

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5139 - L2 Version 4
Chandra X-Ray Center

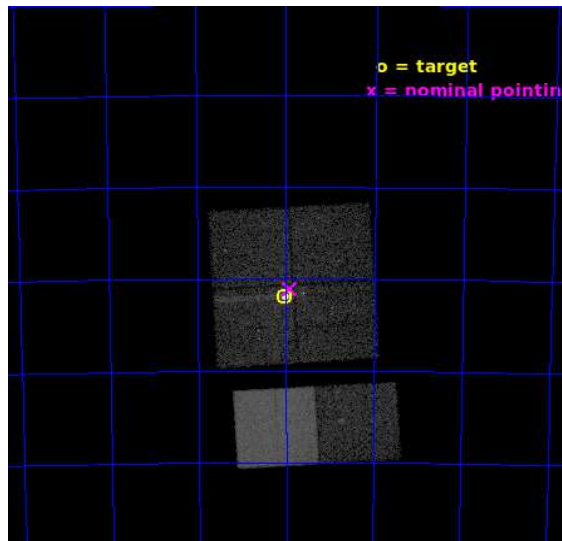
L2 Processing Date : Sep 24 2020

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1 Front

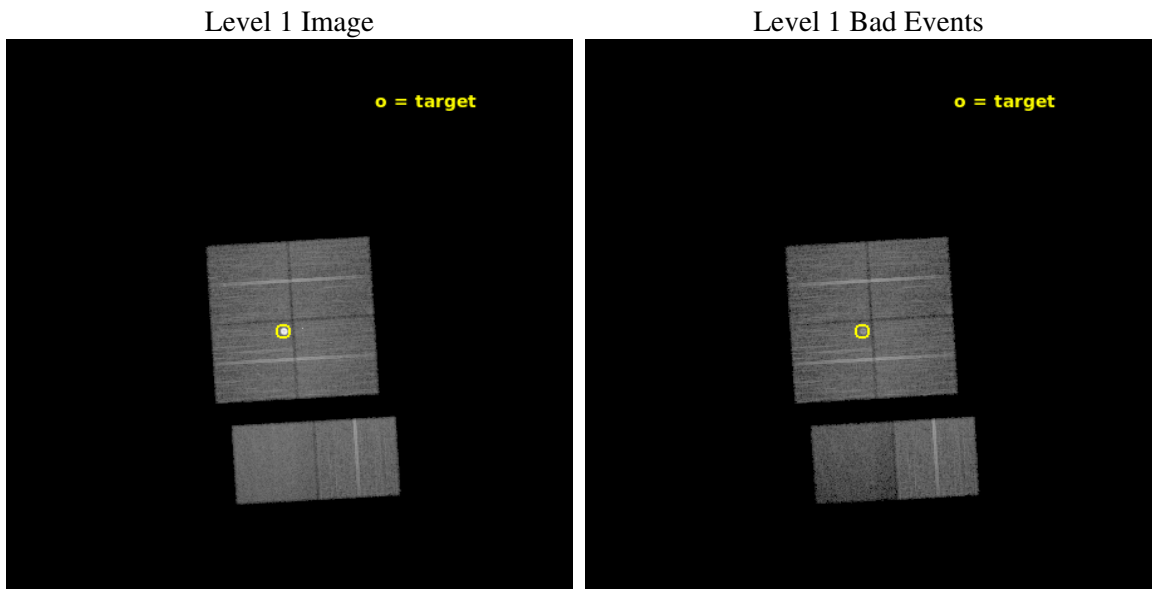
seq_num	590337	Sequence number
obs_id	5139	Observation id
title	AO5B ACIS-I Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.978395903489	Nominal RA [deg]
dec_nom	-72.017999561302	Nominal Dec [deg]
roll_nom	176.5883856495	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20681.558932751	Sum of GTIs [s]
livetime	20419.676580605	Livetime [s]
ontime0	20678.275586039	Sum of GTIs [s]
ontime1	20684.798486859	Sum of GTIs [s]
ontime2	20684.799922943	Sum of GTIs [s]
ontime3	20681.558932751	Sum of GTIs [s]
ontime6	20684.799922943	Sum of GTIs [s]
ontime7	20684.799922943	Sum of GTIs [s]
l2events	174460	Number of level 2 events



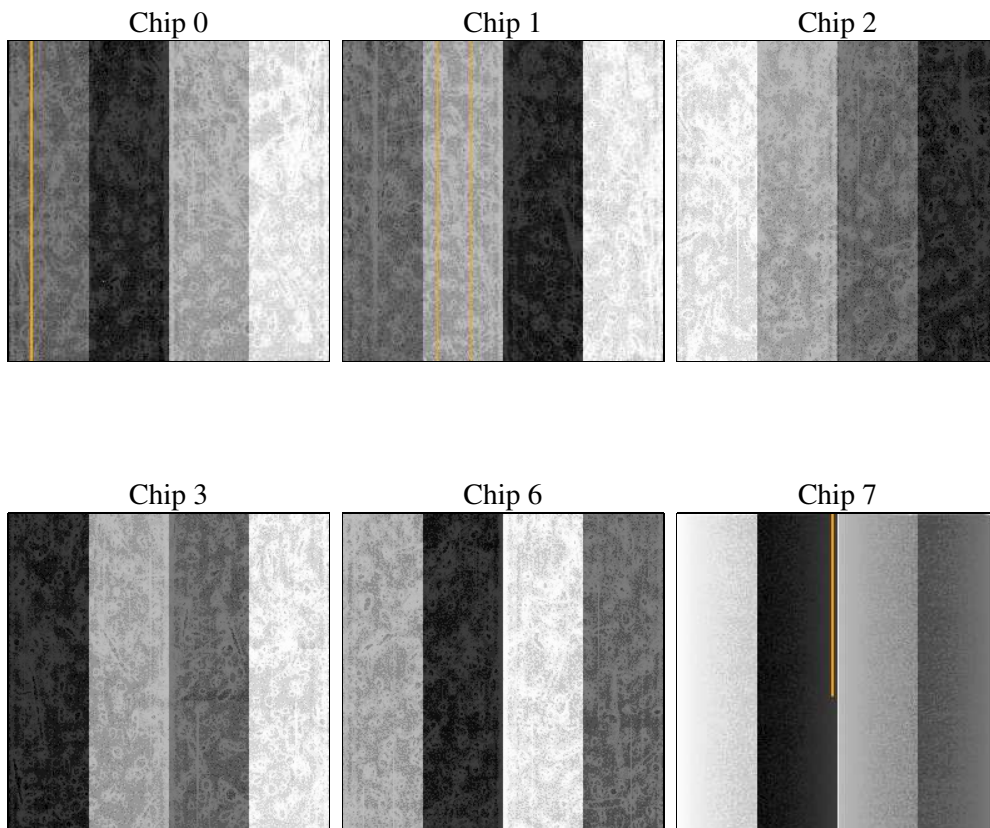
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20724.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	20681.558932751	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	20678.275586039	Sum of GTIs [s]
date	2020-09-25T01:40:24	Date and time of file creation	ontime1	20684.798486859	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	20684.799922943	Sum of GTIs [s]
			ontime3	20681.558932751	Sum of GTIs [s]
			ontime6	20684.799922943	Sum of GTIs [s]
			ontime7	20684.799922943	Sum of GTIs [s]
			l1events	743665	Number of level 1 events

