

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12943 - L2 Version 2
Chandra X-Ray Center

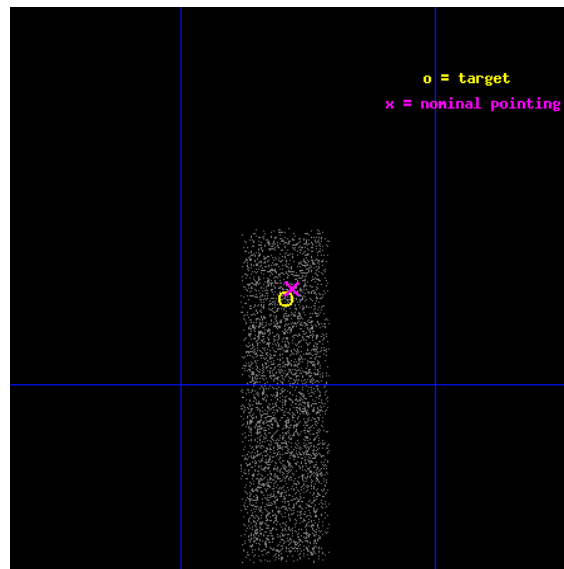
L2 Processing Date : Feb 3 2012

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

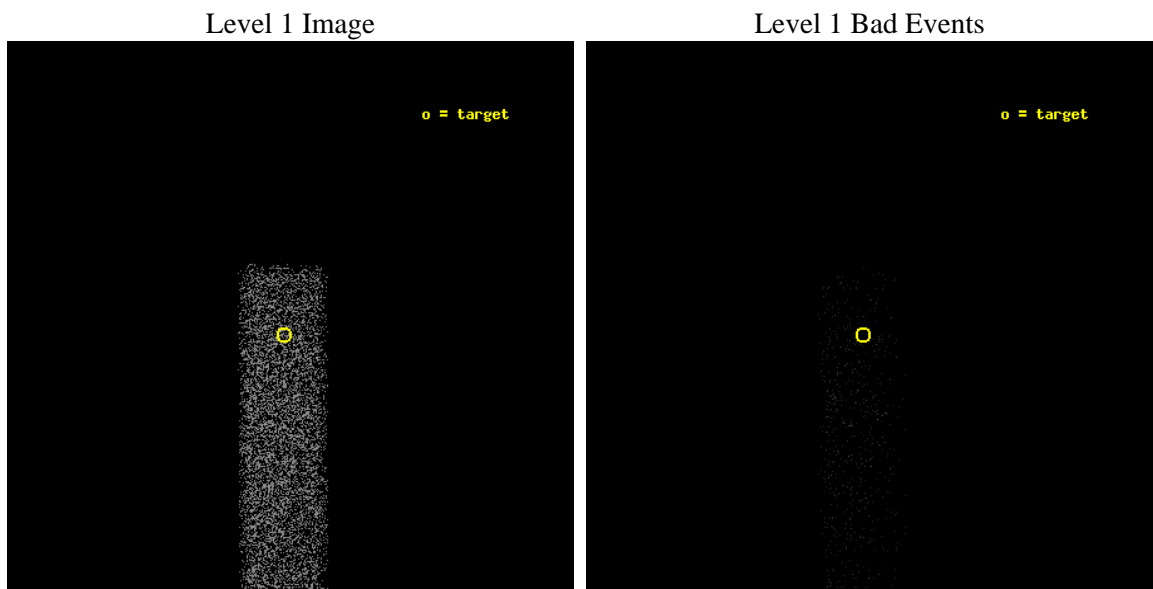
seq_num	900975	Sequence number
obs_id	12943	Observation id
title	Chandra Studies of Unidentified X-ray Sources in the Galactic Bulge	
observer	Dr. Hideyuki Mori	Principal investigator
object	1RXS J172147.6-272746	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	260.448333	Observer's specified target RA [deg]
dec_targ	-27.462778	Observer's specified target Dec [deg]
ra_nom	260.44542818026	Nominal RA [deg]
dec_nom	-27.458725871712	Nominal Dec [deg]
roll_nom	89.827560084499	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4027.2000600696	Sum of GTIs [s]
livetime	3830.6858746976	Livetime [s]
ontime7	4027.2000600696	Sum of GTIs [s]
l2events	4392	Number of level 2 events



2 OBI

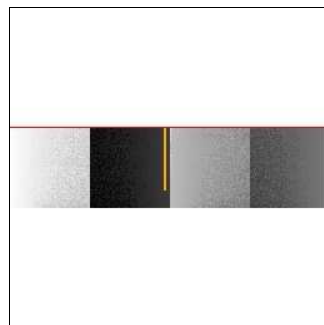
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	4027.2000600696	Sum of GTIs [s]
caldsver	4.4.7	 	ontime7	4027.2000600696	Sum of GTIs [s]
date	2012-02-03T14:13:09	Date and time of file creation	l1events	8949	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

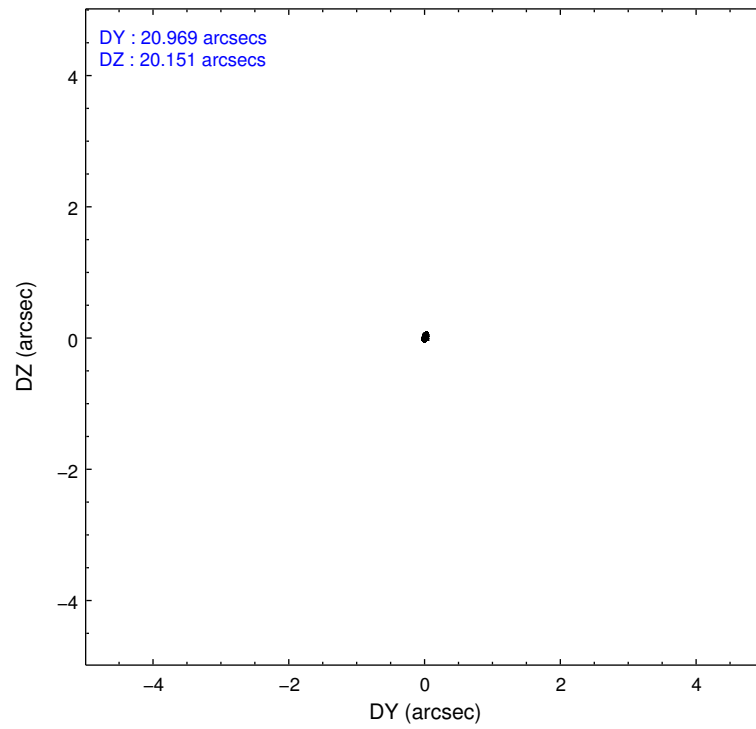
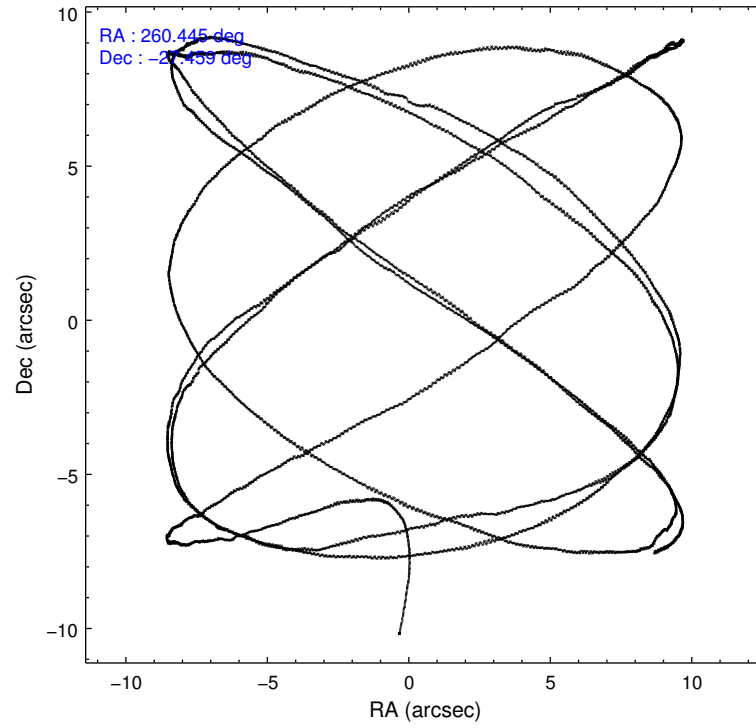
	ccd 7
level 1 events	8949
rejected events	4403
rejected %	49%

