

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21529 - L2 Version 1
Chandra X-Ray Center

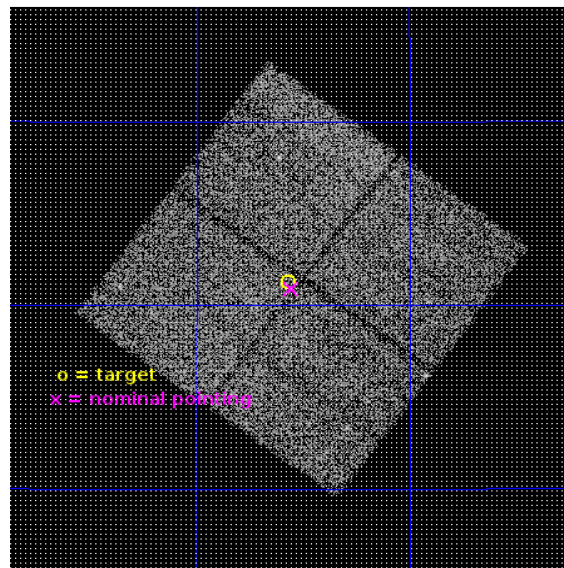
L2 Processing Date : Nov 30 2018

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1 Front

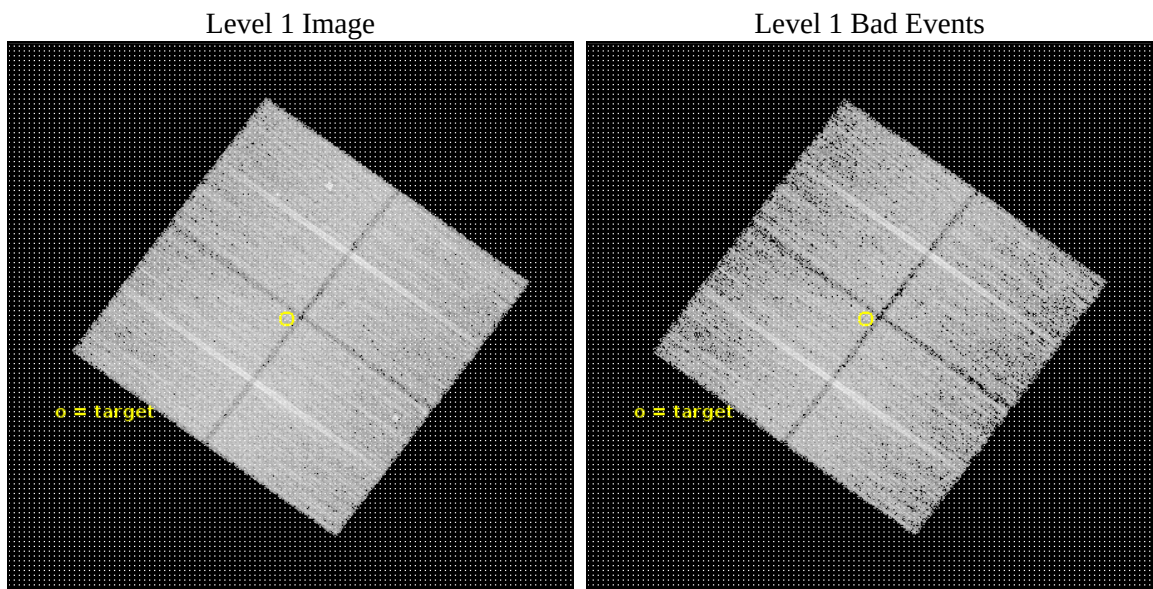
seq_num	801813	Sequence number
obs_id	21529	Observation id
title	Is there an enormous cold front at the virial radius of the Perseus cluster?	Proposal title
observer	Stephen Walker	Principal investigator
object	Perseus_west_cf_2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	48.392083	Observer's specified target RA [deg]
dec_targ	41.854	Observer's specified target Dec [deg]
ra_nom	48.388522658592	Nominal RA [deg]
dec_nom	41.848372756113	Nominal Dec [deg]
roll_nom	216.21102673254	Nominal Roll [deg]
revision	1	Processing version of data
ontime	19077.400146842	Sum of GTIs [s]
livetime	18828.139869346	Livetime [s]
ontime0	19074.259086609	Sum of GTIs [s]
ontime1	19077.400146842	Sum of GTIs [s]
ontime2	19067.976965904	Sum of GTIs [s]
ontime3	19077.400146842	Sum of GTIs [s]
l2events	55966	Number of level 2 events



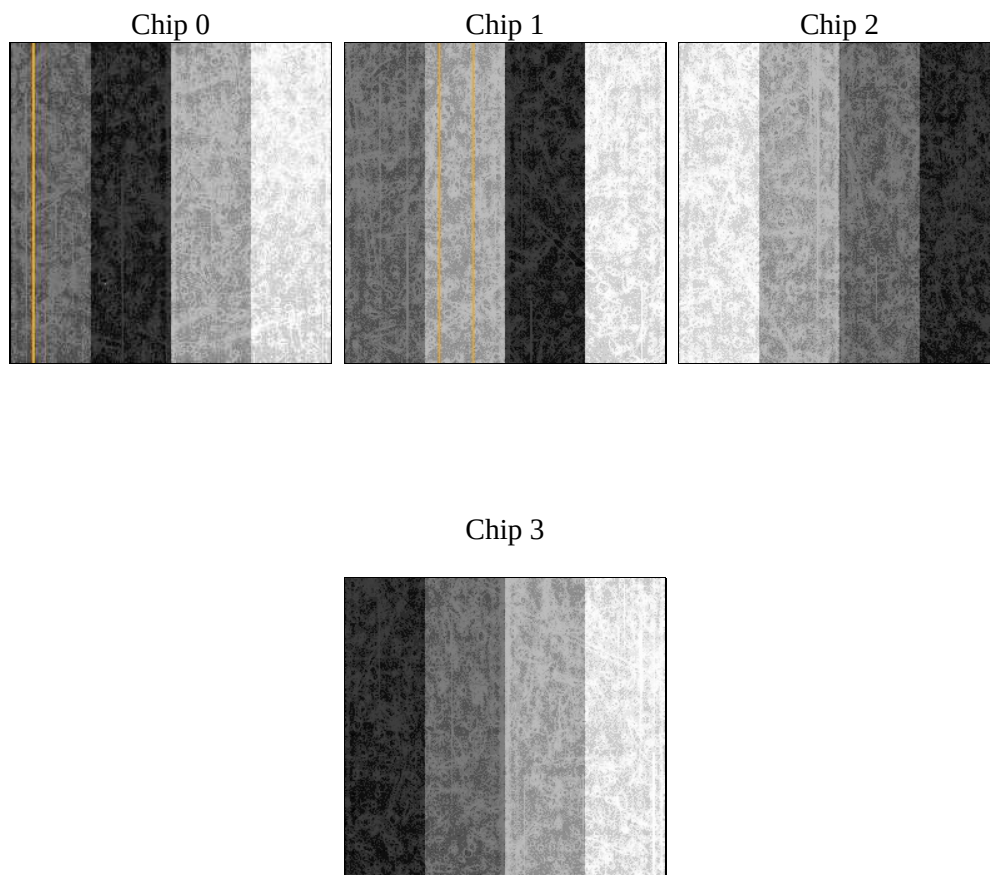
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	19077.400146842	Sum of GTIs [s]
caldsver	4.8.0.1	 	ontime0	19074.259086609	Sum of GTIs [s]
date	2018-11-30T20:56:39	Date and time of file creation	ontime1	19077.400146842	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	19067.976965904	Sum of GTIs [s]
			ontime3	19077.400146842	Sum of GTIs [s]
			l1events	577334	Number of level 1 events

