

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20417 - L2 Version 2
Chandra X-Ray Center

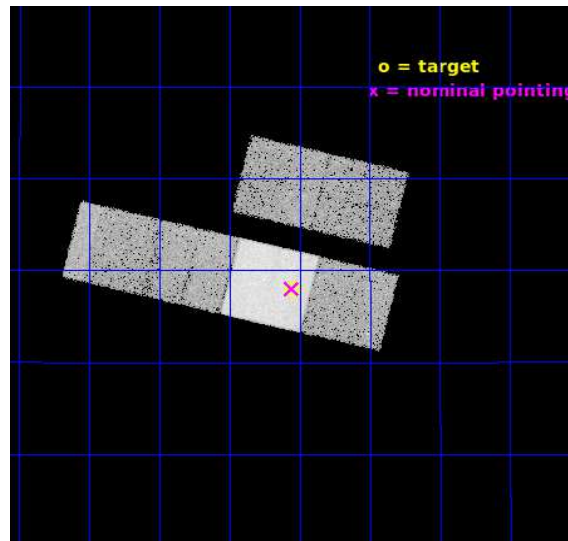
L2 Processing Date : Oct 27 2020

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

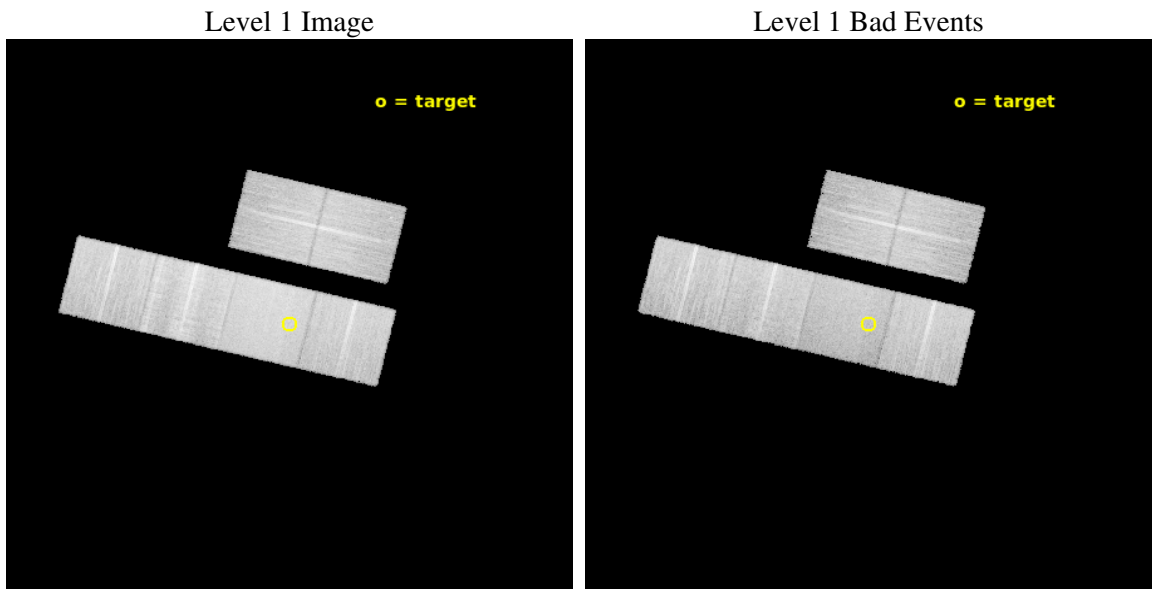
seq_num	703522	Sequence number
obs_id	20417	Observation id
title	A Complete X-ray Survey of Luminous Quasars at the End of Reionization: a Changing Population?	Proposal title
observer	Xiaohui Fan	Principal investigator
object	P323+12	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	323.138333	Observer's specified target RA [deg]
dec_targ	12.298694	Observer's specified target Dec [deg]
ra_nom	323.13877636296	Nominal RA [deg]
dec_nom	12.300324507514	Nominal Dec [deg]
roll_nom	193.63414207734	Nominal Roll [deg]
revision	2	Processing version of data
ontime	18053.348198771	Sum of GTIs [s]
livetime	17824.745833457	Livetime [s]
ontime2	18053.184038758	Sum of GTIs [s]
ontime3	18053.266118765	Sum of GTIs [s]
ontime6	18053.307158709	Sum of GTIs [s]
ontime7	18053.348198771	Sum of GTIs [s]
ontime8	18049.984018326	Sum of GTIs [s]
ontime9	18053.389238715	Sum of GTIs [s]
l2events	141117	Number of level 2 events



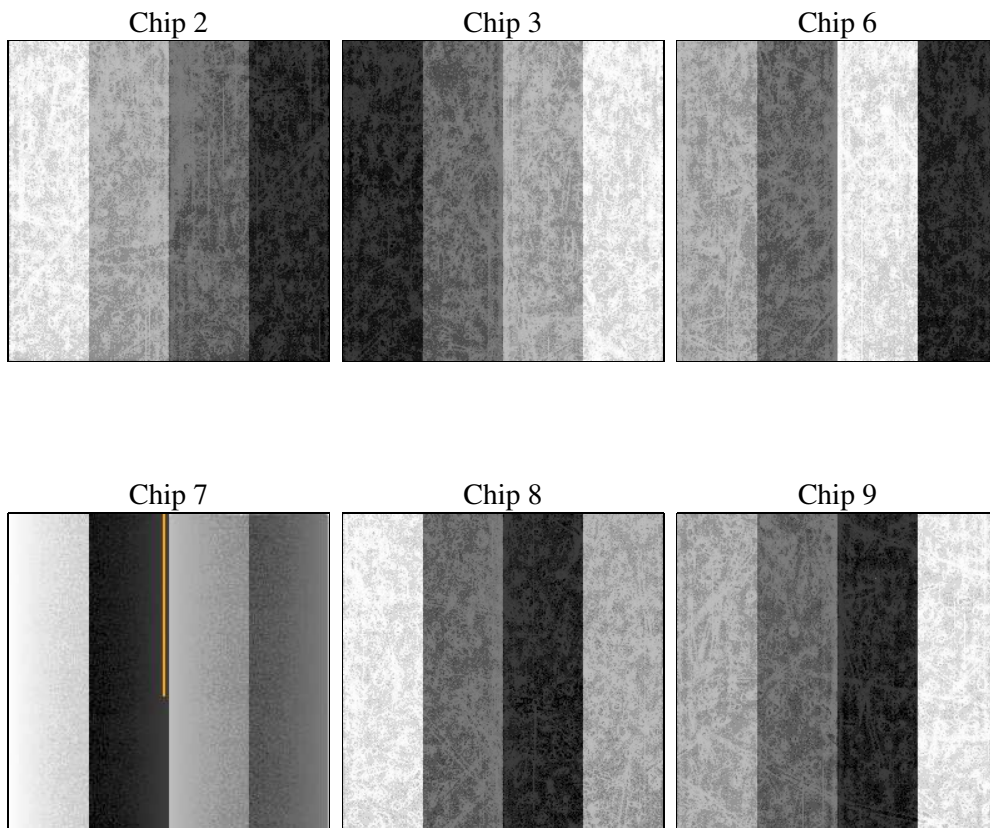
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18100.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	18053.348198771	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	18053.184038758	Sum of GTIs [s]
date	2020-10-27T08:25:51	Date and time of file creation	ontime3	18053.266118765	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	18053.307158709	Sum of GTIs [s]
			ontime7	18053.348198771	Sum of GTIs [s]
			ontime8	18049.984018326	Sum of GTIs [s]
			ontime9	18053.389238715	Sum of GTIs [s]
			l1events	899747	Number of level 1 events

