

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5138 - L2 Version 4
Chandra X-Ray Center

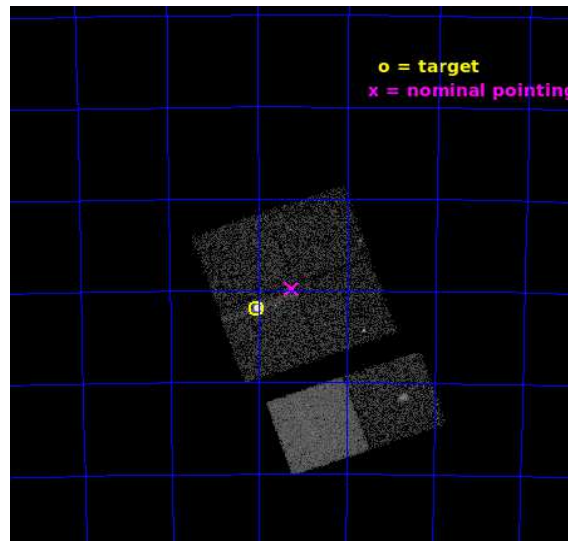
L2 Processing Date : Sep 25 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

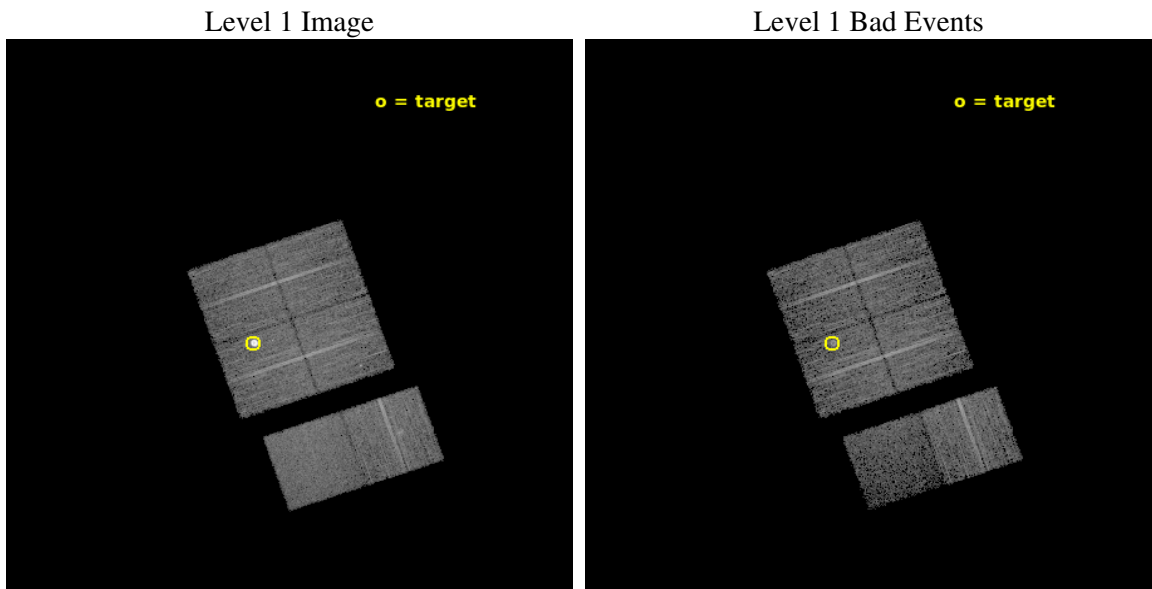
seq_num	590336	Sequence number
obs_id	5138	Observation id
title	AO5B ACIS-I Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.810828163298	Nominal RA [deg]
dec_nom	-71.997017494148	Nominal Dec [deg]
roll_nom	160.8791778555	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7753.5999711156	Sum of GTIs [s]
livetime	7655.4192196239	Livetime [s]
ontime0	7753.5722437203	Sum of GTIs [s]
ontime1	7753.5999711156	Sum of GTIs [s]
ontime2	7750.3590108454	Sum of GTIs [s]
ontime3	7753.5999711156	Sum of GTIs [s]
ontime6	7753.5999711156	Sum of GTIs [s]
ontime7	7753.5999711156	Sum of GTIs [s]
l2events	62217	Number of level 2 events



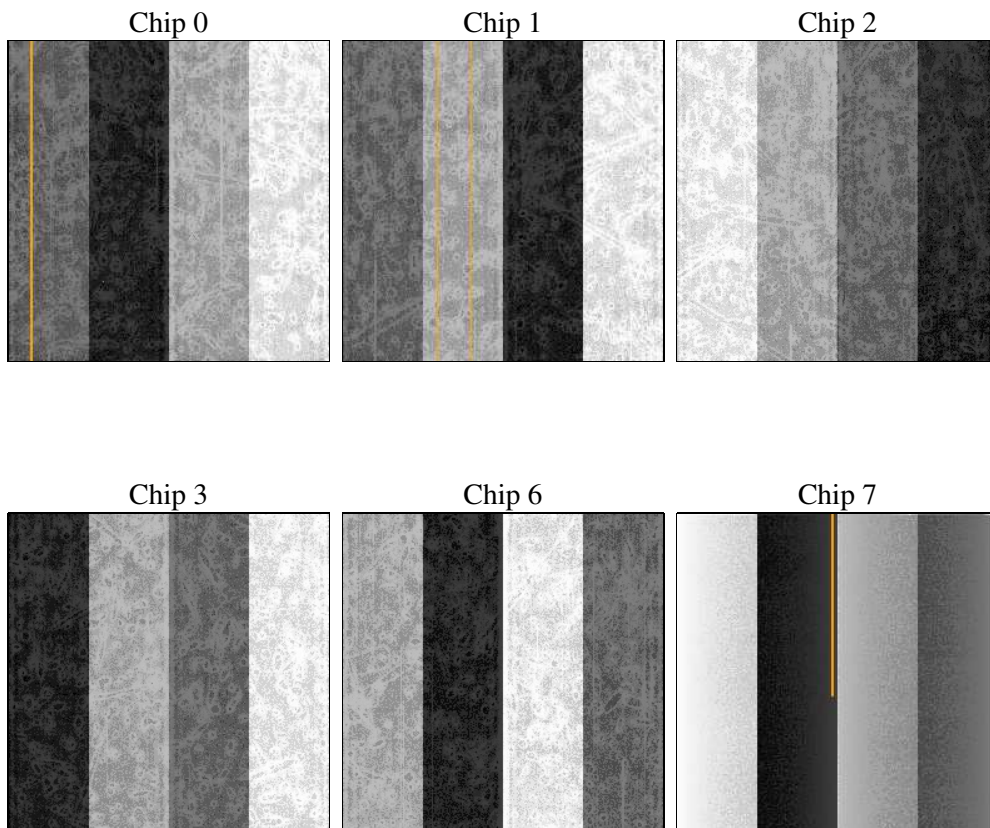
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	7753.5999711156	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	7753.5722437203	Sum of GTIs [s]
date	2020-09-25T09:07:00	Date and time of file creation	ontime1	7753.5999711156	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	7750.3590108454	Sum of GTIs [s]
			ontime3	7753.5999711156	Sum of GTIs [s]
			ontime6	7753.5999711156	Sum of GTIs [s]
			ontime7	7753.5999711156	Sum of GTIs [s]
			l1events	277098	Number of level 1 events