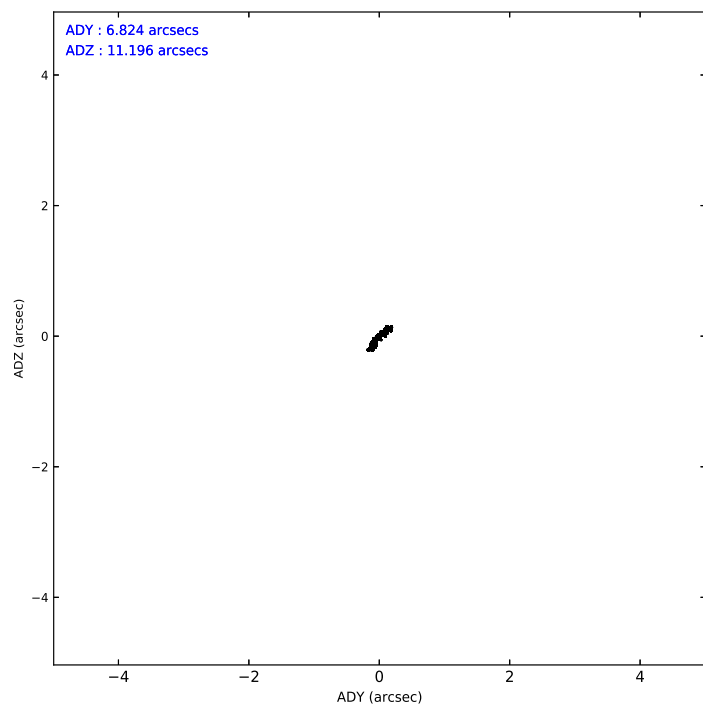
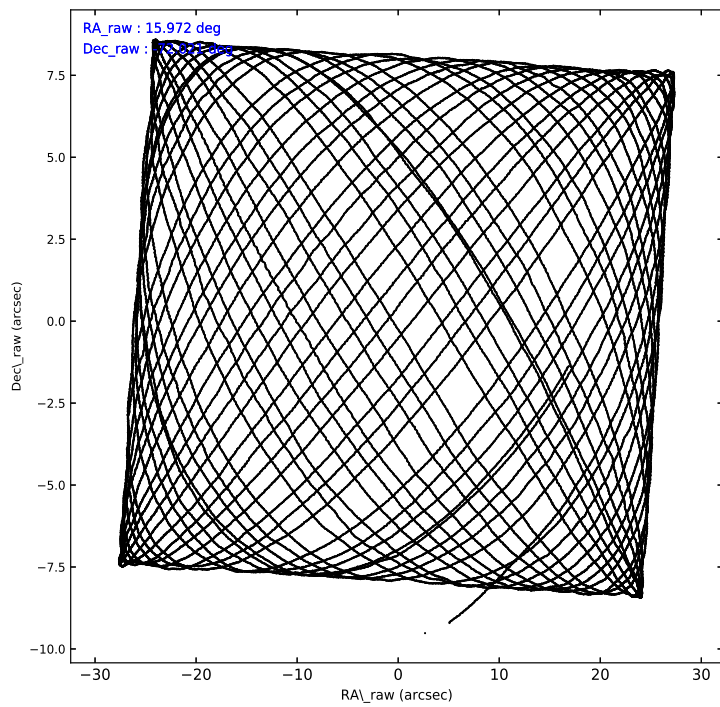
2.1.4 Events

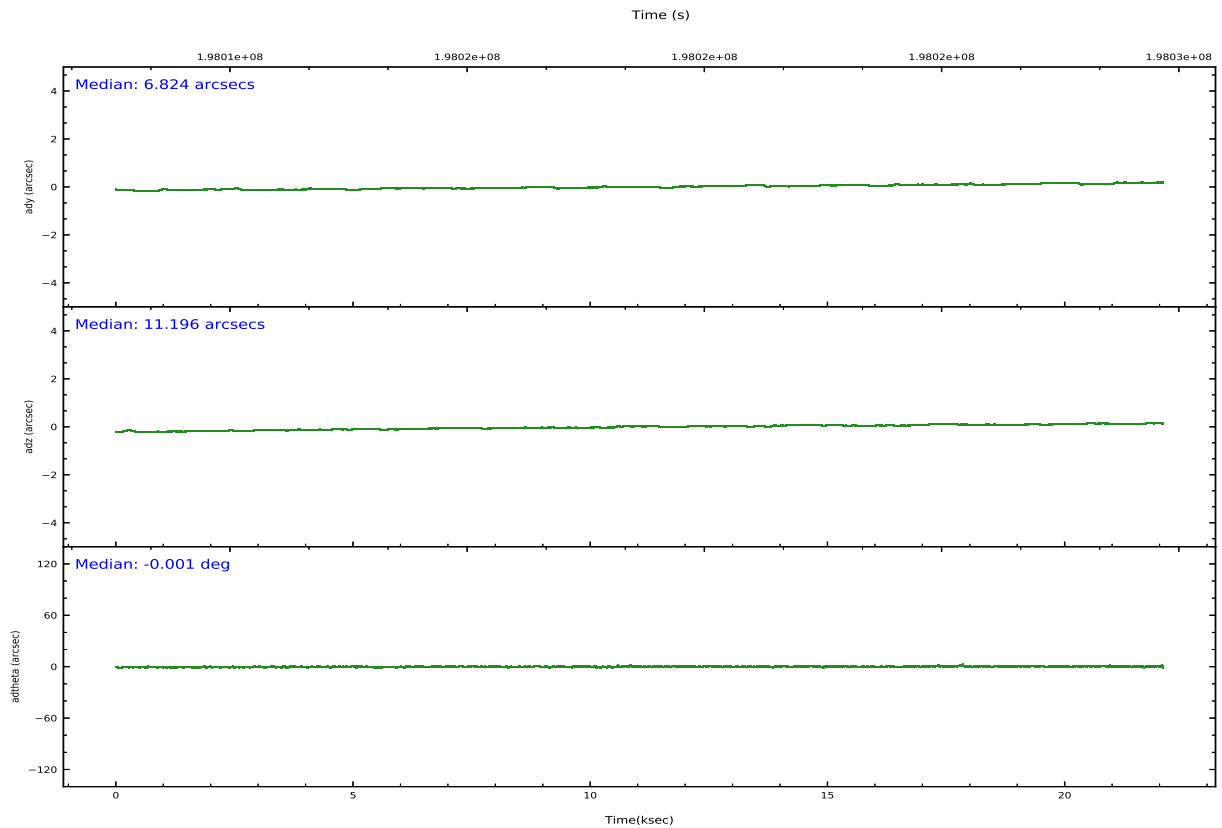
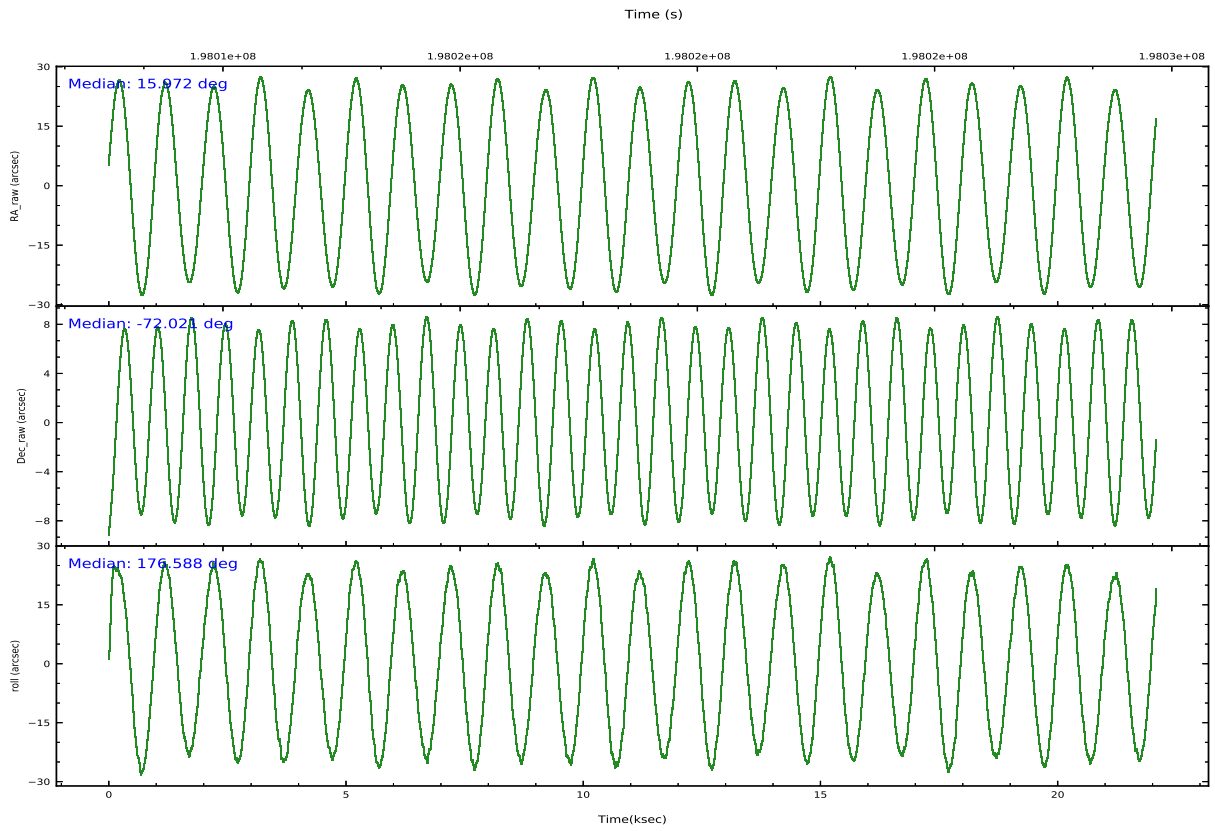
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	105762	106327	119211	183203	118390	110772	grade 0 events	4942	4970	6124	66019	5483	5829
rejected events	93570	93654	105909	103494	105168	54301		4%	4%	5%	36%	4%	5%
rejected %	88%	88%	88%	56%	88%	49%	grade 1 events	60	58	92	825	69	122
								0%	0%	0%	0%	0%	0%
							grade 2 events	2651	2578	2765	6875	2694	11848
								2%	2%	2%	3%	2%	10%
							grade 3 events	1387	1443	1278	2315	1342	5429
								1%	1%	1%	1%	1%	4%
							grade 4 events	1196	1357	1305	2216	1268	5618
								1%	1%	1%	1%	1%	5%
							grade 5 events	3262	3663	3127	4043	4035	11742
								3%	3%	2%	2%	3%	10%
							grade 6 events	2021	2330	1840	2309	2439	27757
								1%	2%	1%	1%	2%	25%
							grade 7 events	90243	89928	102680	98601	101060	42427
								85%	84%	86%	53%	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	16.050379	15.978395903489	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.008769	-72.01799956130201	Alternating exposures requested	N	N
[deg] Pointing Roll	176.462401	176.5883856495	[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)	198008946.184000	198007400.64142			
Observation start date	2004-04-10T18:28:02	2004-04-10T18:03:20			
[s] Observation end time (MET)	198029670.184000	198030452.37994			
Observation end date	2004-04-11T00:13:26	2004-04-11T00:27:32			
Read mode	TIMED	TIMED			

