

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4650 - L2 Version 4
Chandra X-Ray Center

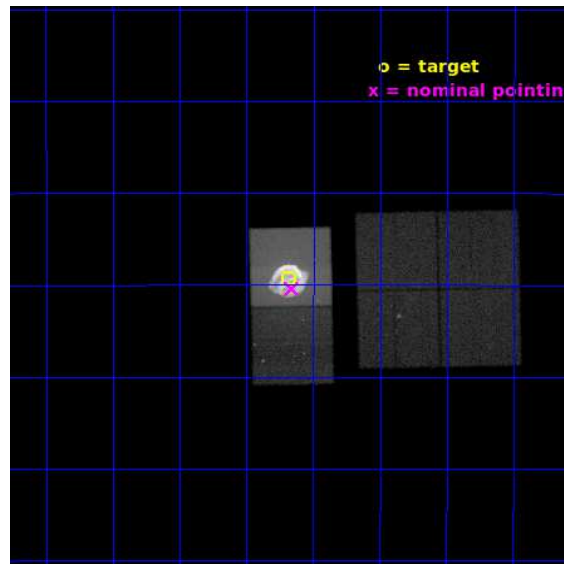
L2 Processing Date : Oct 3 2020

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1 Front

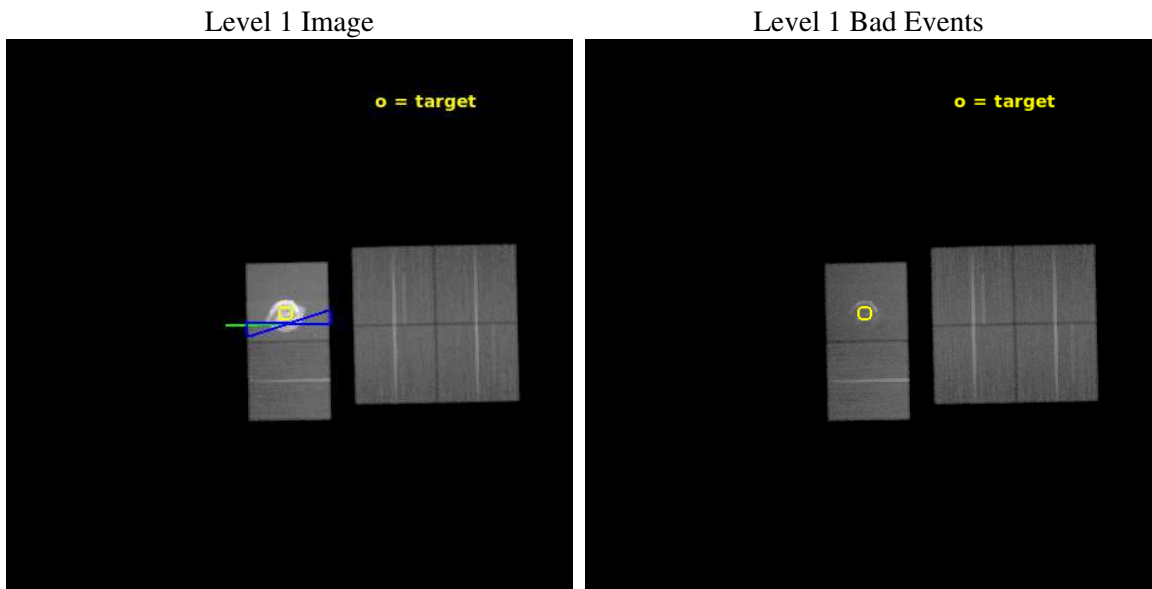
seq_num	500469	Sequence number
obs_id	4650	Observation id
title	Untangling the Dynamics of Kepler's Supernova Remnant	Proposal ti
observer	Lawrence Rudnick	Principal investigator
object	KEPLER SNR	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	262.670833	Observer's specified target RA [deg]
dec_targ	-21.488061	Observer's specified target Dec [deg]
ra_nom	262.6649394956	Nominal RA [deg]
dec_nom	-21.506851812591	Nominal Dec [deg]
roll_nom	268.7840564948	Nominal Roll [deg]
revision	4	Processing version of data
ontime	46764.799825788	Sum of GTIs [s]
livetime	46172.635772012	Livetime [s]
ontime0	46764.799825788	Sum of GTIs [s]
ontime1	46764.799825788	Sum of GTIs [s]
ontime2	46761.558835596	Sum of GTIs [s]
ontime3	46764.799825788	Sum of GTIs [s]
ontime6	46761.558965117	Sum of GTIs [s]
ontime7	46764.799825788	Sum of GTIs [s]
l2events	2405362	Number of level 2 events



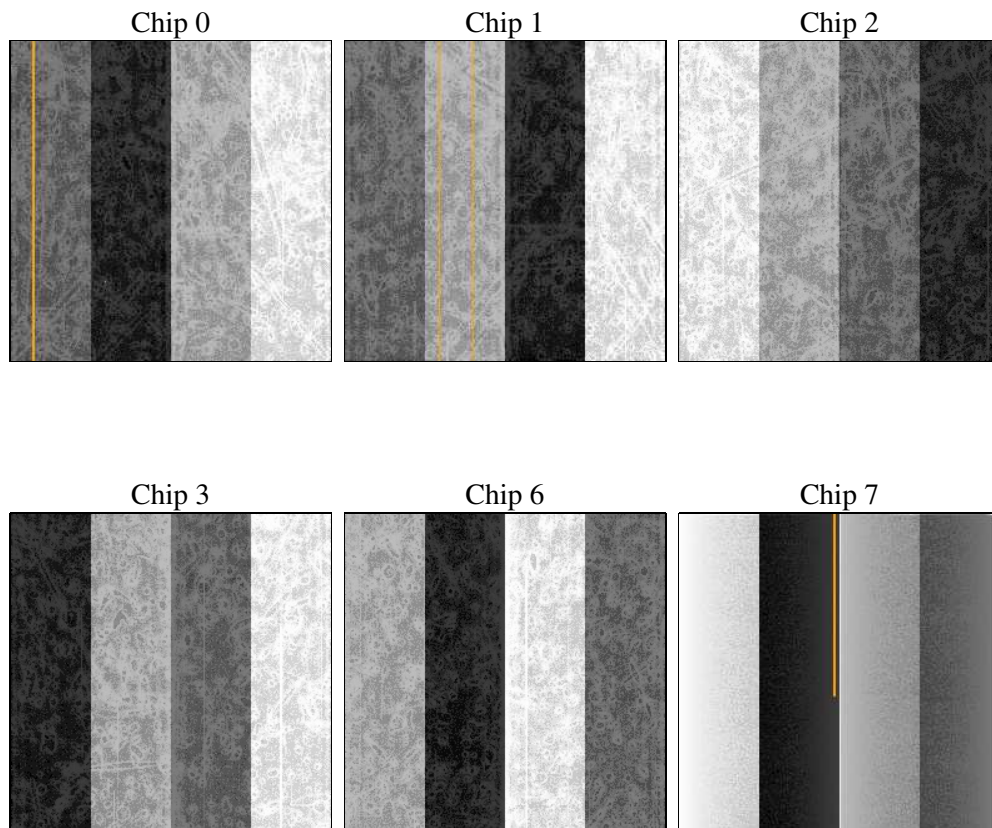
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	46809.518000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	46764.799825788	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	46764.799825788	Sum of GTIs [s]
date	2020-10-03T20:23:04	Date and time of file creation	ontime1	46764.799825788	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	46761.558835596	Sum of GTIs [s]
			ontime3	46764.799825788	Sum of GTIs [s]
			ontime6	46761.558965117	Sum of GTIs [s]
			ontime7	46764.799825788	Sum of GTIs [s]
			l1events	4381466	Number of level 1 events

