

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20526 - L2 Version 2
Chandra X-Ray Center

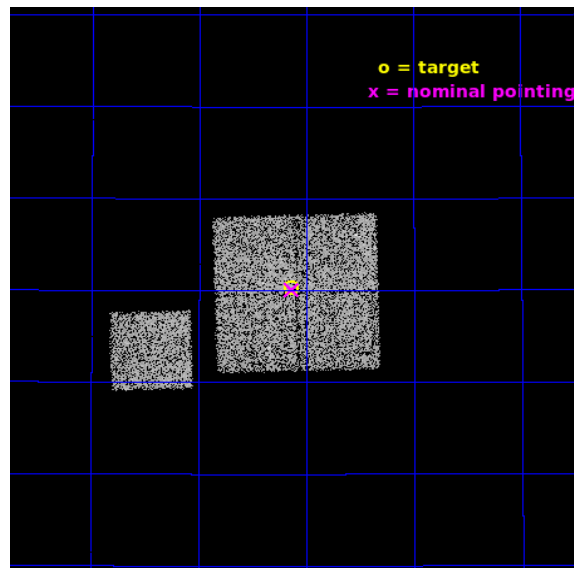
L2 Processing Date : Oct 24 2020

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1 Front

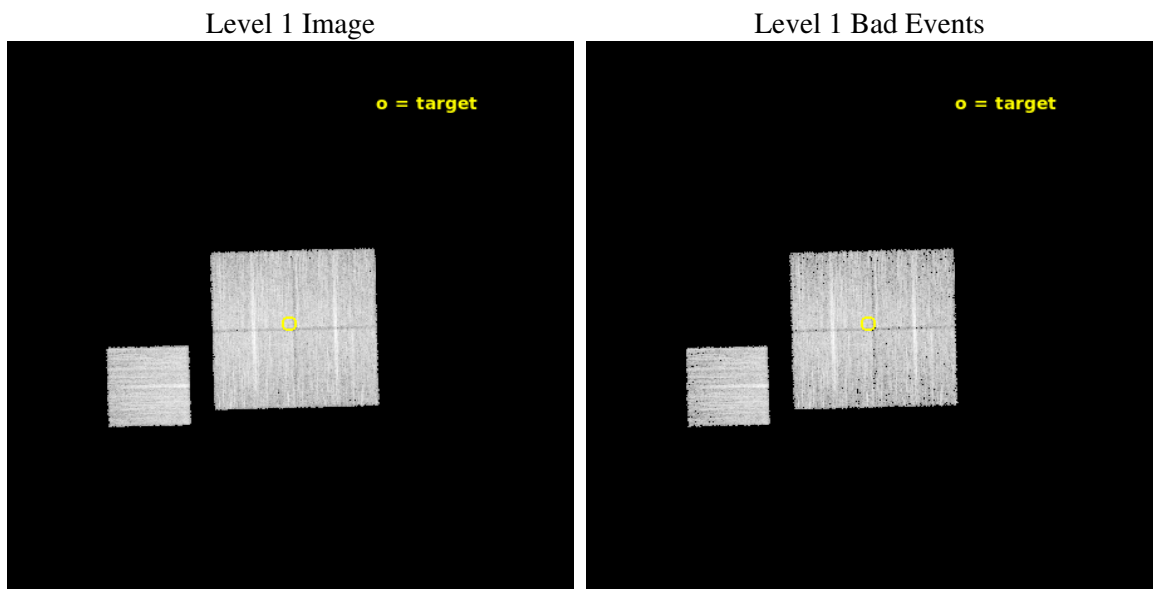
seq_num	801740	Sequence number
obs_id	20526	Observation id
title	Unravelling gas clumping in the outskirts of the Perseus cluster	P
observer	Stephen Walker	Principal investigator
object	Perseus r200 E	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	51.785833	Observer's specified target RA [deg]
dec_targ	41.504444	Observer's specified target Dec [deg]
ra_nom	51.783812279272	Nominal RA [deg]
dec_nom	41.501364649081	Nominal Dec [deg]
roll_nom	268.46643529699	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8140.4363378286	Sum of GTIs [s]
livetime	8034.0755441729	Livetime [s]
ontime0	8140.3132178783	Sum of GTIs [s]
ontime1	8140.3542679548	Sum of GTIs [s]
ontime2	8140.3952978849	Sum of GTIs [s]
ontime3	8140.4363378286	Sum of GTIs [s]
ontime6	8140.2721778154	Sum of GTIs [s]
l2events	27446	Number of level 2 events



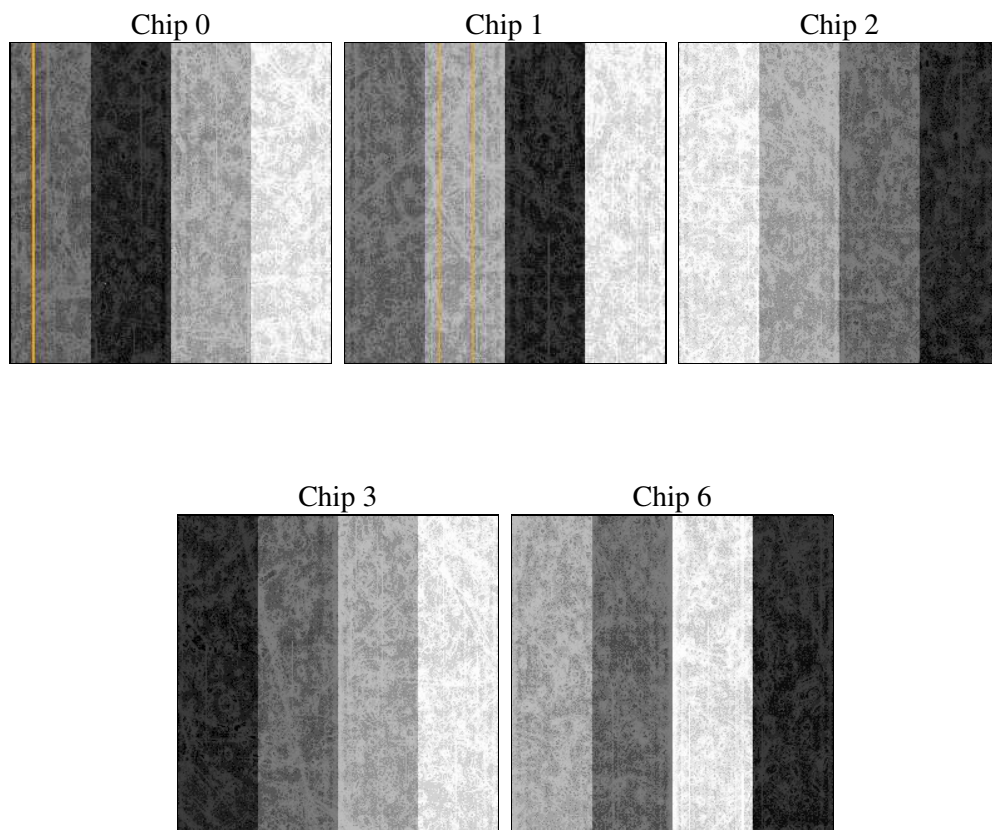
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8248.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	8140.4363378286	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	8140.3132178783	Sum of GTIs [s]
date	2020-10-24T06:27:58	Date and time of file creation	ontime1	8140.3542679548	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8140.3952978849	Sum of GTIs [s]
			ontime3	8140.4363378286	Sum of GTIs [s]
			ontime6	8140.2721778154	Sum of GTIs [s]
			l1events	297312	Number of level 1 events

