

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20180 - L2 Version 2
Chandra X-Ray Center

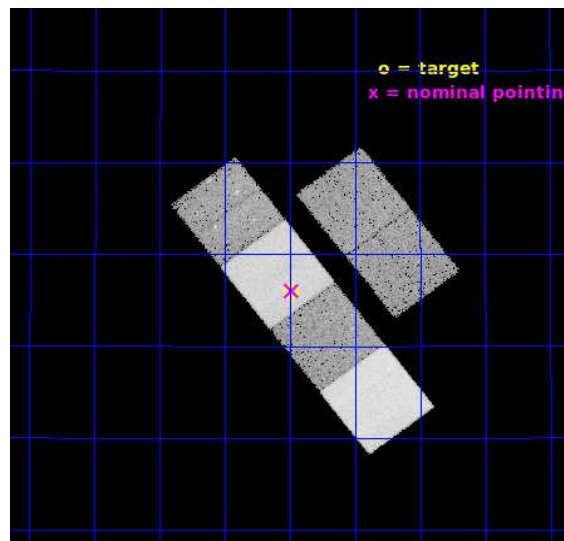
L2 Processing Date : Oct 25 2020

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1 Front

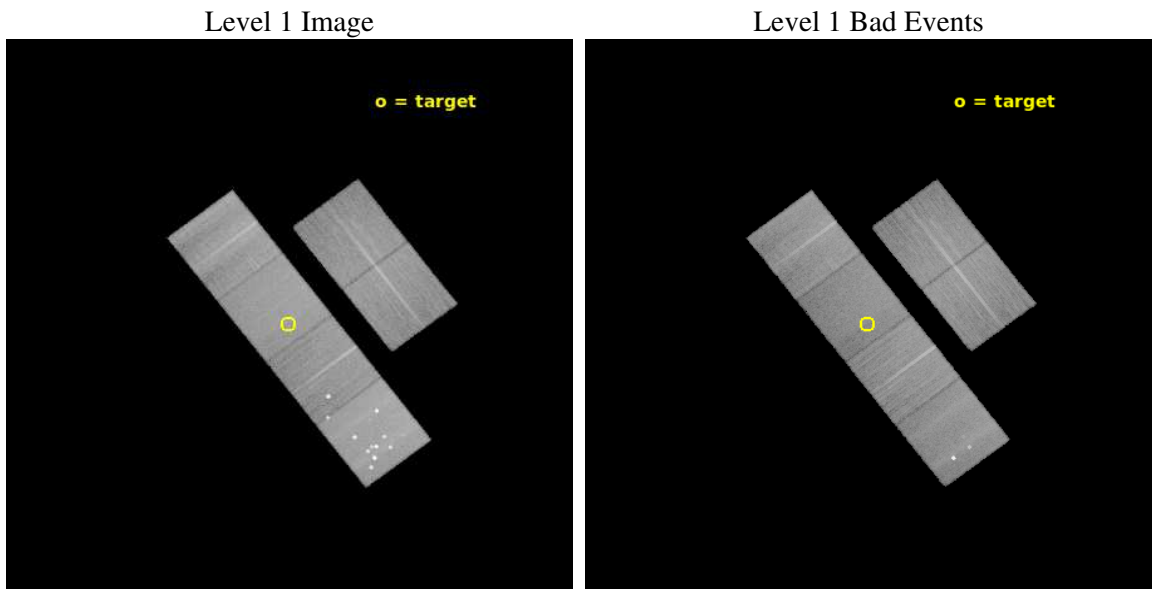
seq_num	401907	Sequence number
obs_id	20180	Observation id
title	The Late-time X-ray Behavior of Short Gamma-ray Bursts: Implications for Energetics and Rates	Proposal title
observer	Wen-fai Fong	Principal investigator
object	sGRB180418A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	170.121667	Observer's specified target RA [deg]
dec_targ	24.933	Observer's specified target Dec [deg]
ra_nom	170.12116742837	Nominal RA [deg]
dec_nom	24.934044600964	Nominal Dec [deg]
roll_nom	232.61634495362	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24399.685703039	Sum of GTIs [s]
livetime	24090.72219094	Livetime [s]
ontime2	24399.726742983	Sum of GTIs [s]
ontime3	24399.56258297	Sum of GTIs [s]
ontime5	24399.644662976	Sum of GTIs [s]
ontime6	24380.157210946	Sum of GTIs [s]
ontime7	24399.685703039	Sum of GTIs [s]
ontime8	24399.521543026	Sum of GTIs [s]
l2events	290162	Number of level 2 events



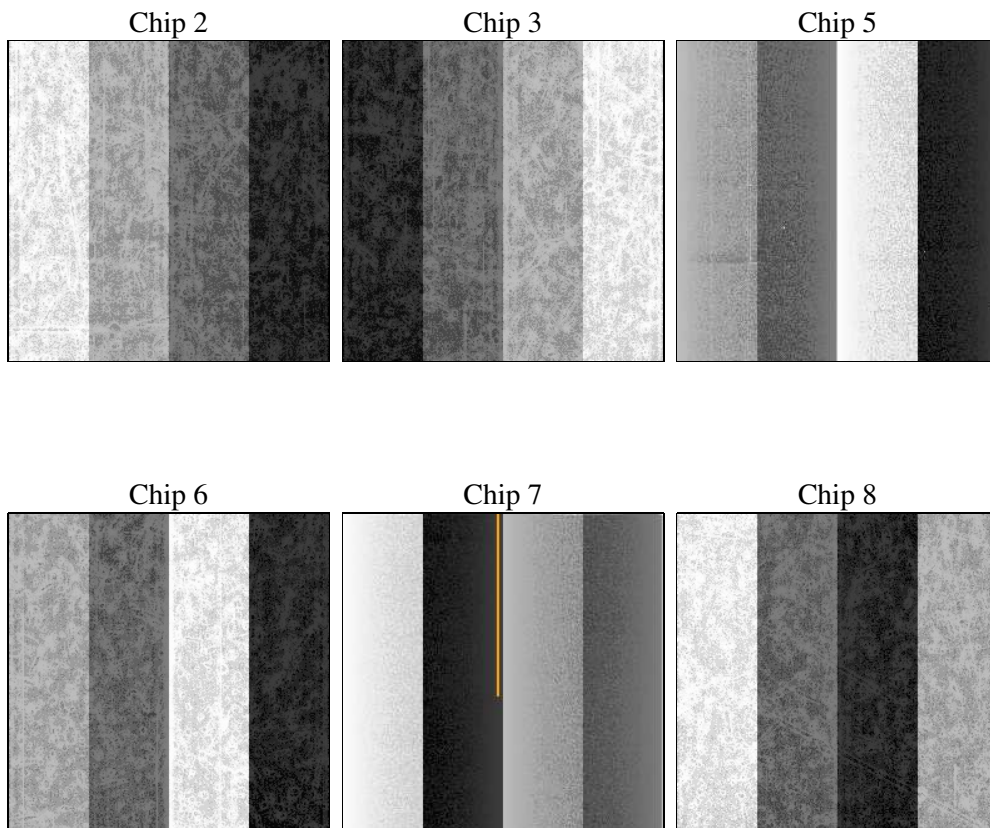
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24448.193000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	24399.685703039	Sum of GTIs [s]
caldbver	4.9.3	 	ontime2	24399.726742983	Sum of GTIs [s]
date	2020-10-25T15:31:10	Date and time of file creation	ontime3	24399.56258297	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	24399.644662976	Sum of GTIs [s]
			ontime6	24380.157210946	Sum of GTIs [s]
			ontime7	24399.685703039	Sum of GTIs [s]
			ontime8	24399.521543026	Sum of GTIs [s]
			l1events	1358966	Number of level 1 events

