

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 13931 - L2 Version 2
Chandra X-Ray Center

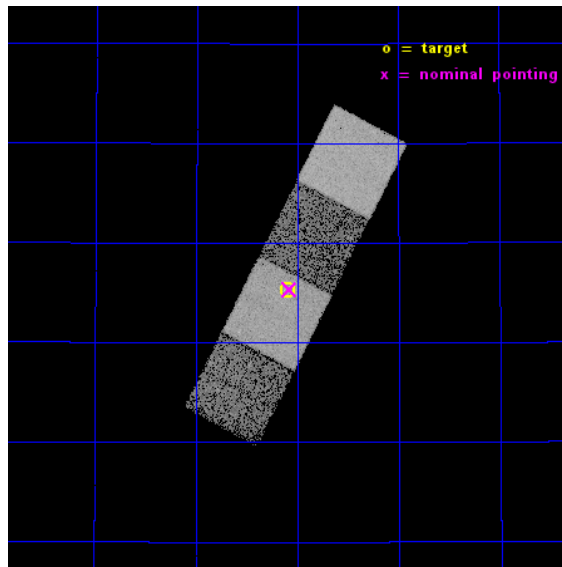
L2 Processing Date : Nov 30 2014

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1 Front

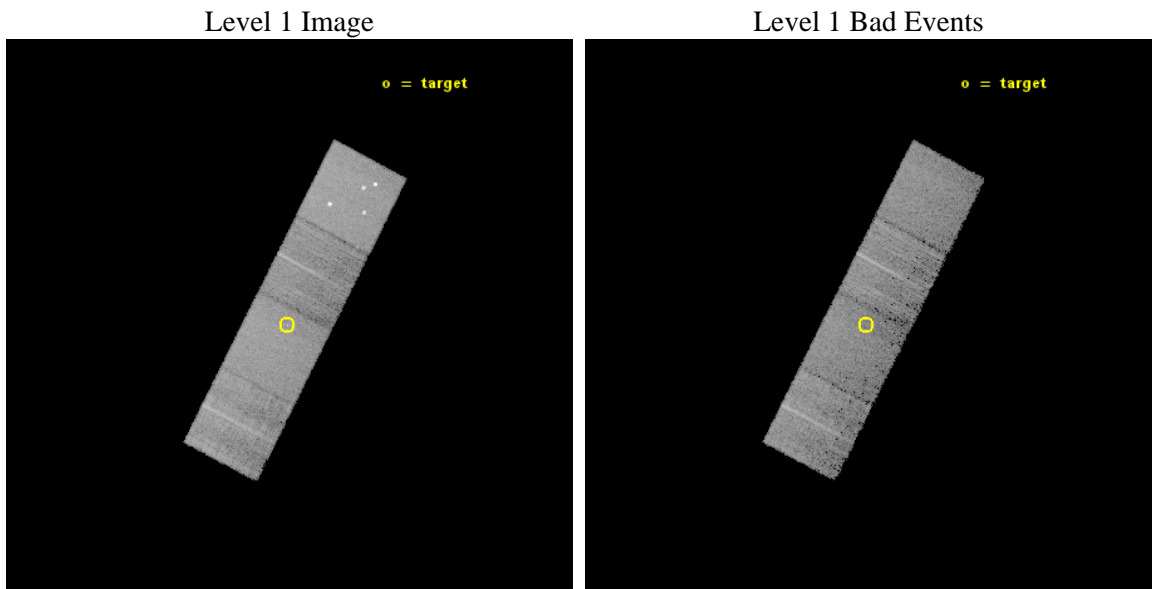
seq_num	702655	Sequence number
obs_id	13931	Observation id
title	Probing the High End of the Quasar Black Hole Mass Function	Propos
observer	Dr. Martin Elvis	Principal investigator
object	SDSS J085605.83+450520.0	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	134.024167	Observer's specified target RA [deg]
dec_targ	45.088889	Observer's specified target Dec [deg]
ra_nom	134.01987395222	Nominal RA [deg]
dec_nom	45.089118547919	Nominal Dec [deg]
roll_nom	117.35357221836	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10667.10008204	Sum of GTIs [s]
livetime	10527.726566463	Livetime [s]
ontime5	10667.10008204	Sum of GTIs [s]
ontime6	10667.10008204	Sum of GTIs [s]
ontime7	10667.10008204	Sum of GTIs [s]
ontime8	10667.10008204	Sum of GTIs [s]
l2events	87334	Number of level 2 events



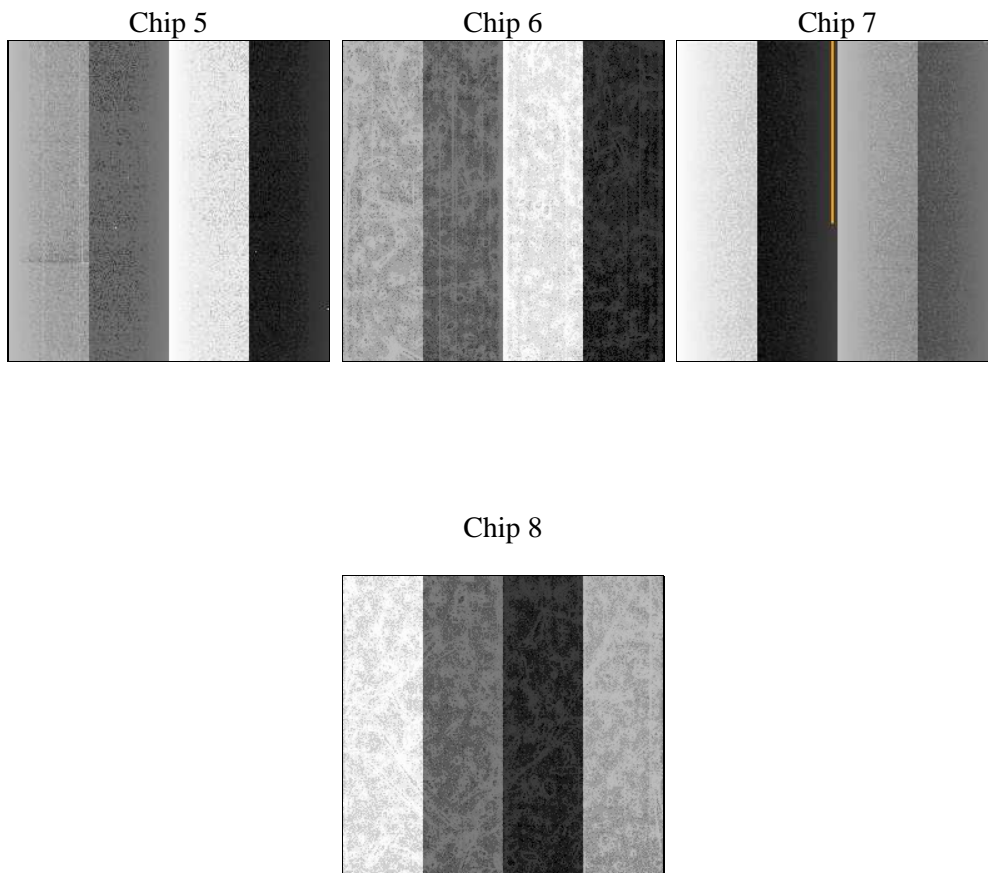
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10600.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10667.10008204	Sum of GTIs [s]
caldbver	4.6.4	 	ontime5	10667.10008204	Sum of GTIs [s]
date	2014-11-30T19:52:58	Date and time of file creation	ontime6	10667.10008204	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	10667.10008204	Sum of GTIs [s]
			ontime8	10667.10008204	Sum of GTIs [s]
			l1events	309053	Number of level 1 events

