

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5590 - L2 Version 4
Chandra X-Ray Center

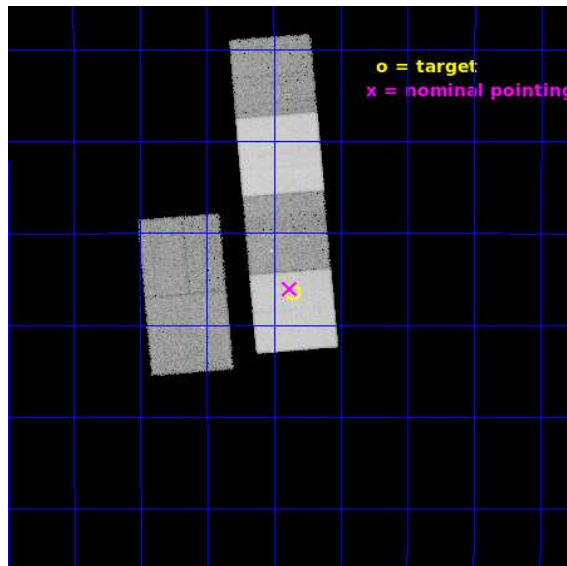
L2 Processing Date : Oct 8 2020

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1 Front

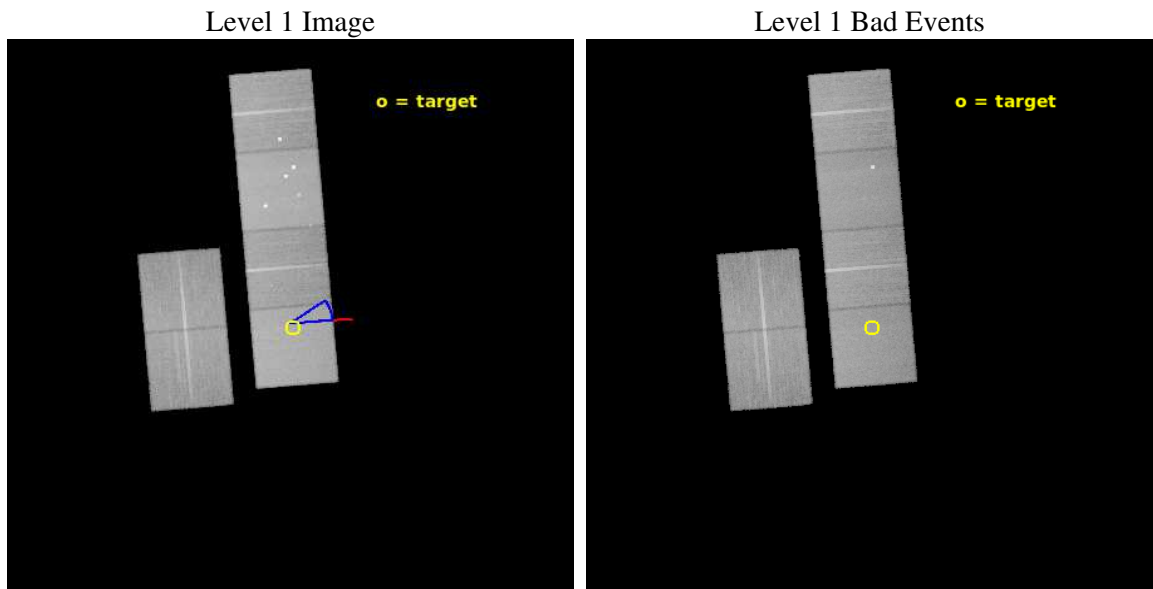
seq_num	500579	Sequence number
obs_id	5590	Observation id
title	Vela-like PSR B1800-21 and its environment	Proposal title
observer	Gordon Garmire	Principal investigator
object	PSR B1800-21	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	270.96375	Observer's specified target RA [deg]
dec_targ	-21.608056	Observer's specified target Dec [deg]
ra_nom	270.969517713	Nominal RA [deg]
dec_nom	-21.600961529059	Nominal Dec [deg]
roll_nom	85.156191419235	Nominal Roll [deg]
revision	4	Processing version of data
ontime	30623.999885917	Sum of GTIs [s]
livetime	30236.220359802	Livetime [s]
ontime2	30620.758995265	Sum of GTIs [s]
ontime3	30623.999885917	Sum of GTIs [s]
ontime4	30623.999885917	Sum of GTIs [s]
ontime5	30623.999885917	Sum of GTIs [s]
ontime6	30623.999885917	Sum of GTIs [s]
ontime7	30623.999885917	Sum of GTIs [s]
l2events	389674	Number of level 2 events



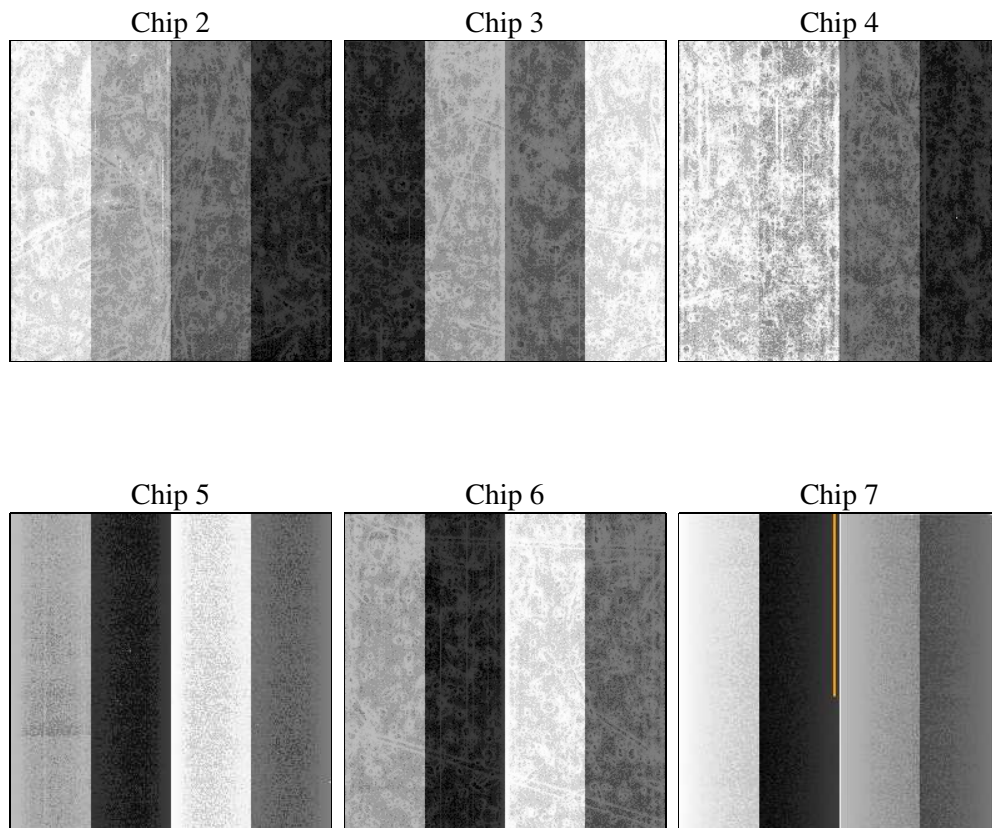
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30500.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	30623.999885917	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	30620.758995265	Sum of GTIs [s]
date	2020-10-08T07:06:39	Date and time of file creation	ontime3	30623.999885917	Sum of GTIs [s]
revision	4	Processing version of data	ontime4	30623.999885917	Sum of GTIs [s]
			ontime5	30623.999885917	Sum of GTIs [s]
			ontime6	30623.999885917	Sum of GTIs [s]
			ontime7	30623.999885917	Sum of GTIs [s]
			l1events	1735931	Number of level 1 events

