

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5304 - L2 Version 4
Chandra X-Ray Center

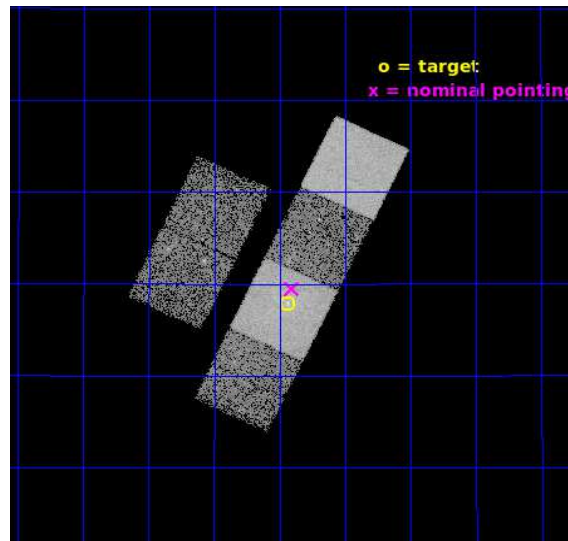
L2 Processing Date : Sep 23 2020

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

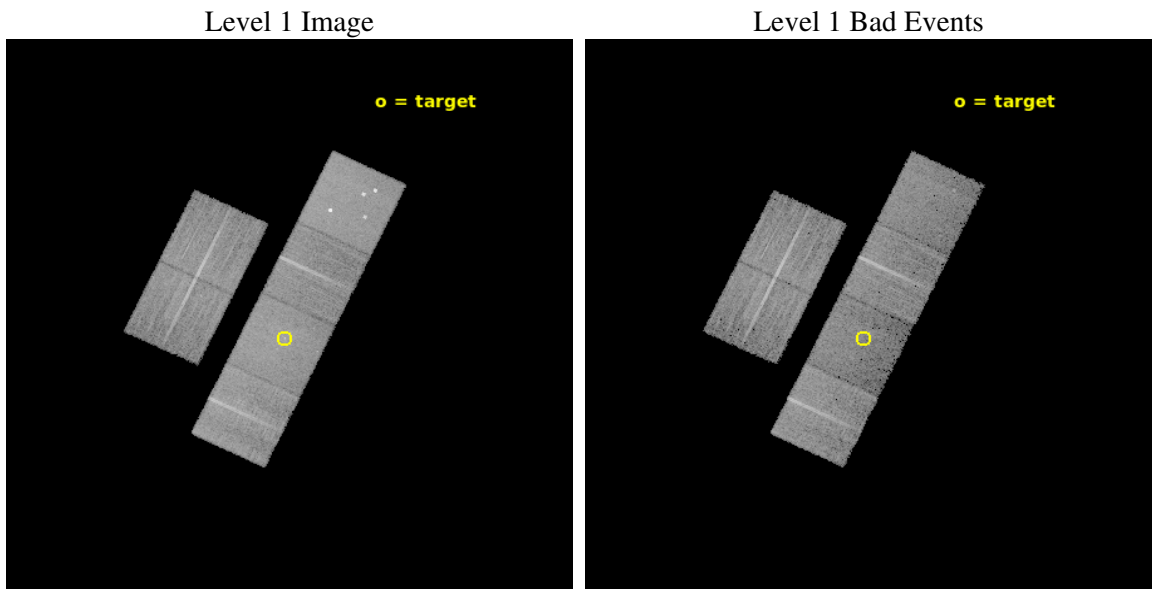
seq_num	800432	Sequence number
obs_id	5304	Observation id
title	X-Ray Bright Hickson Compact Groups: the Origin and Distribution of Metallicity and the Regulation of Cooling Flows	Proposal title
observer	Dr. Jan Vrtilek	Principal investigator
object	HCG 51	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	170.61	Observer's specified target RA [deg]
dec_targ	24.298333	Observer's specified target Dec [deg]
ra_nom	170.60153662441	Nominal RA [deg]
dec_nom	24.324742914656	Nominal Dec [deg]
roll_nom	115.6590720747	Nominal Roll [deg]
revision	4	Processing version of data
ontime	13141.908207506	Sum of GTIs [s]
livetime	12975.497452675	Livetime [s]
ontime2	13109.498354882	Sum of GTIs [s]
ontime3	13122.462266147	Sum of GTIs [s]
ontime5	13151.631148338	Sum of GTIs [s]
ontime6	13119.221295714	Sum of GTIs [s]
ontime7	13141.908207506	Sum of GTIs [s]
ontime8	13119.221305698	Sum of GTIs [s]
l2events	109356	Number of level 2 events



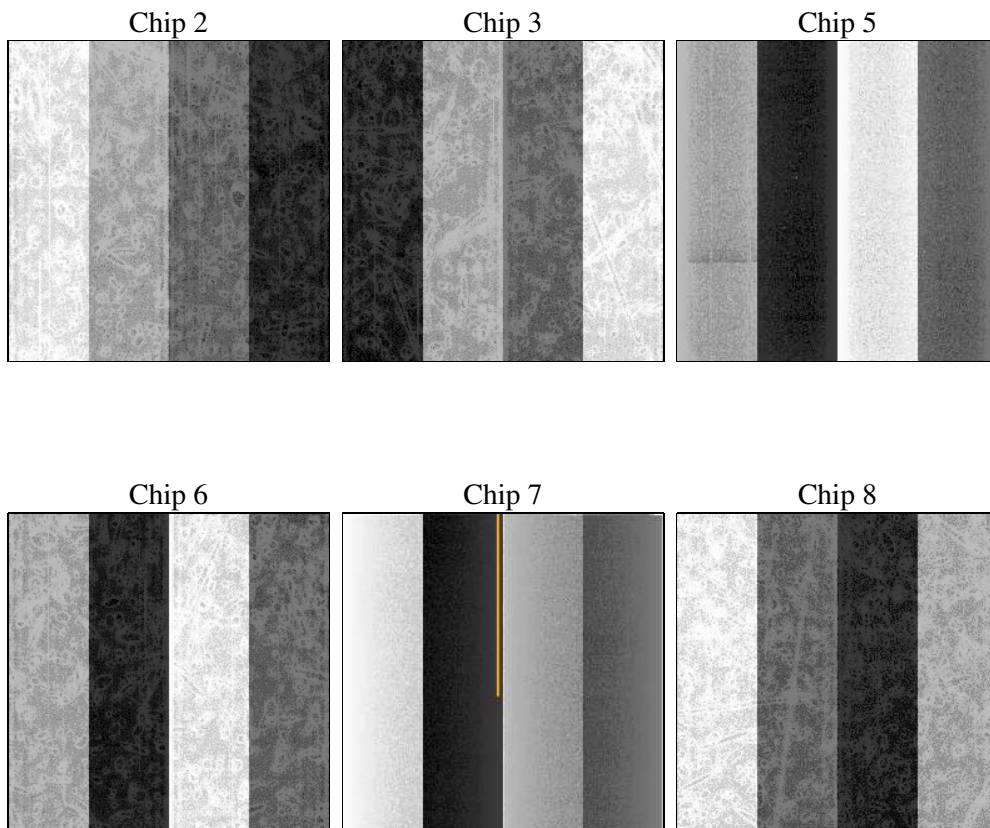
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	13141.908207506	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	13109.498354882	Sum of GTIs [s]
date	2020-09-24T01:32:53	Date and time of file creation	ontime3	13122.462266147	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	13151.631148338	Sum of GTIs [s]
			ontime6	13119.221295714	Sum of GTIs [s]
			ontime7	13141.908207506	Sum of GTIs [s]
			ontime8	13119.221305698	Sum of GTIs [s]
			l1events	497370	Number of level 1 events

