

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19300 - L2 Version 2
Chandra X-Ray Center

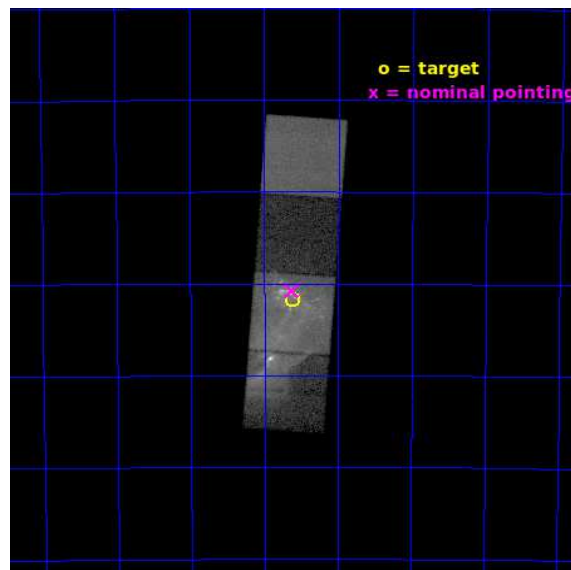
L2 Processing Date : Oct 24 2020

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1 Front

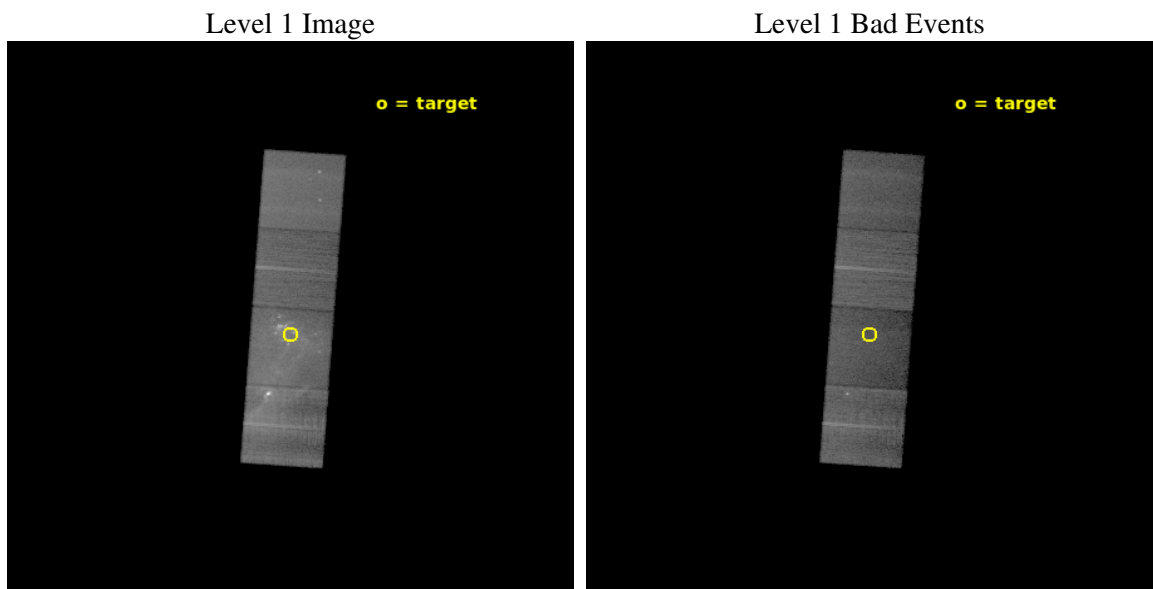
seq_num	502947	Sequence number
obs_id	19300	Observation id
title	RCW 89: The key to a puzzling young supernova remnant	Proposal tit
observer	Kazimierz Borkowski	Principal investigator
object	RCW 89	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.4053	Observer's specified target RA [deg]
dec_targ	-59.0295	Observer's specified target Dec [deg]
ra_nom	228.40648998387	Nominal RA [deg]
dec_nom	-59.012912873994	Nominal Dec [deg]
roll_nom	94.140981391753	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21109.74666059	Sum of GTIs [s]
livetime	20833.9322797	Livetime [s]
ontime5	21109.705620646	Sum of GTIs [s]
ontime6	21106.523620129	Sum of GTIs [s]
ontime7	21109.74666059	Sum of GTIs [s]
ontime8	21106.482469916	Sum of GTIs [s]
l2events	362390	Number of level 2 events



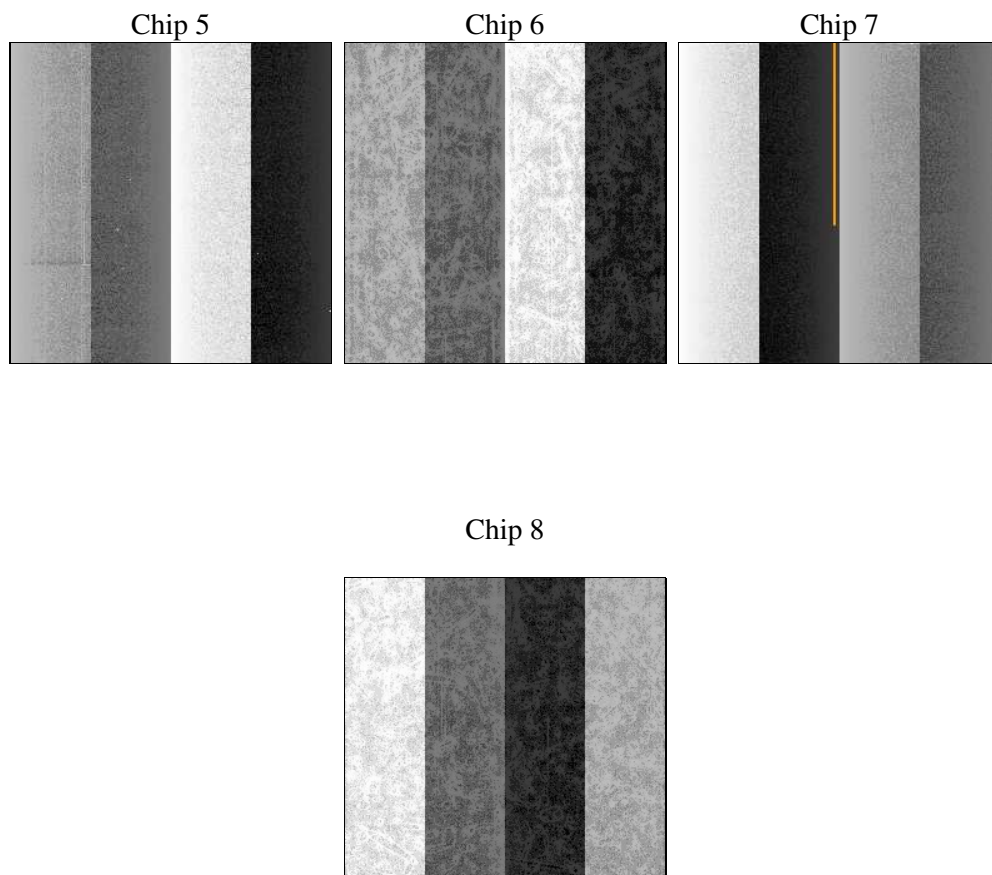
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	21109.74666059	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	21109.705620646	Sum of GTIs [s]
date	2020-10-24T07:22:46	Date and time of file creation	ontime6	21106.523620129	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	21109.74666059	Sum of GTIs [s]
			ontime8	21106.482469916	Sum of GTIs [s]
			l1events	874471	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	204752	154564	252729	262426
rejected events	100077	135451	83230	138556
rejected %	48%	87%	32%	52%

