

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4845 - L2 Version 4
Chandra X-Ray Center

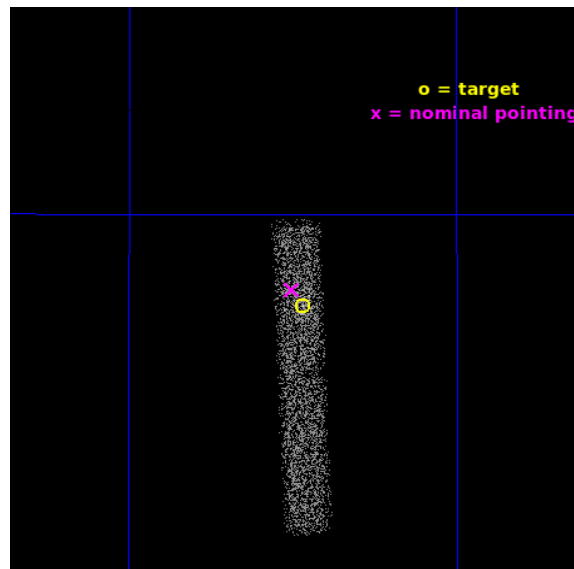
L2 Processing Date : Sep 21 2020

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

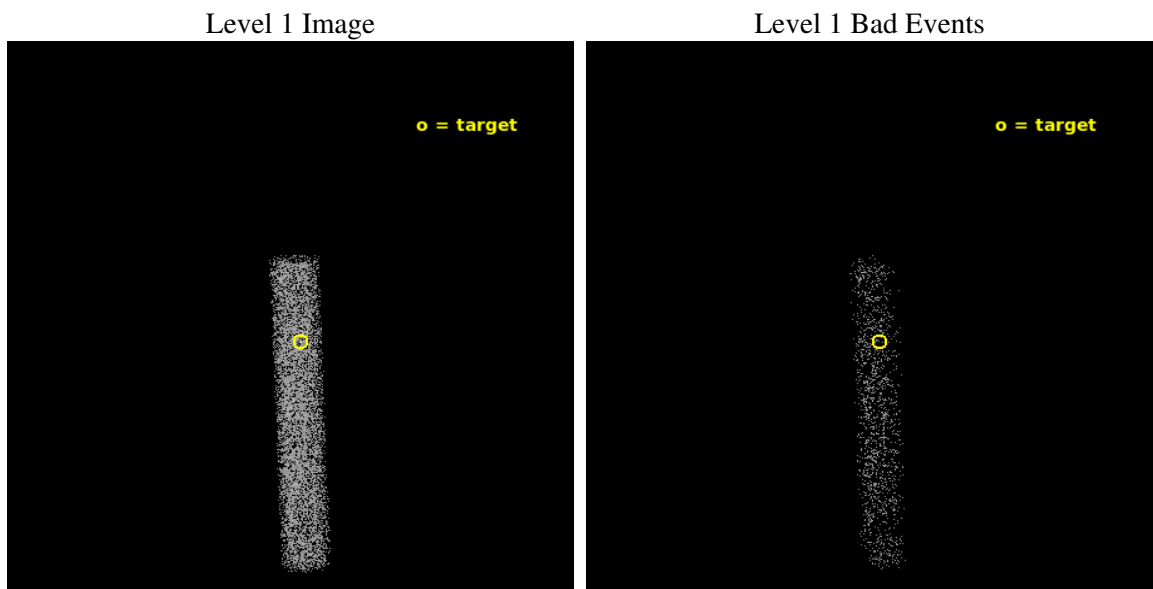
seq_num	700927	Sequence number
obs_id	4845	Observation id
title	Are there any true Seyfert 2 nuclei?	Proposal title
observer	Prof RICHARD POGGE	Principal investigator
object	NGC 3982	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	179.117083	Observer's specified target RA [deg]
dec_targ	55.125278	Observer's specified target Dec [deg]
ra_nom	179.12546212252	Nominal RA [deg]
dec_nom	55.1324926051	Nominal Dec [deg]
roll_nom	87.717636896103	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10148.800151199	Sum of GTIs [s]
livetime	9204.4260395421	Livetime [s]
ontime7	10148.800151199	Sum of GTIs [s]
l2events	5151	Number of level 2 events



2 OBI

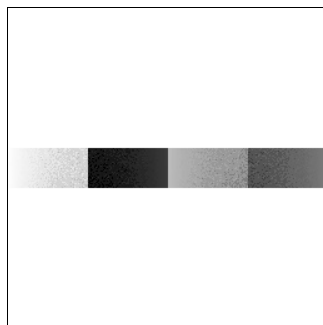
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10148.800151199	Sum of GTIs [s]
caldsver	4.9.2	 	ontime7	10148.800151199	Sum of GTIs [s]
date	2020-09-21T23:57:49	Date and time of file creation	l1events	12938	Number of level 1 events
revision	4	Processing version of data			

2.1.4 Events

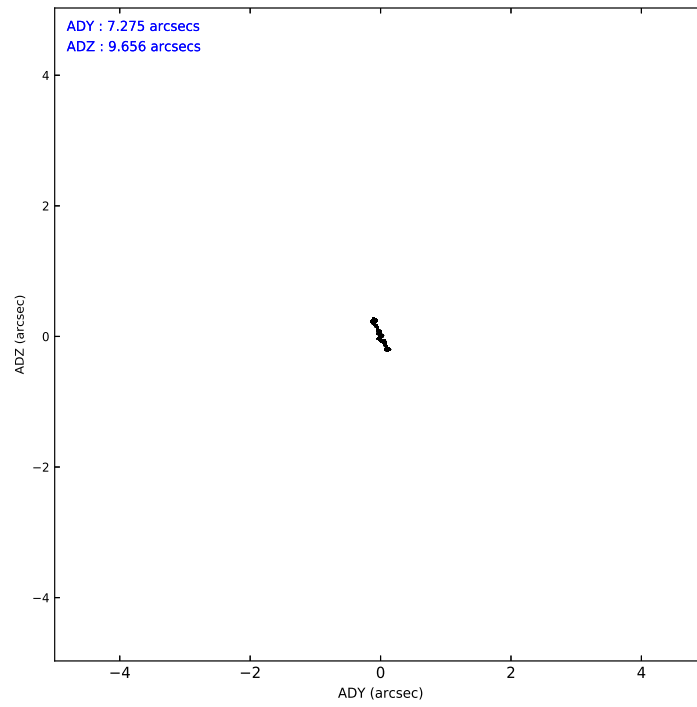
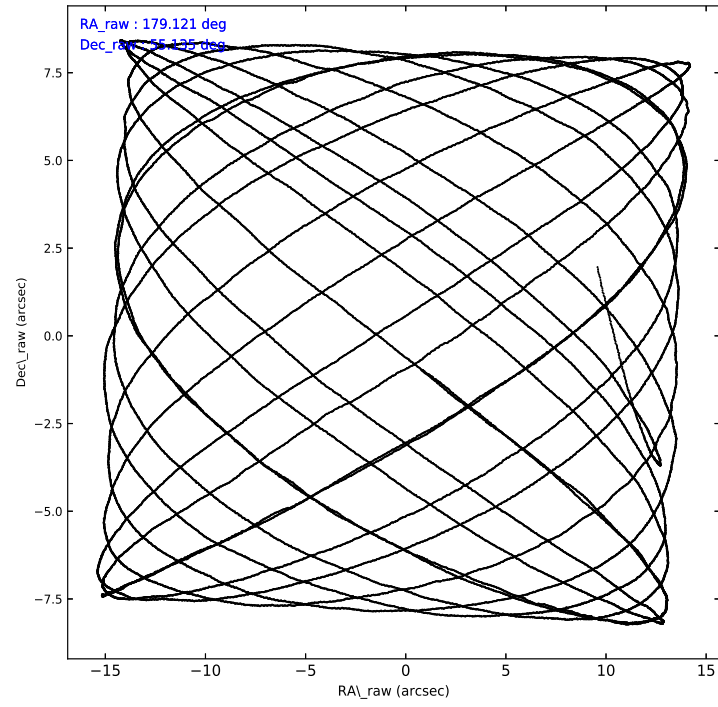
	ccd 7
level 1 events	12938
rejected events	7575
rejected %	58%

