

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20971 - L2 Version 3
Chandra X-Ray Center

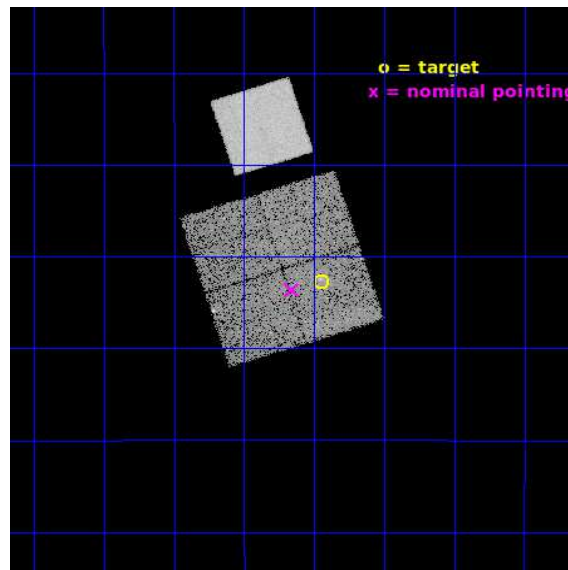
L2 Processing Date : Oct 24 2020

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 5	10
2.4.3	Slot 7	11
2.5	FID Slots	12
2.5.1	Slot 0	12
2.5.2	Slot 1	13
2.5.3	Slot 2	14
A	Summary	15
A.1	Status	15
A.2	Comments	15

1 Front

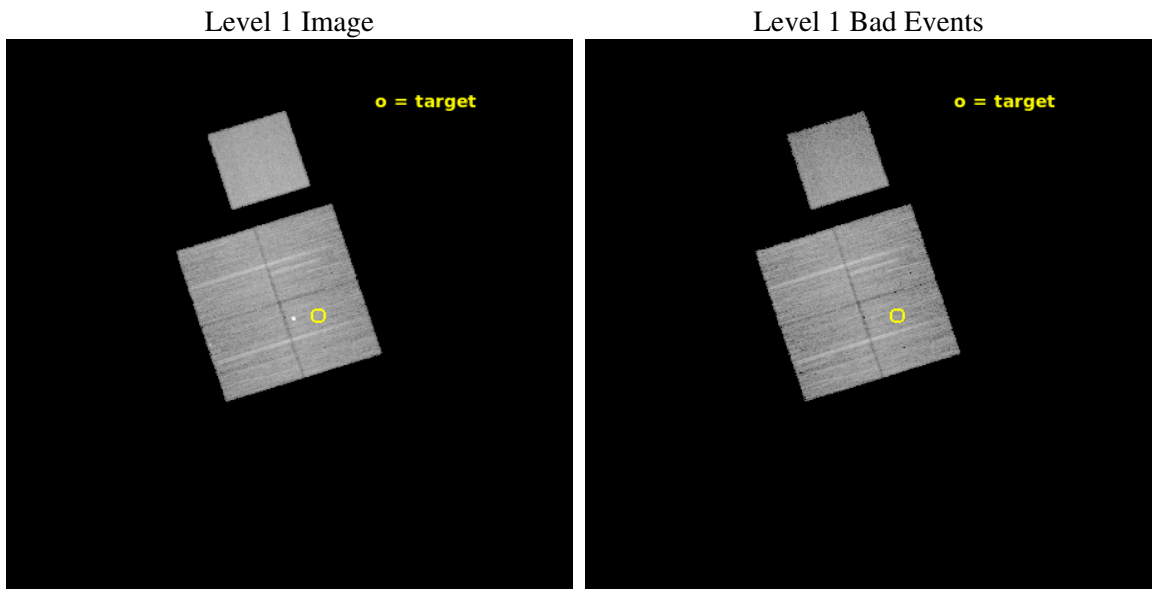
seq_num	801663	Sequence number
obs_id	20971	Observation id
title	THE SPECTACULAR CASE OF A RAM-PRESSURE STRIPPED GALAXY GROUP IN THE OUTSKIRTS OF HYDRA A/A780	Proposal title
observer	Sabrina De Grandi	Principal investigator
object	LEDA 87445	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	139.6125	Observer's specified target RA [deg]
dec_targ	-12.379722	Observer's specified target Dec [deg]
ra_nom	139.66477617024	Nominal RA [deg]
dec_nom	-12.393470092204	Nominal Dec [deg]
roll_nom	342.23417645733	Nominal Roll [deg]
revision	3	Processing version of data
ontime	12821.559028506	Sum of GTIs [s]
livetime	12654.035920704	Livetime [s]
ontime0	12818.417968273	Sum of GTIs [s]
ontime1	12821.559028506	Sum of GTIs [s]
ontime2	12821.55903852	Sum of GTIs [s]
ontime3	12824.700098753	Sum of GTIs [s]
ontime7	12824.700098753	Sum of GTIs [s]
l2events	87879	Number of level 2 events



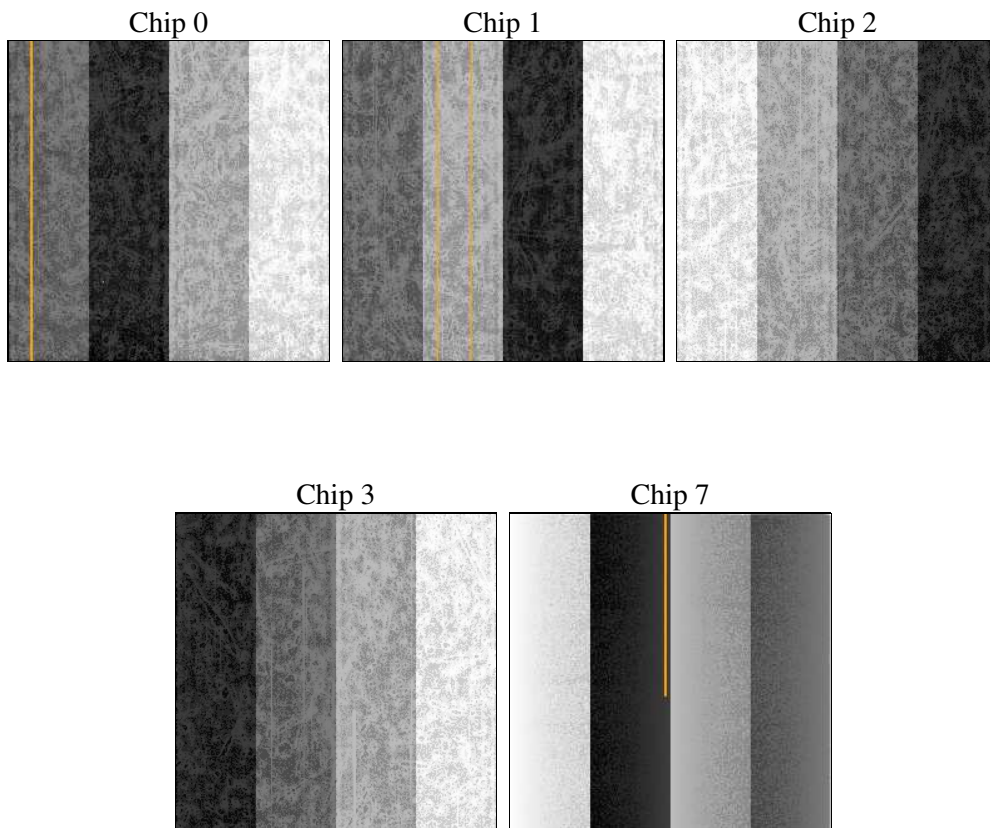
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12775.512000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	12821.559028506	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	12818.417968273	Sum of GTIs [s]
date	2020-10-24T17:52:44	Date and time of file creation	ontime1	12821.559028506	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	12821.55903852	Sum of GTIs [s]
			ontime3	12824.700098753	Sum of GTIs [s]
			ontime7	12824.700098753	Sum of GTIs [s]
			l1events	507755	Number of level 1 events