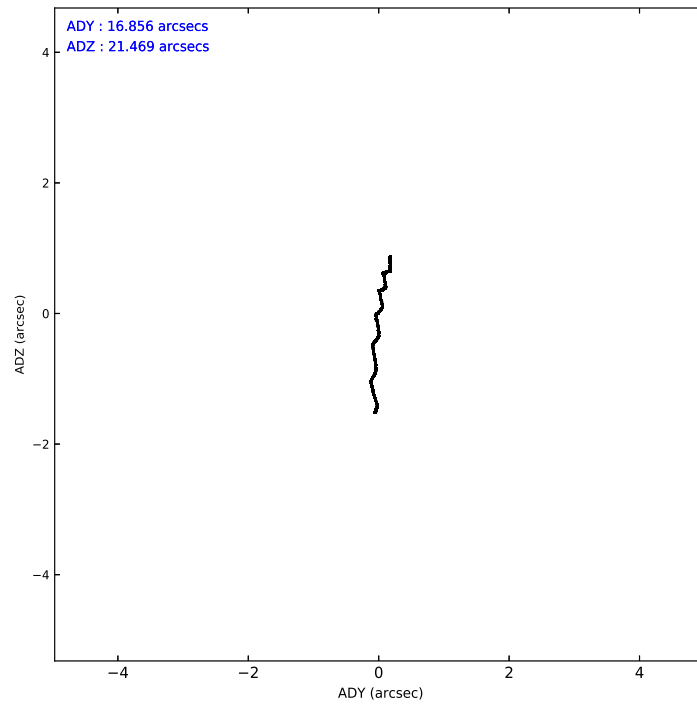
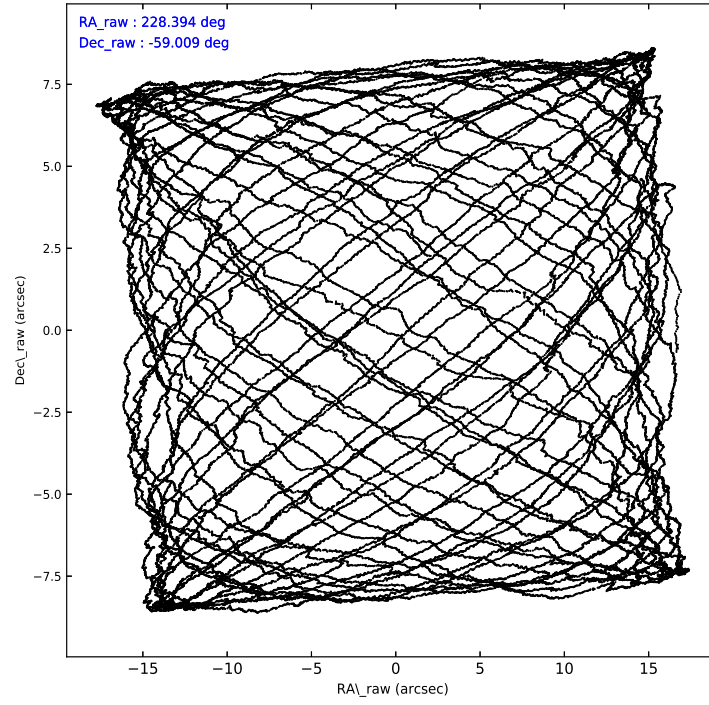
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7151	7696	31567	68927
	3%	4%	12%	26%
grade 1 events	654	92	326	699
	0%	0%	0%	0%
grade 2 events	33805	4391	41926	21608
	16%	2%	16%	8%
grade 3 events	3498	1619	17112	8308
	1%	1%	6%	3%
grade 4 events	3315	1539	16812	7734
	1%	0%	6%	2%
grade 5 events	14153	5485	16560	9248
	6%	3%	6%	3%
grade 6 events	56944	3870	62107	17349
	27%	2%	24%	6%
grade 7 events	85232	129872	66319	128553
	41%	84%	26%	48%

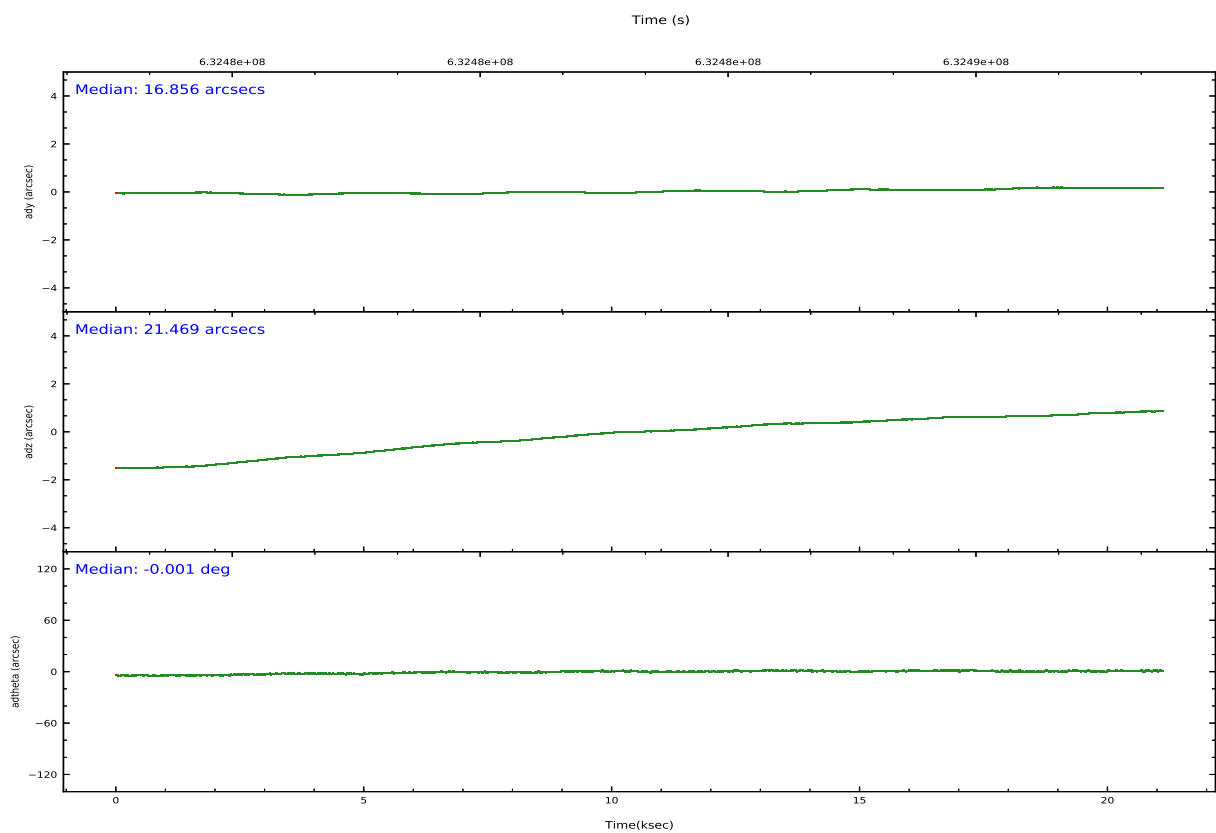
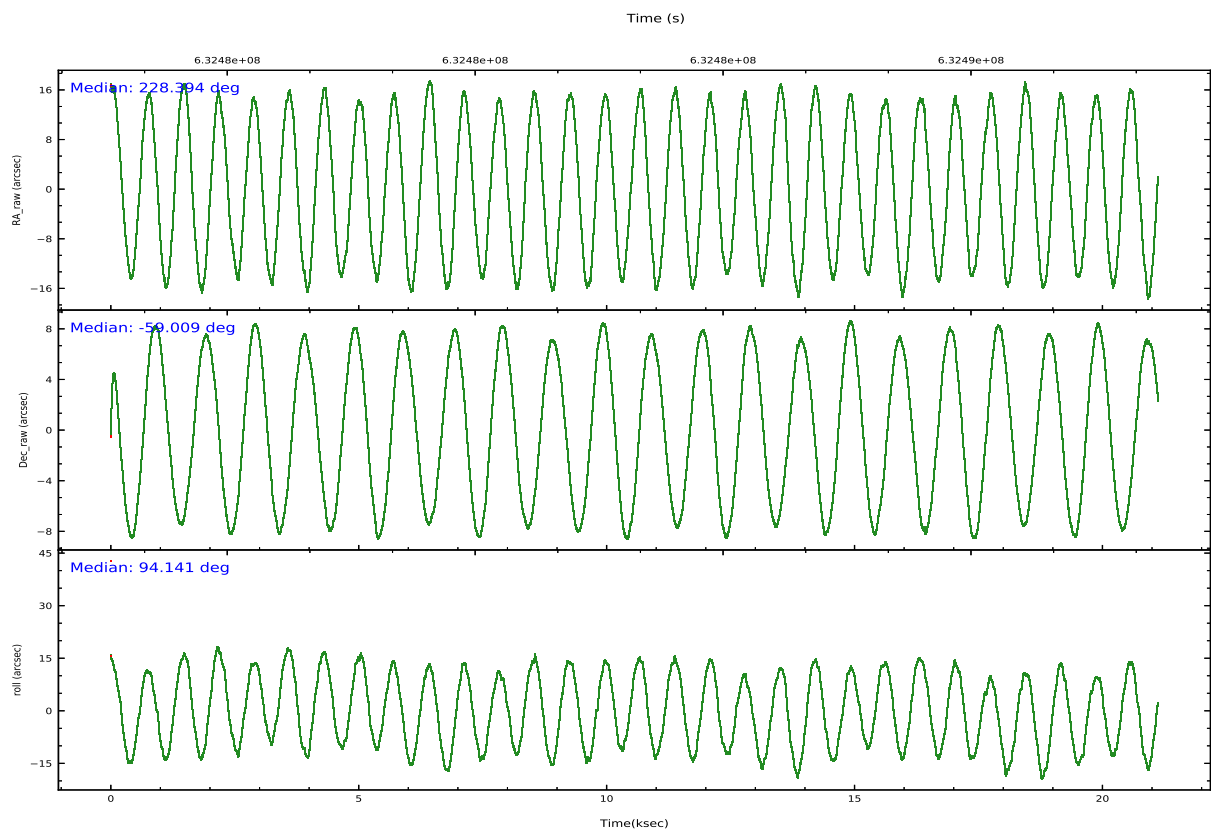
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	228.424466	228.40648998387
[deg] Pointing Dec	-59.031023	-59.012912873994
[deg] Pointing Roll	94.016428	94.140981391753
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	632472774.184000	632471548.00467
Observation start date	2018-01-16T06:51:45	2018-01-16T06:32:28
[s] Observation end time (MET)	632493774.184000	632494698.6560301
Observation end date	2018-01-16T12:41:45	2018-01-16T12:58:18
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
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



