

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 418 - L2 Version 5
Chandra X-Ray Center

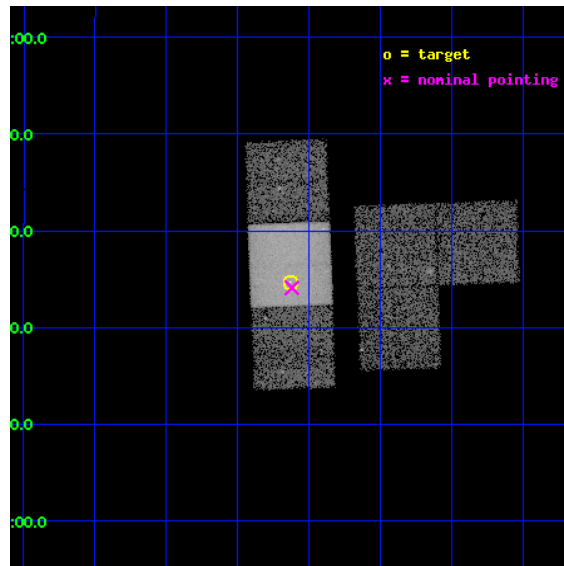
L2 Processing Date : Aug 27 2012

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1 Front

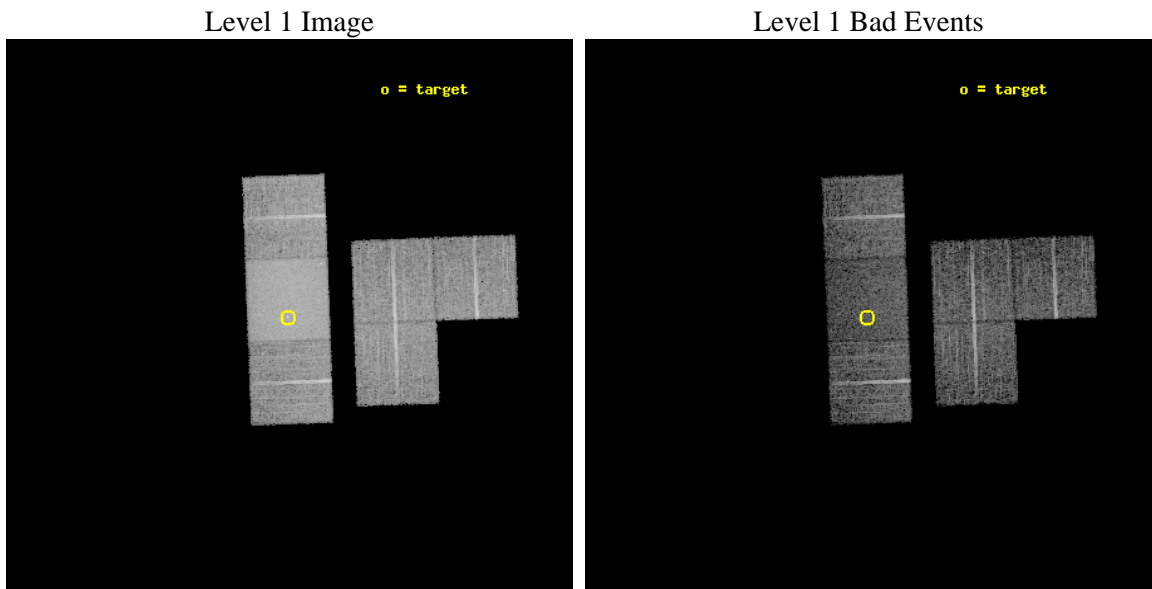
seq_num	700090	Sequence number
obs_id	418	Observation id
title	A SURVEY OF GRAVITATIONALLY LENSED QUASARS	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	MITG J0414+0534	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	63.657083	Observer's specified target RA [deg]
dec_targ	5.578333	Observer's specified target Dec [deg]
ra_nom	63.654860078535	Nominal RA [deg]
dec_nom	5.5685077326912	Nominal Dec [deg]
roll_nom	267.86942613666	Nominal Roll [deg]
revision	5	Processing version of data
ontime	7532.1700188518	Sum of GTIs [s]
livetime	7436.7931467448	Livetime [s]
ontime1	7528.9700786918	Sum of GTIs [s]
ontime2	7532.0058588535	Sum of GTIs [s]
ontime3	7532.0879388601	Sum of GTIs [s]
ontime6	7532.1289788485	Sum of GTIs [s]
ontime7	7532.1700188518	Sum of GTIs [s]
ontime8	7532.0468988568	Sum of GTIs [s]
l2events	104646	Number of level 2 events



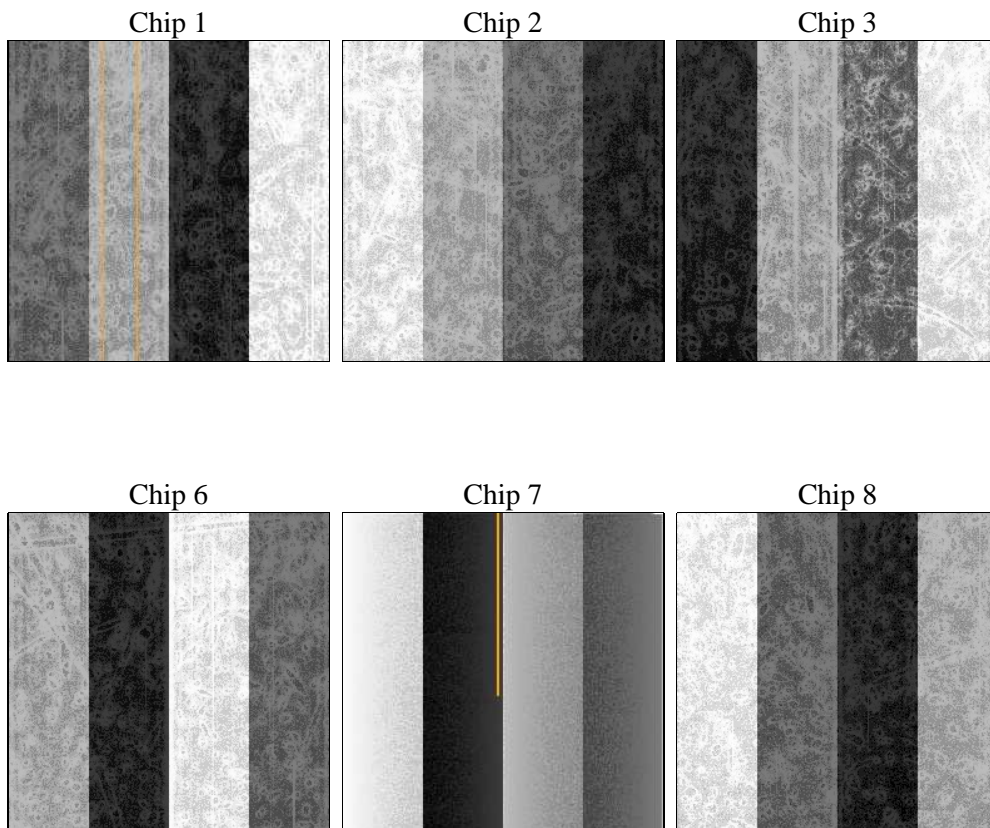
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7532.1700188518	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime1	7528.9700786918	Sum of GTIs [s]
date	2012-08-27T13:10:33	Date and time of file creation	ontime2	7532.0058588535	Sum of GTIs [s]
revision	5	Processing version of data	ontime3	7532.0879388601	Sum of GTIs [s]
			ontime6	7532.1289788485	Sum of GTIs [s]
			ontime7	7532.1700188518	Sum of GTIs [s]
			ontime8	7532.0468988568	Sum of GTIs [s]
			l1events	402684	Number of level 1 events

