

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20986 - L2 Version 2
Chandra X-Ray Center

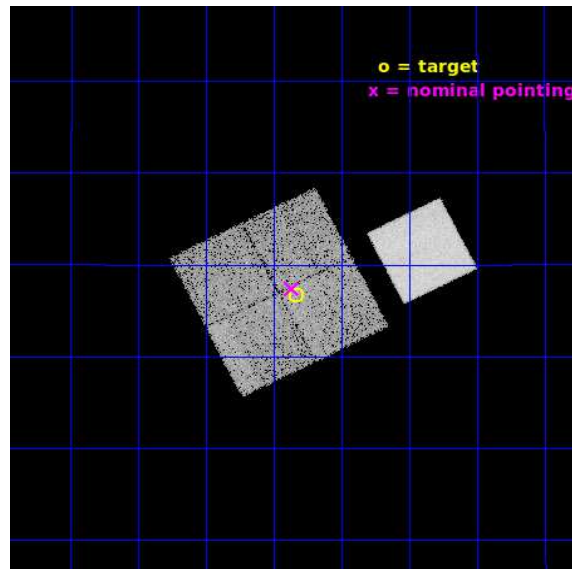
L2 Processing Date : Oct 24 2020

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1 Front

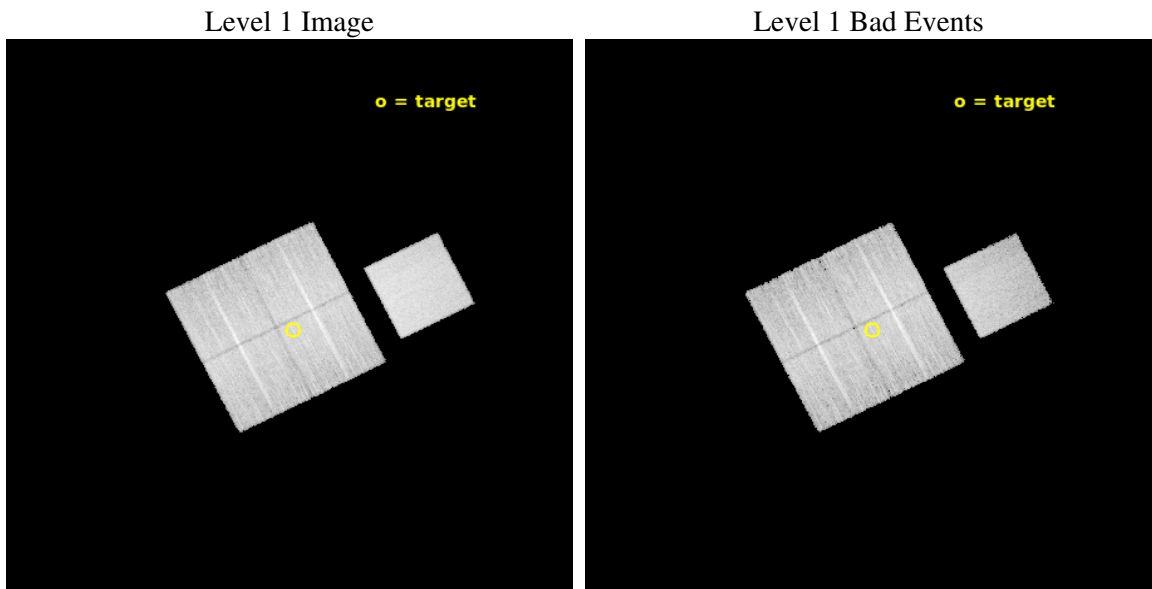
seq_num	503036	Sequence number
obs_id	20986	Observation id
title	Gamma-ray pulsar J1932+1916 and its pulsar wind nebula	Proposal ti
observer	Gordon Garmire	Principal investigator
object	PSR J1932+1916	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	293.082083	Observer's specified target RA [deg]
dec_targ	19.2775	Observer's specified target Dec [deg]
ra_nom	293.09140693868	Nominal RA [deg]
dec_nom	19.289936712311	Nominal Dec [deg]
roll_nom	63.20000633292	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15059.178290009	Sum of GTIs [s]
livetime	14862.419039245	Livetime [s]
ontime0	15059.05516994	Sum of GTIs [s]
ontime1	15059.096210003	Sum of GTIs [s]
ontime2	15059.137249947	Sum of GTIs [s]
ontime3	15059.178290009	Sum of GTIs [s]
ontime7	15059.219329953	Sum of GTIs [s]
l2events	103598	Number of level 2 events



