

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15680 - L2 Version 2
Chandra X-Ray Center

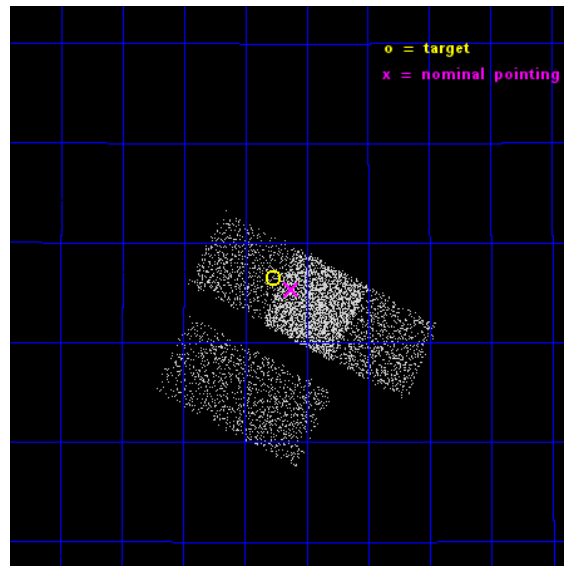
L2 Processing Date : Dec 8 2014

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1 Front

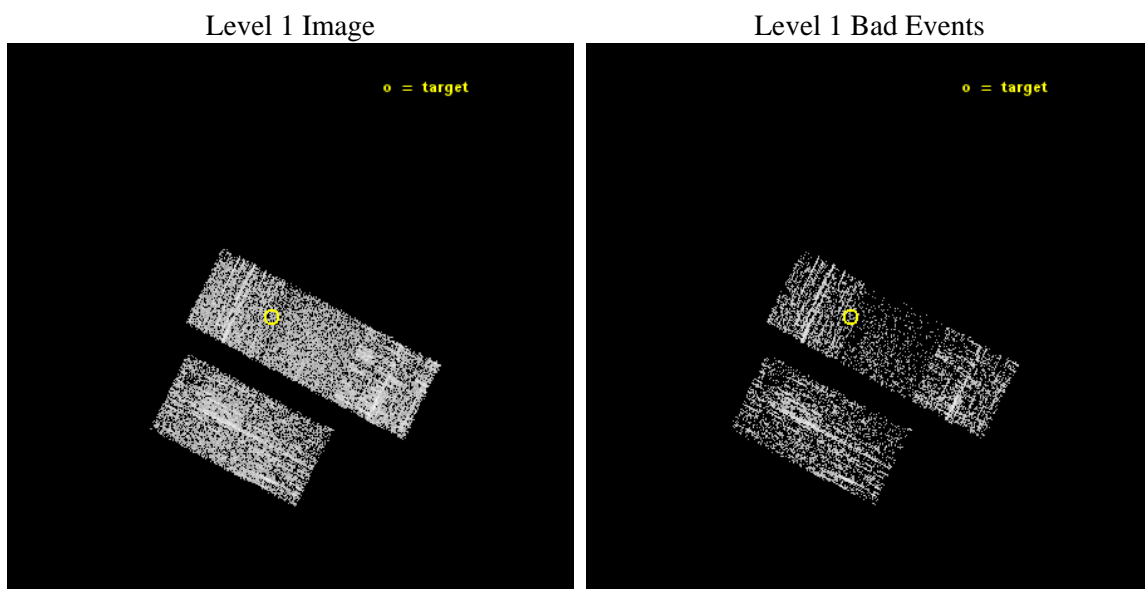
seq_num	100109	Sequence number
obs_id	15680	Observation id
title	Plumbing the Heights of the Solar Wind With Comet ISON	Proposal ti
observer	Dr. Carey Lisse	Principal investigator
object	Comet C/2012 S1 (ISON)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	243.44386	Observer's specified target RA [deg]
dec_targ	30.94058	Observer's specified target Dec [deg]
ra_nom	243.40579056829	Nominal RA [deg]
dec_nom	30.922362875122	Nominal Dec [deg]
roll_nom	27.118933324074	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2070.8000159264	Sum of GTIs [s]
livetime	2043.7434892175	Livetime [s]
ontime2	2070.8000159264	Sum of GTIs [s]
ontime3	2070.8000159264	Sum of GTIs [s]
ontime6	2070.8000159264	Sum of GTIs [s]
ontime7	2070.8000159264	Sum of GTIs [s]
ontime8	2070.8000159264	Sum of GTIs [s]
l2events	6343	Number of level 2 events



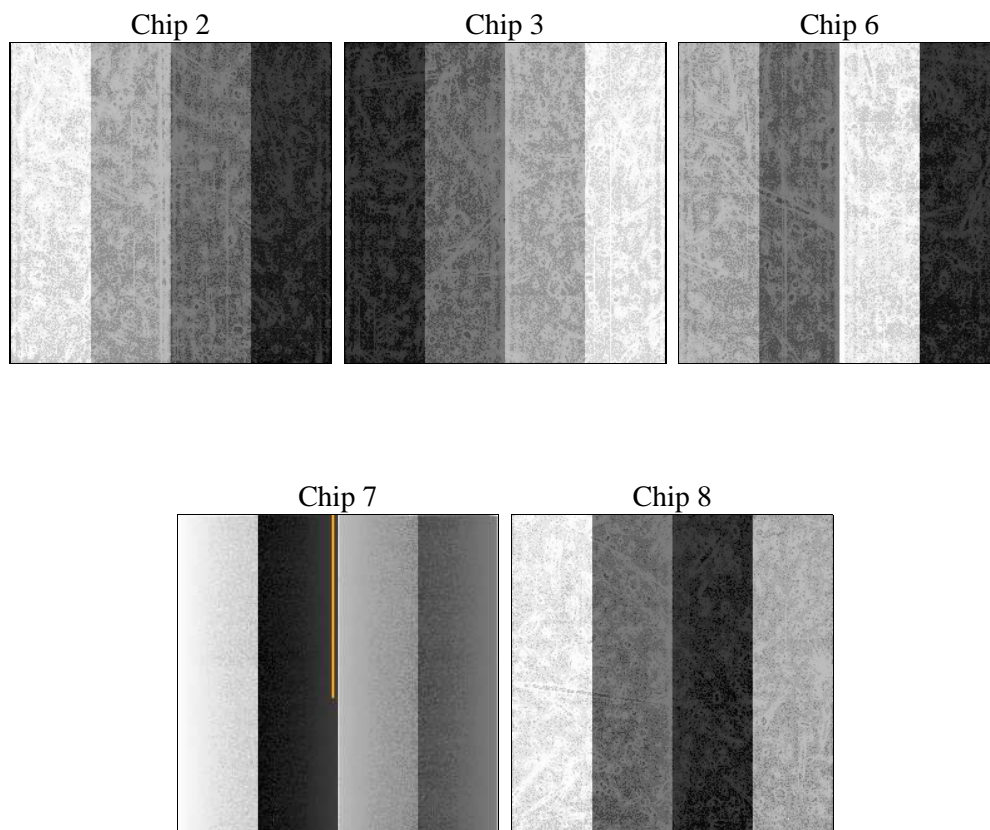
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	2070.8000159264	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	2070.8000159264	Sum of GTIs [s]
date	2014-12-08T09:50:19	Date and time of file creation	ontime3	2070.8000159264	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	2070.8000159264	Sum of GTIs [s]
			ontime7	2070.8000159264	Sum of GTIs [s]
			ontime8	2070.8000159264	Sum of GTIs [s]
			l1events	41348	Number of level 1 events

