

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19283 - L2 Version 2
Chandra X-Ray Center

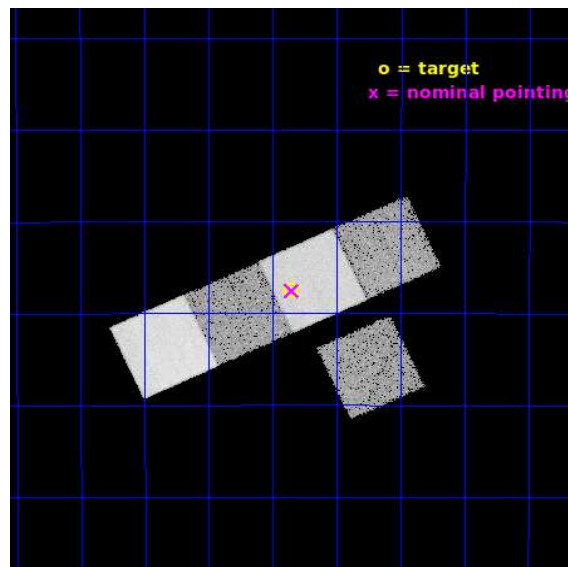
L2 Processing Date : Oct 24 2020

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1 Front

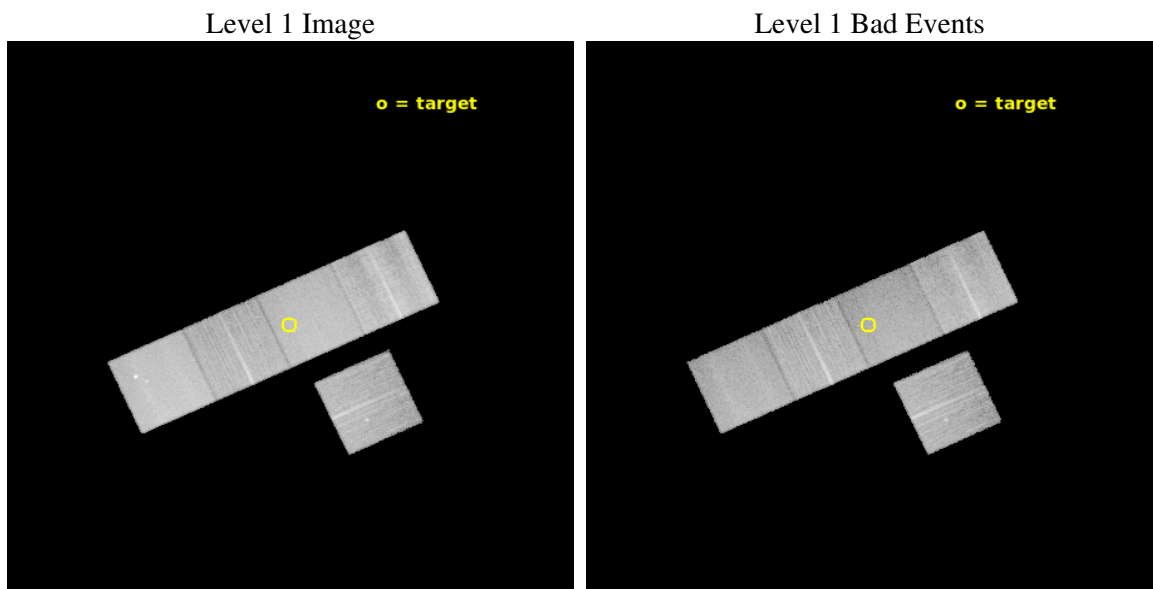
seq_num	502933	Sequence number
obs_id	19283	Observation id
title	Late-time X-rays to map the Zoo of Engine-driven Stellar Explosions	
observer	RAFFAELLA MARGUTTI	Principal investigator
object	GRB161219B	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	91.714042	Observer's specified target RA [deg]
dec_targ	-26.791583	Observer's specified target Dec [deg]
ra_nom	91.712479372513	Nominal RA [deg]
dec_nom	-26.792309781057	Nominal Dec [deg]
roll_nom	335.15459107748	Nominal Roll [deg]
revision	2	Processing version of data
ontime	17049.175092816	Sum of GTIs [s]
livetime	16826.415068809	Livetime [s]
ontime3	17049.051972866	Sum of GTIs [s]
ontime5	17049.134052873	Sum of GTIs [s]
ontime6	17045.951942563	Sum of GTIs [s]
ontime7	17049.175092816	Sum of GTIs [s]
ontime8	17049.010932803	Sum of GTIs [s]
l2events	199588	Number of level 2 events



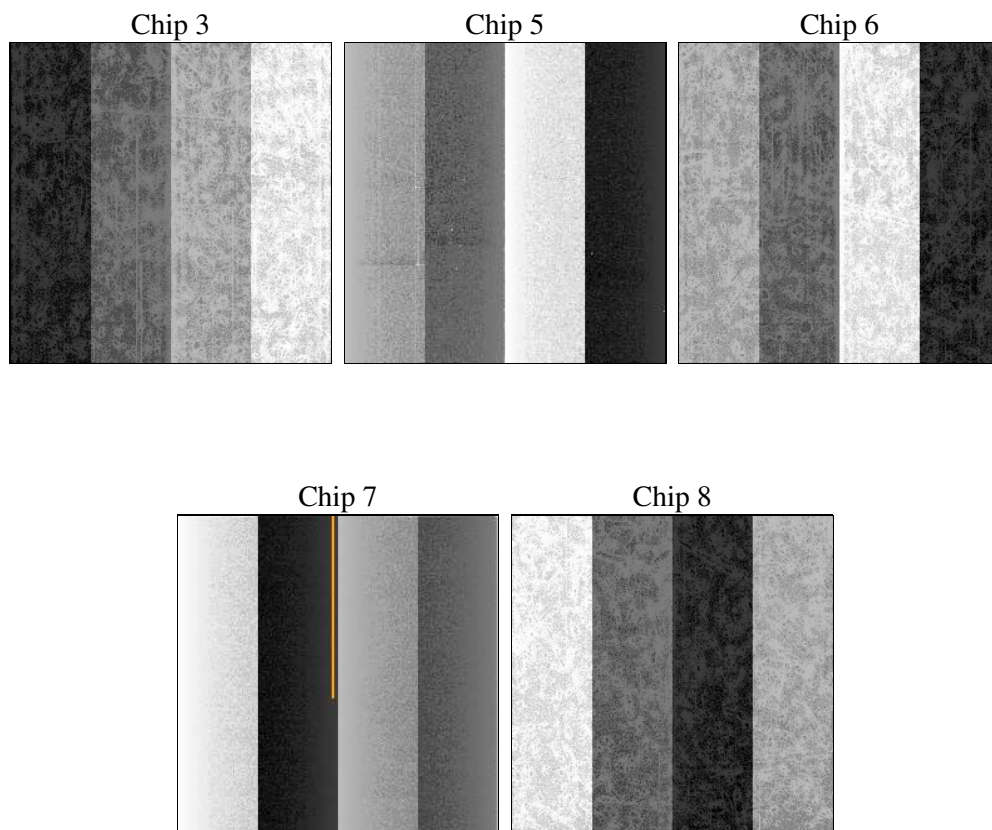
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	17000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	17049.175092816	Sum of GTIs [s]
caldsver	4.9.3	 	ontime3	17049.051972866	Sum of GTIs [s]
date	2020-10-24T07:57:11	Date and time of file creation	ontime5	17049.134052873	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	17045.951942563	Sum of GTIs [s]
			ontime7	17049.175092816	Sum of GTIs [s]
			ontime8	17049.010932803	Sum of GTIs [s]
			l1events	801037	Number of level 1 events