2.1.4 Events

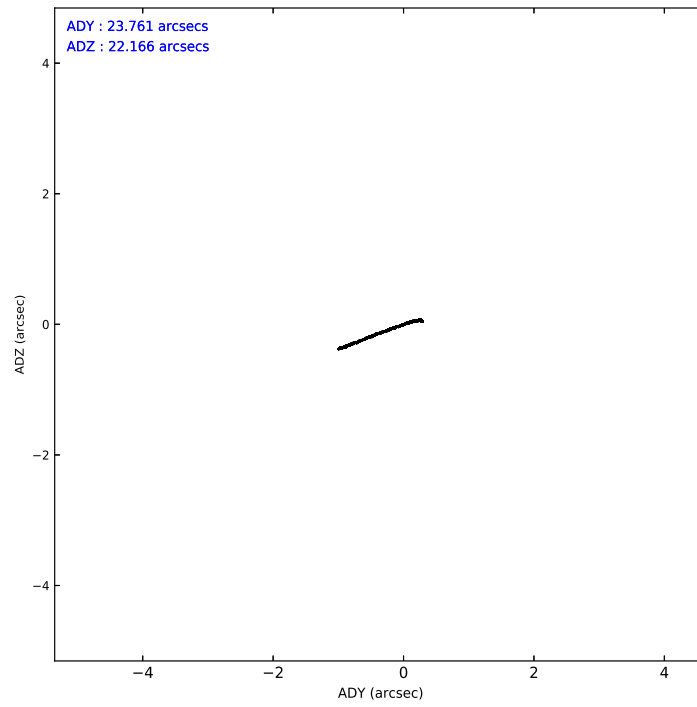
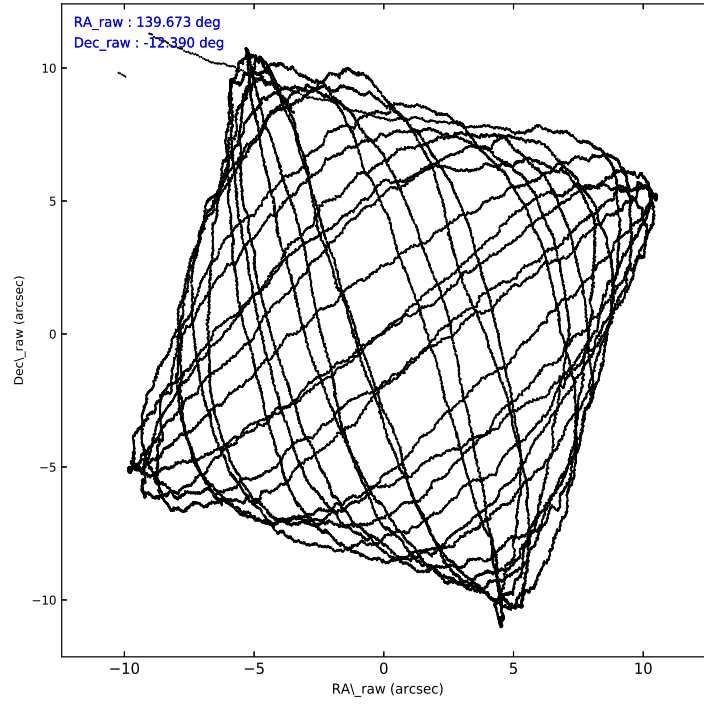
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	89005	95747	100965	99412	122626
rejected events	78380	79610	91140	88897	69636
rejected %	88%	83%	90%	89%	56%

