

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5618 - L2 Version 4
Chandra X-Ray Center

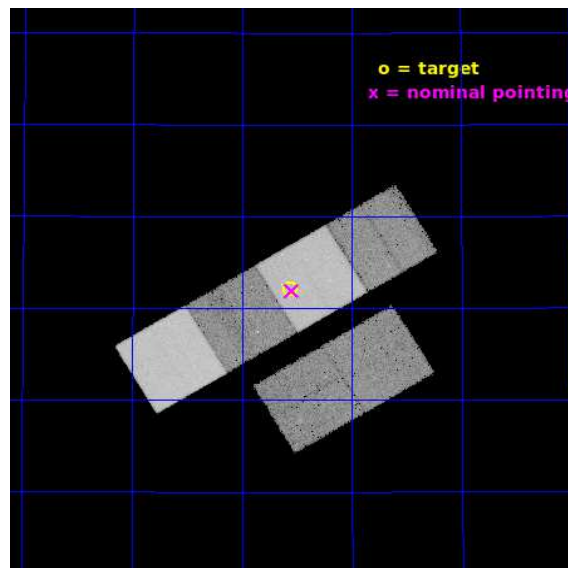
L2 Processing Date : Oct 11 2020

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

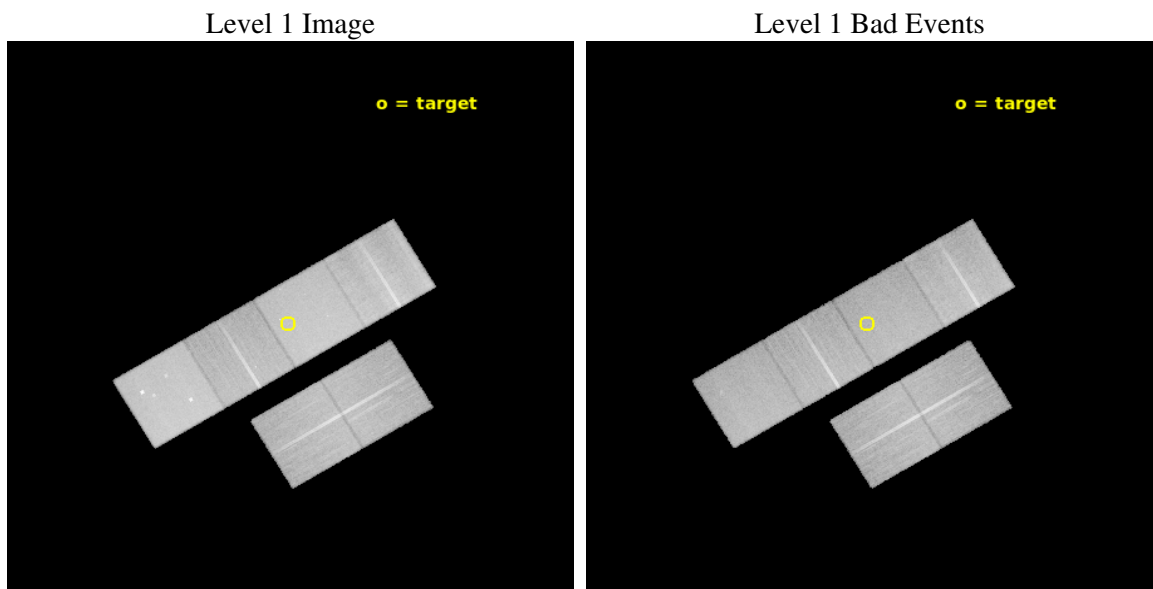
seq_num	701041	Sequence number
obs_id	5618	Observation id
title	A Chandra Survey of the Most Distant Quasars: X-raying the First Massive Black Holes	Proposal title
observer	William Brandt	Principal investigator
object	SDSS J1630+4012	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	247.64125	Observer's specified target RA [deg]
dec_targ	40.202667	Observer's specified target Dec [deg]
ra_nom	247.636583708	Nominal RA [deg]
dec_nom	40.198806142668	Nominal Dec [deg]
roll_nom	329.02215664987	Nominal Roll [deg]
revision	4	Processing version of data
ontime	27737.599896669	Sum of GTIs [s]
livetime	27386.3697052	Livetime [s]
ontime2	27737.599896669	Sum of GTIs [s]
ontime3	27737.599896669	Sum of GTIs [s]
ontime5	27737.599896669	Sum of GTIs [s]
ontime6	27737.599896669	Sum of GTIs [s]
ontime7	27737.599896669	Sum of GTIs [s]
ontime8	27737.599896669	Sum of GTIs [s]
l2events	358589	Number of level 2 events



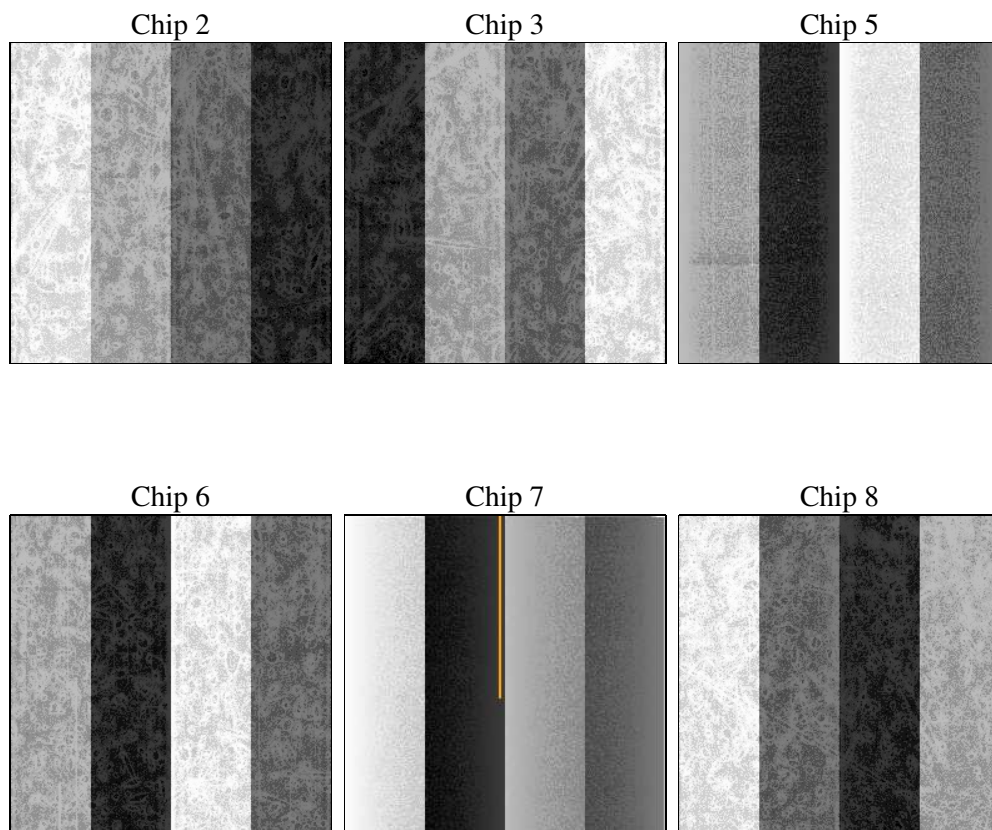
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27600.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	27737.599896669	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	27737.599896669	Sum of GTIs [s]
date	2020-10-11T13:41:36	Date and time of file creation	ontime3	27737.599896669	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	27737.599896669	Sum of GTIs [s]
			ontime6	27737.599896669	Sum of GTIs [s]
			ontime7	27737.599896669	Sum of GTIs [s]
			ontime8	27737.599896669	Sum of GTIs [s]
			l1events	1572201	Number of level 1 events