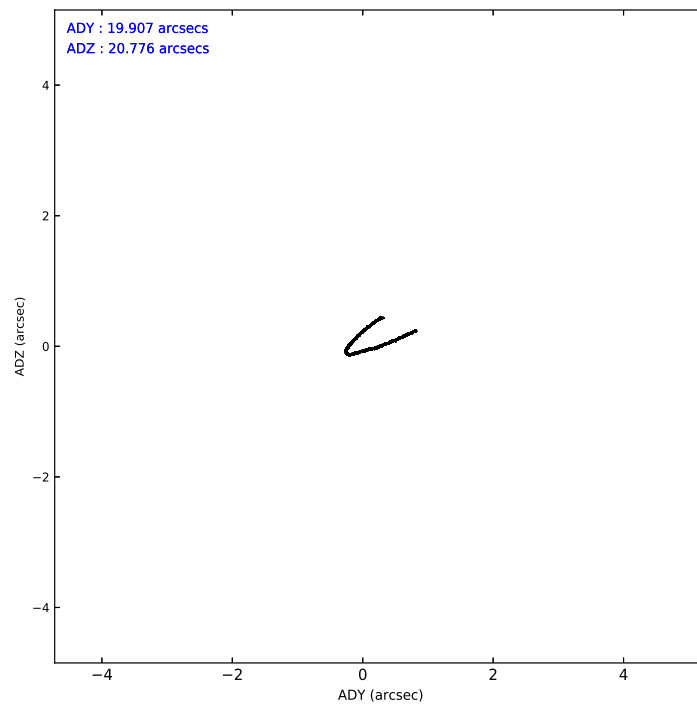
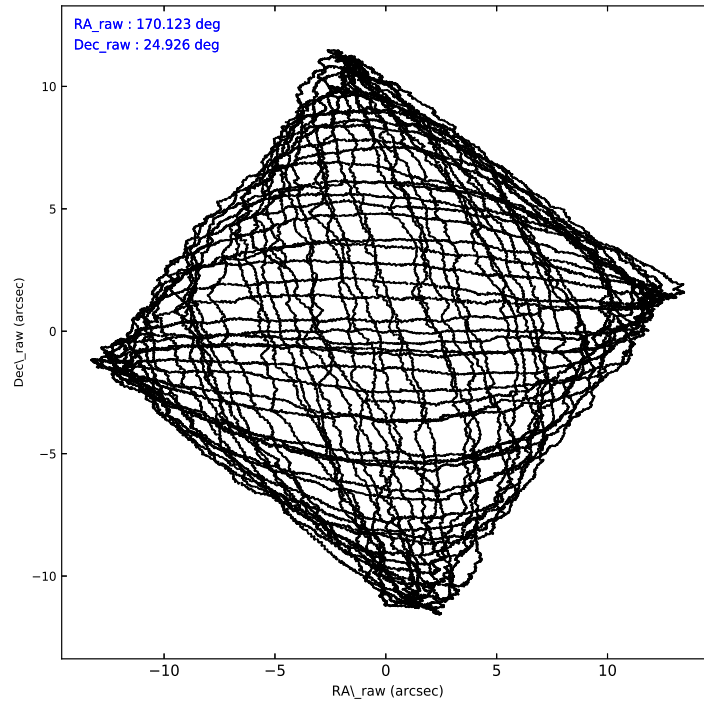
2.1.4 Events

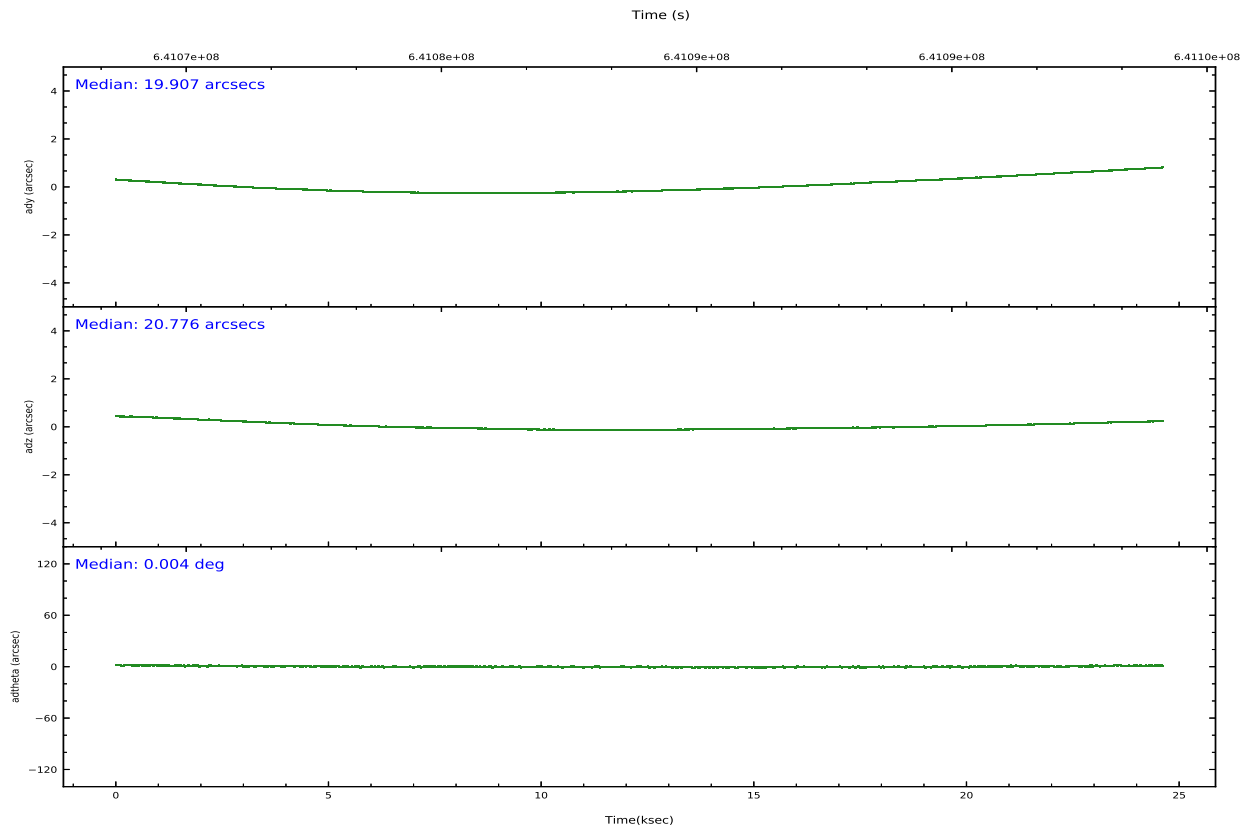
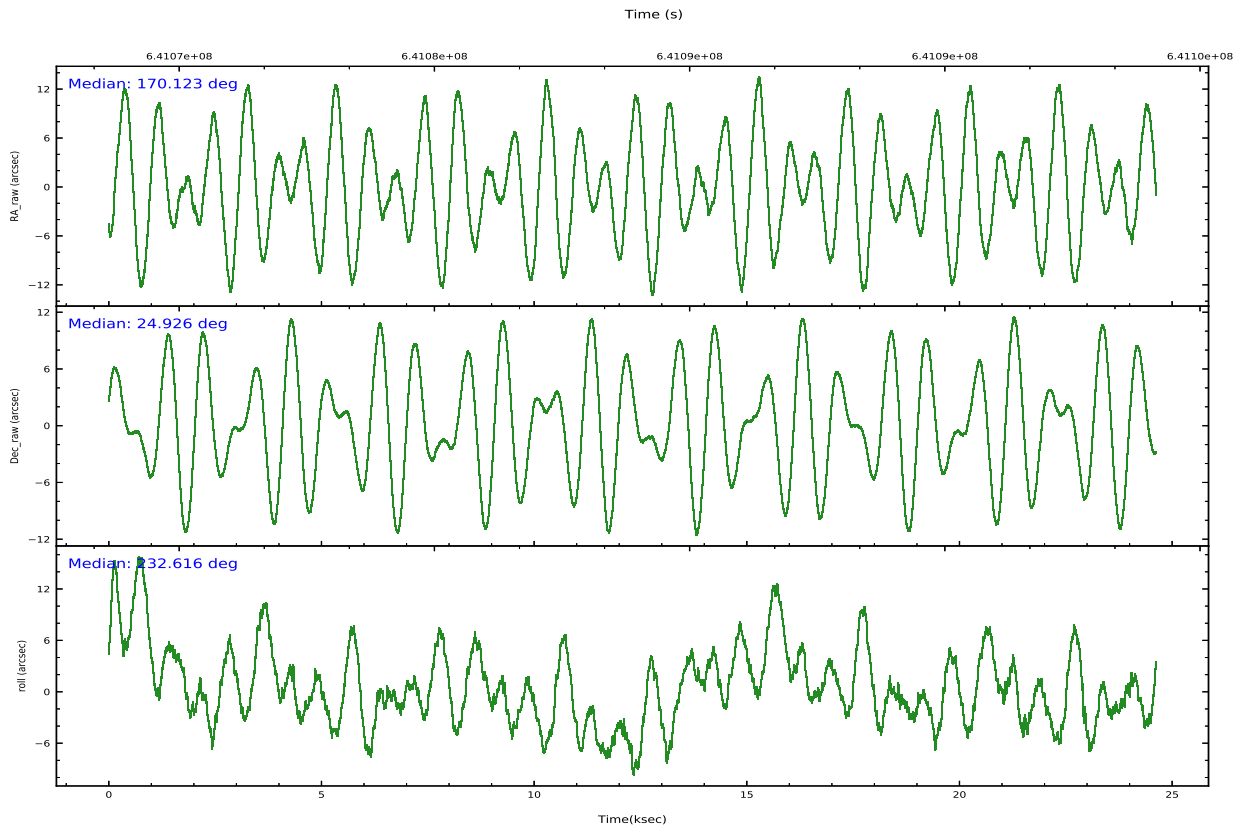
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	187357	176079	337414	195980	228291	233845	grade 0 events	6497	6134	41241	13033	8163	16279
rejected events	168919	158356	160683	169179	130475	175485		3%	3%	12%	6%	3%	6%
rejected %	90%	89%	47%	86%	57%	75%	grade 1 events	108	92	864	111	365	174
								0%	0%	0%	0%	0%	0%
							grade 2 events	4299	3858	49516	5217	20097	14086
								2%	2%	14%	2%	8%	6%
							grade 3 events	1828	1877	4588	1695	7572	6092
								0%	1%	1%	0%	3%	2%
							grade 4 events	1917	1902	4934	1706	7599	5492
								1%	1%	1%	0%	3%	2%
							grade 5 events	6843	7982	19296	7434	22203	11932
								3%	4%	5%	3%	9%	5%
							grade 6 events	3903	3954	76507	5154	54409	16435
								2%	2%	22%	2%	23%	7%
							grade 7 events	161962	150280	140468	161630	107883	163355
								86%	85%	41%	82%	47%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	170.126079	170.12116742837	CCD I2 on	O1	Y
[deg] Pointing Dec	24.953050	24.934044600964	CCD I3 on	O2	Y
[deg] Pointing Roll	232.470397	232.61634495362	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	641072520.184000	641071472.76165	CCD S5 on	N	N
Observation start date	2018-04-25T19:40:51	2018-04-25T19:24:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	641096968.184000	641097567.72569	On-chip summing requested	N	N
Observation end date	2018-04-26T02:28:19	2018-04-26T02:39:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





