

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12766 - L2 Version 2
Chandra X-Ray Center

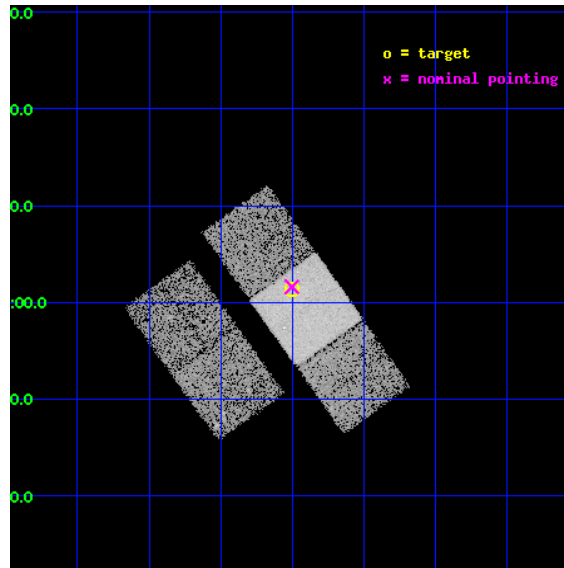
L2 Processing Date : Feb 3 2012

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1 Front

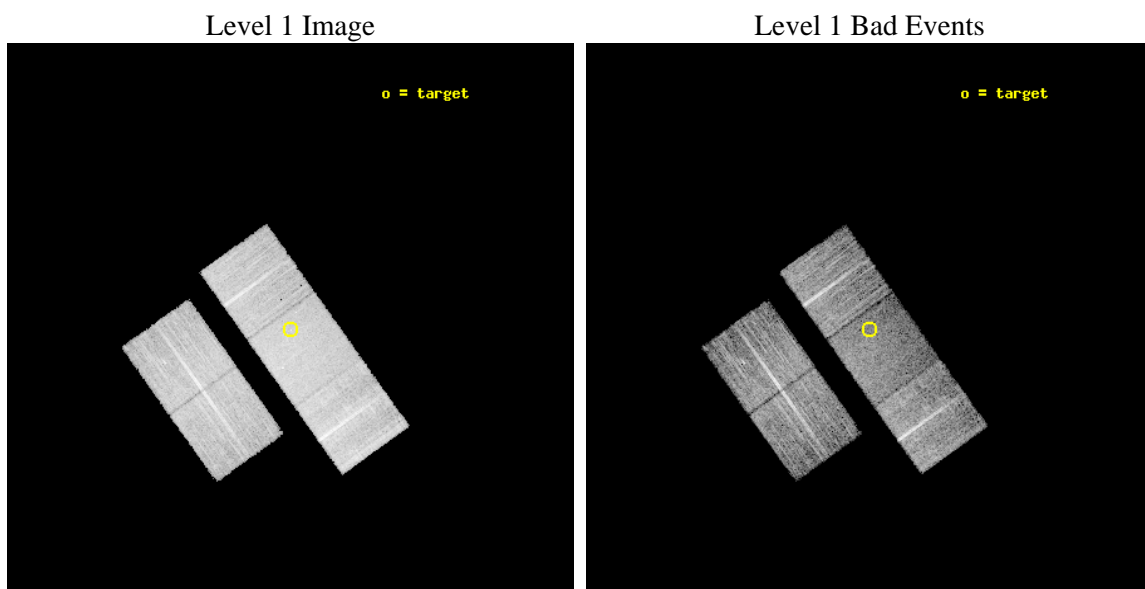
seq_num	702402	Sequence number
obs_id	12766	Observation id
title	X-ray Properties of 2MASS Selected BALQSOs	Proposal title
observer	Dr. Xinyu Dai	Principal investigator
object	SDSSJ104130.17+000118.8	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	160.375833	Observer's specified target RA [deg]
dec_targ	0.021917	Observer's specified target Dec [deg]
ra_nom	160.37614553748	Nominal RA [deg]
dec_nom	0.026752205159509	Nominal Dec [deg]
roll_nom	54.462875788483	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10440.349039197	Sum of GTIs [s]
livetime	10303.938192927	Livetime [s]
ontime2	10437.043859005	Sum of GTIs [s]
ontime3	10440.26695919	Sum of GTIs [s]
ontime6	10440.307999194	Sum of GTIs [s]
ontime7	10440.349039197	Sum of GTIs [s]
ontime8	10440.225919187	Sum of GTIs [s]
l2events	68931	Number of level 2 events



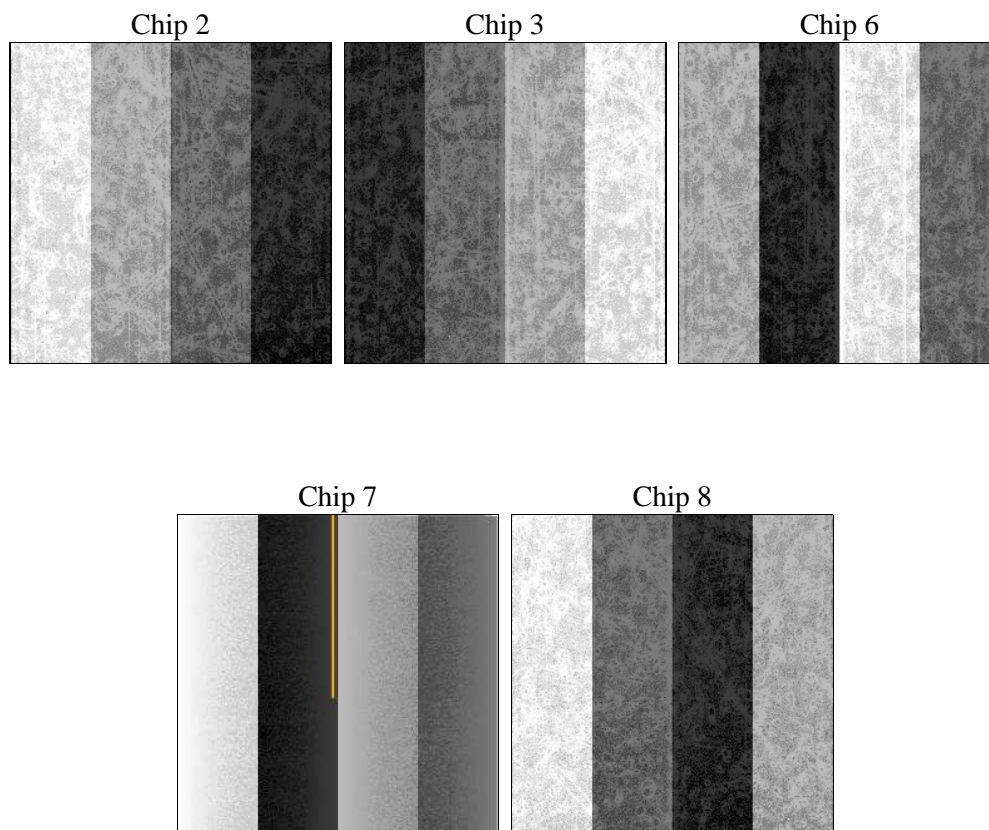
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	10440.349039197	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	10437.043859005	Sum of GTIs [s]
date	2012-02-03T14:44:48	Date and time of file creation	ontime3	10440.26695919	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10440.307999194	Sum of GTIs [s]
			ontime7	10440.349039197	Sum of GTIs [s]
			ontime8	10440.225919187	Sum of GTIs [s]
			l1events	408773	Number of level 1 events

