

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13343 - L2 Version 1
Chandra X-Ray Center

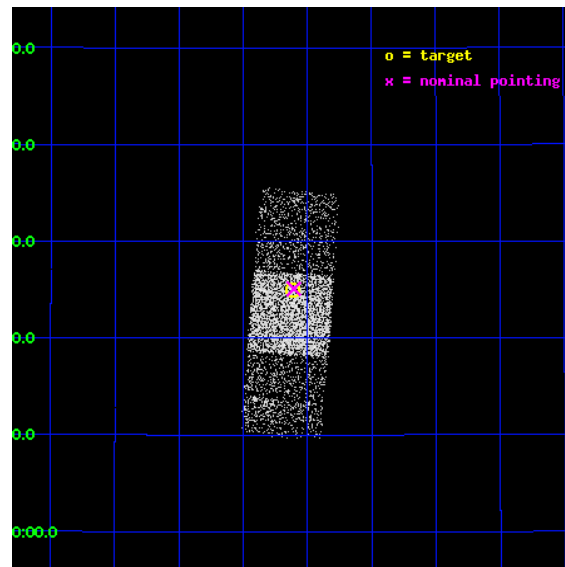
L2 Processing Date : Feb 10 2012

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1 Front

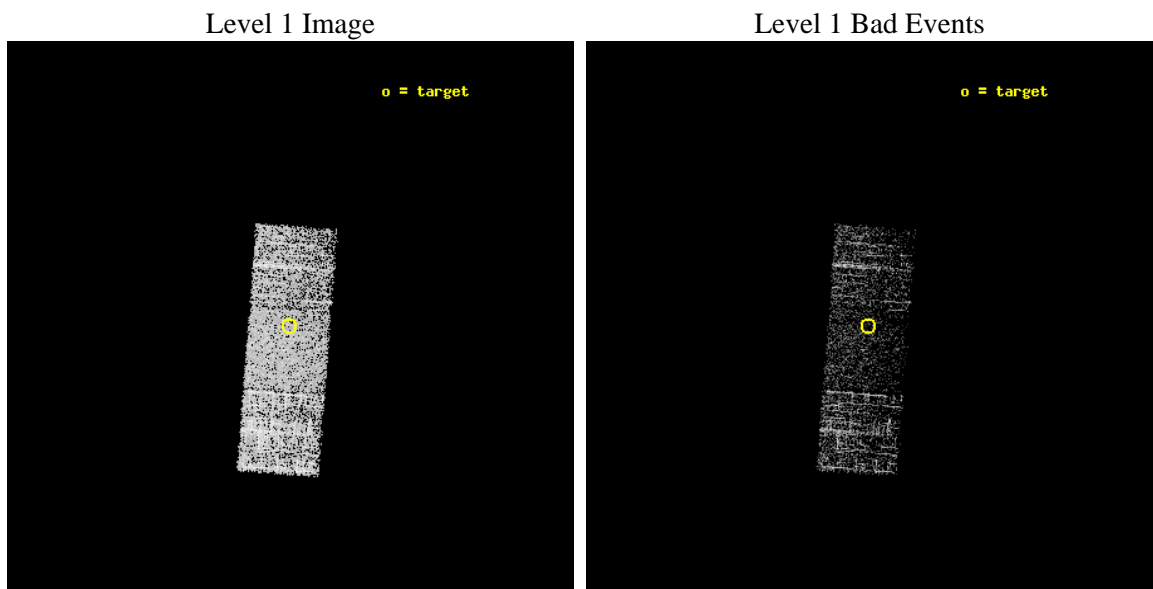
seq_num	702550	Sequence number
obs_id	13343	Observation id
title	A Large, Economical Snapshot Survey of the Most-Luminous Quasars from the Sloan Digital Sky Survey	Proposal title
observer	Prof. Gordon Garmire	Principal investigator
object	SDSS J1246+2625	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	191.654583	Observer's specified target RA [deg]
dec_targ	26.416722	Observer's specified target Dec [deg]
ra_nom	191.65165969242	Nominal RA [deg]
dec_nom	26.418281582803	Nominal Dec [deg]
roll_nom	94.512656990343	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1577.039101541	Sum of GTIs [s]
livetime	1556.4339246801	Livetime [s]
ontime6	1576.9980615377	Sum of GTIs [s]
ontime7	1577.039101541	Sum of GTIs [s]
ontime8	1576.9570215344	Sum of GTIs [s]
l2events	6740	Number of level 2 events



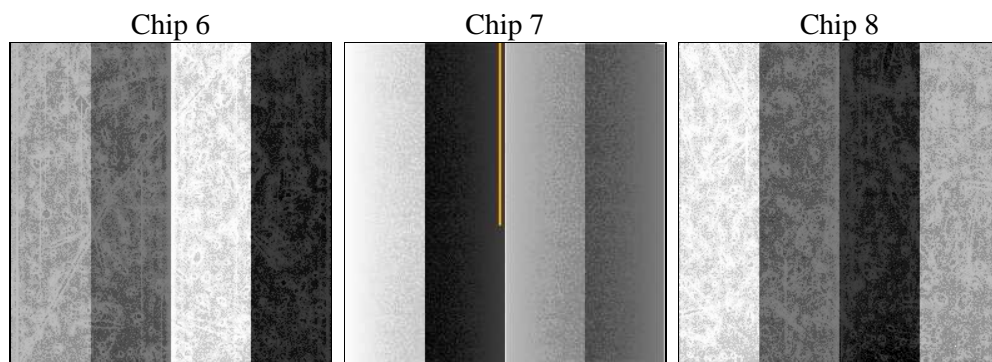
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	1577.039101541	Sum of GTIs [s]
caldsver	4.4.7	 	ontime6	1576.9980615377	Sum of GTIs [s]
date	2012-02-10T07:29:51	Date and time of file creation	ontime7	1577.039101541	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	1576.9570215344	Sum of GTIs [s]
			l1events	31884	Number of level 1 events

