

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21076 - L2 Version 2
Chandra X-Ray Center

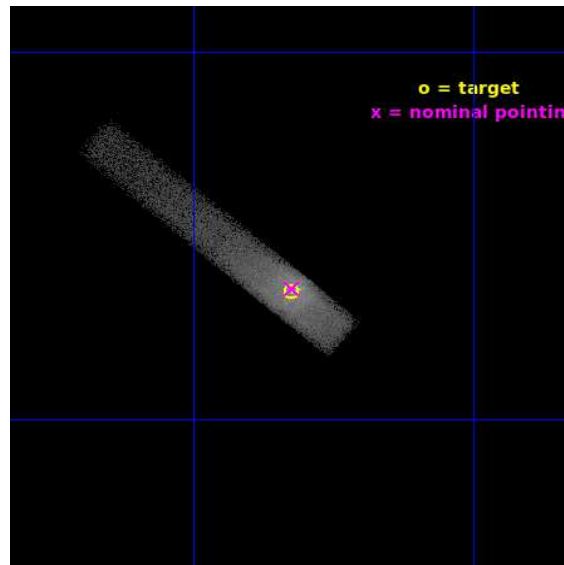
L2 Processing Date : Oct 25 2020

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1 Front

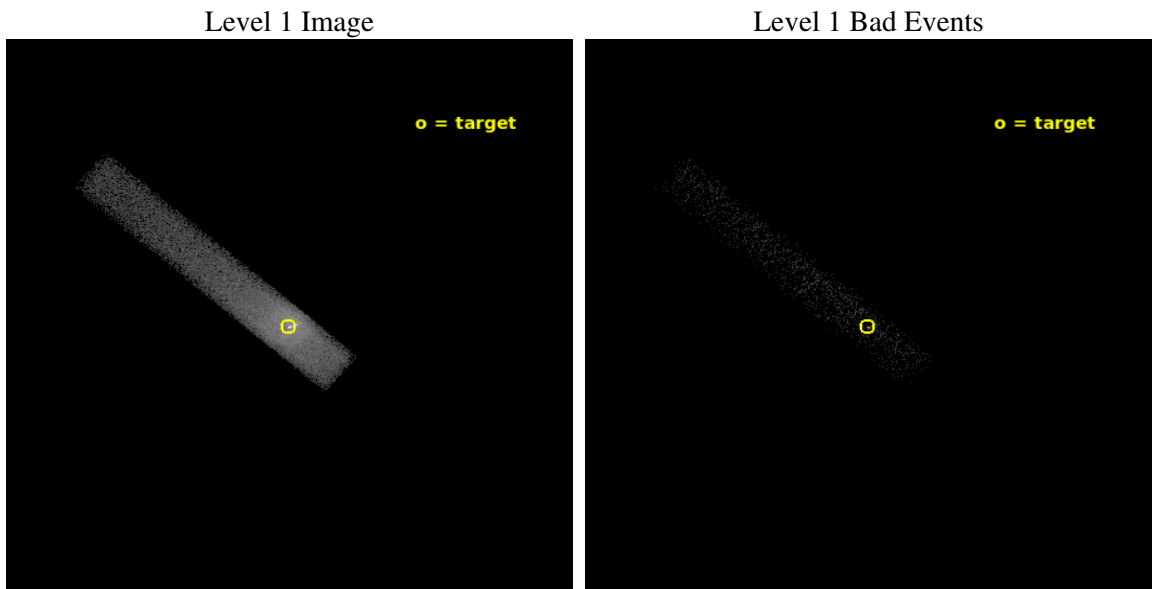
seq_num	703677	Sequence number
obs_id	21076	Observation id
title	Origin of the X-ray to TeV emission of the M87 AGN	Proposal title
observer	KA-WAH WONG	Principal investigator
object	M87	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.705833	Observer's specified target RA [deg]
dec_targ	12.391111	Observer's specified target Dec [deg]
ra_nom	187.70585496449	Nominal RA [deg]
dec_nom	12.392648639072	Nominal Dec [deg]
roll_nom	220.1508489834	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9972.7478612661	Sum of GTIs [s]
liveltime	9044.7559053747	Livetime [s]
ontime7	9972.7478612661	Sum of GTIs [s]
l2events	57281	Number of level 2 events



2 OBI

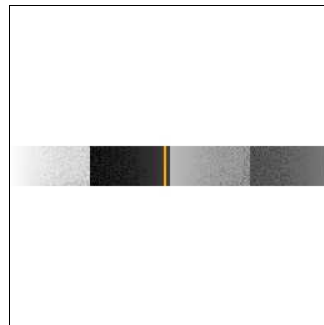
2.1 OBI

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	10.9.2	Processing system revision	ontime	9972.7478612661	Sum of GTIs [s]
caldbver	4.9.3	 	ontime7	9972.7478612661	Sum of GTIs [s]
date	2020-10-25T15:12:09	Date and time of file creation	l1events	64758	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

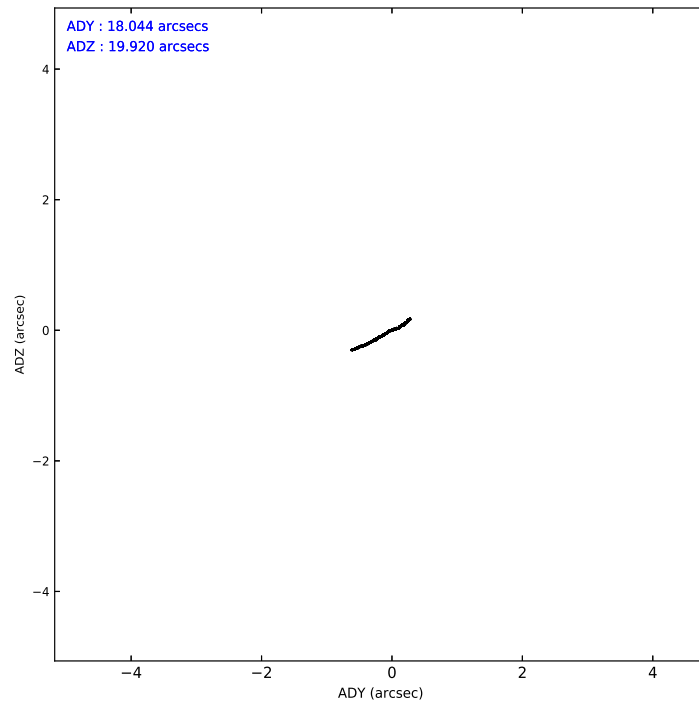
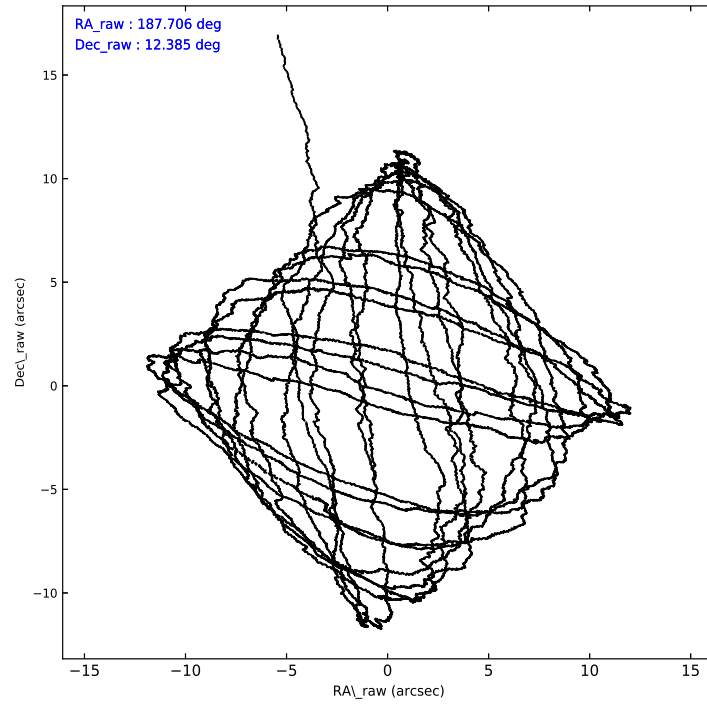
	ccd 7
level 1 events	64758
rejected events	6755
rejected %	10%