2.1.4 Events

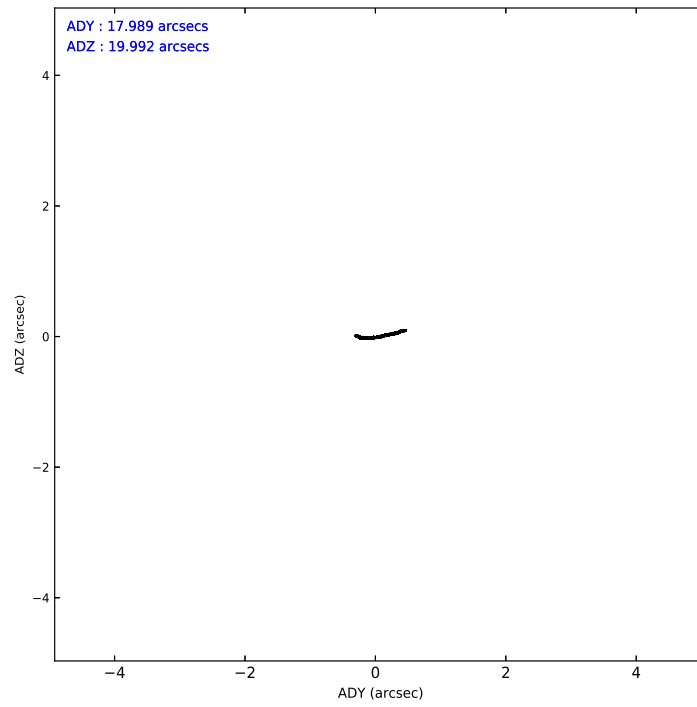
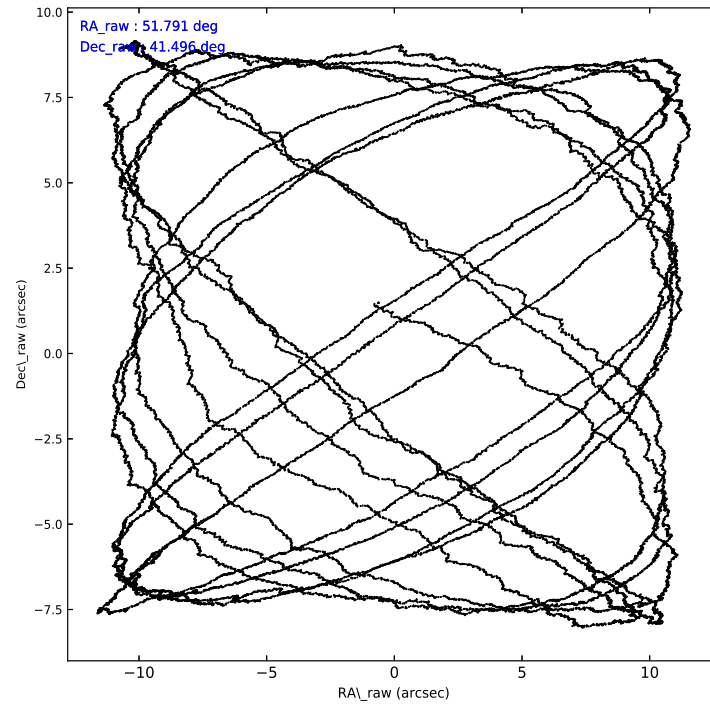
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	56131	56770	61691	61053	61667
rejected events	49709	49776	55432	54749	55135
rejected %	88%	87%	89%	89%	89%

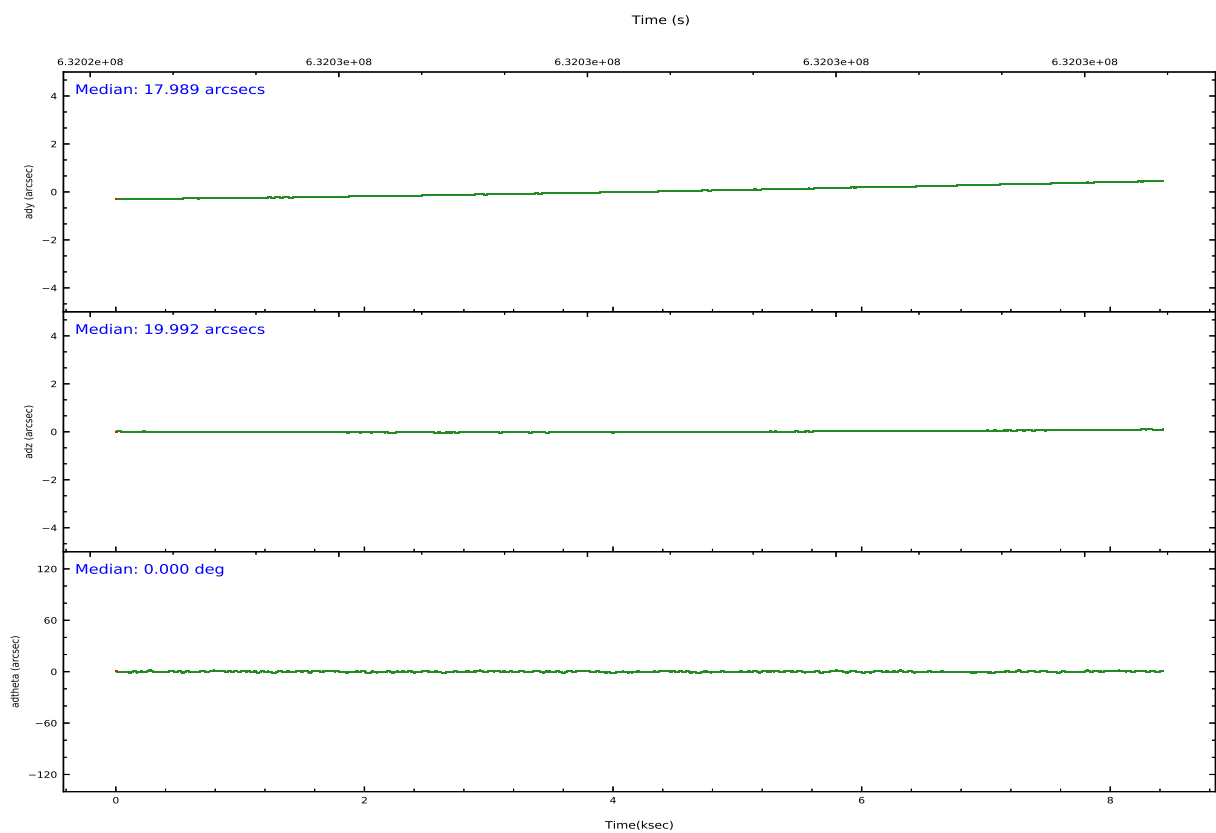
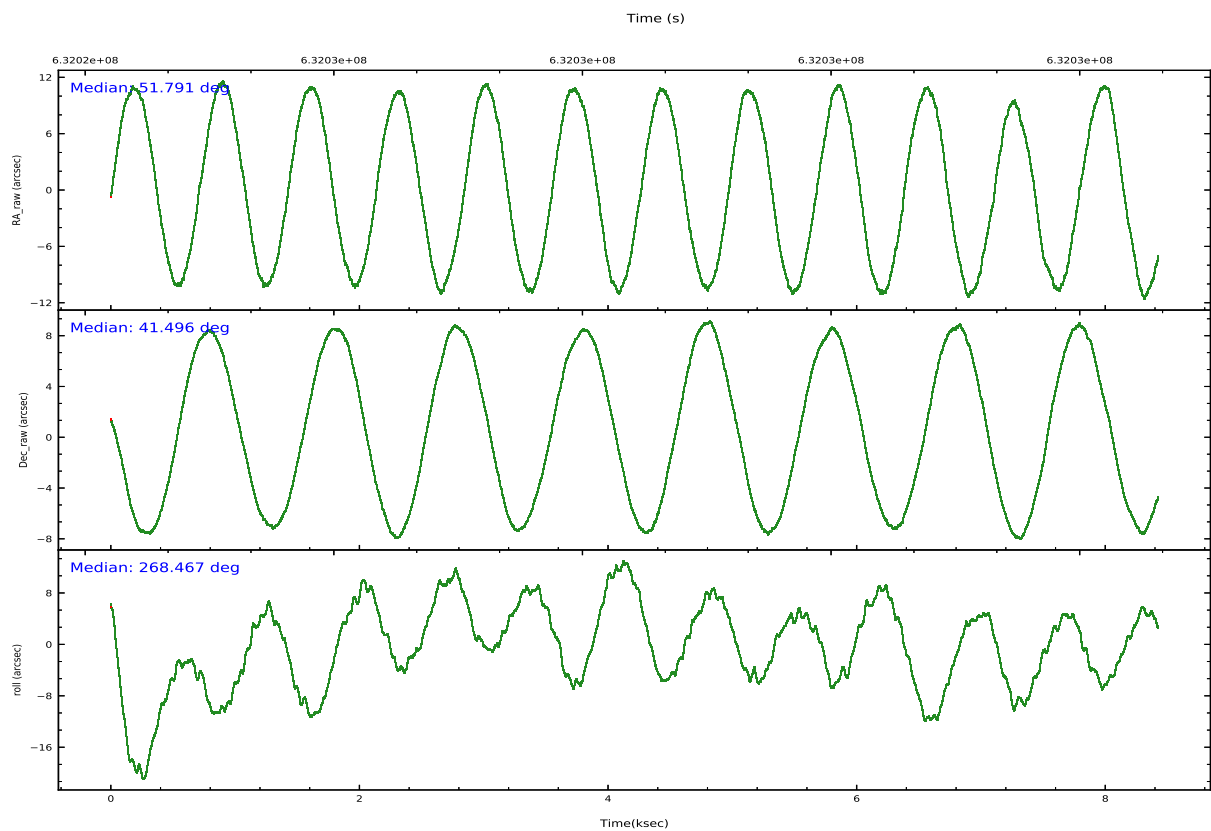
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2159	2150	2227	2240	1961
	3%	3%	3%	3%	3%
grade 1 events	30	34	32	27	18
	0%	0%	0%	0%	0%
grade 2 events	1572	1838	1453	1369	1625
	2%	3%	2%	2%	2%
grade 3 events	637	622	643	651	586
	1%	1%	1%	1%	0%
grade 4 events	606	665	635	638	612
	1%	1%	1%	1%	0%
grade 5 events	2345	2456	2219	2795	2465
	4%	4%	3%	4%	3%
grade 6 events	1452	1722	1304	1407	1751
	2%	3%	2%	2%	2%
grade 7 events	47330	47283	53178	51926	52649
	84%	83%	86%	85%	85%

