

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4963 - L2 Version 4
Chandra X-Ray Center

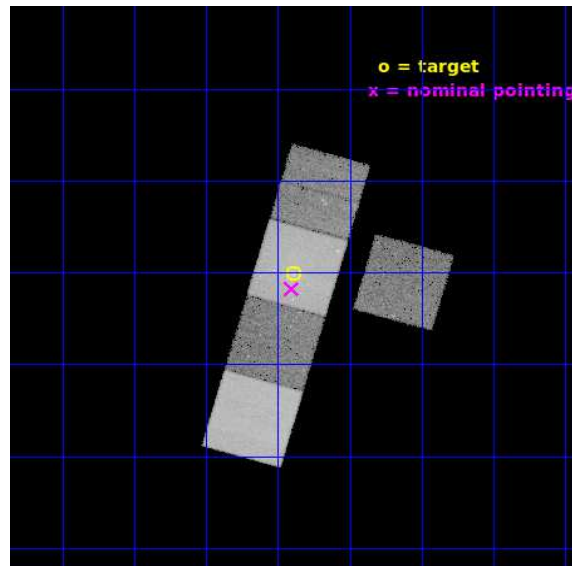
L2 Processing Date : Oct 6 2020

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1 Front

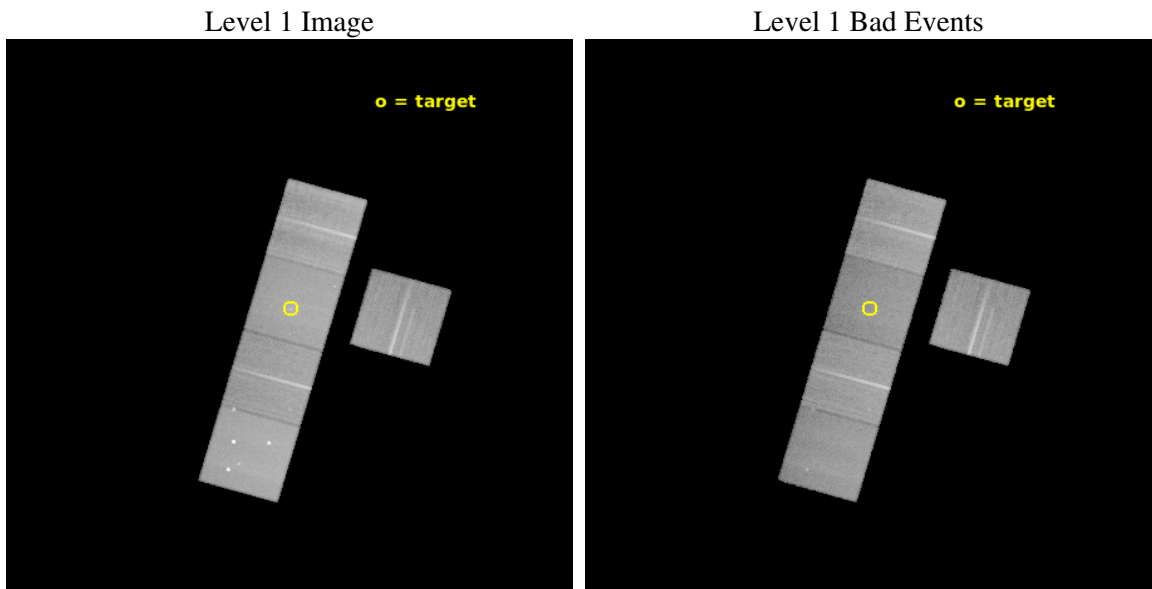
seq_num	800409	Sequence number
obs_id	4963	Observation id
title	Shedding X-ray Light on ``Dark" Groups of Galaxies	Proposal tit
observer	David Buote	Principal investigator
object	MS 0116.3-0115	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	19.723333	Observer's specified target RA [deg]
dec_targ	-1.001944	Observer's specified target Dec [deg]
ra_nom	19.725763654411	Nominal RA [deg]
dec_nom	-1.0291493858021	Nominal Dec [deg]
roll_nom	285.9611874668	Nominal Roll [deg]
revision	4	Processing version of data
ontime	39772.999923497	Sum of GTIs [s]
livetime	39253.33639904	Livetime [s]
ontime3	39766.717953056	Sum of GTIs [s]
ontime5	39772.999923497	Sum of GTIs [s]
ontime6	39772.999923497	Sum of GTIs [s]
ontime7	39772.999923497	Sum of GTIs [s]
ontime8	39757.294912606	Sum of GTIs [s]
l2events	352742	Number of level 2 events



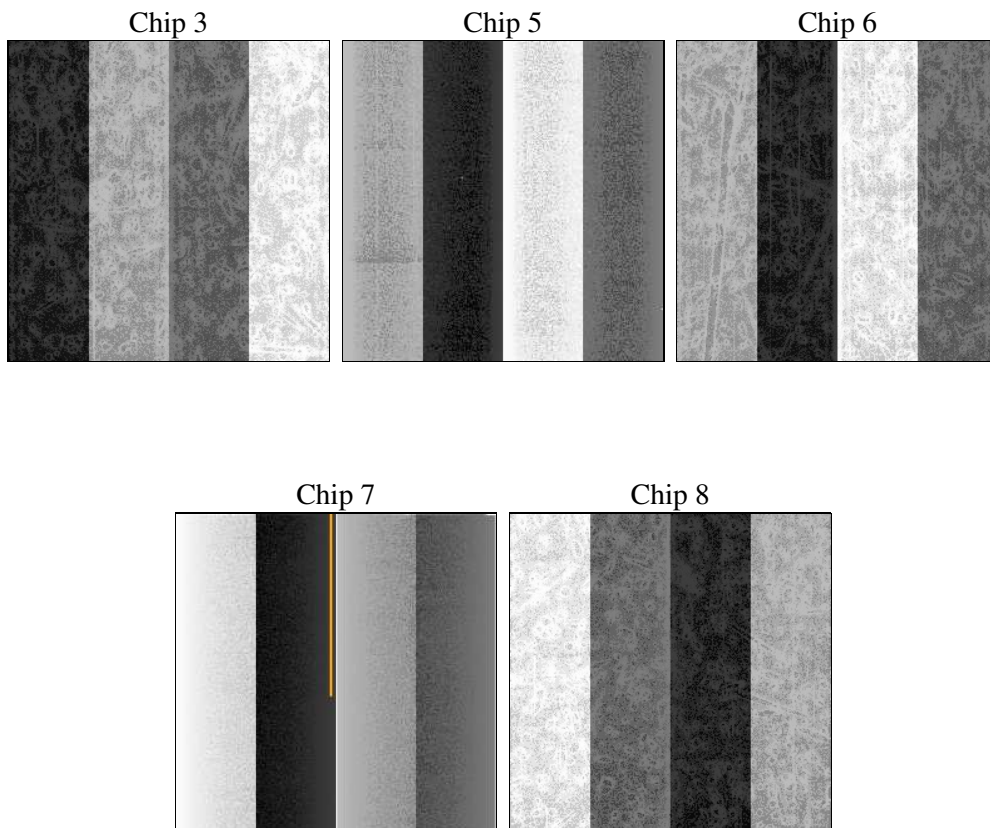
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	39772.999923497	Sum of GTIs [s]
caldsver	4.9.2	 	ontime3	39766.717953056	Sum of GTIs [s]
date	2020-10-06T17:09:56	Date and time of file creation	ontime5	39772.999923497	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	39772.999923497	Sum of GTIs [s]
			ontime7	39772.999923497	Sum of GTIs [s]
			ontime8	39757.294912606	Sum of GTIs [s]
			l1events	1417888	Number of level 1 events