2.1.4 Events

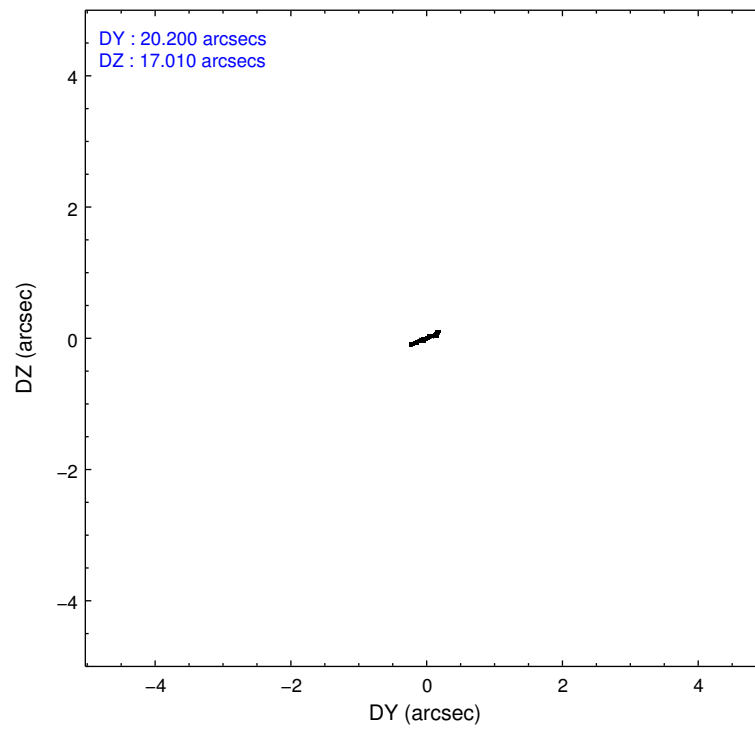
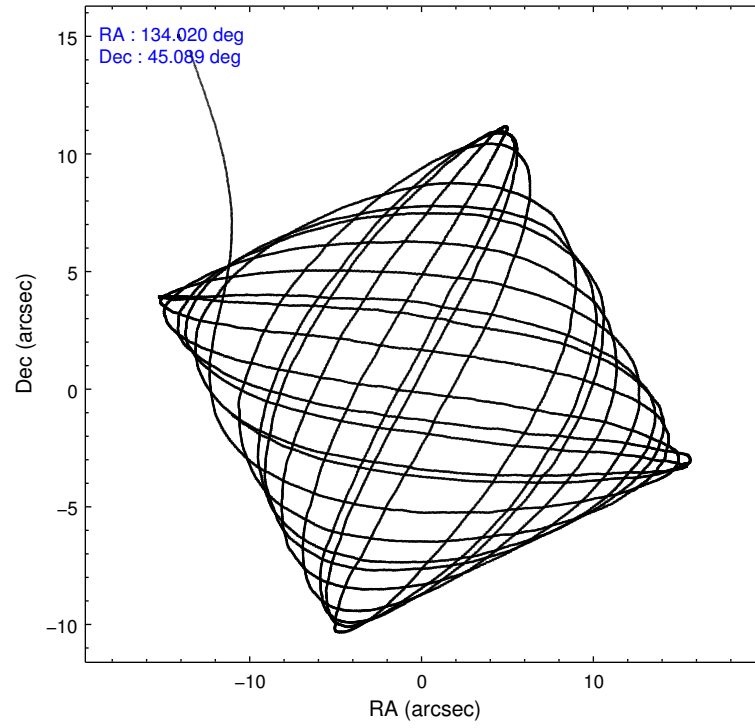
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	101125	57791	77741	72396
rejected events	48289	51002	44299	53655
rejected %	47%	88%	56%	74%

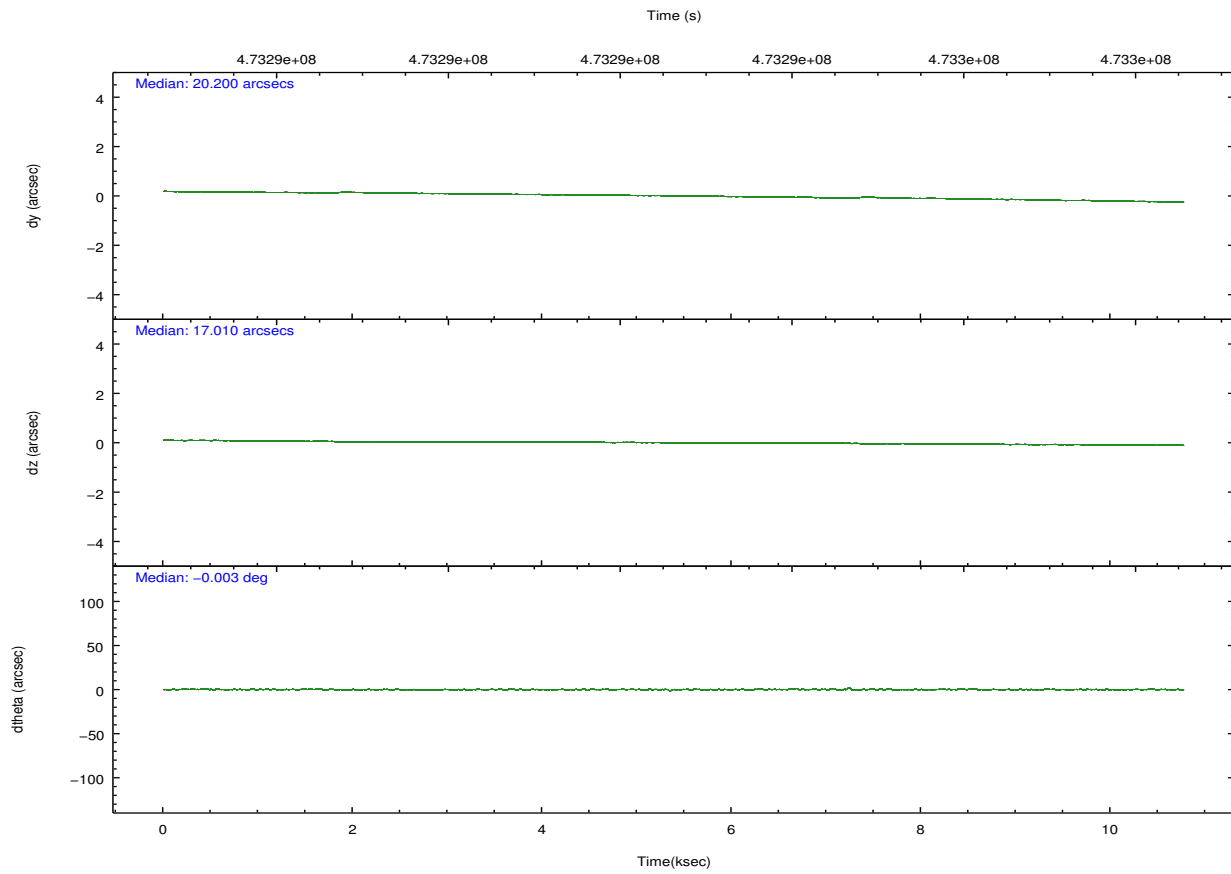
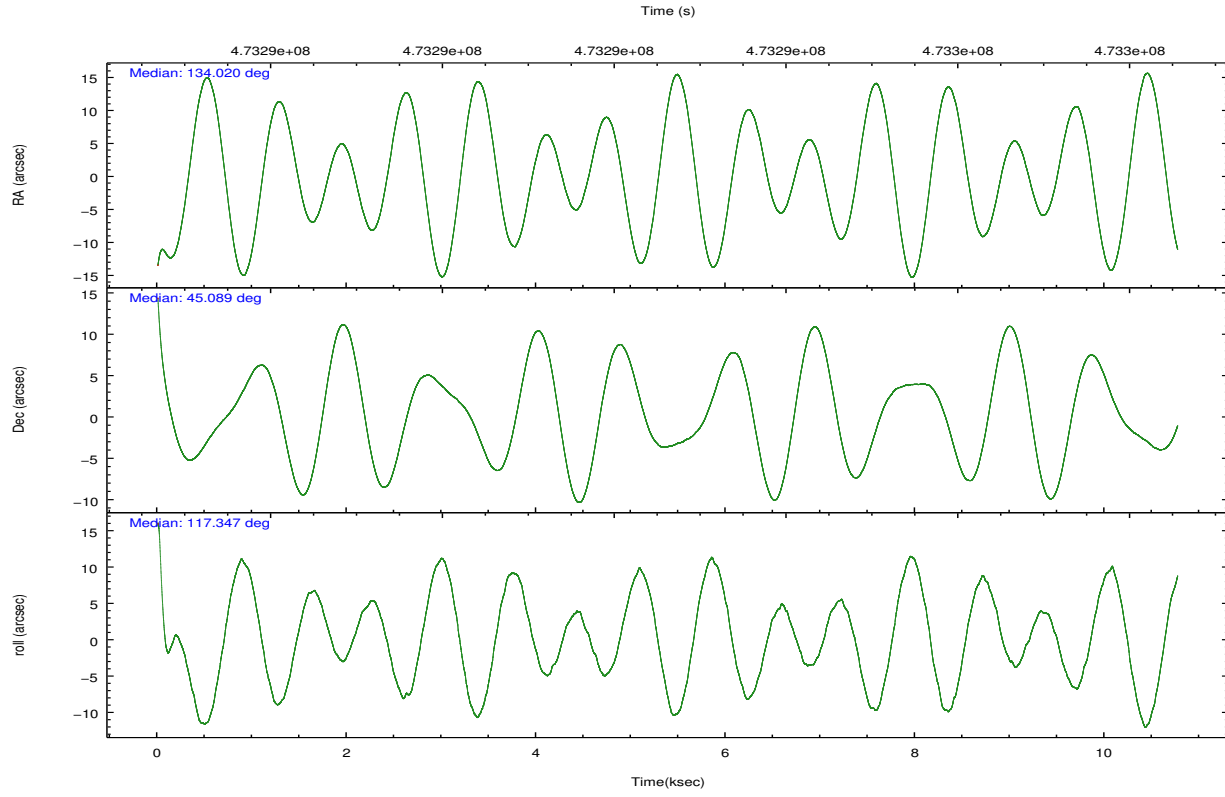
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	8905	2278	2939	5081
	8%	3%	3%	7%
grade 1 events	148	26	69	48
	0%	0%	0%	0%
grade 2 events	16626	1556	6841	4521
	16%	2%	8%	6%
grade 3 events	1497	714	2737	2024
	1%	1%	3%	2%
grade 4 events	1427	669	2813	1895
	1%	1%	3%	2%
grade 5 events	6807	2889	8067	4204
	6%	4%	10%	5%
grade 6 events	24421	1577	18137	5225
	24%	2%	23%	7%
grade 7 events	41294	48082	36138	49398
	40%	83%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	134.052777	134.019873952224	Subarray requested	NONE	NONE
[deg] Pointing Dec	45.074715	45.08911854791877	Alternating exposures requested	N	N
[deg] Pointing Roll	117.173627	117.3535722183555	[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)	473287411.184000	473286382.02335			
Observation start date	2012-12-30T20:42:24	2012-12-30T20:26:22			
[s] Observation end time (MET)	473298011.184000	473298774.27401			
Observation end date	2012-12-30T23:39:04	2012-12-30T23:52:54			
Read mode	TIMED	TIMED			

