

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19412 - L2 Version 2
Chandra X-Ray Center

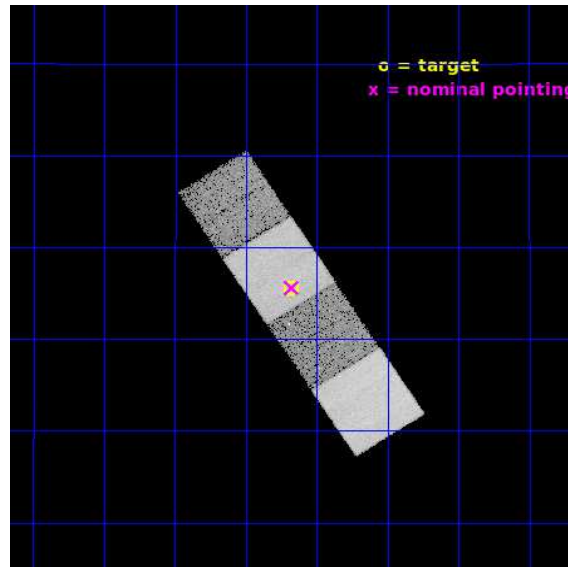
L2 Processing Date : Oct 25 2020

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1 Front

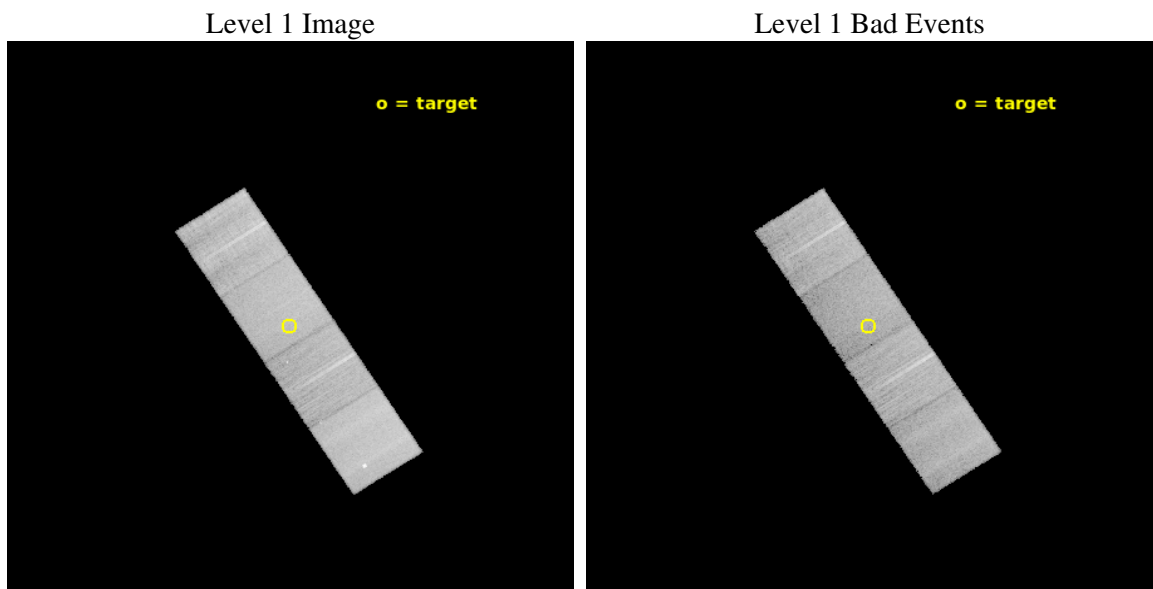
seq_num	601369	Sequence number
obs_id	19412	Observation id
title	Spiral galaxies of the Virgo cluster	Proposal title
observer	Roberto Soria	Principal investigator
object	NGC 4451	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.169167	Observer's specified target RA [deg]
dec_targ	9.258806	Observer's specified target Dec [deg]
ra_nom	187.16887969077	Nominal RA [deg]
dec_nom	9.2601953183499	Nominal Dec [deg]
roll_nom	236.99490513535	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14909.632467747	Sum of GTIs [s]
livetime	14714.827143244	Livetime [s]
ontime5	14909.591427803	Sum of GTIs [s]
ontime6	14909.55038774	Sum of GTIs [s]
ontime7	14909.632467747	Sum of GTIs [s]
ontime8	14900.08621788	Sum of GTIs [s]
l2events	162148	Number of level 2 events



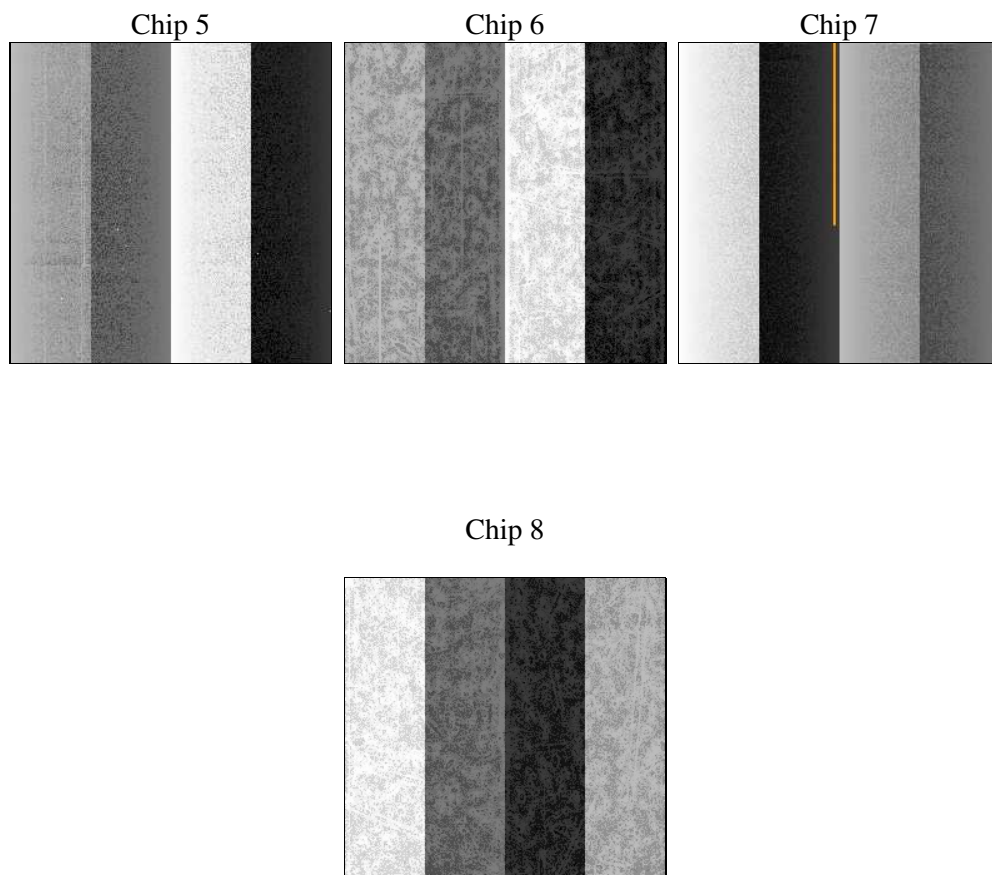
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	14909.632467747	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	14909.591427803	Sum of GTIs [s]
date	2020-10-25T22:33:54	Date and time of file creation	ontime6	14909.55038774	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	14909.632467747	Sum of GTIs [s]
			ontime8	14900.08621788	Sum of GTIs [s]
			l1events	587317	Number of level 1 events

