

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12327 - L2 Version 2
Chandra X-Ray Center

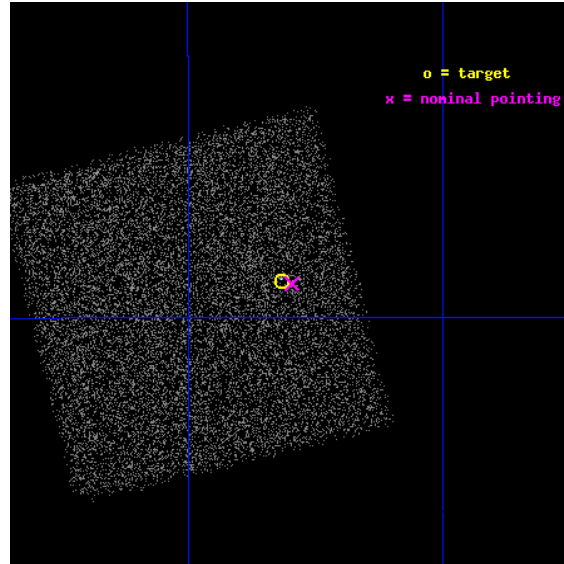
L2 Processing Date : Feb 10 2012

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1 Front

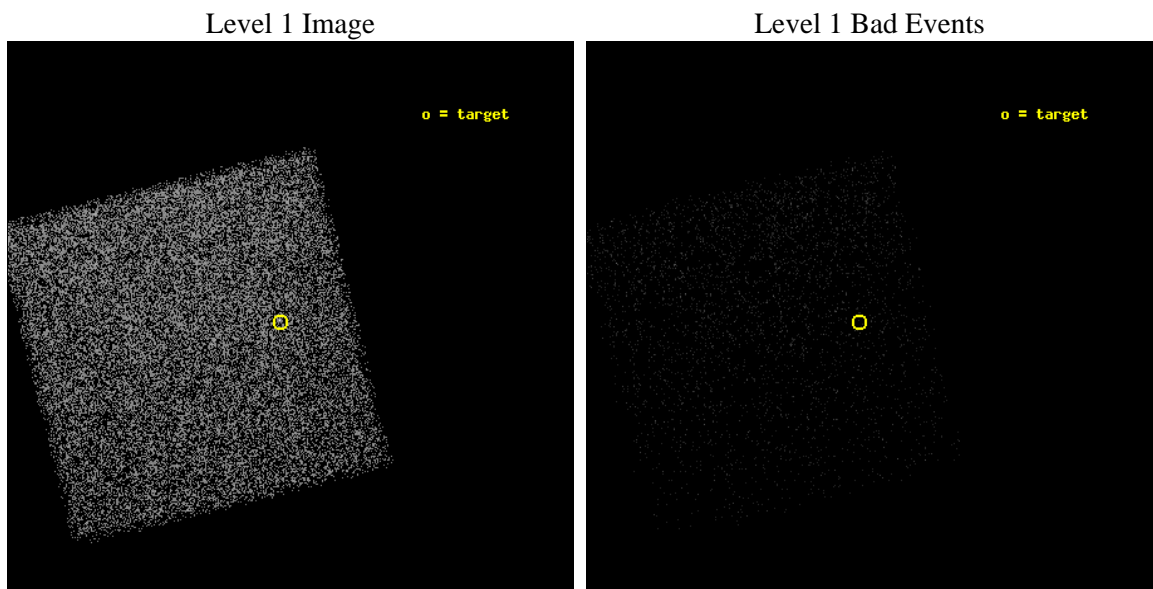
seq_num	200665	Sequence number
obs_id	12327	Observation id
title	Calibrating the time-evolution of the high-energy emissions of GKM stars: key to modeling exoplanet atmospheres	Proposal title
observer	Dr. Ignasi Ribas	Principal investigator
object	LP888-63	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	52.204167	Observer's specified target RA [deg]
dec_targ	-27.317306	Observer's specified target Dec [deg]
ra_nom	52.199048219484	Nominal RA [deg]
dec_nom	-27.318746273589	Nominal Dec [deg]
roll_nom	166.02974365759	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5078.5551198125	Sum of GTIs [s]
livetime	5010.0180725796	Livetime [s]
ontime7	5078.5551198125	Sum of GTIs [s]
l2events	18572	Number of level 2 events



2 OBI

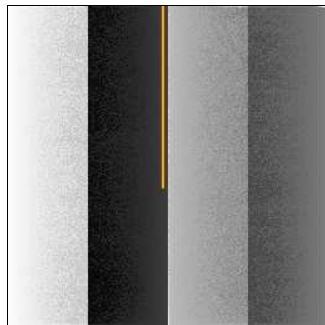
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.624000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5078.5551198125	Sum of GTIs [s]
caldsver	4.4.7	 	ontime7	5078.5551198125	Sum of GTIs [s]
date	2012-02-11T00:14:19	Date and time of file creation	l1events	41782	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

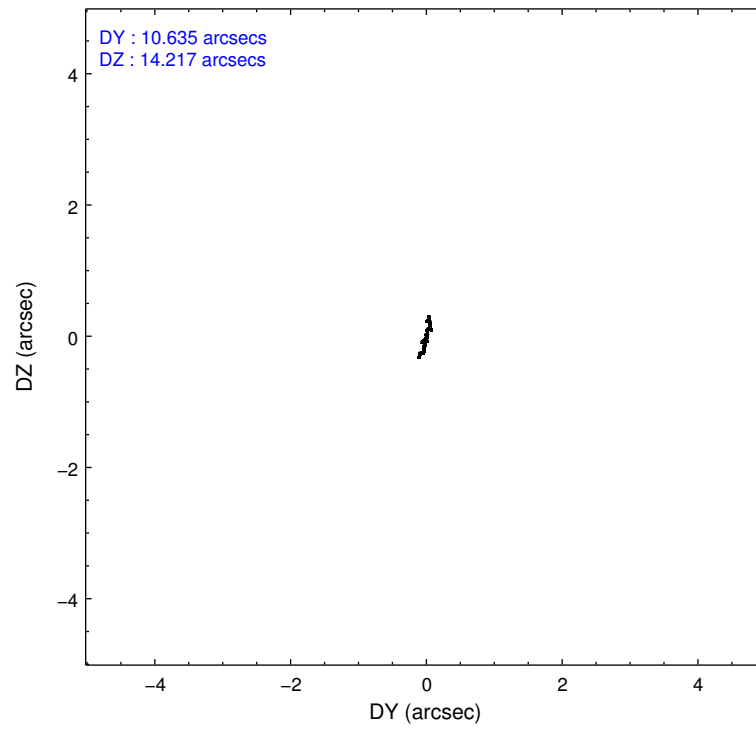
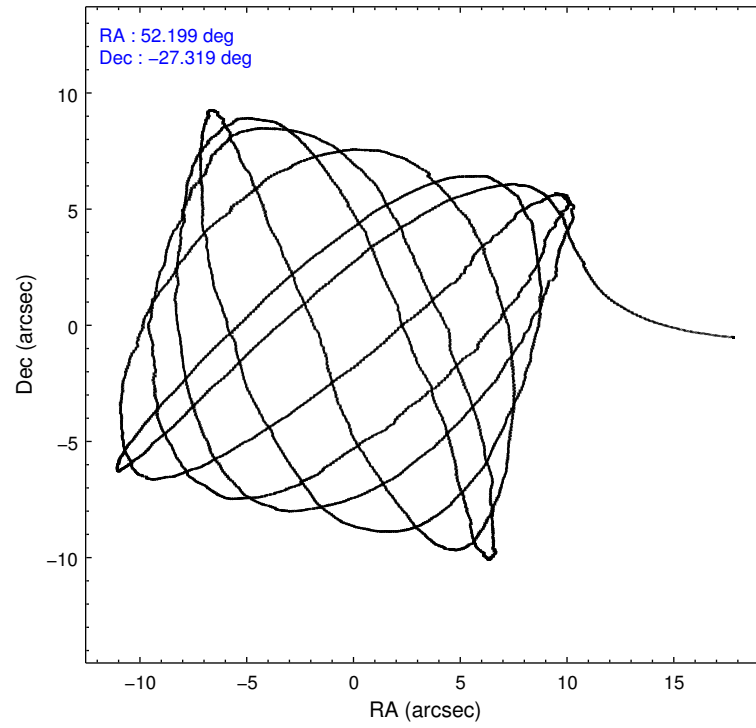
	ccd 7
level 1 events	41782
rejected events	22680
rejected %	54%