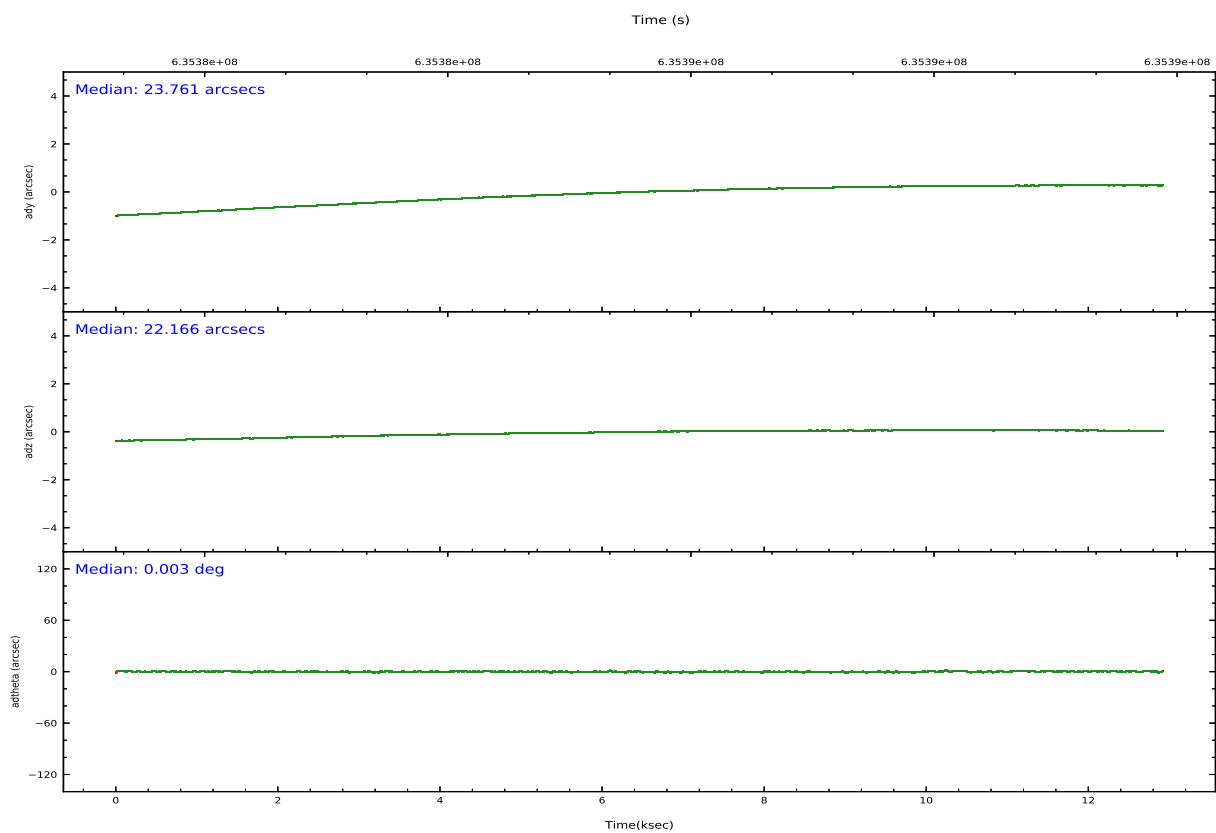
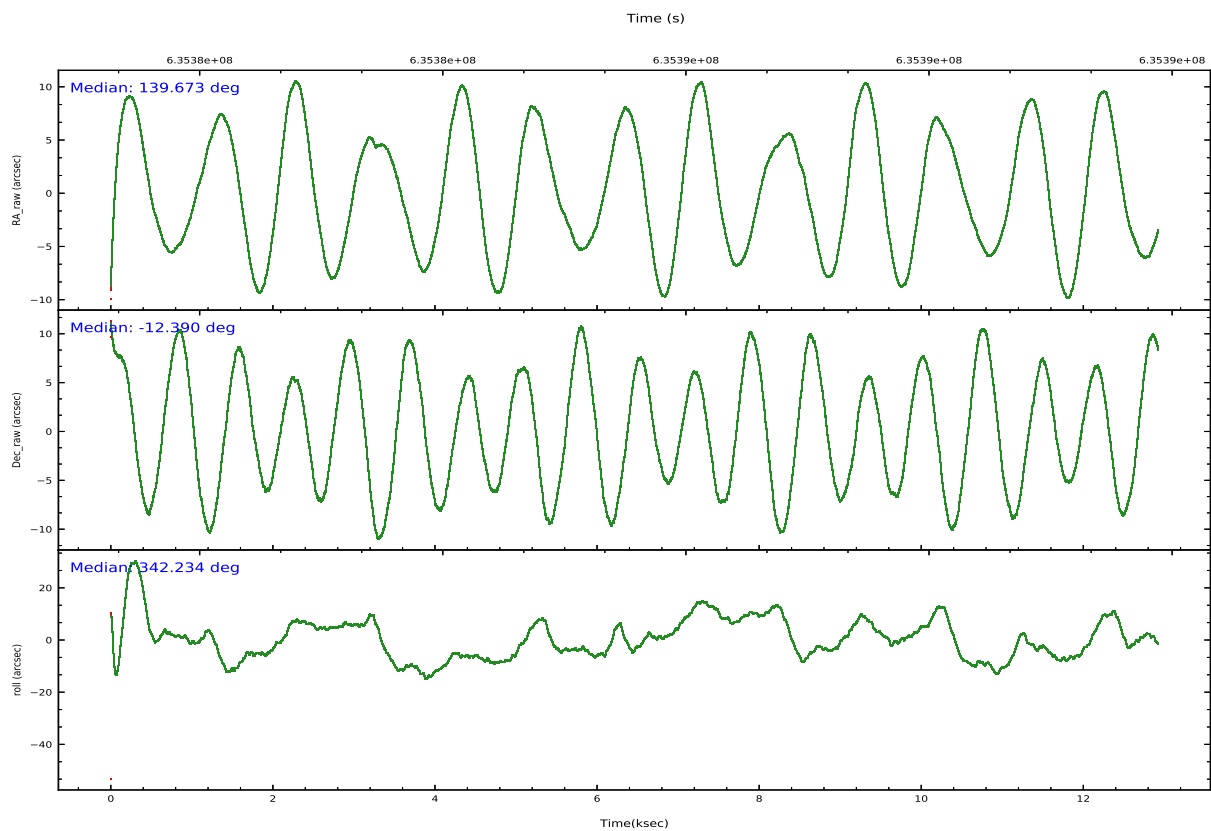
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	3672	4466	3551	3978	4571
	4%	4%	3%	4%	3%
grade 1 events	33	49	56	55	172
	0%	0%	0%	0%	0%
grade 2 events	2643	6958	2352	2304	10995
	2%	7%	2%	2%	8%
grade 3 events	1048	1071	1014	1074	4312
	1%	1%	1%	1%	3%
grade 4 events	956	1067	997	989	4214
	1%	1%	0%	0%	3%
grade 5 events	3883	3989	3514	4530	12292
	4%	4%	3%	4%	10%
grade 6 events	2311	2584	1916	2180	28924
	2%	2%	1%	2%	23%
grade 7 events	74459	75563	87565	84302	57146
	83%	78%	86%	84%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	139.645668	139.66477617024	CCD I2 on	Y	Y
[deg] Pointing Dec	-12.395464	-12.393470092204	CCD I3 on	Y	Y
[deg] Pointing Roll	342.007105	342.23417645733	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-242.342463	-242.3372517102575	CCD S3 on	O1	Y
[mm] SIM translation stage offset	8.75	8.744798707327789	CCD S4 on	N	N
[s] Observation start time (MET)	635379052.184000	635378045.86331	CCD S5 on	N	N
Observation start date	2018-02-18T22:09:43	2018-02-18T21:54:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	635391827.184000	635392927.83919	On-chip summing requested	N	N
Observation end date	2018-02-19T01:42:38	2018-02-19T02:02:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



