

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5711 - L2 Version 4
Chandra X-Ray Center

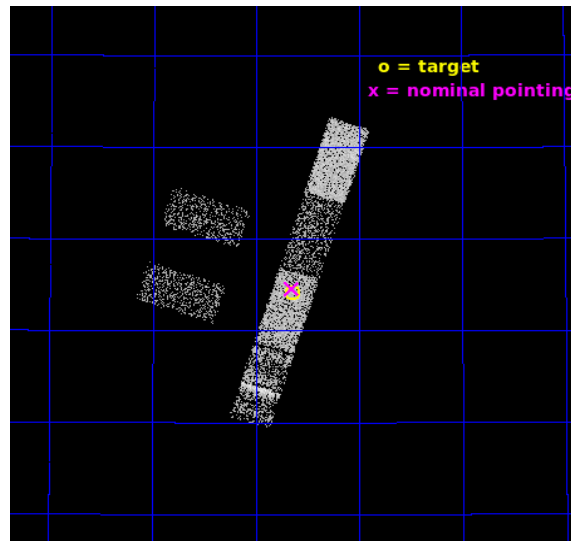
L2 Processing Date : Oct 5 2020

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

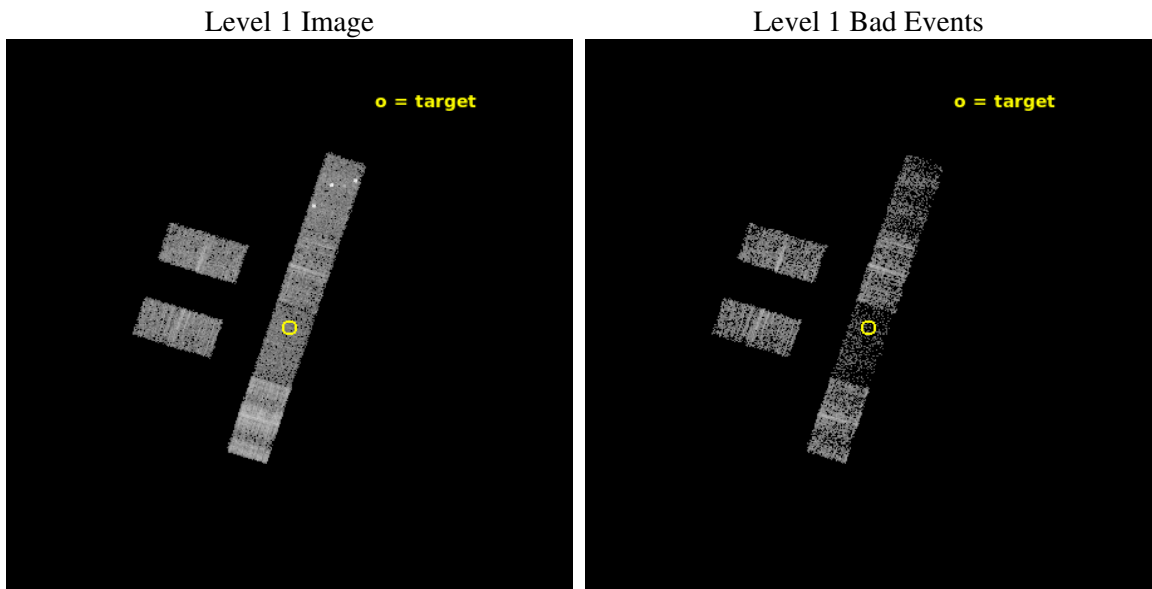
seq_num	701133	Sequence number
obs_id	5711	Observation id
title	What kind of Jets does Nature make? X-ray characterization of the FIRST Flat Spectrum Sample	Proposal title
observer	Dr. Giovanni Fossati	Principal investigator
object	B3 0738+441	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	115.410417	Observer's specified target RA [deg]
dec_targ	44.068	Observer's specified target Dec [deg]
ra_nom	115.41292868459	Nominal RA [deg]
dec_nom	44.076528429848	Nominal Dec [deg]
roll_nom	107.86272978959	Nominal Roll [deg]
revision	4	Processing version of data
ontime	3182.4000210762	Sum of GTIs [s]
livetime	3111.4587613182	Livetime [s]
ontime2	3182.4000210762	Sum of GTIs [s]
ontime3	3182.4000210762	Sum of GTIs [s]
ontime5	3182.4000210762	Sum of GTIs [s]
ontime6	3182.4000210762	Sum of GTIs [s]
ontime7	3182.4000210762	Sum of GTIs [s]
ontime8	3180.5590109229	Sum of GTIs [s]
l2events	13163	Number of level 2 events



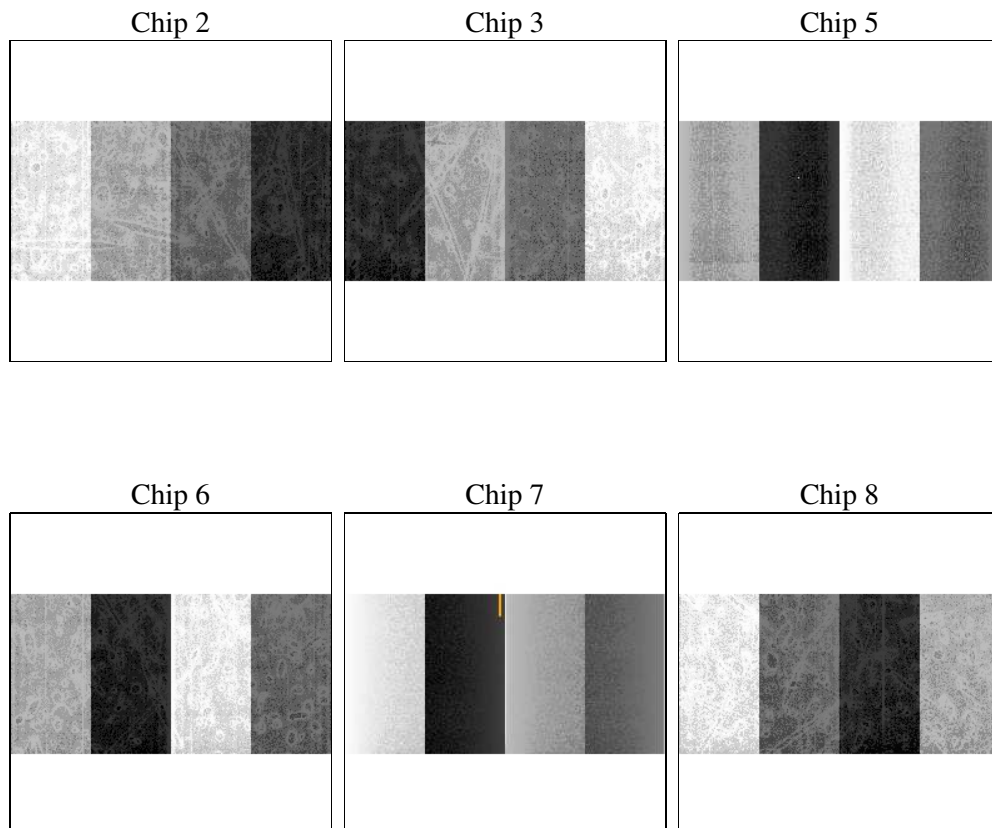
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	3182.4000210762	Sum of GTIs [s]
caldsver	4.9.2	 	ontime2	3182.4000210762	Sum of GTIs [s]
date	2020-10-05T11:26:38	Date and time of file creation	ontime3	3182.4000210762	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	3182.4000210762	Sum of GTIs [s]
			ontime6	3182.4000210762	Sum of GTIs [s]
			ontime7	3182.4000210762	Sum of GTIs [s]
			ontime8	3180.5590109229	Sum of GTIs [s]
			l1events	82270	Number of level 1 events