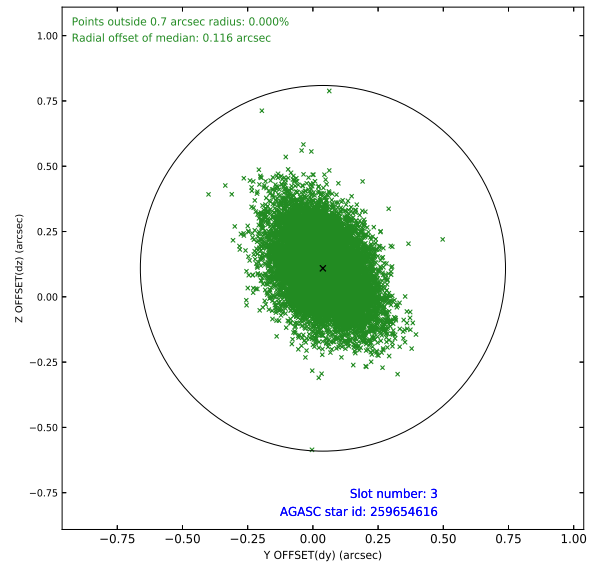
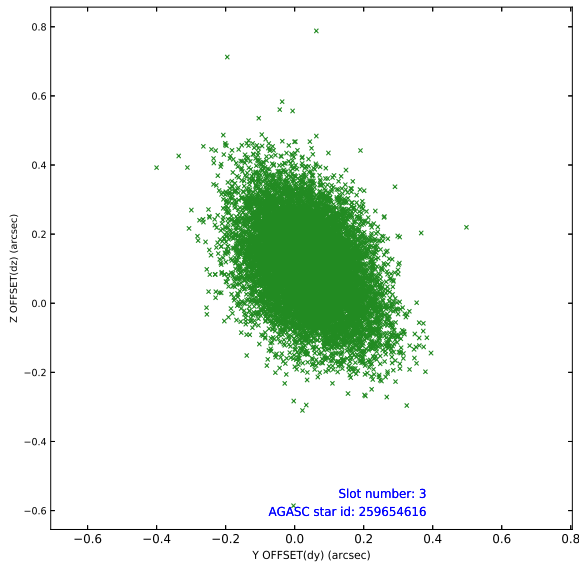
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.07	6005	1.000	0.096	-0.112	0.010	0.028	0.000000	0.000000	-773.24	-1742
1	FID		ACIS-S-4	7.20	6004	1.000	0.128	-0.016	0.013	0.050	0.000000	0.000000	2140.27	165
2	FID		ACIS-S-5	7.18	6004	1.000	-0.255	0.138	0.012	0.021	0.000000	0.000000	-1826.01	160
3	GUIDE	used	259654616	9.18	12003	1.000	0.038	0.109	0.162	0.272	170.040640	25.494737	-1376.71	-1407
4	GUIDE	used	259662544	7.66	12011	1.000	0.105	-0.211	0.140	0.242	169.440651	25.051356	1077.19	-1991
5	GUIDE	used	259663456	8.66	12005	1.000	-0.163	0.179	0.145	0.254	170.962709	24.951050	-1663.87	2165
6	GUIDE	used	259665288	8.59	12003	1.000	-0.020	0.059	0.148	0.259	170.672049	24.733578	-463.13	1894
7	GUIDE	used	259667432	9.08	12002	1.000	0.041	-0.133	0.175	0.297	169.597557	25.235111	241.51	-1985

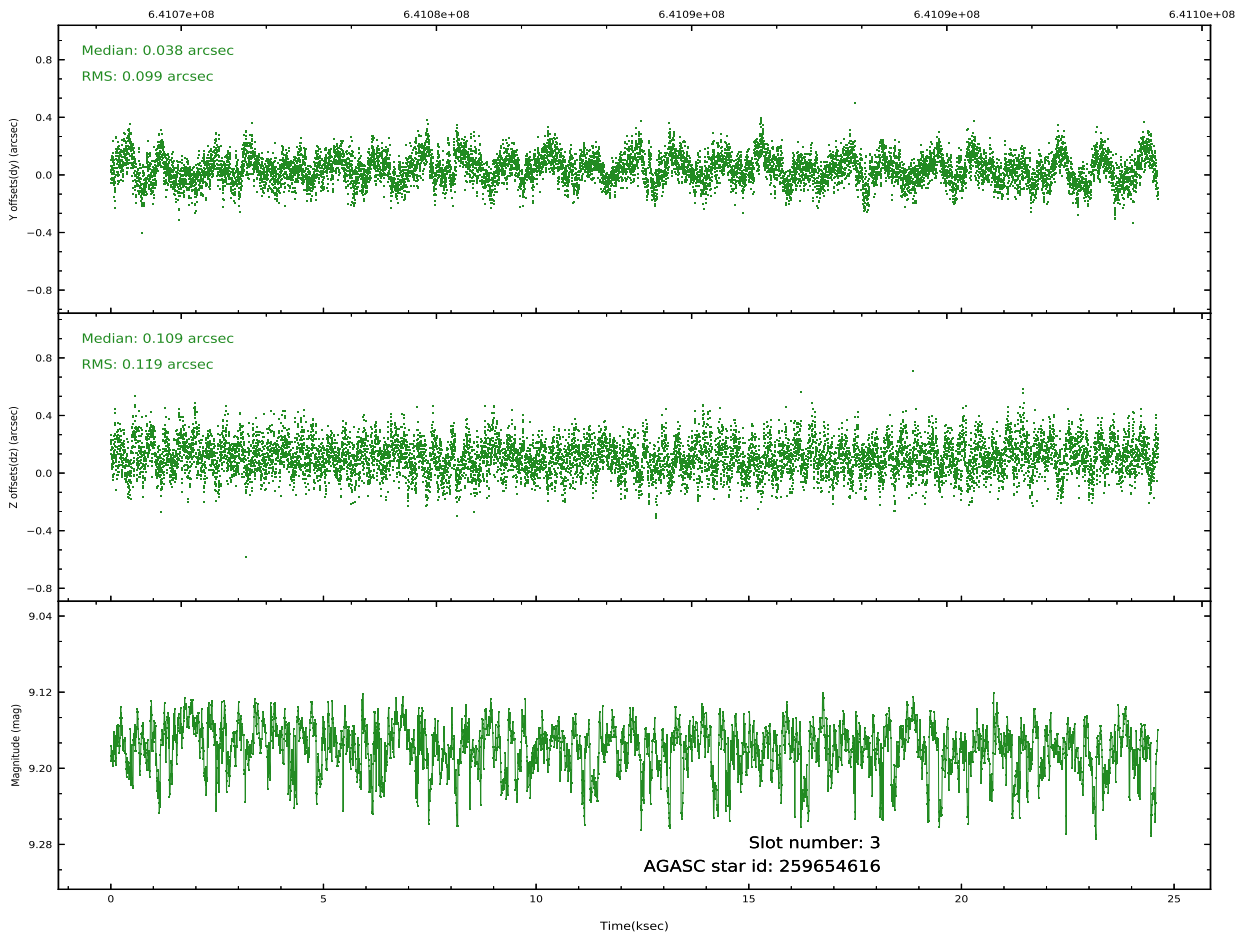
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2.4 Star Slots

