

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5136 - L2 Version 4
Chandra X-Ray Center

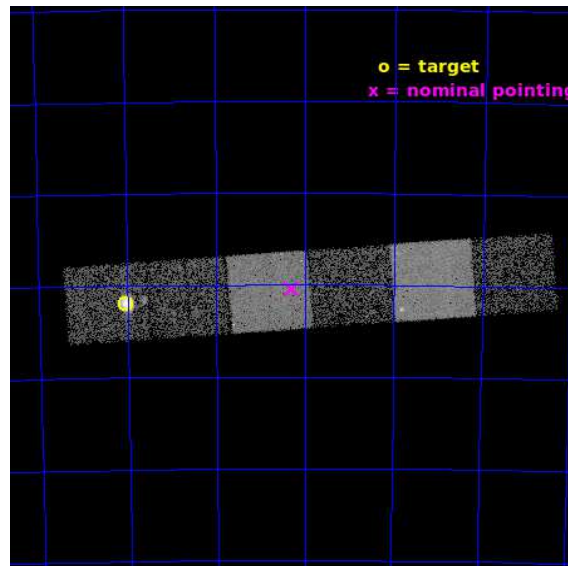
L2 Processing Date : Sep 24 2020

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1 Front

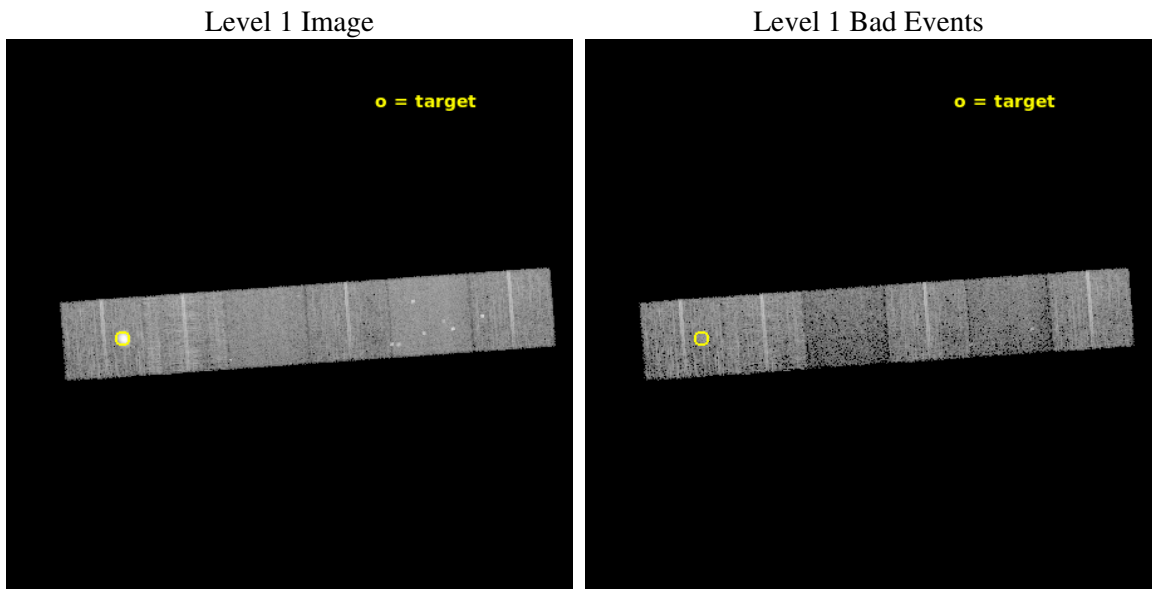
seq_num	590334	Sequence number
obs_id	5136	Observation id
title	AO5B ACIS-S Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.073518836131	Nominal RA [deg]
dec_nom	-72.007033562234	Nominal Dec [deg]
roll_nom	175.72510883936	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8041.3795872033	Sum of GTIs [s]
livetime	7939.5547969326	Livetime [s]
ontime4	8041.58478719	Sum of GTIs [s]
ontime5	8041.5027071834	Sum of GTIs [s]
ontime6	8041.4616671801	Sum of GTIs [s]
ontime7	8041.5437471867	Sum of GTIs [s]
ontime8	8038.179656893	Sum of GTIs [s]
ontime9	8041.3795872033	Sum of GTIs [s]
l2events	84713	Number of level 2 events



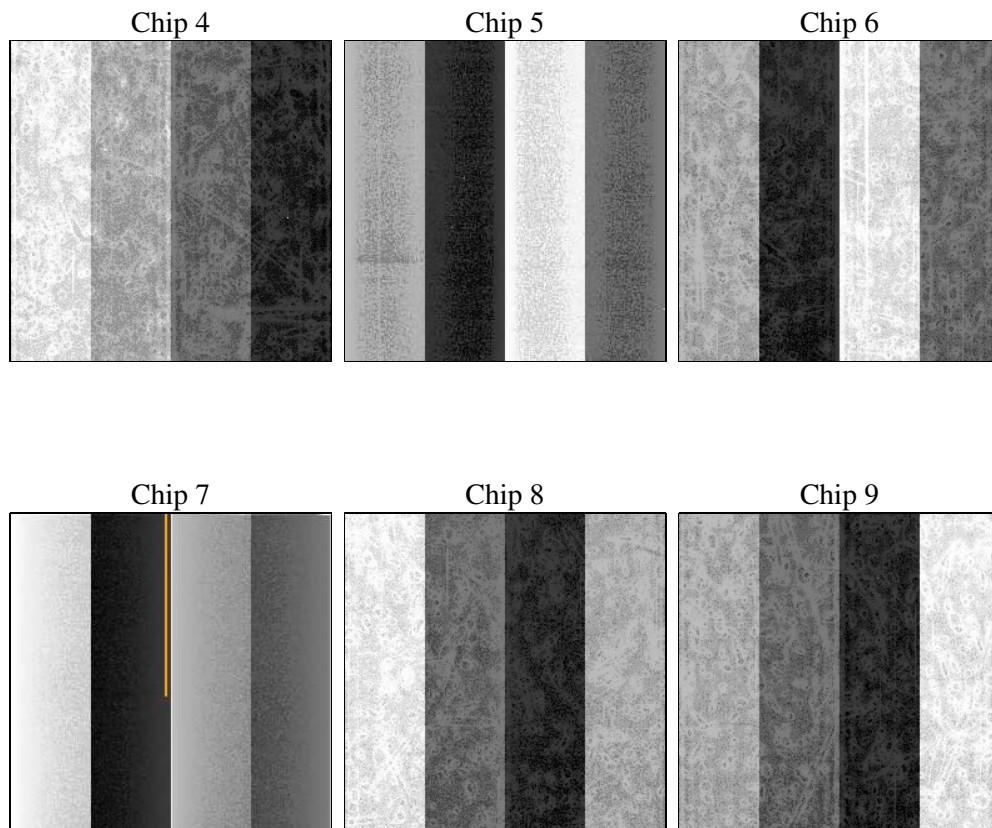
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8289.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8041.3795872033	Sum of GTIs [s]
caldsver	4.9.2	 	ontime4	8041.58478719	Sum of GTIs [s]
date	2020-09-25T01:29:47	Date and time of file creation	ontime5	8041.5027071834	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	8041.4616671801	Sum of GTIs [s]
			ontime7	8041.5437471867	Sum of GTIs [s]
			ontime8	8038.179656893	Sum of GTIs [s]
			ontime9	8041.3795872033	Sum of GTIs [s]
			l1events	320373	Number of level 1 events

