

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5133 - L2 Version 4
Chandra X-Ray Center

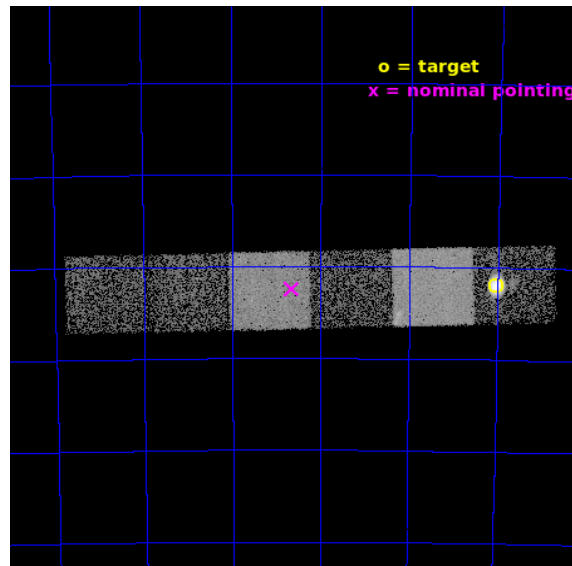
L2 Processing Date : Sep 24 2020

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1 Front

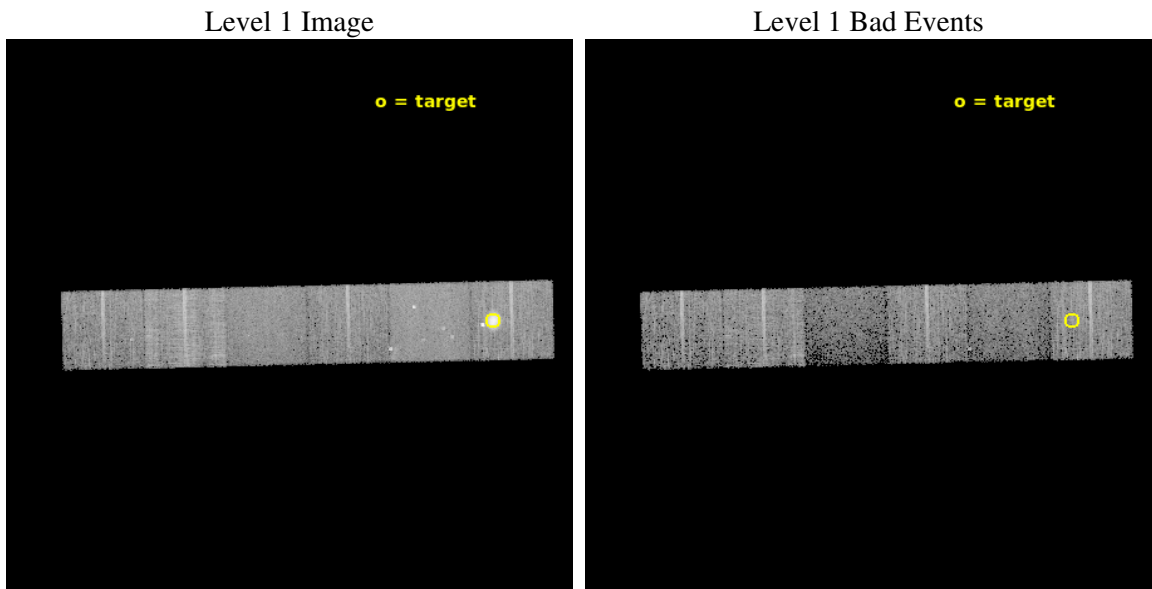
seq_num	590331	Sequence number
obs_id	5133	Observation id
title	AO5B ACIS-S Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	17.161453676165	Nominal RA [deg]
dec_nom	-72.040531623064	Nominal Dec [deg]
roll_nom	178.55839459937	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7596.7999716997	Sum of GTIs [s]
livetime	7500.6047162143	Livetime [s]
ontime4	7596.7999716997	Sum of GTIs [s]
ontime5	7596.7999716997	Sum of GTIs [s]
ontime6	7596.7999716997	Sum of GTIs [s]
ontime7	7596.7999716997	Sum of GTIs [s]
ontime8	7590.3180311322	Sum of GTIs [s]
ontime9	7596.7999716997	Sum of GTIs [s]
l2events	76546	Number of level 2 events



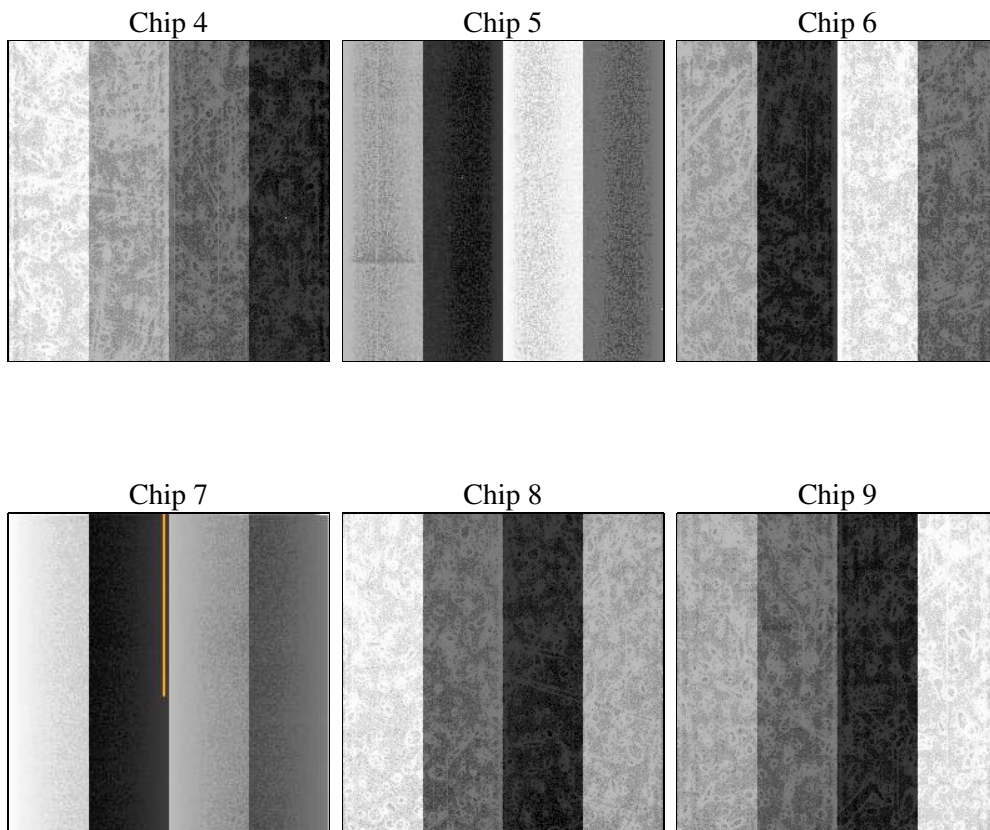
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7840.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	7596.7999716997	Sum of GTIs [s]
caldbver	4.9.2	 	ontime4	7596.7999716997	Sum of GTIs [s]
date	2020-09-25T01:28:49	Date and time of file creation	ontime5	7596.7999716997	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	7596.7999716997	Sum of GTIs [s]
			ontime7	7596.7999716997	Sum of GTIs [s]
			ontime8	7590.3180311322	Sum of GTIs [s]
			ontime9	7596.7999716997	Sum of GTIs [s]
			l1events	308778	Number of level 1 events