2.1.4 Events

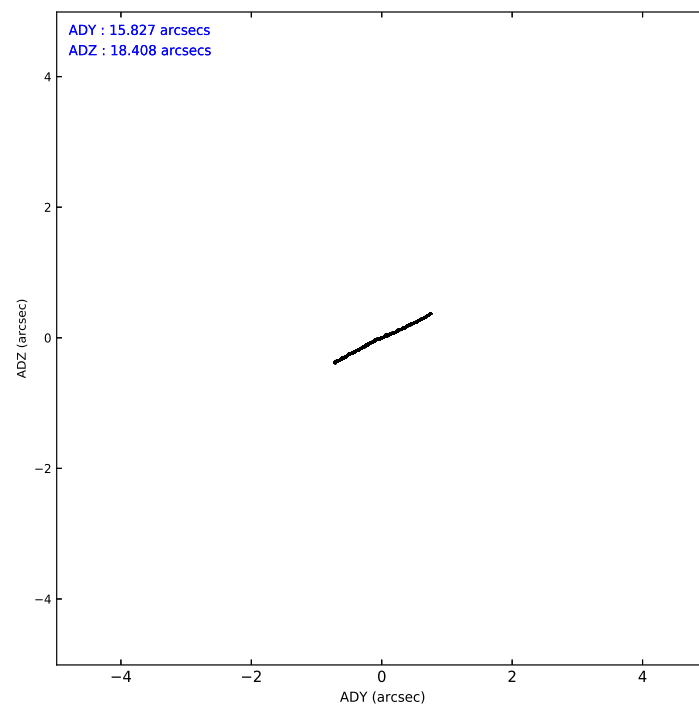
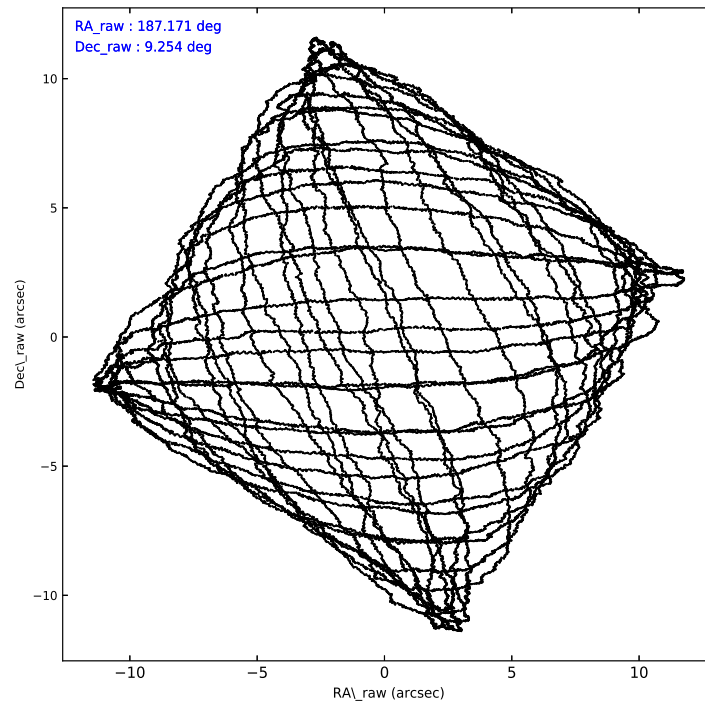
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	177320	119361	143468	147168
rejected events	93915	106545	81916	111134
rejected %	52%	89%	57%	75%

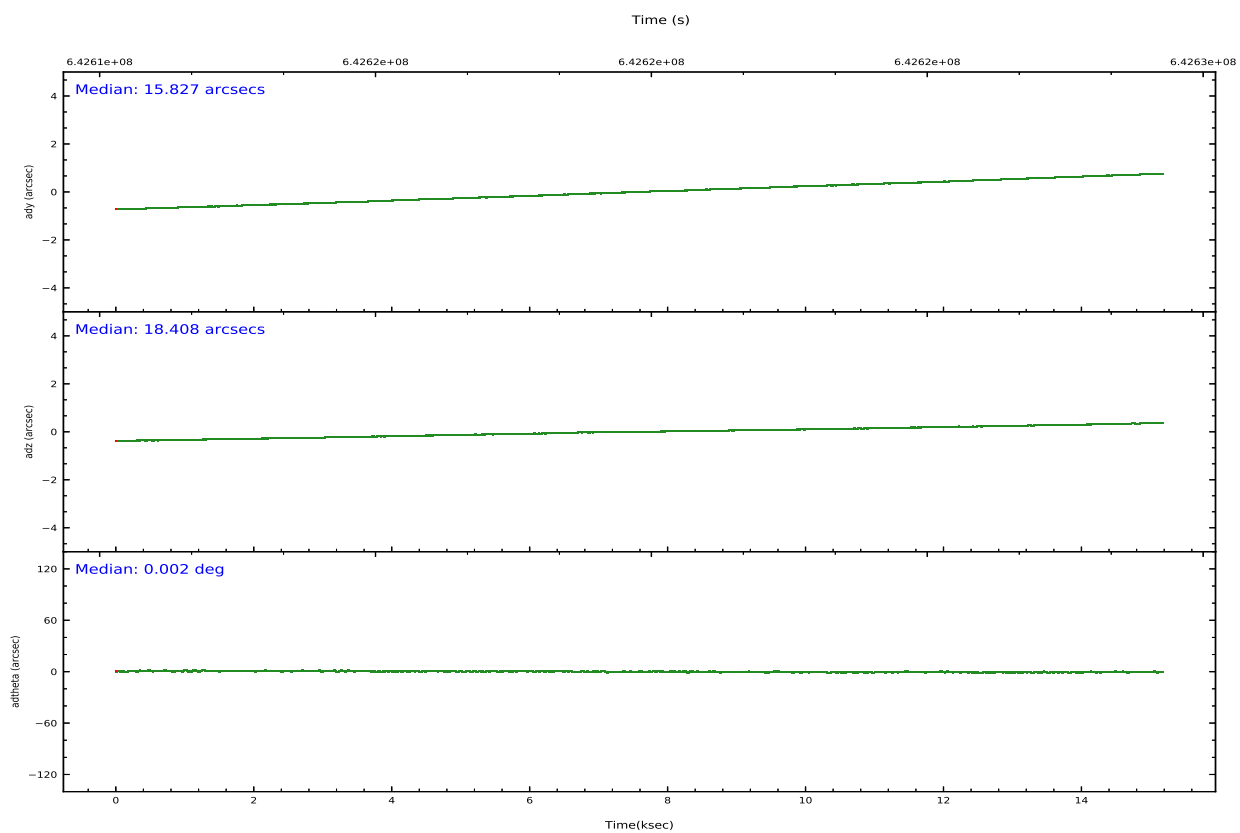
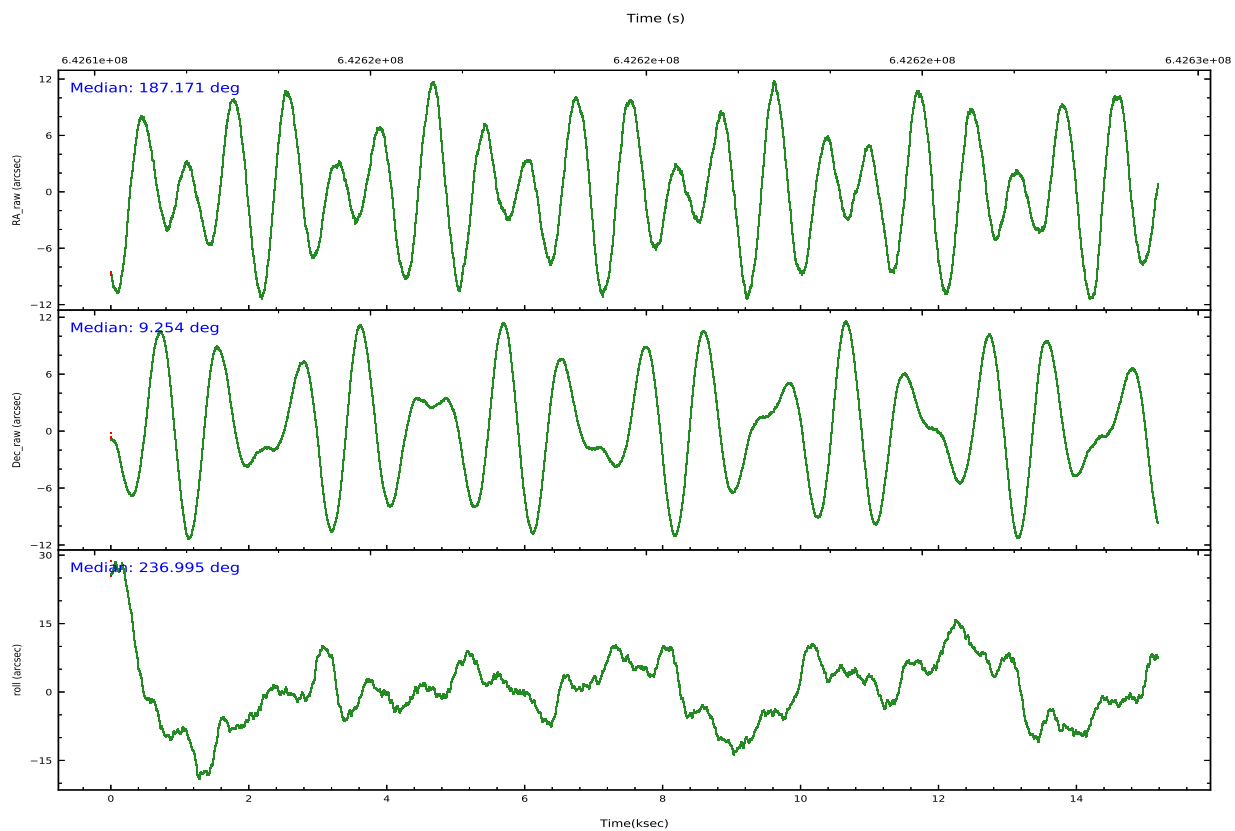
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	5354	3952	5210	10067
	3%	3%	3%	6%
grade 1 events	509	55	228	100
	0%	0%	0%	0%
grade 2 events	25757	3393	12776	8798
	14%	2%	8%	5%
grade 3 events	2510	1076	4910	3659
	1%	0%	3%	2%
grade 4 events	2339	1131	4723	3355
	1%	0%	3%	2%
grade 5 events	11086	4645	14037	7427
	6%	3%	9%	5%
grade 6 events	47467	3270	33945	10161
	26%	2%	23%	6%
grade 7 events	82298	101839	67639	103601
	46%	85%	47%	70%