2.1.4 Events

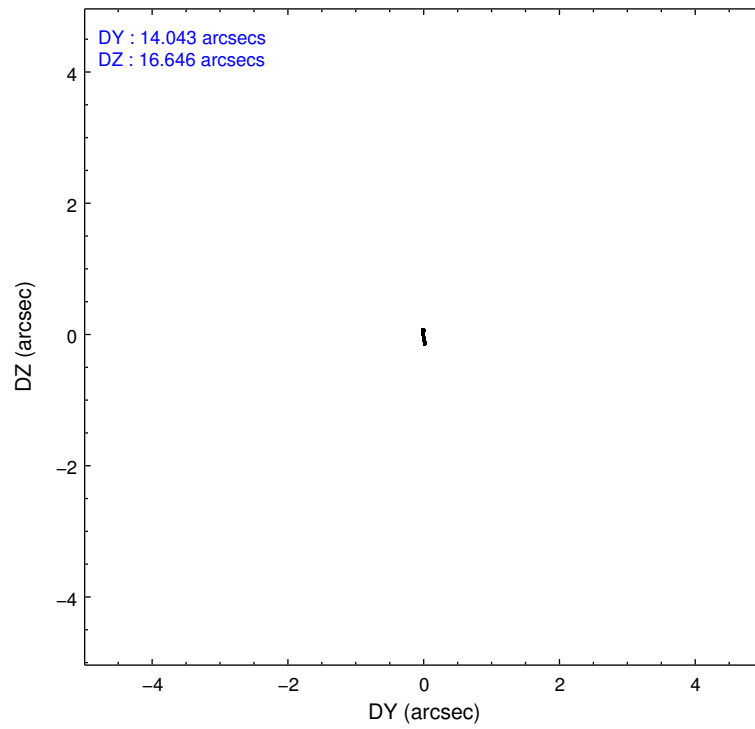
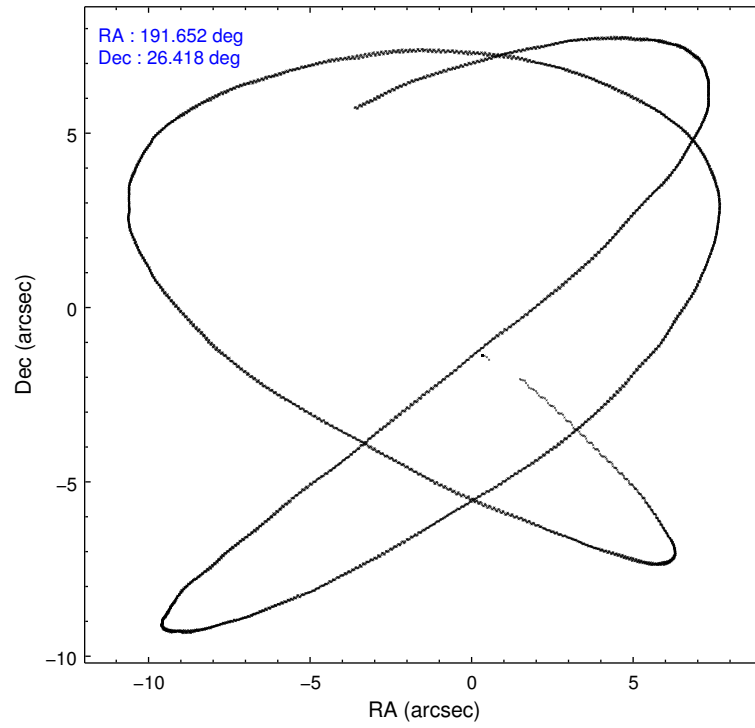
	ccd 6	ccd 7	ccd 8
level 1 events	8619	10076	13189
rejected events	7596	5152	9730
rejected %	88%	51%	73%

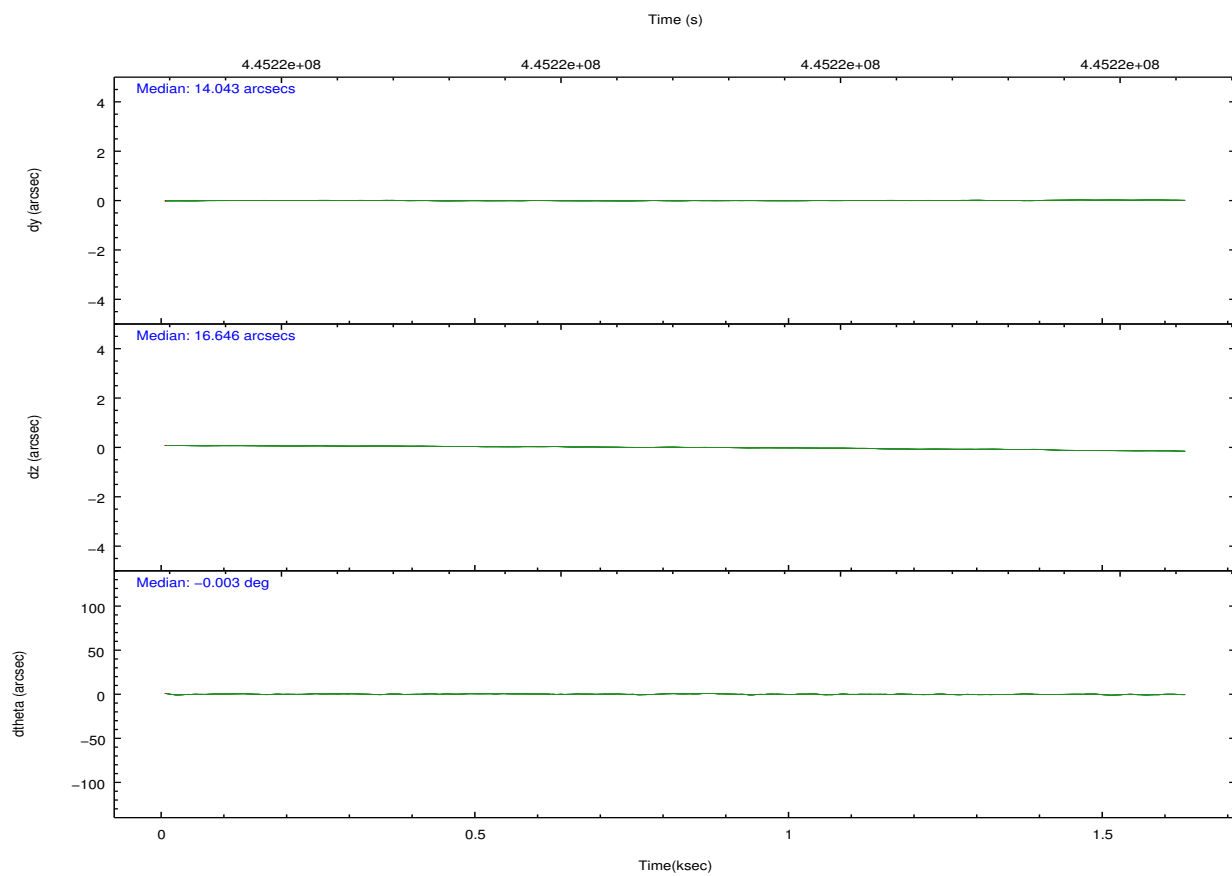
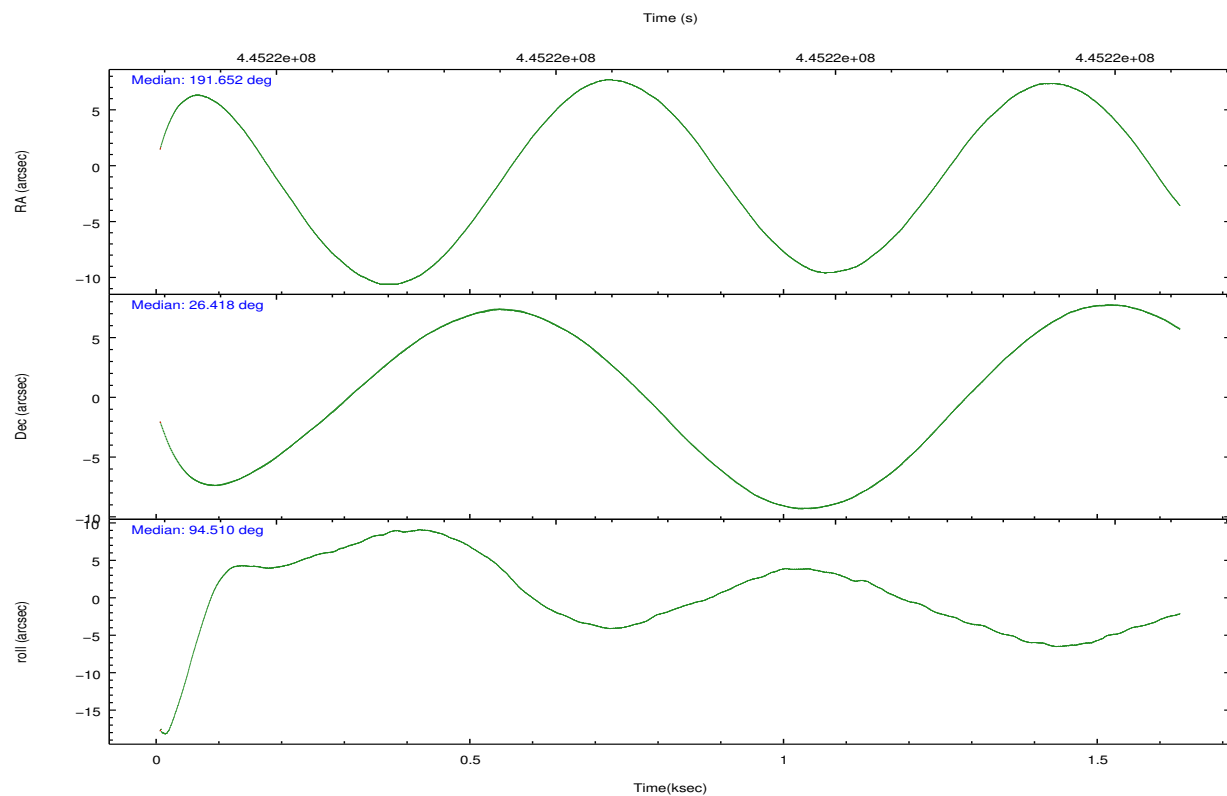
	ccd 6	ccd 7	ccd 8
grade 0 events	388	507	994
	4%	5%	7%
grade 1 events	5	10	10
	0%	0%	0%
grade 2 events	231	1001	811
	2%	9%	6%
grade 3 events	98	491	327
	1%	4%	2%
grade 4 events	105	467	345
	1%	4%	2%
grade 5 events	376	1104	587
	4%	10%	4%
grade 6 events	203	2474	986
	2%	24%	7%
grade 7 events	7213	4022	9129
	83%	39%	69%