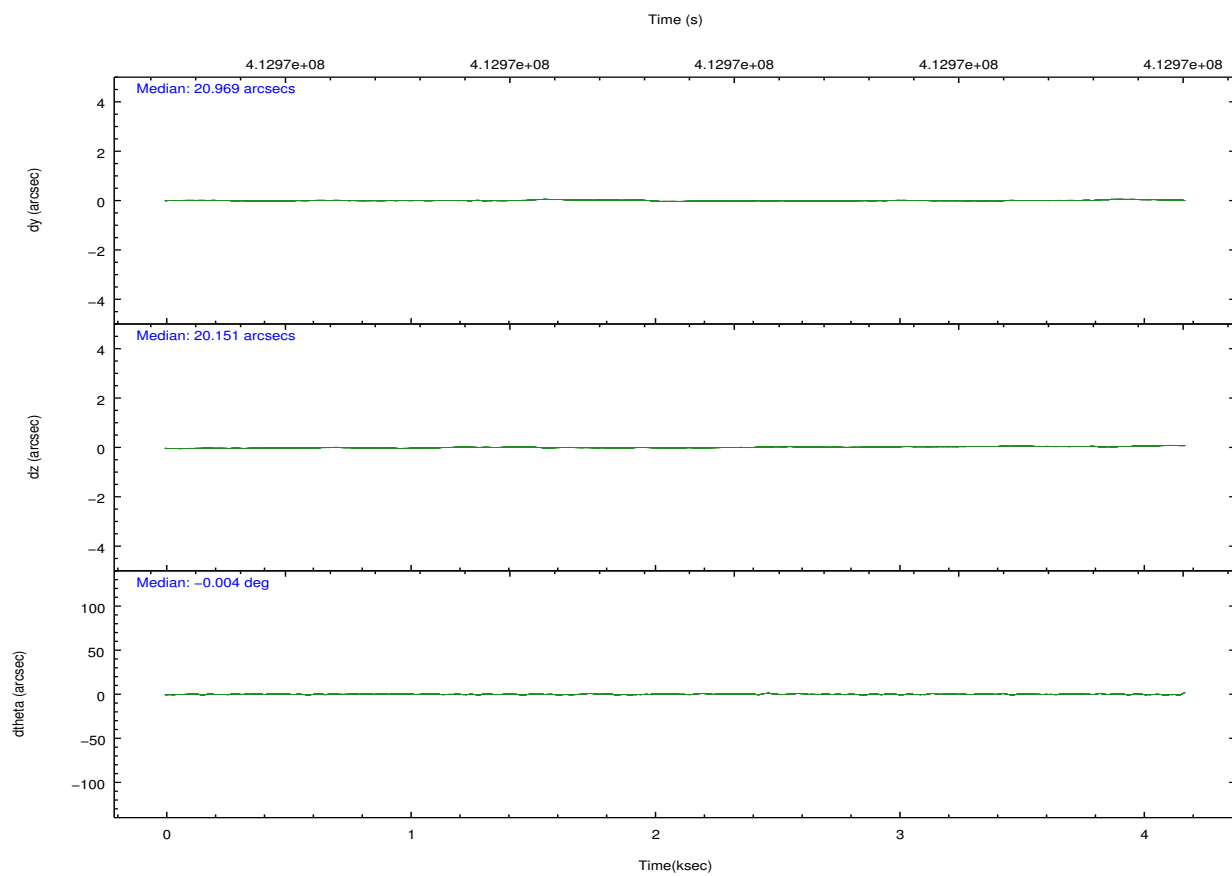
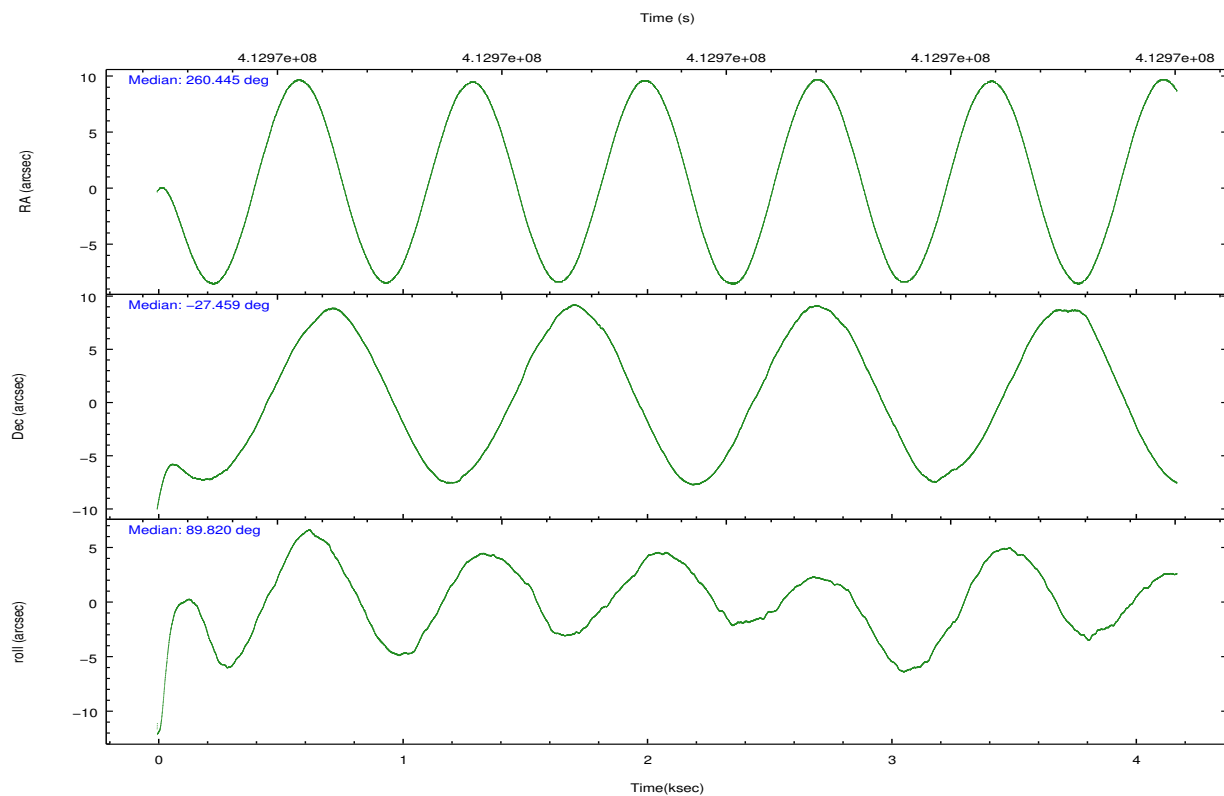
	ccd 7
grade 0 events	490
	5%
grade 1 events	16
	0%
grade 2 events	939
	10%
grade 3 events	556
	6%
grade 4 events	500
	5%
grade 5 events	937
	10%
grade 6 events	2063
	23%
grade 7 events	3448
	38%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	260.461165	260.4454281802622	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-27.482175	-27.45872587171224	Subarray start row	385	385
[deg] Pointing Roll	89.678246	89.82756008449874	Subarray row count	256	256
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.8
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	412966823.184000	412965271.90162			
Observation start date	2011-02-01T16:59:17	2011-02-01T16:34:31			
[s] Observation end time (MET)	412970823.184000	412971235.35193			
Observation end date	2011-02-01T18:05:57	2011-02-01T18:13:55			
Read mode	TIMED	TIMED			

