

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5821 - L2 Version 4
Chandra X-Ray Center

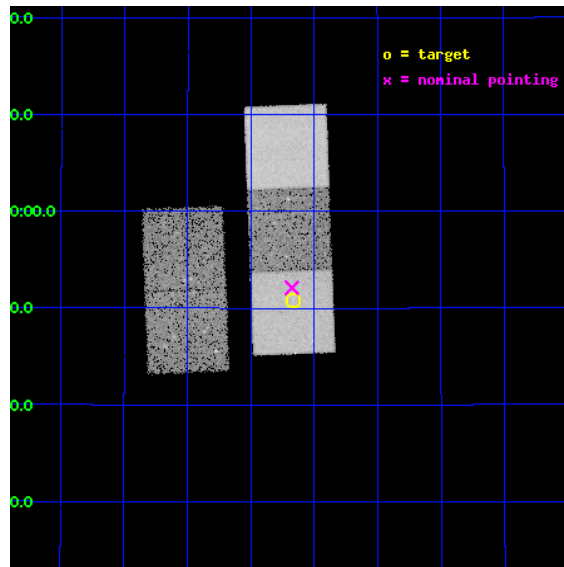
L2 Processing Date : Apr 5 2013

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

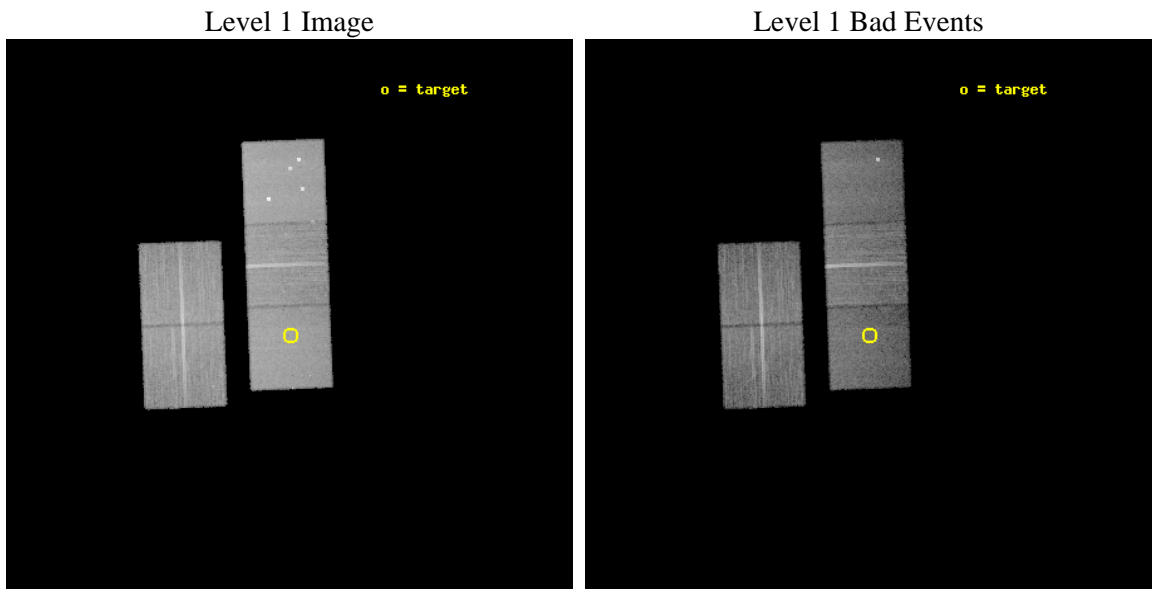
seq_num	800534	Sequence number
obs_id	5821	Observation id
title	The Creation of the Intracluster Medium in High-z Galaxy Clusters	
observer	Dr. Spencer Stanford	Principal investigator
object	3C 210	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	134.54125	Observer's specified target RA [deg]
dec_targ	27.847778	Observer's specified target Dec [deg]
ra_nom	134.54408530094	Nominal RA [deg]
dec_nom	27.868391467733	Nominal Dec [deg]
roll_nom	87.842047870415	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20837.531653285	Sum of GTIs [s]
liveltime	20565.273961867	Livetime [s]
ontime2	20837.367493272	Sum of GTIs [s]
ontime3	20831.126552761	Sum of GTIs [s]
ontime5	20837.490613282	Sum of GTIs [s]
ontime6	20834.308563143	Sum of GTIs [s]
ontime7	20837.531653285	Sum of GTIs [s]
l2events	181318	Number of level 2 events



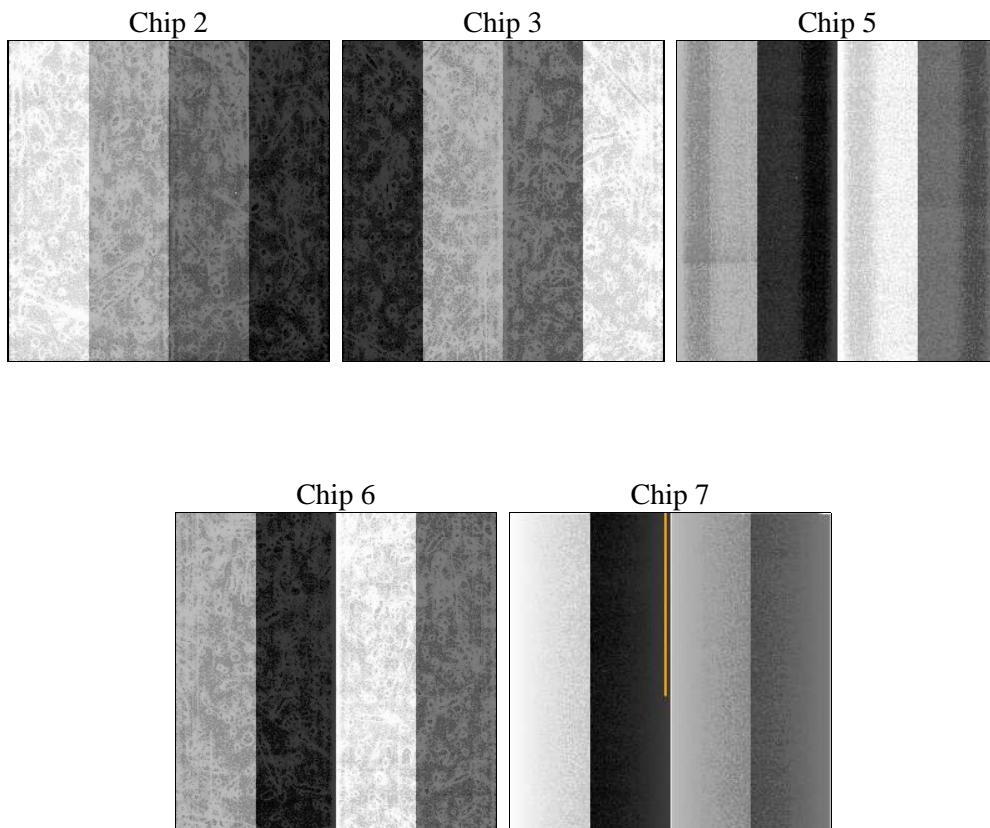
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20800.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	20837.531653285	Sum of GTIs [s]
caldbver	4.5.6	 	ontime2	20837.367493272	Sum of GTIs [s]
date	2013-04-05T17:50:43	Date and time of file creation	ontime3	20831.126552761	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	20837.490613282	Sum of GTIs [s]
			ontime6	20834.308563143	Sum of GTIs [s]
			ontime7	20837.531653285	Sum of GTIs [s]
			l1events	750543	Number of level 1 events

