

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20477 - L2 Version 4
Chandra X-Ray Center

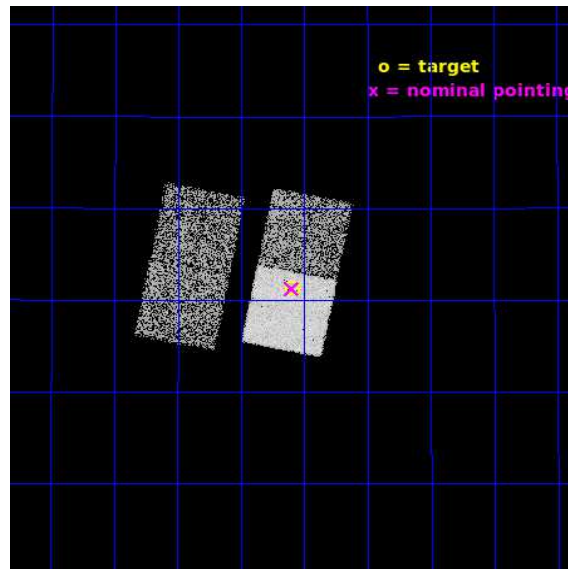
L2 Processing Date : Oct 24 2020

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
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

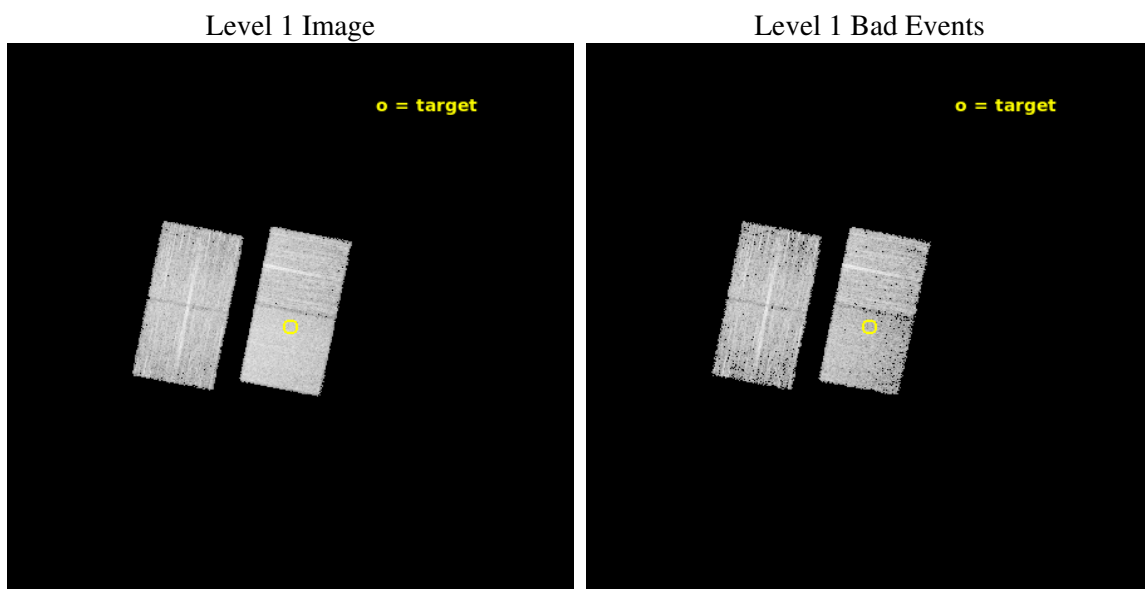
seq_num	703580	Sequence number
obs_id	20477	Observation id
title	Young Radio Sources at High Redshift	Proposal title
observer	Aneta Siemiginowska	Principal investigator
object	NVSS J101335+281118	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	153.3975	Observer's specified target RA [deg]
dec_targ	28.188667	Observer's specified target Dec [deg]
ra_nom	153.39950995792	Nominal RA [deg]
dec_nom	28.187525448389	Nominal Dec [deg]
roll_nom	101.14502285004	Nominal Roll [deg]
revision	4	Processing version of data
ontime	6065.8169126511	Sum of GTIs [s]
livetime	5986.5625490978	Livetime [s]
ontime2	6065.6937927008	Sum of GTIs [s]
ontime3	6065.7348326445	Sum of GTIs [s]
ontime6	6065.7758727074	Sum of GTIs [s]
ontime7	6065.8169126511	Sum of GTIs [s]
l2events	36144	Number of level 2 events



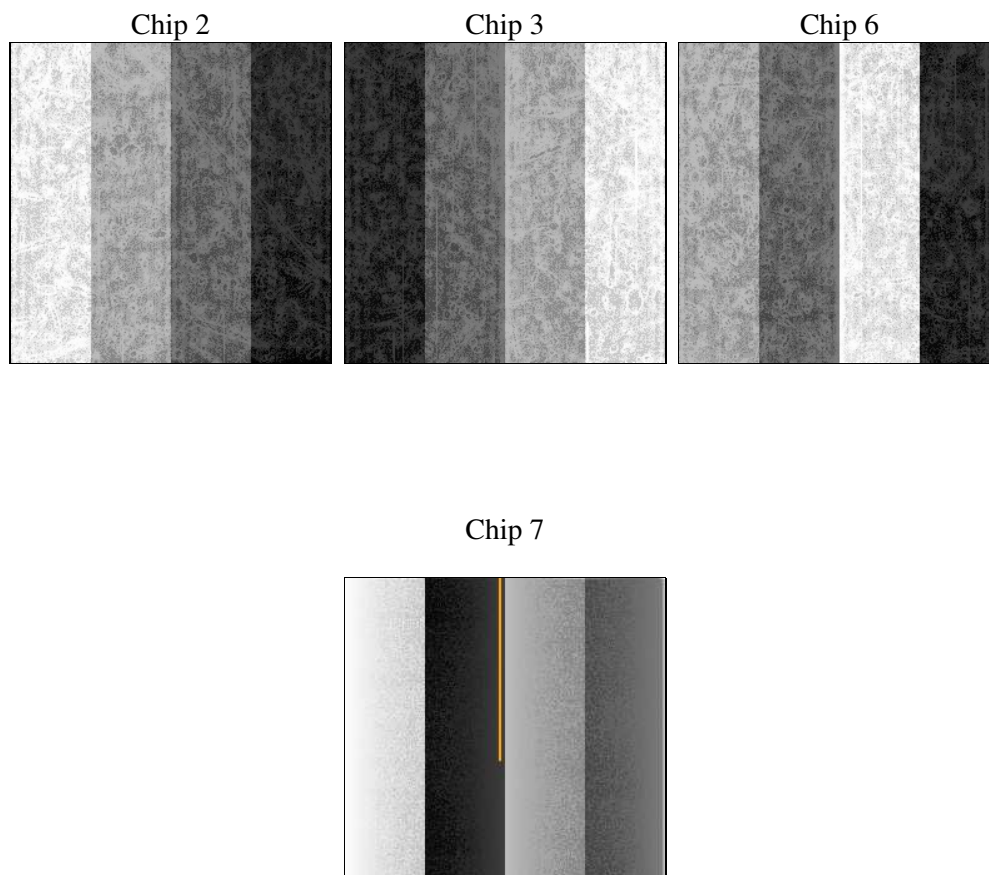
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	6065.8169126511	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	6065.6937927008	Sum of GTIs [s]
date	2020-10-24T08:26:29	Date and time of file creation	ontime3	6065.7348326445	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	6065.7758727074	Sum of GTIs [s]
			ontime7	6065.8169126511	Sum of GTIs [s]
			l1events	193695	Number of level 1 events