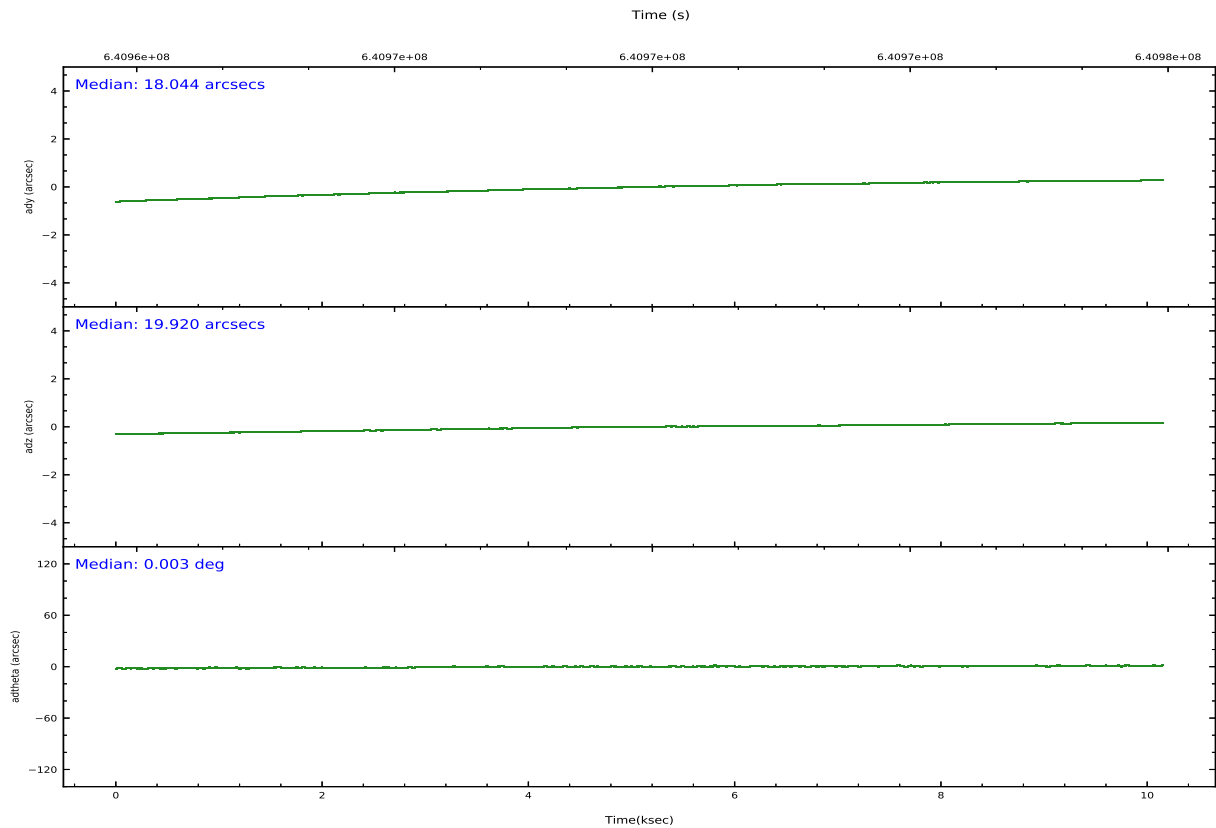
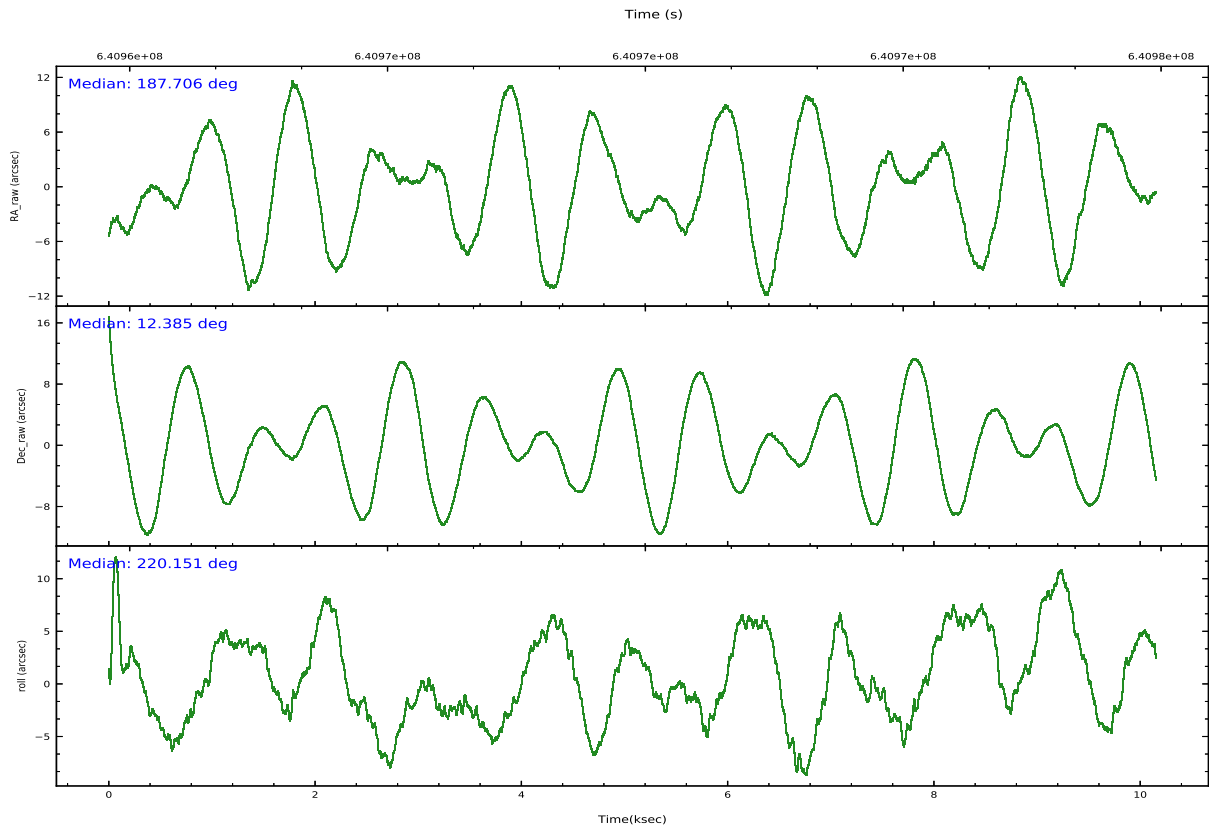
	ccd 7
grade 0 events	15472
	23%
grade 1 events	49
	0%
grade 2 events	14866
	22%
grade 3 events	6981
	10%
grade 4 events	6716
	10%
grade 5 events	1609
	2%
grade 6 events	13976
	21%
grade 7 events	5089
	7%

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	187.714709	187.70585496449	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.410801	12.392648639072	Subarray start row	449	449
[deg] Pointing Roll	219.998090	220.1508489834	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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	640964951.184000	640963289.13026			
Observation start date	2018-04-24T13:48:02	2018-04-24T13:21:29			
[s] Observation end time (MET)	640974951.184000	640975315.45597			
Observation end date	2018-04-24T16:34:42	2018-04-24T16:41:55			
Read mode	TIMED	TIMED			

