

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12534 - L2 Version 2
Chandra X-Ray Center

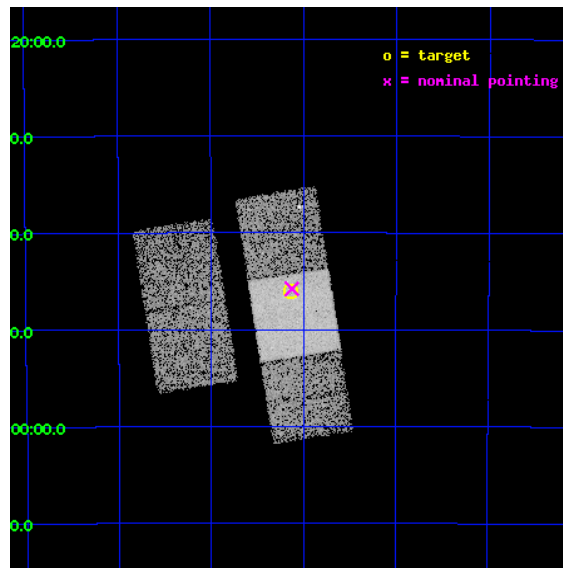
L2 Processing Date : Feb 3 2012

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1 Front

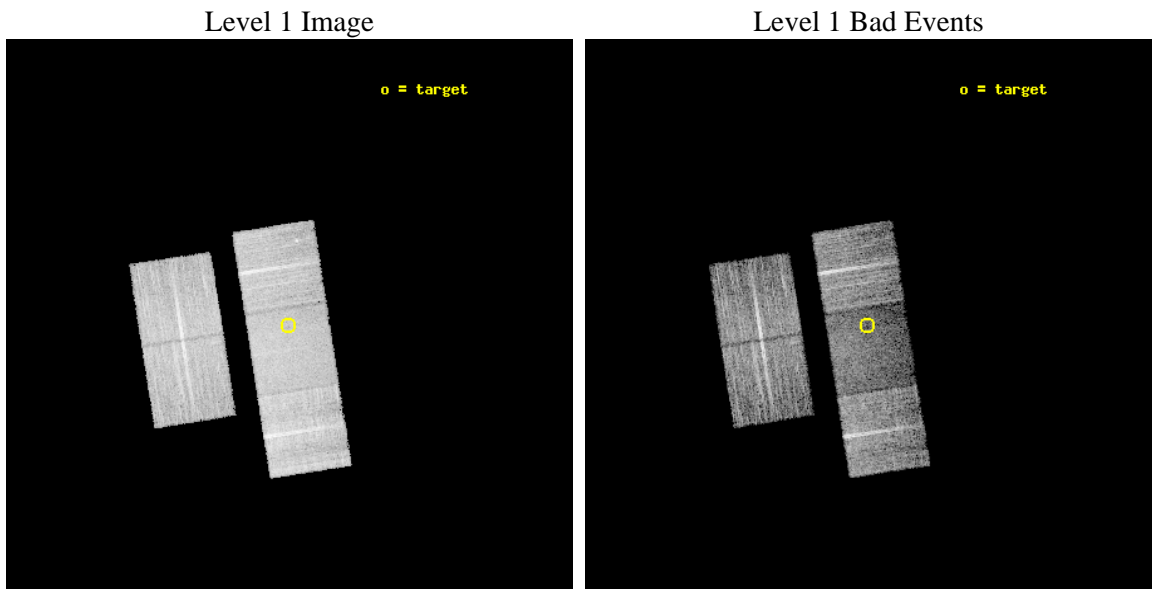
seq_num	401275	Sequence number
obs_id	12534	Observation id
title	Searching New Millisecond Pulsar Fields for X-ray Counterparts	Pro
observer	Dr. Michael Wolff	Principal investigator
object	PSRJ1514-49	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.534208	Observer's specified target RA [deg]
dec_targ	-49.767861	Observer's specified target Dec [deg]
ra_nom	228.53130684517	Nominal RA [deg]
dec_nom	-49.763352232735	Nominal Dec [deg]
roll_nom	81.070522386319	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10040.33940953	Sum of GTIs [s]
livetime	9909.1549835543	Livetime [s]
ontime2	10037.034289122	Sum of GTIs [s]
ontime3	10040.257329524	Sum of GTIs [s]
ontime6	10040.298369527	Sum of GTIs [s]
ontime7	10040.33940953	Sum of GTIs [s]
ontime8	10040.21628952	Sum of GTIs [s]
l2events	57799	Number of level 2 events



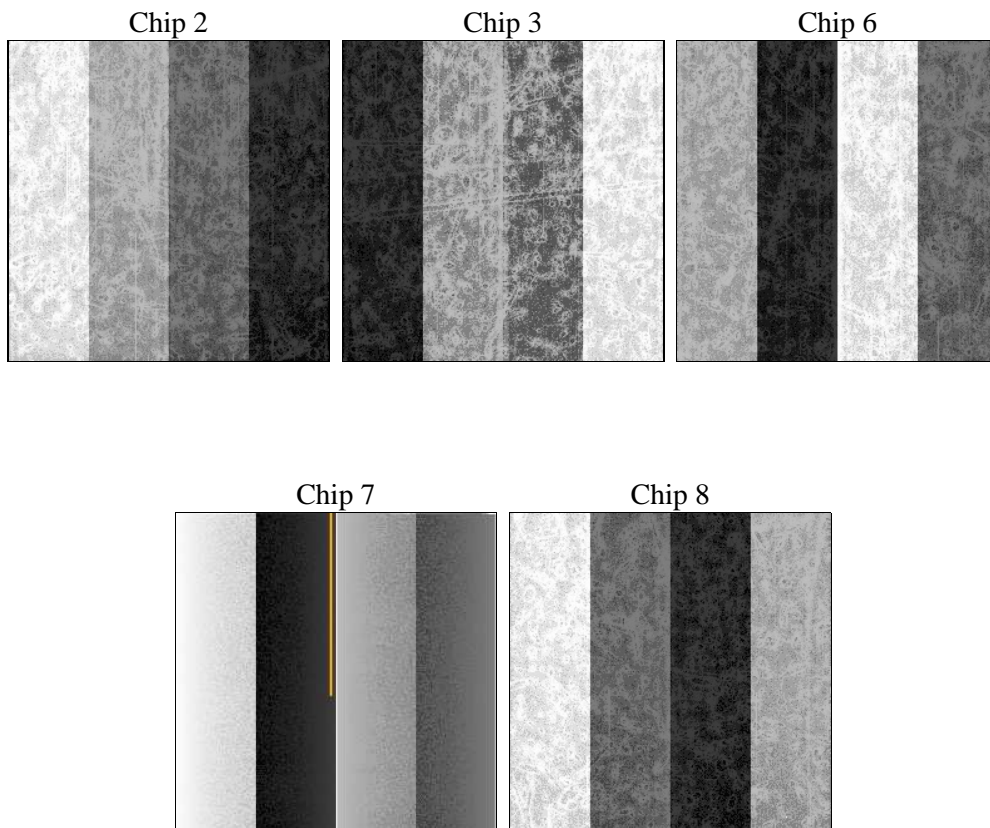
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.357000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	10040.33940953	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	10037.034289122	Sum of GTIs [s]
date	2012-02-03T14:35:14	Date and time of file creation	ontime3	10040.257329524	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10040.298369527	Sum of GTIs [s]
			ontime7	10040.33940953	Sum of GTIs [s]
			ontime8	10040.21628952	Sum of GTIs [s]
			l1events	356903	Number of level 1 events

