

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13318 - L2 Version 1
Chandra X-Ray Center

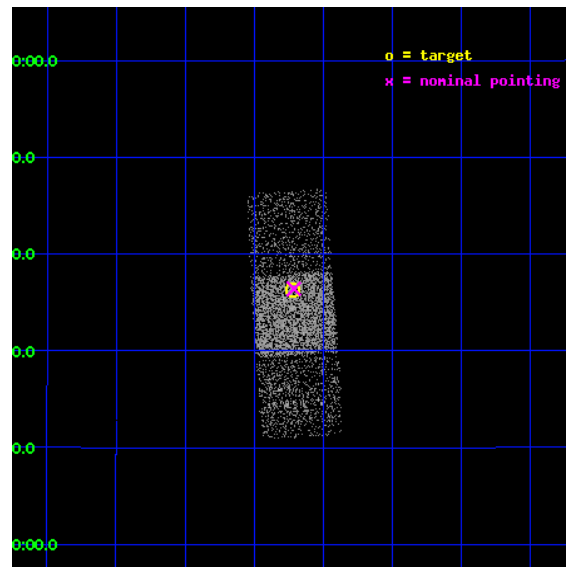
L2 Processing Date : Feb 10 2012

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

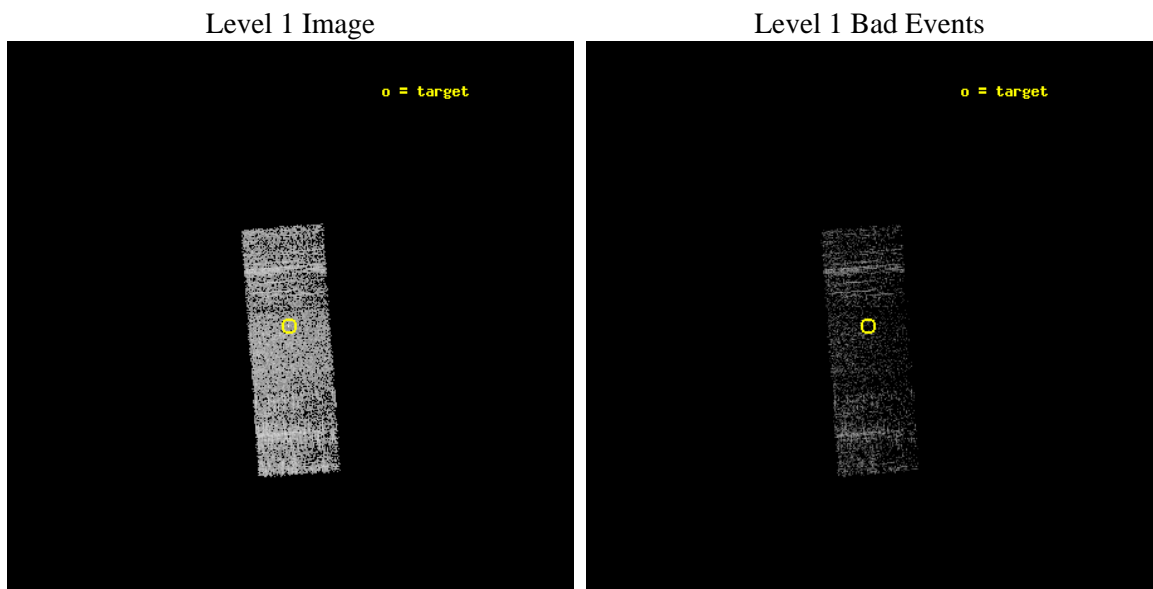
seq_num	702525	Sequence number
obs_id	13318	Observation id
title	A Large, Economical Snapshot Survey of the Most-Luminous Quasars from the Sloan Digital Sky Survey	Proposal title
observer	Prof. Gordon Garmire	Principal investigator
object	SDSS J1218+1536	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	184.680833	Observer's specified target RA [deg]
dec_targ	15.604778	Observer's specified target Dec [deg]
ra_nom	184.67809251734	Nominal RA [deg]
dec_nom	15.60693028535	Nominal Dec [deg]
roll_nom	85.900546445702	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1577.0803570747	Sum of GTIs [s]
livetime	1556.4746411799	Livetime [s]
ontime6	1577.0393170714	Sum of GTIs [s]
ontime7	1577.0803570747	Sum of GTIs [s]
ontime8	1576.9982770681	Sum of GTIs [s]
l2events	6942	Number of level 2 events



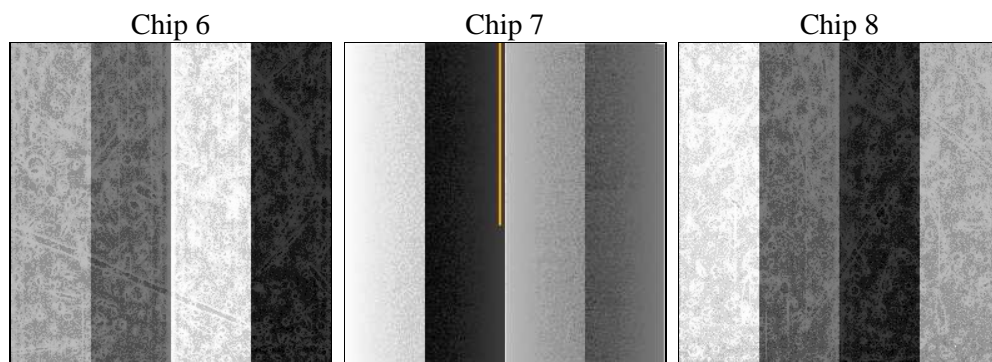
2 OBI

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	1577.0803570747	Sum of GTIs [s]
caldsver	4.4.7	 	ontime6	1577.0393170714	Sum of GTIs [s]
date	2012-02-10T20:59:30	Date and time of file creation	ontime7	1577.0803570747	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	1576.9982770681	Sum of GTIs [s]
			l1events	30723	Number of level 1 events

