

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12483 - L2 Version 2
Chandra X-Ray Center

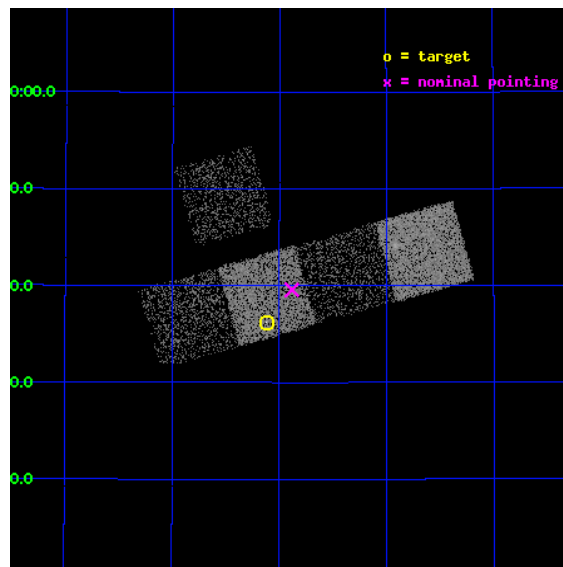
L2 Processing Date : Feb 7 2012

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

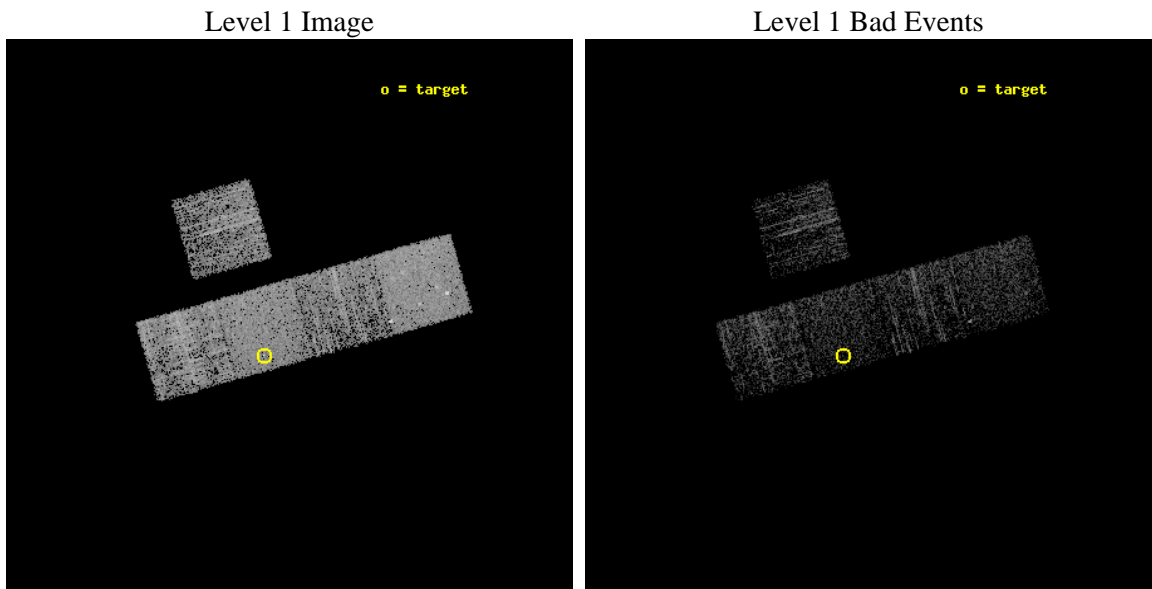
seq_num	401224	Sequence number
obs_id	12483	Observation id
title	The Nearest and Brightest Quiescent Low Mass X-ray Binaries	Propos
observer	Prof. Robert Rutledge	Principal investigator
object	1RXS J135606.8+413613	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	209.028333	Observer's specified target RA [deg]
dec_targ	41.603611	Observer's specified target Dec [deg]
ra_nom	208.97078074901	Nominal RA [deg]
dec_nom	41.659637969405	Nominal Dec [deg]
roll_nom	164.26822383022	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2039.8000156879	Sum of GTIs [s]
liveltime	2013.1485268041	Livetime [s]
ontime3	2039.8000156879	Sum of GTIs [s]
ontime5	2039.8000156879	Sum of GTIs [s]
ontime6	2039.8000156879	Sum of GTIs [s]
ontime7	2039.8000156879	Sum of GTIs [s]
ontime8	2039.8000156879	Sum of GTIs [s]
l2events	20093	Number of level 2 events



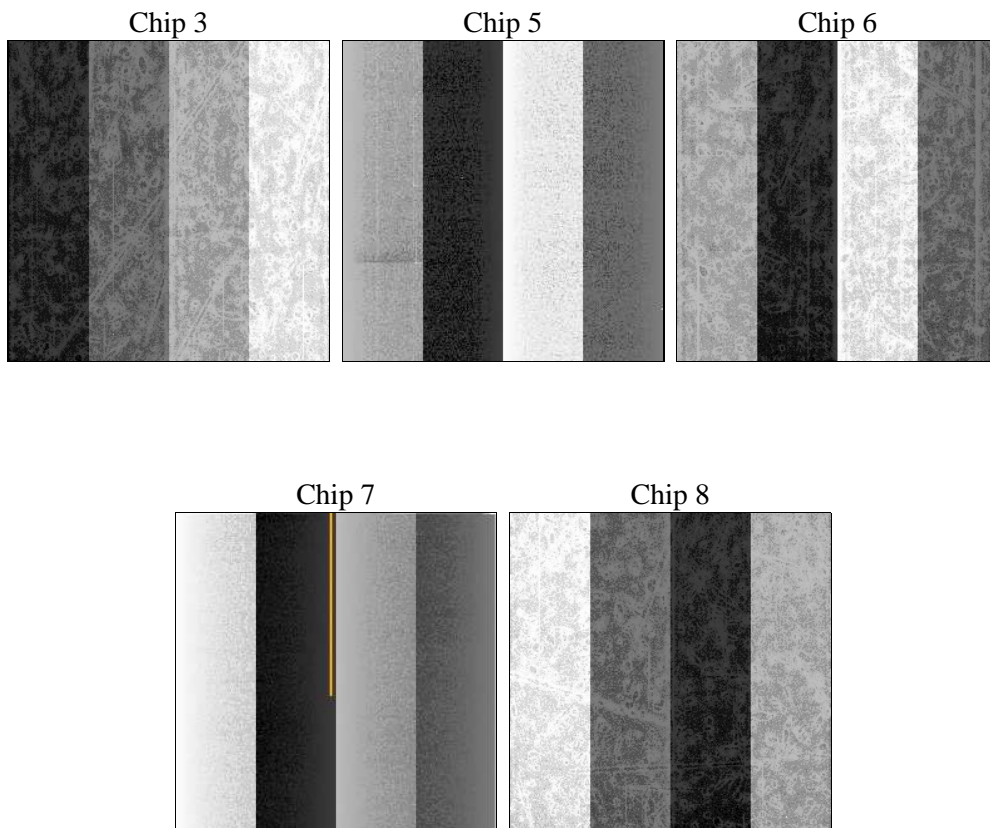
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	2039.8000156879	Sum of GTIs [s]
caldbver	4.4.7	 	ontime3	2039.8000156879	Sum of GTIs [s]
date	2012-02-07T15:10:50	Date and time of file creation	ontime5	2039.8000156879	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	2039.8000156879	Sum of GTIs [s]
			ontime7	2039.8000156879	Sum of GTIs [s]
			ontime8	2039.8000156879	Sum of GTIs [s]
			l1events	76634	Number of level 1 events