2.1.4 Events

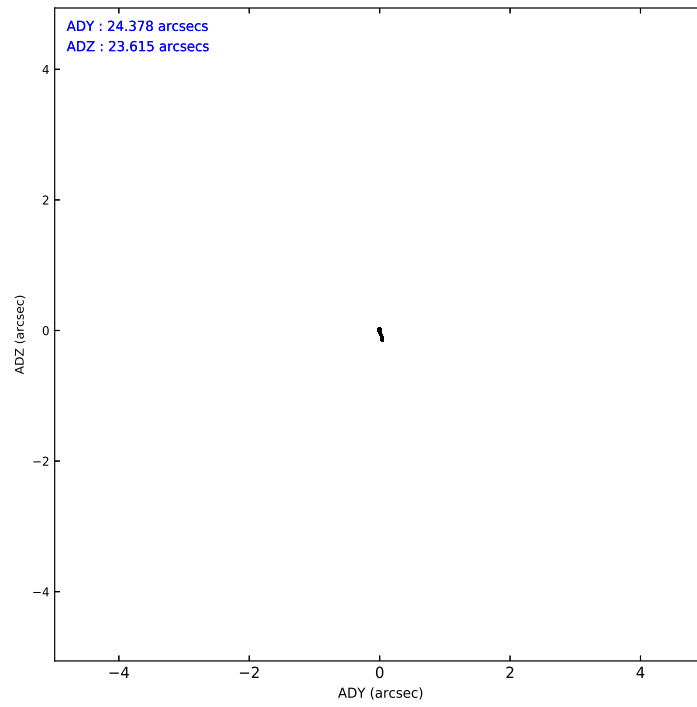
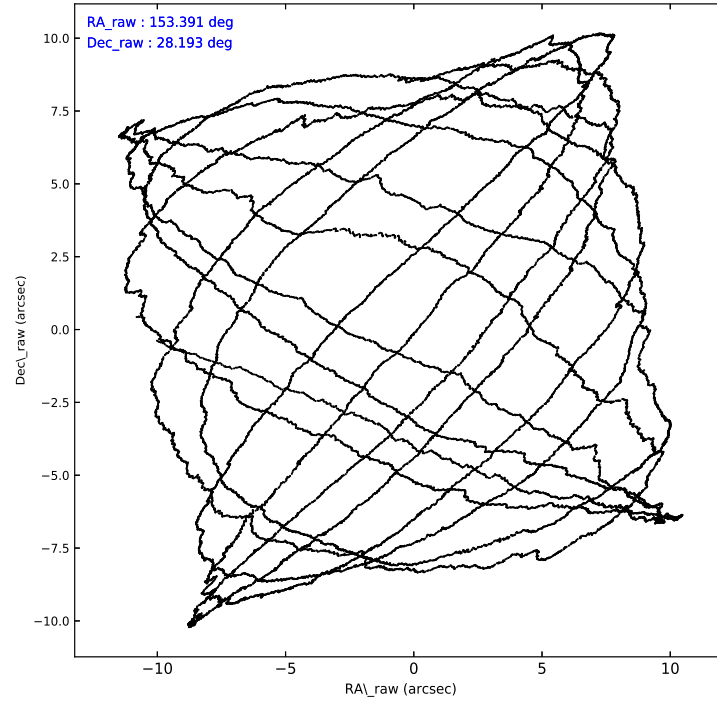
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	45572	42681	47978	57464
rejected events	41047	38214	43011	32707
rejected %	90%	89%	89%	56%

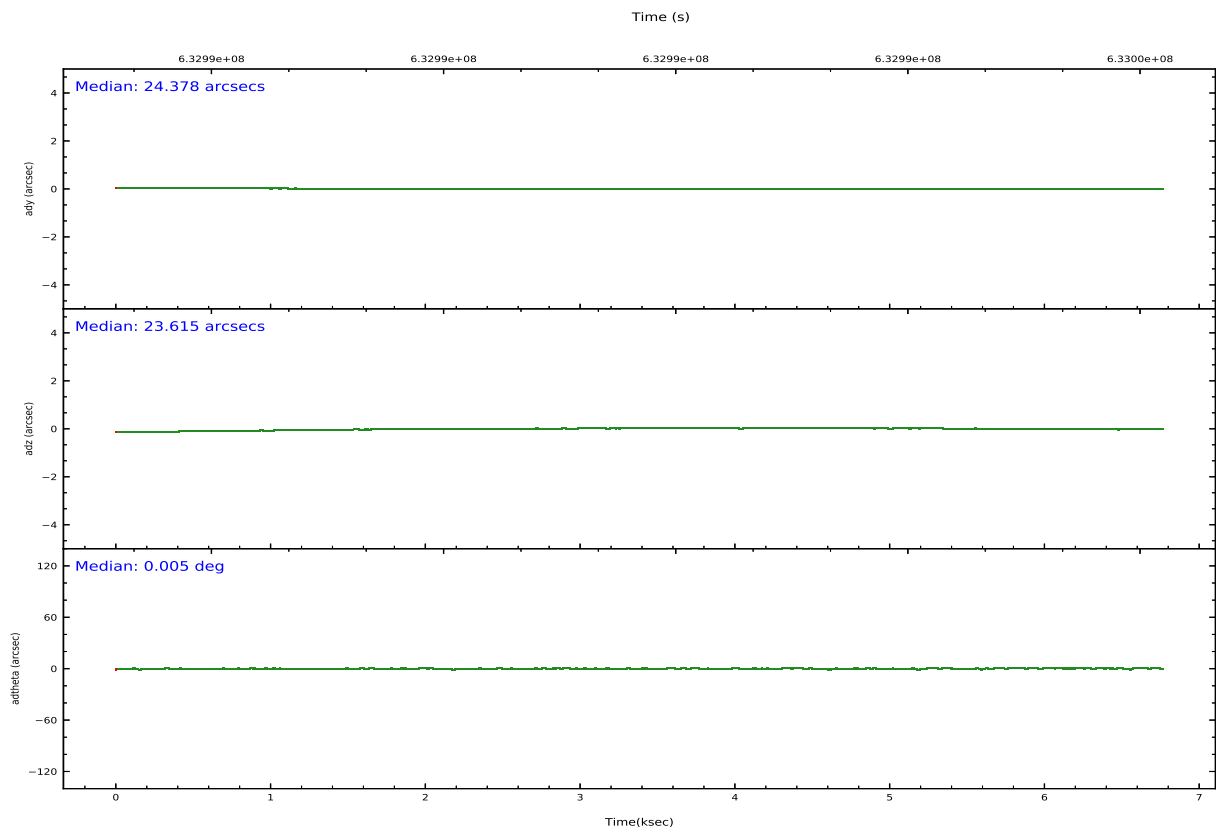
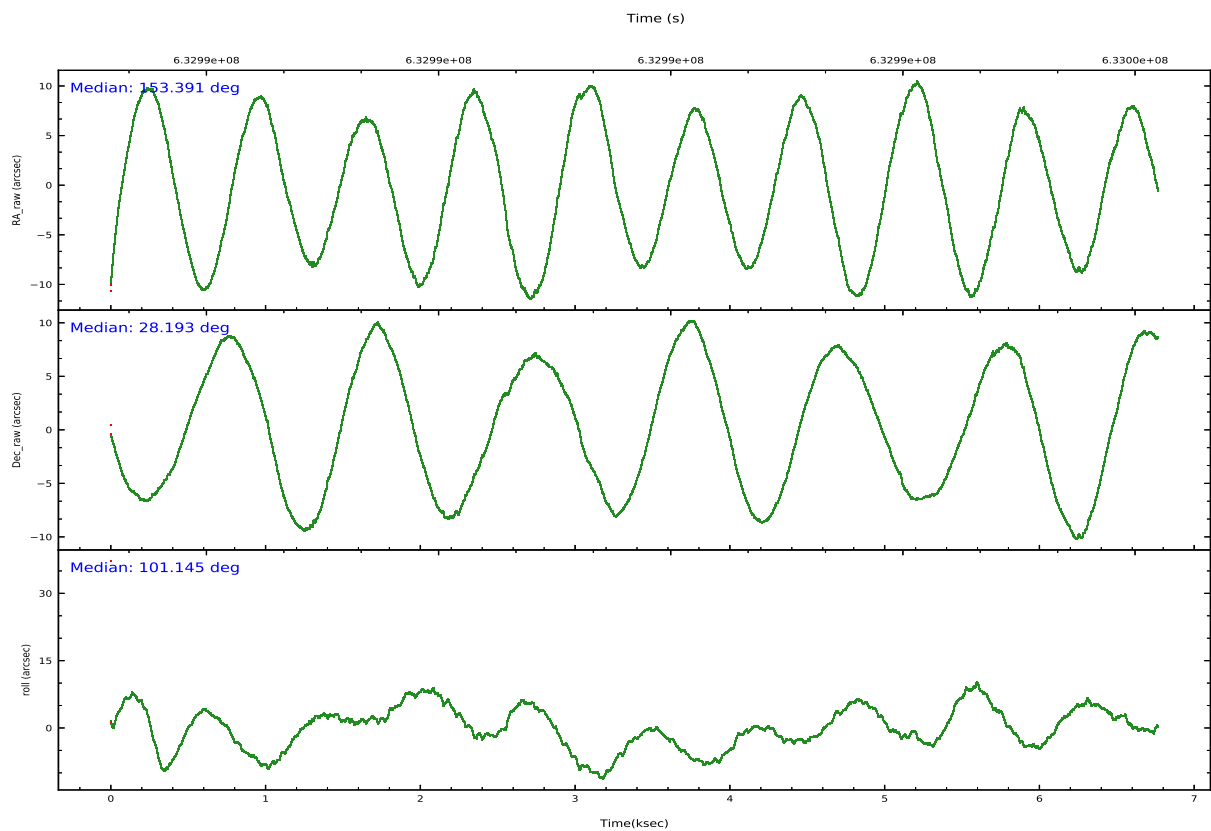
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1572	1554	1553	2048
	3%	3%	3%	3%
grade 1 events	29	17	27	75
	0%	0%	0%	0%
grade 2 events	1092	923	1227	5148
	2%	2%	2%	8%
grade 3 events	476	524	484	1924
	1%	1%	1%	3%
grade 4 events	427	478	448	1988
	0%	1%	0%	3%
grade 5 events	1663	1997	1966	5693
	3%	4%	4%	9%
grade 6 events	961	994	1260	13668
	2%	2%	2%	23%
grade 7 events	39352	36194	41013	26920
	86%	84%	85%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-2367	ACIS-2367	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	153.411223	153.39950995792	CCD I2 on	O1	Y
[deg] Pointing Dec	28.172784	28.187525448389	CCD I3 on	O3	Y
[deg] Pointing Roll	100.992506	101.14502285004	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	O2	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	632989149.184000	632987916.89755	CCD S5 on	N	N
Observation start date	2018-01-22T06:18:00	2018-01-22T05:58:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	632995149.184000	632995558.7855	On-chip summing requested	N	N
Observation end date	2018-01-22T07:58:00	2018-01-22T08:05:58	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