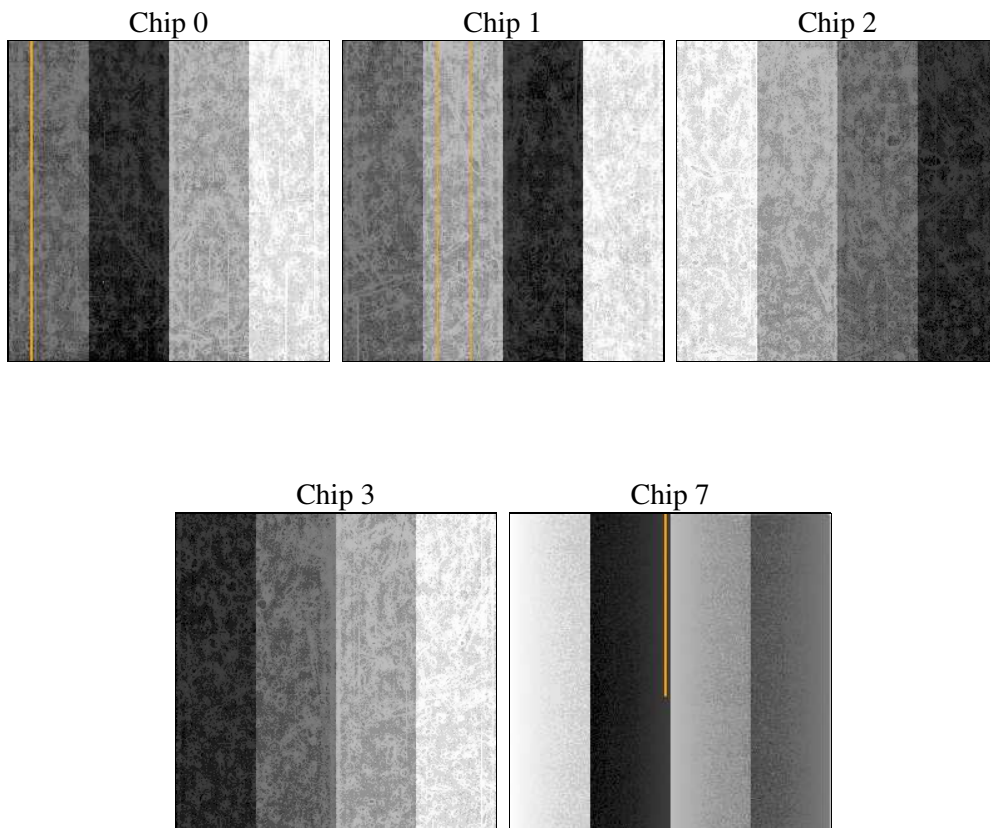
2 OBI

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	15059.178290009	Sum of GTIs [s]
caldbver	4.9.3	 	ontime0	15059.05516994	Sum of GTIs [s]
date	2020-10-24T23:47:07	Date and time of file creation	ontime1	15059.096210003	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15059.137249947	Sum of GTIs [s]
			ontime3	15059.178290009	Sum of GTIs [s]
			ontime7	15059.219329953	Sum of GTIs [s]
			l1events	551643	Number of level 1 events

2.1.4 Events

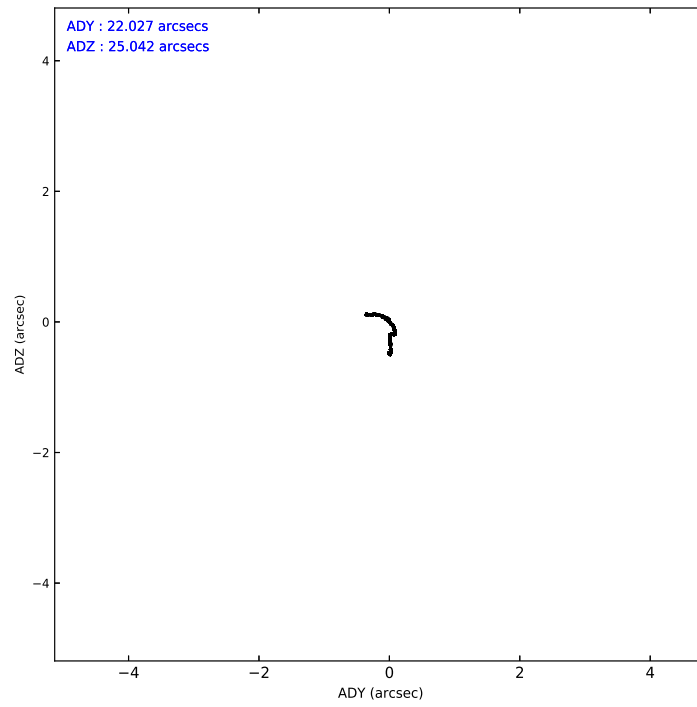
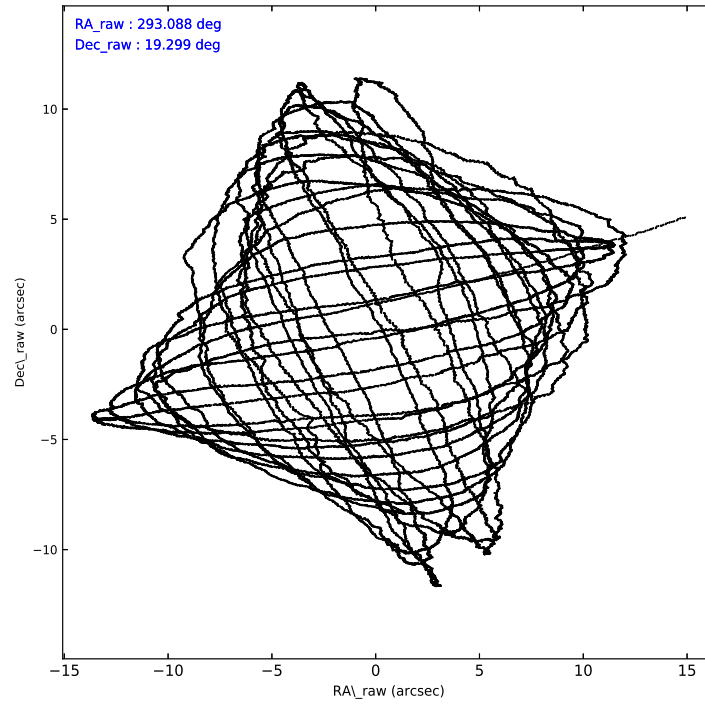
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	97733	99717	106950	106760	140483
rejected events	85028	85492	94330	93971	78719
rejected %	87%	85%	88%	88%	56%

