

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20416 - L2 Version 2
Chandra X-Ray Center

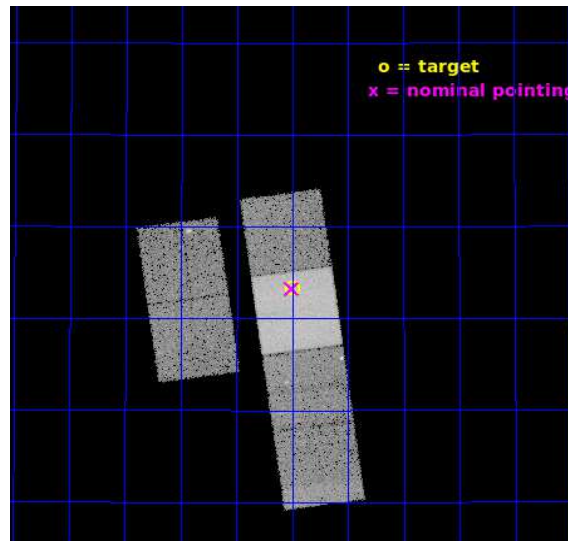
L2 Processing Date : Oct 25 2020

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1 Front

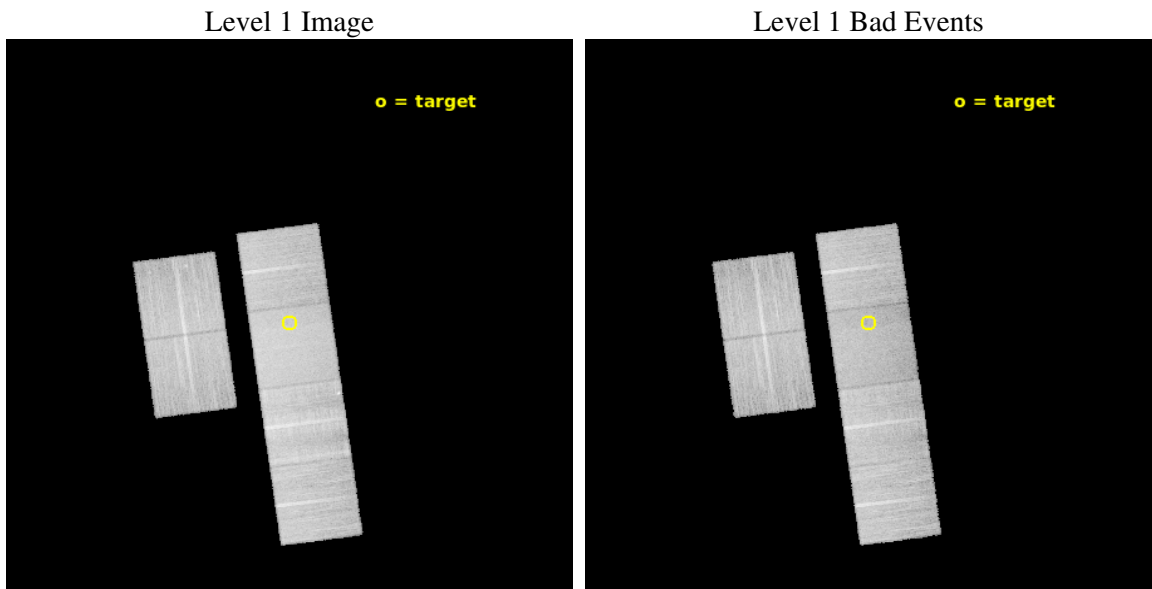
seq_num	703521	Sequence number
obs_id	20416	Observation id
title	A Complete X-ray Survey of Luminous Quasars at the End of Reionization: a Changing Population?	Proposal title
observer	Xiaohui Fan	Principal investigator
object	P006+39	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	6.124167	Observer's specified target RA [deg]
dec_targ	39.221944	Observer's specified target Dec [deg]
ra_nom	6.1258376573912	Nominal RA [deg]
dec_nom	39.220999164745	Nominal Dec [deg]
roll_nom	82.169376478033	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19952.000297308	Sum of GTIs [s]
livetime	19699.356055891	Livetime [s]
ontime2	19952.000297308	Sum of GTIs [s]
ontime3	19952.000297308	Sum of GTIs [s]
ontime6	19952.000297308	Sum of GTIs [s]
ontime7	19952.000297308	Sum of GTIs [s]
ontime8	19945.518435836	Sum of GTIs [s]
ontime9	19948.759326935	Sum of GTIs [s]
l2events	154054	Number of level 2 events



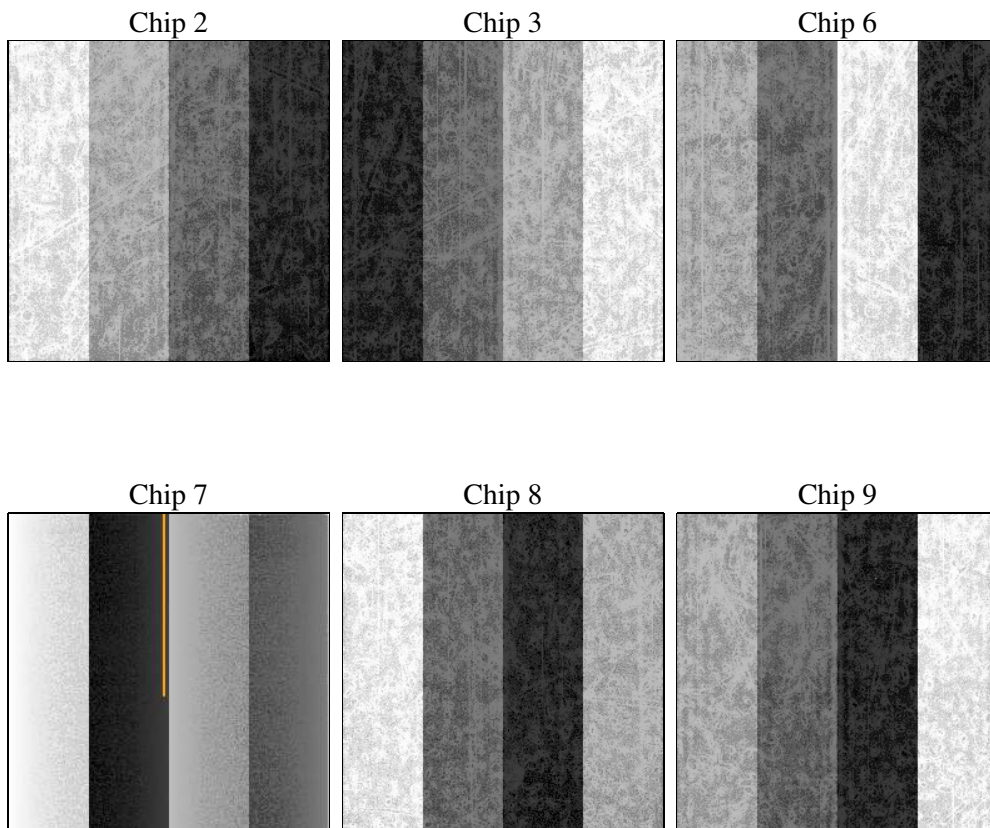
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	19952.000297308	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	19952.000297308	Sum of GTIs [s]
date	2020-10-26T00:06:10	Date and time of file creation	ontime3	19952.000297308	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19952.000297308	Sum of GTIs [s]
			ontime7	19952.000297308	Sum of GTIs [s]
			ontime8	19945.518435836	Sum of GTIs [s]
			ontime9	19948.759326935	Sum of GTIs [s]
			l1events	984291	Number of level 1 events