2.1.4 Events

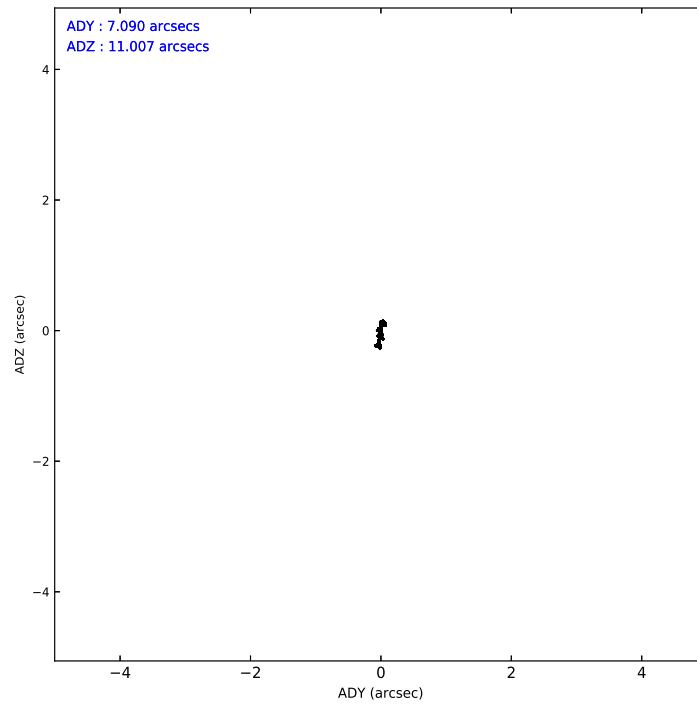
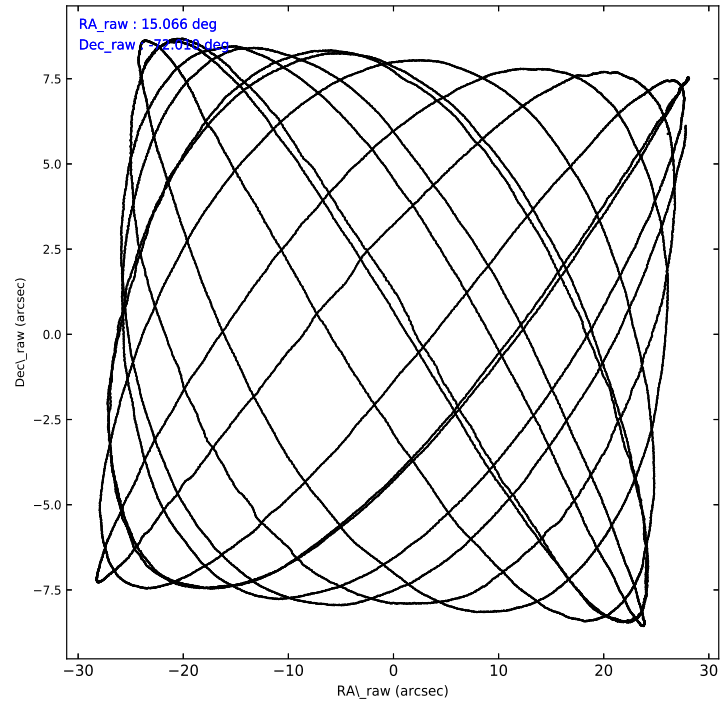
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	51523	56071	44892	43381	58798	65708	grade 0 events	2661	3537	1994	2375	4655	20805
rejected events	45867	26308	40029	21404	44306	39720		5%	6%	4%	5%	7%	31%
rejected %	89%	46%	89%	49%	75%	60%	grade 1 events	41	80	27	53	50	112
								0%	0%	0%	0%	0%	0%
							grade 2 events	1152	8749	976	4693	2912	2455
								2%	15%	2%	10%	4%	3%
							grade 3 events	546	1498	534	2232	1759	864
								1%	2%	1%	5%	2%	1%
							grade 4 events	528	1428	528	2167	1698	823
								1%	2%	1%	4%	2%	1%
							grade 5 events	1414	4470	1479	4588	2270	1647
								2%	7%	3%	10%	3%	2%
							grade 6 events	773	14582	834	10523	3470	1064
								1%	26%	1%	24%	5%	1%
							grade 7 events	44408	21727	38520	16750	41984	37938
								86%	38%	85%	38%	71%	57%

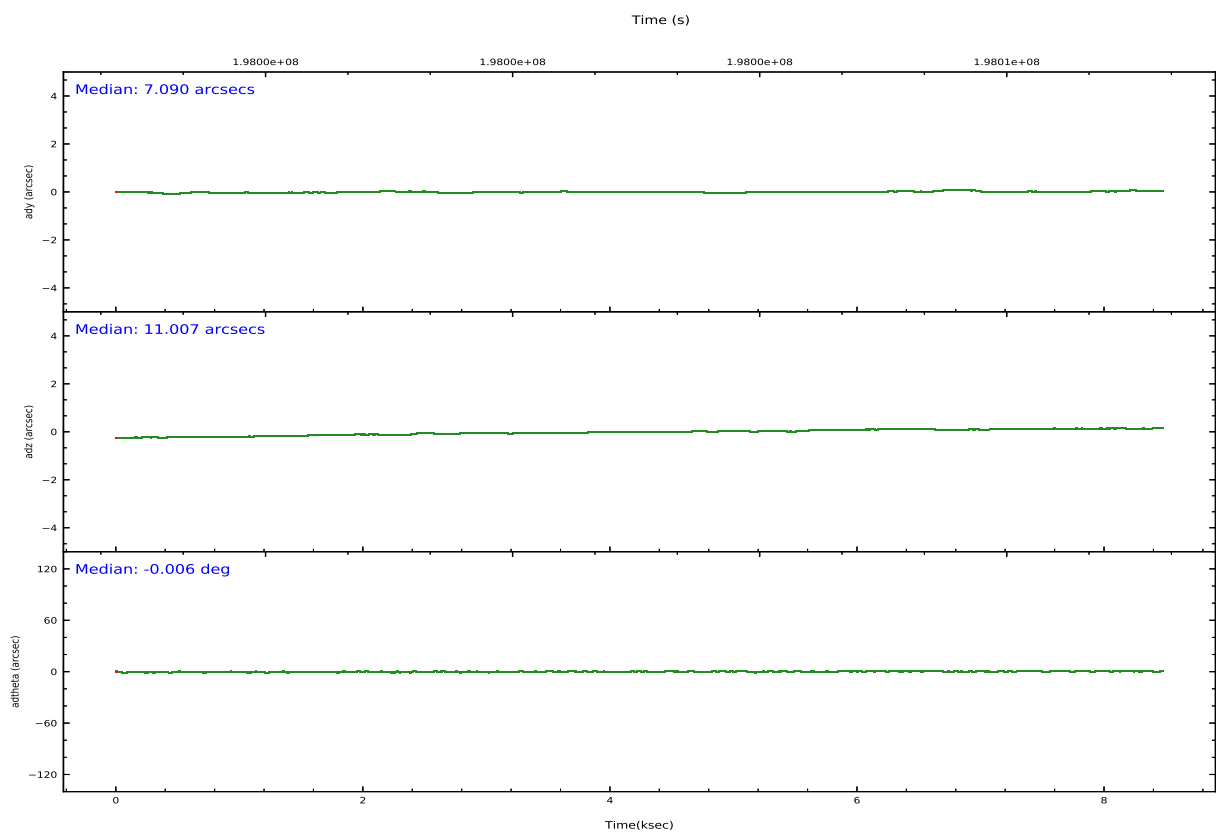
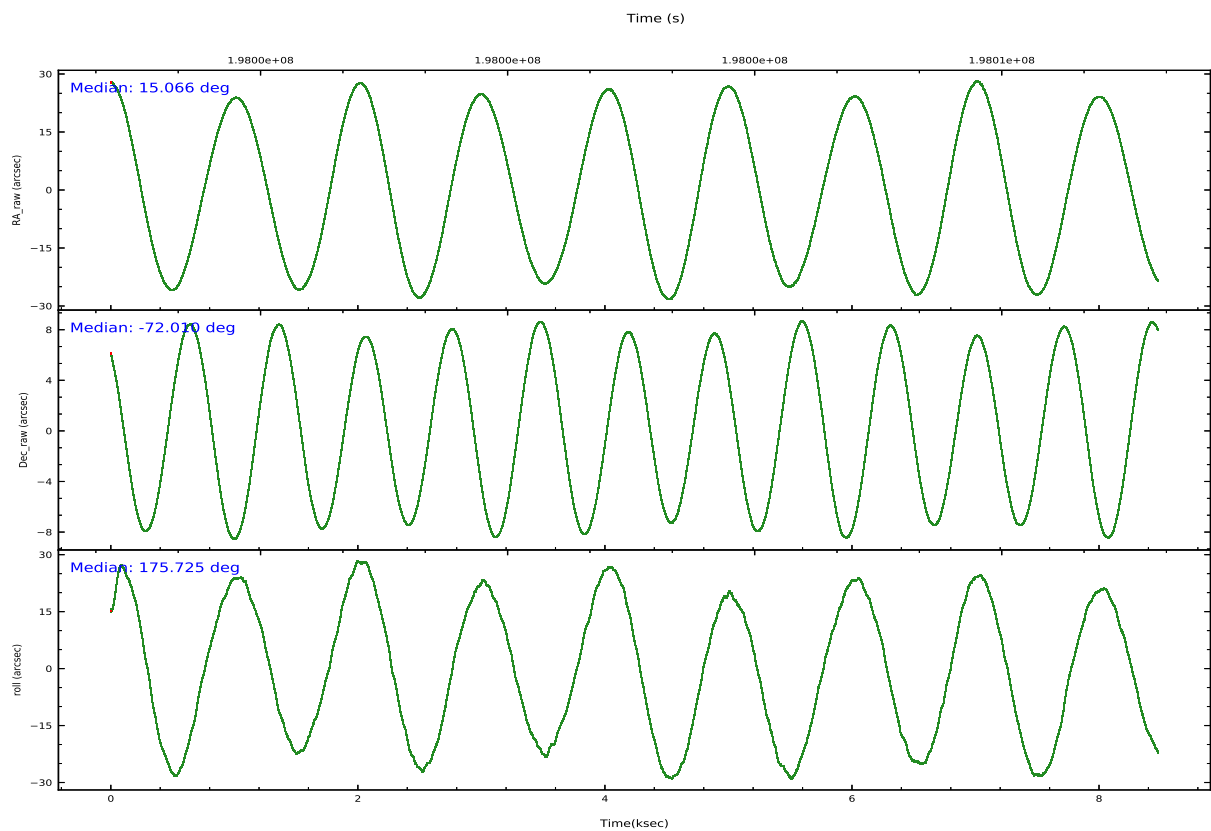
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	15.144881	15.073518836131
[deg] Pointing Dec	-71.997922	-72.007033562234
[deg] Pointing Roll	175.648343	175.72510883936
[s] Window start time (MET)	197164864.184000	197164864.184000
[s] Window stop time (MET)	199670464.184000	199670464.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	197998977.184000	197998601.52853
Observation start date	2004-04-10T15:41:53	2004-04-10T15:36:41
[s] Observation end time (MET)	198007266.184000	198007400.64142
Observation end date	2004-04-10T18:00:02	2004-04-10T18:03:20
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



