

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21958 - L2 Version 1
Chandra X-Ray Center

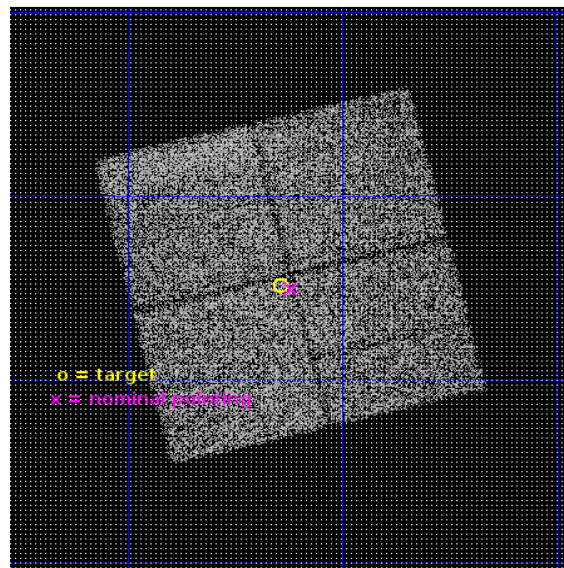
L2 Processing Date : Nov 10 2018

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1 Front

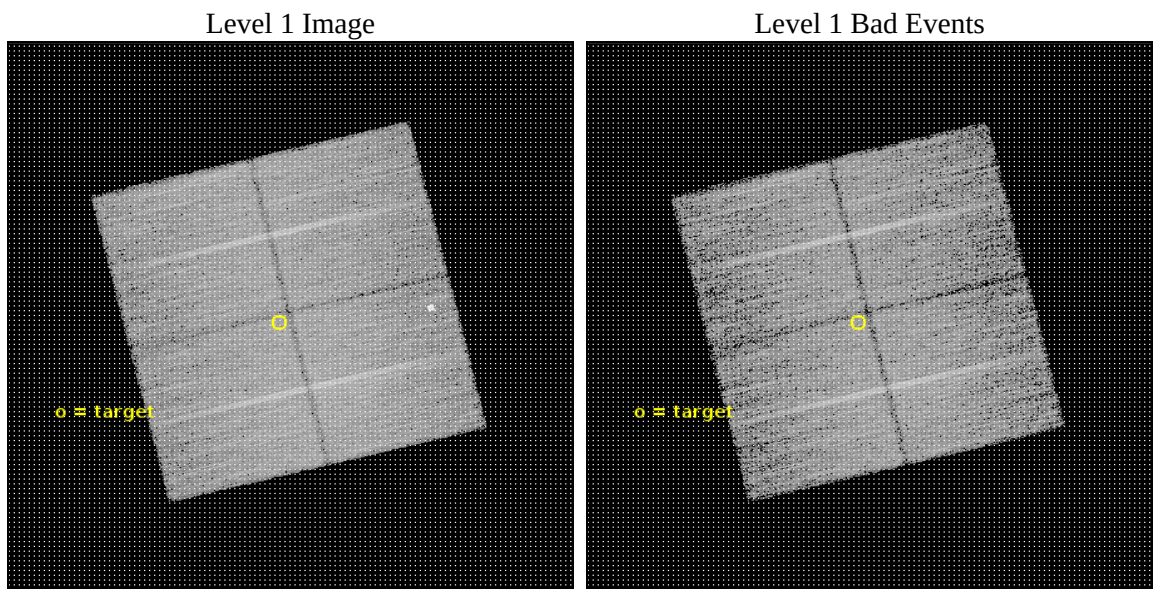
seq_num	801812	Sequence number
obs_id	21958	Observation id
title	Is there an enormous cold front at the virial radius of the Perseus cluster?	Proposal title
observer	Stephen Walker	Principal investigator
object	Perseus_west_cf_1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	48.322083	Observer's specified target RA [deg]
dec_targ	41.584861	Observer's specified target Dec [deg]
ra_nom	48.309367158811	Nominal RA [deg]
dec_nom	41.58257404786	Nominal Dec [deg]
roll_nom	166.21715258999	Nominal Roll [deg]
revision	1	Processing version of data
ontime	19576.459160447	Sum of GTIs [s]
livetime	19320.678309536	Livetime [s]
ontime0	19579.600150704	Sum of GTIs [s]
ontime1	19579.600150704	Sum of GTIs [s]
ontime2	19579.600150704	Sum of GTIs [s]
ontime3	19576.459160447	Sum of GTIs [s]
l2events	56081	Number of level 2 events



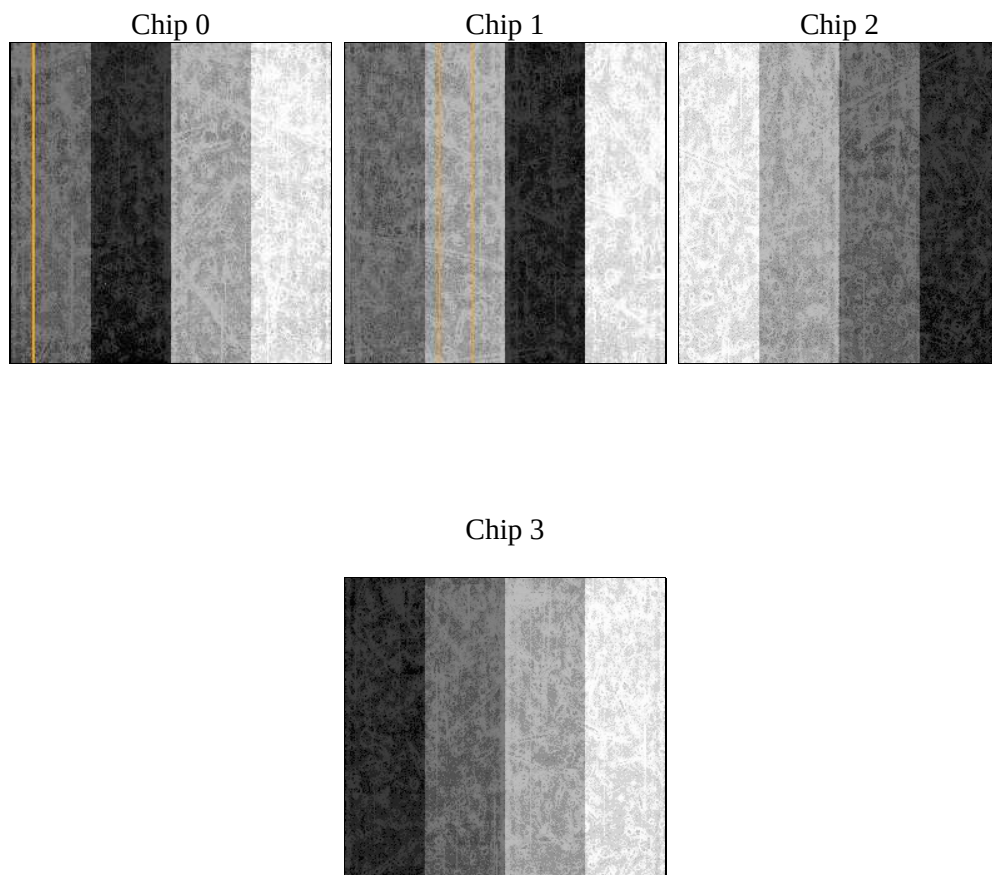
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19500.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	19576.459160447	Sum of GTIs [s]
caldsver	4.8.0.1	 	ontime0	19579.600150704	Sum of GTIs [s]
date	2018-11-10T14:06:48	Date and time of file creation	ontime1	19579.600150704	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	19579.600150704	Sum of GTIs [s]
			ontime3	19576.459160447	Sum of GTIs [s]
			l1events	555524	Number of level 1 events

