

V&V Reference Report

L2 ASCDS Version : 10.3

Observation 17540 - L2 Version 1
Chandra X-Ray Center

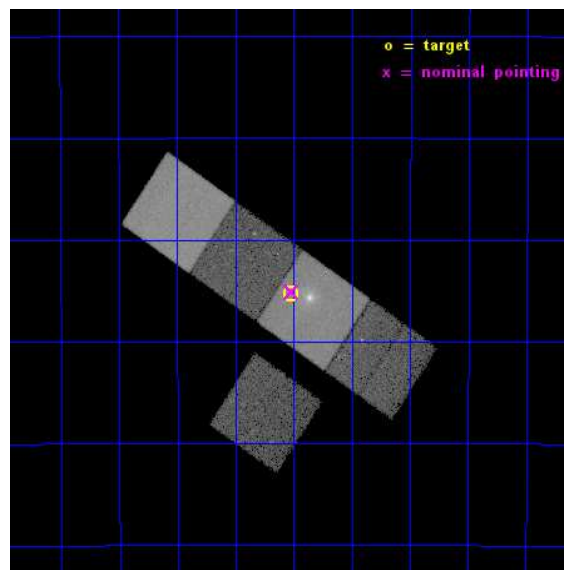
L2 Processing Date : Nov 2 2014

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1 Front

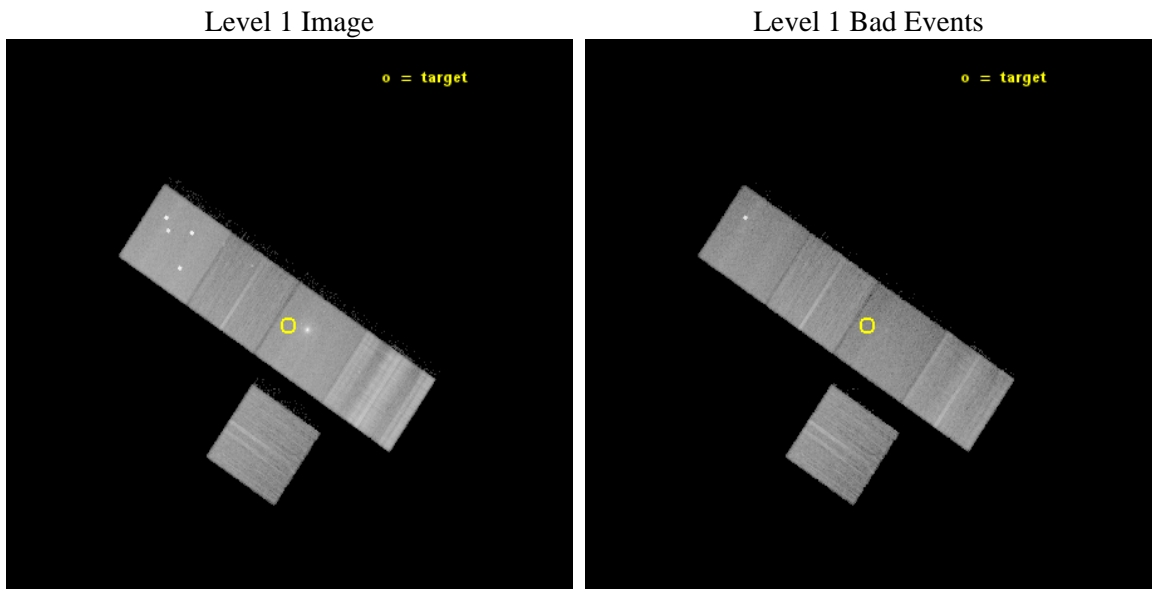
seq_num	801415	Sequence number
obs_id	17540	Observation id
title	Hydrodynamics of merging and stripping in the Fornax Cluster: A Deep Chandra observation of NGC 1404	Proposal title
observer	Dr. Ralph Kraft	Principal investigator
object	NGC 1404	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	54.755	Observer's specified target RA [deg]
dec_targ	-35.5885	Observer's specified target Dec [deg]
ra_nom	54.754856810892	Nominal RA [deg]
dec_nom	-35.585253333252	Nominal Dec [deg]
roll_nom	34.156502825899	Nominal Roll [deg]
revision	1	Processing version of data
ontime	28844.159538925	Sum of GTIs [s]
livetime	28467.289359787	Livetime [s]
ontime3	28844.036418915	Sum of GTIs [s]
ontime5	28844.118498921	Sum of GTIs [s]
ontime6	28844.077458918	Sum of GTIs [s]
ontime7	28844.159538925	Sum of GTIs [s]
ontime8	28843.995378911	Sum of GTIs [s]
l2events	280291	Number of level 2 events



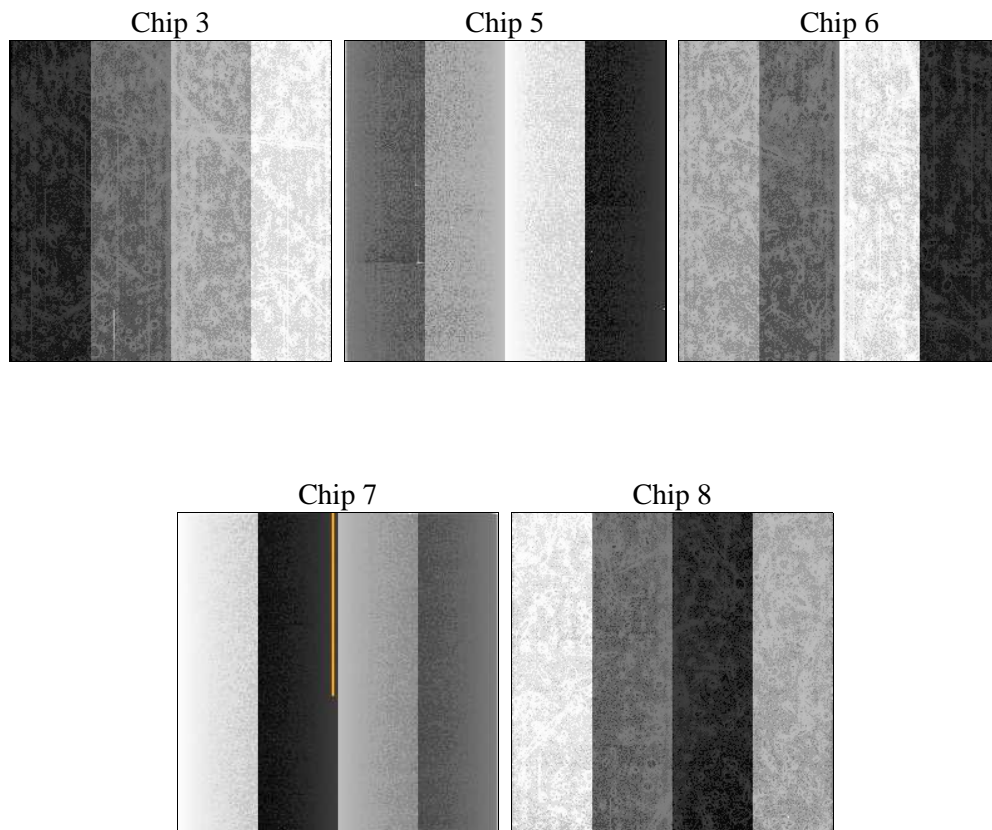
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	28844.159538925	Sum of GTIs [s]
caldbver	4.6.4	 	ontime3	28844.036418915	Sum of GTIs [s]
date	2014-11-02T16:17:31	Date and time of file creation	ontime5	28844.118498921	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	28844.077458918	Sum of GTIs [s]
			ontime7	28844.159538925	Sum of GTIs [s]
			ontime8	28843.995378911	Sum of GTIs [s]
			l1events	1160294	Number of level 1 events