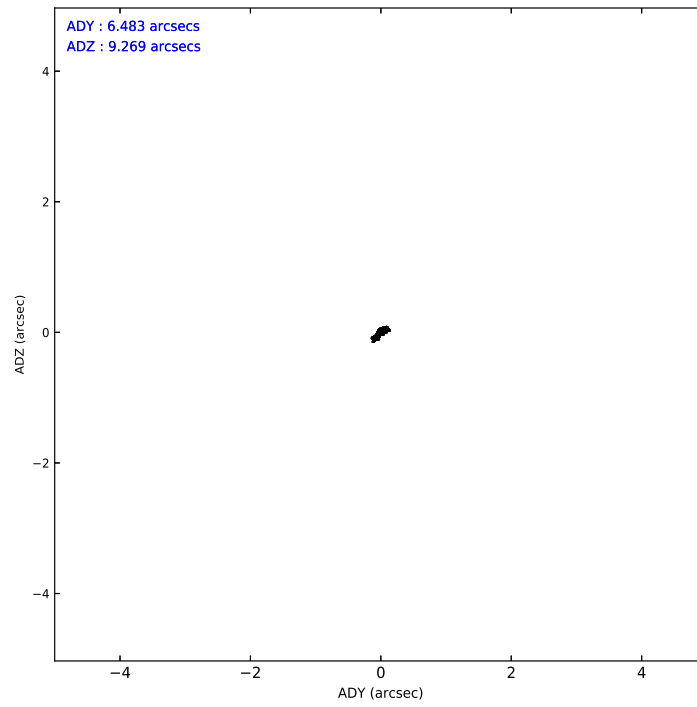
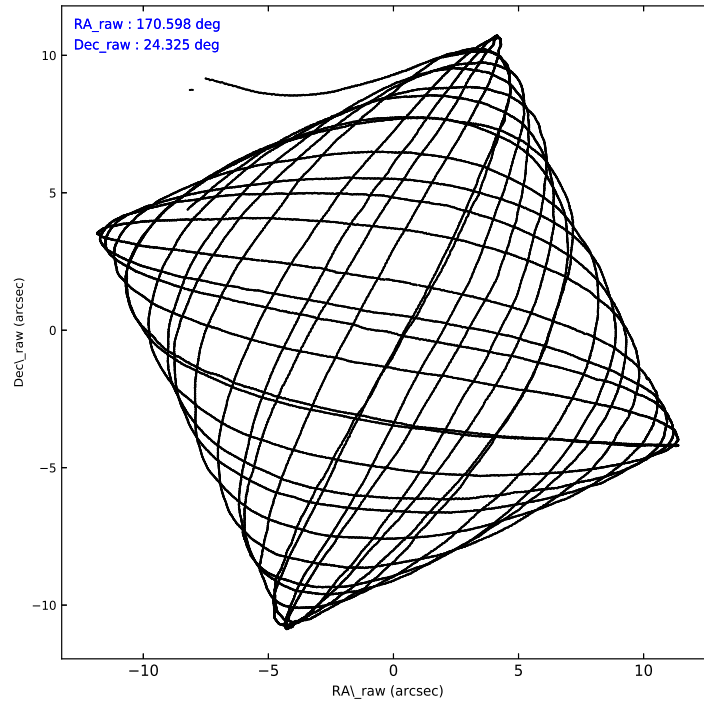
2.1.4 Events

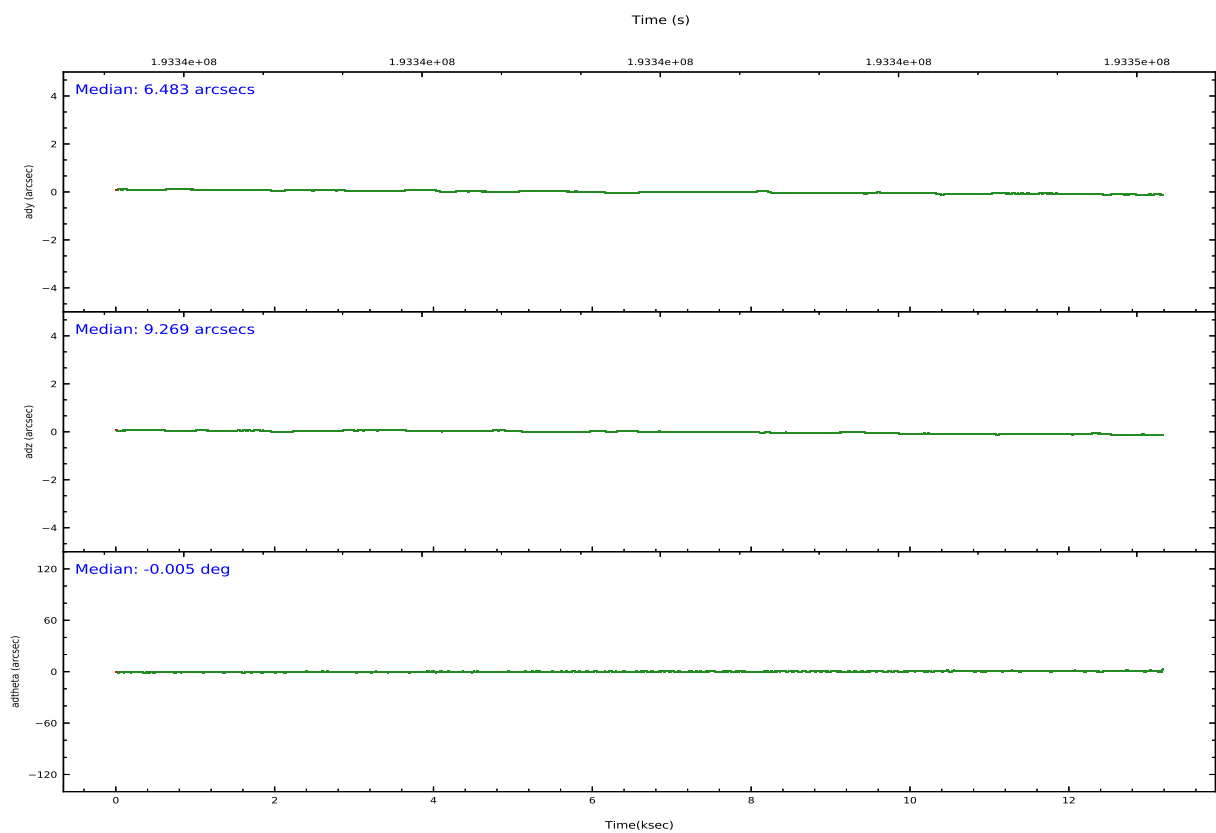
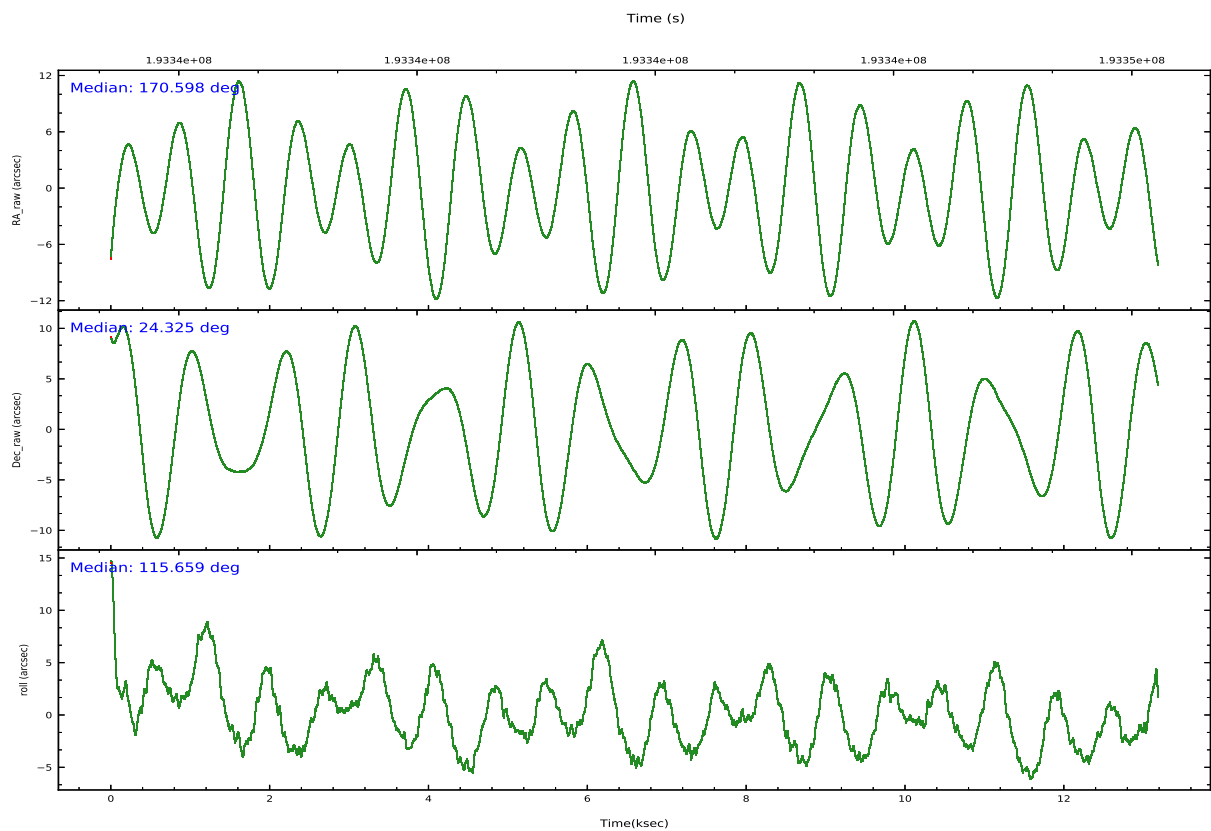
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	76055	69393	103801	71345	85473	91303	grade 0 events	2828	2526	10604	3276	5487	6038
rejected events	68761	62770	51182	63227	44386	72088		3%	3%	10%	4%	6%	6%
rejected %	90%	90%	49%	88%	51%	78%	grade 1 events	38	29	222	31	55	61
								0%	0%	0%	0%	0%	0%
							grade 2 events	1721	1414	14336	1681	8758	4240
								2%	2%	13%	2%	10%	4%
							grade 3 events	837	814	2208	924	4261	2403
								1%	1%	2%	1%	4%	2%
							grade 4 events	841	756	2106	843	4230	2117
								1%	1%	2%	1%	4%	2%
							grade 5 events	2435	2736	8040	2881	8520	4079
								3%	3%	7%	4%	9%	4%
							grade 6 events	1322	1359	25219	1666	19689	5239
								1%	1%	24%	2%	23%	5%
							grade 7 events	66033	59759	41066	60043	34473	67126
								86%	86%	39%	84%	40%	73%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	170.622843	170.60153662441	Subarray requested	NONE	NONE
[deg] Pointing Dec	24.310198	24.324742914656	Alternating exposures requested	N	N
[deg] Pointing Roll	115.494710	115.6590720747	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	193335331.184000	193334002.62388			
Observation start date	2004-02-16T16:14:27	2004-02-16T15:53:22			
[s] Observation end time (MET)	193348331.184000	193349927.02458			
Observation end date	2004-02-16T19:51:07	2004-02-16T20:18:47			
Read mode	TIMED	TIMED			