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	187.171871	187.16887969077	Subarray requested	NONE	NONE
[deg] Pointing Dec	9.280777	9.260195318349901	Alternating exposures requested	N	N
[deg] Pointing Roll	236.848103	236.99490513535	[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)	642612420.184000	642612043.75265			
Observation start date	2018-05-13T15:25:51	2018-05-13T15:20:43			
[s] Observation end time (MET)	642627420.184000	642627589.92857			
Observation end date	2018-05-13T19:35:51	2018-05-13T19:39:49			
Read mode	TIMED	TIMED			

2.3 Aspect



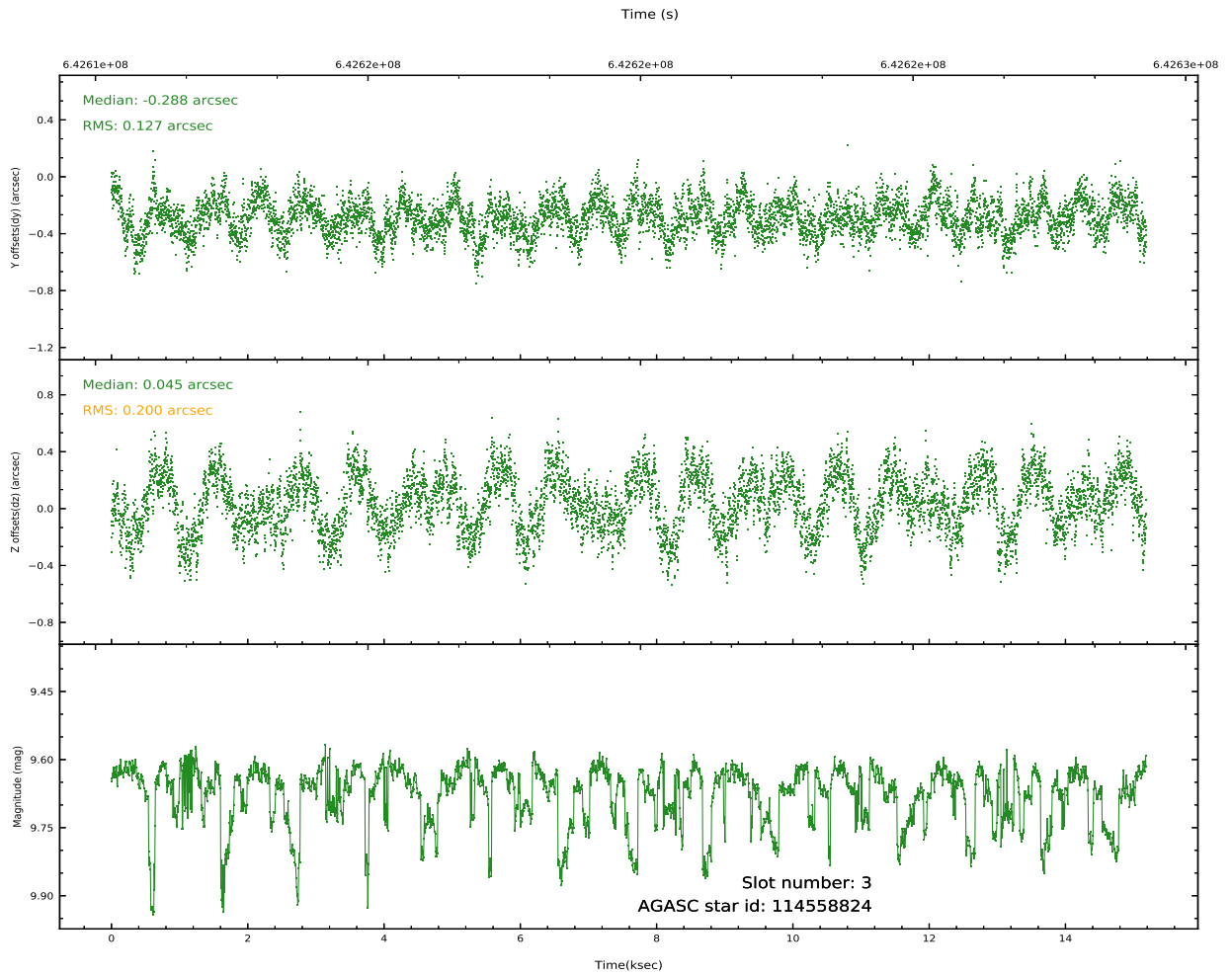
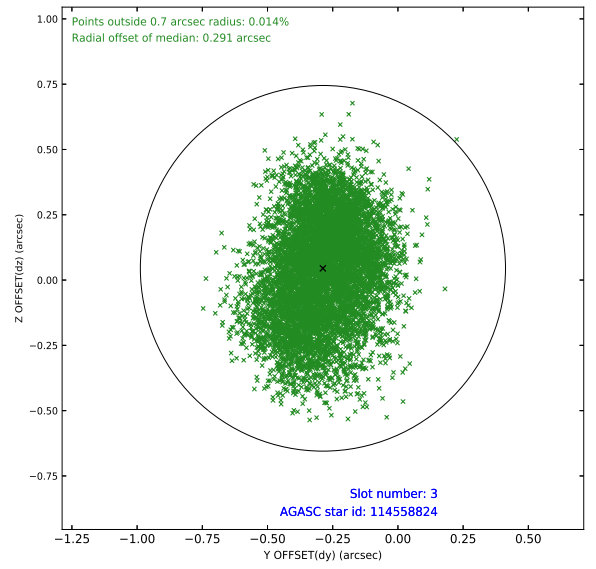
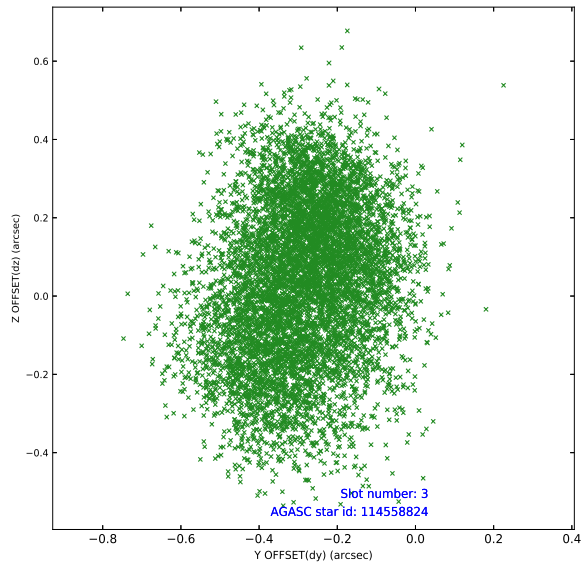


