

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21020 - L2 Version 2
Chandra X-Ray Center

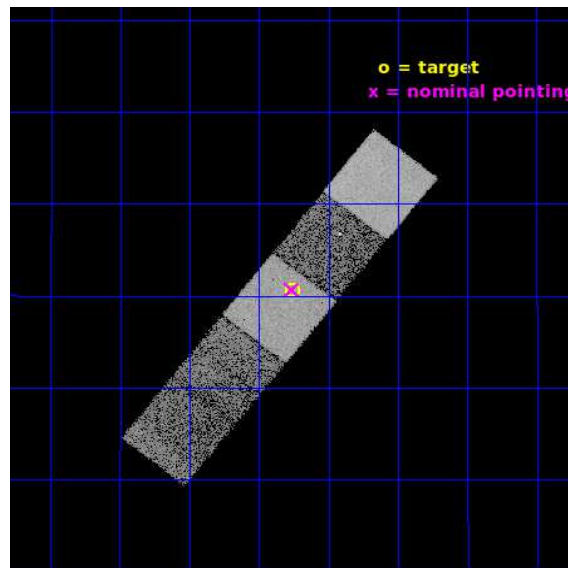
L2 Processing Date : Oct 27 2020

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1 Front

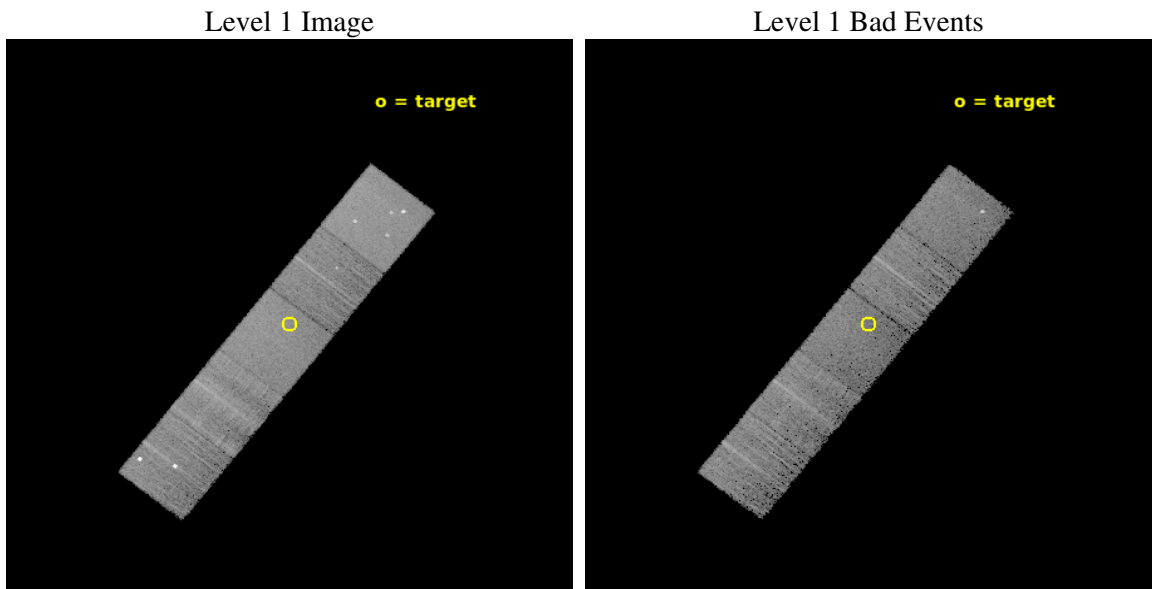
seq_num	703661	Sequence number
obs_id	21020	Observation id
title	LOW SURFACE BRIGHTNESS GALAXIES AND THE BLACK HOLE OCCUPATION FRACTION	Proposal title
observer	Elena Gallo	Principal investigator
object	LSBC F612-01	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	22.564167	Observer's specified target RA [deg]
dec_targ	14.677556	Observer's specified target Dec [deg]
ra_nom	22.565799773942	Nominal RA [deg]
dec_nom	14.678034898417	Nominal Dec [deg]
roll_nom	128.14459023421	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7154.490721941	Sum of GTIs [s]
livetime	7061.0120335994	Livetime [s]
ontime5	7154.4496819973	Sum of GTIs [s]
ontime6	7151.2676516771	Sum of GTIs [s]
ontime7	7154.490721941	Sum of GTIs [s]
ontime8	7154.3676019907	Sum of GTIs [s]
ontime9	7154.3265619278	Sum of GTIs [s]
l2events	86535	Number of level 2 events



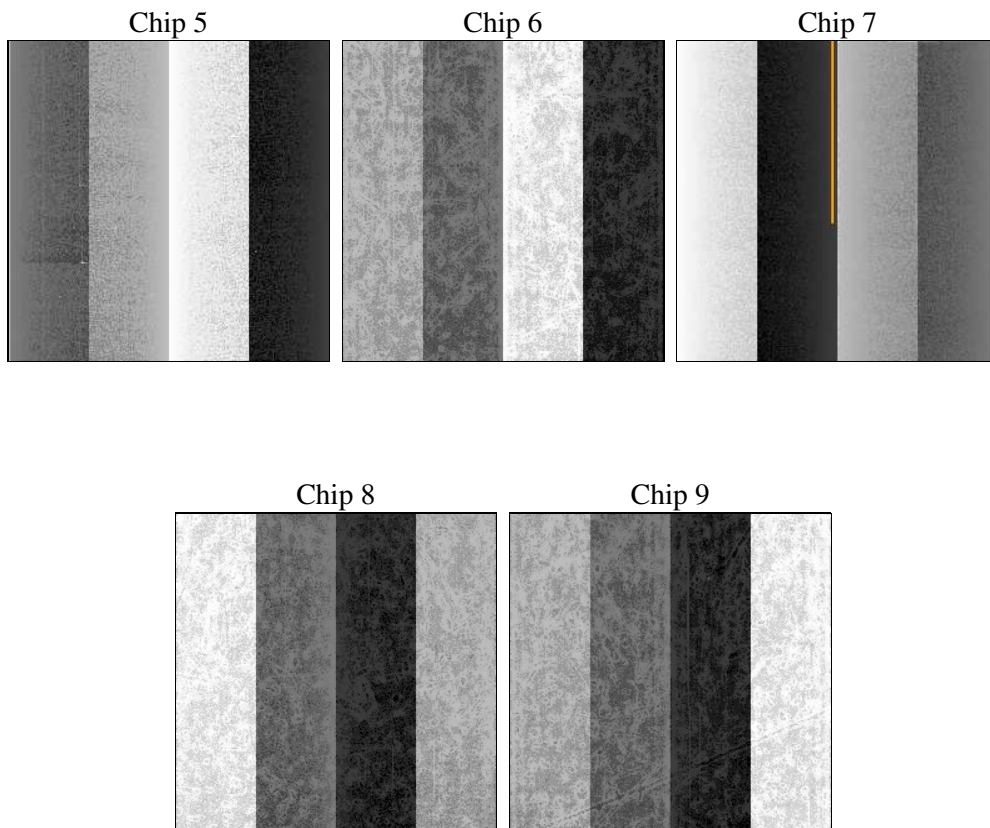
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7100.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	7154.490721941	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	7154.4496819973	Sum of GTIs [s]
date	2020-10-27T20:32:27	Date and time of file creation	ontime6	7151.2676516771	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	7154.490721941	Sum of GTIs [s]
			ontime8	7154.3676019907	Sum of GTIs [s]
			ontime9	7154.3265619278	Sum of GTIs [s]
			l1events	346660	Number of level 1 events

