

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21075 - L2 Version 2
Chandra X-Ray Center

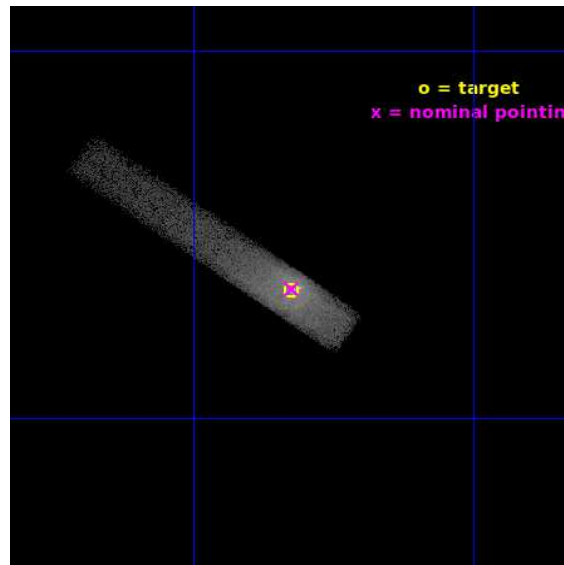
L2 Processing Date : Oct 25 2020

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

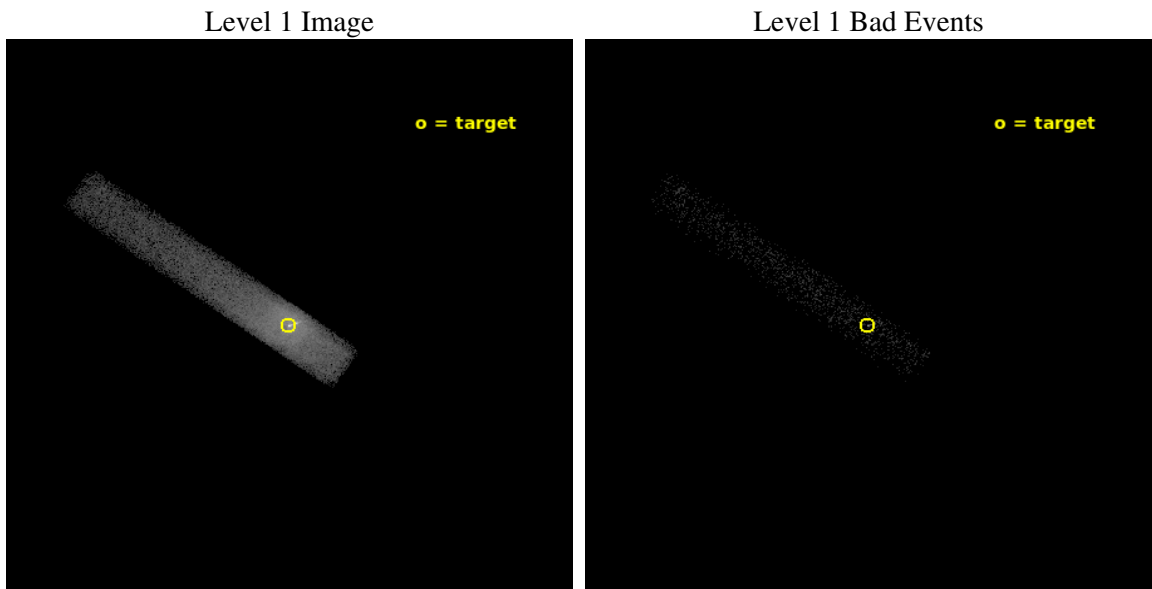
seq_num	703676	Sequence number
obs_id	21075	Observation id
title	Origin of the X-ray to TeV emission of the M87 AGN	Proposal title
observer	KA-WAH WONG	Principal investigator
object	M87	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.705833	Observer's specified target RA [deg]
dec_targ	12.391111	Observer's specified target Dec [deg]
ra_nom	187.7058010554	Nominal RA [deg]
dec_nom	12.391925409265	Nominal Dec [deg]
roll_nom	215.14568020831	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10069.495340943	Sum of GTIs [s]
liveltime	9132.5007626912	Livetime [s]
ontime7	10069.495340943	Sum of GTIs [s]
l2events	57753	Number of level 2 events



2 OBI

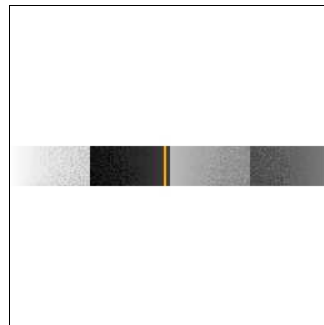
2.1 OBI

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	10069.495340943	Sum of GTIs [s]
caldbver	4.9.3	 	ontime7	10069.495340943	Sum of GTIs [s]
date	2020-10-25T14:35:27	Date and time of file creation	l1events	65417	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

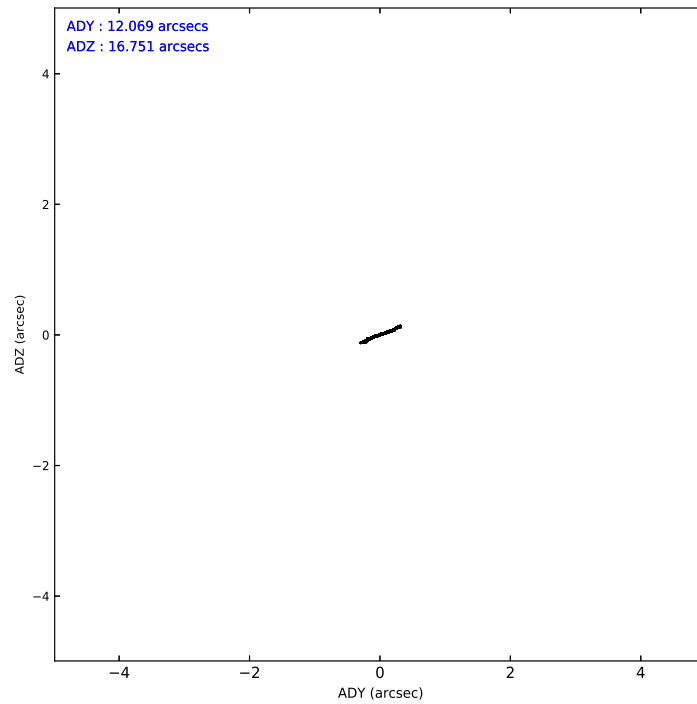
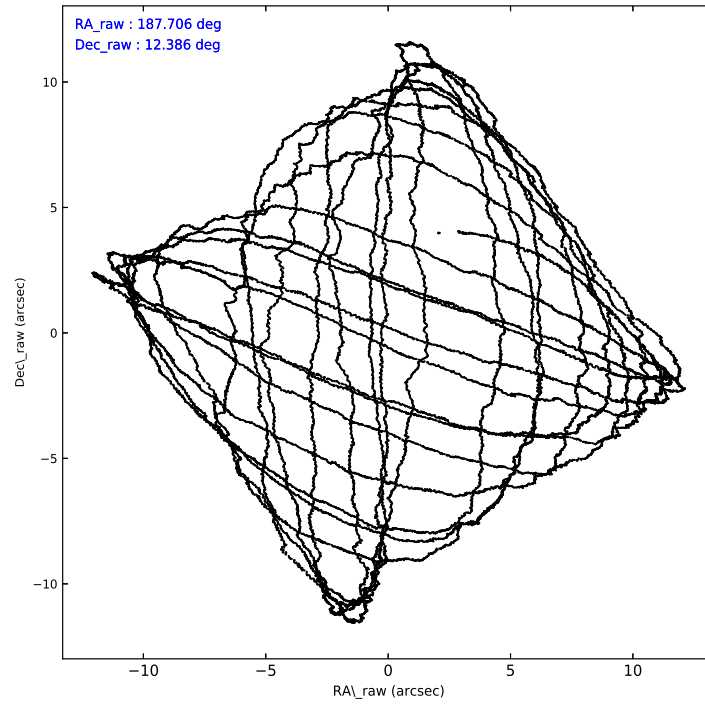
	ccd 7
level 1 events	65417
rejected events	6934
rejected %	10%

