

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20544 - L2 Version 2
Chandra X-Ray Center

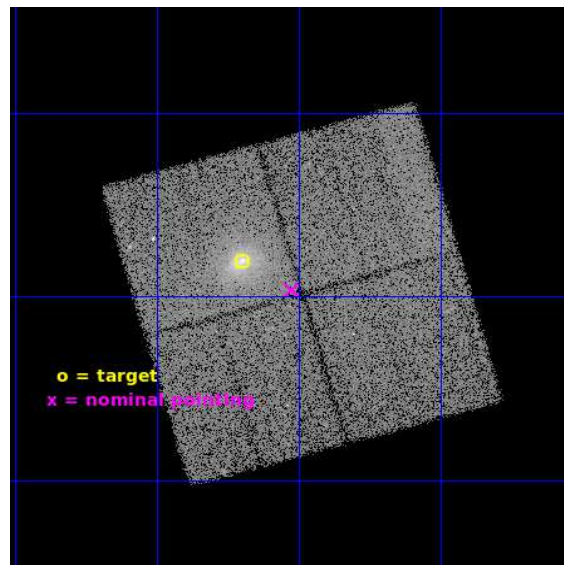
L2 Processing Date : Oct 25 2020

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

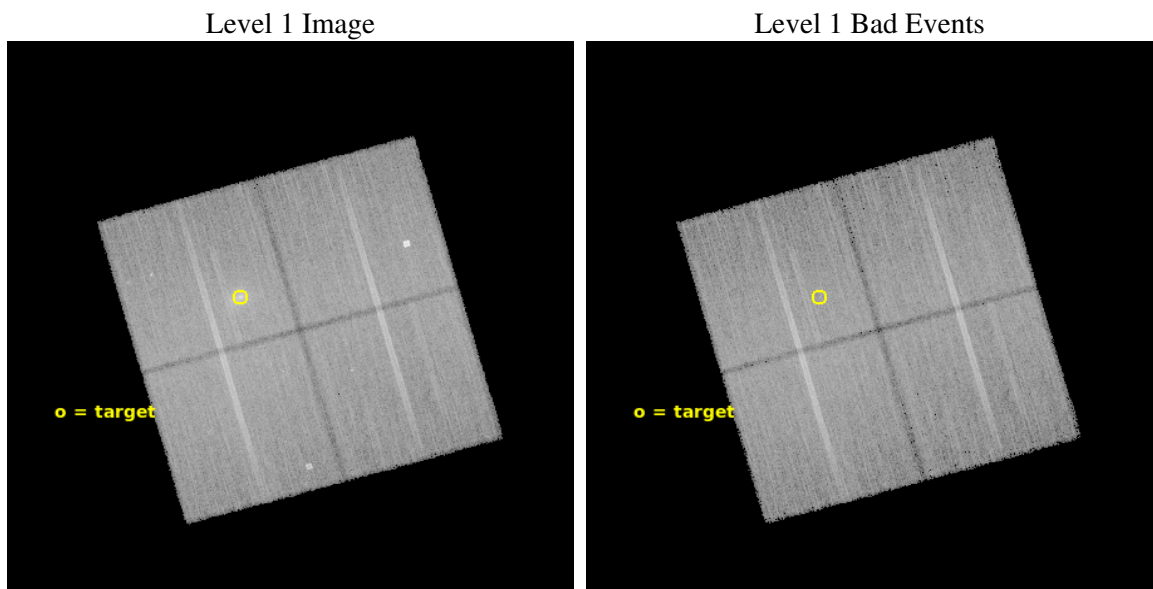
seq_num	801754	Sequence number
obs_id	20544	Observation id
title	Measuring the mass distribution with unprecedented accuracy: the CLASH cluster MACSJ1206	Proposal title
observer	Stefano Ettori	Principal investigator
object	MACS J1206-0847	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	181.550417	Observer's specified target RA [deg]
dec_targ	-8.800917	Observer's specified target Dec [deg]
ra_nom	181.50632290113	Nominal RA [deg]
dec_nom	-8.8271165860408	Nominal Dec [deg]
roll_nom	254.19756662782	Nominal Roll [deg]
revision	2	Processing version of data
ontime	43548.759274721	Sum of GTIs [s]
livetime	42979.762674667	Livetime [s]
ontime0	43551.900335073	Sum of GTIs [s]
ontime1	43551.900335073	Sum of GTIs [s]
ontime2	43545.618174314	Sum of GTIs [s]
ontime3	43548.759274721	Sum of GTIs [s]
l2events	138978	Number of level 2 events



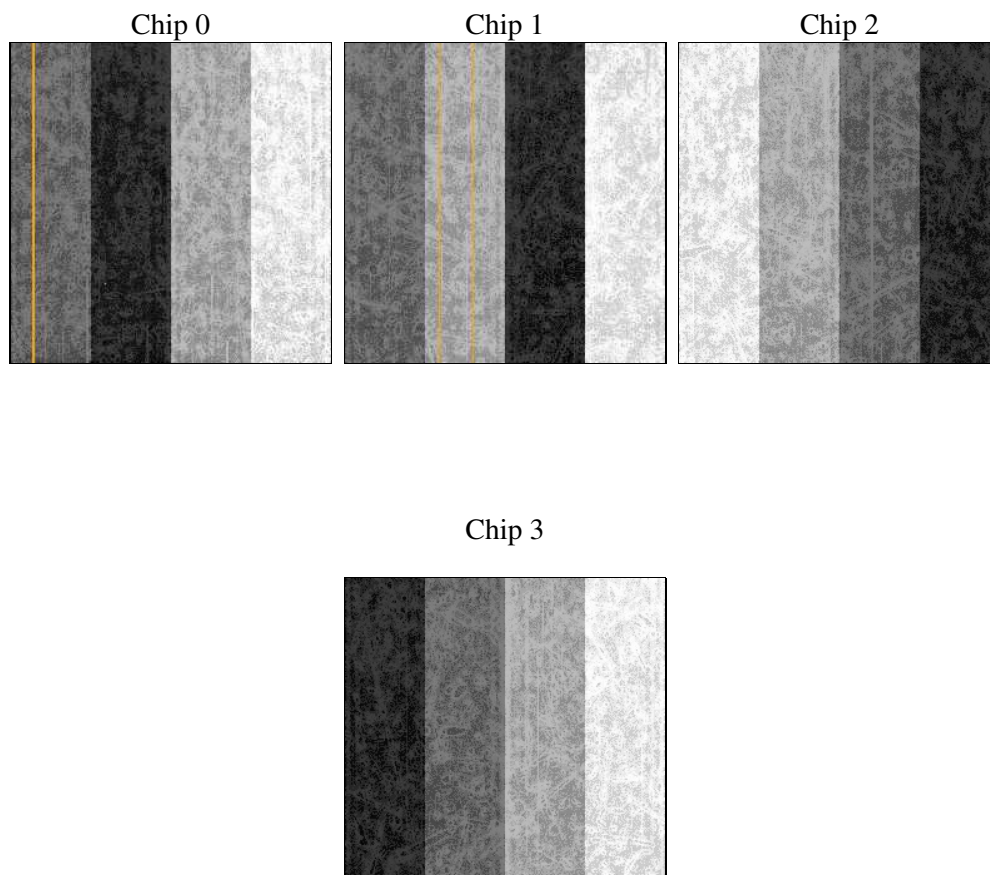
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43471.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	43548.759274721	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	43551.900335073	Sum of GTIs [s]
date	2020-10-25T14:32:18	Date and time of file creation	ontime1	43551.900335073	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	43545.618174314	Sum of GTIs [s]
			ontime3	43548.759274721	Sum of GTIs [s]
			l1events	1278191	Number of level 1 events