2.1.4 Events

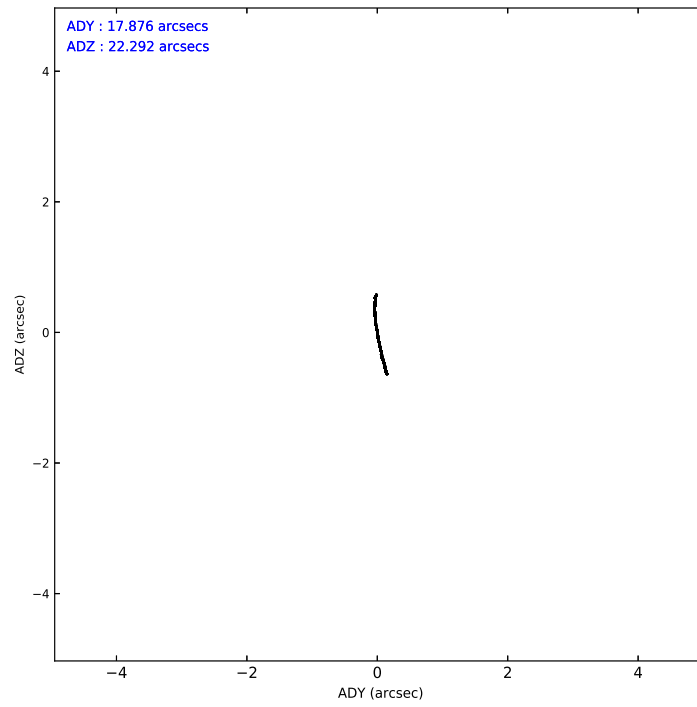
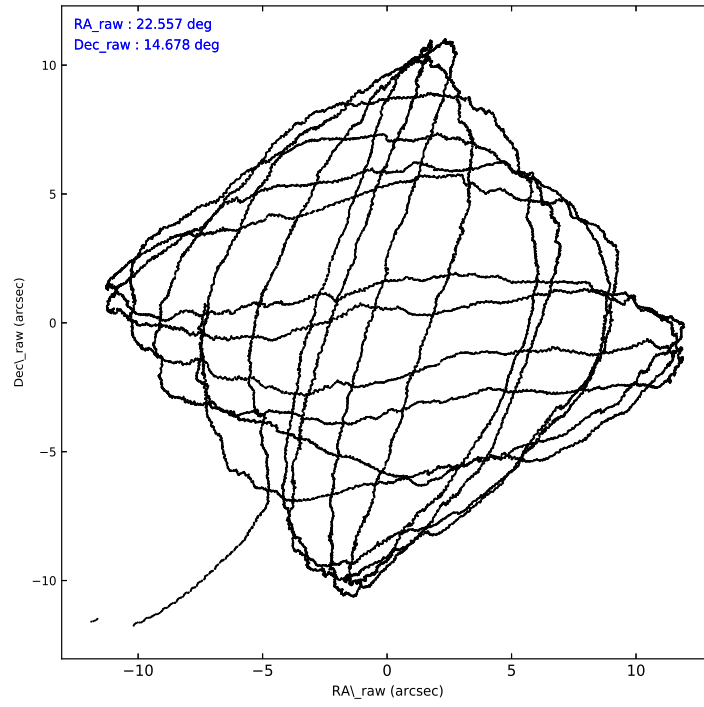
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	88614	54089	69429	70717	63811
rejected events	44623	47586	39382	50453	47012
rejected %	50%	87%	56%	71%	73%

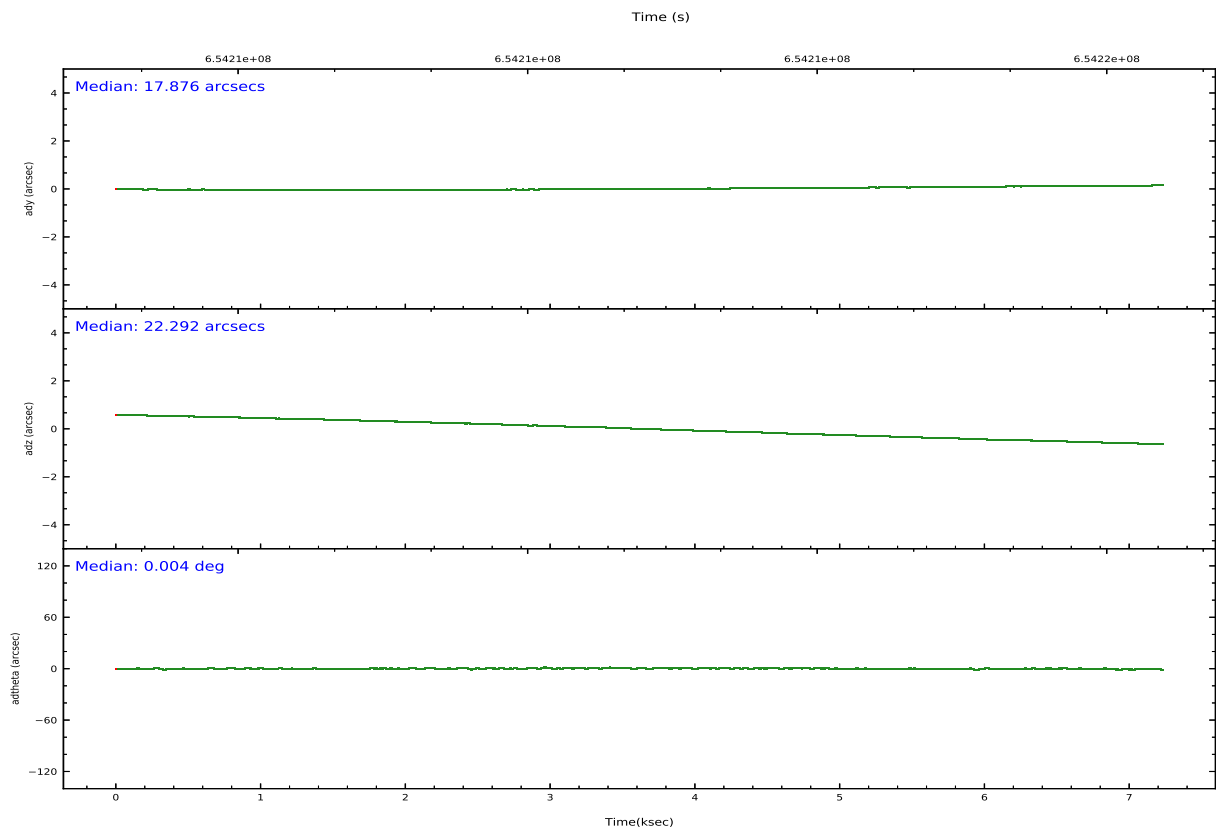
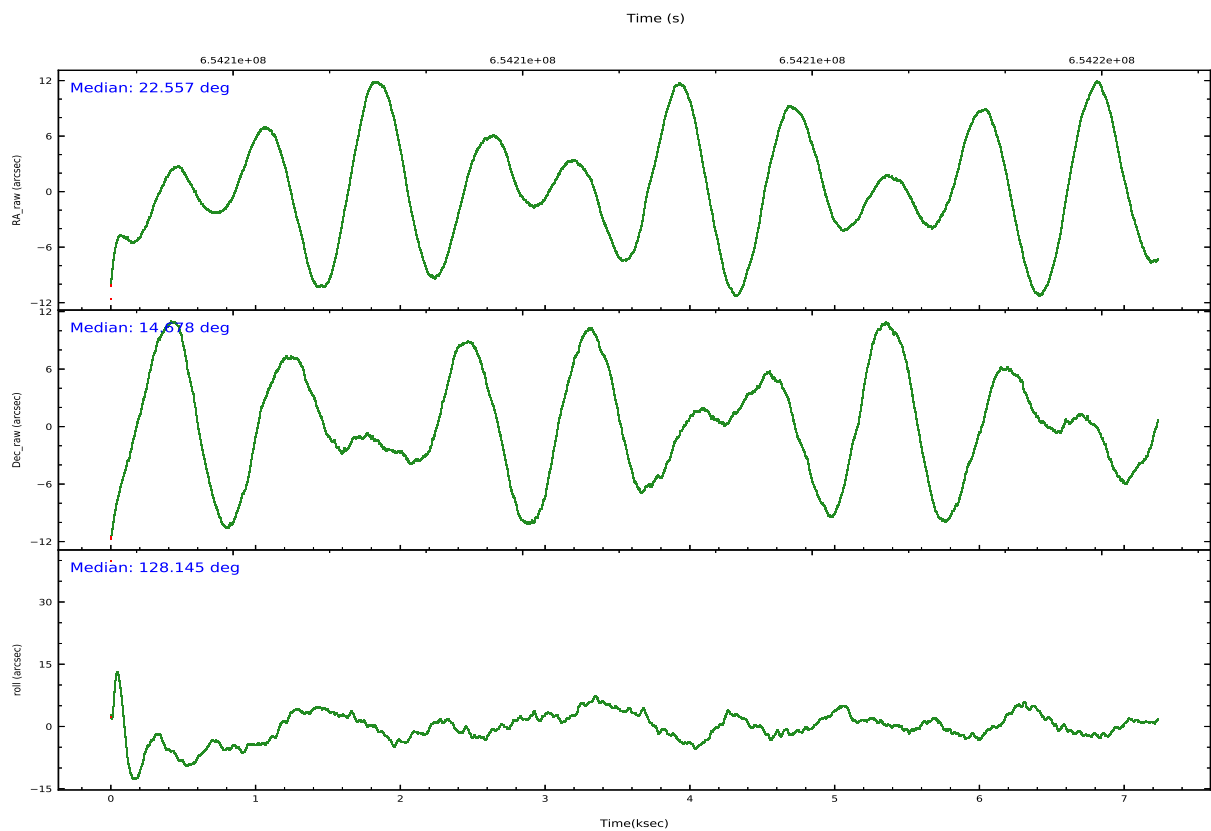
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	4739	2329	2522	5857	6269
	5%	4%	3%	8%	9%
grade 1 events	183	28	97	66	55
	0%	0%	0%	0%	0%
grade 2 events	14119	1516	6489	4920	7742
	15%	2%	9%	6%	12%
grade 3 events	1311	617	2370	2056	697
	1%	1%	3%	2%	1%
grade 4 events	1284	626	2370	1919	642
	1%	1%	3%	2%	1%
grade 5 events	6143	2543	7043	3897	2884
	6%	4%	10%	5%	4%
grade 6 events	22559	1416	16310	5512	1453
	25%	2%	23%	7%	2%
grade 7 events	38276	45014	32228	46490	44069
	43%	83%	46%	65%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	22.583833	22.565799773942	CCD I2 on	N	N
[deg] Pointing Dec	14.668347	14.678034898417	CCD I3 on	N	N
[deg] Pointing Roll	127.995021	128.14459023421	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[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)	654209290.184000	654208034.46486	CCD S5 on	O2	Y
Observation start date	2018-09-24T20:47:01	2018-09-24T20:27:14	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	654216390.184000	654217643.84043	On-chip summing requested	N	N
Observation end date	2018-09-24T22:45:21	2018-09-24T23:07:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



