

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19403 - L2 Version 3
Chandra X-Ray Center

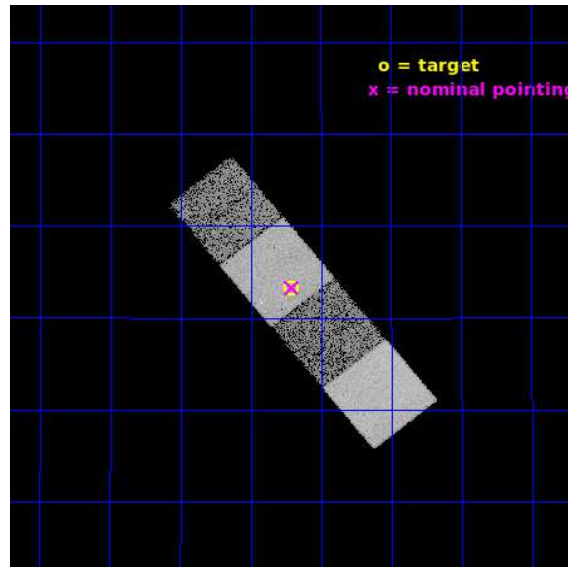
L2 Processing Date : Oct 25 2020

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1 Front

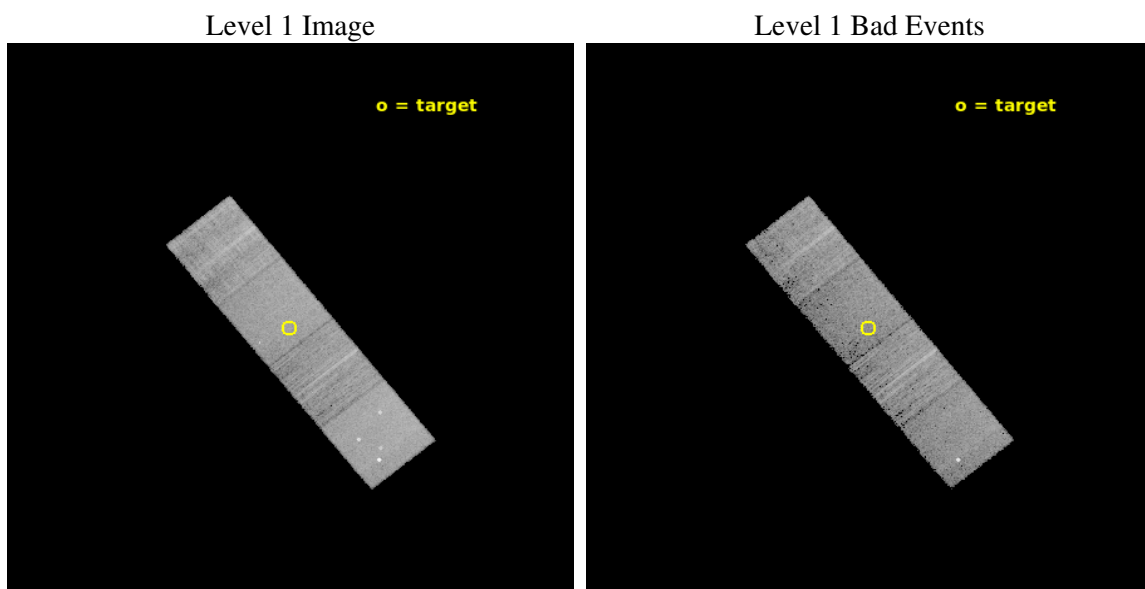
seq_num	601360	Sequence number
obs_id	19403	Observation id
title	Spiral galaxies of the Virgo cluster	Proposal title
observer	Roberto Soria	Principal investigator
object	NGC 4607	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	190.301667	Observer's specified target RA [deg]
dec_targ	11.886639	Observer's specified target Dec [deg]
ra_nom	190.30143633988	Nominal RA [deg]
dec_nom	11.888120973616	Nominal Dec [deg]
roll_nom	231.08911893131	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8063.1000621319	Sum of GTIs [s]
livetime	7957.7497238522	Livetime [s]
ontime5	8063.1000621319	Sum of GTIs [s]
ontime6	8063.1000621319	Sum of GTIs [s]
ontime7	8063.1000621319	Sum of GTIs [s]
ontime8	8063.1000621319	Sum of GTIs [s]
l2events	87237	Number of level 2 events



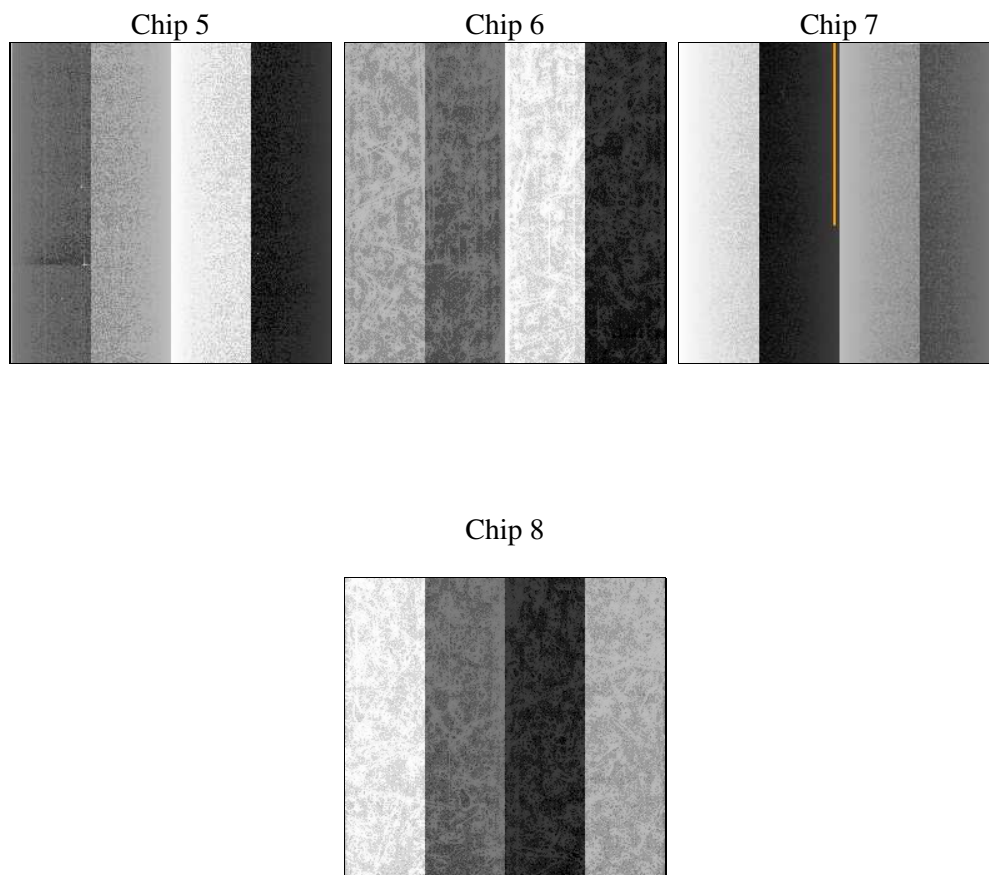
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.170000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	8063.1000621319	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	8063.1000621319	Sum of GTIs [s]
date	2020-10-25T21:43:49	Date and time of file creation	ontime6	8063.1000621319	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	8063.1000621319	Sum of GTIs [s]
			ontime8	8063.1000621319	Sum of GTIs [s]
			l1events	310669	Number of level 1 events