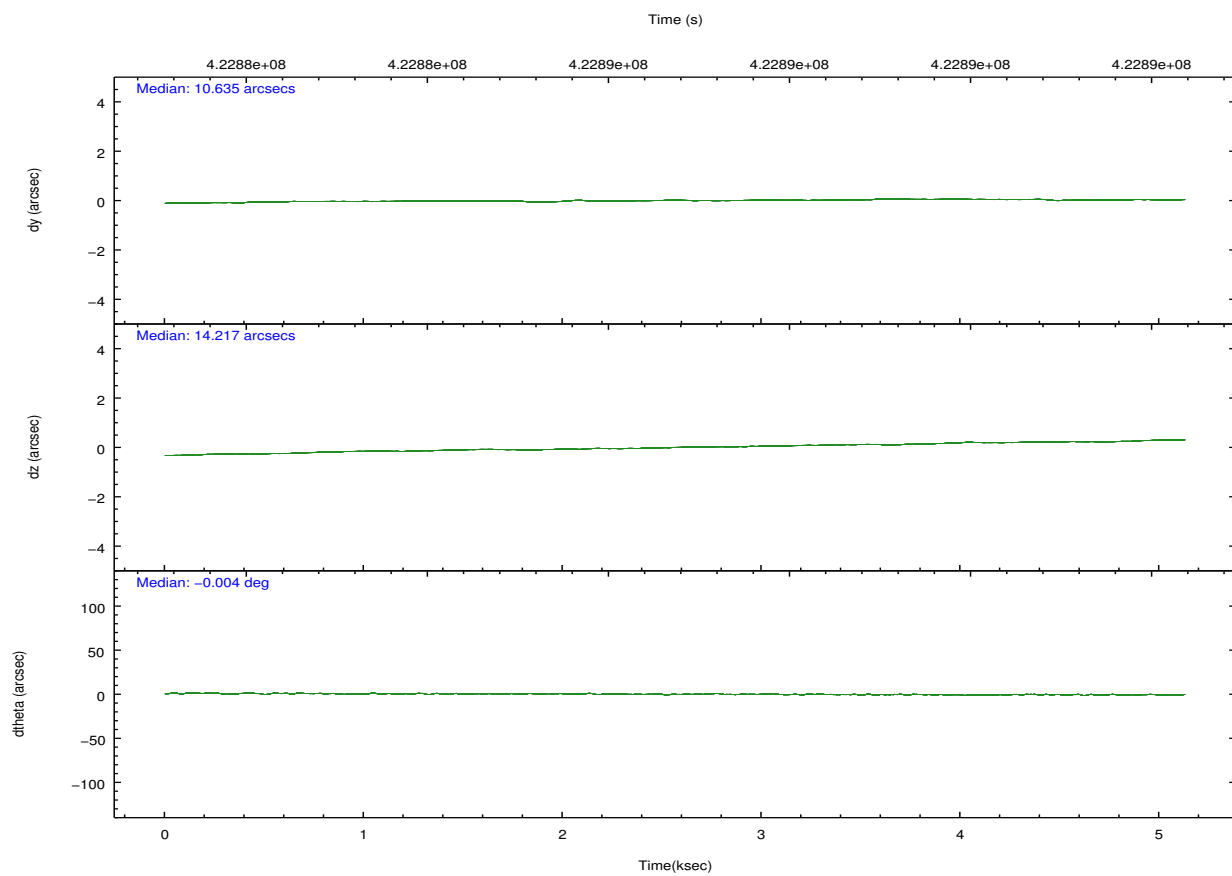
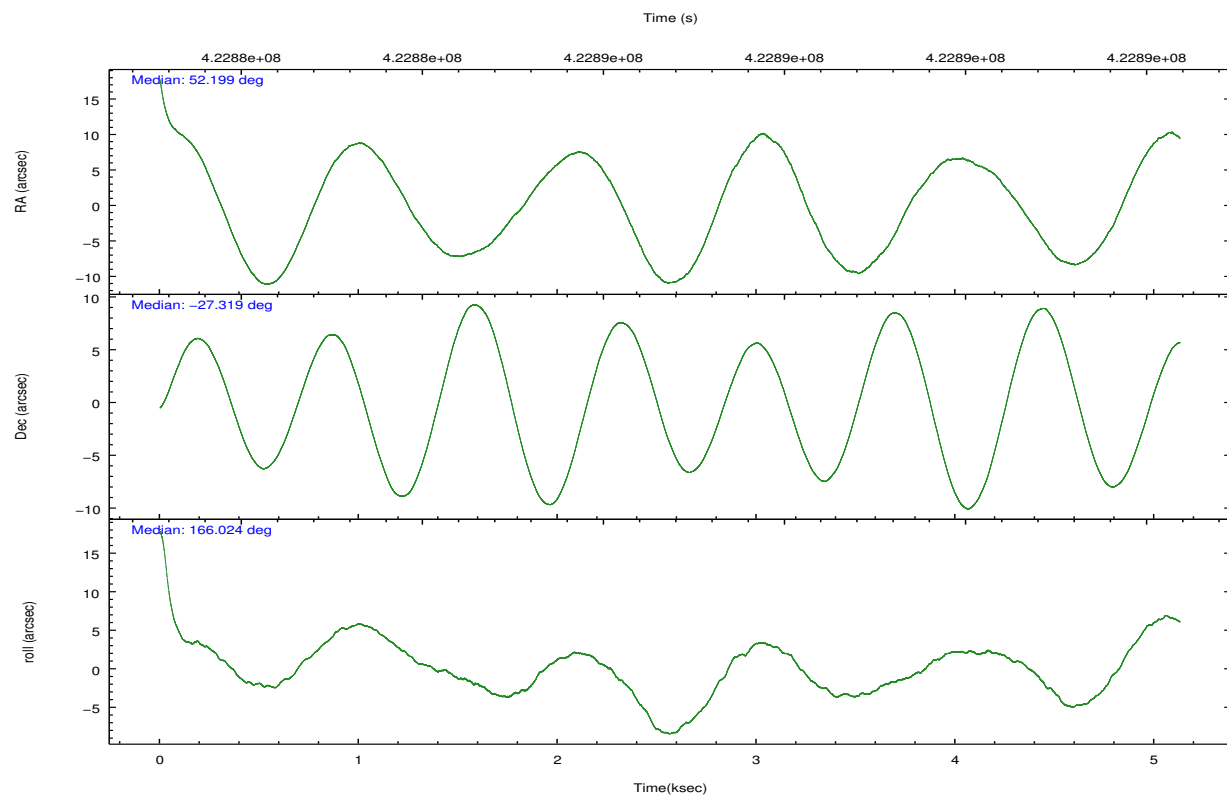
	ccd 7
grade 0 events	1729
	4%
grade 1 events	48
	0%
grade 2 events	3947
	9%
grade 3 events	1738
	4%
grade 4 events	1764
	4%
grade 5 events	4371
	10%
grade 6 events	9945
	23%
grade 7 events	18240
	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	52.228421	52.19904821948449	Subarray requested	NONE	NONE
[deg] Pointing Dec	-27.310868	-27.31874627358904	Alternating exposures requested	N	N
[deg] Pointing Roll	165.886588	166.0297436575891	[s] Primary exposure time	0.000000	3
[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)	422883940.184000	422882596.87828			
Observation start date	2011-05-27T11:44:34	2011-05-27T11:23:16			
[s] Observation end time (MET)	422888940.184000	422889166.61613			
Observation end date	2011-05-27T13:07:54	2011-05-27T13:12:46			
Read mode	TIMED	TIMED			