2.1.4 Events

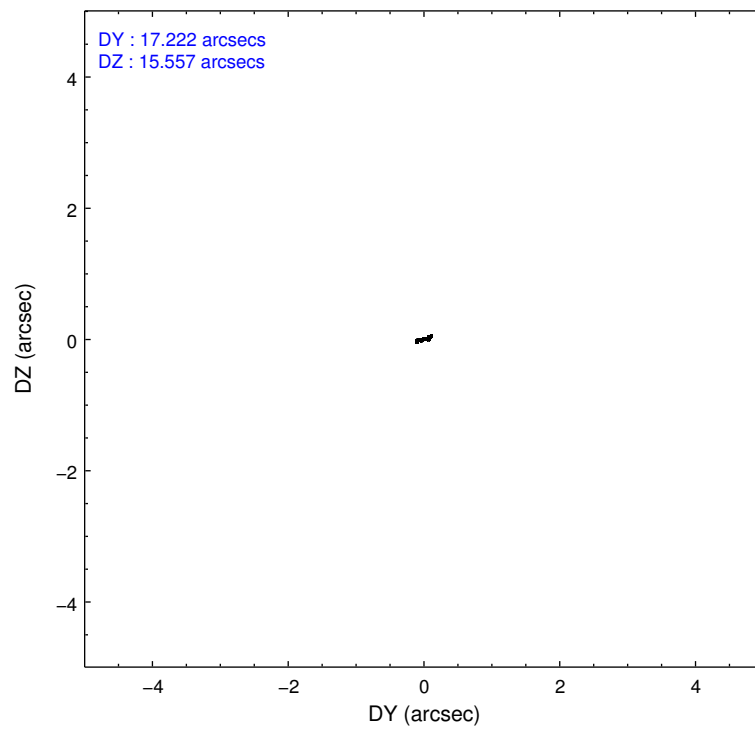
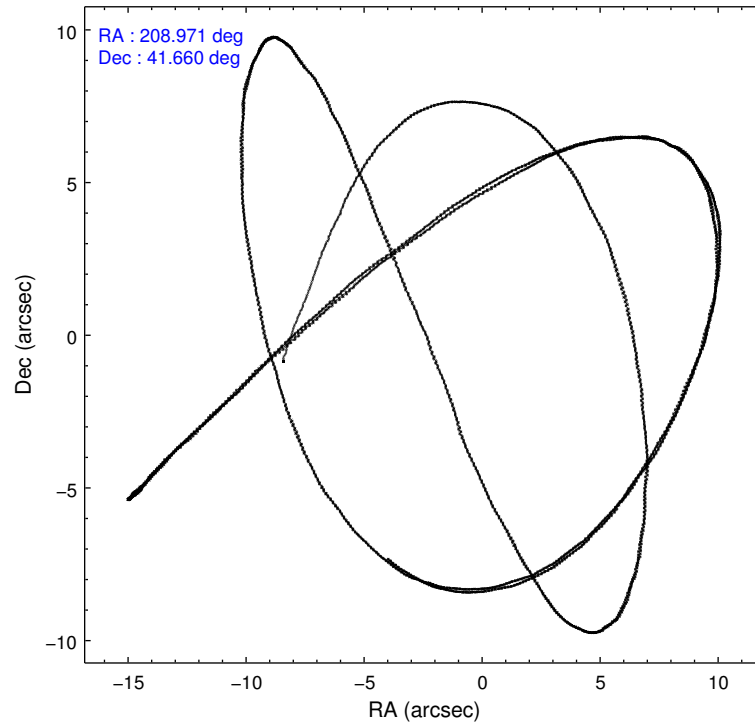
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	11834	20190	12081	16036	16493
rejected events	10511	10070	10673	8760	12038
rejected %	88%	49%	88%	54%	72%

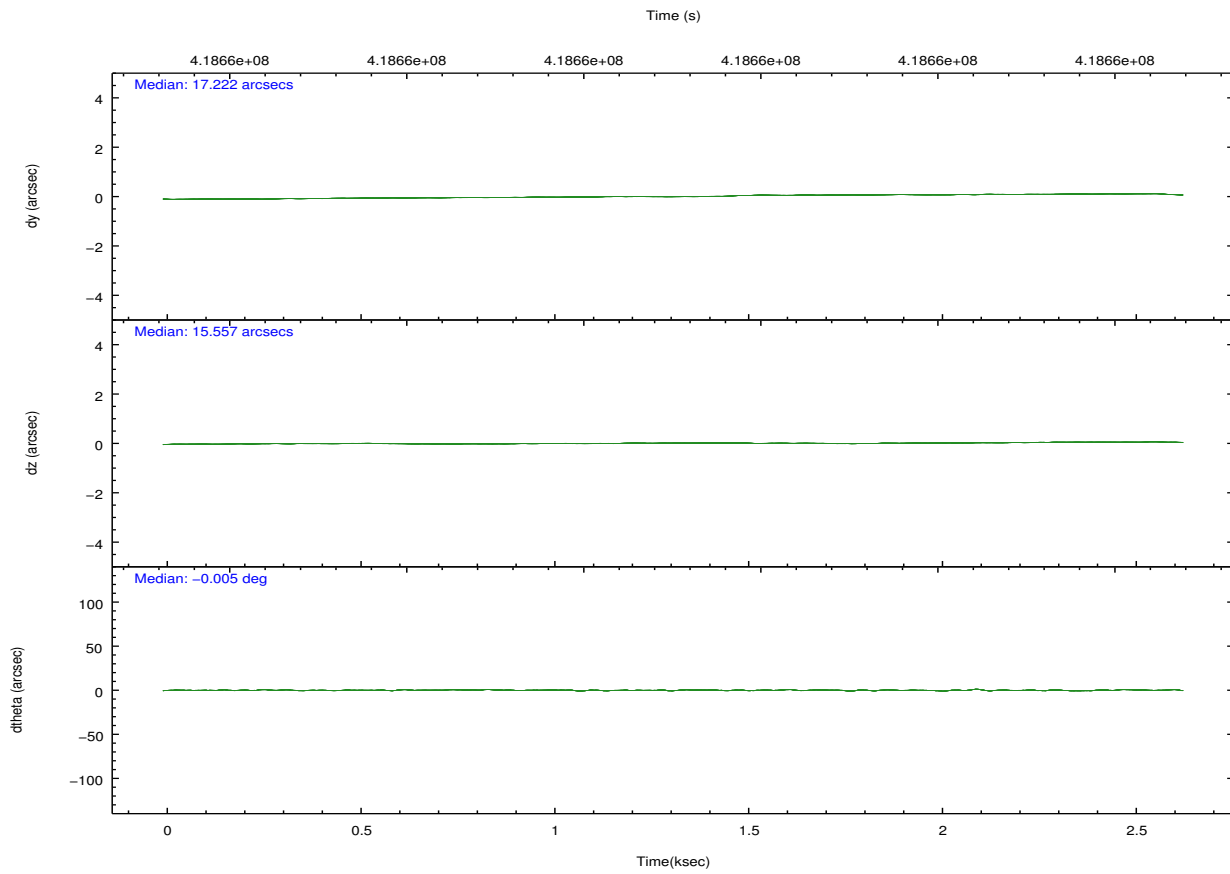
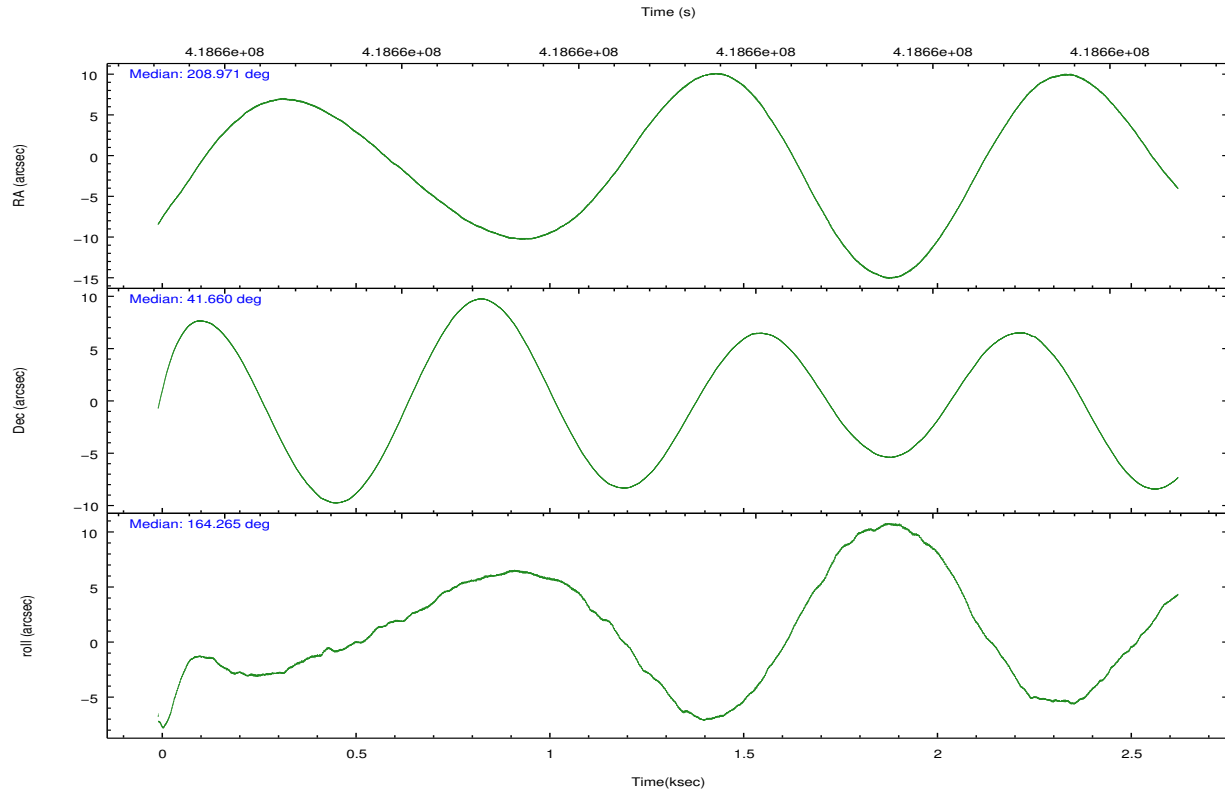
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	456	1302	480	771	1329
	3%	6%	3%	4%	8%
grade 1 events	9	132	4	20	11
	0%	0%	0%	0%	0%
grade 2 events	317	2882	309	1577	943
	2%	14%	2%	9%	5%
grade 3 events	158	374	152	636	520
	1%	1%	1%	3%	3%
grade 4 events	138	410	153	598	464
	1%	2%	1%	3%	2%
grade 5 events	600	1548	611	1696	829
	5%	7%	5%	10%	5%
grade 6 events	260	5176	314	3718	1201
	2%	25%	2%	23%	7%
grade 7 events	9896	8366	10058	7020	11196
	83%	41%	83%	43%	67%