2.1.4 Events

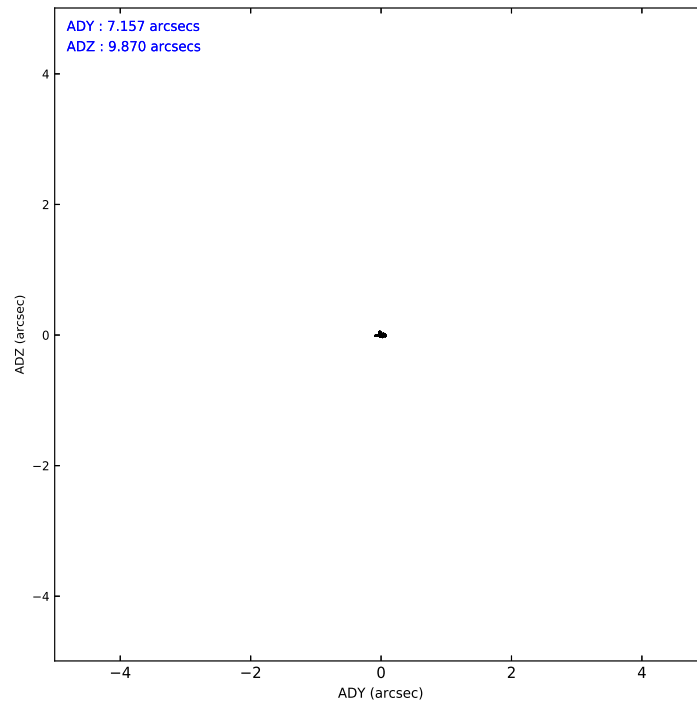
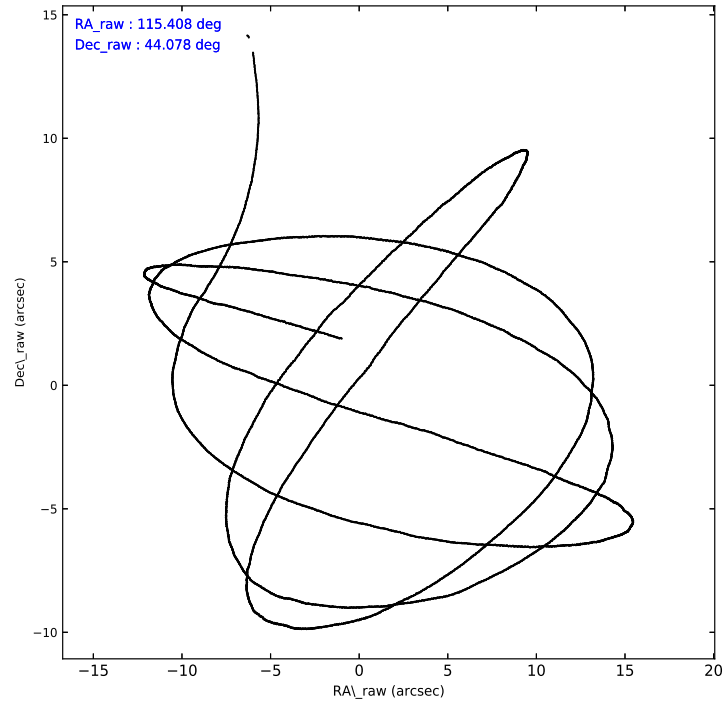
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	11952	11522	14485	11908	6869	25534
rejected events	10641	10617	5431	10581	3050	12605
rejected %	89%	92%	37%	88%	44%	49%

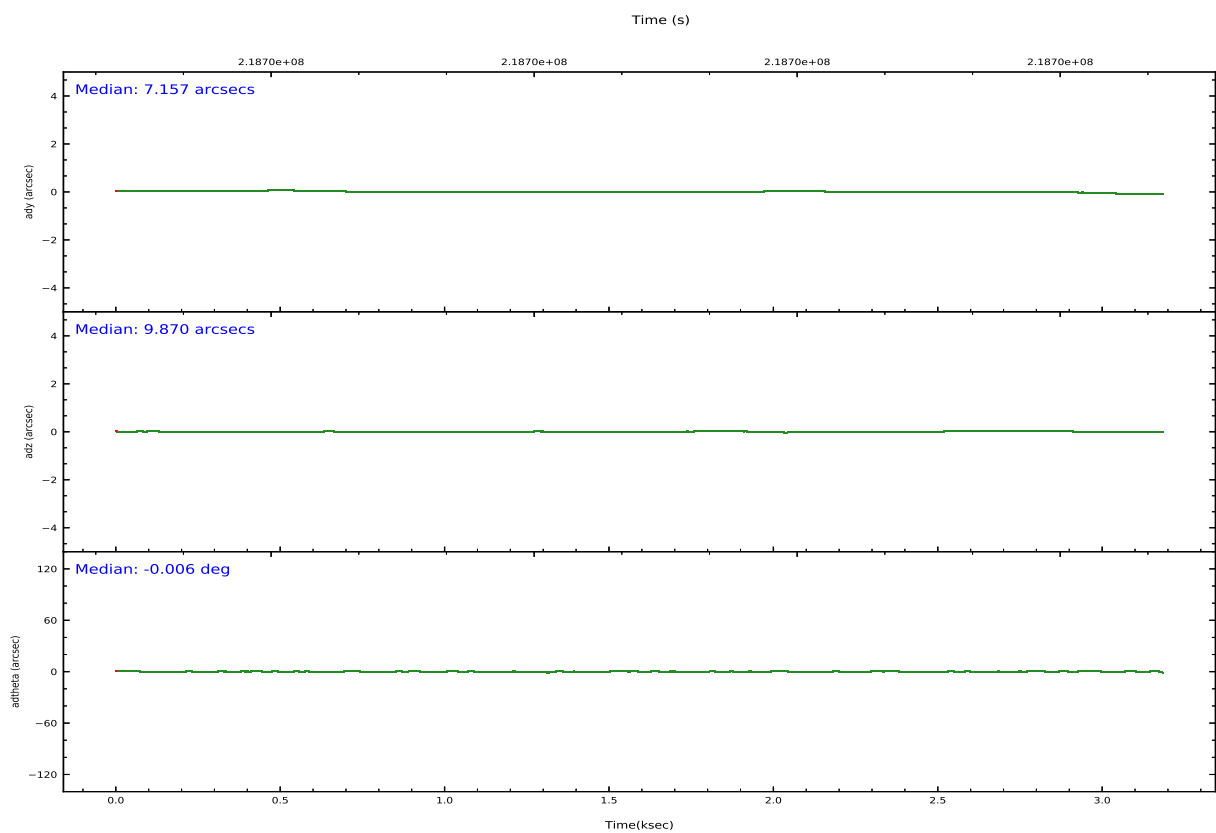
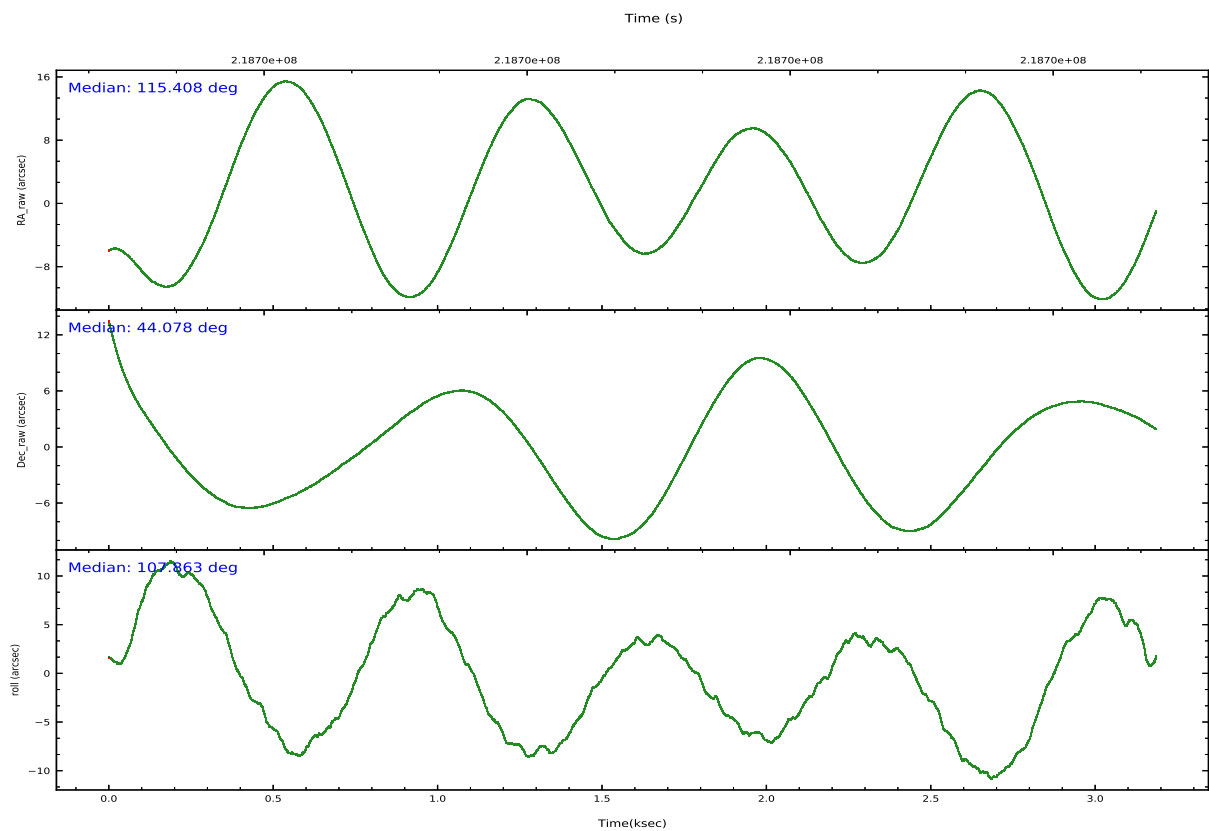
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	717	405	3946	810	548	5657
	5%	3%	27%	6%	7%	22%
grade 1 events	7	5	29	6	11	45
	0%	0%	0%	0%	0%	0%
grade 2 events	283	211	2890	258	1091	1639
	2%	1%	19%	2%	15%	6%
grade 3 events	117	137	478	152	457	2695
	0%	1%	3%	1%	6%	10%
grade 4 events	198	145	485	122	496	2457
	1%	1%	3%	1%	7%	9%
grade 5 events	163	181	841	210	654	389
	1%	1%	5%	1%	9%	1%
grade 6 events	153	118	2361	147	1667	2309
	1%	1%	16%	1%	24%	9%
grade 7 events	10314	10320	3455	10203	1945	10343
	86%	89%	23%	85%	28%	40%

