

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5135 - L2 Version 4
Chandra X-Ray Center

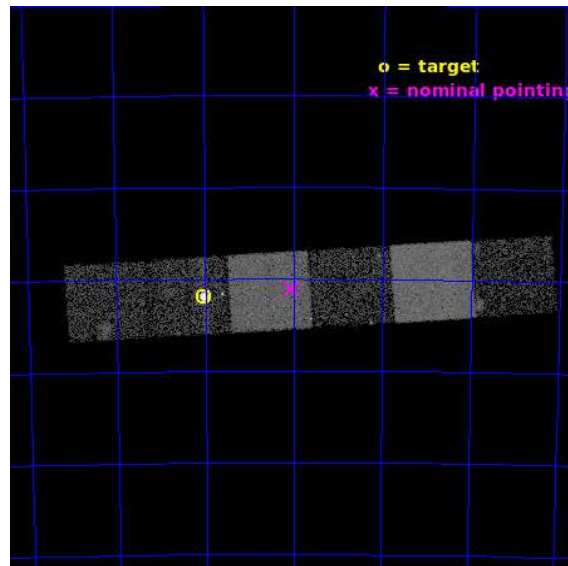
L2 Processing Date : Sep 24 2020

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

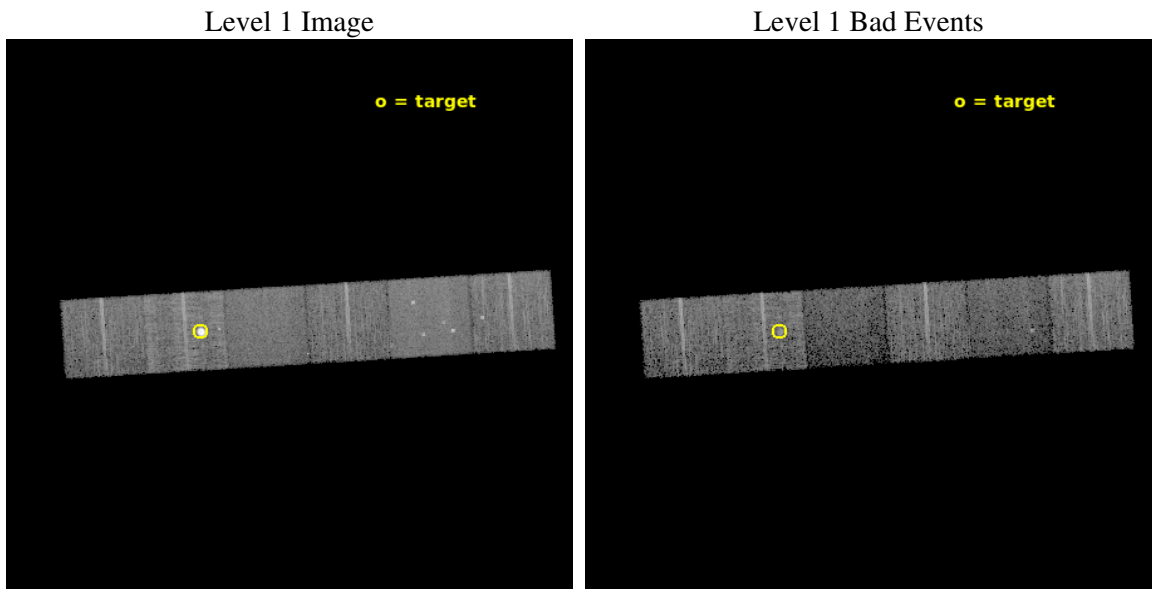
seq_num	590333	Sequence number
obs_id	5135	Observation id
title	AO5B ACIS-S Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.511231768797	Nominal RA [deg]
dec_nom	-72.017557916427	Nominal Dec [deg]
roll_nom	176.27141311916	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8246.3999692798	Sum of GTIs [s]
livetime	8141.9790874828	Livetime [s]
ontime4	8246.3999692798	Sum of GTIs [s]
ontime5	8246.3999692798	Sum of GTIs [s]
ontime6	8246.3999692798	Sum of GTIs [s]
ontime7	8246.3999692798	Sum of GTIs [s]
ontime8	8246.3999692798	Sum of GTIs [s]
ontime9	8246.3999692798	Sum of GTIs [s]
l2events	92623	Number of level 2 events



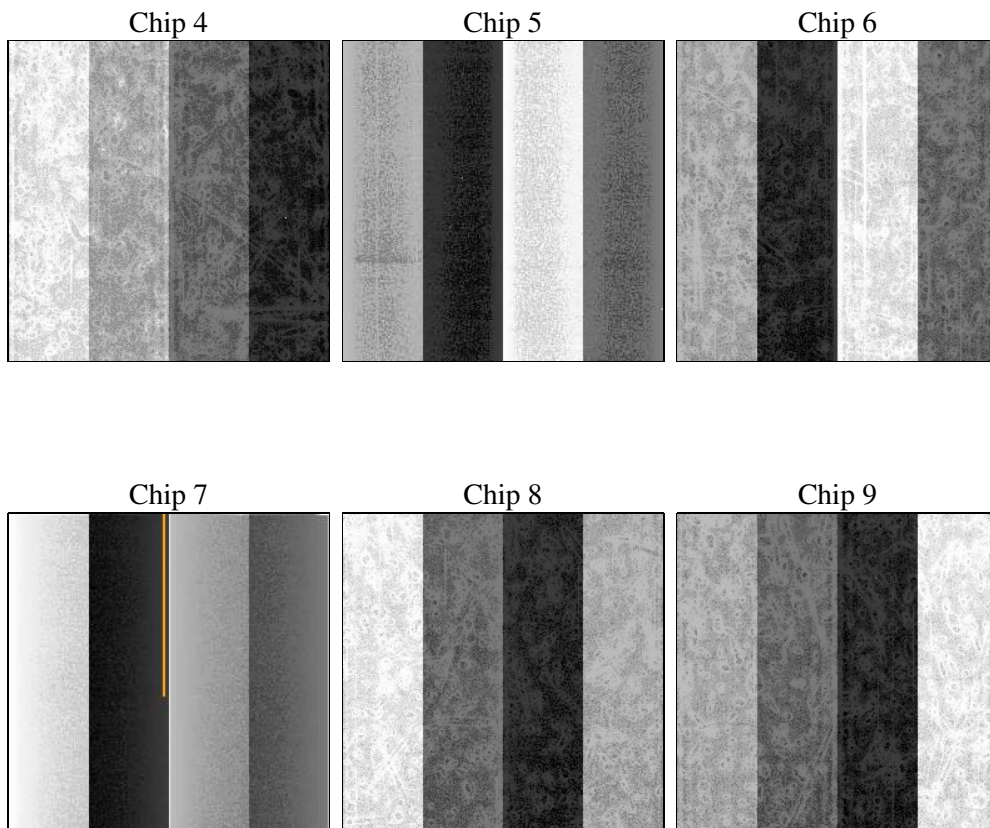
2 OBI

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	8246.3999692798	Sum of GTIs [s]
caldsver	4.9.2	 	ontime4	8246.3999692798	Sum of GTIs [s]
date	2020-09-25T01:28:27	Date and time of file creation	ontime5	8246.3999692798	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	8246.3999692798	Sum of GTIs [s]
			ontime7	8246.3999692798	Sum of GTIs [s]
			ontime8	8246.3999692798	Sum of GTIs [s]
			ontime9	8246.3999692798	Sum of GTIs [s]
			l1events	334841	Number of level 1 events

