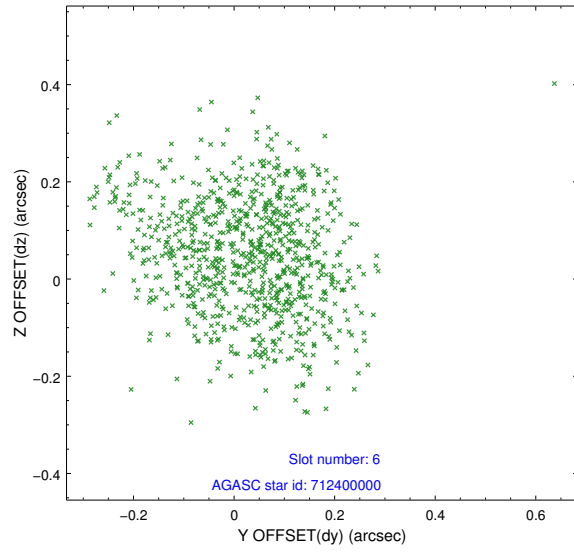
2.4.2 Slot 4



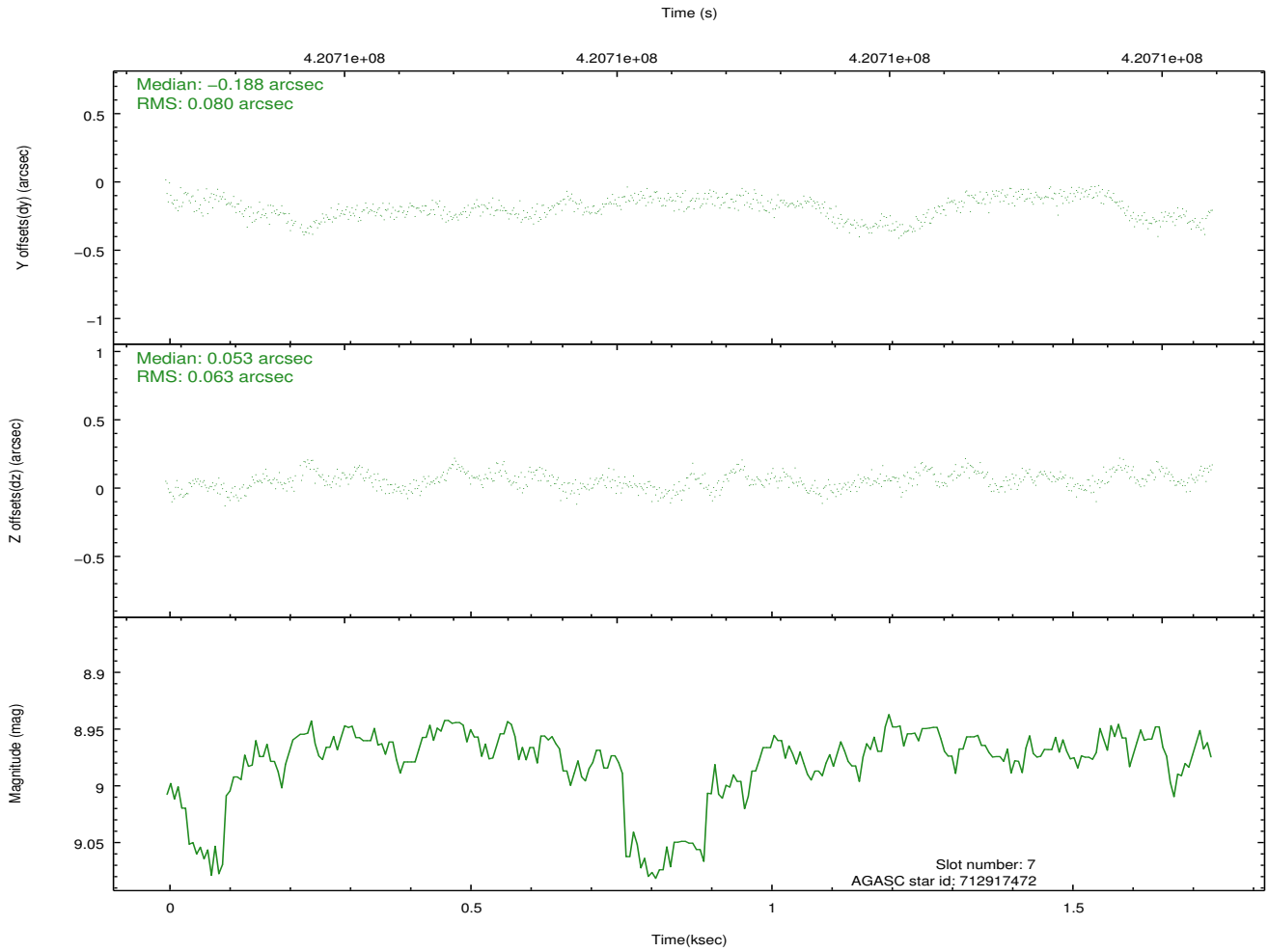
