

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12202 - L2 Version 2
Chandra X-Ray Center

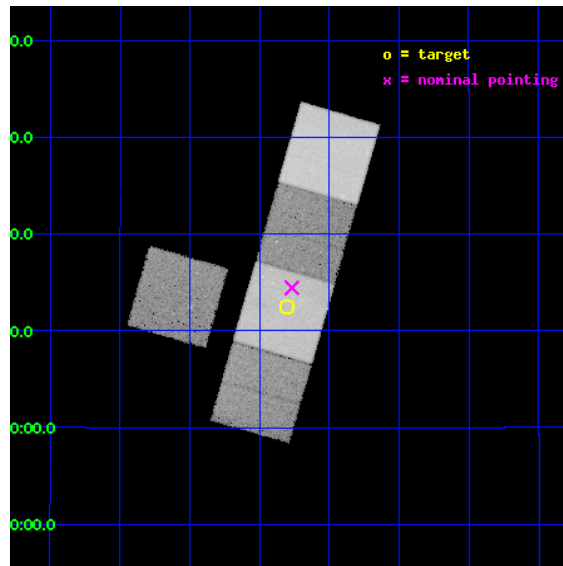
L2 Processing Date : Feb 5 2012

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

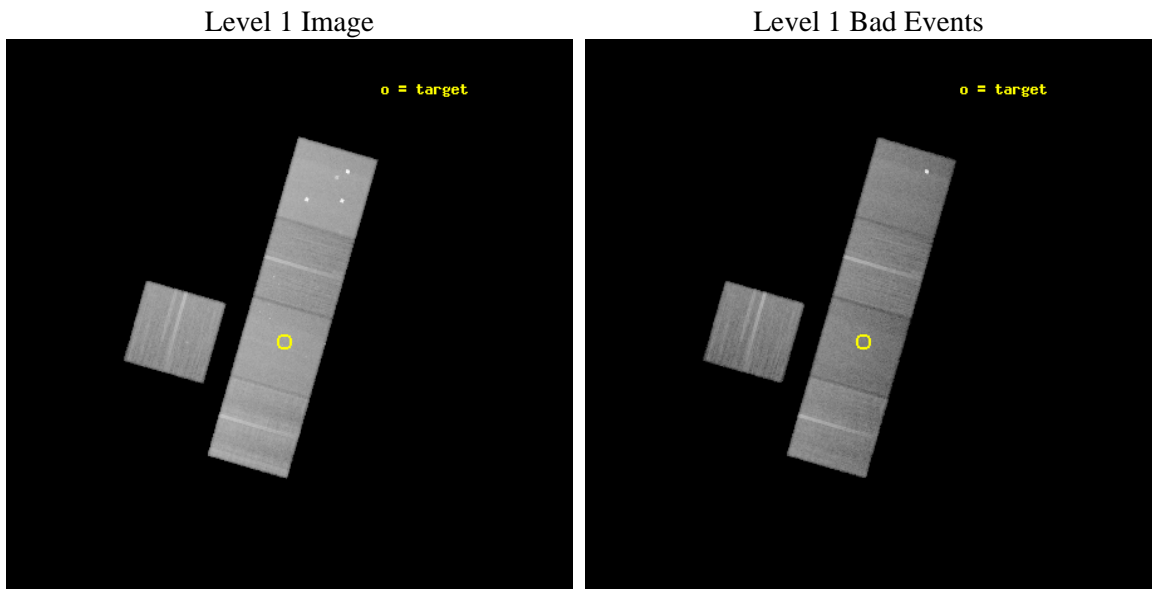
seq_num	800964	Sequence number
obs_id	12202	Observation id
title	Distant Calibration Clusters for eROSITA	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	XMMU J1243+1313 & J1243+1311	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	190.825	Observer's specified target RA [deg]
dec_targ	13.208333	Observer's specified target Dec [deg]
ra_nom	190.81720807397	Nominal RA [deg]
dec_nom	13.240782771694	Nominal Dec [deg]
roll_nom	106.08018905013	Nominal Roll [deg]
revision	2	Processing version of data
ontime	37048.100284934	Sum of GTIs [s]
livetime	36564.039580297	Livetime [s]
ontime3	37044.959254563	Sum of GTIs [s]
ontime5	37048.100284934	Sum of GTIs [s]
ontime6	37048.100284934	Sum of GTIs [s]
ontime7	37048.100284934	Sum of GTIs [s]
ontime8	37048.100284934	Sum of GTIs [s]
l2events	406549	Number of level 2 events



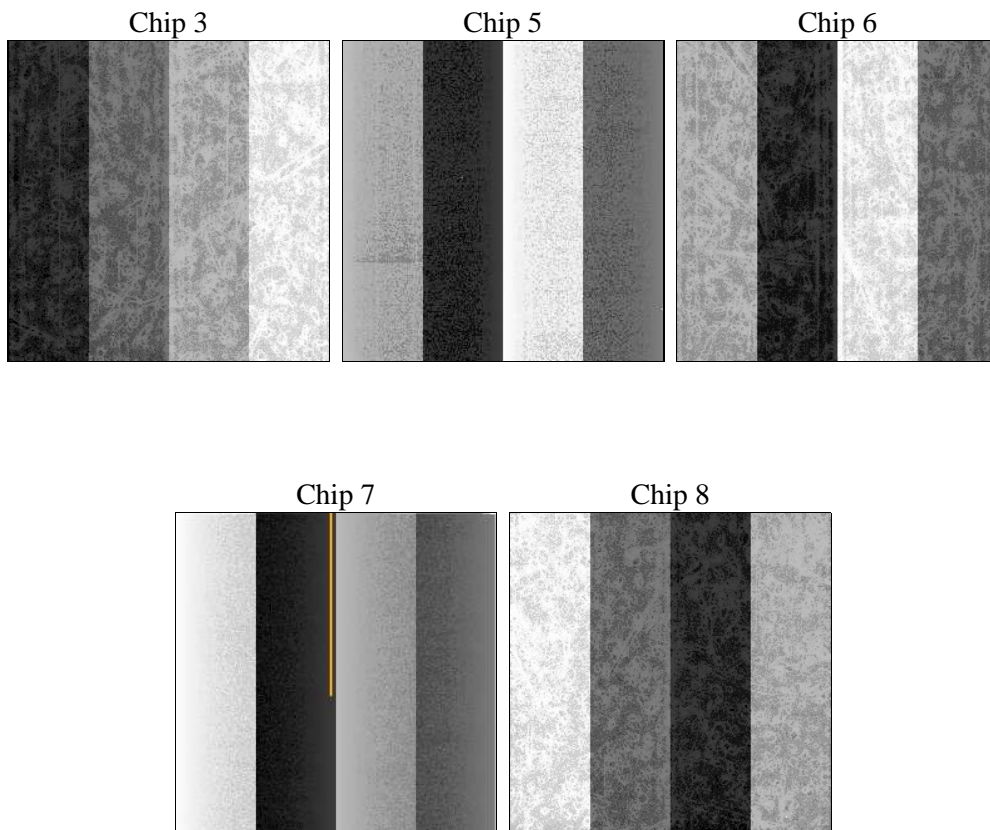
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	37012.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	37048.100284934	Sum of GTIs [s]
caldsver	4.4.7	 	ontime3	37044.959254563	Sum of GTIs [s]
date	2012-02-05T15:28:57	Date and time of file creation	ontime5	37048.100284934	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	37048.100284934	Sum of GTIs [s]
			ontime7	37048.100284934	Sum of GTIs [s]
			ontime8	37048.100284934	Sum of GTIs [s]
			l1events	1596811	Number of level 1 events