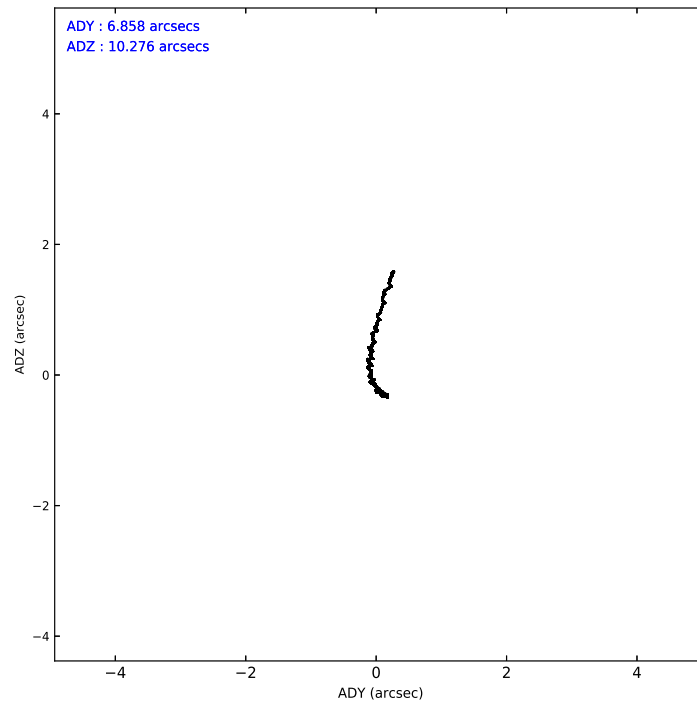
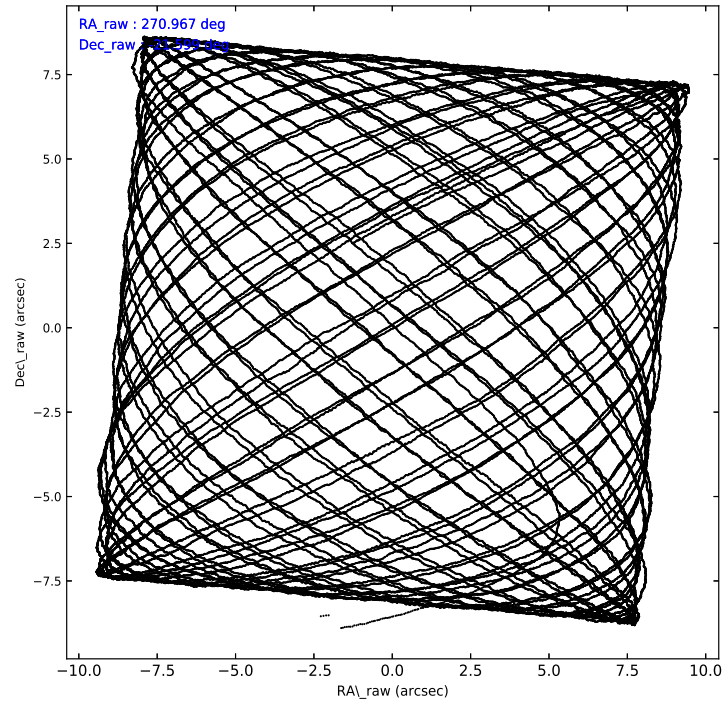
2.1.4 Events

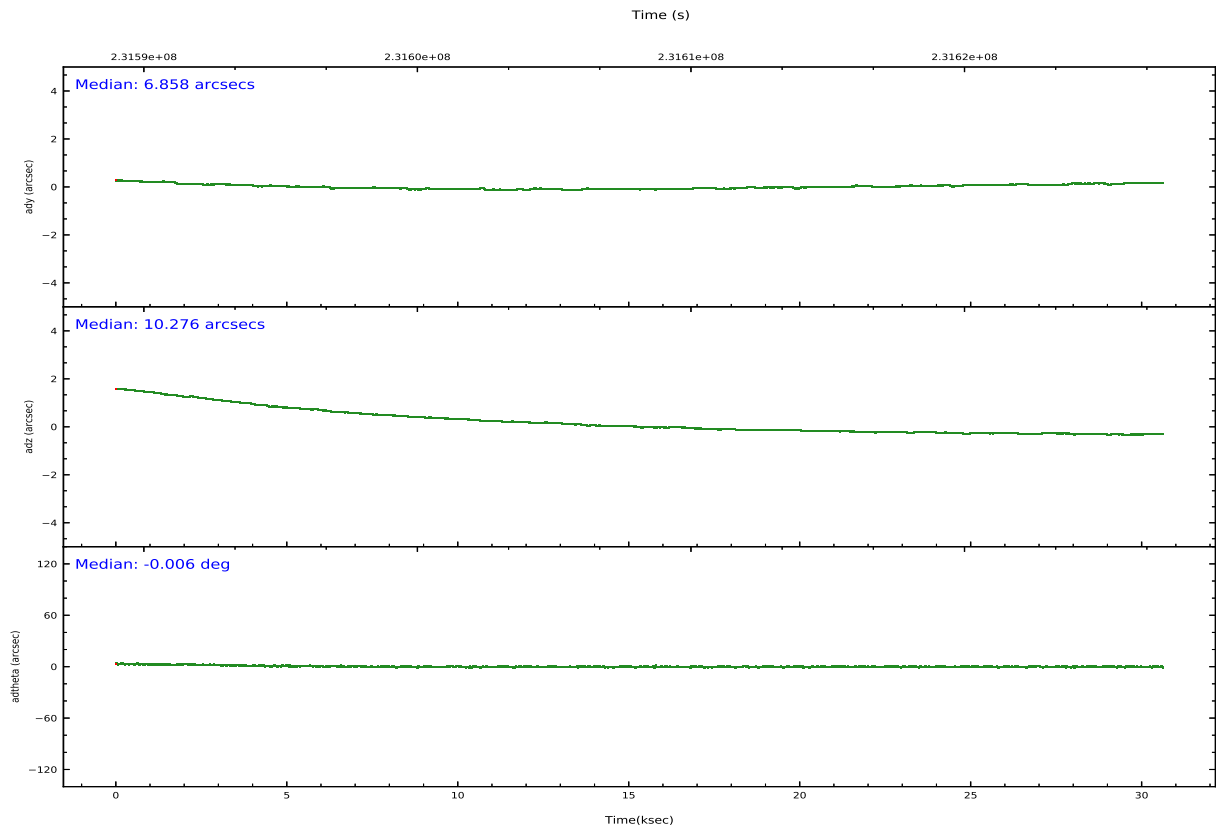
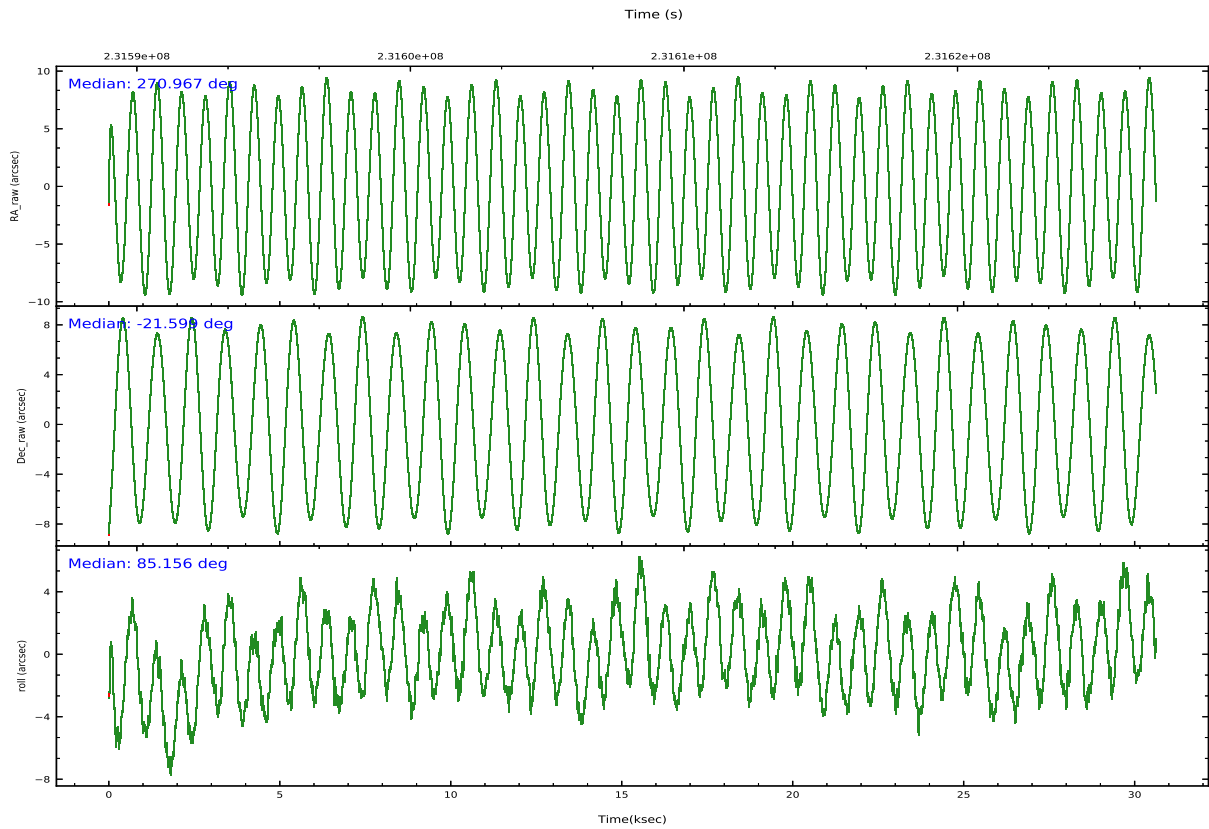
	ccd 2	ccd 3	ccd 4	ccd 5	ccd 6	ccd 7		ccd 2	ccd 3	ccd 4	ccd 5	ccd 6	ccd 7
level 1 events	239333	239563	282084	384795	249436	340720	grade 0 events	14521	14355	21917	24510	15345	13545
rejected events	210006	209987	244212	212102	217942	203551		6%	5%	7%	6%	6%	3%
rejected %	87%	87%	86%	55%	87%	59%	grade 1 events	176	159	296	442	306	350
								0%	0%	0%	0%	0%	0%
							grade 2 events	5953	5775	6615	54068	6930	29419
								2%	2%	2%	14%	2%	8%
							grade 3 events	2740	2814	3248	6537	3065	12880
								1%	1%	1%	1%	1%	3%
							grade 4 events	2736	2872	2919	6195	2987	12761
								1%	1%	1%	1%	1%	3%
							grade 5 events	9560	10904	11102	27008	11374	31698
								3%	4%	3%	7%	4%	9%
							grade 6 events	4747	5198	4799	89472	6145	75831
								1%	2%	1%	23%	2%	22%
							grade 7 events	198900	197486	231188	176563	203284	164236
								83%	82%	81%	45%	81%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-234567	ACIS-234567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	270.979244	270.969517713	Subarray requested	NONE	NONE
[deg] Pointing Dec	-21.623205	-21.600961529059	Alternating exposures requested	N	N
[deg] Pointing Roll	85.005713	85.156191419235	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	70.000000	70.000000			
[deg] Roll tolerance	15.000000	15.000000			
Roll constraint allows 180D rotation	N	N			
[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)	231591309.184000	231589561.70762			
Observation start date	2005-05-04T10:54:05	2005-05-04T10:26:01			
[s] Observation end time (MET)	231621809.184000	231622426.79662			
Observation end date	2005-05-04T19:22:25	2005-05-04T19:33:46			
Read mode	TIMED	TIMED			