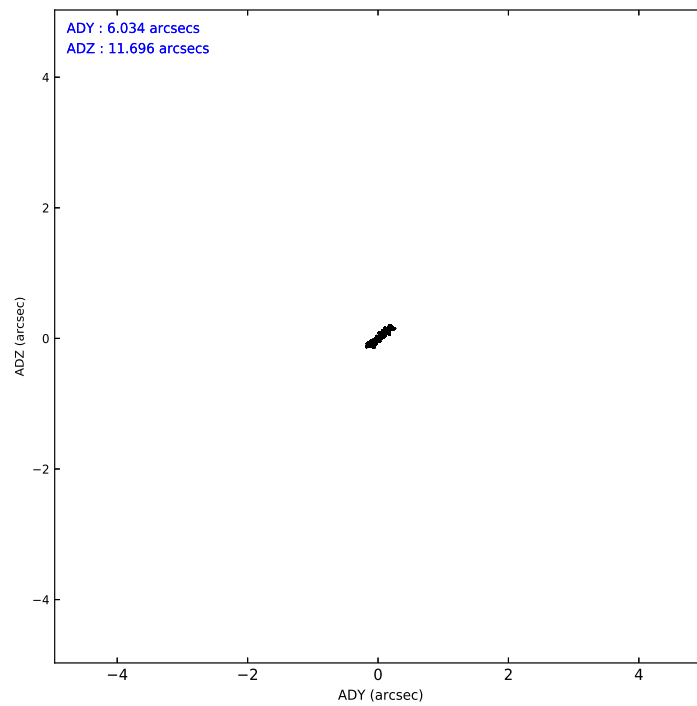
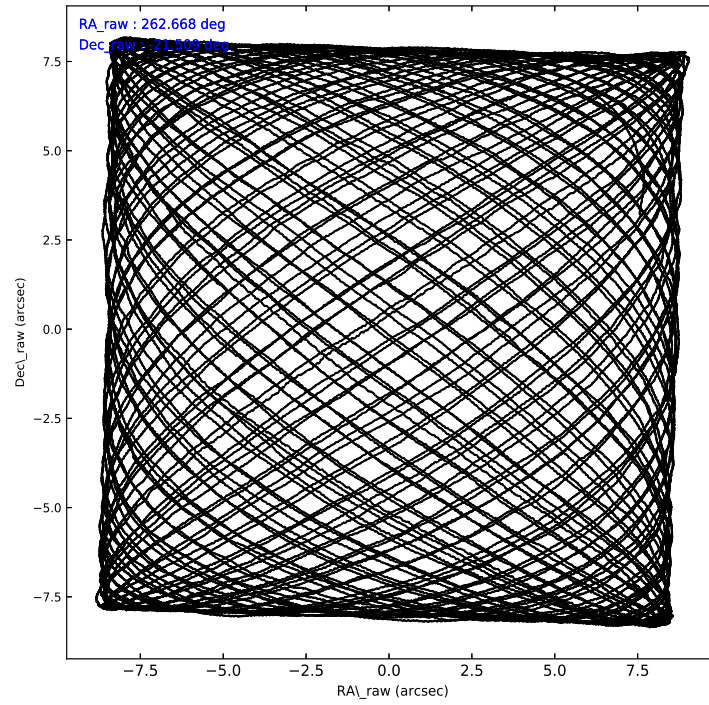
2.1.4 Events

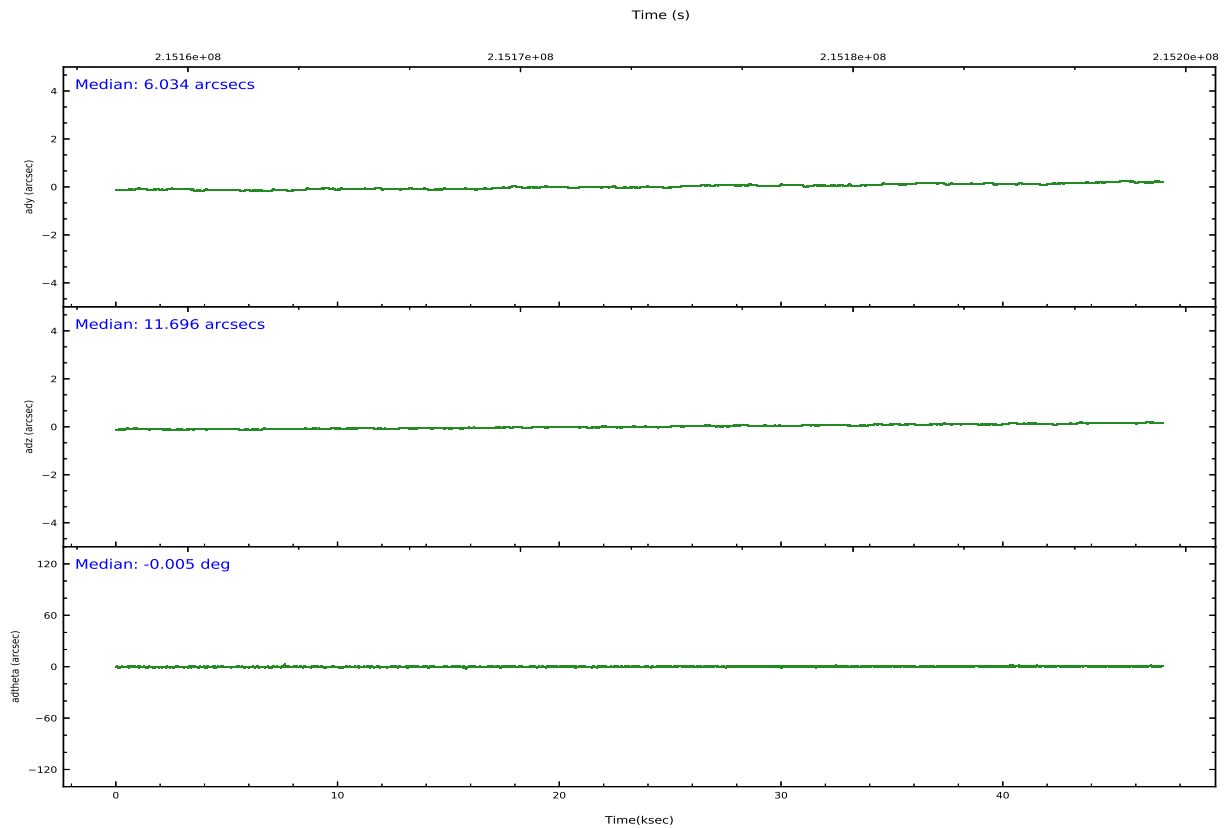
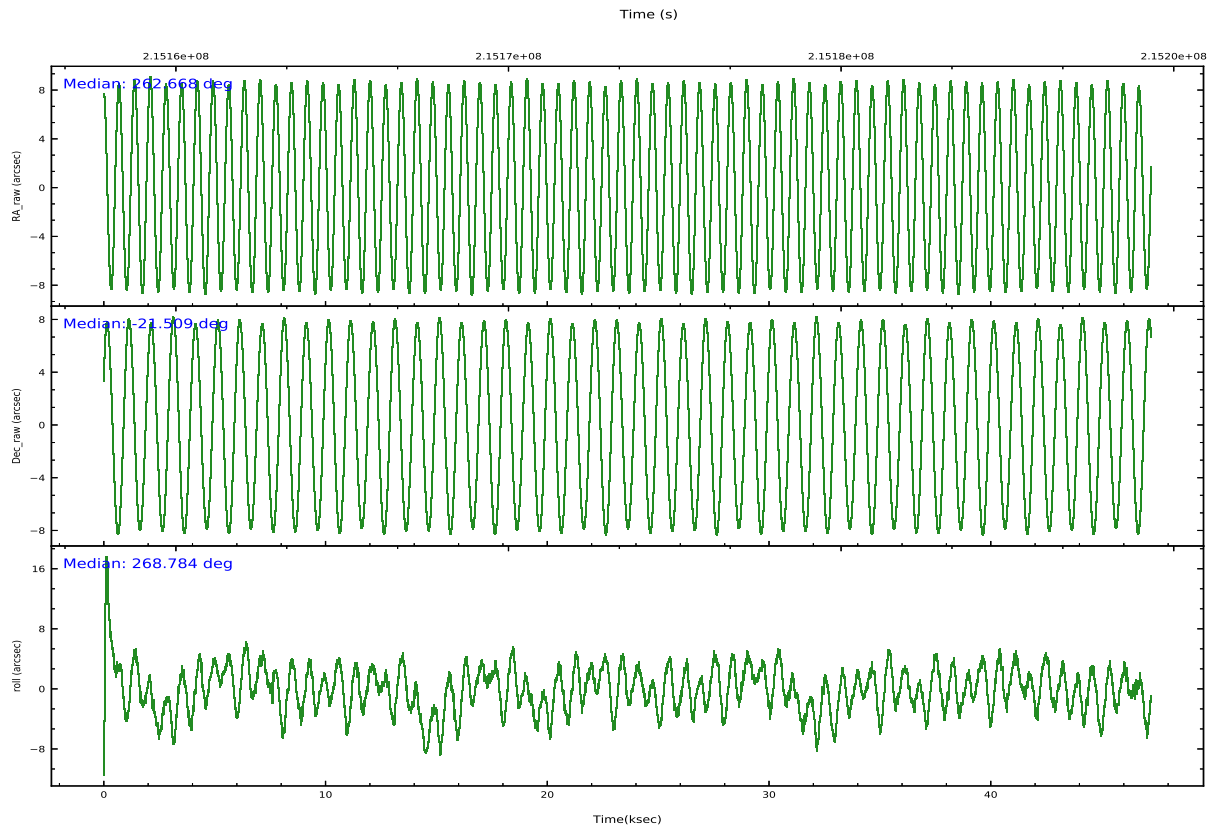
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	356742	336254	373130	366803	396332	2552205	grade 0 events	20004	18983	23552	22836	34450	677829
rejected events	310888	289436	325065	319538	333009	318583		5%	5%	6%	6%	8%	26%
rejected %	87%	86%	87%	87%	84%	12%	grade 1 events	225	164	273	224	255	4992
								0%	0%	0%	0%	0%	0%
							grade 2 events	9699	10051	9272	8627	10701	595219
								2%	2%	2%	2%	2%	23%
							grade 3 events	4463	4504	4076	4174	4755	260400
								1%	1%	1%	1%	1%	10%
							grade 4 events	3993	4434	4176	4223	4495	259771
								1%	1%	1%	1%	1%	10%
							grade 5 events	15233	15391	13921	16188	17089	65640
								4%	4%	3%	4%	4%	2%
							grade 6 events	7703	8858	6993	7409	8934	440710
								2%	2%	1%	2%	2%	17%
							grade 7 events	295422	273869	310867	303122	315653	247644
								82%	81%	83%	82%	79%	9%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	262.654064	262.6649394956	Subarray requested	NONE	NONE
[deg] Pointing Dec	-21.485018	-21.506851812591	Alternating exposures requested	N	N
[deg] Pointing Roll	268.617776	268.7840564948	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	261.124000	261.124000			
[deg] Roll tolerance	10.000000	10.000000			
Roll constraint allows 180D rotation	Y	Y			
[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)	215152173.184000	215151090.66506			
Observation start date	2004-10-26T04:28:29	2004-10-26T04:11:30			
[s] Observation end time (MET)	215198982.184000	215199210.31721			
Observation end date	2004-10-26T17:28:38	2004-10-26T17:33:30			
Read mode	TIMED	TIMED			

