

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20525 - L2 Version 2
Chandra X-Ray Center

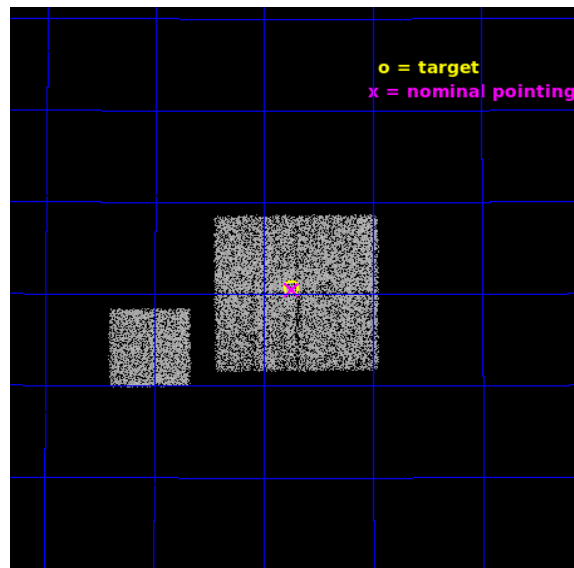
L2 Processing Date : Oct 24 2020

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1 Front

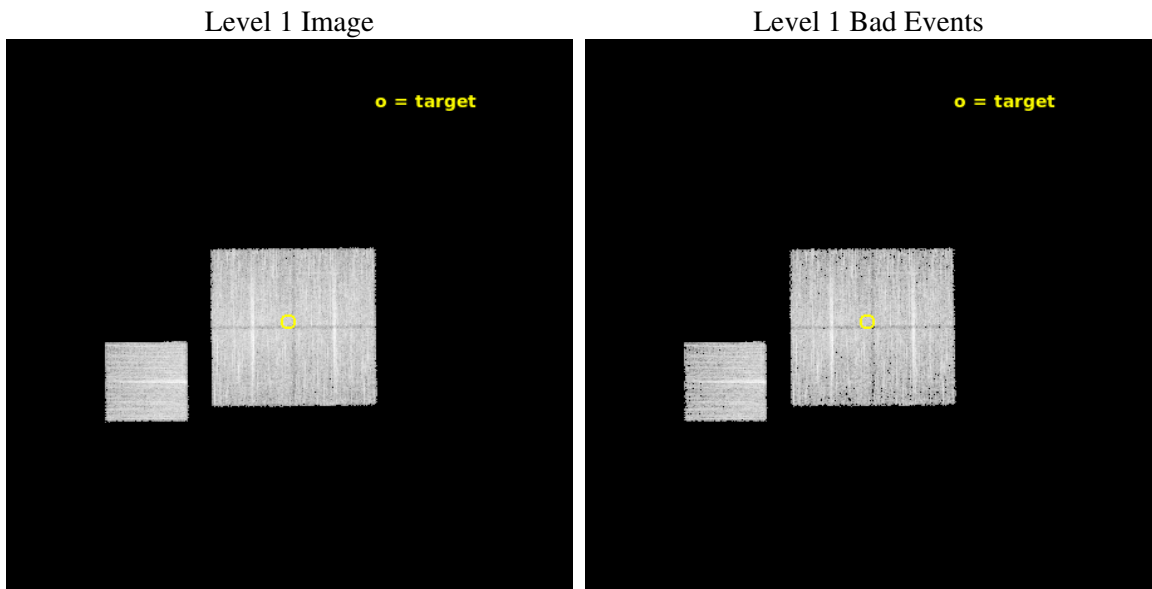
seq_num	801739	Sequence number
obs_id	20525	Observation id
title	Unravelling gas clumping in the outskirts of the Perseus cluster	P
observer	Stephen Walker	Principal investigator
object	Perseus r200 SE	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	51.187917	Observer's specified target RA [deg]
dec_targ	40.511333	Observer's specified target Dec [deg]
ra_nom	51.185792797819	Nominal RA [deg]
dec_nom	40.508216850609	Nominal Dec [deg]
roll_nom	269.53502008121	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8065.6431527138	Sum of GTIs [s]
livetime	7960.2595870835	Livetime [s]
ontime0	8065.5200327635	Sum of GTIs [s]
ontime1	8062.4199922085	Sum of GTIs [s]
ontime2	8065.6021127701	Sum of GTIs [s]
ontime3	8065.6431527138	Sum of GTIs [s]
ontime6	8065.4789927006	Sum of GTIs [s]
l2events	27266	Number of level 2 events



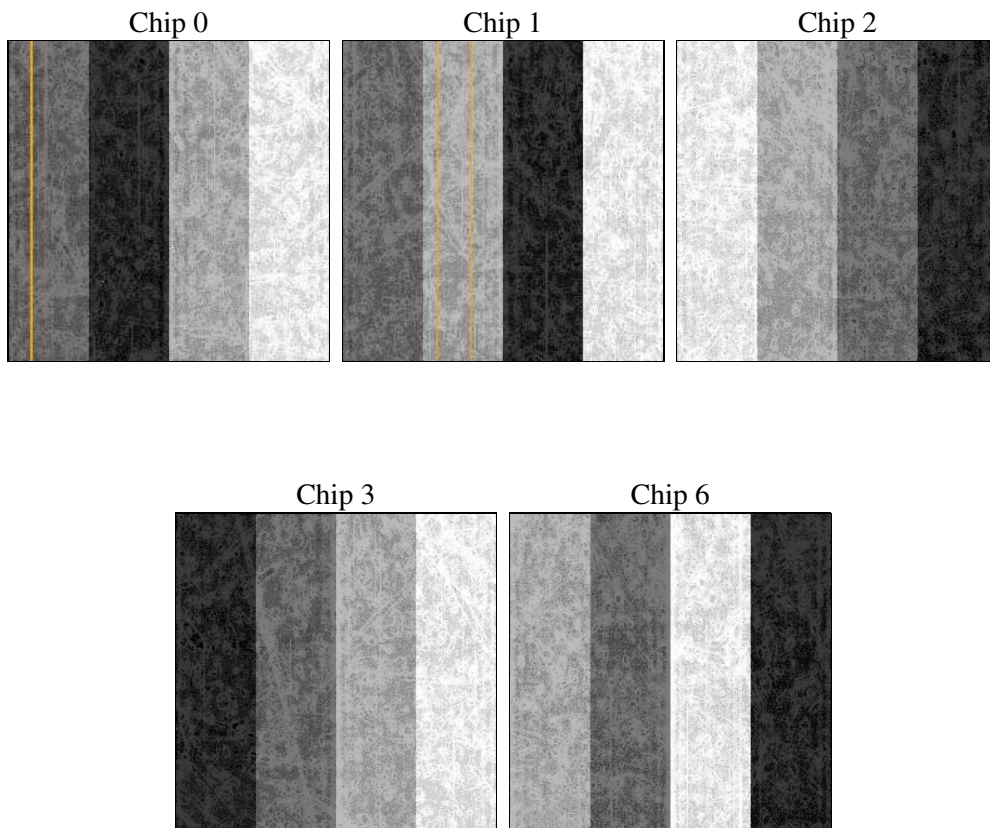
2 OBI

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	8065.6431527138	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	8065.5200327635	Sum of GTIs [s]
date	2020-10-24T06:27:05	Date and time of file creation	ontime1	8062.4199922085	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8065.6021127701	Sum of GTIs [s]
			ontime3	8065.6431527138	Sum of GTIs [s]
			ontime6	8065.4789927006	Sum of GTIs [s]
			l1events	292464	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	55315	59515	59531	57579	60524
rejected events	48964	52412	53506	51472	54080
rejected %	88%	88%	89%	89%	89%