2.1.4 Events

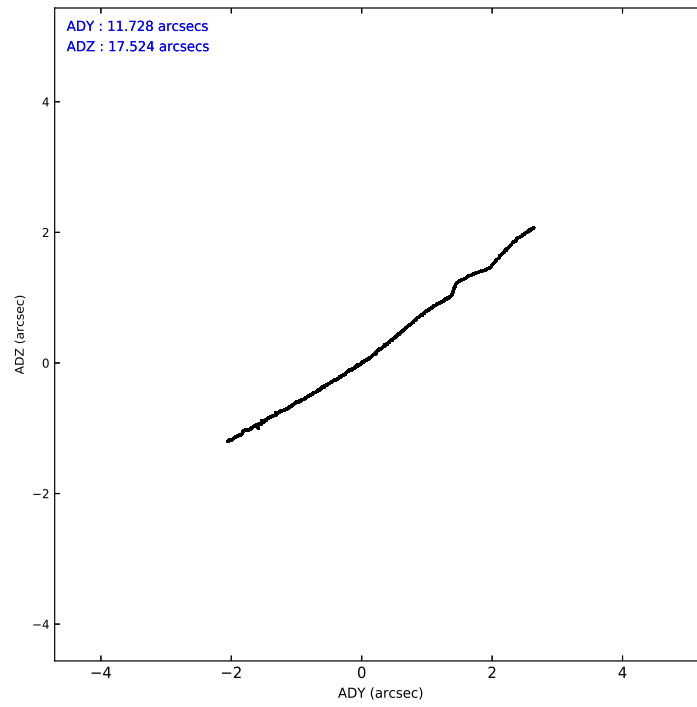
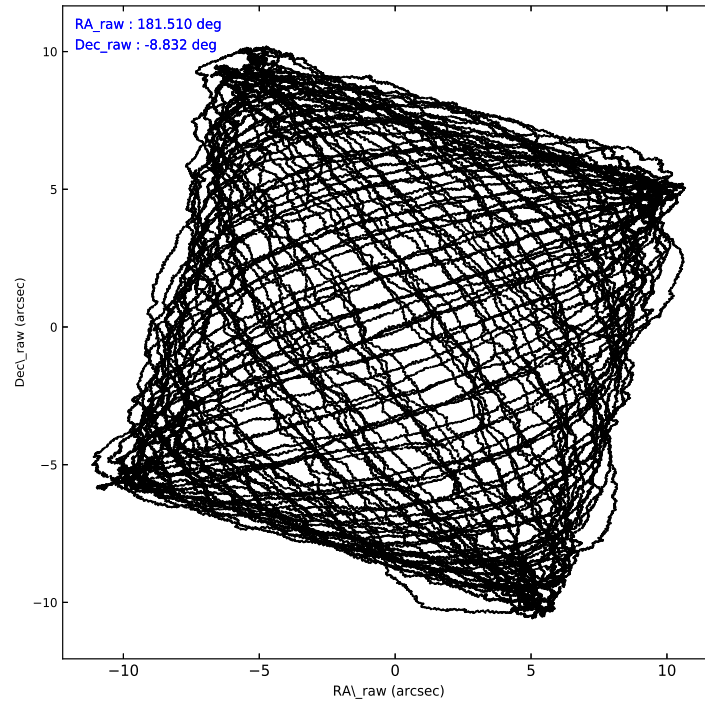
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	299349	312261	330740	335841
rejected events	262947	266636	293528	284293
rejected %	87%	85%	88%	84%

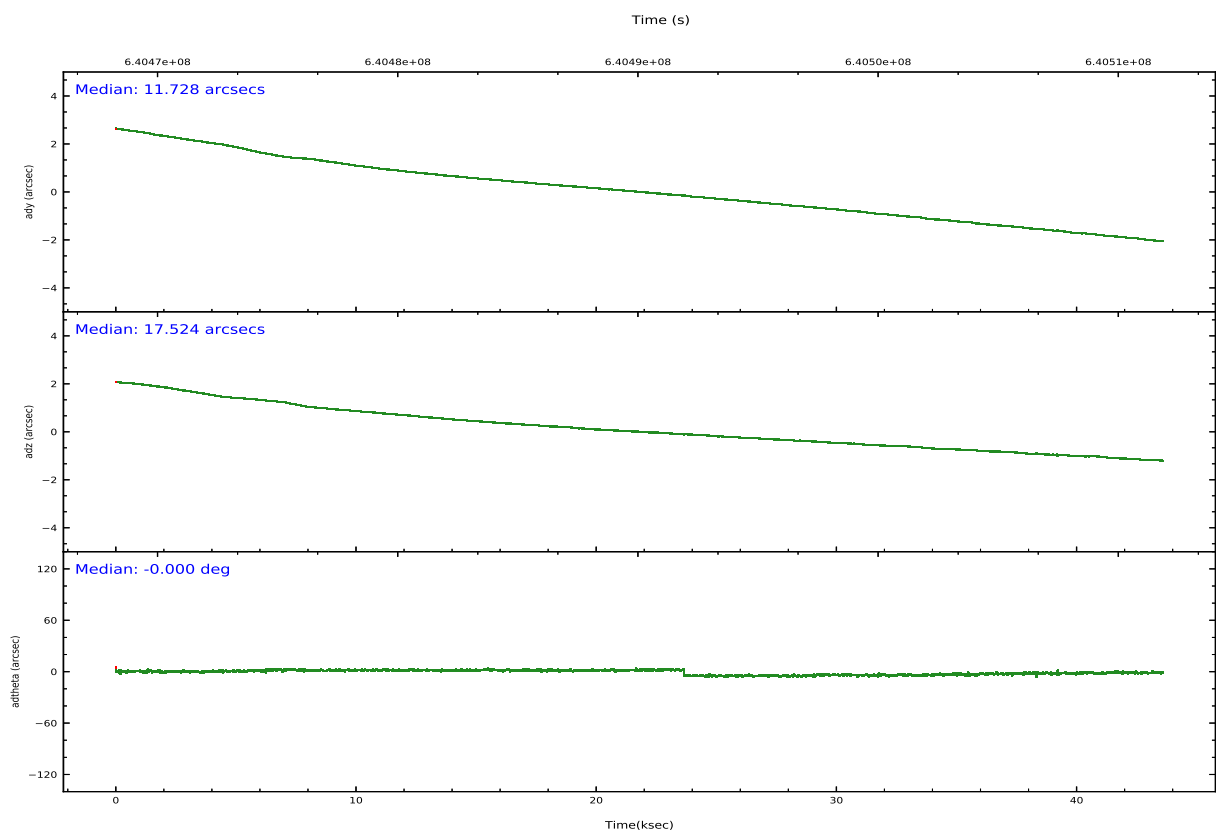
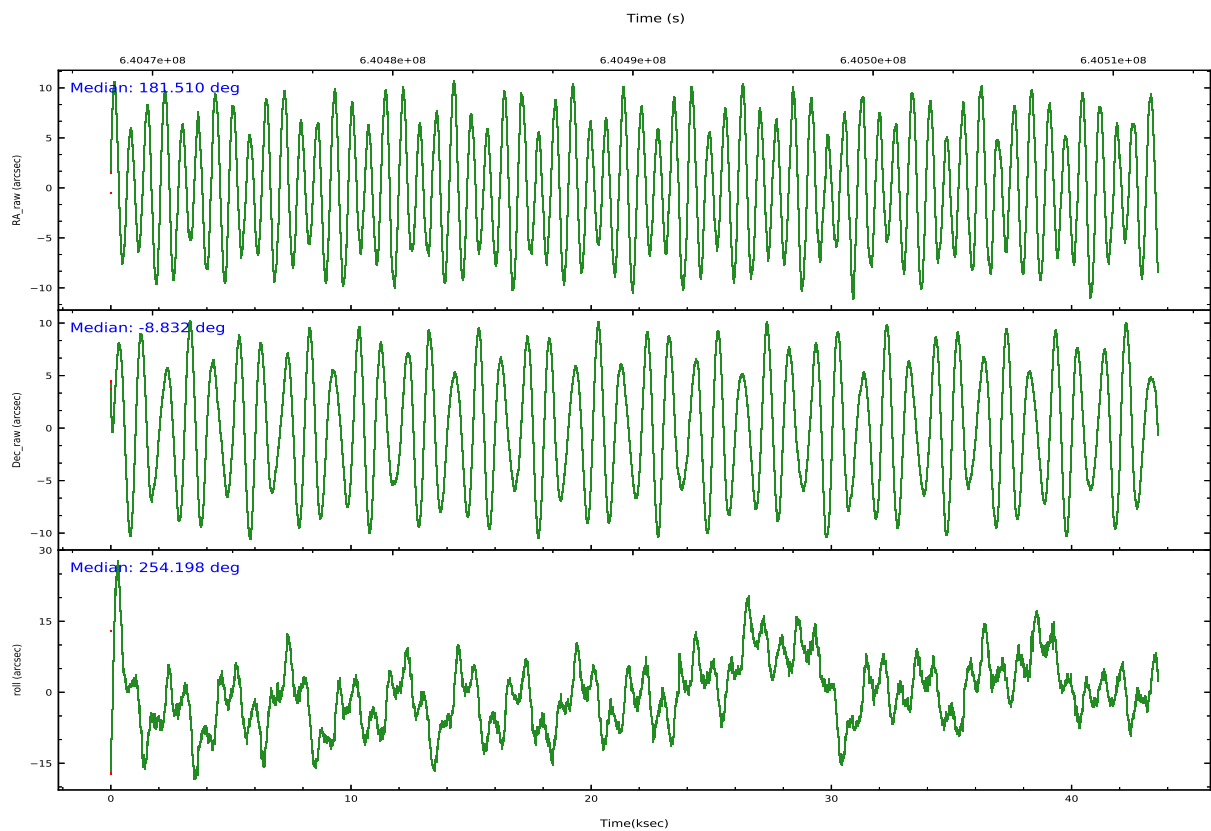
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	12501	19067	14554	25635
	4%	6%	4%	7%
grade 1 events	171	202	213	270
	0%	0%	0%	0%
grade 2 events	9044	9954	8766	9395
	3%	3%	2%	2%
grade 3 events	3793	3905	3503	4243
	1%	1%	1%	1%
grade 4 events	3537	3702	3524	4234
	1%	1%	1%	1%
grade 5 events	13854	14424	12850	15589
	4%	4%	3%	4%
grade 6 events	7530	9000	6870	8043
	2%	2%	2%	2%
grade 7 events	248919	252007	280460	268432
	83%	80%	84%	79%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-0123	ACIS-0123	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	181.503396	181.50632290113	CCD I2 on	Y	Y
[deg] Pointing Dec	-8.805085	-8.8271165860408	CCD I3 on	Y	Y
[deg] Pointing Roll	253.992802	254.19756662782	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	O2	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	640468396.184000	640467082.50096	CCD S5 on	N	N
Observation start date	2018-04-18T19:52:07	2018-04-18T19:31:22	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	640511867.184000	640512626.84115	On-chip summing requested	N	N
Observation end date	2018-04-19T07:56:38	2018-04-19T08:10:26	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