2.1.4 Events

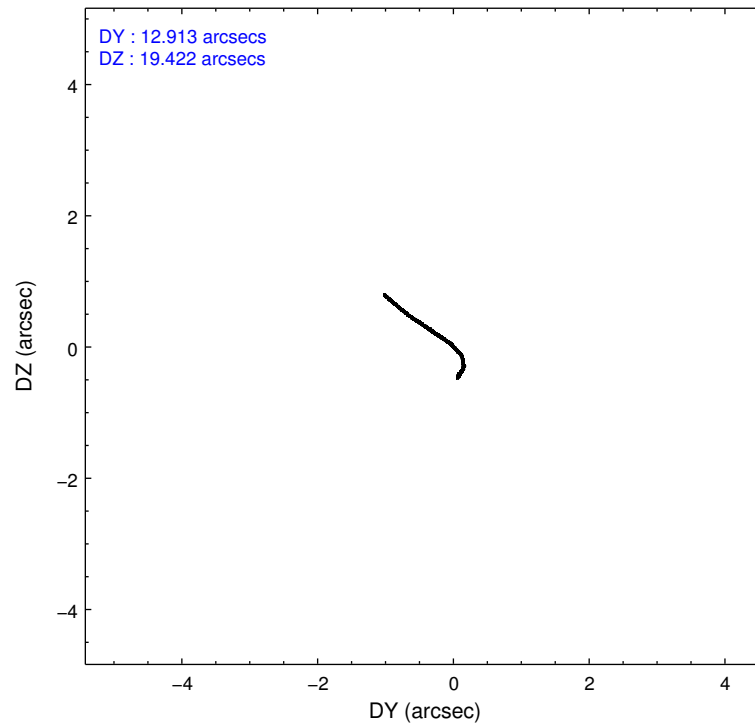
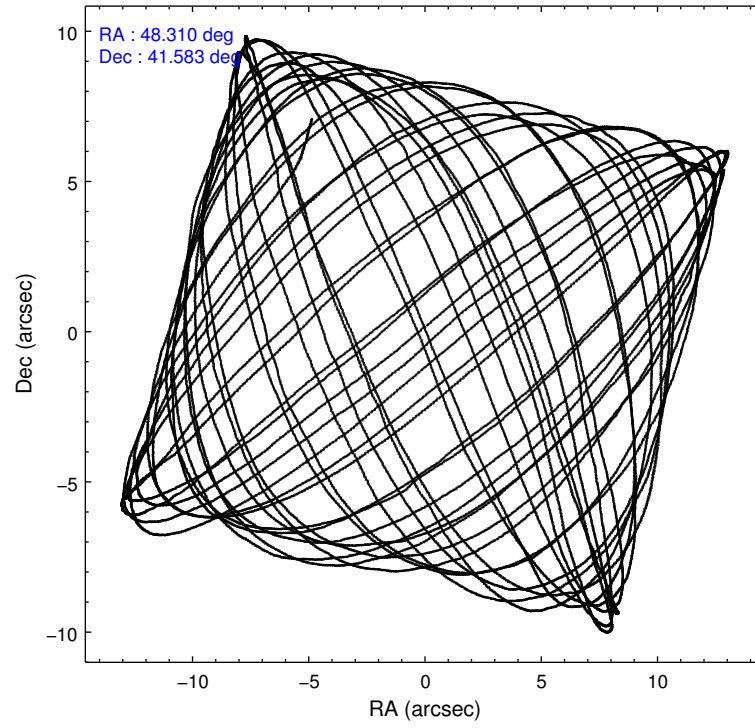
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	131385	136456	147208	140475
rejected events	114747	117957	128151	124736
rejected %	87%	86%	87%	88%

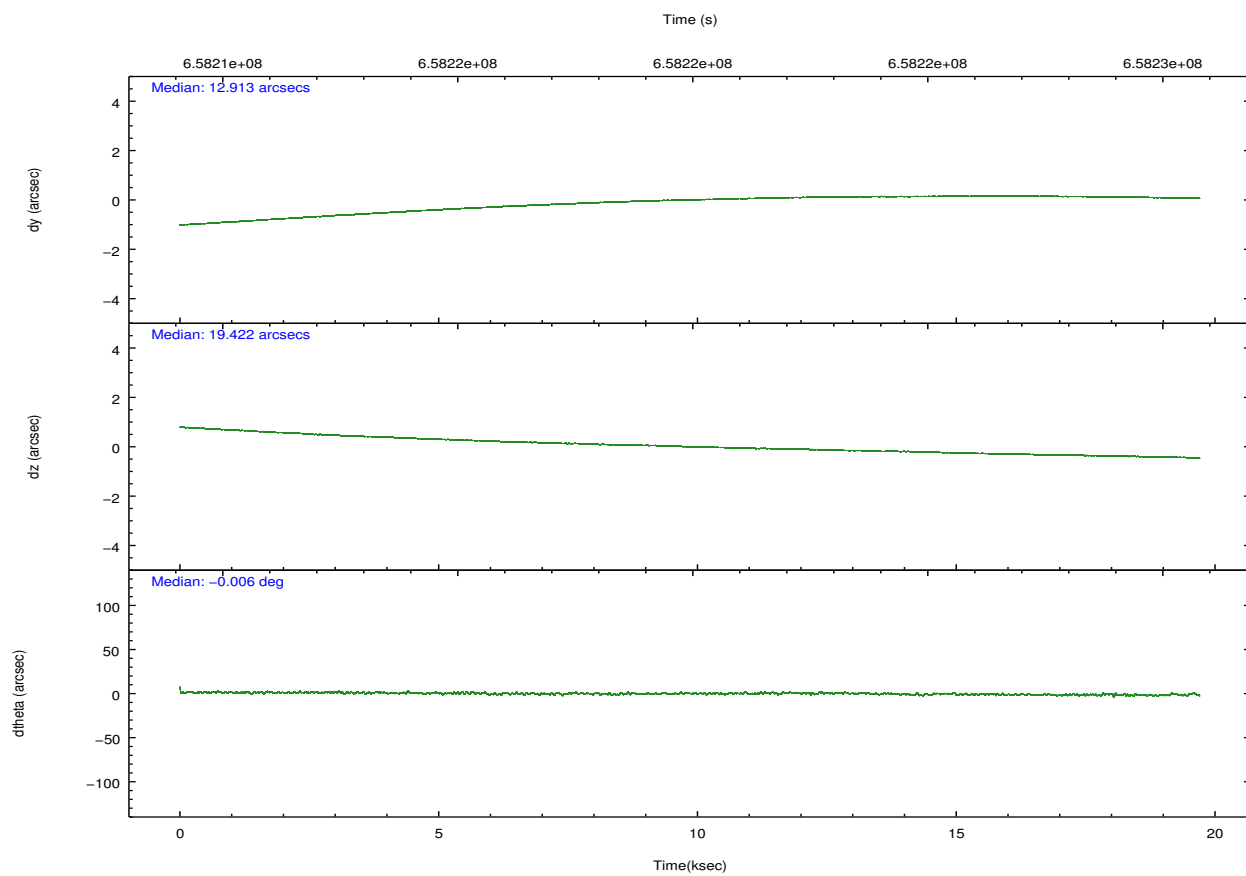
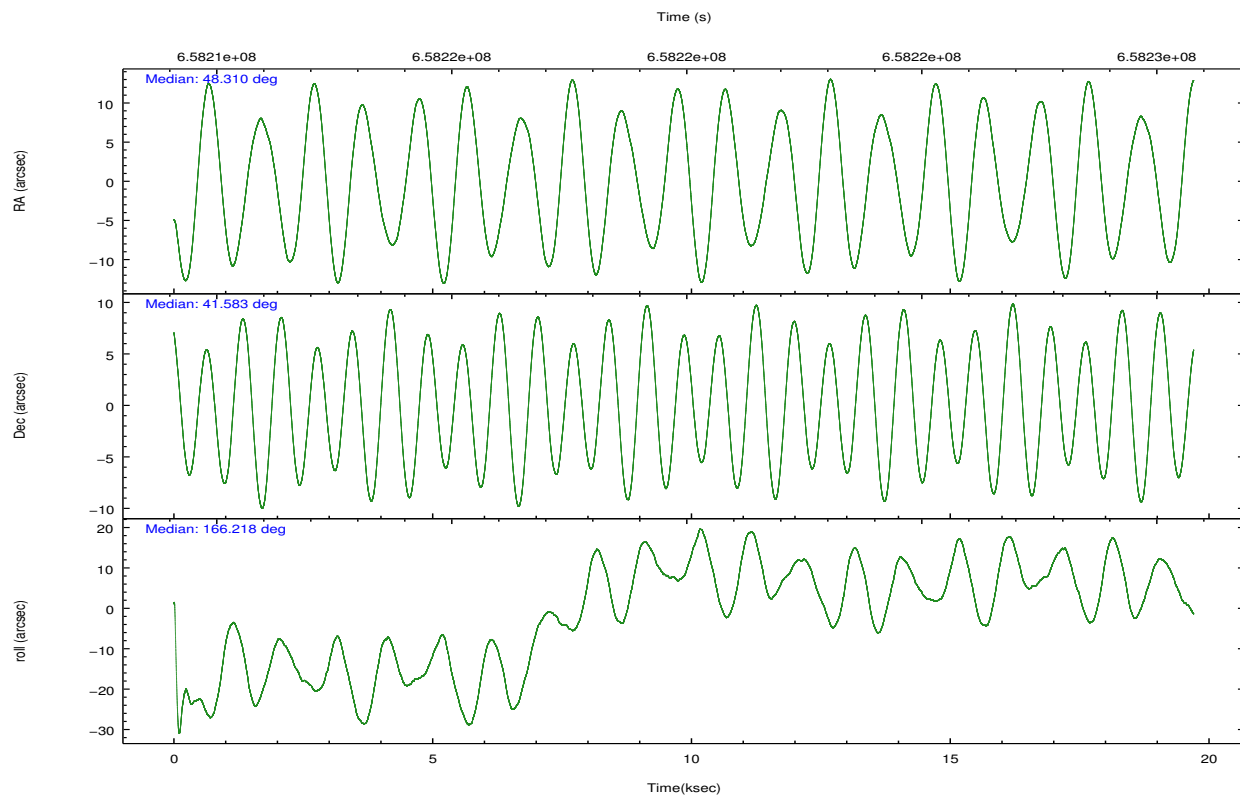
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5665	6483	8708	5751
	4%	4%	5%	4%
grade 1 events	63	78	109	82
	0%	0%	0%	0%
grade 2 events	4167	4548	3937	3429
	3%	3%	2%	2%
grade 3 events	1709	1733	1585	1643
	1%	1%	1%	1%
grade 4 events	1665	1701	1579	1654
	1%	1%	1%	1%
grade 5 events	6316	6463	6033	6880
	4%	4%	4%	4%
grade 6 events	3435	4036	3251	3264
	2%	2%	2%	2%
grade 7 events	108365	111414	122006	117772
	82%	81%	82%	83%