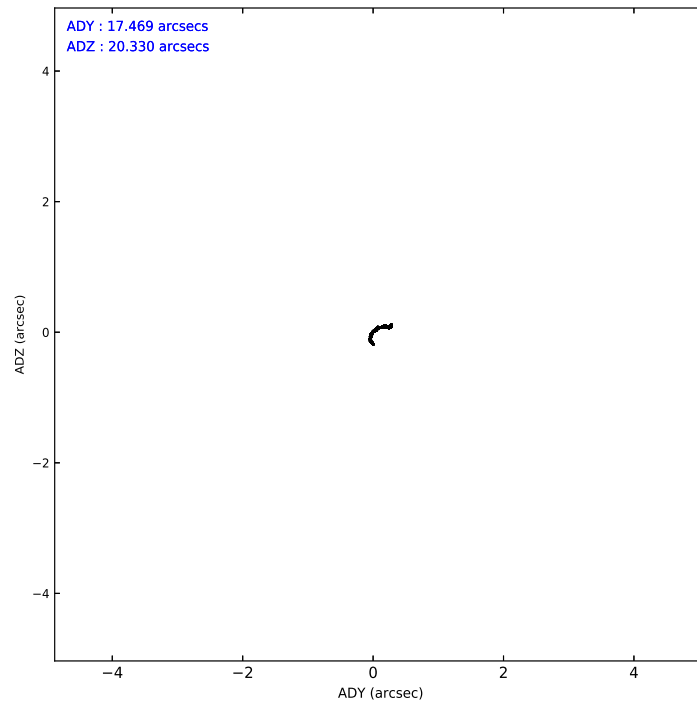
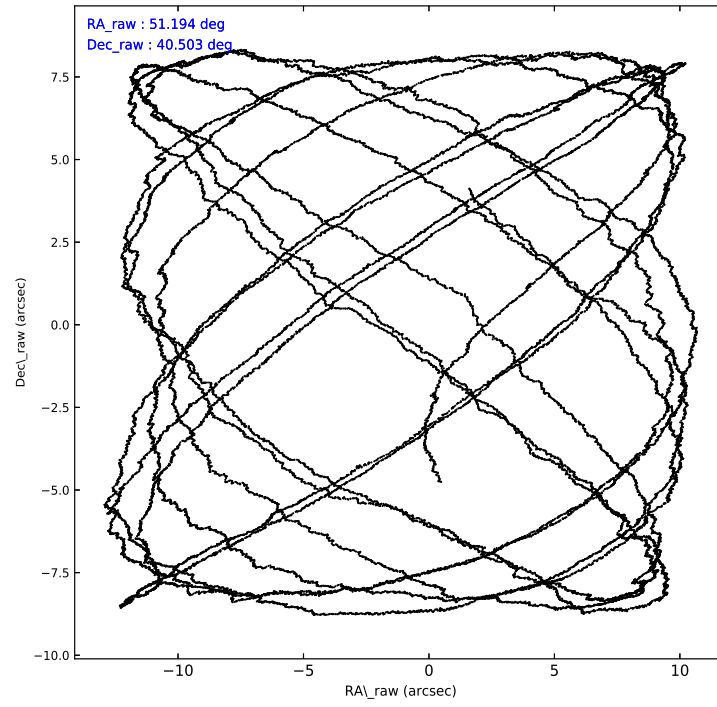
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2143	2160	2163	2180	2008
	3%	3%	3%	3%	3%
grade 1 events	17	34	25	21	33
	0%	0%	0%	0%	0%
grade 2 events	1560	1904	1412	1336	1644
	2%	3%	2%	2%	2%
grade 3 events	604	659	617	605	575
	1%	1%	1%	1%	0%
grade 4 events	627	664	629	619	570
	1%	1%	1%	1%	0%
grade 5 events	2411	2459	2232	2767	2465
	4%	4%	3%	4%	4%
grade 6 events	1420	1718	1207	1369	1650
	2%	2%	2%	2%	2%
grade 7 events	46533	49917	51246	48682	51579
	84%	83%	86%	84%	85%

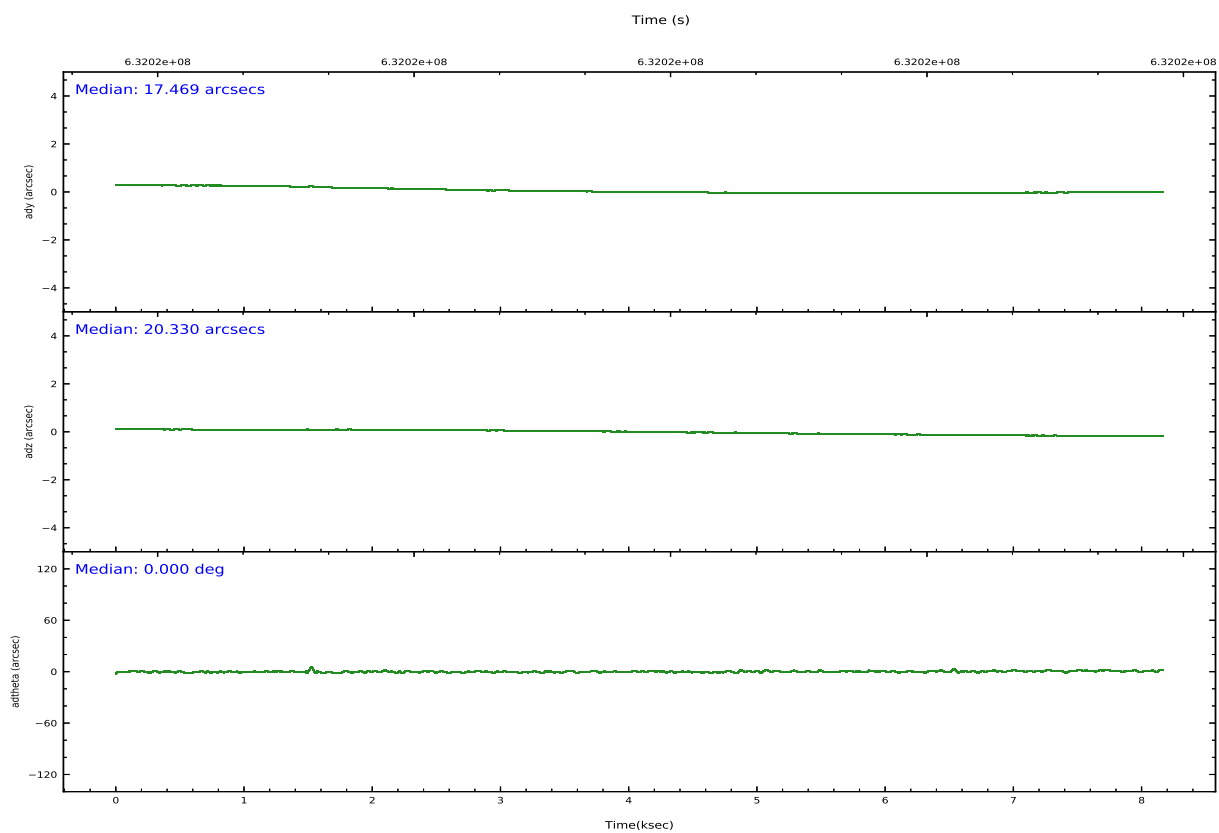
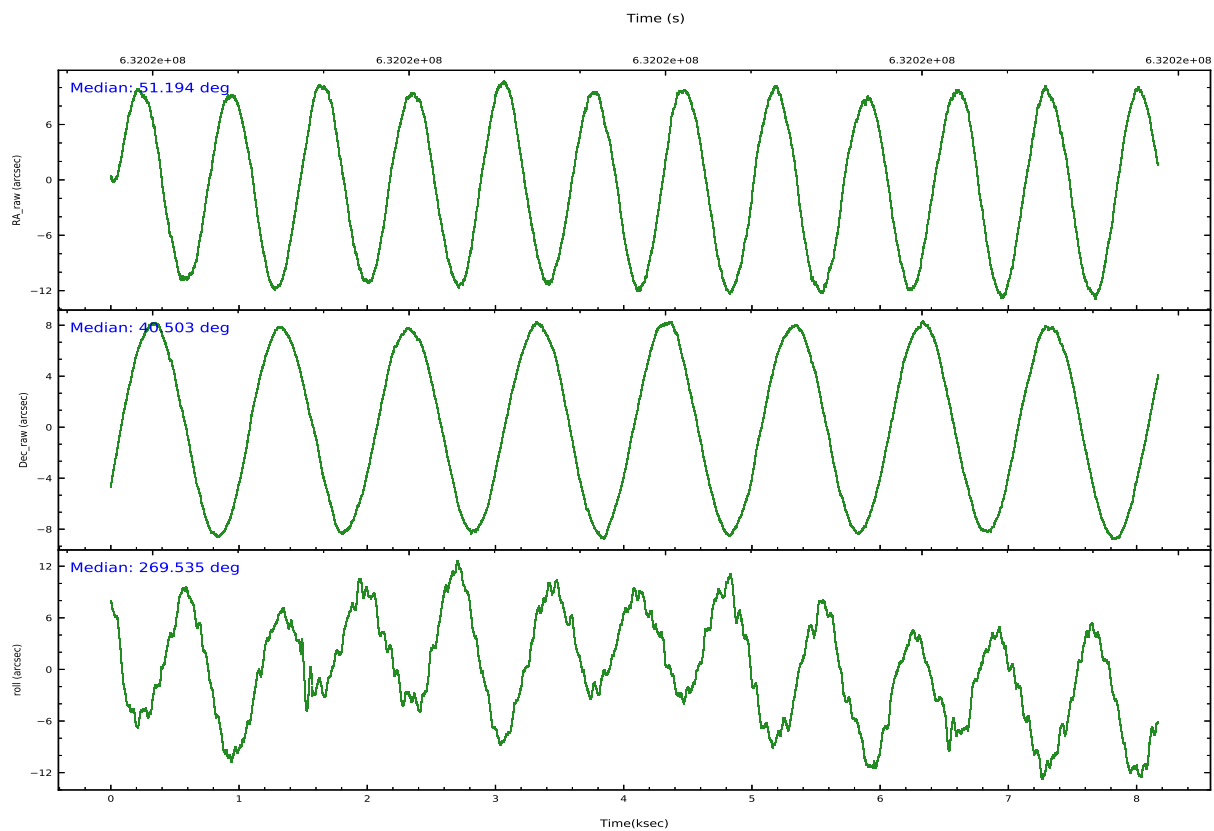
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	51.175322	51.185792797819
[deg] Pointing Dec	40.527048	40.508216850609
[deg] Pointing Roll	269.340052	269.53502008121
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	632015842.184000	632014992.9903001
Observation start date	2018-01-10T23:56:13	2018-01-10T23:43:12
[s] Observation end time (MET)	632023842.184000	632023991.97833
Observation end date	2018-01-11T02:09:33	2018-01-11T02:13:11
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