2.1.4 Events

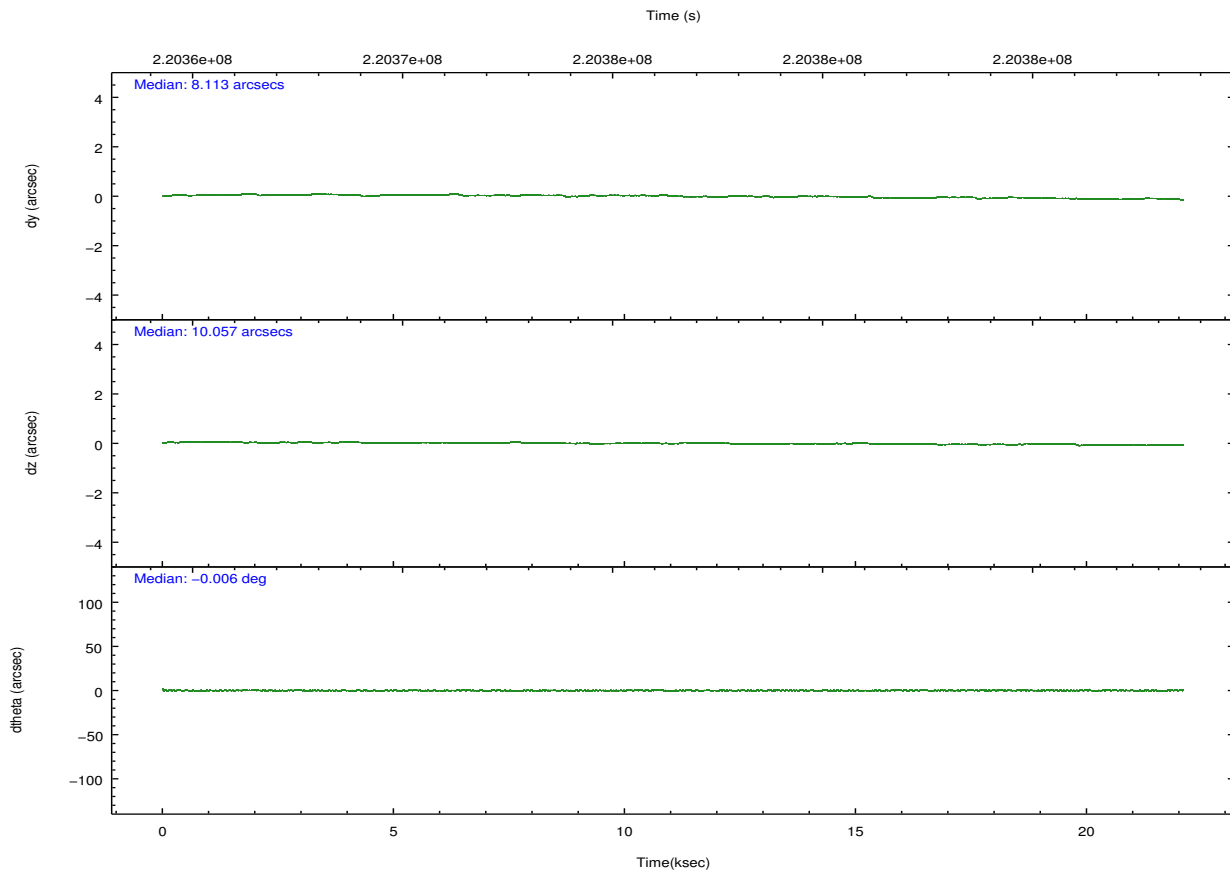
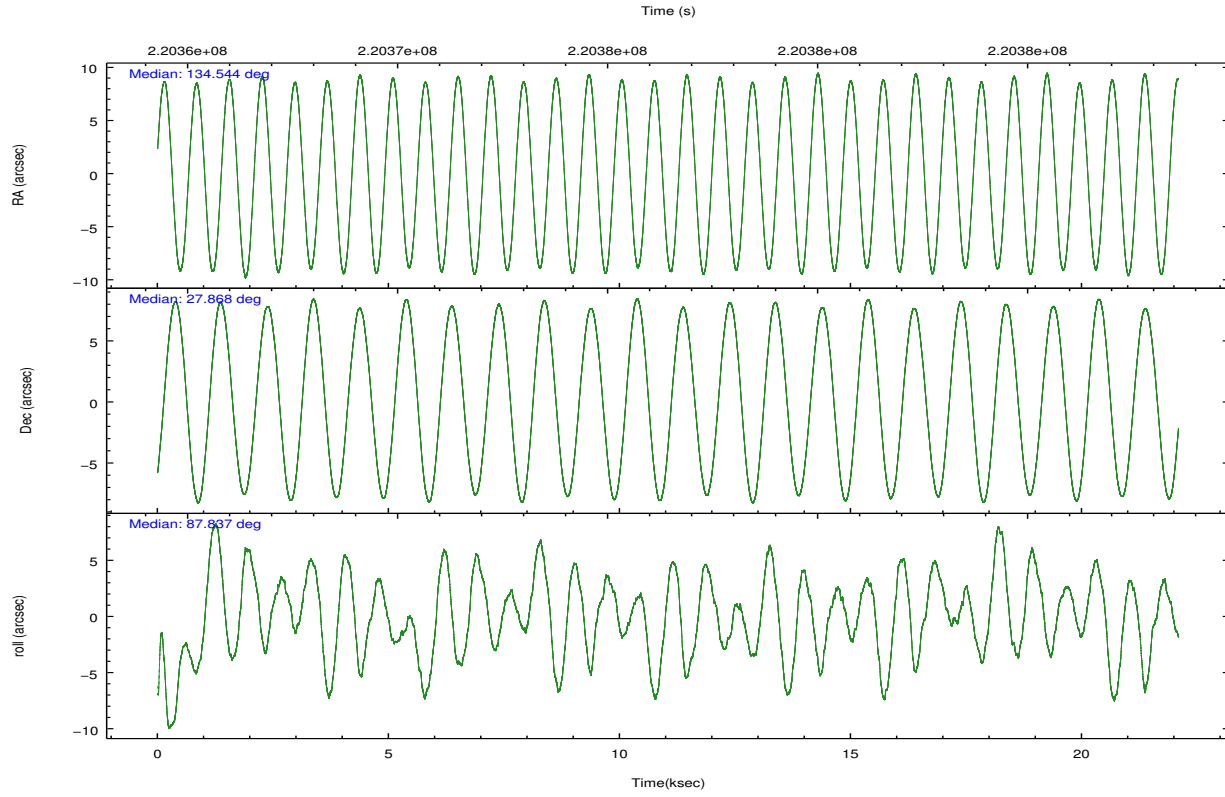
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	140275	133577	192259	136721	147711
rejected events	127484	121190	93774	122828	80736
rejected %	90%	90%	48%	89%	54%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	4750	4490	16785	4908	5978
	3%	3%	8%	3%	4%
grade 1 events	69	56	193	62	121
	0%	0%	0%	0%	0%
grade 2 events	2967	2643	27646	2989	13526
	2%	1%	14%	2%	9%
grade 3 events	1389	1417	3846	1526	6270
	0%	1%	2%	1%	4%
grade 4 events	1435	1435	3672	1505	6421
	1%	1%	1%	1%	4%
grade 5 events	4275	5186	14469	5498	15872
	3%	3%	7%	4%	10%
grade 6 events	2253	2405	46561	2971	34810
	1%	1%	24%	2%	23%
grade 7 events	123137	115945	79087	117262	64713
	87%	86%	41%	85%	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	134.558825	134.544085300945	Subarray requested	NONE	NONE
[deg] Pointing Dec	27.844480	27.86839146773293	Alternating exposures requested	N	N
[deg] Pointing Roll	87.678535	87.84204787041519	[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)	220366691.184000	220365209.01179			
Observation start date	2004-12-25T12:57:07	2004-12-25T12:33:29			
[s] Observation end time (MET)	220387491.184000	220388035.76282			
Observation end date	2004-12-25T18:43:47	2004-12-25T18:53:55			
Read mode	TIMED	TIMED			