2.3 Aspect





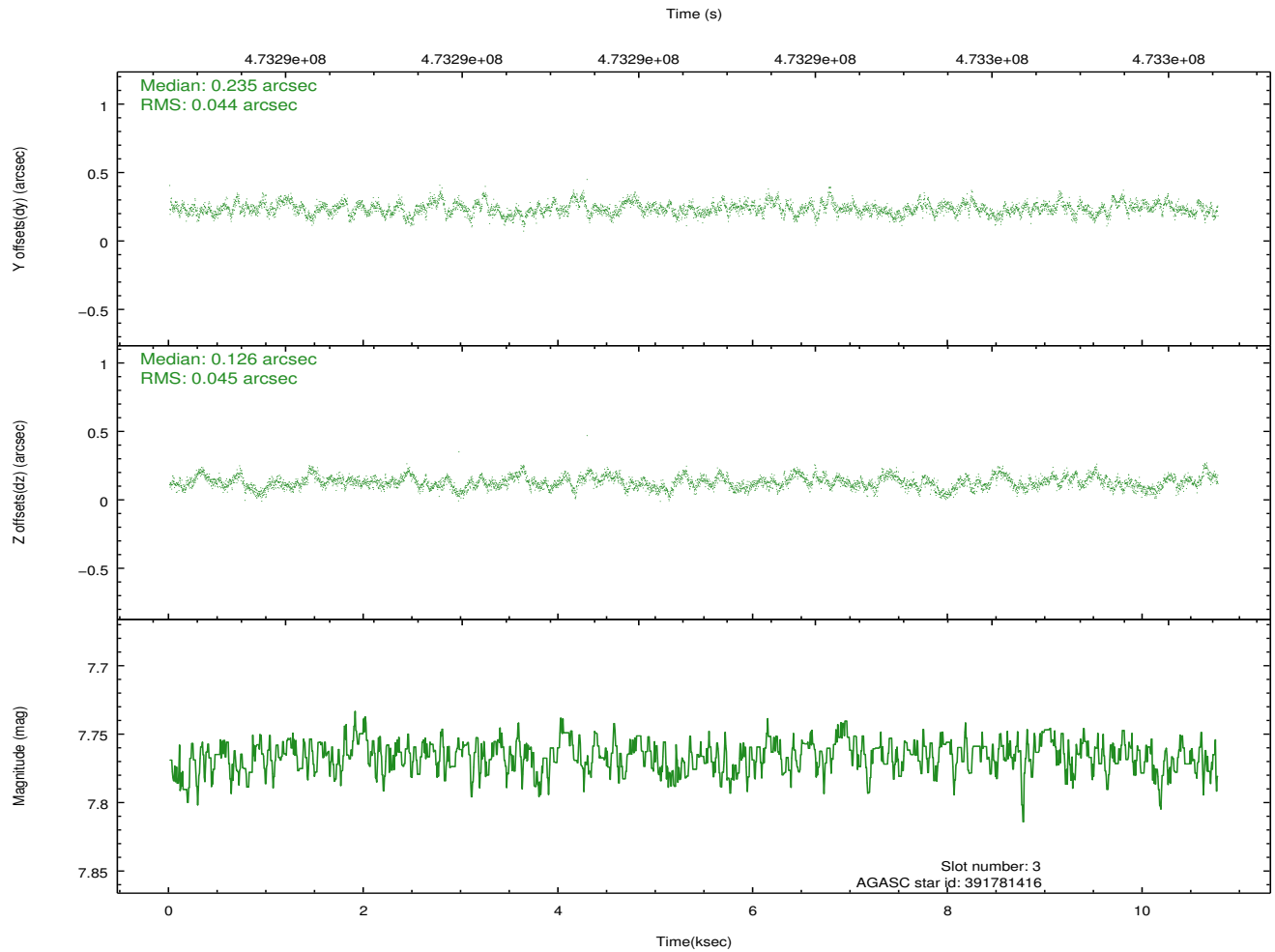
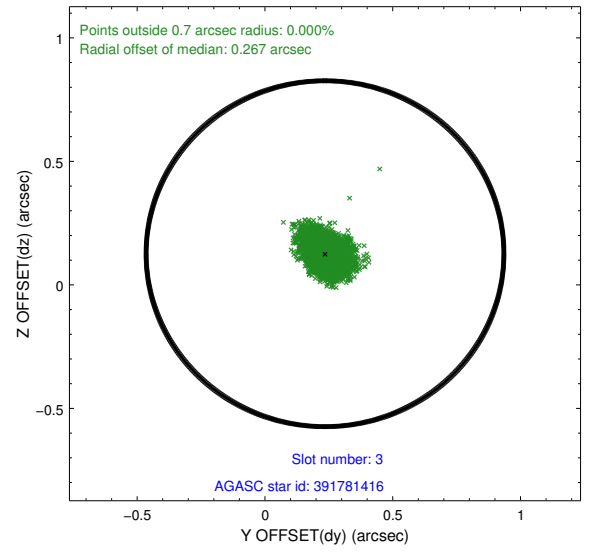
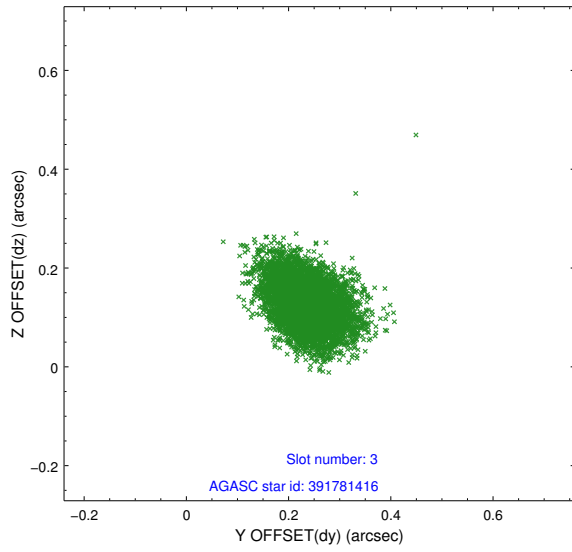
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	2627	-0.131	-0.056	0.007	0.011	0.000000	0.000000	-773.46	-1738.43
1	FID		ACIS-S-4	7.14	2627	0.297	0.078	0.006	0.011	0.000000	0.000000	2140.05	169.64
2	FID		ACIS-S-5	7.17	2627	-0.197	-0.014	0.007	0.012	0.000000	0.000000	-1825.72	163.83
3	GUIDE	used	391781416	7.77	5250	0.235	0.126	0.066	0.111	134.030668	44.352715	-2286.03	1237.78
4	GUIDE	used	391787320	8.03	5253	0.257	0.004	0.070	0.119	133.954936	44.662079	-1207.95	901.38
5	GUIDE	used	447874400	8.33	5251	-0.096	-0.099	0.089	0.139	133.900863	45.661997	2055.45	-625.15
6	GUIDE	used	447886584	7.15	5252	-0.002	0.139	0.064	0.109	134.140922	45.764114	2107.73	-1329.96
7	GUIDE	used	391654448	9.41	5238	-0.397	-0.184	0.133	0.226	133.231060	44.903081	416.64	2141.18

