

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13340 - L2 Version 1
Chandra X-Ray Center

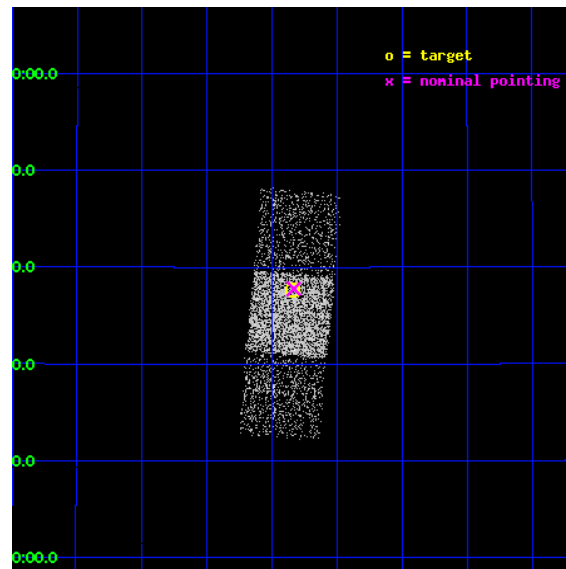
L2 Processing Date : Jan 31 2012

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

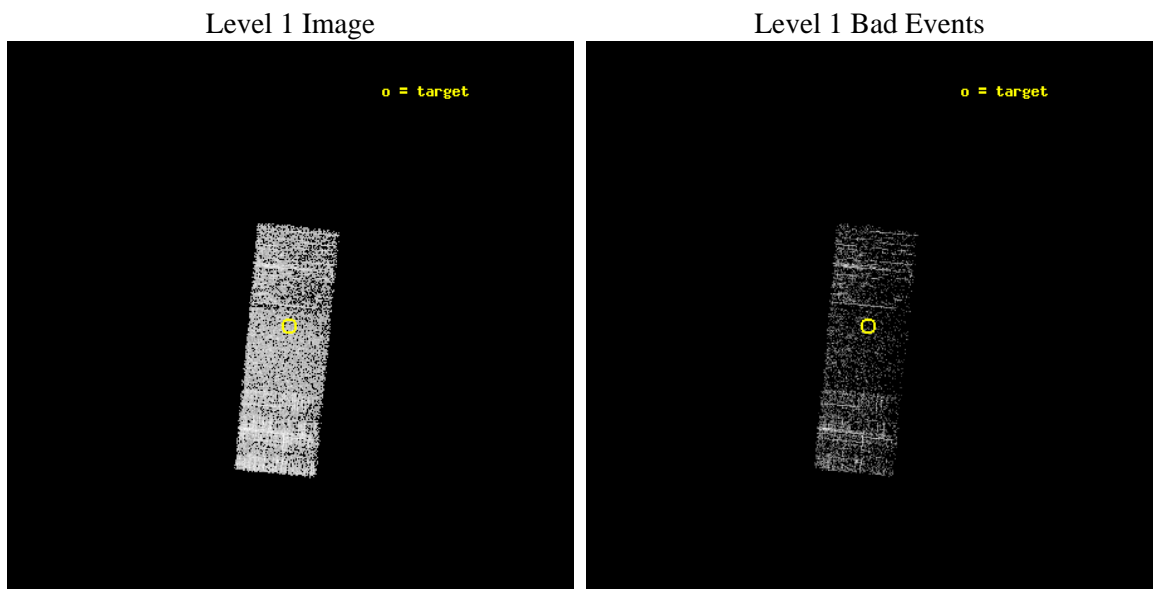
seq_num	702547	Sequence number
obs_id	13340	Observation id
title	A Large, Economical Snapshot Survey of the Most-Luminous Quasars from the Sloan Digital Sky Survey	Proposal title
observer	Prof. Gordon Garmire	Principal investigator
object	SDSS J1111+2437	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	167.835833	Observer's specified target RA [deg]
dec_targ	24.628	Observer's specified target Dec [deg]
ra_nom	167.83286579169	Nominal RA [deg]
dec_nom	24.629553186012	Nominal Dec [deg]
roll_nom	95.427318761911	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1484.9000114202	Sum of GTIs [s]
livetime	1465.4986996036	Livetime [s]
ontime6	1484.9000114202	Sum of GTIs [s]
ontime7	1484.9000114202	Sum of GTIs [s]
ontime8	1475.4770306945	Sum of GTIs [s]
l2events	6402	Number of level 2 events



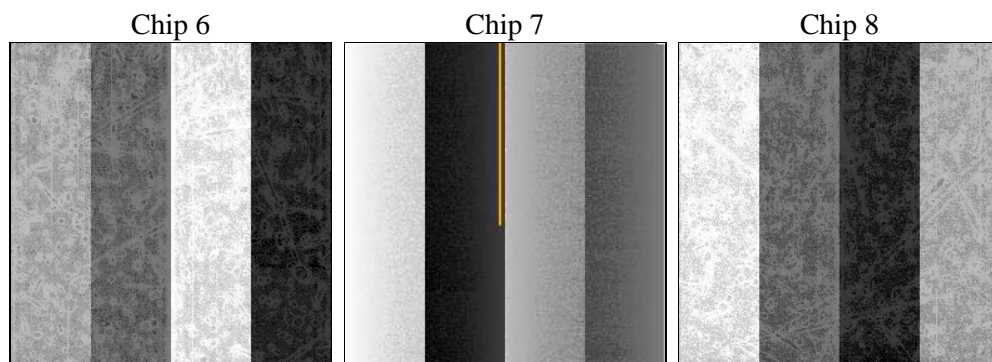
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	1679.147000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	1484.9000114202	Sum of GTIs [s]
caldsver	4.4.7	 	ontime6	1484.9000114202	Sum of GTIs [s]
date	2012-01-31T22:17:33	Date and time of file creation	ontime7	1484.9000114202	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	1475.4770306945	Sum of GTIs [s]
			l1events	31808	Number of level 1 events

