

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21054 - L2 Version 3
Chandra X-Ray Center

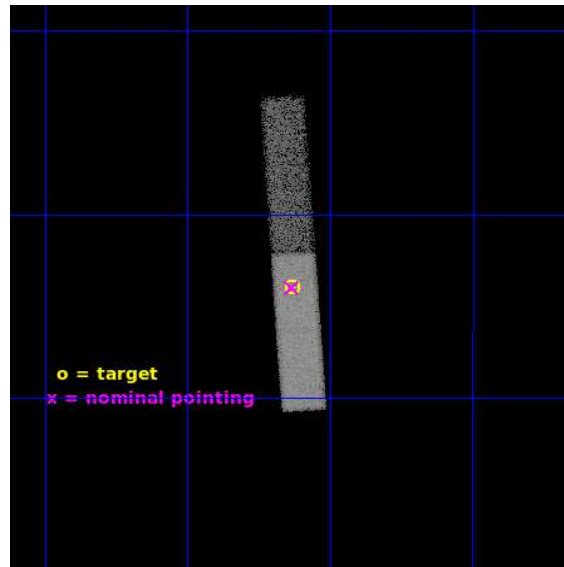
L2 Processing Date : Oct 25 2020

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1 Front

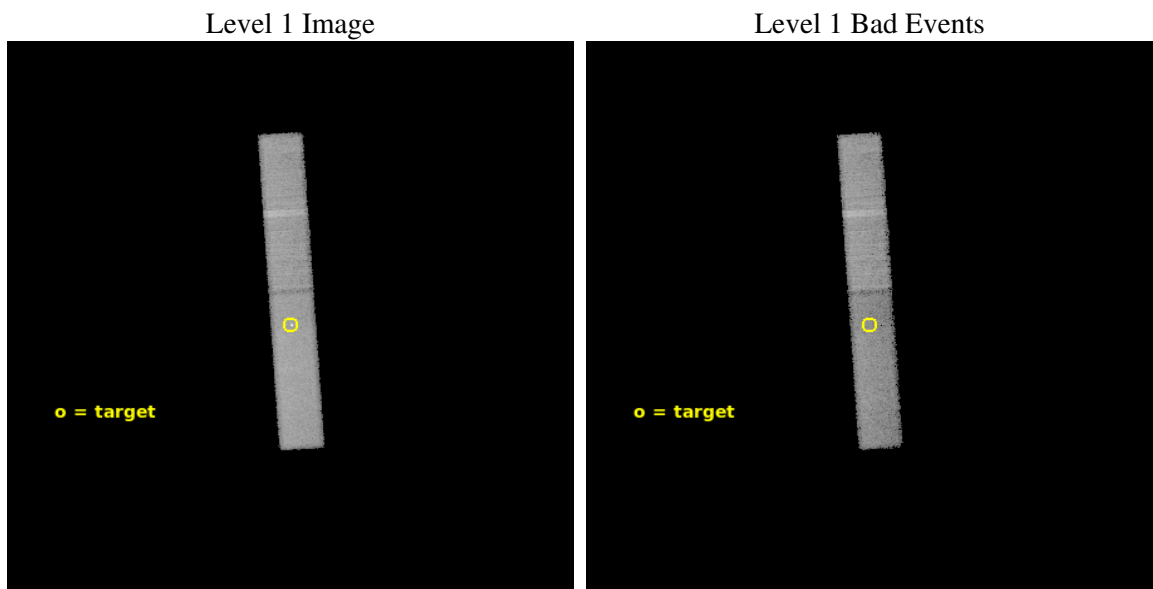
seq_num	703550	Sequence number
obs_id	21054	Observation id
title	The X-ray-radio morphology anomaly in a high-redshift quasar jet	P
observer	Diana Worrall	Principal investigator
object	J1421-0643	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	215.2825	Observer's specified target RA [deg]
dec_targ	-6.732306	Observer's specified target Dec [deg]
ra_nom	215.2835518586	Nominal RA [deg]
dec_nom	-6.7332972169501	Nominal Dec [deg]
roll_nom	86.158680820521	Nominal Roll [deg]
revision	3	Processing version of data
ontime	43103.698858023	Sum of GTIs [s]
livetime	41223.889496961	Livetime [s]
ontime6	43103.698858023	Sum of GTIs [s]
ontime7	43103.698858023	Sum of GTIs [s]
l2events	57888	Number of level 2 events



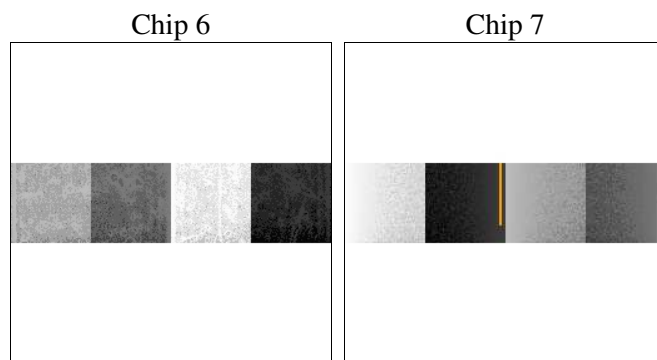
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	43103.698858023	Sum of GTIs [s]
caldsver	4.9.3	 	ontime6	43103.698858023	Sum of GTIs [s]
date	2020-10-25T05:13:41	Date and time of file creation	ontime7	43103.698858023	Sum of GTIs [s]
revision	3	Processing version of data	l1events	200412	Number of level 1 events

2.1.4 Events

	ccd 6	ccd 7
level 1 events	94099	106313
rejected events	83683	55361
rejected %	88%	52%