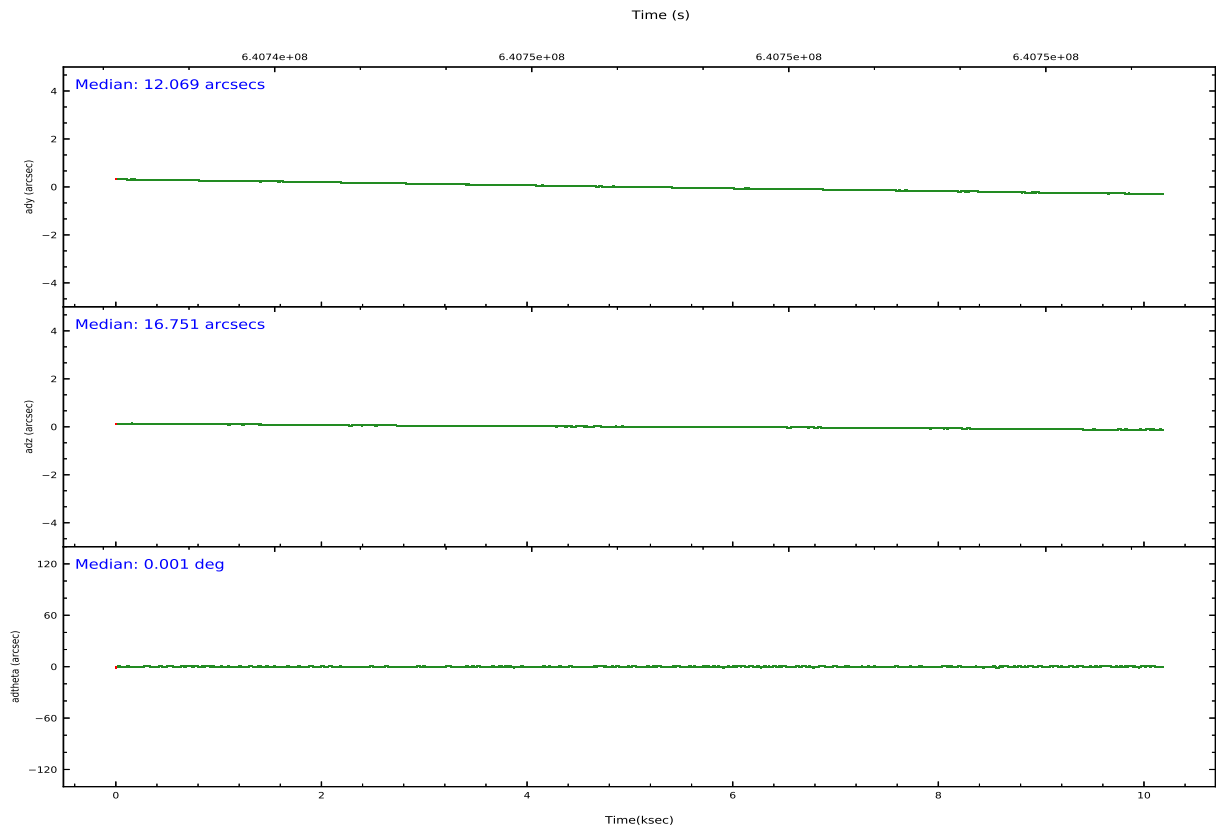
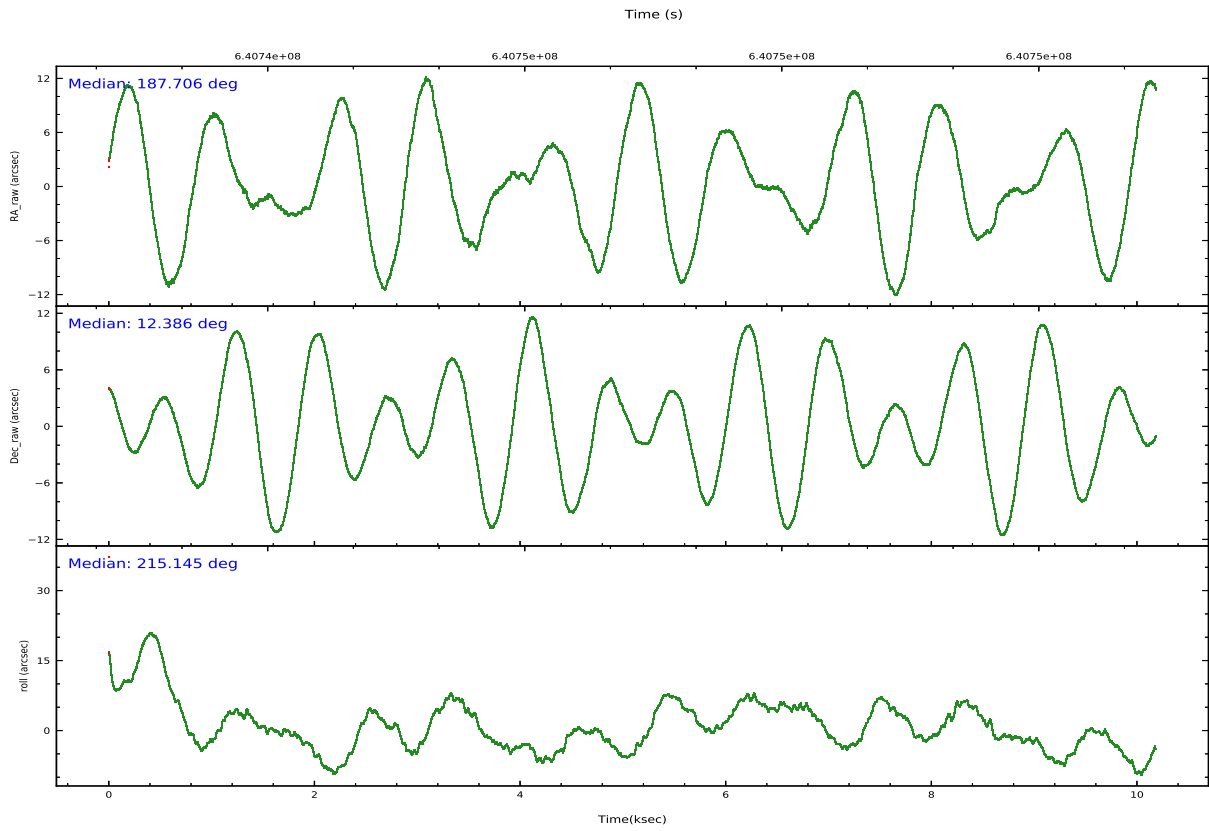
	ccd 7
grade 0 events	15684
	23%
grade 1 events	47
	0%
grade 2 events	14834
	22%
grade 3 events	7049
	10%
grade 4 events	6911
	10%
grade 5 events	1567
	2%
grade 6 events	14006
	21%
grade 7 events	5319
	8%

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	187.717035	187.7058010554	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.411042	12.391925409265	Subarray start row	449	449
[deg] Pointing Roll	214.997598	215.14568020831	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)	640743641.184000	640743057.61726			
Observation start date	2018-04-22T00:19:32	2018-04-22T00:10:57			
[s] Observation end time (MET)	640753641.184000	640755076.25547			
Observation end date	2018-04-22T03:06:12	2018-04-22T03:31:16			
Read mode	TIMED	TIMED			