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	191.669238	191.6516596924211	Subarray requested	NONE	NONE
[deg] Pointing Dec	26.395821	26.41828158280272	Alternating exposures requested	N	N
[deg] Pointing Roll	94.348350	94.51265699034255	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	445218020.184000	445216830.35341			
Observation start date	2012-02-09T23:39:14	2012-02-09T23:20:30			
[s] Observation end time (MET)	445219520.184000	445221002.61613			
Observation end date	2012-02-10T00:04:14	2012-02-10T00:30:02			
Read mode	TIMED	TIMED			

2.3 Aspect



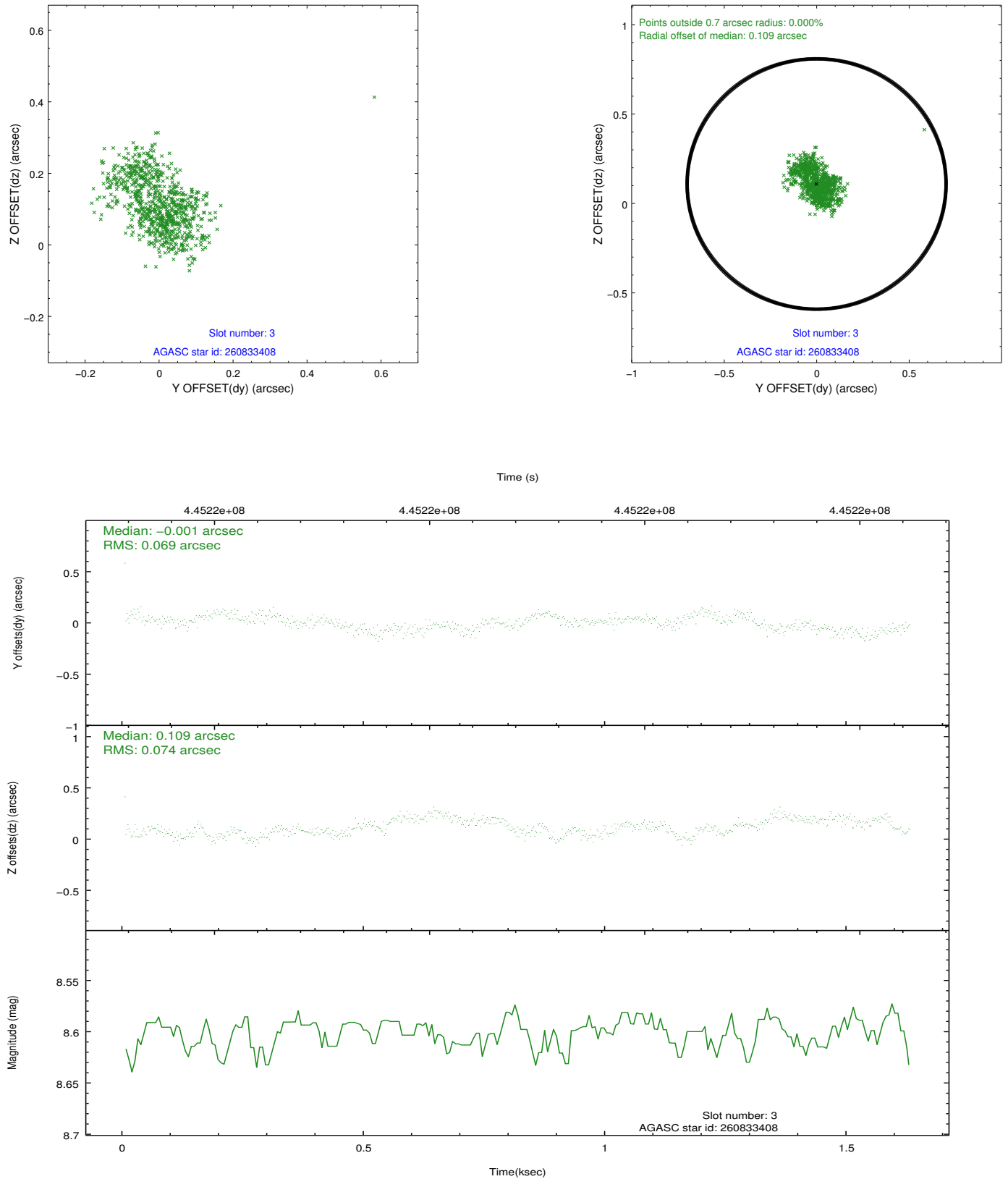


Slot Statistics

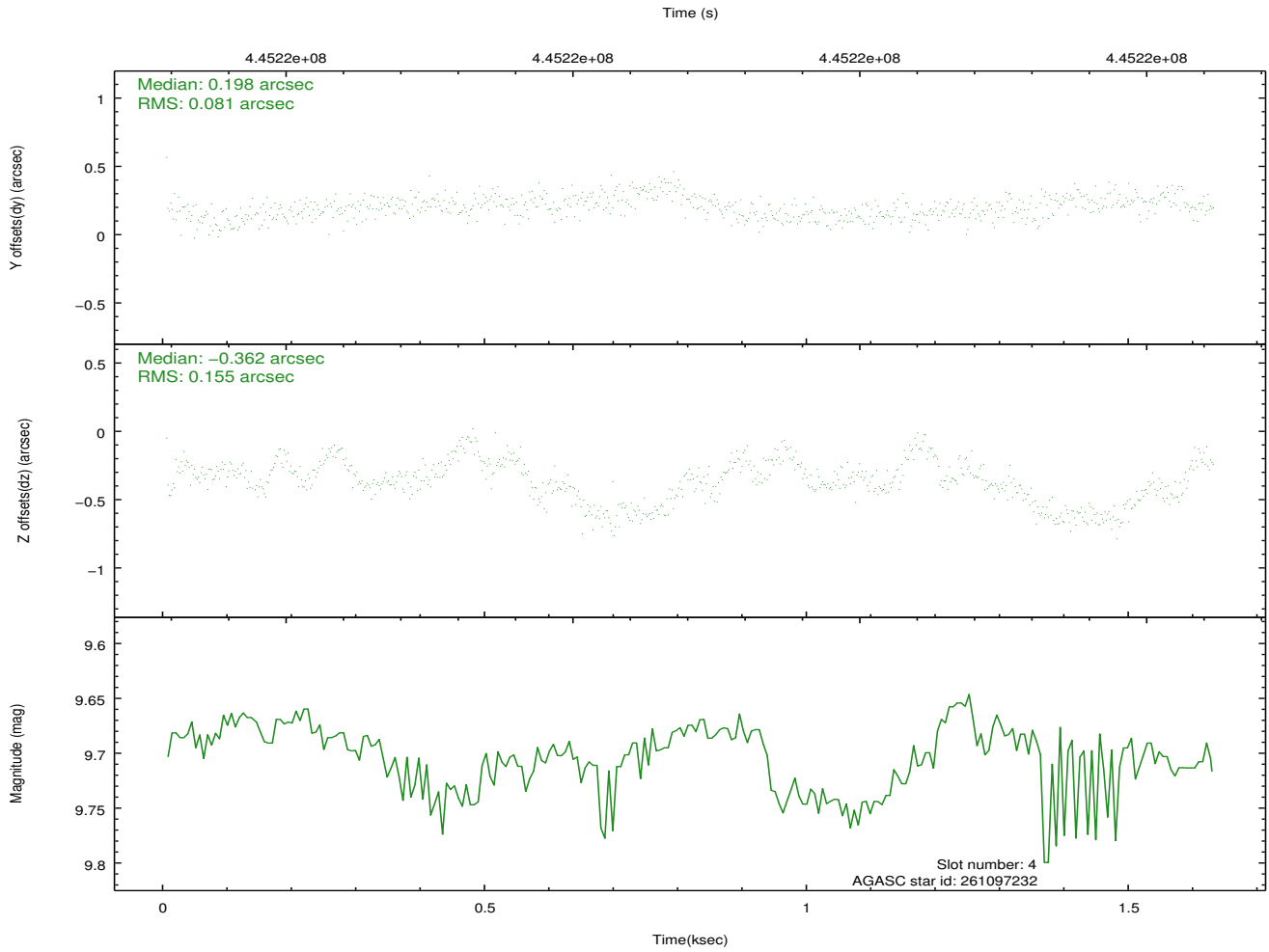
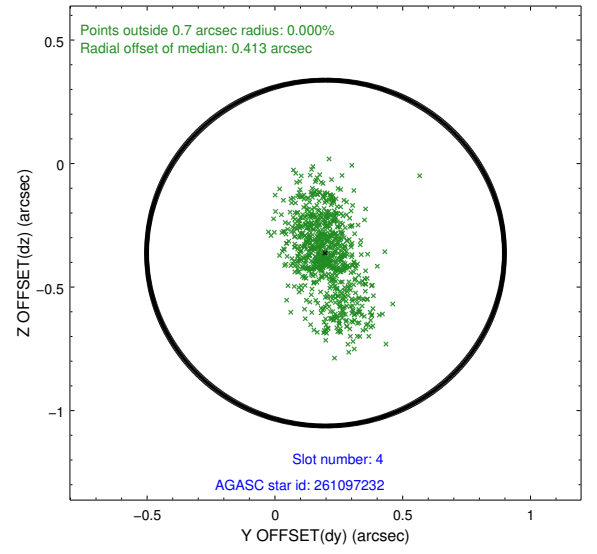
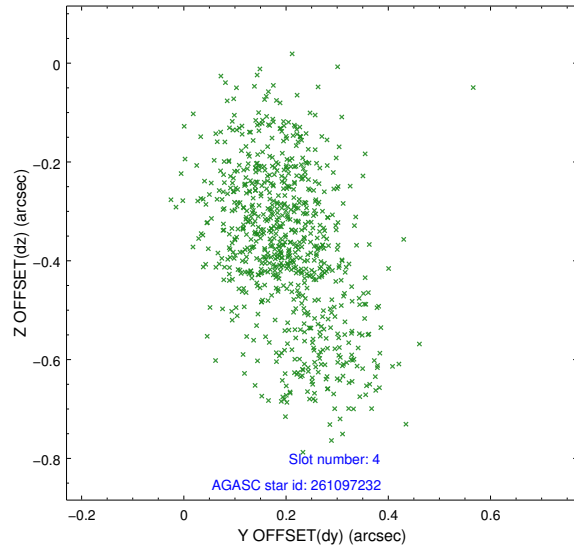
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	397	-0.057	-0.010	0.007	0.011	0.000000	0.000000	-767.08	-1738.00
1	FID	ACIS-S-4	6.98	397	0.212	0.031	0.006	0.011	0.000000	0.000000	2144.64	166.25
2	FID	ACIS-S-5	7.01	397	-0.186	-0.011	0.007	0.010	0.000000	0.000000	-1814.81	164.58
3	GUIDE	260833408	8.60	794	-0.001	0.109	0.110	0.165	192.386444	26.221912	-793.76	-2262.04
4	GUIDE	261097232	9.70	793	0.198	-0.362	0.182	0.318	191.620016	26.344502	-173.92	169.35
5	GUIDE	261106928	9.57	790	-0.099	-0.169	0.133	0.227	191.718974	26.970872	2051.96	-315.44
6	GUIDE	261107968	9.53	791	-0.077	0.398	0.194	0.295	192.297173	26.884890	1610.41	-2143.76
7	GUIDE	261112944	8.85	793	-0.030	0.041	0.098	0.159	192.142022	26.597008	611.24	-1571.83