2.1.4 Events

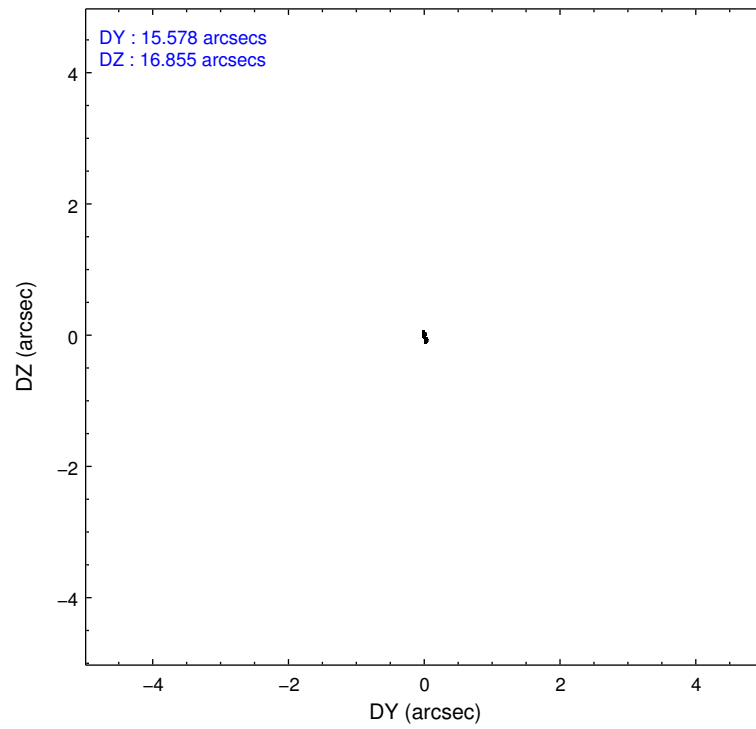
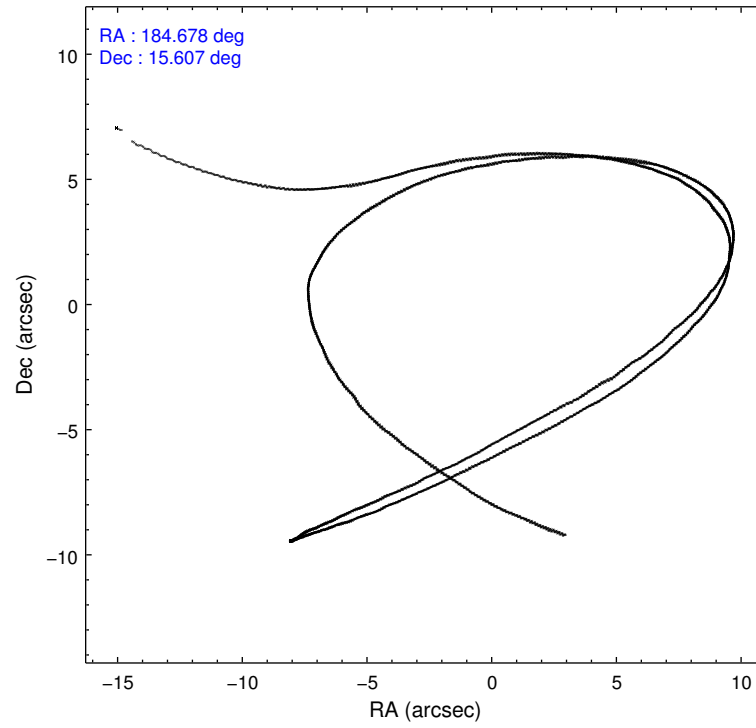
	ccd 6	ccd 7	ccd 8
level 1 events	8960	10070	11693
rejected events	7907	5145	8373
rejected %	88%	51%	71%

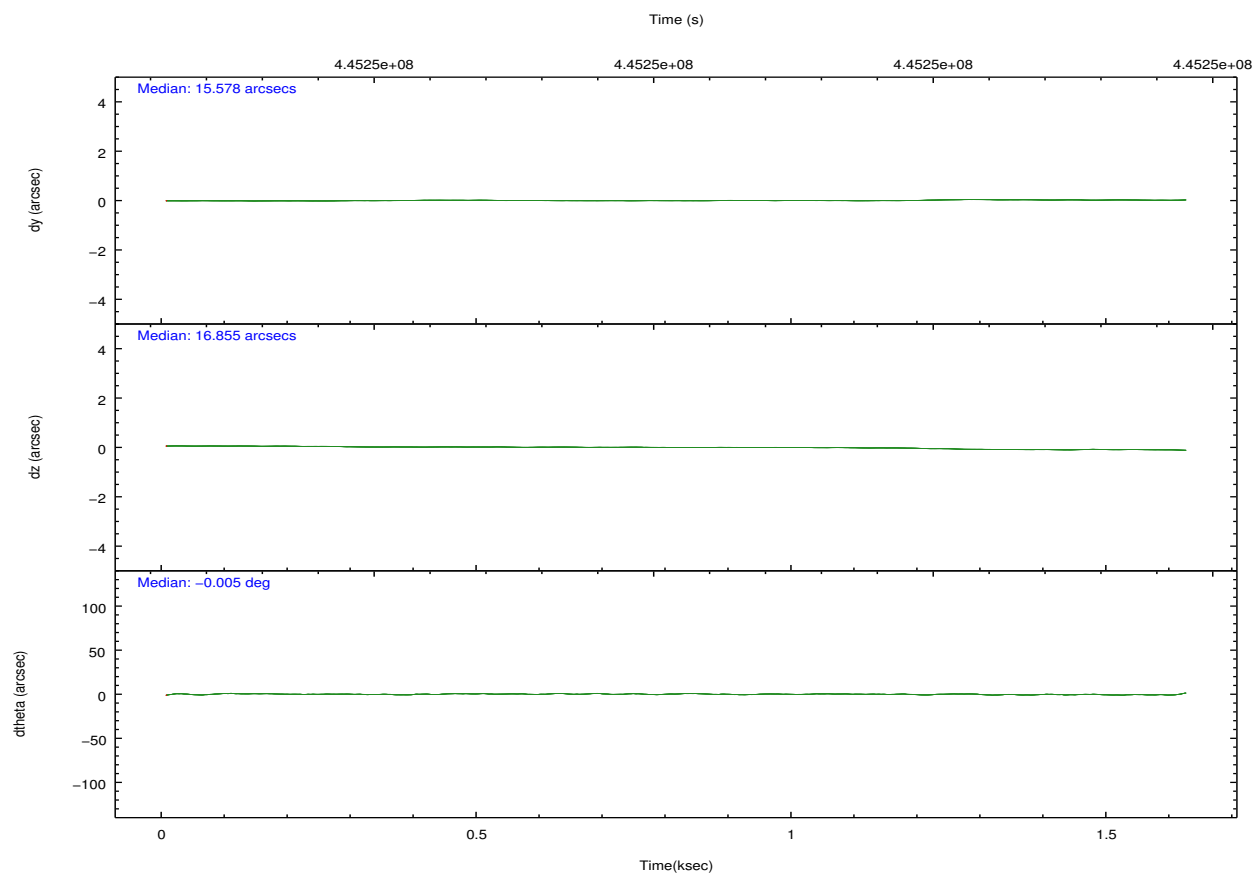
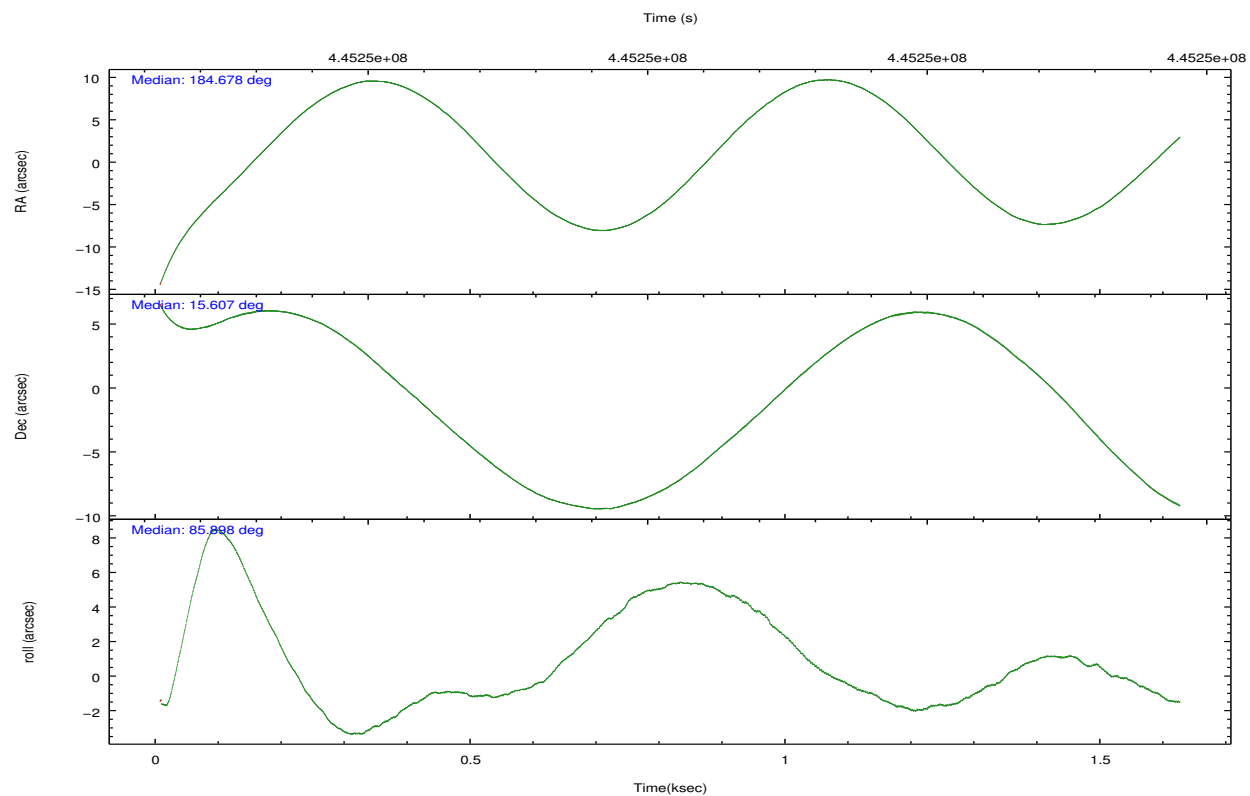
	ccd 6	ccd 7	ccd 8
grade 0 events	385	500	918
	4%	4%	7%
grade 1 events	4	18	6
	0%	0%	0%
grade 2 events	241	1075	823
	2%	10%	7%
grade 3 events	99	438	338
	1%	4%	2%
grade 4 events	113	473	320
	1%	4%	2%
grade 5 events	349	1099	582
	3%	10%	4%
grade 6 events	219	2455	927
	2%	24%	7%
grade 7 events	7550	4012	7779
	84%	39%	66%