2.3 Aspect





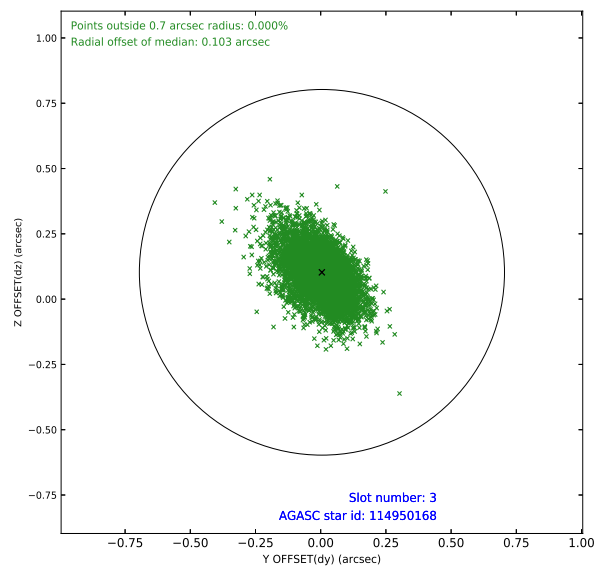
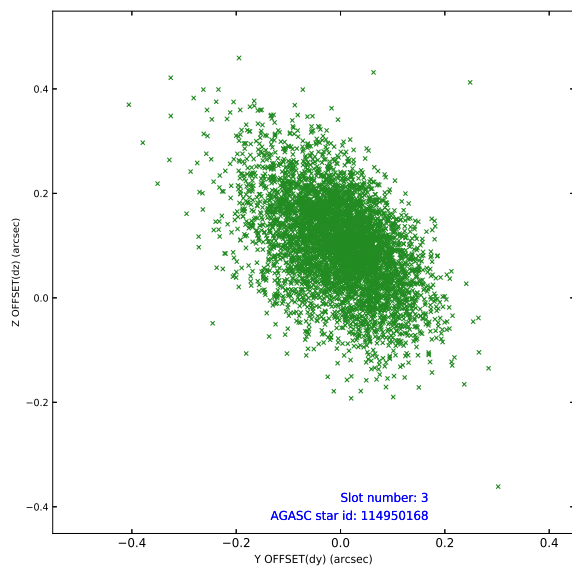
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.08	2485	1.000	0.102	-0.088	0.009	0.015	0.000000	0.000000	-765.01	-1738
1	FID		ACIS-S-4	7.23	2484	1.000	0.131	-0.026	0.007	0.012	0.000000	0.000000	2148.22	169
2	FID		ACIS-S-5	7.21	2485	1.000	-0.265	0.122	0.012	0.019	0.000000	0.000000	-1817.39	164
3	GUIDE	used	114950168	7.82	4967	1.000	0.005	0.103	0.125	0.222	187.143398	12.117441	2259.61	-293
4	GUIDE	used	114952792	9.42	4967	1.000	0.018	-0.086	0.206	0.322	187.070263	12.344747	2001.51	-1111
5	GUIDE	used	114952824	8.55	4968	1.000	0.142	0.125	0.149	0.257	187.703904	12.486727	-116.77	-250
6	GUIDE	used	114955056	8.32	4965	1.000	-0.187	-0.012	0.147	0.237	187.914001	12.127854	17.76	1231
7	GUIDE	used	114956608	9.60	4961	1.000	0.025	-0.132	0.177	0.292	187.452443	11.725979	2180.07	1485

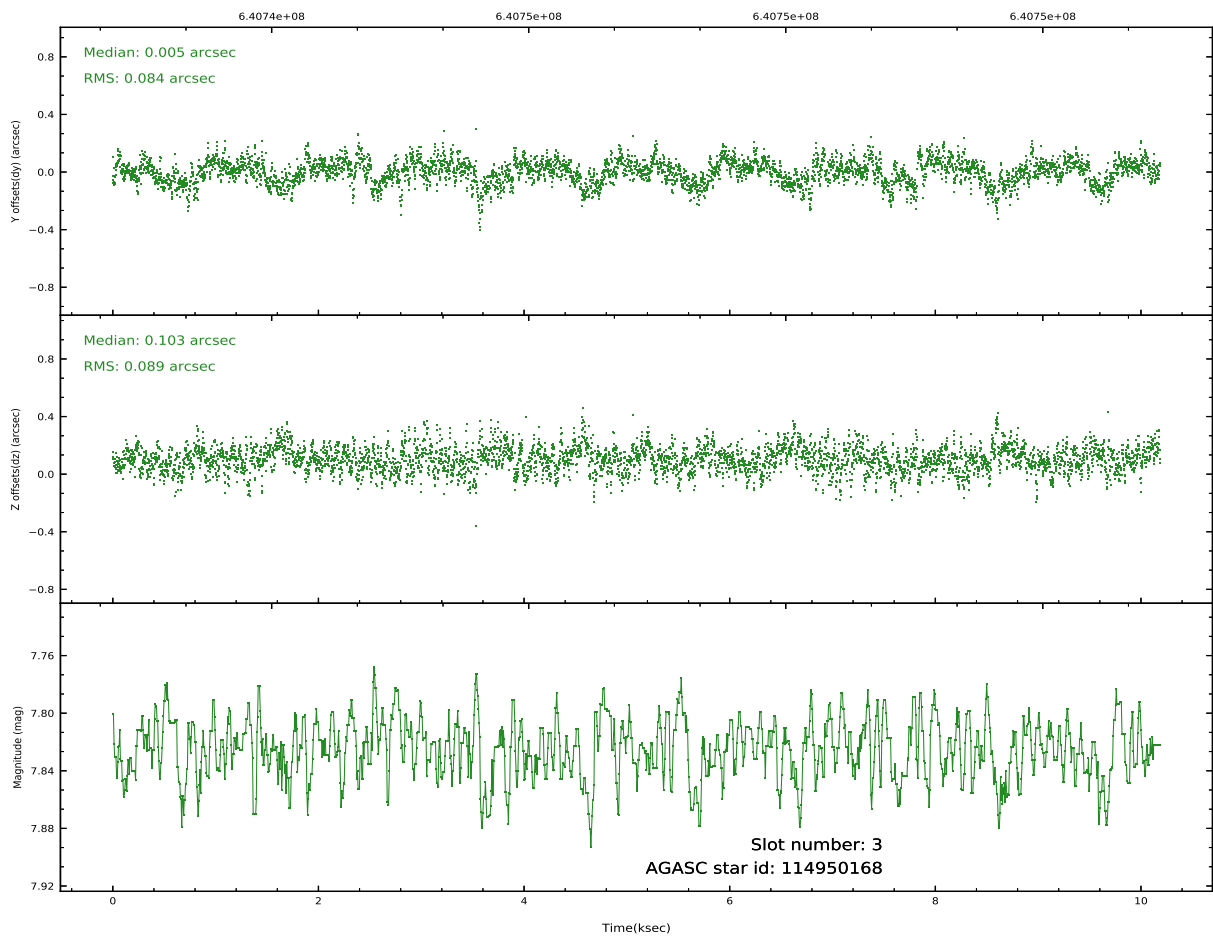
∞

2.4 Star Slots

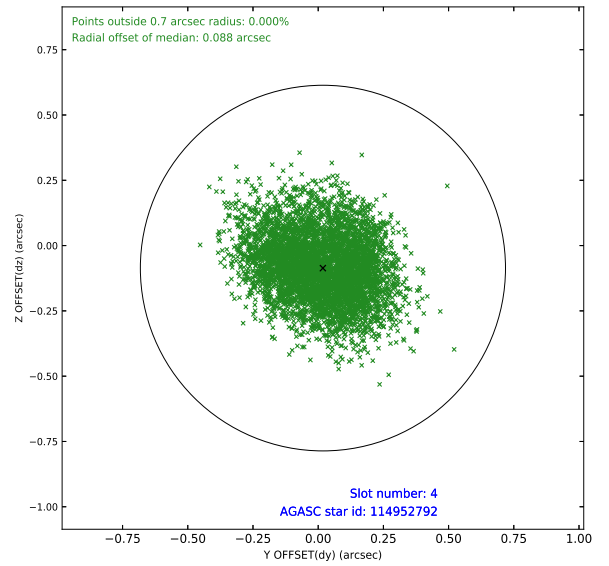
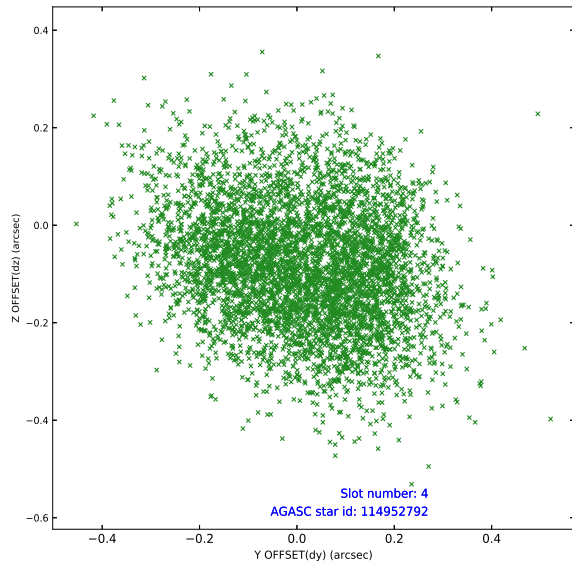
2.4.1 Slot 3