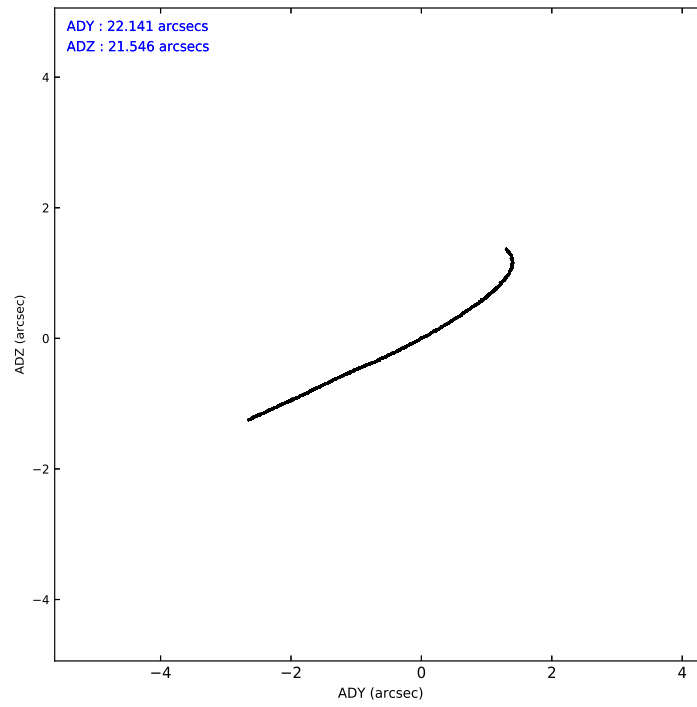
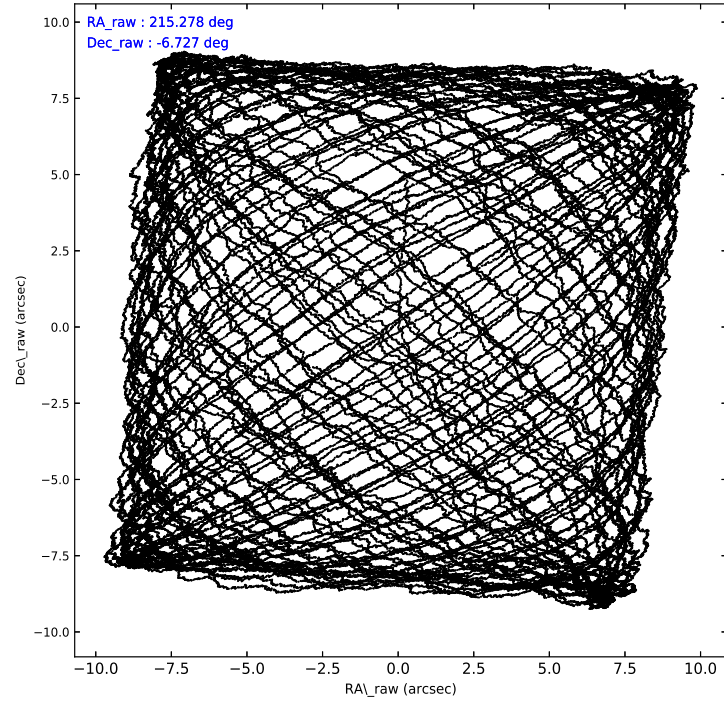
	ccd 6	ccd 7
grade 0 events	3070	5066
	3%	4%
grade 1 events	42	175
	0%	0%
grade 2 events	2104	10324
	2%	9%
grade 3 events	1548	5539
	1%	5%
grade 4 events	1537	5512
	1%	5%
grade 5 events	3824	10905
	4%	10%
grade 6 events	2157	24512
	2%	23%
grade 7 events	79817	44280
	84%	41%

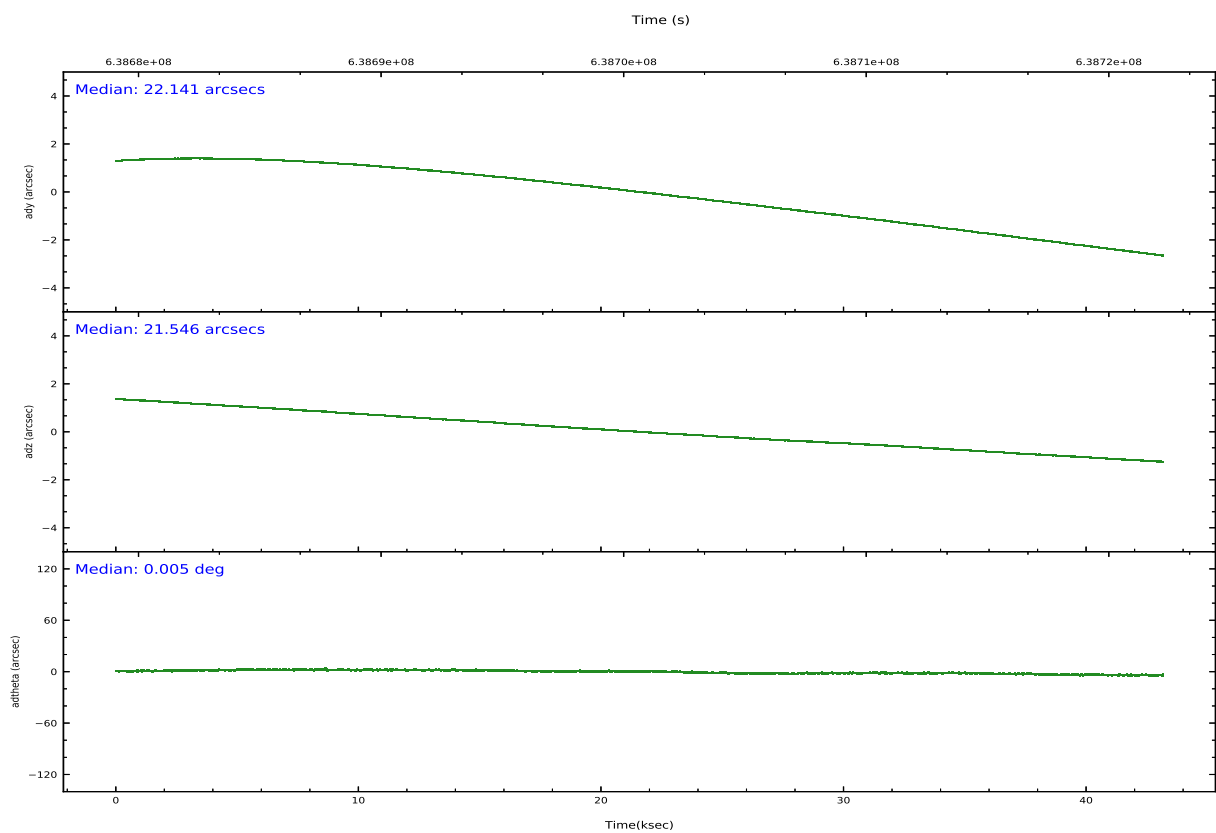
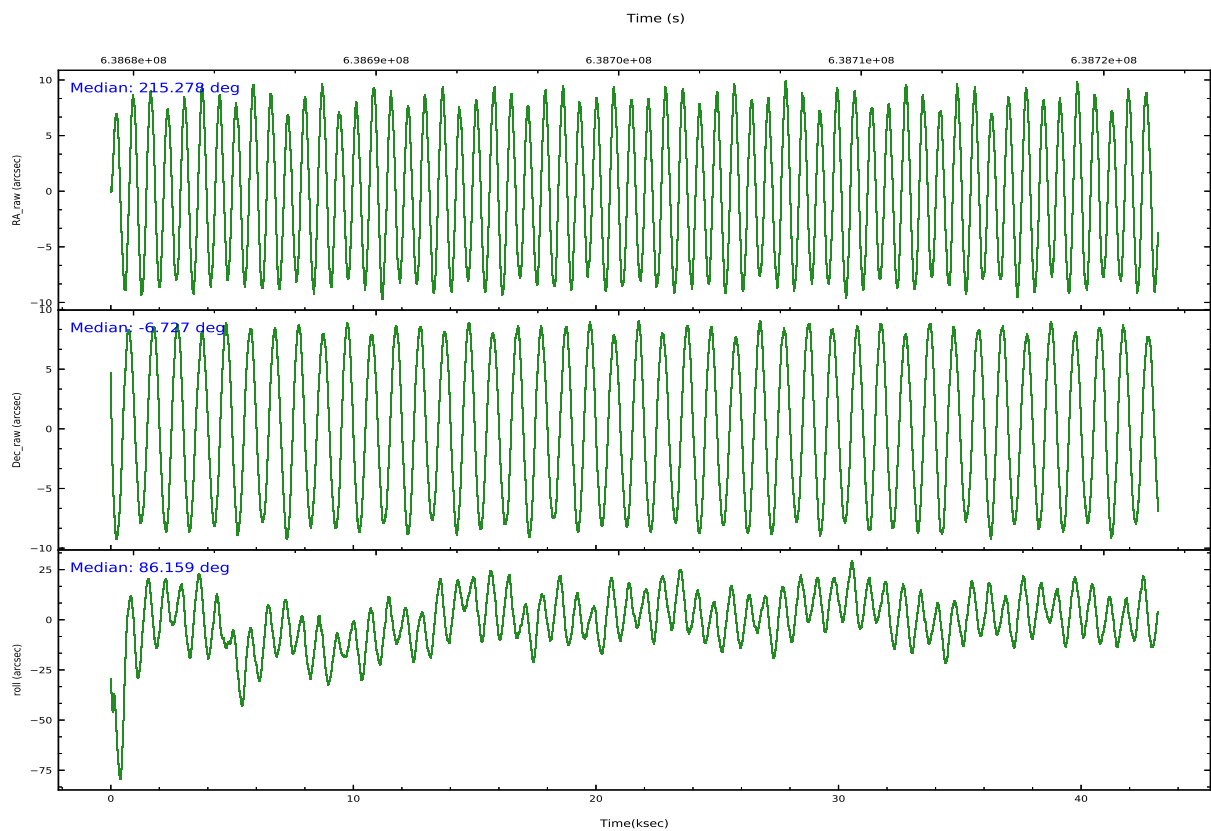
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-67	ACIS-67
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	215.290263	215.2835518586
[deg] Pointing Dec	-6.751122	-6.7332972169501
[deg] Pointing Roll	86.000919	86.158680820521
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	638679241.184000	638677472.8828501
Observation start date	2018-03-29T02:52:52	2018-03-29T02:24:32
[s] Observation end time (MET)	638722241.184000	638722953.67304
Observation end date	2018-03-29T14:49:32	2018-03-29T15:02:33
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	Y	Y
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/4
Subarray start row	385	385
Subarray row count	256	256
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.9