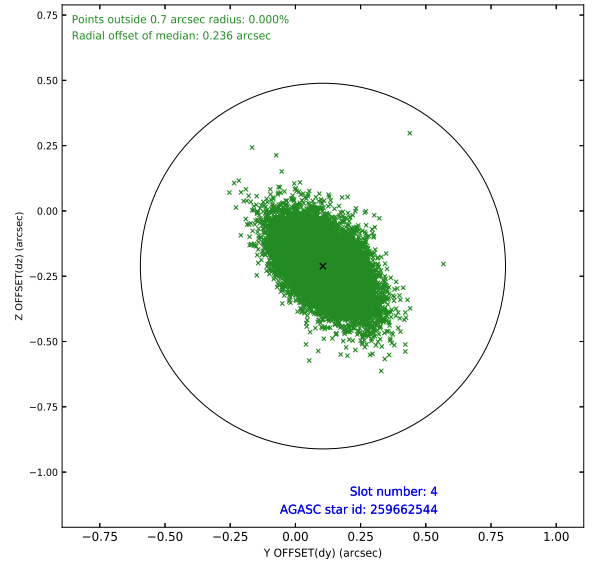
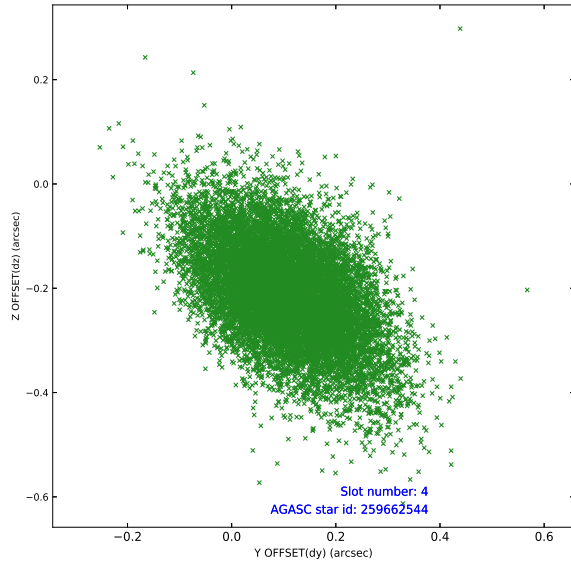
2.4.1 Slot 3



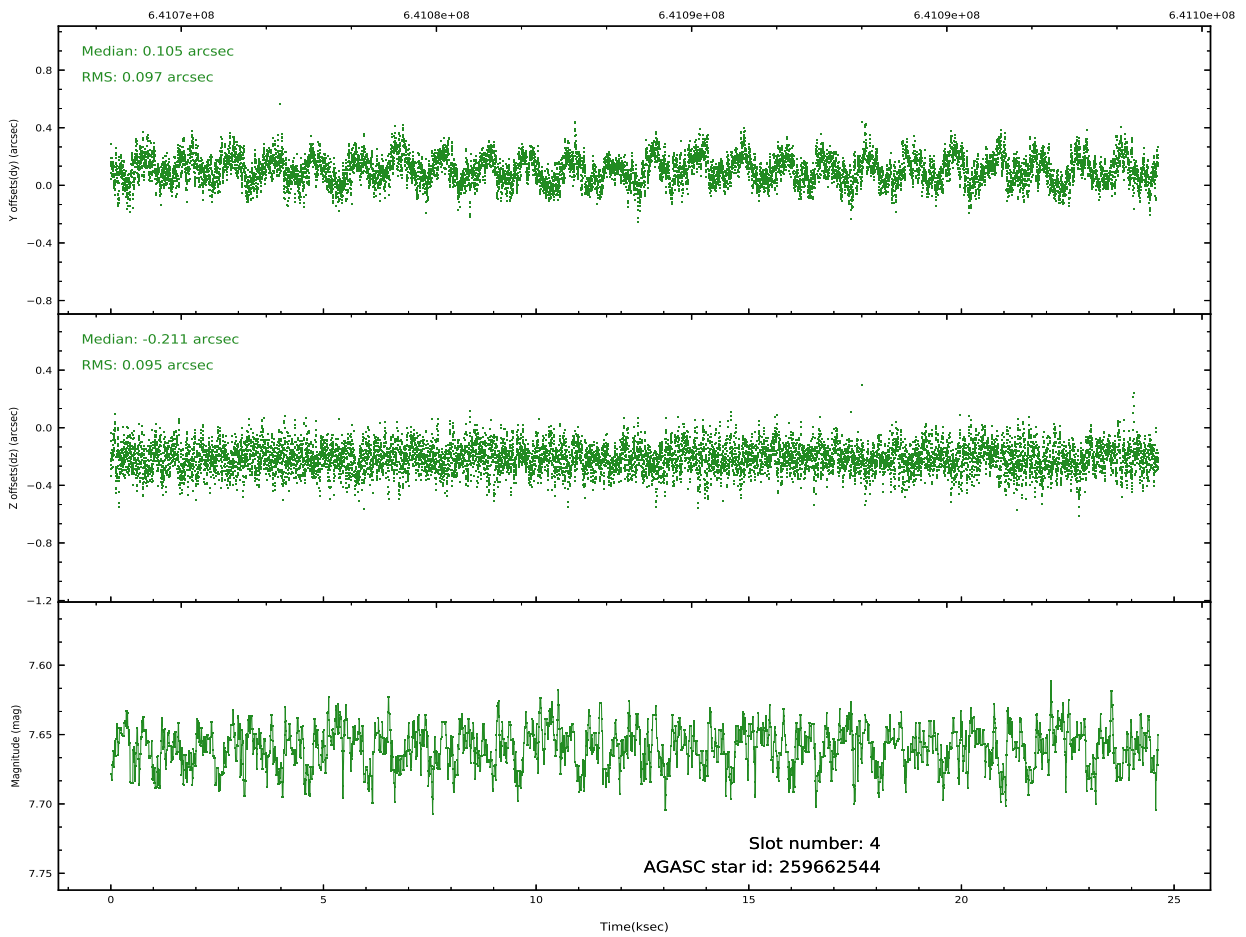
Time (s)



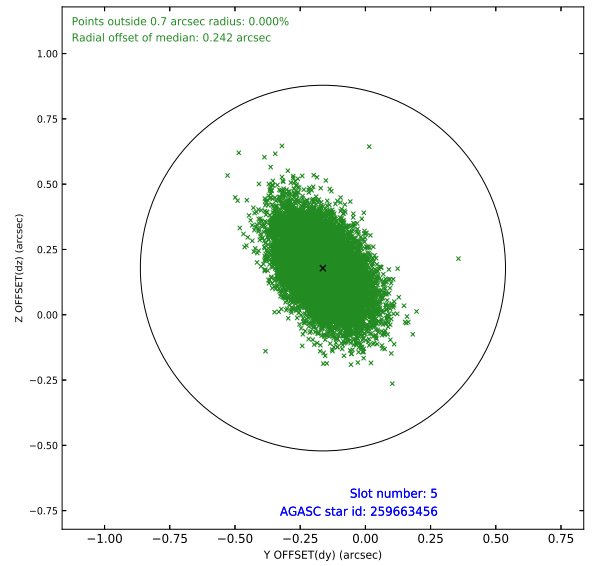
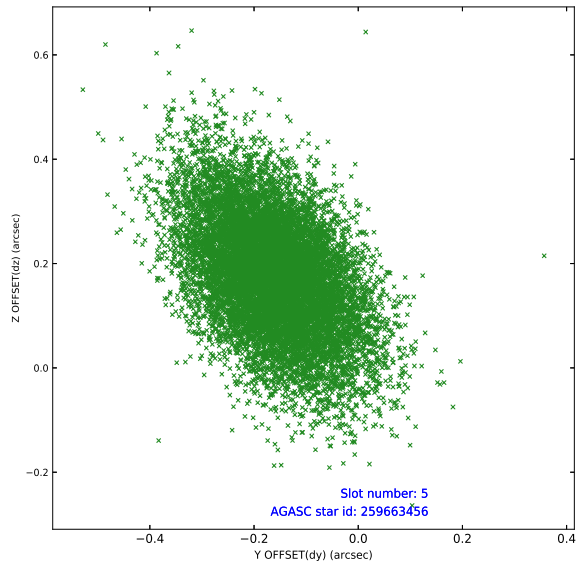
2.4.2 Slot 4