2.3 Aspect



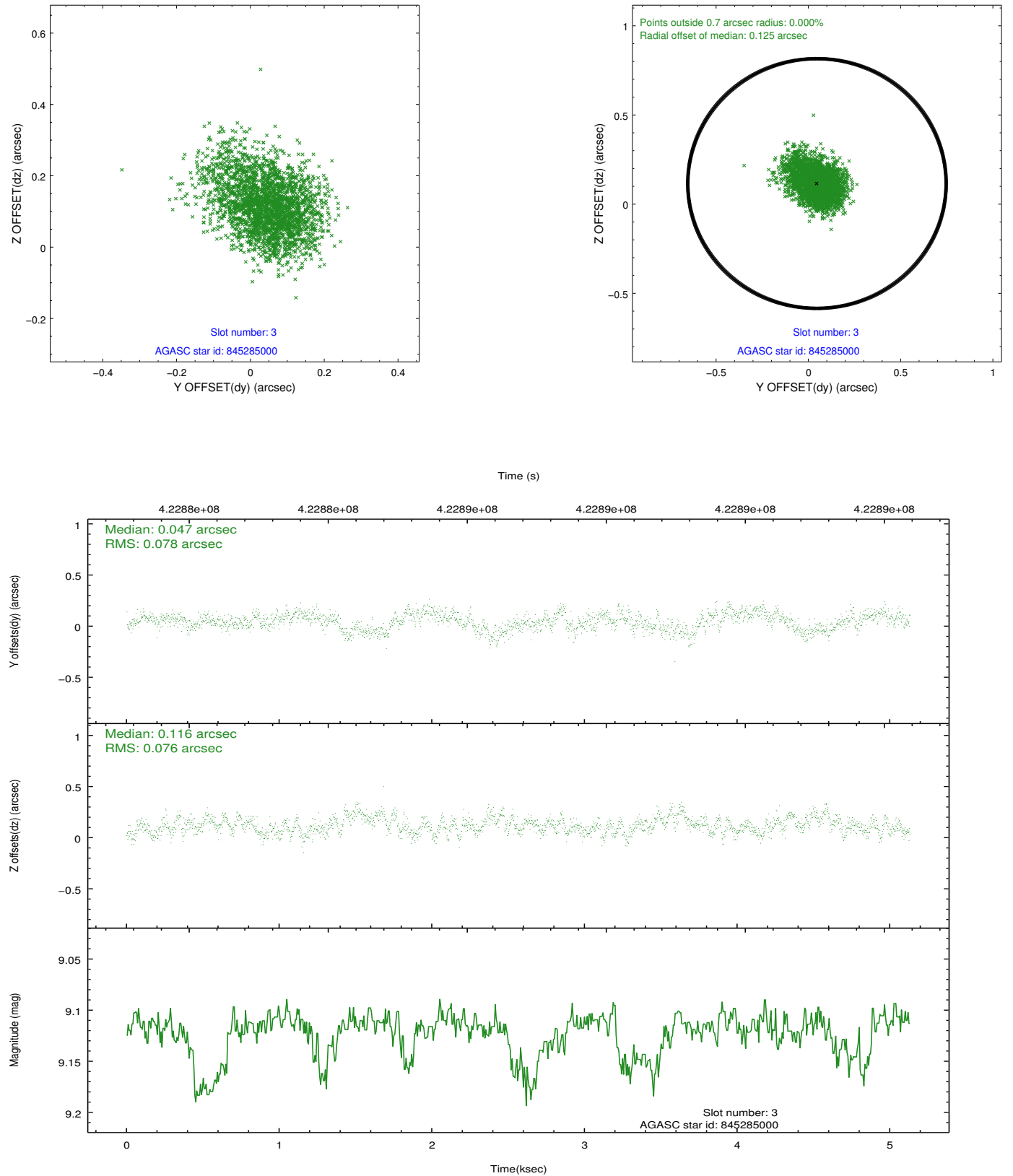


Slot Statistics

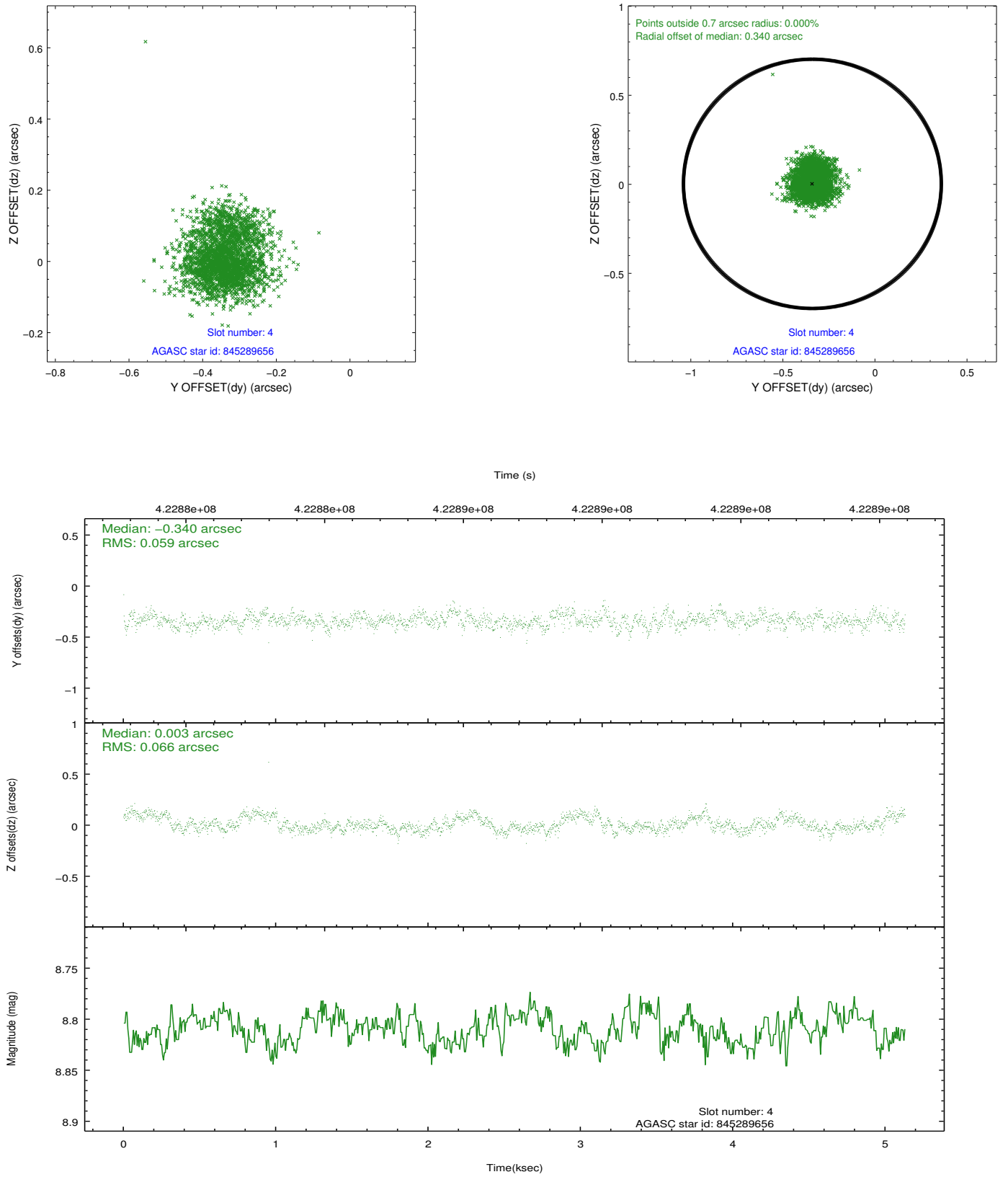
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	1251	-0.046	-0.037	0.007	0.012	0.000000	0.000000	-763.53	-1735.56
1	FID	ACIS-S-4	6.99	1251	0.151	0.032	0.005	0.010	0.000000	0.000000	2149.41	171.76
2	FID	ACIS-S-5	7.02	1251	-0.137	0.014	0.007	0.011	0.000000	0.000000	-1814.94	166.77
3	GUIDE	845285000	9.12	2501	0.047	0.116	0.116	0.191	52.110677	-26.610766	982.29	-2351.62
4	GUIDE	845289656	8.81	2496	-0.340	0.003	0.095	0.150	51.634770	-26.985990	2131.64	-665.85
5	GUIDE	845292280	9.22	2499	0.087	-0.210	0.122	0.197	51.927381	-27.411861	845.58	587.21
6	GUIDE	845677048	8.43	2503	-0.127	0.138	0.087	0.139	51.863905	-27.746821	743.69	1807.75
7	GUIDE	845676728	9.33	2501	0.338	-0.057	0.093	0.151	52.877179	-27.664318	-2316.70	735.69