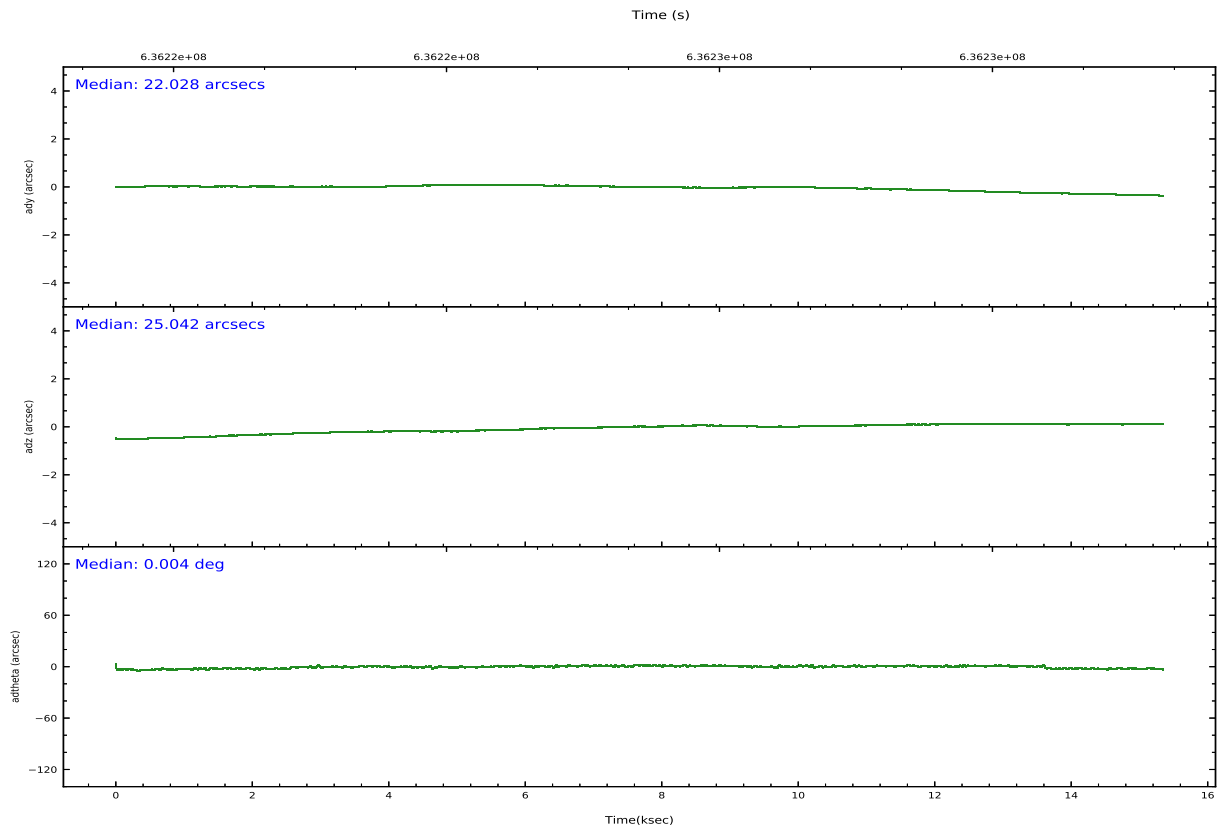
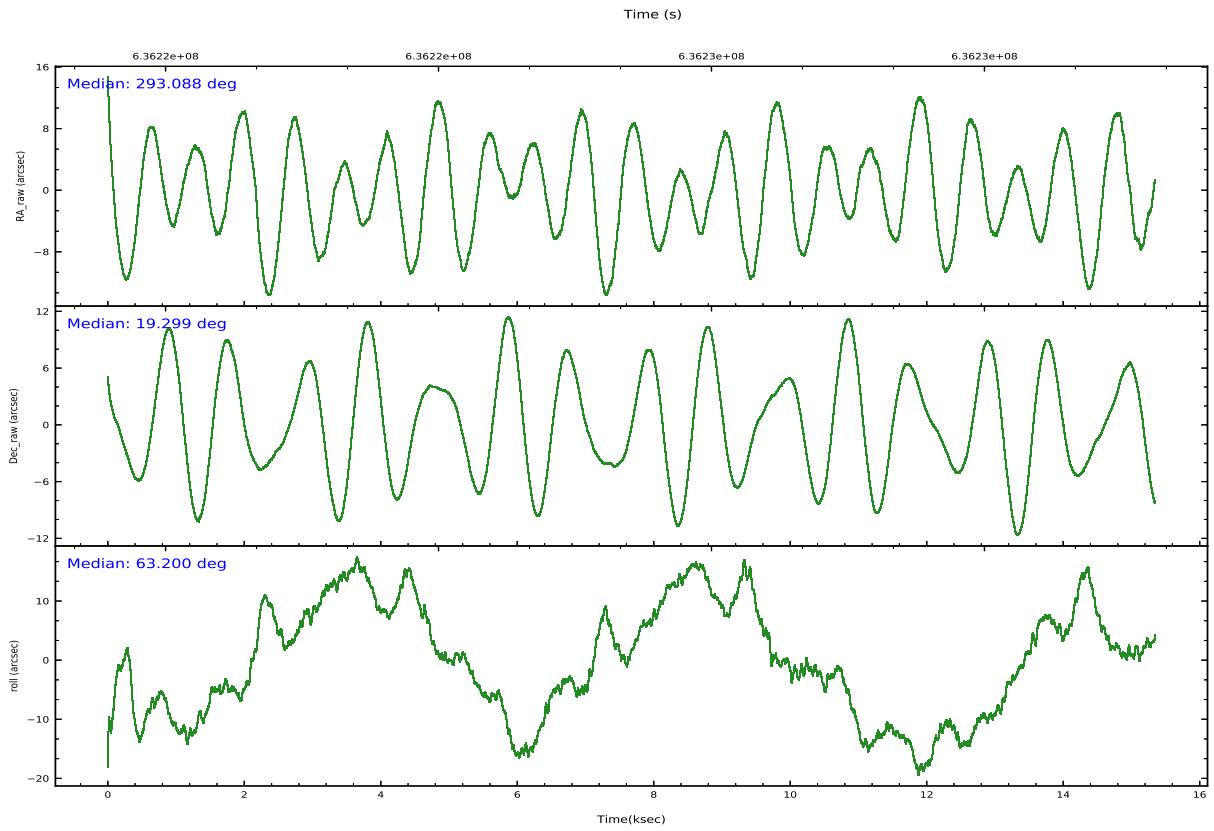
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	4504	4953	4674	5112	5213
	4%	4%	4%	4%	3%
grade 1 events	68	62	88	57	232
	0%	0%	0%	0%	0%
grade 2 events	3327	3668	3131	2710	13278
	3%	3%	2%	2%	9%
grade 3 events	1308	1352	1208	1263	4870
	1%	1%	1%	1%	3%
grade 4 events	1148	1262	1247	1361	4936
	1%	1%	1%	1%	3%
grade 5 events	4924	5099	4633	5228	14051
	5%	5%	4%	4%	10%
grade 6 events	2423	2996	2368	2354	33497
	2%	3%	2%	2%	23%
grade 7 events	80031	80325	89601	88675	64406
	81%	80%	83%	83%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01237	ACIS-01237	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	293.089417	293.09140693868	CCD I2 on	Y	Y
[deg] Pointing Dec	19.271289	19.289936712311	CCD I3 on	Y	Y
[deg] Pointing Roll	62.997576	63.20000633292	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	N	N
[mm] SIM translation stage pos	-230.667463	-230.6708287110191	CCD S3 on	O1	Y
[mm] SIM translation stage offset	-2.925	-2.921624291910604	CCD S4 on	N	N
[s] Observation start time (MET)	636219500.184000	636218475.70034	CCD S5 on	N	N
Observation start date	2018-02-28T15:37:11	2018-02-28T15:21:15	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	636234500.184000	636235541.95134	On-chip summing requested	N	N
Observation end date	2018-02-28T19:47:11	2018-02-28T20:05:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