2.1.4 Events

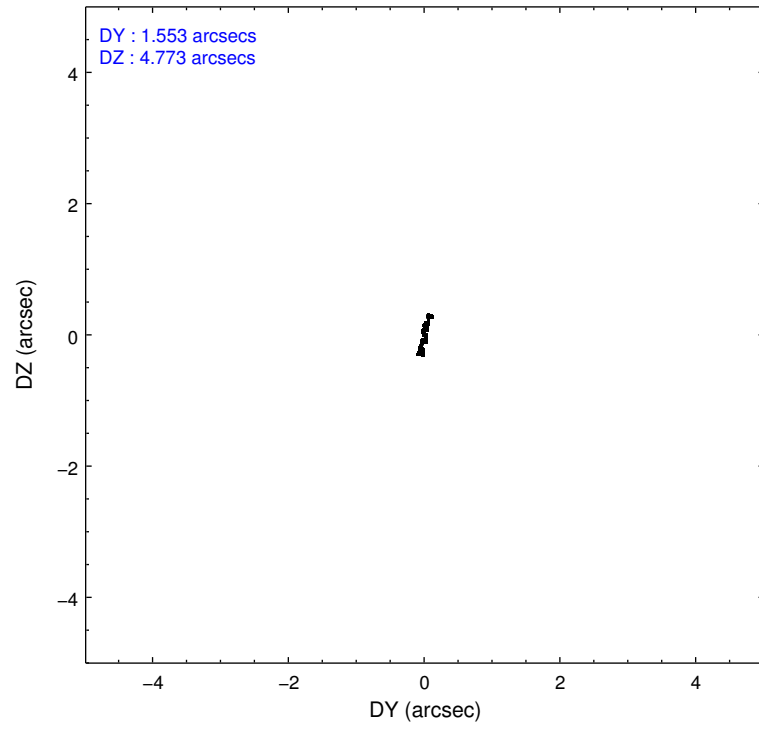
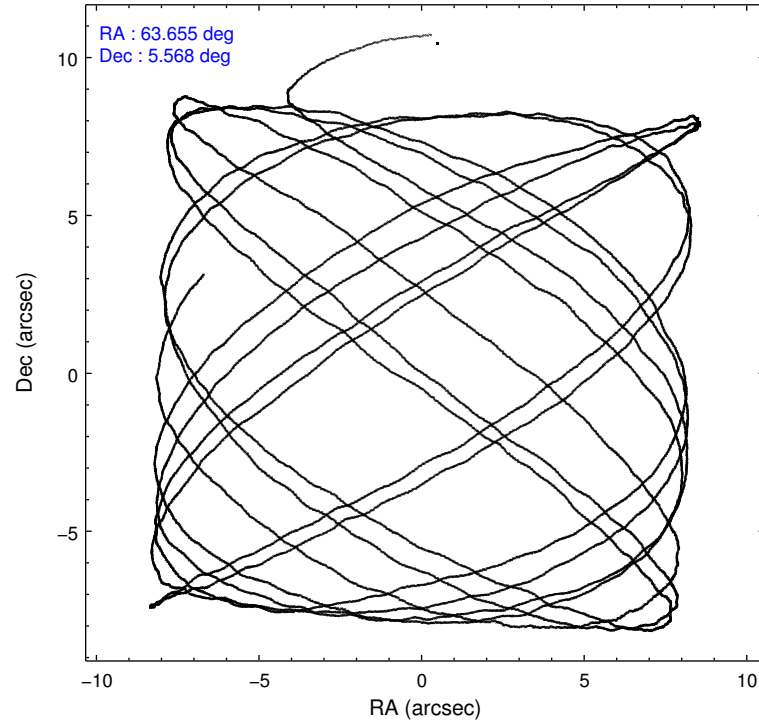
	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8		ccd 1	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	52802	55459	55566	57562	111954	69341	grade 0 events	3283	3176	3389	4059	9151	5177
rejected events	45682	48963	48856	49875	37425	55459		6%	5%	6%	7%	8%	7%
rejected %	86%	88%	87%	86%	33%	79%	grade 1 events	21	28	27	29	61	33
								0%	0%	0%	0%	0%	0%
							grade 2 events	1298	1231	1169	1231	14054	2910
								2%	2%	2%	2%	12%	4%
							grade 3 events	675	561	572	637	6284	1314
								1%	1%	1%	1%	5%	1%
							grade 4 events	671	617	630	628	6329	1242
								1%	1%	1%	1%	5%	1%
							grade 5 events	1931	1573	1820	1982	6368	2388
								3%	2%	3%	3%	5%	3%
							grade 6 events	1202	916	953	1141	38850	3251
								2%	1%	1%	1%	34%	4%
							grade 7 events	43721	47357	47006	47855	30857	53026
								82%	85%	84%	83%	27%	76%