2.4 Star Slots

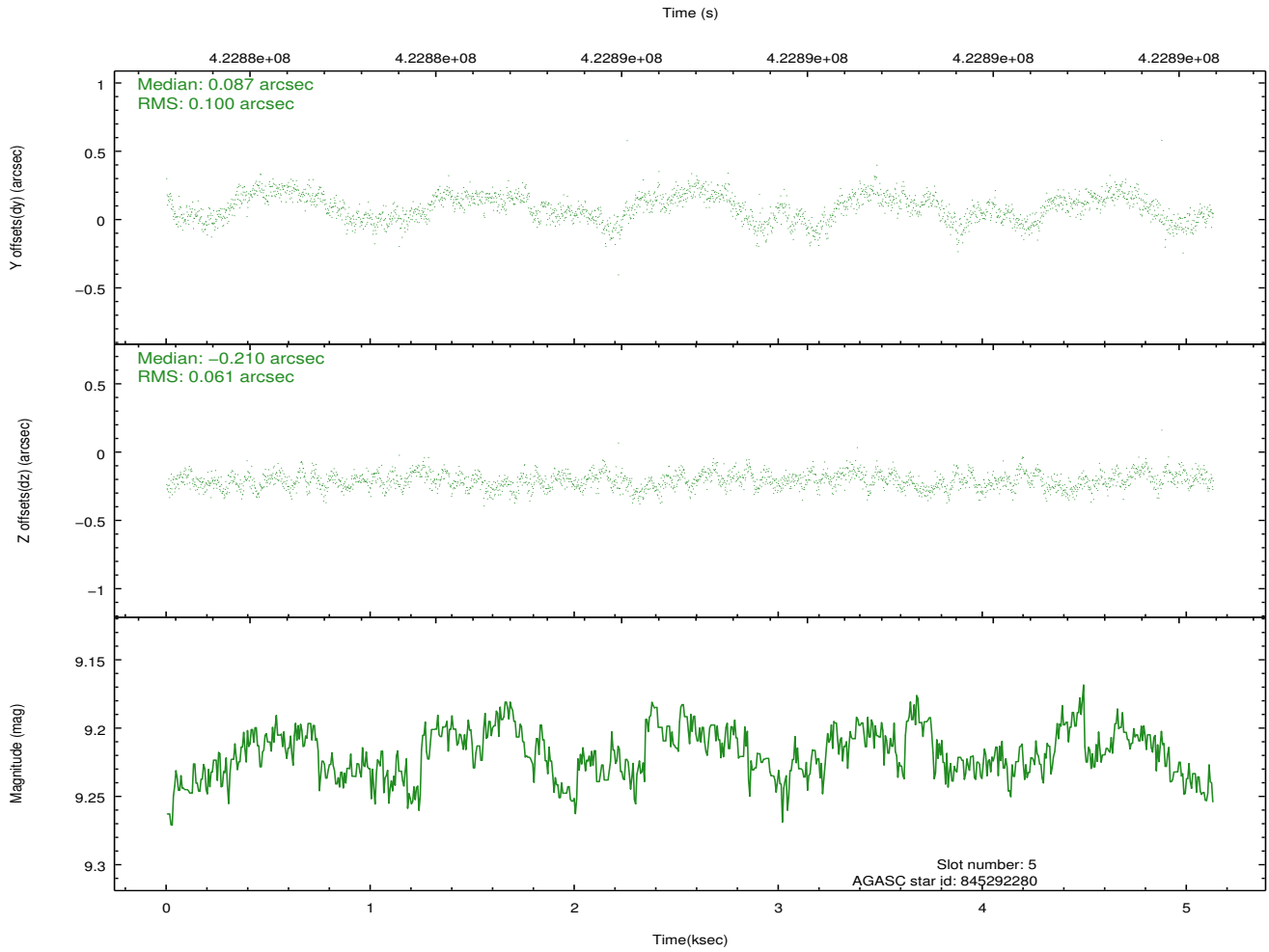
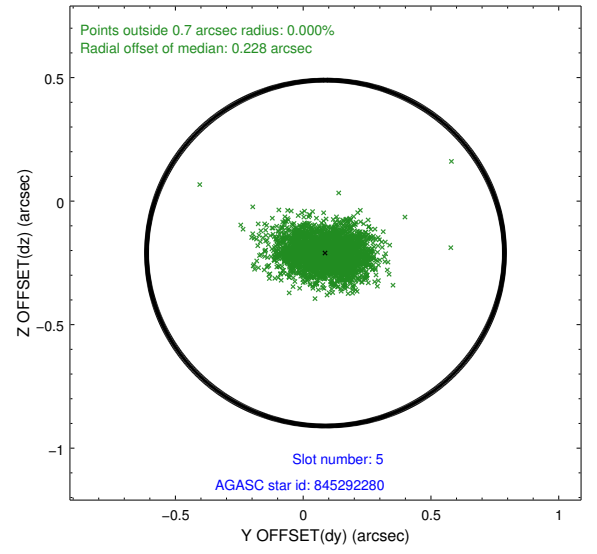
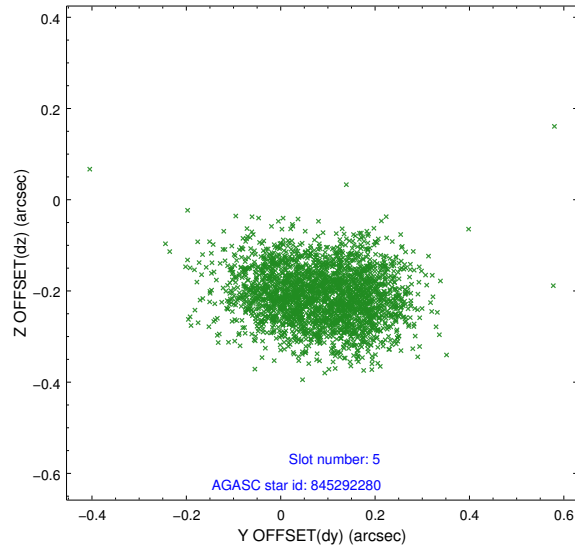