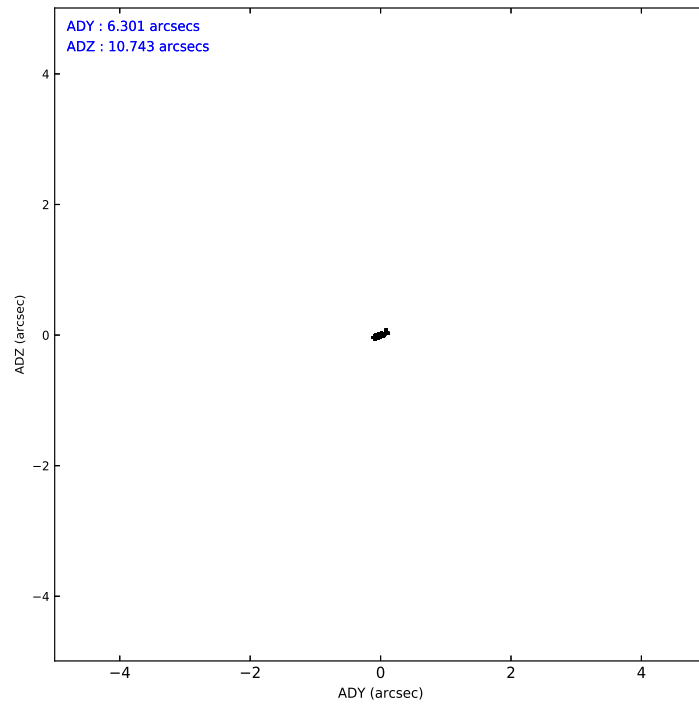
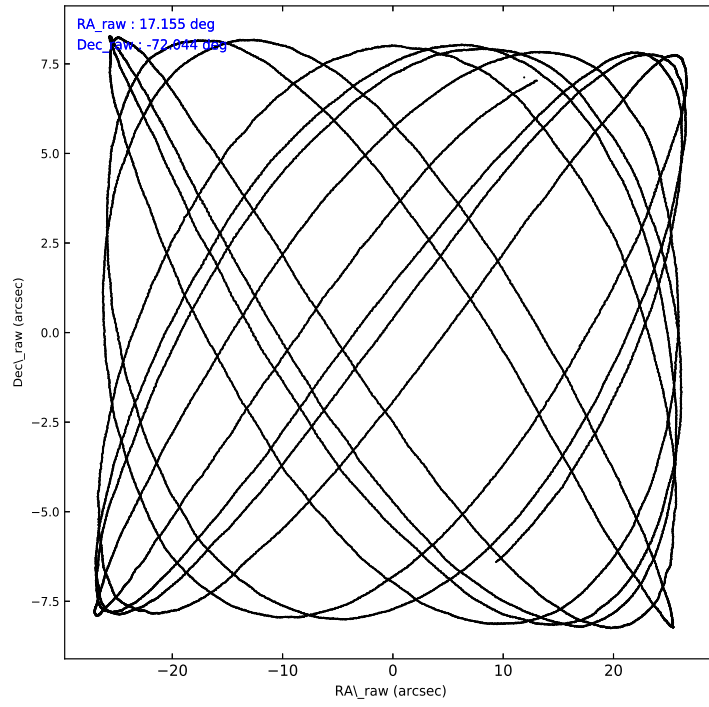
2.1.4 Events

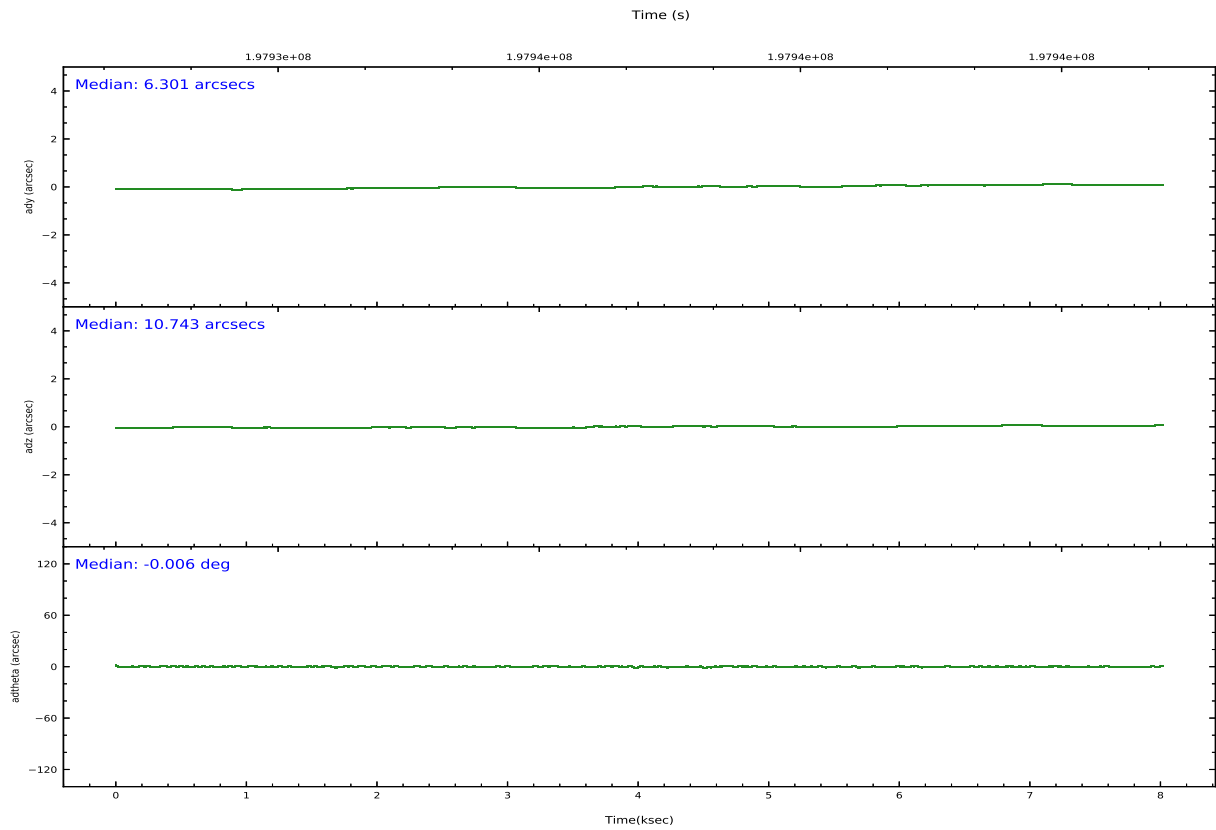
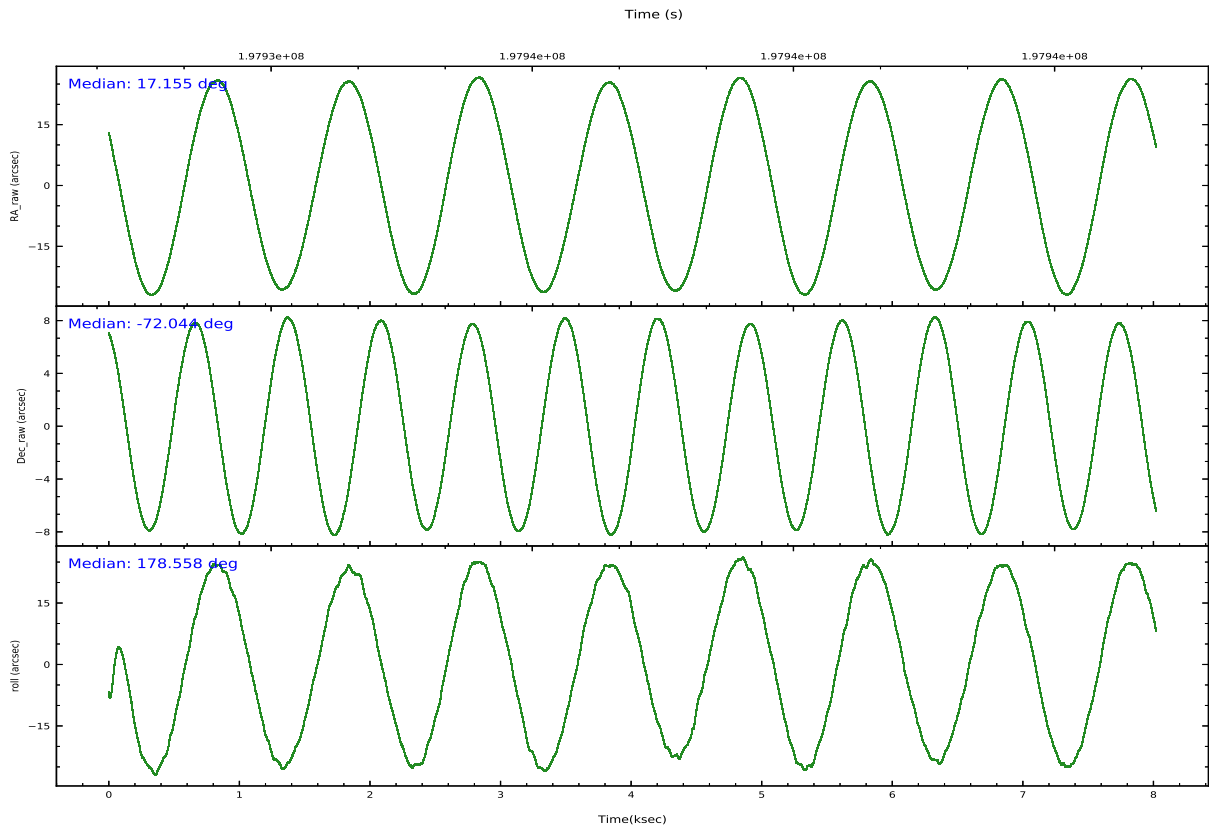
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	68799	53646	42698	39918	63149	40568	grade 0 events	19939	3818	1821	1910	6202	1837
rejected events	44565	24898	37942	20015	44425	35907		28%	7%	4%	4%	9%	4%
rejected %	64%	46%	88%	50%	70%	88%	grade 1 events	136	185	20	39	79	22
								0%	0%	0%	0%	0%	0%
							grade 2 events	2080	8255	985	4228	3035	969
								3%	15%	2%	10%	4%	2%
							grade 3 events	716	1471	560	1983	2850	522
								1%	2%	1%	4%	4%	1%
							grade 4 events	766	1437	494	1939	2652	475
								1%	2%	1%	4%	4%	1%
							grade 5 events	1431	4414	1412	4297	2059	1515
								2%	8%	3%	10%	3%	3%
							grade 6 events	747	13794	898	9857	3996	860
								1%	25%	2%	24%	6%	2%
							grade 7 events	42984	20272	36508	15665	42276	34368
								62%	37%	85%	39%	66%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-456789	ACIS-456789	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	17.232004	17.161453676165	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.030207	-72.040531623064	Alternating exposures requested	N	N
[deg] Pointing Roll	178.476762	178.55839459937	[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	-0.684267	-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)	197932937.184000	197932561.80063			
Observation start date	2004-04-09T21:21:13	2004-04-09T21:16:01			
[s] Observation end time (MET)	197940777.184000	197940911.45099			
Observation end date	2004-04-09T23:31:53	2004-04-09T23:35:11			
Read mode	TIMED	TIMED			

