

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20933 - L2 Version 2
Chandra X-Ray Center

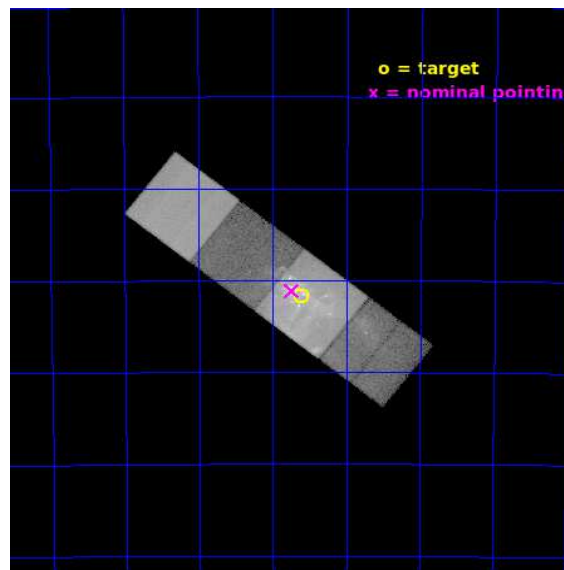
L2 Processing Date : Oct 25 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

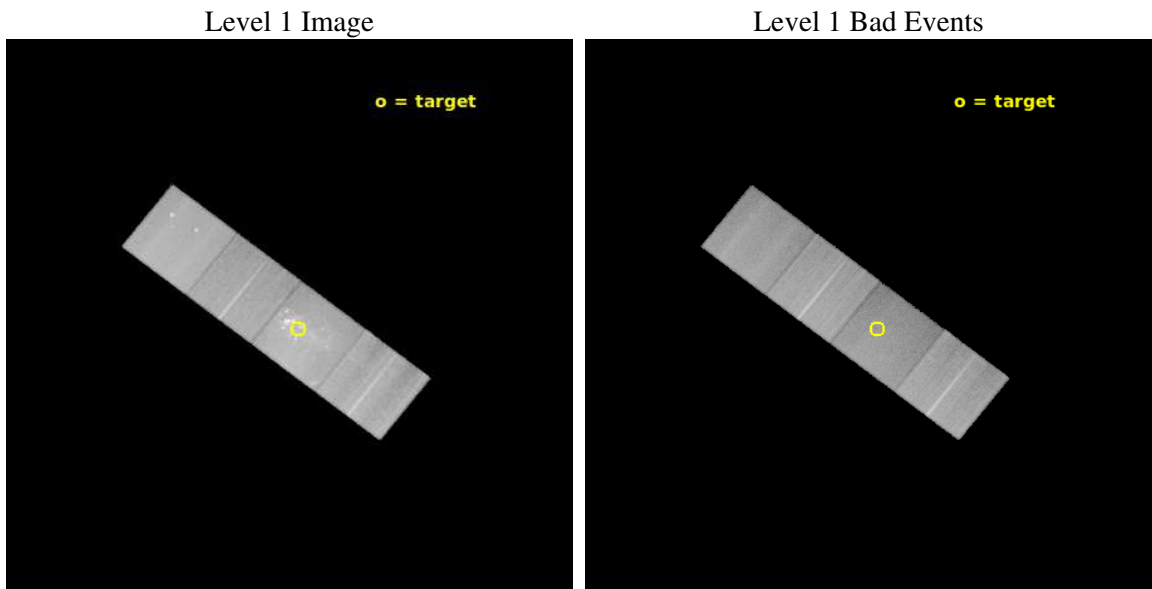
seq_num	502947	Sequence number
obs_id	20933	Observation id
title	RCW 89: The key to a puzzling young supernova remnant	Proposal tit
observer	Kazimierz Borkowski	Principal investigator
object	RCW 89	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.4053	Observer's specified target RA [deg]
dec_targ	-59.0295	Observer's specified target Dec [deg]
ra_nom	228.43536588109	Nominal RA [deg]
dec_nom	-59.018906786209	Nominal Dec [deg]
roll_nom	38.001777778187	Nominal Roll [deg]
revision	2	Processing version of data
ontime	43592.200335383	Sum of GTIs [s]
livetime	43022.636145891	Livetime [s]
ontime5	43592.200335383	Sum of GTIs [s]
ontime6	43589.059285402	Sum of GTIs [s]
ontime7	43592.200335383	Sum of GTIs [s]
ontime8	43592.200335383	Sum of GTIs [s]
l2events	610860	Number of level 2 events



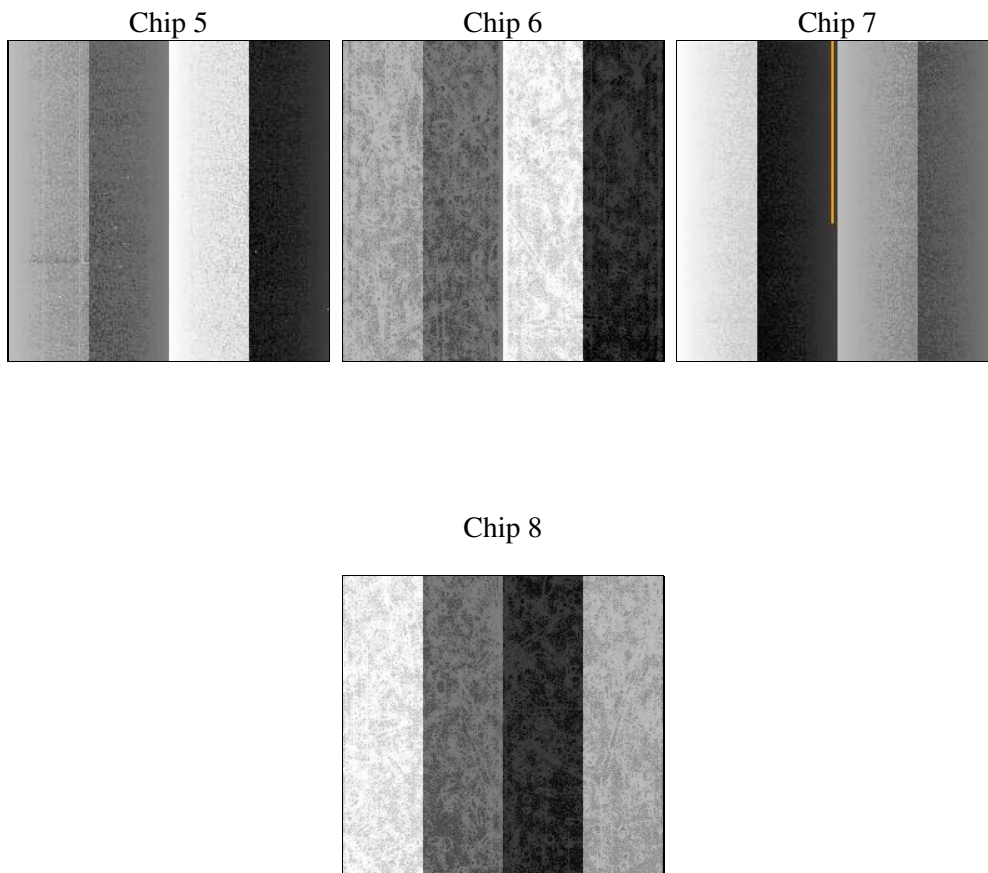
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	43500.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	43592.200335383	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	43592.200335383	Sum of GTIs [s]
date	2020-10-25T11:24:55	Date and time of file creation	ontime6	43589.059285402	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	43592.200335383	Sum of GTIs [s]
			ontime8	43592.200335383	Sum of GTIs [s]
			l1events	1651624	Number of level 1 events