2.1.4 Events

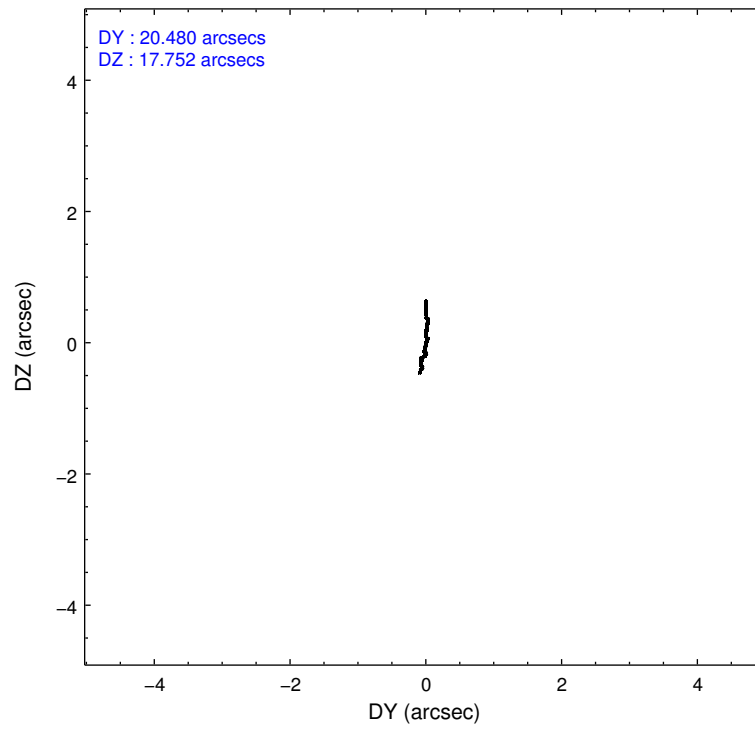
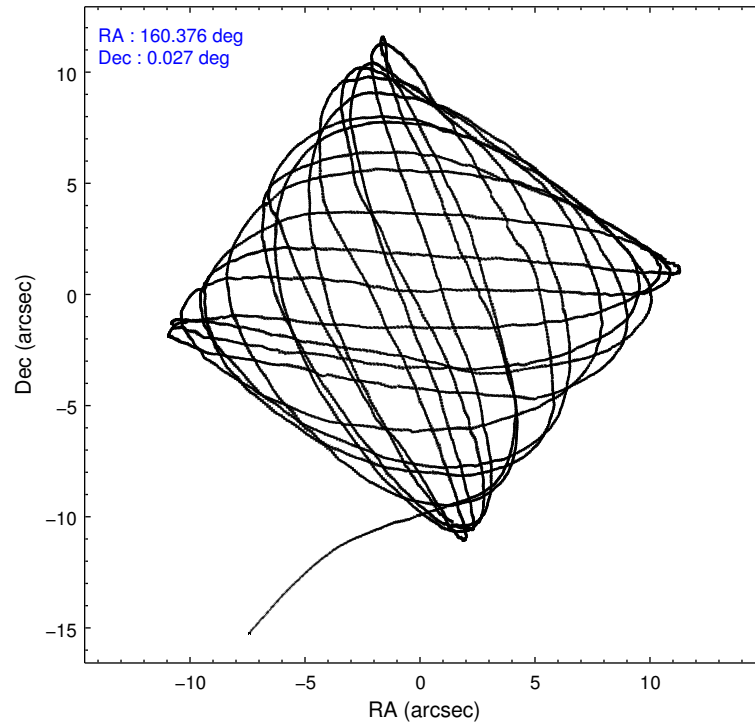
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	73587	70419	74975	92167	97625
rejected events	65896	62607	66575	51202	72489
rejected %	89%	88%	88%	55%	74%