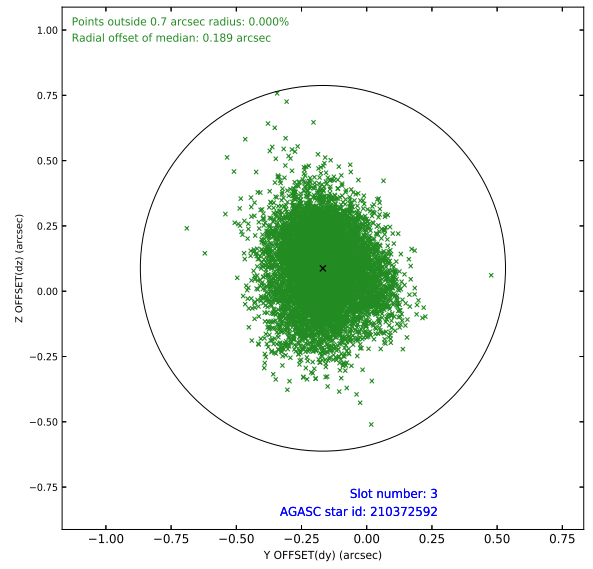
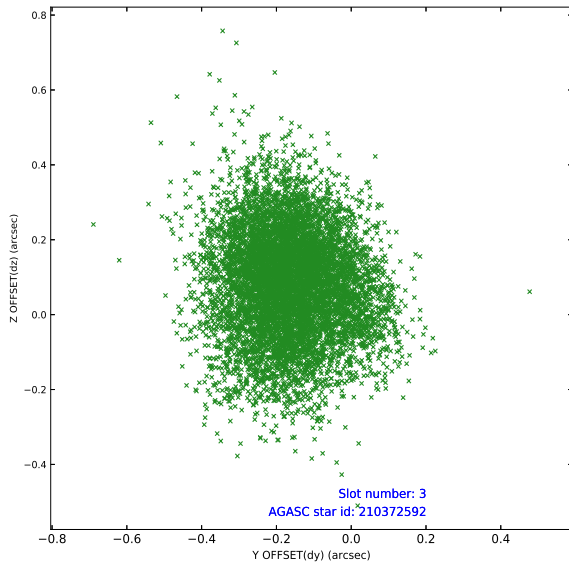
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.17	3744	1.000	0.248	-0.120	0.014	0.037	0.000000	0.000000	917.38	-908
1	FID		ACIS-I-4	7.11	3743	1.000	0.026	-0.012	0.013	0.027	0.000000	0.000000	2137.40	991
2	FID		ACIS-I-5	7.15	3744	1.000	-0.371	0.203	0.009	0.015	0.000000	0.000000	-1830.66	989
3	GUIDE	used	210372592	9.16	7476	1.000	-0.168	0.088	0.192	0.312	292.900736	18.702395	-2116.32	-356
4	GUIDE	used	210376496	8.62	7481	1.000	0.154	0.015	0.122	0.209	293.385337	18.705566	-1355.34	-1823
5	GUIDE	used	210909704	8.33	7482	1.000	-0.074	-0.037	0.170	0.291	293.560733	19.386974	1100.68	-1236
6	GUIDE	used	210910720	8.93	7477	1.000	-0.038	-0.168	0.142	0.244	293.320637	18.950574	-670.14	-1225
7	GUIDE	used	210380592	9.05	7481	1.000	0.124	0.104	0.176	0.289	293.362355	18.406916	-2348.74	-2243