2.1.4 Events

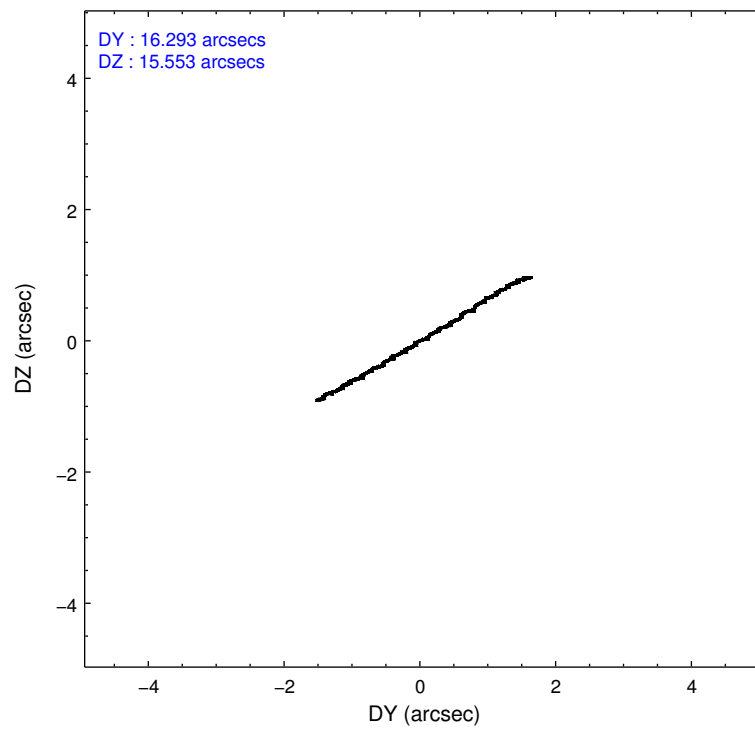
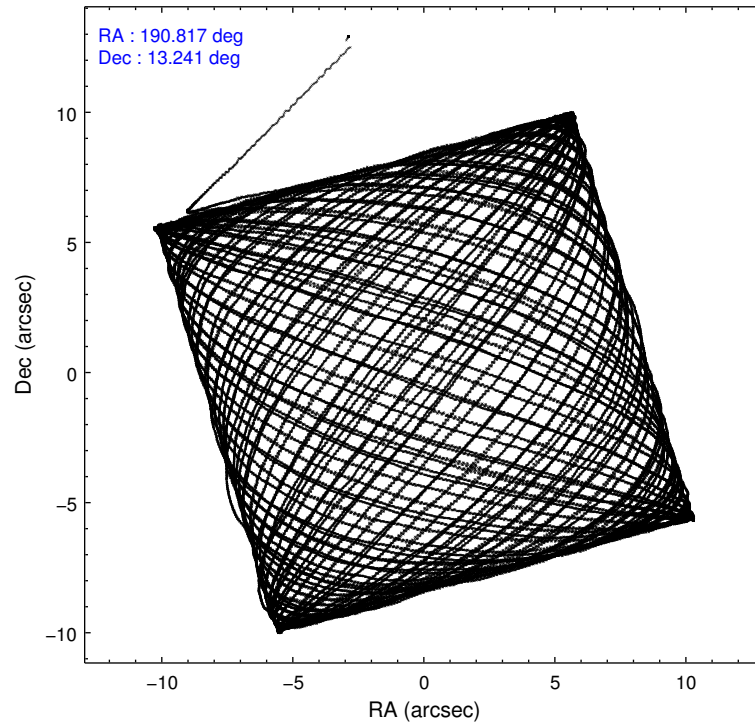
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	247935	423541	263419	326991	334925
rejected events	221118	210832	233026	180801	248707
rejected %	89%	49%	88%	55%	74%

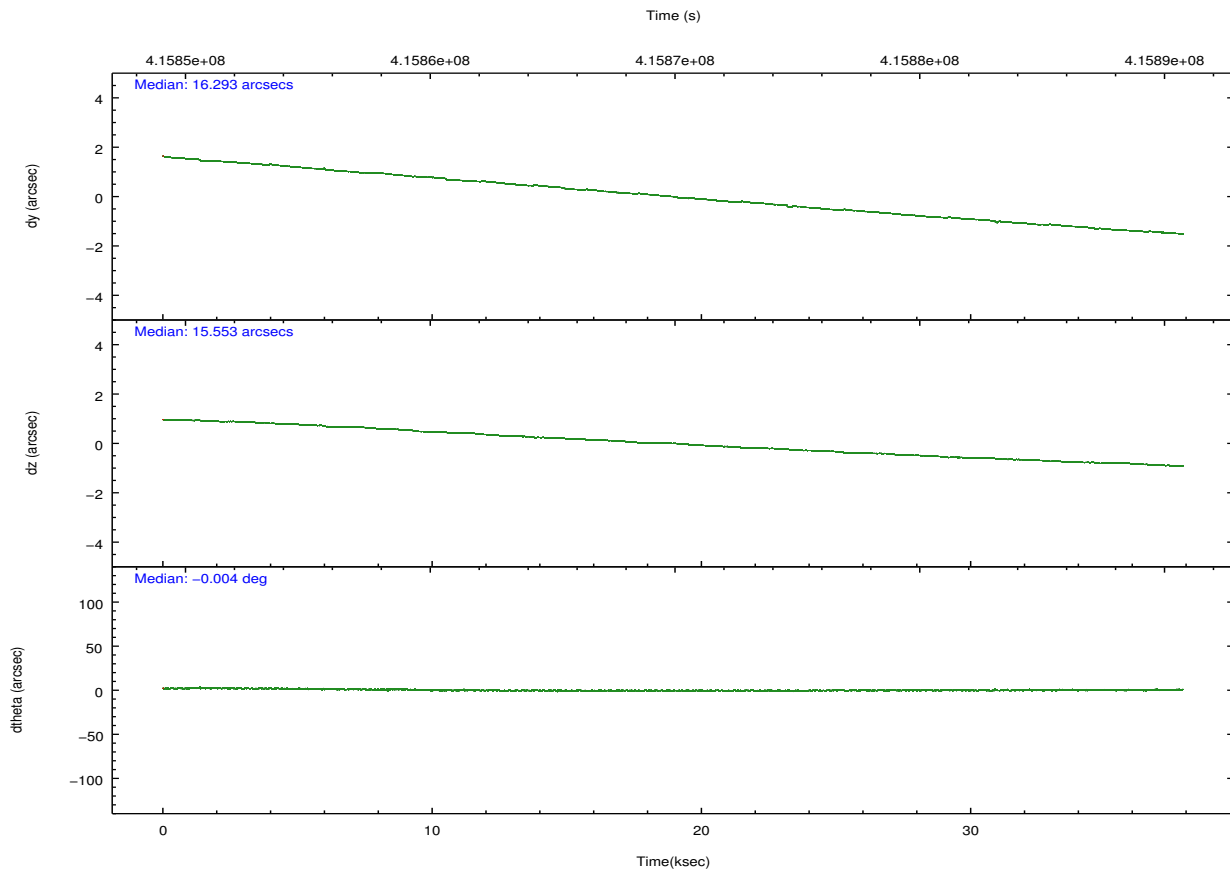
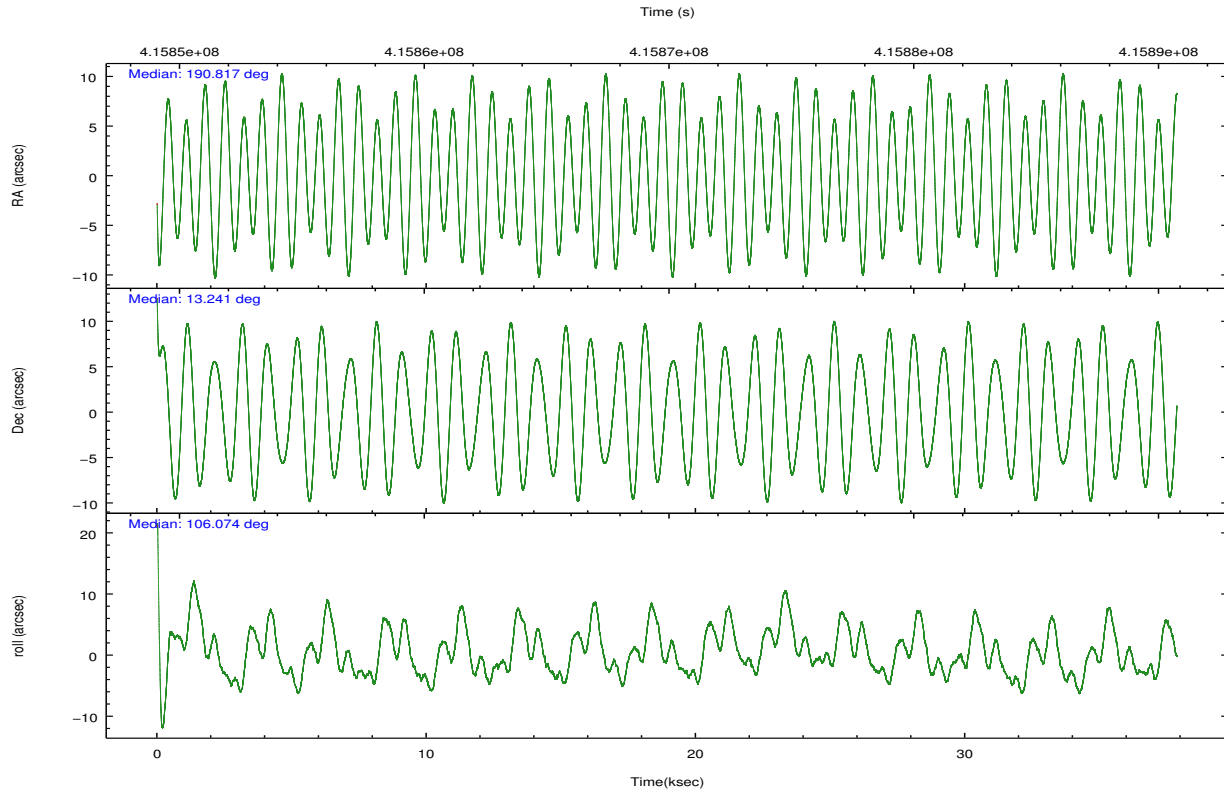
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	9630	33533	10904	13905	24865
	3%	7%	4%	4%	7%
grade 1 events	141	941	123	368	267
	0%	0%	0%	0%	0%
grade 2 events	5928	61620	6862	29857	20345
	2%	14%	2%	9%	6%
grade 3 events	2947	7530	3027	12786	9351
	1%	1%	1%	3%	2%
grade 4 events	2925	7246	3039	12986	8673
	1%	1%	1%	3%	2%
grade 5 events	11894	31684	12116	33699	17459
	4%	7%	4%	10%	5%
grade 6 events	5391	102815	6569	76688	22996
	2%	24%	2%	23%	6%
grade 7 events	209079	178172	220779	146702	230969
	84%	42%	83%	44%	68%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	190.837708	190.8172080739735	Subarray requested	NONE	NONE
[deg] Pointing Dec	13.222087	13.24078277169396	Alternating exposures requested	N	N
[deg] Pointing Roll	105.918859	106.0801890501337	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	415851846.184000	415850226.80096			
Observation start date	2011-03-07T02:23:00	2011-03-07T01:57:06			
[s] Observation end time (MET)	415888858.184000	415889475.07799			
Observation end date	2011-03-07T12:39:52	2011-03-07T12:51:15			
Read mode	TIMED	TIMED			