2.3 Aspect





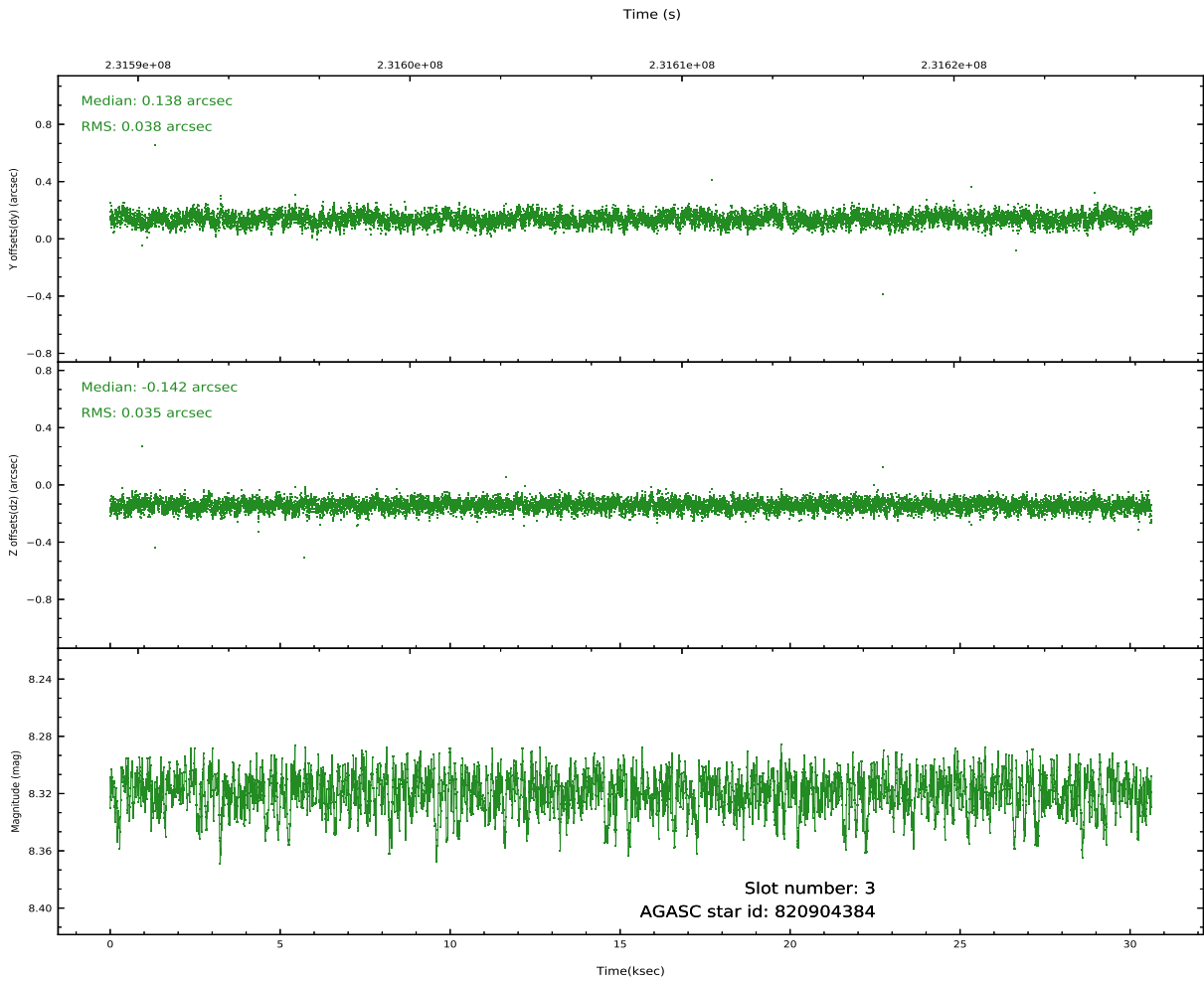
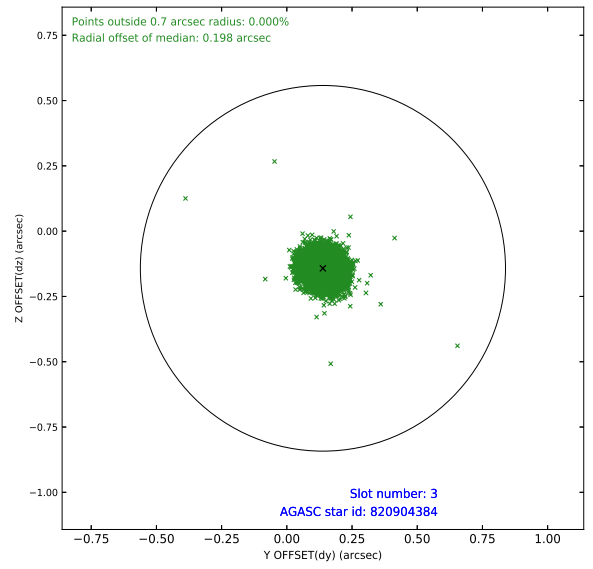
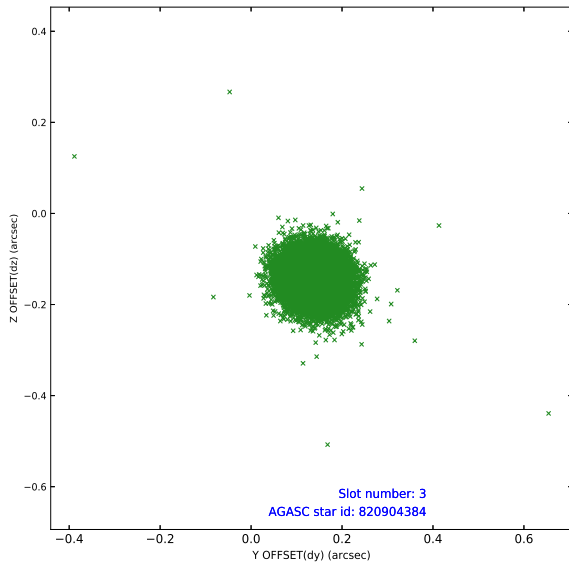
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	7471	1.000	-0.089	-0.063	0.009	0.020	0.000000	0.000000	-759.65	-1731
1	FID		ACIS-S-4	7.21	7471	1.000	0.154	0.059	0.009	0.019	0.000000	0.000000	2153.78	176
2	FID		ACIS-S-5	7.23	7471	1.000	-0.098	0.012	0.008	0.014	0.000000	0.000000	-1812.48	170
3	GUIDE	used	820904384	8.32	14931	1.000	0.138	-0.142	0.054	0.088	270.591600	-21.963127	-1333.21	1182
4	GUIDE	used	820908040	8.96	14938	1.000	0.156	-0.118	0.083	0.131	270.888554	-22.202158	-2102.49	119
5	GUIDE	used	820924960	8.25	14936	1.000	-0.016	-0.057	0.061	0.099	270.663174	-21.508592	317.70	1090
6	GUIDE	used	820910656	8.88	14935	1.000	-0.062	0.108	0.072	0.115	271.369896	-21.142203	1837.90	-1155
7	GUIDE	used	820909640	7.95	14937	1.000	-0.218	0.211	0.058	0.093	271.713313	-21.505332	631.43	-2412