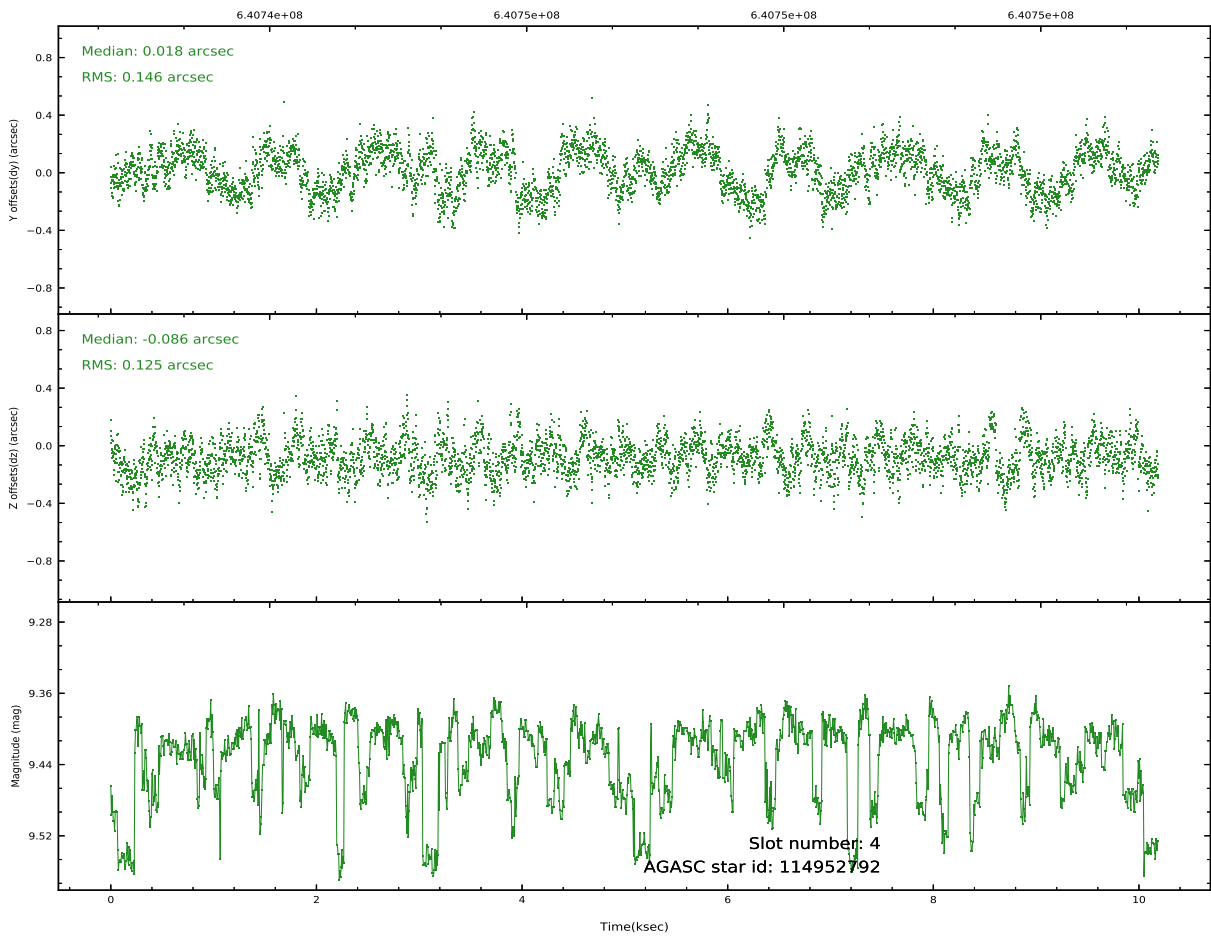
Time (s)



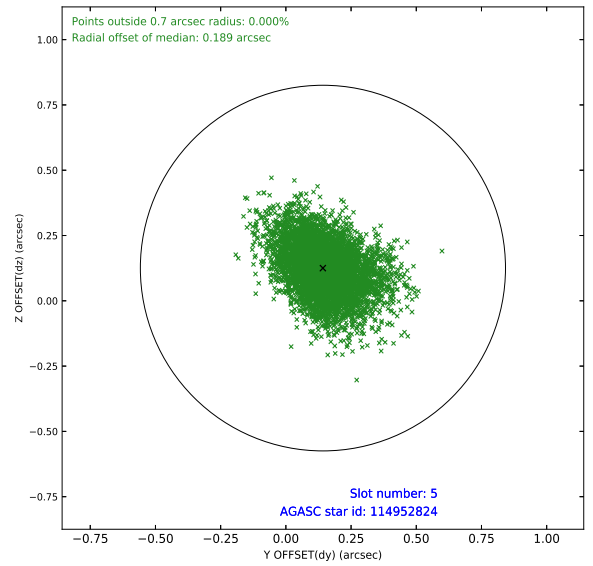
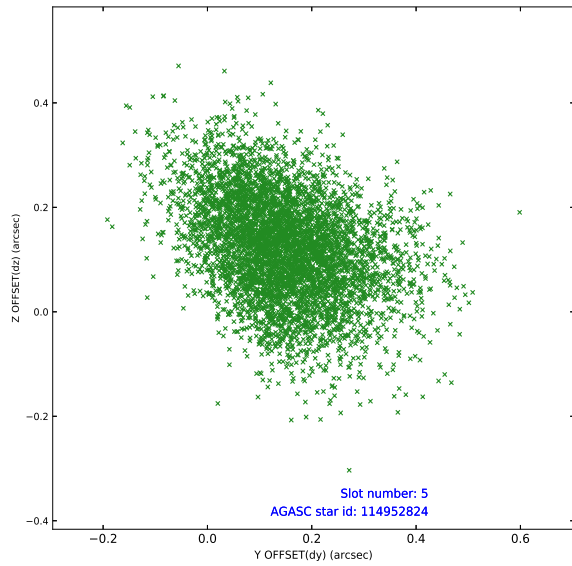
2.4.2 Slot 4