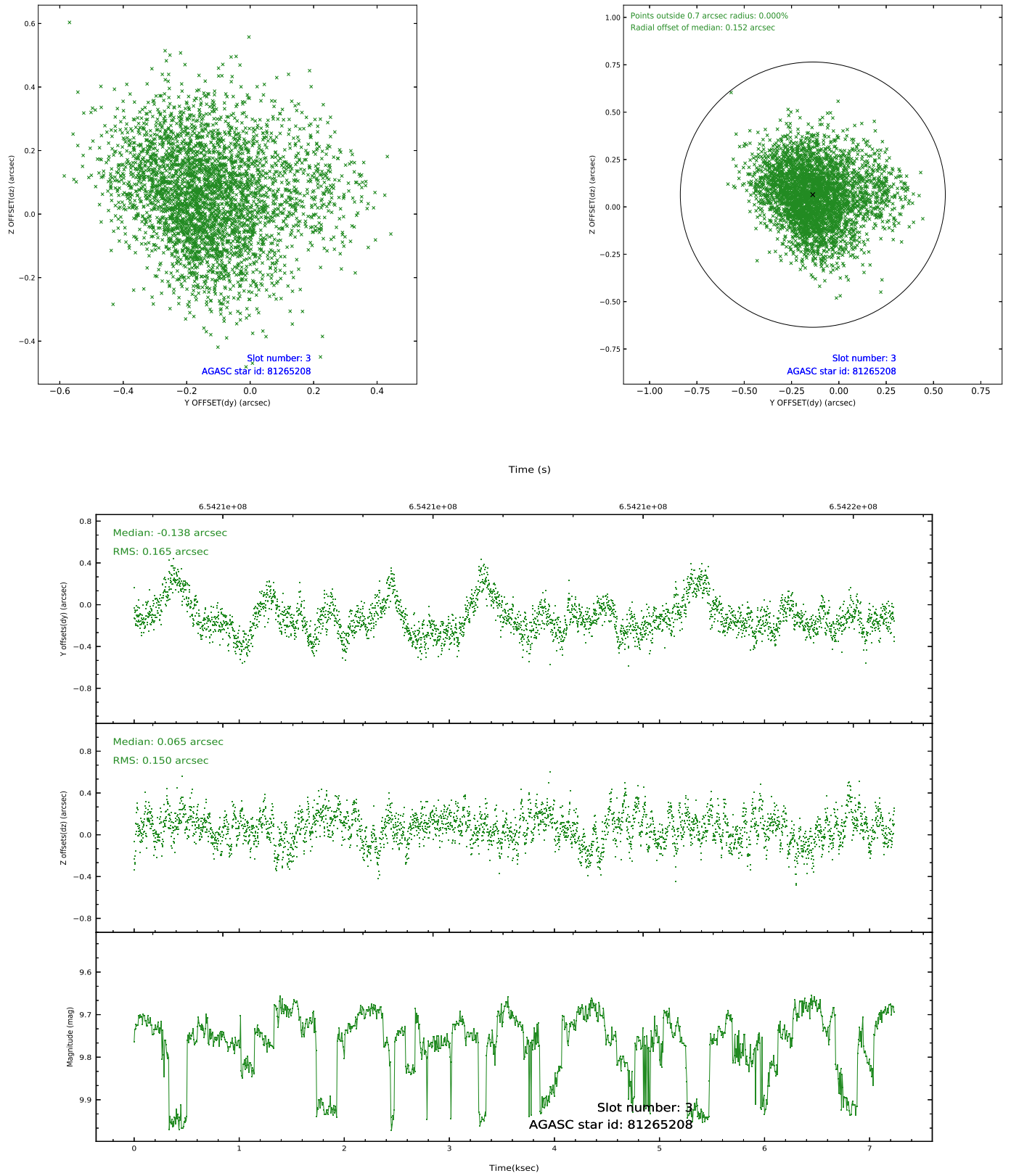


Slot Statistics

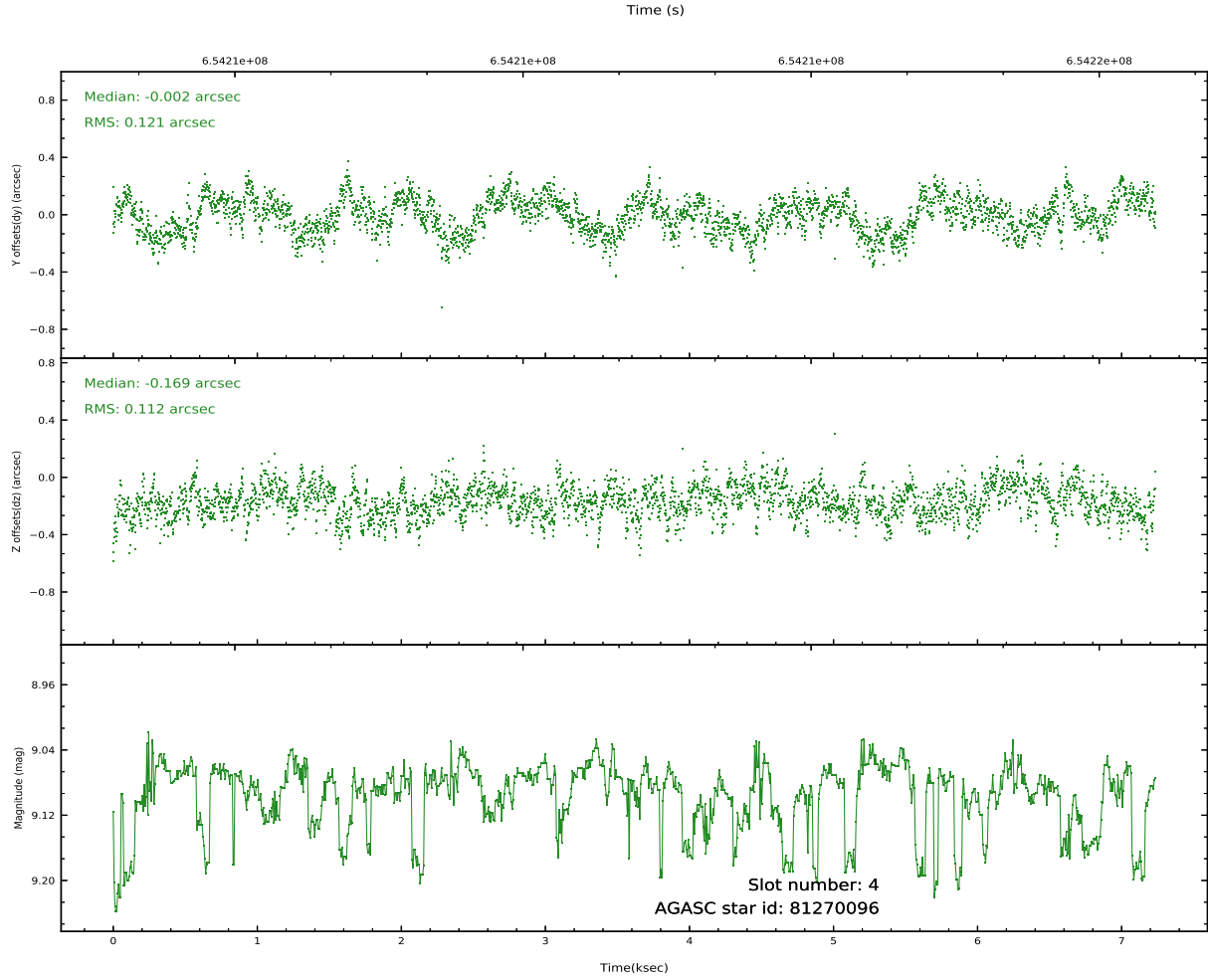
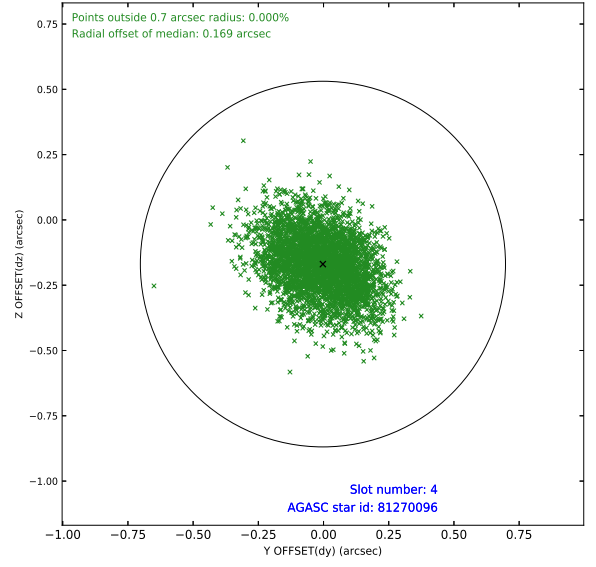
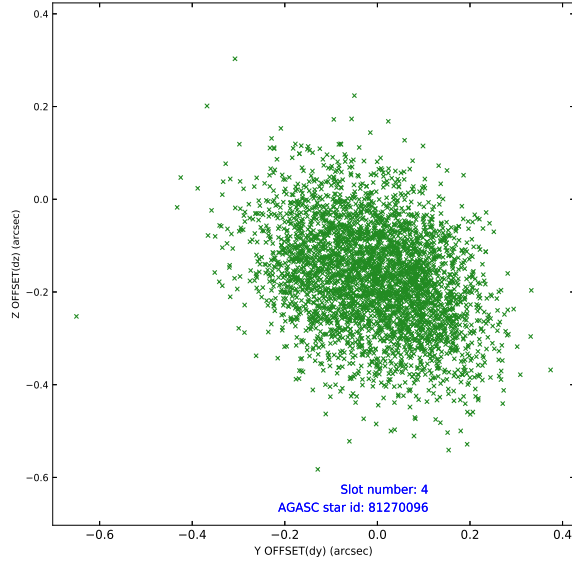
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.99	1765	1.000	0.135	-0.092	0.011	0.018	0.000000	0.000000	-771.05	-1743
1	FID		ACIS-S-4	7.10	1764	1.000	0.070	-0.040	0.008	0.020	0.000000	0.000000	2142.06	163
2	FID		ACIS-S-5	7.10	1765	1.000	-0.238	0.141	0.011	0.017	0.000000	0.000000	-1822.99	158
3	GUIDE	used	81265208	9.75	3518	1.000	-0.138	0.065	0.237	0.389	22.703528	14.791484	93.10	-601
4	GUIDE	used	81270096	9.09	3524	1.000	-0.002	-0.169	0.176	0.283	22.472690	14.209616	-1062.52	1321
5	GUIDE	used	82187384	8.80	3527	1.000	0.176	0.154	0.142	0.240	23.262168	14.467049	-2023.69	-1419
6	GUIDE	used	157028440	9.44	3523	1.000	0.048	0.005	0.174	0.303	22.863777	15.035861	443.80	-1582
7	GUIDE	used	157028840	6.78	3529	1.000	-0.087	-0.040	0.125	0.217	22.695967	15.021613	762.46	-1090

2.4 Star Slots

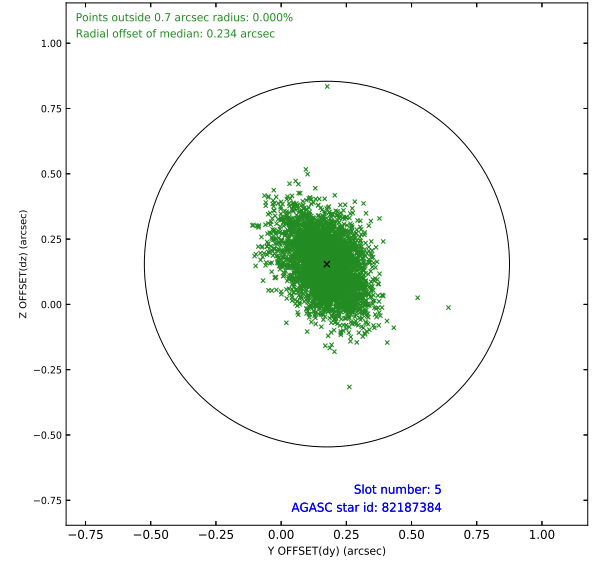
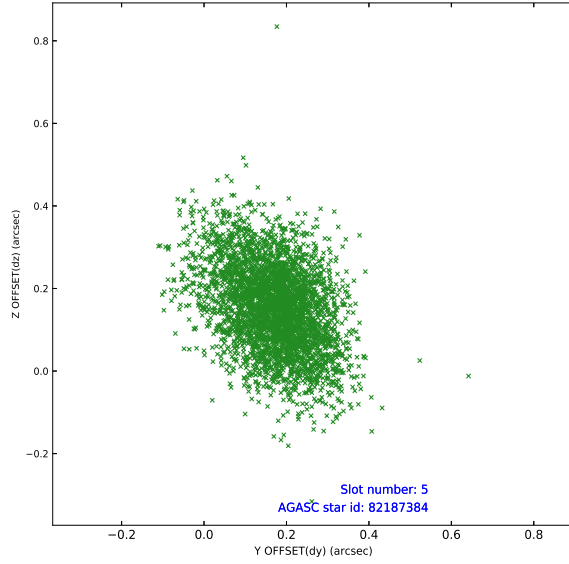
2.4.1 Slot 3