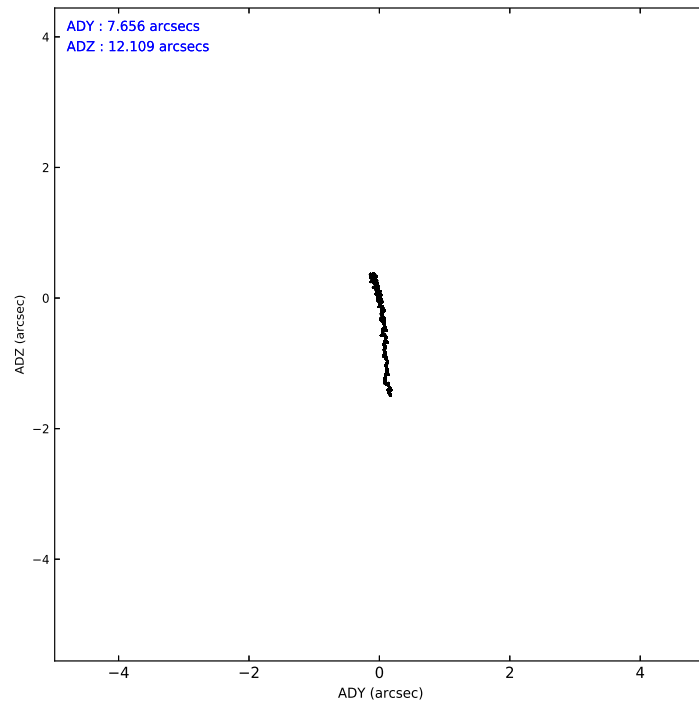
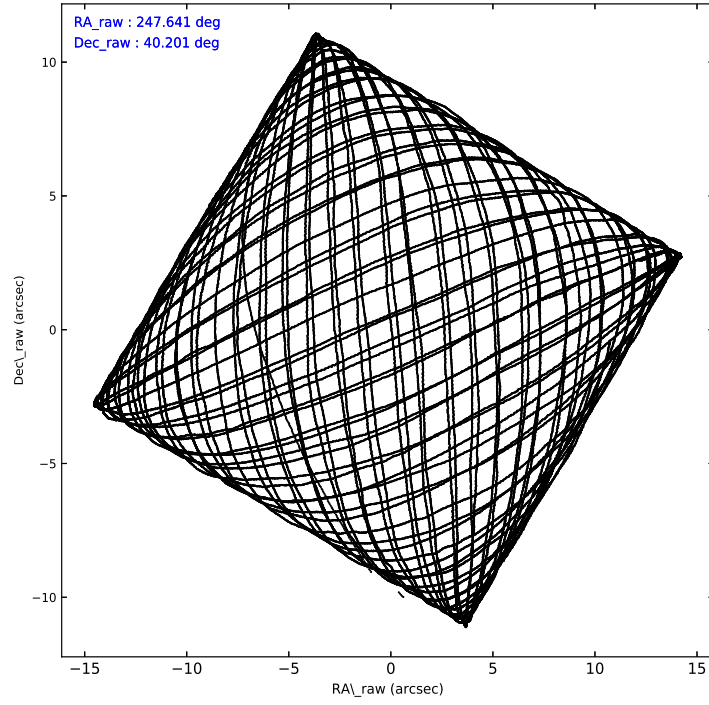
2.1.4 Events

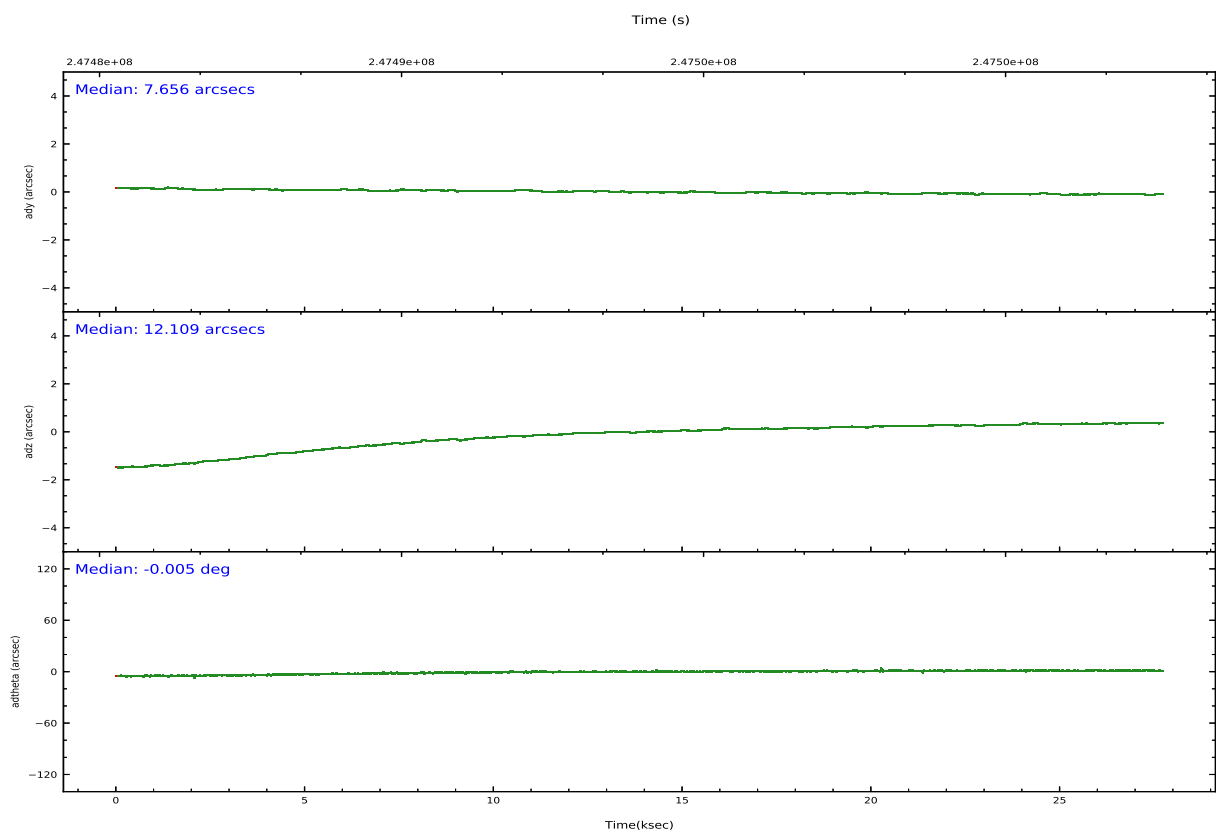
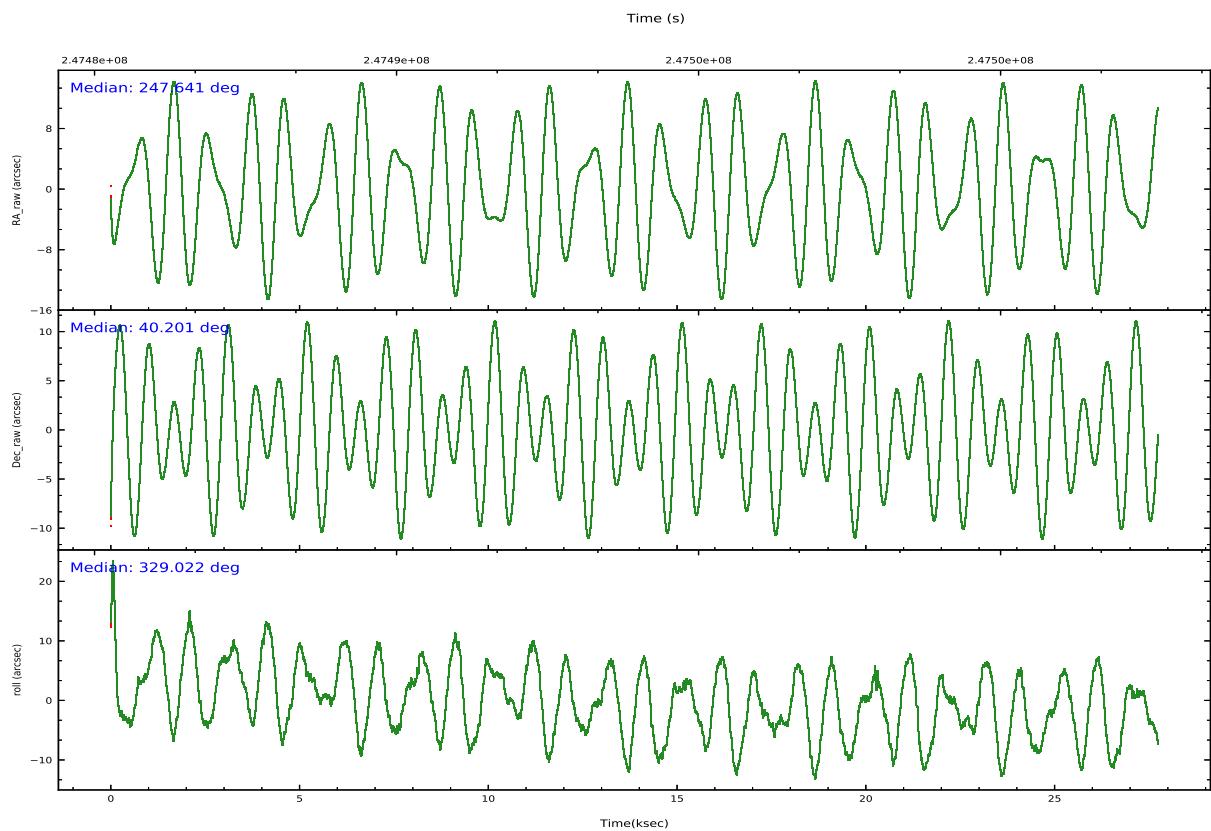
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	225663	215080	332694	217969	300877	279918	grade 0 events	12126	11222	15502	11090	11612	19854
rejected events	198973	189145	180517	190775	175618	217811		5%	5%	4%	5%	3%	7%
rejected %	88%	87%	54%	87%	58%	77%	grade 1 events	141	137	645	114	298	217
								0%	0%	0%	0%	0%	0%
							grade 2 events	5619	5171	45048	5840	24980	13953
								2%	2%	13%	2%	8%	4%
							grade 3 events	2443	2567	5935	2596	10922	6417
								1%	1%	1%	1%	3%	2%
							grade 4 events	2359	2519	5825	2547	10942	5986
								1%	1%	1%	1%	3%	2%
							grade 5 events	8633	9828	24850	10206	28979	13702
								3%	4%	7%	4%	9%	4%
							grade 6 events	4280	4603	80654	5245	67469	16288
								1%	2%	24%	2%	22%	5%
							grade 7 events	190062	179033	154235	180331	145675	203501
								84%	83%	46%	82%	48%	72%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	247.605871	247.636583708	Subarray requested	NONE	NONE
[deg] Pointing Dec	40.200684	40.198806142668	Alternating exposures requested	N	N
[deg] Pointing Roll	328.885821	329.02215664987	[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)	247480574.184000	247479401.99818			
Observation start date	2005-11-04T08:35:10	2005-11-04T08:16:41			
[s] Observation end time (MET)	247508174.184000	247508693.93703			
Observation end date	2005-11-04T16:15:10	2005-11-04T16:24:53			
Read mode	TIMED	TIMED			

