

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5411 - L2 Version 4
Chandra X-Ray Center

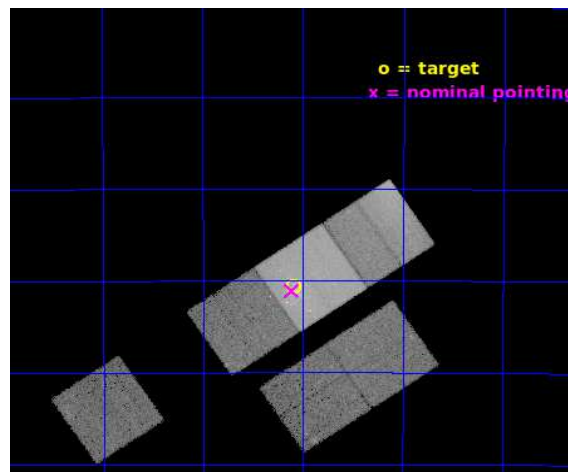
L2 Processing Date : Oct 8 2020

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1 Front

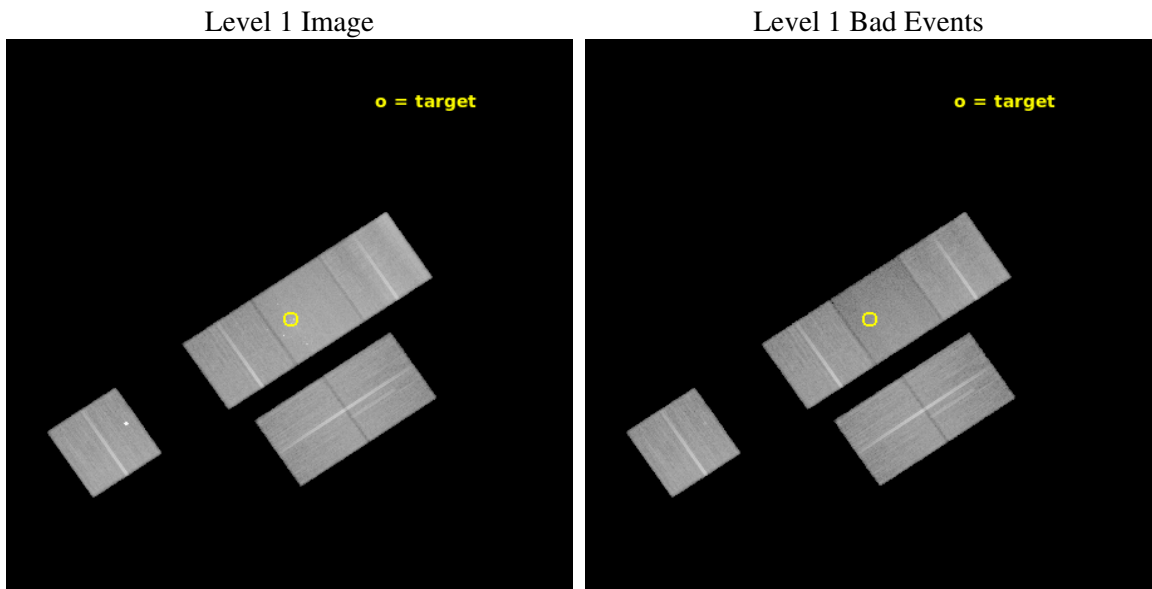
seq_num	200344	Sequence number
obs_id	5411	Observation id
title	A Rich Population of Massive Young Stars in the Cluster Westerlund 1	
observer	Stephen Skinner	Principal investigator
object	Westerlund1	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	251.7725	Observer's specified target RA [deg]
dec_targ	-45.843528	Observer's specified target Dec [deg]
ra_nom	251.77784453969	Nominal RA [deg]
dec_nom	-45.851506276804	Nominal Dec [deg]
roll_nom	325.87617928006	Nominal Roll [deg]
revision	4	Processing version of data
ontime	38966.399854839	Sum of GTIs [s]
livetime	38472.983837128	Livetime [s]
ontime2	38963.158864558	Sum of GTIs [s]
ontime3	38966.399854839	Sum of GTIs [s]
ontime4	38963.158884555	Sum of GTIs [s]
ontime6	38966.399854839	Sum of GTIs [s]
ontime7	38966.399854839	Sum of GTIs [s]
ontime8	38966.399854839	Sum of GTIs [s]
l2events	327819	Number of level 2 events



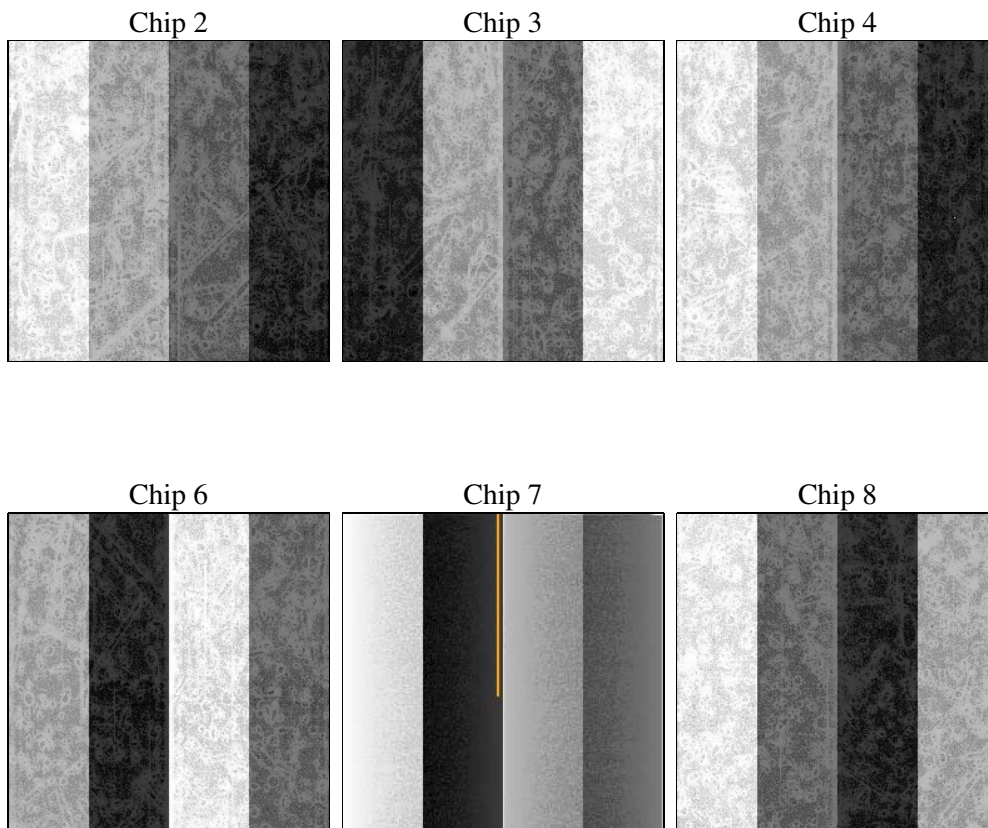
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	38787.489000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	38966.399854839	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	38963.158864558	Sum of GTIs [s]
date	2020-10-09T01:17:39	Date and time of file creation	ontime3	38966.399854839	Sum of GTIs [s]
revision	4	Processing version of data	ontime4	38963.158884555	Sum of GTIs [s]
			ontime6	38966.399854839	Sum of GTIs [s]
			ontime7	38966.399854839	Sum of GTIs [s]
			ontime8	38966.399854839	Sum of GTIs [s]
			l1events	1769912	Number of level 1 events