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	184.691056	184.6780925173437	Subarray requested	NONE	NONE
[deg] Pointing Dec	15.582155	15.6069302853503	Alternating exposures requested	N	N
[deg] Pointing Roll	85.740501	85.90054644570182	[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)	445252351.184000	445251160.16773			
Observation start date	2012-02-10T09:11:25	2012-02-10T08:52:40			
[s] Observation end time (MET)	445253851.184000	445255236.59294			
Observation end date	2012-02-10T09:36:25	2012-02-10T10:00:36			
Read mode	TIMED	TIMED			

2.3 Aspect



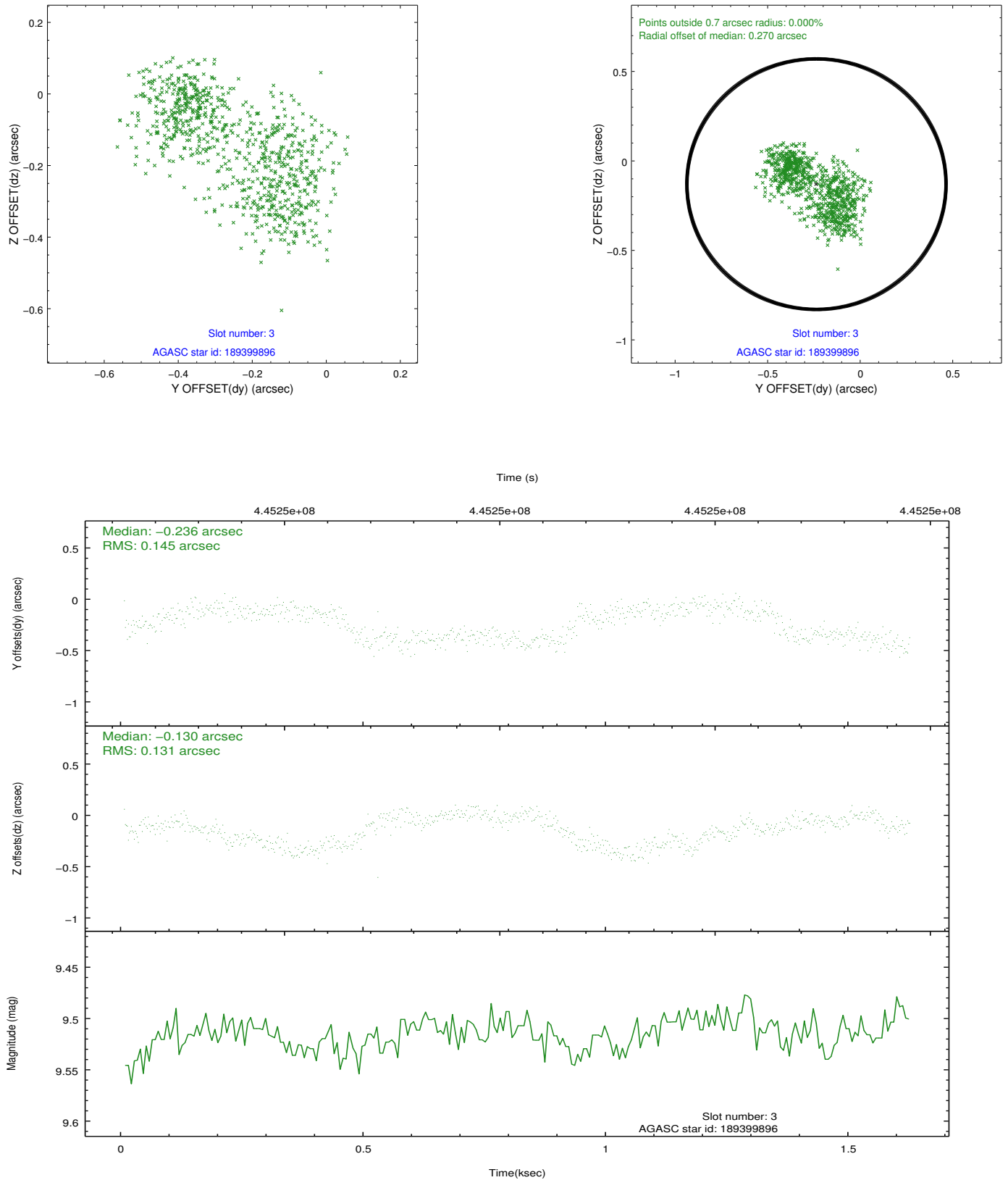


Slot Statistics

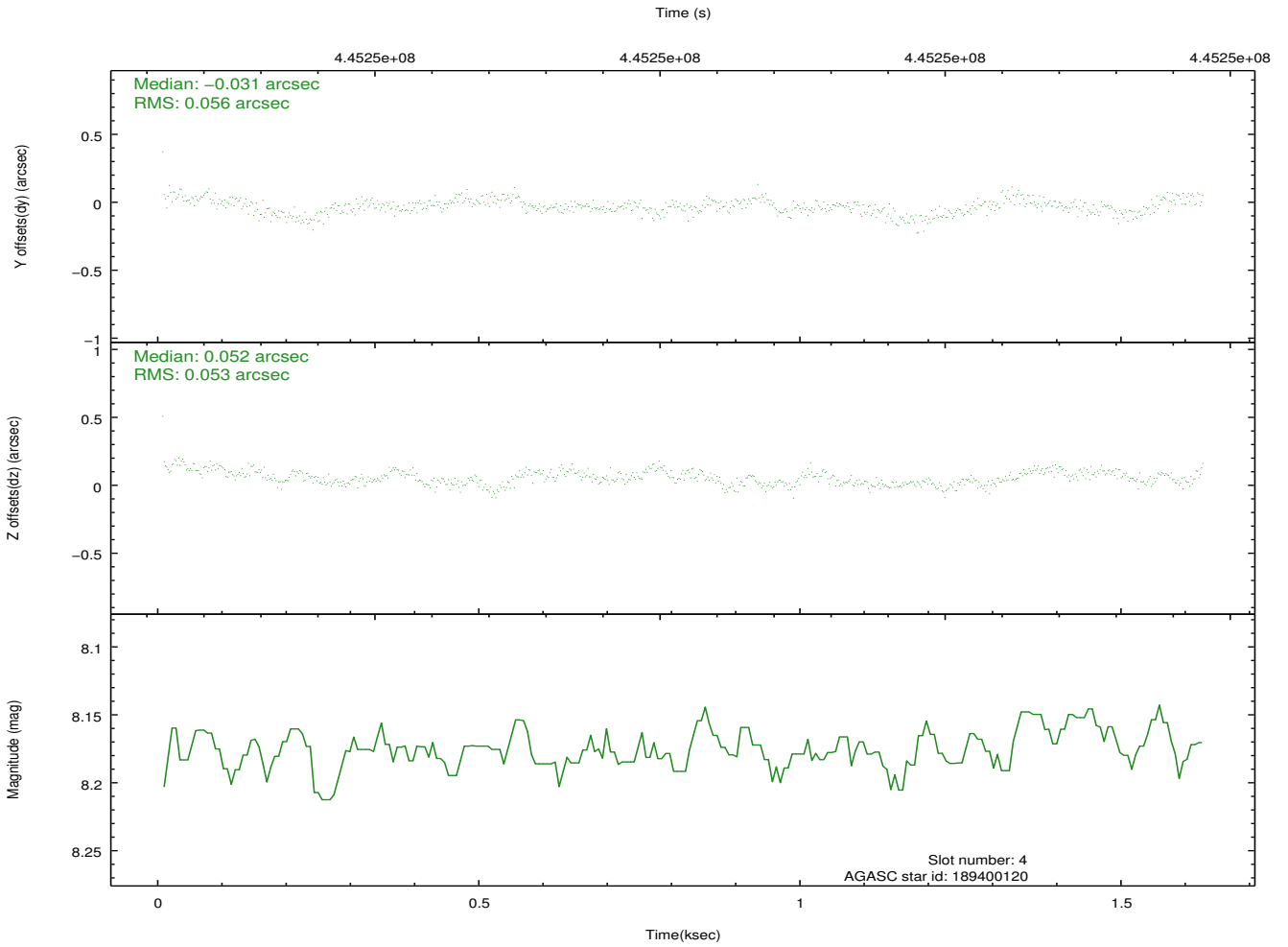
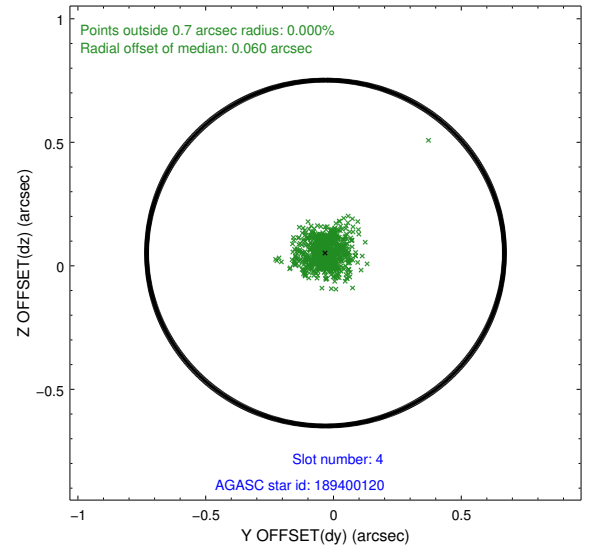
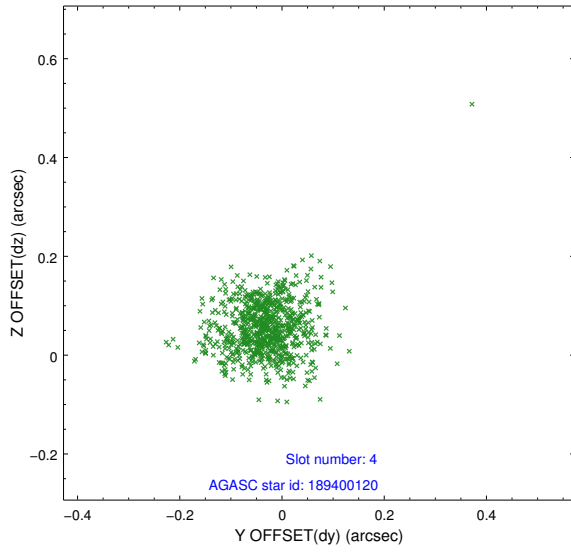
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.98	396	0.085	-0.086	0.007	0.012	0.000000	0.000000	927.53	-1733.95
1	FID	ACIS-S-5	7.03	396	-0.132	0.051	0.007	0.011	0.000000	0.000000	-1819.40	159.56
2	FID	ACIS-S-6	7.12	396	0.026	0.047	0.007	0.011	0.000000	0.000000	388.64	808.10
3	GUIDE	189399896	9.51	789	-0.236	-0.130	0.213	0.301	184.620736	16.203824	2212.32	408.54
4	GUIDE	189400120	8.18	791	-0.031	0.052	0.077	0.131	185.025387	15.714800	564.20	-1118.93
5	GUIDE	189403680	8.83	791	0.192	0.216	0.087	0.141	185.171503	15.144043	-1447.21	-1784.06
6	GUIDE	189416408	8.46	791	0.113	-0.183	0.109	0.167	184.461757	15.019223	-2082.54	643.25
7	GUIDE	189021920	9.60	782	-0.010	0.072	0.174	0.269	183.990218	15.042765	-2117.32	2286.35