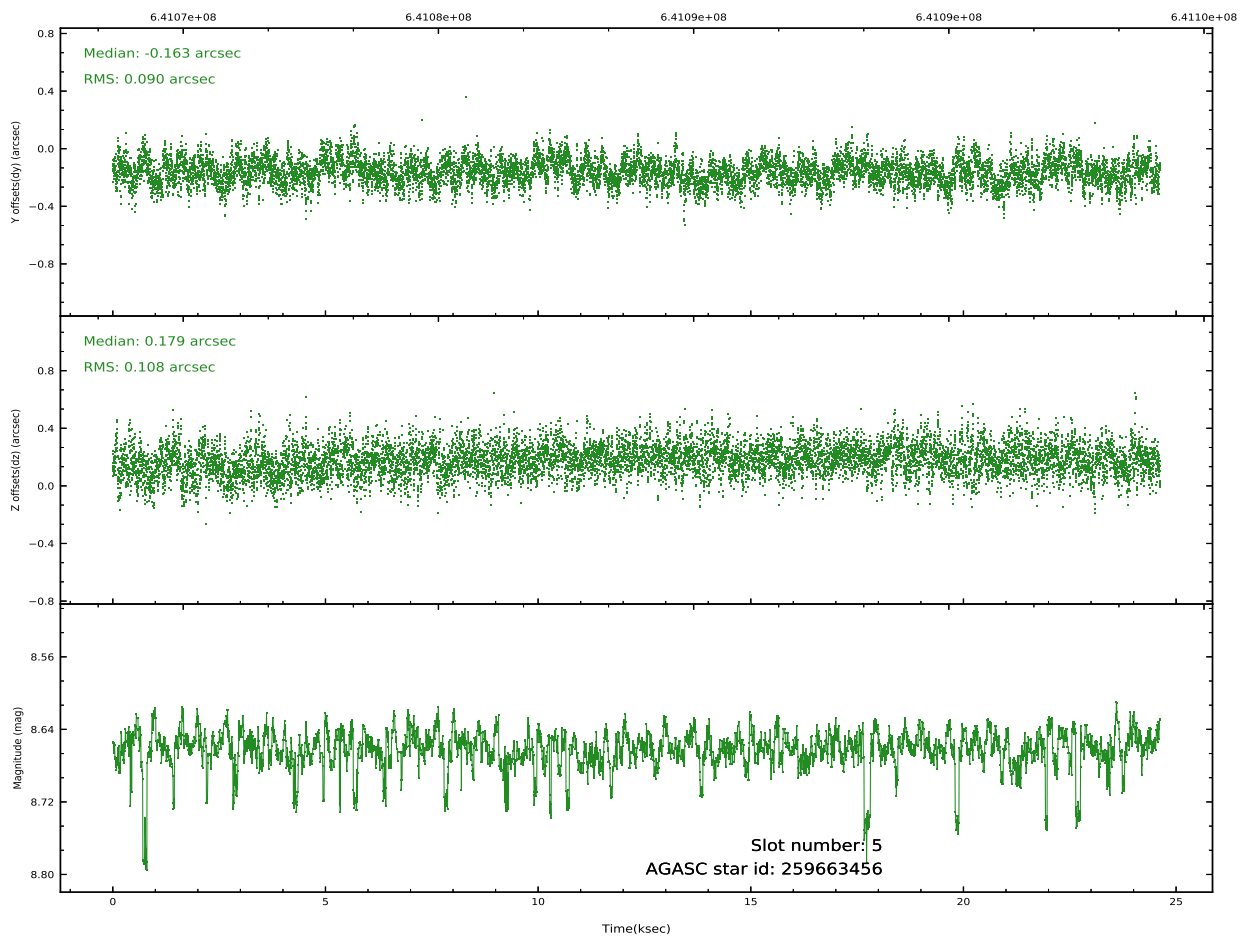
Time (s)



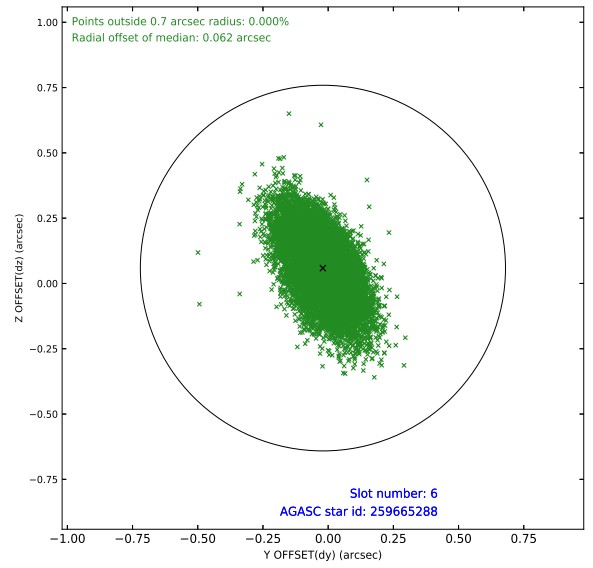
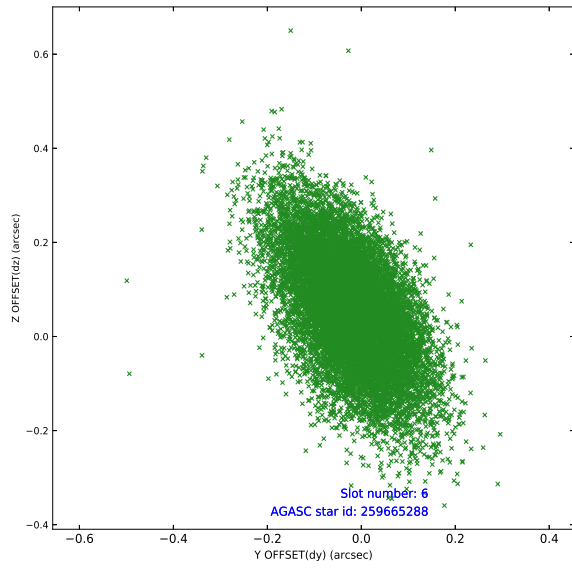
2.4.3 Slot 5



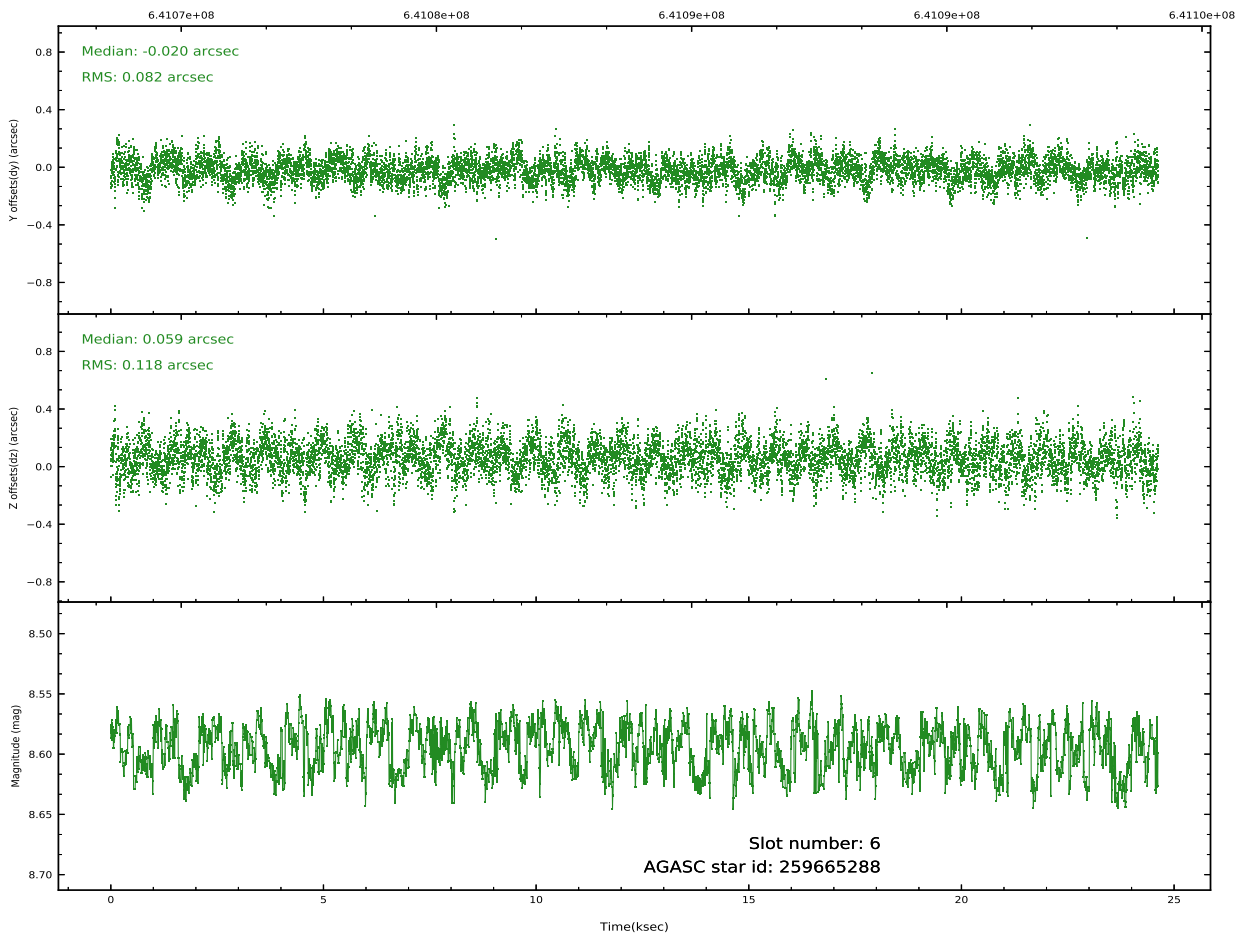
Time (s)