2.4 Star Slots

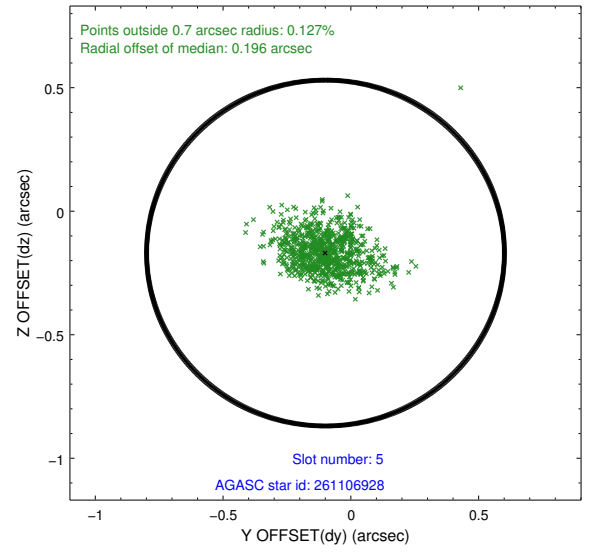
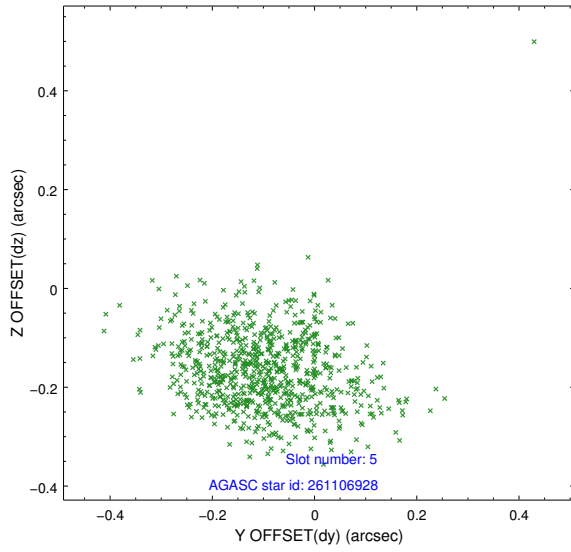
2.4.1 Slot 3