2.4 Star Slots

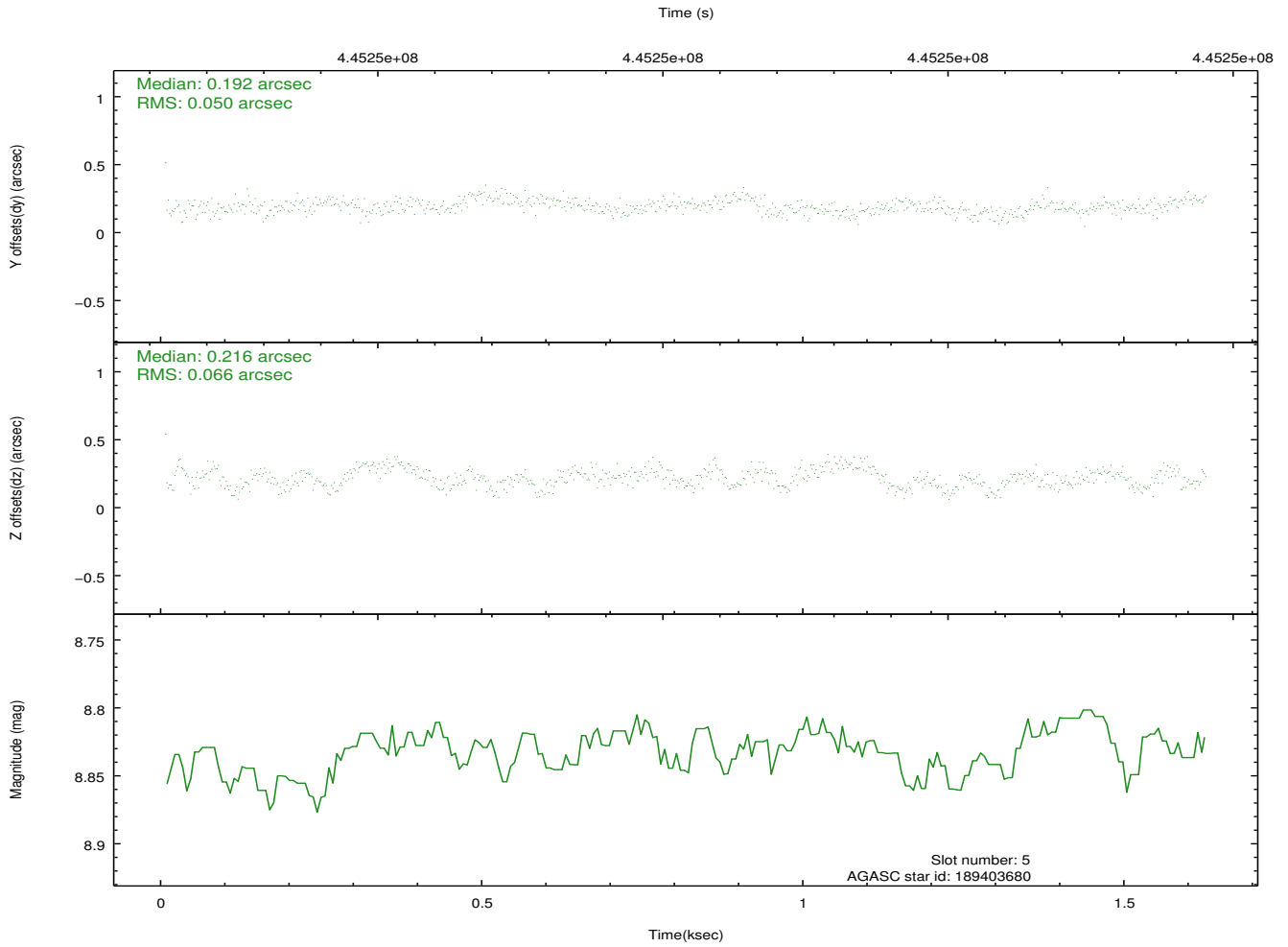
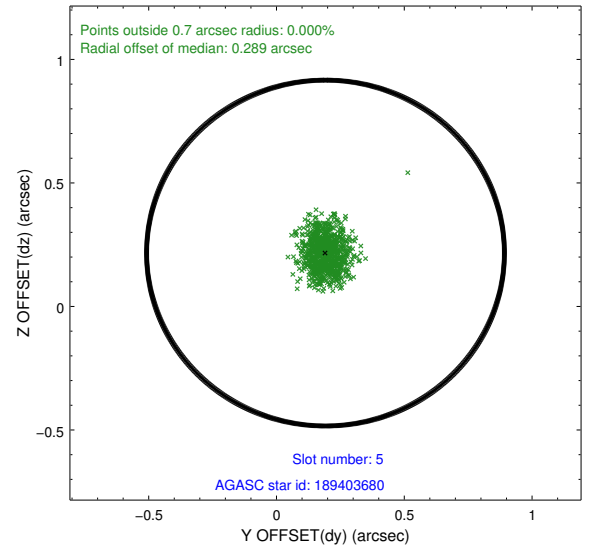
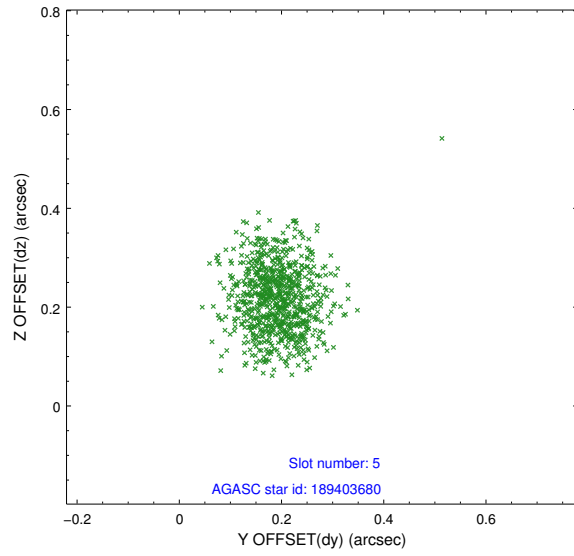
2.4.1 Slot 3



