

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4481 - L2 Version 4
Chandra X-Ray Center

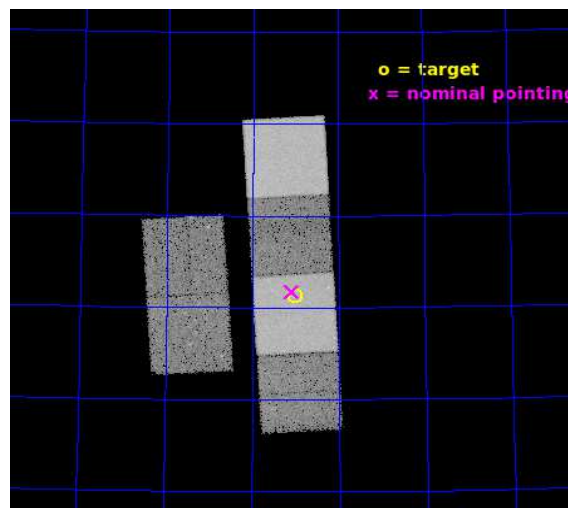
L2 Processing Date : Sep 26 2020

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1 Front

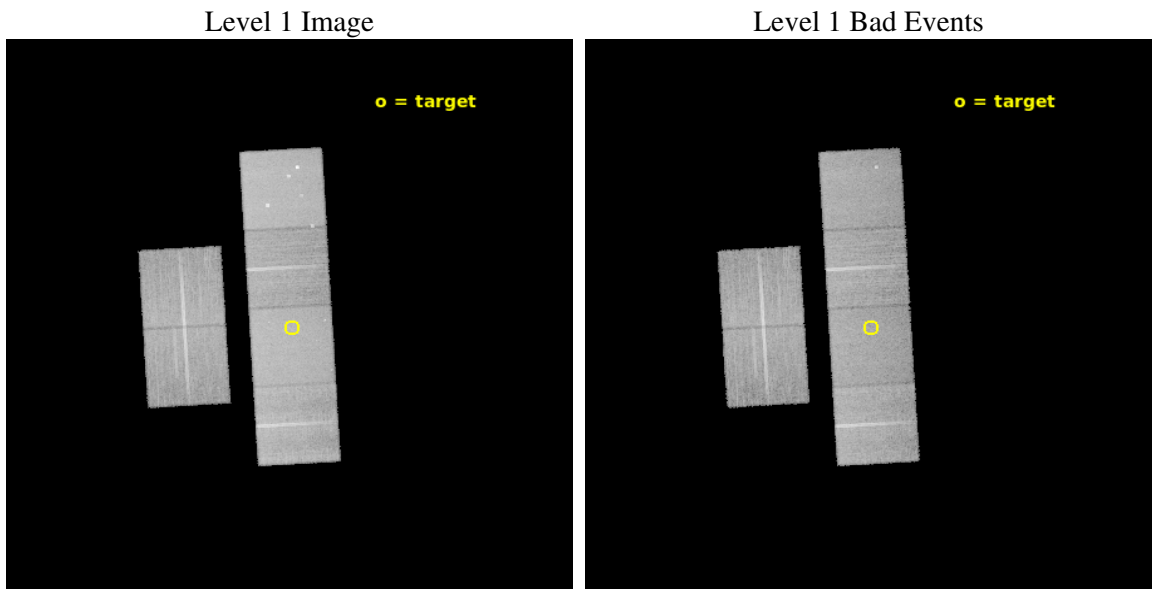
seq_num	200250	Sequence number
obs_id	4481	Observation id
title	The Early Onset of X-ray Emission from Planetary Nebulae	Proposal
observer	Joel Kastner	Principal investigator
object	NGC 40	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	3.254167	Observer's specified target RA [deg]
dec_targ	72.521944	Observer's specified target Dec [deg]
ra_nom	3.2713857660917	Nominal RA [deg]
dec_nom	72.529100221124	Nominal Dec [deg]
roll_nom	86.675227780562	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20143.594498694	Sum of GTIs [s]
livetime	19888.524176135	Livetime [s]
ontime2	20143.635538697	Sum of GTIs [s]
ontime3	20143.471378684	Sum of GTIs [s]
ontime5	20143.553458691	Sum of GTIs [s]
ontime6	20143.512418687	Sum of GTIs [s]
ontime7	20143.594498694	Sum of GTIs [s]
ontime8	20143.430338711	Sum of GTIs [s]
l2events	236735	Number of level 2 events



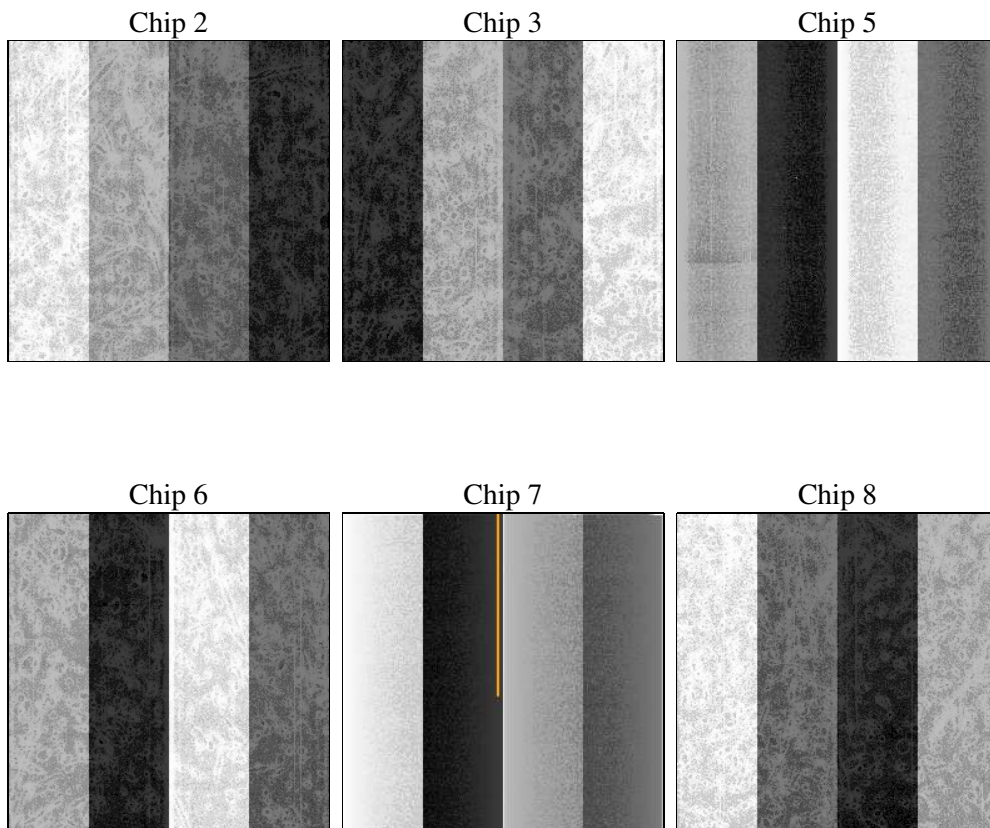
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	20143.594498694	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	20143.635538697	Sum of GTIs [s]
date	2020-09-26T12:08:26	Date and time of file creation	ontime3	20143.471378684	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	20143.553458691	Sum of GTIs [s]
			ontime6	20143.512418687	Sum of GTIs [s]
			ontime7	20143.594498694	Sum of GTIs [s]
			ontime8	20143.430338711	Sum of GTIs [s]
			l1events	1043725	Number of level 1 events