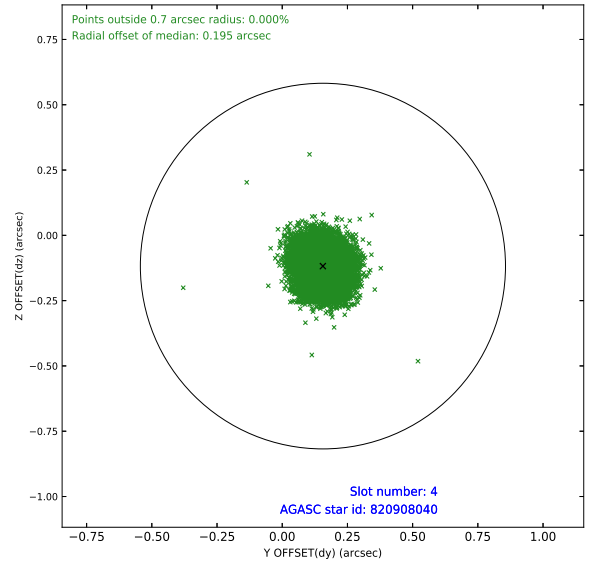
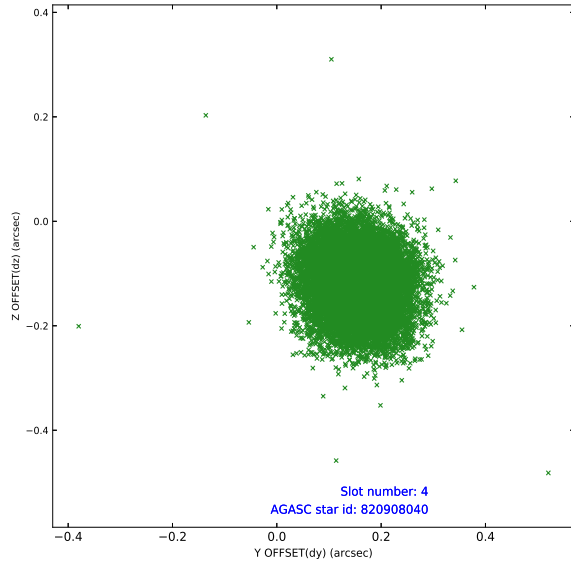
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2.4 Star Slots

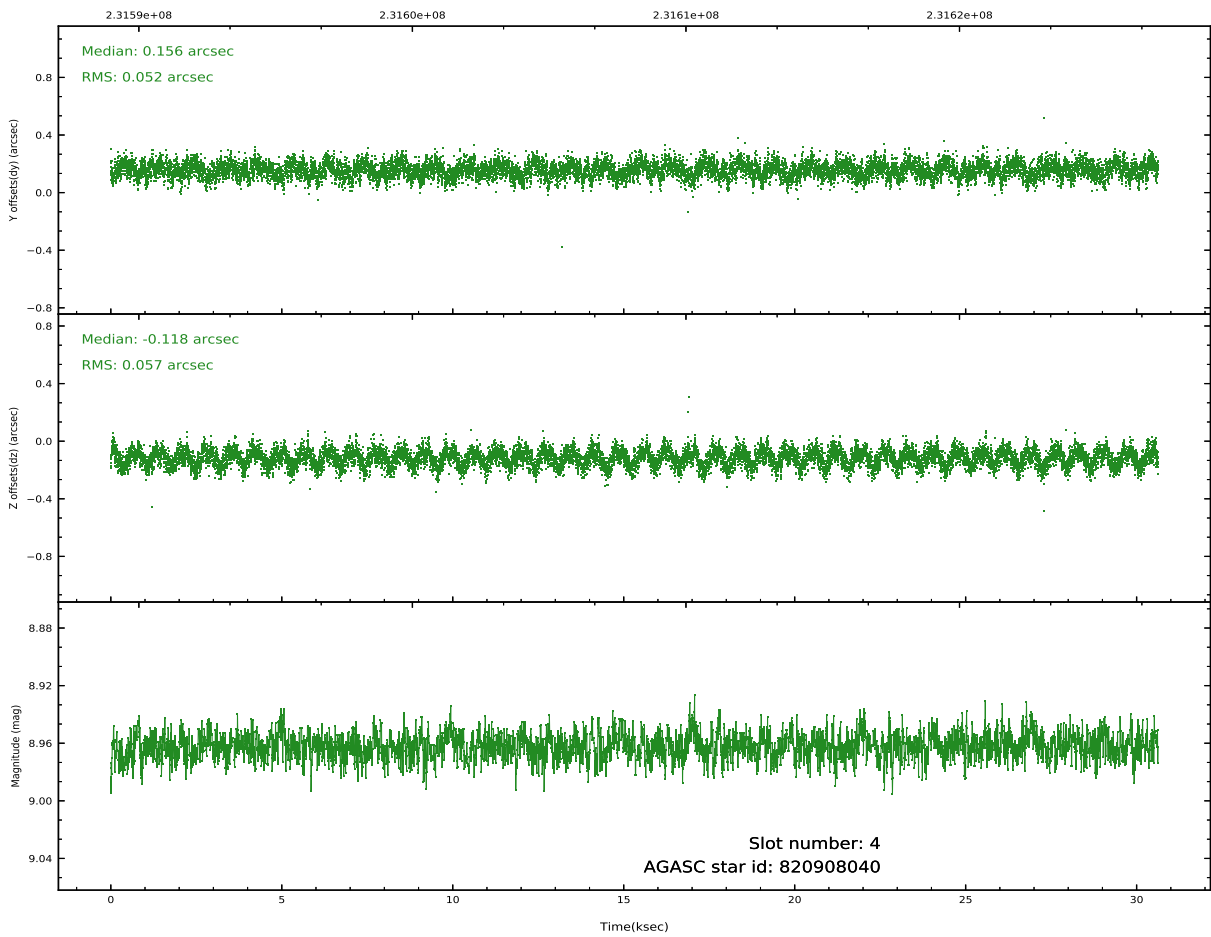
2.4.1 Slot 3



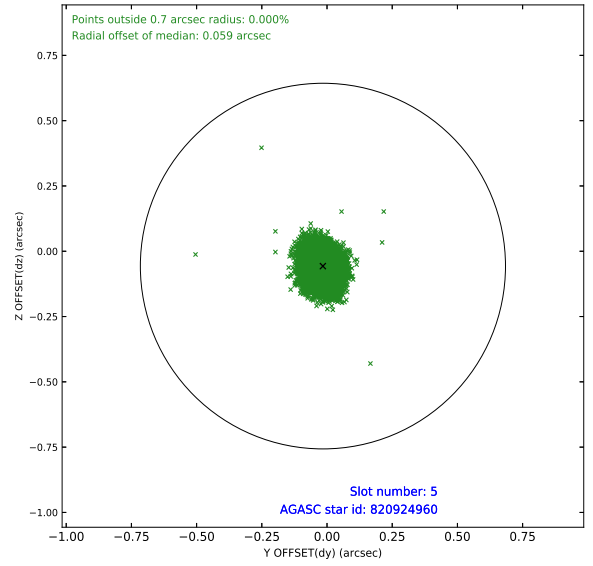
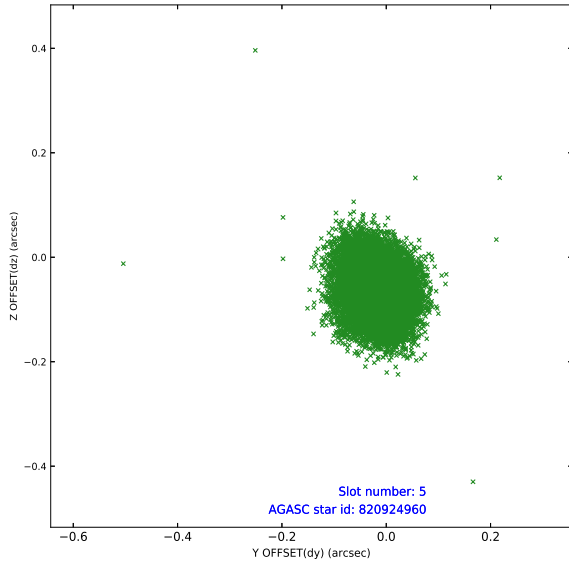
2.4.2 Slot 4



