

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22205 - L2 Version 2
Chandra X-Ray Center

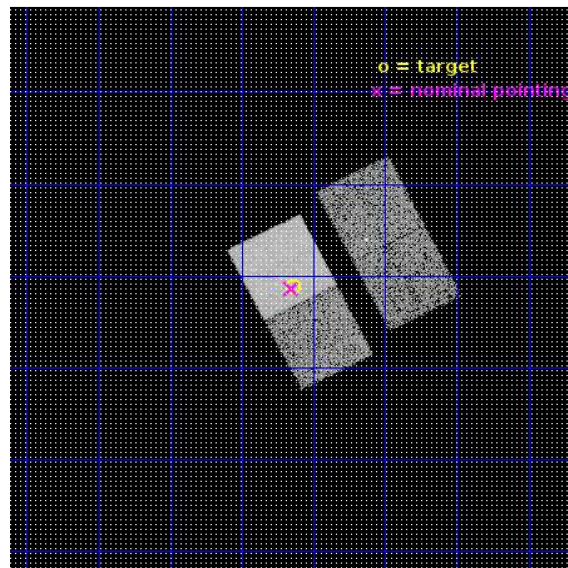
L2 Processing Date : May 9 2019

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1 Front

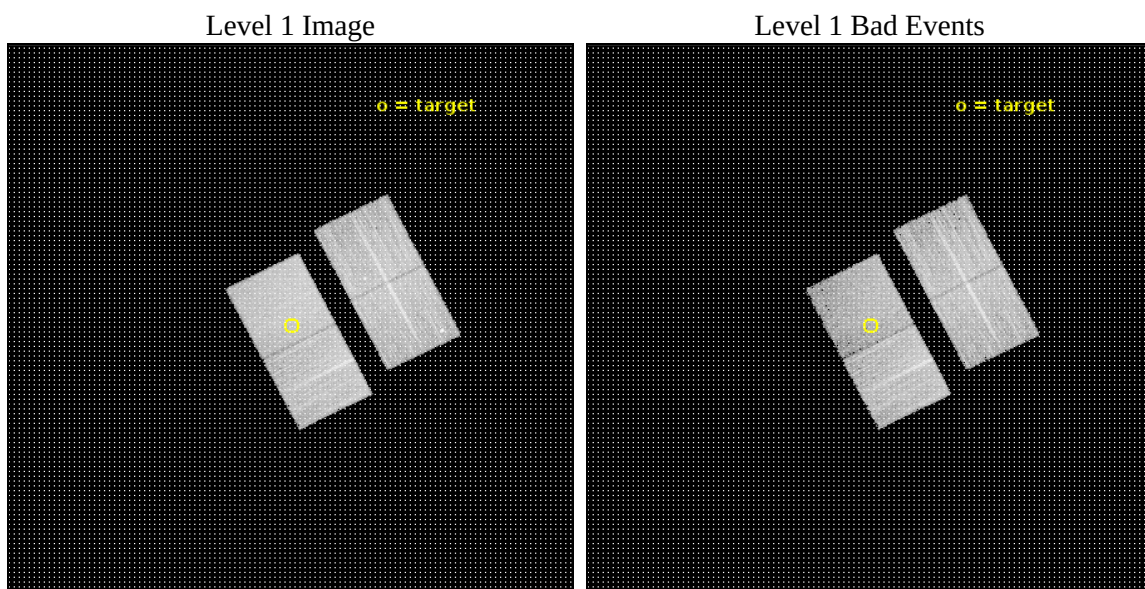
seq_num	703710	Sequence number
obs_id	22205	Observation id
title	Changing-Look Quasars: Radical Changes in Accretion Rate?	Proposal
observer	Paul Green	Principal investigator
object	SDSS J1226-0011	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.66112	Observer's specified target RA [deg]
dec_targ	-0.18725	Observer's specified target Dec [deg]
ra_nom	186.66343338822	Nominal RA [deg]
dec_nom	-0.19013824825738	Nominal Dec [deg]
roll_nom	243.15661054991	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12067.258671761	Sum of GTIs [s]
livetime	11909.591053427	Livetime [s]
ontime2	12063.994471431	Sum of GTIs [s]
ontime3	12067.176591754	Sum of GTIs [s]
ontime6	12067.217631817	Sum of GTIs [s]
ontime7	12067.258671761	Sum of GTIs [s]
l2events	66737	Number of level 2 events



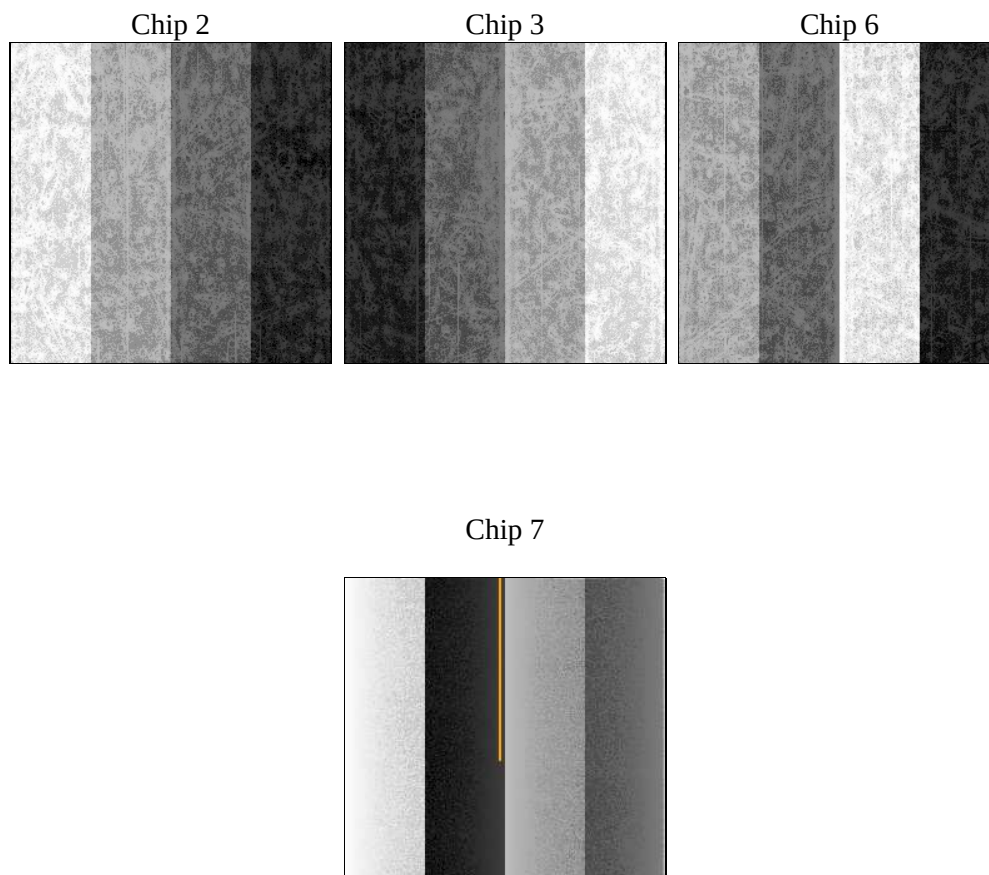
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	12067.258671761	Sum of GTIs [s]
caldsver	4.8.2	 	ontime2	12063.994471431	Sum of GTIs [s]
date	2019-05-09T19:57:22	Date and time of file creation	ontime3	12067.176591754	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	12067.217631817	Sum of GTIs [s]
			ontime7	12067.258671761	Sum of GTIs [s]
			l1events	357796	Number of level 1 events