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	209.005839	208.9707807490062	CCD I2 on	N	N
[deg] Pointing Dec	41.666810	41.65963796940515	CCD I3 on	O1	Y
[deg] Pointing Roll	164.088329	164.268223830216	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)	418658060.184000	418656910.64639	CCD S5 on	N	N
Observation start date	2011-04-08T13:53:14	2011-04-08T13:35:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	418660060.184000	418660864.58409	On-chip summing requested	N	N
Observation end date	2011-04-08T14:26:34	2011-04-08T14:41:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



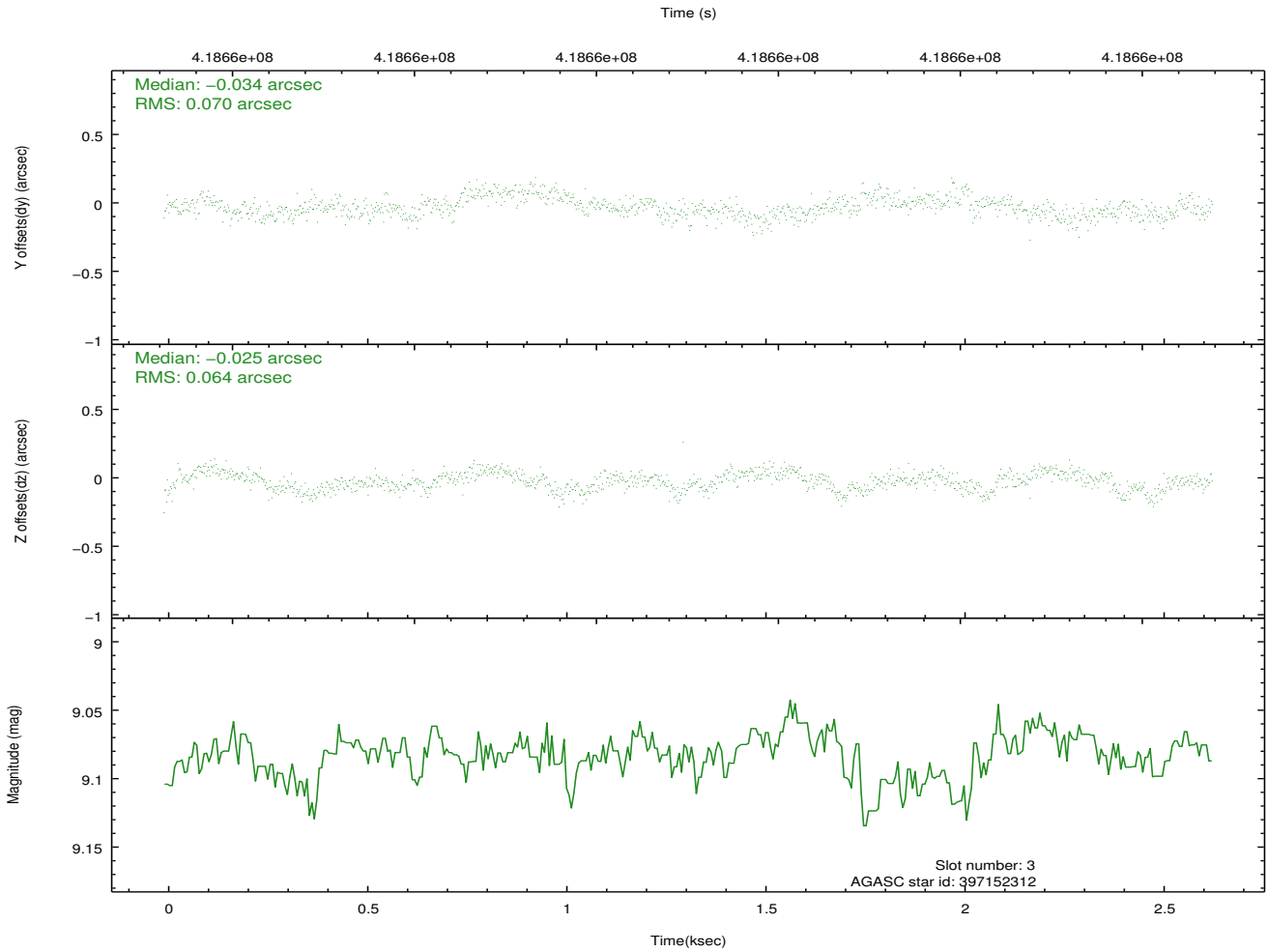
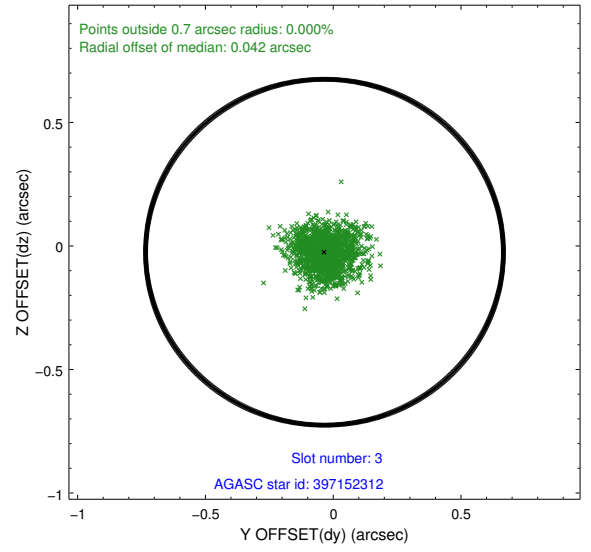
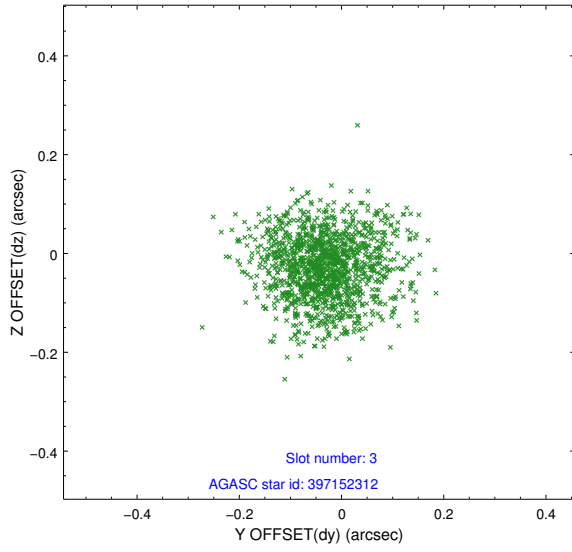