2.1.4 Events

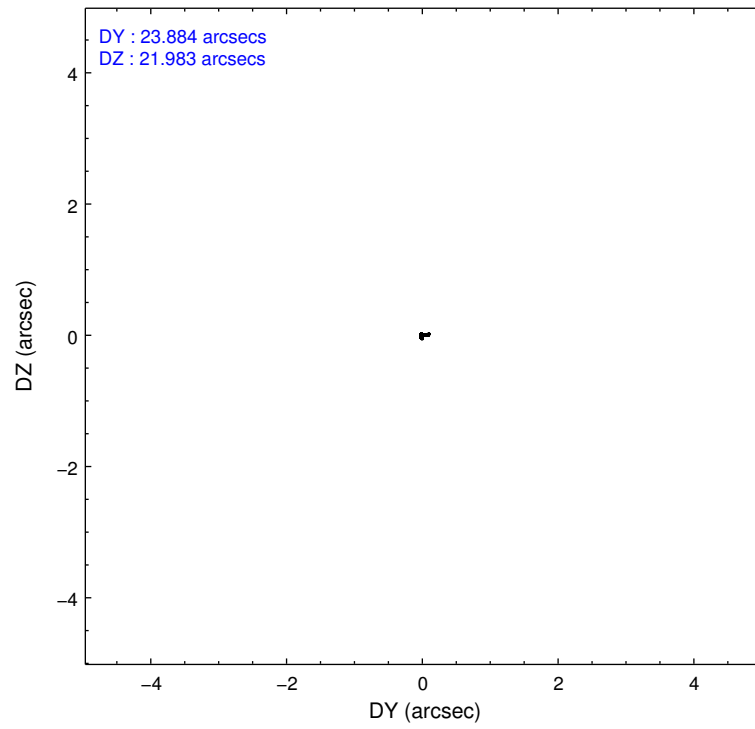
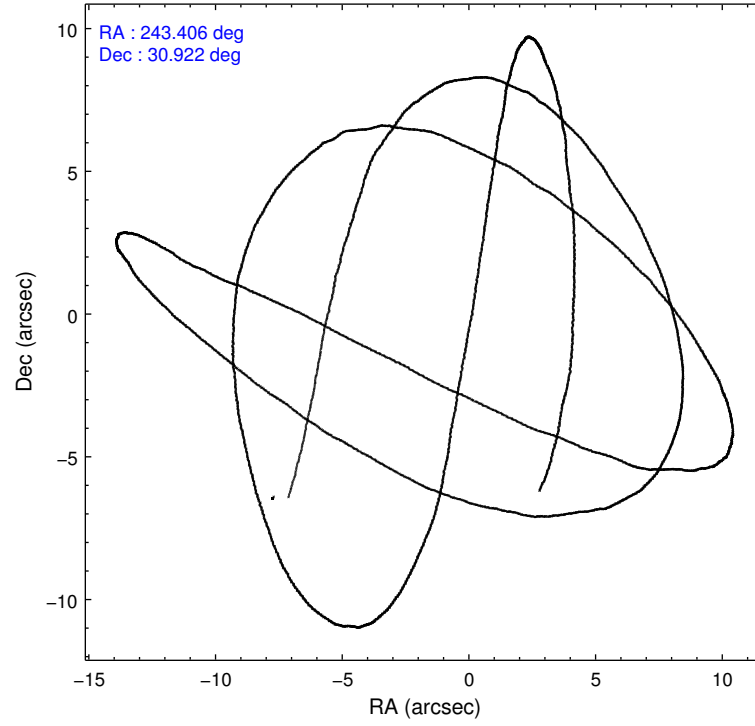
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	8231	7594	8363	6526	10634
rejected events	7460	6769	7519	3049	7359
rejected %	90%	89%	89%	46%	69%

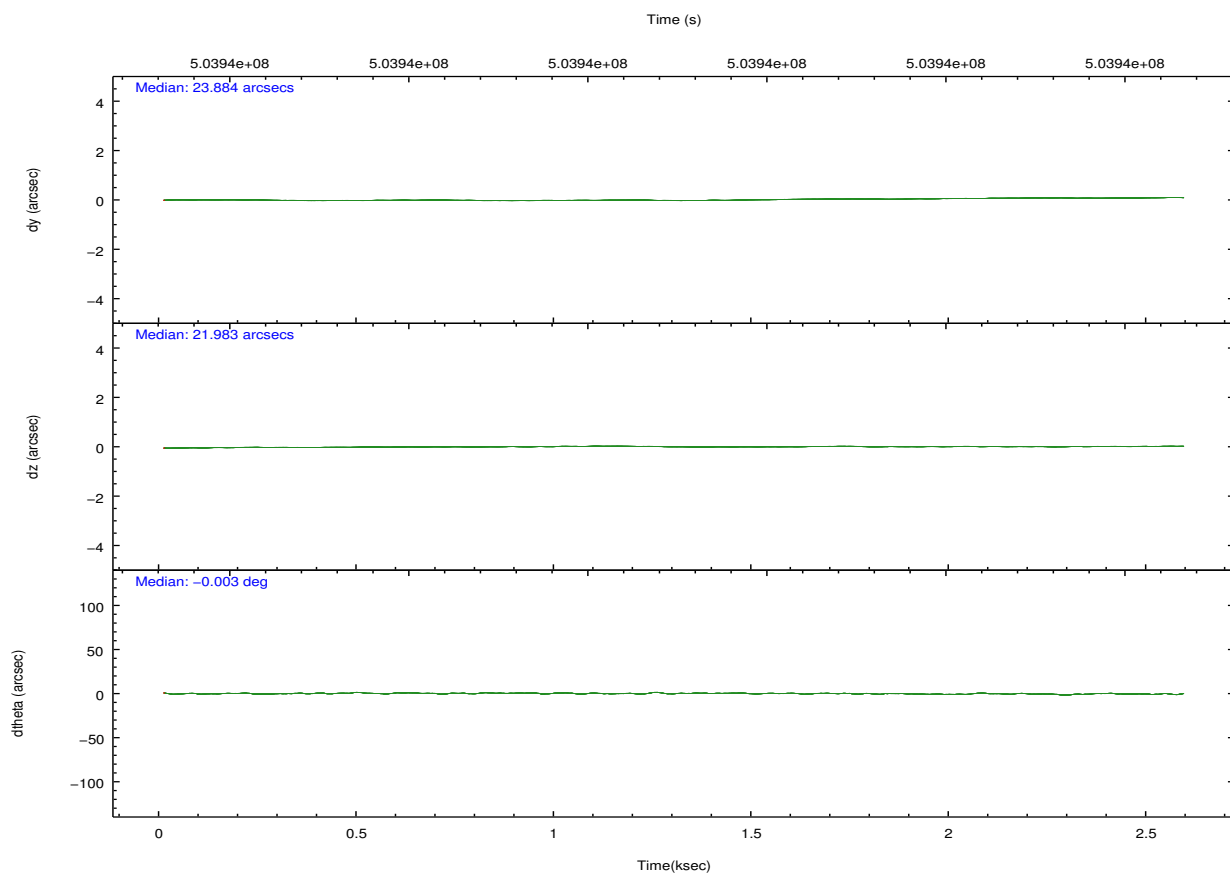
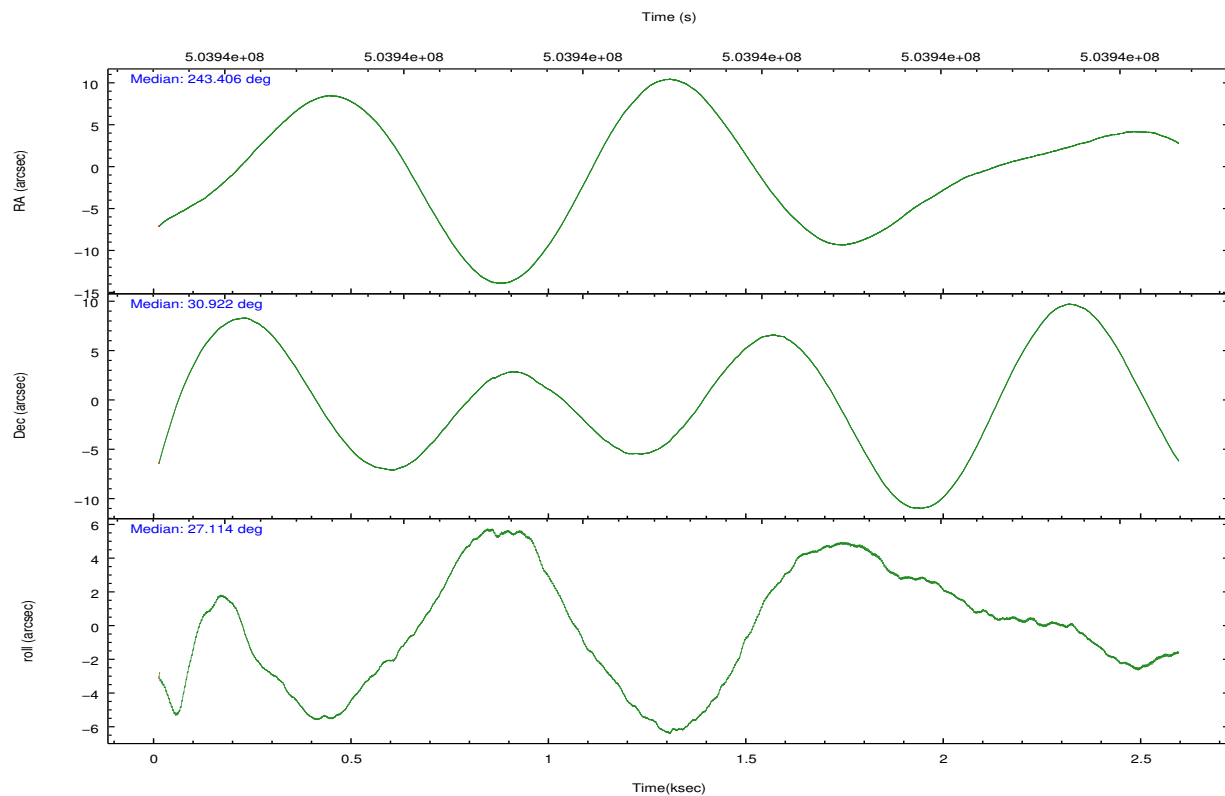
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	300	376	354	489	1045
	3%	4%	4%	7%	9%
grade 1 events	0	5	7	10	7
	0%	0%	0%	0%	0%
grade 2 events	209	191	207	912	775
	2%	2%	2%	13%	7%
grade 3 events	75	80	107	340	343
	0%	1%	1%	5%	3%
grade 4 events	88	73	73	338	326
	1%	0%	0%	5%	3%
grade 5 events	191	238	224	666	420
	2%	3%	2%	10%	3%
grade 6 events	145	152	164	1601	937
	1%	2%	1%	24%	8%
grade 7 events	7223	6479	7227	2170	6781
	87%	85%	86%	33%	63%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	243.388673	243.4057905682893	Subarray requested	NONE	NONE
[deg] Pointing Dec	30.898961	30.92236287512214	Alternating exposures requested	N	N
[deg] Pointing Roll	26.971112	27.11893332407392	[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)	503939542.184000	503938402.40249			
Observation start date	2013-12-20T15:11:15	2013-12-20T14:53:22			
[s] Observation end time (MET)	503941542.184000	503941675.74017			
Observation end date	2013-12-20T15:44:35	2013-12-20T15:47:55			
Read mode	TIMED	TIMED			