2.3 Aspect





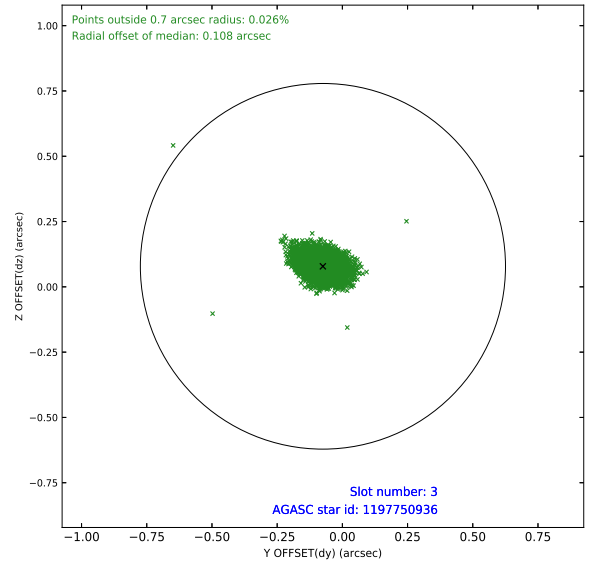
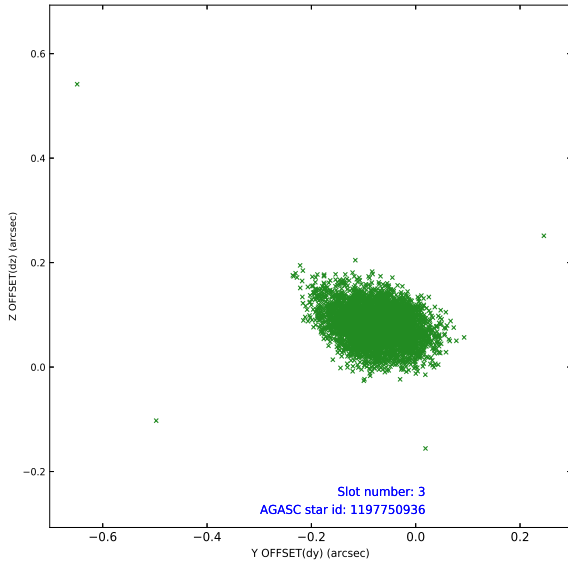
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	1957	1.000	-0.090	-0.047	0.007	0.012	0.000000	0.000000	-759.07	-1732
1	FID		ACIS-S-4	7.20	1957	1.000	0.140	0.056	0.008	0.014	0.000000	0.000000	2154.06	175
2	FID		ACIS-S-5	7.23	1957	1.000	-0.081	-0.000	0.007	0.012	0.000000	0.000000	-1811.06	170
3	GUIDE	used	1197750936	7.59	3914	1.000	-0.075	0.079	0.067	0.110	15.387940	-71.549550	2145.66	-1641
4	GUIDE	used	1197884536	8.49	3914	1.000	-0.002	0.026	0.069	0.110	17.160729	-71.835289	99.67	-699
5	GUIDE	used	1197884712	8.30	3912	1.000	-0.031	-0.095	0.062	0.096	16.087398	-72.252690	1234.18	845
6	GUIDE	used	1197885104	9.36	3911	1.000	0.116	-0.066	0.088	0.144	17.845067	-72.189368	-689.22	558
7	GUIDE	used	1197885328	7.23	3913	1.000	-0.006	0.058	0.051	0.080	16.283090	-71.733943	1098.35	-1029

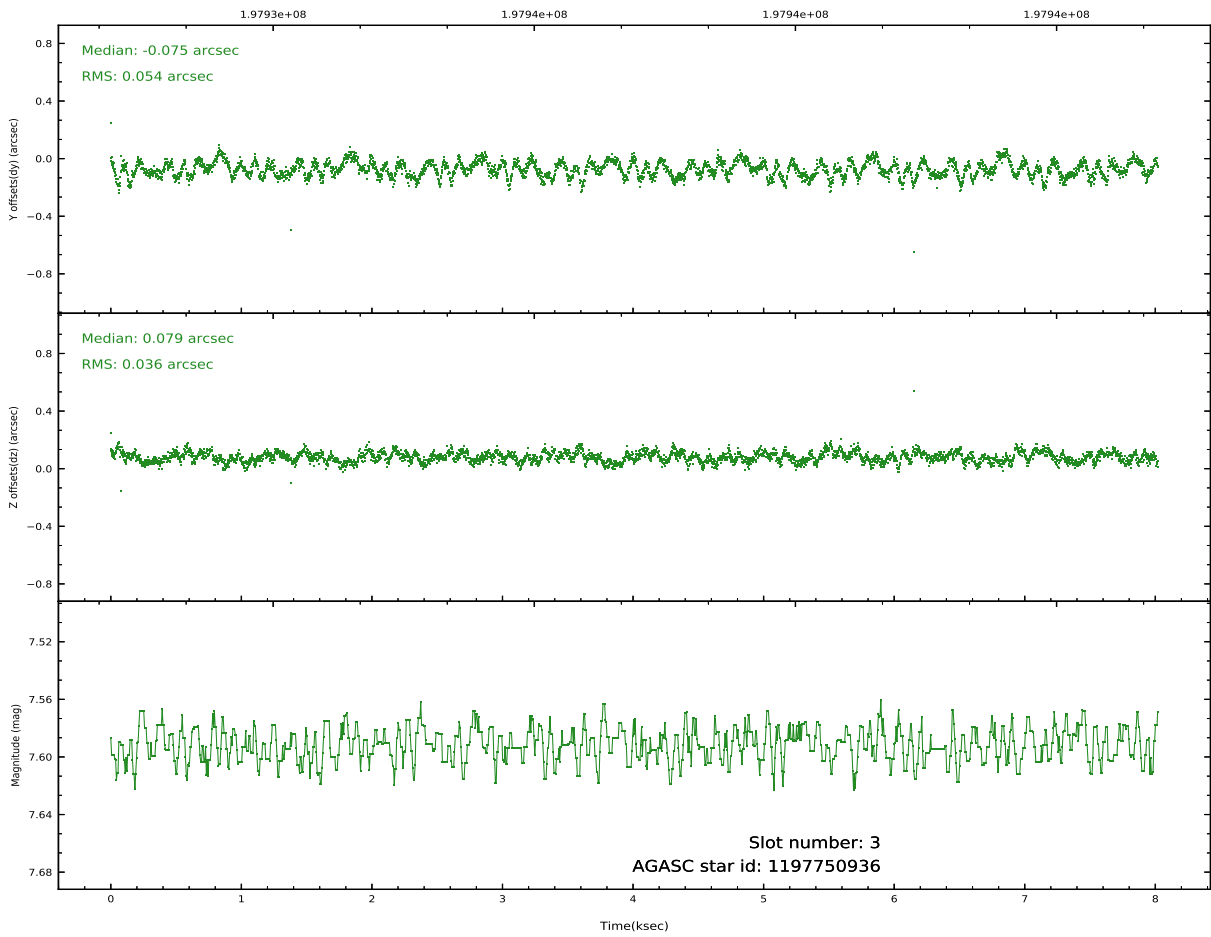
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2.4 Star Slots