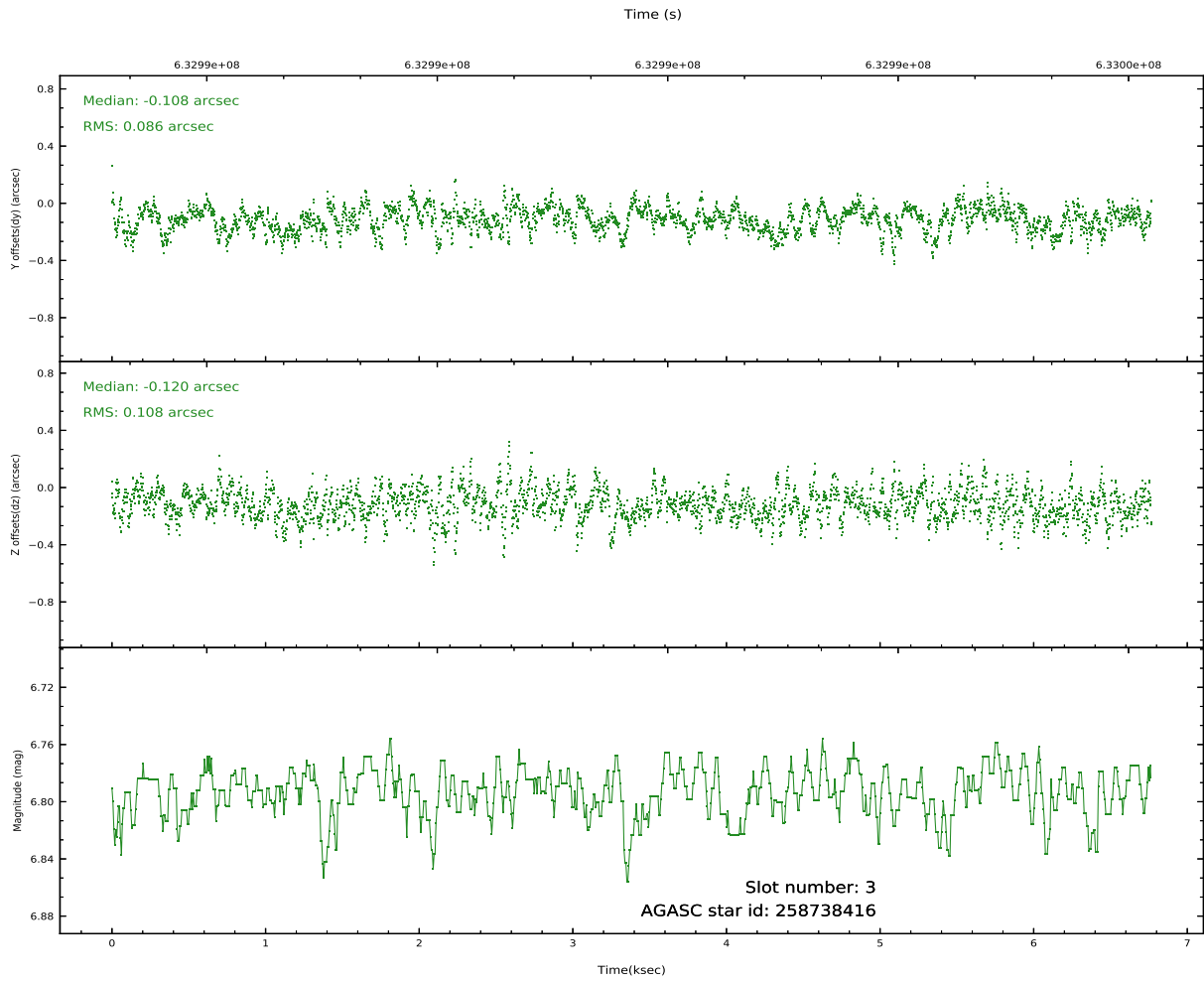
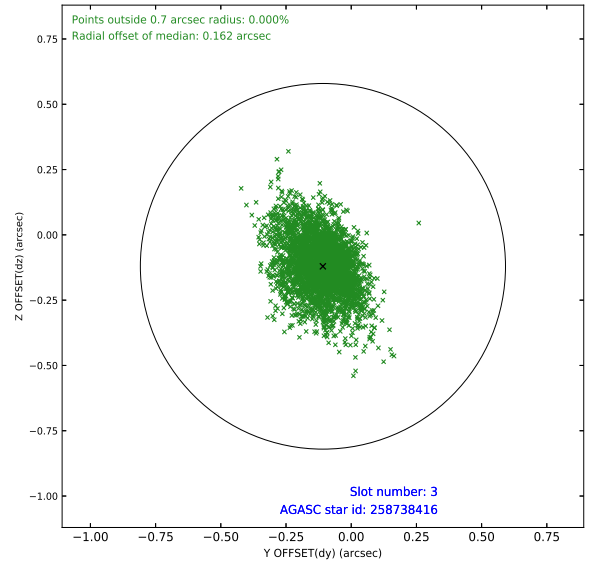
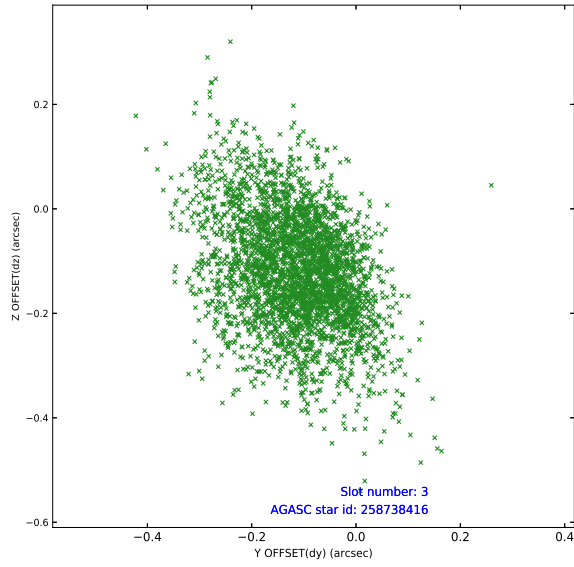