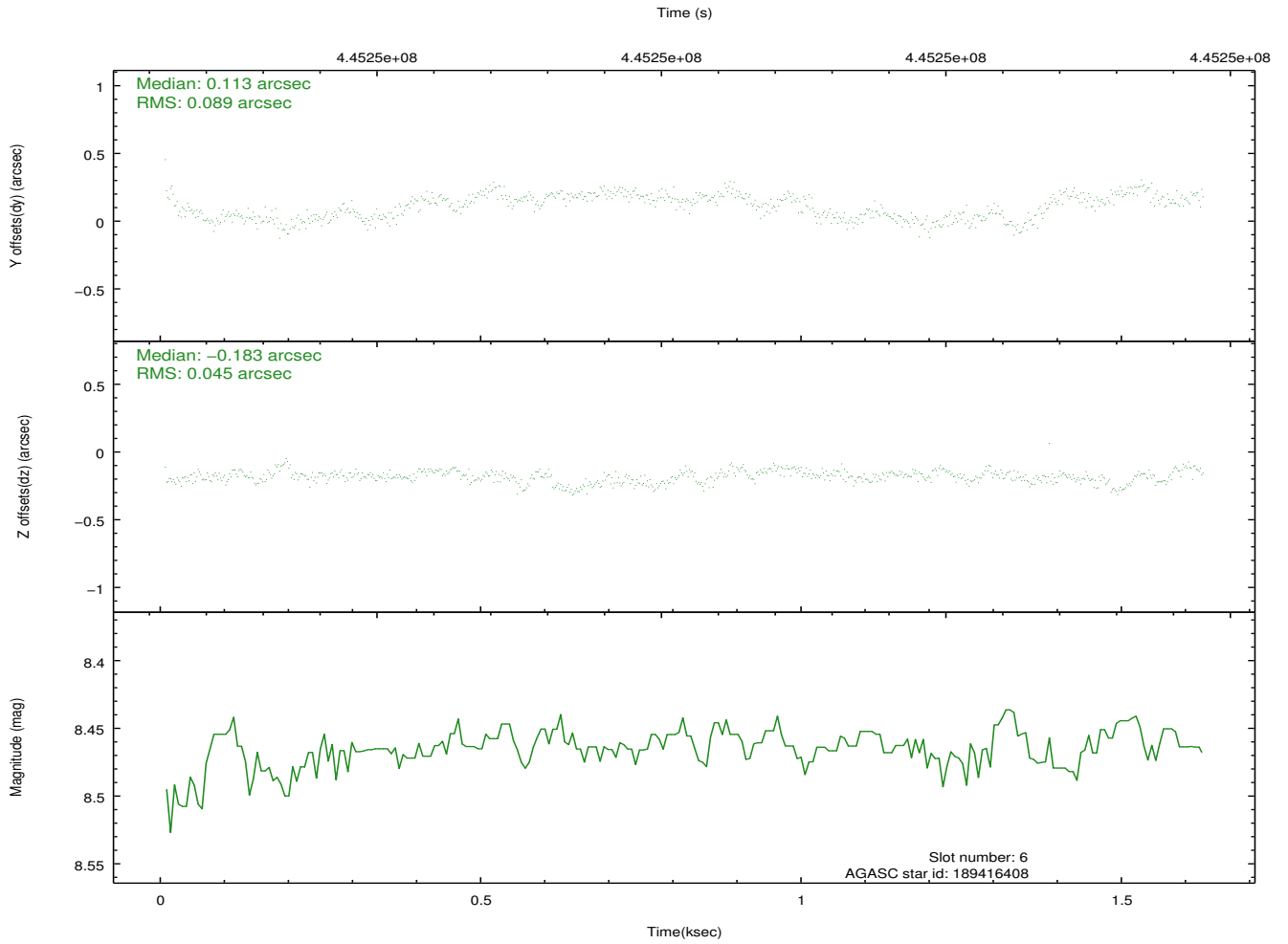
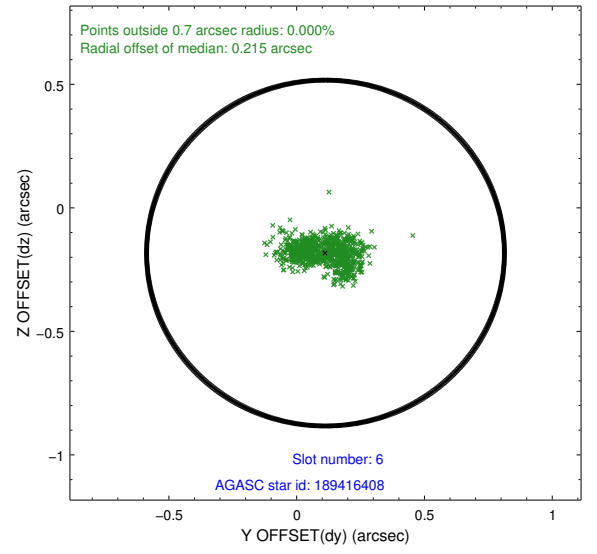
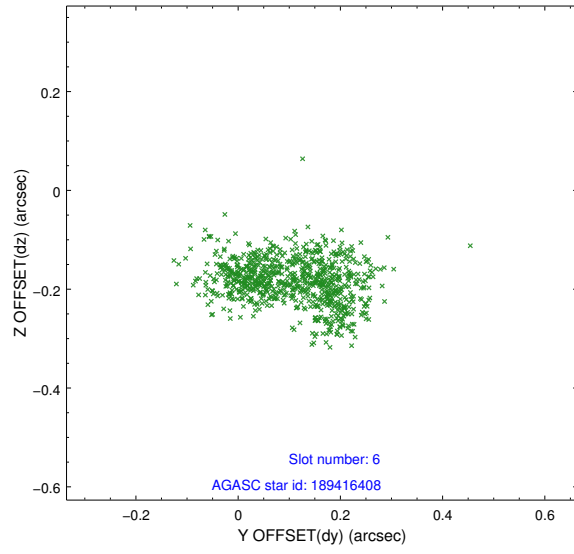
2.4.2 Slot 4