2.1.4 Events

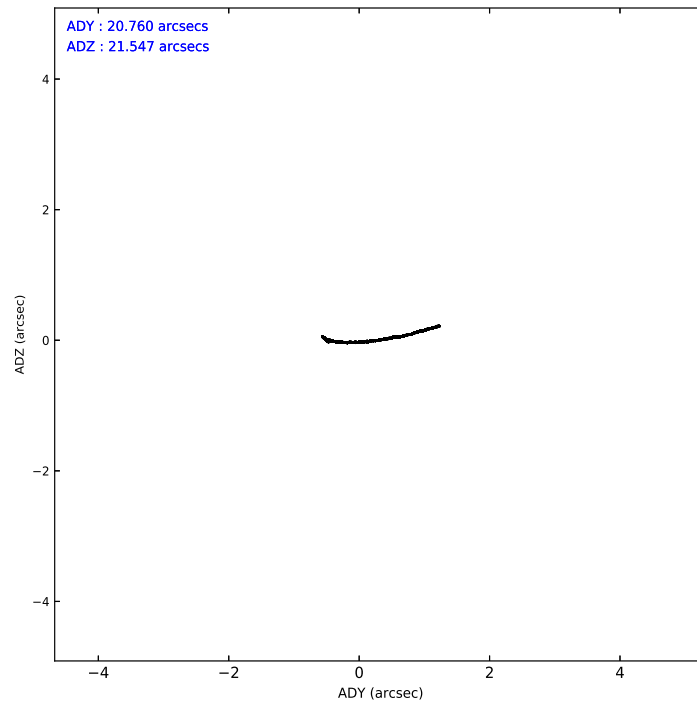
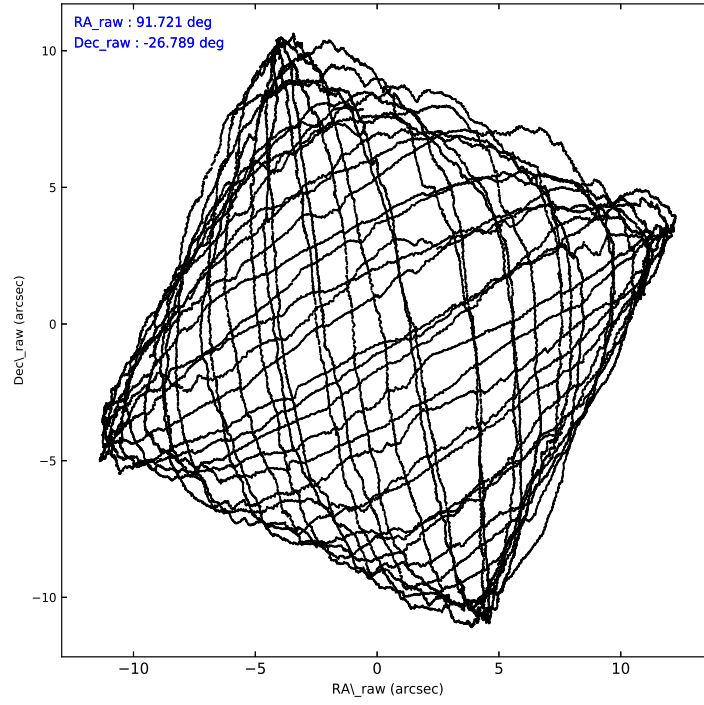
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	124174	204908	135200	165319	171436
rejected events	111411	107683	120911	94032	127593
rejected %	89%	52%	89%	56%	74%

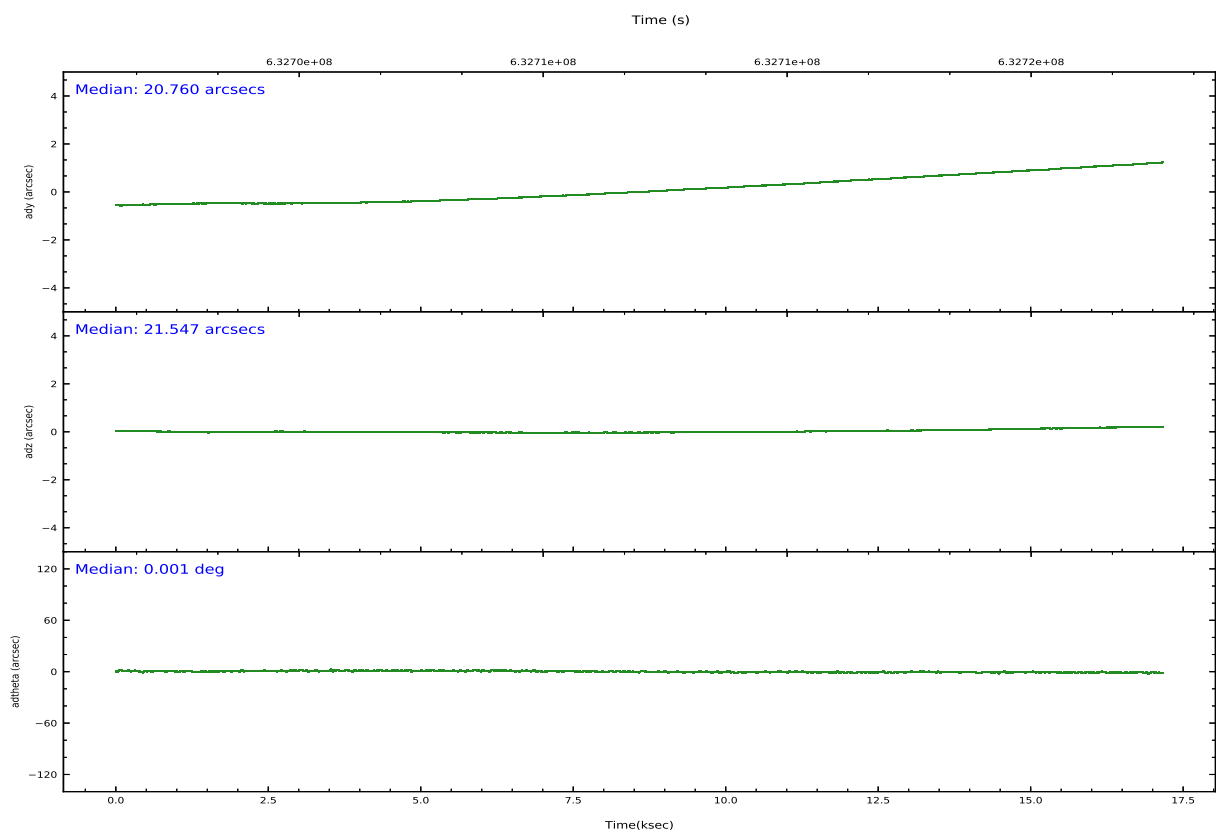
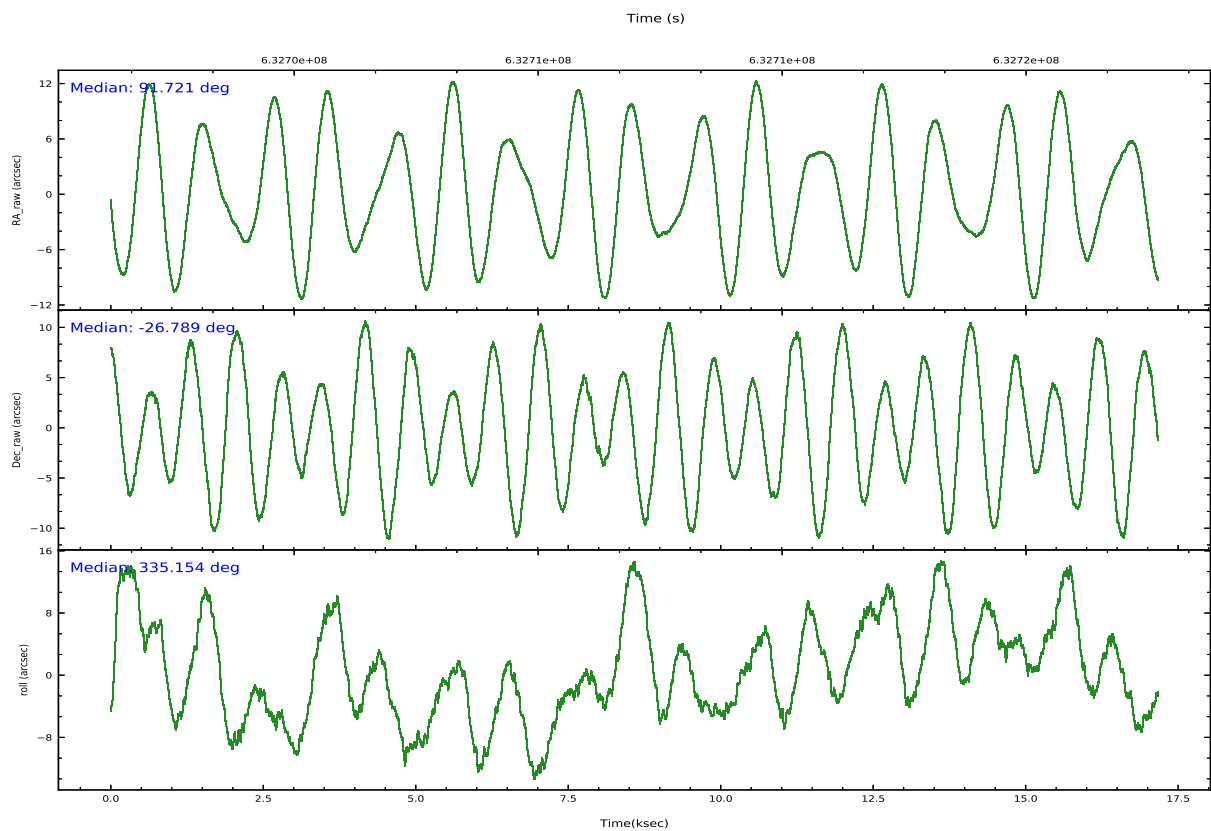
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4357	6270	4495	6111	11996
	3%	3%	3%	3%	6%
grade 1 events	165	605	79	233	137
	0%	0%	0%	0%	0%
grade 2 events	2738	29887	3553	15063	10710
	2%	14%	2%	9%	6%
grade 3 events	1381	3054	1311	5596	4735
	1%	1%	0%	3%	2%
grade 4 events	1427	2957	1324	5616	4411
	1%	1%	0%	3%	2%
grade 5 events	6009	13396	5613	16379	8864
	4%	6%	4%	9%	5%
grade 6 events	2865	55079	3608	38915	12010
	2%	26%	2%	23%	7%
grade 7 events	105232	93660	115217	77406	118573
	84%	45%	85%	46%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-35678	ACIS-35678	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	91.691056	91.712479372513	CCD I2 on	N	N
[deg] Pointing Dec	-26.792047	-26.792309781057	CCD I3 on	O1	Y
[deg] Pointing Roll	334.989634	335.15459107748	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	632701165.184000	632700272.66813	CCD S5 on	N	N
Observation start date	2018-01-18T22:18:16	2018-01-18T22:04:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	632718165.184000	632719092.69423	On-chip summing requested	N	N
Observation end date	2018-01-19T03:01:36	2018-01-19T03:18:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