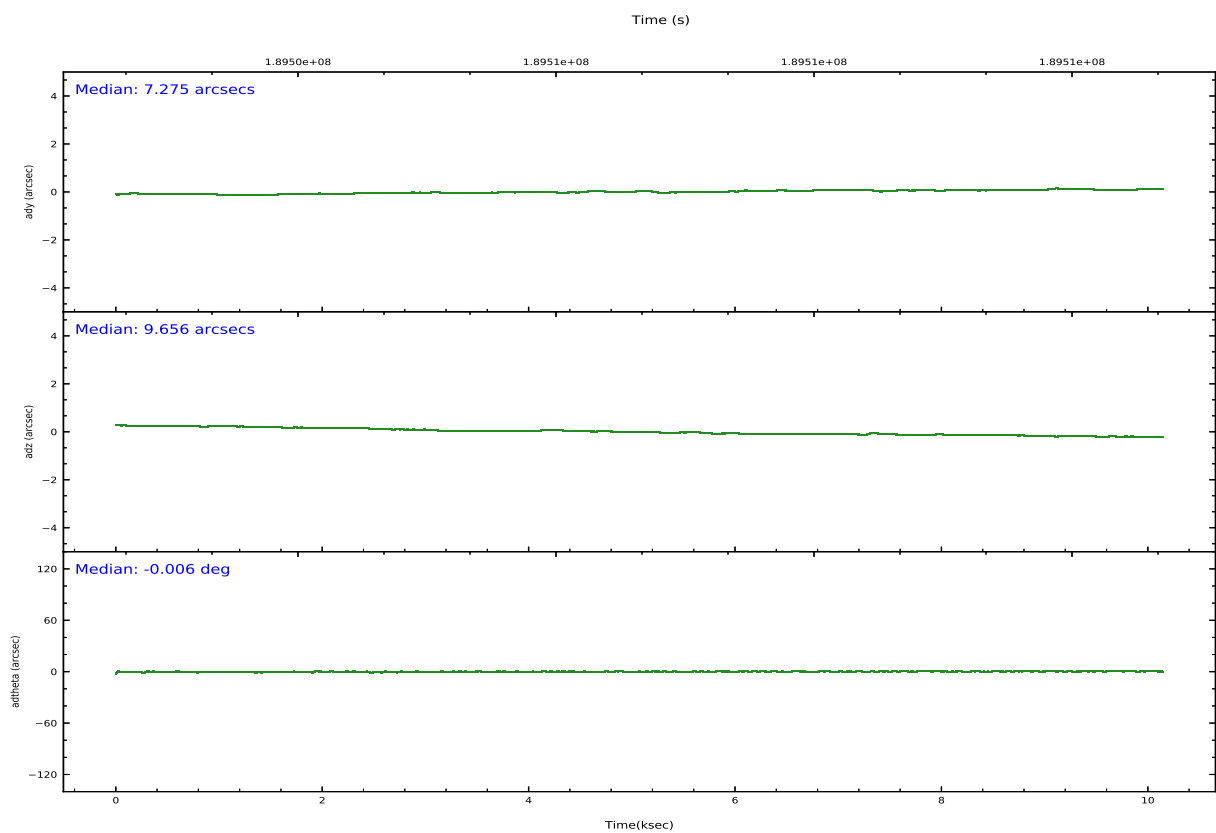
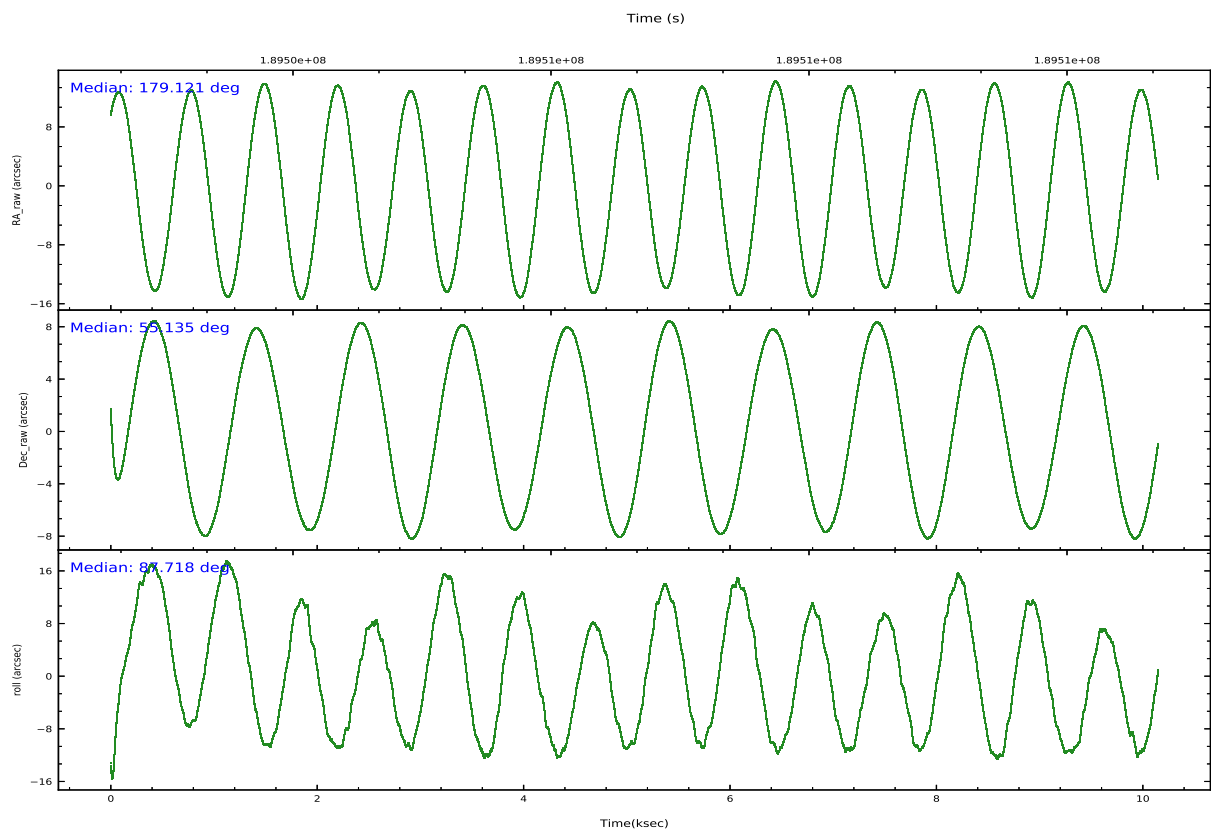
	ccd 7
grade 0 events	688
	5%
grade 1 events	10
	0%
grade 2 events	1141
	8%
grade 3 events	747
	5%
grade 4 events	753
	5%
grade 5 events	1213
	9%
grade 6 events	2657
	20%
grade 7 events	5729
	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	179.143424	179.12546212252	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	55.110791	55.1324926051	Subarray start row	449	449
[deg] Pointing Roll	87.538772	87.717636896103	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	189503384.184000	189501998.95663			
Observation start date	2004-01-03T07:48:40	2004-01-03T07:26:38			
[s] Observation end time (MET)	189513384.184000	189513916.63215			
Observation end date	2004-01-03T10:35:20	2004-01-03T10:45:16			
Read mode	TIMED	TIMED			