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	51.773473	51.783812279272	CCD I2 on	Y	Y
[deg] Pointing Dec	41.520262	41.501364649081	CCD I3 on	Y	Y
[deg] Pointing Roll	268.282190	268.46643529699	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)	632024383.184000	632023991.97833	CCD S5 on	N	N
Observation start date	2018-01-11T02:18:34	2018-01-11T02:13:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	632032631.184000	632033107.81637	On-chip summing requested	N	N
Observation end date	2018-01-11T04:36:02	2018-01-11T04:45:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



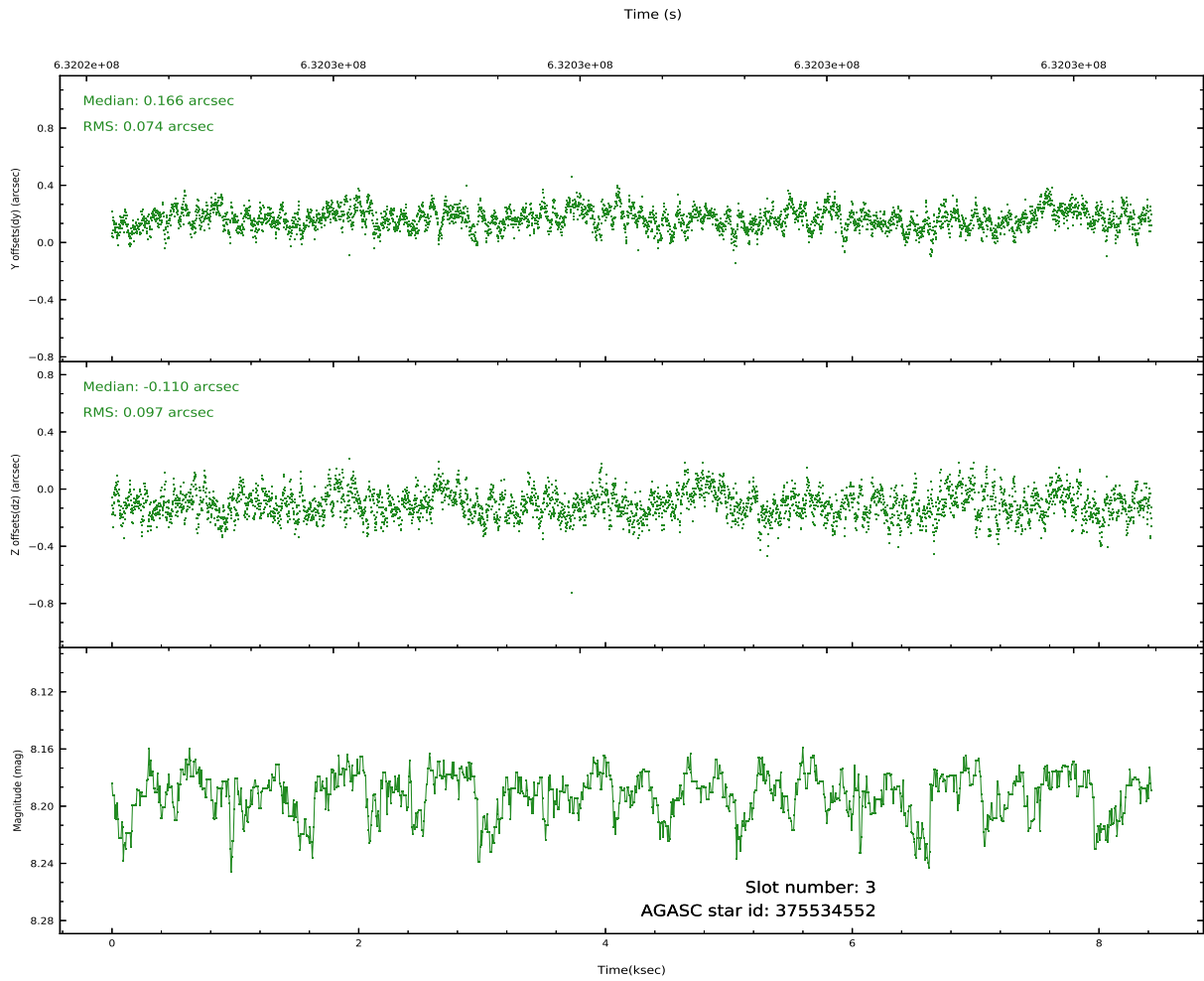
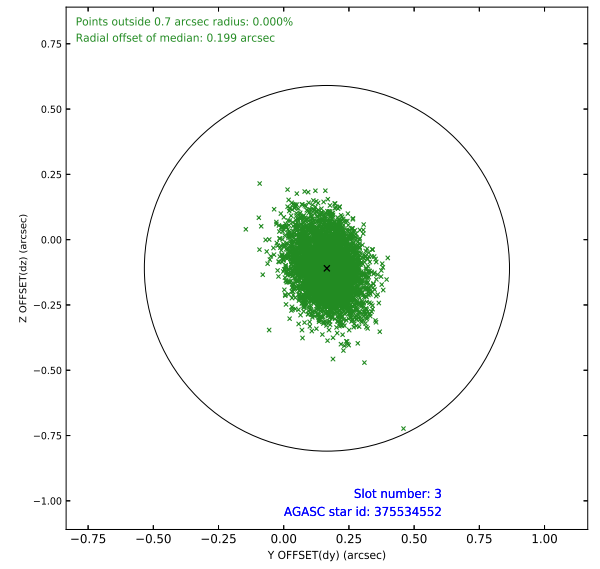
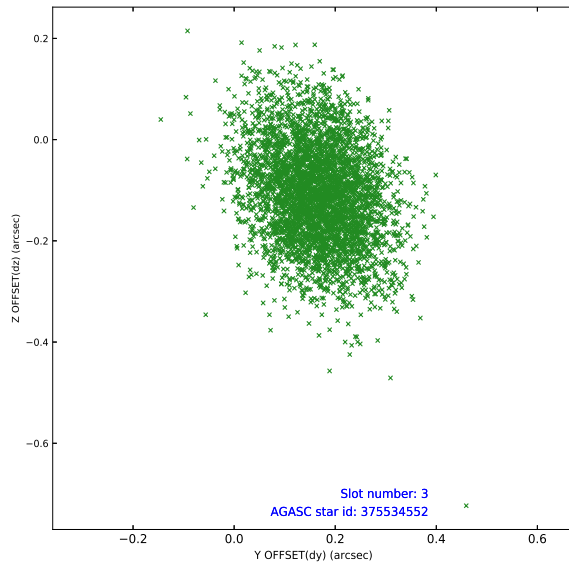