2.1.4 Events

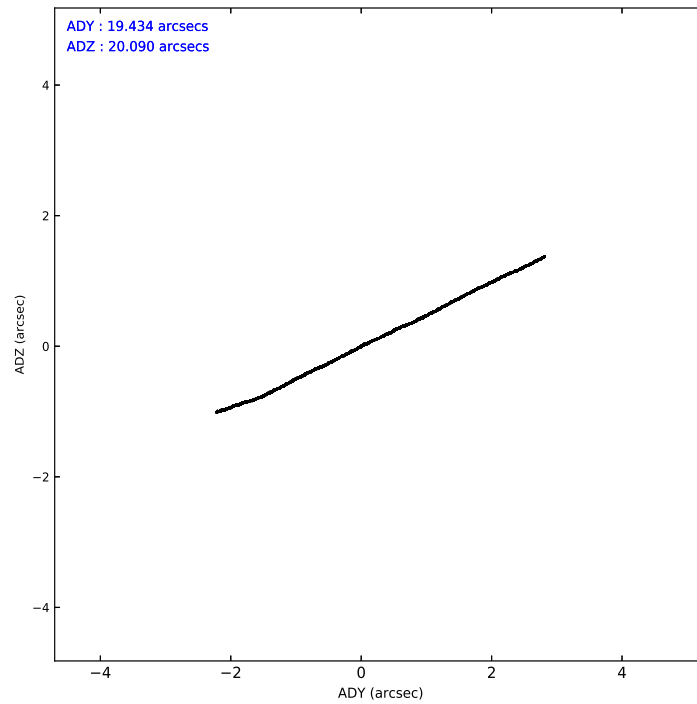
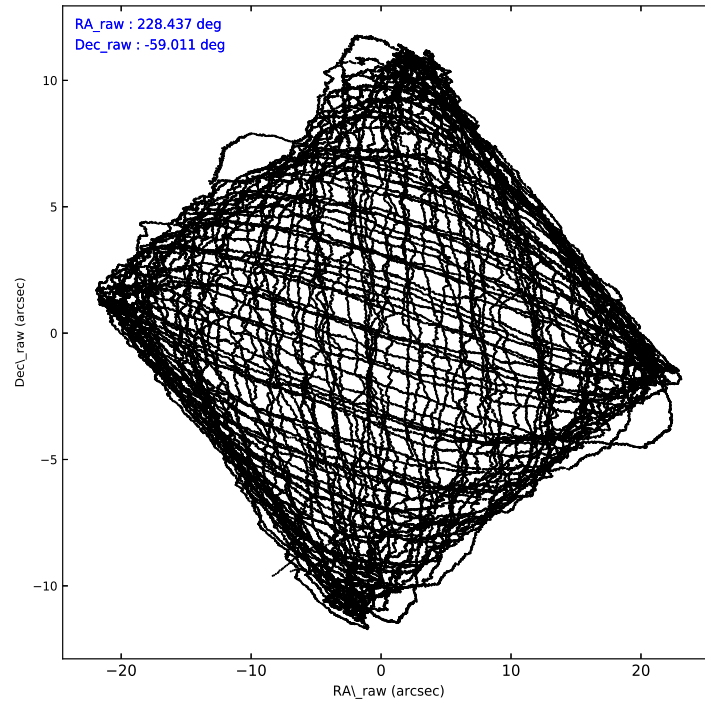
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	431947	323942	497587	398148
rejected events	210699	277848	174855	275825
rejected %	48%	85%	35%	69%

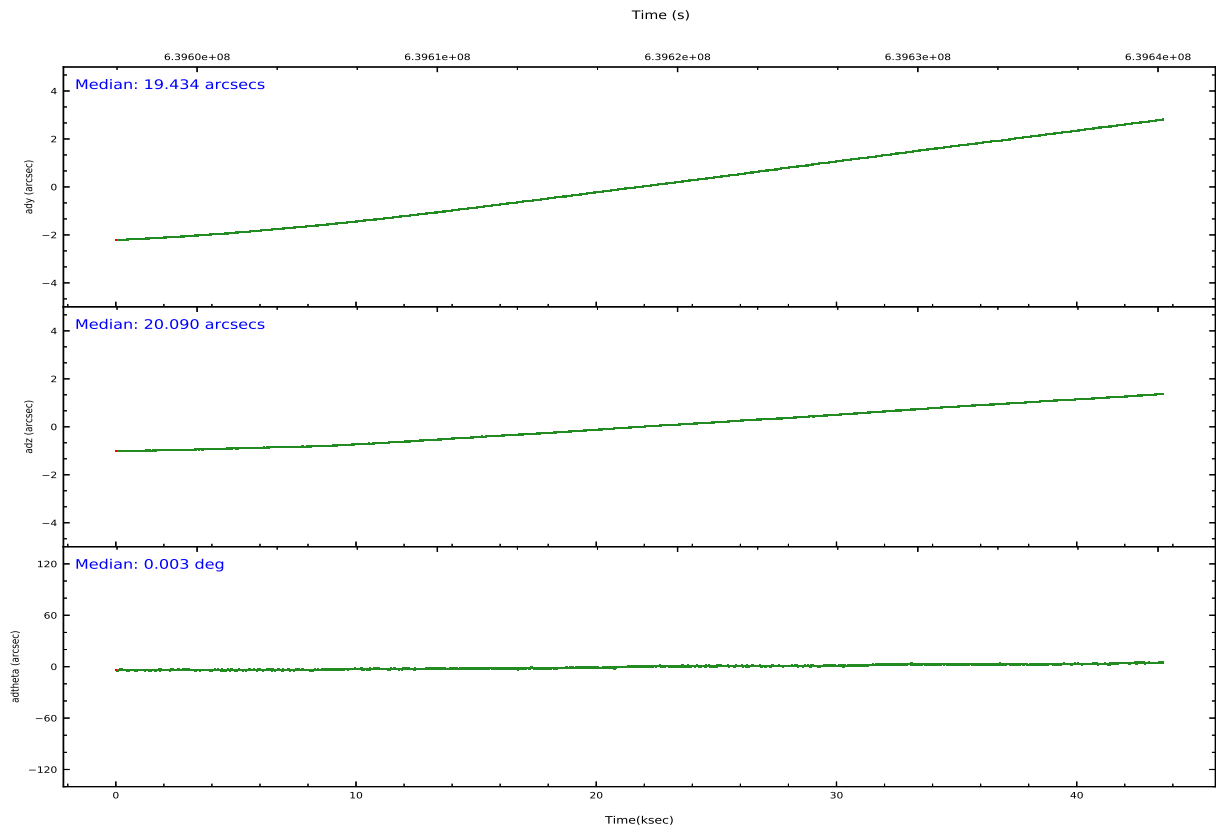
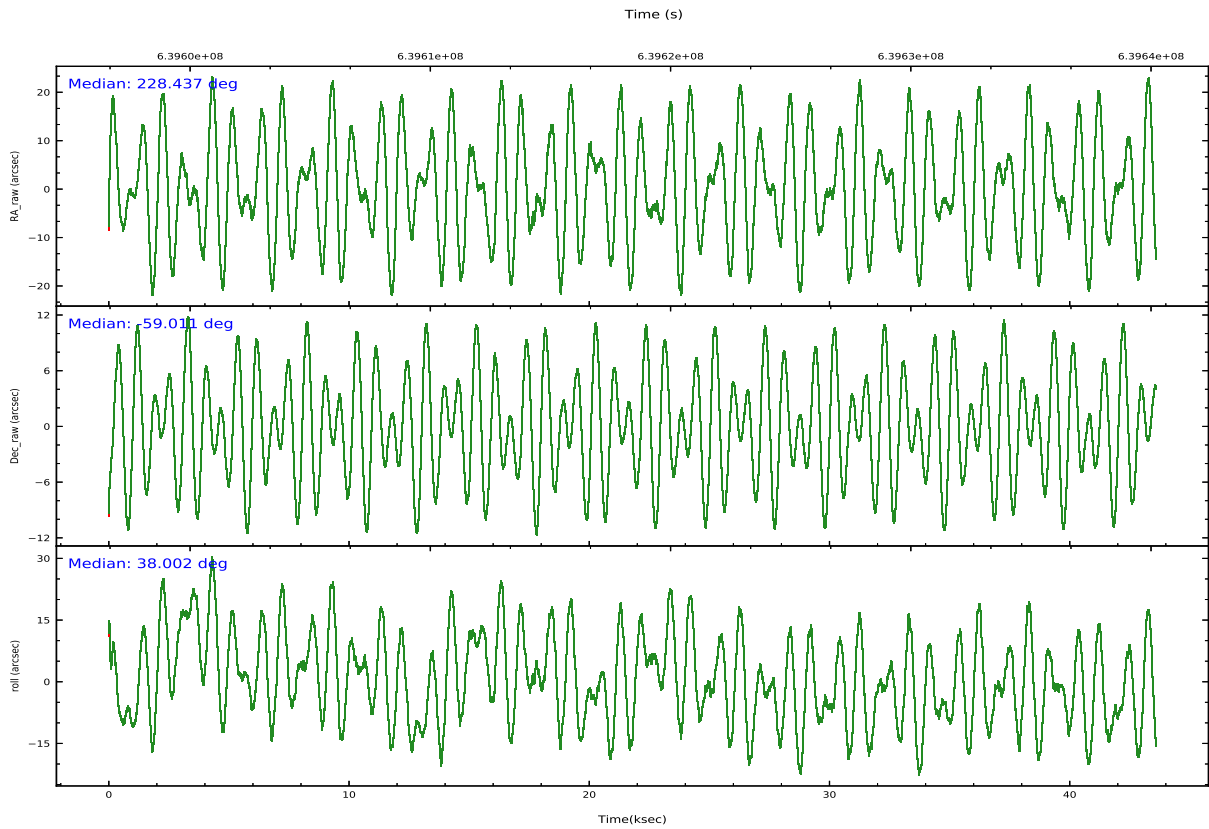
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	16852	21240	58849	42154
	3%	6%	11%	10%
grade 1 events	1394	181	607	375
	0%	0%	0%	0%
grade 2 events	71051	9979	78944	28387
	16%	3%	15%	7%
grade 3 events	7043	3445	32389	11448
	1%	1%	6%	2%
grade 4 events	6837	3469	31529	10653
	1%	1%	6%	2%
grade 5 events	28944	11383	34470	18624
	6%	3%	6%	4%
grade 6 events	119575	7986	121175	29775
	27%	2%	24%	7%
grade 7 events	180251	266259	139624	256732
	41%	82%	28%	64%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	228.417833	228.43536588109	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.036450	-59.018906786209	Alternating exposures requested	N	N
[deg] Pointing Roll	37.839367	38.001777778187	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	639596714.184000	639595104.6994801			
Observation start date	2018-04-08T17:44:05	2018-04-08T17:18:24			
[s] Observation end time (MET)	639640214.184000	639641732.97724			
Observation end date	2018-04-09T05:49:05	2018-04-09T06:15:32			
Read mode	TIMED	TIMED			