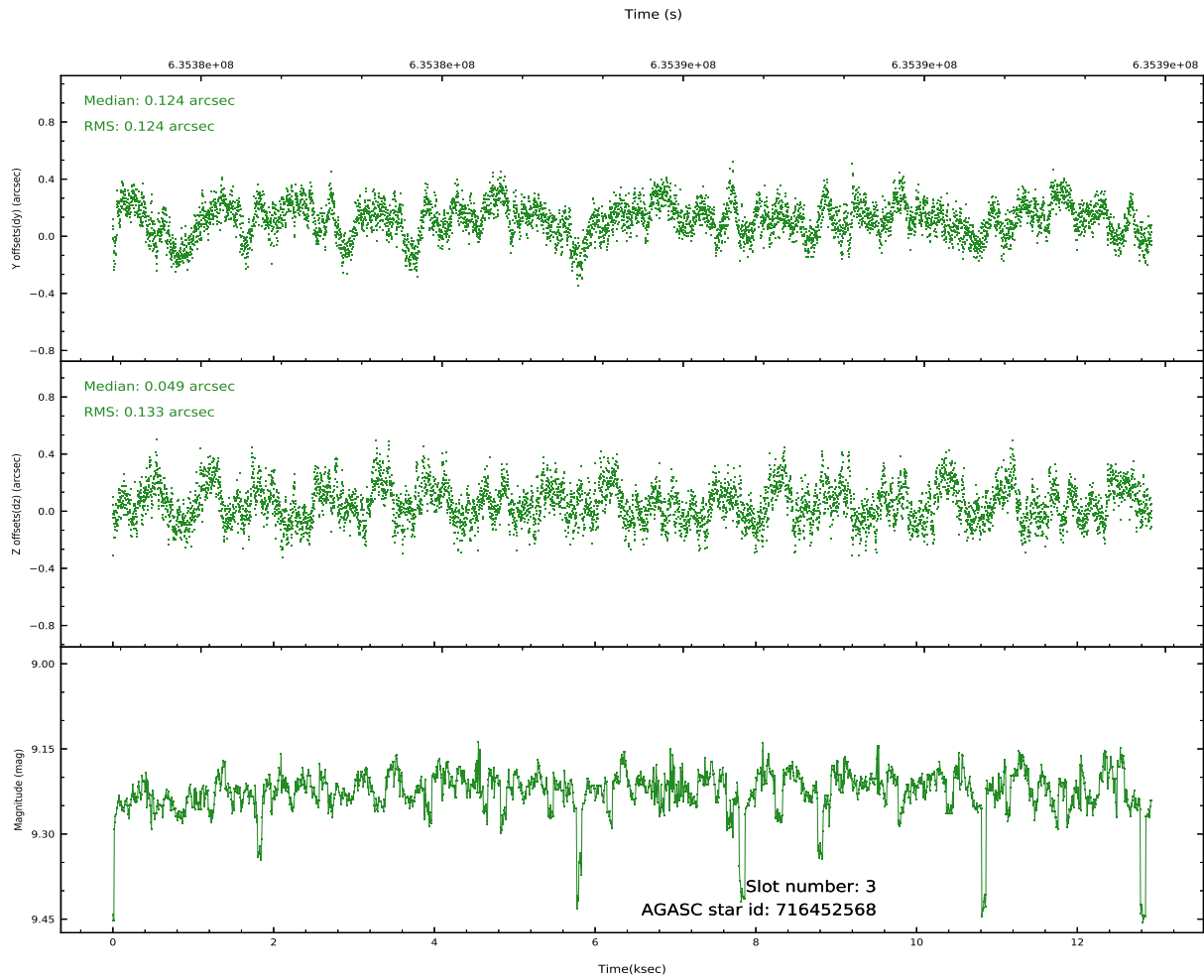
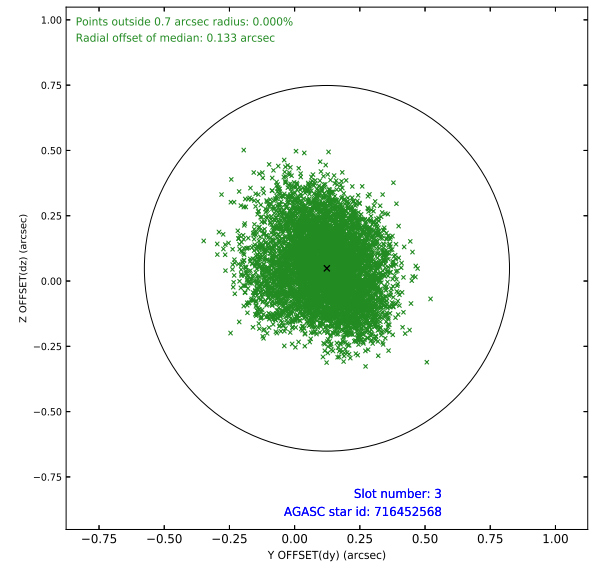
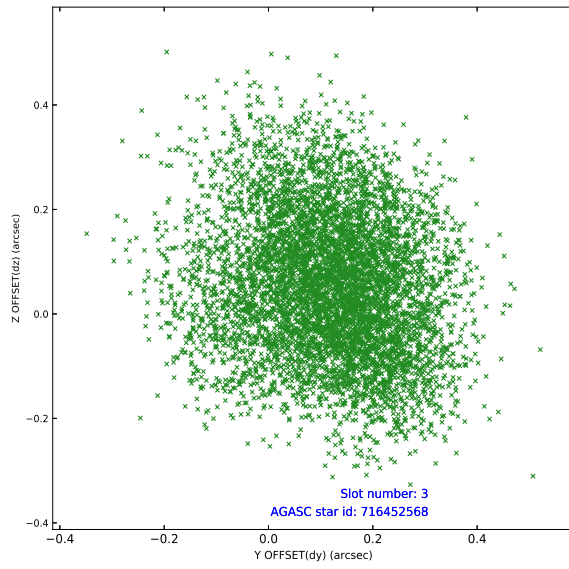


