

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20545 - L2 Version 3
Chandra X-Ray Center

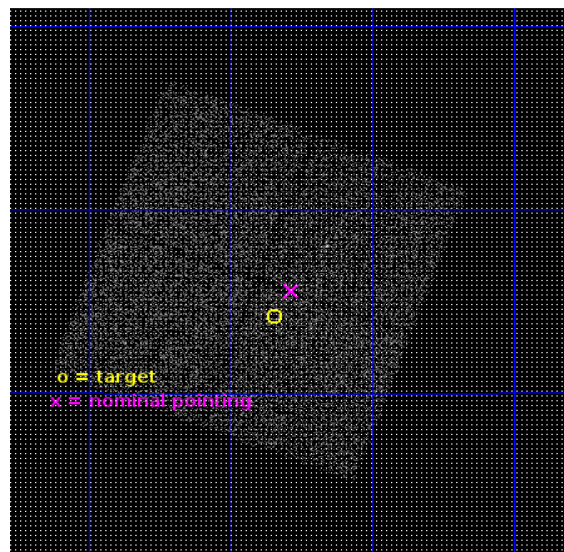
L2 Processing Date : Jun 11 2018

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1 Front

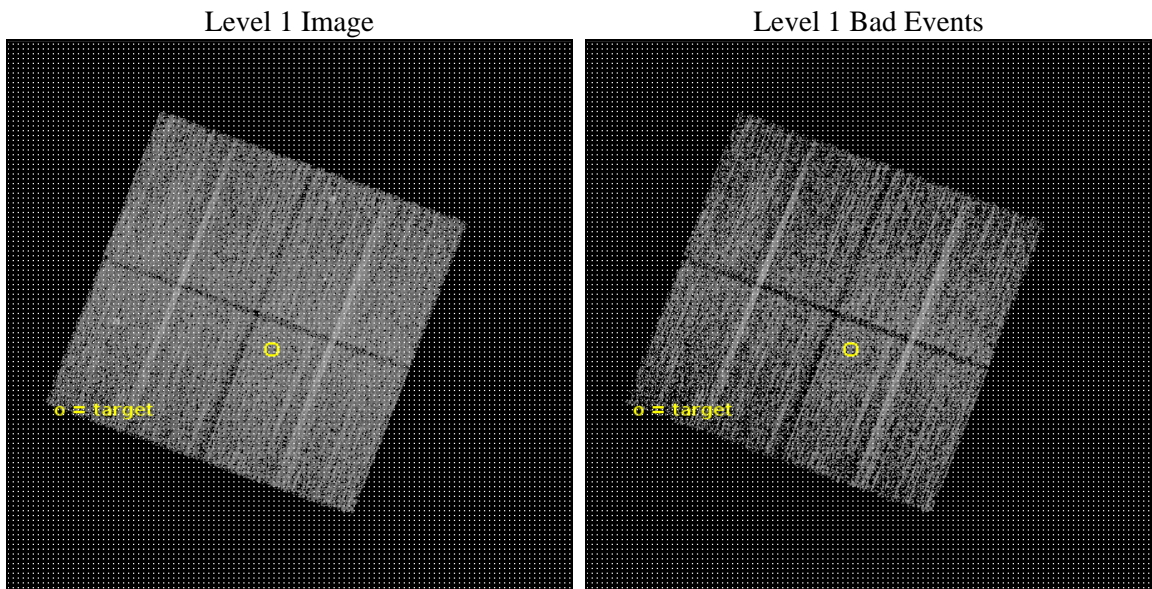
seq_num	801755	Sequence number
obs_id	20545	Observation id
title	Hiding in Plain Sight - Recovering Clusters with the Strongest AGN in their Cores	Proposal title
observer	Paul Nulsen	Principal investigator
object	1RXSJ001420.5+085411	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	3.585417	Observer's specified target RA [deg]
dec_targ	8.903056	Observer's specified target Dec [deg]
ra_nom	3.5710981282435	Nominal RA [deg]
dec_nom	8.926292818237	Nominal Dec [deg]
roll_nom	110.76662912017	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9579.0000737906	Sum of GTIs [s]
livetime	9453.8433858692	Livetime [s]
ontime0	9579.0000737906	Sum of GTIs [s]
ontime1	9579.0000737906	Sum of GTIs [s]
ontime2	9579.0000737906	Sum of GTIs [s]
ontime3	9579.0000737906	Sum of GTIs [s]
l2events	24251	Number of level 2 events



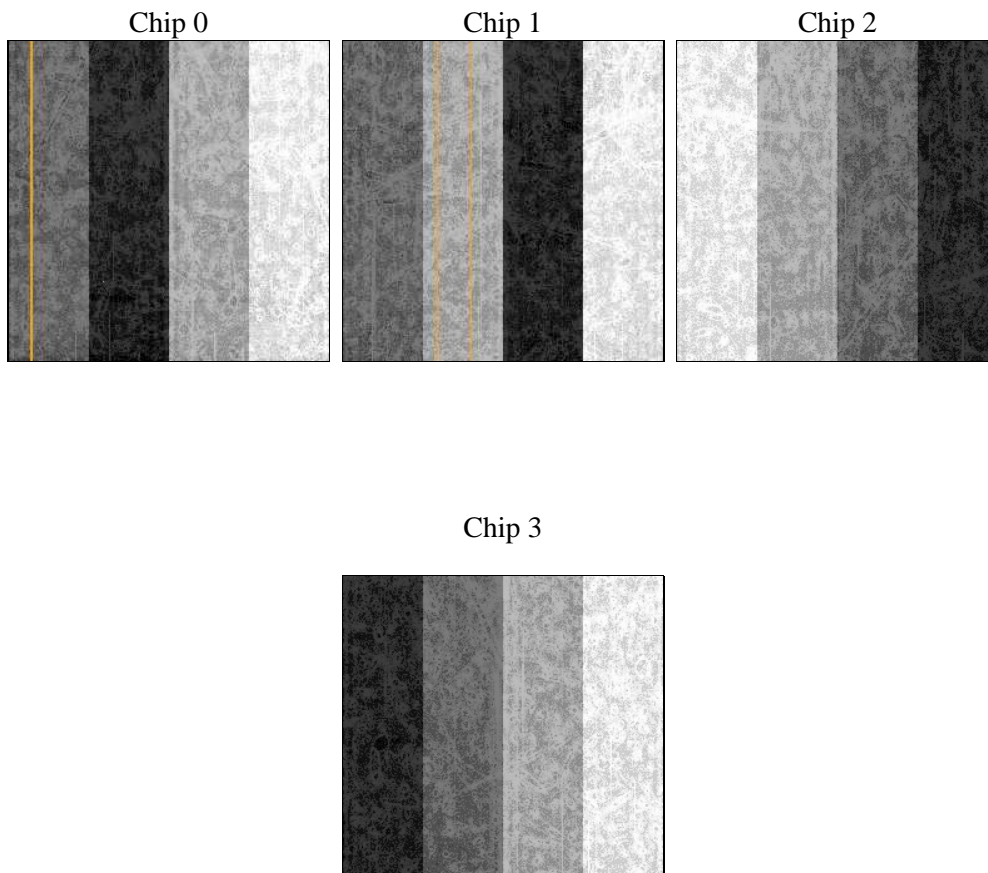
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9500.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	9579.0000737906	Sum of GTIs [s]
caldbver	4.7.8	 	ontime0	9579.0000737906	Sum of GTIs [s]
date	2018-06-11T19:33:45	Date and time of file creation	ontime1	9579.0000737906	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9579.0000737906	Sum of GTIs [s]
			ontime3	9579.0000737906	Sum of GTIs [s]
			l1events	249627	Number of level 1 events

