

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13001 - L2 Version 2
Chandra X-Ray Center

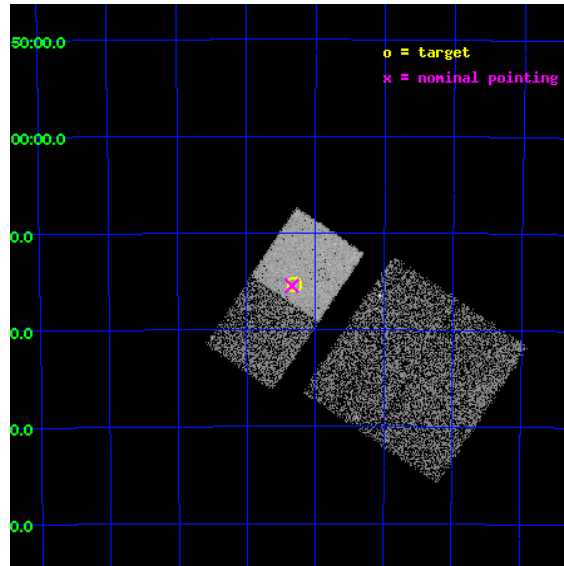
L2 Processing Date : Feb 3 2012

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1 Front

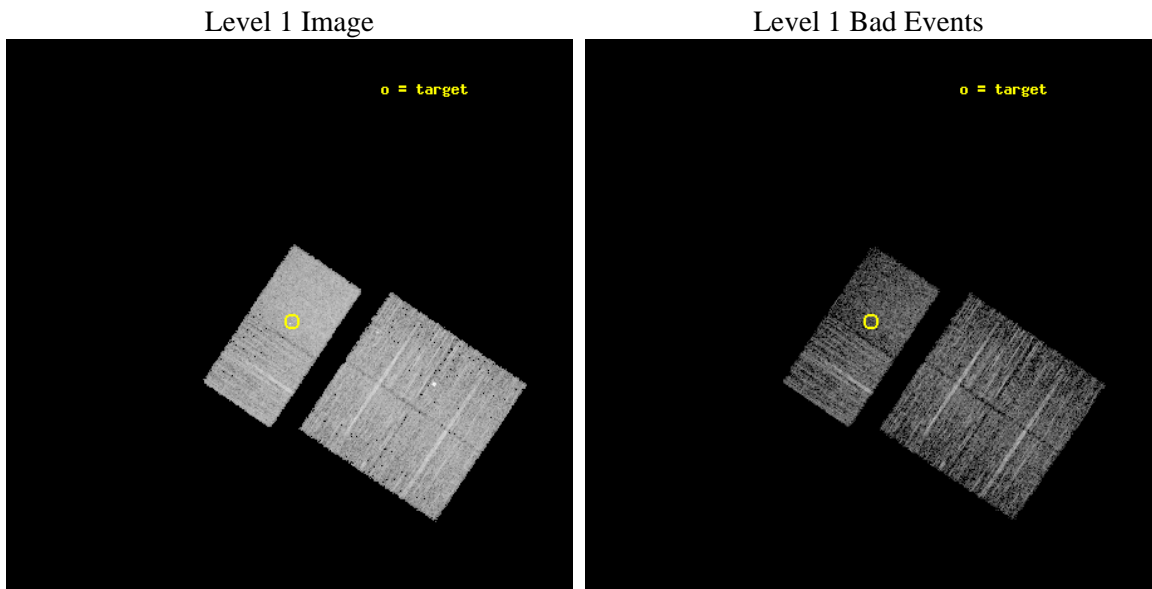
seq_num	600965	Sequence number
obs_id	13001	Observation id
title	The brightest ultraluminous X-ray sources across the sky	Proposal
observer	Dr Jifeng Liu	Principal investigator
object	J052018.3-611521	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	80.07625	Observer's specified target RA [deg]
dec_targ	-61.255833	Observer's specified target Dec [deg]
ra_nom	80.085589585874	Nominal RA [deg]
dec_nom	-61.257857495162	Nominal Dec [deg]
roll_nom	303.89227161905	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4961.7089282274	Sum of GTIs [s]
livetime	4898.8807821958	Livetime [s]
ontime0	4961.7499682307	Sum of GTIs [s]
ontime1	4961.5447682142	Sum of GTIs [s]
ontime2	4961.5858082175	Sum of GTIs [s]
ontime3	4961.6268482208	Sum of GTIs [s]
ontime6	4961.6678882241	Sum of GTIs [s]
ontime7	4961.7089282274	Sum of GTIs [s]
l2events	35966	Number of level 2 events



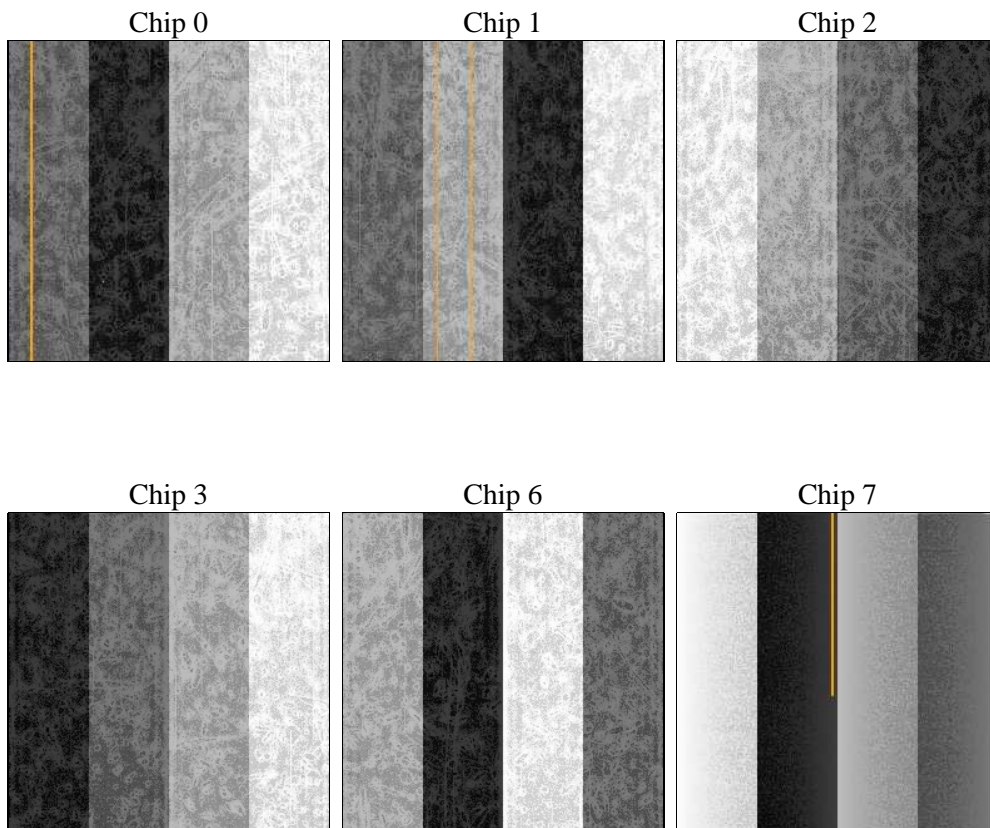
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	4961.7089282274	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	4961.7499682307	Sum of GTIs [s]
date	2012-02-03T14:43:47	Date and time of file creation	ontime1	4961.5447682142	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4961.5858082175	Sum of GTIs [s]
			ontime3	4961.6268482208	Sum of GTIs [s]
			ontime6	4961.6678882241	Sum of GTIs [s]
			ontime7	4961.7089282274	Sum of GTIs [s]
			l1events	217881	Number of level 1 events

