

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20523 - L2 Version 2
Chandra X-Ray Center

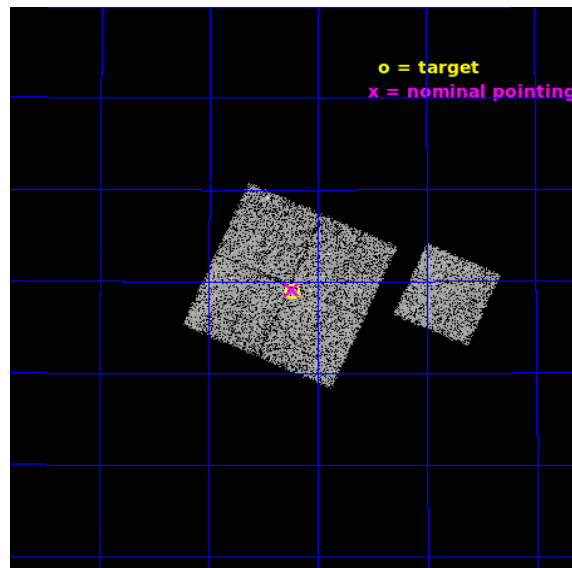
L2 Processing Date : Oct 27 2020

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1 Front

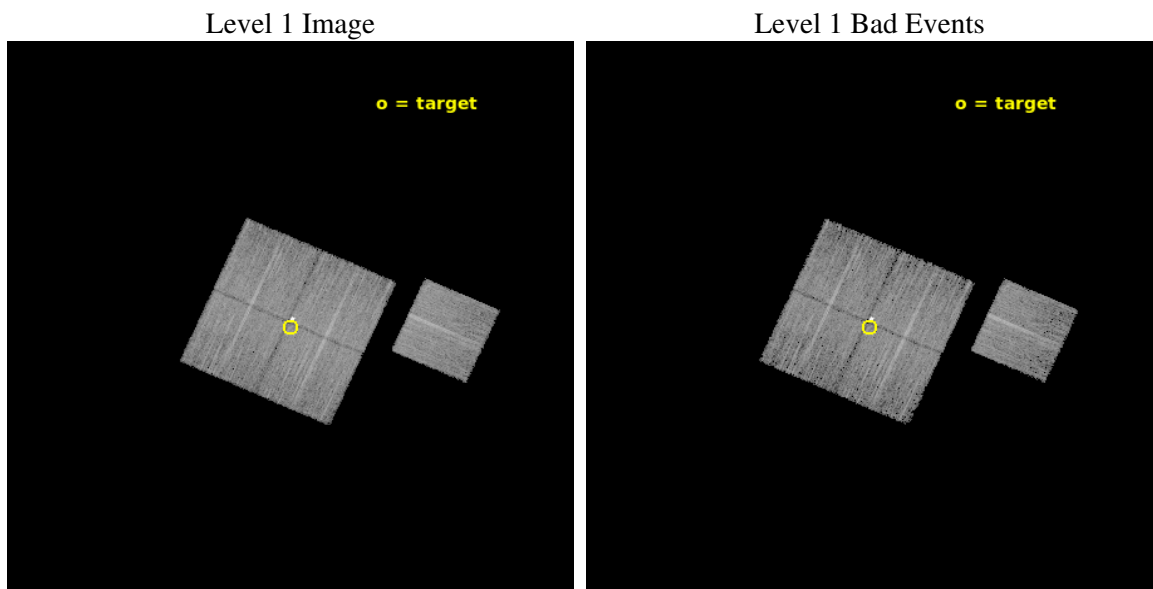
seq_num	801737	Sequence number
obs_id	20523	Observation id
title	Unravelling gas clumping in the outskirts of the Perseus cluster	P
observer	Stephen Walker	Principal investigator
object	Perseus r200 SW	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	48.559167	Observer's specified target RA [deg]
dec_targ	40.64825	Observer's specified target Dec [deg]
ra_nom	48.559289067985	Nominal RA [deg]
dec_nom	40.651944322705	Nominal Dec [deg]
roll_nom	114.14253811206	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8065.5952612162	Sum of GTIs [s]
livetime	7960.2123213235	Livetime [s]
ontime0	8068.6132115126	Sum of GTIs [s]
ontime1	8068.6542514563	Sum of GTIs [s]
ontime2	8068.6952915192	Sum of GTIs [s]
ontime3	8065.5952612162	Sum of GTIs [s]
ontime6	8068.5721714497	Sum of GTIs [s]
l2events	28794	Number of level 2 events



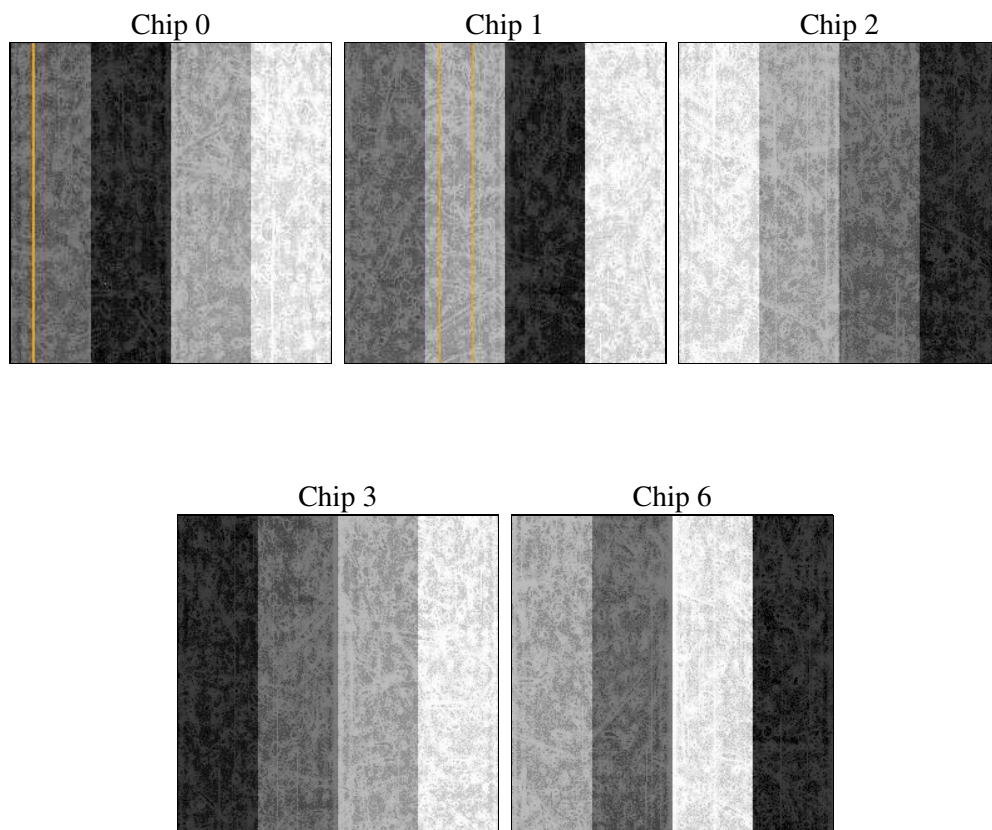
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	8065.5952612162	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	8068.6132115126	Sum of GTIs [s]
date	2020-10-27T17:42:13	Date and time of file creation	ontime1	8068.6542514563	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8068.6952915192	Sum of GTIs [s]
			ontime3	8065.5952612162	Sum of GTIs [s]
			ontime6	8068.5721714497	Sum of GTIs [s]
			l1events	312513	Number of level 1 events