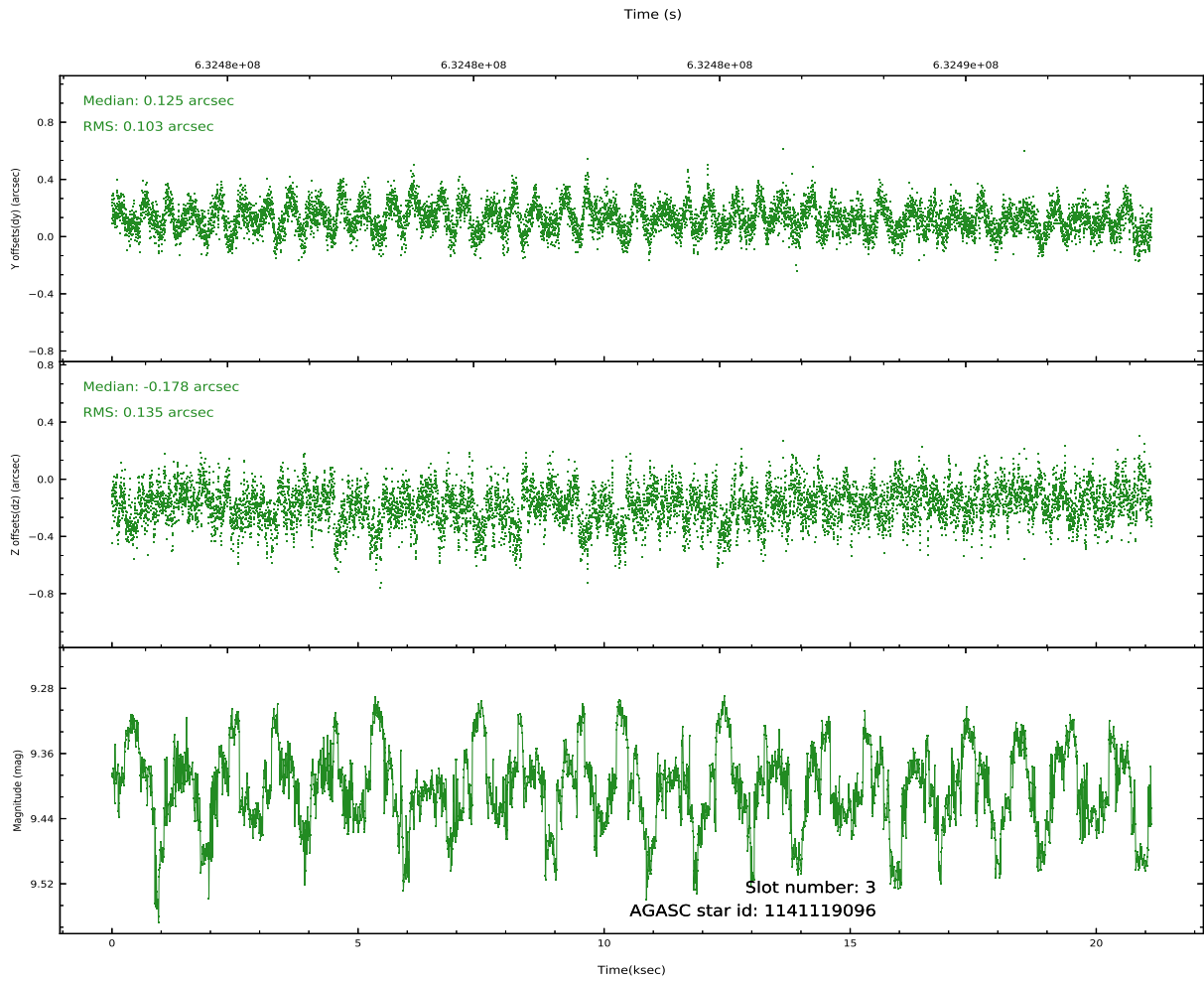
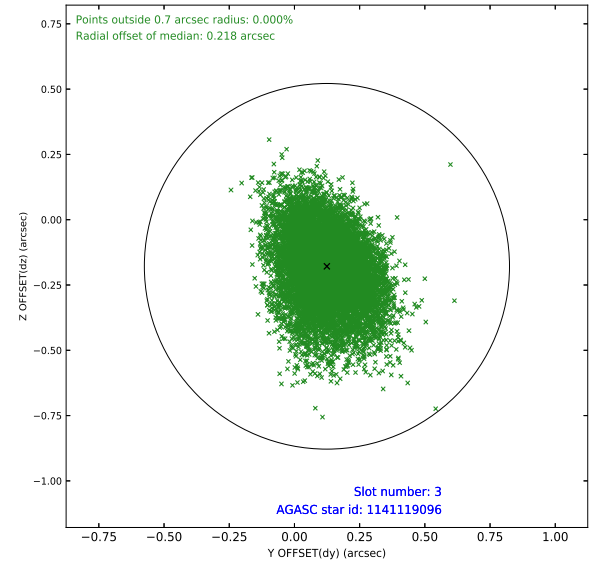
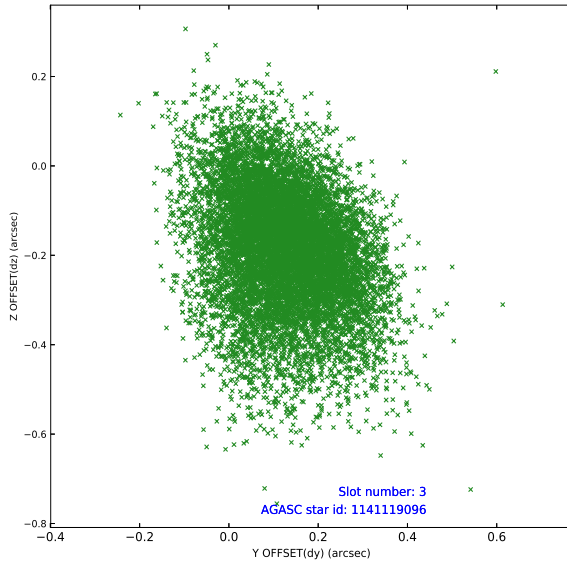