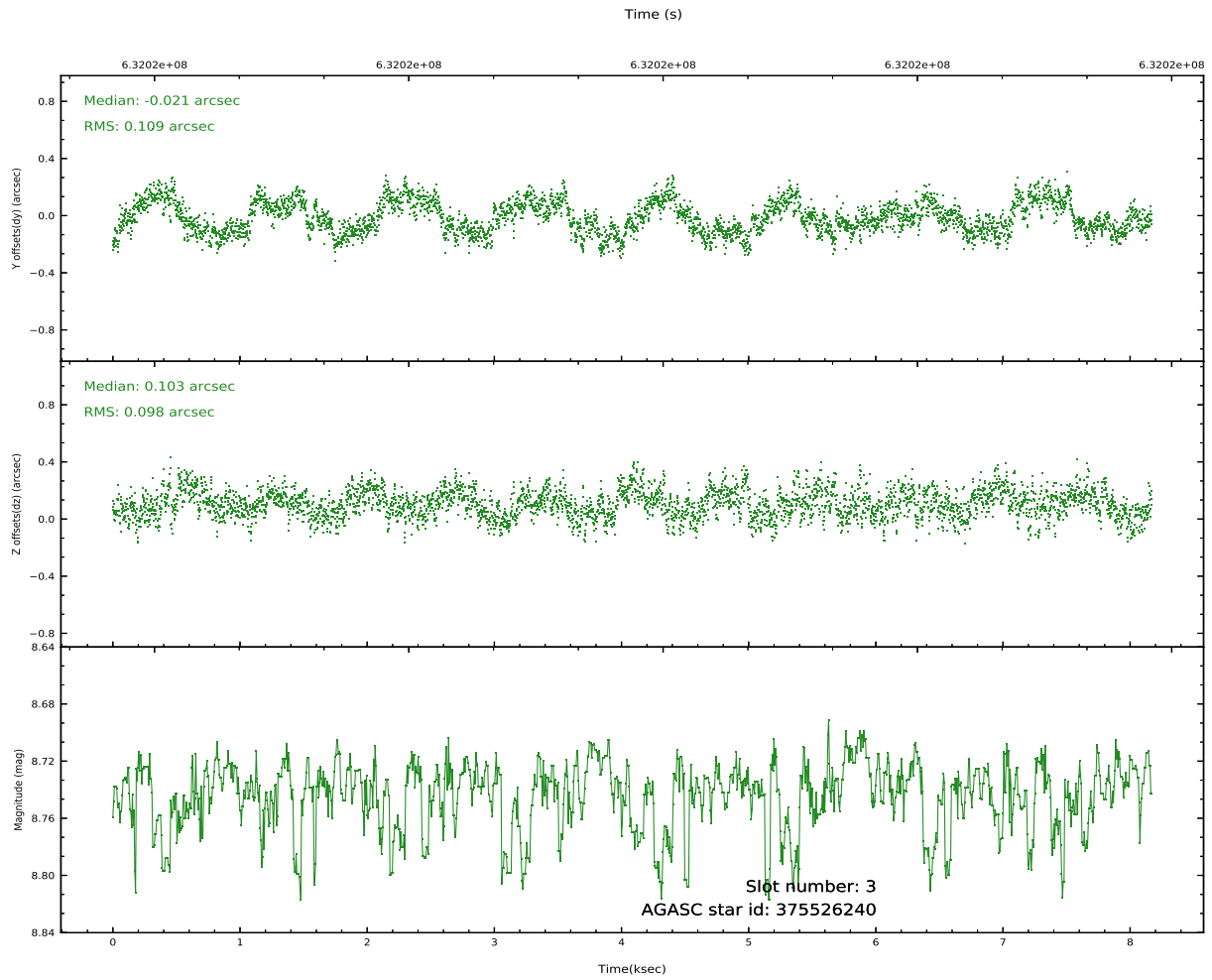
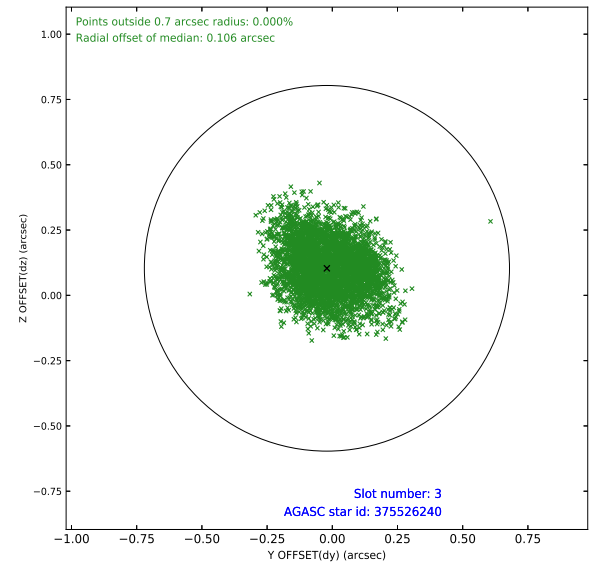
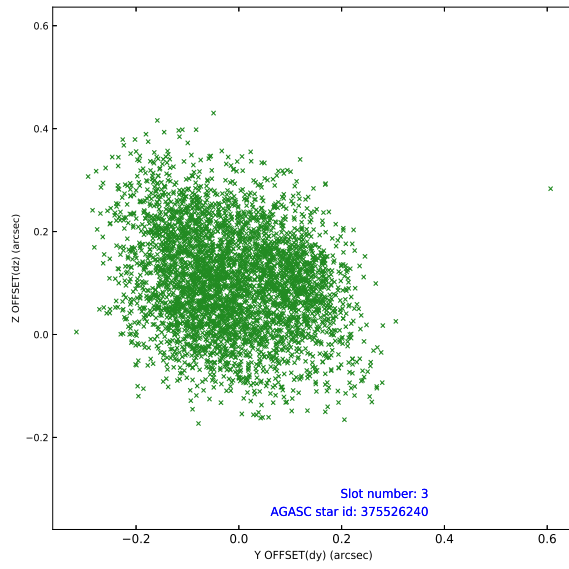