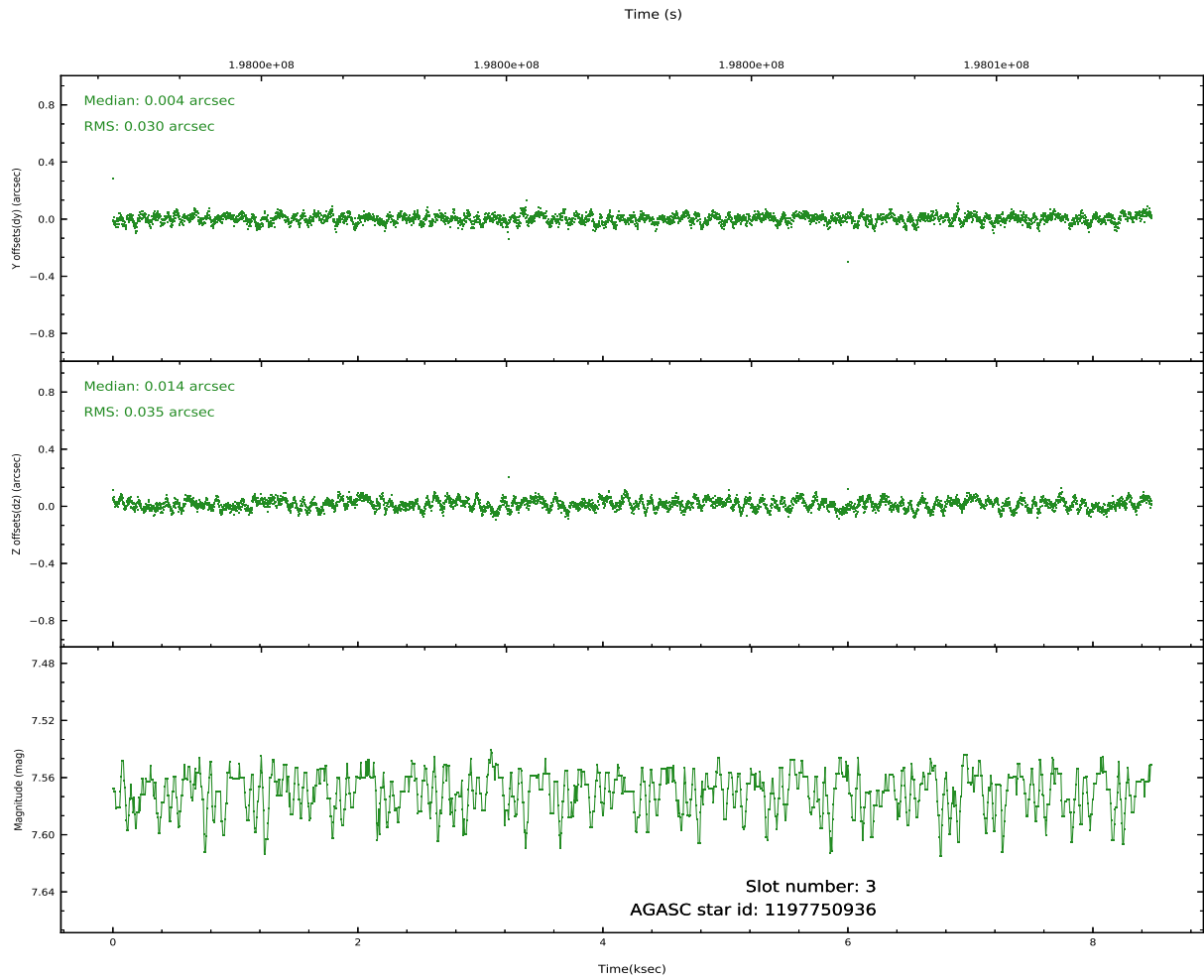
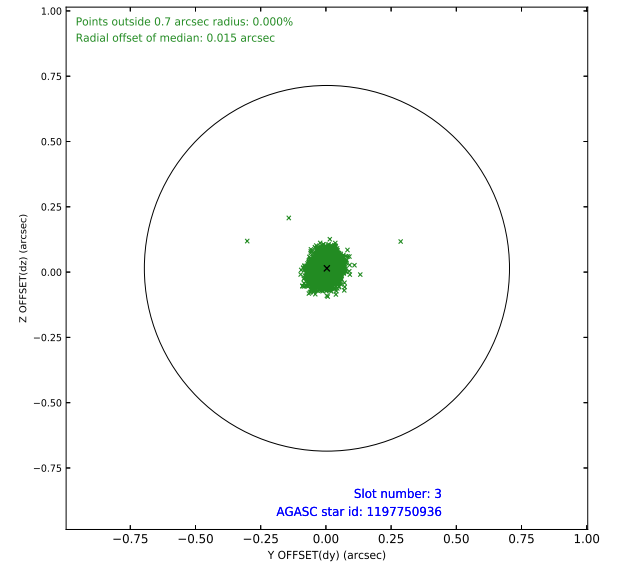
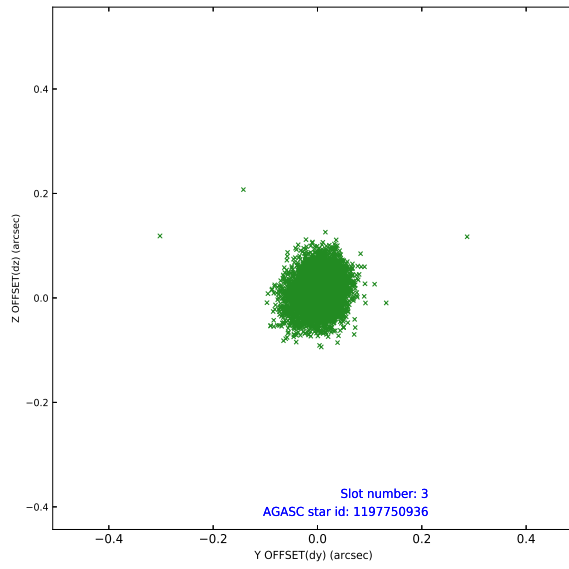