2.1.4 Events

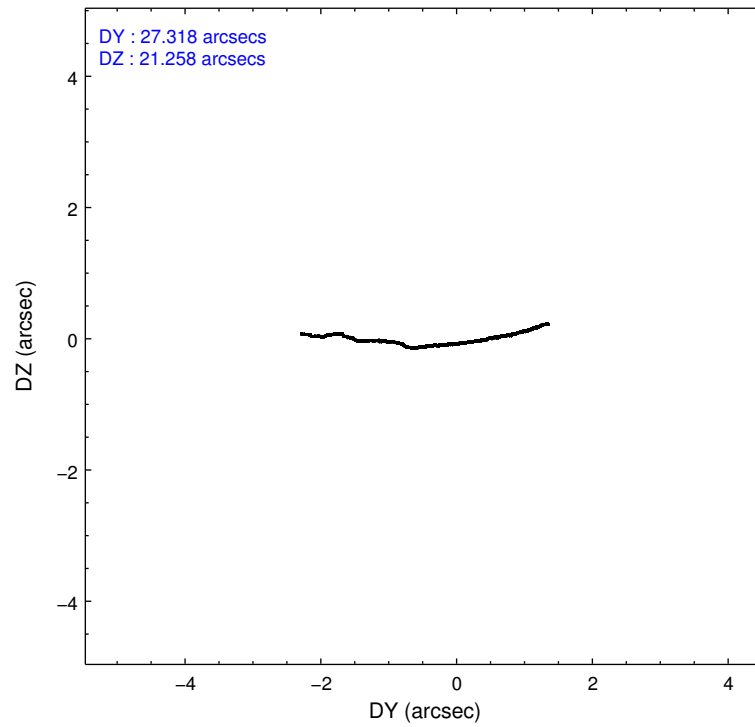
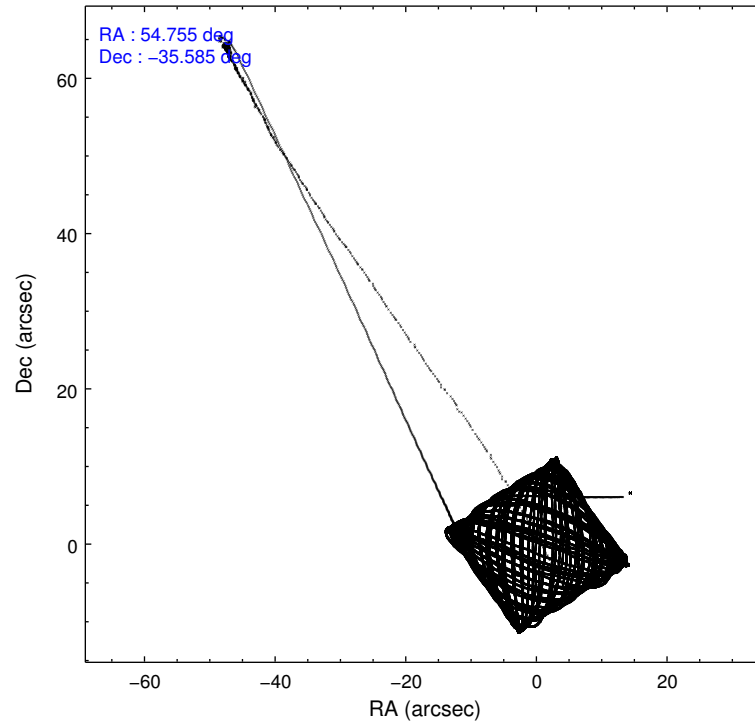
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	162938	277932	175556	222042	321826
rejected events	144646	135307	150060	114086	170060
rejected %	88%	48%	85%	51%	52%

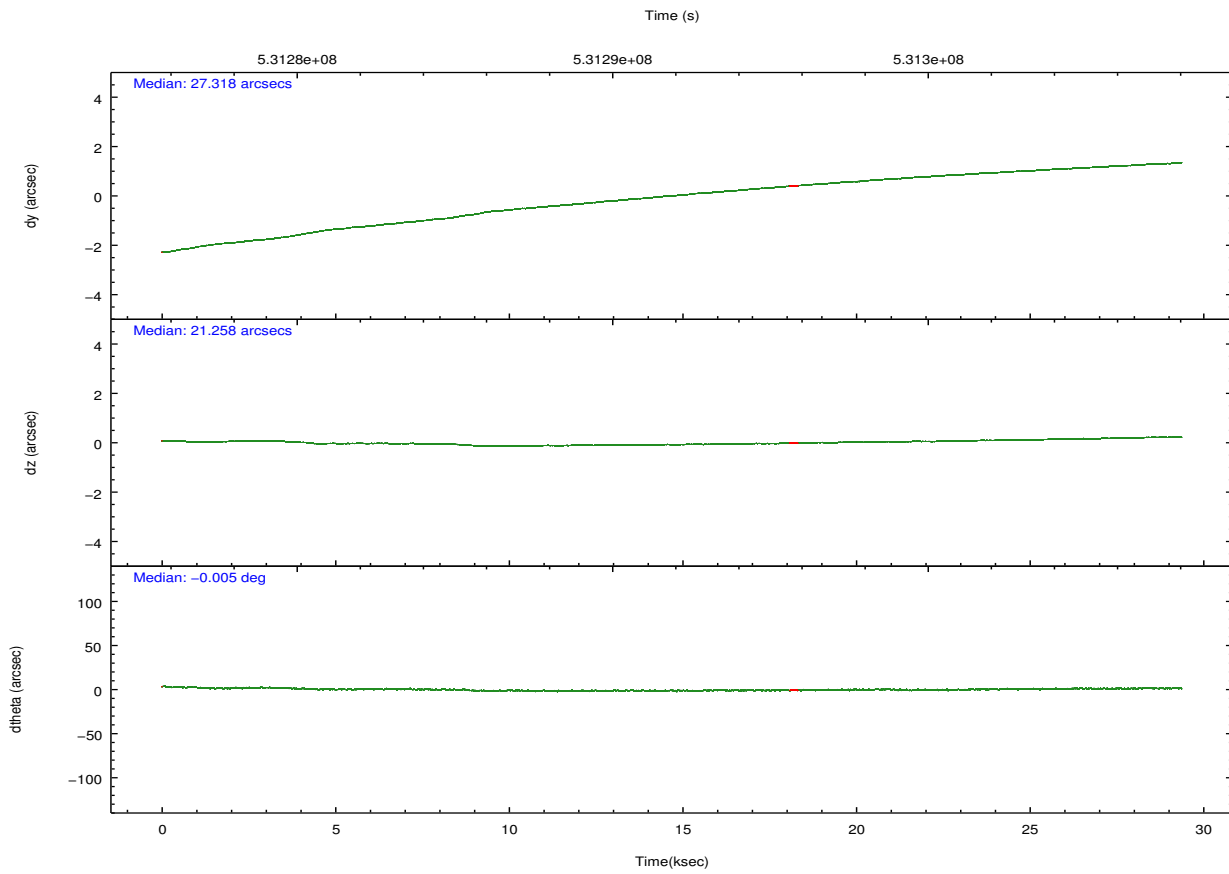
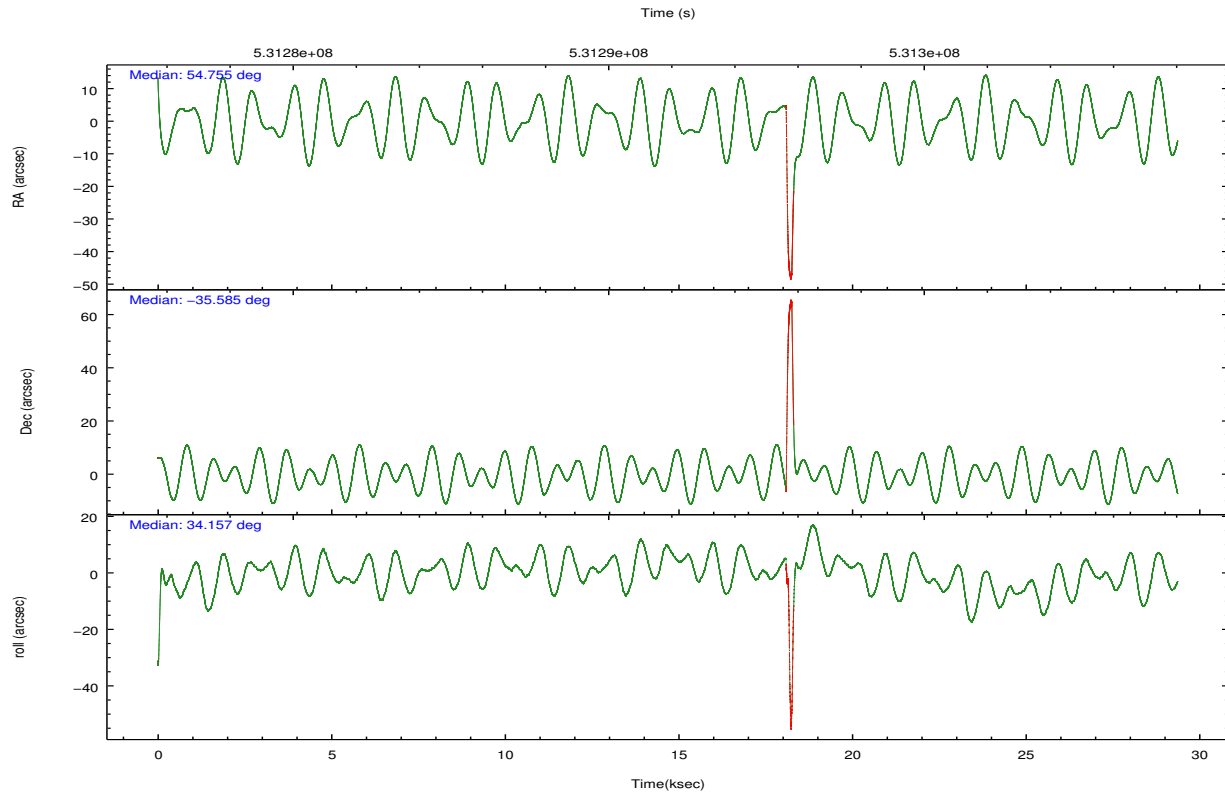
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7414	31632	11806	15287	44303
	4%	11%	6%	6%	13%
grade 1 events	96	545	96	286	346
	0%	0%	0%	0%	0%
grade 2 events	4078	39418	5759	24617	27076
	2%	14%	3%	11%	8%
grade 3 events	1744	5516	1962	9989	23065
	1%	1%	1%	4%	7%
grade 4 events	1715	4680	1941	9926	21314
	1%	1%	1%	4%	6%
grade 5 events	7450	21100	7766	20817	12391
	4%	7%	4%	9%	3%
grade 6 events	3471	62578	4242	49041	37636
	2%	22%	2%	22%	11%
grade 7 events	136970	112463	141984	92079	155695
	84%	40%	80%	41%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	54.740641	54.75485681089181	Subarray requested	NONE	NONE
[deg] Pointing Dec	-35.610247	-35.58525333325177	Alternating exposures requested	N	N
[deg] Pointing Roll	33.991643	34.15650282589937	[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)	531277547.184000	531276508.4509			
Observation start date	2014-11-02T01:04:40	2014-11-02T00:48:28			
[s] Observation end time (MET)	531306547.184000	531306853.57758			
Observation end date	2014-11-02T09:08:00	2014-11-02T09:14:13			
Read mode	TIMED	TIMED			