2.1.4 Events

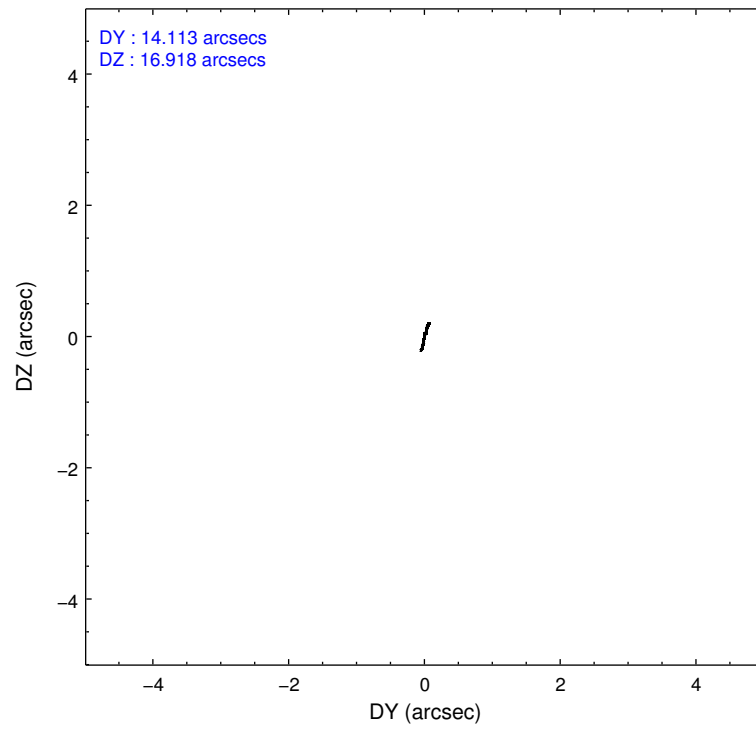
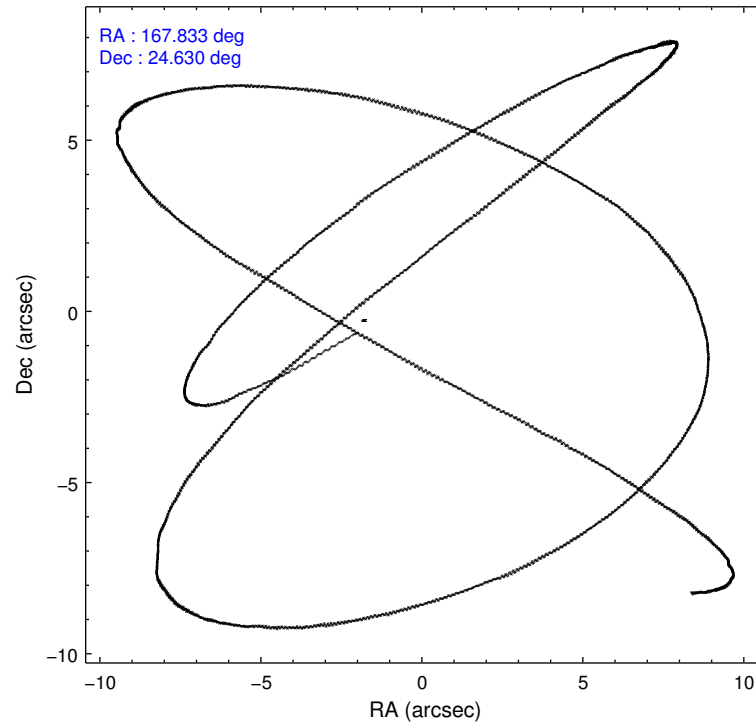
	ccd 6	ccd 7	ccd 8
level 1 events	8265	9203	14340
rejected events	7193	4626	9864
rejected %	87%	50%	68%

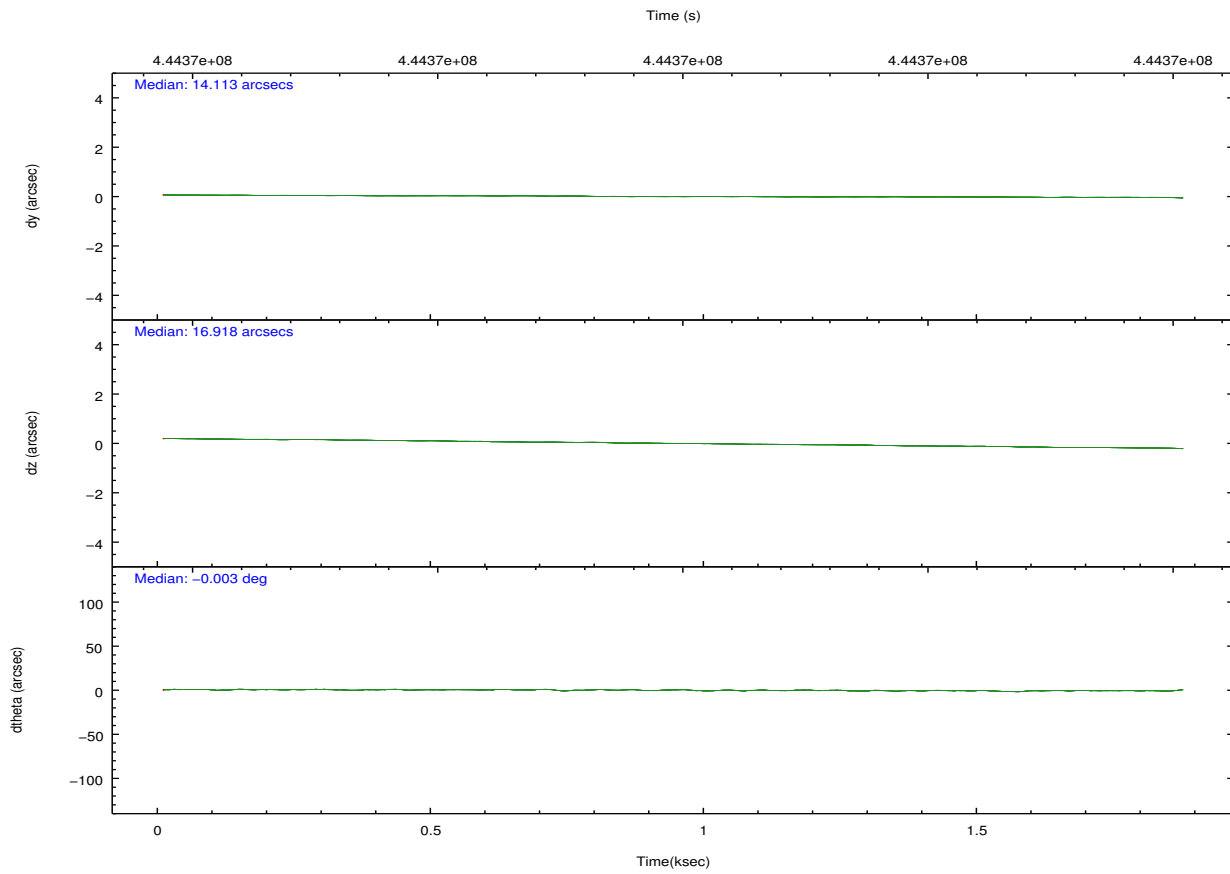
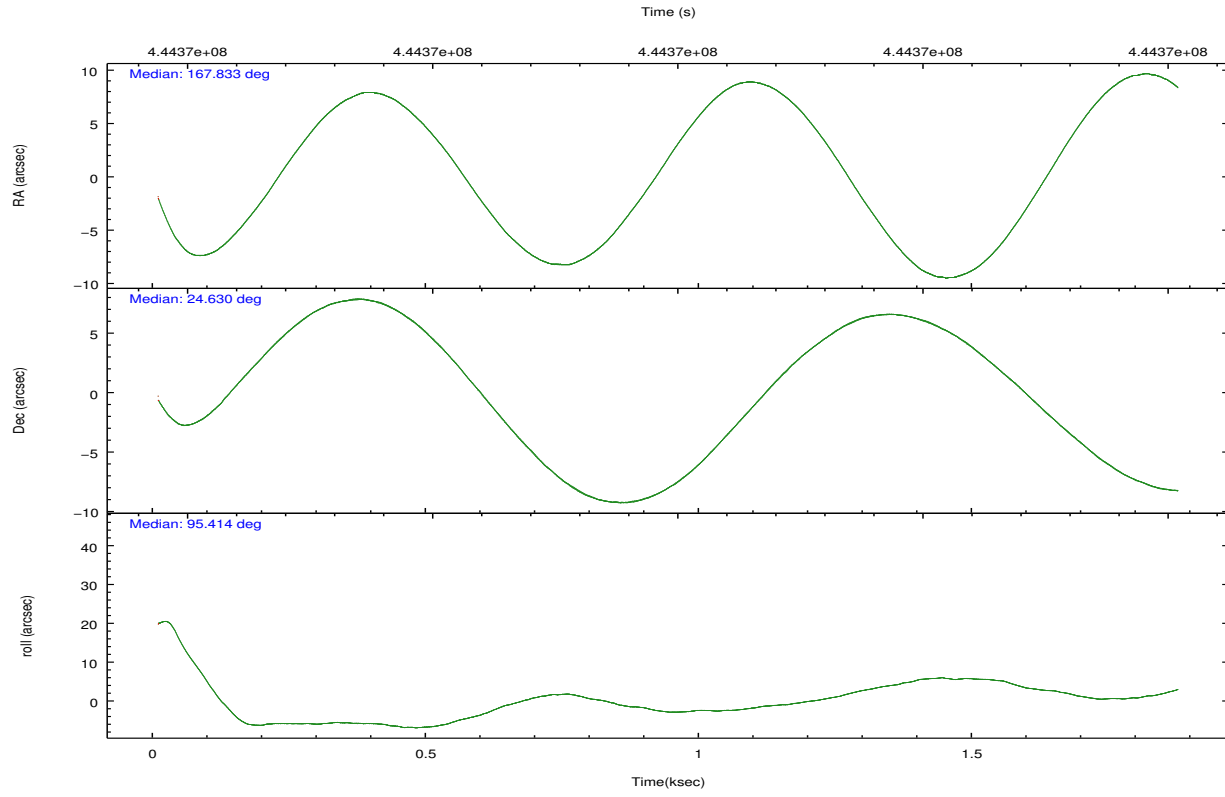
	ccd 6	ccd 7	ccd 8
grade 0 events	390	455	1284
	4%	4%	8%
grade 1 events	4	16	27
	0%	0%	0%
grade 2 events	259	979	894
	3%	10%	6%
grade 3 events	98	422	582
	1%	4%	4%
grade 4 events	104	424	565
	1%	4%	3%
grade 5 events	328	928	510
	3%	10%	3%
grade 6 events	226	2317	1174
	2%	25%	8%
grade 7 events	6856	3662	9304
	82%	39%	64%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	167.850638	167.8328657916905	Subarray requested	NONE	NONE
[deg] Pointing Dec	24.607317	24.62955318601168	Alternating exposures requested	N	N
[deg] Pointing Roll	95.263136	95.42731876191139	[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)	444369735.184000	444369047.68358			
Observation start date	2012-01-31T04:01:09	2012-01-31T03:50:47			
[s] Observation end time (MET)	444371414.184000	444371640.42121			
Observation end date	2012-01-31T04:29:08	2012-01-31T04:34:00			
Read mode	TIMED	TIMED			

