

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20164 - L2 Version 1
Chandra X-Ray Center

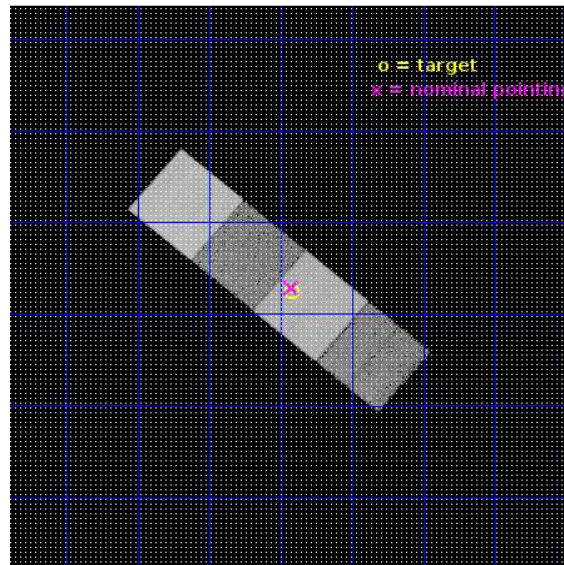
L2 Processing Date : Dec 25 2017

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1 Front

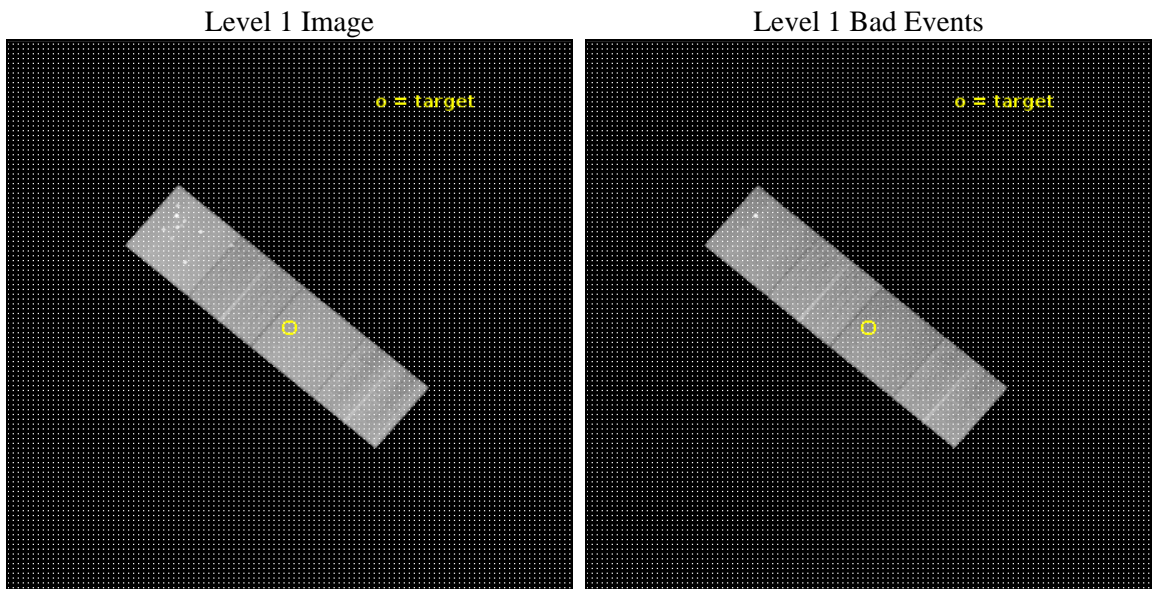
seq_num	201181	Sequence number
obs_id	20164	Observation id
title	Beyond Proxima b: Characterizing the X-ray Environments of the Next Three Nearest Potentially Habitable Exoplanets	Proposal title
observer	Edward Guinan	Principal investigator
object	Luyten's Star	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	111.855037	Observer's specified target RA [deg]
dec_targ	5.206808	Observer's specified target Dec [deg]
ra_nom	111.85596329864	Nominal RA [deg]
dec_nom	5.2143533190845	Nominal Dec [deg]
roll_nom	40.156537756954	Nominal Roll [deg]
revision	1	Processing version of data
ontime	28513.800219417	Sum of GTIs [s]
livetime	28141.246427996	Livetime [s]
ontime5	28513.800219417	Sum of GTIs [s]
ontime6	28513.800219417	Sum of GTIs [s]
ontime7	28513.800219417	Sum of GTIs [s]
ontime8	28513.800219417	Sum of GTIs [s]
l2events	305001	Number of level 2 events



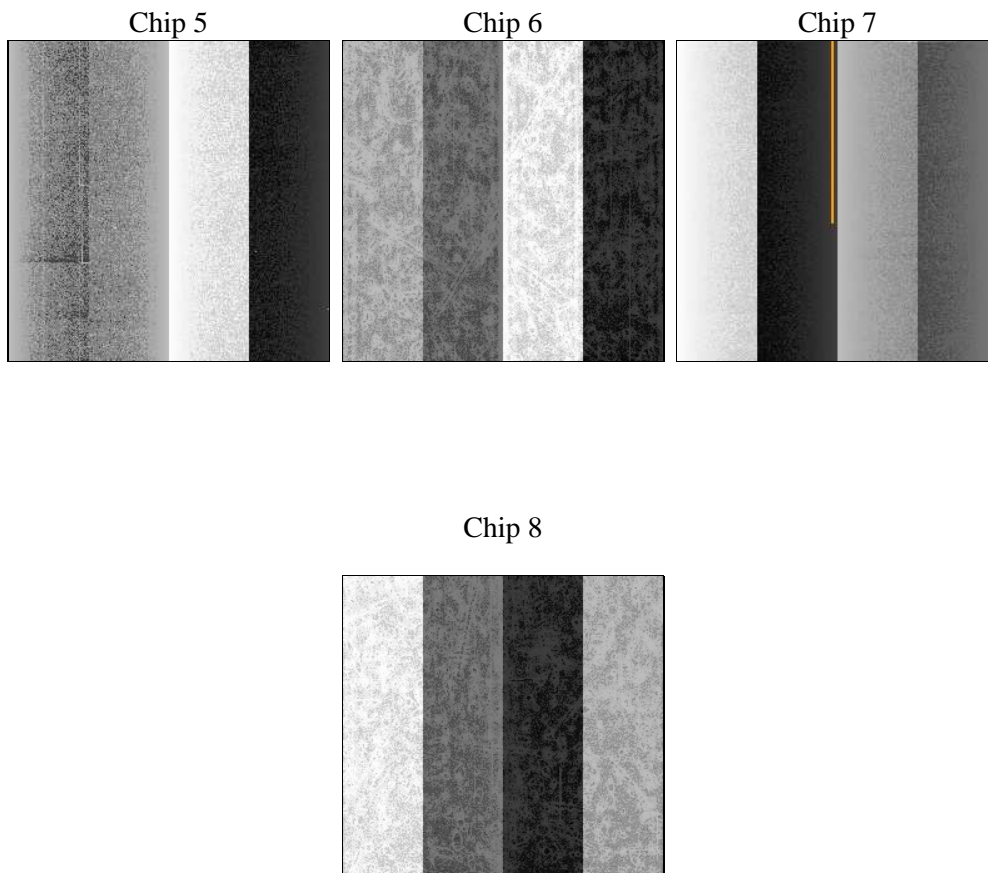
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28500.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	28513.800219417	Sum of GTIs [s]
caldbver	4.7.7	 	ontime5	28513.800219417	Sum of GTIs [s]
date	2017-12-25T15:34:41	Date and time of file creation	ontime6	28513.800219417	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	28513.800219417	Sum of GTIs [s]
			ontime8	28513.800219417	Sum of GTIs [s]
			l1events	1121659	Number of level 1 events