2.1.4 Events

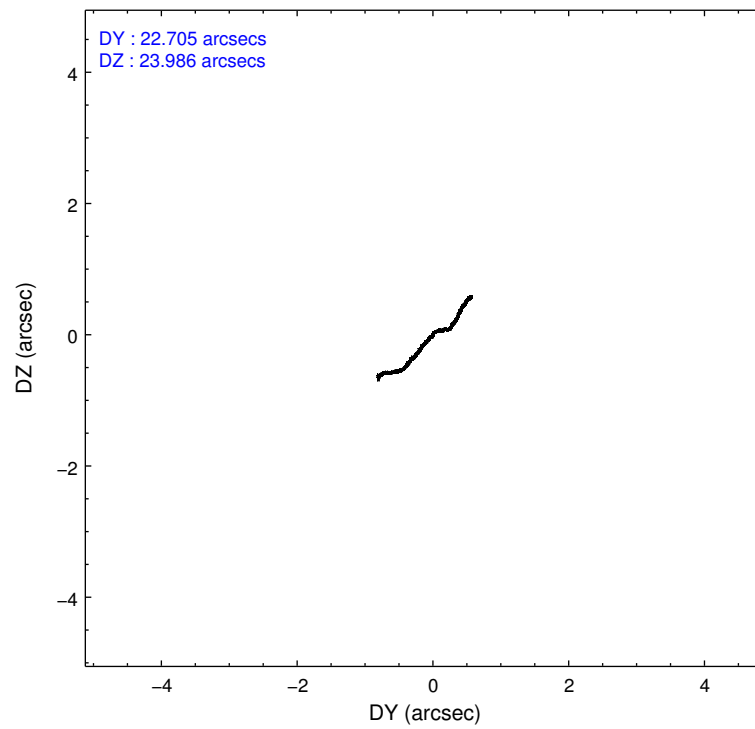
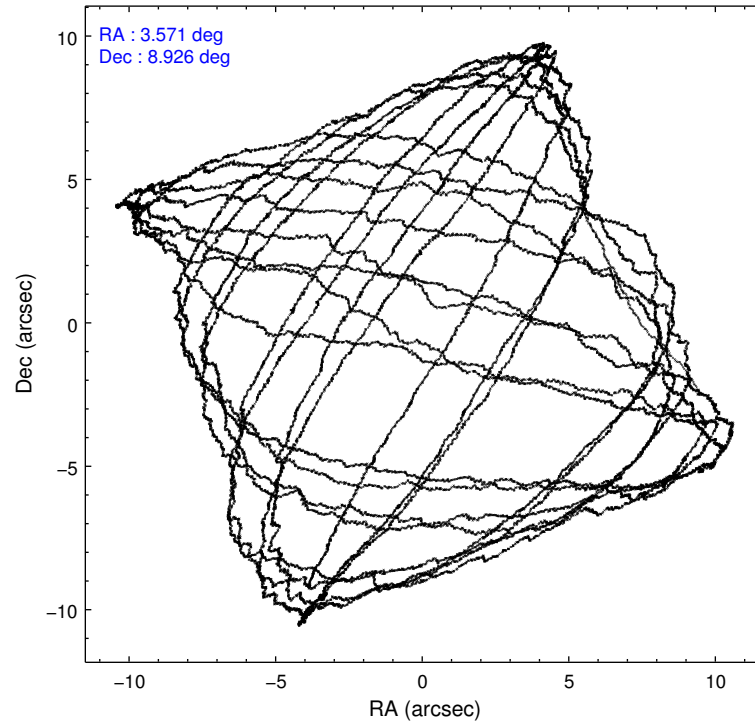
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	60081	58784	66988	63774
rejected events	52798	51112	59008	56431
rejected %	87%	86%	88%	88%

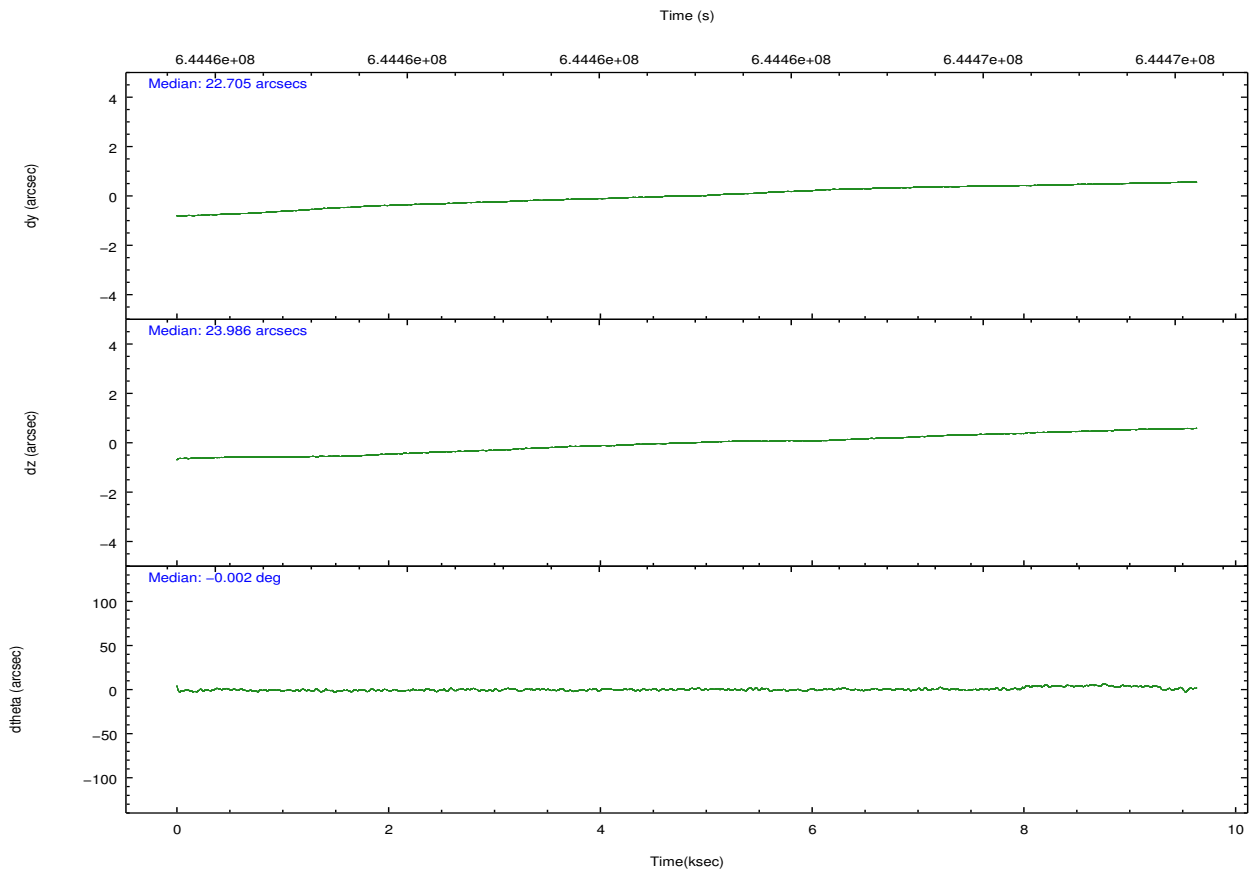
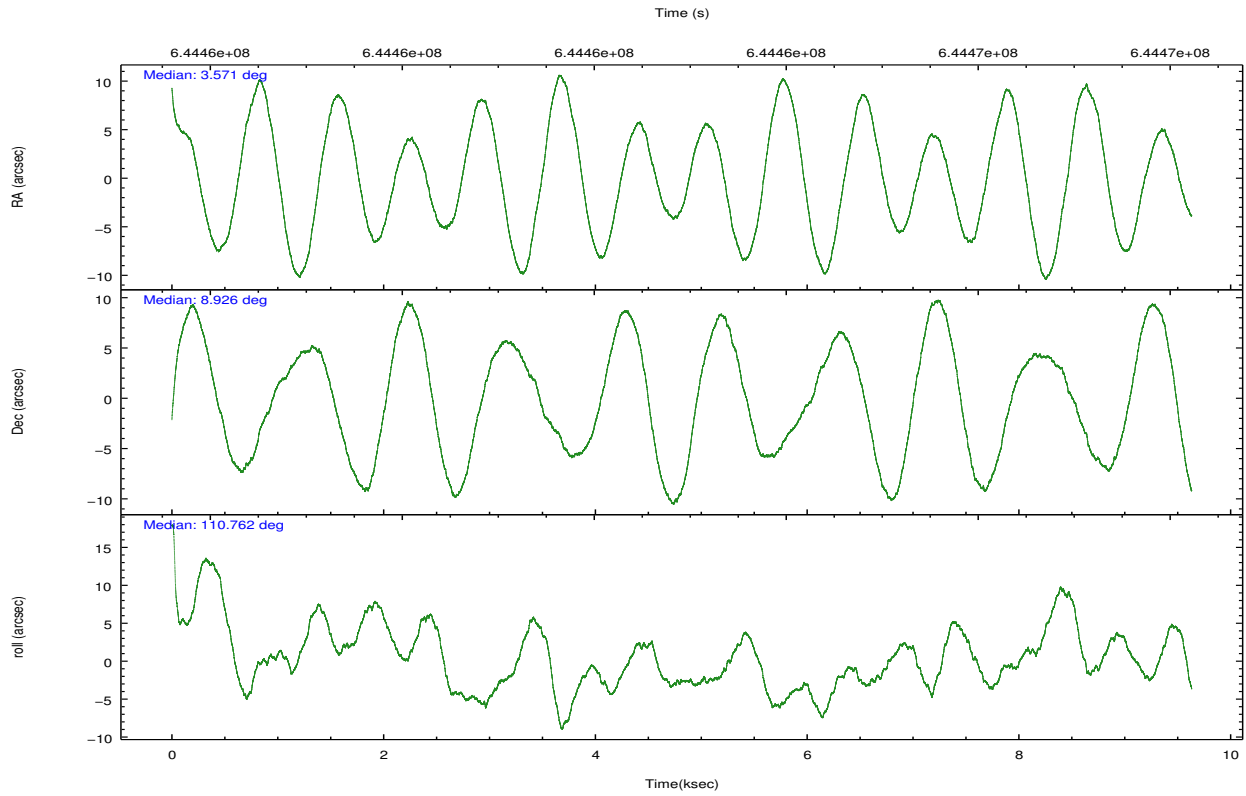
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2525	2733	3413	2930
	4%	4%	5%	4%
grade 1 events	48	33	52	51
	0%	0%	0%	0%
grade 2 events	1964	1755	1897	1548
	3%	2%	2%	2%
grade 3 events	719	751	641	712
	1%	1%	0%	1%
grade 4 events	695	747	719	749
	1%	1%	1%	1%
grade 5 events	2272	2518	2158	2700
	3%	4%	3%	4%
grade 6 events	1382	1687	1313	1407
	2%	2%	1%	2%
grade 7 events	50476	48560	56795	53677
	84%	82%	84%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	3.592778	3.571098128243534	Subarray requested	NONE	NONE
[deg] Pointing Dec	8.908846	8.926292818237016	Alternating exposures requested	N	N
[deg] Pointing Roll	110.554555	110.766629120166	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-230.662463	-230.6708287110191			
[mm] SIM translation stage offset	-2.93	-2.921624291910604			
[s] Observation start time (MET)	644458245.184000	644456916.7617			
Observation start date	2018-06-04T00:09:36	2018-06-03T23:48:36			
[s] Observation end time (MET)	644467745.184000	644468647.37489			
Observation end date	2018-06-04T02:47:56	2018-06-04T03:04:07			
Read mode	TIMED	TIMED			