2.3 Aspect





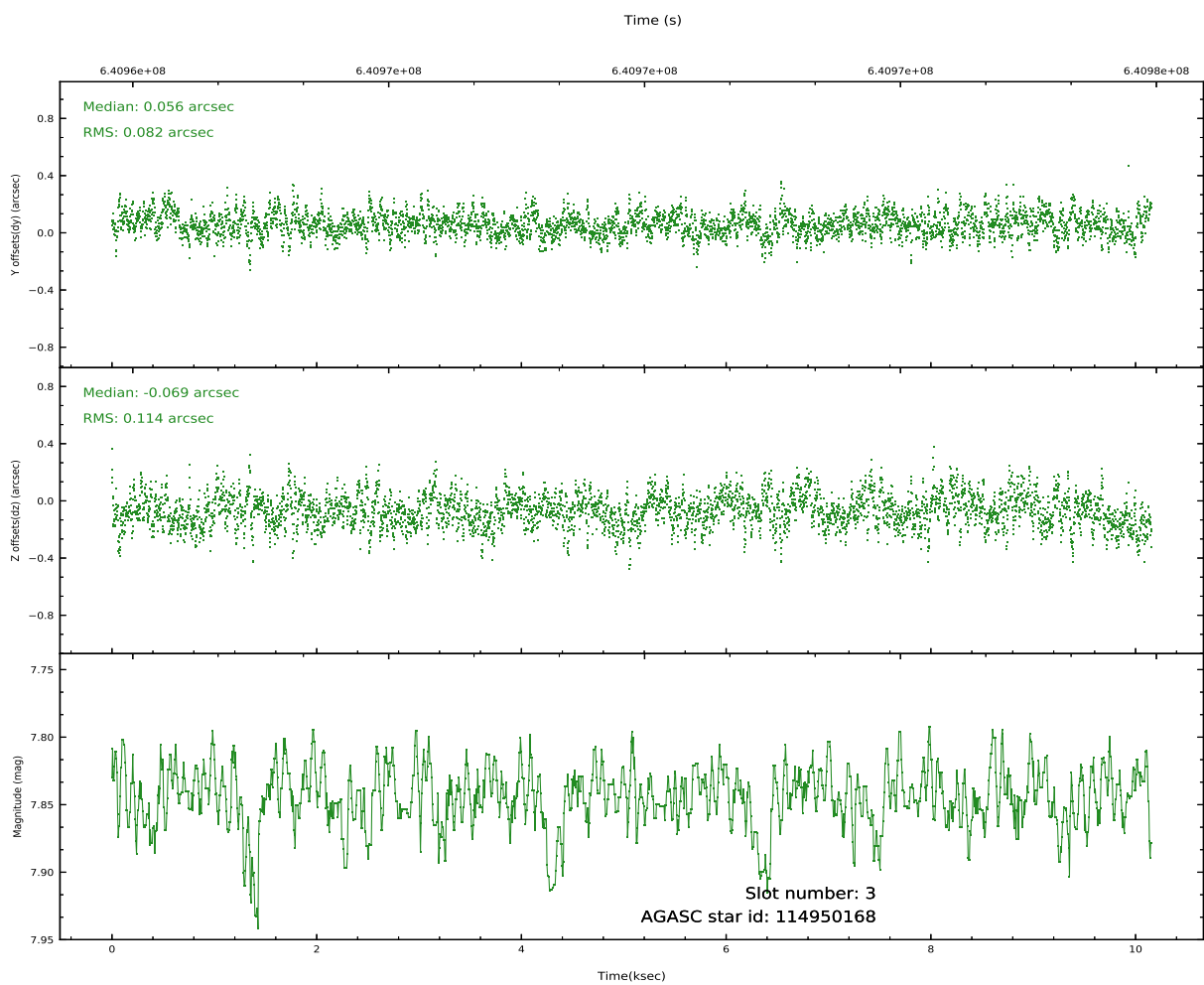
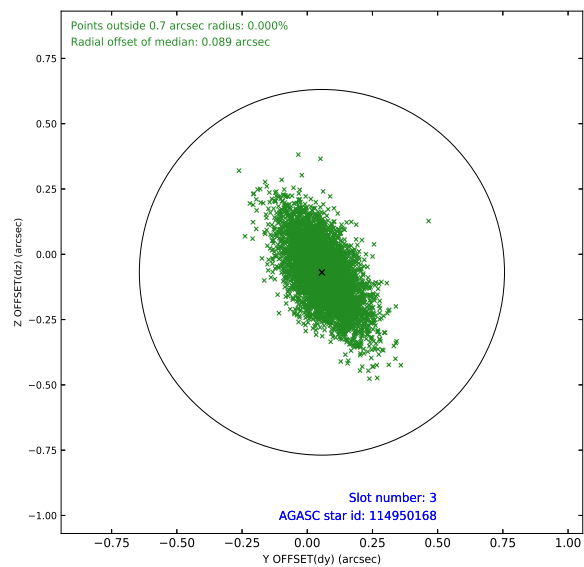
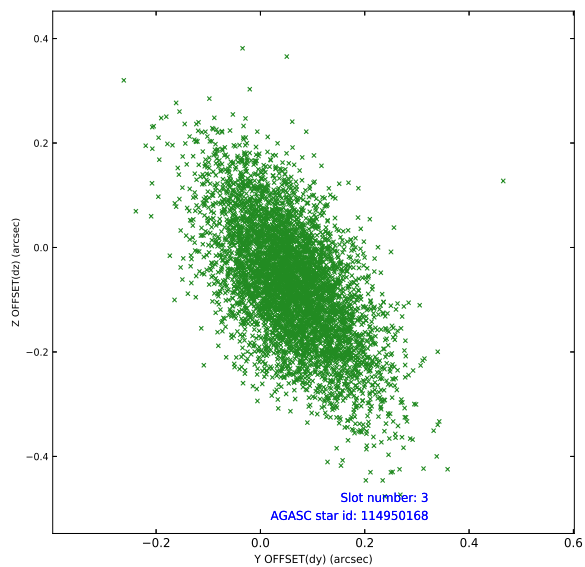
Slot Statistics

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	7.03	2477	1.000	0.110	-0.088	0.008	0.013	0.000000	0.000000	-771.13	-1741
1	FID		ACIS-S-4	7.13	2476	1.000	0.141	-0.029	0.007	0.014	0.000000	0.000000	2142.16	166
2	FID		ACIS-S-5	7.11	2477	1.000	-0.282	0.125	0.007	0.012	0.000000	0.000000	-1823.48	161
3	GUIDE	used	114950168	7.84	4955	1.000	0.056	-0.069	0.142	0.259	187.143398	12.117441	2218.58	-484
4	GUIDE	used	114950584	9.16	4951	1.000	-0.030	-0.213	0.181	0.302	187.487323	11.827248	1965.20	1094
5	GUIDE	used	114952824	8.56	4946	1.000	0.232	0.239	0.154	0.258	187.703904	12.486727	-144.94	-233
6	GUIDE	used	114955056	8.31	4952	1.000	-0.332	0.003	0.154	0.281	187.914001	12.127854	118.17	1230
7	GUIDE	used	115347520	10.10	4935	1.000	0.069	0.048	0.254	0.416	187.517505	12.810279	-393.80	-1546

