

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19424 - L2 Version 3
Chandra X-Ray Center

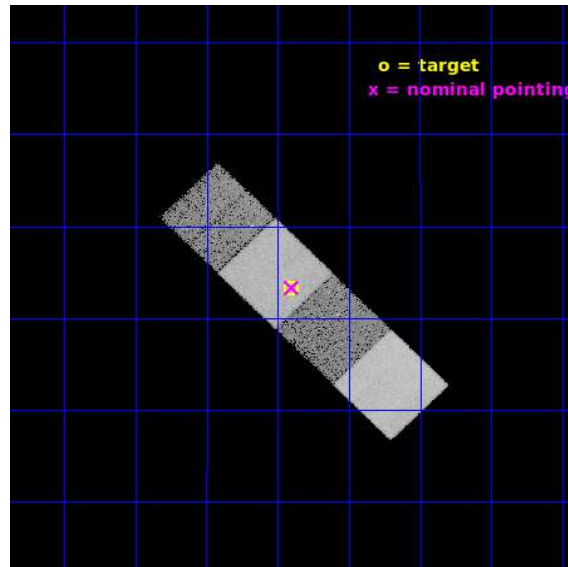
L2 Processing Date : Oct 25 2020

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1 Front

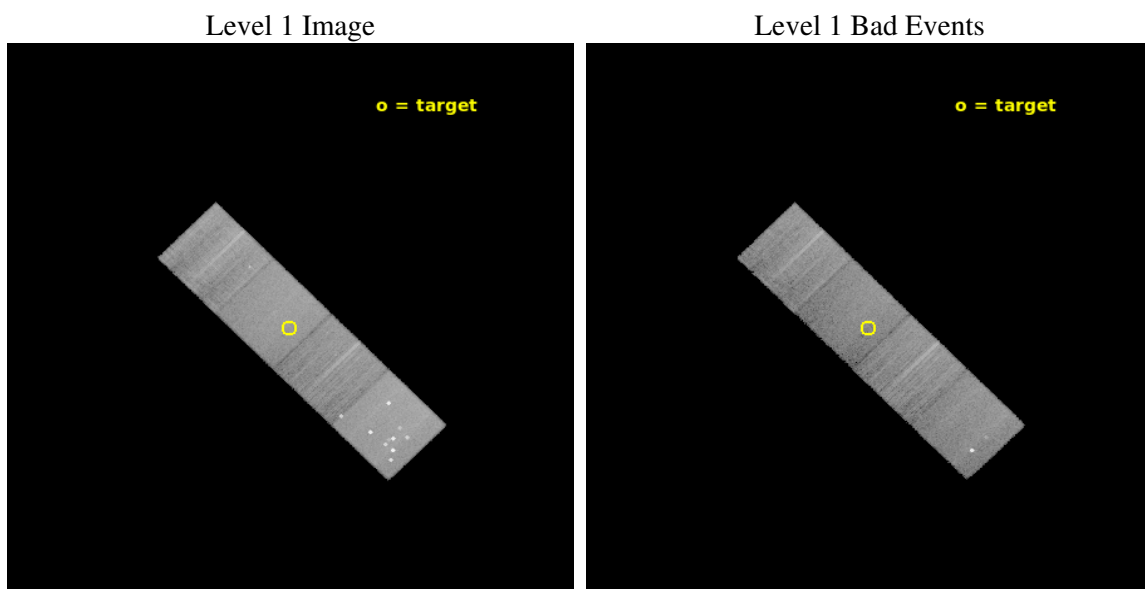
seq_num	601381	Sequence number
obs_id	19424	Observation id
title	Spiral galaxies of the Virgo cluster	Proposal title
observer	Roberto Soria	Principal investigator
object	IC 3322	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.475417	Observer's specified target RA [deg]
dec_targ	7.554778	Observer's specified target Dec [deg]
ra_nom	186.47509397394	Nominal RA [deg]
dec_nom	7.5556031226334	Nominal Dec [deg]
roll_nom	225.14914048366	Nominal Roll [deg]
revision	3	Processing version of data
ontime	15061.699835062	Sum of GTIs [s]
livetime	14864.907638455	Livetime [s]
ontime5	15061.658795118	Sum of GTIs [s]
ontime6	15061.617755055	Sum of GTIs [s]
ontime7	15061.699835062	Sum of GTIs [s]
ontime8	15058.435634851	Sum of GTIs [s]
l2events	160824	Number of level 2 events



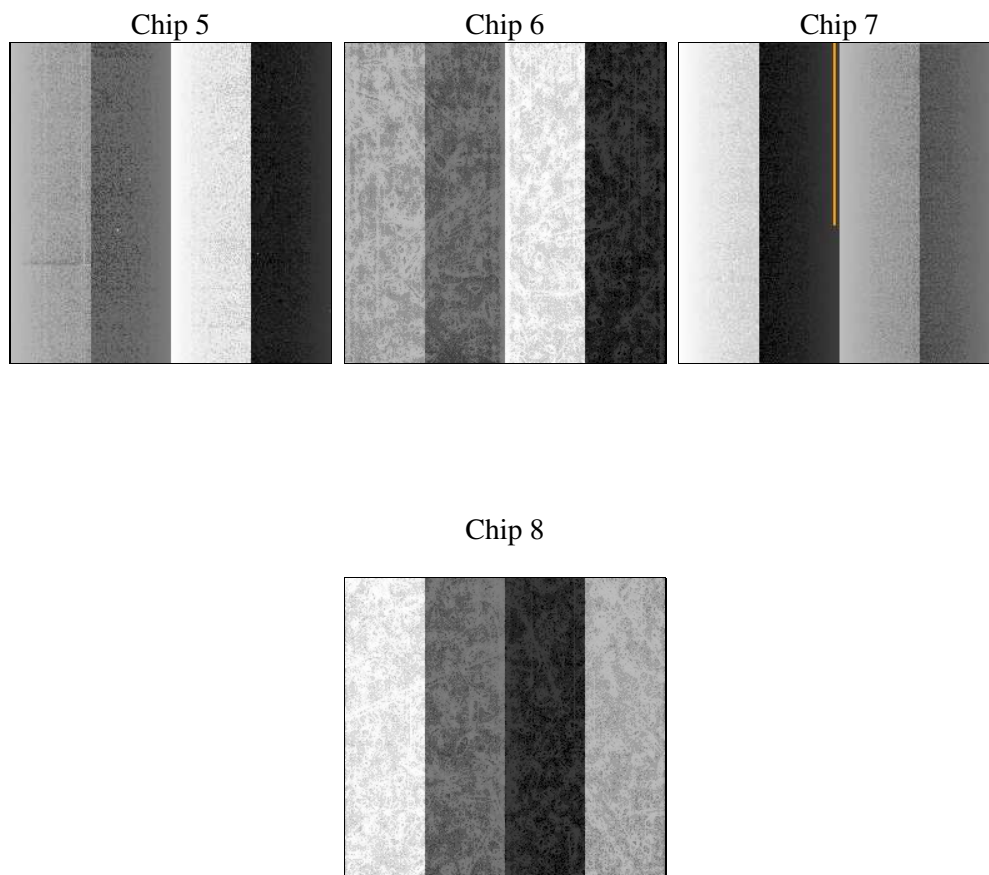
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	15061.699835062	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	15061.658795118	Sum of GTIs [s]
date	2020-10-25T14:33:47	Date and time of file creation	ontime6	15061.617755055	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	15061.699835062	Sum of GTIs [s]
			ontime8	15058.435634851	Sum of GTIs [s]
			l1events	597282	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	200646	112901	141356	142379
rejected events	95760	100271	80898	105377
rejected %	47%	88%	57%	74%