2.1.4 Events

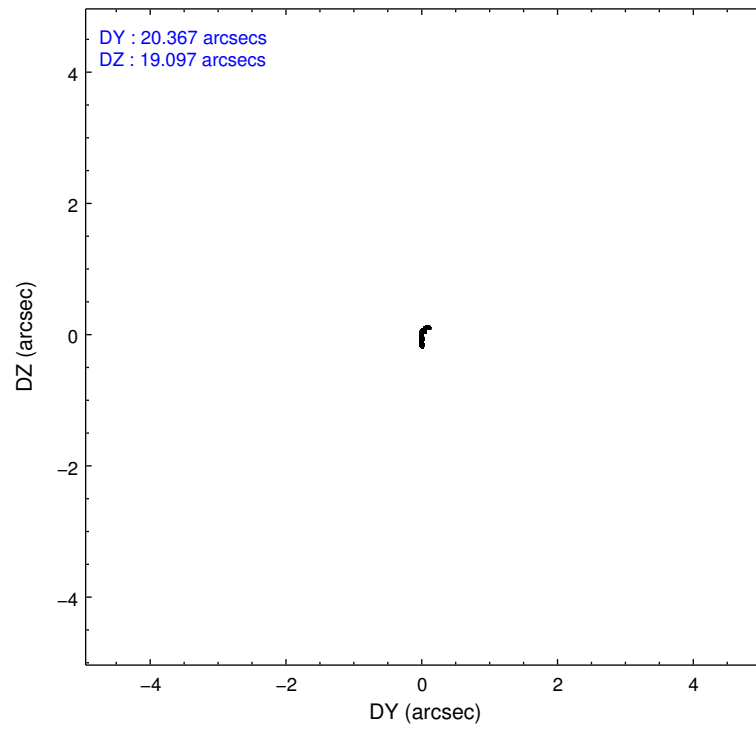
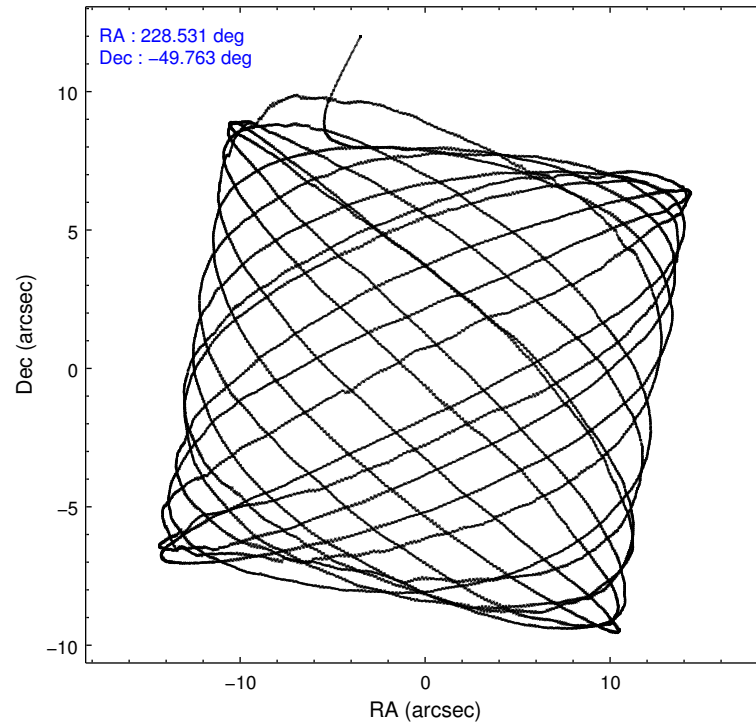
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	68211	64528	68602	69793	85769
rejected events	61201	57823	60928	35976	62609
rejected %	89%	89%	88%	51%	72%