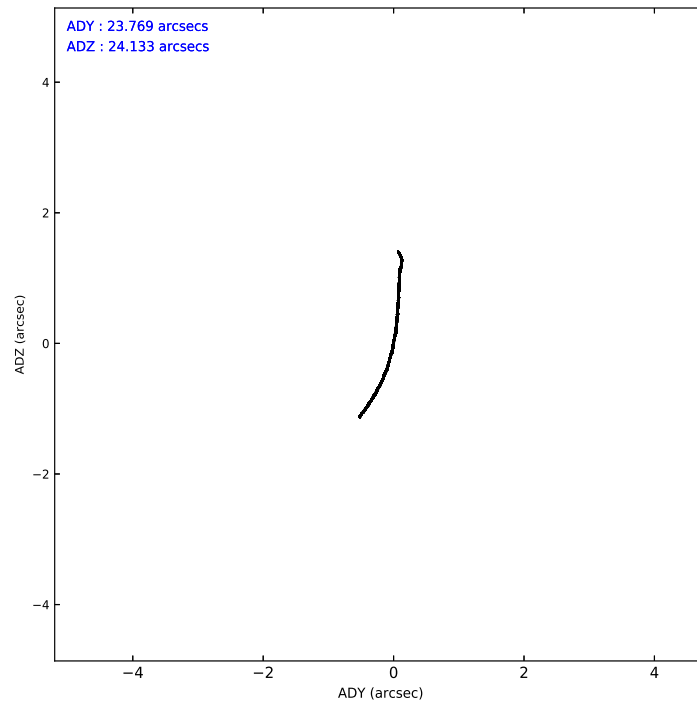
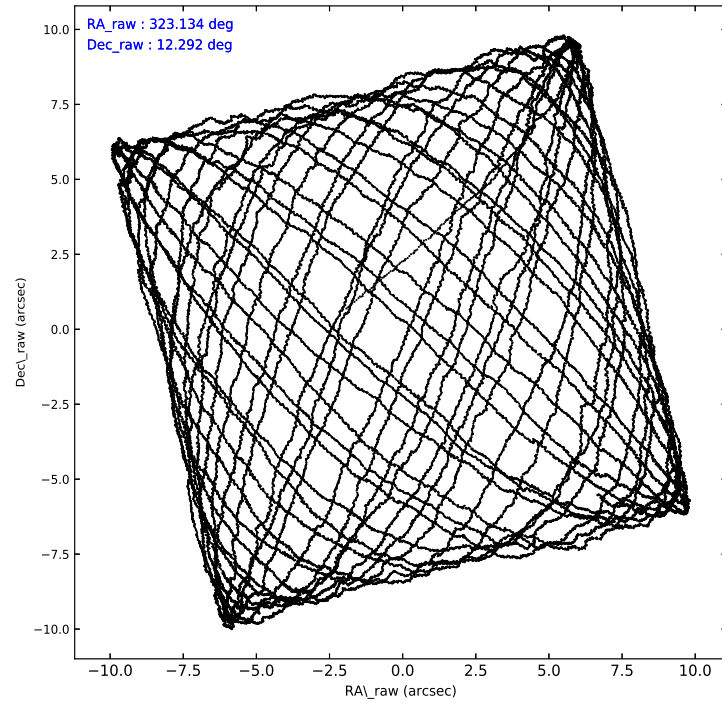
2.1.4 Events

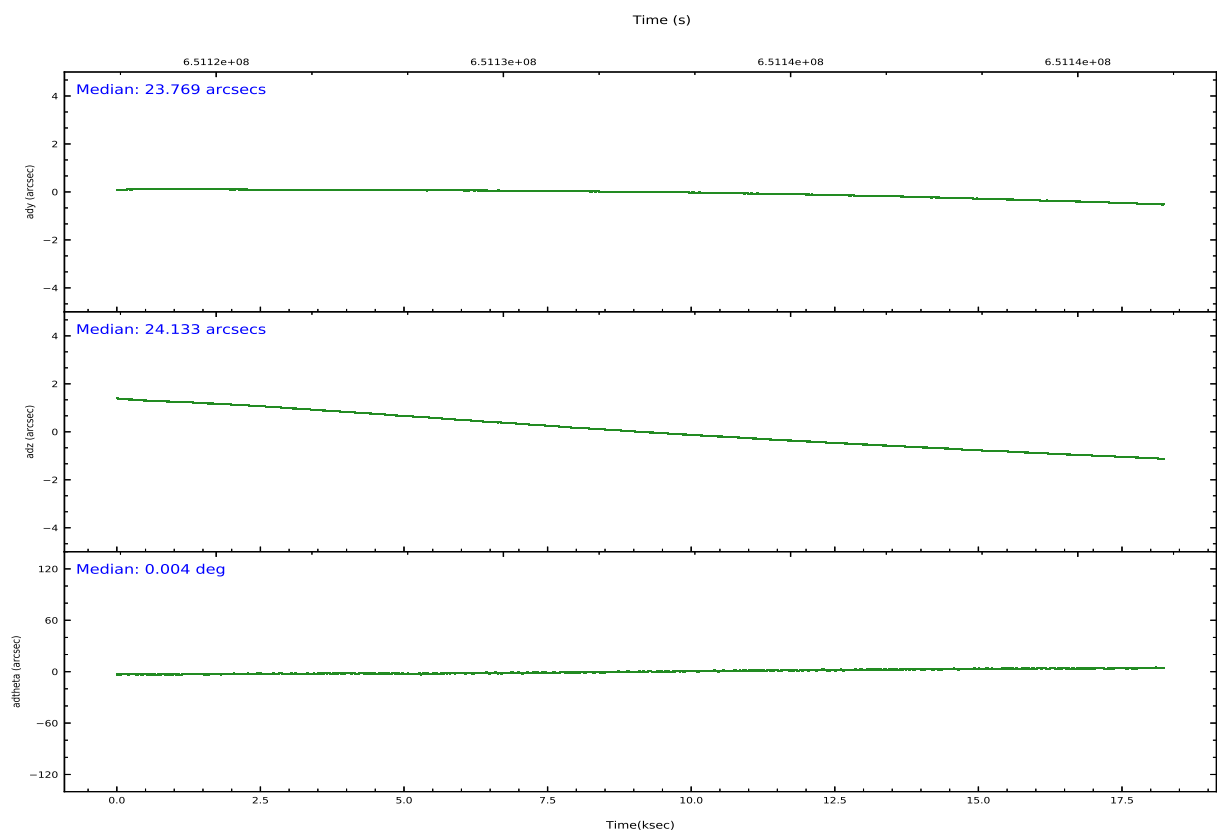
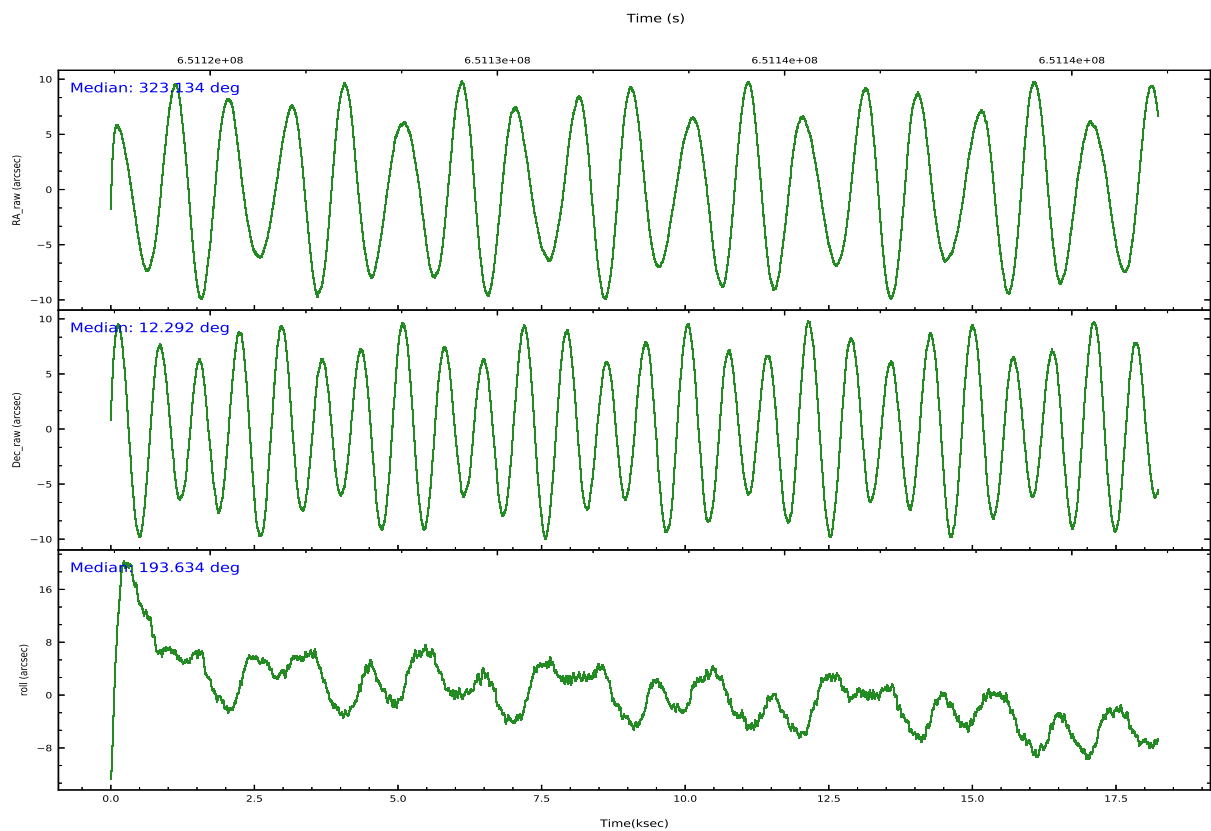
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	132221	127962	141001	175546	176395	146622	grade 0 events	5262	4832	5202	6465	13822	5776
rejected events	117855	114295	125417	99307	127885	129904		3%	3%	3%	3%	7%	3%
rejected %	89%	89%	88%	56%	72%	88%	grade 1 events	62	74	66	283	149	87
								0%	0%	0%	0%	0%	0%
							grade 2 events	3588	2993	3655	16313	12003	3912
								2%	2%	2%	9%	6%	2%
							grade 3 events	1369	1475	1575	6122	4948	1654
								1%	1%	1%	3%	2%	1%
							grade 4 events	1392	1482	1543	6058	4485	1609
								1%	1%	1%	3%	2%	1%
							grade 5 events	5250	6267	6453	17614	9705	7516
								3%	4%	4%	10%	5%	5%
							grade 6 events	2756	2890	3615	41312	13263	3774
								2%	2%	2%	23%	7%	2%
							grade 7 events	112542	107949	118892	81379	118020	122294
								85%	84%	84%	46%	66%	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	323.153667	323.13877636296	CCD I2 on	O2	Y
[deg] Pointing Dec	12.311125	12.300324507514	CCD I3 on	Y	Y
[deg] Pointing Roll	193.483054	193.63414207734	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)	651123404.184000	651122173.38159	CCD S5 on	O1	Y
Observation start date	2018-08-20T03:35:35	2018-08-20T03:16:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	651141504.184000	651142986.00783	On-chip summing requested	N	N
Observation end date	2018-08-20T08:37:15	2018-08-20T09:03:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