2.3 Aspect

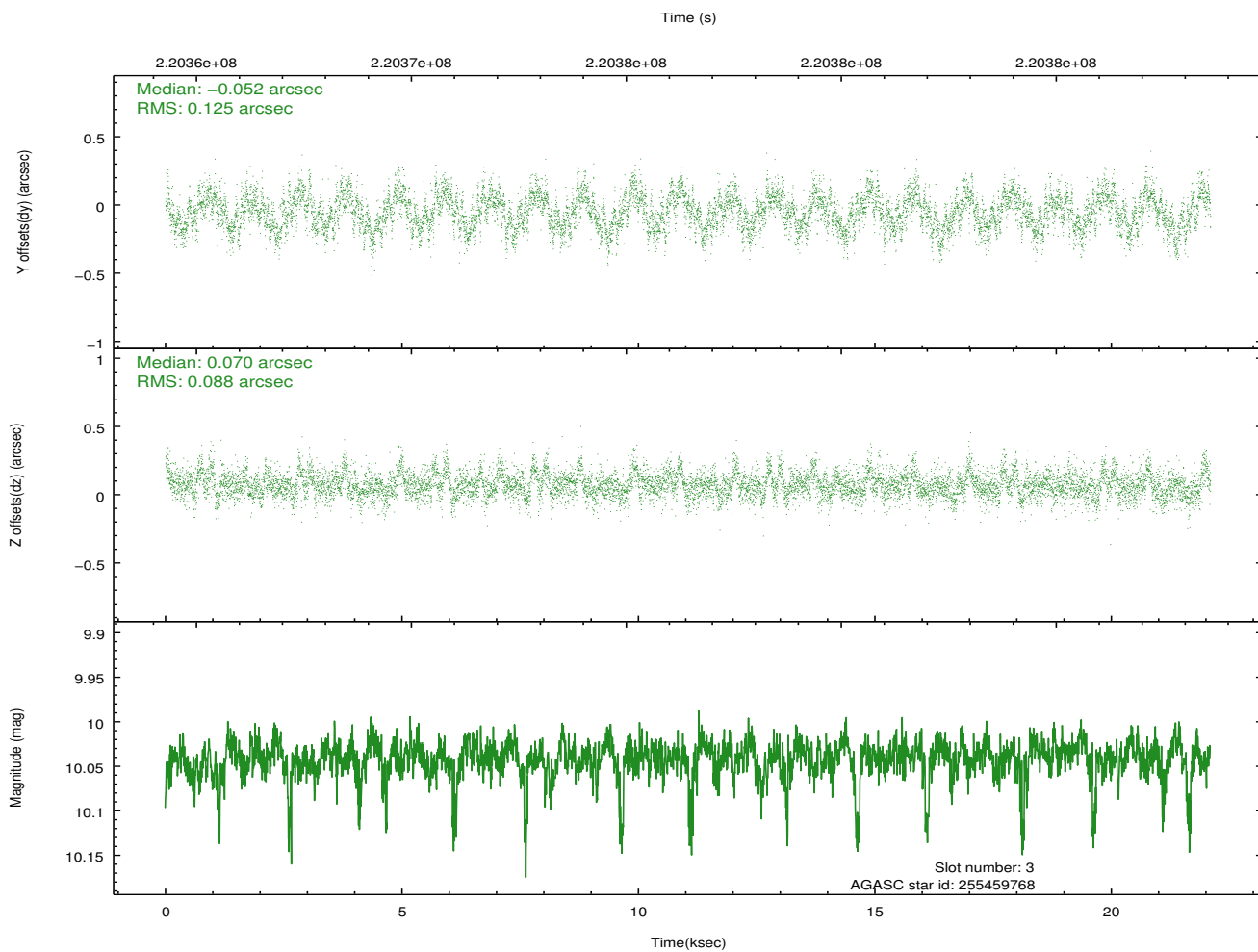
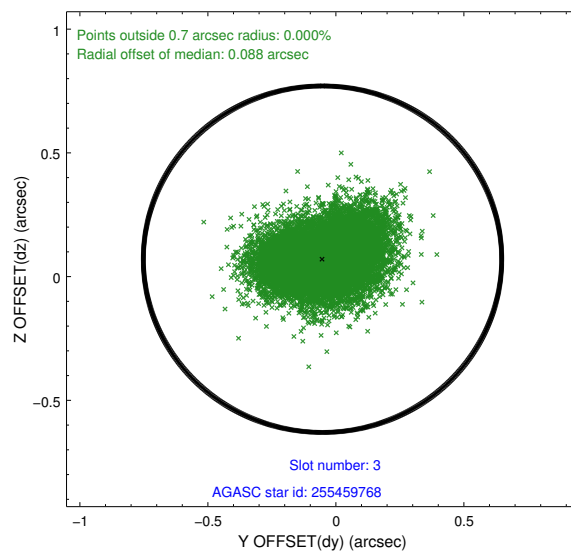
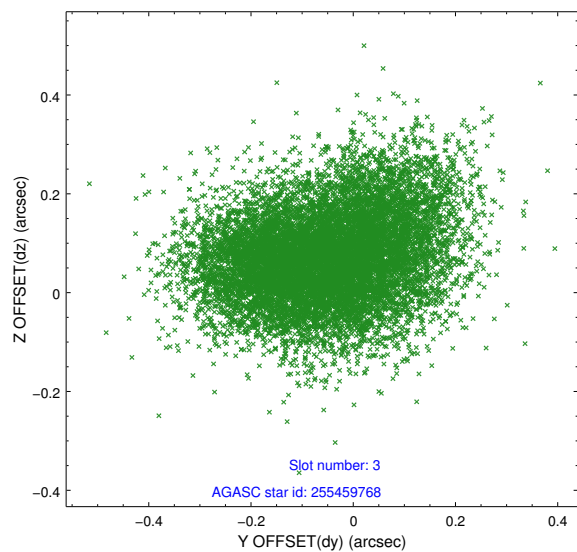