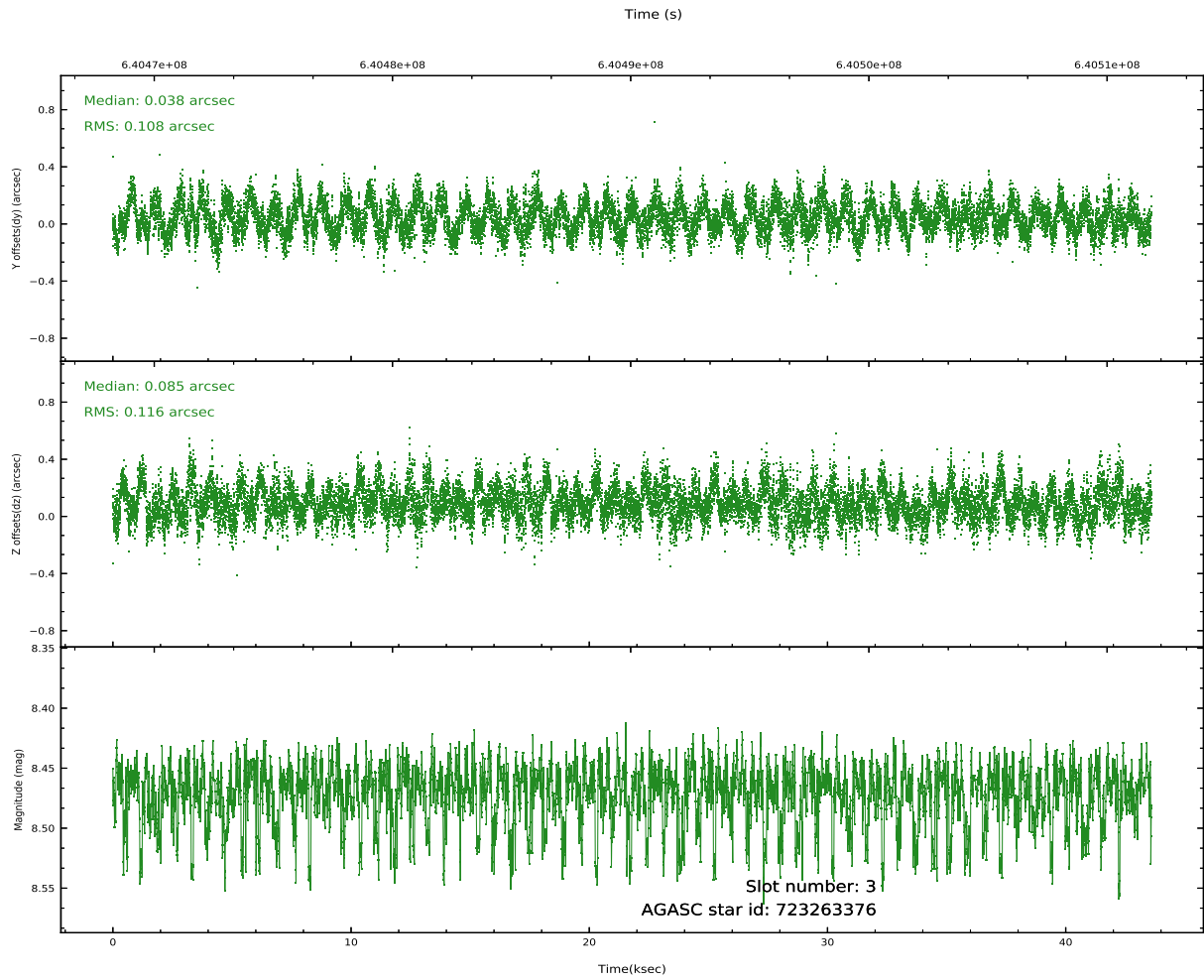
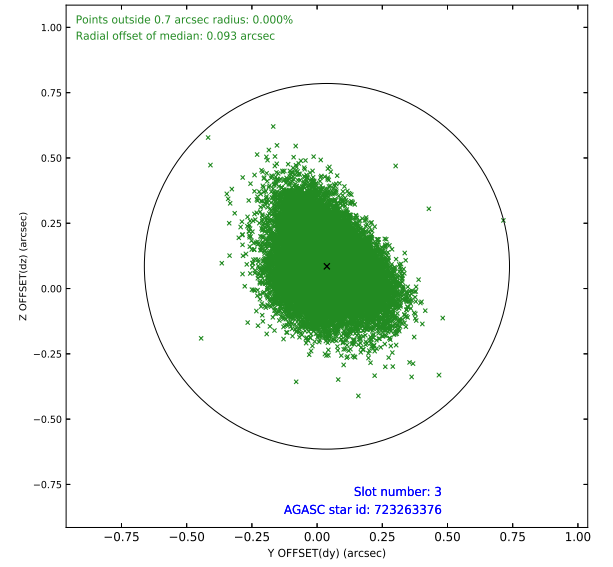
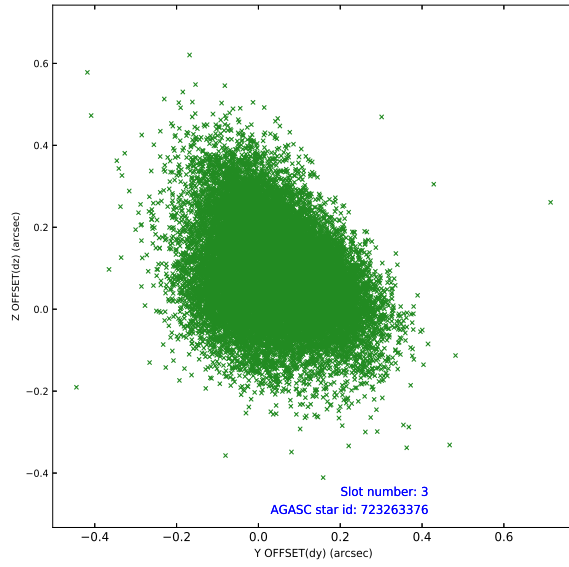