2.1.4 Events

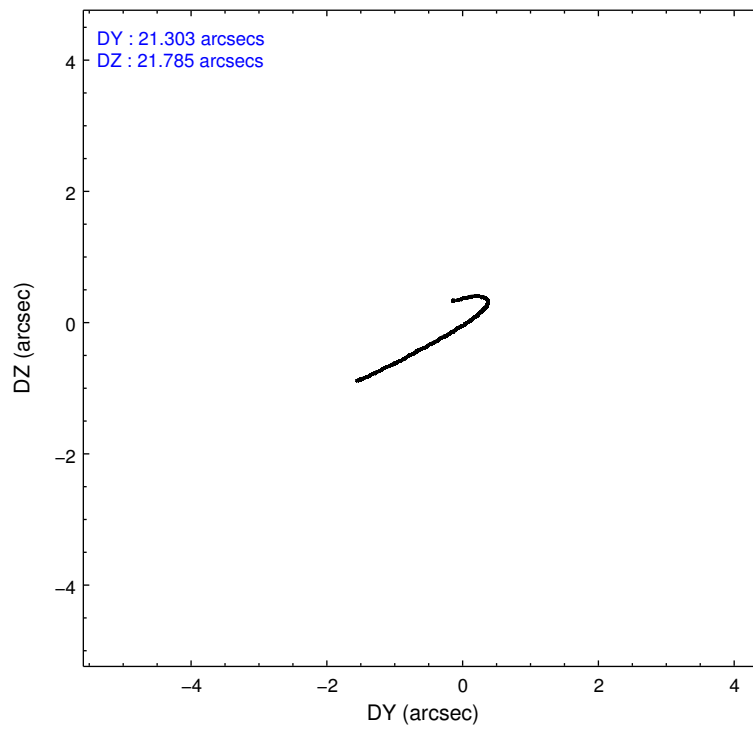
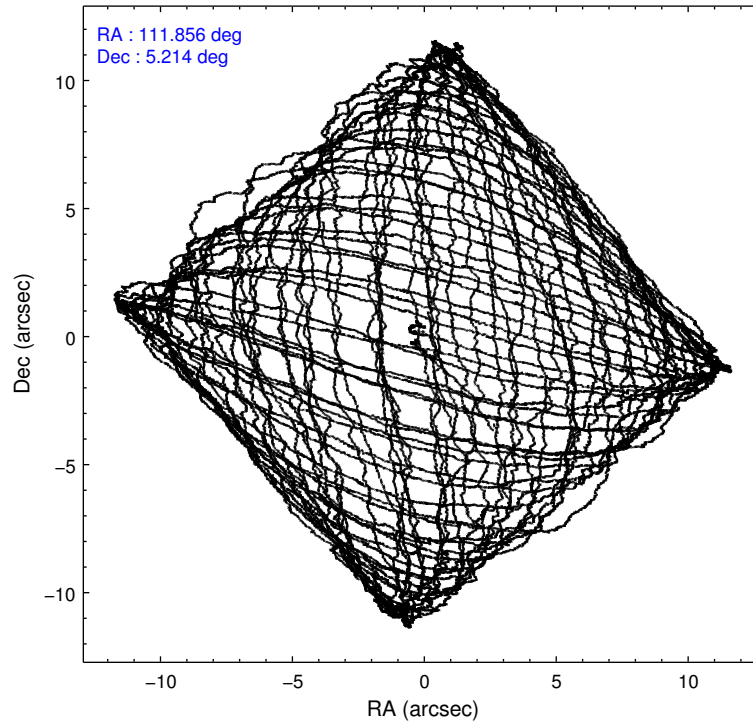
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	365829	215826	268580	271424
rejected events	182427	192313	151989	200832
rejected %	49%	89%	56%	73%

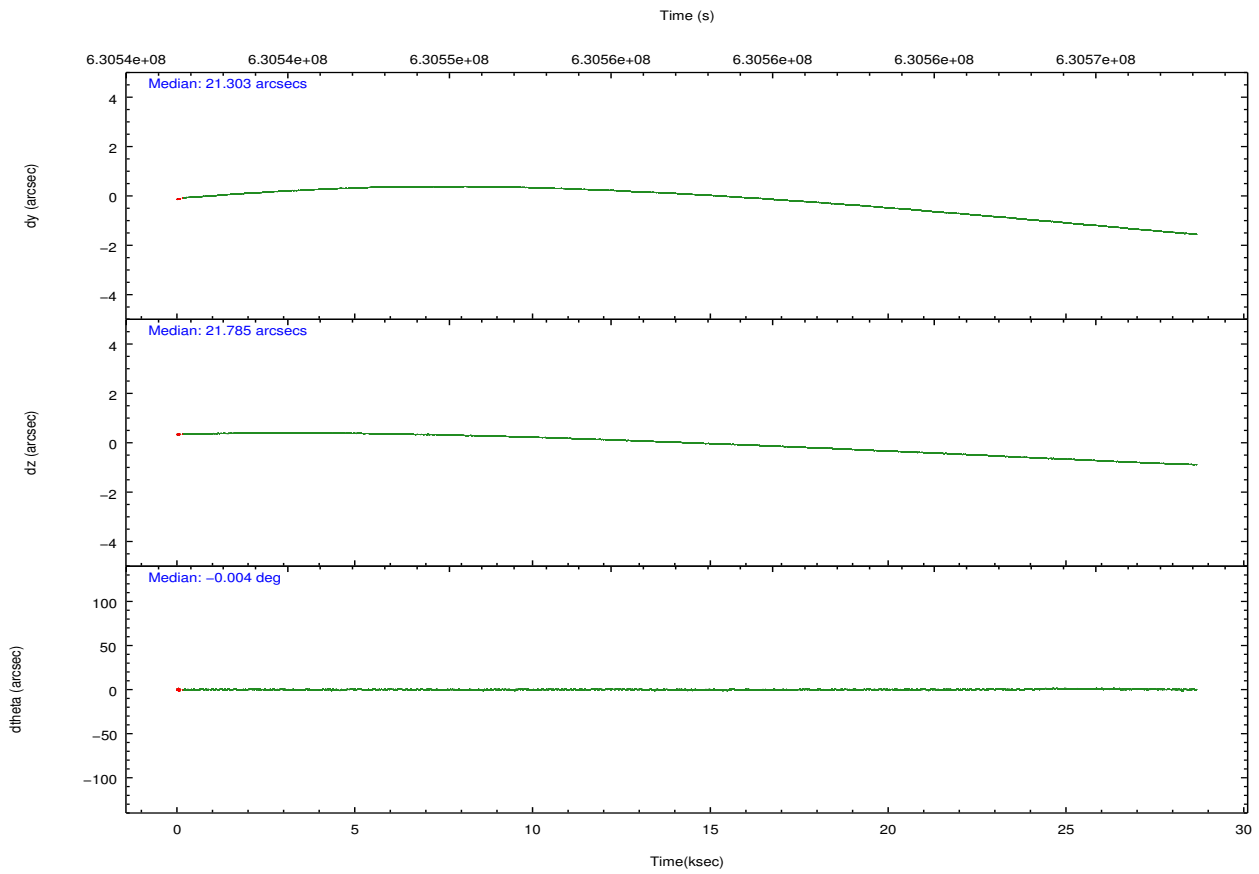
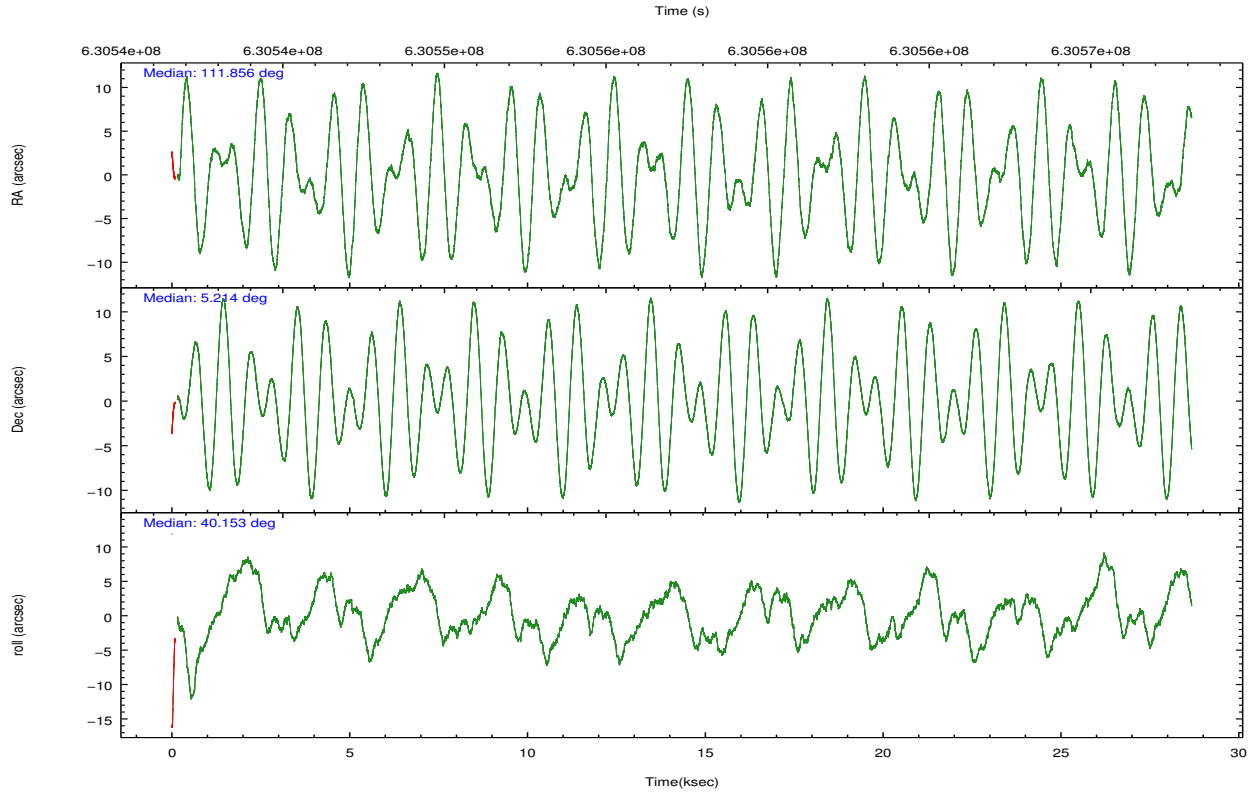
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	30849	7391	10120	20031
	8%	3%	3%	7%
grade 1 events	851	103	376	219
	0%	0%	0%	0%
grade 2 events	54745	5779	24360	17118
	14%	2%	9%	6%
grade 3 events	5257	2384	9494	7329
	1%	1%	3%	2%
grade 4 events	4939	2233	9267	6886
	1%	1%	3%	2%
grade 5 events	22760	9495	26690	14822
	6%	4%	9%	5%
grade 6 events	87920	5761	63610	19333
	24%	2%	23%	7%
grade 7 events	158508	182680	124663	185686
	43%	84%	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	111.846935	111.855963298643	Subarray requested	NONE	NONE
[deg] Pointing Dec	5.188409	5.214353319084536	Alternating exposures requested	N	N
[deg] Pointing Roll	40.000735	40.15653775695444	[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)	630543200.184000	630542111.46617			
Observation start date	2017-12-24T22:52:11	2017-12-24T22:35:11			
[s] Observation end time (MET)	630571700.184000	630572369.46795			
Observation end date	2017-12-25T06:47:11	2017-12-25T06:59:29			
Read mode	TIMED	TIMED			