2.3 Aspect





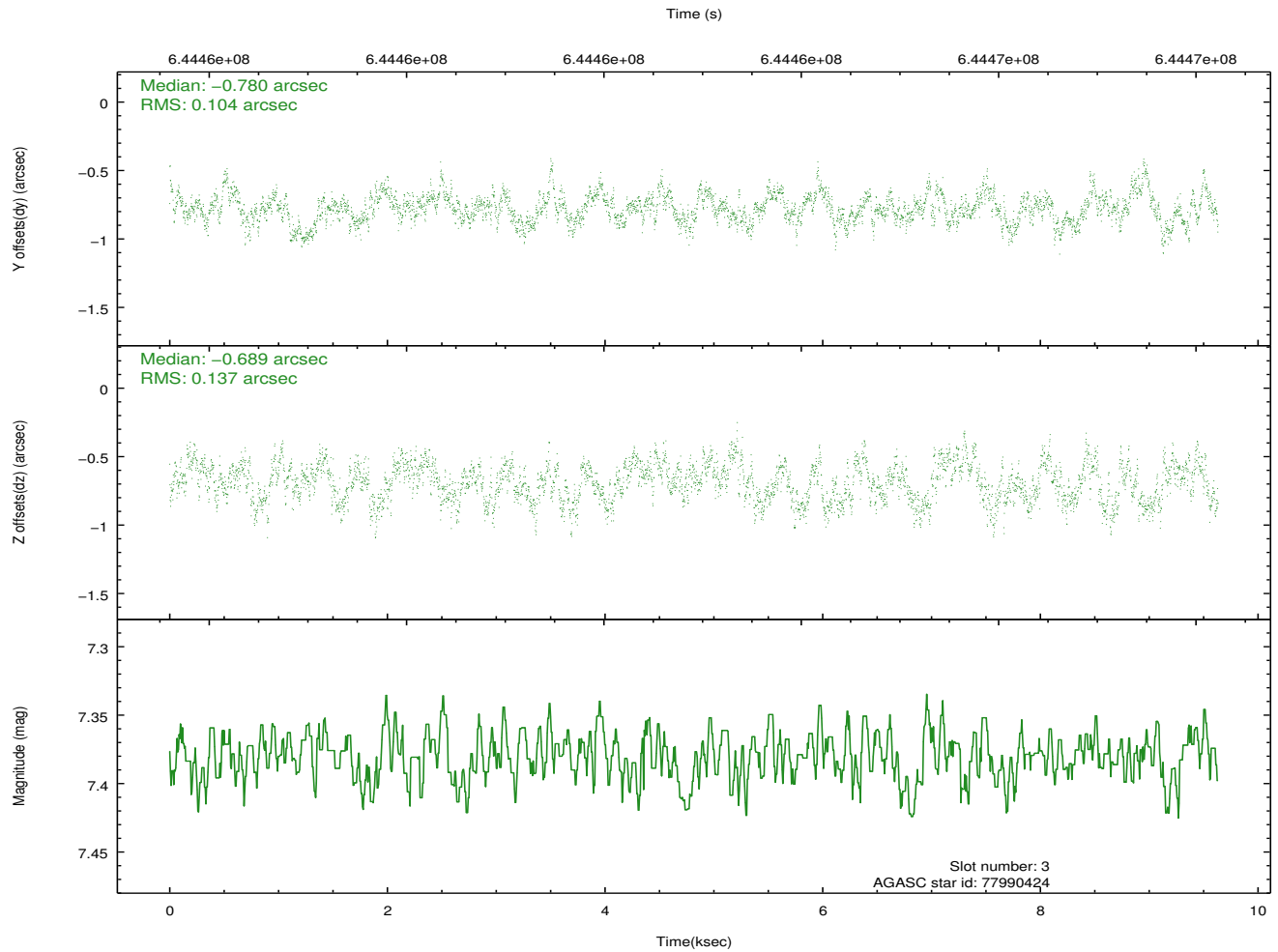
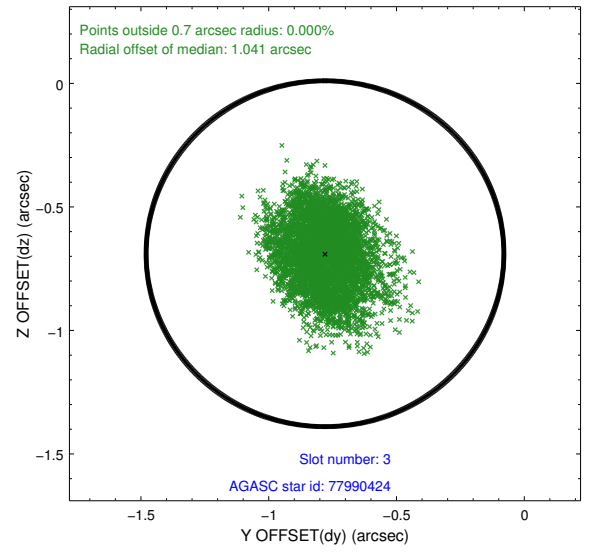
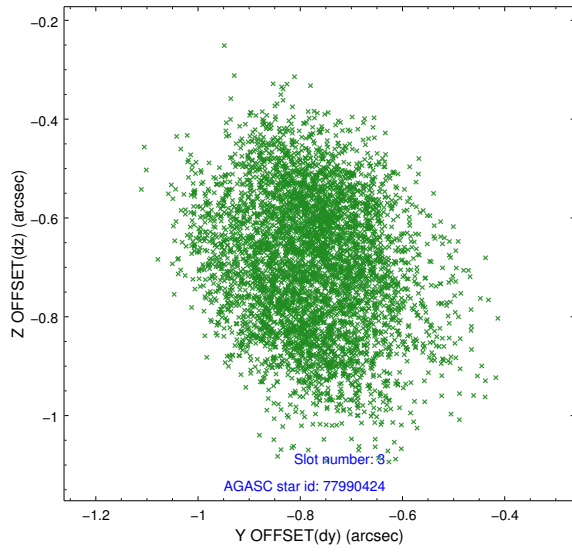
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.10	2350	0.013	-0.007	0.014	0.023	0.000000	0.000000	916.52	-907.69
1	FID		ACIS-I-2	7.02	2350	-0.474	-0.228	0.010	0.016	0.000000	0.000000	-777.91	-914.28
2	FID		ACIS-I-4	7.05	2349	0.365	0.301	0.011	0.022	0.000000	0.000000	2136.32	992.48
3	GUIDE	used	77990424	7.38	4700	-0.780	-0.689	0.185	0.288	2.948039	9.139961	1584.85	1853.69
4	GUIDE	used	77990824	7.59	4699	0.098	-0.172	0.170	0.277	3.440442	8.193521	-2220.71	1411.04
5	GUIDE	used	77992112	10.12	4251	-0.348	-0.310	0.310	0.497	3.168694	9.136020	1294.49	1123.98
6	GUIDE	used	77992480	9.70	4653	0.574	0.460	0.383	0.605	4.050386	9.071642	-20.40	-1728.03
7	GUIDE	used	77995784	9.53	4690	0.485	0.739	0.268	0.412	3.901785	8.346962	-2279.52	-319.86