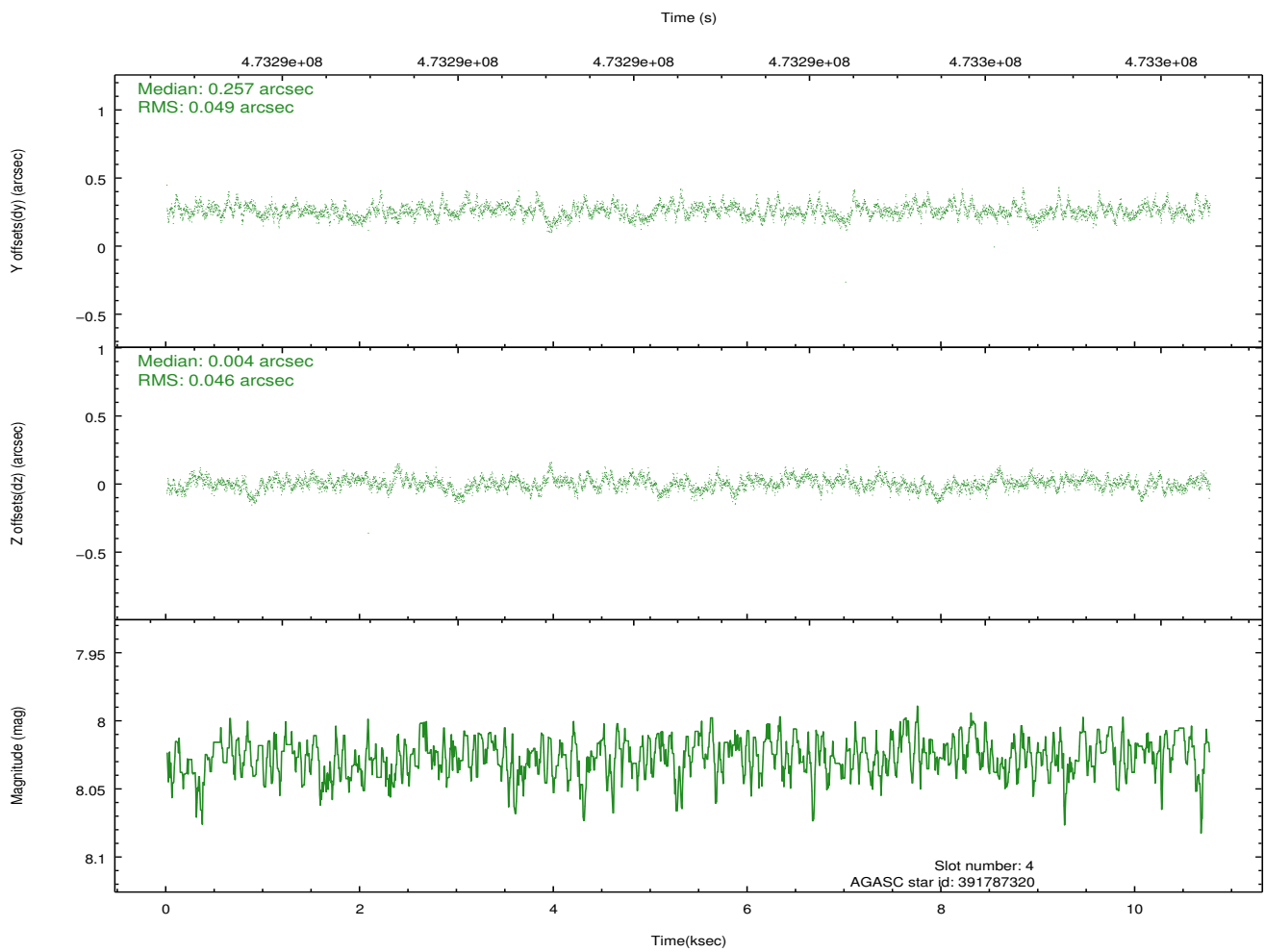
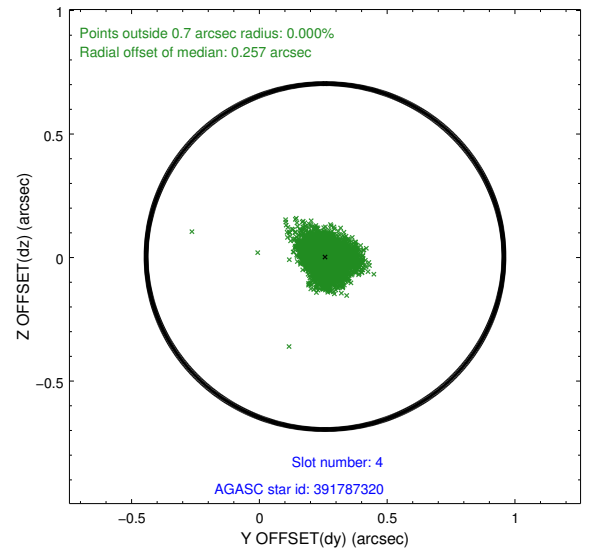
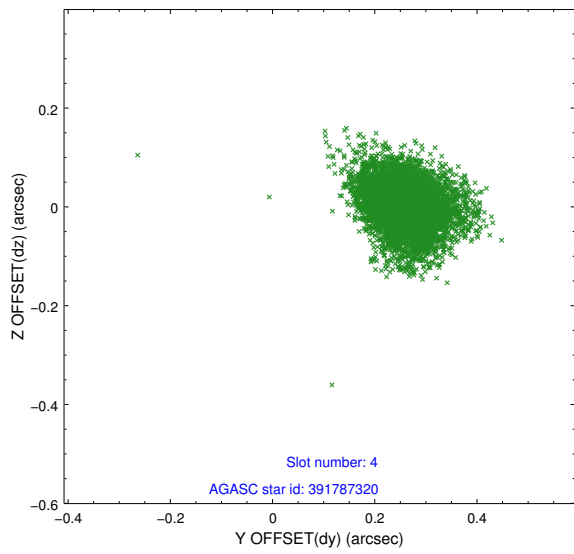
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2.4 Star Slots