2.1.4 Events

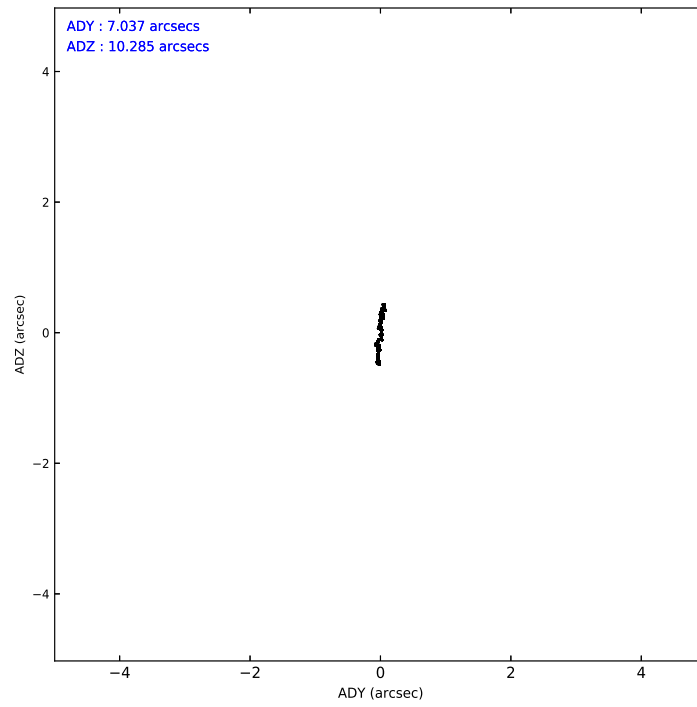
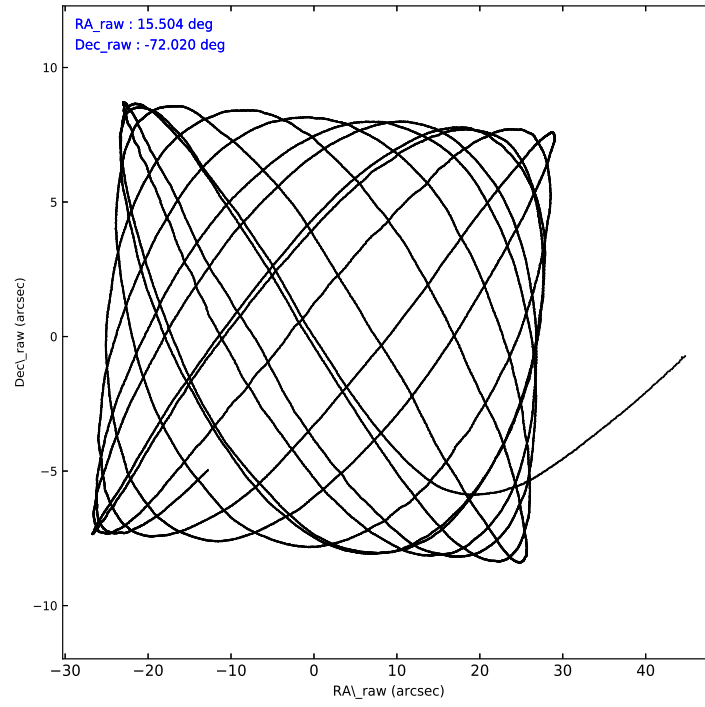
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	55868	56932	47066	43771	85788	45416	grade 0 events	2779	3879	2189	2392	29249	2137
rejected events	49975	26612	41931	21716	43087	40272		4%	6%	4%	5%	34%	4%
rejected %	89%	46%	89%	49%	50%	88%	grade 1 events	49	57	28	44	204	20
								0%	0%	0%	0%	0%	0%
							grade 2 events	1272	8977	933	4654	4824	1000
								2%	15%	1%	10%	5%	2%
							grade 3 events	514	1542	541	2189	2435	552
								0%	2%	1%	5%	2%	1%
							grade 4 events	546	1419	540	2164	2321	515
								0%	2%	1%	4%	2%	1%
							grade 5 events	1485	4624	1526	4586	2399	1746
								2%	8%	3%	10%	2%	3%
							grade 6 events	788	14516	932	10670	3884	943
								1%	25%	1%	24%	4%	2%
							grade 7 events	48435	21918	40377	17072	40472	38503
								86%	38%	85%	39%	47%	84%

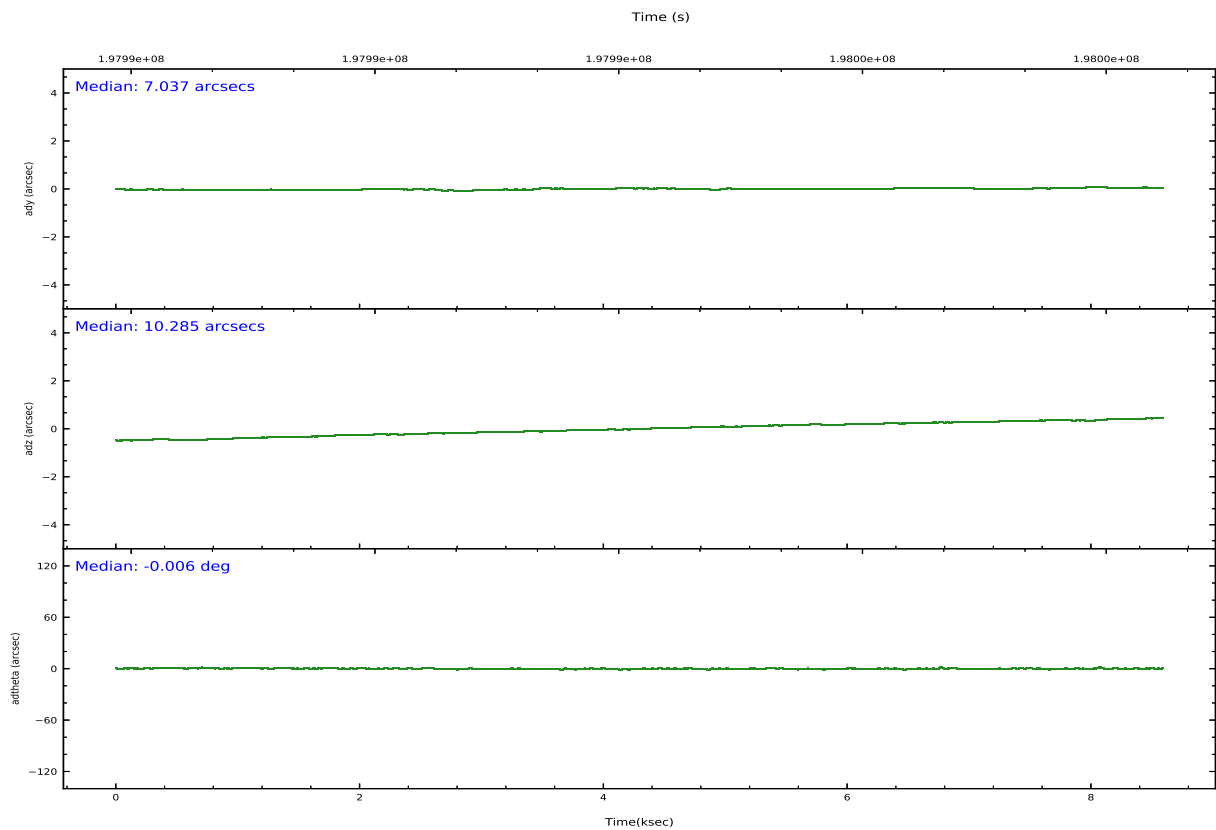
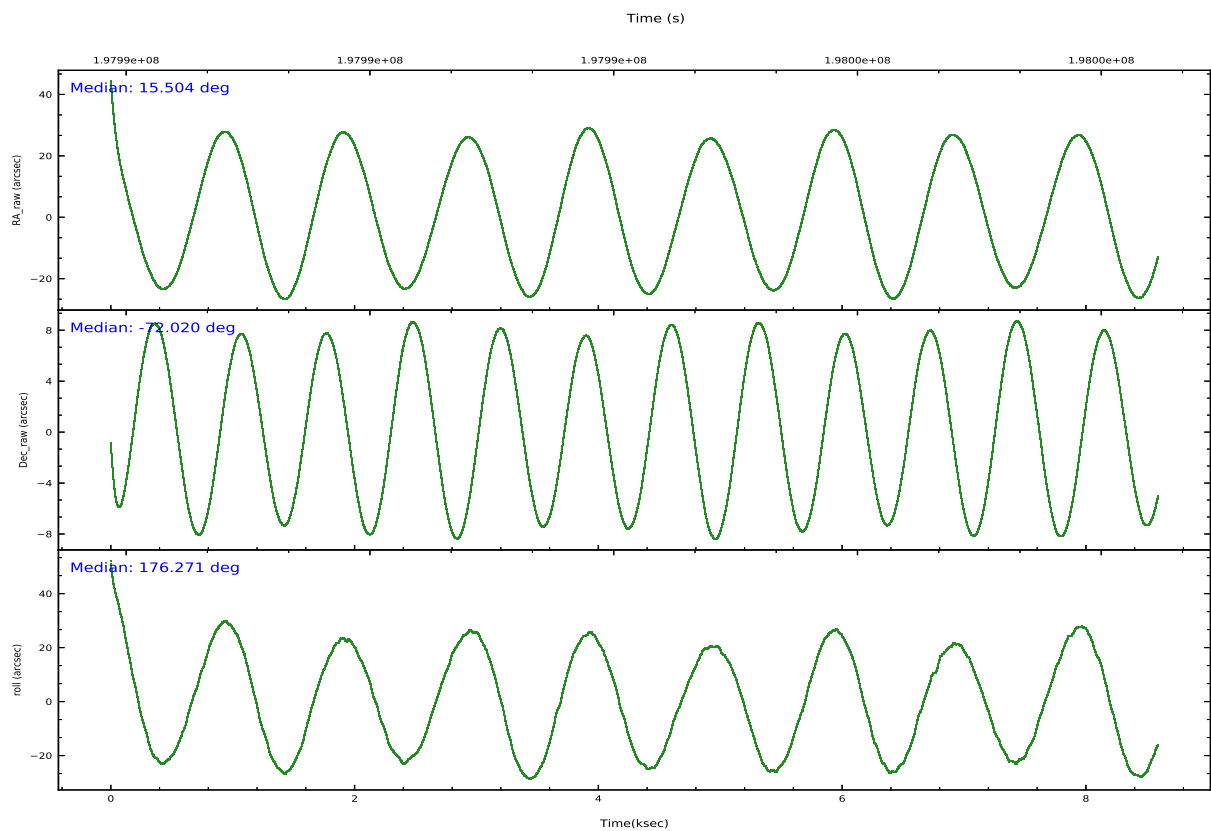
2.2 Compared Parameters