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	115.437042	115.41292868459	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	44.059576	44.076528429848	Subarray start row	257	257
[deg] Pointing Roll	107.682985	107.86272978959	Subarray row count	512	512
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1.8
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	218694914.184000	218693873.14906			
Observation start date	2004-12-06T04:34:10	2004-12-06T04:17:53			
[s] Observation end time (MET)	218697914.184000	218699417.88681			
Observation end date	2004-12-06T05:24:10	2004-12-06T05:50:17			
Read mode	TIMED	TIMED			

2.3 Aspect



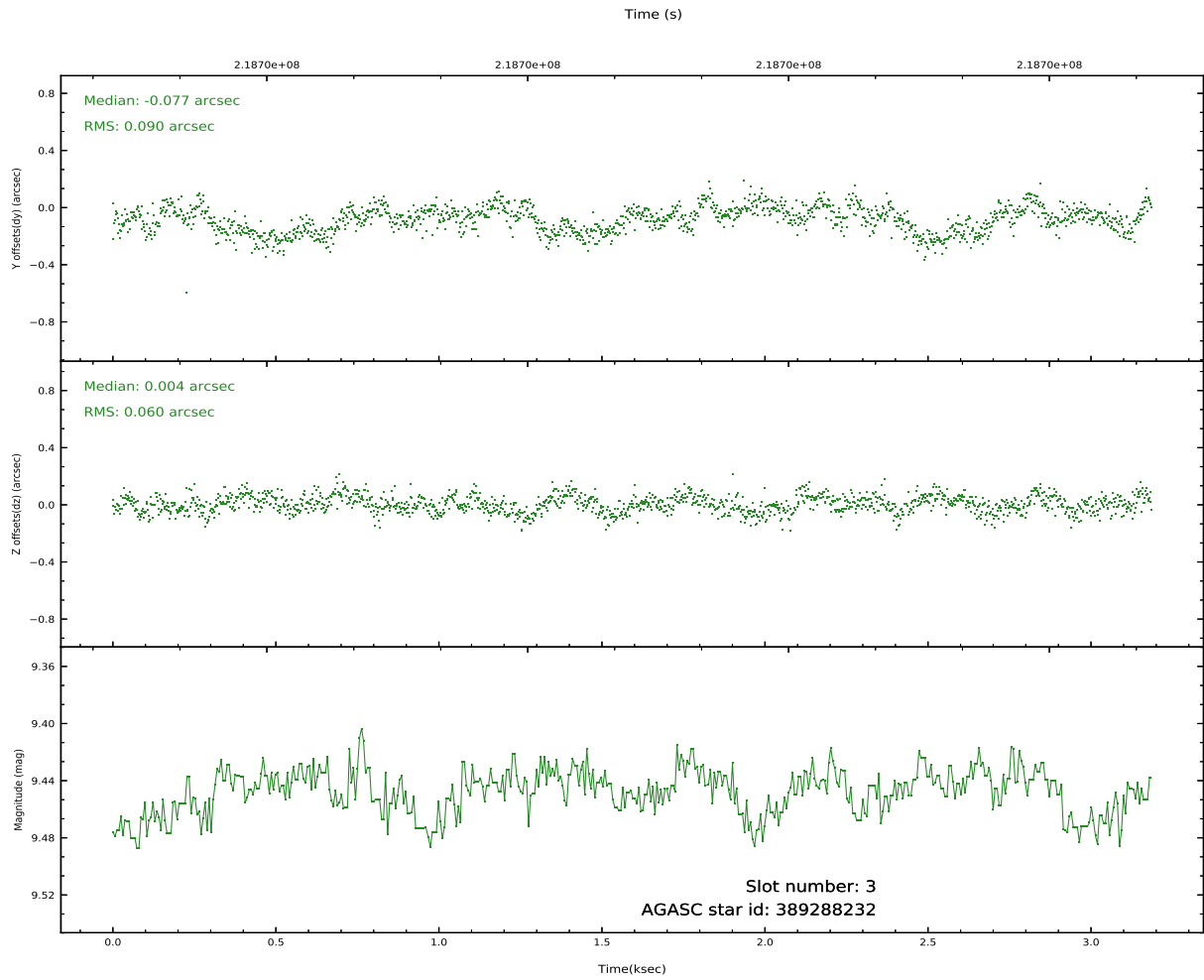
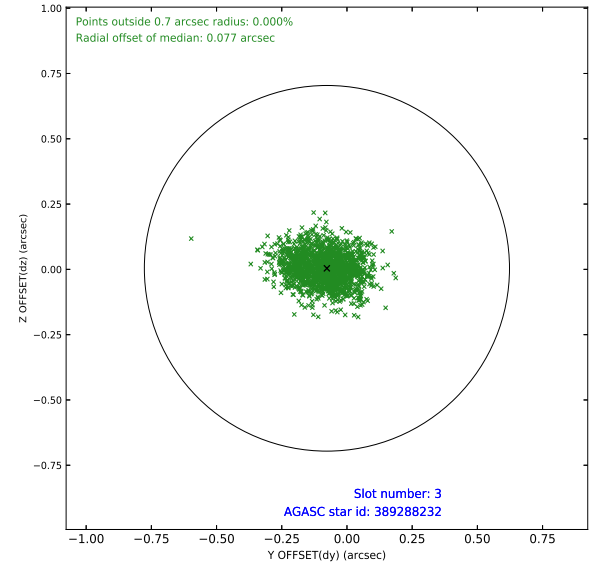
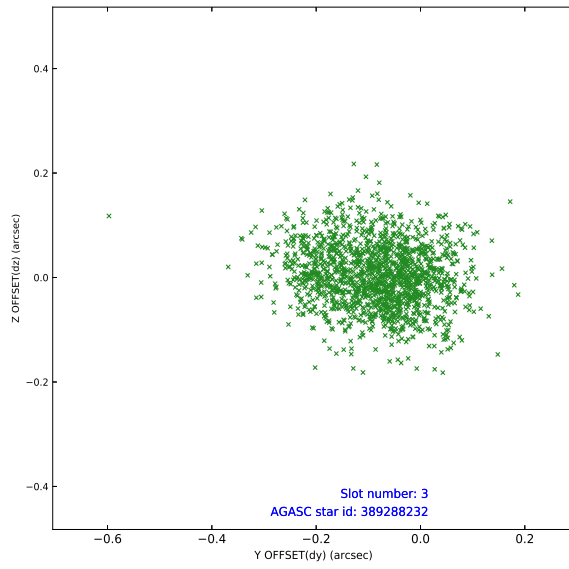