2.3 Aspect



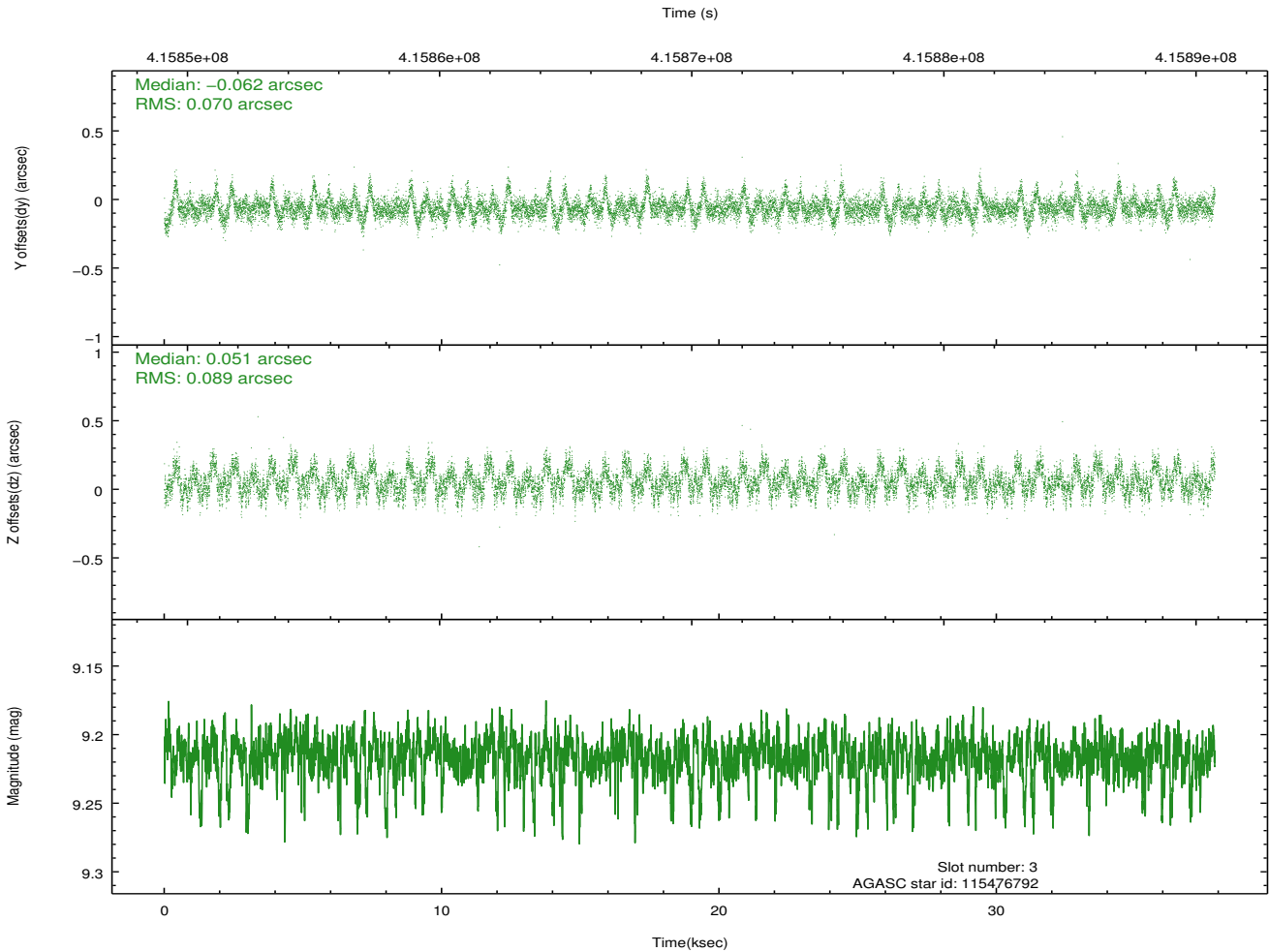
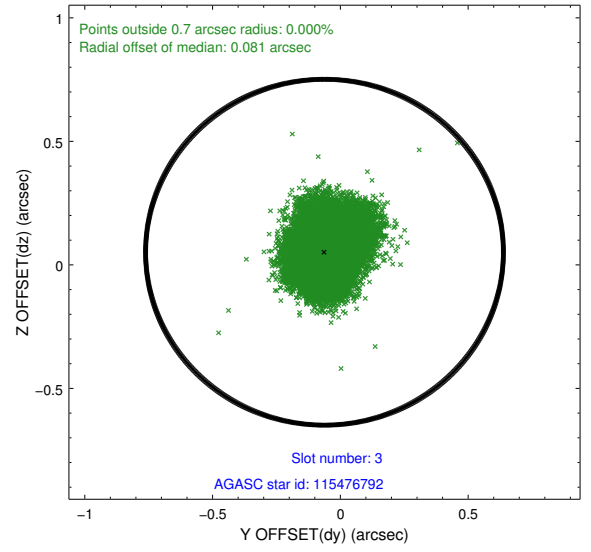
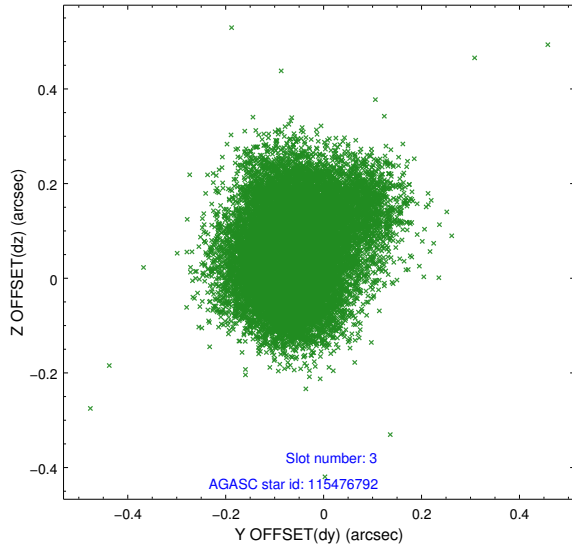