2.4.1 Slot 3



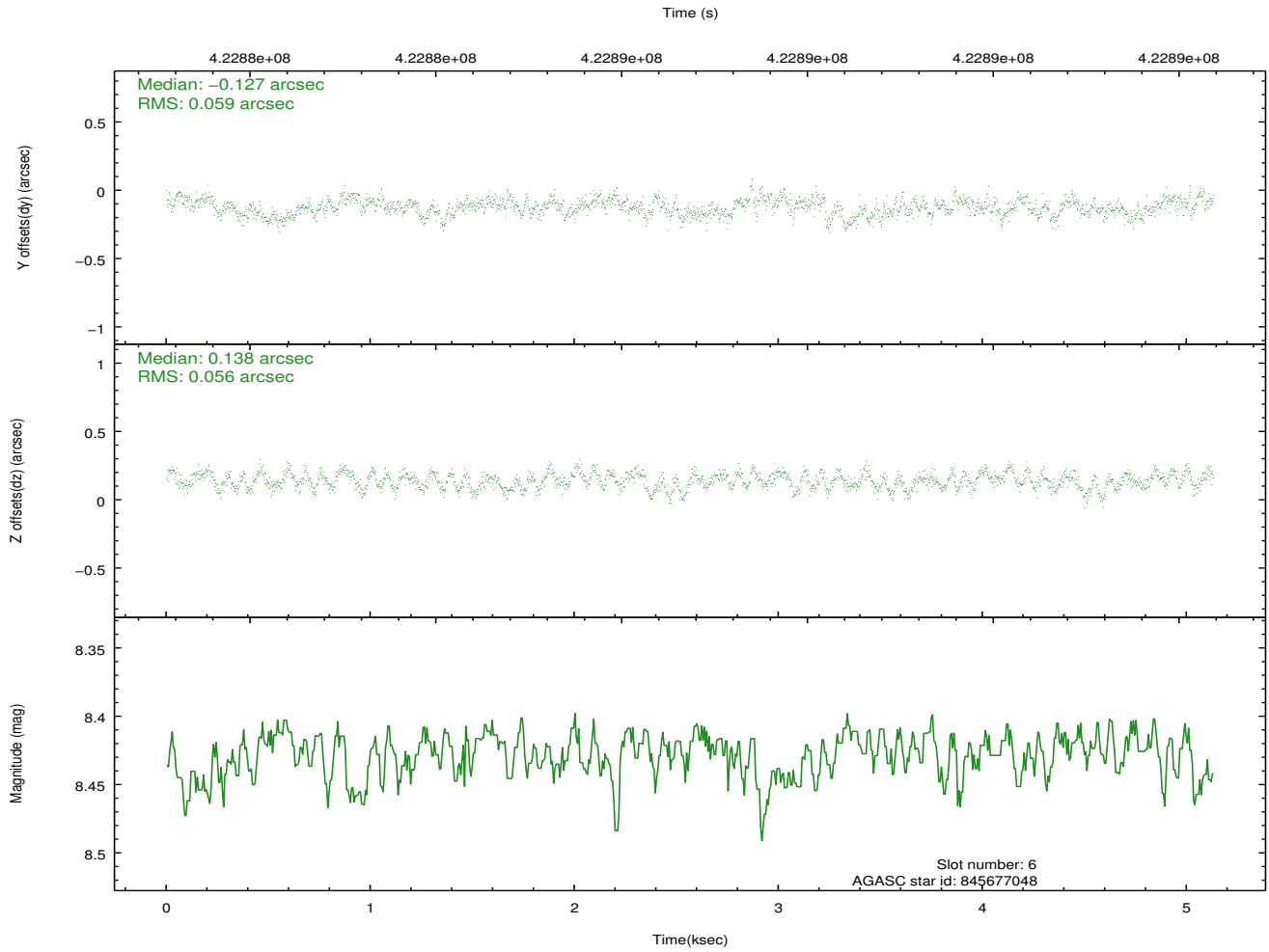
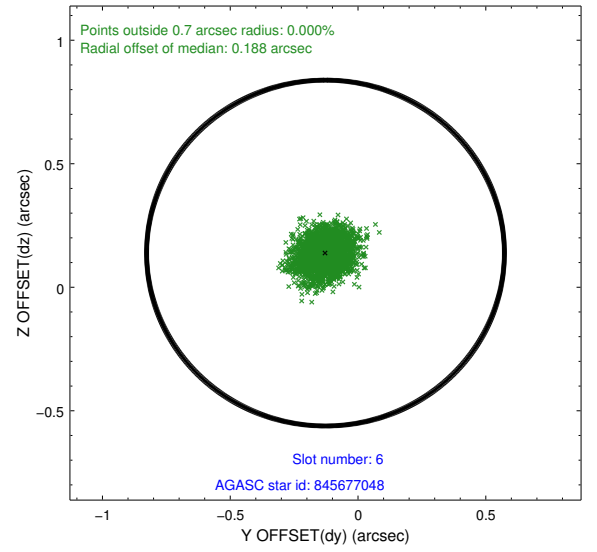
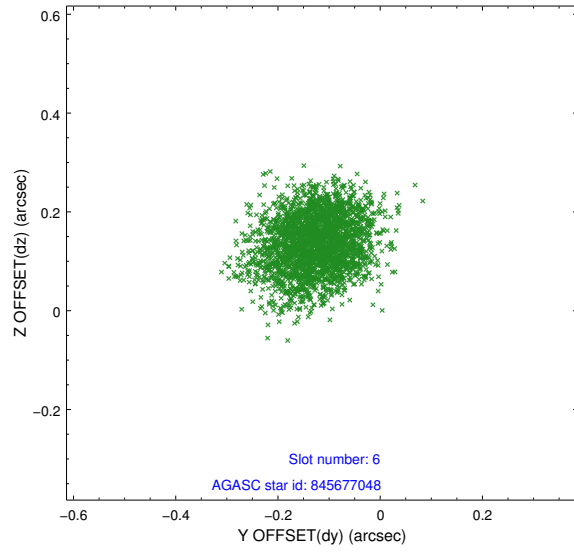
2.4.2 Slot 4