2.3 Aspect



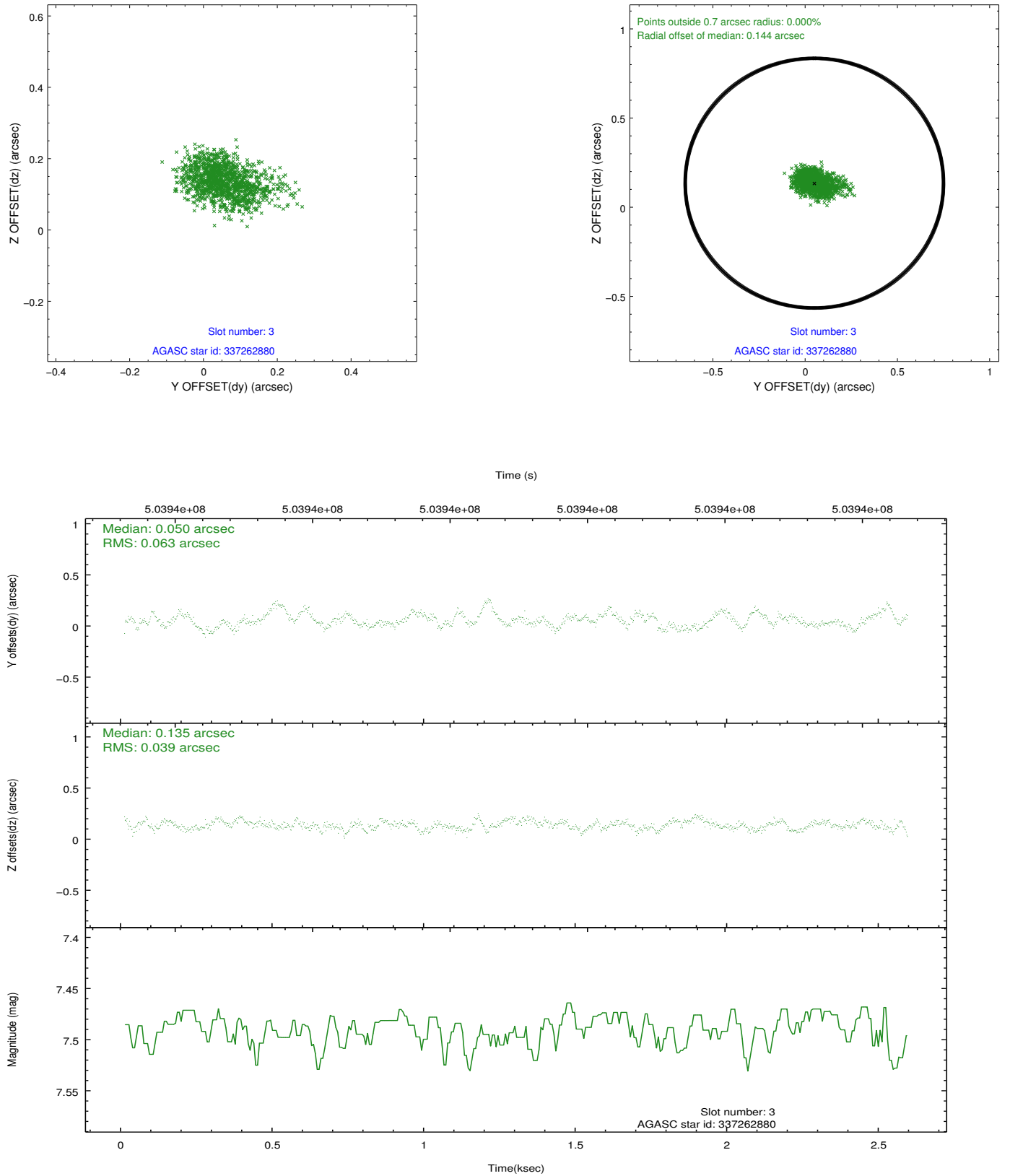


Slot Statistics

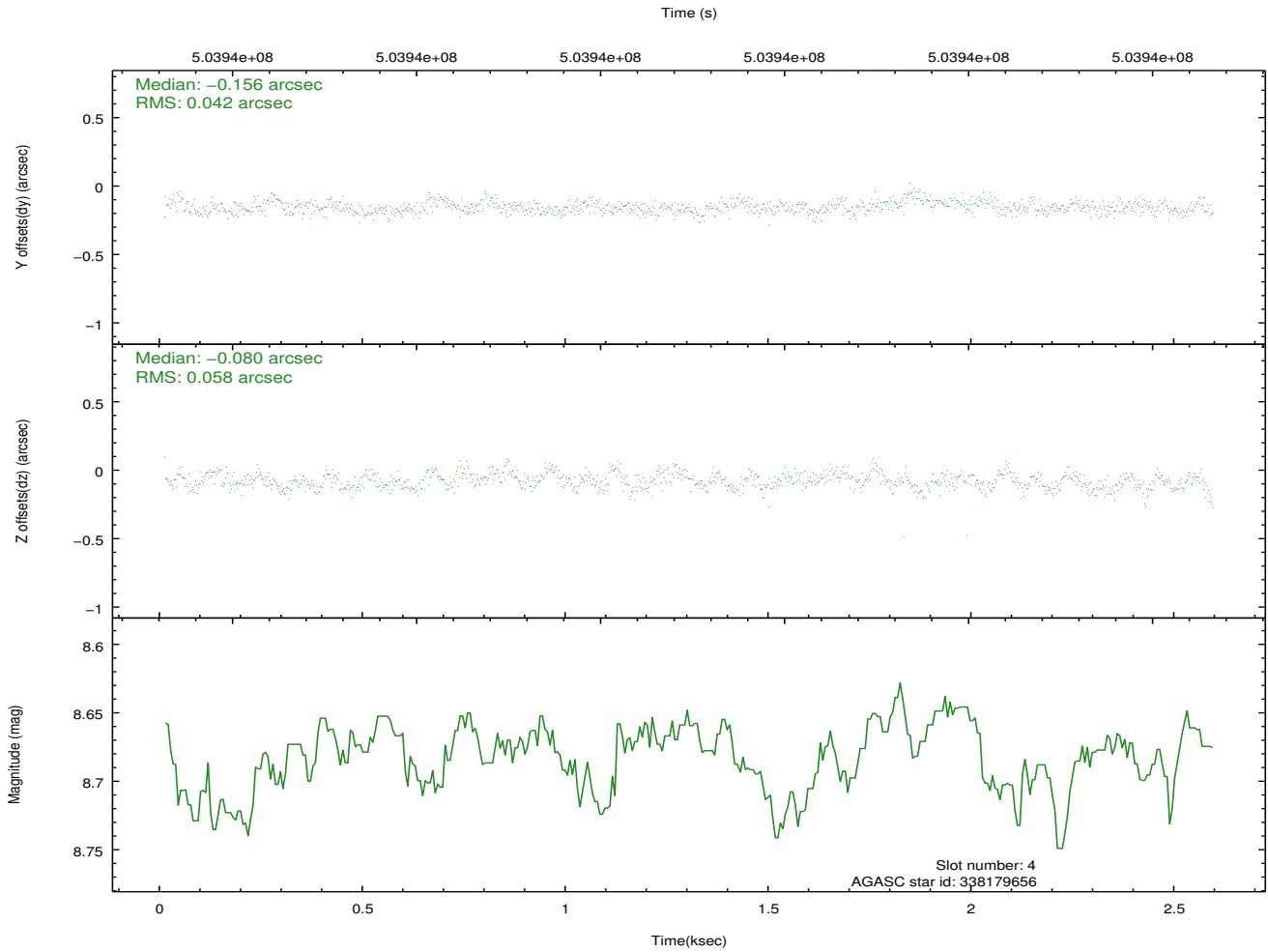
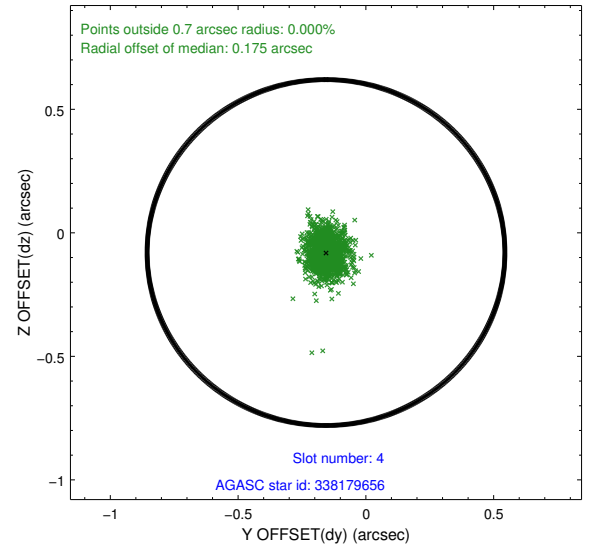
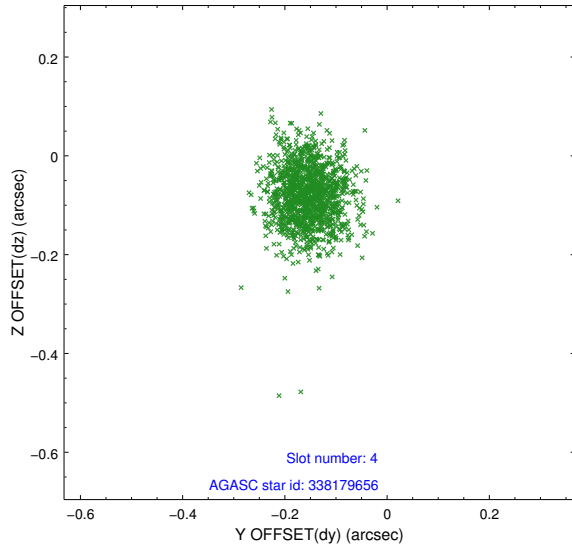
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.02	631	-0.135	-0.046	0.007	0.011	0.000000	0.000000	-777.28	-1743.52
1	FID		ACIS-S-4	7.11	631	0.324	0.078	0.006	0.012	0.000000	0.000000	2135.33	162.42
2	FID		ACIS-S-5	7.14	629	-0.220	-0.023	0.007	0.012	0.000000	0.000000	-1826.98	158.91
3	GUIDE	used	337262880	7.49	1261	0.050	0.135	0.077	0.128	242.725099	30.985399	-1684.14	1209.63
4	GUIDE	used	338179656	8.68	1260	-0.156	-0.080	0.074	0.121	243.346722	31.229324	422.16	1119.09
5	GUIDE	used	338181368	8.62	1261	0.101	-0.160	0.081	0.127	243.086649	30.848731	-913.76	263.36
6	GUIDE	used	338184744	9.11	1261	0.141	0.532	0.093	0.143	243.359501	30.458792	-800.42	-1370.90
7	GUIDE	used	338176888	8.53	1258	-0.151	-0.432	0.104	0.156	243.086660	31.476302	114.65	2272.98