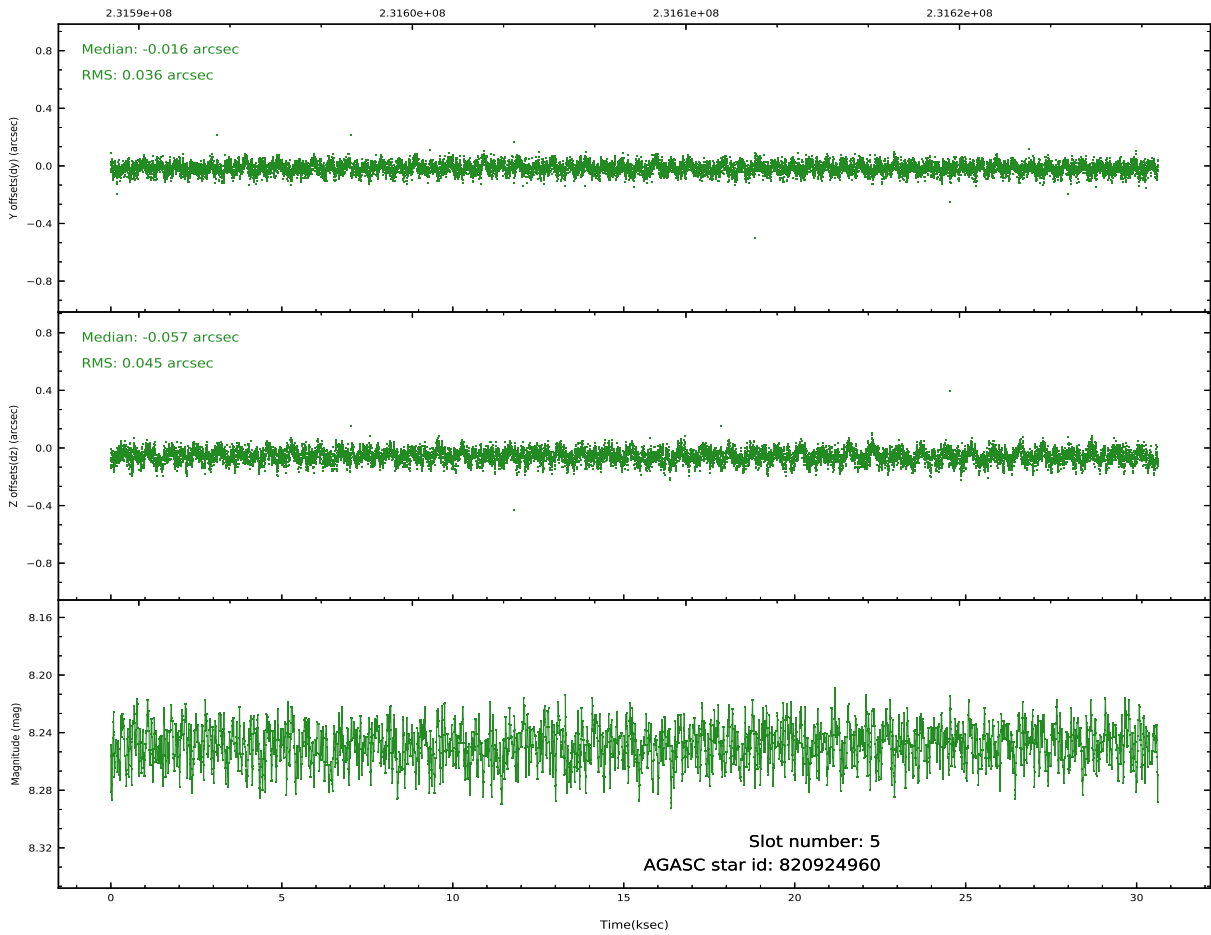
Time (s)



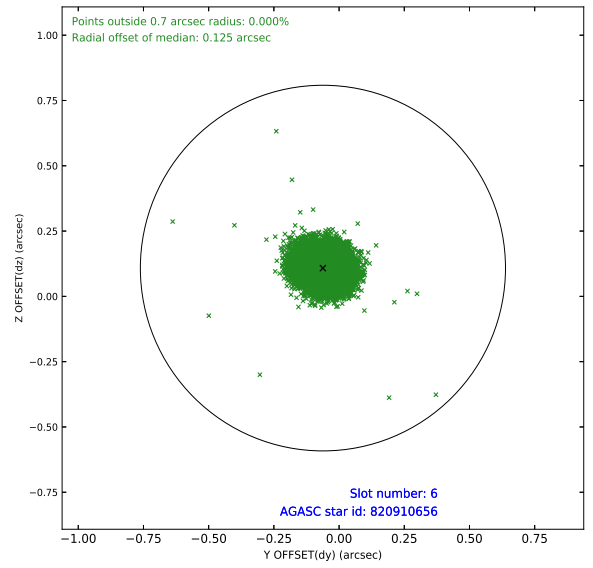
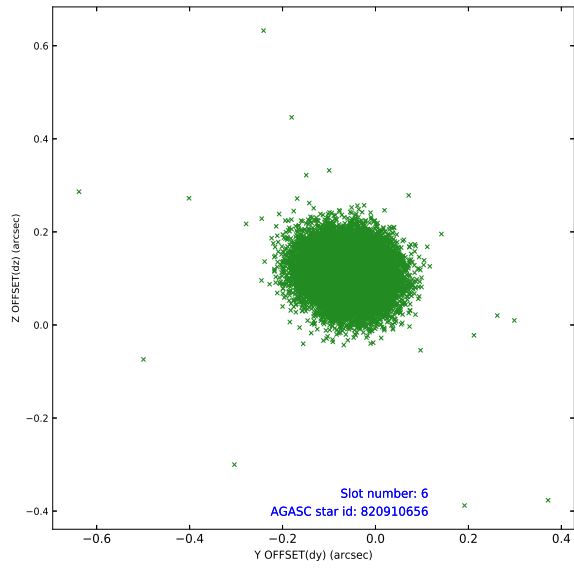
2.4.3 Slot 5



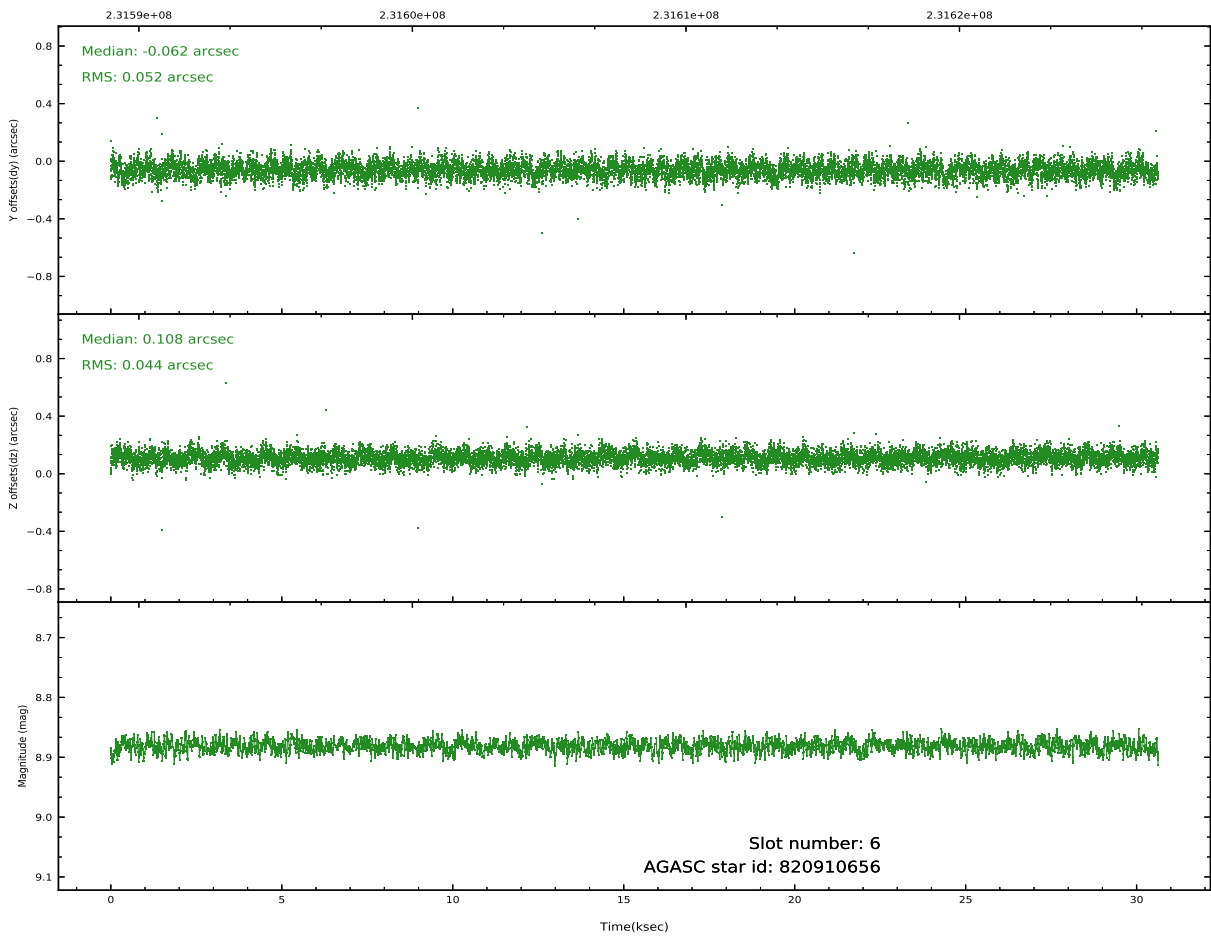
Time (s)