2.3 Aspect



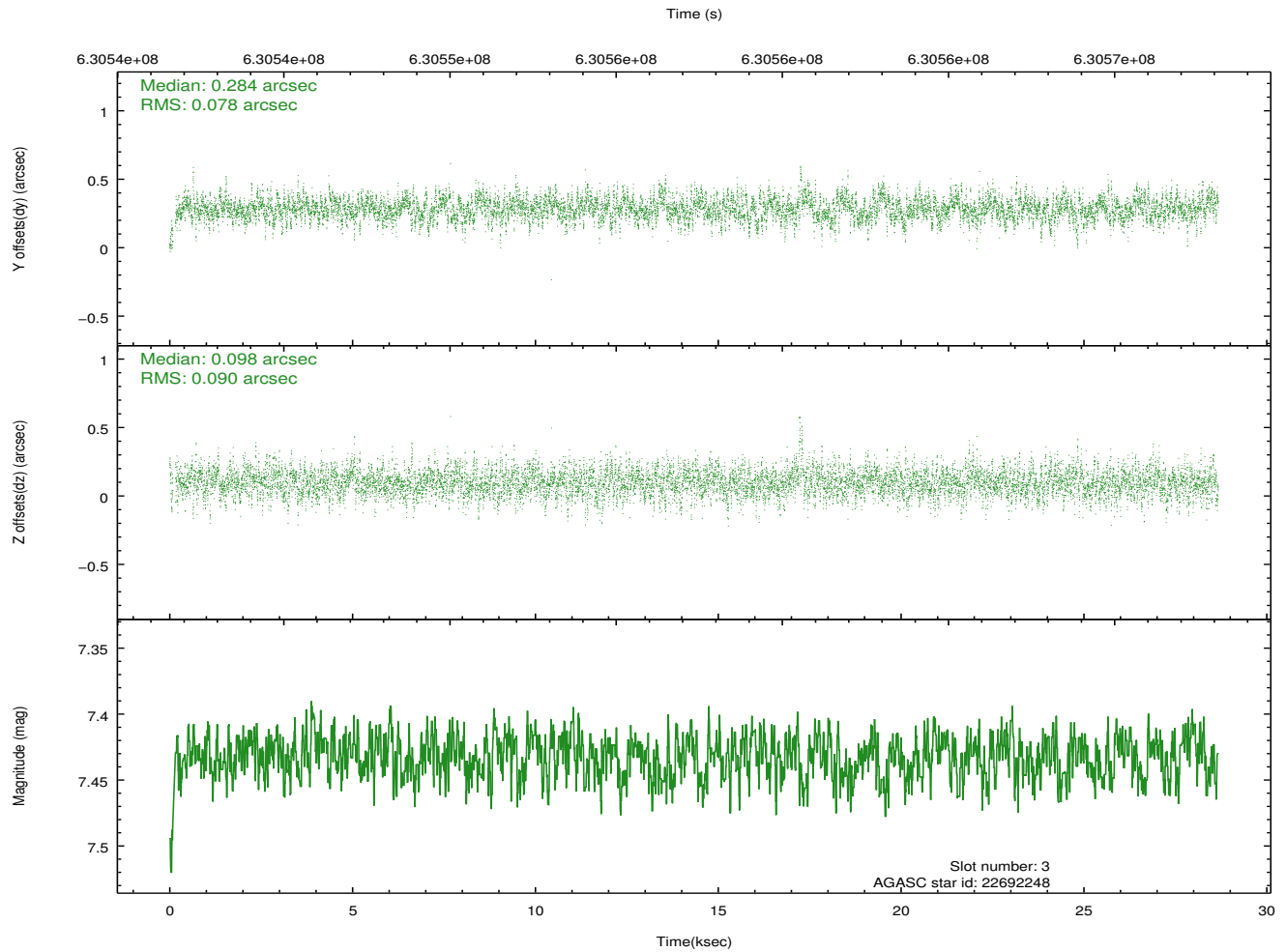
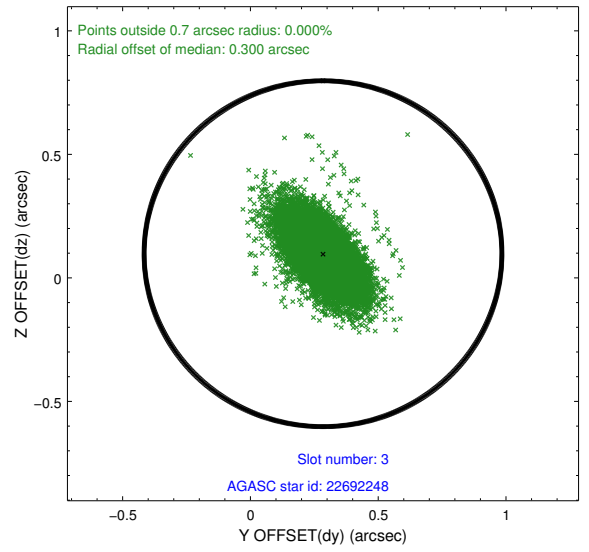
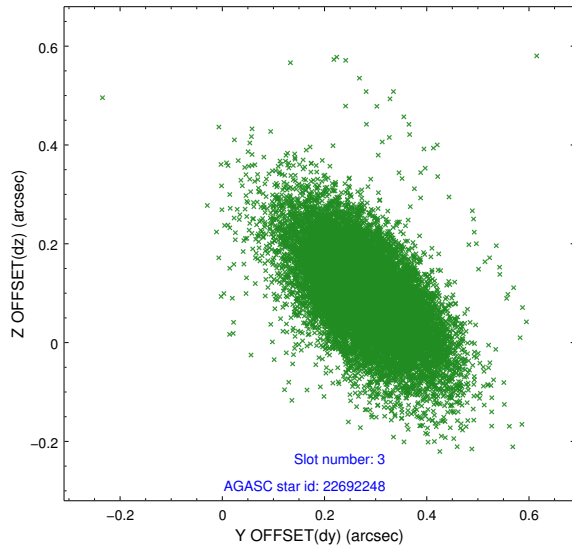