Slot Statistics

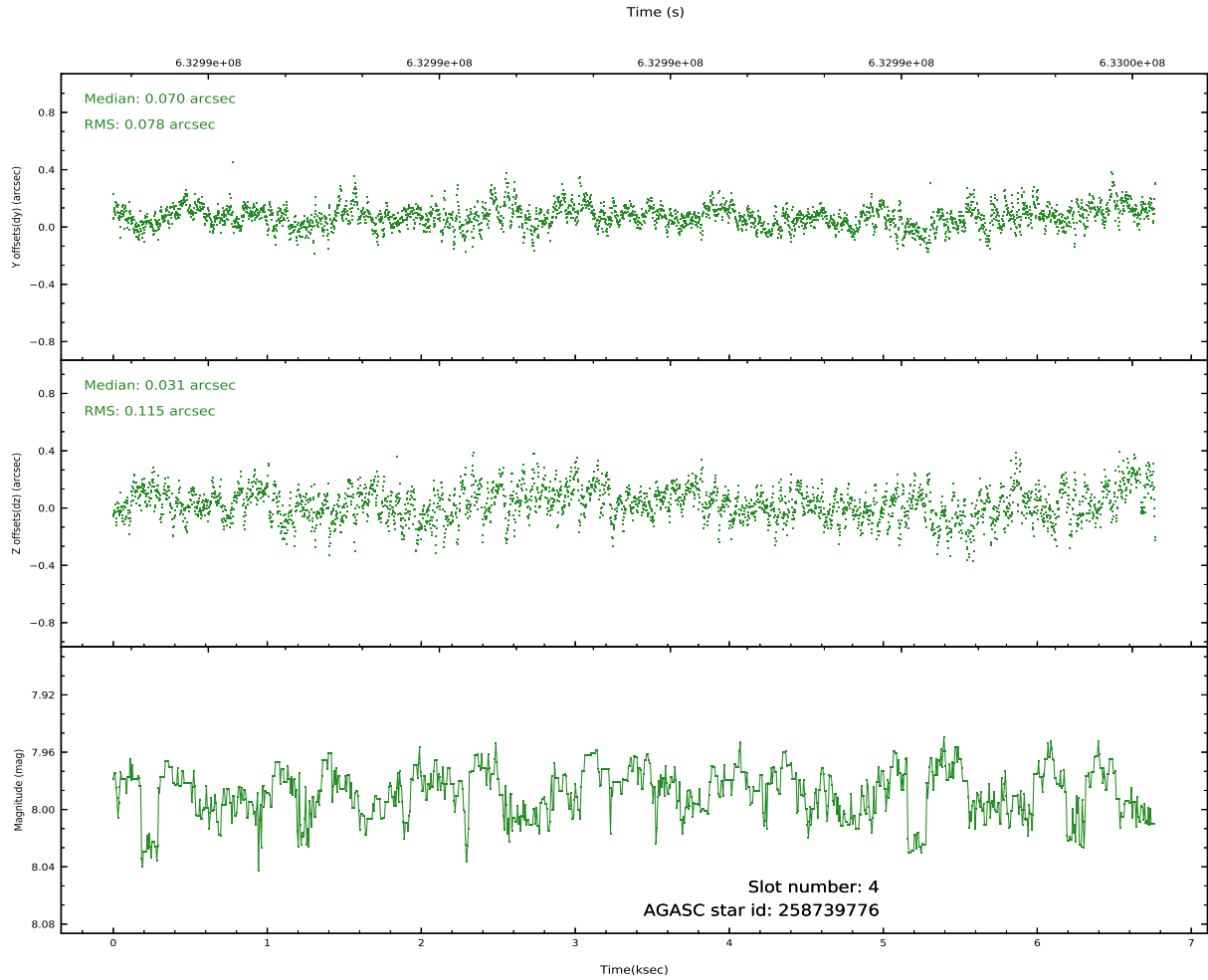
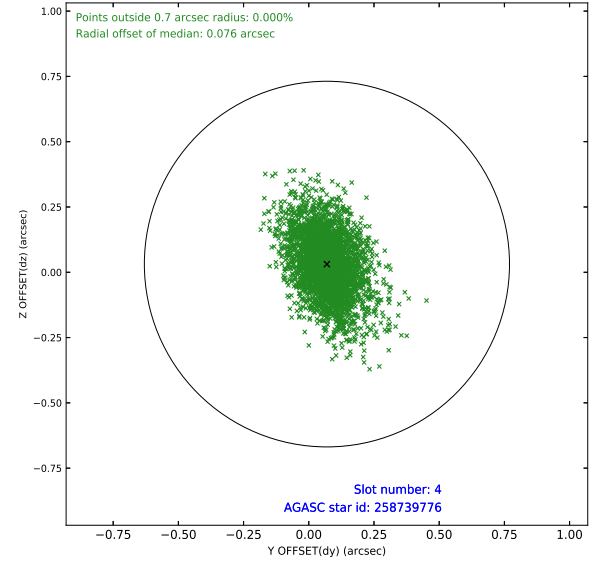
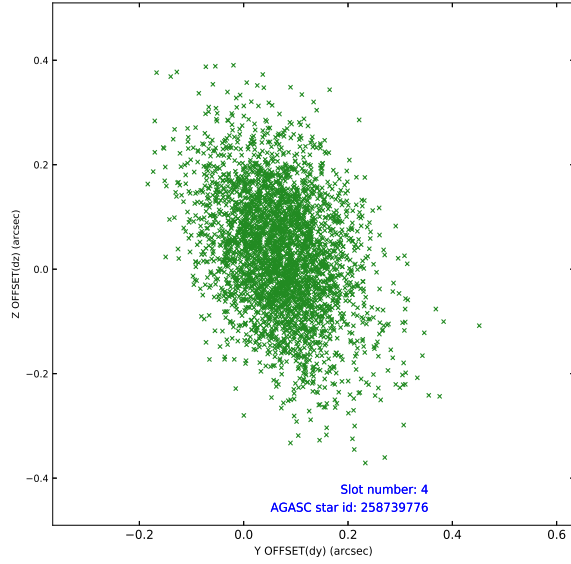
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.04	1650	1.000	0.140	-0.071	0.007	0.011	0.000000	0.000000	-777.76	-1745
1	FID		ACIS-S-4	7.14	1651	1.000	0.099	-0.048	0.005	0.010	0.000000	0.000000	2135.39	161
2	FID		ACIS-S-5	7.15	1651	1.000	-0.271	0.128	0.007	0.011	0.000000	0.000000	-1829.61	157
3	GUIDE	used	258738416	6.79	3302	1.000	-0.108	-0.120	0.141	0.248	153.177238	28.242014	387.20	681
4	GUIDE	used	258739776	7.99	3299	1.000	0.070	0.031	0.143	0.253	152.896774	27.842666	-851.12	1833
5	GUIDE	used	258744848	8.99	3300	1.000	0.146	0.060	0.171	0.285	153.355329	28.734424	2018.55	-211
6	GUIDE	used	258875632	8.99	3294	1.000	-0.111	0.031	0.192	0.307	153.546222	28.701193	1787.55	-780
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