2.3 Aspect



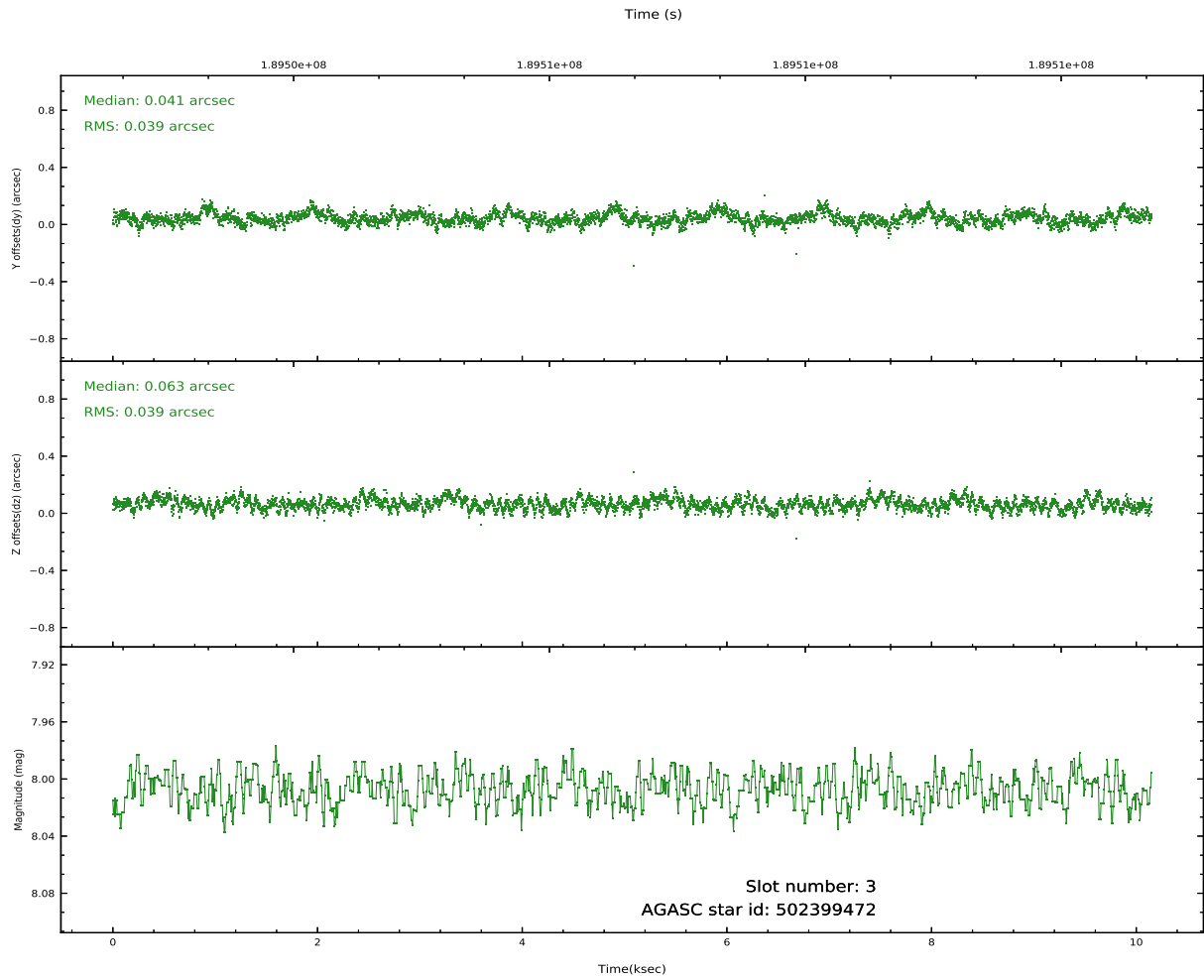
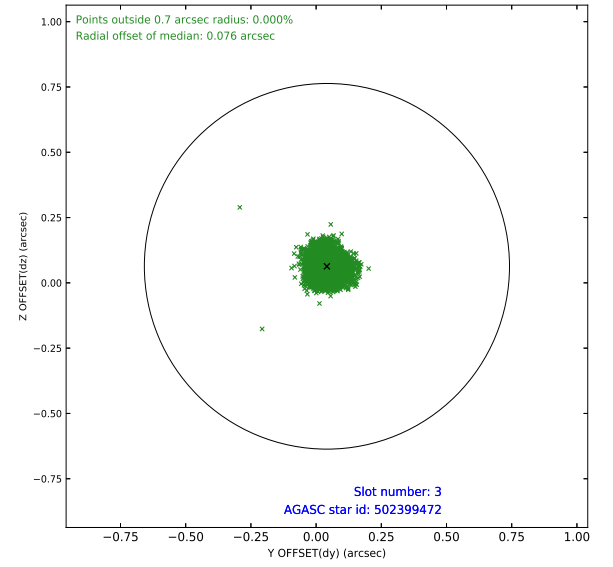
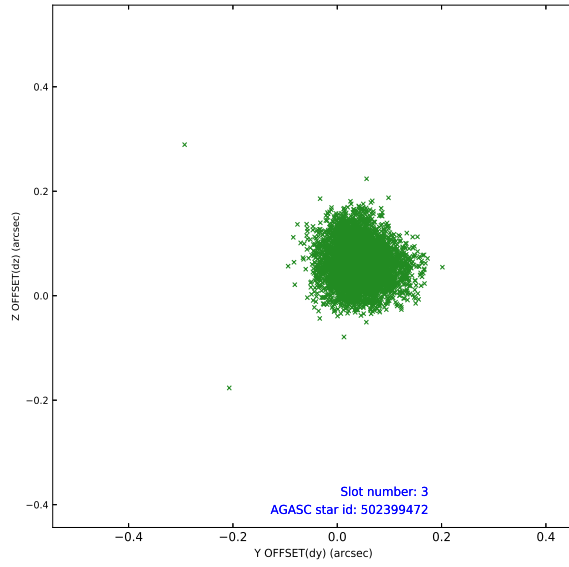