2.1.4 Events

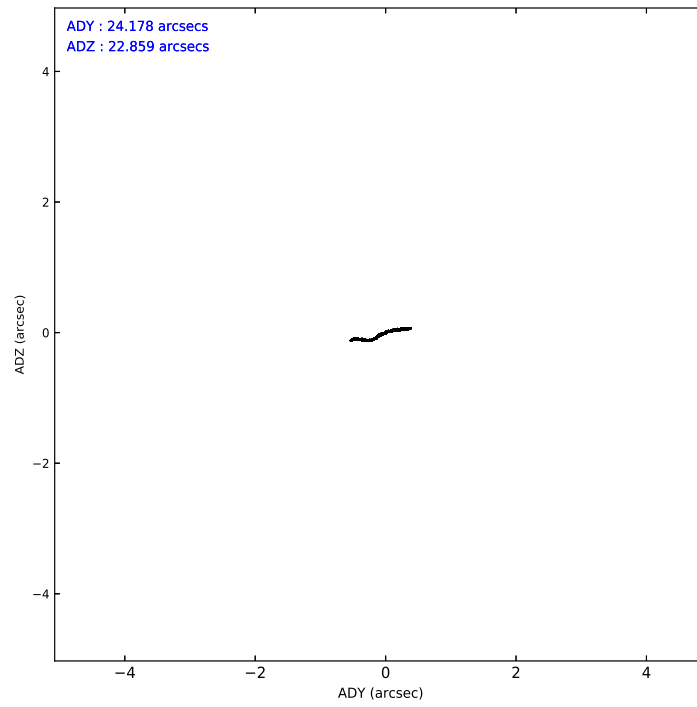
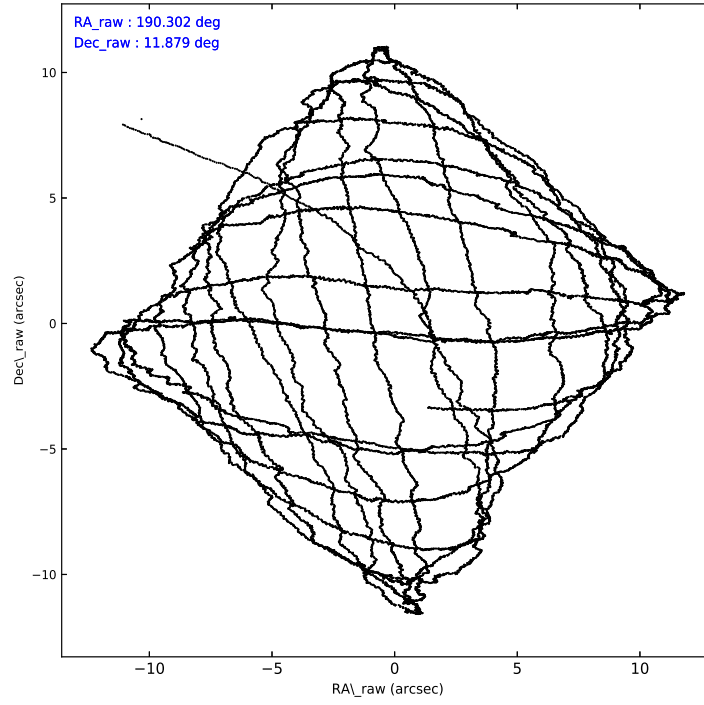
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	96255	61576	75794	77044
rejected events	49895	54824	42423	56504
rejected %	51%	89%	55%	73%

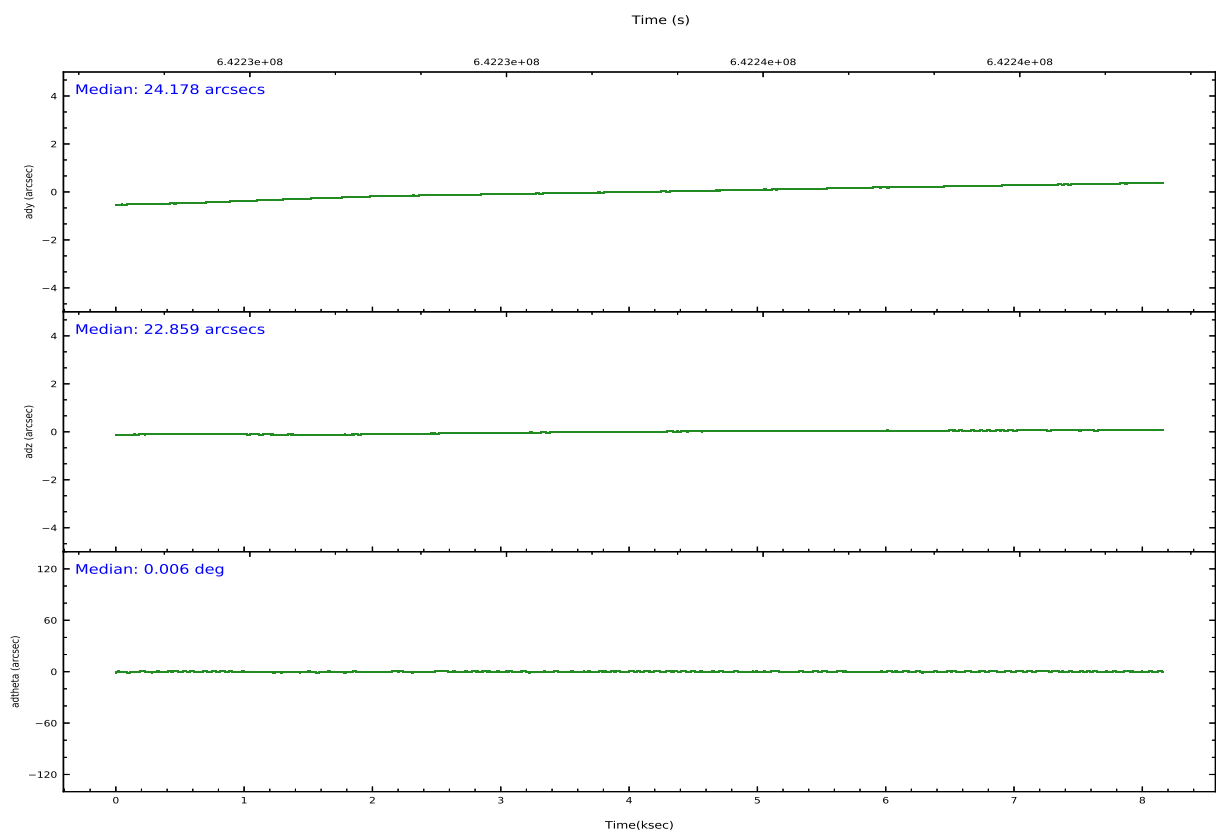
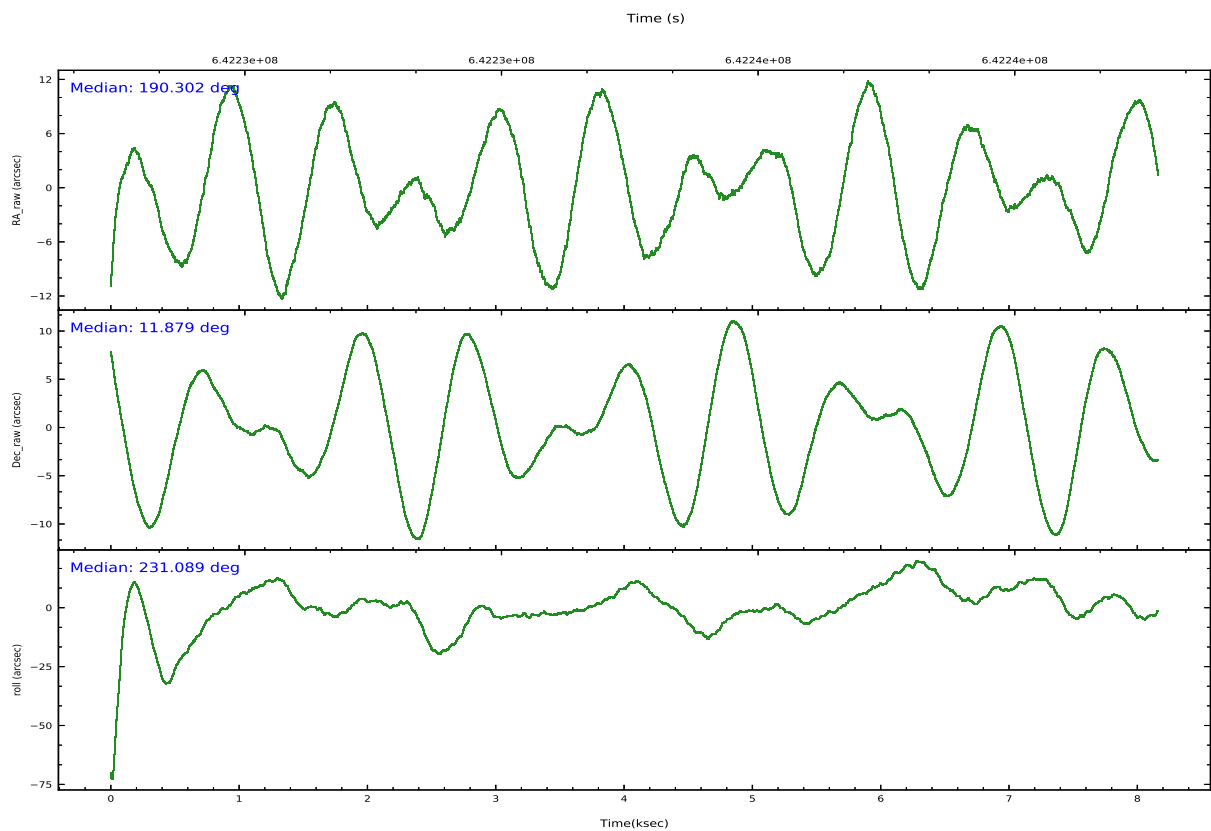
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4691	2274	2850	5960
	4%	3%	3%	7%
grade 1 events	222	30	98	69
	0%	0%	0%	0%
grade 2 events	14660	1566	7099	4973
	15%	2%	9%	6%
grade 3 events	1321	655	2694	2161
	1%	1%	3%	2%
grade 4 events	1317	683	2697	2009
	1%	1%	3%	2%
grade 5 events	6471	2738	7437	4246
	6%	4%	9%	5%
grade 6 events	24409	1580	18061	5481
	25%	2%	23%	7%
grade 7 events	43164	52050	34858	52145
	44%	84%	45%	67%