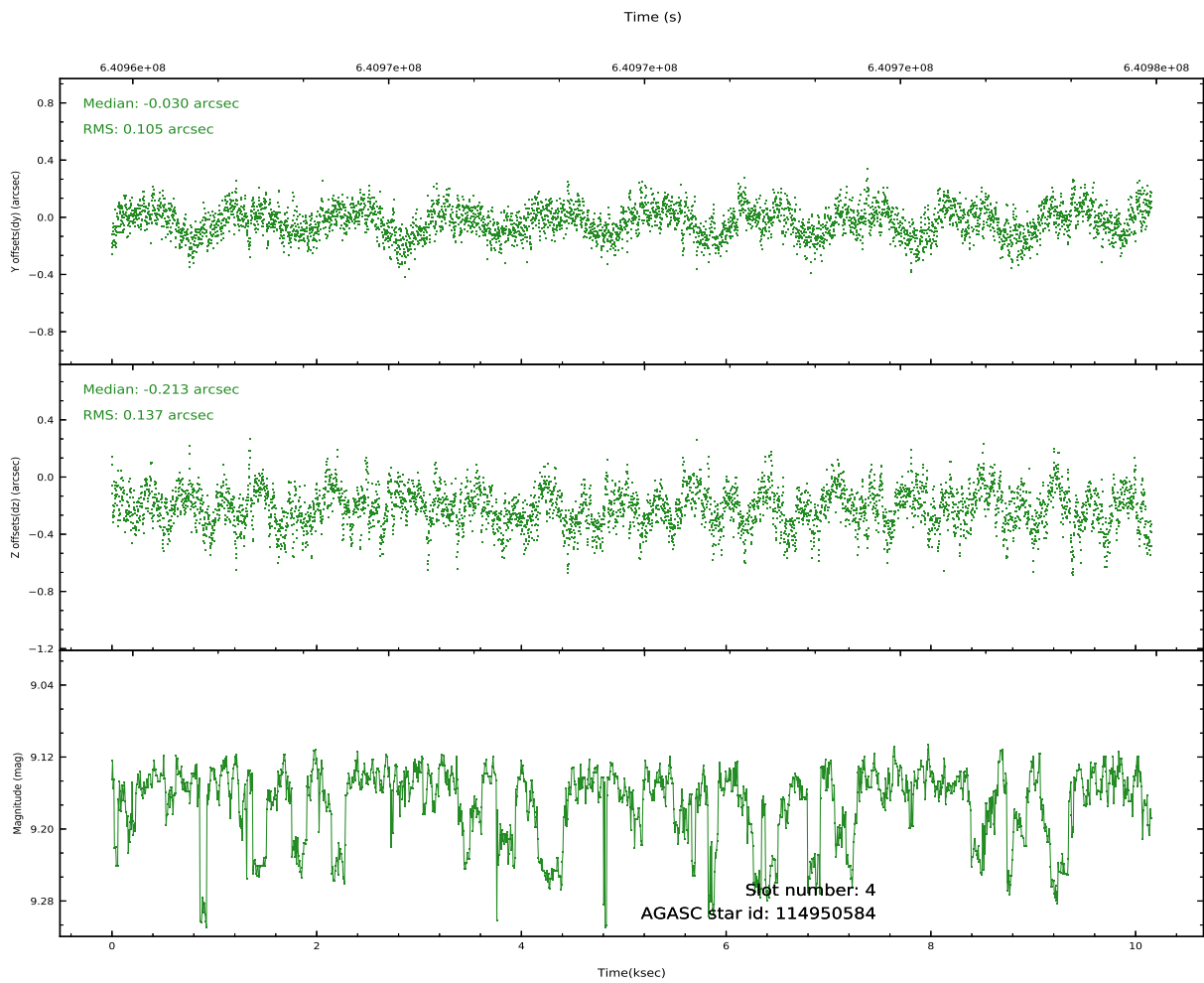
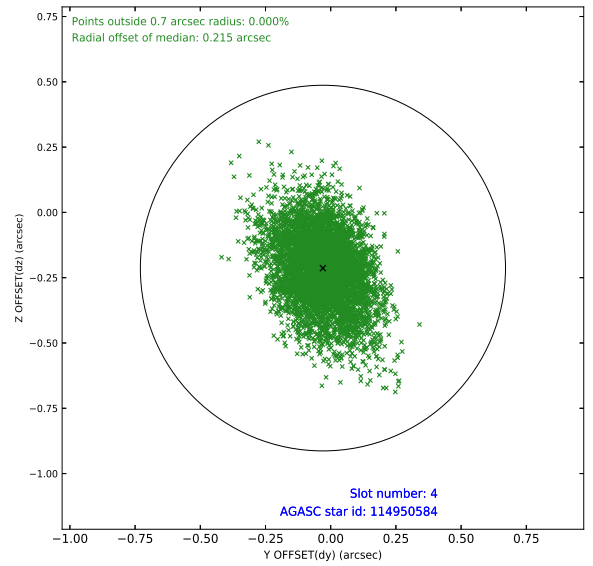
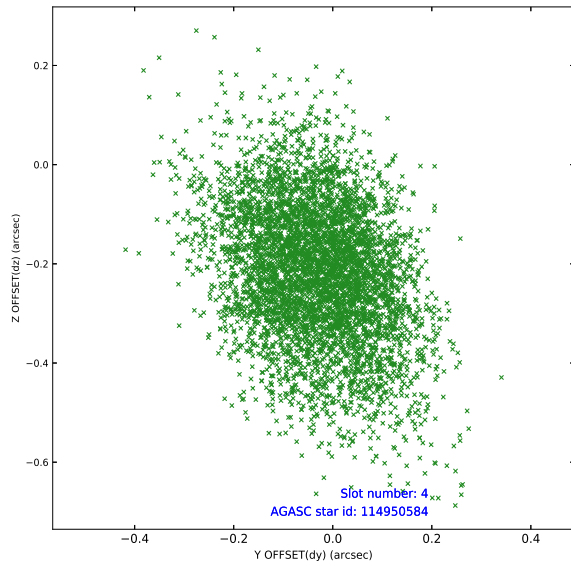
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2.4 Star Slots

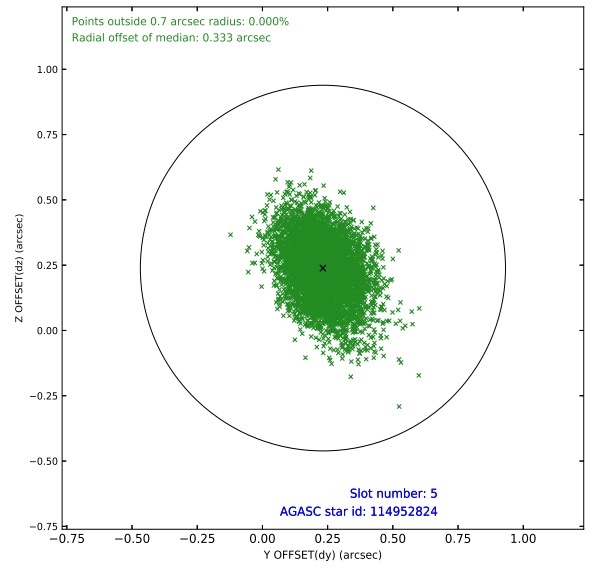
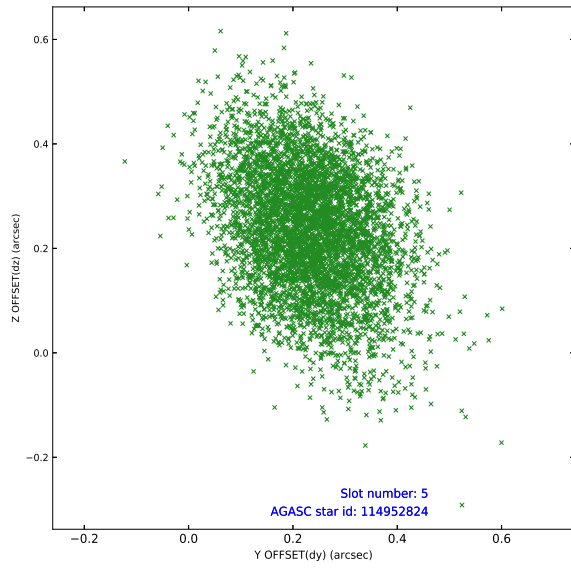
2.4.1 Slot 3