Slot Statistics

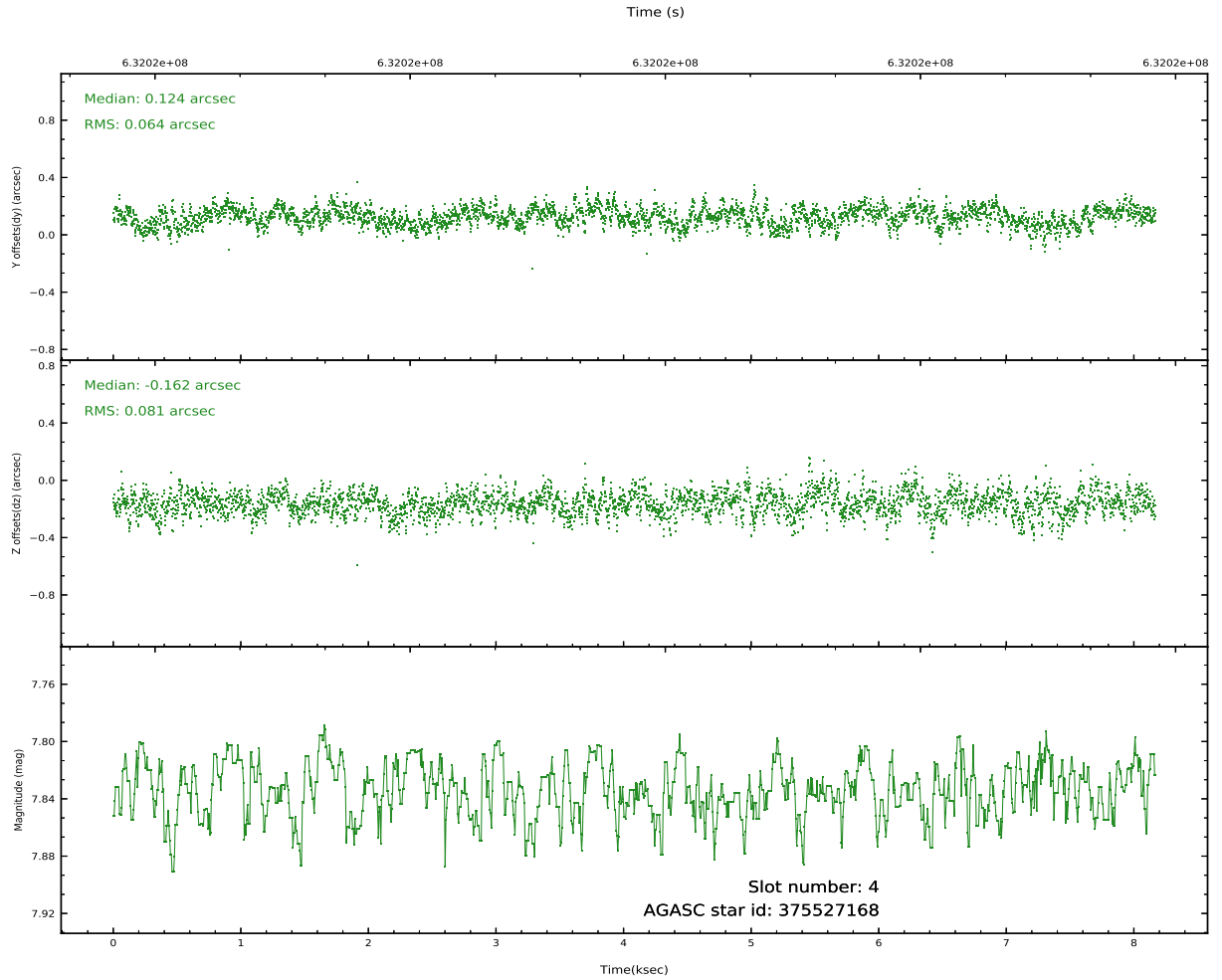
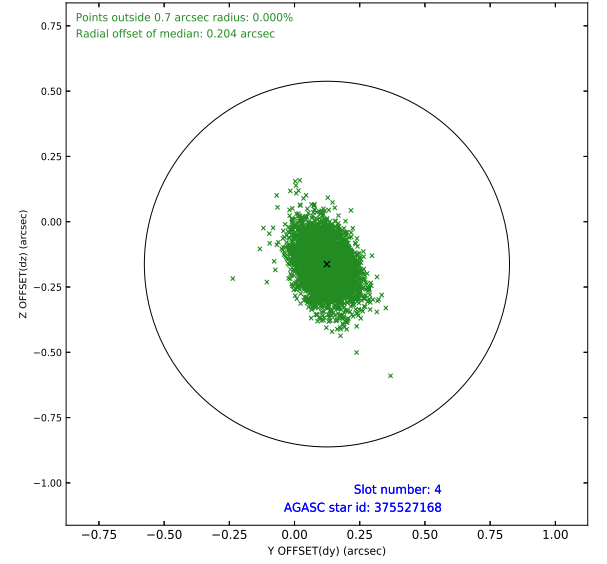
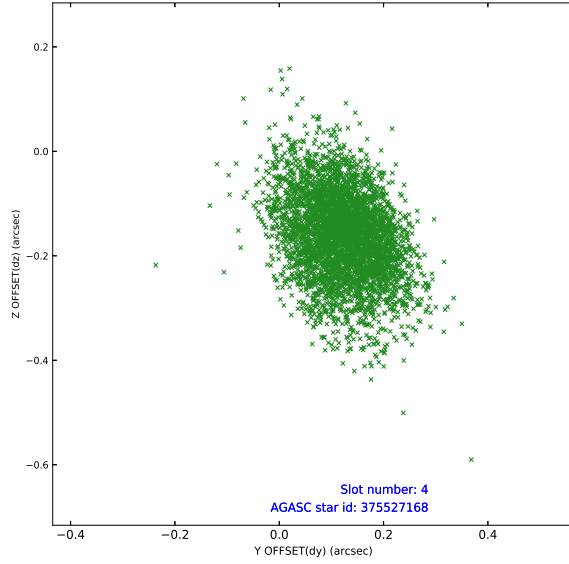
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	1993	1.000	-0.032	-0.064	0.009	0.017	0.000000	0.000000	921.79	-844
1	FID		ACIS-I-4	7.12	1992	1.000	0.047	0.022	0.009	0.016	0.000000	0.000000	2142.37	1055
2	FID		ACIS-I-6	7.18	1993	1.000	-0.111	0.108	0.012	0.020	0.000000	0.000000	388.59	1698
3	GUIDE	used	375526240	8.74	3985	1.000	-0.021	0.103	0.159	0.246	51.034416	40.968783	-1585.29	-401
4	GUIDE	used	375527168	7.83	3985	1.000	0.124	-0.162	0.107	0.184	50.968367	40.629276	-361.96	-569
5	GUIDE	used	375532312	6.93	3986	1.000	0.070	0.051	0.100	0.178	51.110353	40.043849	1742.10	-159
6	GUIDE	used	375534824	9.04	3985	1.000	-0.059	0.074	0.140	0.228	50.943864	41.119832	-2126.62	-652
7	GUIDE	used	375533304	8.92	3982	1.000	-0.129	-0.067	0.125	0.223	51.833632	40.116937	1448.35	1828