2.1.4 Events

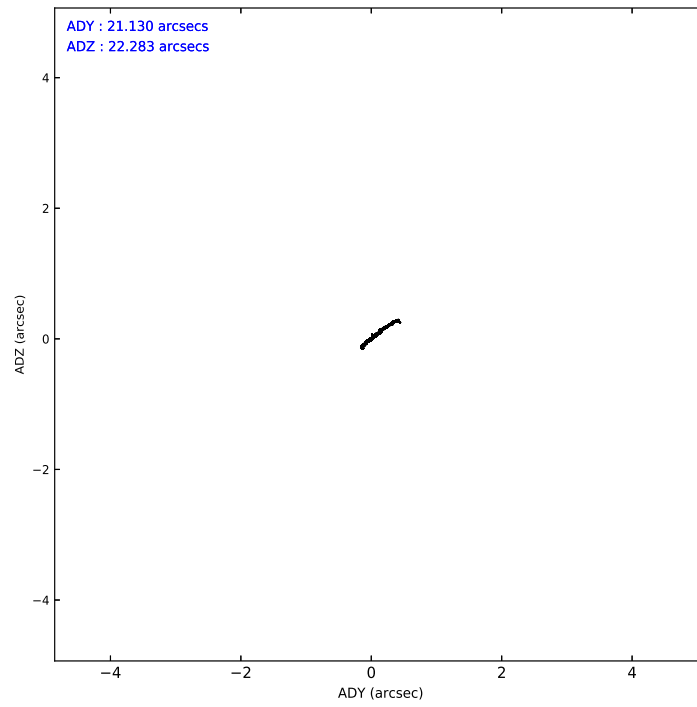
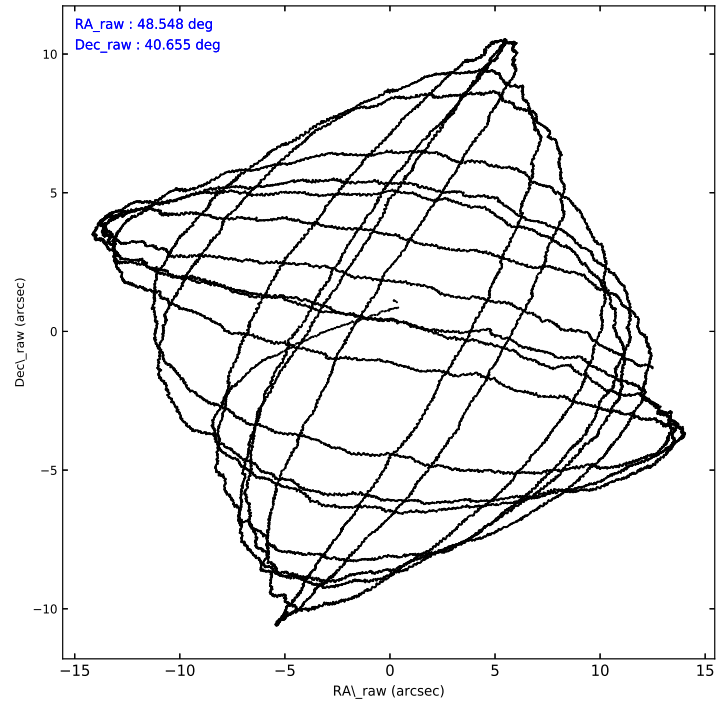
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	58895	59004	69879	60716	64019
rejected events	52066	51566	62940	54484	57115
rejected %	88%	87%	90%	89%	89%

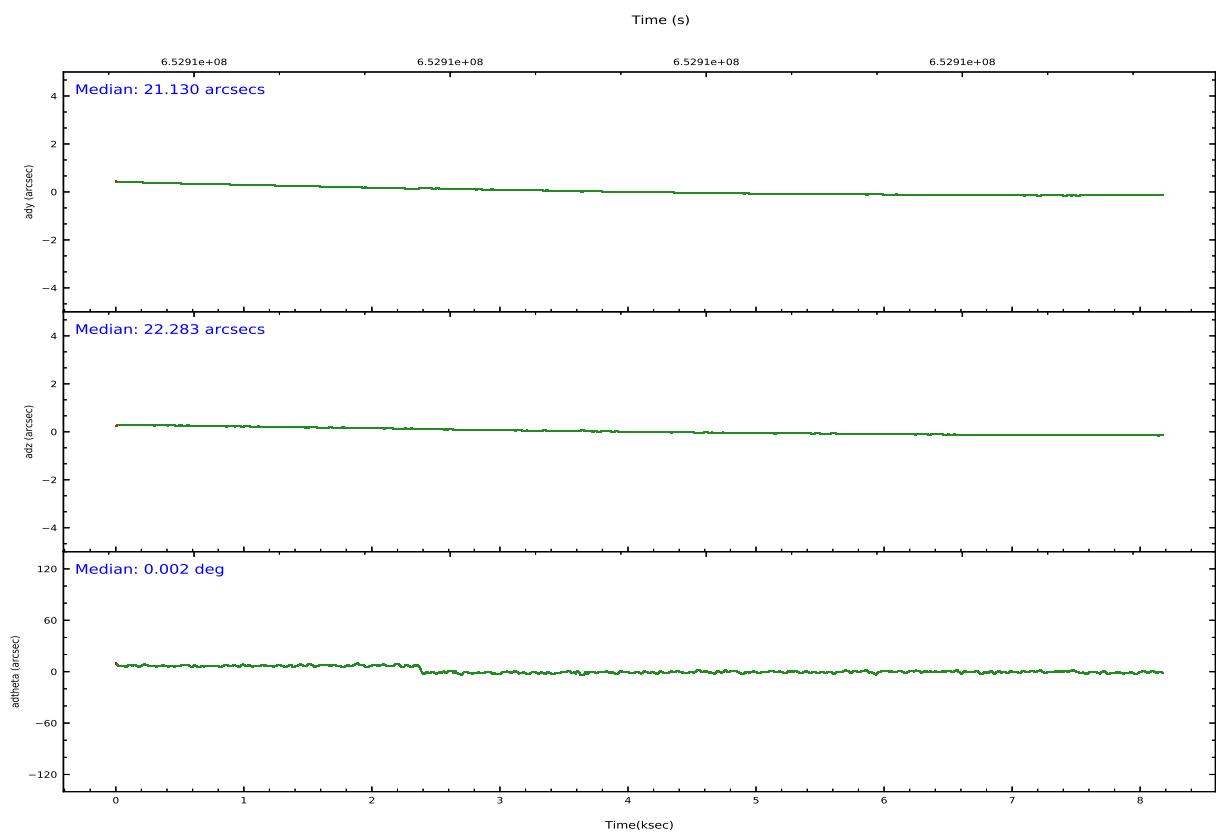
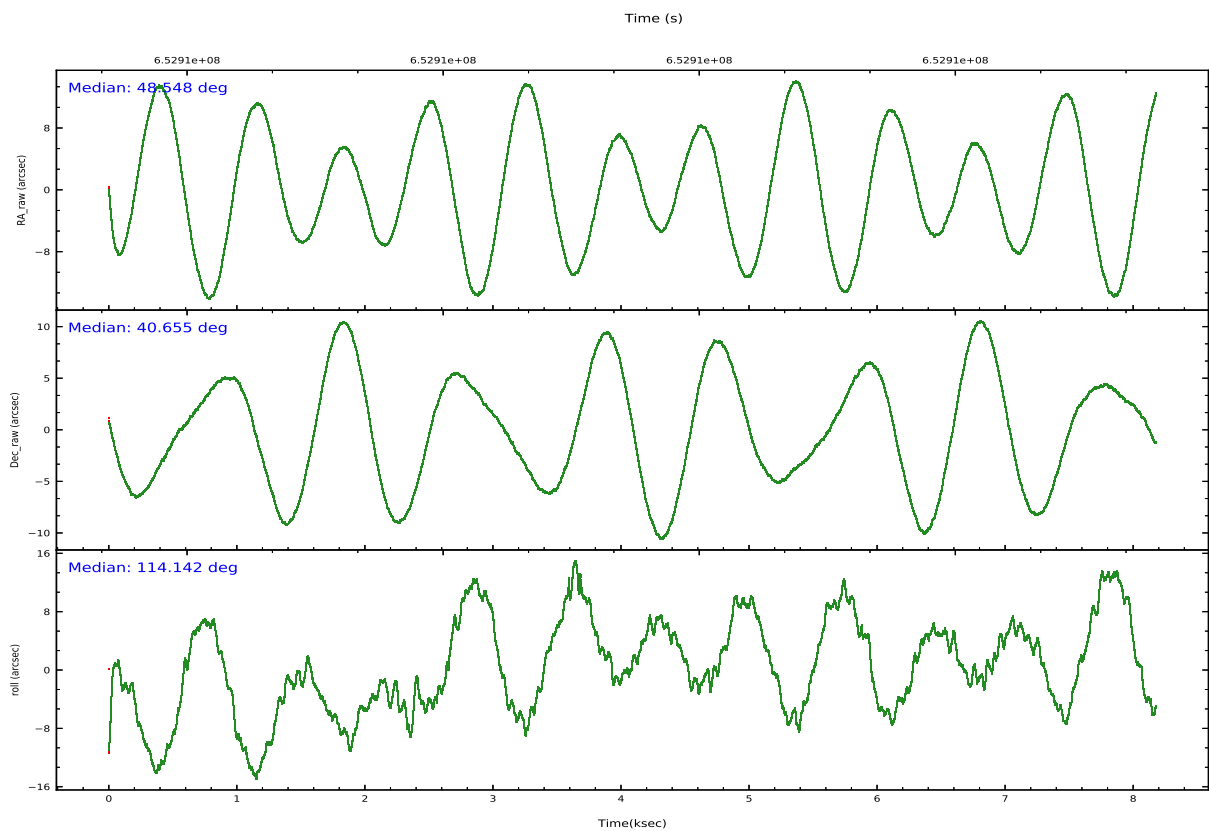
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2252	2520	2504	2226	2279
	3%	4%	3%	3%	3%
grade 1 events	35	46	4919	38	23
	0%	0%	7%	0%	0%
grade 2 events	1710	1827	1680	1355	1651
	2%	3%	2%	2%	2%
grade 3 events	655	710	677	628	671
	1%	1%	0%	1%	1%
grade 4 events	645	676	719	661	693
	1%	1%	1%	1%	1%
grade 5 events	2672	2787	2480	2827	2784
	4%	4%	3%	4%	4%
grade 6 events	1569	1706	1359	1366	1612
	2%	2%	1%	2%	2%
grade 7 events	49357	48732	55541	51615	54306
	83%	82%	79%	85%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	48.577875	48.559289067985	CCD I2 on	Y	Y
[deg] Pointing Dec	40.638778	40.651944322705	CCD I3 on	Y	Y
[deg] Pointing Roll	113.919948	114.14253811206	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	652907569.184000	652906627.76255	CCD S5 on	N	N
Observation start date	2018-09-09T19:11:40	2018-09-09T18:57:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	652915569.184000	652916207.41311	On-chip summing requested	N	N
Observation end date	2018-09-09T21:25:00	2018-09-09T21:36:47	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