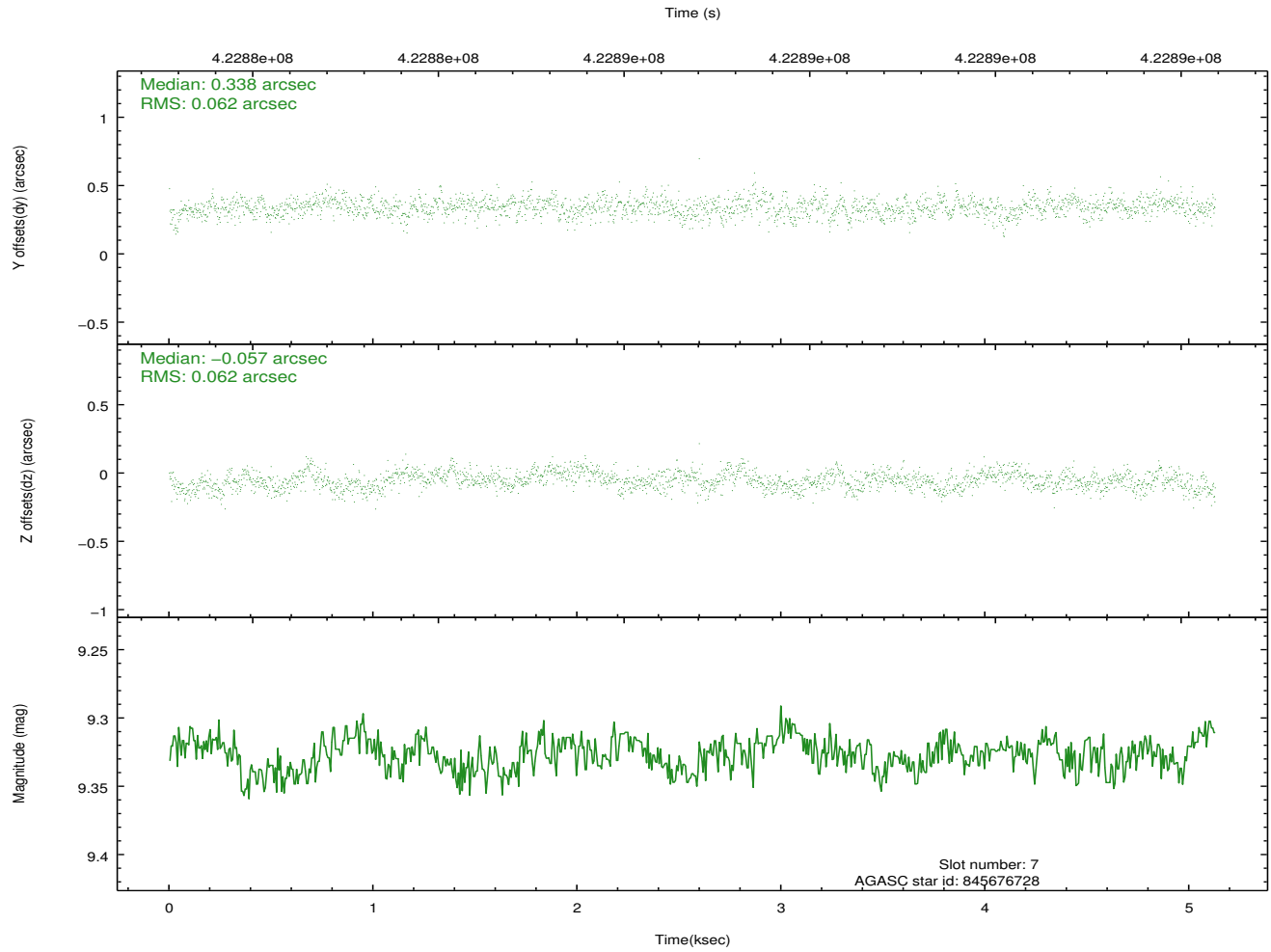
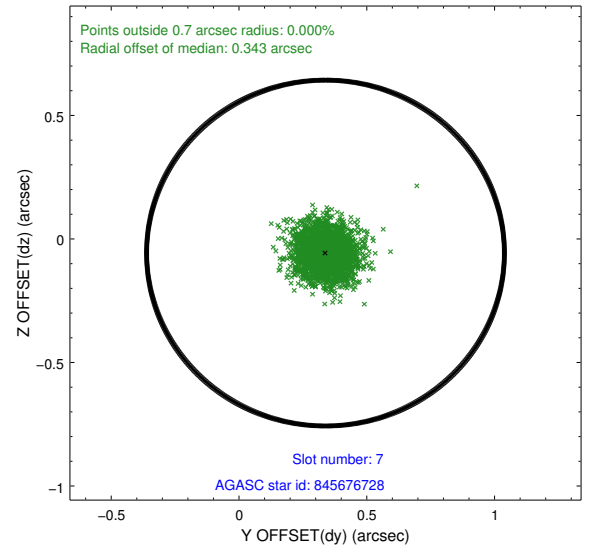
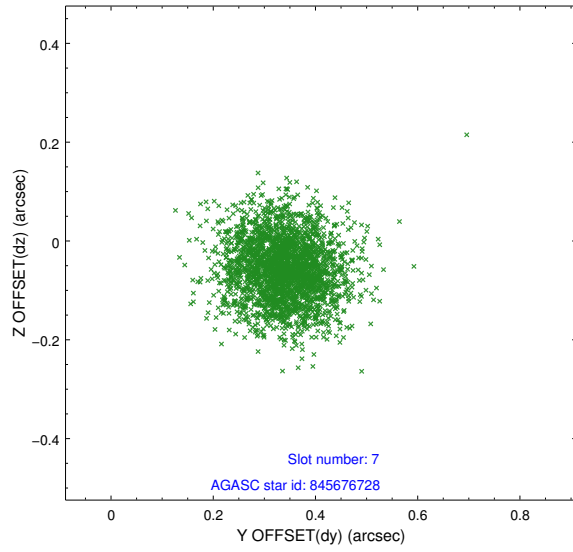
2.4.3 Slot 5