2.1.4 Events

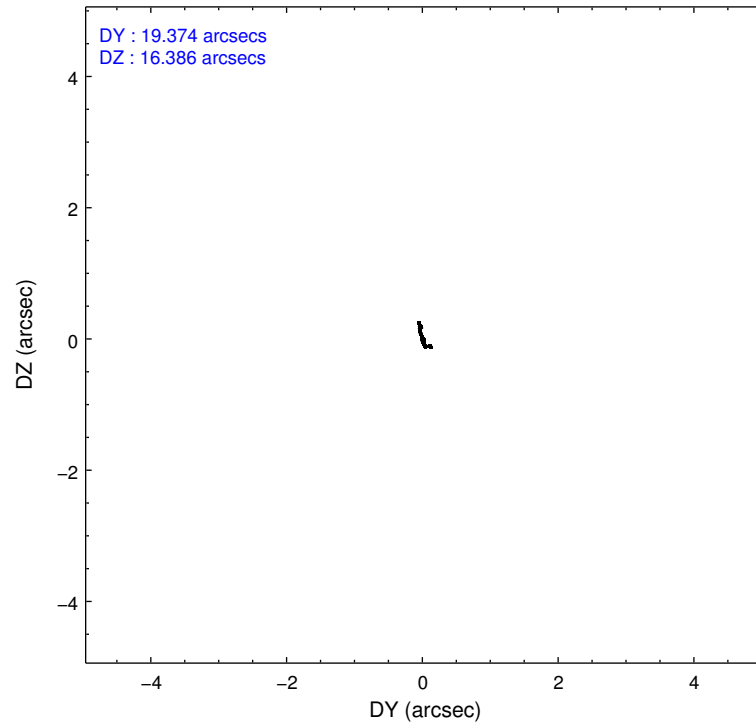
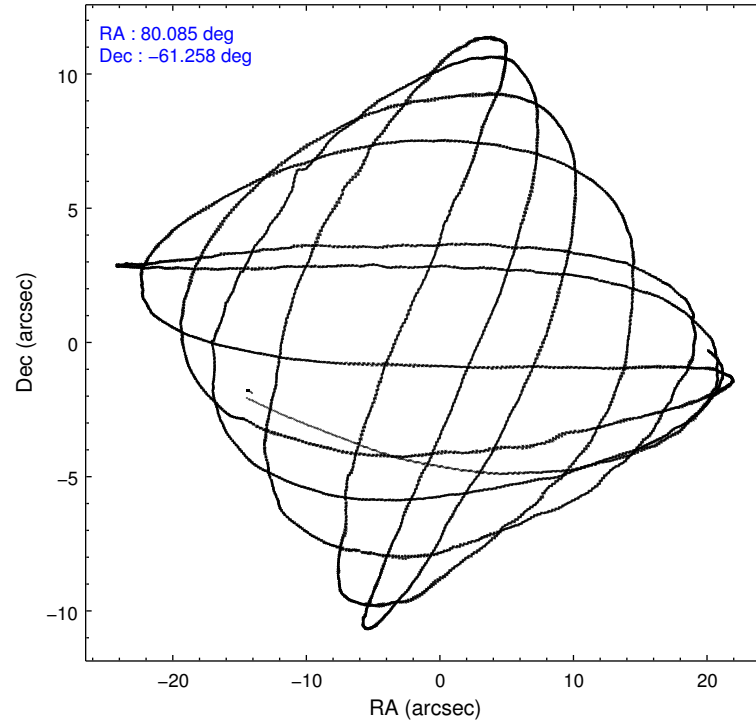
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	33401	32735	35592	35867	36515	43771
rejected events	29391	27762	31736	32304	32381	23831
rejected %	87%	84%	89%	90%	88%	54%