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	15.582645	15.511231768797
[deg] Pointing Dec	-72.008035	-72.01755791642699
[deg] Pointing Roll	176.196615	176.27141311916
[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)	197990178.184000	197987756.51556
Observation start date	2004-04-10T13:15:14	2004-04-10T12:35:56
[s] Observation end time (MET)	197998467.184000	197998601.52853
Observation end date	2004-04-10T15:33:23	2004-04-10T15:36:41
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



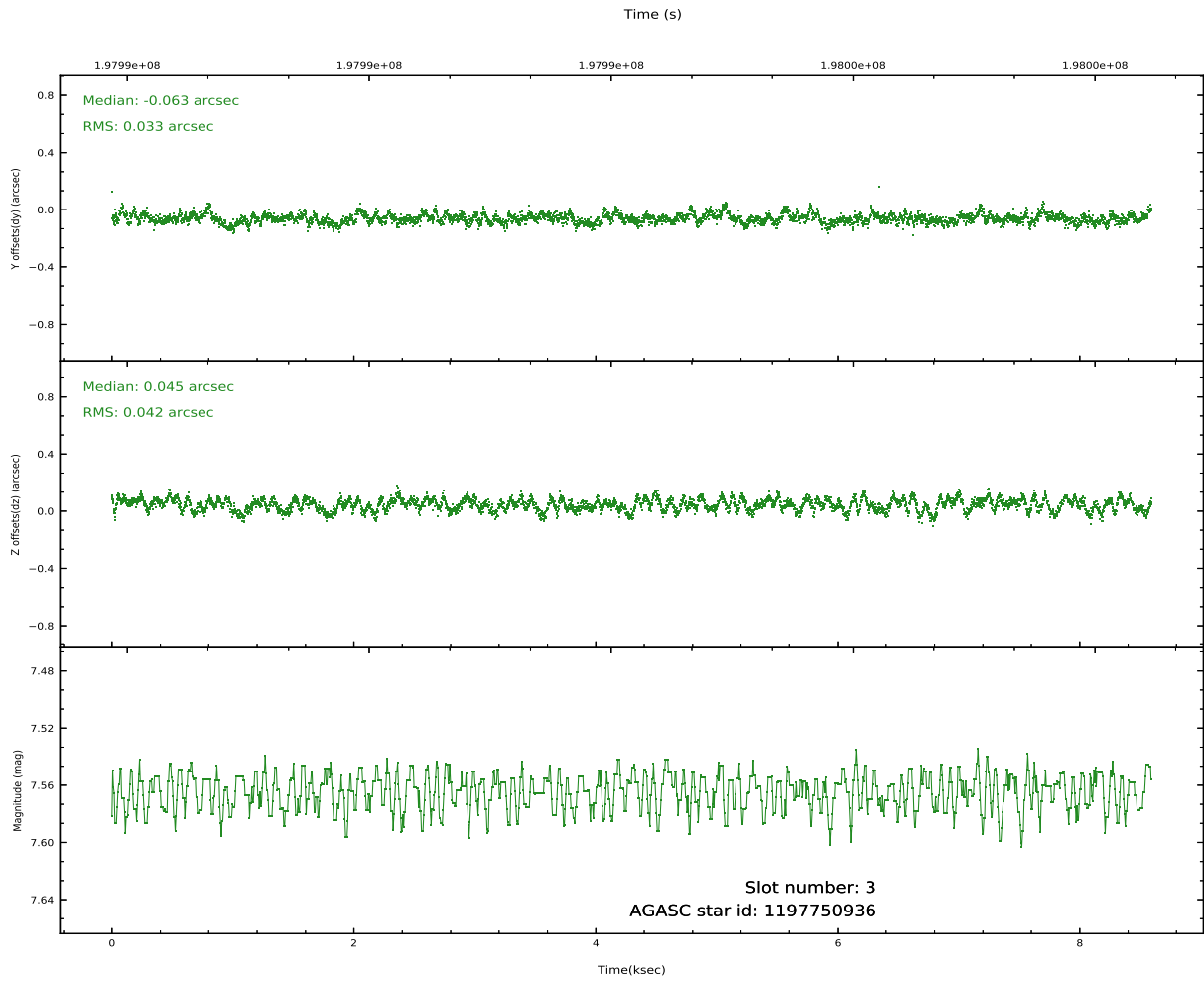
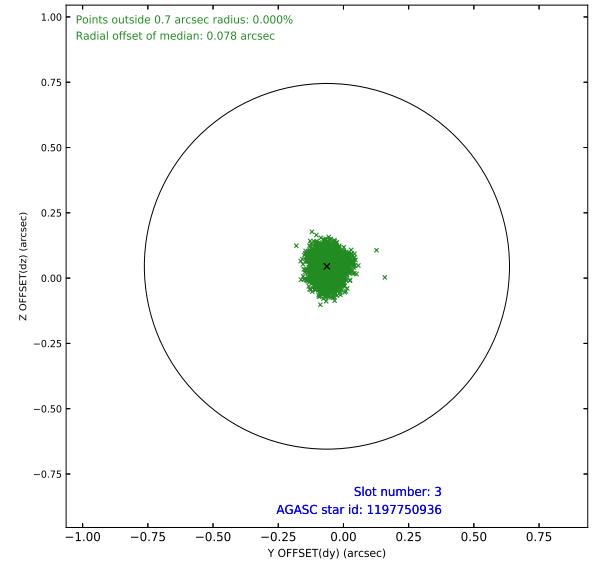
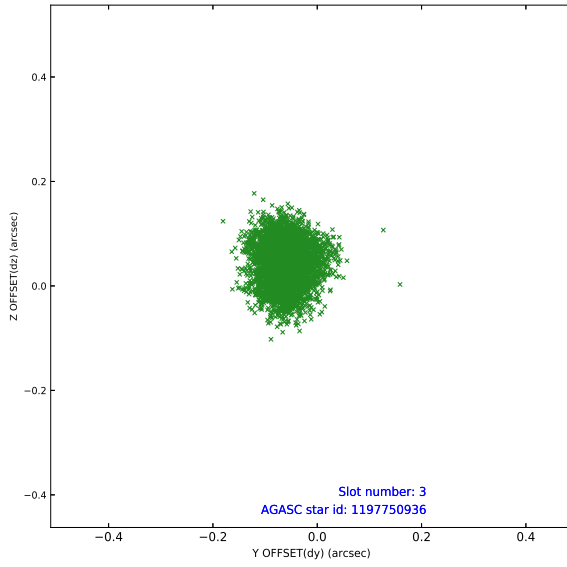