2.3 Aspect



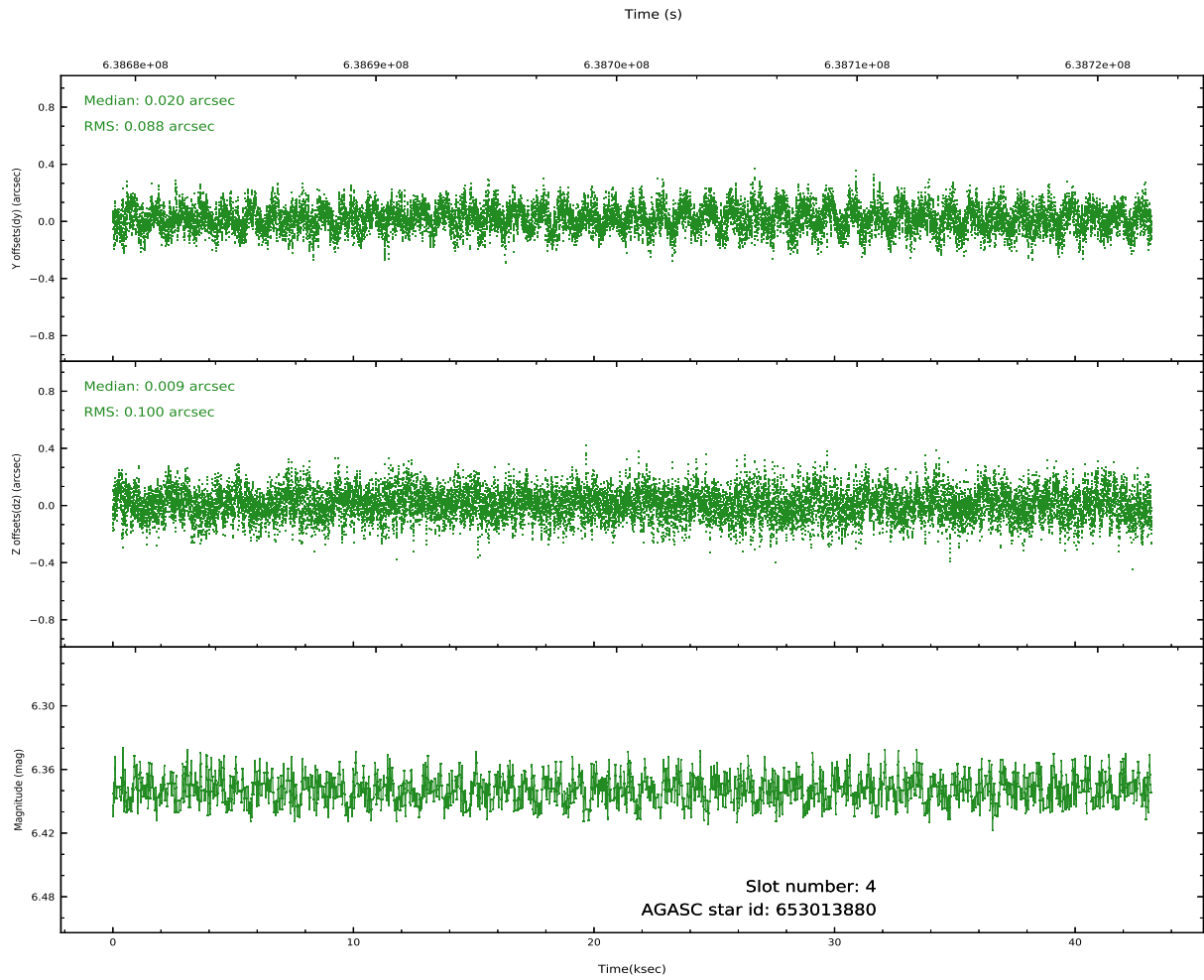
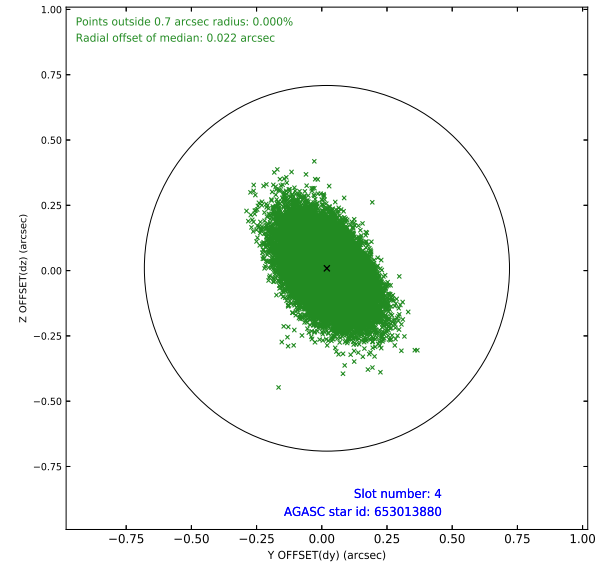
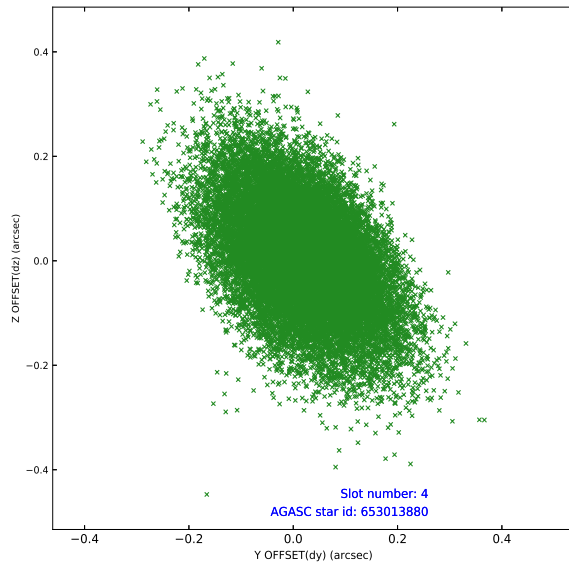