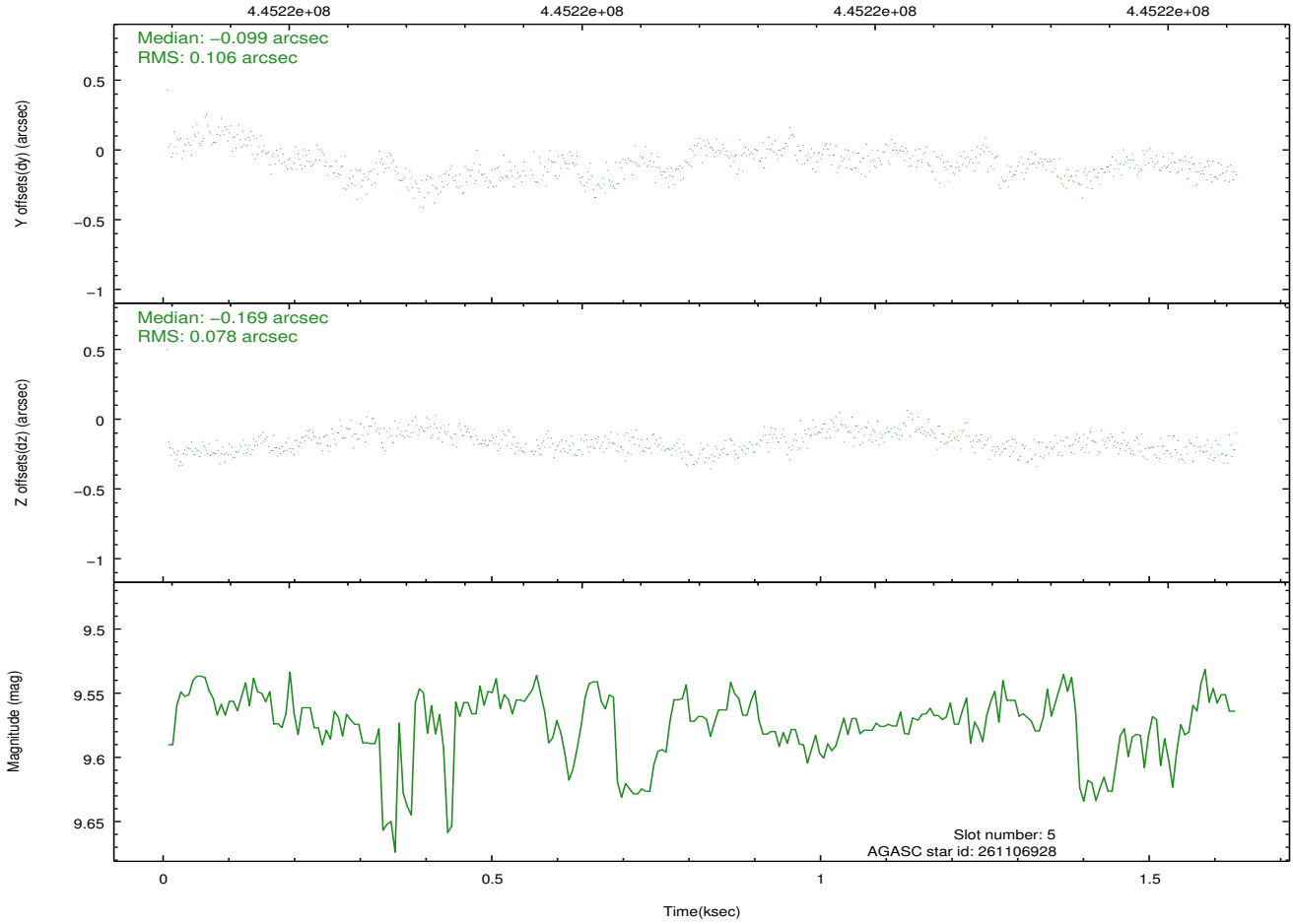
2.4.2 Slot 4



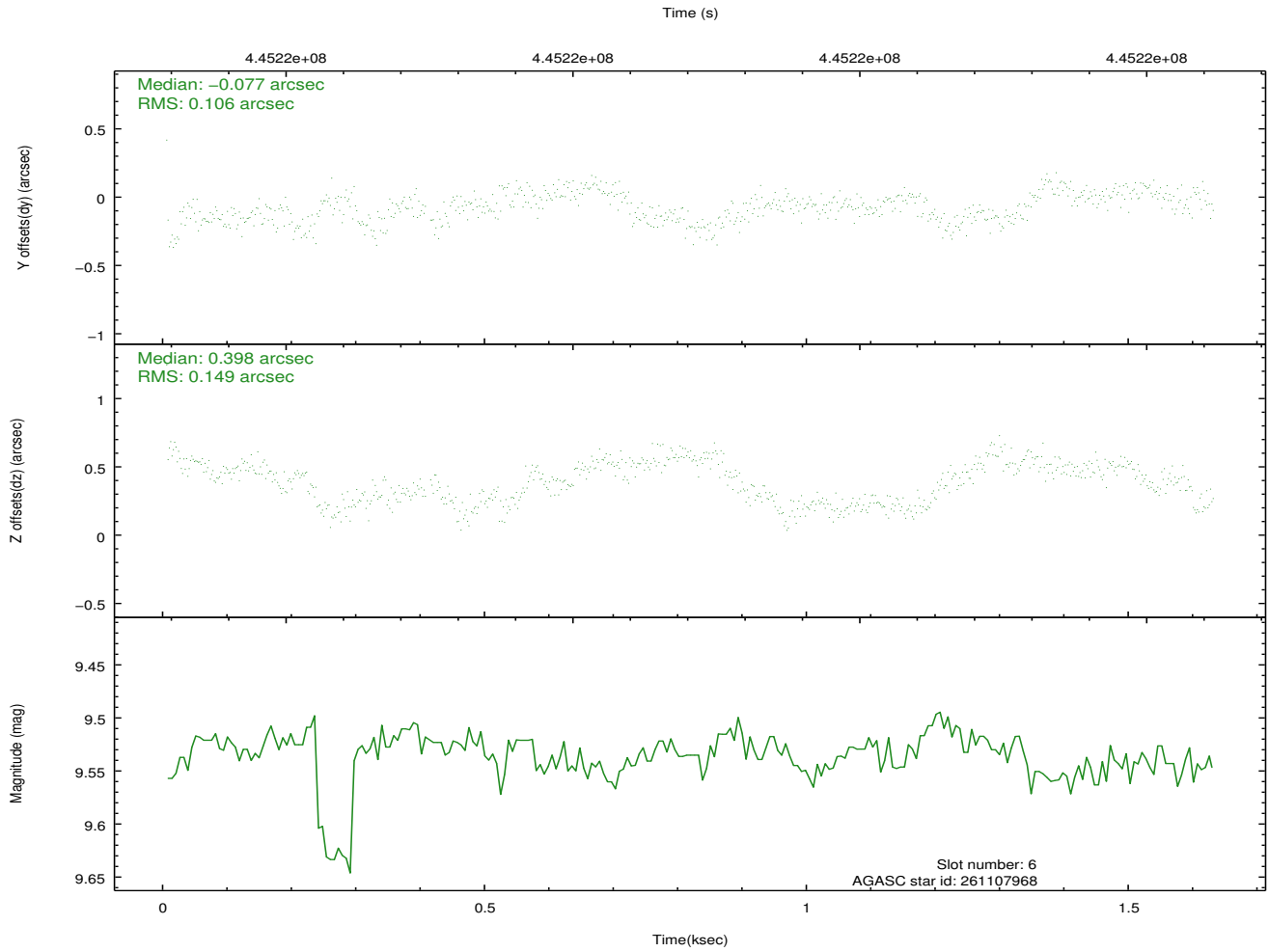
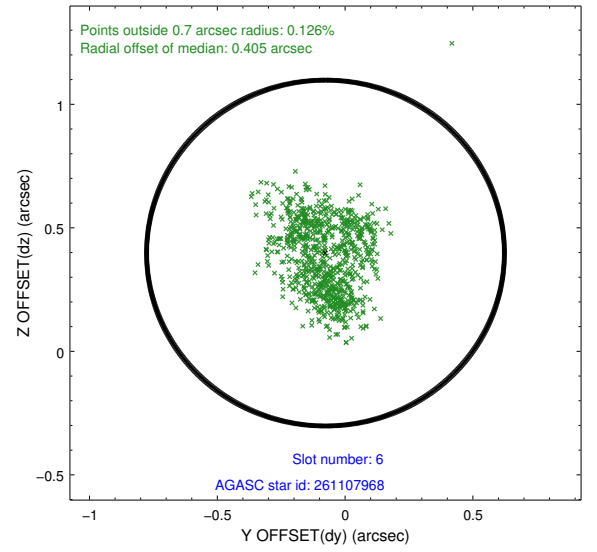
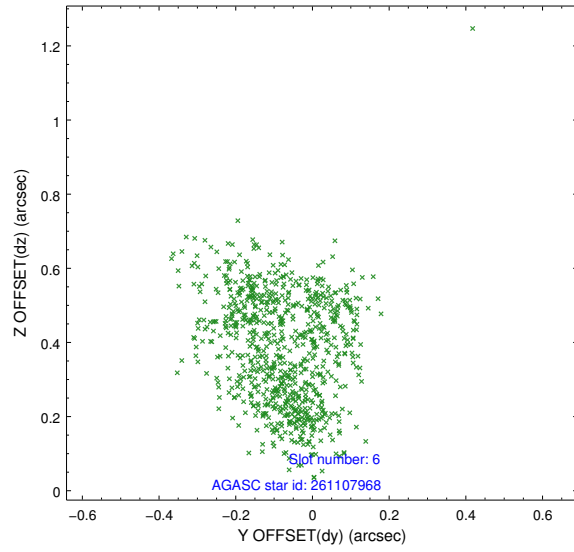