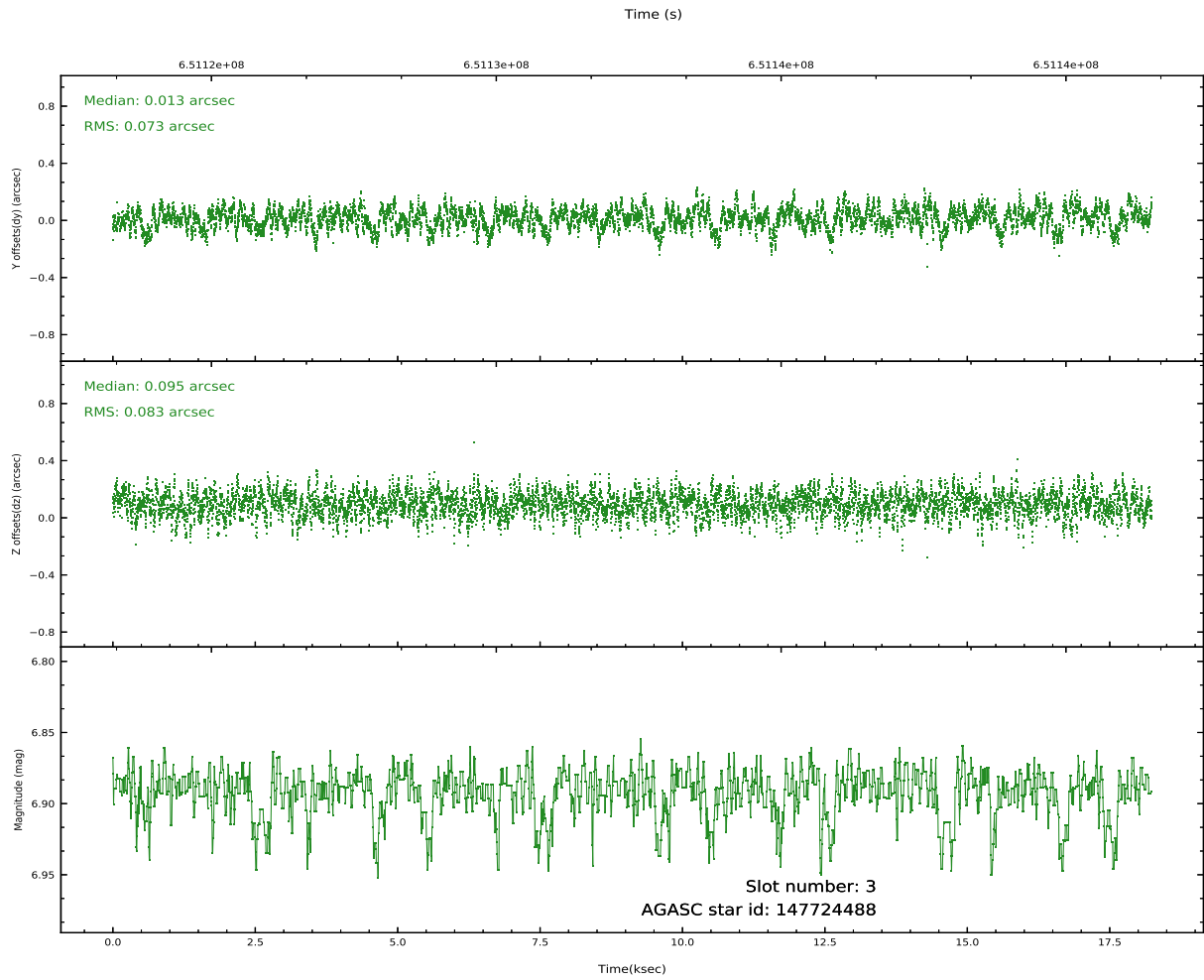
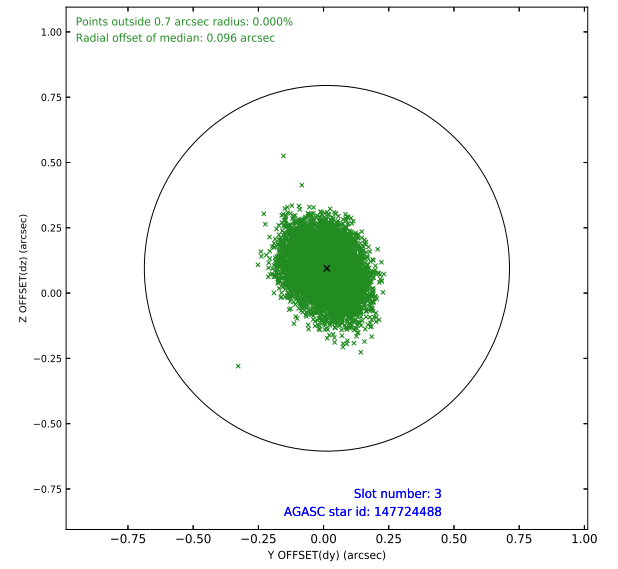
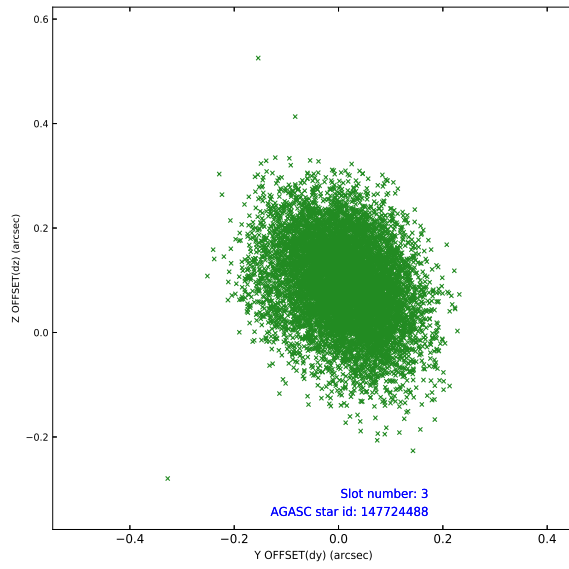