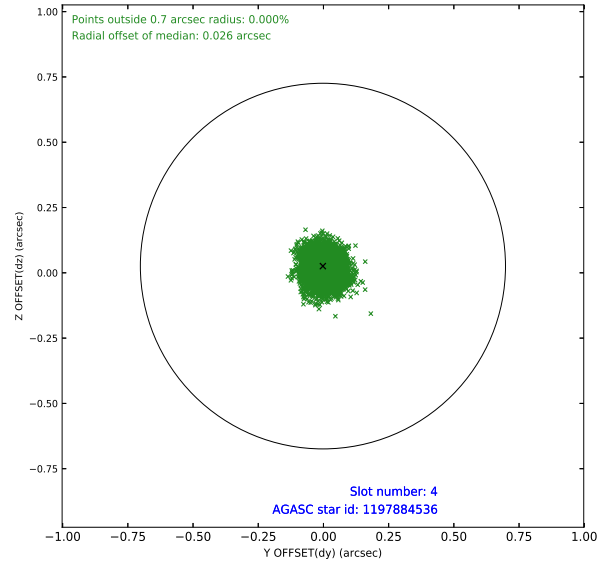
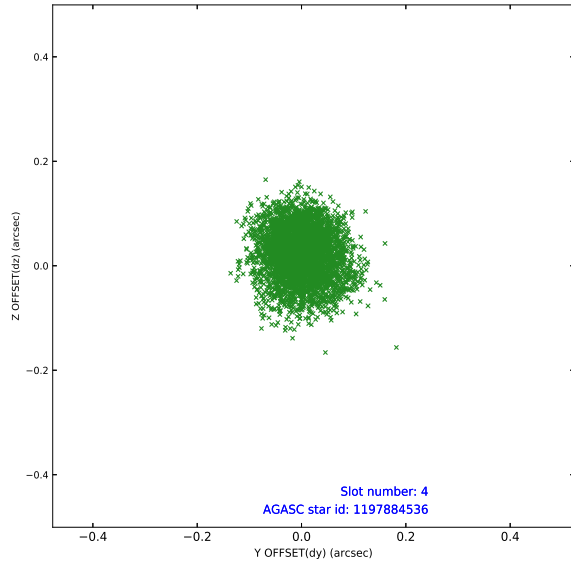
2.4.1 Slot 3



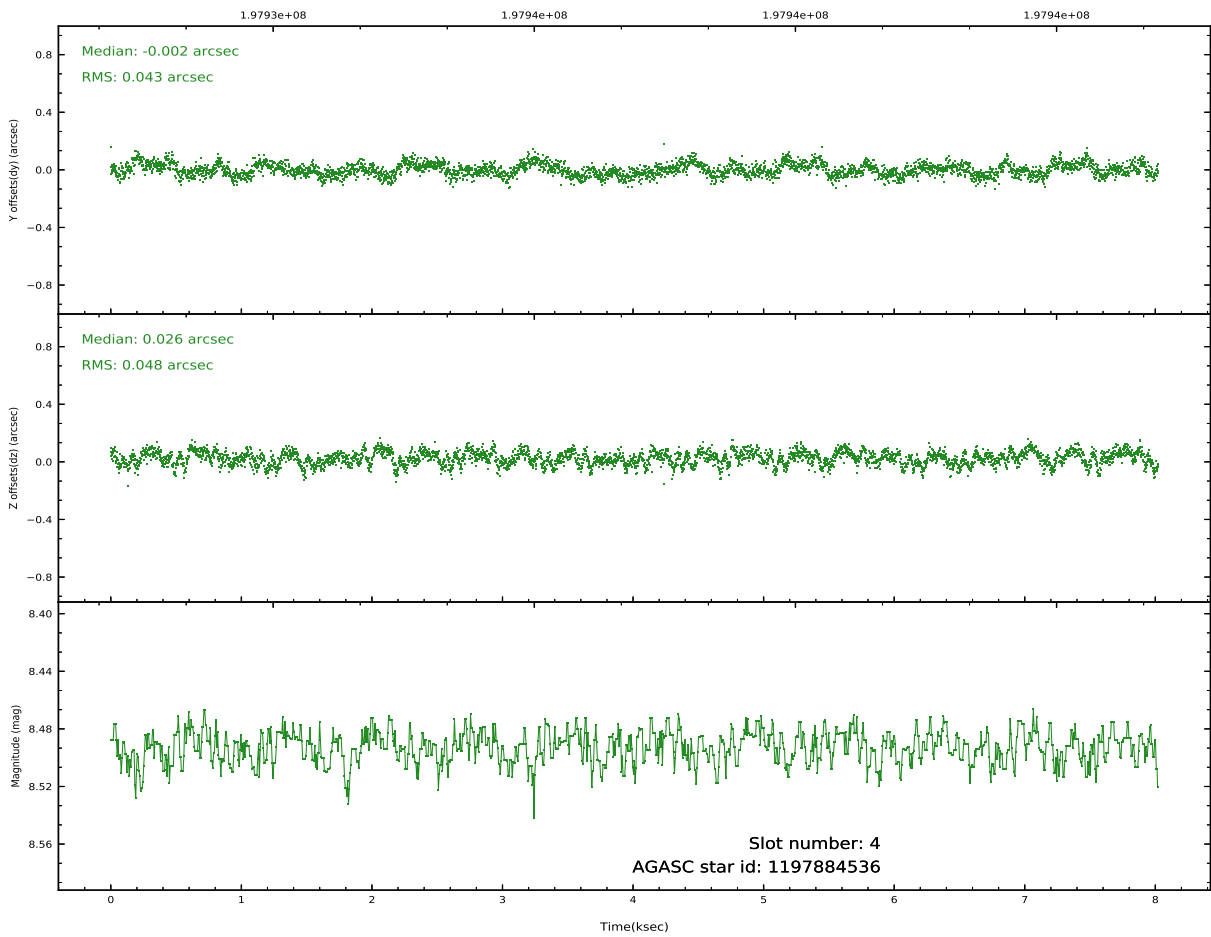
Time (s)



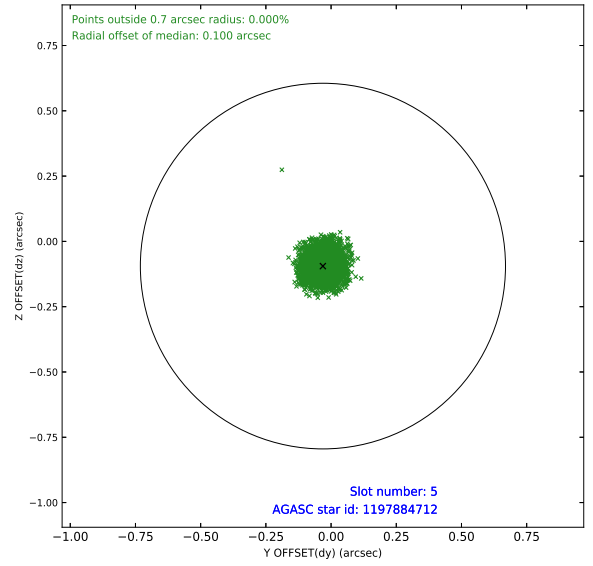
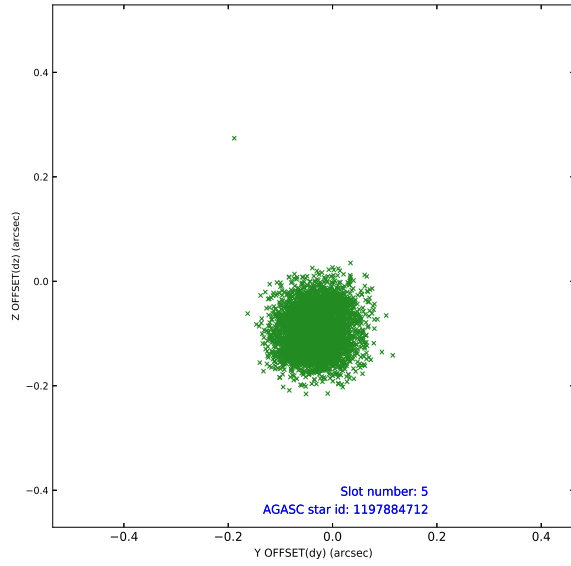
2.4.2 Slot 4