2.3 Aspect



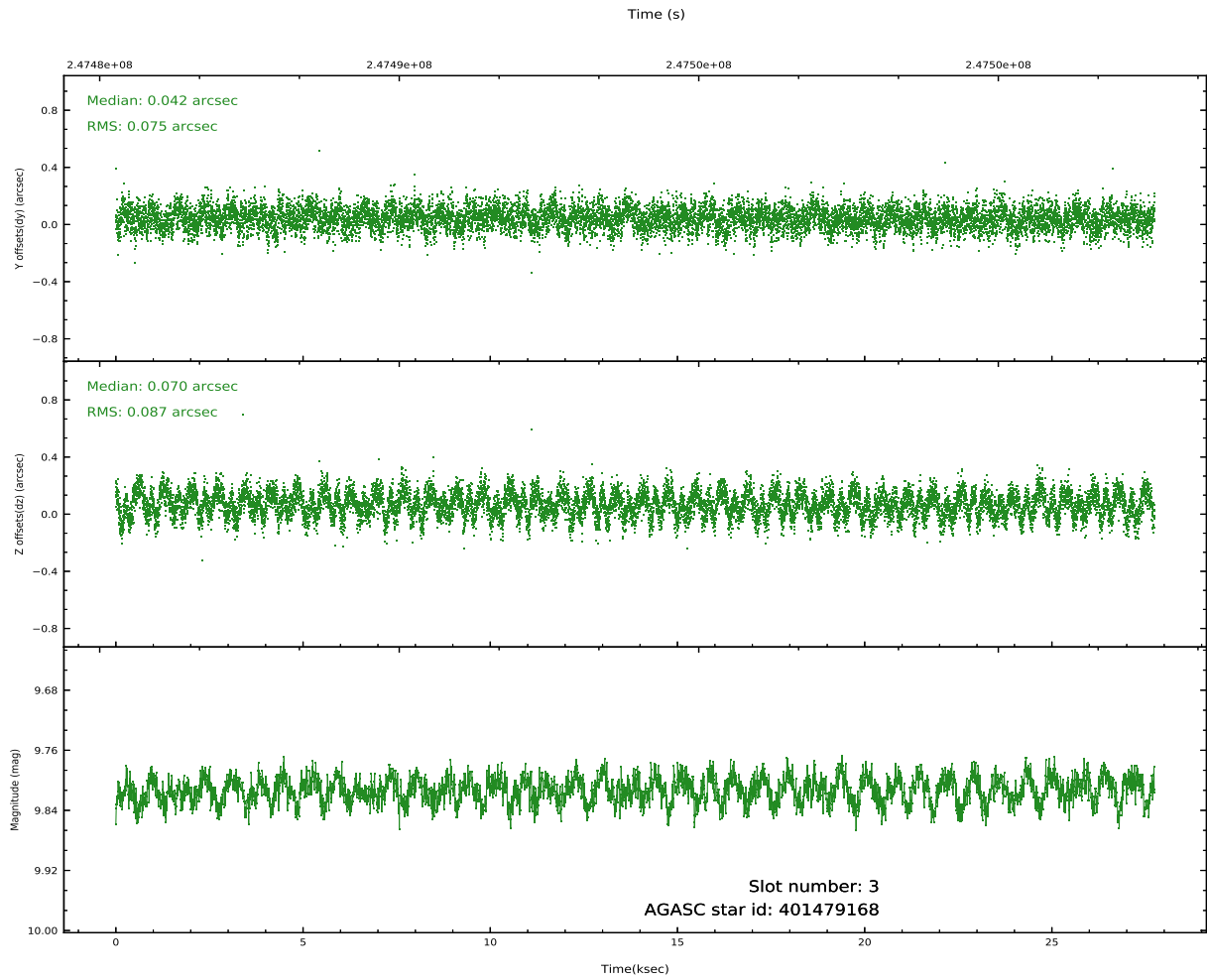
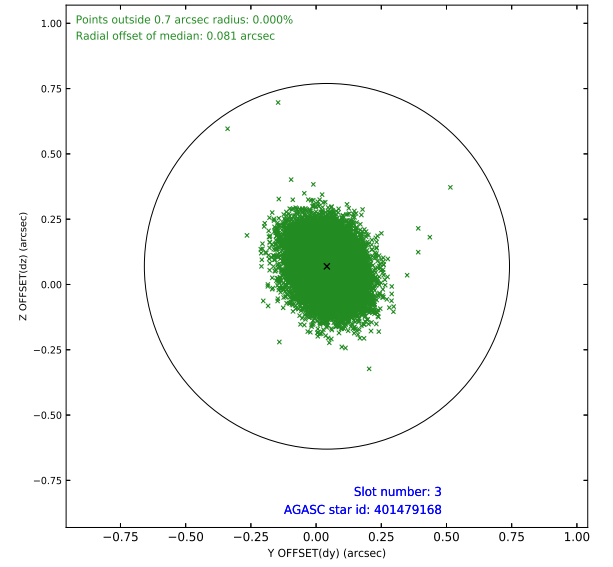
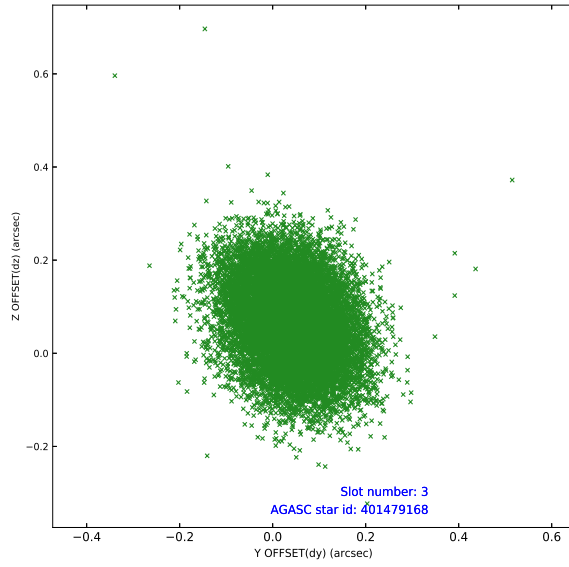