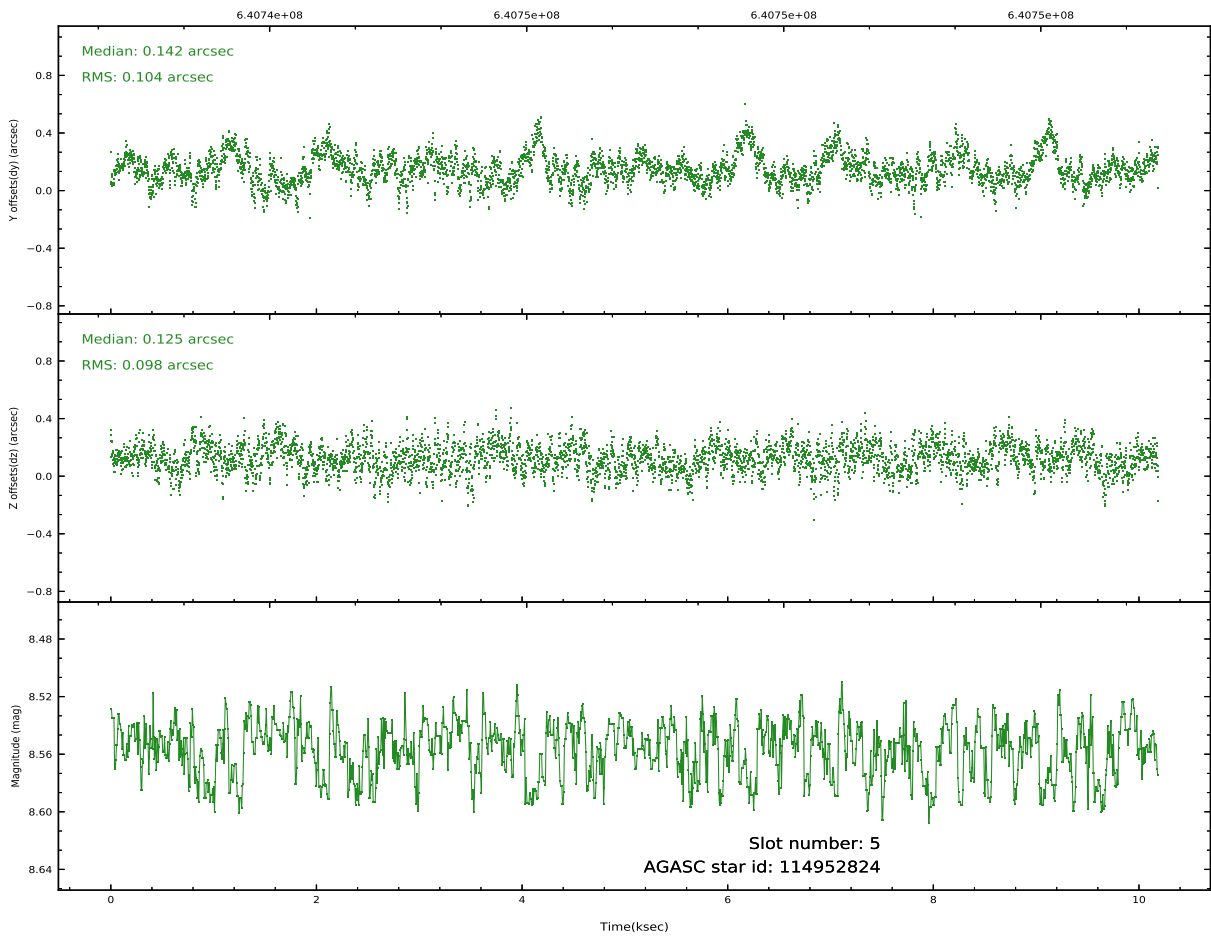
Time (s)



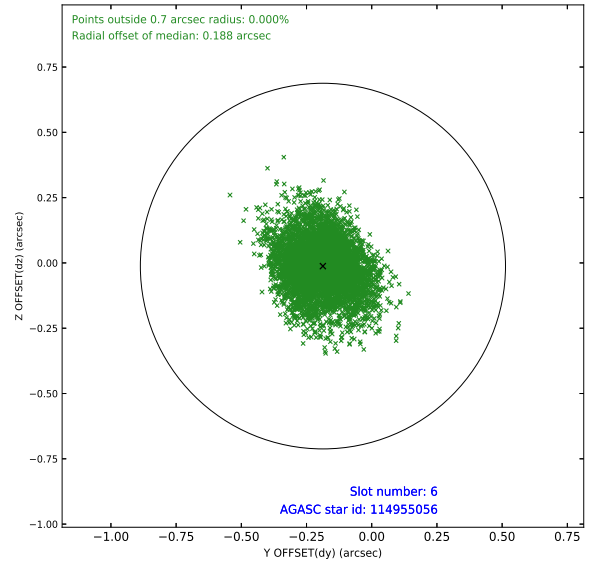
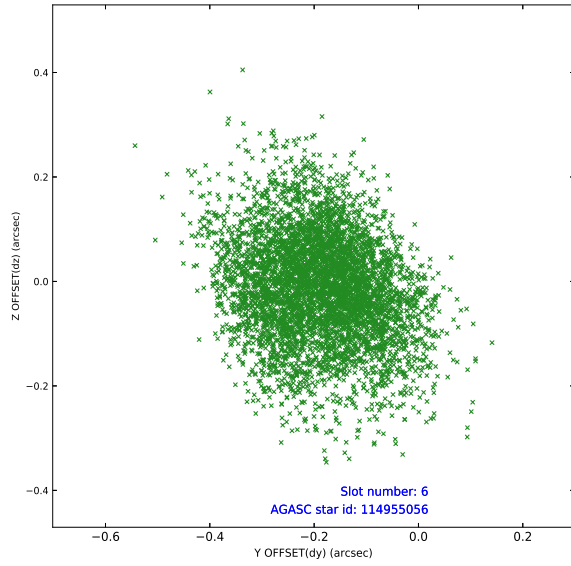
2.4.3 Slot 5



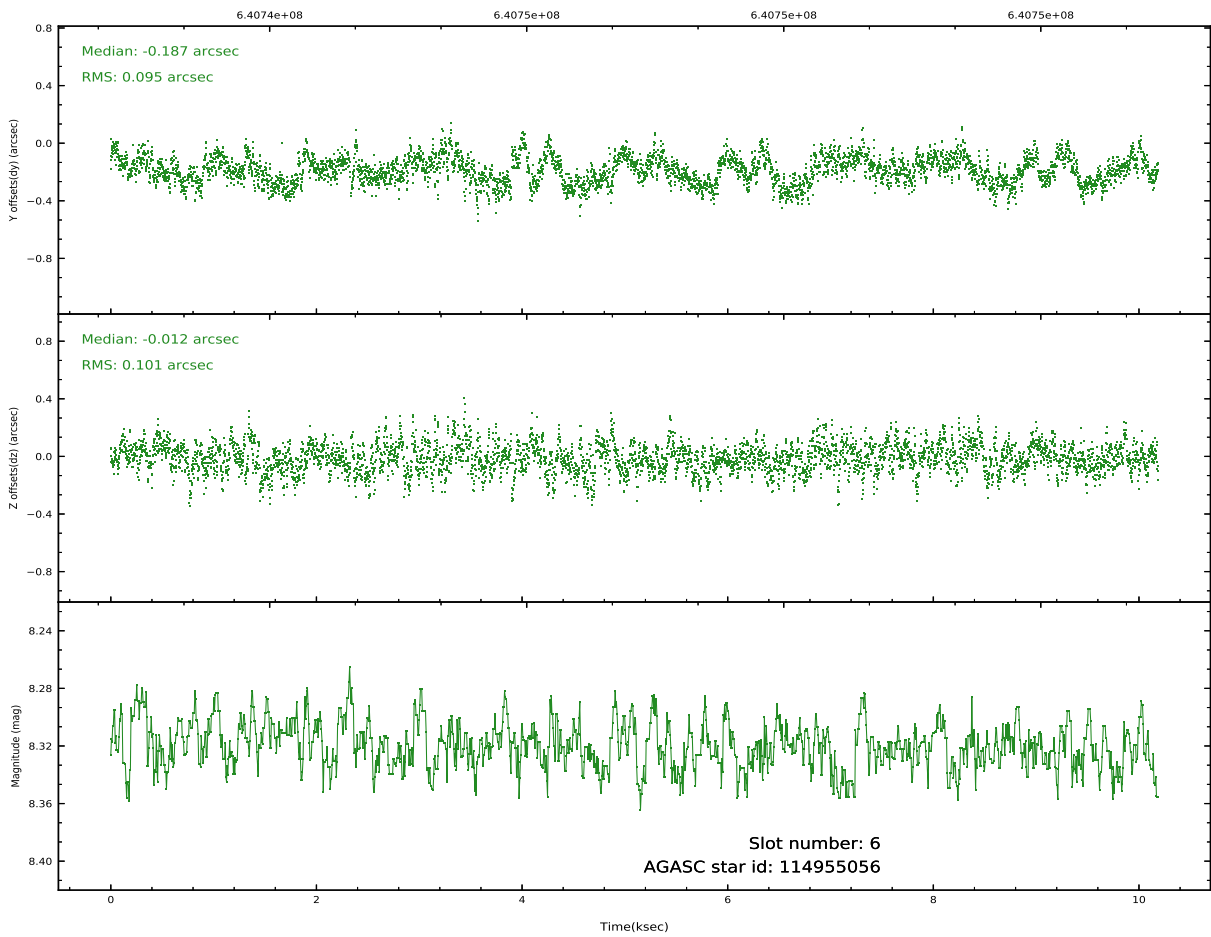
Time (s)



