

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19518 - L2 Version 2
Chandra X-Ray Center

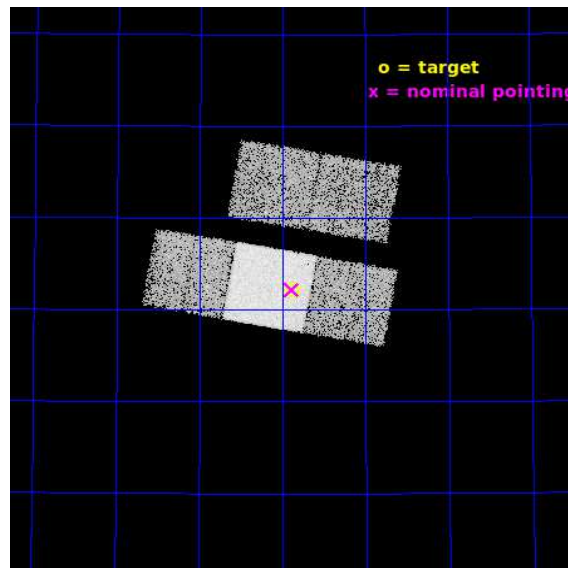
L2 Processing Date : Oct 24 2020

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

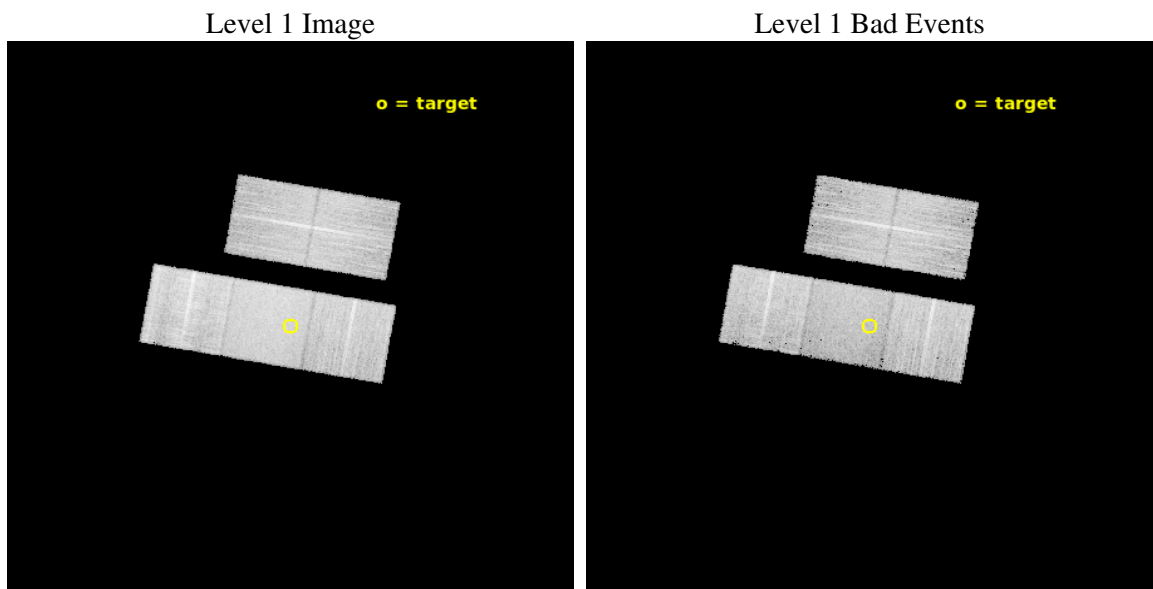
seq_num	703366	Sequence number
obs_id	19518	Observation id
title	Understanding AGN Accretion State Transitions via a Sample of Confirmed Changing-Look Quasars	Proposal title
observer	John Ruan	Principal investigator
object	SDSS J101152.98+544206.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	152.970833	Observer's specified target RA [deg]
dec_targ	54.701778	Observer's specified target Dec [deg]
ra_nom	152.97181679838	Nominal RA [deg]
dec_nom	54.703326939731	Nominal Dec [deg]
roll_nom	190.15284120635	Nominal Roll [deg]
revision	2	Processing version of data
ontime	11054.600085139	Sum of GTIs [s]
livetime	10910.163596749	Livetime [s]
ontime2	11051.459074736	Sum of GTIs [s]
ontime3	11051.459074974	Sum of GTIs [s]
ontime6	11054.600085139	Sum of GTIs [s]
ontime7	11054.600085139	Sum of GTIs [s]
ontime8	11054.600085139	Sum of GTIs [s]
l2events	76131	Number of level 2 events



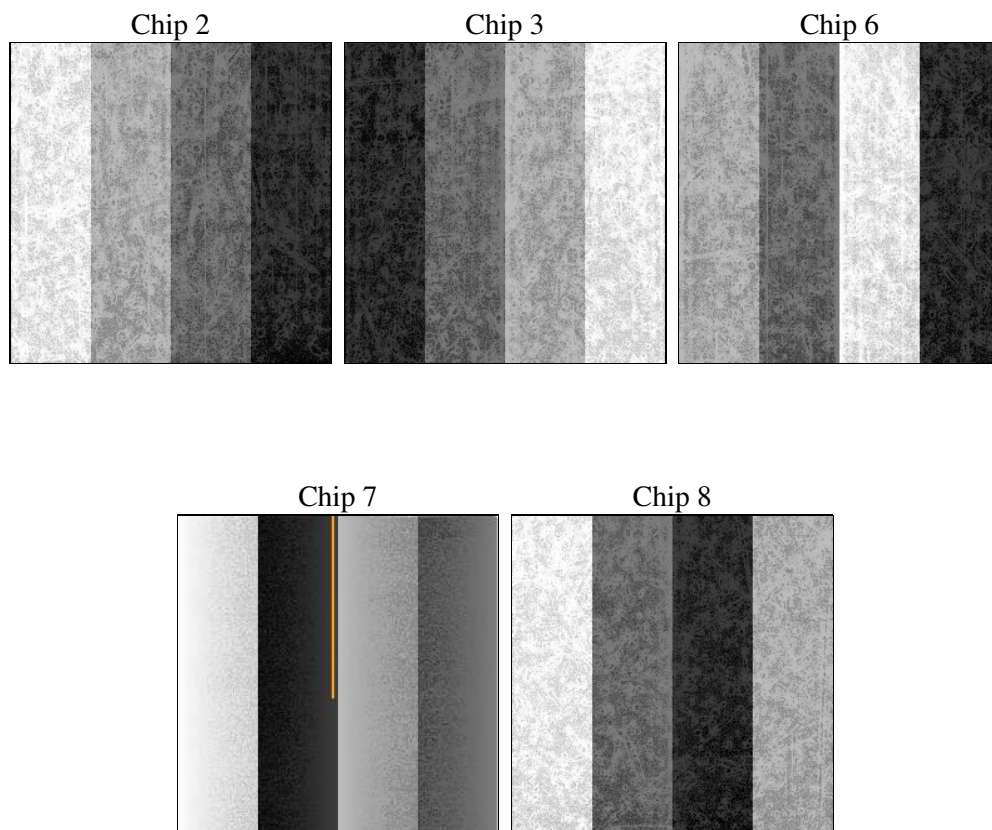
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	11054.600085139	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	11051.459074736	Sum of GTIs [s]
date	2020-10-25T00:19:36	Date and time of file creation	ontime3	11051.459074974	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	11054.600085139	Sum of GTIs [s]
			ontime7	11054.600085139	Sum of GTIs [s]
			ontime8	11054.600085139	Sum of GTIs [s]
			l1events	464764	Number of level 1 events