Slot Statistics

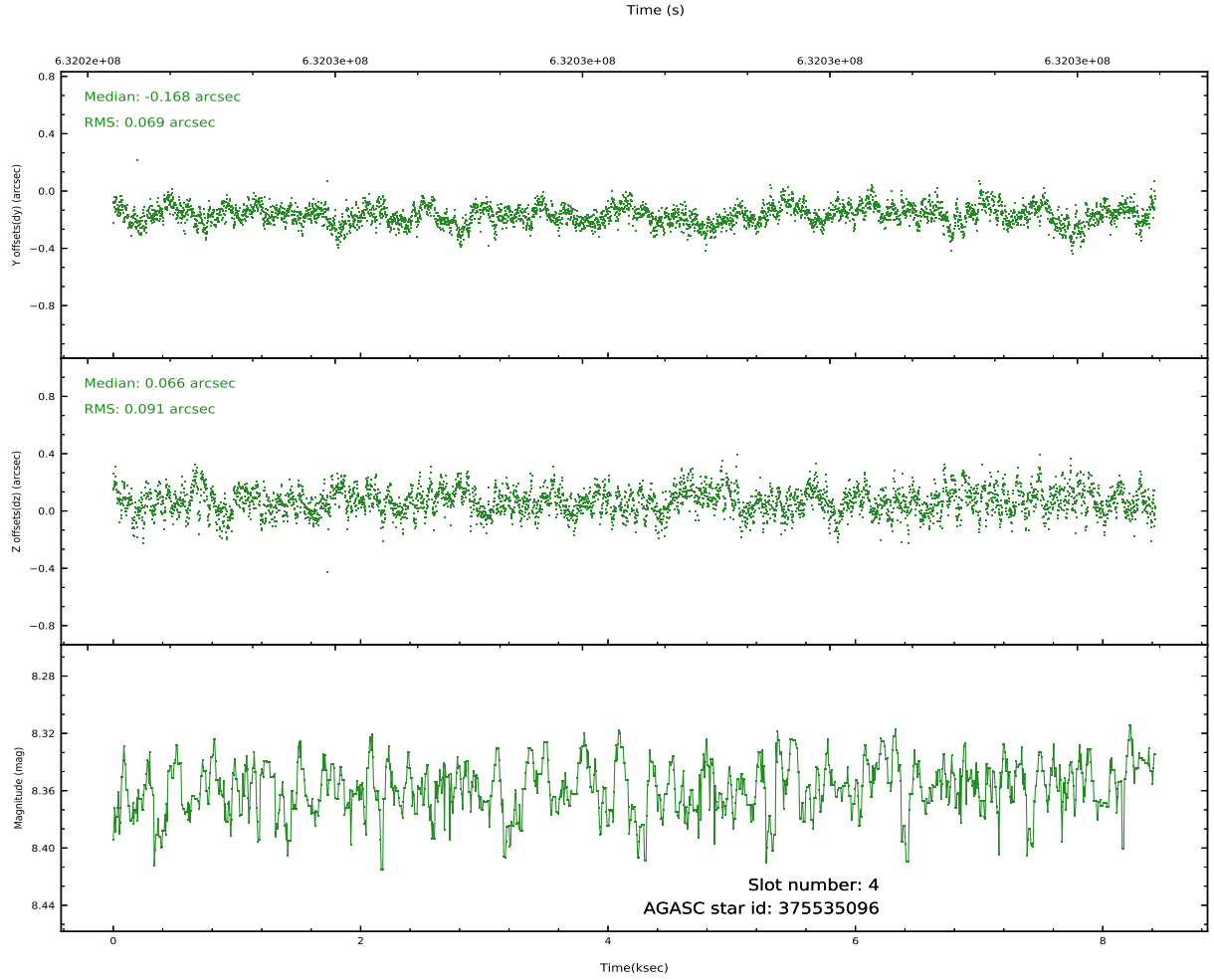
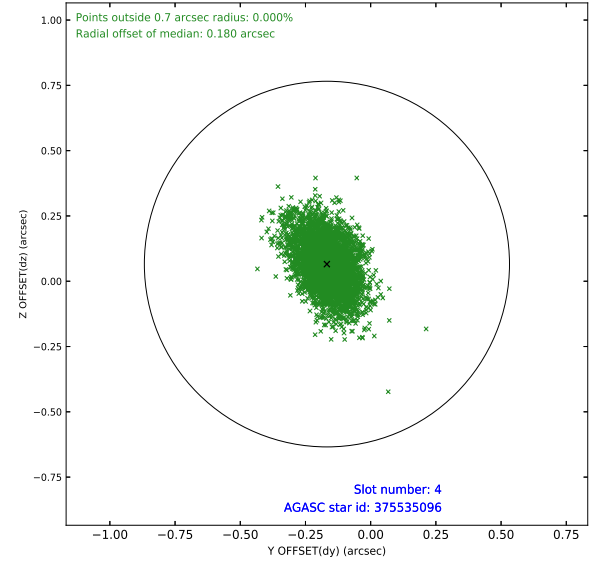
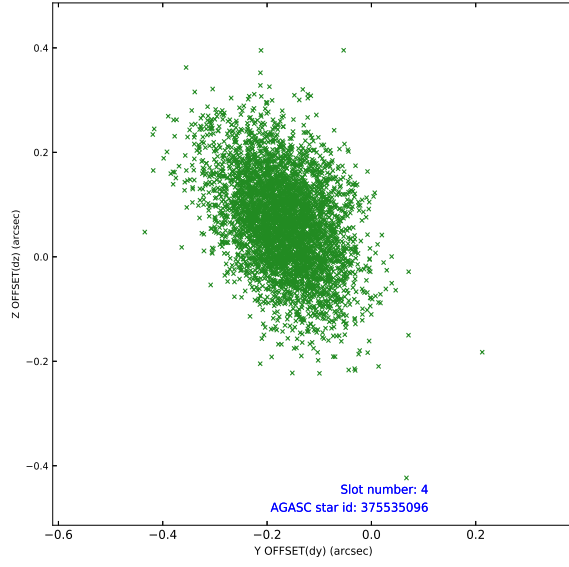
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.10	2056	1.000	0.100	-0.019	0.010	0.019	0.000000	0.000000	-772.76	-850
1	FID		ACIS-I-5	7.20	2056	1.000	-0.260	0.132	0.009	0.014	0.000000	0.000000	-1827.43	1053
2	FID		ACIS-I-6	7.21	2056	1.000	0.067	-0.045	0.008	0.013	0.000000	0.000000	386.31	1698
3	GUIDE	used	375534552	8.19	4106	1.000	0.166	-0.110	0.128	0.213	50.877490	41.206927	1189.07	-2391
4	GUIDE	used	375535096	8.36	4110	1.000	-0.168	0.066	0.118	0.208	52.465681	41.176409	1173.50	1910
5	GUIDE	used	376070440	6.96	4111	1.000	0.100	-0.103	0.133	0.215	51.289107	41.257301	982.57	-1281
6	GUIDE	used	375665456	8.68	4109	1.000	0.062	-0.010	0.139	0.234	52.612960	40.961571	1930.98	2340
7	GUIDE	used	376054296	9.30	4104	1.000	-0.152	0.169	0.207	0.359	51.304444	42.123131	-2131.79	-1313

