

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20327 - L2 Version 2
Chandra X-Ray Center

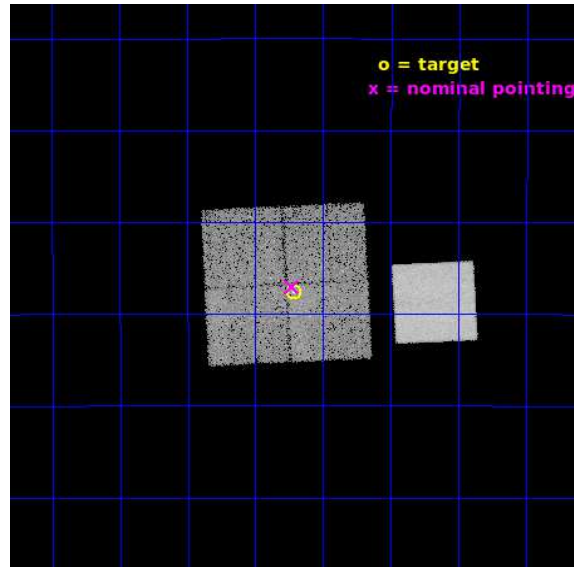
L2 Processing Date : Oct 24 2020

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1 Front

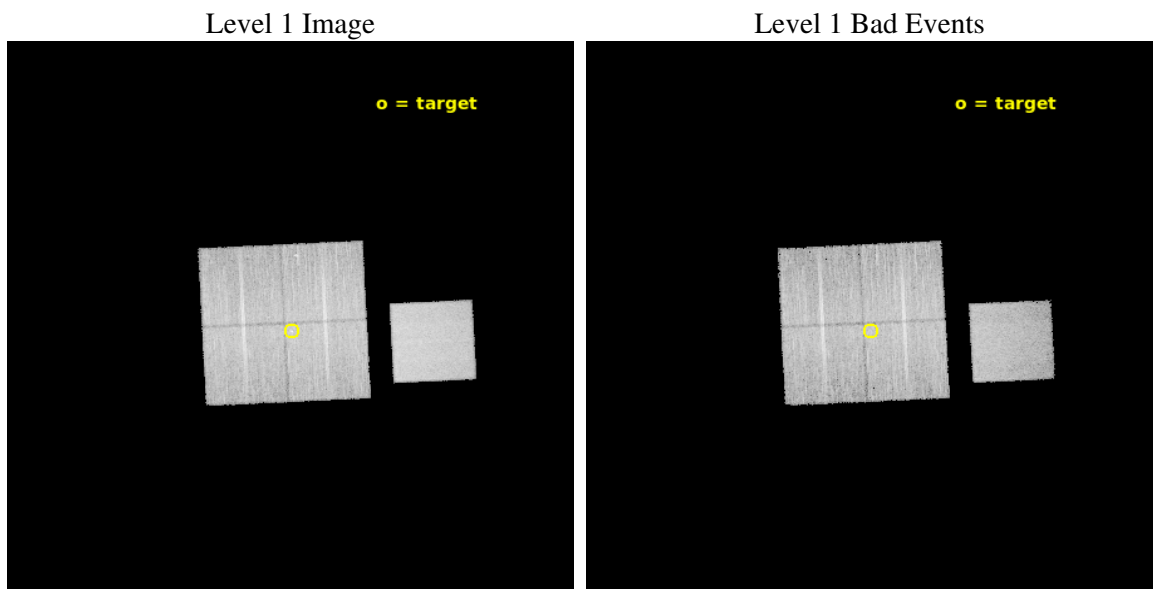
seq_num	503020	Sequence number
obs_id	20327	Observation id
title	The wagging jet and the X-ray plerion of PSR J1809-1917	Proposal t
observer	George Pavlov	Principal investigator
object	PSR J1809-1917	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	272.429583	Observer's specified target RA [deg]
dec_targ	-19.293917	Observer's specified target Dec [deg]
ra_nom	272.43258962006	Nominal RA [deg]
dec_nom	-19.283845832023	Nominal Dec [deg]
roll_nom	87.198016905879	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15521.700119495	Sum of GTIs [s]
livetime	15318.897680525	Livetime [s]
ontime0	15521.700119495	Sum of GTIs [s]
ontime1	15521.700119495	Sum of GTIs [s]
ontime2	15521.700119495	Sum of GTIs [s]
ontime3	15521.700119495	Sum of GTIs [s]
ontime7	15521.700119495	Sum of GTIs [s]
l2events	112833	Number of level 2 events



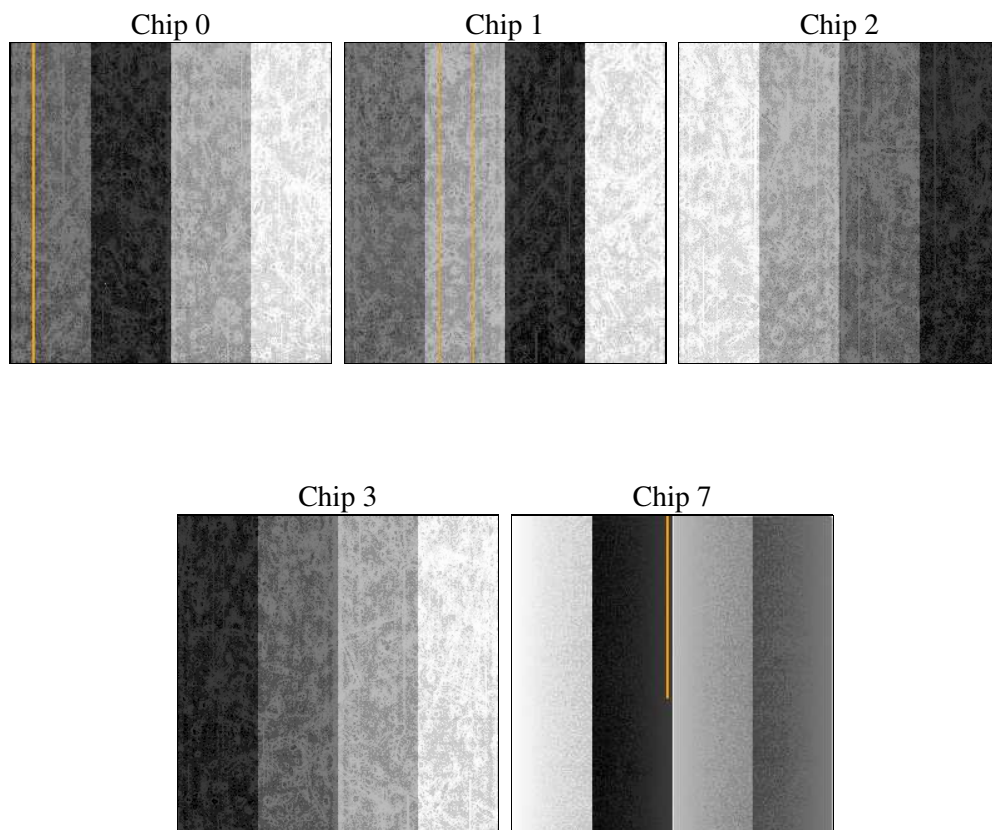
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15464.224000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	15521.700119495	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	15521.700119495	Sum of GTIs [s]
date	2020-10-24T15:39:45	Date and time of file creation	ontime1	15521.700119495	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15521.700119495	Sum of GTIs [s]
			ontime3	15521.700119495	Sum of GTIs [s]
			ontime7	15521.700119495	Sum of GTIs [s]
			l1events	588671	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	103166	106939	115787	115838	146941
rejected events	88997	90606	101701	100792	82011
rejected %	86%	84%	87%	87%	55%