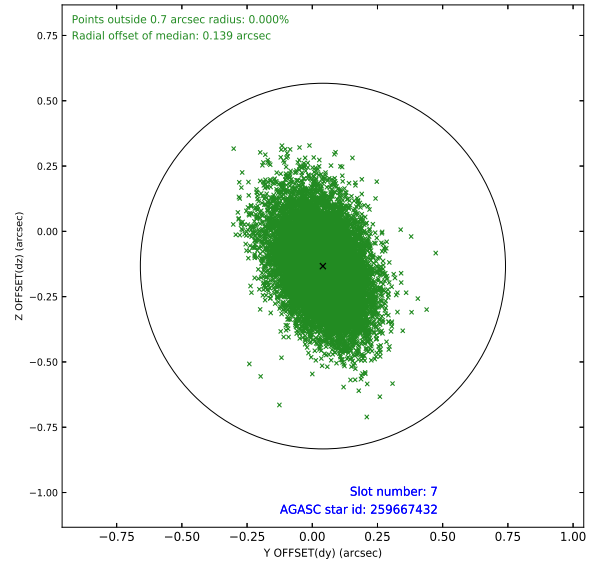
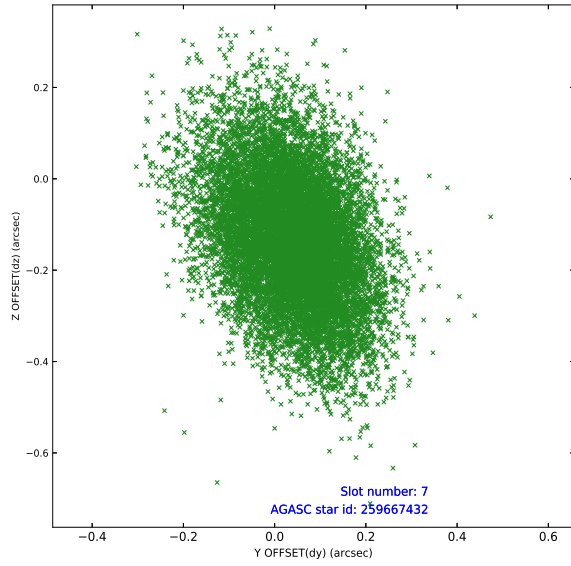
2.4.4 Slot 6



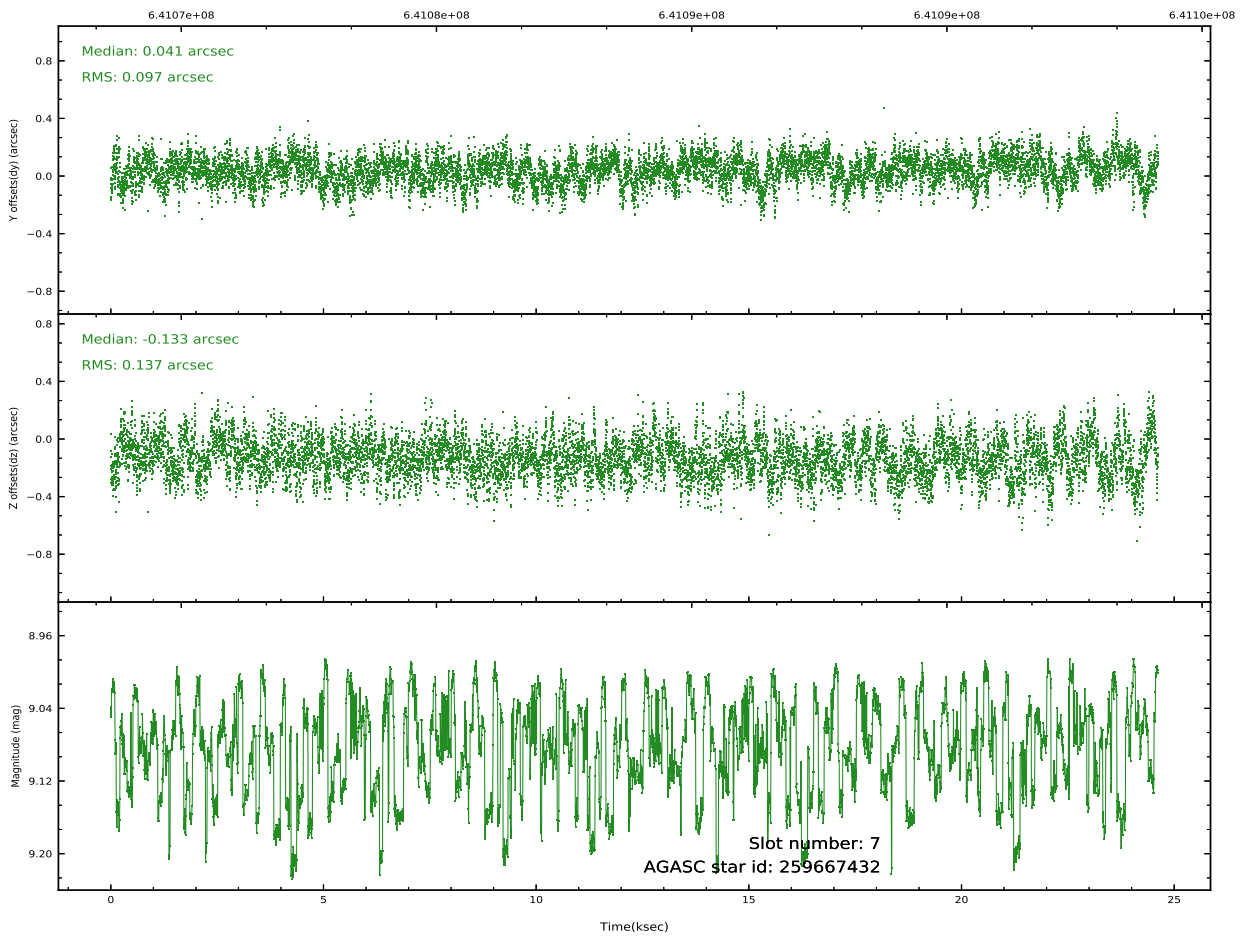
Time (s)