Slot Statistics

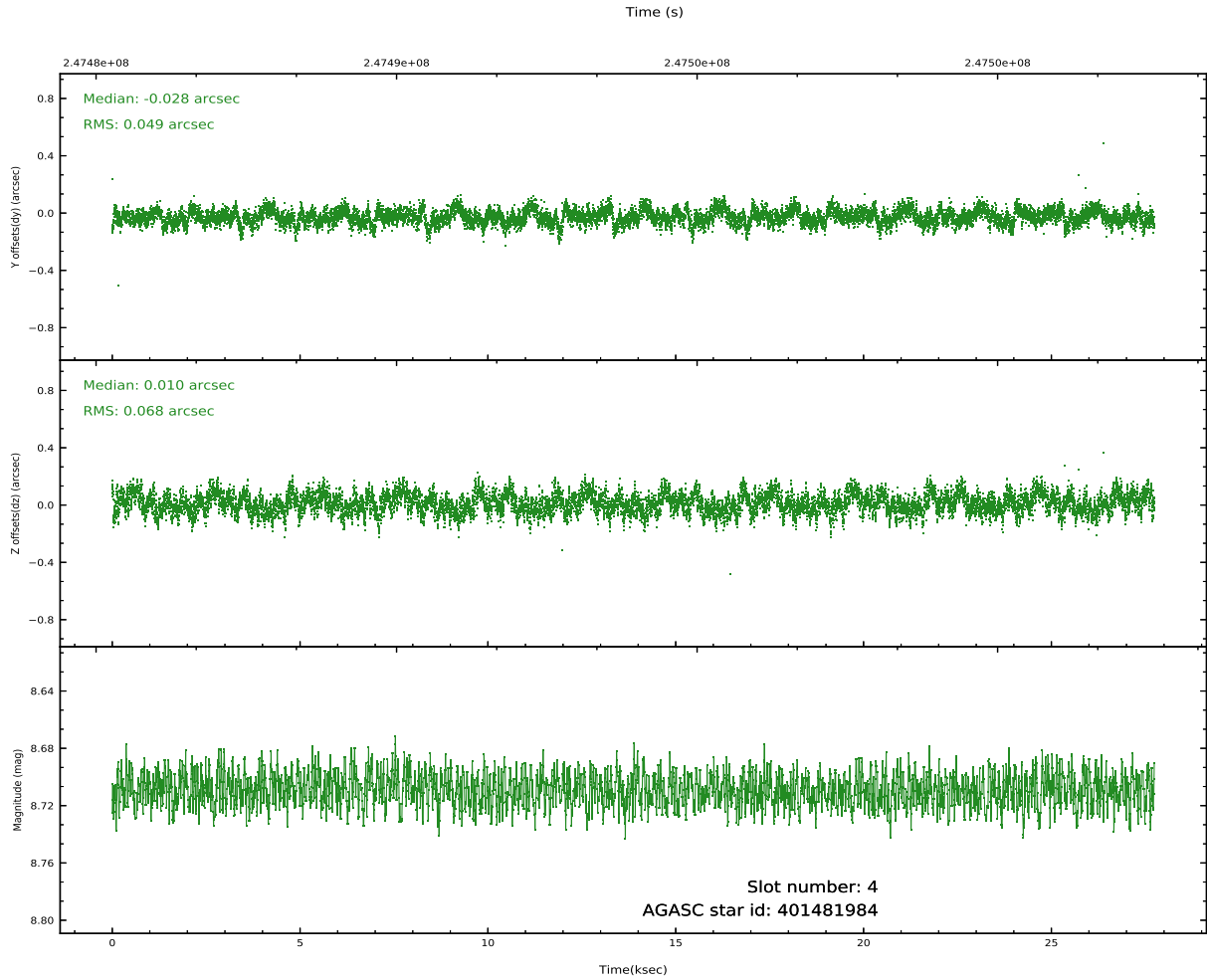
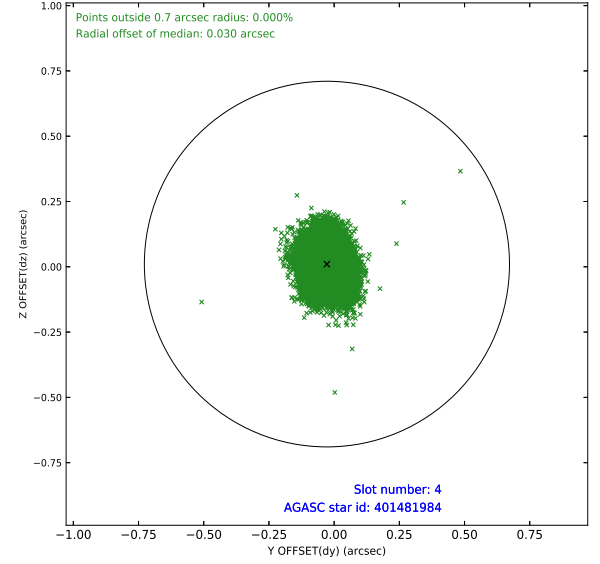
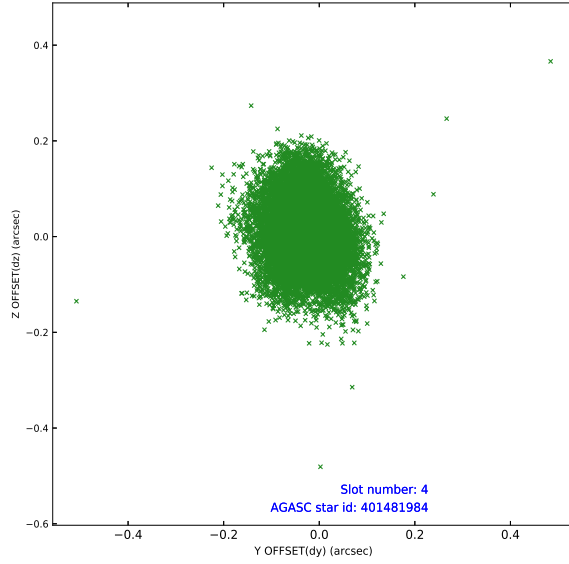
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	6767	1.000	-0.044	-0.063	0.014	0.034	0.000000	0.000000	-760.44	-1733
1	FID		ACIS-S-4	7.20	6767	1.000	0.144	0.039	0.016	0.035	0.000000	0.000000	2152.95	175
2	FID		ACIS-S-5	7.23	6766	1.000	-0.130	0.034	0.012	0.023	0.000000	0.000000	-1813.29	168
3	GUIDE	used	401479168	9.81	13509	1.000	0.042	0.070	0.123	0.196	248.051525	39.792234	1813.97	-618
4	GUIDE	used	401481984	8.71	13529	1.000	-0.028	0.010	0.089	0.145	247.136950	39.776672	-323.13	-1974
5	GUIDE	used	401882056	9.14	13528	1.000	-0.031	-0.049	0.080	0.134	248.472543	40.010094	2394.80	657
6	GUIDE	used	401480560	9.77	13521	1.000	-0.101	0.176	0.167	0.281	246.896626	39.730877	-810.50	-2455
7	GUIDE	used	401881872	10.04	13511	1.000	0.121	-0.194	0.122	0.198	246.976416	40.551930	-2130.13	197