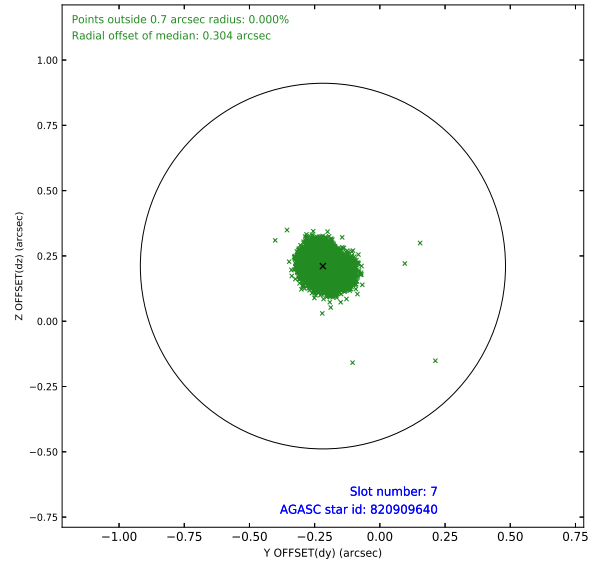
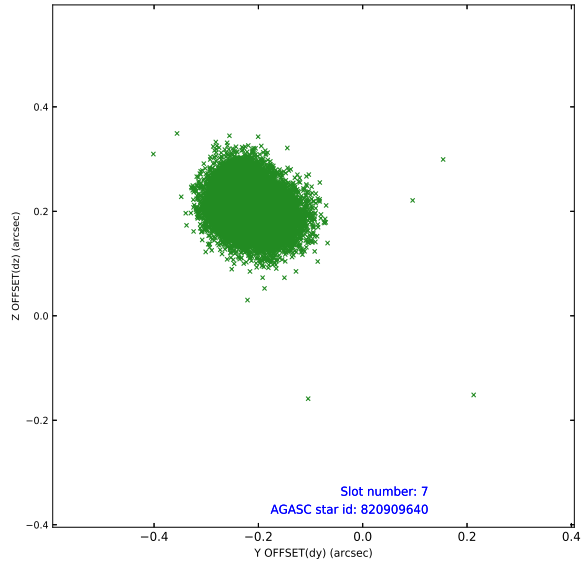
2.4.4 Slot 6



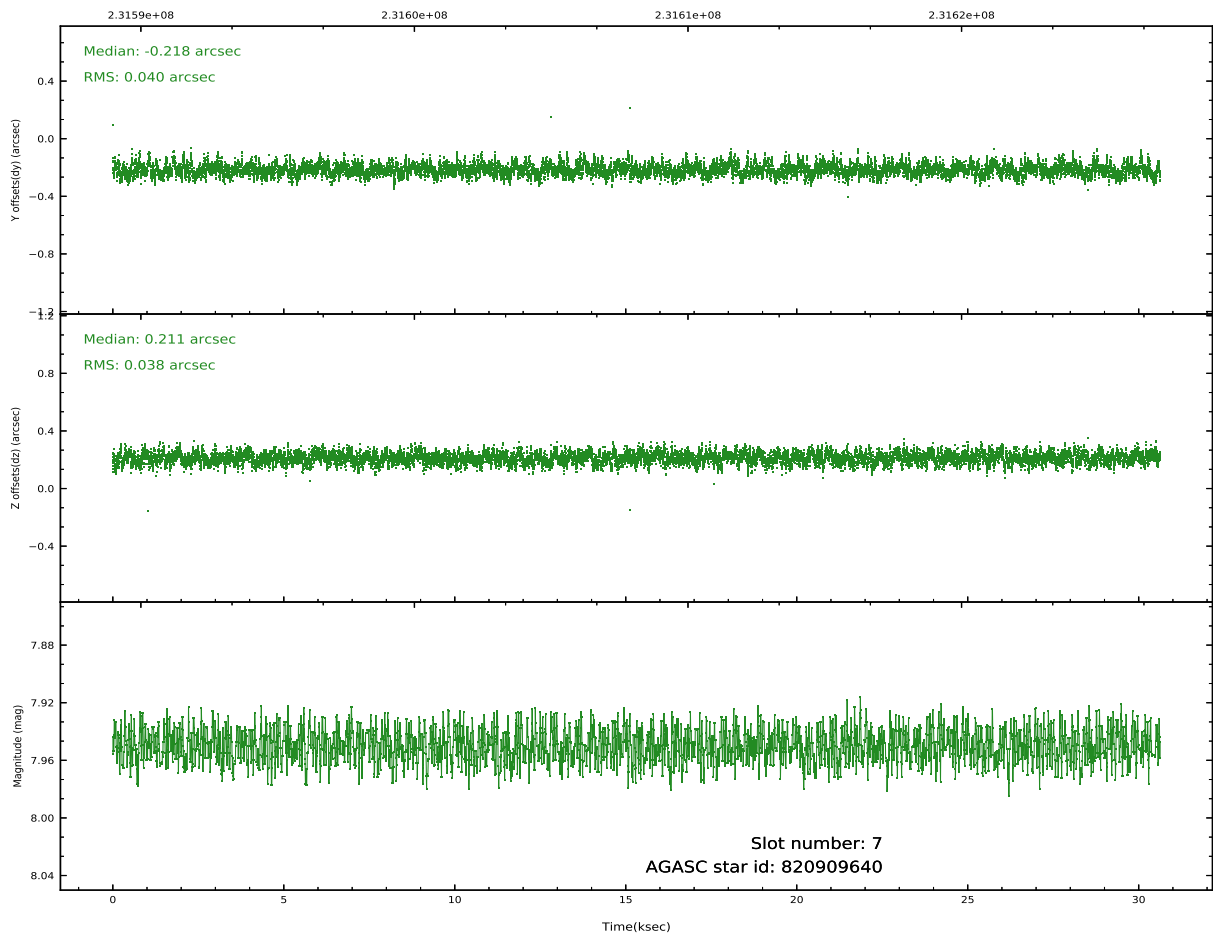
Time (s)