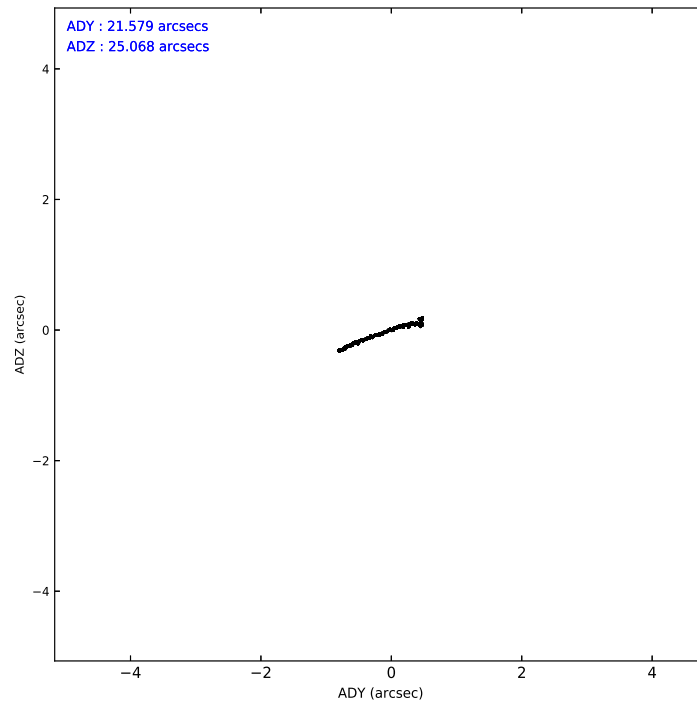
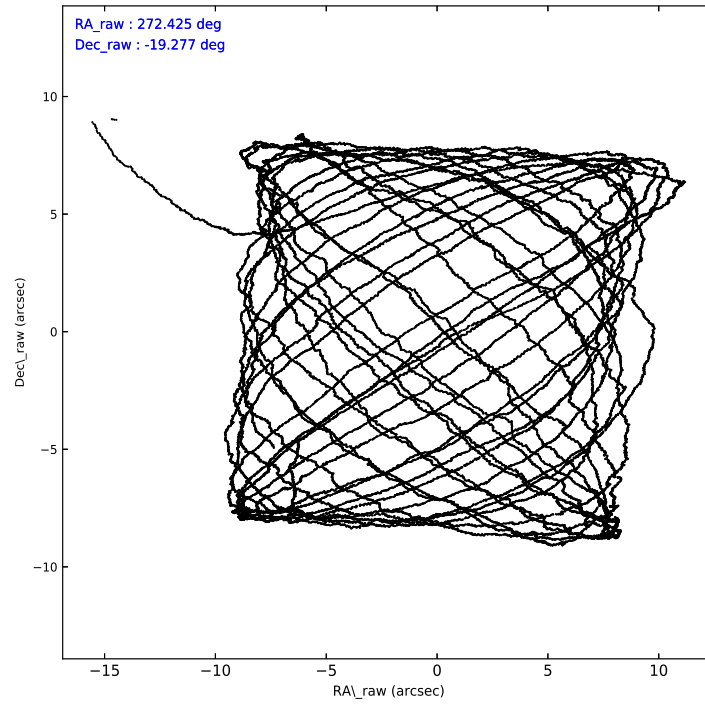
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	5332	6244	5656	6662	5705
	5%	5%	4%	5%	3%
grade 1 events	72	90	62	86	206
	0%	0%	0%	0%	0%
grade 2 events	3493	3906	3218	2974	14065
	3%	3%	2%	2%	9%
grade 3 events	1356	1378	1254	1361	5287
	1%	1%	1%	1%	3%
grade 4 events	1219	1498	1375	1404	5296
	1%	1%	1%	1%	3%
grade 5 events	4978	5206	4652	5429	14662
	4%	4%	4%	4%	9%
grade 6 events	2770	3310	2586	2646	34595
	2%	3%	2%	2%	23%
grade 7 events	83946	85307	96984	95276	67125
	81%	79%	83%	82%	45%

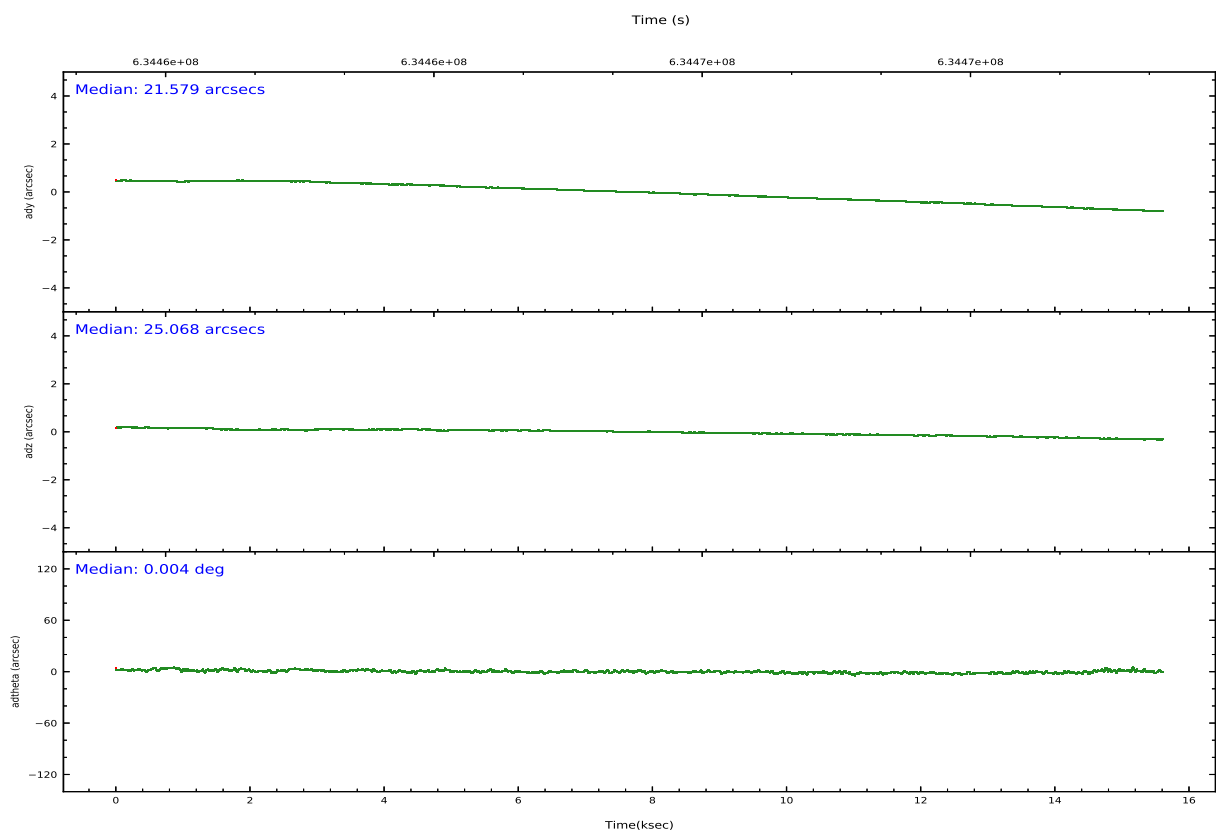
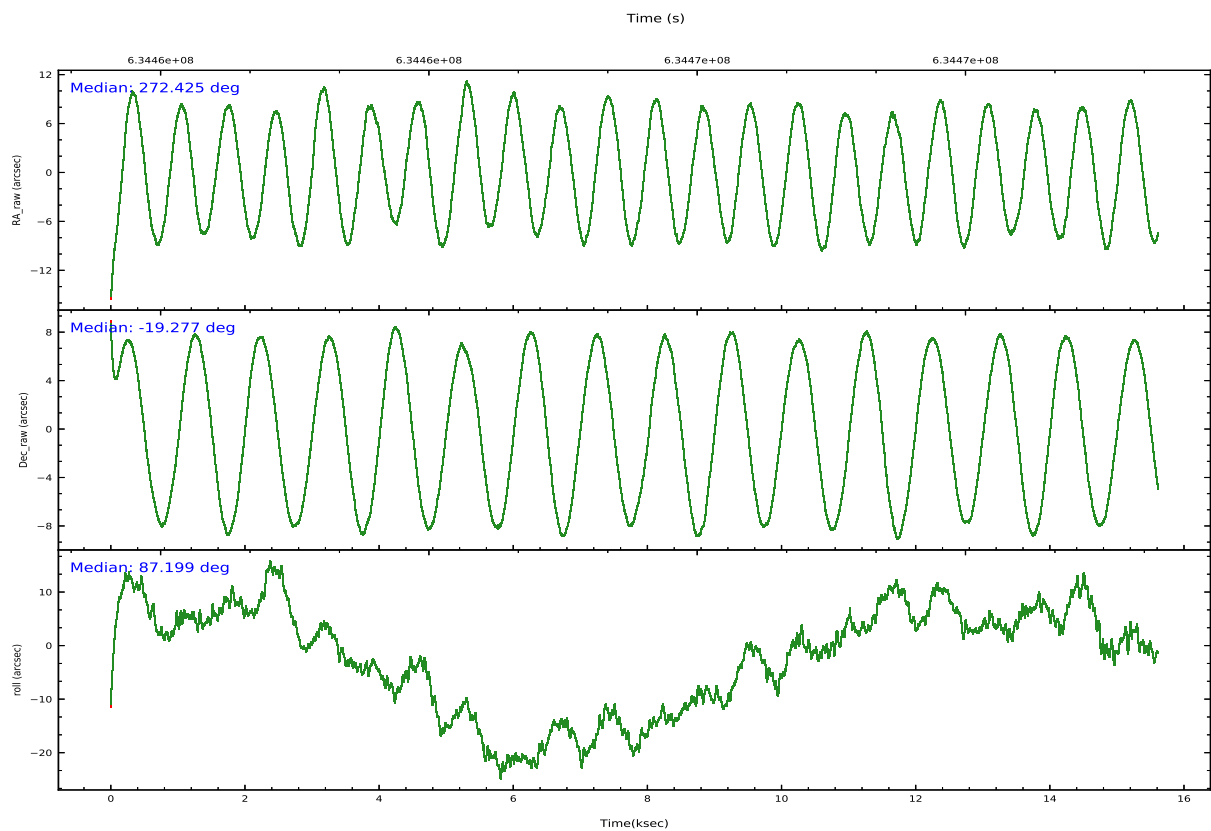
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01237	ACIS-01237
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	272.438740	272.43258962006
[deg] Pointing Dec	-19.301869	-19.283845832023
[deg] Pointing Roll	87.003021	87.198016905879
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.007463	-233.0041133108668
[mm] SIM translation stage offset	-0.585	-0.5883396920629309
[s] Observation start time (MET)	634459409.184000	634457947.89661
Observation start date	2018-02-08T06:42:20	2018-02-08T06:19:07
[s] Observation end time (MET)	634474873.184000	634475989.4351701
Observation end date	2018-02-08T11:00:04	2018-02-08T11:19:49
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	N	N
CCD S3 on	O1	Y
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