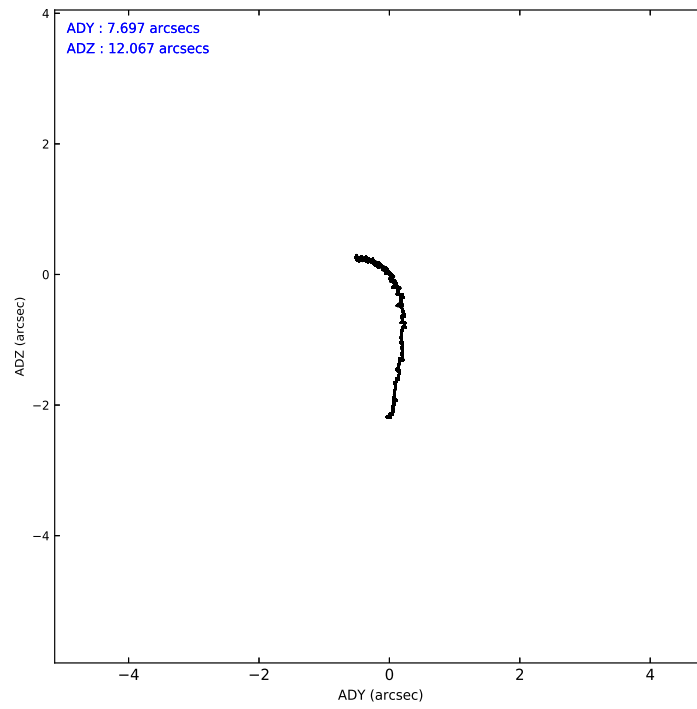
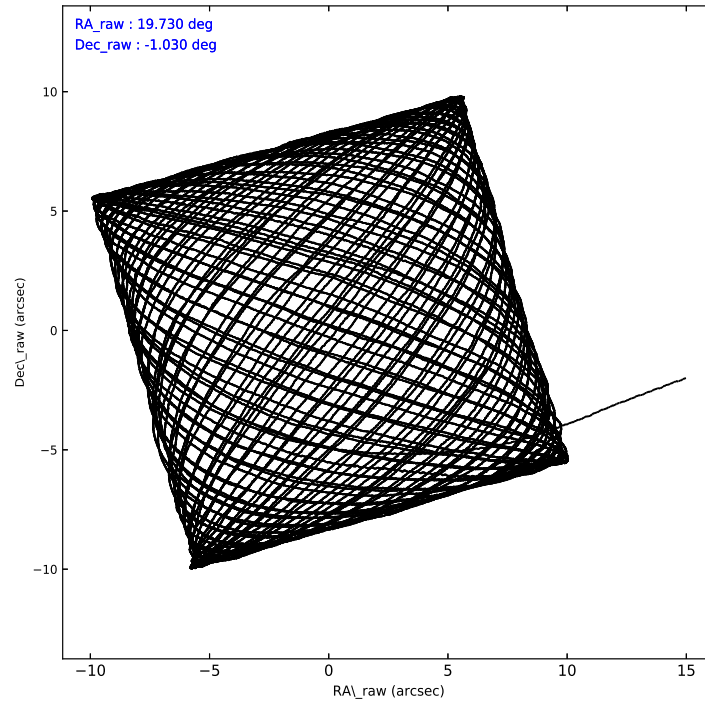
2.1.4 Events

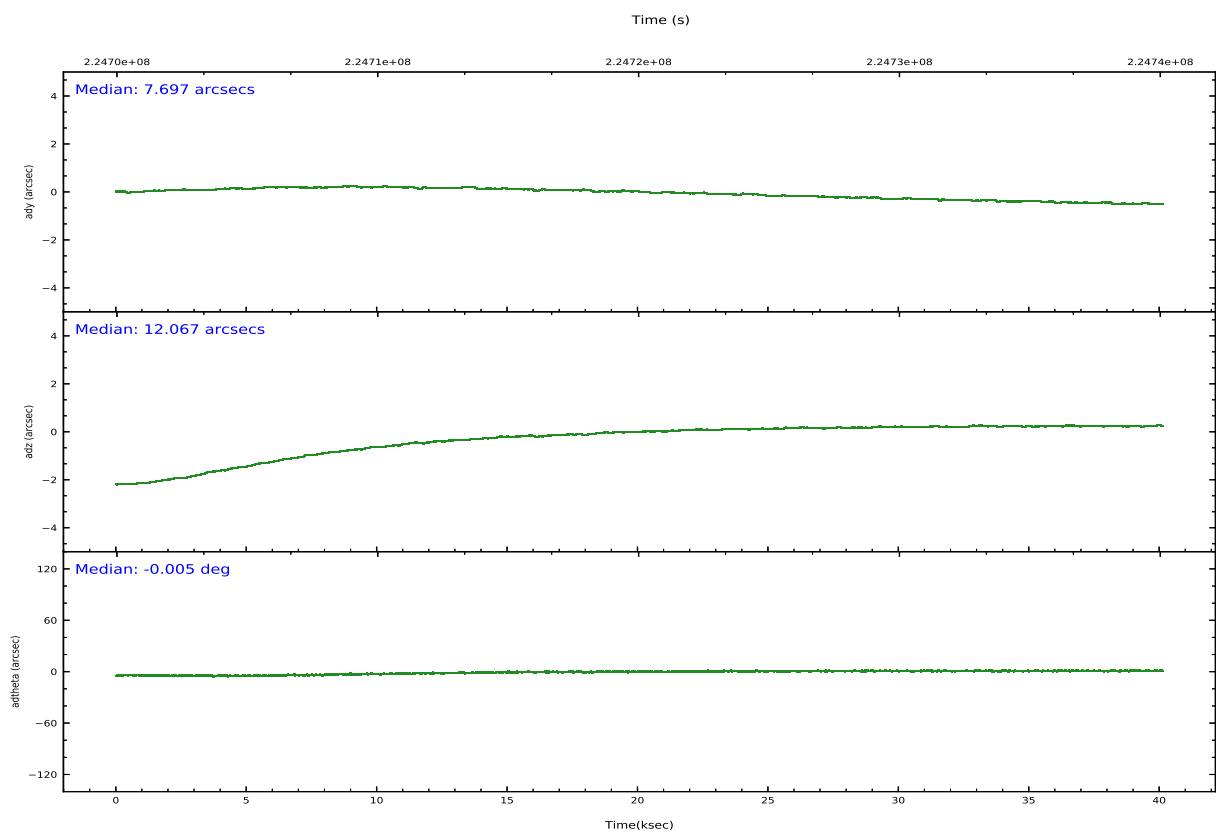
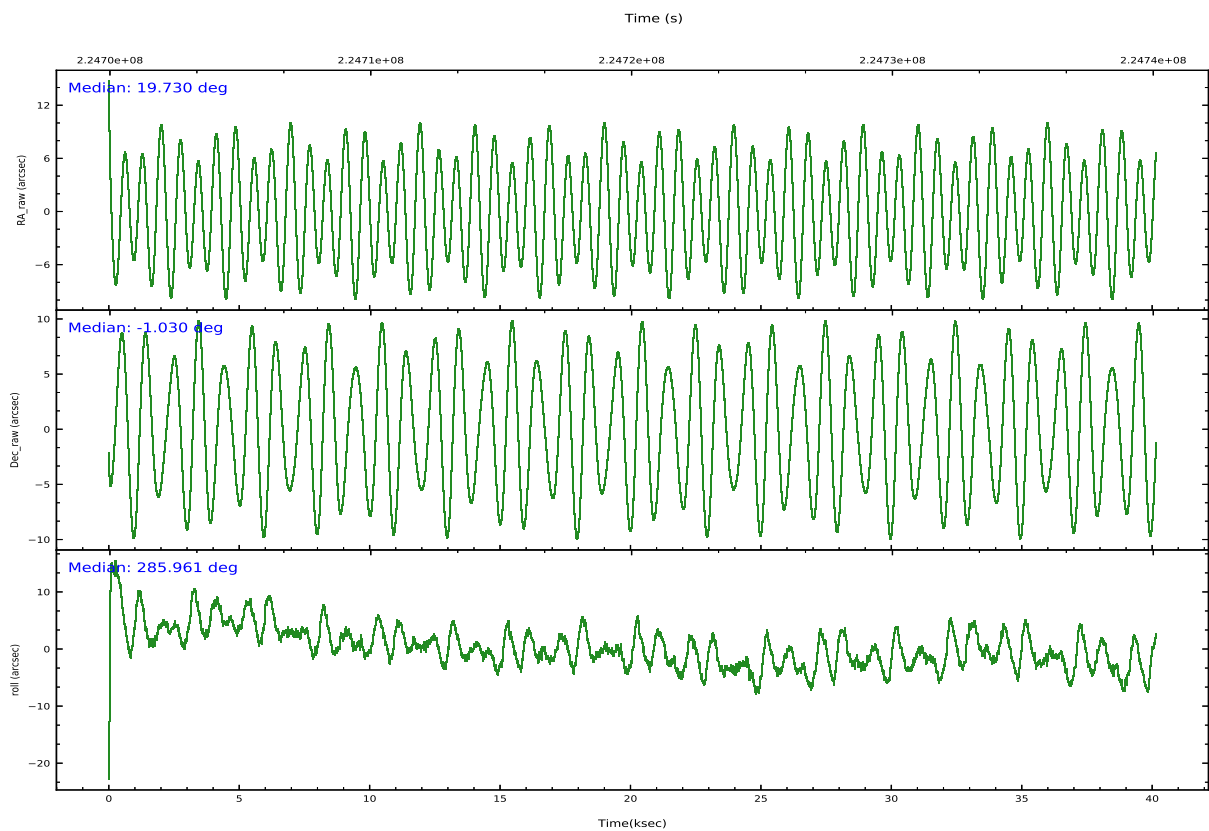
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	230934	346011	248378	281266	311299	grade 0 events	8085	28113	10036	14606	22288
rejected events	208317	168546	221661	147324	237804		3%	8%	4%	5%	7%
rejected %	90%	48%	89%	52%	76%	grade 1 events	124	534	119	253	240
							0%	0%	0%	0%	0%
						grade 2 events	4729	49829	5685	27776	15979
							2%	14%	2%	9%	5%
						grade 3 events	2686	7372	2991	12995	8129
							1%	2%	1%	4%	2%
						grade 4 events	2582	6998	2853	12607	7440
							1%	2%	1%	4%	2%
						grade 5 events	9281	26798	9813	28745	13921
							4%	7%	3%	10%	4%
						grade 6 events	4535	85173	5154	65967	19659
							1%	24%	2%	23%	6%
						grade 7 events	198912	141194	211727	118317	223643
							86%	40%	85%	42%	71%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-35678	ACIS-35678	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	19.709799	19.725763654411	Subarray requested	NONE	NONE
[deg] Pointing Dec	-1.011663	-1.0291493858021	Alternating exposures requested	N	N
[deg] Pointing Roll	285.799905	285.9611874668	[s] Primary exposure time	0.000000	3.1
[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)	224700110.184000	224698964.55741			
Observation start date	2005-02-13T16:40:46	2005-02-13T16:22:44			
[s] Observation end time (MET)	224740110.184000	224741966.38435			
Observation end date	2005-02-14T03:47:26	2005-02-14T04:19:26			
Read mode	TIMED	TIMED			