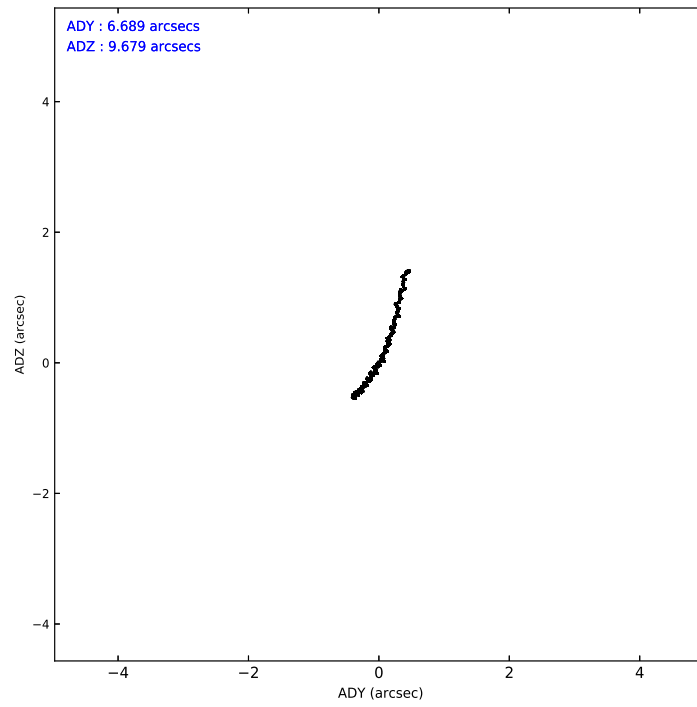
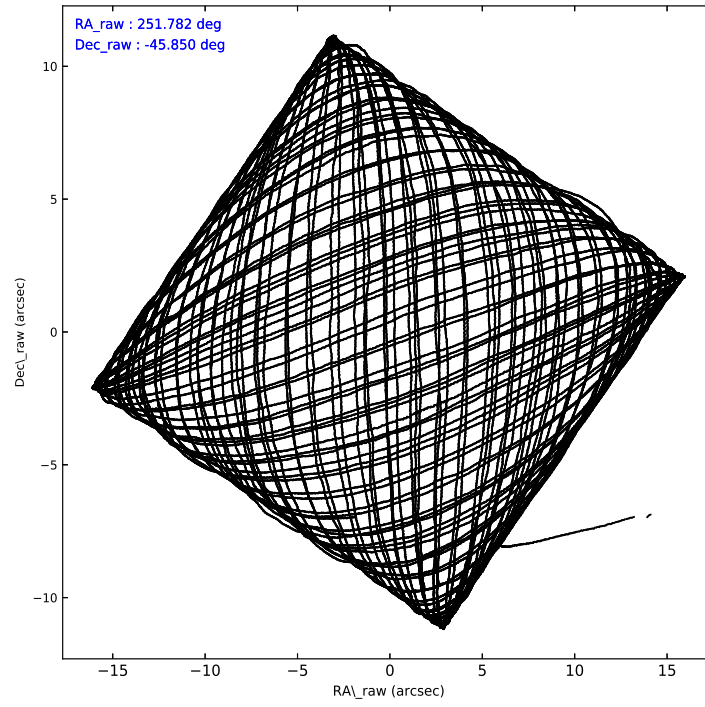
2.1.4 Events

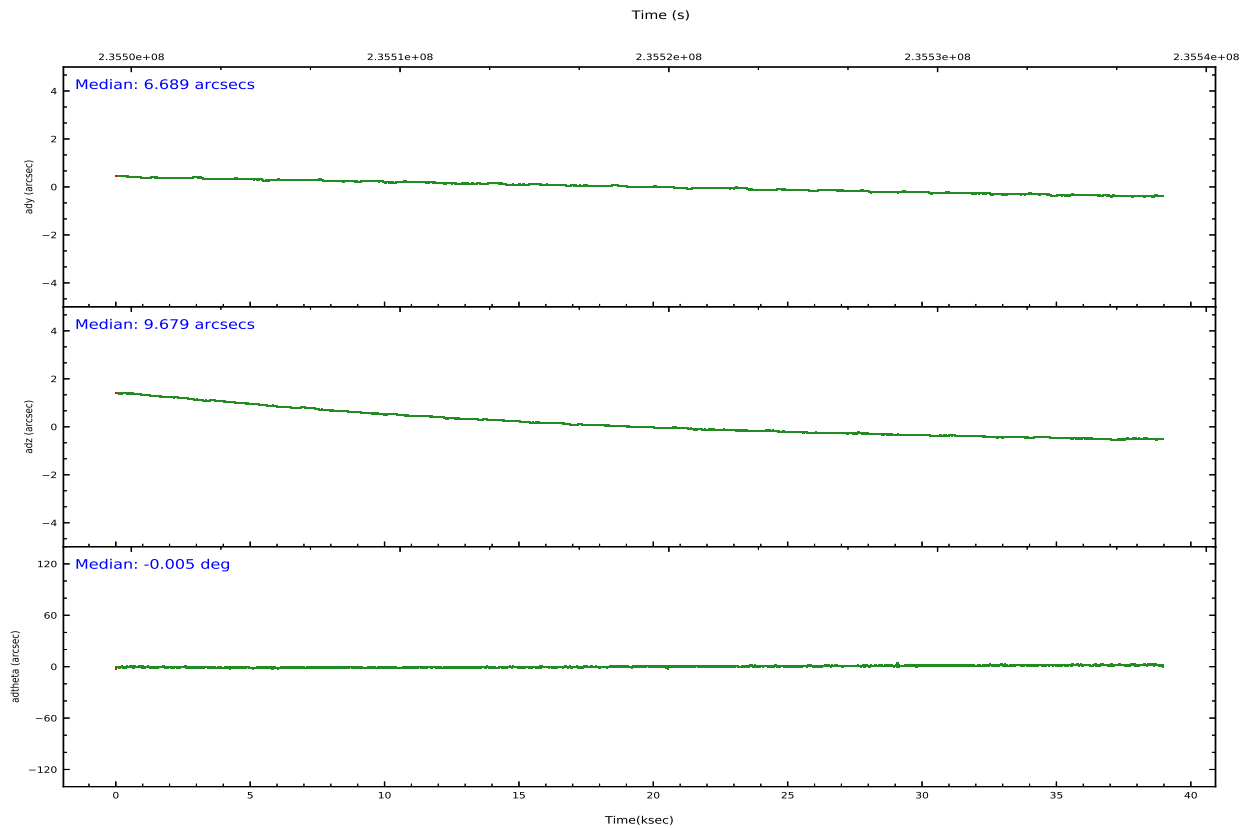
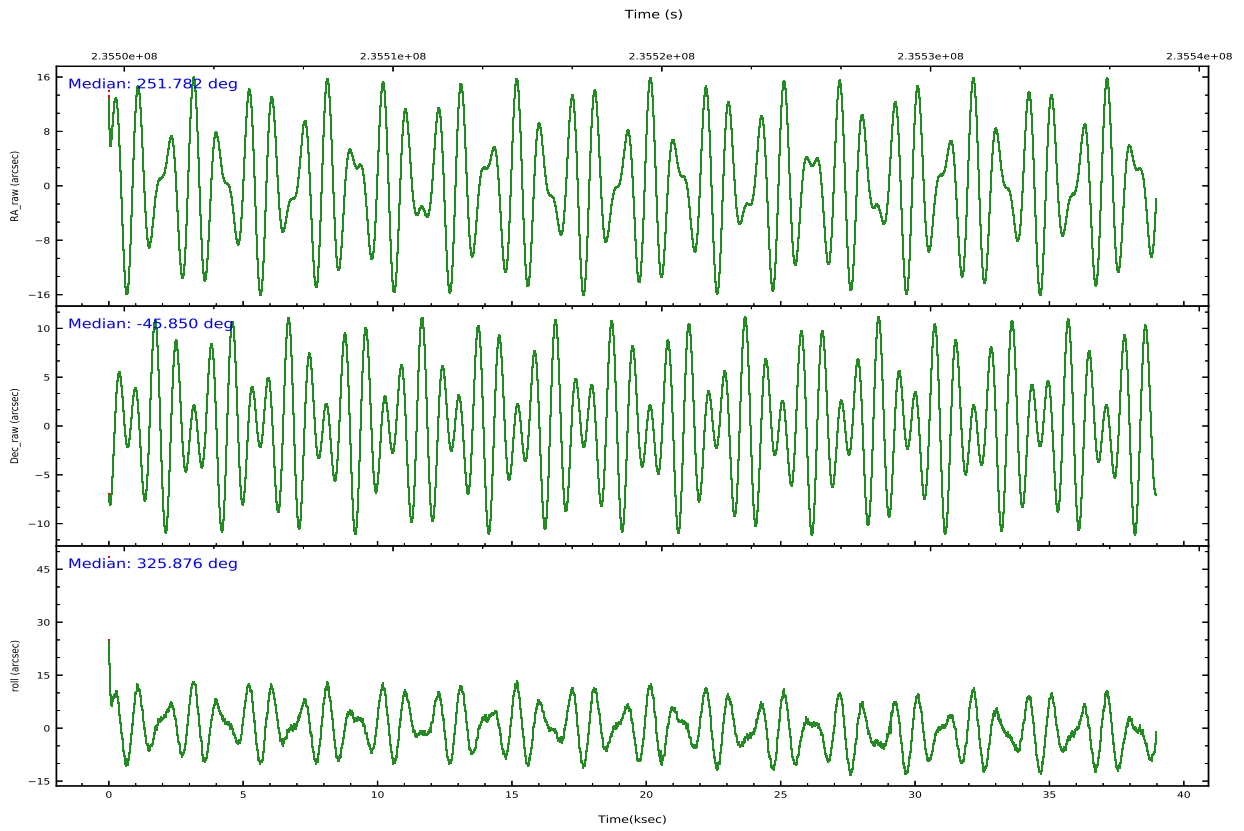
	ccd 2	ccd 3	ccd 4	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 4	ccd 6	ccd 7	ccd 8
level 1 events	265063	251264	300723	262675	311063	379124	grade 0 events	13032	14720	23794	15861	17915	68607
rejected events	235892	219645	261065	229782	156754	247566		4%	5%	7%	6%	5%	18%
rejected %	88%	87%	86%	87%	50%	65%	grade 1 events	154	161	337	282	254	965
								0%	0%	0%	0%	0%	0%
							grade 2 events	6325	6110	6777	6776	33281	25053
								2%	2%	2%	2%	10%	6%
							grade 3 events	2836	2999	3077	3220	15318	10920
								1%	1%	1%	1%	4%	2%
							grade 4 events	2895	3118	3018	3250	15464	10319
								1%	1%	1%	1%	4%	2%
							grade 5 events	7945	9771	9672	10172	29709	15230
								2%	3%	3%	3%	9%	4%
							grade 6 events	4642	5227	4682	6087	76898	23195
								1%	2%	1%	2%	24%	6%
							grade 7 events	227234	209158	249366	217027	122224	224835
								85%	83%	82%	82%	39%	59%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-234678	ACIS-234678	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	251.743420	251.77784453969	Subarray requested	NONE	NONE
[deg] Pointing Dec	-45.848676	-45.851506276804	Alternating exposures requested	N	N
[deg] Pointing Roll	325.696634	325.87617928006	[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)	235499607.184000	235498170.2983			
Observation start date	2005-06-18T16:32:23	2005-06-18T16:09:30			
[s] Observation end time (MET)	235538394.184000	235538618.33765			
Observation end date	2005-06-19T03:18:50	2005-06-19T03:23:38			
Read mode	TIMED	TIMED			

