

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20528 - L2 Version 2
Chandra X-Ray Center

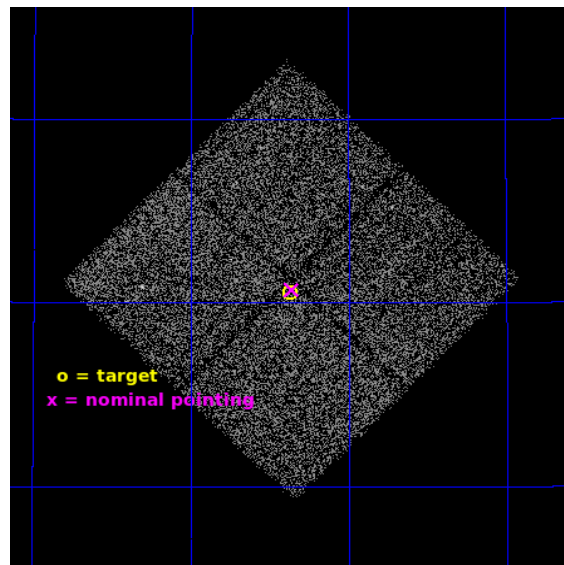
L2 Processing Date : Oct 24 2020

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1 Front

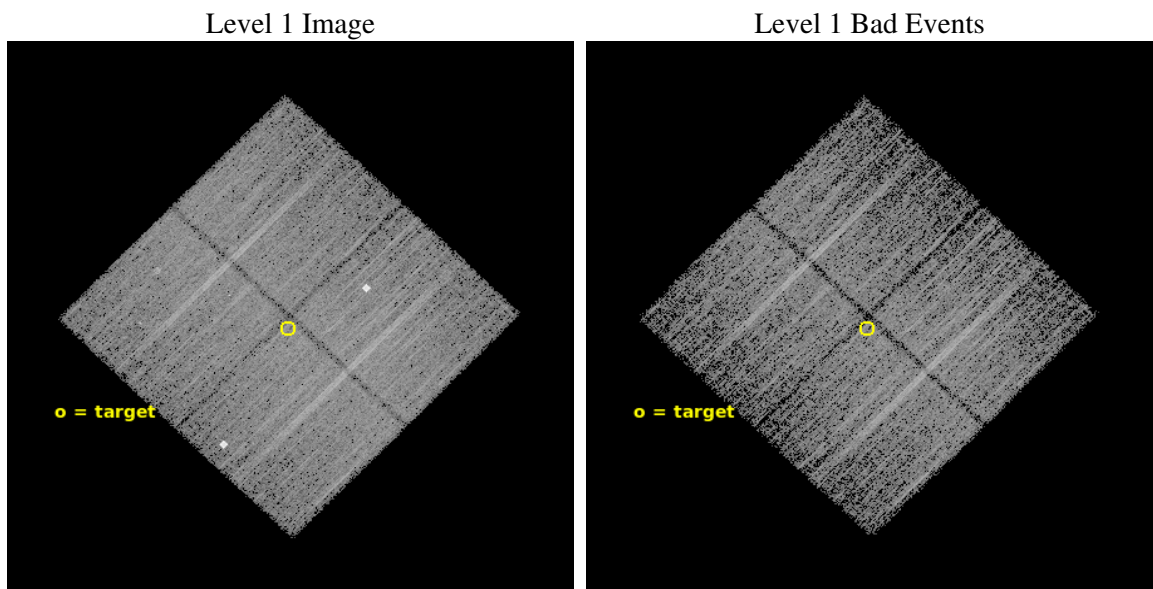
seq_num	801742	Sequence number
obs_id	20528	Observation id
title	Chandra observations of an exceptional cluster of galaxies at z=1.7	
observer	Julie Hlavacek-Larrondo	Principal investigator
object	SpARCS104922.6+564032.5	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	162.341667	Observer's specified target RA [deg]
dec_targ	56.675556	Observer's specified target Dec [deg]
ra_nom	162.33977268065	Nominal RA [deg]
dec_nom	56.678676215472	Nominal Dec [deg]
roll_nom	134.21379520825	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13075.800100684	Sum of GTIs [s]
livetime	12904.955146105	Livetime [s]
ontime0	13072.659050584	Sum of GTIs [s]
ontime1	13075.800100684	Sum of GTIs [s]
ontime2	13075.800100684	Sum of GTIs [s]
ontime3	13075.800100684	Sum of GTIs [s]
l2events	34486	Number of level 2 events



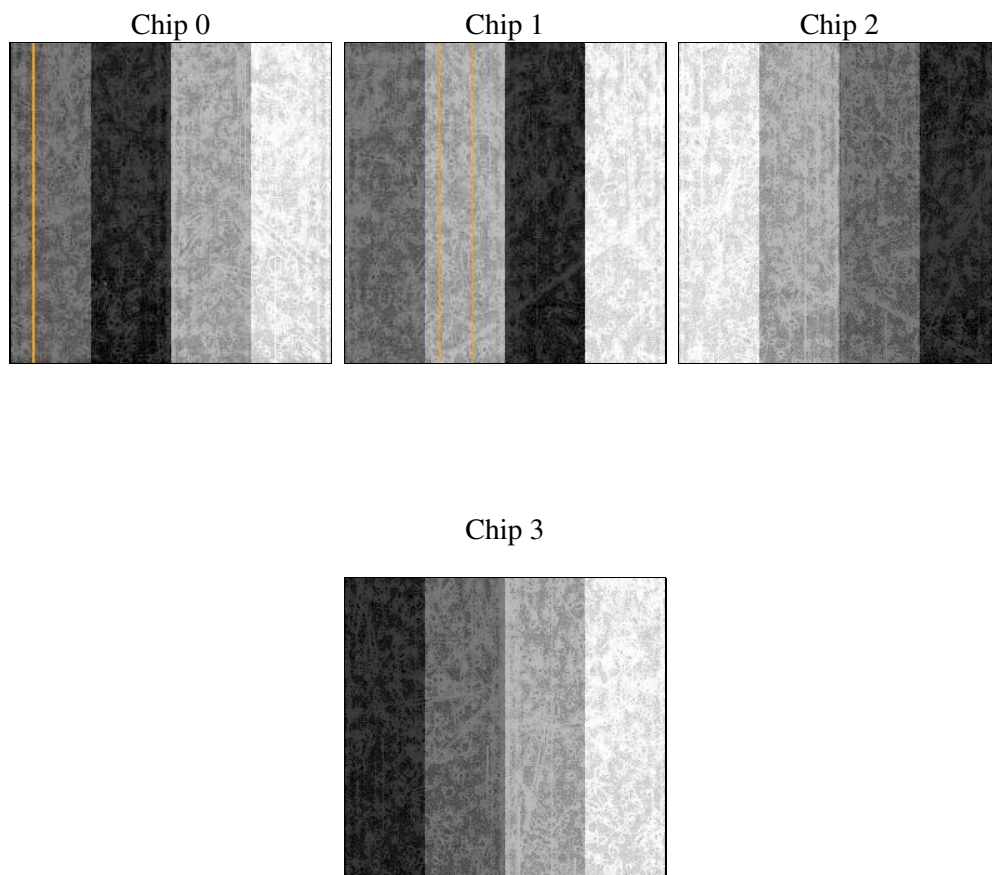
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	13075.800100684	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	13072.659050584	Sum of GTIs [s]
date	2020-10-24T09:31:15	Date and time of file creation	ontime1	13075.800100684	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	13075.800100684	Sum of GTIs [s]
			ontime3	13075.800100684	Sum of GTIs [s]
			l1events	380019	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	87065	92141	101822	98991
rejected events	76806	80456	87971	85281
rejected %	88%	87%	86%	86%