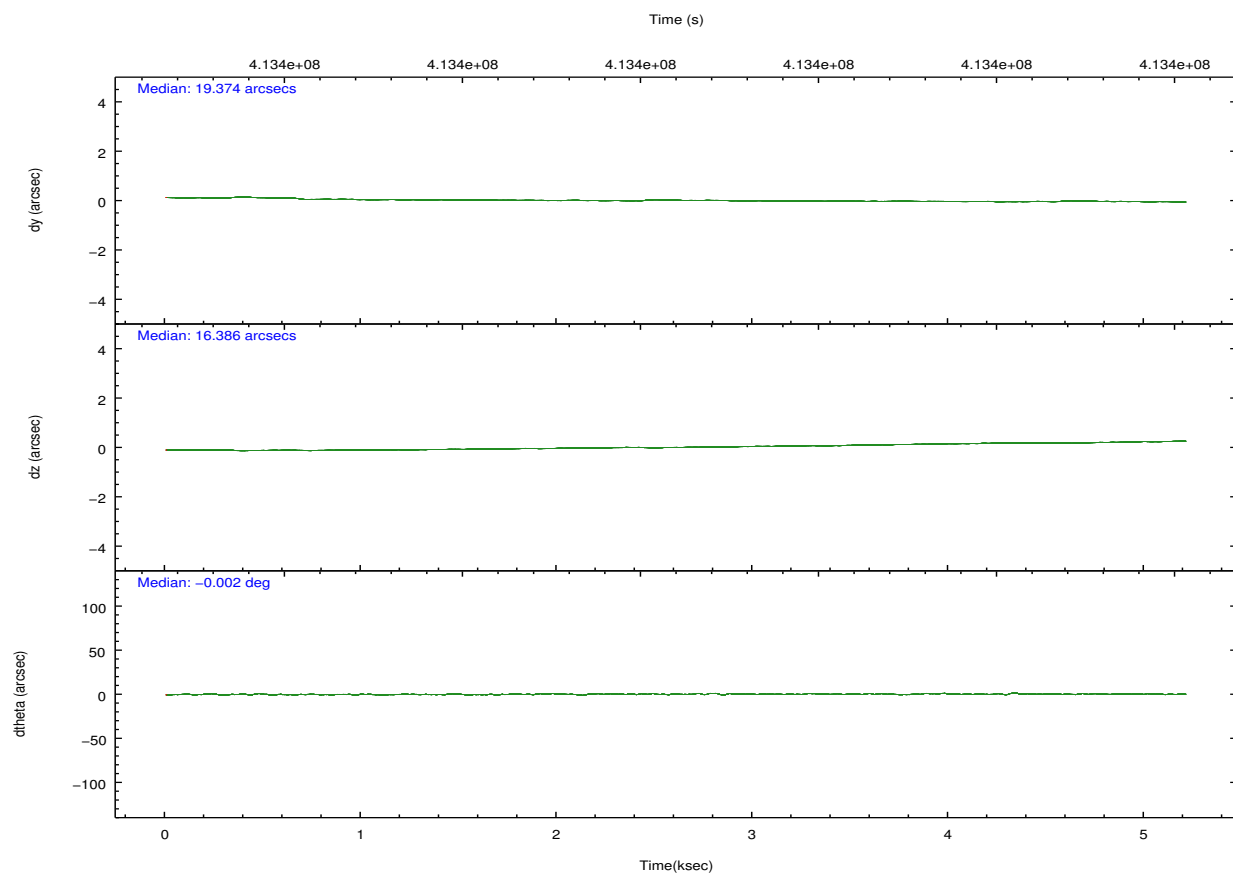
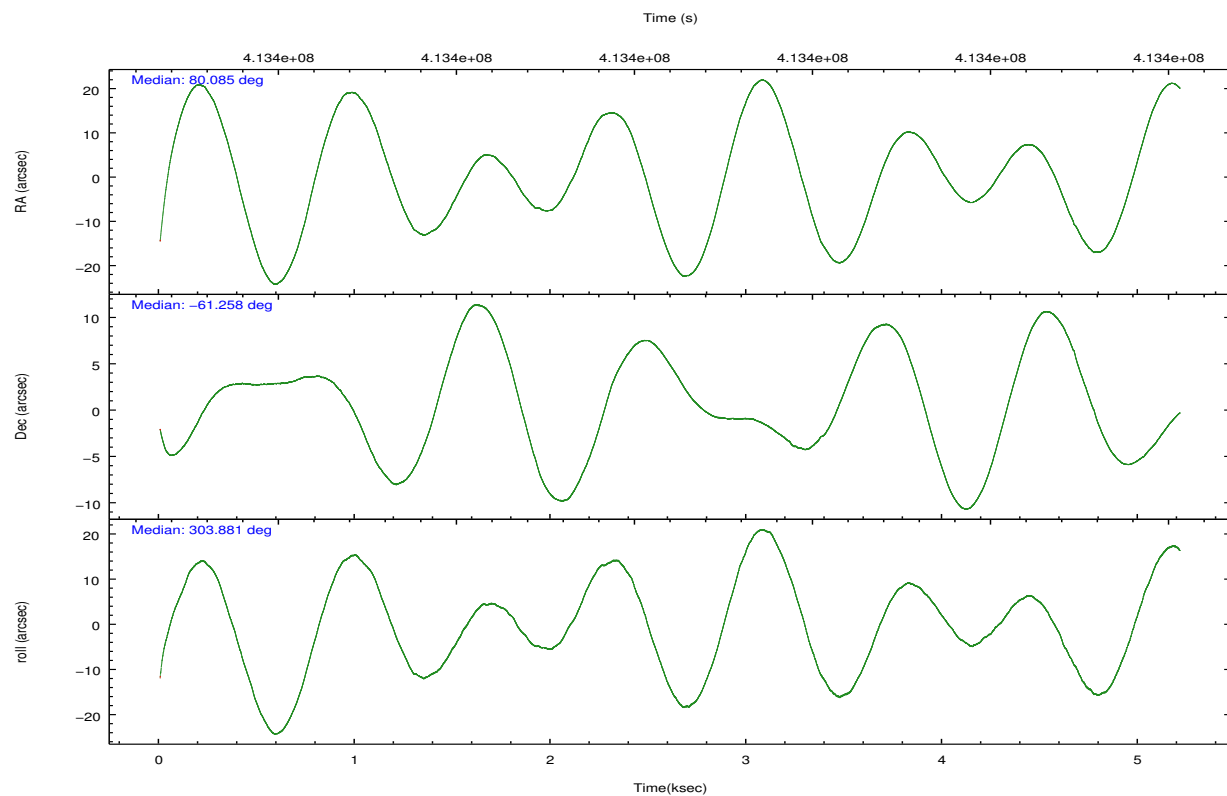
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1447	1553	1307	1371	1441	1983
	4%	4%	3%	3%	3%	4%
grade 1 events	18	11	21	28	20	57
	0%	0%	0%	0%	0%	0%
grade 2 events	961	1753	993	809	896	4122
	2%	5%	2%	2%	2%	9%
grade 3 events	433	451	381	355	425	1664
	1%	1%	1%	0%	1%	3%
grade 4 events	402	398	398	354	446	1729
	1%	1%	1%	0%	1%	3%
grade 5 events	1546	1576	1381	1663	1657	4551
	4%	4%	3%	4%	4%	10%
grade 6 events	770	821	781	675	929	10449
	2%	2%	2%	1%	2%	23%
grade 7 events	27824	26172	30330	30612	30701	19216
	83%	79%	85%	85%	84%	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	80.034050	80.08558958587443	Subarray requested	NONE	NONE
[deg] Pointing Dec	-61.246143	-61.25785749516163	Alternating exposures requested	N	N
[deg] Pointing Roll	303.690445	303.8922716190539	[s] Primary exposure time	0.000000	3.2
[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)	413398810.184000	413397829.61151			
Observation start date	2011-02-06T16:59:04	2011-02-06T16:43:49			
[s] Observation end time (MET)	413403810.184000	413405239.84939			
Observation end date	2011-02-06T18:22:24	2011-02-06T18:47:19			
Read mode	TIMED	TIMED			