2.1.4 Events

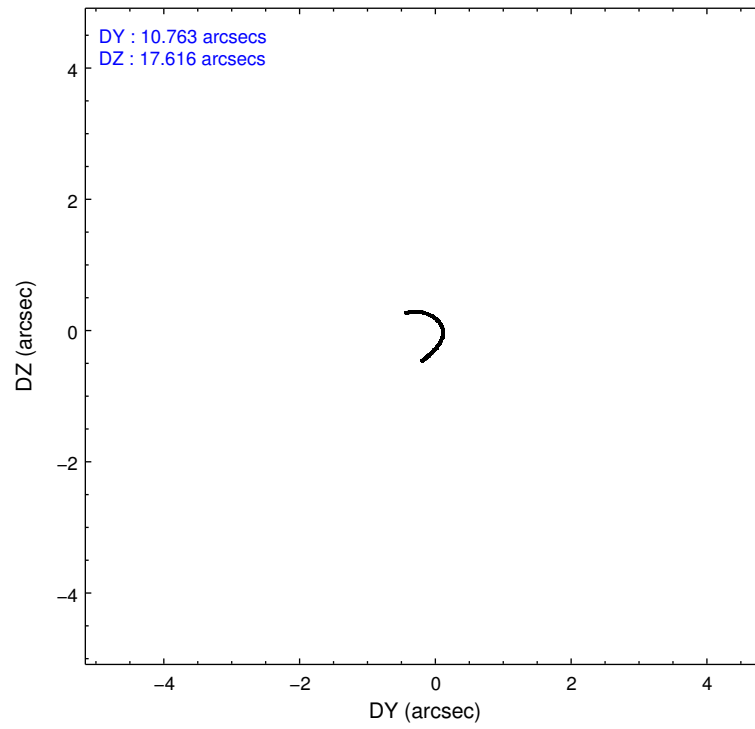
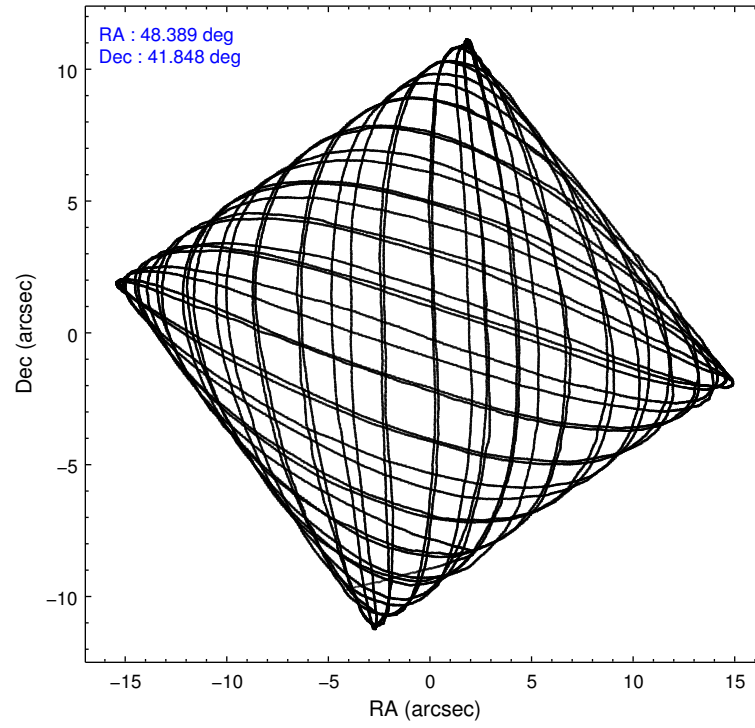
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	134805	141746	152540	148243
rejected events	118480	122982	136042	132390
rejected %	87%	86%	89%	89%

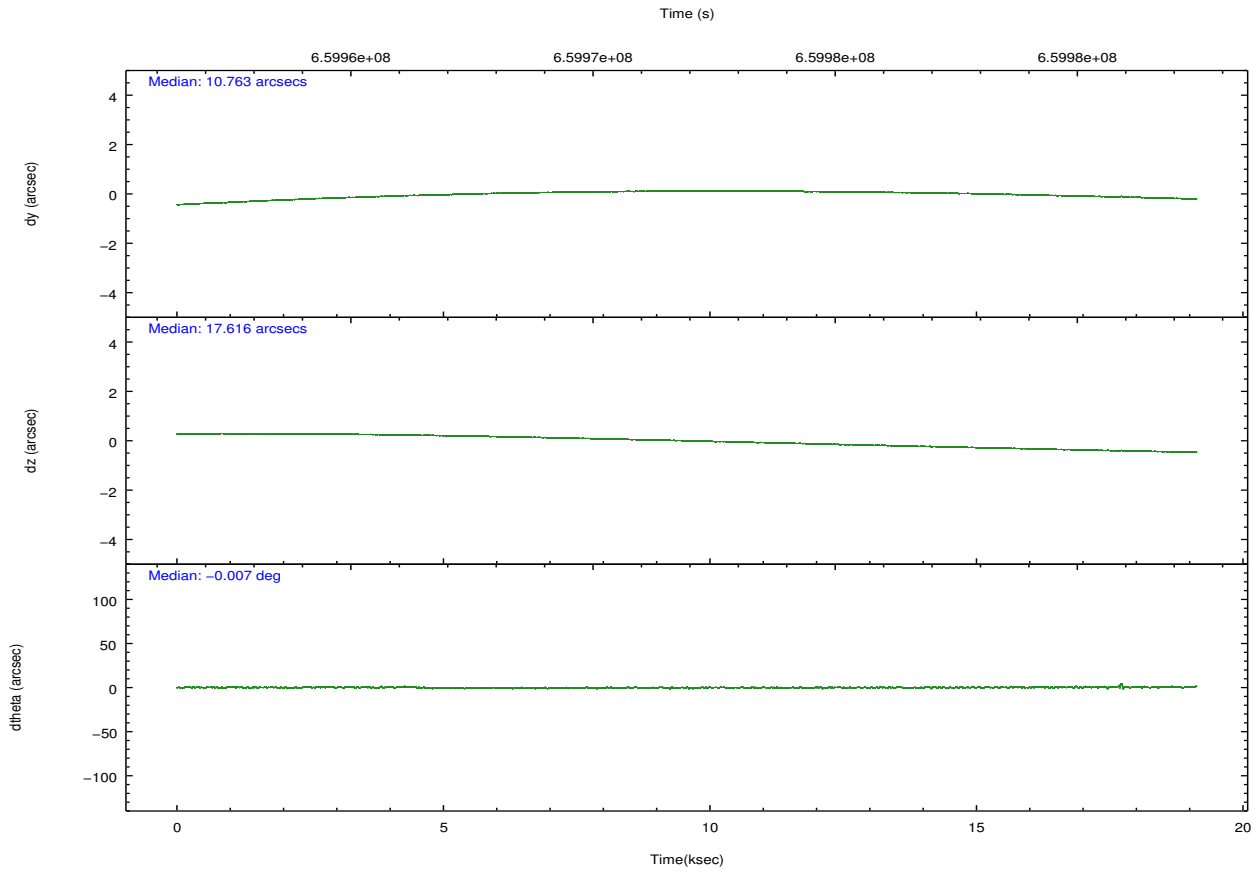
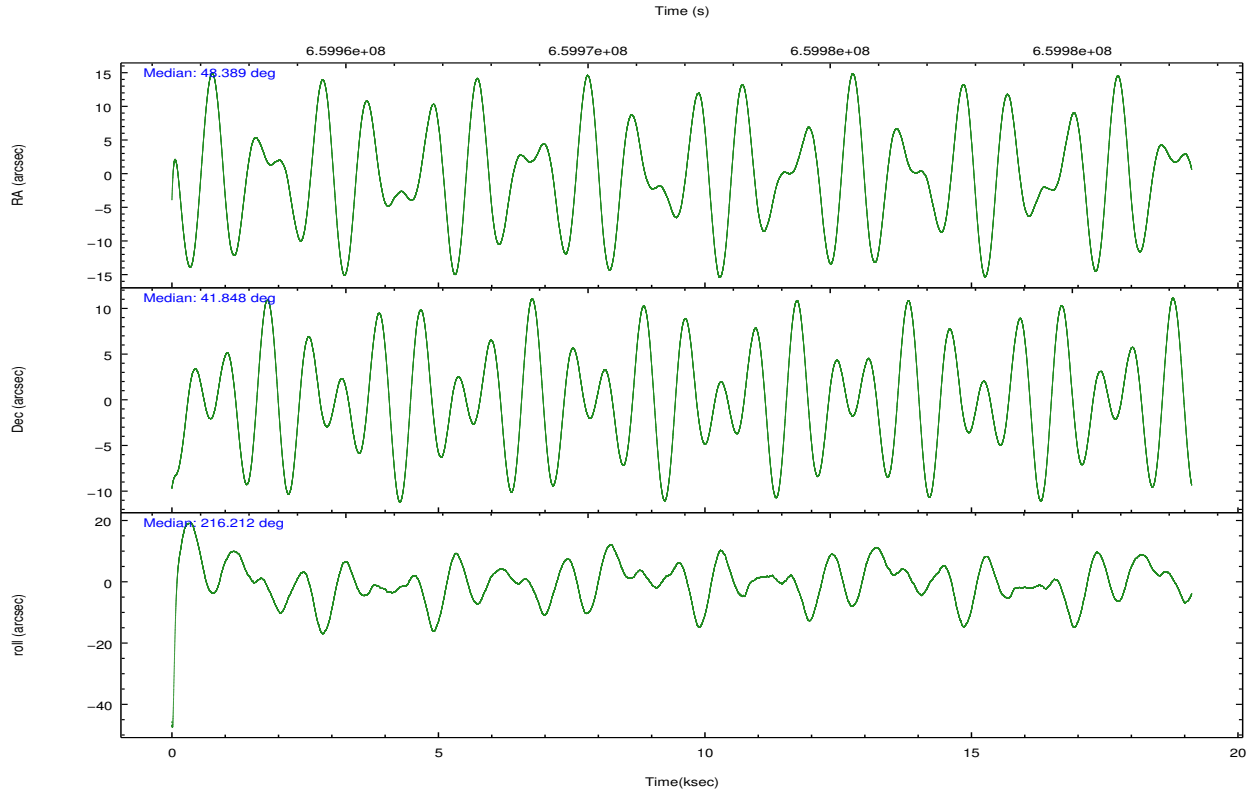
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5648	6650	6383	5723
	4%	4%	4%	3%
grade 1 events	74	78	89	106
	0%	0%	0%	0%
grade 2 events	3935	4703	3841	3495
	2%	3%	2%	2%
grade 3 events	1635	1625	1601	1685
	1%	1%	1%	1%
grade 4 events	1555	1601	1562	1629
	1%	1%	1%	1%
grade 5 events	6183	6230	5692	6889
	4%	4%	3%	4%
grade 6 events	3554	4187	3113	3324
	2%	2%	2%	2%
grade 7 events	112221	116672	130259	125392
	83%	82%	85%	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	48.403347	48.38852265859164	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.873688	41.84837275611345	Alternating exposures requested	N	N
[deg] Pointing Roll	215.992482	216.2110267325441	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	659962519.184000	659961381.41207			
Observation start date	2018-11-30T10:54:10	2018-11-30T10:36:21			
[s] Observation end time (MET)	659981519.184000	659982472.32583			
Observation end date	2018-11-30T16:10:50	2018-11-30T16:27:52			
Read mode	TIMED	TIMED			