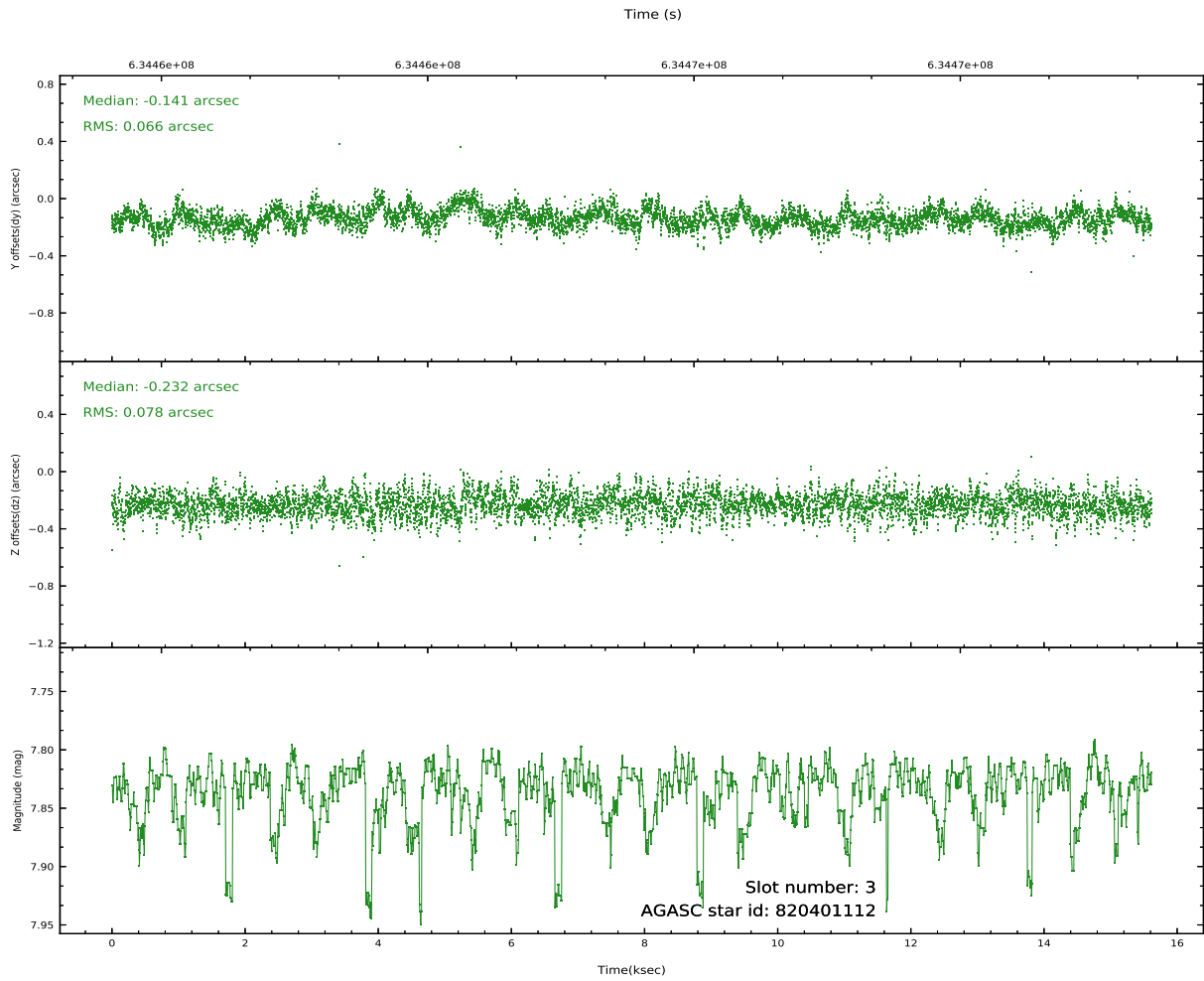
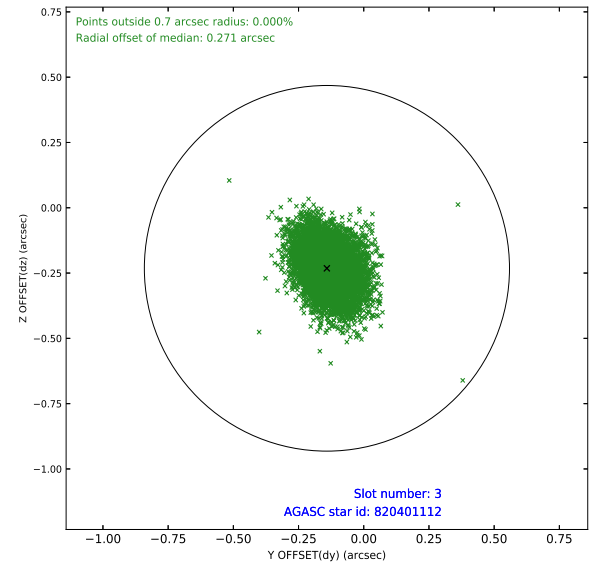
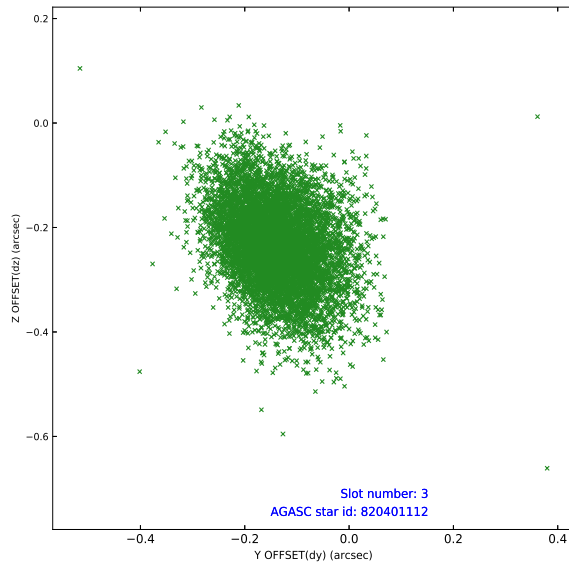