2.3 Aspect



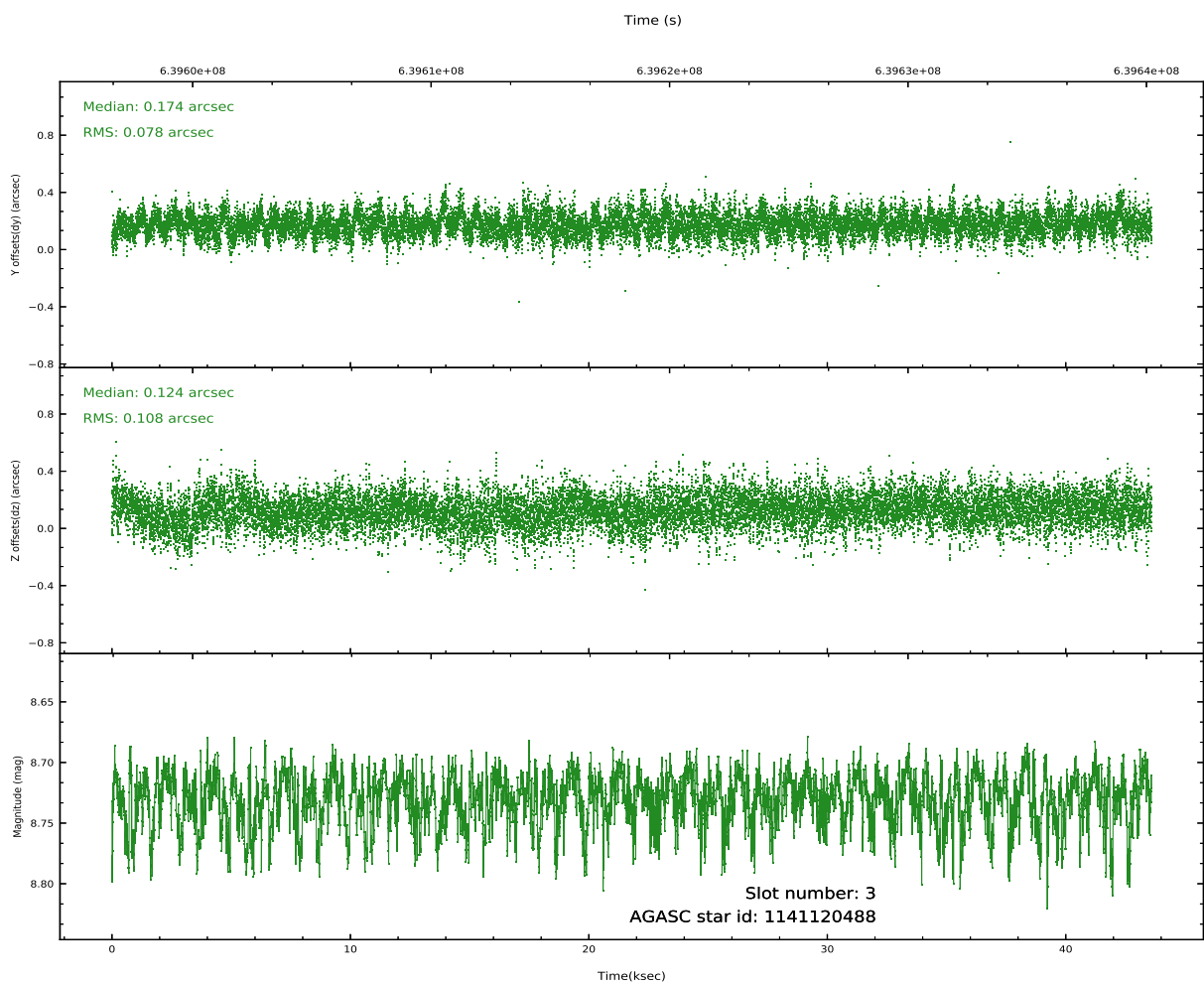
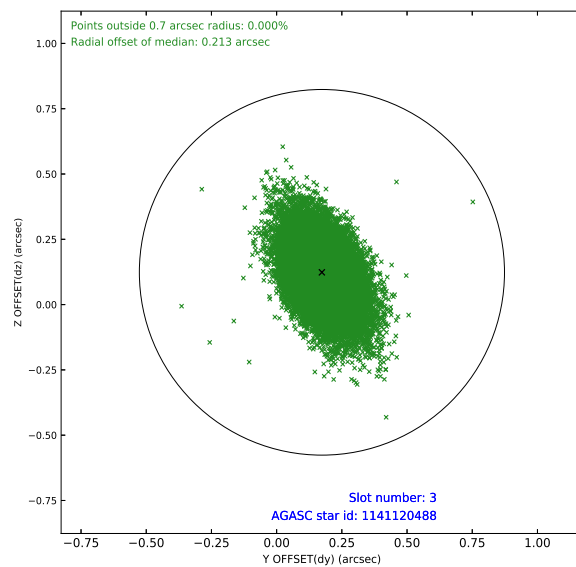
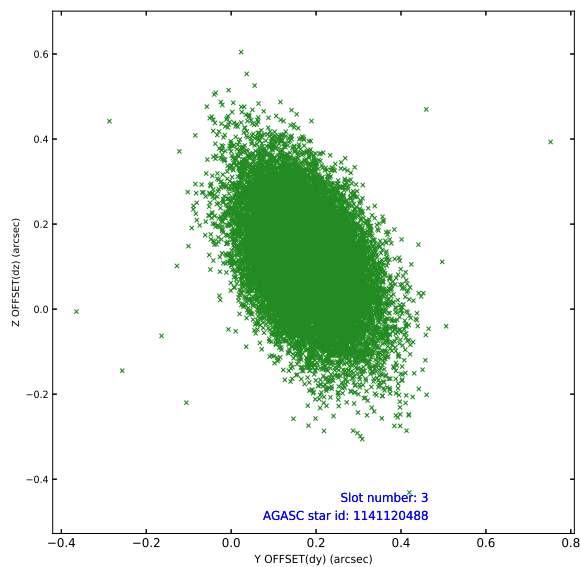