Slot Statistics

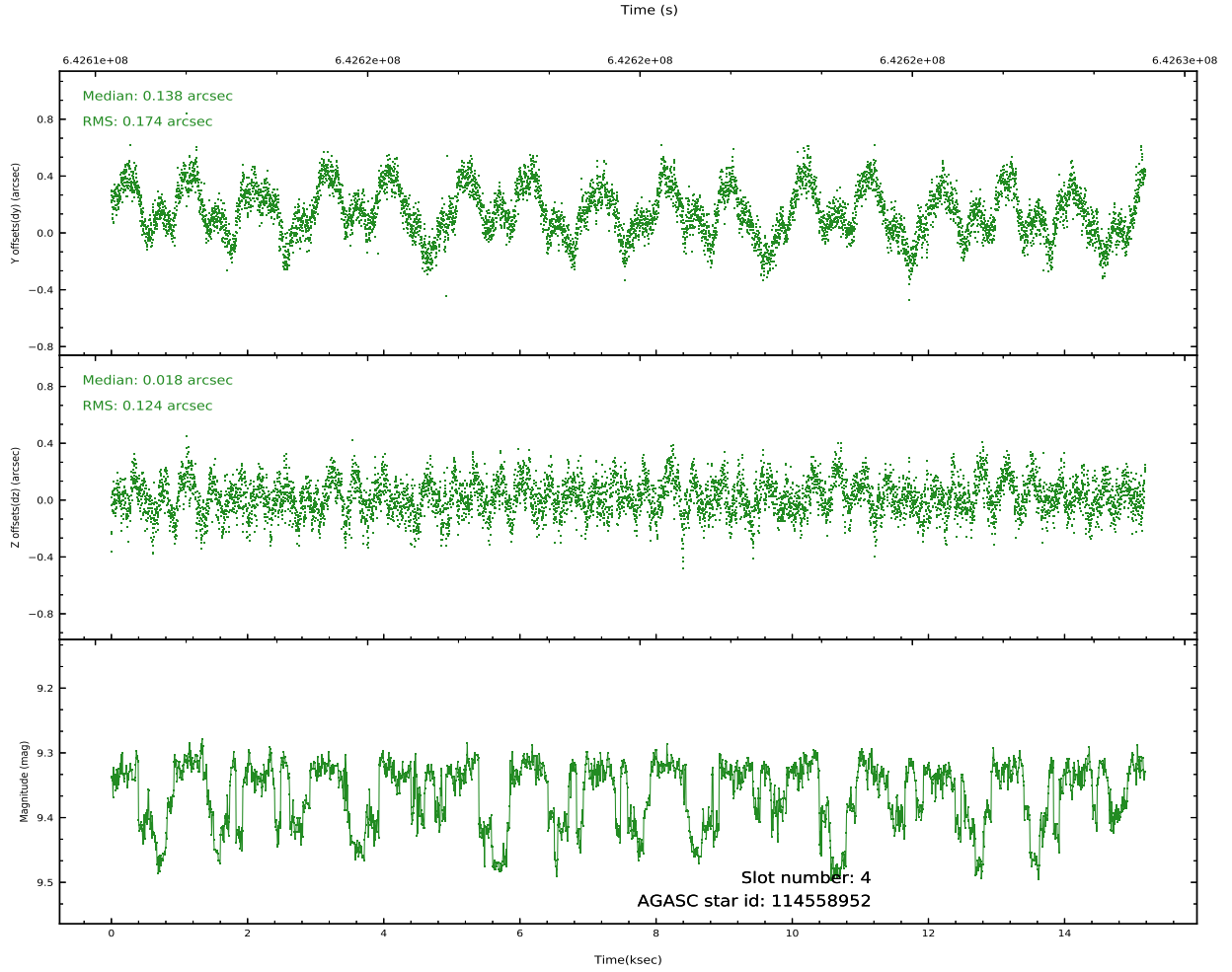
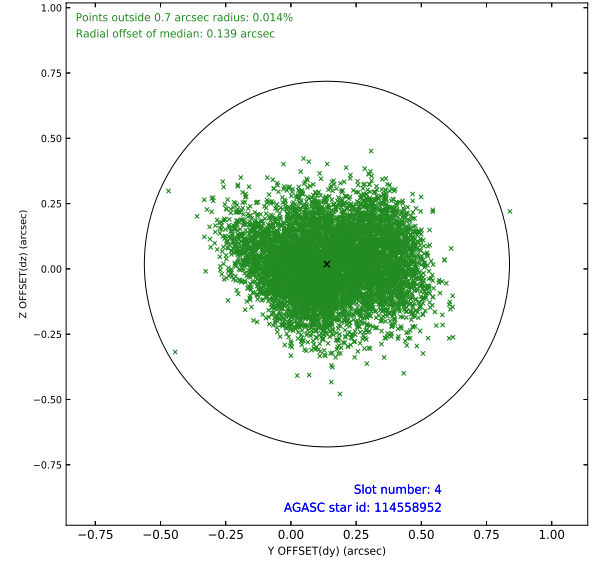
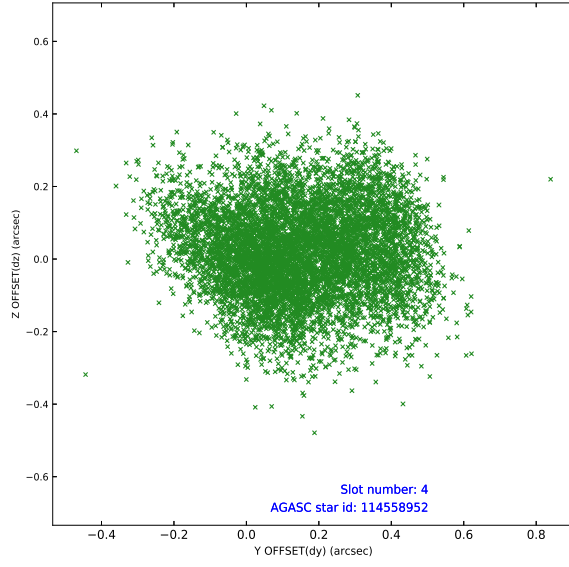
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.16	3703	1.000	0.089	-0.152	0.009	0.018	0.000000	0.000000	-768.93	-1739
1	FID		ACIS-S-4	7.27	3704	1.000	0.188	-0.002	0.008	0.023	0.000000	0.000000	2144.52	168
2	FID		ACIS-S-5	7.25	3703	1.000	-0.308	0.163	0.008	0.013	0.000000	0.000000	-1821.58	162
3	GUIDE	used	114558824	9.66	7397	1.000	-0.288	0.045	0.257	0.399	187.023305	9.331255	137.05	-540
4	GUIDE	used	114558952	9.34	7398	1.000	0.138	0.018	0.234	0.356	186.929093	9.345397	277.65	-849
5	GUIDE	used	114559320	9.88	7375	1.000	-0.273	0.130	0.229	0.386	187.769706	9.386795	-1481.32	1568
6	GUIDE	used	114561264	9.53	7392	1.000	0.244	-0.070	0.218	0.369	186.762657	8.969089	1735.39	-604
7	GUIDE	used	114562600	8.73	7404	1.000	0.163	-0.125	0.165	0.284	186.973653	8.898661	1538.09	161