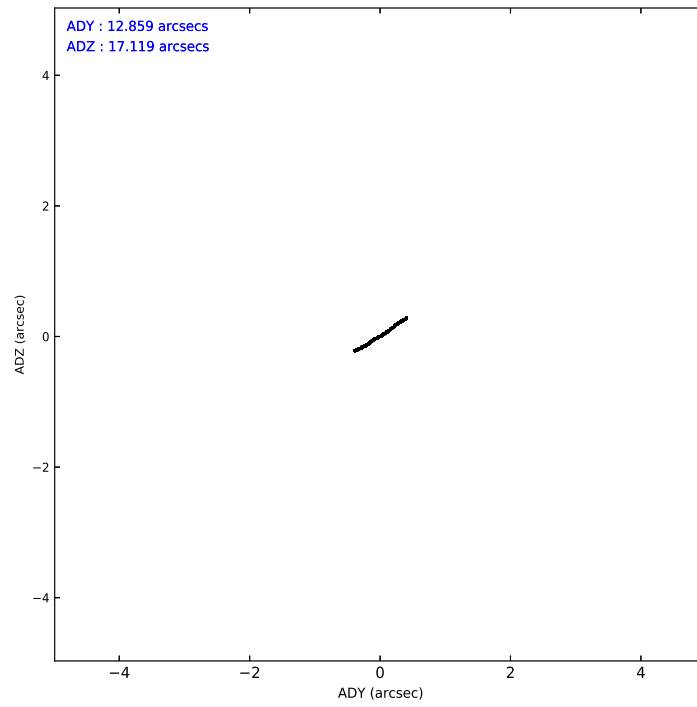
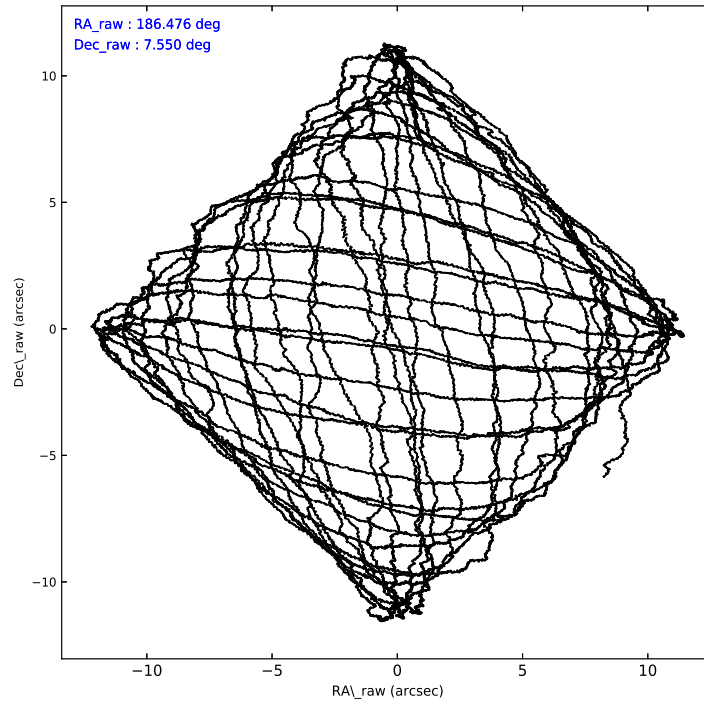
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	23640	4069	4990	10571
	11%	3%	3%	7%
grade 1 events	465	40	206	110
	0%	0%	0%	0%
grade 2 events	28886	3083	12484	9047
	14%	2%	8%	6%
grade 3 events	2901	1158	4688	3801
	1%	1%	3%	2%
grade 4 events	2946	1204	4602	3452
	1%	1%	3%	2%
grade 5 events	11524	4916	13772	7667
	5%	4%	9%	5%
grade 6 events	46572	3122	33721	10158
	23%	2%	23%	7%
grade 7 events	83712	95309	66893	97573
	41%	84%	47%	68%

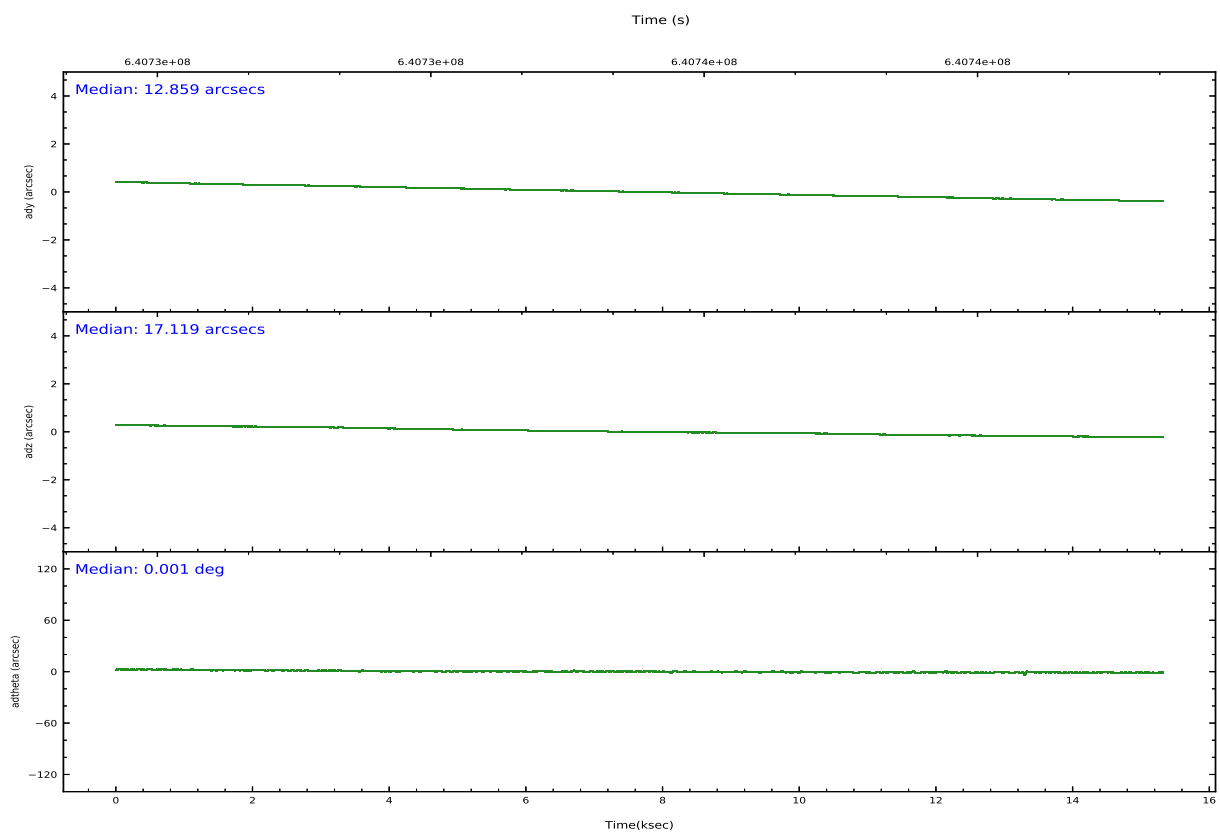
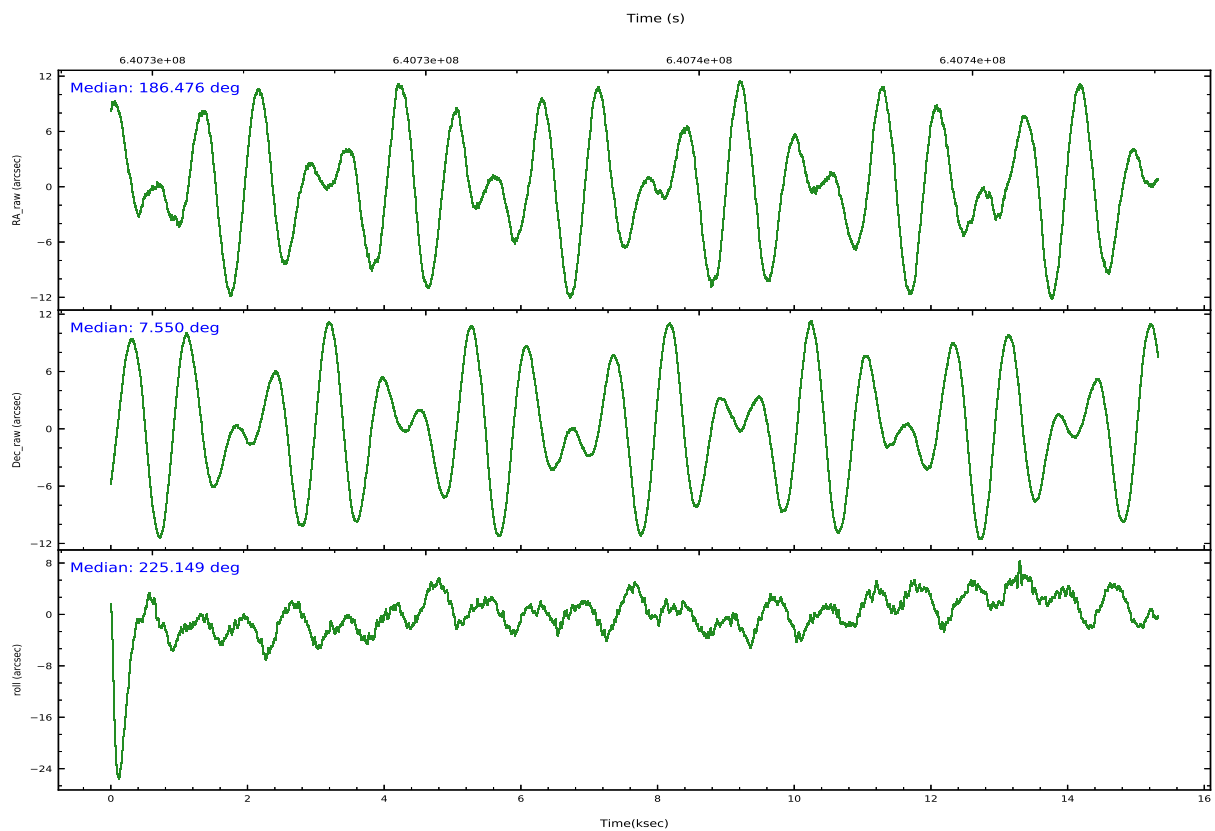
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	186.482721	186.47509397394
[deg] Pointing Dec	7.576071	7.5556031226334
[deg] Pointing Roll	224.999037	225.14914048366
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	640727715.184000	640726762.1663001
Observation start date	2018-04-21T19:54:06	2018-04-21T19:39:22
[s] Observation end time (MET)	640742715.184000	640743057.61726
Observation end date	2018-04-22T00:04:06	2018-04-22T00:10:57
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