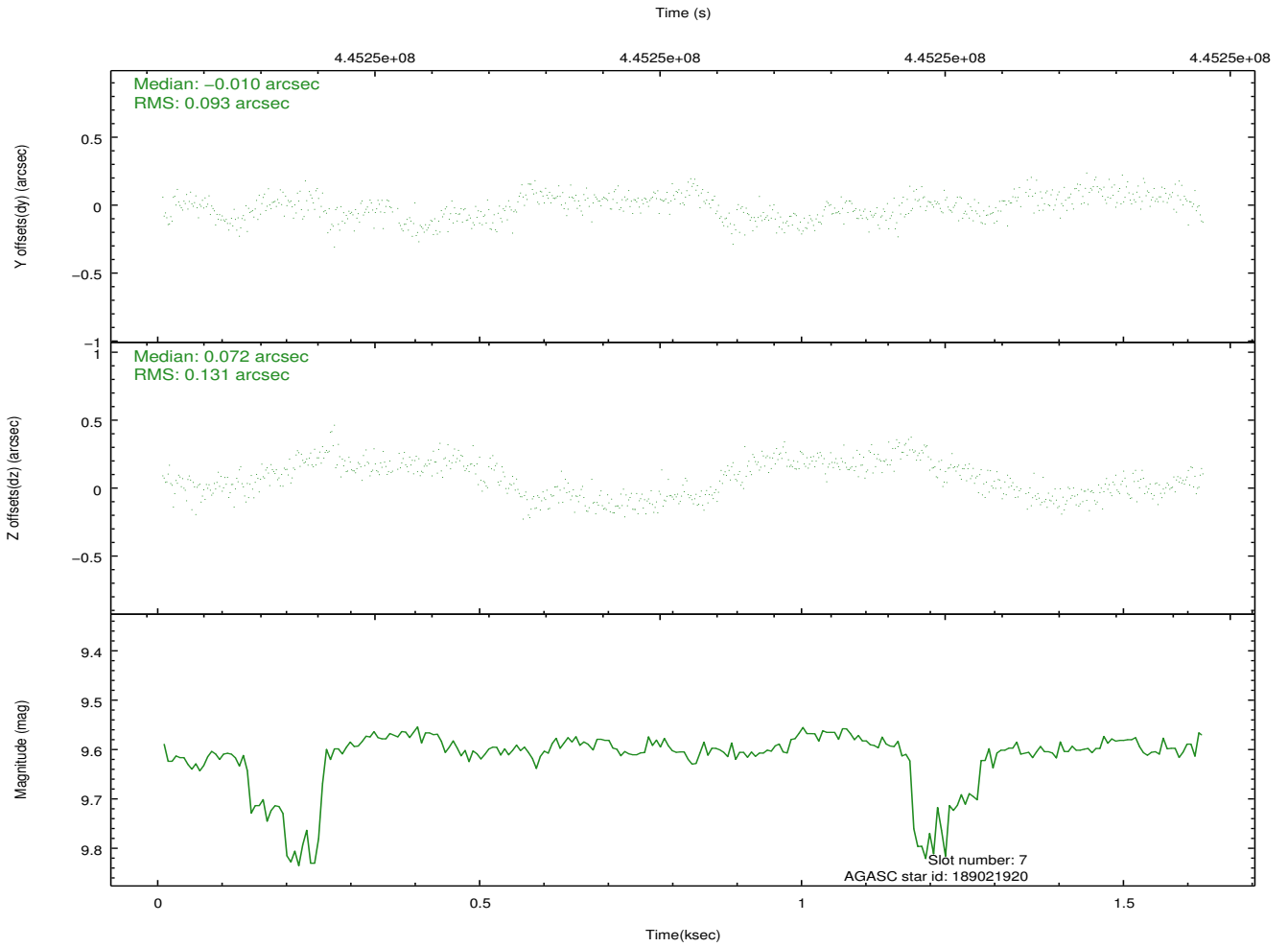
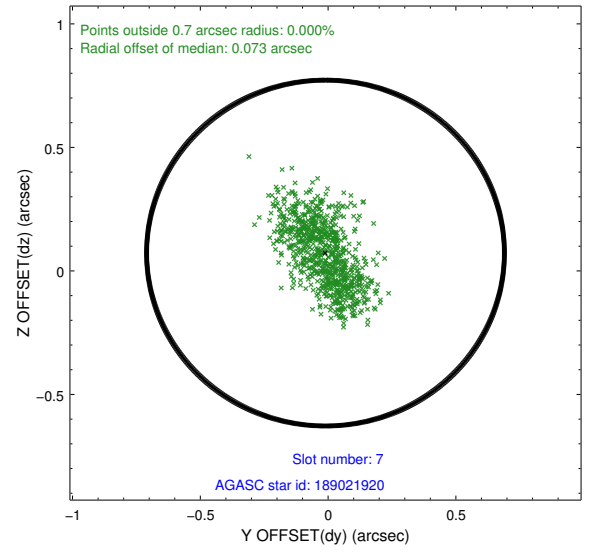
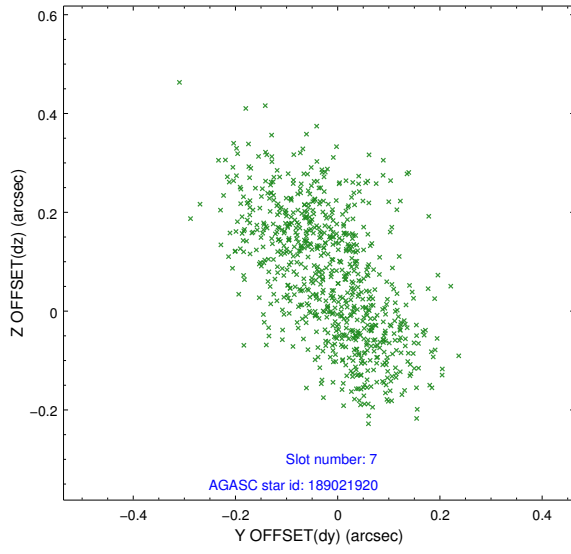
2.4.3 Slot 5