2.3 Aspect





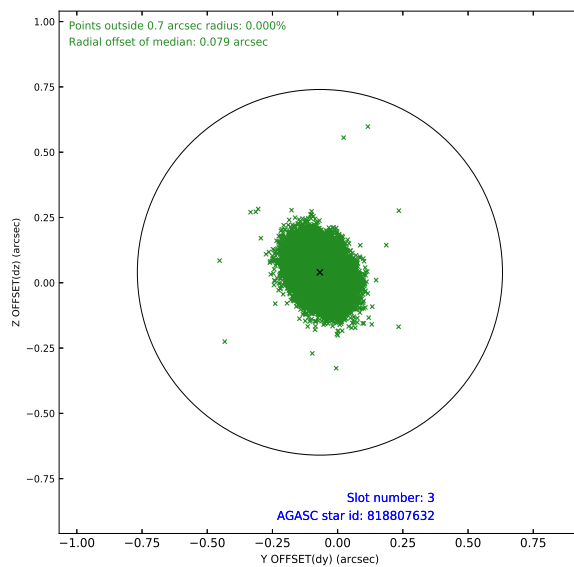
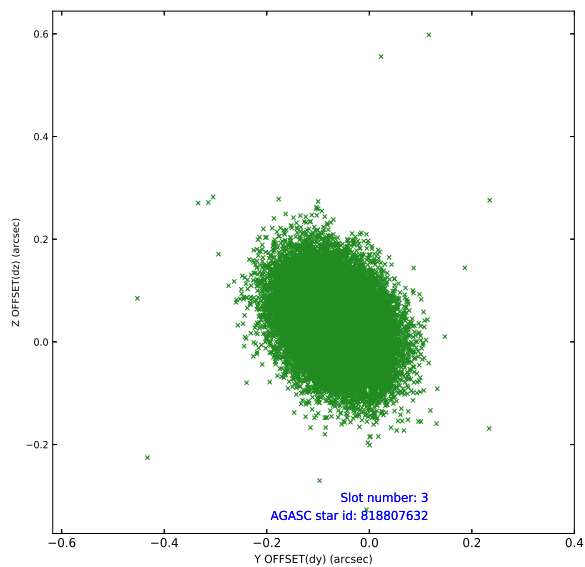
Slot Statistics

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	11520	1.000	-0.078	-0.061	0.008	0.013	0.000000	0.000000	-758.82	-1733
1	FID		ACIS-S-4	7.20	11521	1.000	0.132	0.054	0.006	0.011	0.000000	0.000000	2154.64	175
2	FID		ACIS-S-5	7.23	11521	1.000	-0.085	0.016	0.007	0.012	0.000000	0.000000	-1811.71	169
3	GUIDE	used	818807632	9.44	23027	1.000	-0.068	0.040	0.088	0.146	262.882186	-21.522238	116.27	767
4	GUIDE	used	818808256	8.83	23033	1.000	0.065	0.044	0.085	0.135	263.255476	-21.831270	1202.87	2039
5	GUIDE	used	818808880	9.56	22996	1.000	-0.117	-0.045	0.092	0.151	262.860845	-20.882902	-2182.94	642
6	GUIDE	used	818809592	9.18	23021	1.000	0.100	-0.154	0.093	0.150	262.650746	-21.954180	1689.12	29
7	GUIDE	used	818810616	7.85	23034	1.000	0.026	0.116	0.051	0.082	263.165516	-21.873468	1359.95	1742

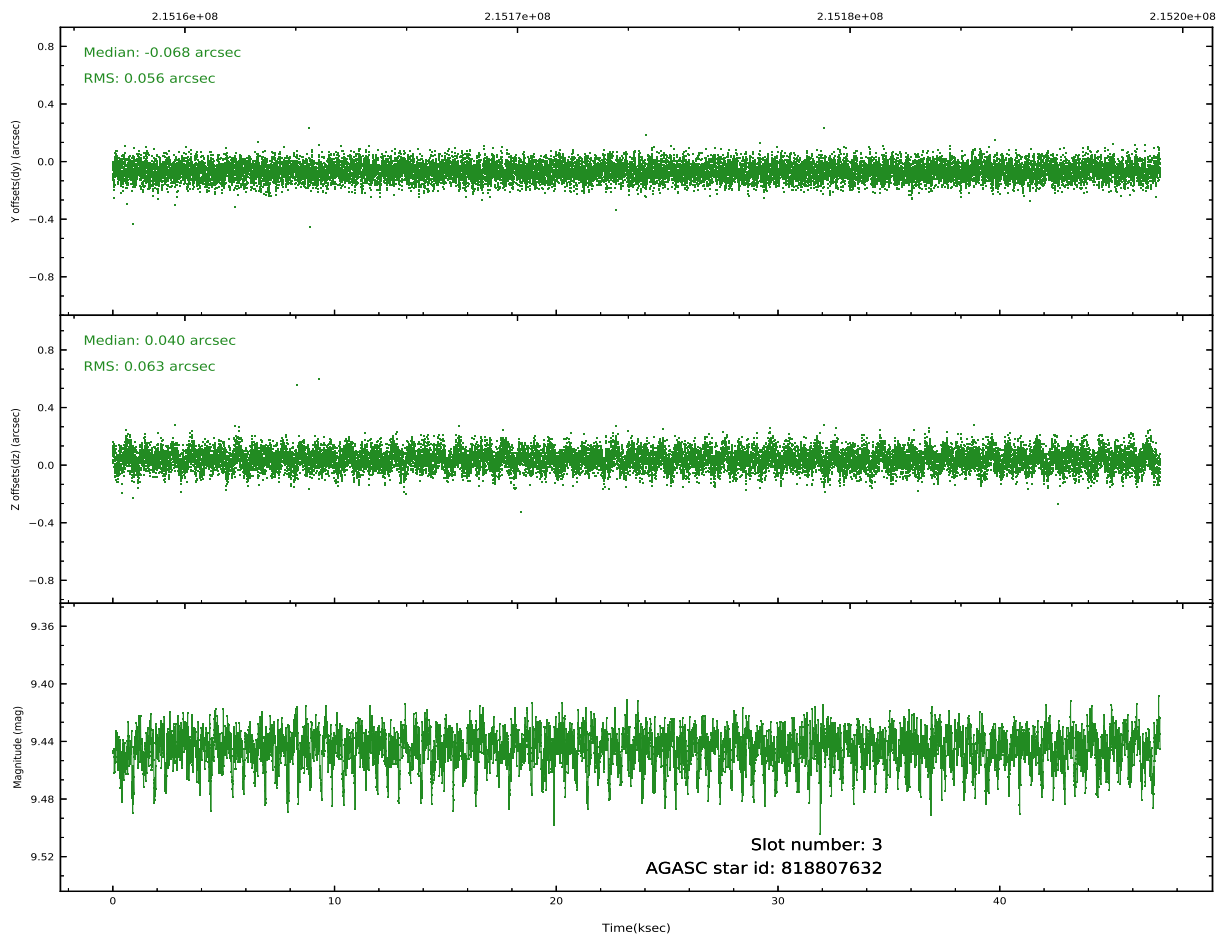
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2.4 Star Slots