2.3 Aspect





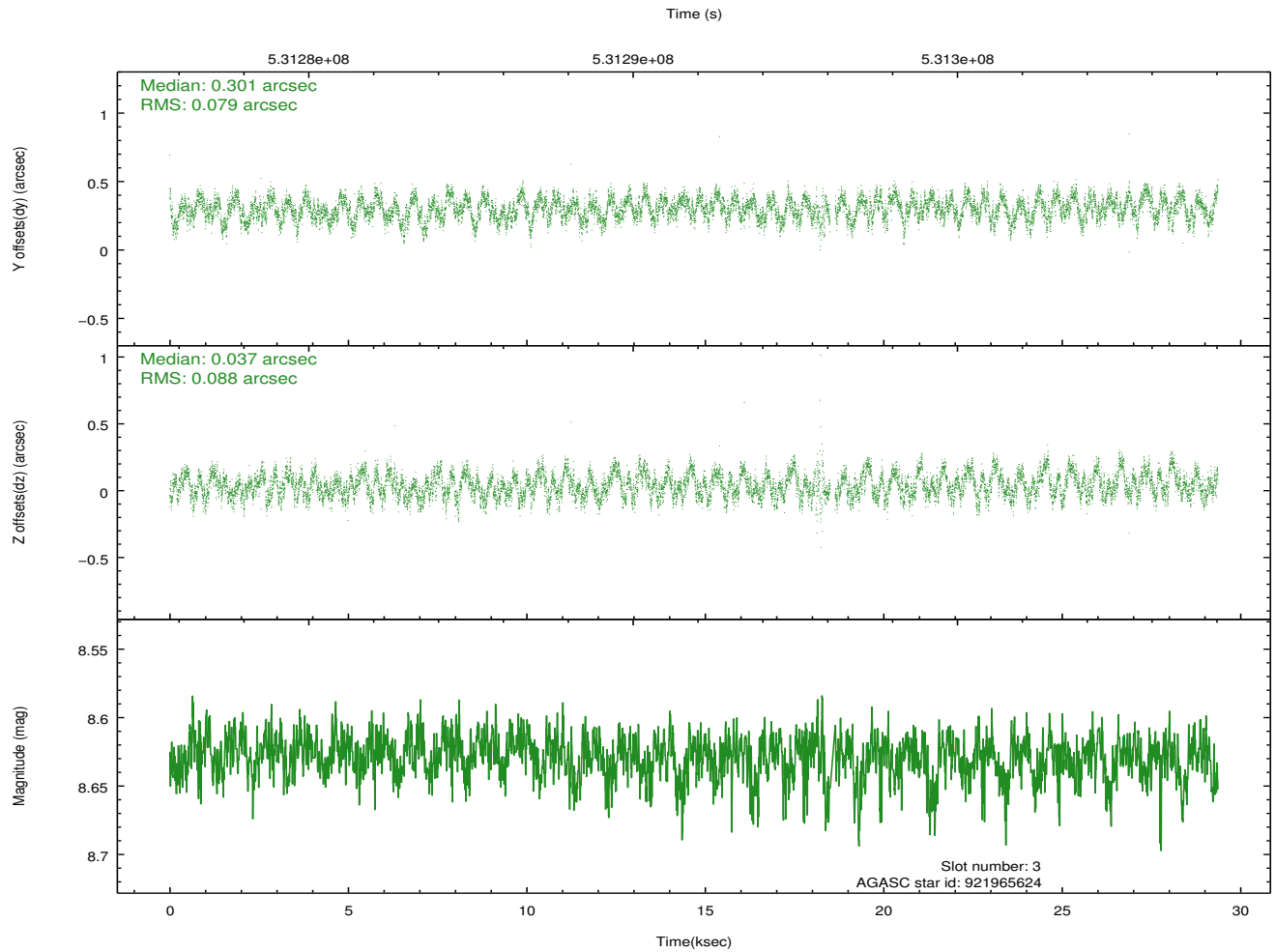
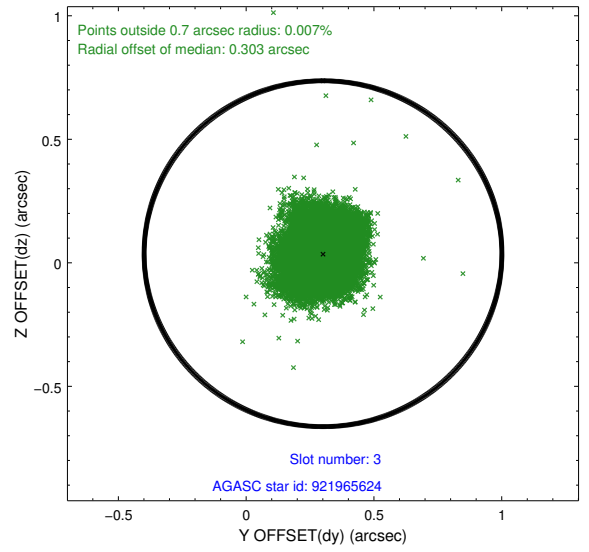
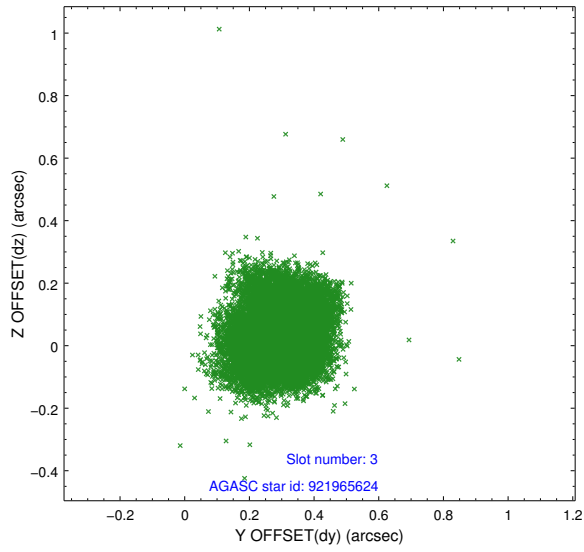
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	7164	-0.183	-0.014	0.016	0.034	0.000000	0.000000	-780.63	-1742.79
1	FID		ACIS-S-4	7.05	7164	0.385	0.091	0.039	0.051	0.000000	0.000000	2133.16	165.75
2	FID		ACIS-S-5	7.08	7164	-0.237	-0.071	0.025	0.041	0.000000	0.000000	-1833.44	159.30
3	GUIDE	used	921965624	8.63	14238	0.301	0.037	0.128	0.197	54.900706	-35.940077	-276.73	-1245.94
4	GUIDE	used	921966528	6.75	14314	-0.428	-0.461	0.097	0.146	54.675841	-35.204254	659.11	1317.54
5	GUIDE	used	921966544	7.93	14313	-0.054	0.164	0.077	0.123	54.743508	-35.636012	-45.48	-81.79
6	GUIDE	used	921970016	9.36	14304	0.128	0.368	0.148	0.251	54.228536	-36.081558	-2183.10	-578.41
7	GUIDE	used	921970112	9.57	14292	0.049	-0.110	0.164	0.273	54.291262	-35.695592	-1262.67	476.77