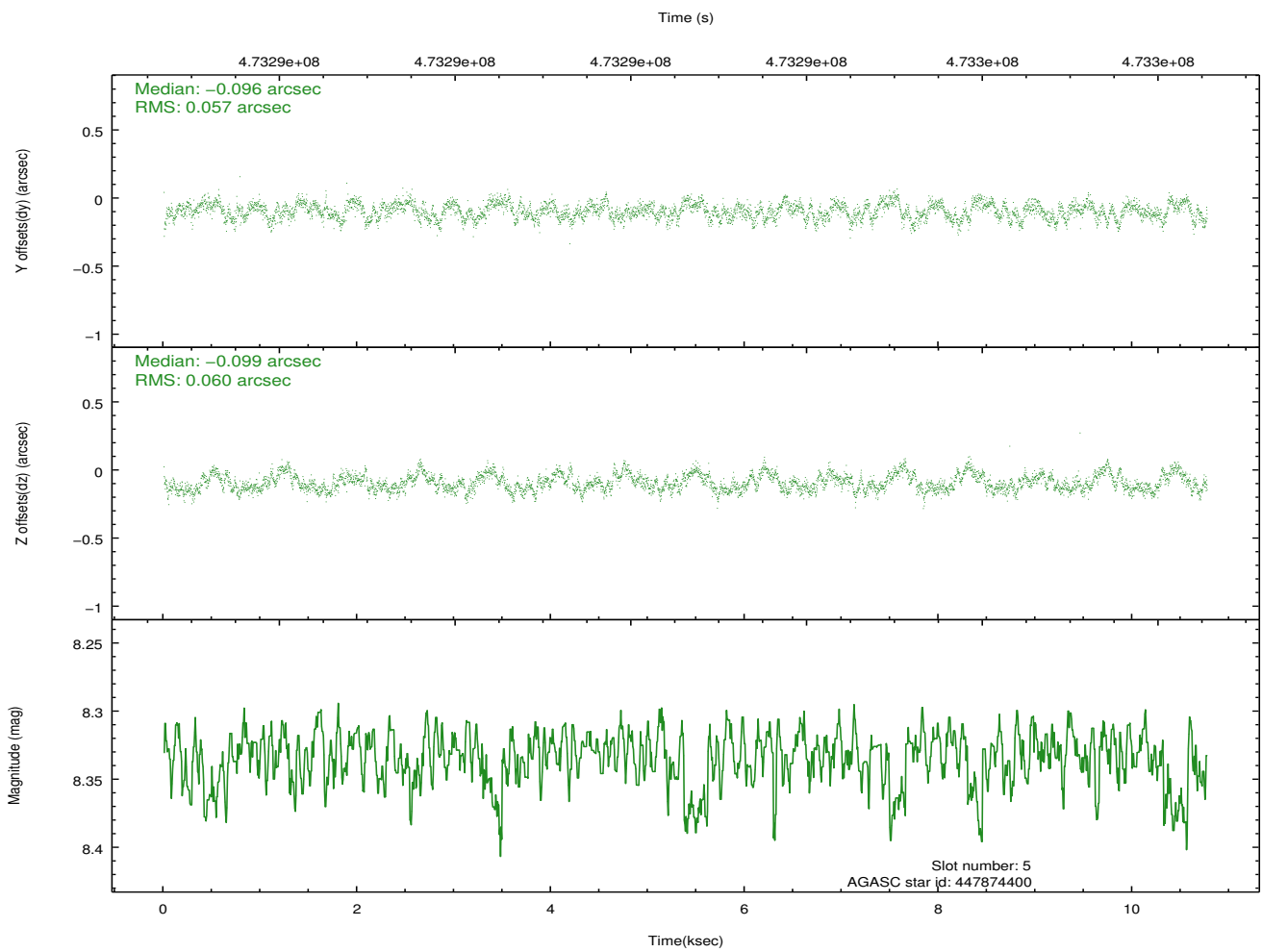
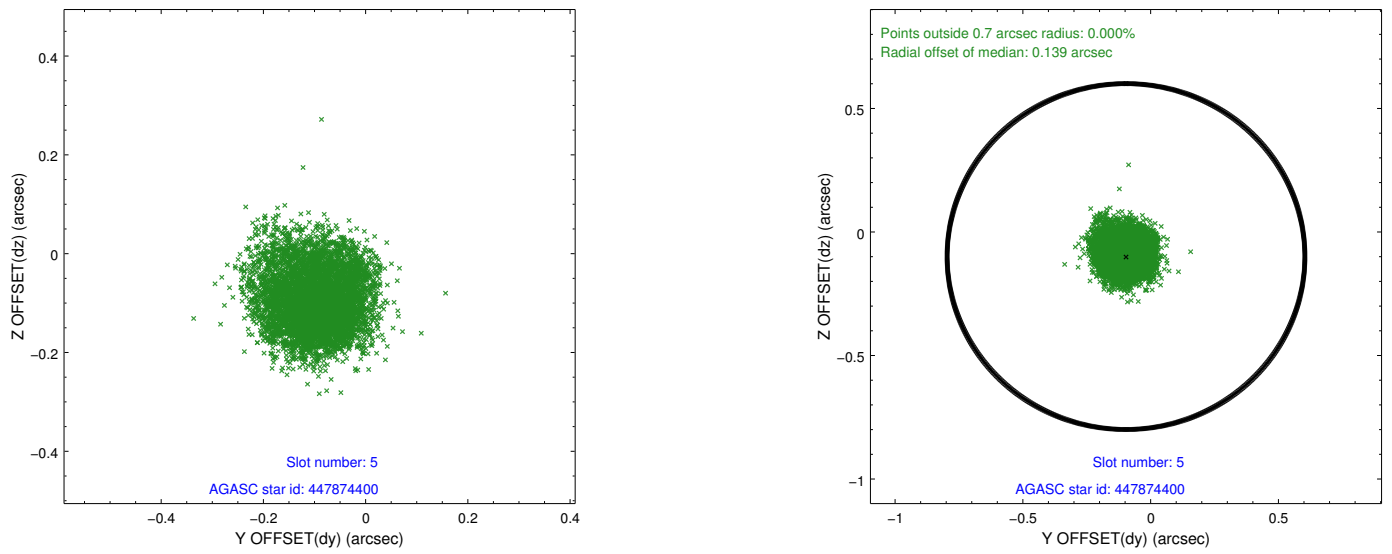
2.4.1 Slot 3



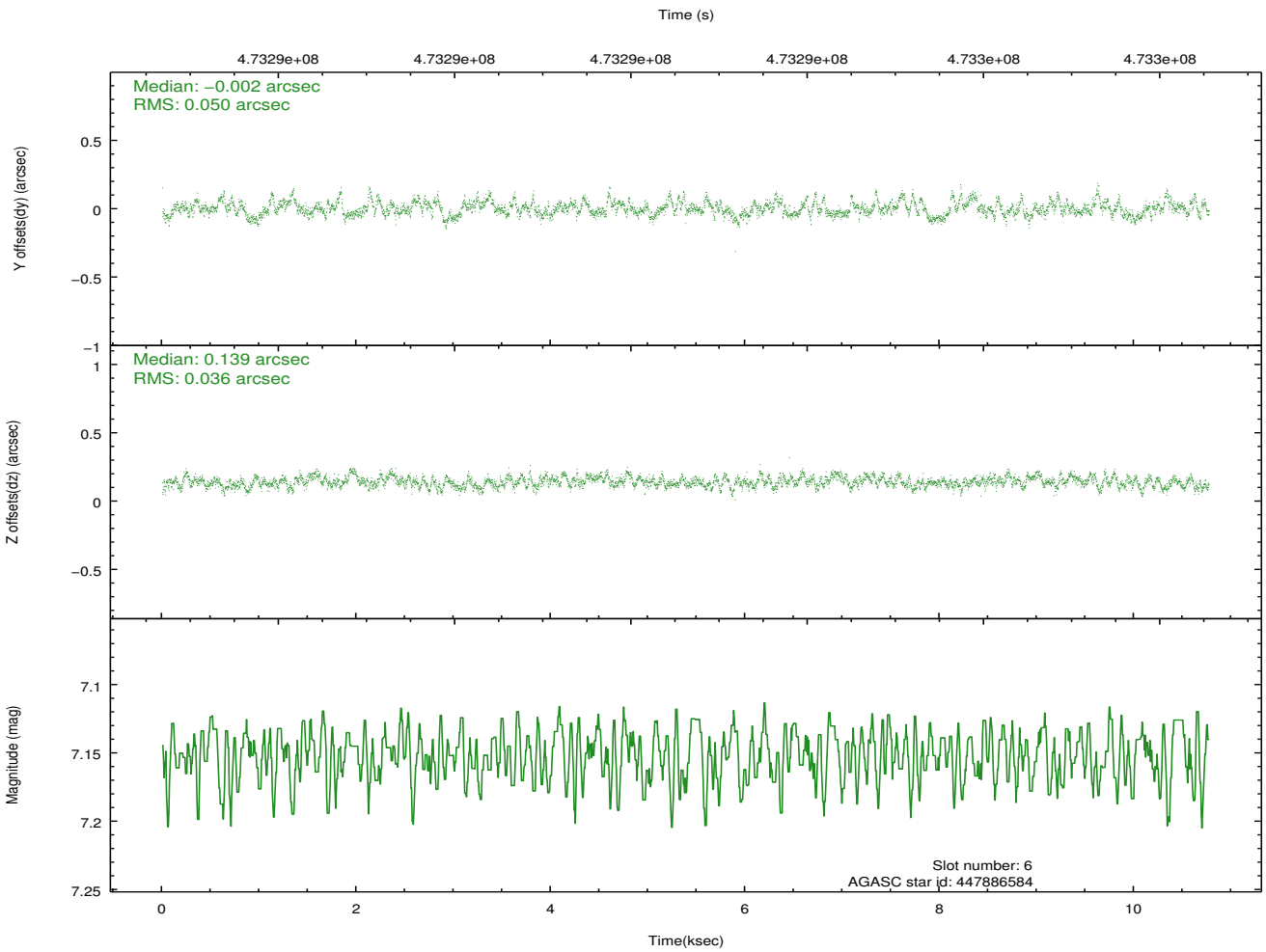
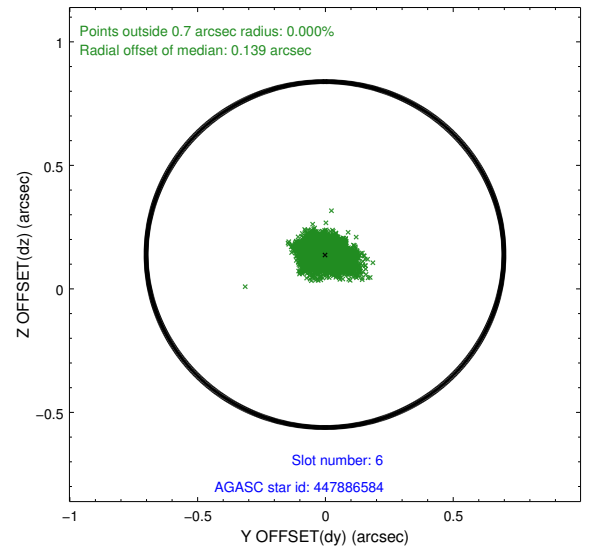
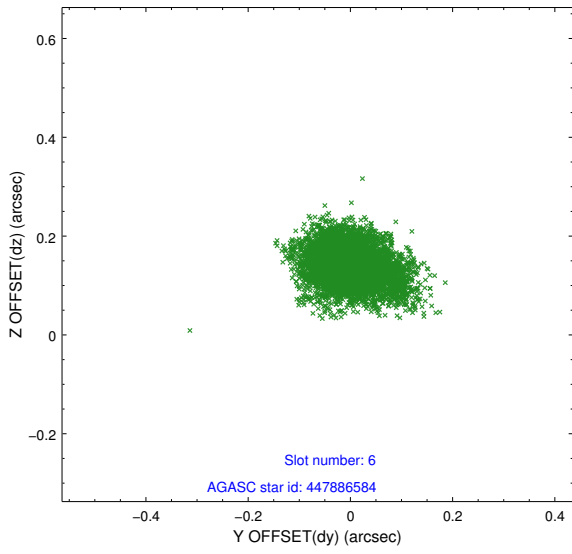
2.4.2 Slot 4