Slot Statistics

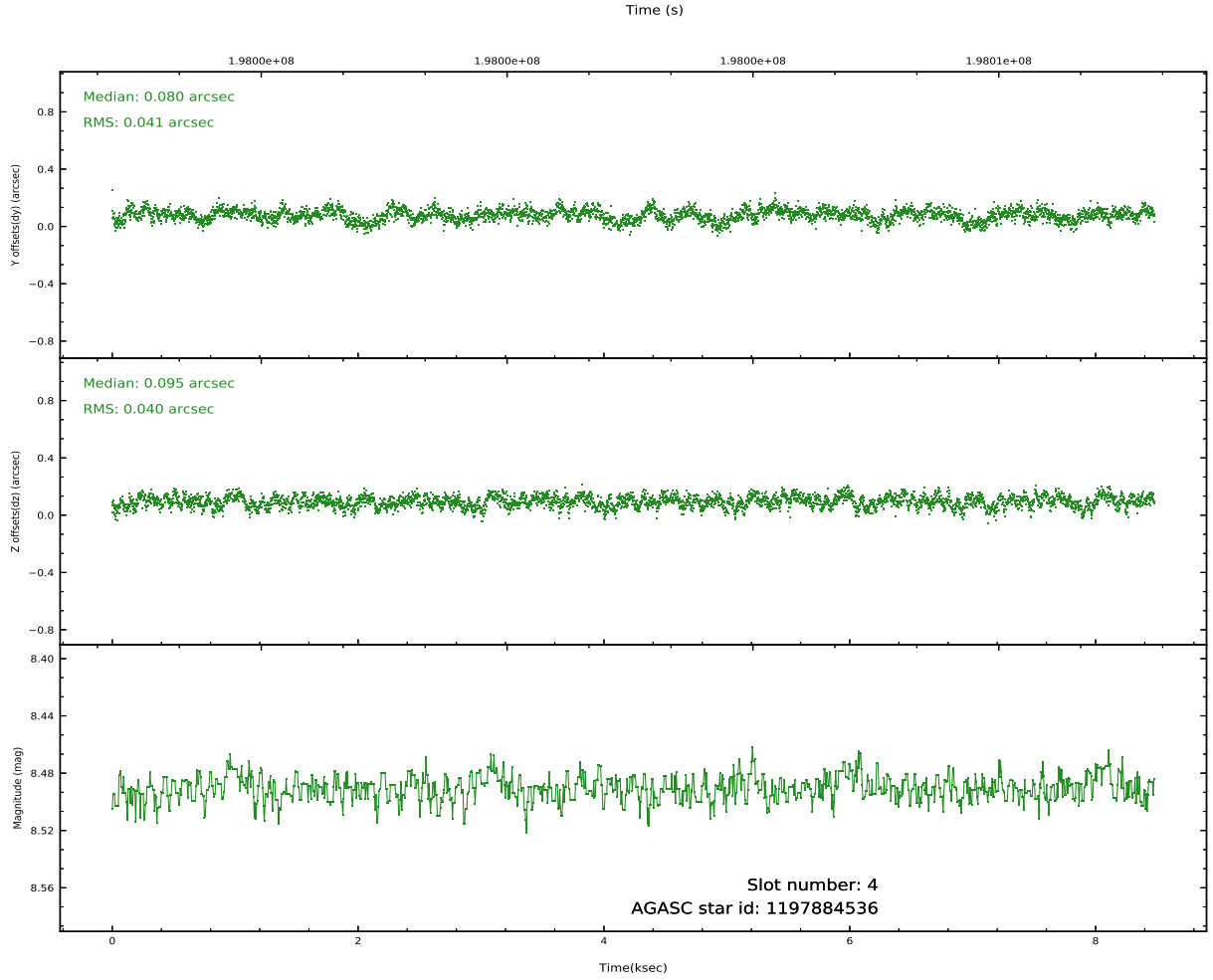
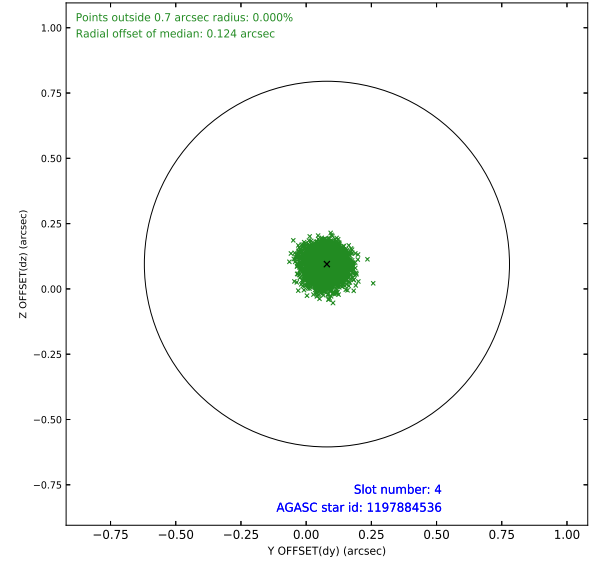
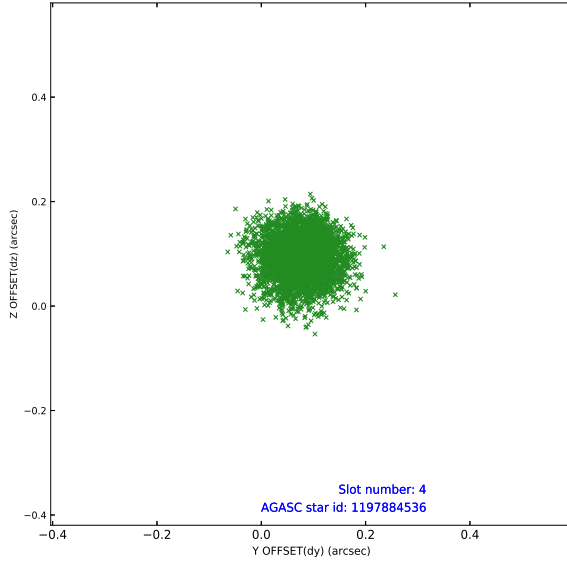
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2069	1.000	-0.072	-0.040	0.006	0.010	0.000000	0.000000	-759.86	-1732
1	FID		ACIS-S-4	7.20	2069	1.000	0.125	0.046	0.005	0.009	0.000000	0.000000	2153.26	175
2	FID		ACIS-S-5	7.23	2068	1.000	-0.084	0.004	0.006	0.010	0.000000	0.000000	-1811.93	169
3	GUIDE	used	1197750936	7.57	4136	1.000	0.004	0.014	0.050	0.077	15.387940	-71.549550	-153.19	-1629
4	GUIDE	used	1197884536	8.49	4137	1.000	0.080	0.095	0.062	0.099	17.160729	-71.835289	-2213.46	-718
5	GUIDE	used	1197884712	8.30	4134	1.000	0.016	-0.046	0.059	0.096	16.087398	-72.252690	-1101.90	844
6	GUIDE	used	1197885328	7.24	4137	1.000	-0.038	0.022	0.058	0.087	16.283090	-71.733943	-1209.62	-1032
7	GUIDE	used	1198190968	10.01	4133	1.000	-0.057	-0.088	0.108	0.177	15.749622	-72.545972	-801.53	1920