Slot Statistics

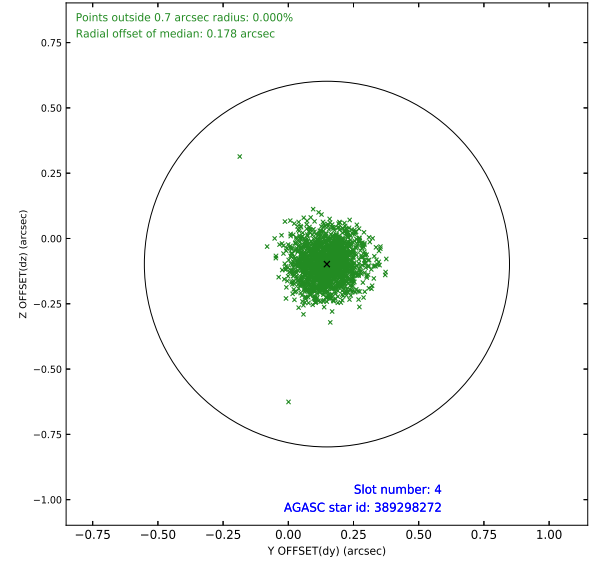
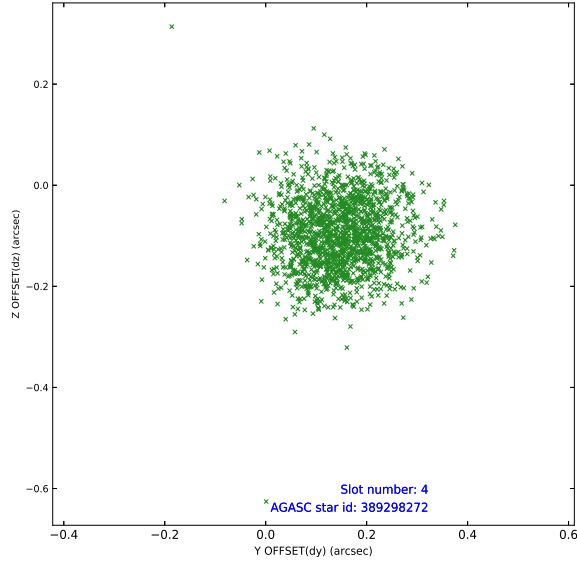
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	778	1.000	-0.080	-0.063	0.006	0.011	0.000000	0.000000	-759.93	-1731
1	FID		ACIS-S-4	7.20	778	1.000	0.154	0.056	0.005	0.010	0.000000	0.000000	2152.61	175
2	FID		ACIS-S-5	7.23	778	1.000	-0.105	0.017	0.006	0.011	0.000000	0.000000	-1810.30	171
3	GUIDE	used	389288232	9.45	1552	1.000	-0.077	0.004	0.116	0.184	114.829465	44.567912	2221.80	926
4	GUIDE	used	389298272	9.41	1553	1.000	0.148	-0.098	0.107	0.168	114.980828	43.324126	-2155.51	1941
5	GUIDE	used	389420080	7.14	1554	1.000	-0.048	-0.008	0.054	0.083	115.946742	43.794648	-1308.71	-972
6	GUIDE	used	389422952	9.67	1553	1.000	-0.062	0.080	0.112	0.171	115.880705	44.517623	1226.97	-1588
7	GUIDE	used	389428384	8.72	1554	1.000	0.045	0.016	0.078	0.121	115.866298	43.886583	-928.37	-874