2.3 Aspect



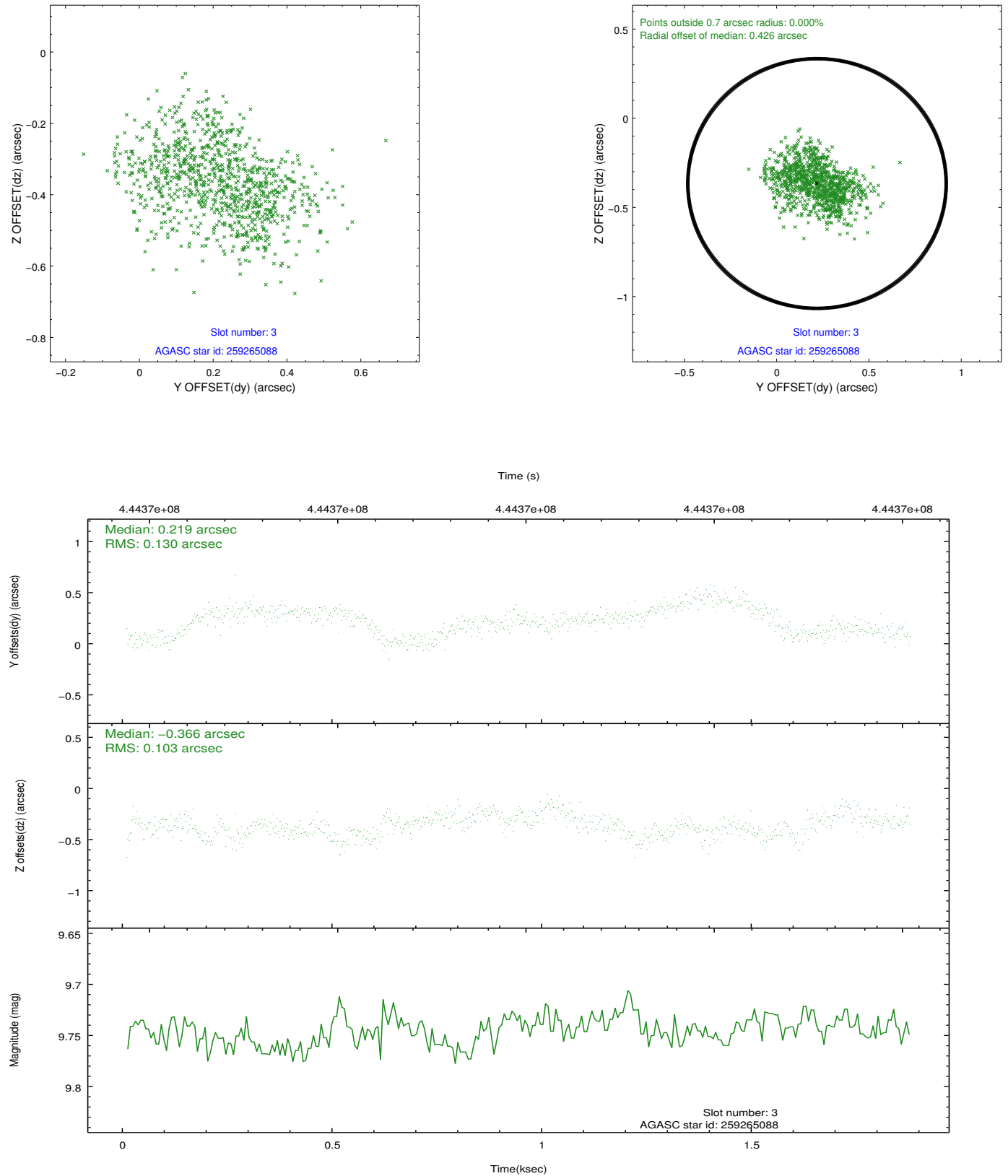


Slot Statistics

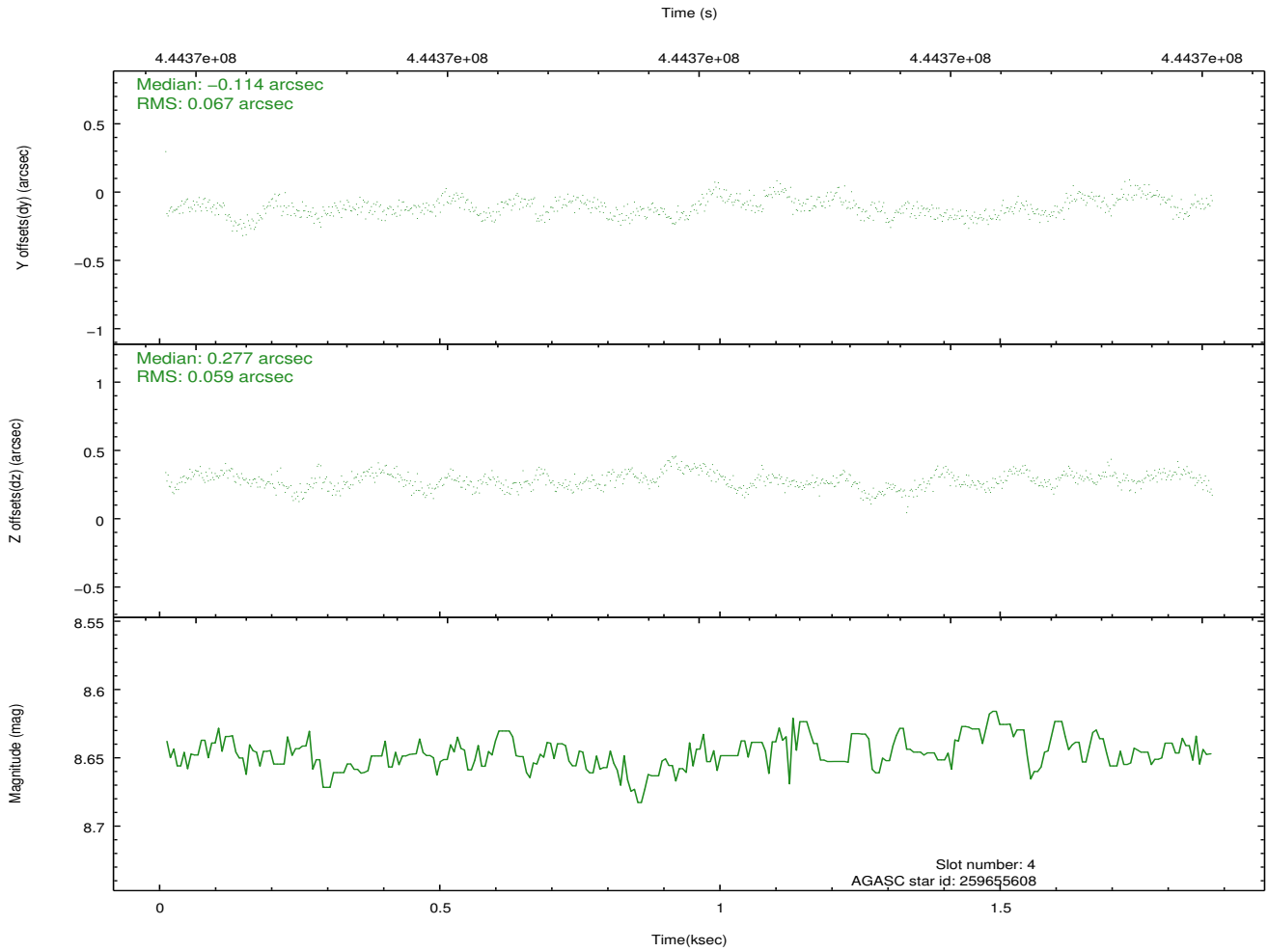
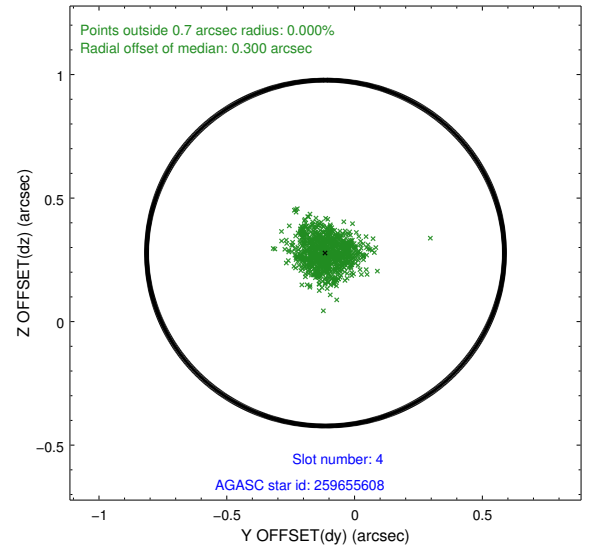
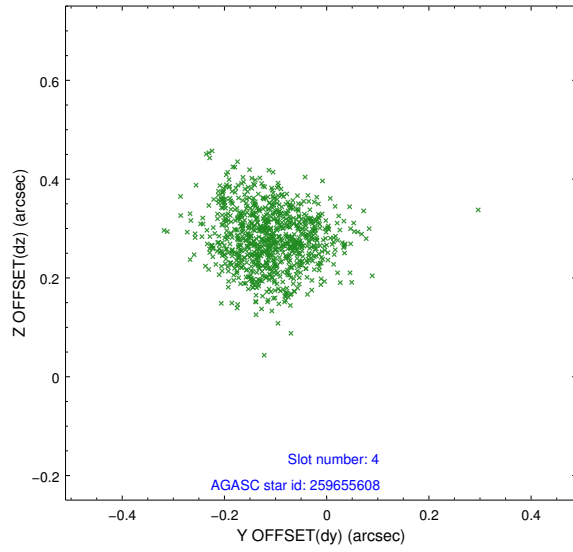
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	456	-0.063	-0.031	0.006	0.010	0.000000	0.000000	-767.17	-1738.36
1	FID	ACIS-S-4	6.97	456	0.240	0.039	0.005	0.010	0.000000	0.000000	2144.84	166.47
2	FID	ACIS-S-5	7.01	456	-0.208	0.001	0.006	0.010	0.000000	0.000000	-1815.61	164.20
3	GUIDE	259265088	9.74	912	0.219	-0.366	0.179	0.281	167.331459	24.325927	-849.88	1788.03
4	GUIDE	259655608	8.65	910	-0.114	0.277	0.094	0.149	168.421819	25.104102	1612.45	-2015.08
5	GUIDE	259659960	8.34	912	-0.012	0.277	0.069	0.114	168.126185	24.651902	79.88	-914.98
6	GUIDE	259660336	8.61	912	-0.080	-0.051	0.091	0.139	167.659033	25.133643	1943.97	447.72
7	GUIDE	259664392	9.69	907	-0.018	-0.143	0.132	0.220	167.671653	24.816987	807.31	513.66