Slot Statistics

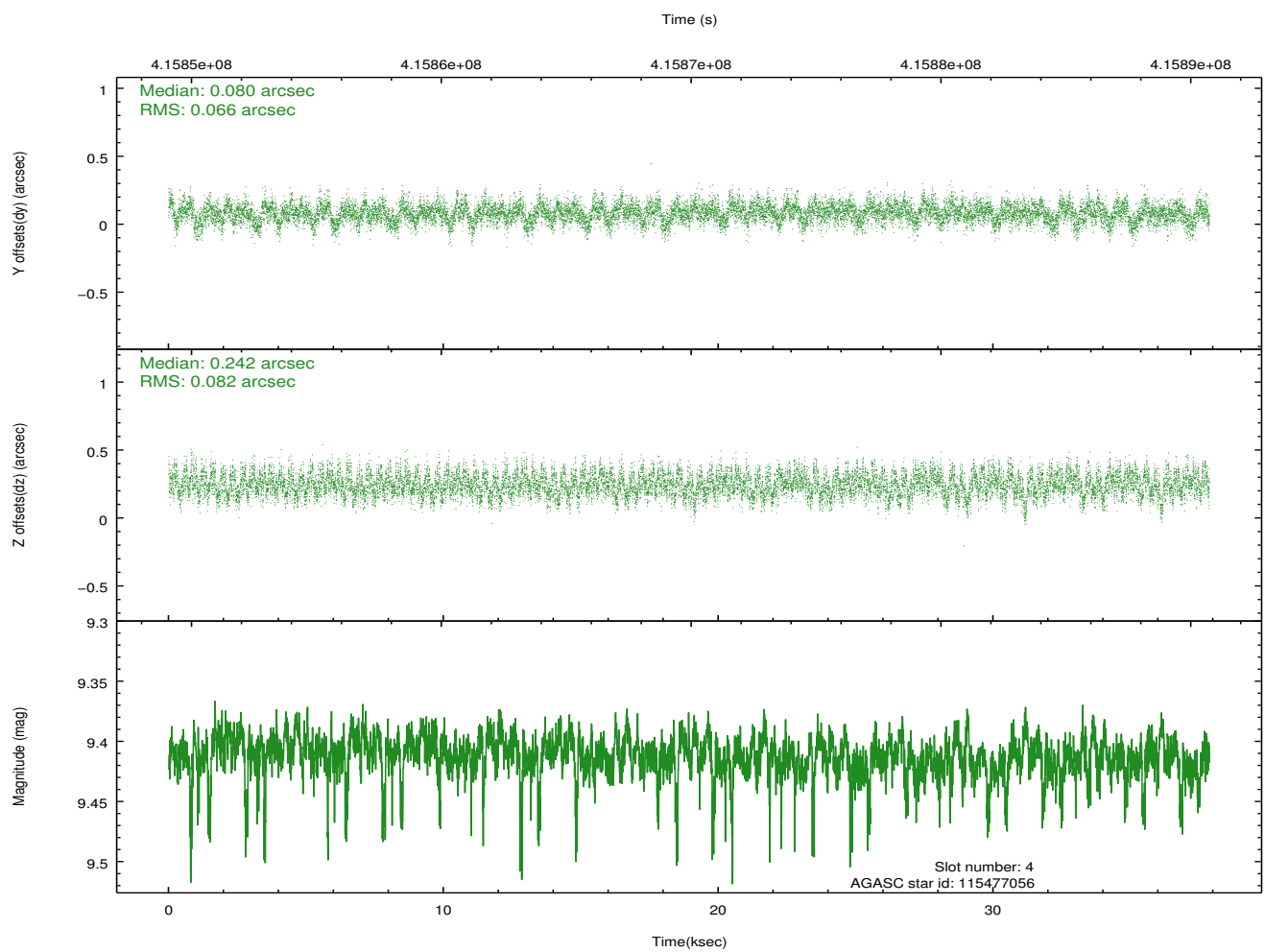
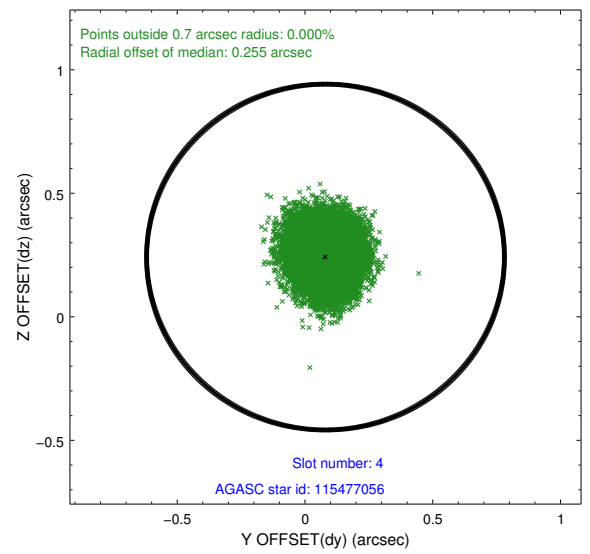
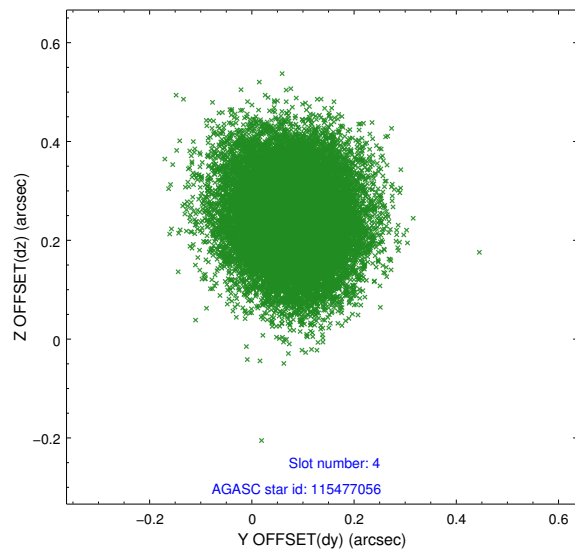
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	9238	-0.100	-0.023	0.016	0.023	0.000000	0.000000	-769.39	-1736.98
1	FID	ACIS-S-4	7.01	9234	0.199	0.055	0.016	0.031	0.000000	0.000000	2144.16	171.57
2	FID	ACIS-S-5	7.04	9238	-0.127	-0.023	0.022	0.052	0.000000	0.000000	-1822.25	165.17
3	GUIDE	115476792	9.22	18456	-0.062	0.051	0.121	0.197	190.933104	13.143247	-364.44	-243.41
4	GUIDE	115477056	9.41	18456	0.080	0.242	0.113	0.179	191.137929	12.866912	-1517.47	-662.30
5	GUIDE	115477104	9.91	18443	0.091	0.111	0.141	0.234	191.351540	12.923156	-1527.09	-1438.89
6	GUIDE	115477200	8.65	18467	-0.096	-0.098	0.095	0.148	191.140191	13.348570	148.00	-1143.60
7	GUIDE	115477424	9.22	18456	-0.017	-0.320	0.100	0.166	190.783230	12.743104	-1605.61	656.89