2.3 Aspect



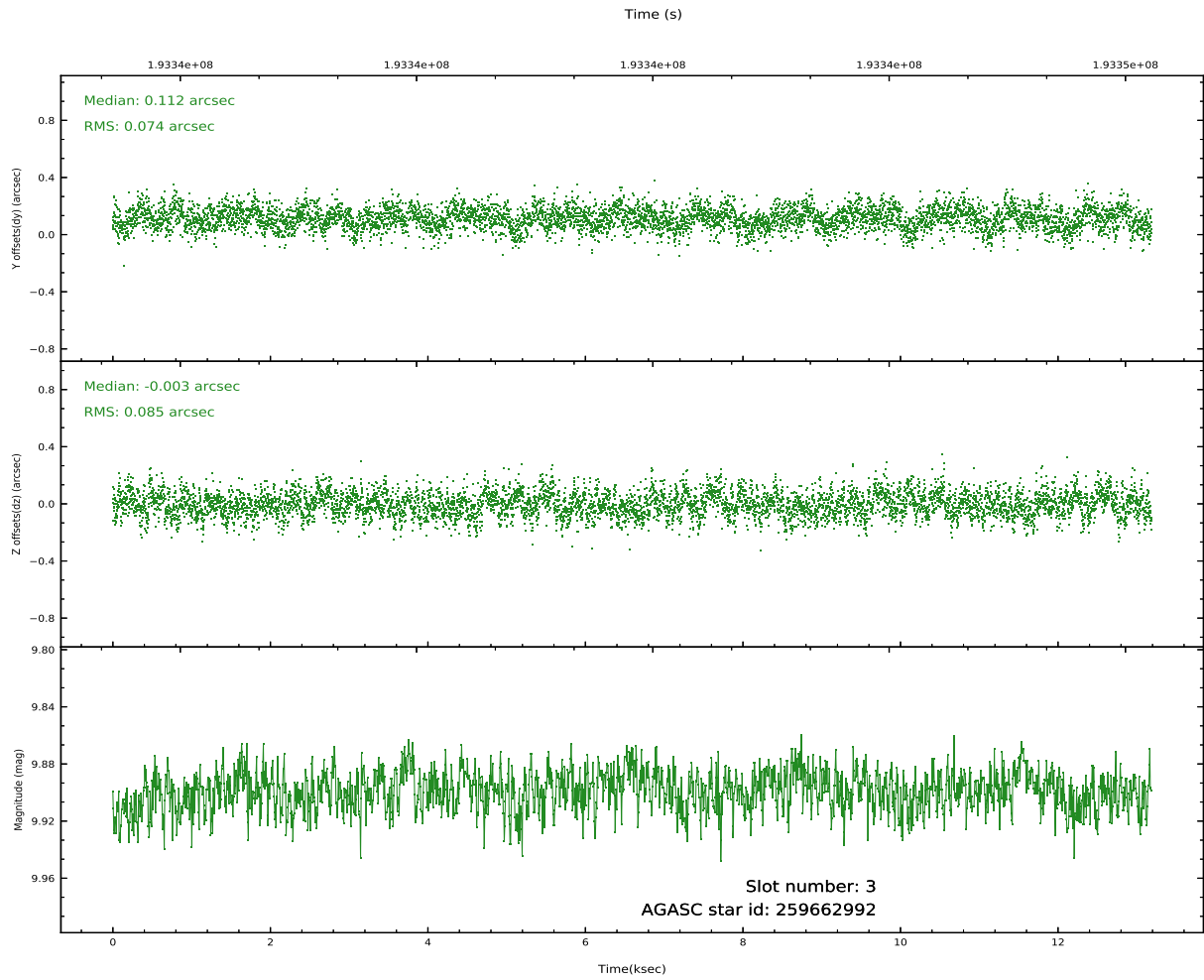
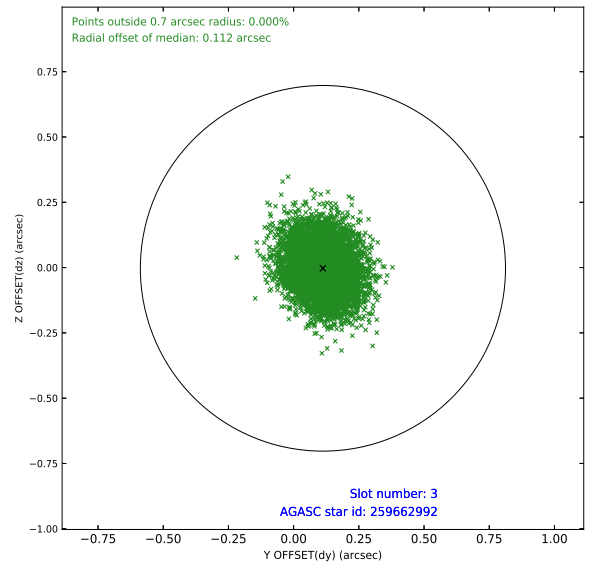
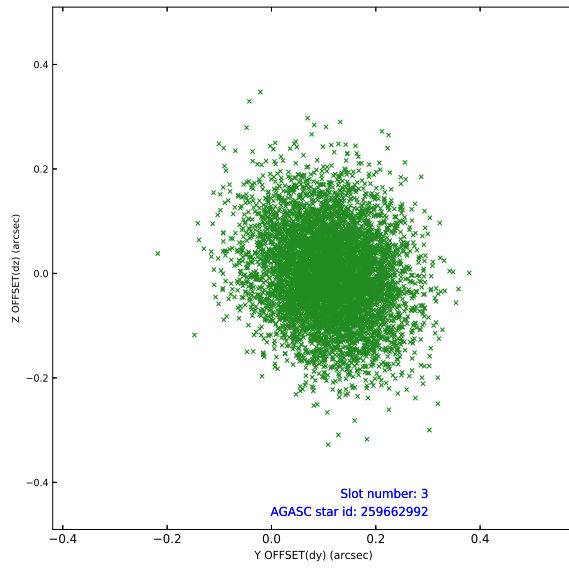