2.4 Star Slots

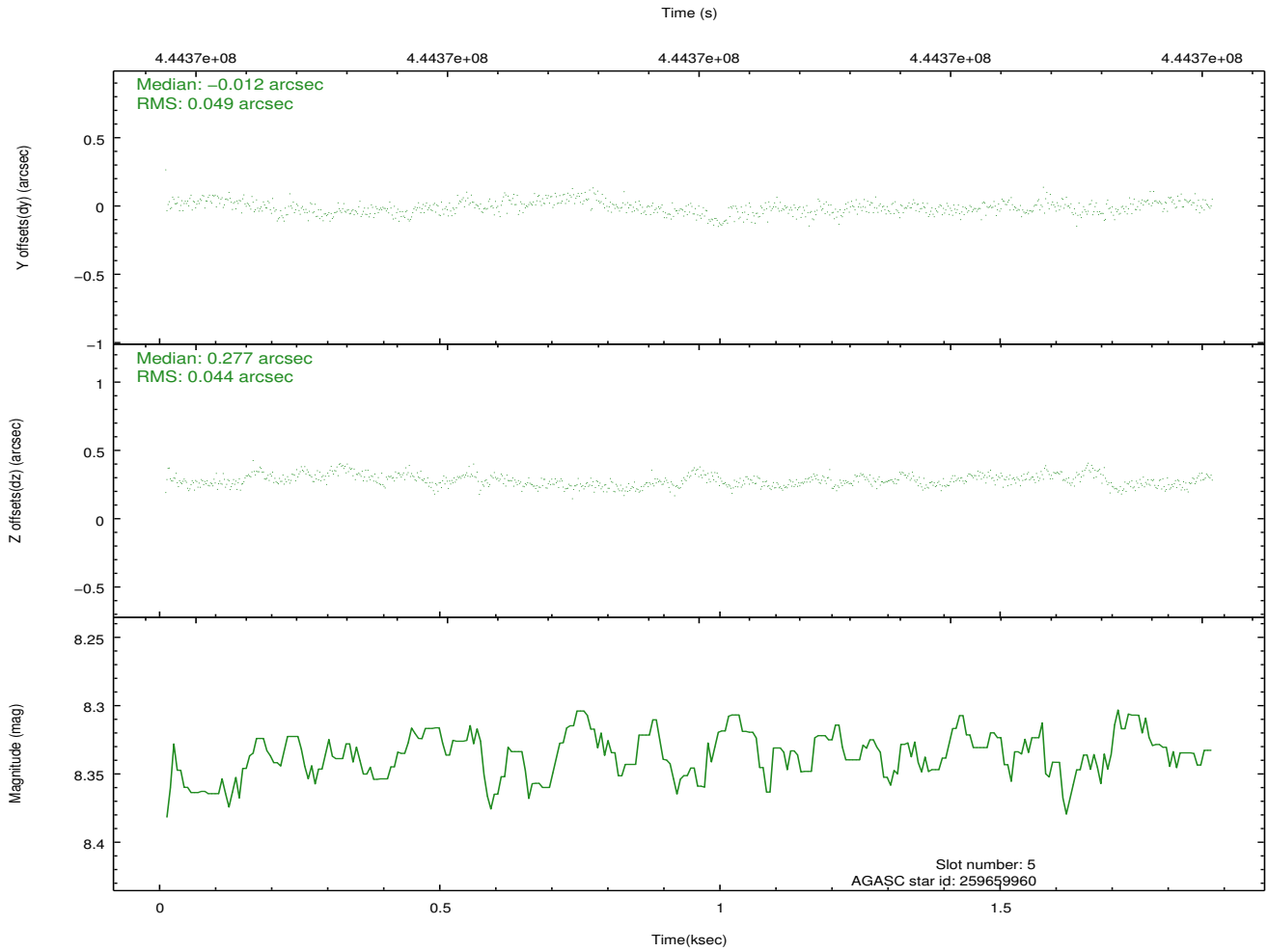
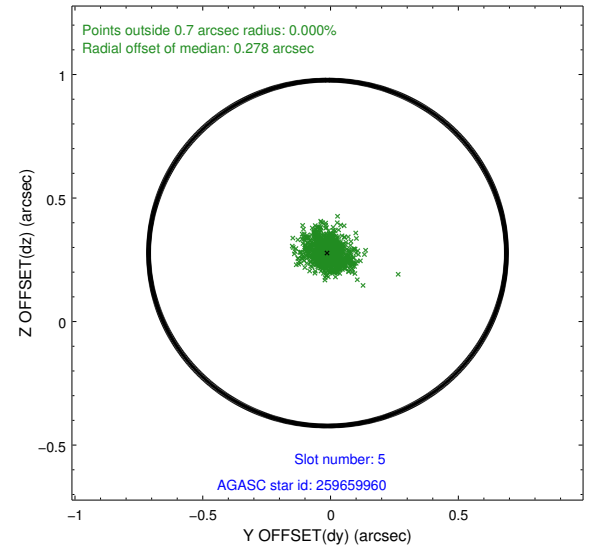
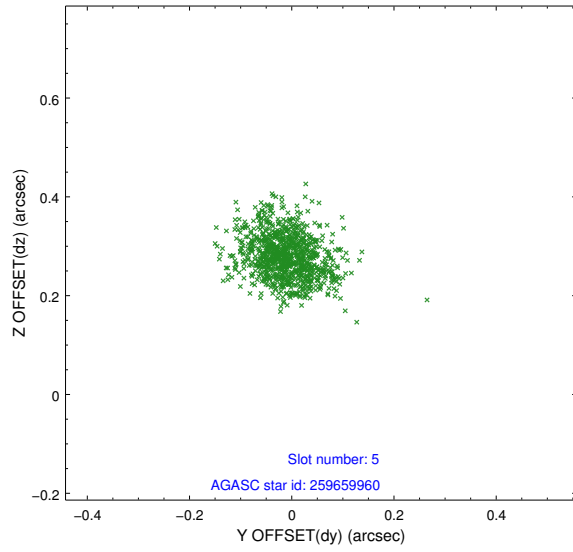
2.4.1 Slot 3