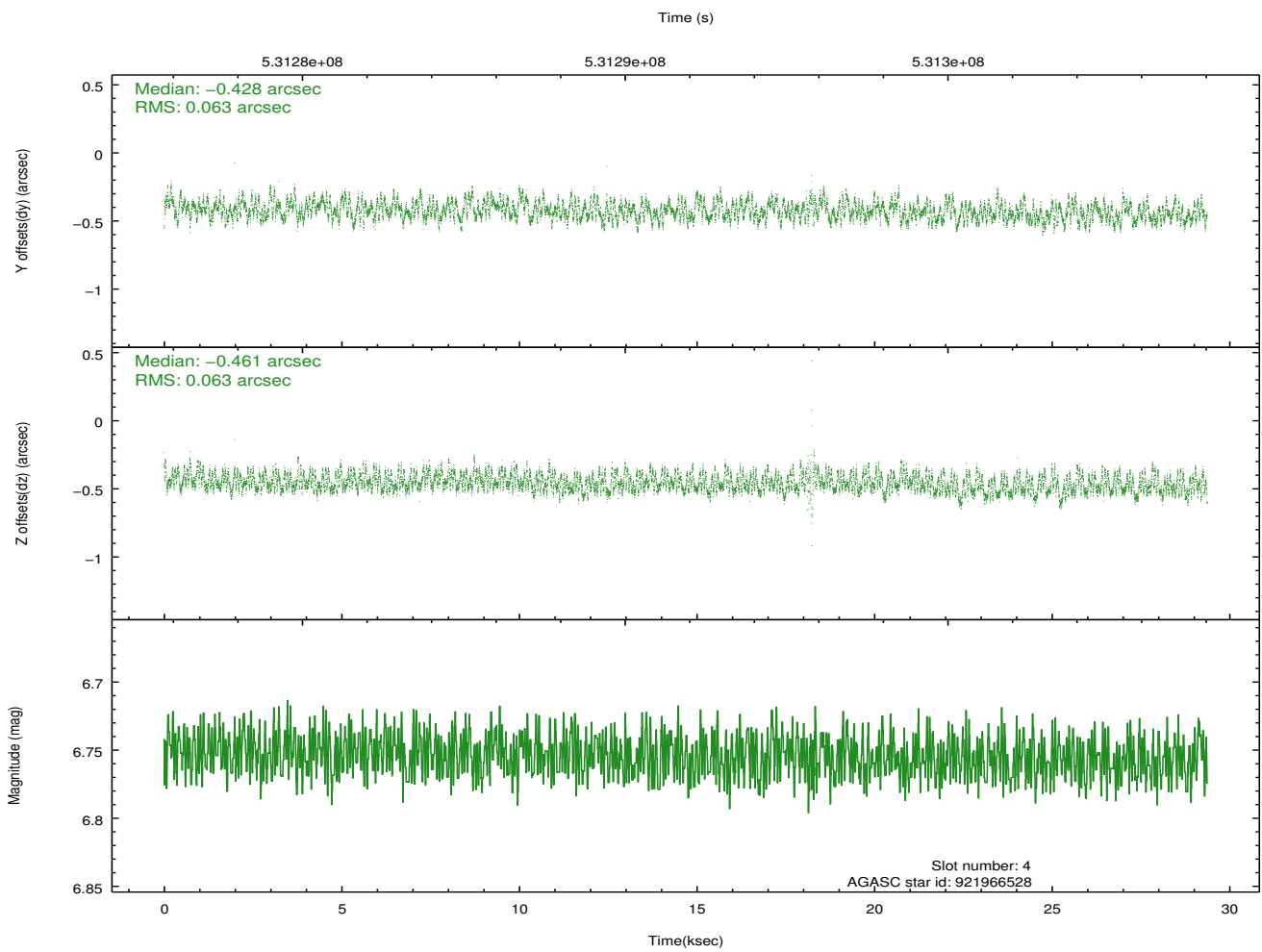
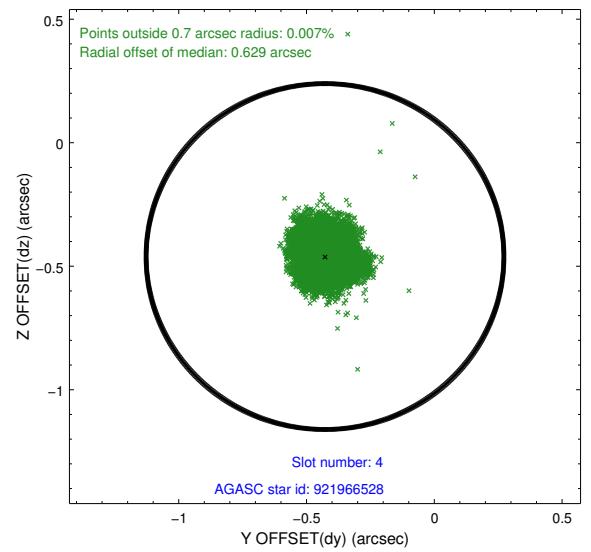
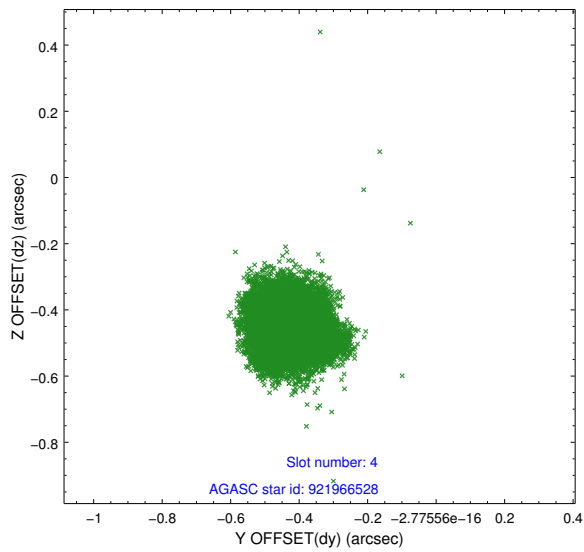
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2.4 Star Slots