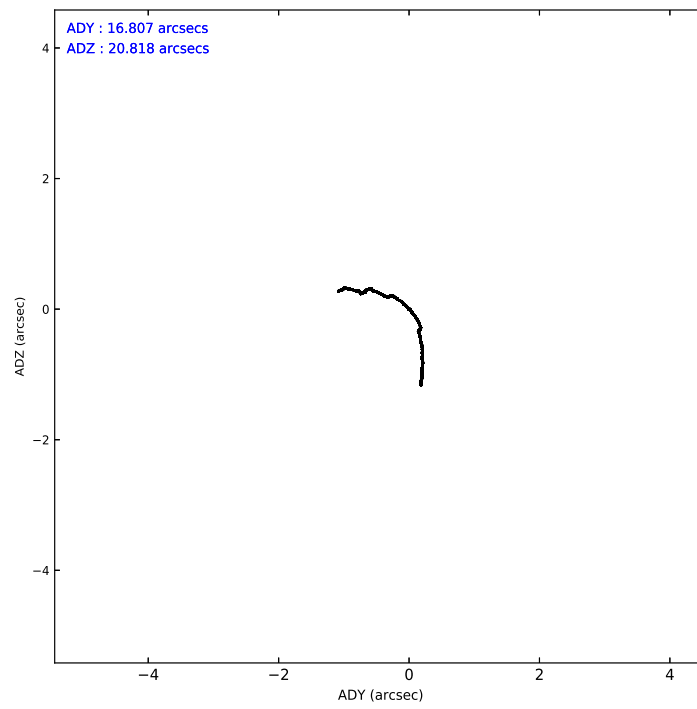
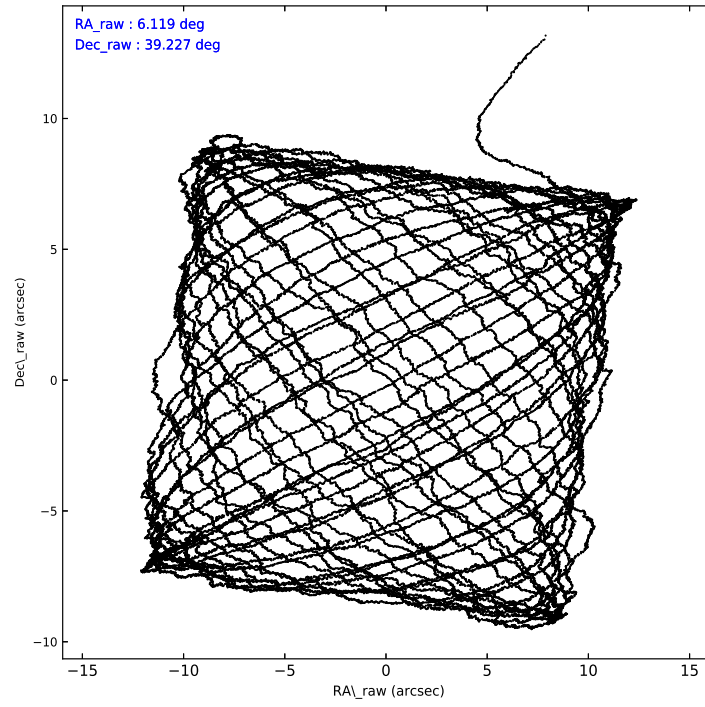
2.1.4 Events

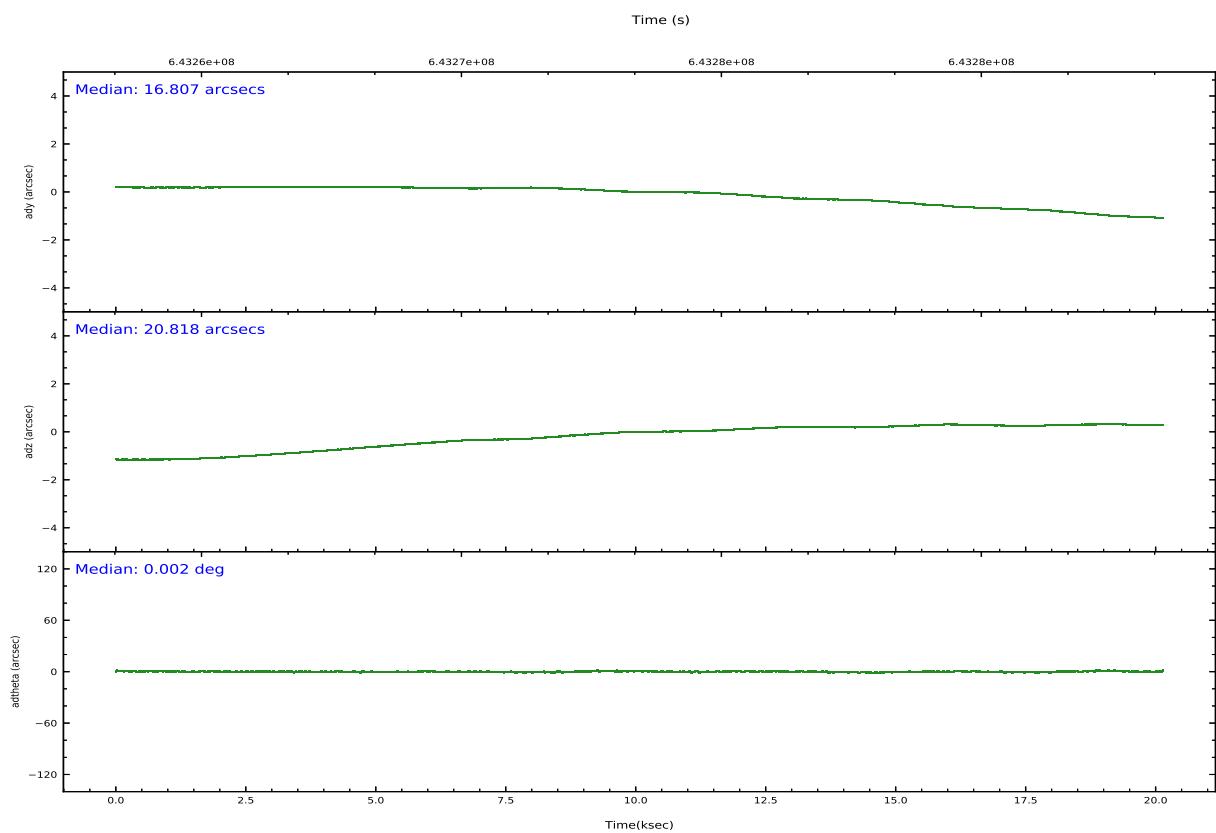
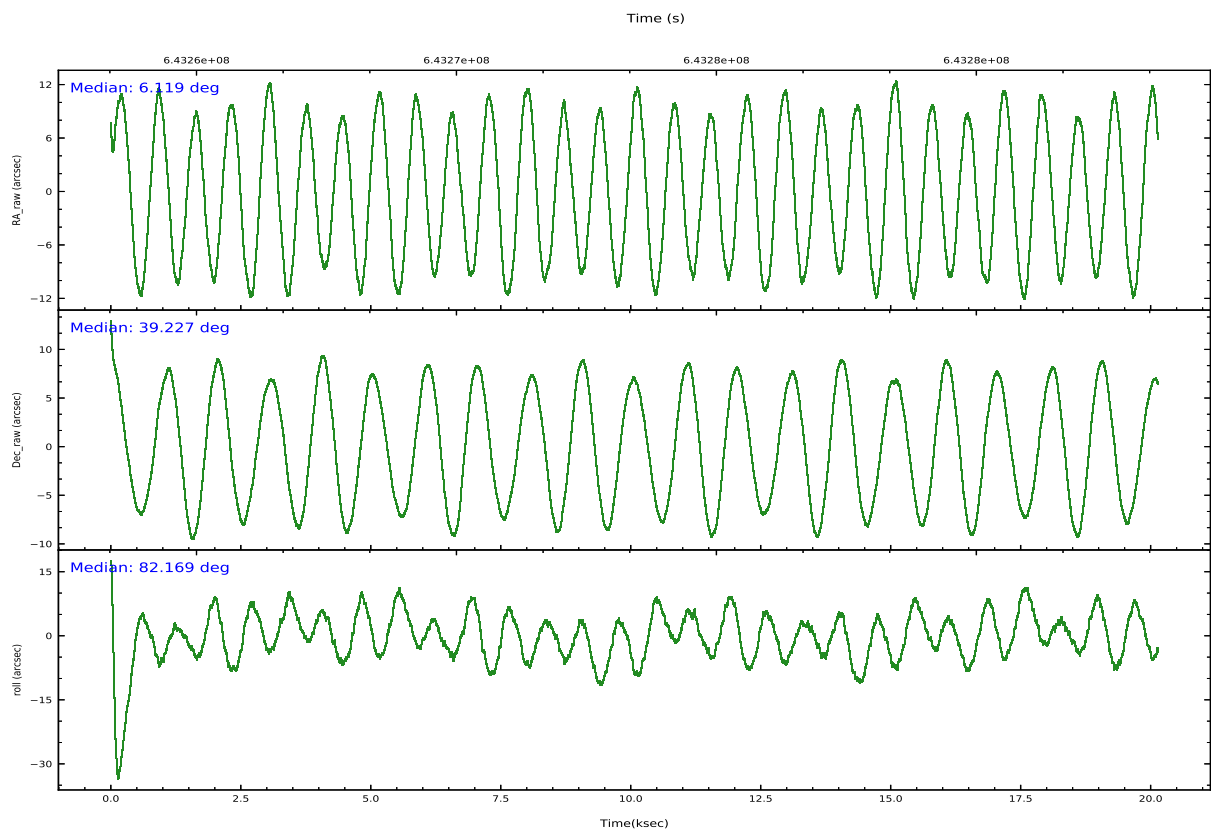
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	148338	141771	152009	187874	194134	160165	grade 0 events	5879	5537	5493	6614	15031	6564
rejected events	132161	126375	135357	106435	141356	141645		3%	3%	3%	3%	7%	4%
rejected %	89%	89%	89%	56%	72%	88%	grade 1 events	87	104	68	277	162	93
								0%	0%	0%	0%	0%	0%
							grade 2 events	3988	3404	3984	17454	12600	4240
								2%	2%	2%	9%	6%	2%
							grade 3 events	1549	1580	1632	6476	5525	1897
								1%	1%	1%	3%	2%	1%
							grade 4 events	1706	1638	1549	6415	5148	1706
								1%	1%	1%	3%	2%	1%
							grade 5 events	5690	6823	6999	18798	10291	8149
								3%	4%	4%	10%	5%	5%
							grade 6 events	3061	3242	4000	44510	14486	4121
								2%	2%	2%	23%	7%	2%
							grade 7 events	126378	119443	128284	87330	130891	133395
								85%	84%	84%	46%	67%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-236789	ACIS-236789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	6.132927	6.1258376573912	CCD I2 on	O2	Y
[deg] Pointing Dec	39.201345	39.220999164745	CCD I3 on	Y	Y
[deg] Pointing Roll	82.008967	82.169376478033	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	643263496.184000	643262203.34108	CCD S5 on	O1	Y
Observation start date	2018-05-21T04:17:07	2018-05-21T03:56:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	643283496.184000	643284523.2299	On-chip summing requested	N	N
Observation end date	2018-05-21T09:50:27	2018-05-21T10:08:43	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