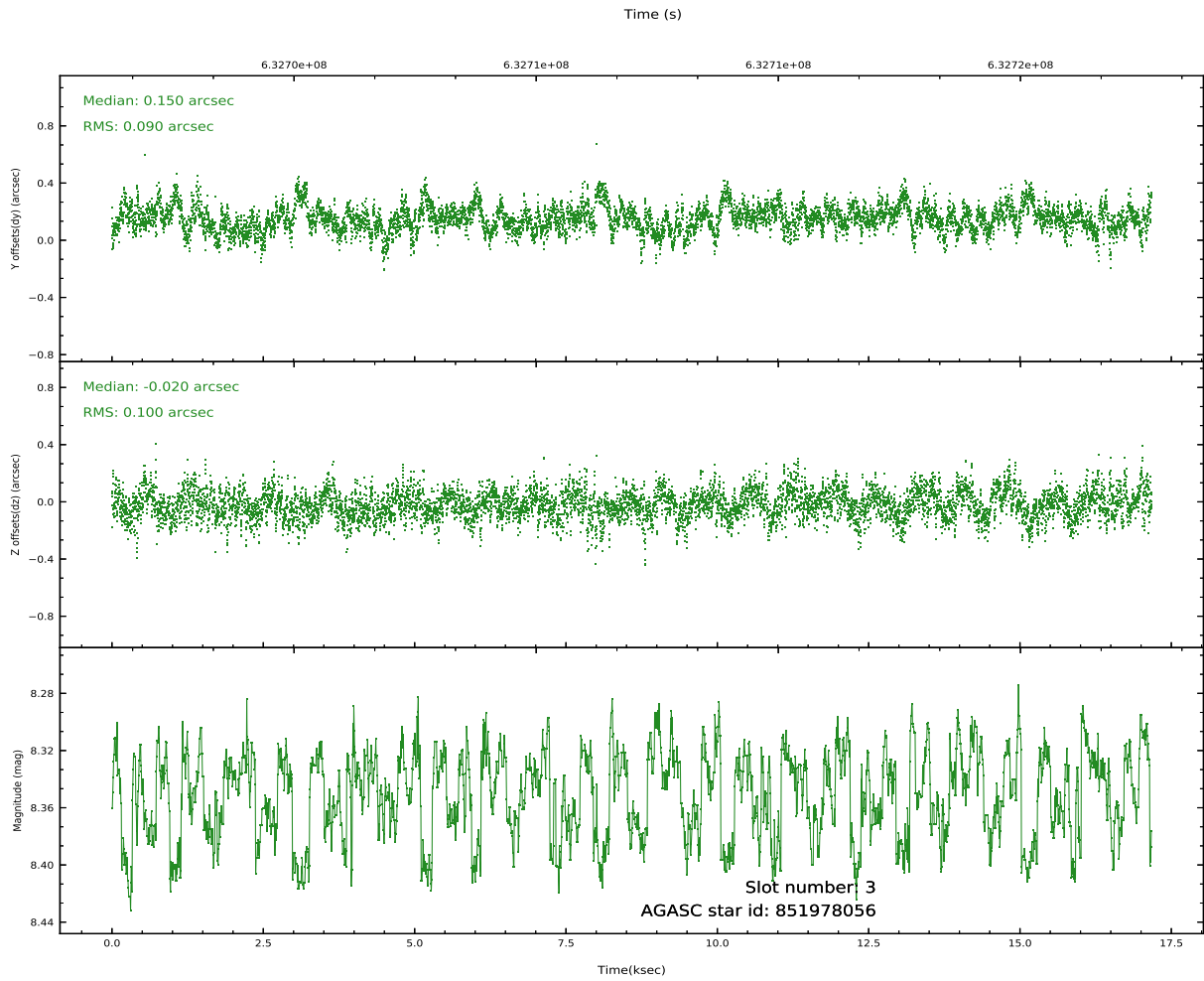
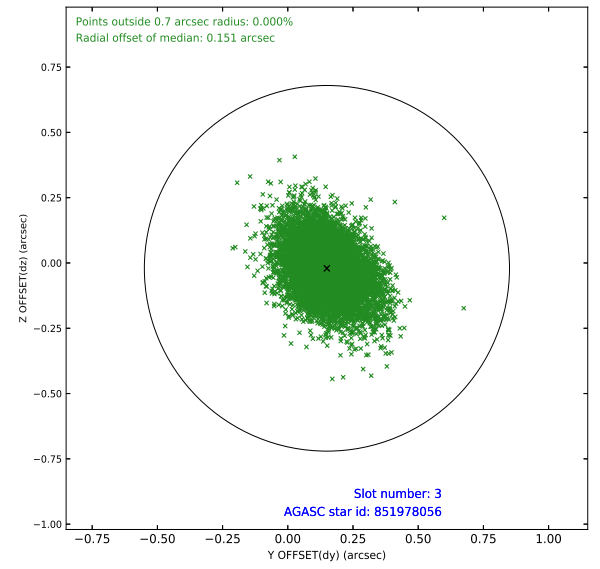
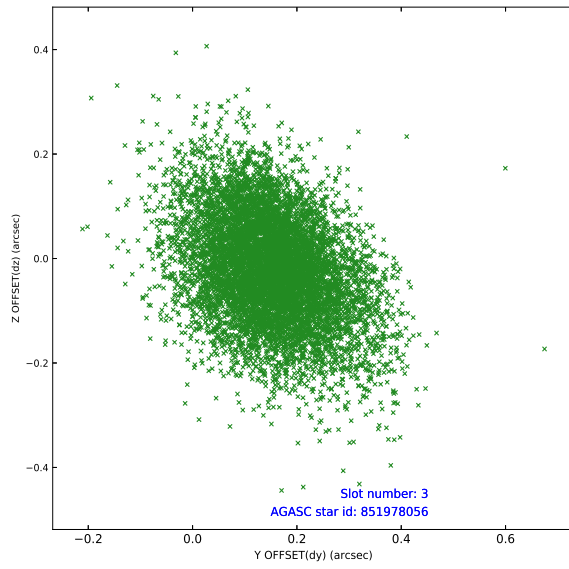