Slot Statistics

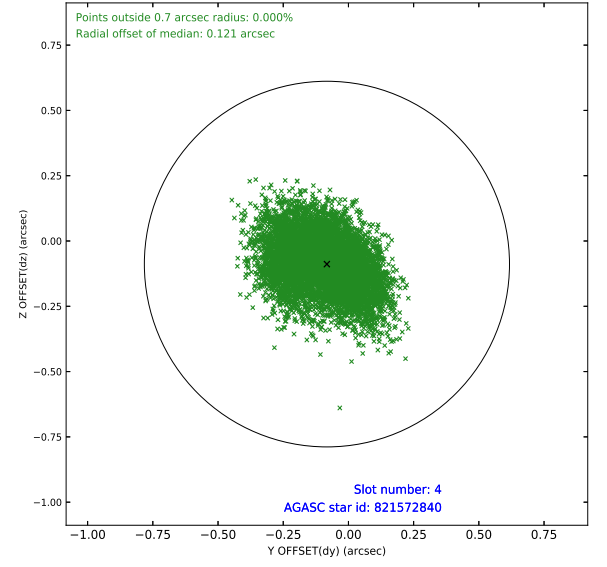
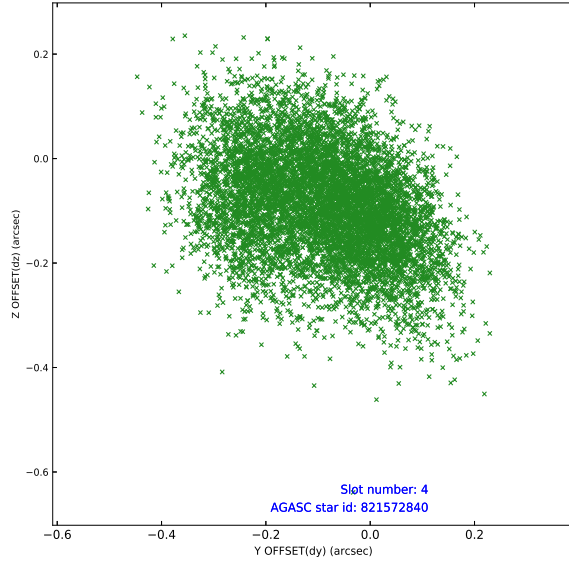
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.12	3809	1.000	0.046	0.011	0.014	0.023	0.000000	0.000000	917.69	-860
1	FID		ACIS-I-2	7.05	3809	1.000	-0.059	0.059	0.013	0.021	0.000000	0.000000	-776.38	-867
2	FID		ACIS-I-4	7.05	3809	1.000	-0.085	-0.003	0.013	0.026	0.000000	0.000000	2137.47	1038
3	GUIDE	used	820401112	7.83	7618	1.000	-0.141	-0.232	0.106	0.181	271.884761	-19.293988	-73.38	1881
4	GUIDE	used	821572840	8.76	7613	1.000	-0.082	-0.088	0.170	0.265	272.287378	-18.702558	2127.04	628
5	GUIDE	used	822088160	6.45	7618	1.000	-0.164	0.263	0.110	0.184	272.729284	-18.869551	1605.39	-906
6	GUIDE	used	822098736	8.46	7612	1.000	0.209	0.045	0.135	0.230	272.269355	-19.875225	-2091.25	464
7	GUIDE	used	822100176	8.57	7612	1.000	0.181	0.019	0.129	0.223	272.112888	-19.868886	-2097.37	995