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	48.344794	48.30936715881116	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.590389	41.58257404786002	Alternating exposures requested	N	N
[deg] Pointing Roll	165.984926	166.2171525899905	[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)	658210309.184000	658209507.17023			
Observation start date	2018-11-10T04:10:40	2018-11-10T03:58:27			
[s] Observation end time (MET)	658229809.184000	658230357.20897			
Observation end date	2018-11-10T09:35:40	2018-11-10T09:45:57			
Read mode	TIMED	TIMED			

2.3 Aspect



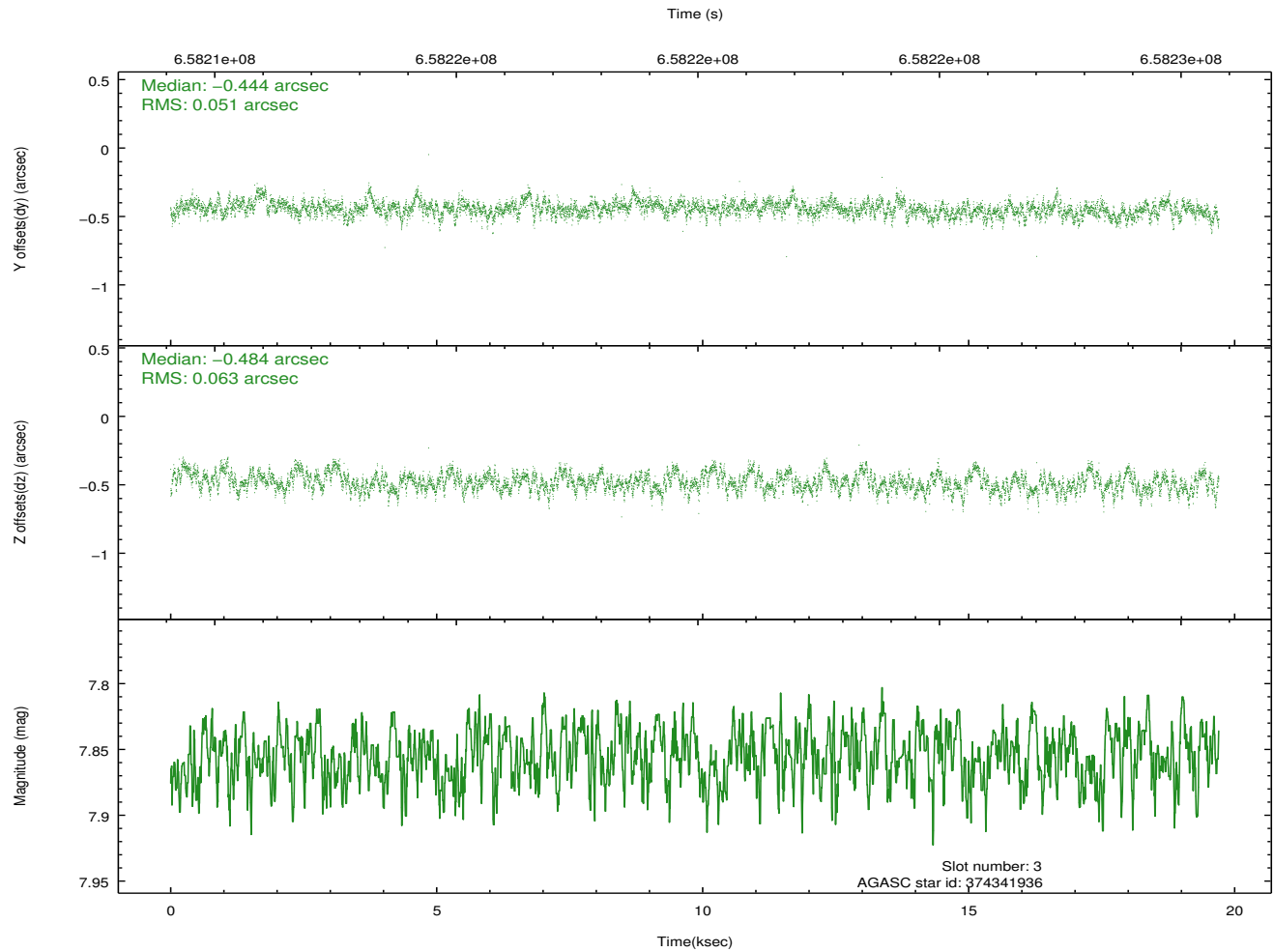
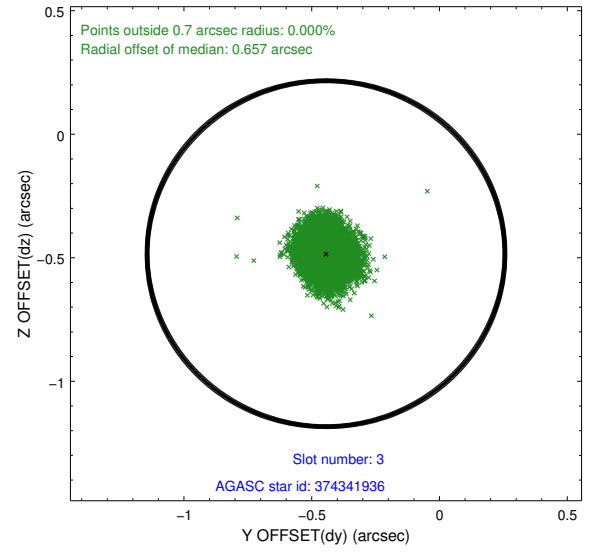
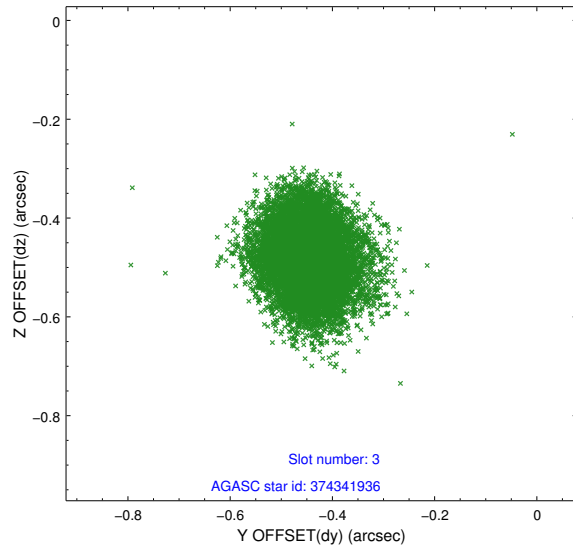