Slot Statistics

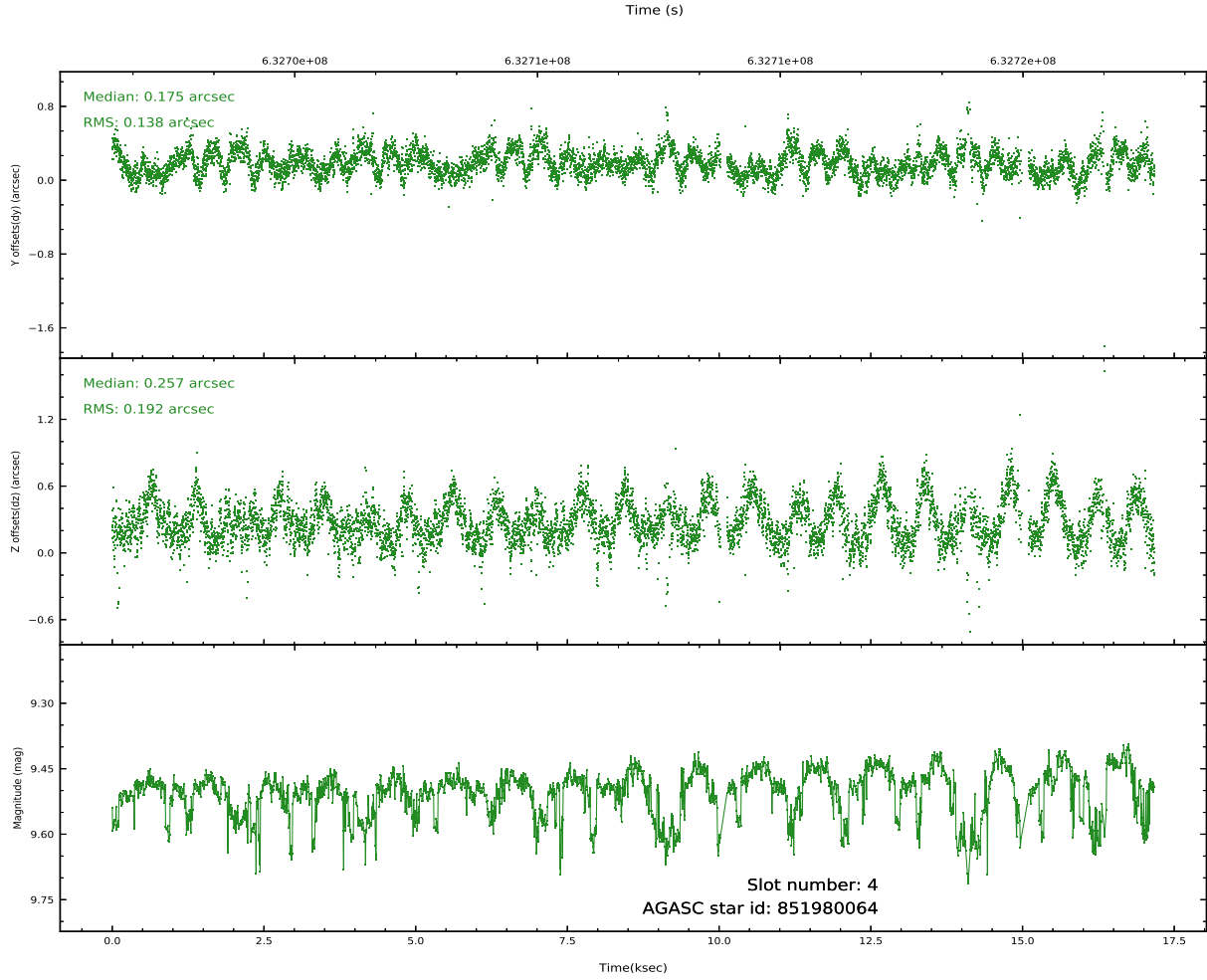
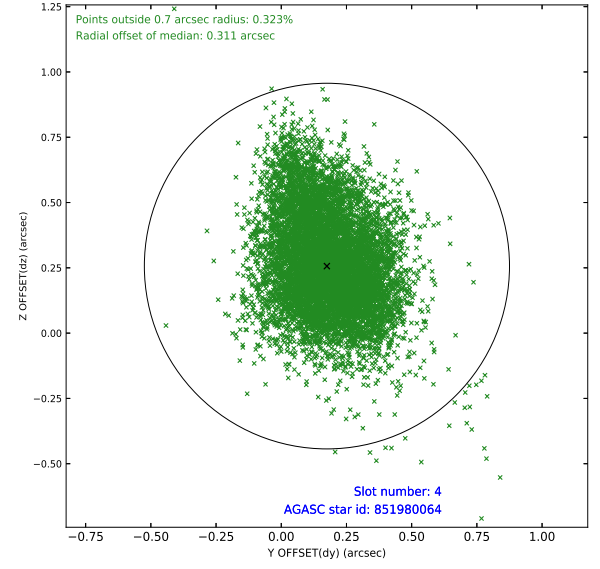
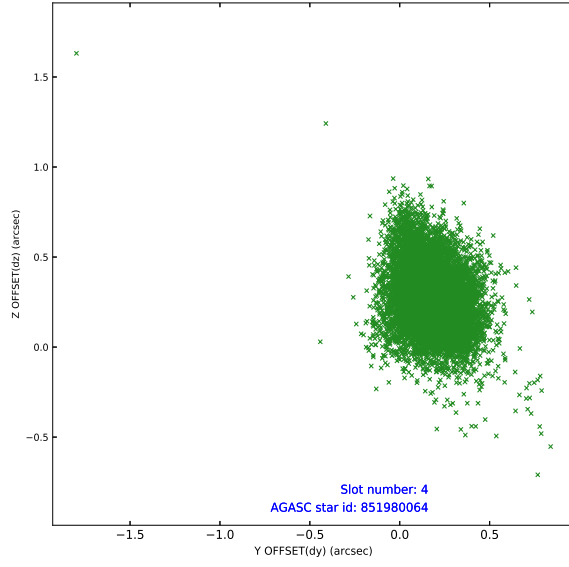
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.13	4189	1.000	0.143	-0.056	0.010	0.019	0.000000	0.000000	921.96	-1738
1	FID		ACIS-S-2	7.04	4188	1.000	-0.092	0.065	0.019	0.030	0.000000	0.000000	-774.04	-1743
2	FID		ACIS-S-4	7.16	4189	1.000	-0.074	-0.000	0.017	0.047	0.000000	0.000000	2139.09	164
3	GUIDE	used	851978056	8.35	8366	1.000	0.150	-0.020	0.140	0.239	91.827916	-27.134854	919.99	-932
4	GUIDE	used	851980064	9.49	8059	1.000	0.175	0.257	0.245	0.408	91.487754	-26.922639	-391.50	-702
5	GUIDE	used	851984760	9.61	8260	1.000	-0.091	-0.098	0.215	0.355	91.138044	-26.529509	-2011.50	99
6	GUIDE	used	851987472	9.58	8354	1.000	0.036	0.177	0.291	0.463	91.729305	-26.453890	-402.46	1155
7	GUIDE	used	853691200	6.15	8377	1.000	-0.274	-0.297	0.176	0.281	92.446440	-26.701088	2066.06	1317