2.4 Star Slots

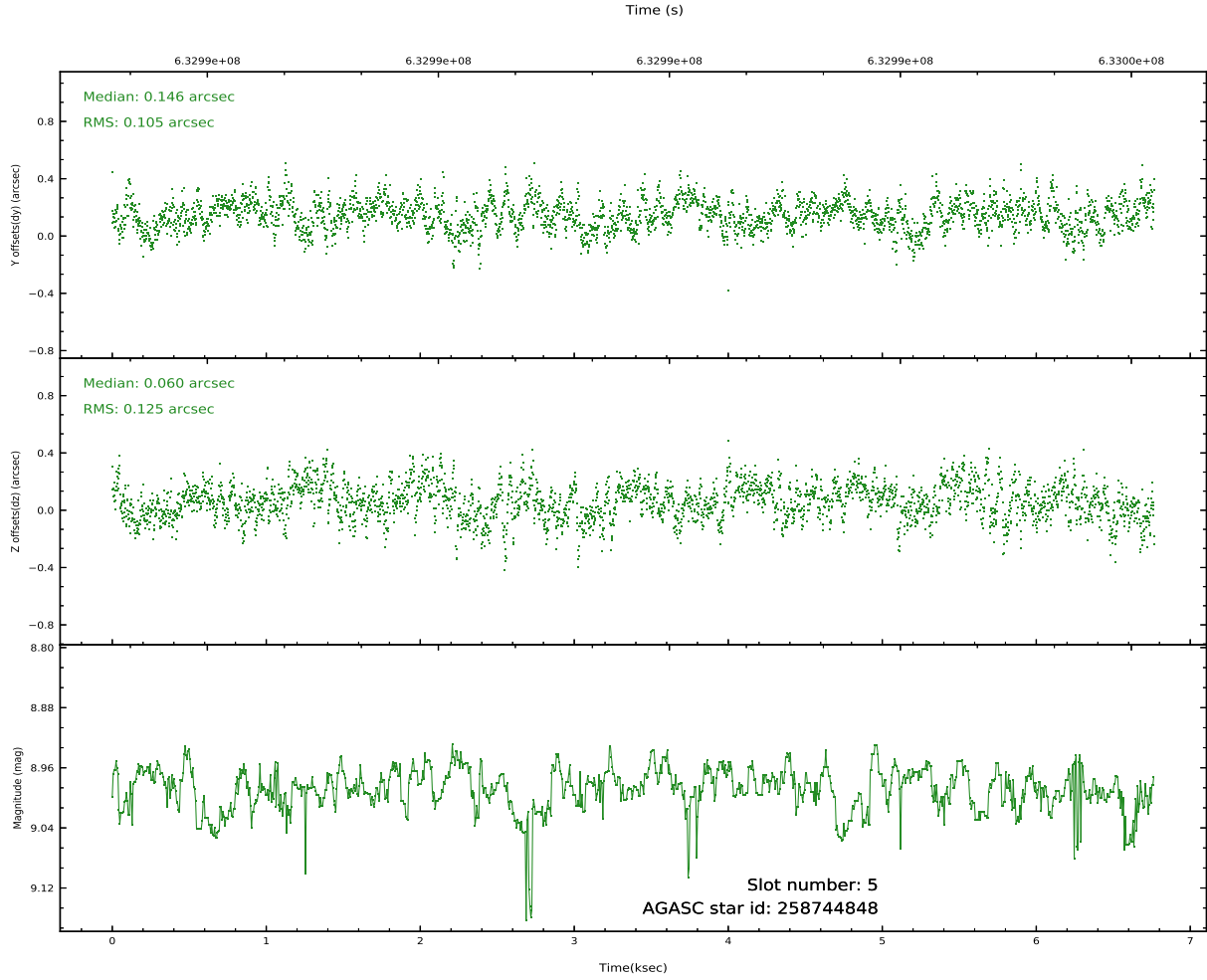
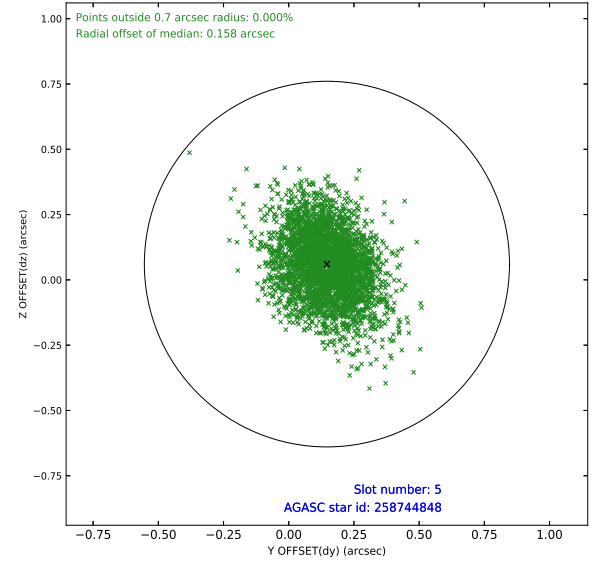
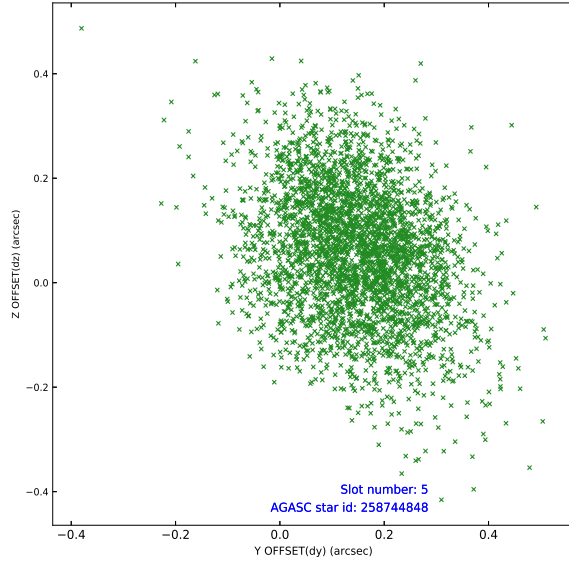
2.4.1 Slot 3