2.4 Star Slots

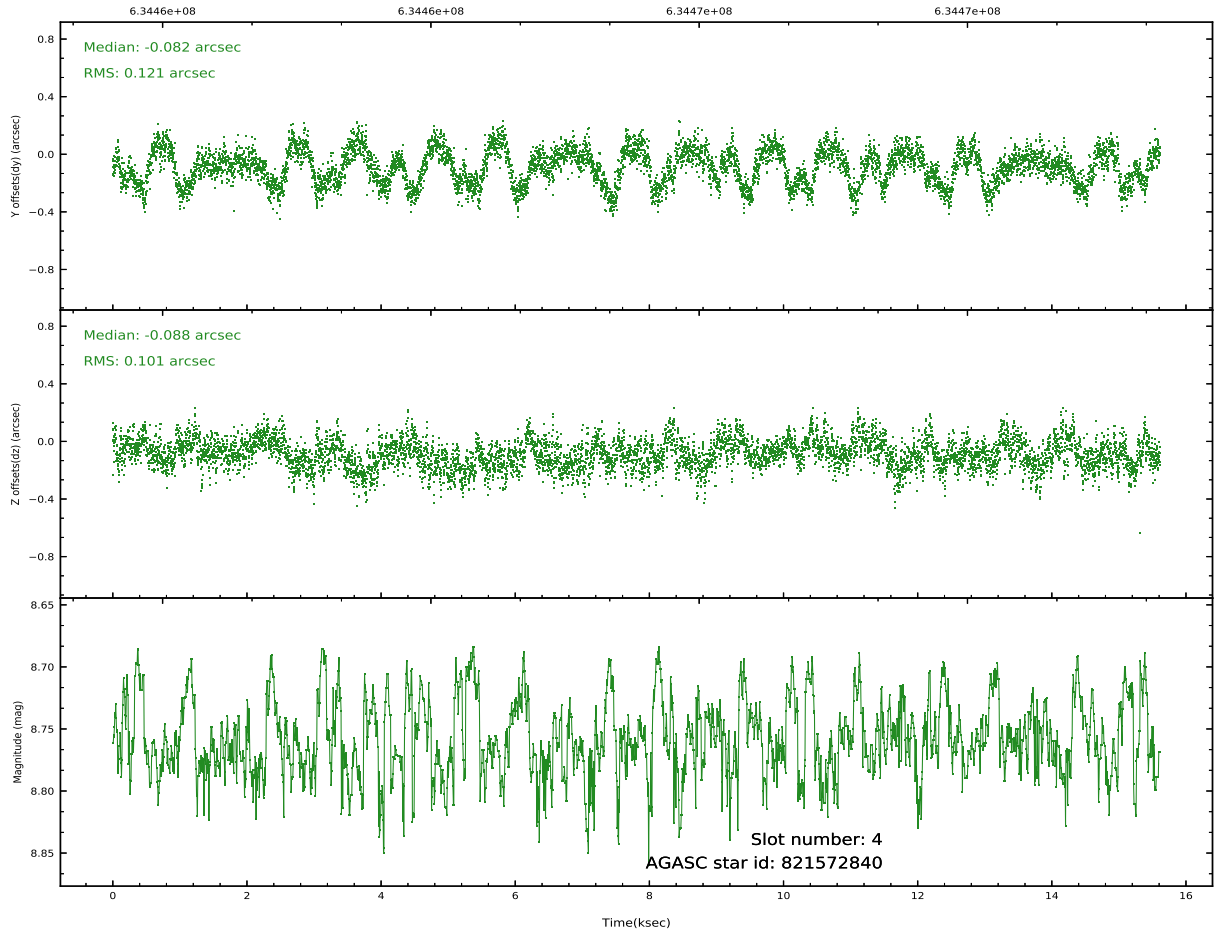
2.4.1 Slot 3



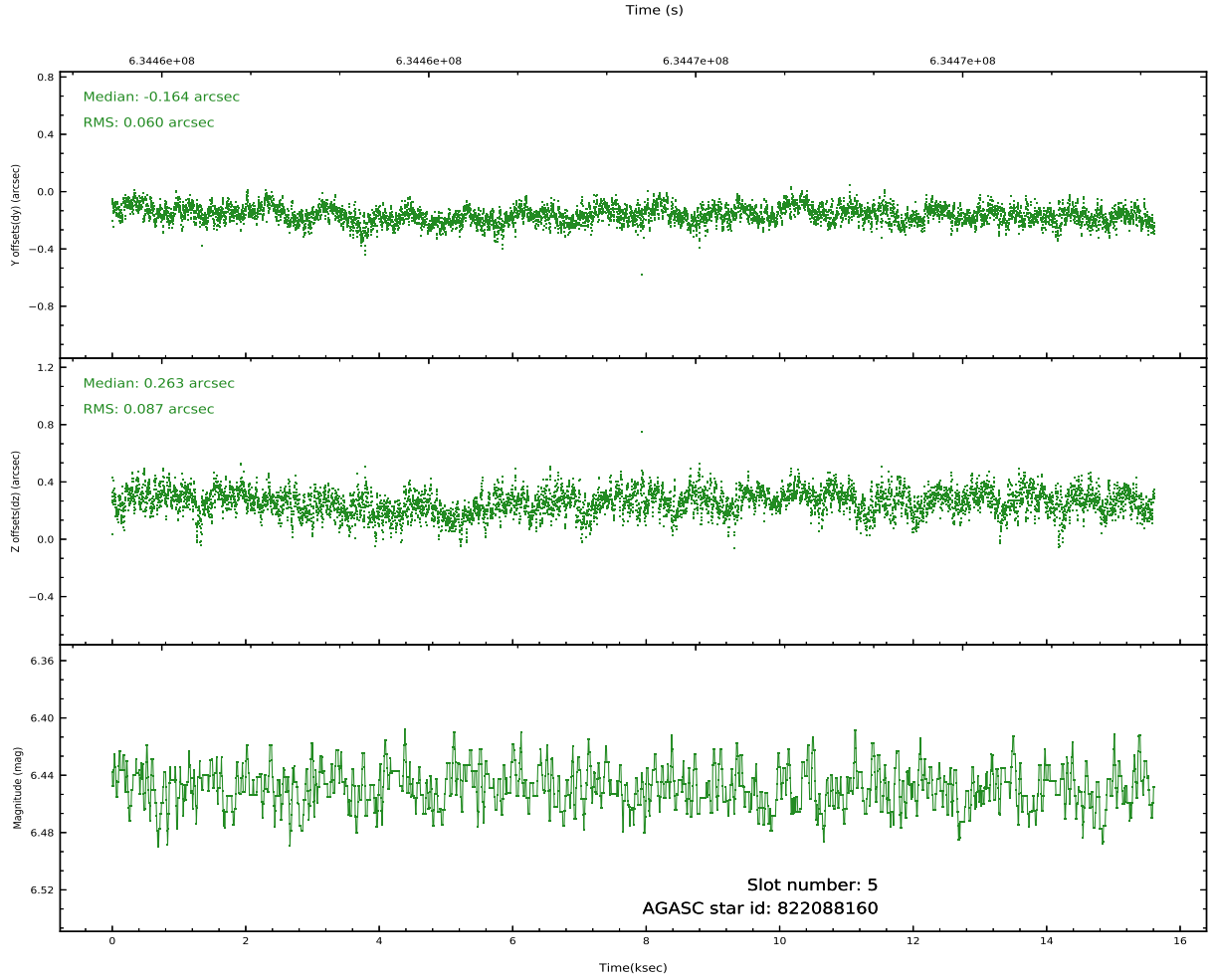
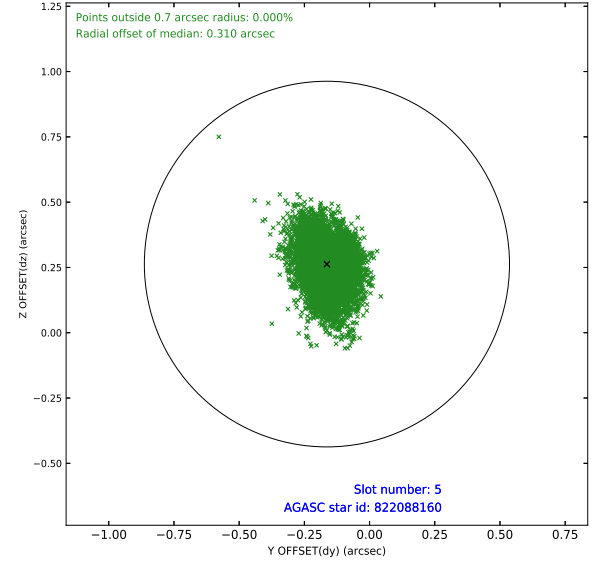
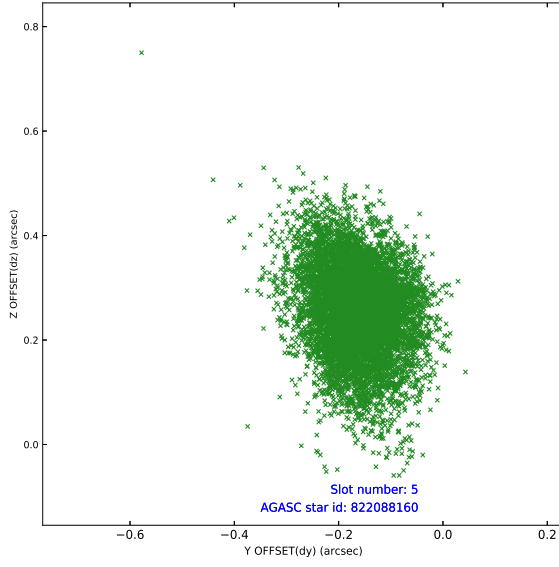
2.4.2 Slot 4



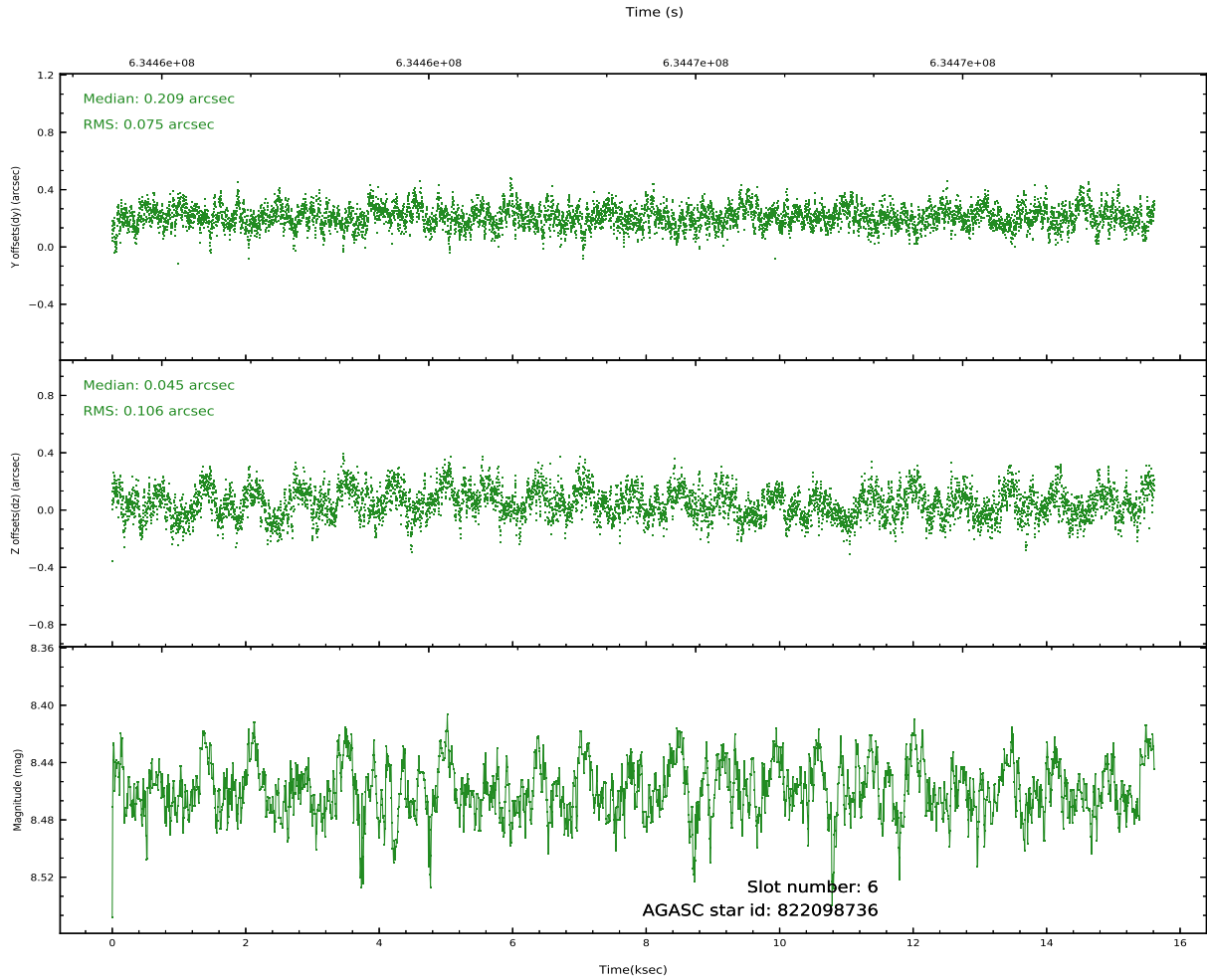
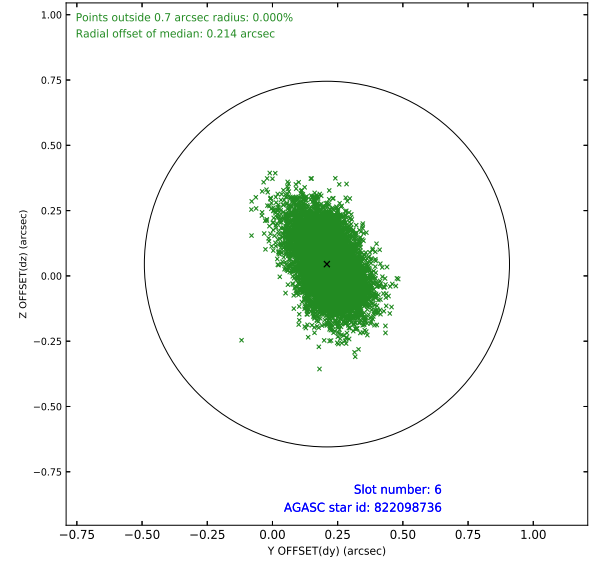
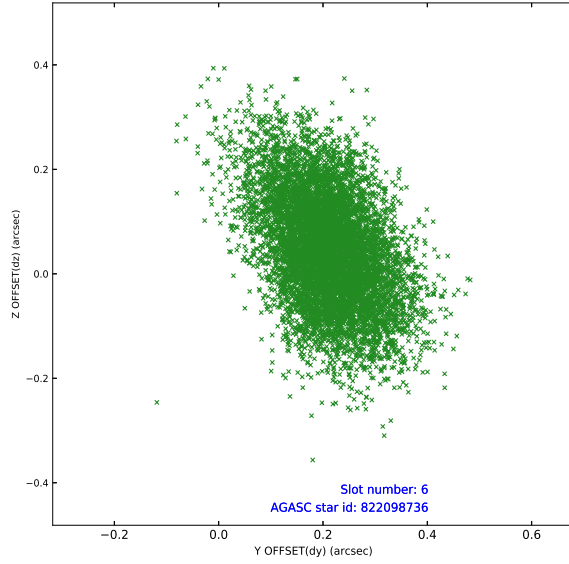
Time (s)