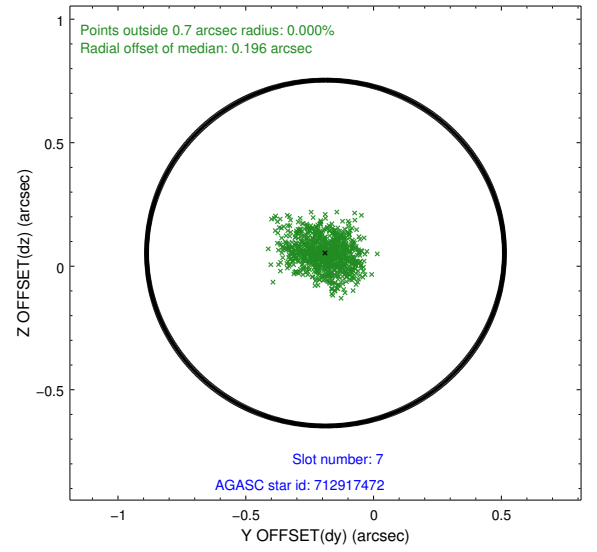
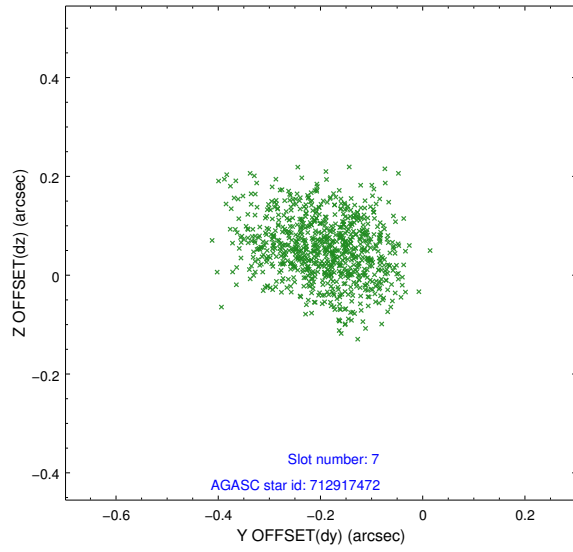
2.4.3 Slot 5