Slot Statistics

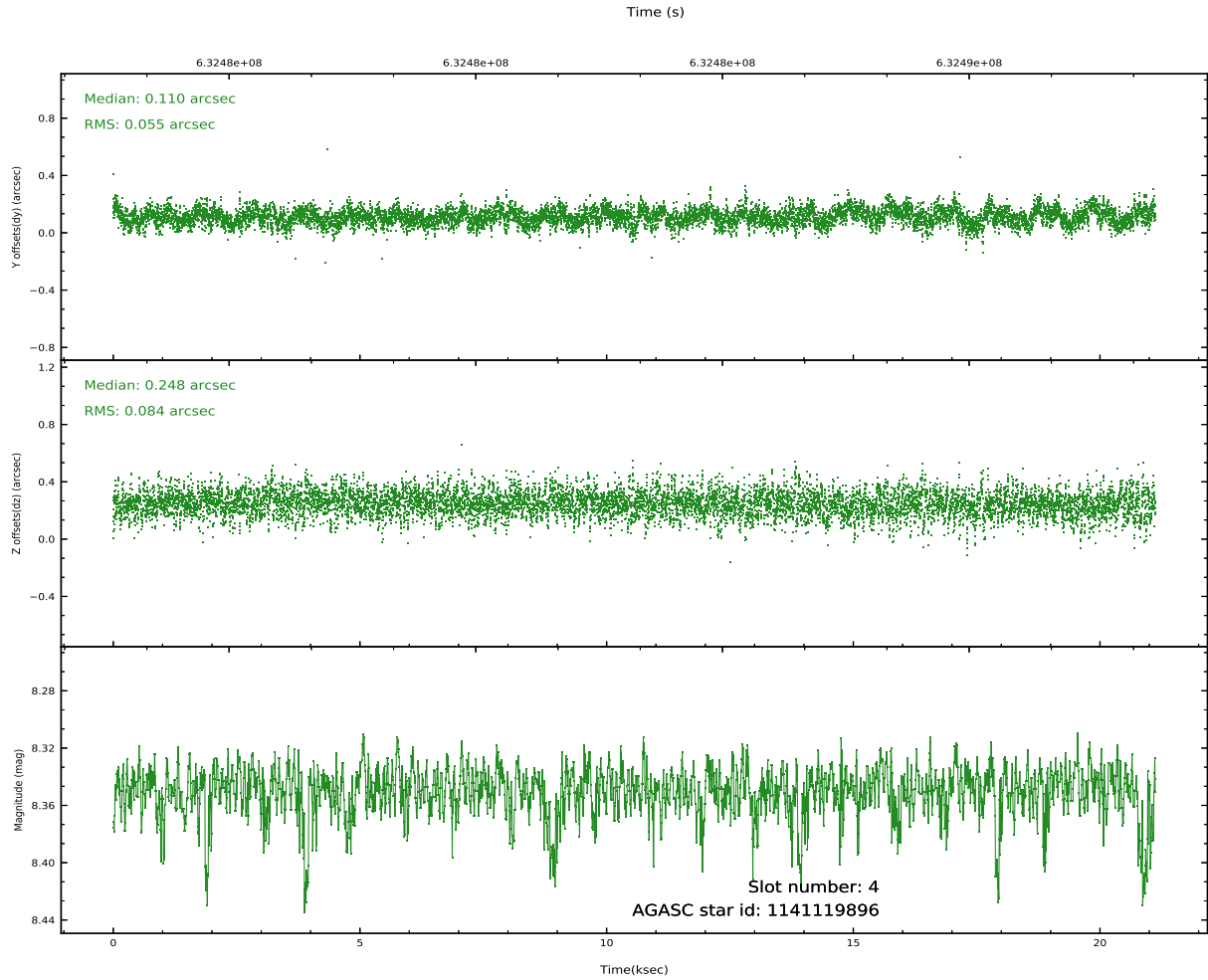
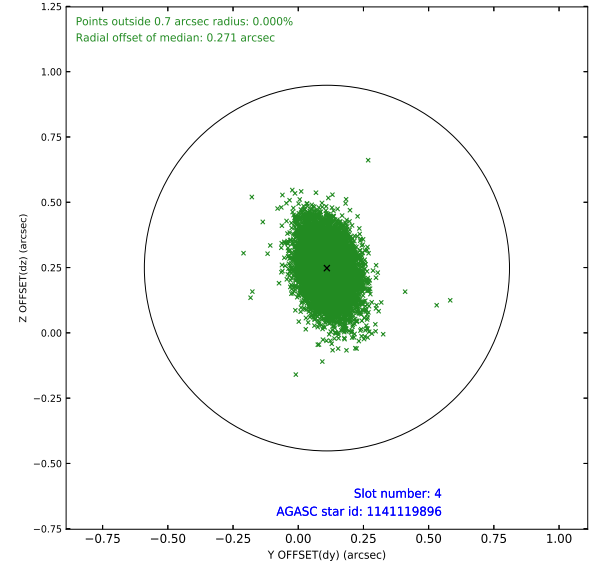
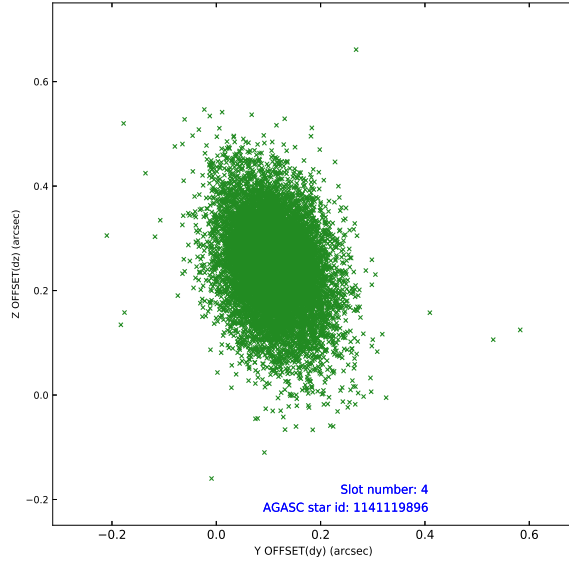
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.13	5153	1.000	0.278	-0.196	0.017	0.030	0.000000	0.000000	926.28	-1738
1	FID		ACIS-S-5	7.15	5151	1.000	-0.228	0.219	0.013	0.020	0.000000	0.000000	-1822.98	159
2	FID		ACIS-S-6	7.30	5153	1.000	-0.073	-0.012	0.024	0.033	0.000000	0.000000	391.50	803
3	GUIDE	used	1141119096	9.40	10296	1.000	0.125	-0.178	0.176	0.302	228.052751	-59.529718	-1745.83	803
4	GUIDE	used	1141119896	8.35	10297	1.000	0.110	0.248	0.103	0.180	229.637327	-59.405643	-1521.00	-2120
5	GUIDE	used	1141121072	9.02	10294	1.000	-0.026	-0.099	0.156	0.259	227.898628	-59.420815	-1336.81	1059
6	GUIDE	used	1141120488	8.74	10301	1.000	-0.107	0.053	0.133	0.225	228.236450	-59.504731	-1677.92	462
7	GUIDE	used	1141114888	7.00	10302	1.000	-0.096	-0.013	0.120	0.223	229.339260	-58.368001	2248.19	-1888