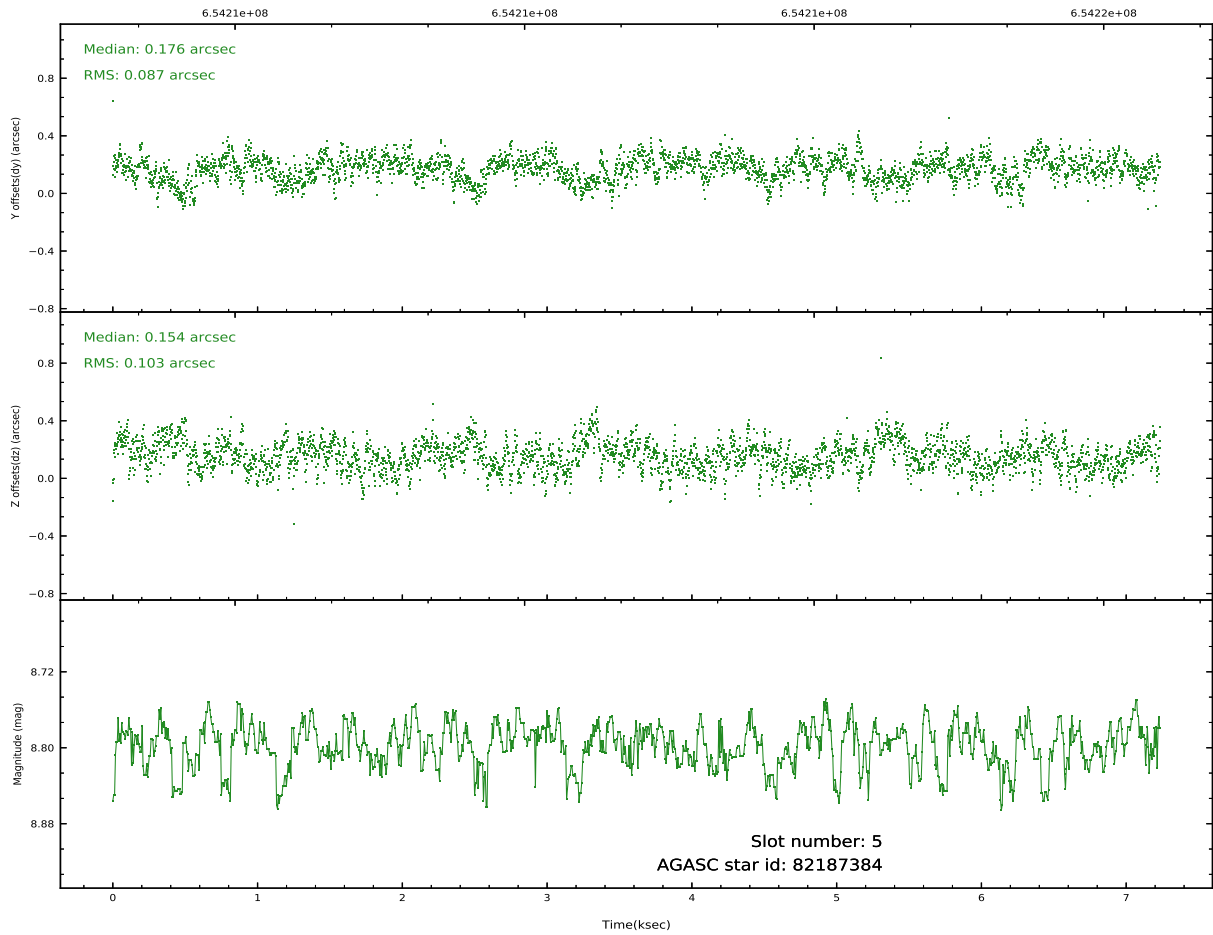
2.4.2 Slot 4



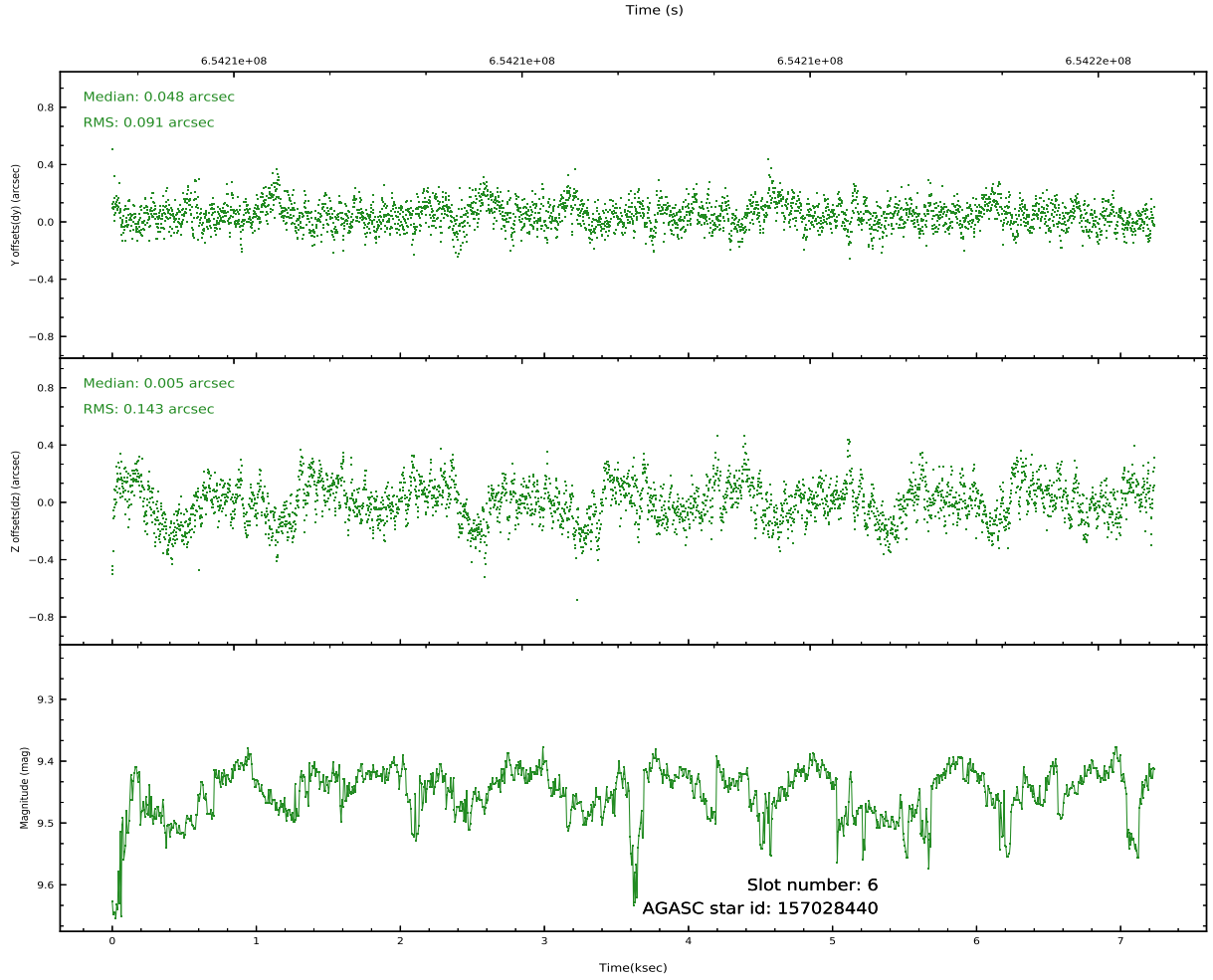
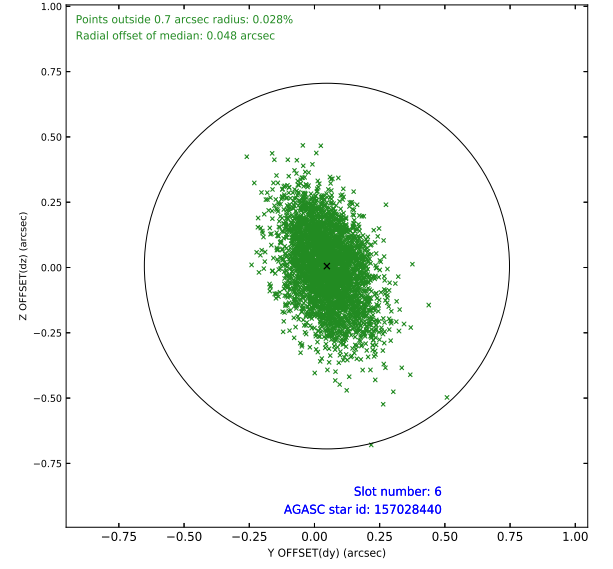
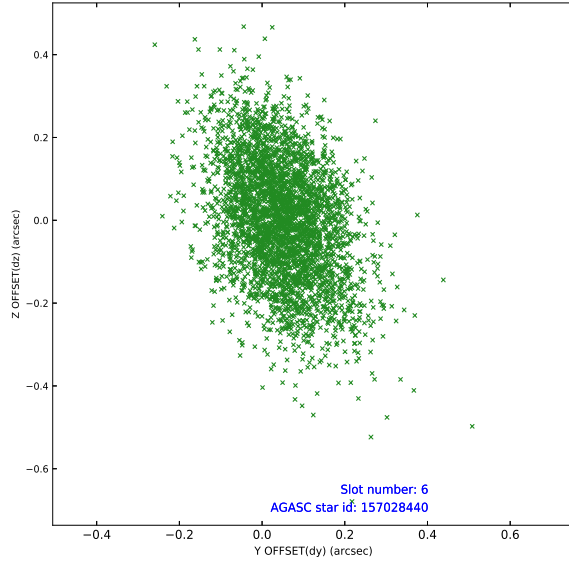
2.4.3 Slot 5