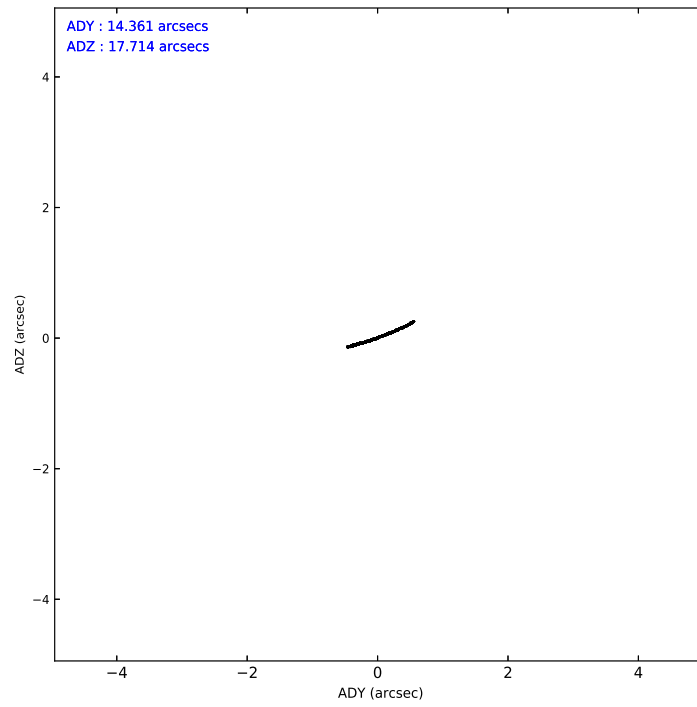
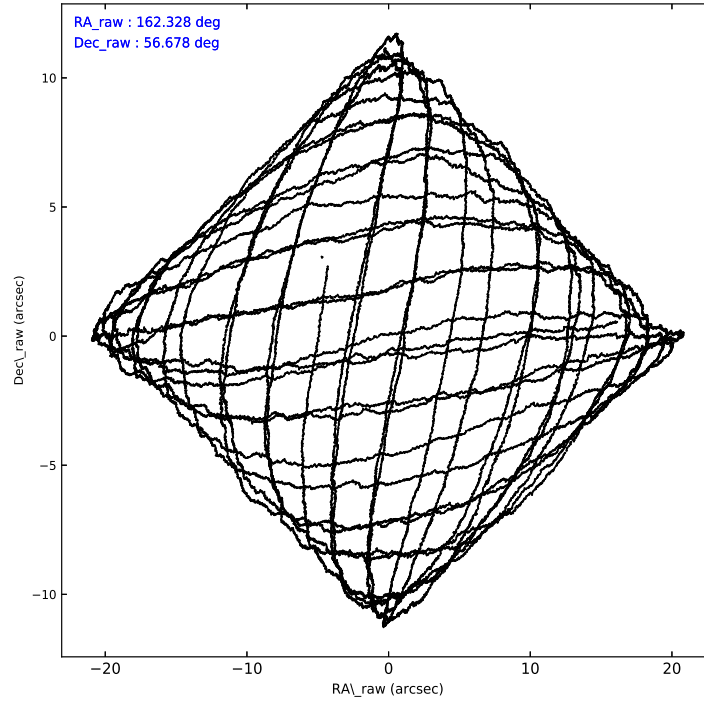
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	3366	3912	7397	3365
	3%	4%	7%	3%
grade 1 events	53	43	73	40
	0%	0%	0%	0%
grade 2 events	2567	2950	2429	6165
	2%	3%	2%	6%
grade 3 events	1044	1057	1028	976
	1%	1%	1%	0%
grade 4 events	1014	1028	1004	1056
	1%	1%	0%	1%
grade 5 events	3997	3887	3688	4300
	4%	4%	3%	4%
grade 6 events	2278	2745	1999	2155
	2%	2%	1%	2%
grade 7 events	72746	76519	84204	80934
	83%	83%	82%	81%

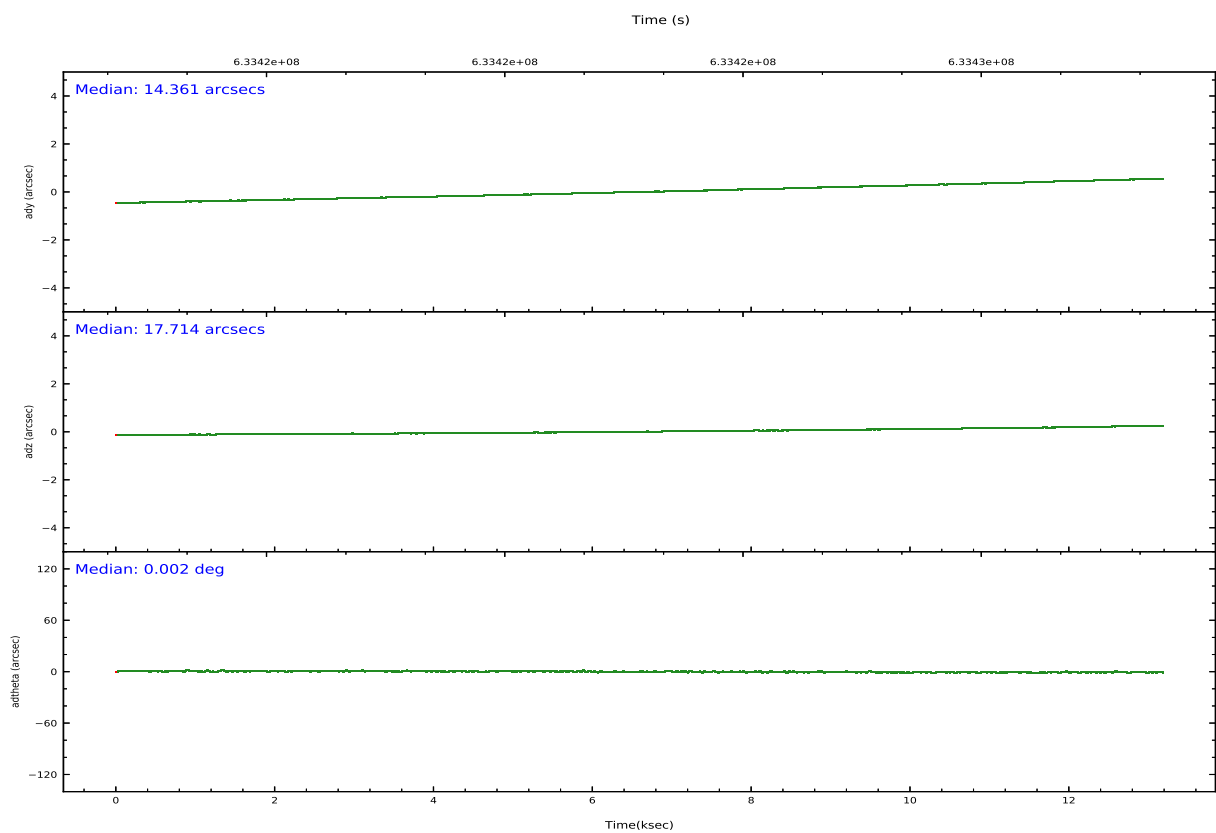
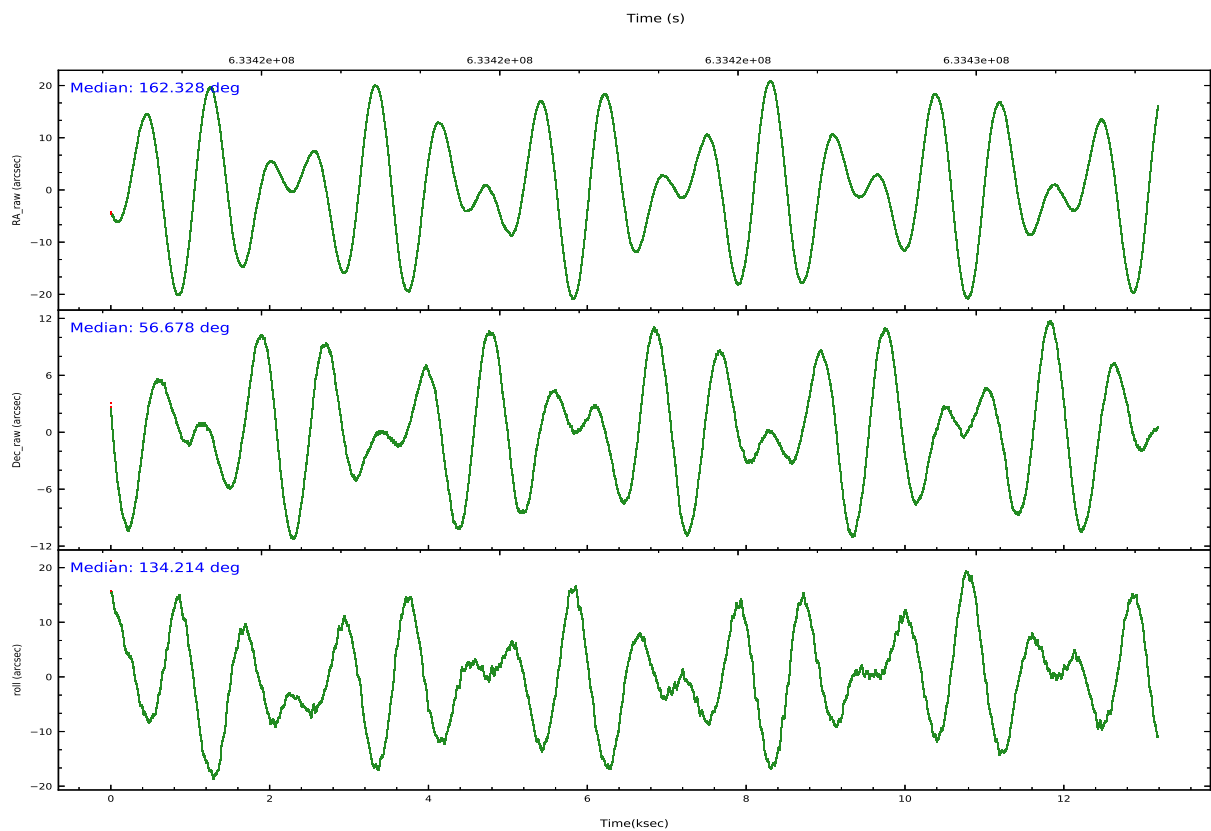
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	162.376423	162.33977268065
[deg] Pointing Dec	56.670655	56.678676215472
[deg] Pointing Roll	133.970962	134.21379520825
[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)	633416289.184000	633415047.7477
Observation start date	2018-01-27T04:57:00	2018-01-27T04:37:27
[s] Observation end time (MET)	633429289.184000	633429969.18608
Observation end date	2018-01-27T08:33:40	2018-01-27T08:46:09
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	N
CCD S3 on	O2	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	2	2
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