2.3 Aspect



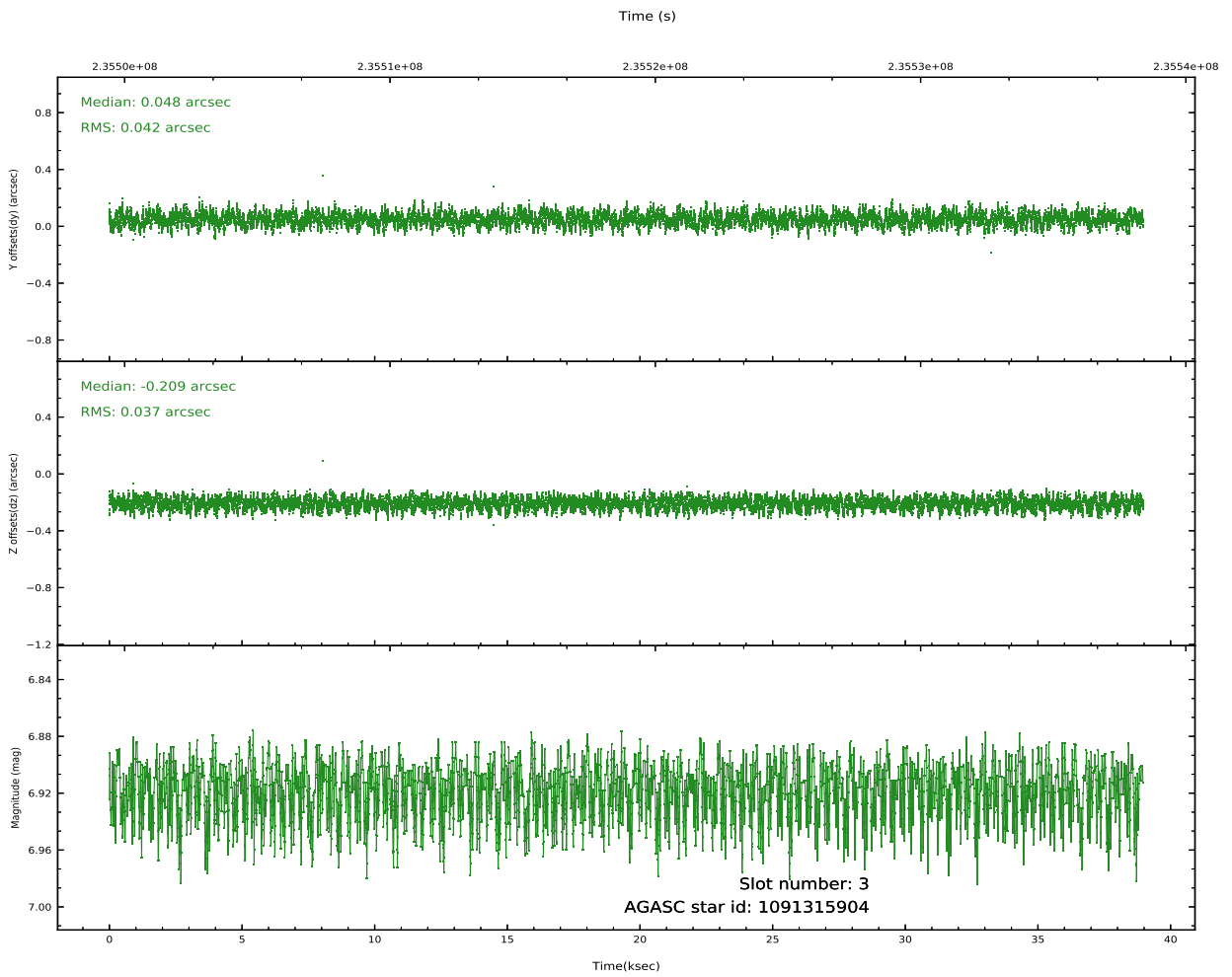
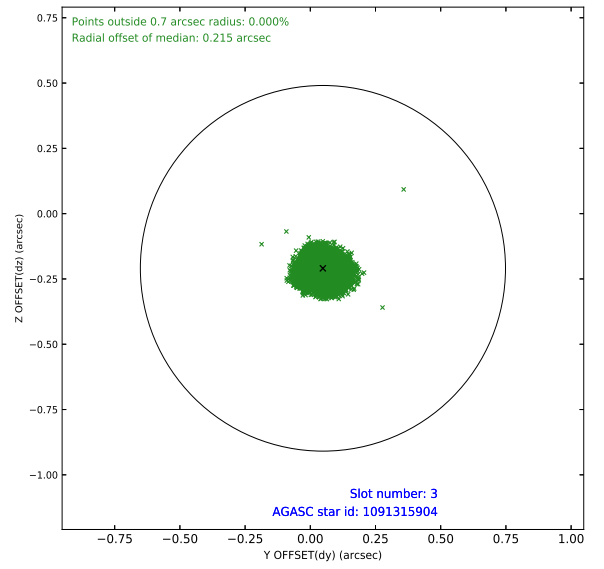
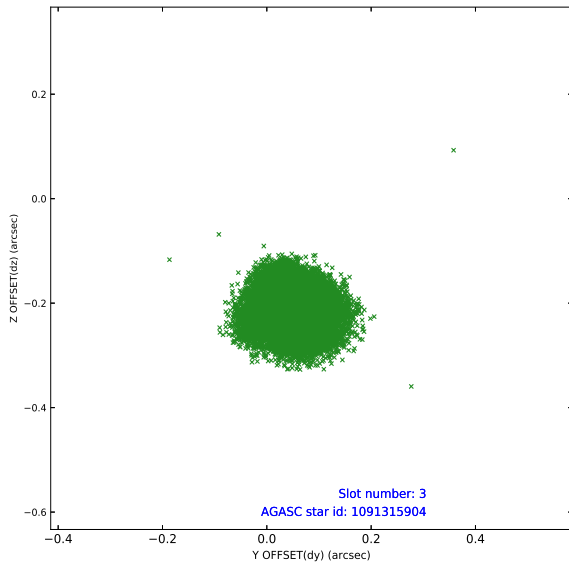