2.3 Aspect





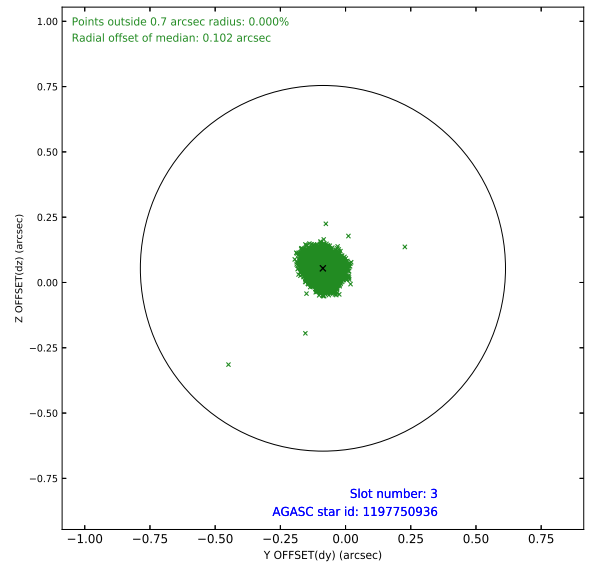
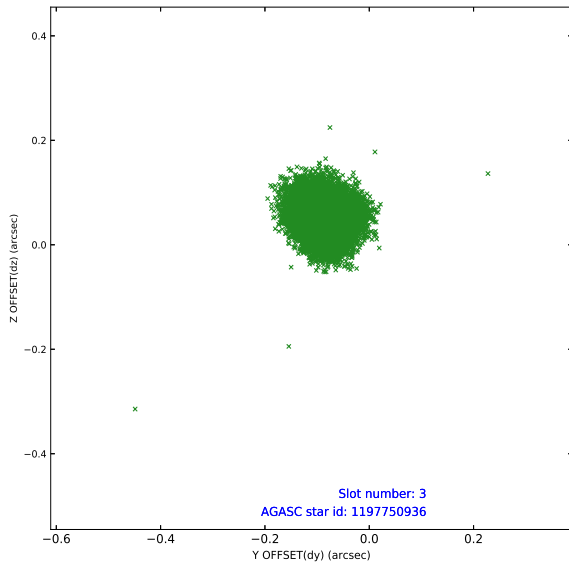
Slot Statistics

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	7.23	5385	1.000	0.039	-0.032	0.007	0.013	0.000000	0.000000	932.88	-834
1	FID		ACIS-I-5	7.23	5385	1.000	-0.189	0.044	0.007	0.011	0.000000	0.000000	-1815.34	1062
2	FID		ACIS-I-6	7.25	5384	1.000	0.059	0.058	0.007	0.011	0.000000	0.000000	398.32	1707
3	GUIDE	used	1197750936	7.57	10770	1.000	-0.087	0.054	0.051	0.078	15.387940	-71.549550	855.47	-1598
4	GUIDE	used	1197884536	8.50	10768	1.000	0.014	0.024	0.072	0.109	17.160729	-71.835289	-1205.37	-688
5	GUIDE	used	1197884712	8.30	10768	1.000	-0.033	-0.041	0.054	0.085	16.087398	-72.252690	-94.72	874
6	GUIDE	used	1197885104	9.36	10766	1.000	0.081	-0.051	0.083	0.137	17.845067	-72.189368	-2013.64	556
7	GUIDE	used	1197885328	7.23	10768	1.000	0.024	0.013	0.054	0.083	16.283090	-71.733943	-201.20	-1003

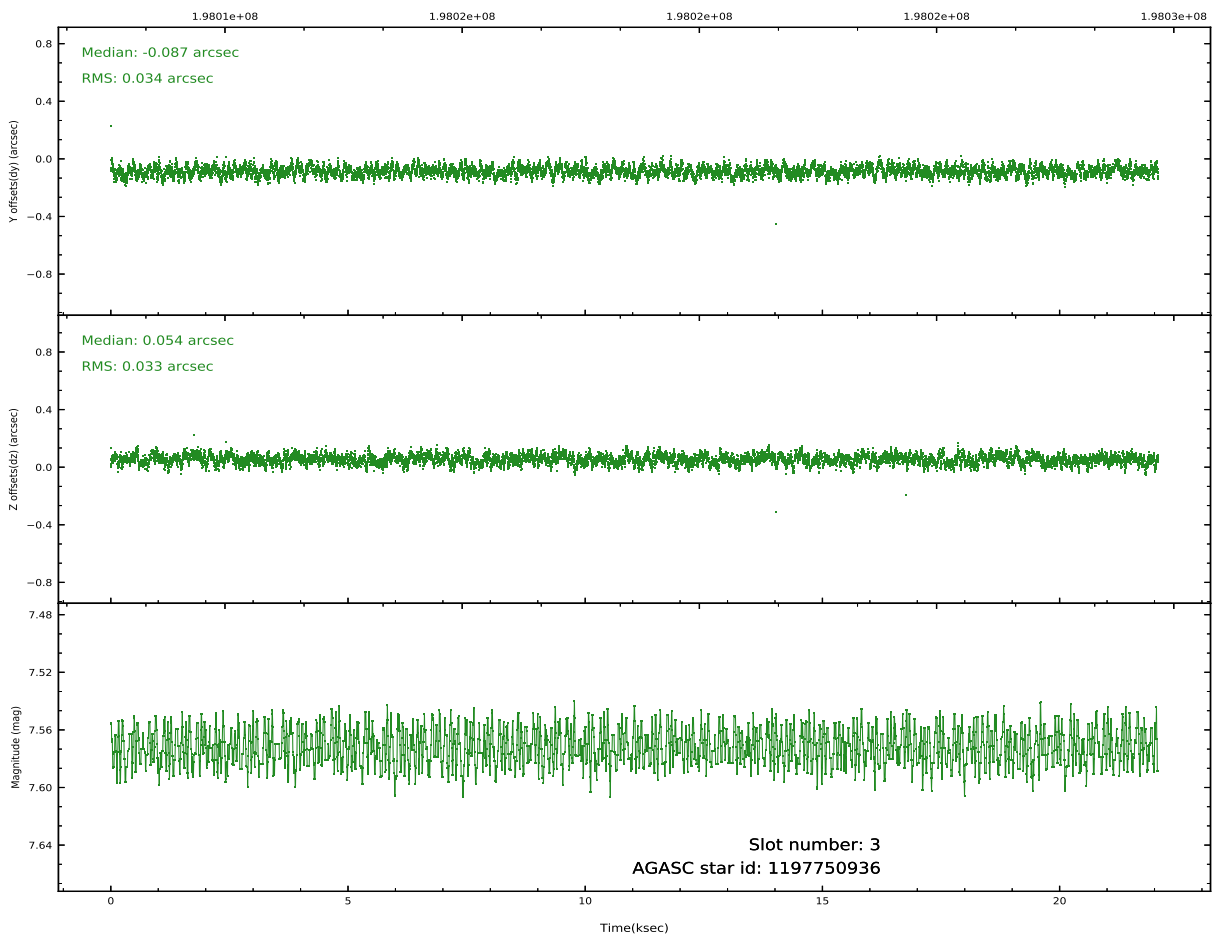
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2.4 Star Slots