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	190.306100	190.30143633988	Subarray requested	NONE	NONE
[deg] Pointing Dec	11.905693	11.888120973616	Alternating exposures requested	N	N
[deg] Pointing Roll	230.931986	231.08911893131	[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)	642231118.184000	642230231.23009			
Observation start date	2018-05-09T05:30:49	2018-05-09T05:17:11			
[s] Observation end time (MET)	642239118.184000	642239953.35567			
Observation end date	2018-05-09T07:44:09	2018-05-09T07:59:13			
Read mode	TIMED	TIMED			

2.3 Aspect



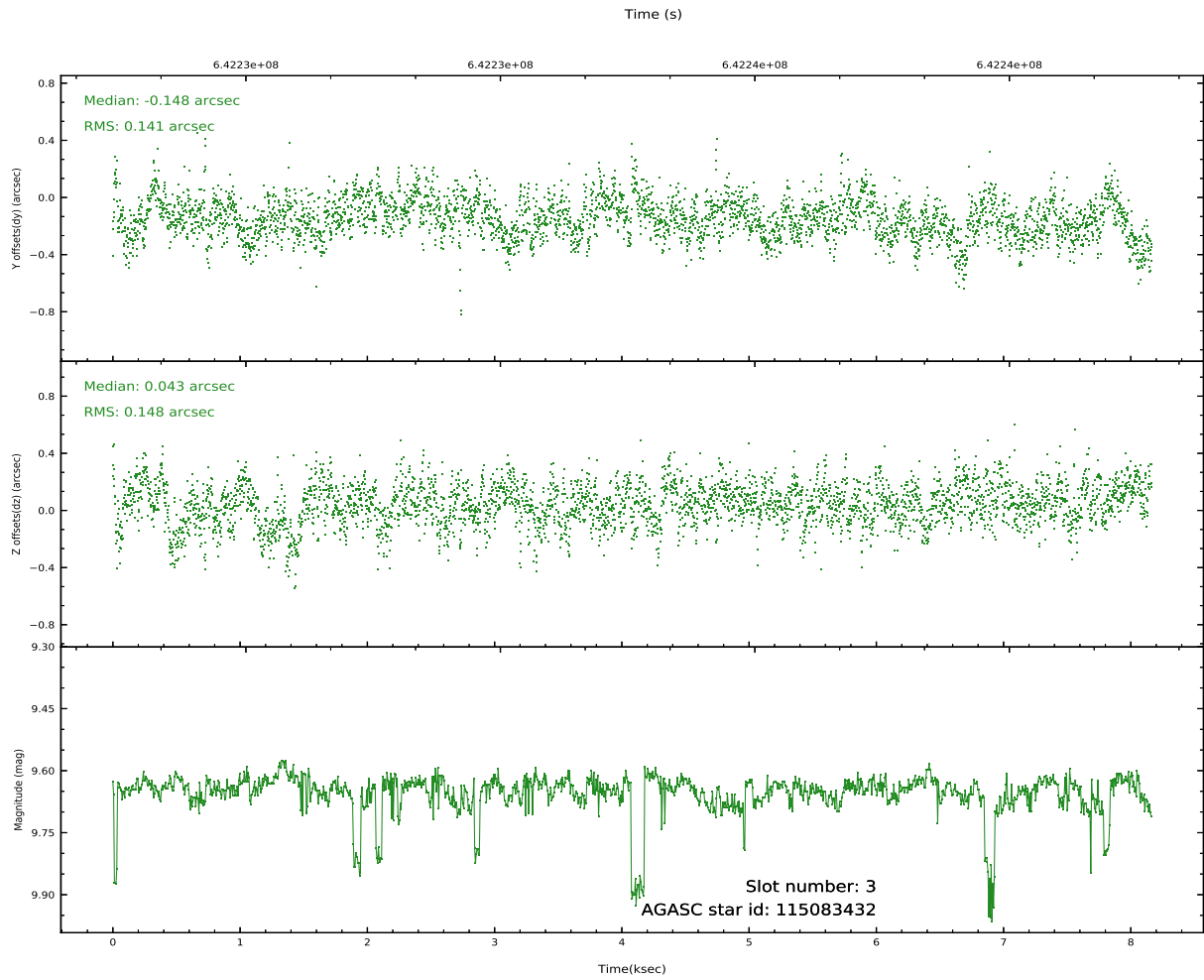
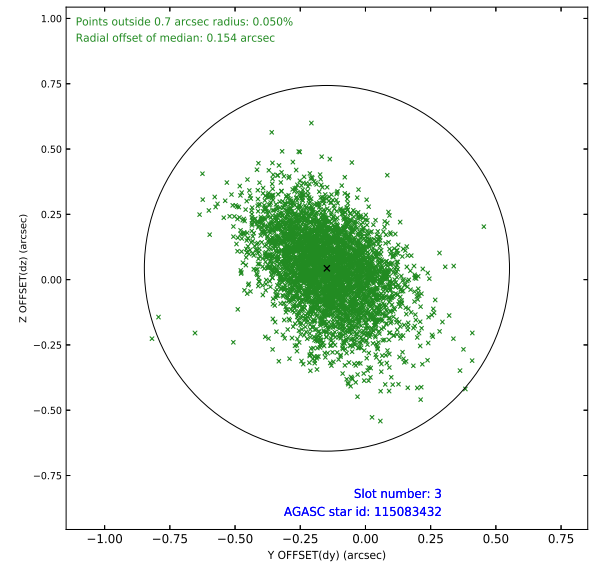
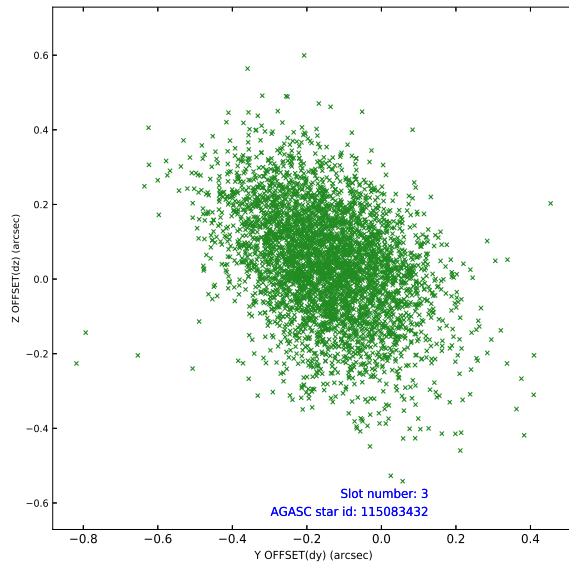