Slot Statistics

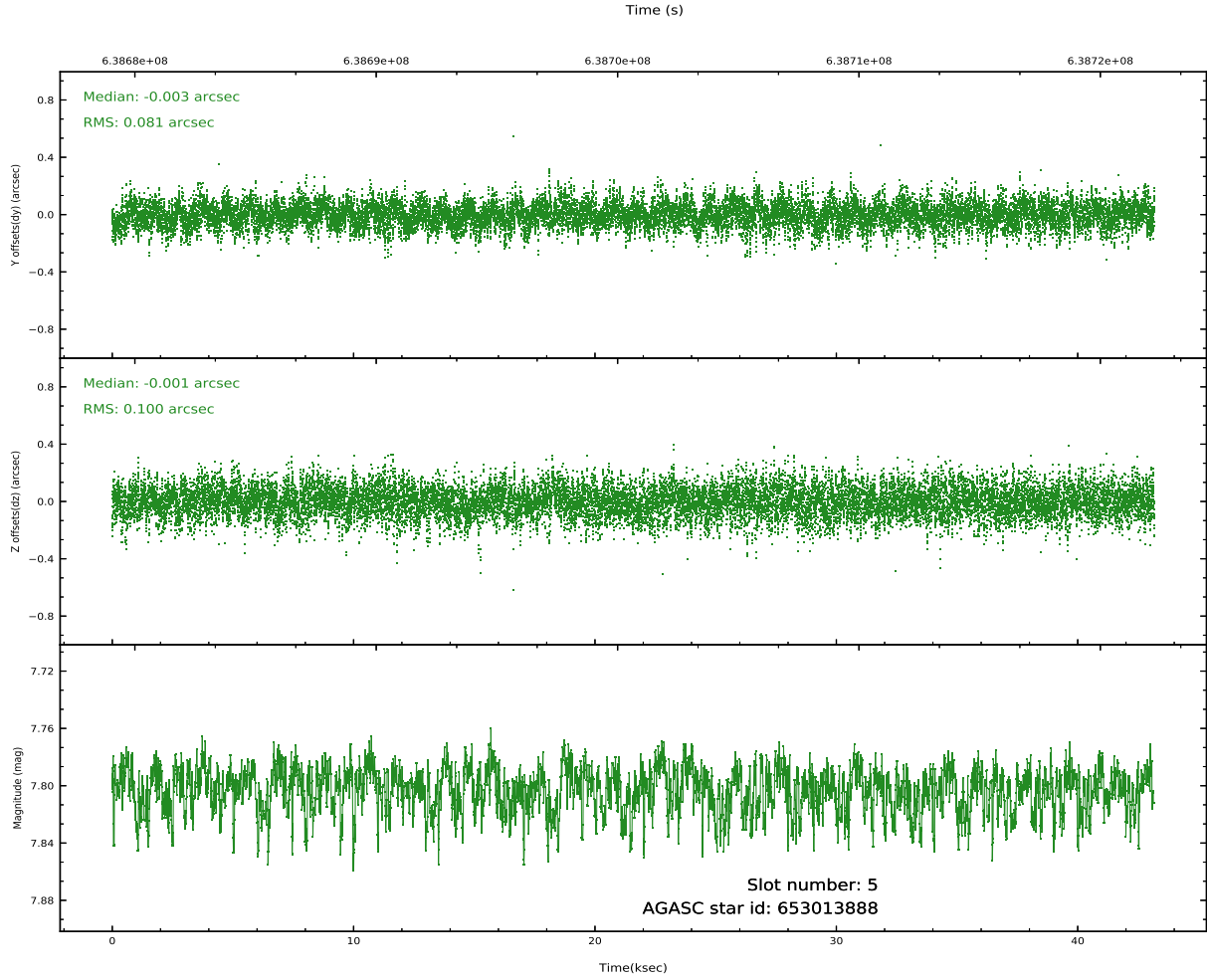
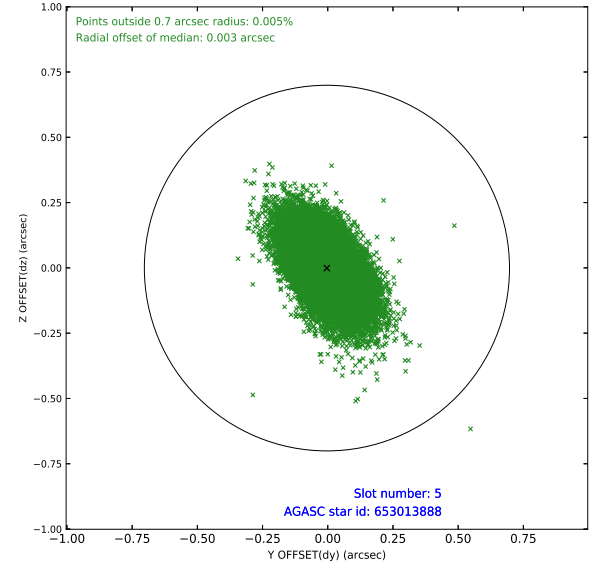
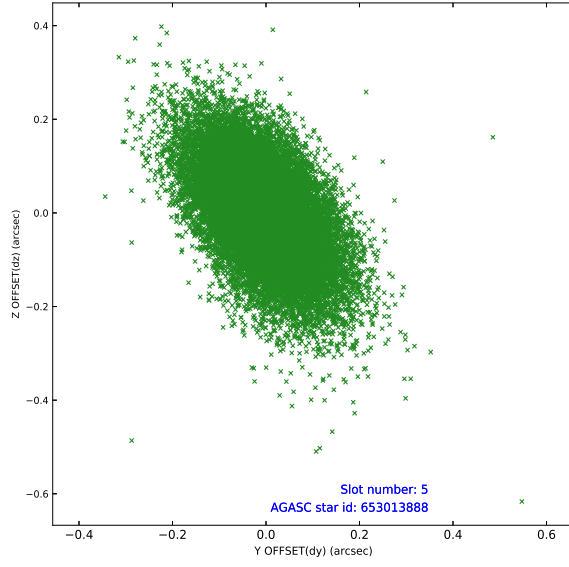
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.04	10530	1.000	0.166	-0.099	0.028	0.080	0.000000	0.000000	-775.24	-1743
1	FID		ACIS-S-4	7.15	10530	1.000	0.080	-0.052	0.027	0.065	0.000000	0.000000	2138.26	164
2	FID		ACIS-S-5	7.15	10531	1.000	-0.261	0.162	0.037	0.049	0.000000	0.000000	-1828.20	159
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
4	GUIDE	used	653013880	6.38	21062	1.000	0.020	0.009	0.139	0.237	214.971669	-6.746165	-62.39	1139
5	GUIDE	used	653013888	7.80	21058	1.000	-0.003	-0.001	0.132	0.231	214.671610	-7.013692	-1098.63	2139
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	653141776	9.30	21030	1.000	-0.014	-0.004	0.175	0.292	215.017653	-6.536026	704.38	1026