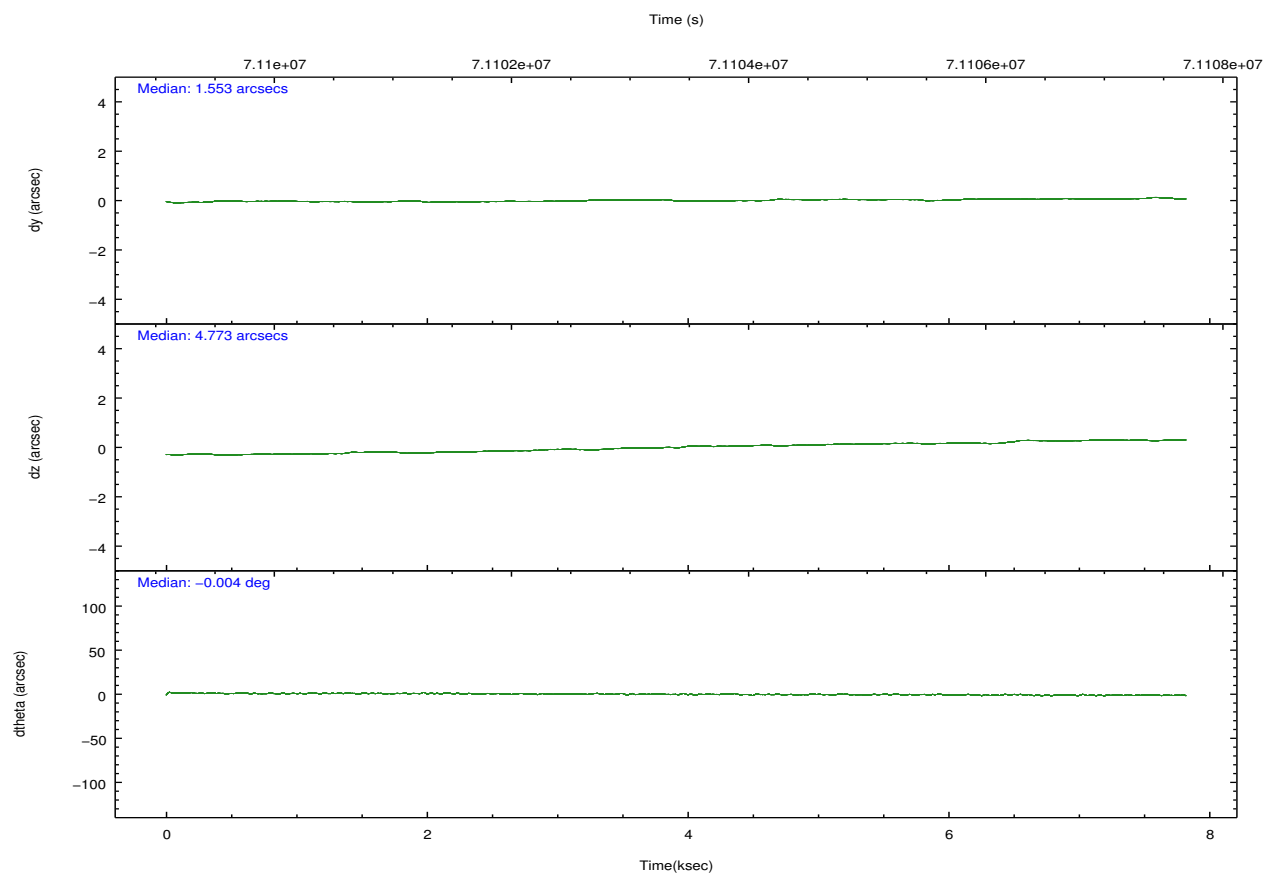
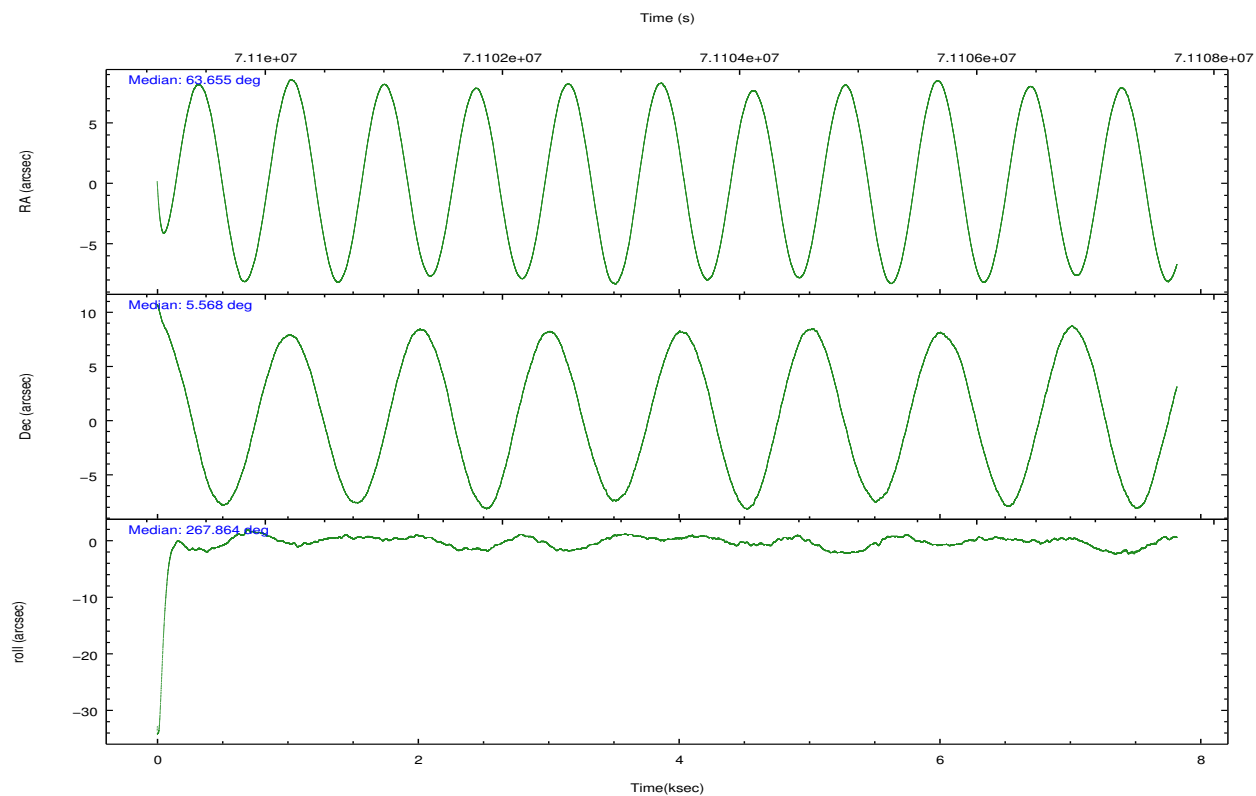
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-123678	ACIS-123678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	63.641905	63.65486007853463
[deg] Pointing Dec	5.592784	5.568507732691169
[deg] Pointing Roll	267.714498	267.8694261366592
[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)	71099813.184000	71098700.481828
Observation start date	2000-04-02T21:55:49	2000-04-02T21:38:20
[s] Observation end time (MET)	71107213.184000	71108047.969671
Observation end date	2000-04-02T23:59:09	2000-04-03T00:14:07
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