Slot Statistics

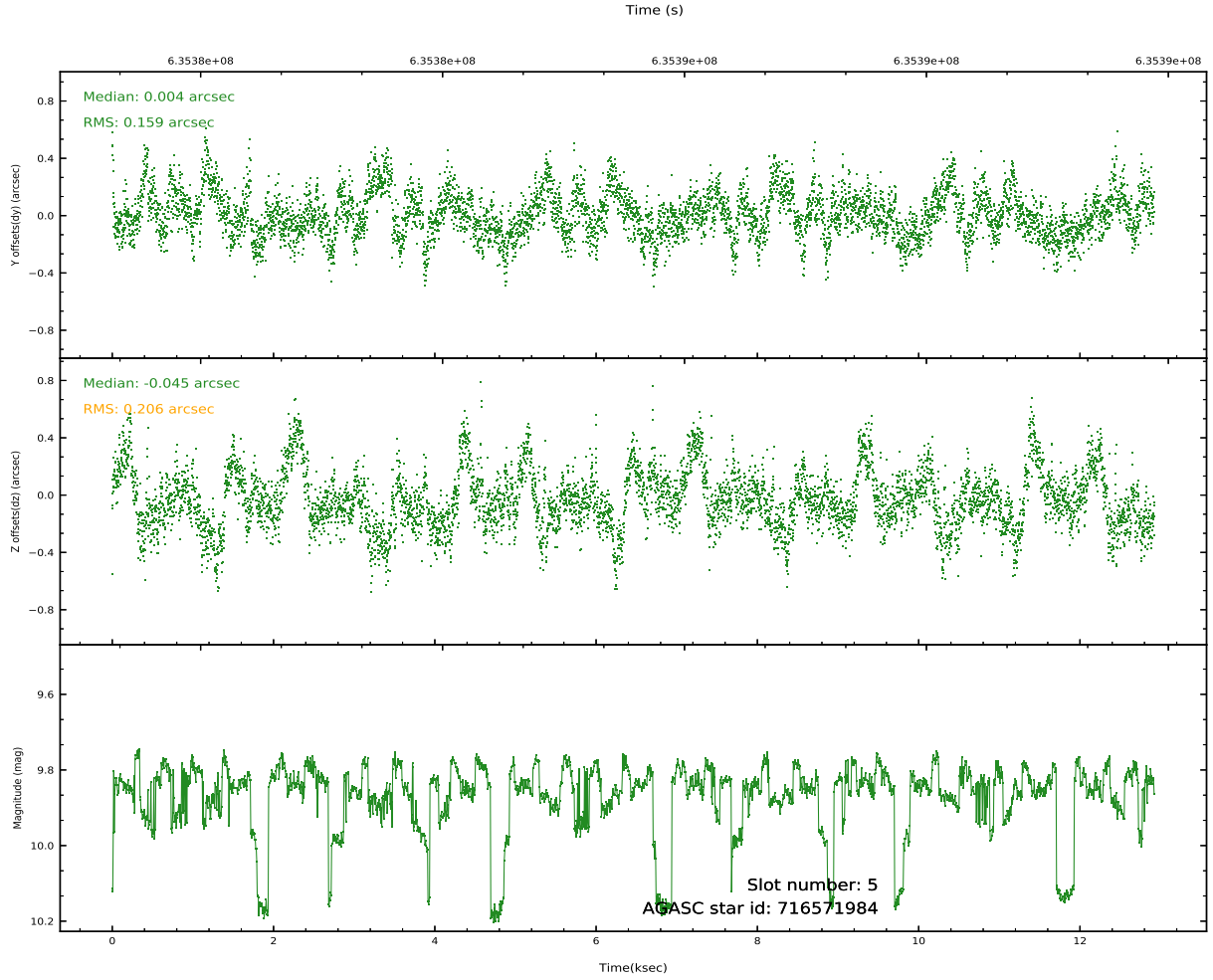
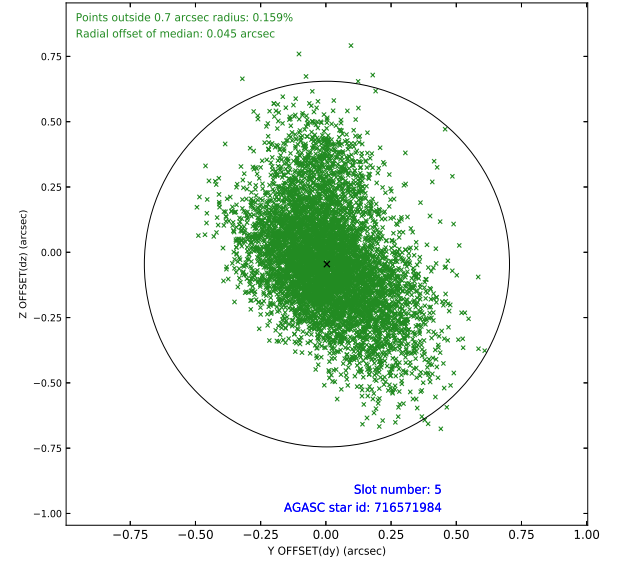
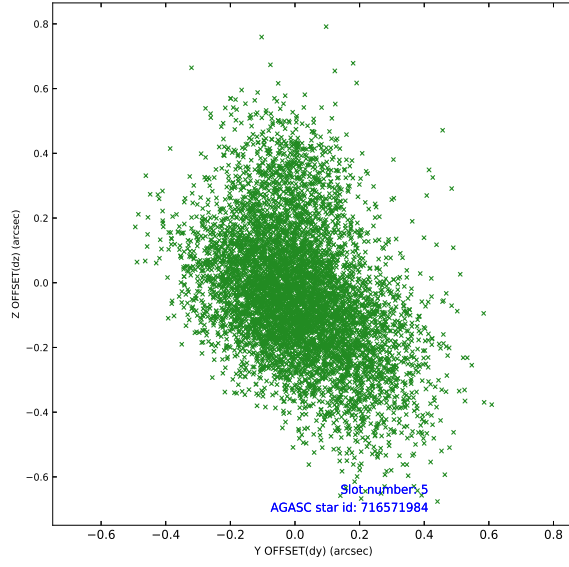
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.31	3153	1.000	0.170	-0.067	0.011	0.020	0.000000	0.000000	915.86	-666
1	FID		ACIS-I-5	7.24	3153	1.000	-0.212	0.179	0.010	0.017	0.000000	0.000000	-1832.27	1231
2	FID		ACIS-I-6	7.25	3153	1.000	-0.049	-0.043	0.009	0.015	0.000000	0.000000	380.98	1876
3	GUIDE	used	716452568	9.22	6296	1.000	0.124	0.049	0.197	0.311	139.317316	-12.008019	-1530.88	969
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	716571984	9.85	6288	1.000	0.004	-0.045	0.270	0.471	140.274671	-12.264834	1961.23	1127
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	716453424	9.96	6294	1.000	-0.121	-0.009	0.253	0.417	139.175719	-11.750909	-2291.82	1694