2.4 Star Slots

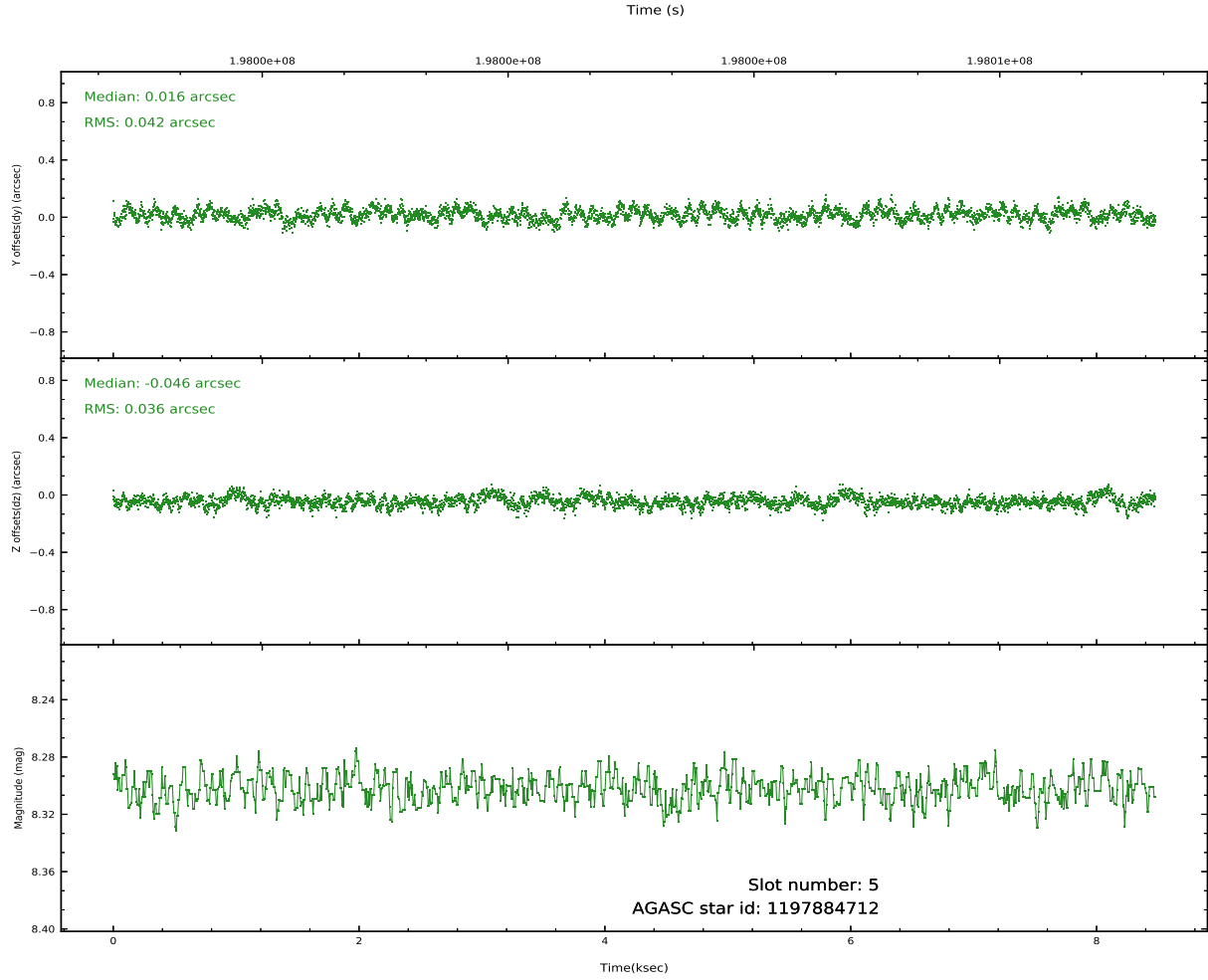
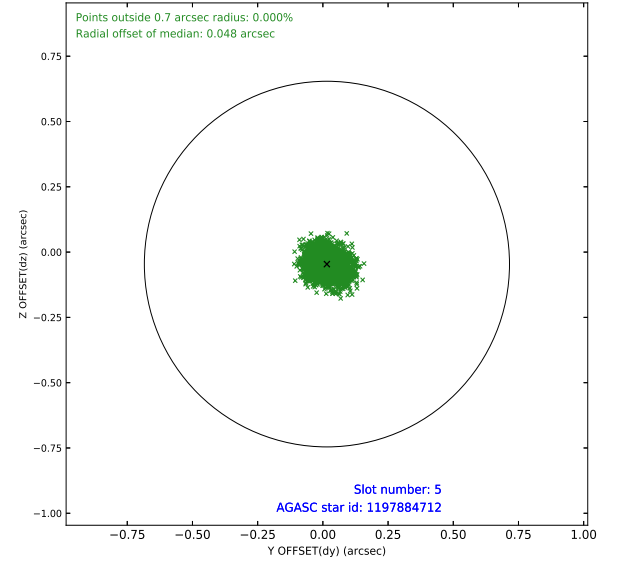
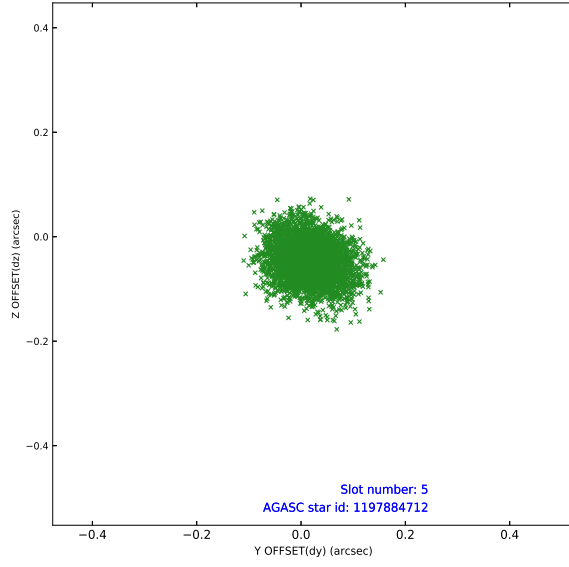
2.4.1 Slot 3



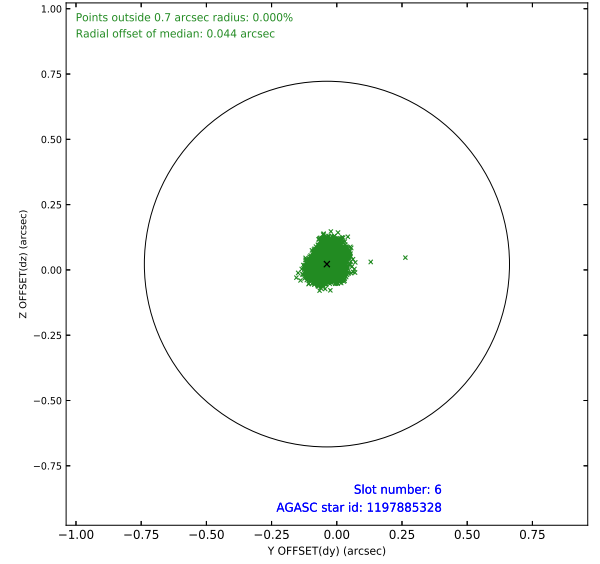
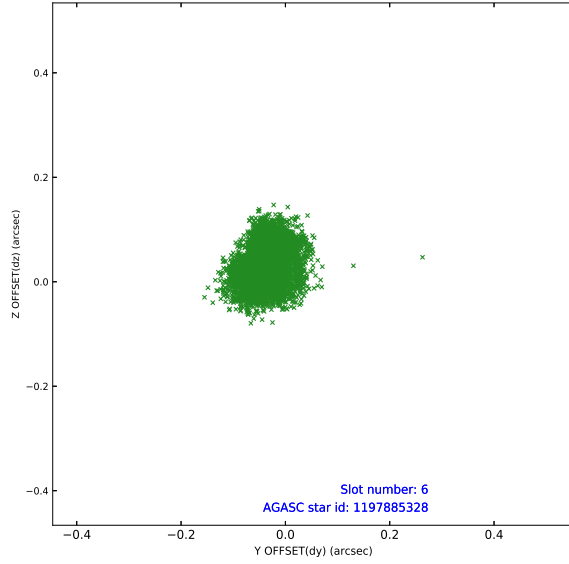
2.4.2 Slot 4