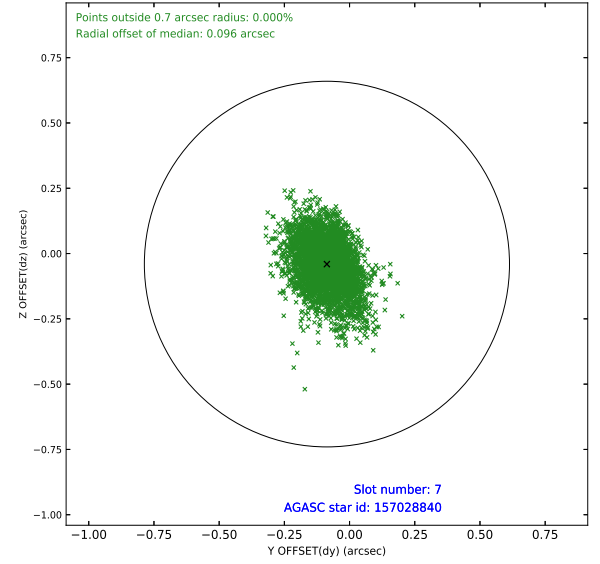
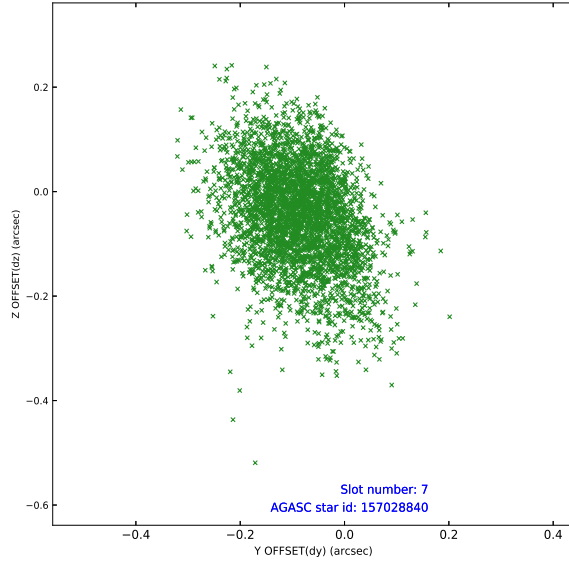
Time (s)