2.4 Star Slots

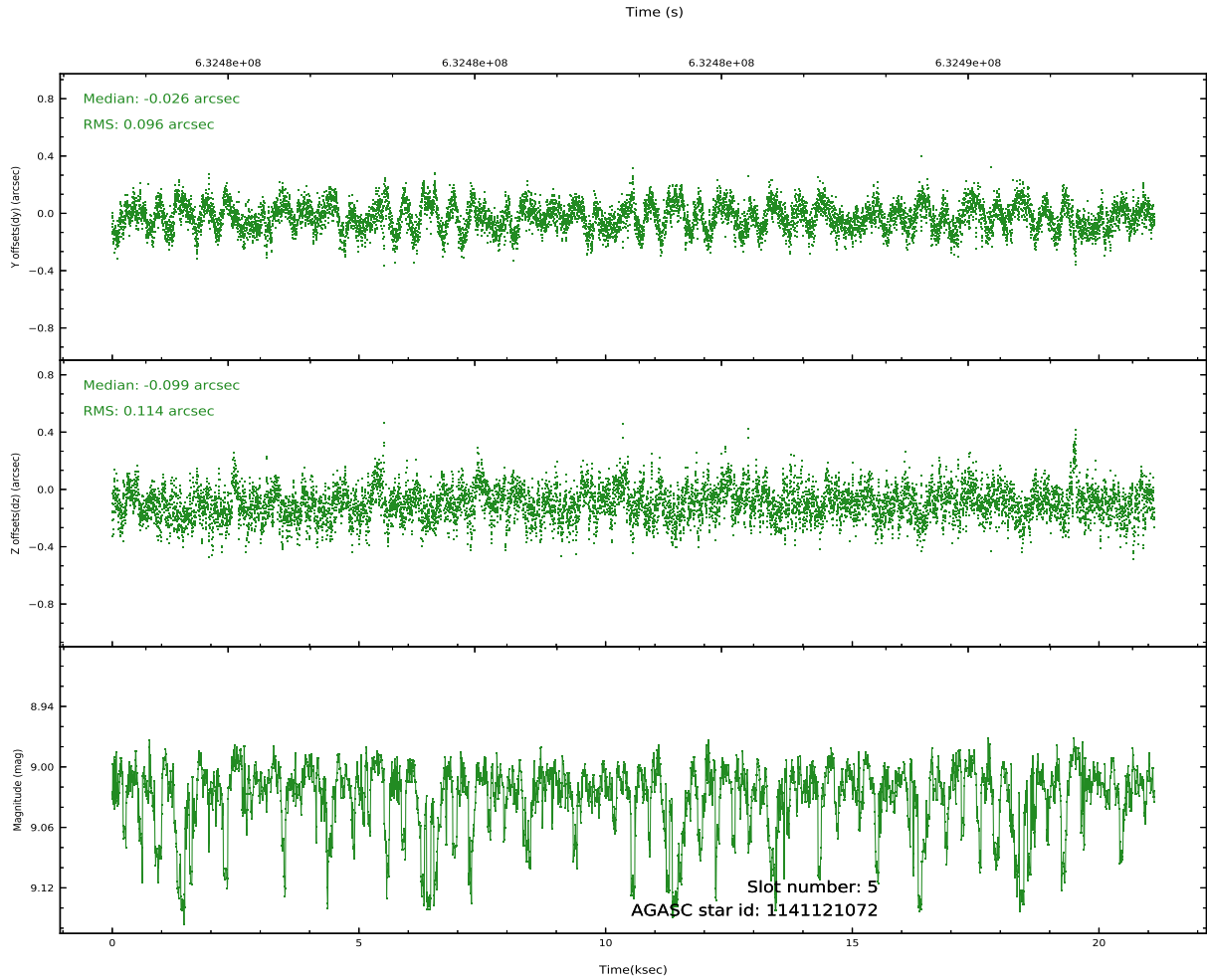
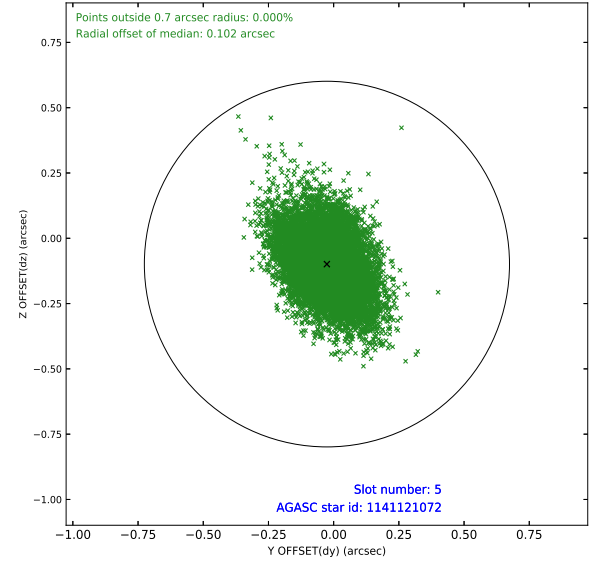
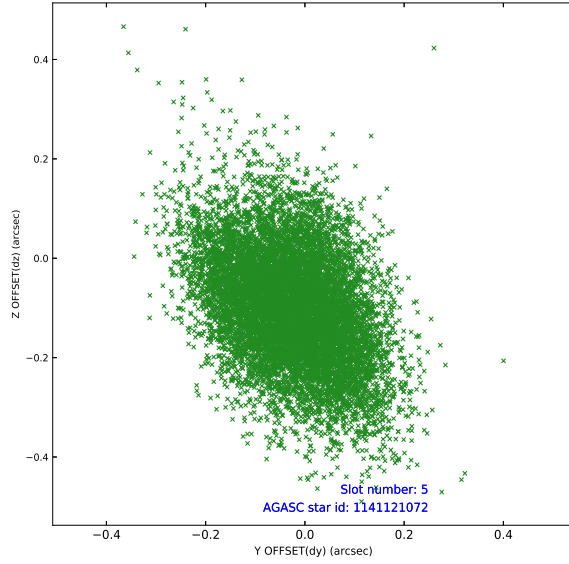
2.4.1 Slot 3



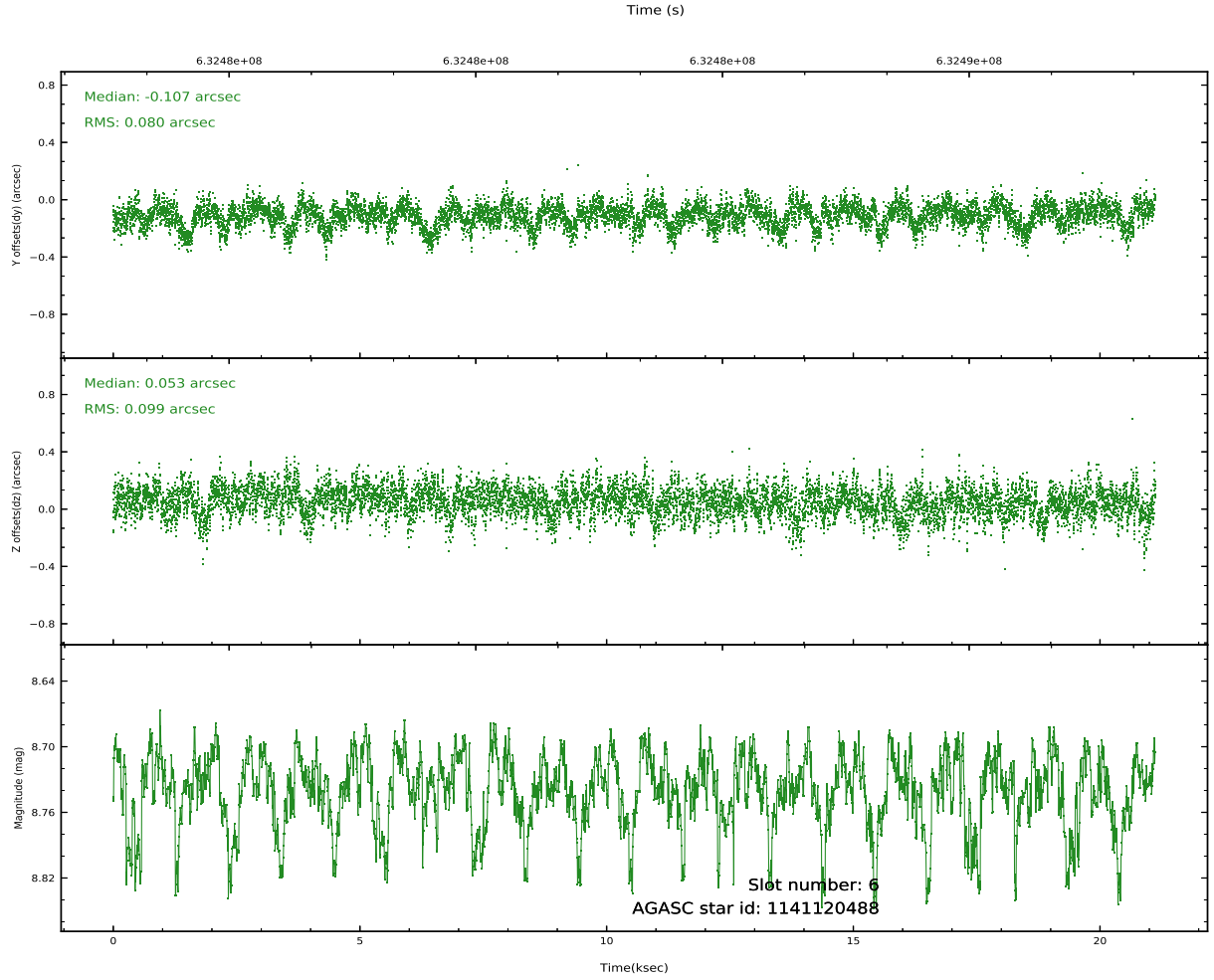
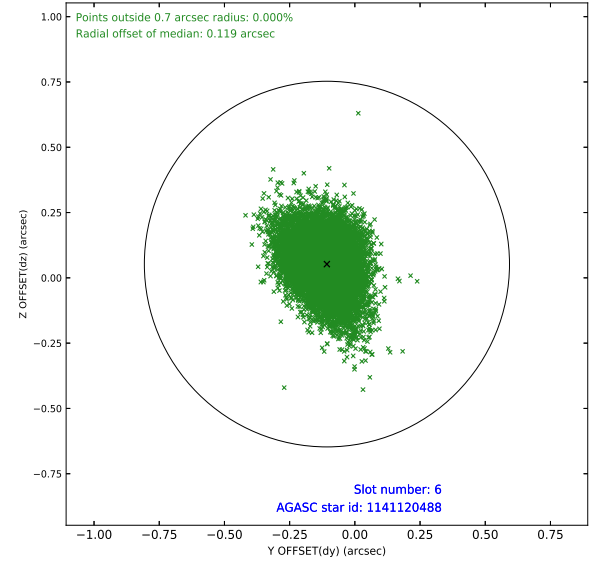
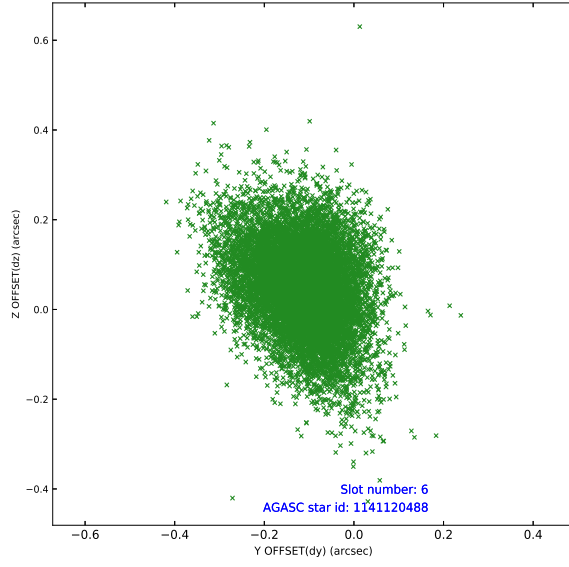
2.4.2 Slot 4