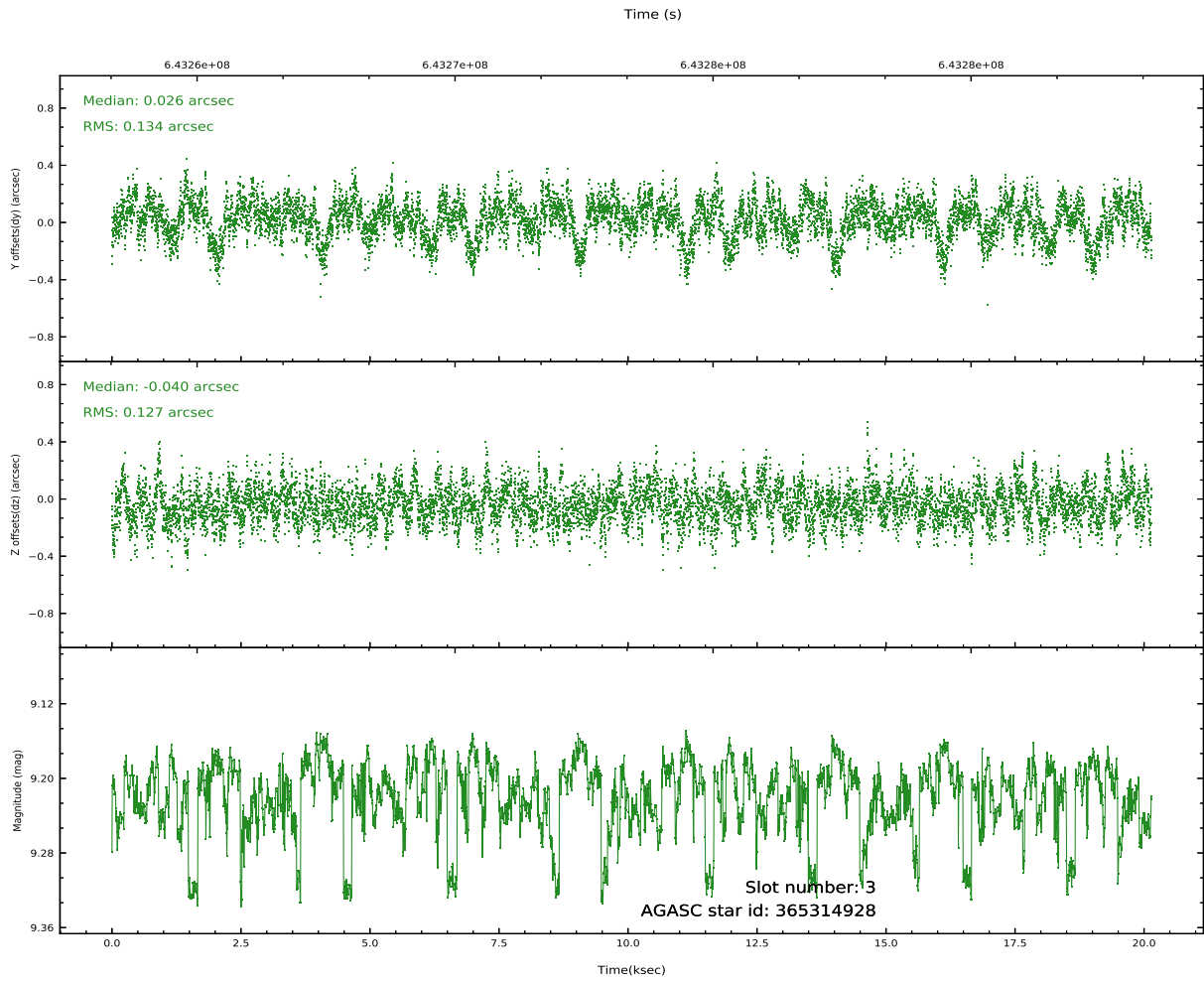
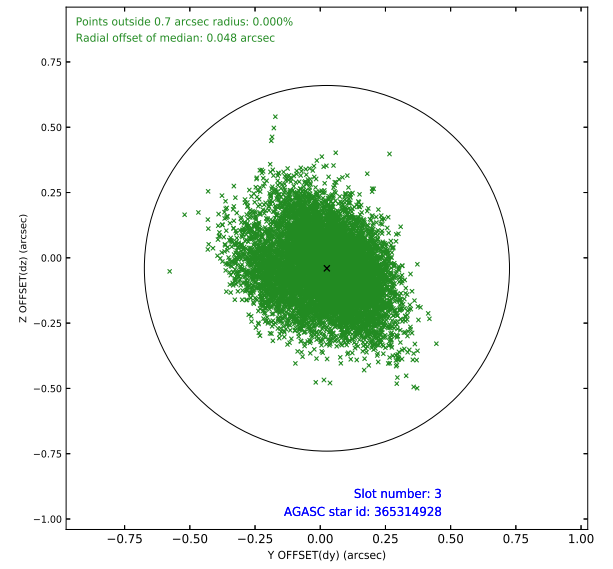
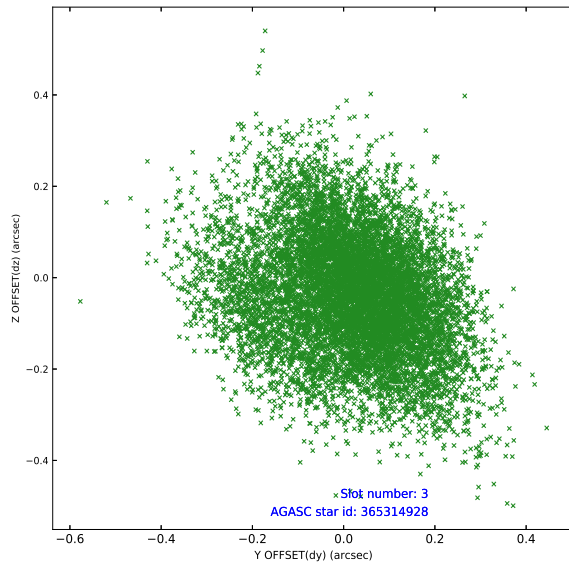