Slot Statistics

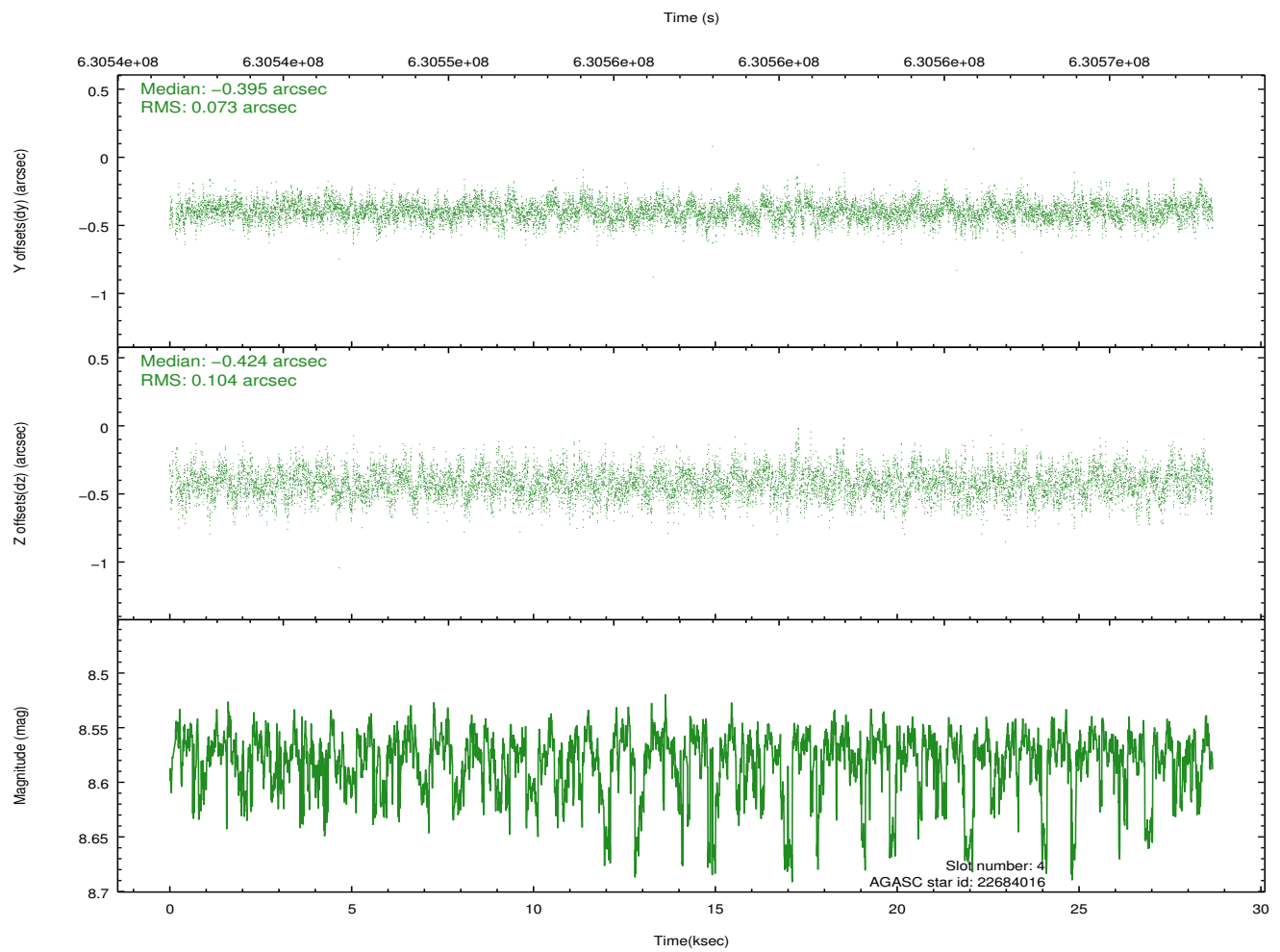
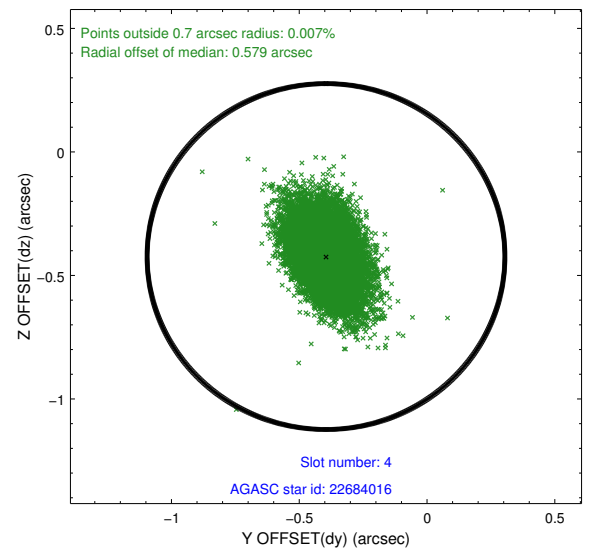
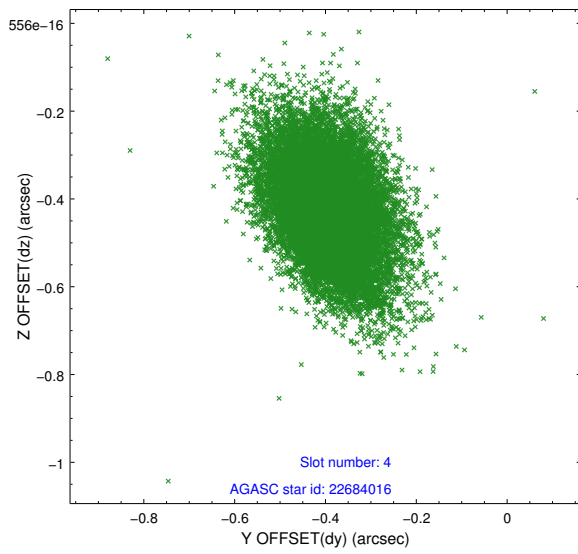
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.07	6979	-0.245	-0.177	0.021	0.042	0.000000	0.000000	-774.45	-1743.39
1	FID		ACIS-S-4	7.19	6979	0.553	0.166	0.015	0.033	0.000000	0.000000	2139.58	165.36
2	FID		ACIS-S-5	7.19	6977	-0.337	0.021	0.019	0.036	0.000000	0.000000	-1827.29	158.95
3	GUIDE	used	22692248	7.43	13956	0.284	0.098	0.120	0.219	111.481924	5.233464	-897.34	965.78
4	GUIDE	used	22684016	8.58	13941	-0.395	-0.424	0.132	0.227	111.553028	5.589549	121.54	1783.02
5	GUIDE	used	22693544	8.87	13873	0.397	0.693	0.179	0.296	111.970943	4.435370	-1400.75	-2362.02
6	GUIDE	used	23209952	9.25	13932	-0.287	-0.371	0.173	0.277	111.973725	5.917909	2035.84	1719.63
7	MONITOR	unused		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