2.4 Star Slots

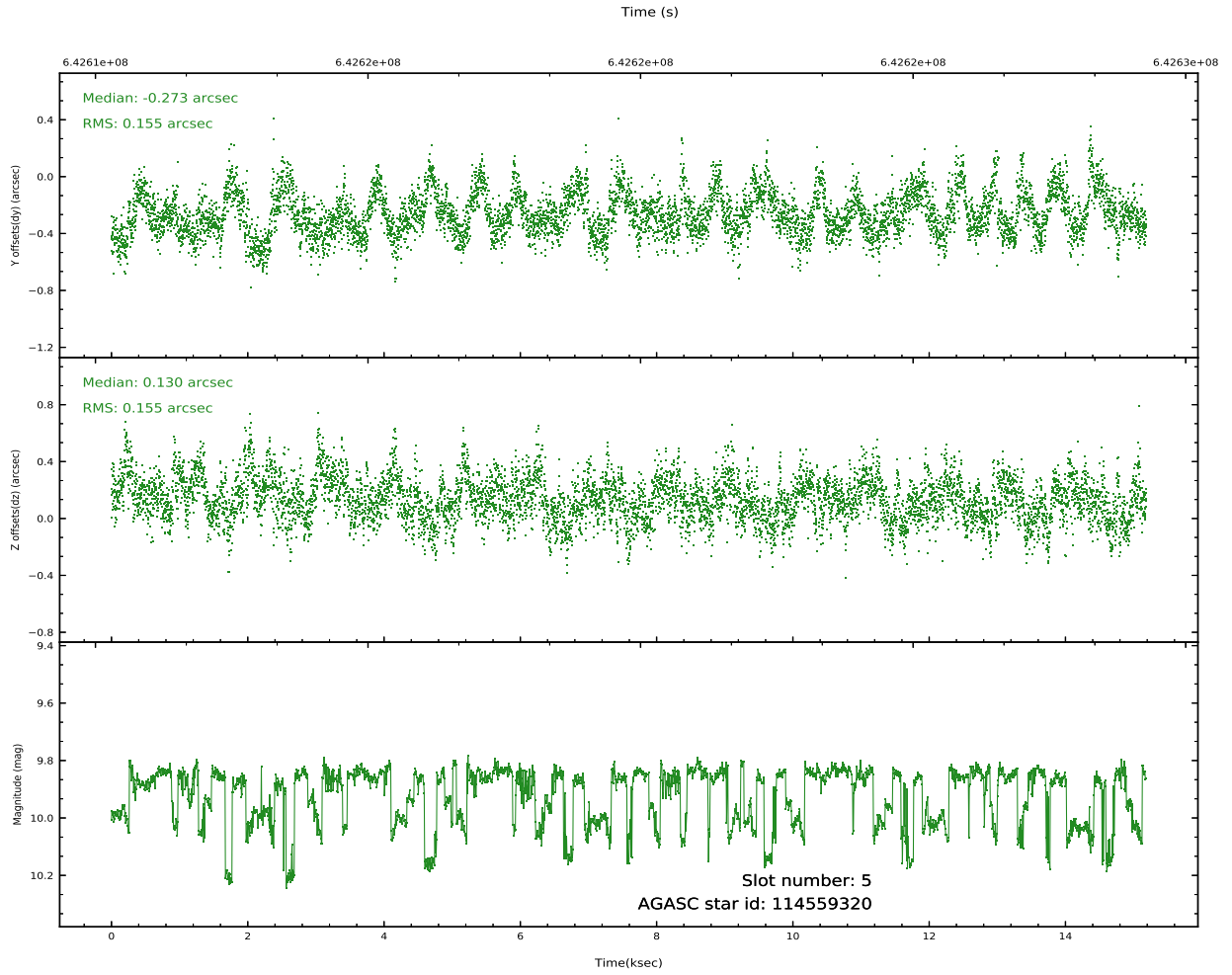
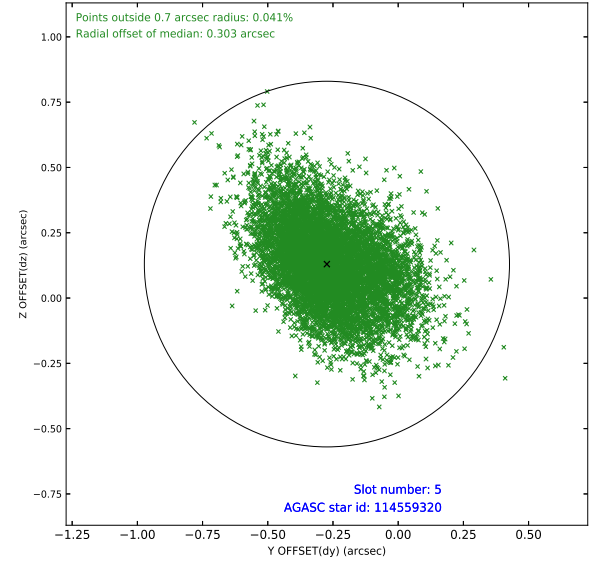
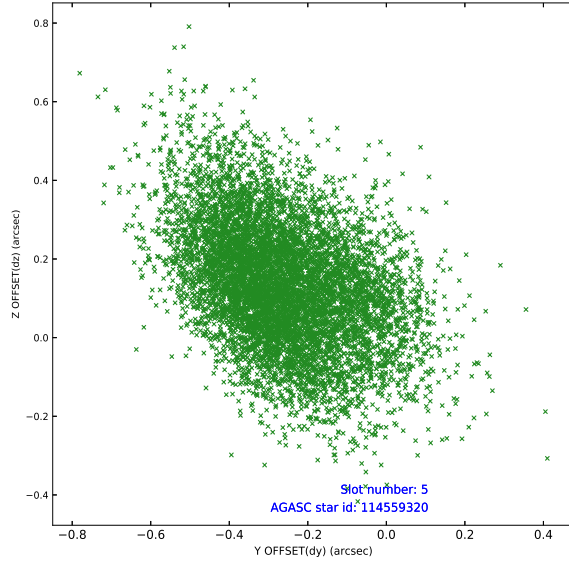
2.4.1 Slot 3



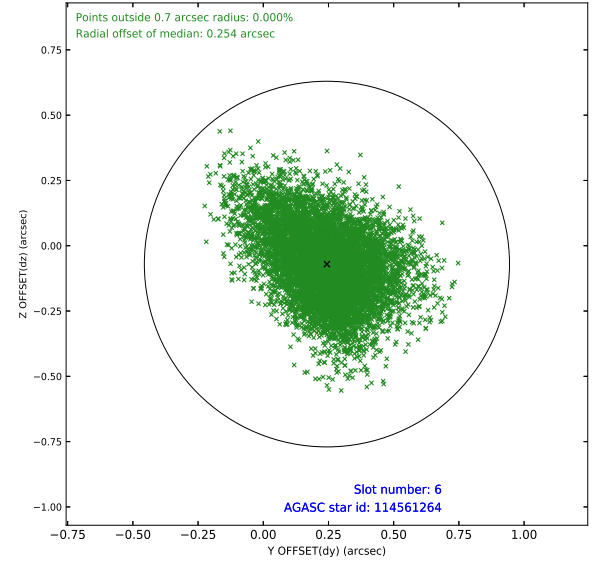
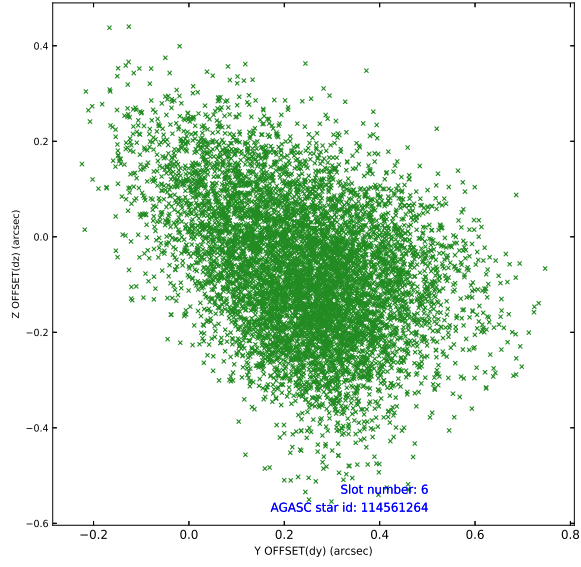
2.4.2 Slot 4