Slot Statistics

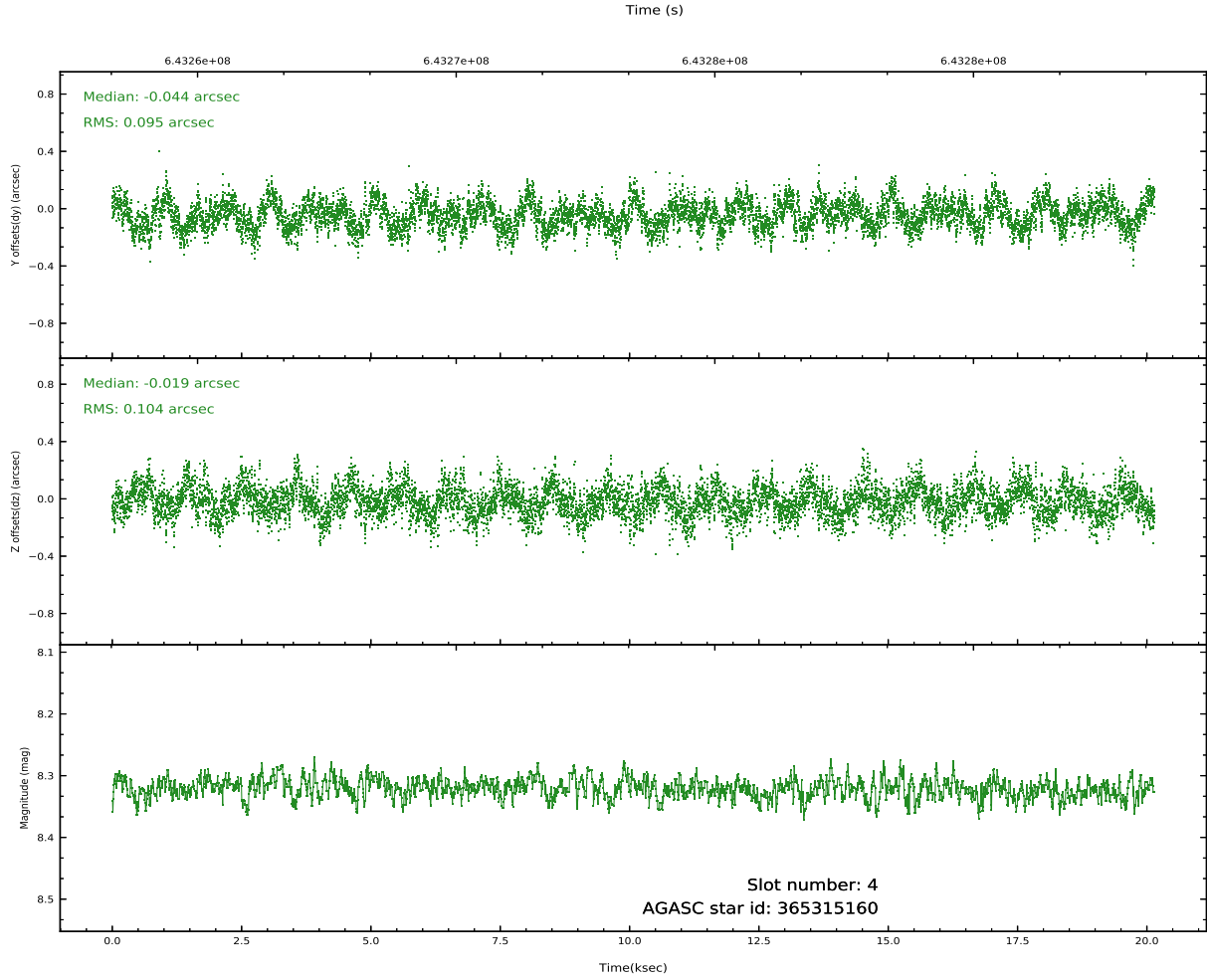
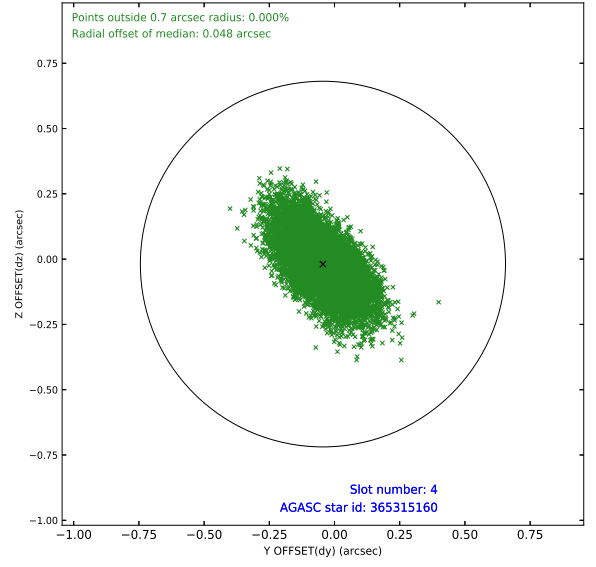
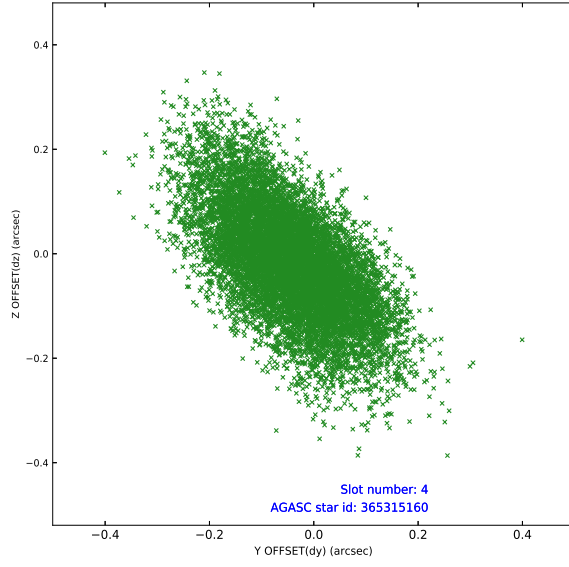
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.05	4912	1.000	0.104	-0.071	0.017	0.030	0.000000	0.000000	-769.75	-1742
1	FID		ACIS-S-4	7.16	4913	1.000	0.111	-0.029	0.013	0.021	0.000000	0.000000	2143.65	165
2	FID		ACIS-S-5	7.15	4913	1.000	-0.239	0.108	0.023	0.034	0.000000	0.000000	-1822.50	160
3	GUIDE	used	365314928	9.21	9817	1.000	0.026	-0.040	0.196	0.325	6.982532	39.558812	1613.75	-2154
4	GUIDE	used	365315160	8.32	9823	1.000	-0.044	-0.019	0.146	0.255	6.459911	39.424881	925.38	-789
5	GUIDE	used	364784368	7.94	9821	1.000	0.085	-0.061	0.120	0.203	6.270251	39.145836	-143.76	-407
6	GUIDE	used	364783856	9.11	9810	1.000	0.136	0.117	0.174	0.292	6.862884	38.492491	-2233.59	-2392
7	GUIDE	used	365304456	7.53	9825	1.000	-0.197	0.005	0.114	0.207	6.352501	39.829795	2325.38	-287