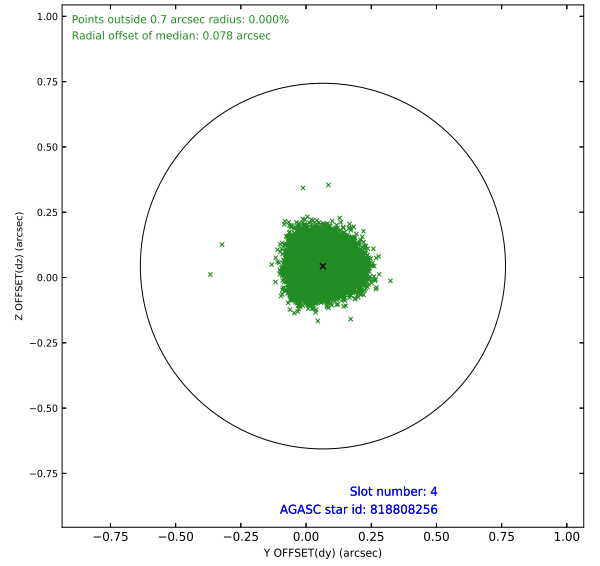
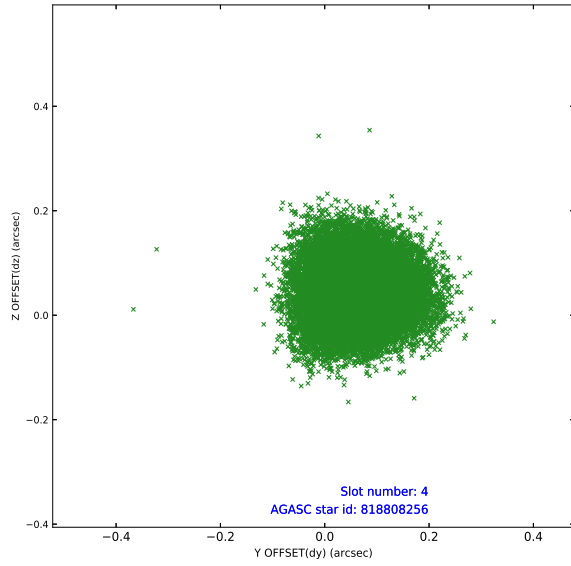
2.4.1 Slot 3



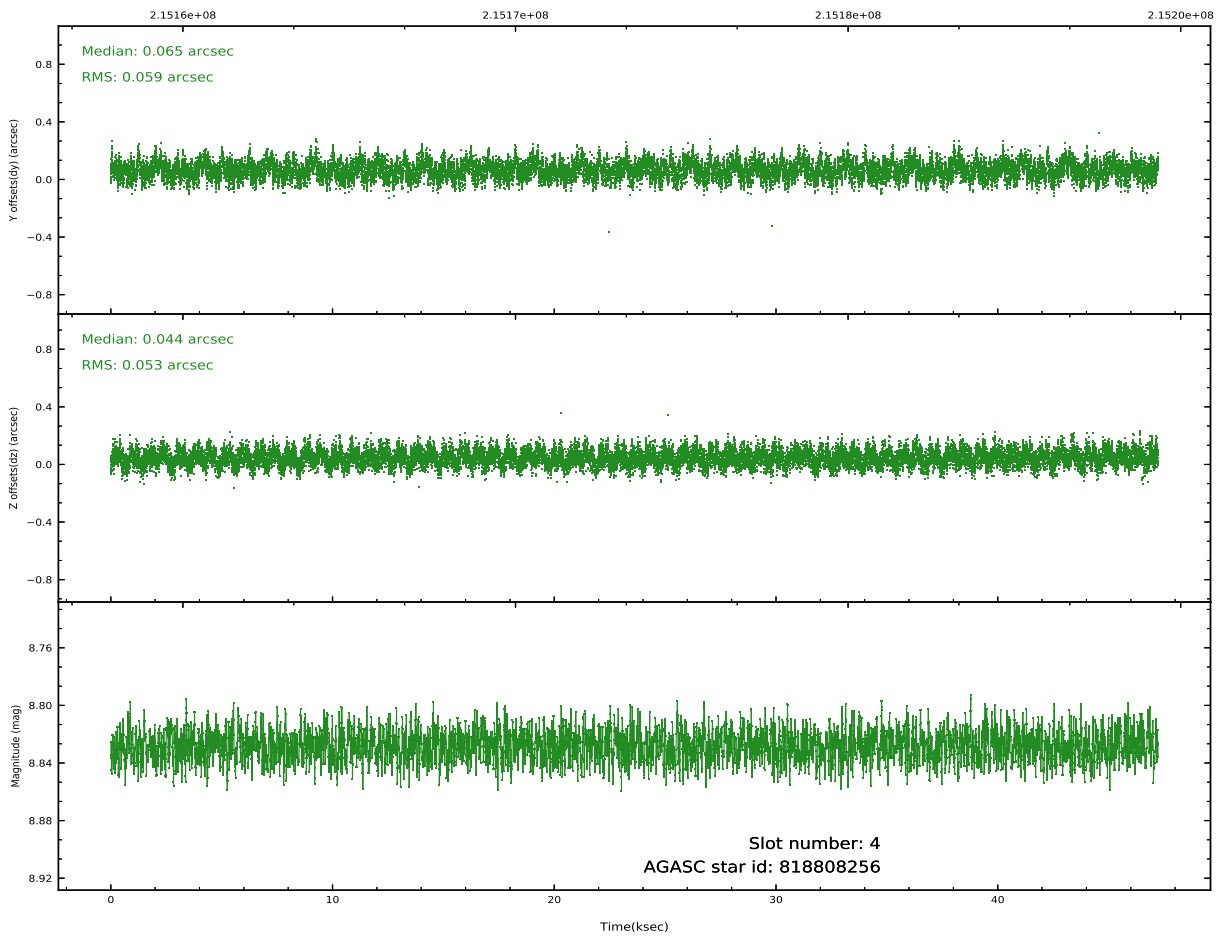
Time (s)



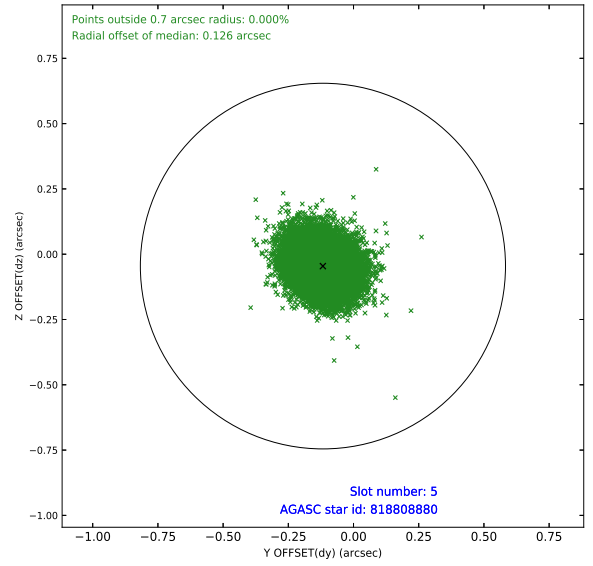
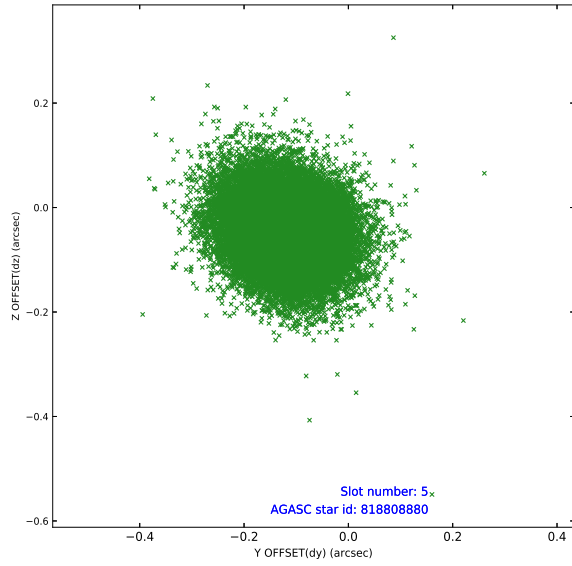
2.4.2 Slot 4