2.4 Star Slots

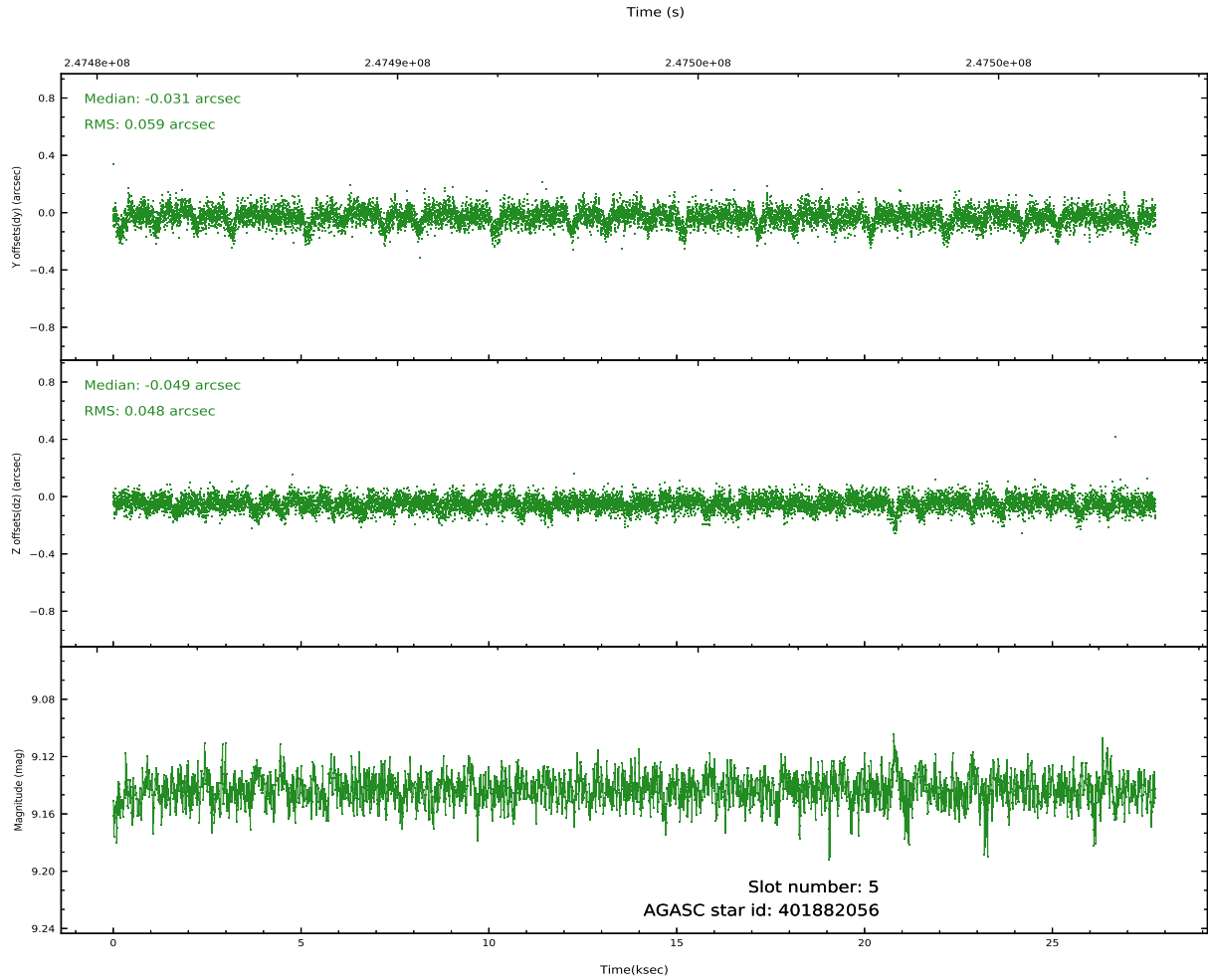
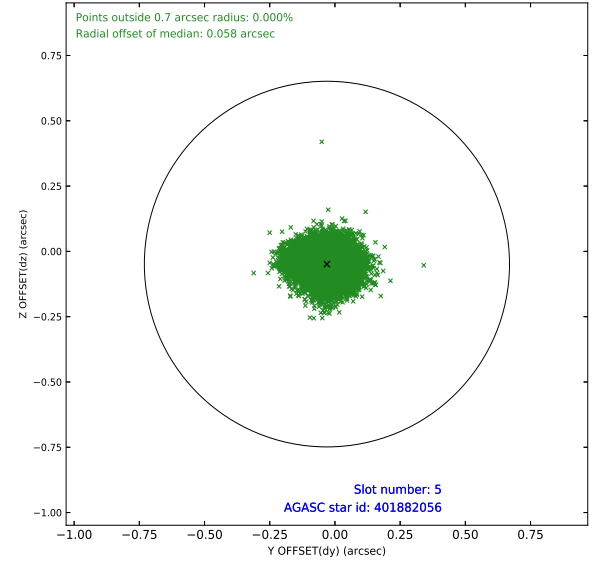
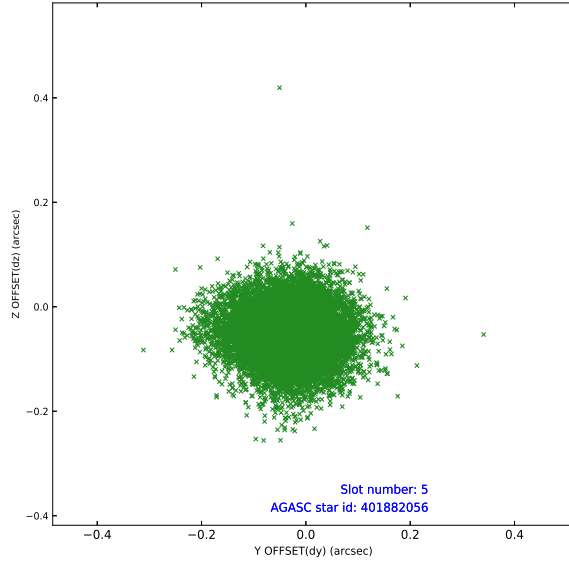
2.4.1 Slot 3



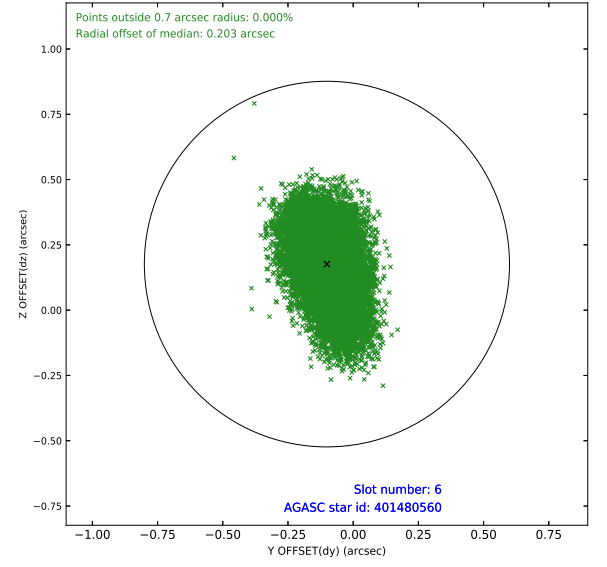
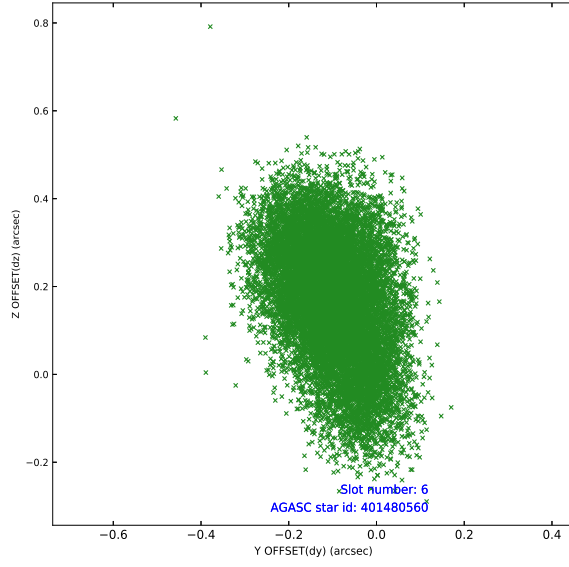
2.4.2 Slot 4