Slot Statistics

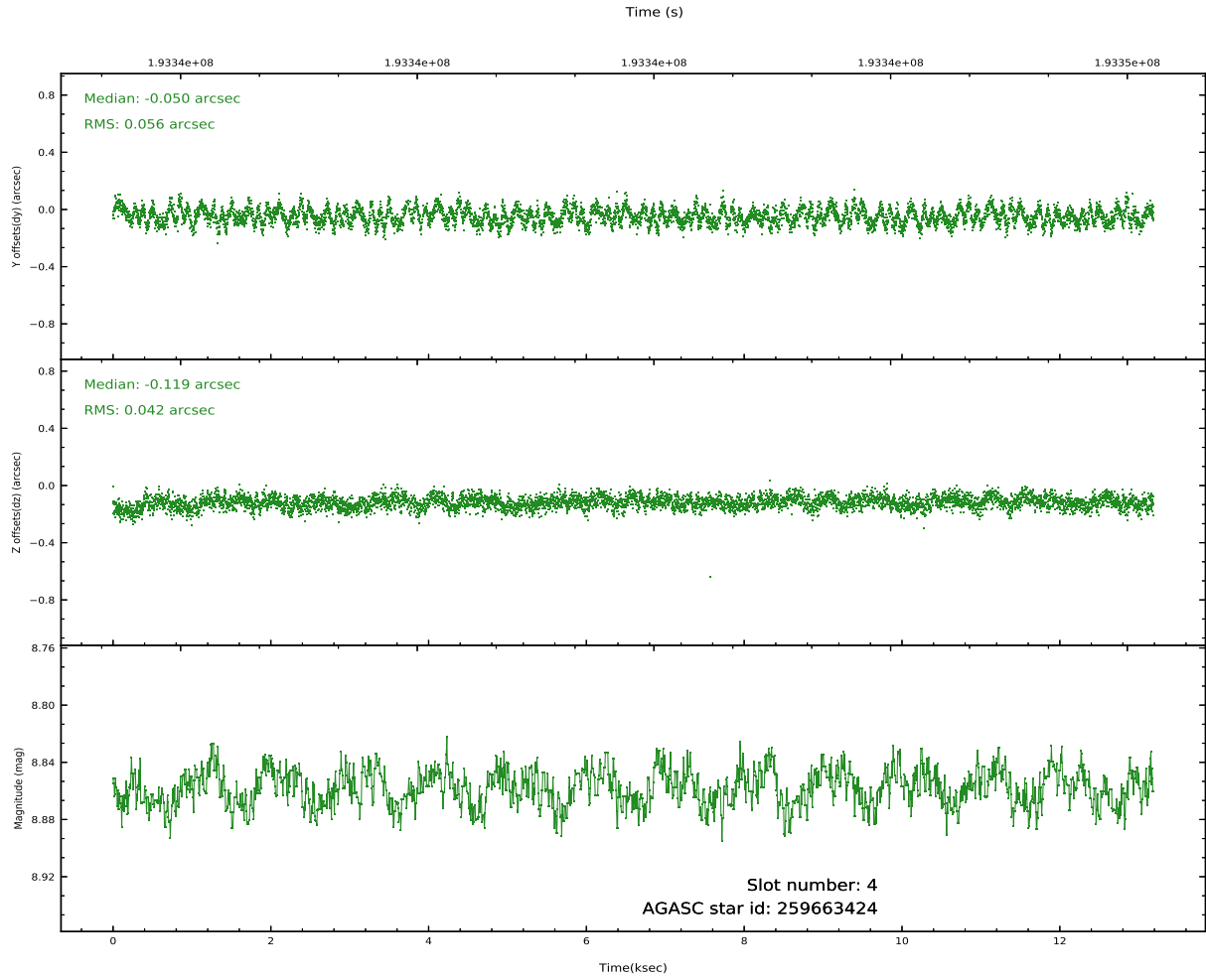
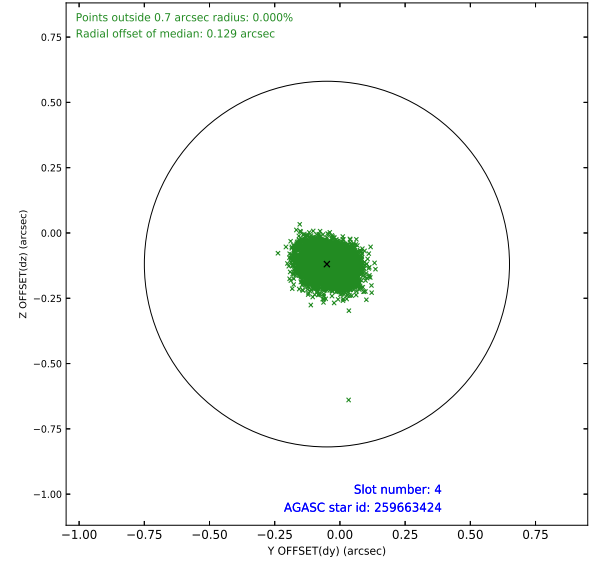
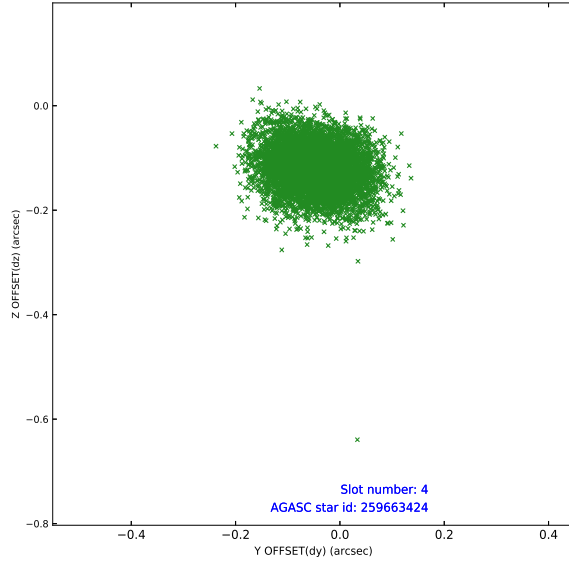
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	3188	1.000	-0.075	-0.070	0.007	0.012	0.000000	0.000000	-759.26	-1730
1	FID		ACIS-S-4	7.20	3186	1.000	0.138	0.055	0.006	0.010	0.000000	0.000000	2154.03	177
2	FID		ACIS-S-5	7.23	3186	1.000	-0.094	0.024	0.007	0.011	0.000000	0.000000	-1811.68	171
3	GUIDE	used	259662992	9.90	6396	1.000	0.112	-0.003	0.119	0.195	170.634435	23.634300	-2212.59	1012
4	GUIDE	used	259663424	8.86	6401	1.000	-0.050	-0.119	0.074	0.120	170.243291	23.834131	-1007.97	1865
5	GUIDE	used	259663456	8.71	6397	1.000	-0.165	0.084	0.072	0.118	170.962709	24.951050	1606.21	-1993
6	GUIDE	used	259665288	8.62	6398	1.000	0.055	-0.001	0.060	0.095	170.672049	24.733578	1307.21	-800
7	GUIDE	used	259665864	9.69	6398	1.000	0.046	0.035	0.108	0.173	170.950609	24.417770	-111.54	-1136