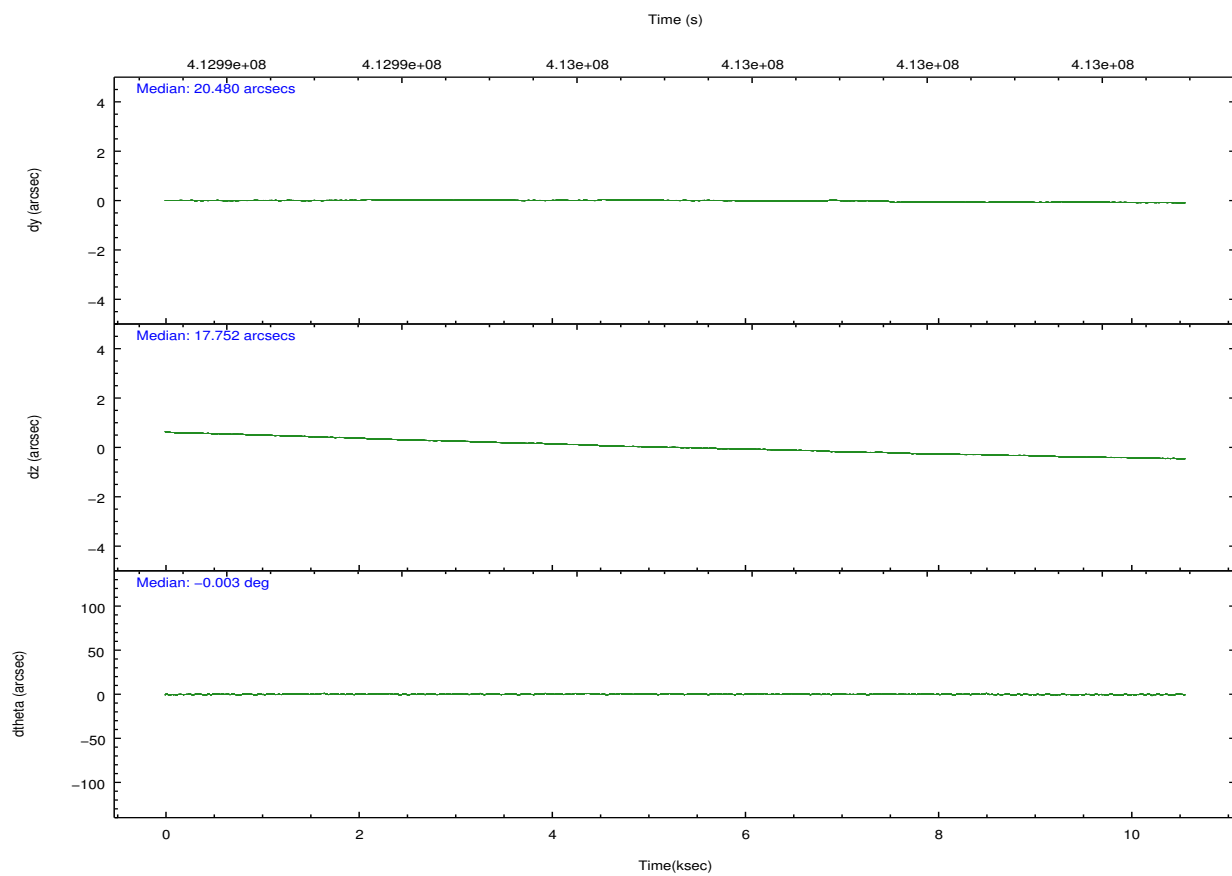
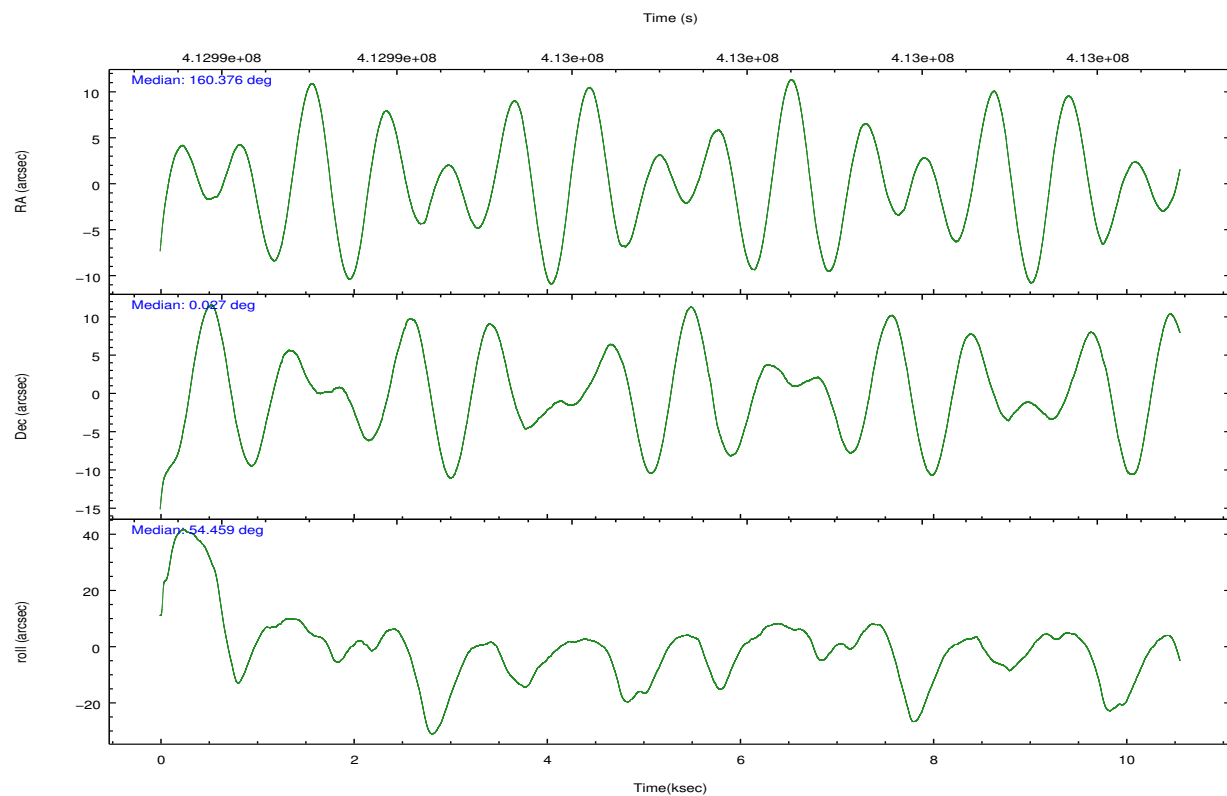
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2742	2934	2784	3561	7339
	3%	4%	3%	3%	7%
grade 1 events	48	36	42	114	82
	0%	0%	0%	0%	0%
grade 2 events	1899	1690	1995	8400	5793
	2%	2%	2%	9%	5%
grade 3 events	780	815	842	3685	2725
	1%	1%	1%	3%	2%
grade 4 events	784	845	891	3566	2598
	1%	1%	1%	3%	2%
grade 5 events	2860	3409	3439	9467	4856
	3%	4%	4%	10%	4%
grade 6 events	1490	1531	1890	21763	6682
	2%	2%	2%	23%	6%
grade 7 events	62984	59159	63092	41611	67550
	85%	84%	84%	45%	69%

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	160.373894	160.3761455374783	CCD I2 on	O4	Y
[deg] Pointing Dec	-0.000497	0.02675220515950851	CCD I3 on	O3	Y
[deg] Pointing Roll	54.306267	54.46287578848258	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	O2	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)	412991991.184000	412990797.47794	CCD S5 on	N	N
Observation start date	2011-02-01T23:58:45	2011-02-01T23:39:57	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	413002391.184000	413003141.04108	On-chip summing requested	N	N
Observation end date	2011-02-02T02:52:05	2011-02-02T03:05:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