2.4 Star Slots

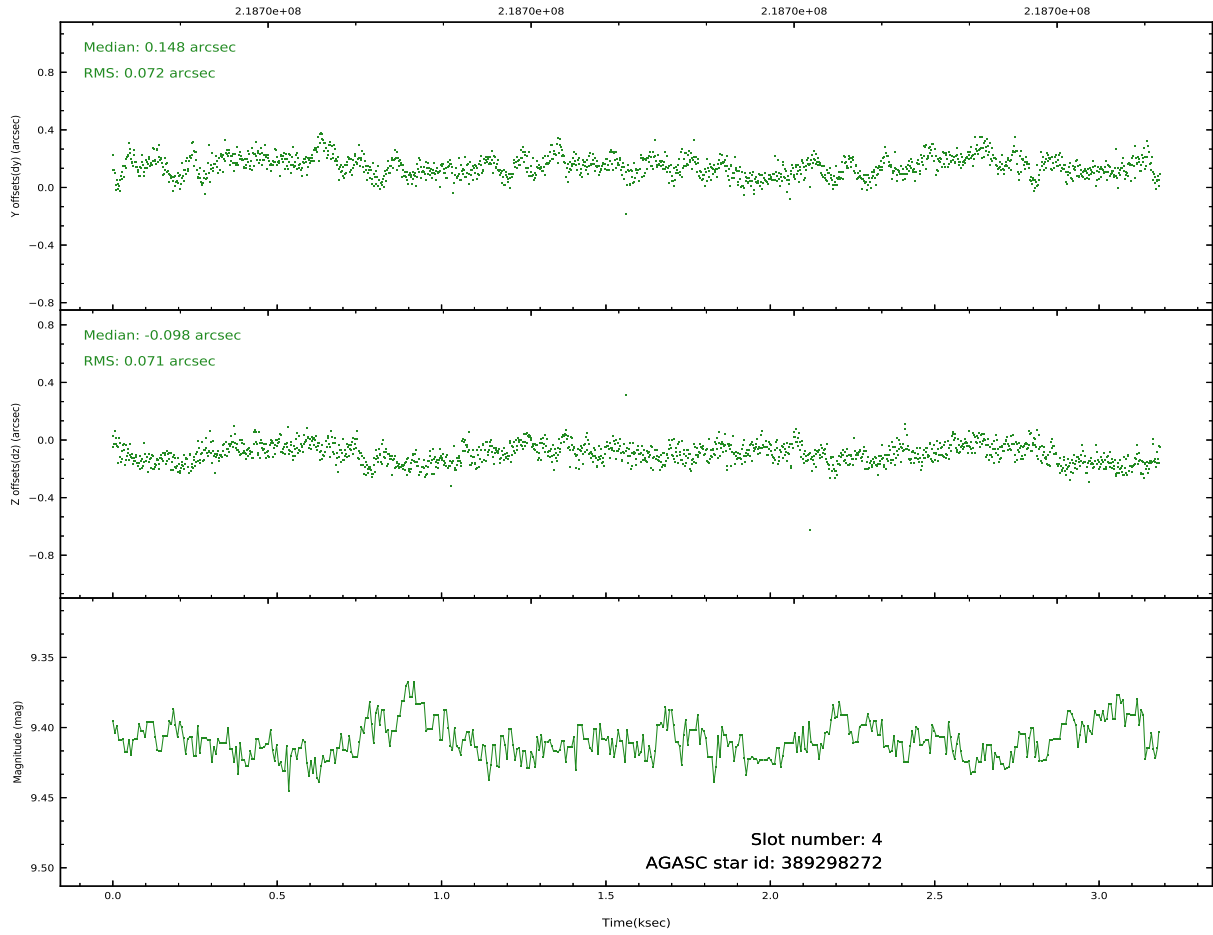
2.4.1 Slot 3



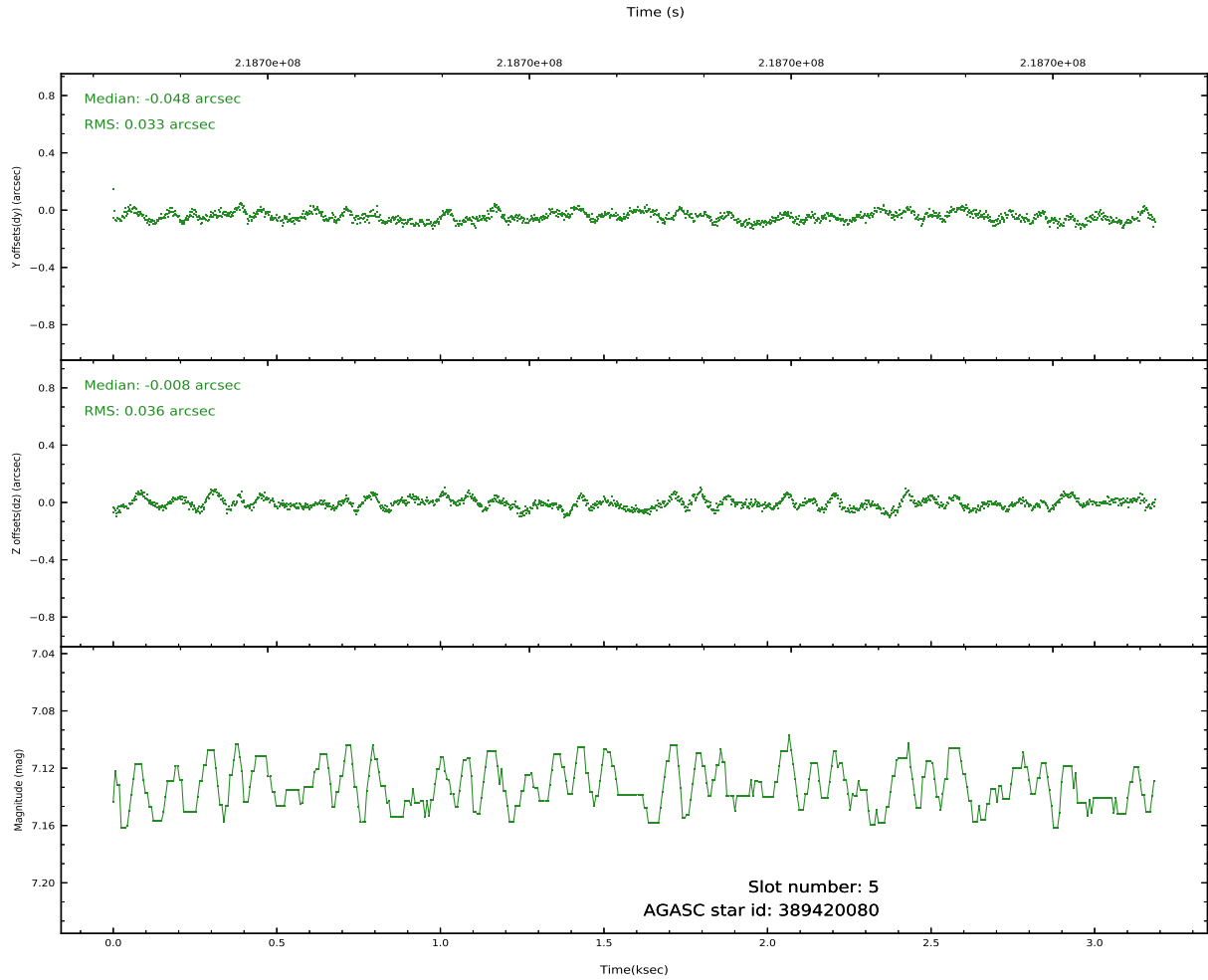
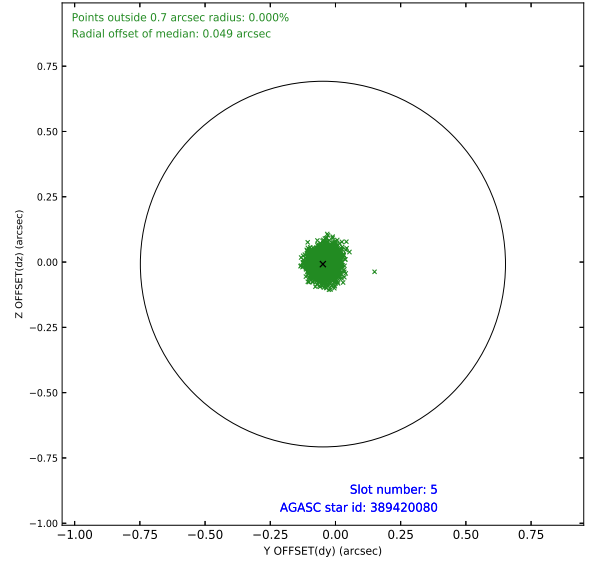
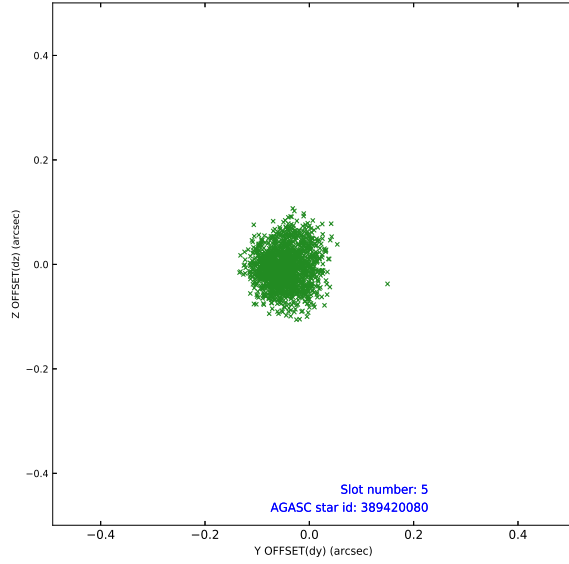
2.4.2 Slot 4



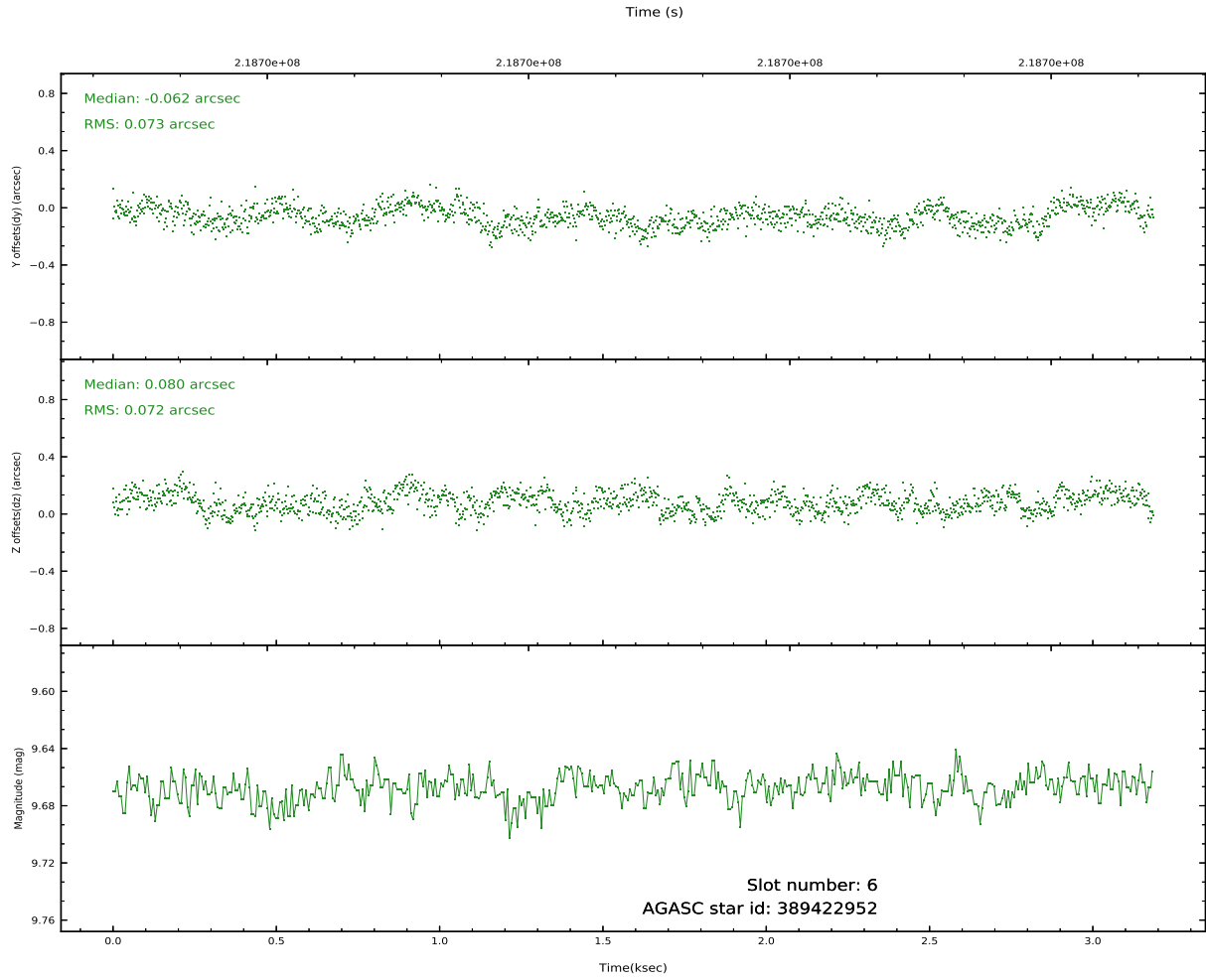
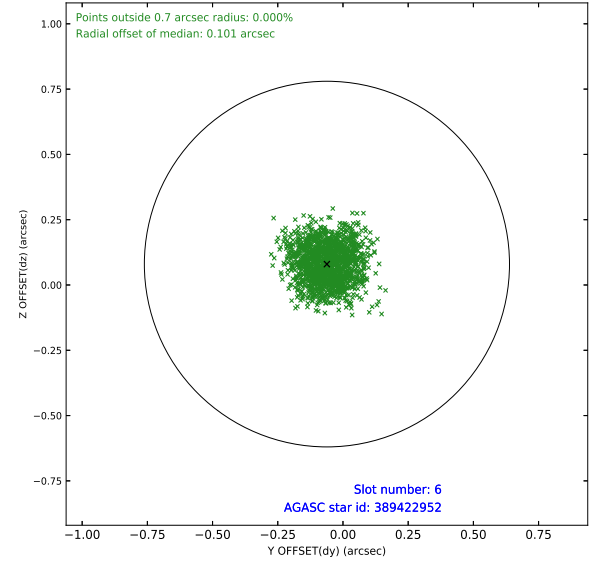
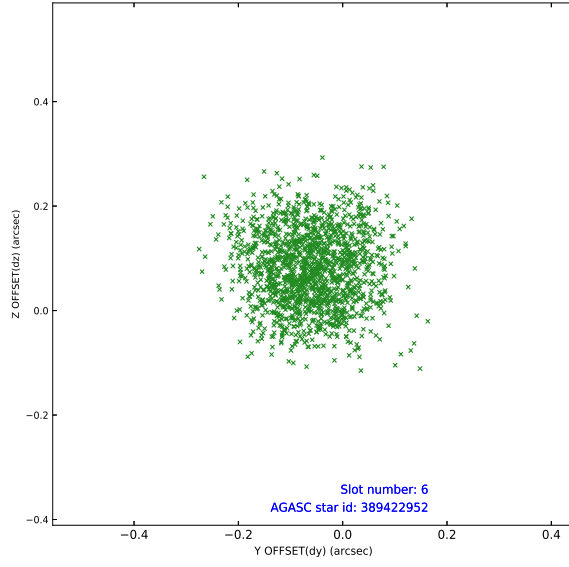
Time (s)