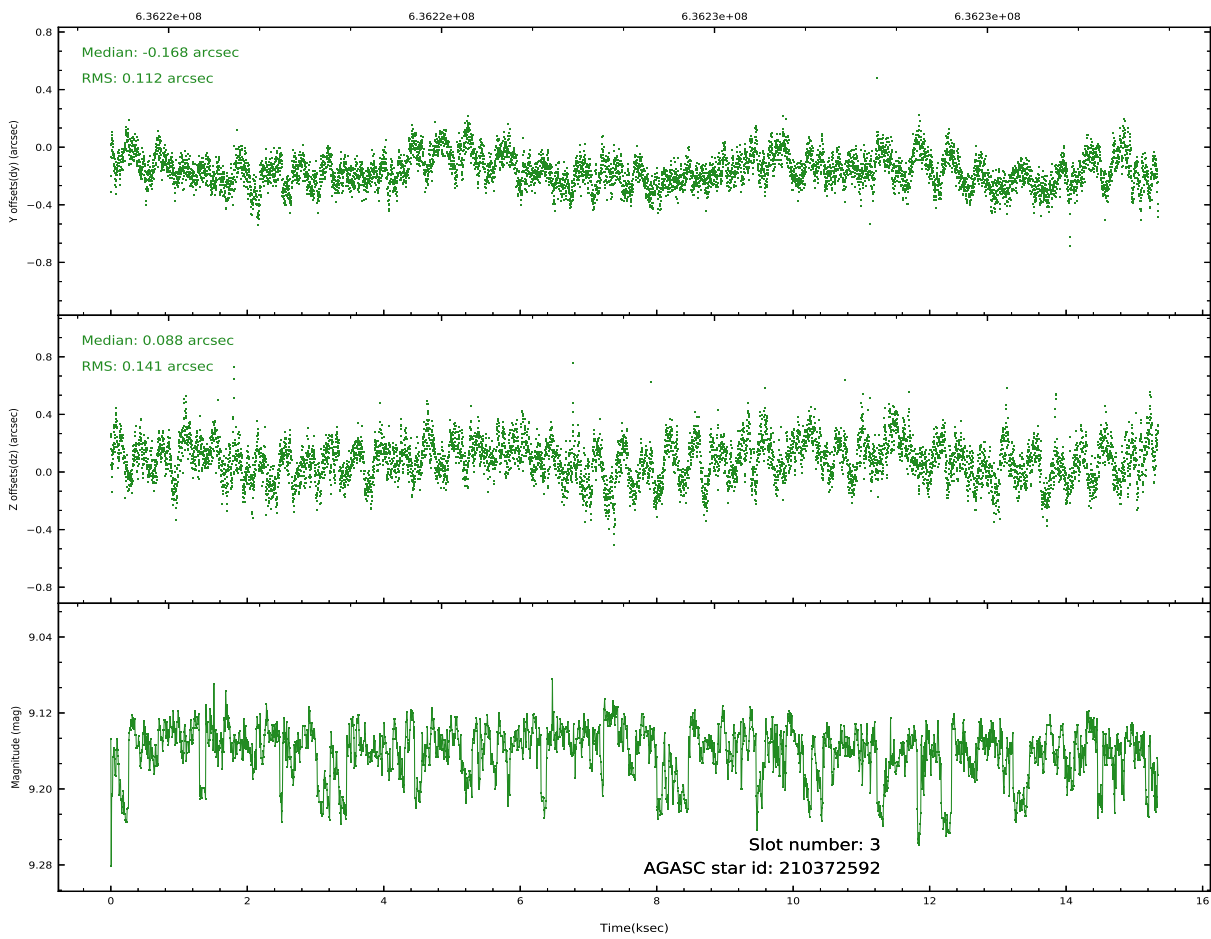
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2.4 Star Slots