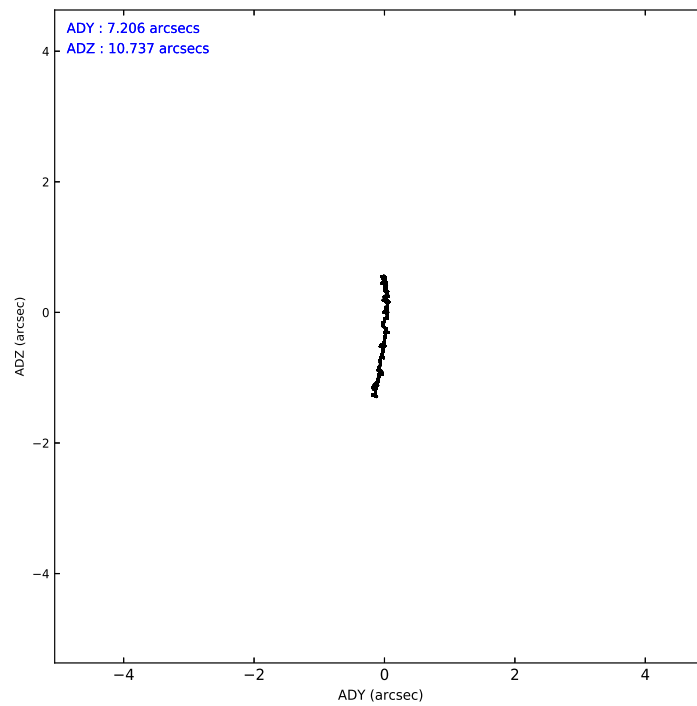
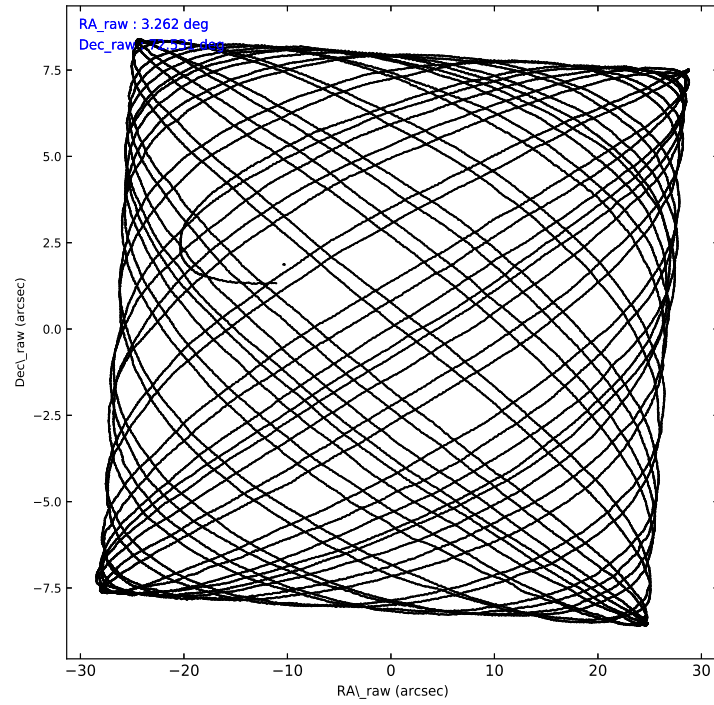
2.1.4 Events

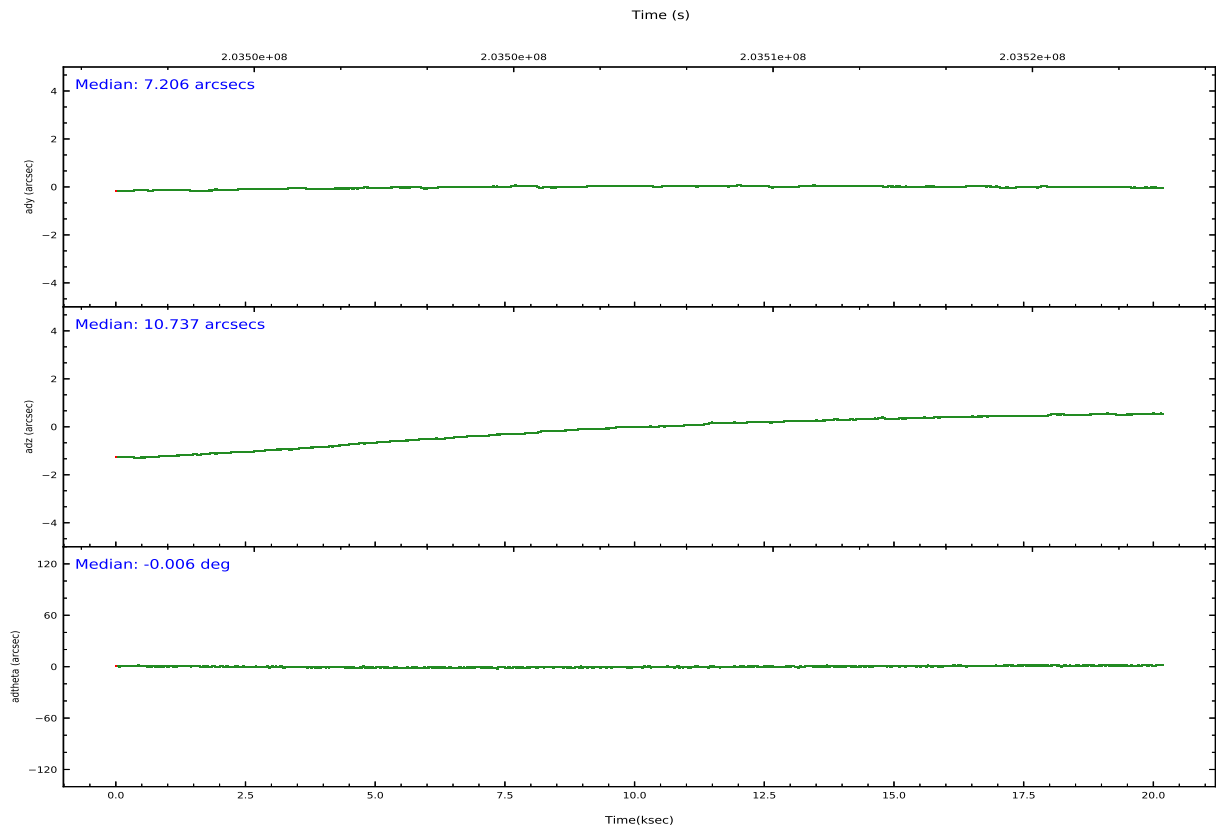
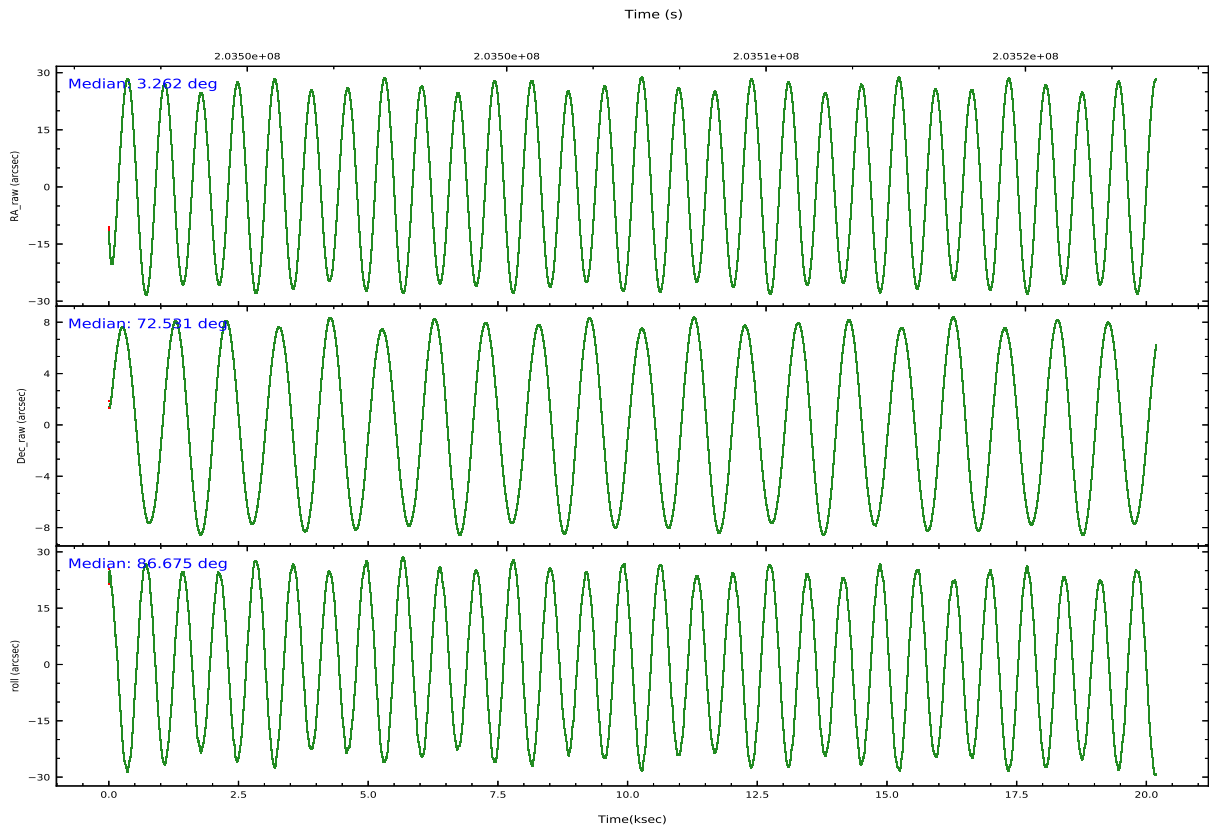
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	153106	140711	219552	146517	198961	184878	grade 0 events	7953	8066	10974	6997	7742	12877
rejected events	135566	123178	118829	128960	115417	145089		5%	5%	4%	4%	3%	6%
rejected %	88%	87%	54%	88%	58%	78%	grade 1 events	85	88	452	72	178	145
								0%	0%	0%	0%	0%	0%
							grade 2 events	3543	3257	29530	3607	16796	8635
								2%	2%	13%	2%	8%	4%
							grade 3 events	1645	1745	4152	1739	7594	4013
								1%	1%	1%	1%	3%	2%
							grade 4 events	1635	1614	3737	1701	7375	3881
								1%	1%	1%	1%	3%	2%
							grade 5 events	5649	6496	15895	6795	18593	8927
								3%	4%	7%	4%	9%	4%
							grade 6 events	2767	2852	52359	3517	44075	10394
								1%	2%	23%	2%	22%	5%
							grade 7 events	129829	116593	102453	122089	96608	136006
								84%	82%	46%	83%	48%	73%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	3.303392	3.2713857660917	Subarray requested	NONE	NONE
[deg] Pointing Dec	72.507188	72.529100221124	Alternating exposures requested	N	N
[deg] Pointing Roll	86.477094	86.675227780562	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	203497519.184000	203496466.02115			
Observation start date	2004-06-13T07:04:15	2004-06-13T06:47:46			
[s] Observation end time (MET)	203517519.184000	203518274.43462			
Observation end date	2004-06-13T12:37:35	2004-06-13T12:51:14			
Read mode	TIMED	TIMED			