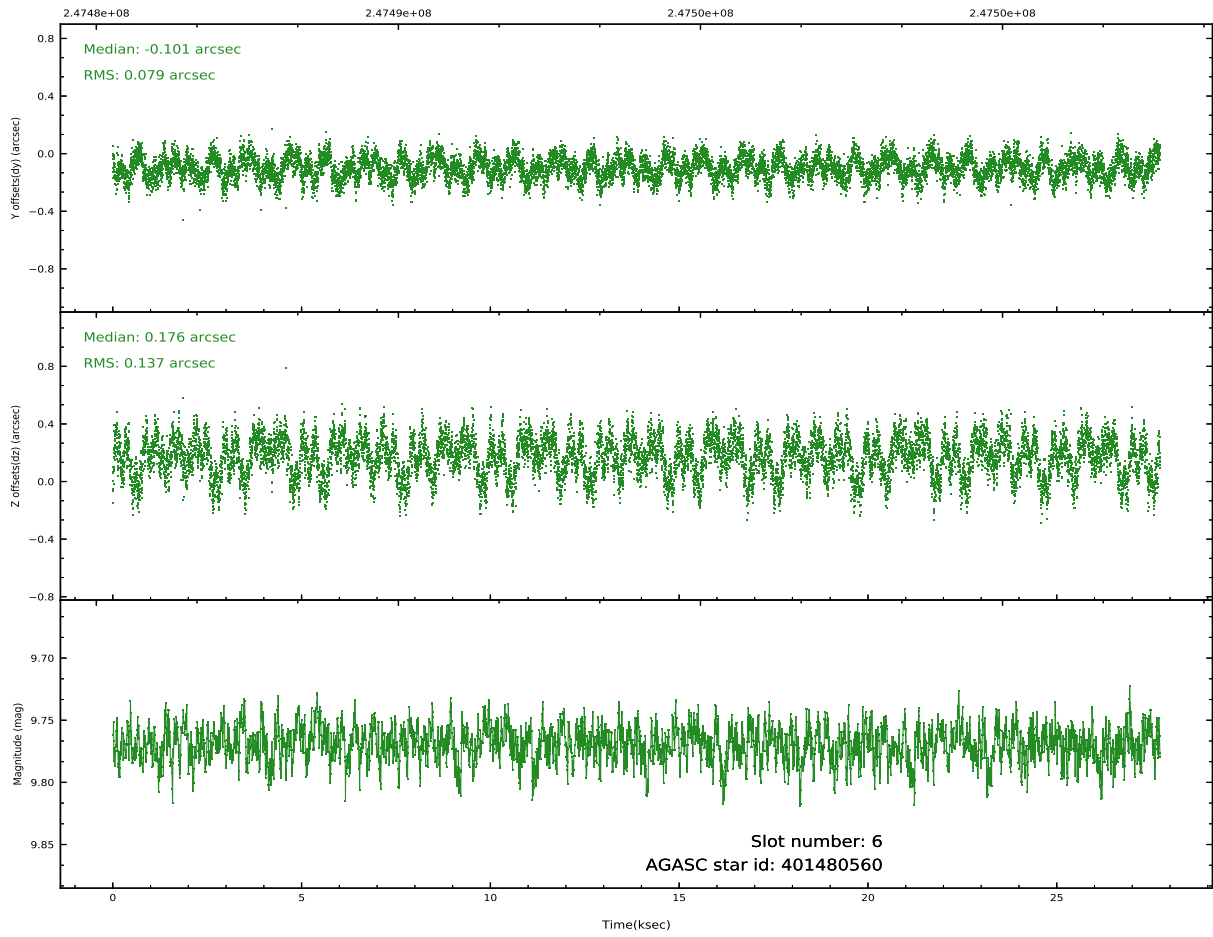
2.4.3 Slot 5



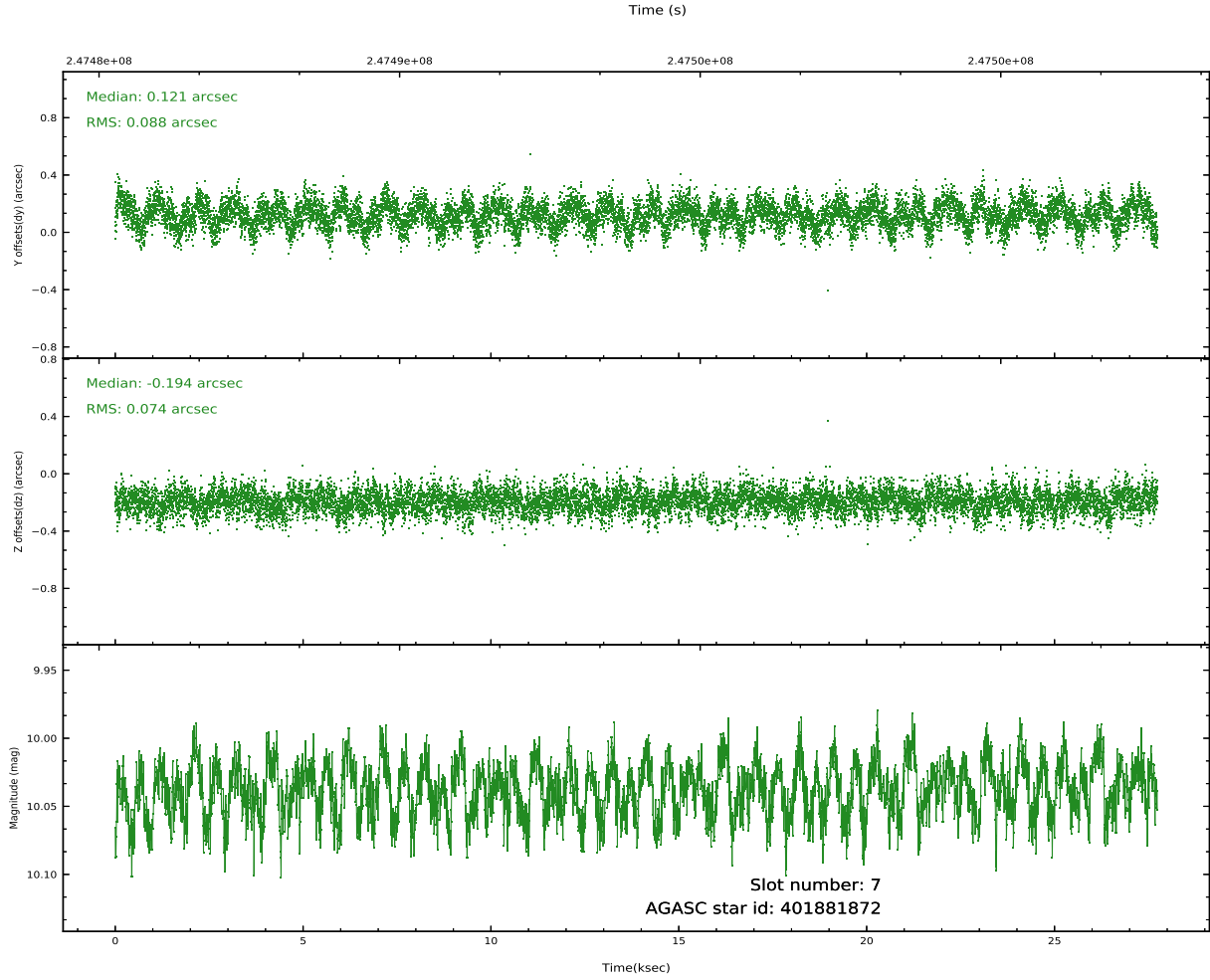
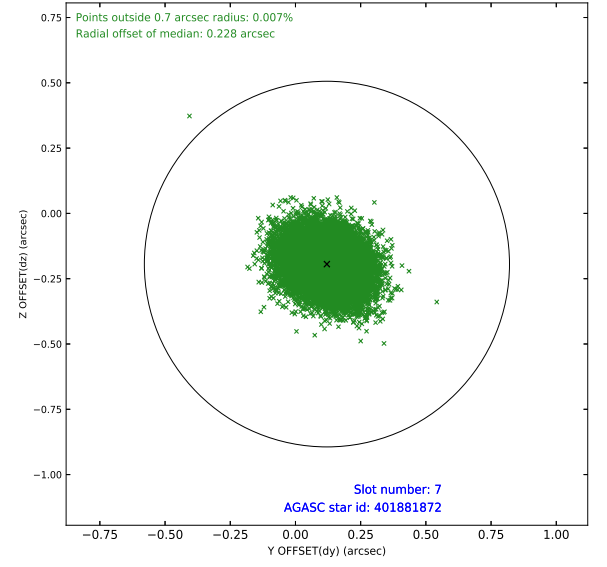
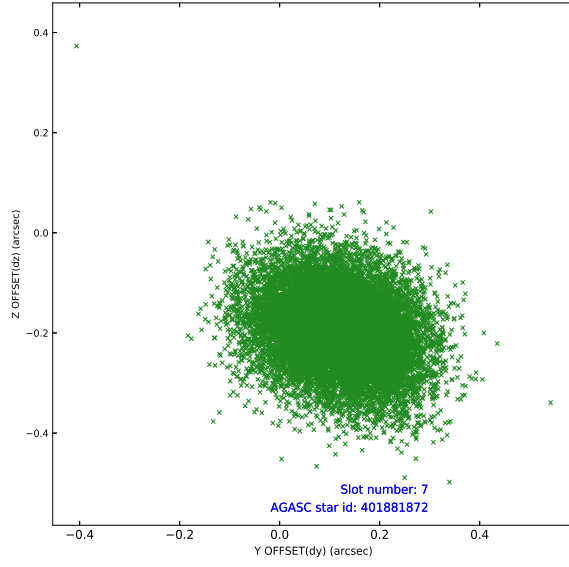
2.4.4 Slot 6



Time (s)