2.4 Star Slots

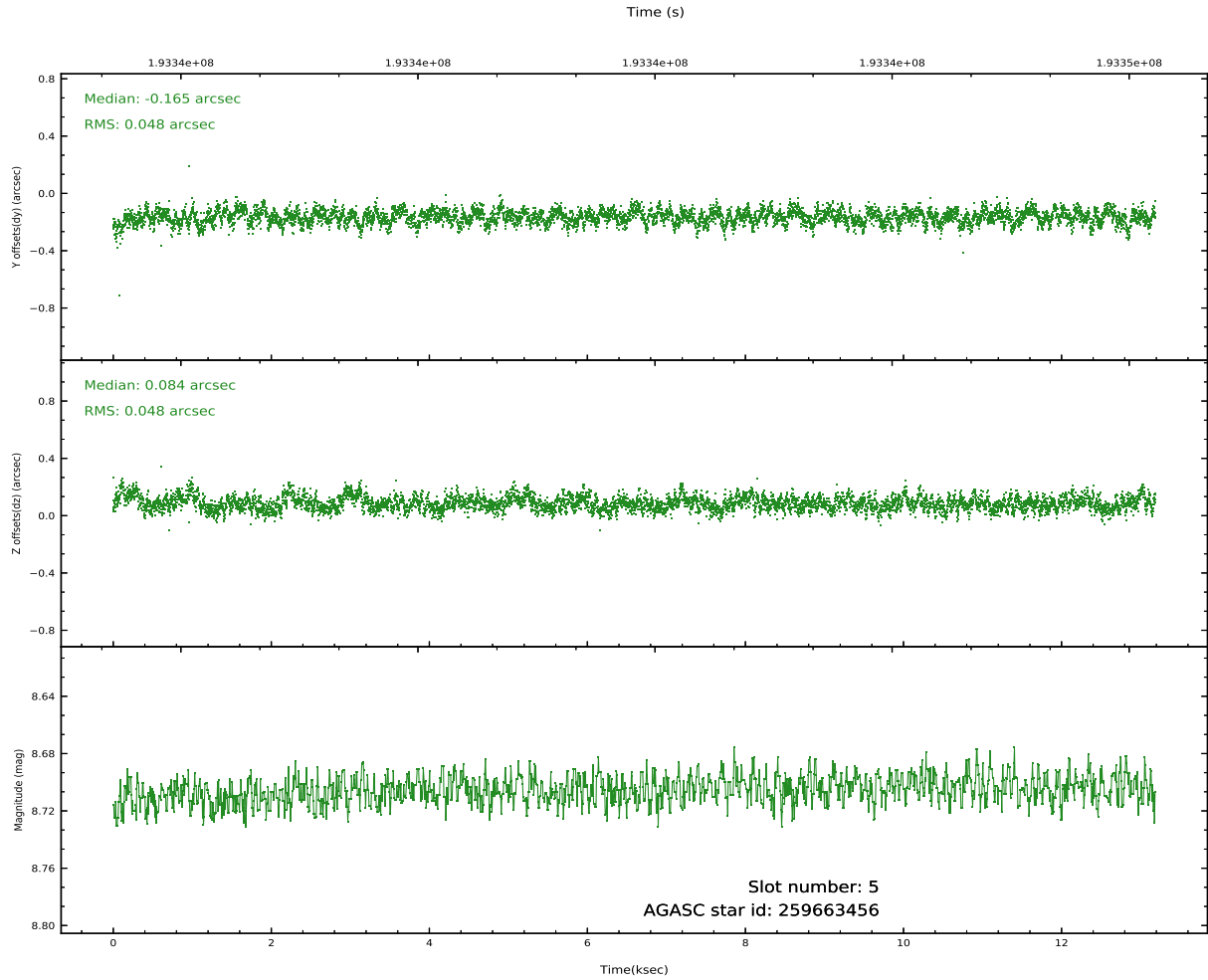
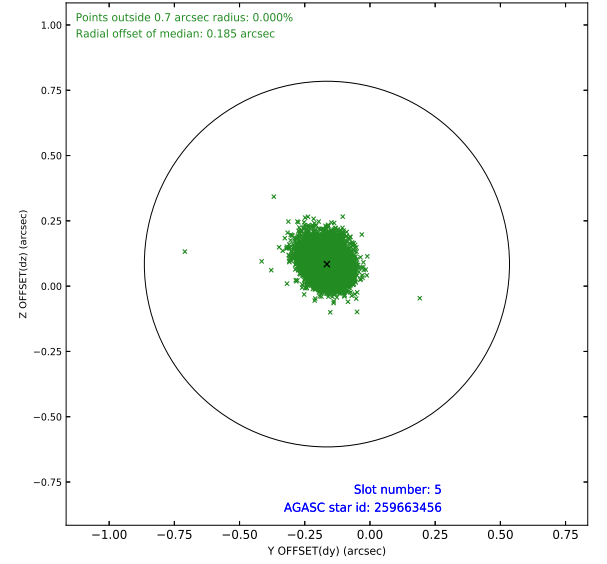
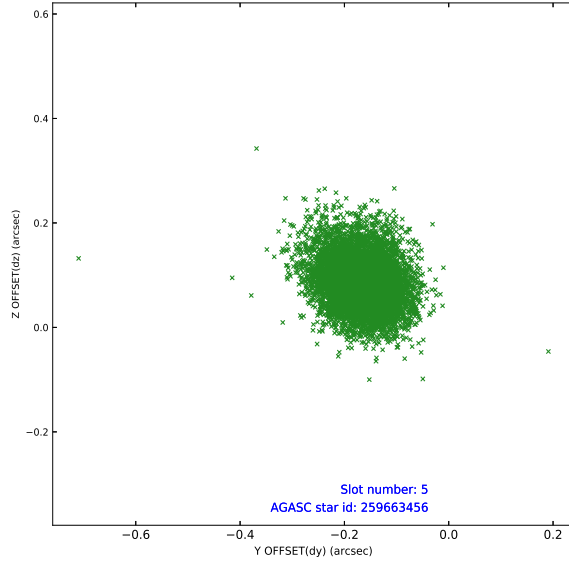
2.4.1 Slot 3



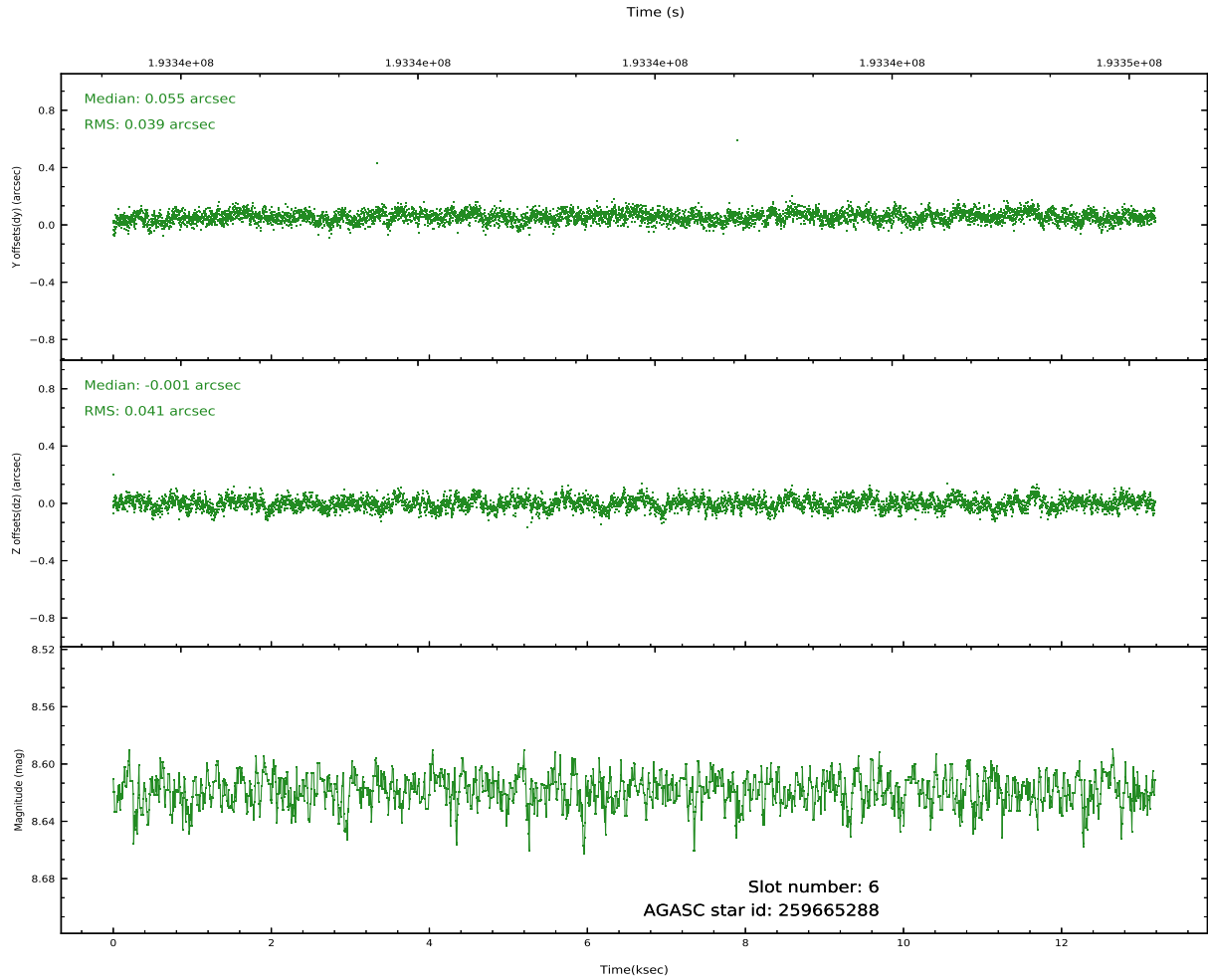
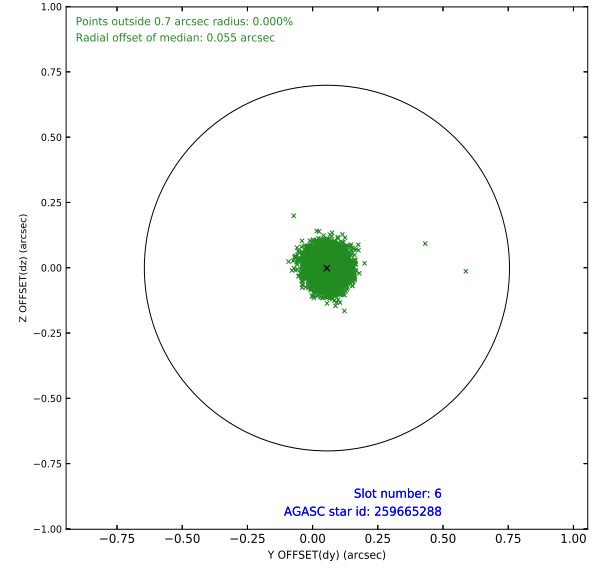
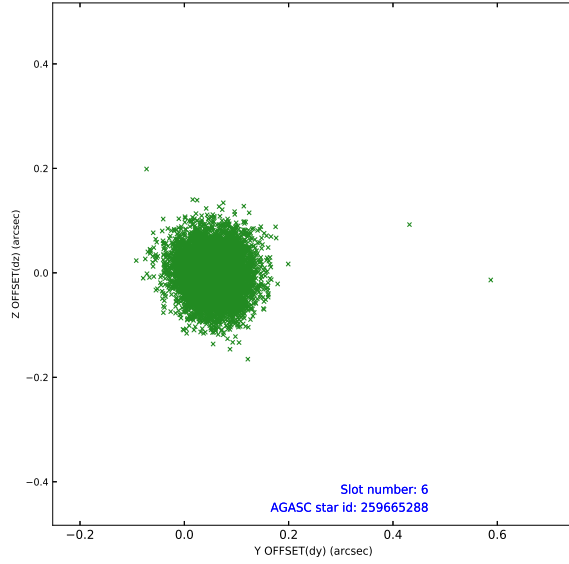
2.4.2 Slot 4