2.3 Aspect



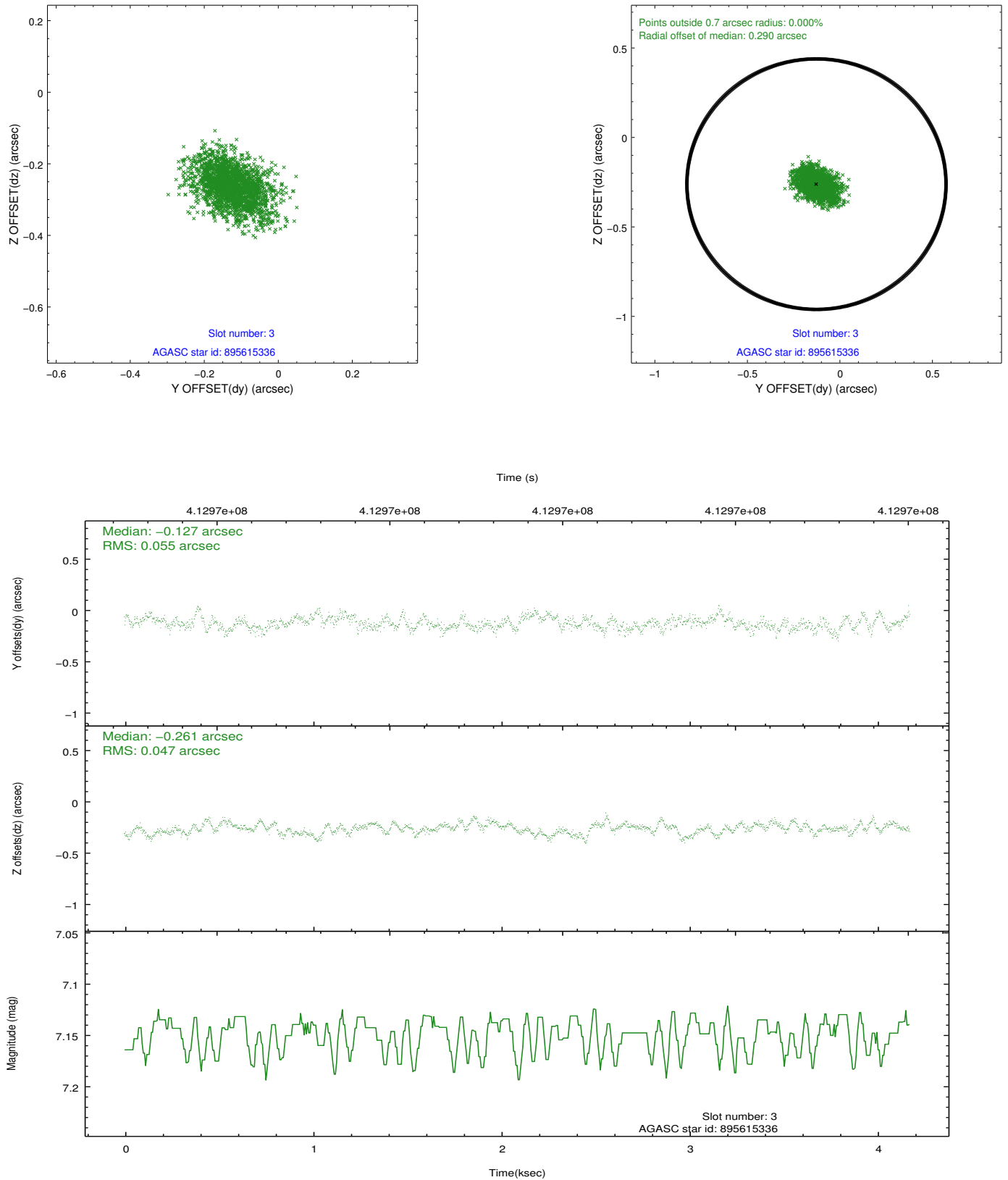


Slot Statistics

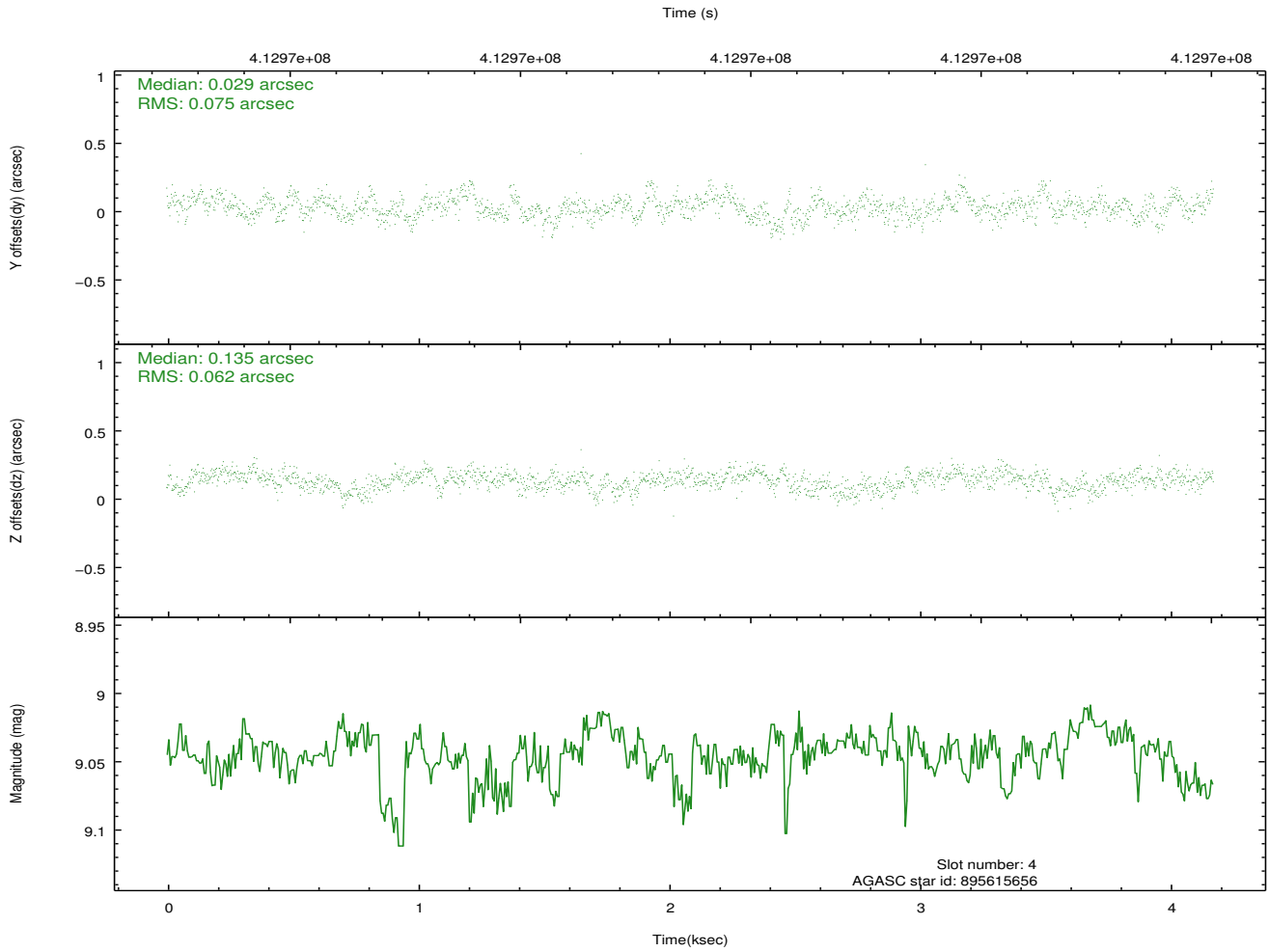
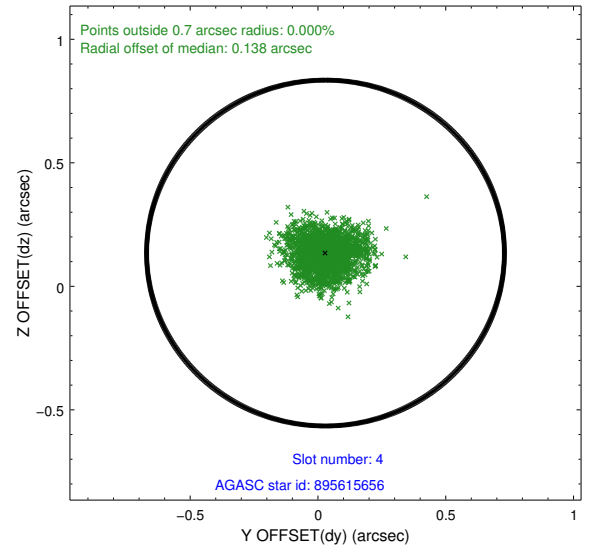
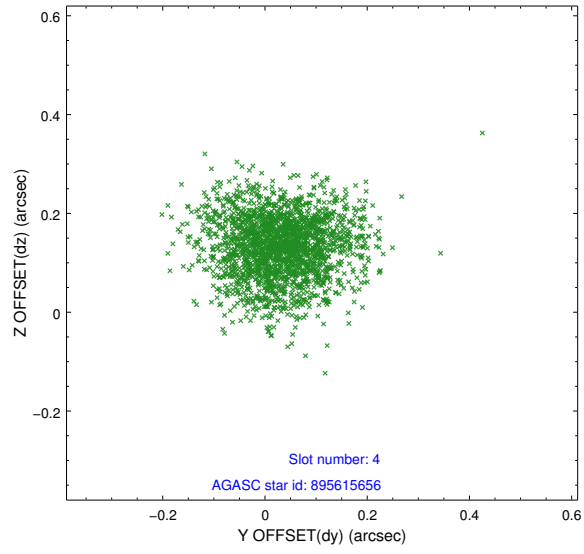
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	1018	-0.101	-0.010	0.006	0.011	0.000000	0.000000	-774.20	-1741.63
1	FID	ACIS-S-4	6.97	1018	0.182	0.051	0.005	0.010	0.000000	0.000000	2138.67	165.36
2	FID	ACIS-S-5	7.00	1018	-0.112	-0.033	0.006	0.012	0.000000	0.000000	-1825.16	160.65
3	GUIDE	895615336	7.15	2037	-0.127	-0.261	0.077	0.131	260.273379	-27.417925	227.93	601.19