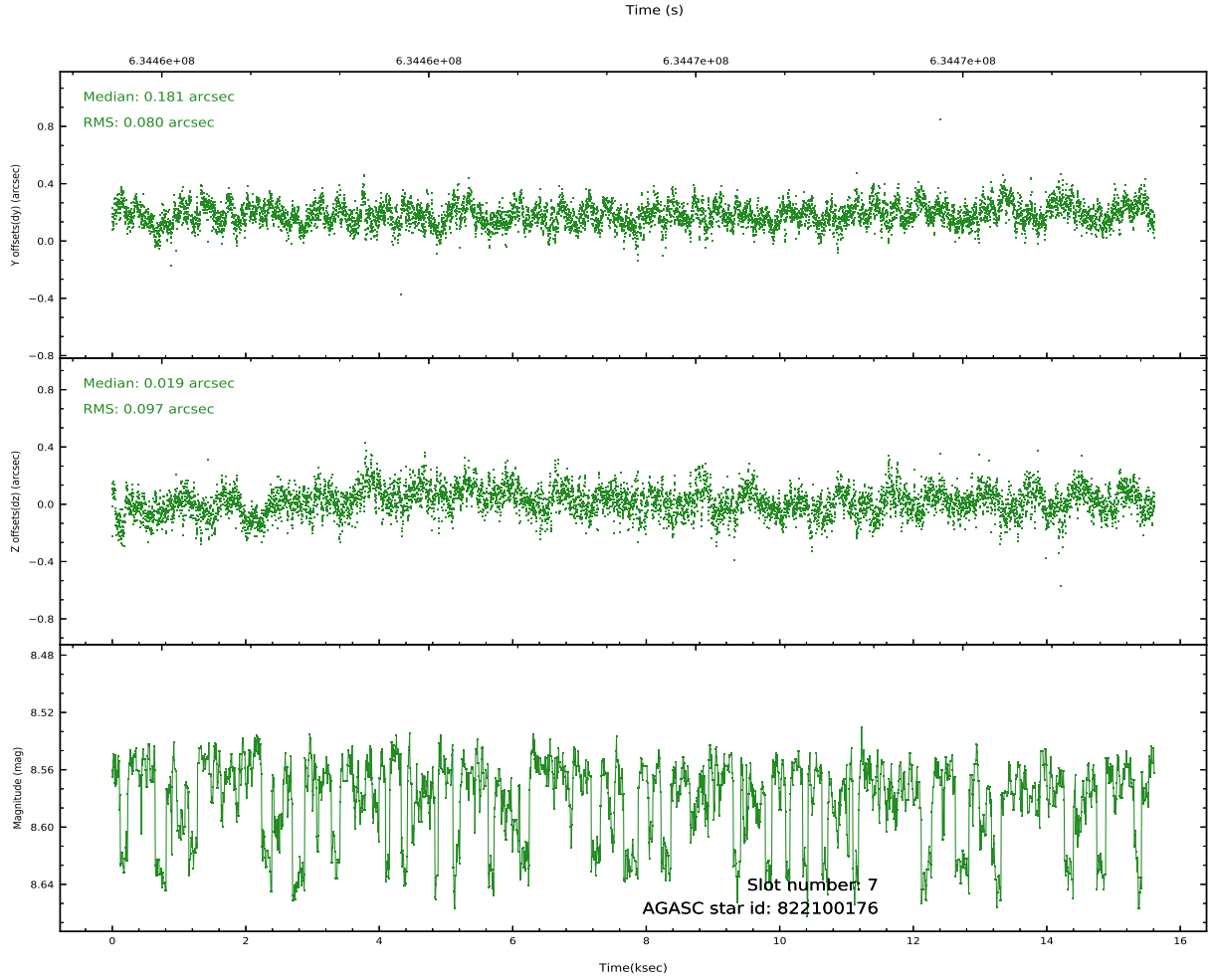
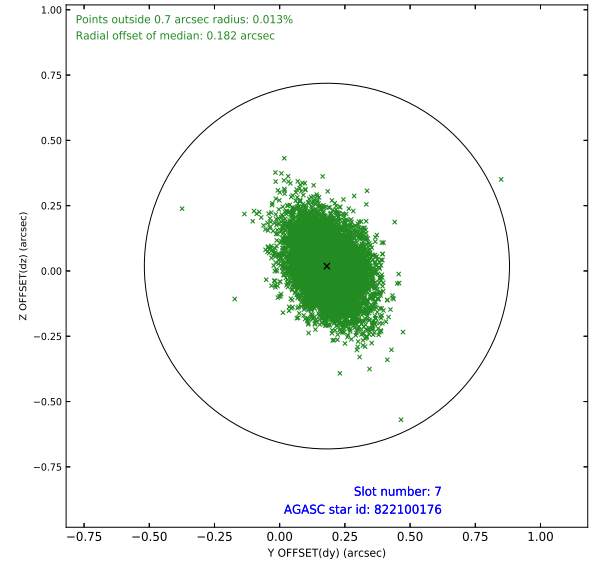
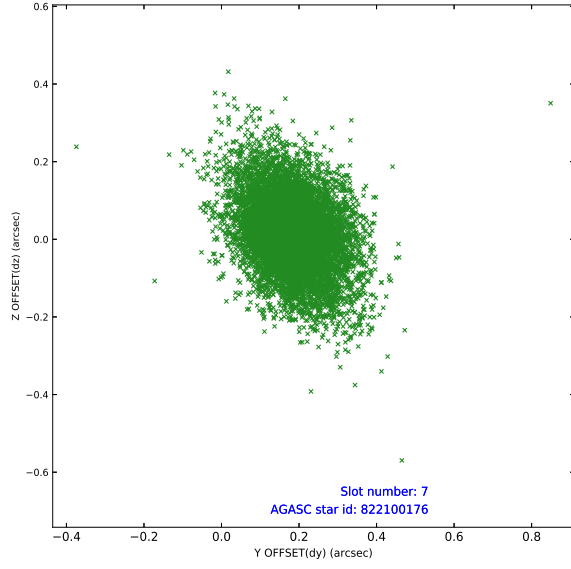
2.4.3 Slot 5