Slot Statistics

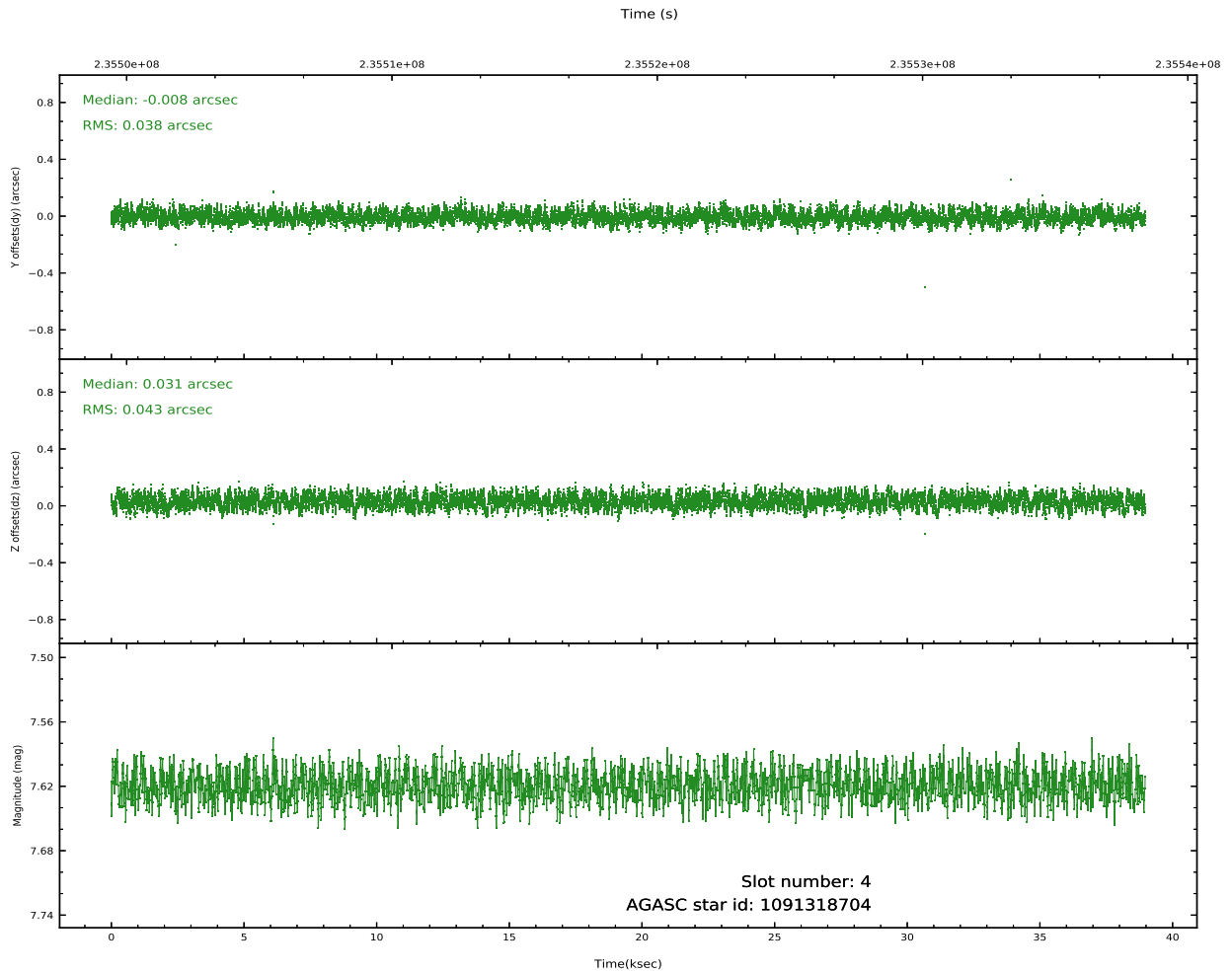
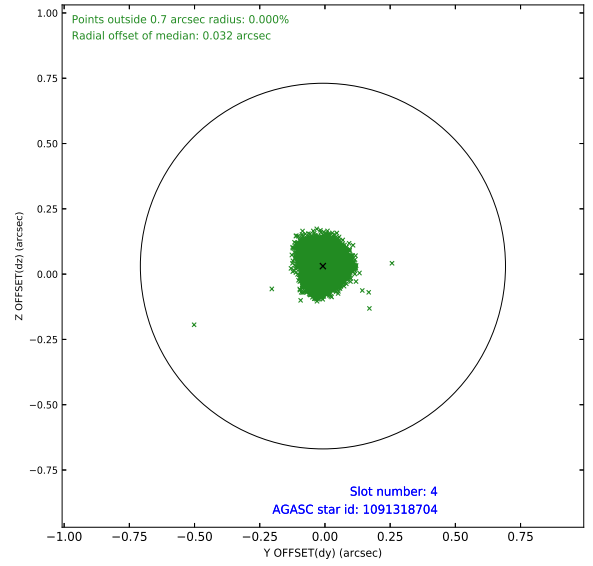
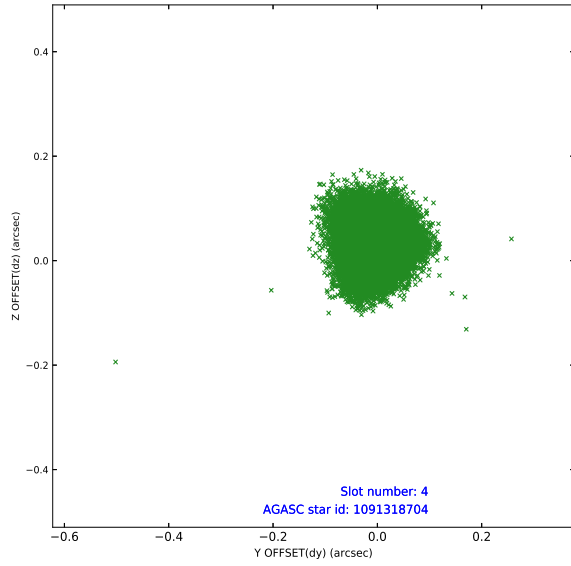
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	9506	1.000	-0.126	-0.102	0.008	0.016	0.000000	0.000000	-759.53	-1731
1	FID		ACIS-S-4	7.21	9506	1.000	0.105	0.066	0.011	0.018	0.000000	0.000000	2153.93	177
2	FID		ACIS-S-6	7.35	9506	1.000	-0.007	0.045	0.014	0.022	0.000000	0.000000	402.55	814
3	GUIDE	used	1091315904	6.92	19010	1.000	0.048	-0.209	0.061	0.093	252.023077	-45.944918	774.59	107
4	GUIDE	used	1091318704	7.62	19008	1.000	-0.008	0.031	0.063	0.095	251.955714	-45.390313	-486.22	1665
5	GUIDE	used	1091321136	8.53	19005	1.000	-0.013	0.063	0.059	0.097	252.629031	-45.865288	1874.49	1192
6	GUIDE	used	1091321752	6.96	18942	1.000	-0.033	0.058	0.047	0.078	251.516776	-46.486101	830.40	-2212
7	GUIDE	used	1091343368	6.92	19010	1.000	-0.007	0.065	0.059	0.108	251.526552	-46.531998	943.92	-2335

2.4 Star Slots

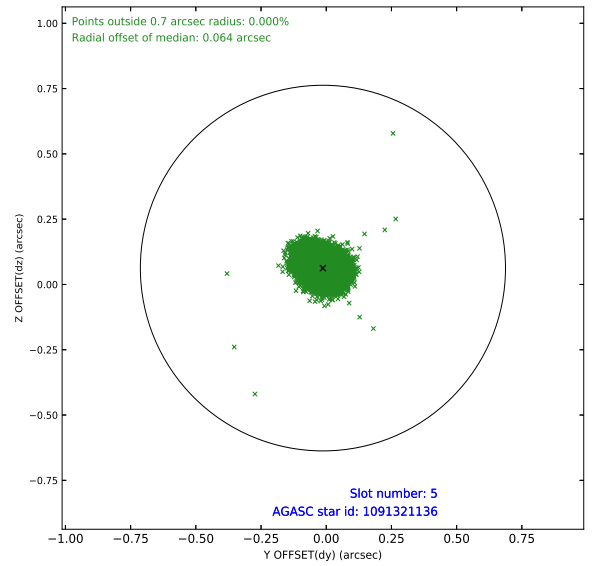
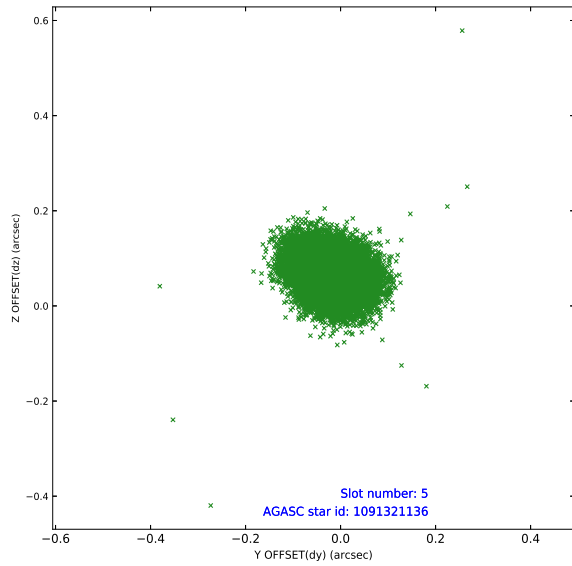
2.4.1 Slot 3