Slot Statistics

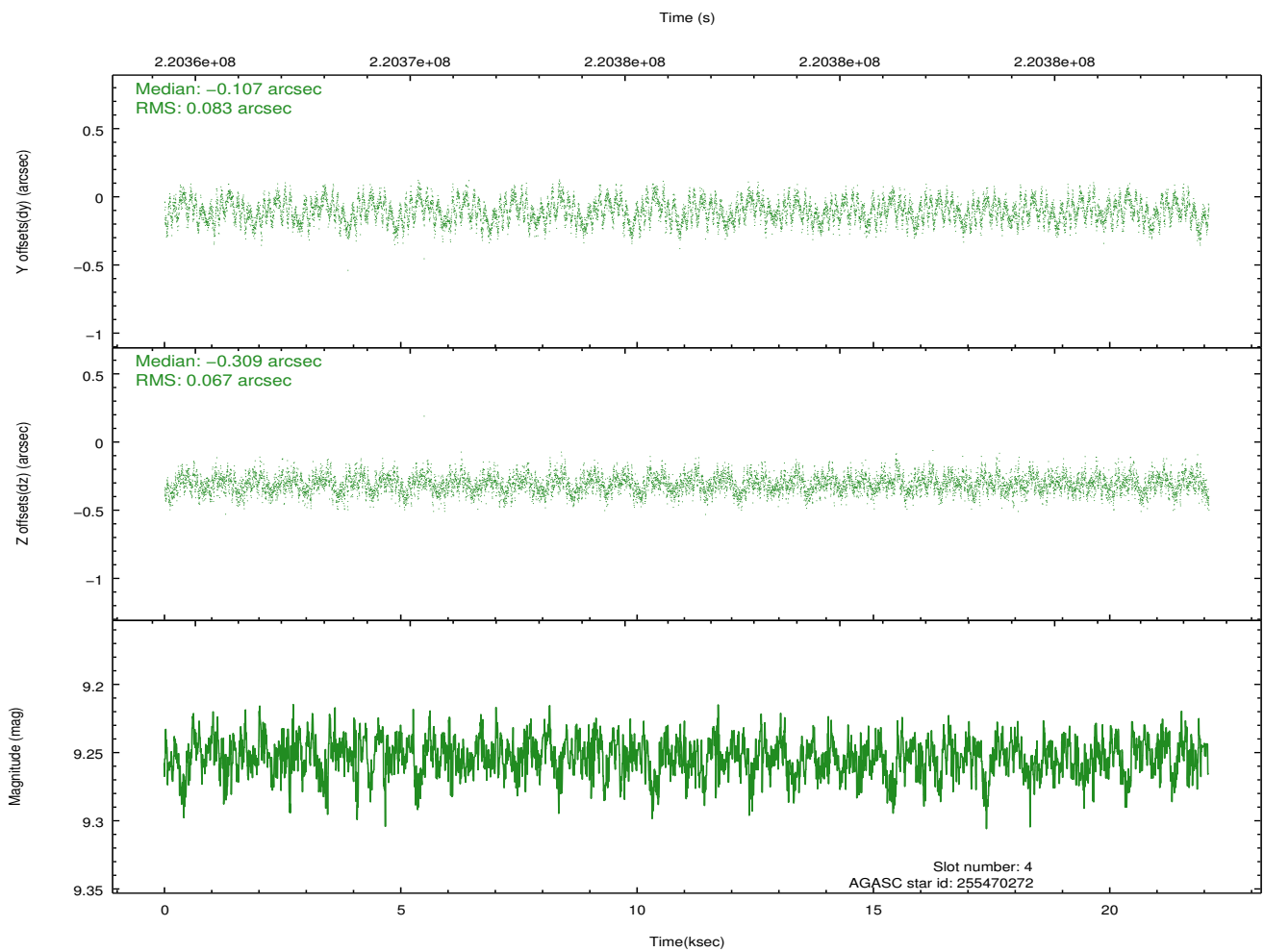
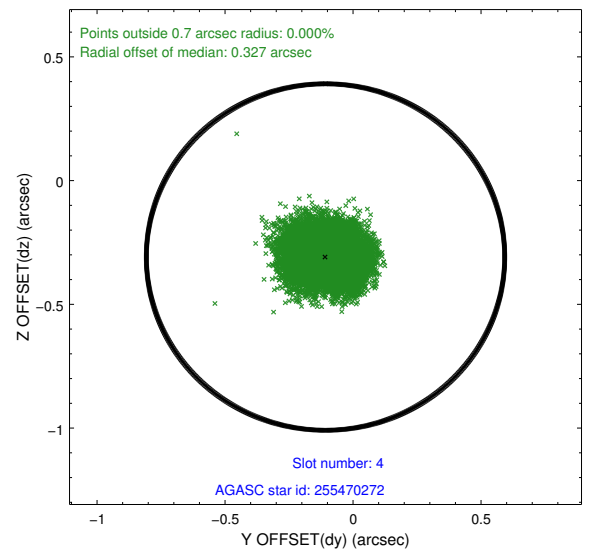
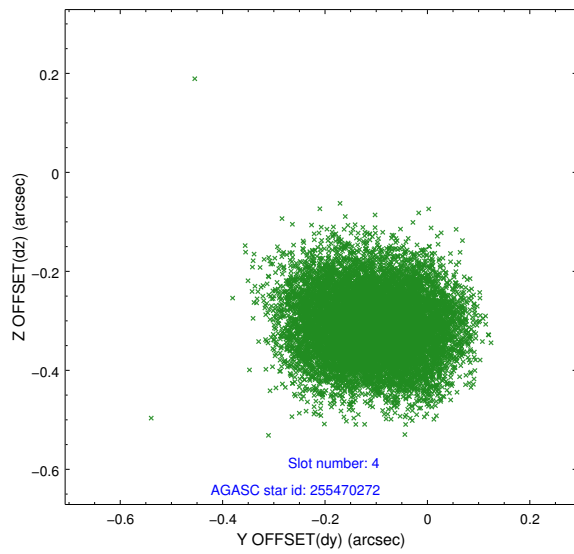
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5389	-0.041	-0.023	0.007	0.011	0.000000	0.000000	-760.88	-1731.34
1	FID	ACIS-S-4	7.21	5388	0.112	0.026	0.006	0.012	0.000000	0.000000	2152.43	177.10
2	FID	ACIS-S-5	7.23	5389	-0.102	0.005	0.007	0.012	0.000000	0.000000	-1813.63	170.83
3	GUIDE	255459768	10.04	10762	-0.052	0.070	0.163	0.266	133.896950	28.506403	2301.77	2189.47
4	GUIDE	255470272	9.25	10773	-0.107	-0.309	0.116	0.178	133.844161	28.114281	885.06	2307.27
5	GUIDE	255984792	9.36	10773	0.103	0.041	0.089	0.140	134.698273	27.233445	-2179.25	-534.93
6	GUIDE	255986024	9.06	10775	-0.002	0.120	0.106	0.165	135.247679	27.336469	-1731.94	-2274.95
7	GUIDE	256381208	9.28	10771	0.058	0.074	0.092	0.149	134.758821	27.635369	-725.95	-667.84

2.4 Star Slots

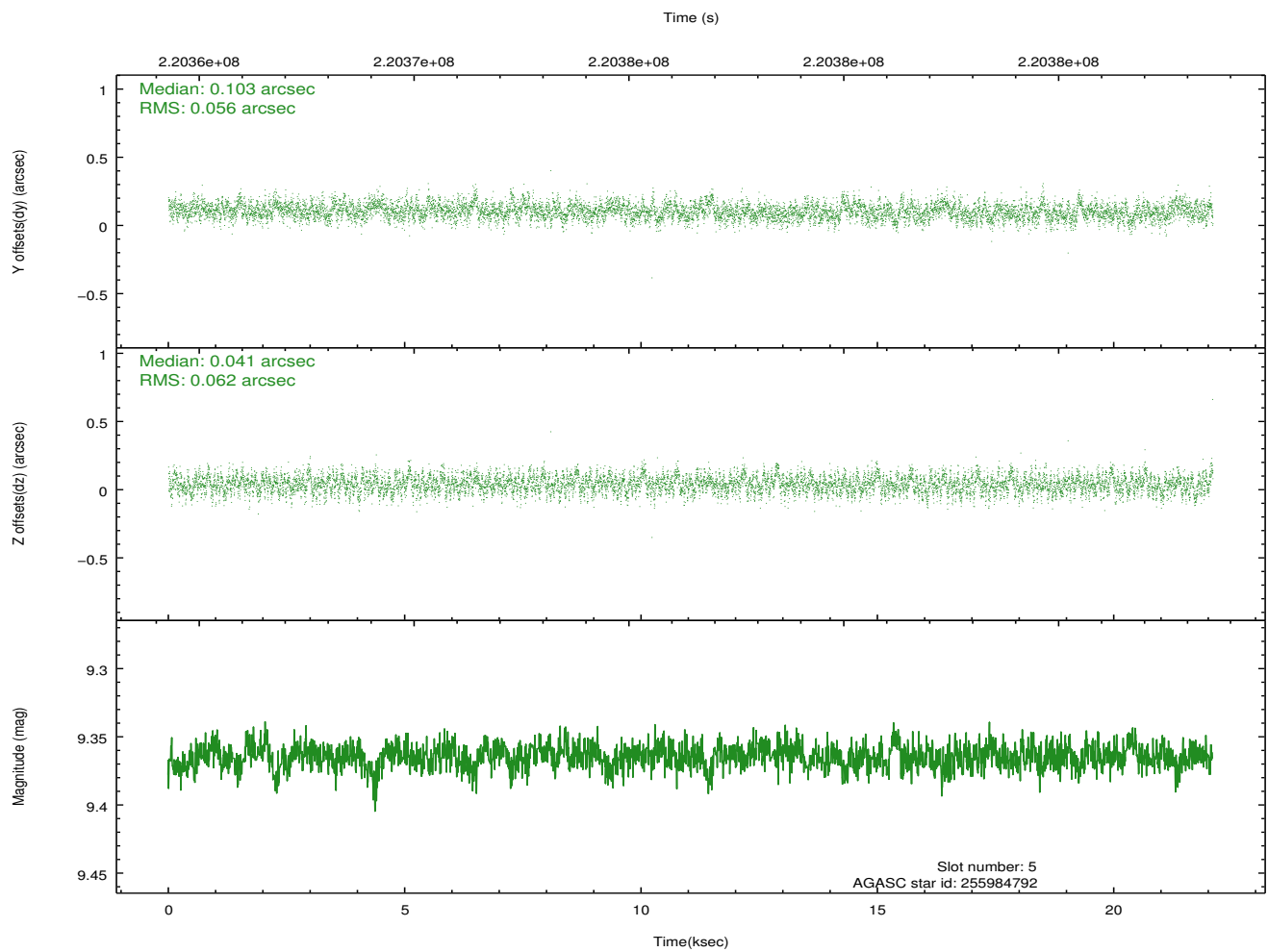
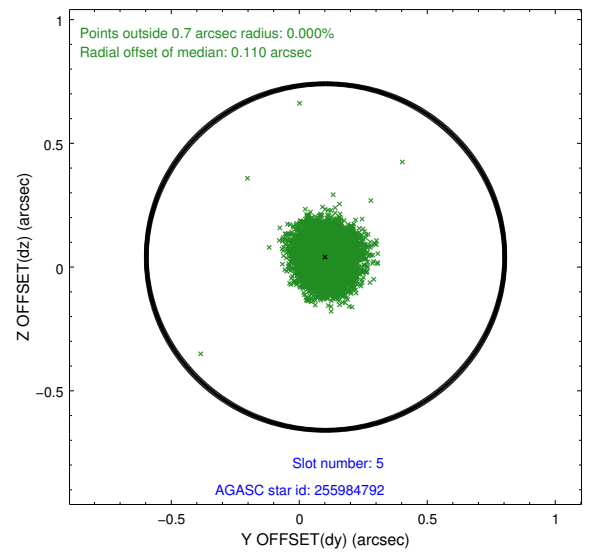
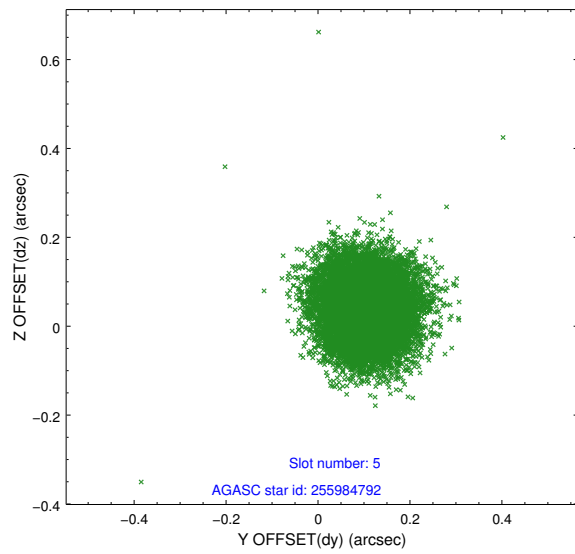
2.4.1 Slot 3