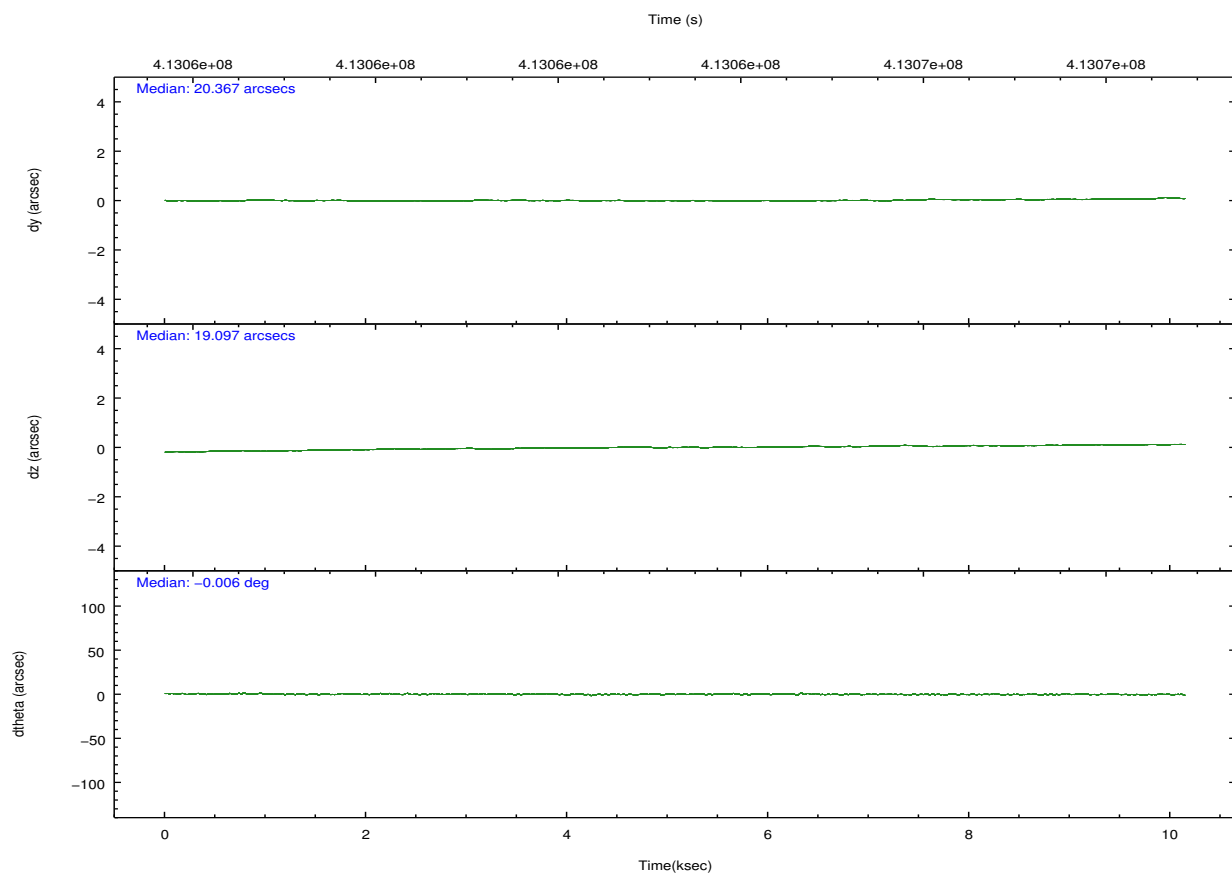
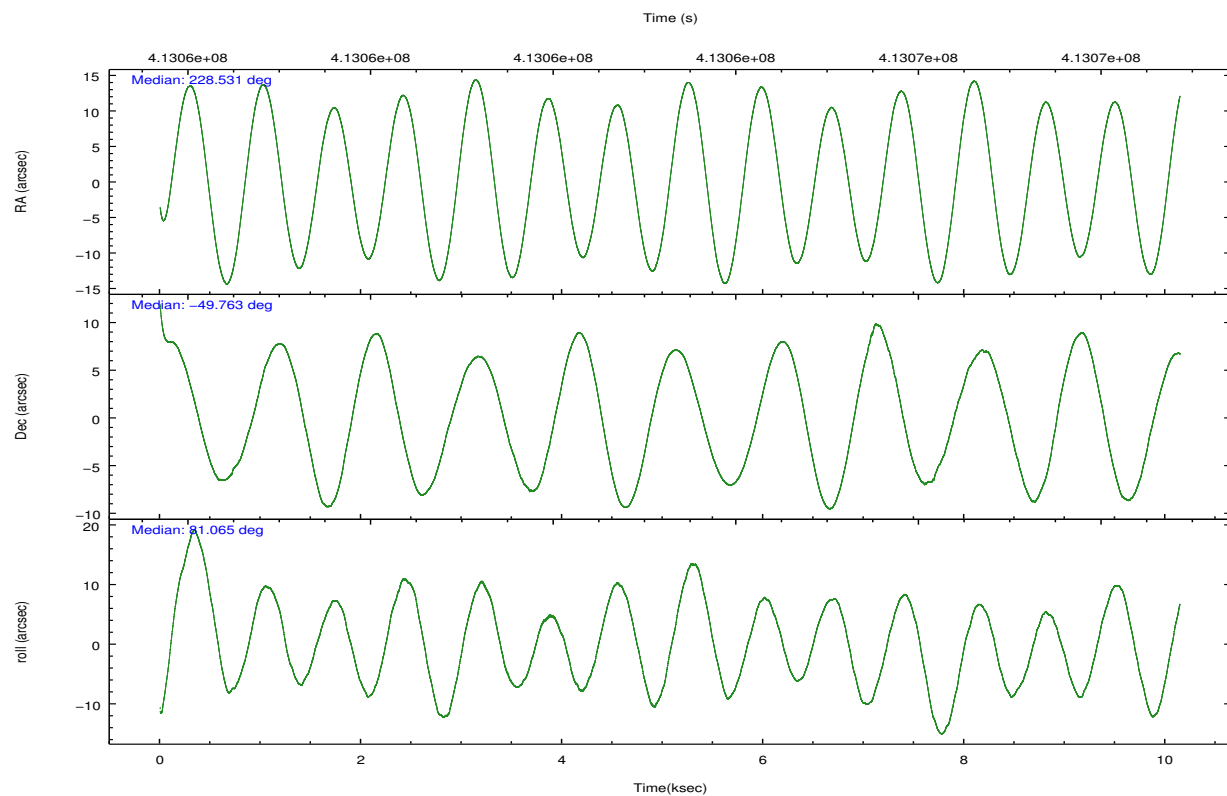
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2664	2529	2979	3383	6684
	3%	3%	4%	4%	7%
grade 1 events	54	30	37	109	81
	0%	0%	0%	0%	0%
grade 2 events	1736	1493	1640	7283	5543
	2%	2%	2%	10%	6%
grade 3 events	681	697	770	3039	2569
	0%	1%	1%	4%	2%
grade 4 events	733	733	787	3056	2322
	1%	1%	1%	4%	2%
grade 5 events	2178	2607	2619	7572	4009
	3%	4%	3%	10%	4%
grade 6 events	1202	1255	1499	17059	6045
	1%	1%	2%	24%	7%
grade 7 events	58963	55184	58271	28292	58516
	86%	85%	84%	40%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	228.547065	228.5313068451713	CCD I2 on	O2	Y
[deg] Pointing Dec	-49.788769	-49.7633522327354	CCD I3 on	Y	Y
[deg] Pointing Roll	80.925943	81.0705223863194	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O1	Y
[s] Observation start time (MET)	413058359.184000	413057372.76889	CCD S5 on	N	N
Observation start date	2011-02-02T18:24:53	2011-02-02T18:09:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	413068359.184000	413068584.73197	On-chip summing requested	N	N
Observation end date	2011-02-02T21:11:33	2011-02-02T21:16:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