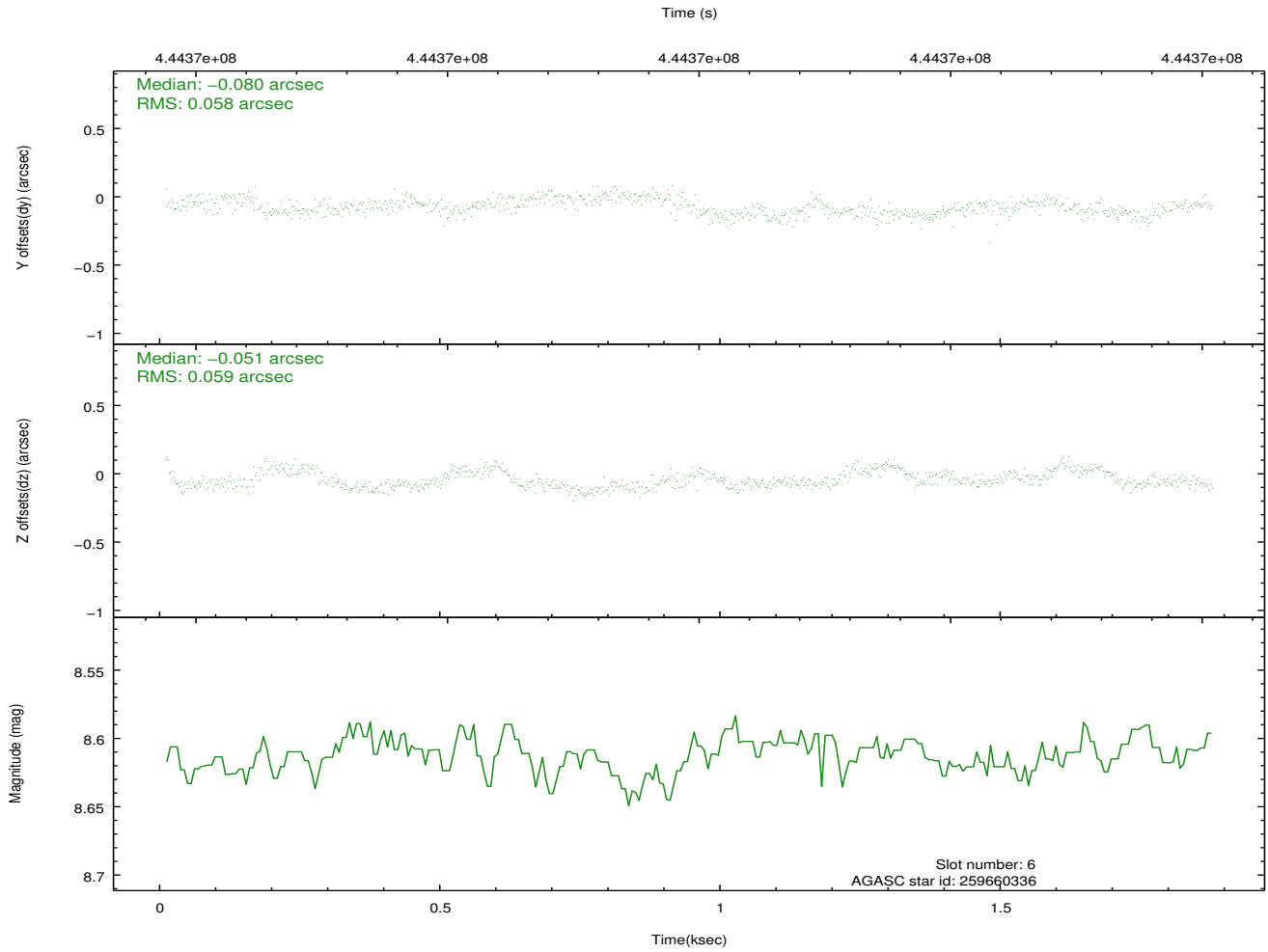
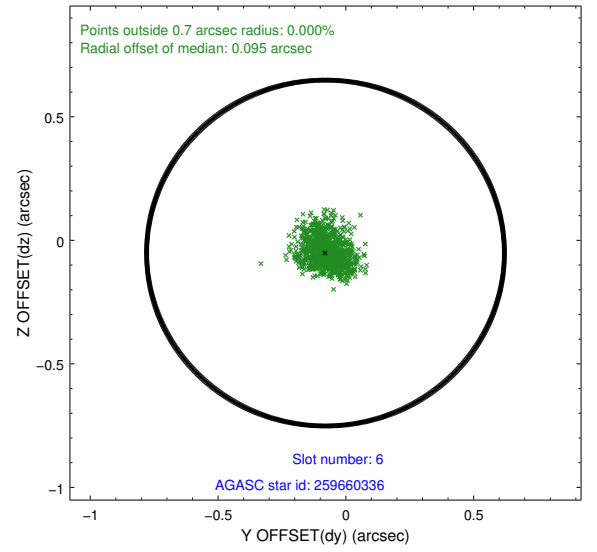
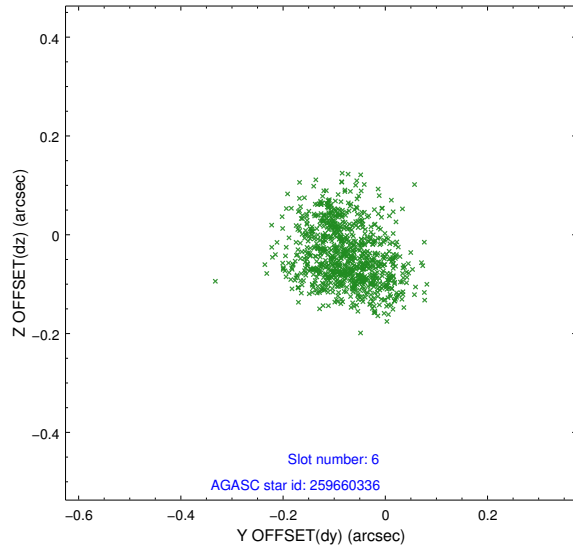
2.4.2 Slot 4