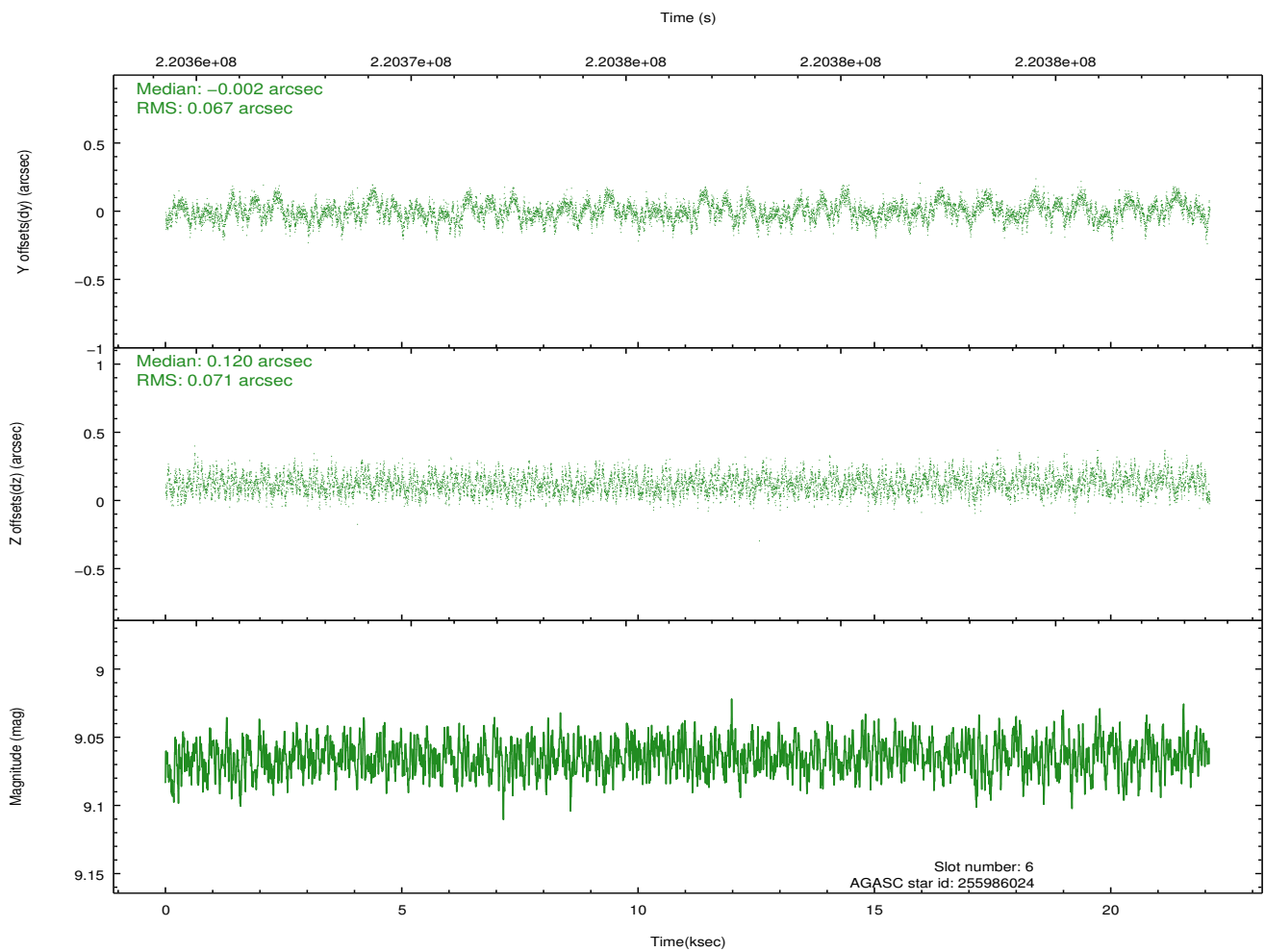
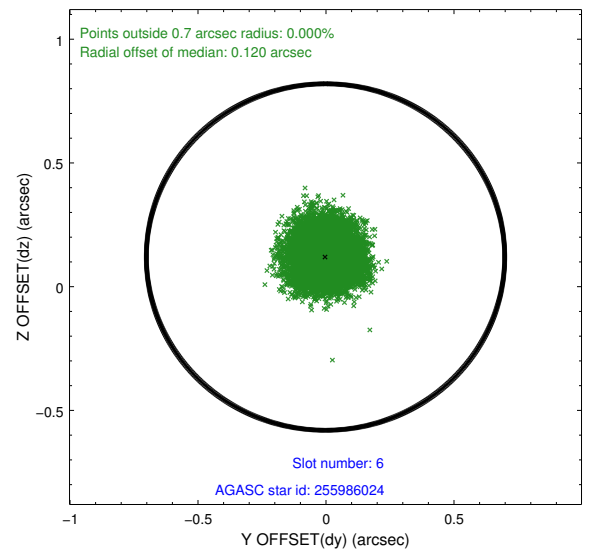
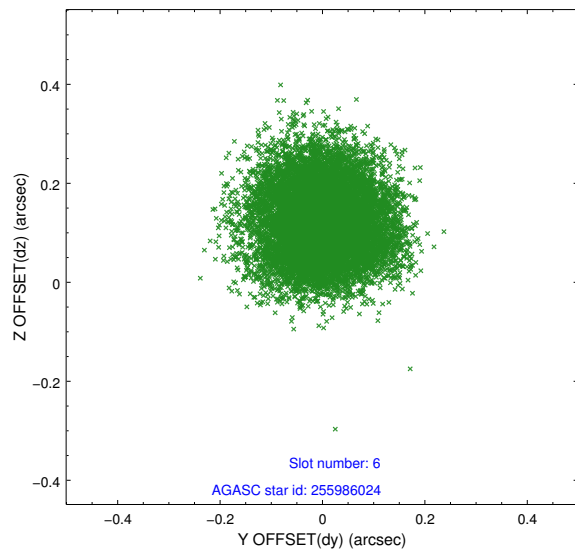
2.4.2 Slot 4