2.4 Star Slots

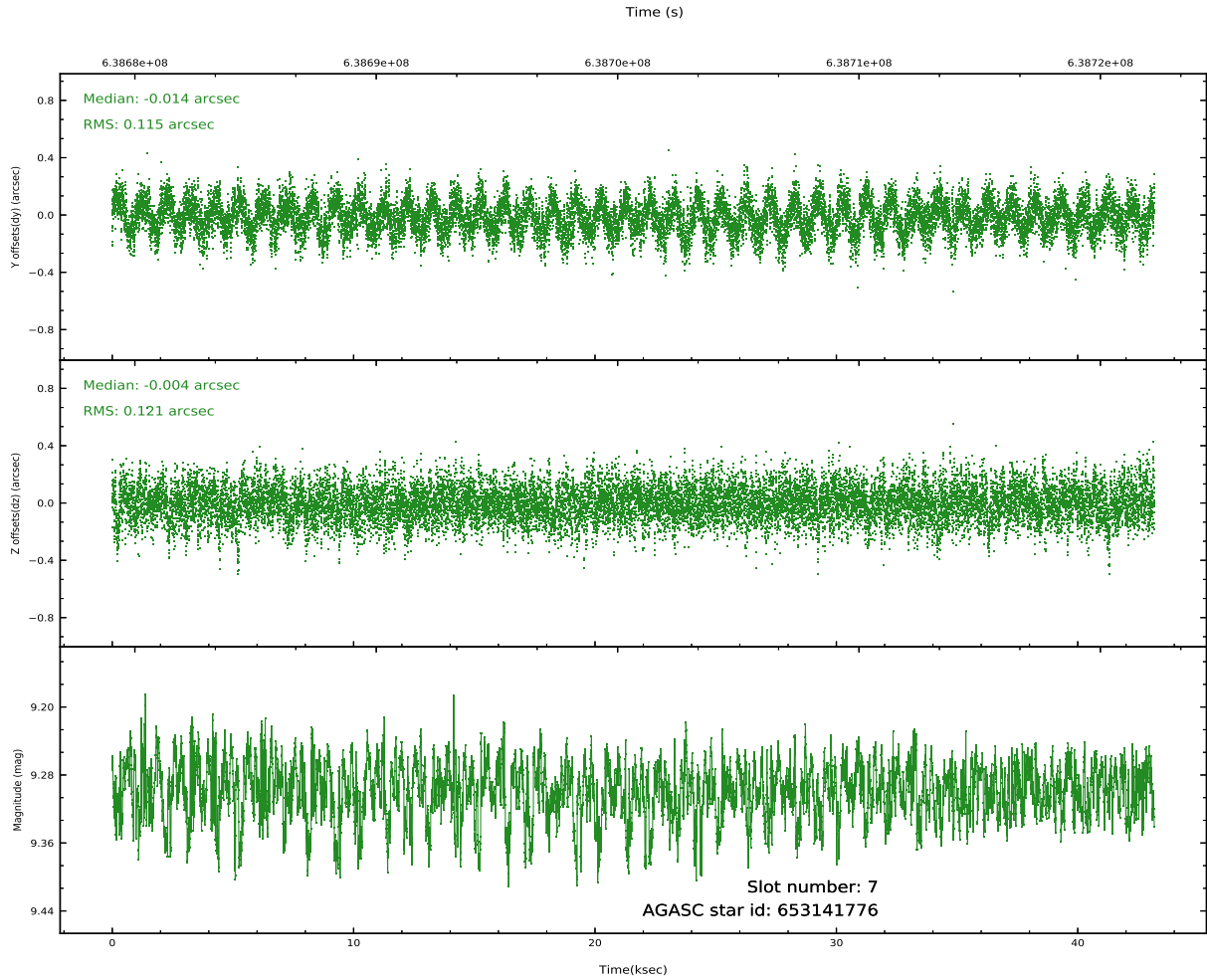
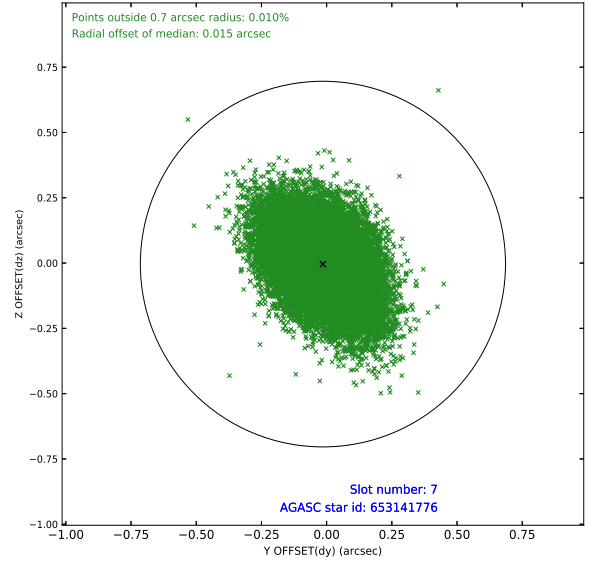
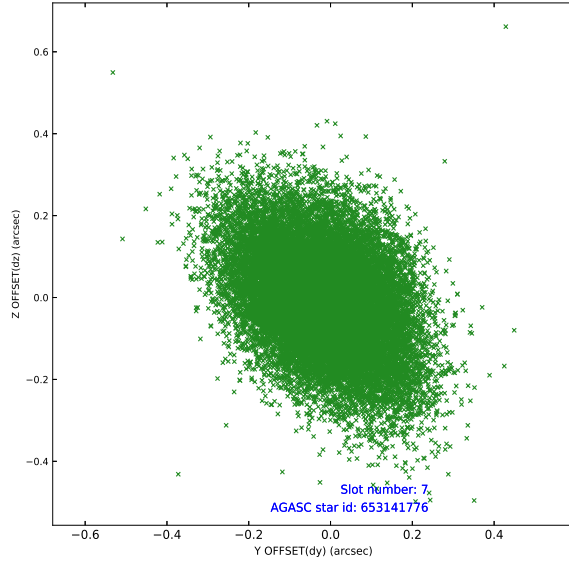
2.4.1 Slot 4