2.3 Aspect



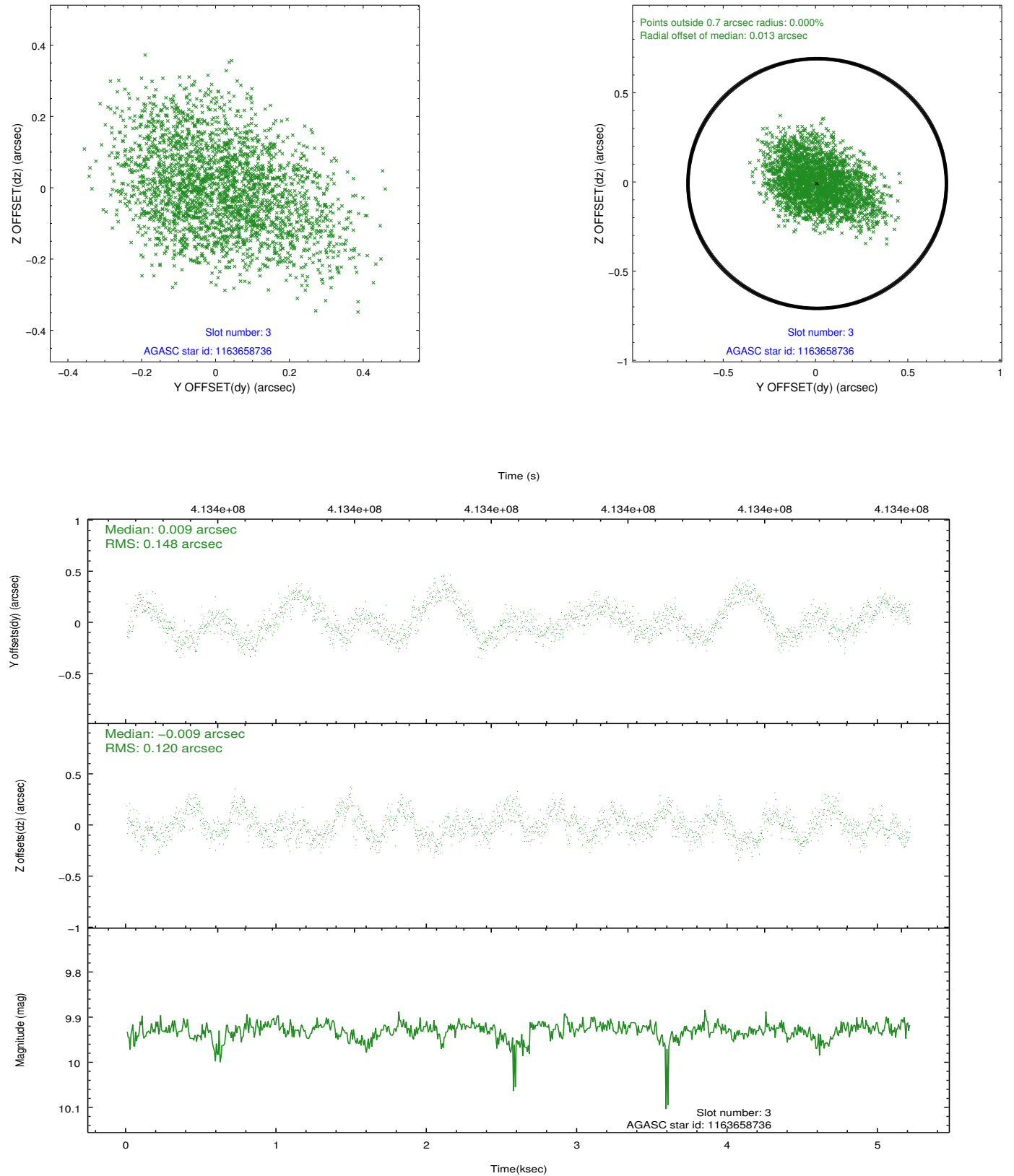


Slot Statistics

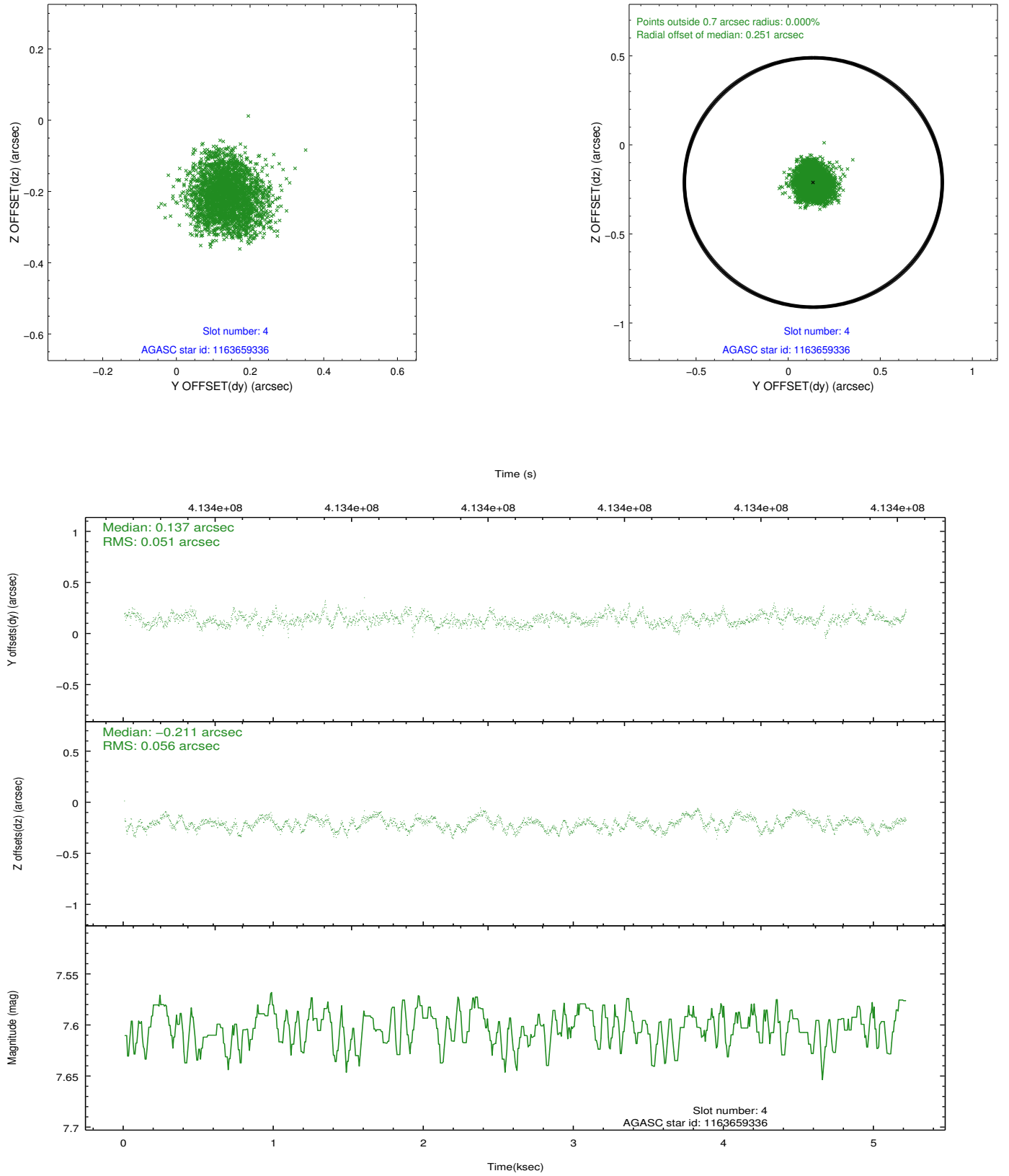
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	1271	-0.144	-0.102	0.007	0.013	0.000000	0.000000	-772.67	-1737.90
1	FID	ACIS-S-4	7.05	1271	0.186	0.062	0.007	0.013	0.000000	0.000000	2140.46	169.44
2	FID	ACIS-S-6	7.19	1271	-0.070	0.047	0.008	0.014	0.000000	0.000000	390.95	808.20
3	GUIDE	1163658736	9.93	2539	0.009	-0.009	0.206	0.325	79.382283	-61.535635	251.96	-1511.48
4	GUIDE	1163659336	7.60	2542	0.137	-0.211	0.083	0.127	80.035513	-61.167986	-232.74	158.05
5	GUIDE	1164184184	7.65	2542	-0.221	0.297	0.093	0.157	79.543183	-61.950713	1652.46	-2099.33
6	GUIDE	1163660520	7.52	2542	0.074	-0.025	0.098	0.156	80.117504	-60.779846	-1314.93	1052.32
7	GUIDE	1163666472	9.38	2533	-0.015	-0.051	0.128	0.205	78.908159	-61.656504	175.79	-2429.16