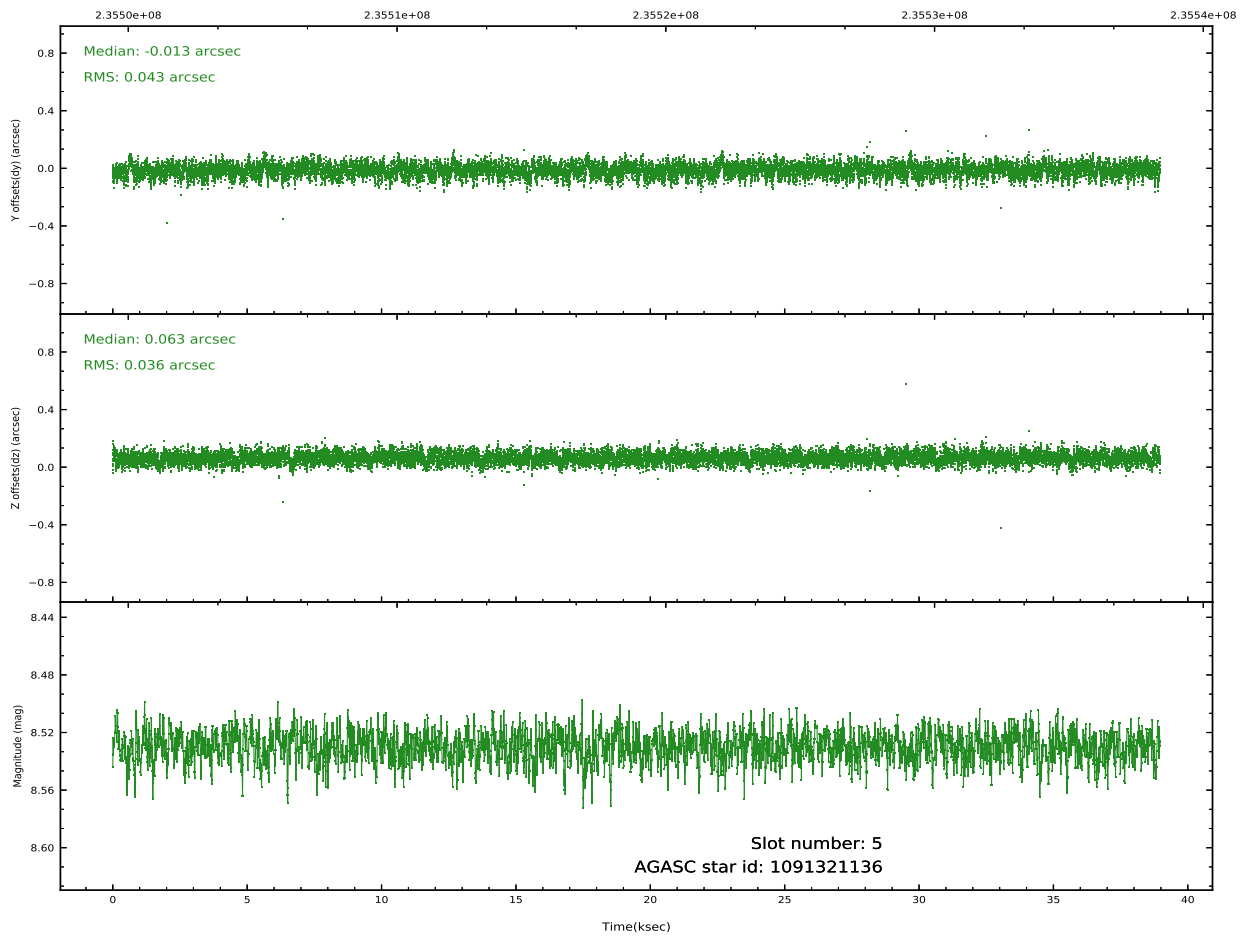
2.4.2 Slot 4



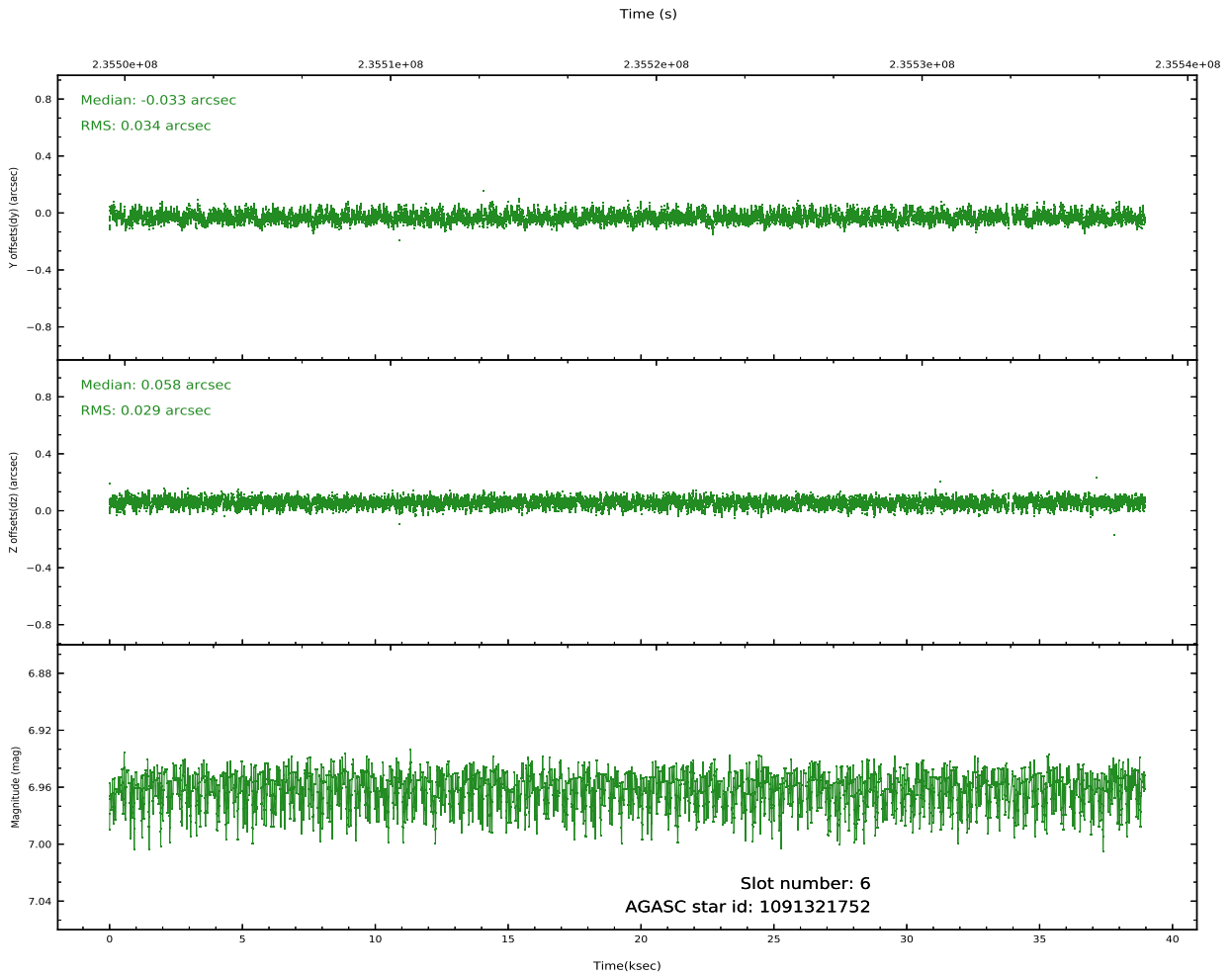
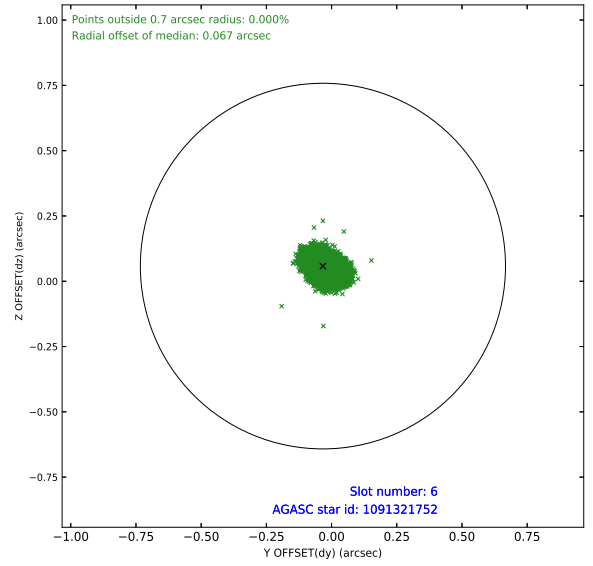
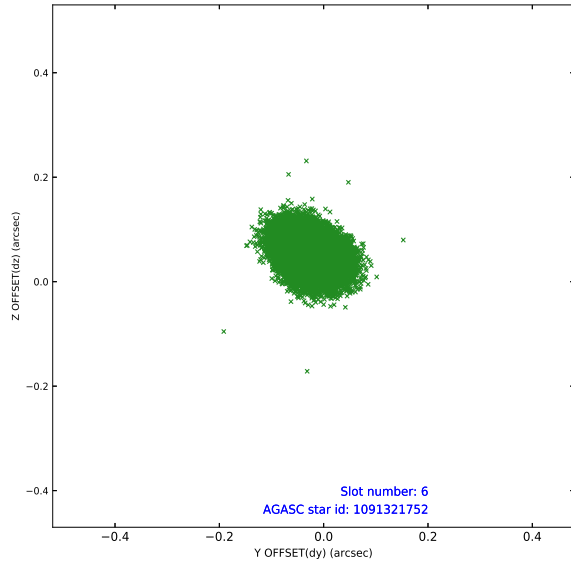
2.4.3 Slot 5