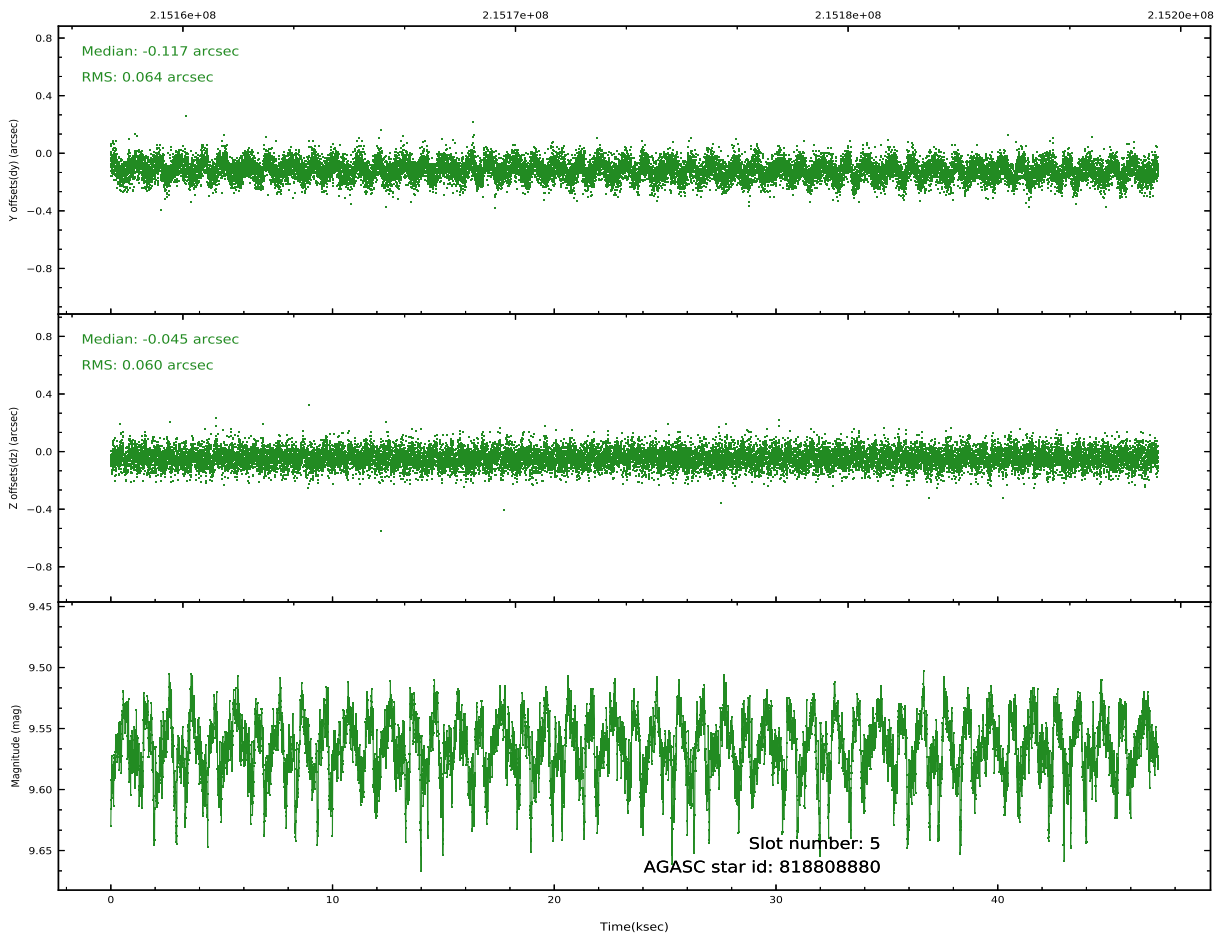
Time (s)



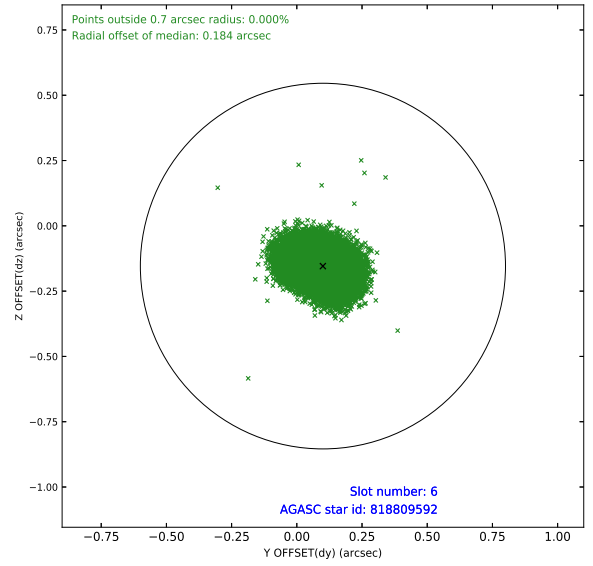
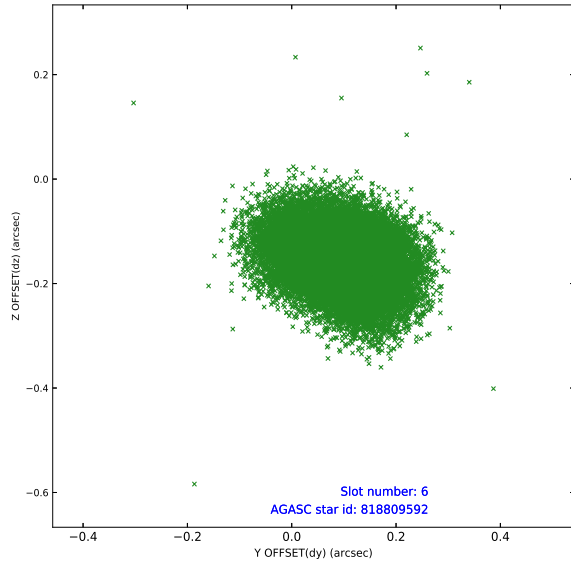
2.4.3 Slot 5



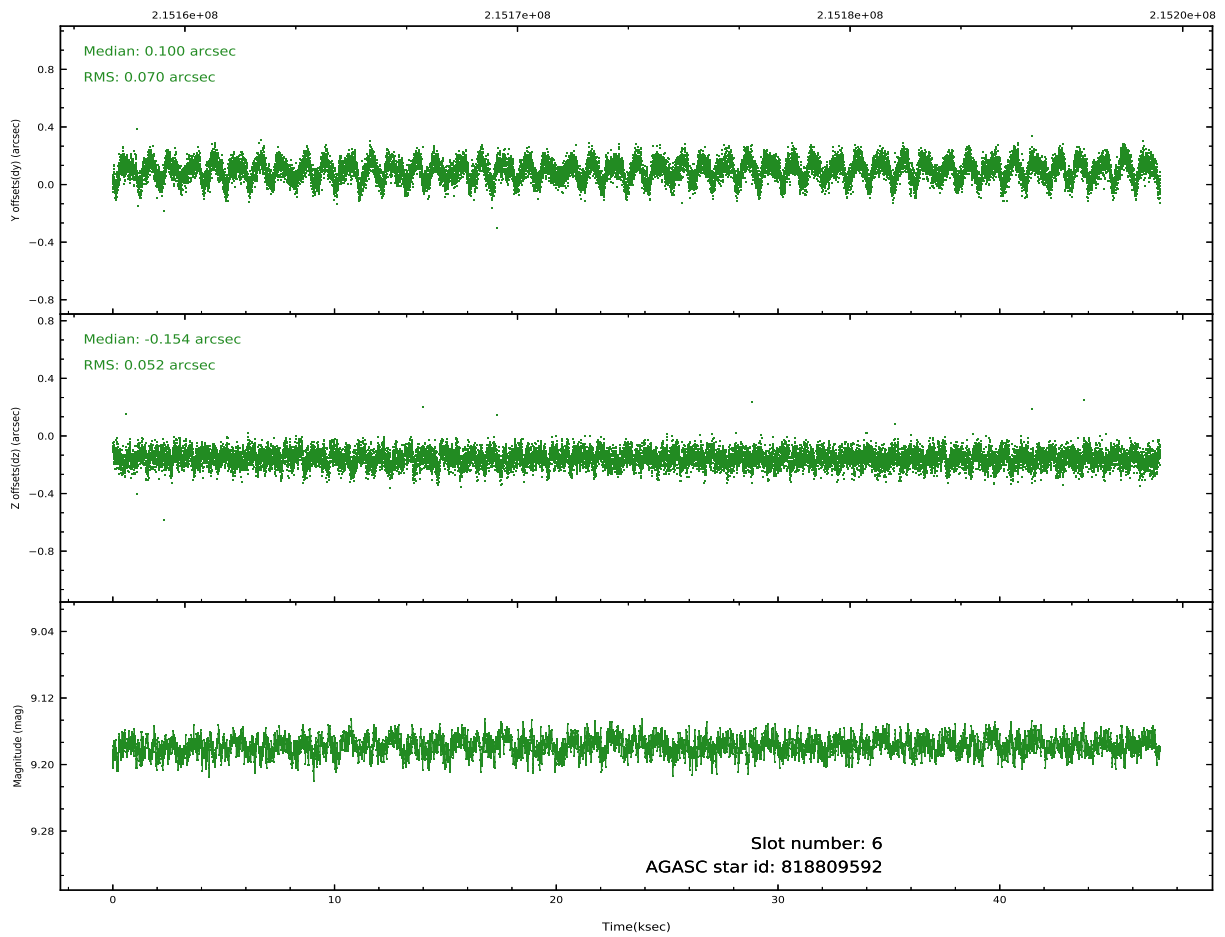
Time (s)