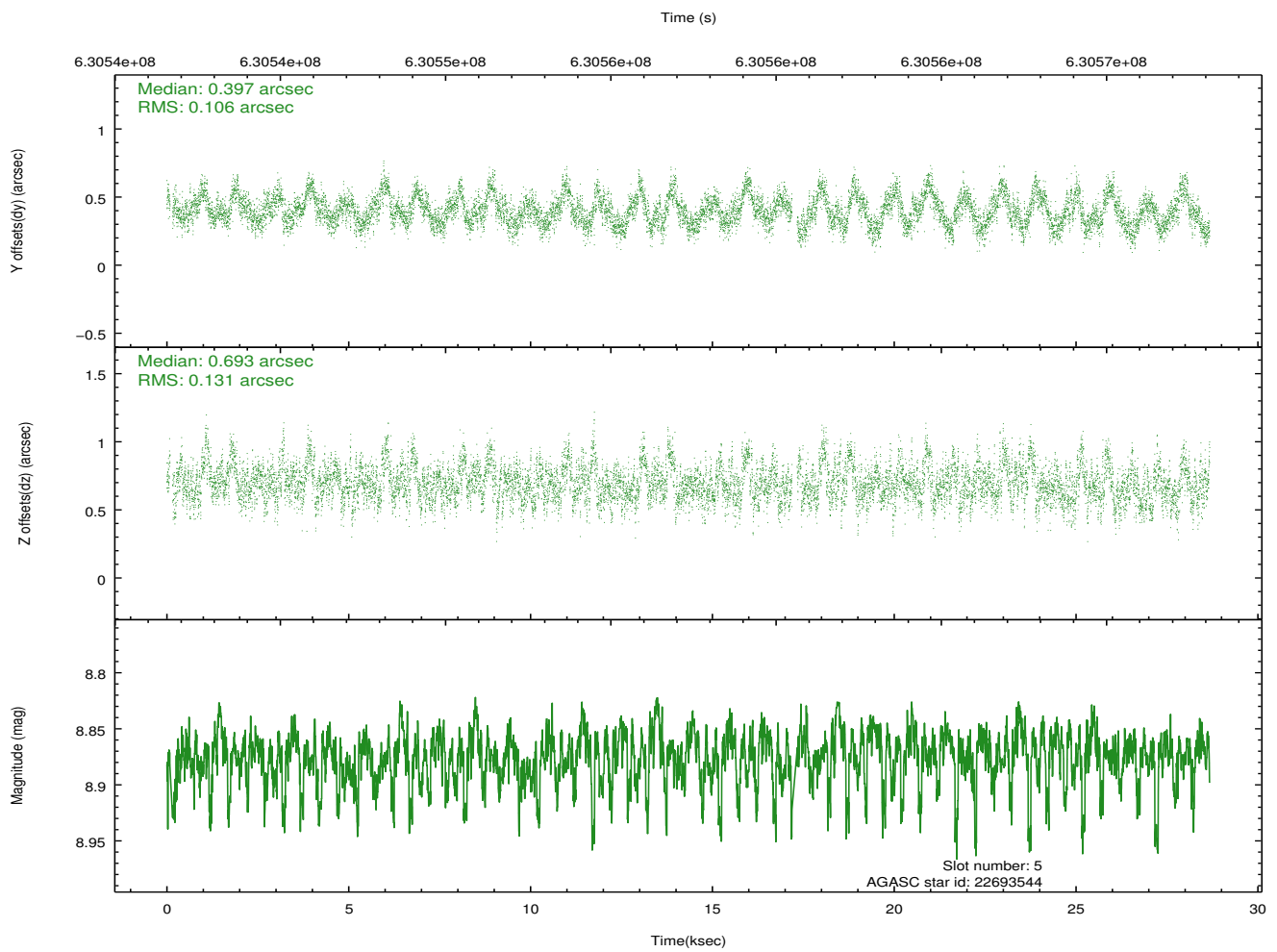
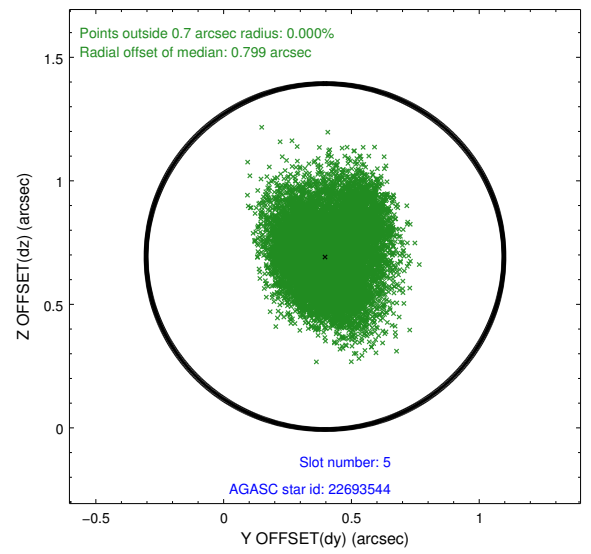
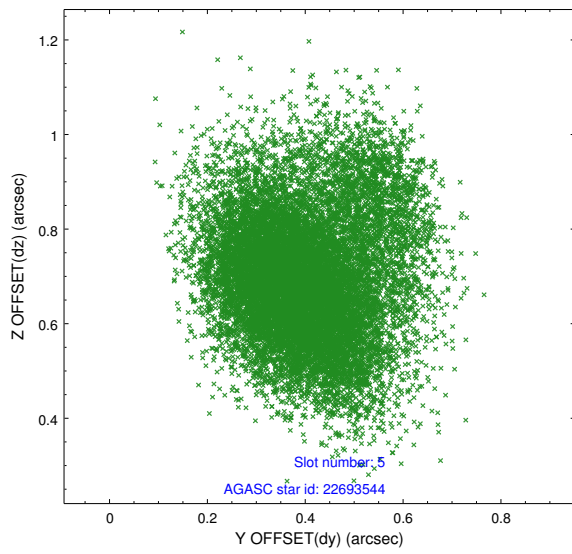
2.4.1 Slot 3