2.4.4 Slot 6

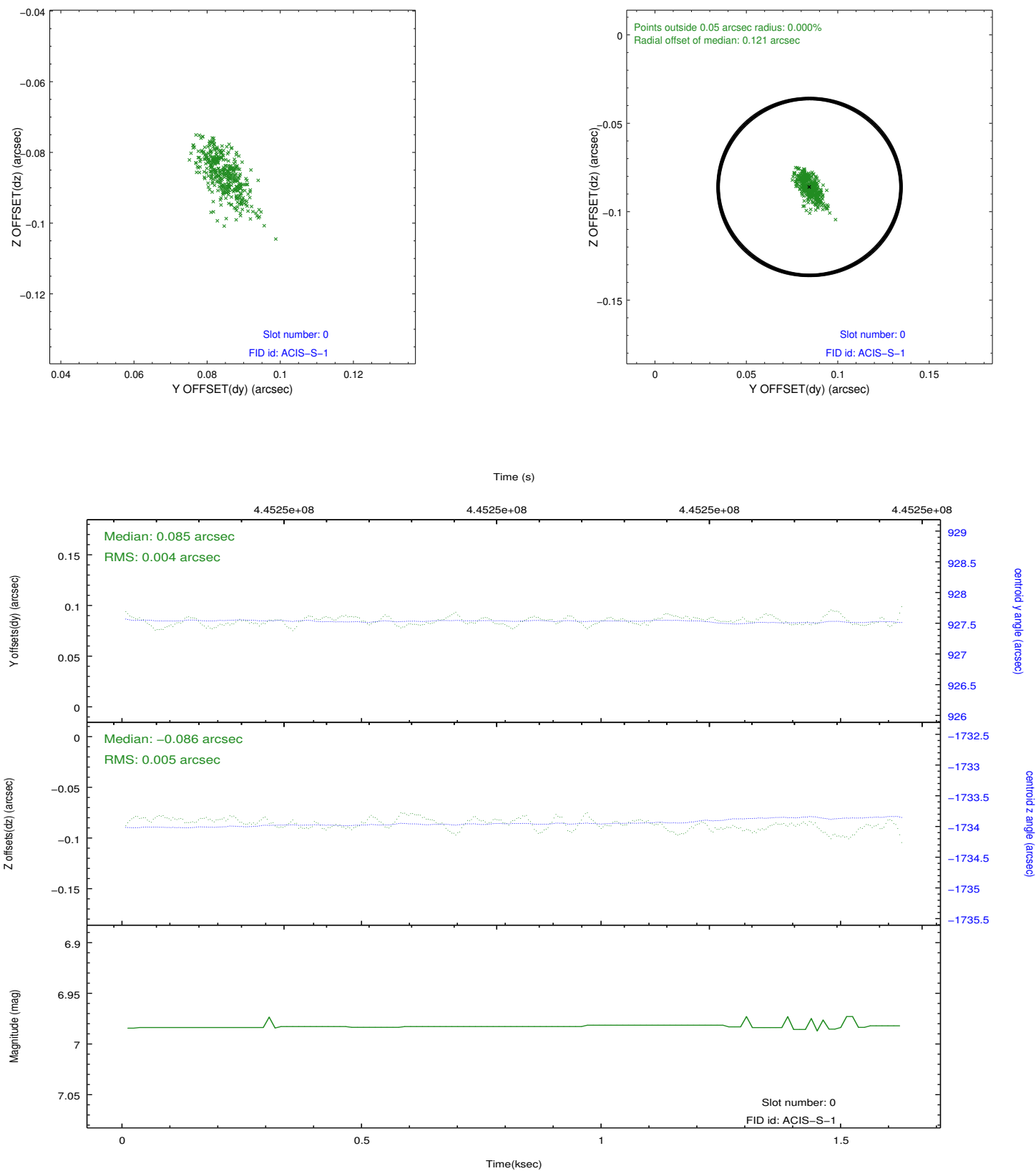


2.4.5 Slot 7

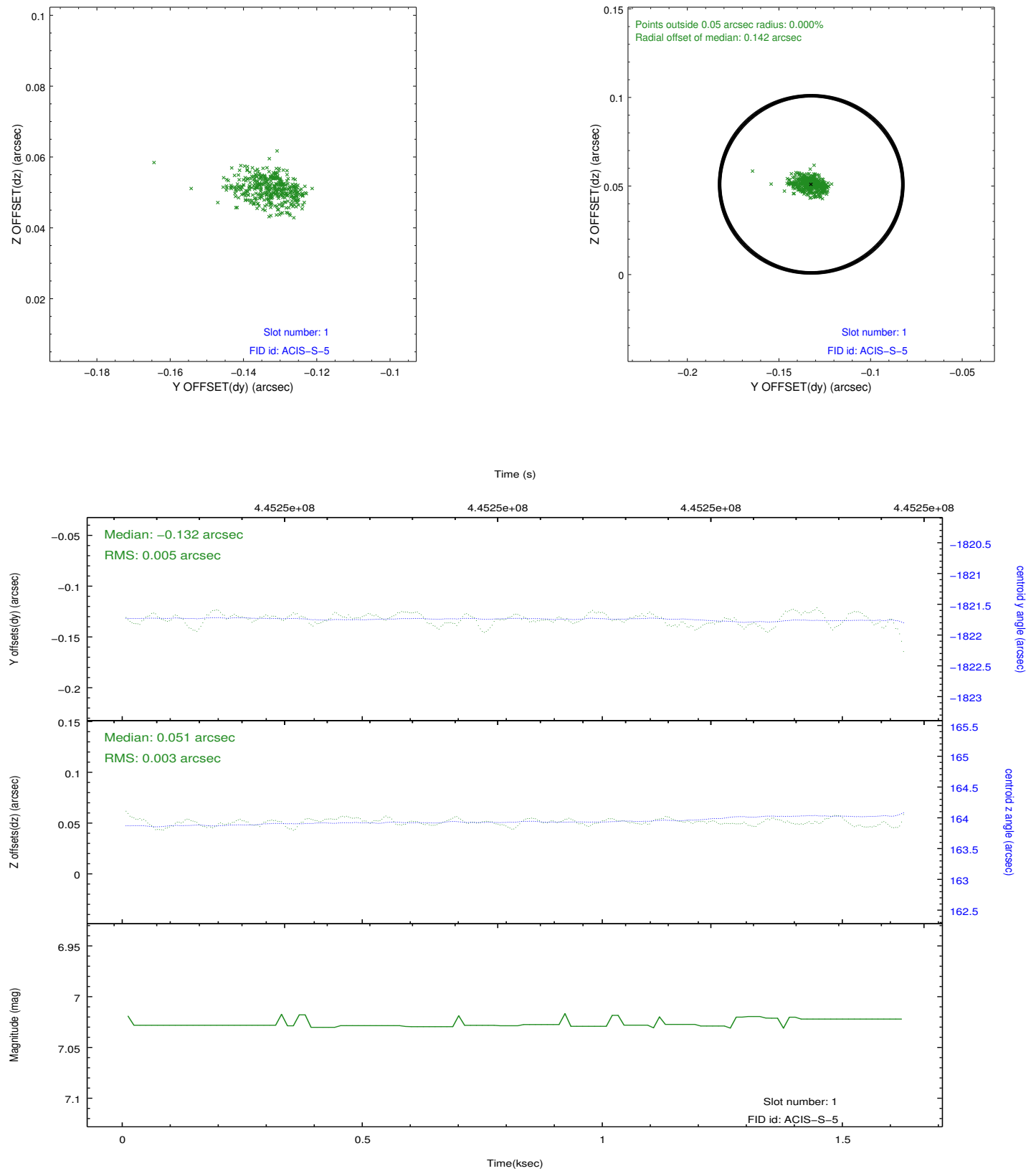


2.5 FID Slots

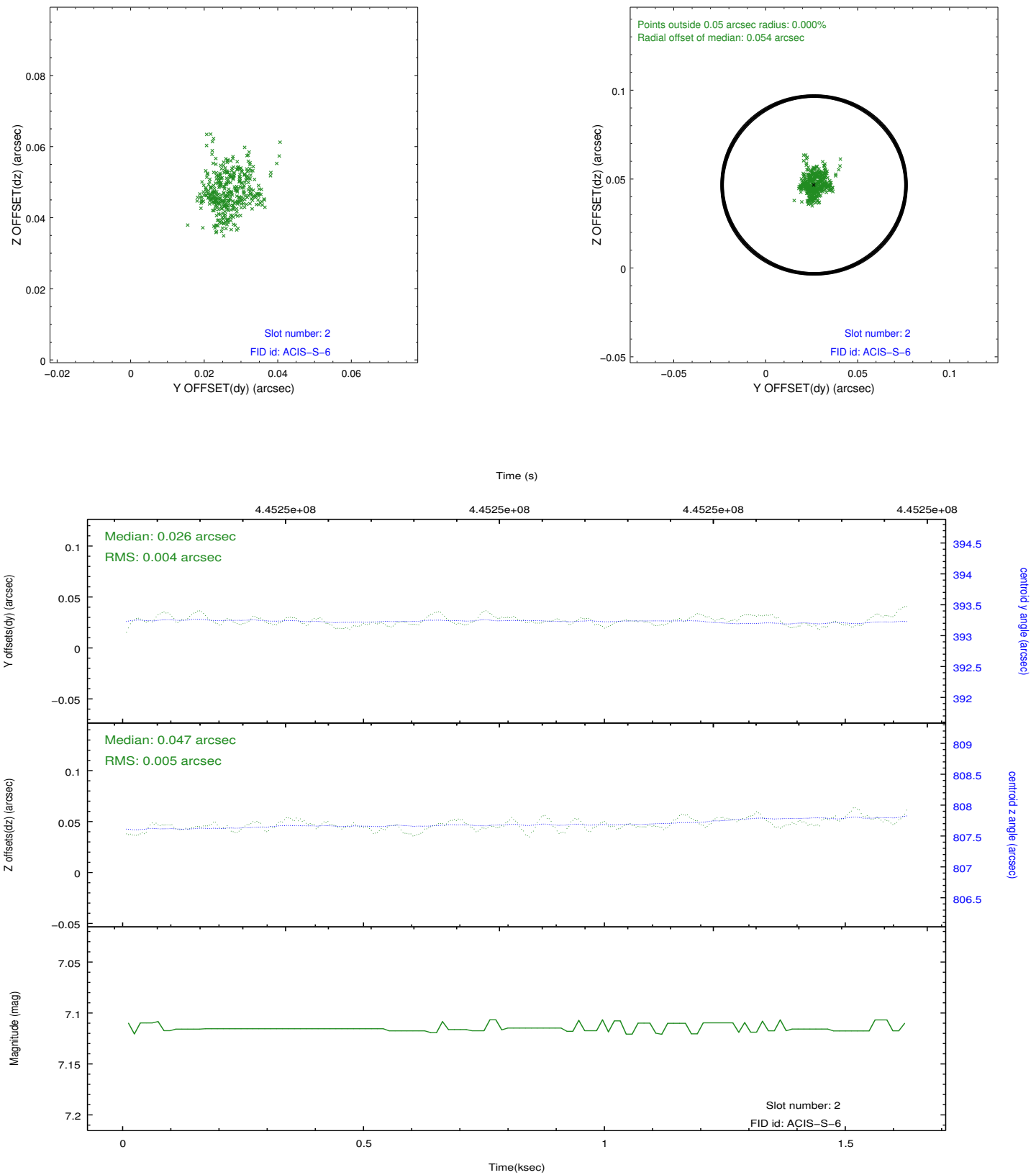
2.5.1 Slot 0



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)	2012.02.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.5770803570747

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.