4	GUIDE	895615656	9.04	2022	0.029	0.135	0.103	0.168	261.145081	-26.924733	2014.11	-2183.20
5	GUIDE	895616608	8.87	2034	0.187	0.149	0.100	0.161	260.570146	-28.002203	-1868.54	-357.96
6	GUIDE	895616720	8.46	2037	-0.145	0.120	0.069	0.111	260.955260	-27.427442	202.43	-1577.58
7	GUIDE	895617152	8.99	2034	0.054	-0.136	0.096	0.160	260.031297	-27.773123	-1056.99	1362.42

2.4 Star Slots

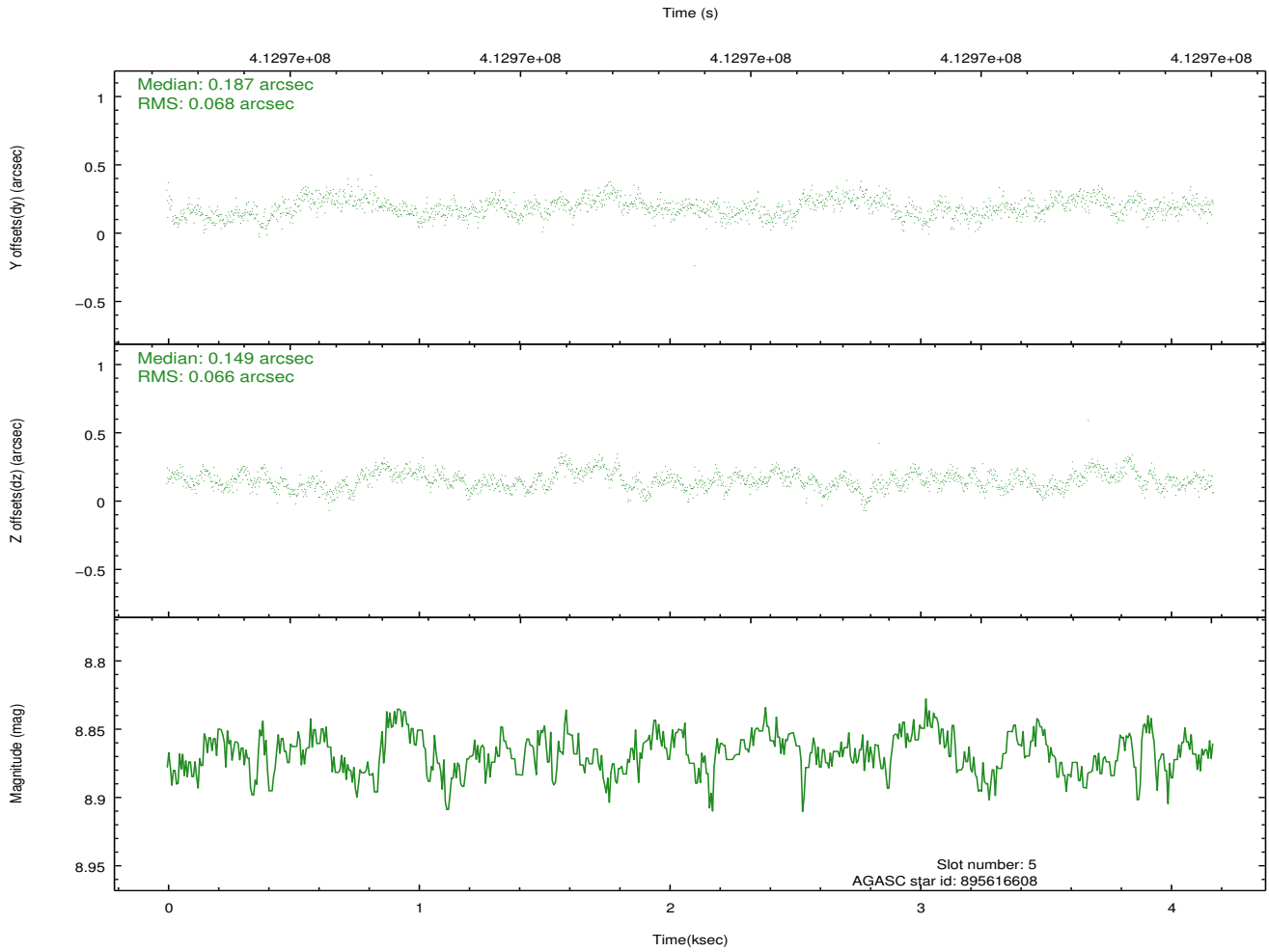
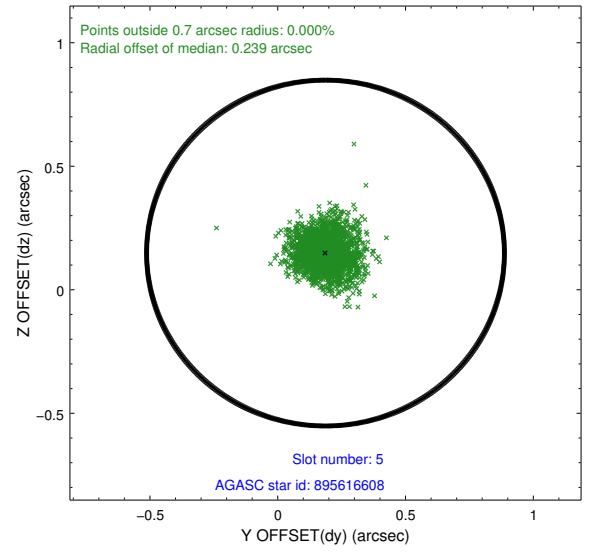
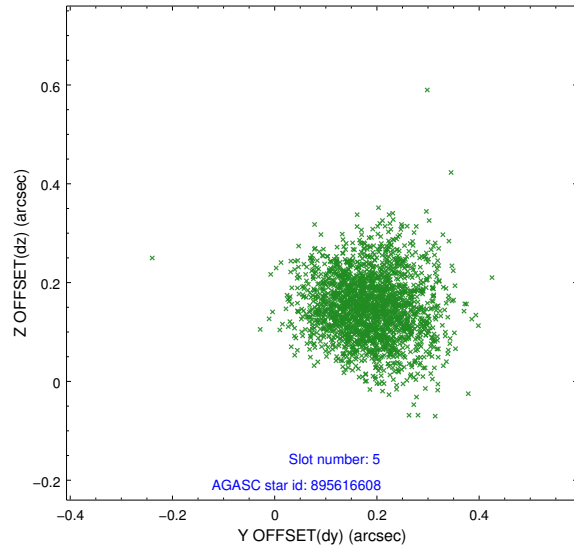
2.4.1 Slot 3