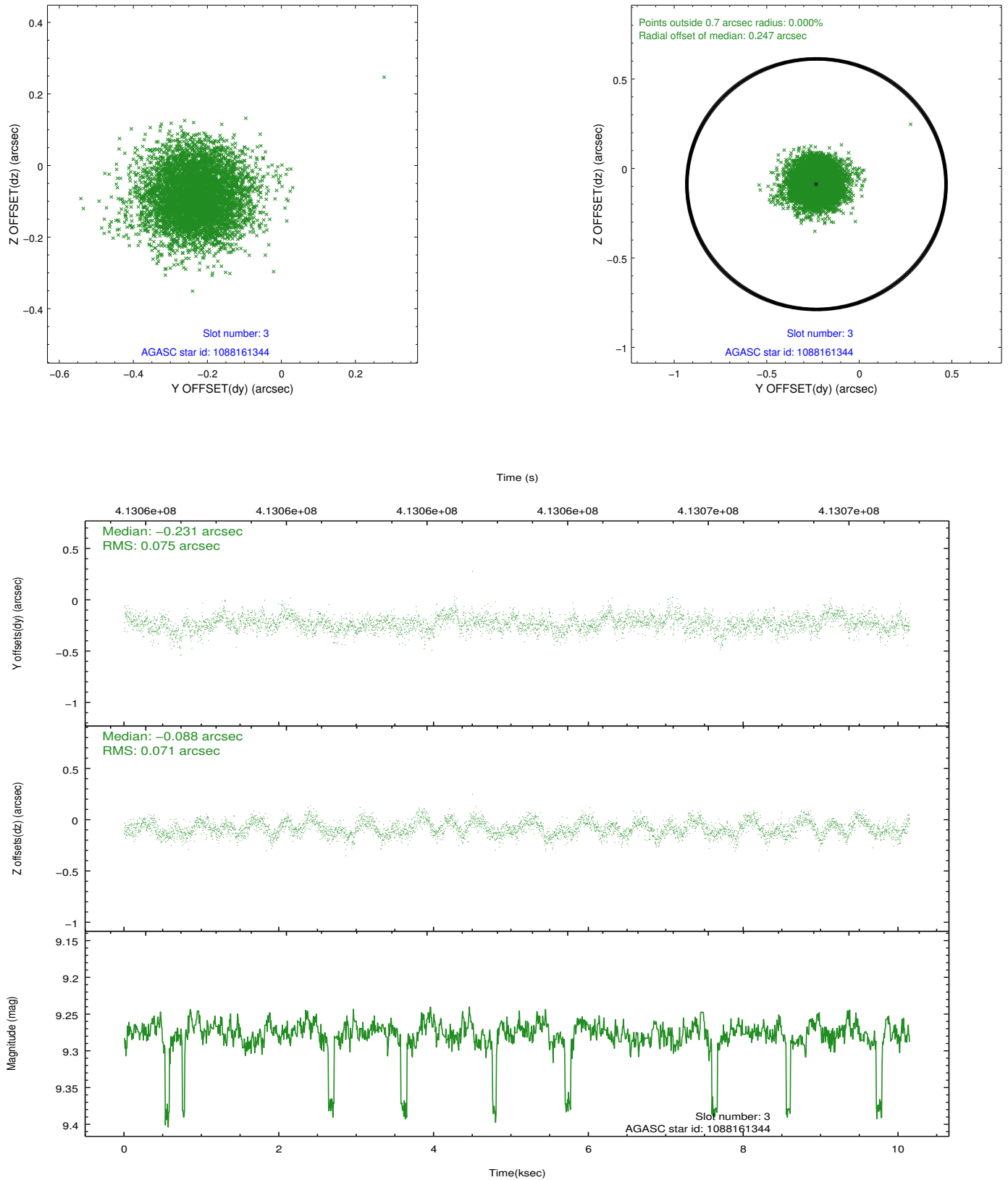


Slot Statistics

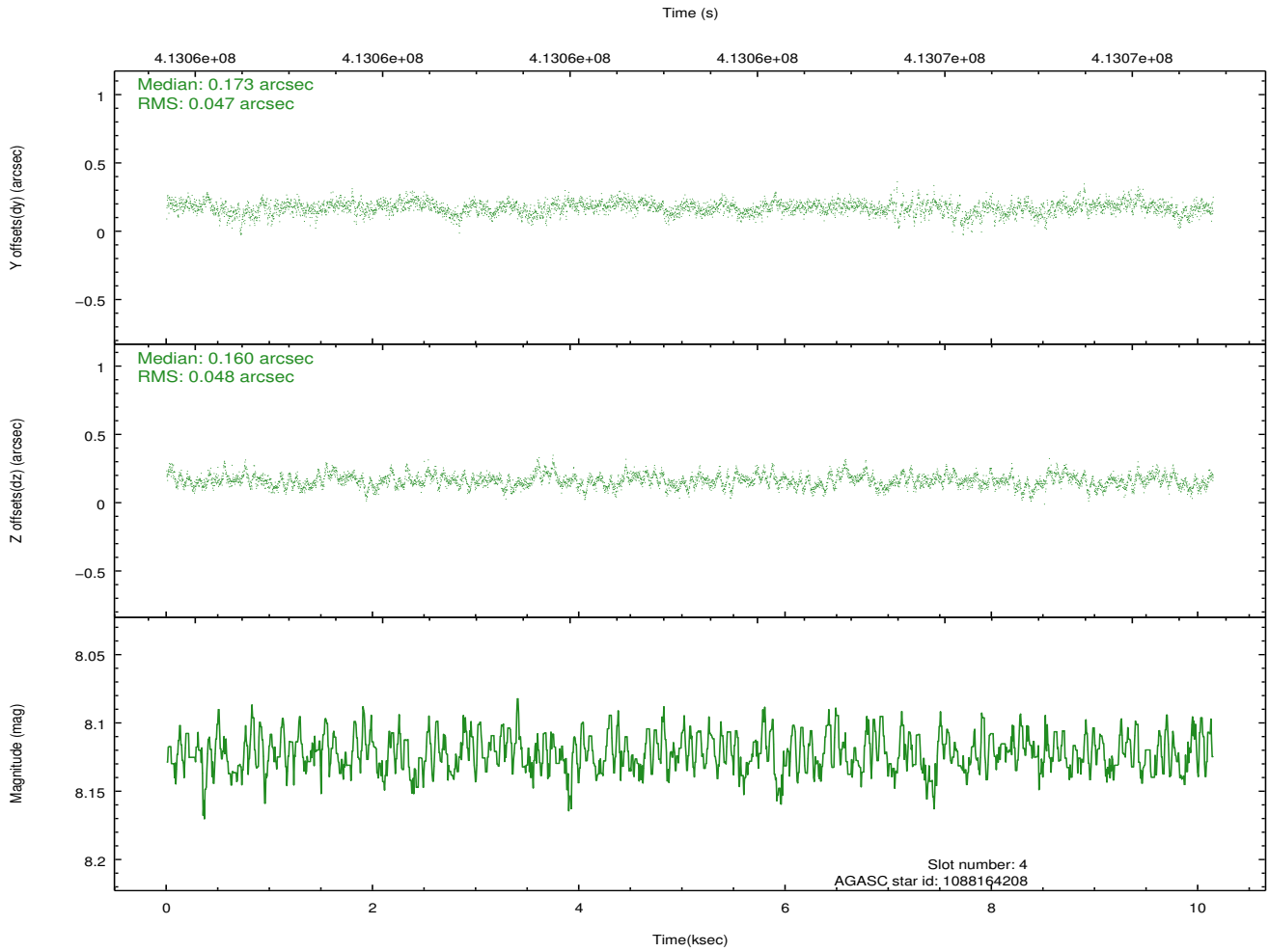
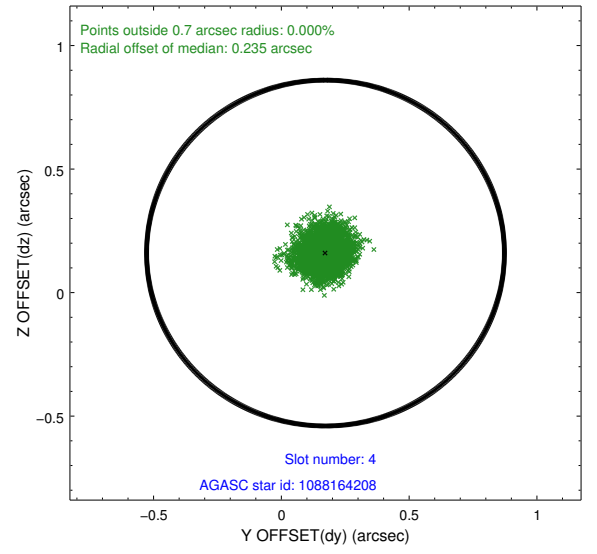
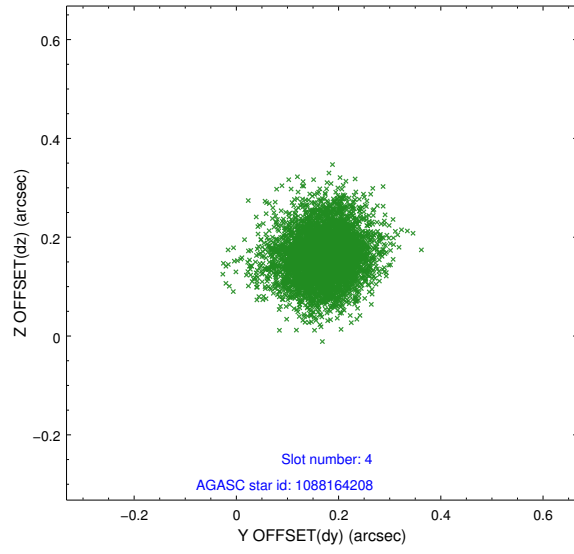
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.98	2475	0.058	-0.009	0.007	0.011	0.000000	0.000000	922.60	-1736.16
1	FID	ACIS-S-5	7.03	2475	-0.127	0.040	0.006	0.010	0.000000	0.000000	-1826.29	160.90
2	FID	ACIS-S-6	7.14	2475	0.048	-0.020	0.007	0.012	0.000000	0.000000	387.58	805.39
3	GUIDE	1088161344	9.28	4919	-0.231	-0.088	0.110	0.177	228.545234	-49.156184	2247.96	363.53
4	GUIDE	1088164208	8.12	4948	0.173	0.160	0.070	0.119	228.991866	-49.878784	-159.64	-1070.30
5	GUIDE	1088180328	8.46	4949	-0.265	-0.128	0.070	0.113	228.332453	-49.313987	1607.34	766.36
6	GUIDE	1088051400	9.23	4947	-0.016	-0.406	0.103	0.163	227.584500	-49.899806	-762.18	2140.12
7	GUIDE	1088160520	9.18	4947	0.340	0.457	0.106	0.170	229.077429	-50.400623	-1987.01	-1549.28