2.3 Aspect





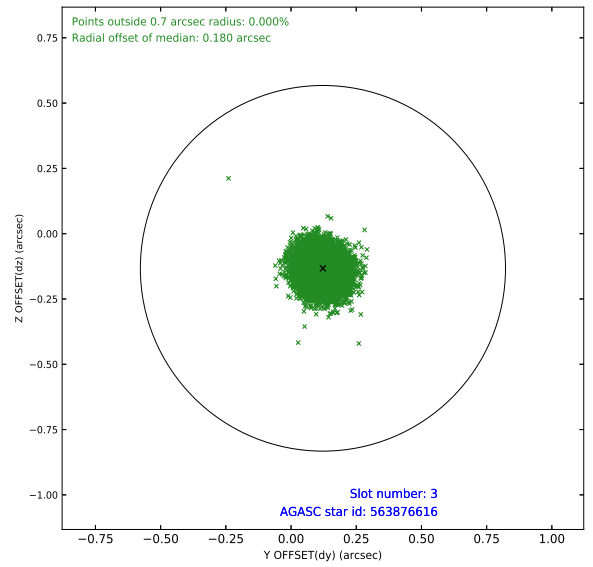
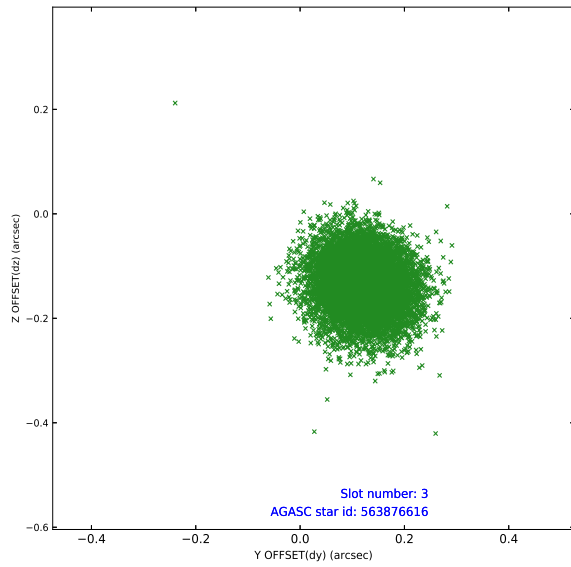
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	4925	1.000	0.006	-0.088	0.027	0.048	0.000000	0.000000	936.12	-1727
1	FID		ACIS-S-4	7.20	4925	1.000	0.098	0.064	0.018	0.037	0.000000	0.000000	2153.69	176
2	FID		ACIS-S-5	7.23	4925	1.000	-0.131	0.037	0.011	0.015	0.000000	0.000000	-1812.68	170
3	GUIDE	used	563876616	9.19	9843	1.000	0.122	-0.133	0.073	0.119	3.202309	72.464947	-158.13	100
4	GUIDE	used	563881704	8.65	9841	1.000	-0.083	-0.048	0.060	0.098	2.231330	72.827527	1091.18	1209
5	GUIDE	used	563884680	9.10	9840	1.000	-0.017	0.038	0.066	0.107	2.193111	73.018551	1776.64	1279
6	GUIDE	used	563885032	7.20	9847	1.000	-0.097	0.106	0.057	0.097	4.825464	73.122582	2329.44	-1449
7	GUIDE	used	563883920	9.01	9835	1.000	0.071	0.033	0.084	0.143	1.145559	71.968522	-2039.97	2283

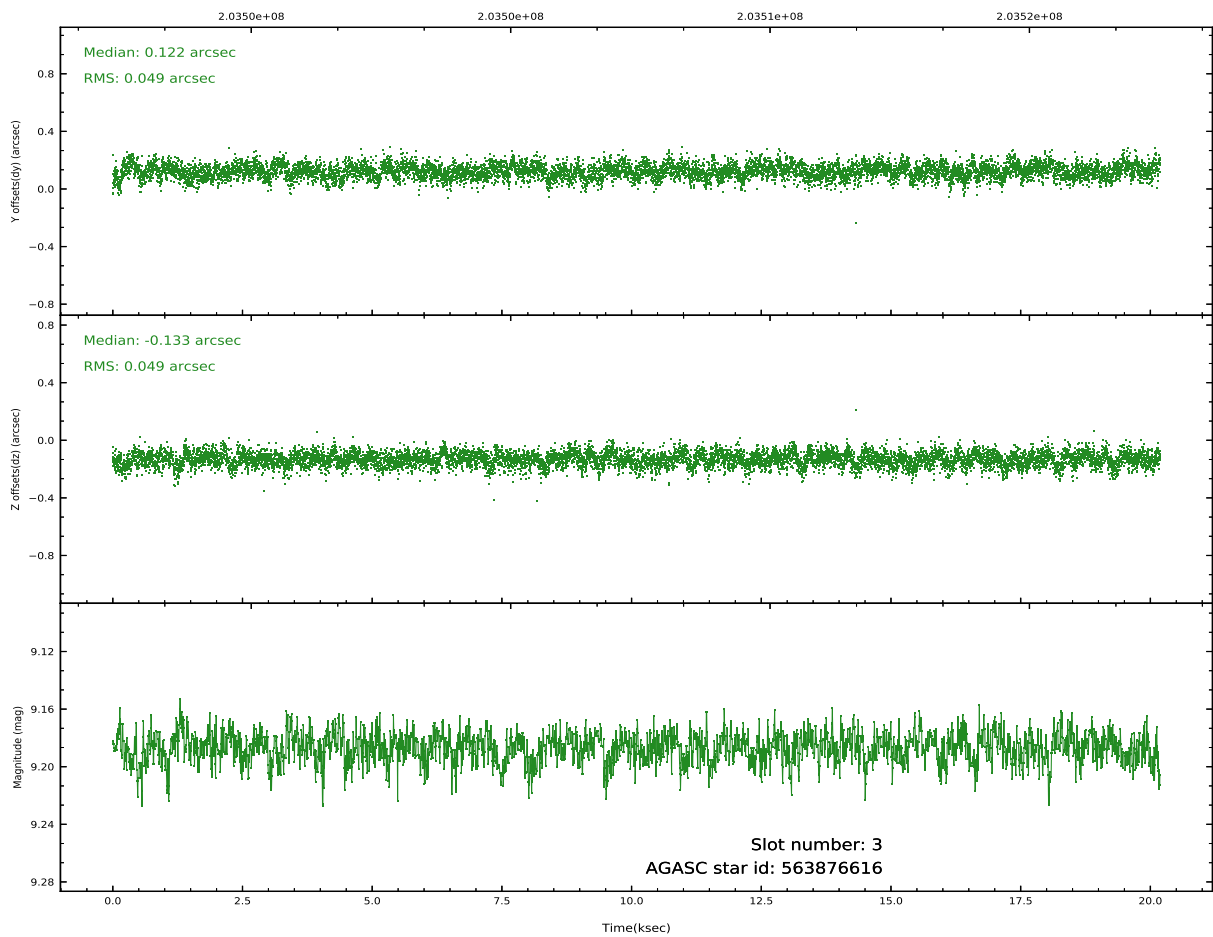
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2.4 Star Slots