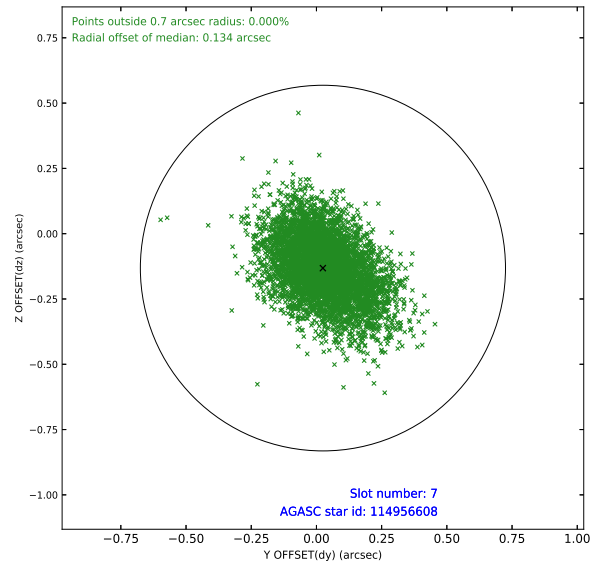
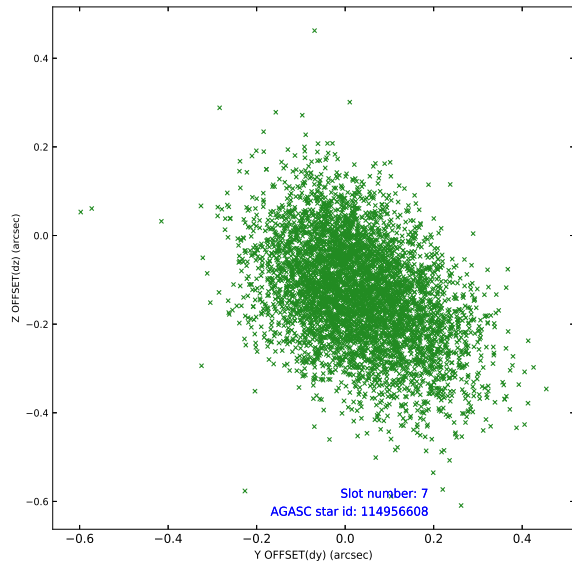
2.4.4 Slot 6



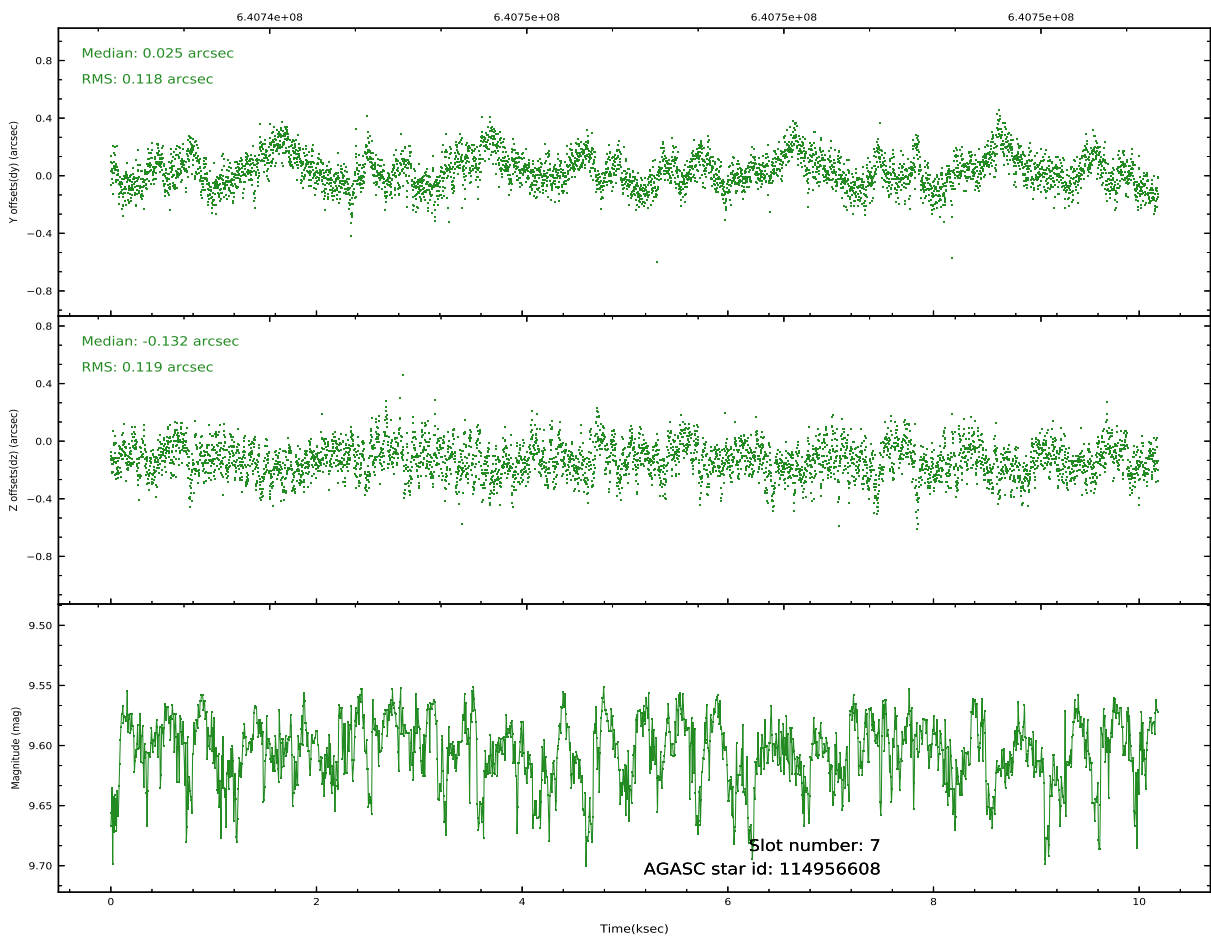
Time (s)