Slot Statistics

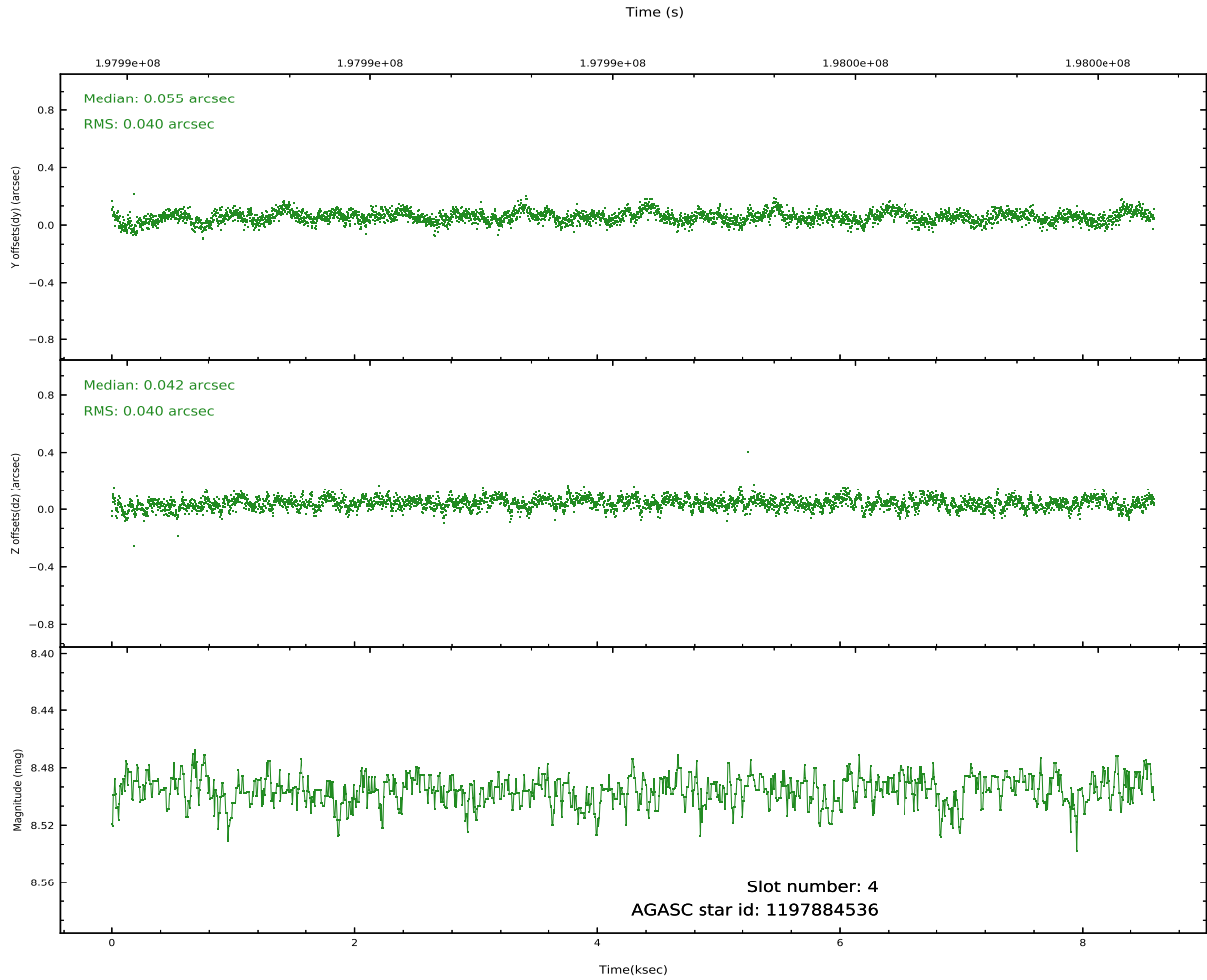
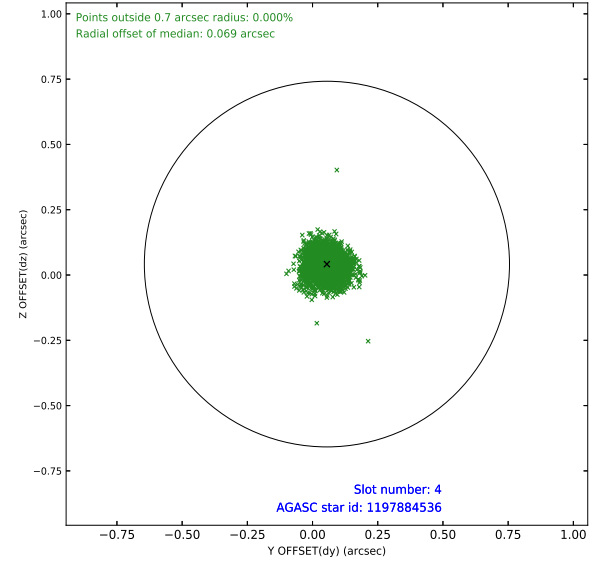
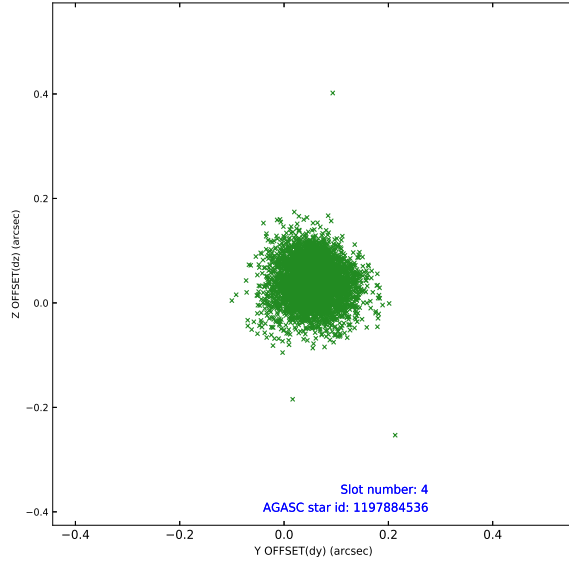
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2096	1.000	-0.082	-0.050	0.008	0.013	0.000000	0.000000	-759.80	-1731
1	FID		ACIS-S-4	7.20	2095	1.000	0.135	0.053	0.006	0.011	0.000000	0.000000	2153.33	176
2	FID		ACIS-S-5	7.23	2097	1.000	-0.084	0.007	0.007	0.012	0.000000	0.000000	-1811.89	170
3	GUIDE	used	1197750936	7.56	4193	1.000	-0.063	0.045	0.058	0.090	15.387940	-71.549550	331.11	-1631
4	GUIDE	used	1197884536	8.50	4190	1.000	0.055	0.042	0.060	0.099	17.160729	-71.835289	-1726.93	-715
5	GUIDE	used	1197884712	8.31	4192	1.000	0.013	-0.048	0.065	0.103	16.087398	-72.252690	-611.82	844
6	GUIDE	used	1197885328	7.24	4192	1.000	0.029	0.023	0.053	0.083	16.283090	-71.733943	-723.72	-1032
7	GUIDE	used	1198190968	10.00	4181	1.000	-0.037	-0.061	0.126	0.201	15.749622	-72.545972	-309.00	1920