2.1.4 Events

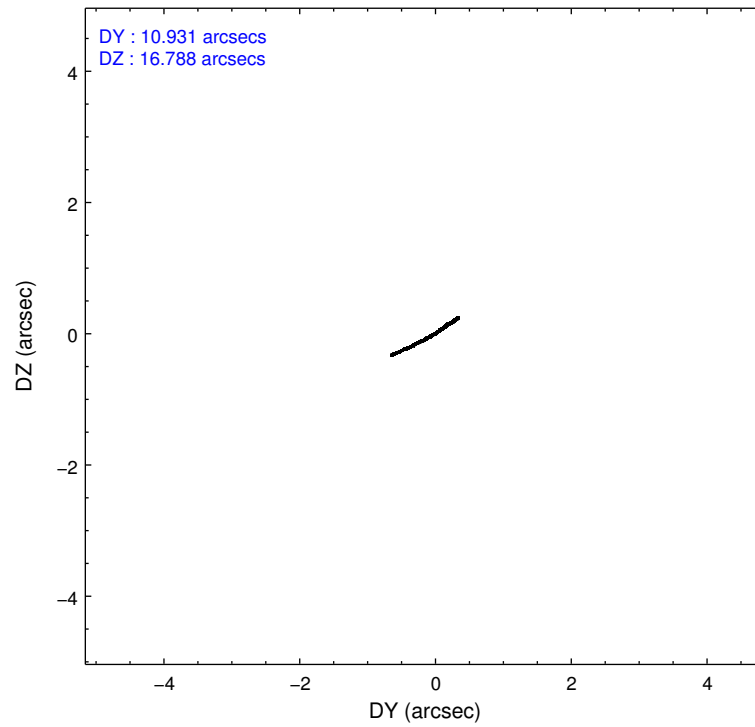
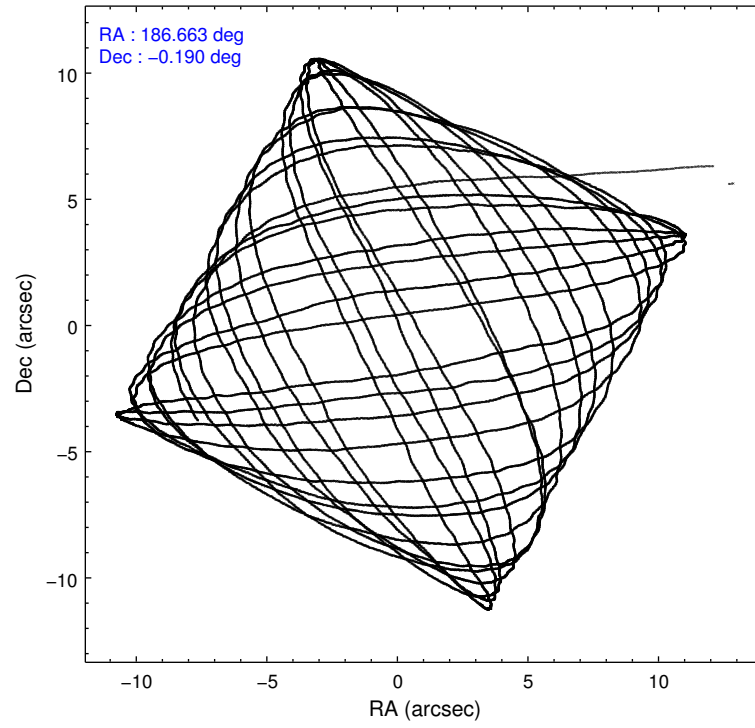
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	86842	85603	90030	95321
rejected events	77682	76812	80343	50685
rejected %	89%	89%	89%	53%