2.3 Aspect



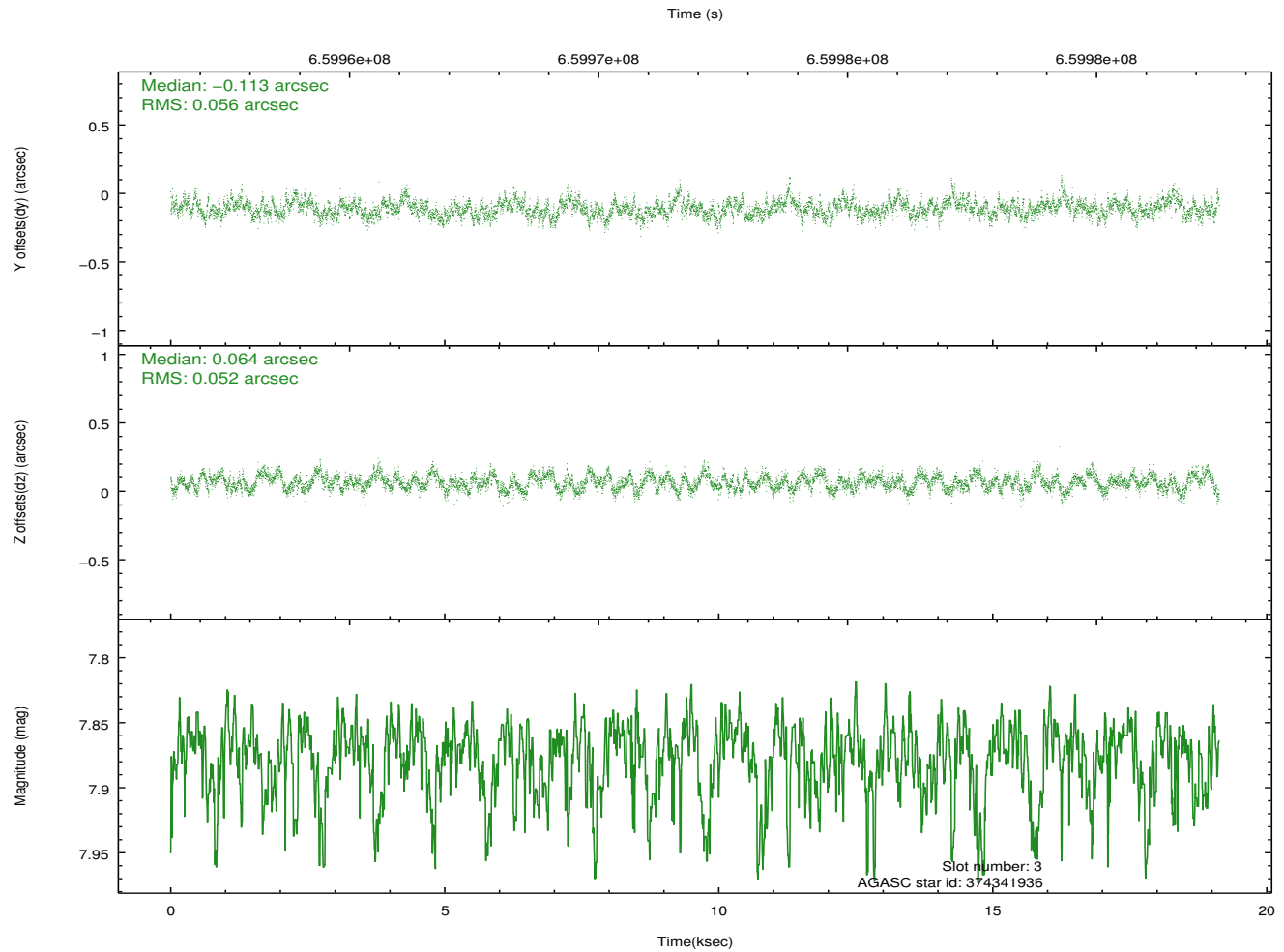
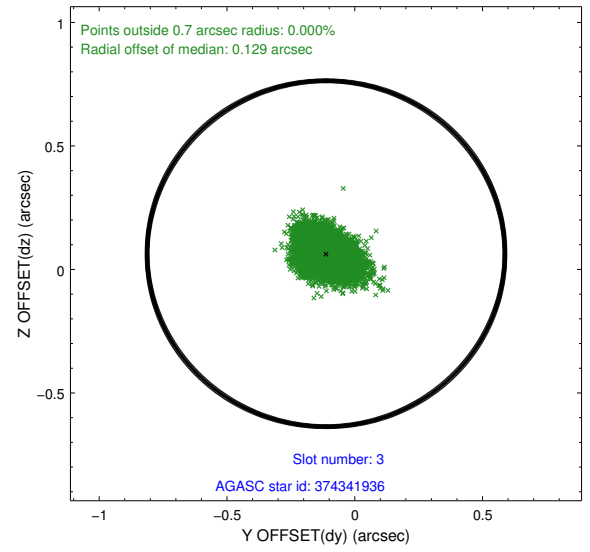
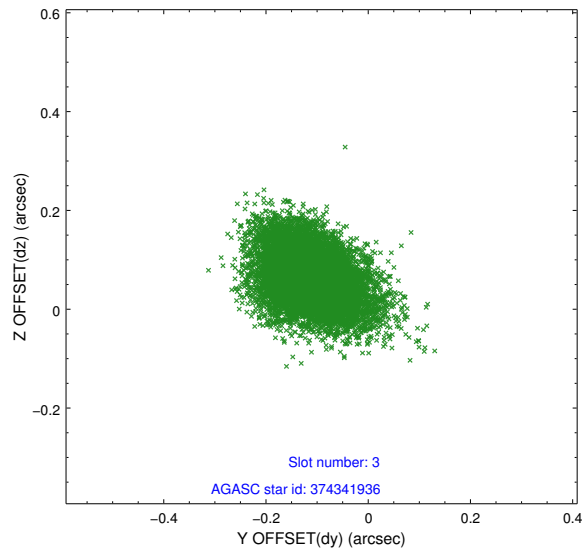