2.4.4 Slot 6

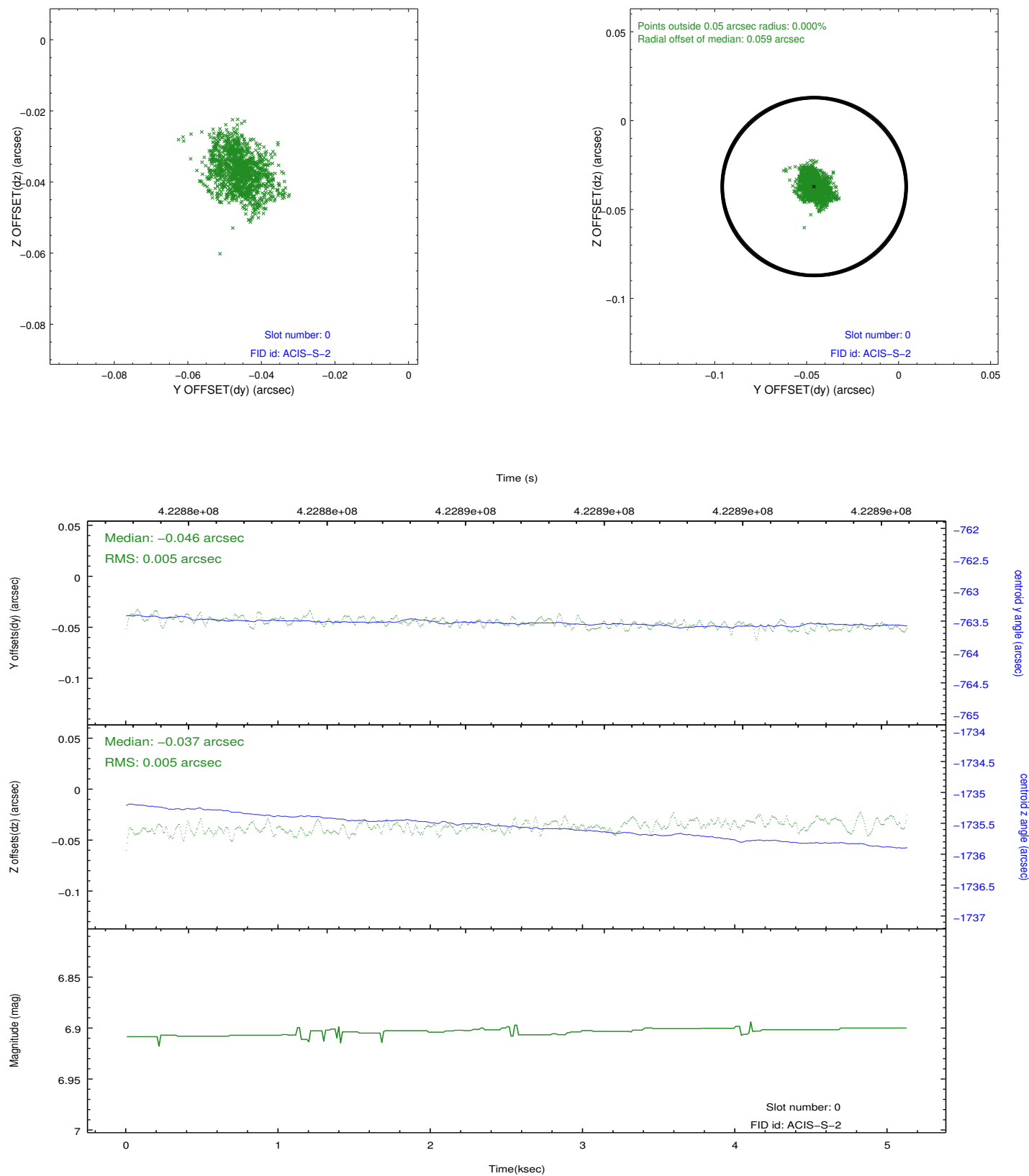


2.4.5 Slot 7

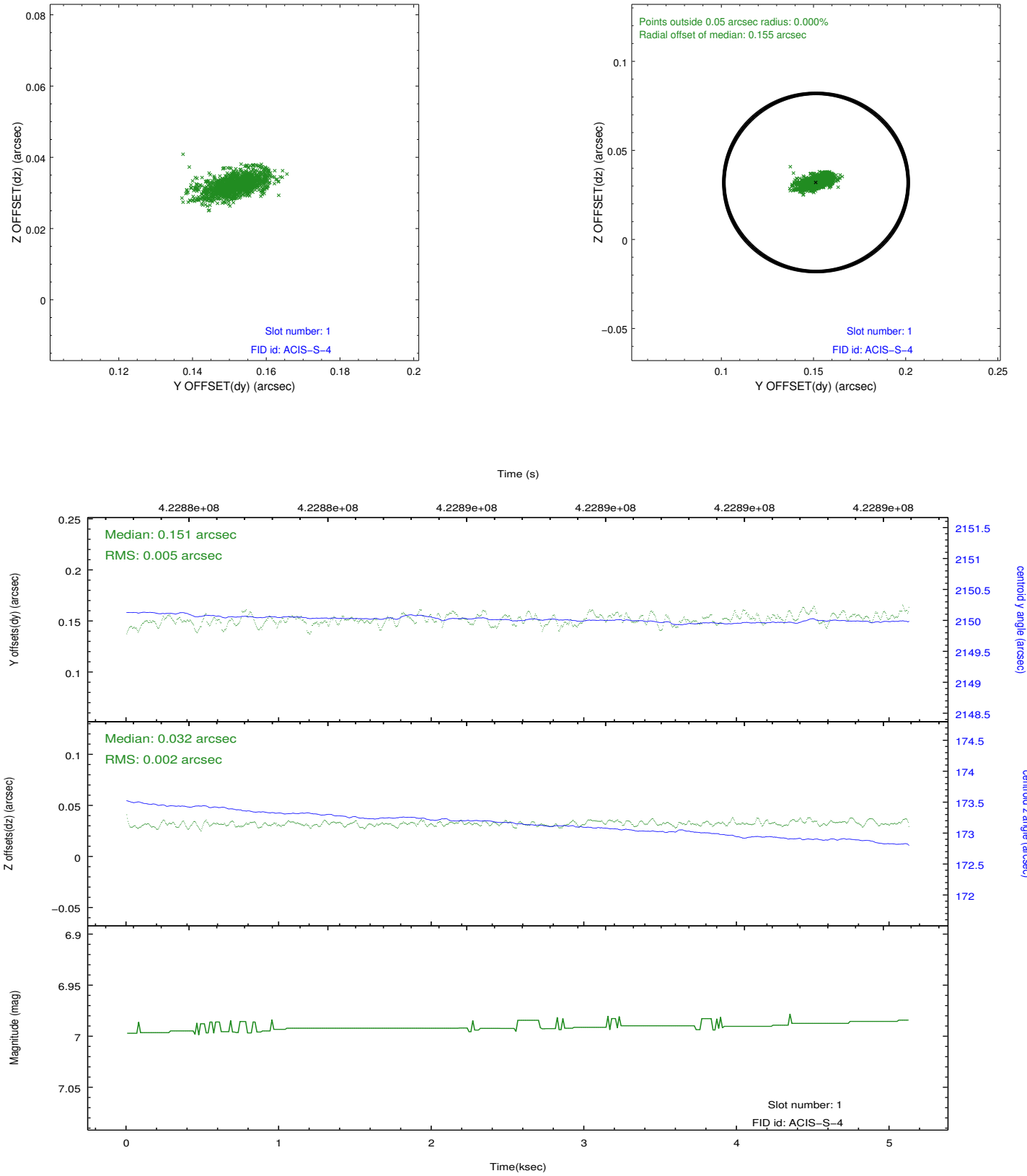


2.5 FID Slots