2.4.3 Slot 5



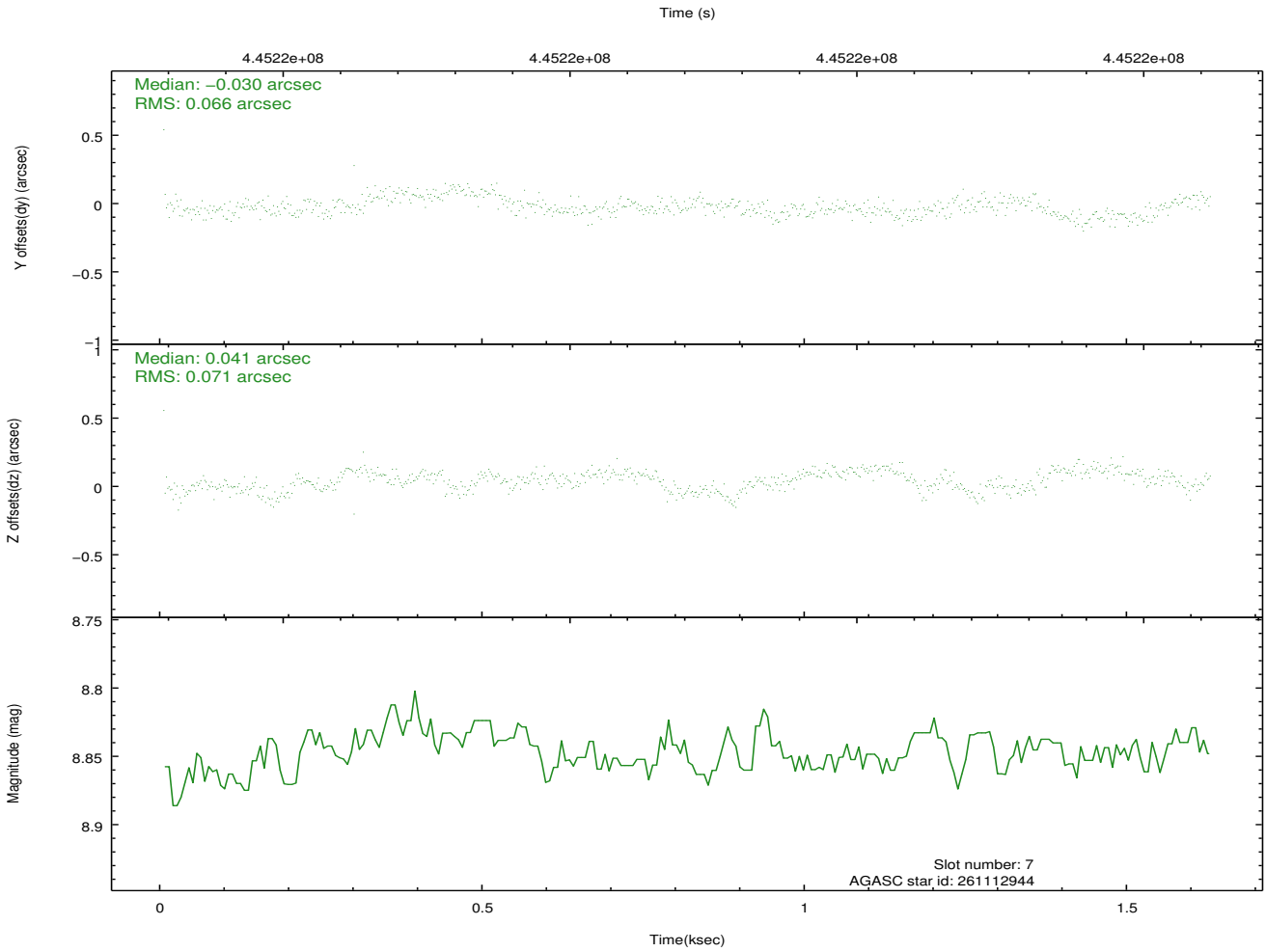
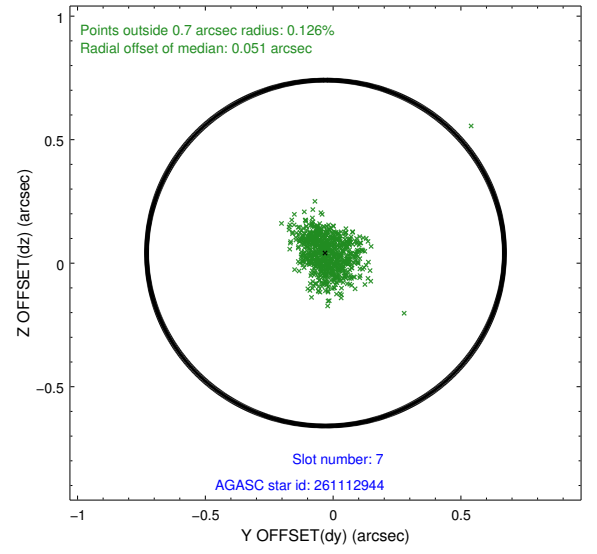
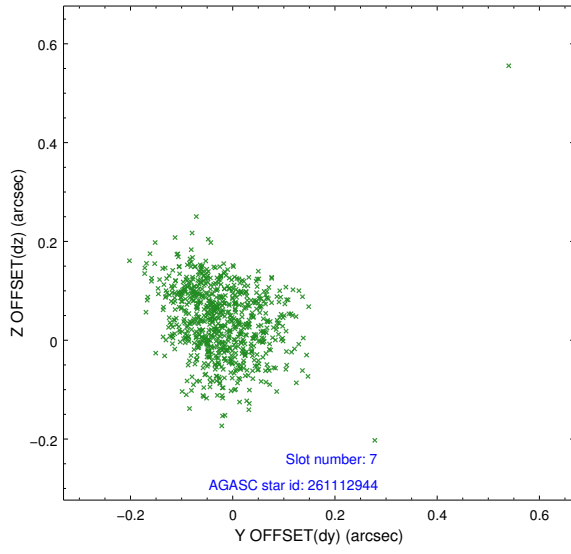
Time (s)