2.4.4 Slot 6

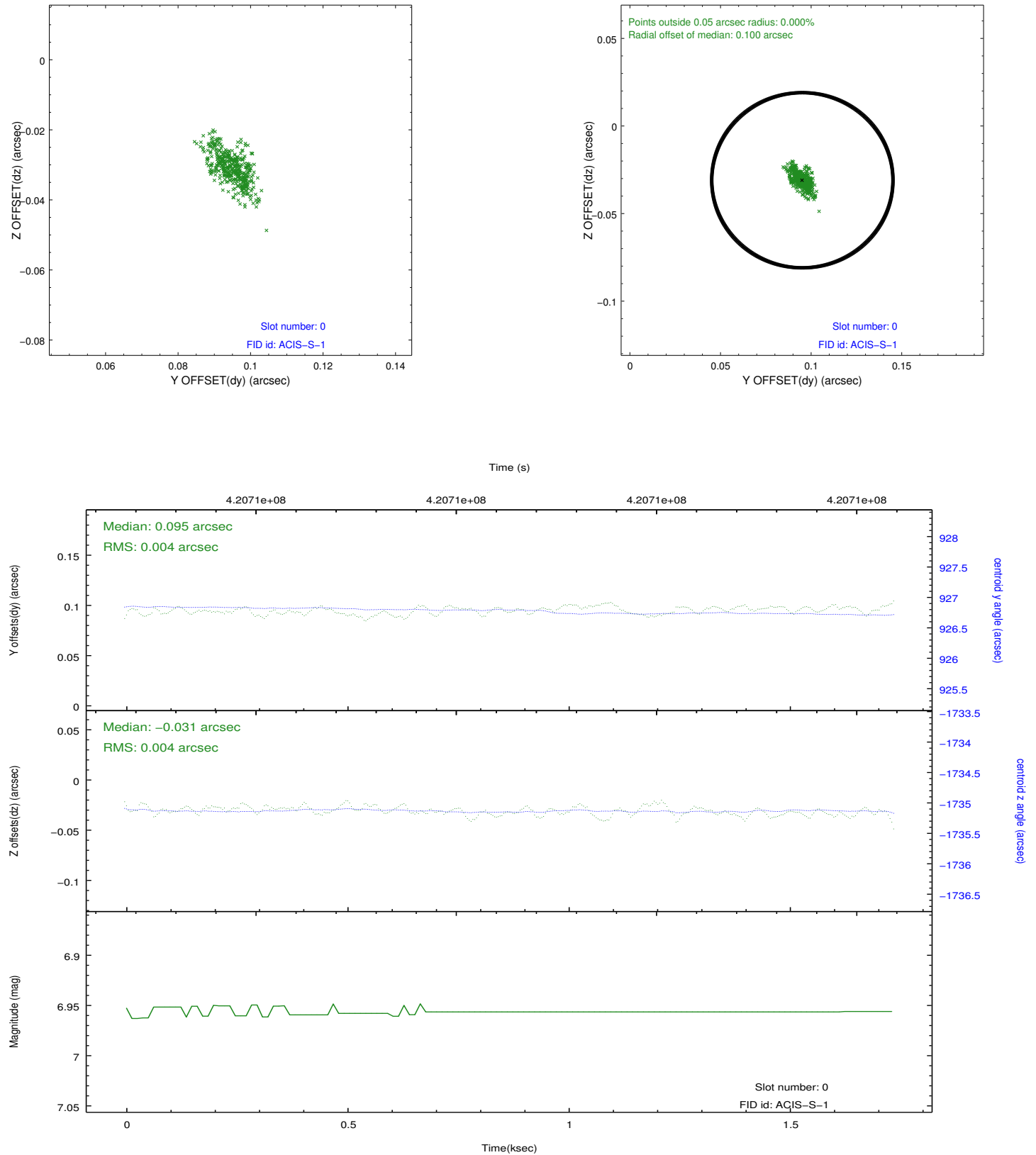


2.4.5 Slot 7

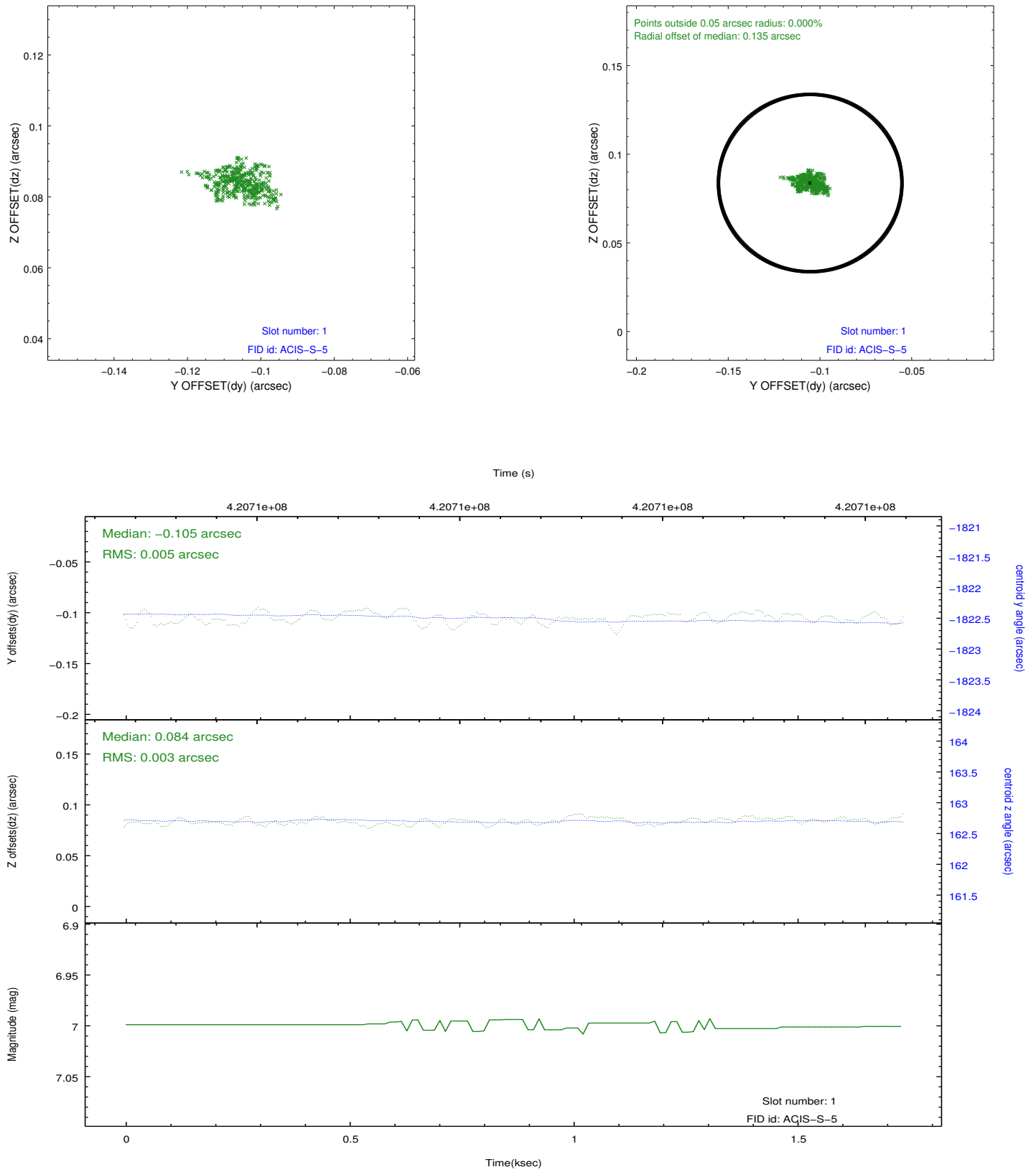


2.5 FID Slots

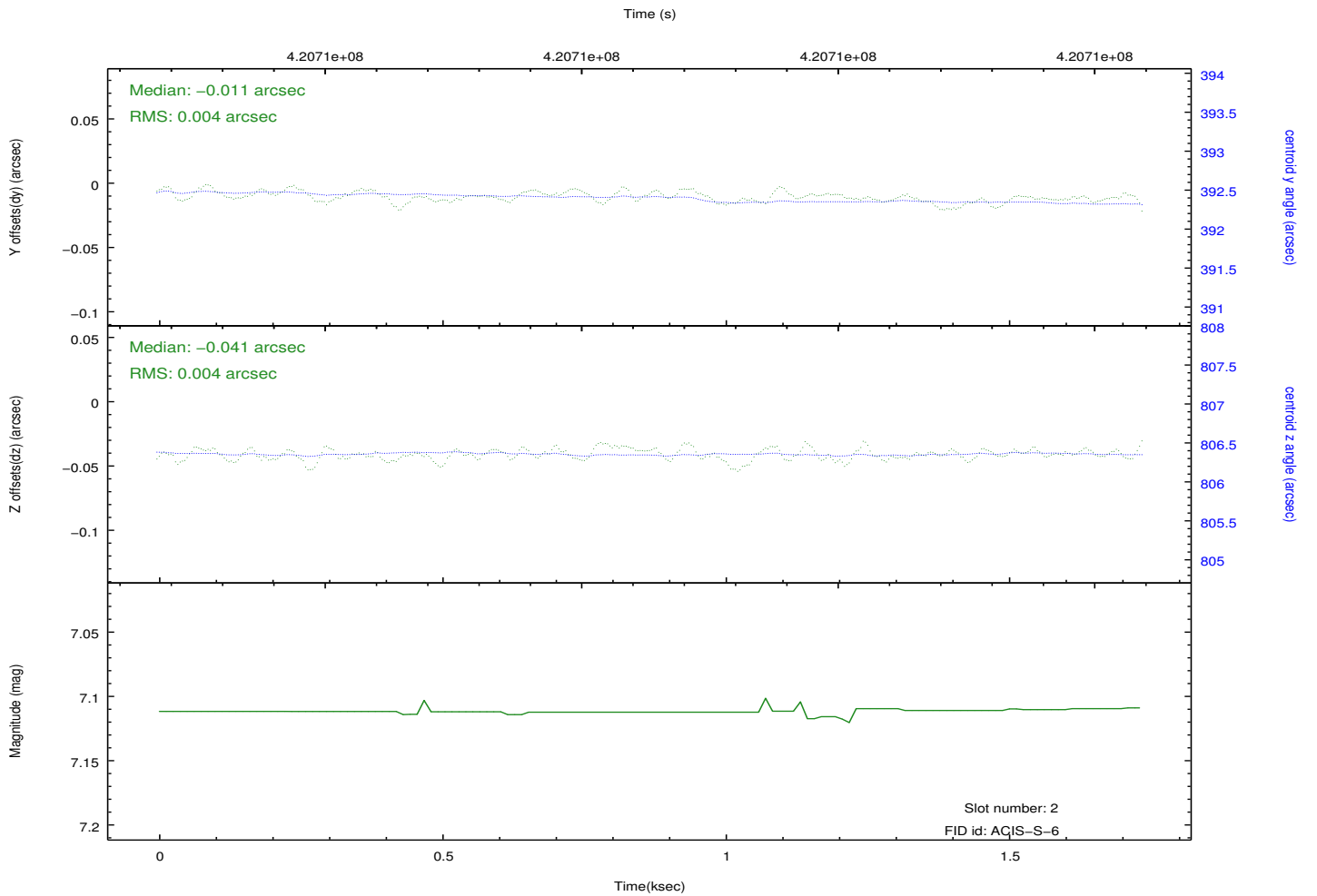