Slot Statistics

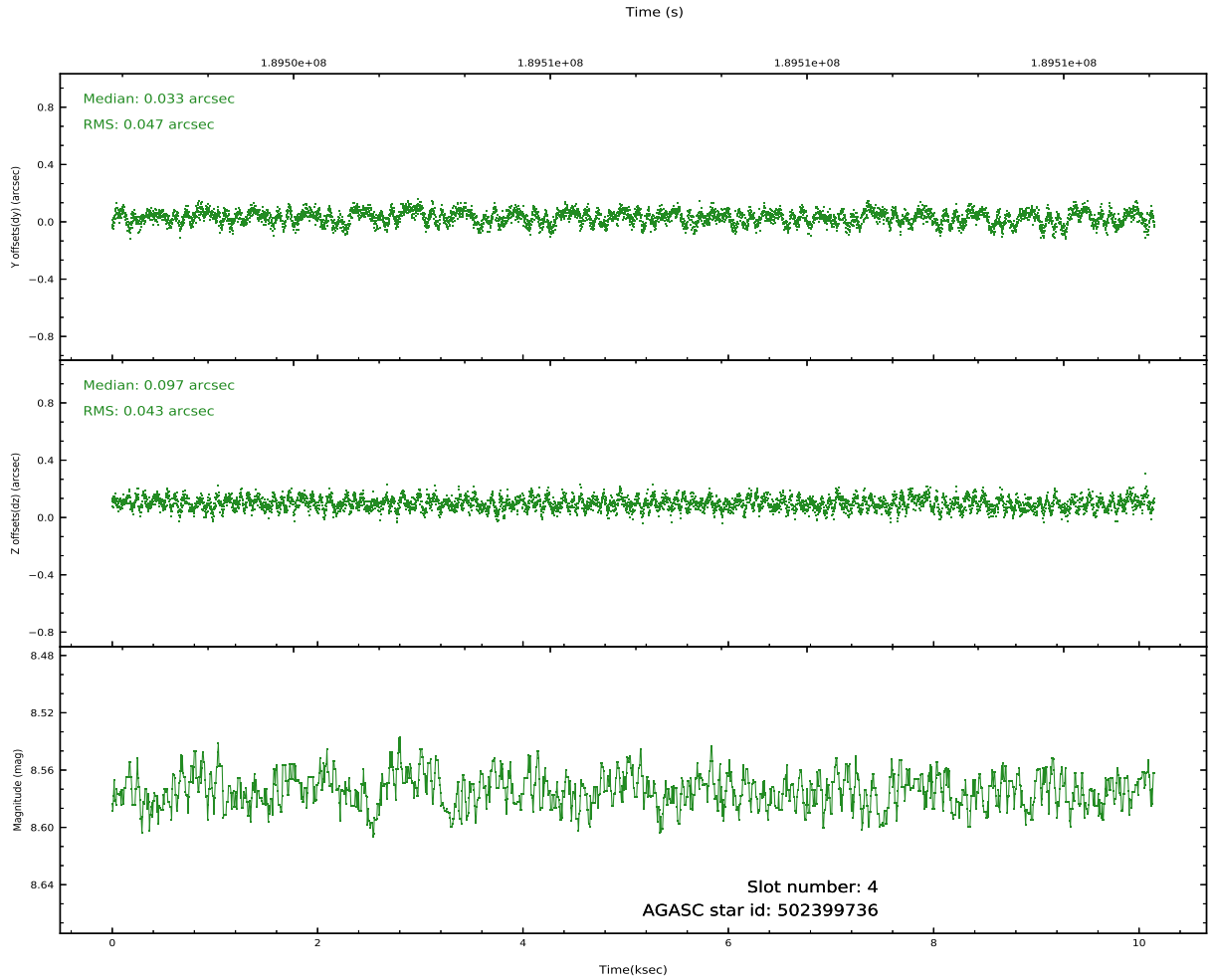
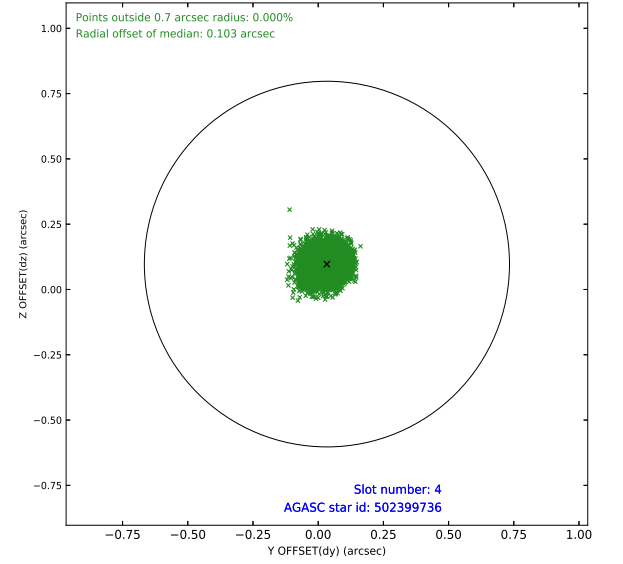
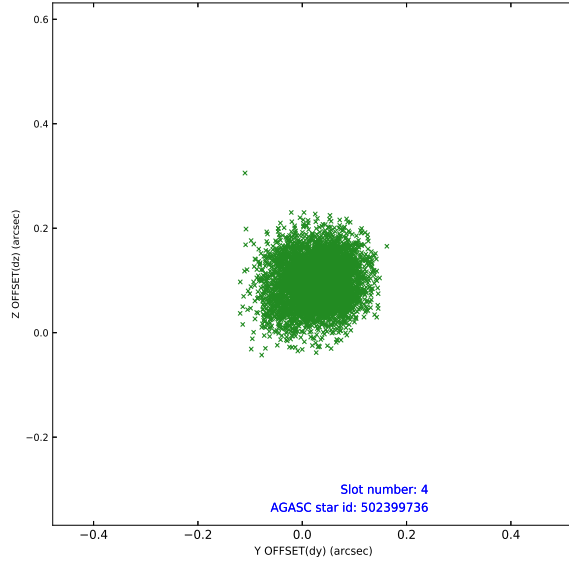
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2476	1.000	-0.062	-0.059	0.008	0.014	0.000000	0.000000	-760.05	-1730
1	FID		ACIS-S-4	7.20	2476	1.000	0.121	0.045	0.006	0.010	0.000000	0.000000	2153.12	177
2	FID		ACIS-S-5	7.23	2476	1.000	-0.091	0.022	0.009	0.015	0.000000	0.000000	-1812.30	171
3	GUIDE	used	502399472	8.01	4952	1.000	0.041	0.063	0.059	0.094	179.672347	54.485646	-2196.60	-1201
4	GUIDE	used	502399736	8.57	4950	1.000	0.033	0.097	0.068	0.109	179.860915	54.569737	-1874.16	-1579
5	GUIDE	used	502400568	8.68	4950	1.000	0.003	-0.047	0.065	0.107	178.868651	54.779372	-1215.51	518
6	GUIDE	used	502793960	9.57	4945	1.000	-0.014	0.073	0.083	0.135	179.393376	55.531414	1535.66	-443
7	GUIDE	used	502793208	9.16	4946	1.000	-0.070	-0.188	0.107	0.162	177.980338	55.276529	513.95	2409