2.4.5 Slot 7

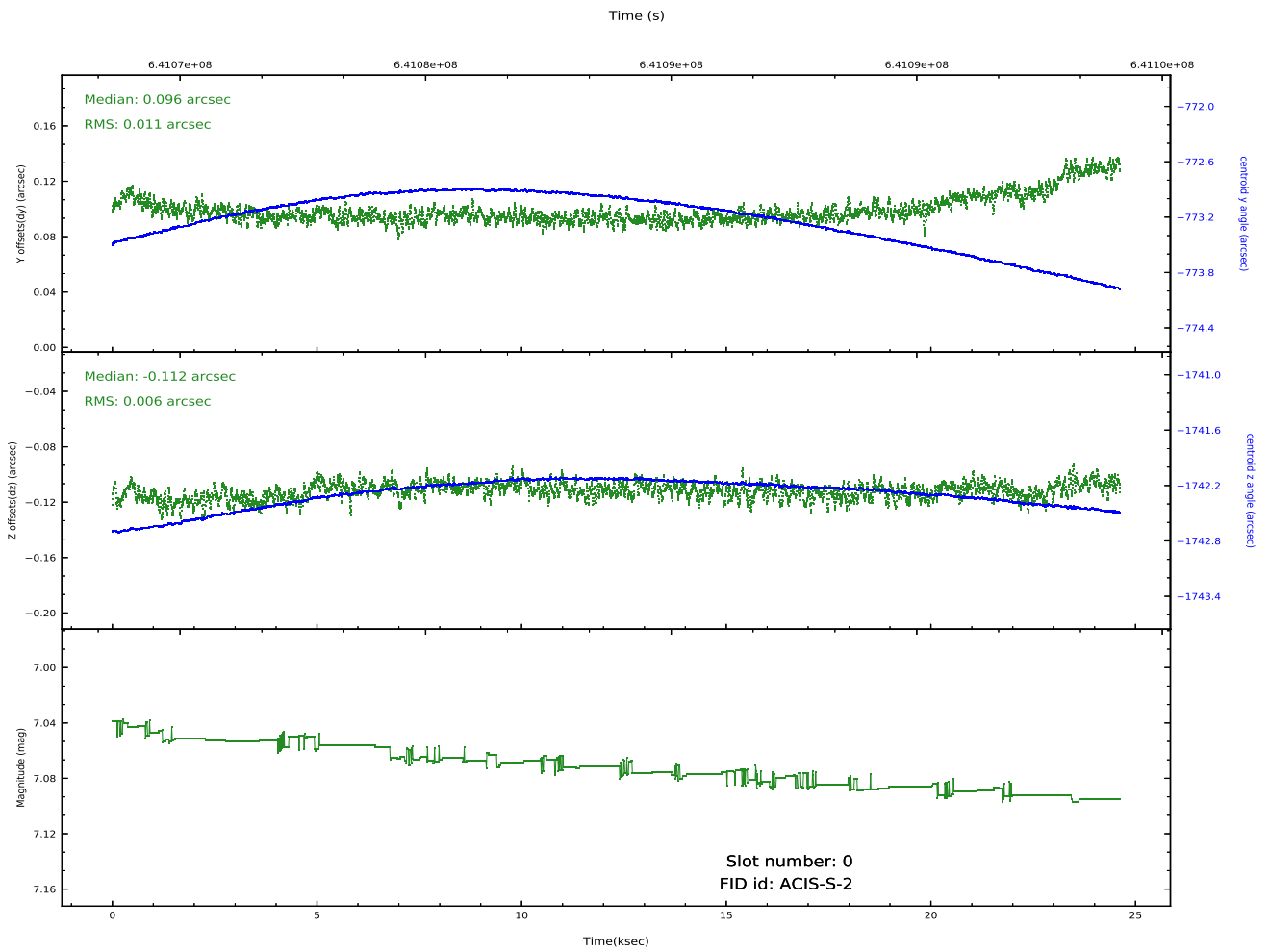
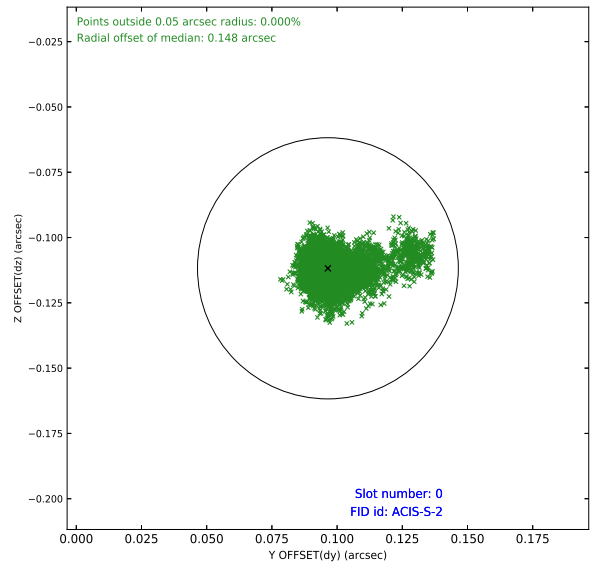
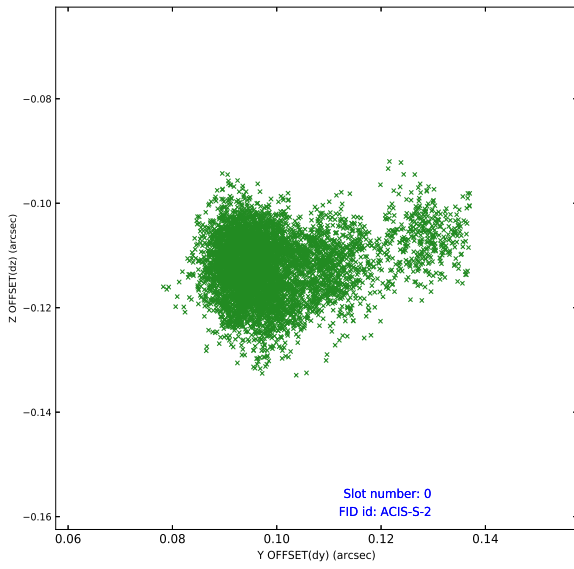


Time (s)

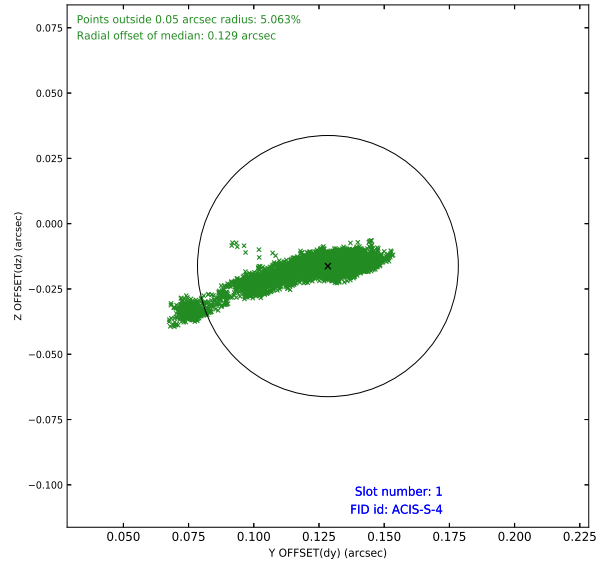
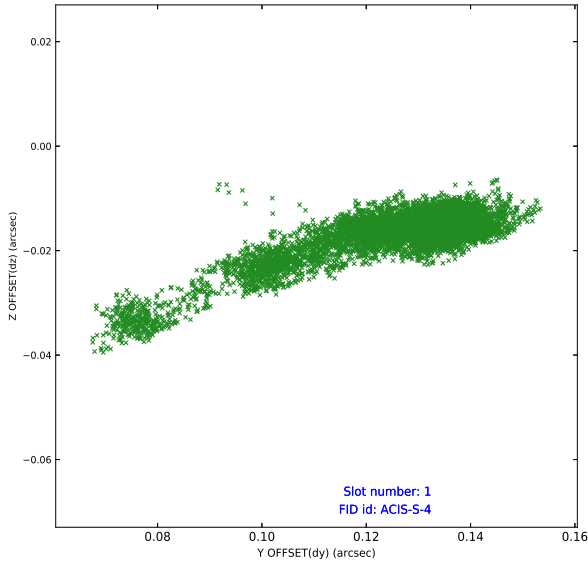