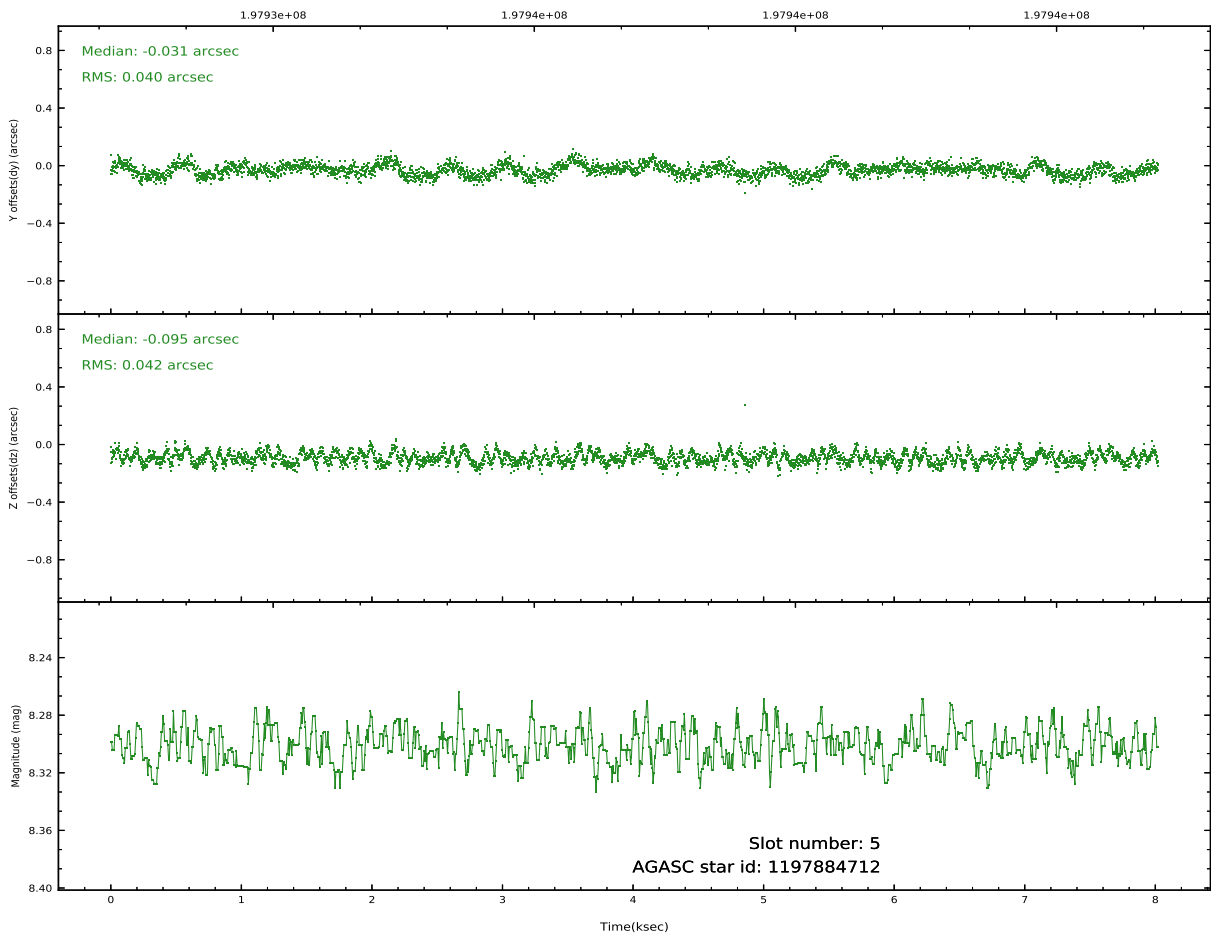
Time (s)



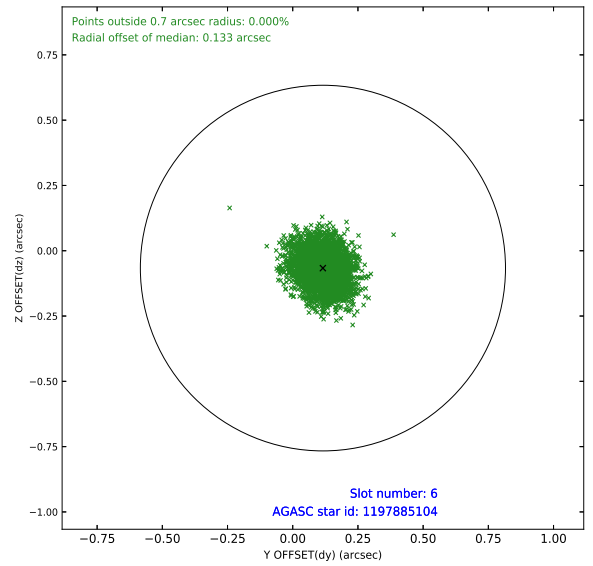
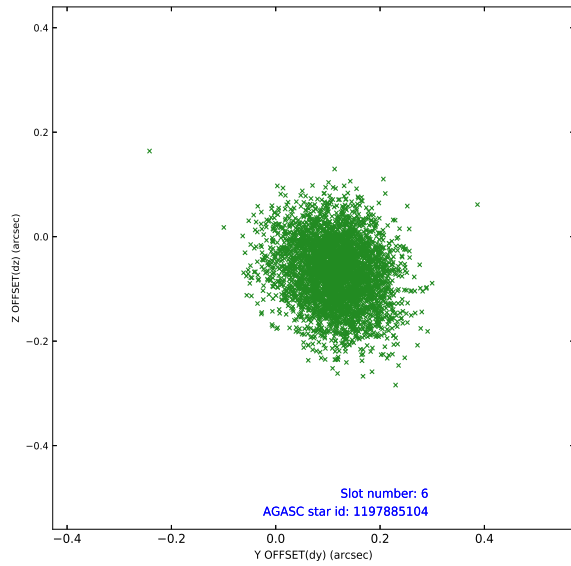
2.4.3 Slot 5



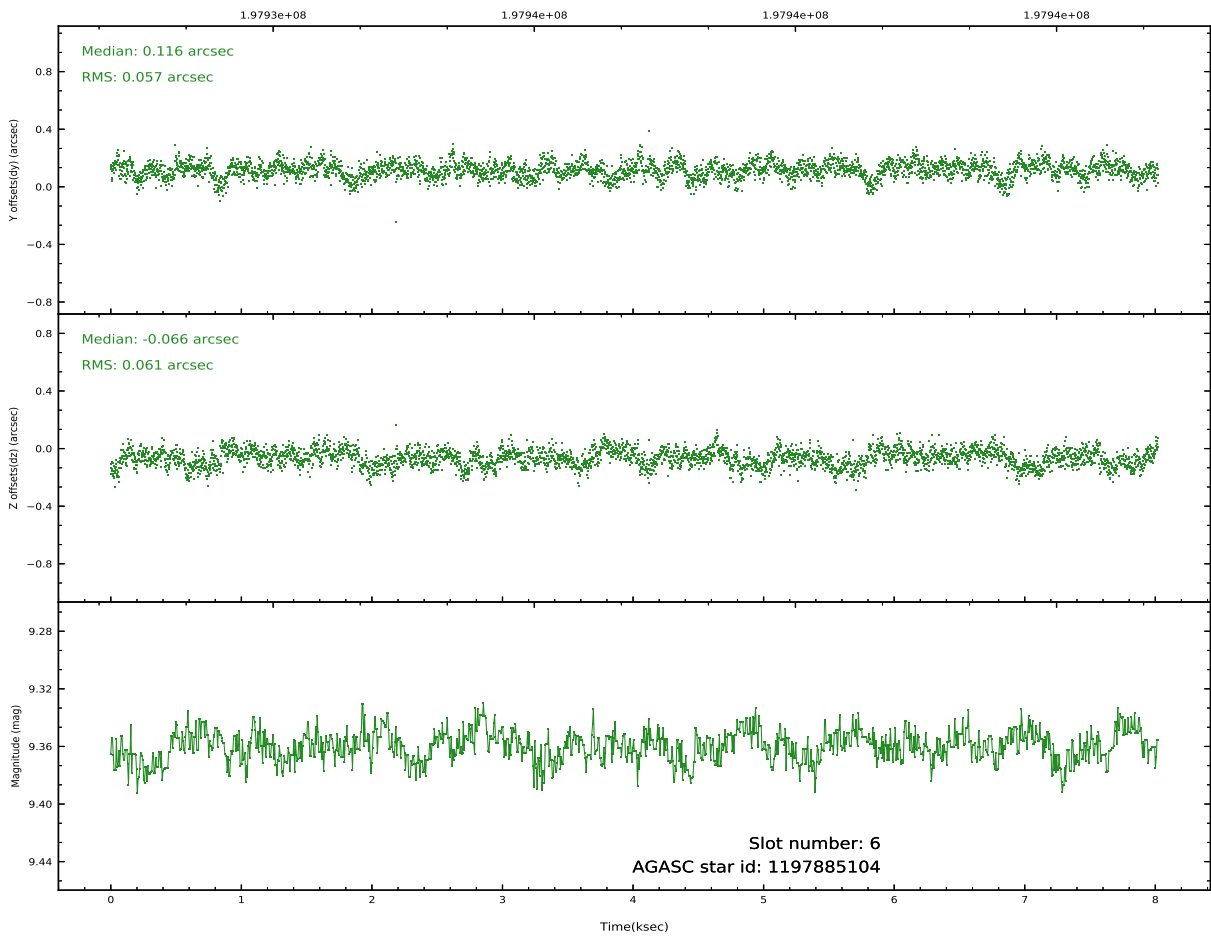
Time (s)