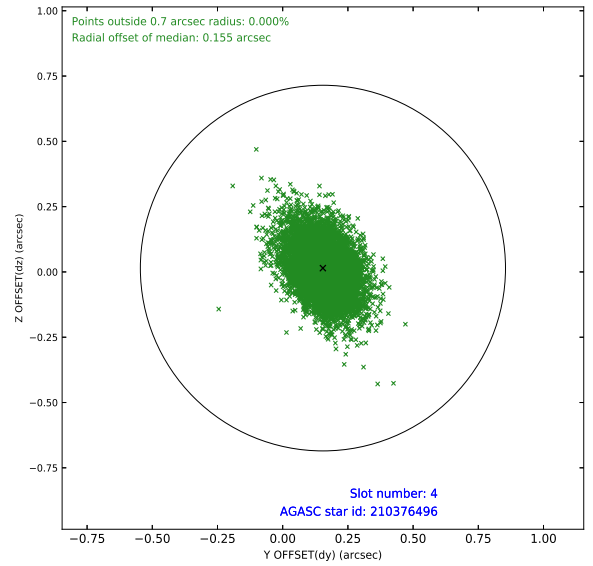
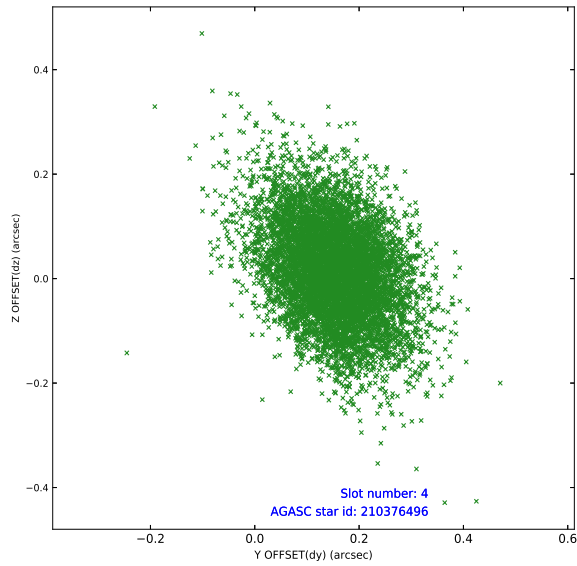
2.4.1 Slot 3



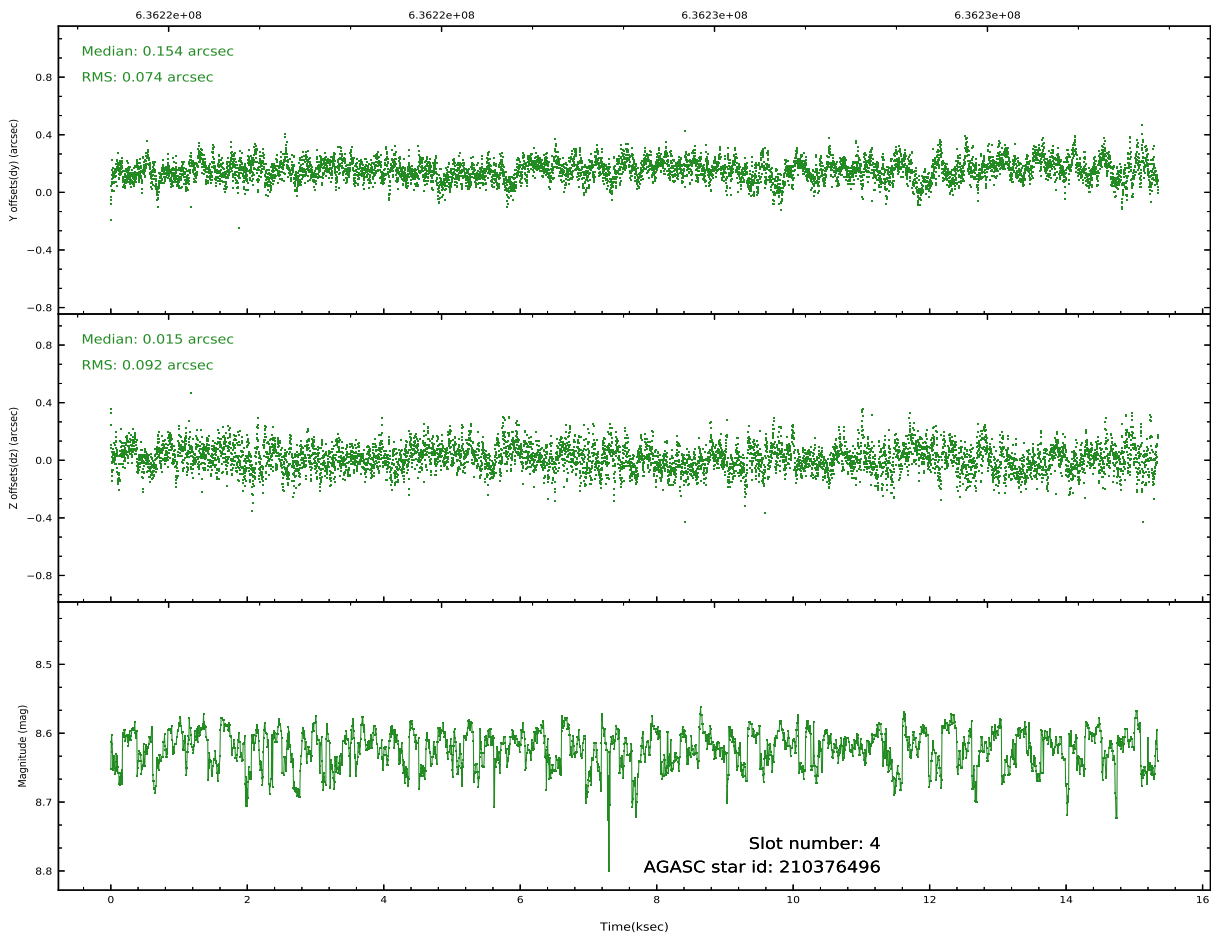
Time (s)