Slot Statistics

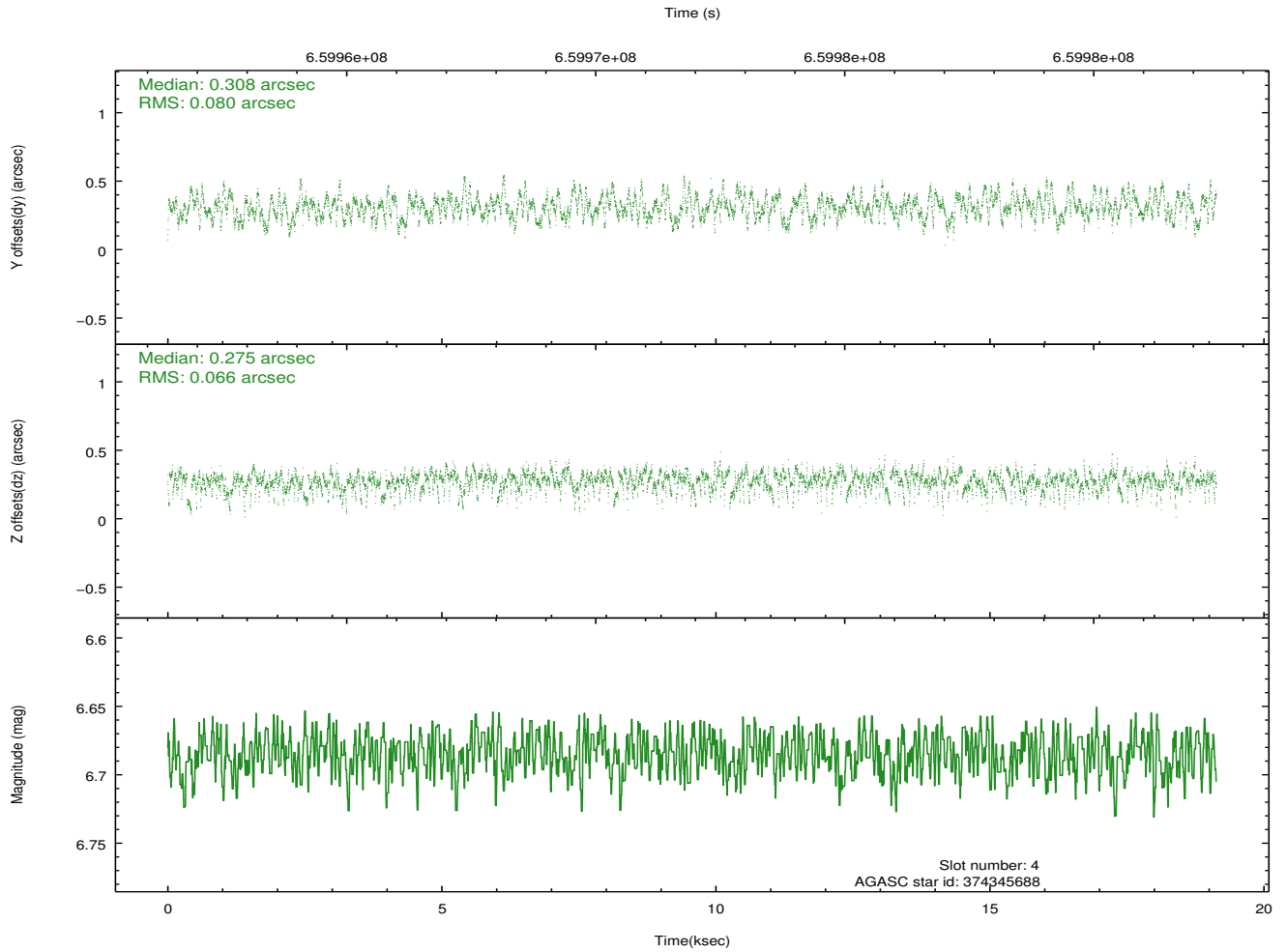
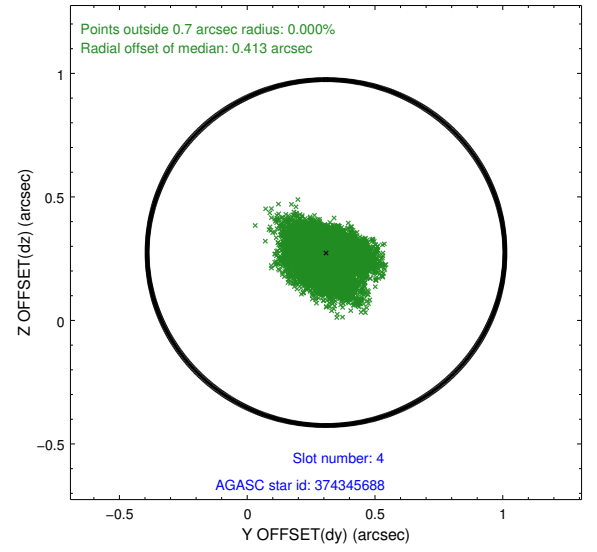
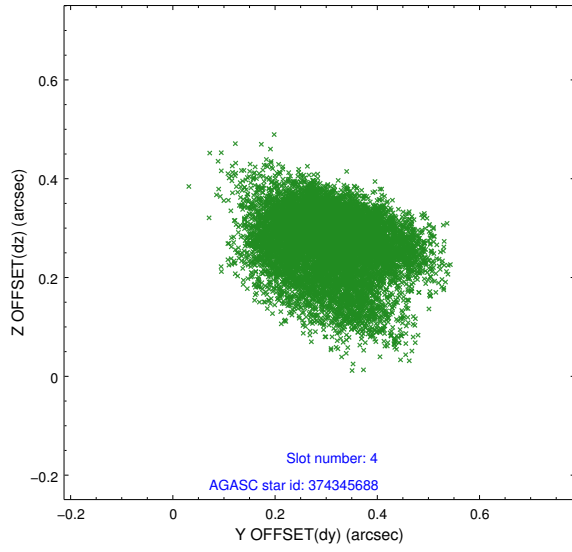
id	status	used	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		7.24	4667	1.000	0.103	-0.088	0.017	0.031	0.000000	0.000000	929.03	-841
1	FID		7.22	4667	1.000	-0.474	0.020	0.010	0.015	0.000000	0.000000	-1819.71	1055
2	FID		7.22	4667	1.000	0.281	0.138	0.021	0.035	0.000000	0.000000	394.31	1701
3	GUIDE	used	7.88	9330	1.000	-0.113	0.064	0.080	0.132	47.693096	41.597853	2126.35	-326
4	GUIDE	used	6.69	9334	1.000	0.308	0.275	0.111	0.177	48.039816	42.375903	-280.72	-2031
5	GUIDE	used	8.32	9330	1.000	-0.056	-0.300	0.114	0.171	48.175092	41.439059	1417.57	903
6	GUIDE	used	8.52	9329	1.000	-0.220	-0.204	0.107	0.174	48.517523	41.466988	611.07	1366
7	GUIDE	used	9.23	9318	1.000	0.073	0.175	0.185	0.296	49.259903	42.100043	-2336.20	676