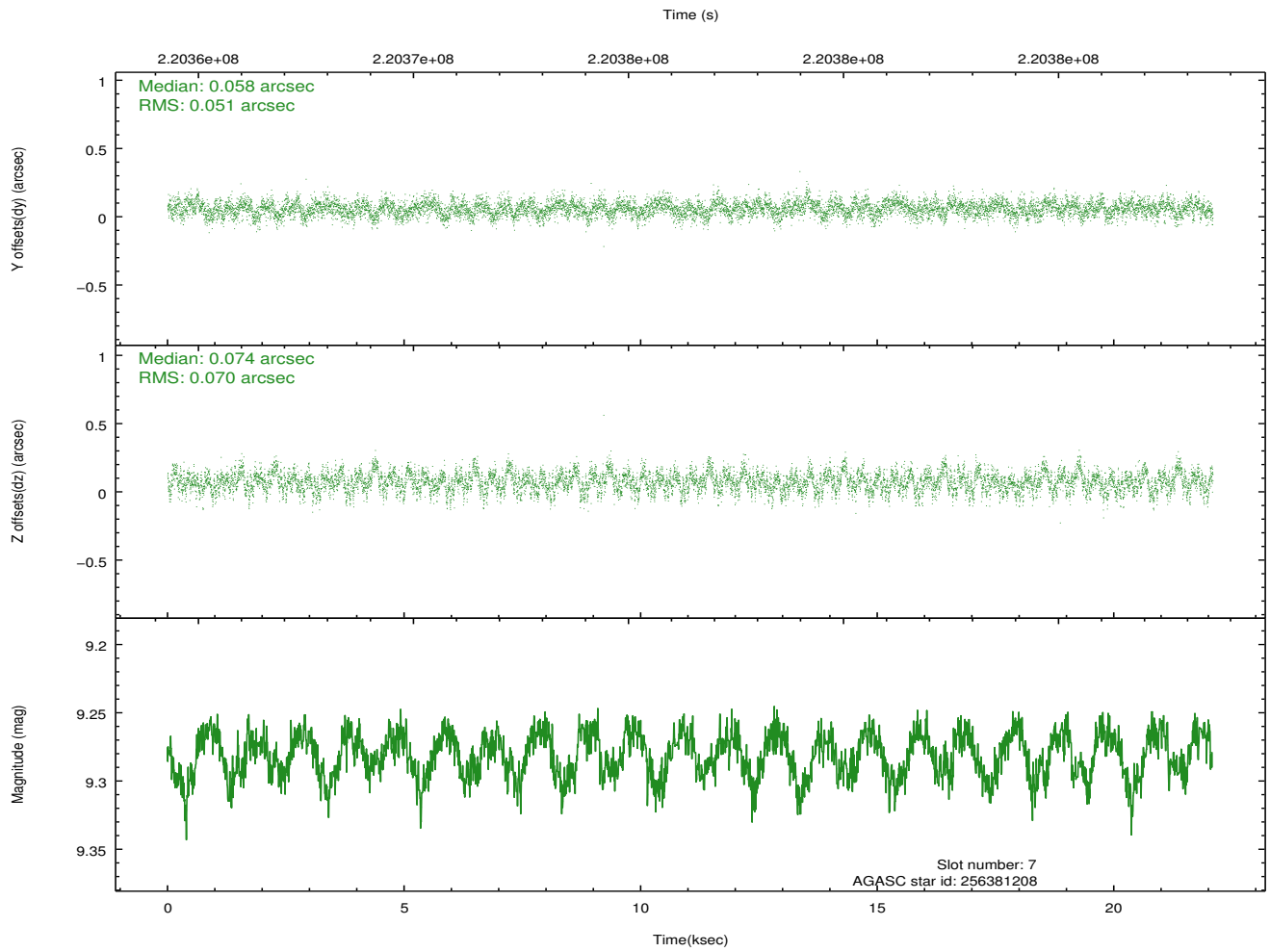
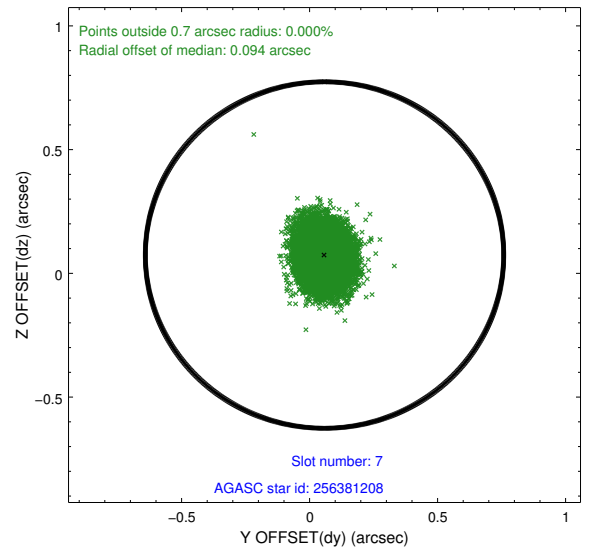
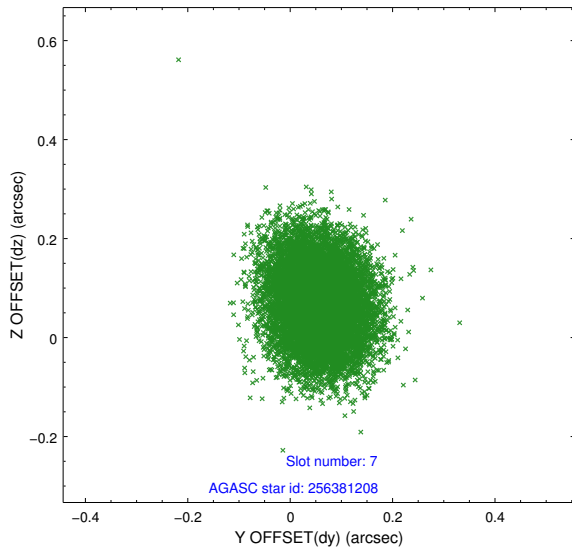
2.4.3 Slot 5