2.1.4 Events

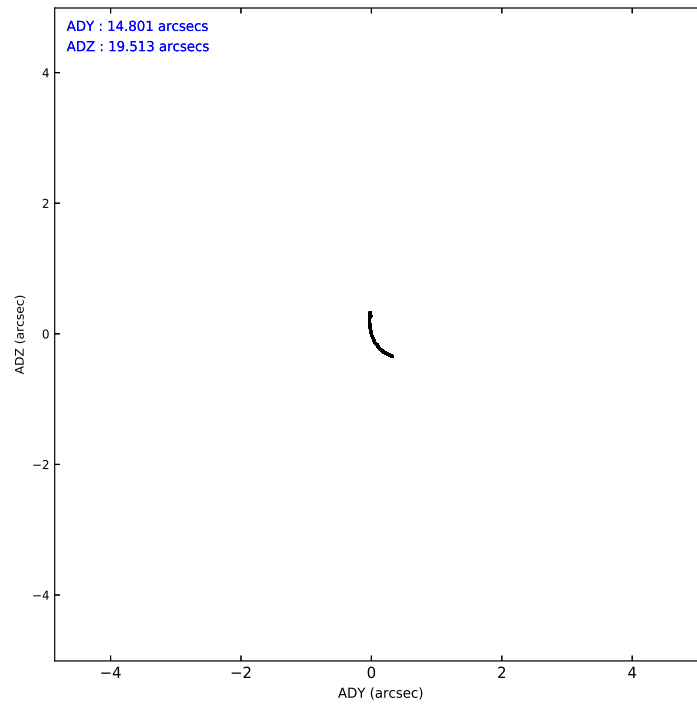
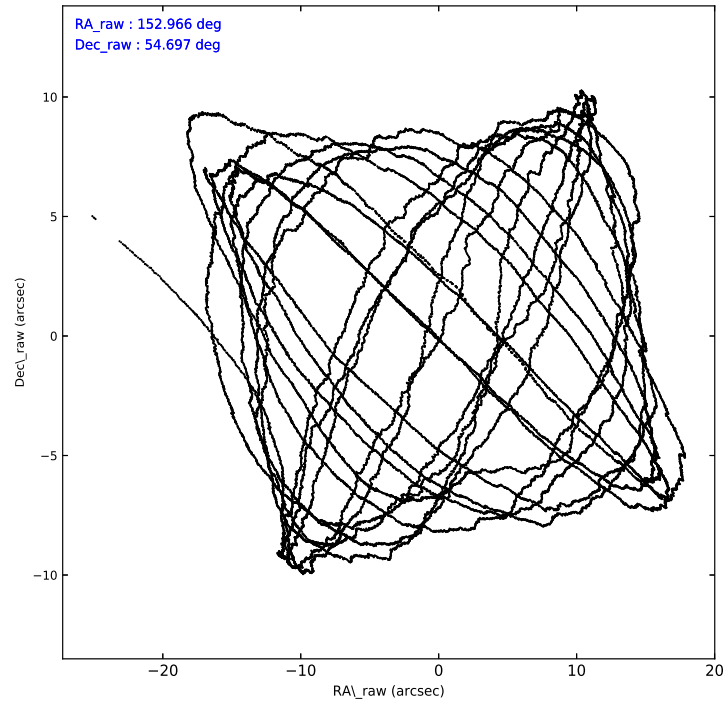
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	84089	78088	86730	106192	109665
rejected events	75461	69822	77329	60152	80081
rejected %	89%	89%	89%	56%	73%

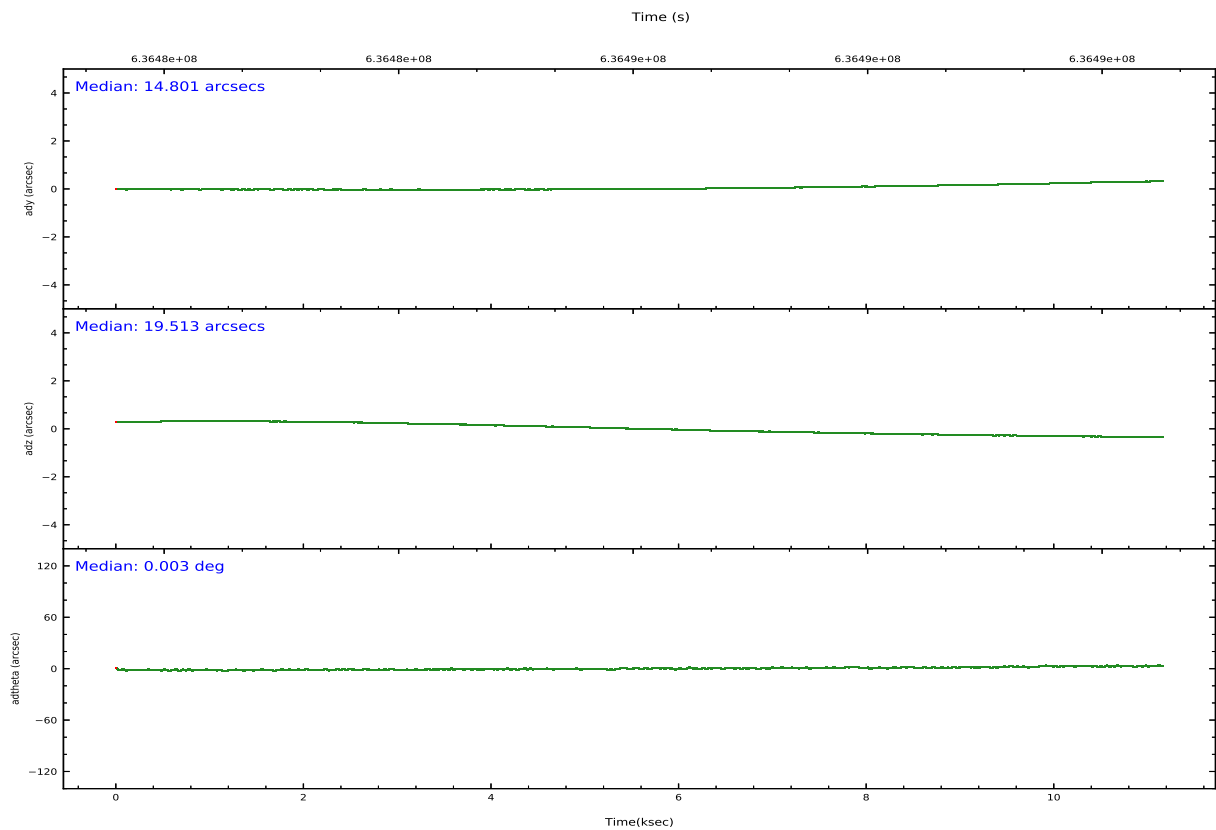
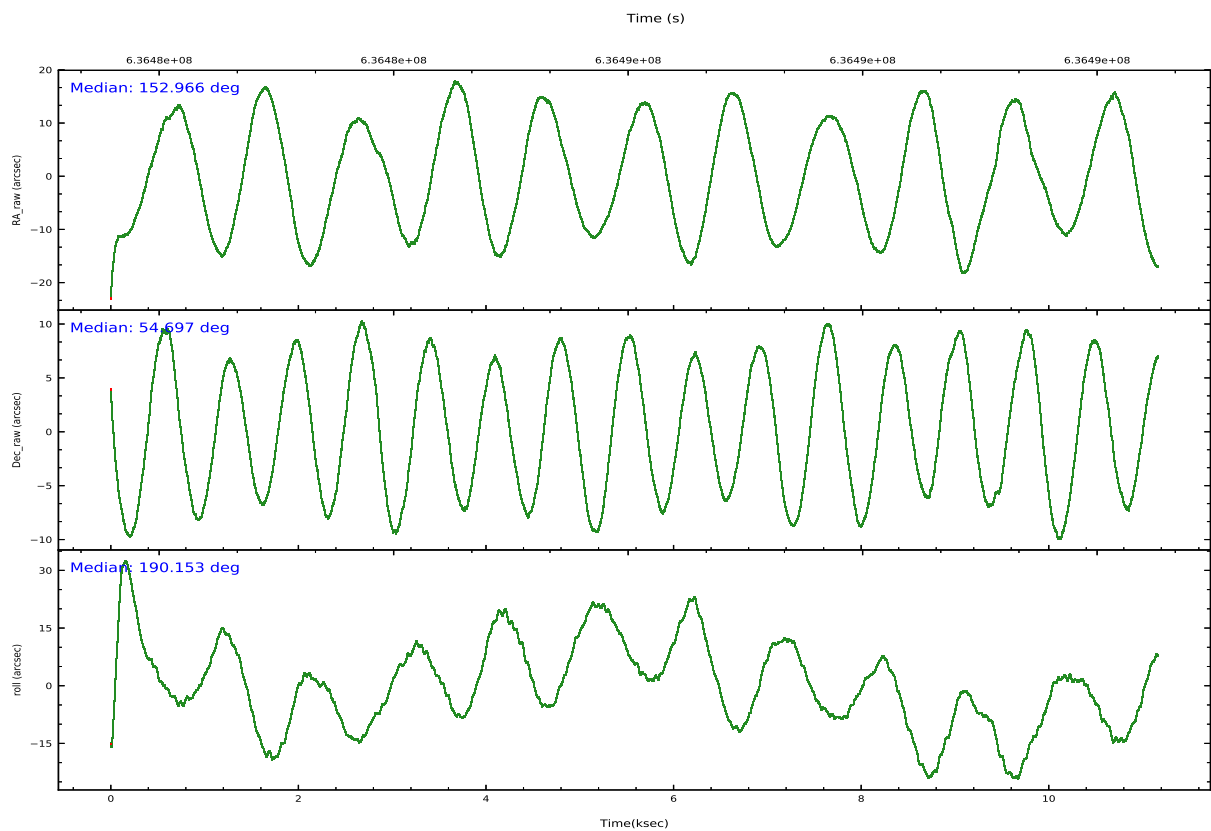
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3058	2808	3150	3858	8297
	3%	3%	3%	3%	7%
grade 1 events	46	60	45	144	88
	0%	0%	0%	0%	0%
grade 2 events	2077	1853	2239	9983	7223
	2%	2%	2%	9%	6%
grade 3 events	927	871	869	3731	3038
	1%	1%	1%	3%	2%
grade 4 events	918	958	870	3620	2831
	1%	1%	1%	3%	2%
grade 5 events	3213	3951	3896	10672	5772
	3%	5%	4%	10%	5%
grade 6 events	1652	1777	2274	24864	8196
	1%	2%	2%	23%	7%
grade 7 events	72198	65810	73387	49320	74220
	85%	84%	84%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23678	ACIS-23678	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	153.002082	152.97181679838	CCD I2 on	O1	Y
[deg] Pointing Dec	54.715005	54.703326939731	CCD I3 on	O2	Y
[deg] Pointing Roll	189.974498	190.15284120635	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)	636482151.184000	636480761.9408	CCD S5 on	N	N
Observation start date	2018-03-03T16:34:42	2018-03-03T16:12:41	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	636493151.184000	636493511.91655	On-chip summing requested	N	N
Observation end date	2018-03-03T19:38:02	2018-03-03T19:45:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