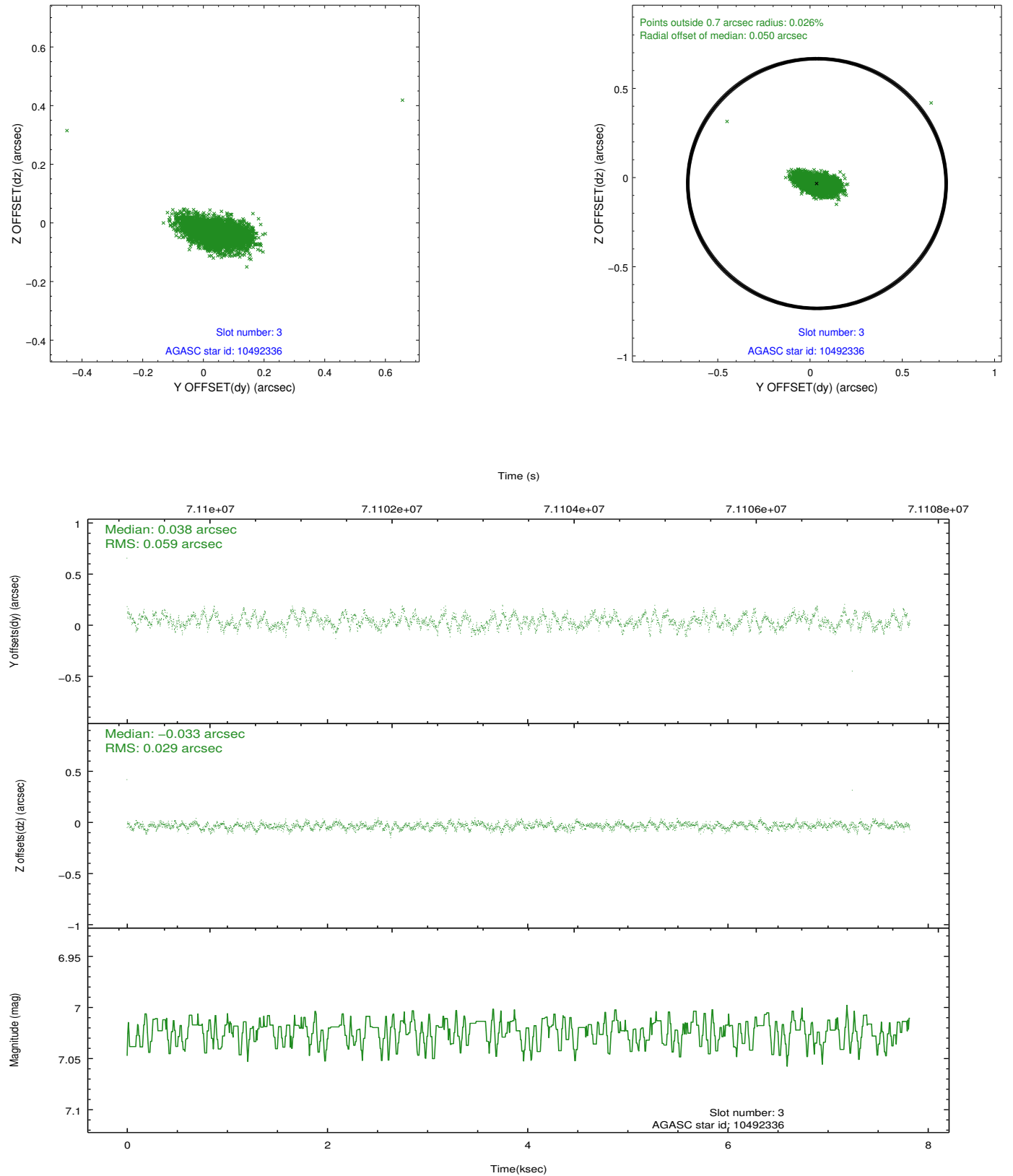


Slot Statistics

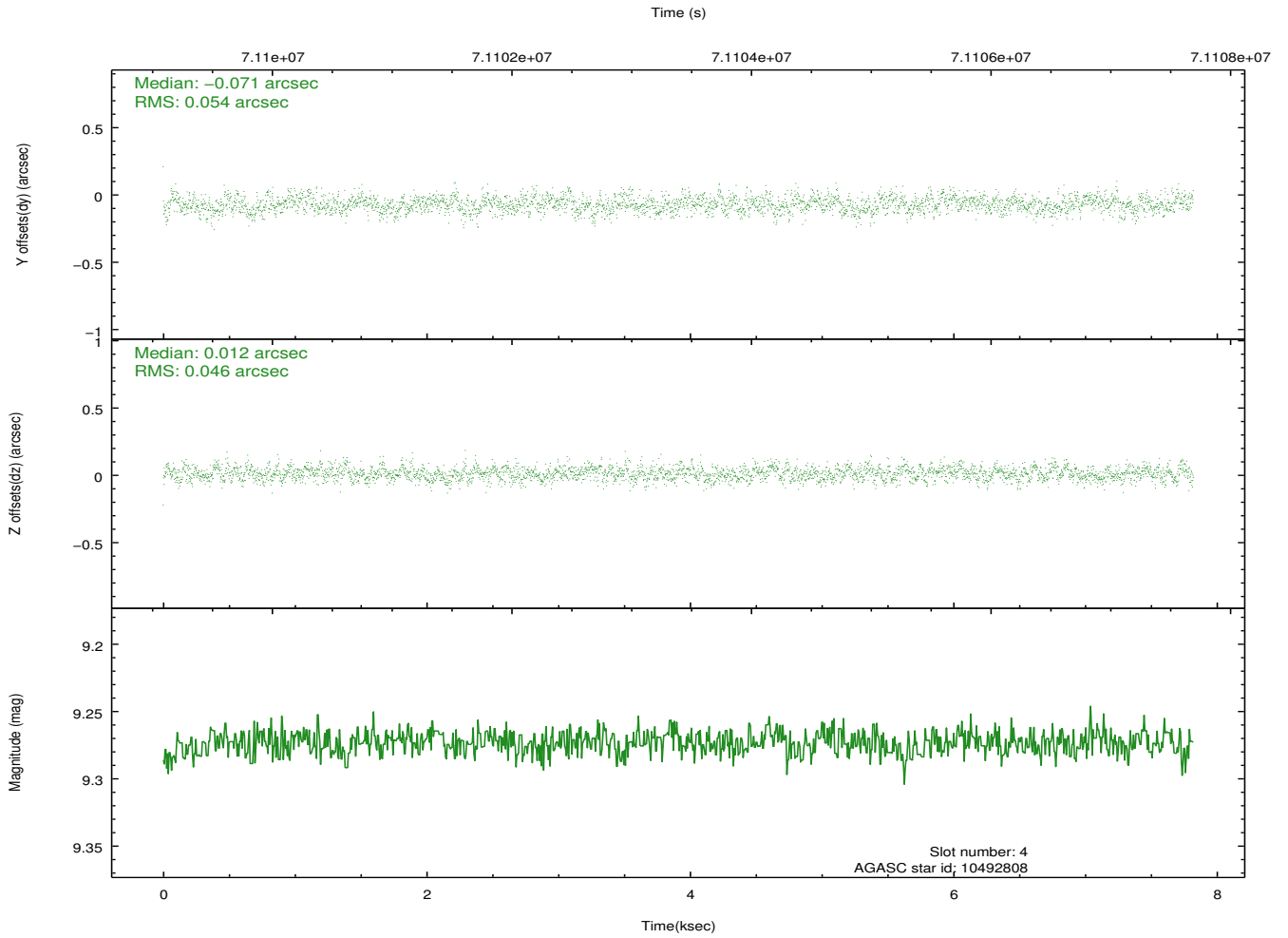
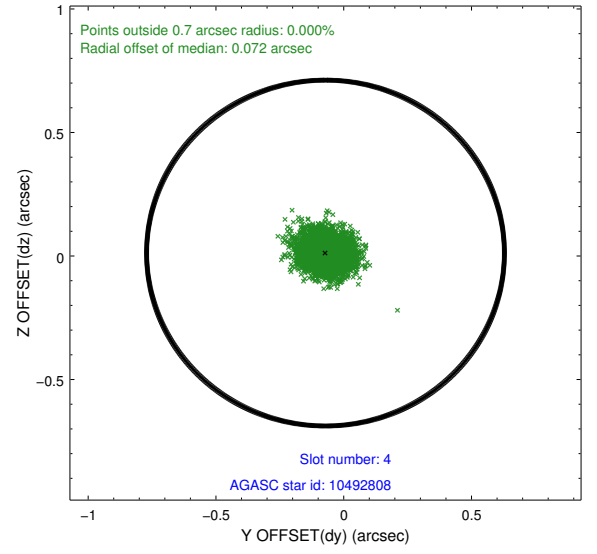
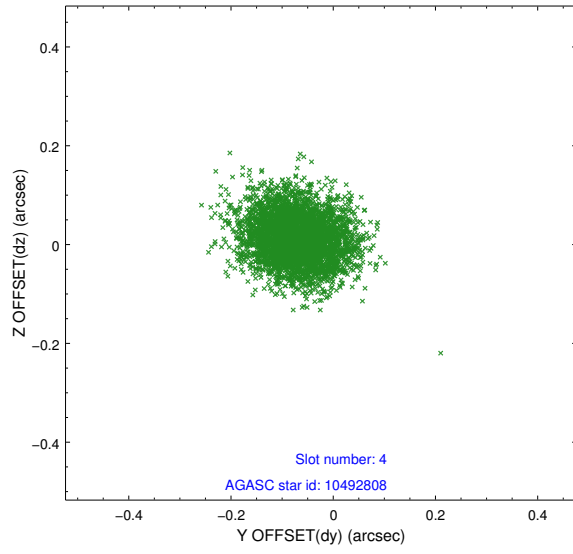
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1908	-0.027	-0.004	0.008	0.013	0.000000	0.000000	-754.19	-1725.87
1	FID	ACIS-S-4	7.20	1908	-0.006	0.014	0.005	0.010	0.000000	0.000000	2158.78	181.87
2	FID	ACIS-S-5	7.23	1908	0.001	-0.001	0.009	0.015	0.000000	0.000000	-1806.07	176.36
3	GUIDE	10492336	7.02	3816	0.038	-0.033	0.066	0.115	63.181049	5.030869	2086.09	-1571.33
4	GUIDE	10492808	9.27	3814	-0.071	0.012	0.076	0.122	63.555055	6.190155	-2136.67	-397.70
5	GUIDE	10489120	8.97	3816	0.074	-0.082	0.087	0.145	63.037180	5.195794	1512.50	-2110.18
6	GUIDE	10488672	7.45	3816	-0.166	0.005	0.048	0.082	63.917906	6.229652	-2331.14	894.07
7	GUIDE	10492272	6.94	3815	0.122	0.097	0.061	0.093	64.297548	5.024571	1947.52	2430.84