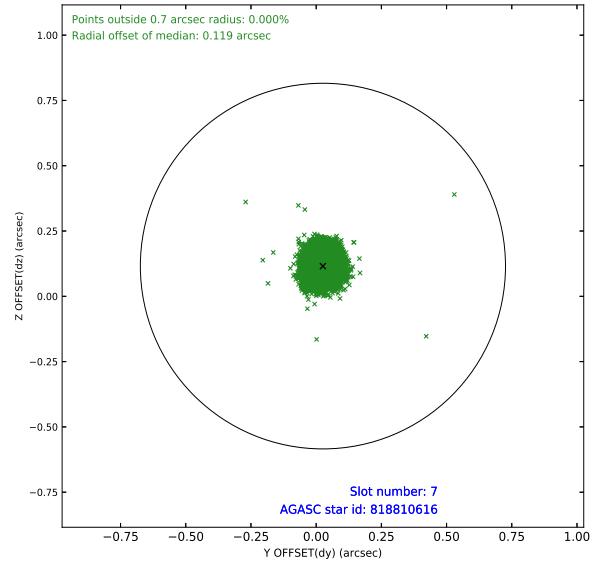
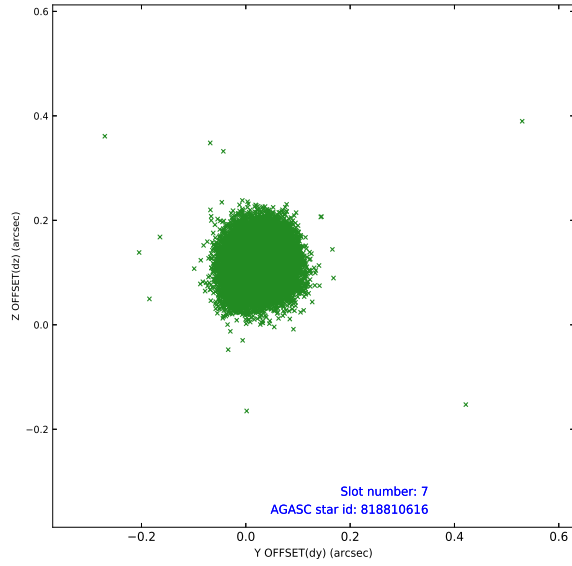
2.4.4 Slot 6



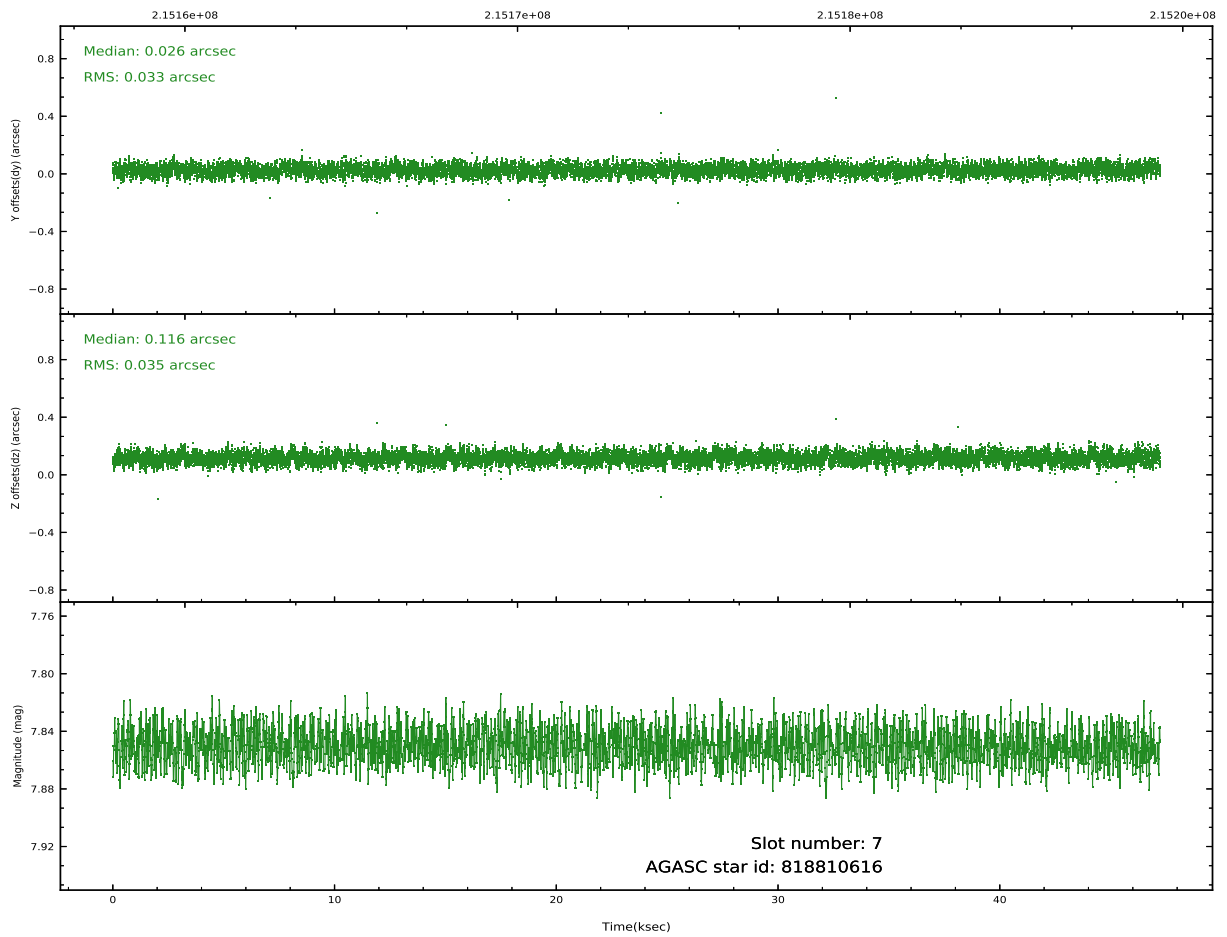
Time (s)



2.4.5 Slot 7

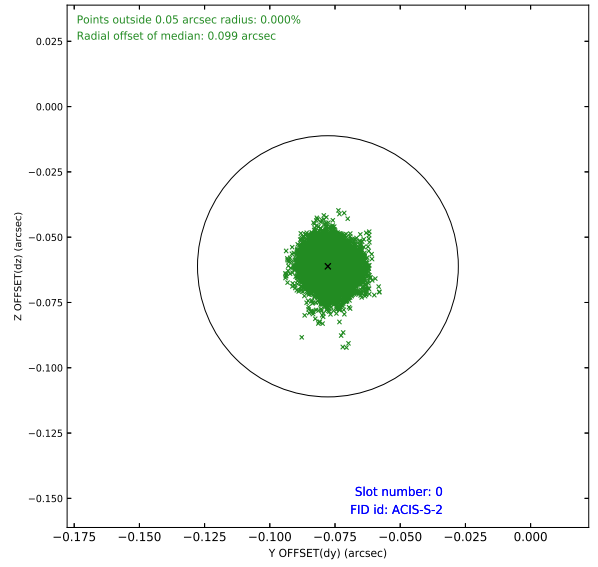
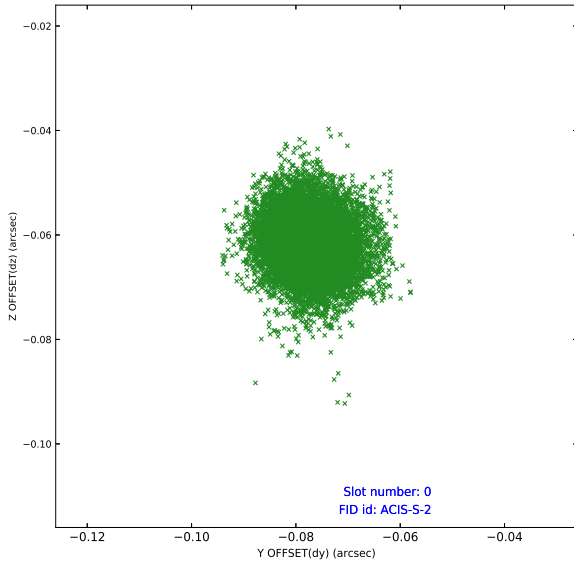