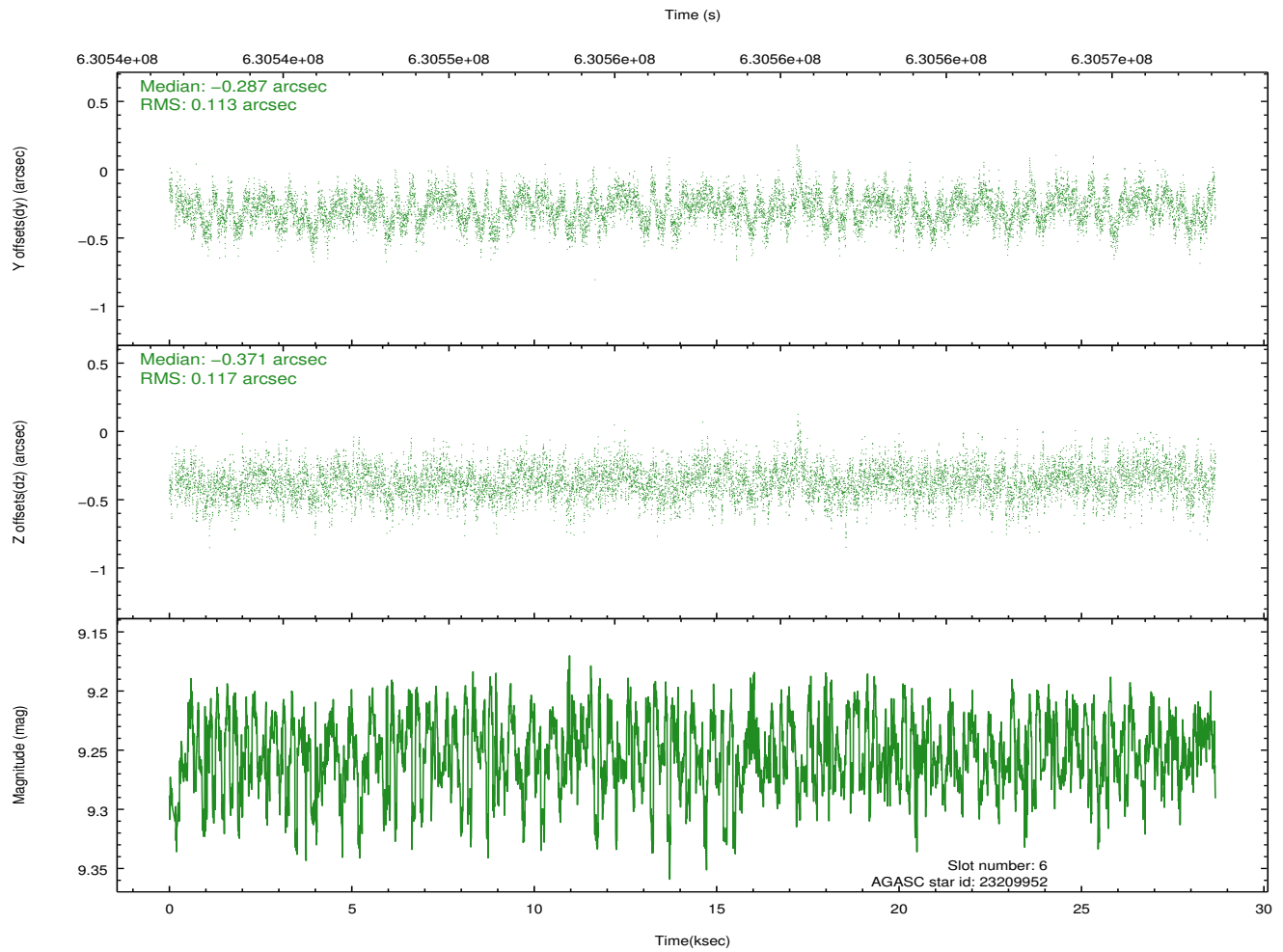
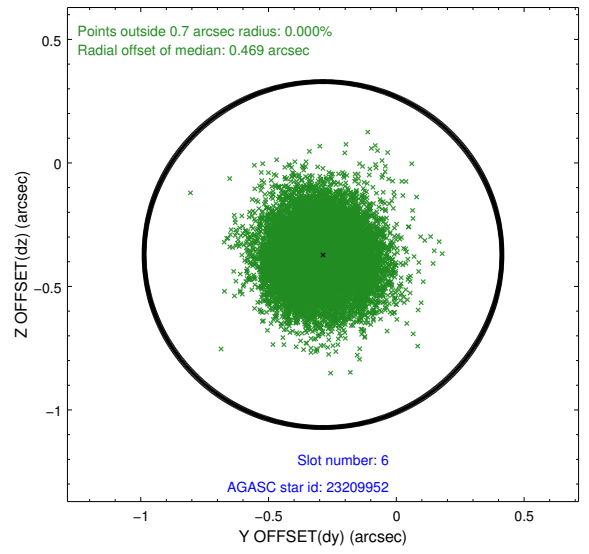
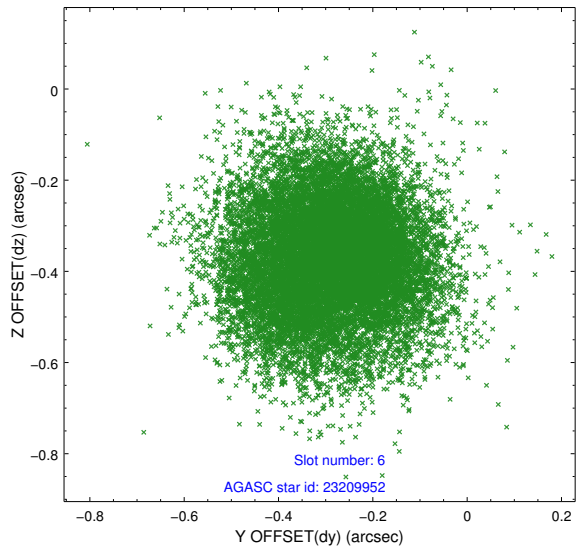
2.4.2 Slot 4