Slot Statistics

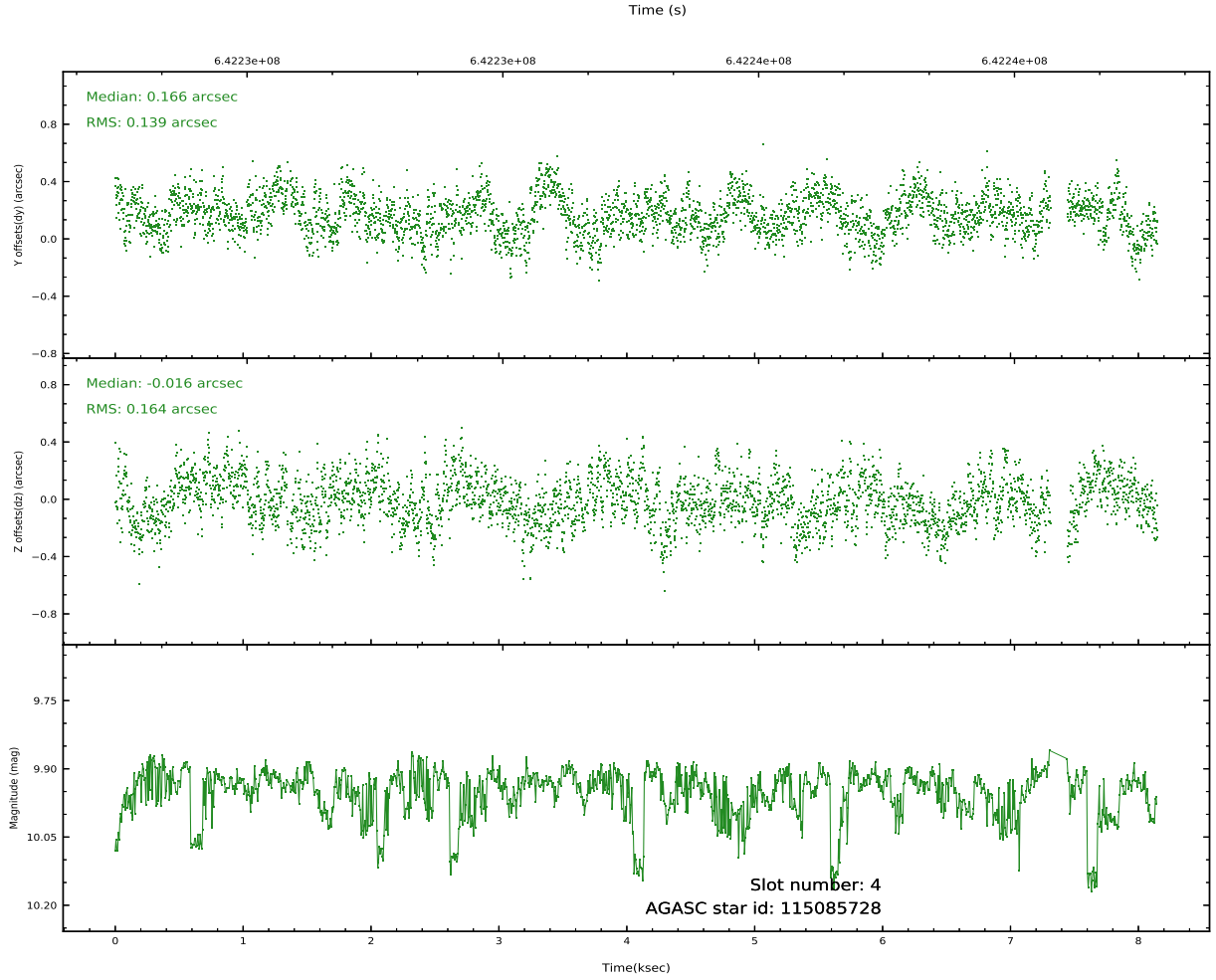
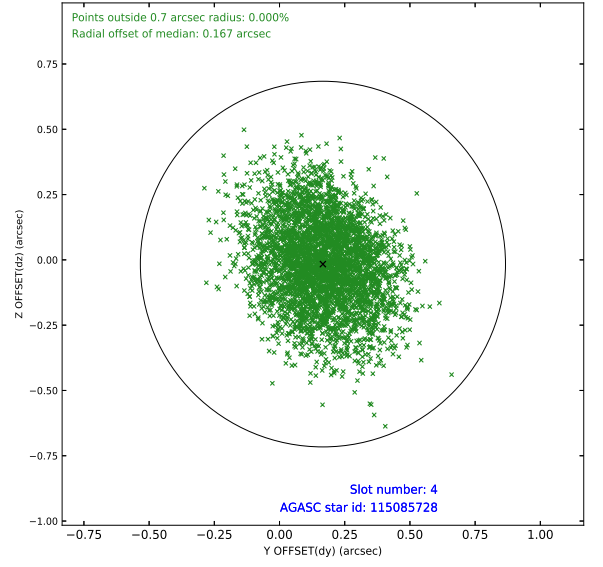
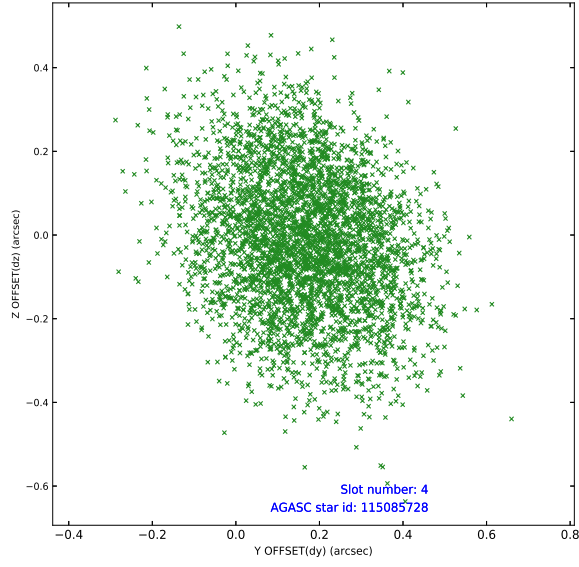
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.02	1990	1.000	0.156	-0.098	0.009	0.018	0.000000	0.000000	-777.54	-1744
1	FID		ACIS-S-4	7.12	1991	1.000	0.101	-0.049	0.007	0.013	0.000000	0.000000	2135.70	162
2	FID		ACIS-S-5	7.13	1991	1.000	-0.290	0.155	0.010	0.015	0.000000	0.000000	-1829.62	158
3	GUIDE	used	115083432	9.65	3975	1.000	-0.148	0.043	0.212	0.361	190.888504	12.192141	-2093.36	940
4	GUIDE	used	115085728	9.94	3884	1.000	0.166	-0.016	0.230	0.366	190.191864	12.341254	-963.71	-1299
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
6	GUIDE	used	115089520	9.57	3965	1.000	0.055	-0.145	0.293	0.480	189.892491	12.217562	44.93	-1838
7	GUIDE	used	115482240	7.30	3982	1.000	-0.083	0.106	0.163	0.273	190.182782	12.715426	-1989.69	-2173