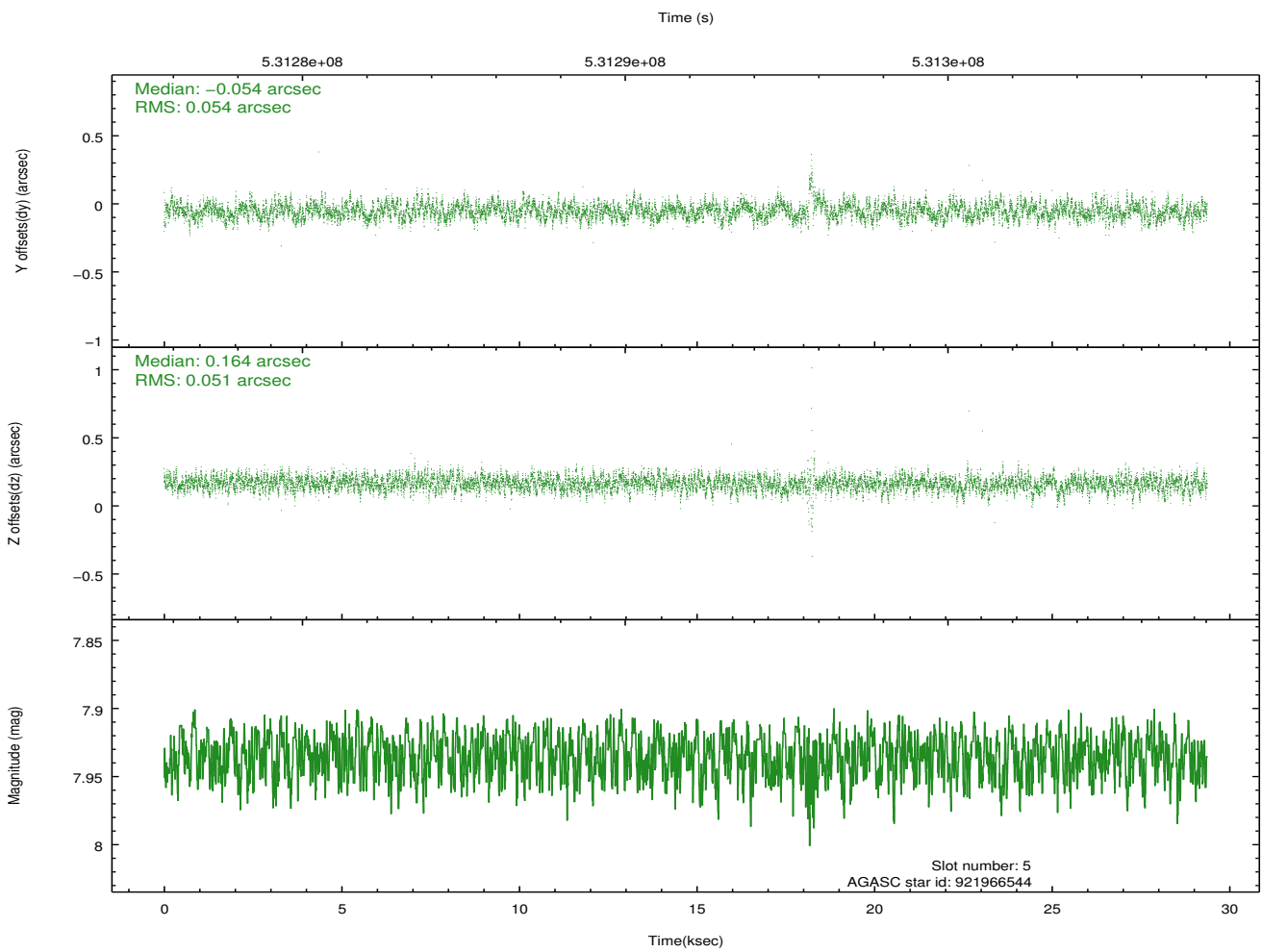
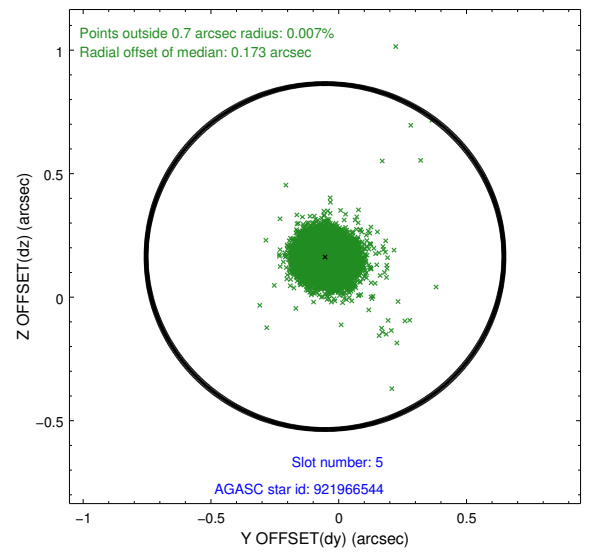
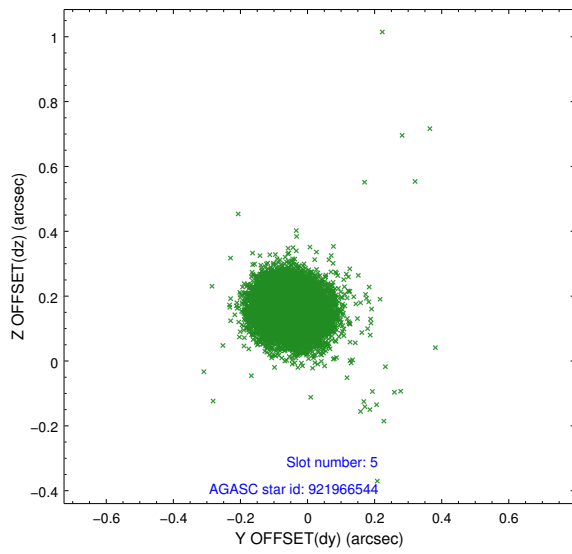
2.4.1 Slot 3



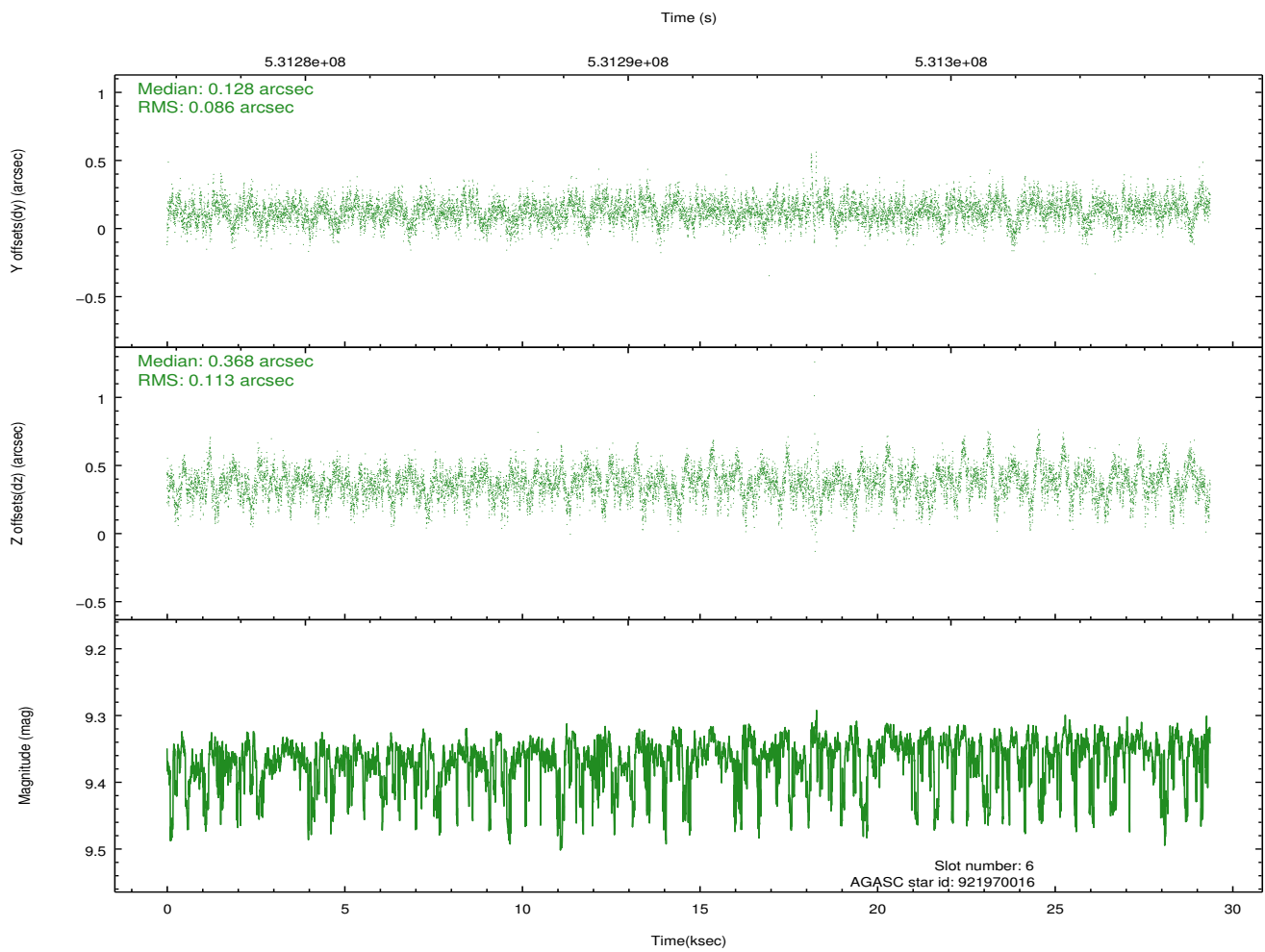
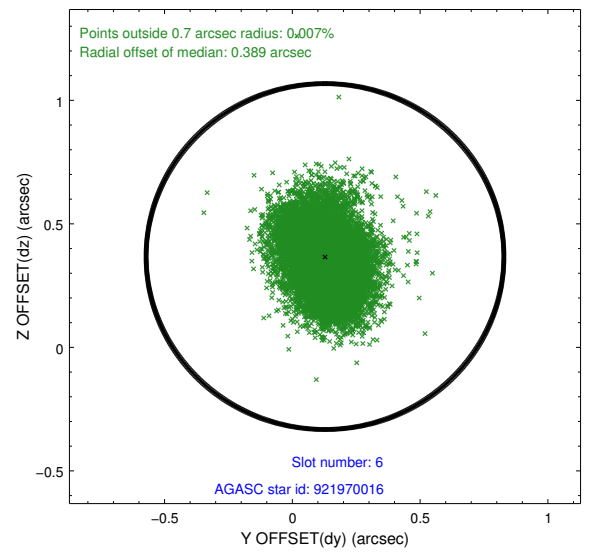
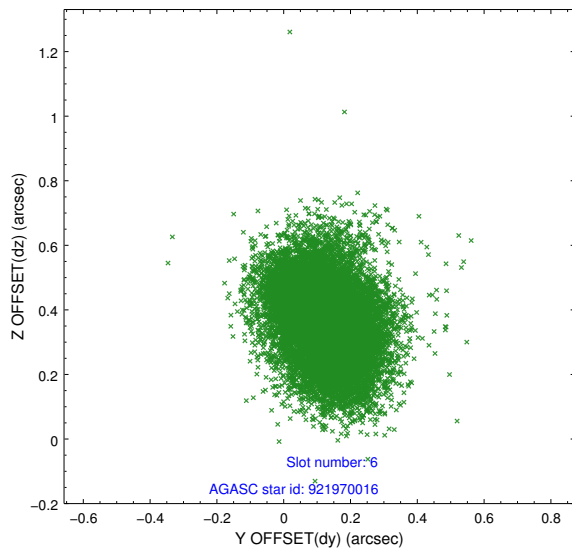
2.4.2 Slot 4