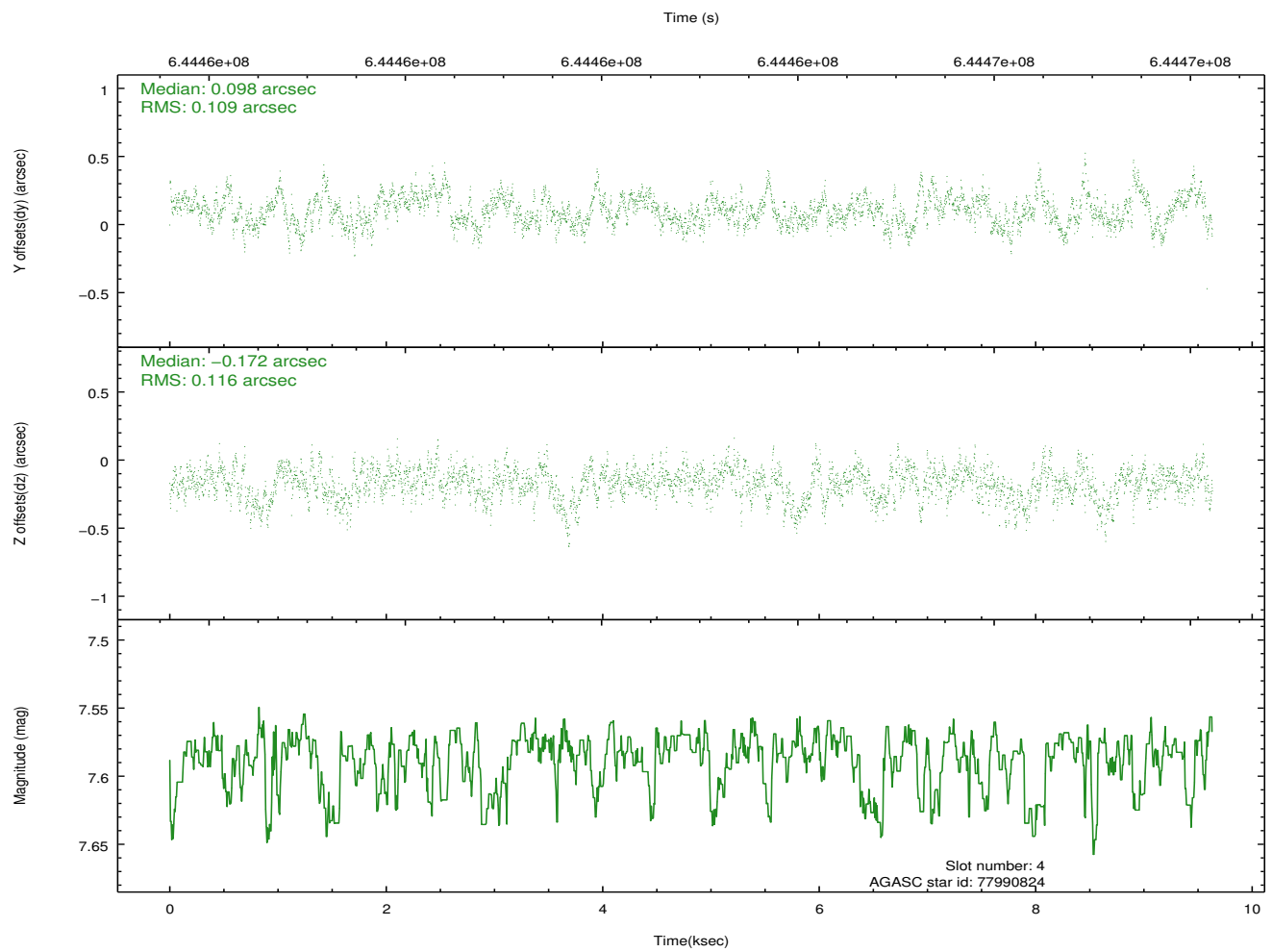
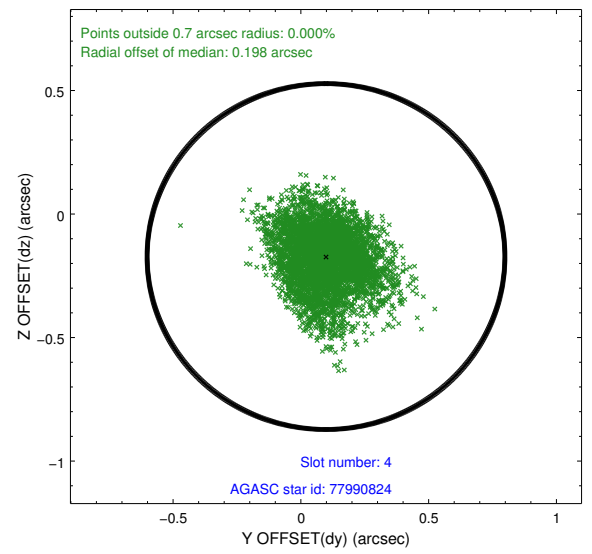
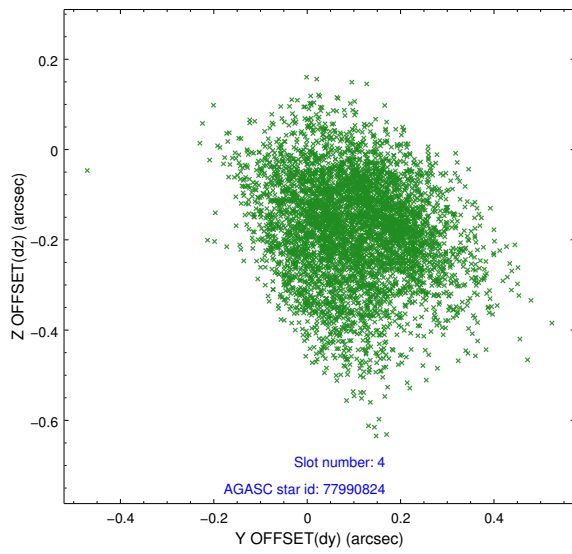
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2.4 Star Slots