2.4 Star Slots

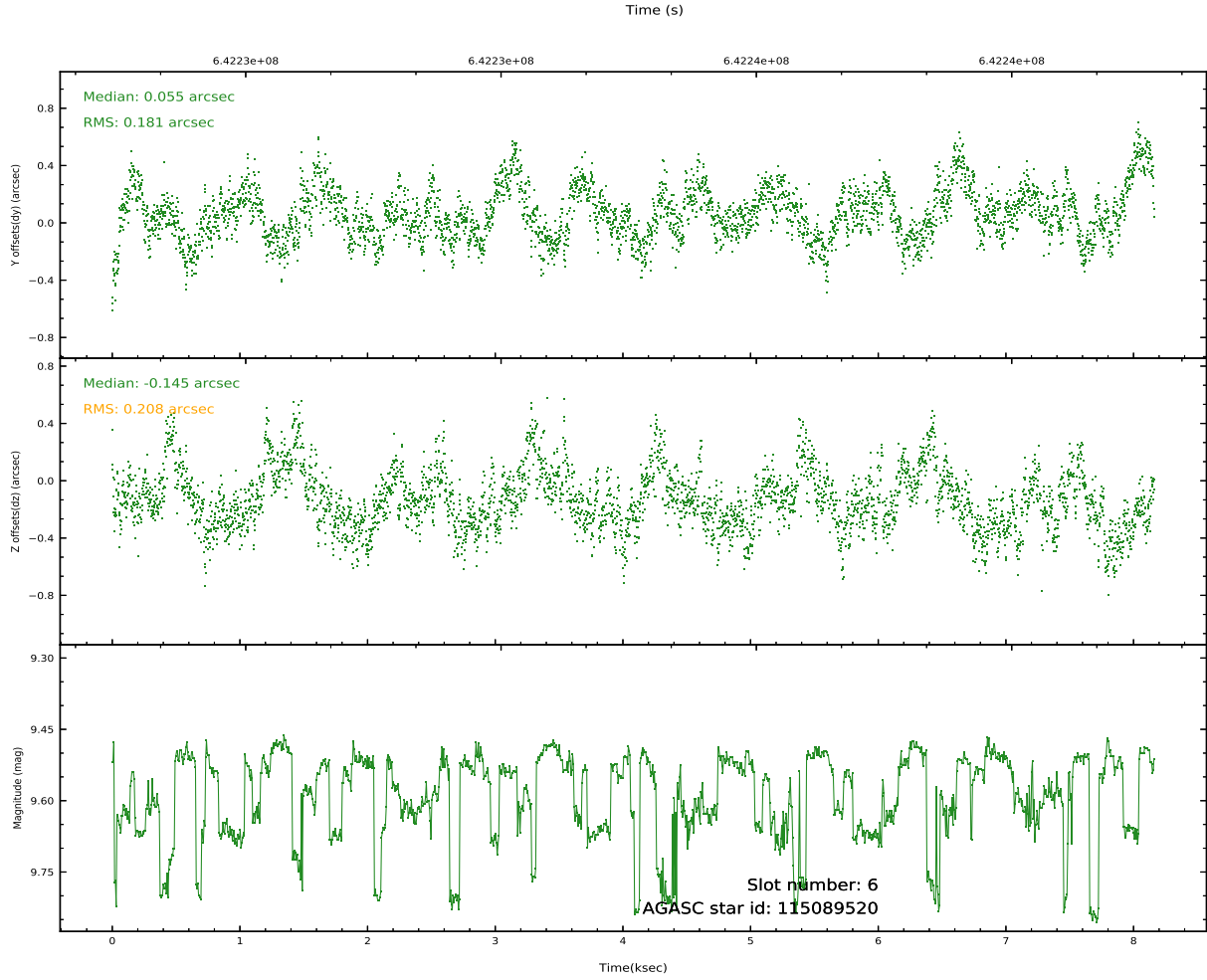
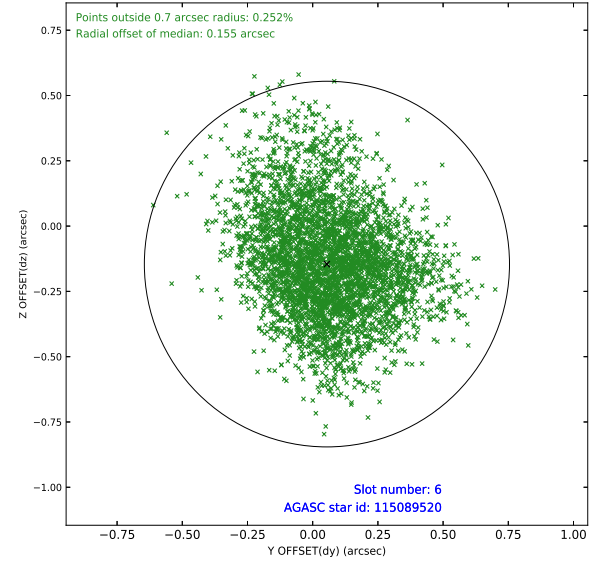
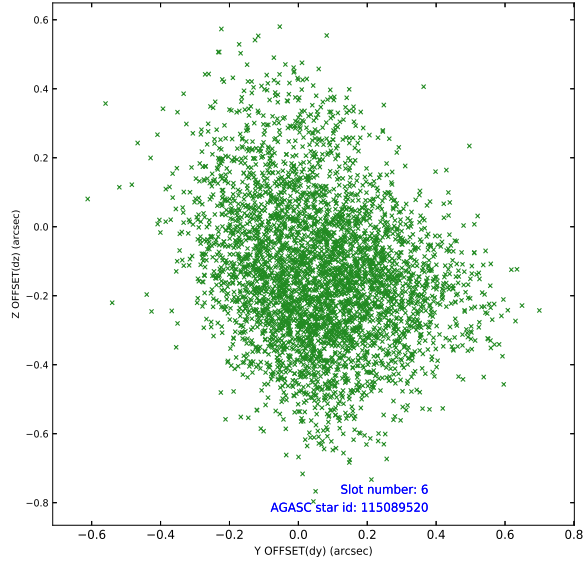
2.4.1 Slot 3