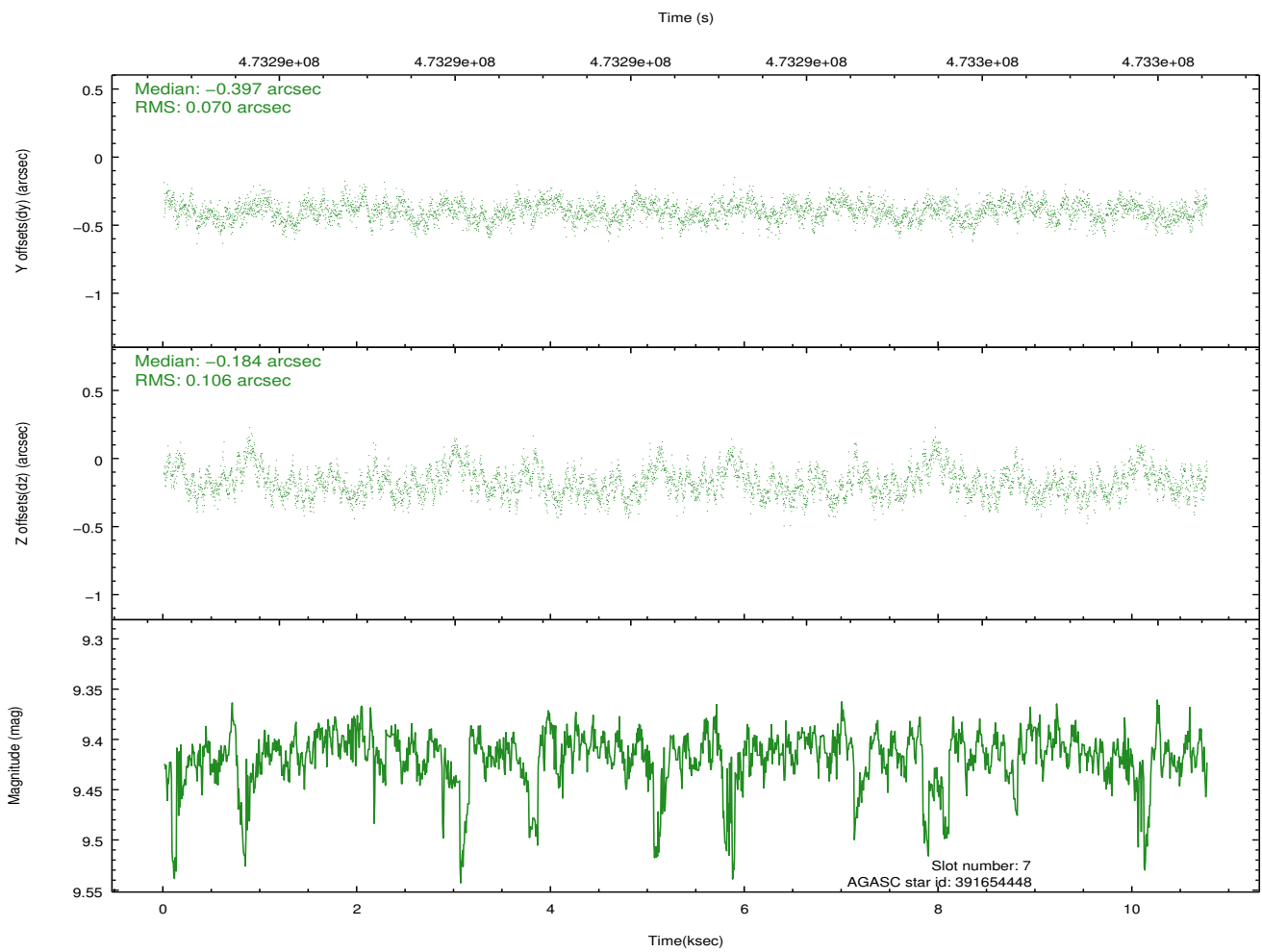
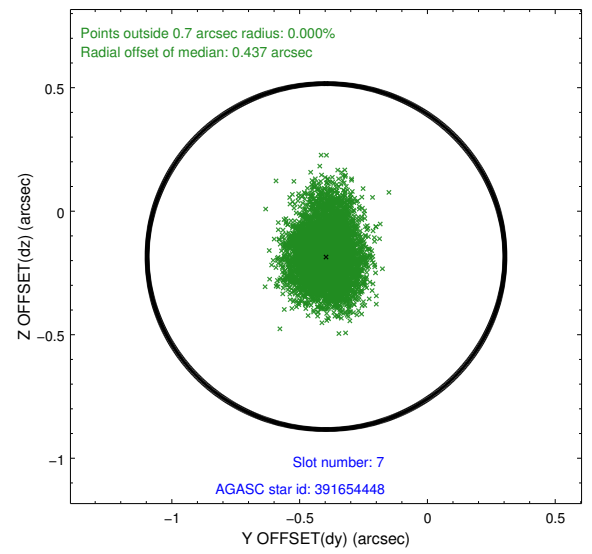
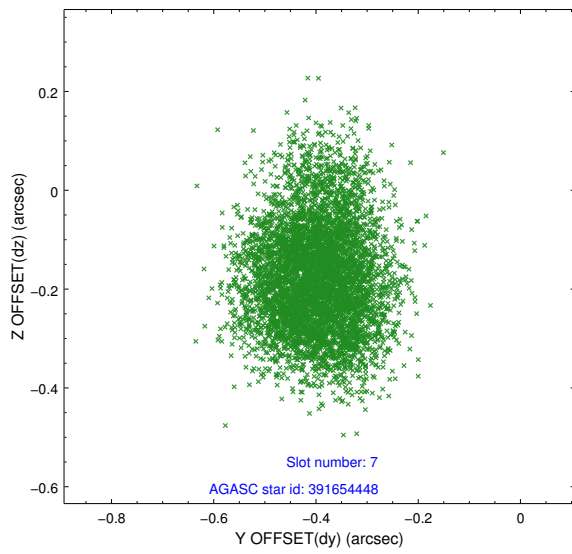
2.4.3 Slot 5