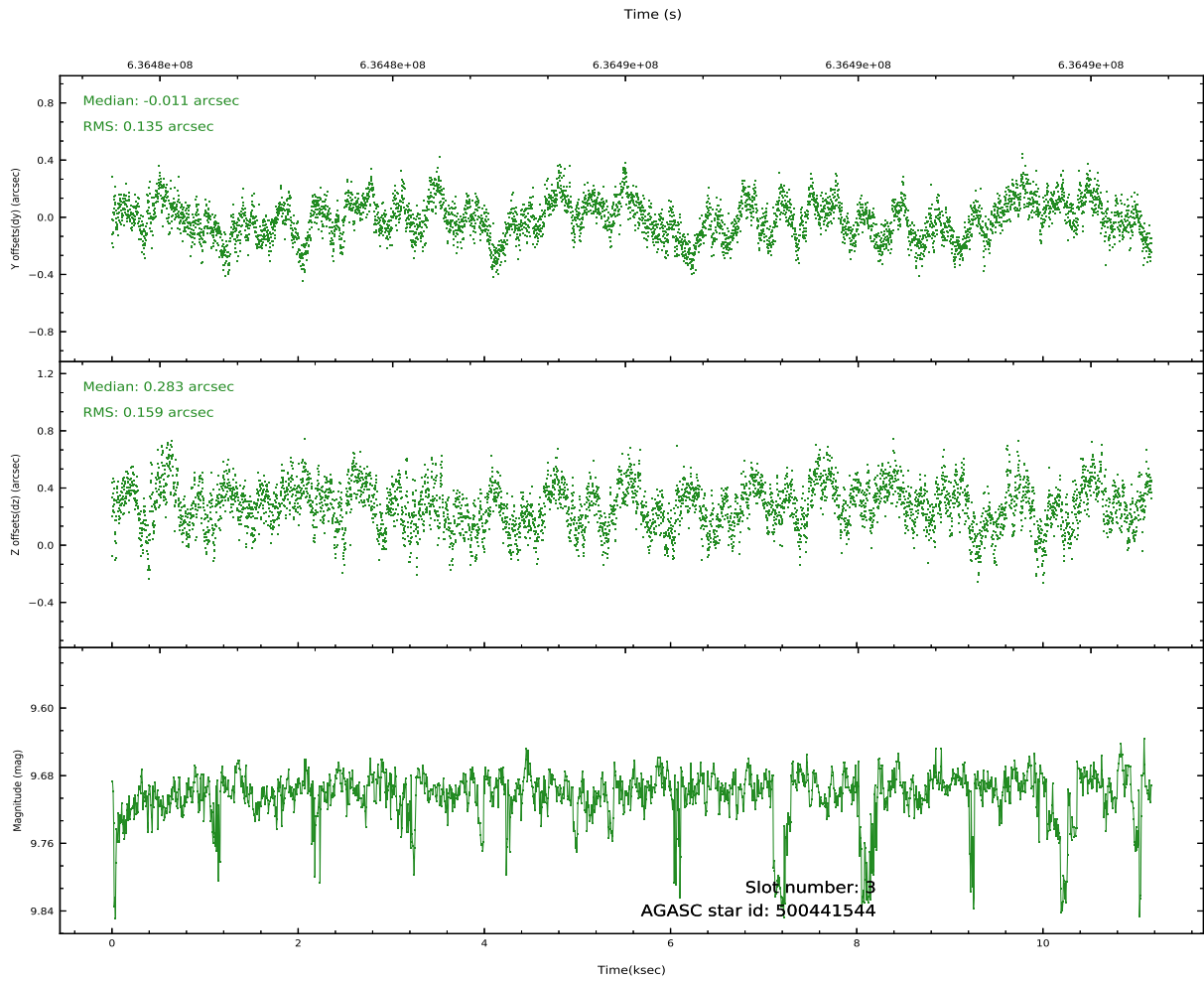
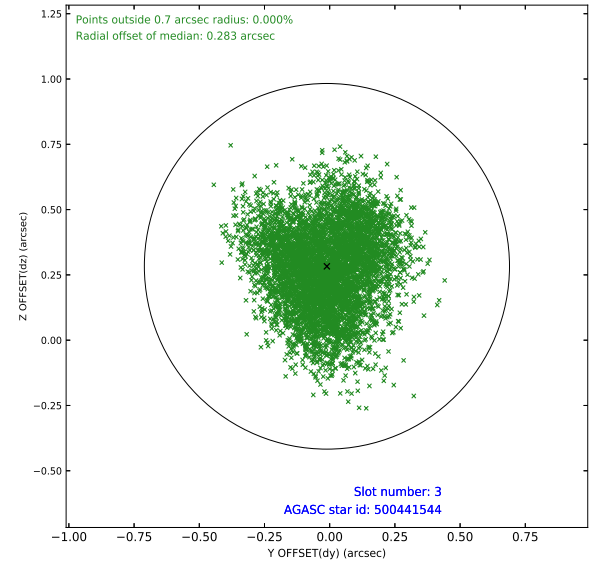
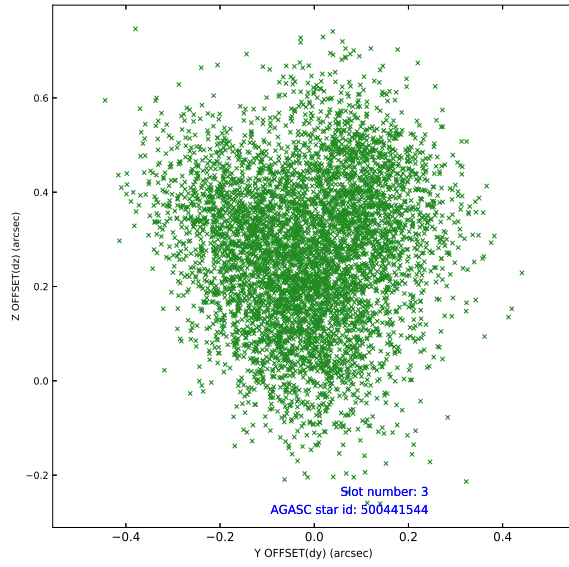