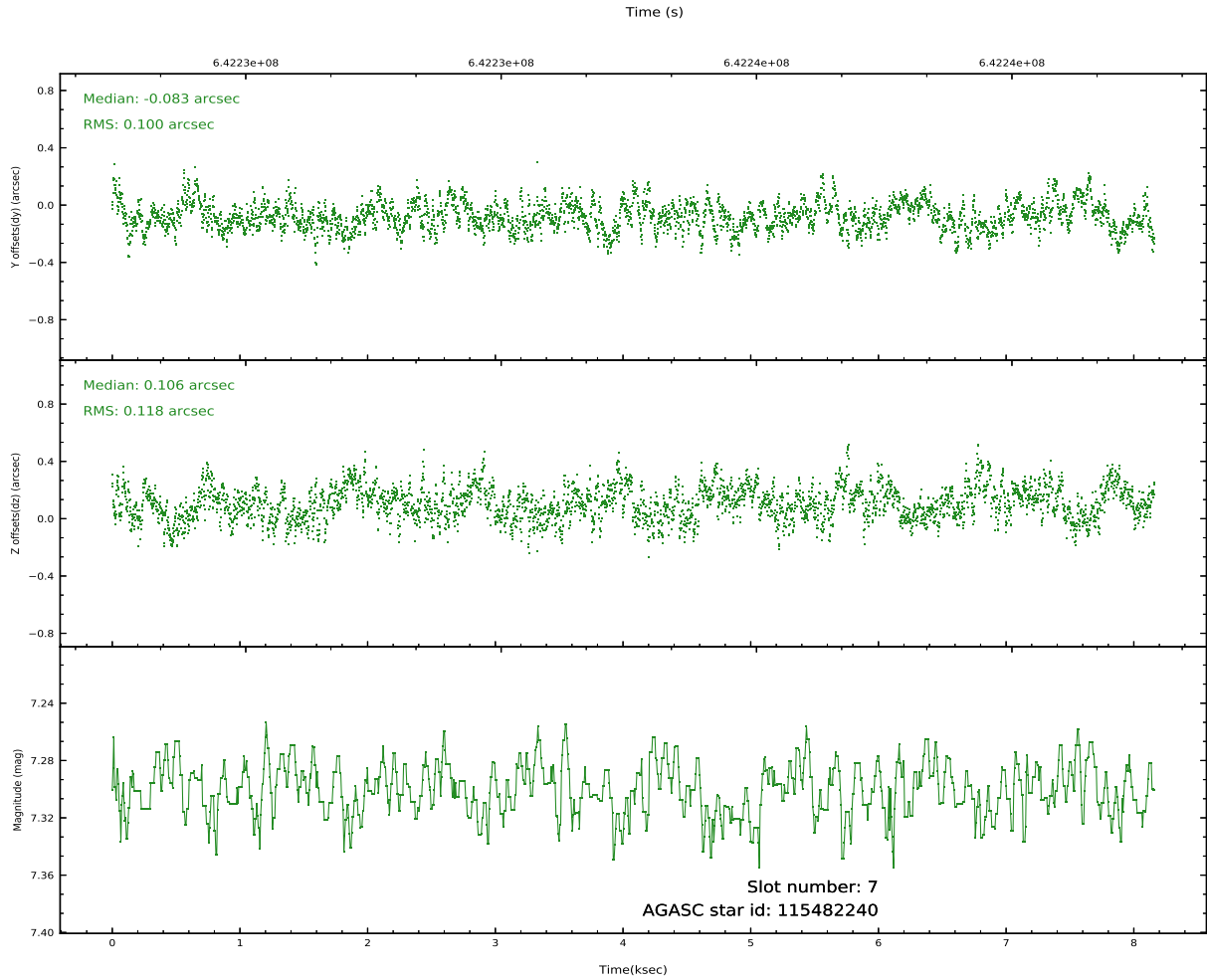
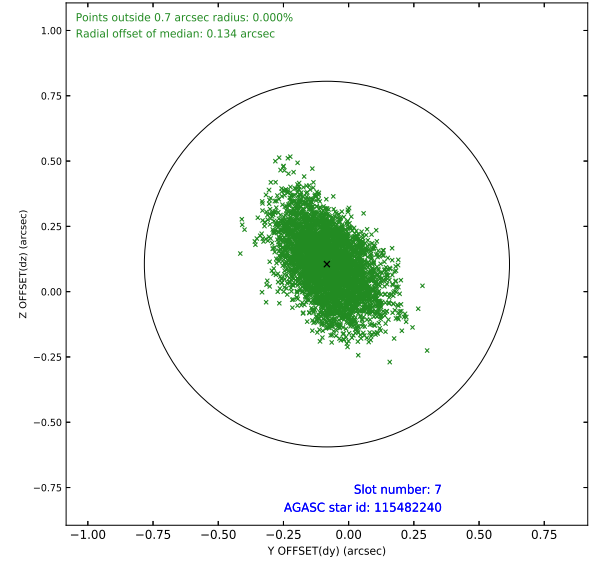
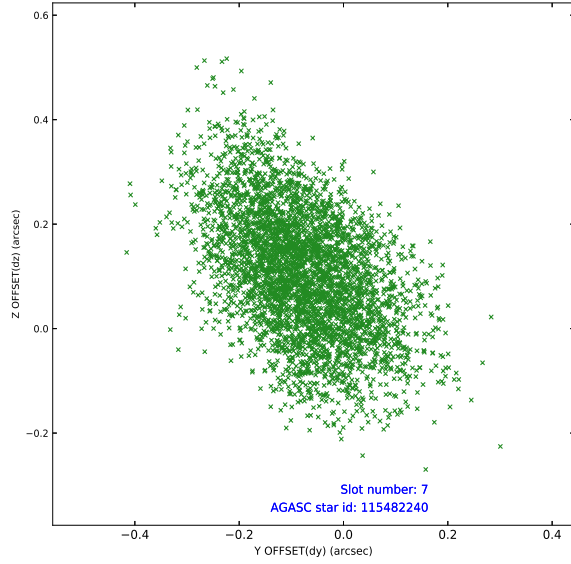
2.4.2 Slot 4