2.4.4 Slot 6

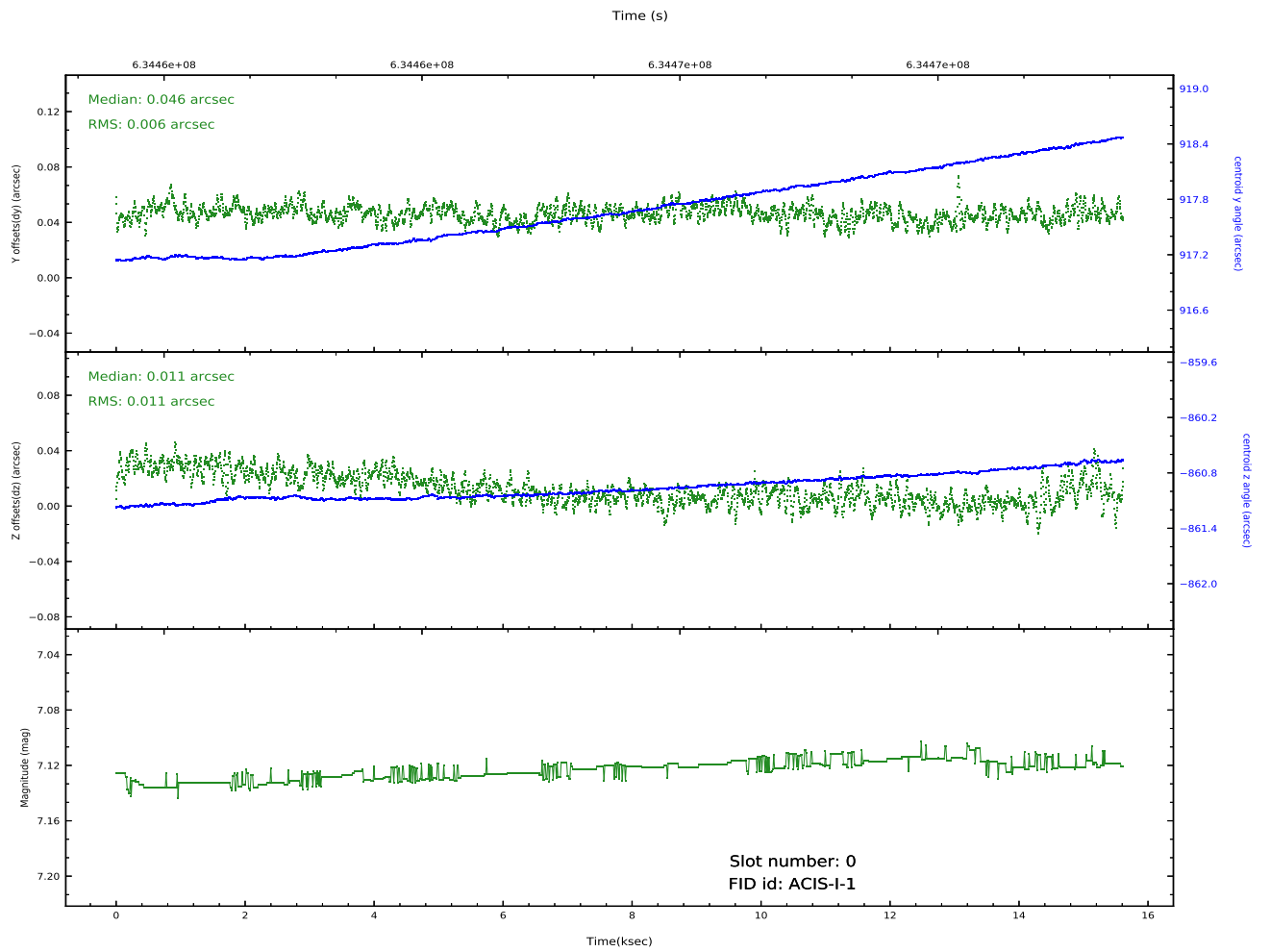
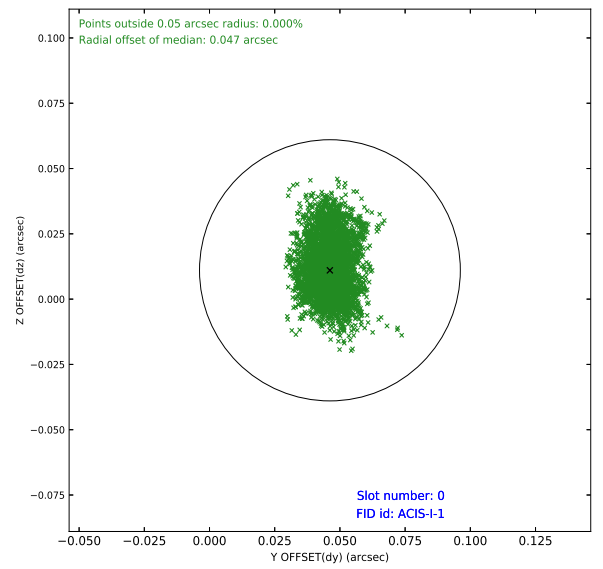
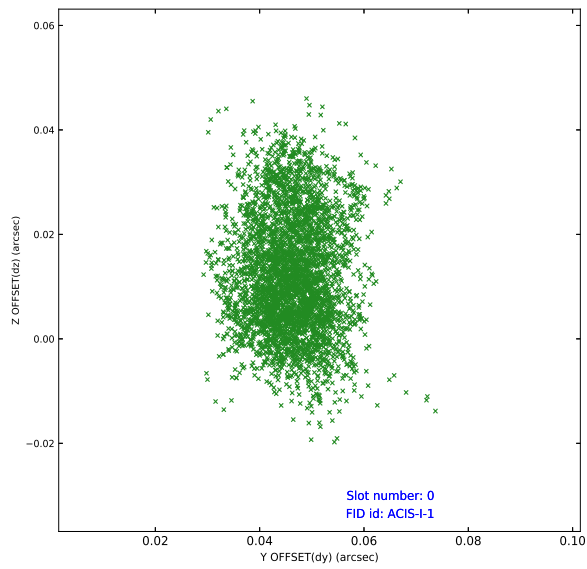


2.4.5 Slot 7

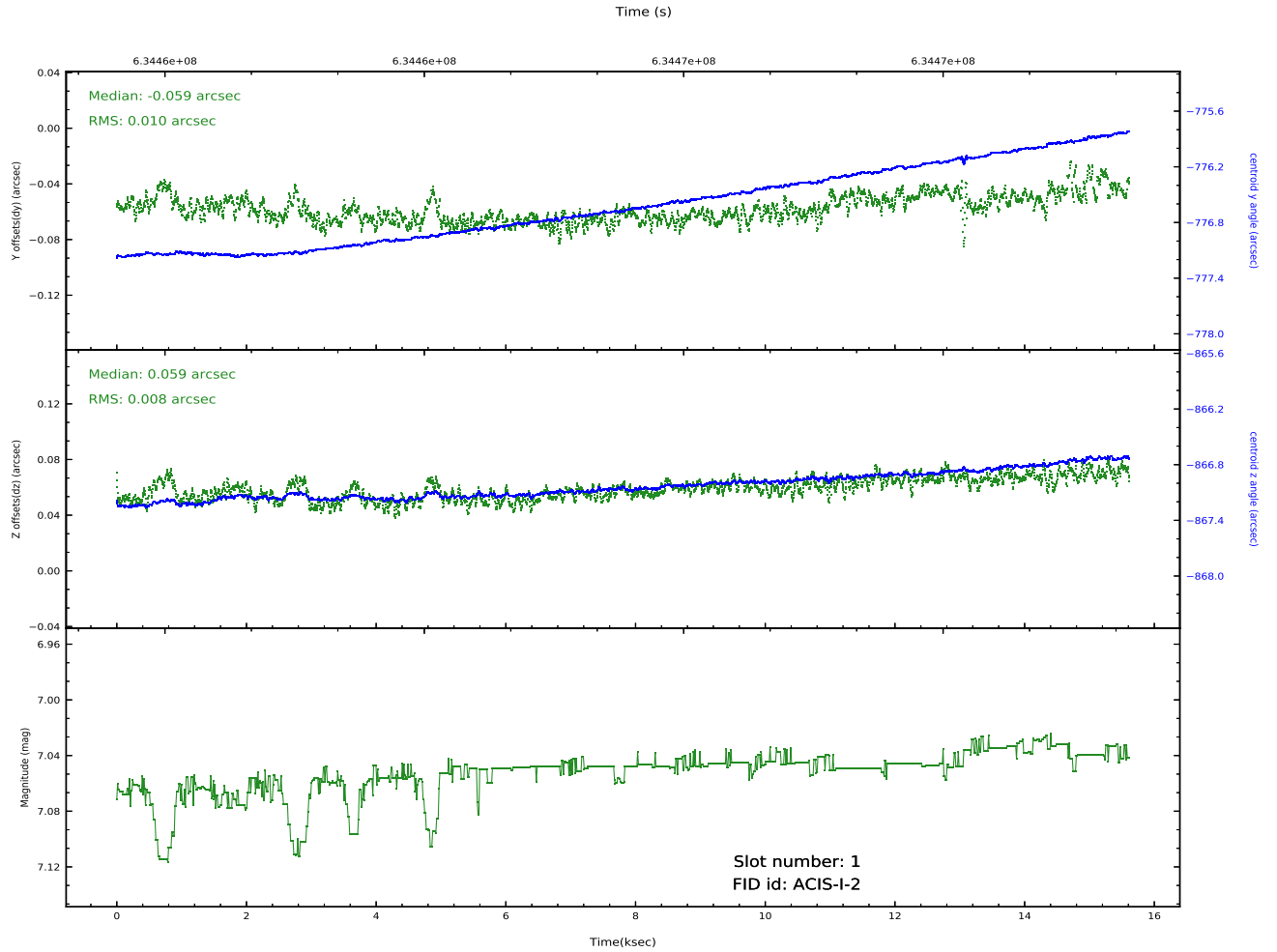
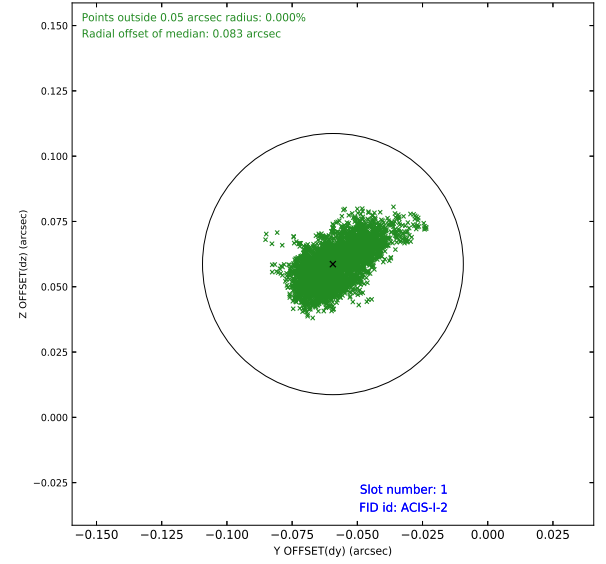
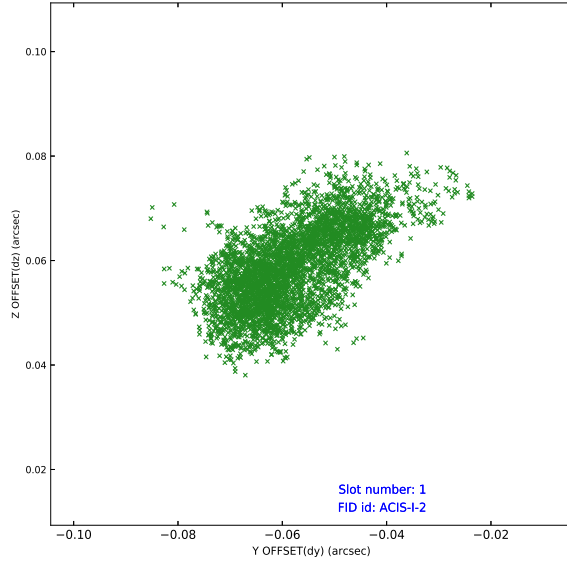