2.4 Star Slots

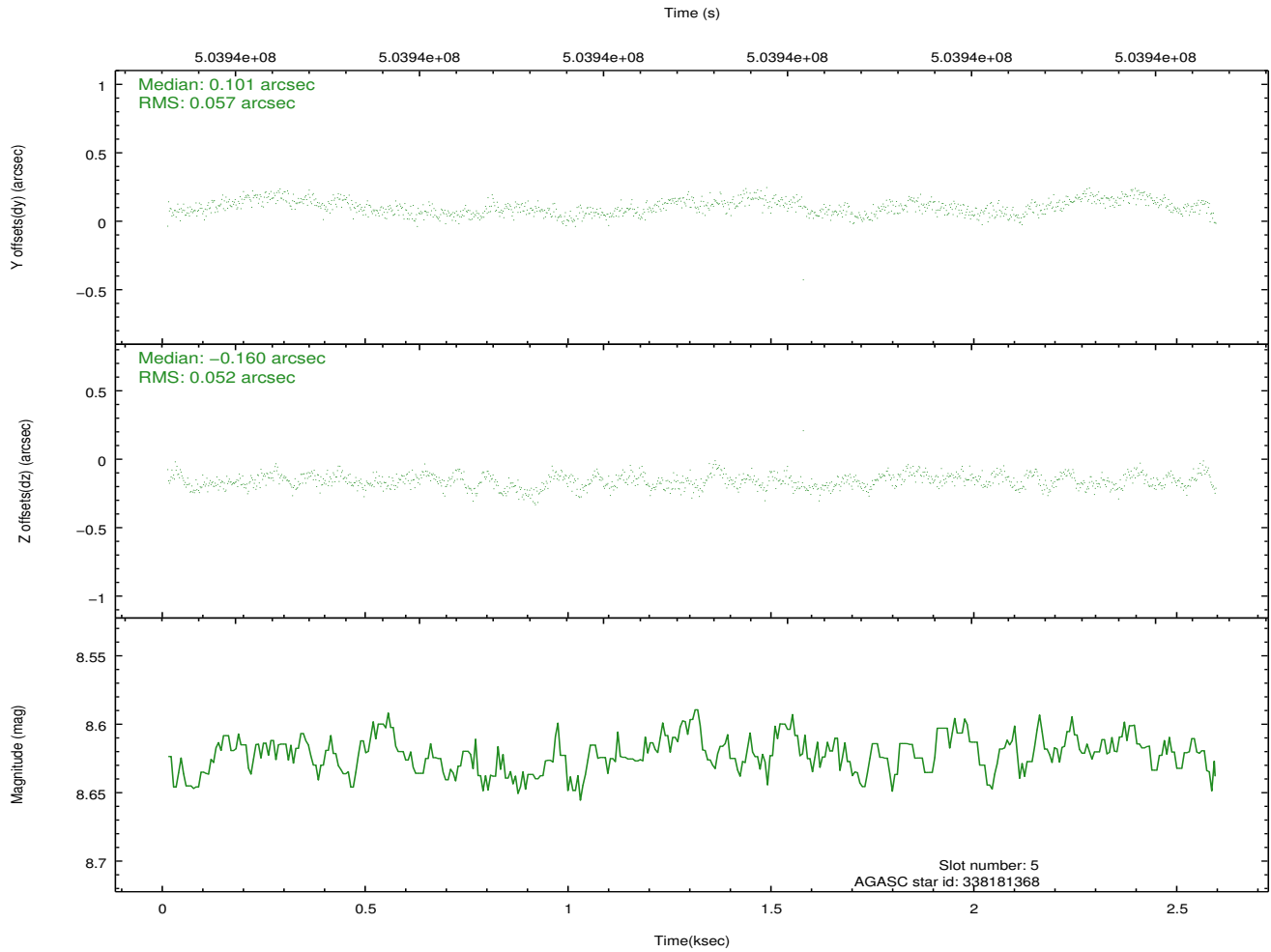
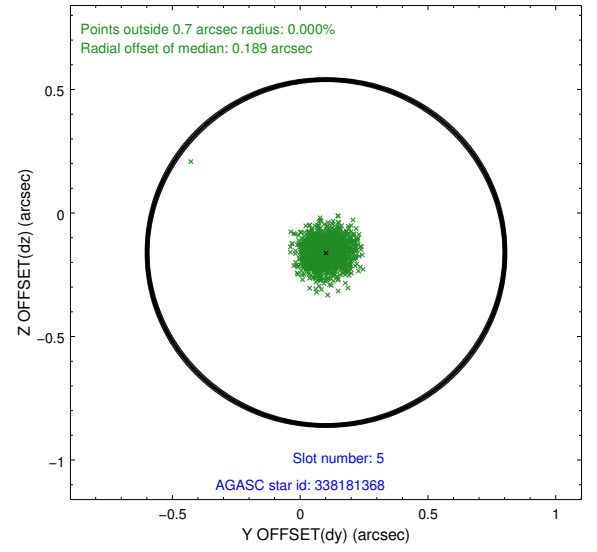
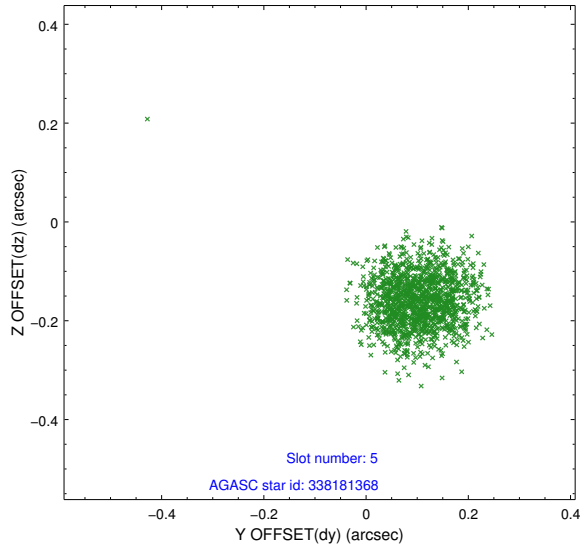
2.4.1 Slot 3