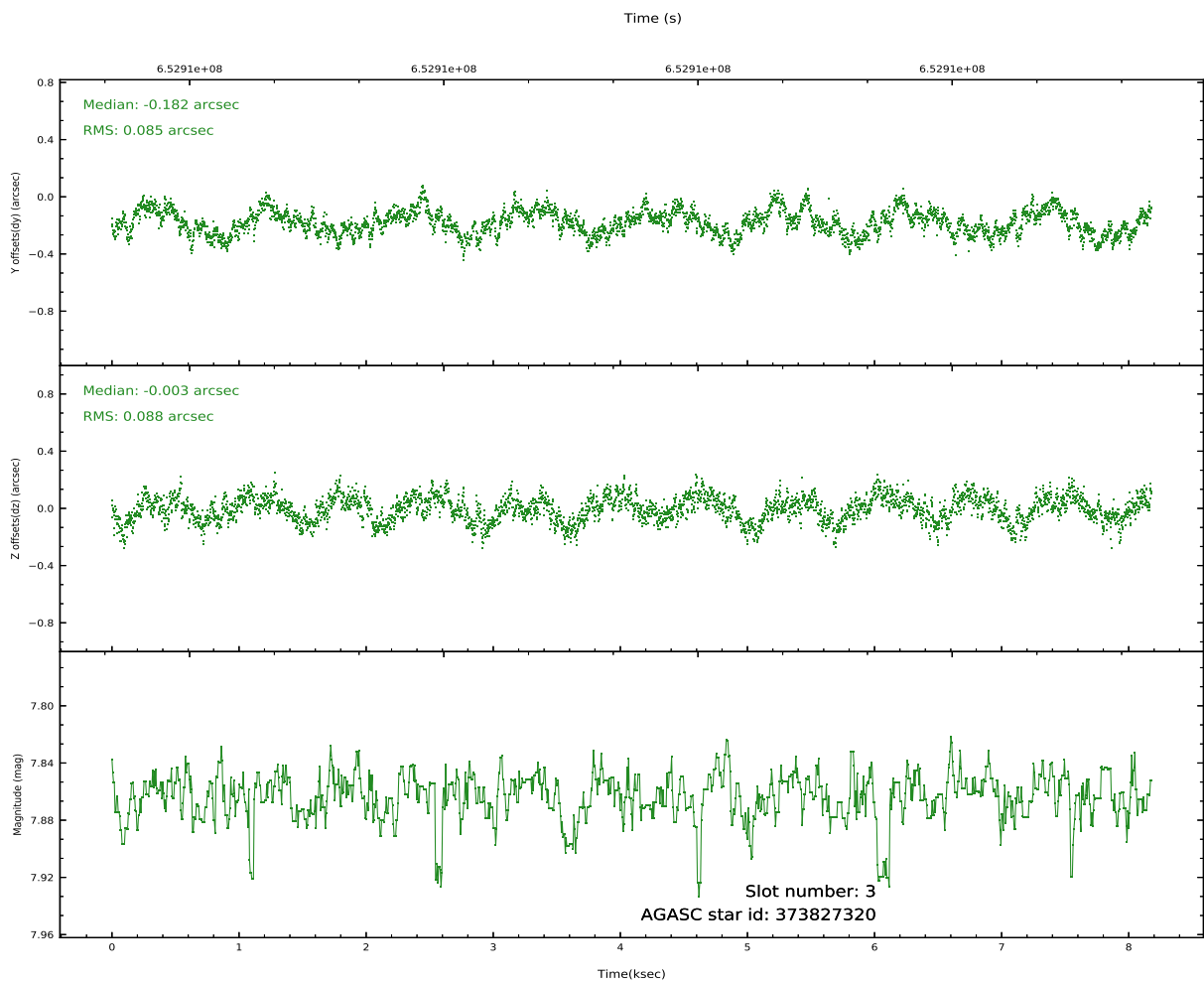
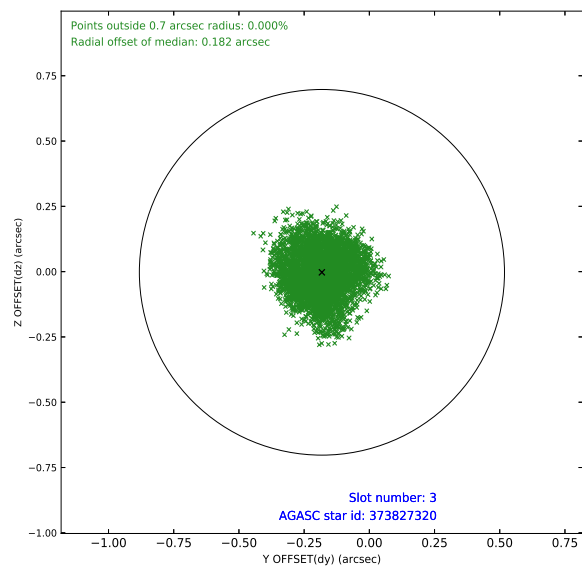
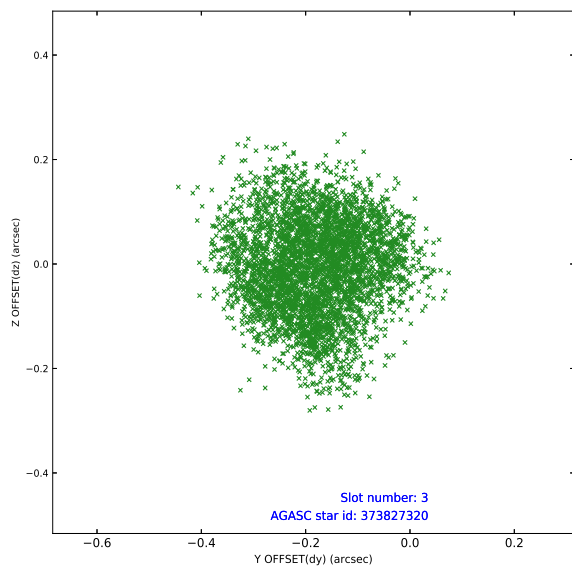