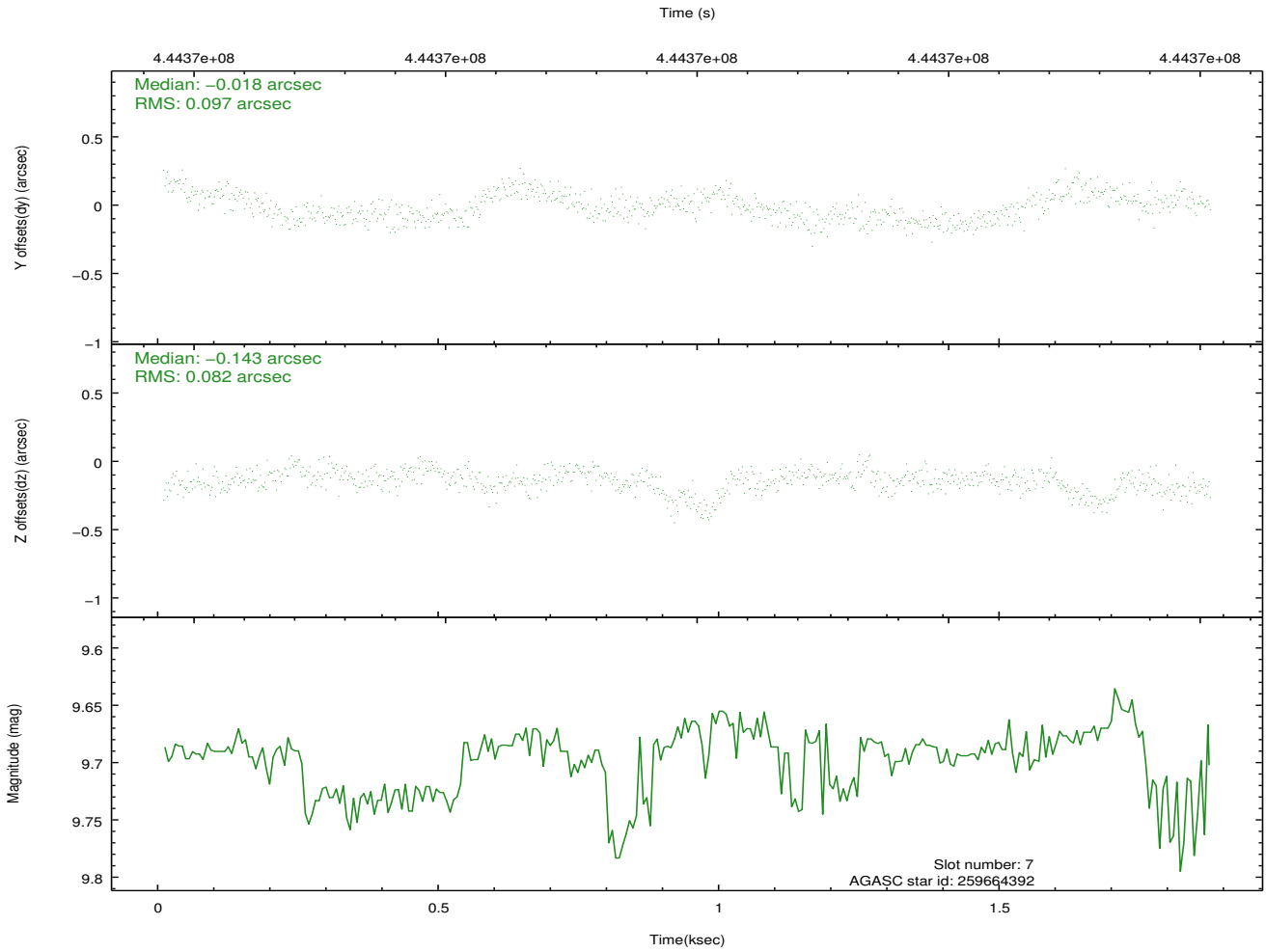
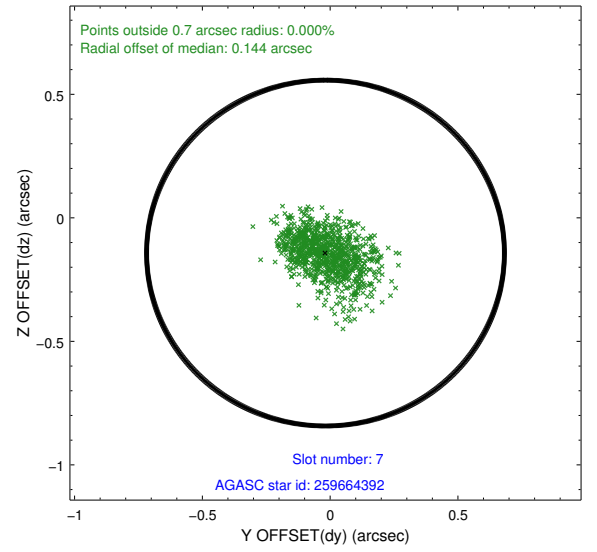
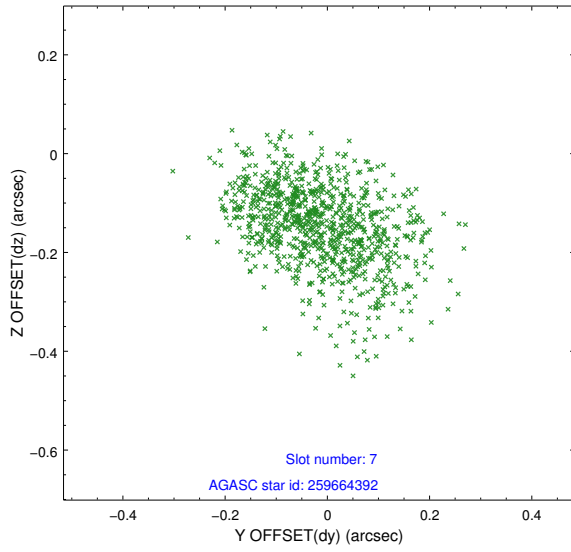
2.4.3 Slot 5