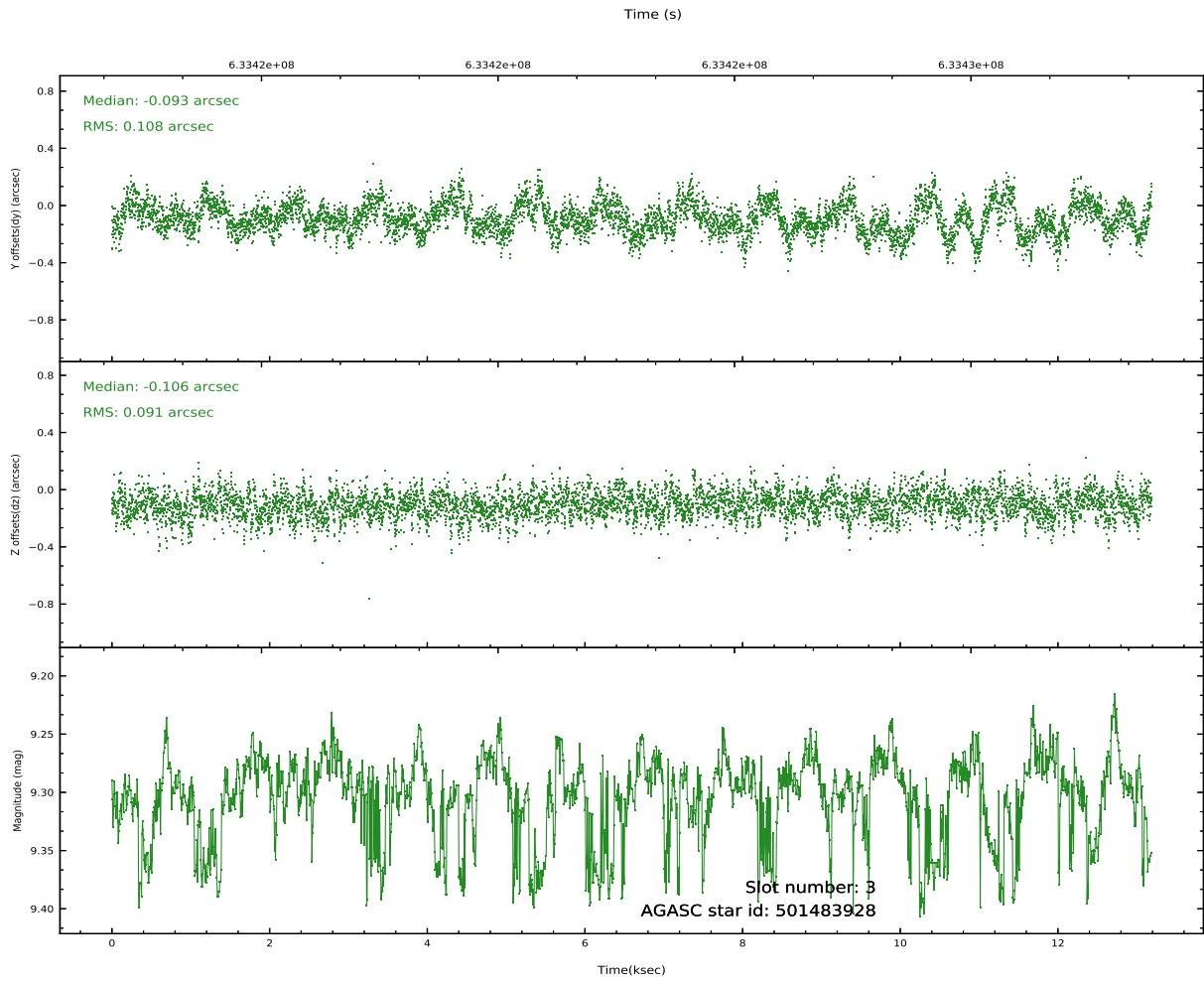
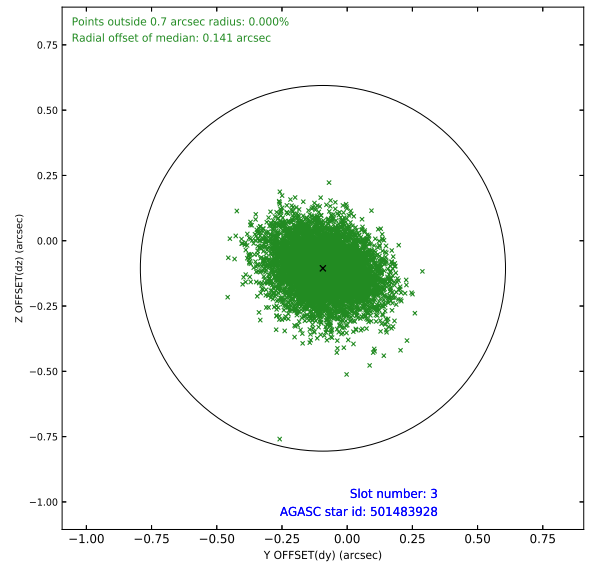
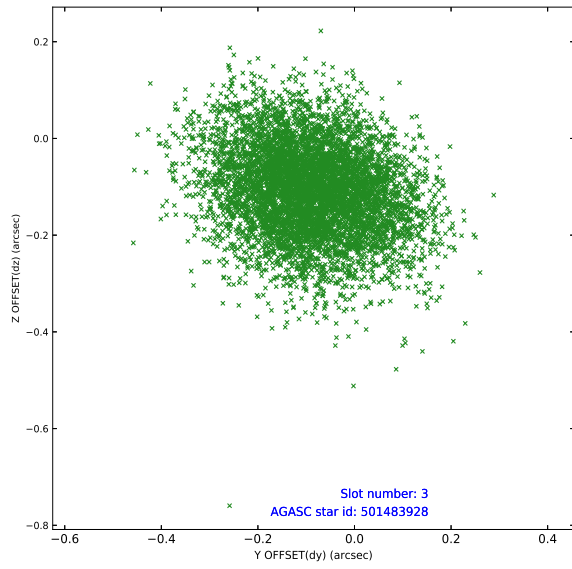