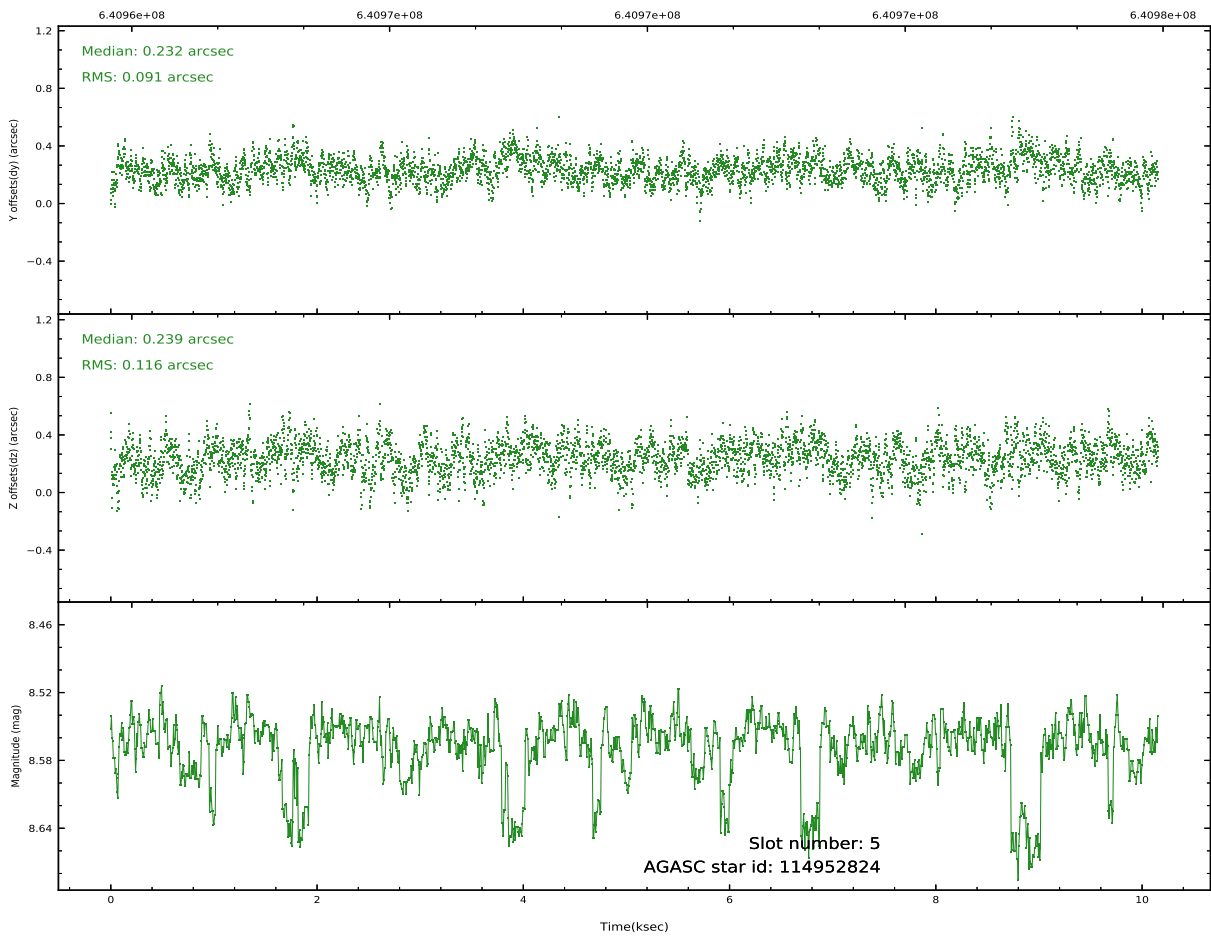
2.4.2 Slot 4



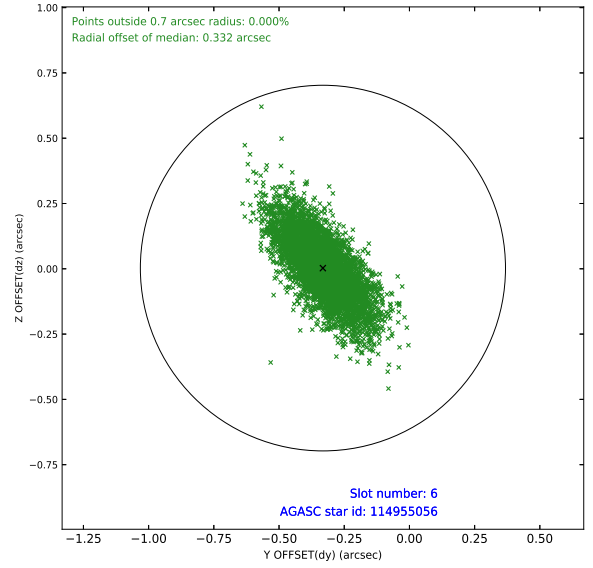
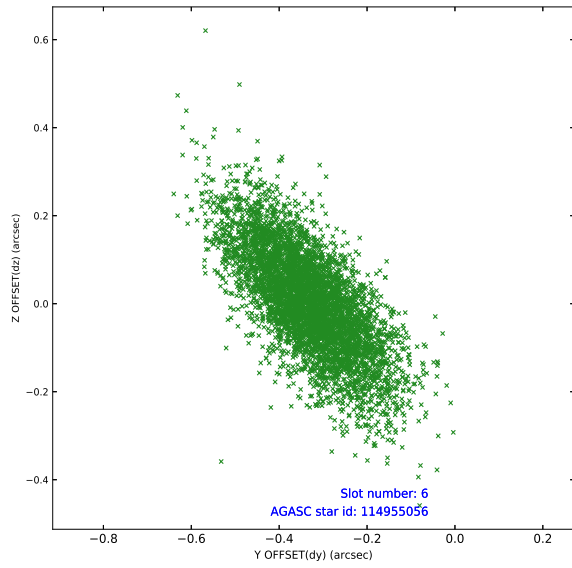
2.4.3 Slot 5



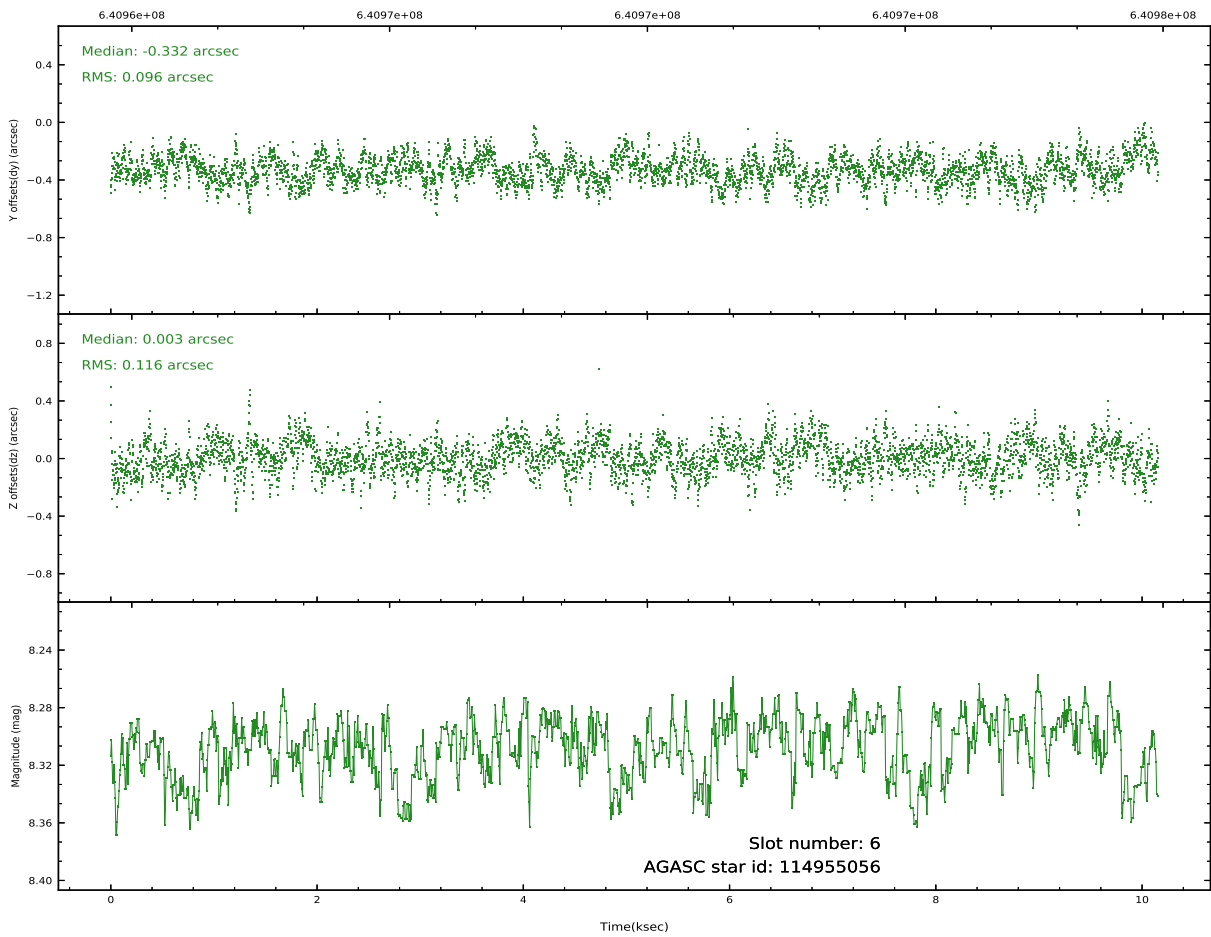
Time (s)