Slot Statistics

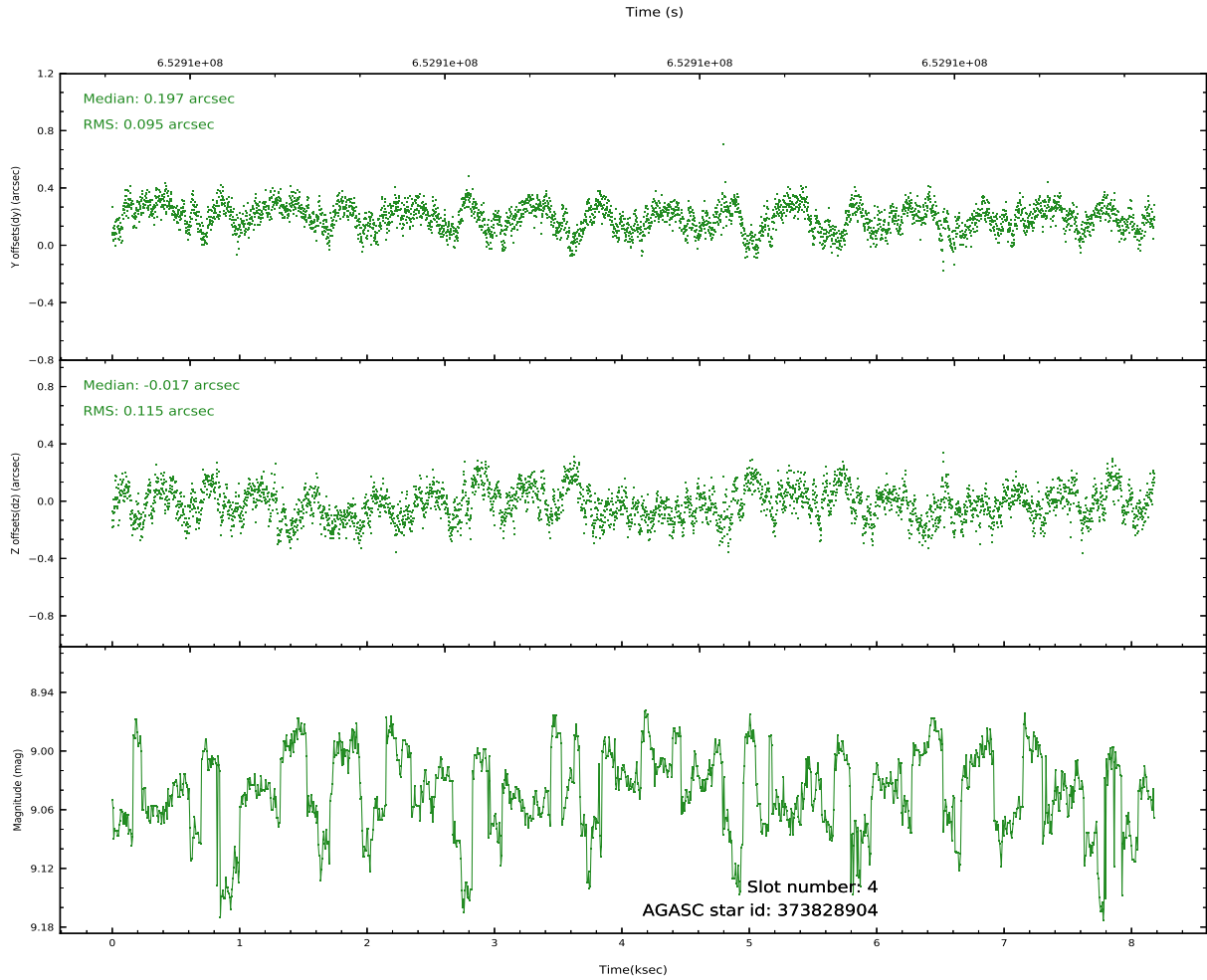
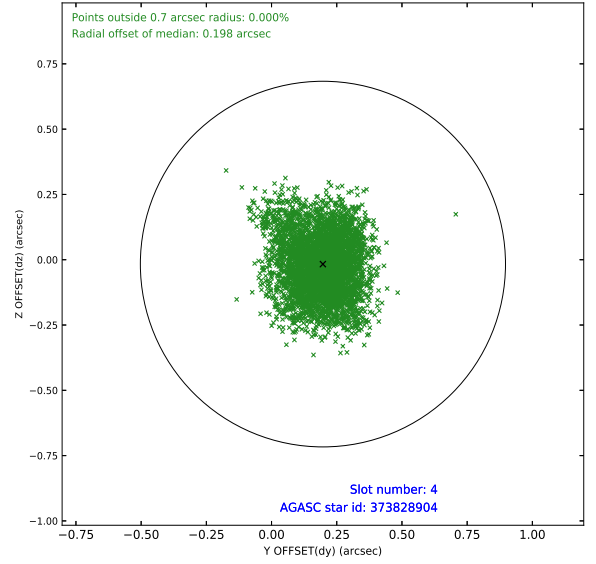
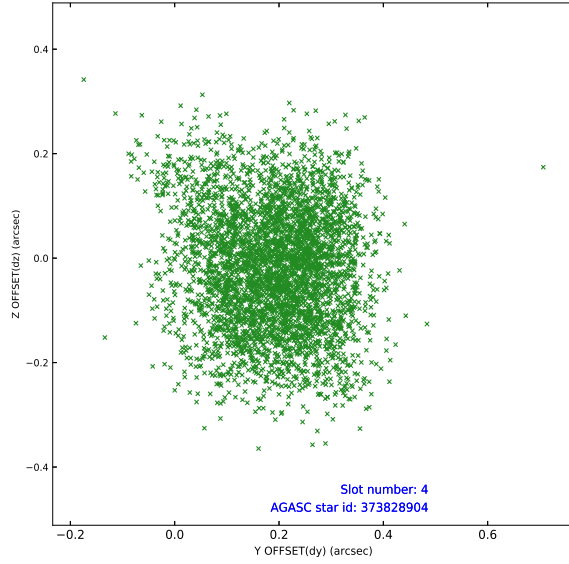
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.22	1996	1.000	0.009	-0.058	0.024	0.066	0.000000	0.000000	918.05	-846
1	FID		ACIS-I-2	7.10	1995	1.000	-0.036	0.074	0.017	0.023	0.000000	0.000000	-775.71	-852
2	FID		ACIS-I-4	7.16	1995	1.000	-0.072	0.049	0.016	0.045	0.000000	0.000000	2137.70	1053
3	GUIDE	used	373827320	7.86	3989	1.000	-0.182	-0.003	0.135	0.199	48.375282	40.153551	-1370.33	1217
4	GUIDE	used	373828904	9.04	3989	1.000	0.197	-0.017	0.160	0.257	48.512060	40.522603	-309.16	334
5	GUIDE	used	373828992	8.89	3985	1.000	0.161	0.174	0.238	0.329	48.516760	40.201630	-1370.34	792
6	GUIDE	used	373832520	7.52	3991	1.000	0.121	0.011	0.138	0.223	48.535317	40.119033	-1663.39	865
7	GUIDE	used	373693512	8.06	3989	1.000	-0.273	-0.153	0.116	0.180	47.455281	40.932839	2222.87	2354