Time (s)

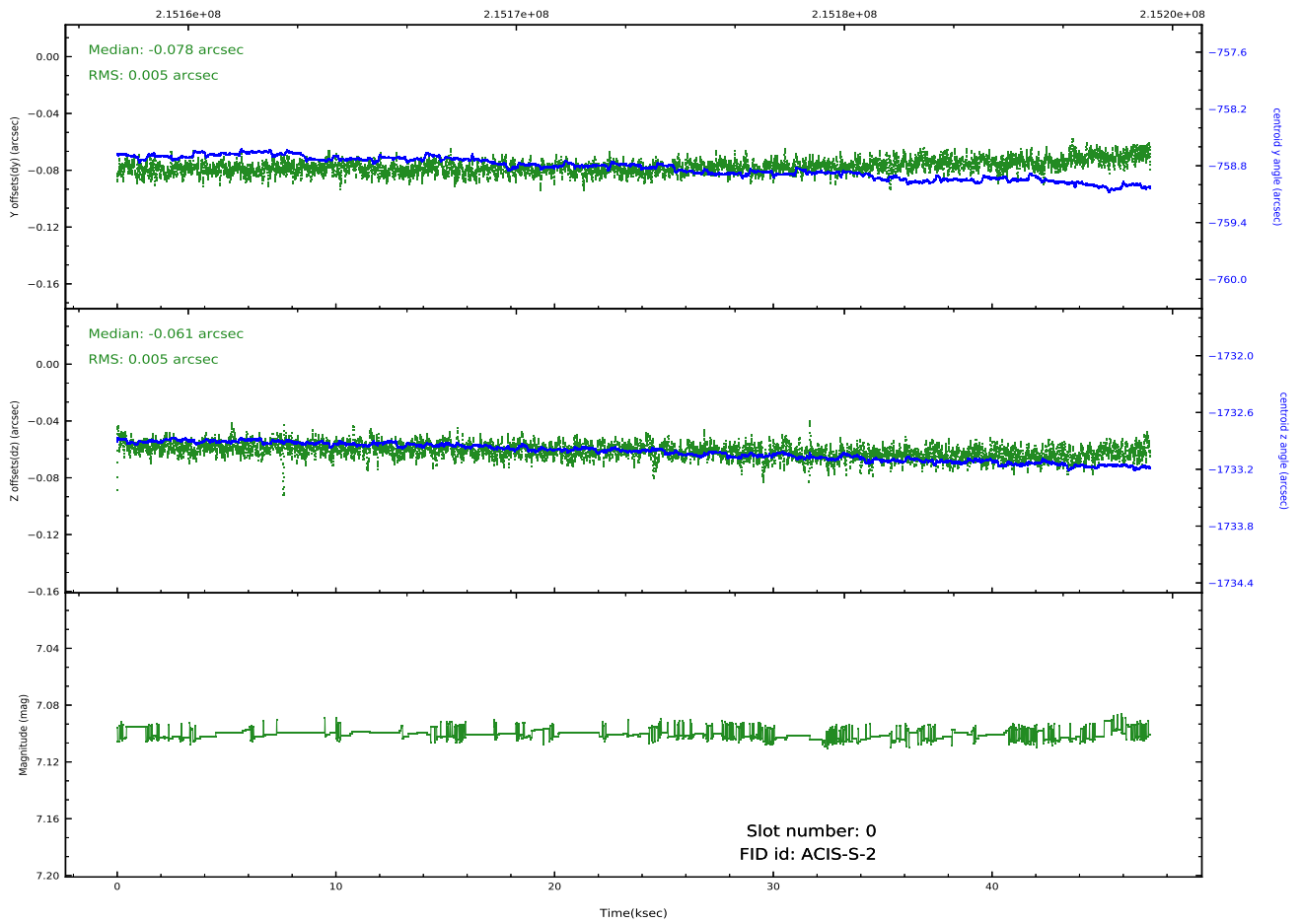


2.5 FID Slots

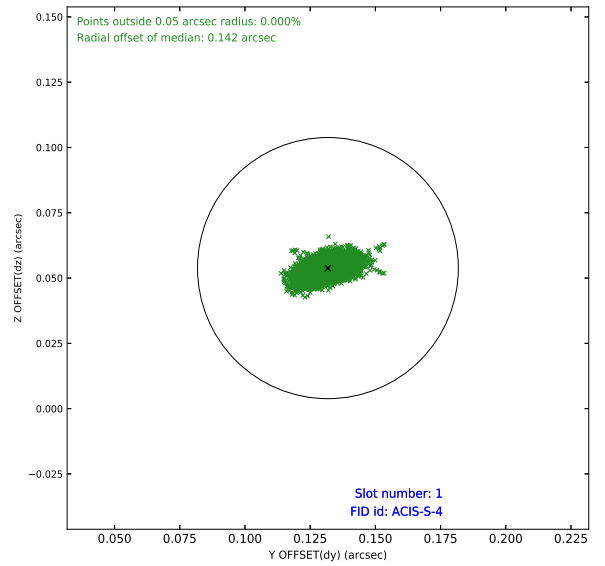
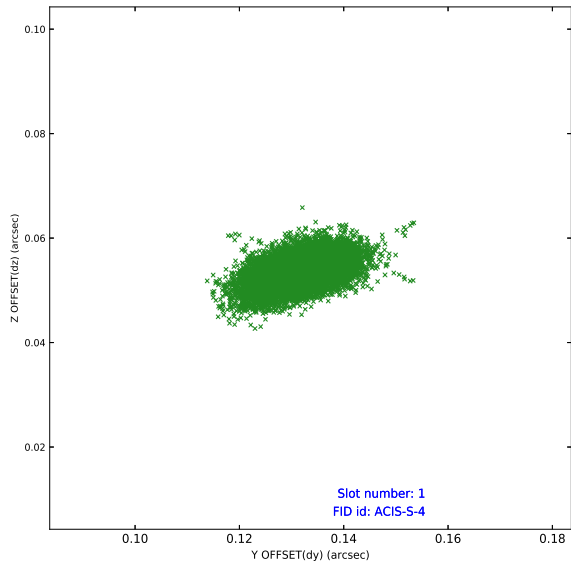
2.5.1 Slot 0