2.3 Aspect



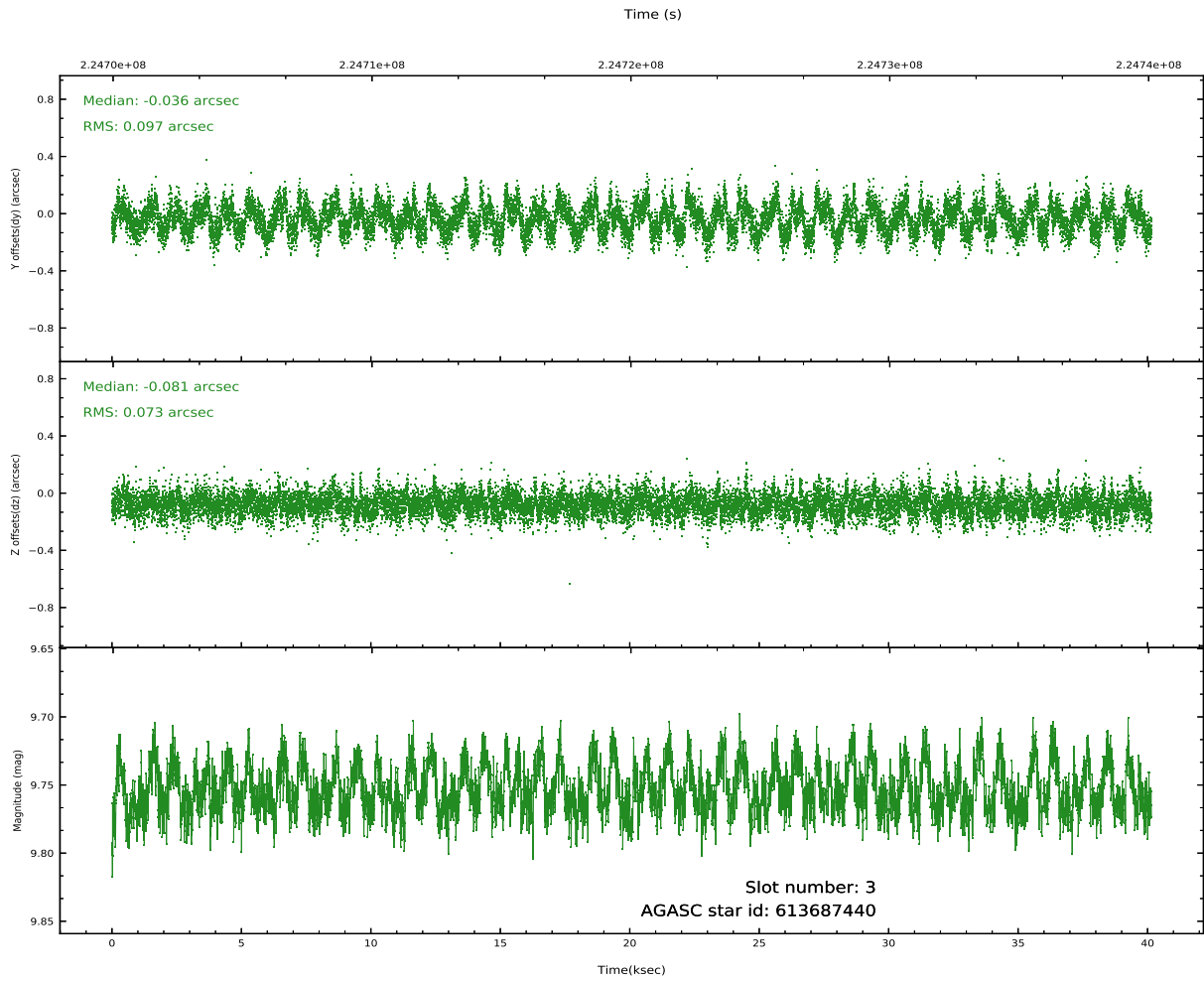
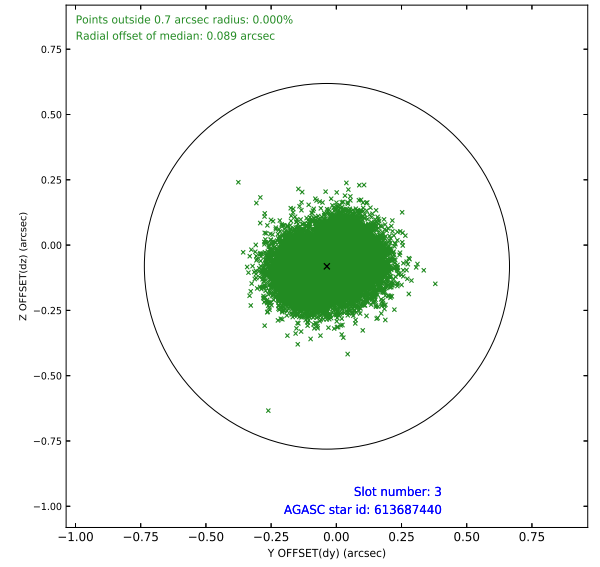
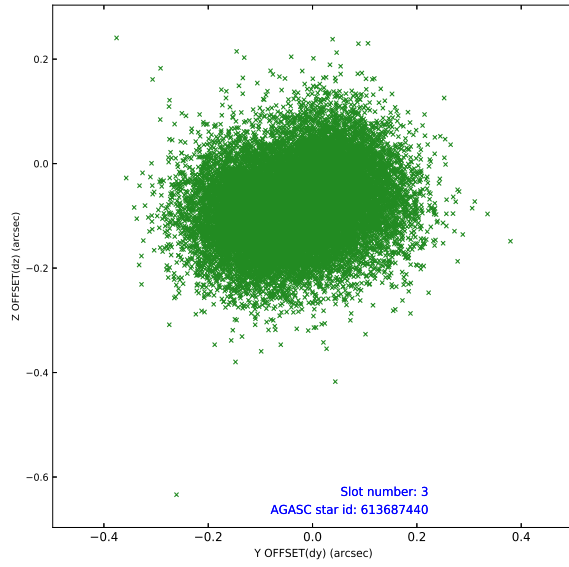