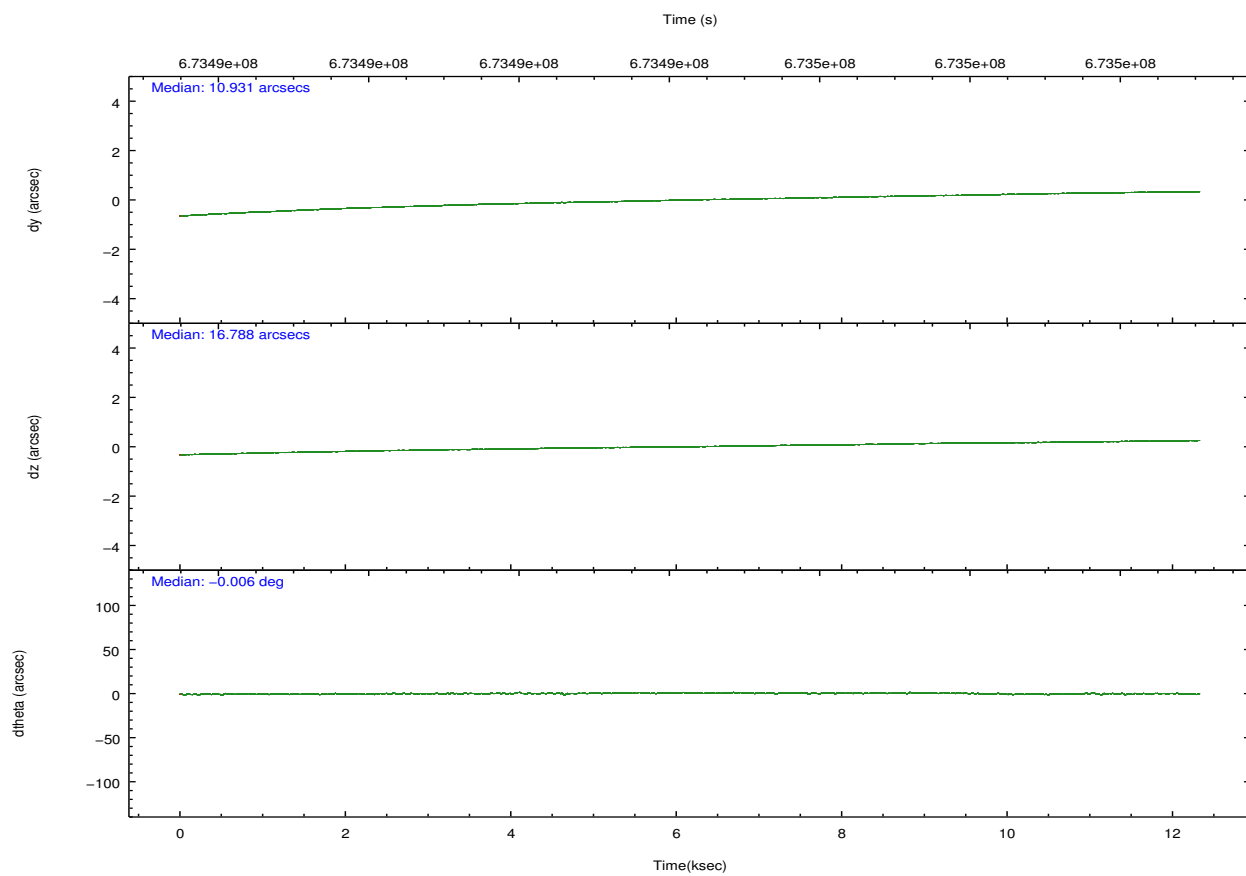
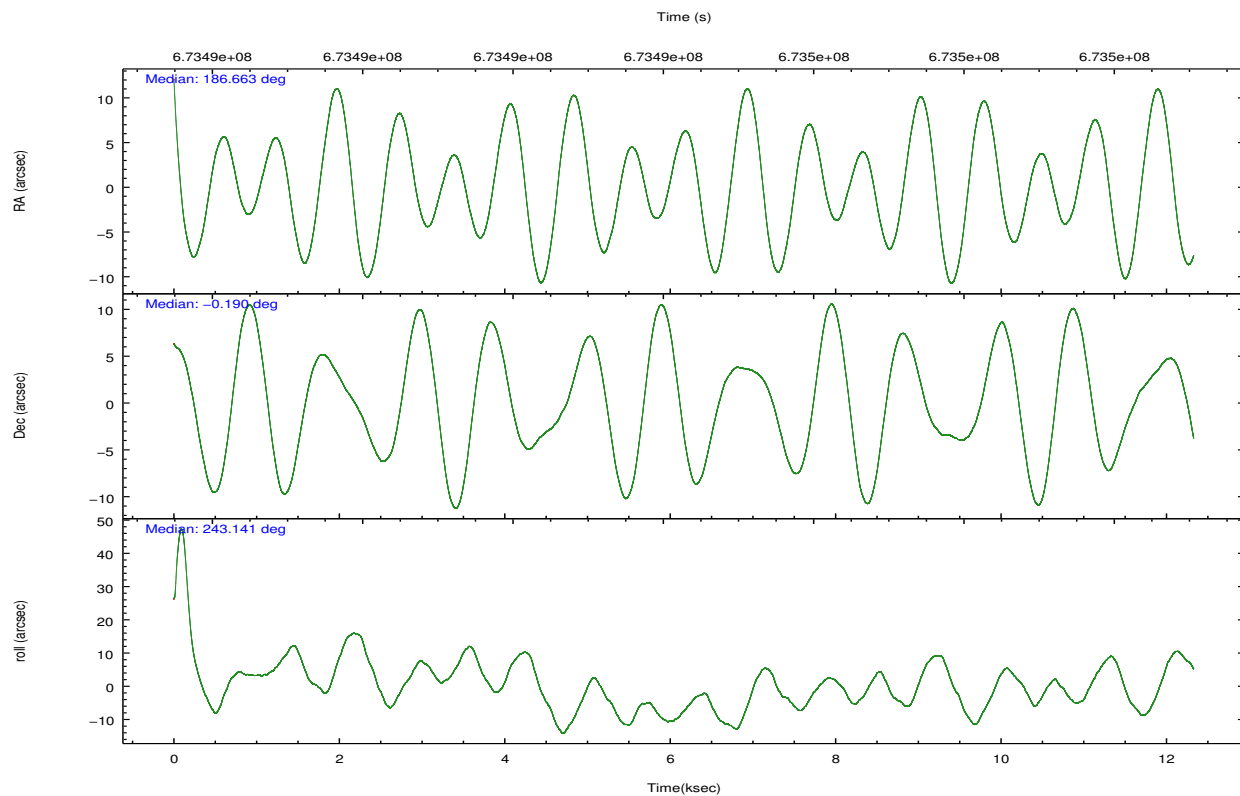
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	3877	3326	2951	4223
	4%	3%	3%	4%
grade 1 events	60	39	45	150
	0%	0%	0%	0%
grade 2 events	1941	1851	2614	9700
	2%	2%	2%	10%
grade 3 events	832	889	865	3607
	0%	1%	0%	3%
grade 4 events	859	905	818	3549
	0%	1%	0%	3%
grade 5 events	2792	3355	3186	9424
	3%	3%	3%	9%
grade 6 events	1651	1825	2440	23566
	1%	2%	2%	24%
grade 7 events	74830	73413	77111	41102
	86%	85%	85%	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	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	186.661575	186.6634333882156	Subarray requested	NONE	NONE
[deg] Pointing Dec	-0.162775	-0.1901382482573835	Alternating exposures requested	N	N
[deg] Pointing Roll	243.000006	243.1566105499079	[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)	673488420.184000	673487319.6328599			
Observation start date	2019-05-06T00:05:51	2019-05-05T23:48:39			
[s] Observation end time (MET)	673500420.184000	673501486.15871			
Observation end date	2019-05-06T03:25:51	2019-05-06T03:44:46			
Read mode	TIMED	TIMED			