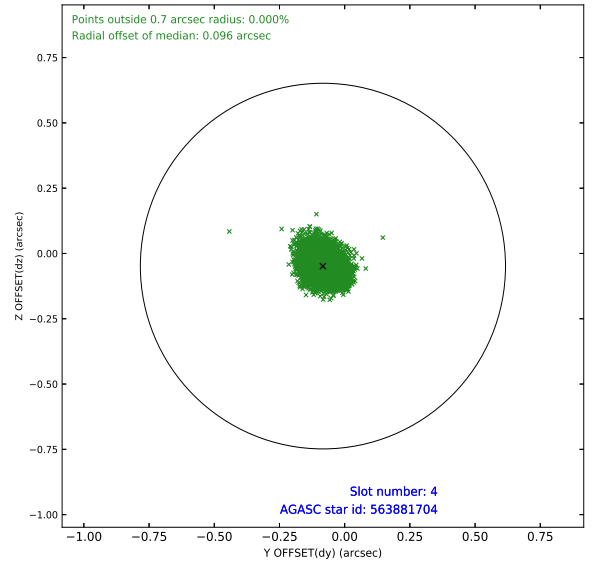
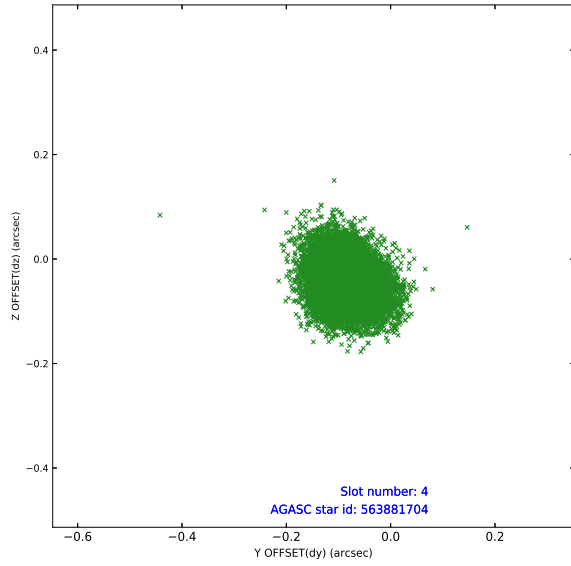
2.4.1 Slot 3



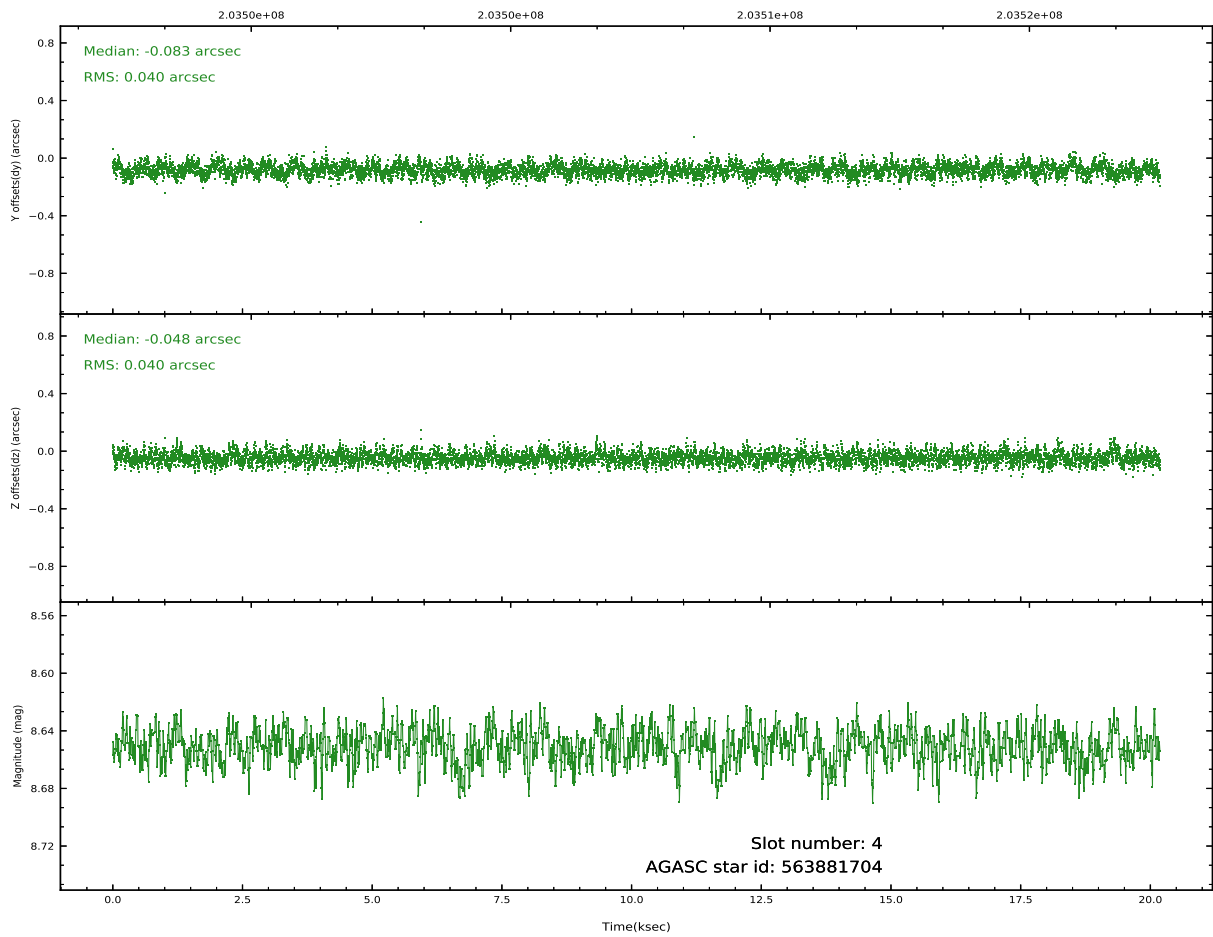
Time (s)



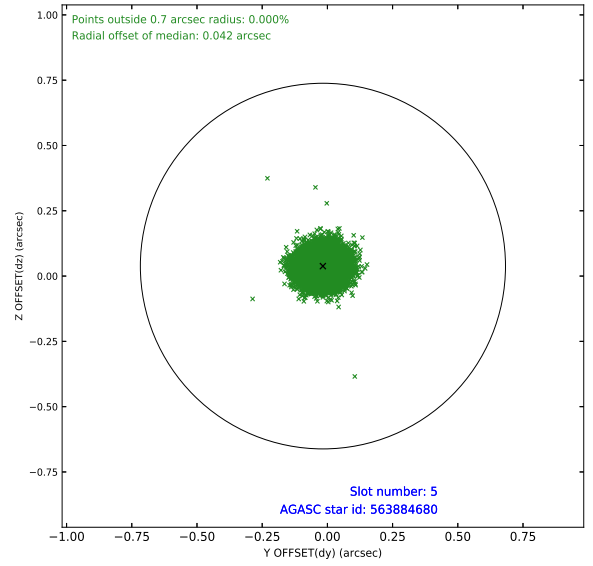
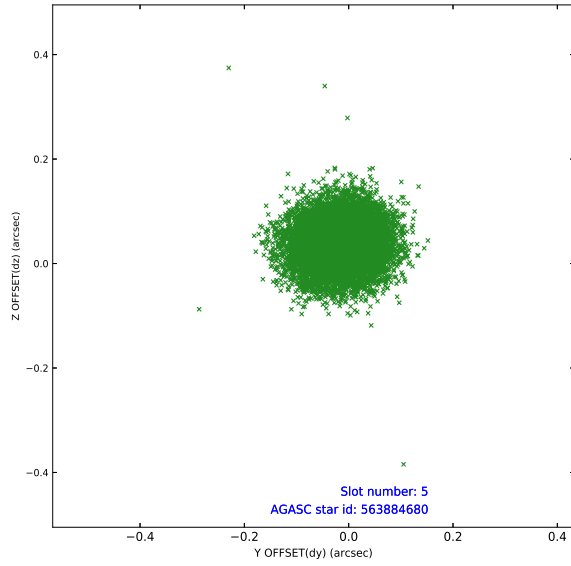
2.4.2 Slot 4