Slot Statistics

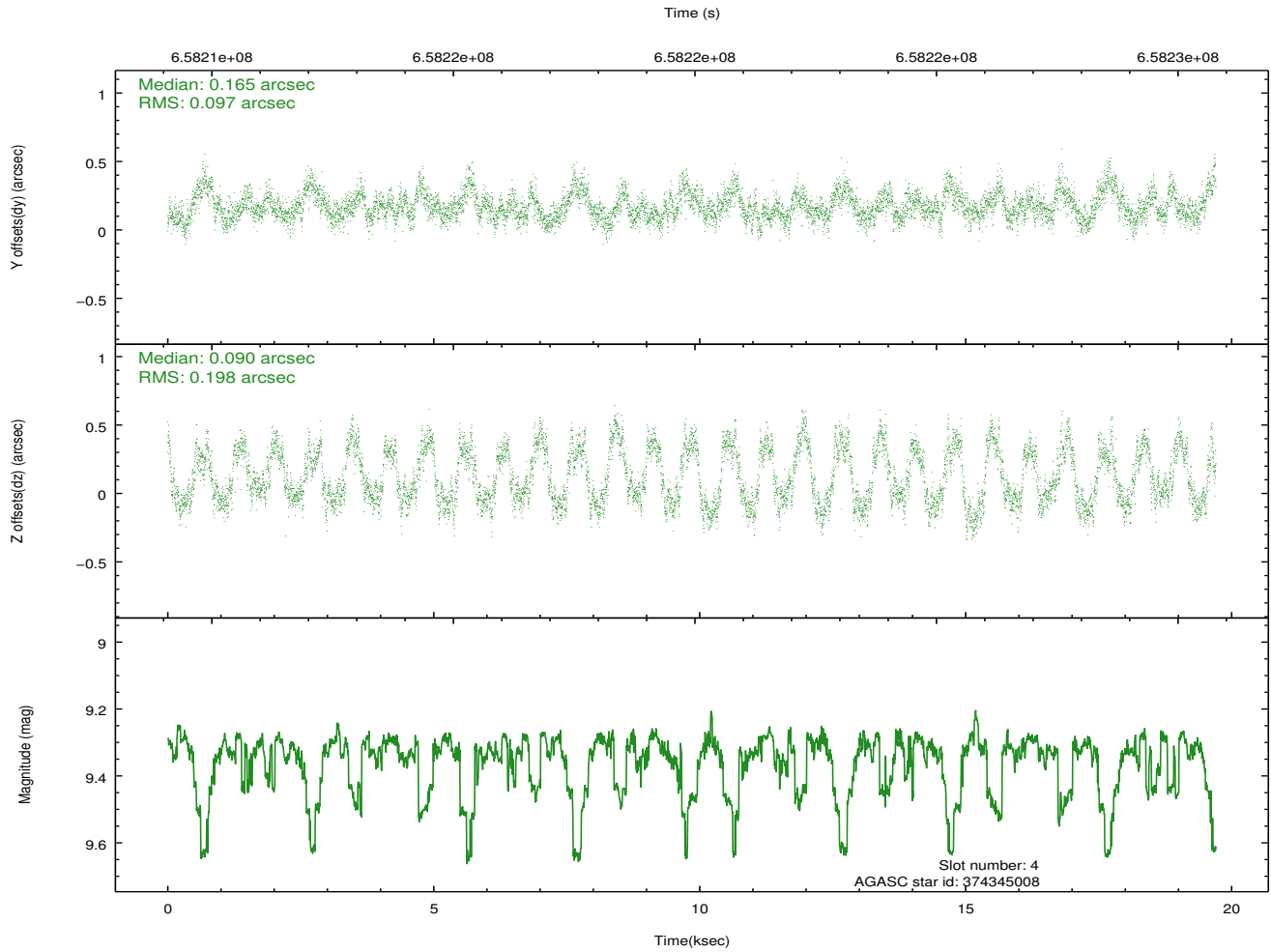
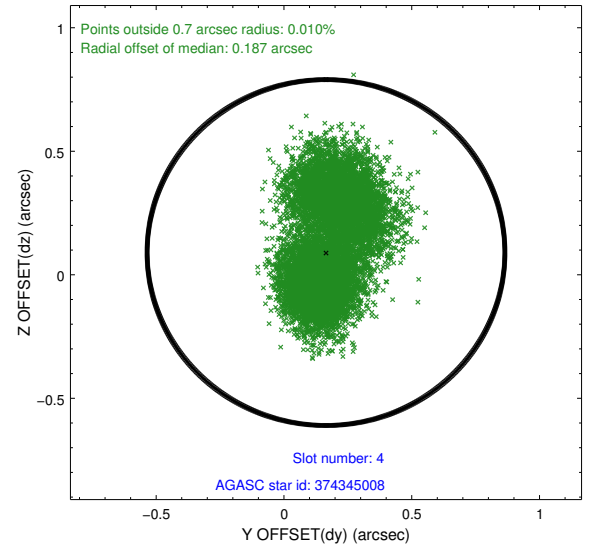
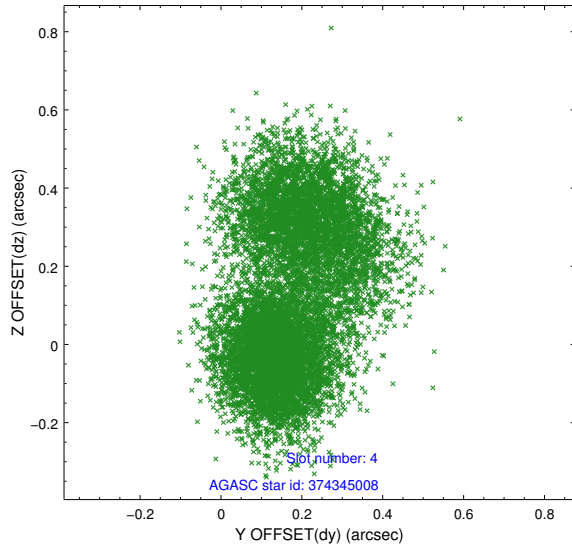
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.05	4806	1.000	-0.365	-0.063	0.025	0.034	0.000000	0.000000	-767.72	-849
1	FID		ACIS-I-4	7.11	4806	1.000	0.747	0.204	0.029	0.055	0.000000	0.000000	2147.25	1056
2	FID		ACIS-I-5	7.13	4806	1.000	-0.478	-0.073	0.019	0.033	0.000000	0.000000	-1821.52	1054
3	GUIDE	used	374341936	7.86	9612	1.000	-0.444	-0.484	0.087	0.138	47.693096	41.597853	1710.59	392
4	GUIDE	used	374345008	9.34	9599	1.000	0.165	0.090	0.241	0.364	48.768668	41.619367	-1080.95	-378
5	GUIDE	used	374353904	8.32	9606	1.000	-0.404	-0.235	0.196	0.302	48.175092	41.439059	312.01	639
6	GUIDE	used	374359480	8.73	9607	1.000	0.188	0.068	0.118	0.201	48.054064	42.164482	1253.99	-1817
7	GUIDE	used	374358688	9.24	9599	1.000	0.495	0.542	0.172	0.273	49.259903	42.100043	-1923.13	-2383