2.5 FID Slots

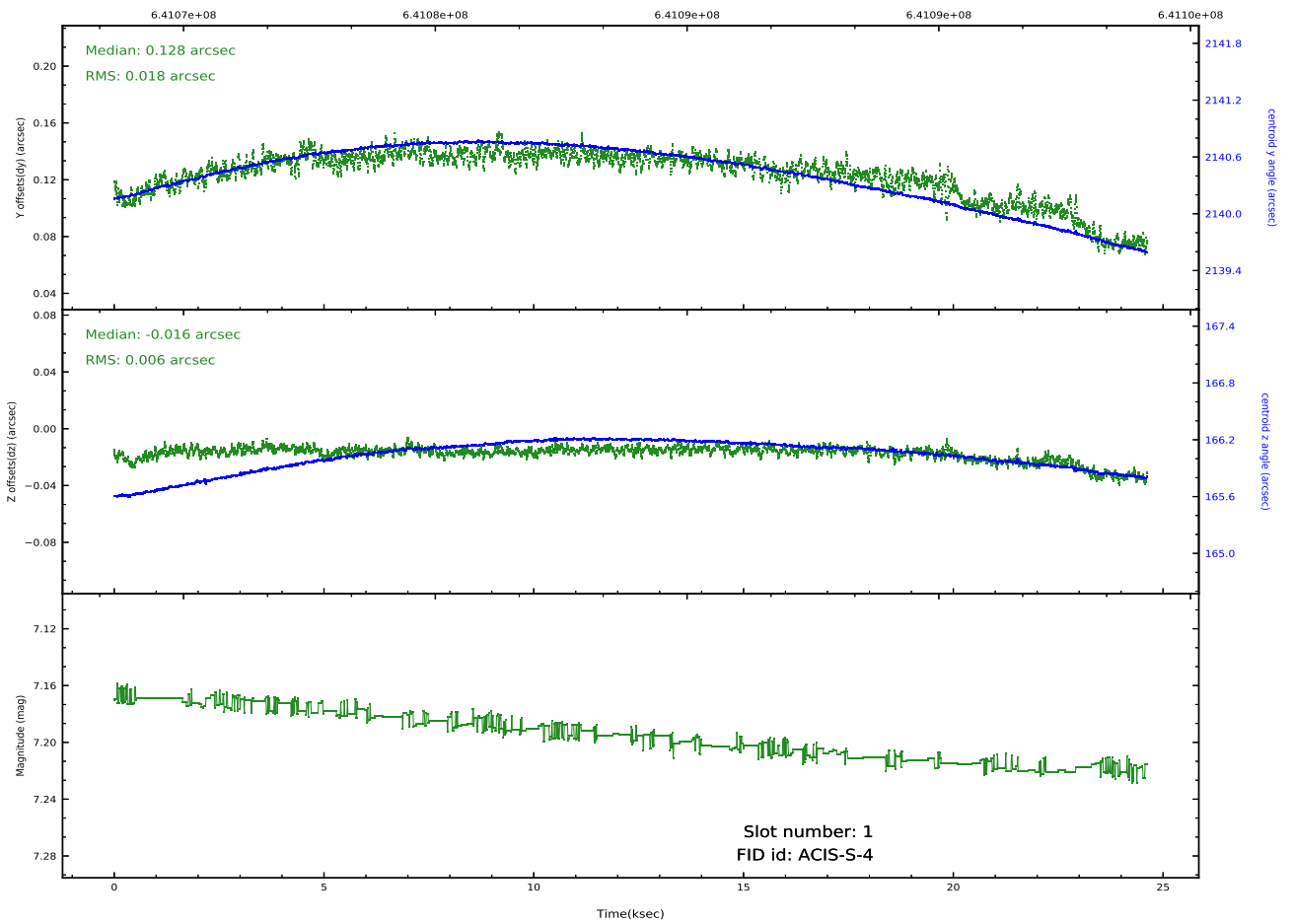
2.5.1 Slot 0



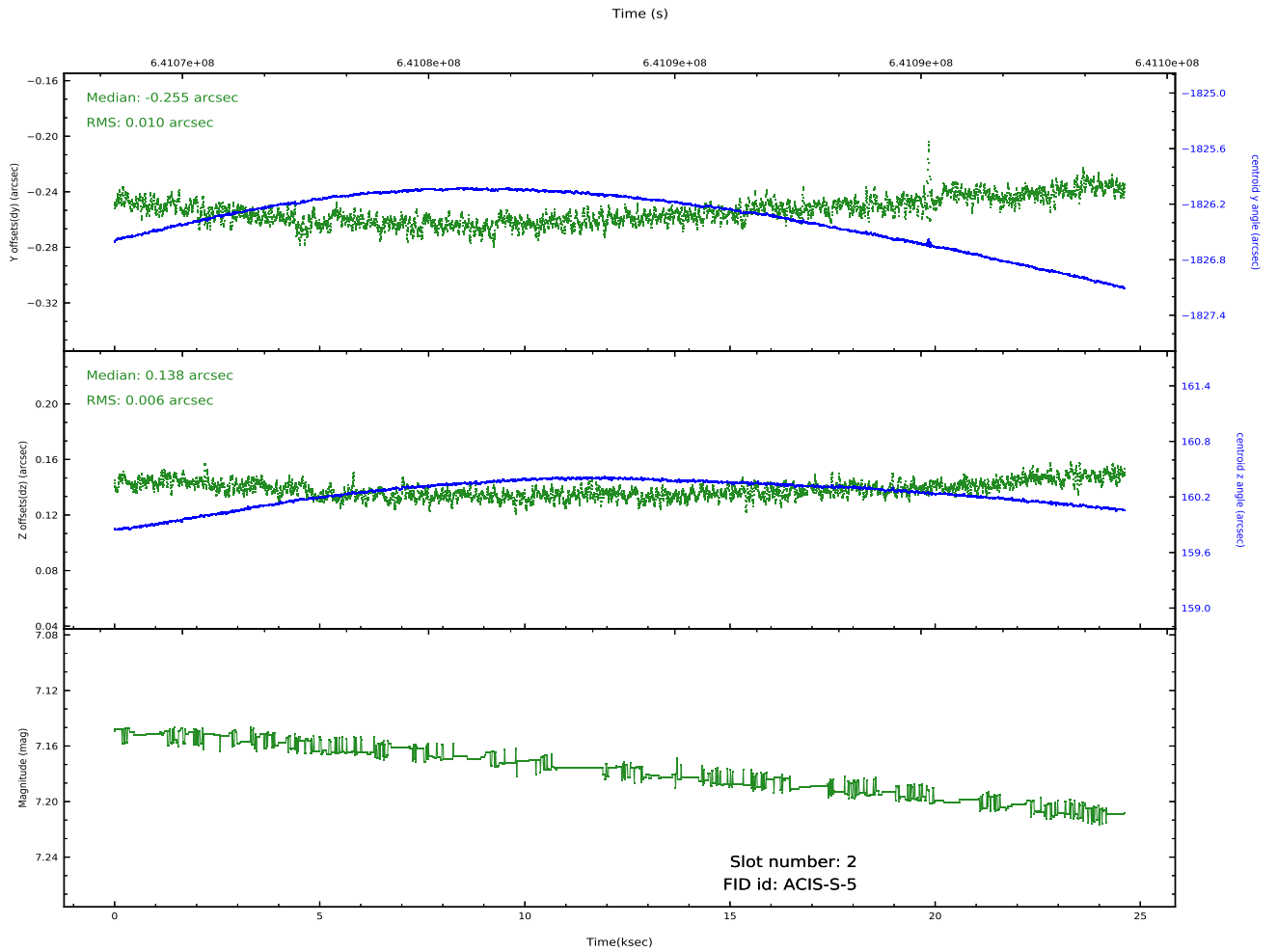
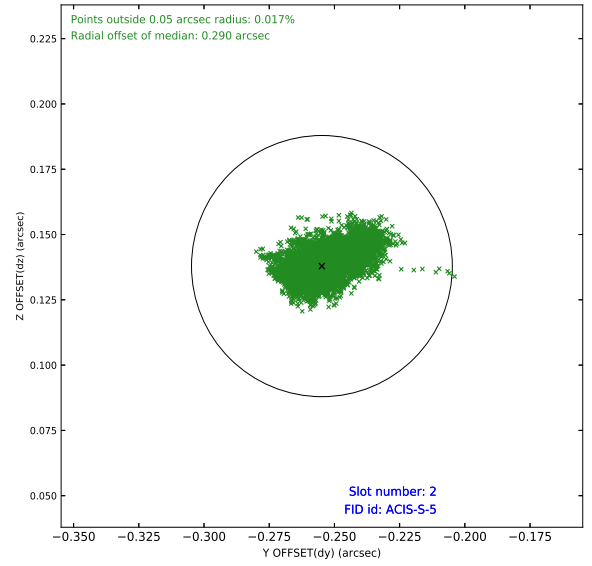
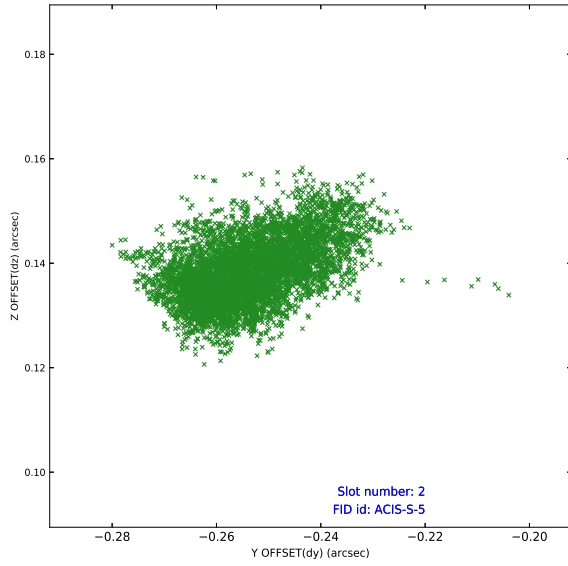
2.5.2 Slot 1



Time (s)



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	24.399685709357

A.2 Comments