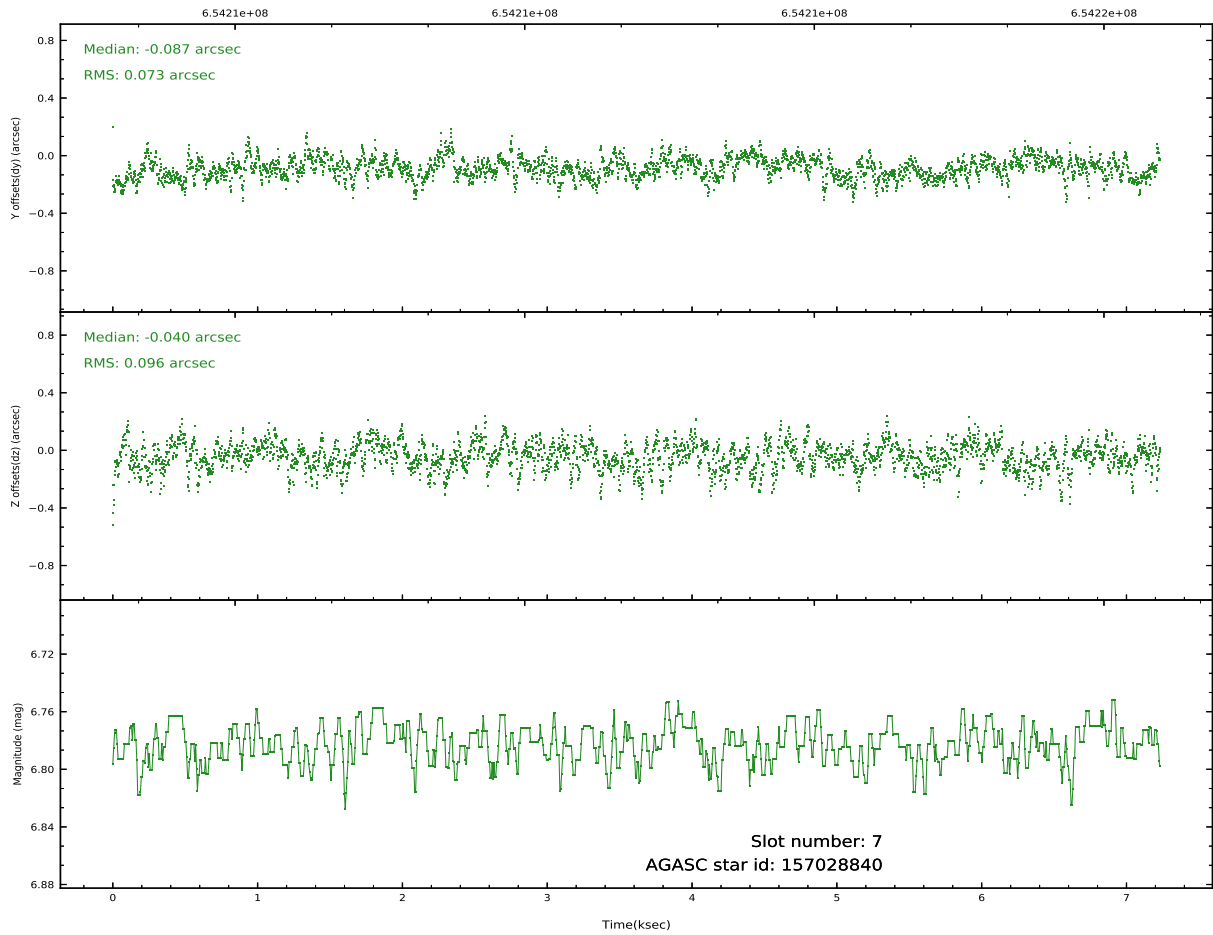
2.4.4 Slot 6



2.4.5 Slot 7

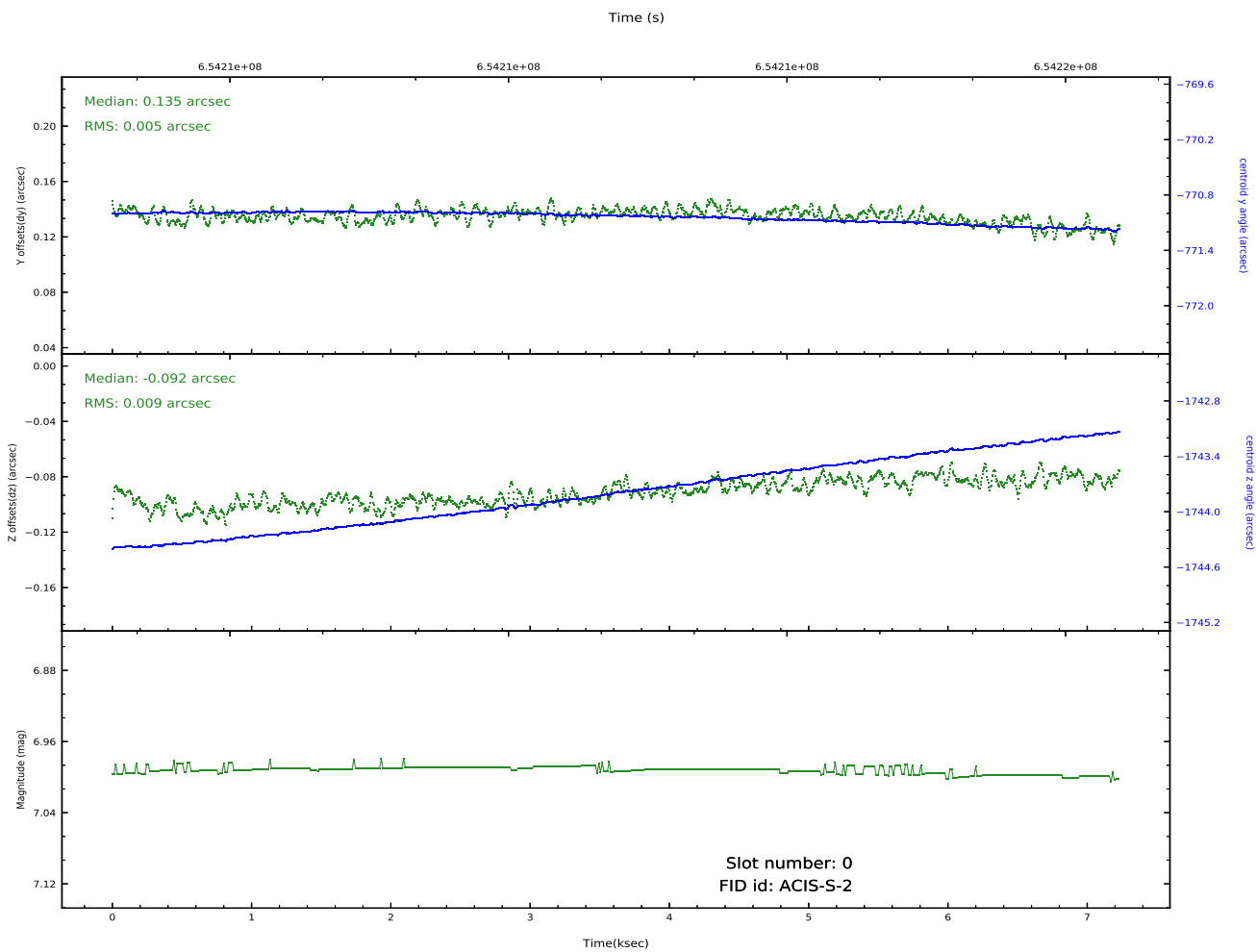
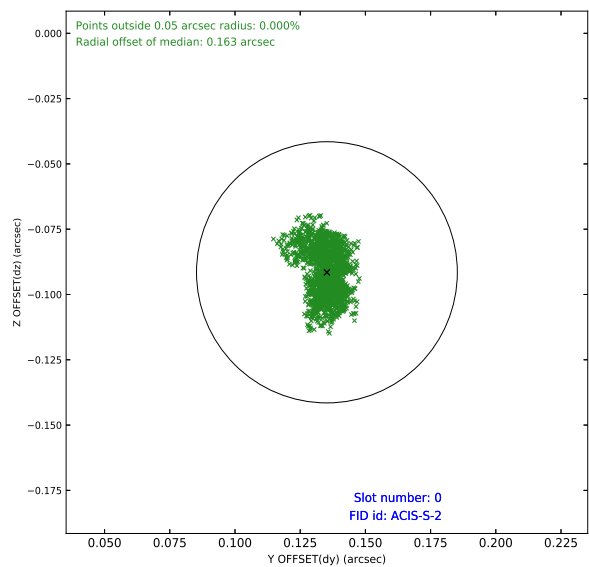