2.4 Star Slots

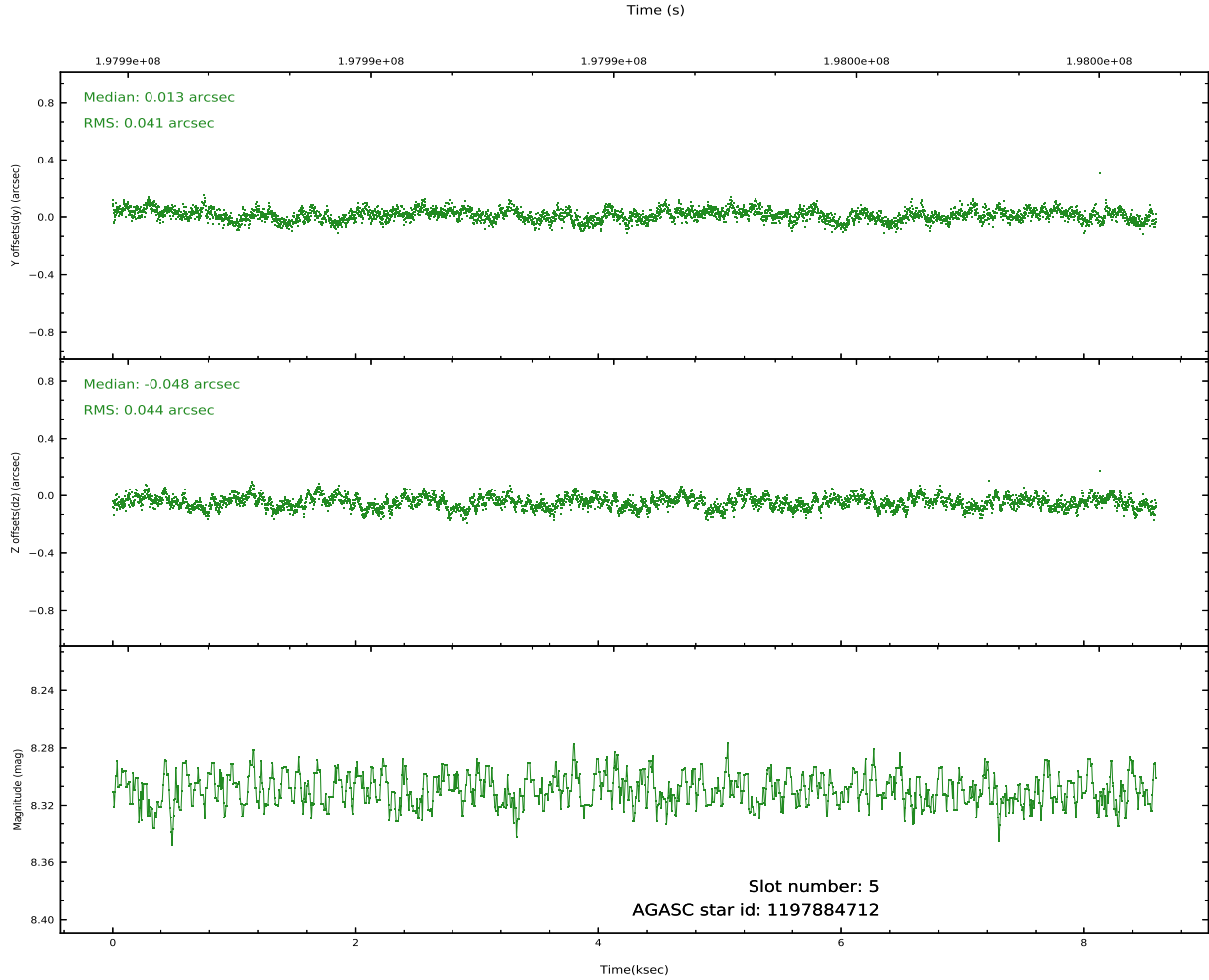
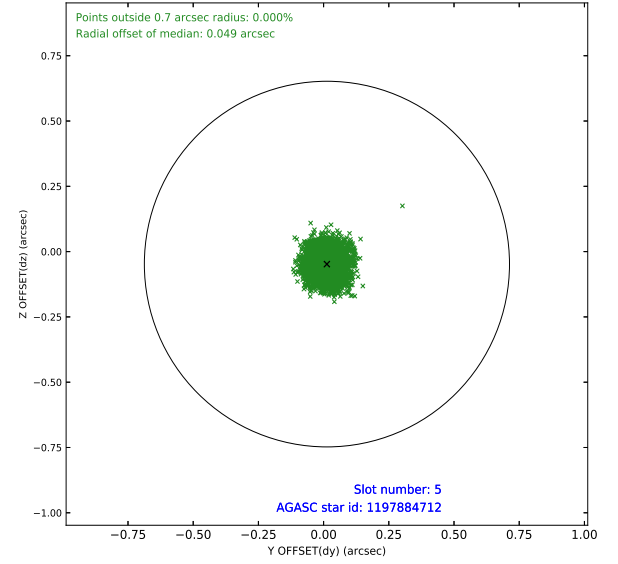
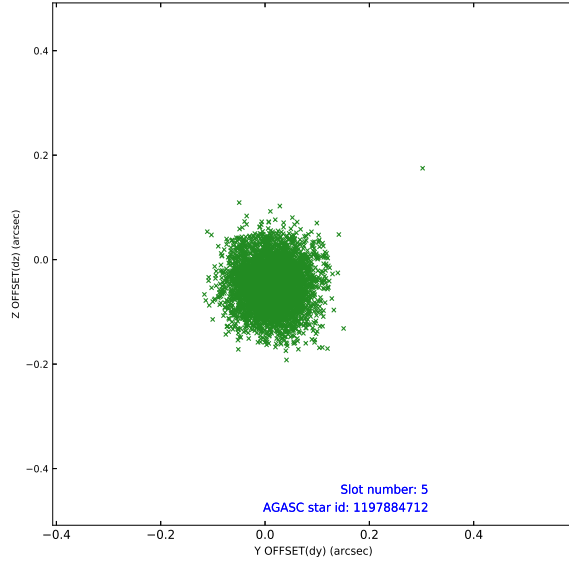
2.4.1 Slot 3



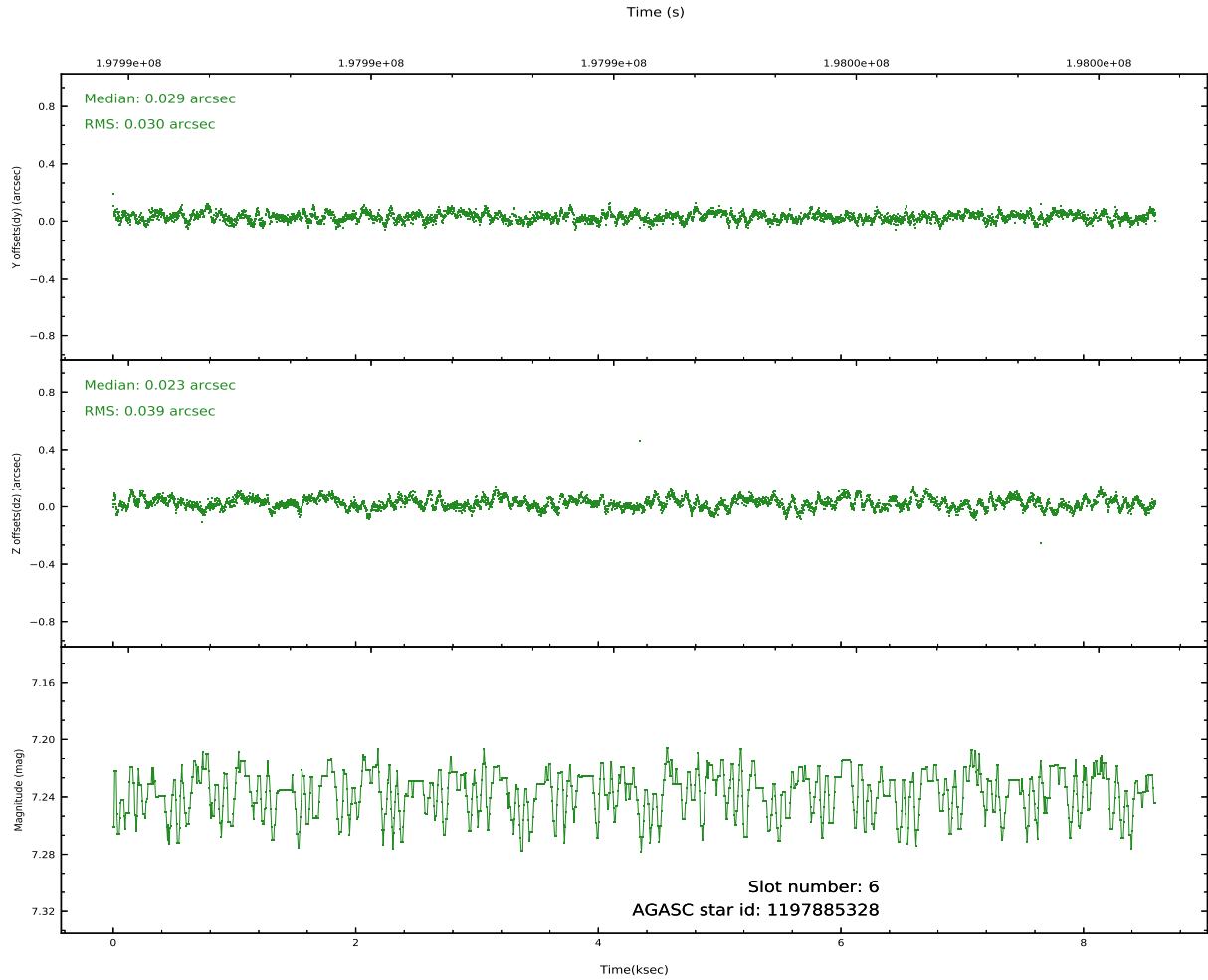
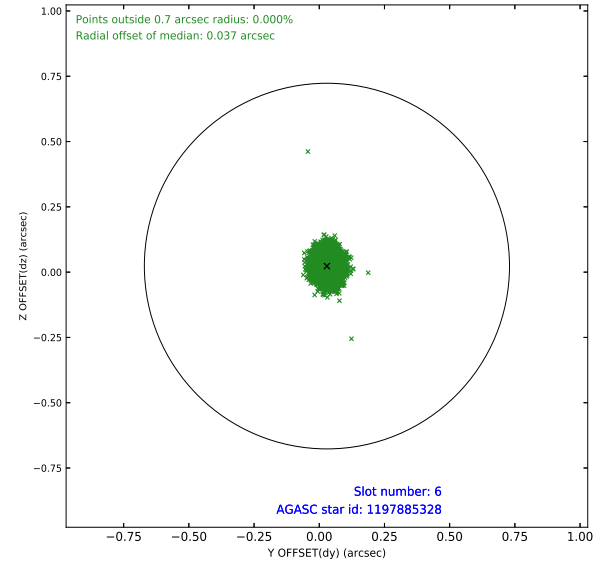
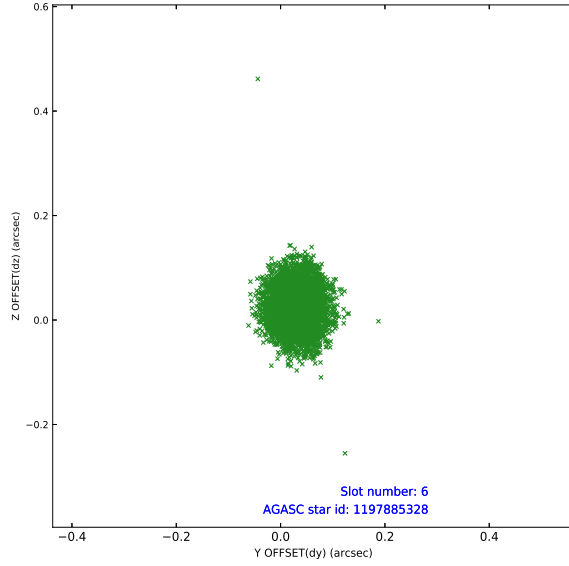
2.4.2 Slot 4