2.4 Star Slots

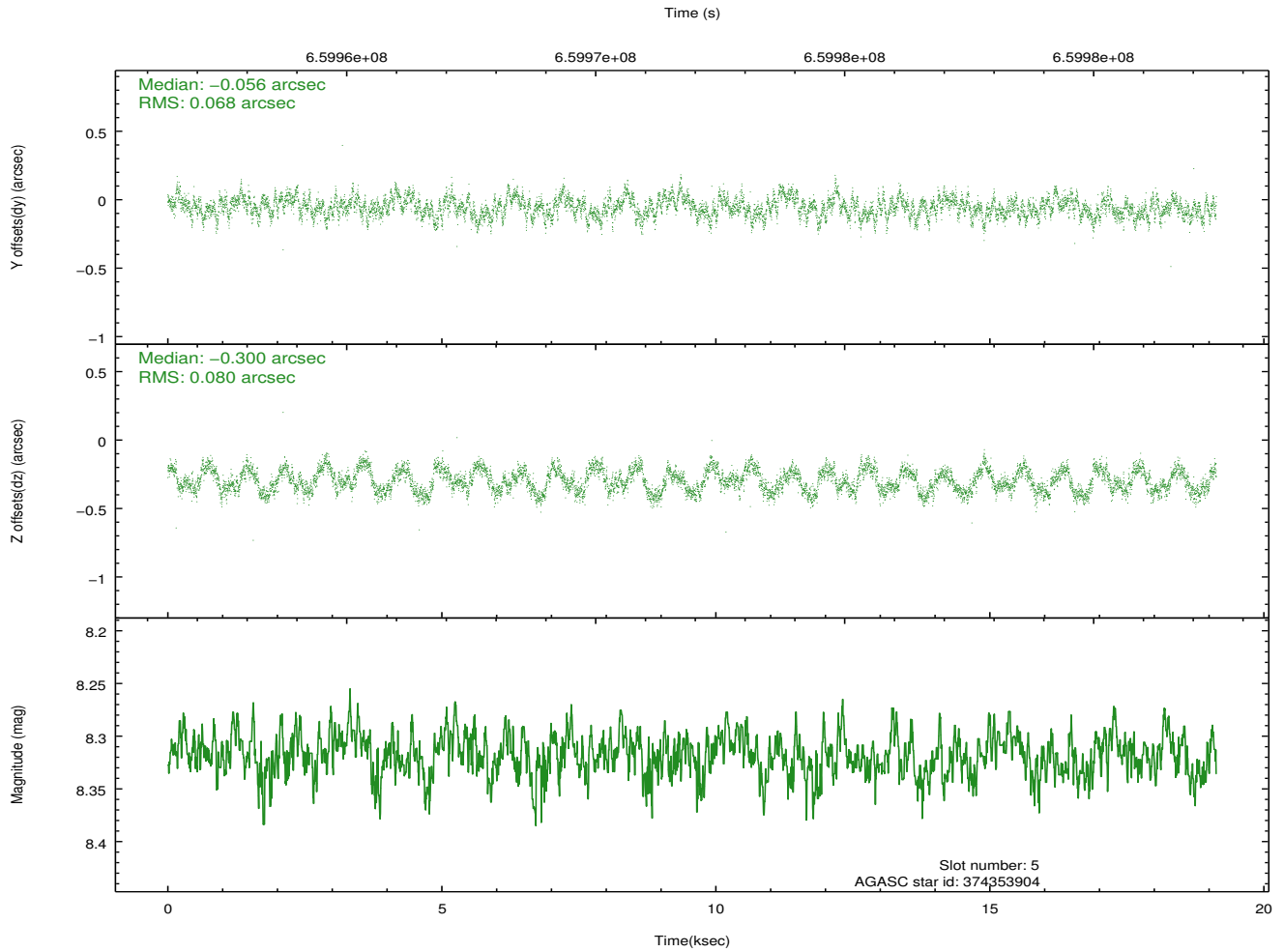
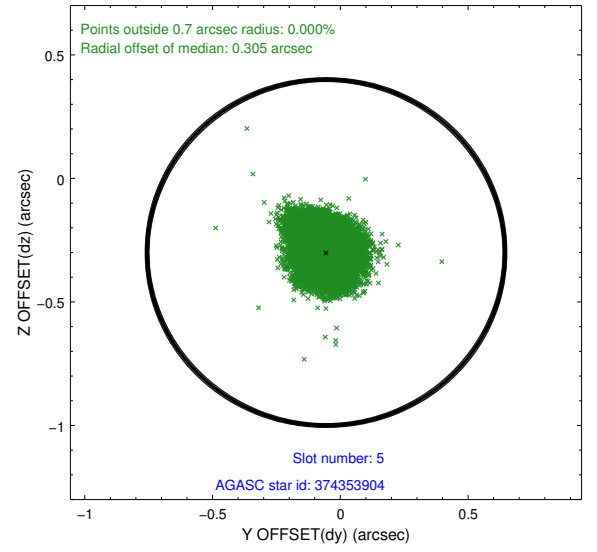
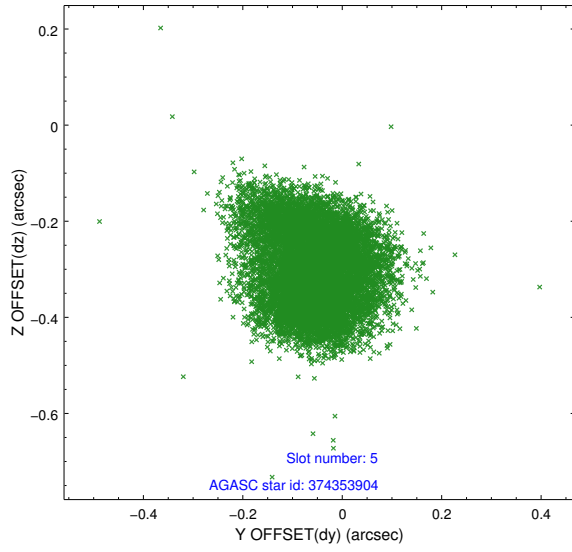
2.4.1 Slot 3