2.4 Star Slots

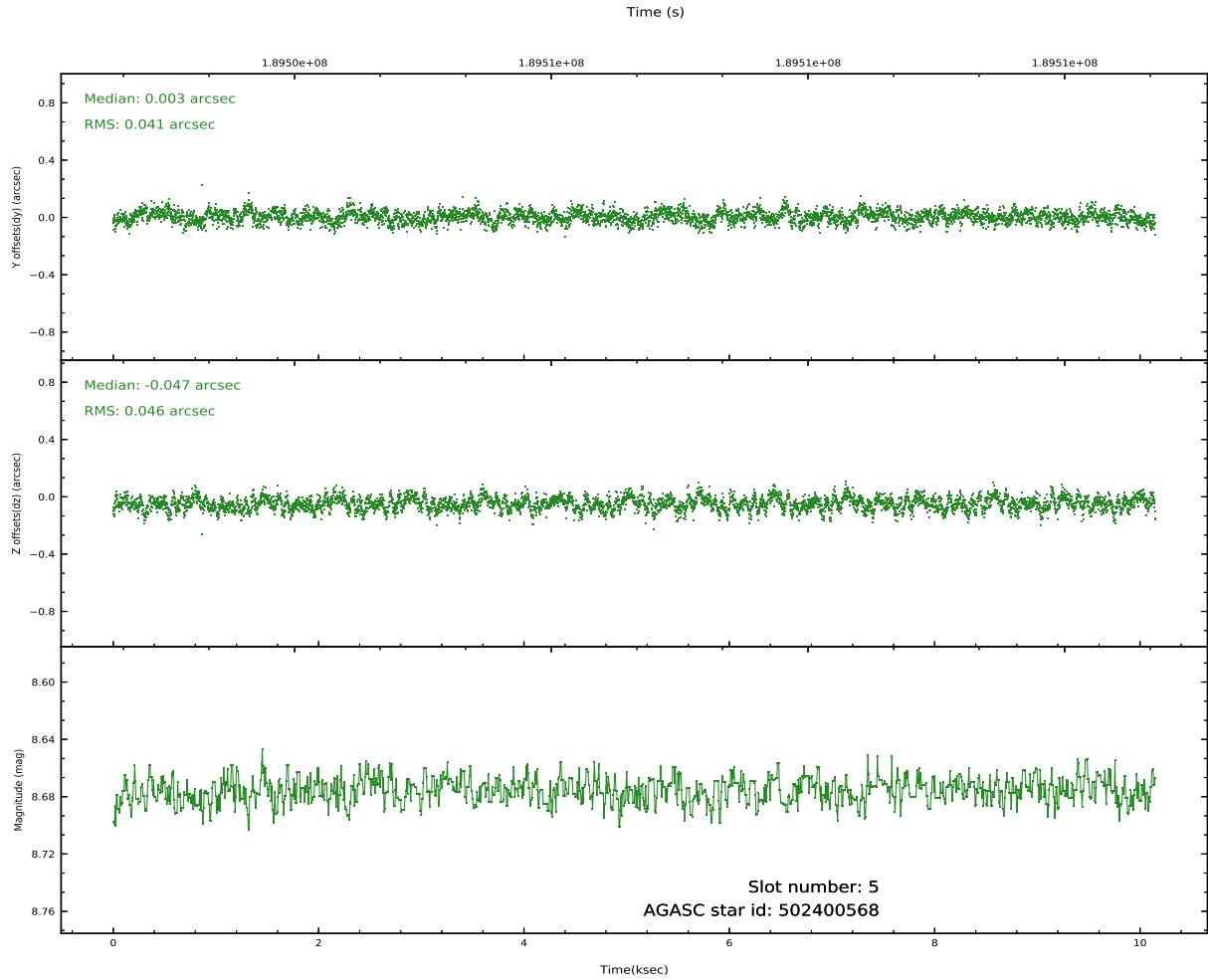
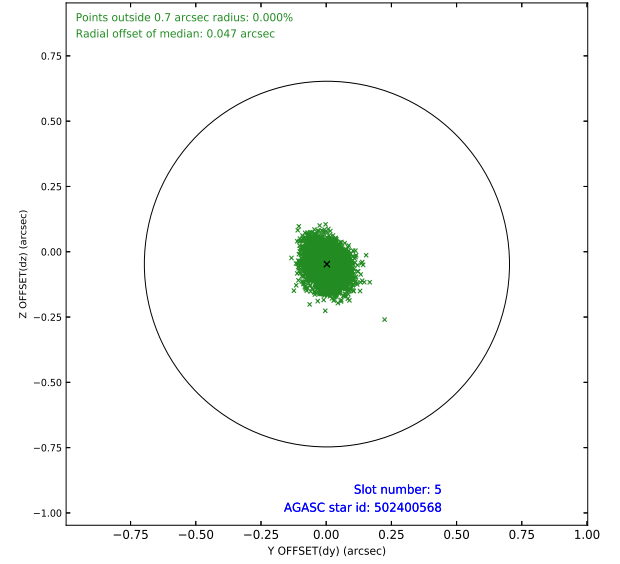
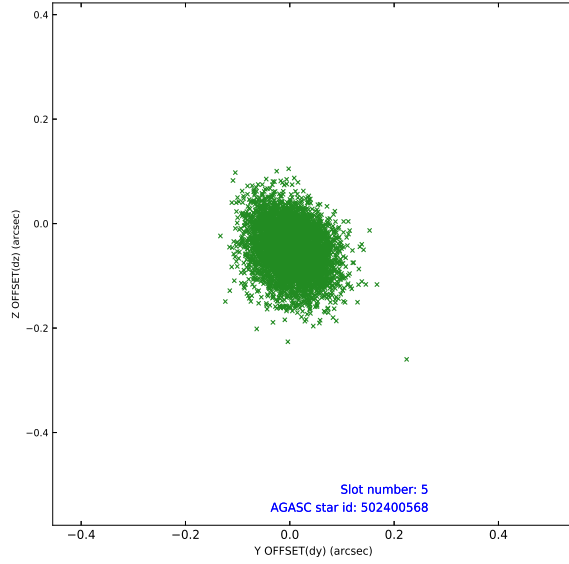
2.4.1 Slot 3



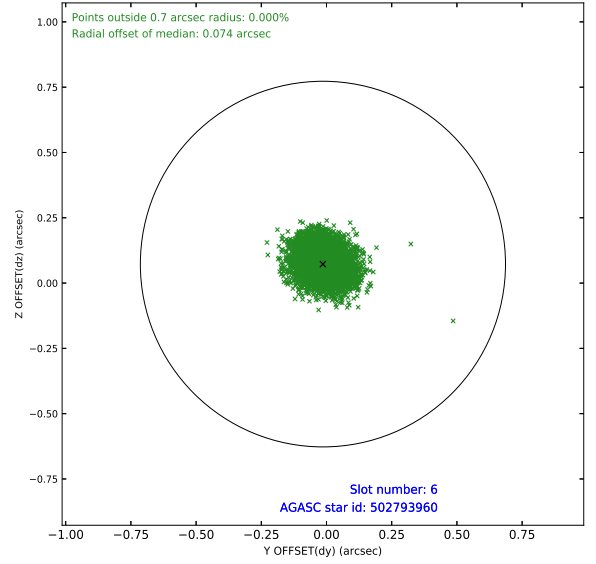
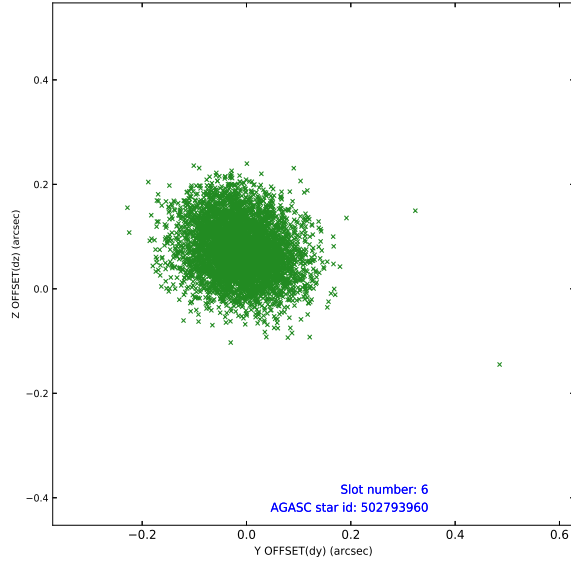
2.4.2 Slot 4