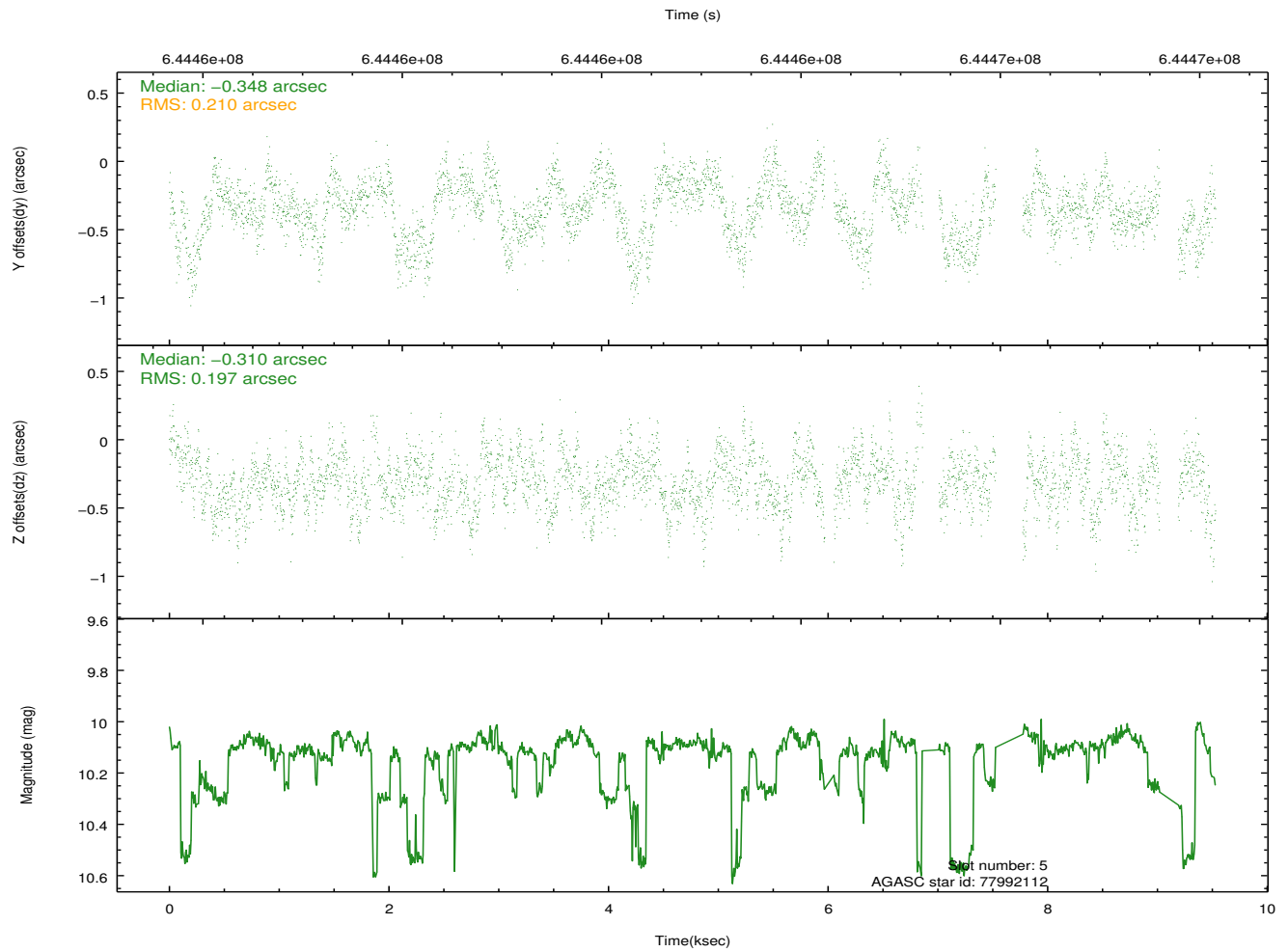
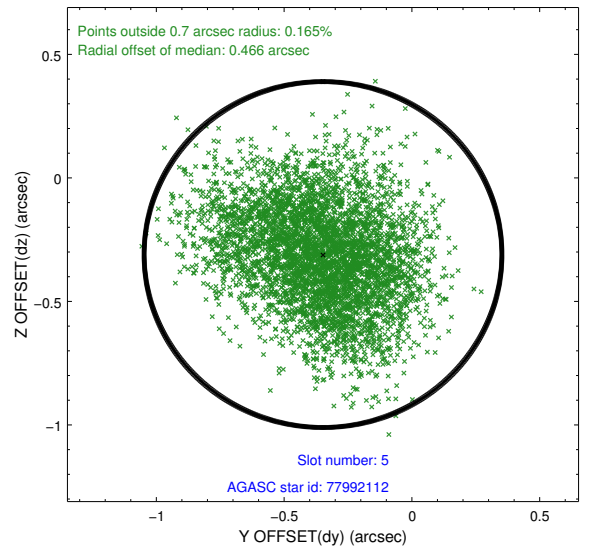
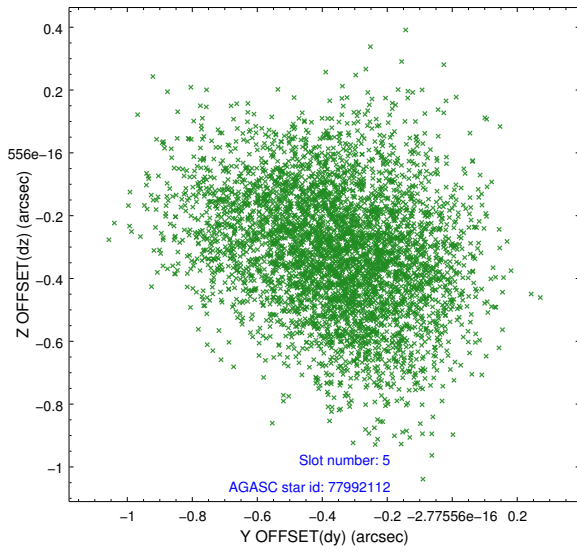
2.4.1 Slot 3



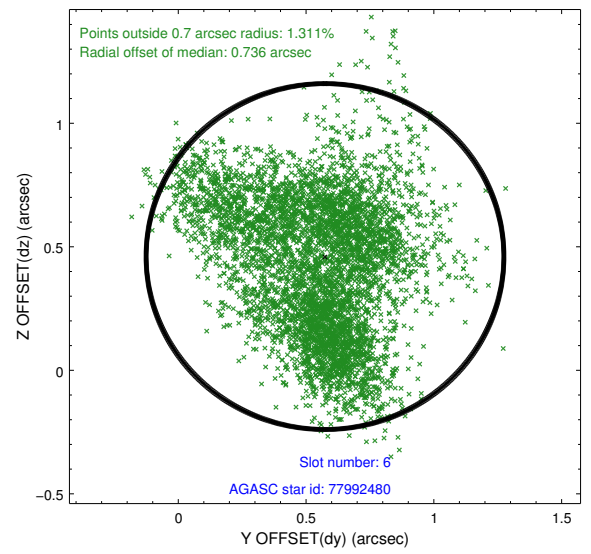
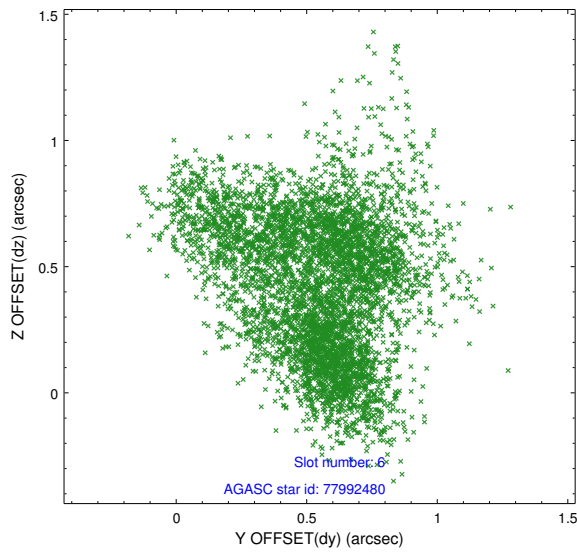
2.4.2 Slot 4