2.4.5 Slot 7

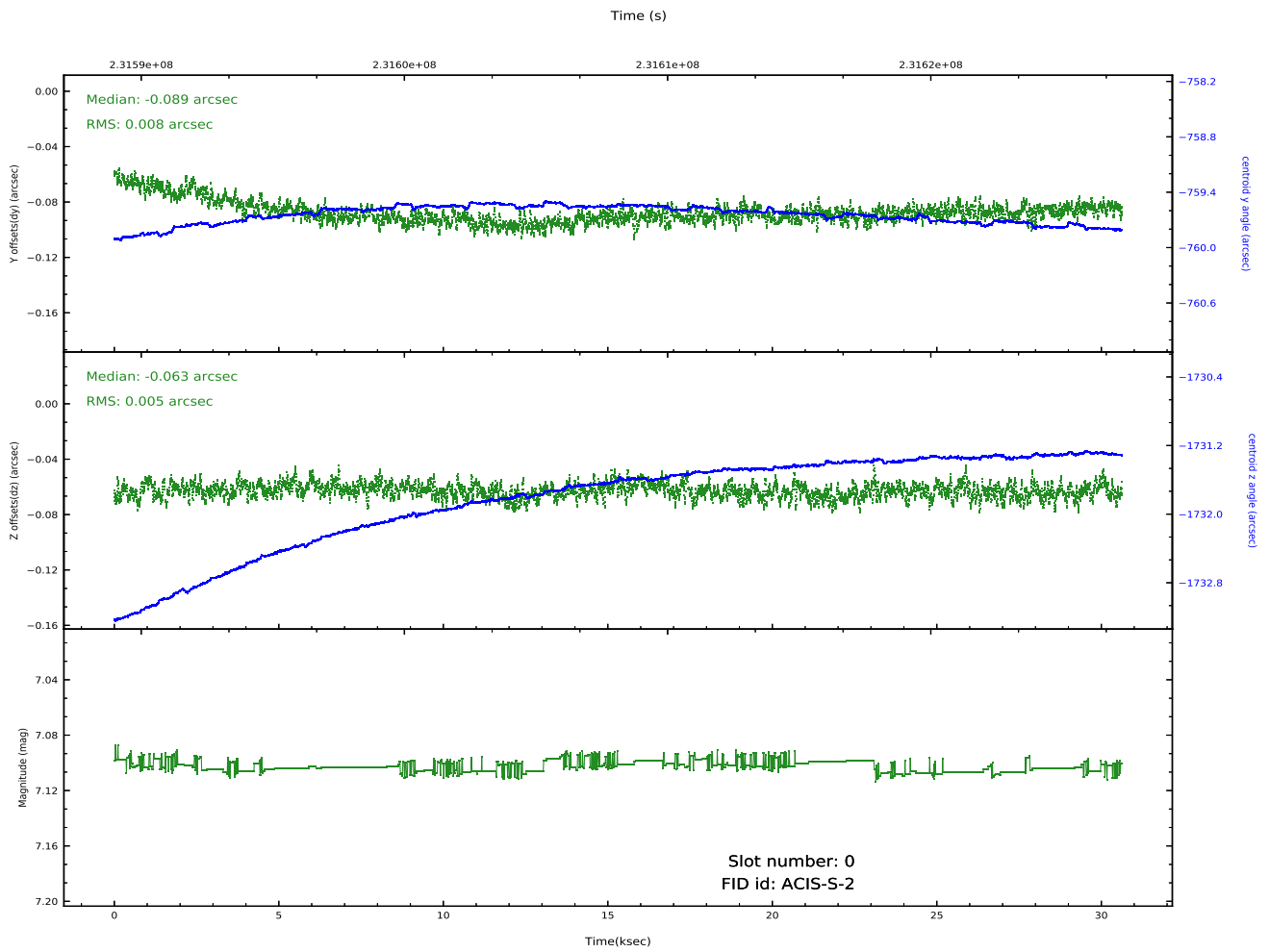
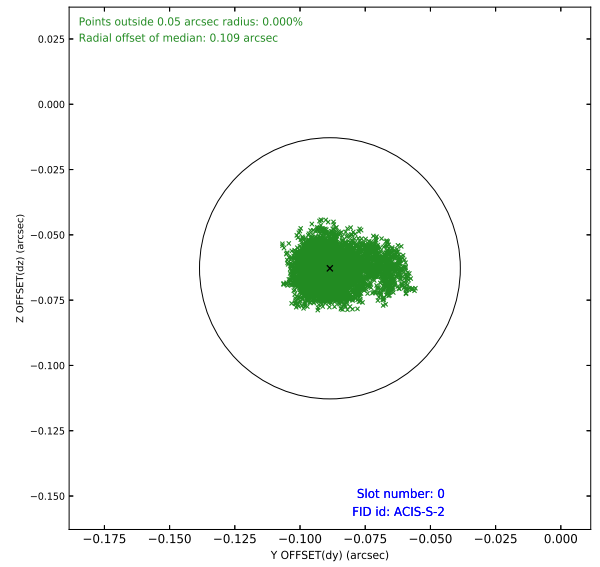
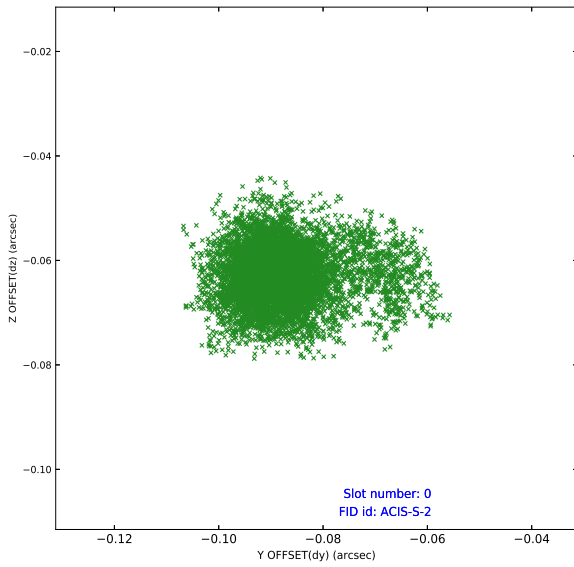


Time (s)

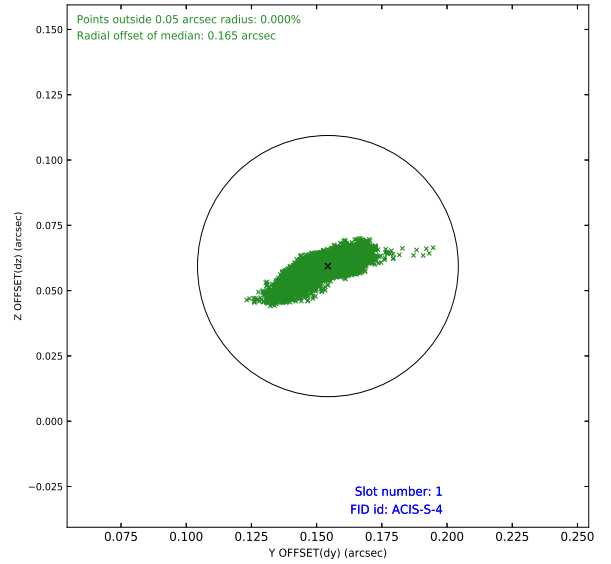
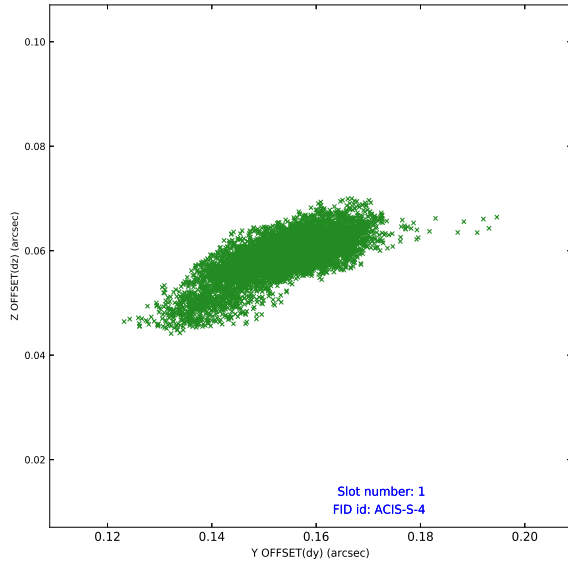