2.4 Star Slots

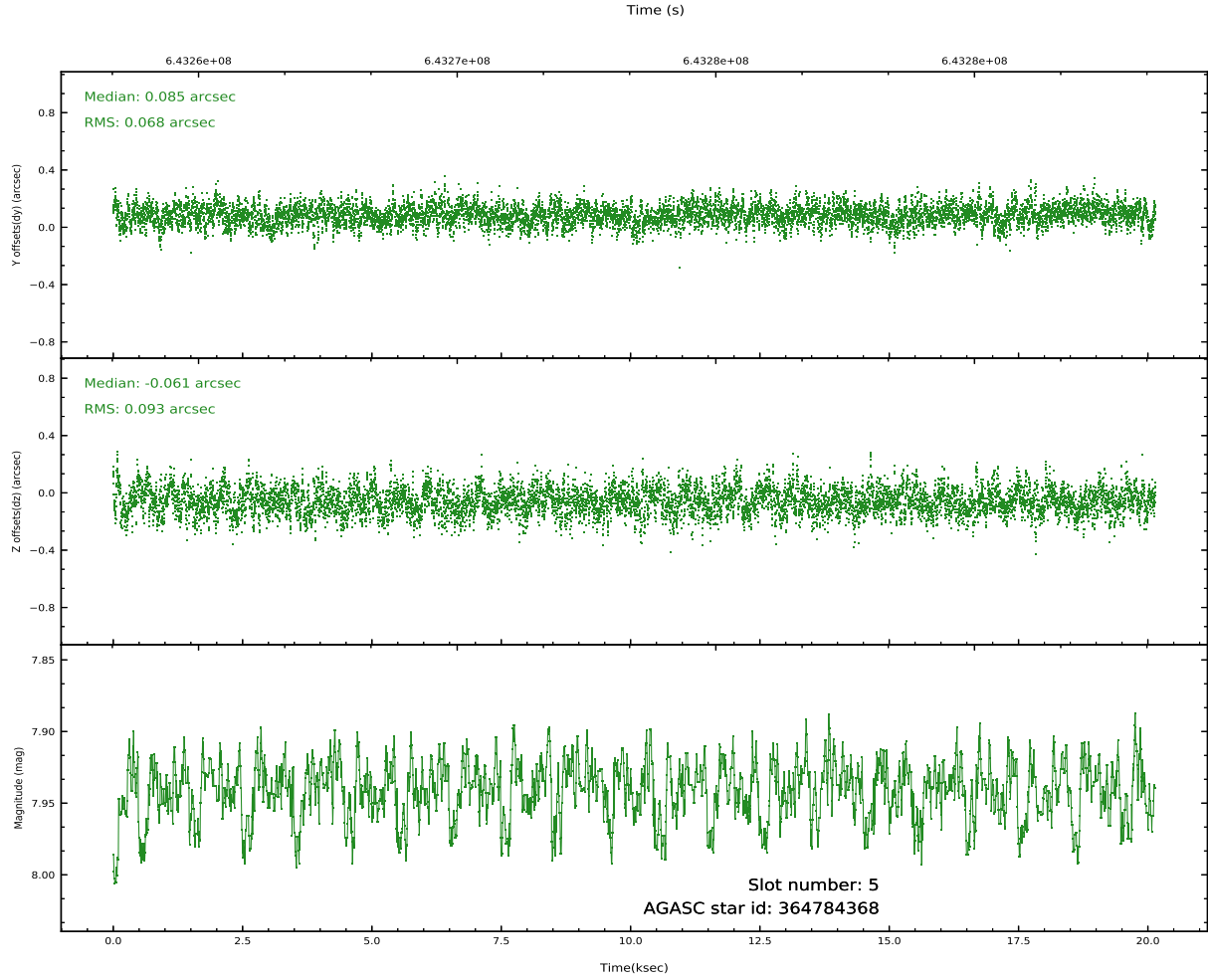
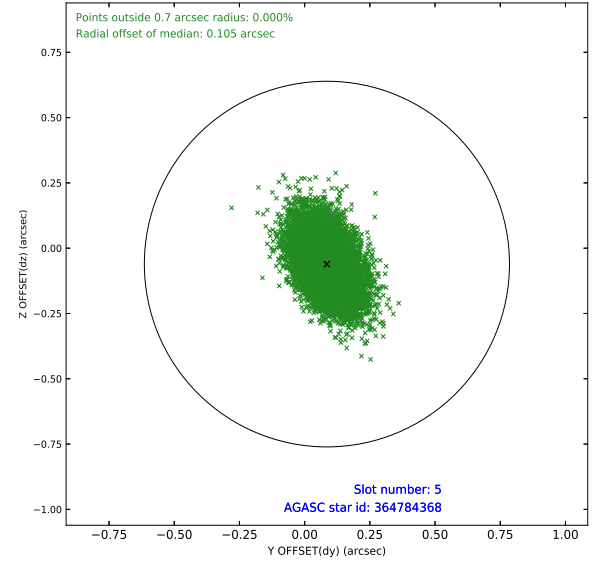
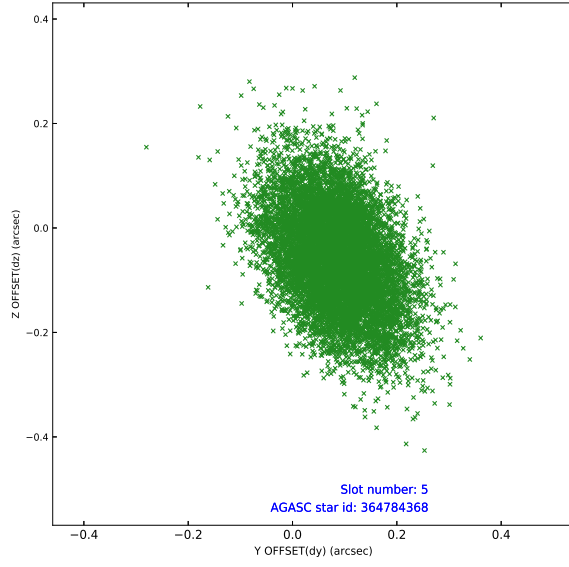
2.4.1 Slot 3



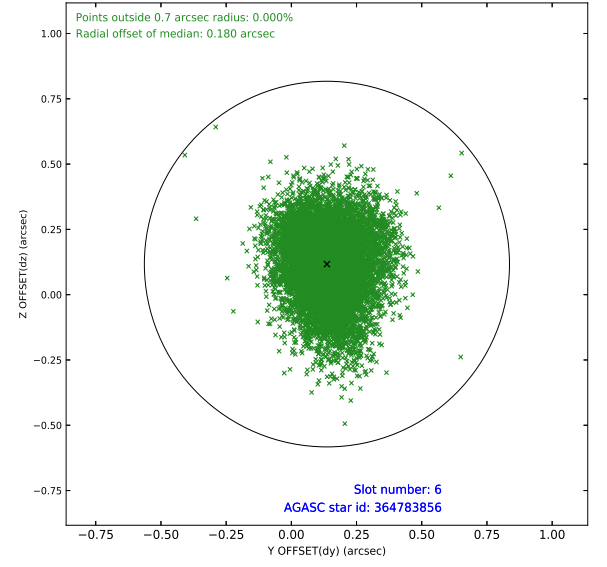
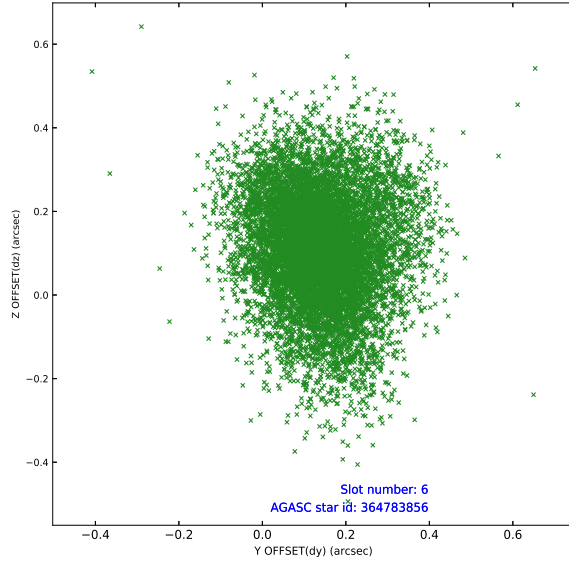
2.4.2 Slot 4