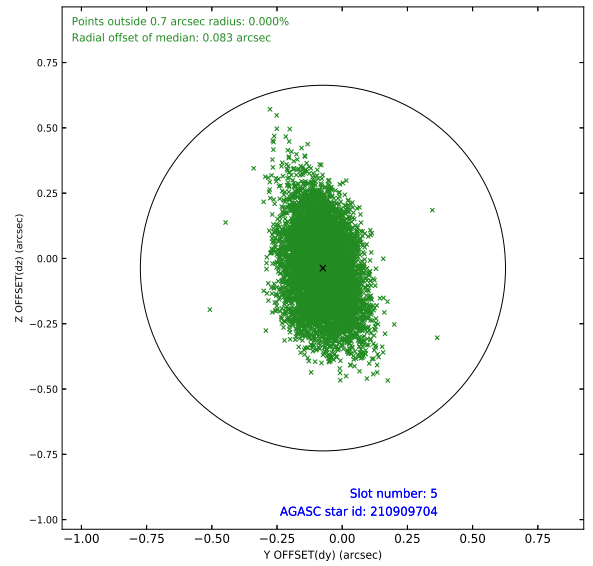
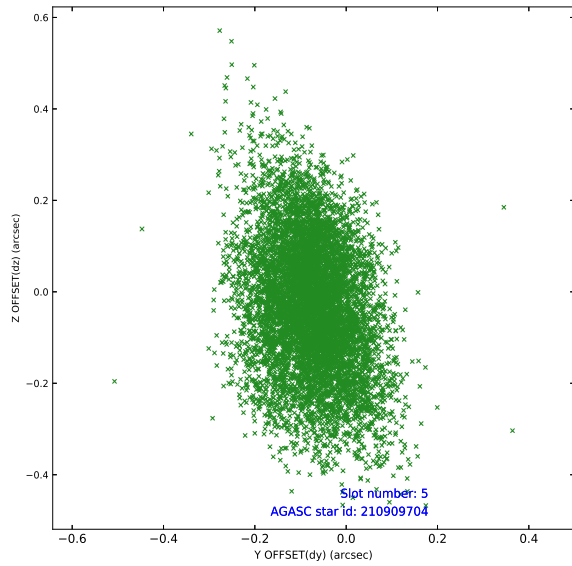
2.4.2 Slot 4