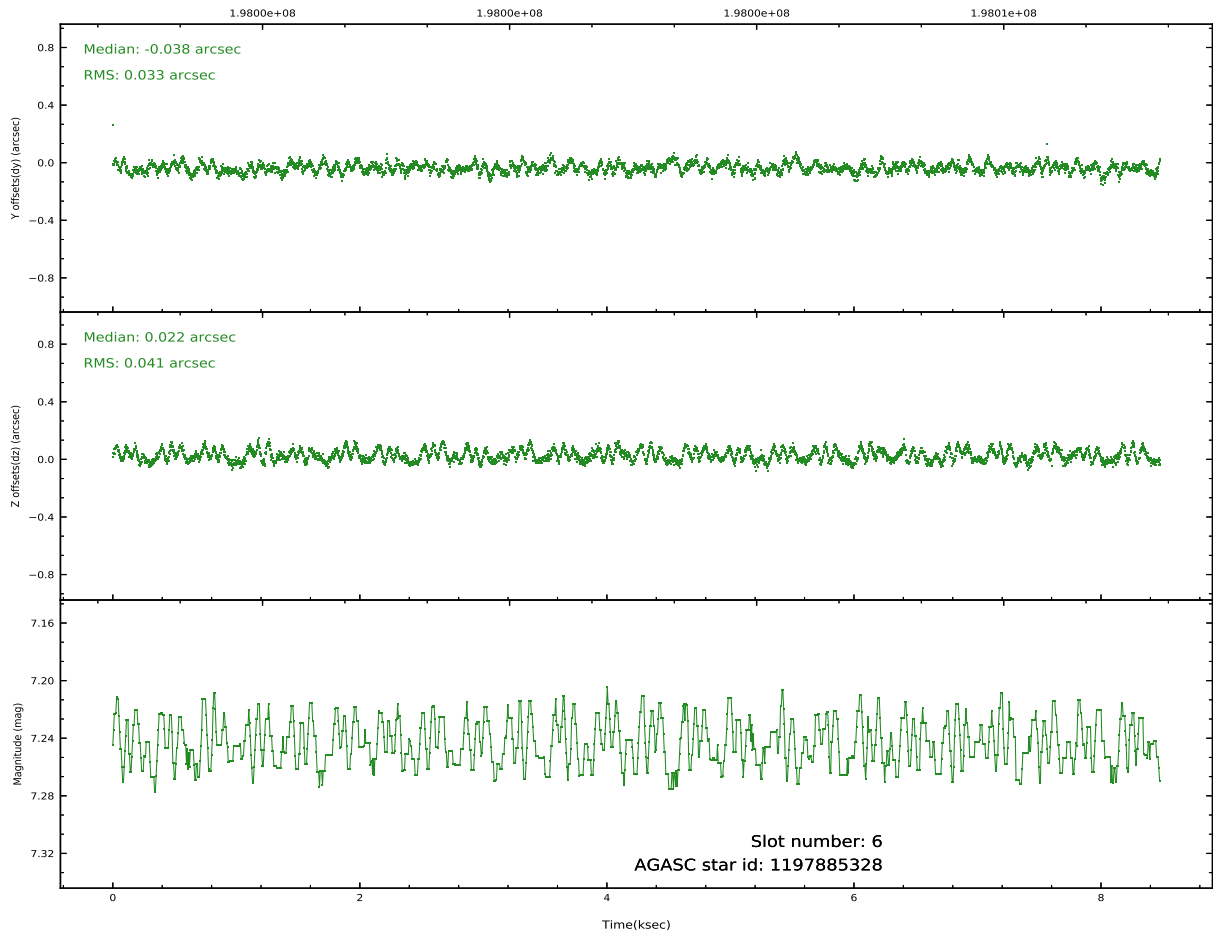
2.4.3 Slot 5



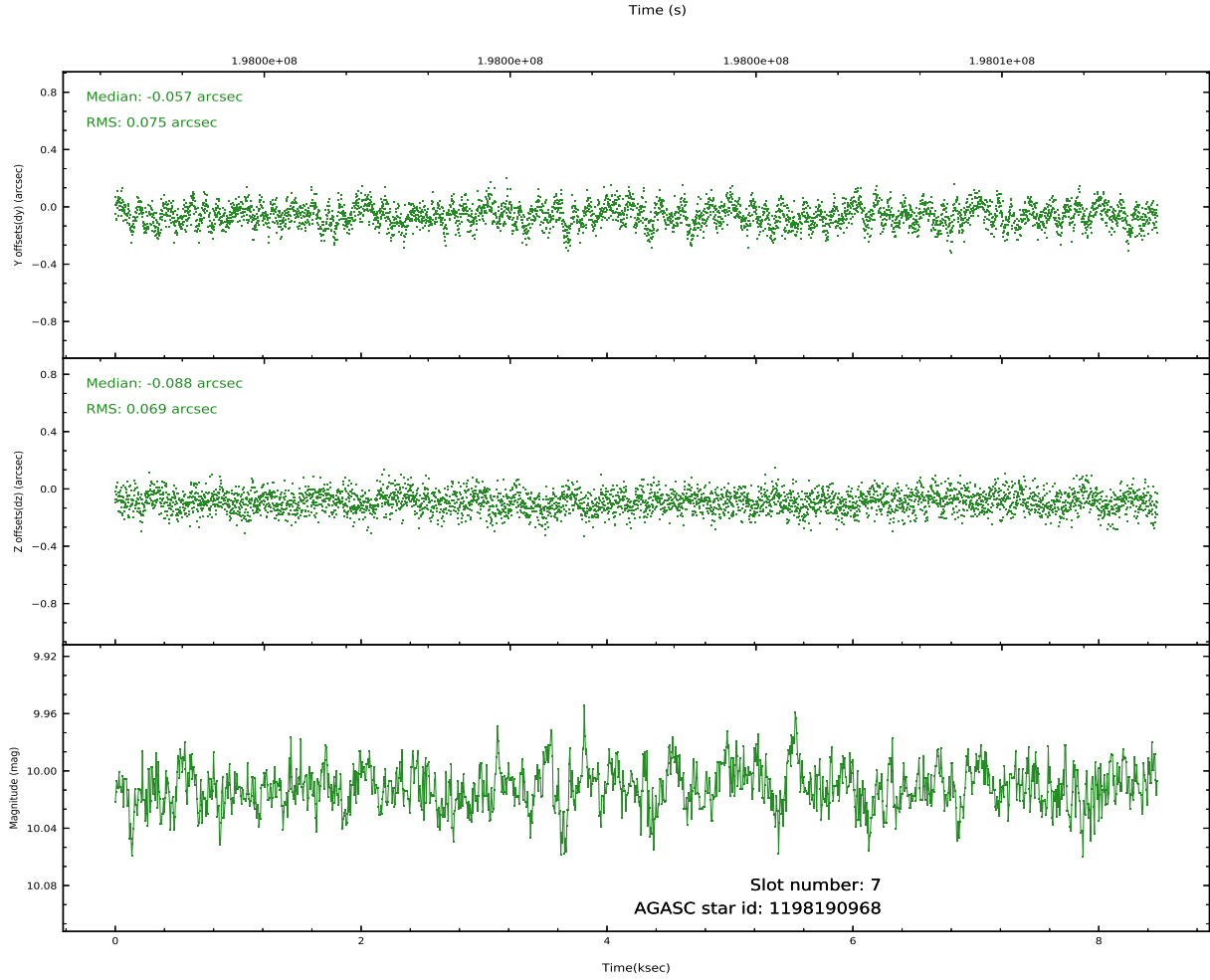
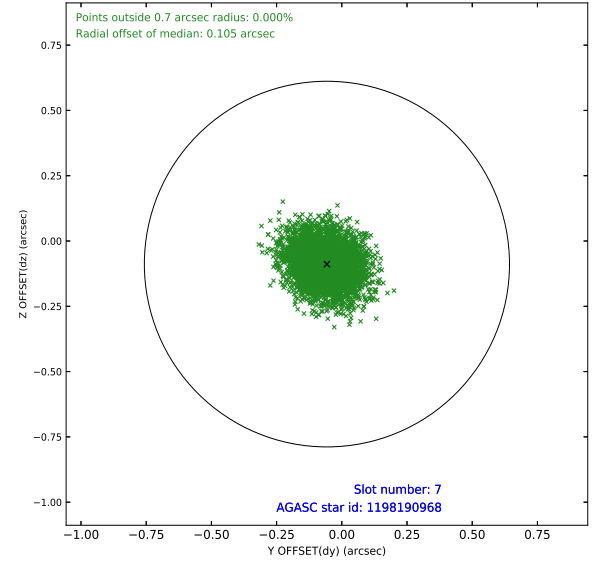
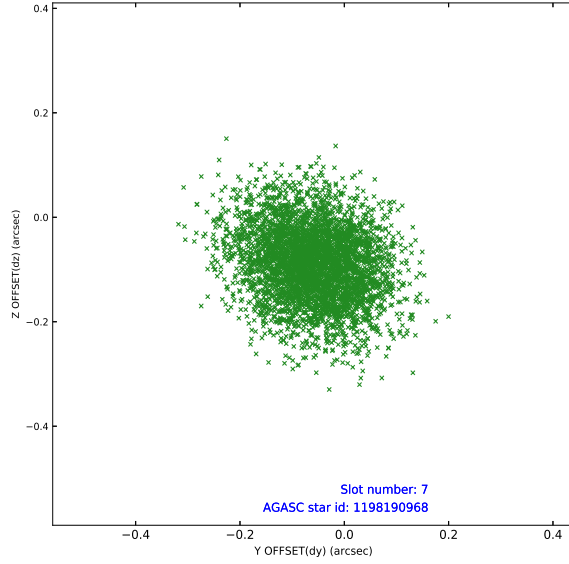
2.4.4 Slot 6