Slot Statistics

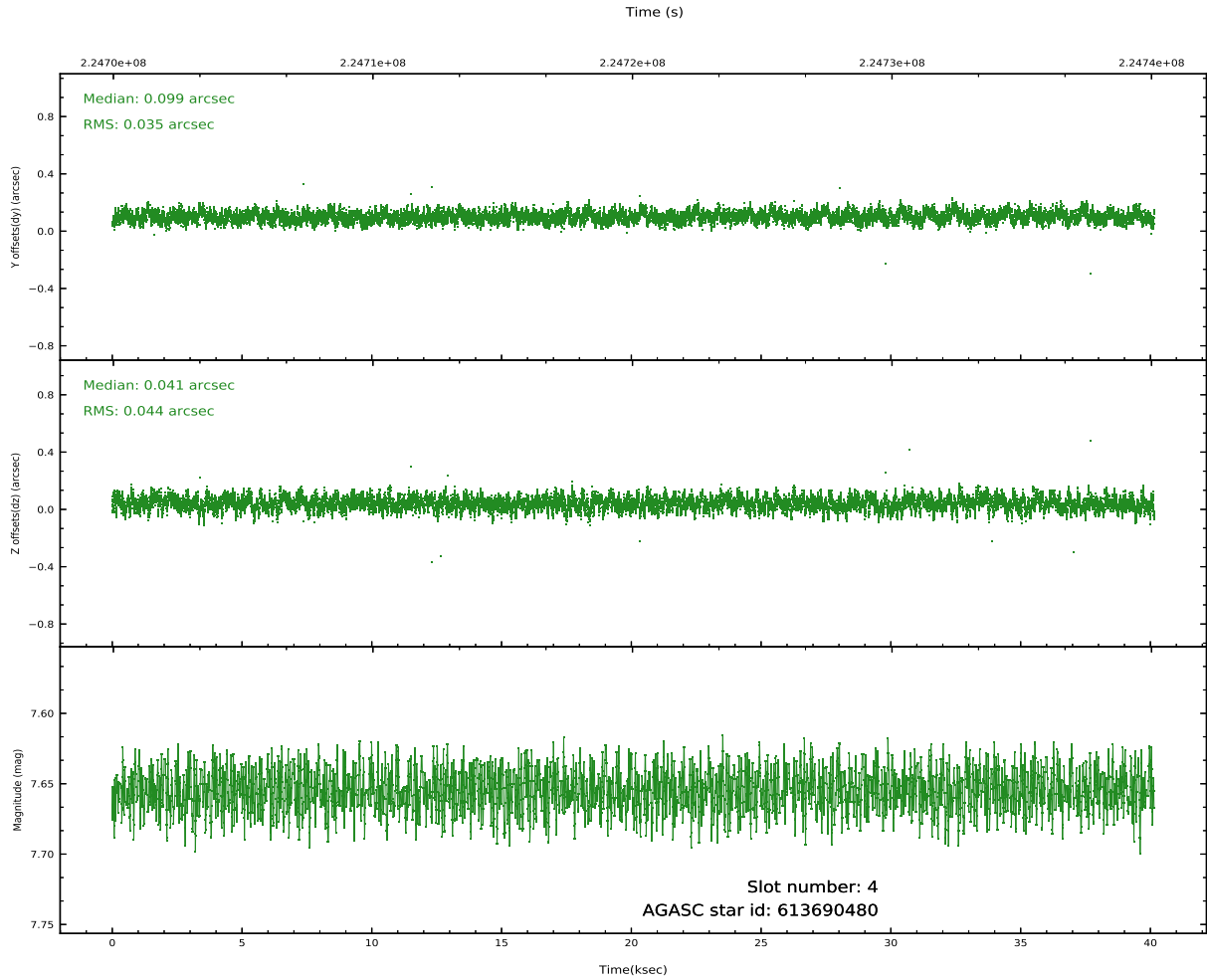
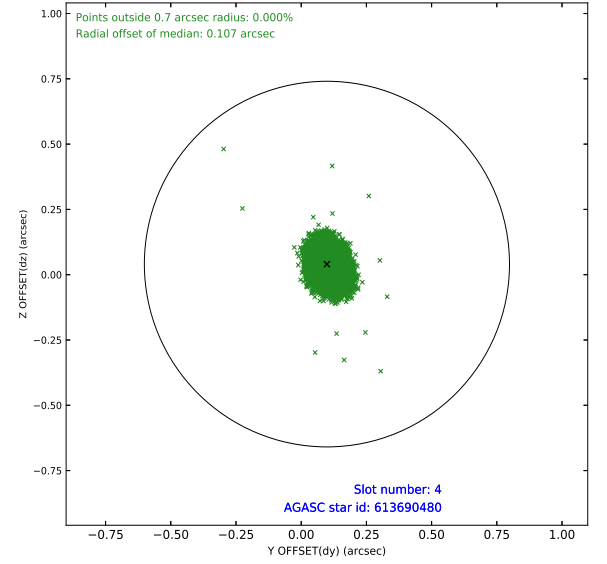
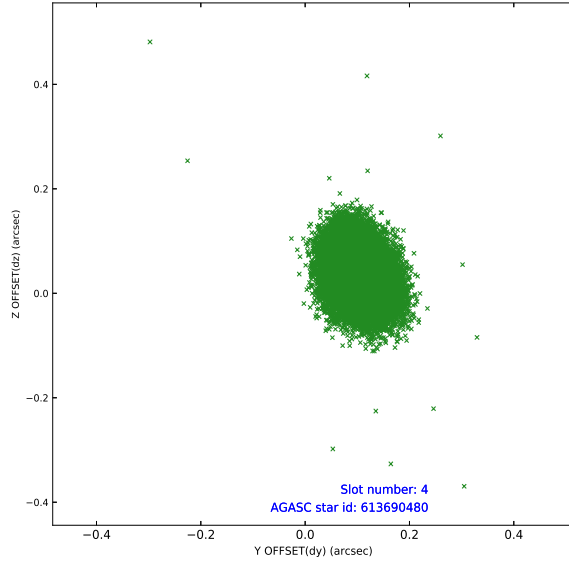
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	9794	1.000	-0.048	-0.059	0.013	0.026	0.000000	0.000000	-760.41	-1733
1	FID		ACIS-S-4	7.20	9794	1.000	0.136	0.040	0.011	0.026	0.000000	0.000000	2153.01	175
2	FID		ACIS-S-5	7.23	9793	1.000	-0.119	0.029	0.012	0.020	0.000000	0.000000	-1813.34	169
3	GUIDE	used	613687440	9.75	19567	1.000	-0.036	-0.081	0.130	0.207	19.730049	-0.398183	-2105.16	671
4	GUIDE	used	613690480	7.65	19583	1.000	0.099	0.041	0.059	0.096	20.221201	-1.310586	1536.91	1478
5	GUIDE	used	613690664	9.10	19581	1.000	0.014	0.068	0.084	0.140	20.005872	-0.823410	-361.61	1210
6	GUIDE	used	613692216	9.73	19536	1.000	-0.030	0.110	0.112	0.184	19.881949	-0.589032	-1295.21	1010
7	GUIDE	used	613689696	10.51	19552	1.000	-0.050	-0.137	0.213	0.318	19.232058	-0.909892	-820.57	-1555