2.5 FID Slots

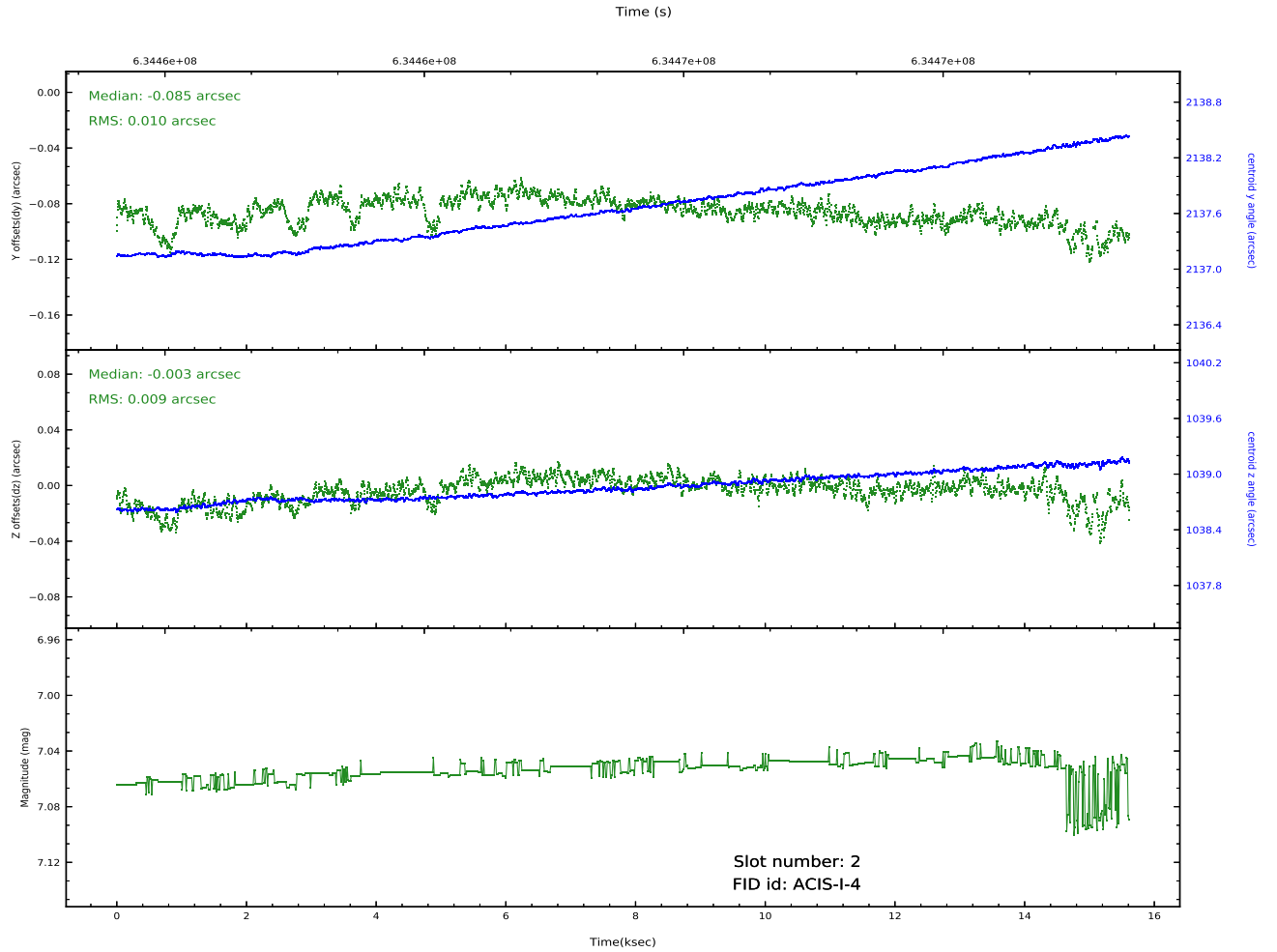
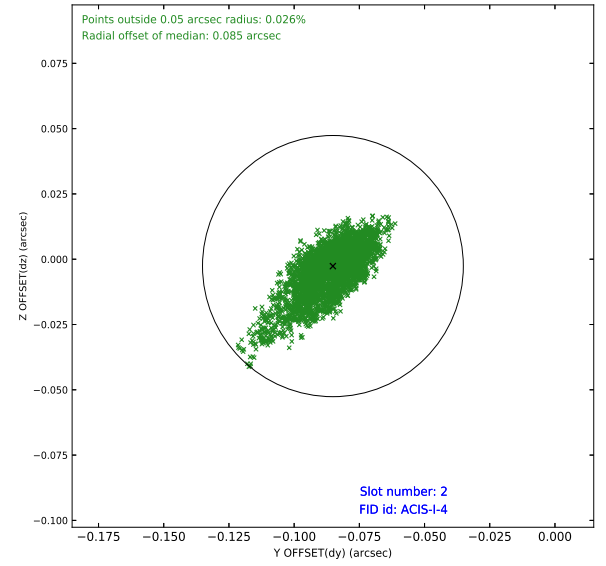
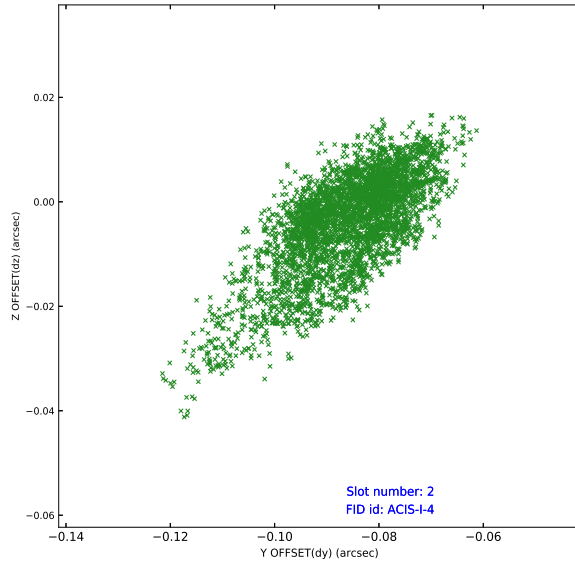
2.5.1 Slot 0



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	15.521700119495

A.2 Comments