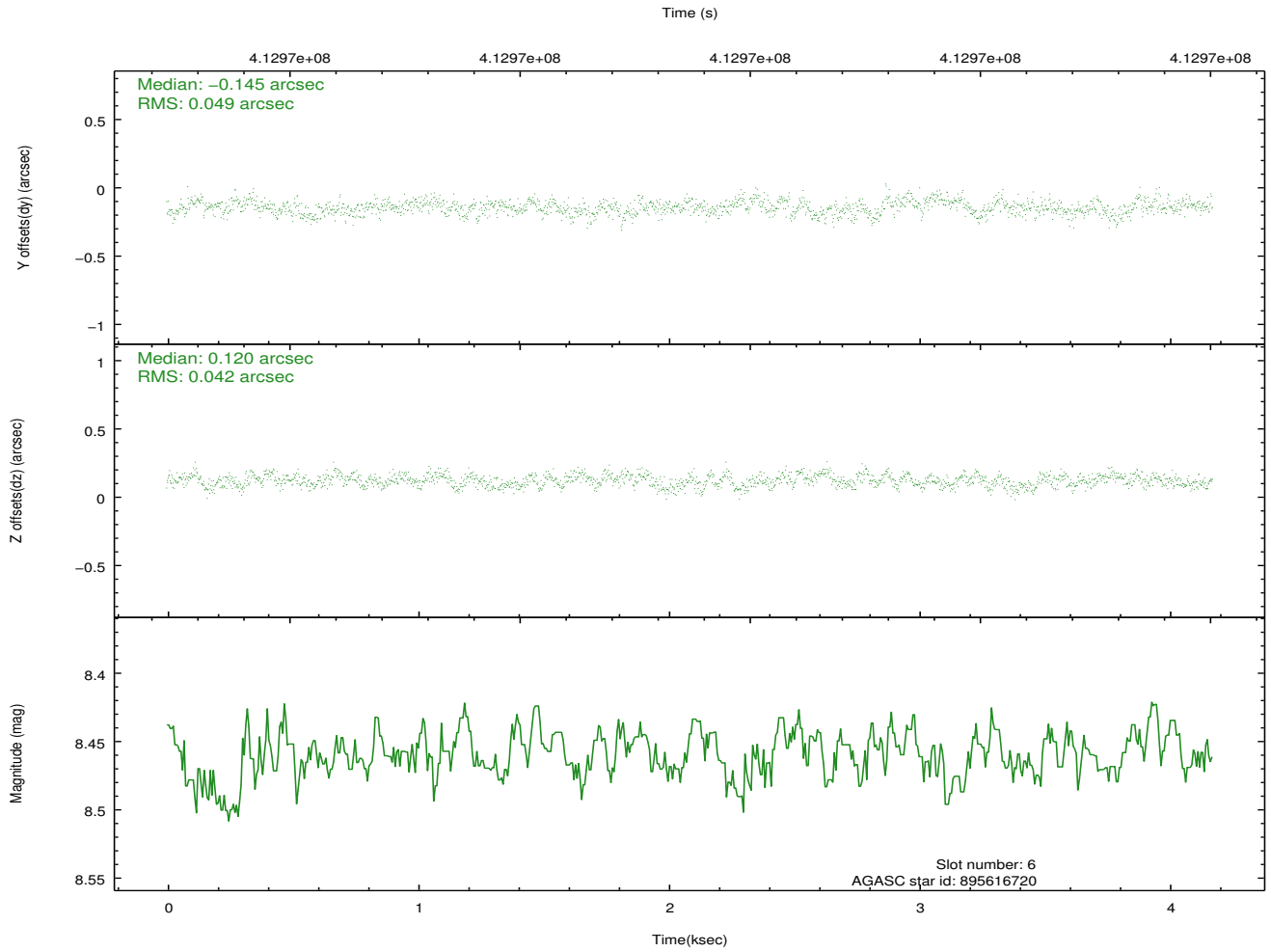
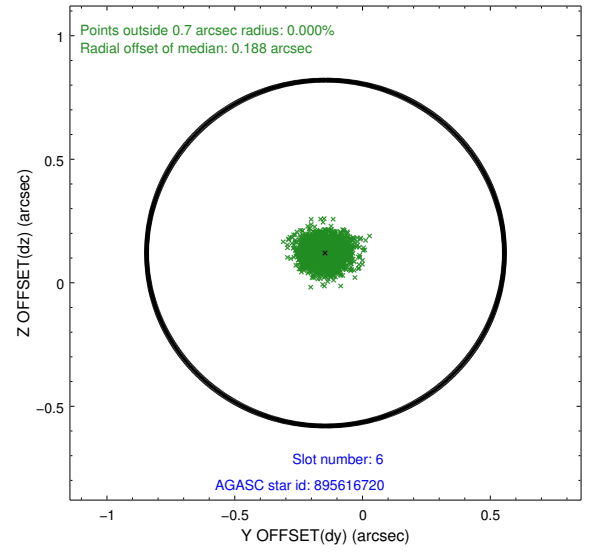
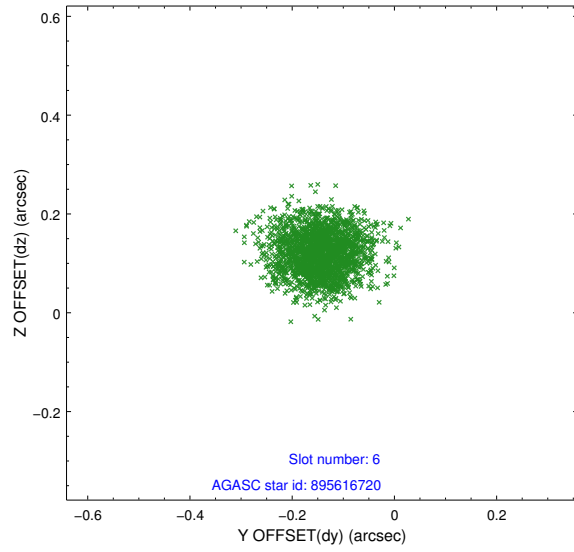
2.4.2 Slot 4