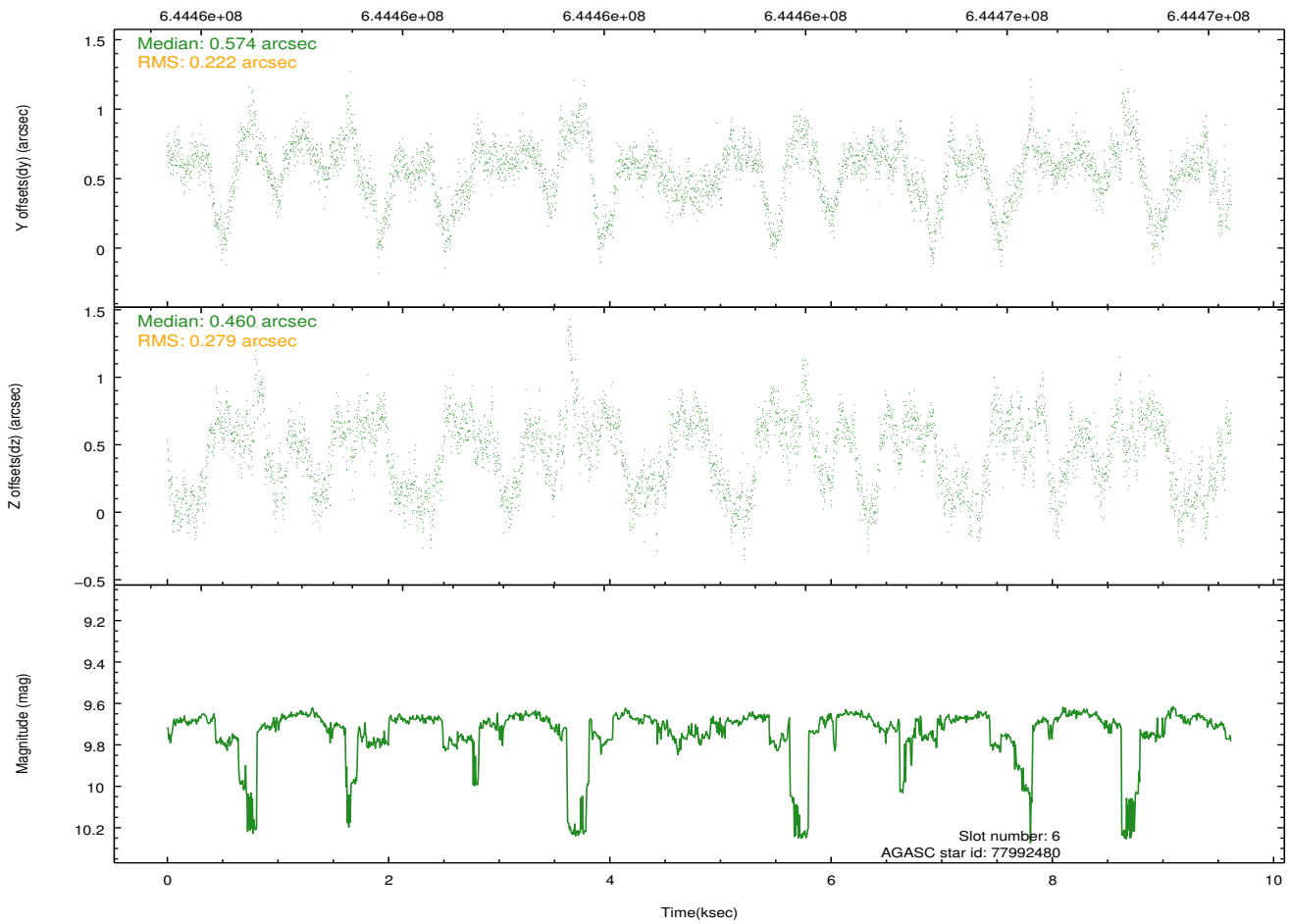
2.4.3 Slot 5



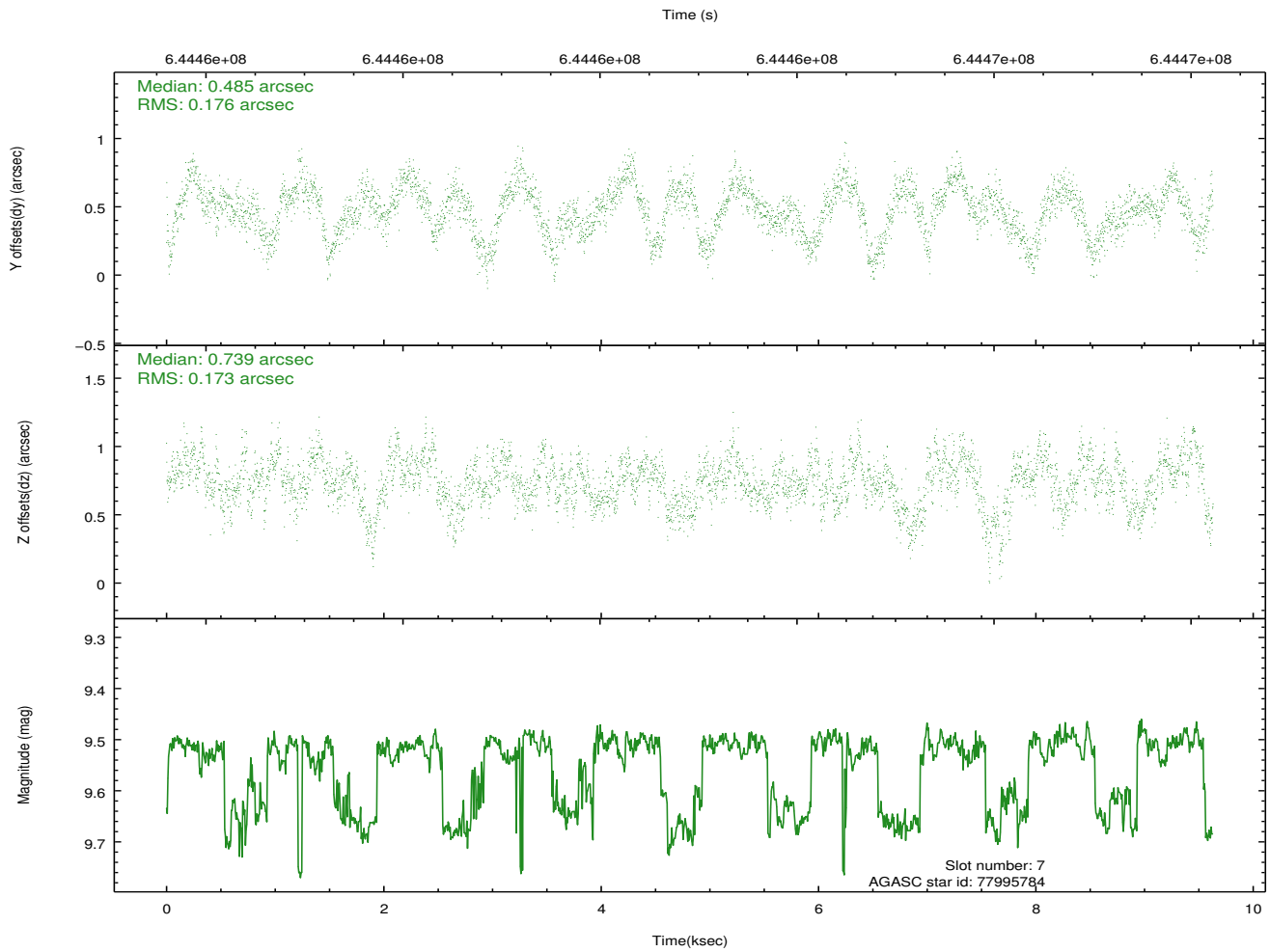
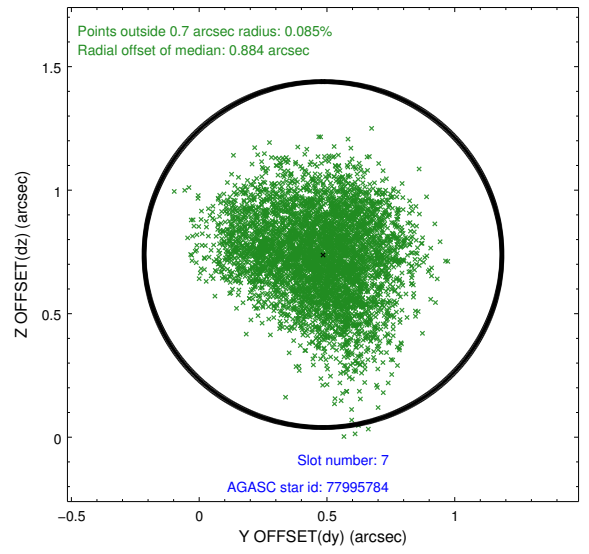
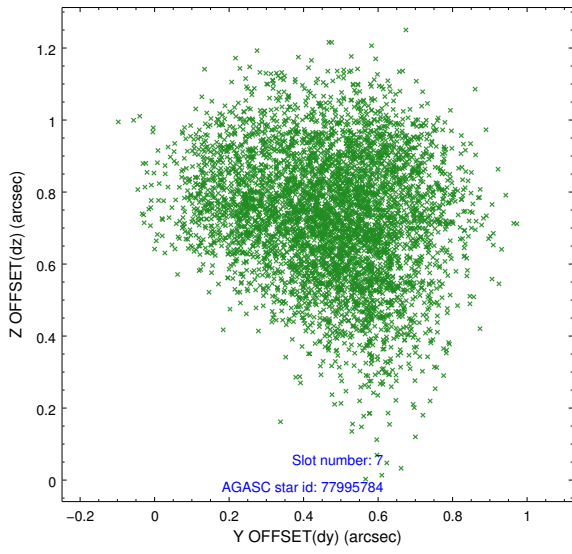
2.4.4 Slot 6



Time (s)