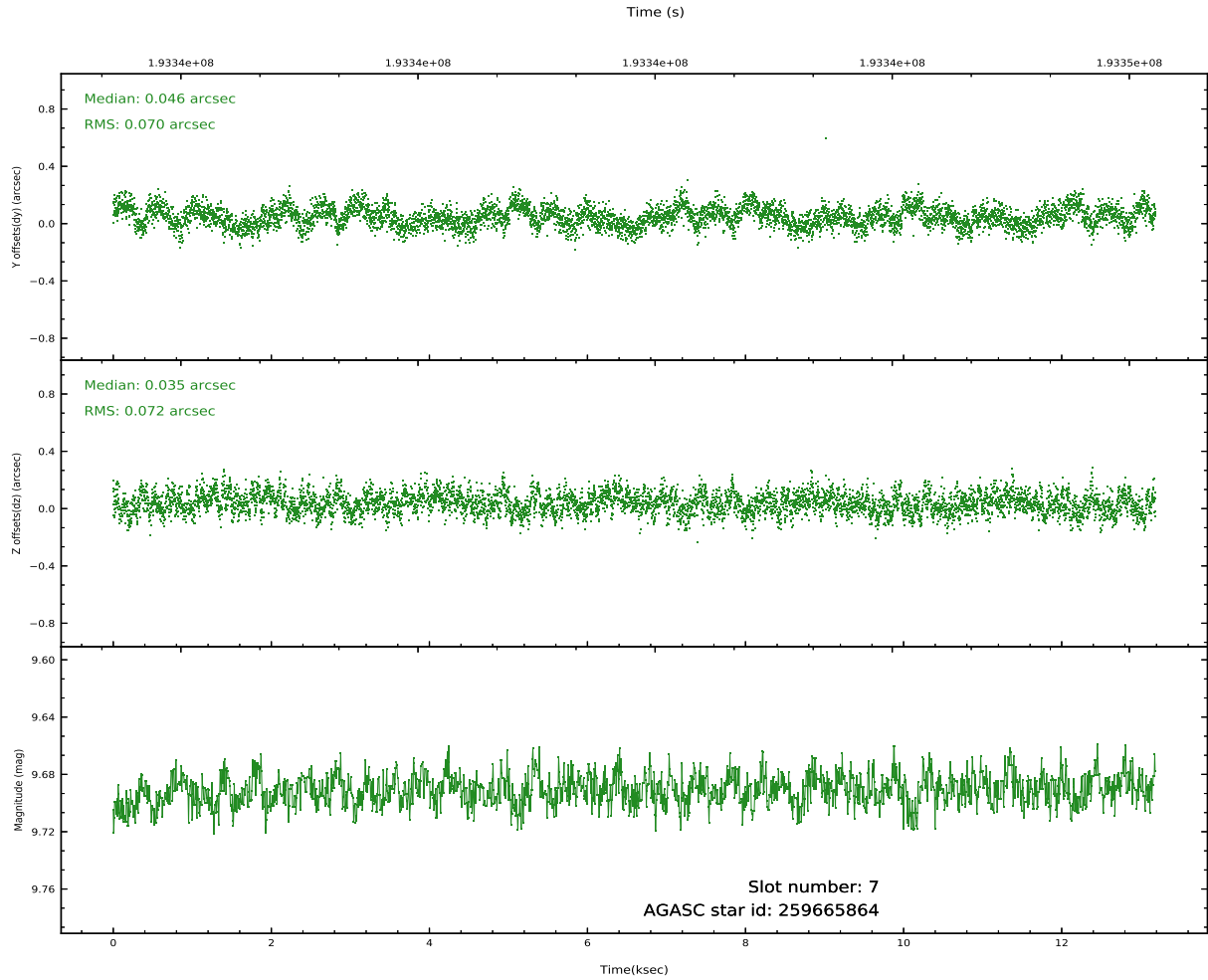
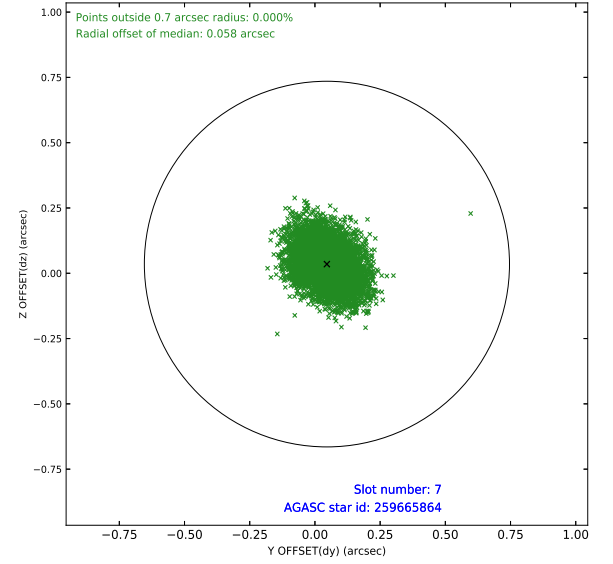
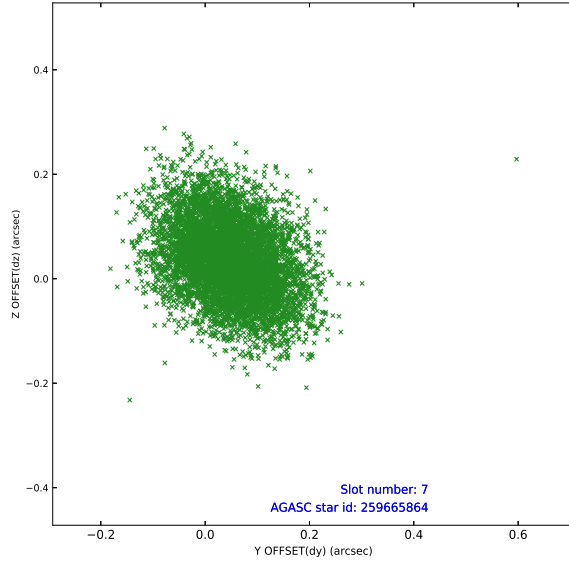
2.4.3 Slot 5