Slot Statistics

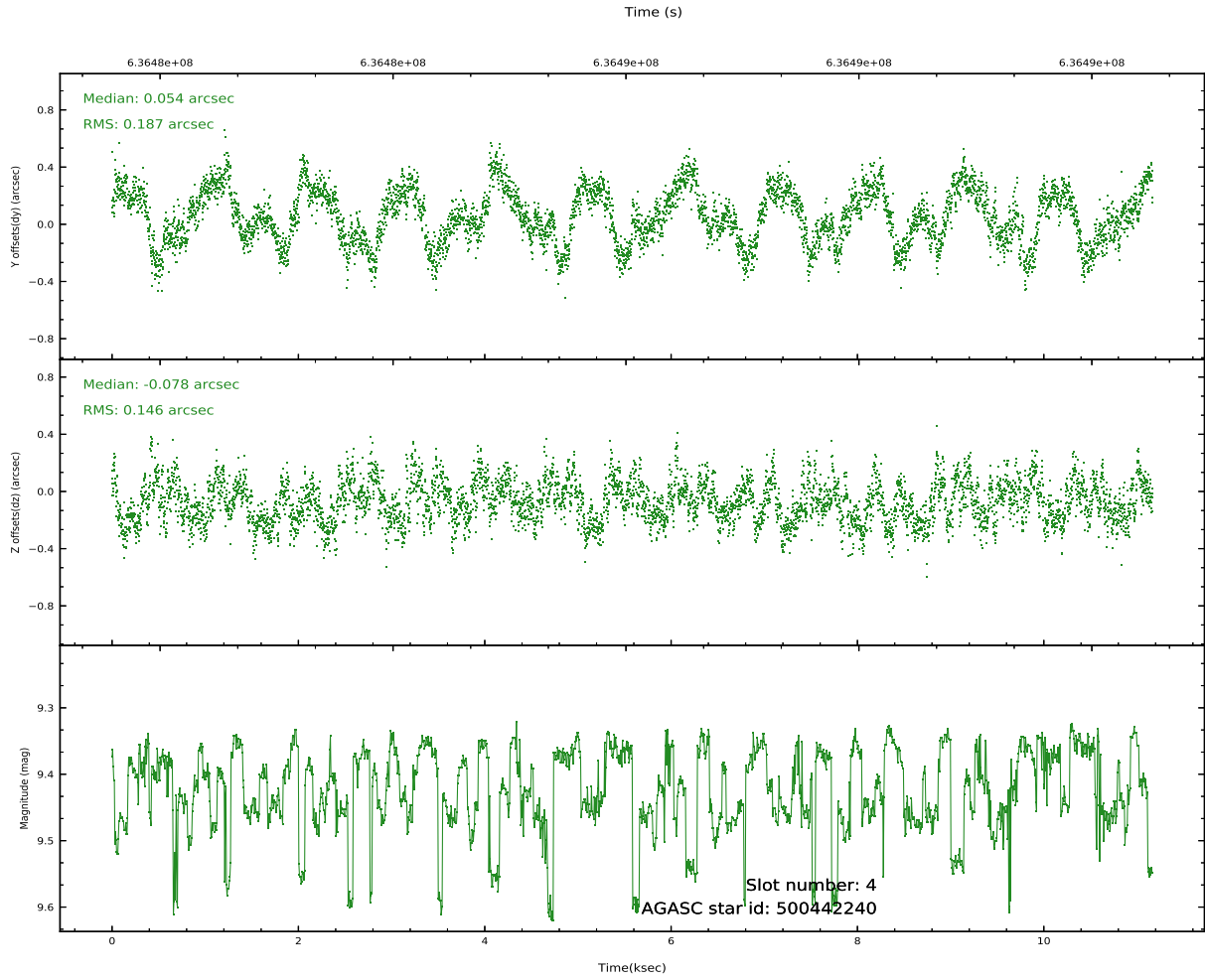
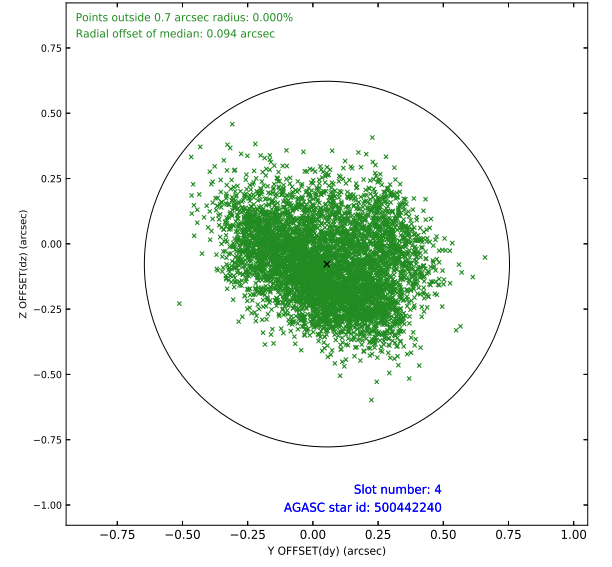
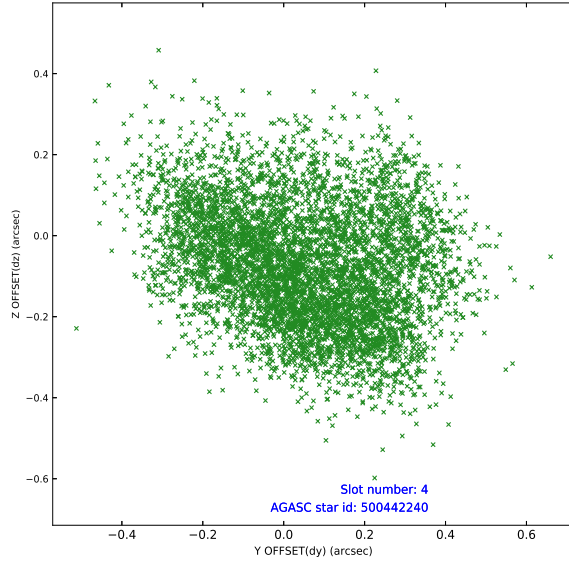
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-4	7.16	2723	1.000	0.206	0.025	0.008	0.013	0.000000	0.000000	2145.75	167
1	FID		ACIS-S-5	7.16	2724	1.000	-0.207	0.027	0.008	0.017	0.000000	0.000000	-1820.27	161
2	FID		ACIS-S-6	7.30	2724	1.000	-0.028	-0.037	0.012	0.019	0.000000	0.000000	393.36	804
3	GUIDE	used	500441544	9.70	5437	1.000	-0.011	0.283	0.228	0.352	153.655223	55.426997	-1758.75	-2299
4	GUIDE	used	500442240	9.42	5434	1.000	0.054	-0.078	0.260	0.389	152.462222	55.106002	851.82	-1583
5	GUIDE	used	500444720	8.50	5445	1.000	0.225	-0.064	0.138	0.224	152.123211	55.134146	1518.96	-1810
6	GUIDE	used	500444984	7.53	5447	1.000	-0.035	-0.023	0.138	0.234	152.409907	55.288393	838.13	-2248
7	GUIDE	used	500046400	7.80	5447	1.000	-0.230	-0.118	0.152	0.240	153.832116	54.702112	-1693.96	335