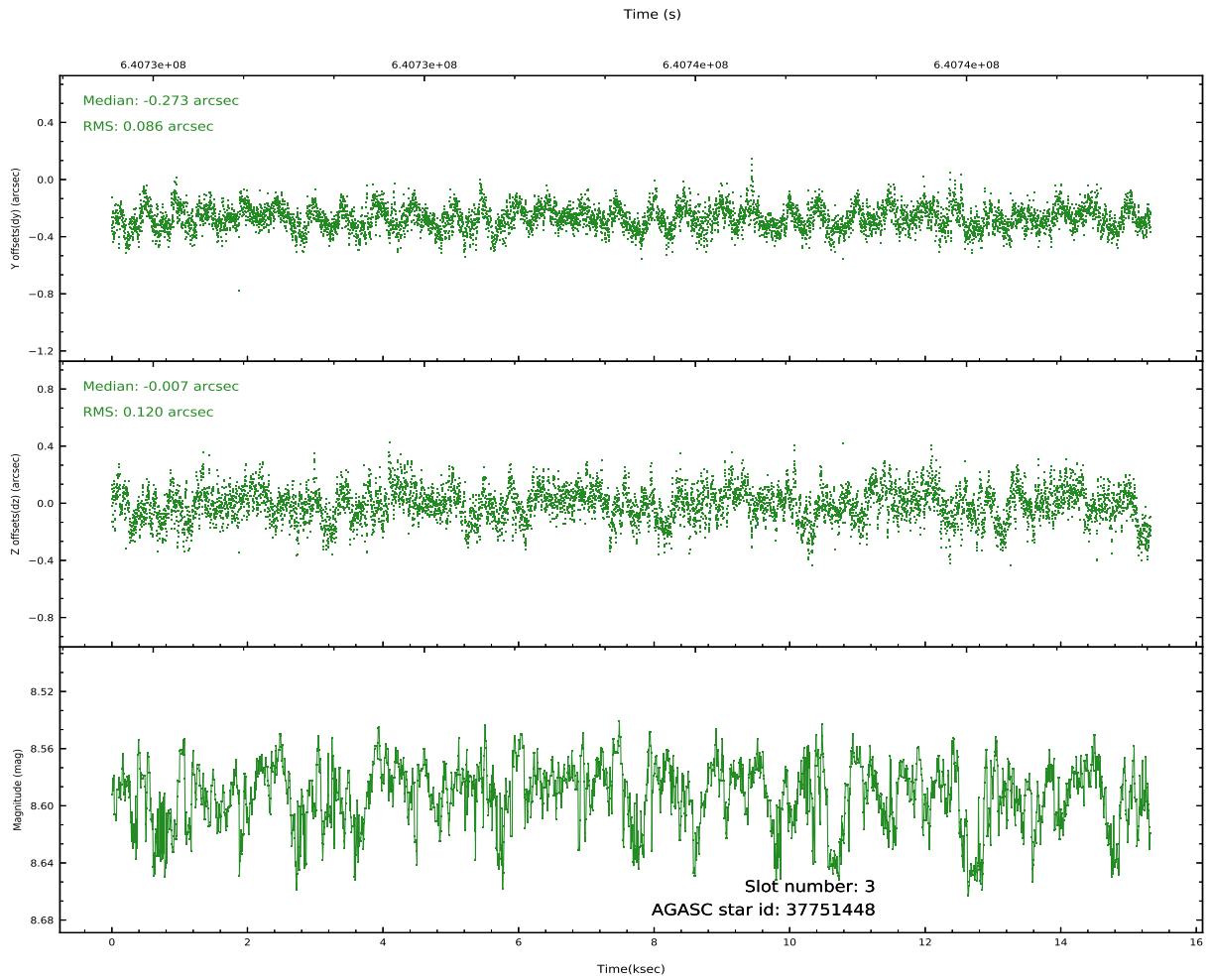
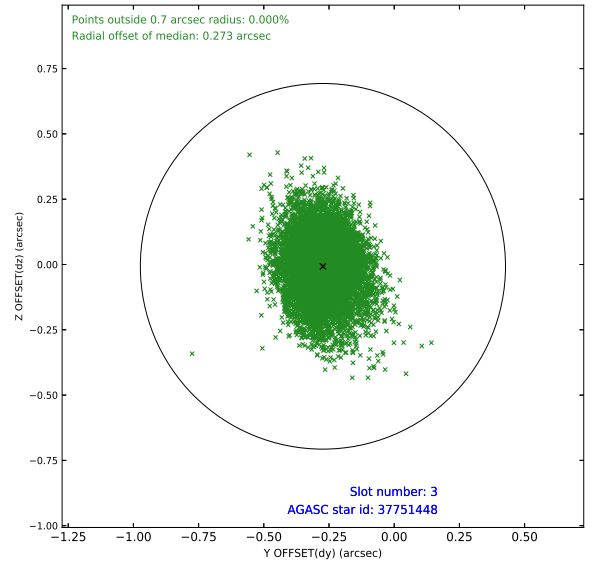
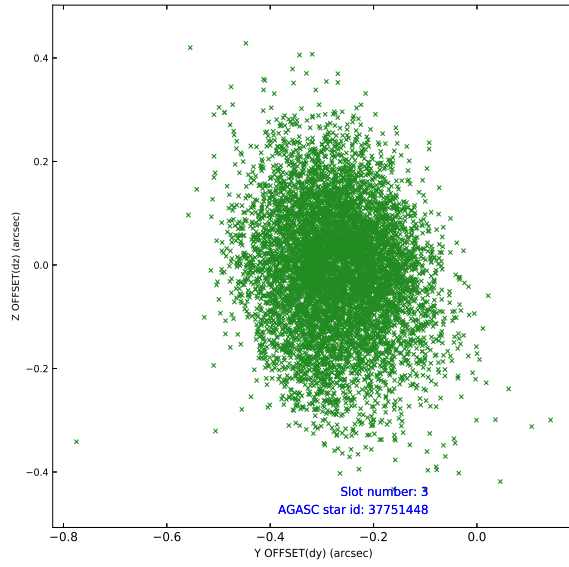