Slot Statistics

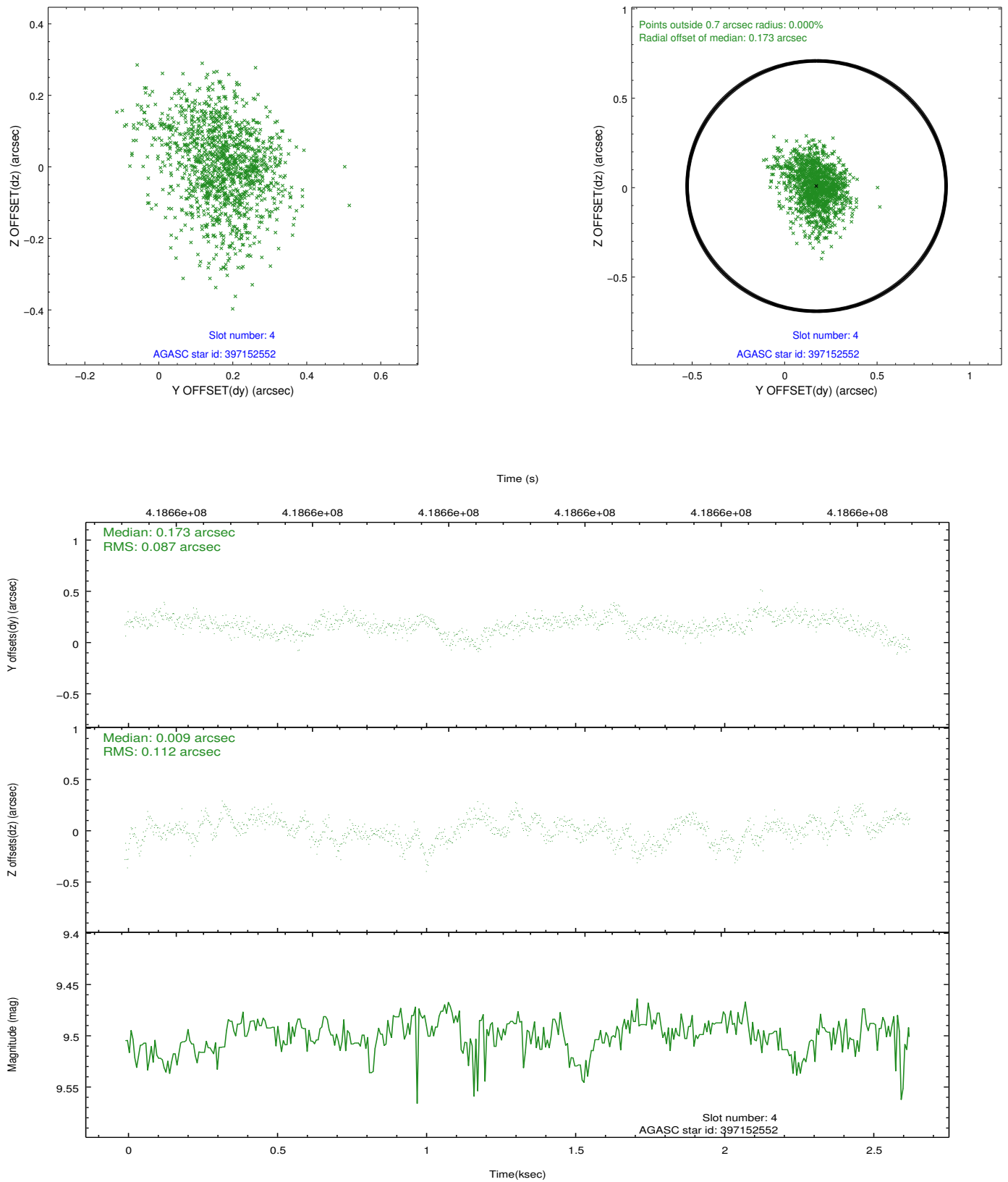
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	642	-0.095	-0.027	0.006	0.010	0.000000	0.000000	-770.33	-1737.00
1	FID	ACIS-S-4	7.05	642	0.208	0.053	0.006	0.011	0.000000	0.000000	2142.09	169.07
2	FID	ACIS-S-5	7.08	642	-0.143	-0.017	0.007	0.012	0.000000	0.000000	-1820.11	165.40
3	GUIDE	397152312	9.08	1284	-0.034	-0.025	0.101	0.163	208.228675	41.691993	2037.53	477.64
4	GUIDE	397152552	9.50	1285	0.173	0.009	0.148	0.251	208.603940	41.206789	596.00	1889.17
5	GUIDE	397152776	7.74	1285	0.083	0.179	0.065	0.109	209.922998	42.049808	-1974.72	-2009.42
6	GUIDE	397156440	8.57	1283	-0.028	-0.087	0.098	0.150	208.545135	41.543749	1073.18	761.61
7	GUIDE	397157192	8.32	1283	-0.195	-0.074	0.108	0.177	209.593412	40.845696	-2345.79	2399.32