2.4 Star Slots

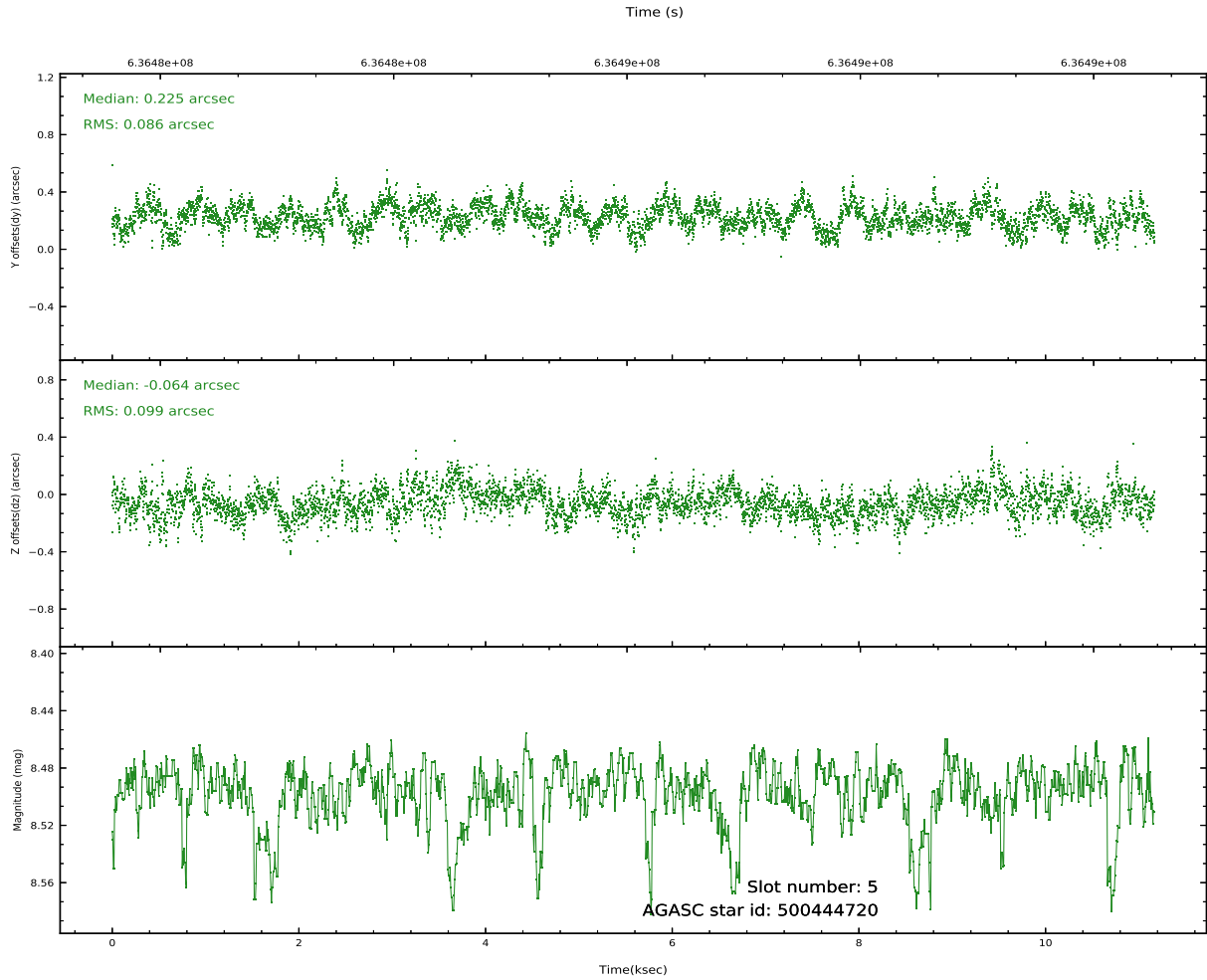
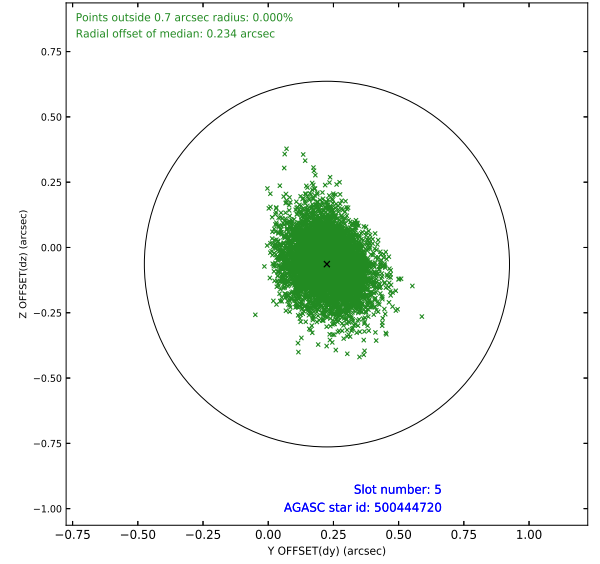
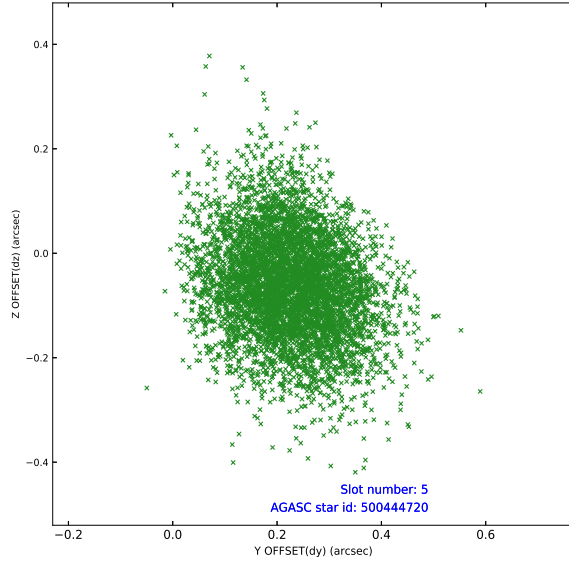
2.4.1 Slot 3



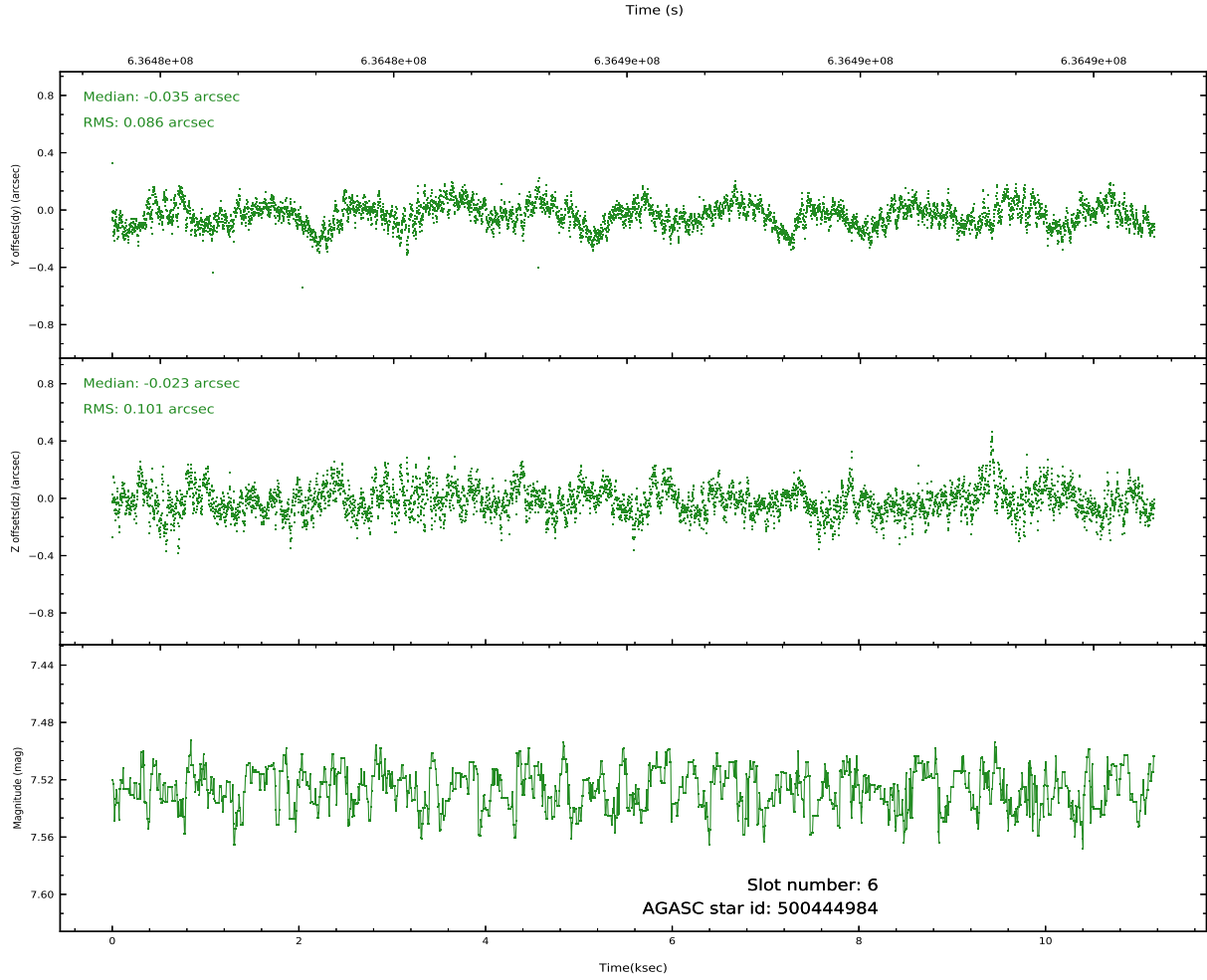
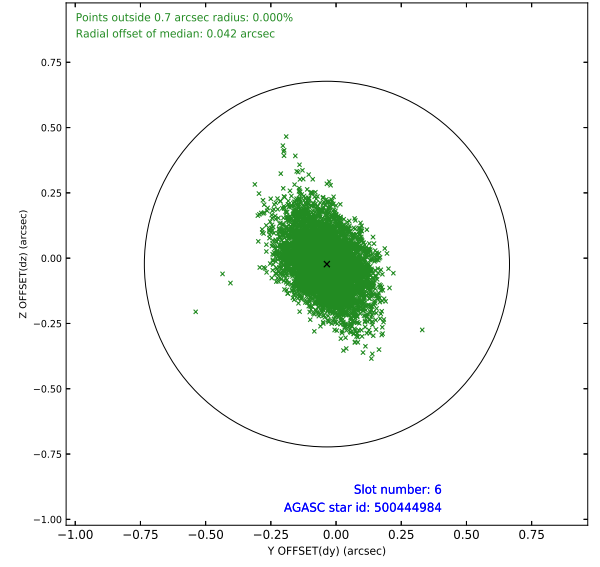
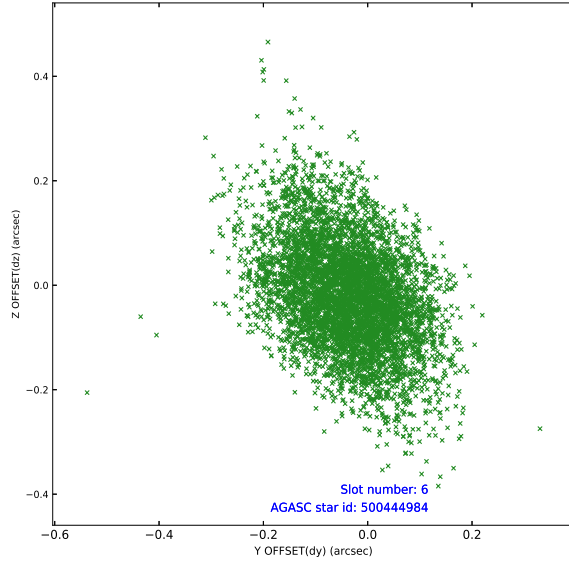
2.4.2 Slot 4