Slot Statistics

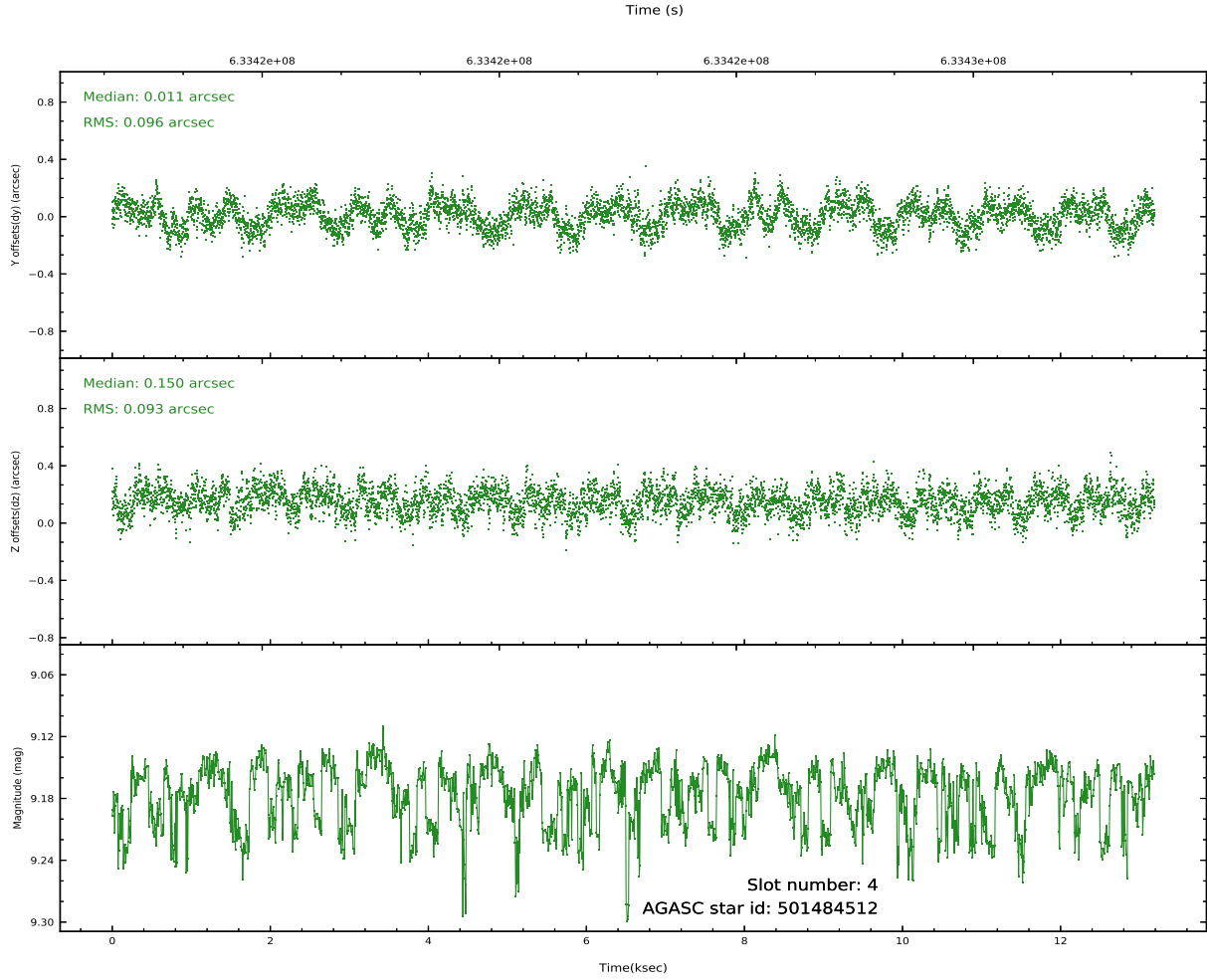
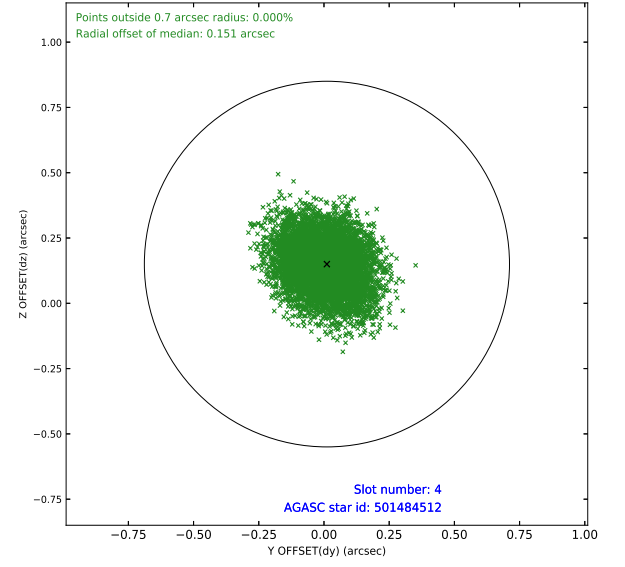
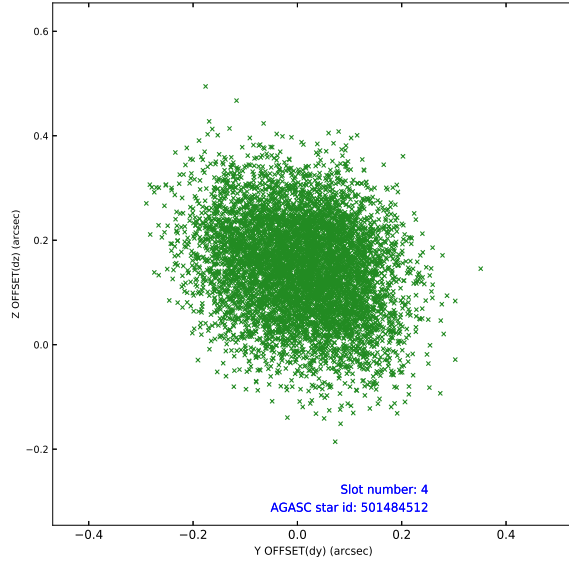
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.20	3217	1.000	0.183	-0.115	0.011	0.019	0.000000	0.000000	925.22	-841
1	FID		ACIS-I-5	7.21	3217	1.000	-0.292	0.160	0.007	0.013	0.000000	0.000000	-1823.04	1056
2	FID		ACIS-I-6	7.20	3216	1.000	0.018	0.024	0.011	0.018	0.000000	0.000000	390.36	1700
3	GUIDE	used	501483928	9.30	6423	1.000	-0.093	-0.106	0.149	0.245	162.842069	56.191074	-1888.09	524
4	GUIDE	used	501484512	9.17	6427	1.000	0.011	0.150	0.144	0.228	162.843287	56.129836	-2049.69	675
5	GUIDE	used	501487456	7.39	6433	1.000	-0.078	-0.154	0.103	0.171	161.499463	56.920840	1851.99	606
6	GUIDE	used	501488528	8.09	6432	1.000	0.100	0.105	0.124	0.198	162.150935	57.312270	1967.29	-1287
7	GUIDE	used	501483392	8.93	6423	1.000	0.059	0.012	0.118	0.197	163.119491	56.165550	-2335.61	187