2.4 Star Slots

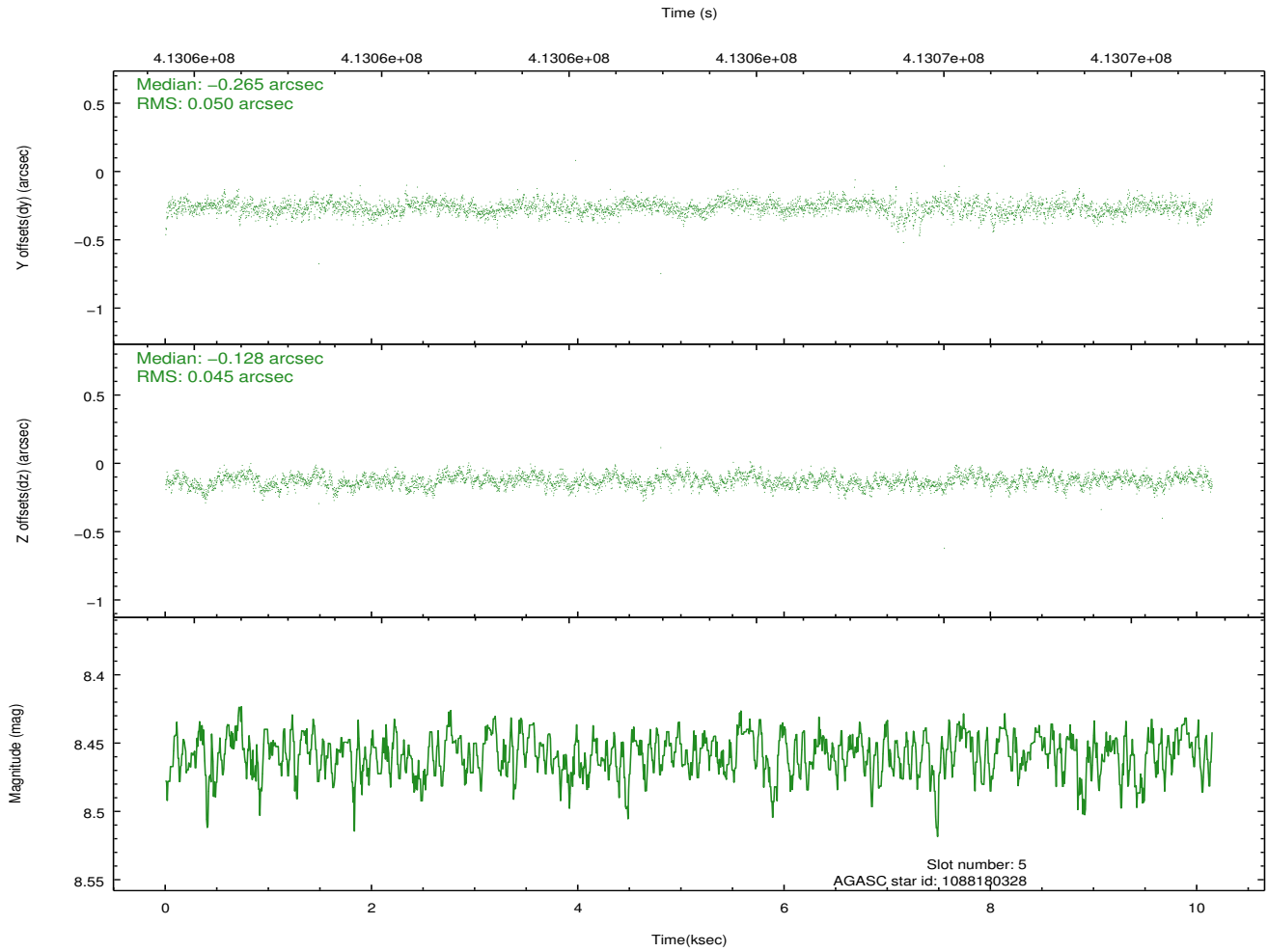
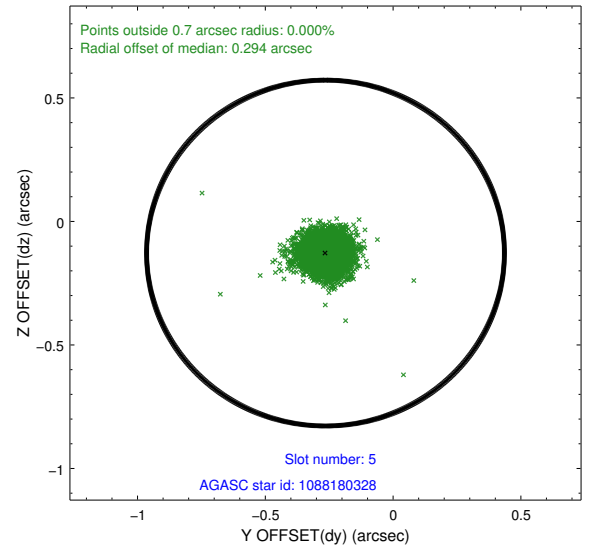
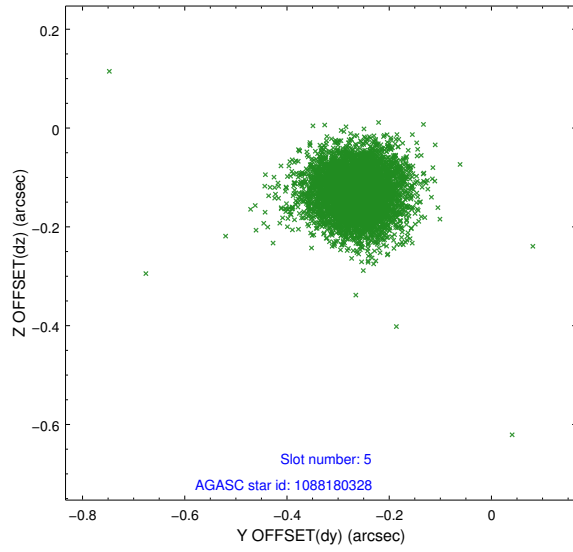
2.4.1 Slot 3