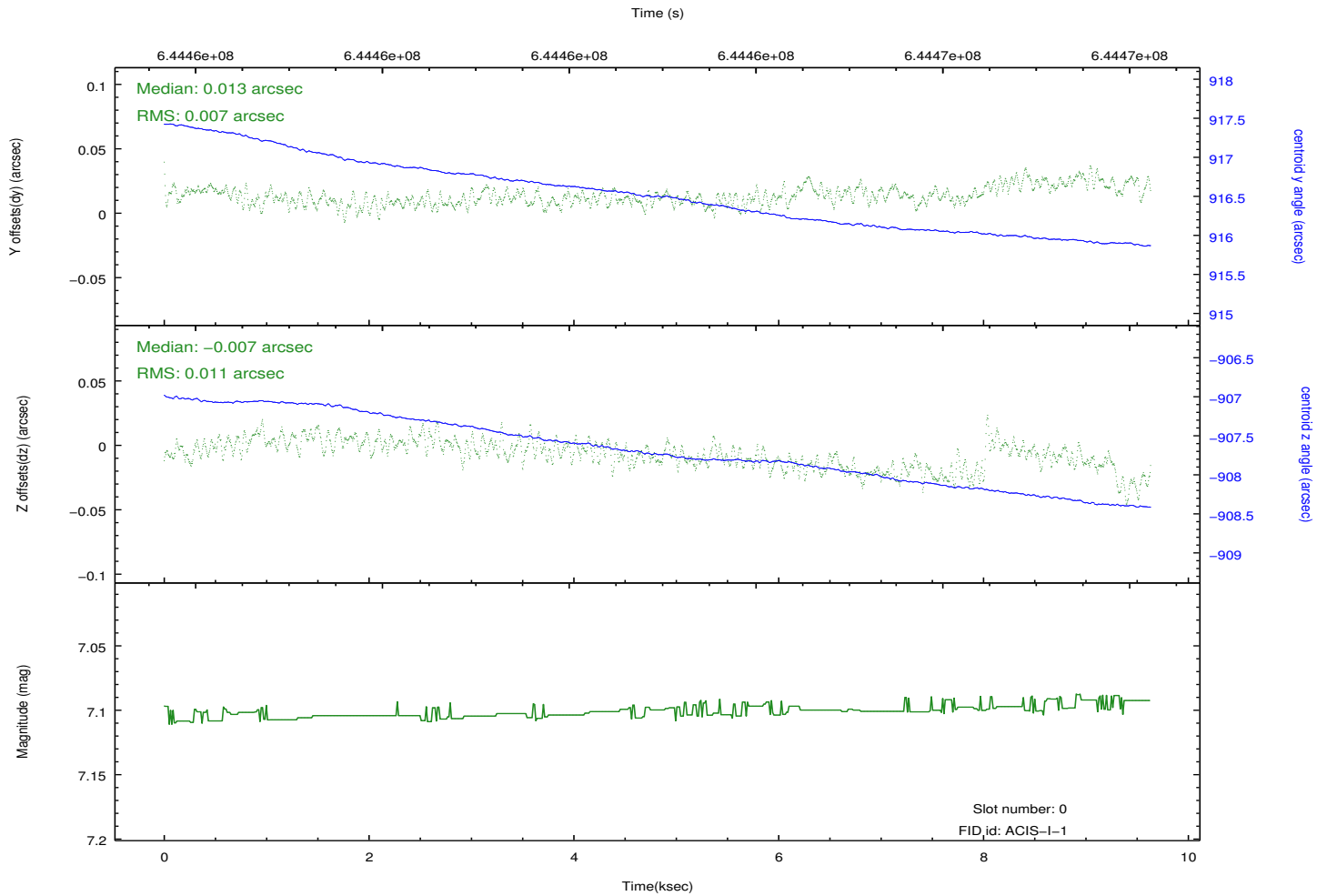
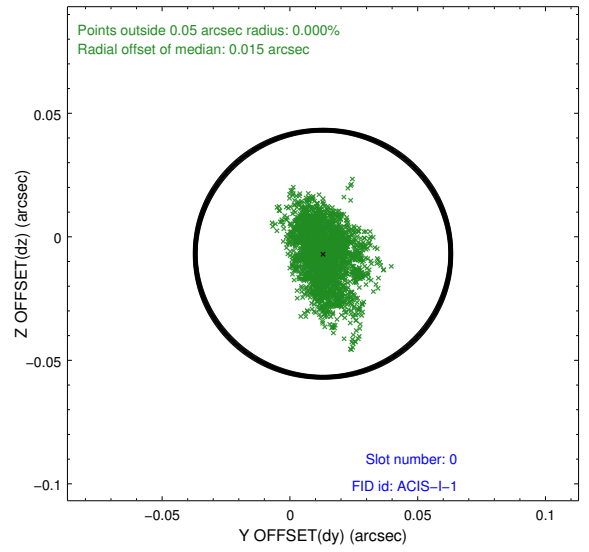
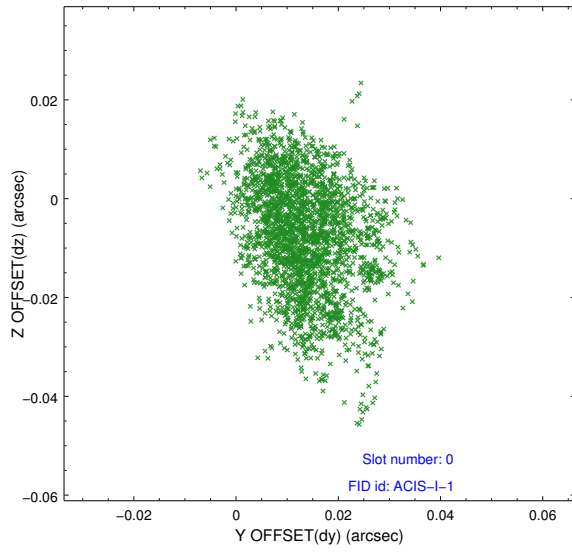


2.4.5 Slot 7

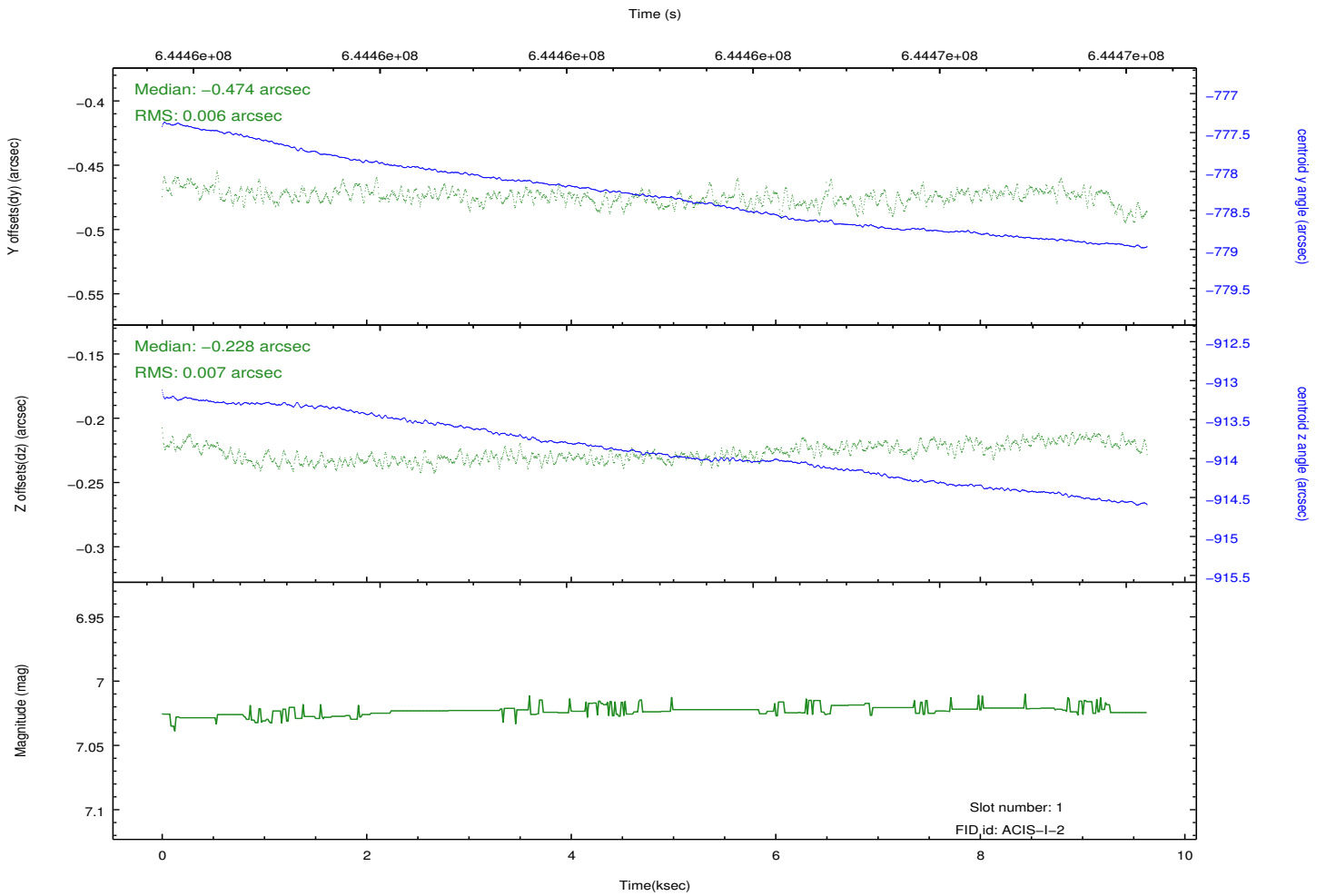
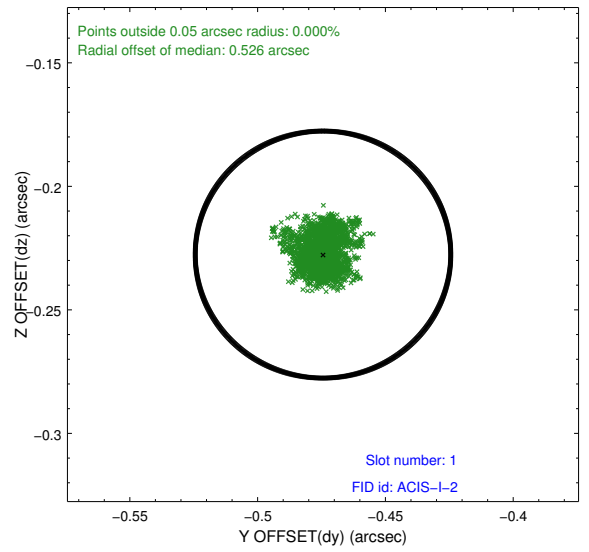
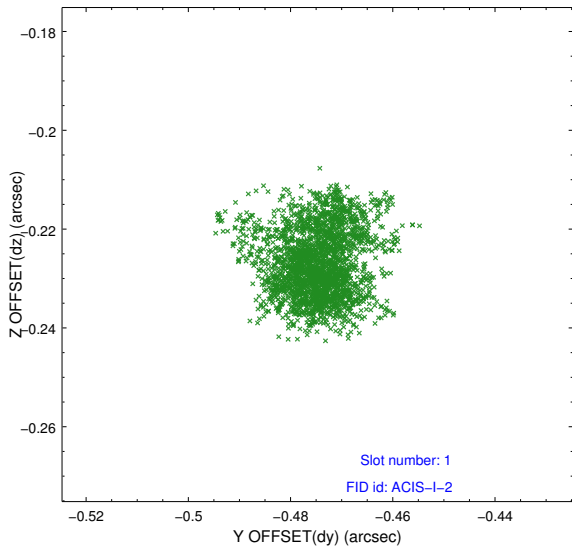