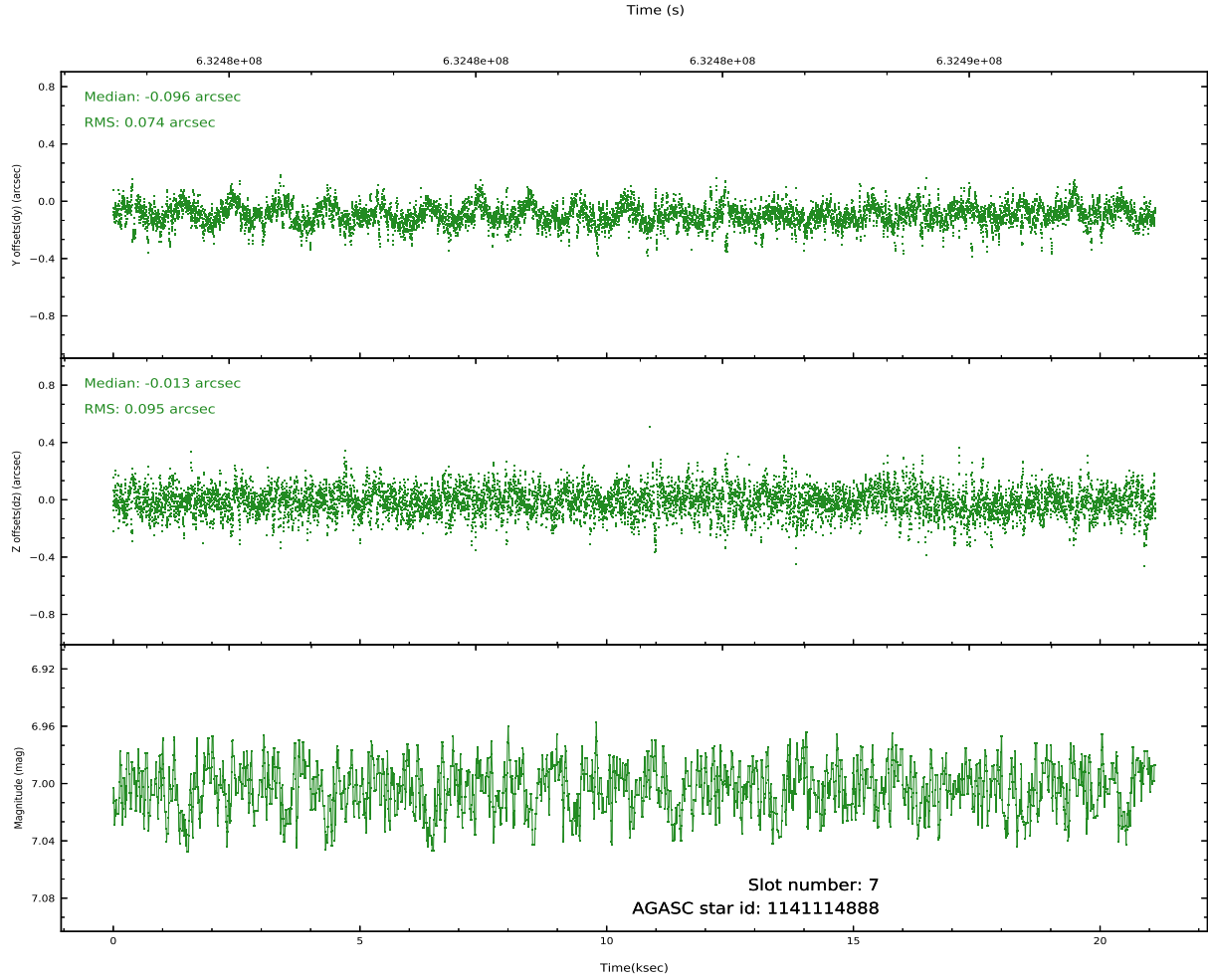
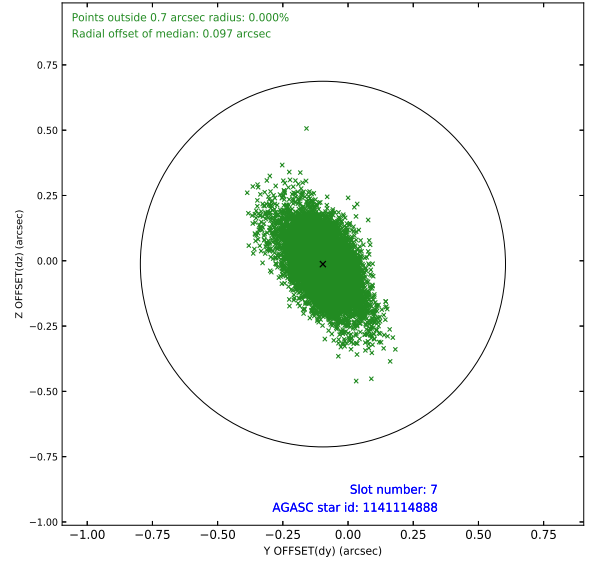
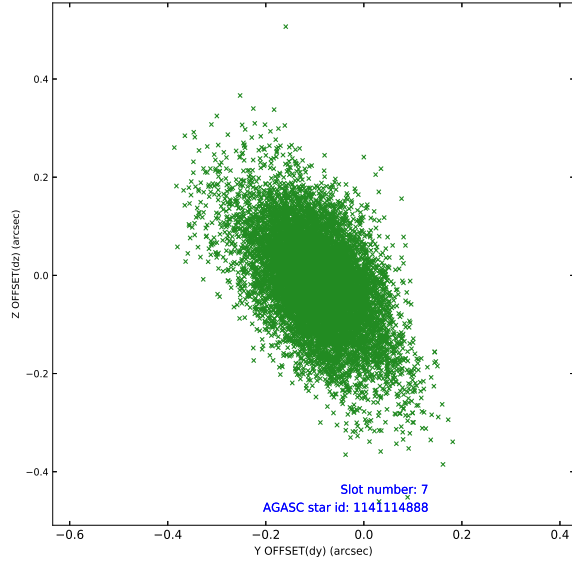
2.4.3 Slot 5