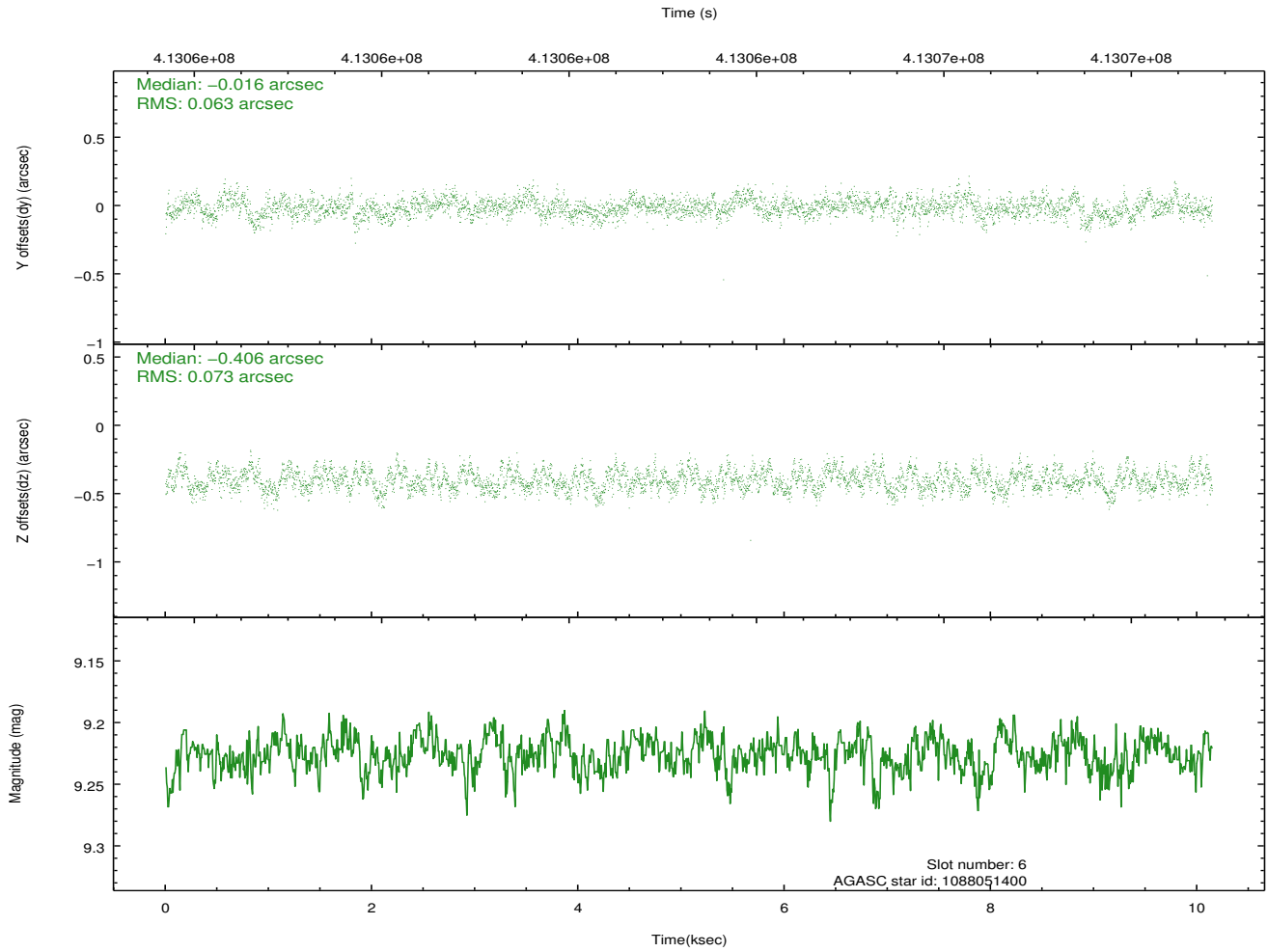
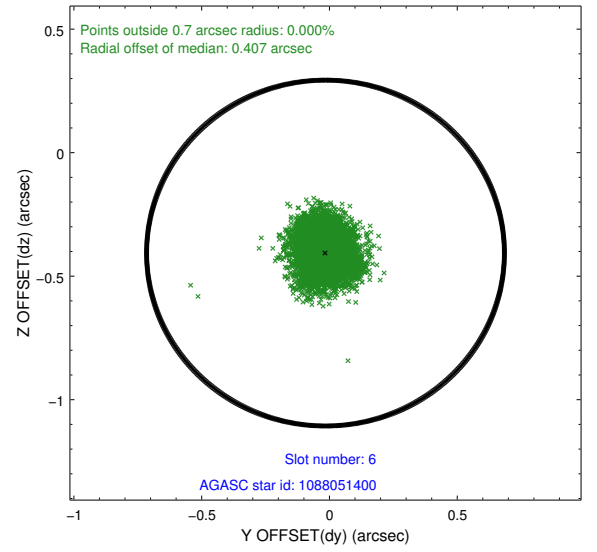
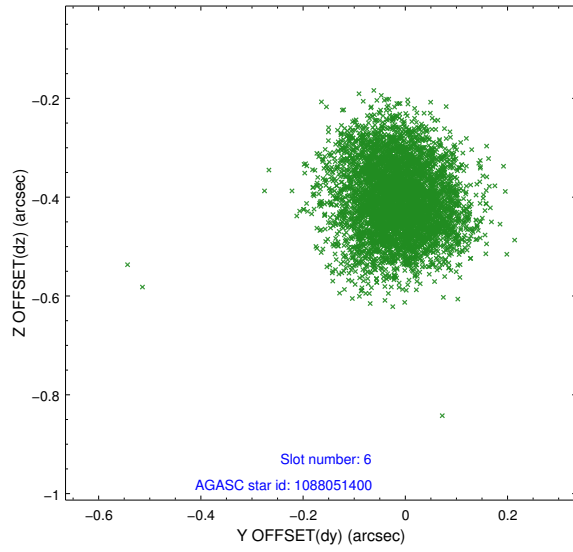
2.4.2 Slot 4