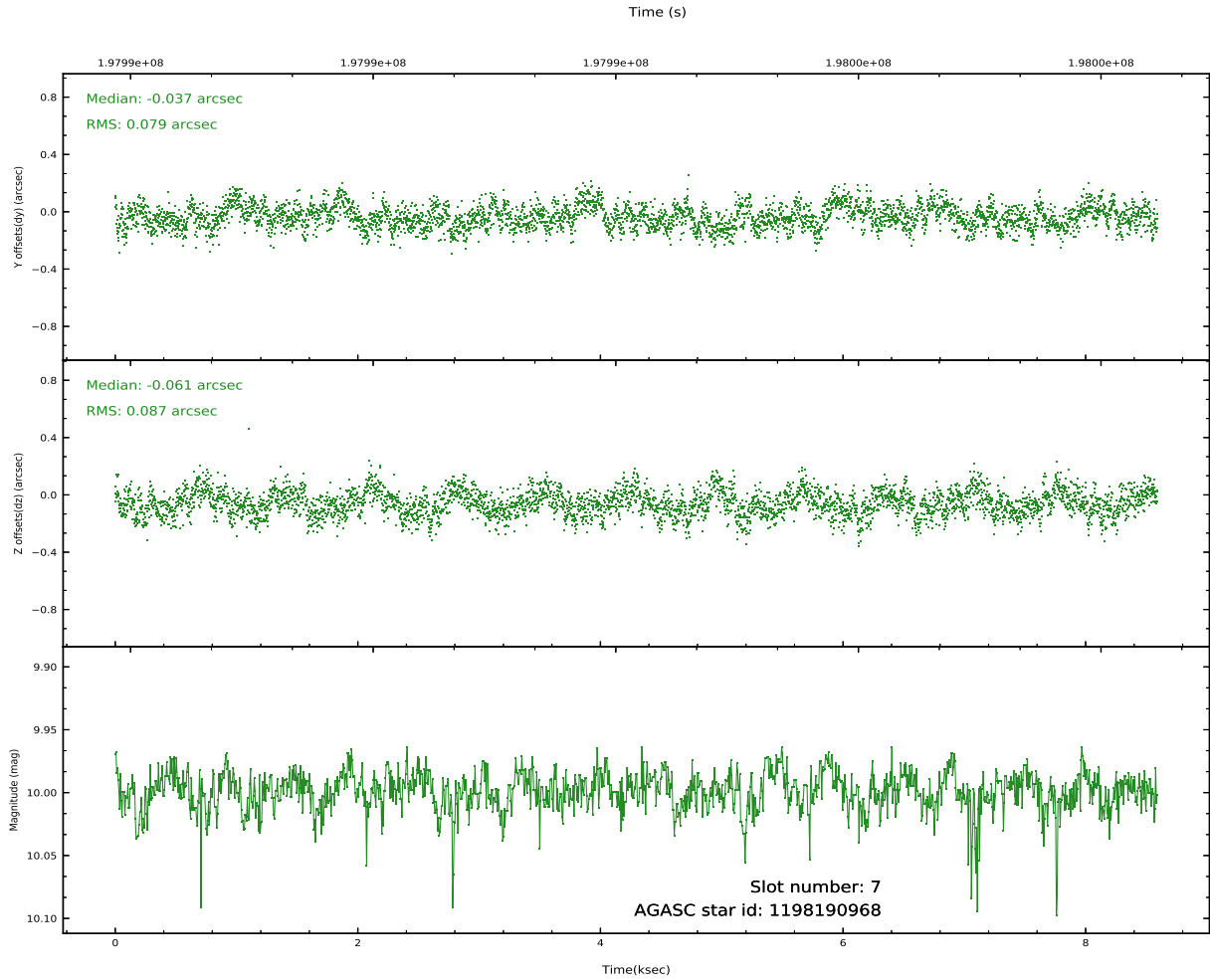
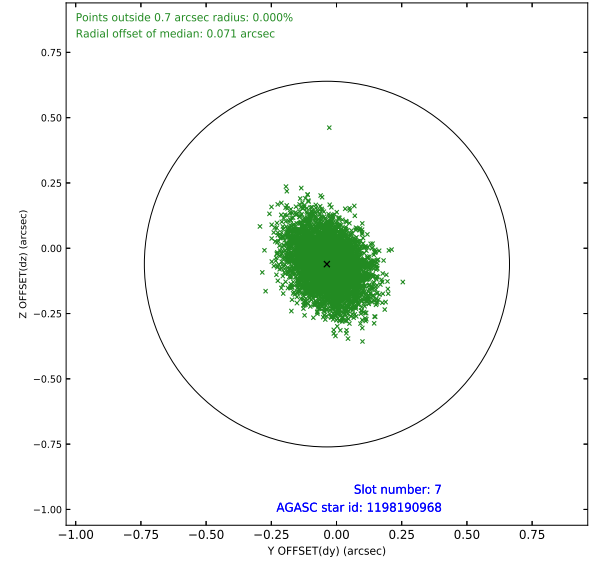
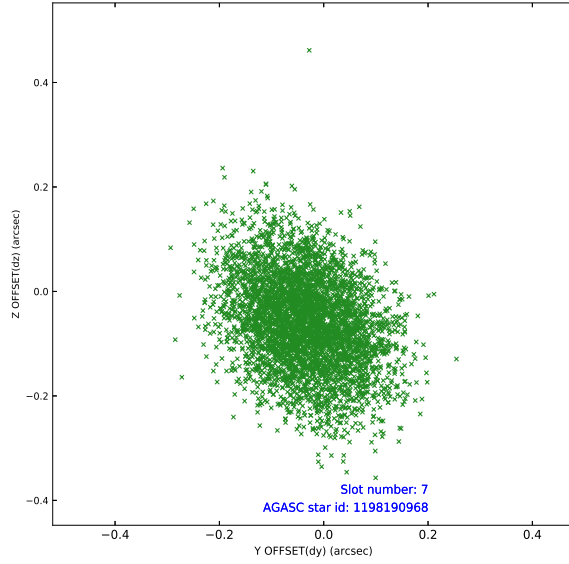
2.4.3 Slot 5