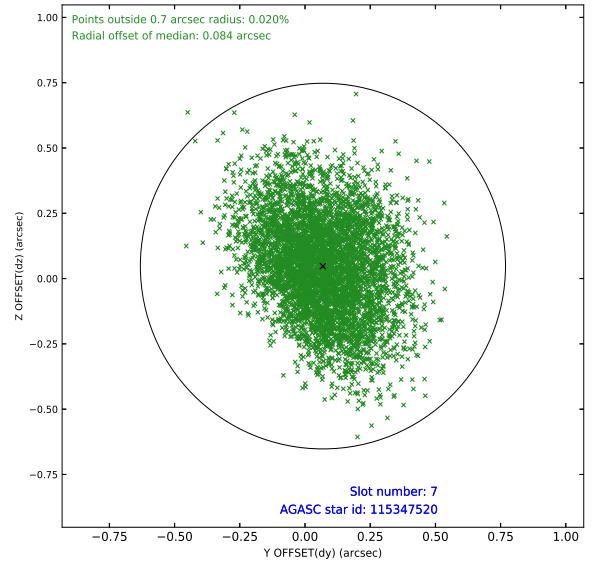
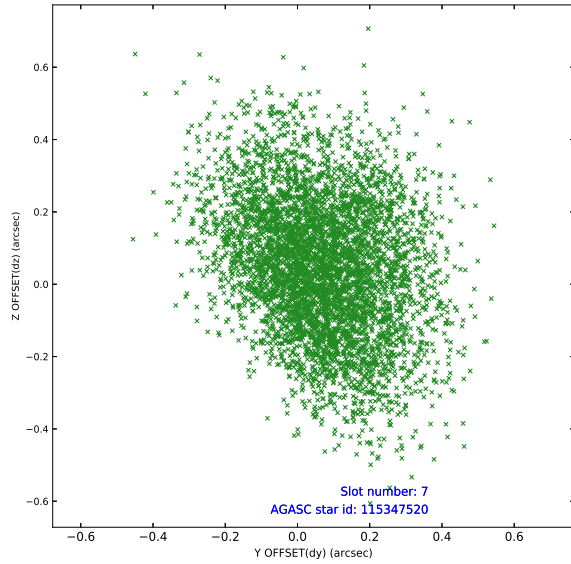
2.4.4 Slot 6



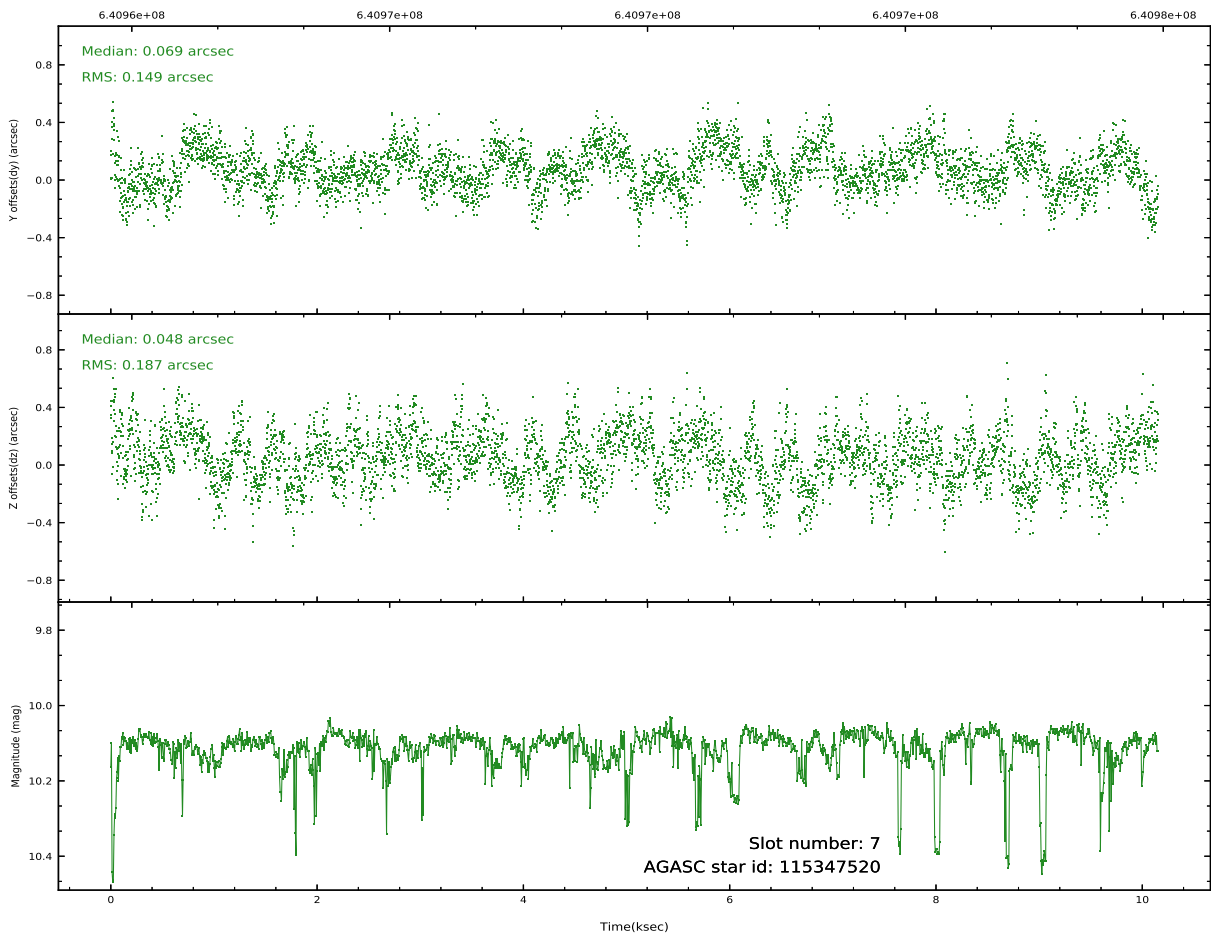
Time (s)