2.4.4 Slot 6

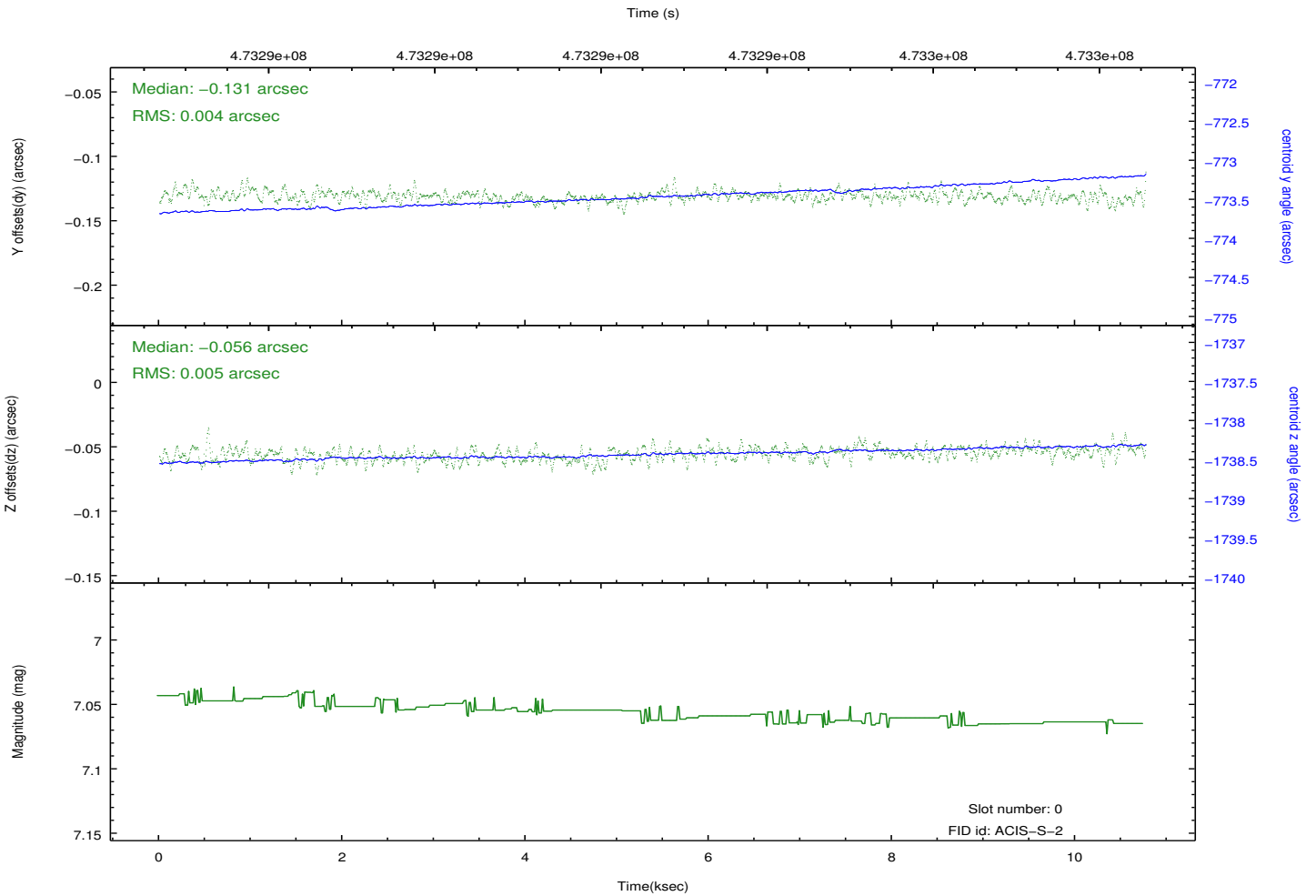
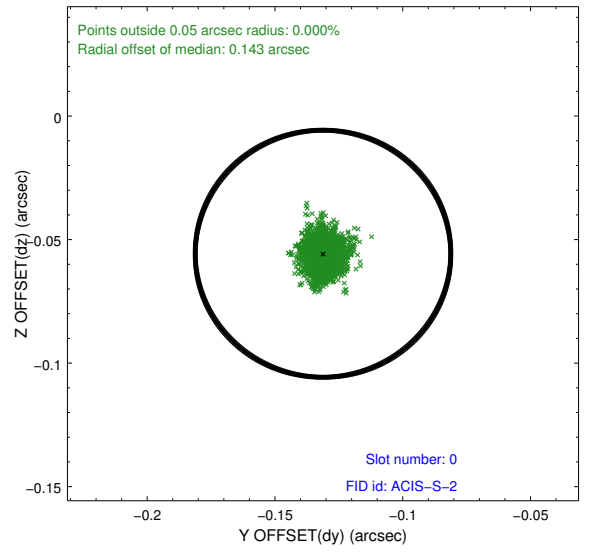
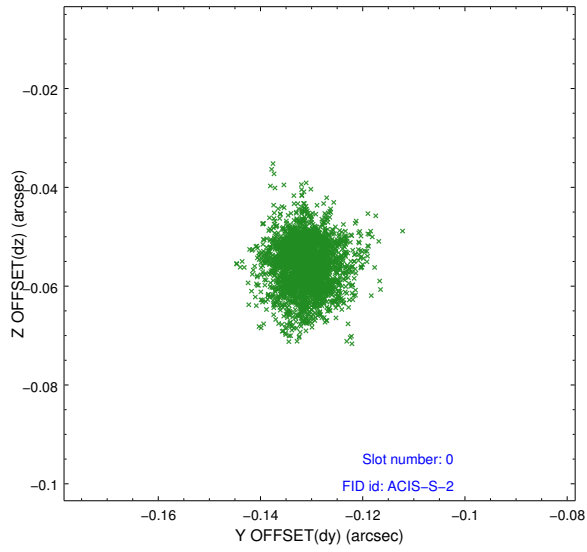


2.4.5 Slot 7

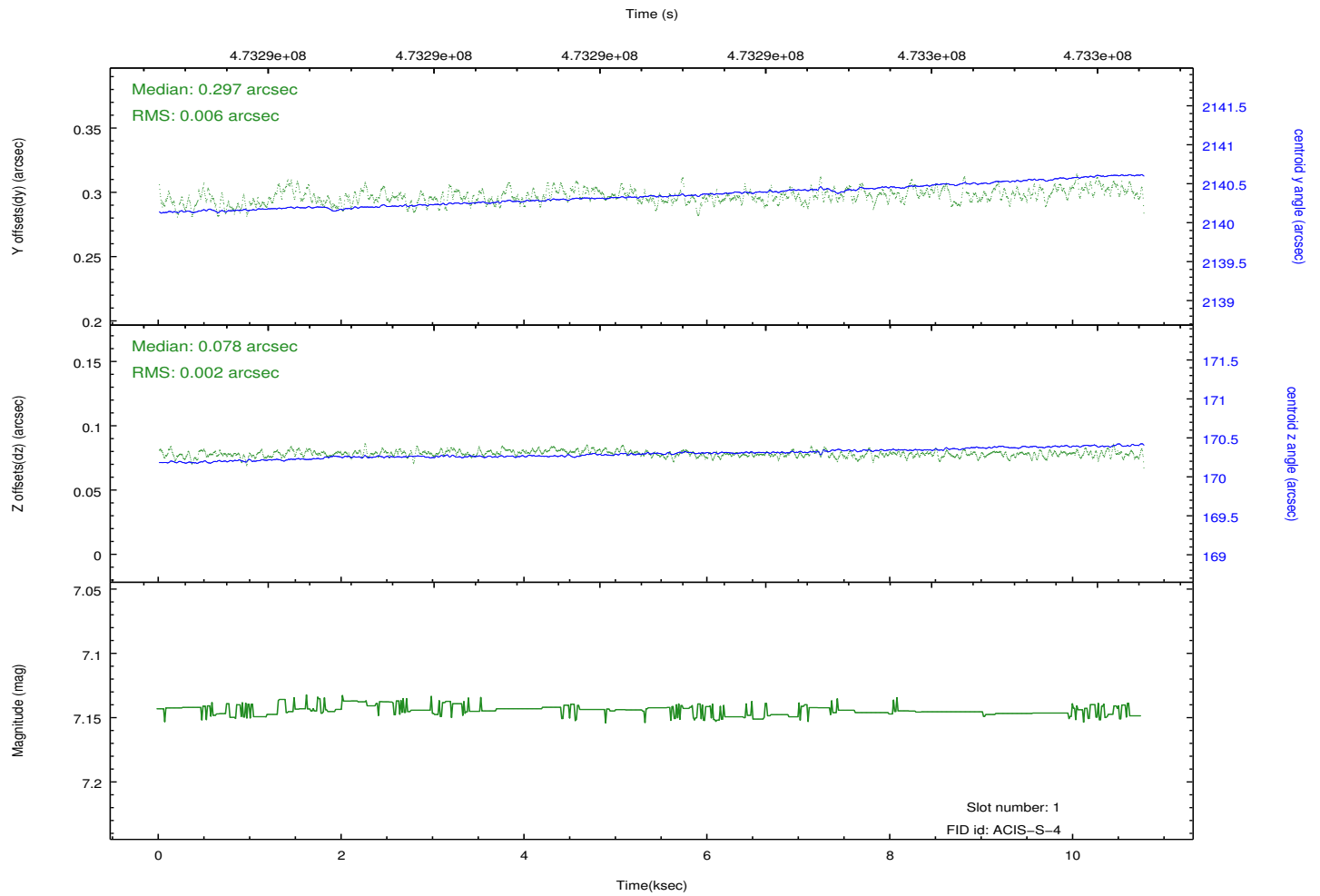
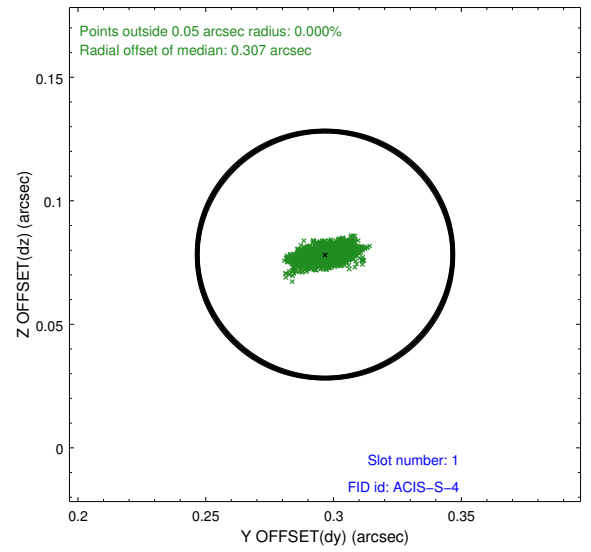
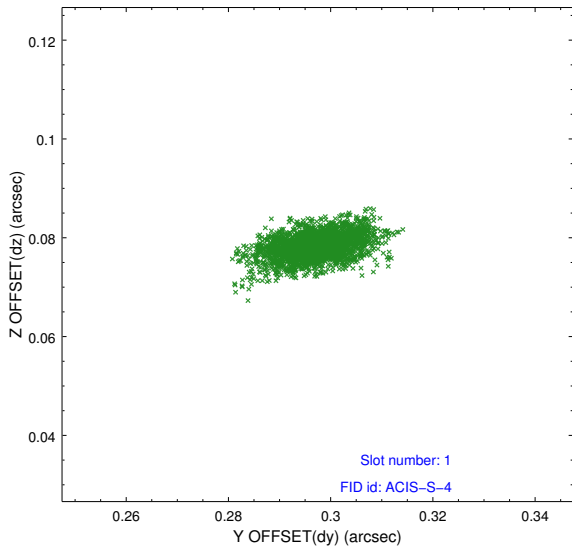