Slot Statistics

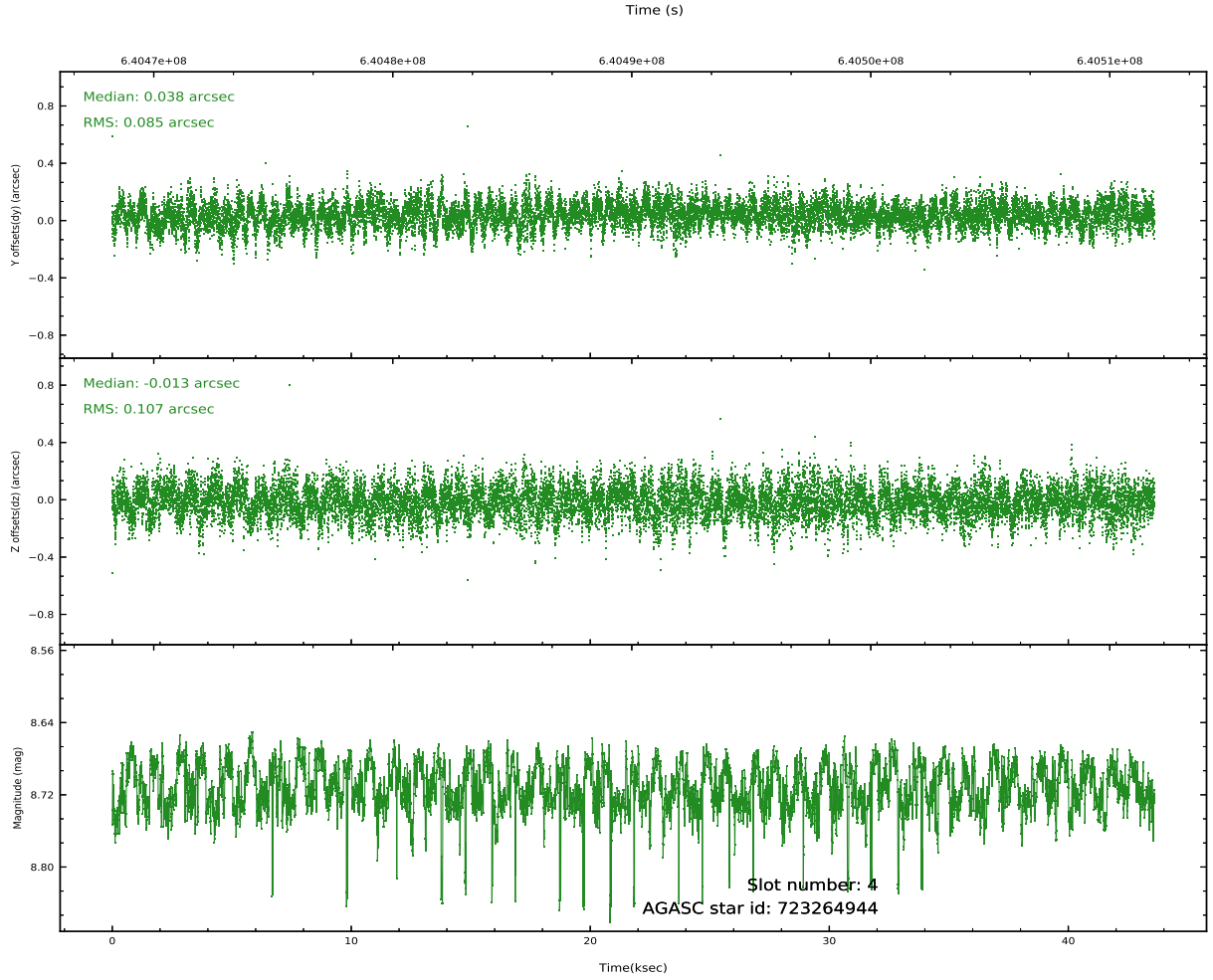
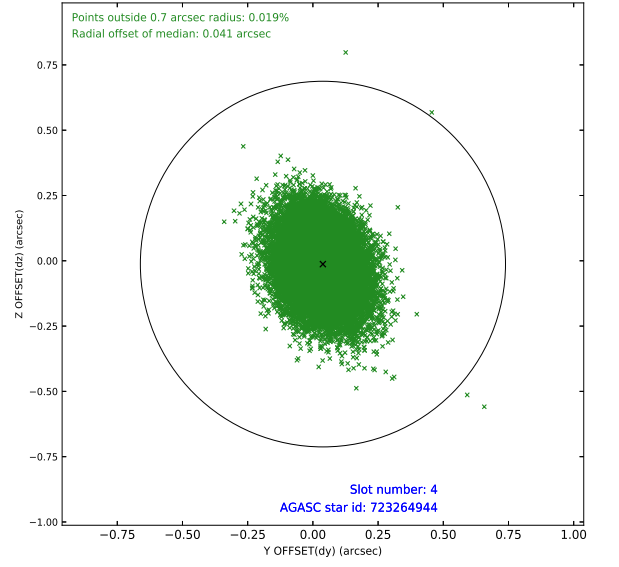
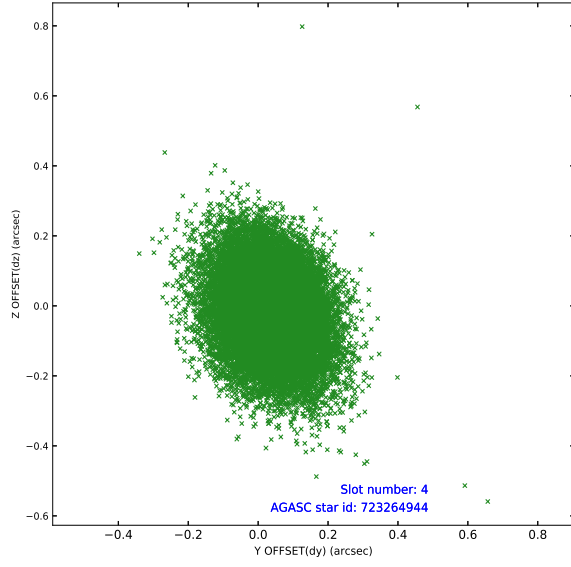
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.12	10636	1.000	-0.030	-0.049	0.074	0.098	0.000000	0.000000	927.70	-841
1	FID		ACIS-I-4	7.07	10636	1.000	0.021	0.015	0.049	0.063	0.000000	0.000000	2147.85	1058
2	FID		ACIS-I-6	7.12	10636	1.000	-0.099	0.104	0.049	0.060	0.000000	0.000000	393.62	1700
3	GUIDE	used	723263376	8.47	21262	1.000	0.038	0.085	0.169	0.273	181.274677	-9.308585	1967.39	-281
4	GUIDE	used	723264944	8.71	21249	1.000	0.038	-0.013	0.143	0.240	181.255643	-8.527713	-715.28	-1121
5	GUIDE	used	723397104	7.72	21263	1.000	-0.283	0.094	0.139	0.246	181.946290	-8.486028	-1537.20	1197
6	GUIDE	used	723263288	9.31	21236	1.000	0.214	-0.224	0.220	0.355	181.077399	-9.358326	2333.30	-905
7	GUIDE	used	723394376	9.75	21221	1.000	0.028	0.052	0.279	0.506	181.467227	-8.140366	-2264.00	-783