Slot Statistics

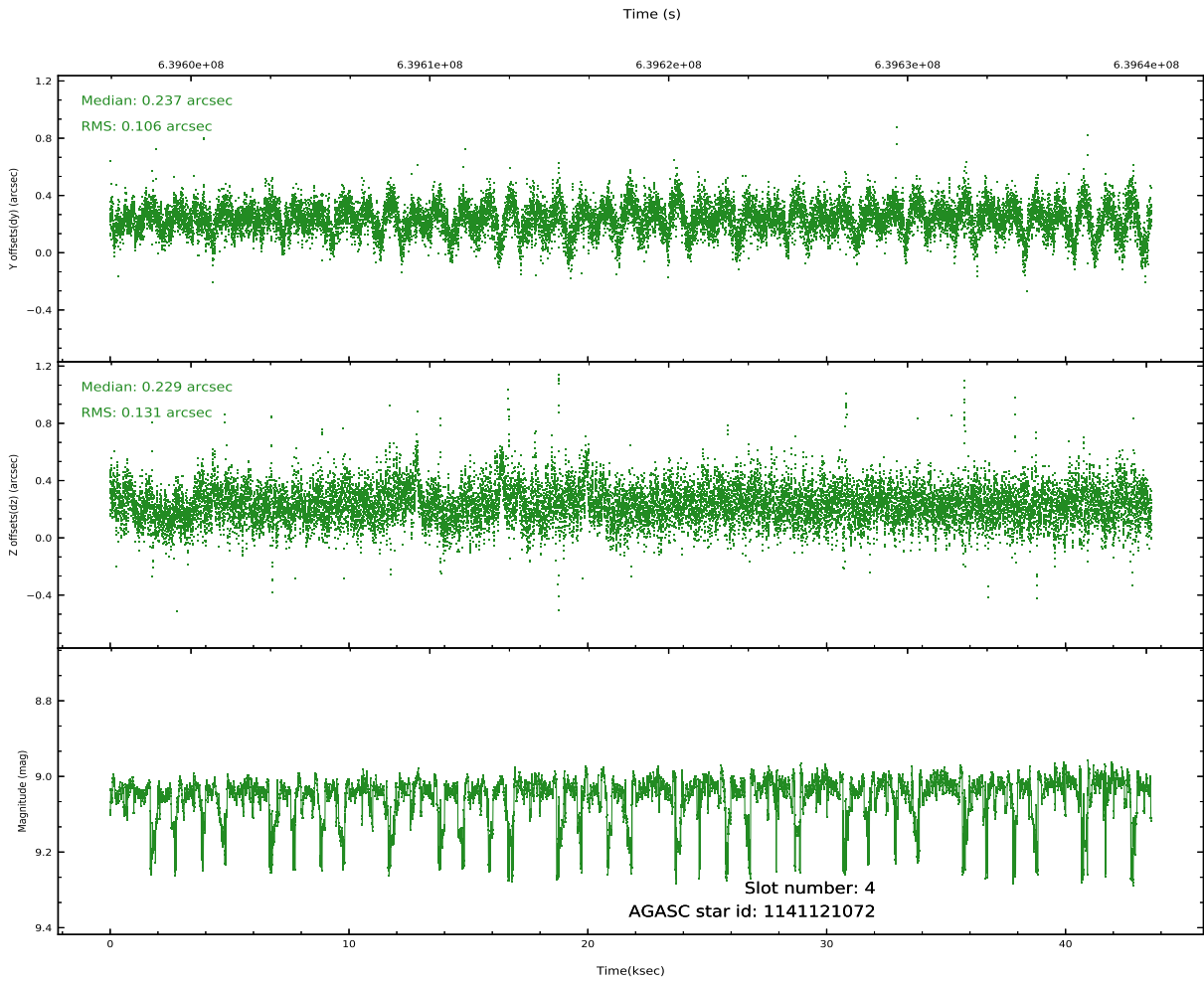
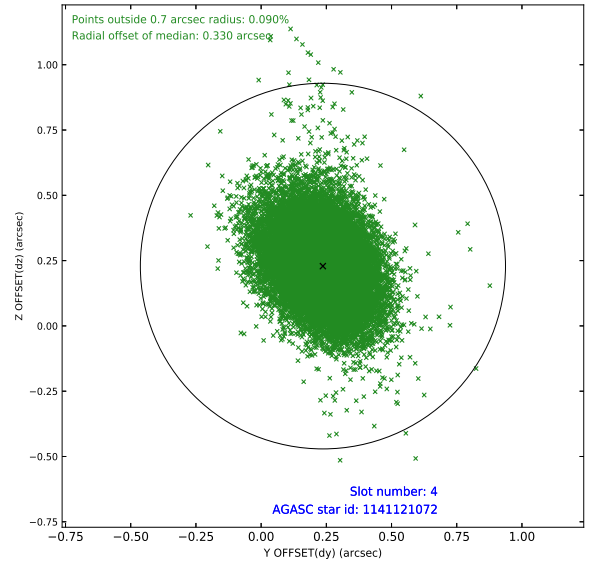
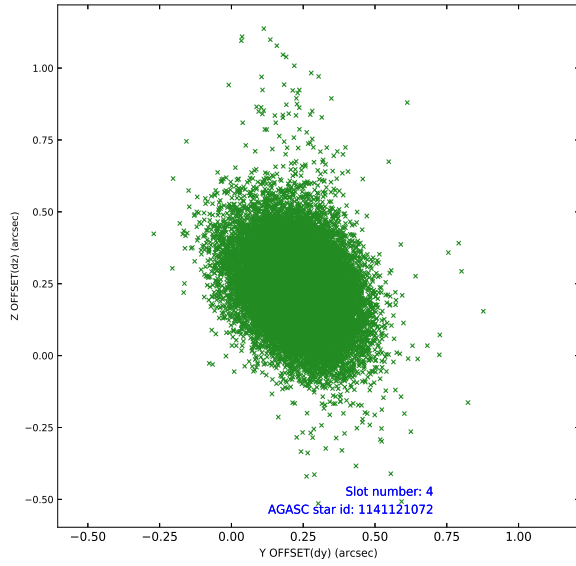
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.11	10634	1.000	0.115	-0.107	0.026	0.052	0.000000	0.000000	-772.71	-1741
1	FID		ACIS-S-4	7.23	10632	1.000	0.143	-0.025	0.034	0.076	0.000000	0.000000	2140.82	166
2	FID		ACIS-S-5	7.22	10631	1.000	-0.278	0.143	0.029	0.039	0.000000	0.000000	-1825.70	160
3	GUIDE	used	1141120488	8.73	21244	1.000	0.174	0.124	0.136	0.241	228.236450	-59.504731	-1295.51	-1128
4	GUIDE	used	1141121072	9.04	21184	1.000	0.237	0.229	0.171	0.298	227.898628	-59.420815	-1602.48	-512
5	GUIDE	used	1141116568	8.50	21256	1.000	-0.292	-0.257	0.143	0.266	228.578452	-58.520066	1378.96	1282
6	GUIDE	used	1141113152	8.72	21243	1.000	-0.250	-0.258	0.152	0.272	228.952453	-58.305202	2411.13	1455
7	GUIDE	used	1141119896	8.36	21245	1.000	0.126	0.163	0.147	0.260	229.637327	-59.405643	937.70	-2436