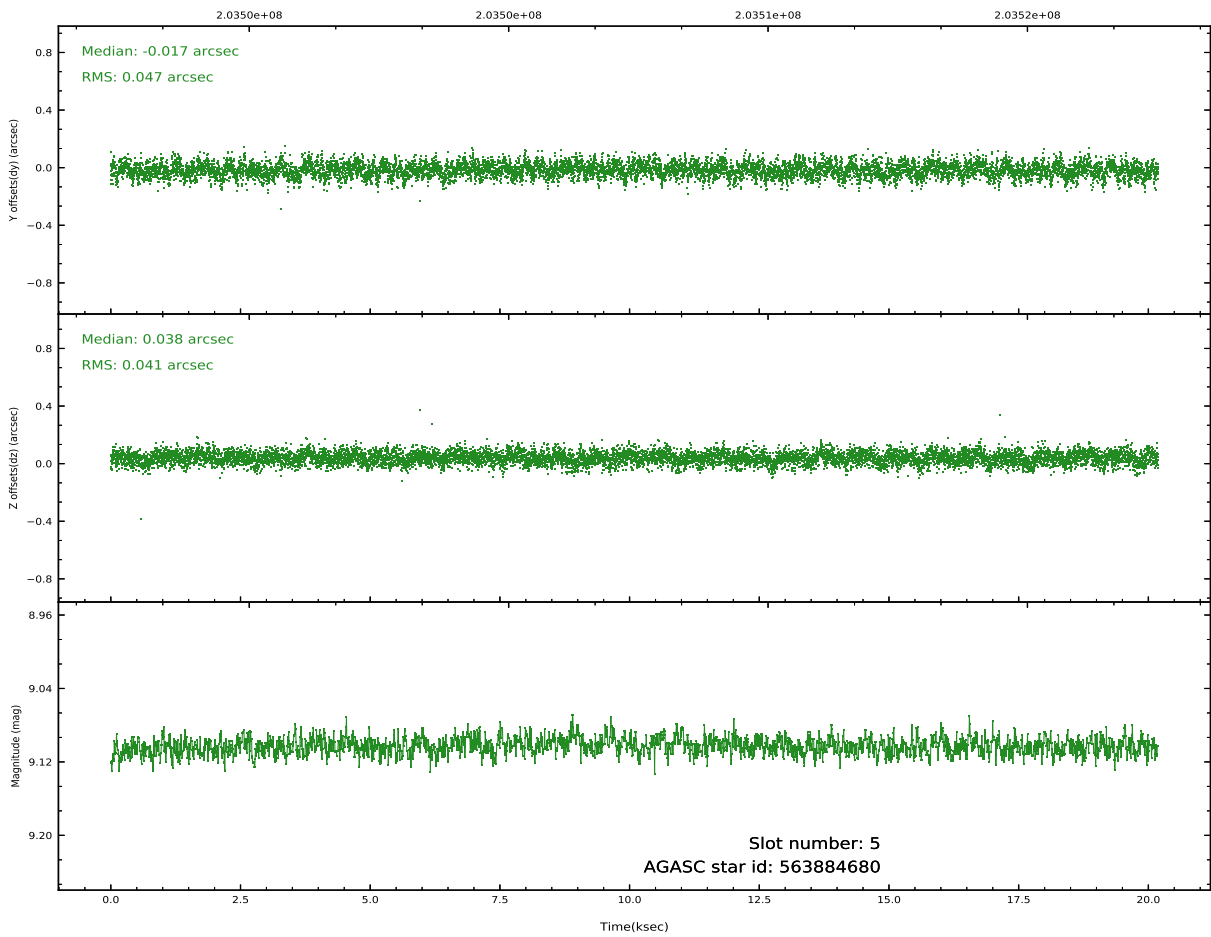
Time (s)



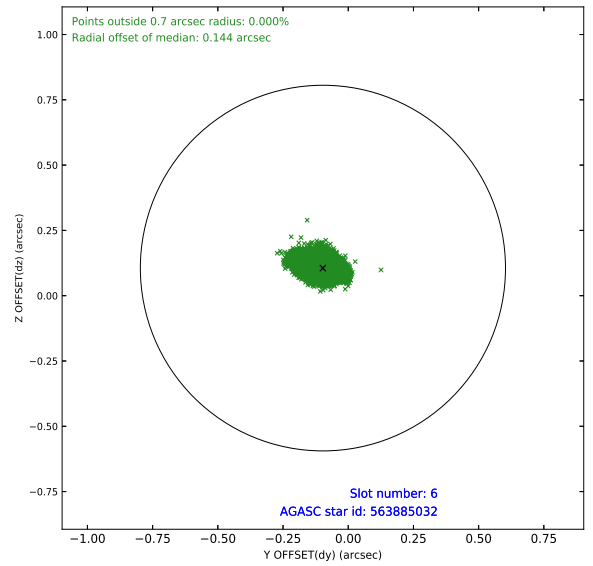
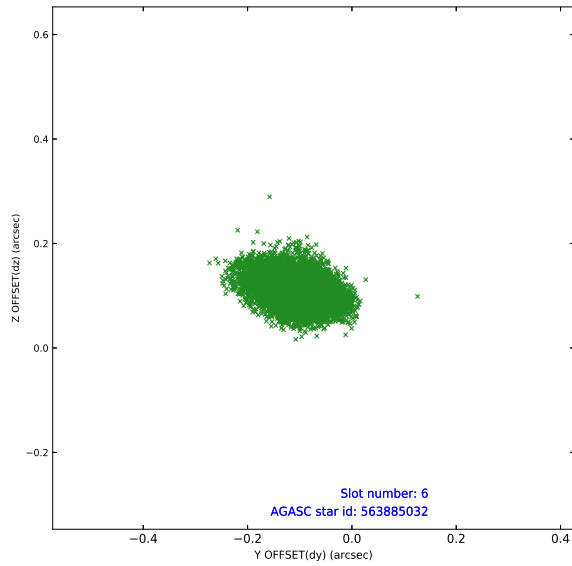
2.4.3 Slot 5



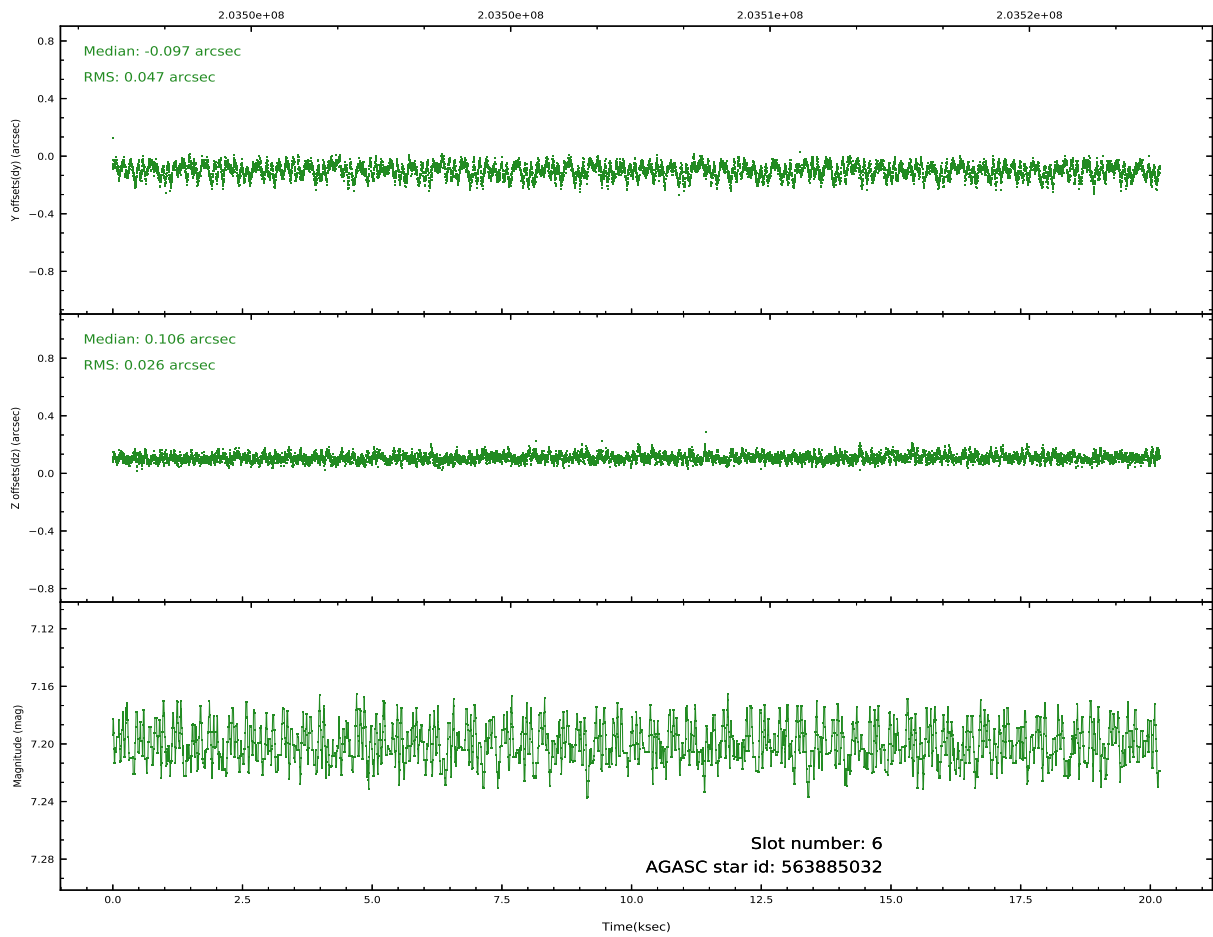
Time (s)