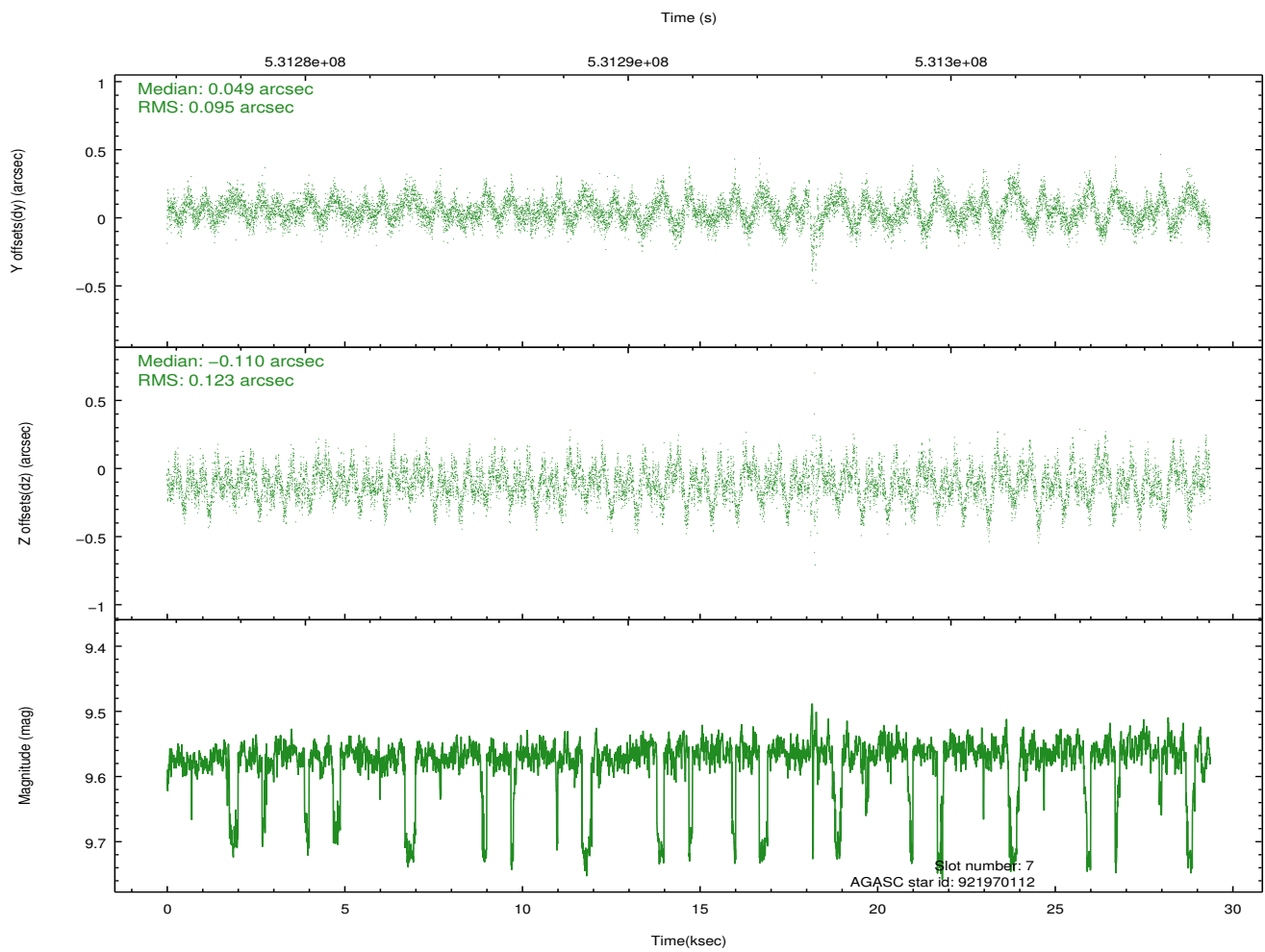
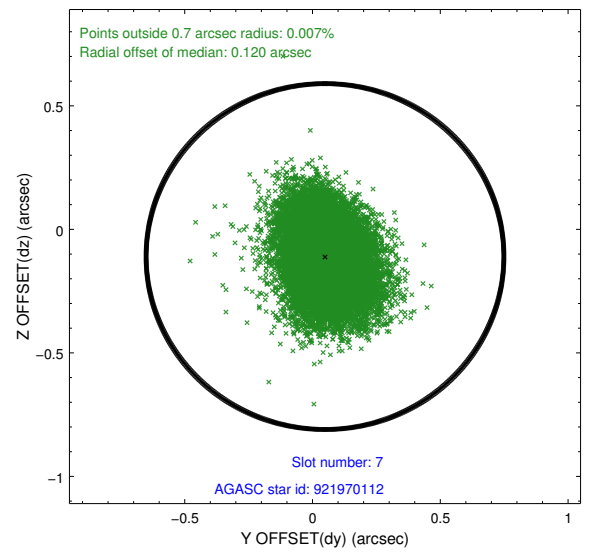
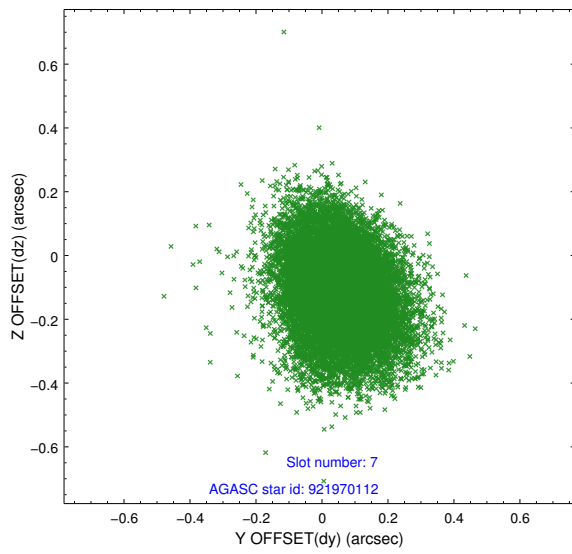
2.4.3 Slot 5