2.4 Star Slots

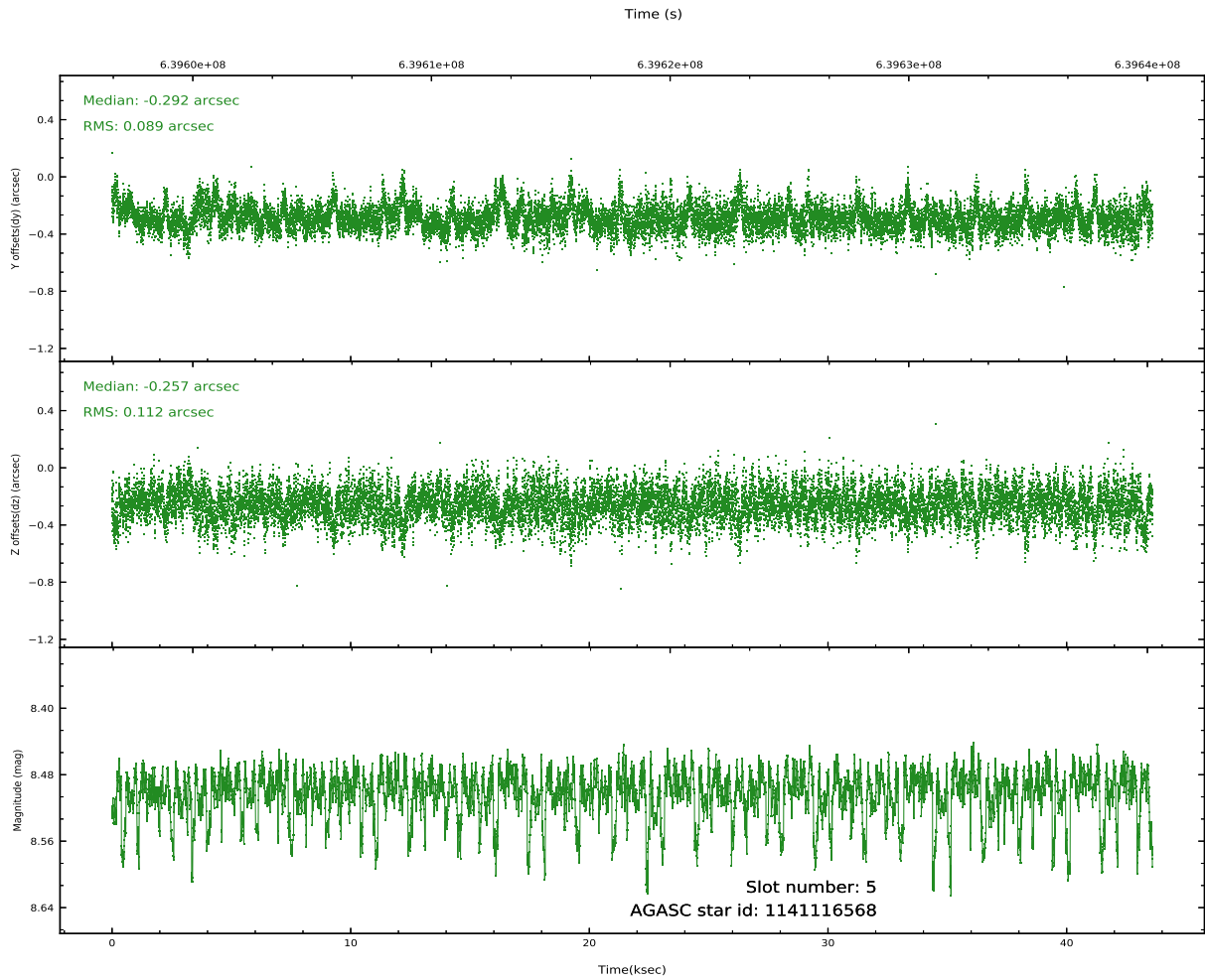
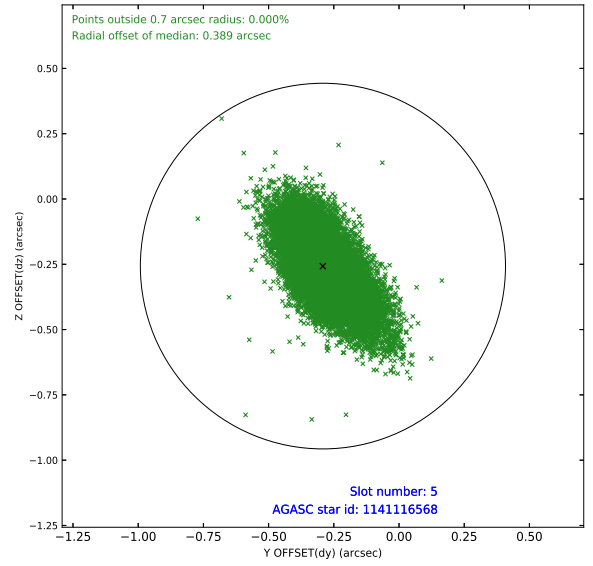
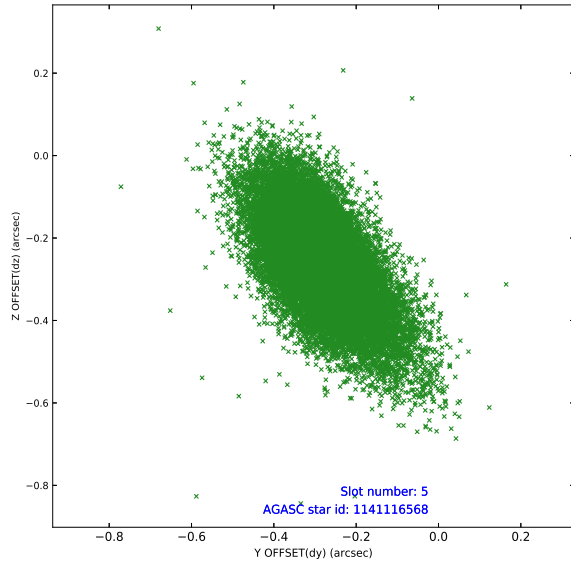
2.4.1 Slot 3



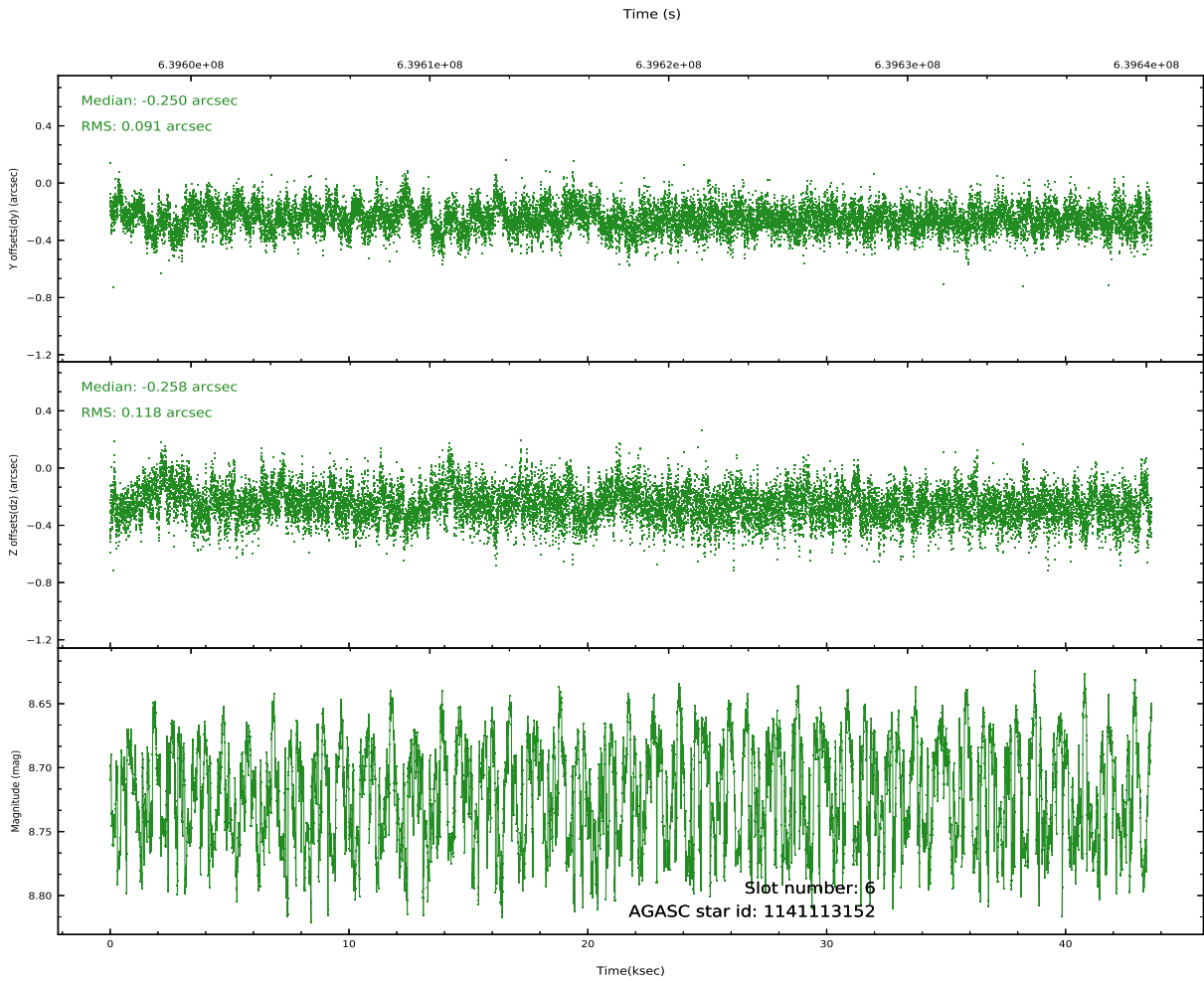
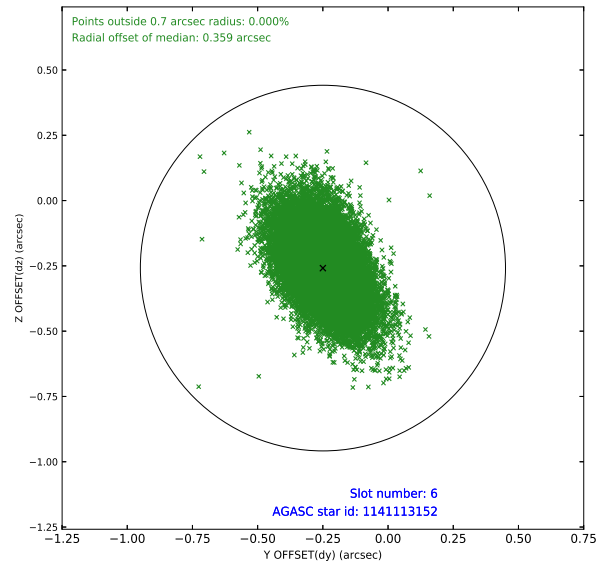
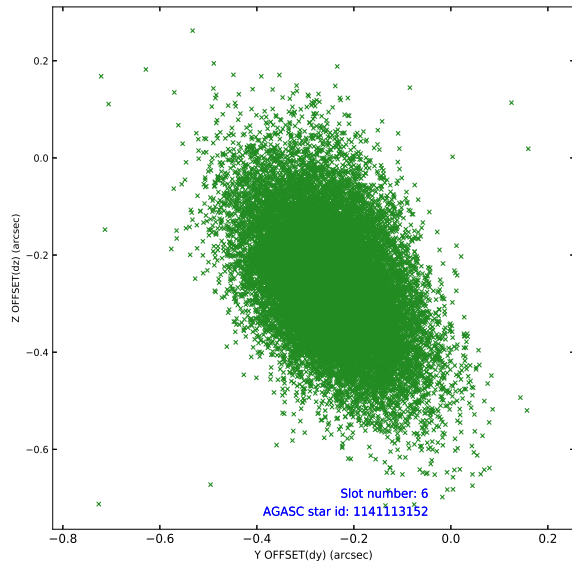
2.4.2 Slot 4