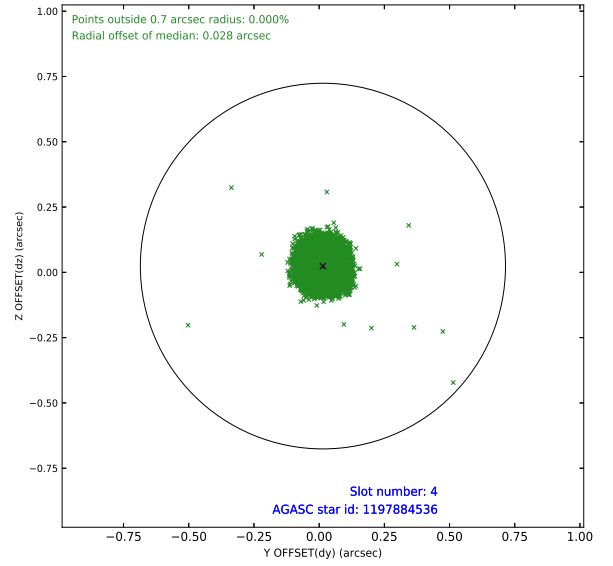
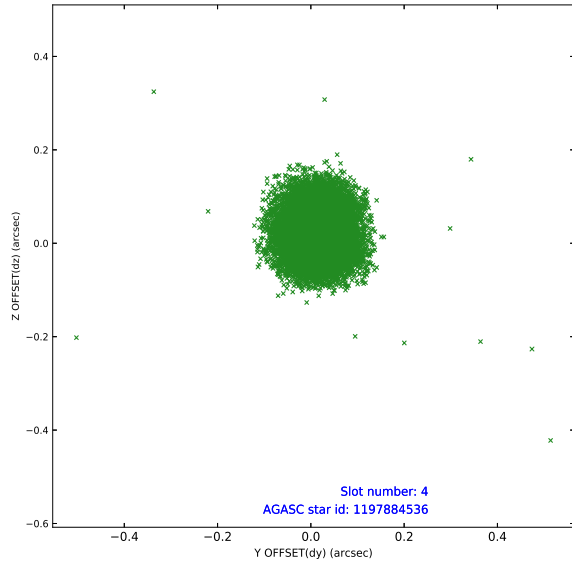
2.4.1 Slot 3



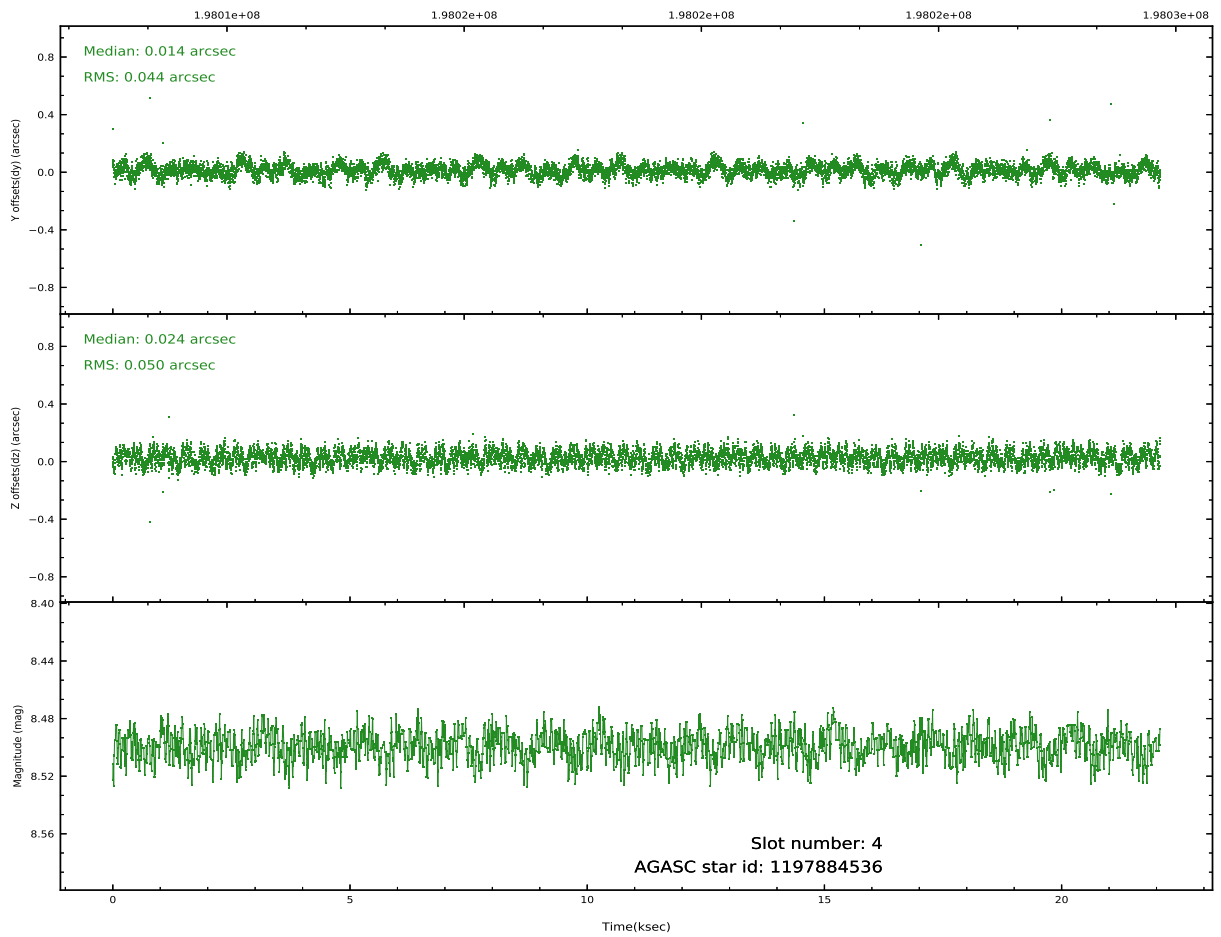
Time (s)



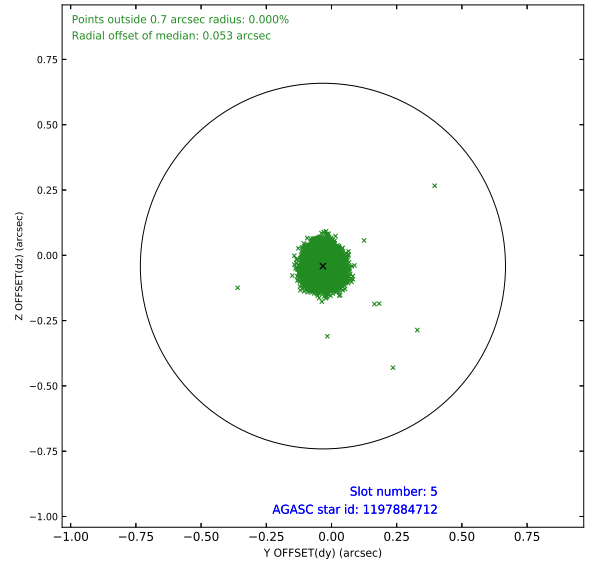
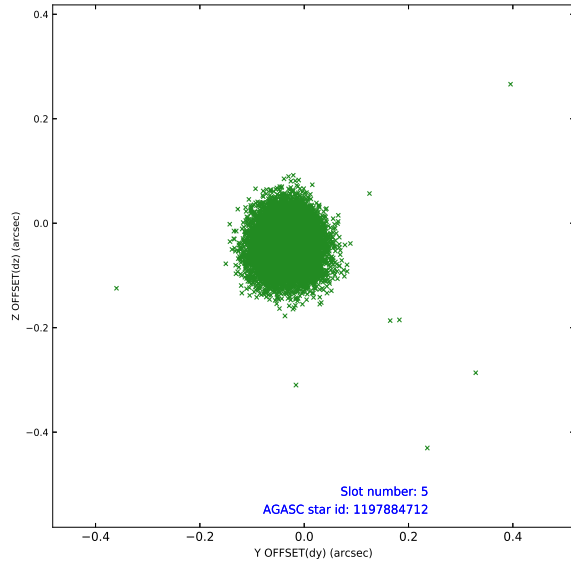
2.4.2 Slot 4