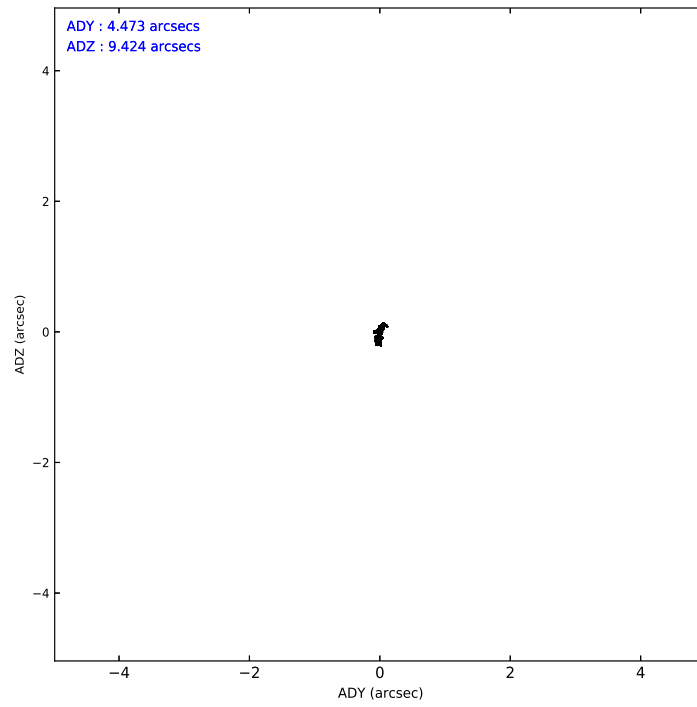
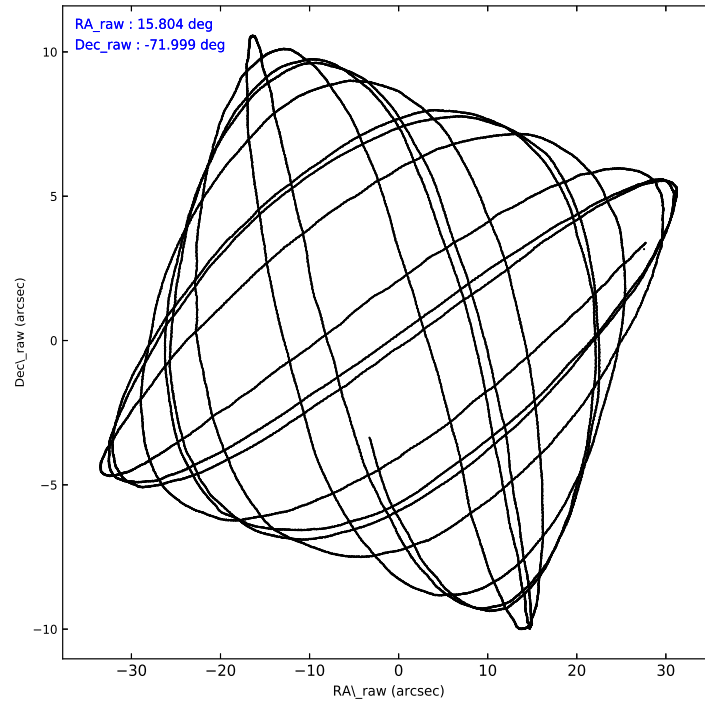
2.1.4 Events

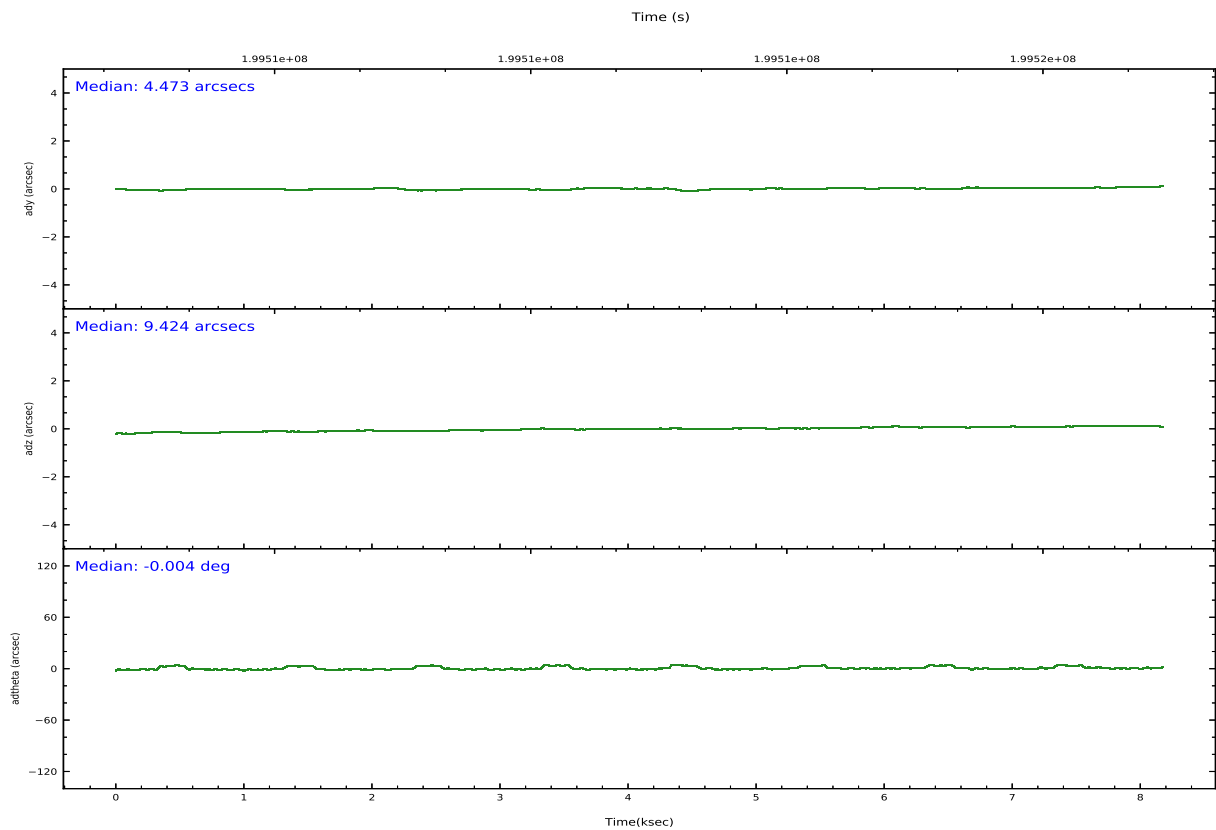
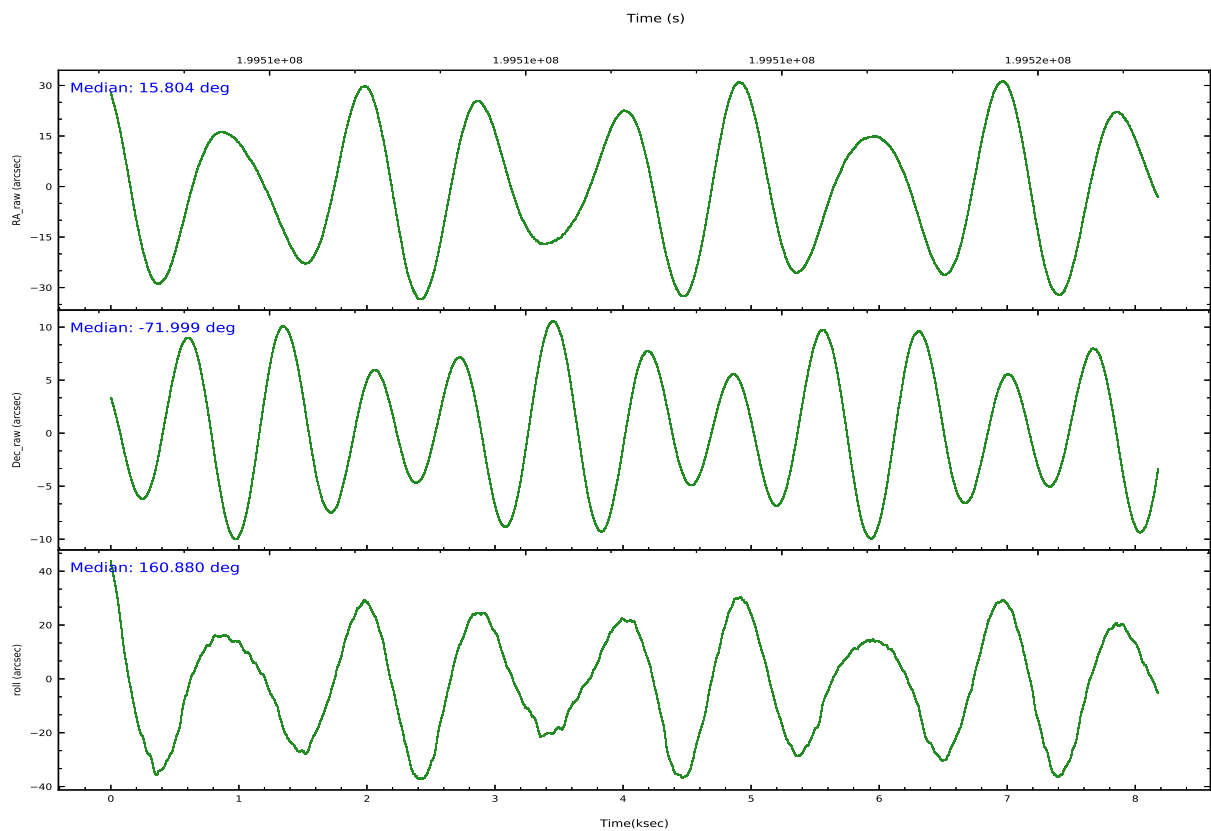
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	39594	38712	45396	68267	44996	40133	grade 0 events	1558	1532	1790	23751	1985	2114
rejected events	35447	34269	40964	39260	40160	20150		3%	3%	3%	34%	4%	5%
rejected %	89%	88%	90%	57%	89%	50%	grade 1 events	28	18	30	241	18	42
								0%	0%	0%	0%	0%	0%
							grade 2 events	974	927	946	2597	997	4175
								2%	2%	2%	3%	2%	10%
							grade 3 events	477	573	484	936	496	2016
								1%	1%	1%	1%	1%	5%
							grade 4 events	419	545	490	862	467	1937
								1%	1%	1%	1%	1%	4%
							grade 5 events	1237	1345	1204	1575	1538	4509
								3%	3%	2%	2%	3%	11%
							grade 6 events	721	875	724	889	893	9759
								1%	2%	1%	1%	1%	24%
							grade 7 events	34180	32897	39728	37416	38602	15581
								86%	84%	87%	54%	85%	38%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	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	15.890763	15.810828163298	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.993801	-71.997017494148	Alternating exposures requested	N	N
[deg] Pointing Roll	160.763347	160.8791778555	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	197164864.184000	197164864.184000			
[s] Window stop time (MET)	199670464.184000	199670464.184000			
[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)	199508940.184000	199508563.94506			
Observation start date	2004-04-28T03:07:56	2004-04-28T03:02:43			
[s] Observation end time (MET)	199516940.184000	199518270.18299			
Observation end date	2004-04-28T05:21:16	2004-04-28T05:44:30			
Read mode	TIMED	TIMED			