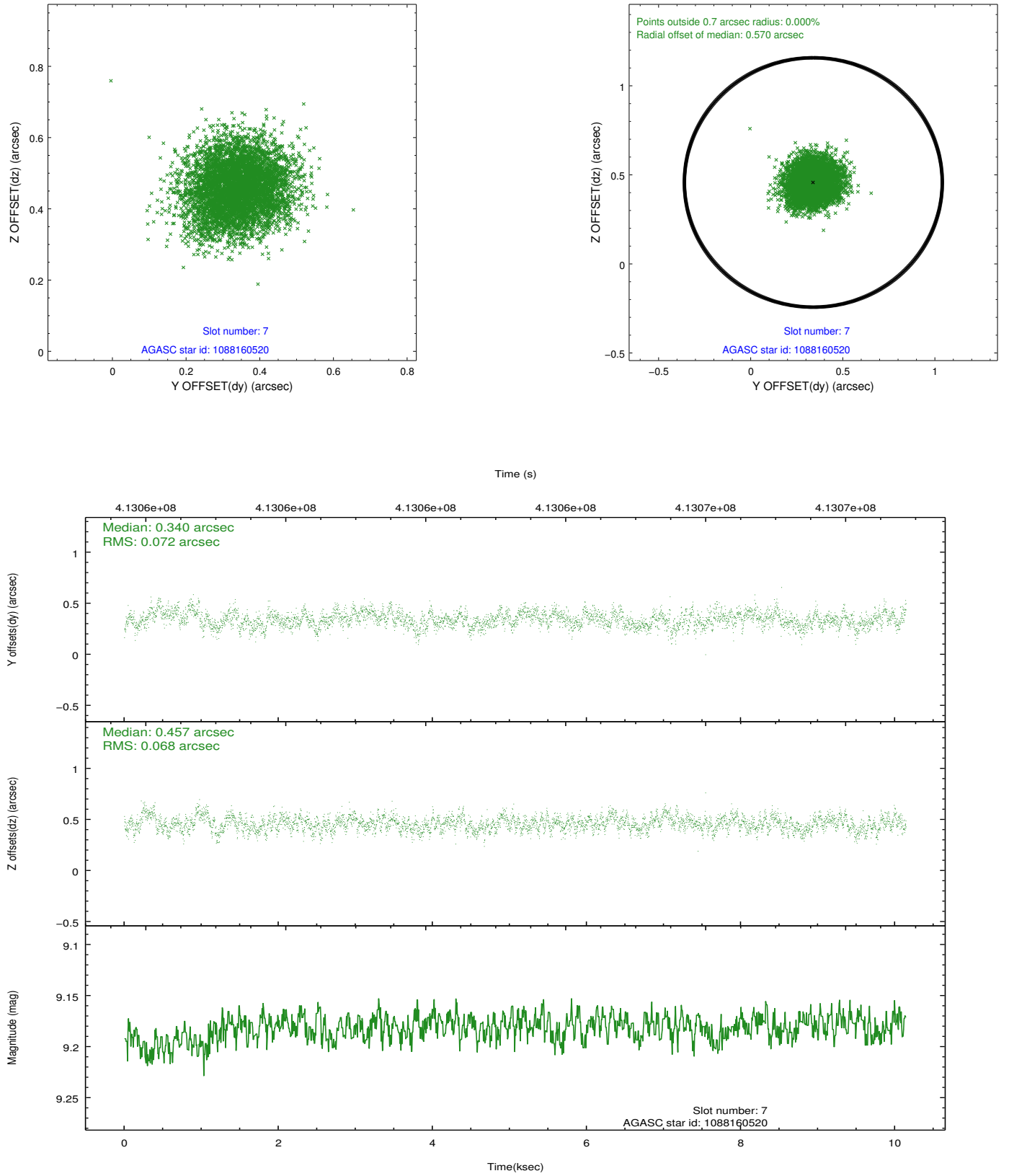
2.4.3 Slot 5



2.4.4 Slot 6

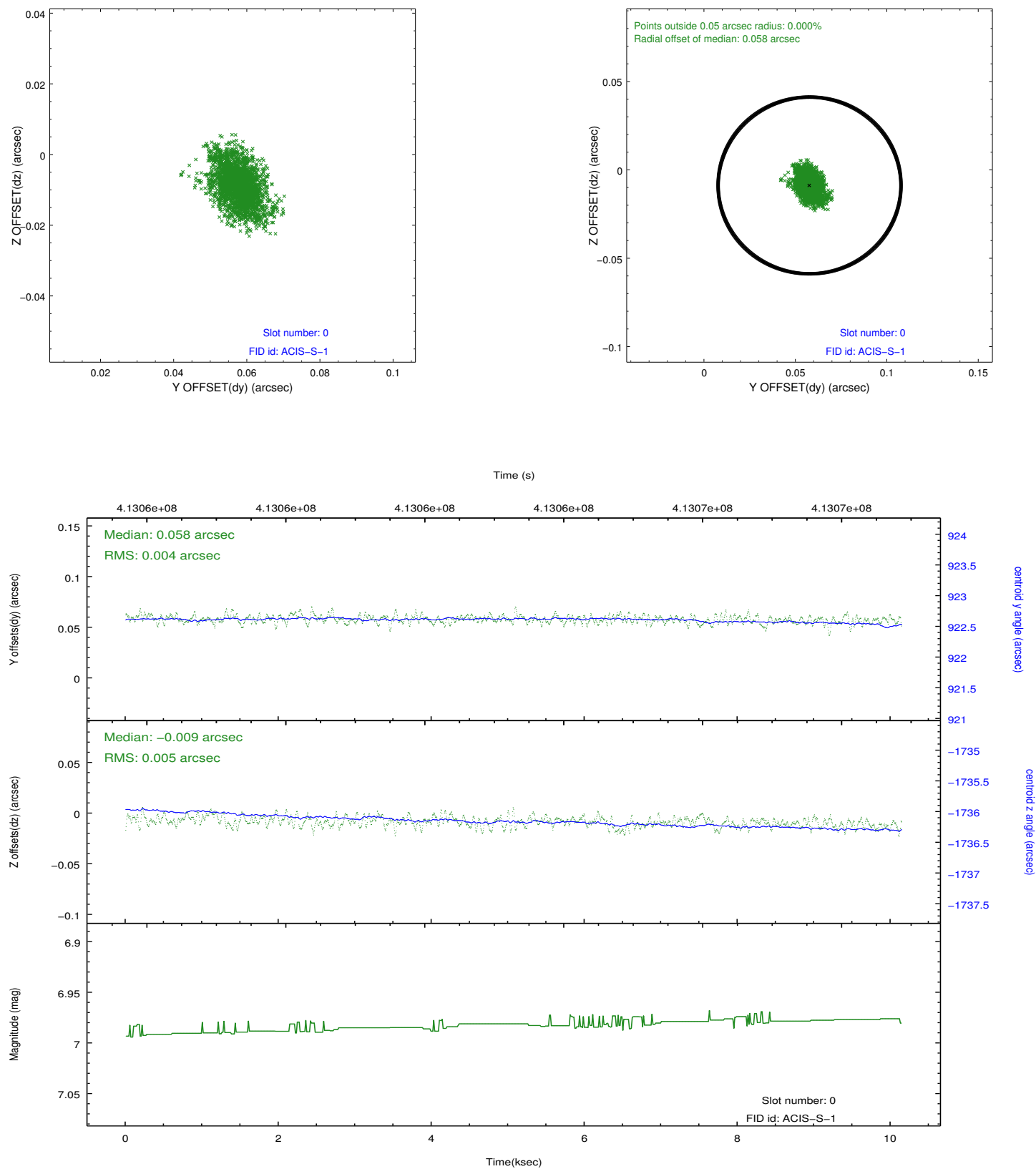


2.4.5 Slot 7

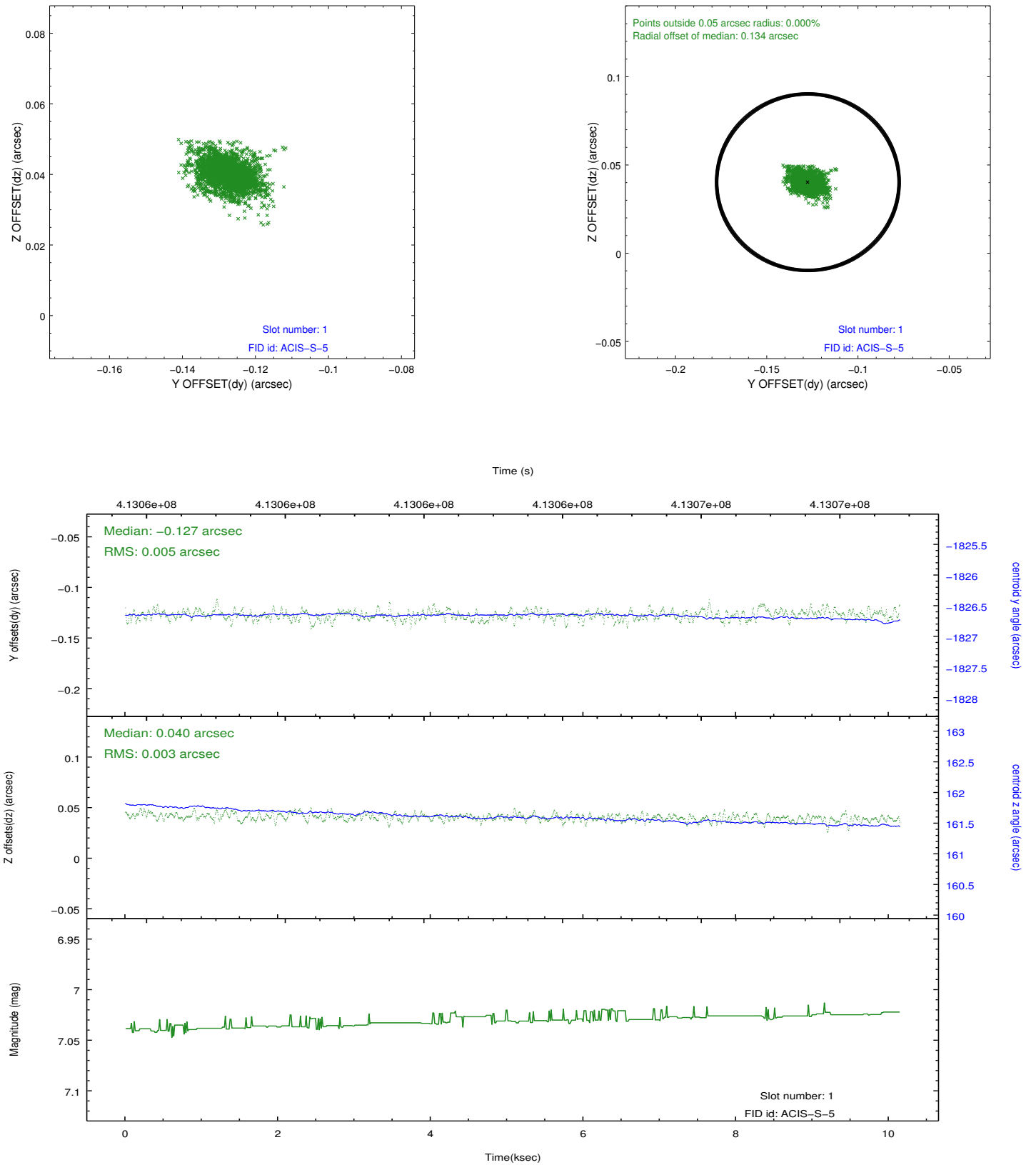


2.5 FID Slots