2.4.3 Slot 5

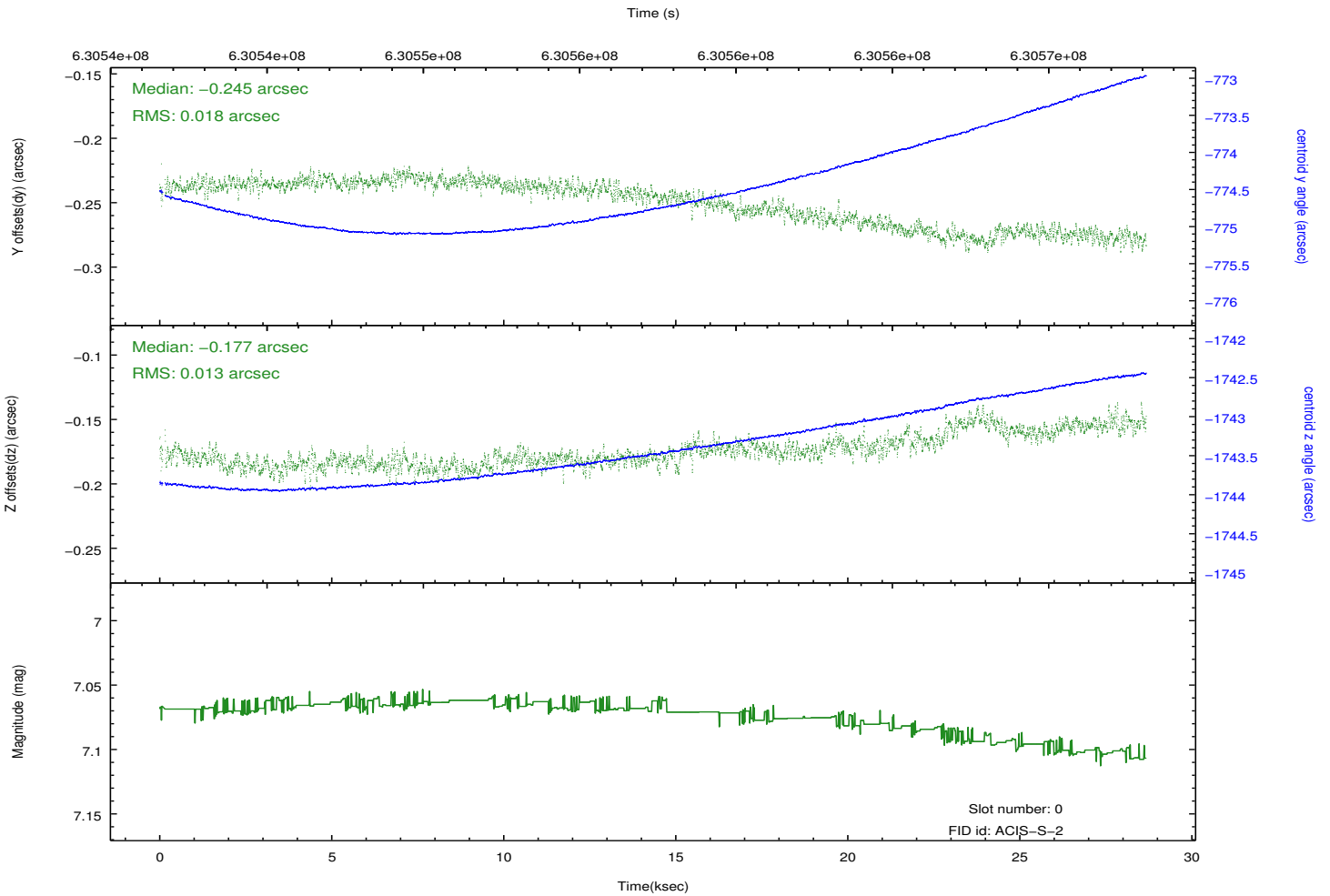
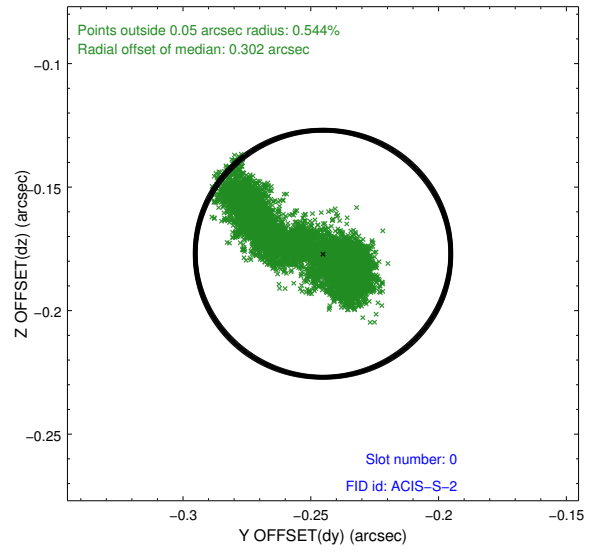
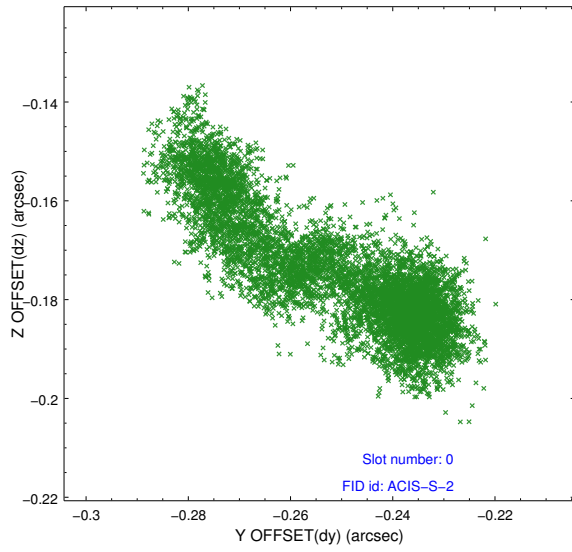


2.4.4 Slot 6

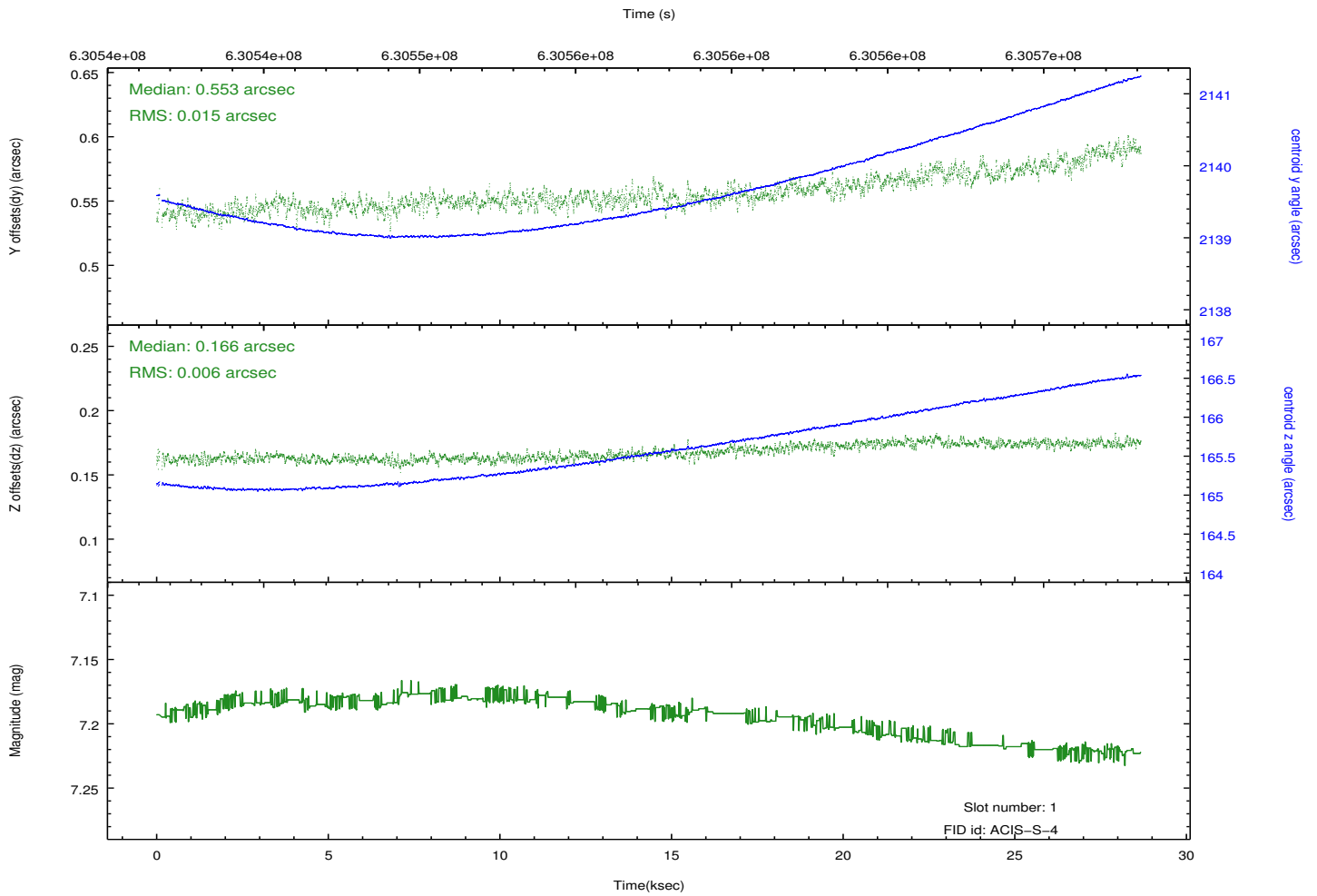
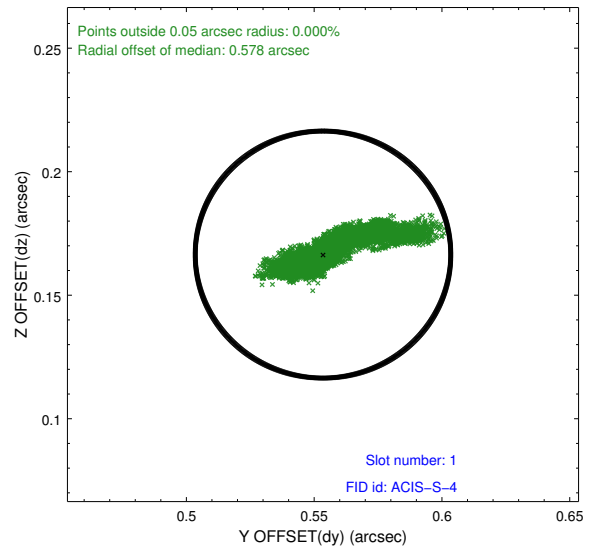
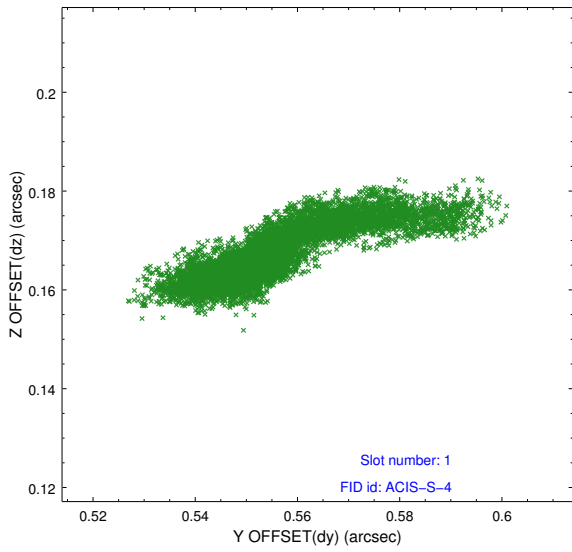