2.4 Star Slots

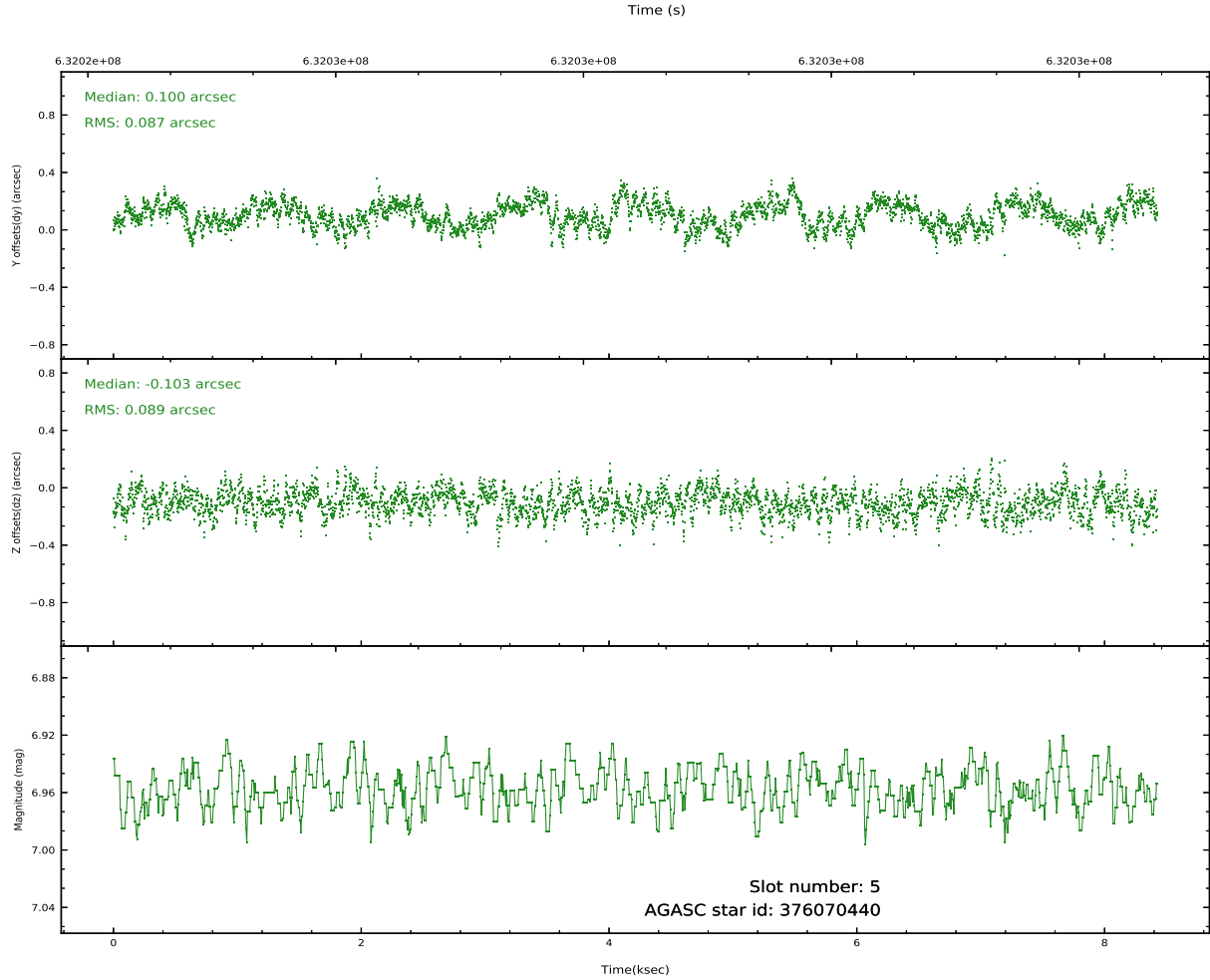
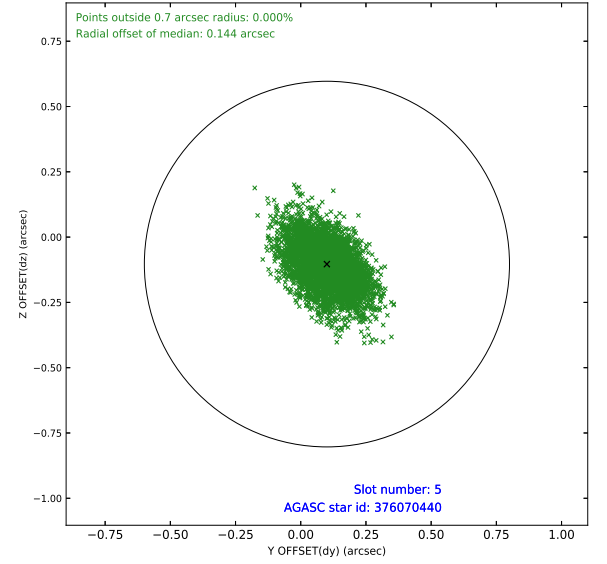
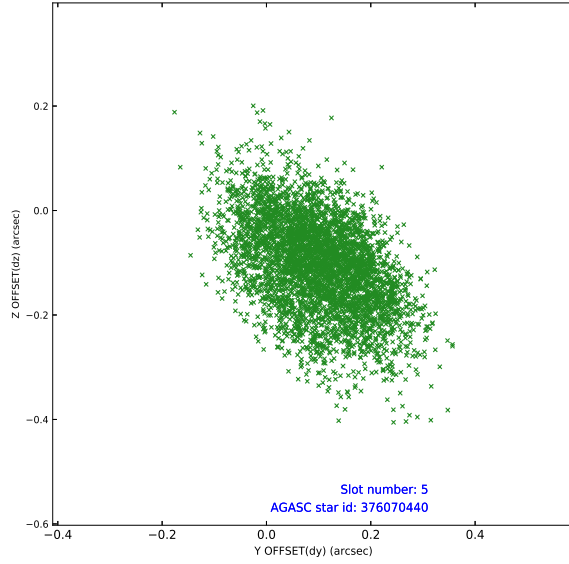
2.4.1 Slot 3



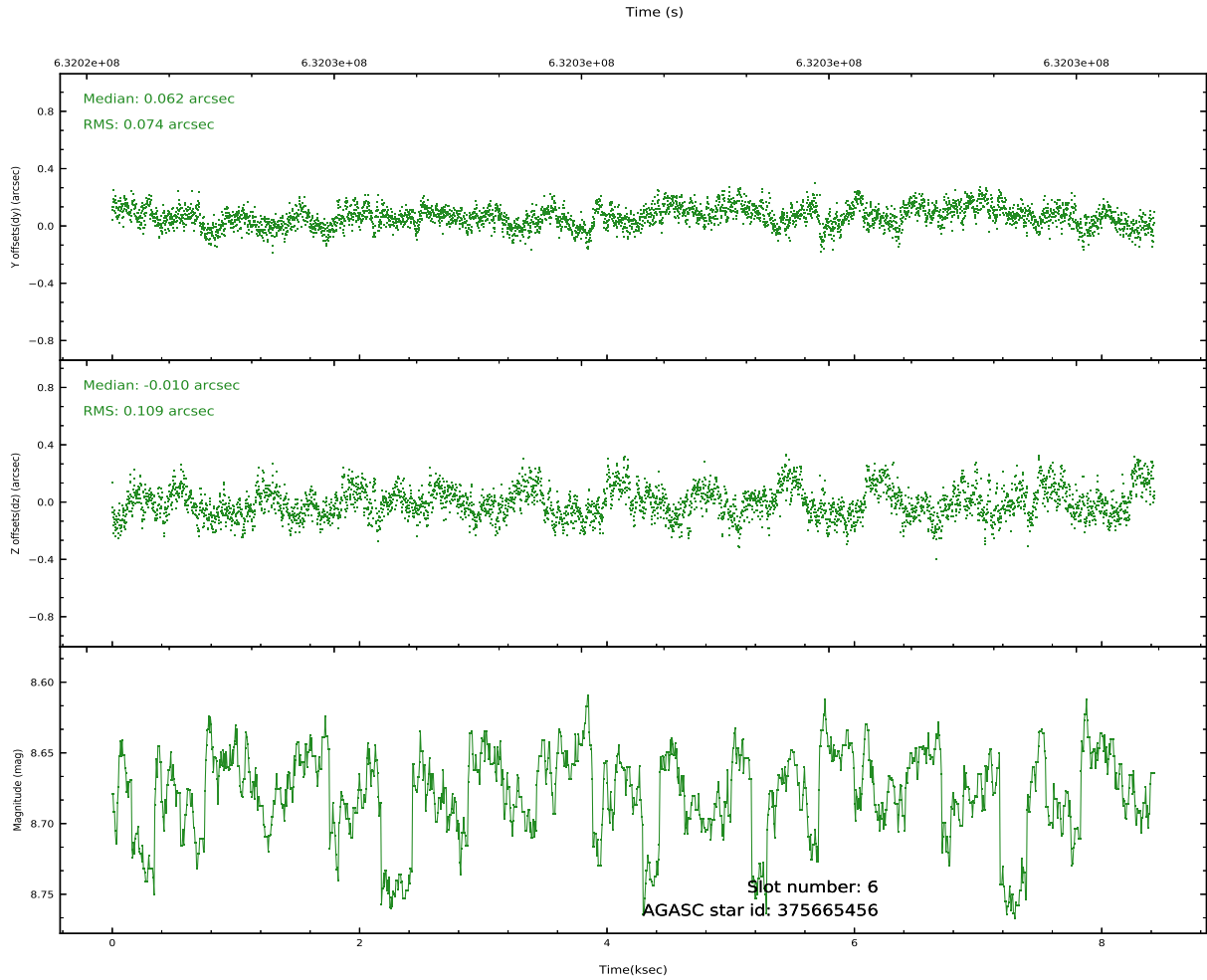
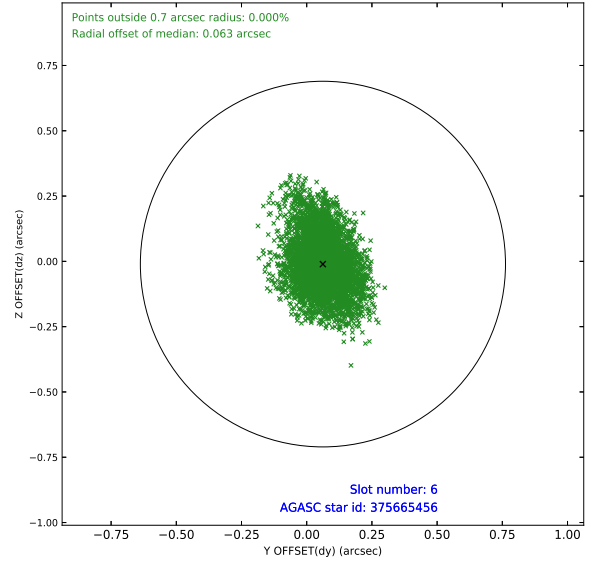
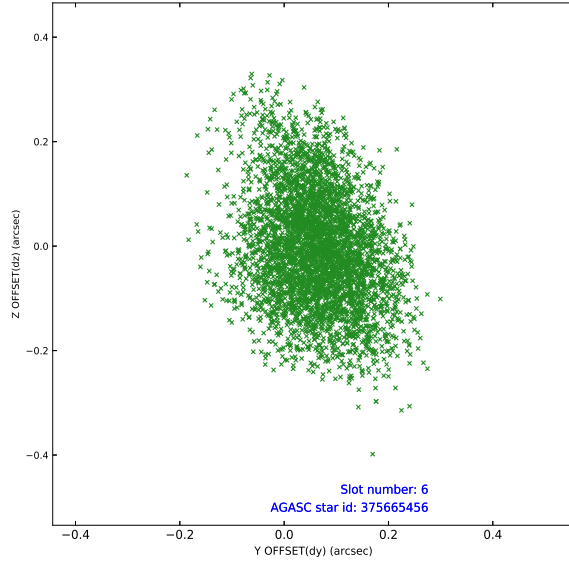
2.4.2 Slot 4