2.4.4 Slot 6

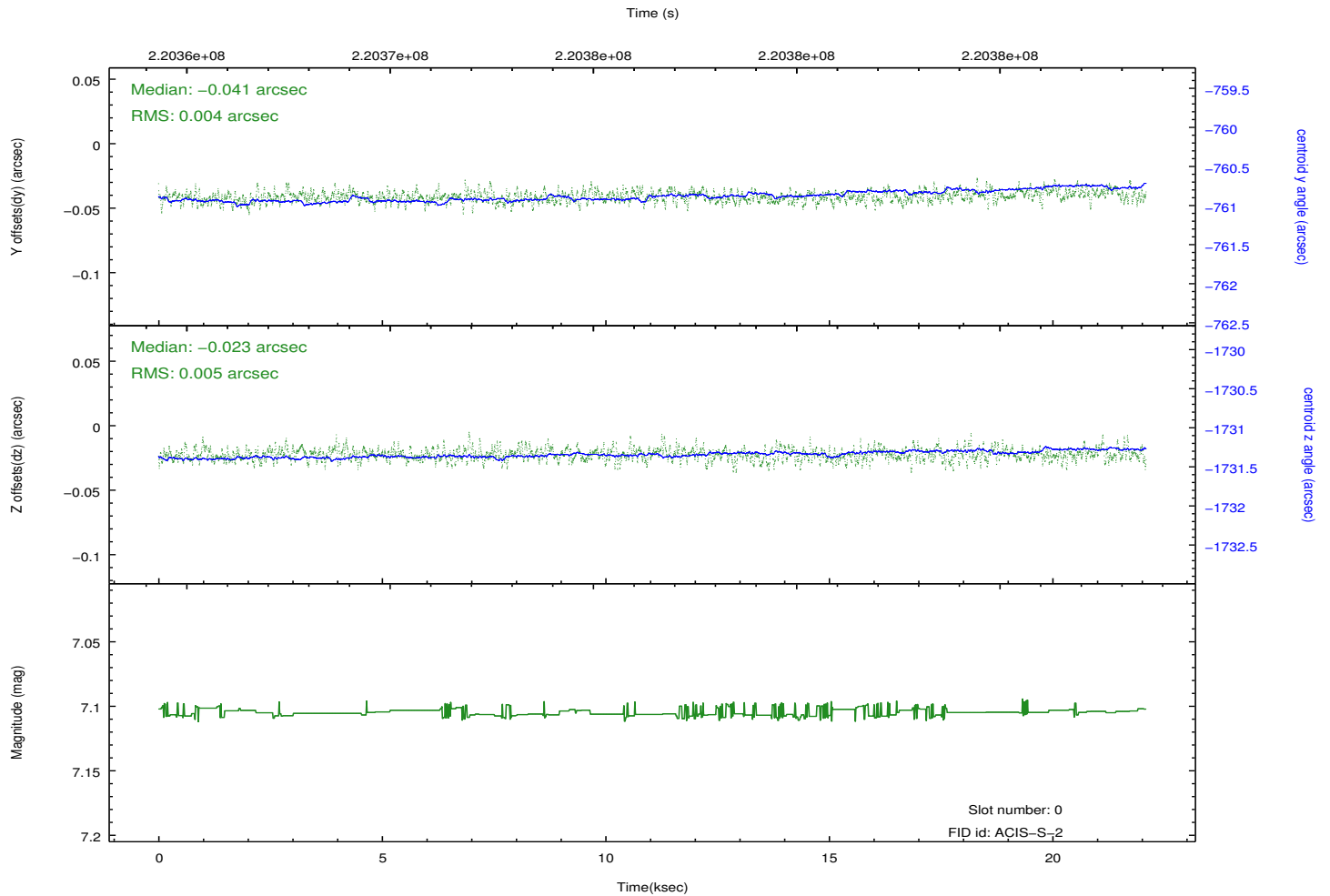
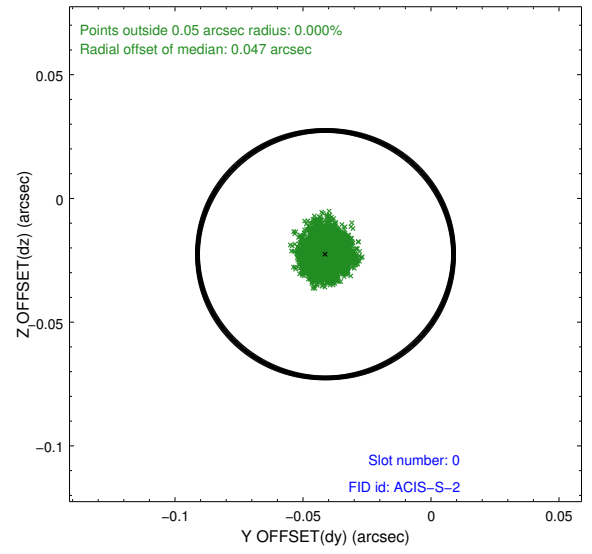
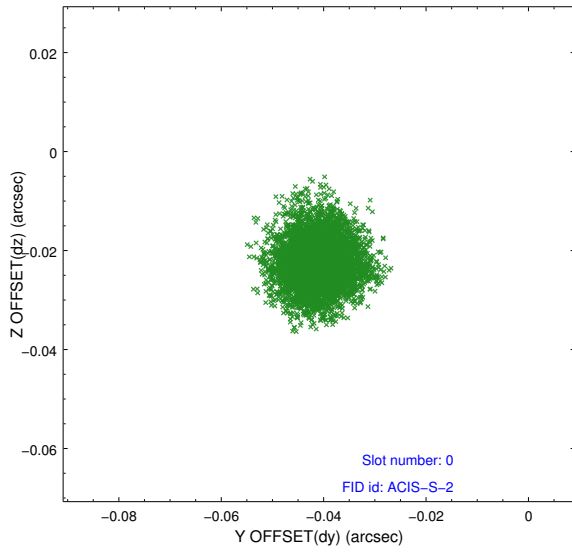


2.4.5 Slot 7

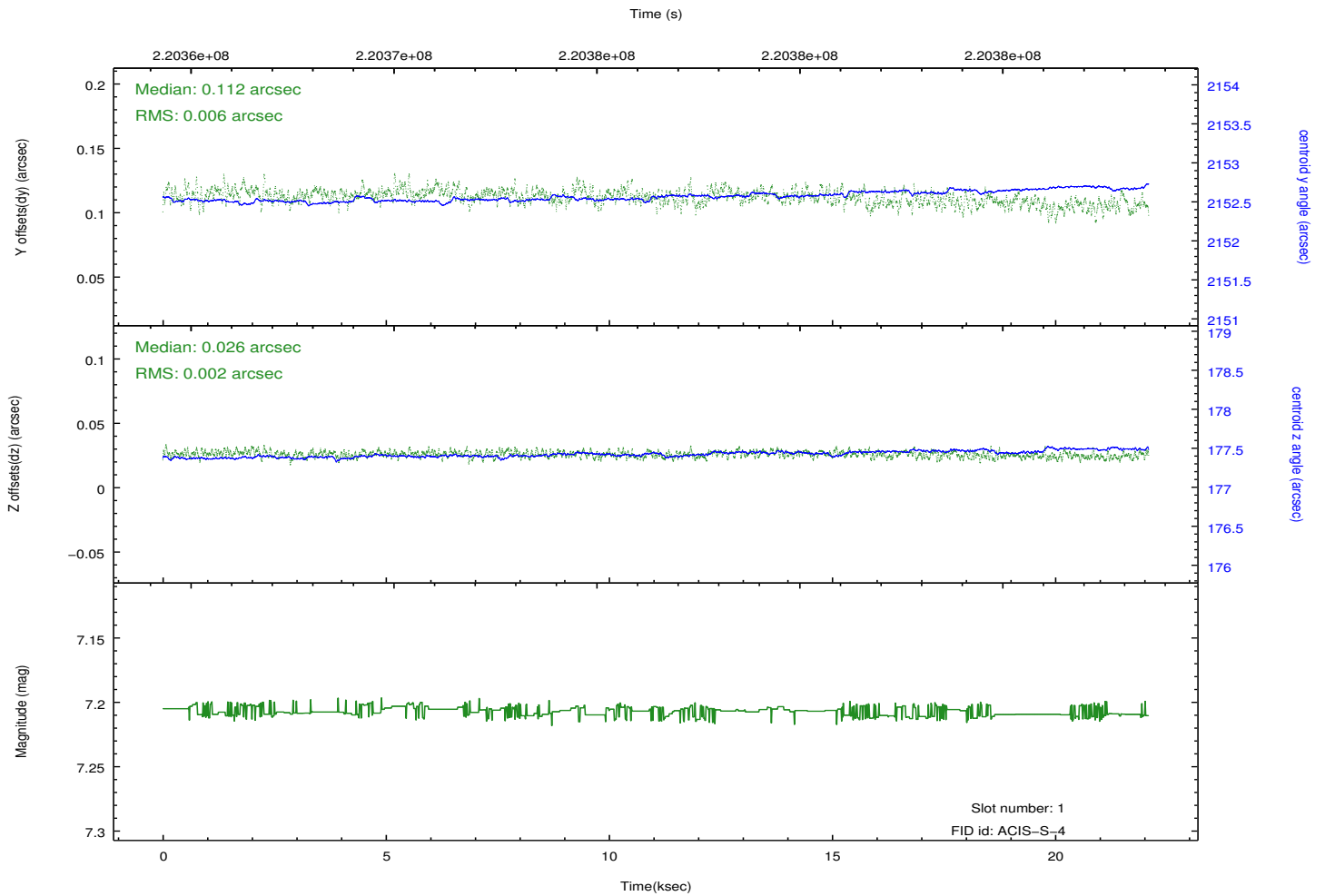
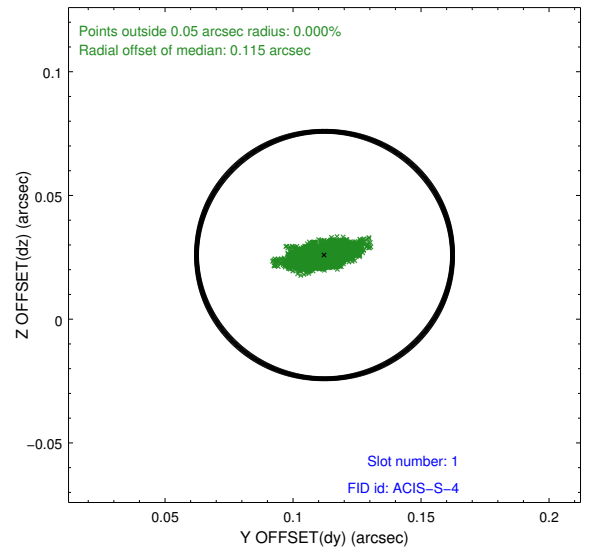
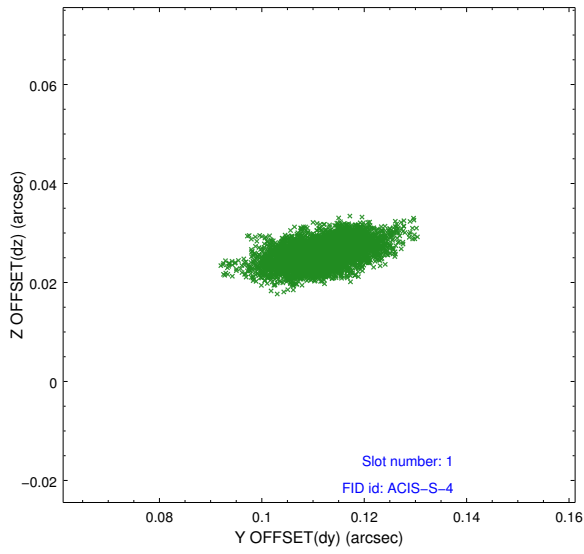