2.4.4 Slot 6

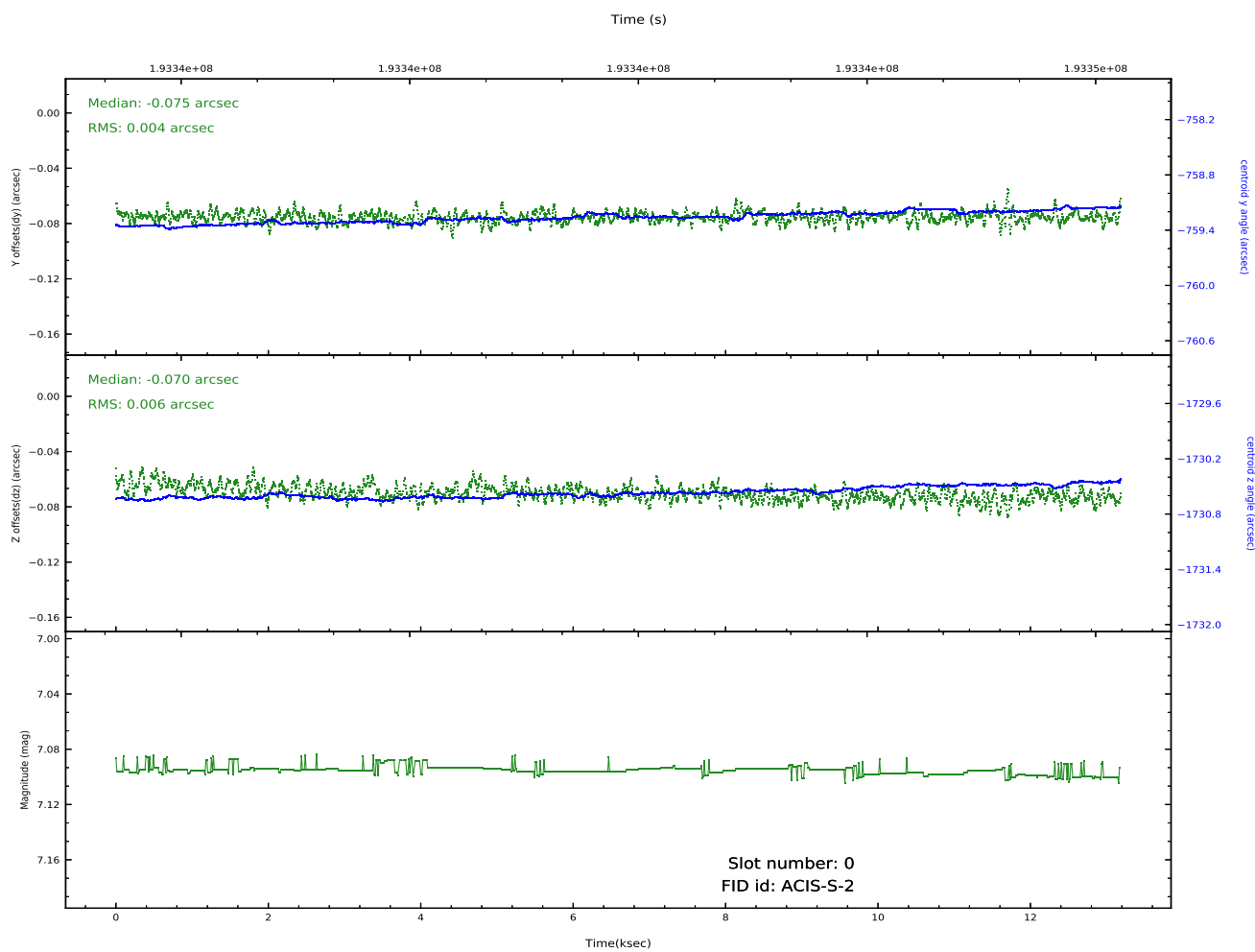
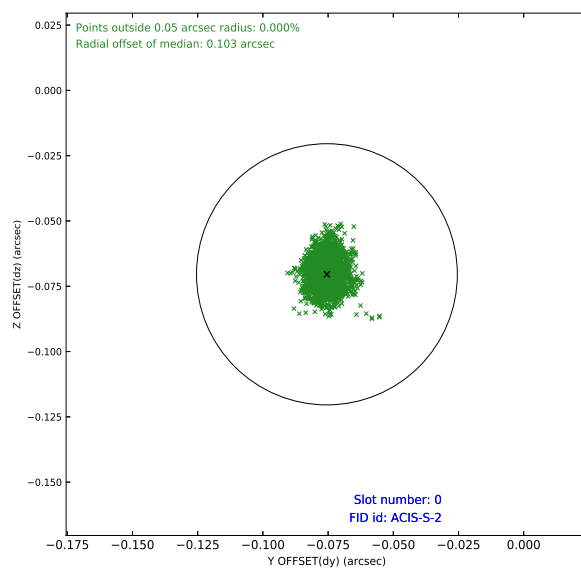
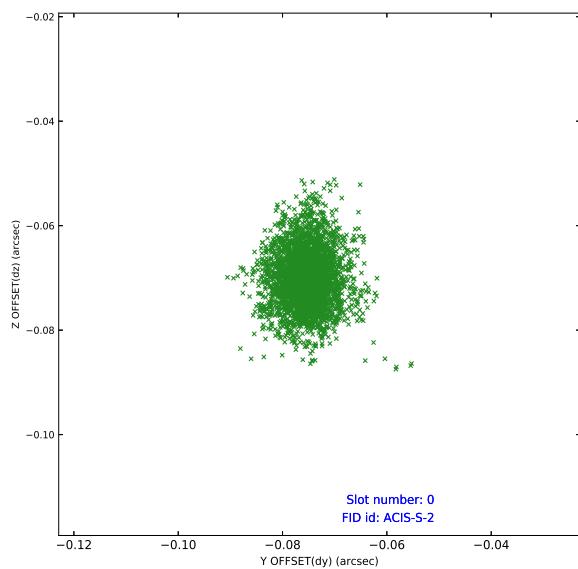


2.4.5 Slot 7

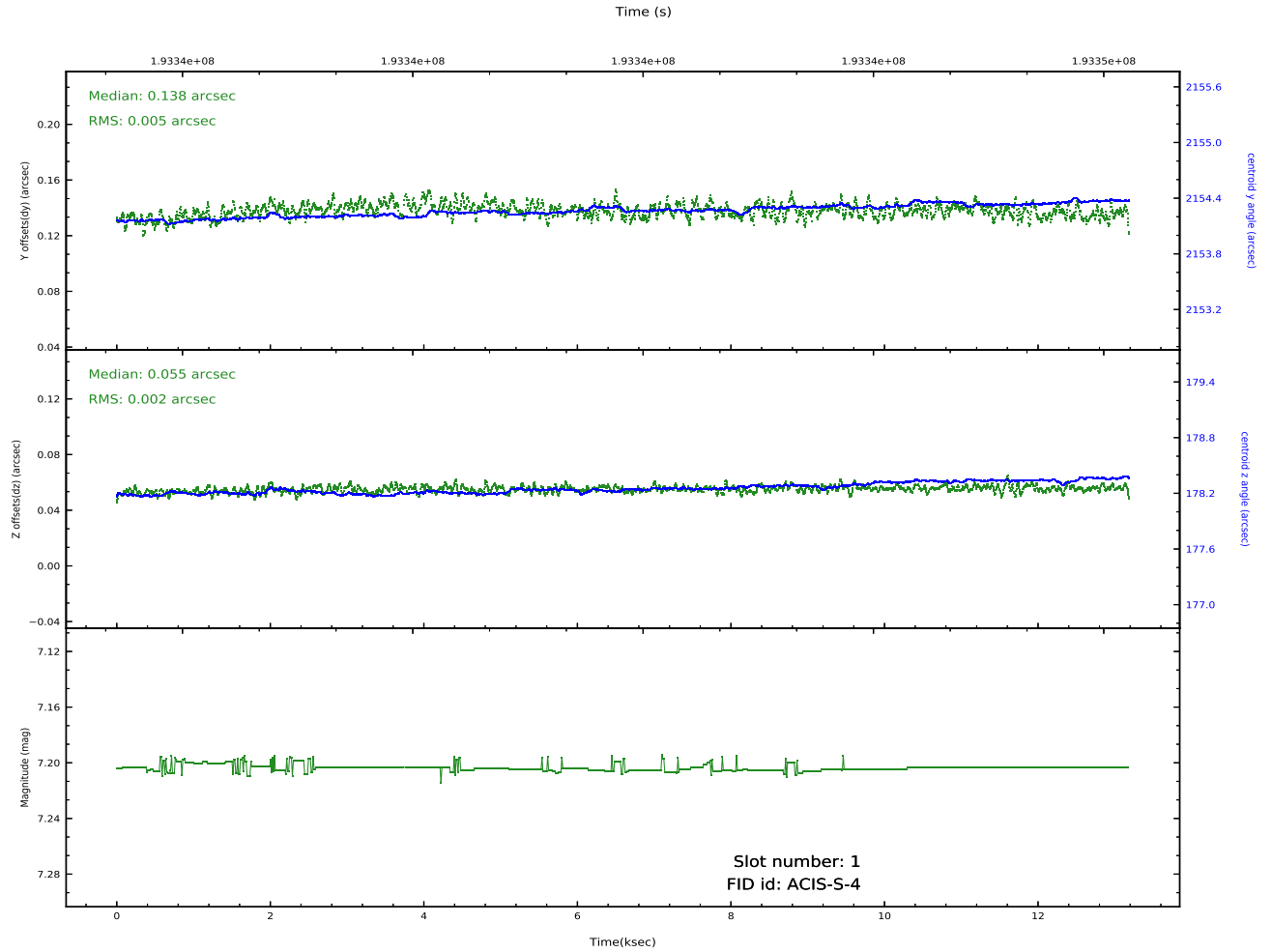
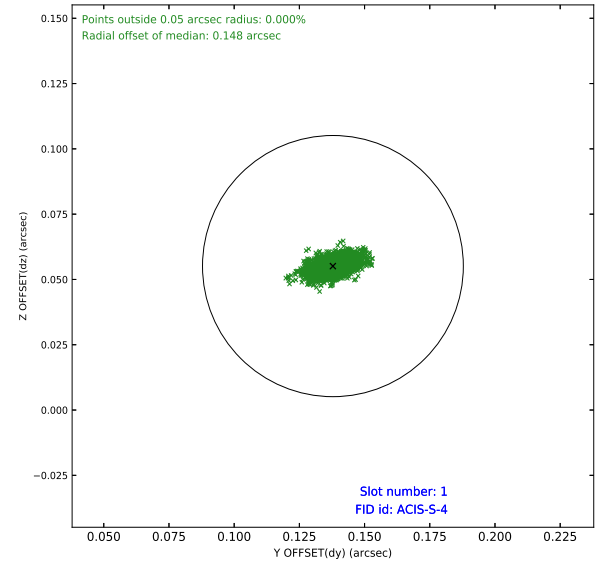
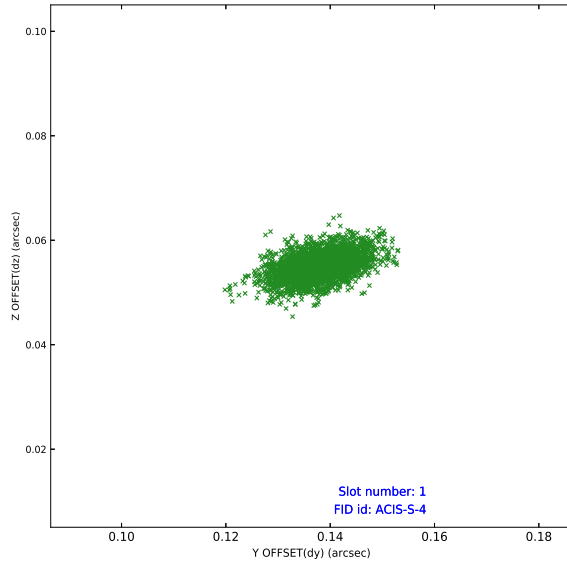