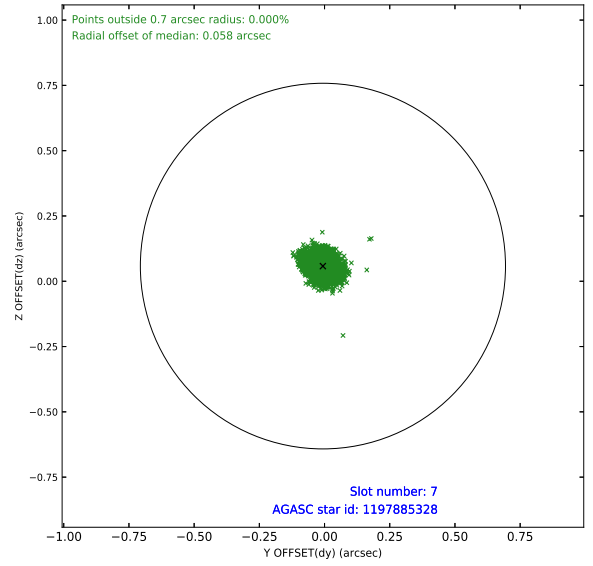
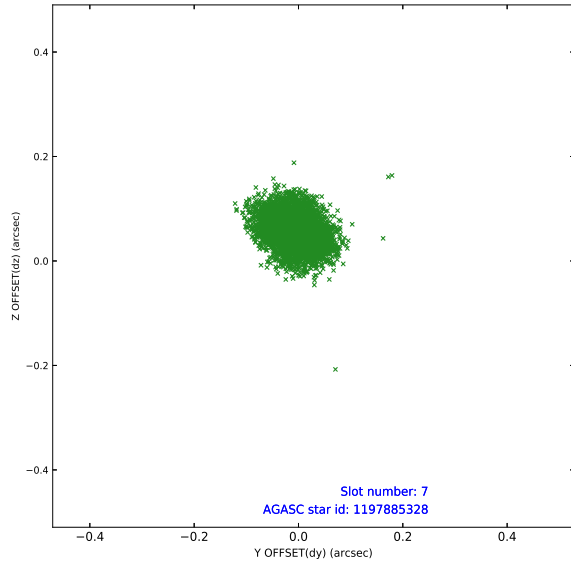
2.4.4 Slot 6



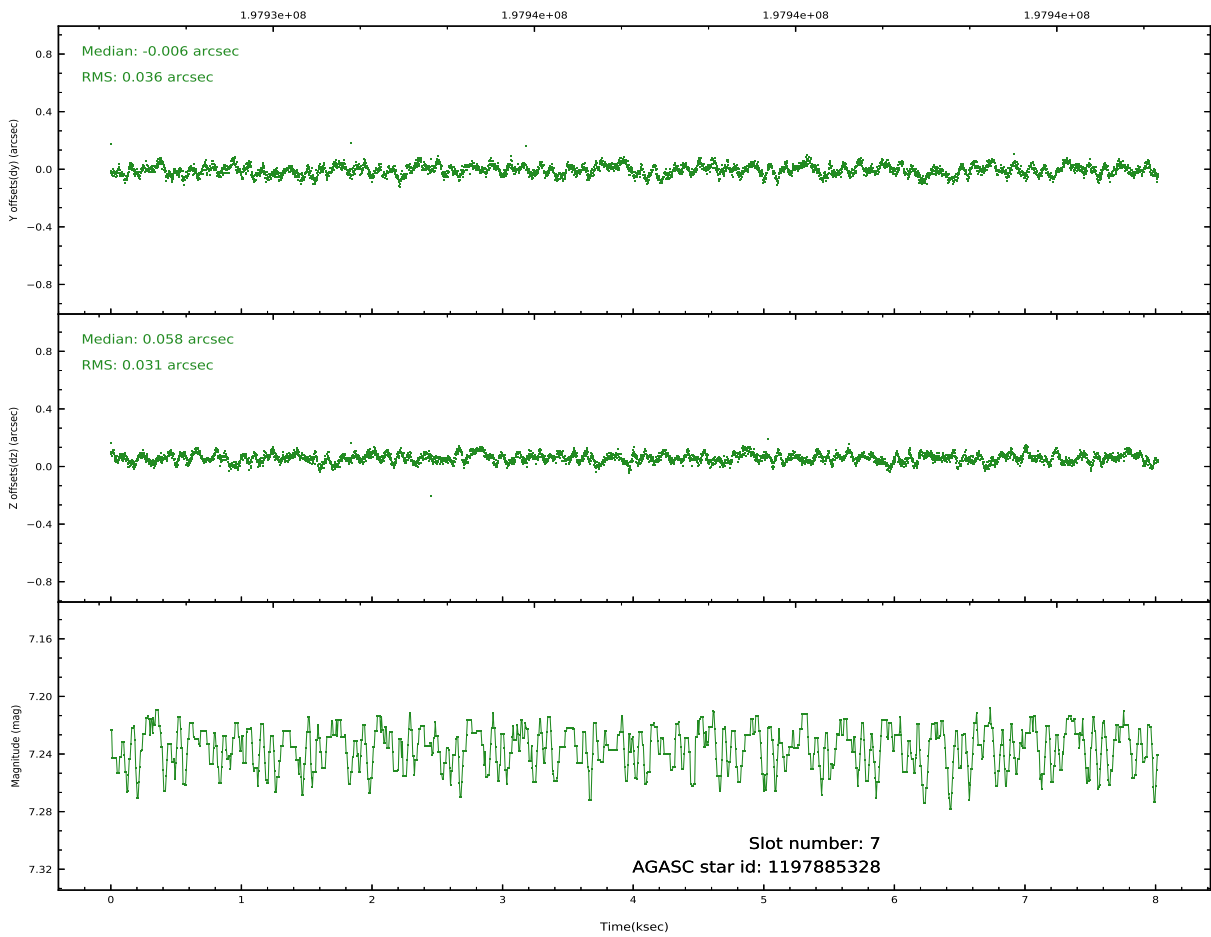
Time (s)