2.3 Aspect



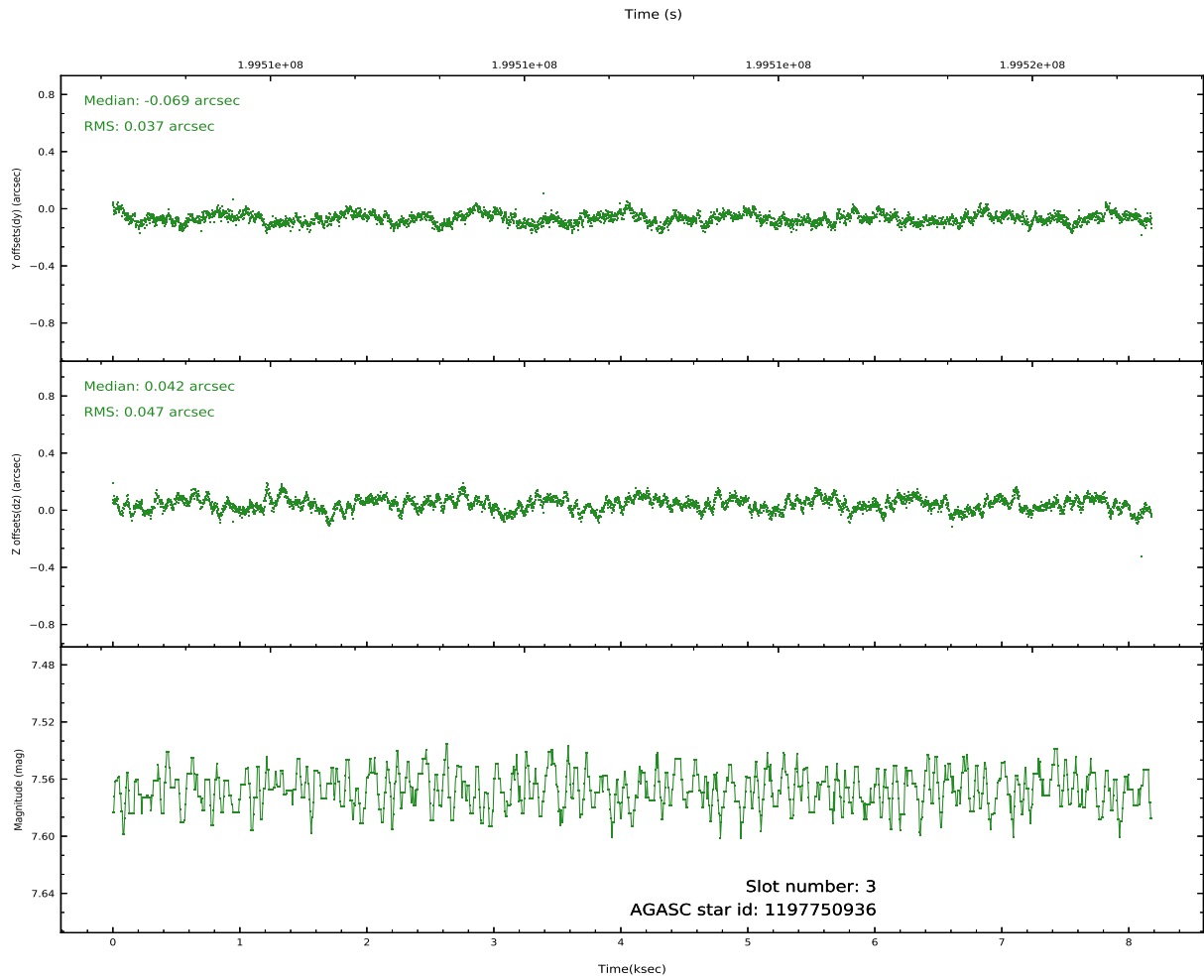
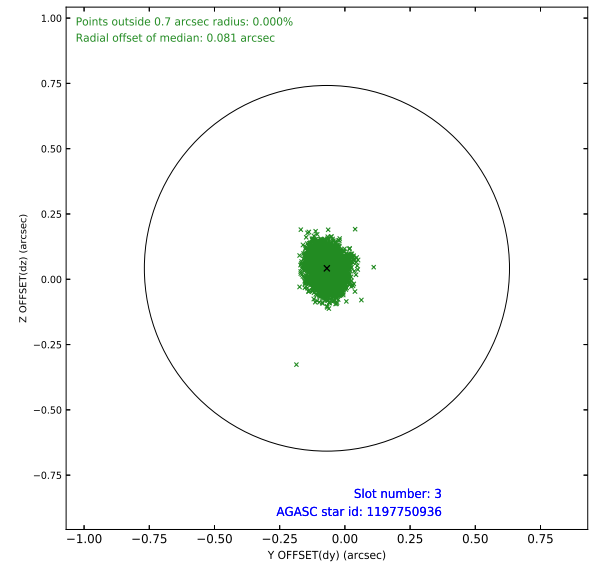
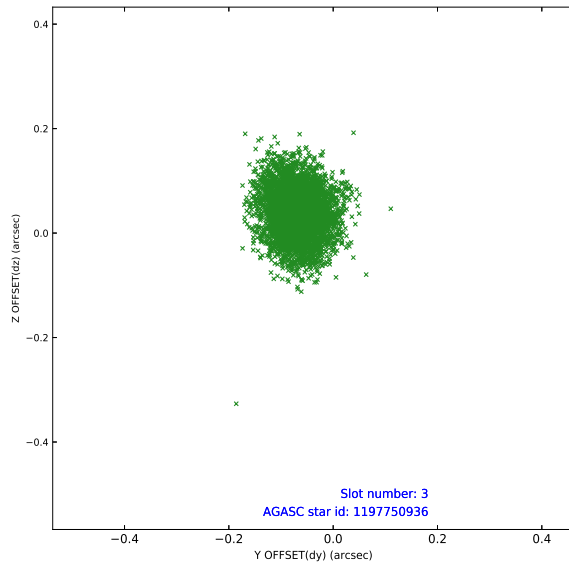