2.3 Aspect



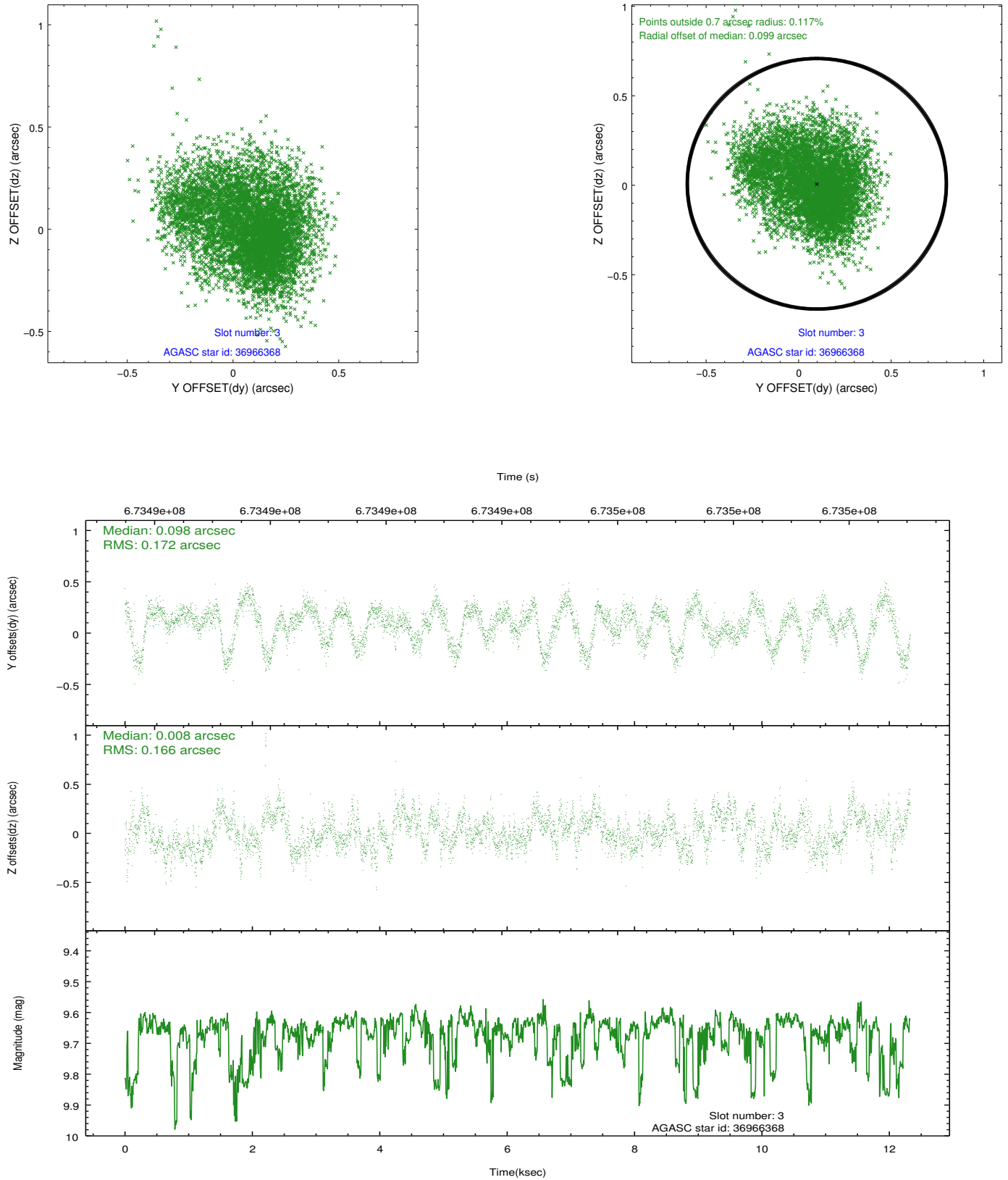


Slot Statistics

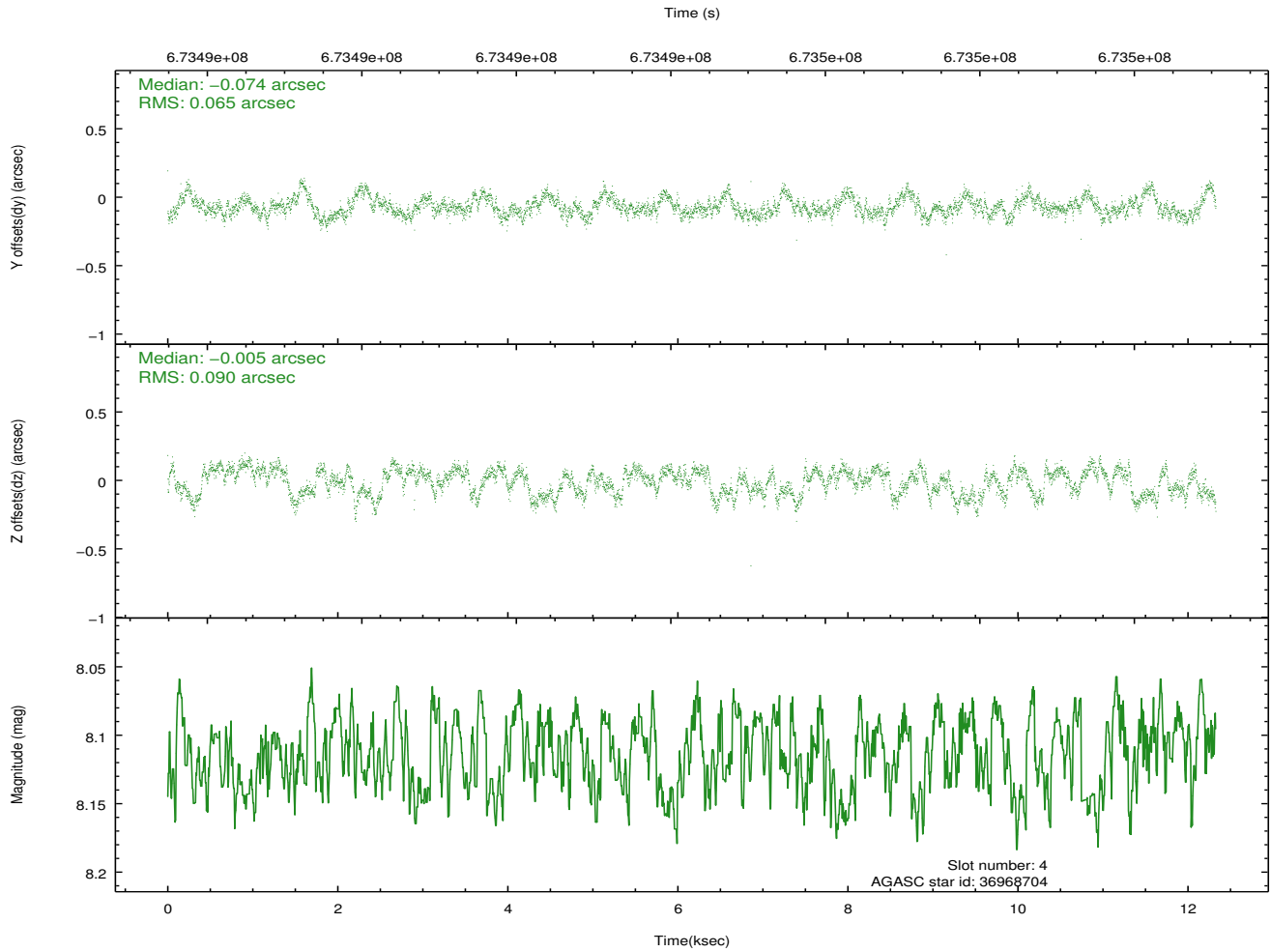
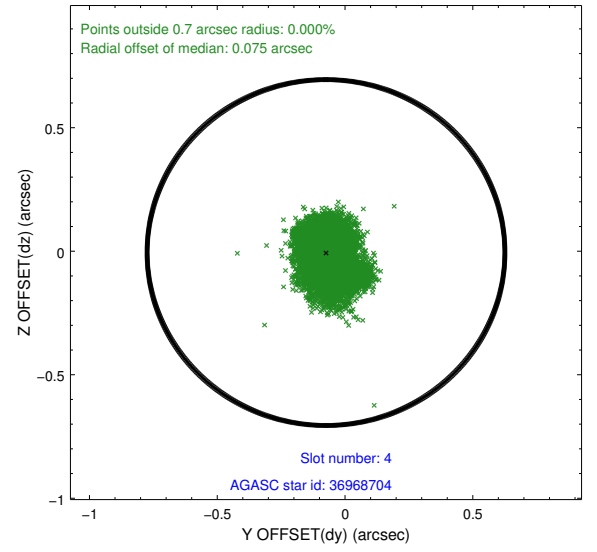
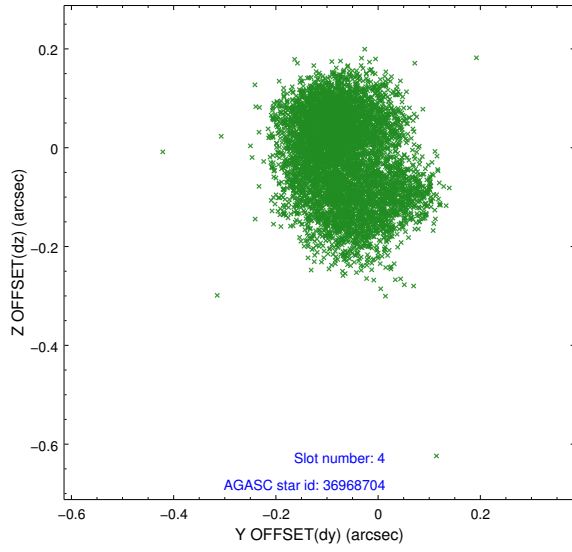
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.11	3008	1.000	-0.268	-0.163	0.010	0.023	0.000000	0.000000	-763.96	-1738
1	FID		ACIS-S-4	7.26	3008	1.000	0.671	0.172	0.007	0.013	0.000000	0.000000	2150.02	170
2	FID		ACIS-S-5	7.22	3008	1.000	-0.434	-0.001	0.011	0.021	0.000000	0.000000	-1816.51	163
3	GUIDE	used	36966368	9.66	5995	1.000	0.098	0.008	0.257	0.408	186.269790	0.401316	-1168.72	-2179
4	GUIDE	used	36968704	8.11	6014	1.000	-0.074	-0.005	0.119	0.185	186.570138	0.514751	-2023.08	-1401
5	GUIDE	used	36969392	8.74	6014	1.000	0.015	0.150	0.128	0.196	186.429114	0.515782	-1795.99	-1853
6	GUIDE	used	36970160	8.84	6007	1.000	-0.020	-0.141	0.111	0.178	186.752121	0.119529	-1053.15	-171
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