2.4 Star Slots

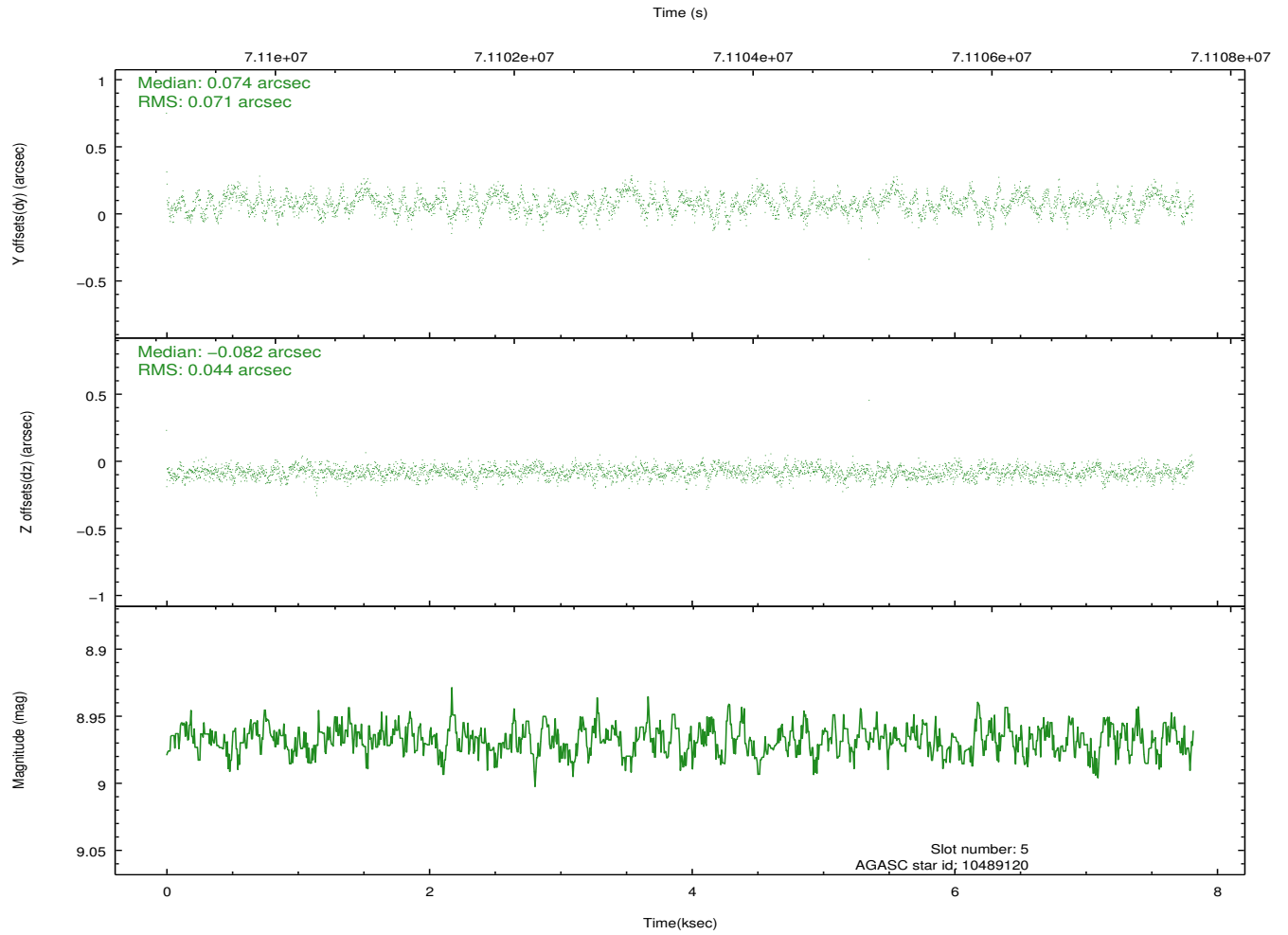
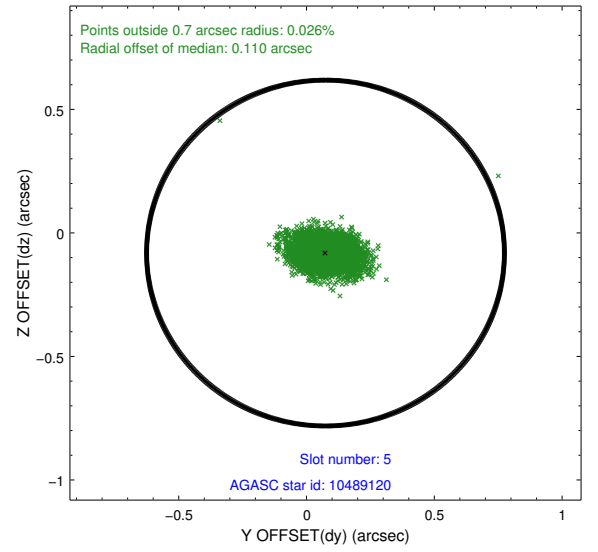
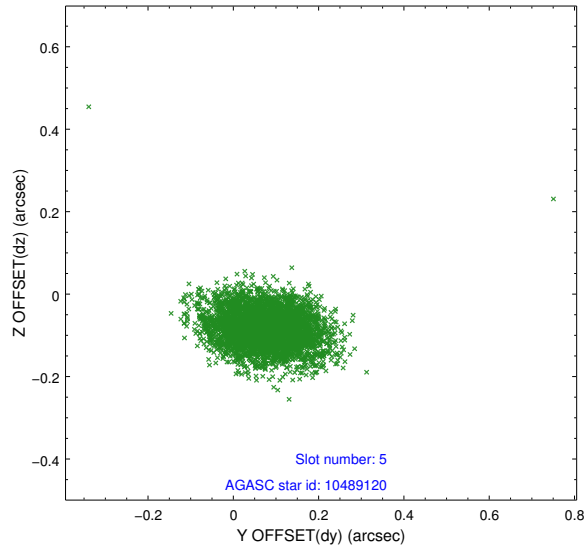
2.4.1 Slot 3