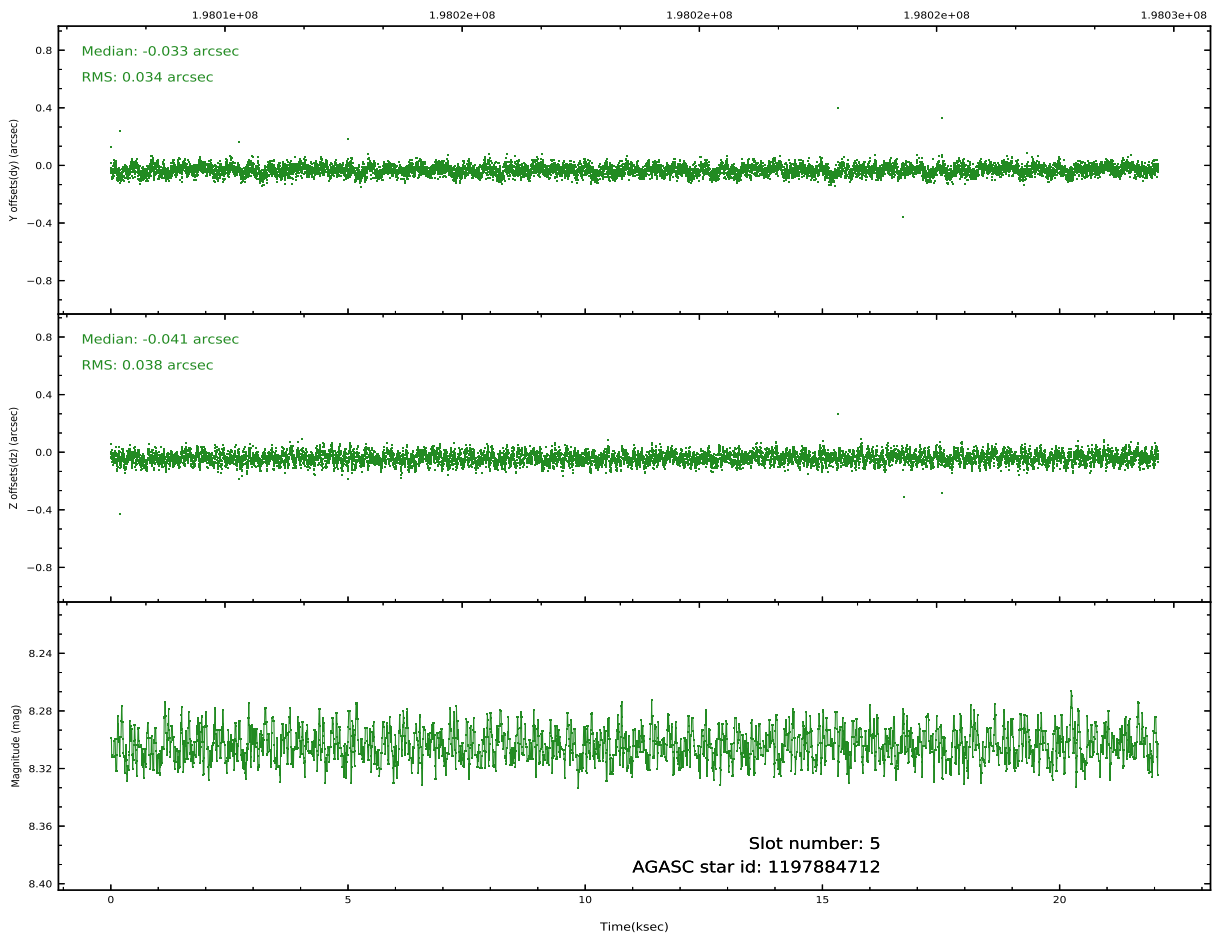
Time (s)



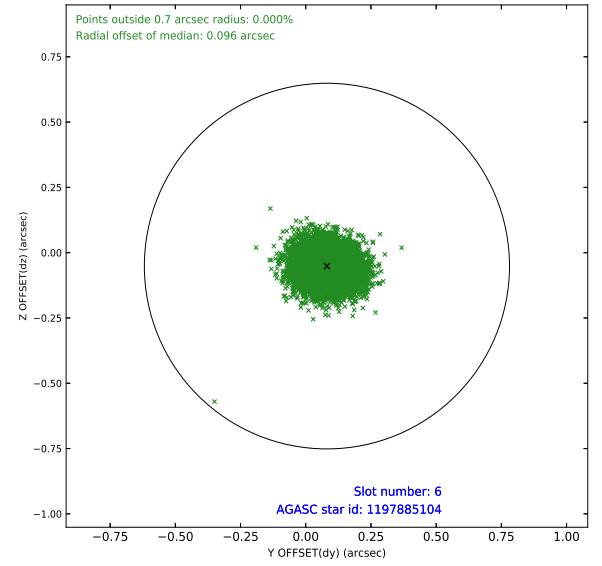
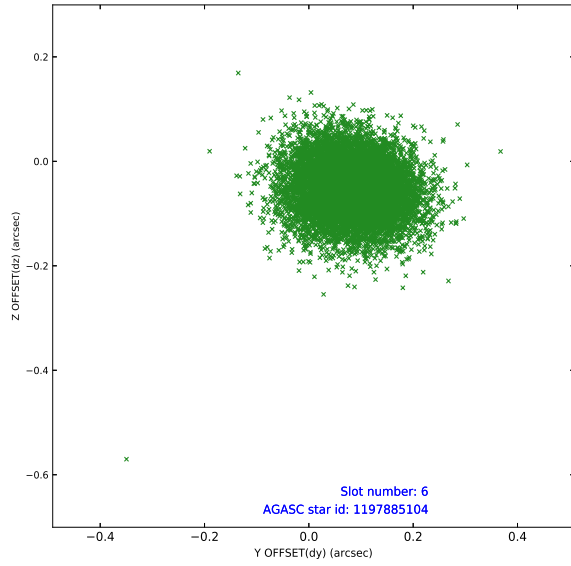
2.4.3 Slot 5



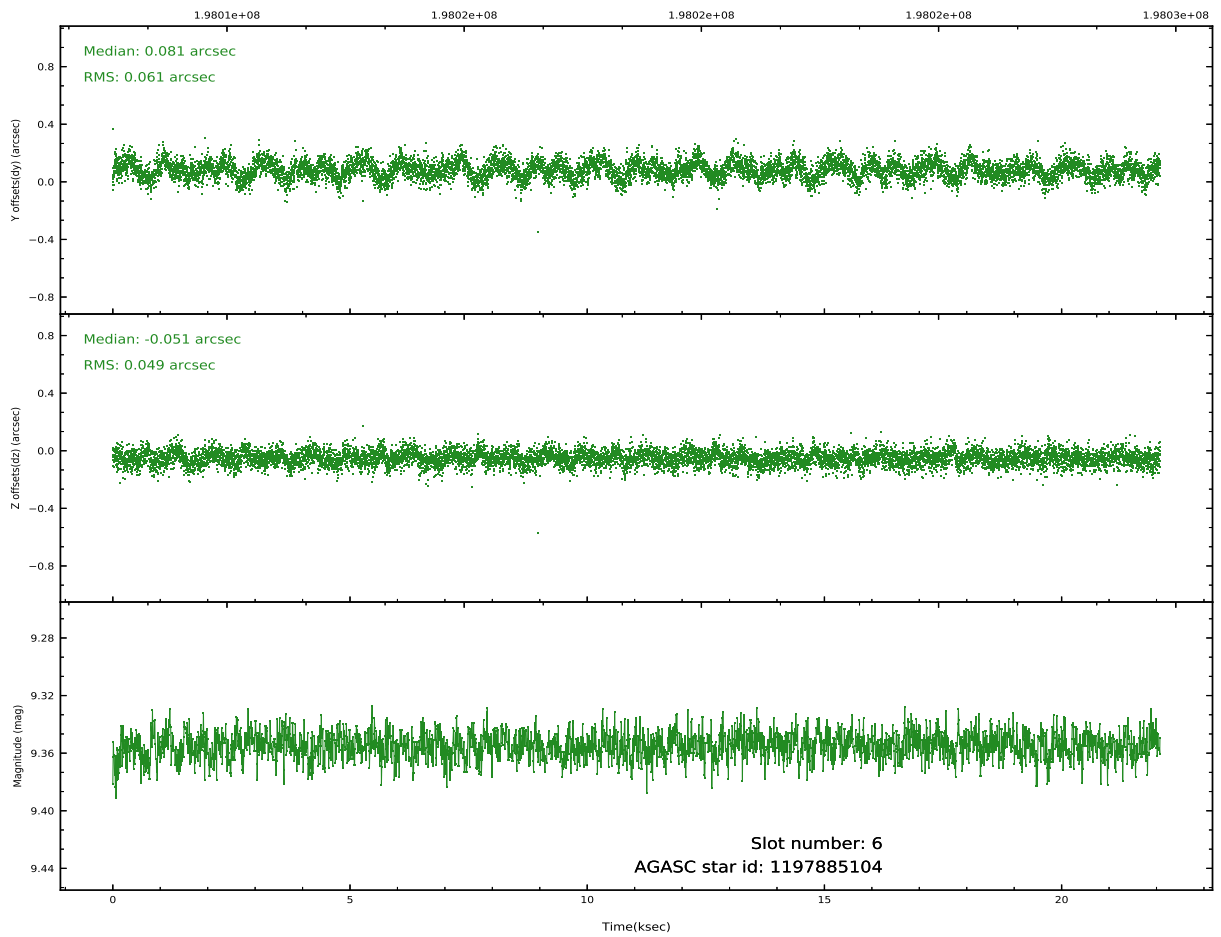
Time (s)