2.4 Star Slots

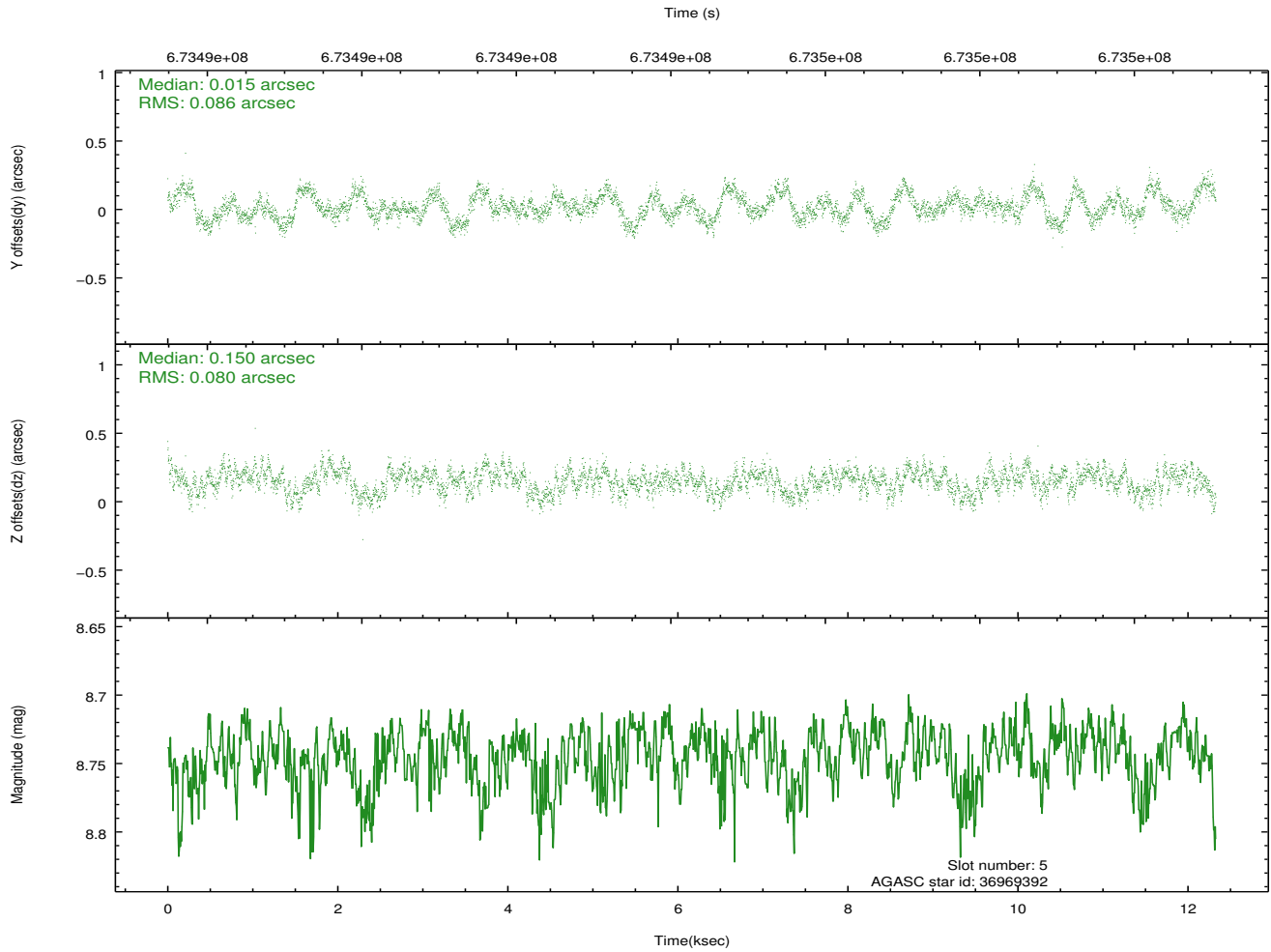
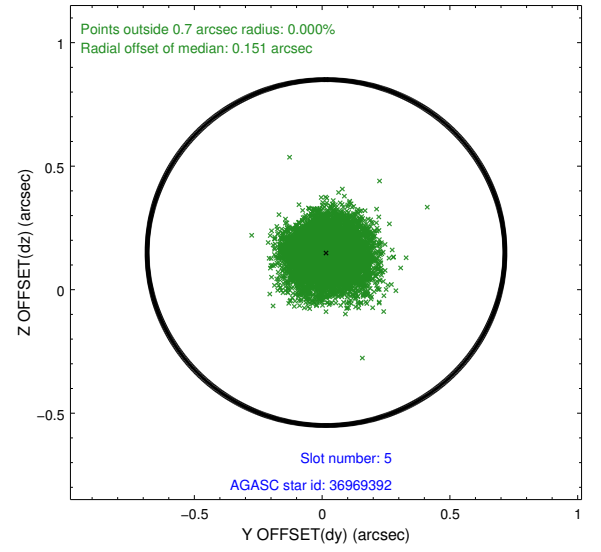
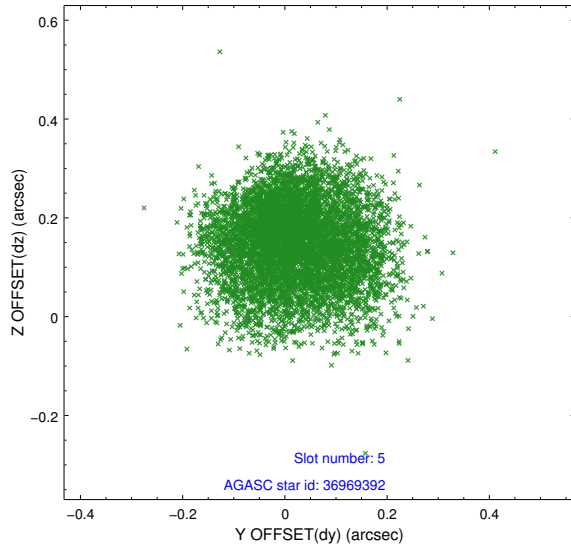
2.4.1 Slot 3