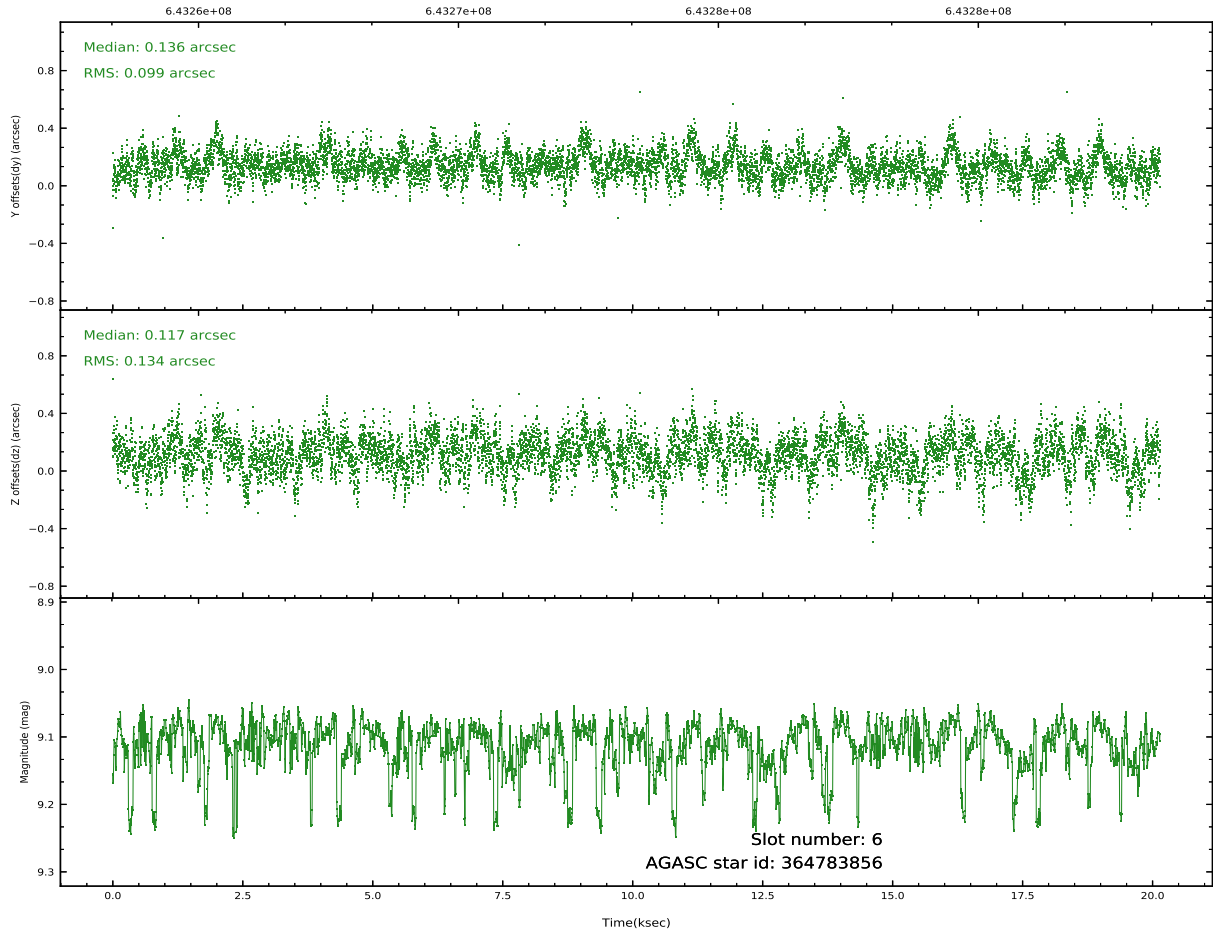
2.4.3 Slot 5



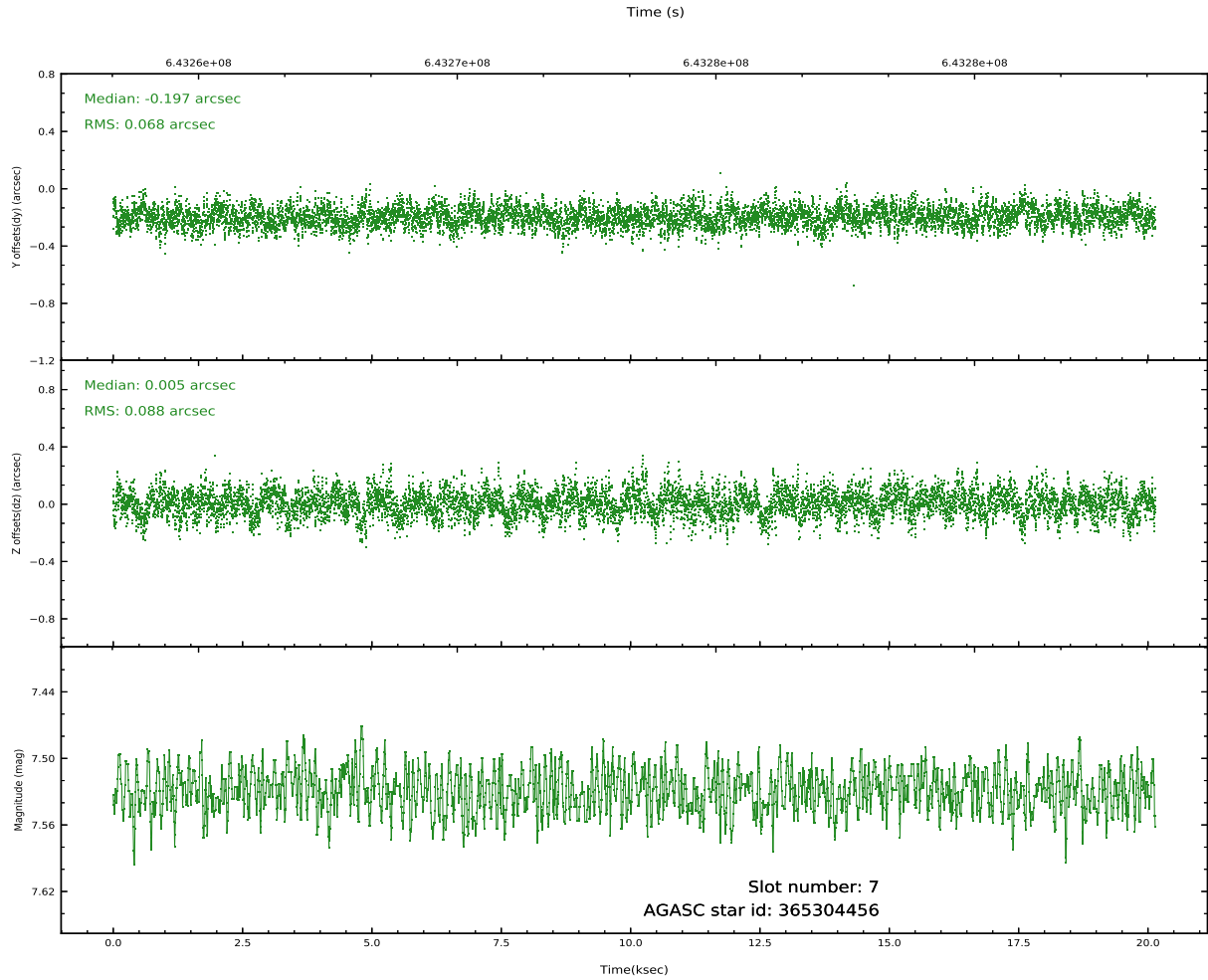
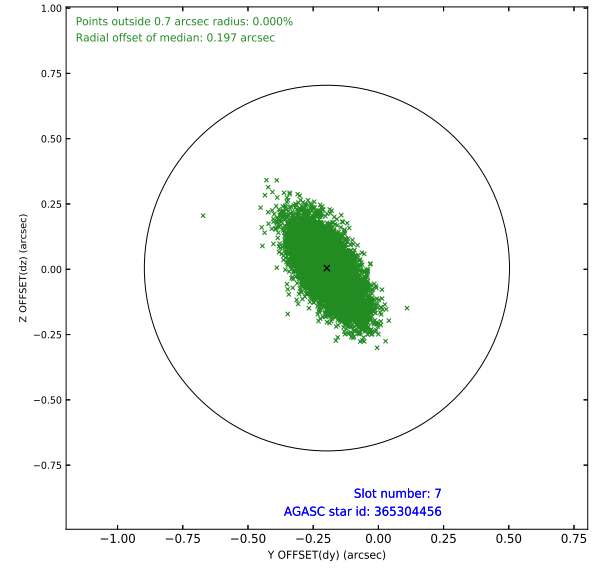
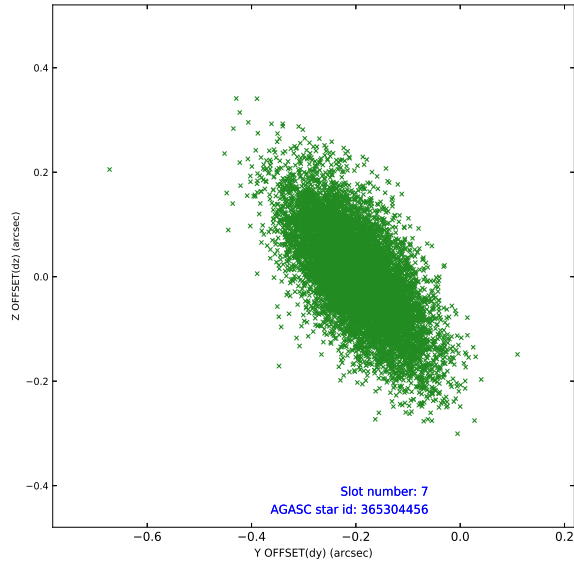
2.4.4 Slot 6