2.4.4 Slot 6

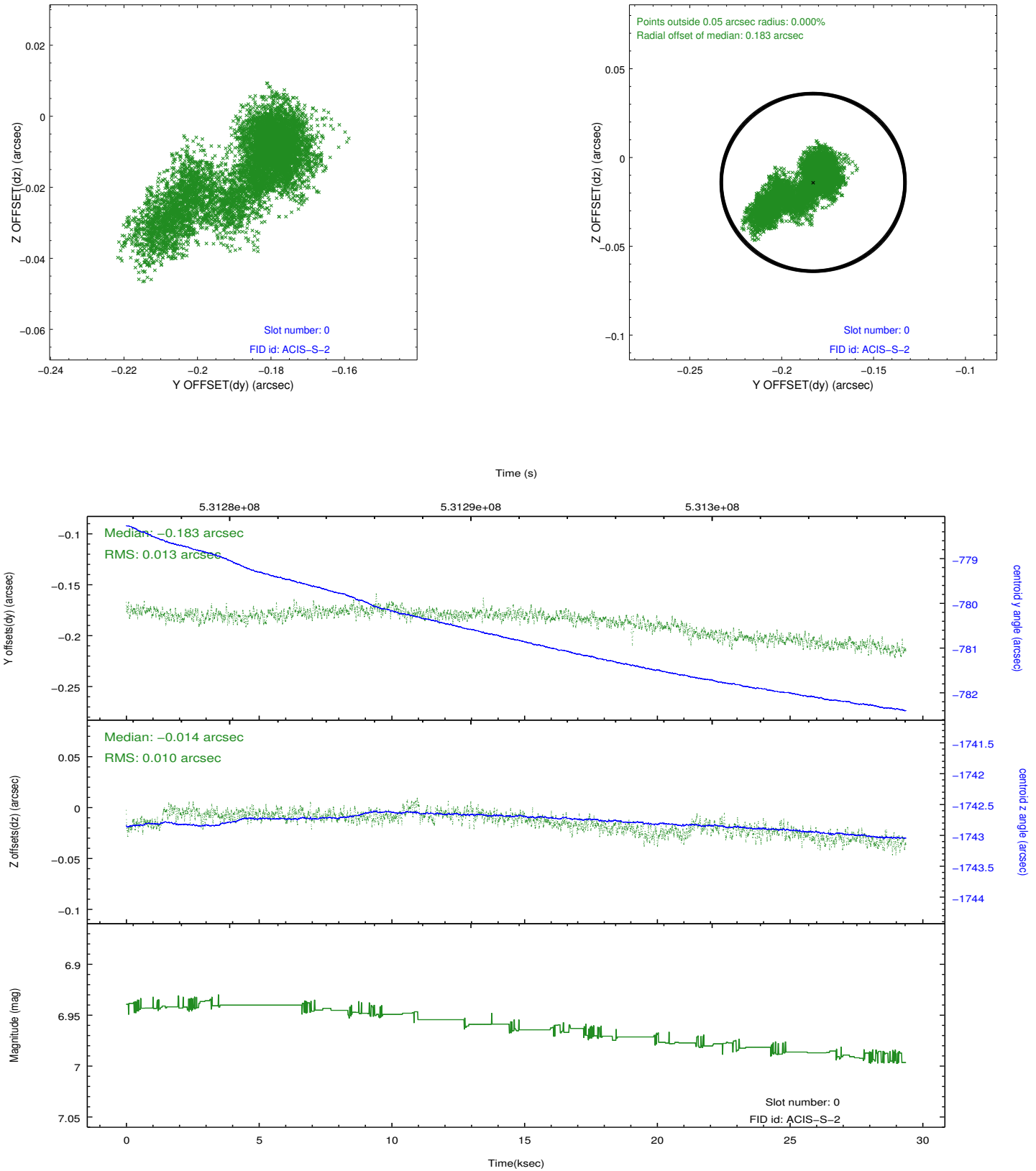


2.4.5 Slot 7

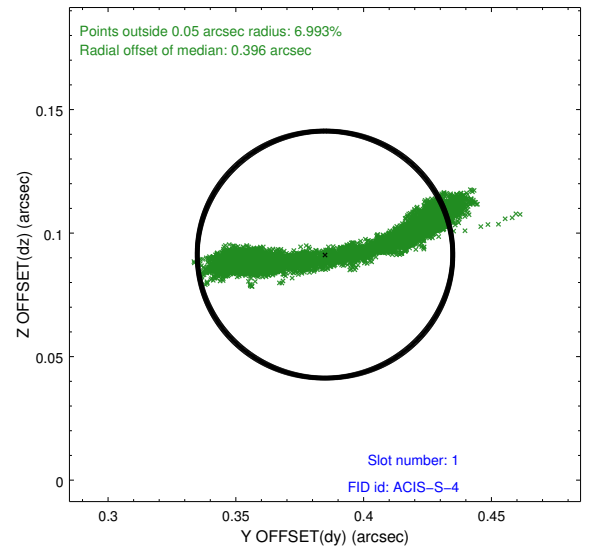
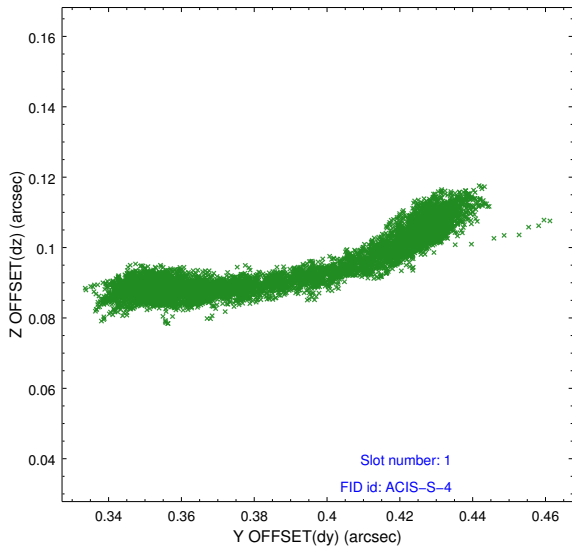