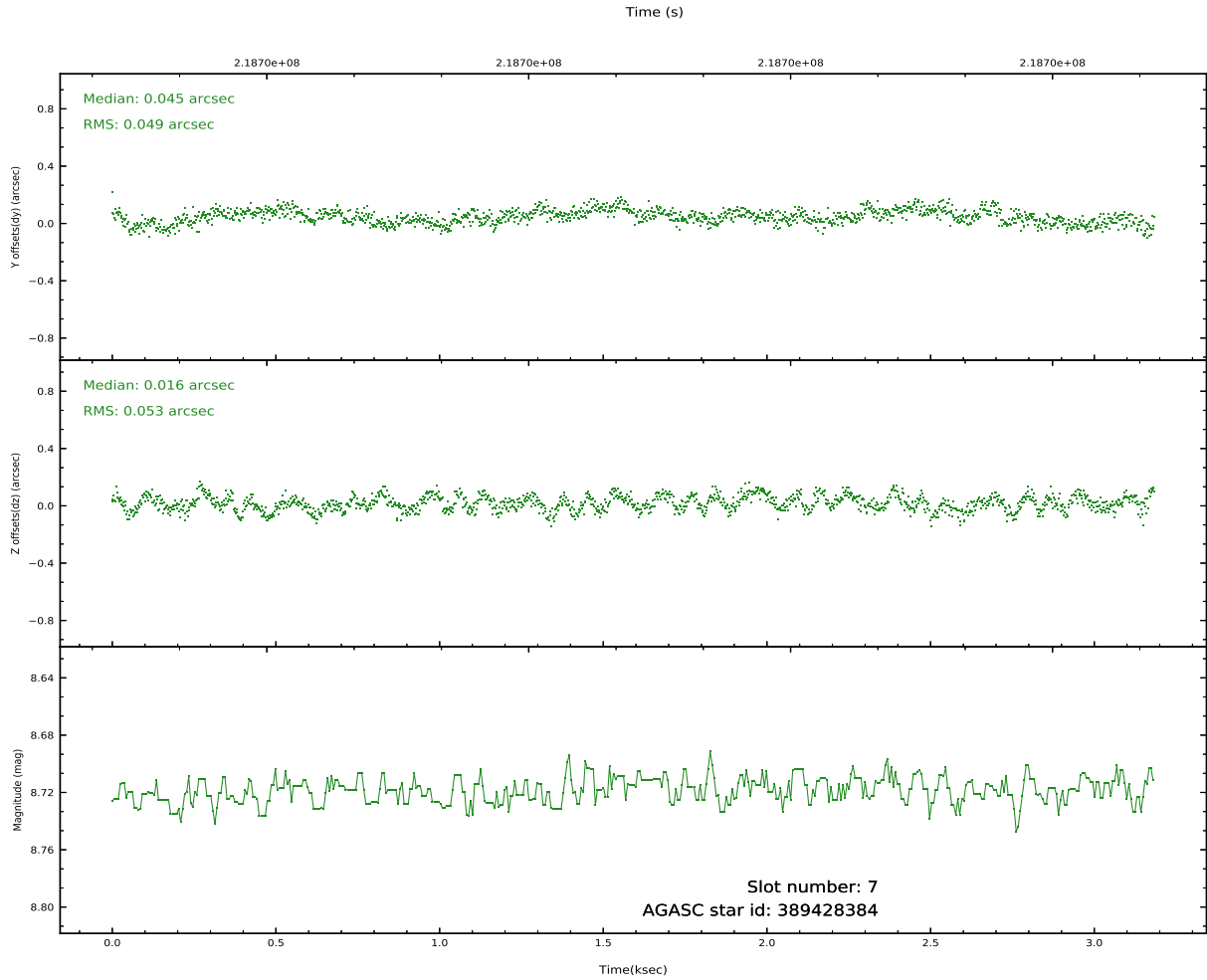
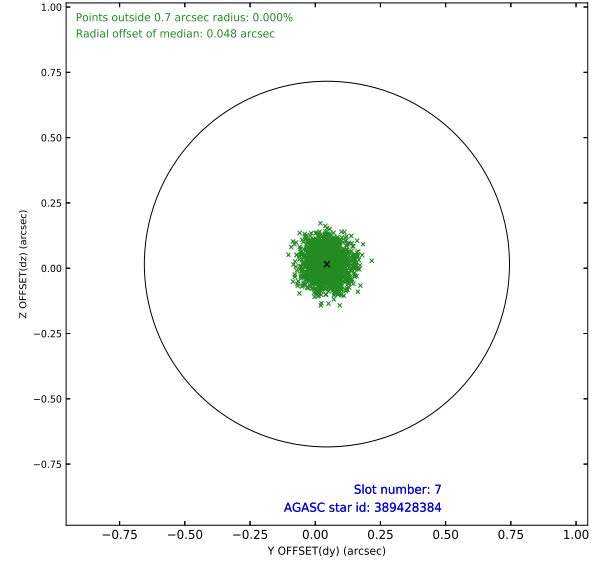
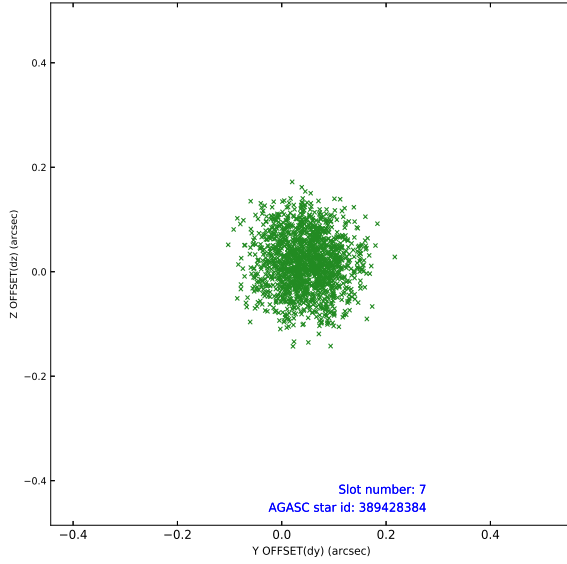
2.4.3 Slot 5