2.4 Star Slots

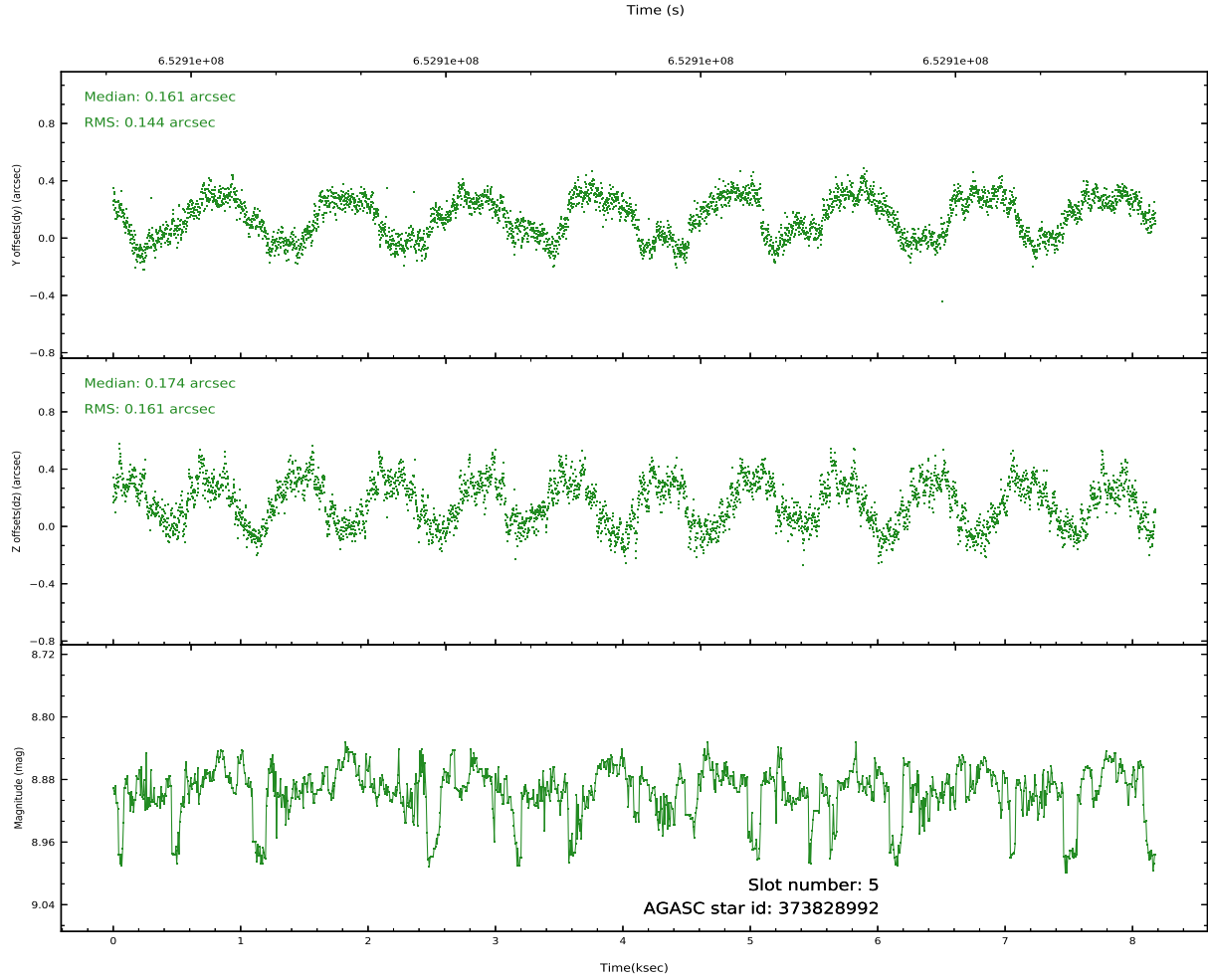
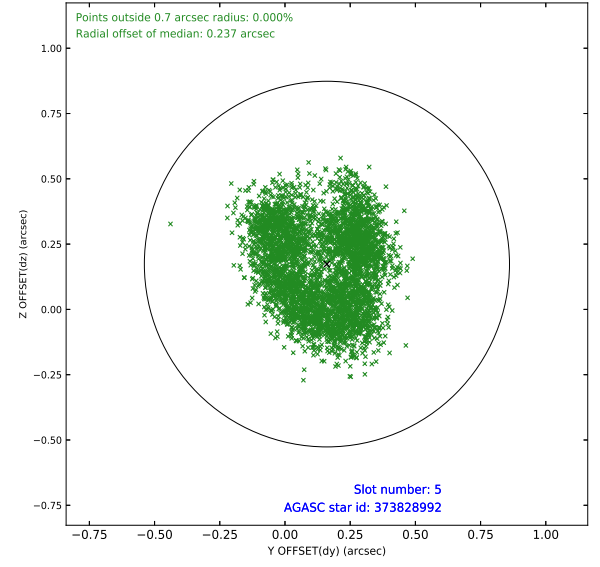
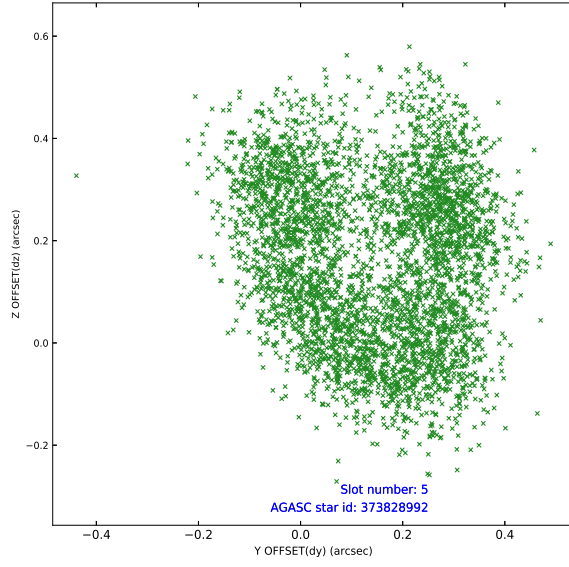
2.4.1 Slot 3



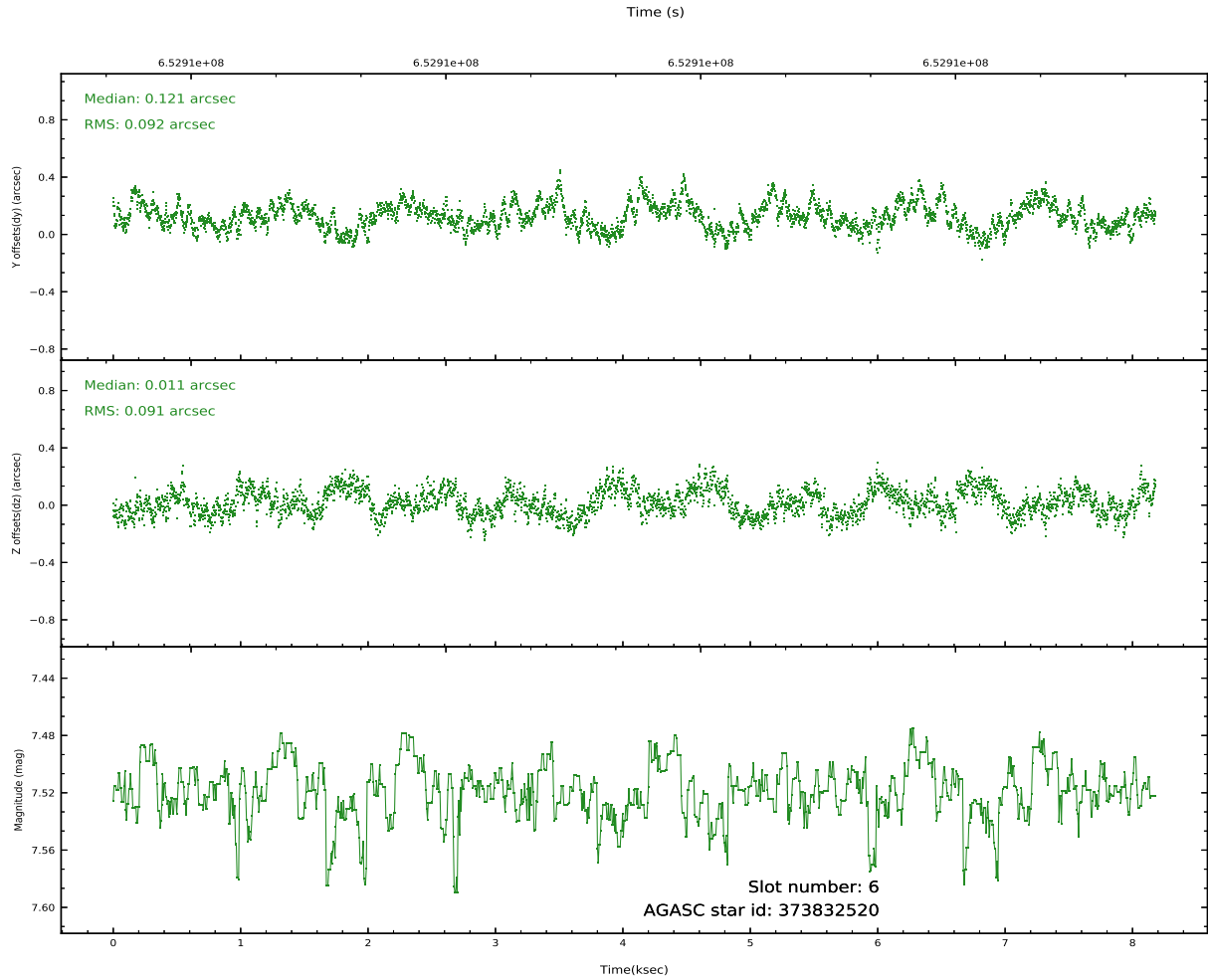
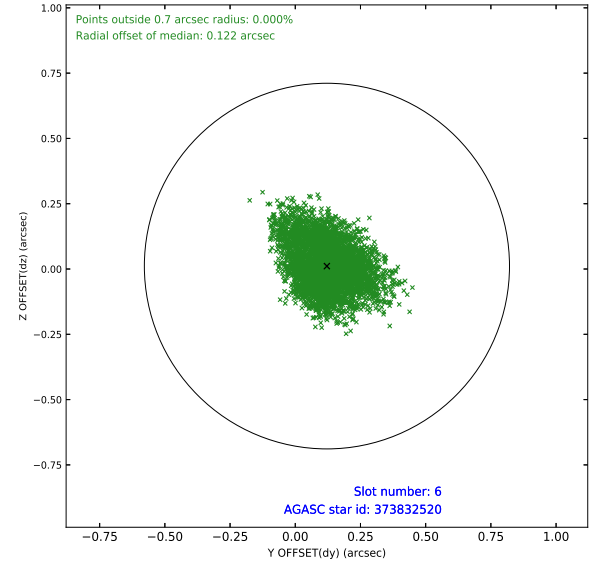
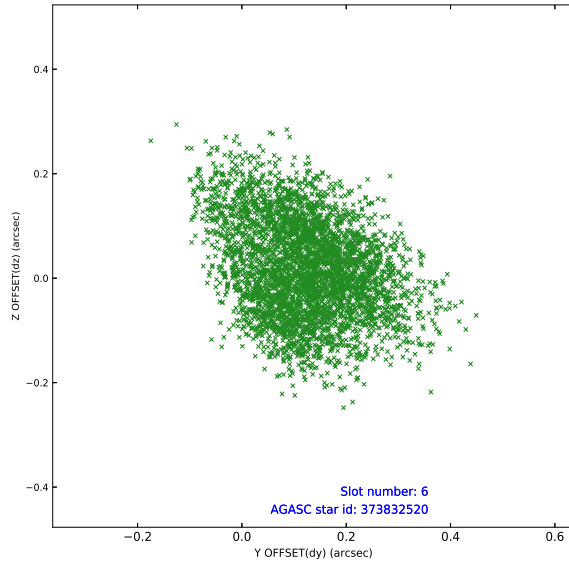
2.4.2 Slot 4