2.4.4 Slot 6

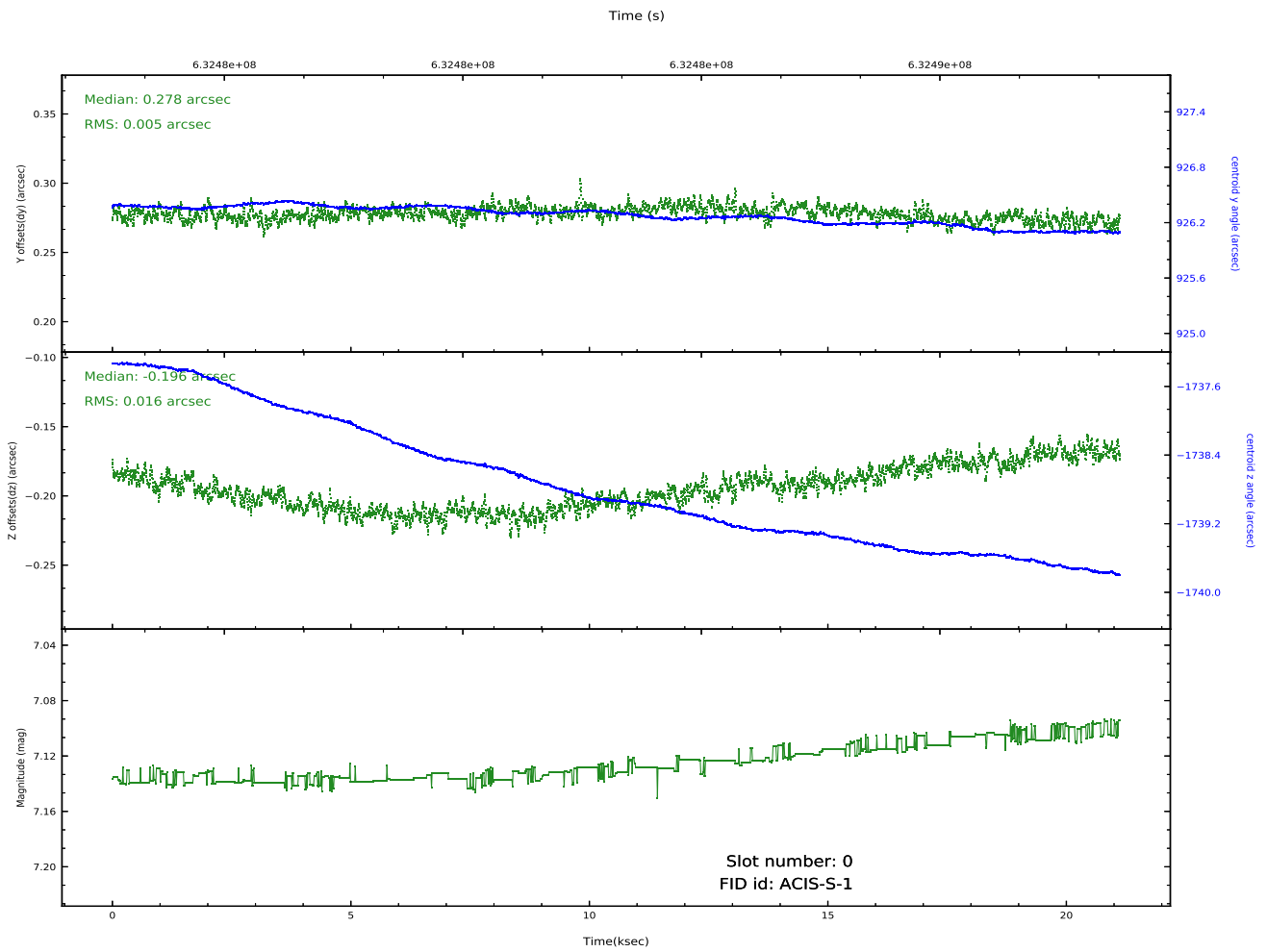
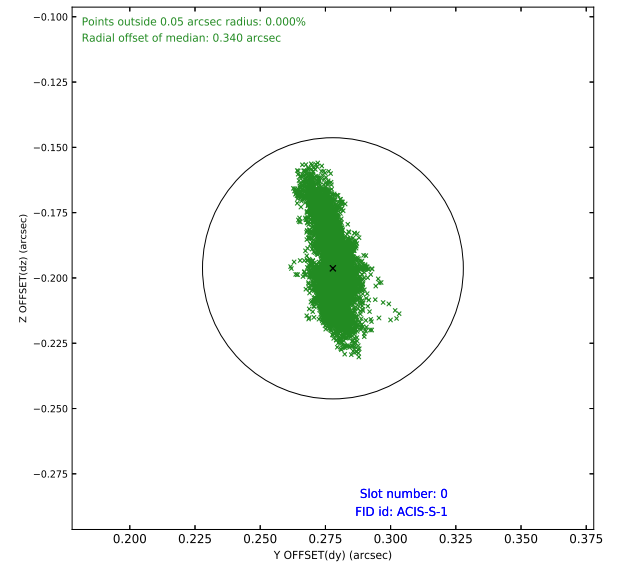
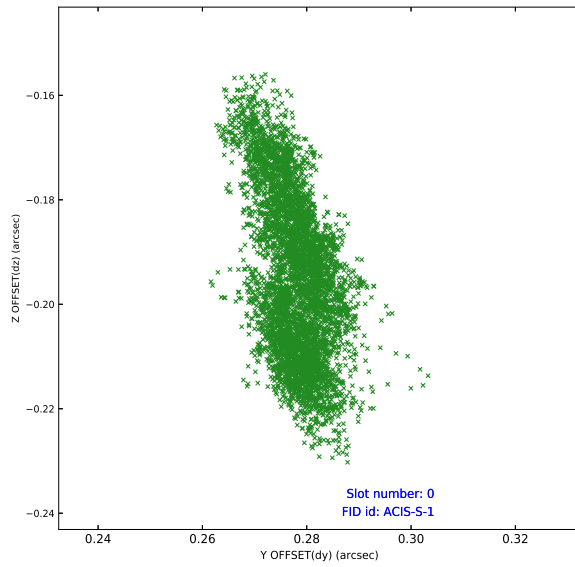


2.4.5 Slot 7

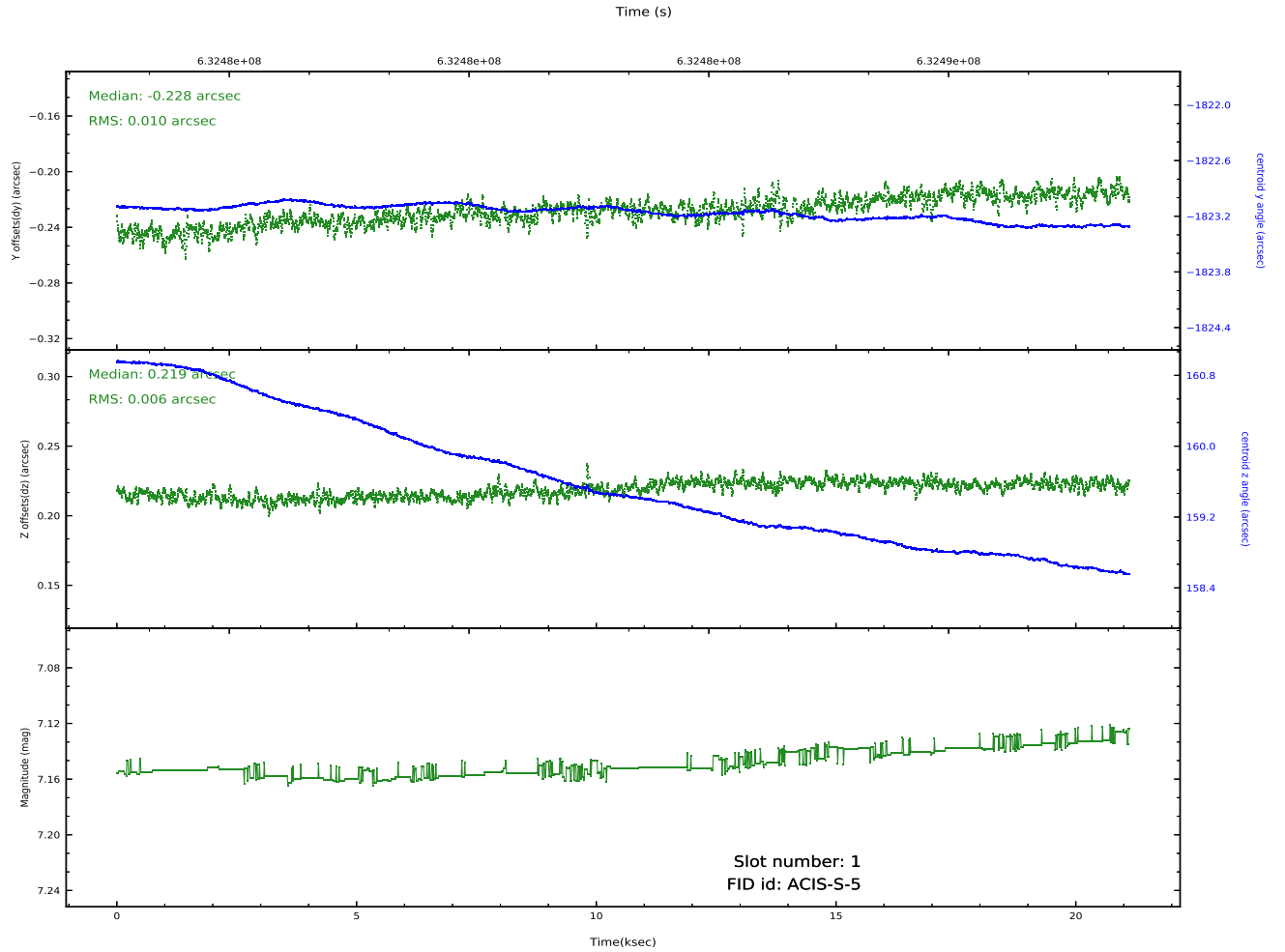
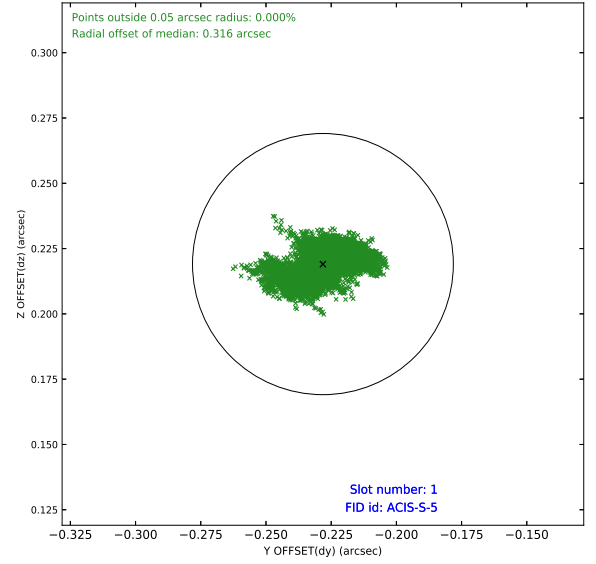
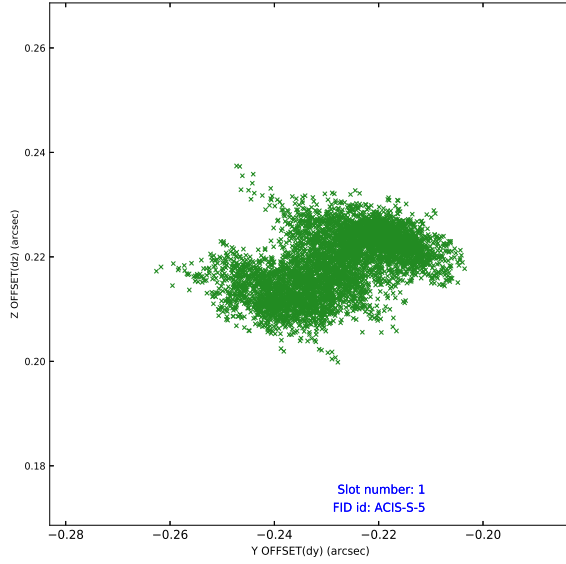