Slot Statistics

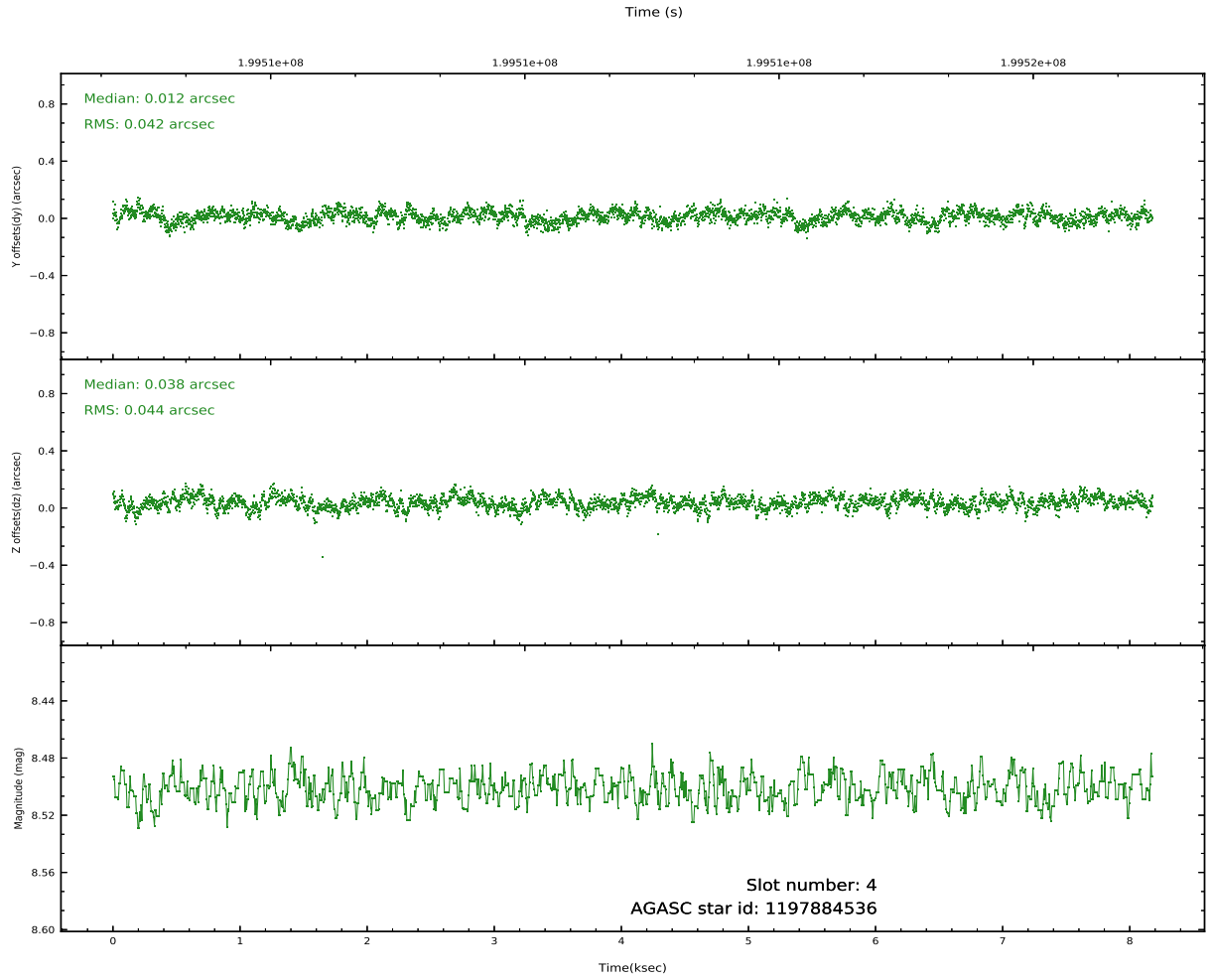
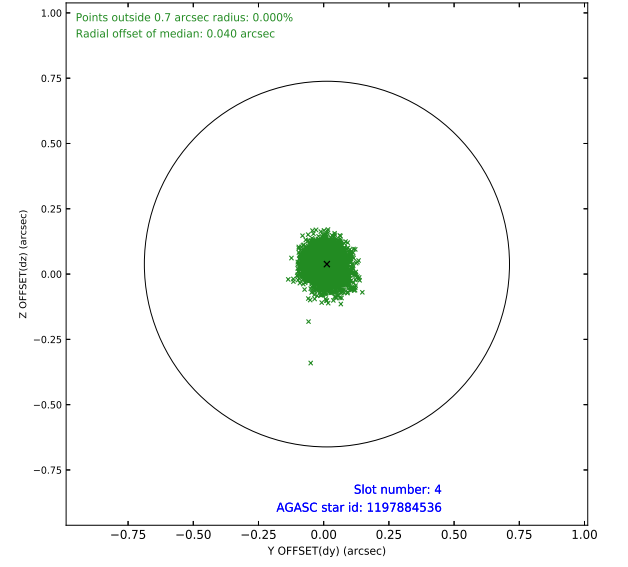
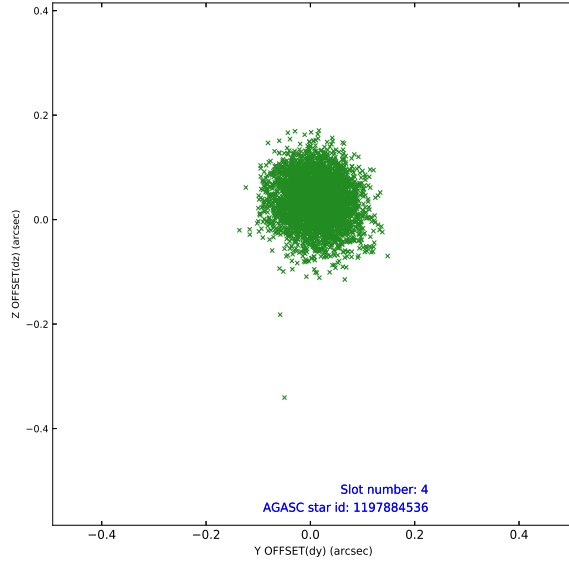
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	1995	1.000	0.056	-0.011	0.011	0.027	0.000000	0.000000	935.36	-832
1	FID		ACIS-I-5	7.23	1995	1.000	-0.121	0.089	0.015	0.058	0.000000	0.000000	-1812.62	1064
2	FID		ACIS-I-6	7.24	1995	1.000	-0.026	-0.006	0.018	0.067	0.000000	0.000000	400.00	1709
3	GUIDE	used	1197750936	7.57	3991	1.000	-0.069	0.042	0.064	0.102	15.387940	-71.549550	1067.58	-1318
4	GUIDE	used	1197884536	8.50	3991	1.000	0.012	0.038	0.065	0.103	17.160729	-71.835289	-1161.63	-994
5	GUIDE	used	1197884712	8.30	3986	1.000	0.020	-0.048	0.083	0.129	16.087398	-72.252690	-511.05	808
6	GUIDE	used	1197885328	7.24	3991	1.000	0.041	0.016	0.066	0.106	16.283090	-71.733943	-110.03	-1027
7	GUIDE	used	1198190968	9.99	3989	1.000	-0.009	-0.039	0.212	0.323	15.749622	-72.545972	-511.26	1926