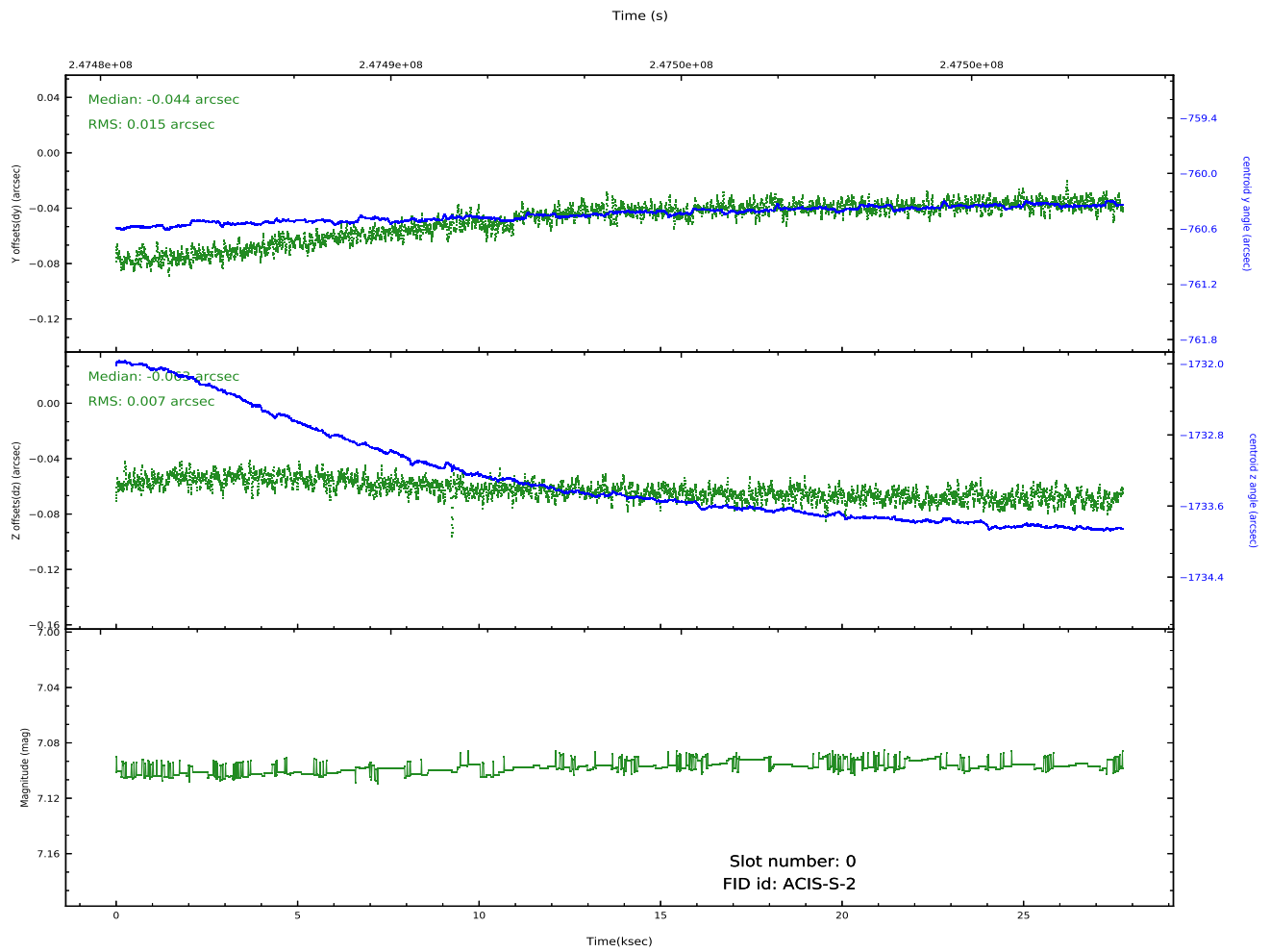
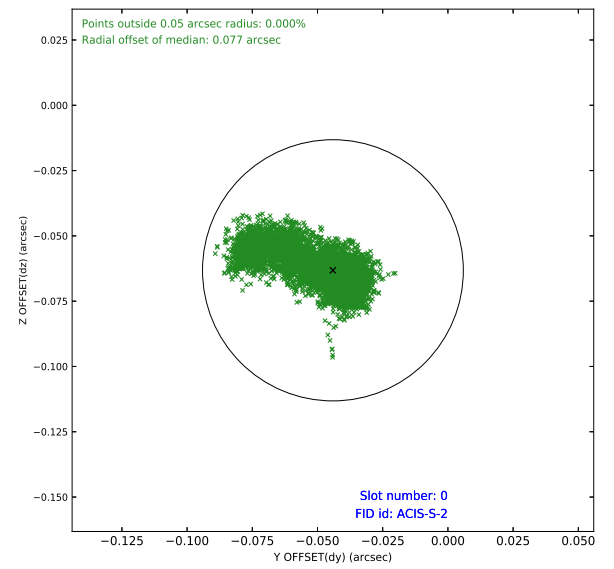
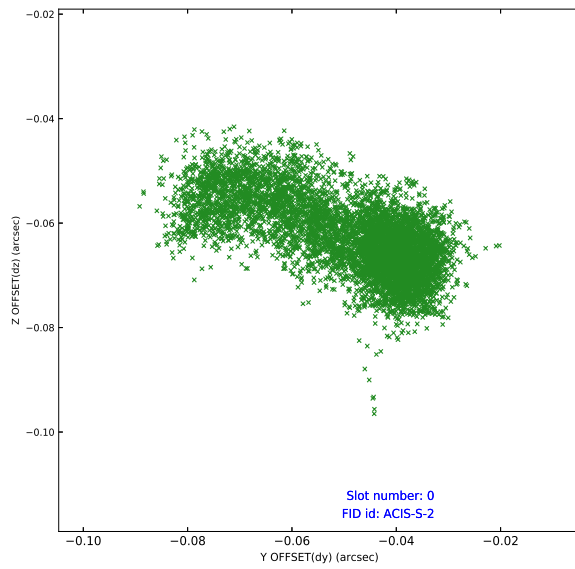


2.4.5 Slot 7

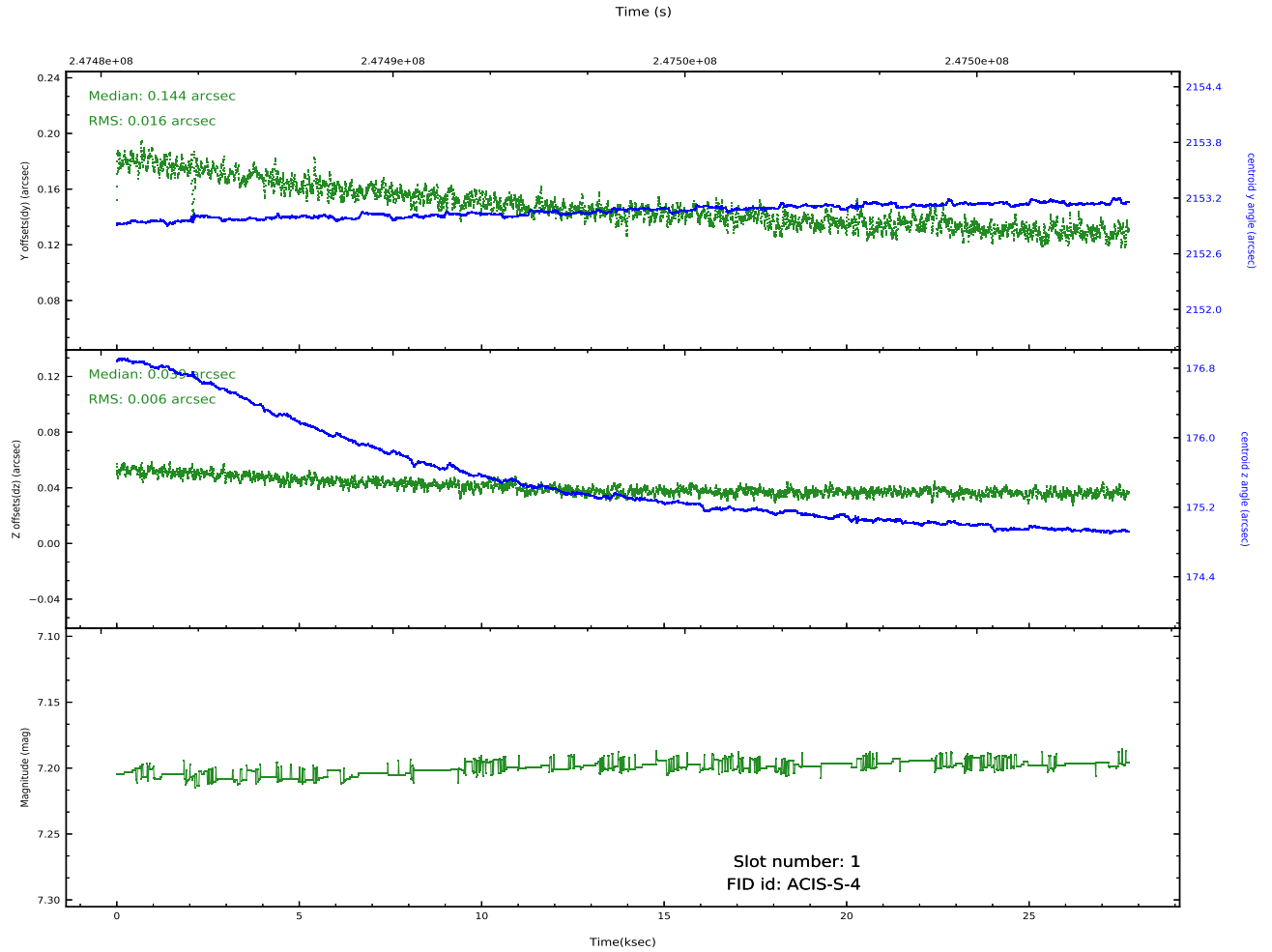
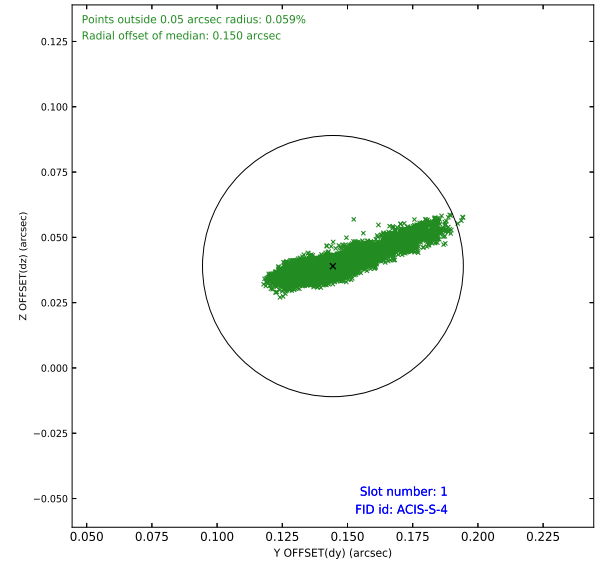
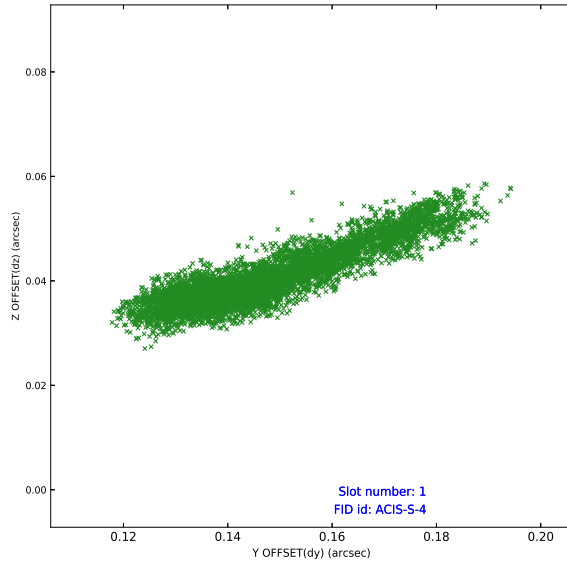