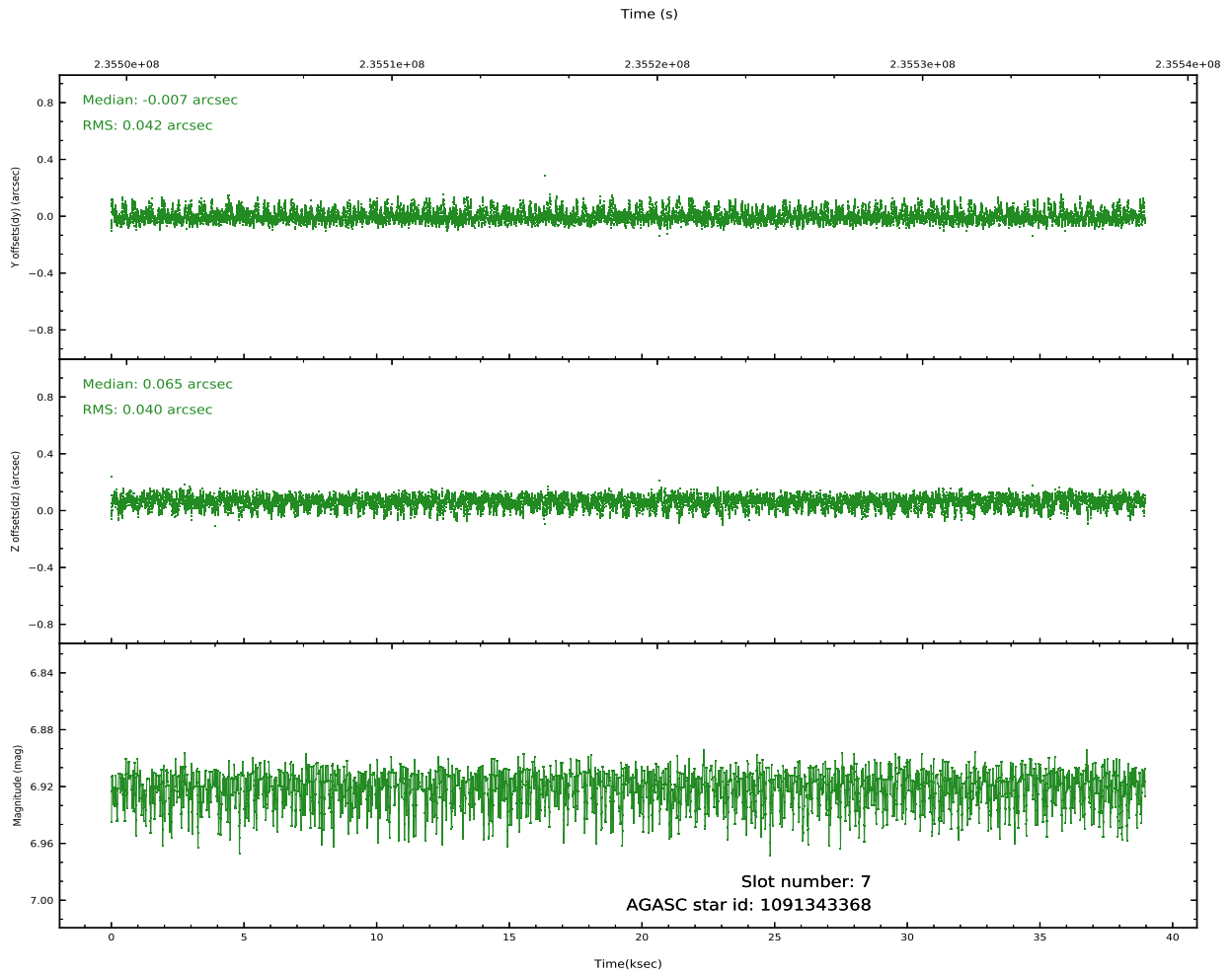
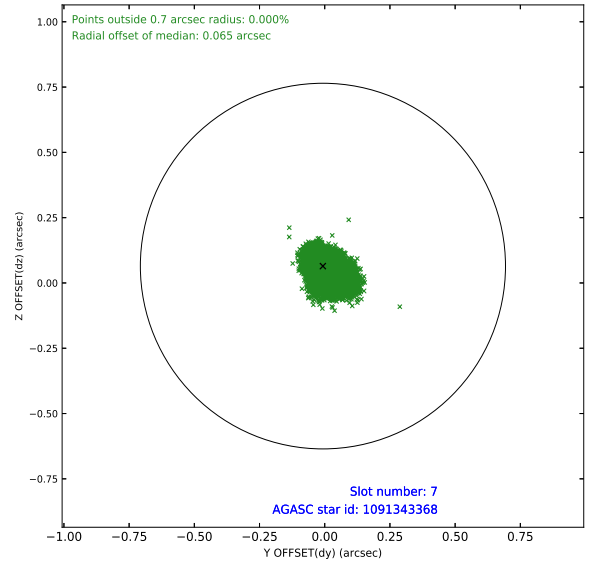
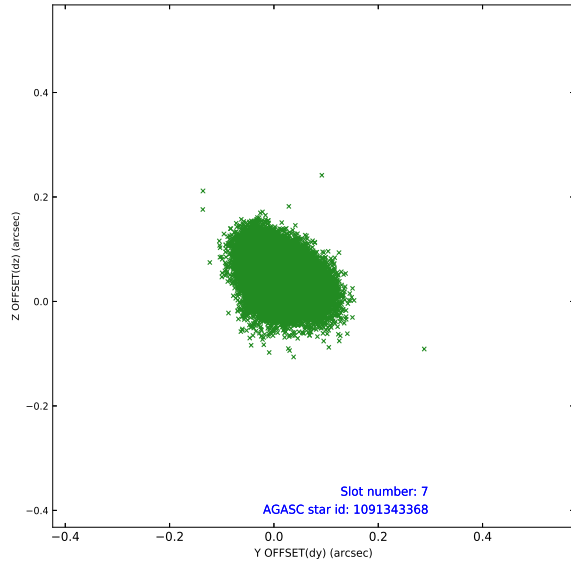
Time (s)