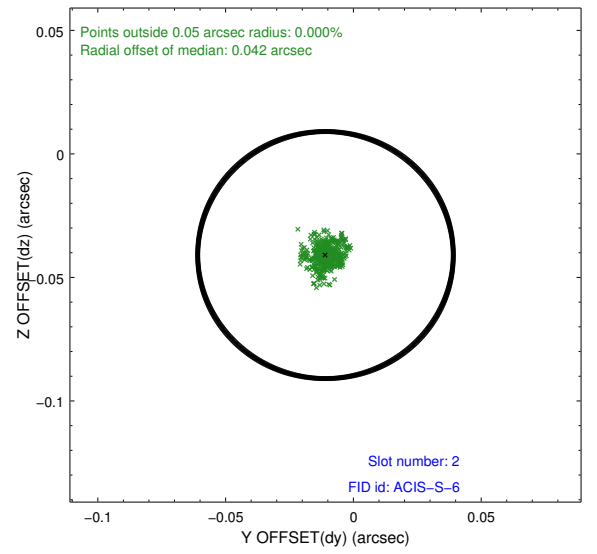
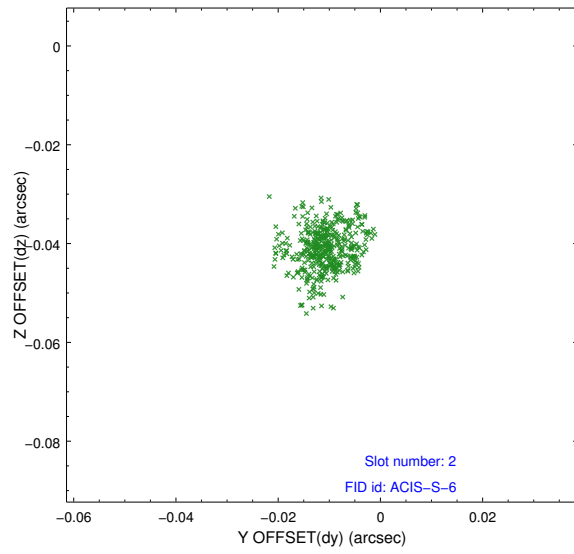
2.5.1 Slot 0



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)	2012.02.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.6399000126123

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.