2.4 Star Slots

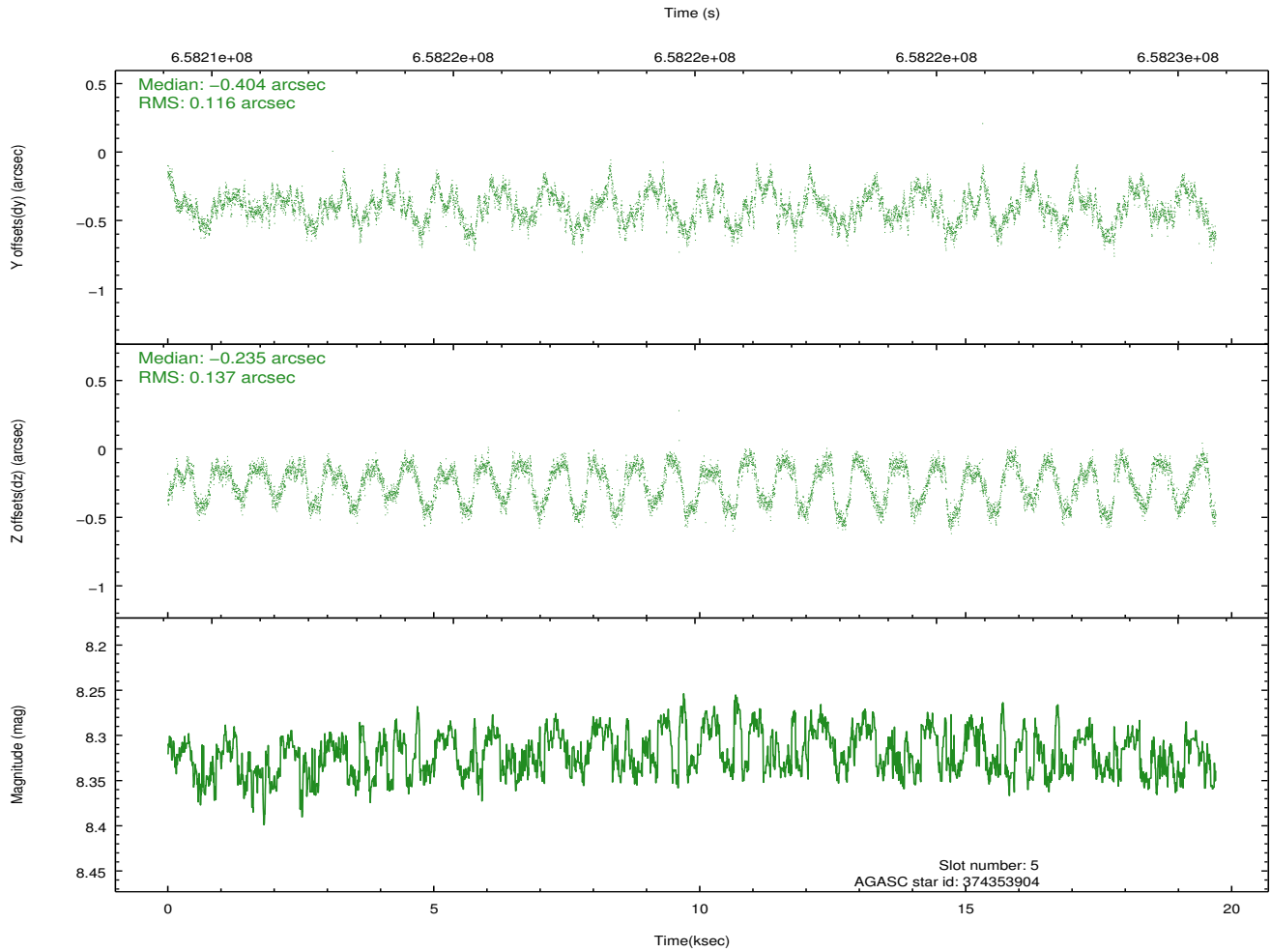
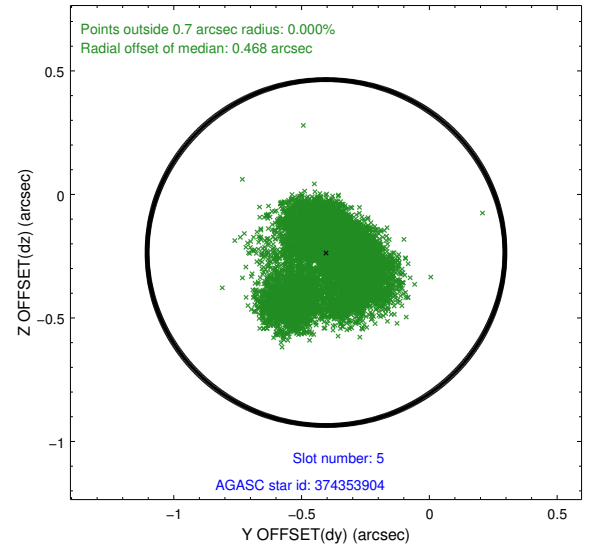
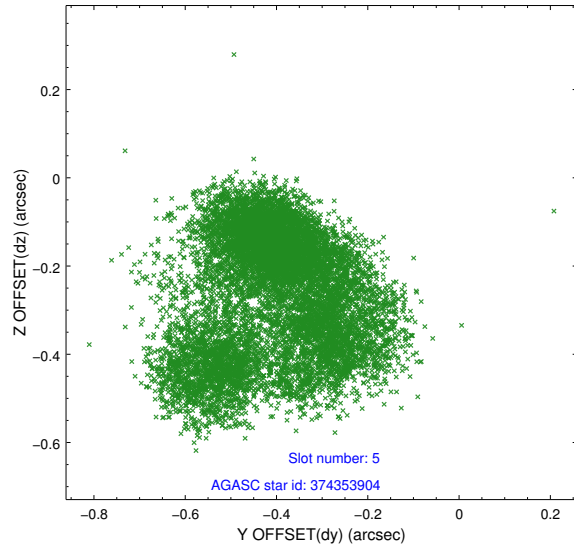
2.4.1 Slot 3