2.4.3 Slot 6

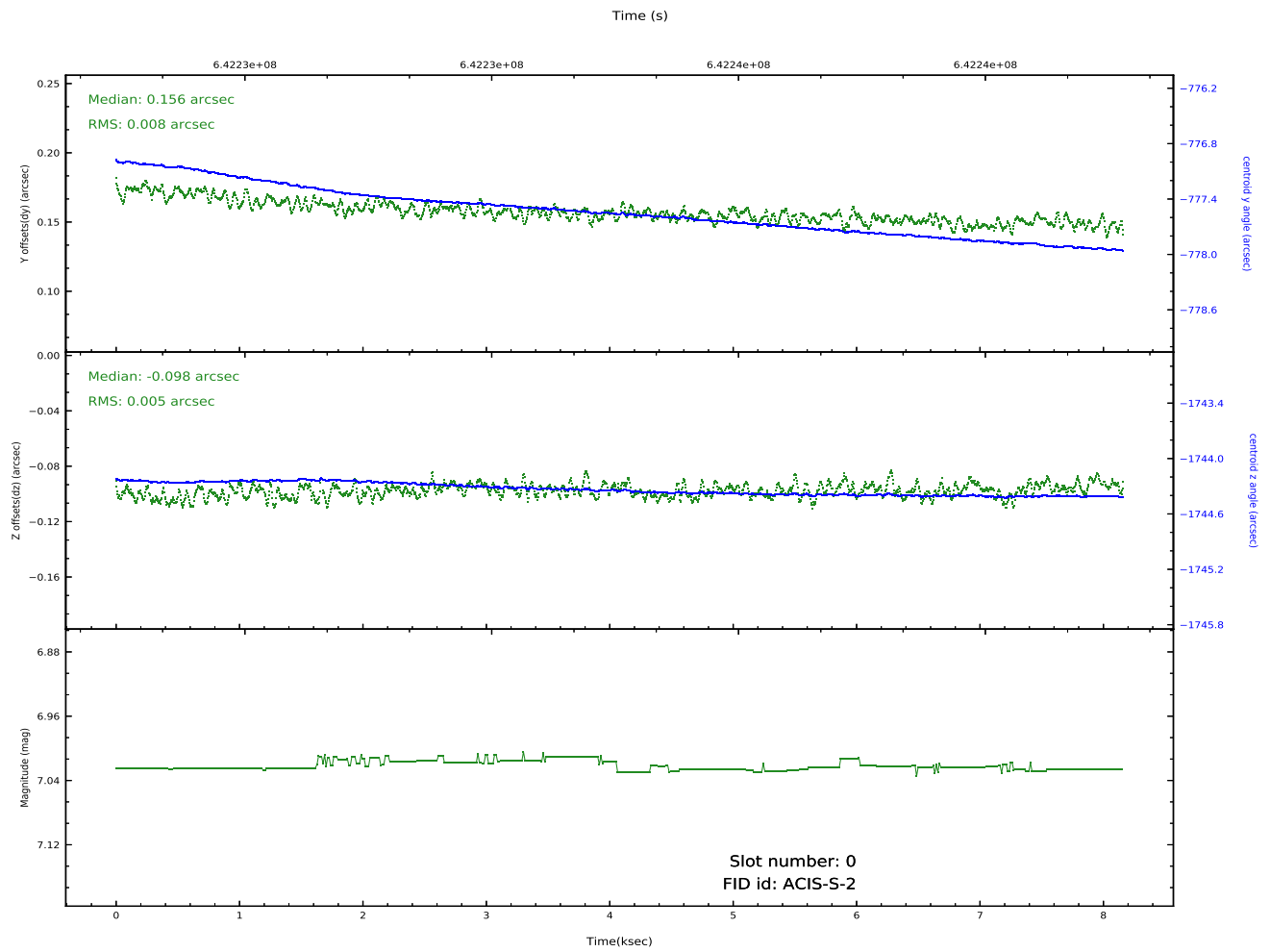
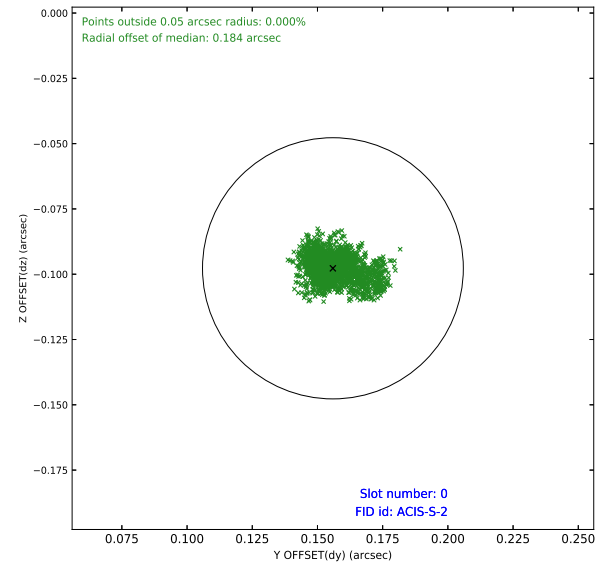
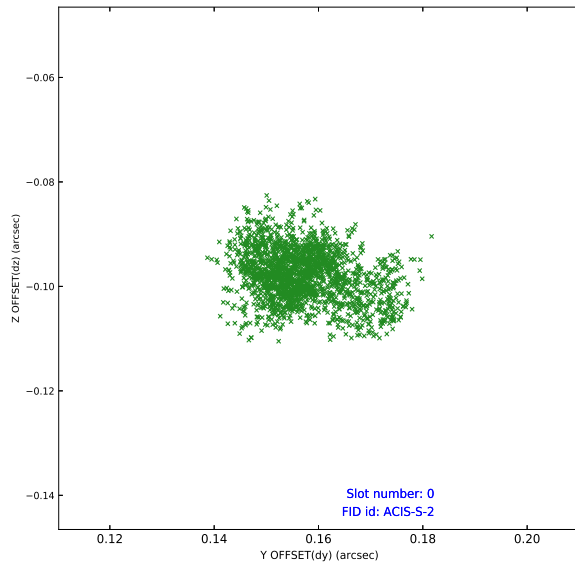


2.4.4 Slot 7

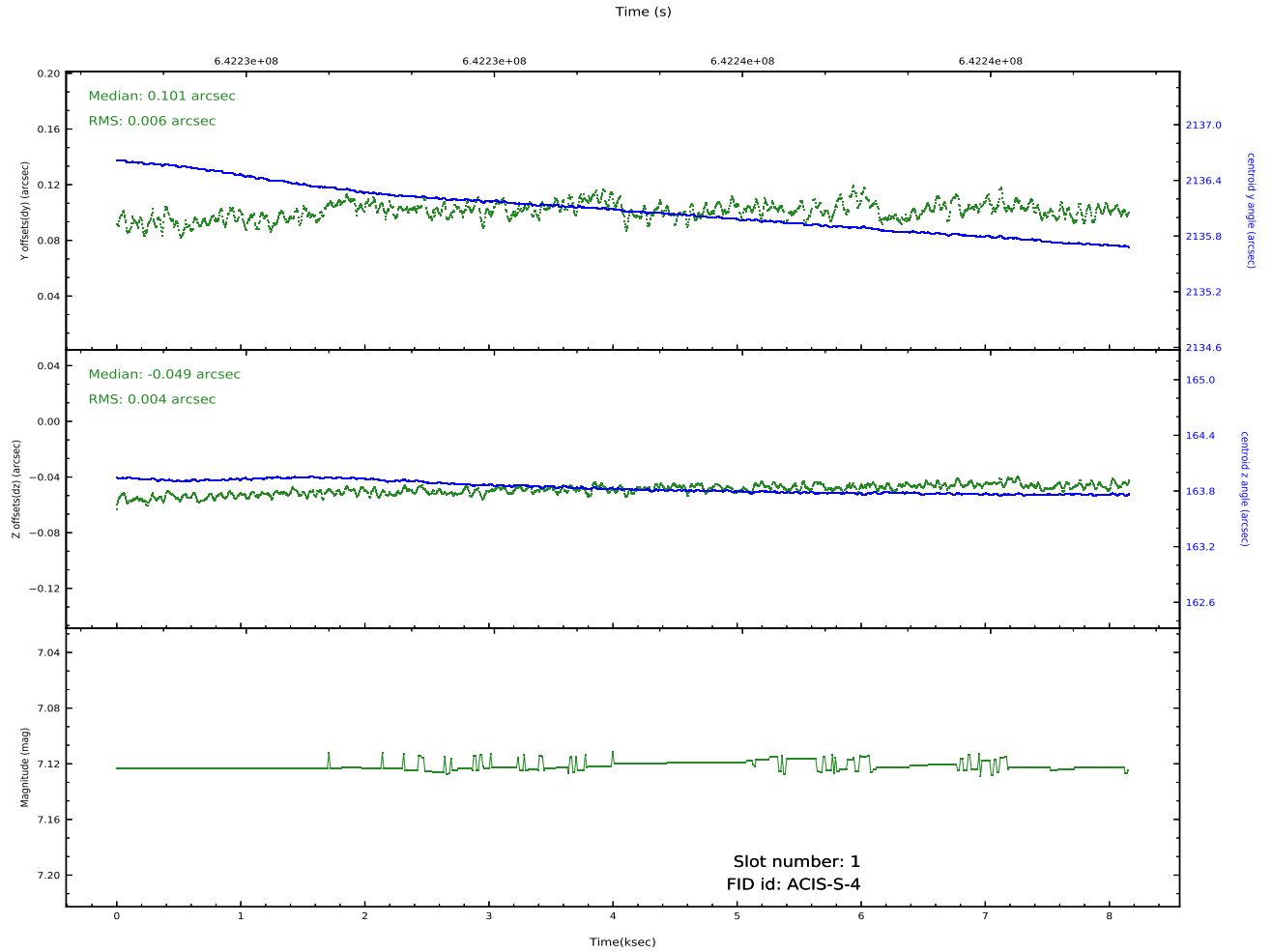
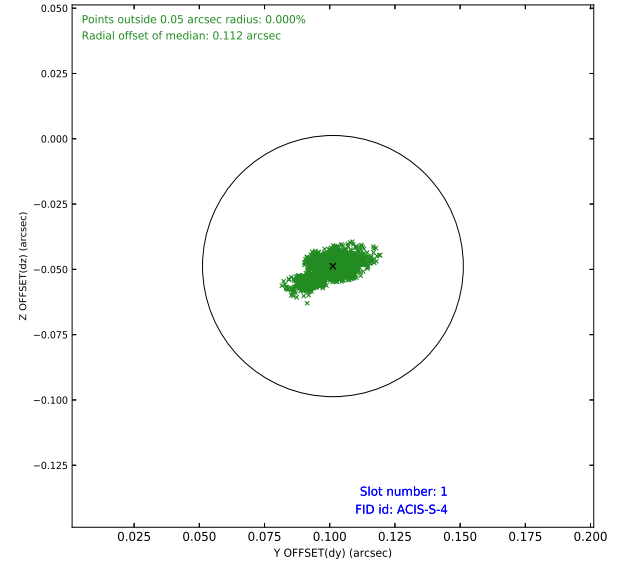
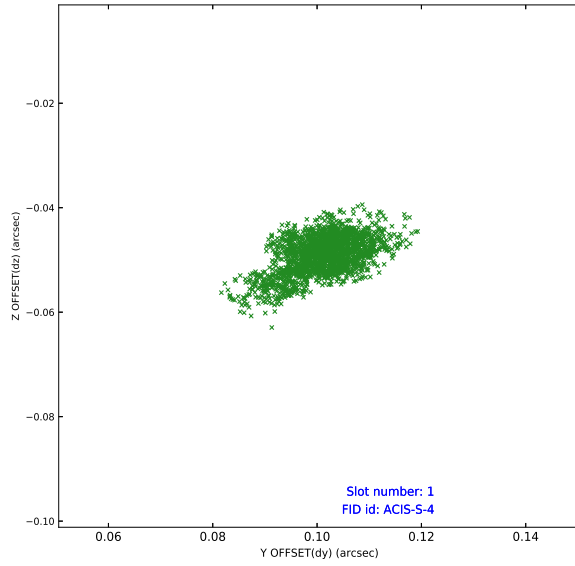