2.4 Star Slots

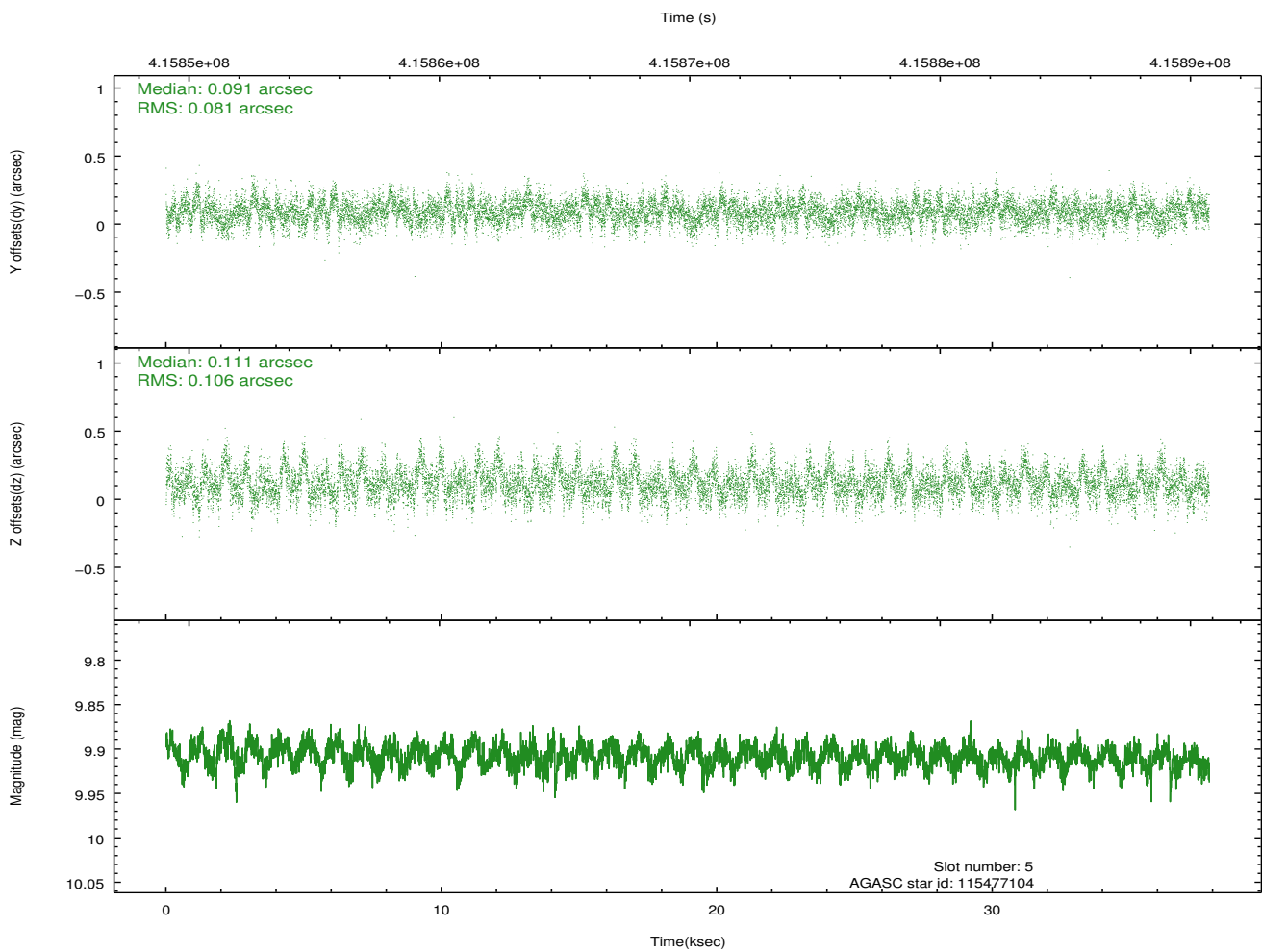
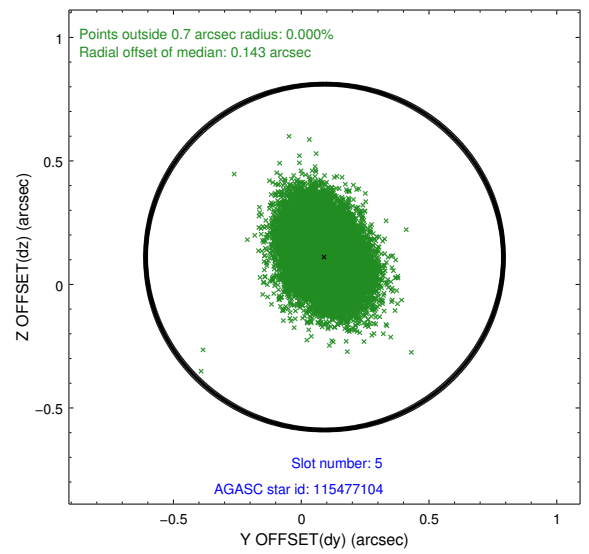
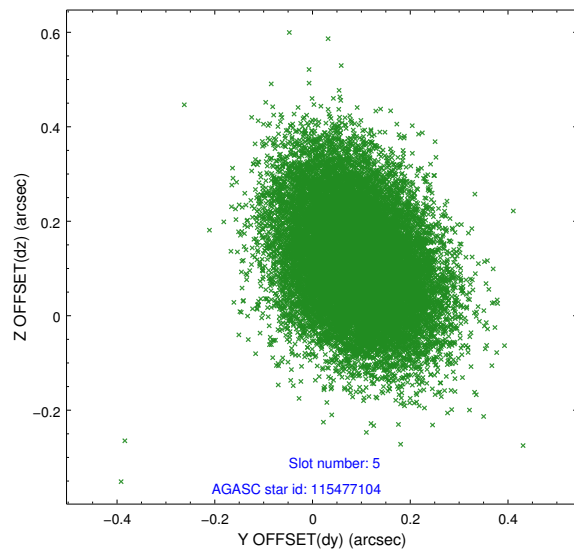
2.4.1 Slot 3



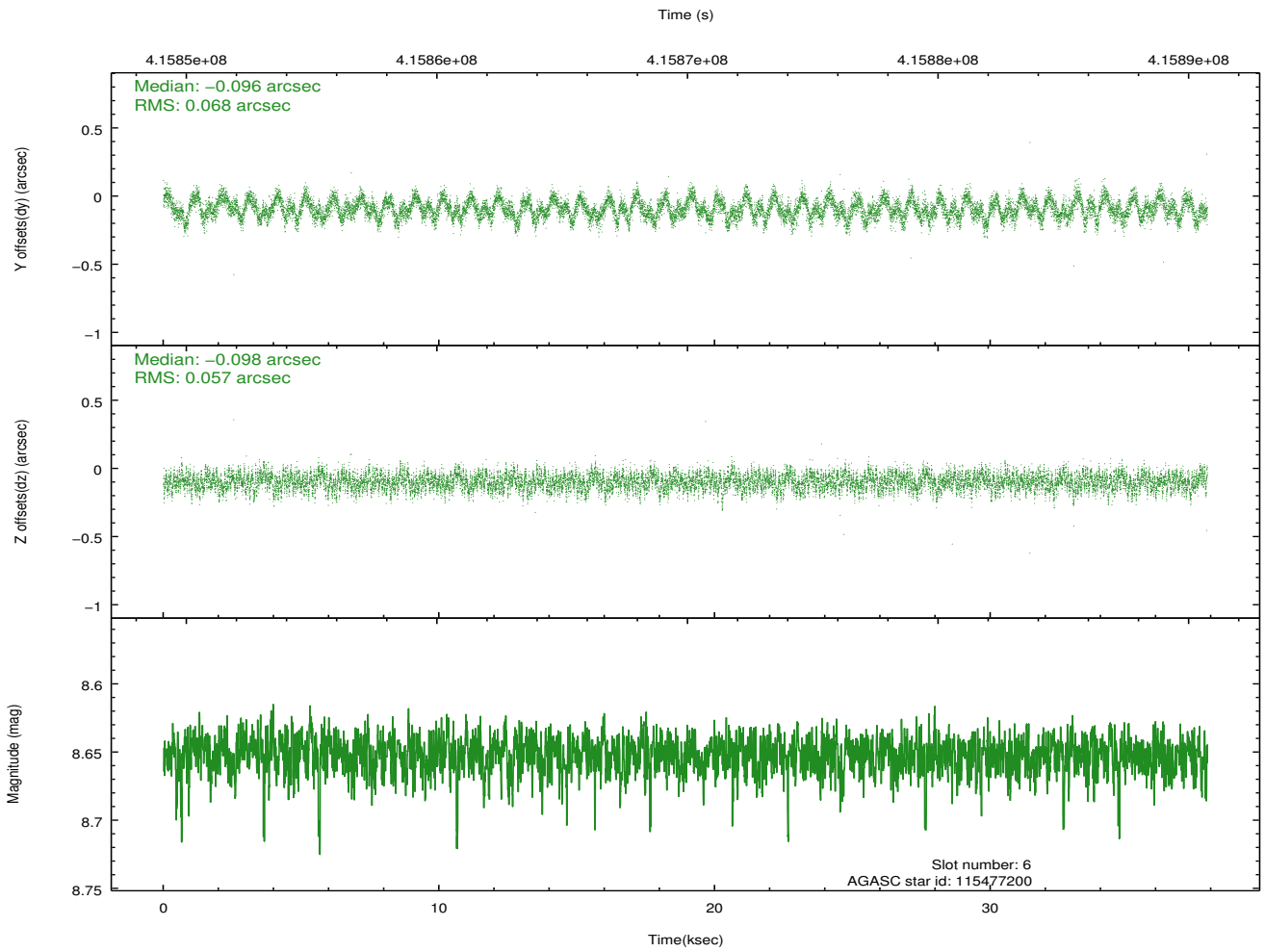
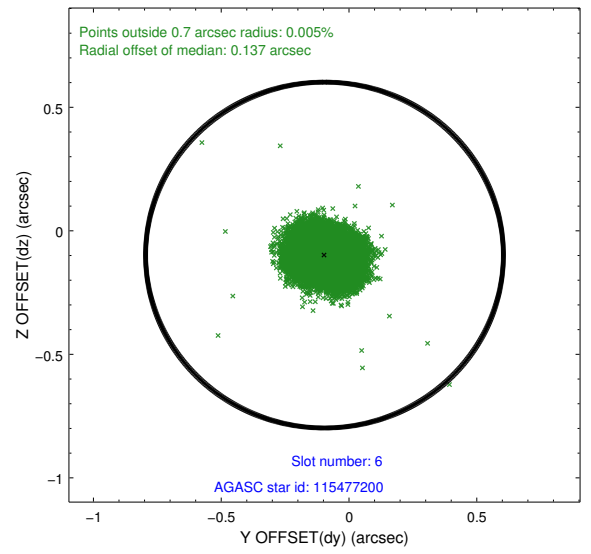
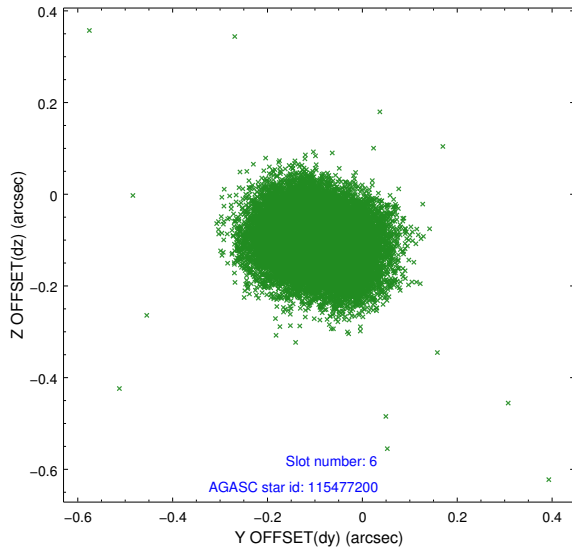
2.4.2 Slot 4