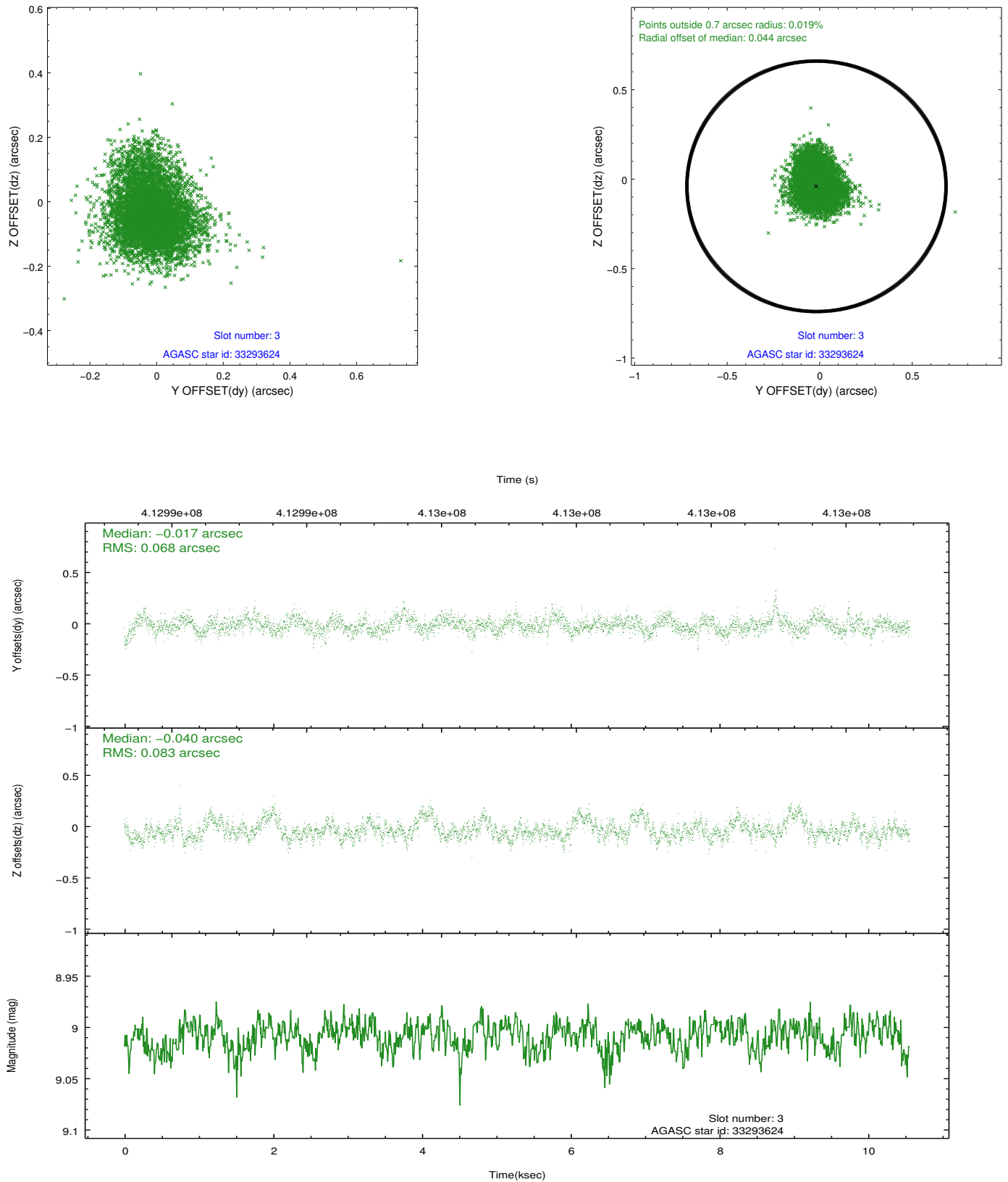


Slot Statistics

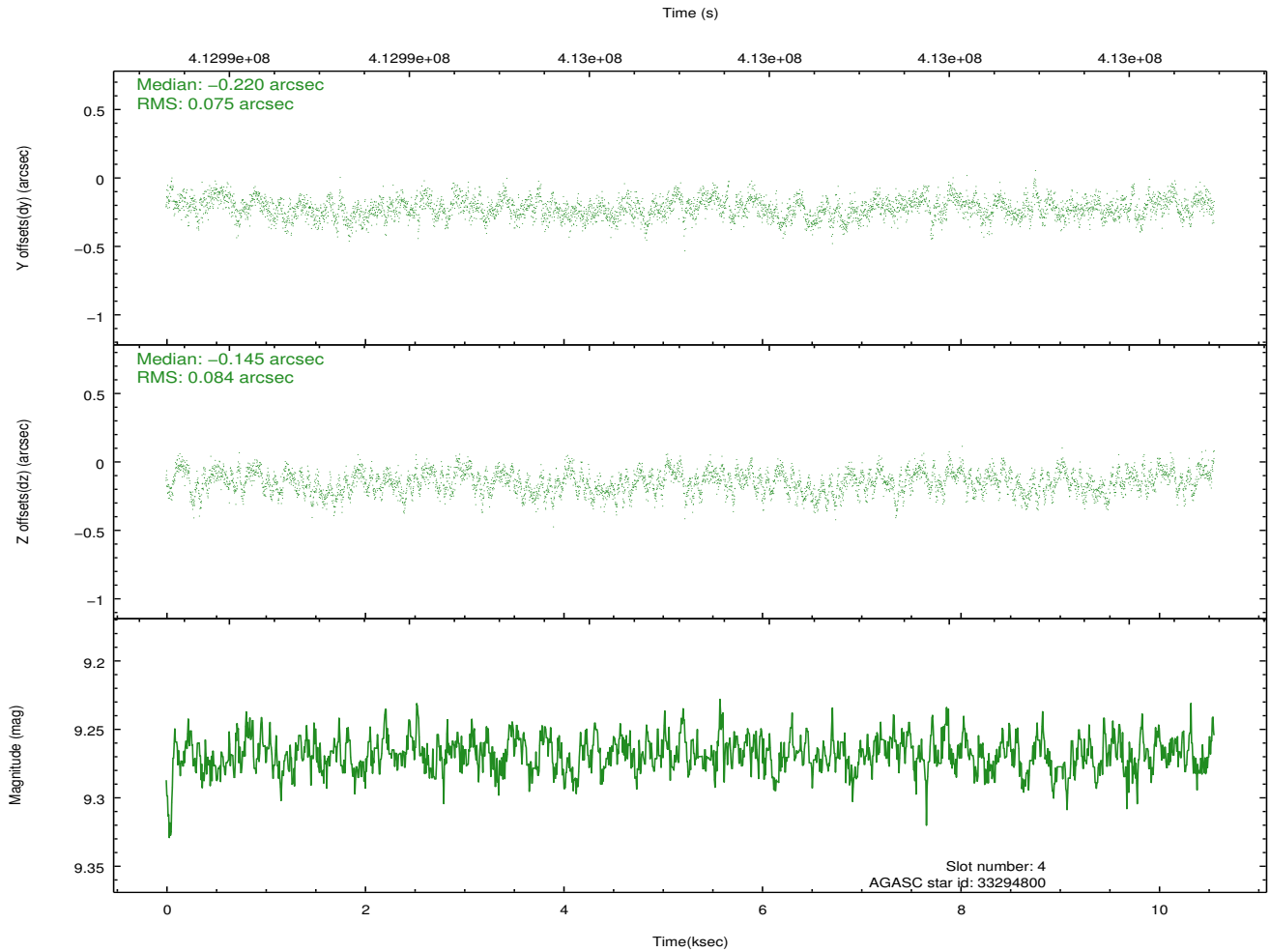
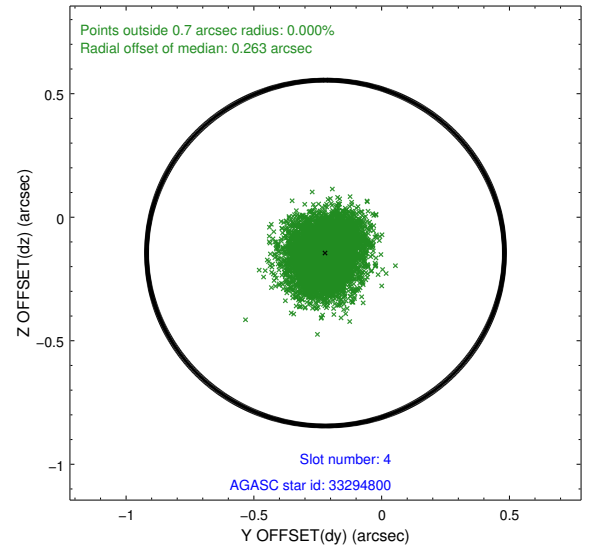
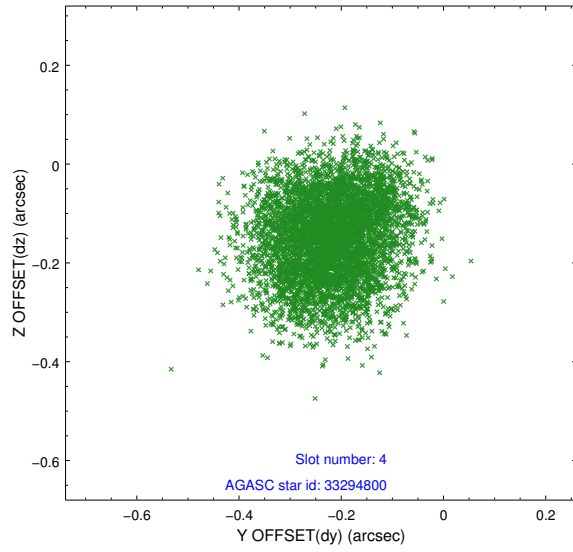
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	2576	-0.086	-0.042	0.009	0.015	0.000000	0.000000	-773.71	-1739.20
1	FID	ACIS-S-4	7.00	2576	0.194	0.052	0.006	0.011	0.000000	0.000000	2139.66	168.79
2	FID	ACIS-S-5	7.02	2575	-0.139	-0.002	0.008	0.014	0.000000	0.000000	-1825.93	163.06
3	GUIDE	33293624	9.01	5148	-0.017	-0.040	0.112	0.188	160.058960	0.132504	-272.31	1200.32
4	GUIDE	33294800	9.27	5147	-0.220	-0.145	0.123	0.190	160.198736	0.510111	1125.05	1585.01
5	BAD	33299280	10.48	4888	-0.120	-0.040	0.230	0.378	160.966193	0.289376	2092.62	-1121.29
6	GUIDE	643958552	7.76	5152	0.024	0.127	0.086	0.138	160.293847	-0.276304	-974.15	-345.09
7	GUIDE	643964248	9.82	5095	0.330	0.091	0.138	0.272	160.236855	-0.669033	-2241.65	-1003.53