2.4 Star Slots

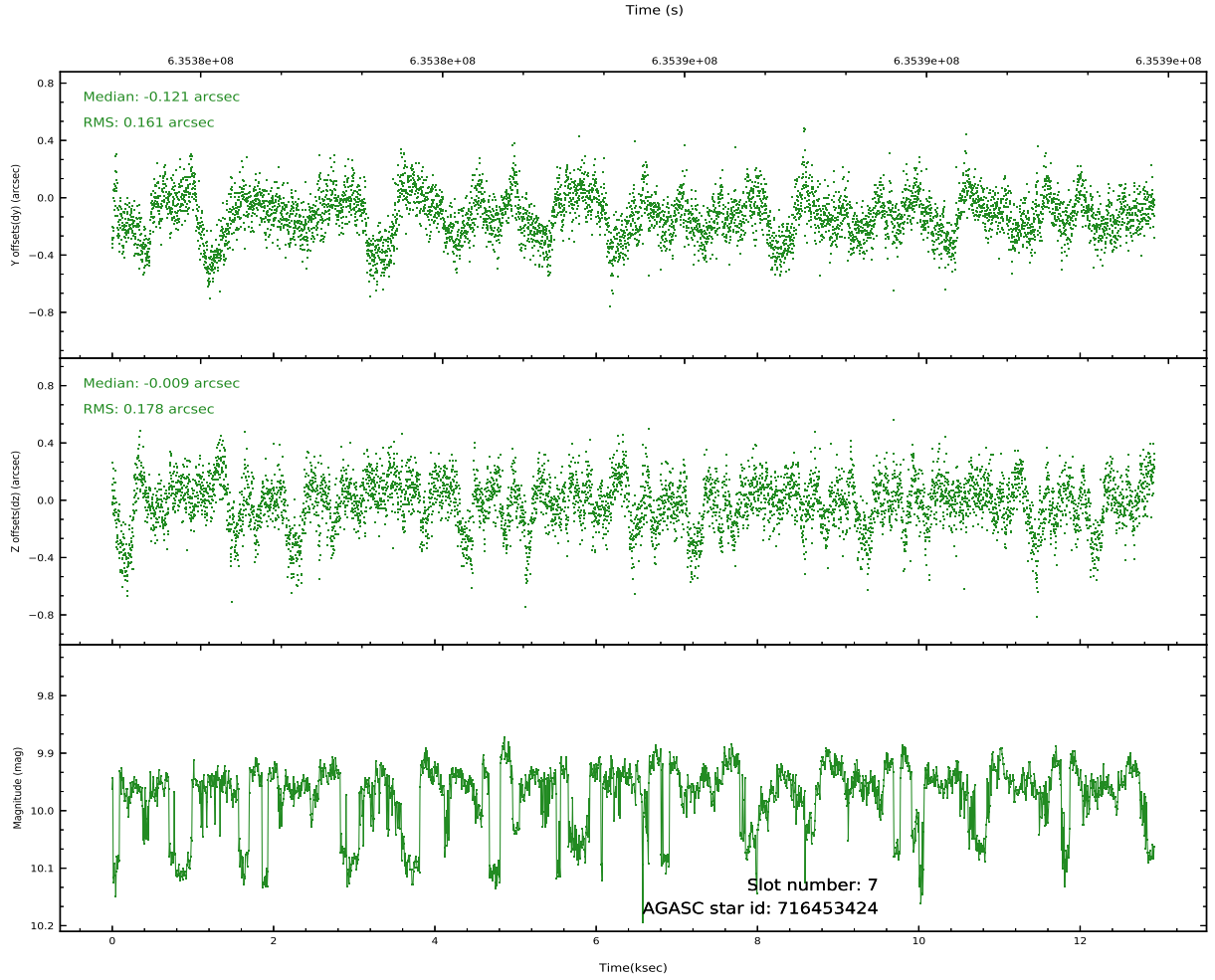
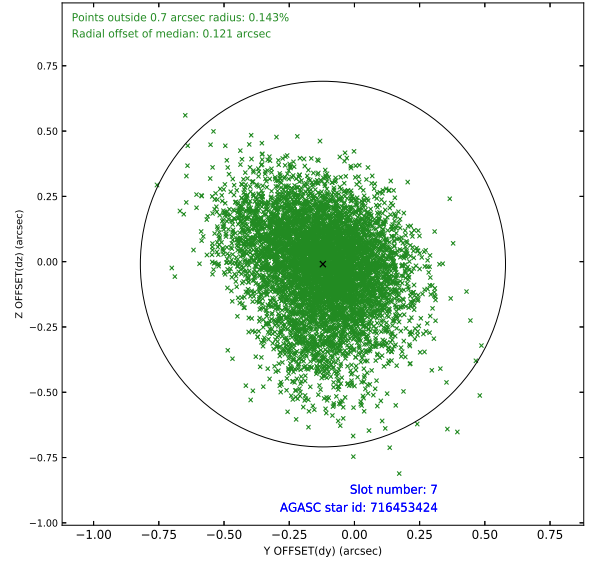
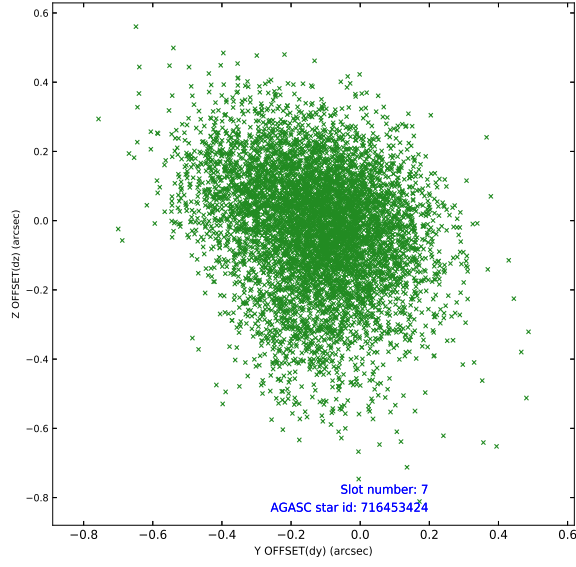
2.4.1 Slot 3