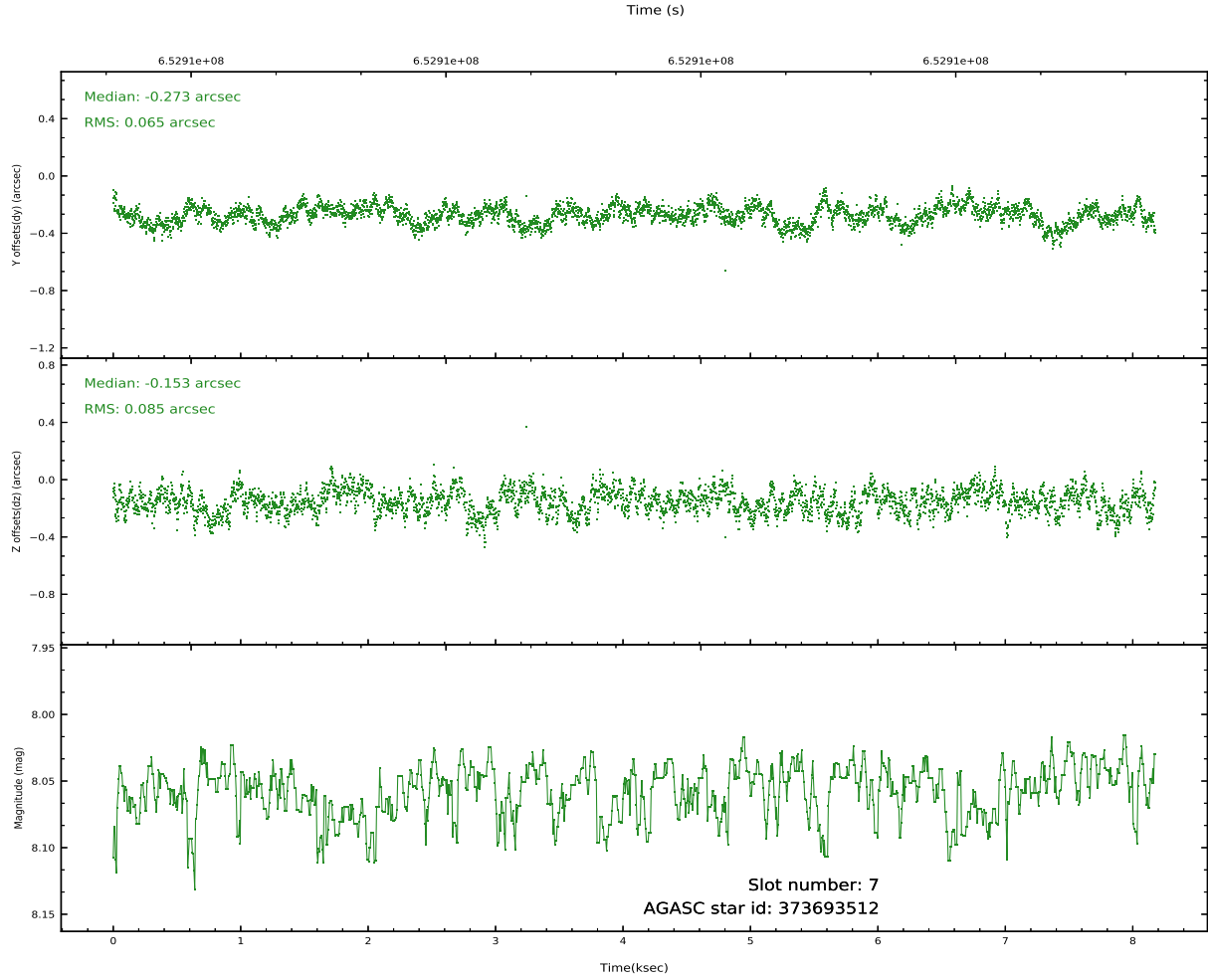
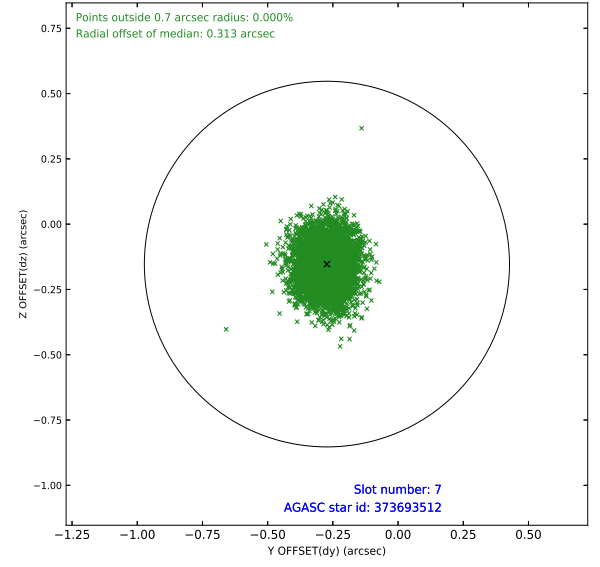
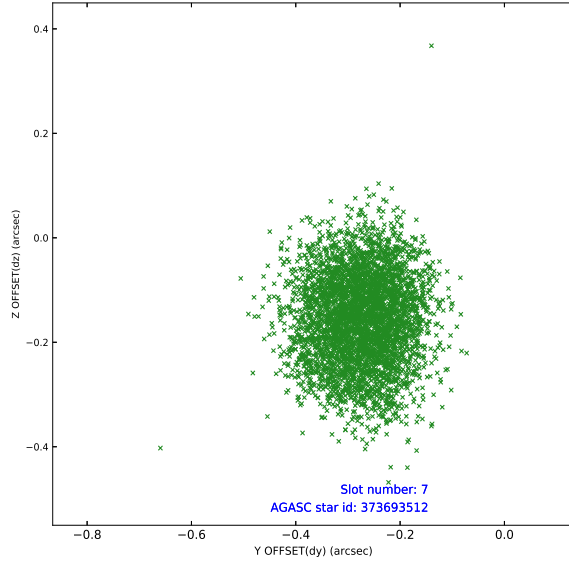
2.4.3 Slot 5