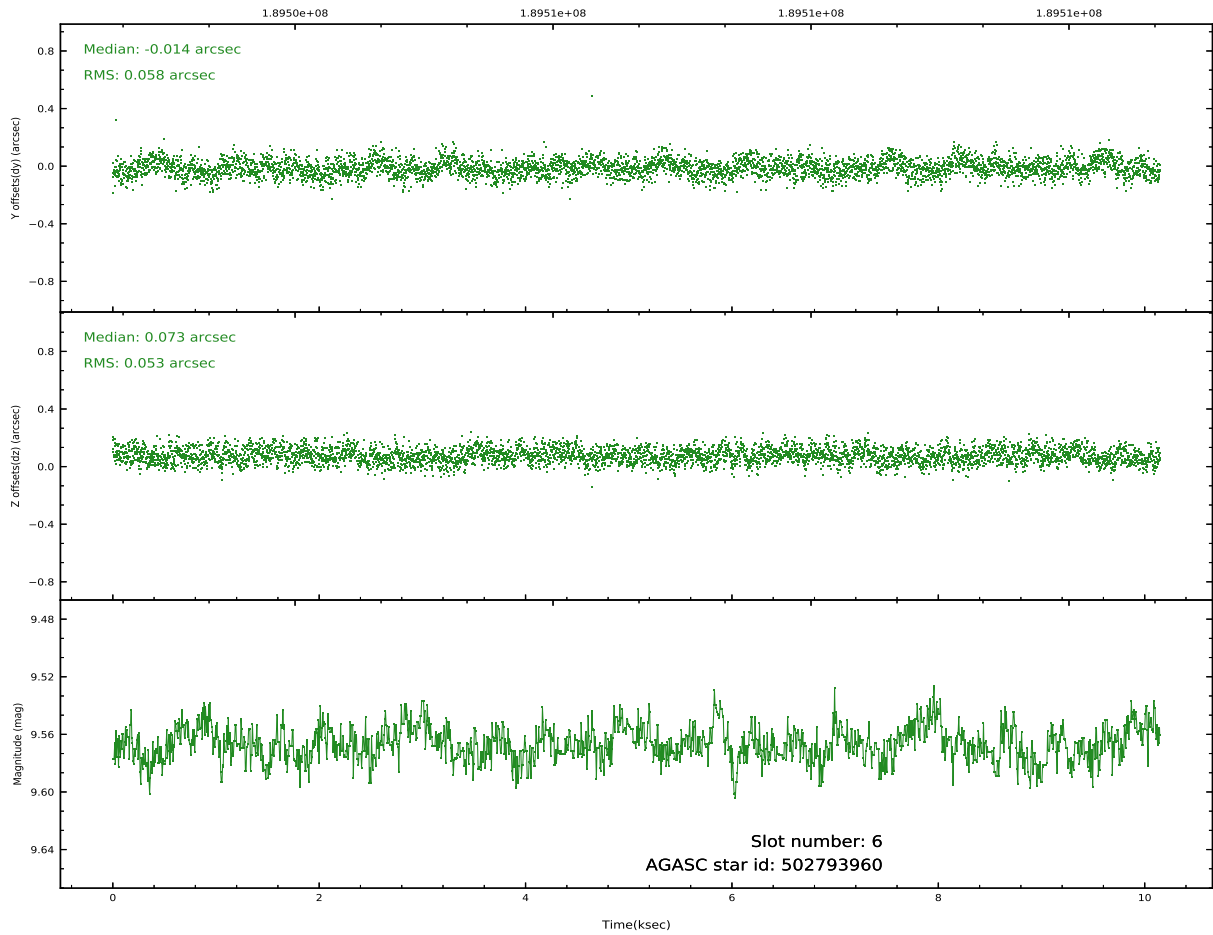
2.4.3 Slot 5



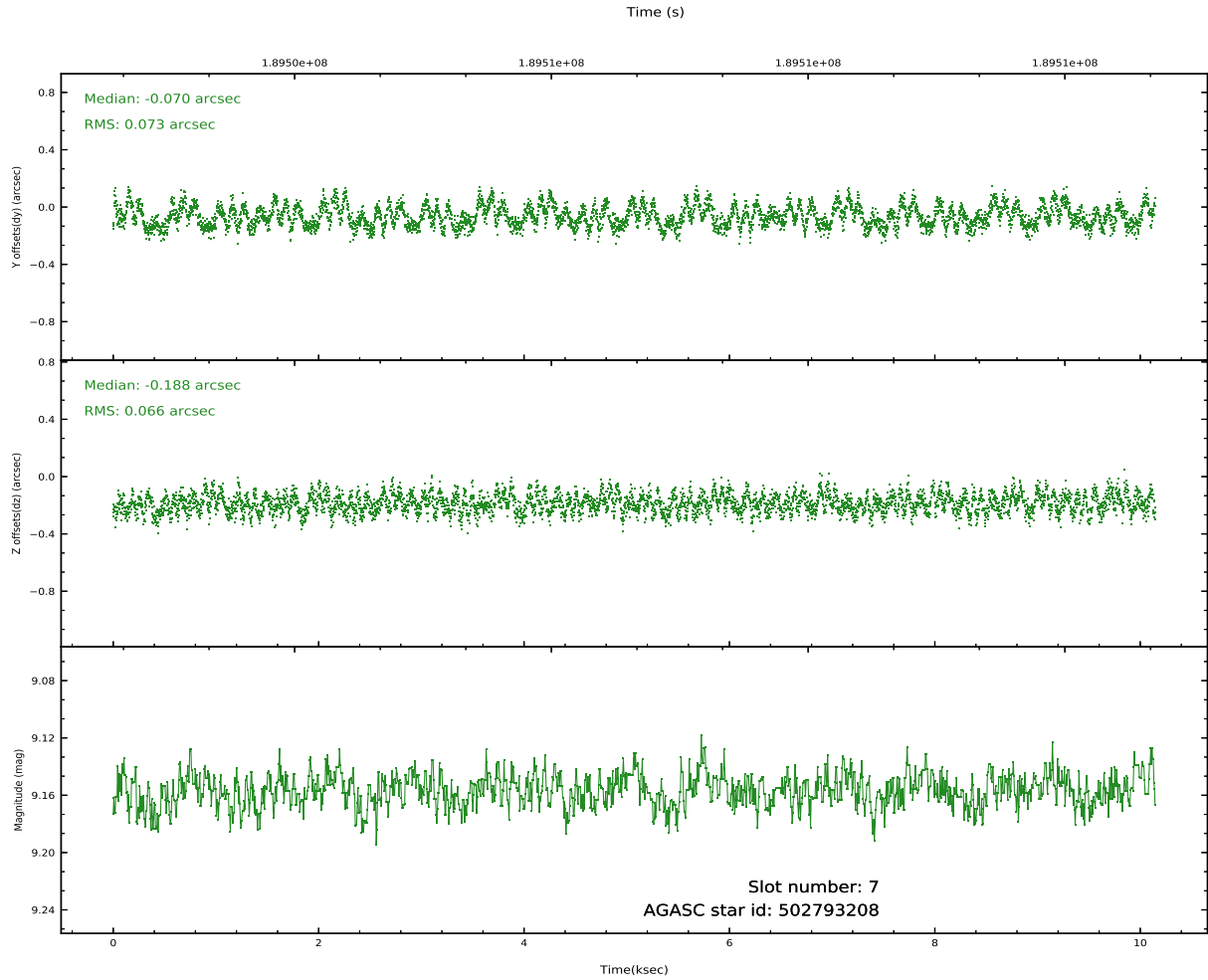
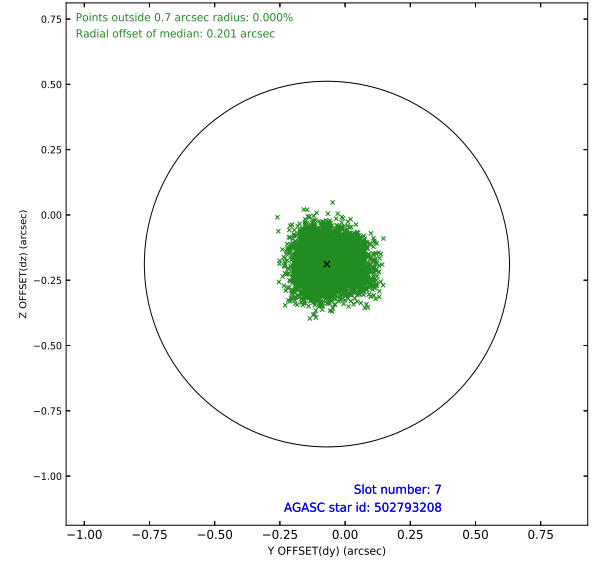
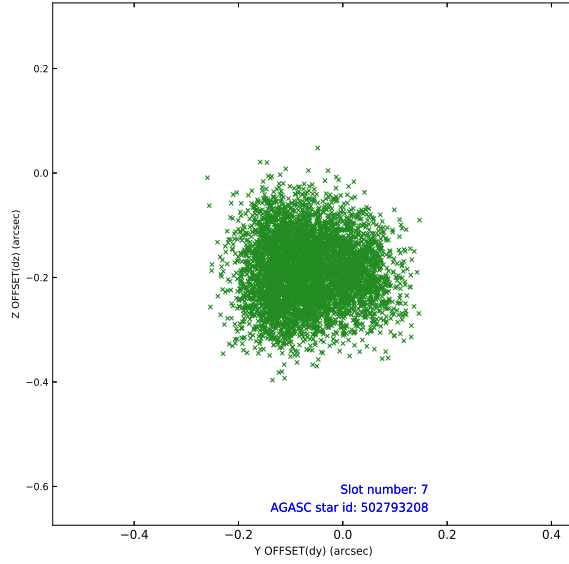
2.4.4 Slot 6



Time (s)