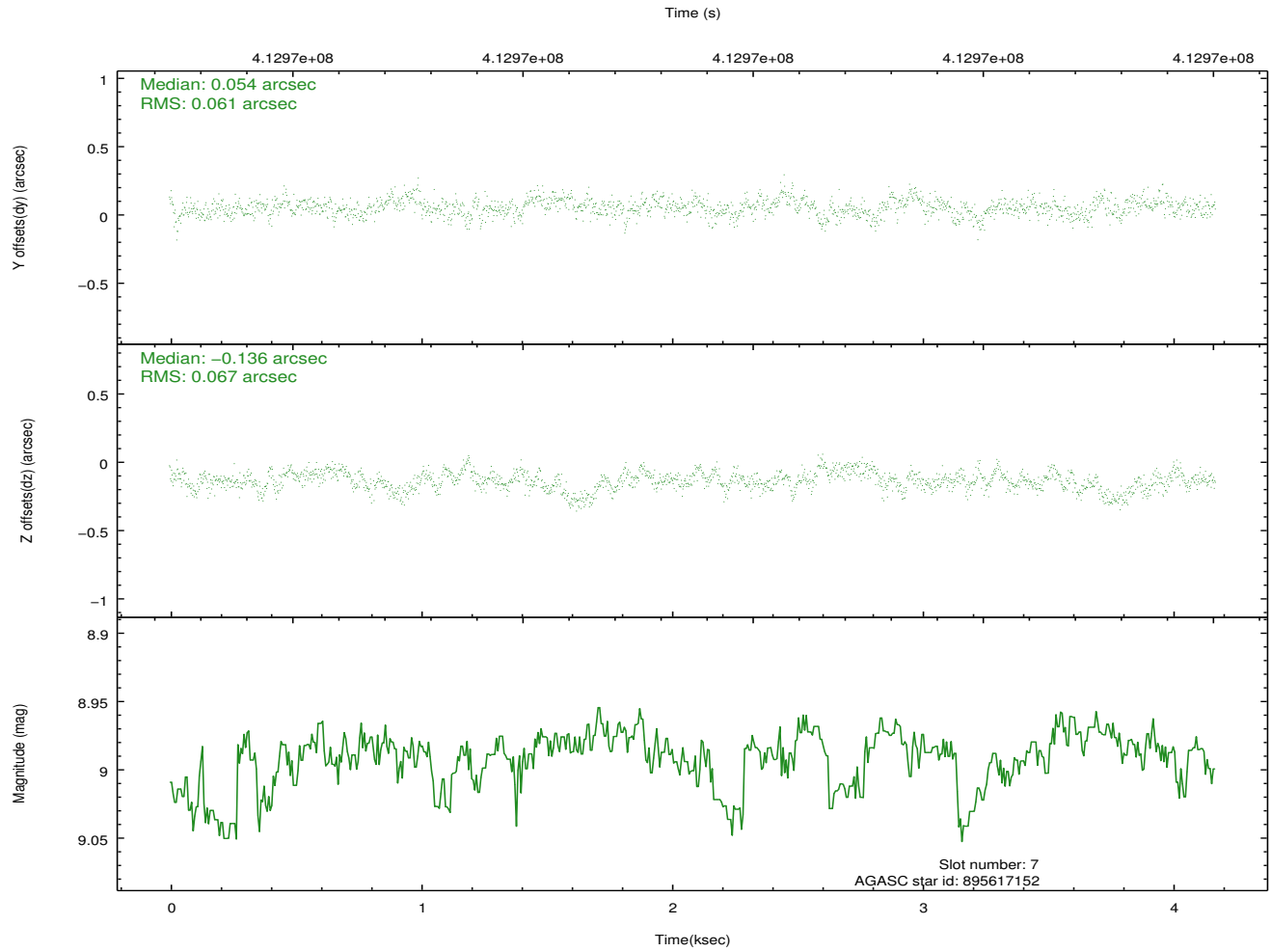
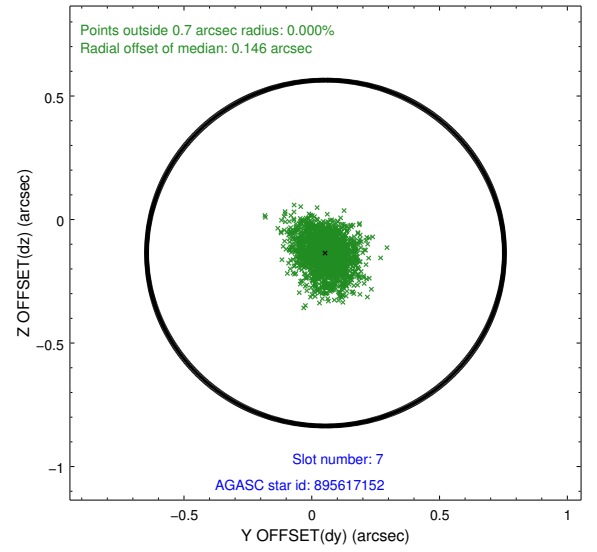
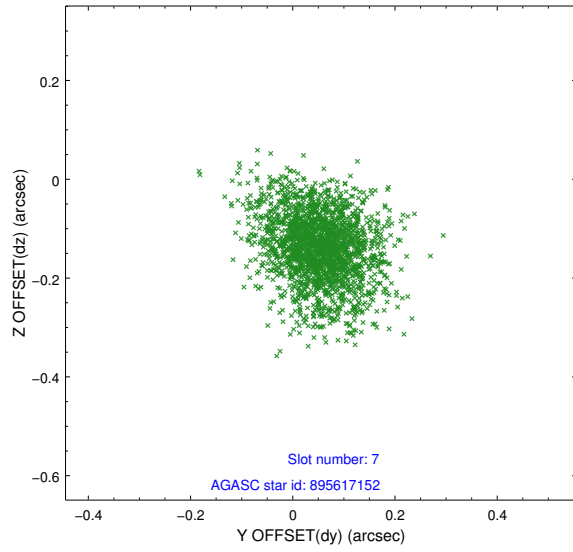
2.4.3 Slot 5