2.4 Star Slots

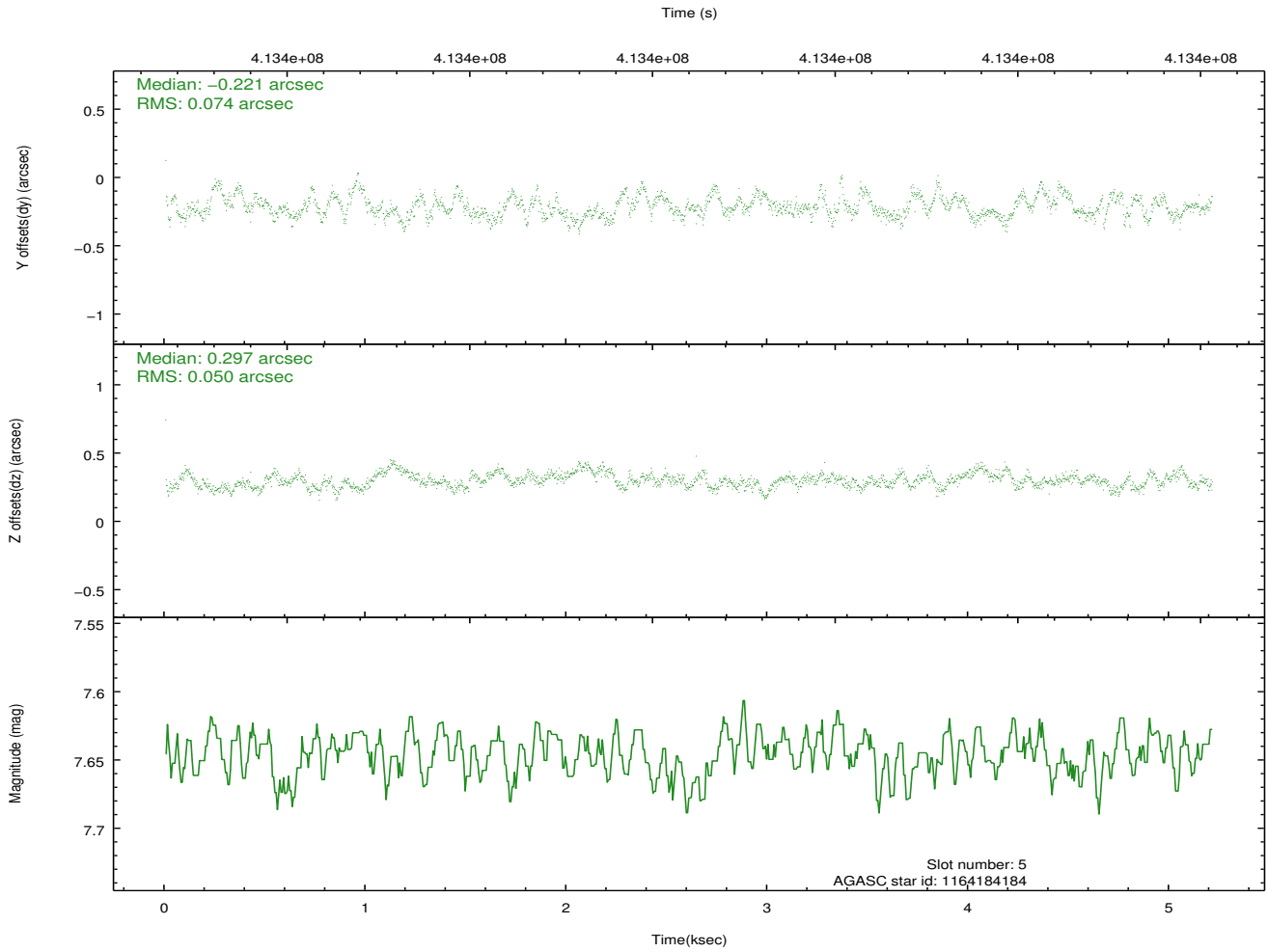
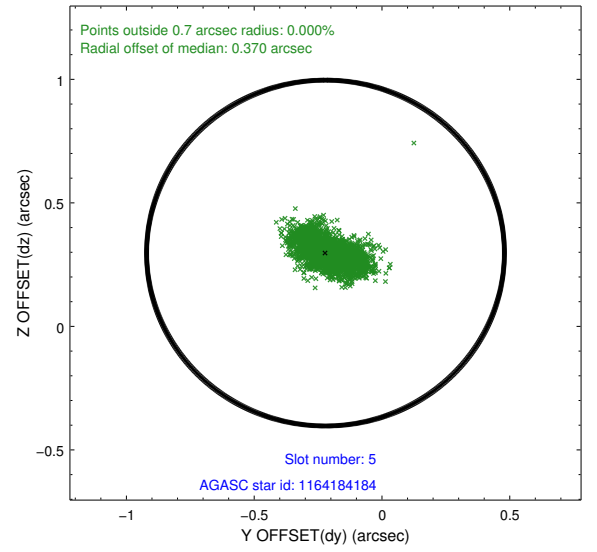
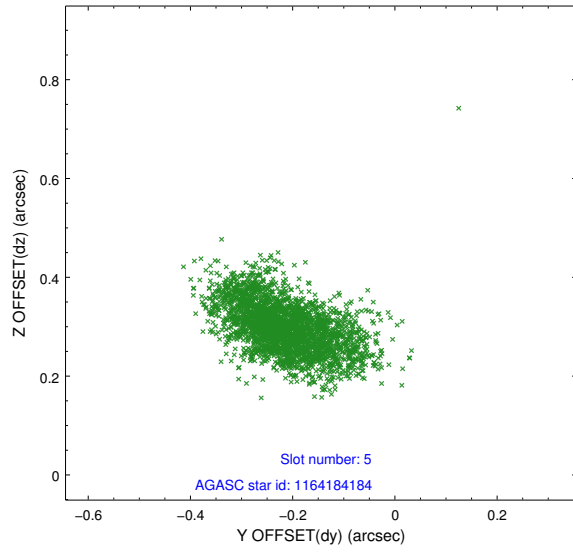
2.4.1 Slot 3