2.4.2 Slot 5

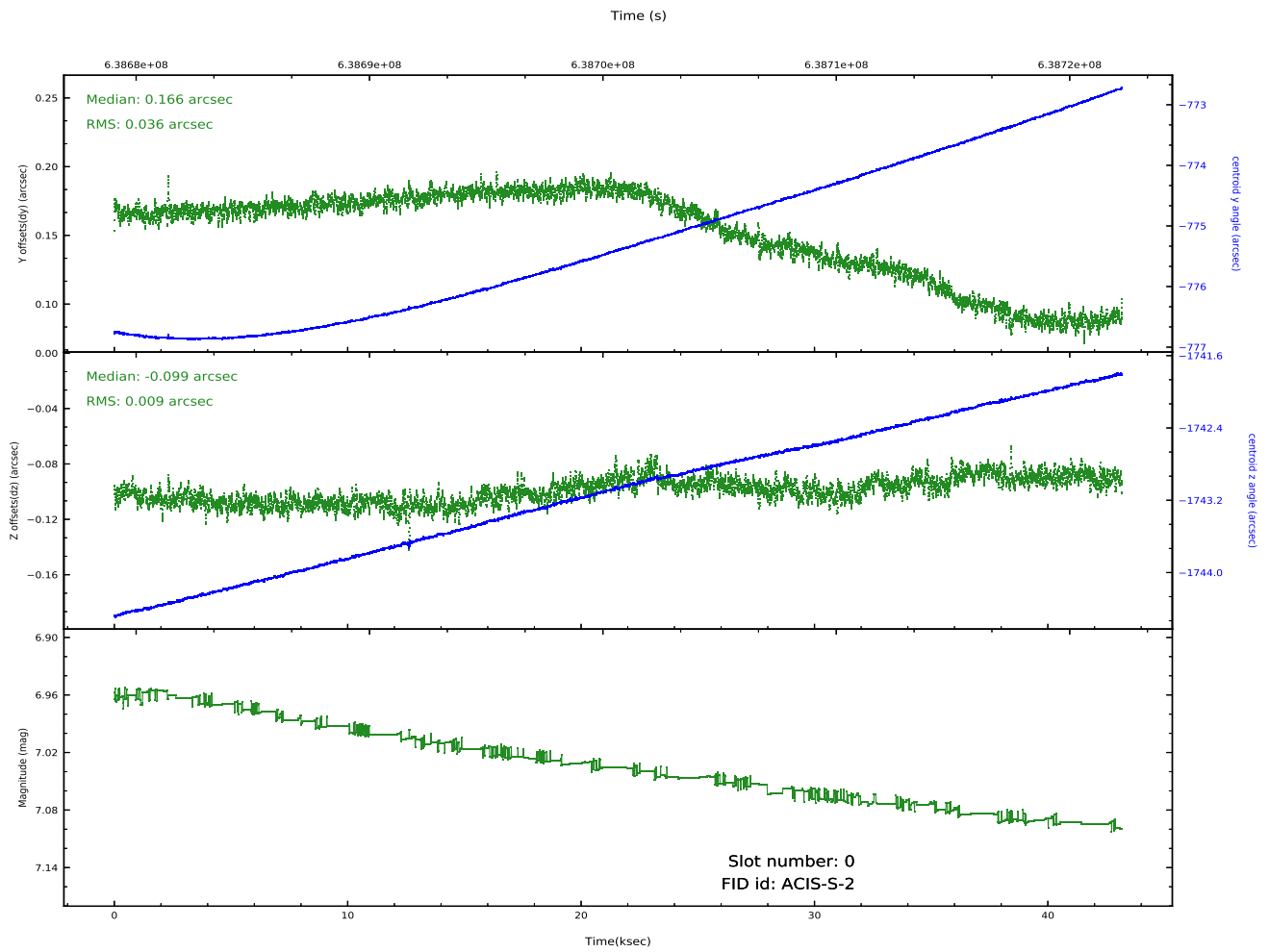
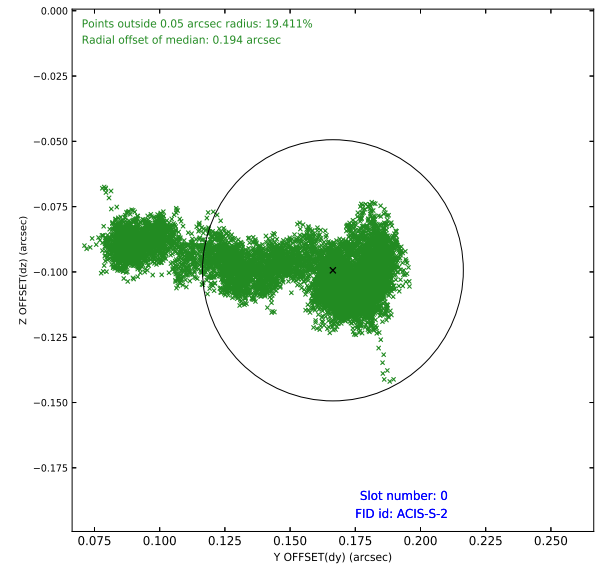
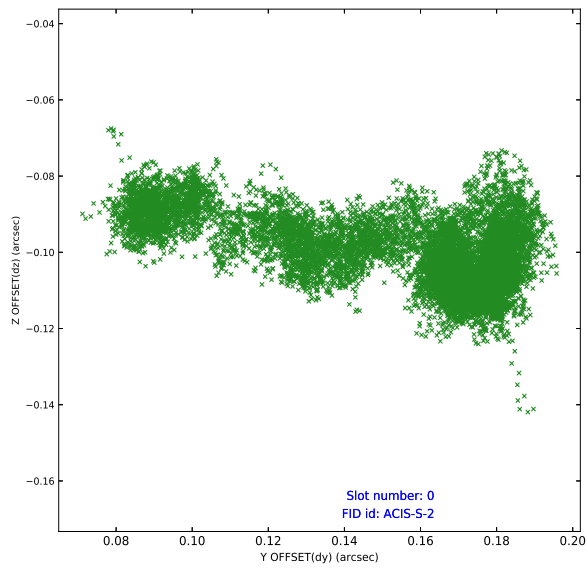