2.4 Star Slots

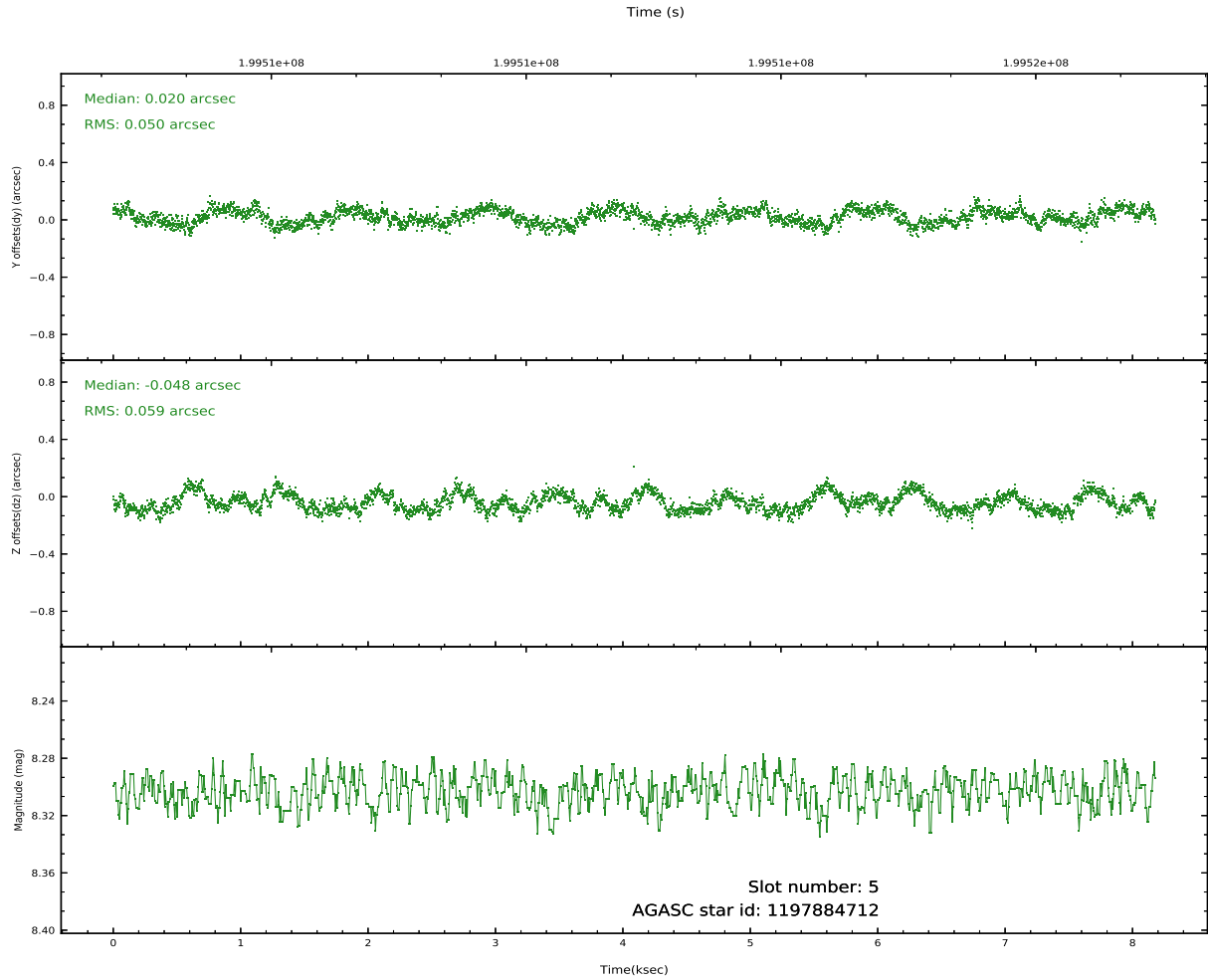
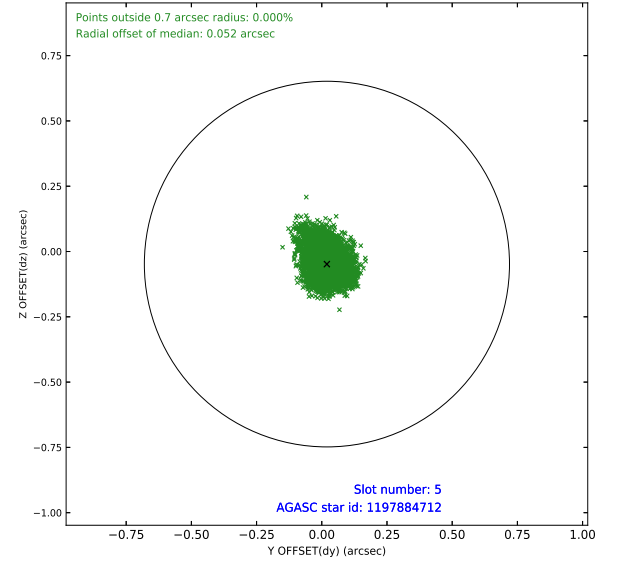
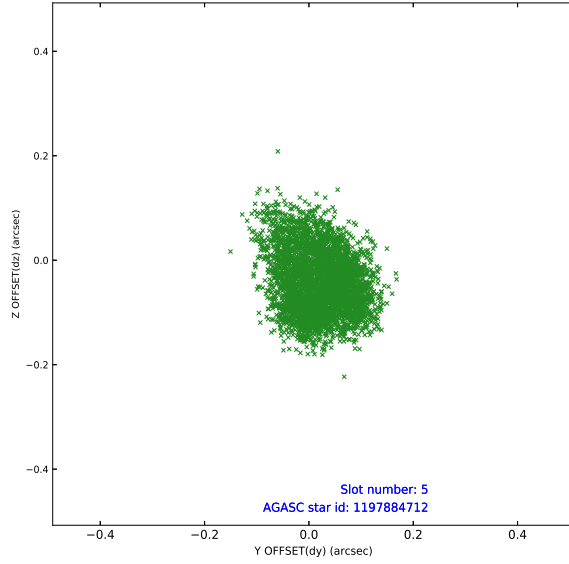
2.4.1 Slot 3



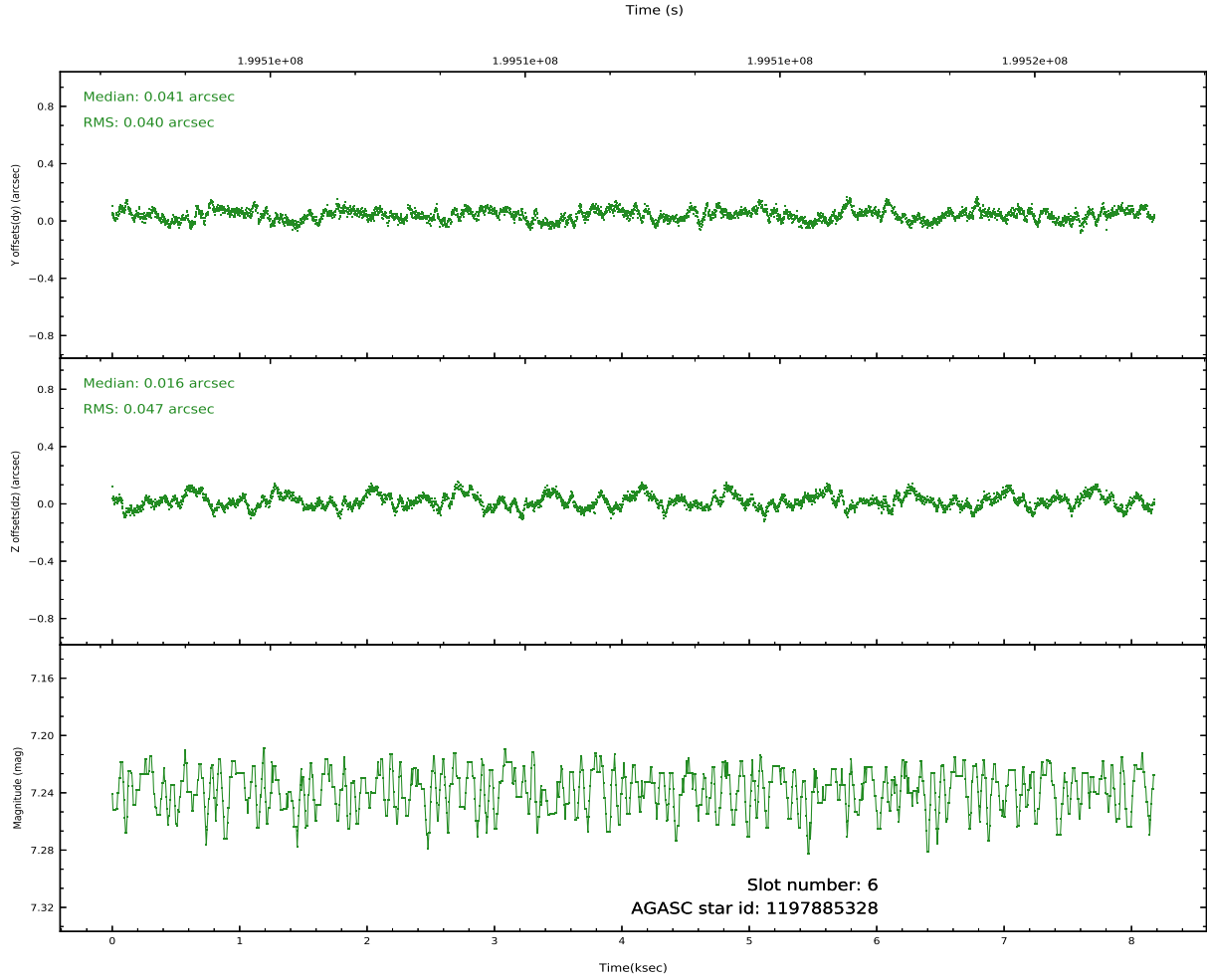
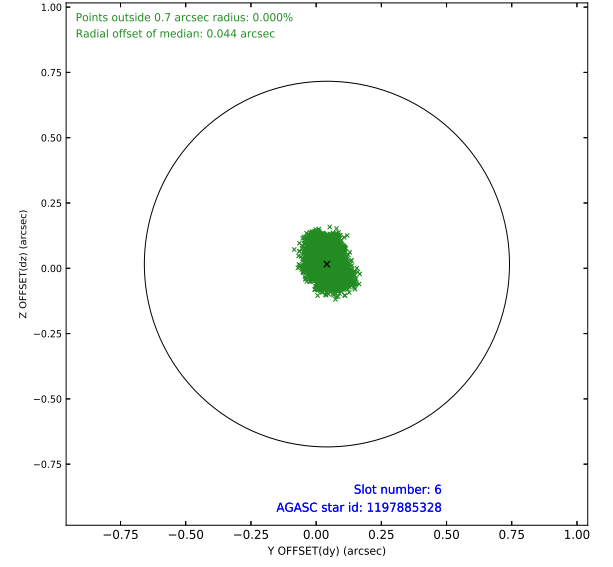
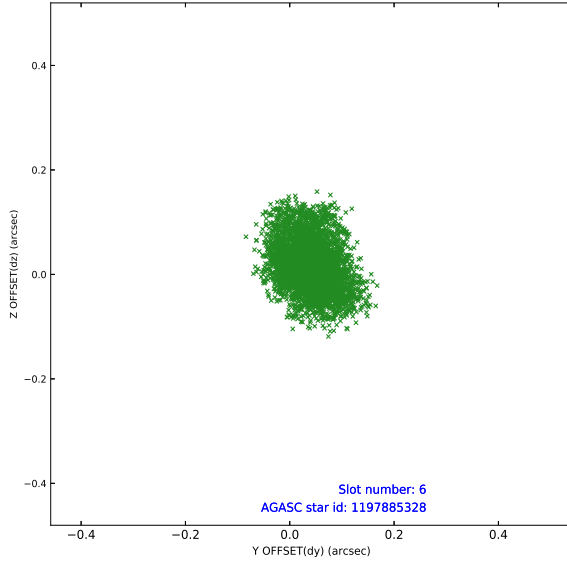
2.4.2 Slot 4