Time (s)

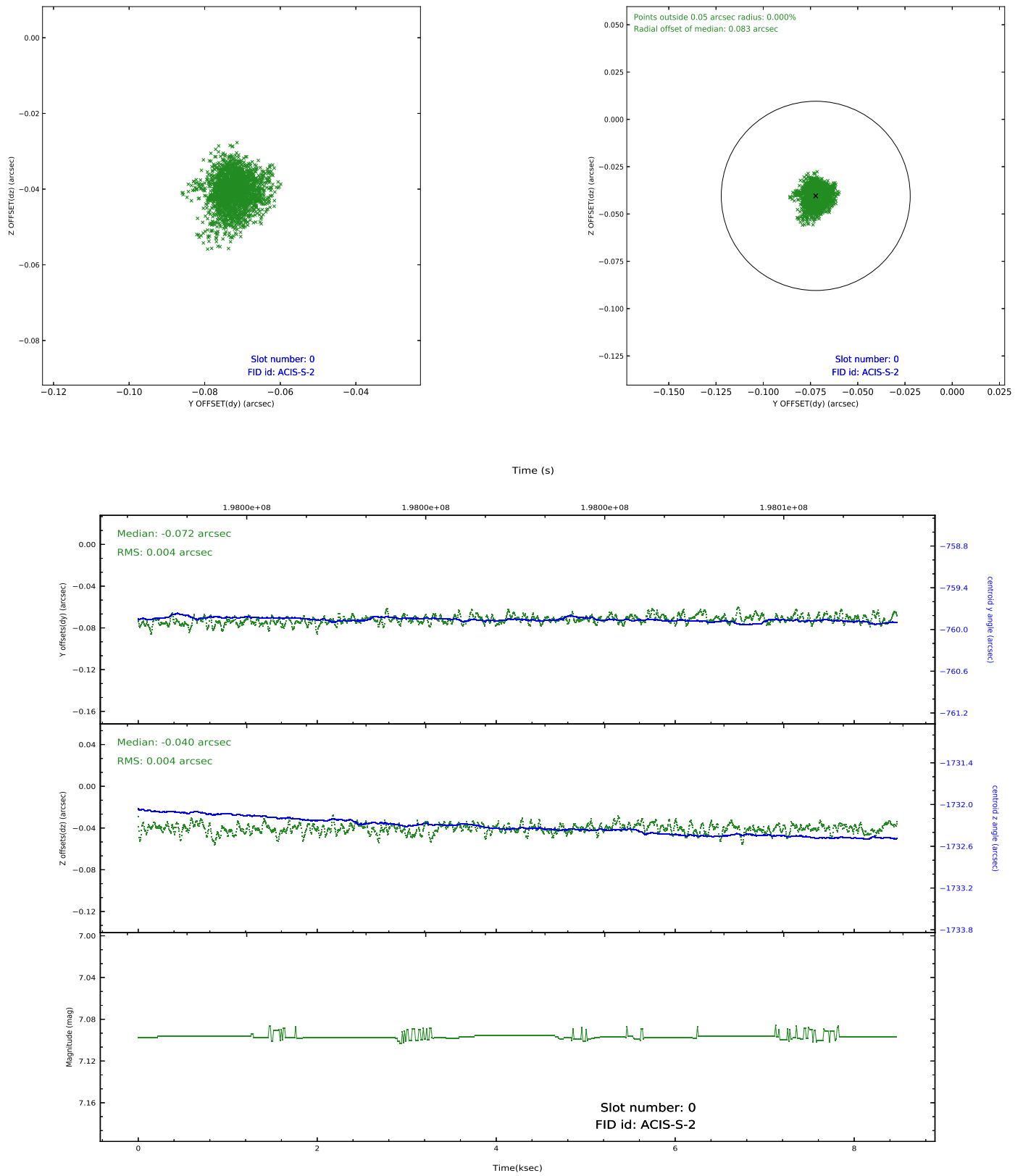


2.4.5 Slot 7

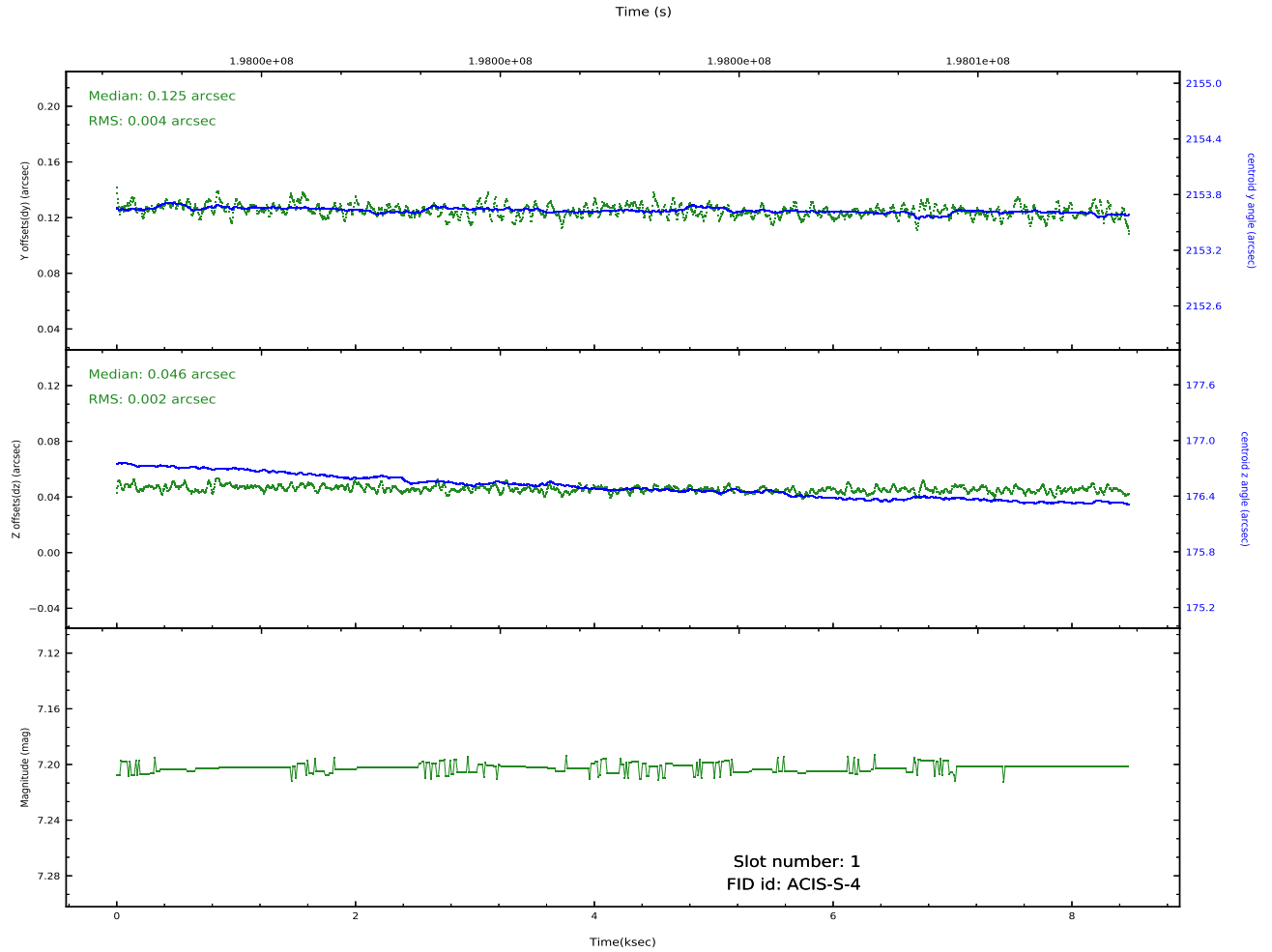
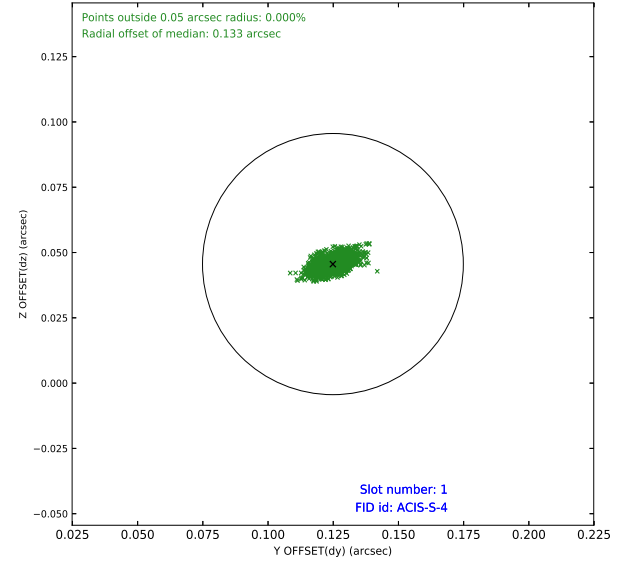
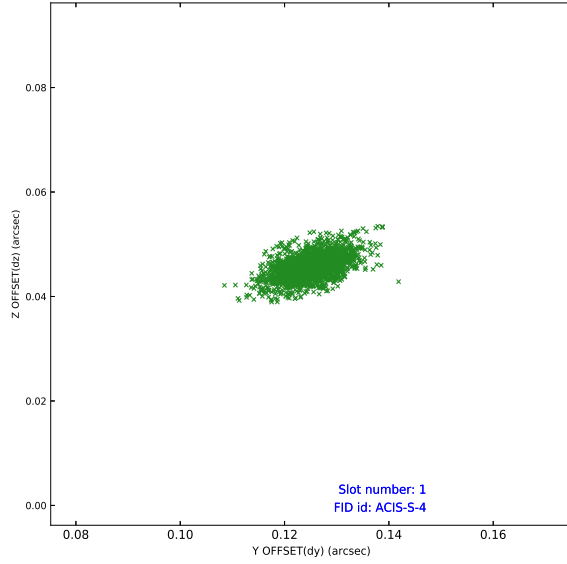