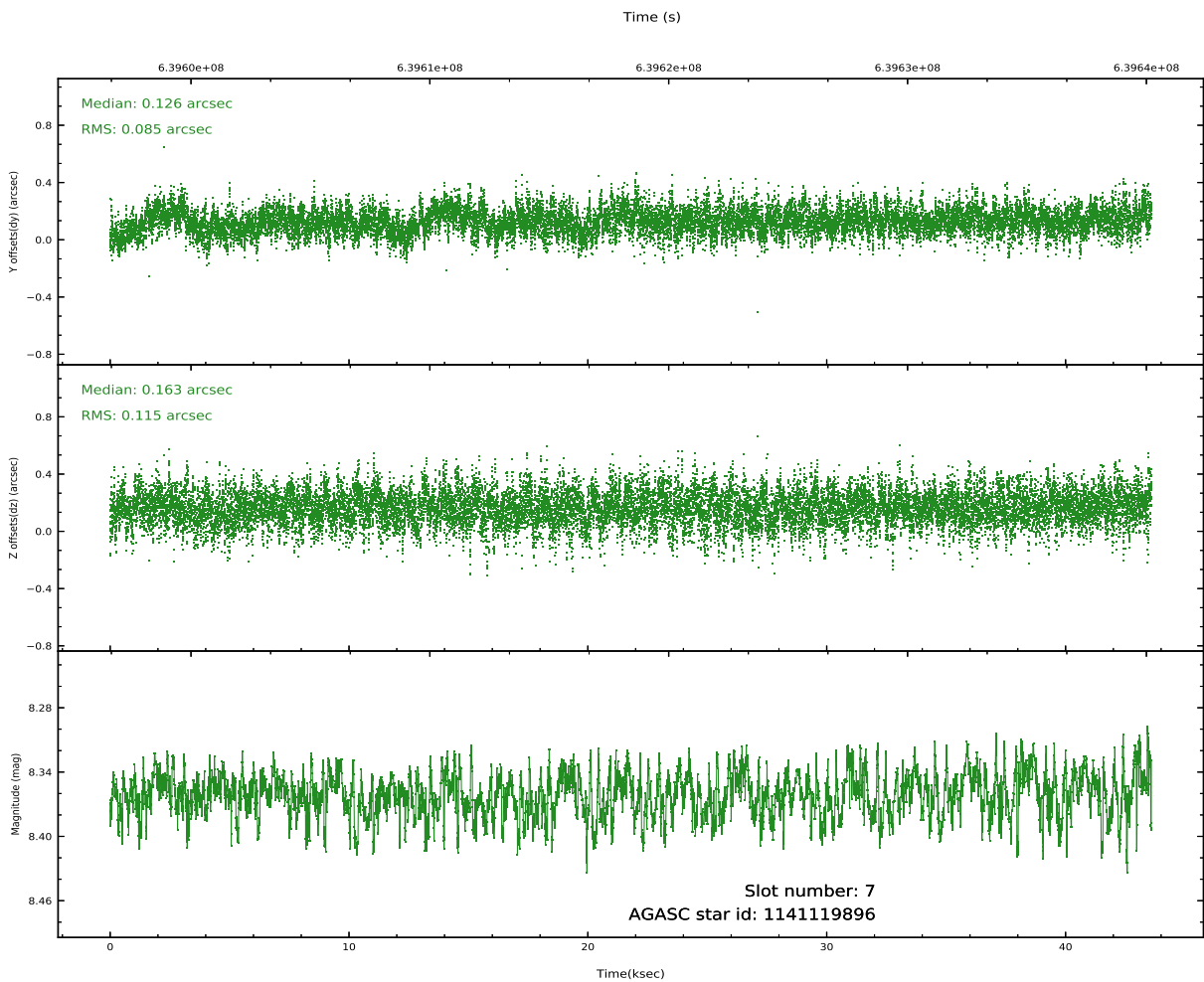
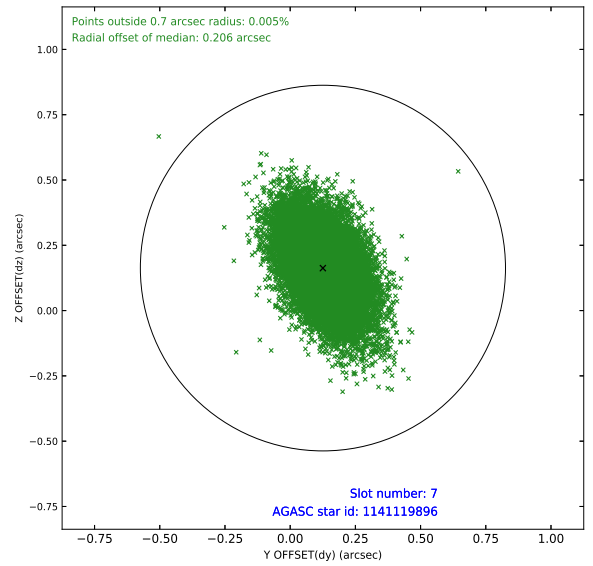
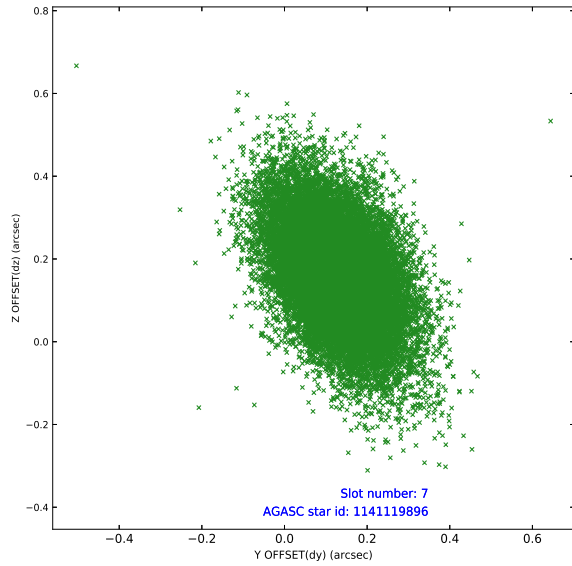
2.4.3 Slot 5