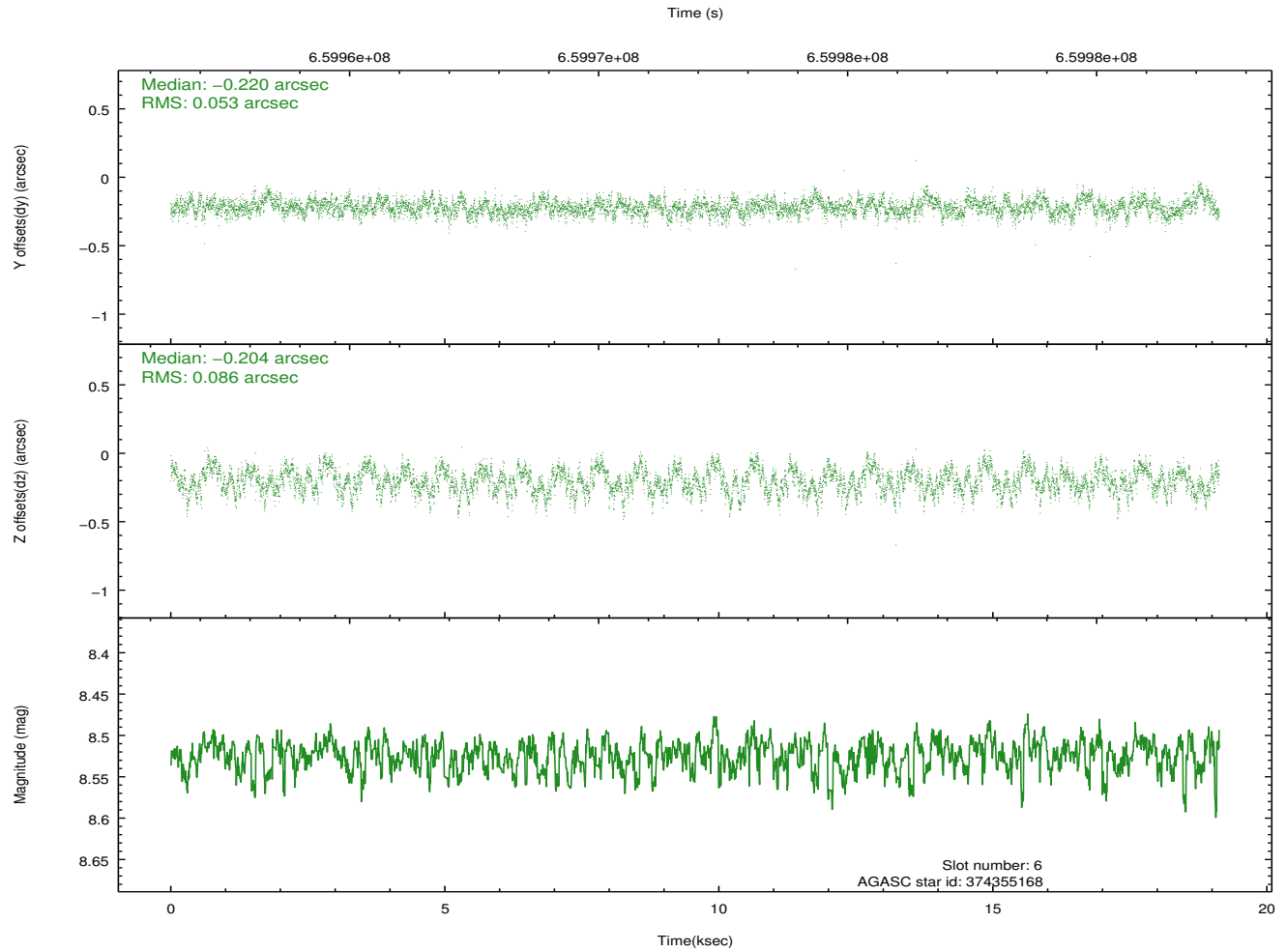
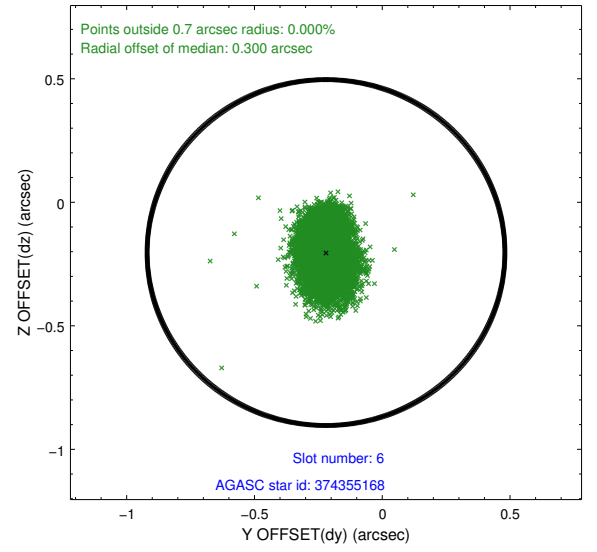
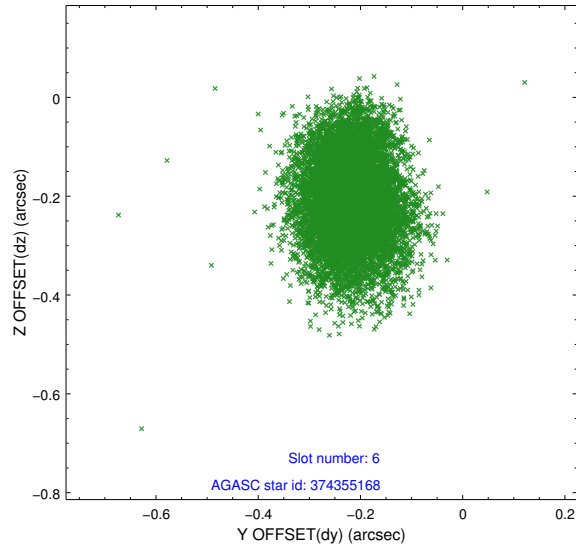
2.4.2 Slot 4



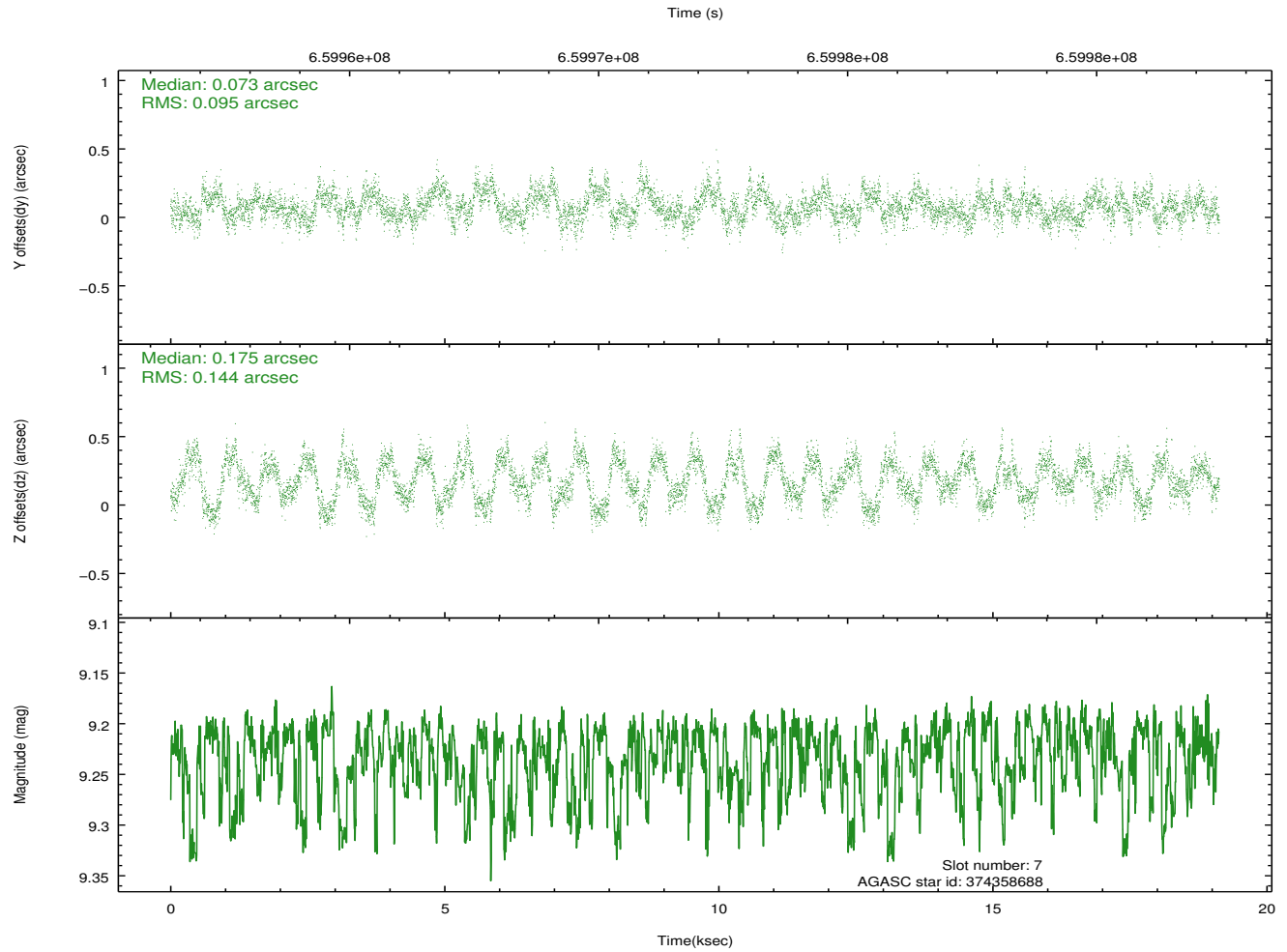
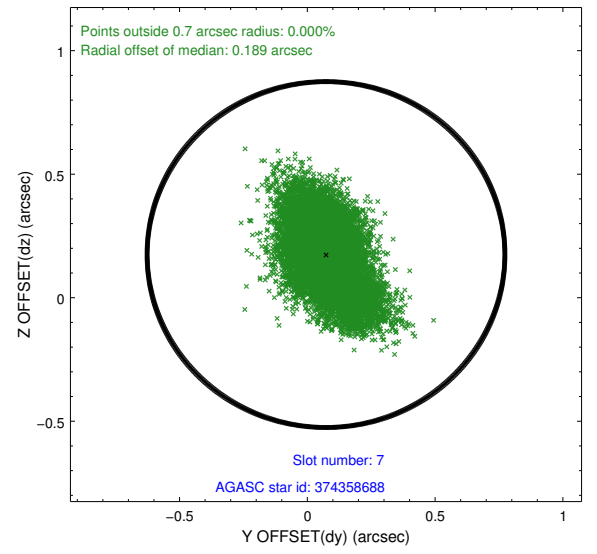
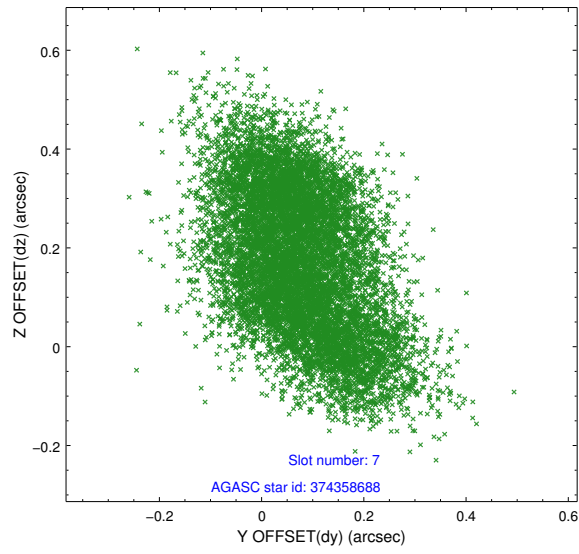
2.4.3 Slot 5