2.4 Star Slots

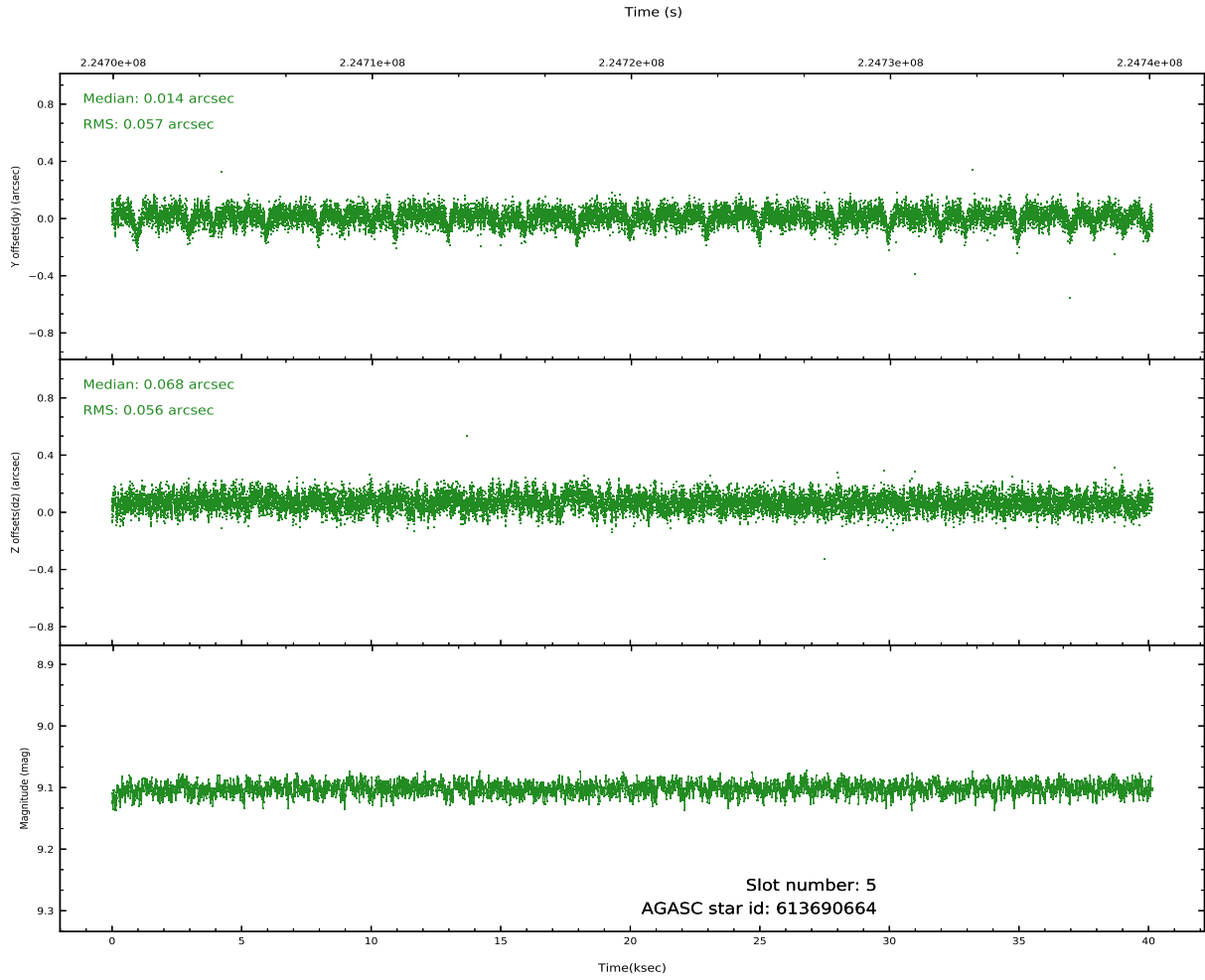
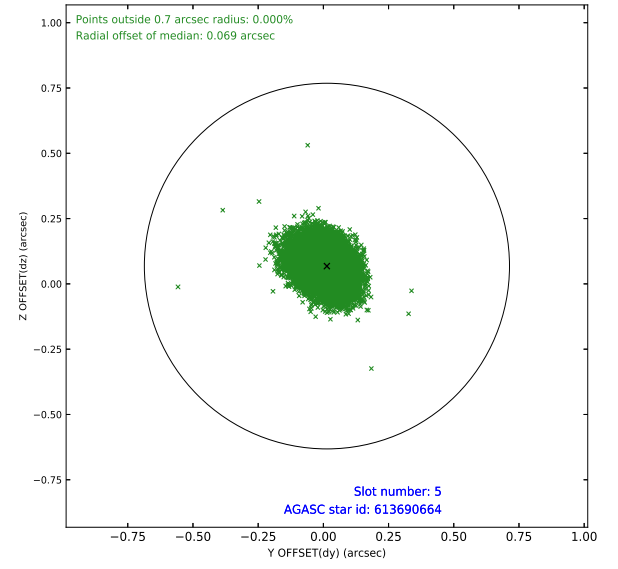
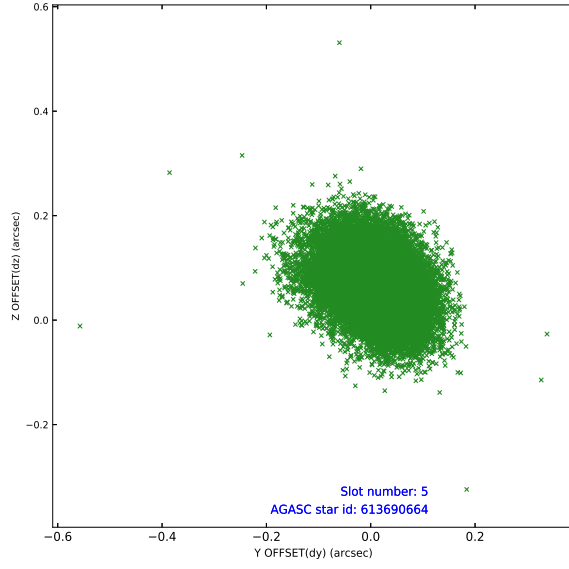
2.4.1 Slot 3



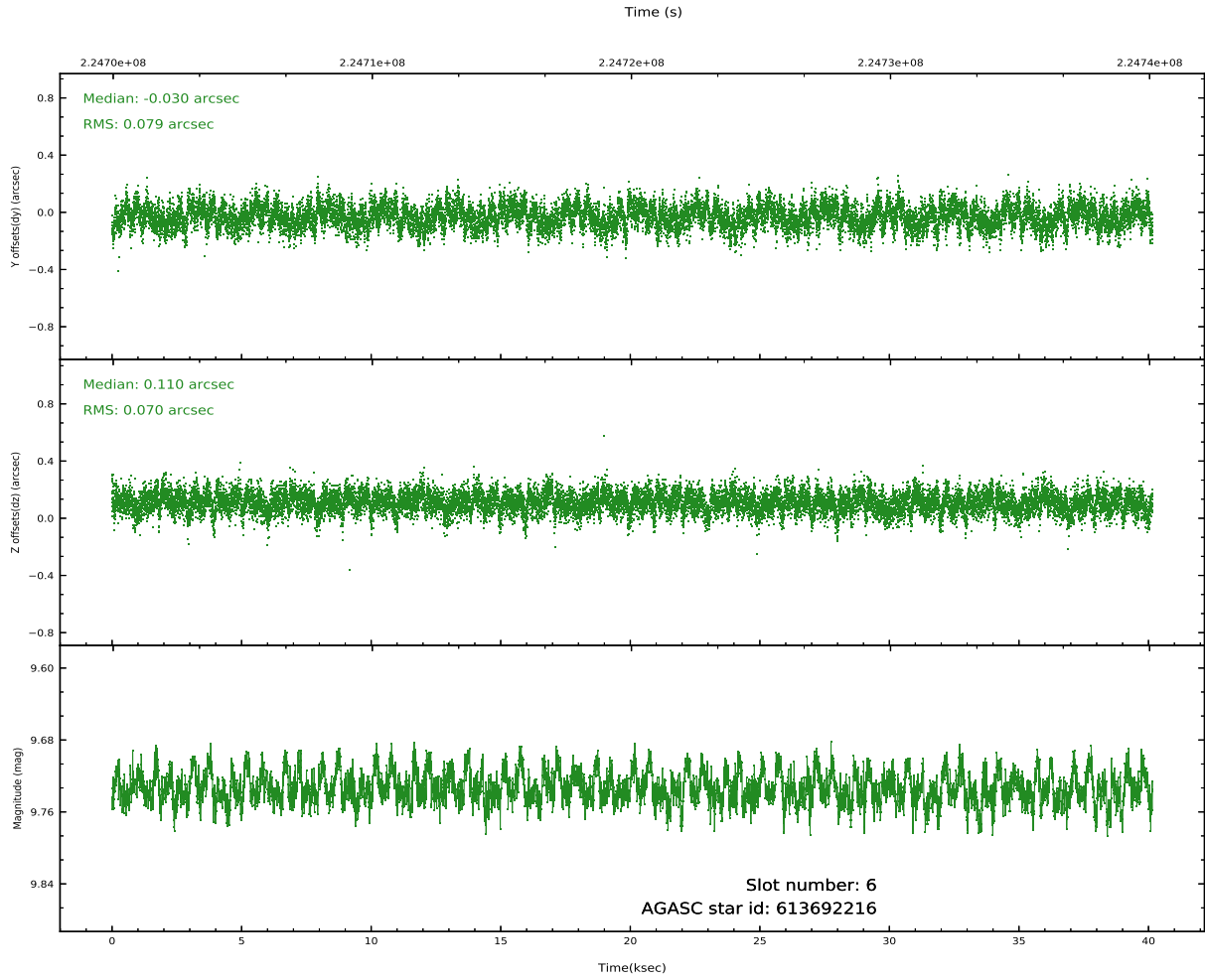
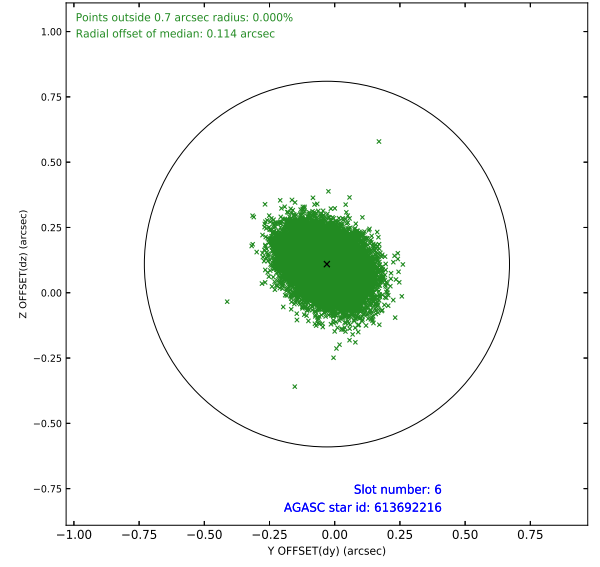
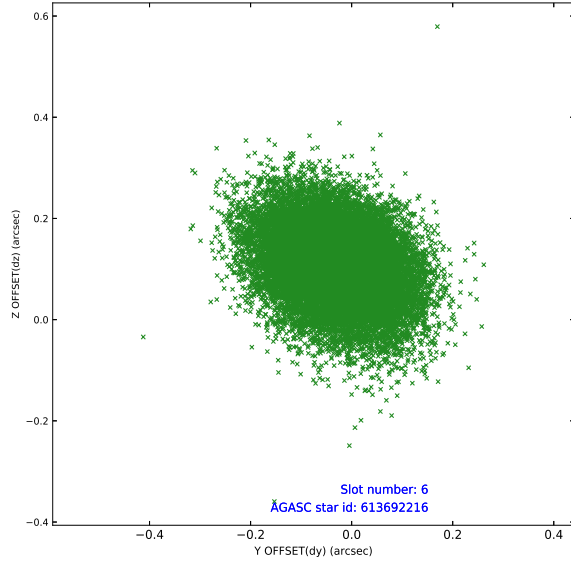
2.4.2 Slot 4