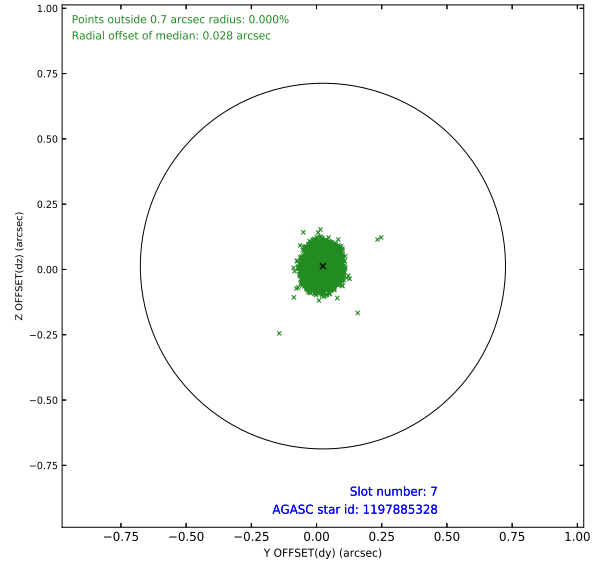
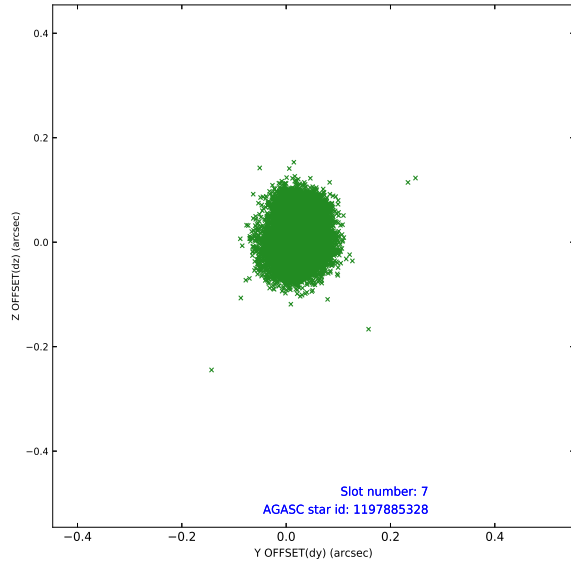
2.4.4 Slot 6



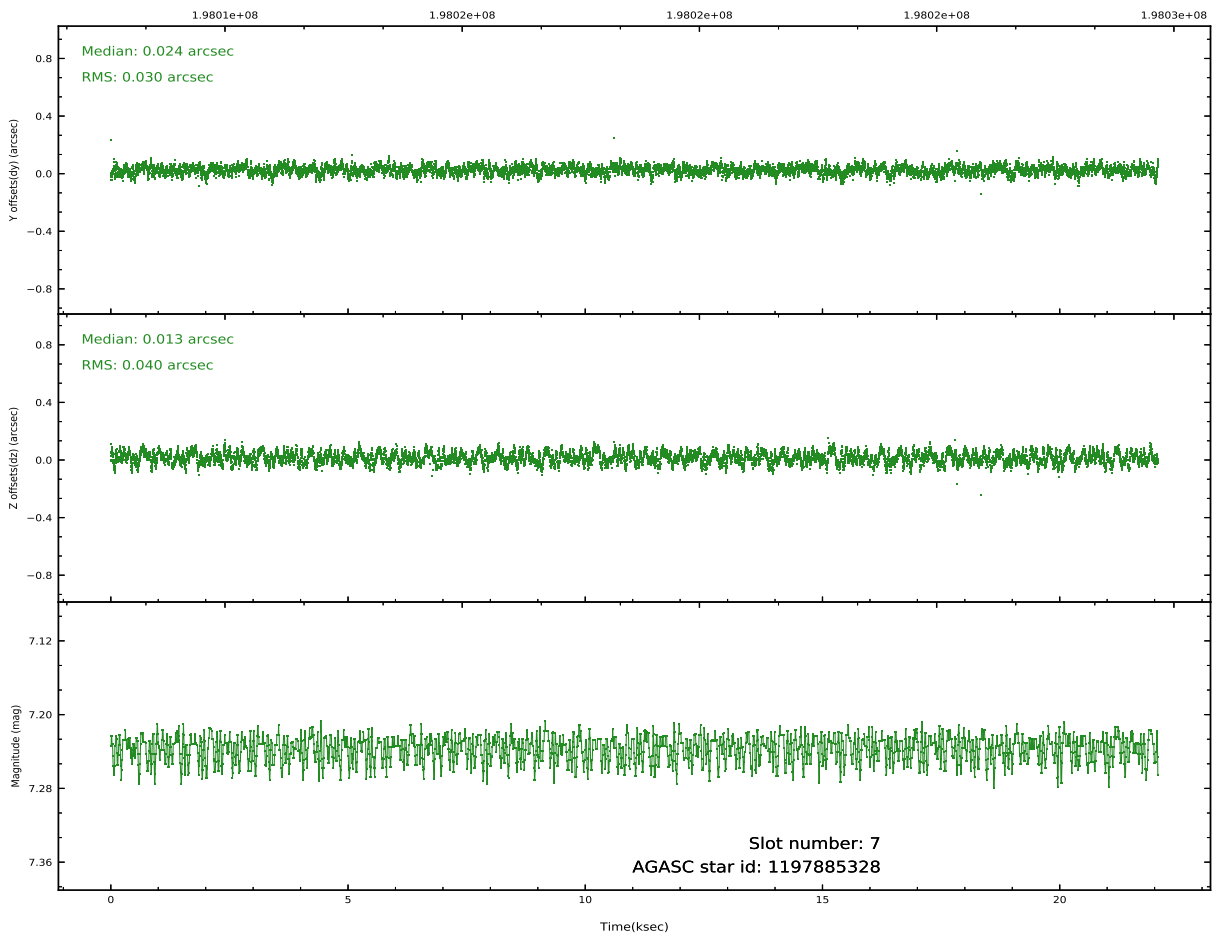
Time (s)