2.4.5 Slot 7

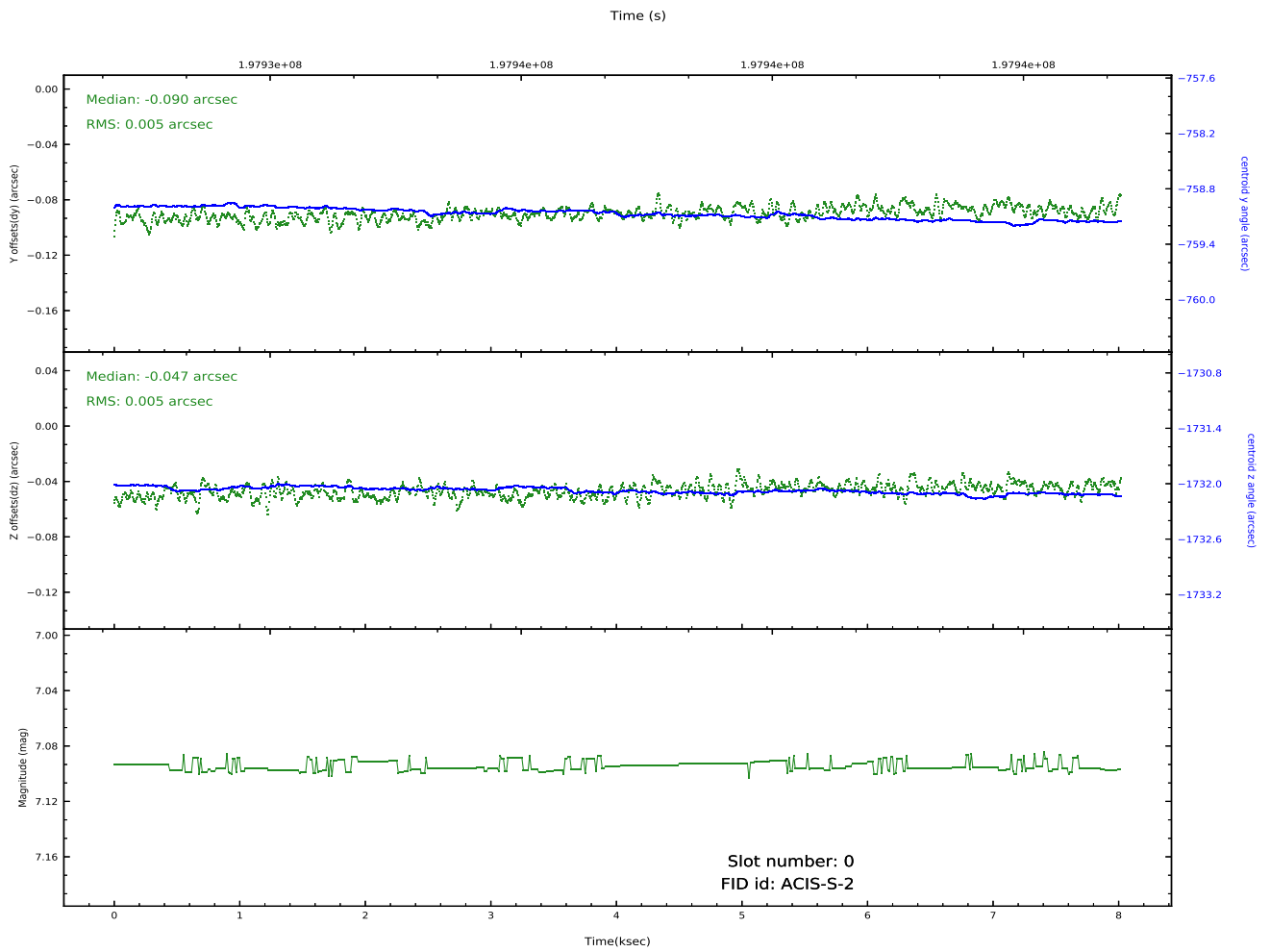
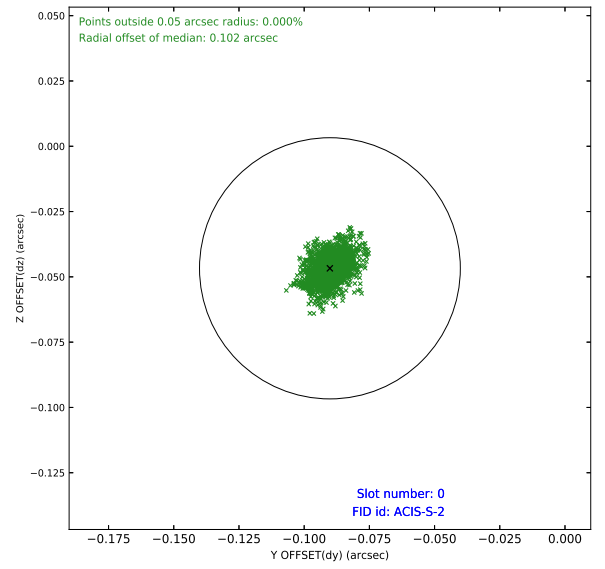
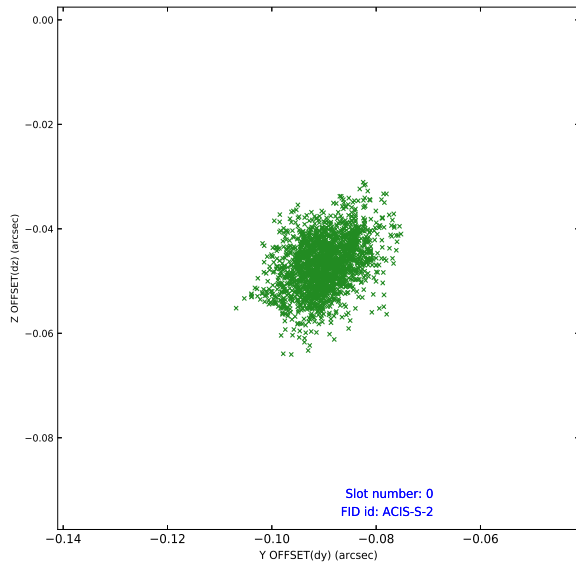


Time (s)

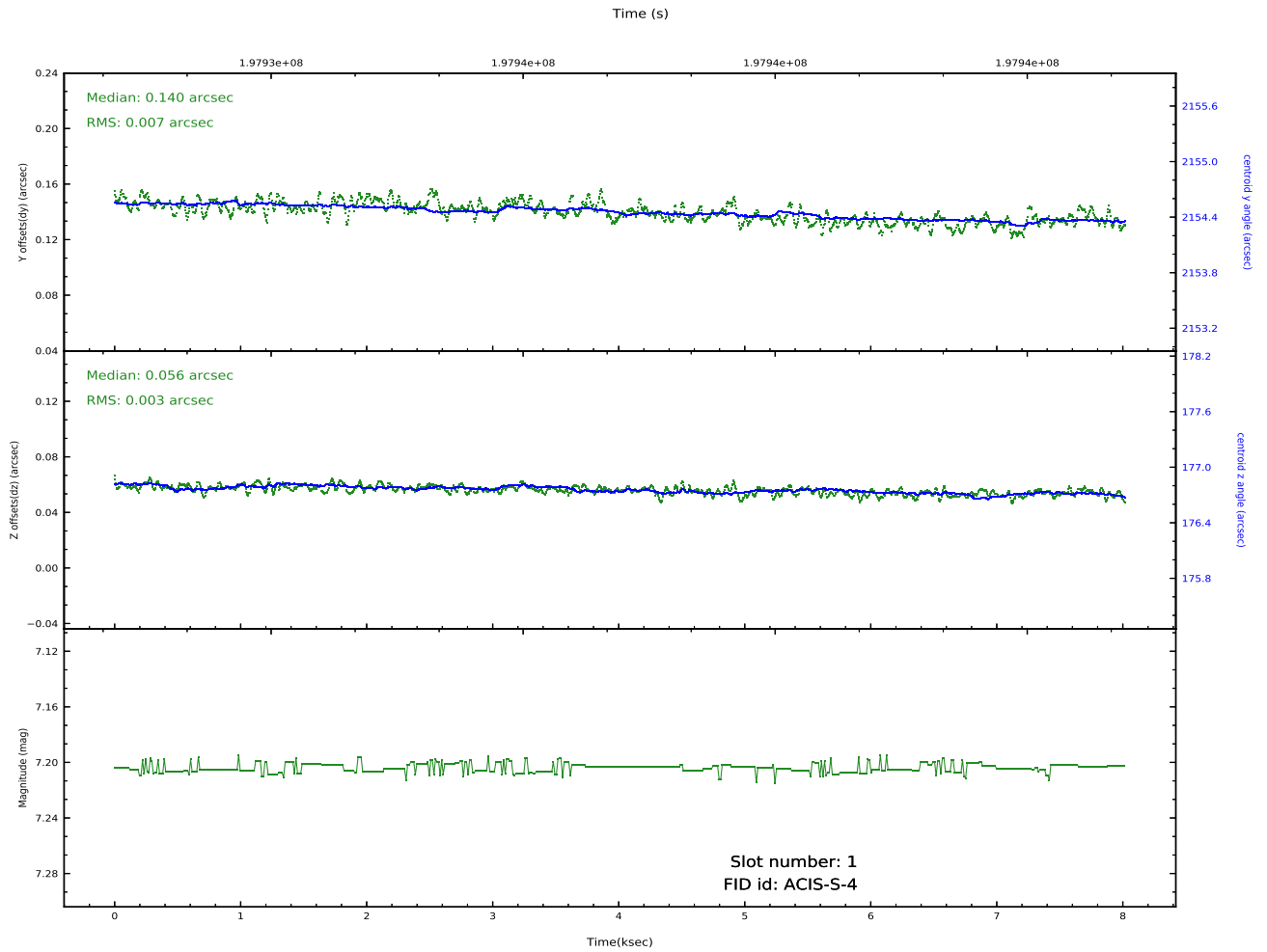
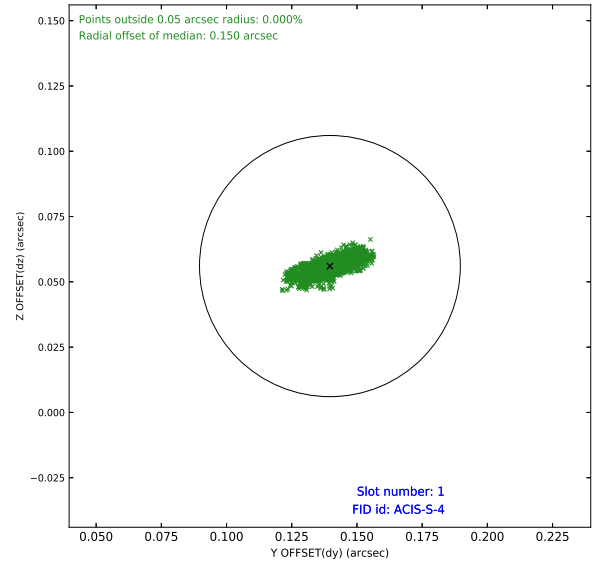
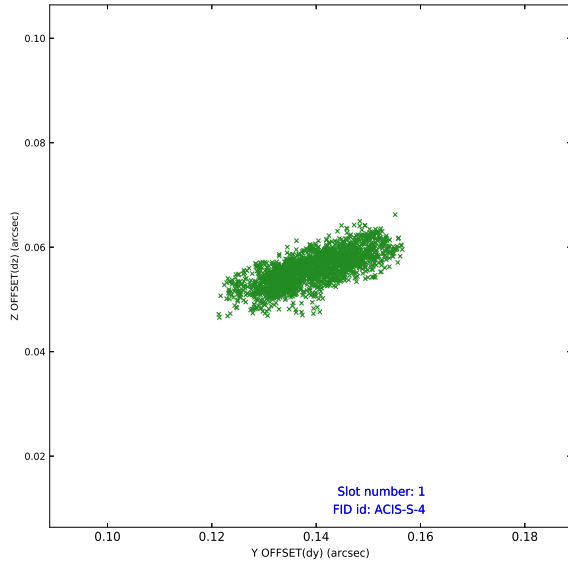