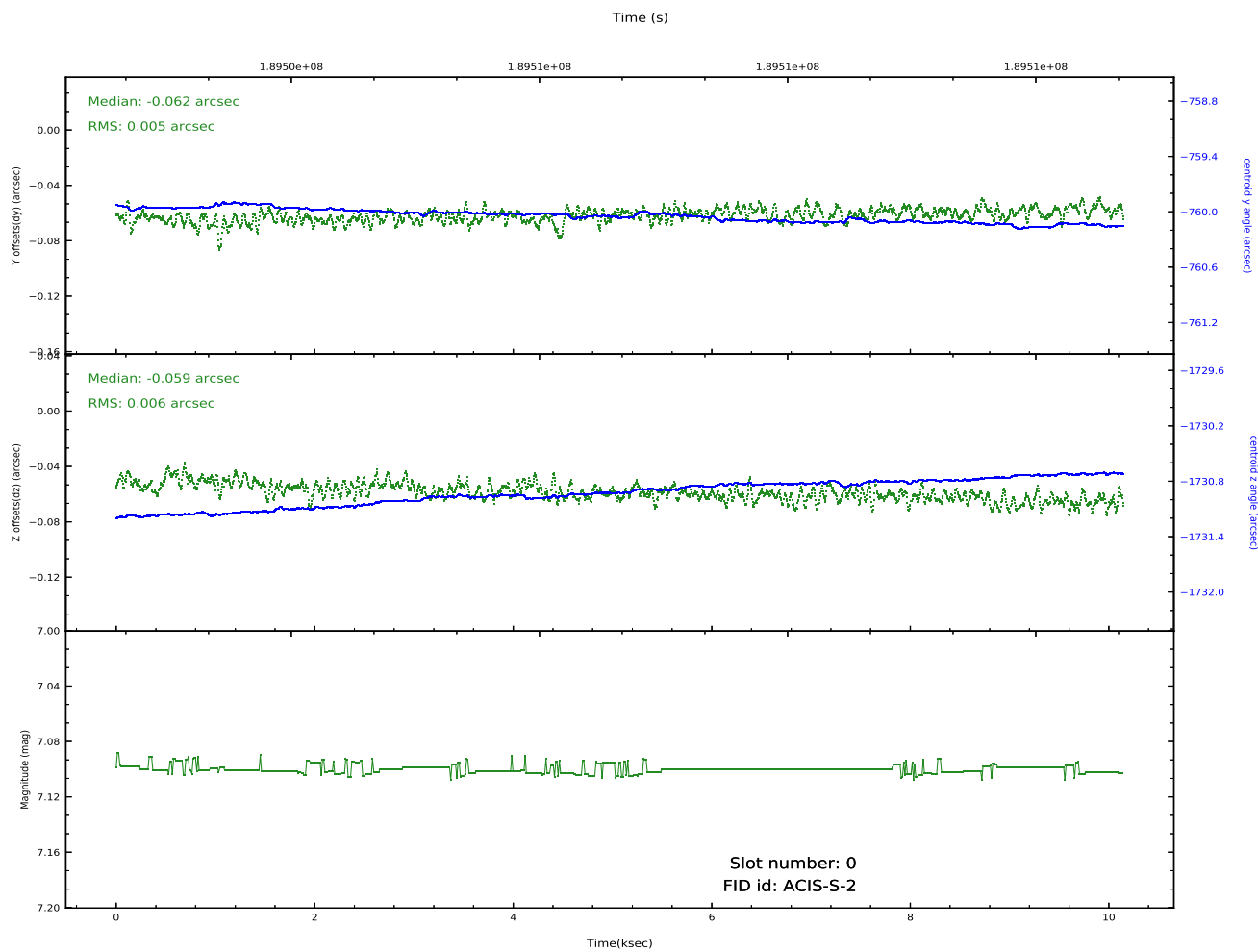
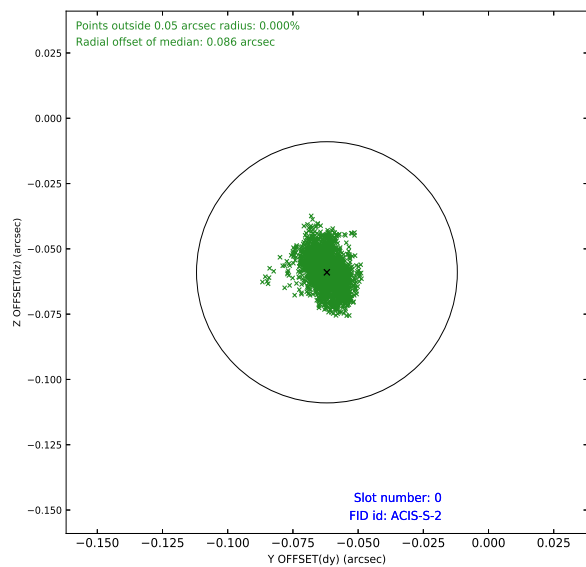
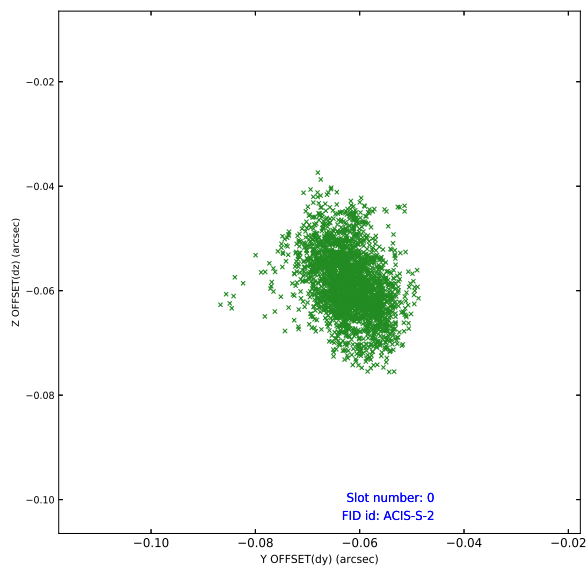