Slot Statistics

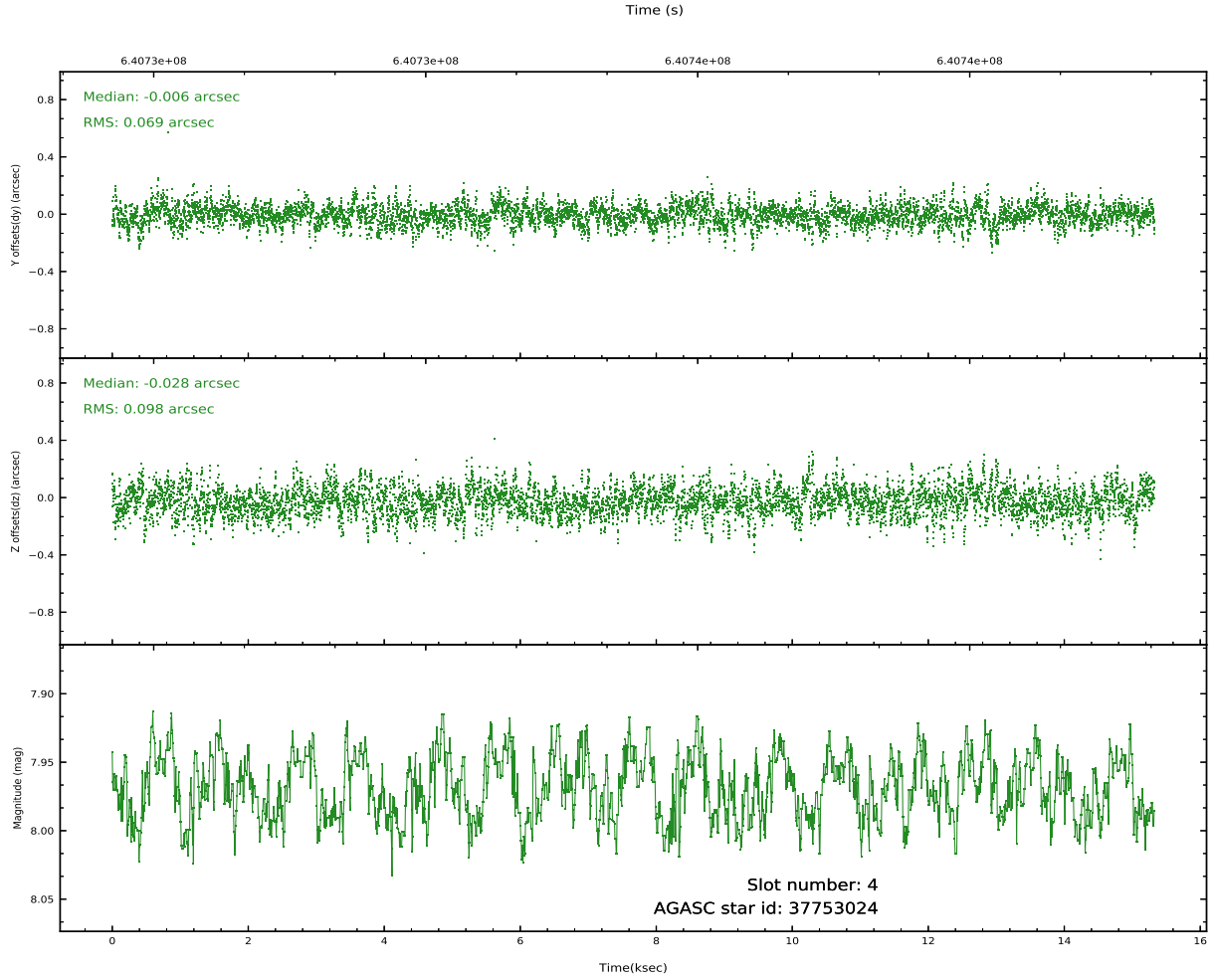
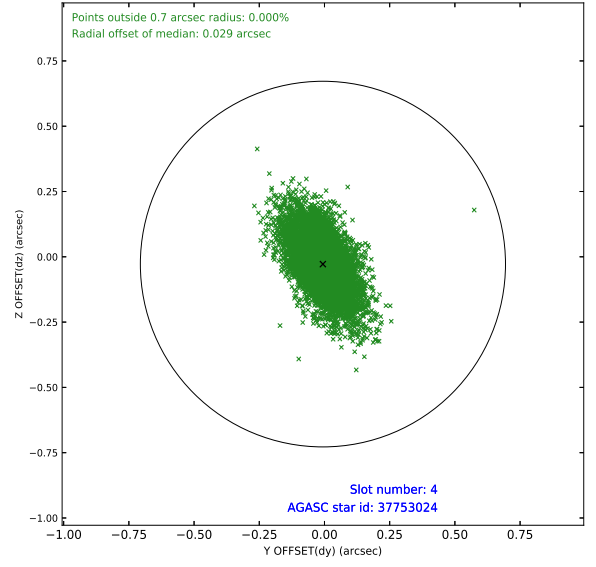
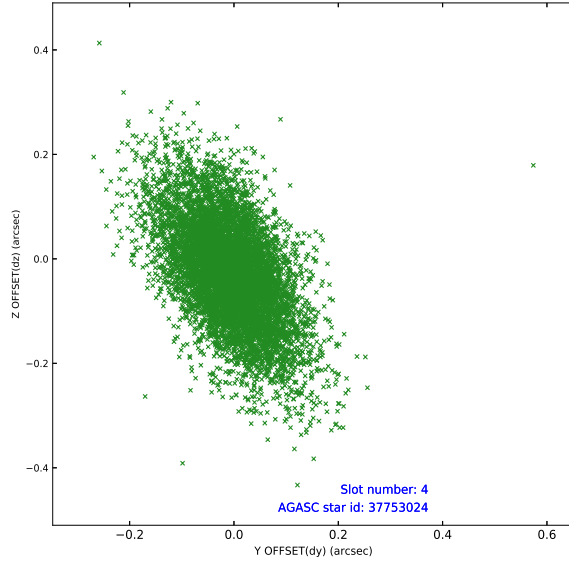
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.04	3738	1.000	0.122	-0.088	0.008	0.014	0.000000	0.000000	-765.82	-1738
1	FID		ACIS-S-4	7.17	3738	1.000	0.131	-0.035	0.008	0.015	0.000000	0.000000	2147.51	169
2	FID		ACIS-S-5	7.15	3738	1.000	-0.286	0.132	0.011	0.019	0.000000	0.000000	-1818.52	163
3	GUIDE	used	37751448	8.59	7473	1.000	-0.273	-0.007	0.154	0.257	186.840242	7.148441	185.29	1991
4	GUIDE	used	37753024	7.97	7476	1.000	-0.006	-0.028	0.120	0.219	186.830113	7.241612	-25.77	1727
5	GUIDE	used	114563576	7.85	7474	1.000	-0.170	0.376	0.121	0.217	186.867039	8.012388	-2078.62	-142
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	114434008	8.73	7467	1.000	0.450	-0.336	0.166	0.309	185.534773	7.569663	2407.06	-2378