Time (s)

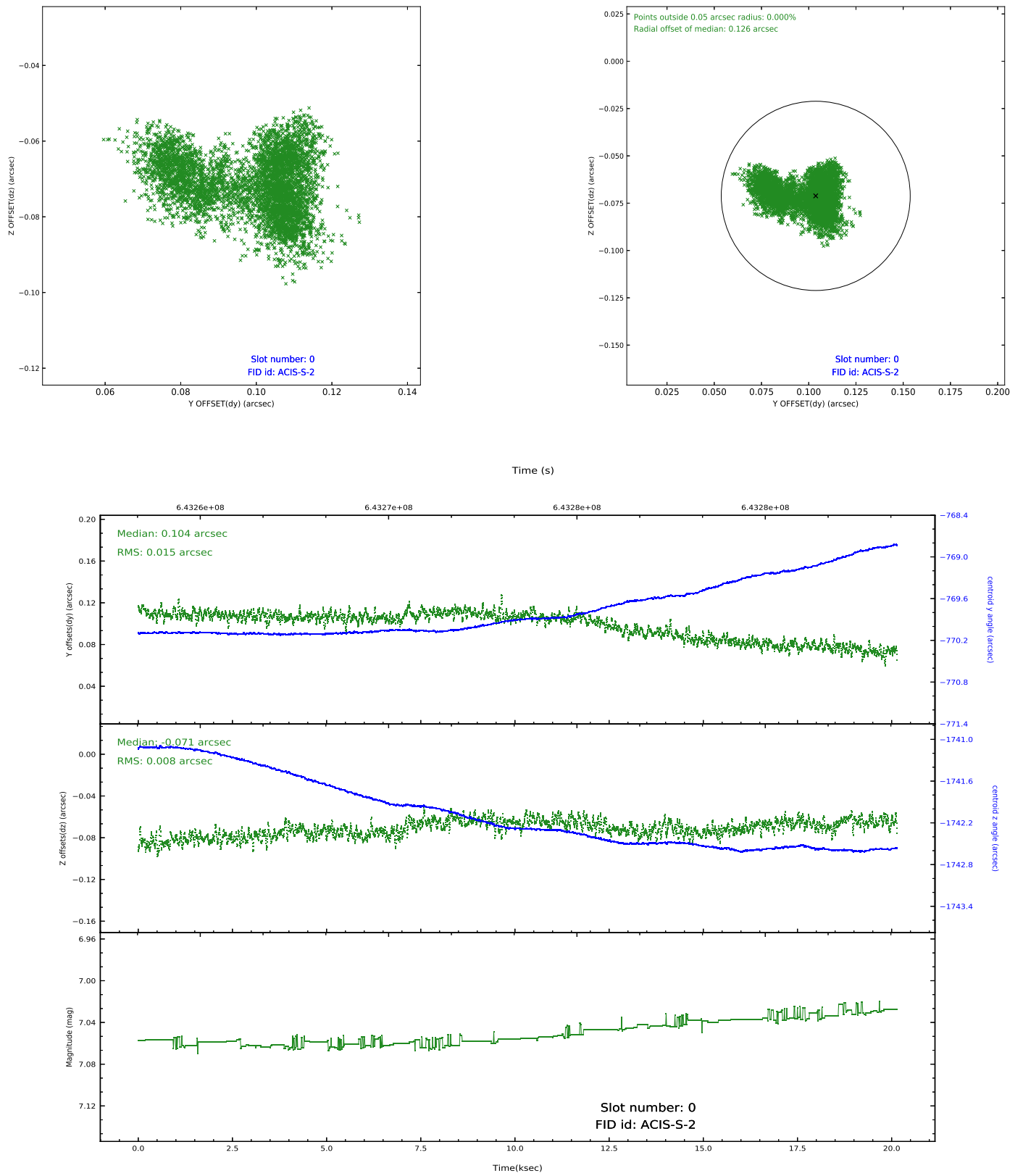


2.4.5 Slot 7

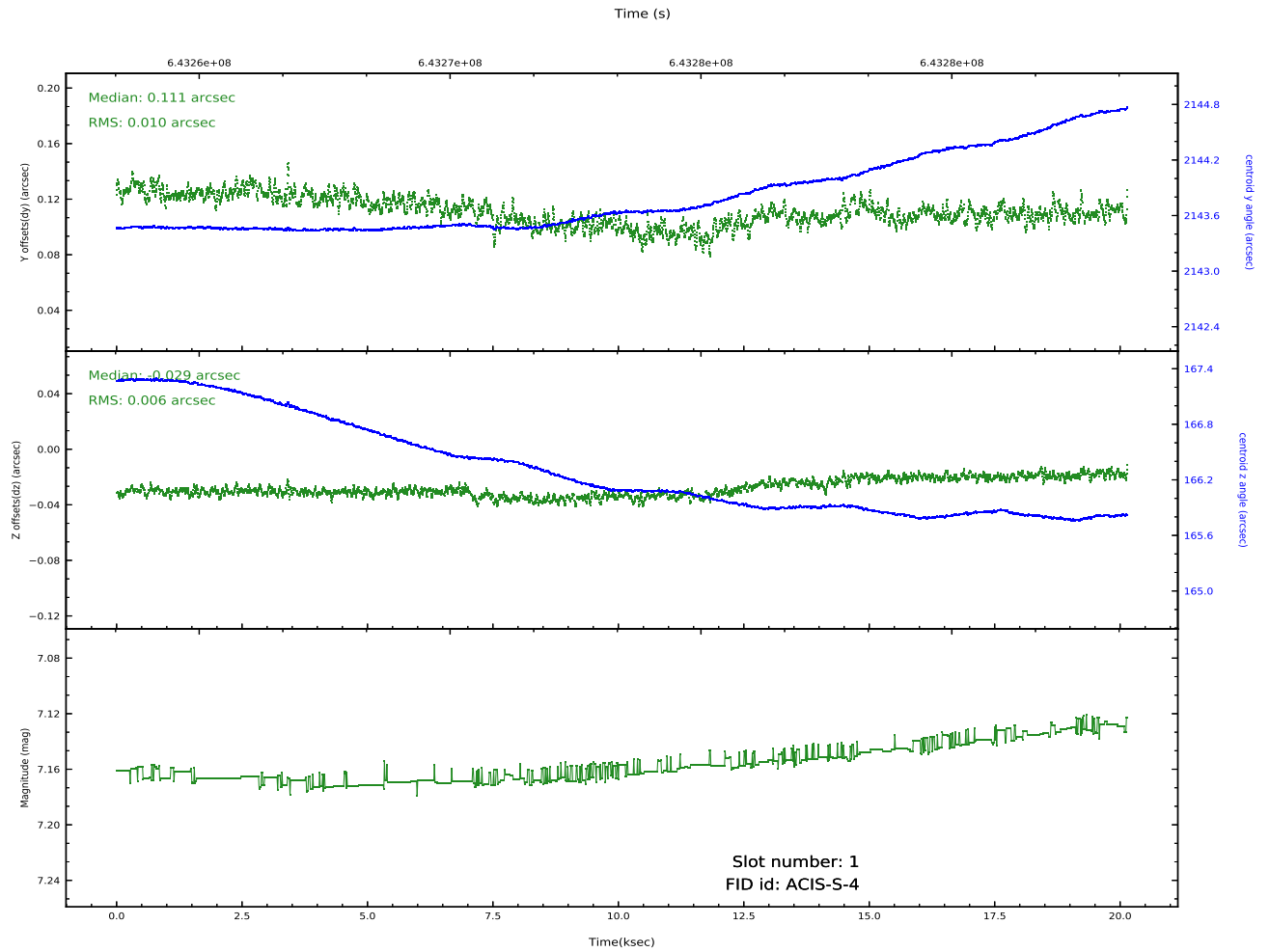
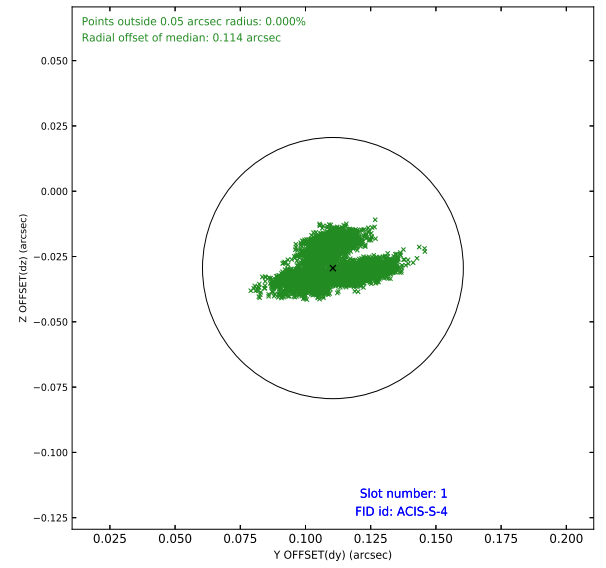
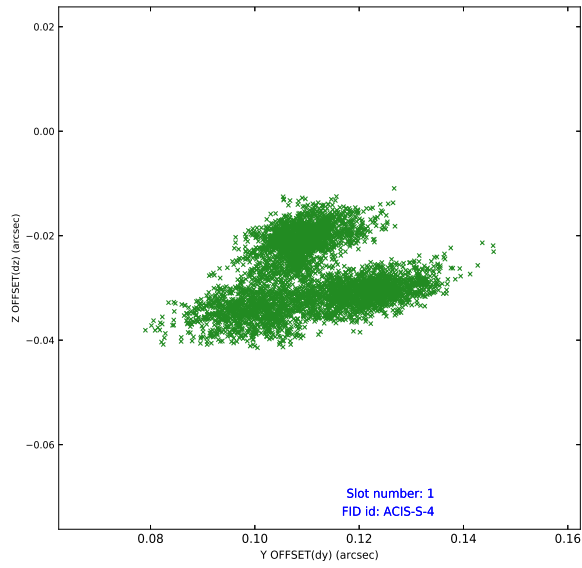