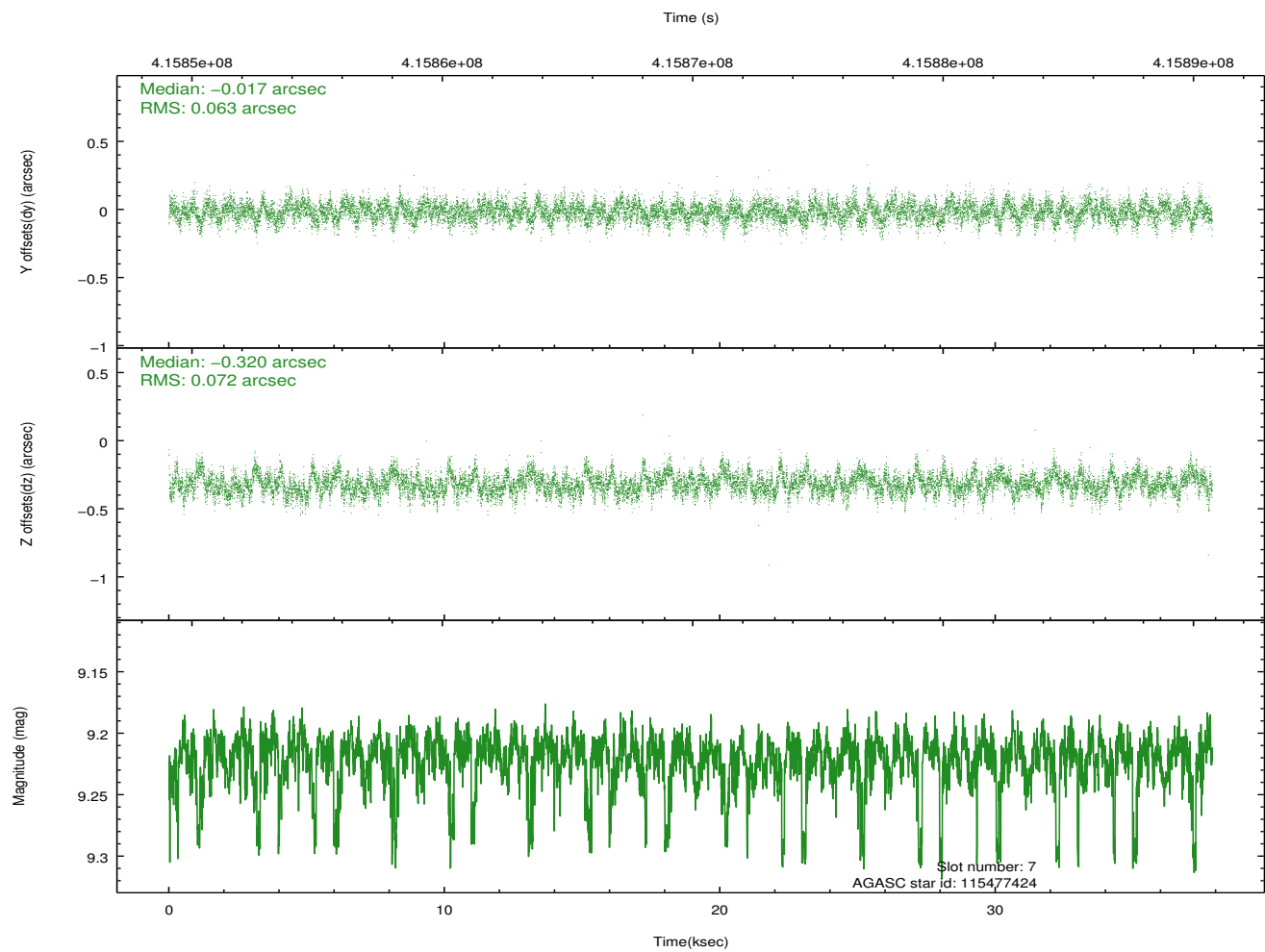
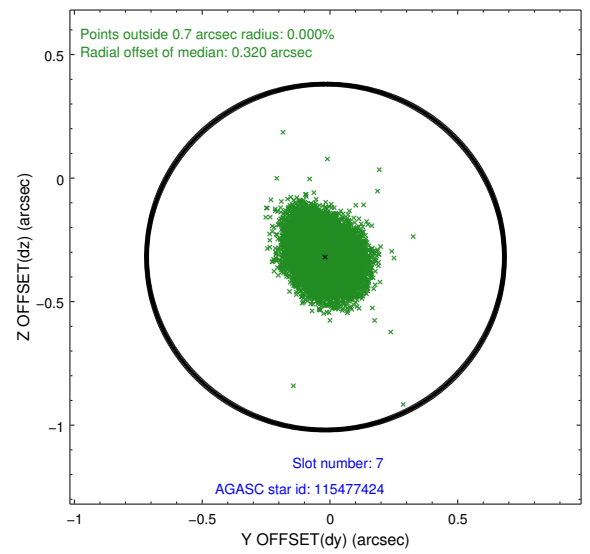
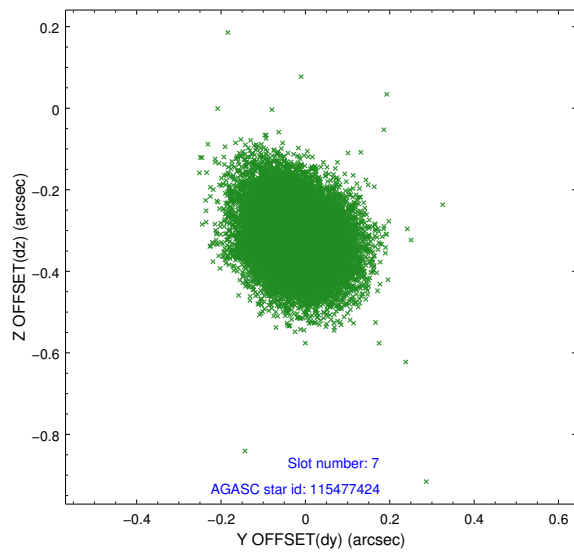
2.4.3 Slot 5