2.4 Star Slots

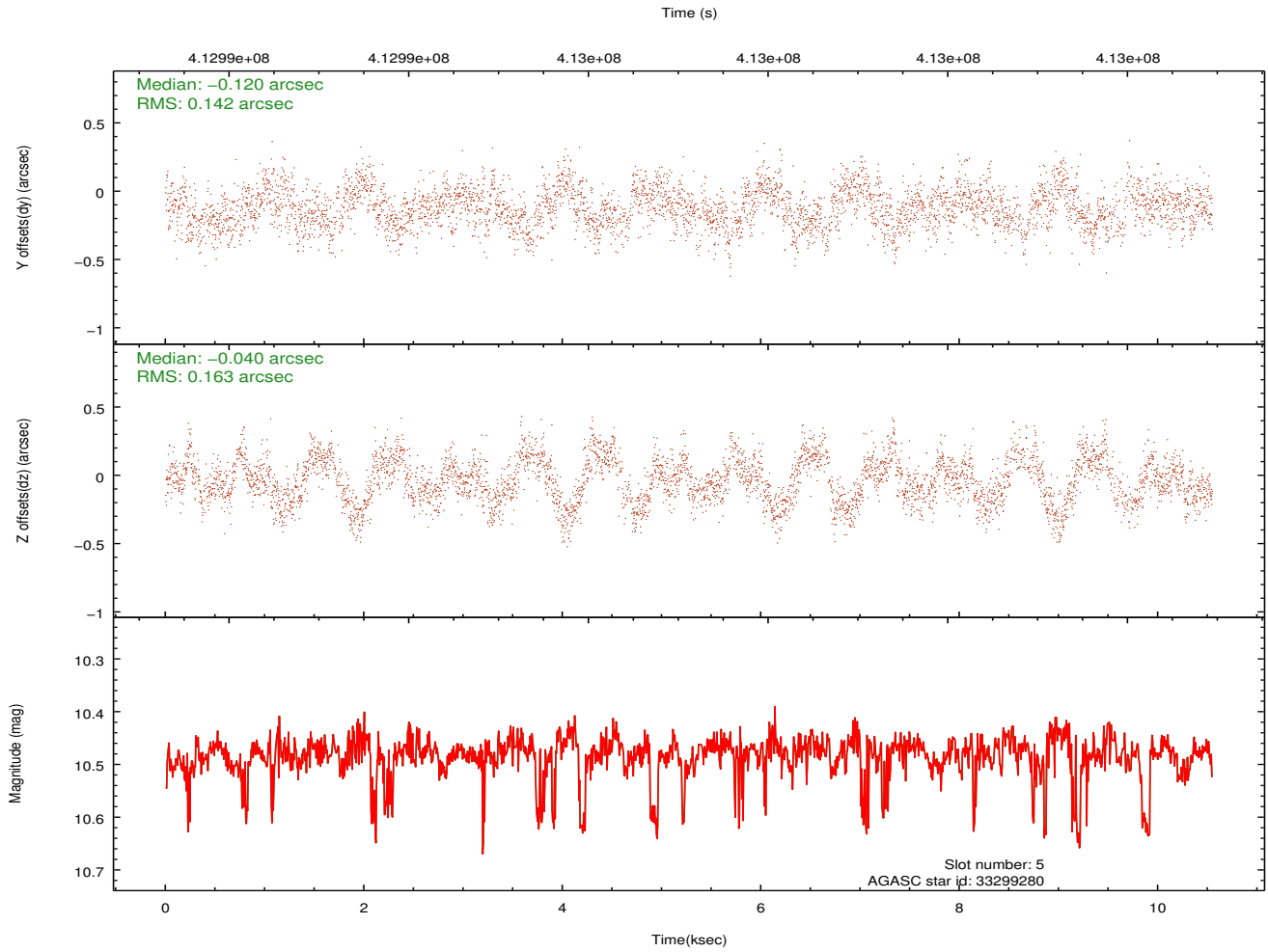
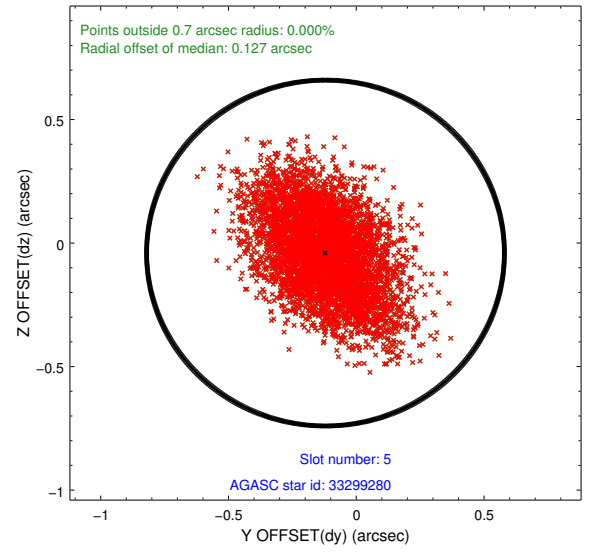
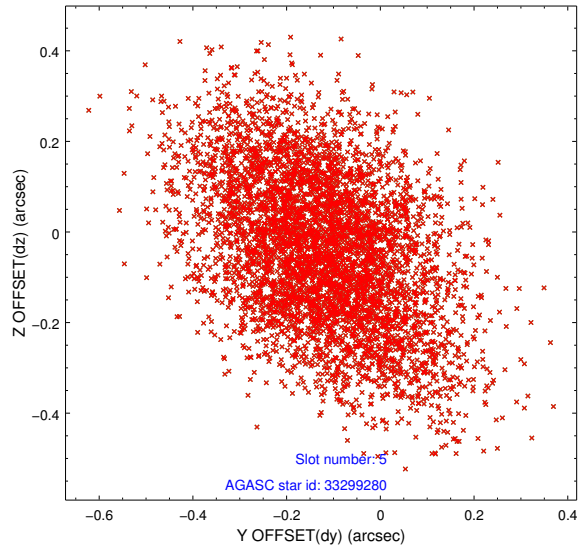
2.4.1 Slot 3