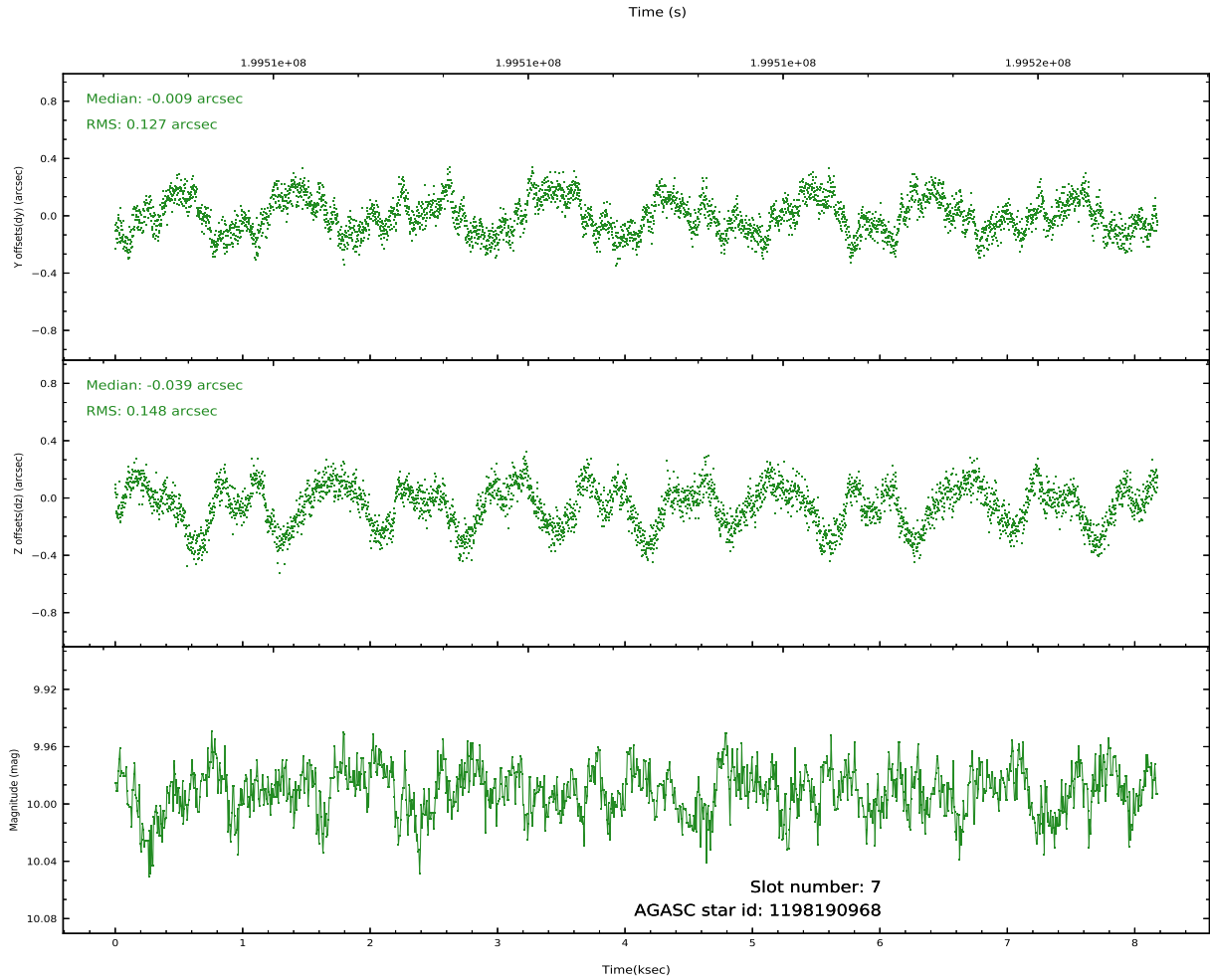
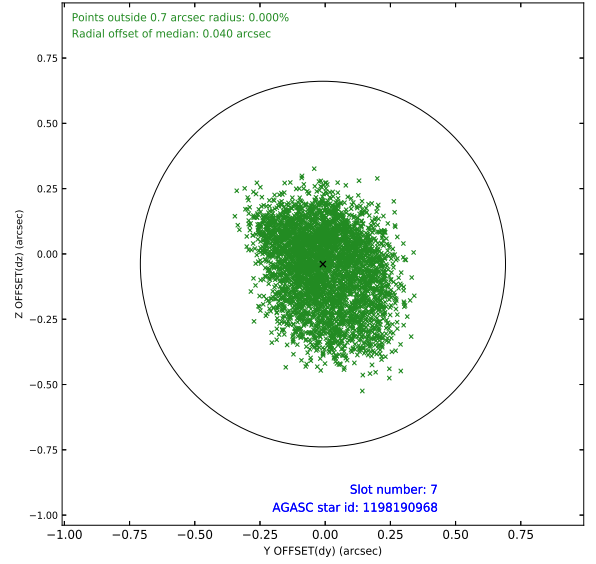
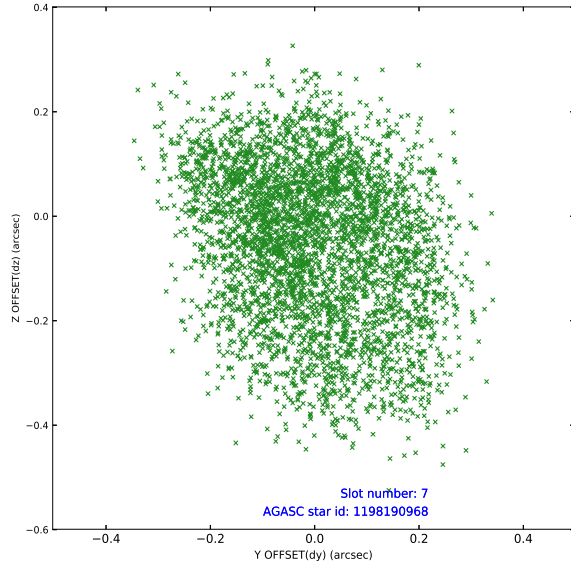
2.4.3 Slot 5