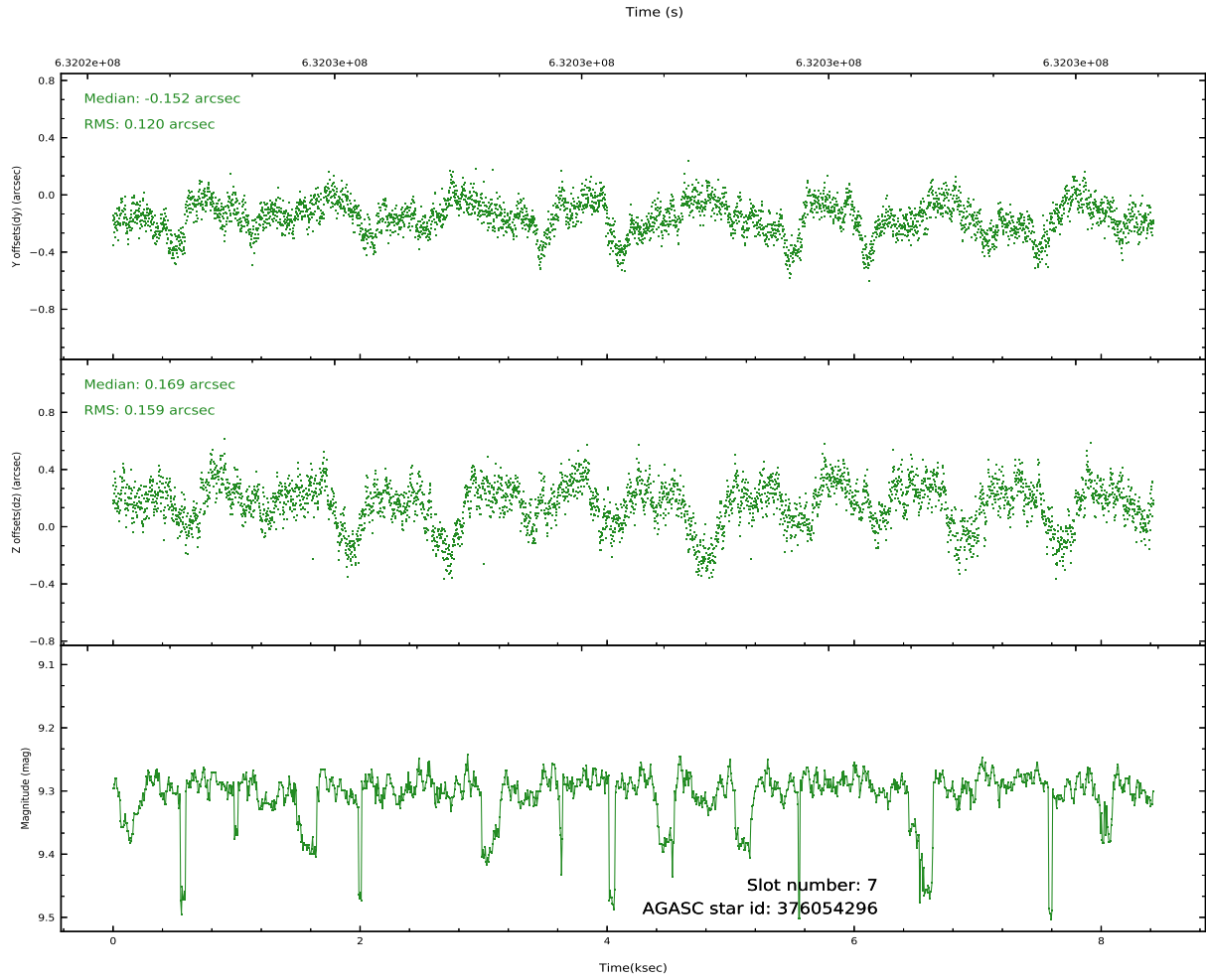
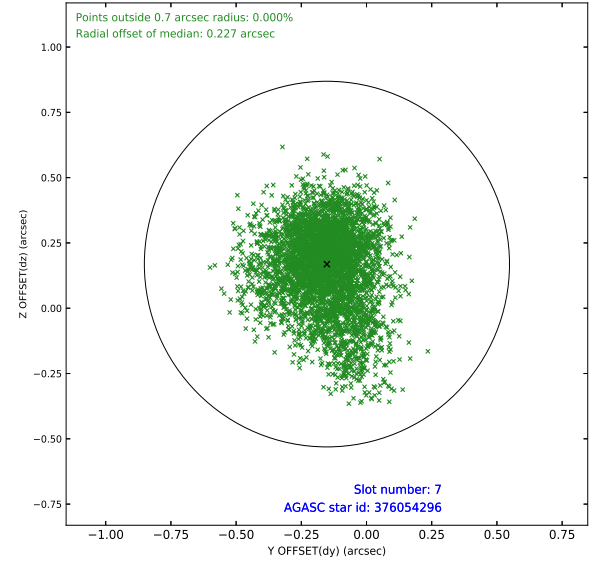
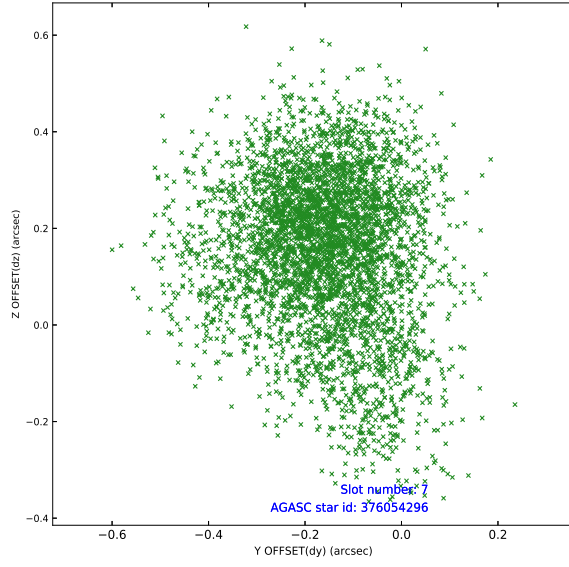
2.4.3 Slot 5