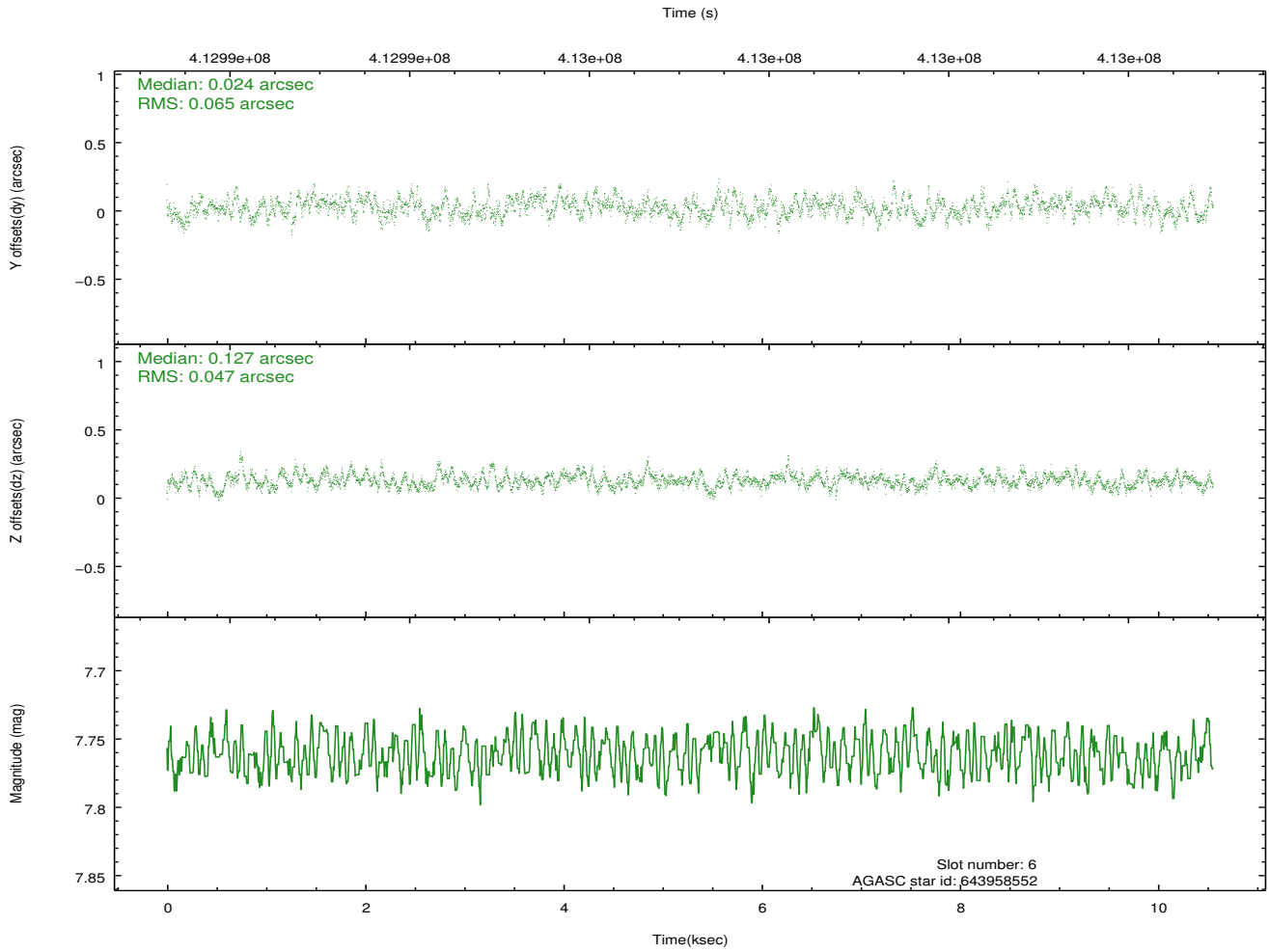
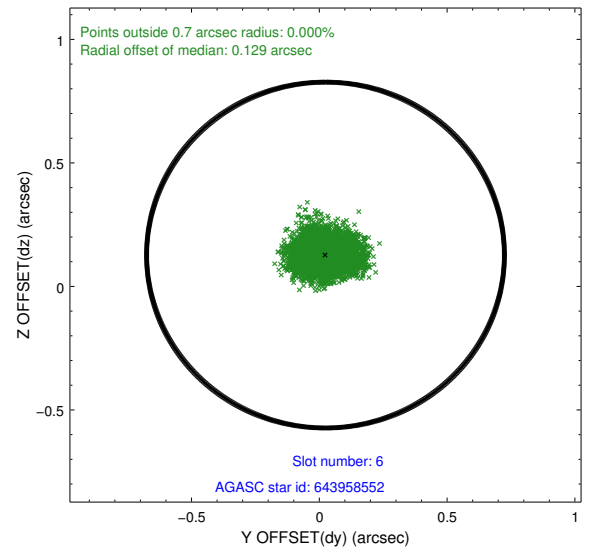
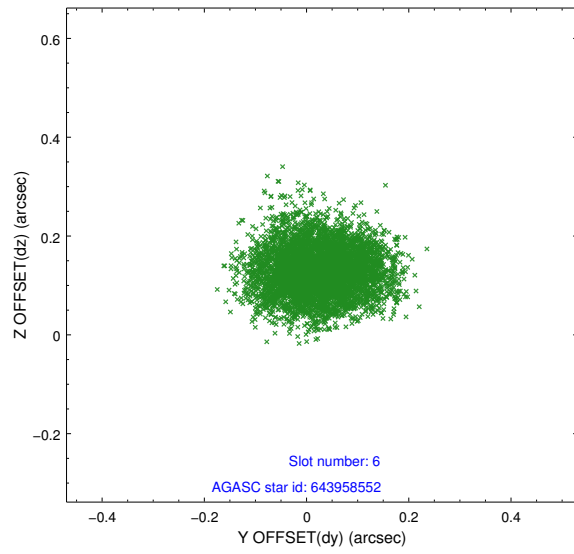
2.4.2 Slot 4