2.4 Star Slots

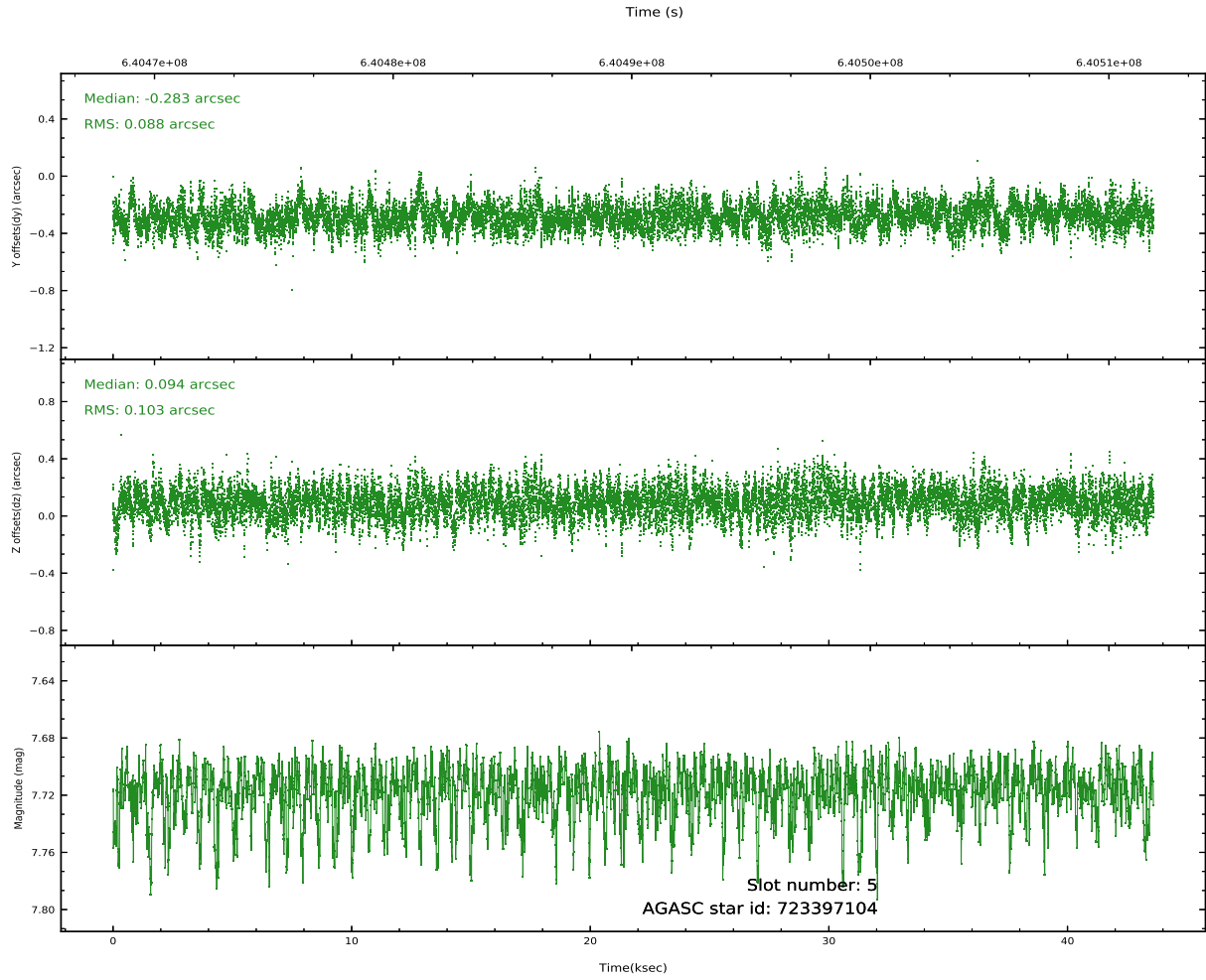
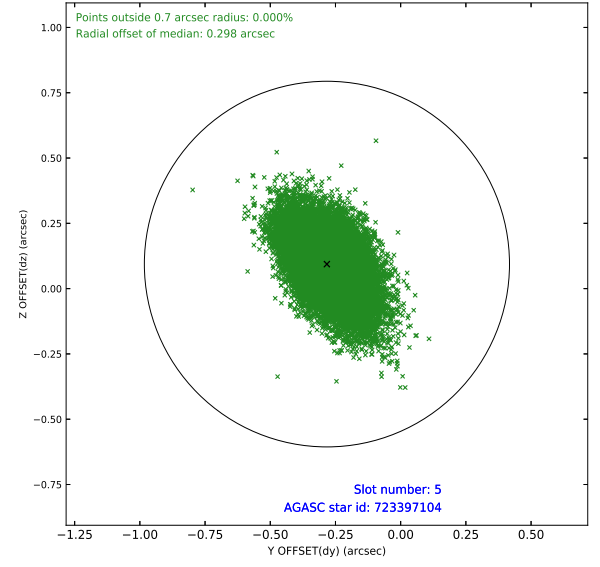
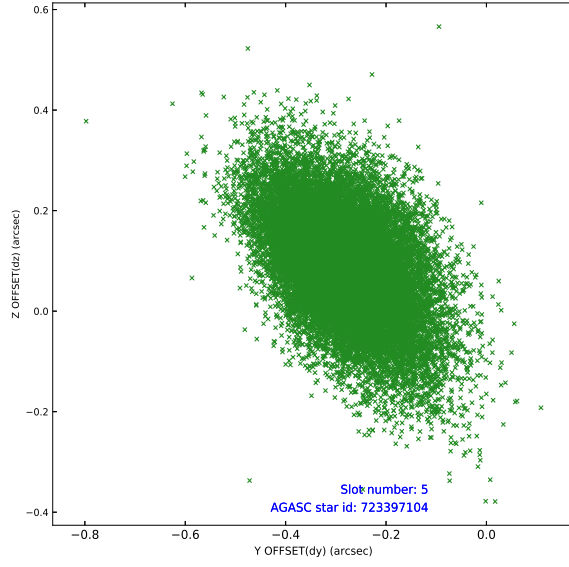
2.4.1 Slot 3



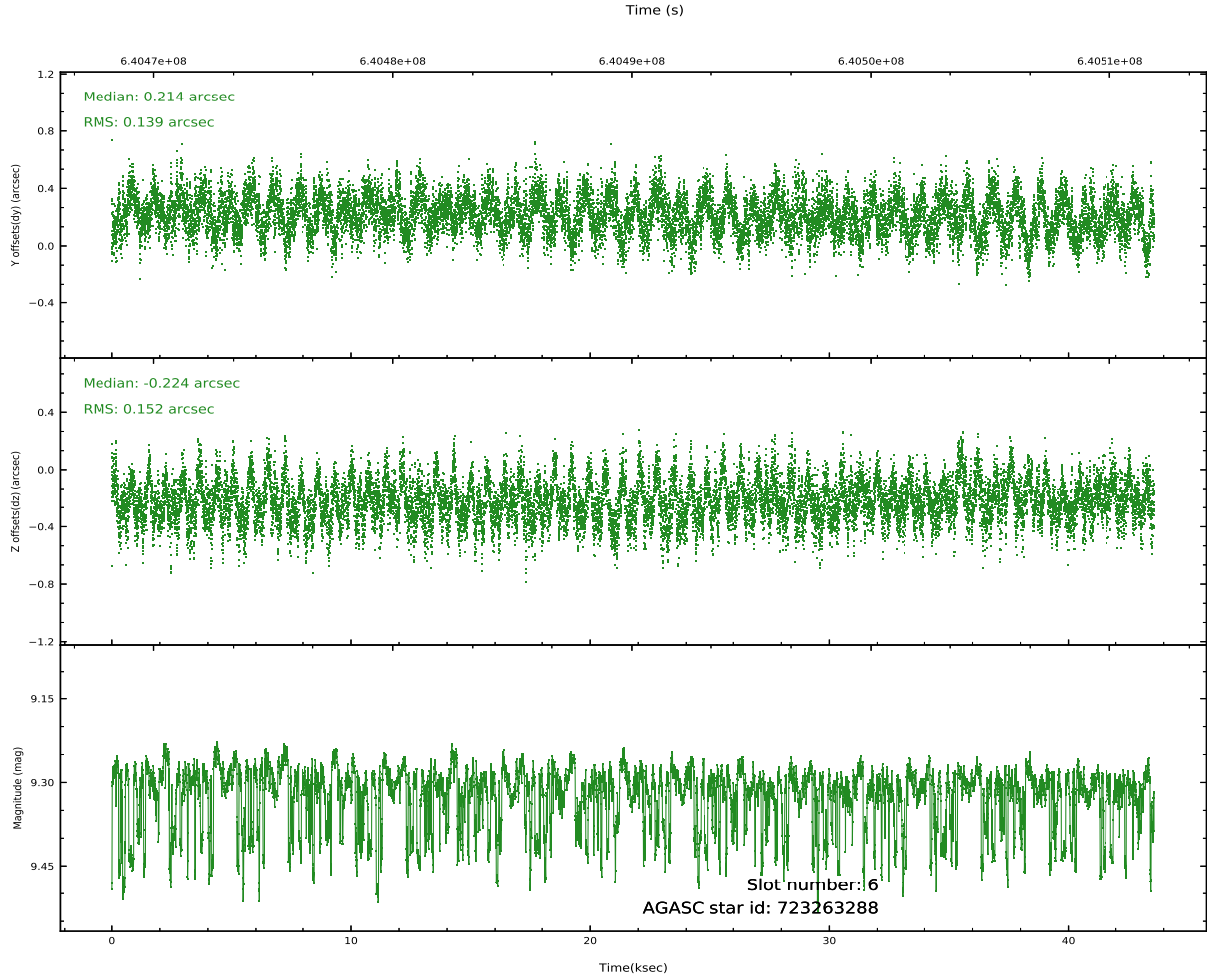
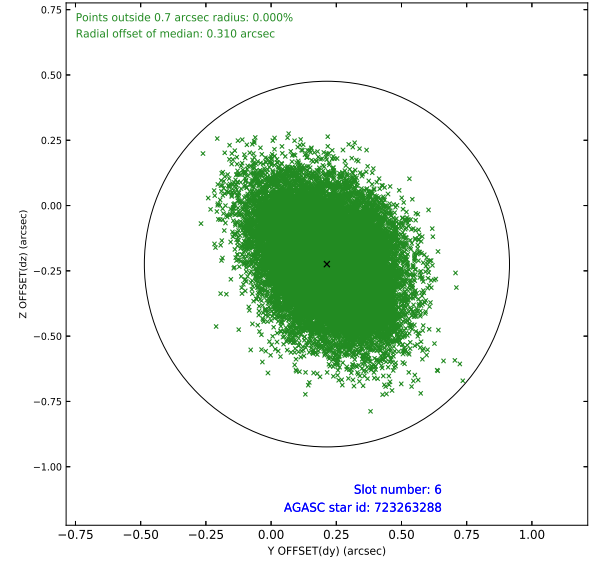
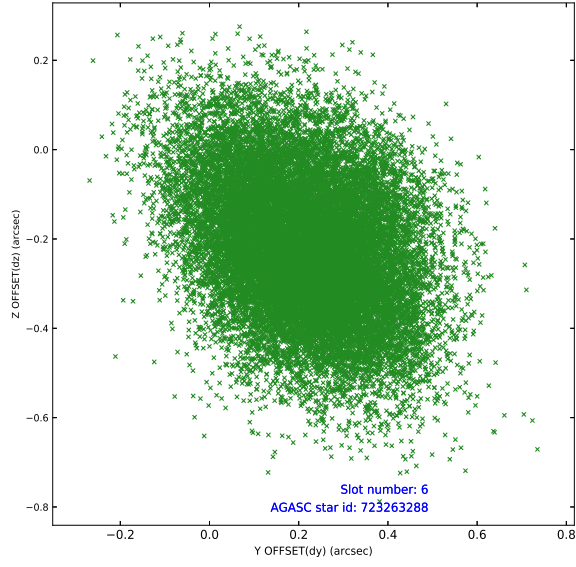
2.4.2 Slot 4