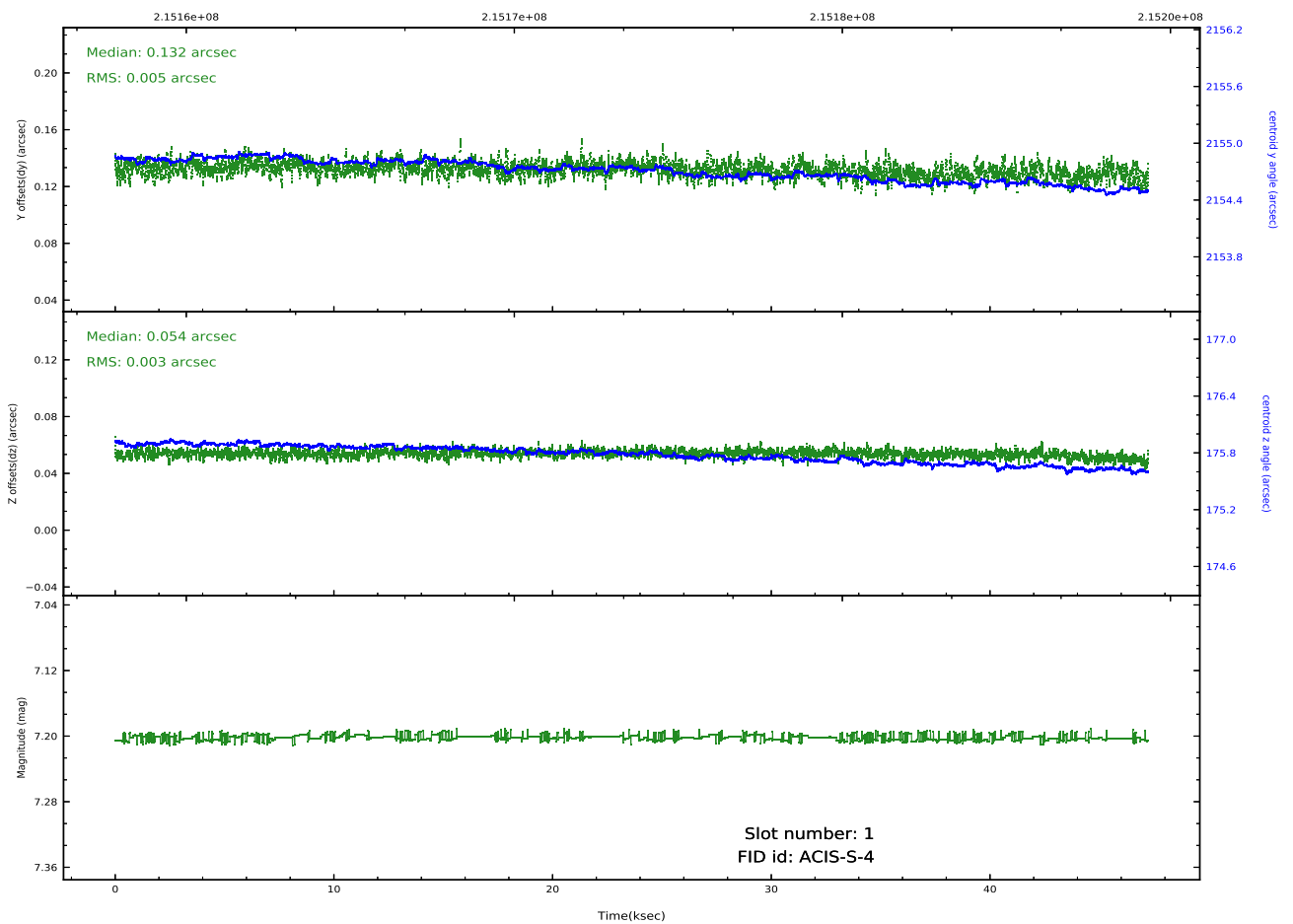
Time (s)



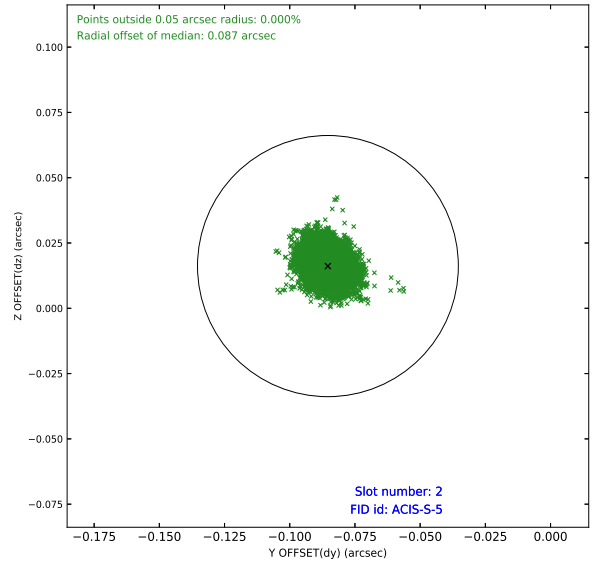
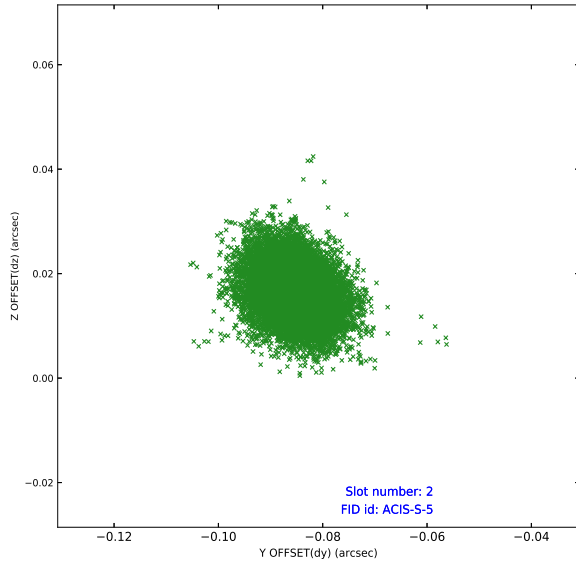
2.5.2 Slot 1



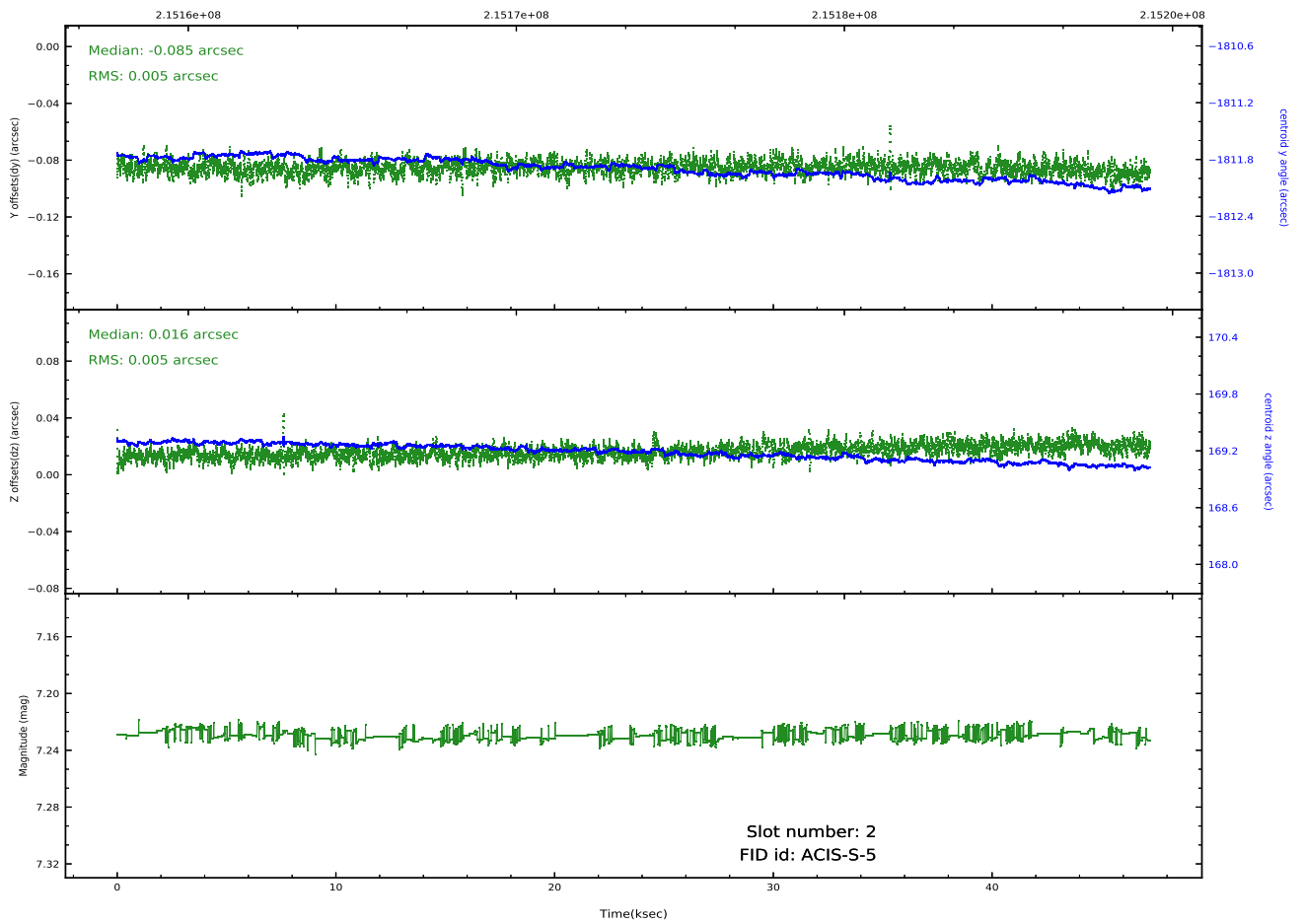
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.764

A.2 Comments

Roll constraint met.