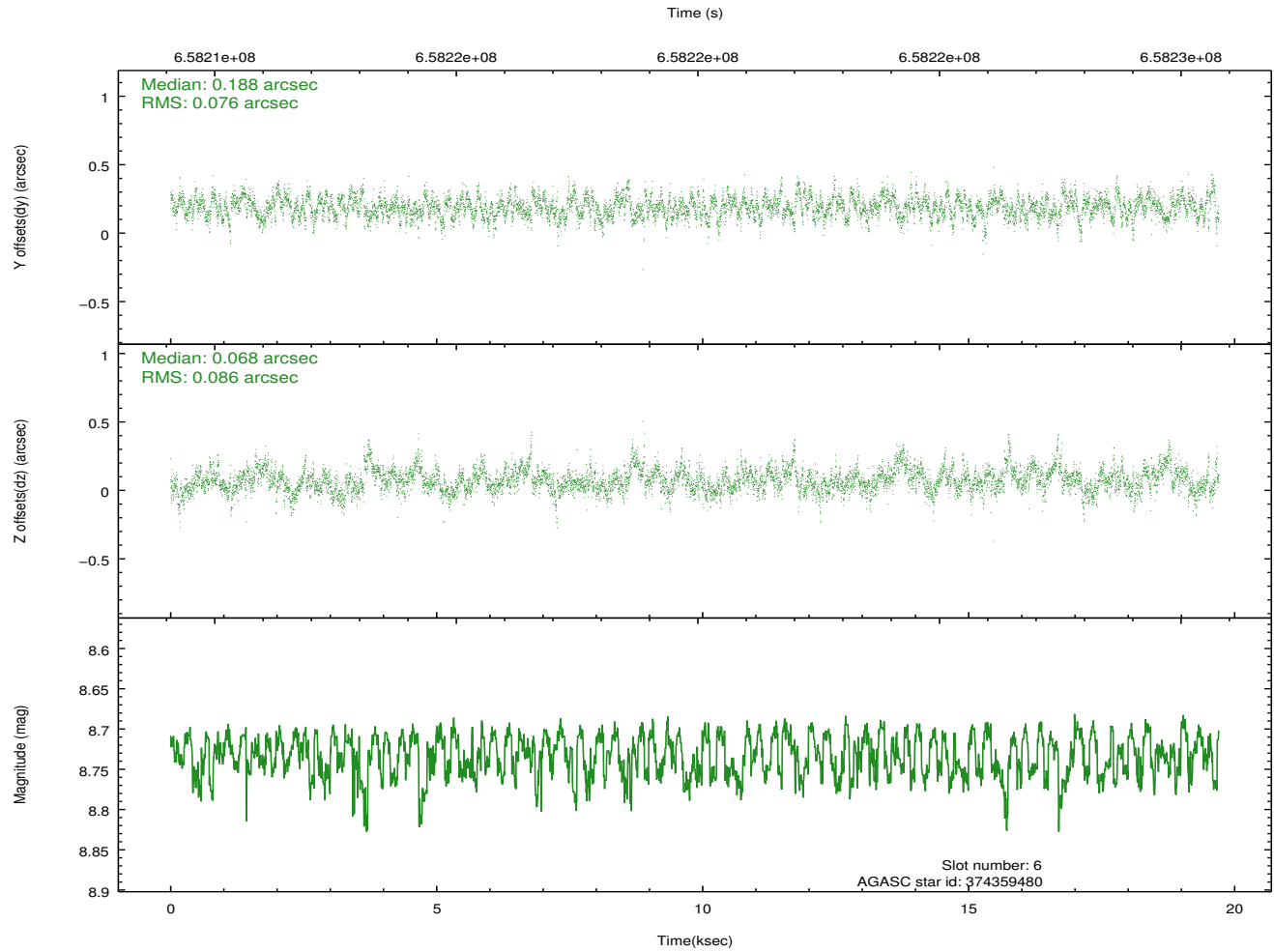
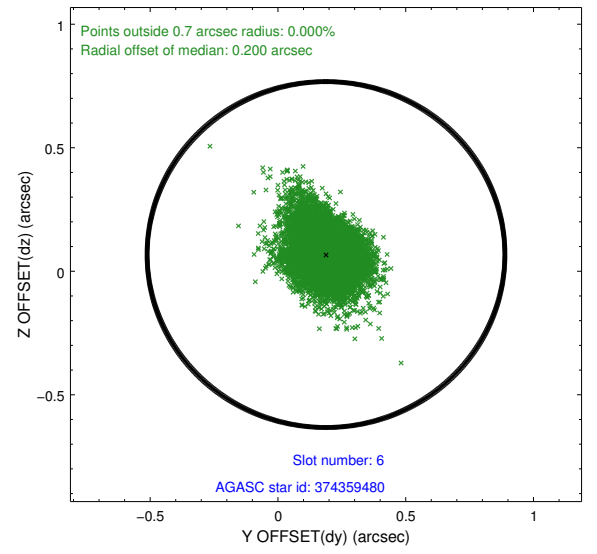
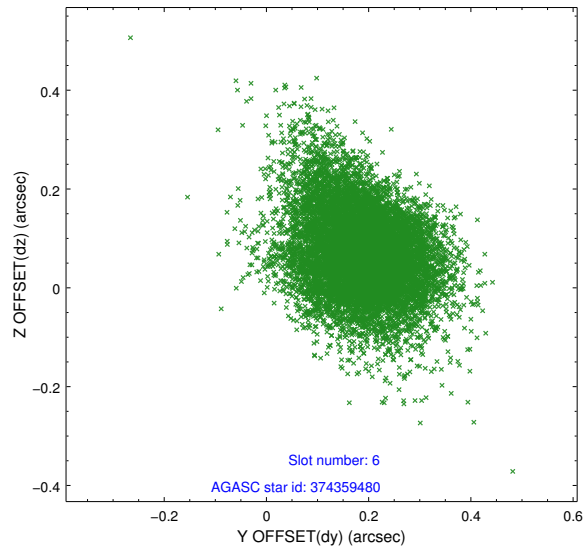
2.4.2 Slot 4



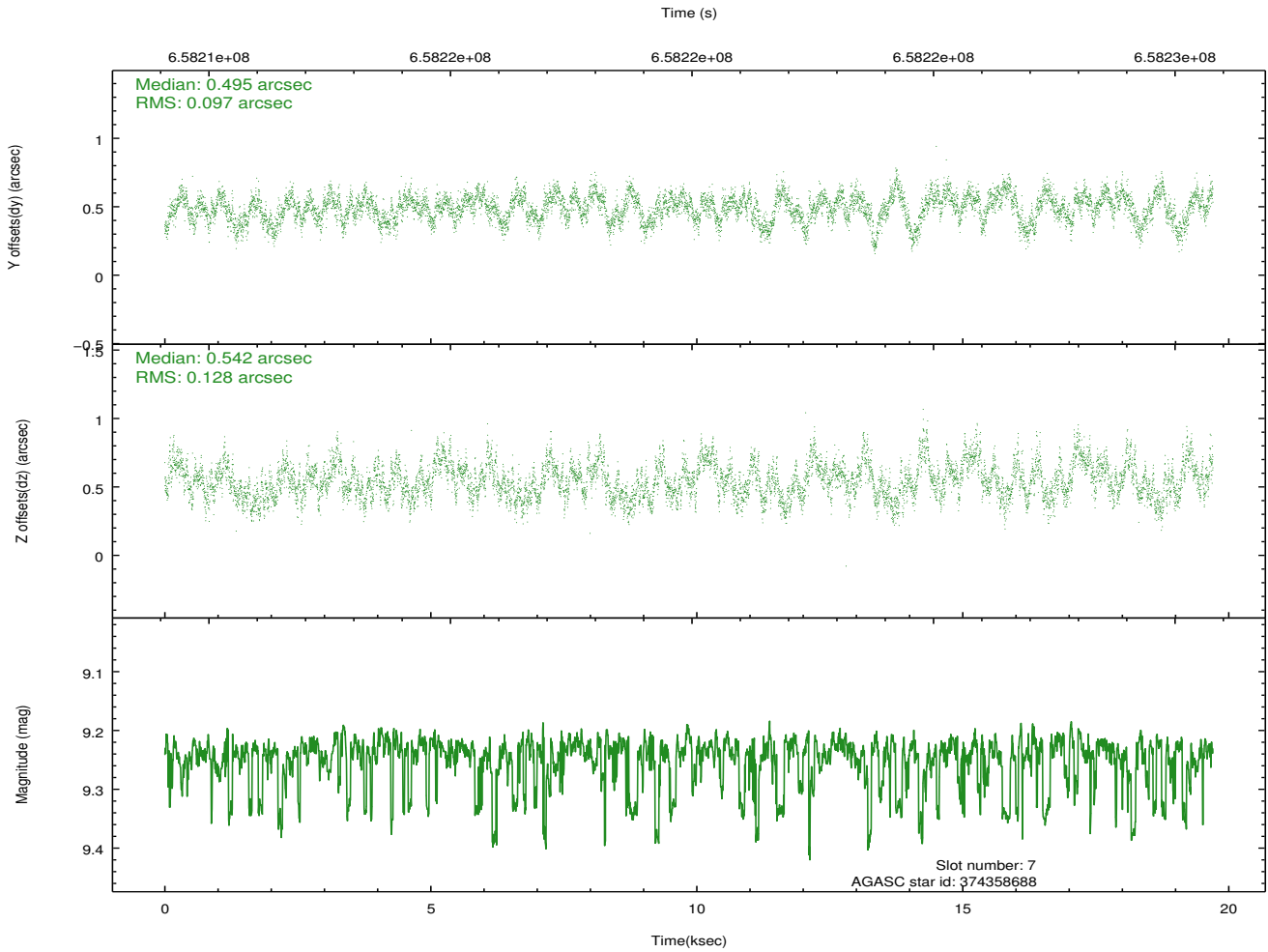
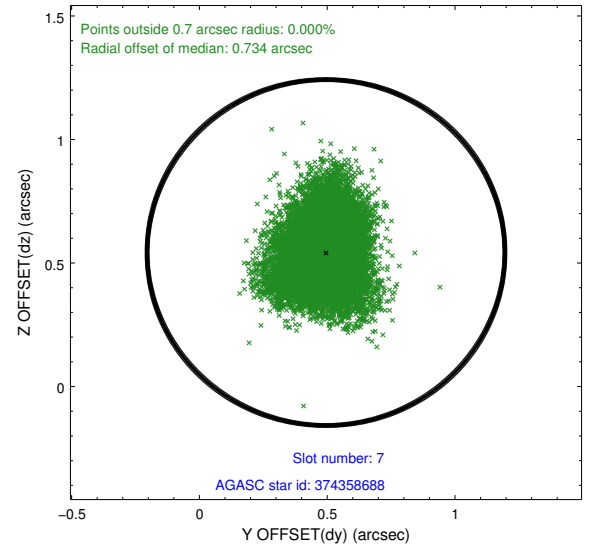
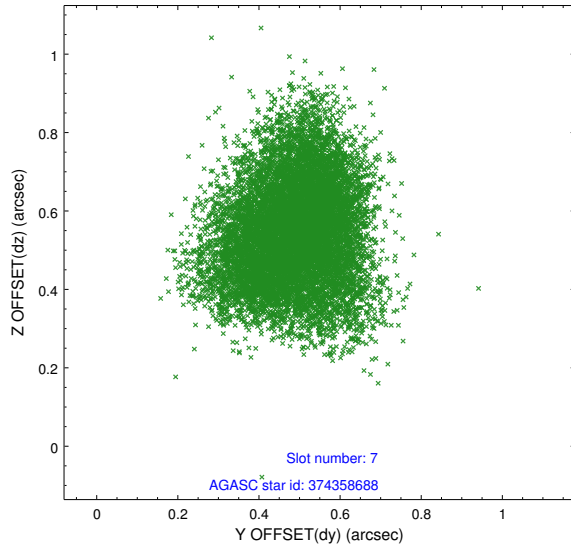
2.4.3 Slot 5