2.5 FID Slots

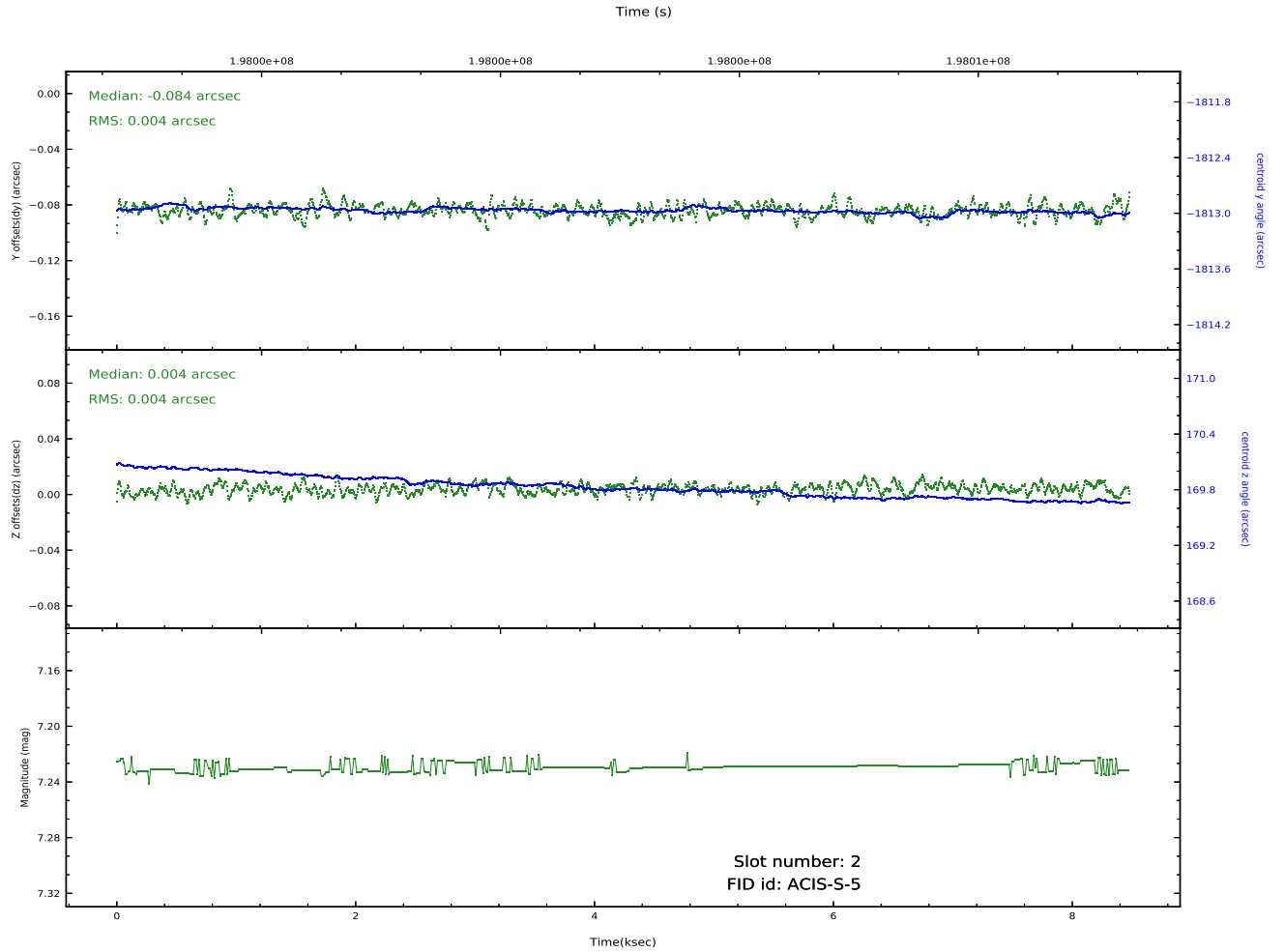
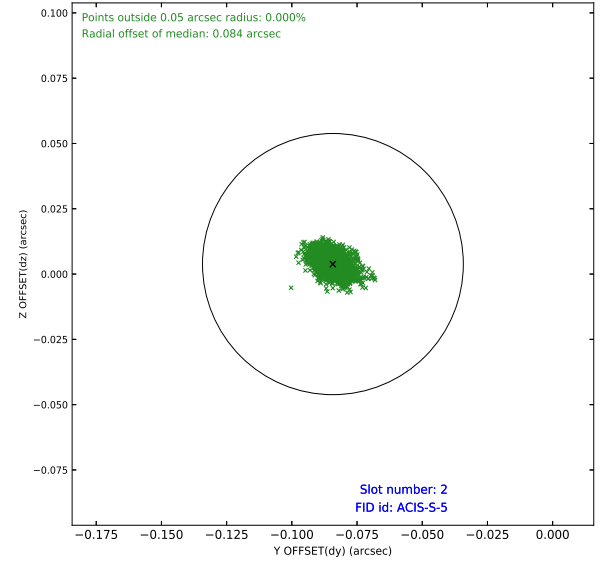
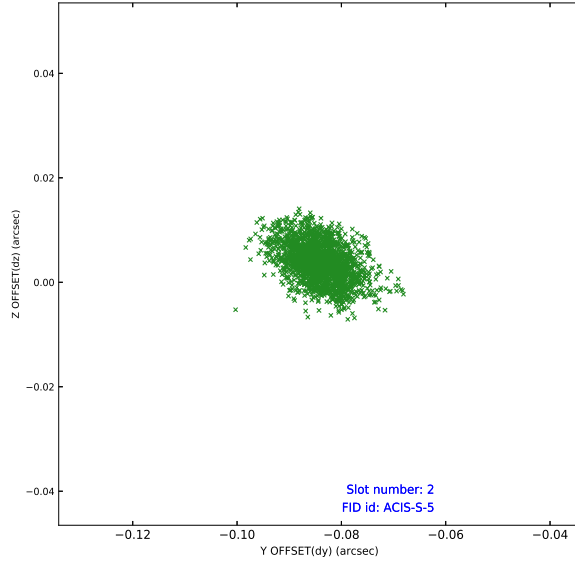
2.5.1 Slot 0



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)	2020.09.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.045

A.2 Comments

Window constraint met.