2.5 FID Slots

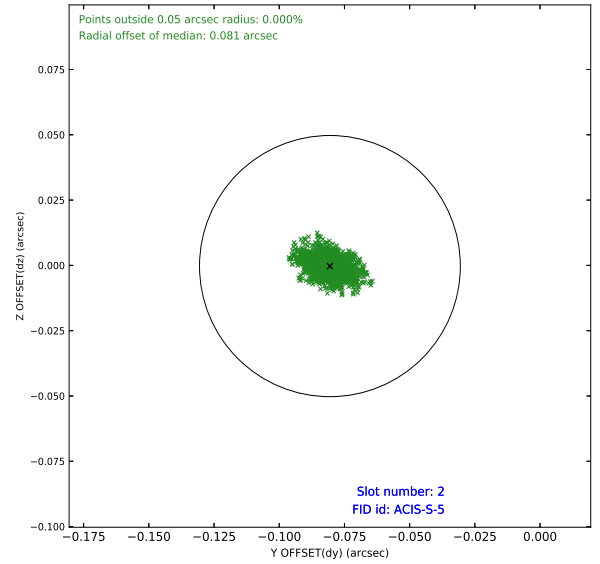
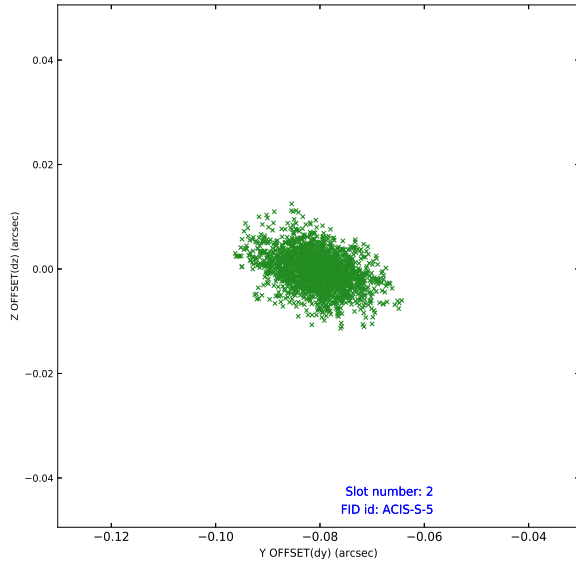
2.5.1 Slot 0



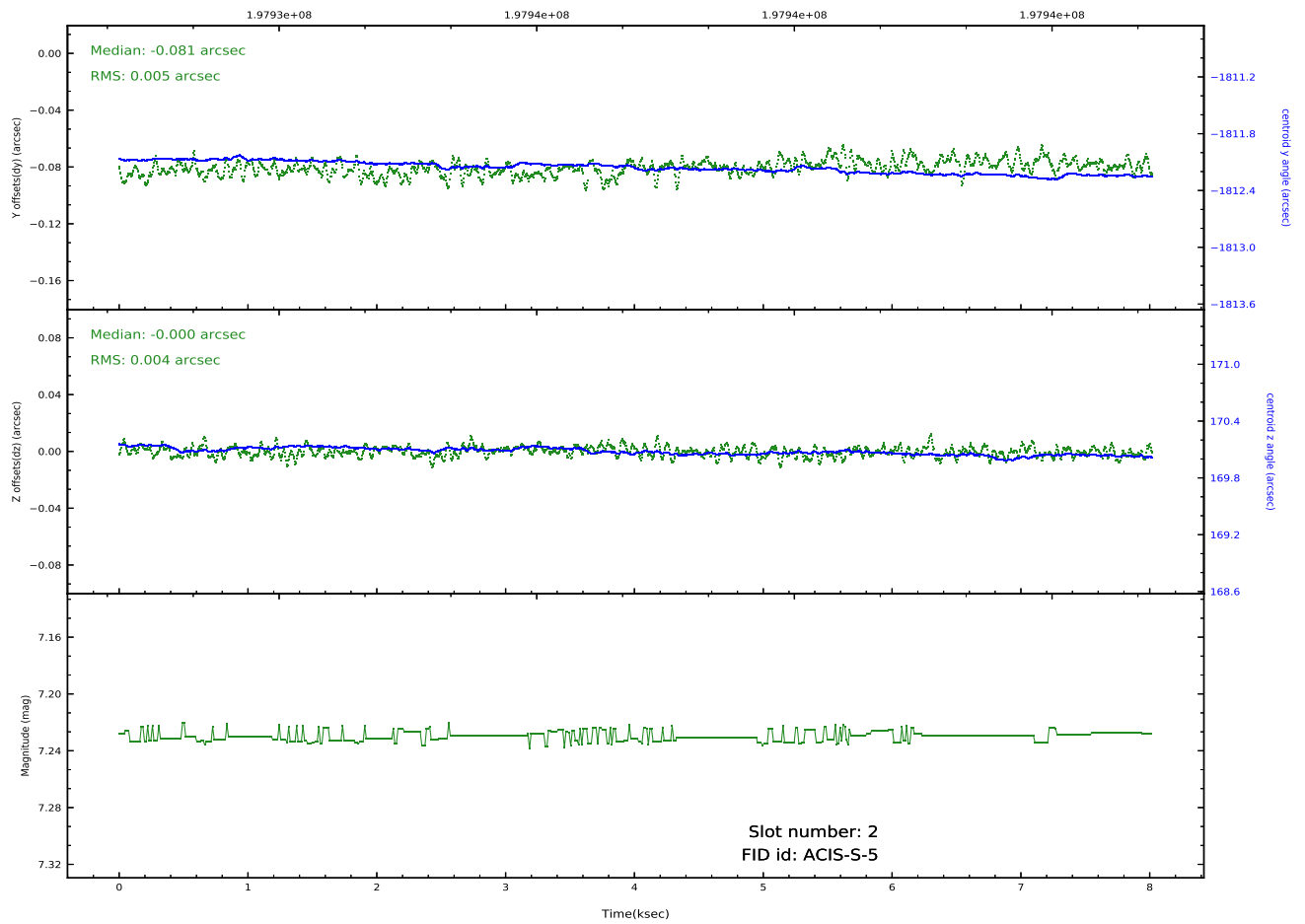
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



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	7.599

A.2 Comments

Window preference met.