2.4.4 Slot 6

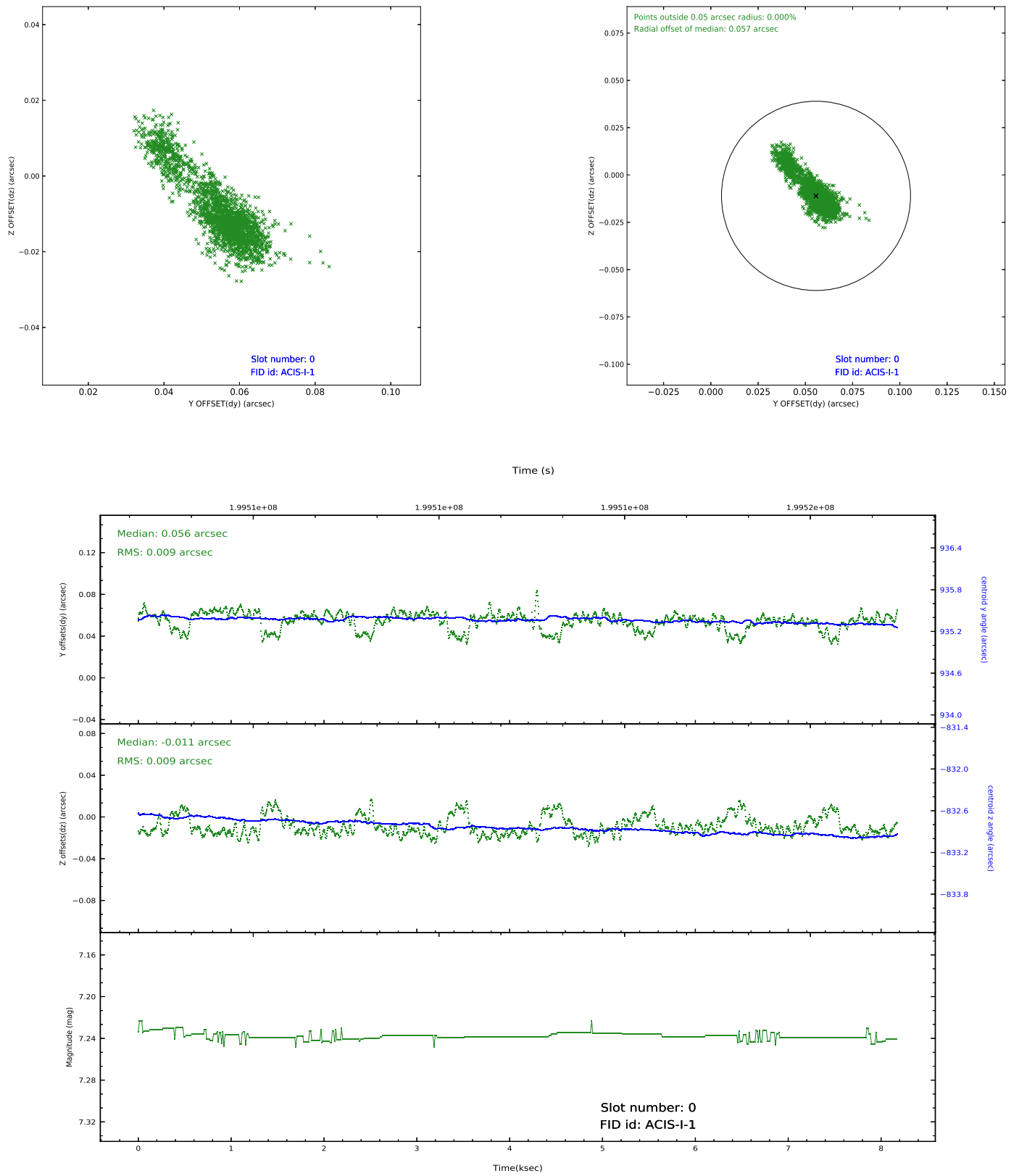


2.4.5 Slot 7

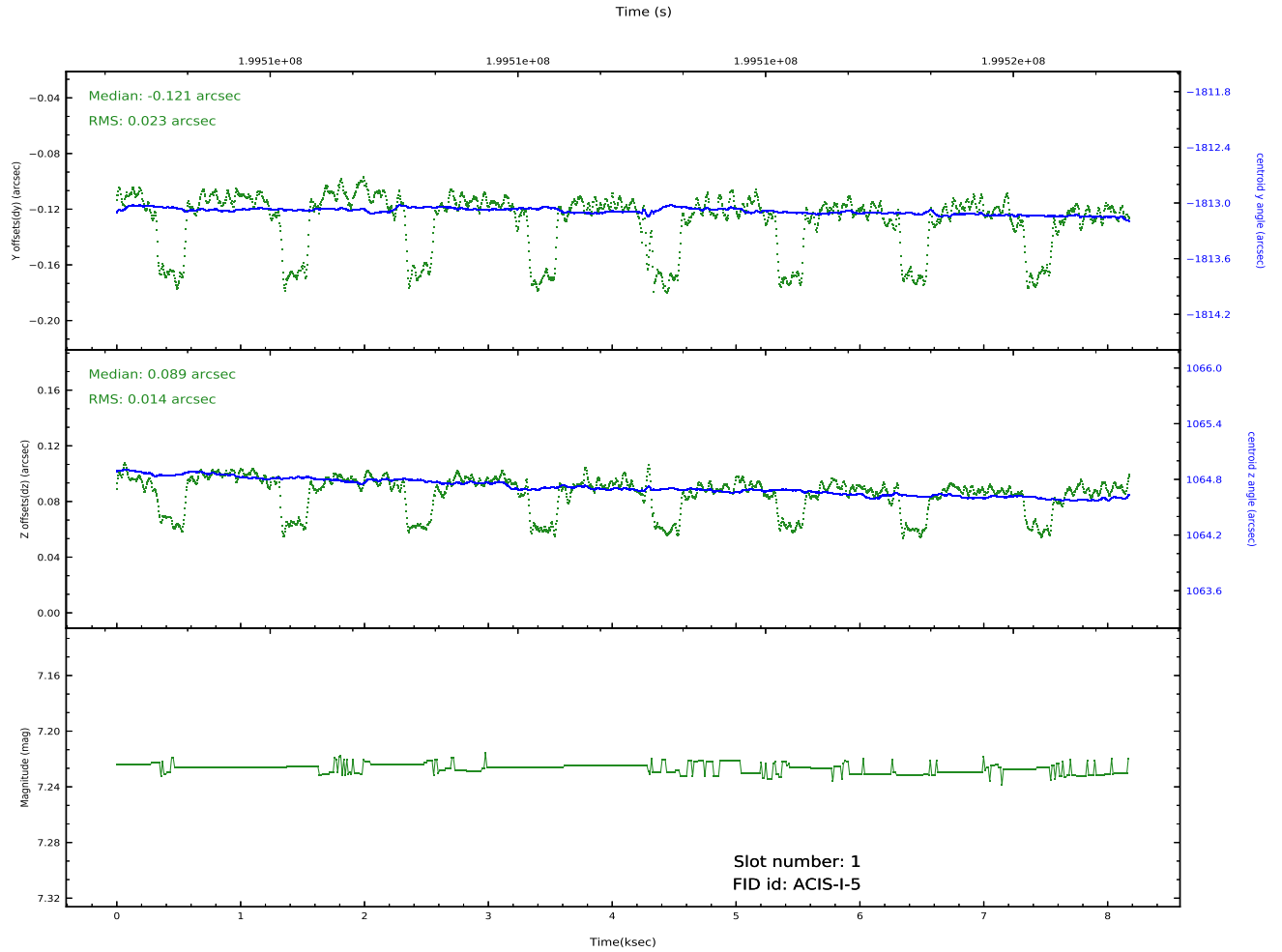
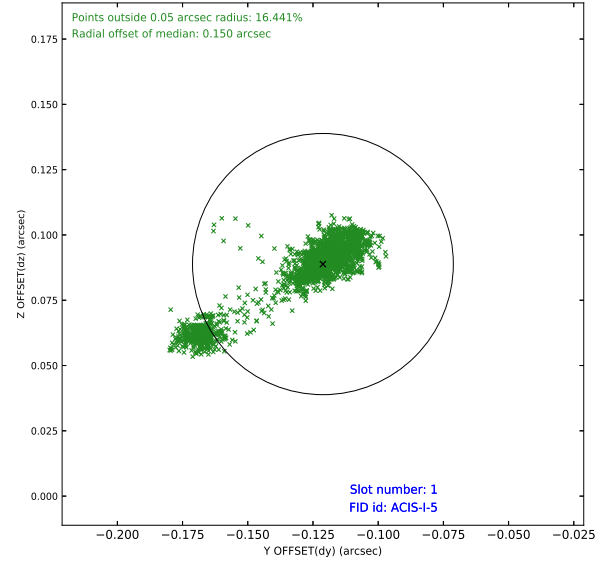
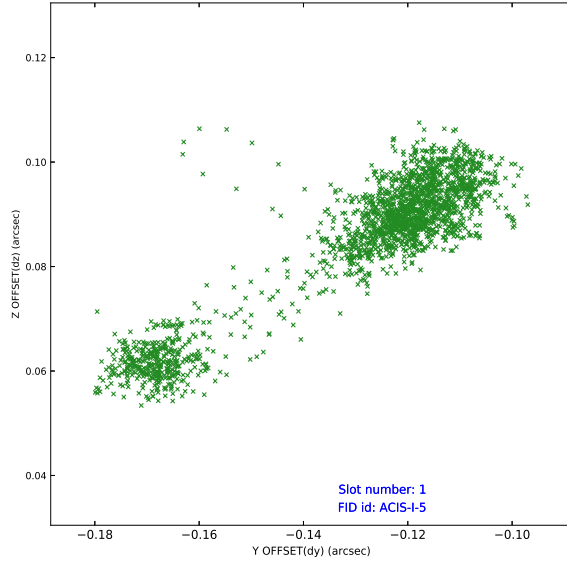