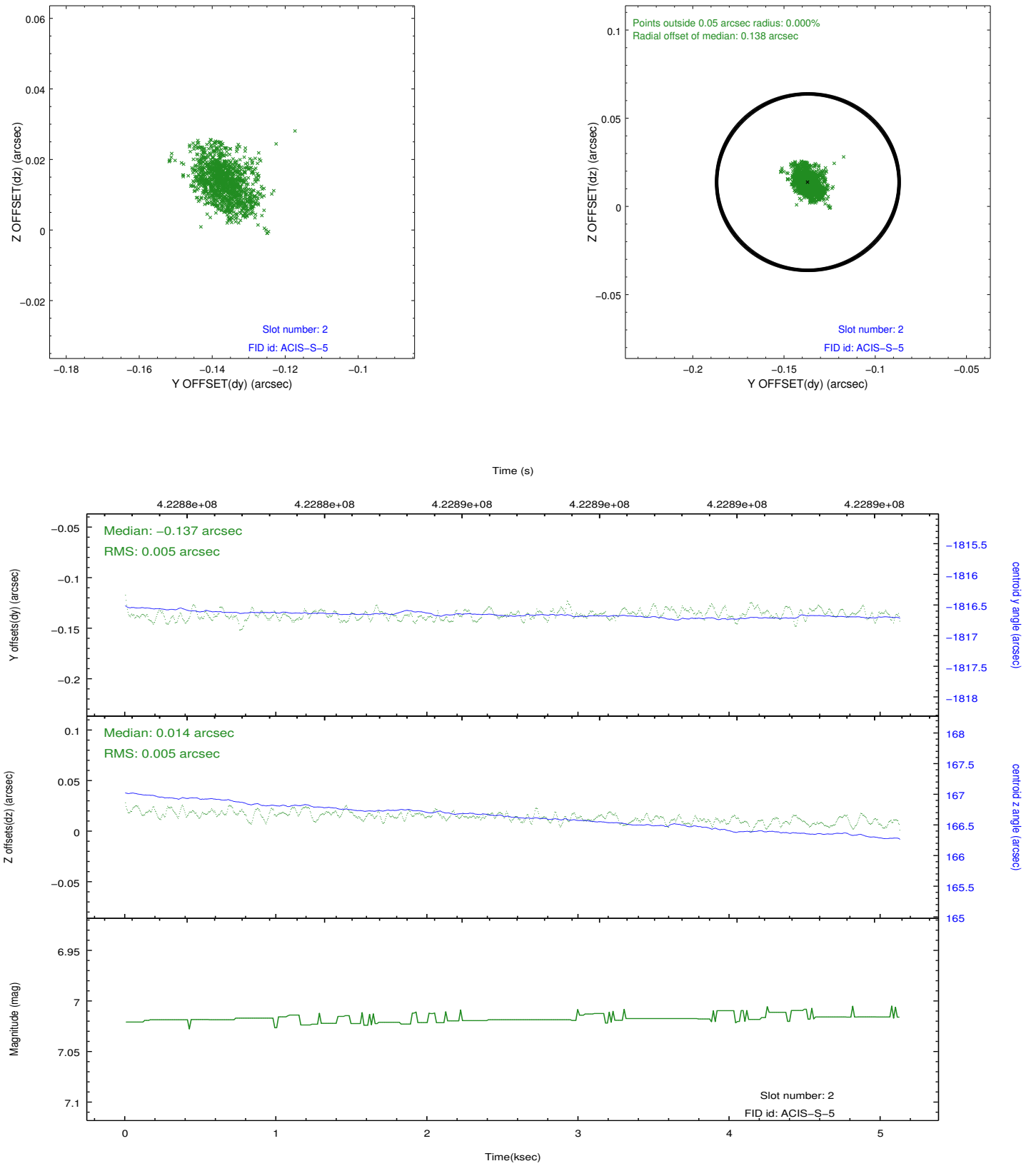
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0785551236272

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.