2.4.4 Slot 6

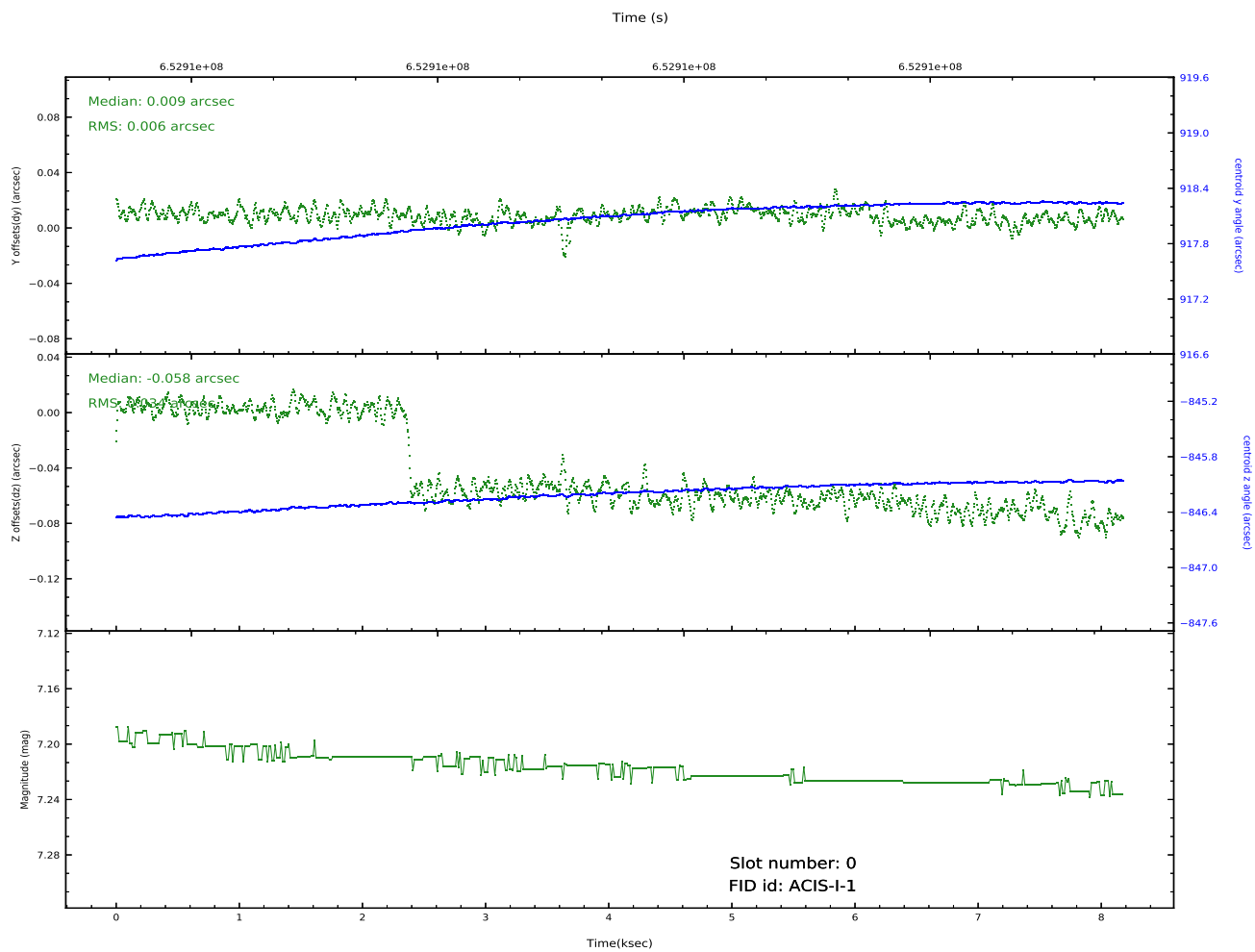
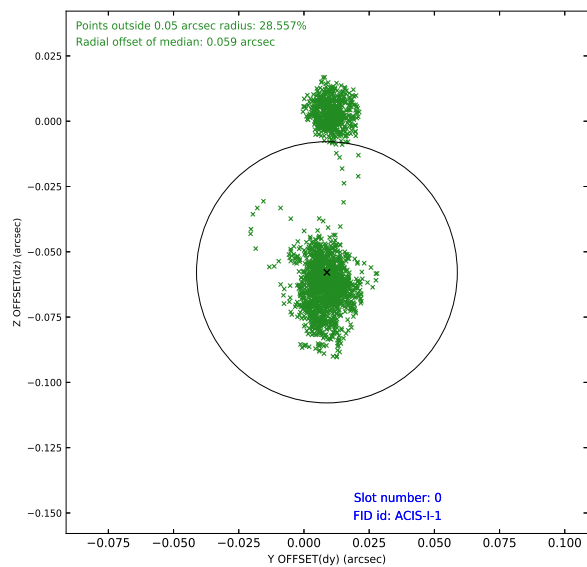
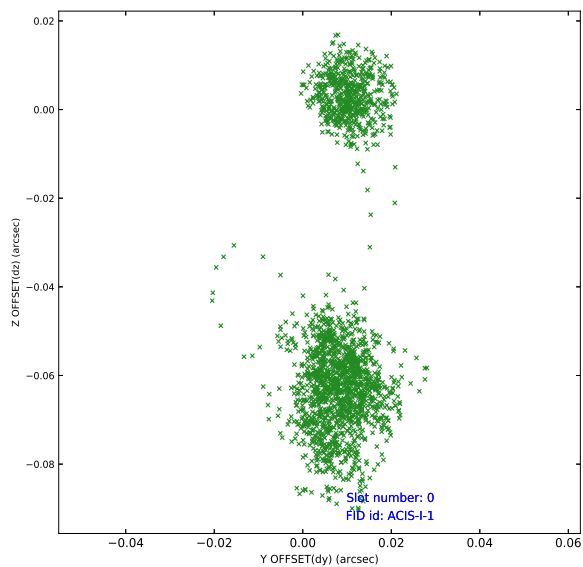


2.4.5 Slot 7

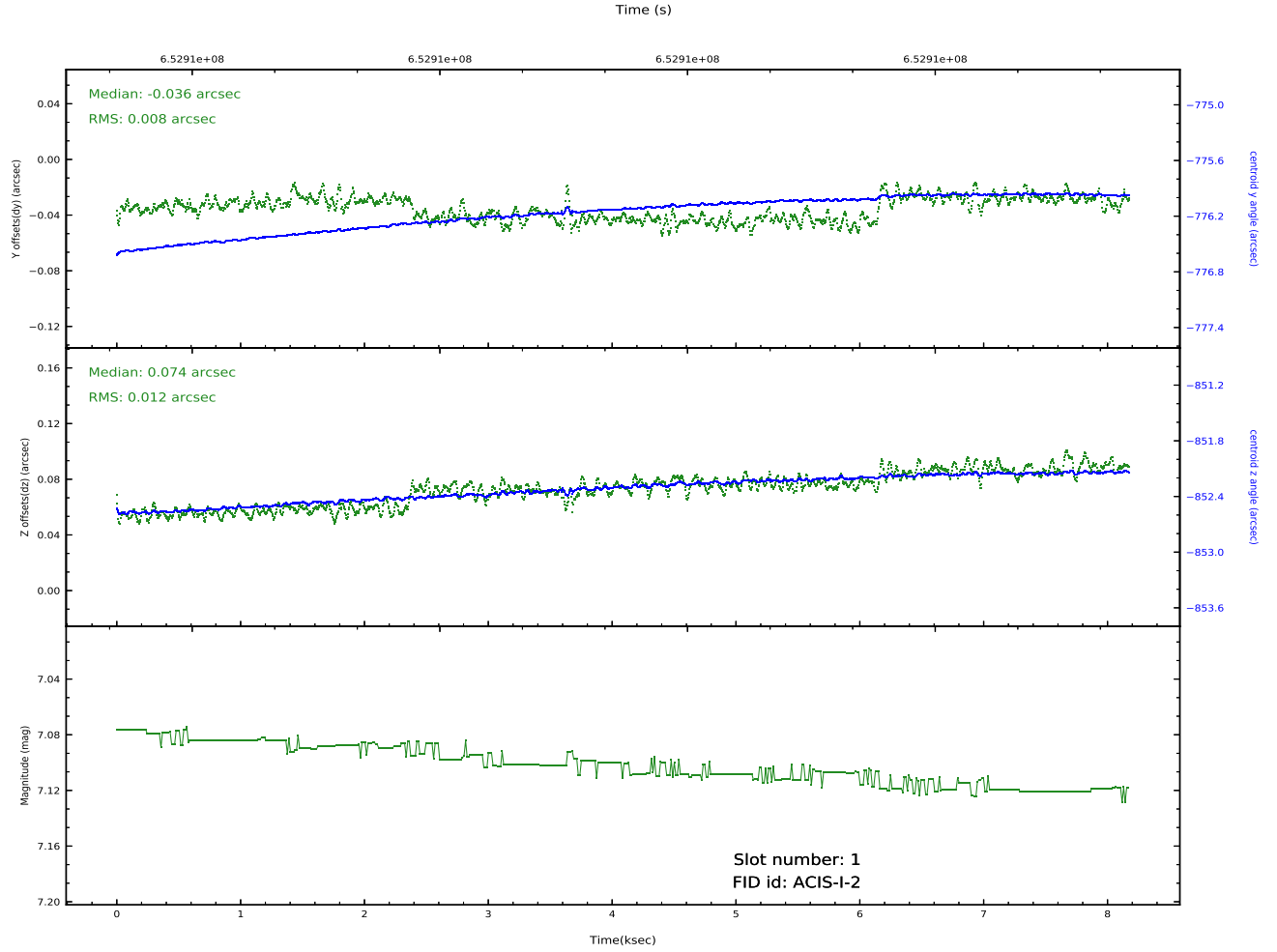
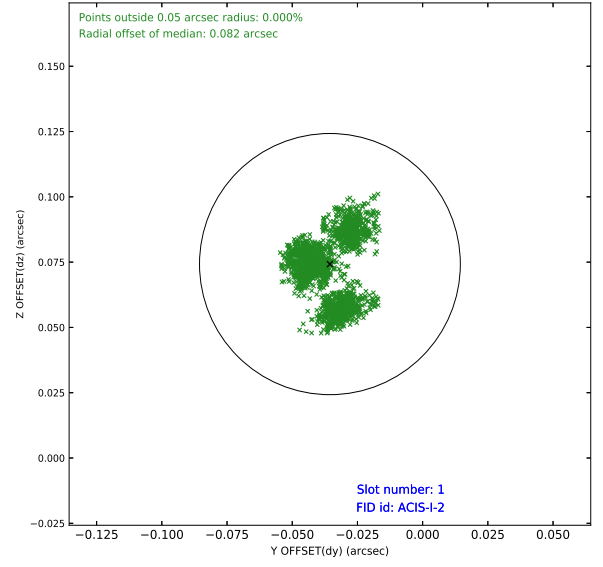
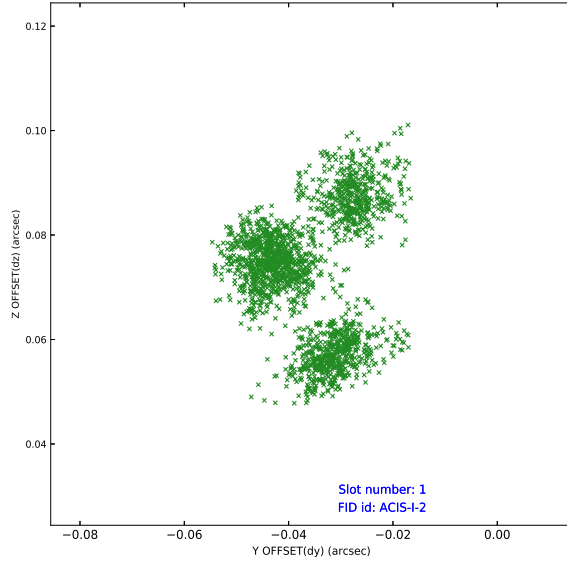