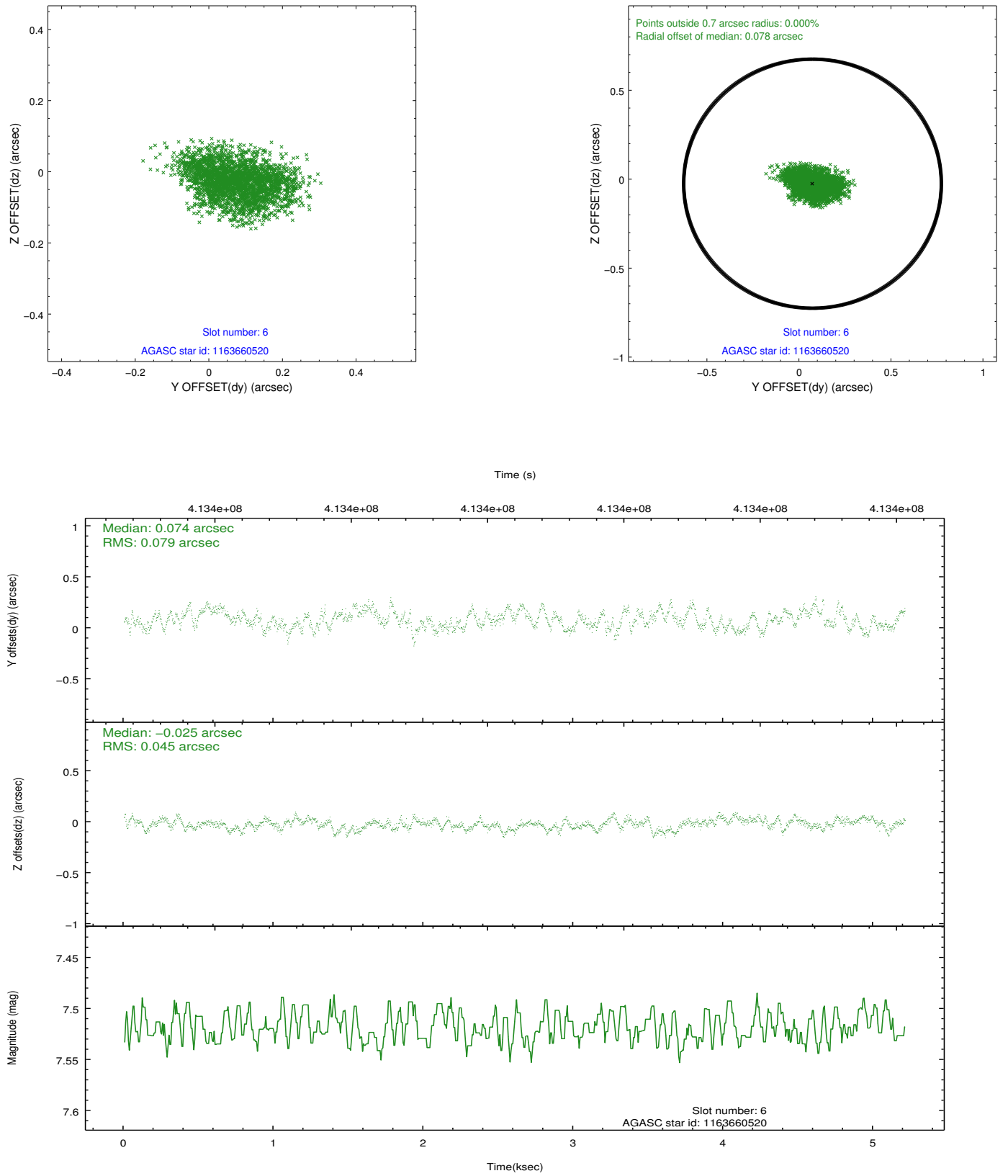
2.4.2 Slot 4



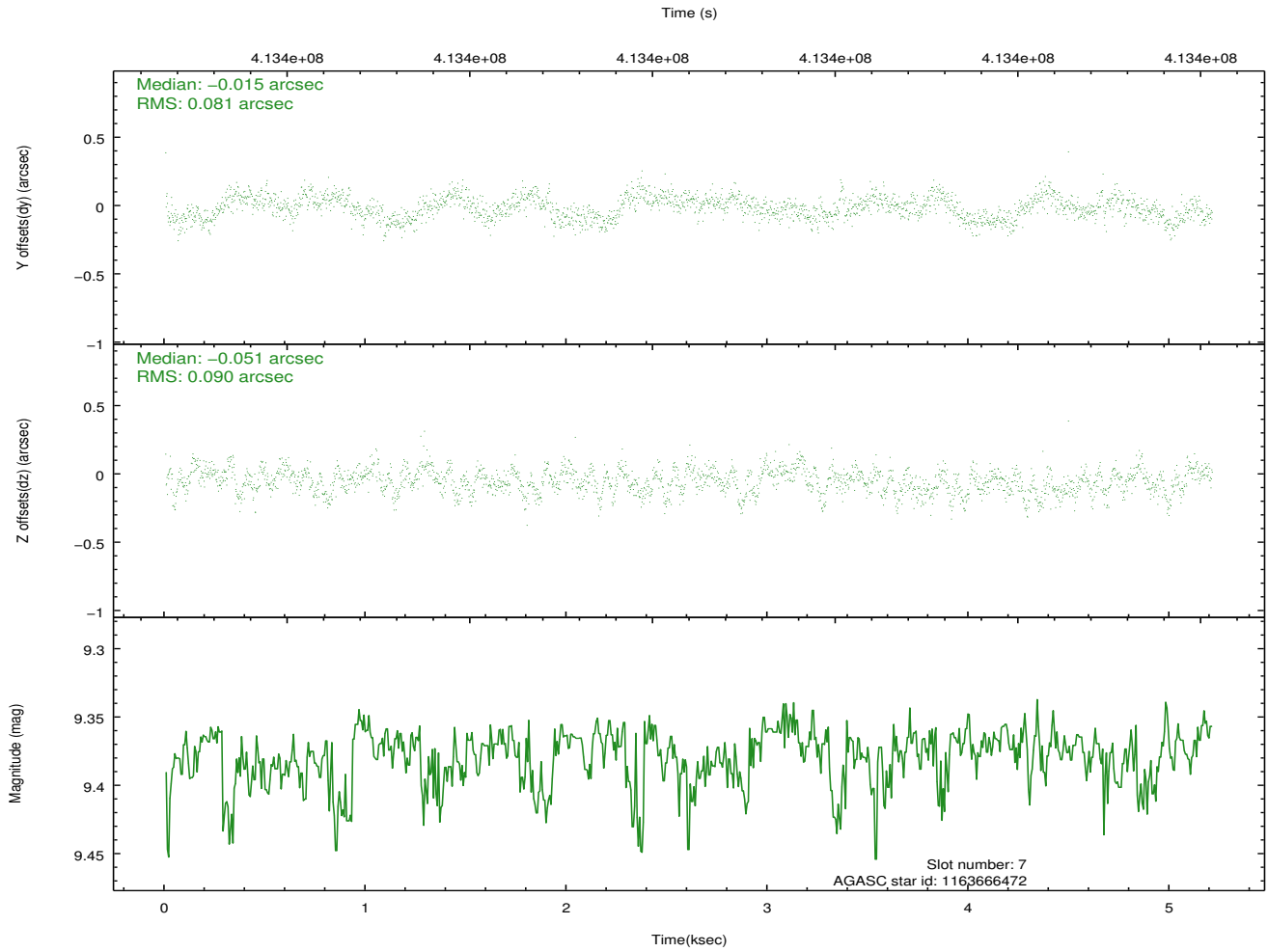
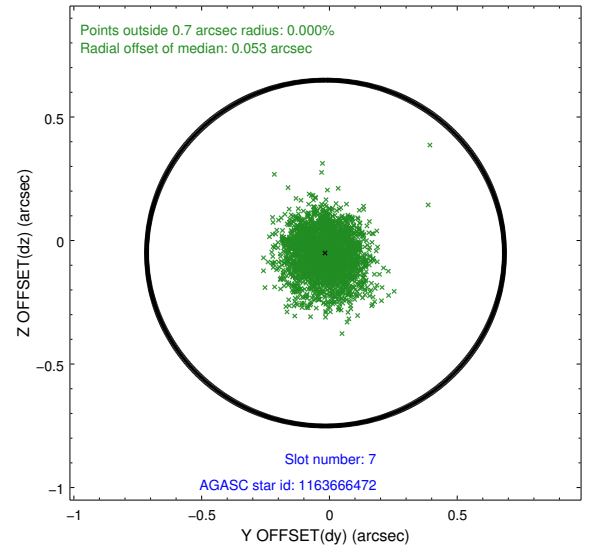
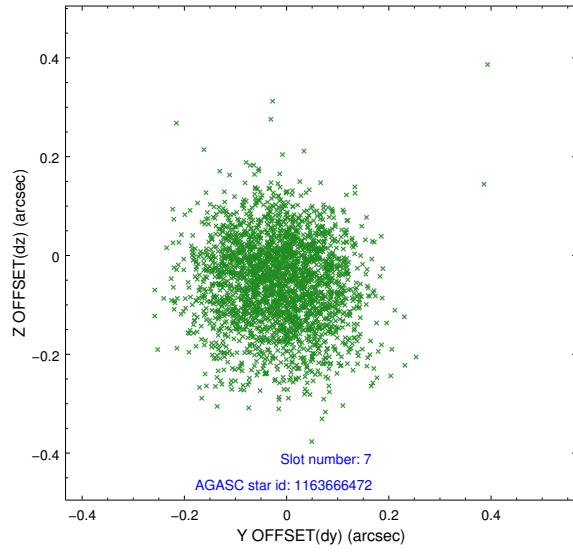
2.4.3 Slot 5