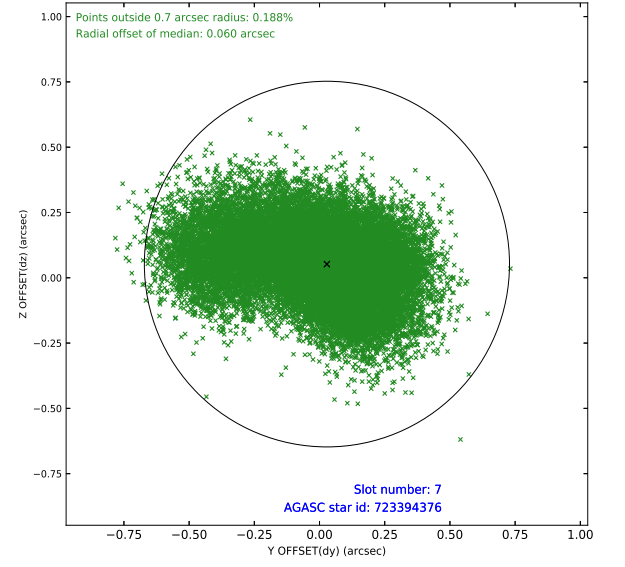
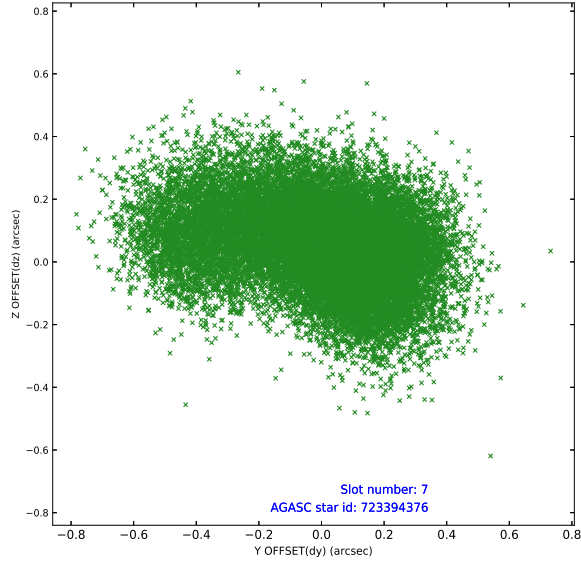
2.4.3 Slot 5