2.4 Star Slots

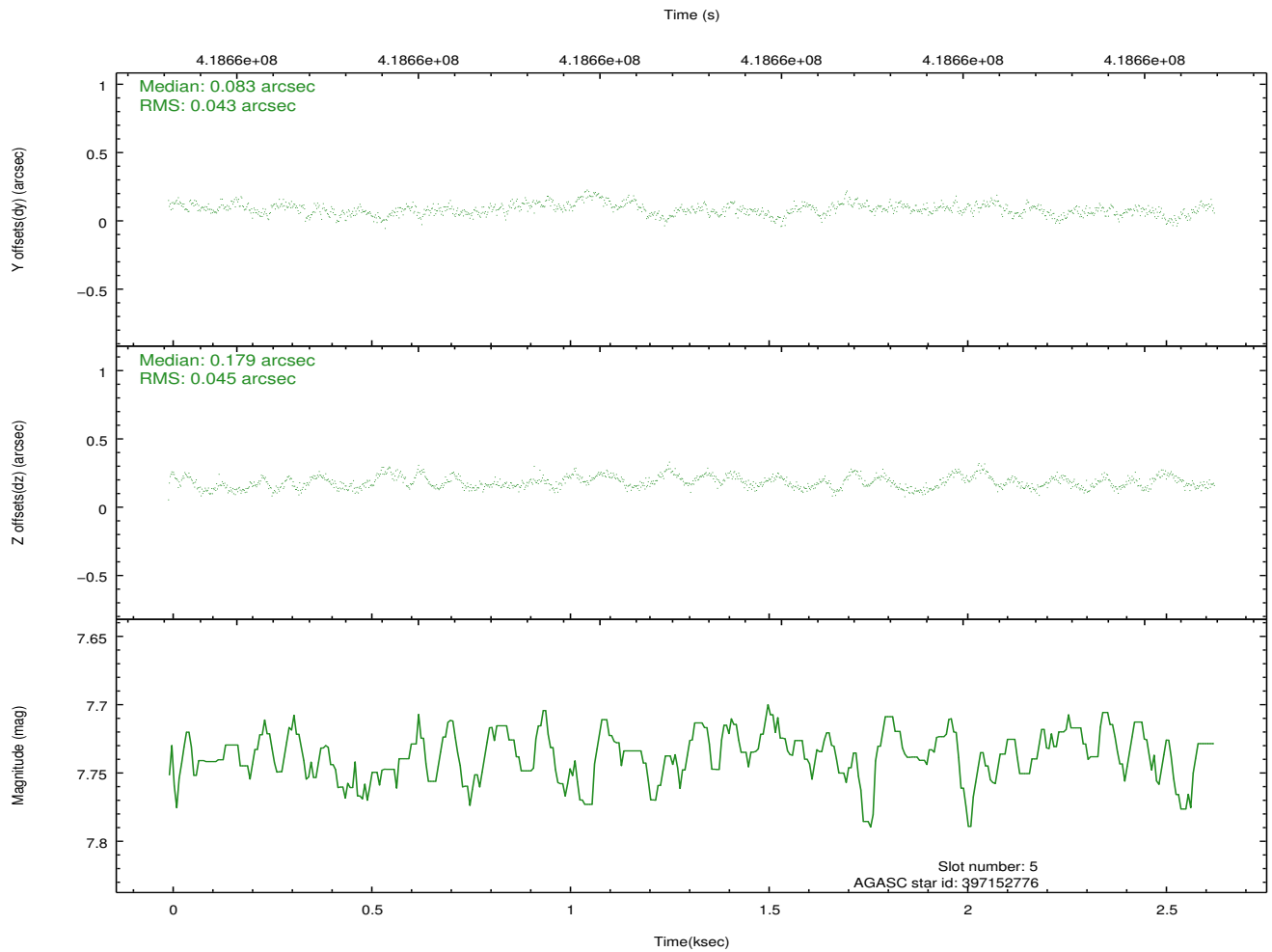
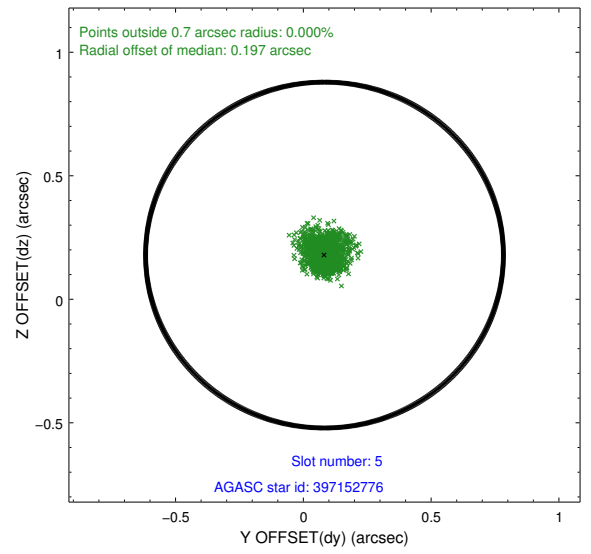
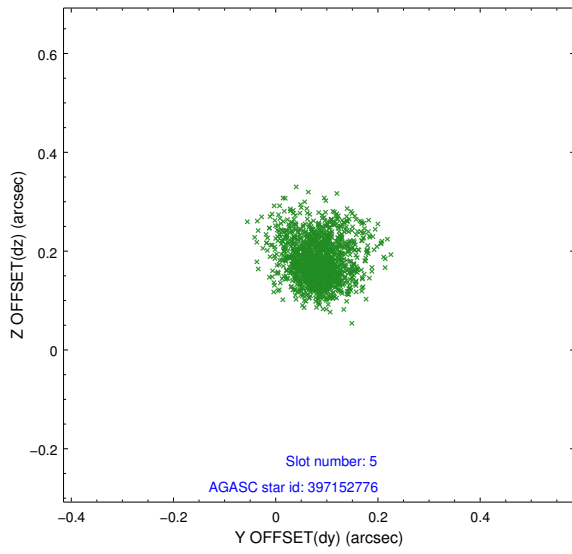
2.4.1 Slot 3



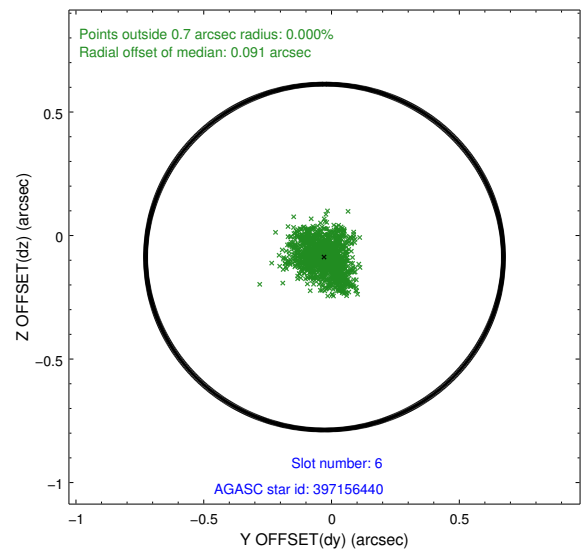
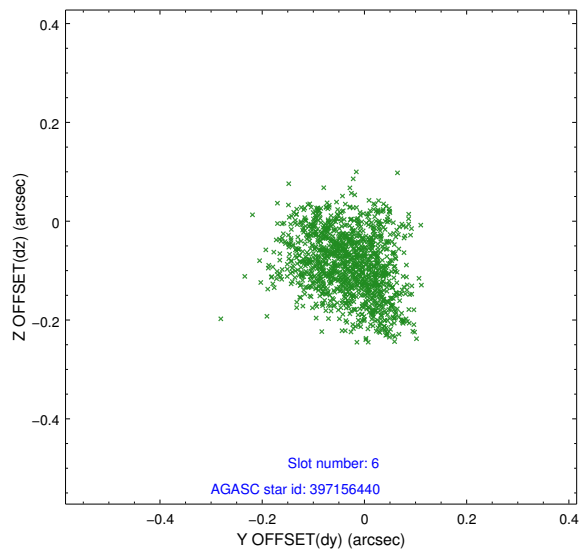
2.4.2 Slot 4