2.4 Star Slots

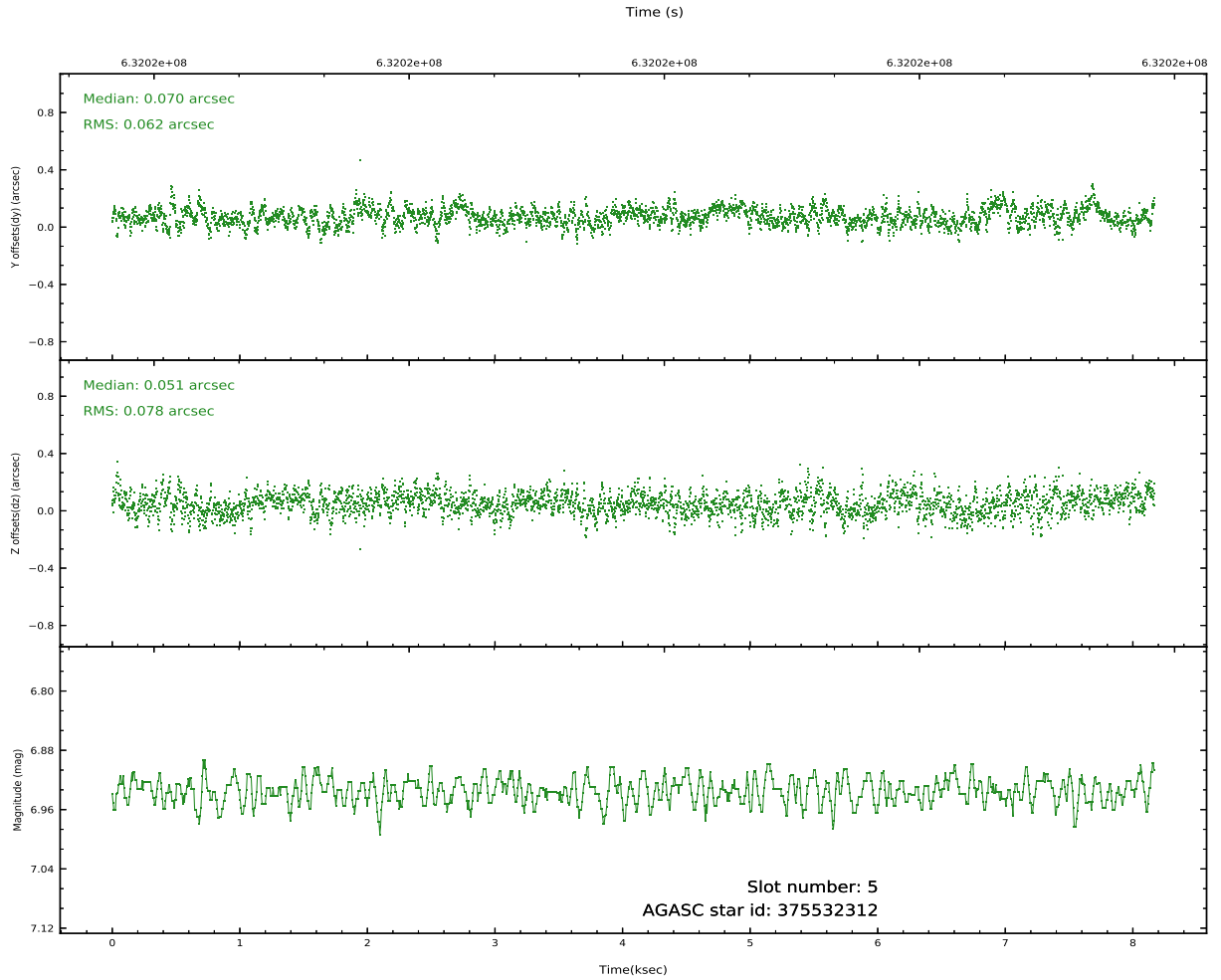
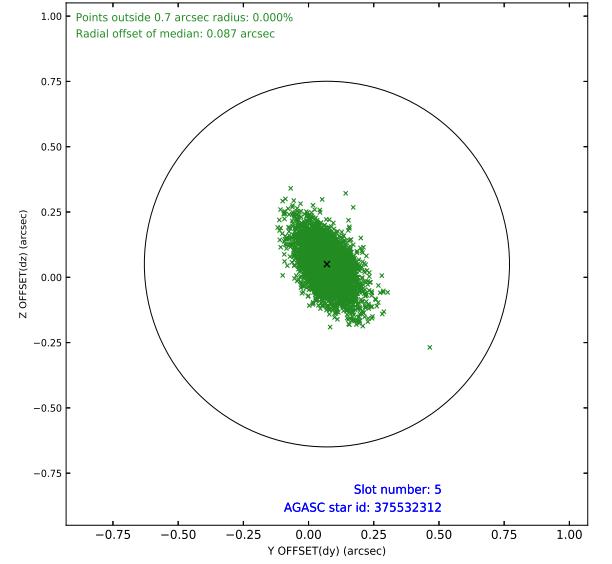
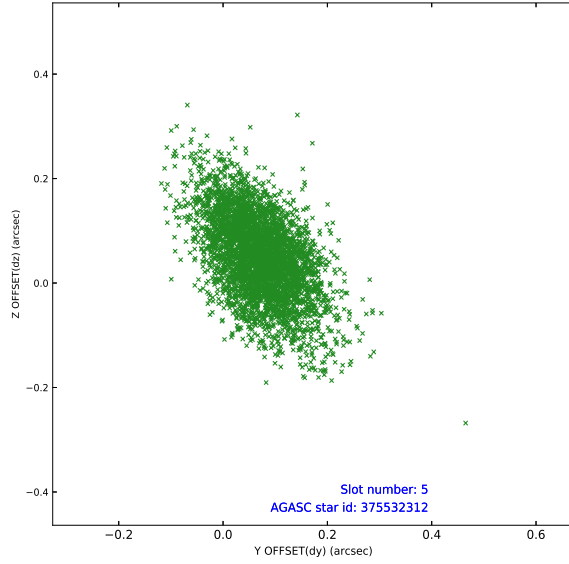
2.4.1 Slot 3



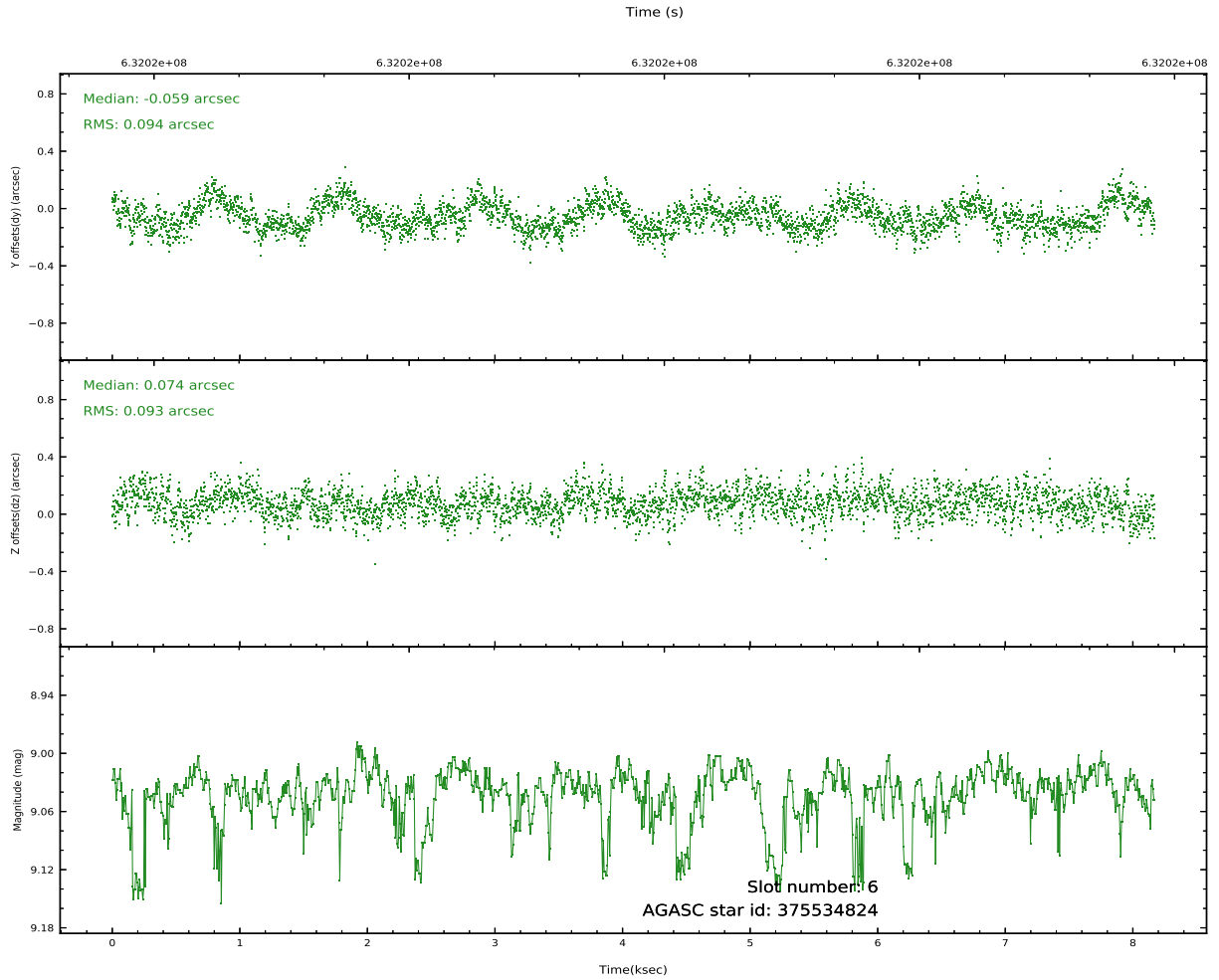
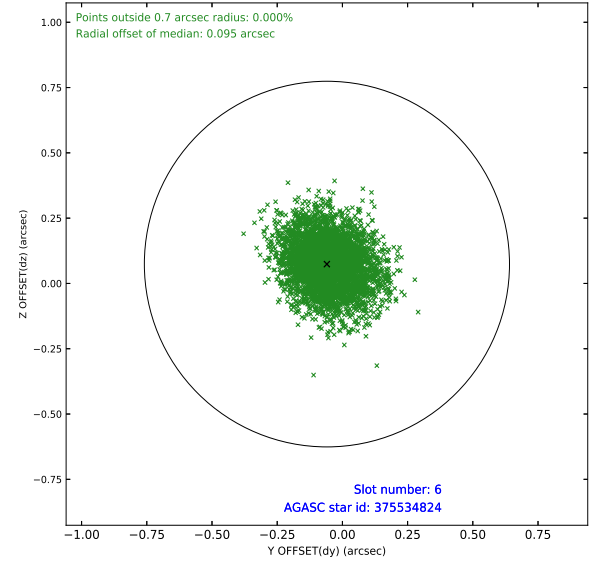
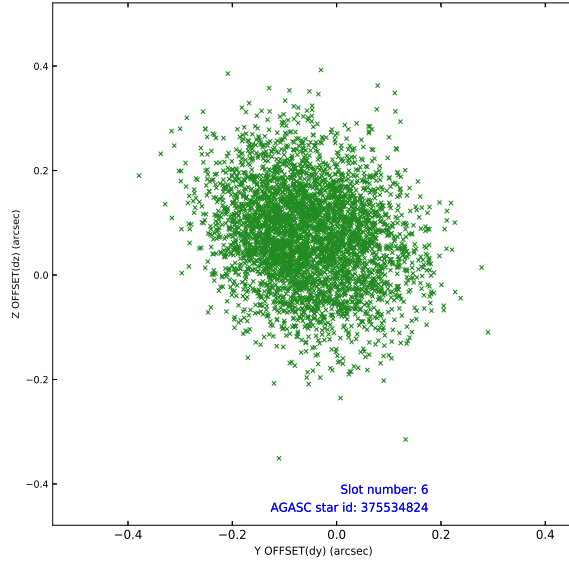
2.4.2 Slot 4