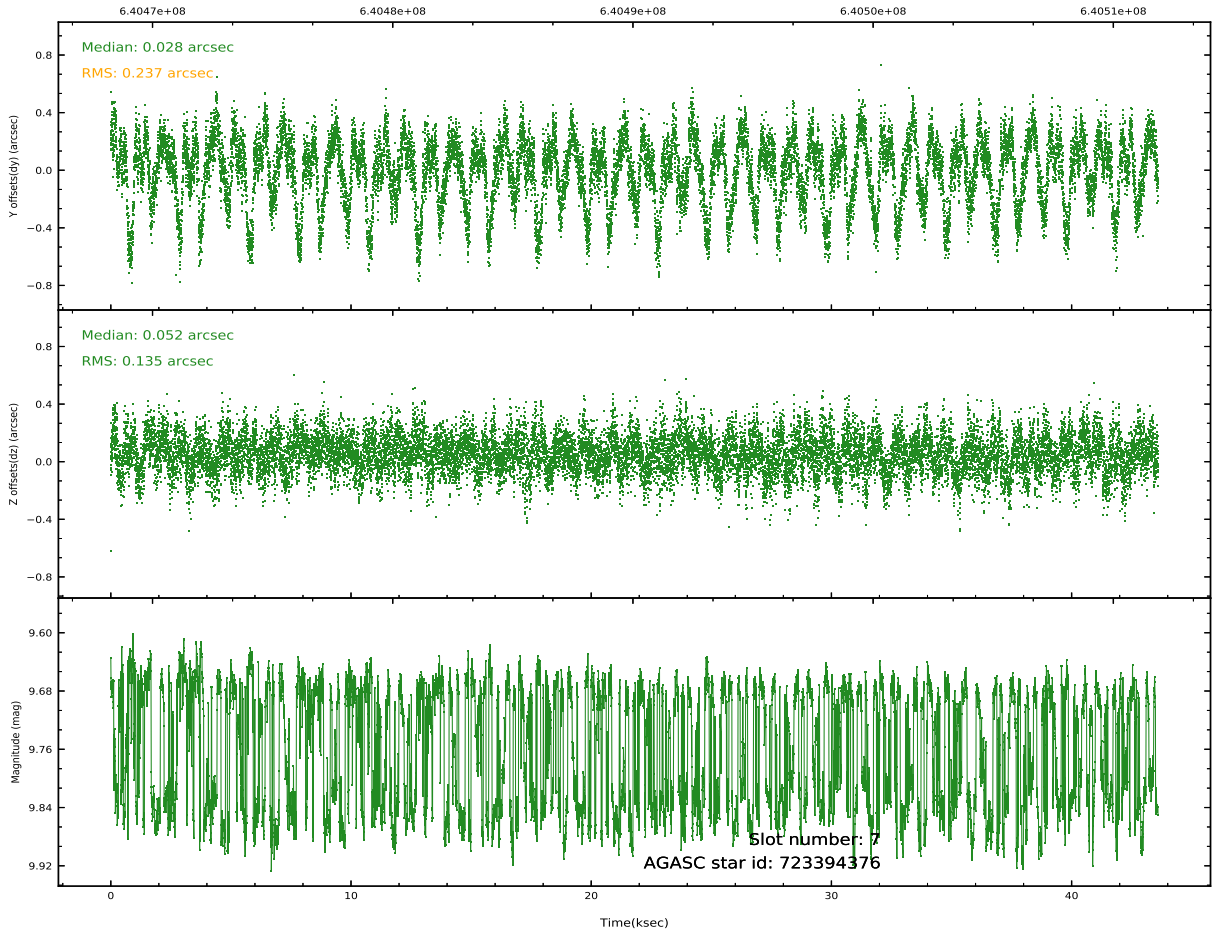
2.4.4 Slot 6



2.4.5 Slot 7

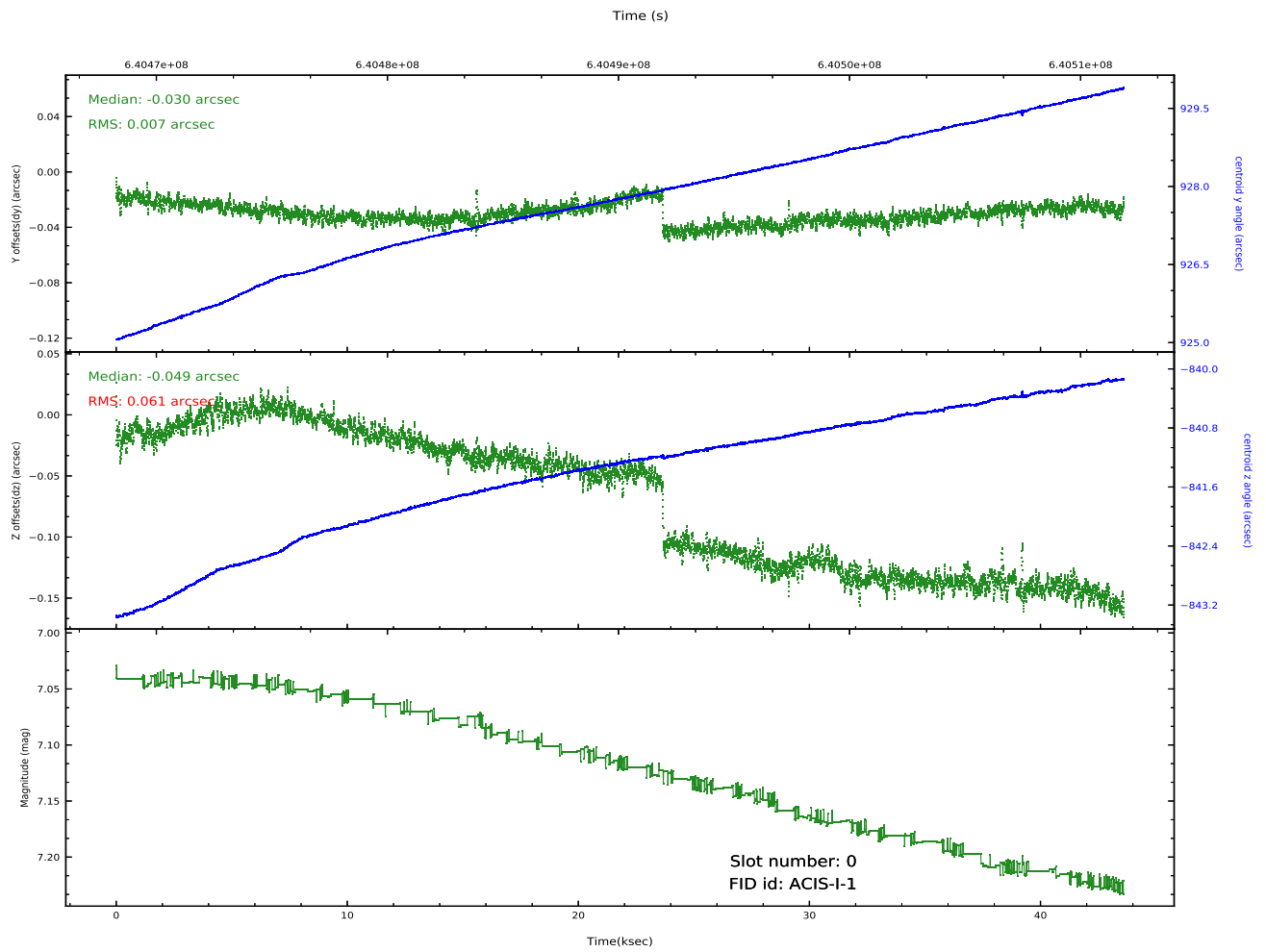
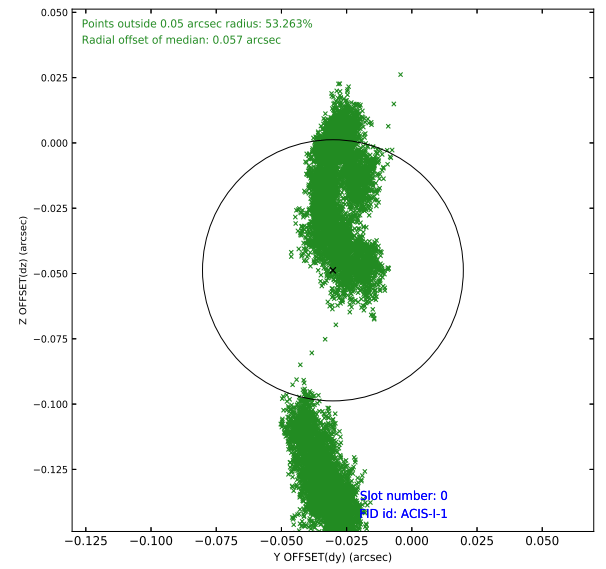
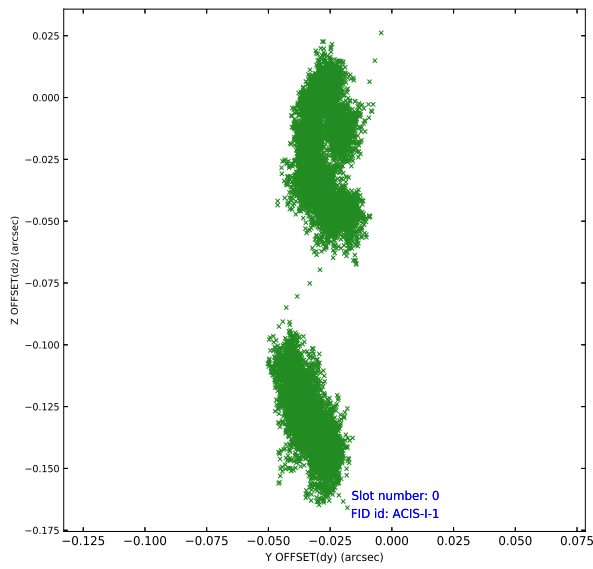


Time (s)

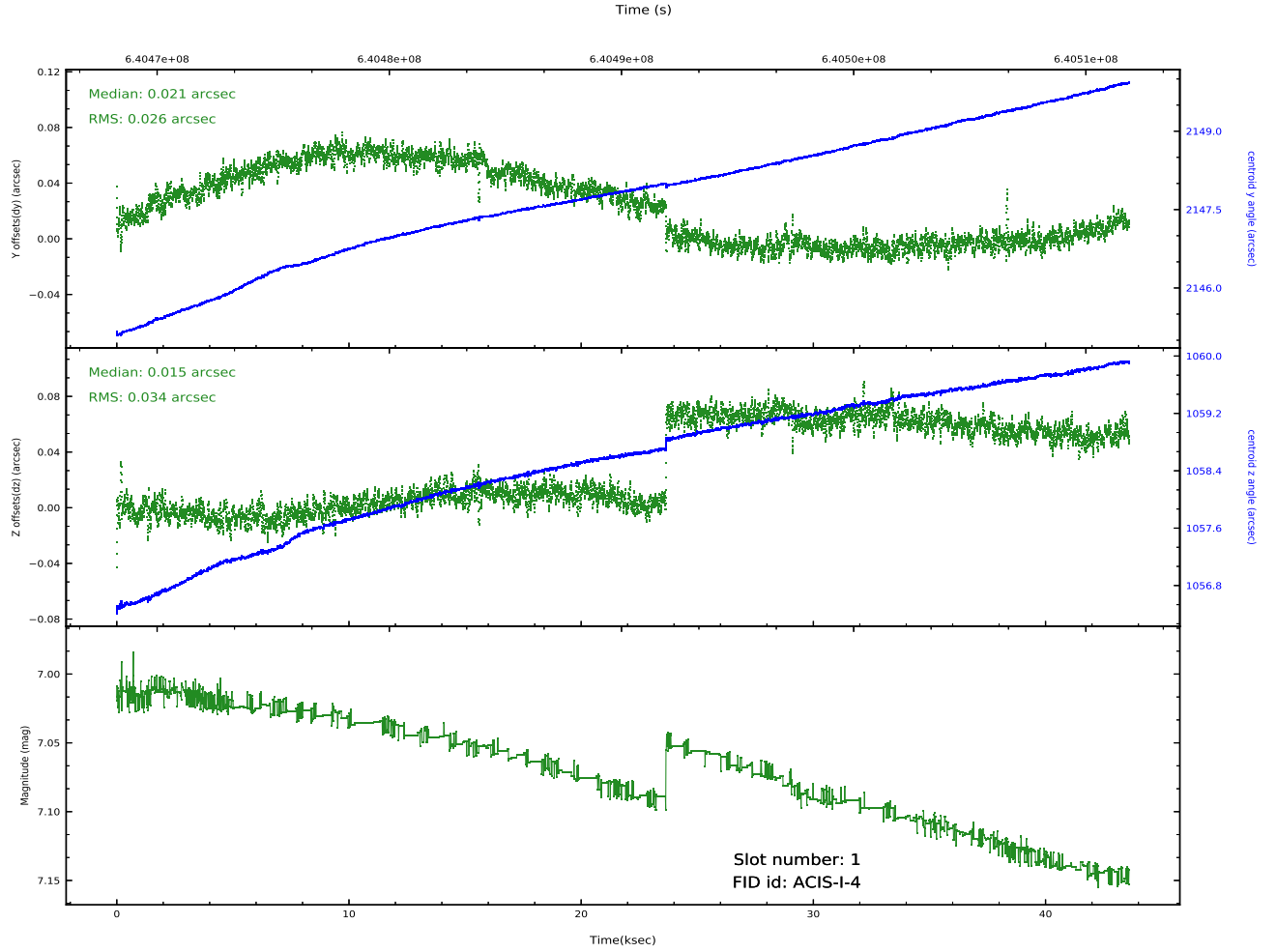
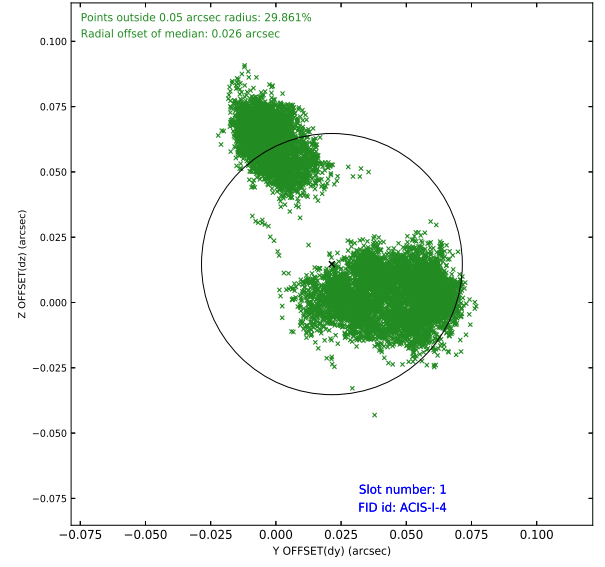
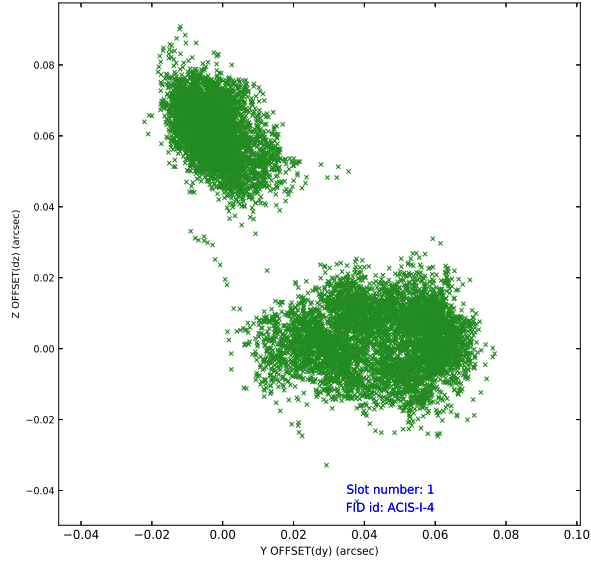