2.4.4 Slot 6

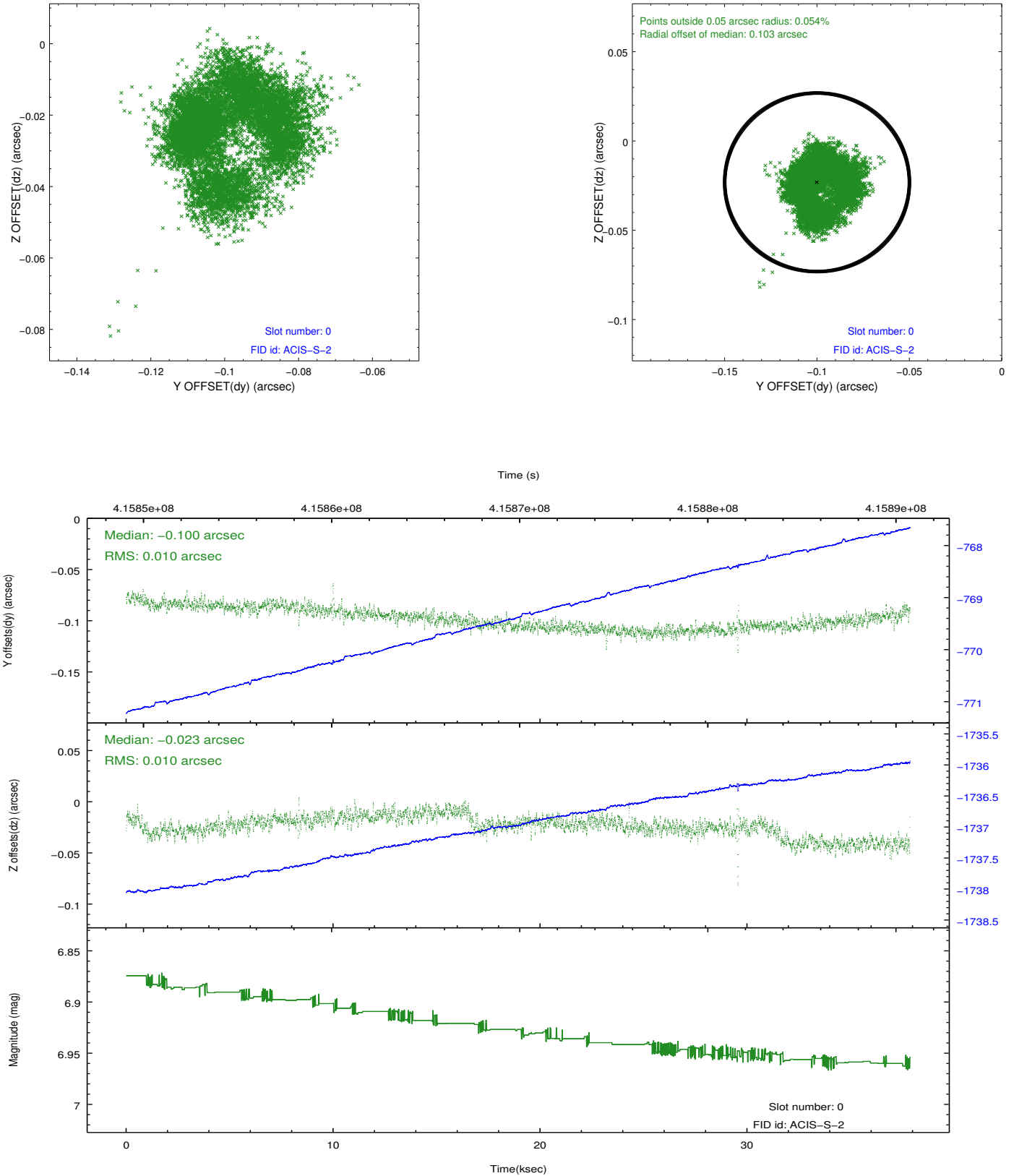


2.4.5 Slot 7

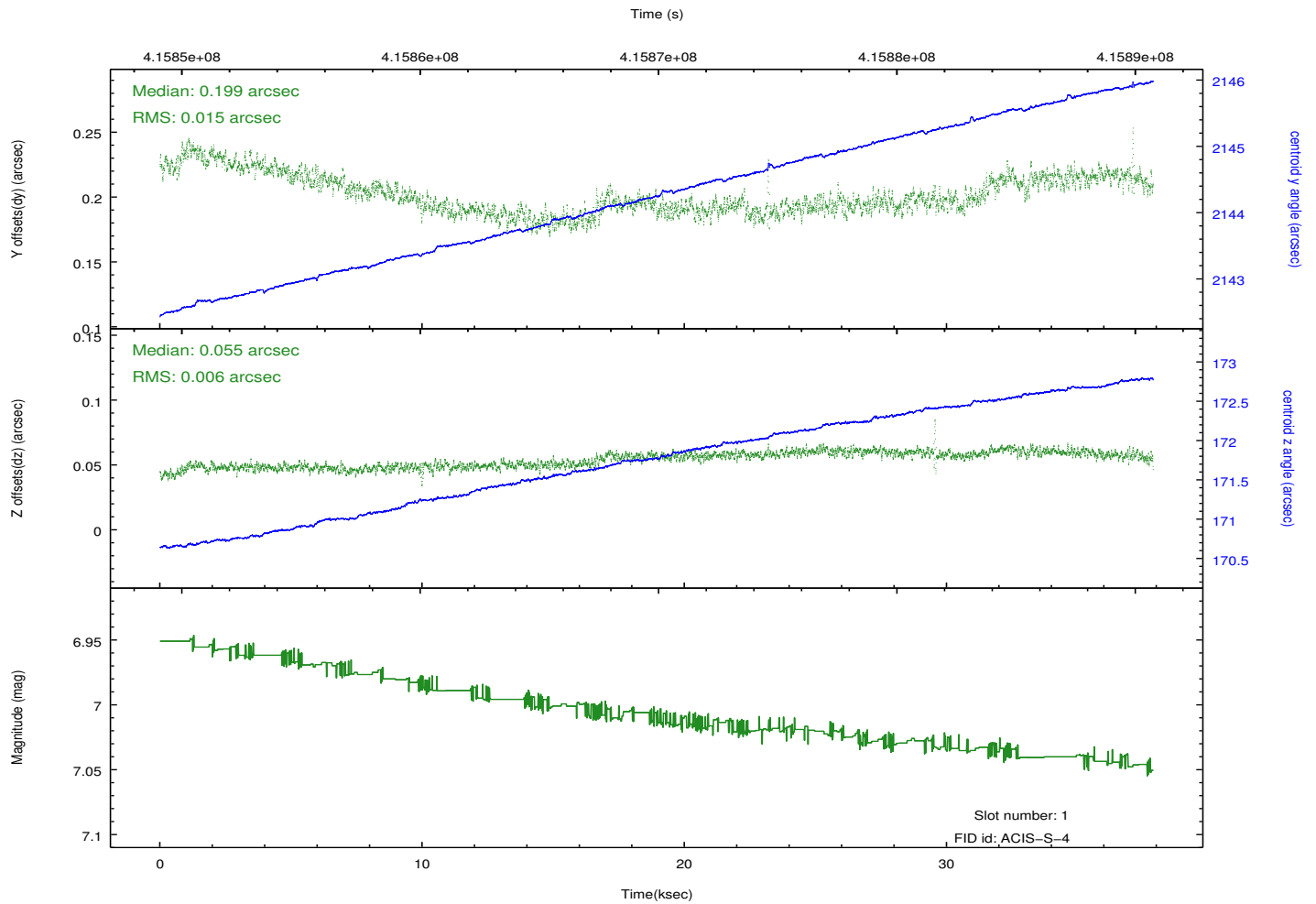
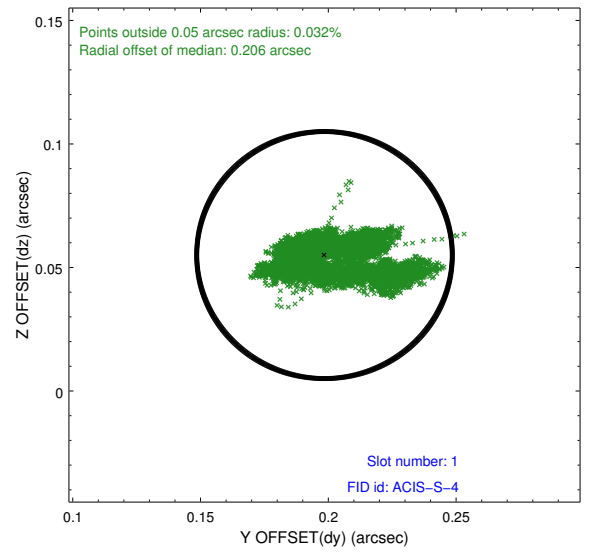
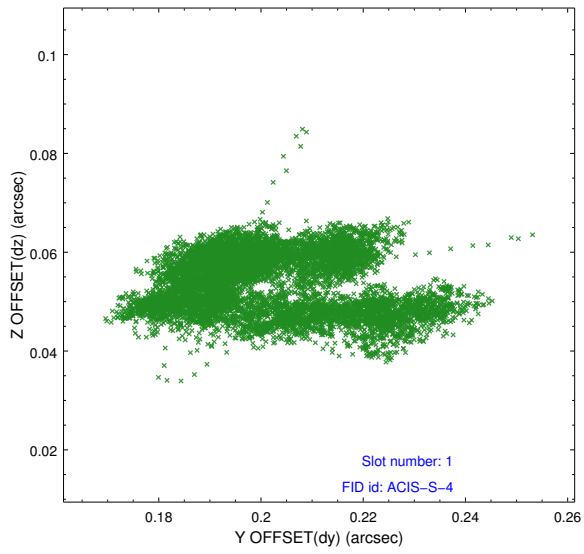