2.4.4 Slot 6

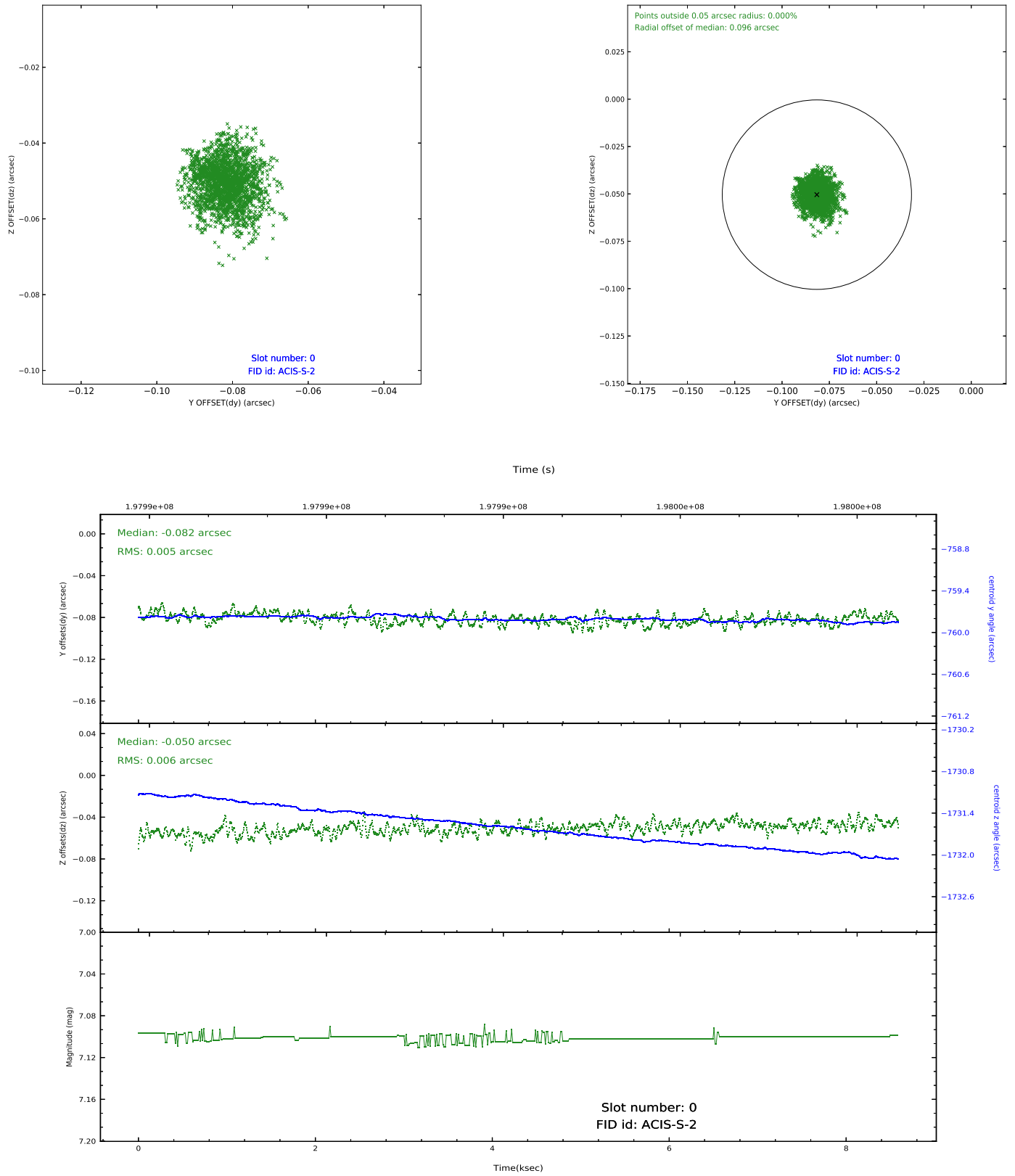


2.4.5 Slot 7

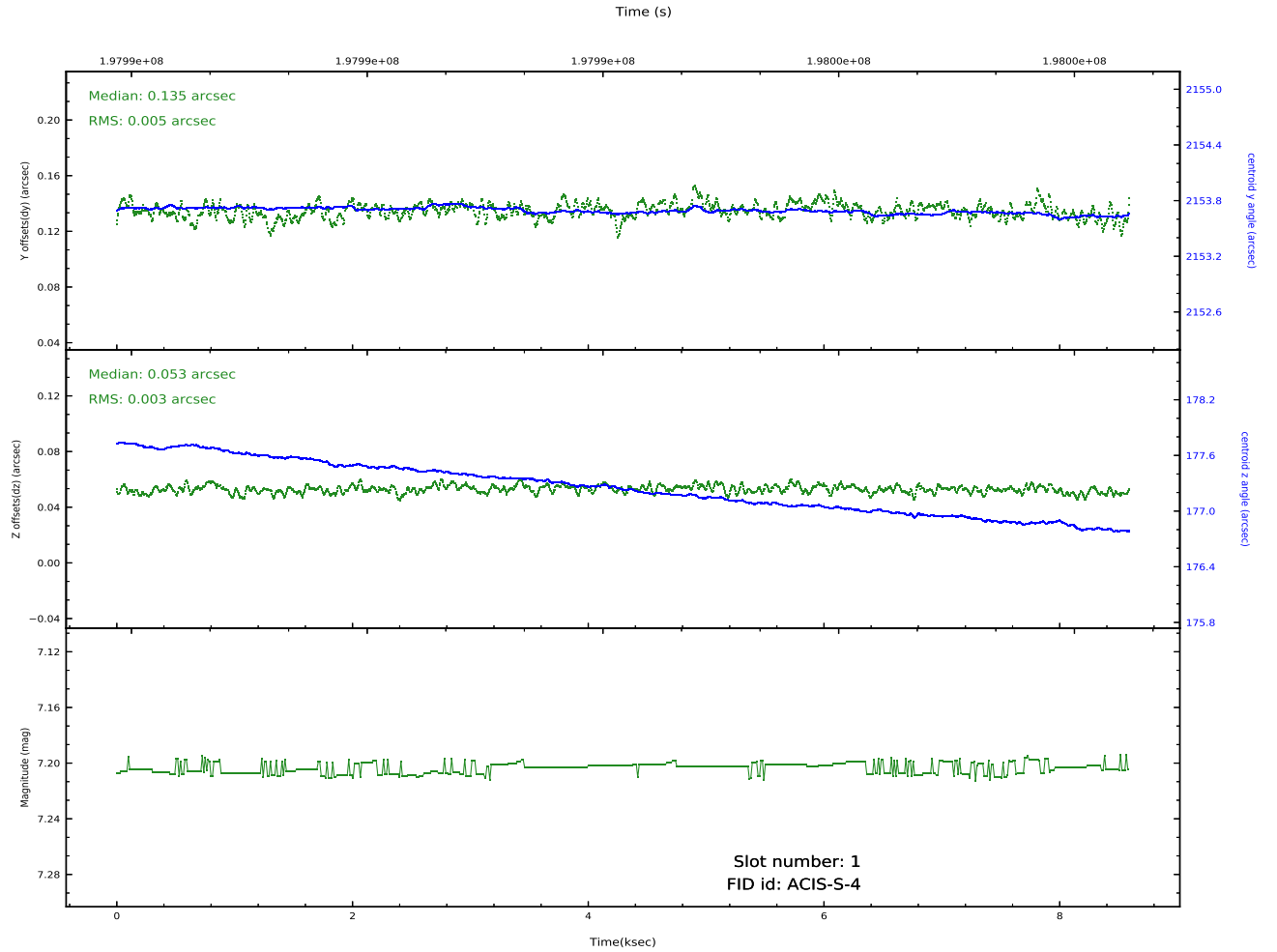
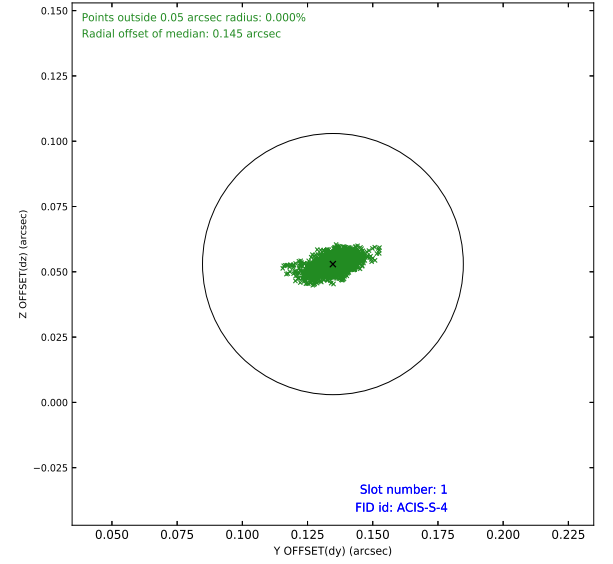
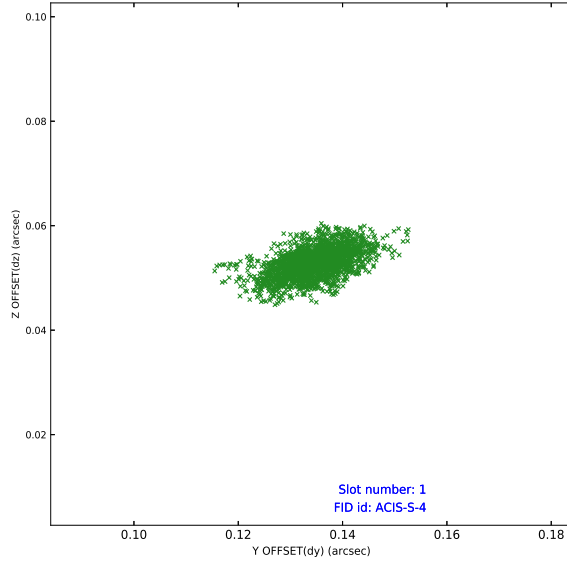