2.5 FID Slots

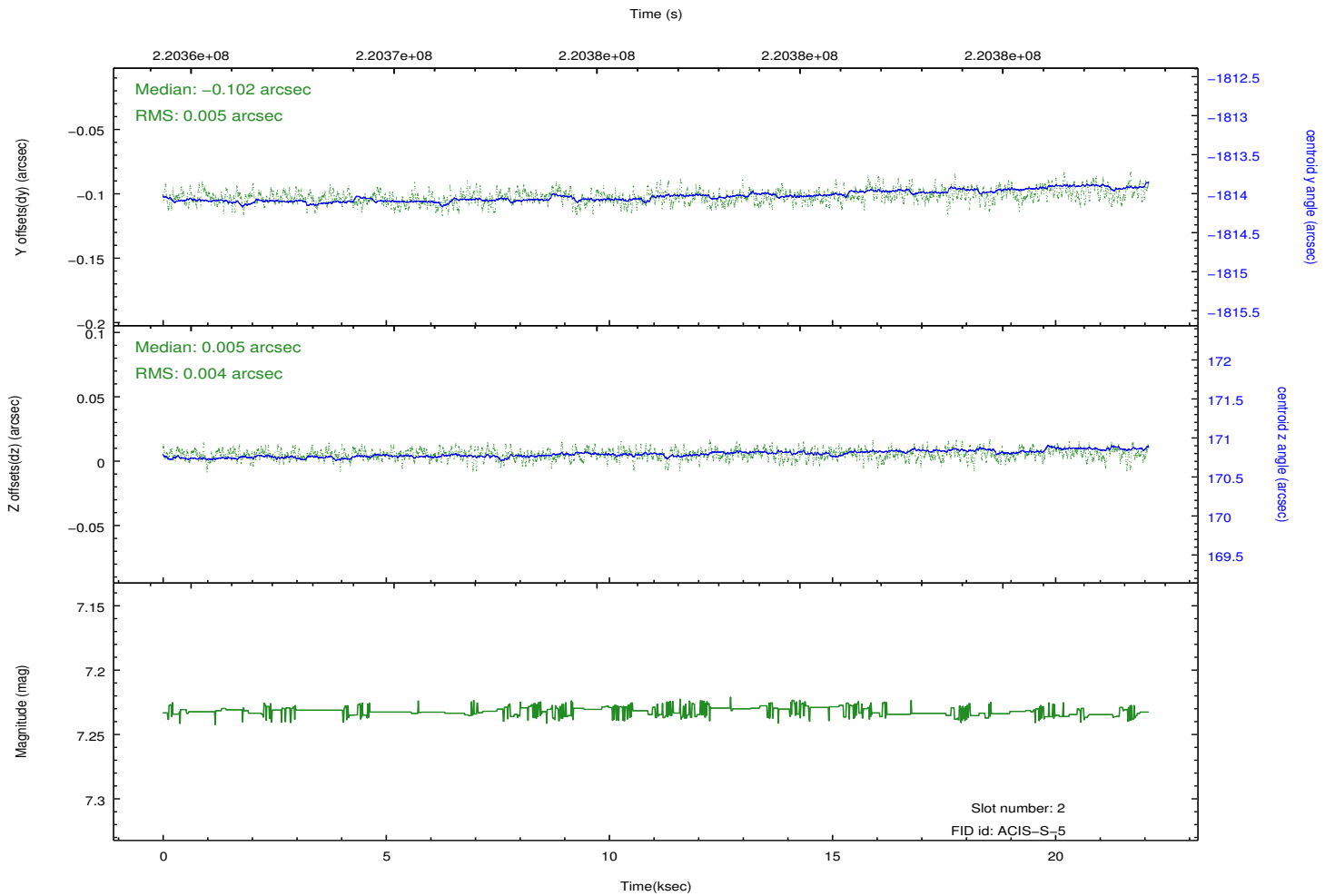
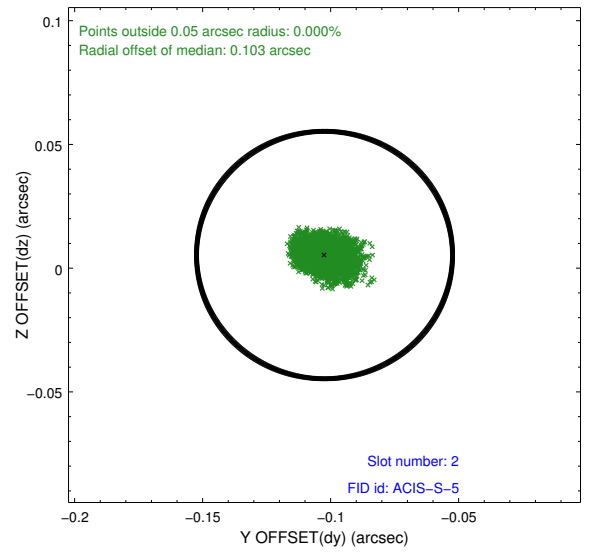
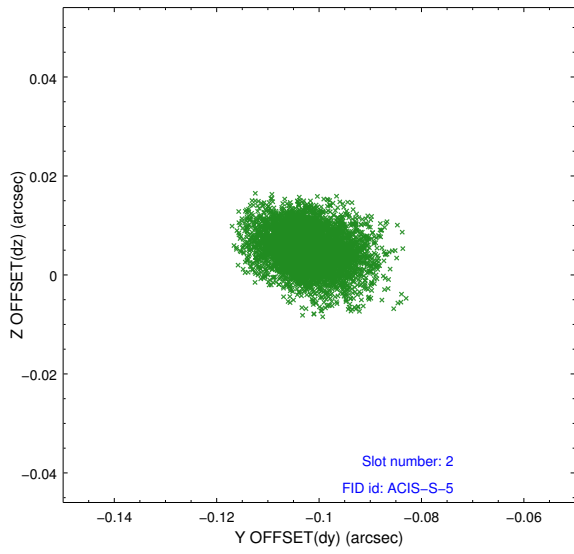
2.5.1 Slot 0



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)	2013.04.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.83819

A.2 Comments

Joint proposal with XMM

=====

A spatial region of the original bias map for CCD = 2 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(134.77167,27.97230), (134.76719,27.97245), (134.76510,27.92572), (134.76957,27.92558)