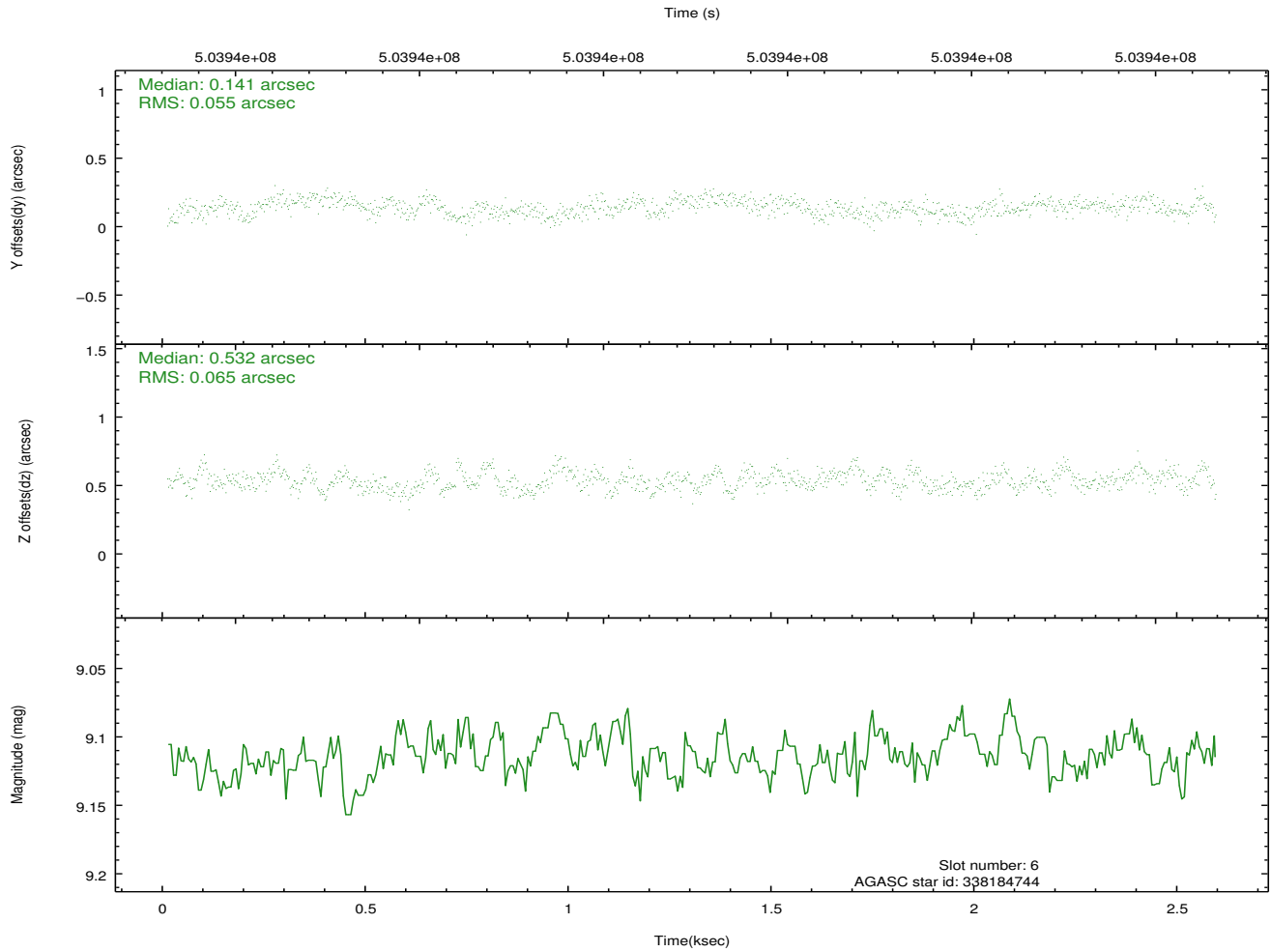
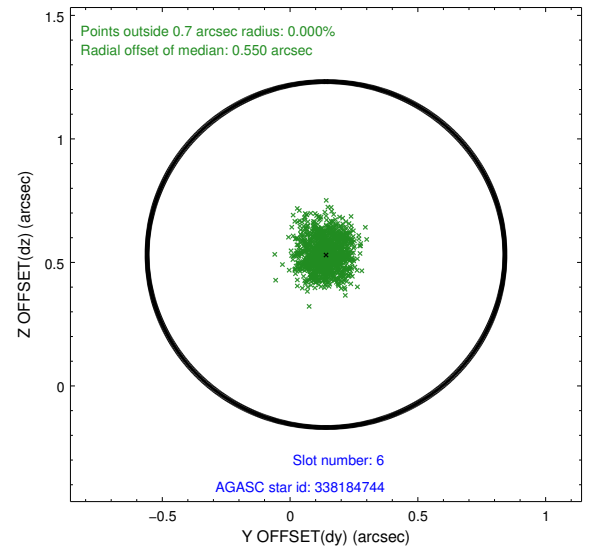
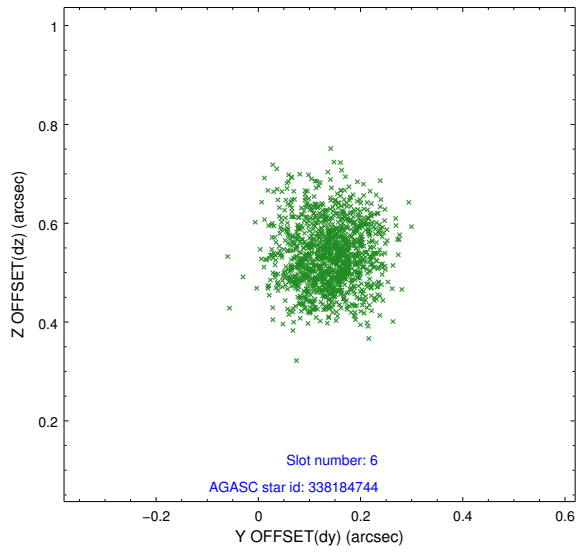
2.4.2 Slot 4