2.4.5 Slot 7

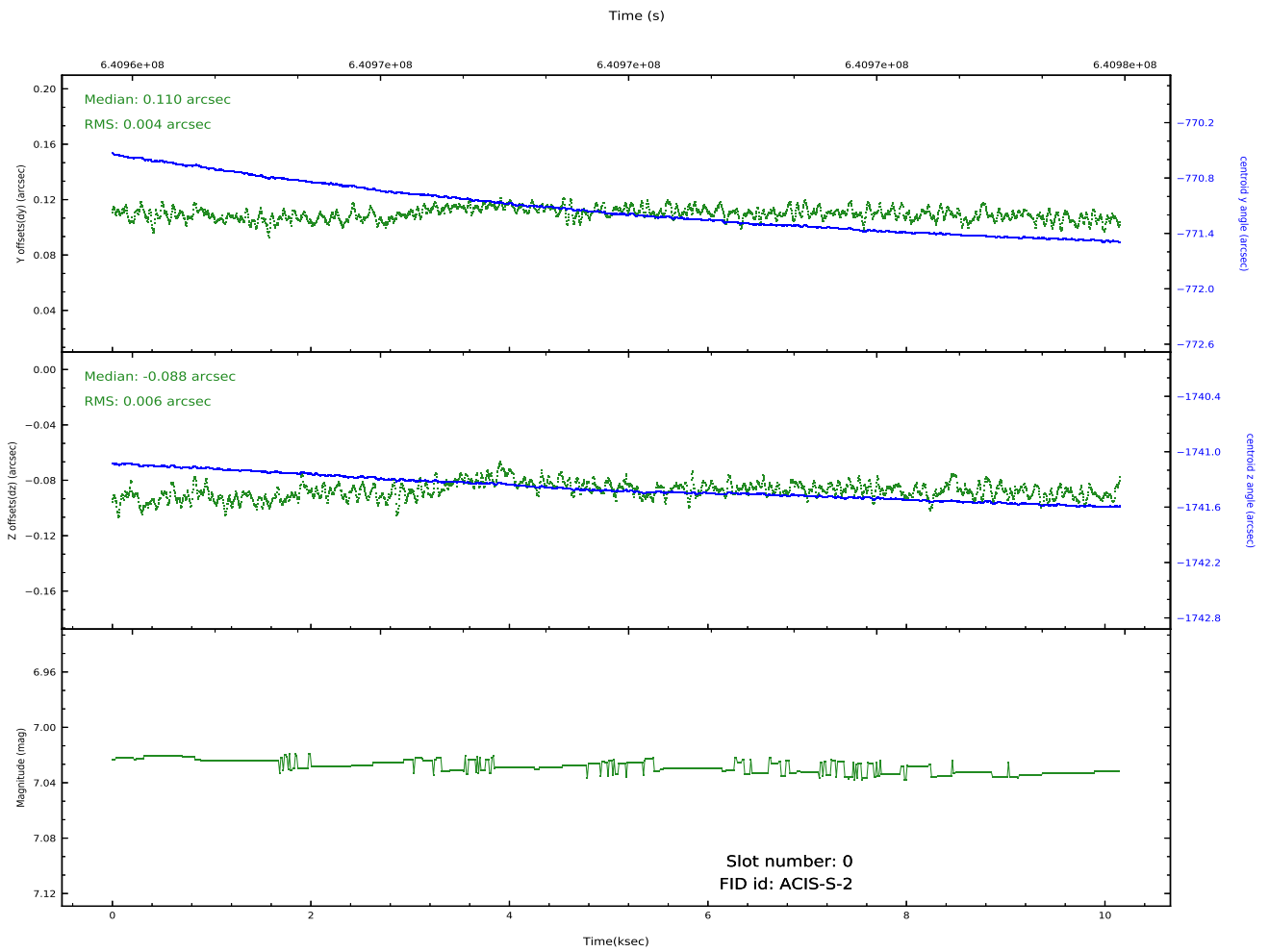
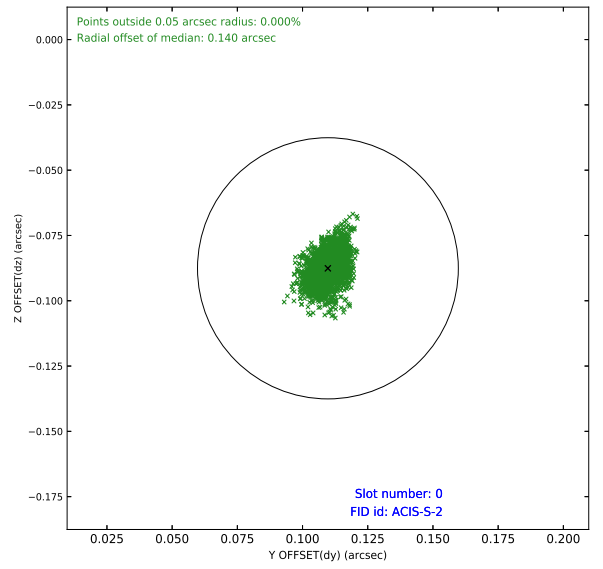
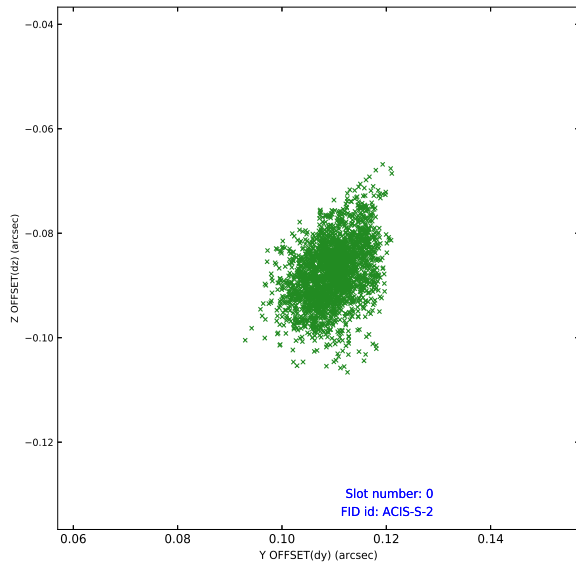


Time (s)

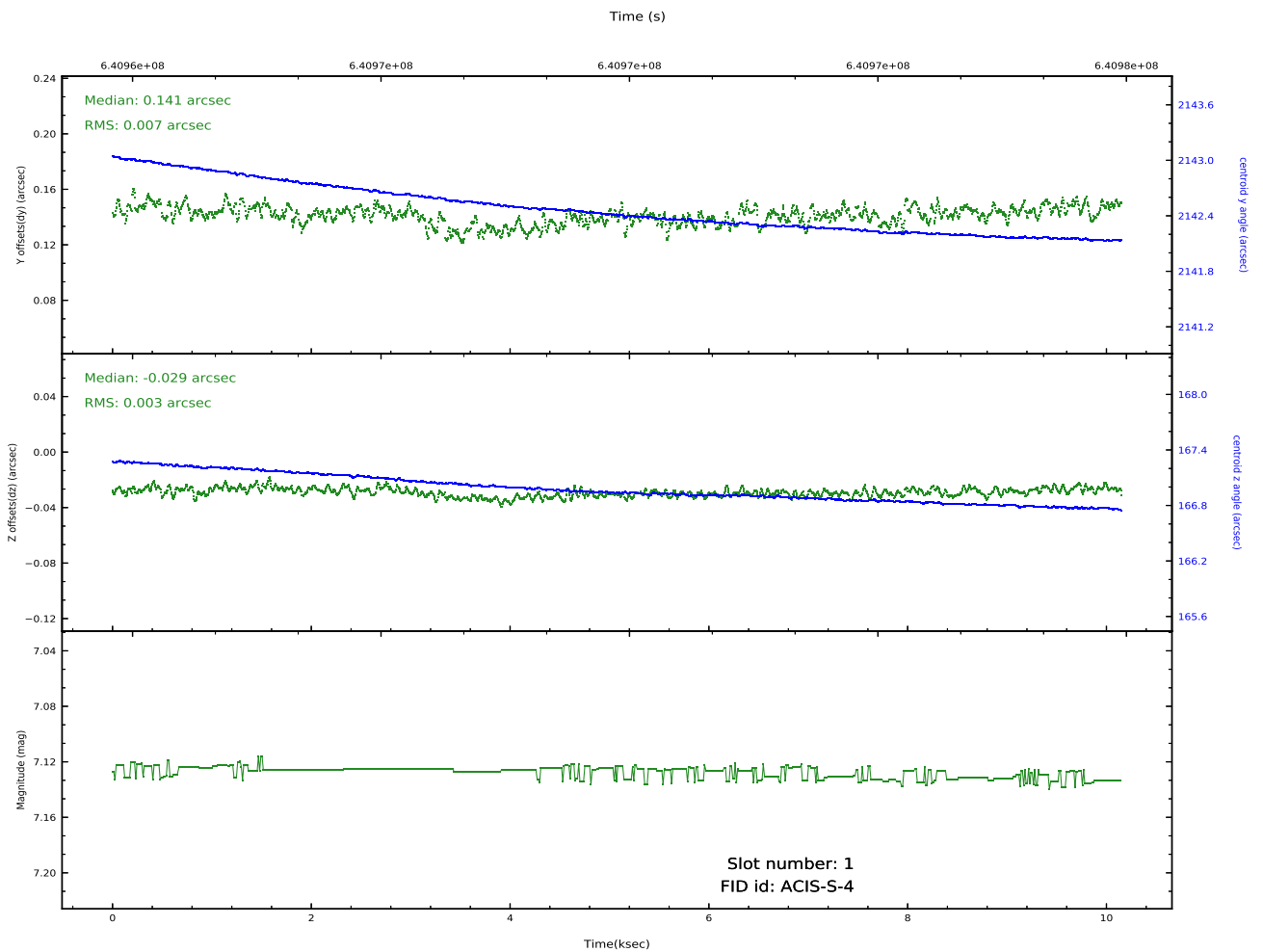
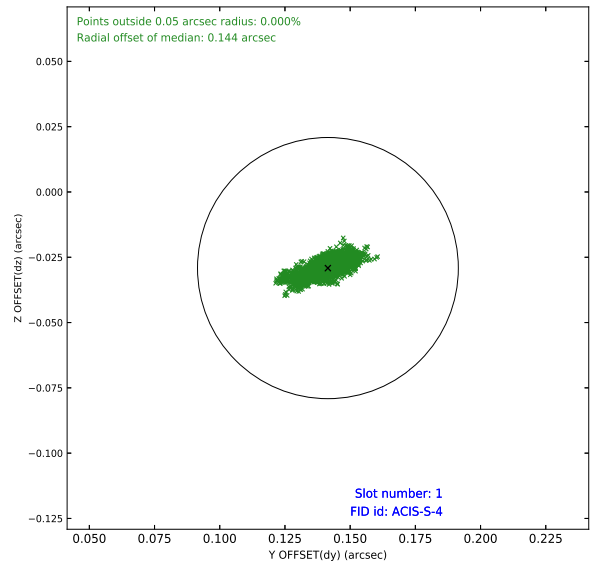
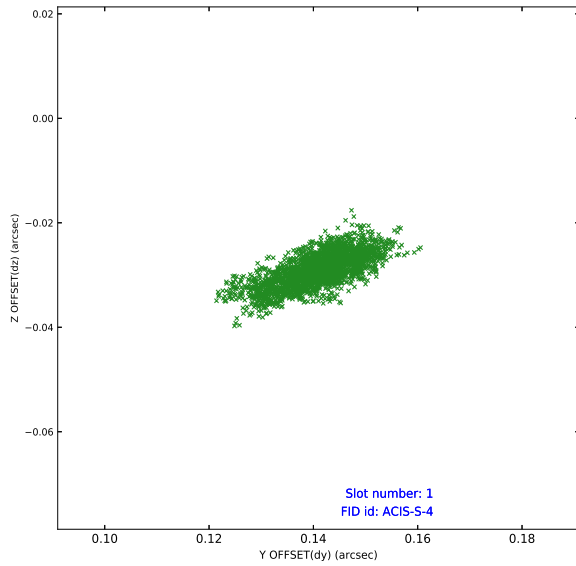