2.4 Star Slots

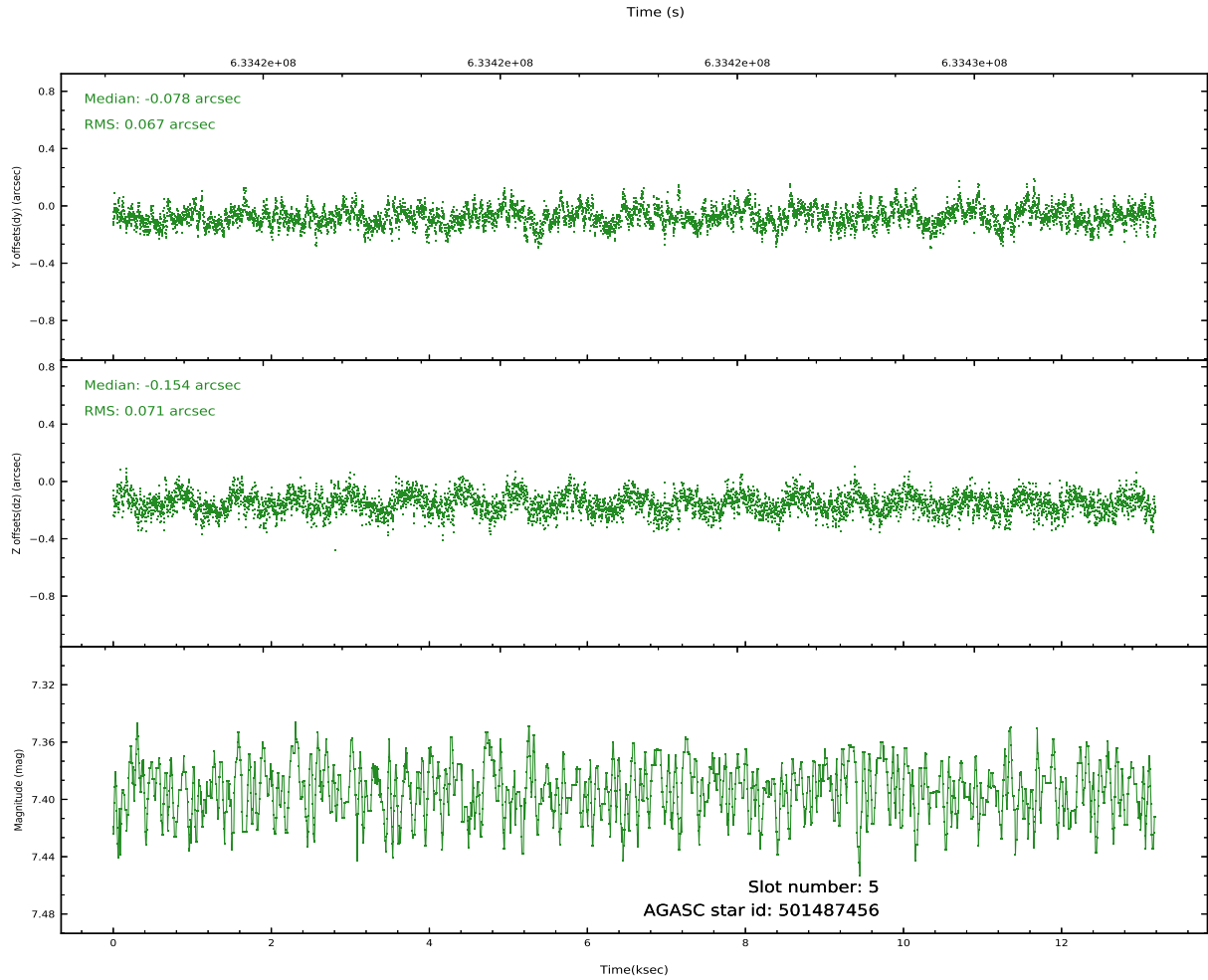
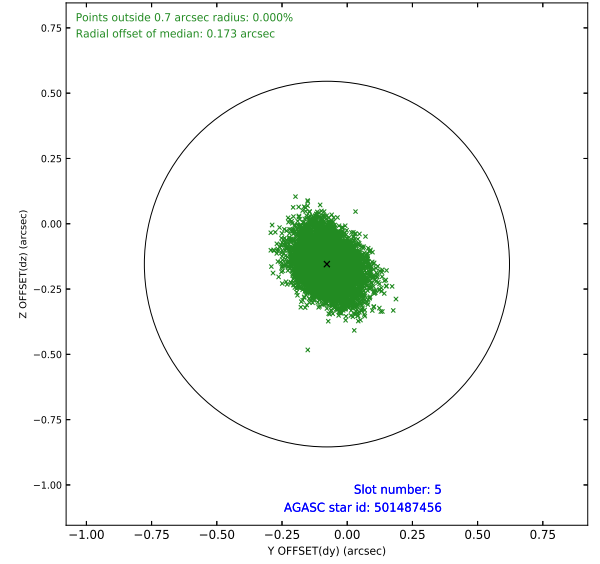
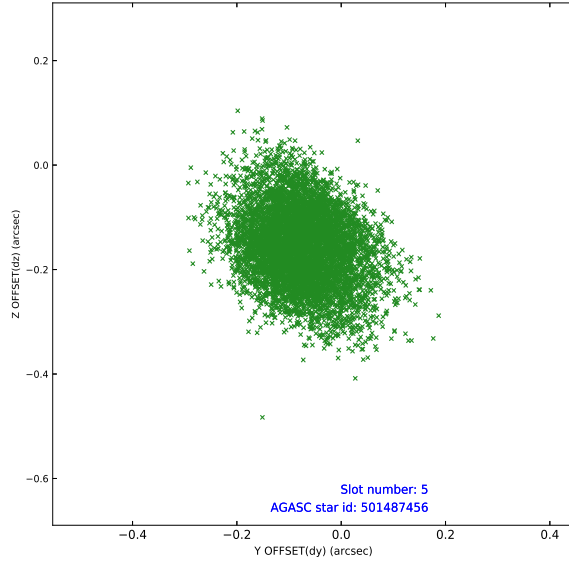
2.4.1 Slot 3



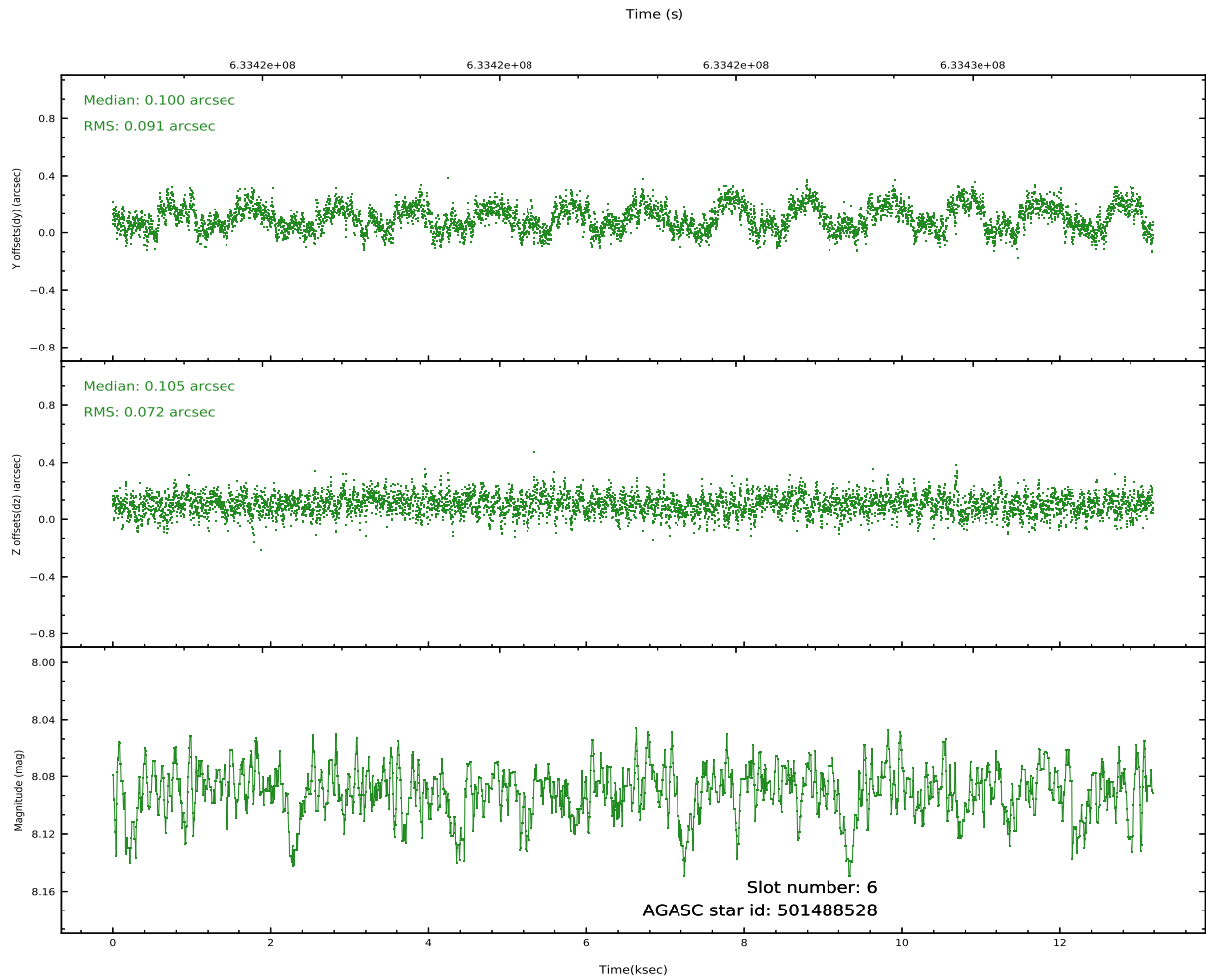
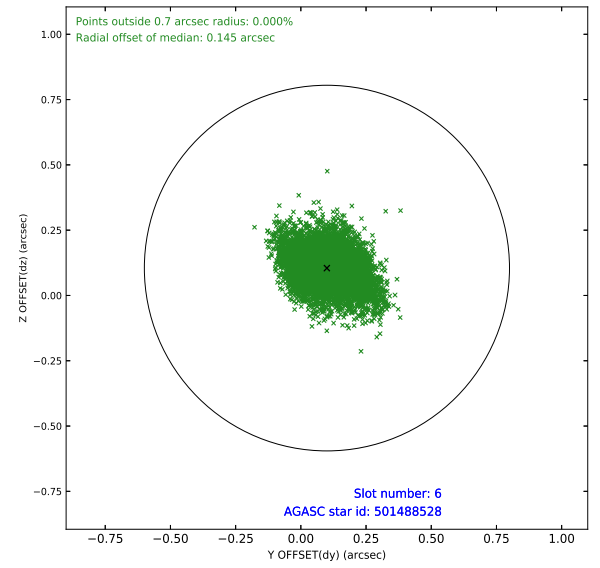
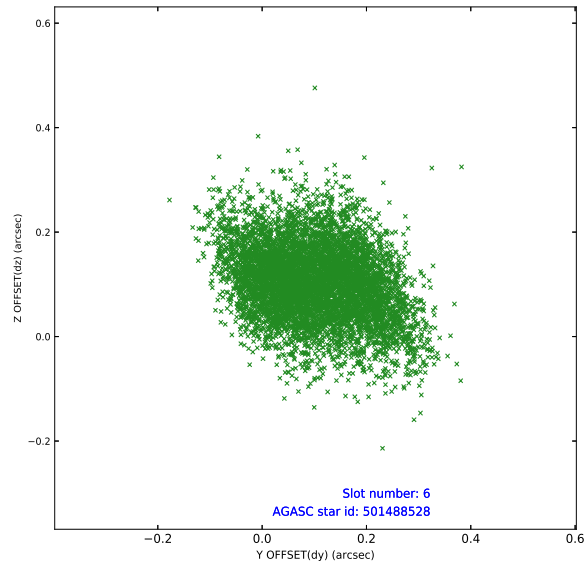
2.4.2 Slot 4