2.4 Star Slots

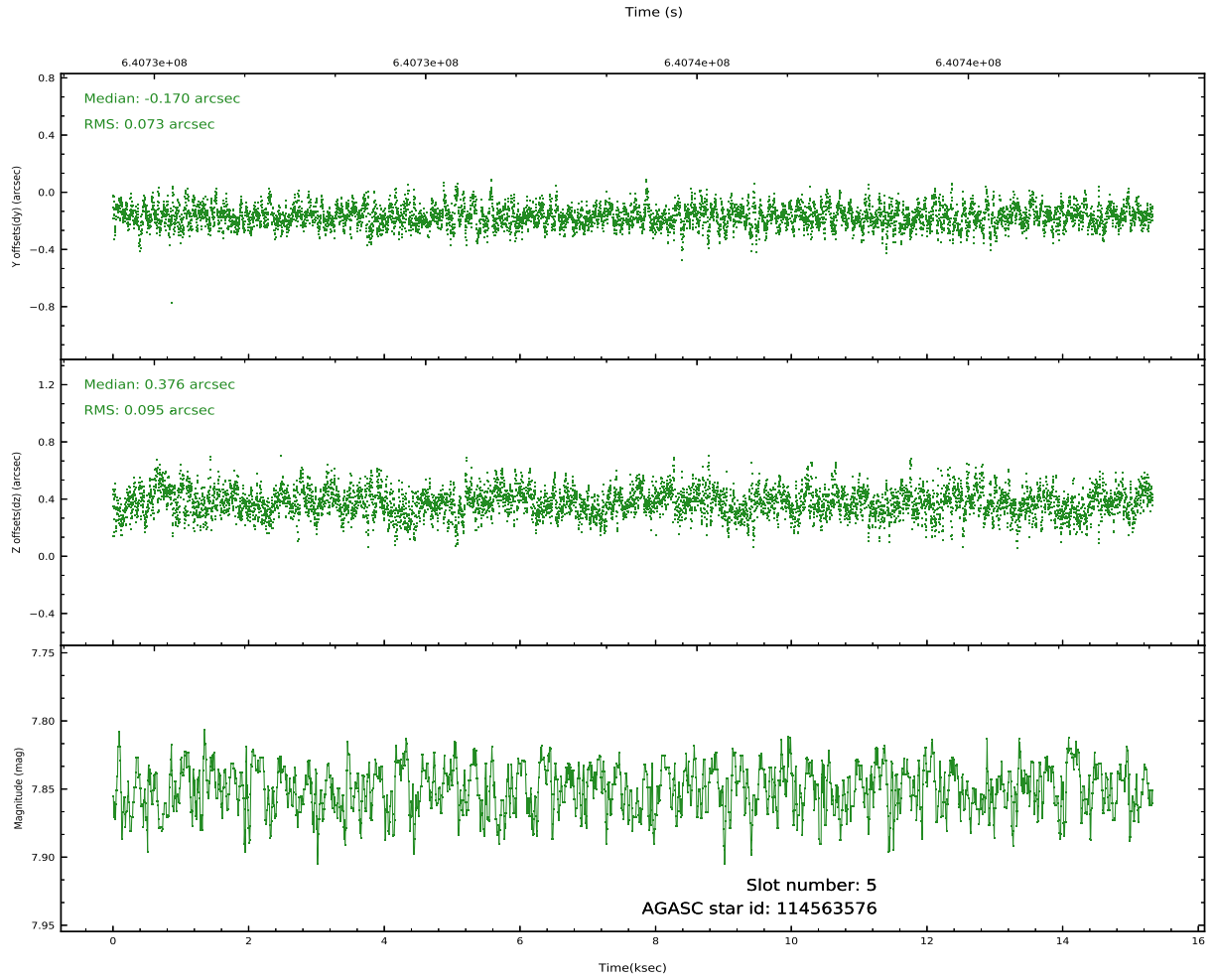
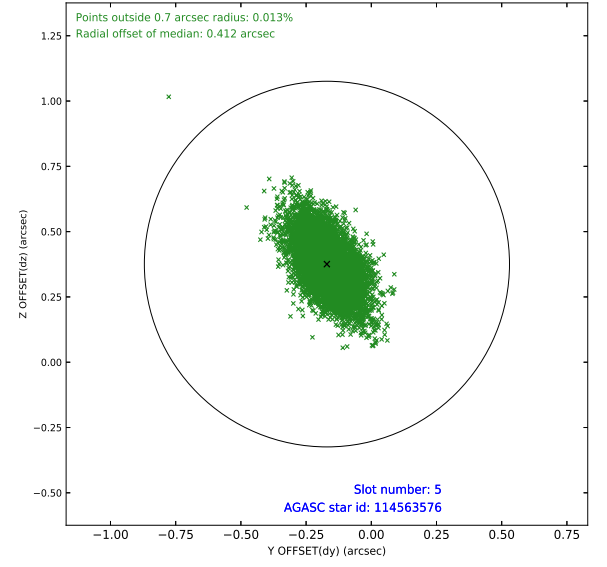
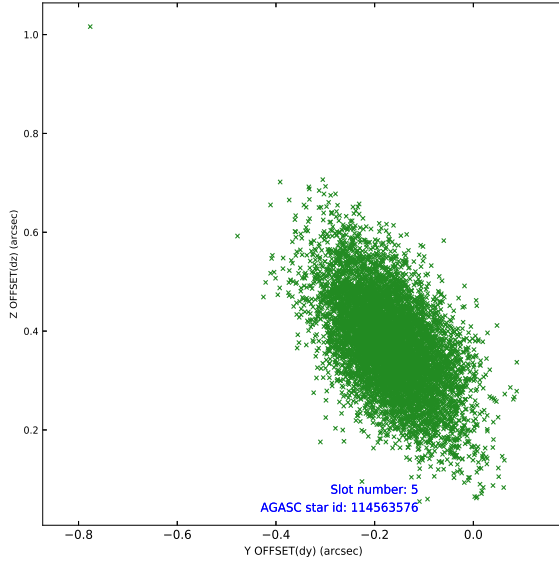
2.4.1 Slot 3