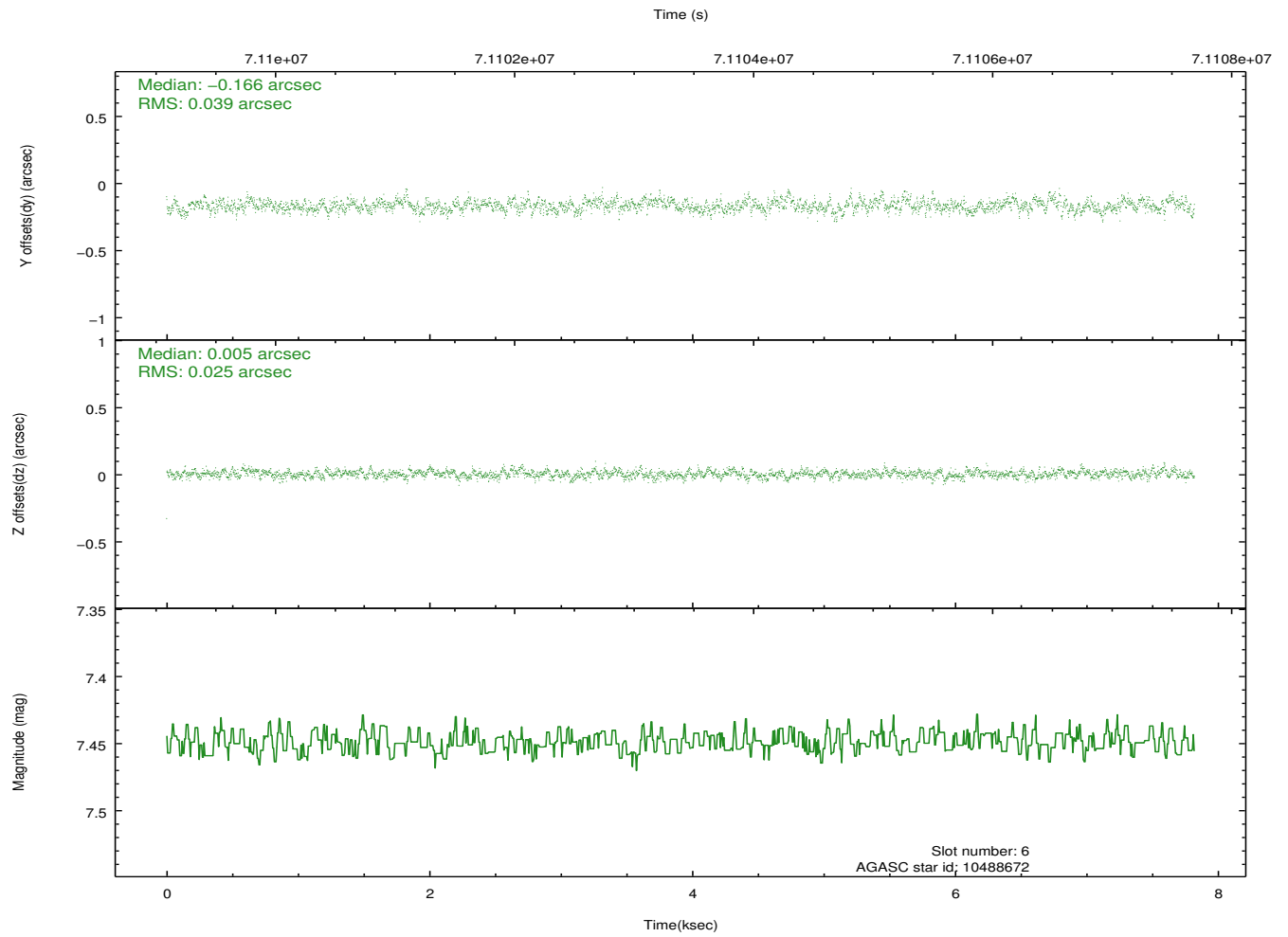
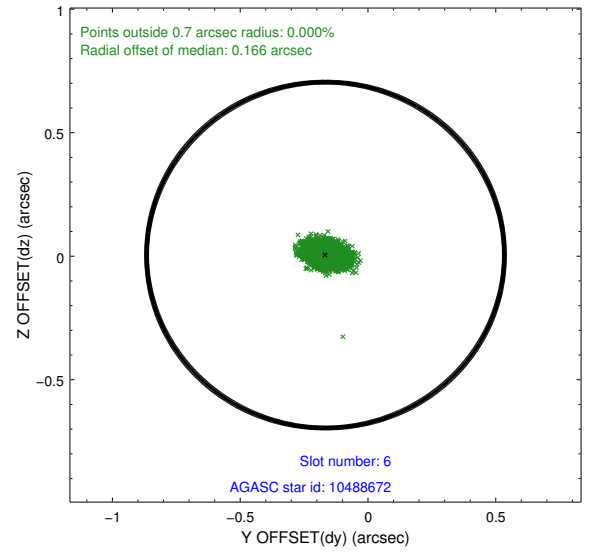
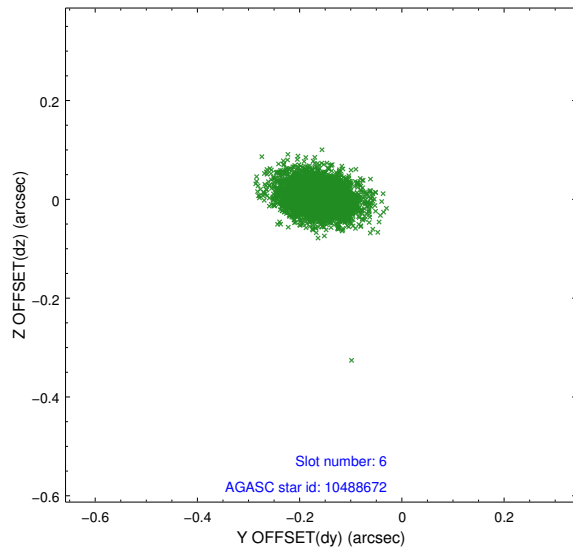
2.4.2 Slot 4