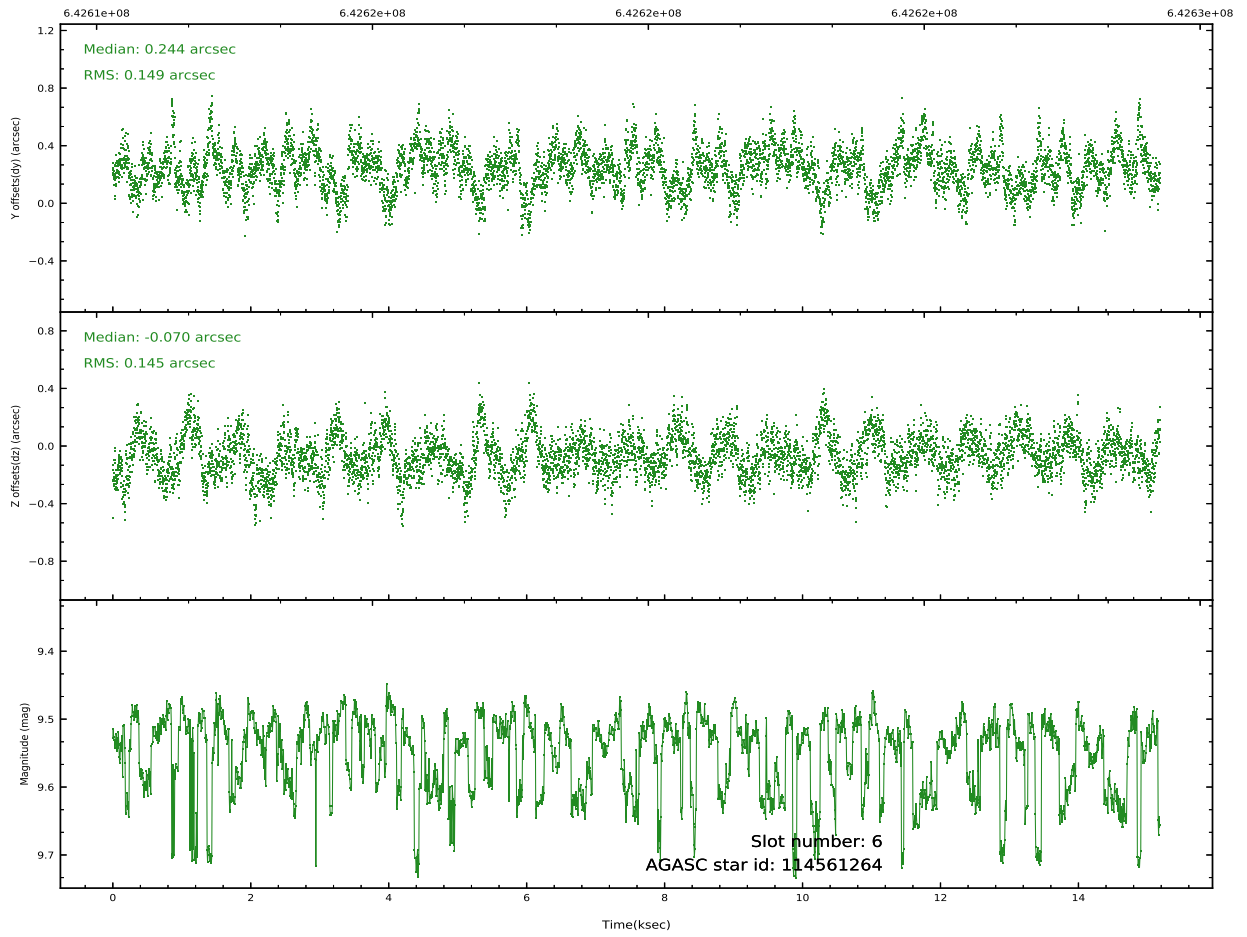
2.4.3 Slot 5



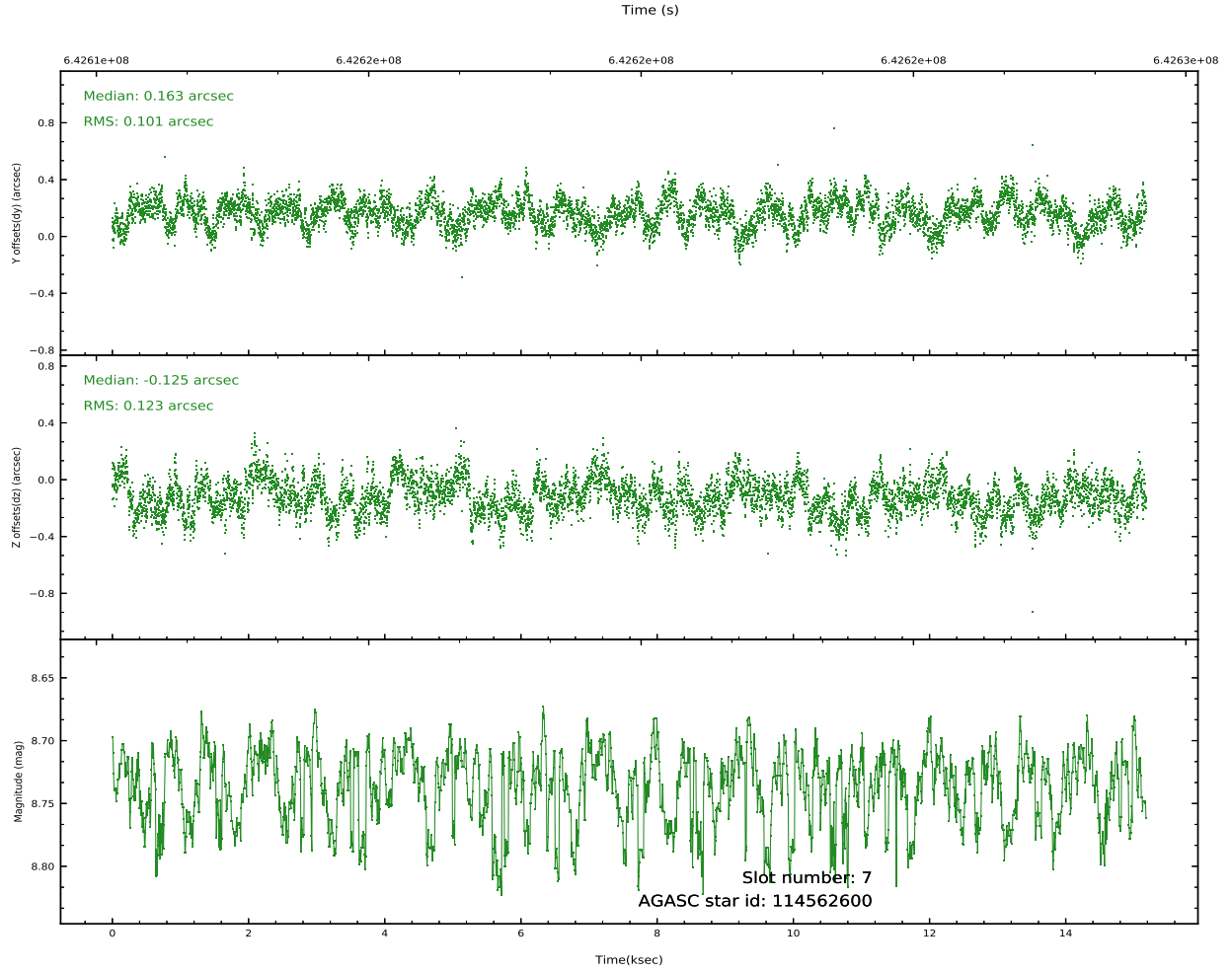
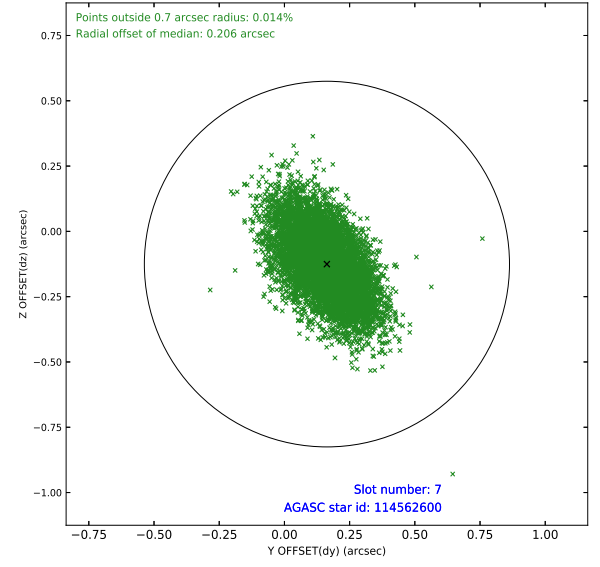
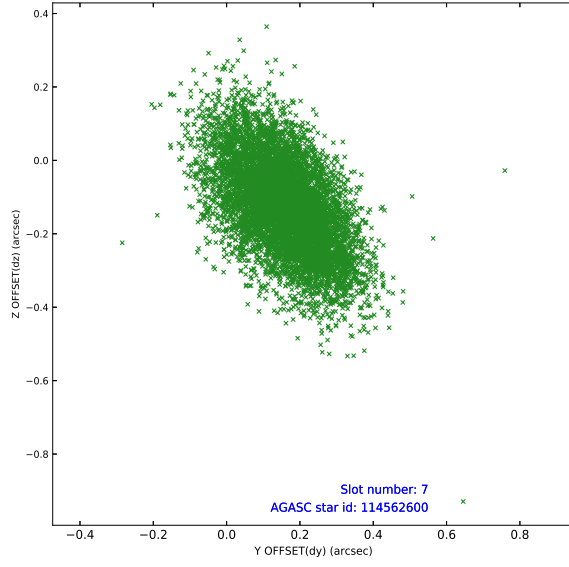
2.4.4 Slot 6



Time (s)