2.4.4 Slot 6

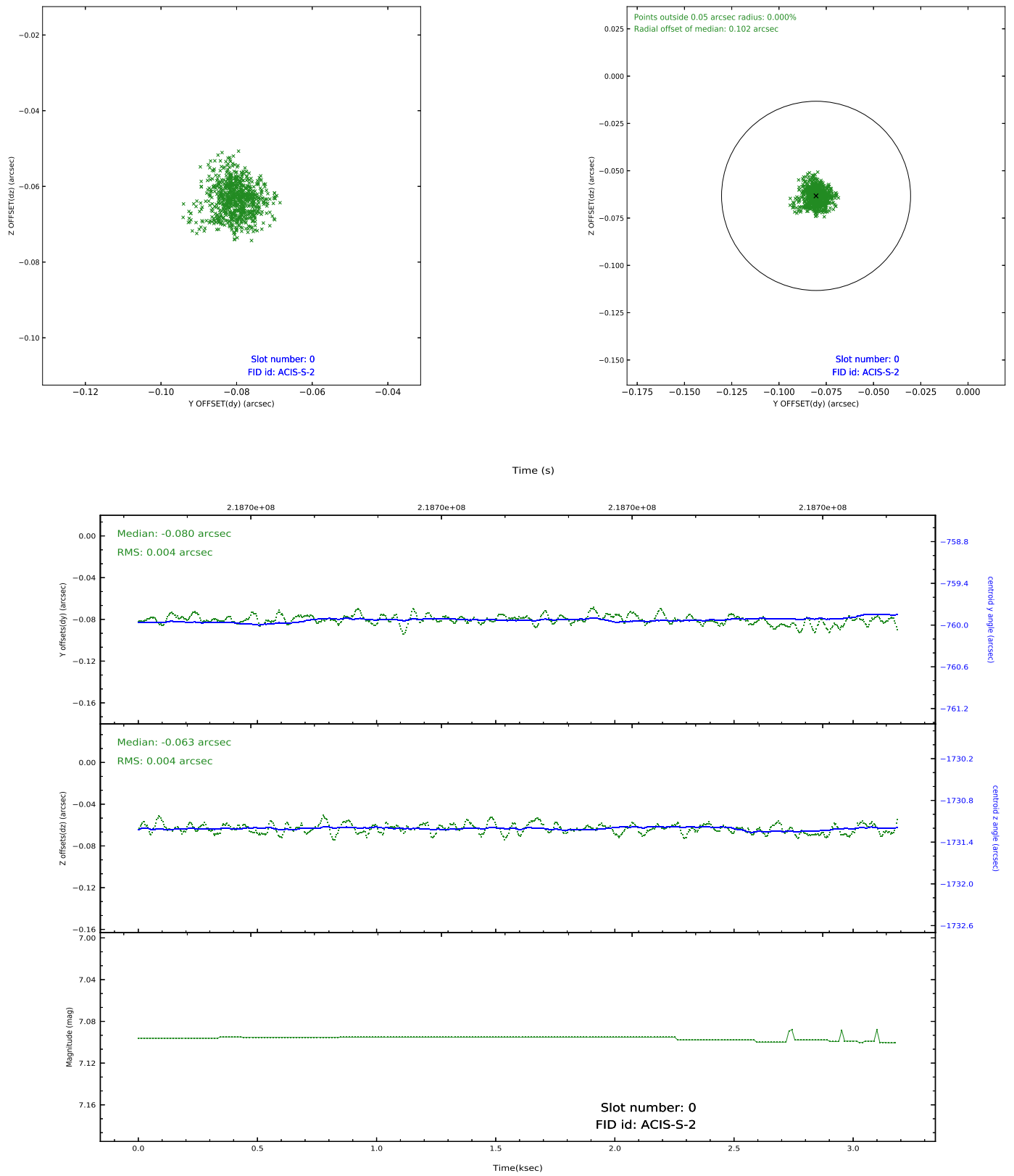


2.4.5 Slot 7

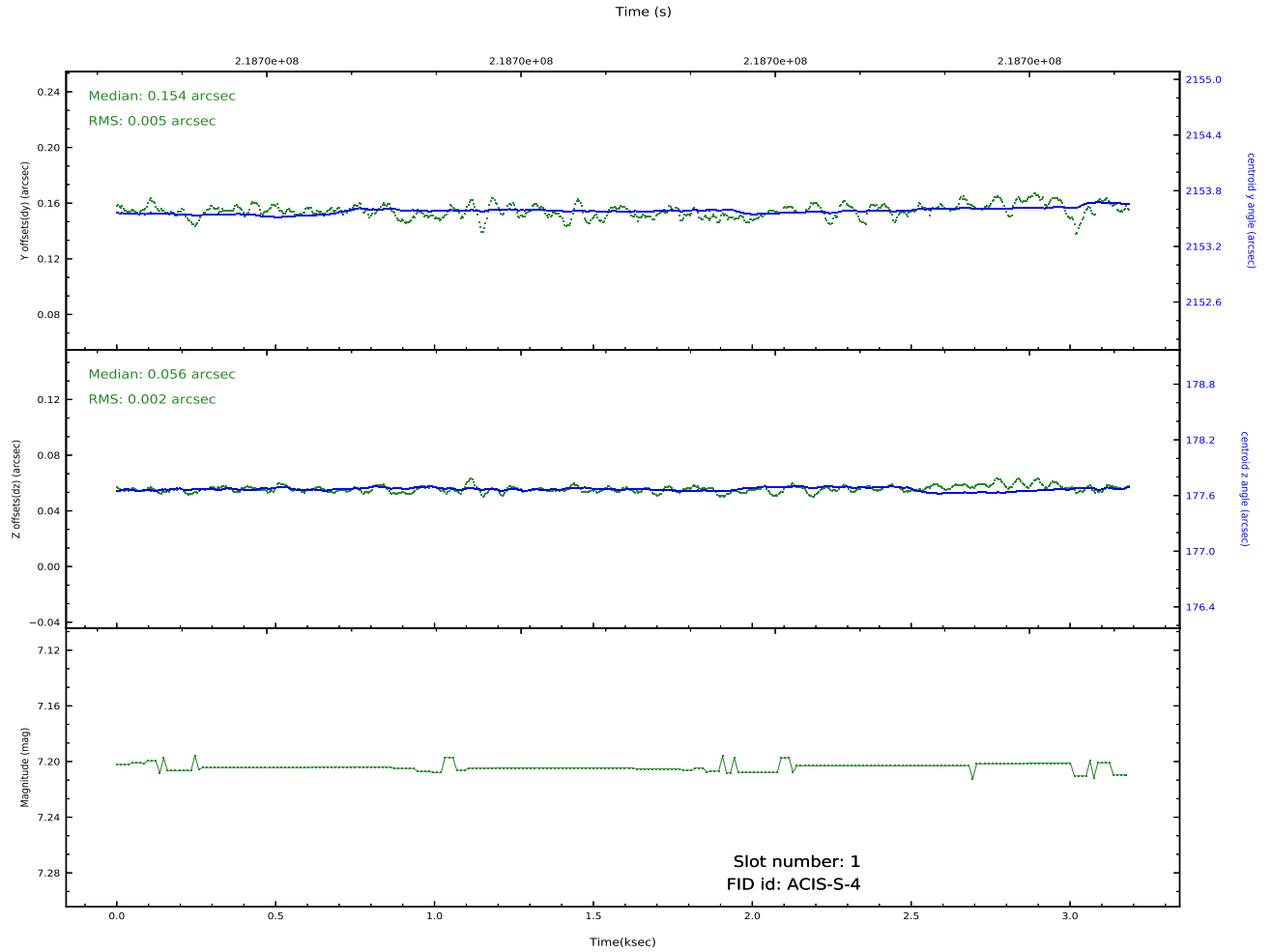
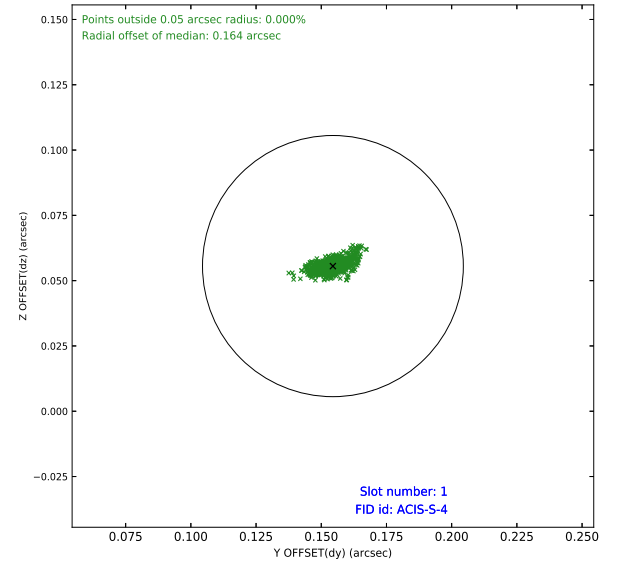
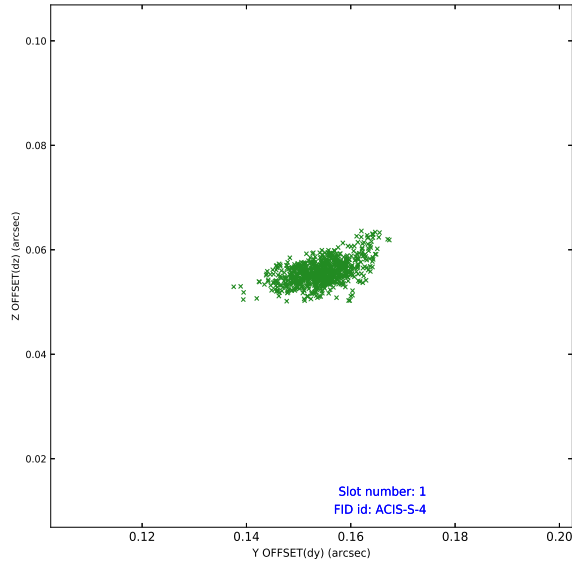