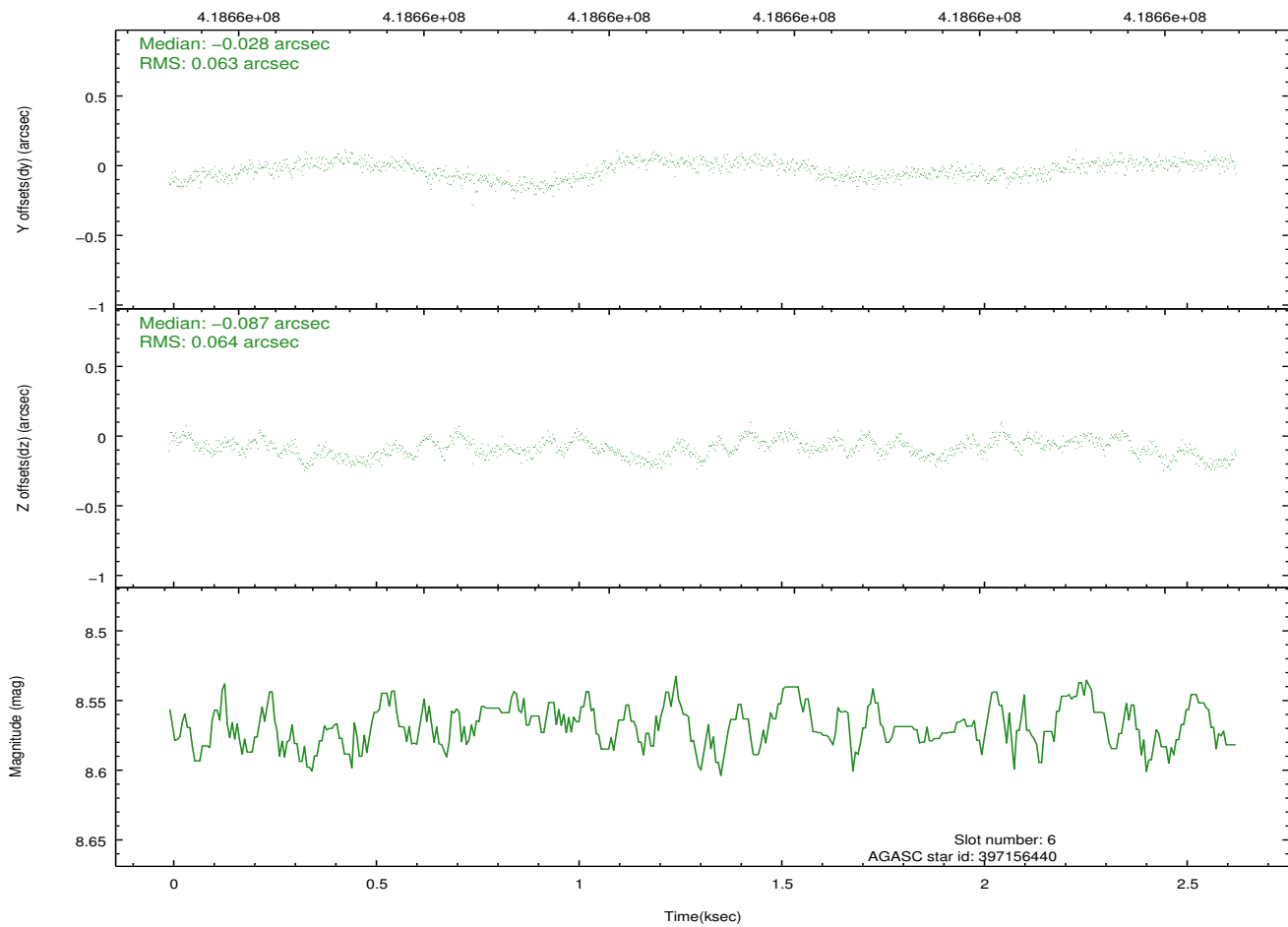
2.4.3 Slot 5



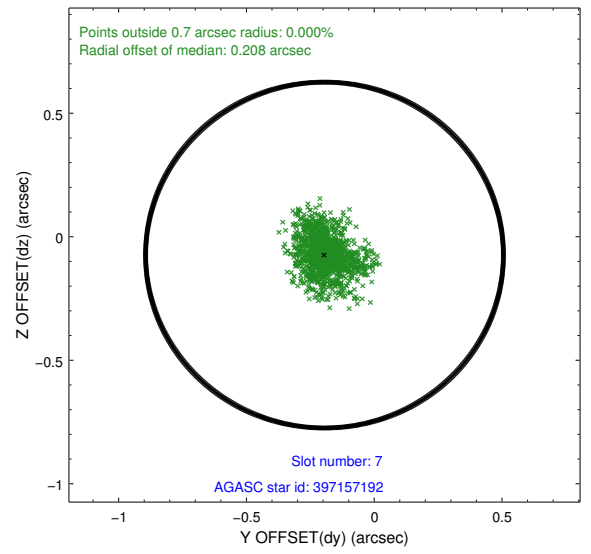
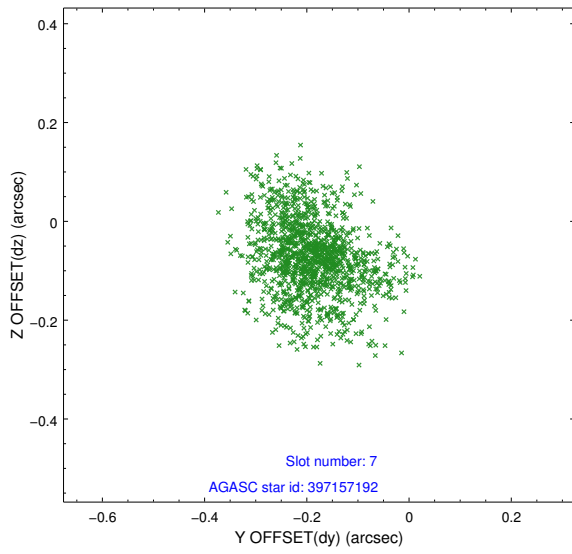
2.4.4 Slot 6



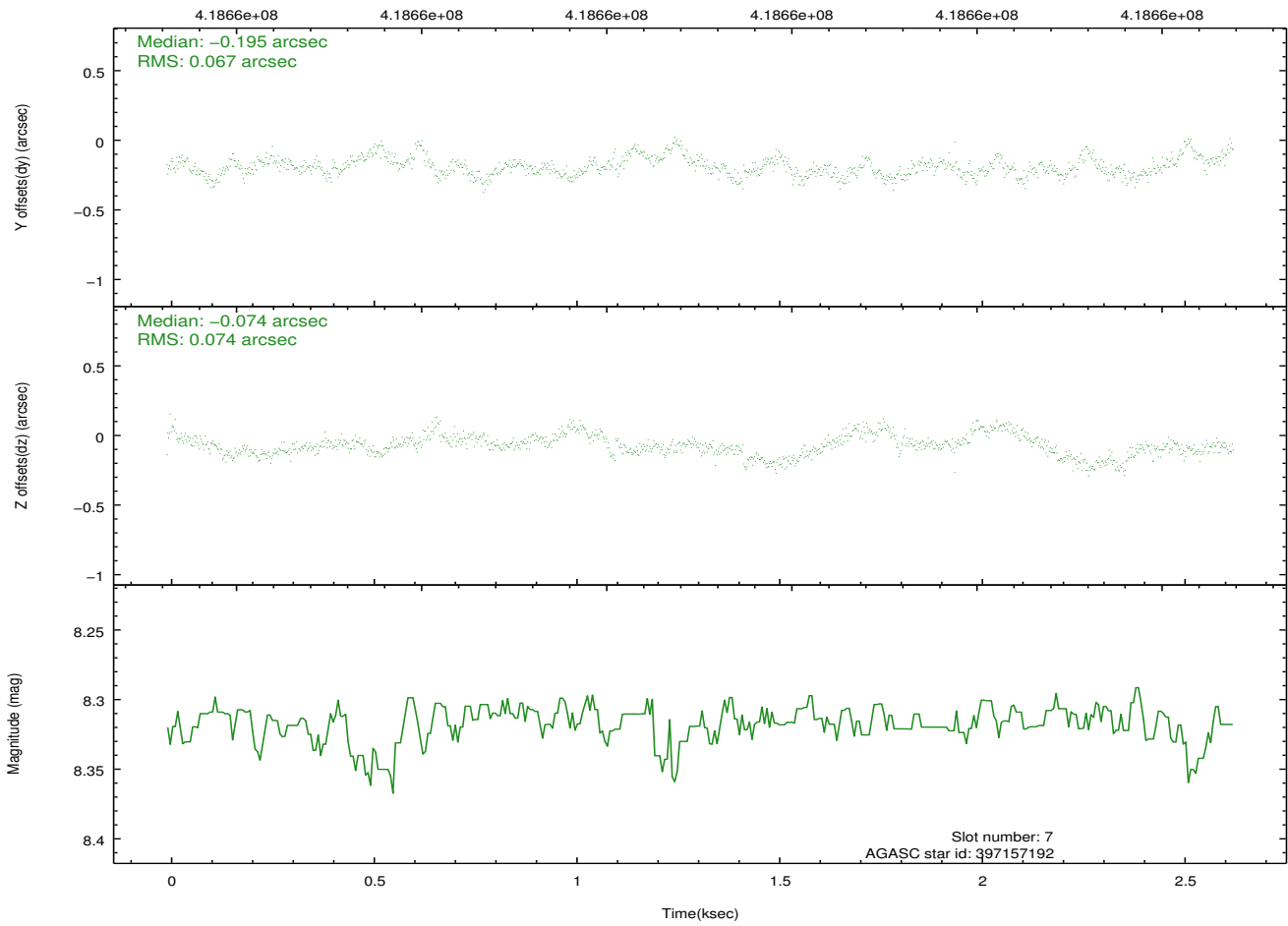
Time (s)