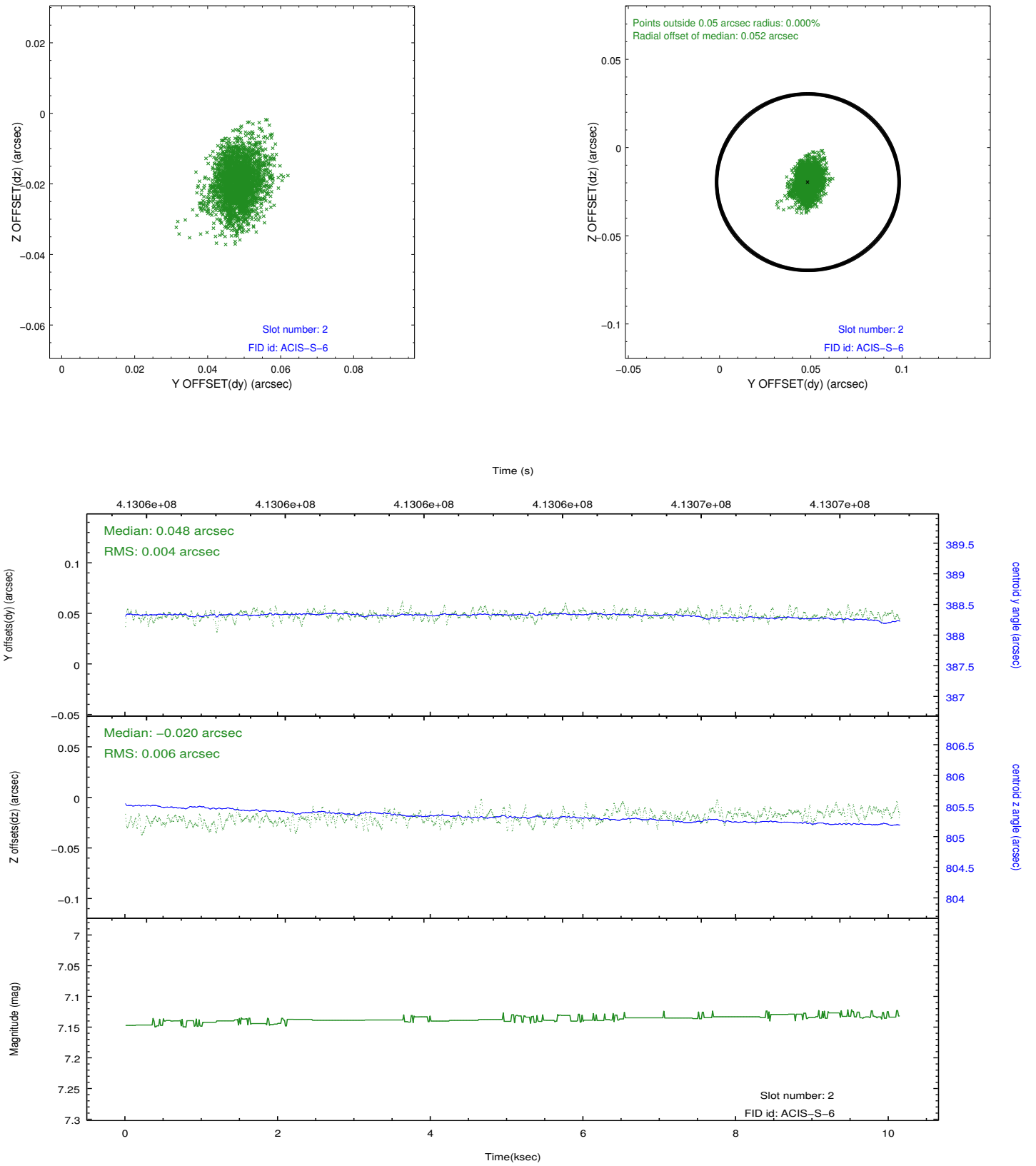
2.5.1 Slot 0



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	10.040339409828

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.