2.5 FID Slots

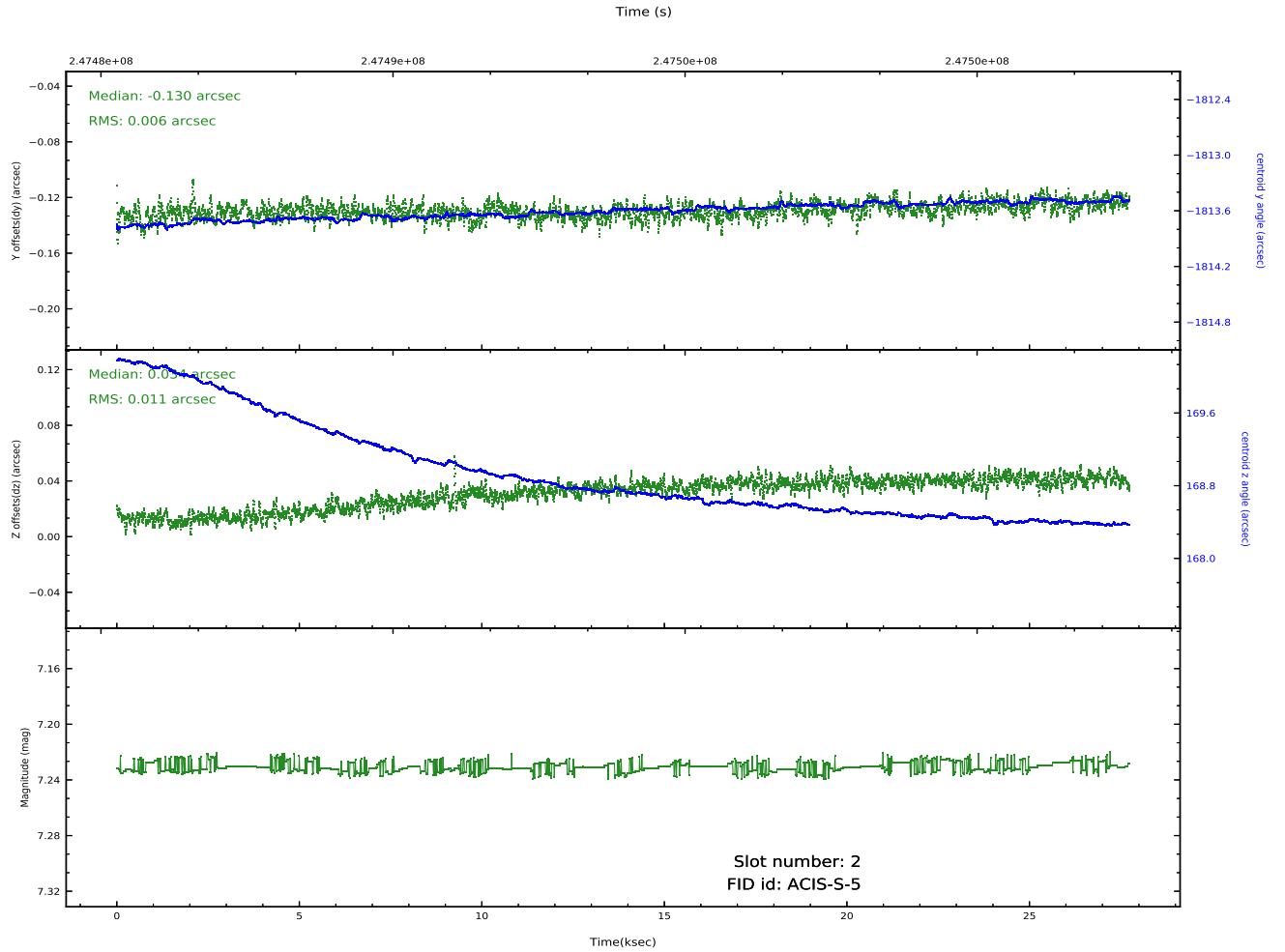
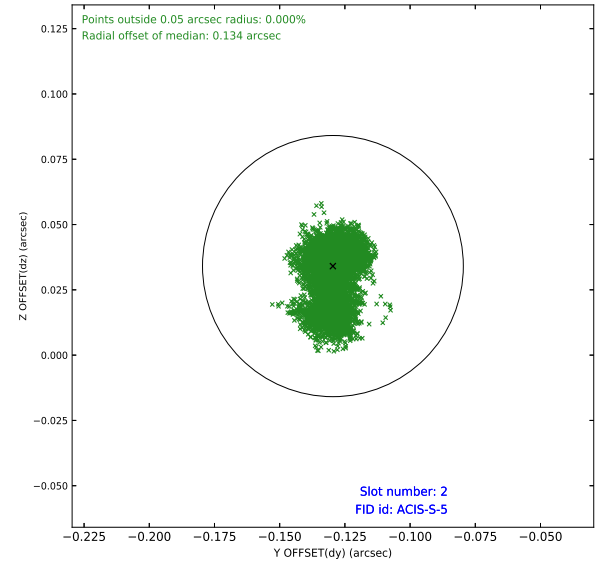
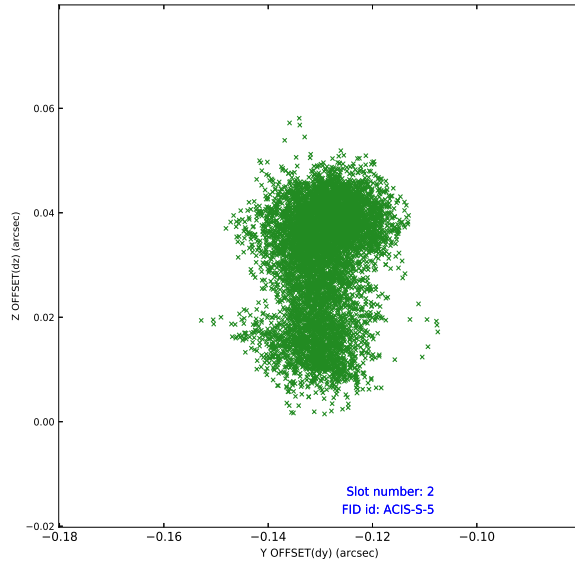
2.5.1 Slot 0



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)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.73759

A.2 Comments