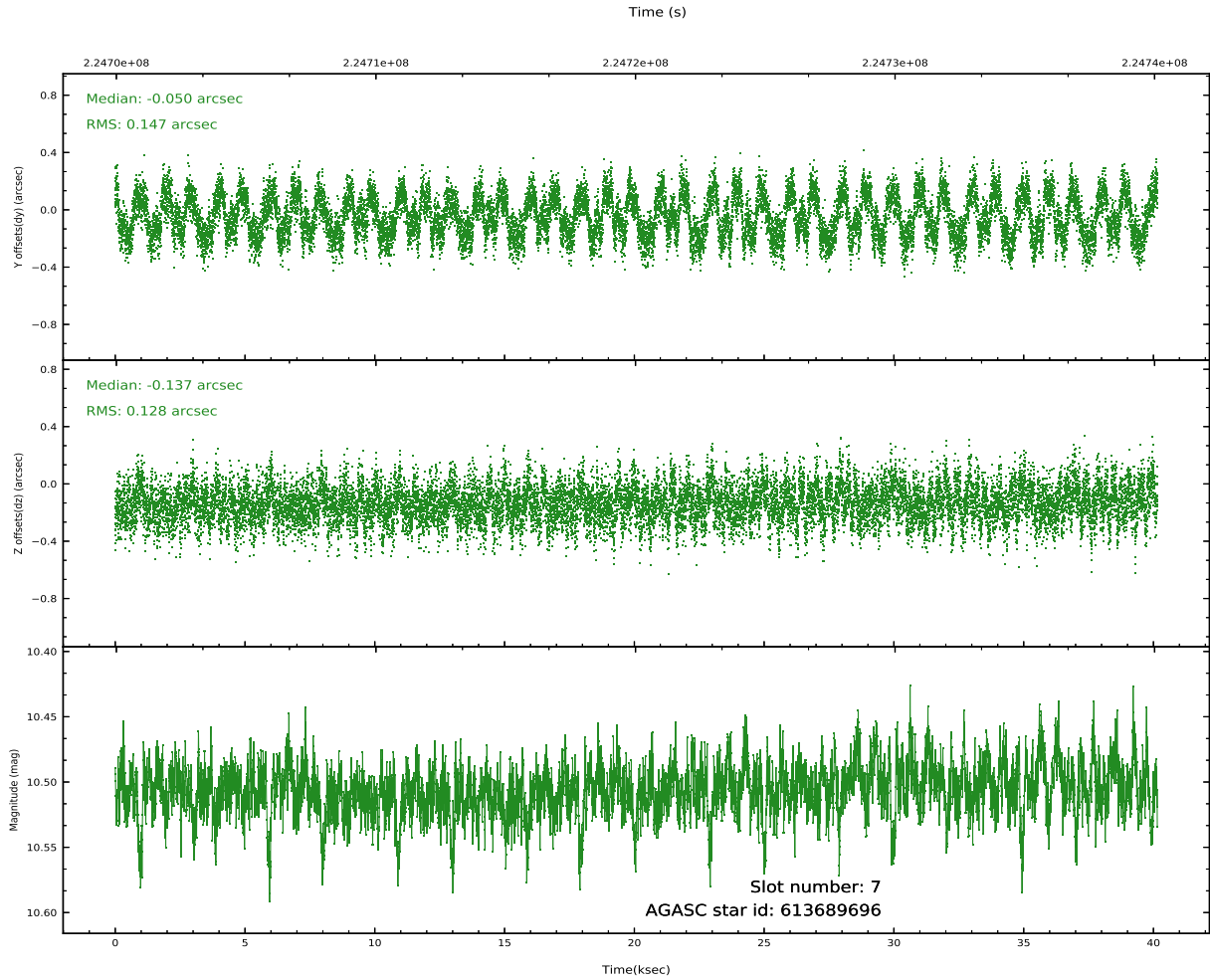
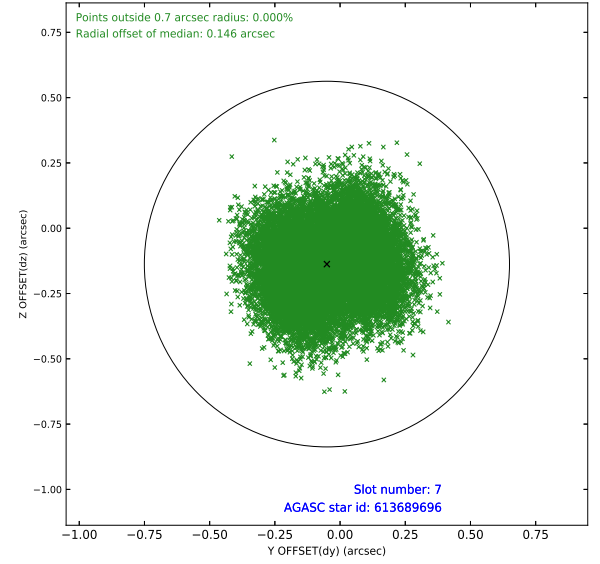
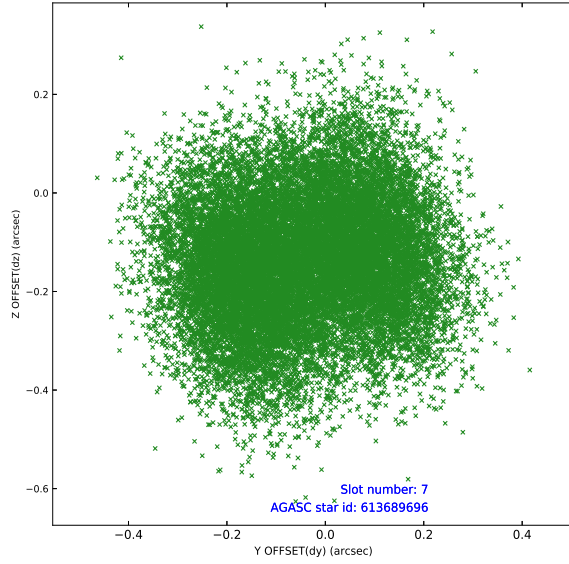
2.4.3 Slot 5