2.4.4 Slot 6

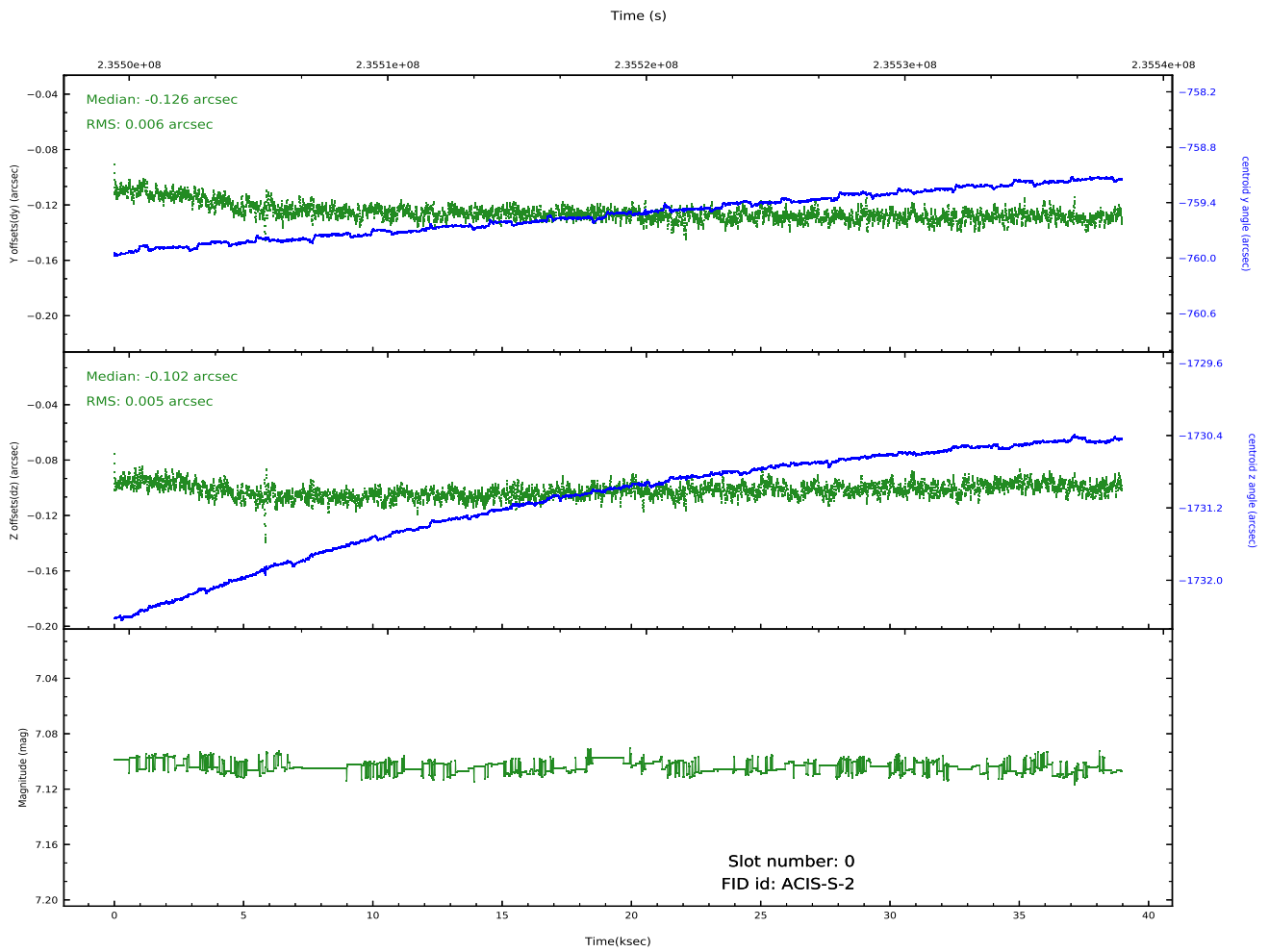
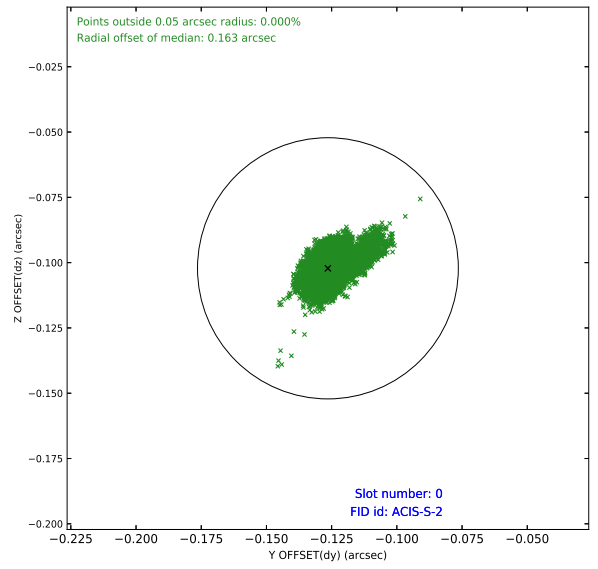
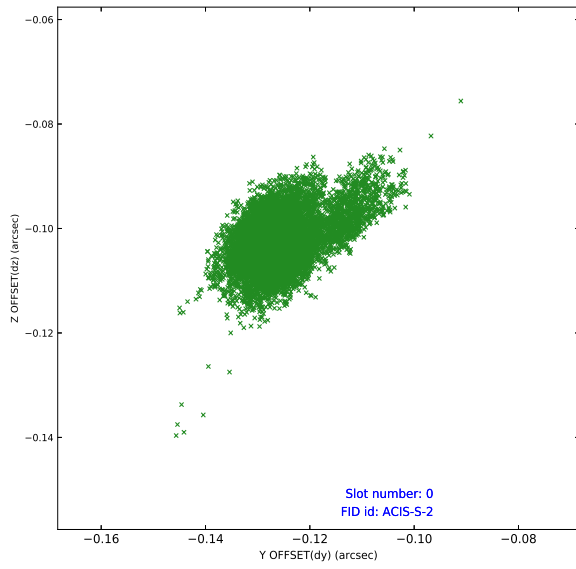


2.4.5 Slot 7

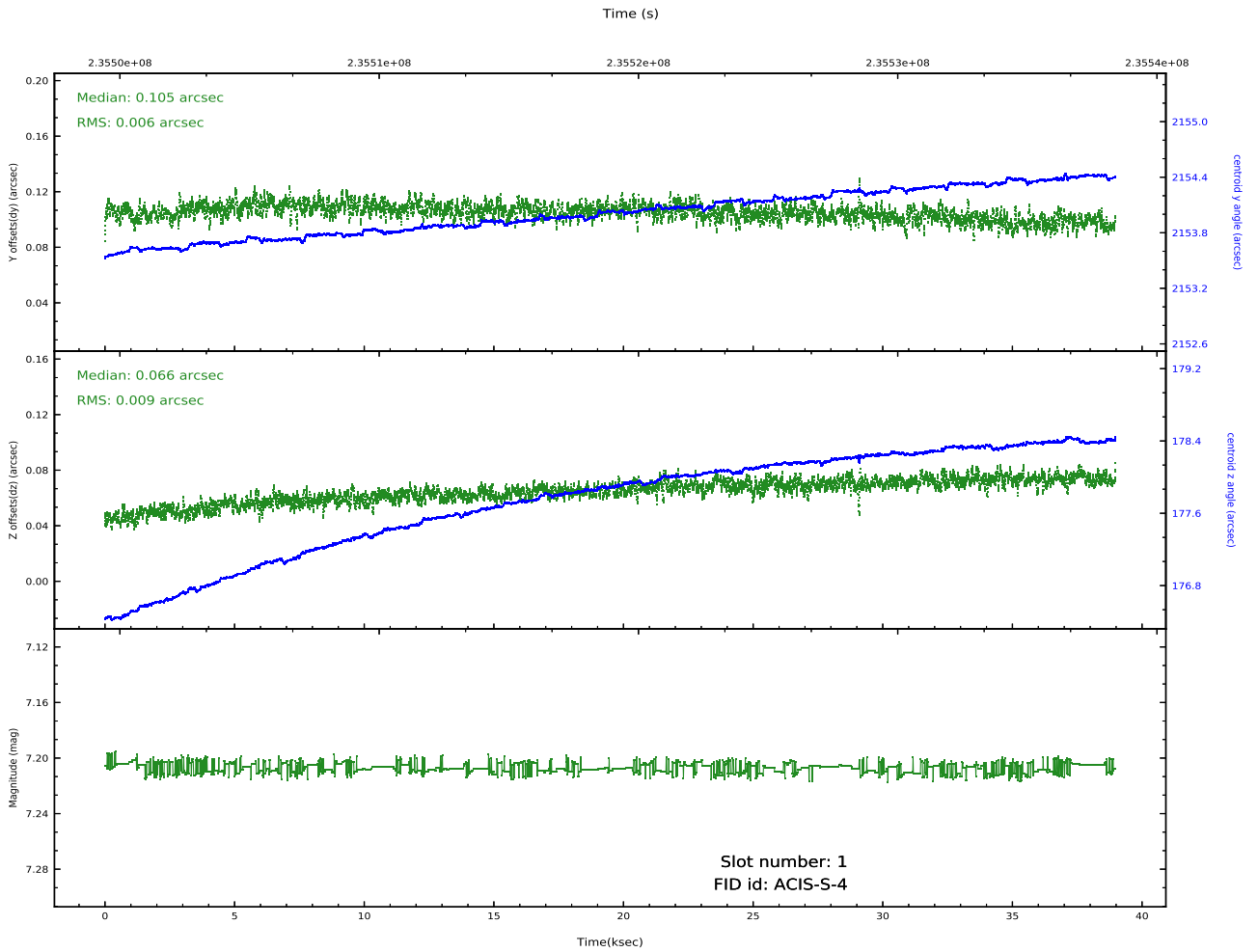
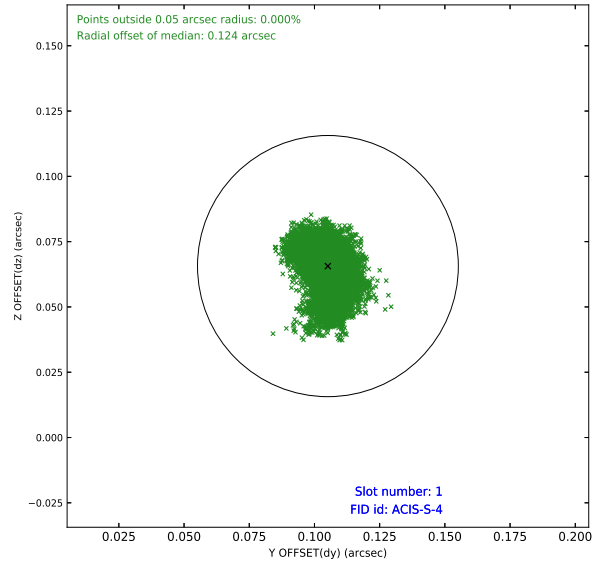
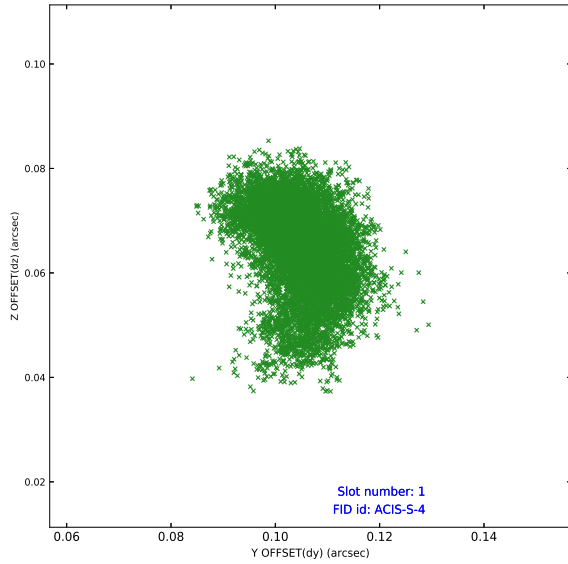