2.5 FID Slots

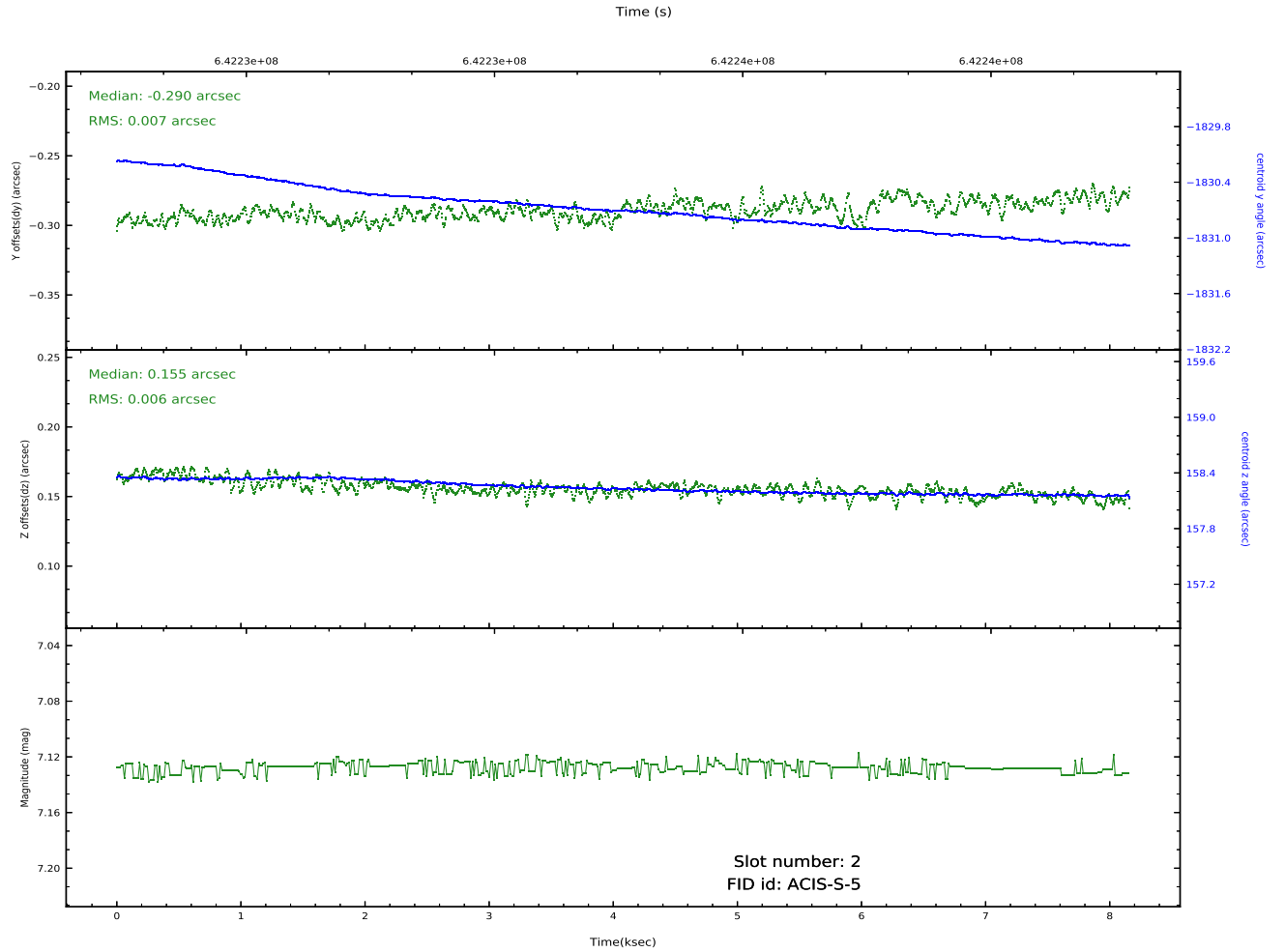
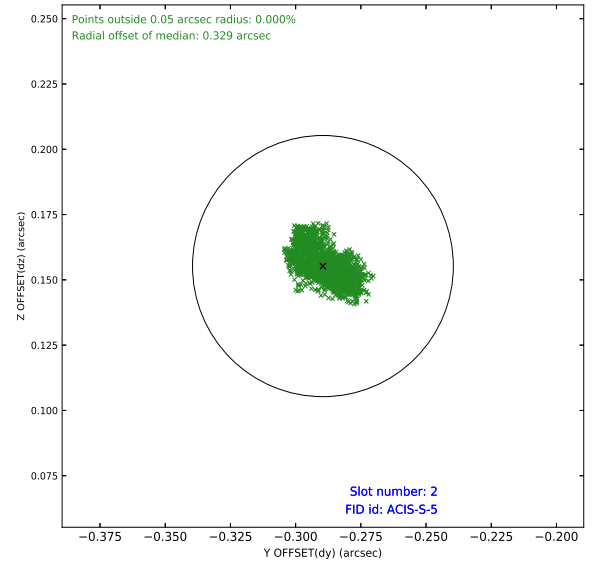
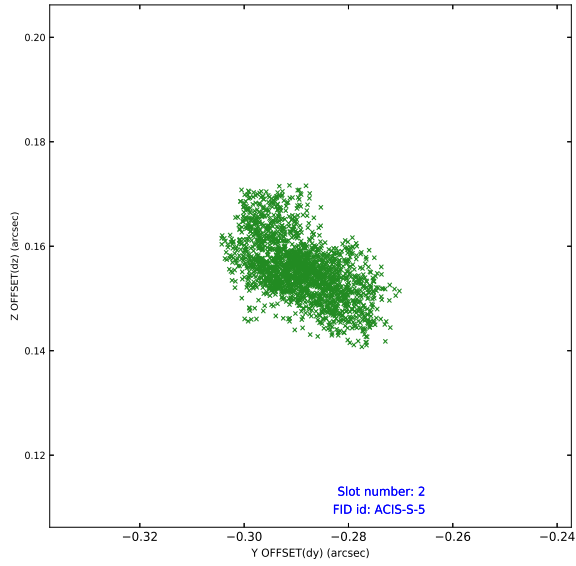
2.5.1 Slot 0



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	8.0631000621319

A.2 Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.