2.5 FID Slots

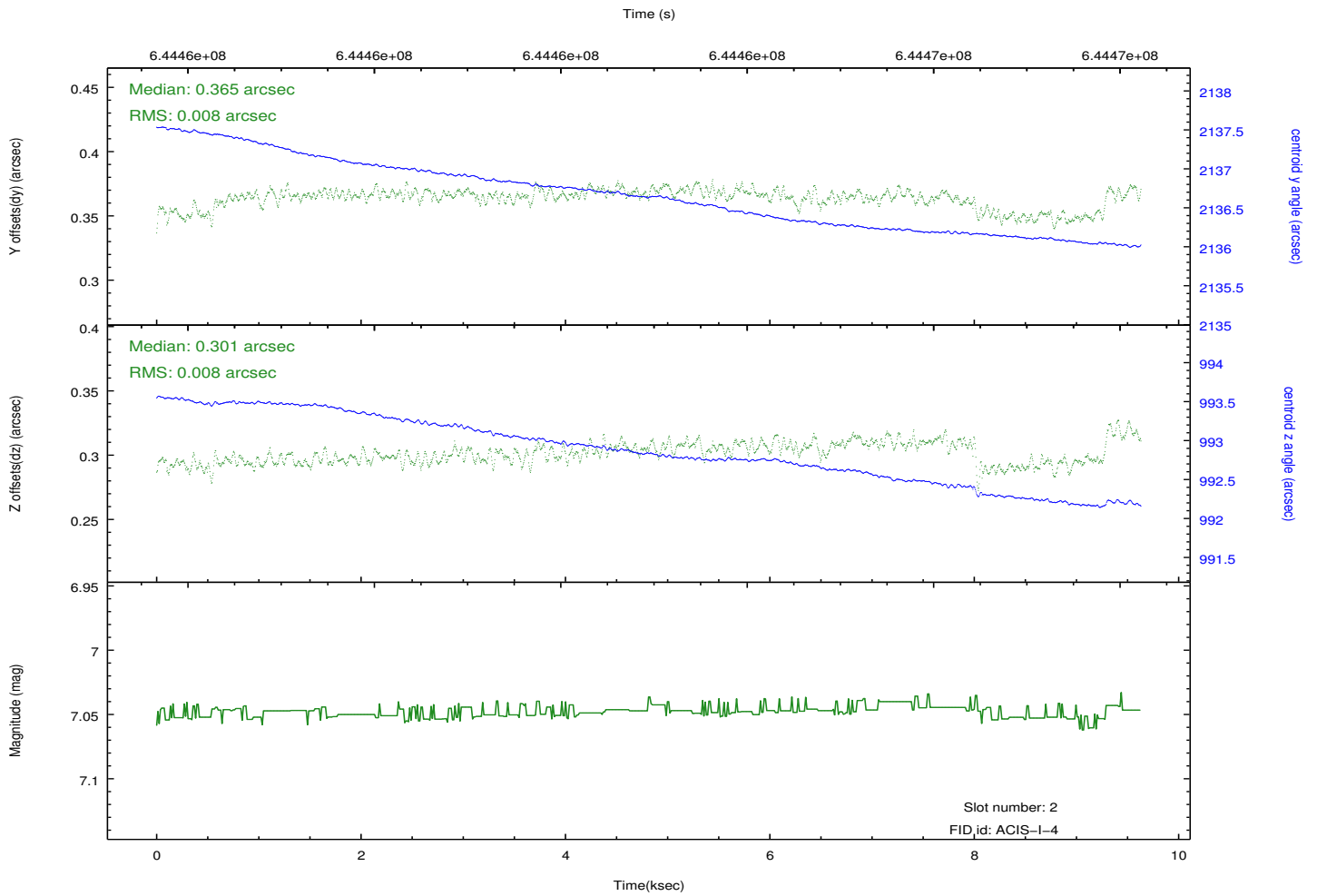
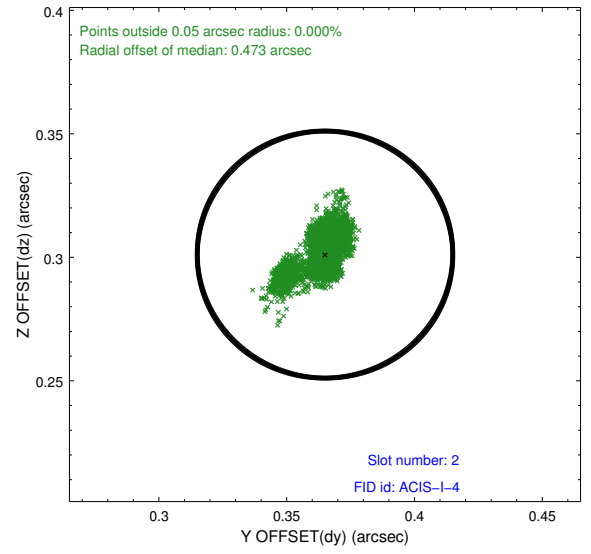
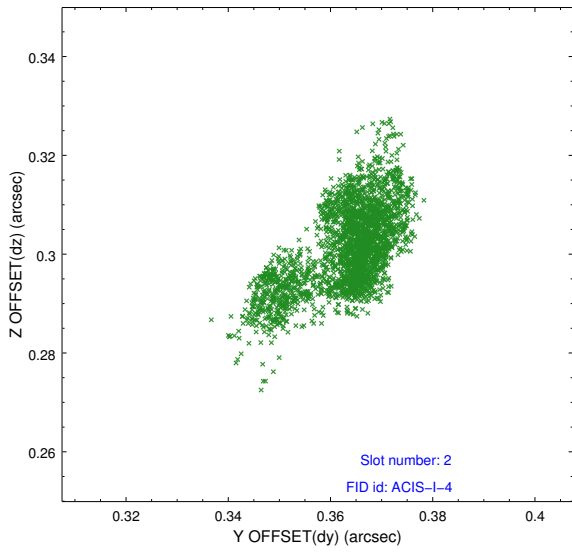
2.5.1 Slot 0



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)	2018.06.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.5790000737906

A.2 Comments

Special processing steps were taken to manually improve the proper-motion corrected positions of three of the guide stars used in this observation (stars with AGASC ids 77990824, 77992112 and 77992480). Each had an incomplete record of the proper motion in the star catalog (AGASC 1.6) and had no proper motion corrections applied automatically by the aspect pipeline. The positions were fixed manually using the available data in AGASC 1.6 to ensure high quality absolute astrometry, and the corrected positions are now reasonable compared to the observed star positions.