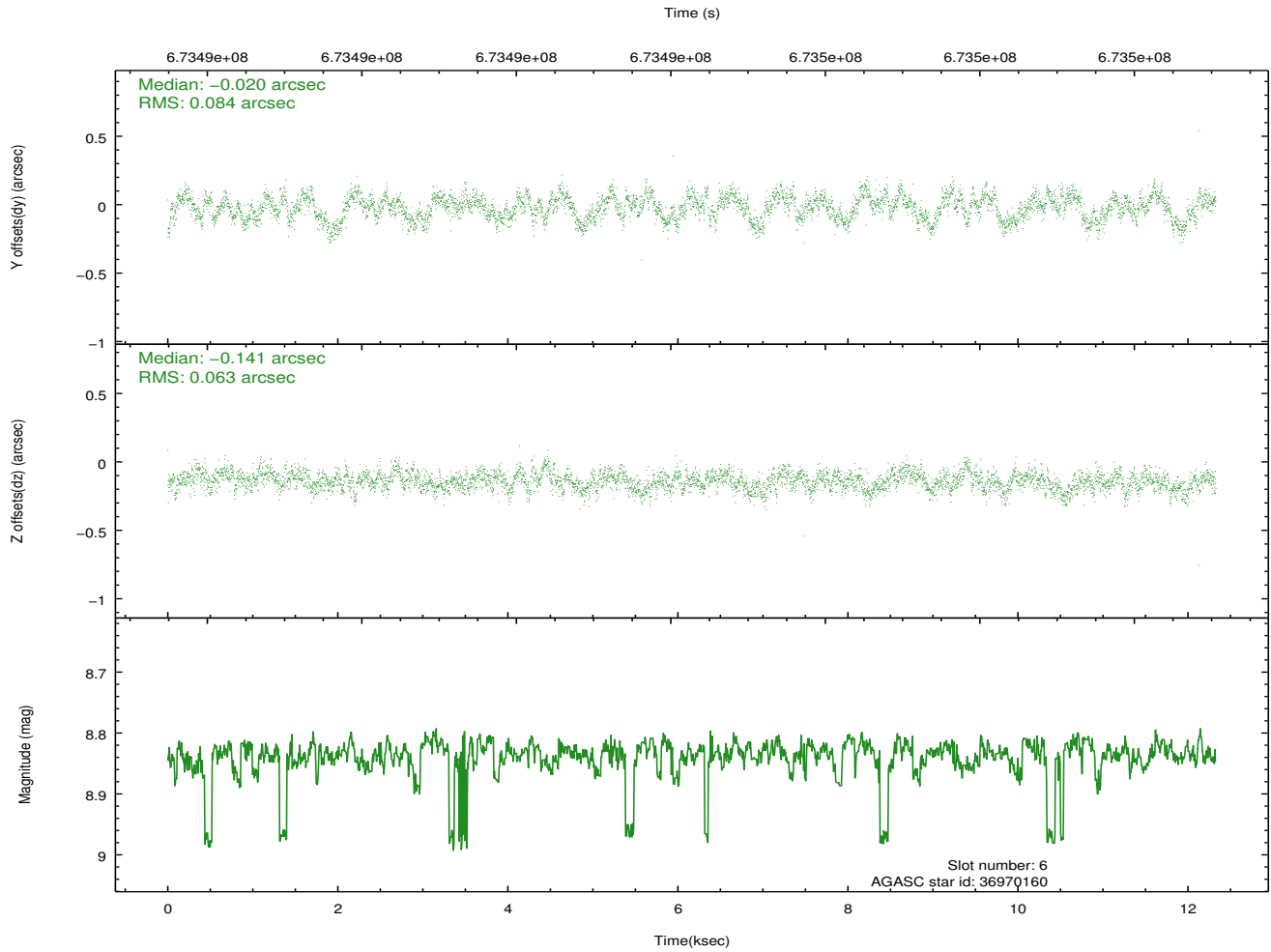
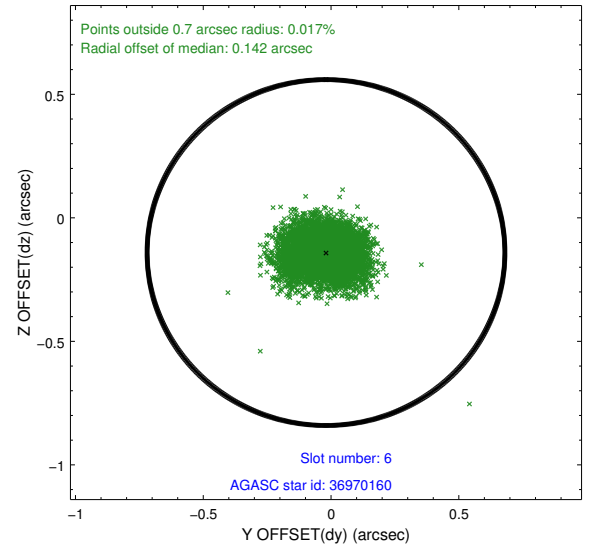
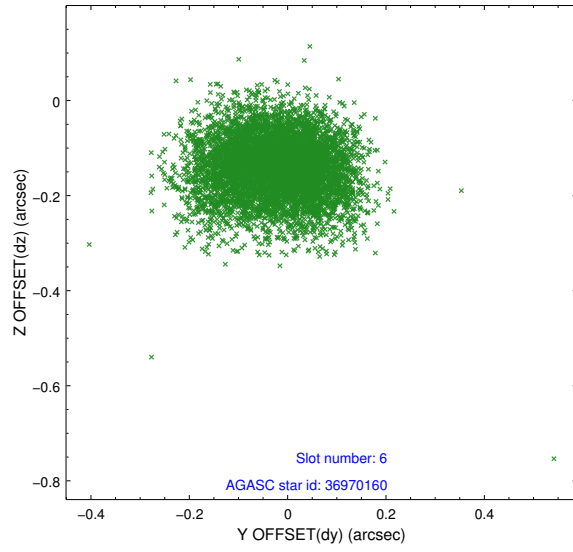
2.4.2 Slot 4