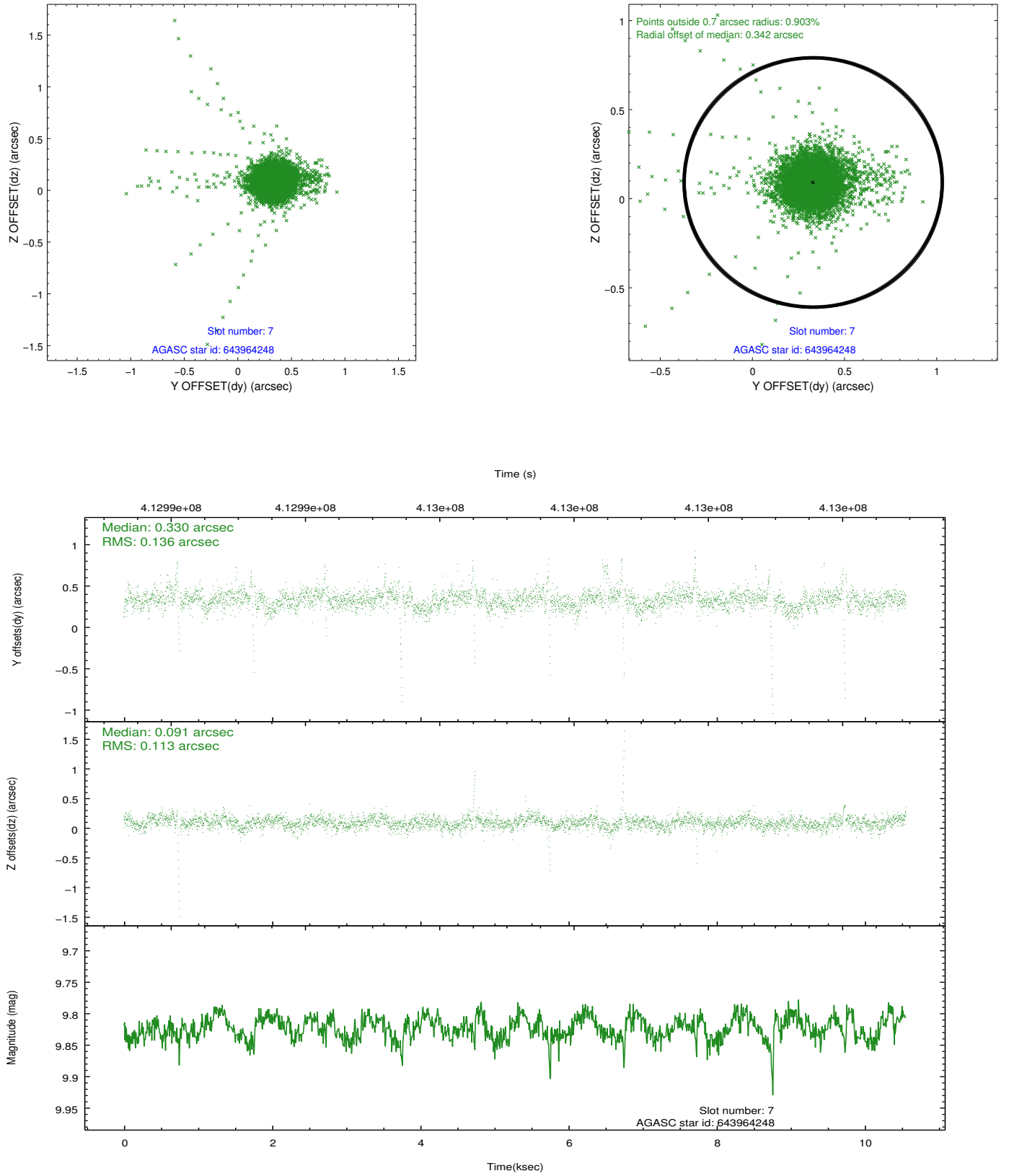
2.4.3 Slot 5



2.4.4 Slot 6

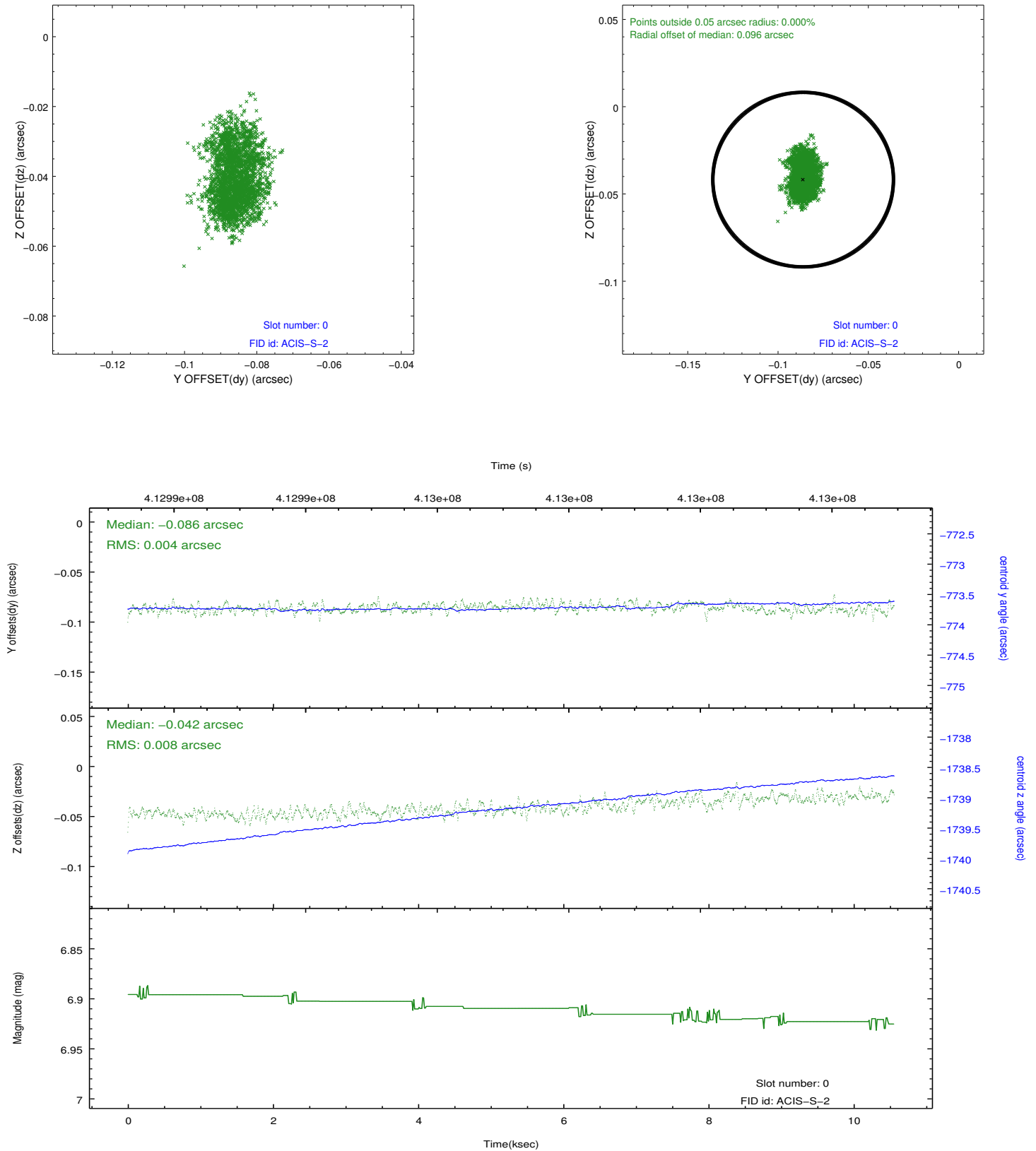


2.4.5 Slot 7

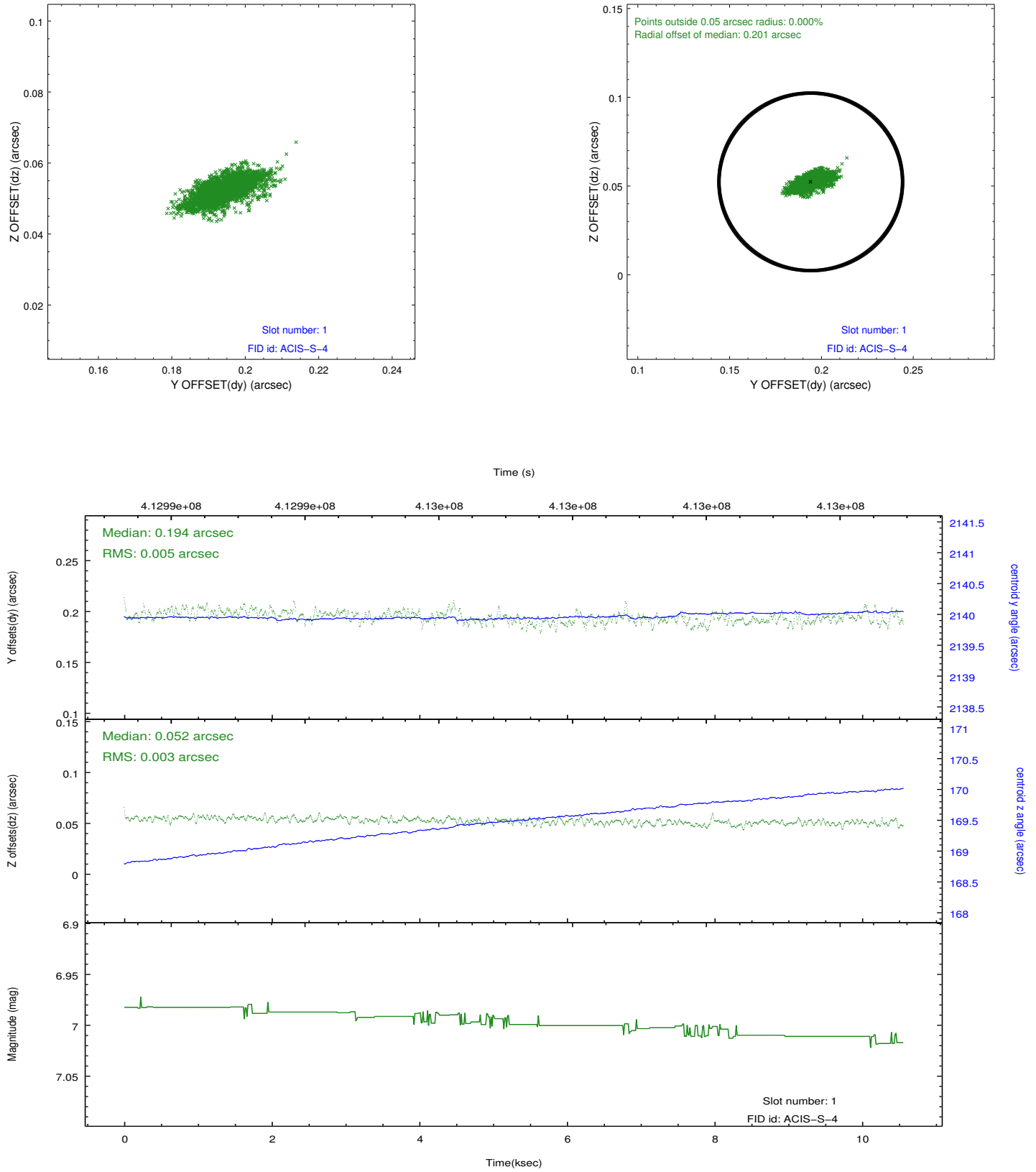


2.5 FID Slots

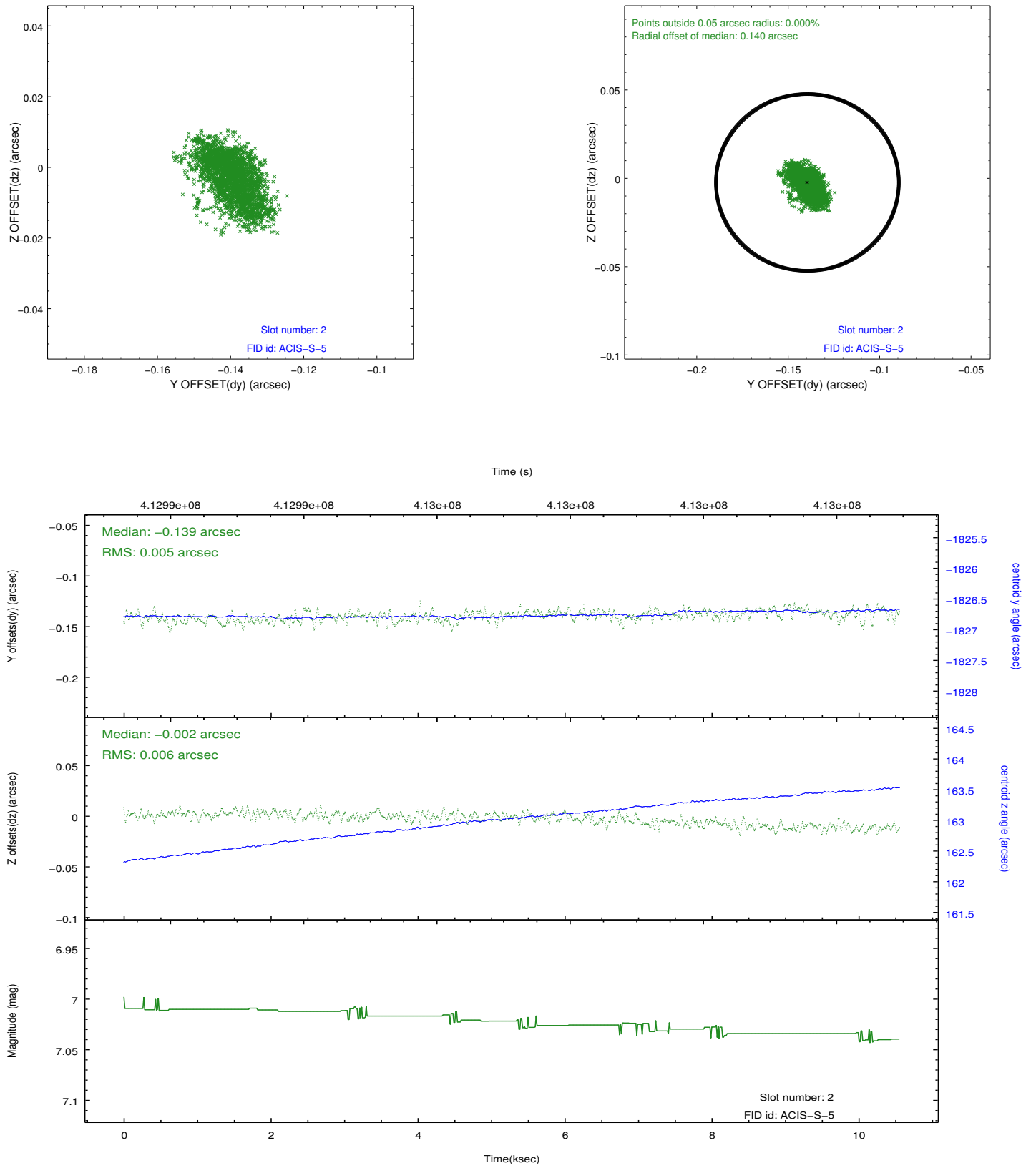
2.5.1 Slot 0



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)	2012.02.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.440349040329

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.