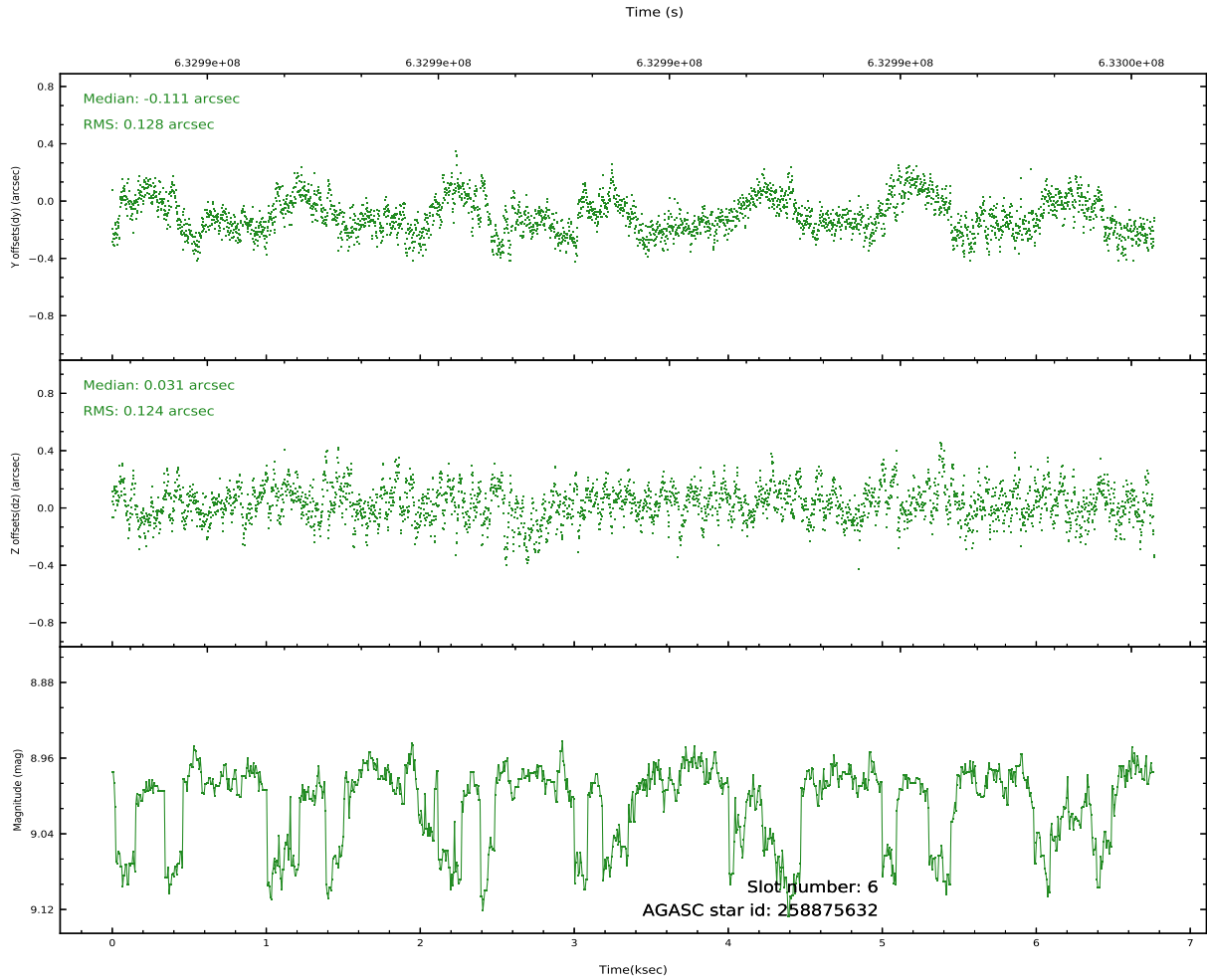
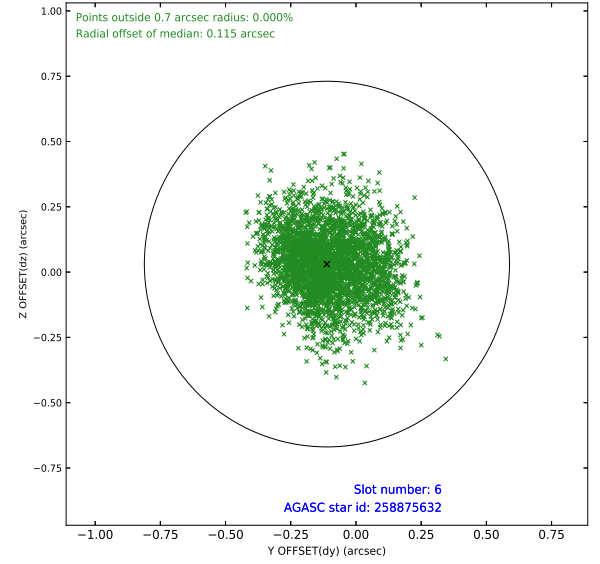
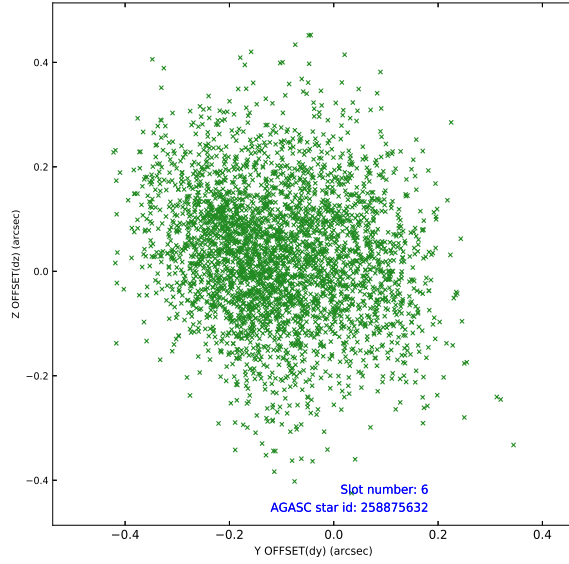
2.4.2 Slot 4