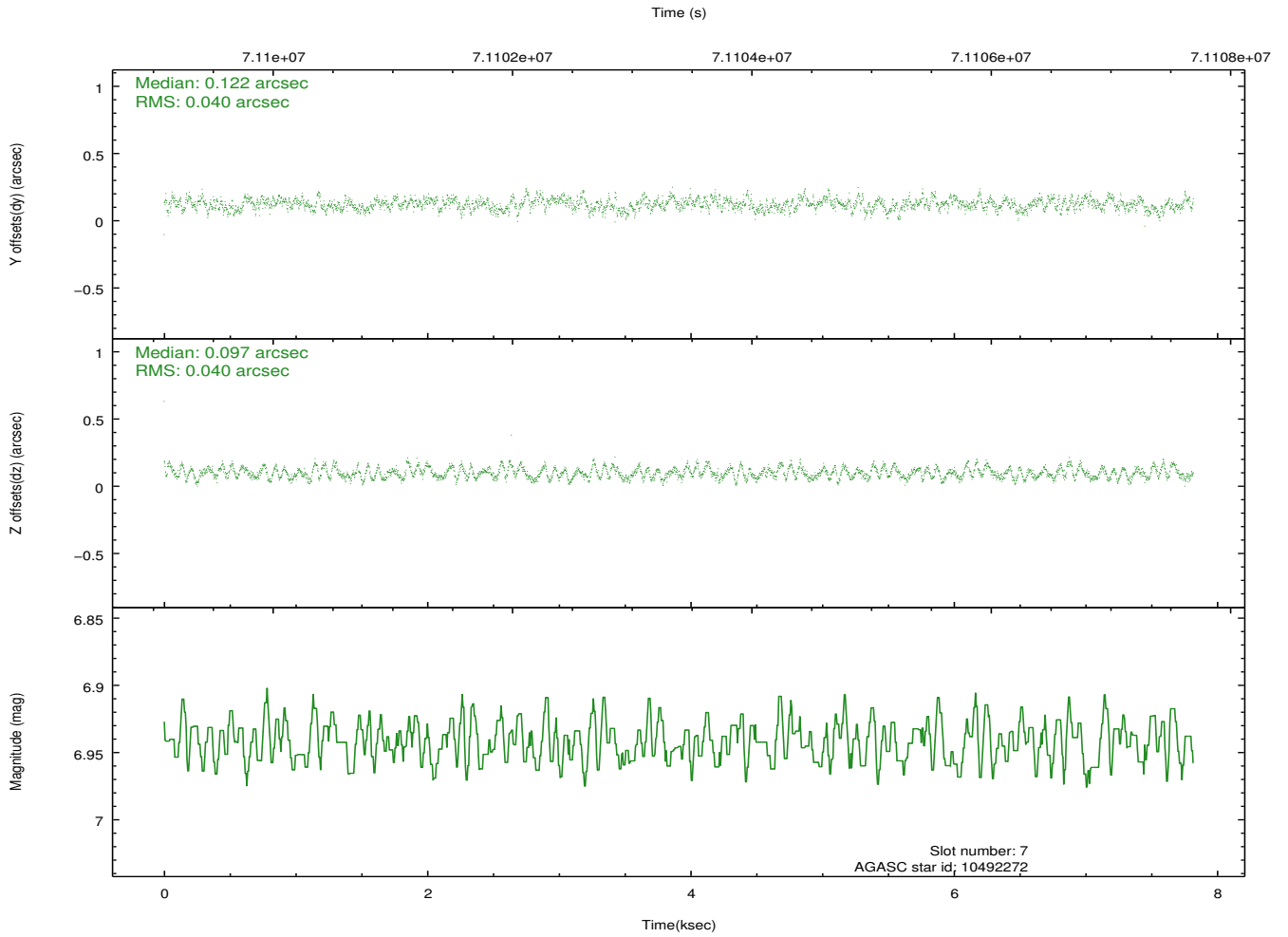
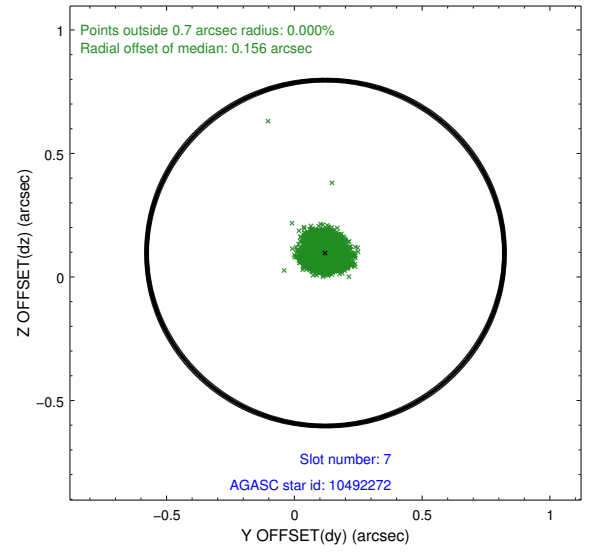
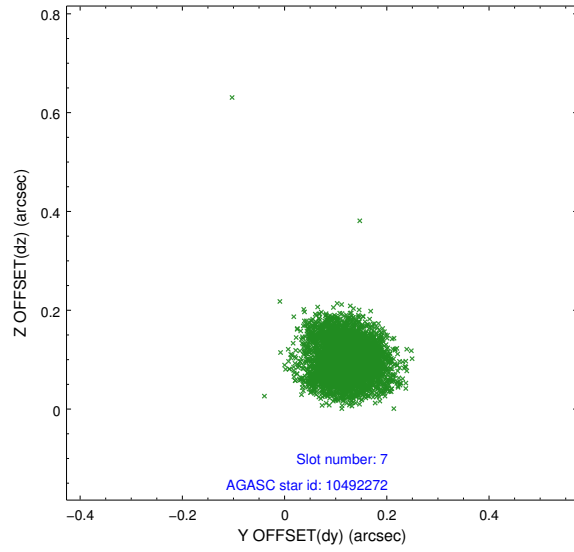
2.4.3 Slot 5