2.4.4 Slot 6

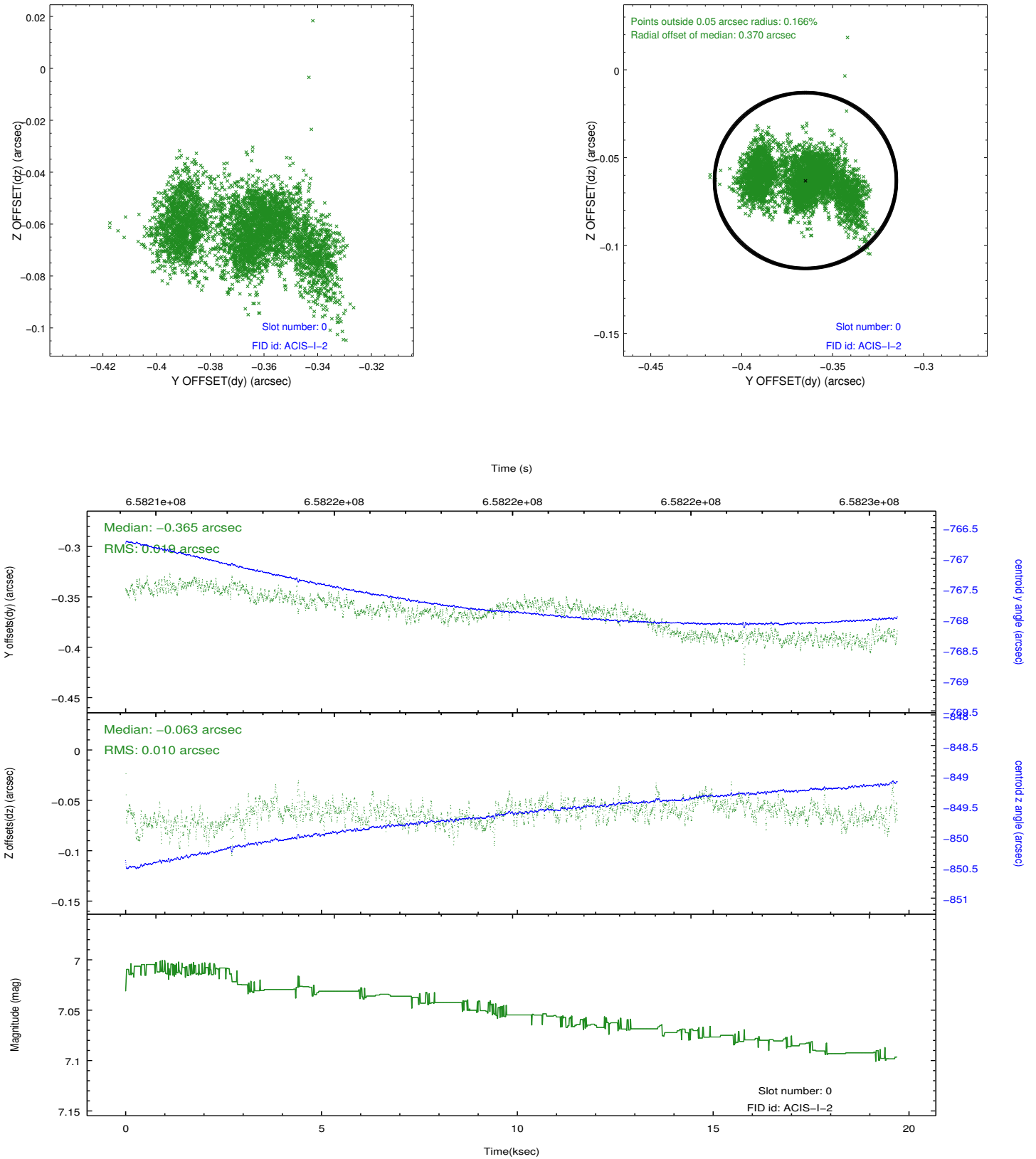


2.4.5 Slot 7

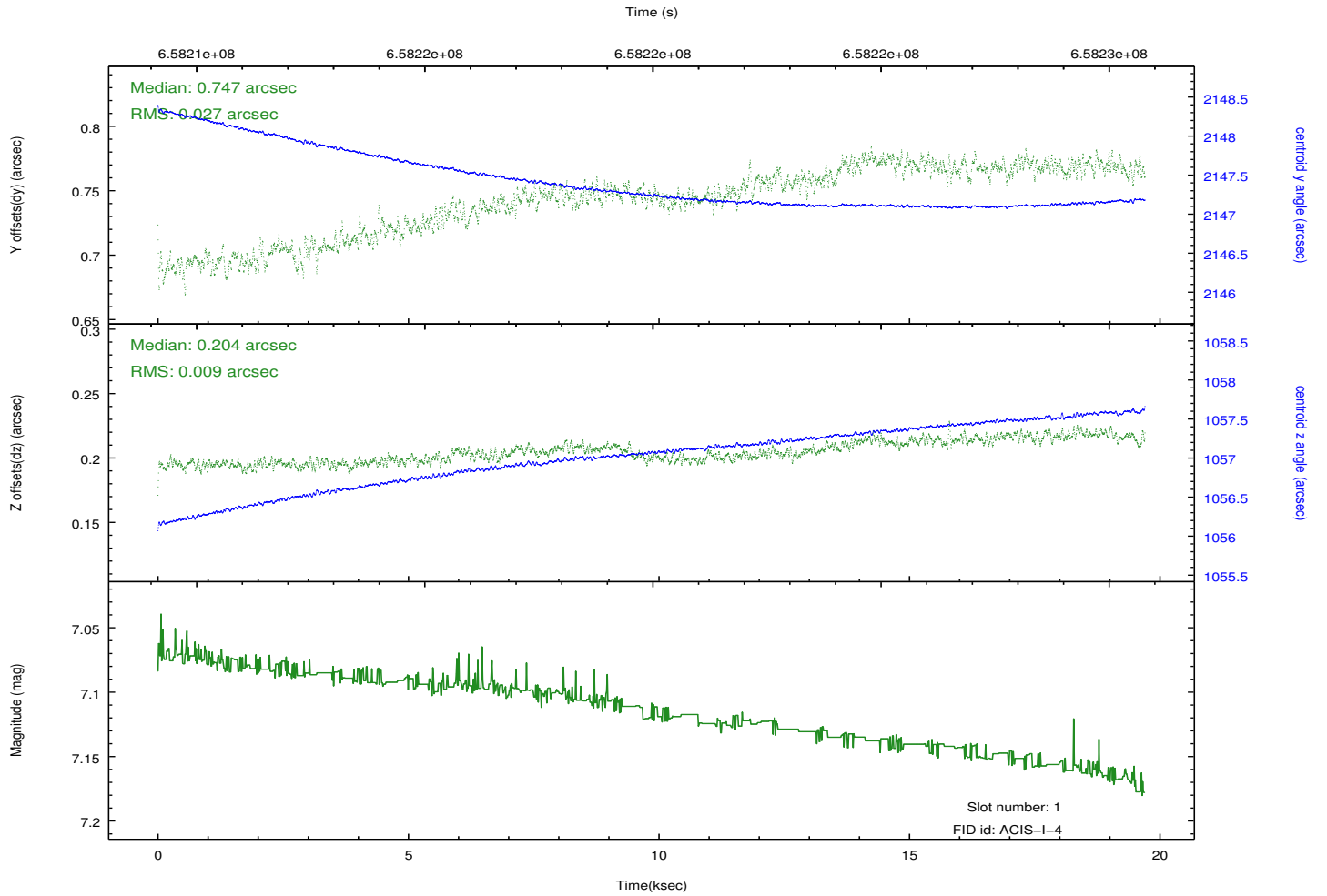
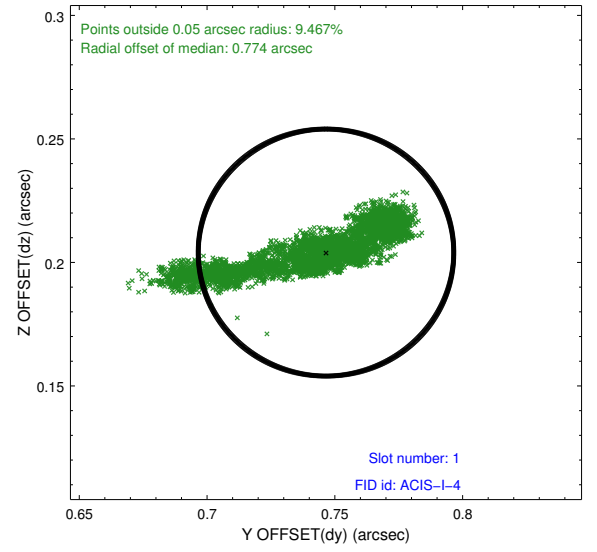
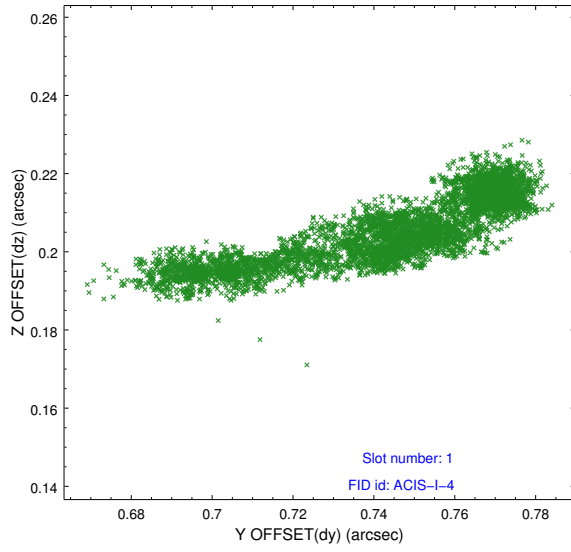


2.5 FID Slots