2.4.4 Slot 6

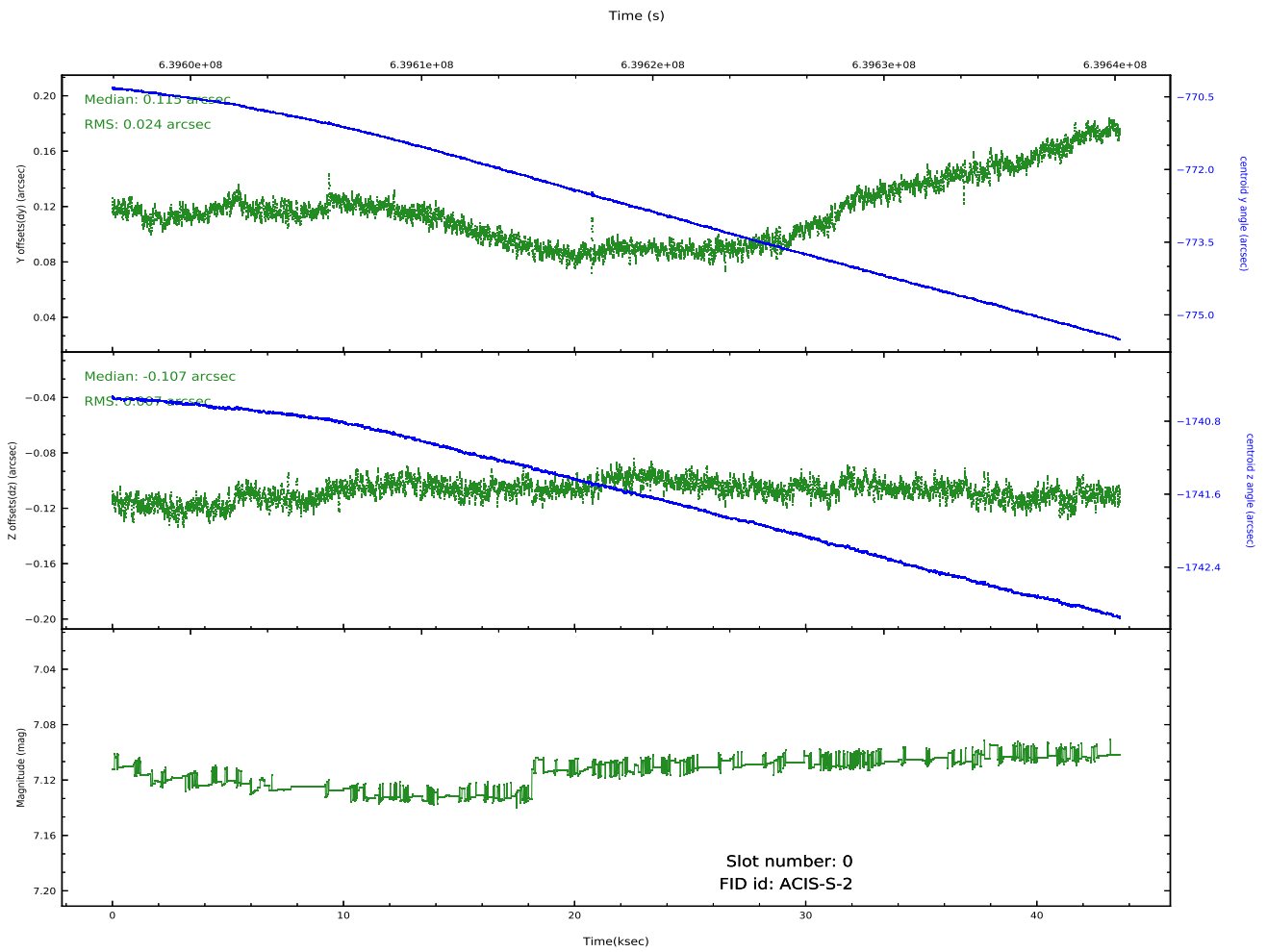
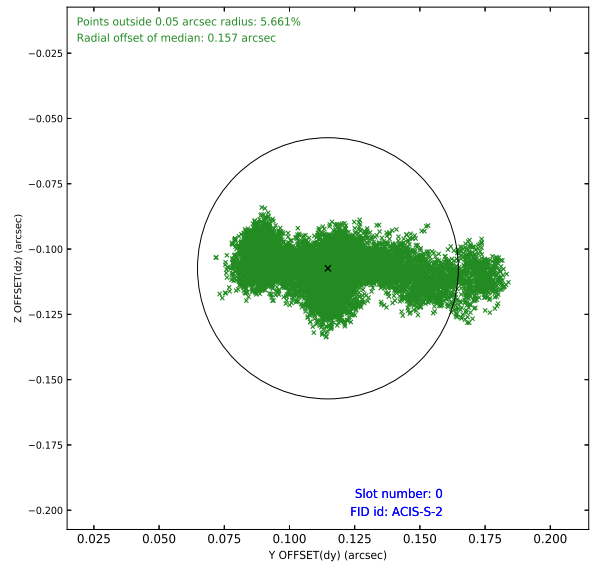
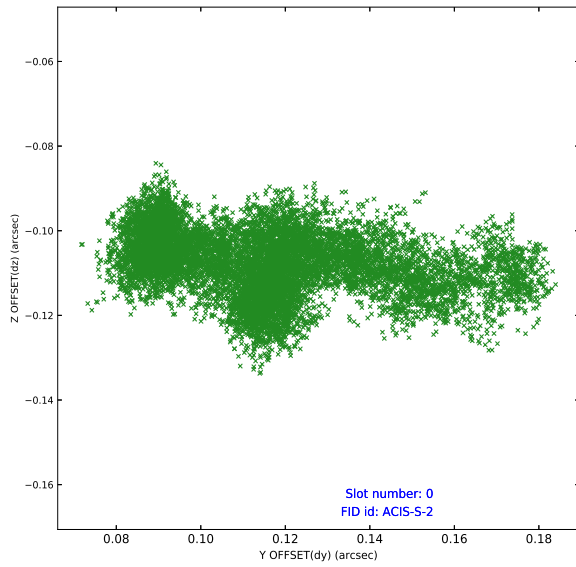


2.4.5 Slot 7

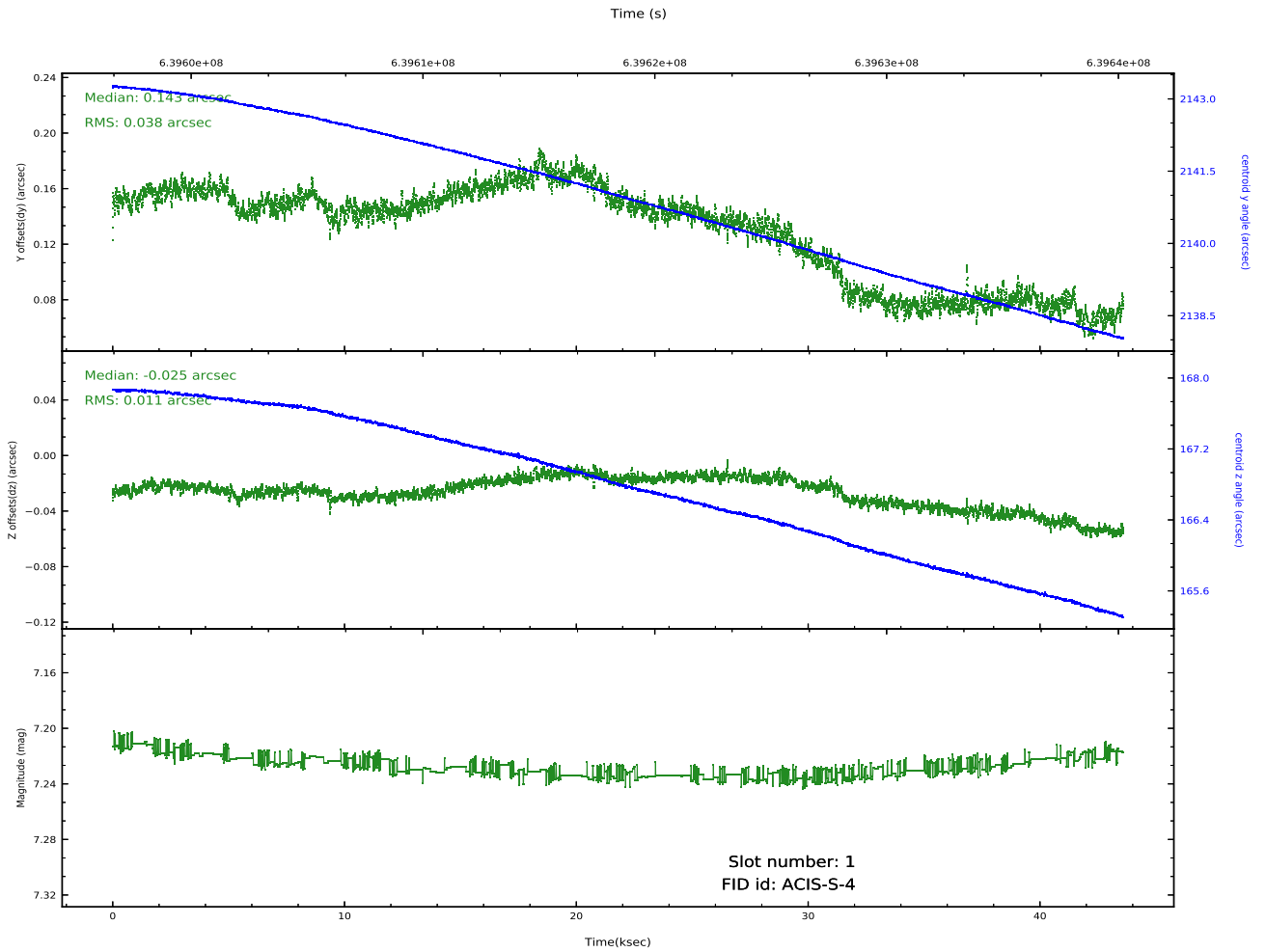
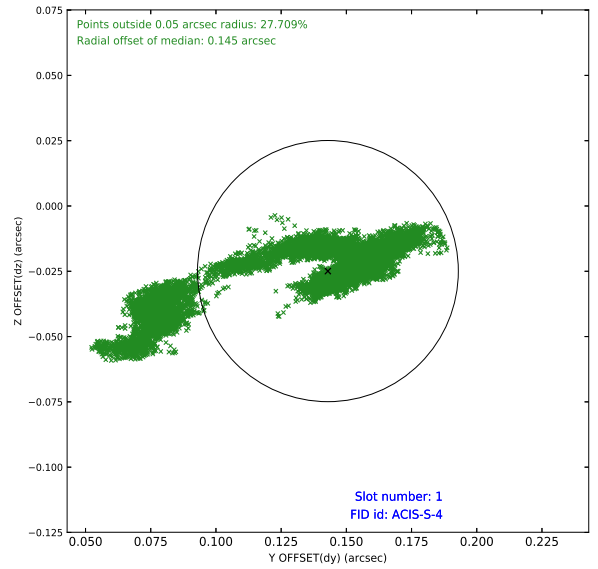
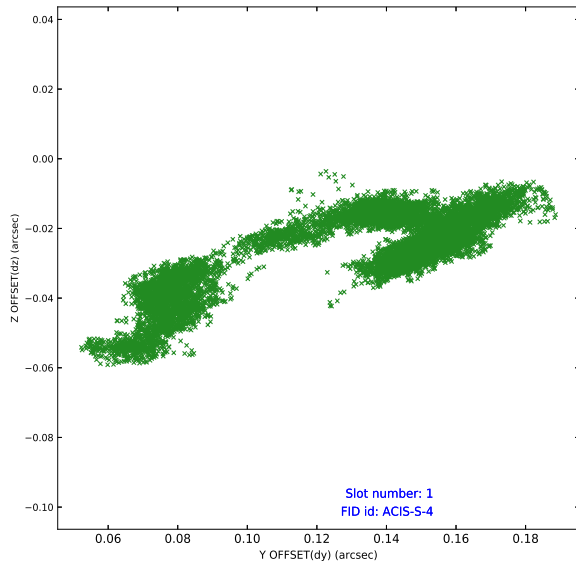