2.5 FID Slots

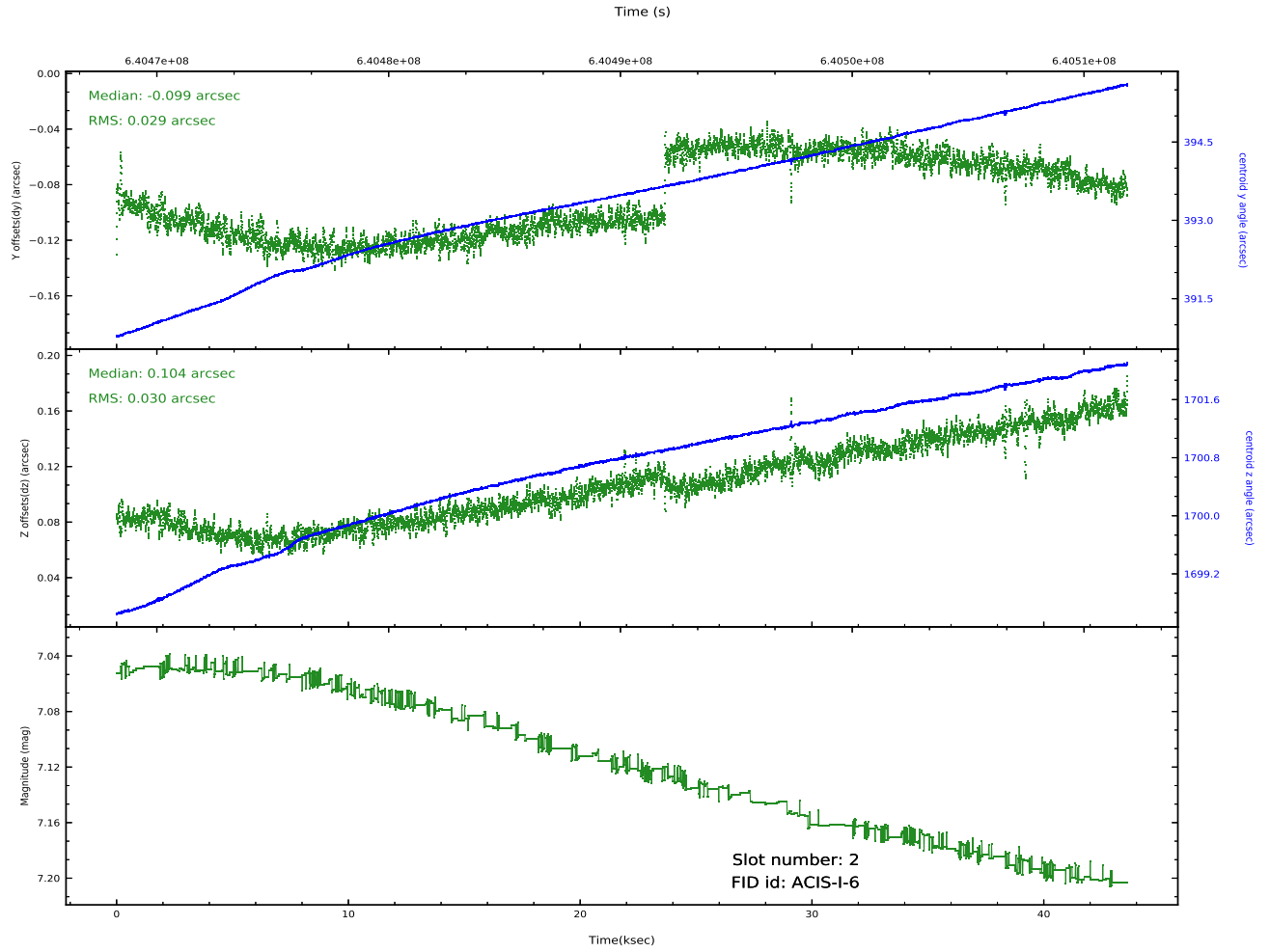
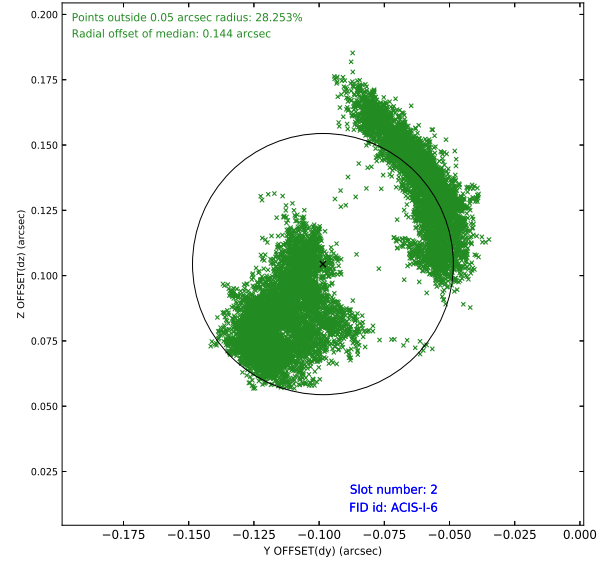
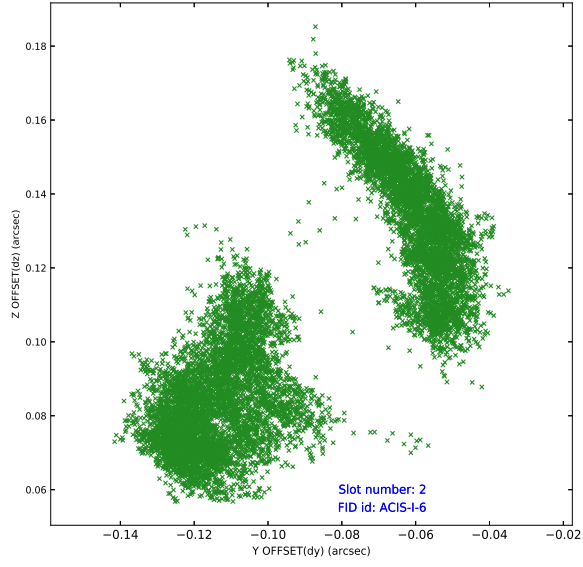
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.54875927484

A.2 Comments

Two optional chips were dropped.