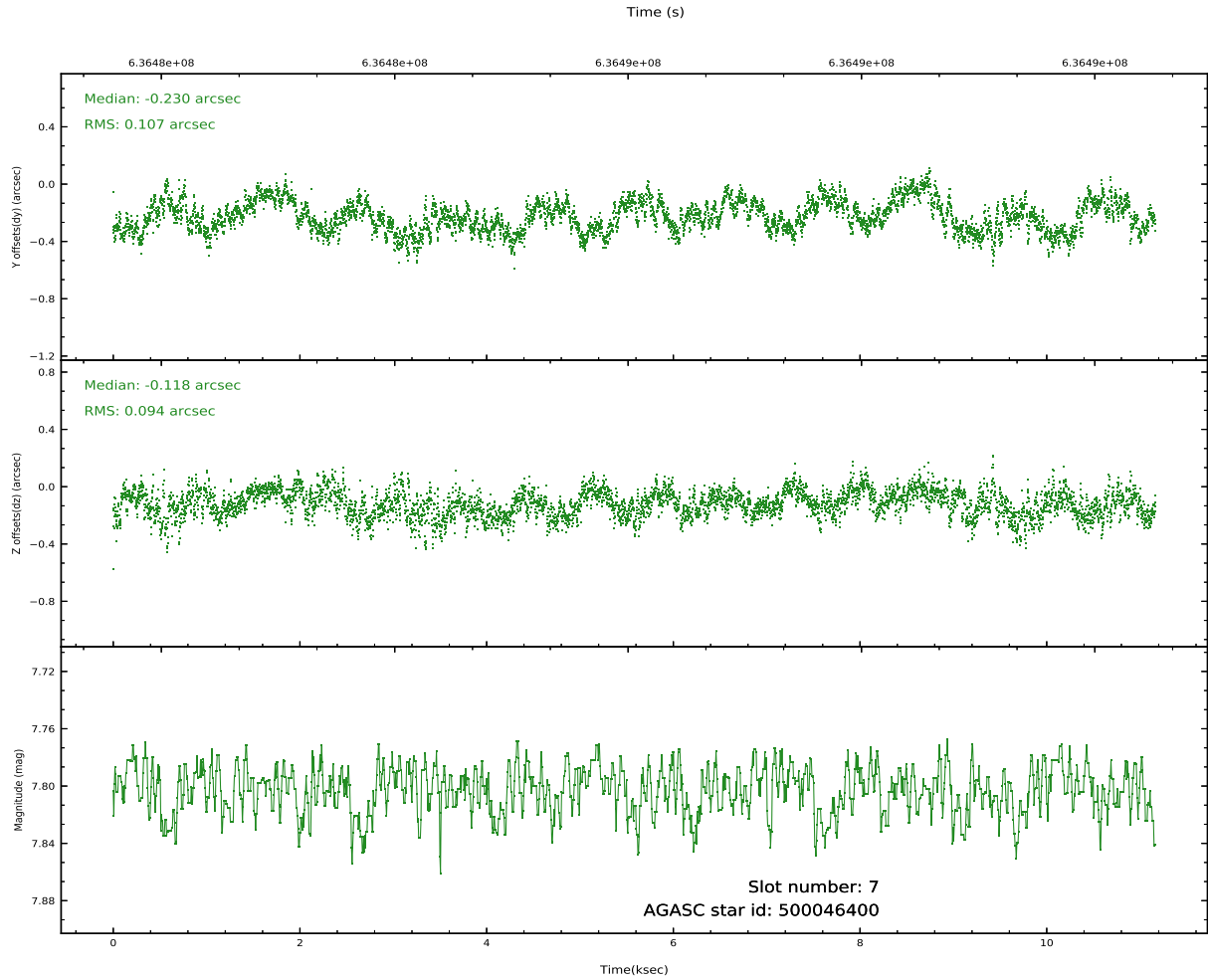
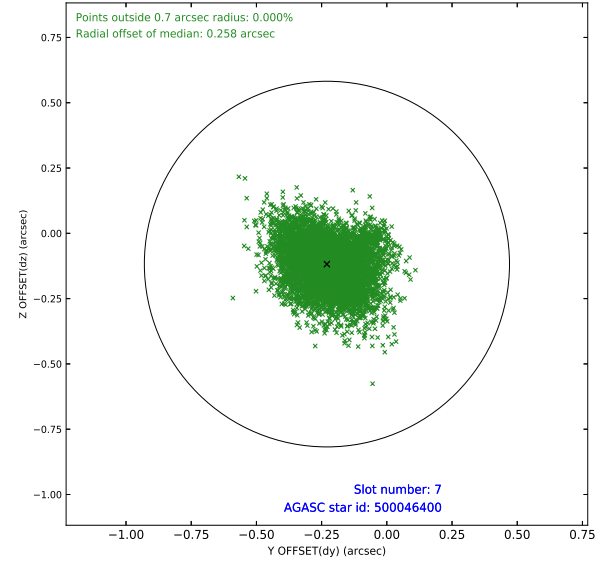
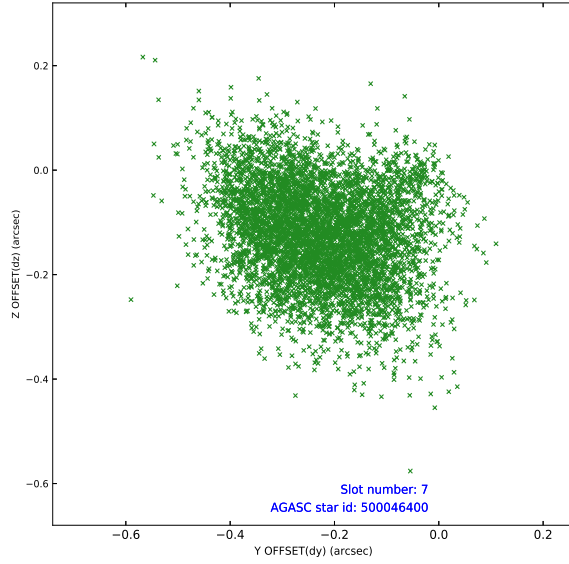
2.4.3 Slot 5