2.5 FID Slots

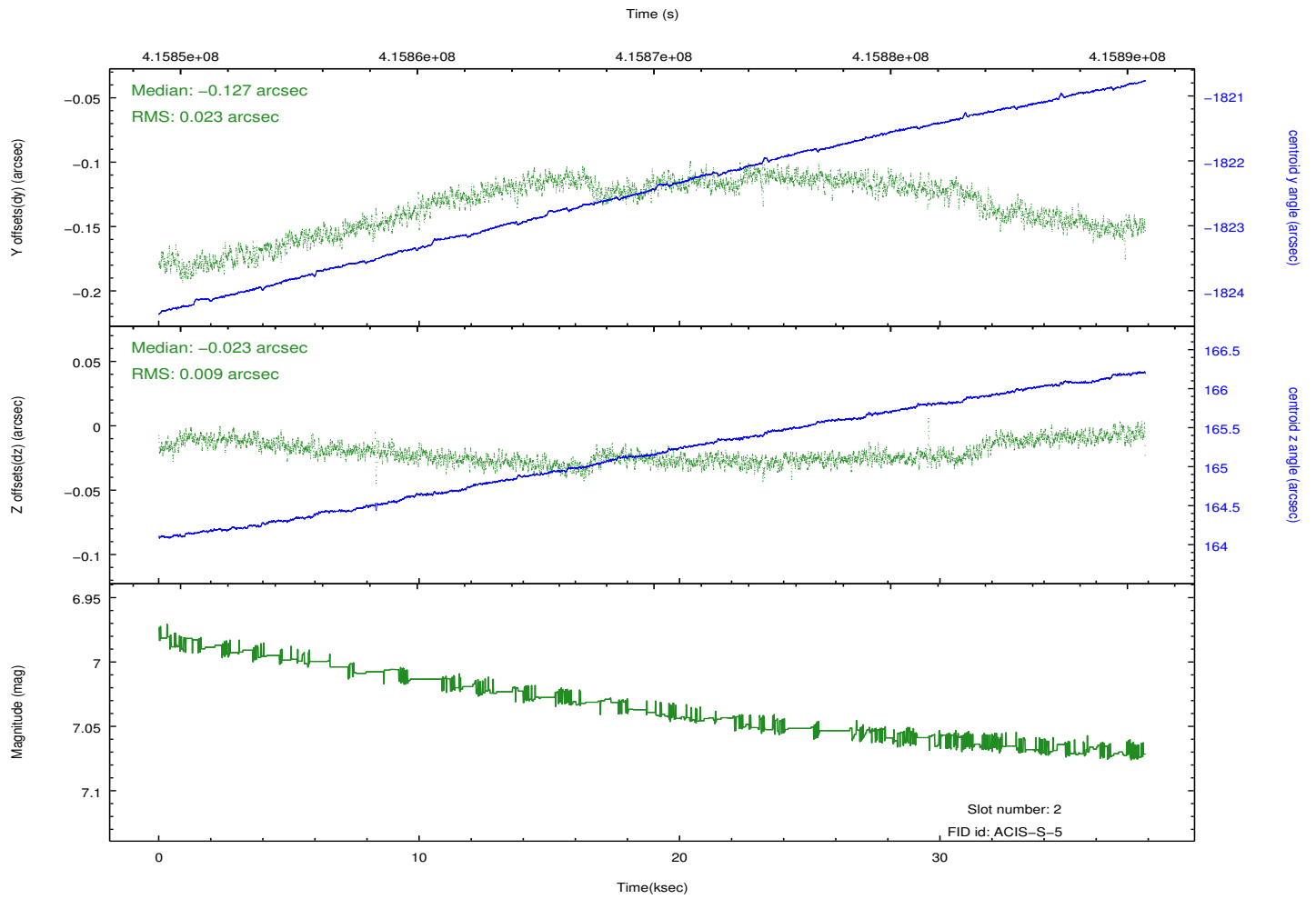
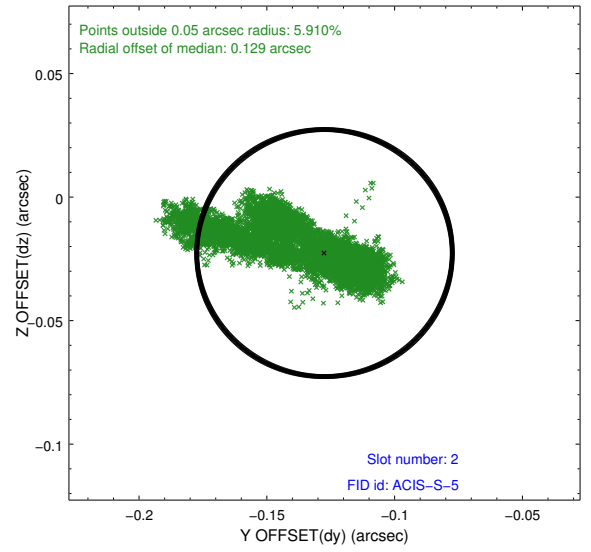
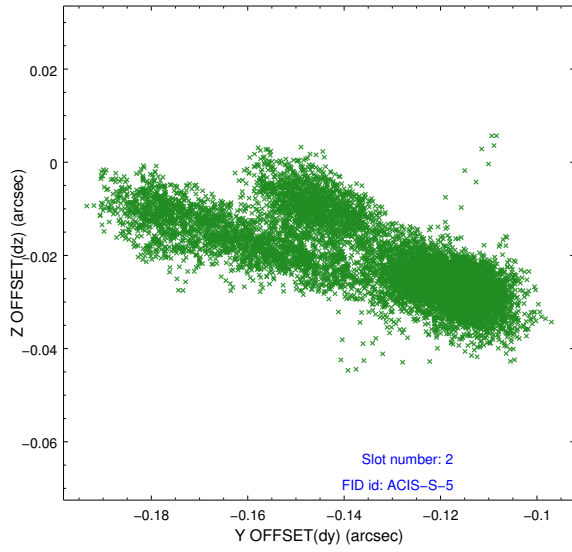
2.5.1 Slot 0



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)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.048100284934

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.