2.5 FID Slots

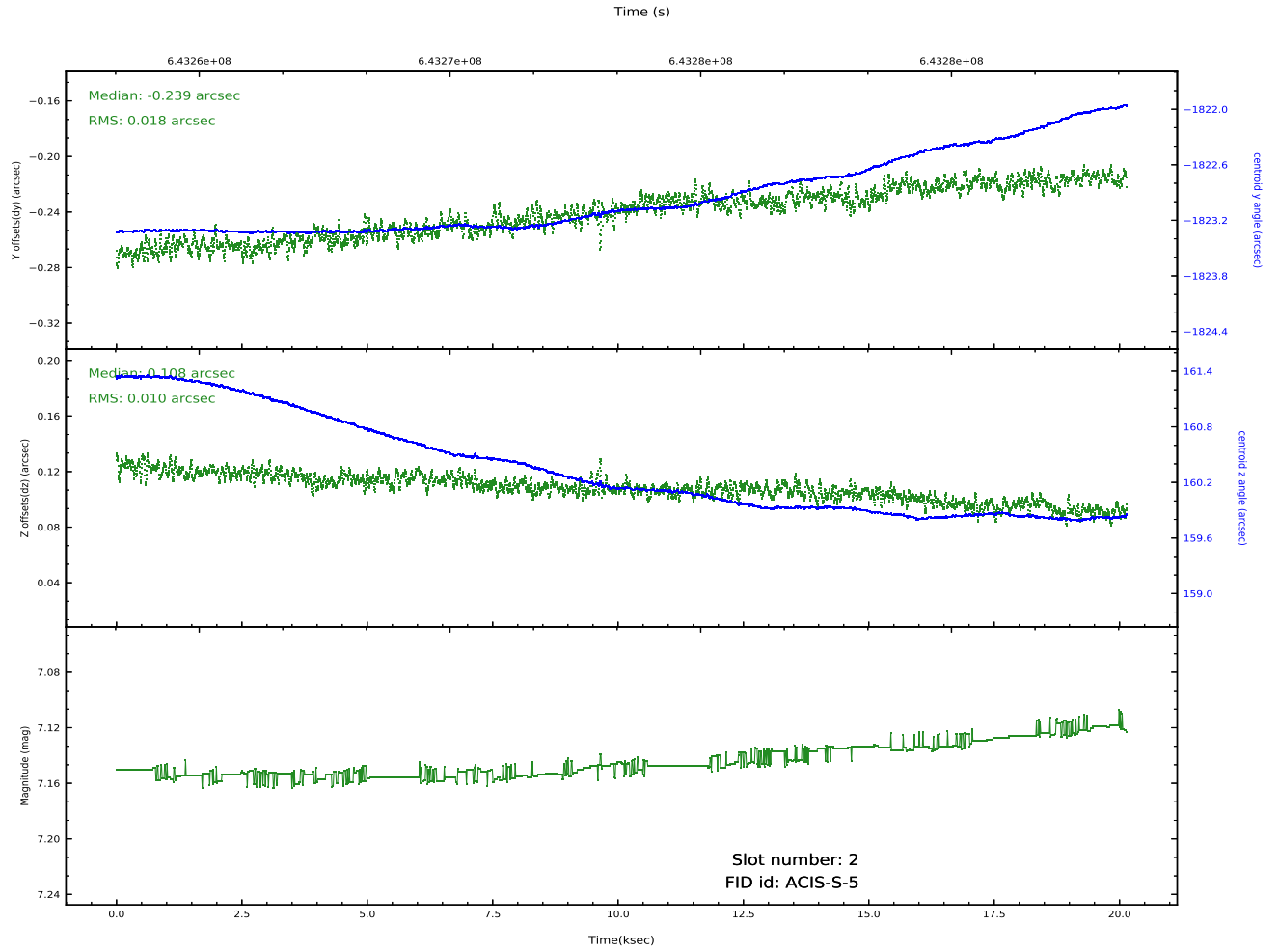
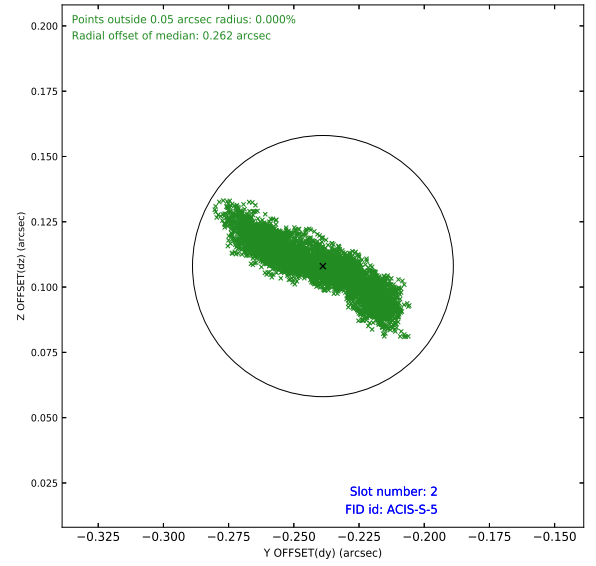
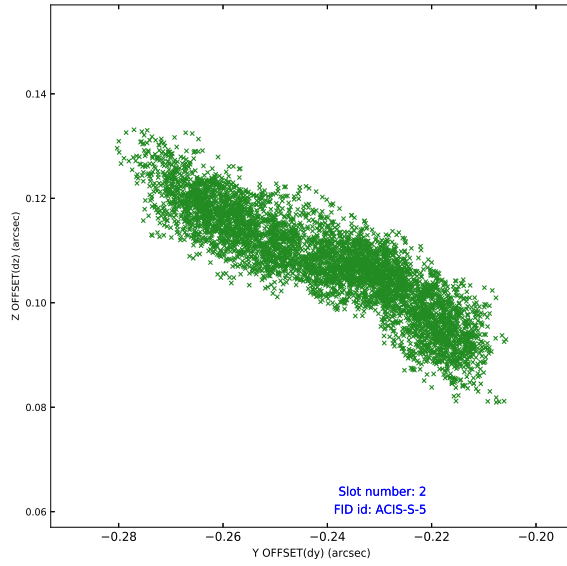
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.952000297308

A.2 Comments