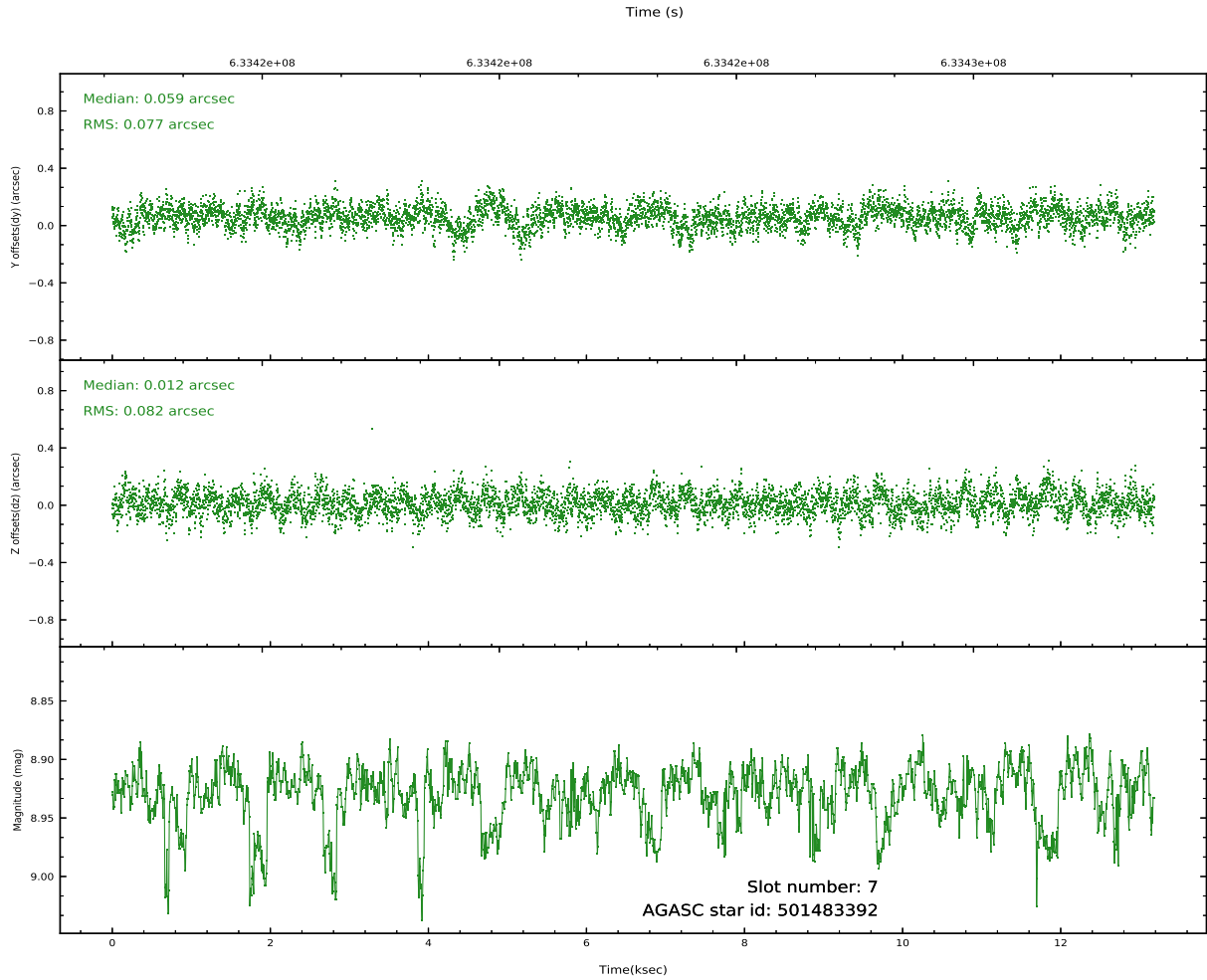
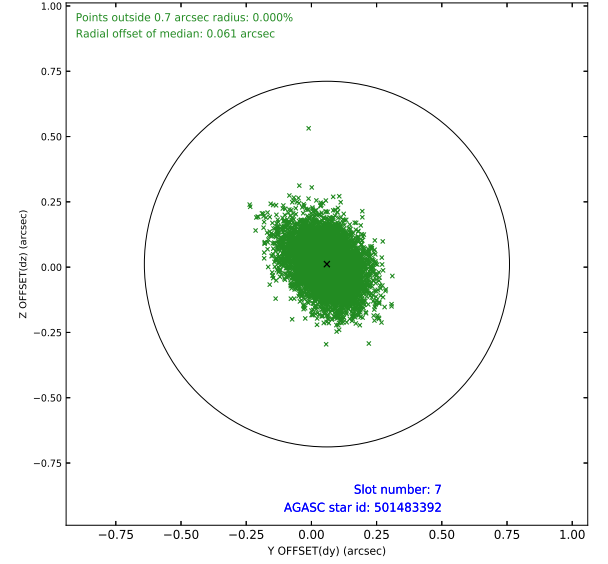
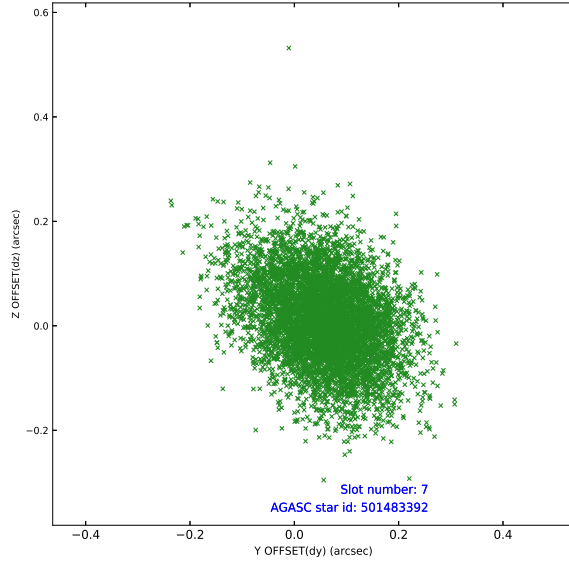
2.4.3 Slot 5