2.4 Star Slots

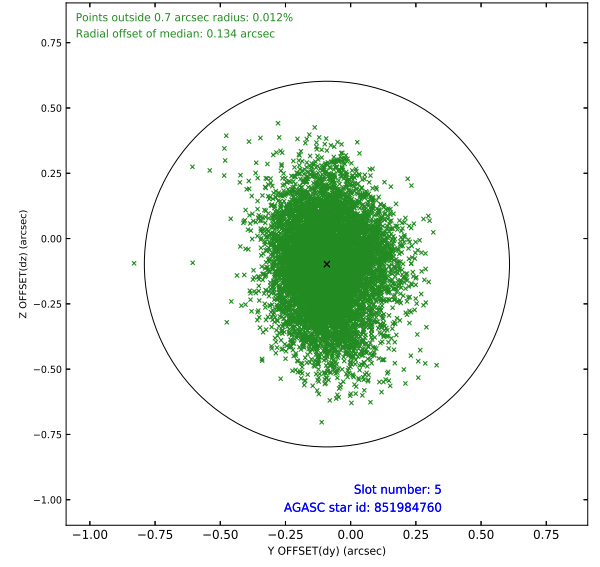
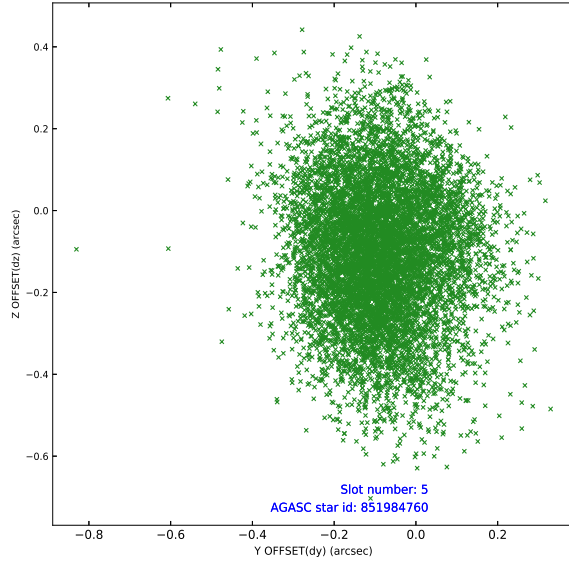
2.4.1 Slot 3



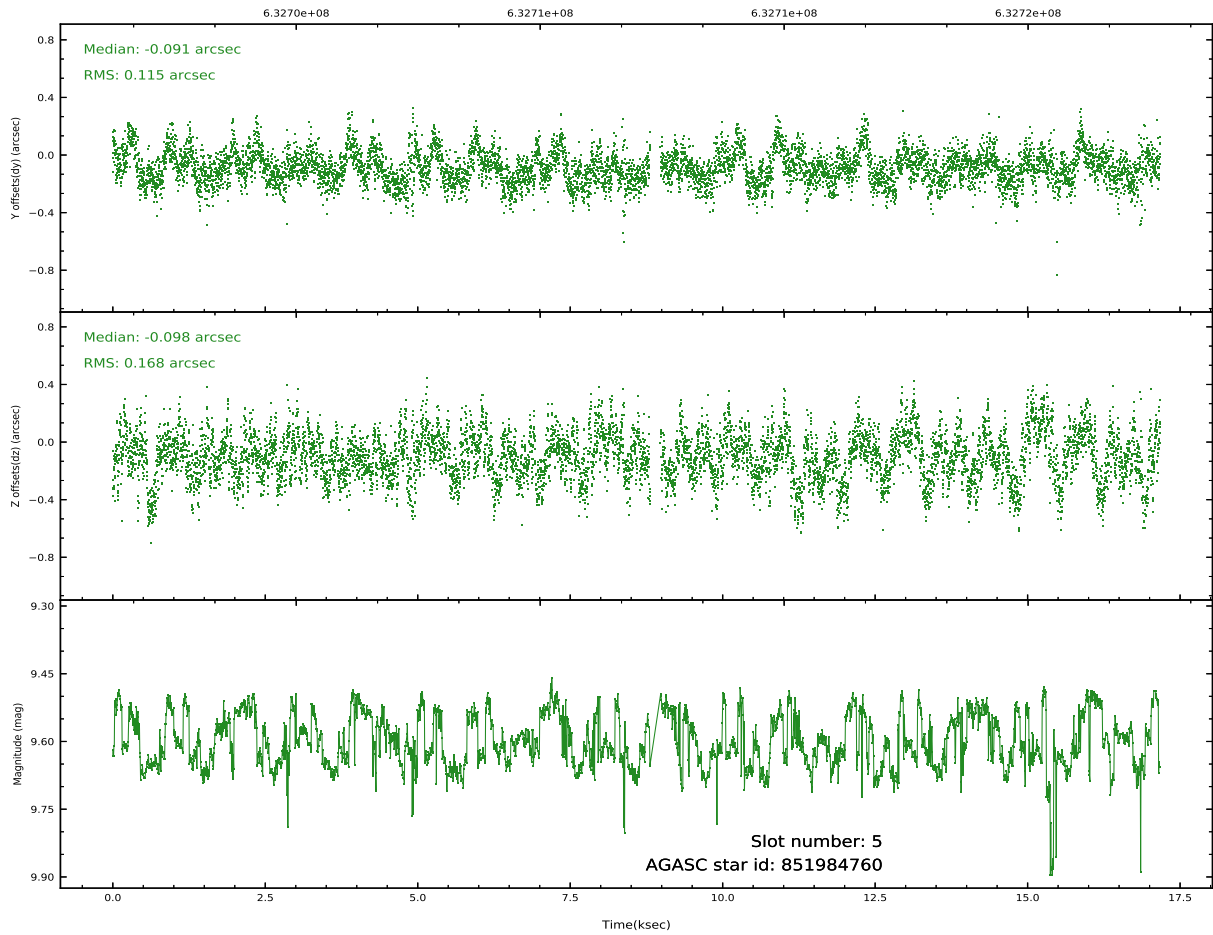
2.4.2 Slot 4



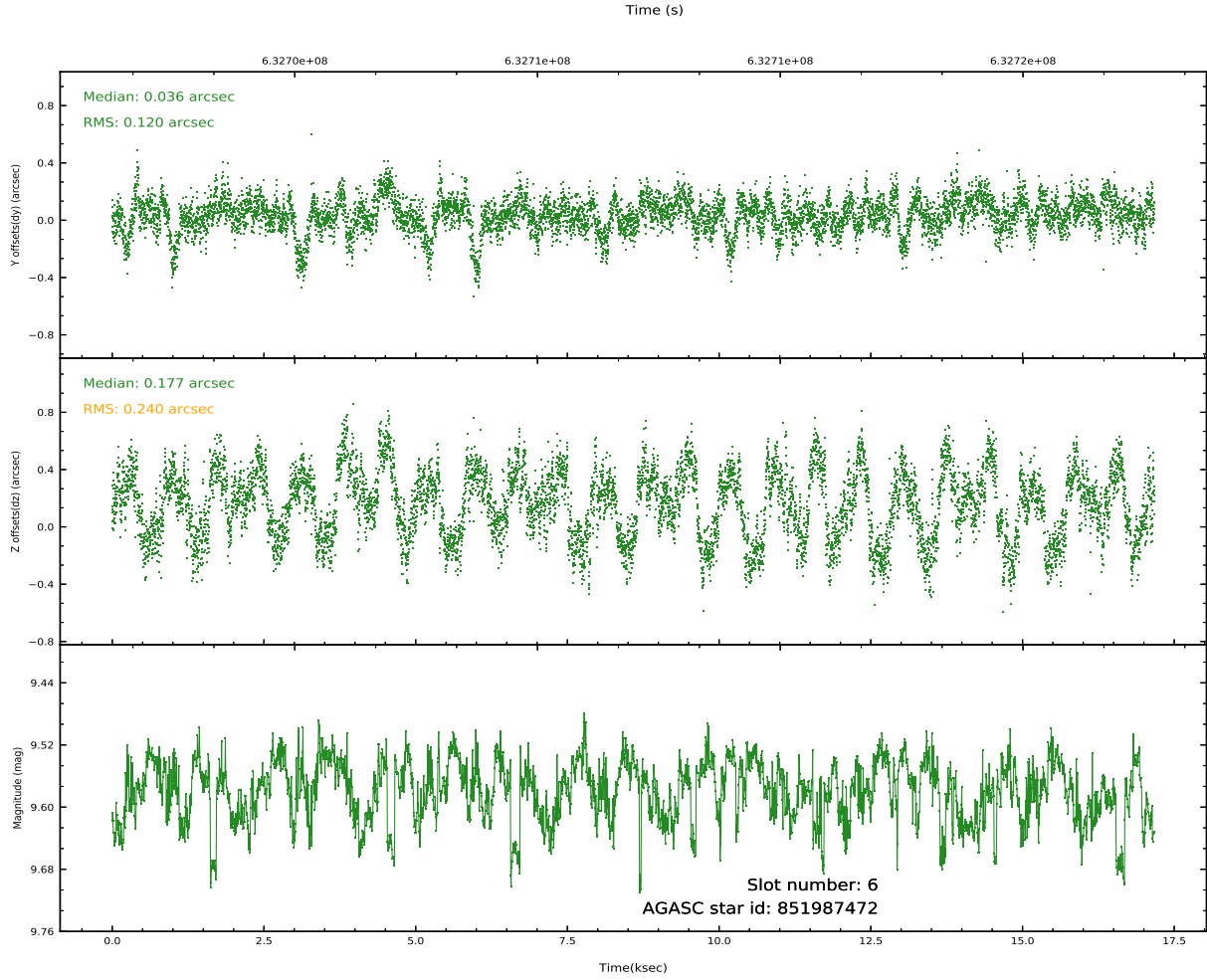
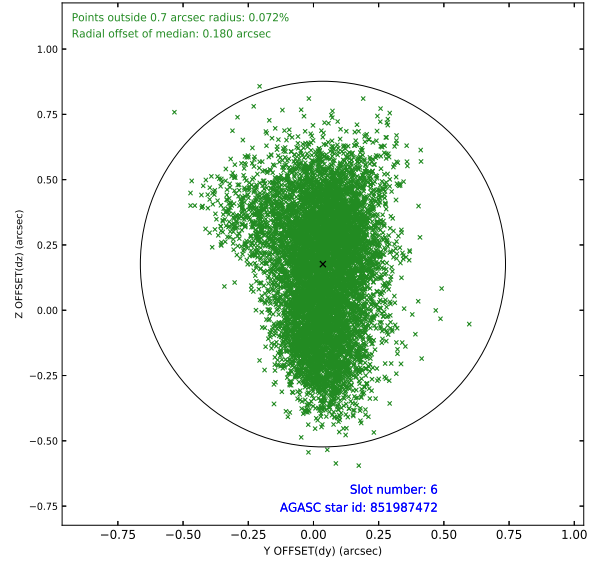
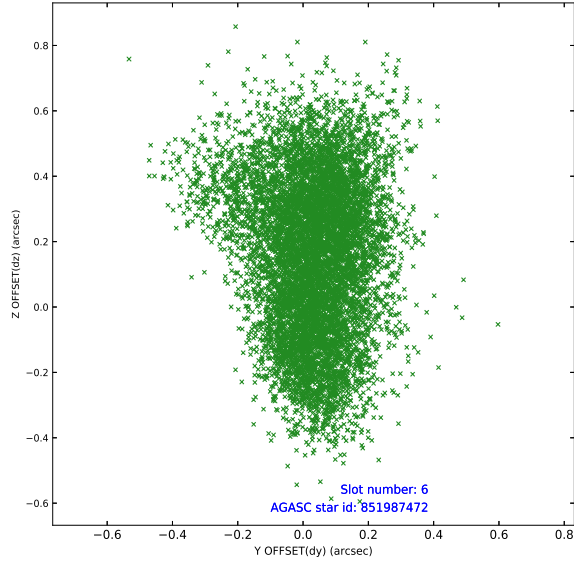
2.4.3 Slot 5