2.5 FID Slots

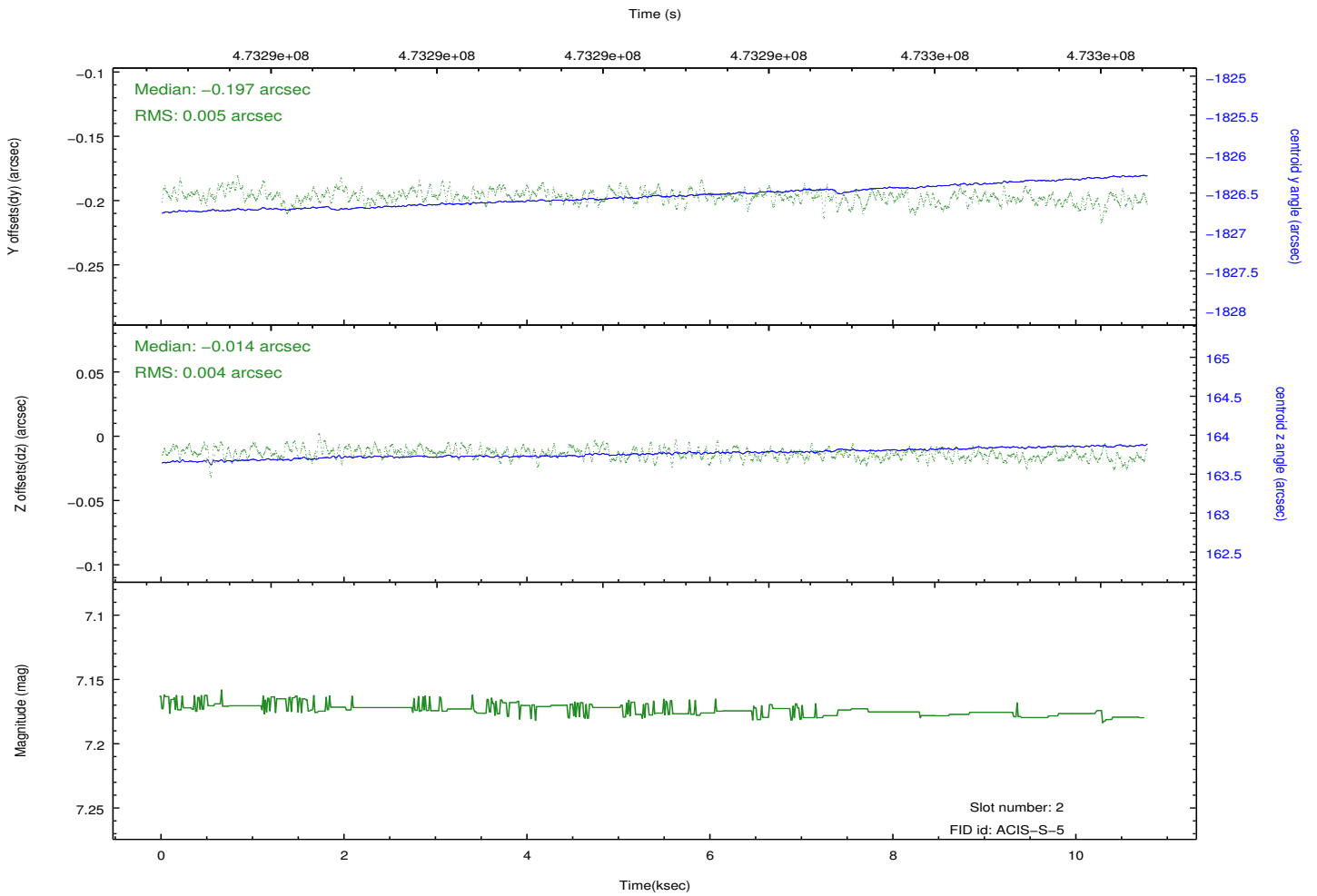
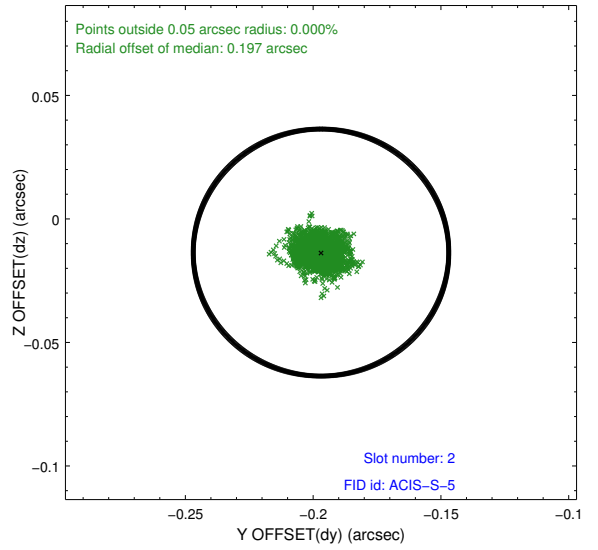
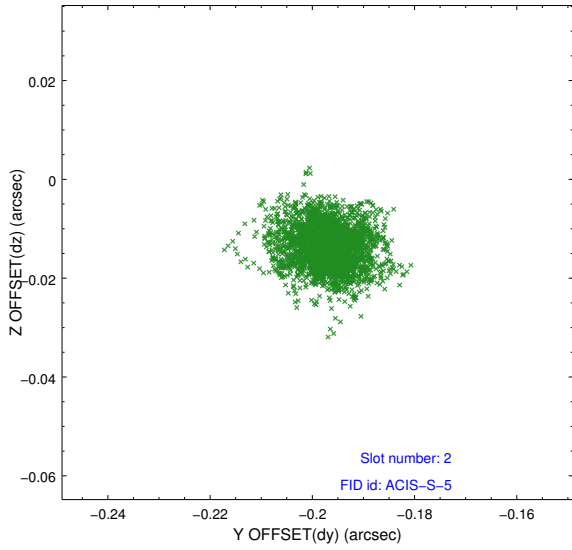
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.66710008204

A.2 Comments

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.