Slot Statistics

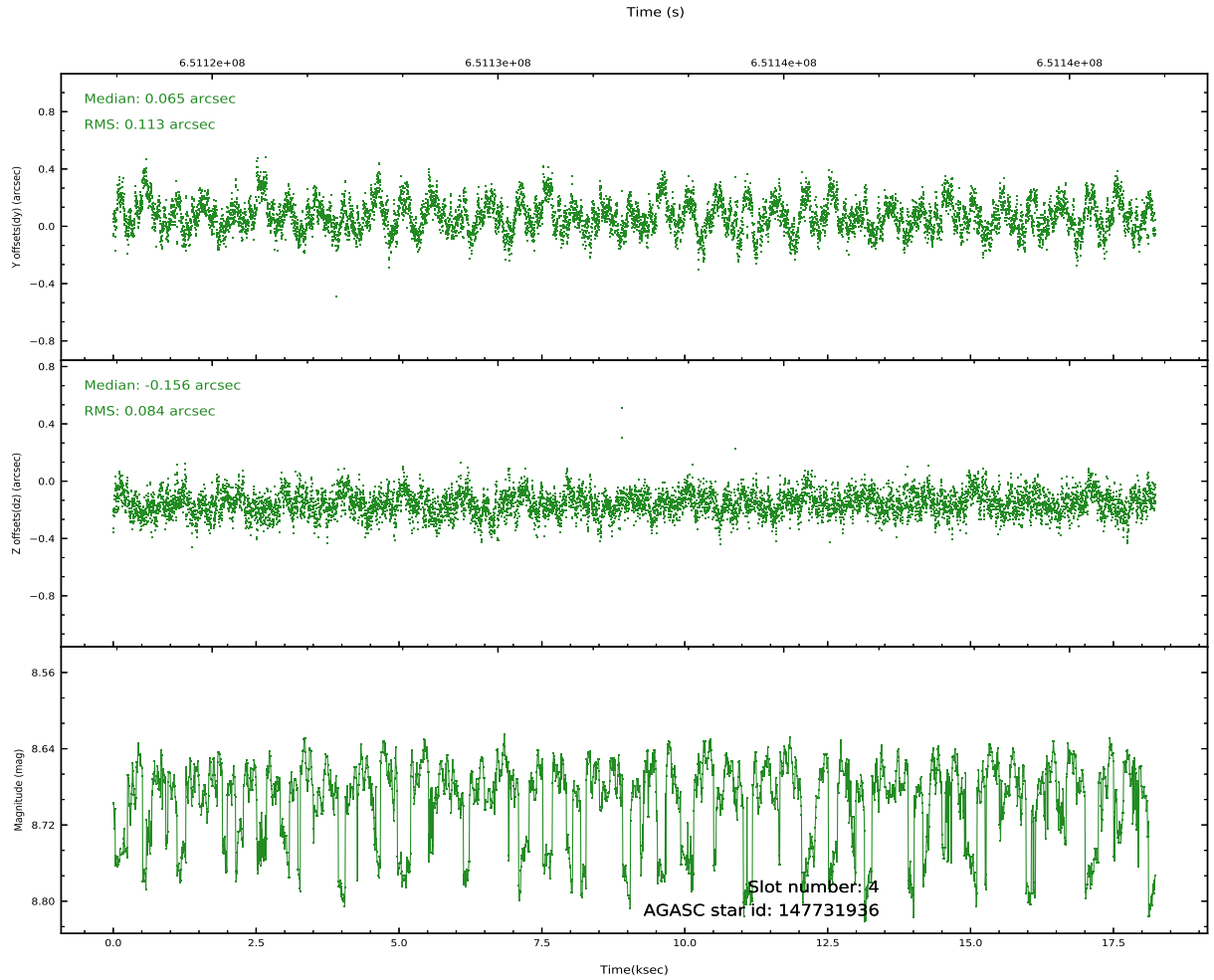
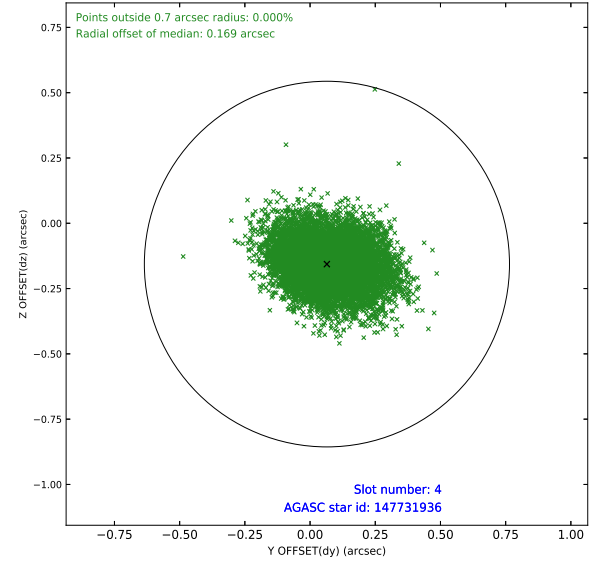
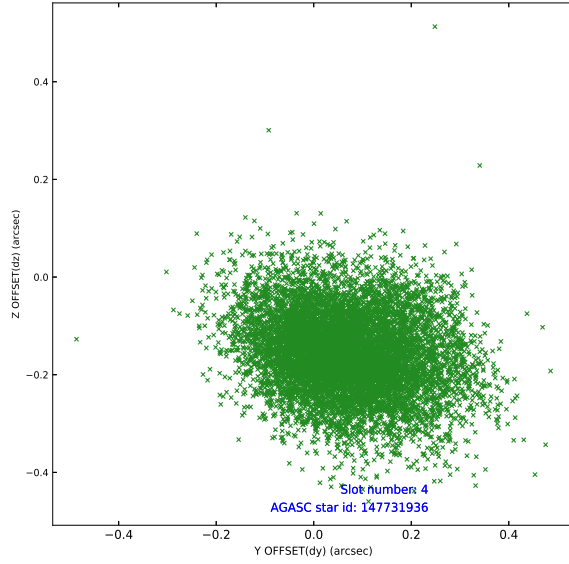
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.02	4448	1.000	0.152	-0.043	0.053	0.067	0.000000	0.000000	-777.02	-1745
1	FID		ACIS-S-4	7.12	4448	1.000	0.080	-0.062	0.012	0.024	0.000000	0.000000	2136.37	162
2	FID		ACIS-S-5	7.14	4447	1.000	-0.263	0.114	0.048	0.060	0.000000	0.000000	-1829.71	156
3	GUIDE	used	147724488	6.89	8896	1.000	0.013	0.095	0.118	0.190	323.246427	12.539602	-508.59	-722
4	GUIDE	used	147731936	8.68	8891	1.000	0.065	-0.156	0.148	0.244	322.421133	12.450297	2387.20	-1090
5	GUIDE	used	147722152	7.55	8891	1.000	-0.086	0.064	0.089	0.148	322.735072	12.555367	1225.86	-1198
6	GUIDE	used	147719608	8.65	8889	1.000	0.096	0.043	0.131	0.214	322.898936	12.907459	369.72	-2295
7	GUIDE	used	147722480	8.17	8892	1.000	-0.095	-0.044	0.101	0.164	323.598183	12.256806	-1473.09	555