2.4.5 Slot 7

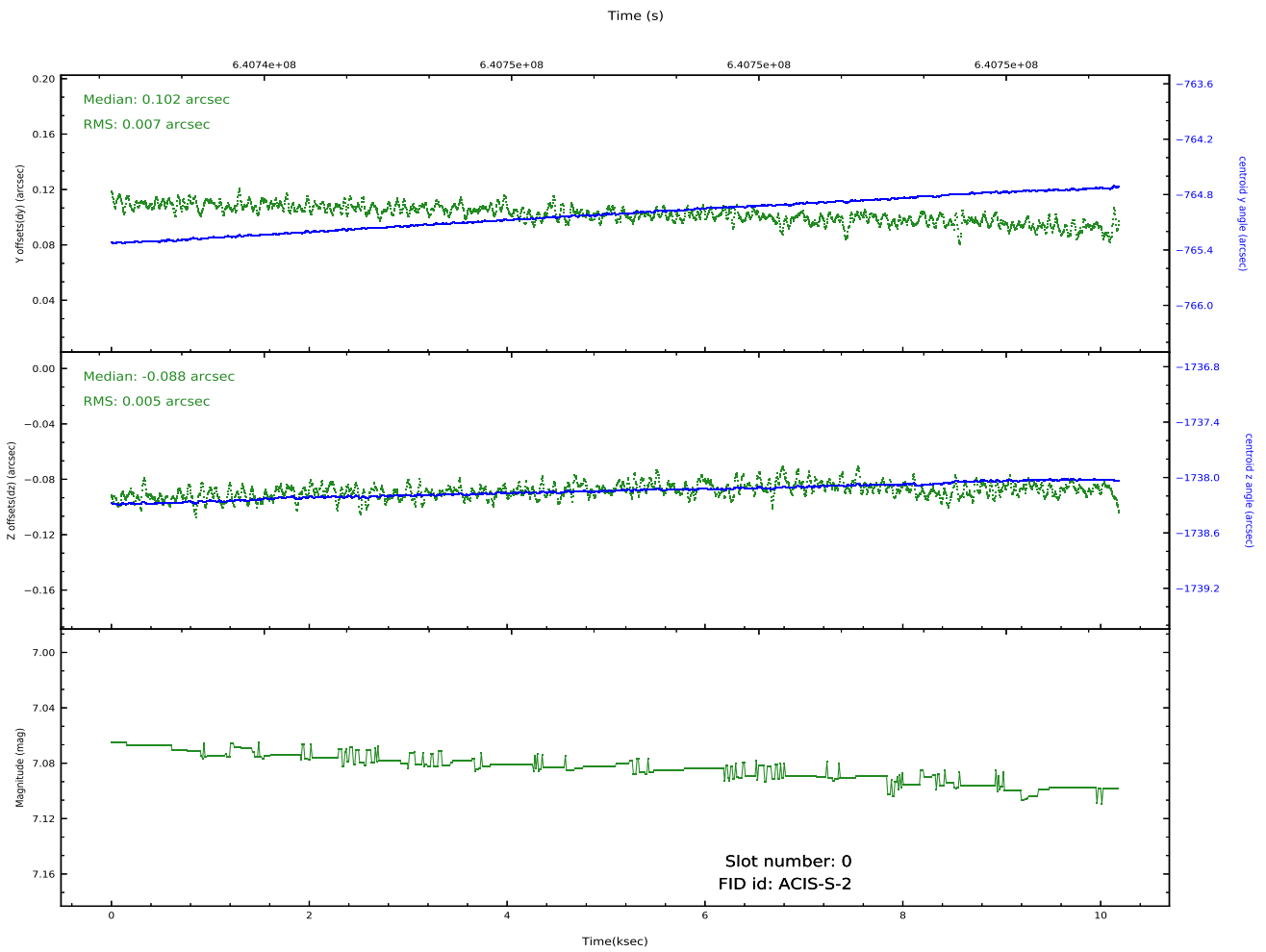
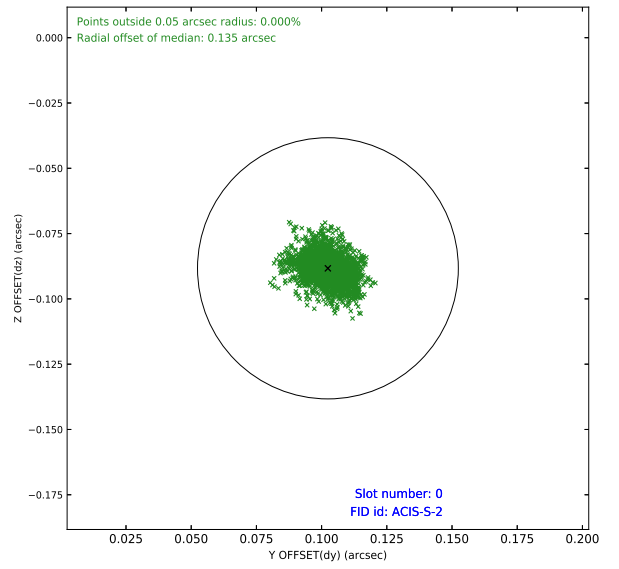
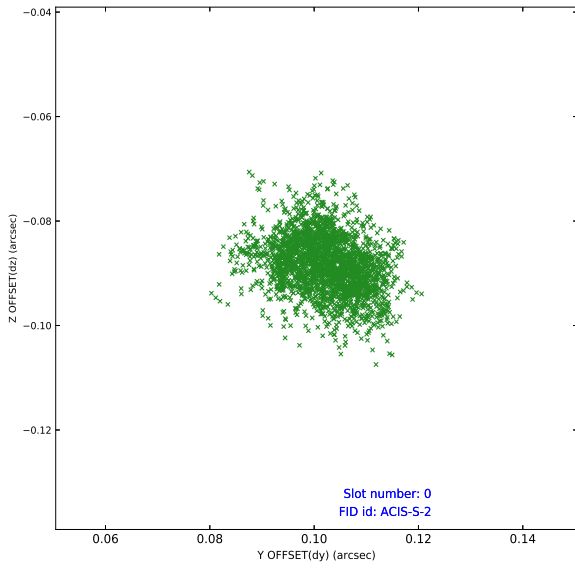


Time (s)

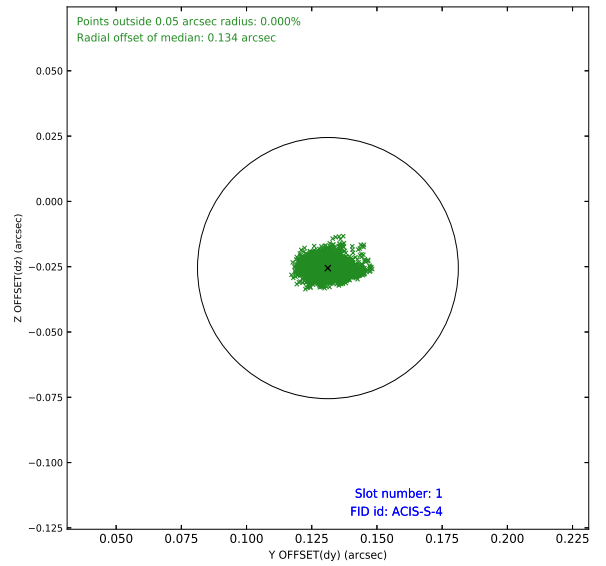
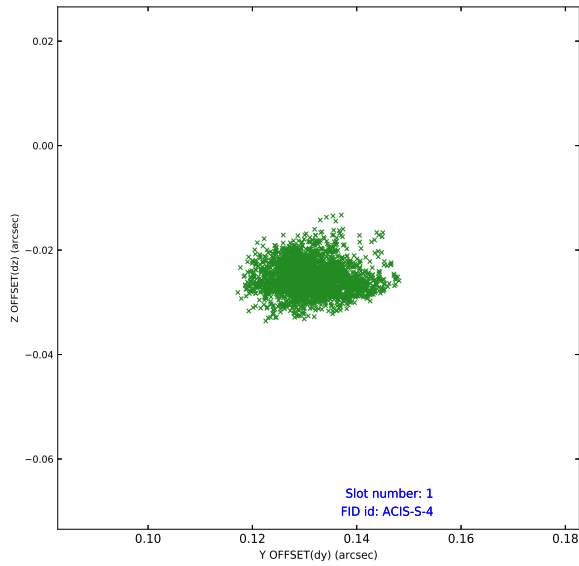