2.4.4 Slot 6

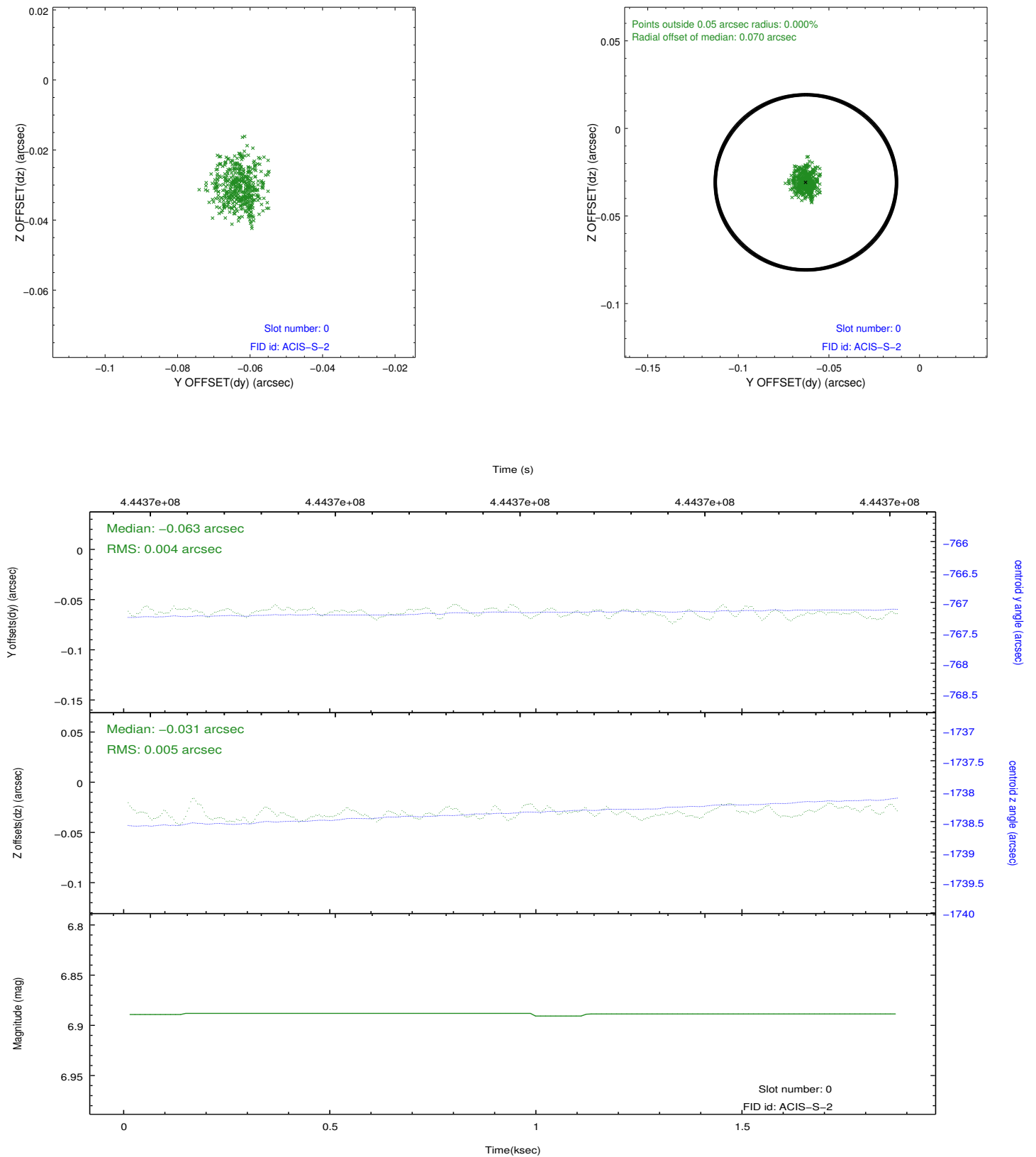


2.4.5 Slot 7

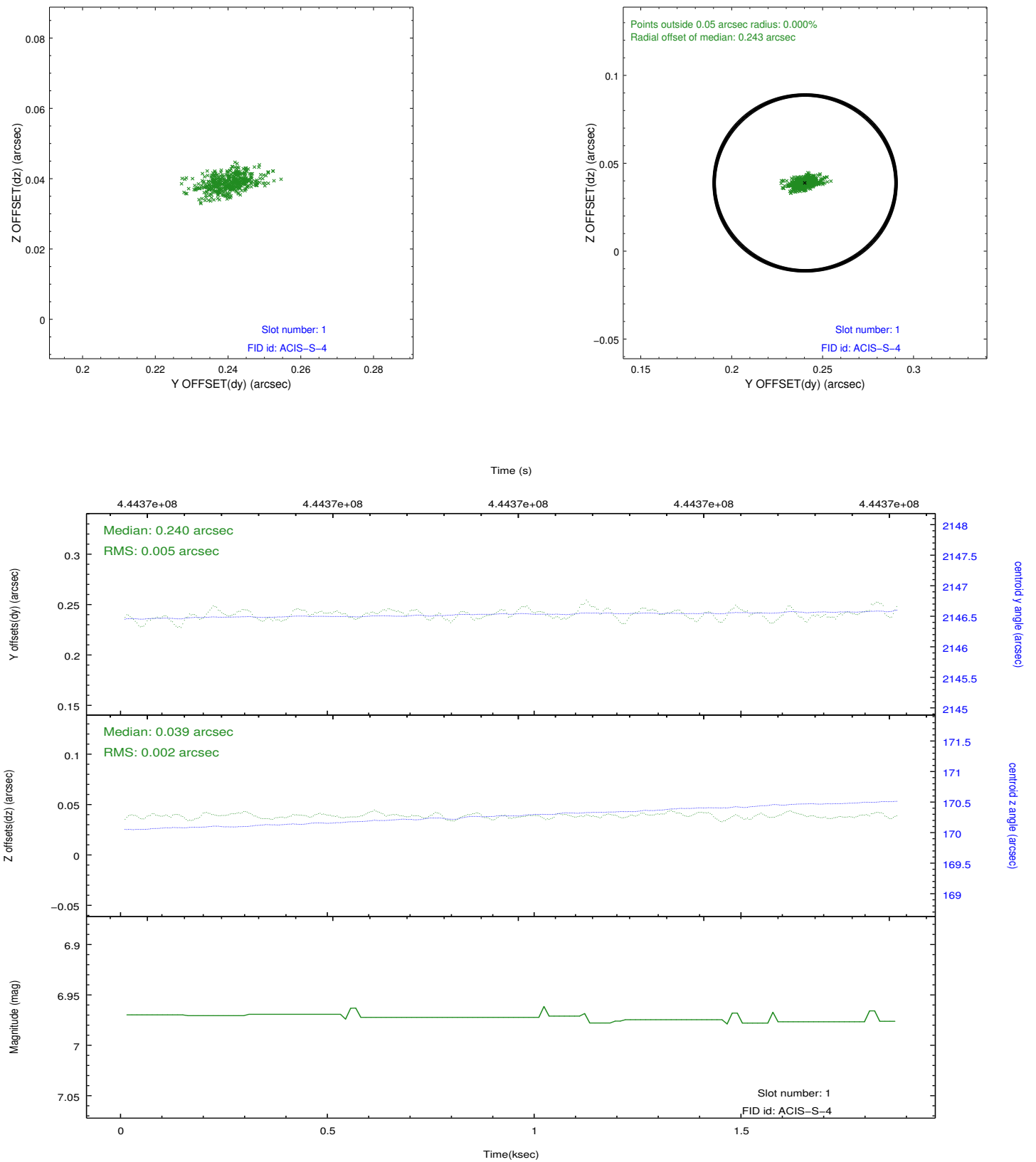


2.5 FID Slots