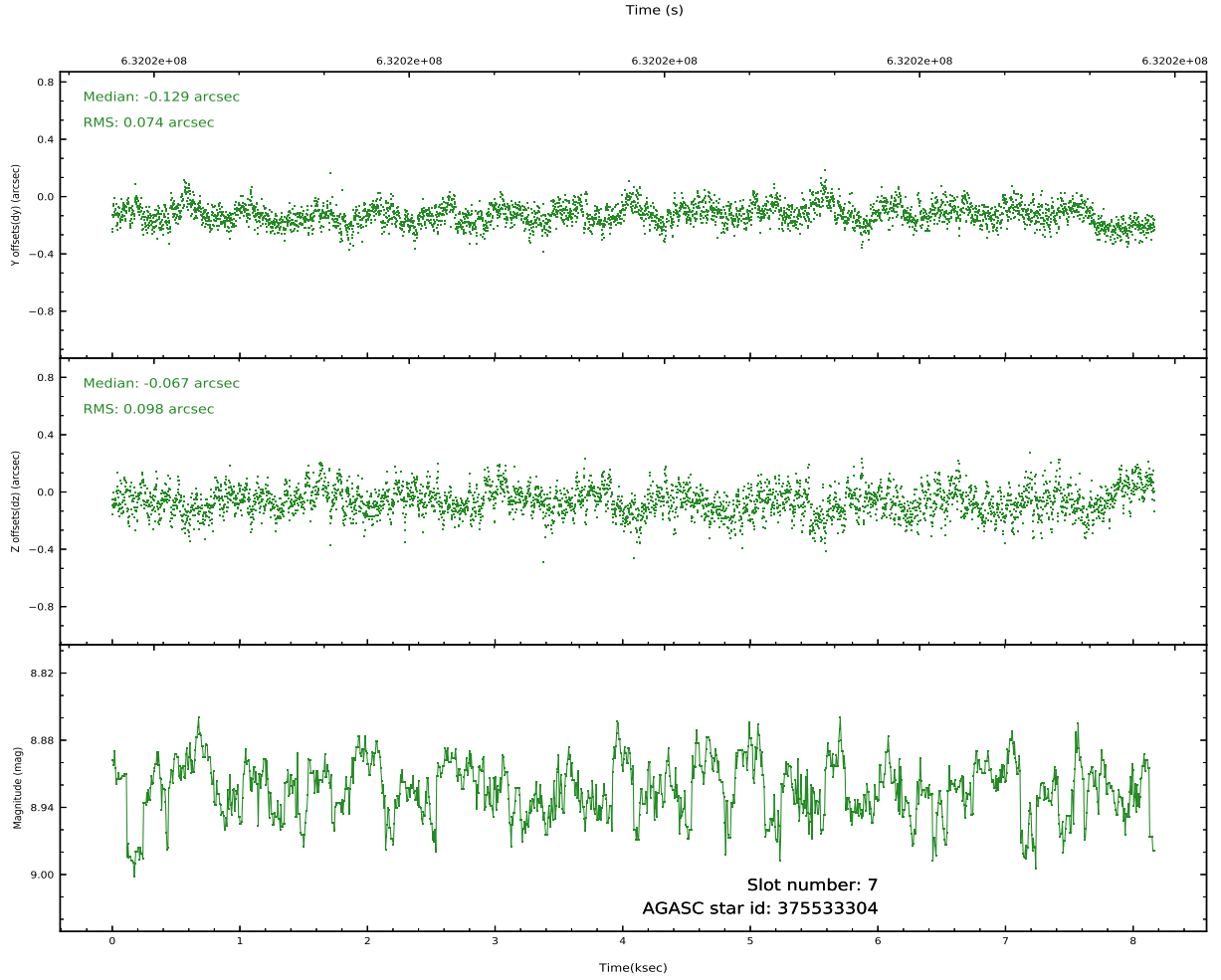
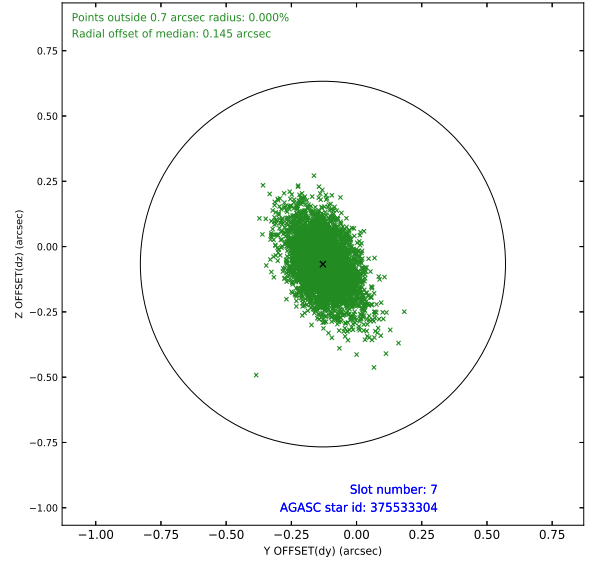
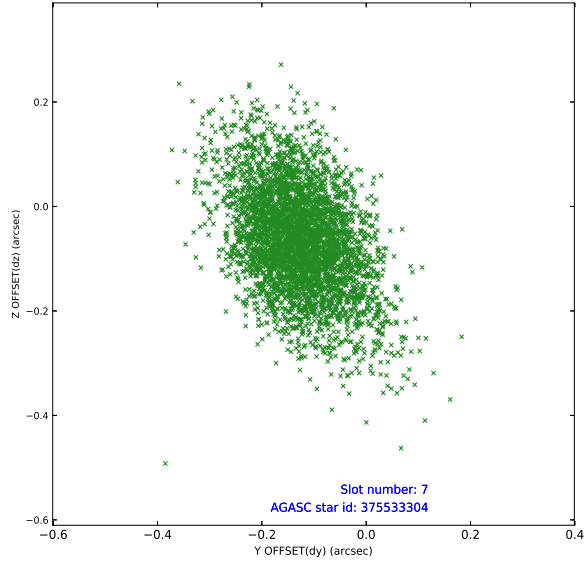
2.4.3 Slot 5