2.5 FID Slots

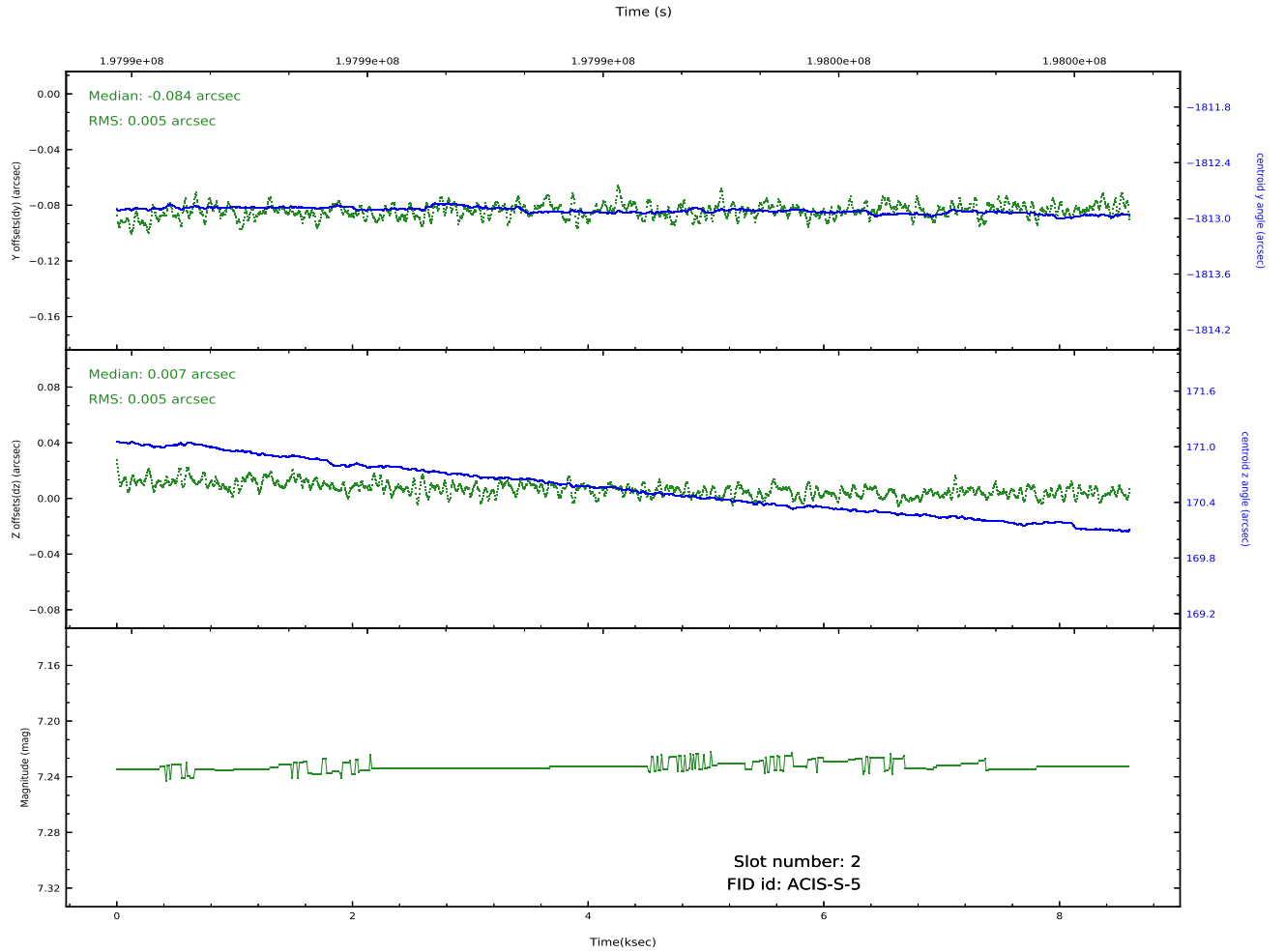
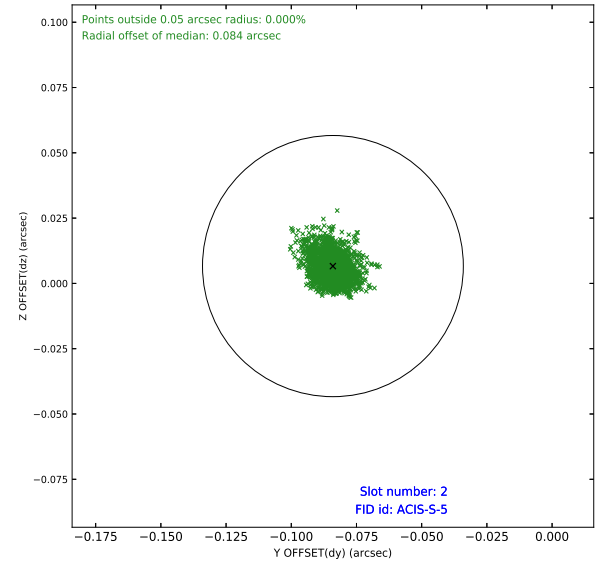
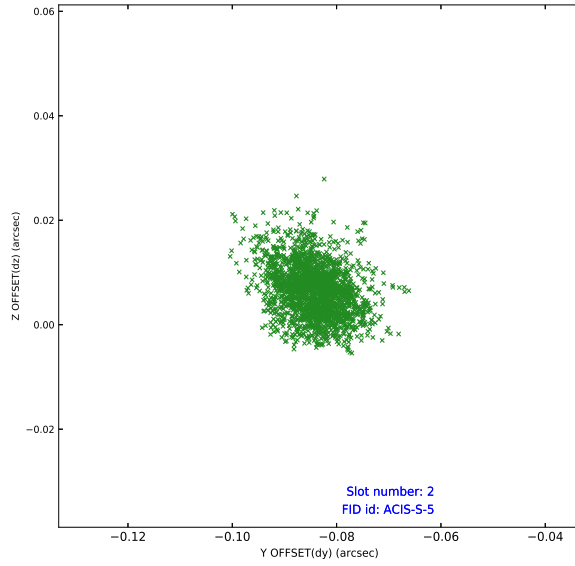
2.5.1 Slot 0



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	8.249

A.2 Comments

Window constraint met.