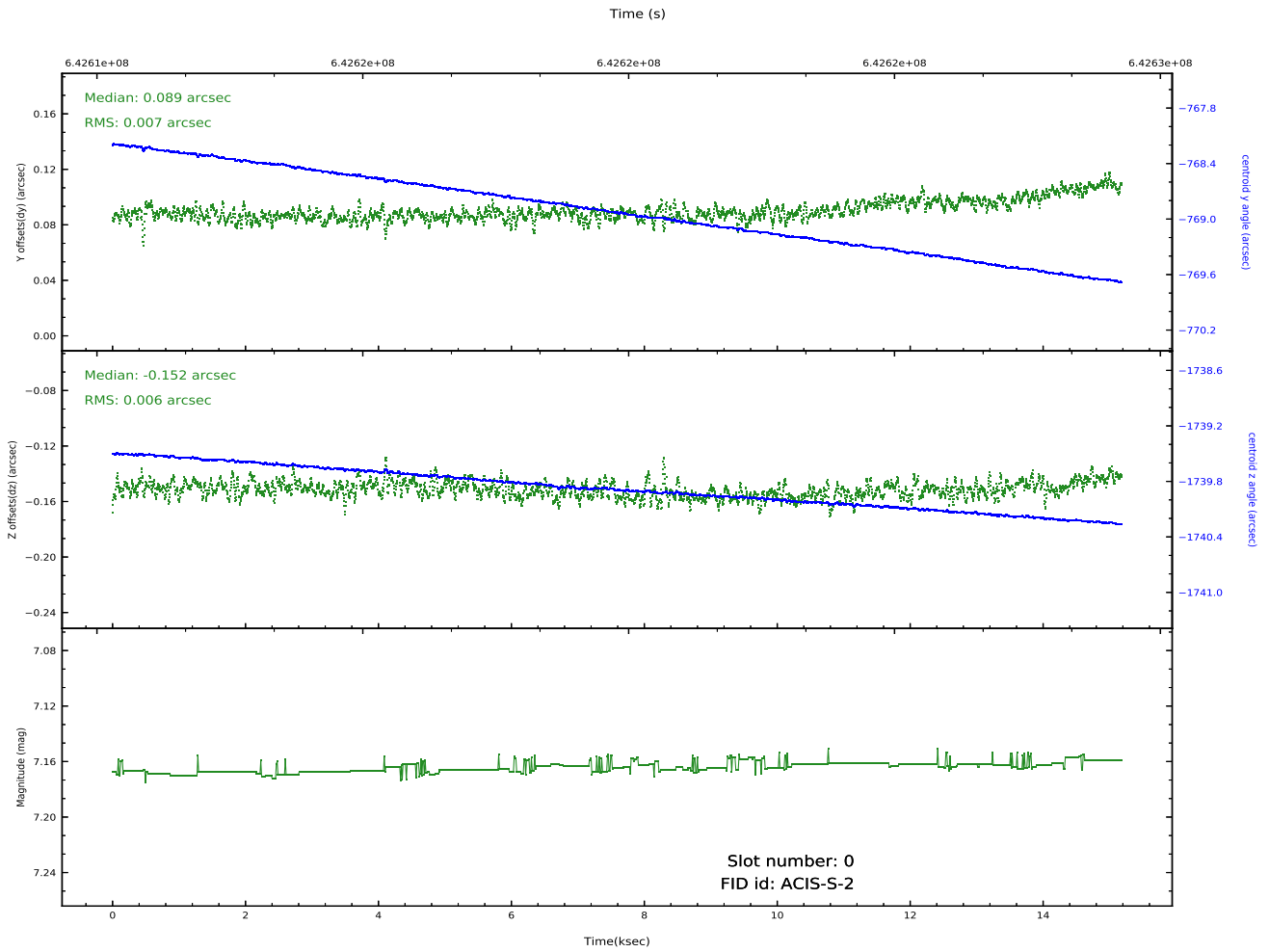
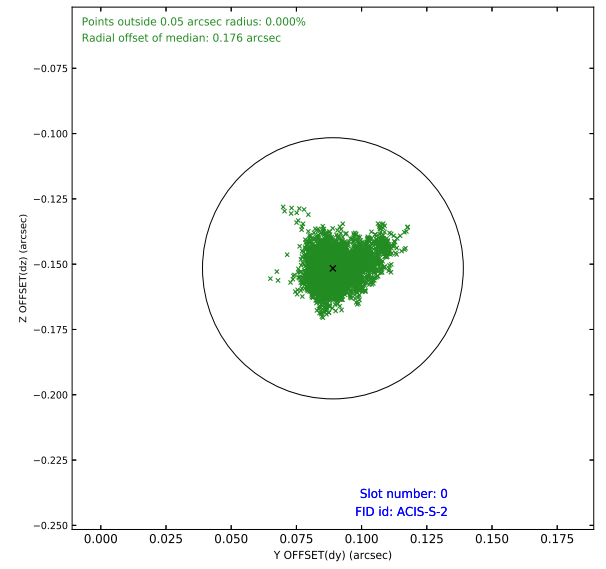
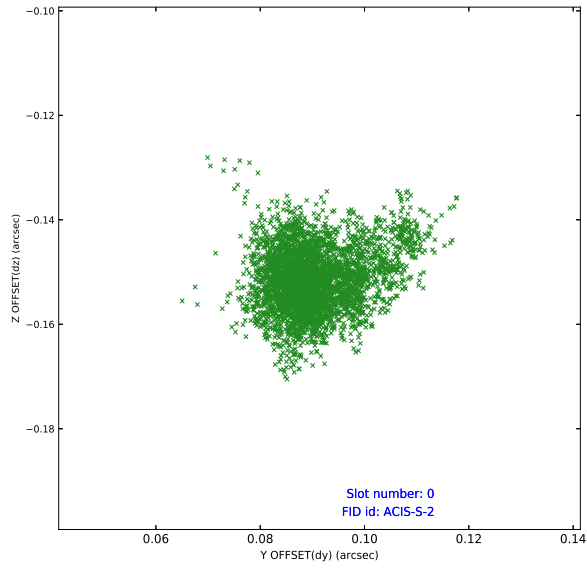


2.4.5 Slot 7

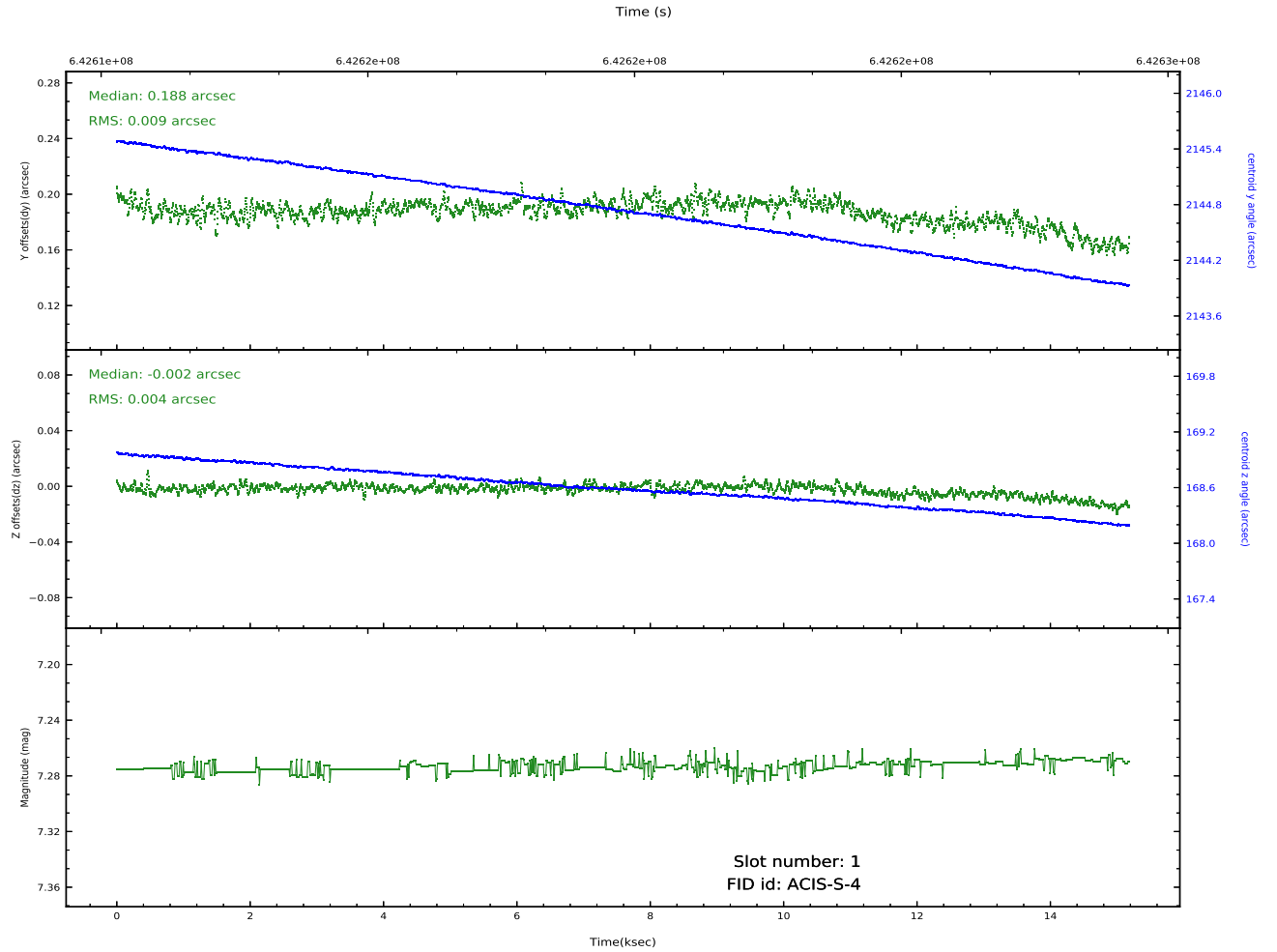
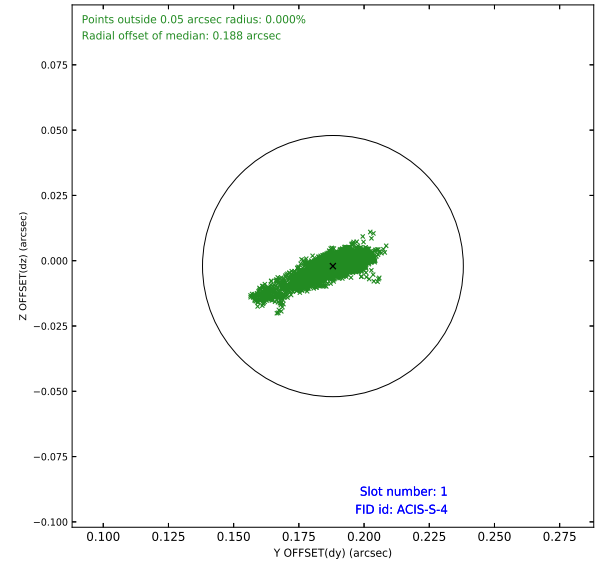
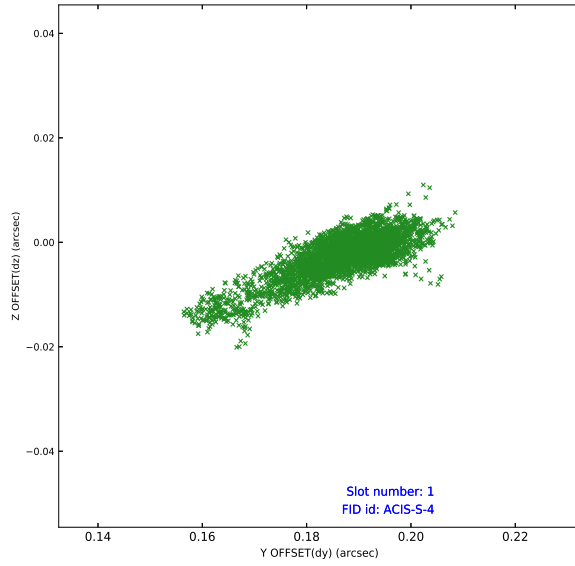