2.4.4 Slot 6

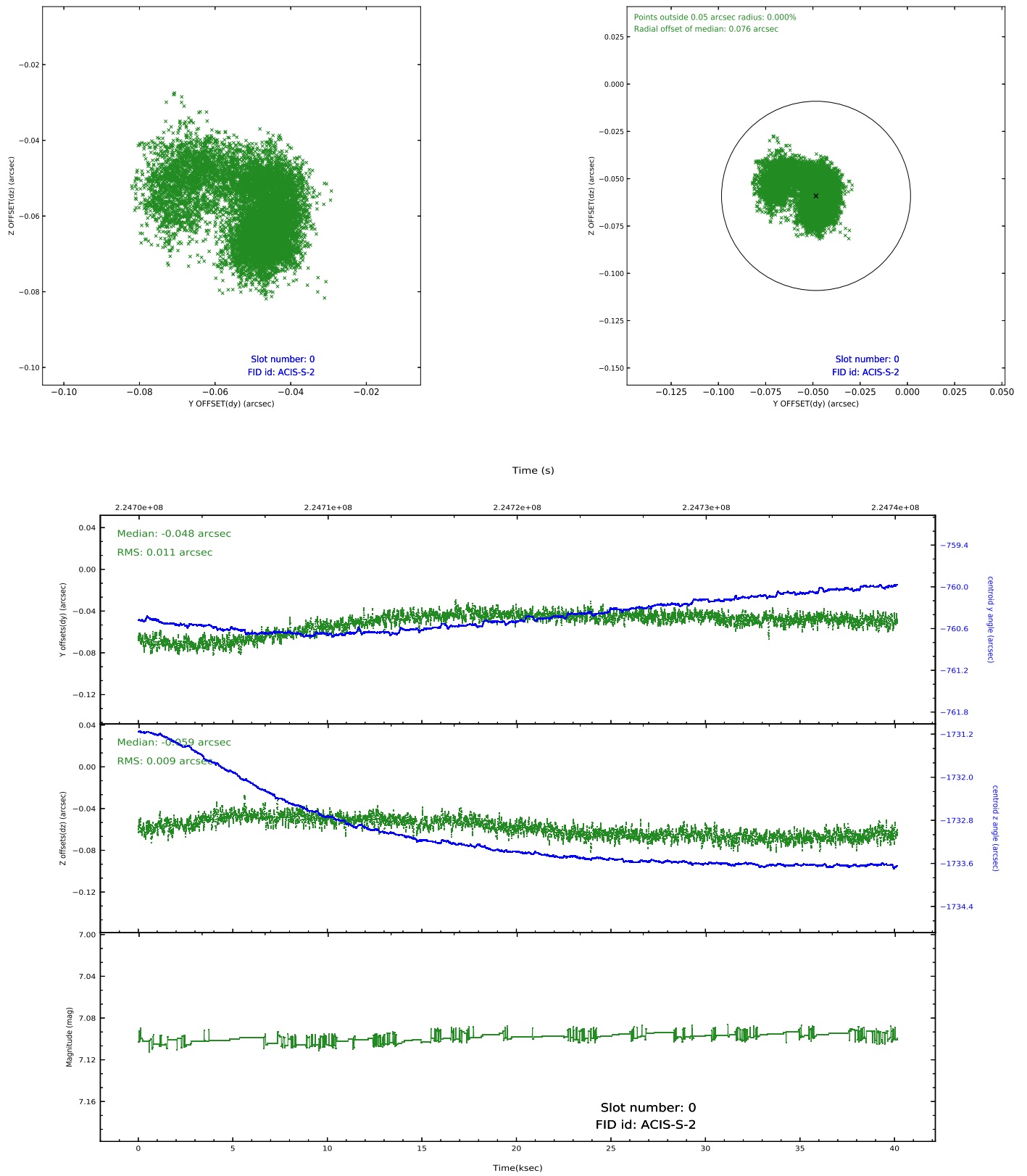


2.4.5 Slot 7

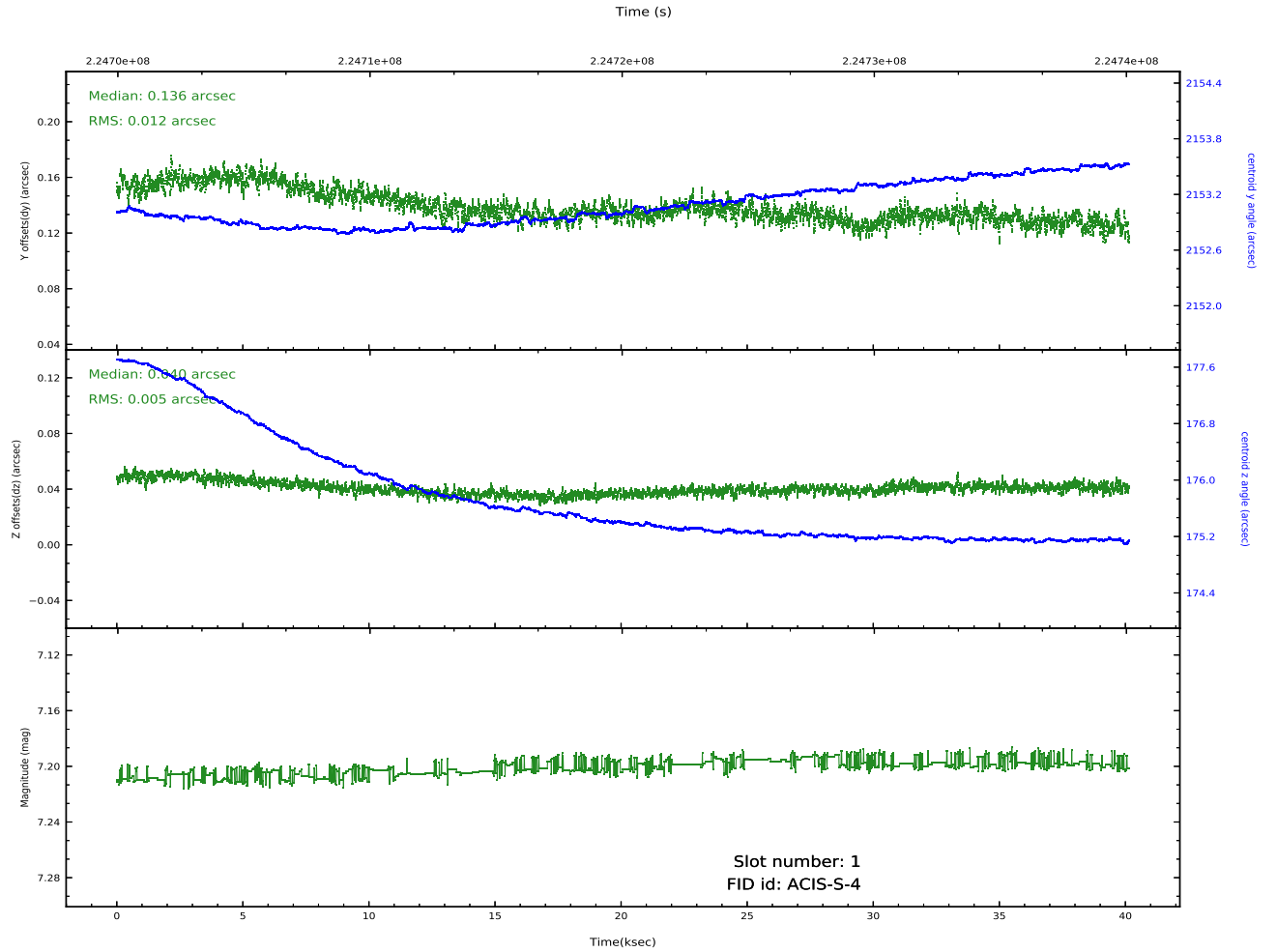
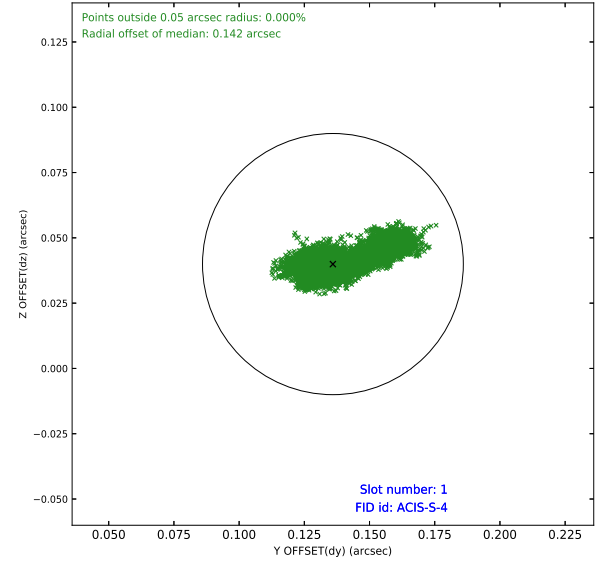
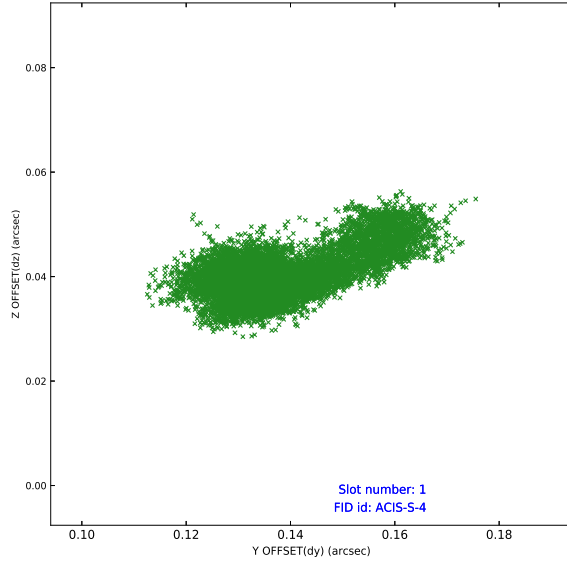