2.5 FID Slots

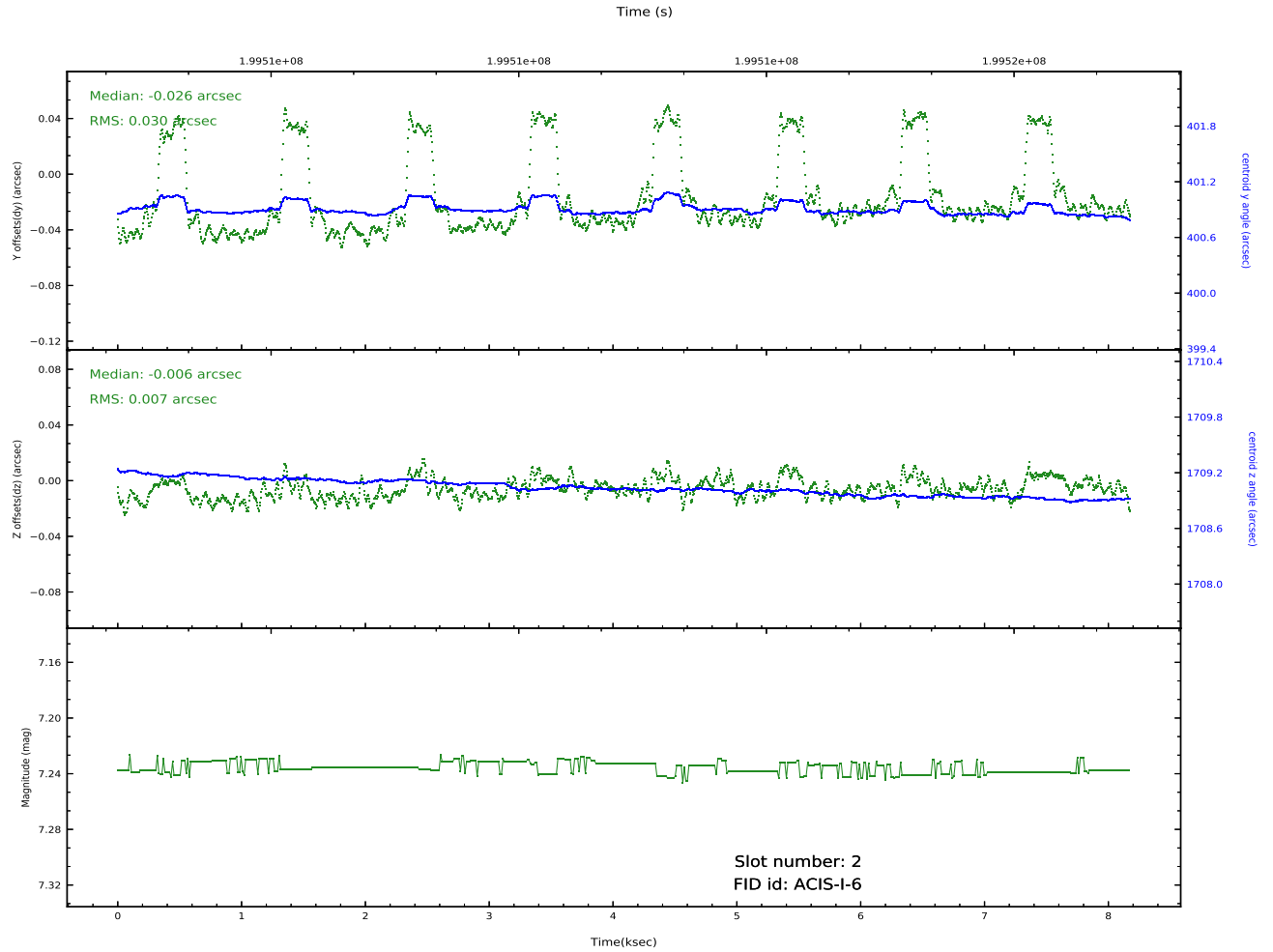
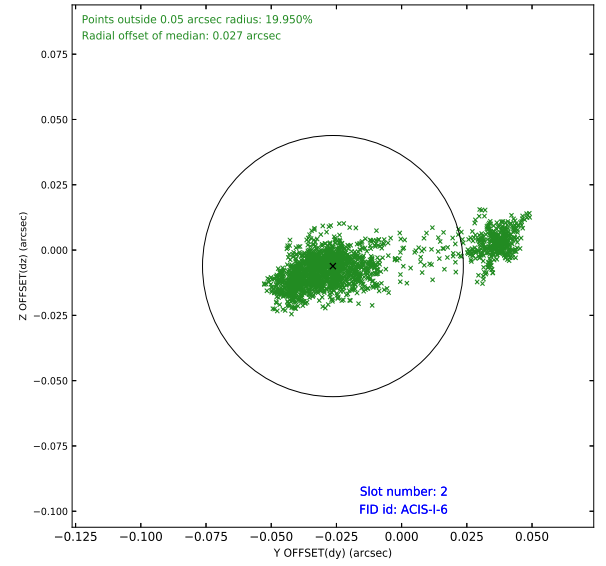
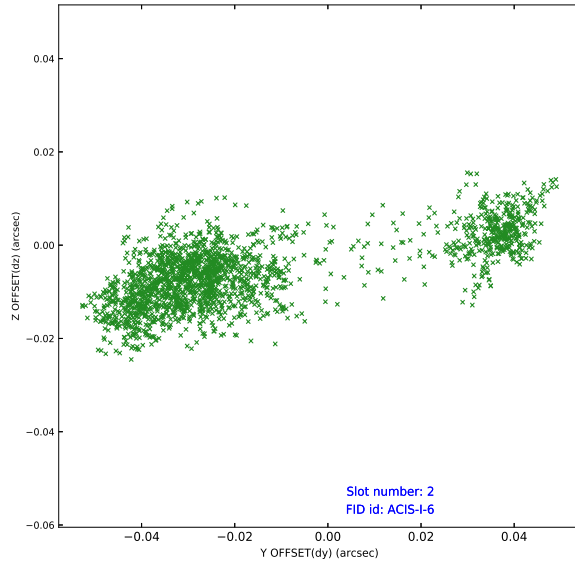
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2020.09.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.756

A.2 Comments

Window preference met.