2.5 FID Slots

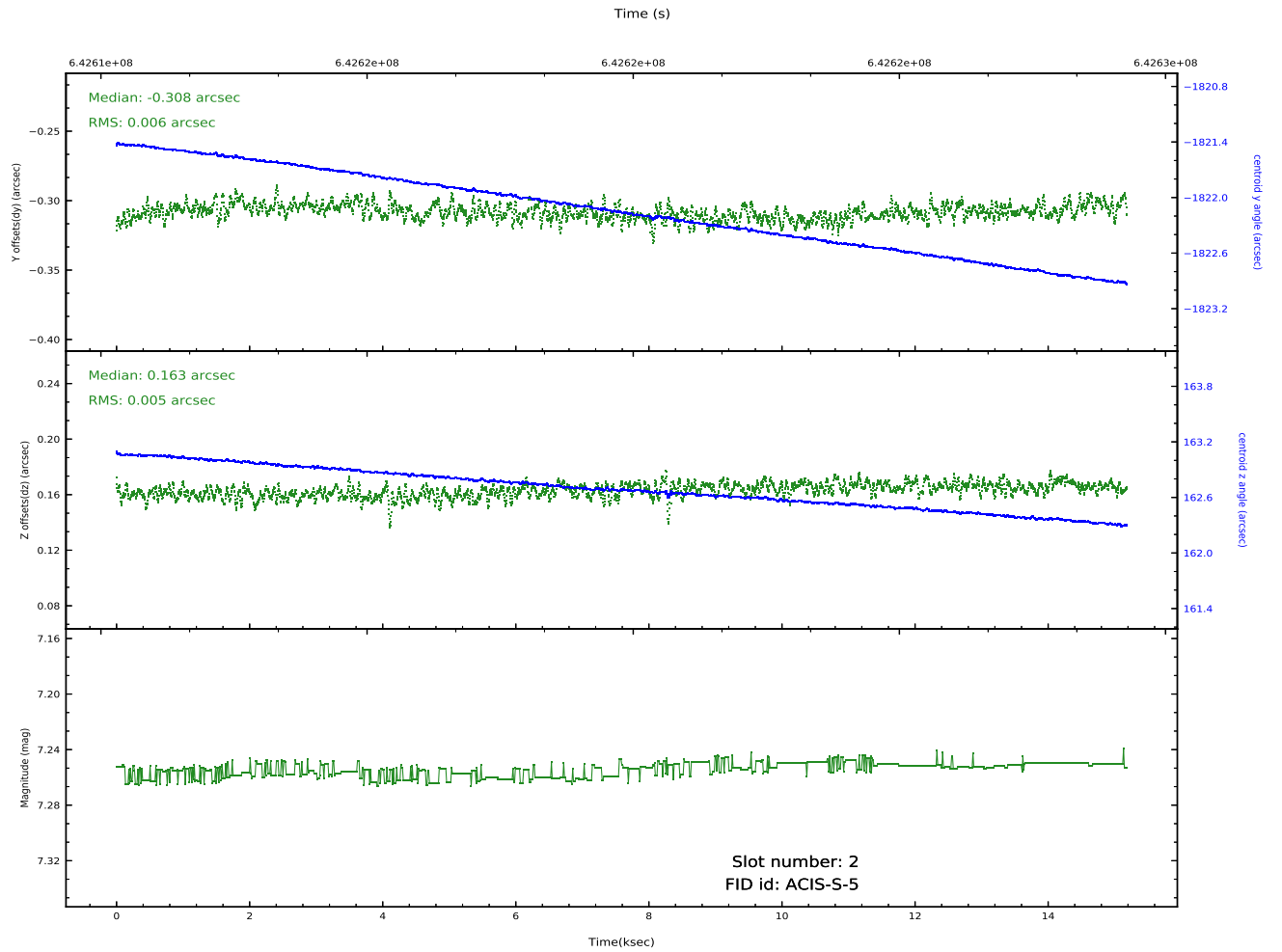
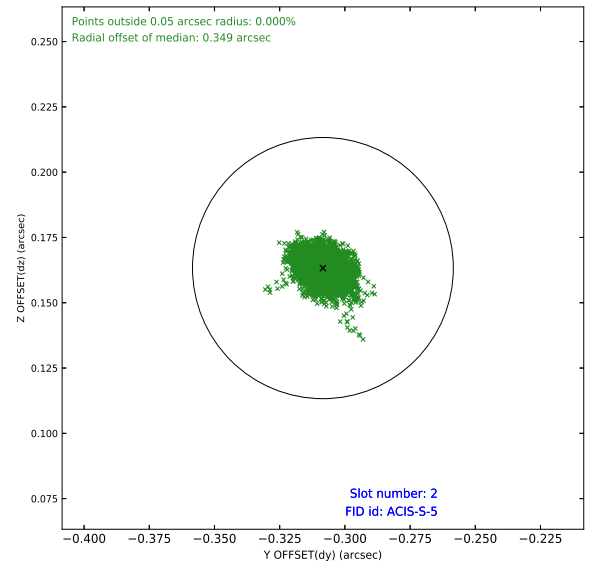
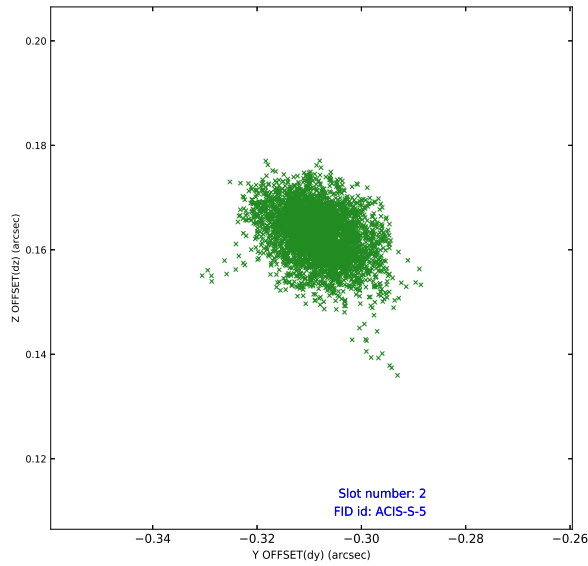
2.5.1 Slot 0



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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.909632467508

A.2 Comments