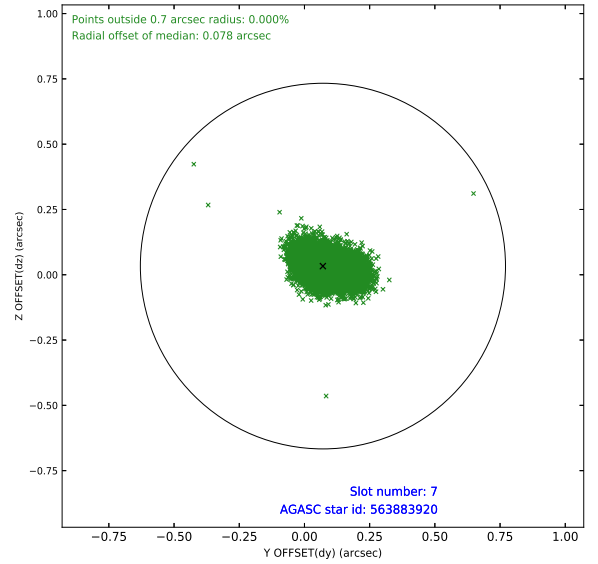
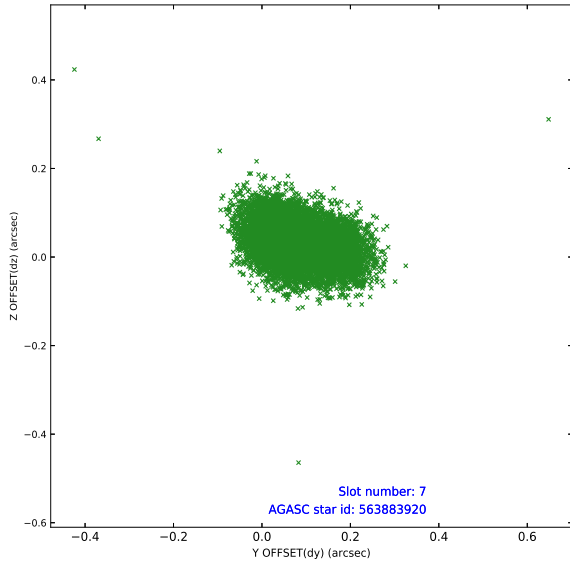
2.4.4 Slot 6



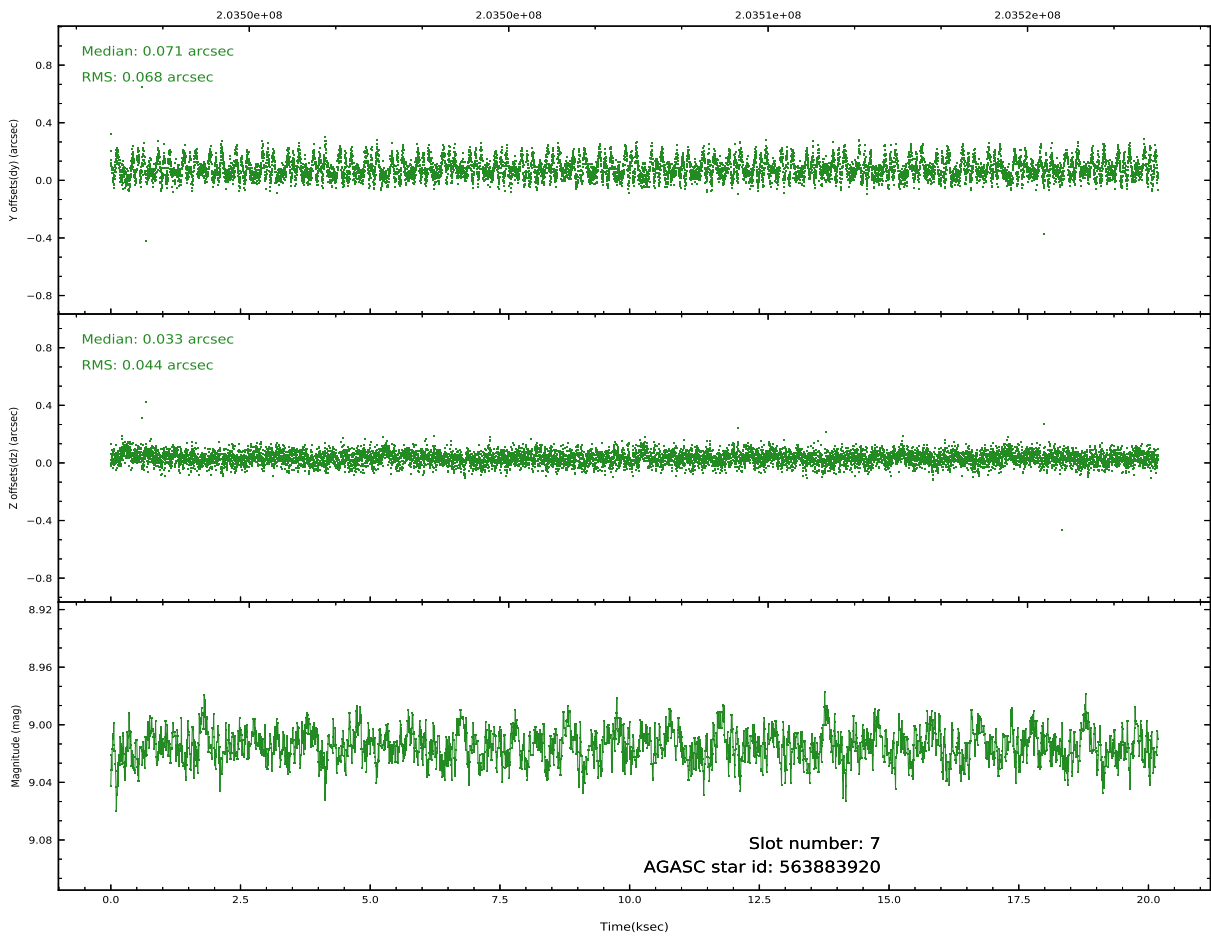
Time (s)



2.4.5 Slot 7

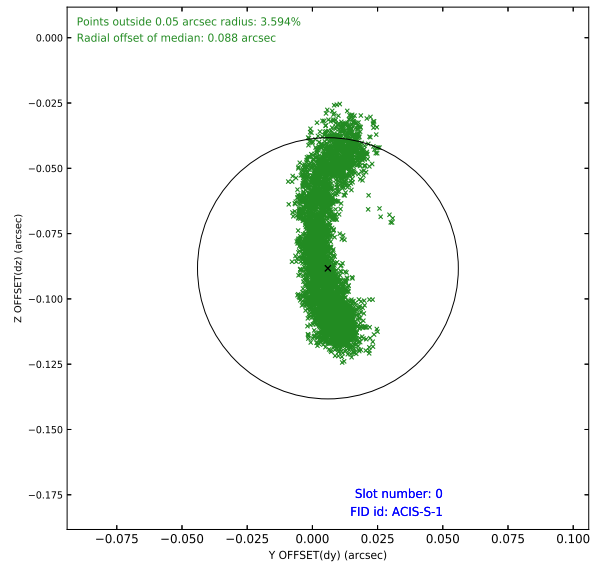
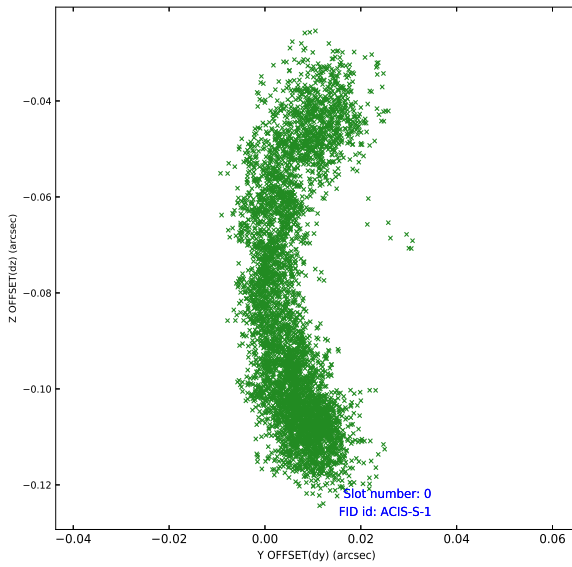