2.4.5 Slot 7

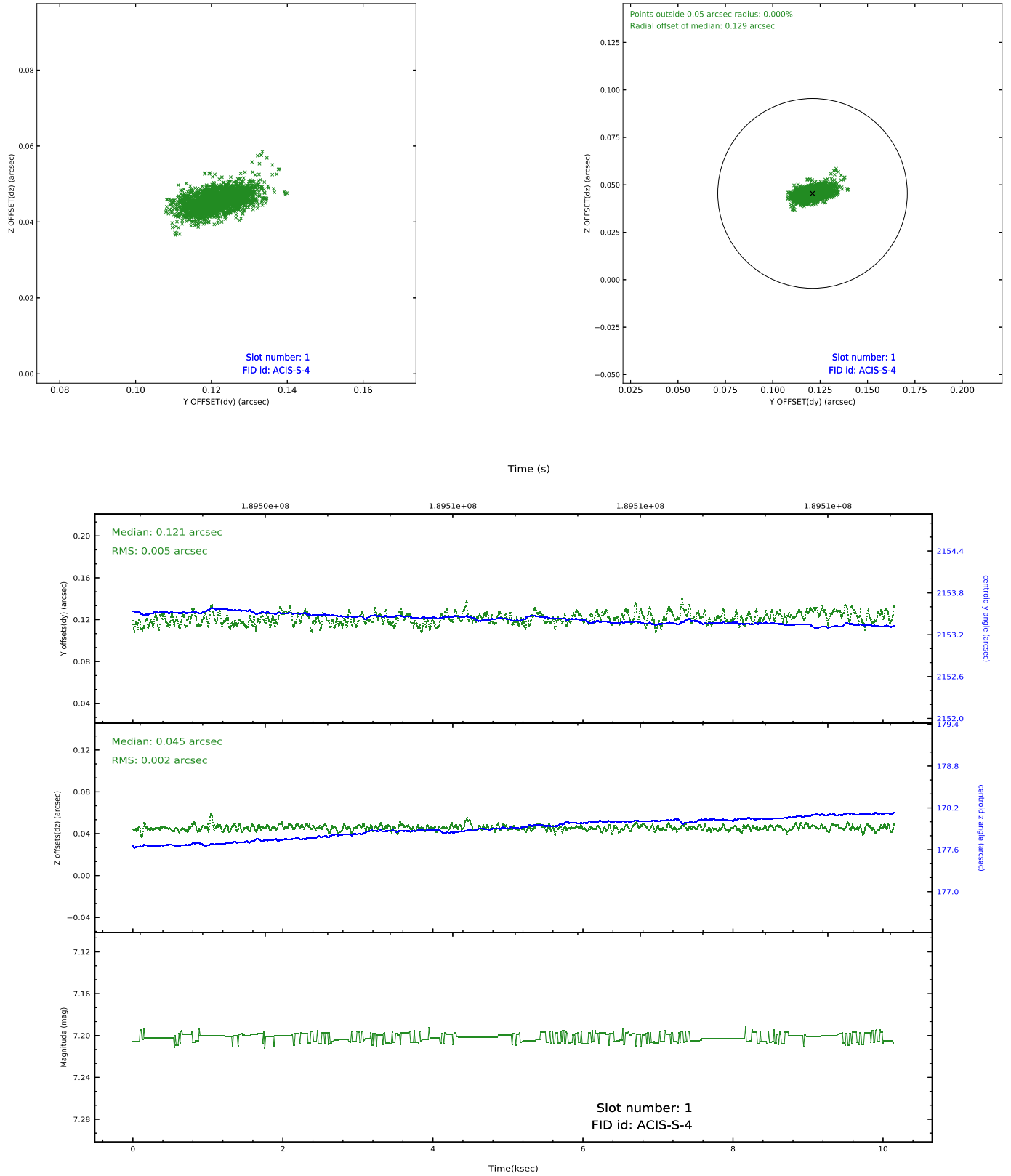


2.5 FID Slots

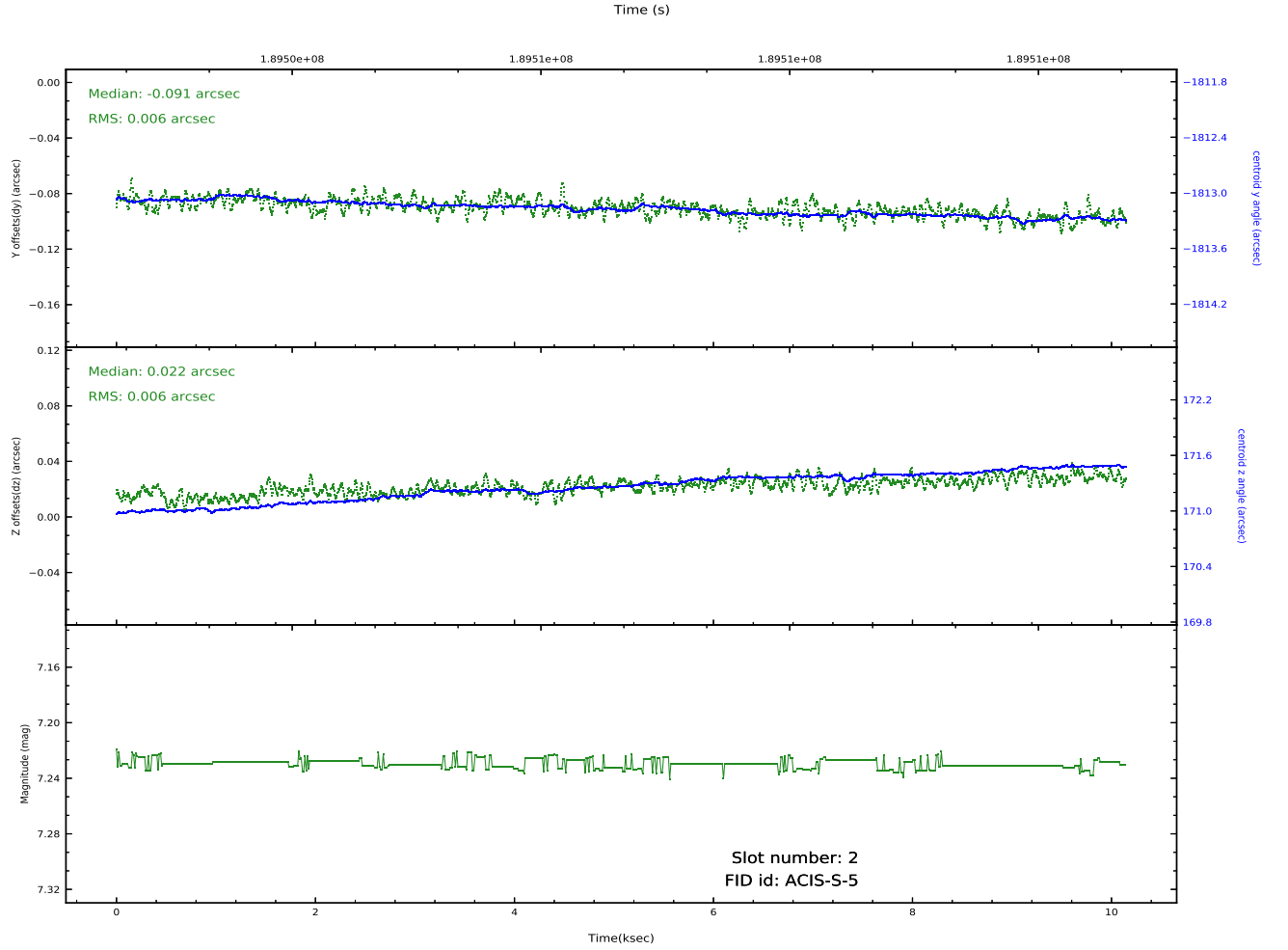
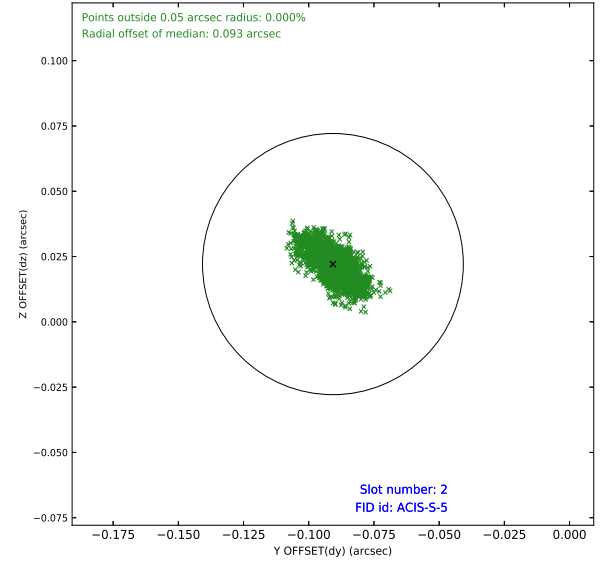
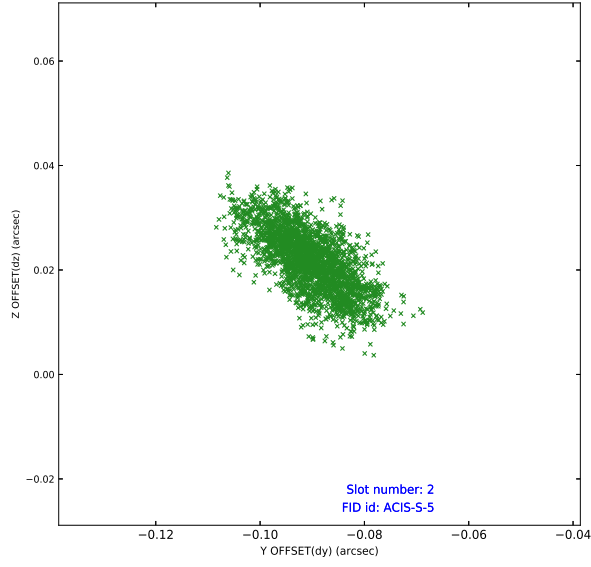
2.5.1 Slot 0



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)	2020.09.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.148

A.2 Comments

On day 356 at about 00:30, the OBA heater stuck in the "on" position. This situation affected obsid 4901 and all subsequent observations to this point. The result of this anomaly could be a displacement of the target on the chip in the z direction. The displacement will be small because everything is still within spec, but the target may be spatially displaced, have a different point spread function, or trail across the chip.