2.4.2 Slot 5

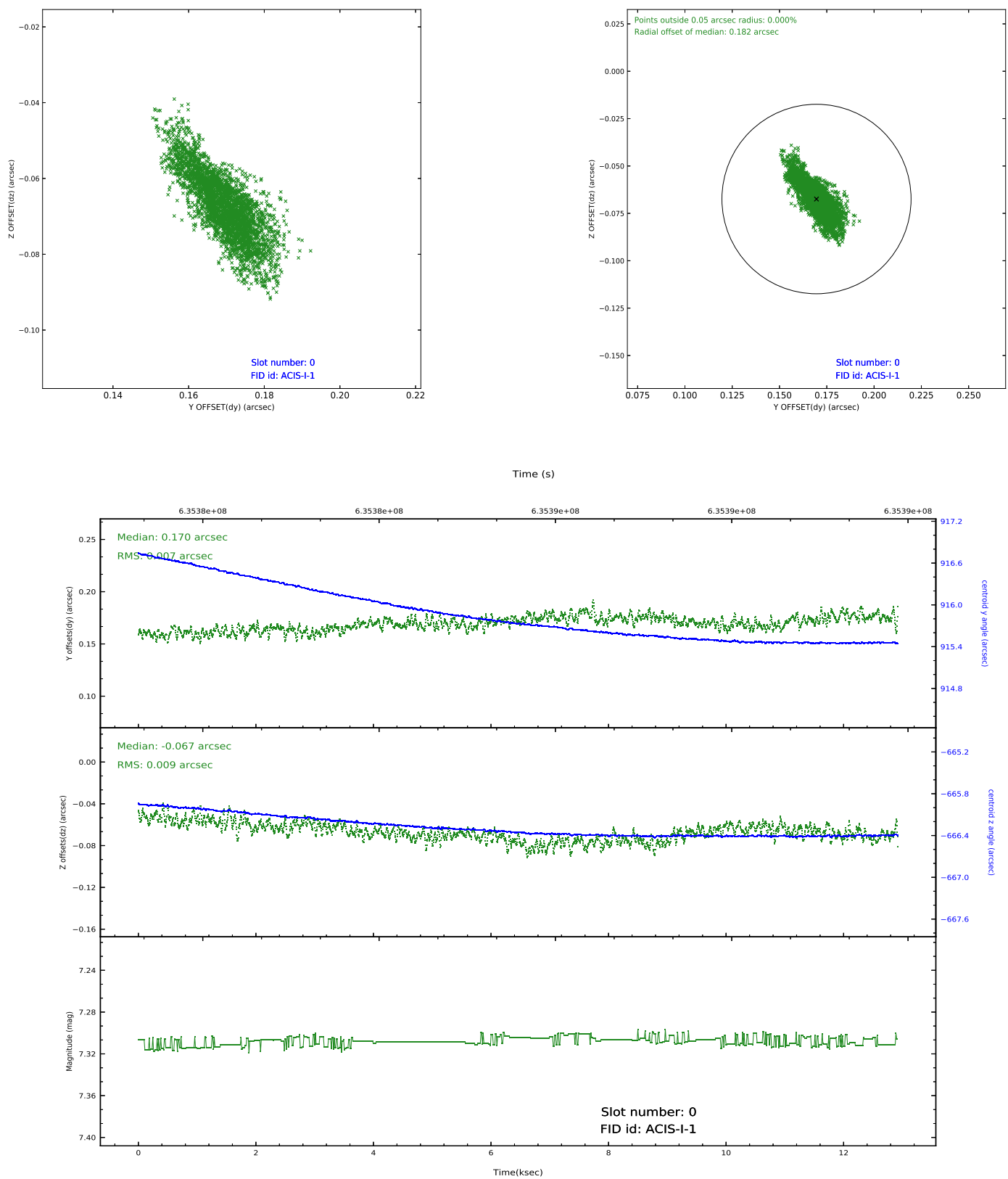


2.4.3 Slot 7

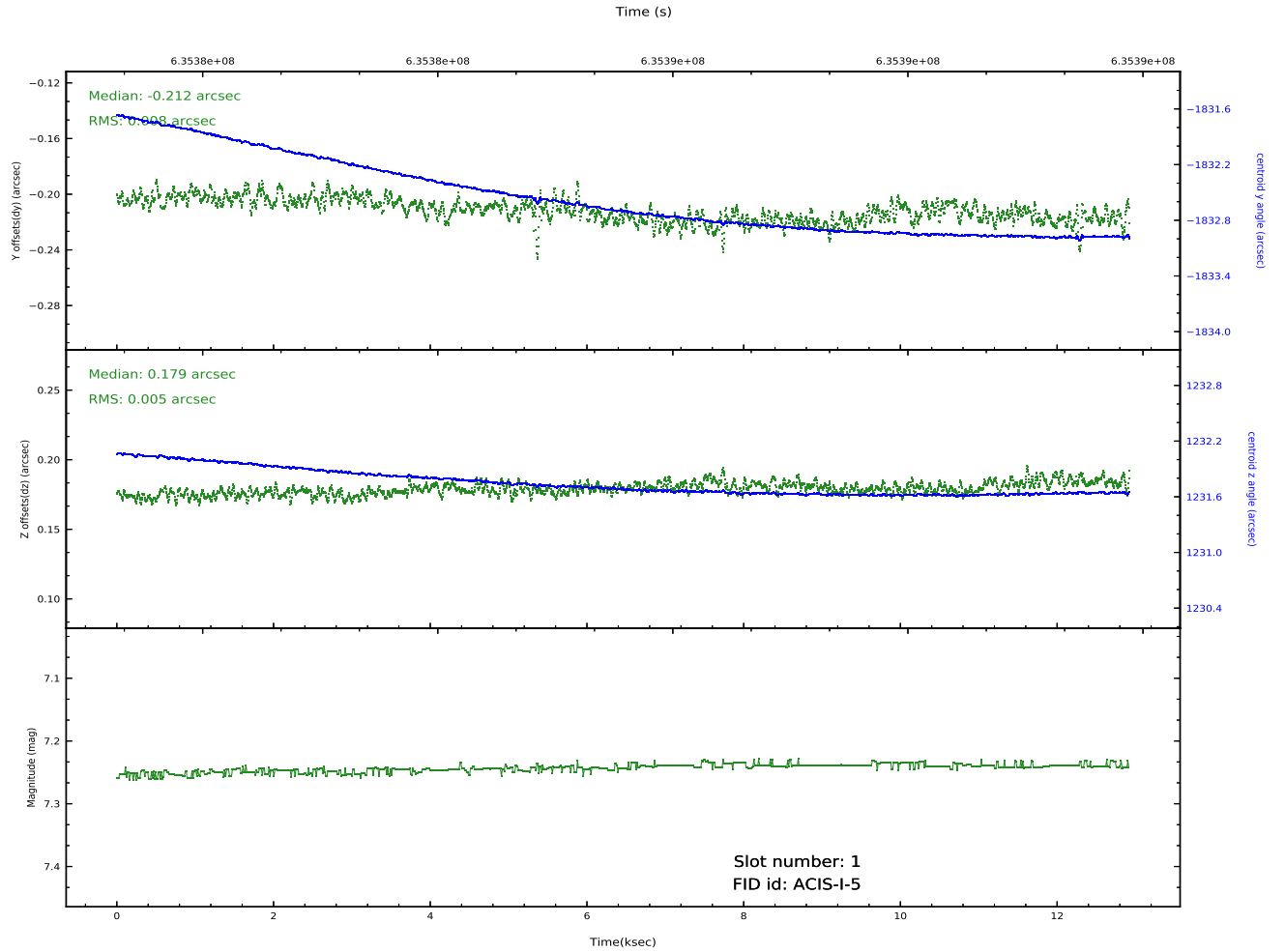
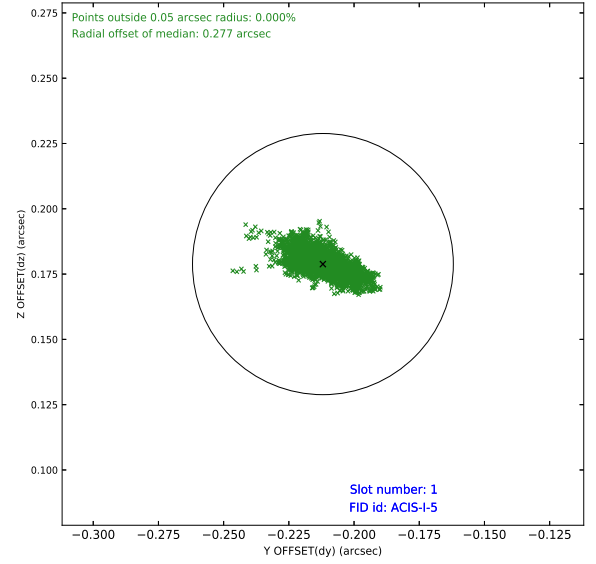
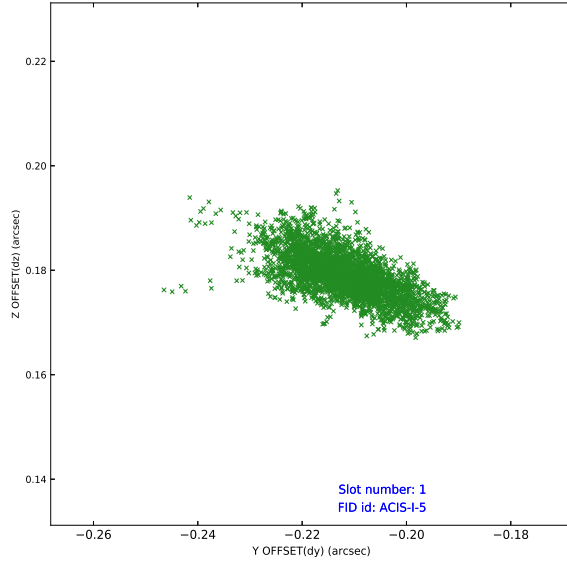