Time (s)

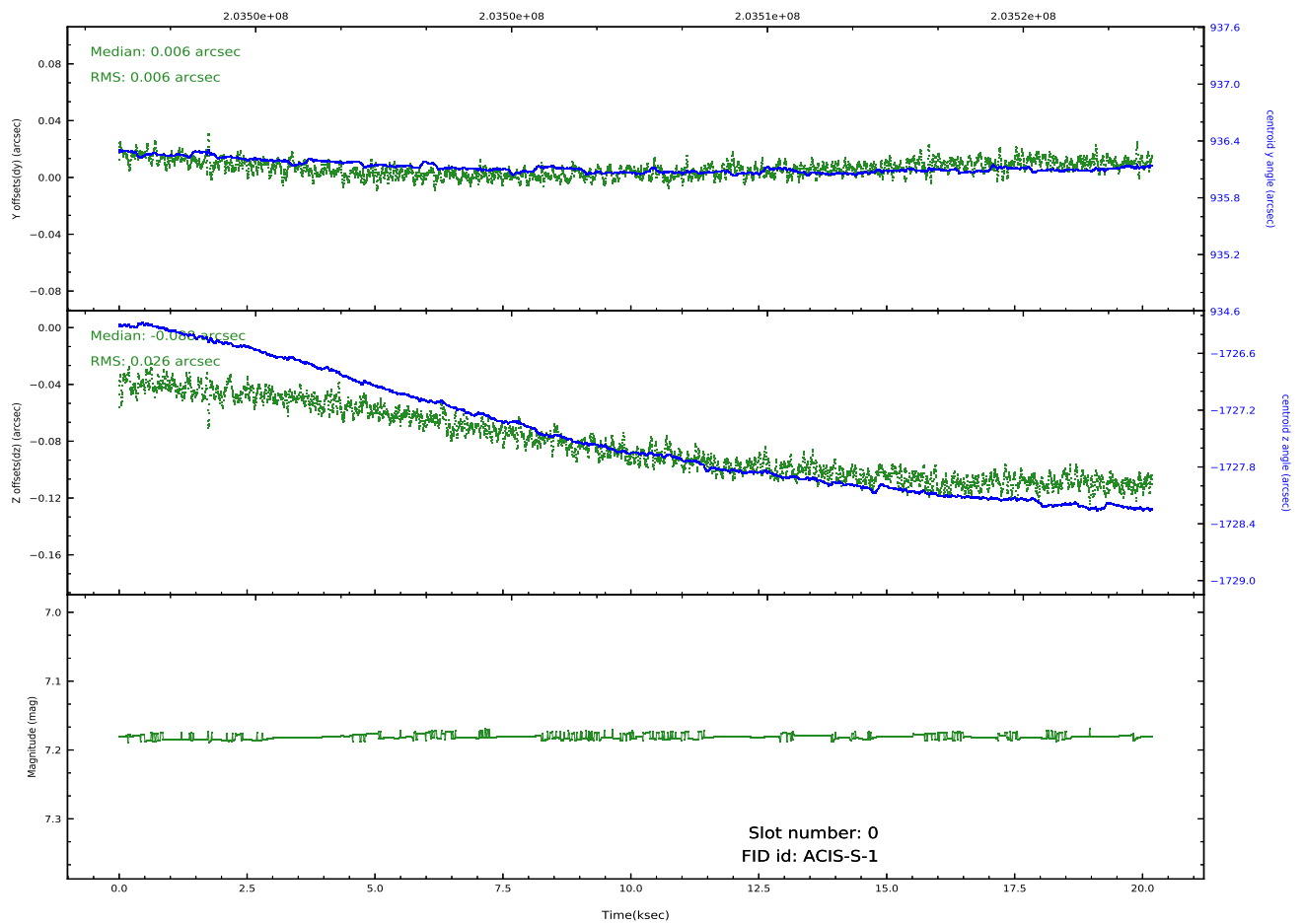


2.5 FID Slots

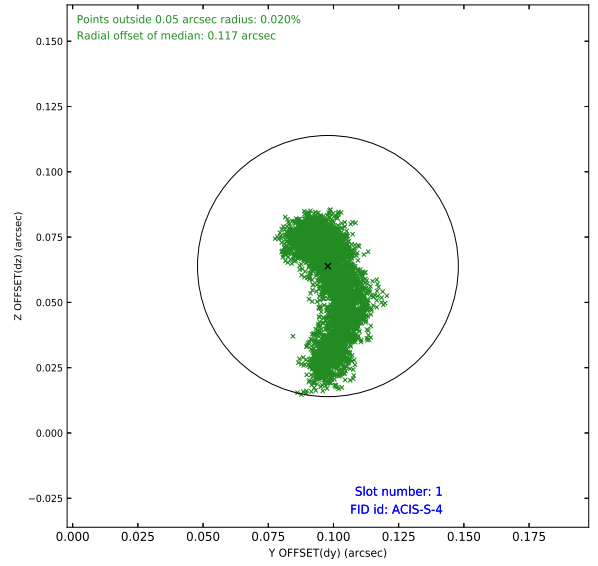
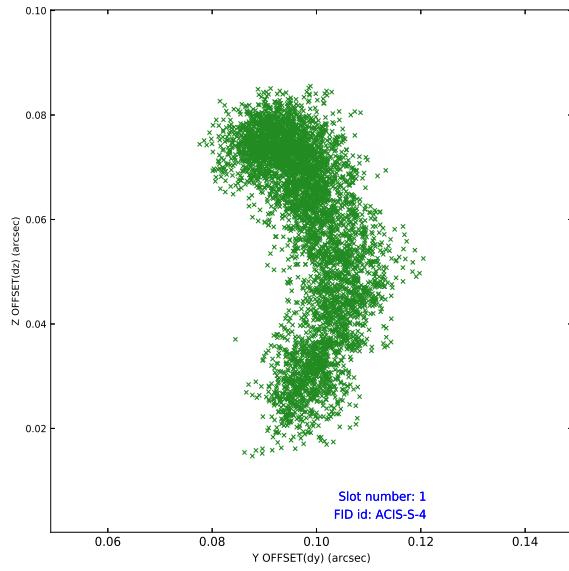
2.5.1 Slot 0