2.4.4 Slot 6

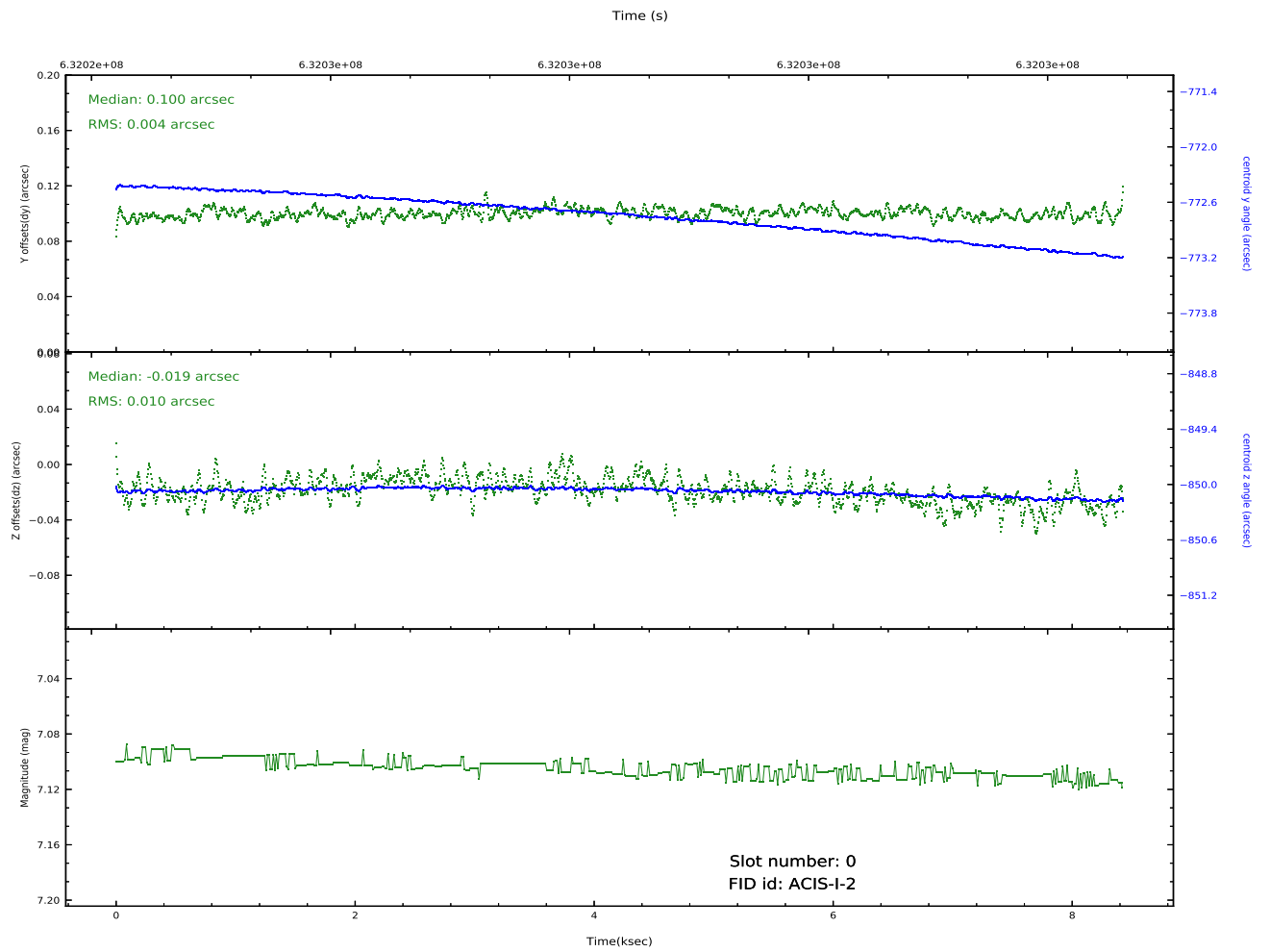
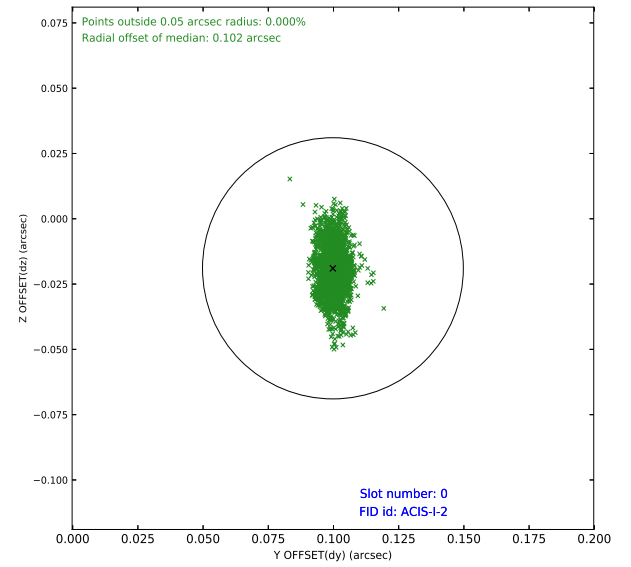
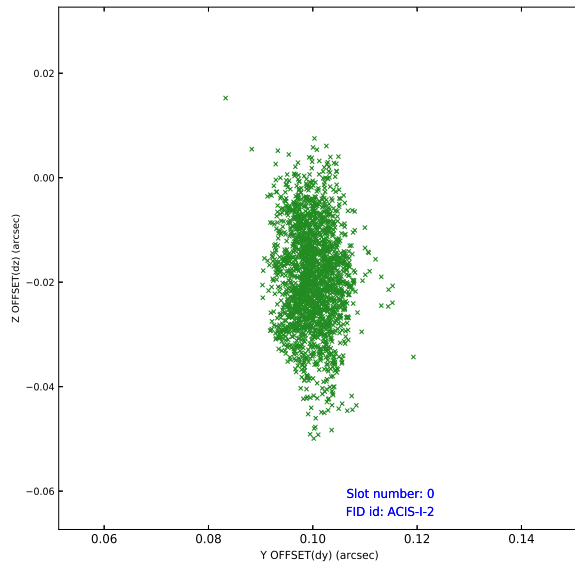


2.4.5 Slot 7

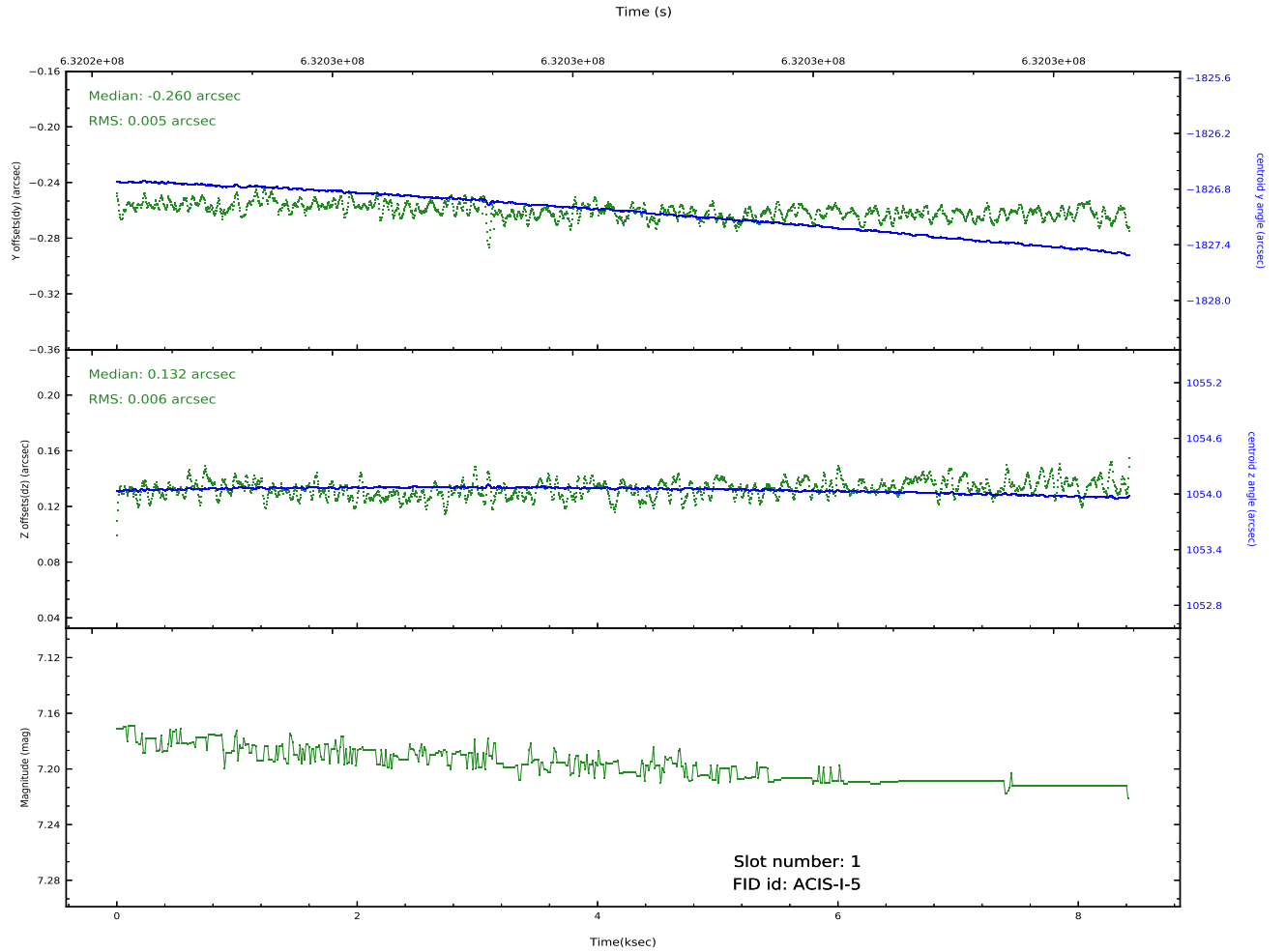
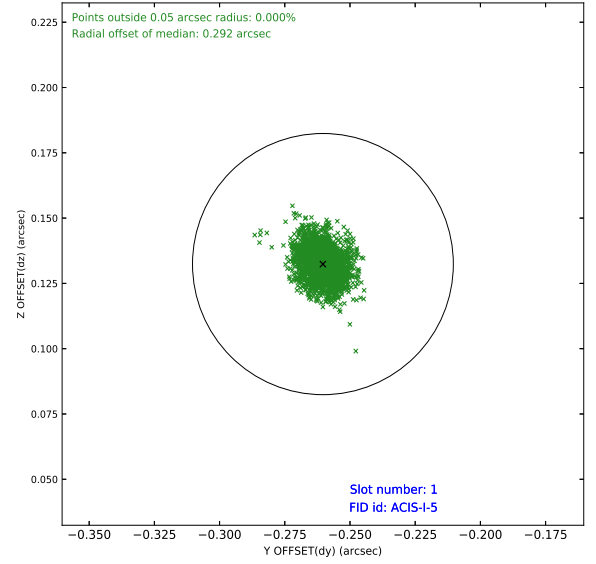
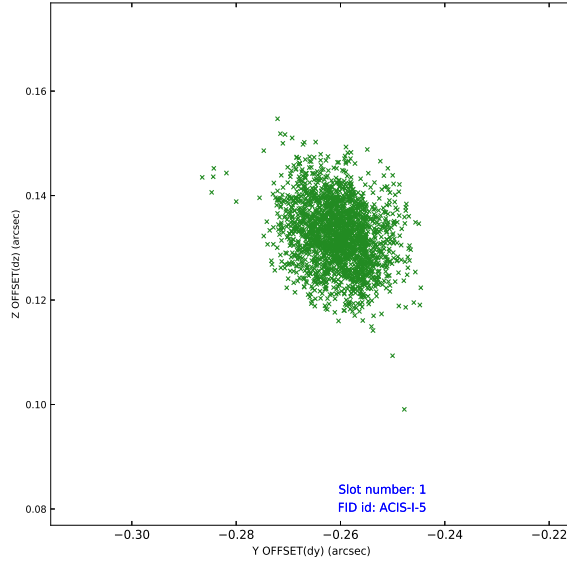