2.4.5 Slot 7

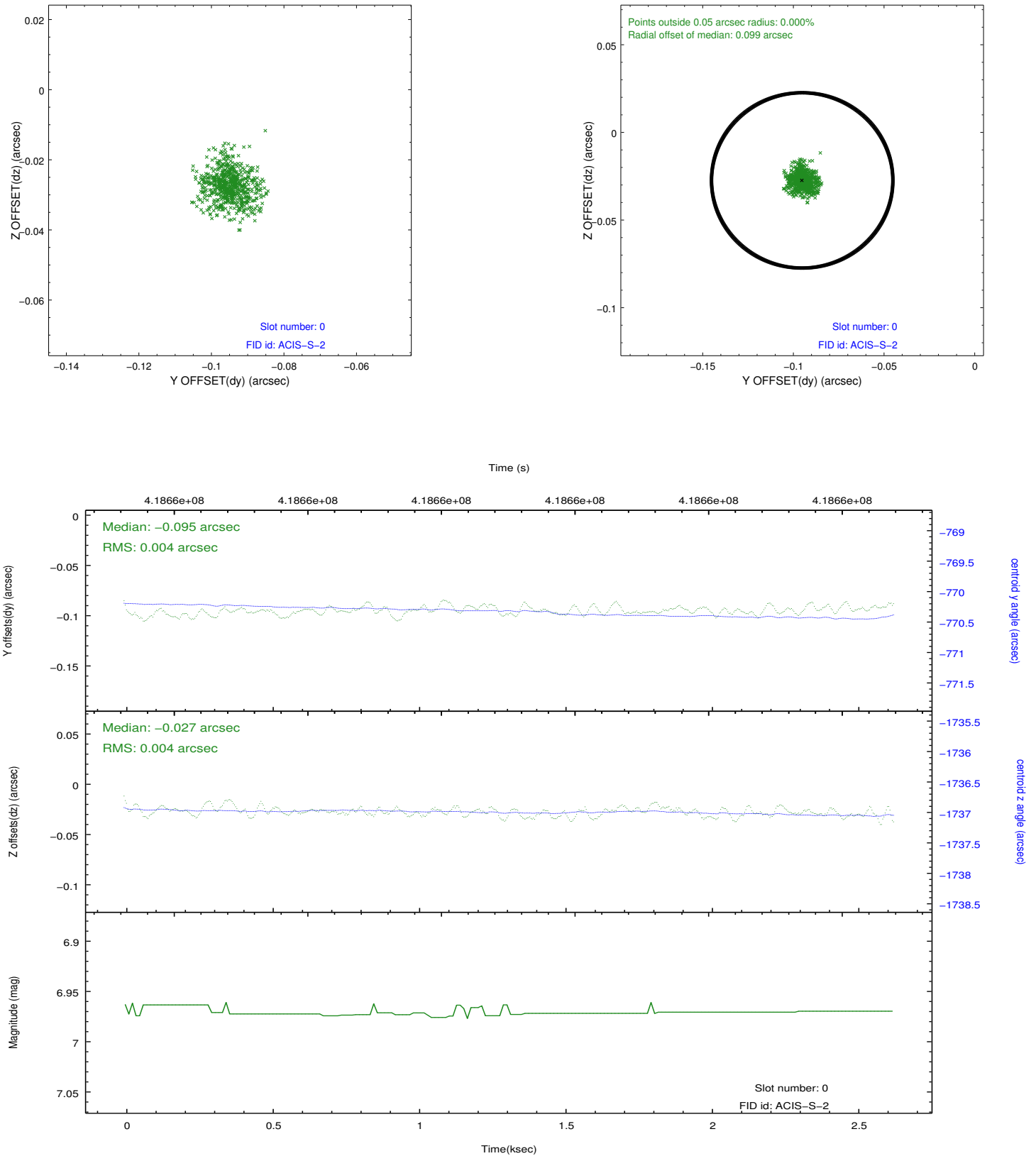


Time (s)

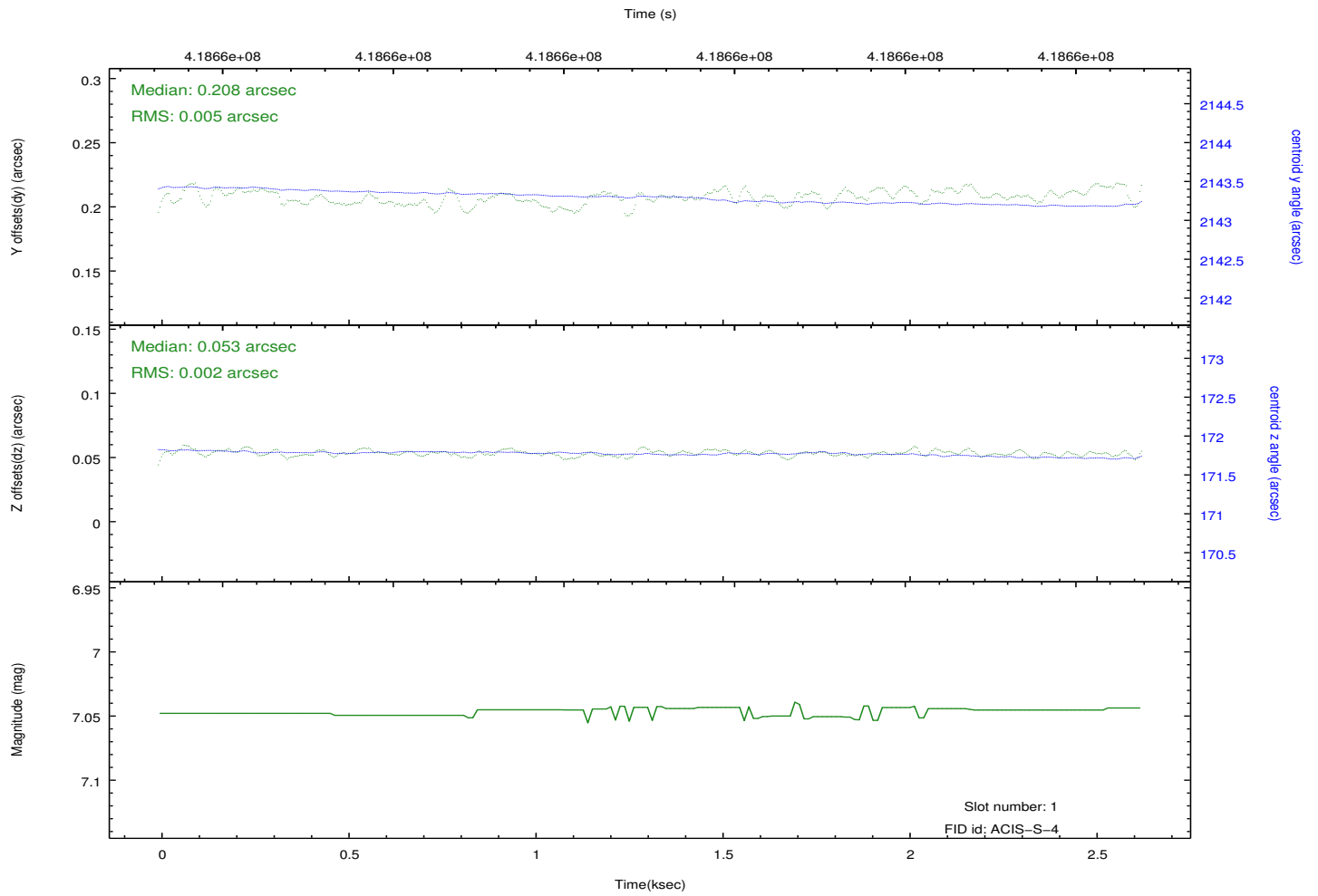
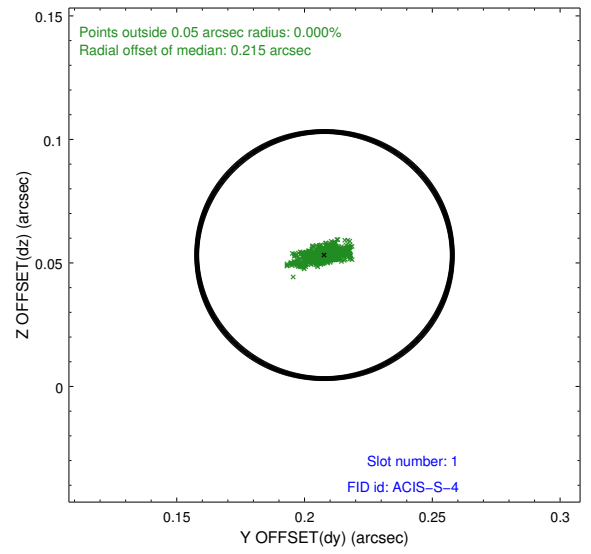
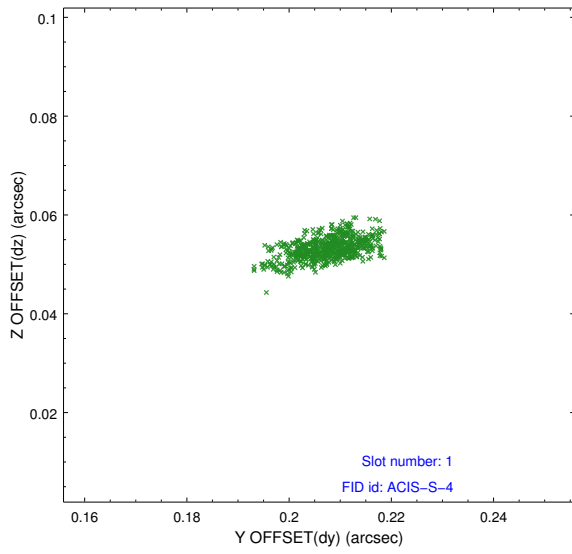