2.4.4 Slot 6

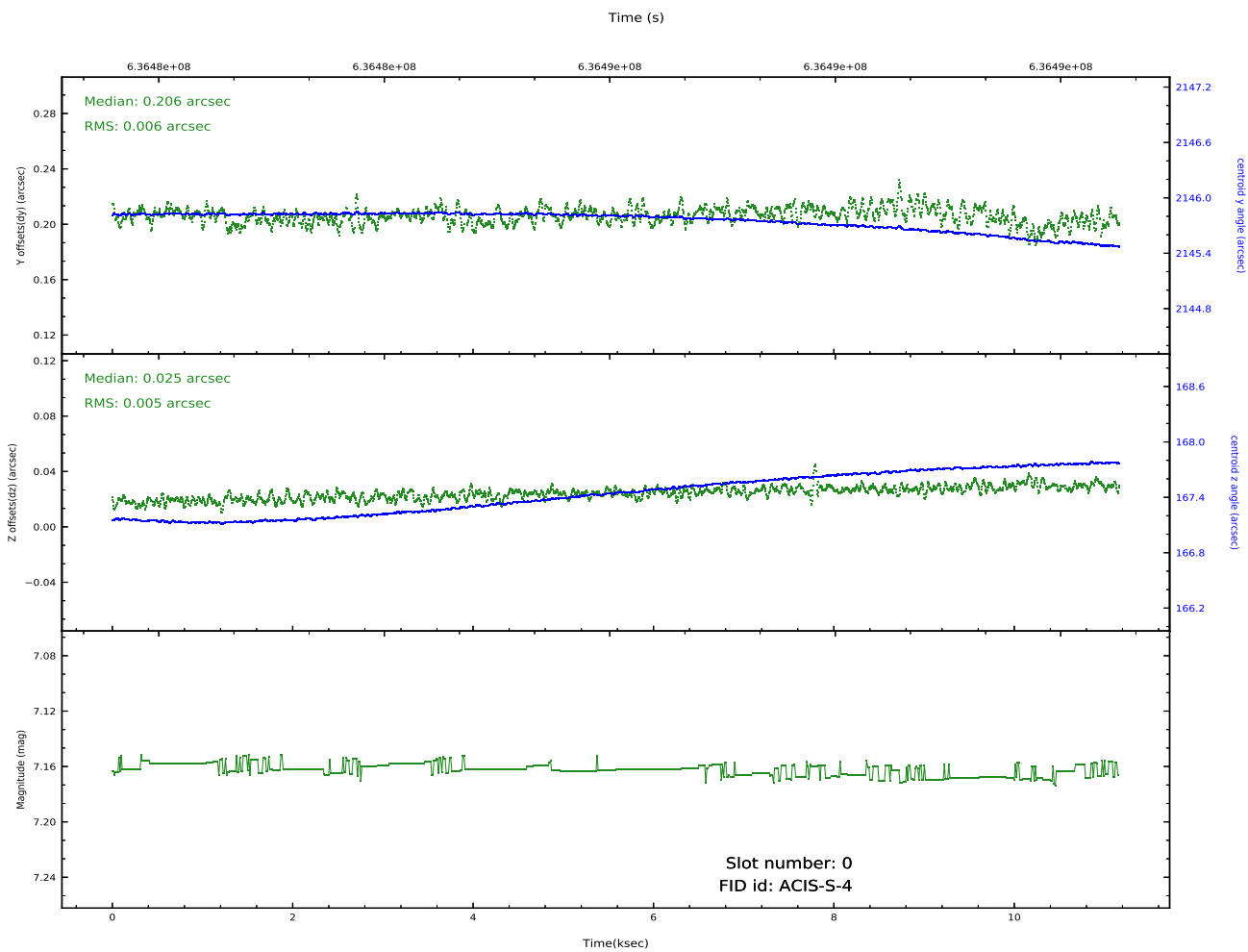
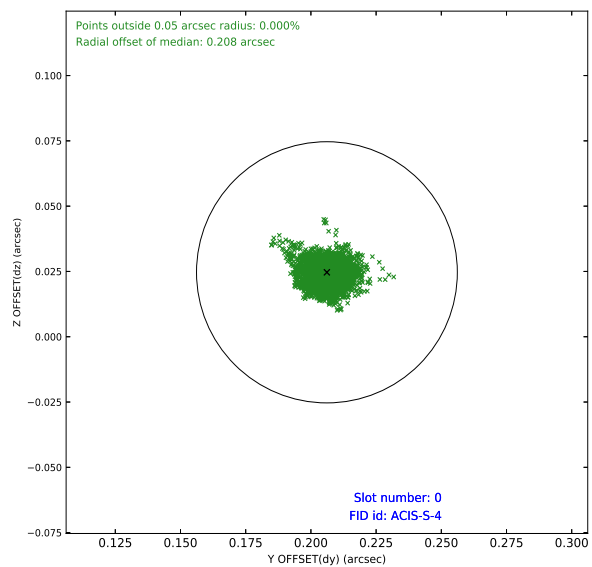
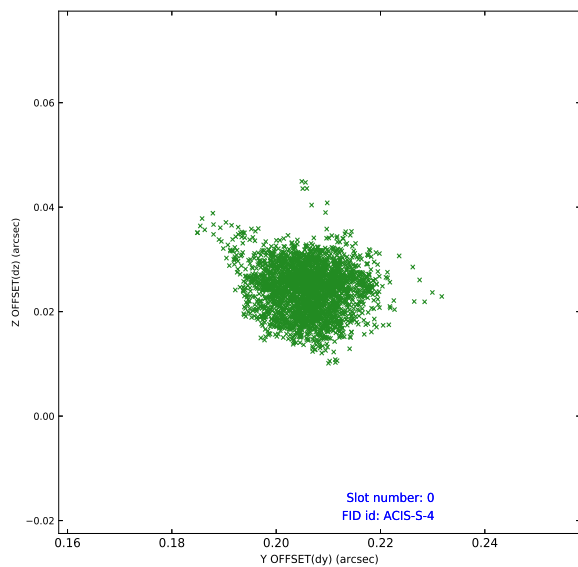


2.4.5 Slot 7

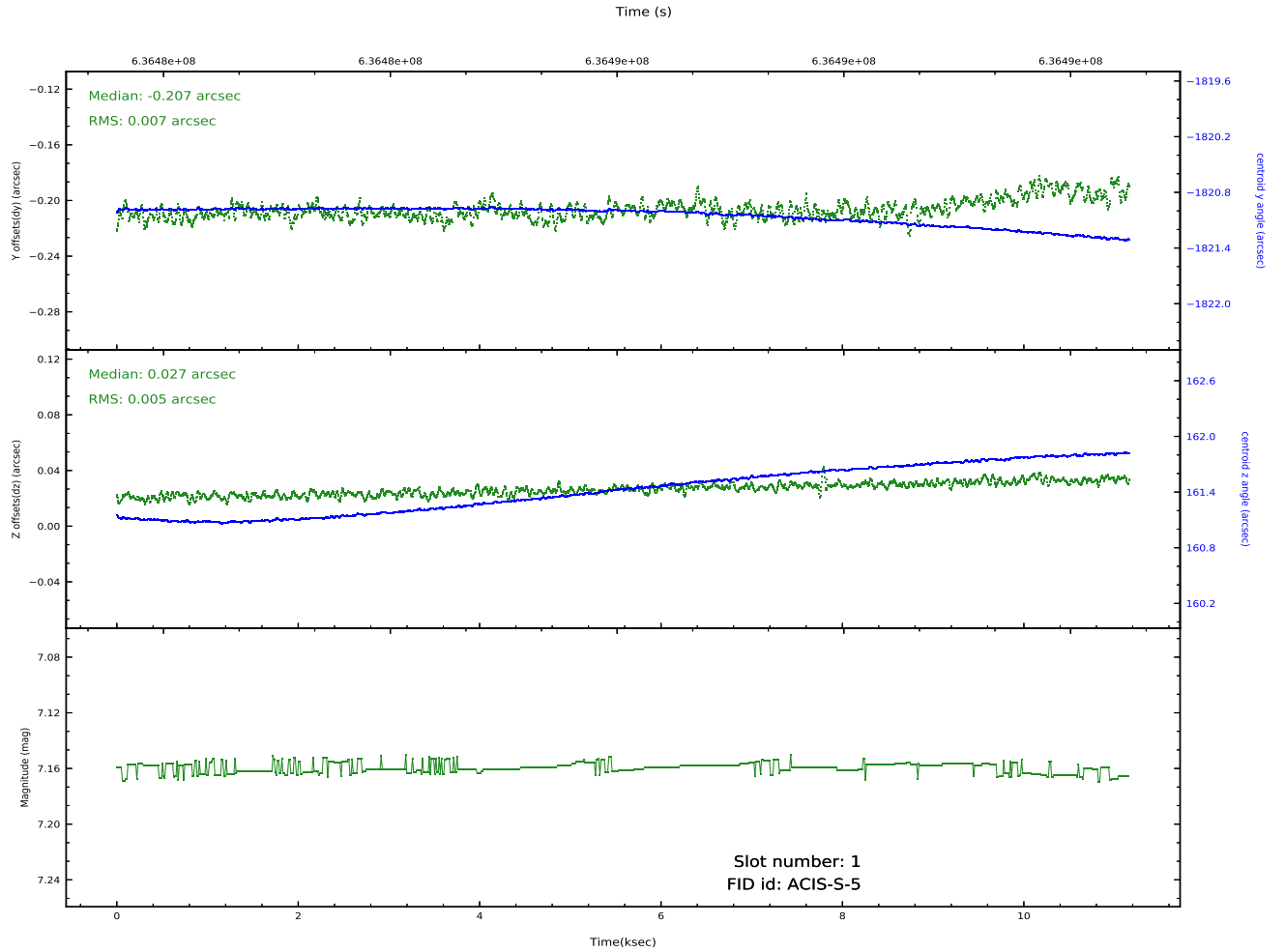
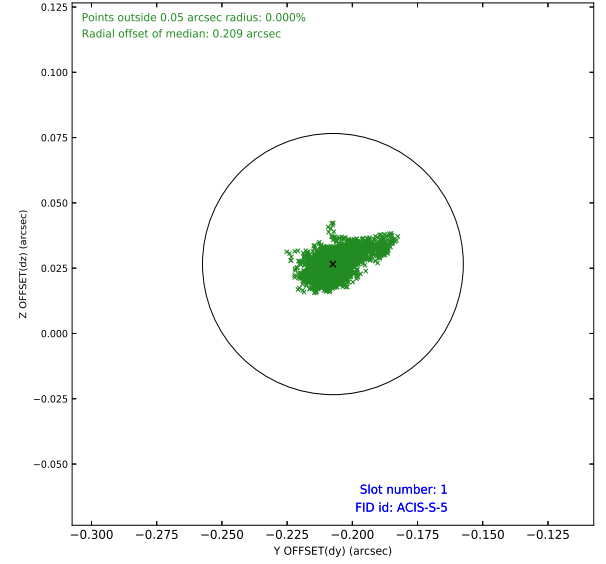
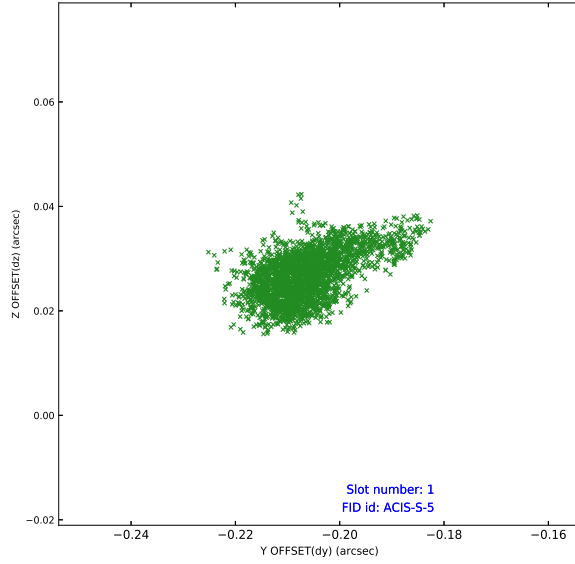