2.5 FID Slots

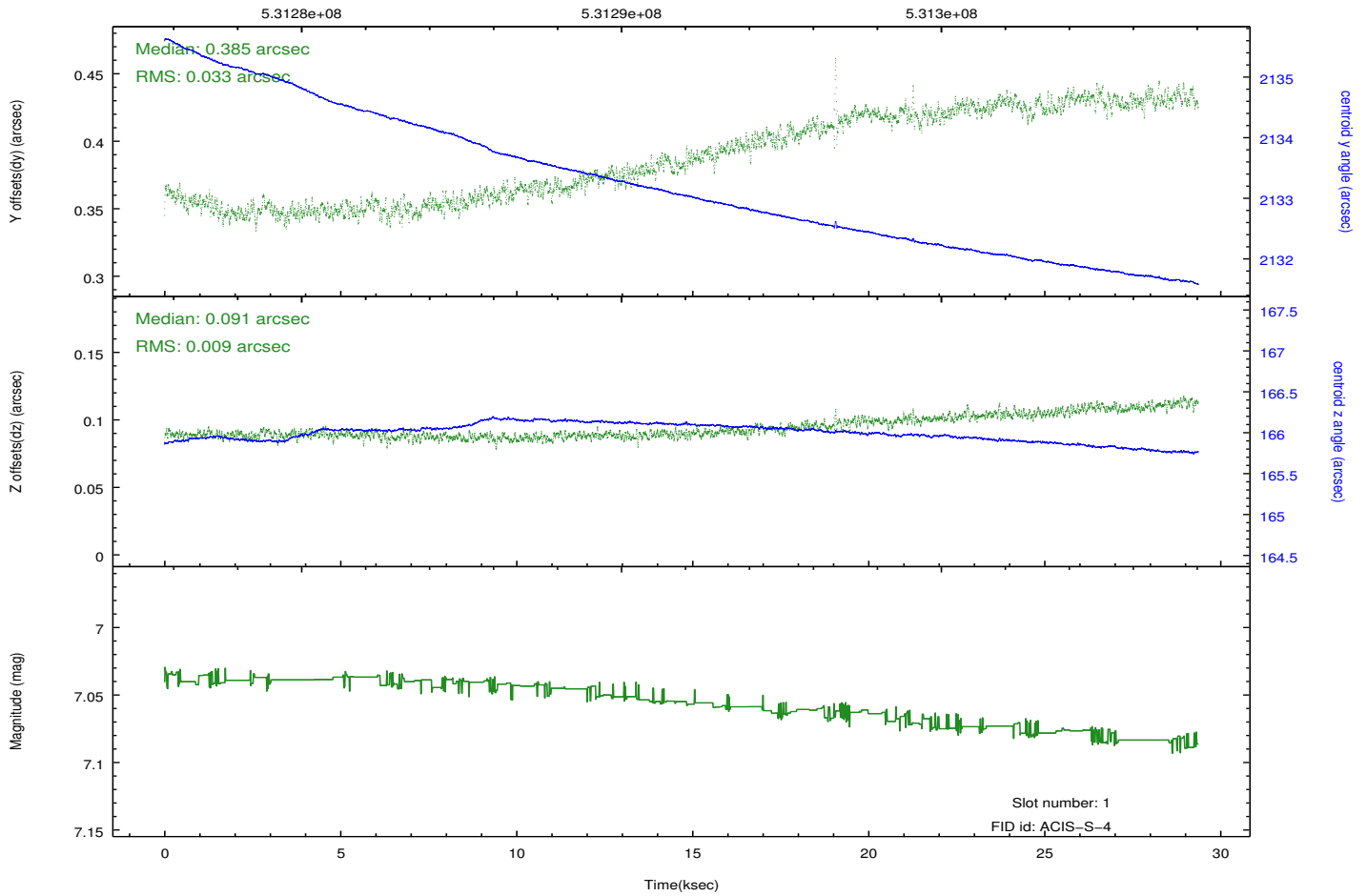
2.5.1 Slot 0



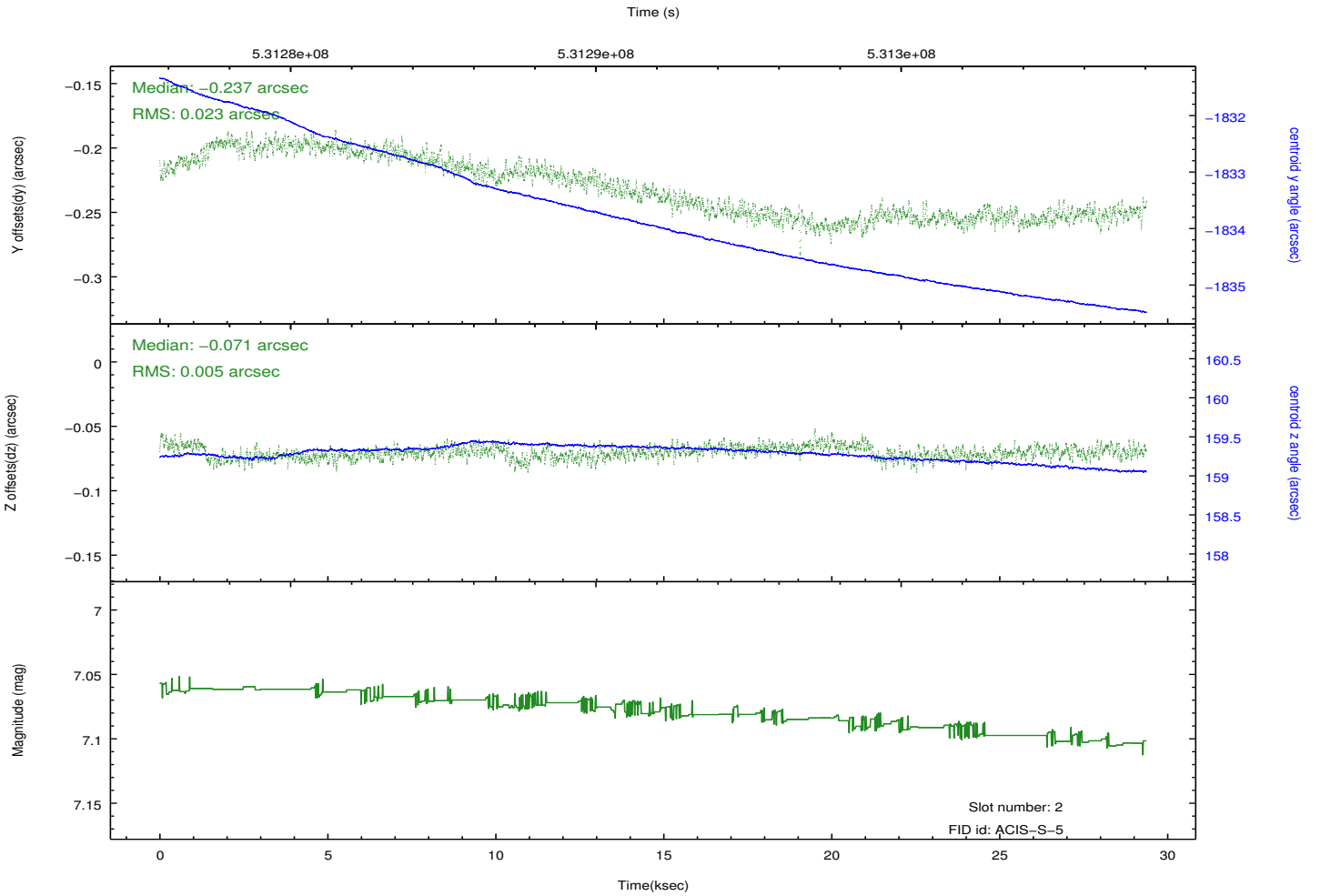
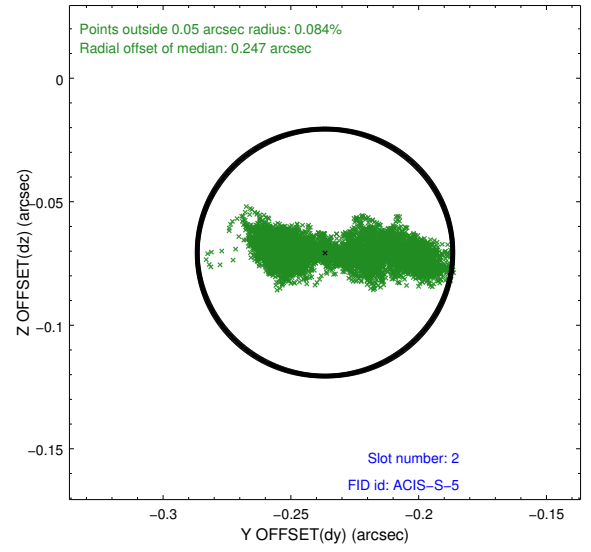
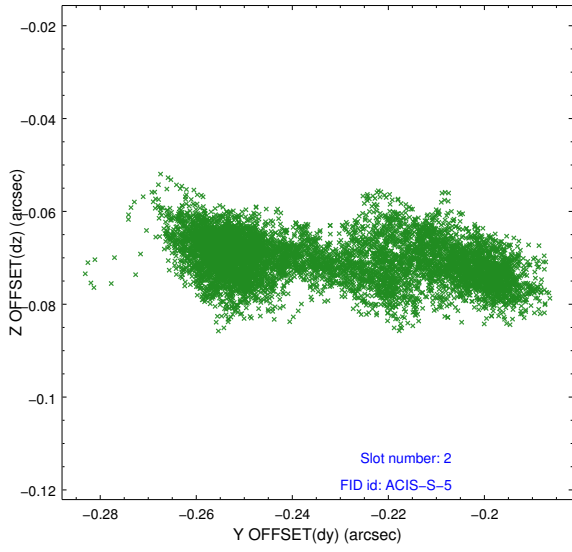
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.11.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.844159538925

A.2 Comments

Apparent large deviation (about 1 arcmin) in pointing about 18 ksec into the observation is due to a momentum dump. This time period is excluded from the GTI for this observation.