2.4.3 Slot 5

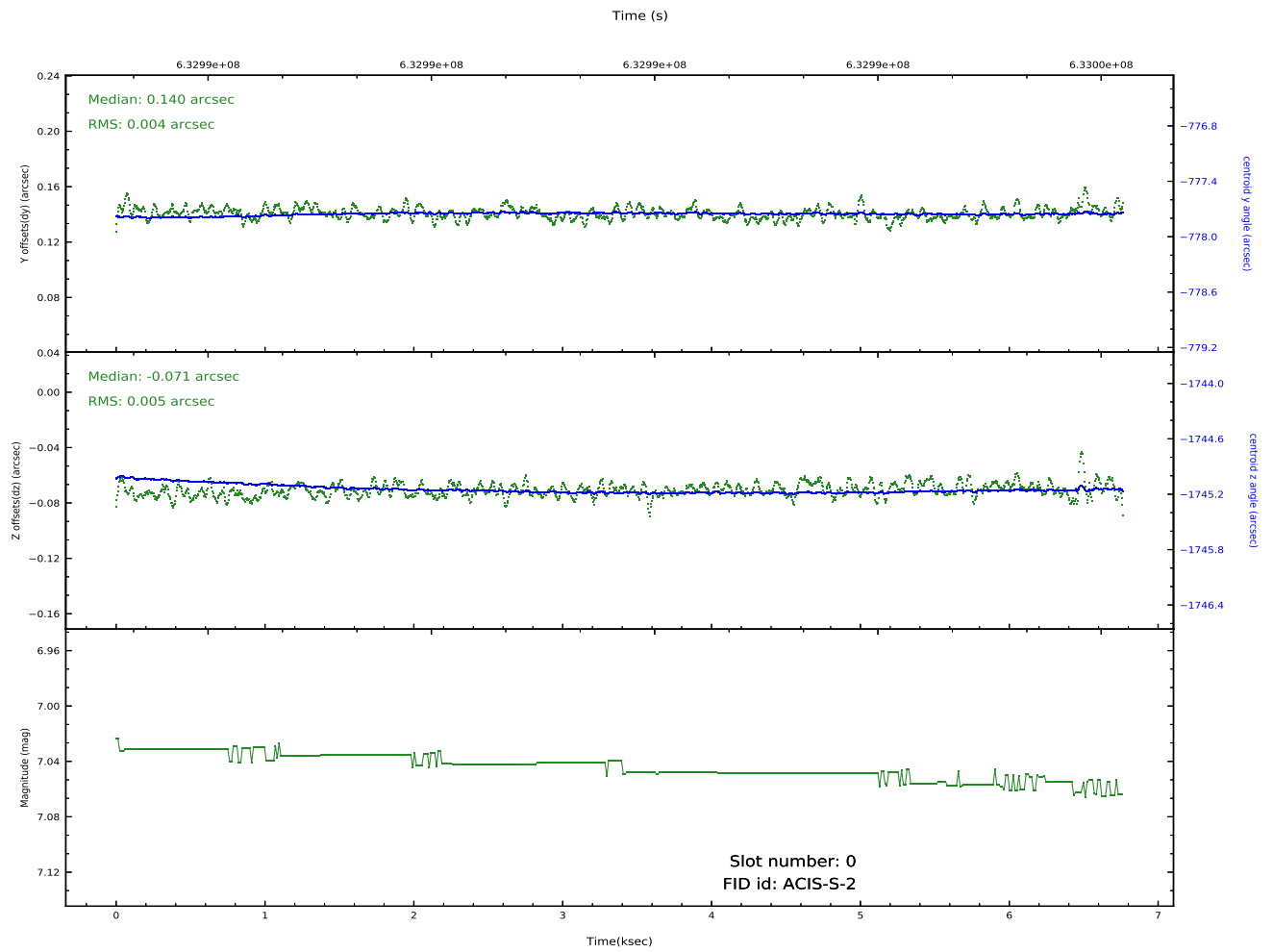
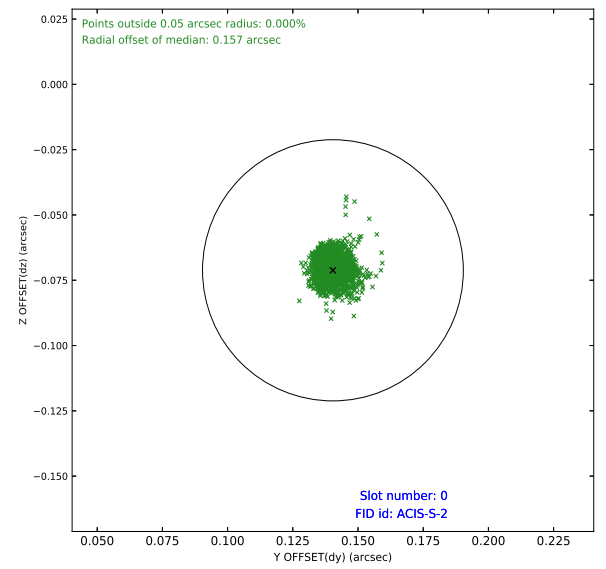
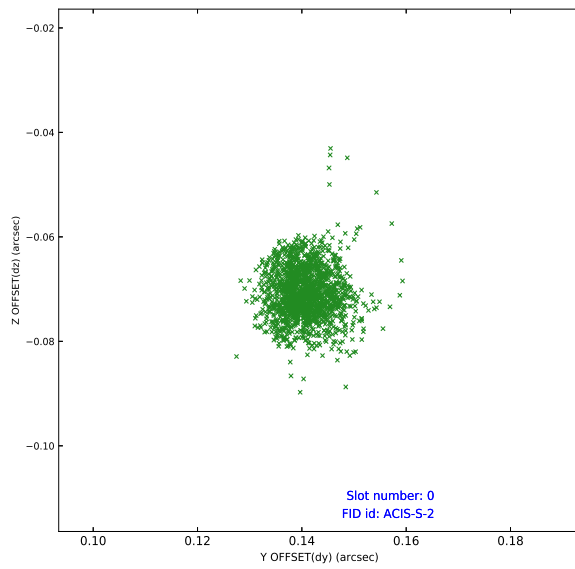


2.4.4 Slot 6

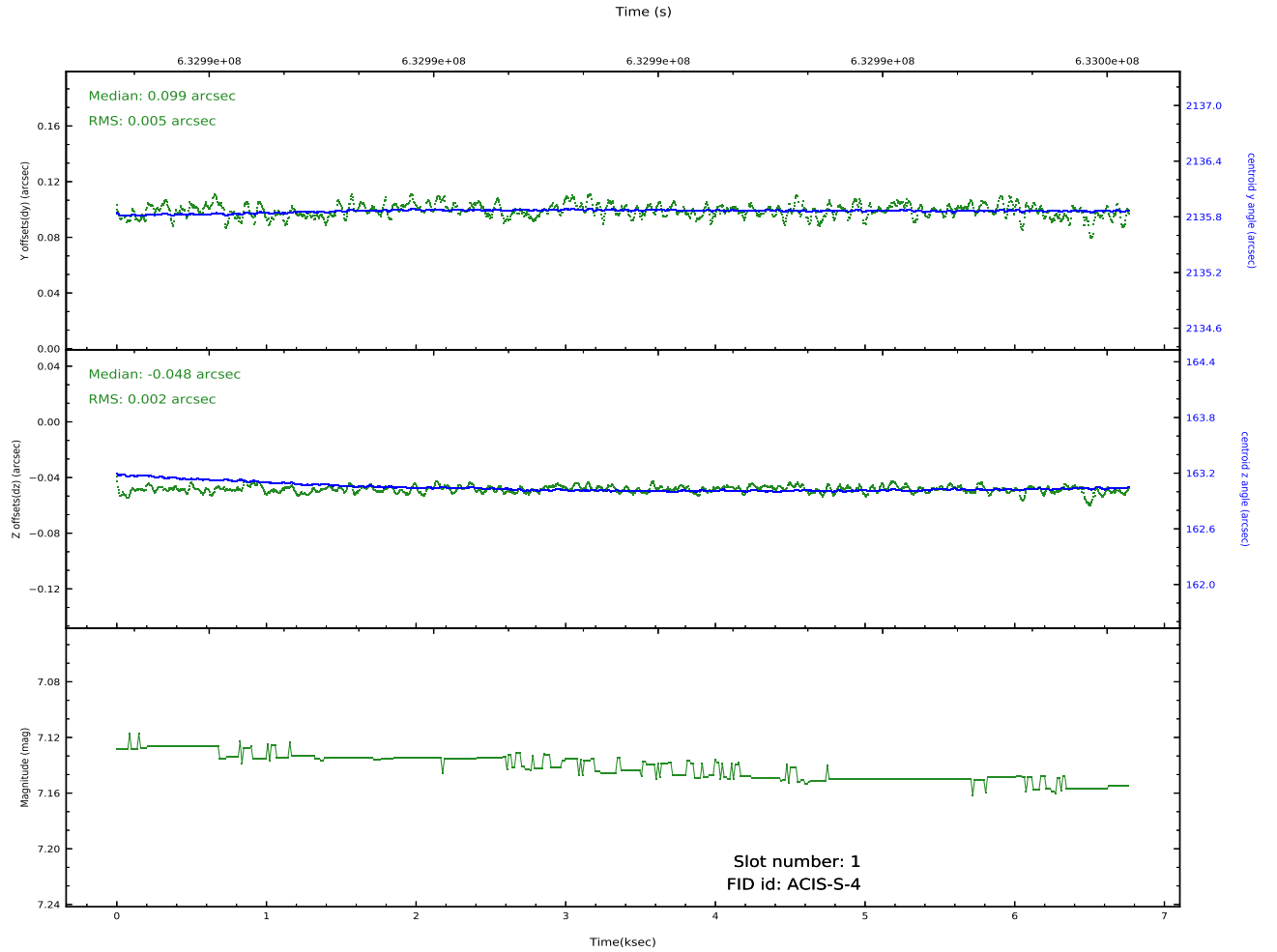
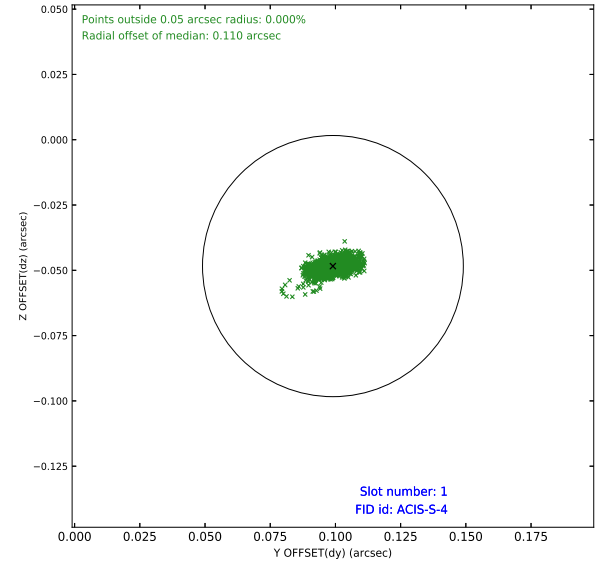
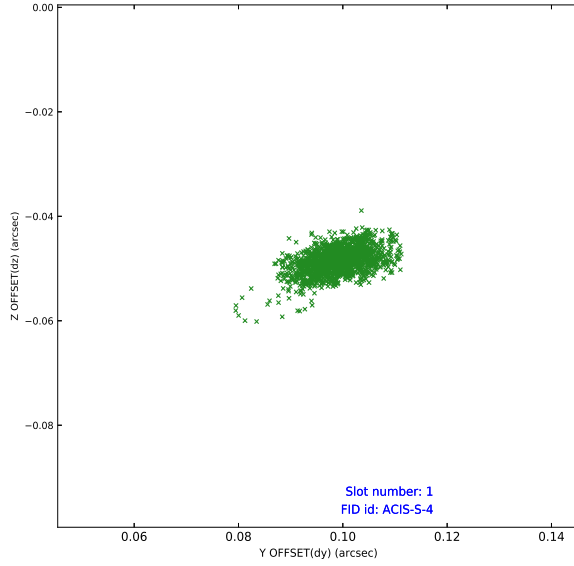