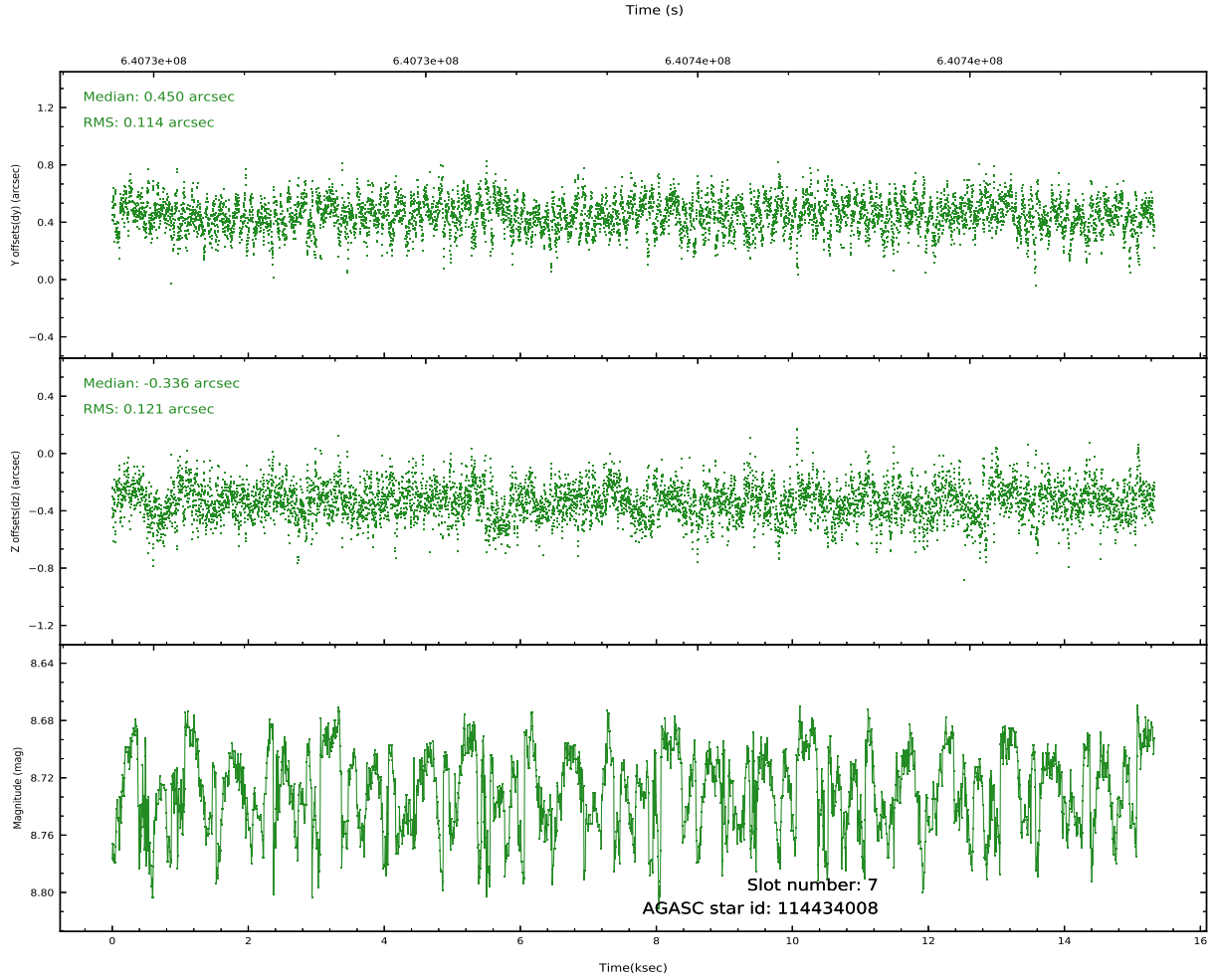
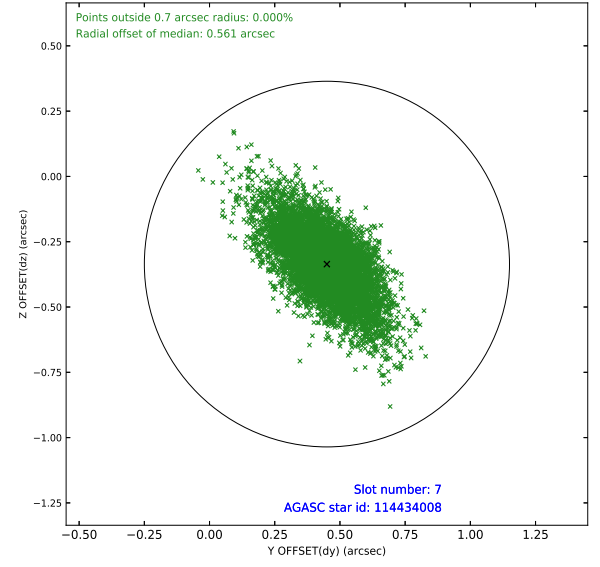
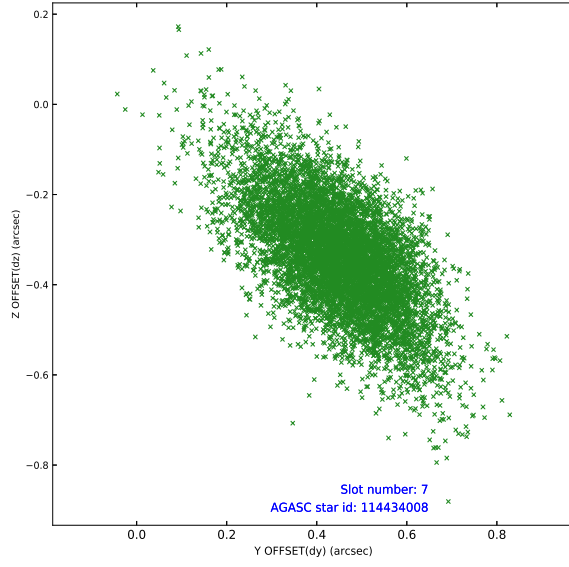
2.4.2 Slot 4