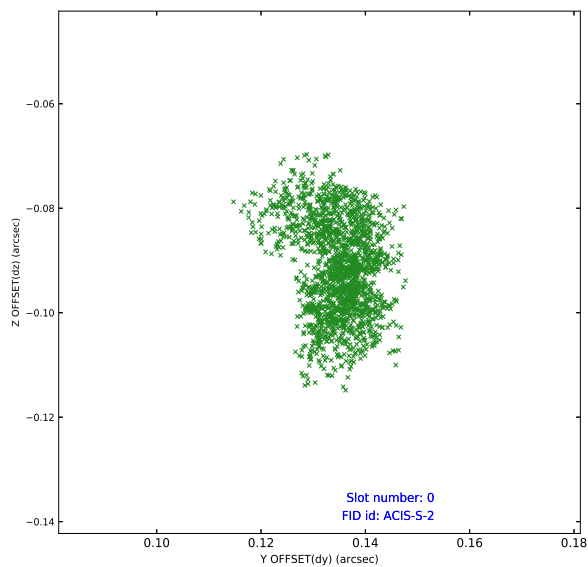


Time (s)

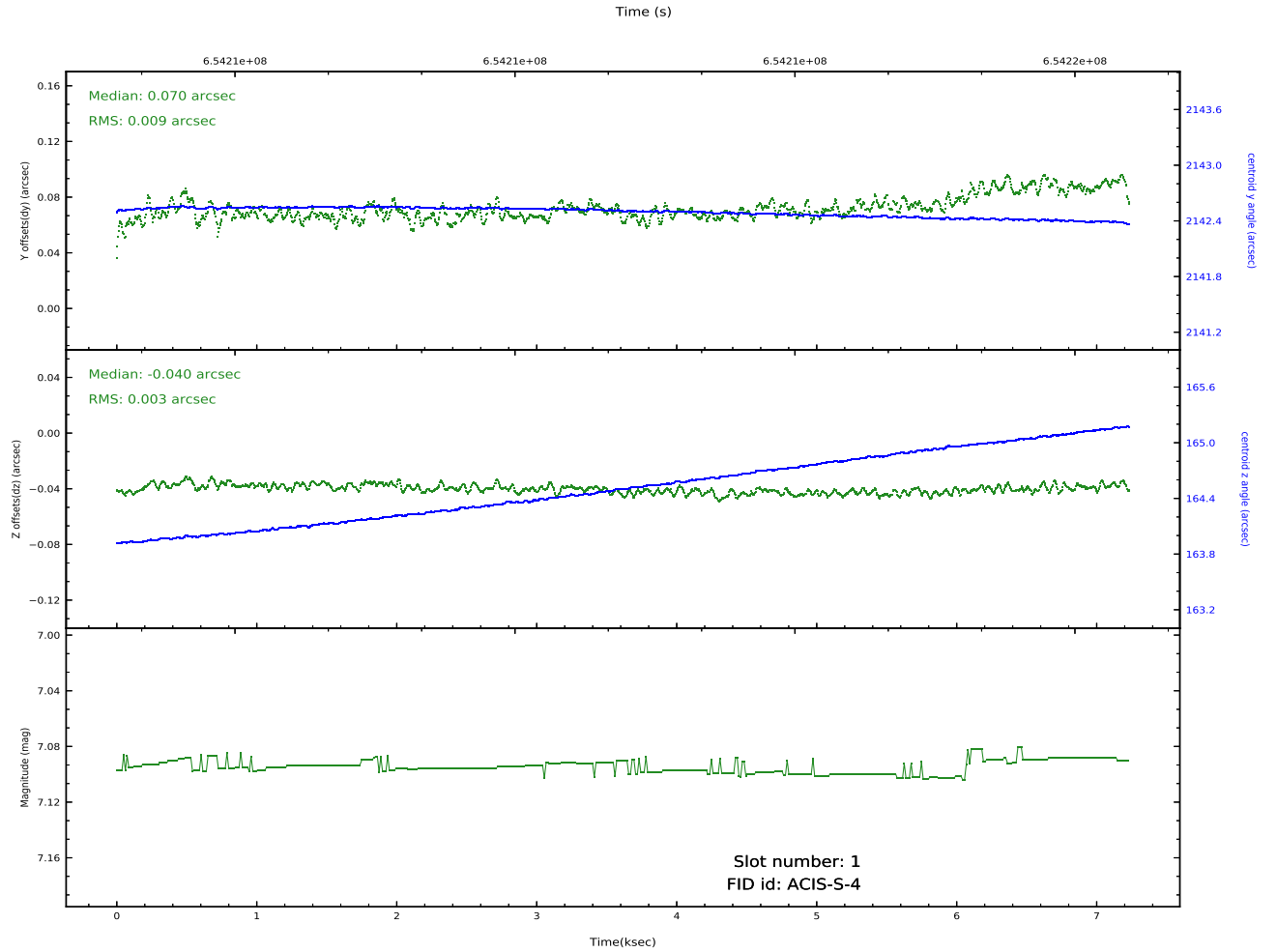
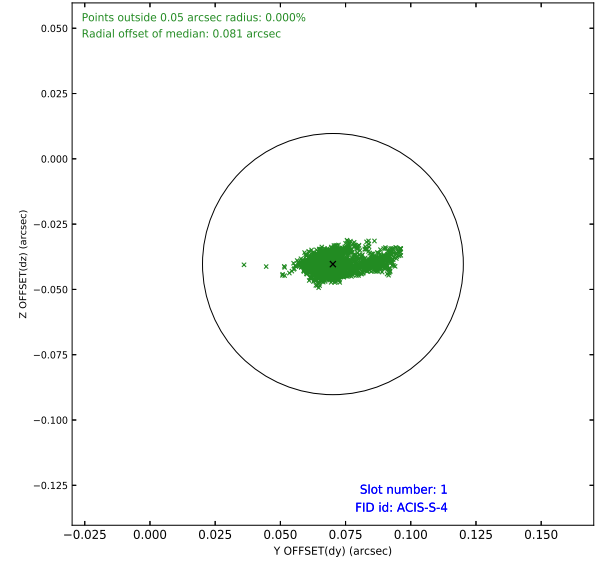
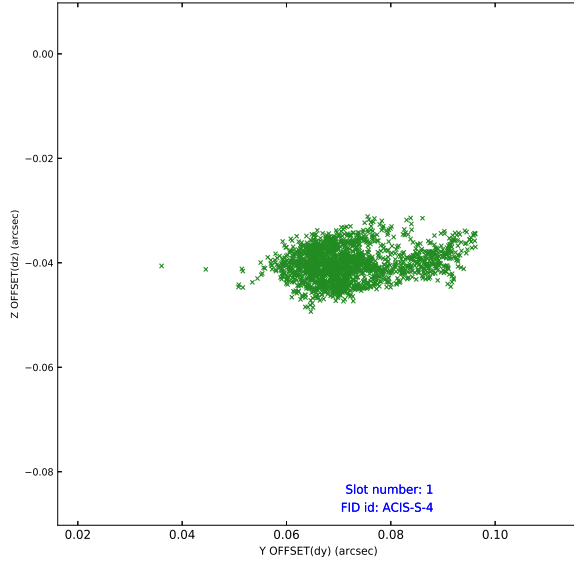