2.5 FID Slots

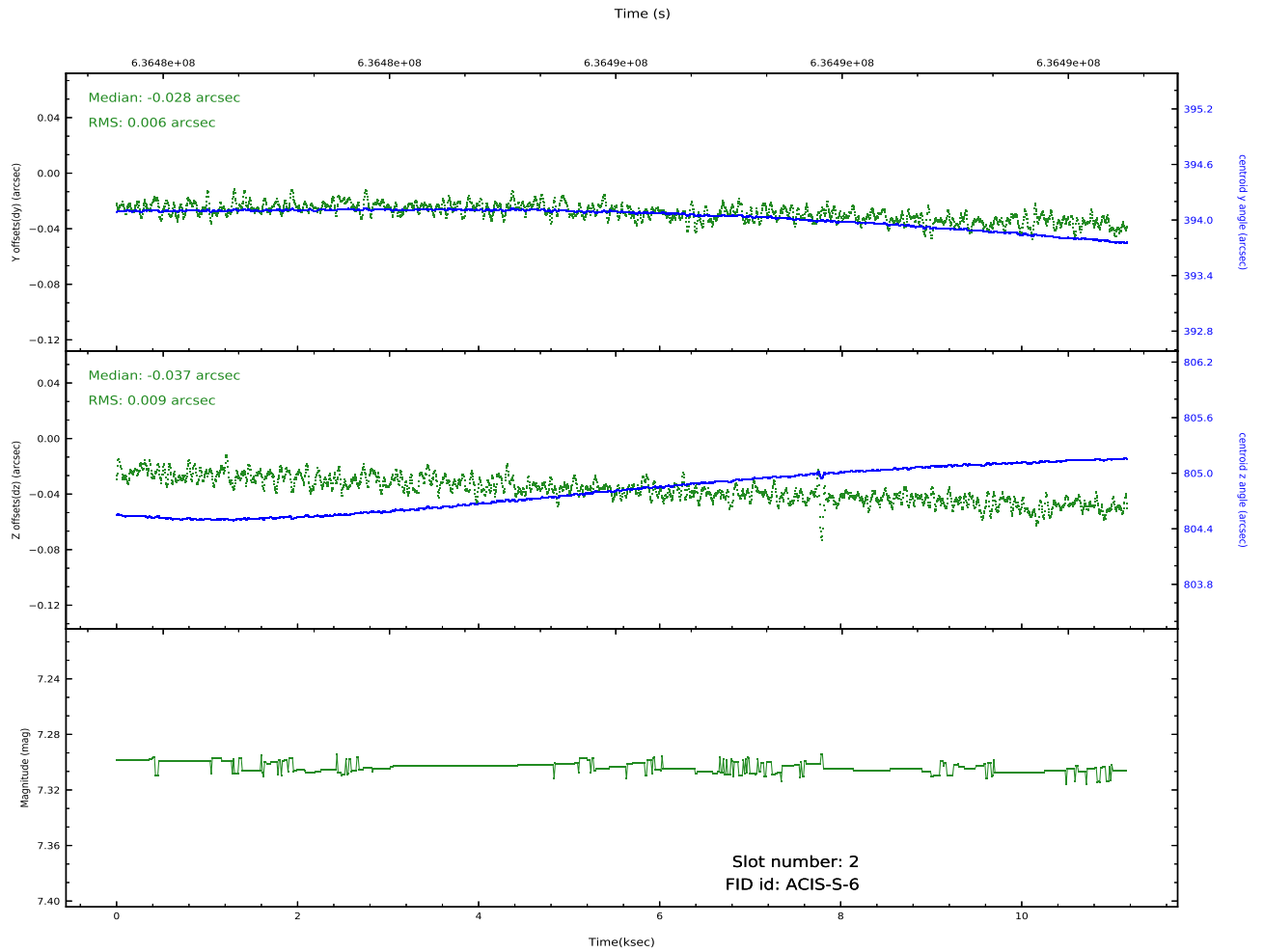
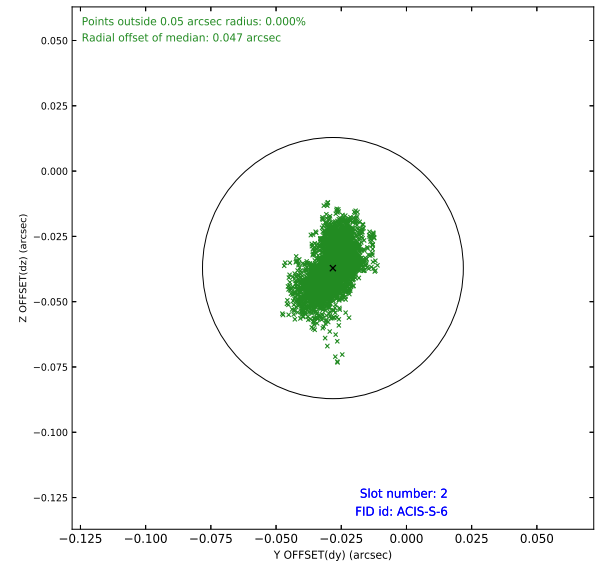
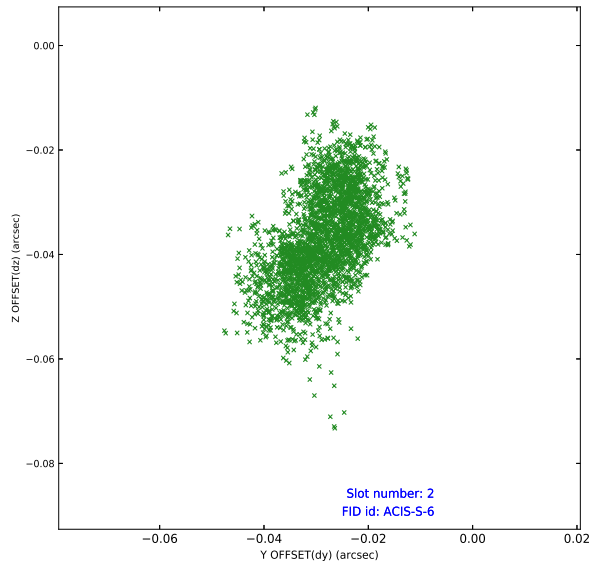
2.5.1 Slot 0



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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.054600085139

A.2 Comments