2.4.4 Slot 6

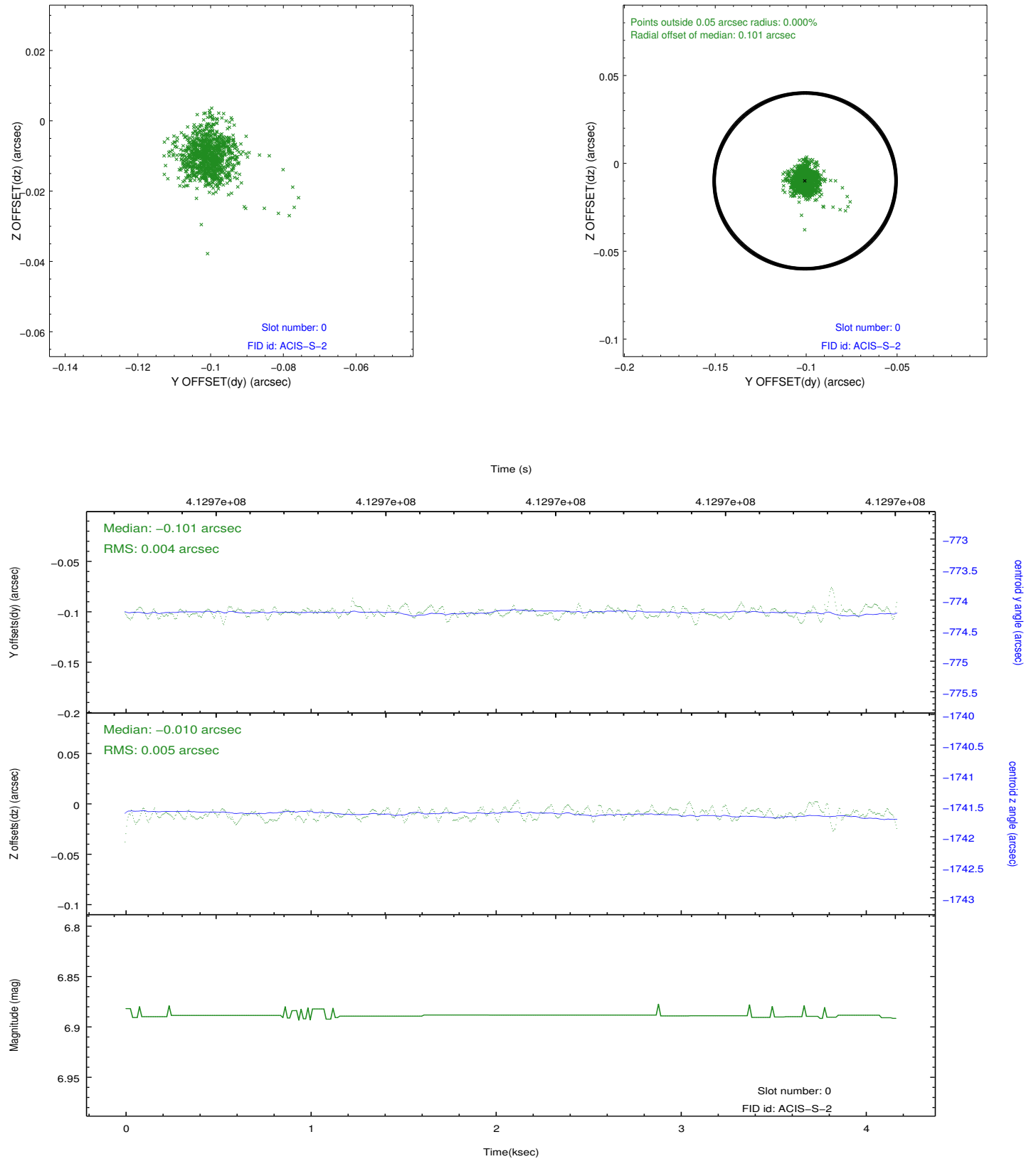


2.4.5 Slot 7

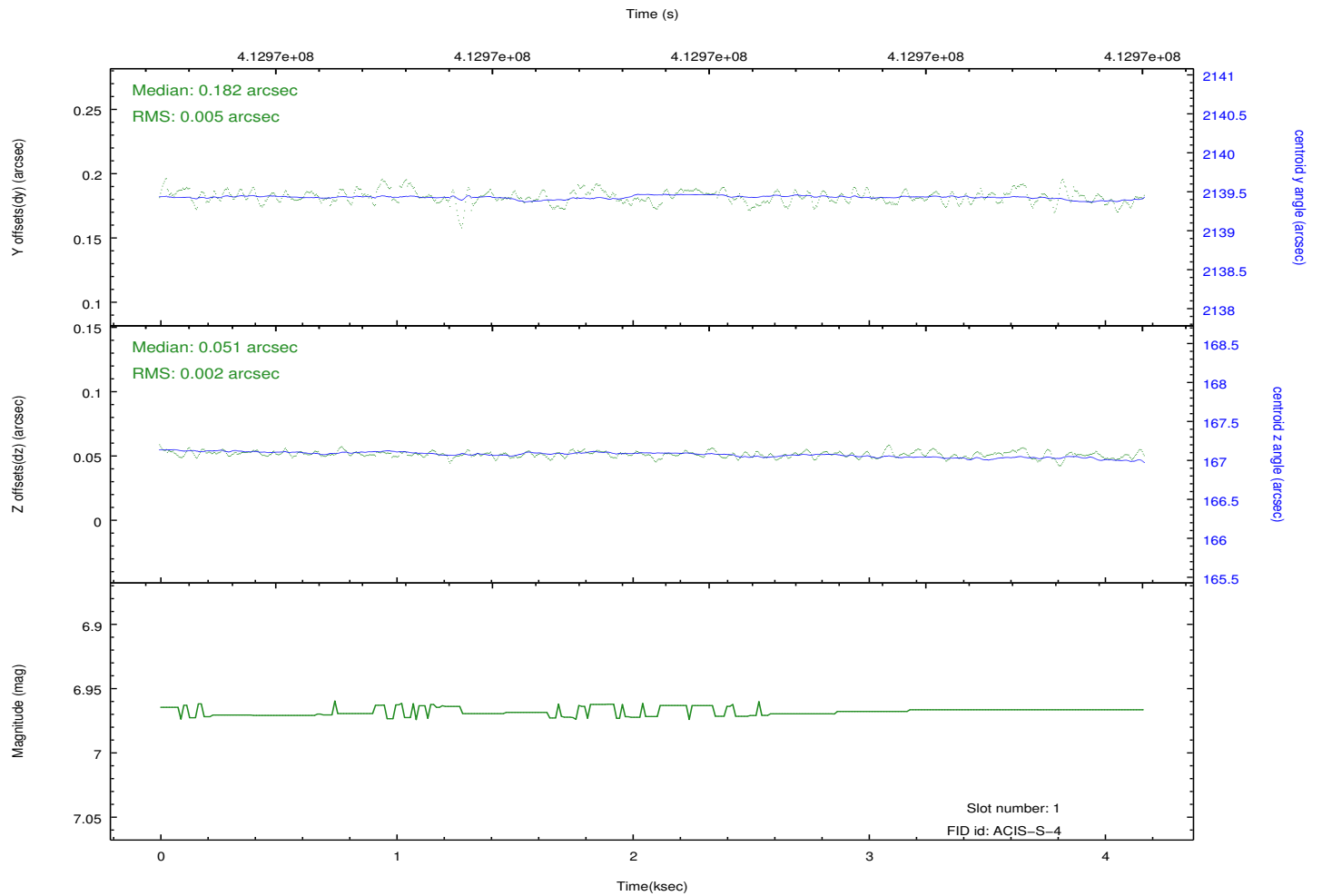
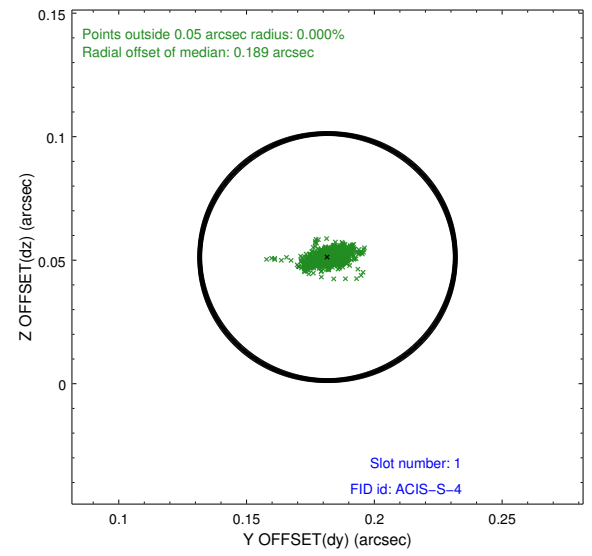
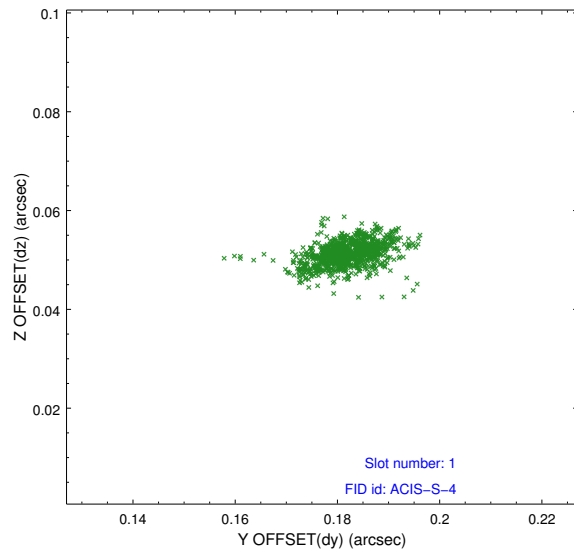