2.4.4 Slot 6

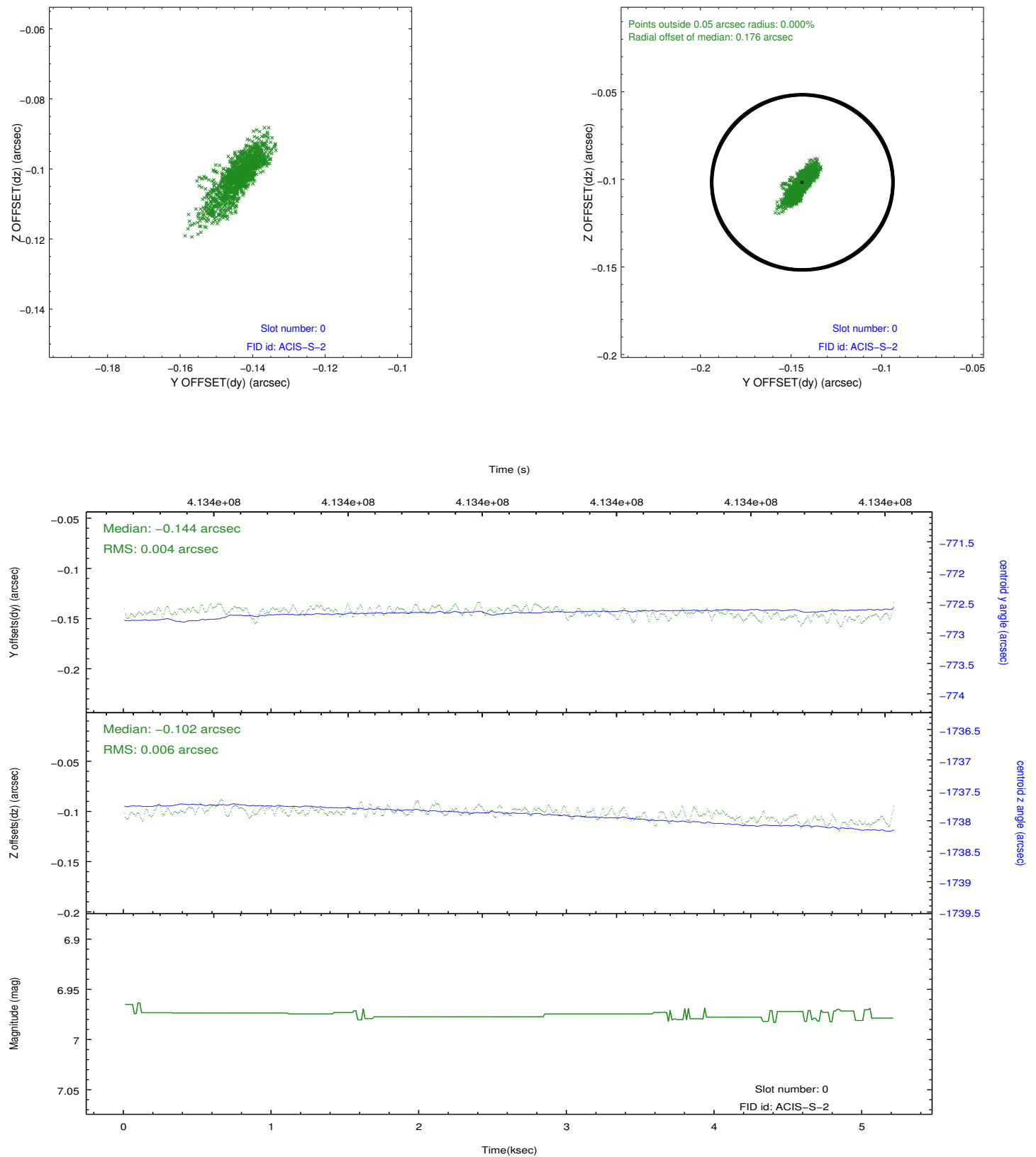


2.4.5 Slot 7

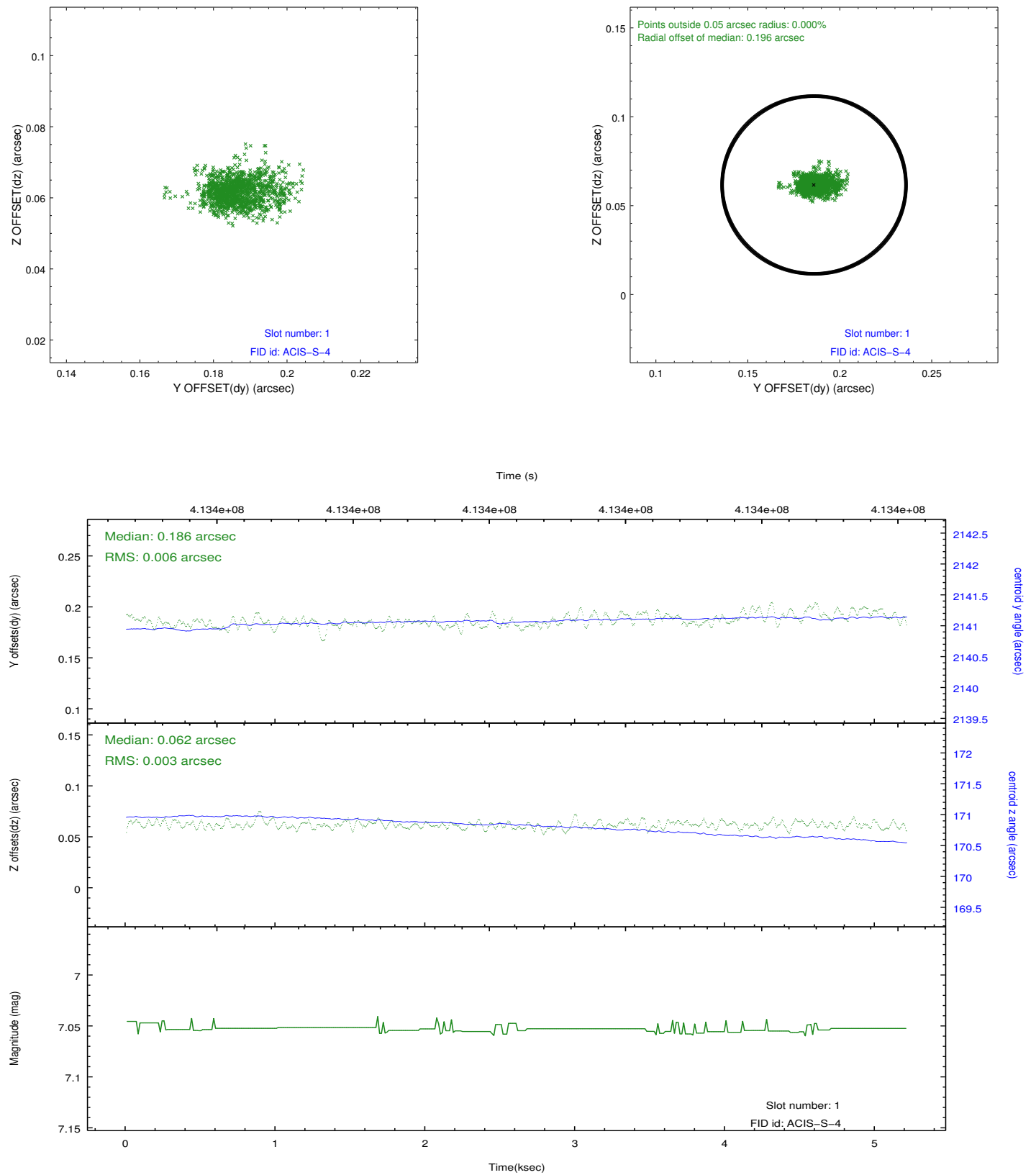


2.5 FID Slots

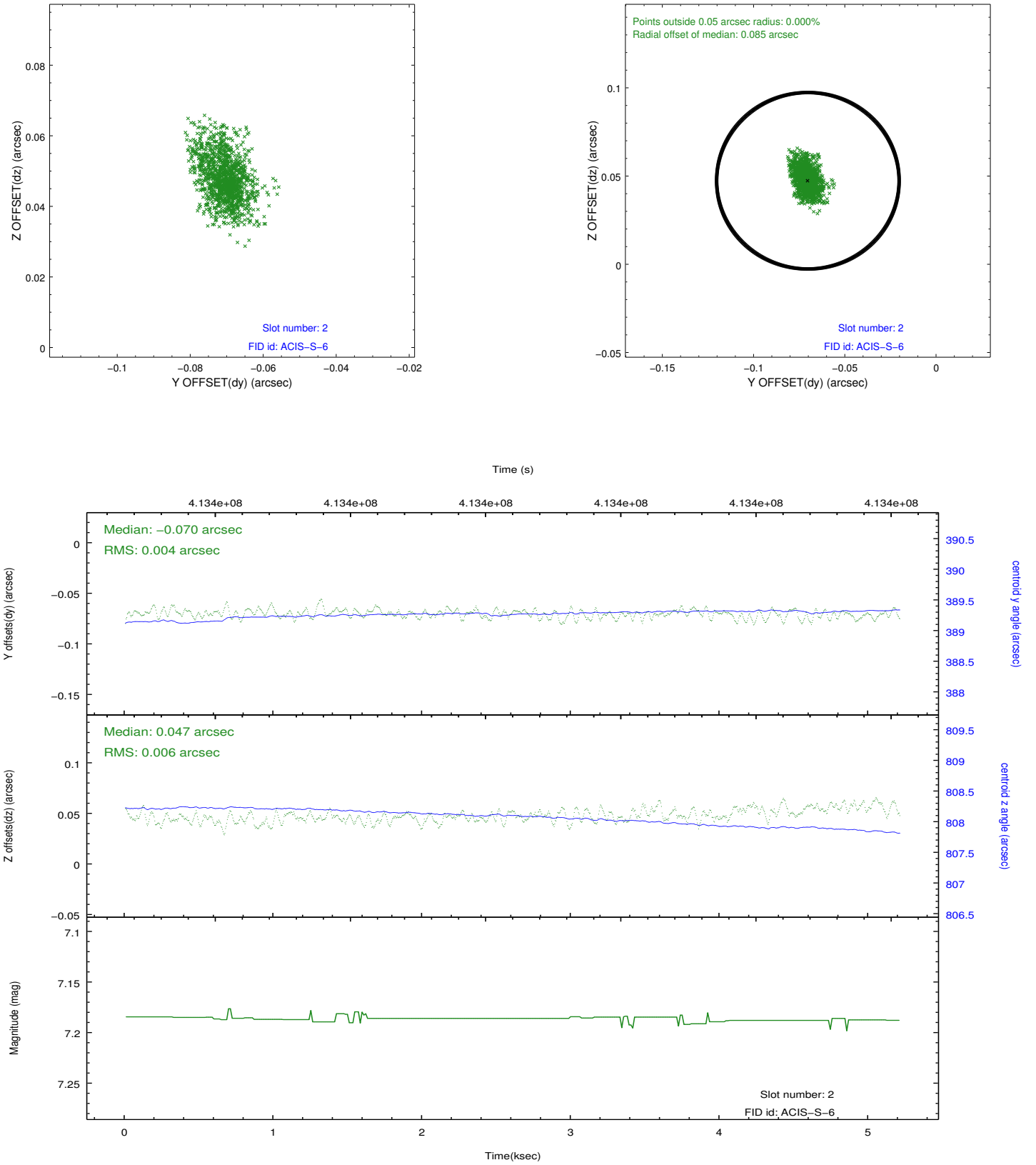
2.5.1 Slot 0



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	4.961708927691

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.