2.5 FID Slots

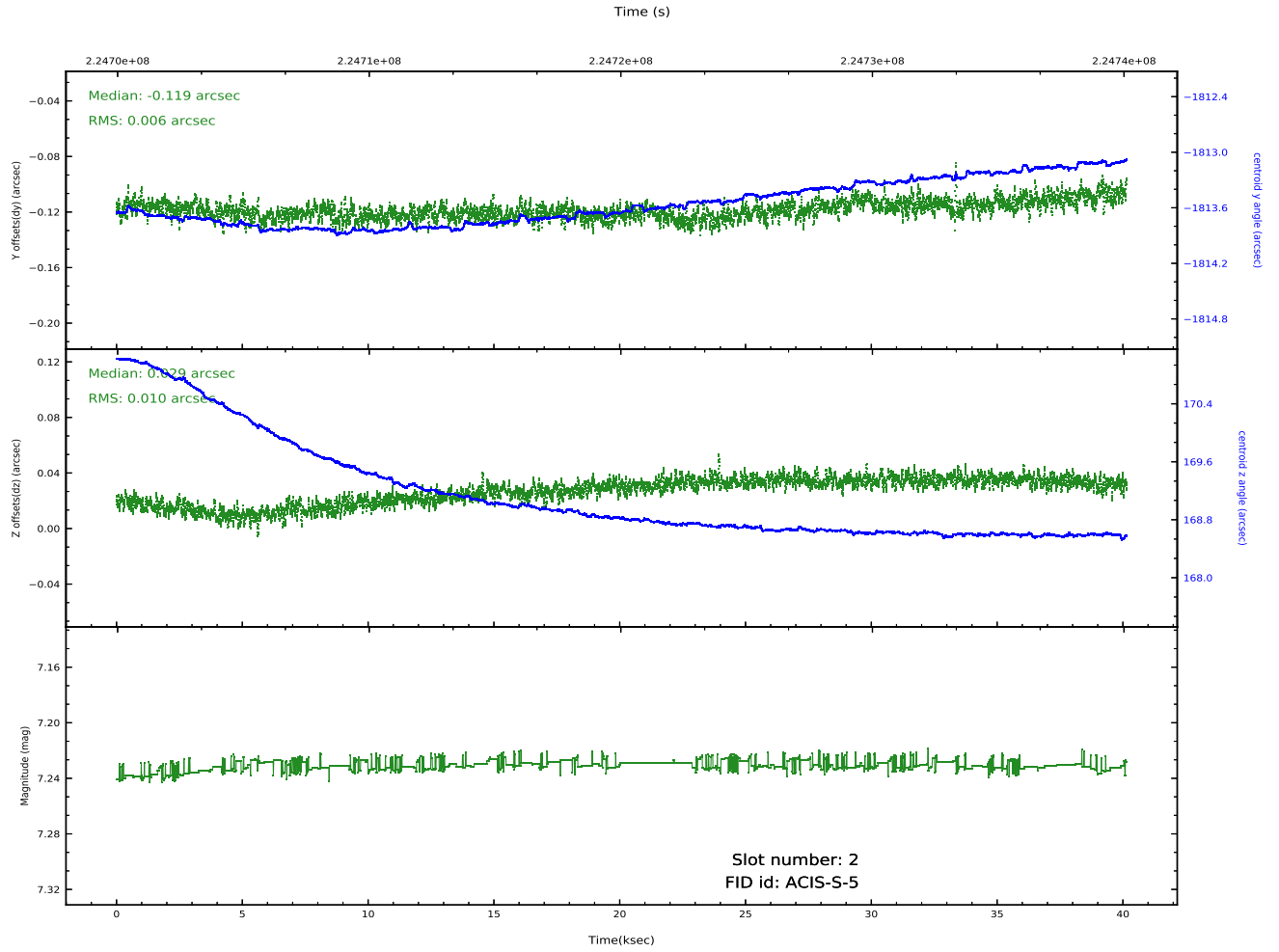
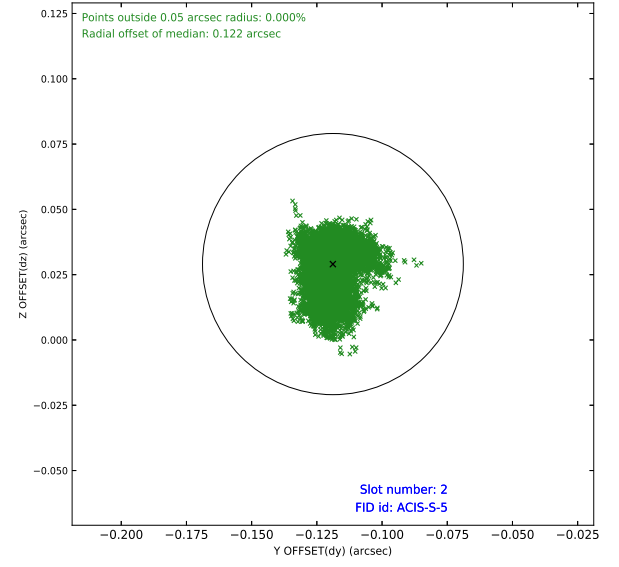
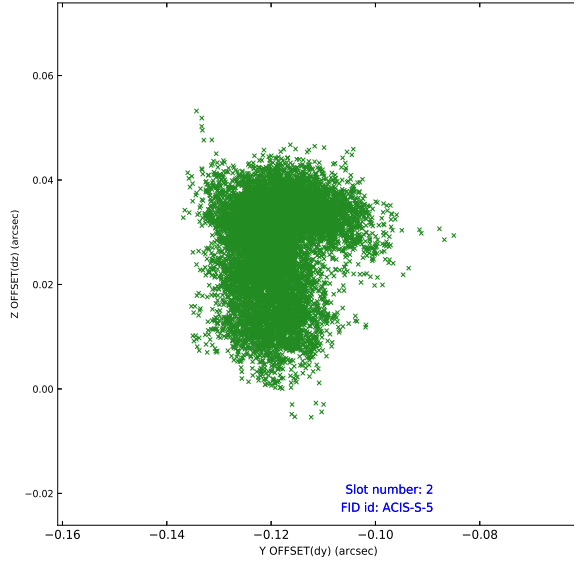
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.77299

A.2 Comments