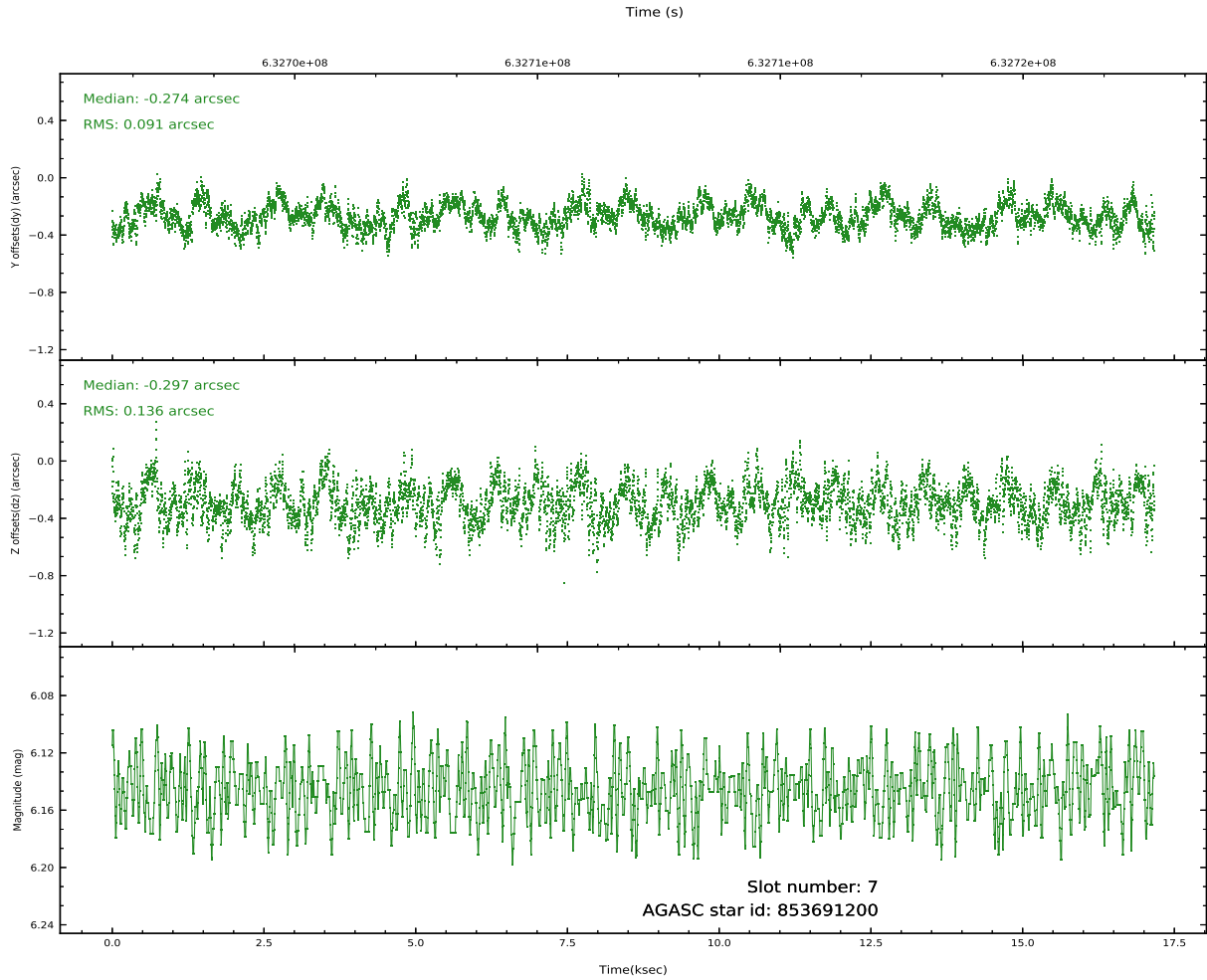
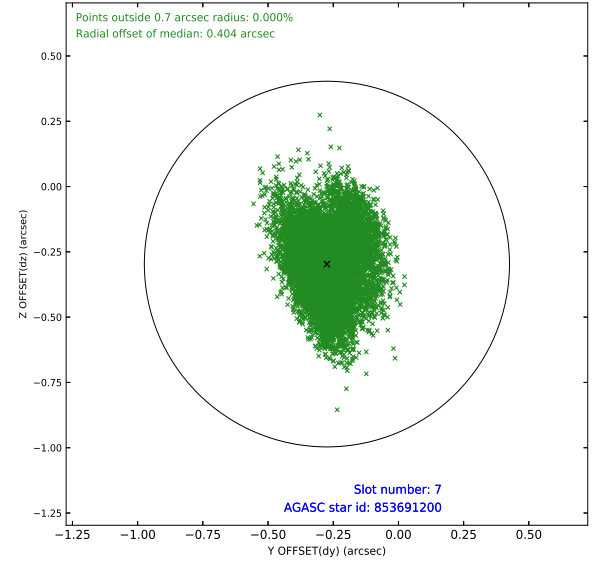
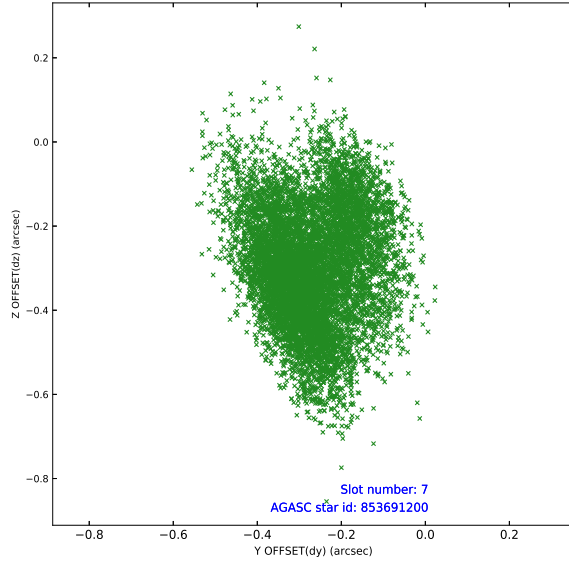
Time (s)