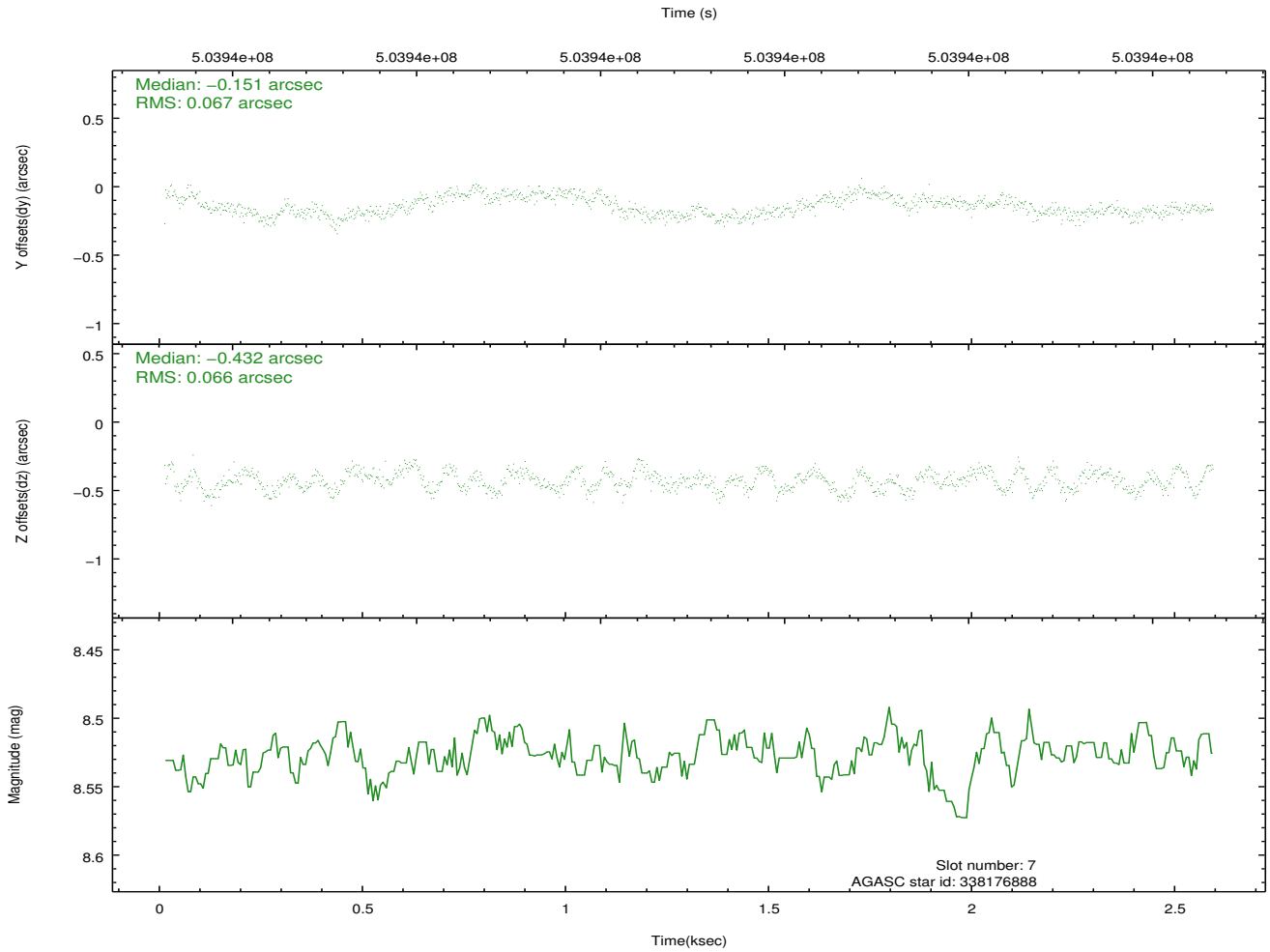
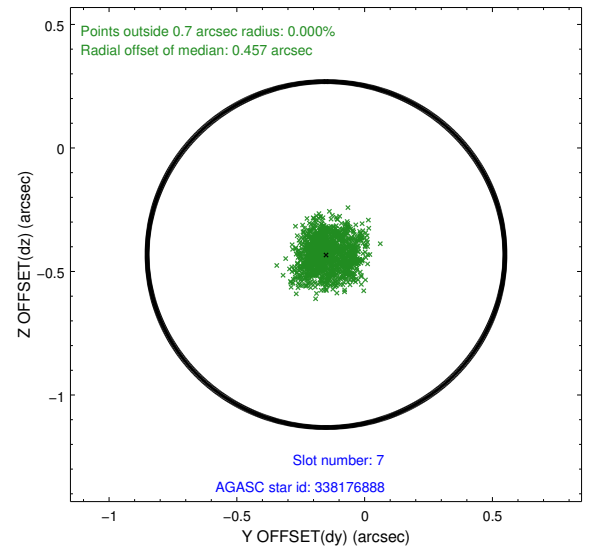
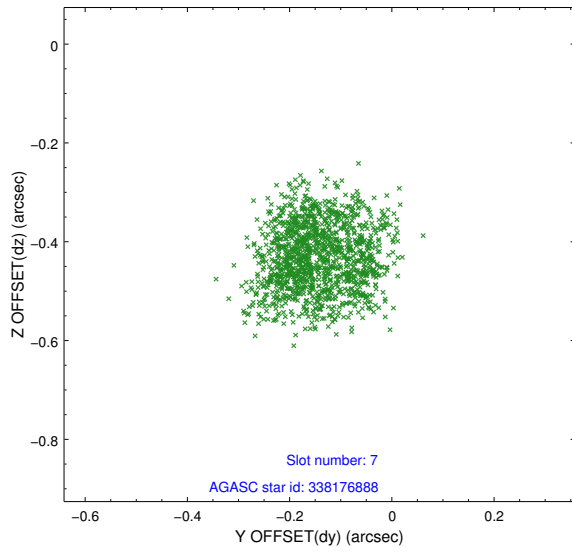
2.4.3 Slot 5