2.4.3 Slot 5

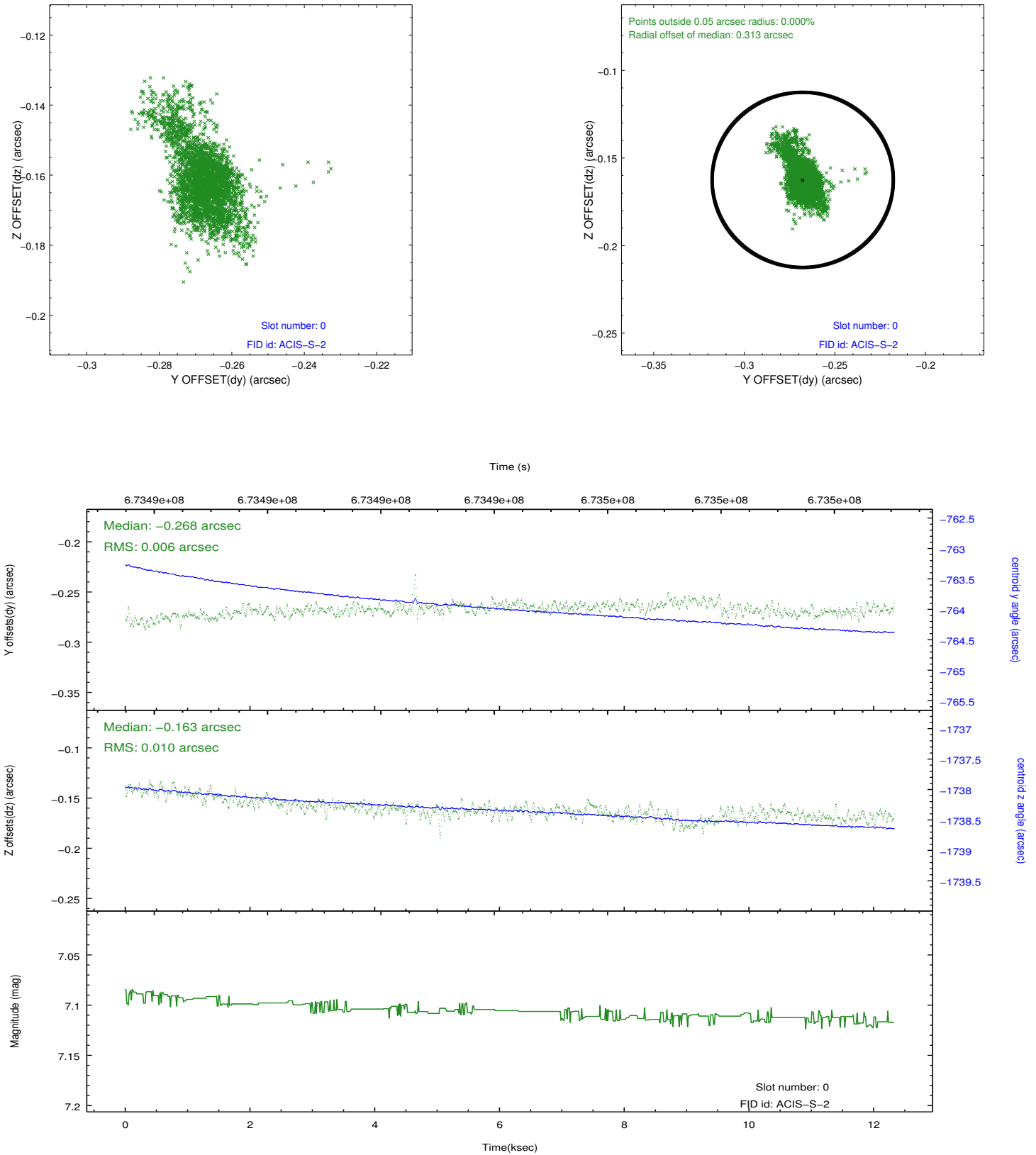


2.4.4 Slot 6

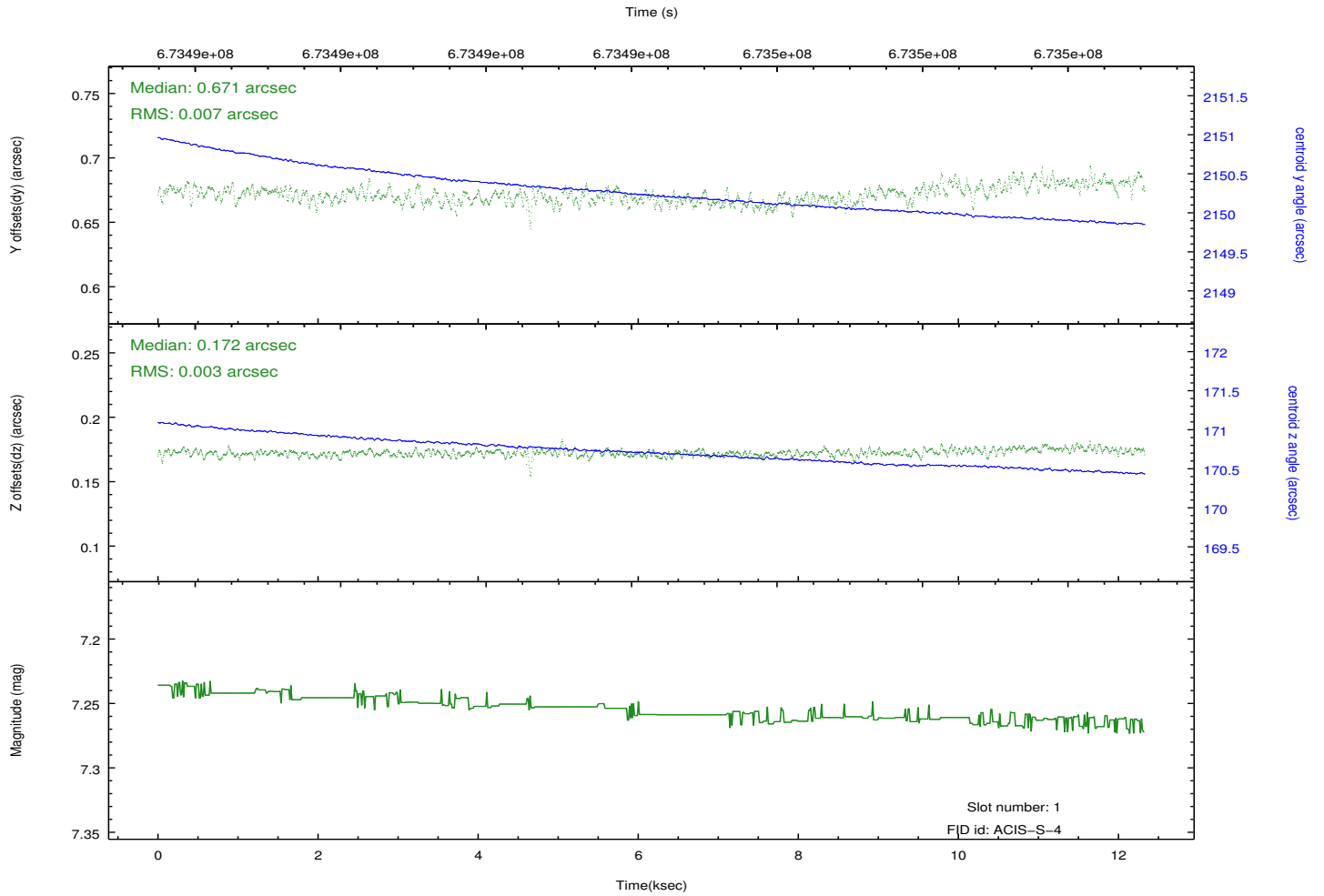
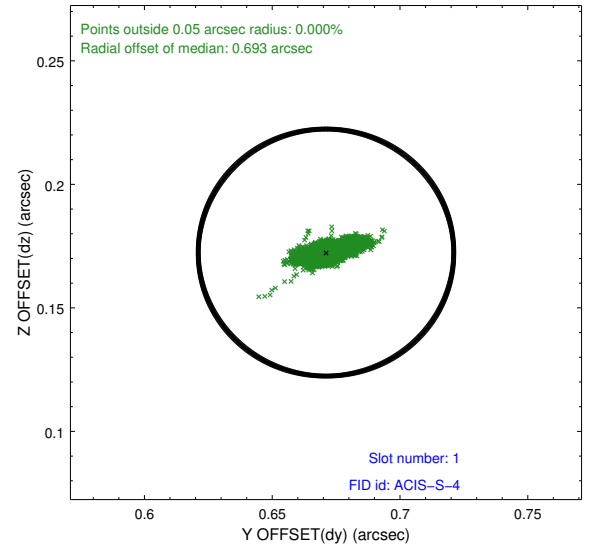
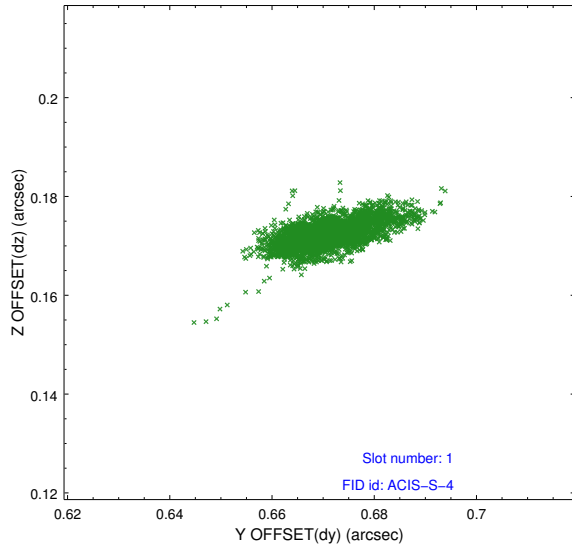