2.5 FID Slots

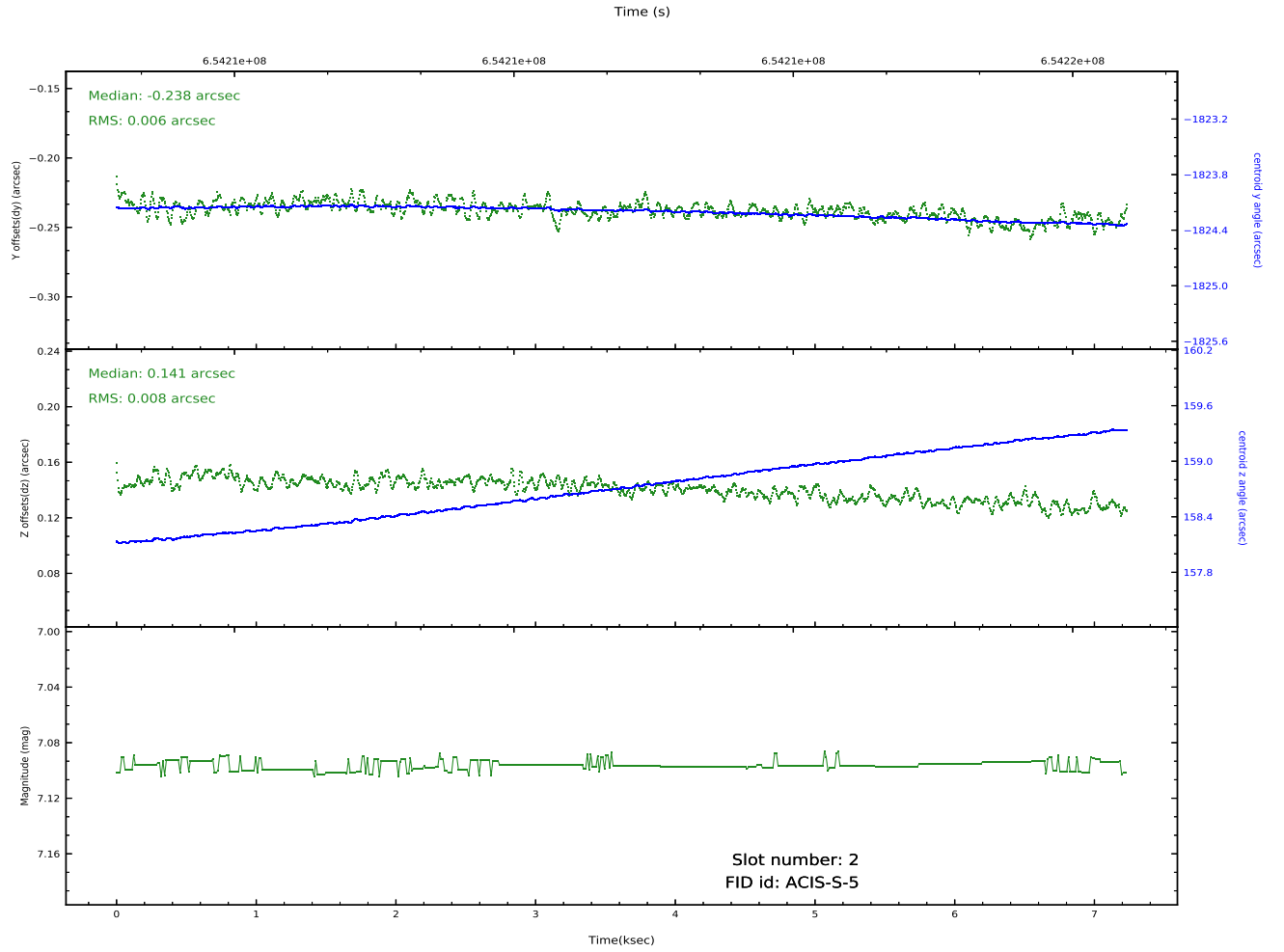
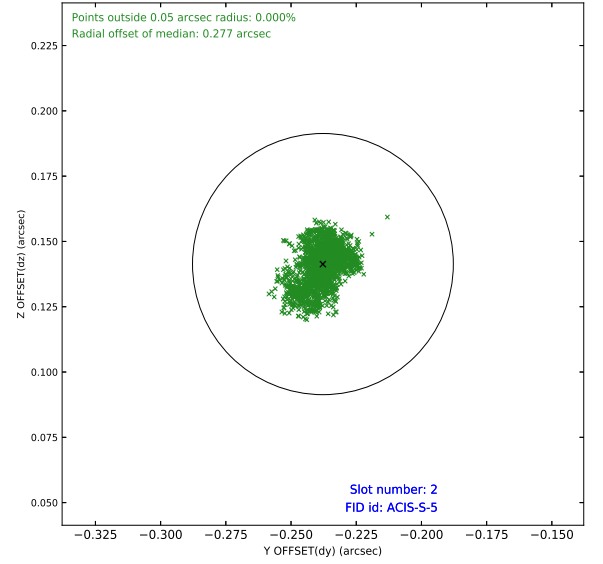
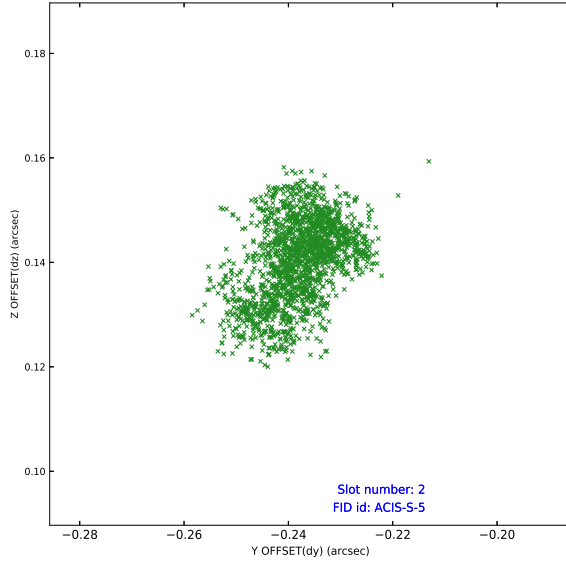
2.5.1 Slot 0



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	7.1544907233715

A.2 Comments