2.5 FID Slots

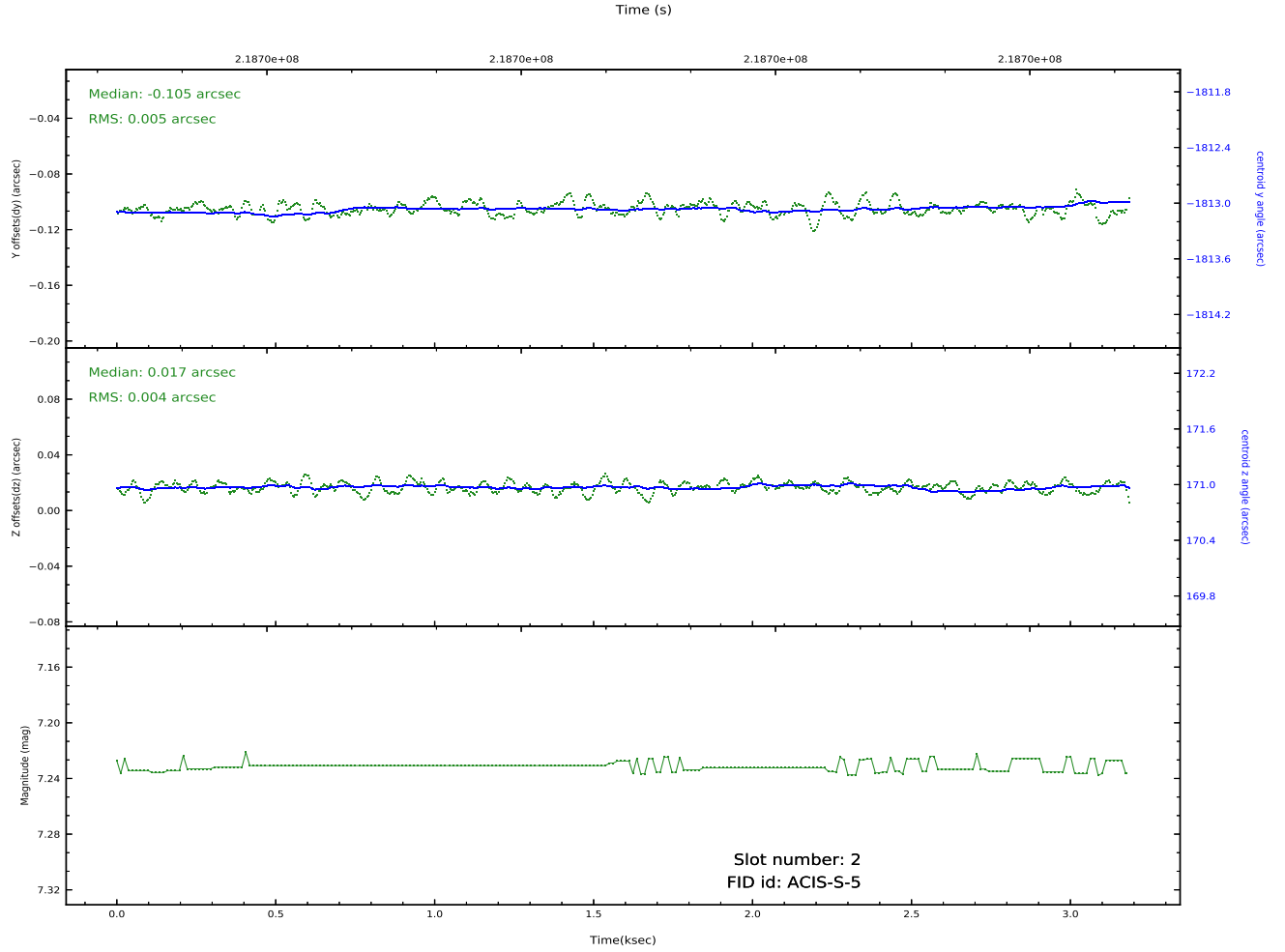
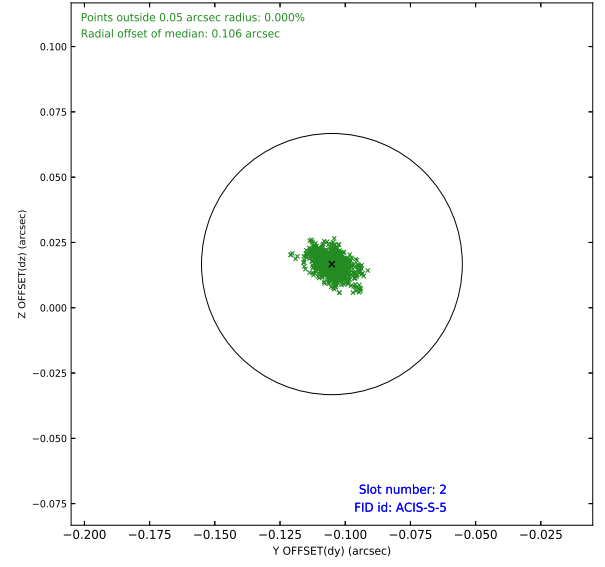
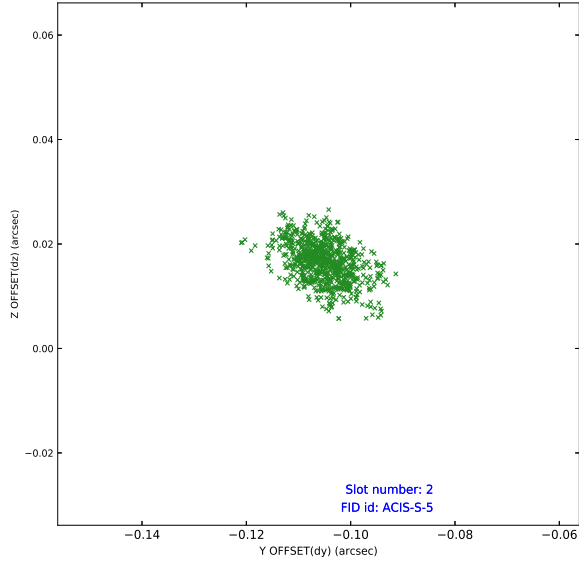
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.1824

A.2 Comments