2.4.3 Slot 7

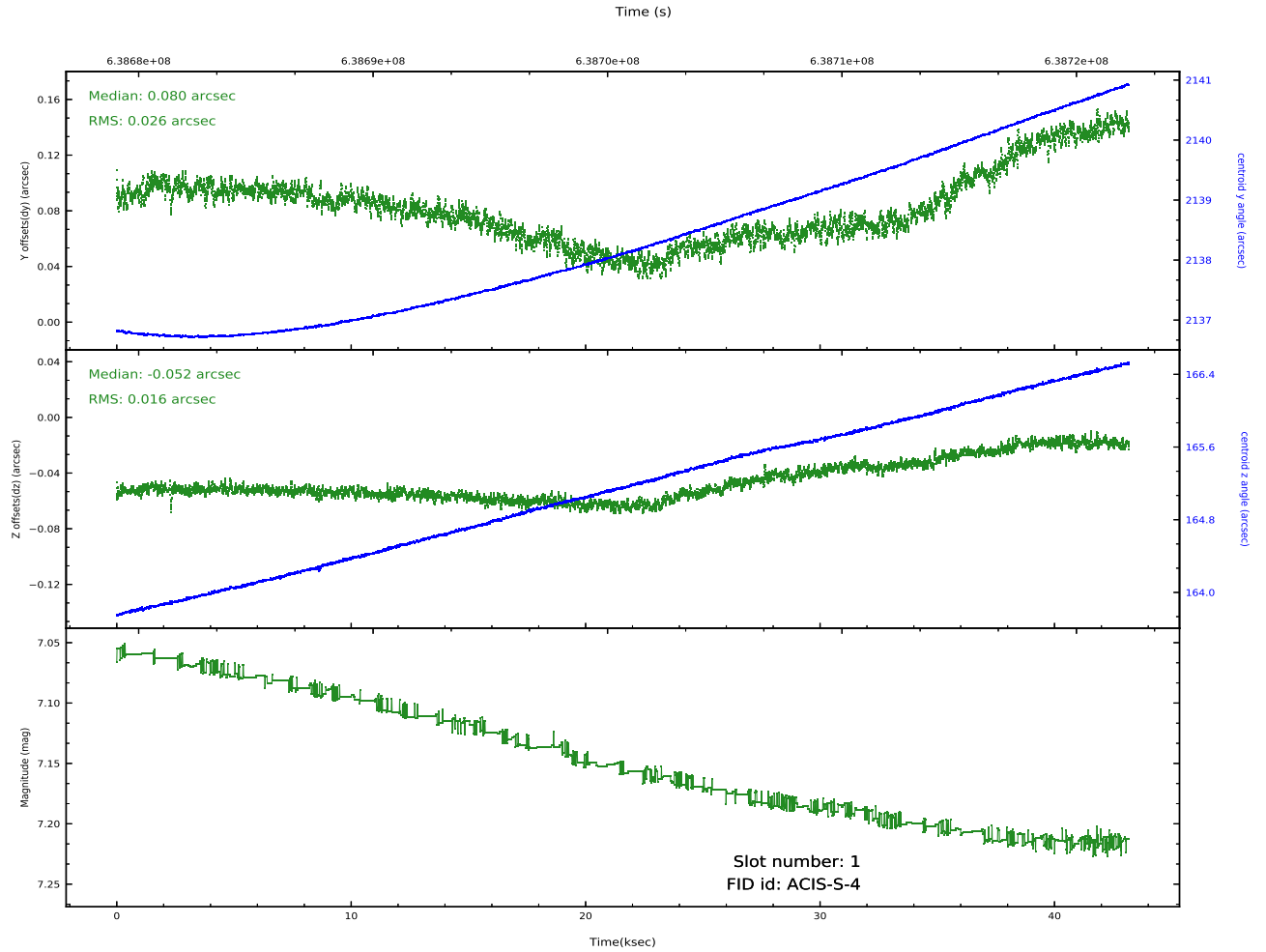
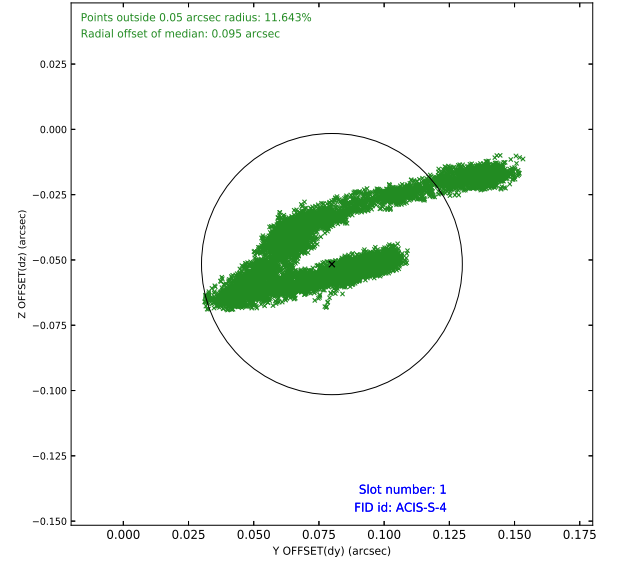
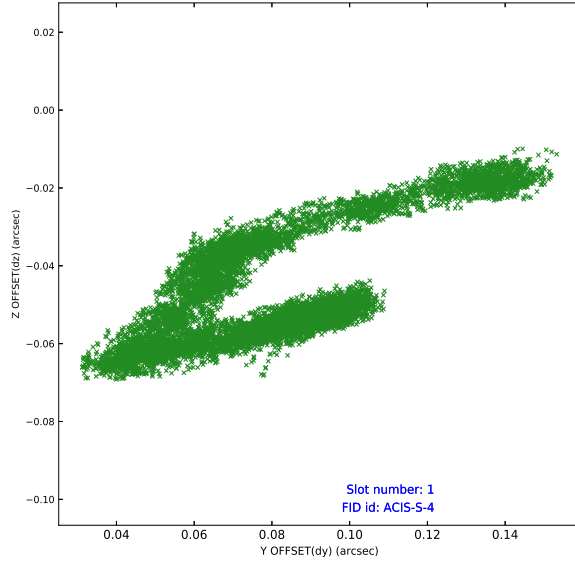