2.4.5 Slot 7

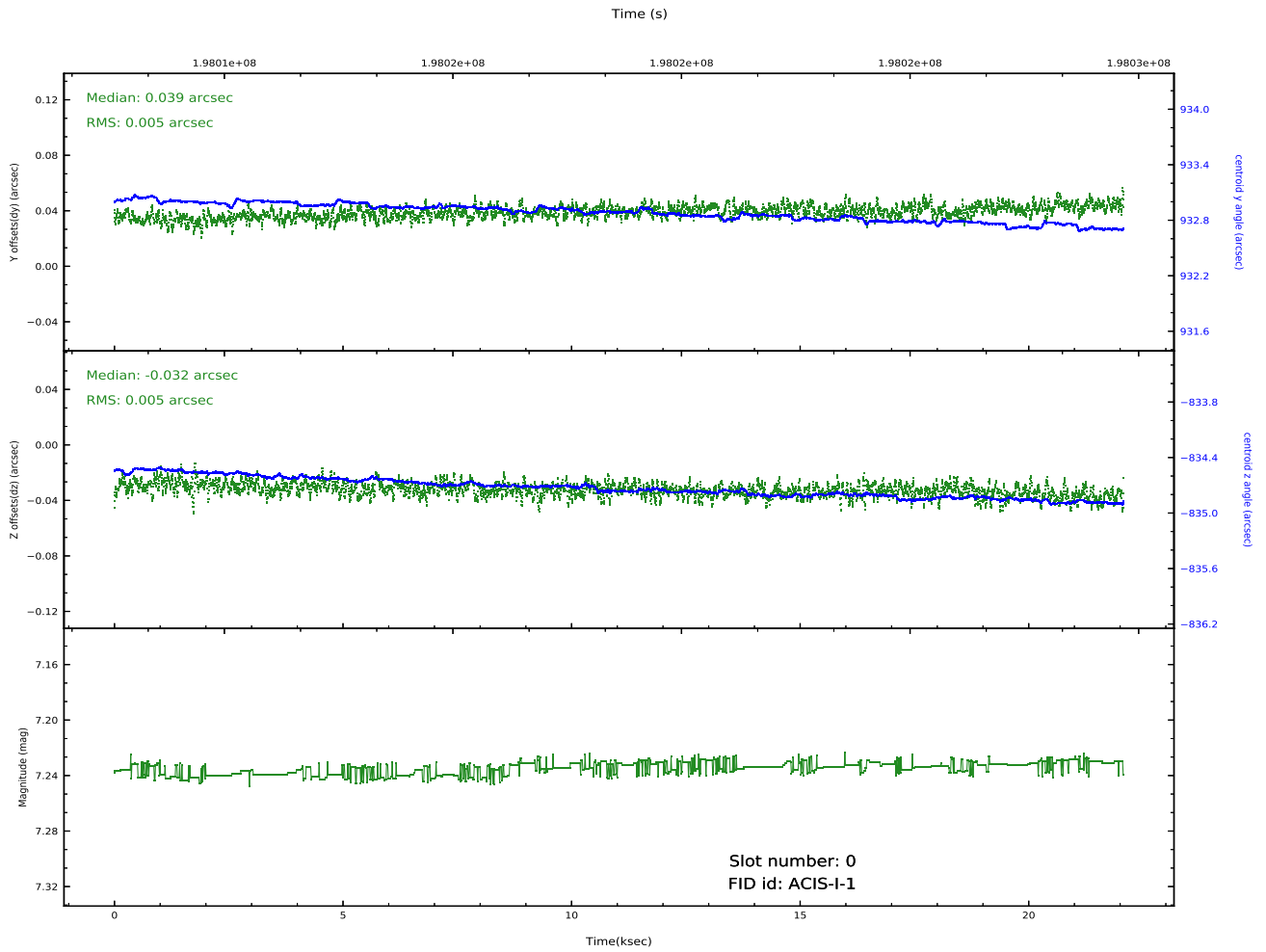
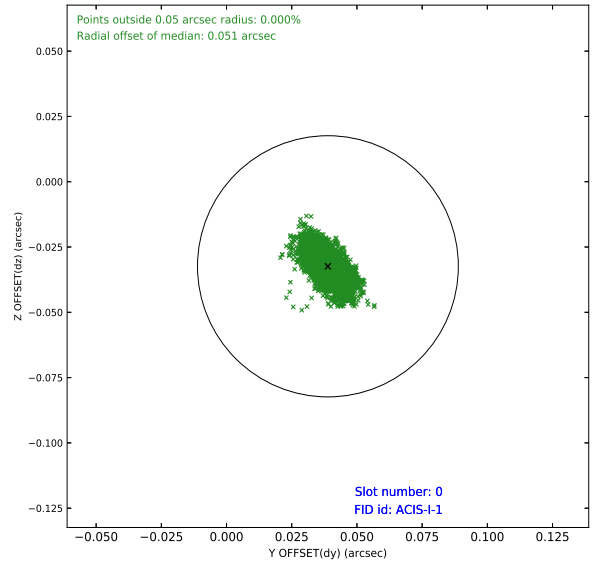
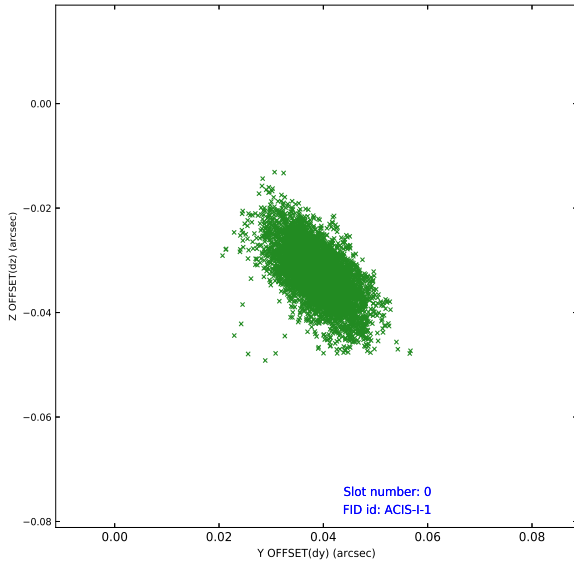


Time (s)

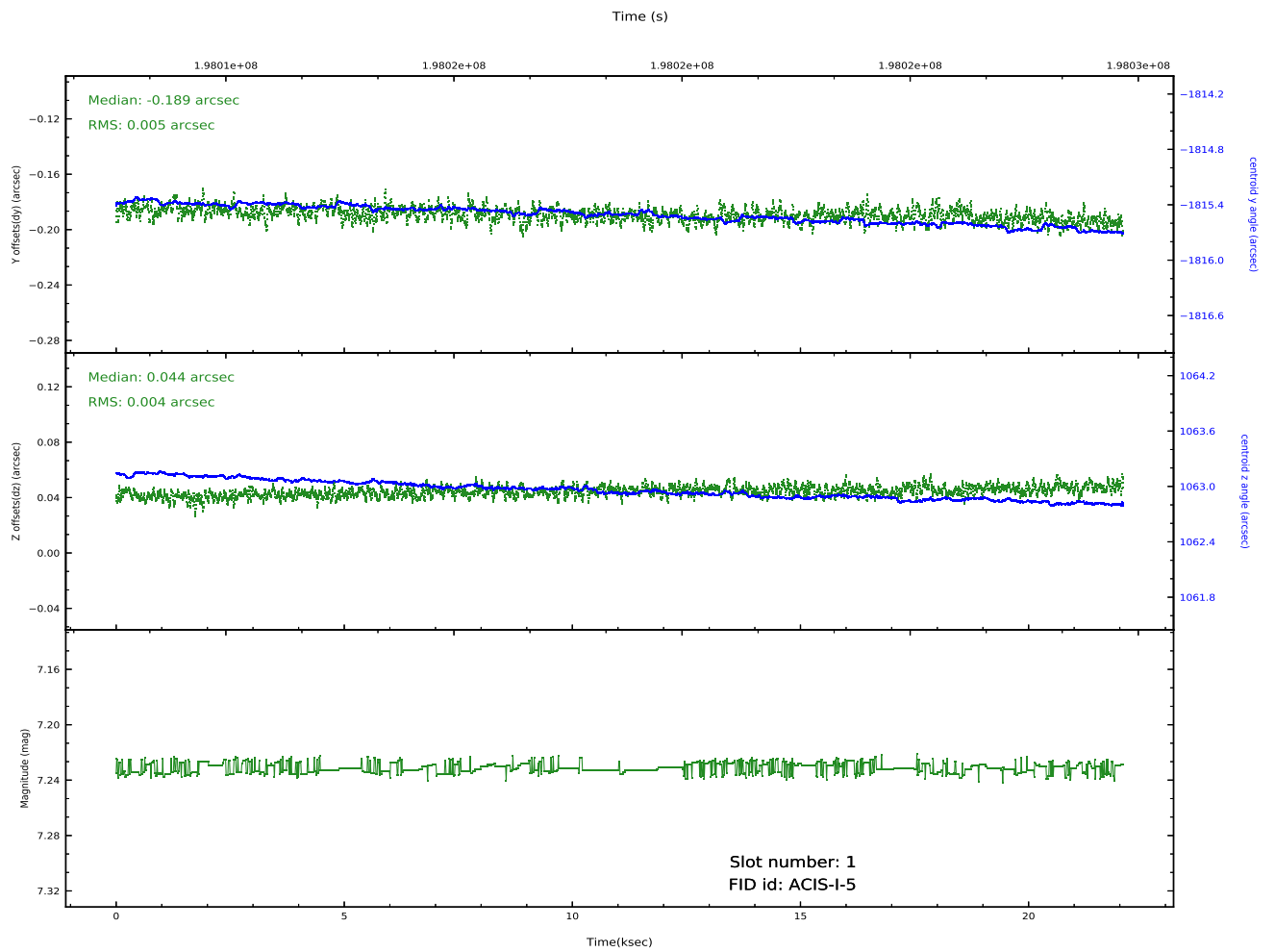
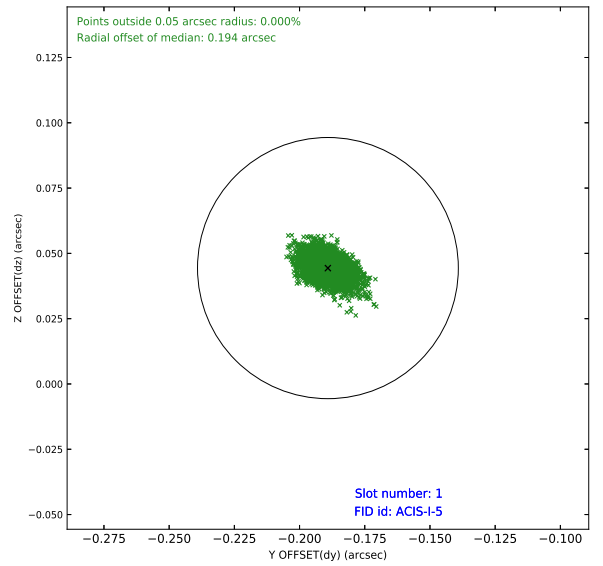
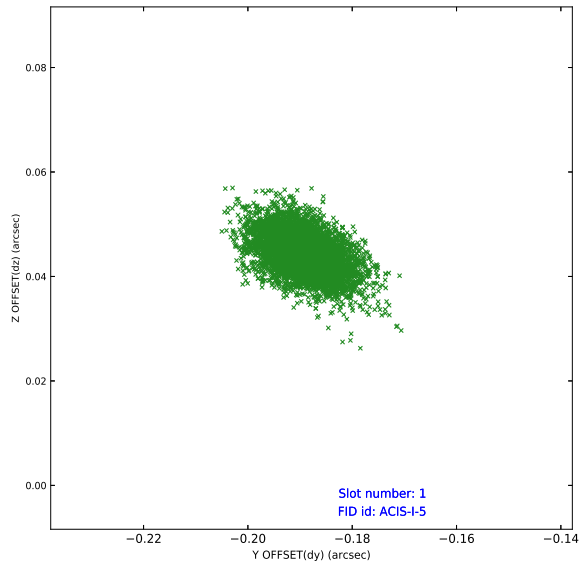