2.4.4 Slot 6

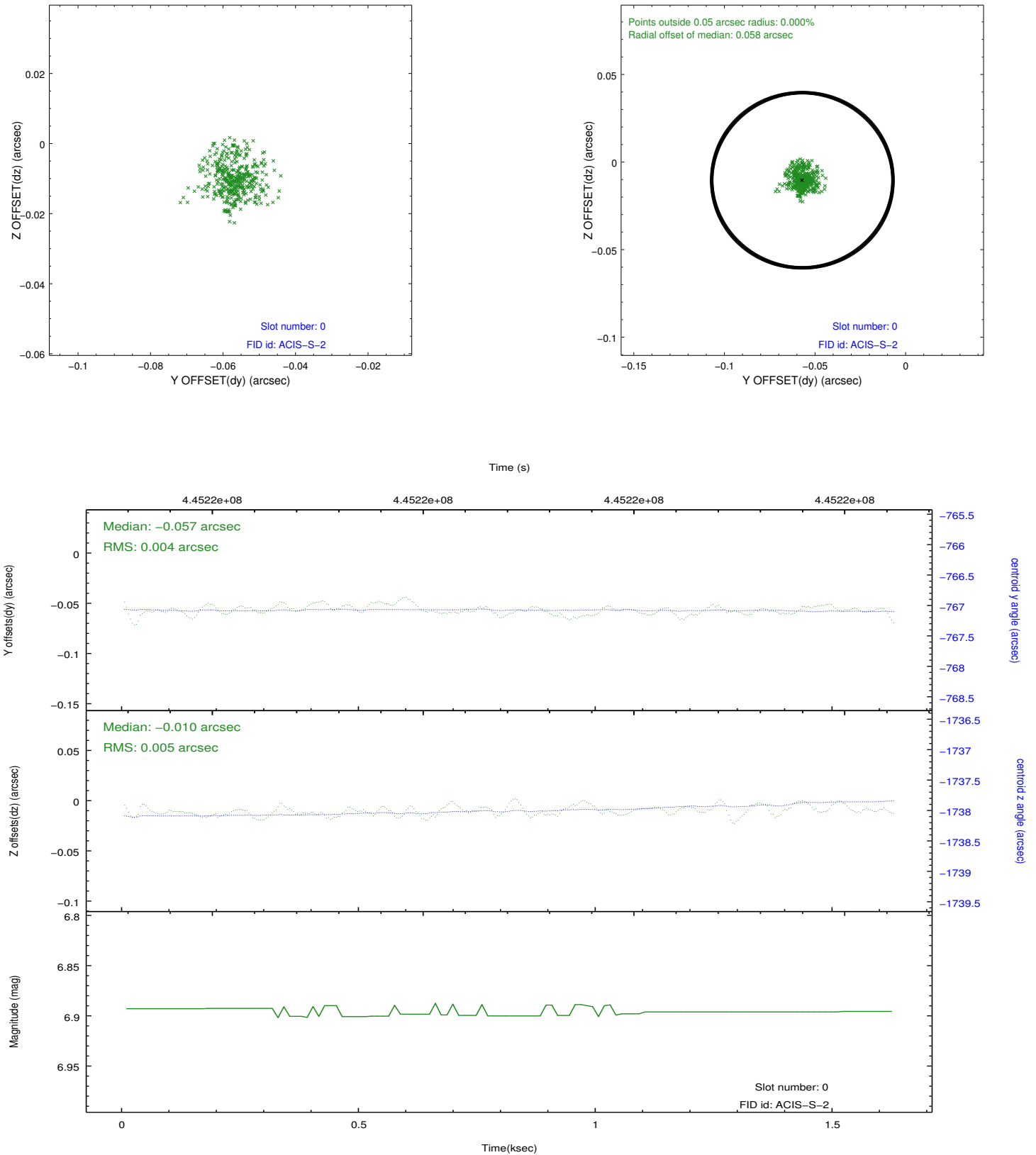


2.4.5 Slot 7

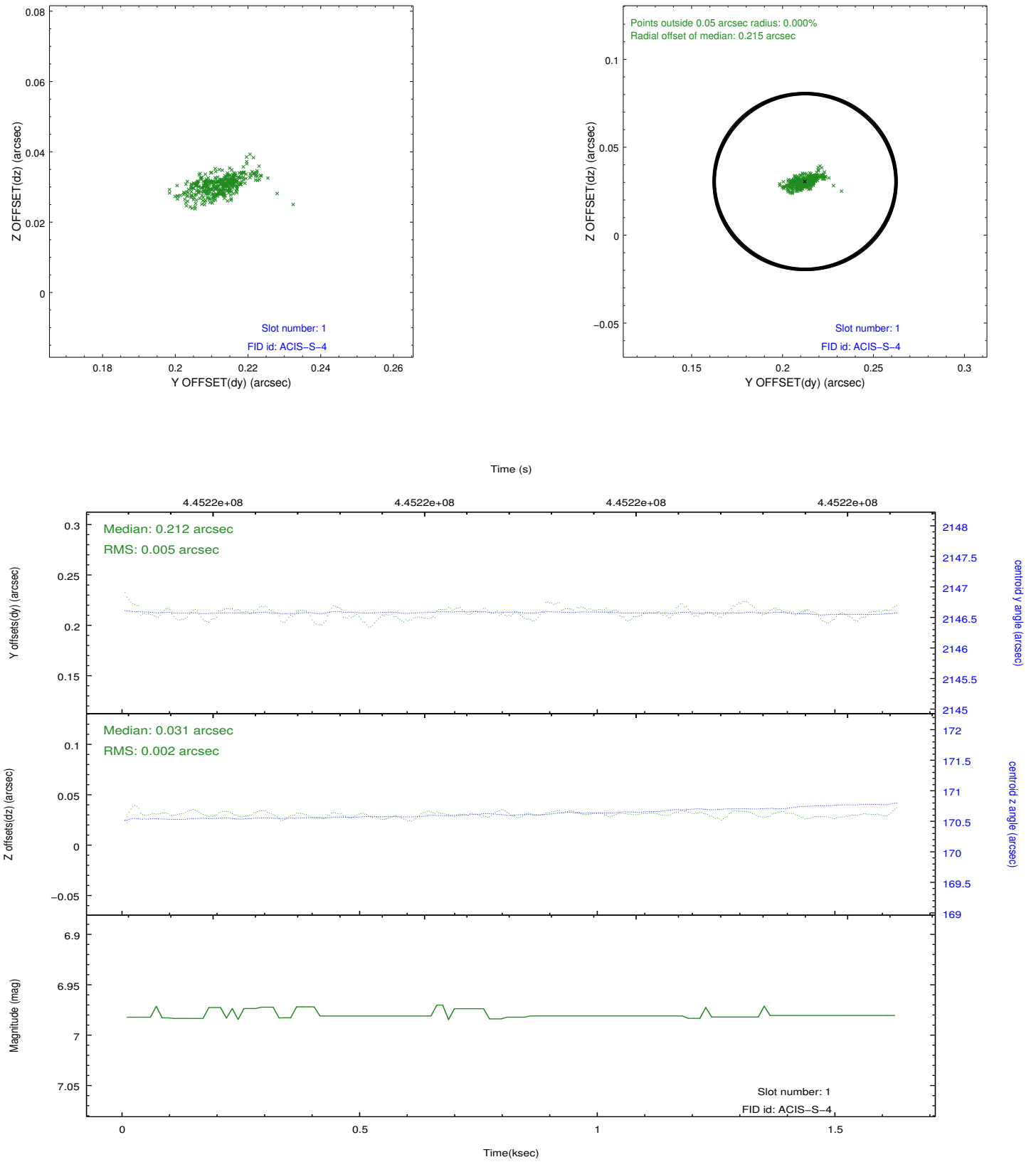


2.5 FID Slots

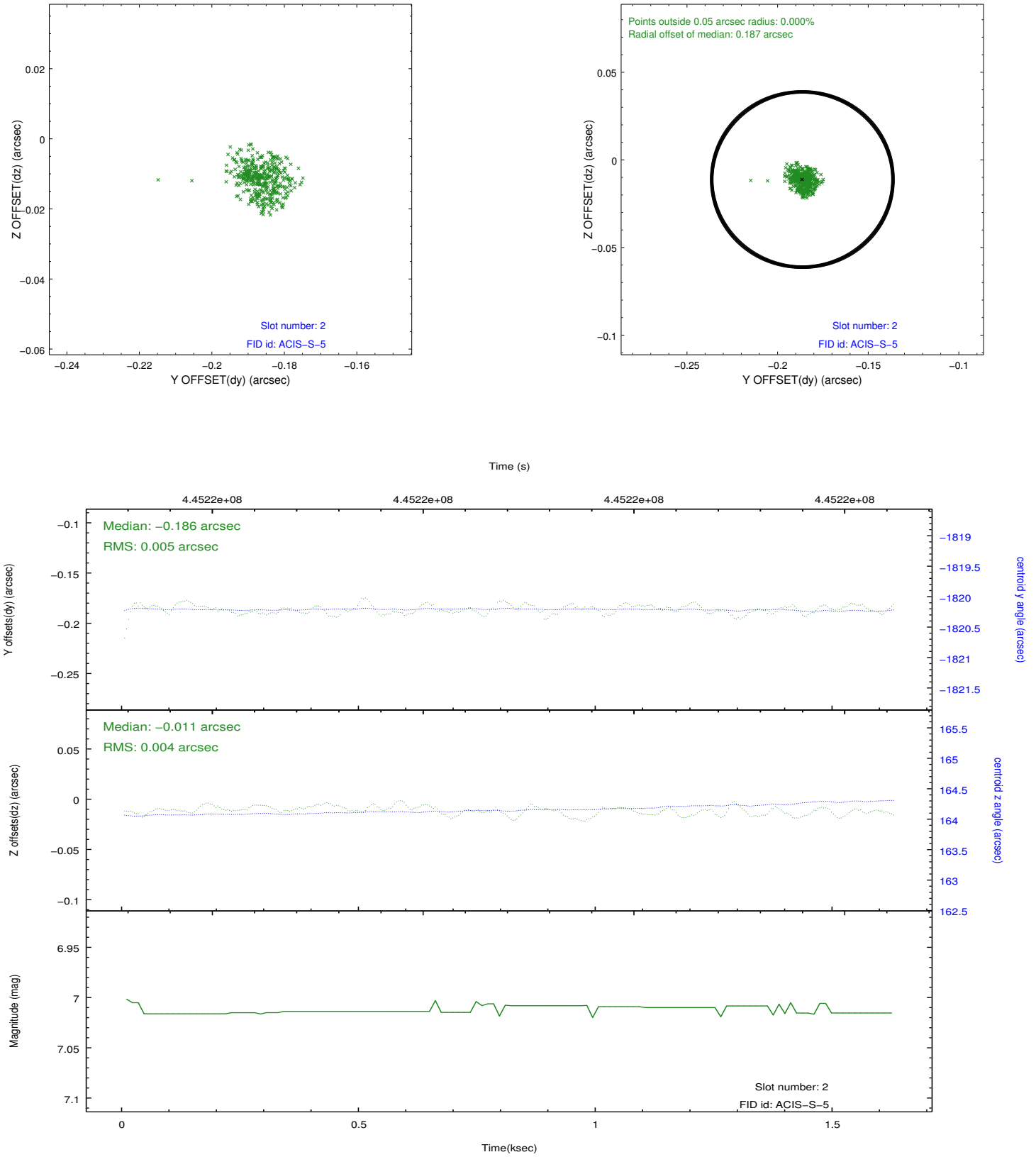
2.5.1 Slot 0



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)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.577039101541

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.