2.4 Star Slots

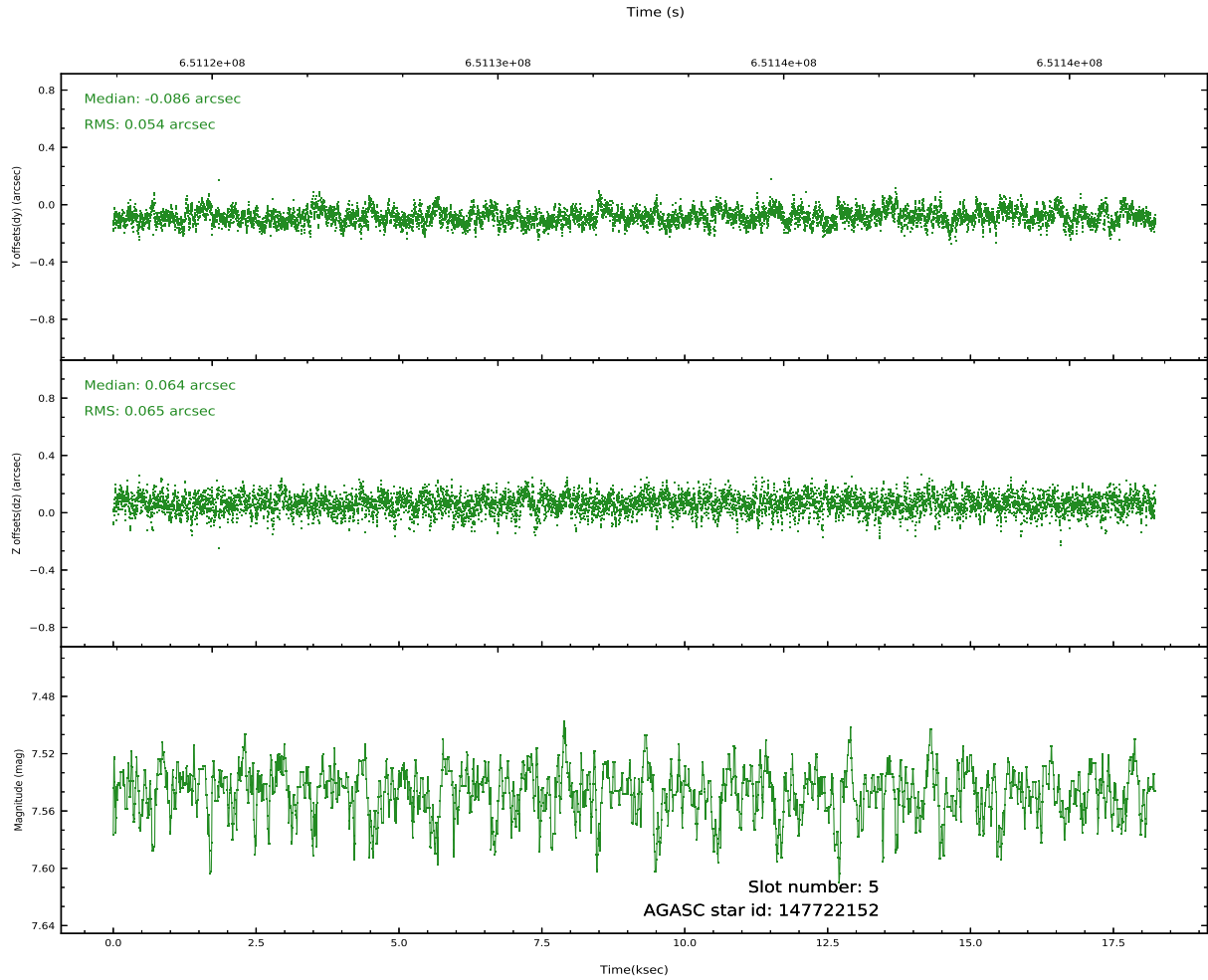
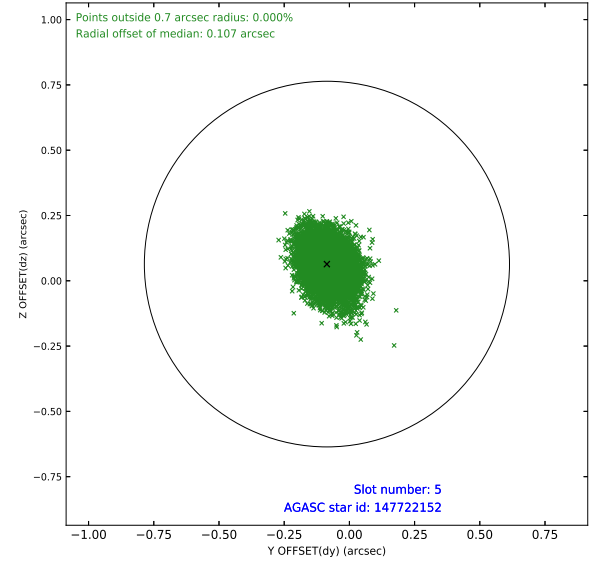
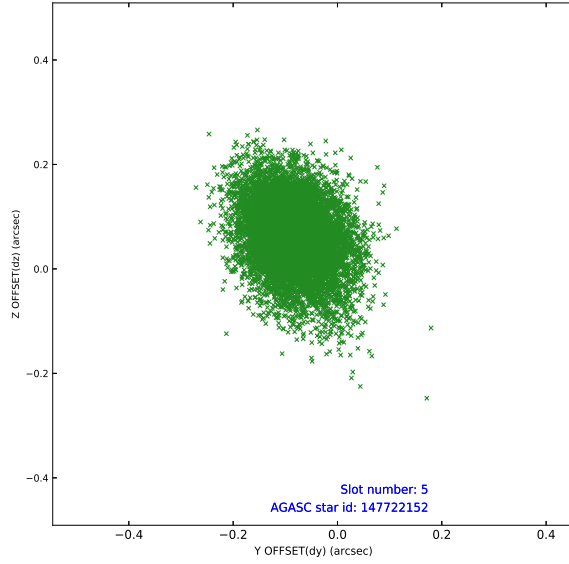
2.4.1 Slot 3



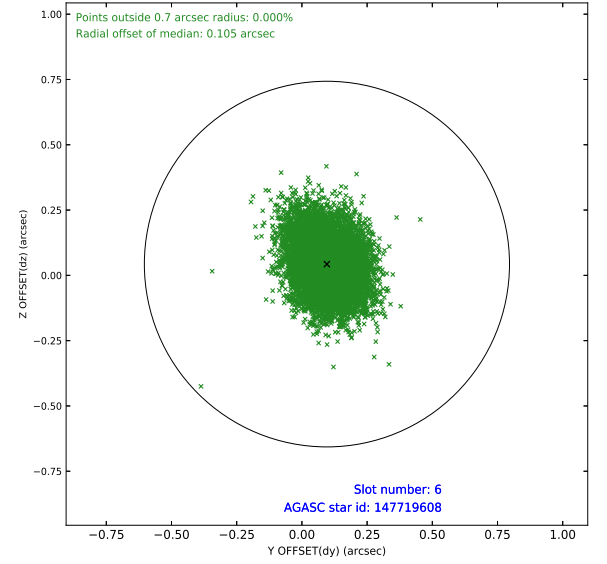
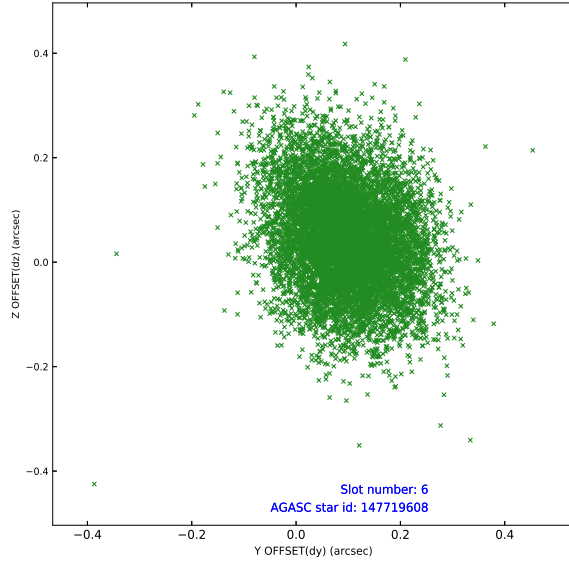
2.4.2 Slot 4