2.5 FID Slots

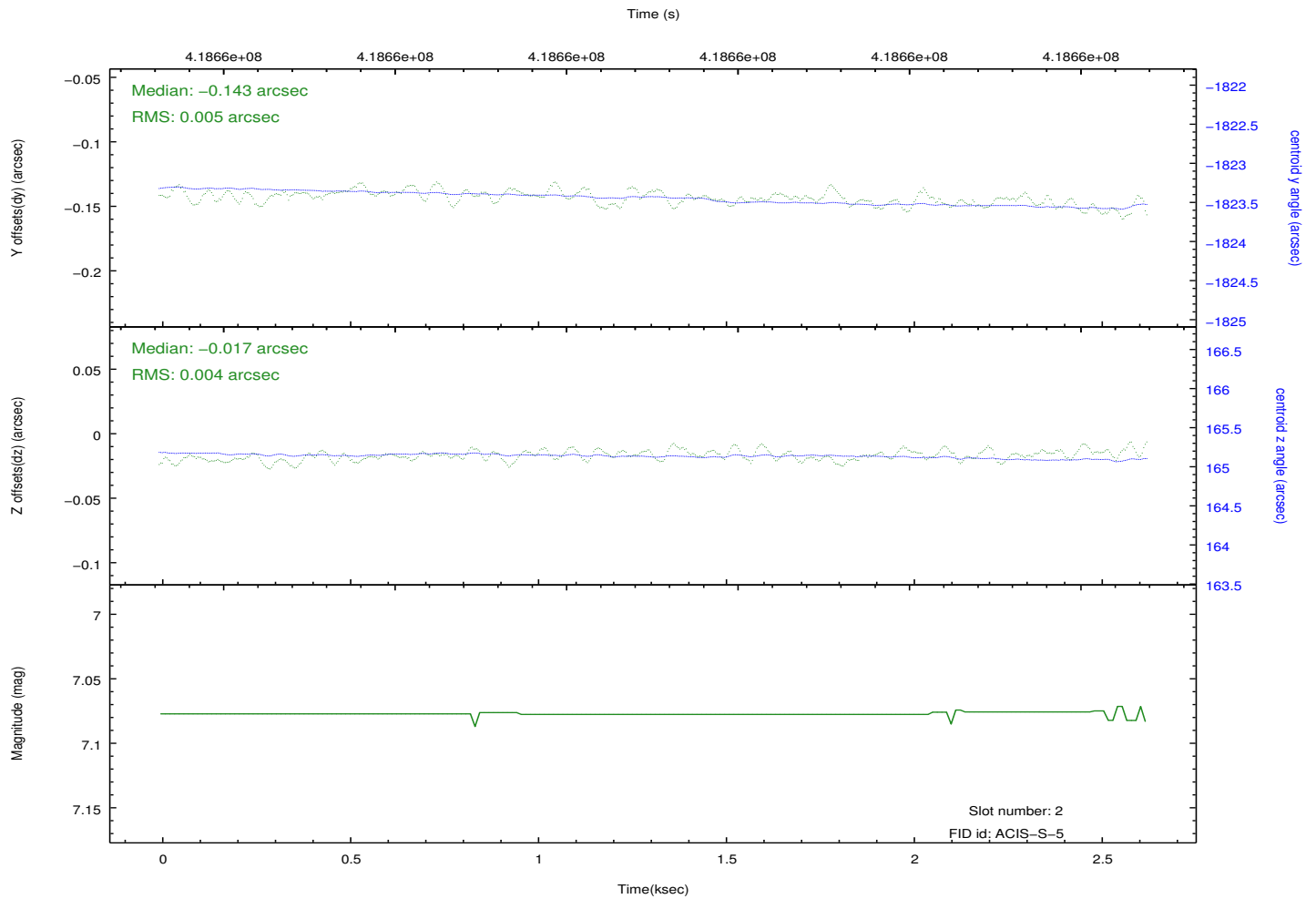
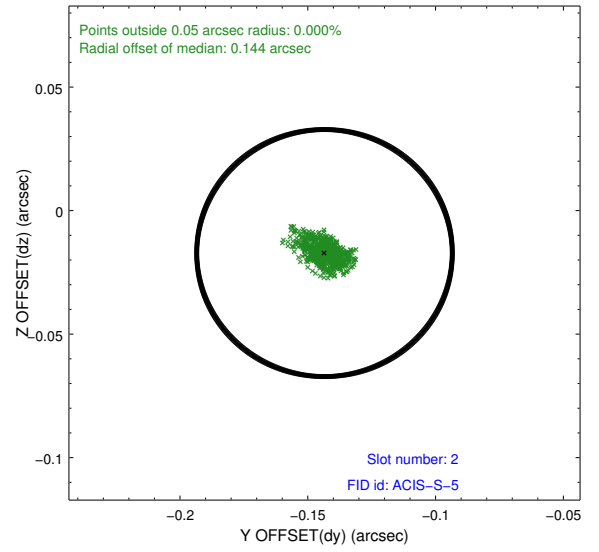
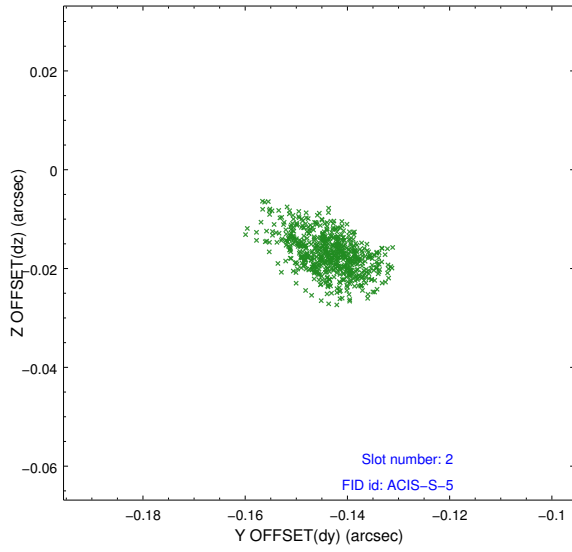
2.5.1 Slot 0



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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0398000156879

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.