2.4.4 Slot 6

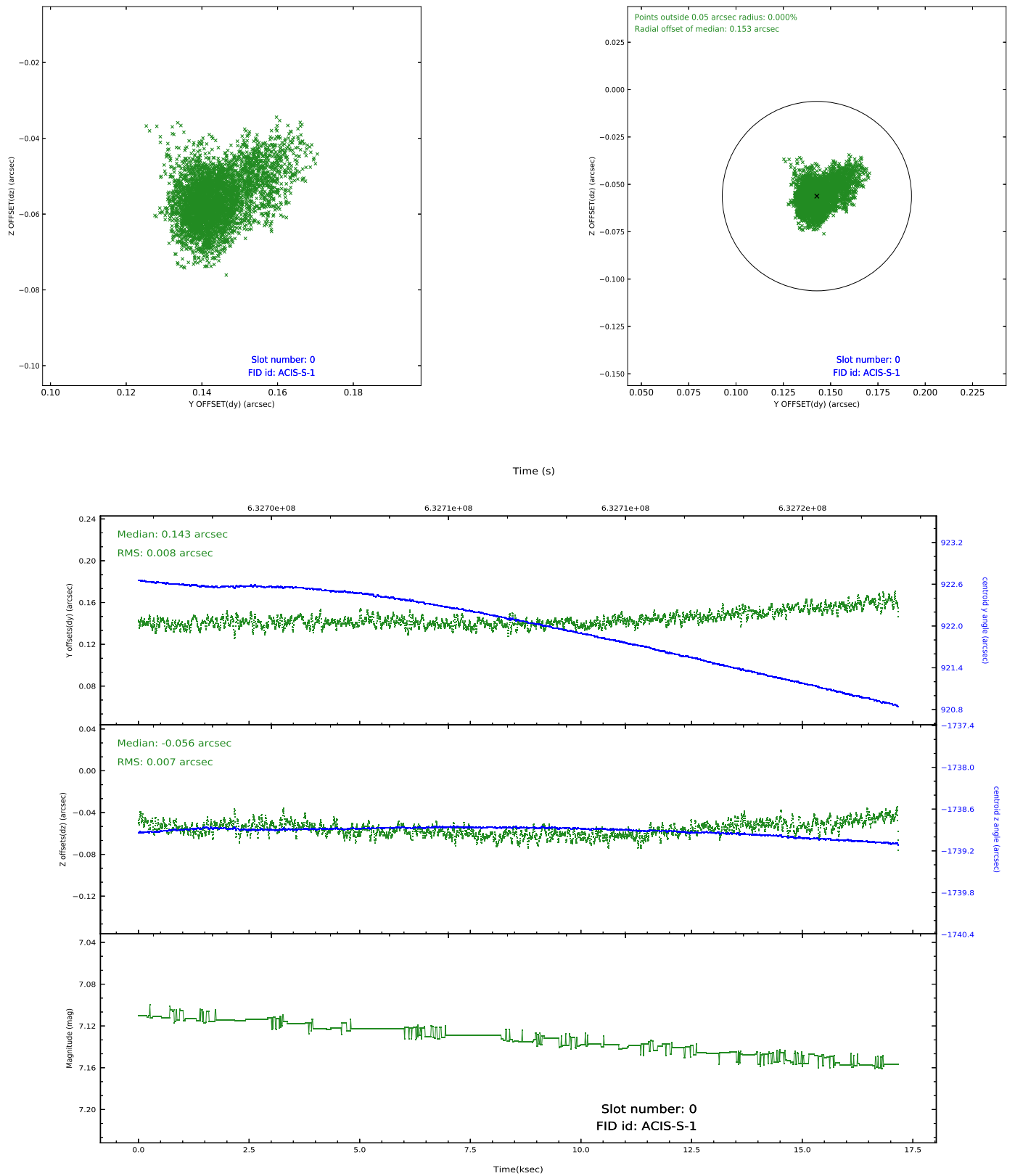


2.4.5 Slot 7

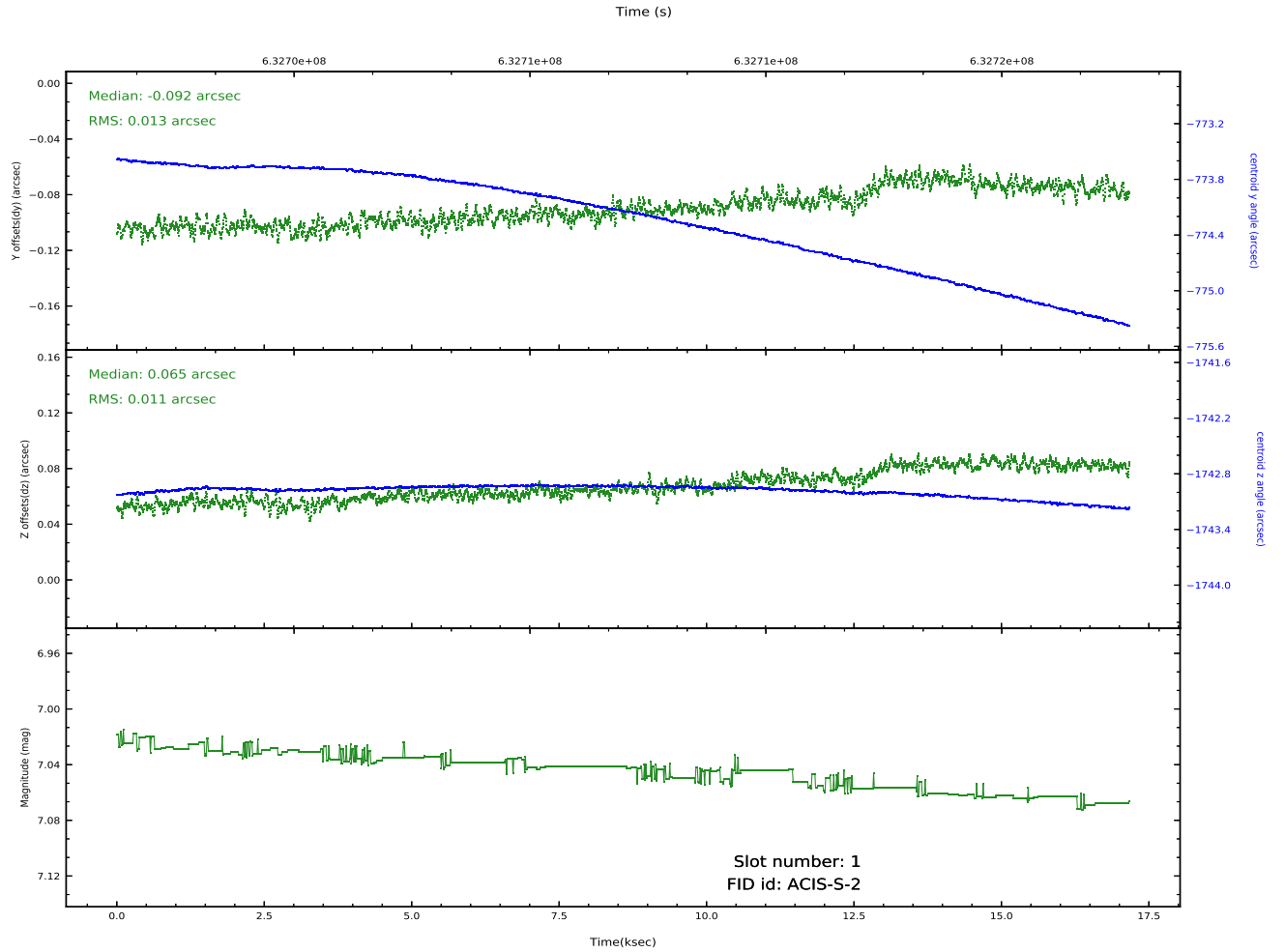
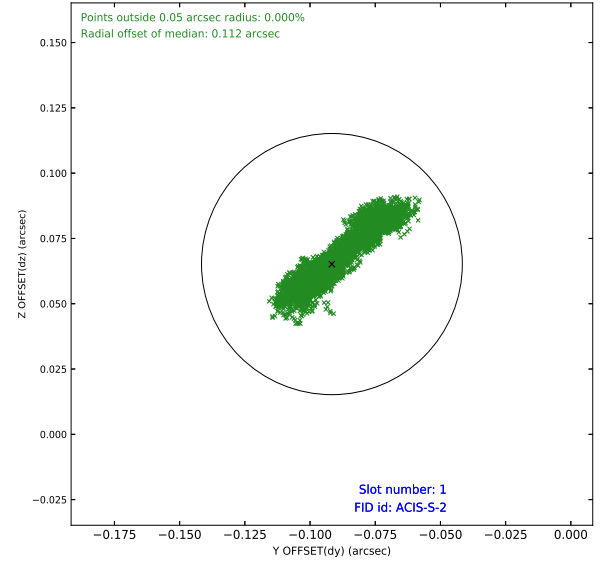
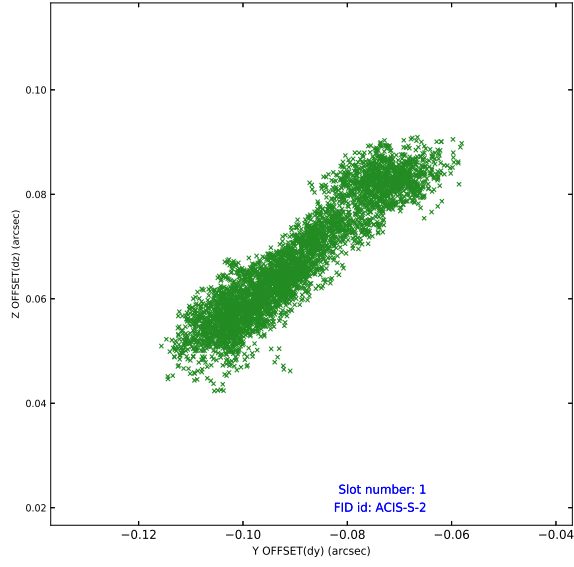