2.5 FID Slots

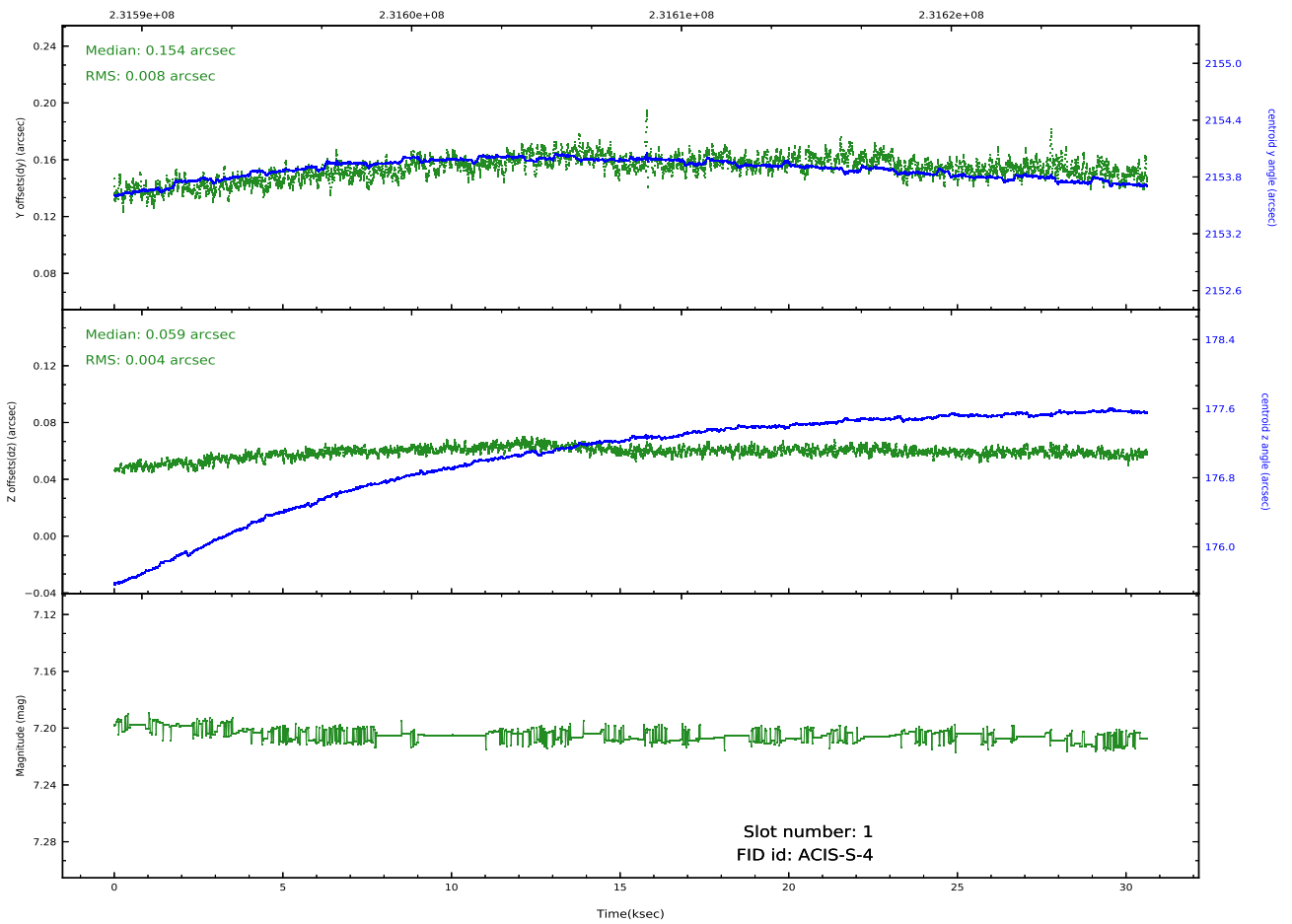
2.5.1 Slot 0



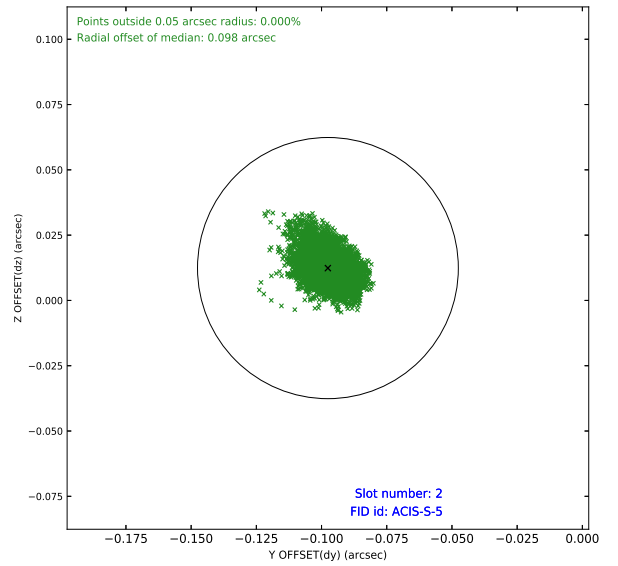
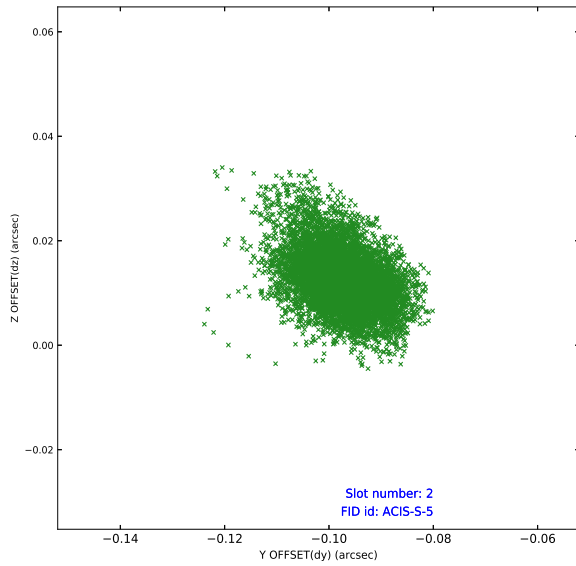
2.5.2 Slot 1



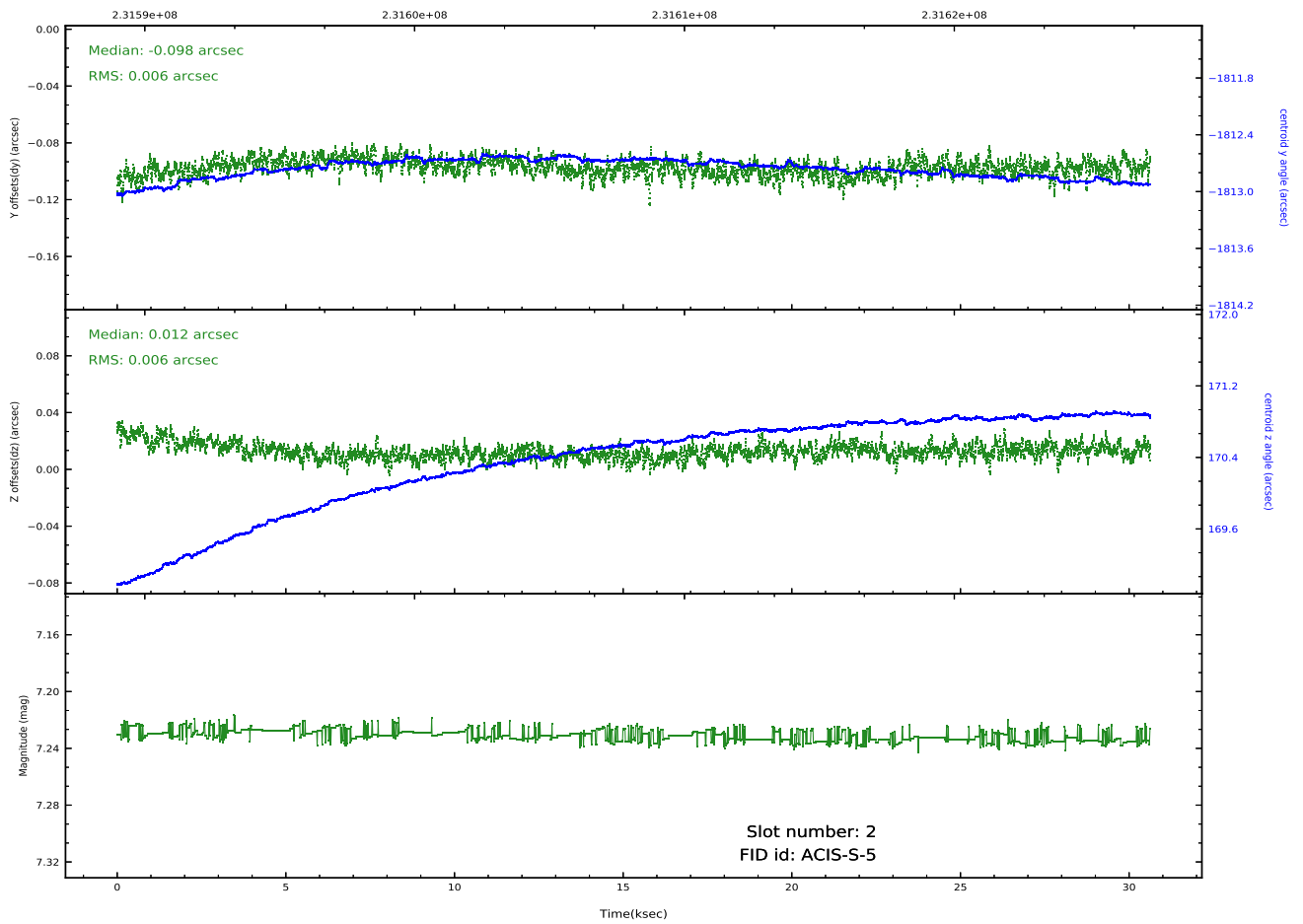
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.62399

A.2 Comments

Roll constraint not satisfied: roll is a fraction of a degree outside roll constraint tolerance.