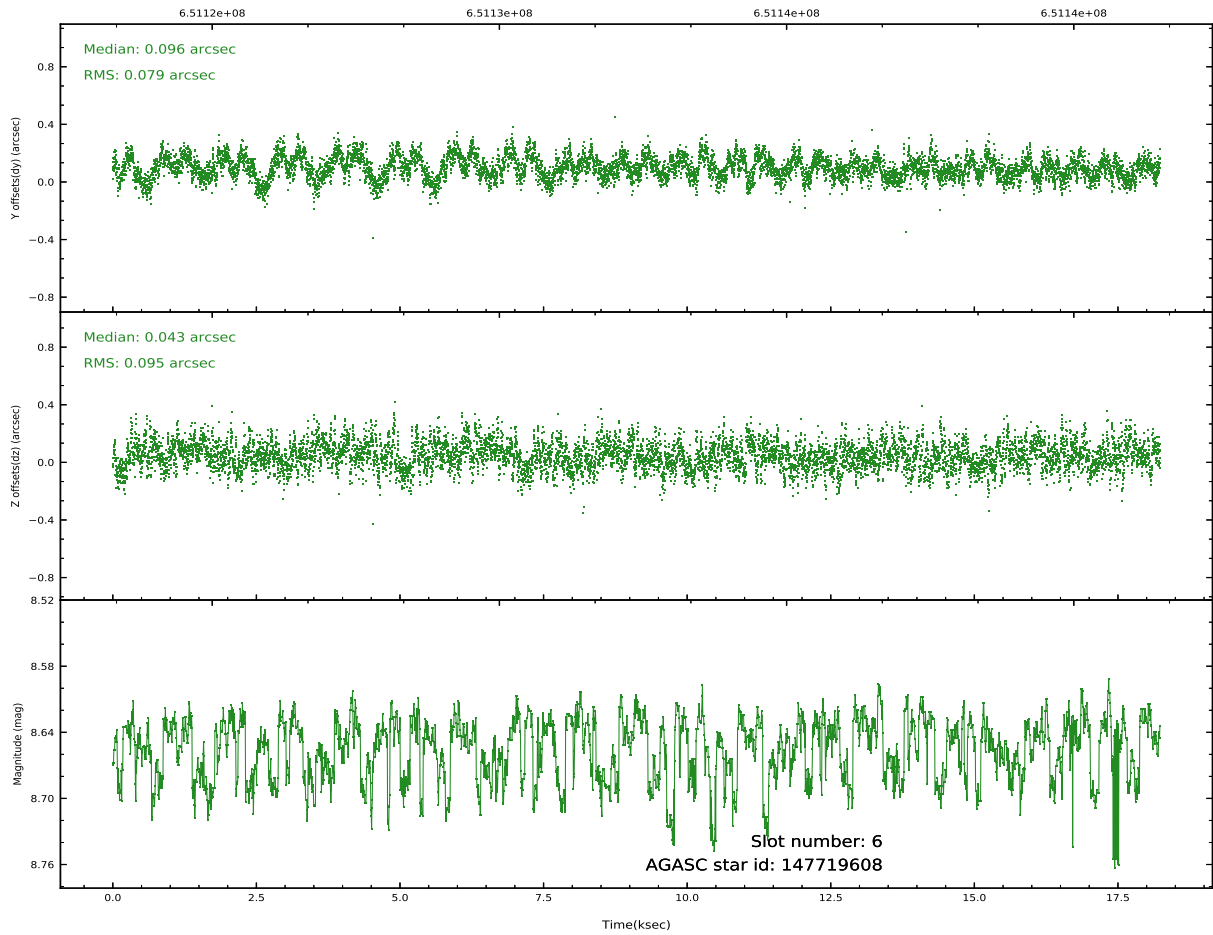
2.4.3 Slot 5



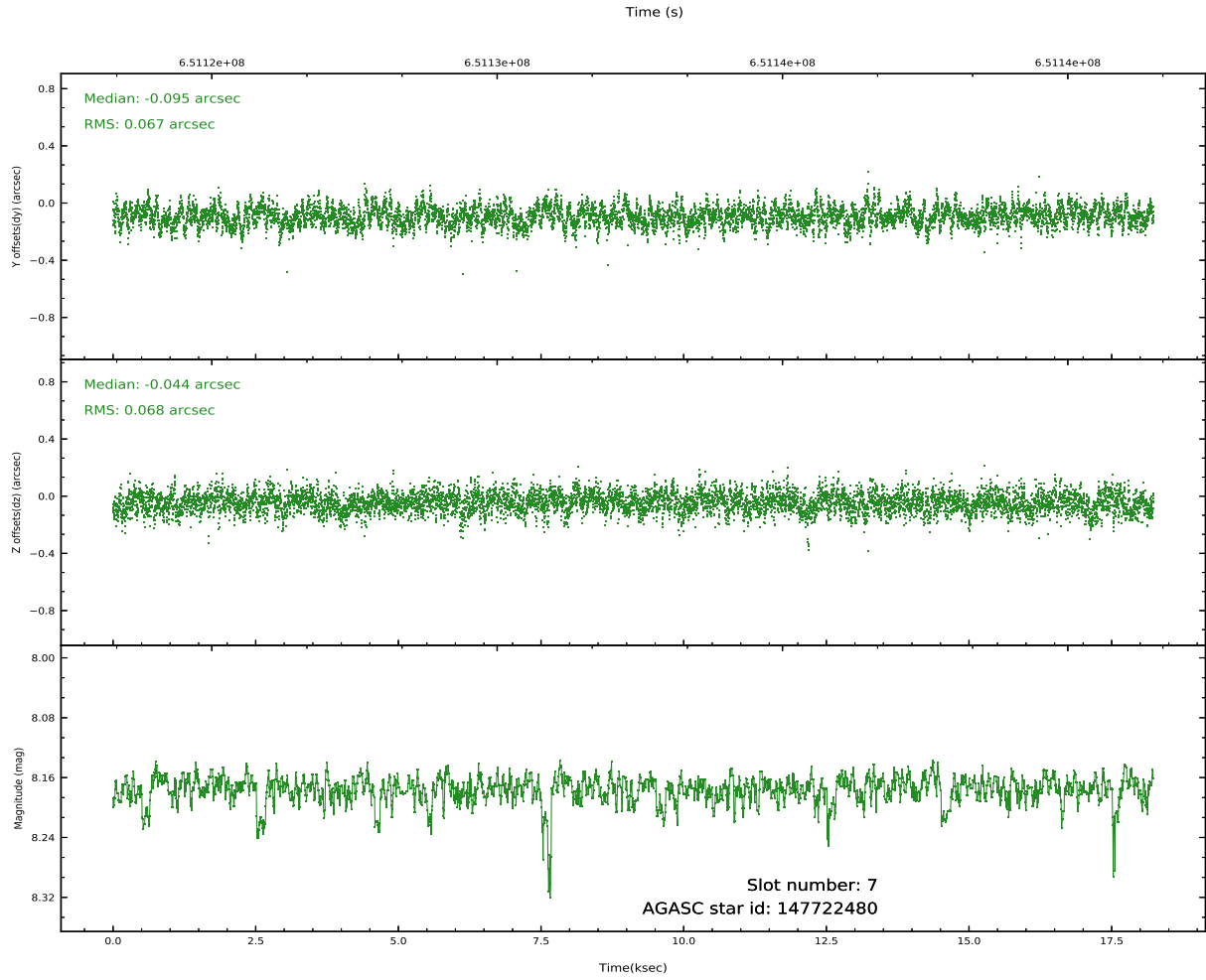
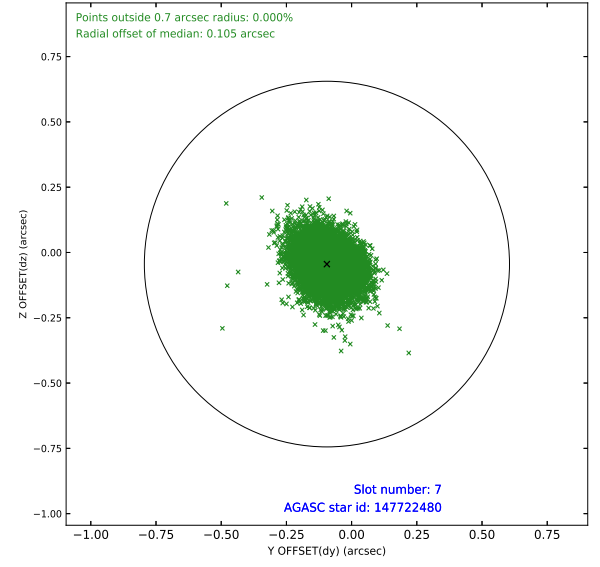
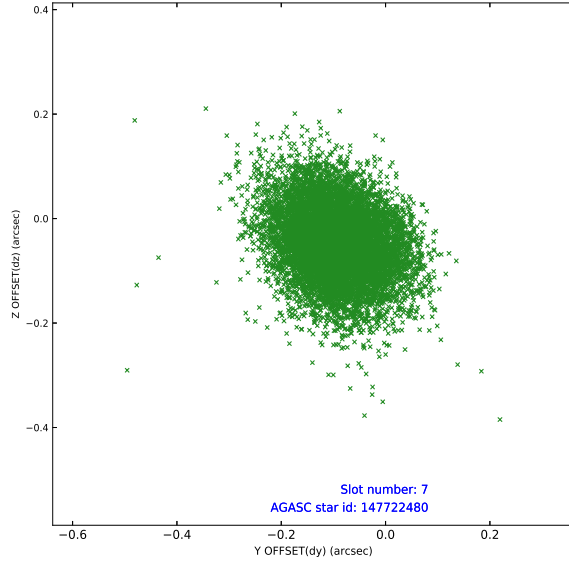
2.4.4 Slot 6



Time (s)