2.4.4 Slot 6

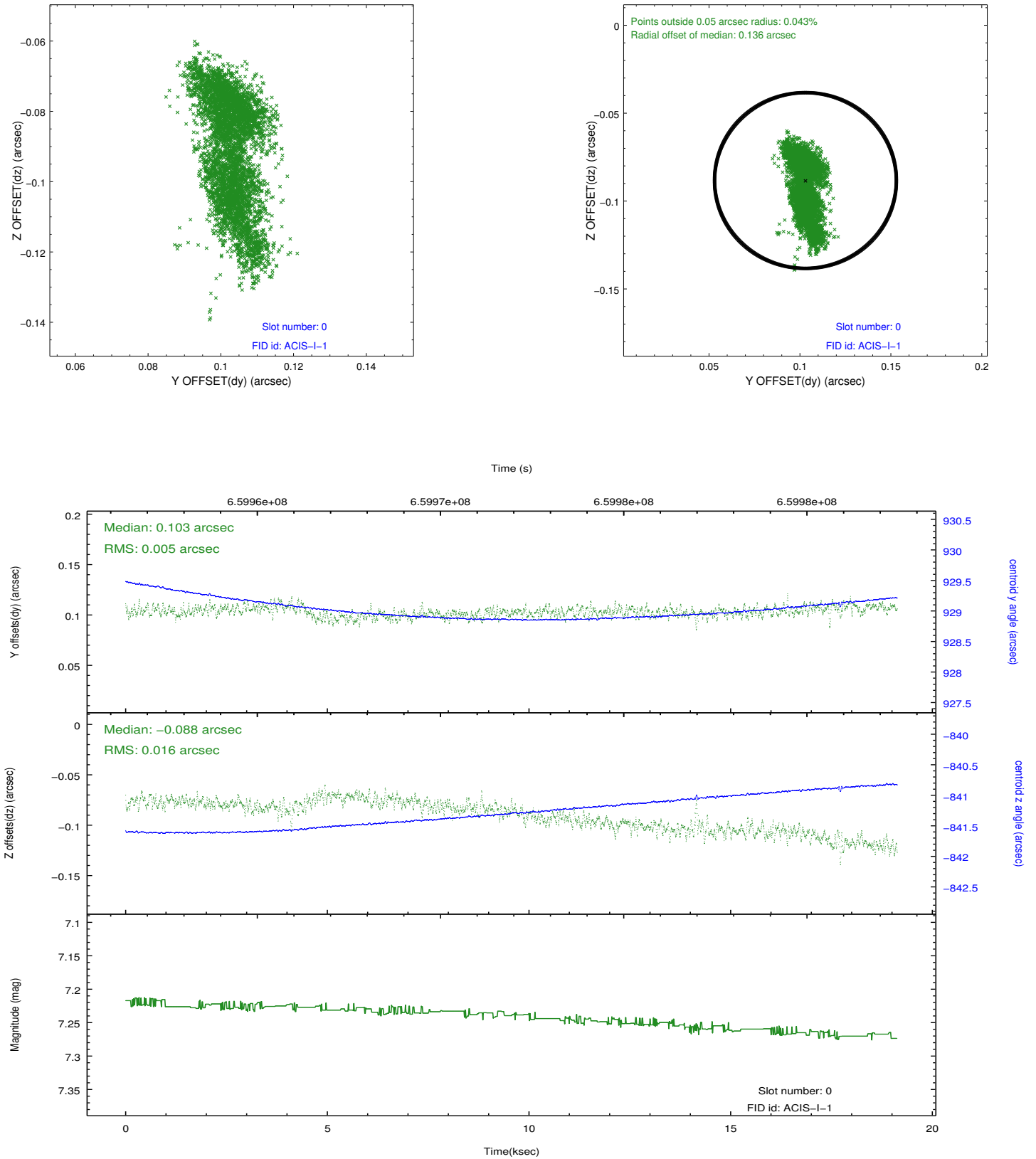


2.4.5 Slot 7

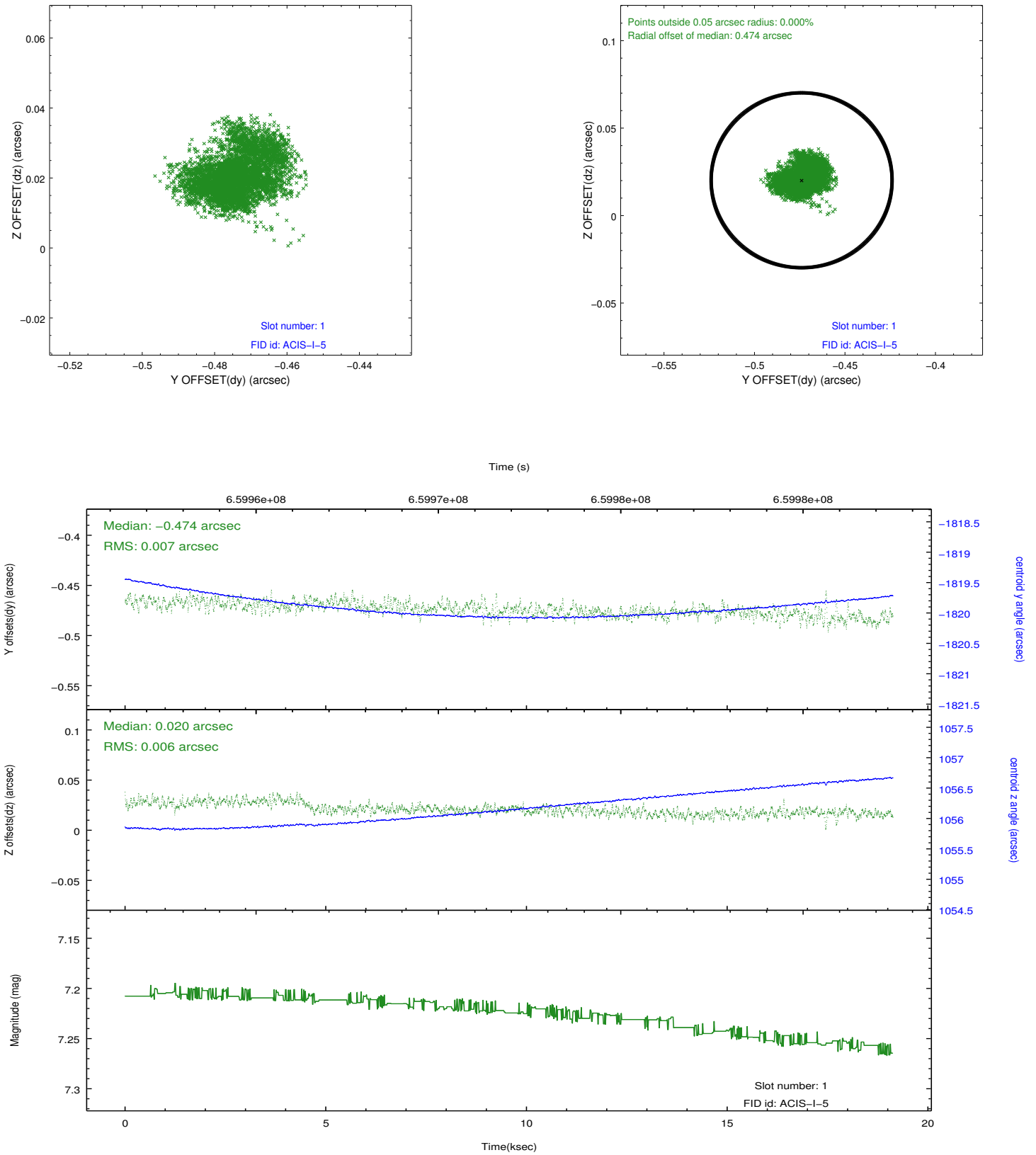


2.5 FID Slots

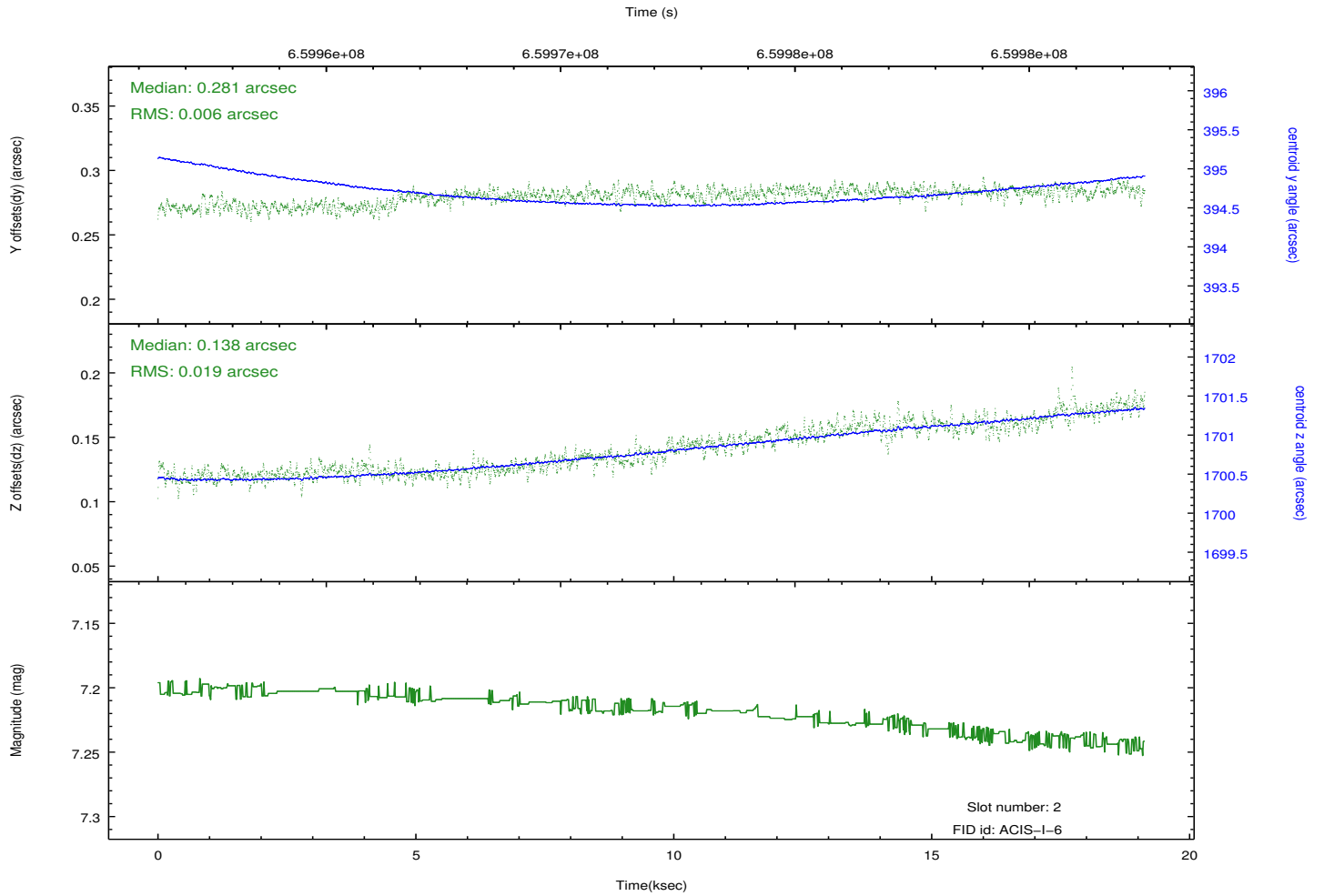
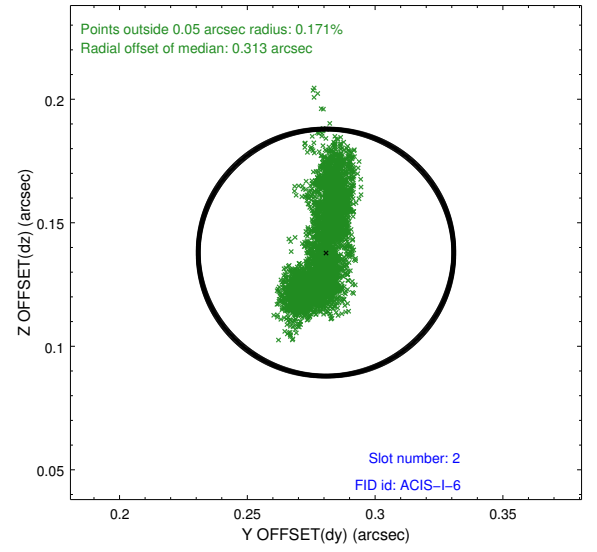
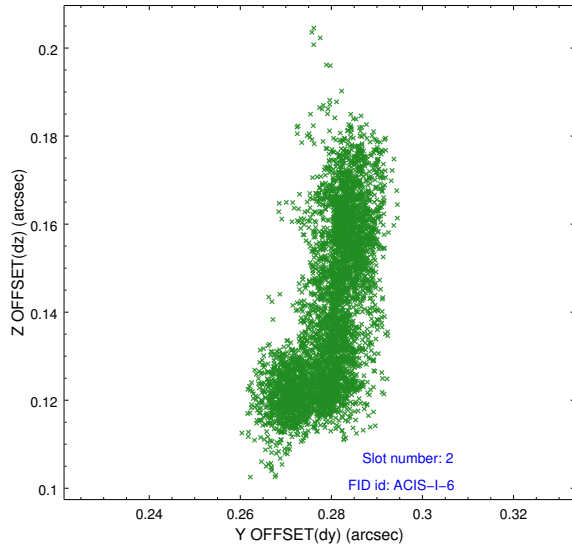
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2018.12.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.077400146842

A.2 Comments