2.5 FID Slots

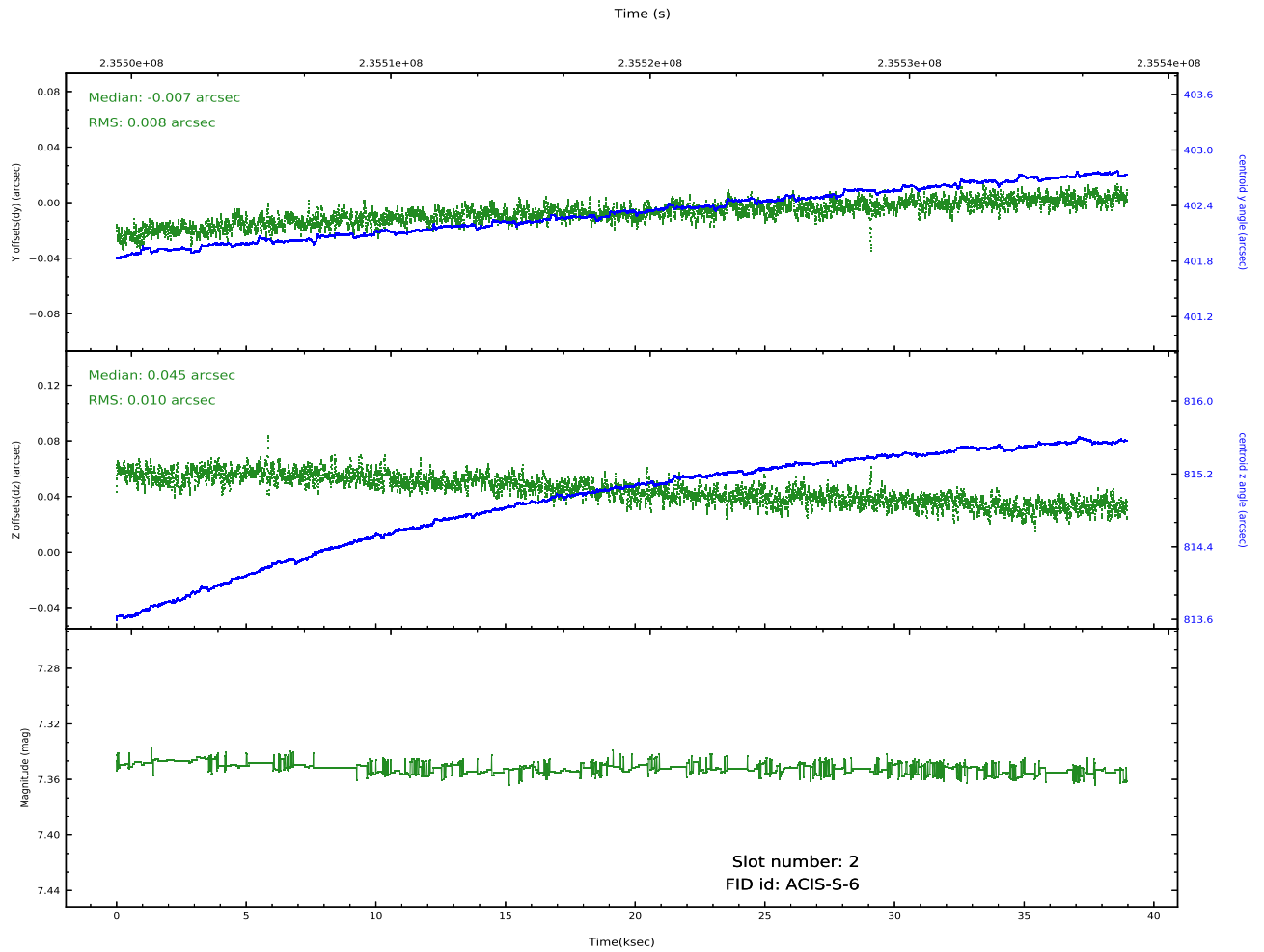
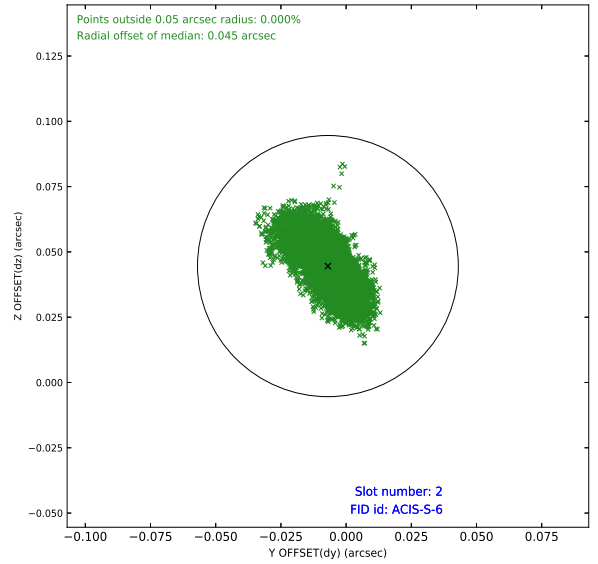
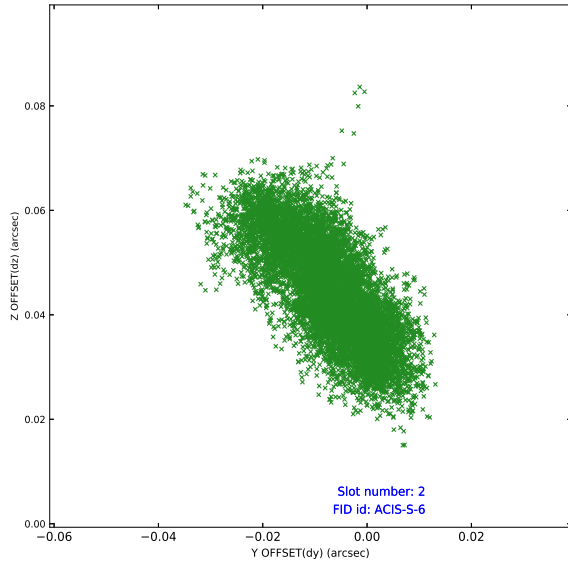
2.5.1 Slot 0



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)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.96639

A.2 Comments