2.5 FID Slots

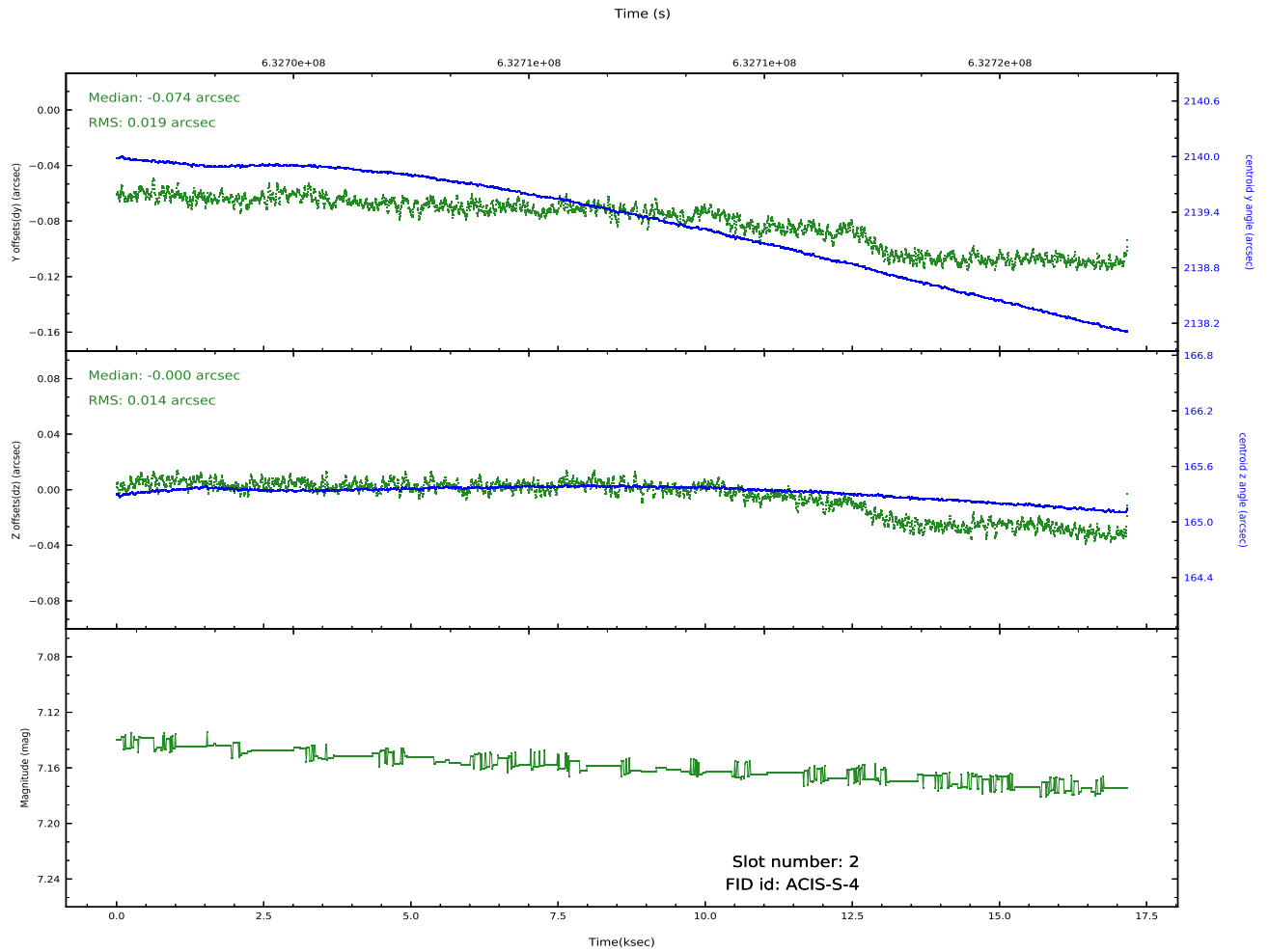
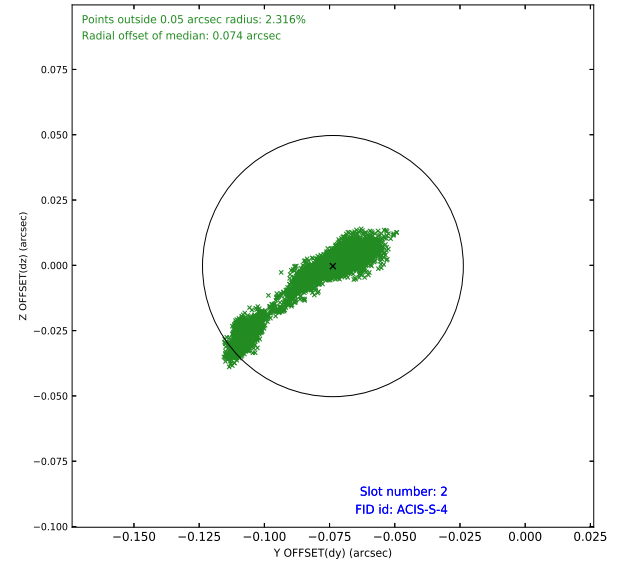
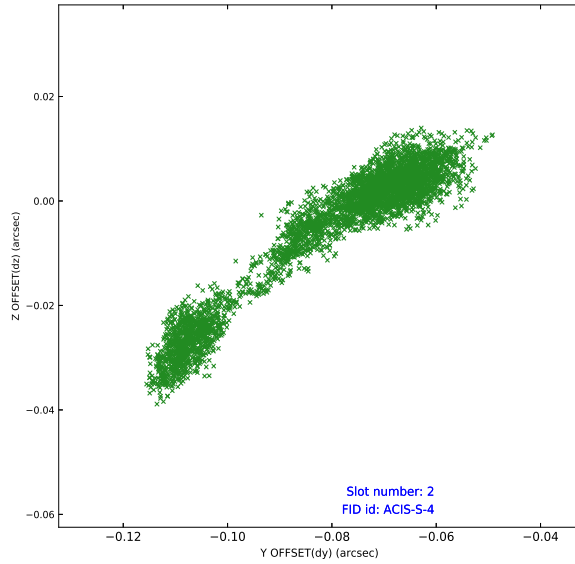
2.5.1 Slot 0



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)	2020.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.049175091028

A.2 Comments