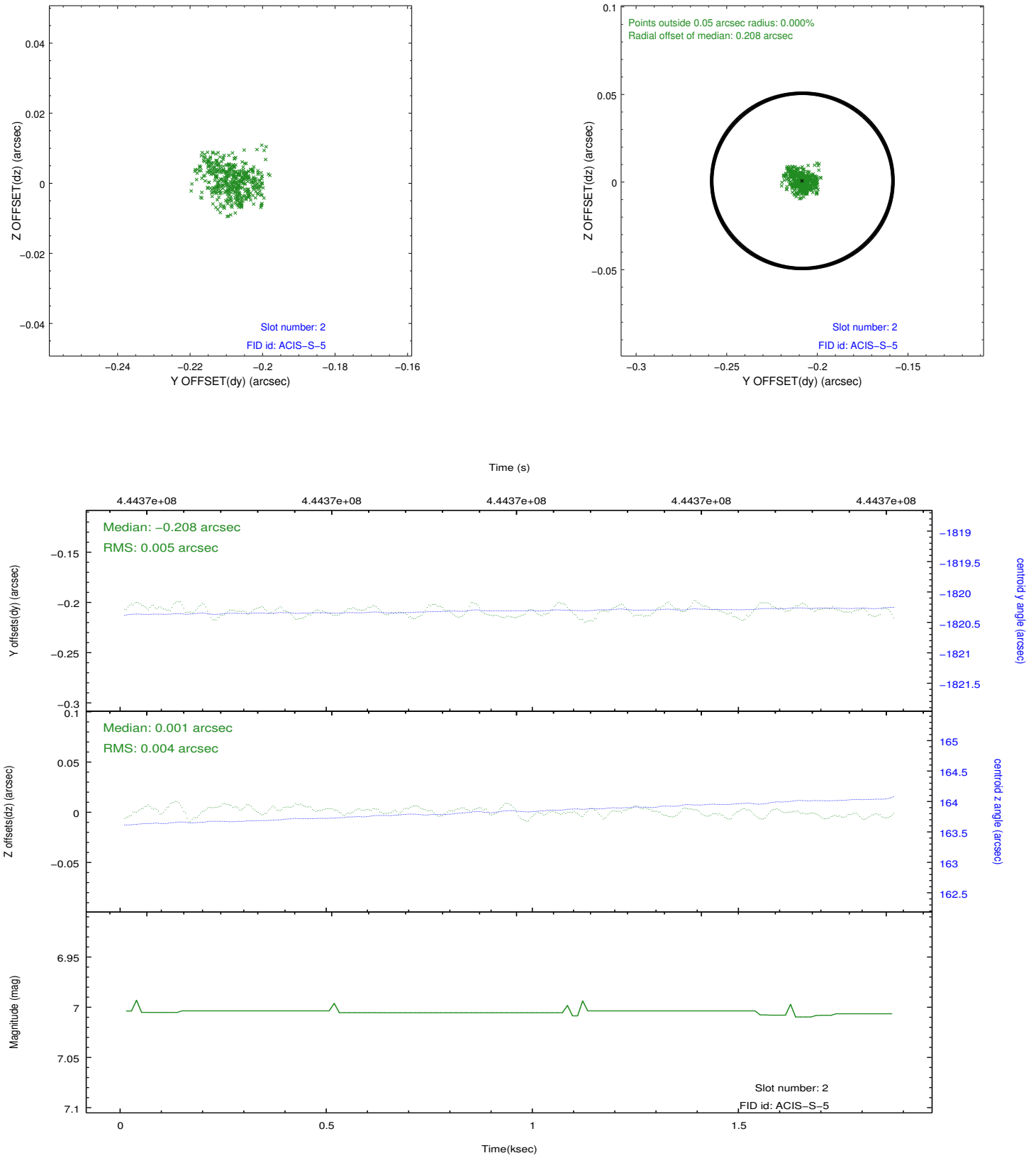
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.4849000114202

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.