2.5 FID Slots

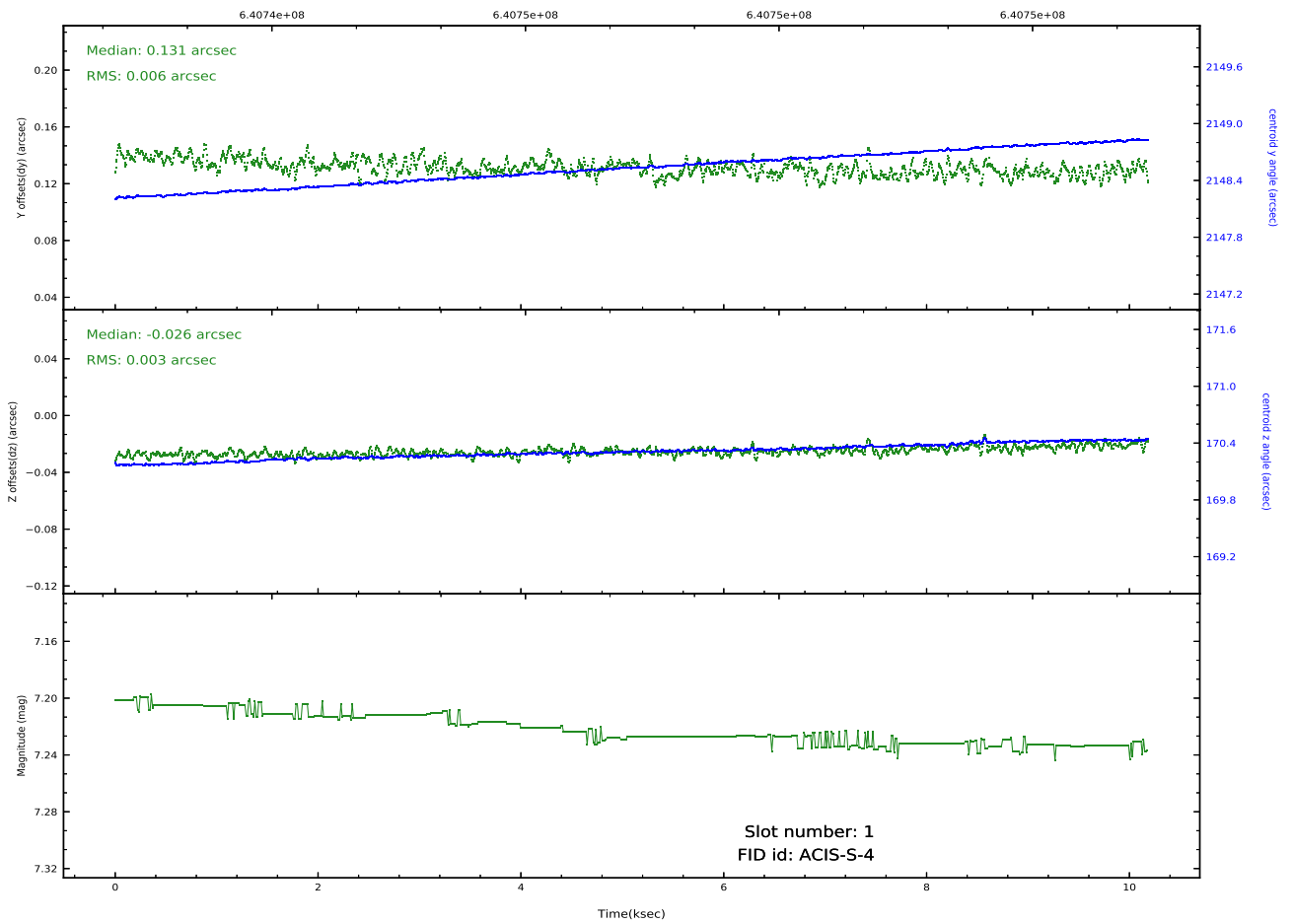
2.5.1 Slot 0



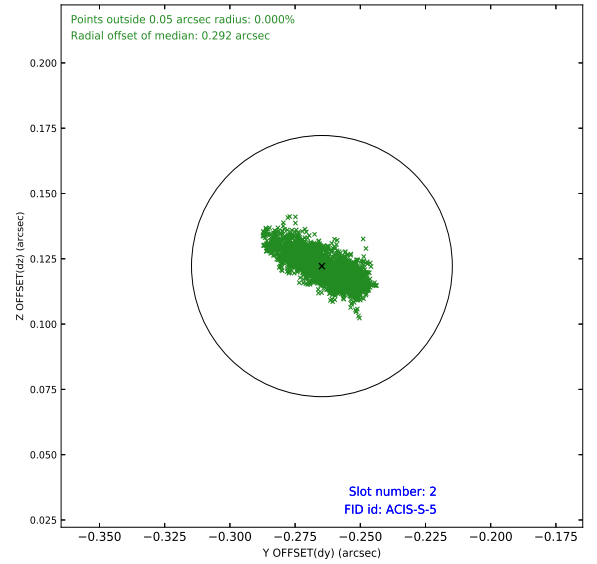
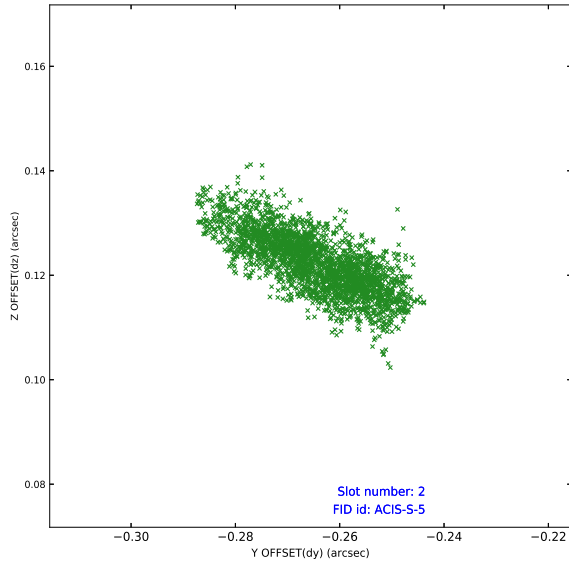
2.5.2 Slot 1



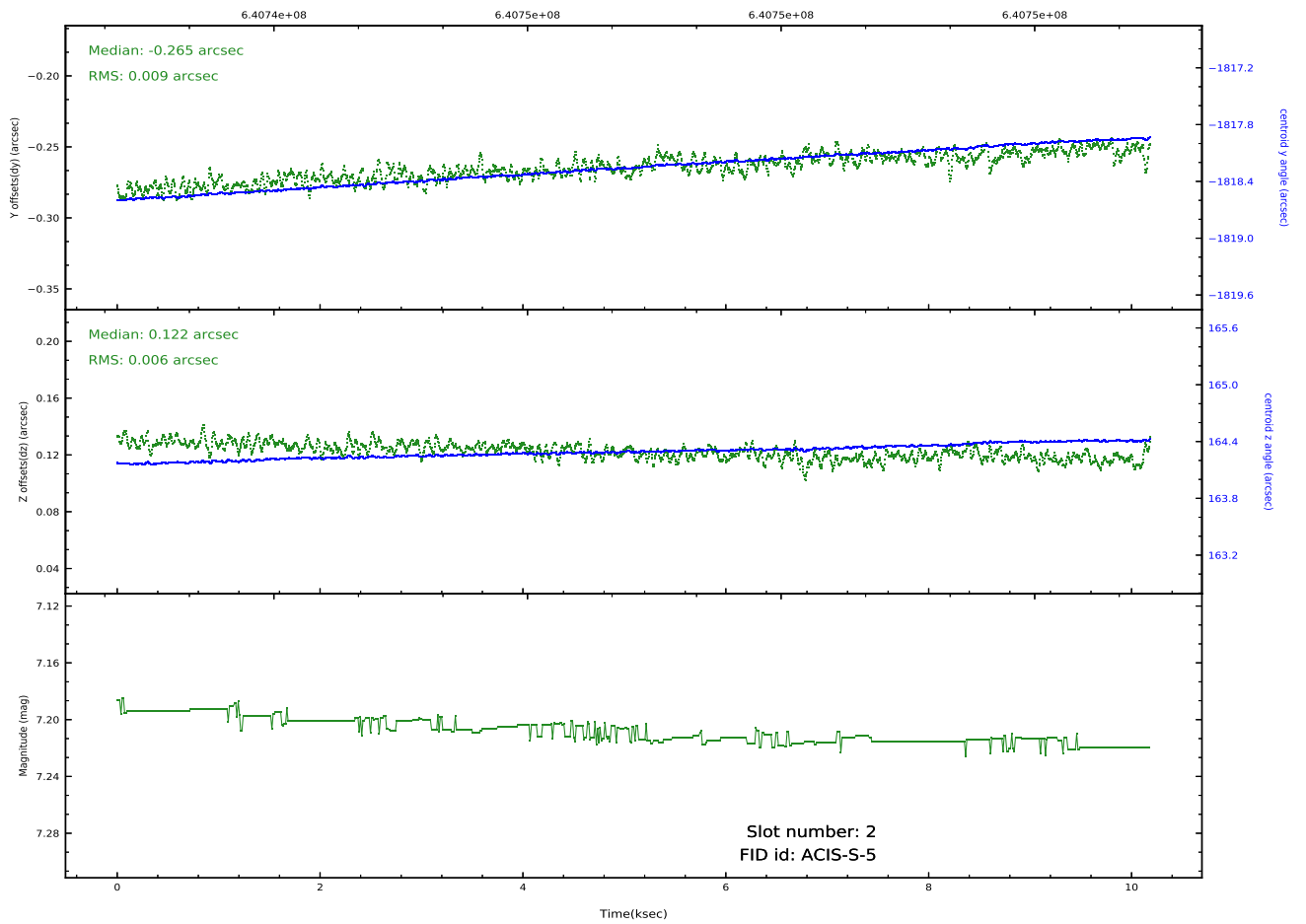
Time (s)



2.5.3 Slot 2



Time (s)



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	10.069495342851

A.2 Comments