2.5 FID Slots

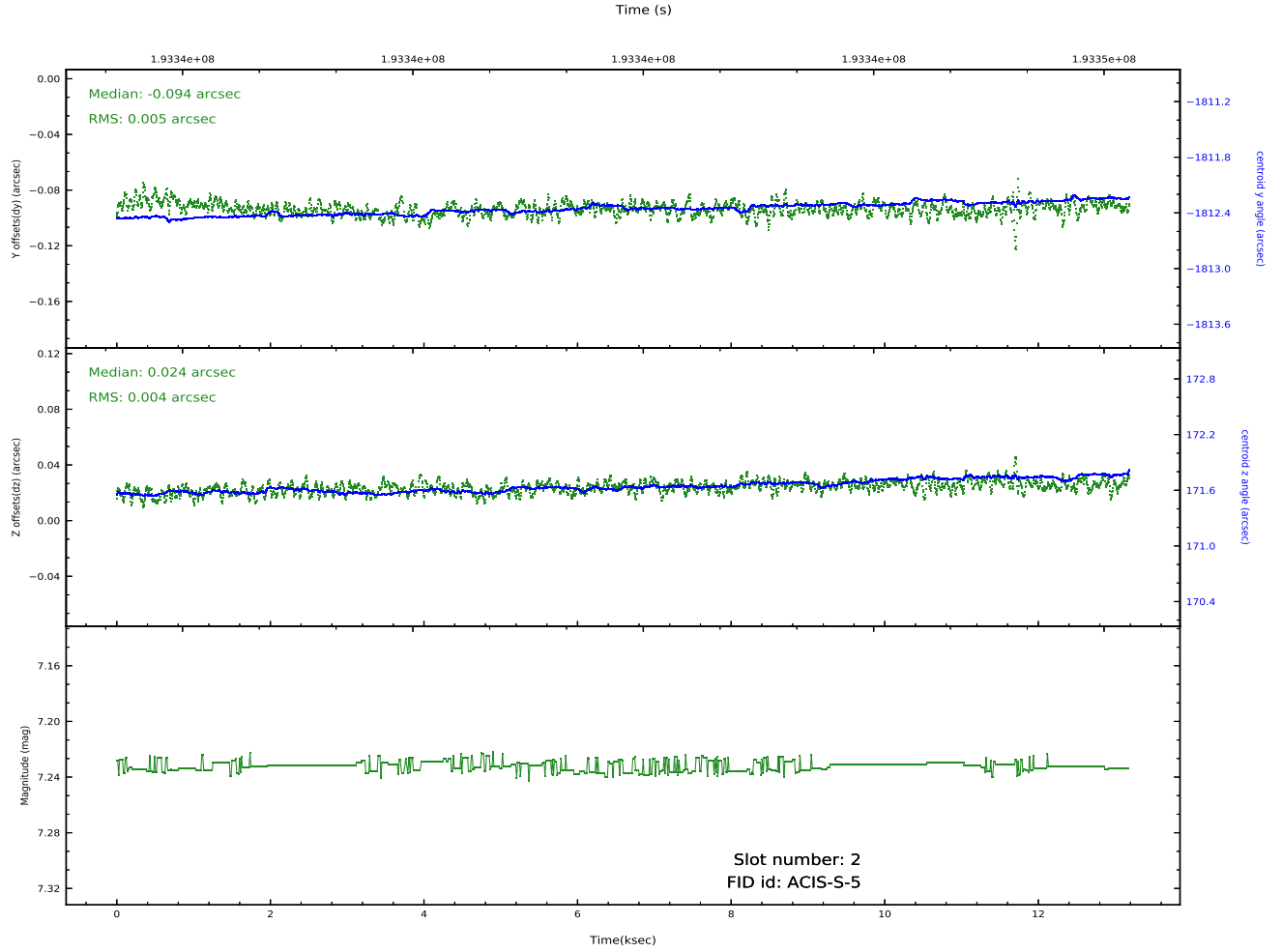
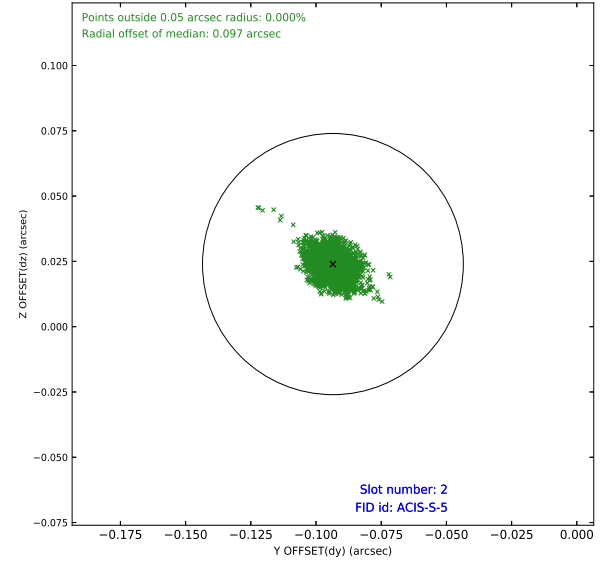
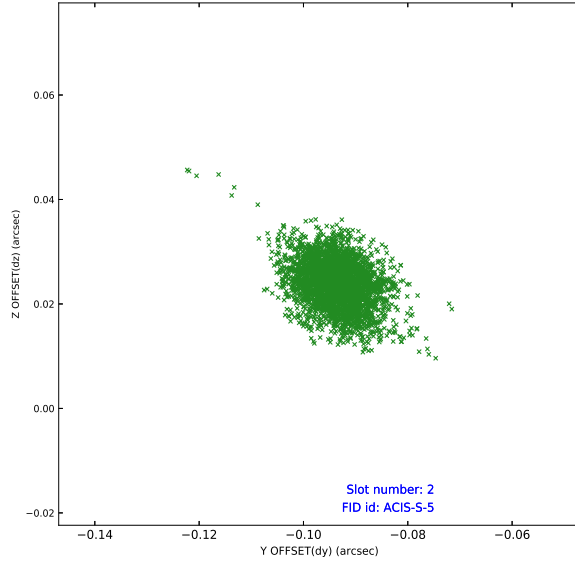
2.5.1 Slot 0



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)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.141

A.2 Comments