2.4.4 Slot 6

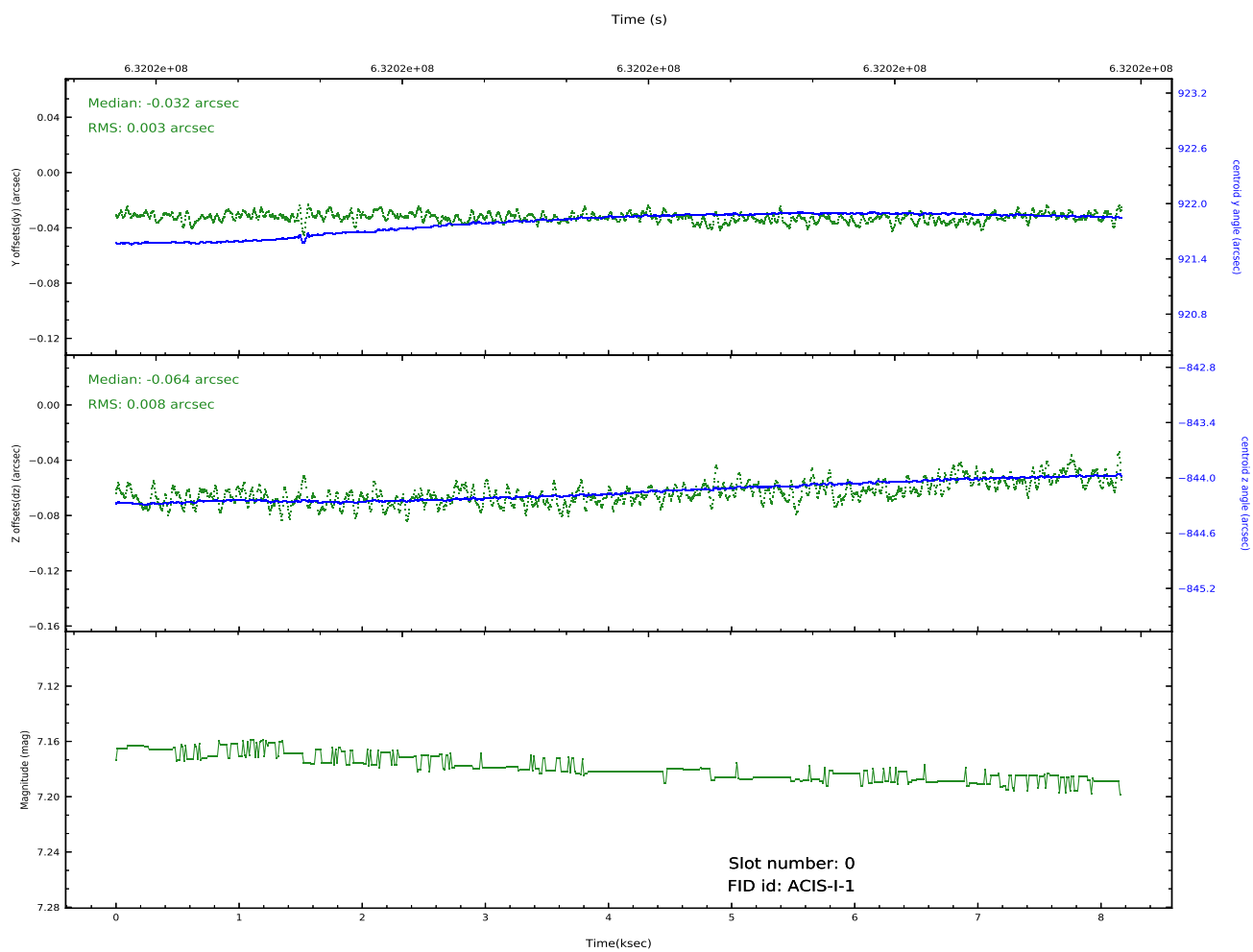
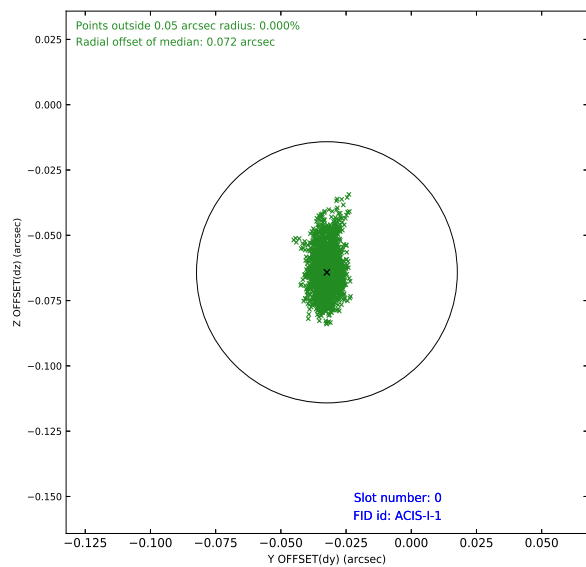
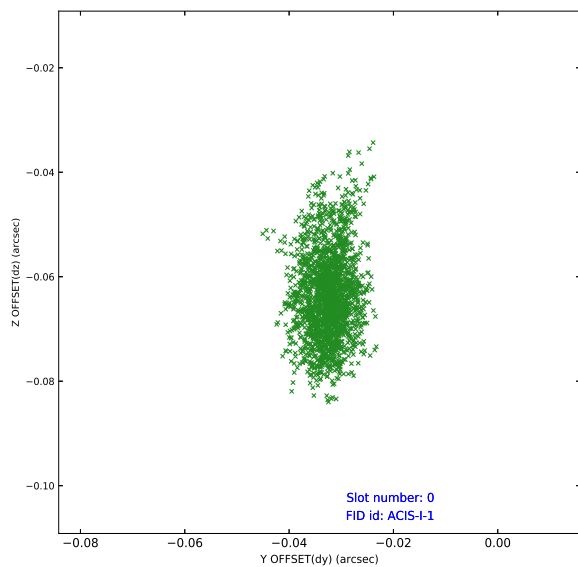


2.4.5 Slot 7

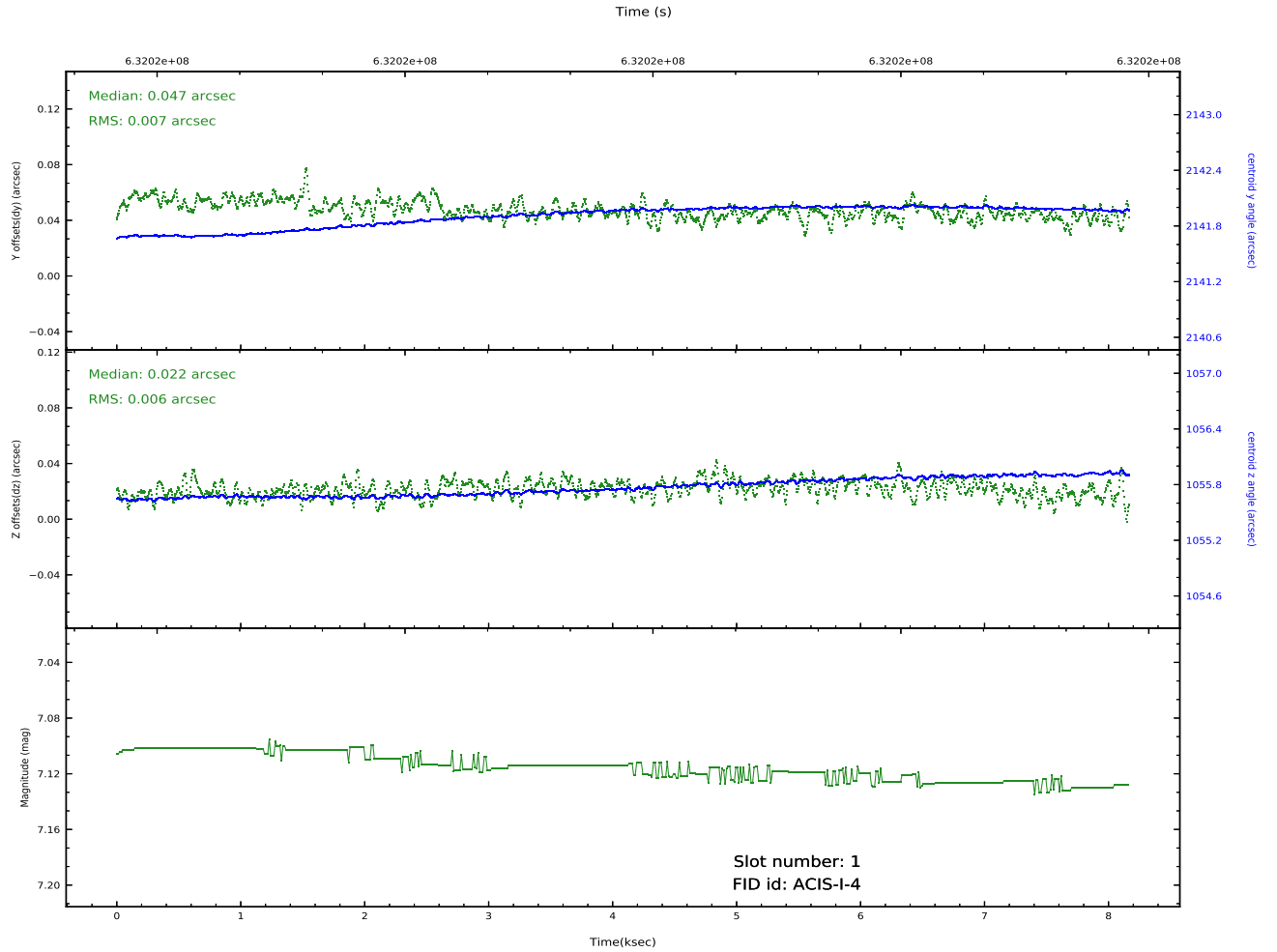
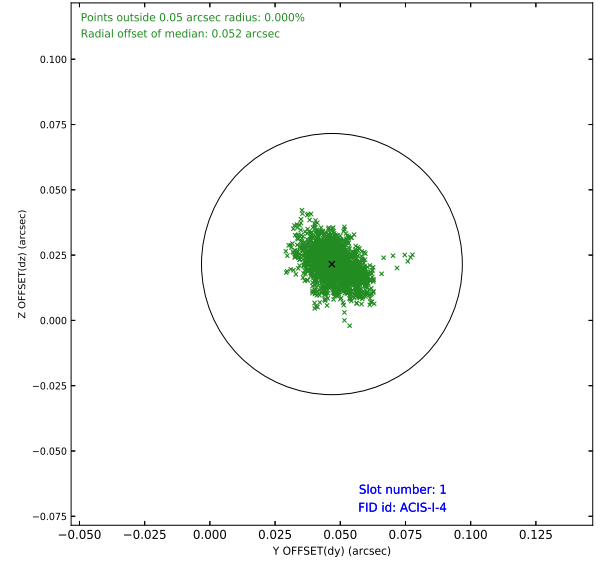
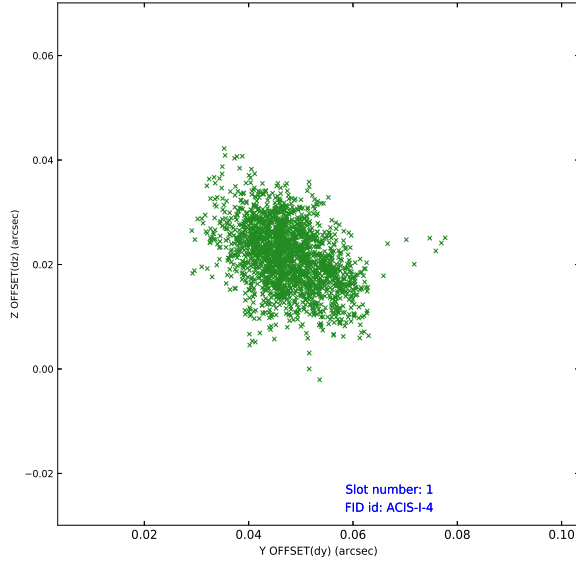