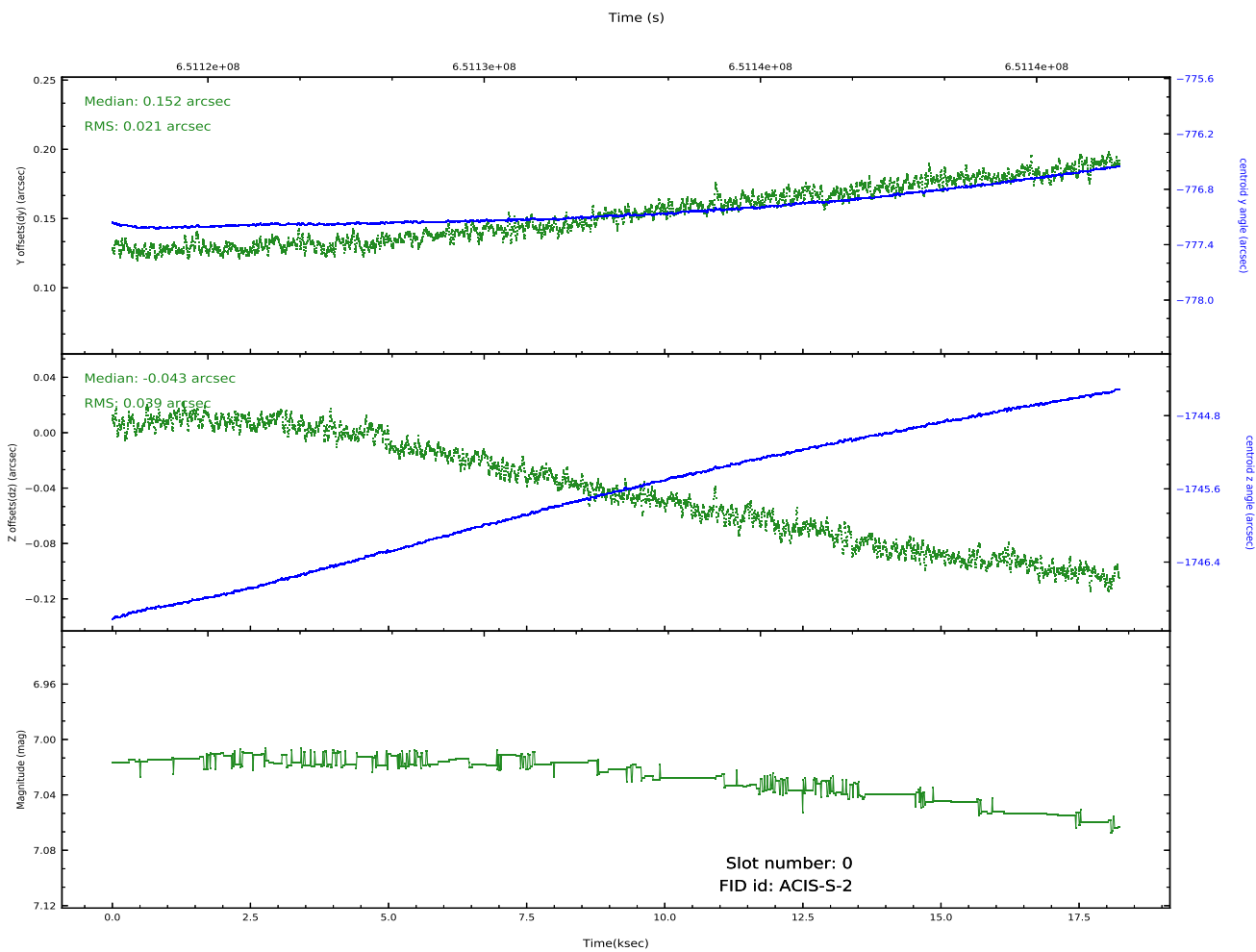
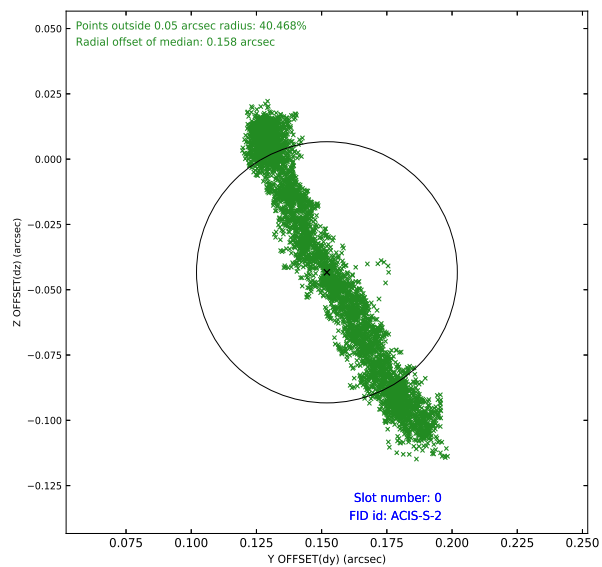
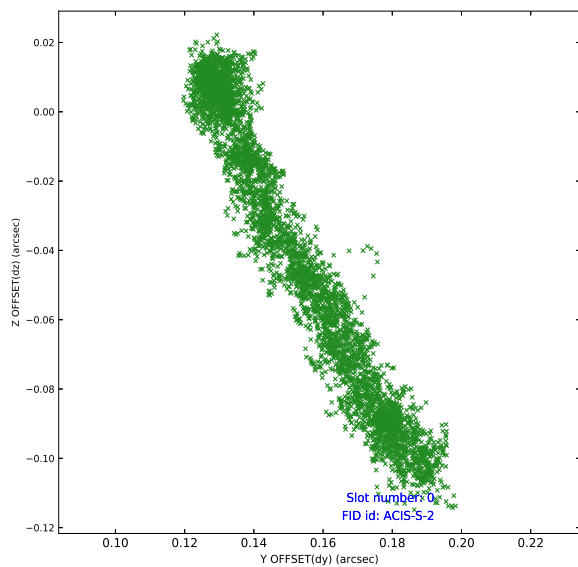


2.4.5 Slot 7

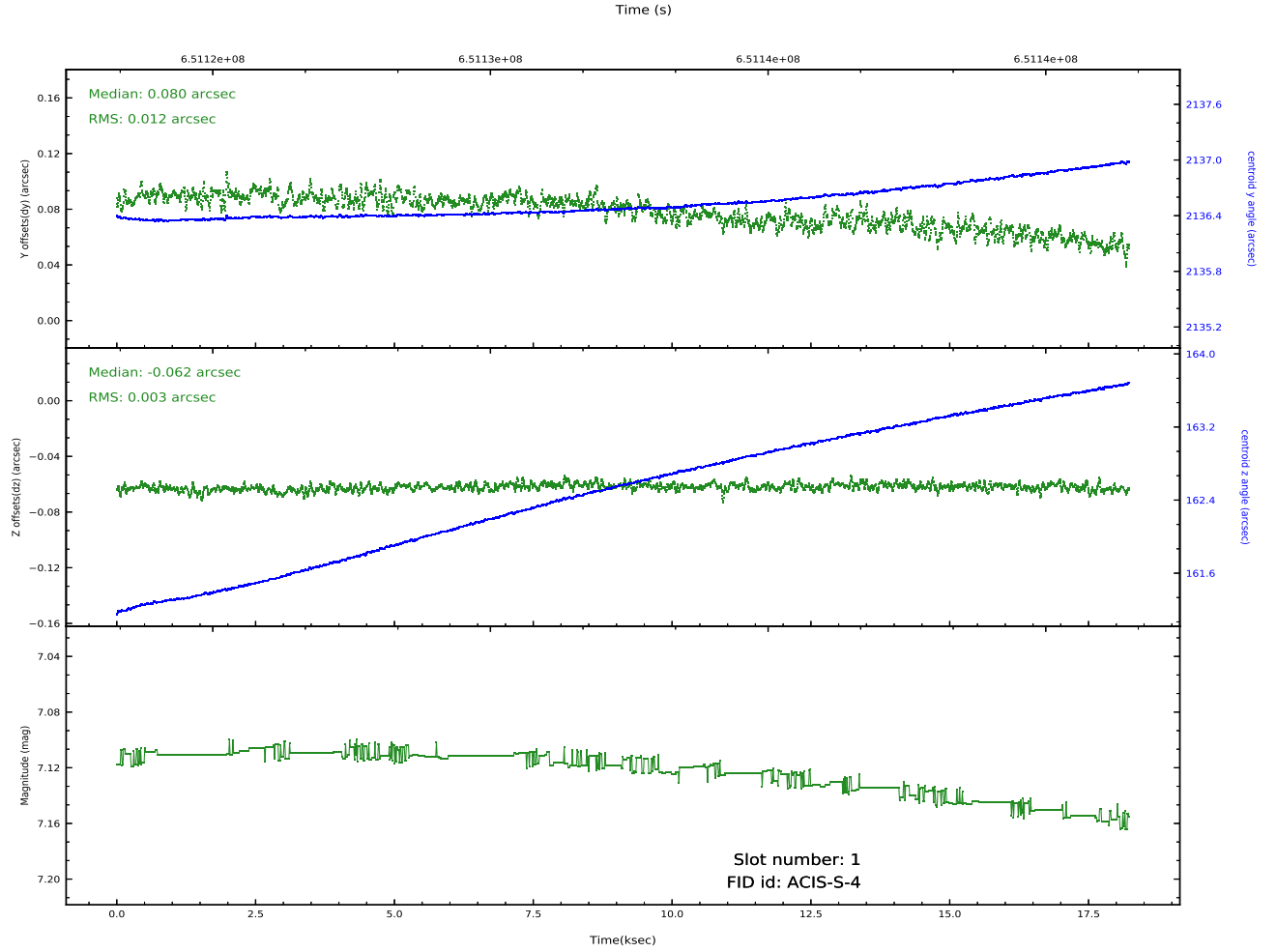
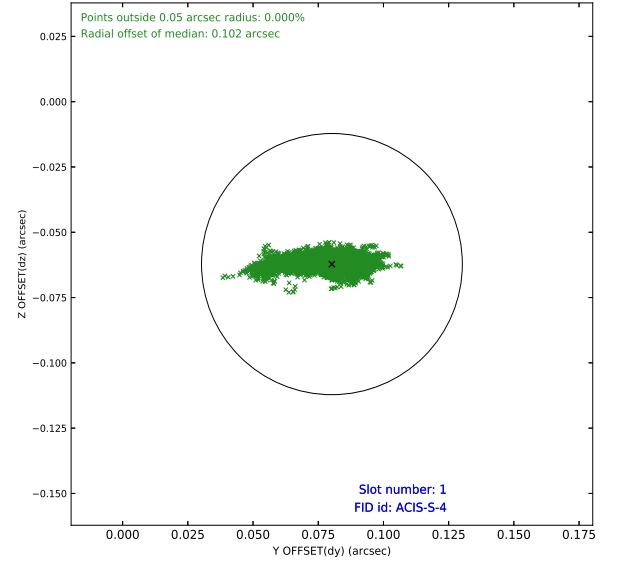
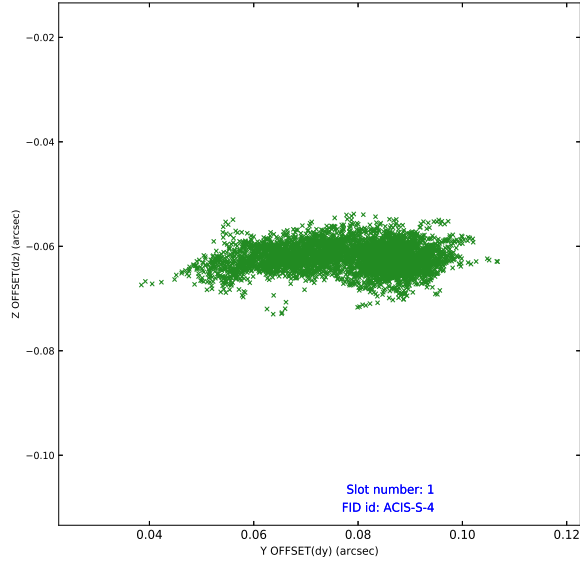