2.5 FID Slots

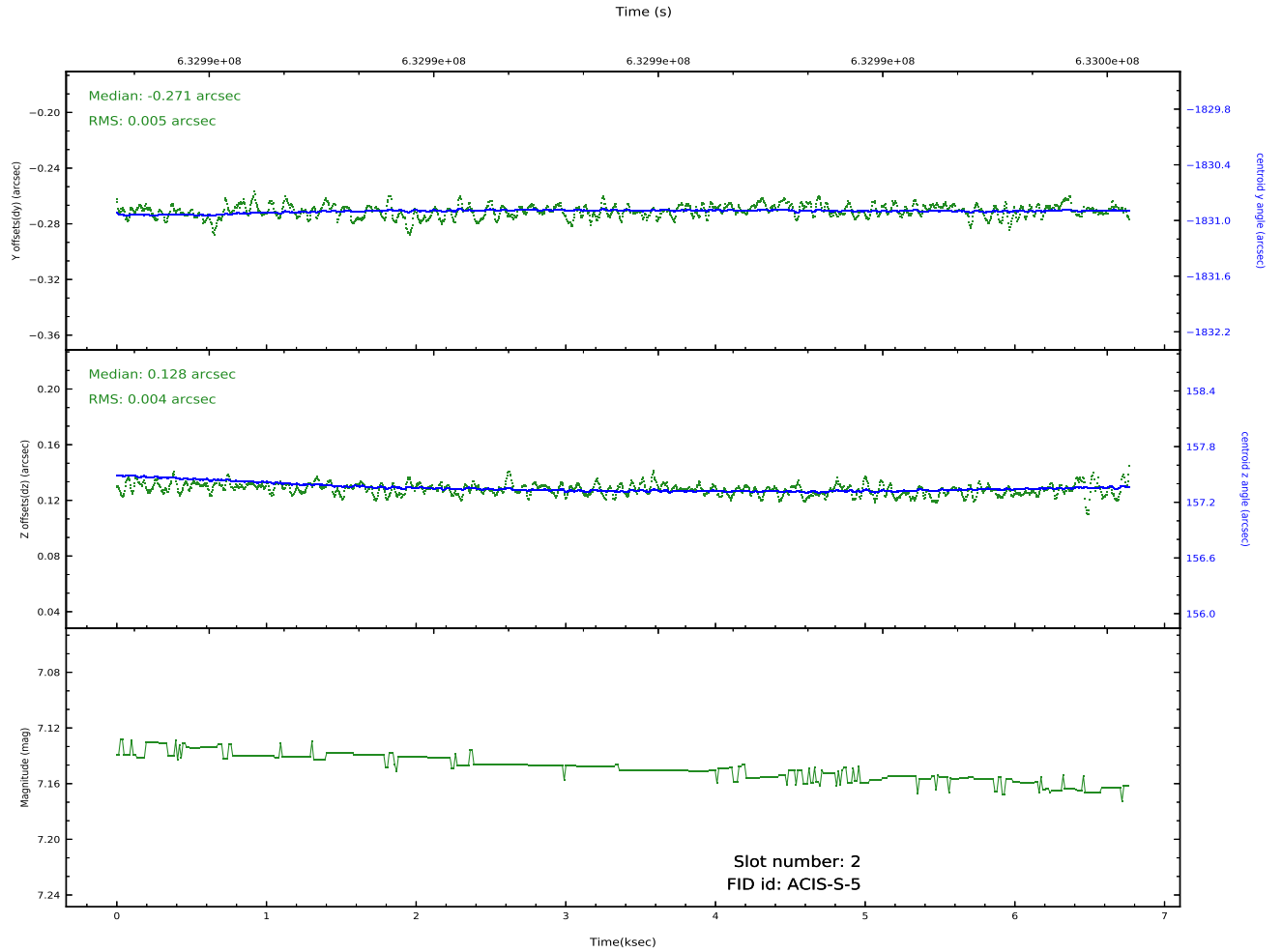
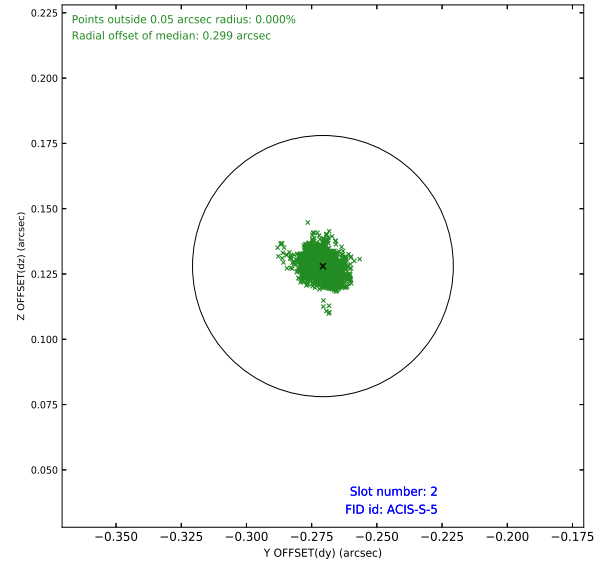
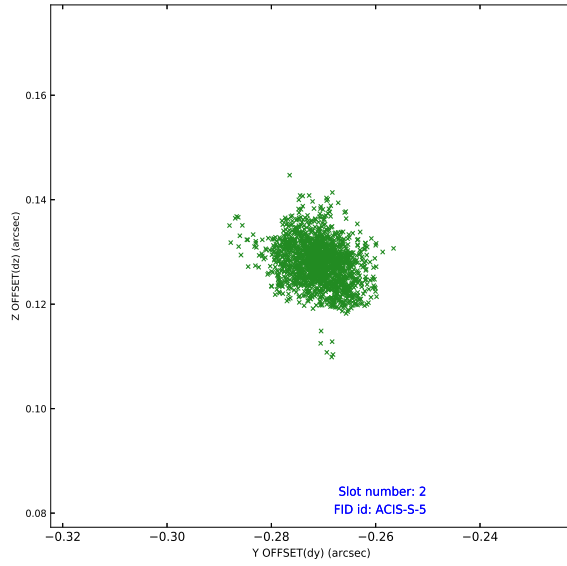
2.5.1 Slot 0



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	6.0658169169426

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.