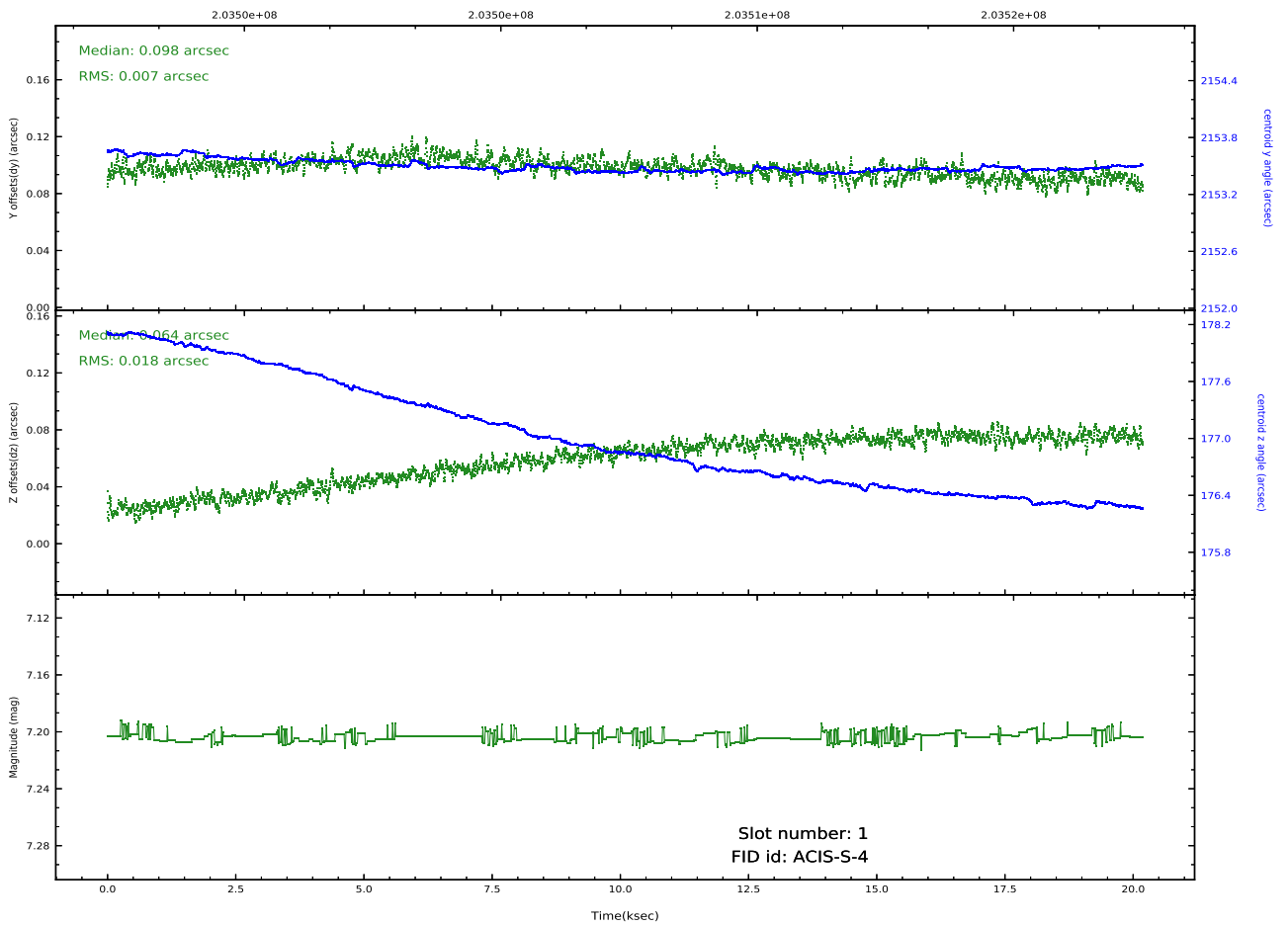
Time (s)



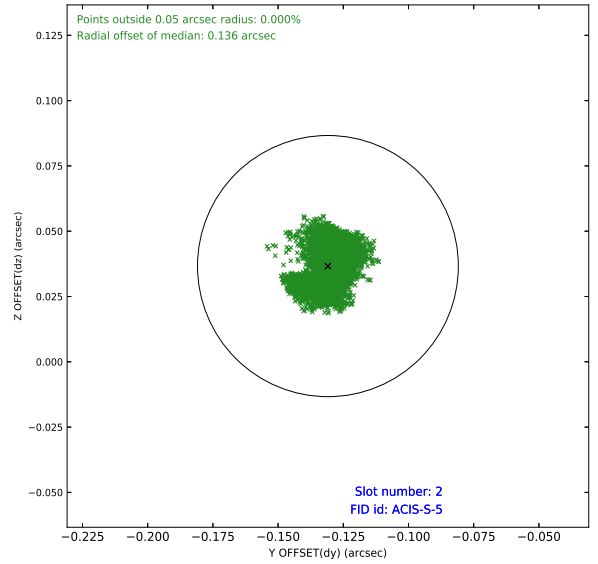
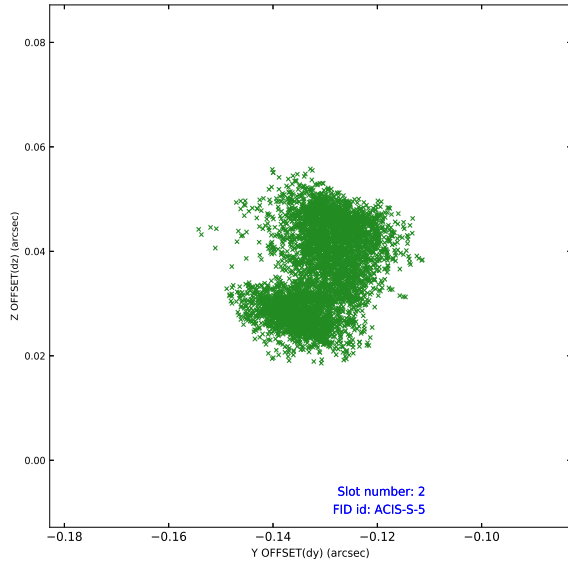
2.5.2 Slot 1



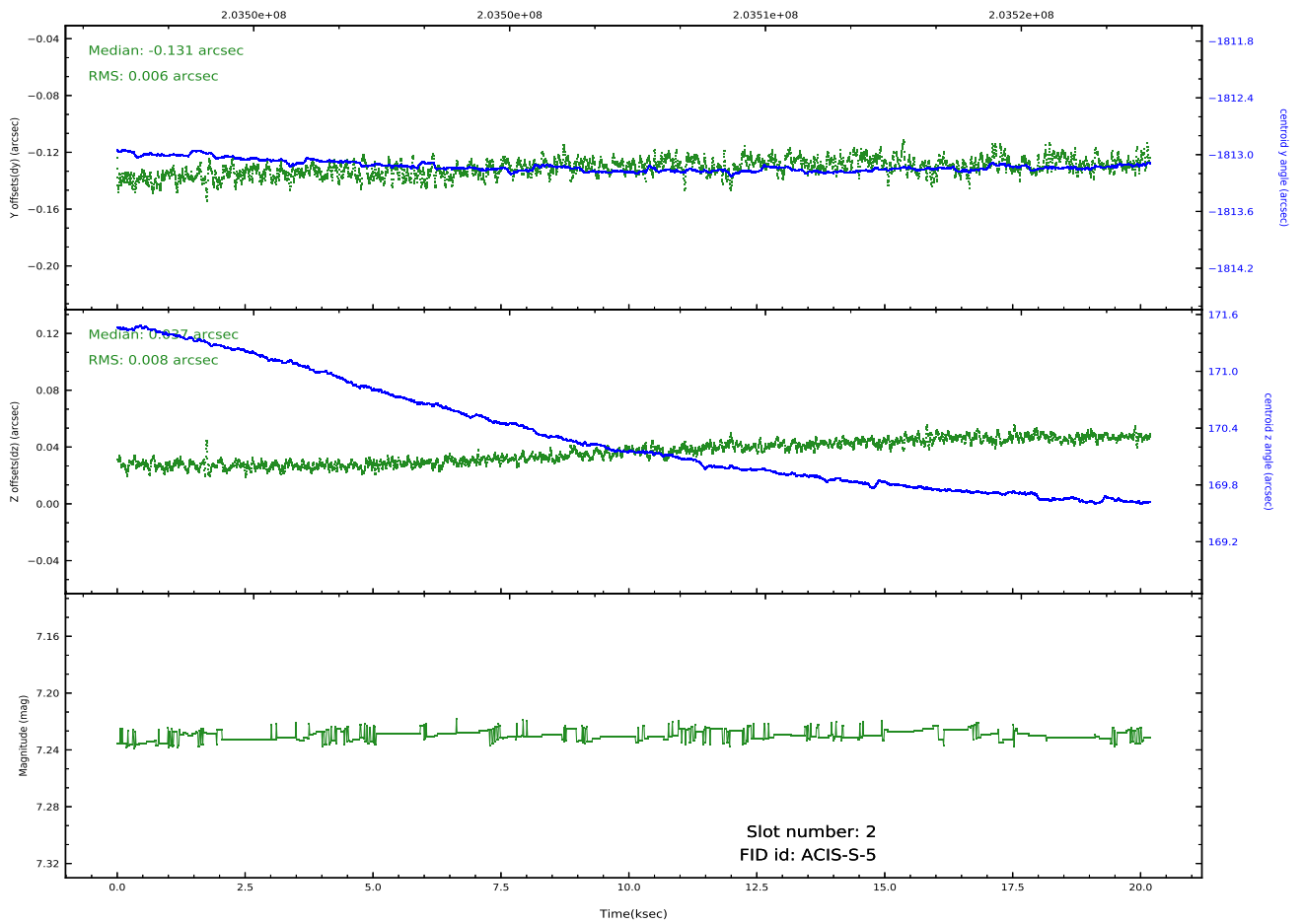
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.143

A.2 Comments