2.4.4 Slot 6

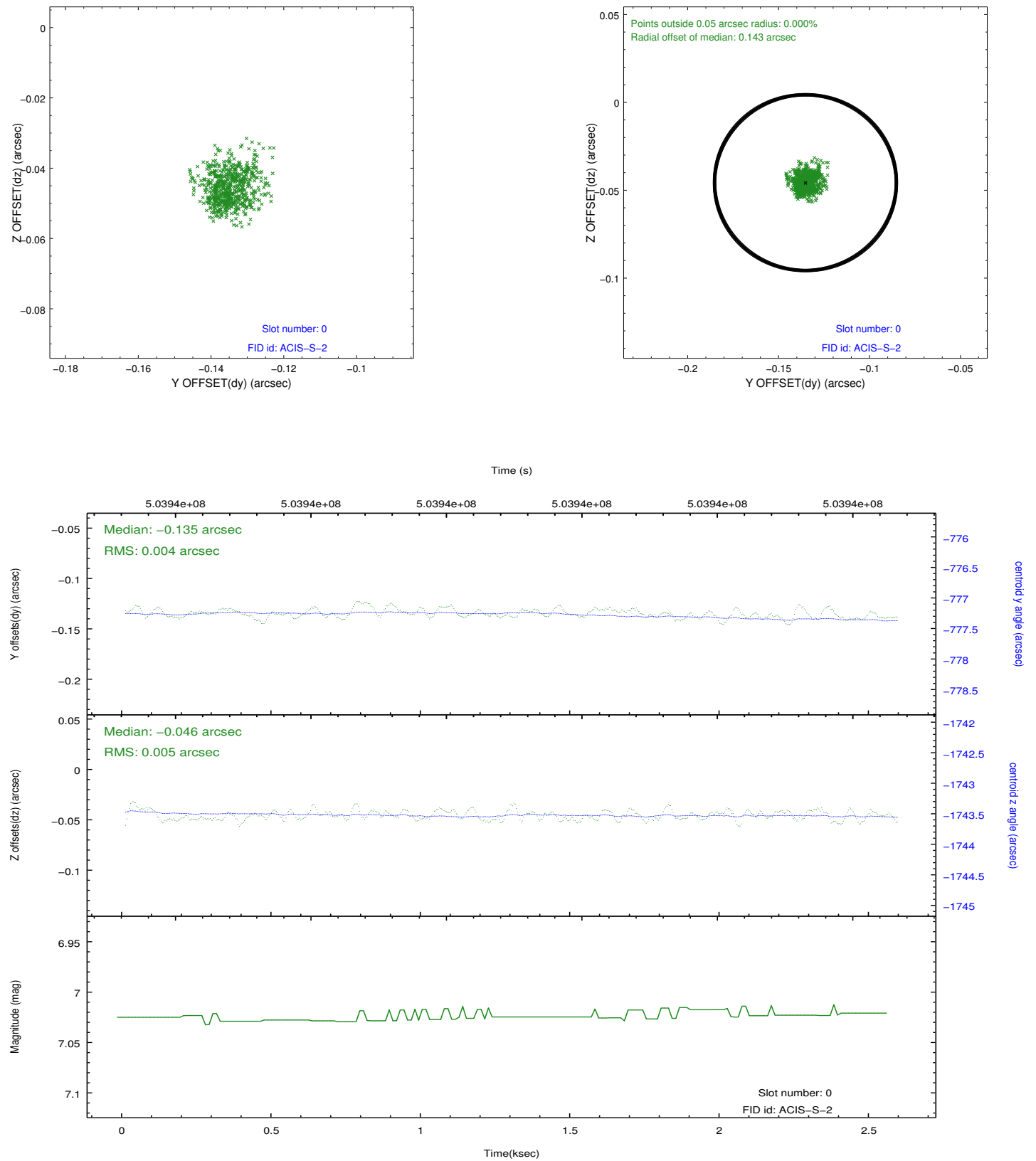


2.4.5 Slot 7

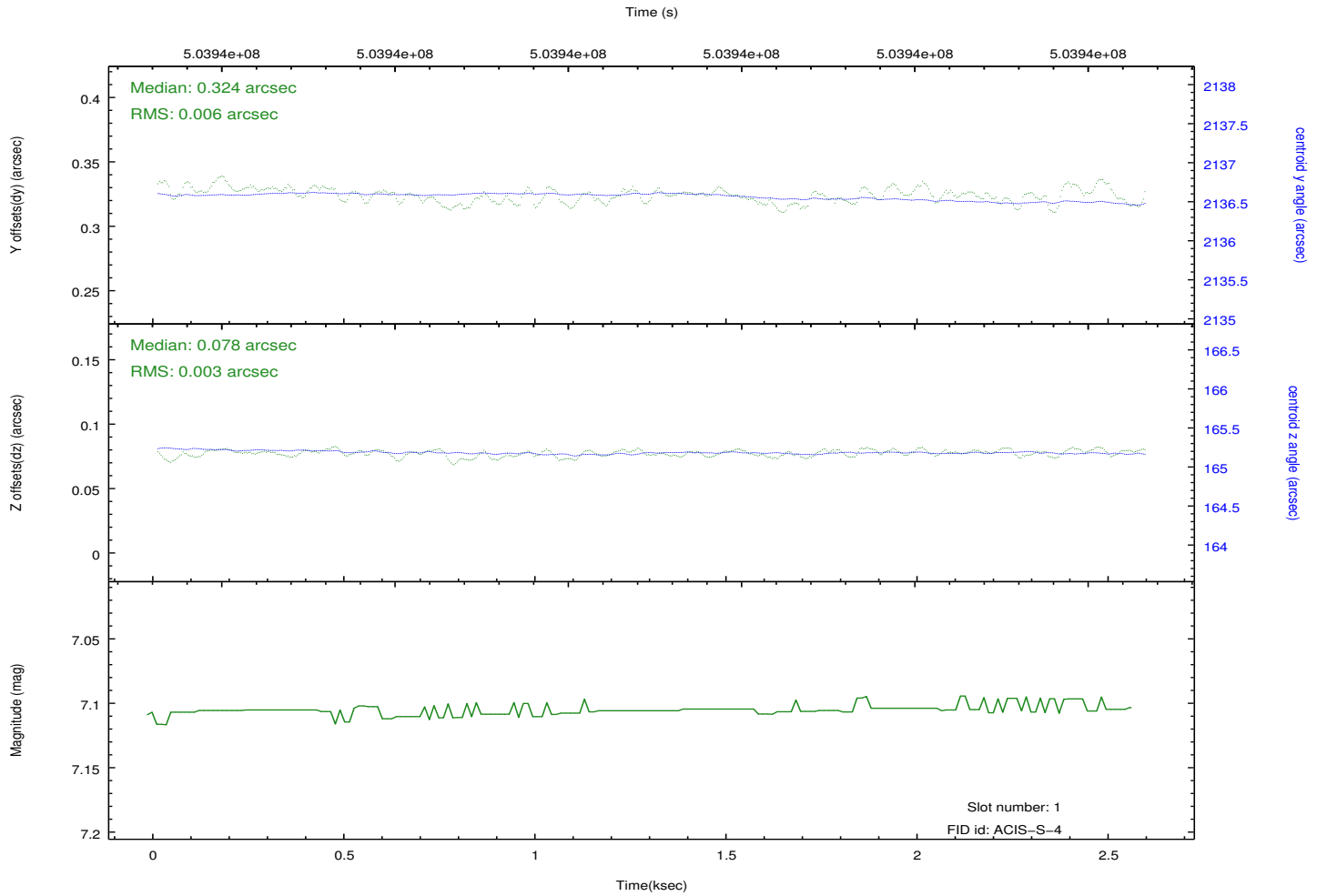
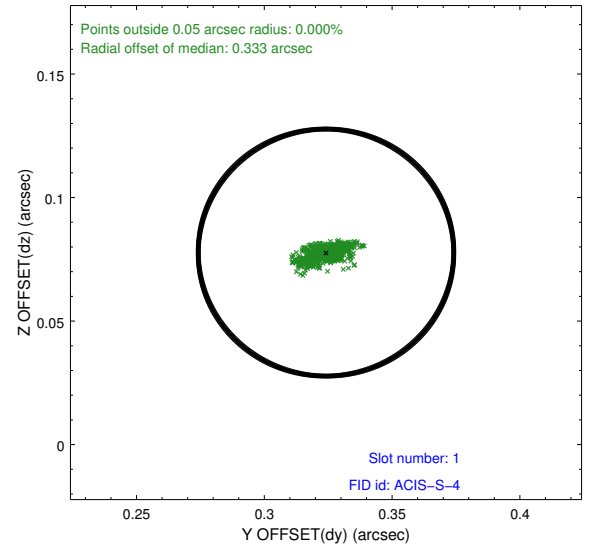
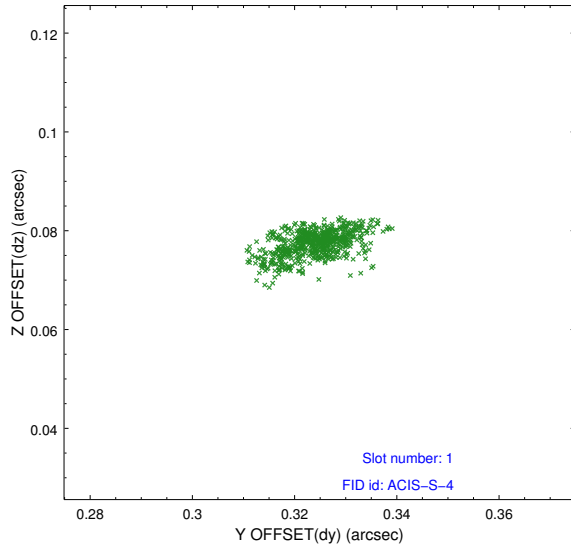


2.5 FID Slots

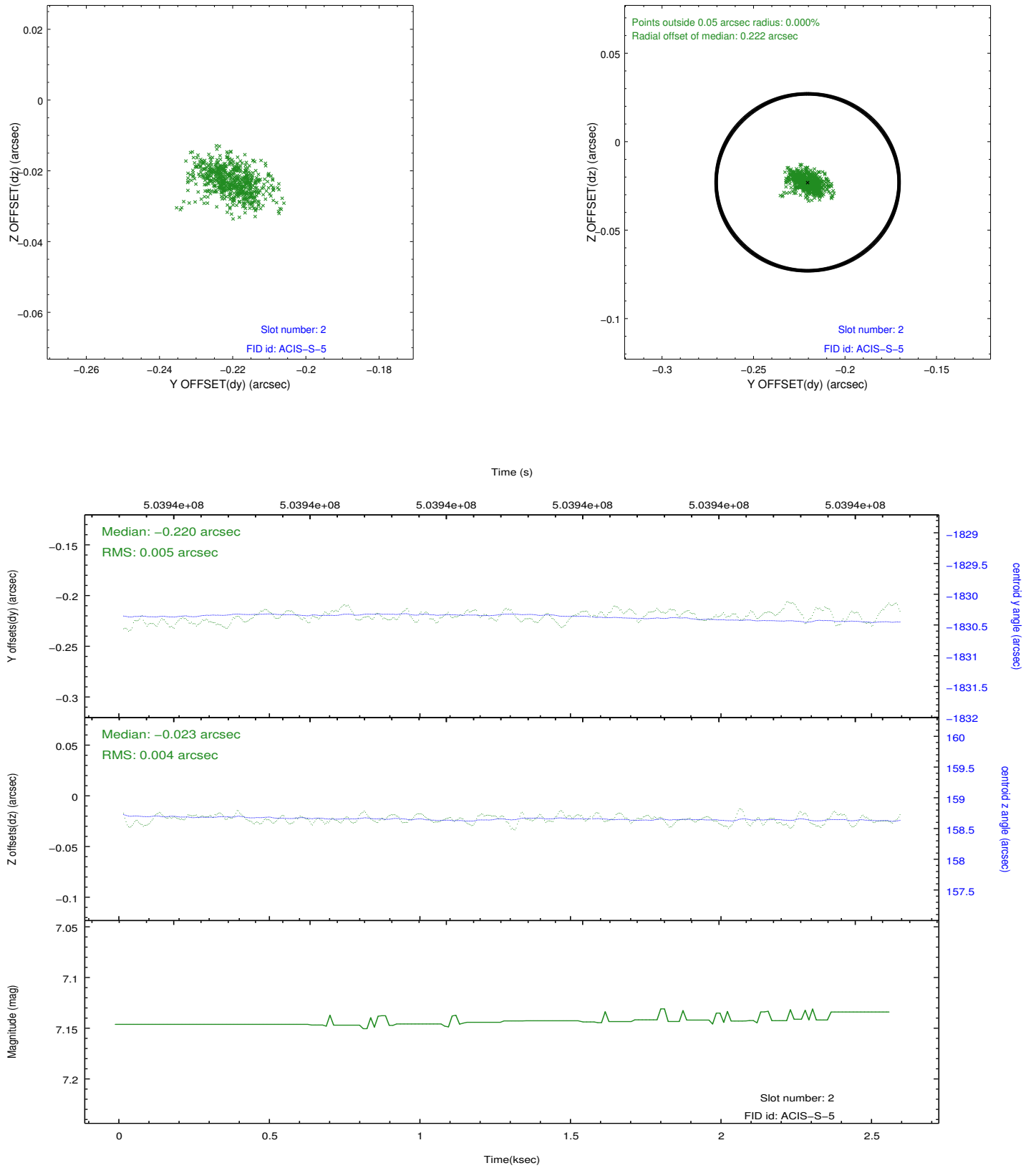
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0708000159264

A.2 Comments

This is a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.

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These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.