2.5 FID Slots

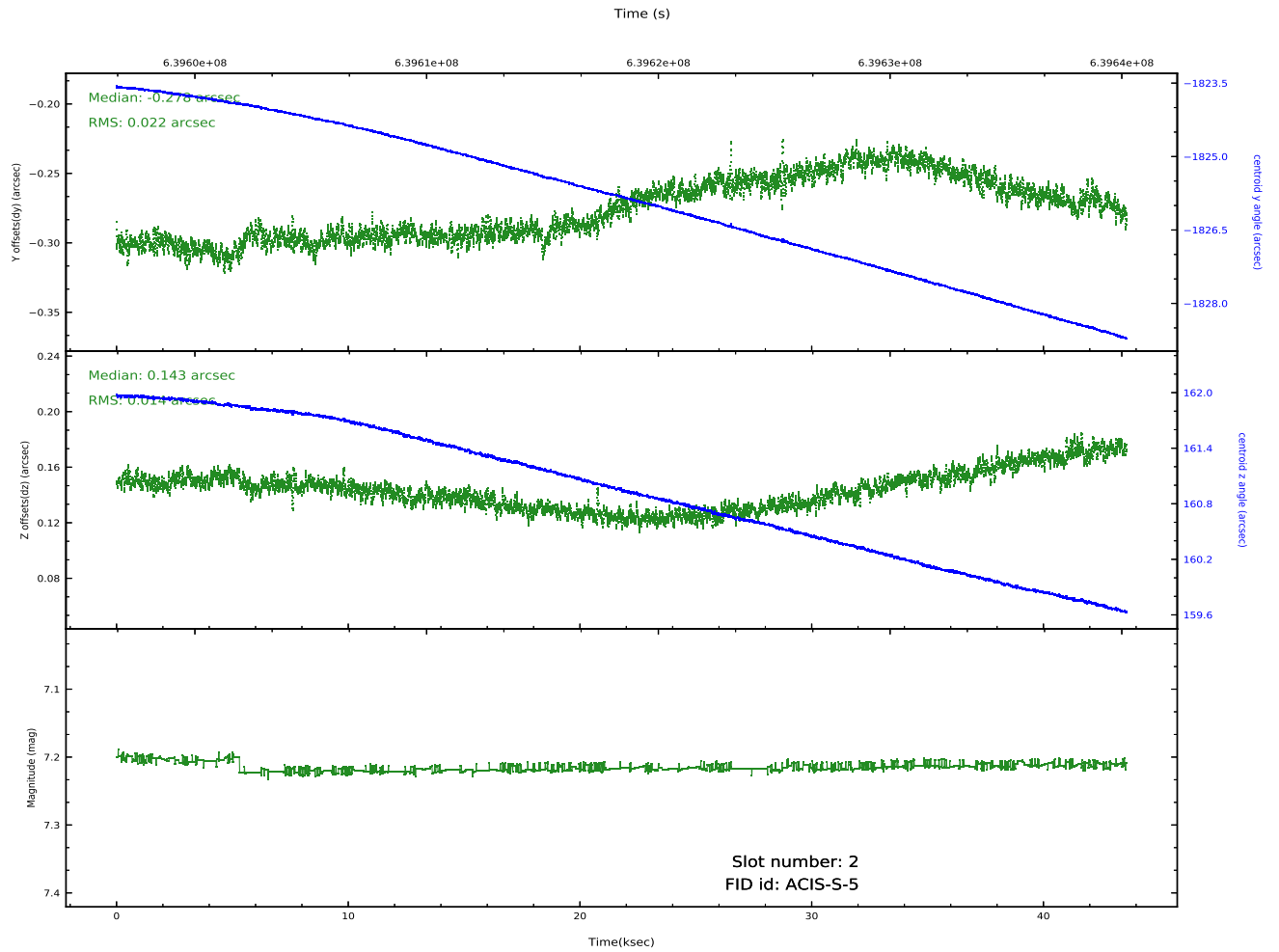
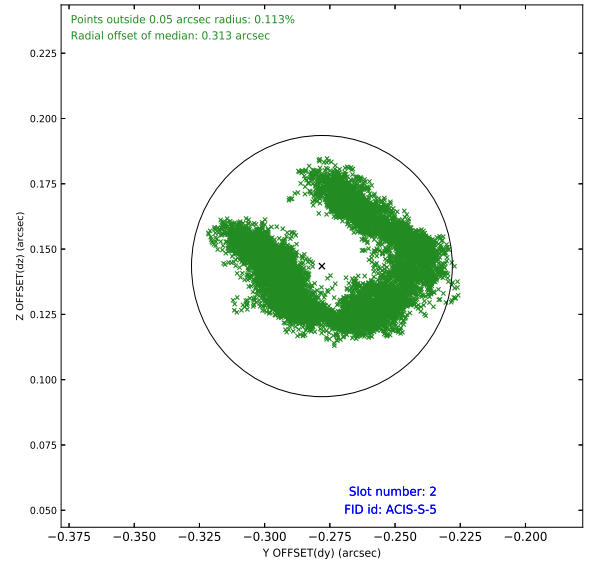
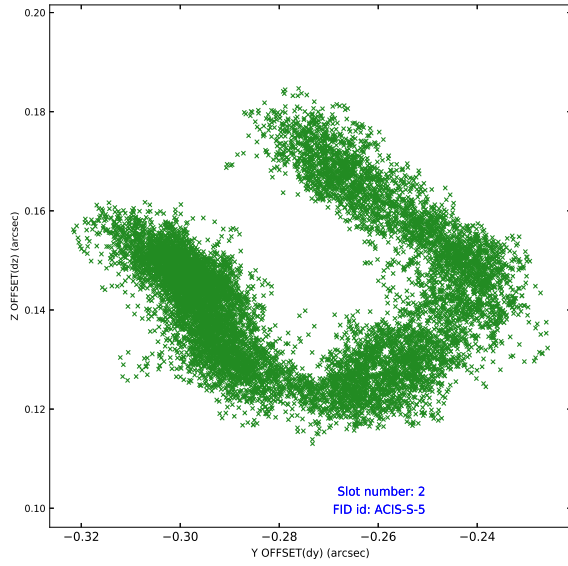
2.5.1 Slot 0



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)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.592200335383

A.2 Comments