2.5 FID Slots

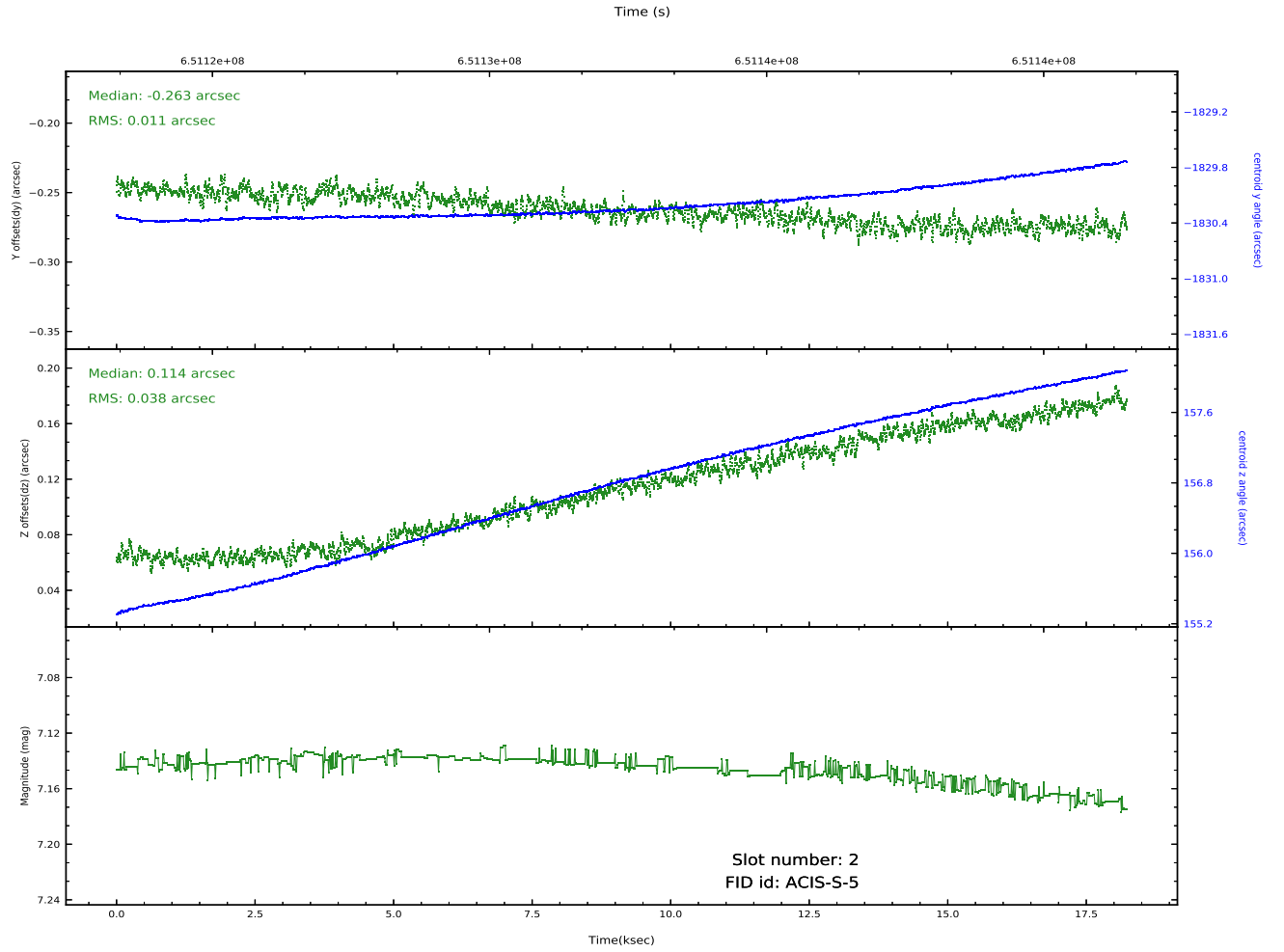
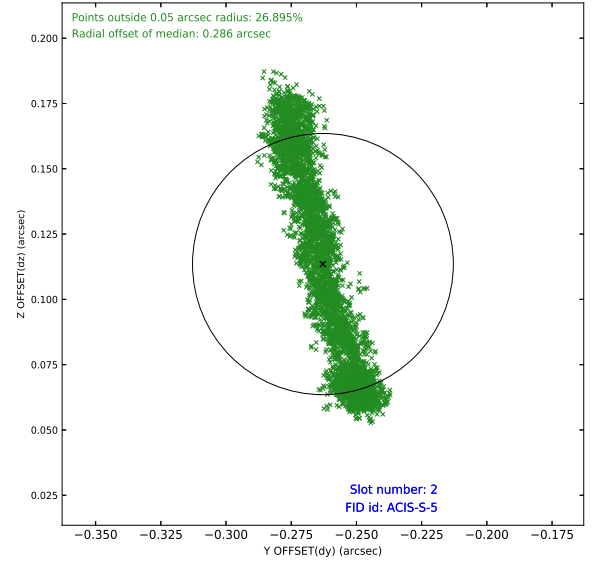
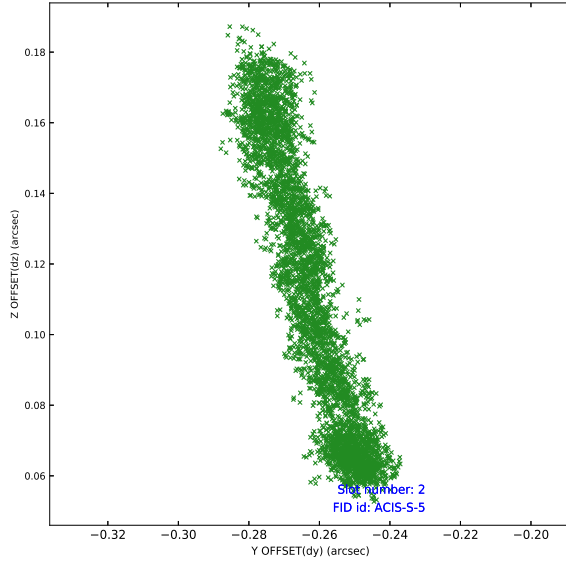
2.5.1 Slot 0



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)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.053348204255

A.2 Comments