2.5 FID Slots

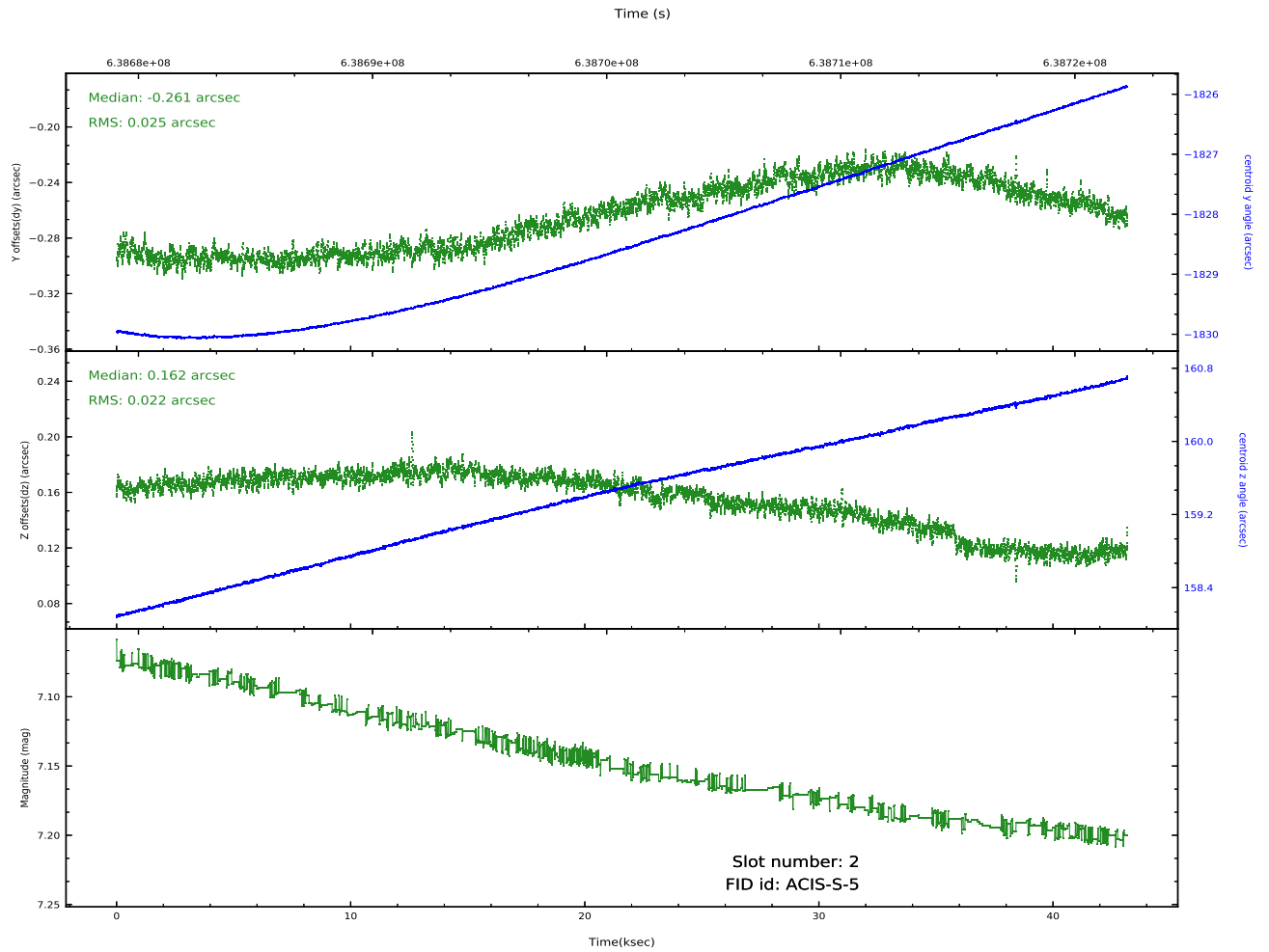
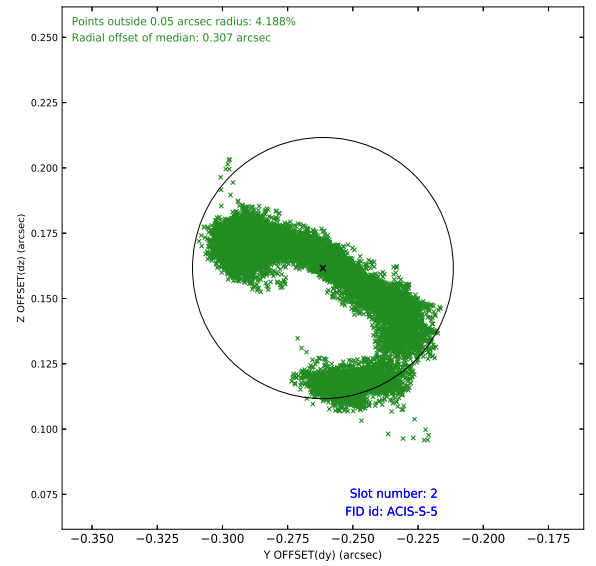
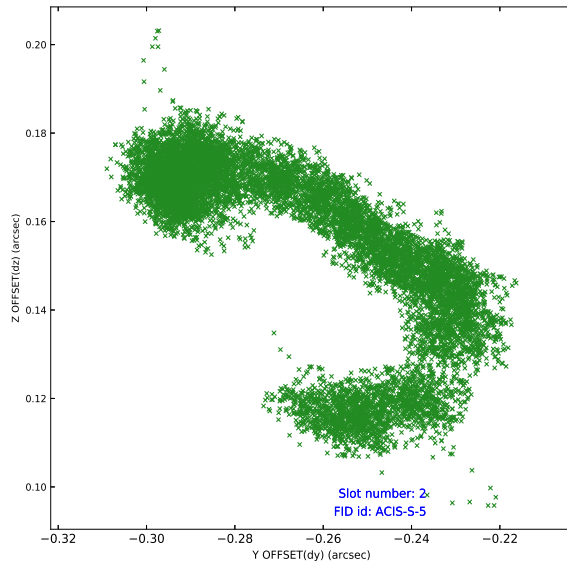
2.5.1 Slot 0



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	43.103698858023

A.2 Comments

Joint proposal with HST and NRAO.

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The guide stars in slots 3 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.