2.5 FID Slots

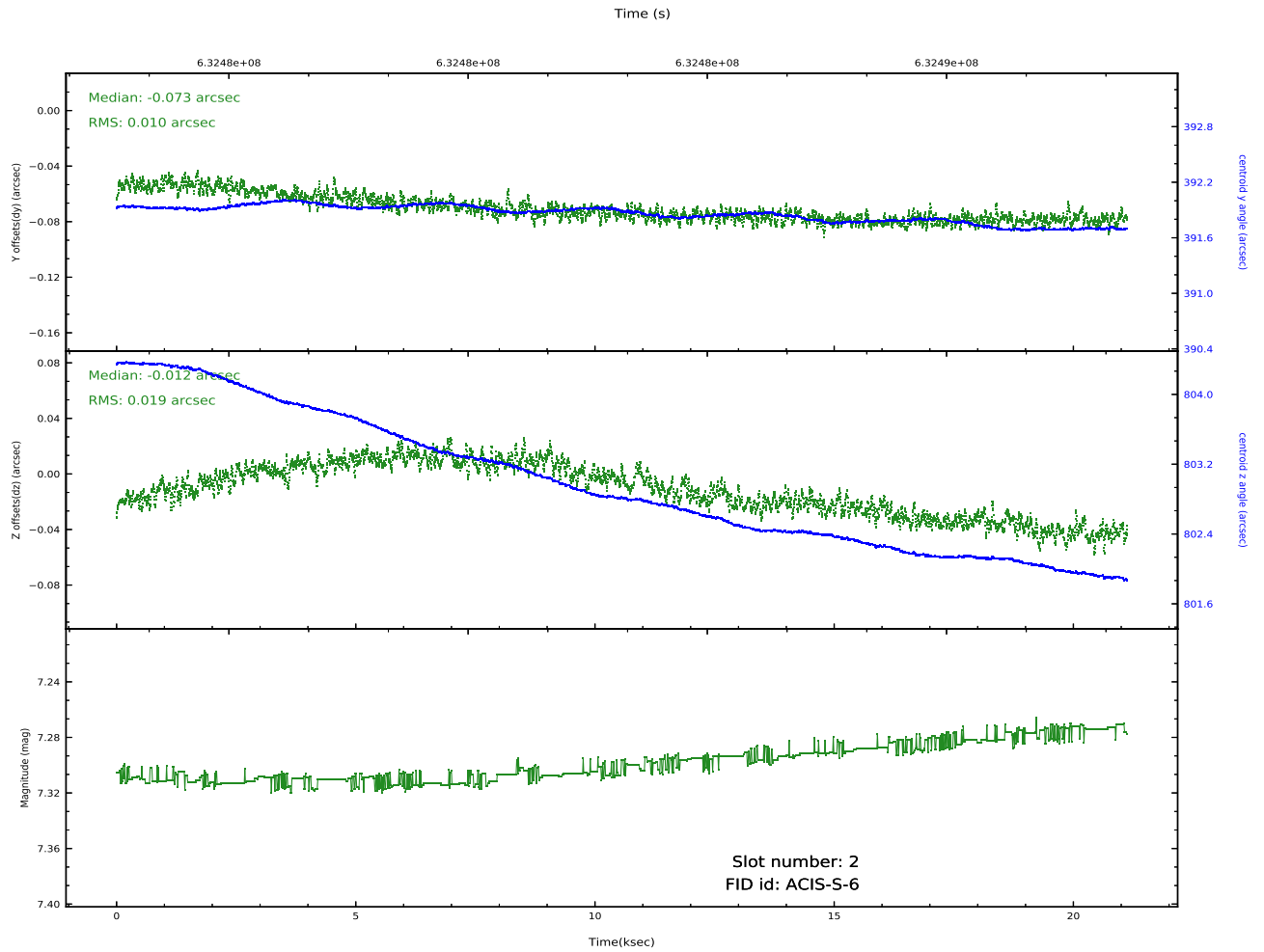
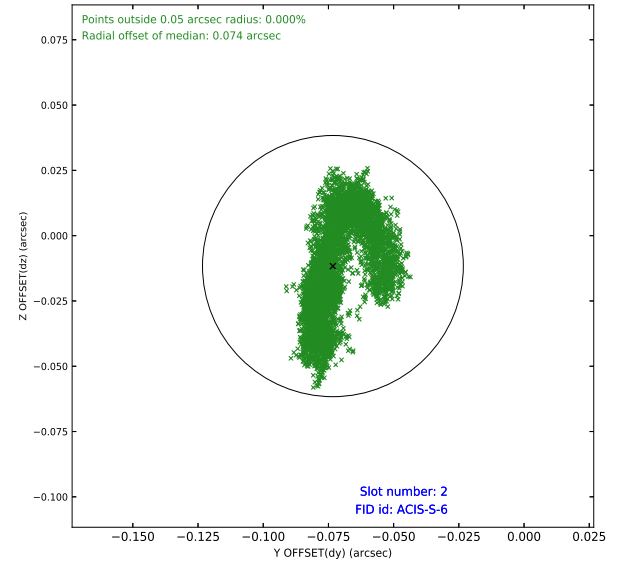
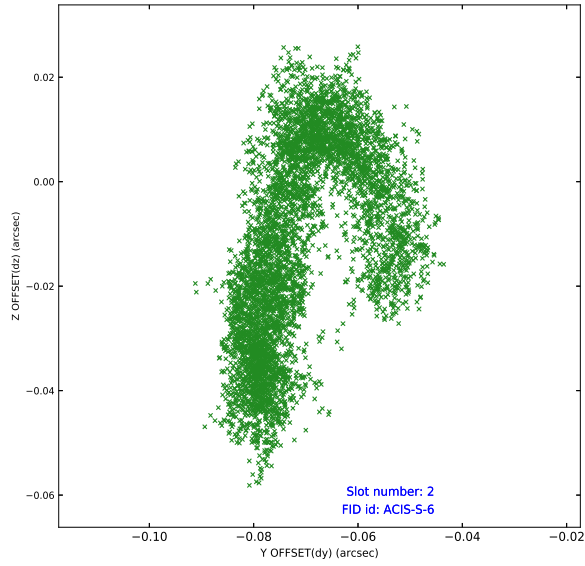
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.109746658564

A.2 Comments