2.4.3 Slot 5

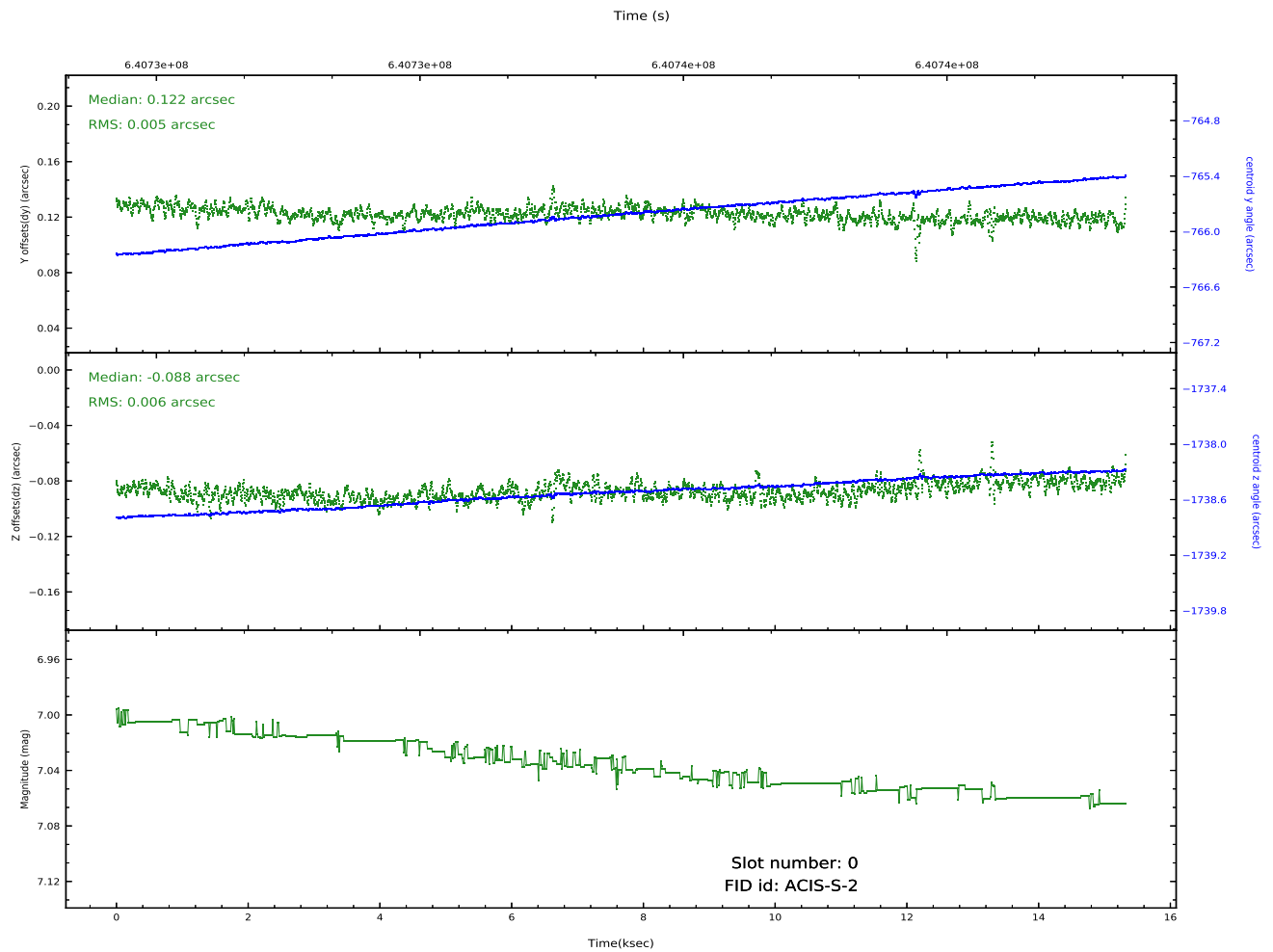
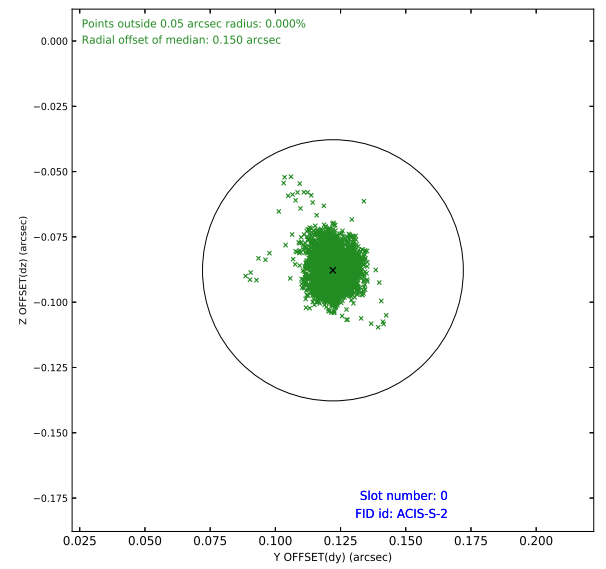
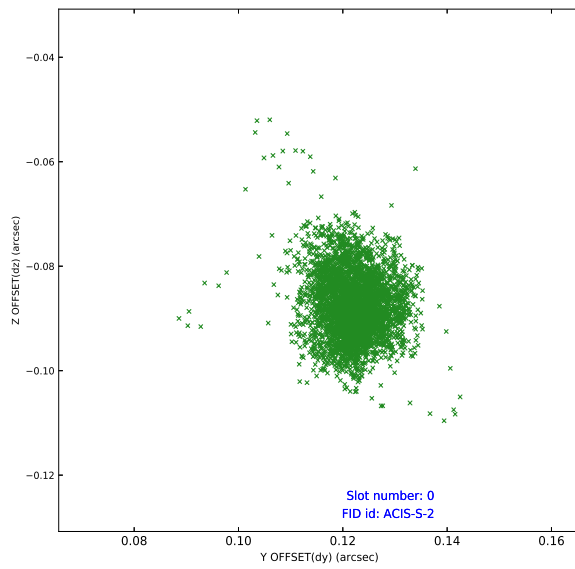


2.4.4 Slot 7

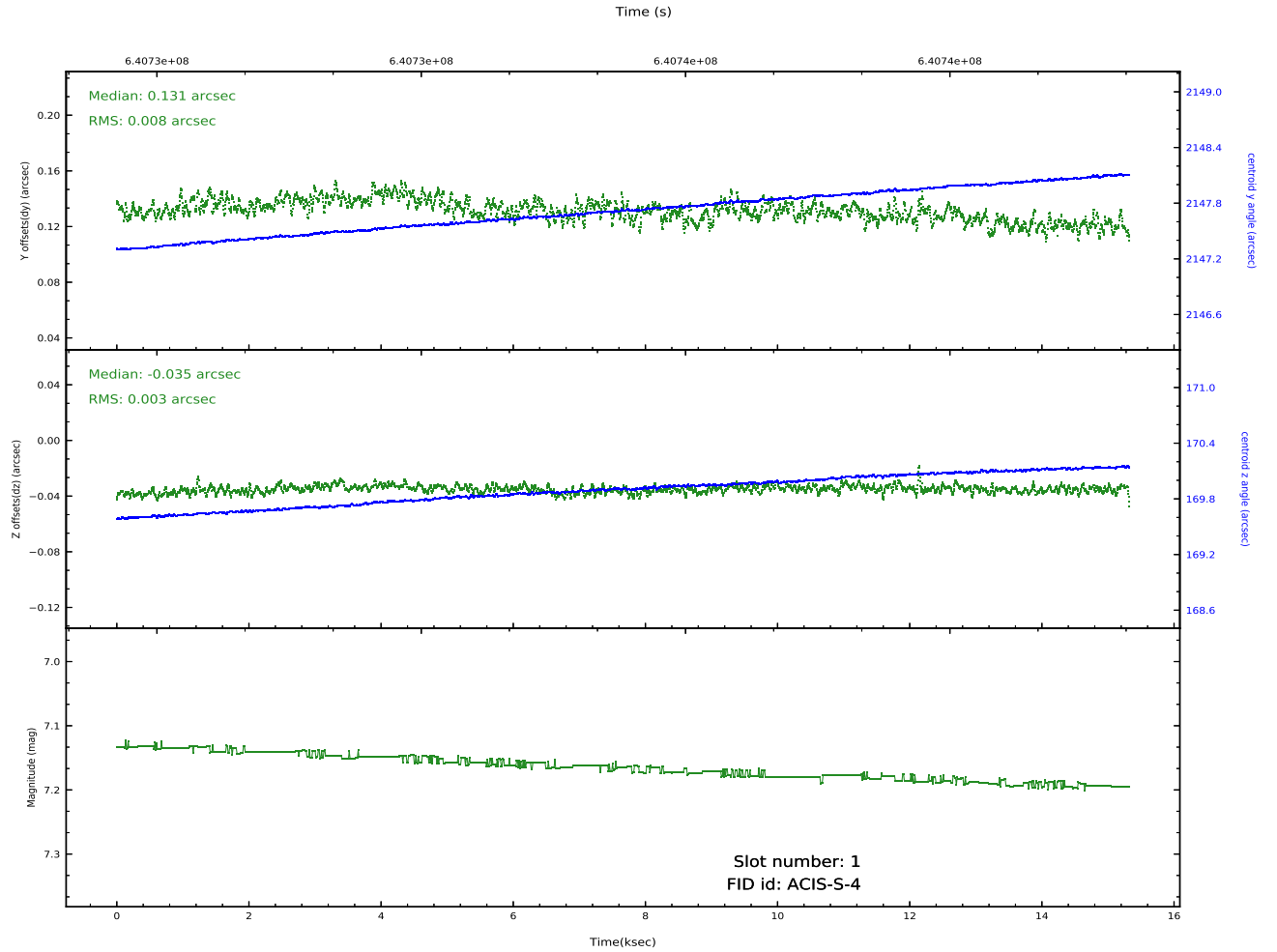
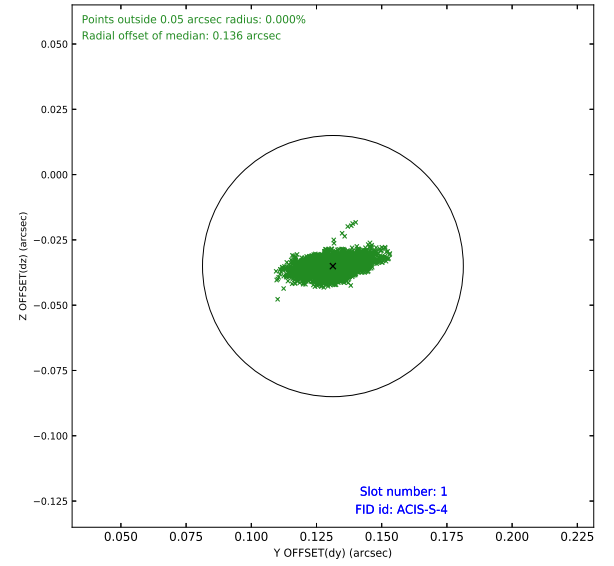
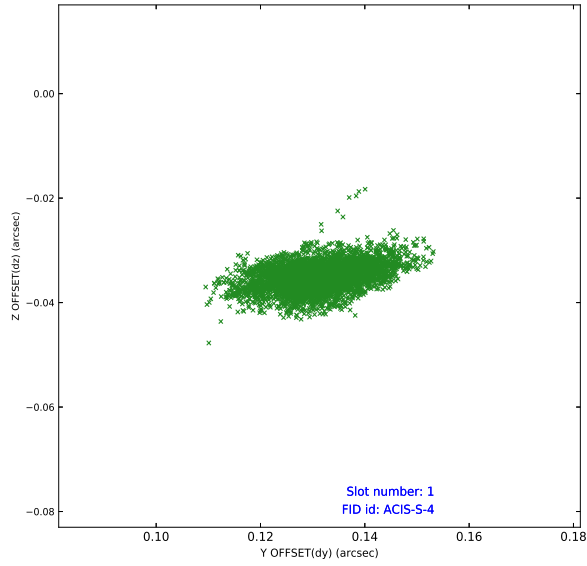