2.5 FID Slots

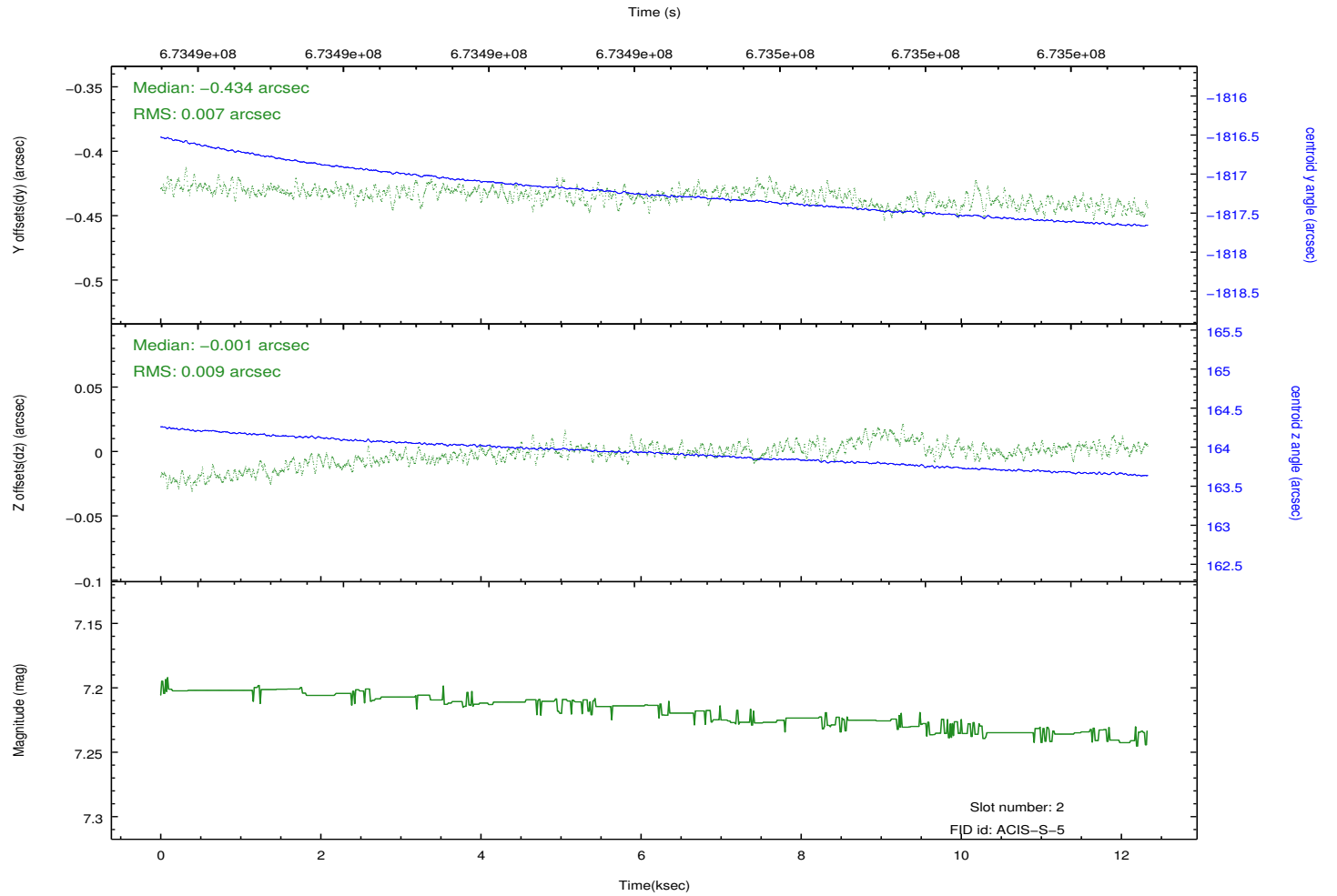
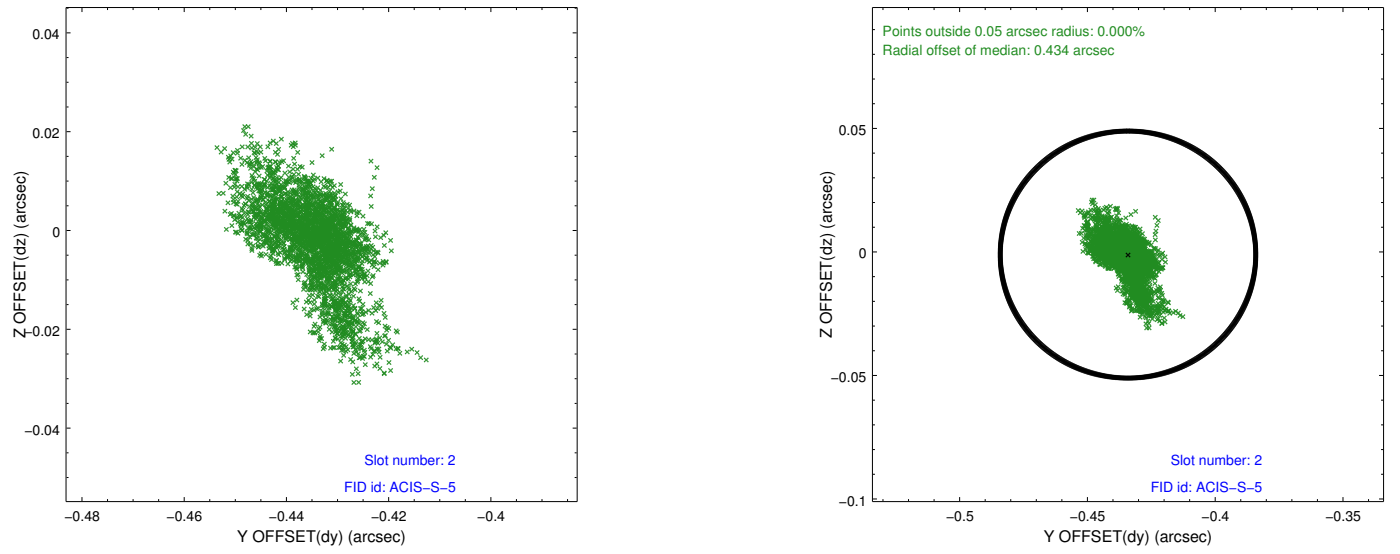
2.5.1 Slot 0



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)	2019.05.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.067258671761

A.2 Comments

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (186.53316,-0.05315), (186.52988,-0.05148), (186.51062,-0.08956), (186.51329,-0.09245).

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The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.

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Joint proposal with NRAO and NOAO.