2.5 FID Slots

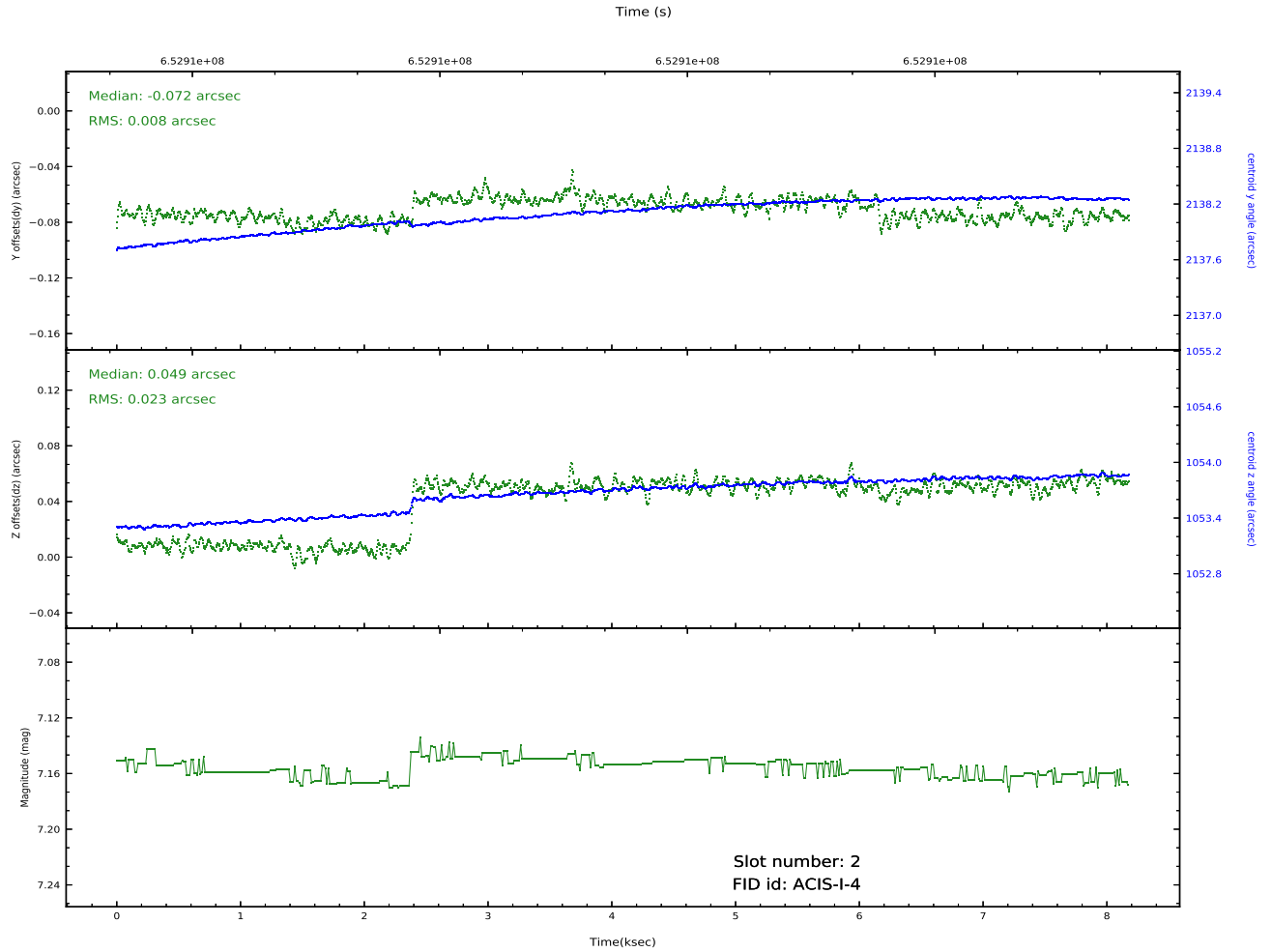
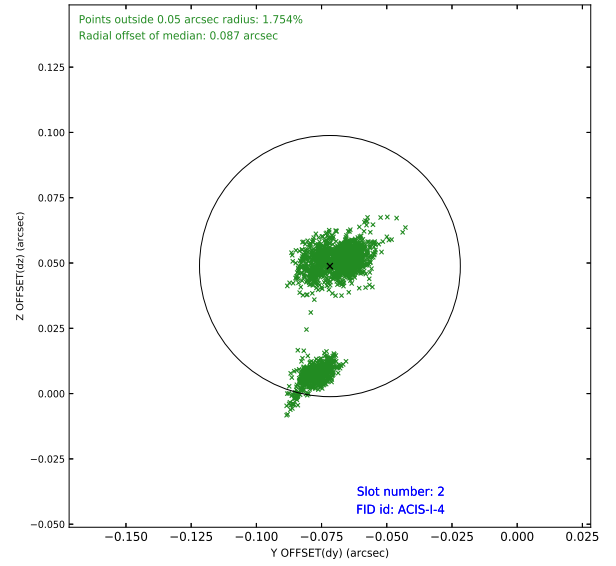
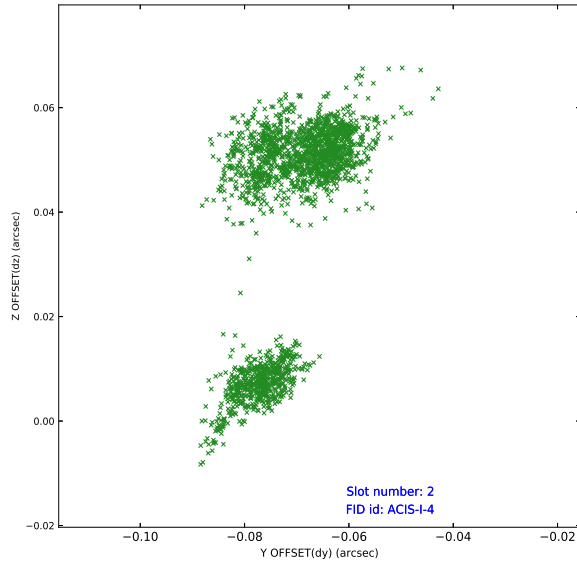
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0655952609777

A.2 Comments