2.4.4 Slot 6

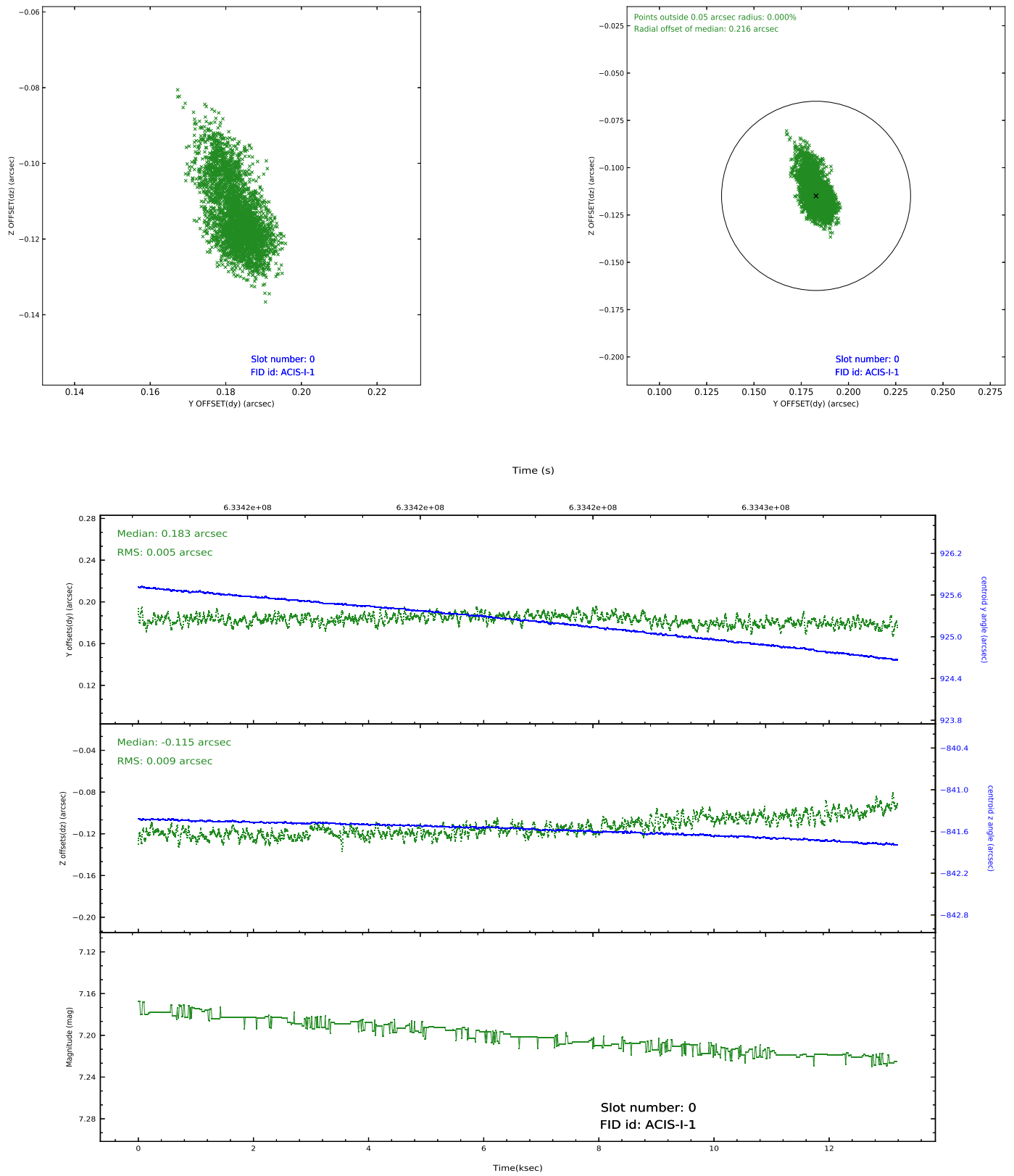


2.4.5 Slot 7

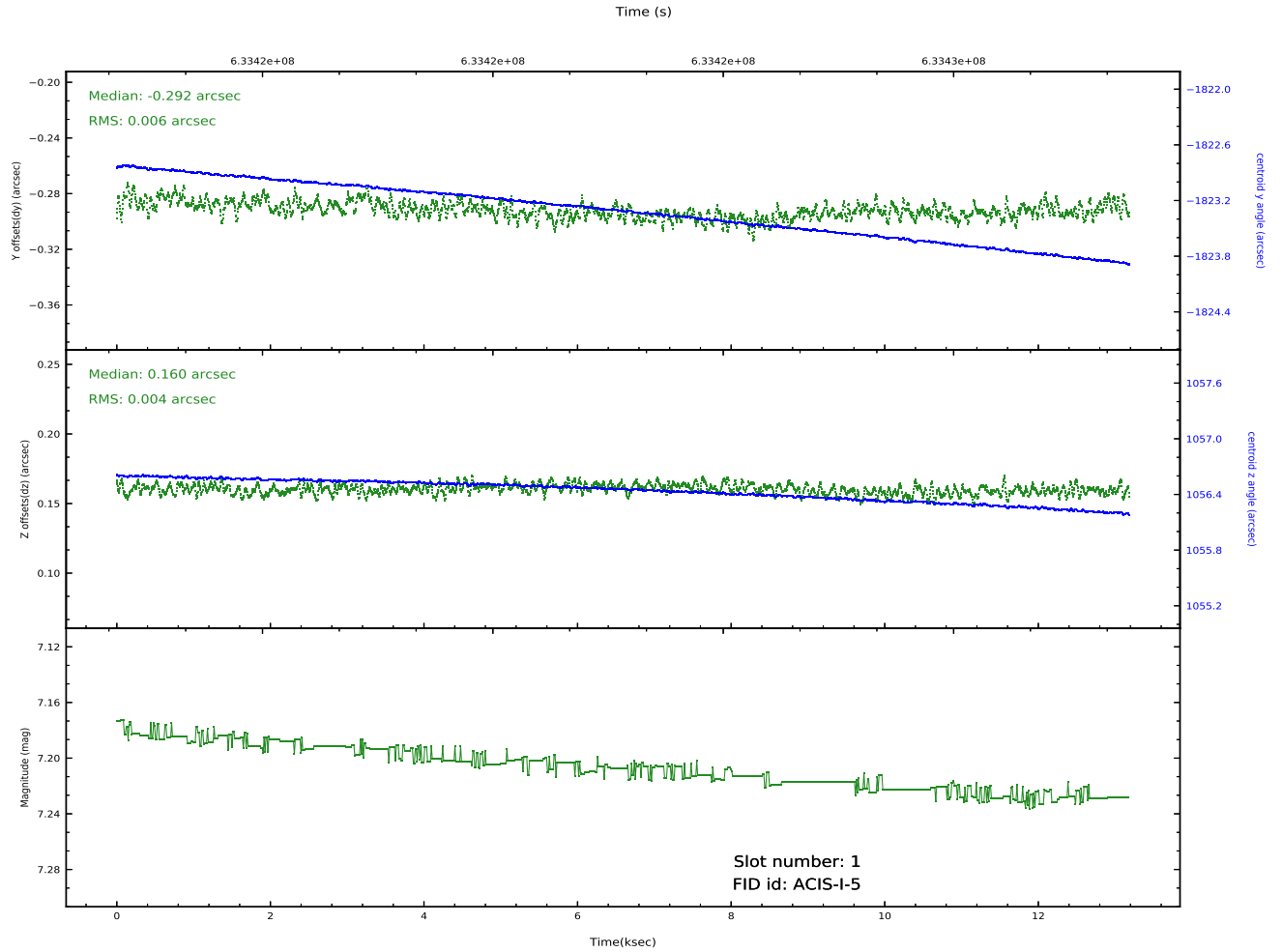
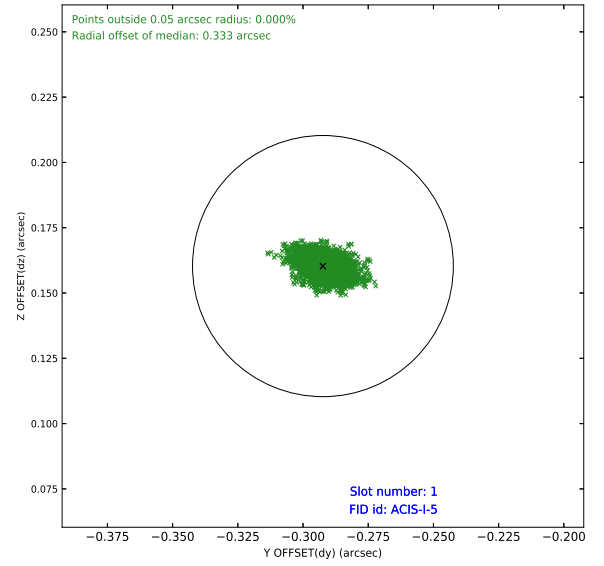
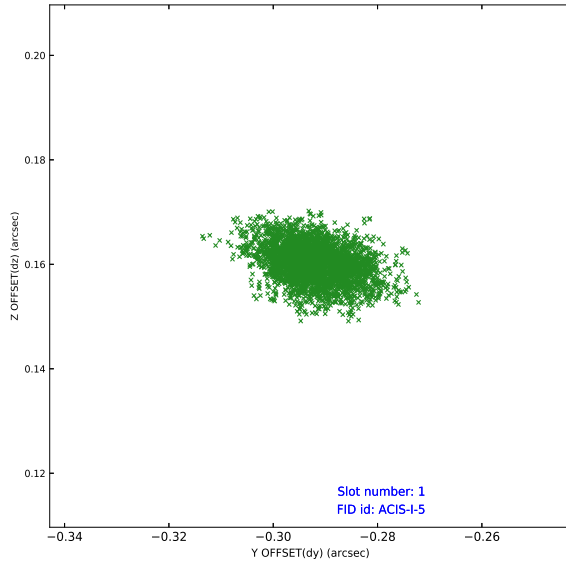