2.5 FID Slots

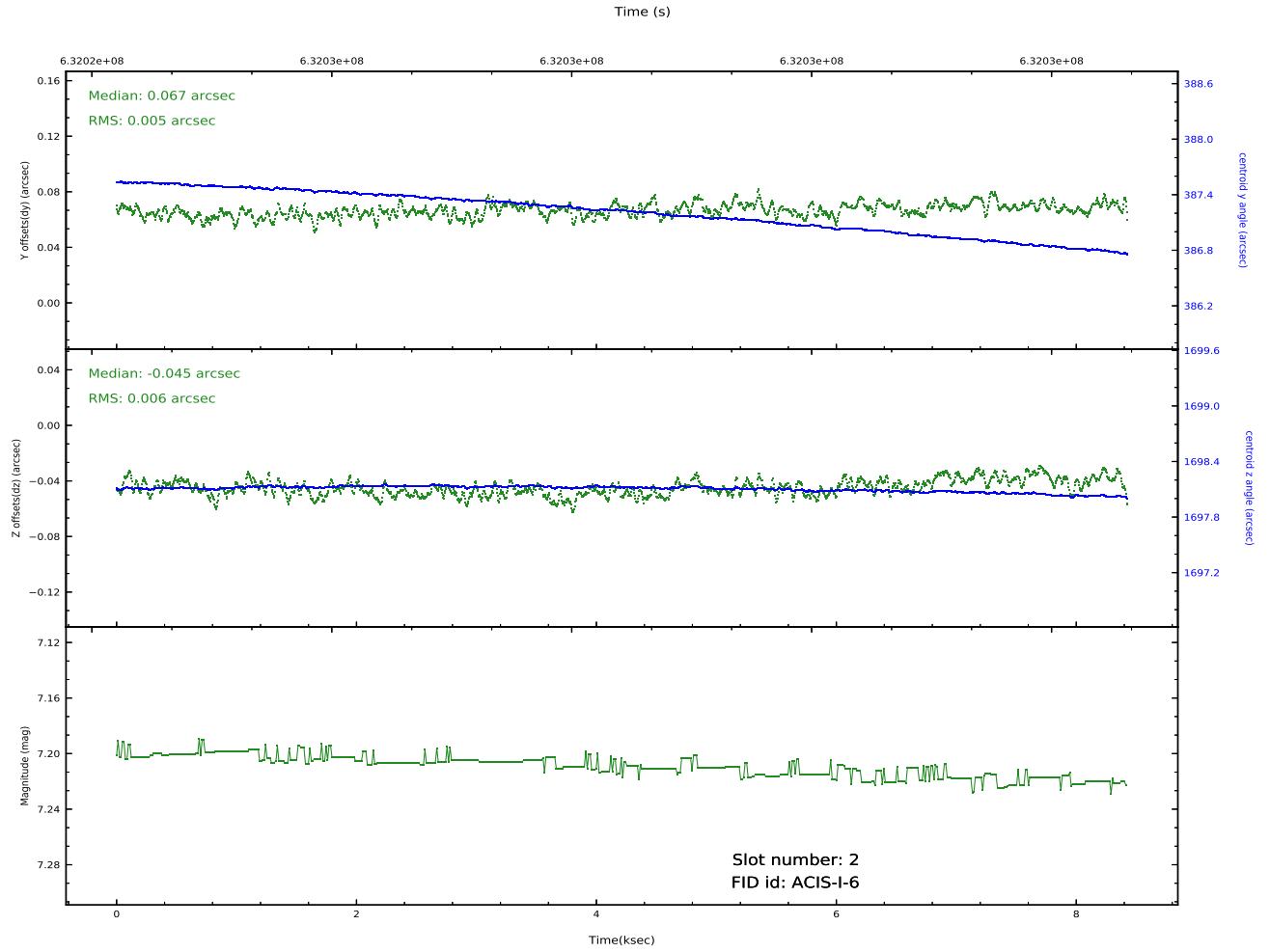
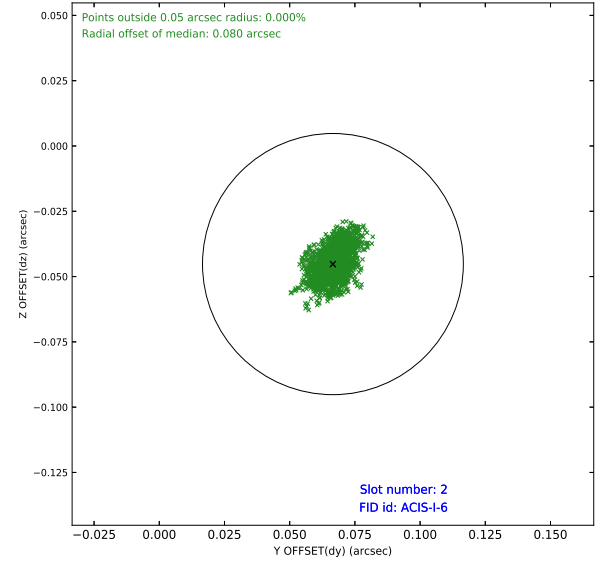
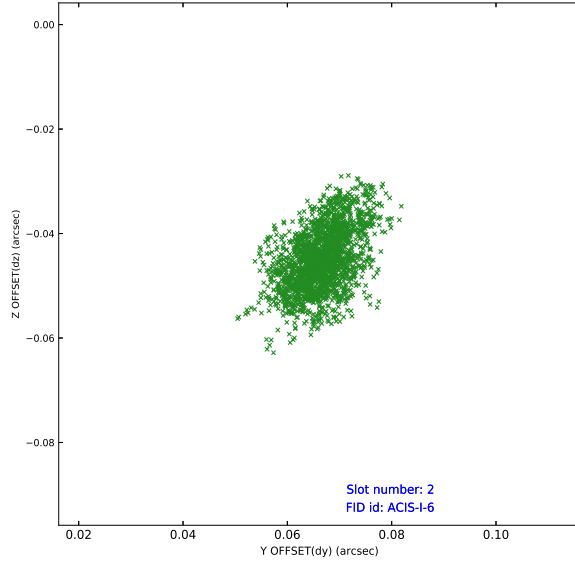
2.5.1 Slot 0



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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.140436339736

A.2 Comments