2.5 FID Slots

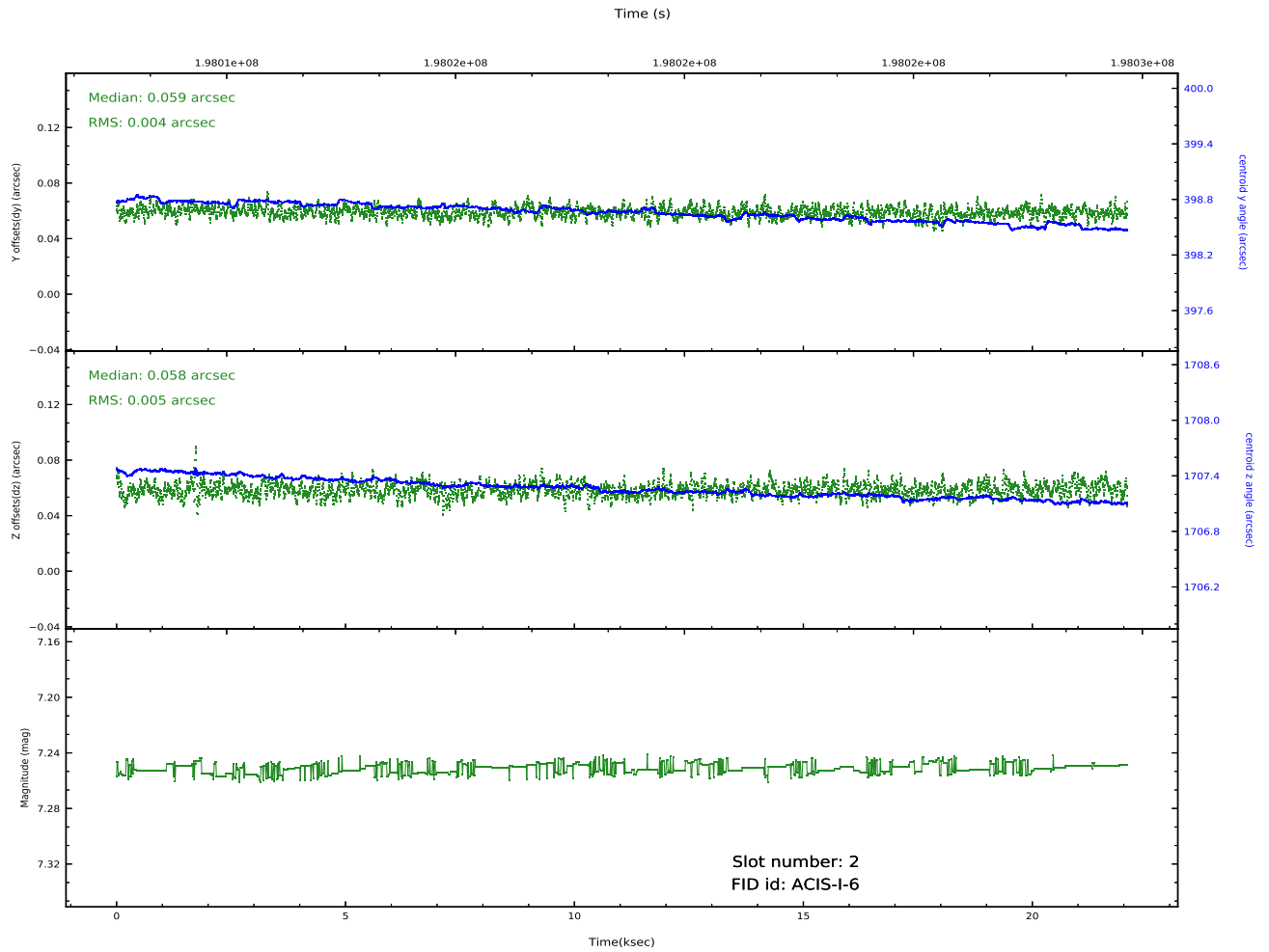
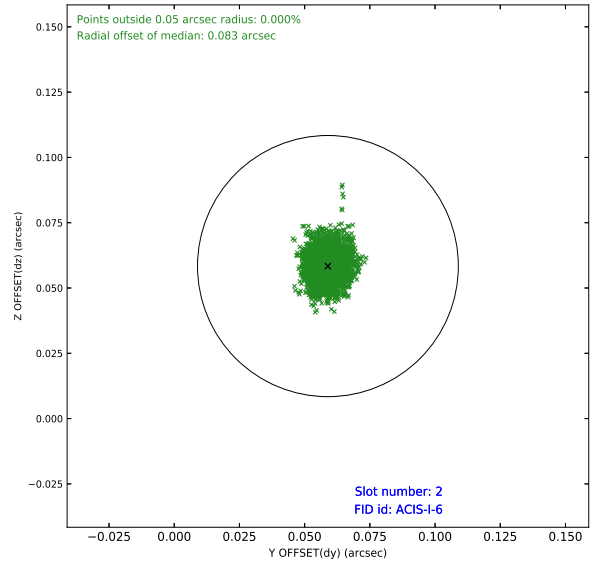
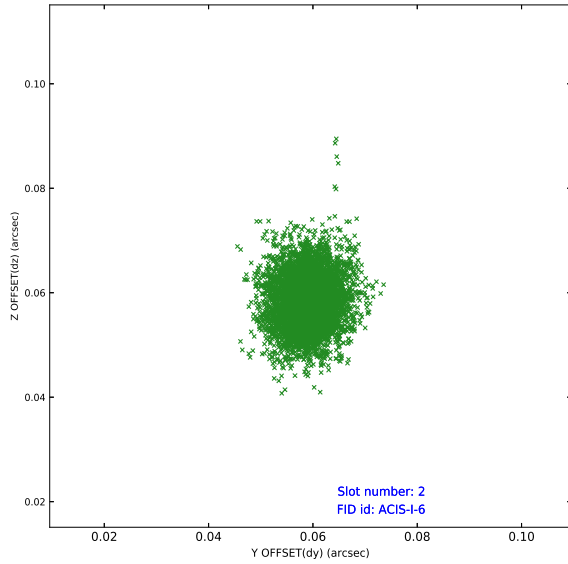
2.5.1 Slot 0



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	20.684

A.2 Comments

Window constraint met.