2.5 FID Slots

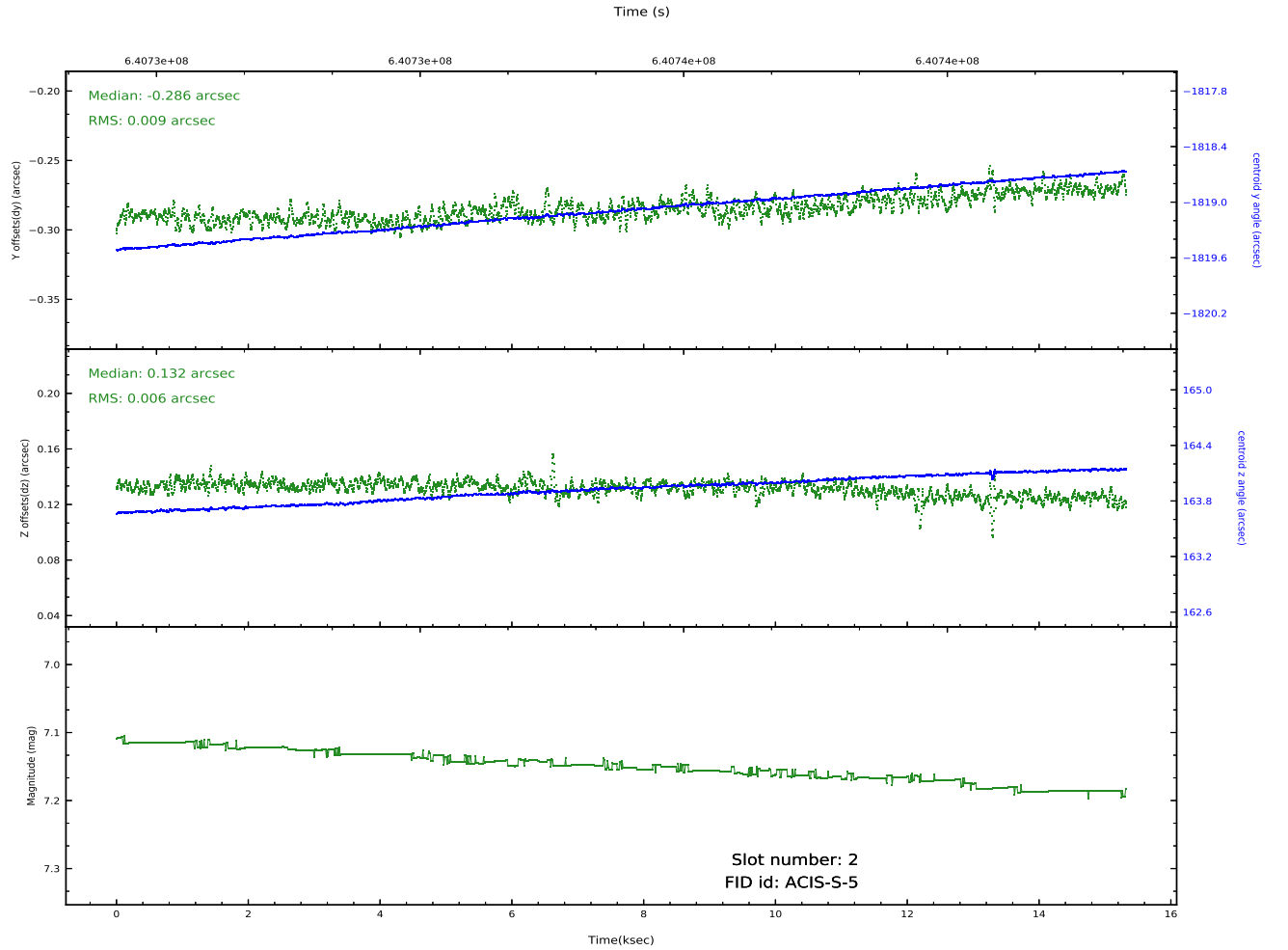
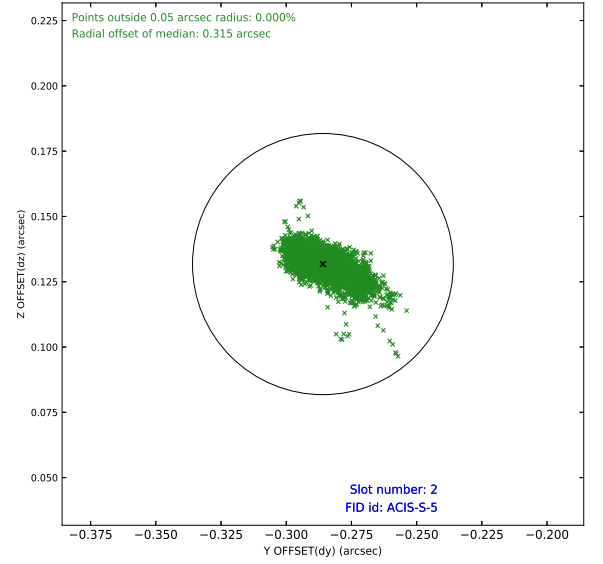
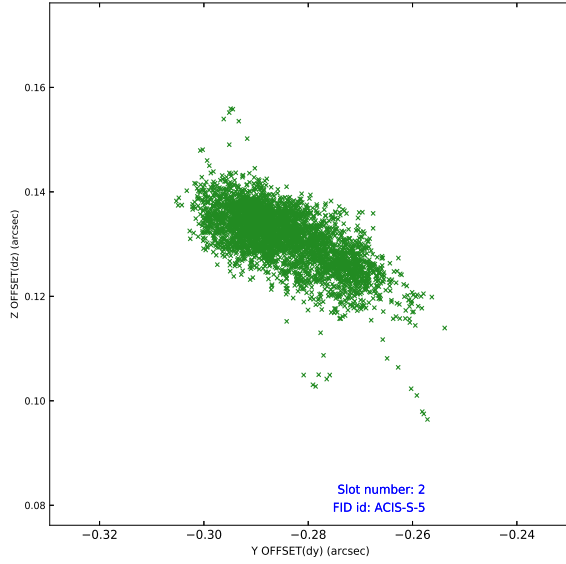
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.061699826956

A.2 Comments

The guide star in slot 6 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.