2.5 FID Slots

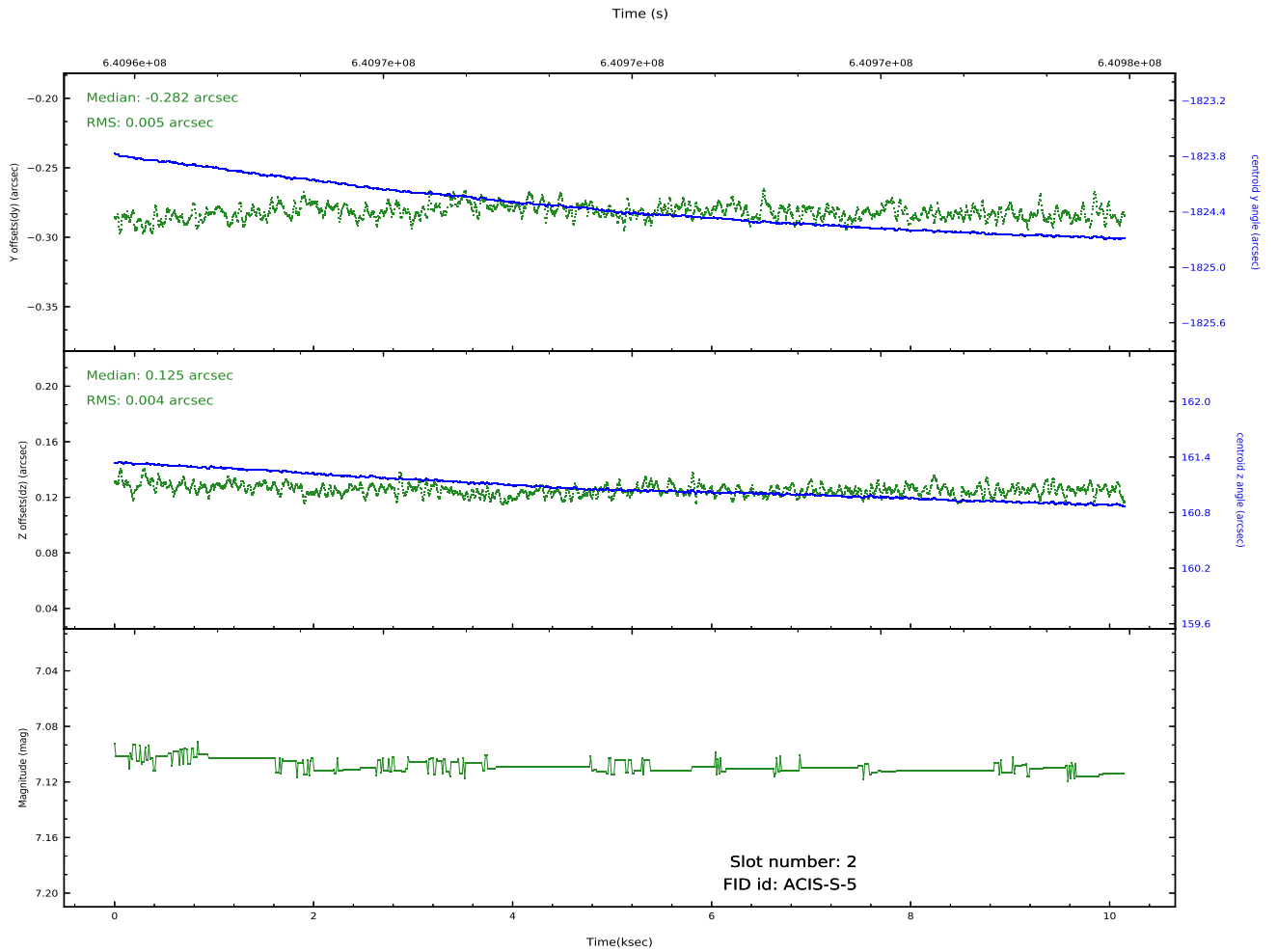
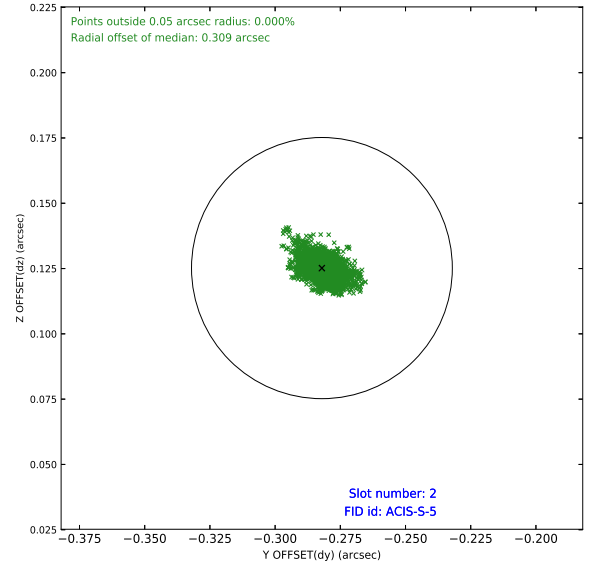
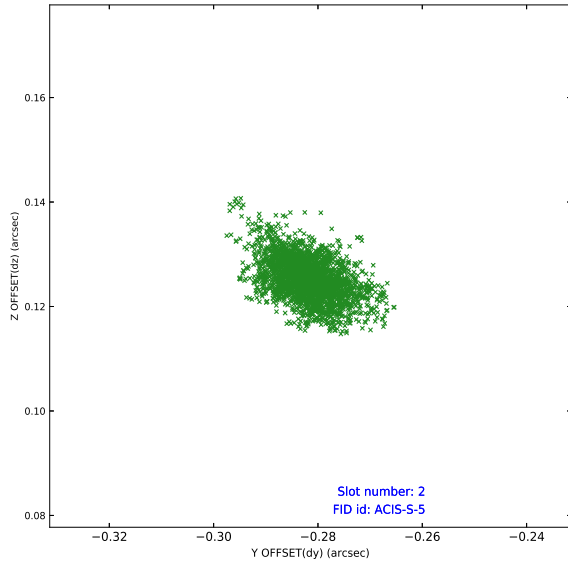
2.5.1 Slot 0



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)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.97274786973

A.2 Comments