2.5 FID Slots

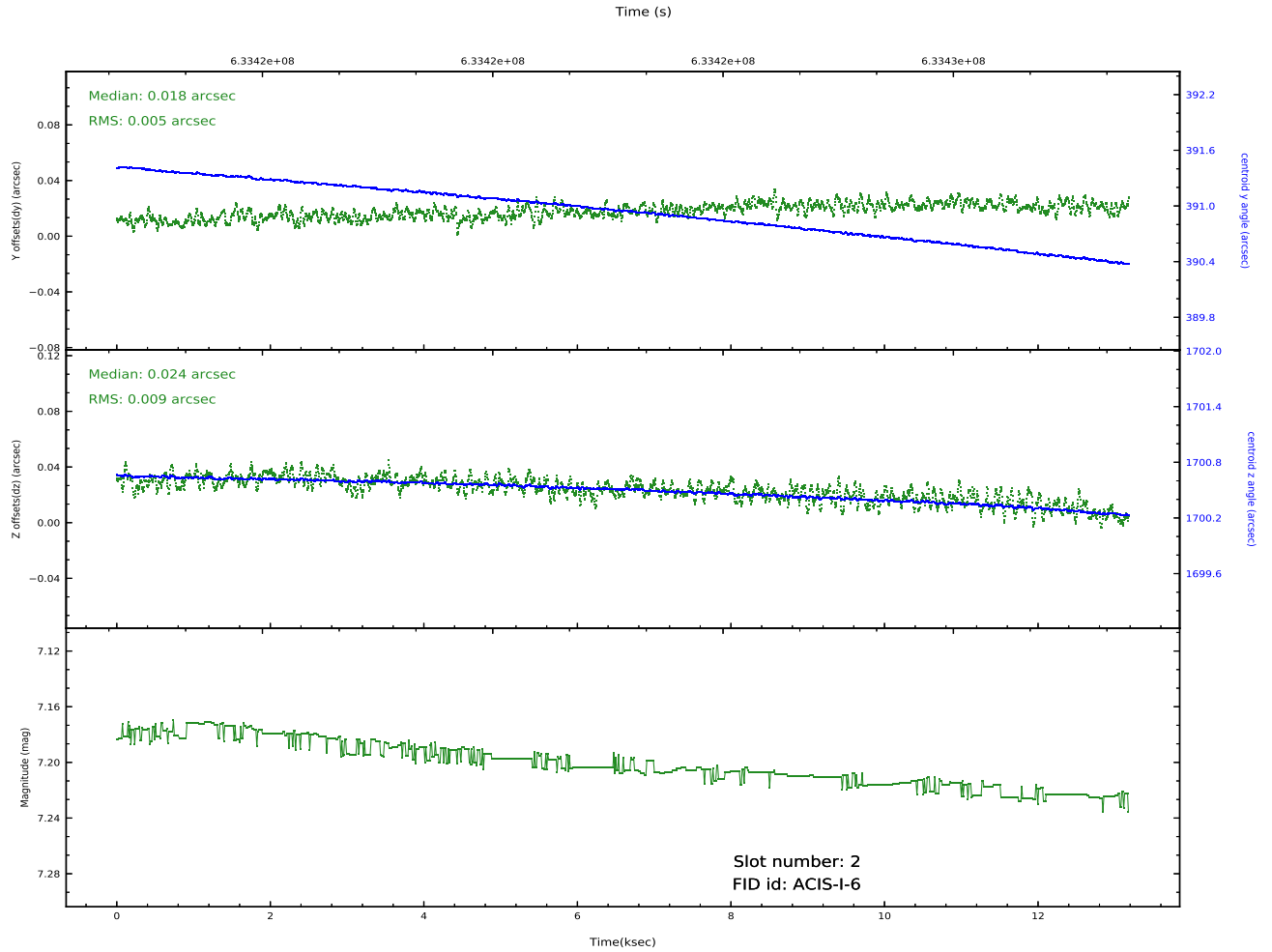
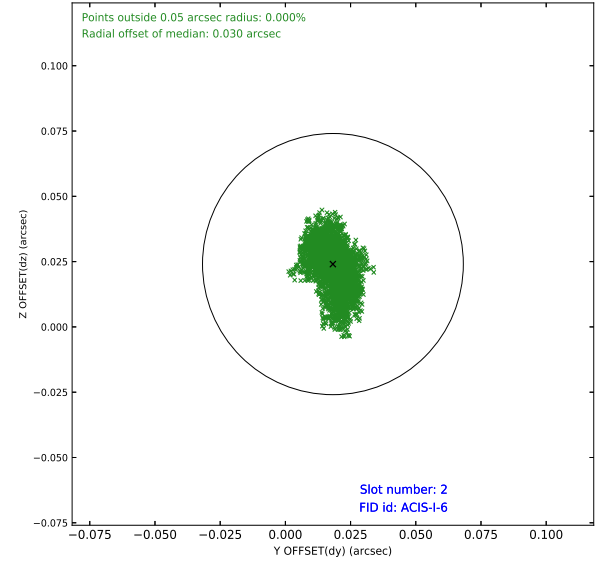
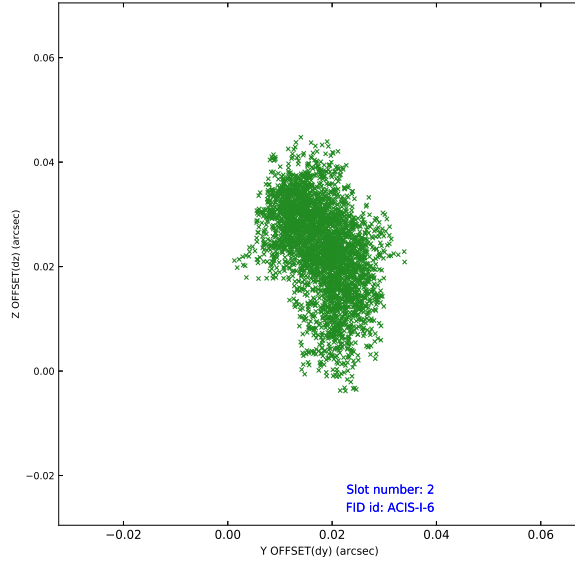
2.5.1 Slot 0



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	13.075800100684

A.2 Comments

Two optional chips were dropped.