2.5 FID Slots

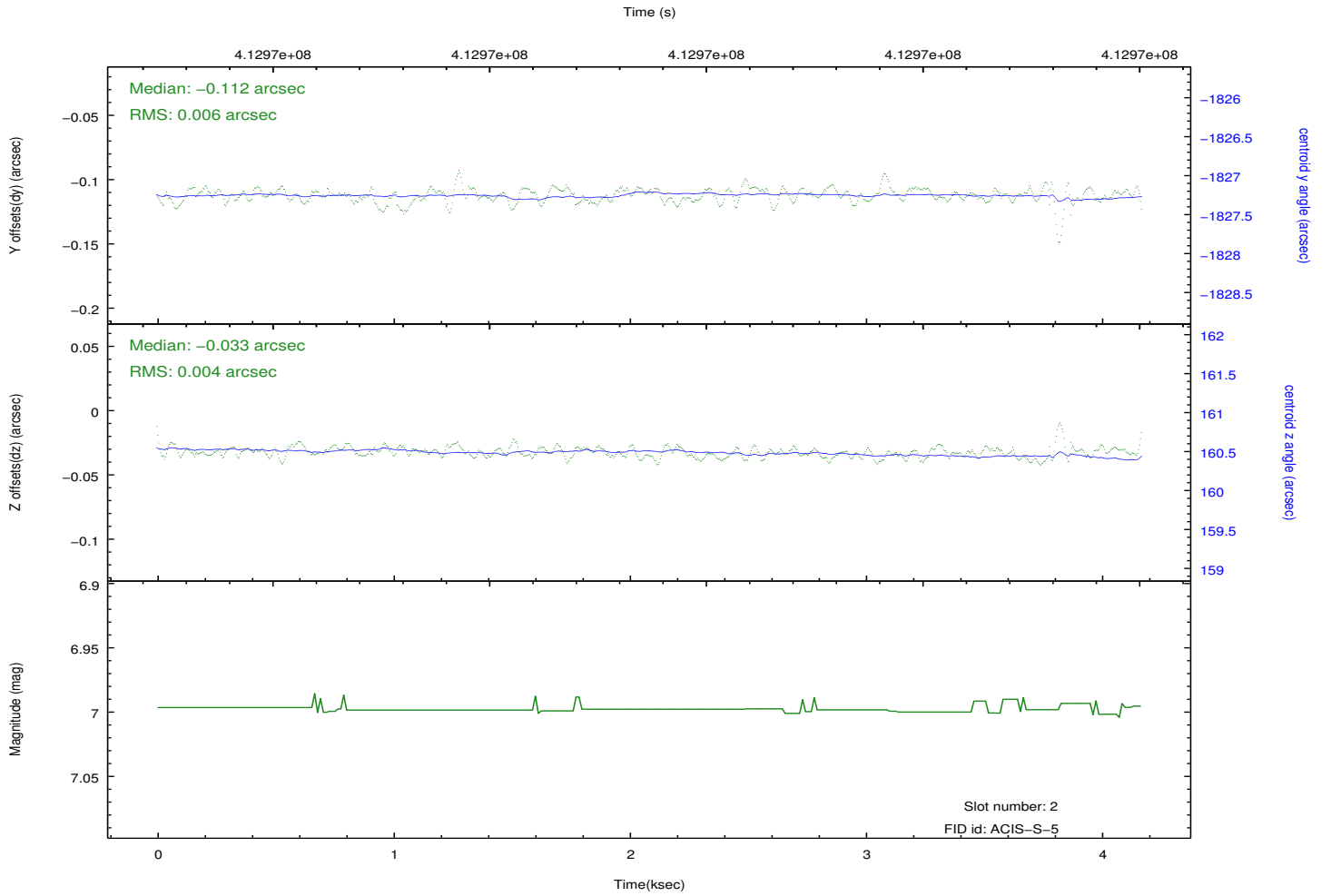
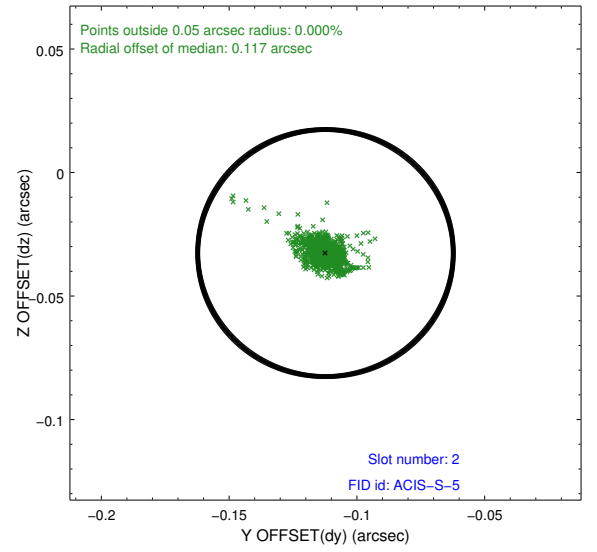
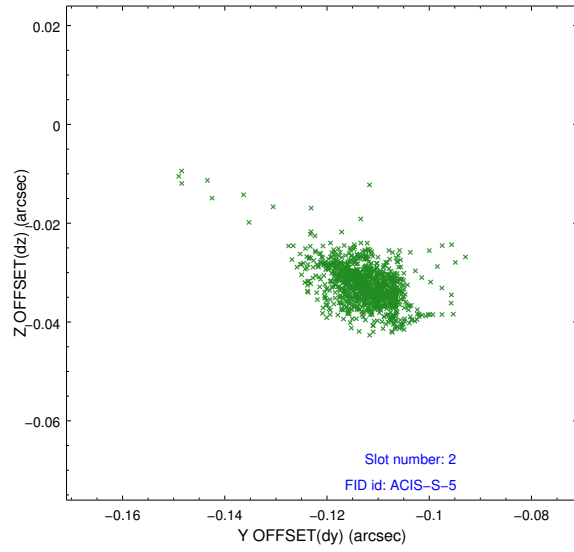
2.5.1 Slot 0



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)	2012.02.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.0272000600696

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.