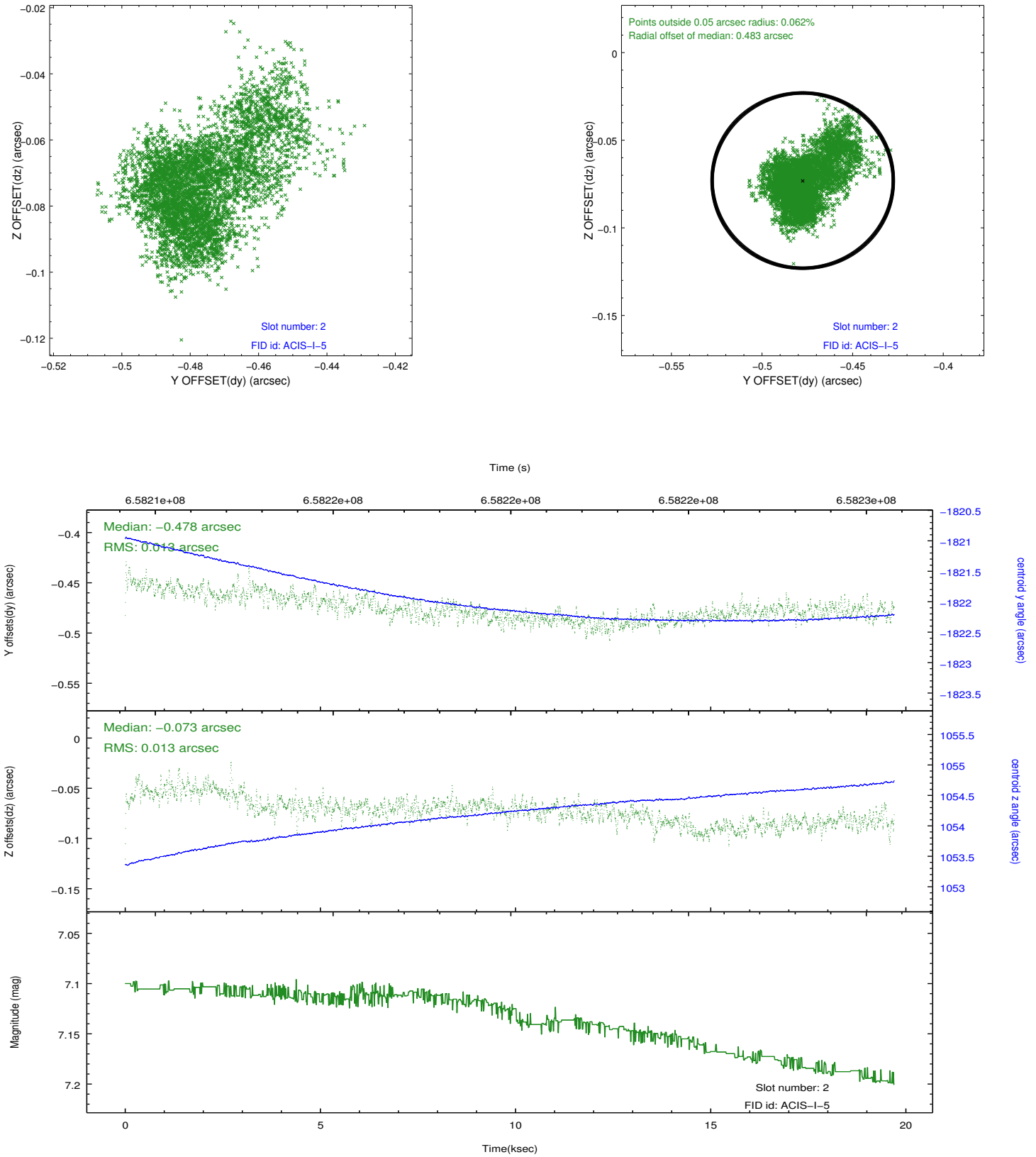
2.5.1 Slot 0



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)	2018.11.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.576459160447

A.2 Comments