2.5 FID Slots

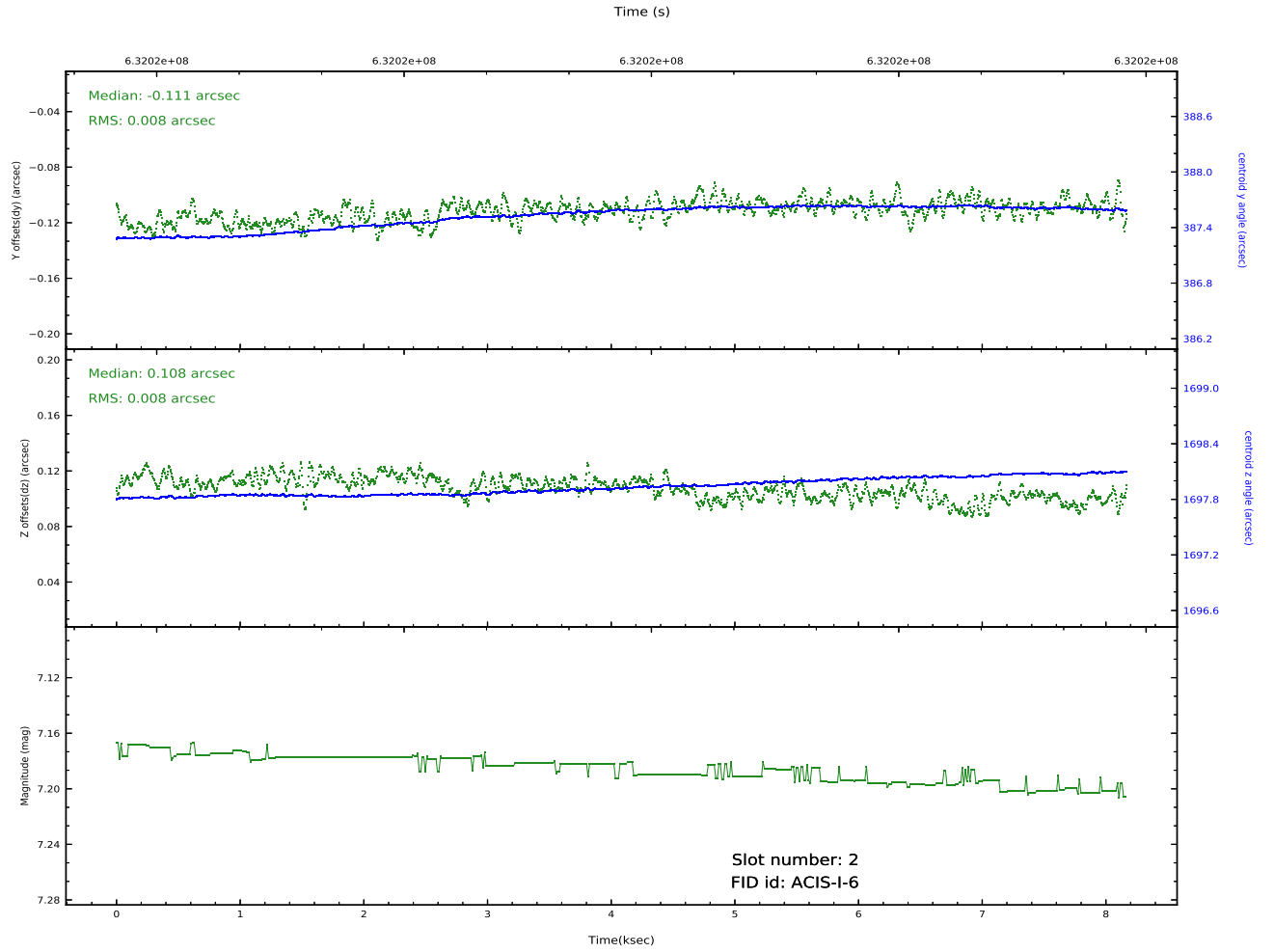
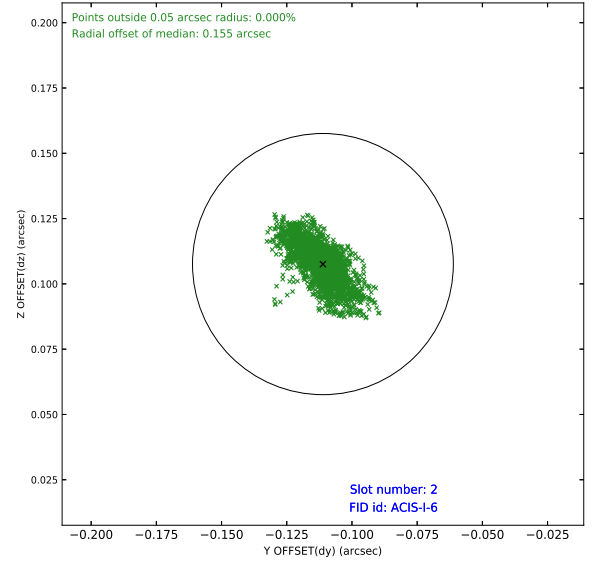
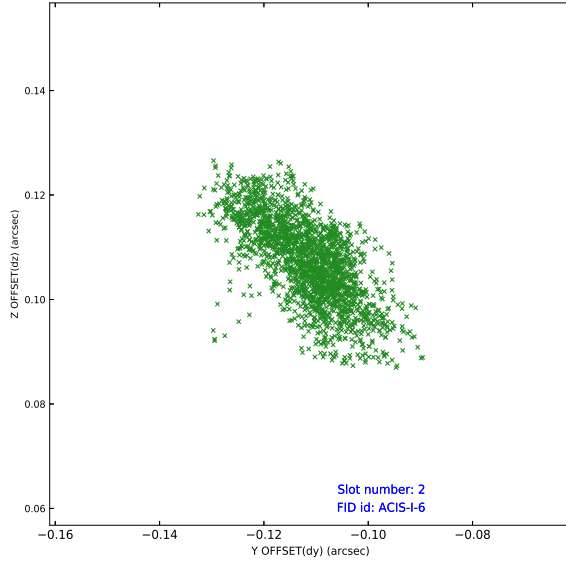
2.5.1 Slot 0



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	8.0656431545019

A.2 Comments