2.5 FID Slots

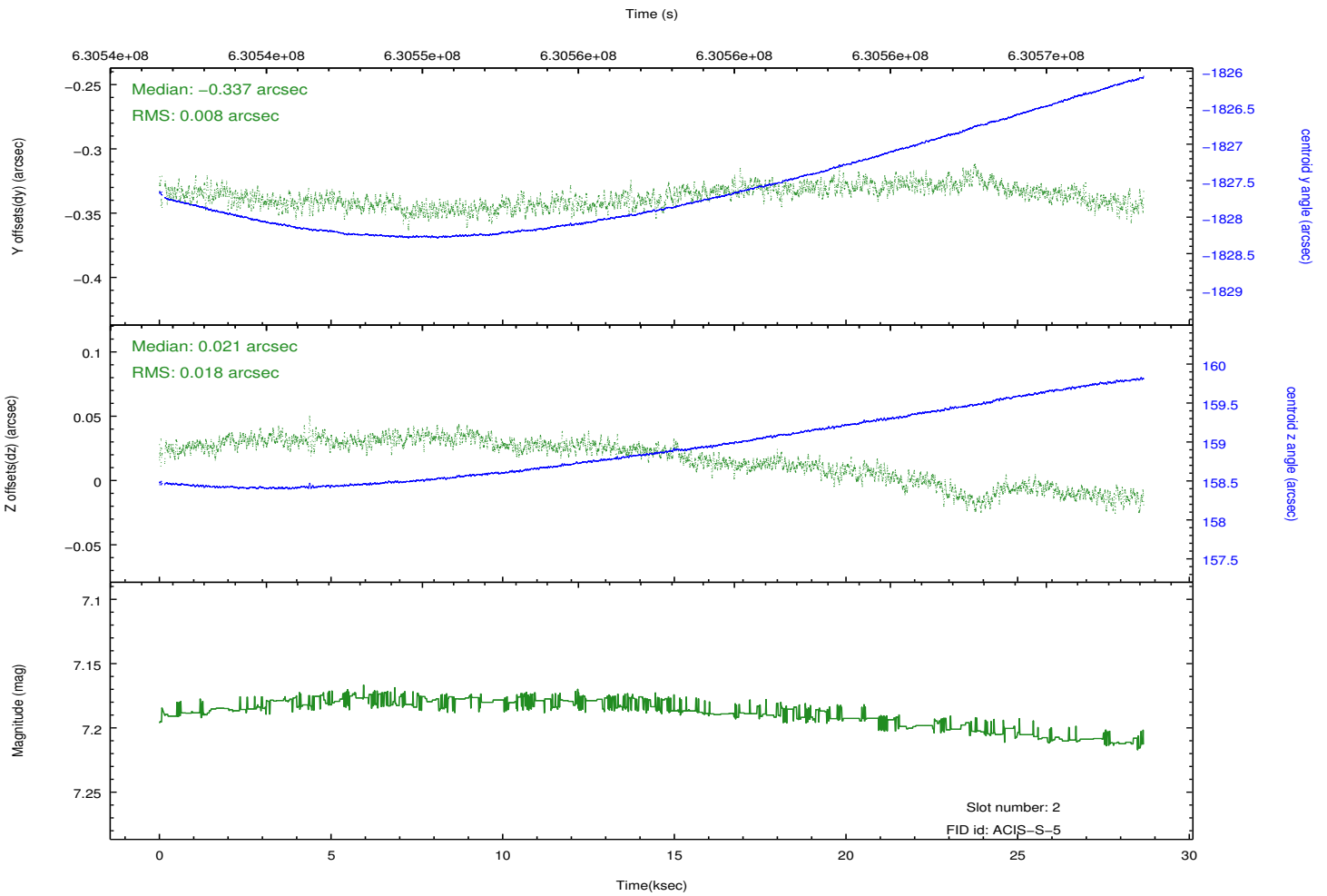
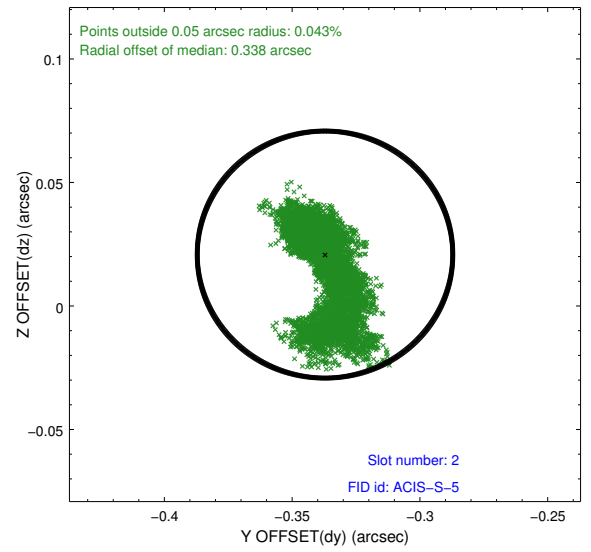
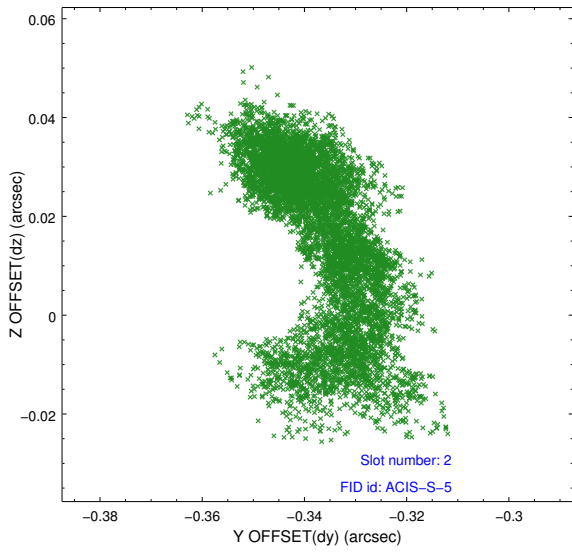
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.12.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.513800219417

A.2 Comments