2.5 FID Slots

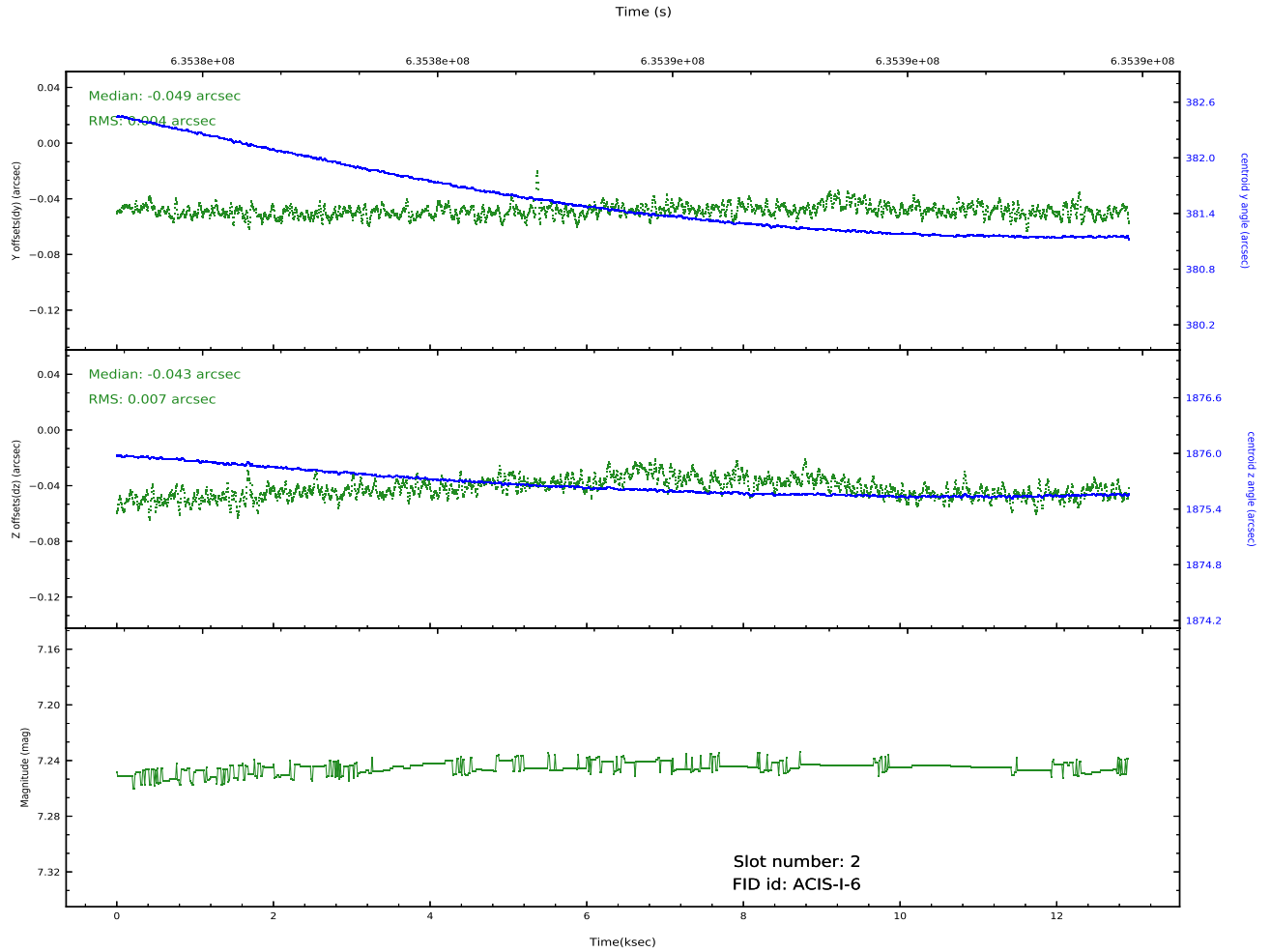
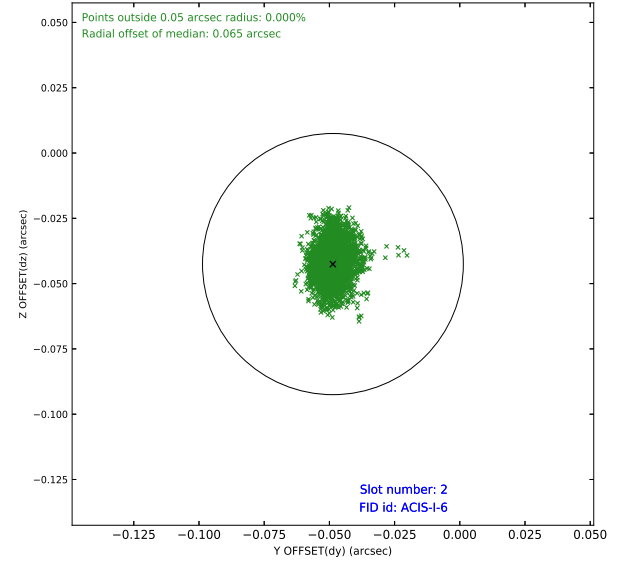
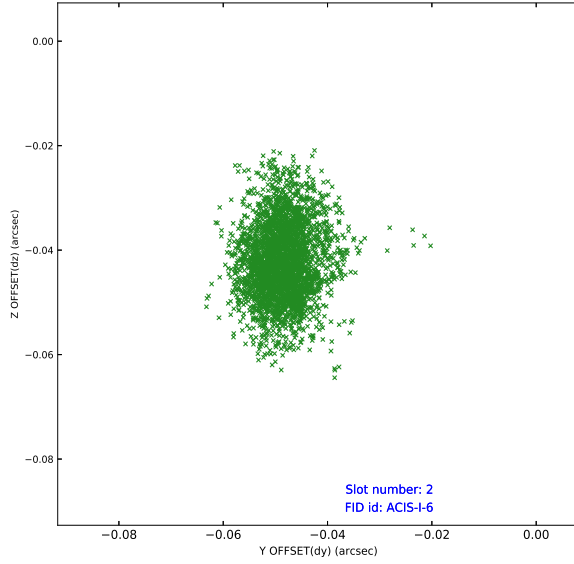
2.5.1 Slot 0



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)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.821559028387

A.2 Comments

The guide stars in slots 4 and 6 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these slots from the solution.