2.4.4 Slot 6

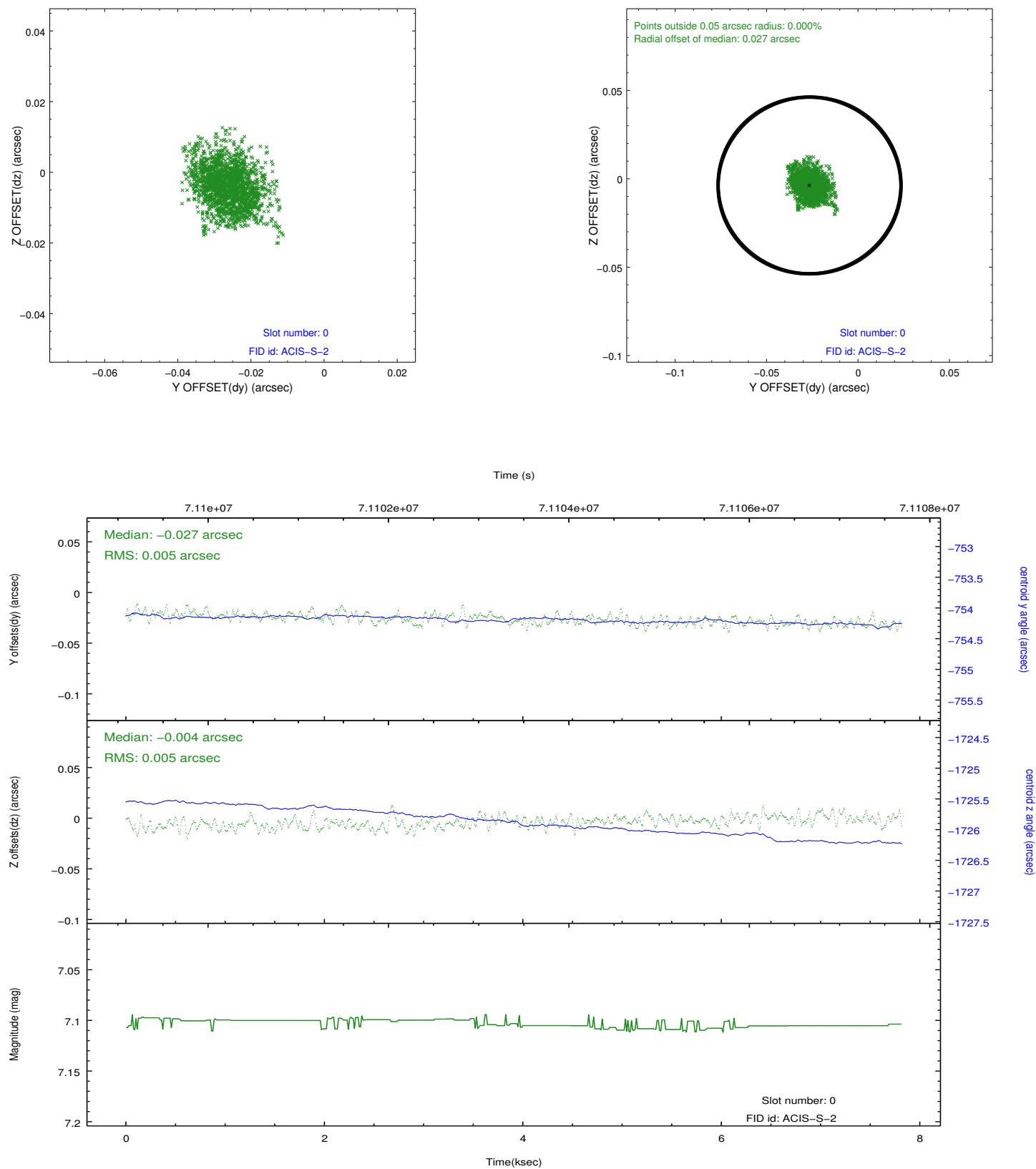


2.4.5 Slot 7

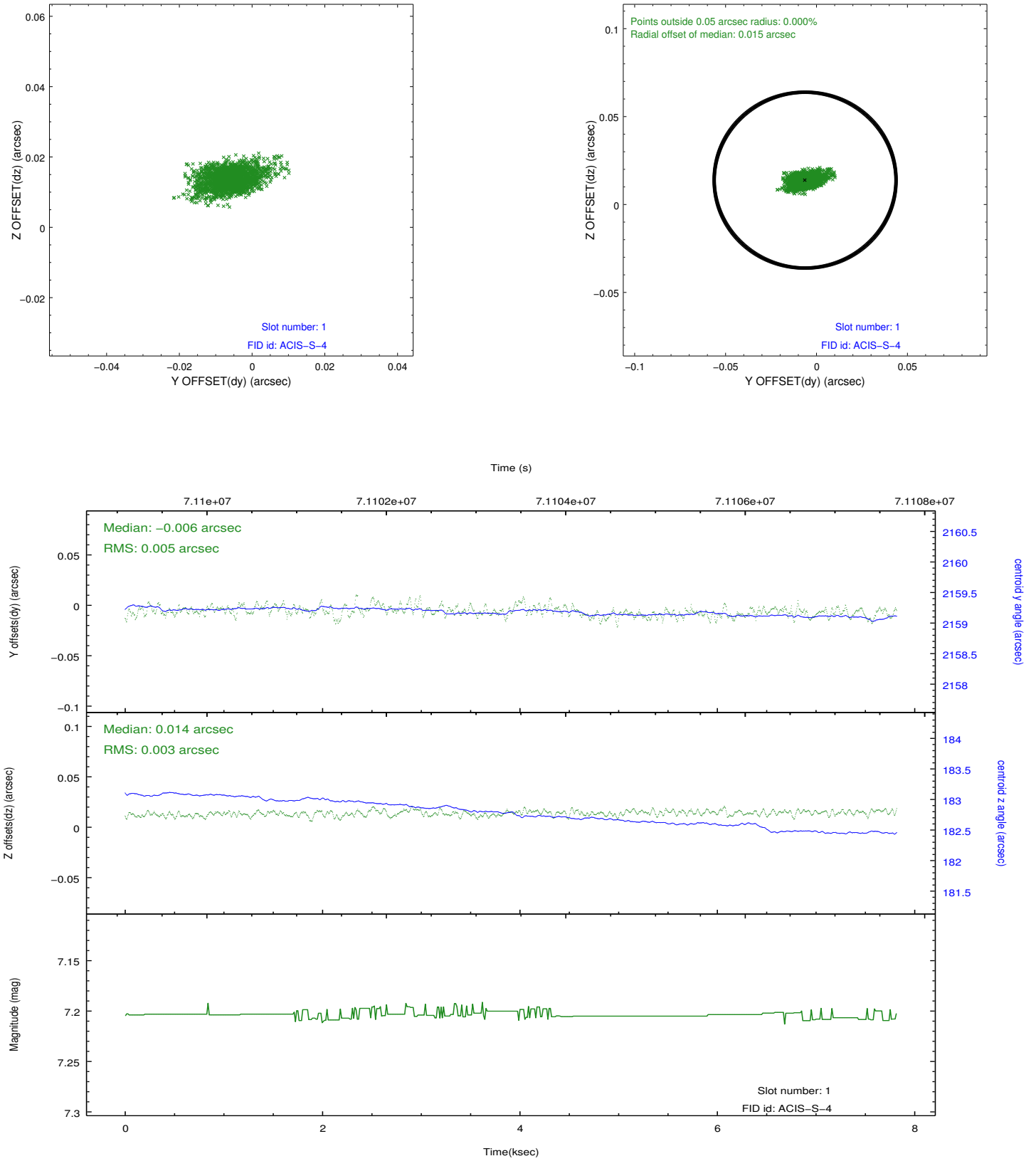


2.5 FID Slots

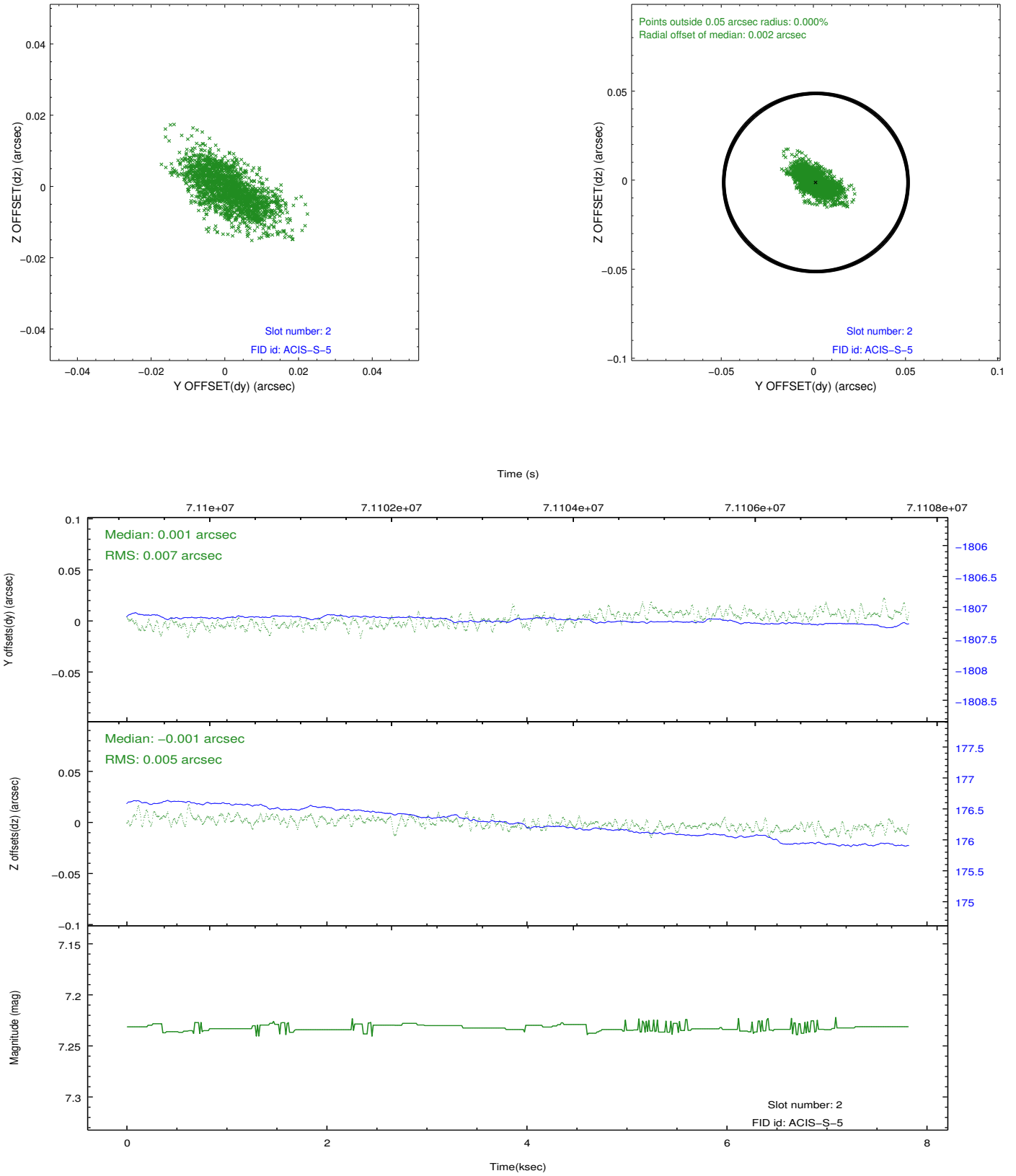
2.5.1 Slot 0



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)	2012.08.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.532

A.2 Comments

Monitor constraint met.

=====

A spatial region of the original bias map for CCD = 1 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 = 1 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:
(63.36072,5.64801),(63.35812,5.64810),(63.35683,5.61282),(63.35948,5.61395)