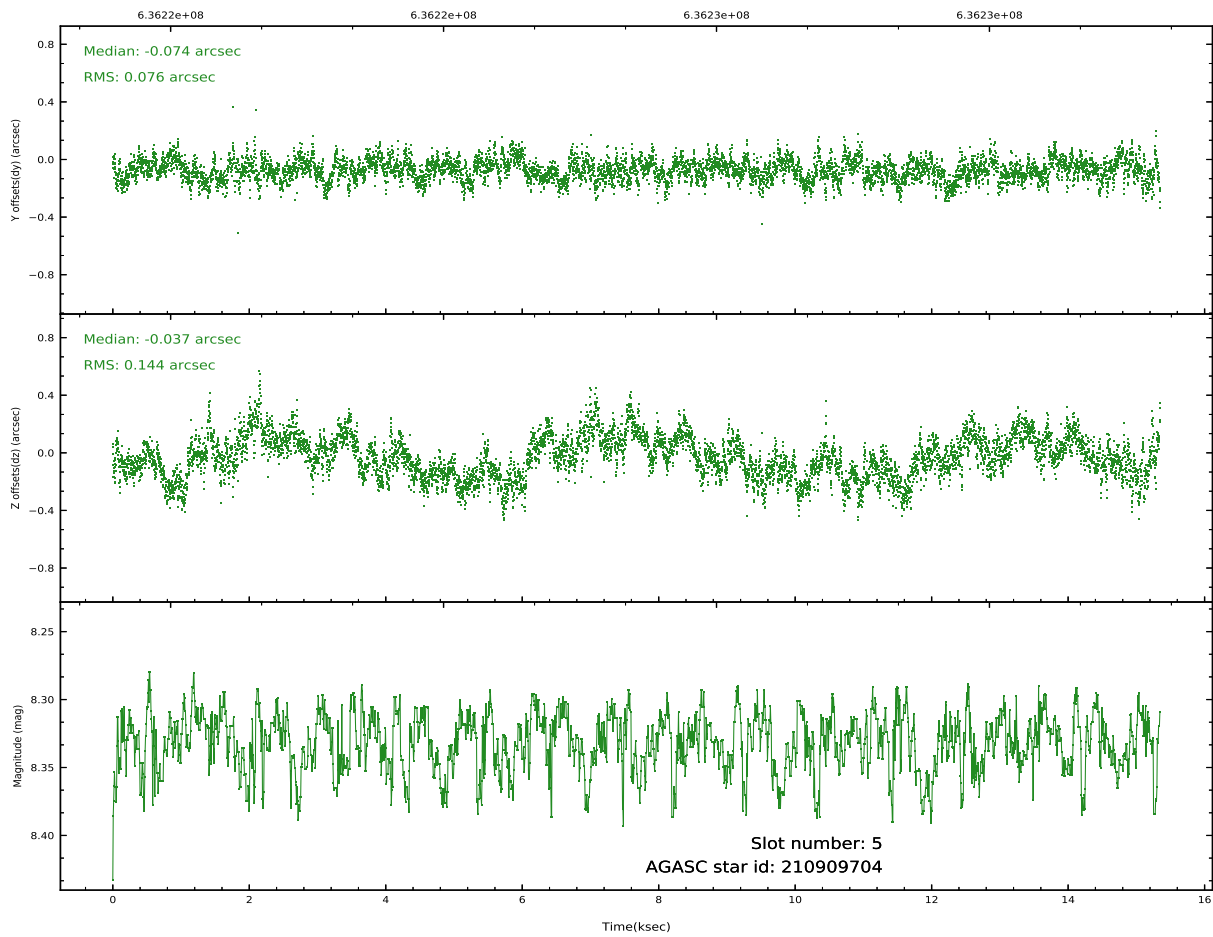
Time (s)



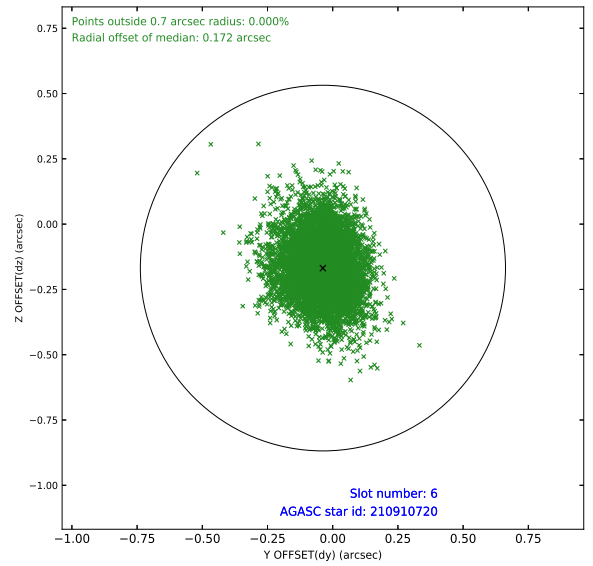
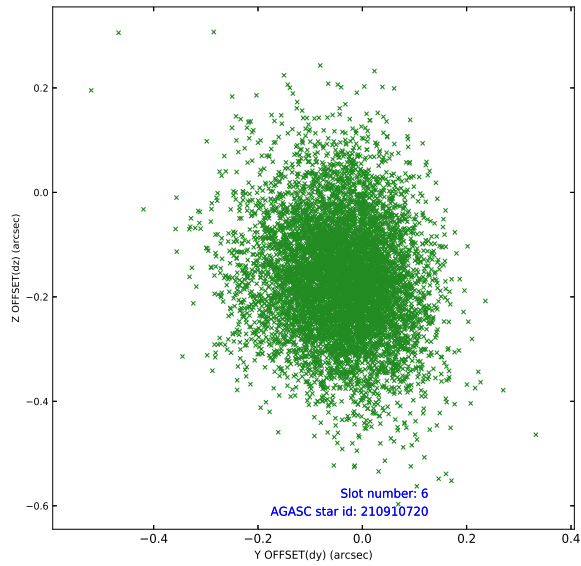
2.4.3 Slot 5



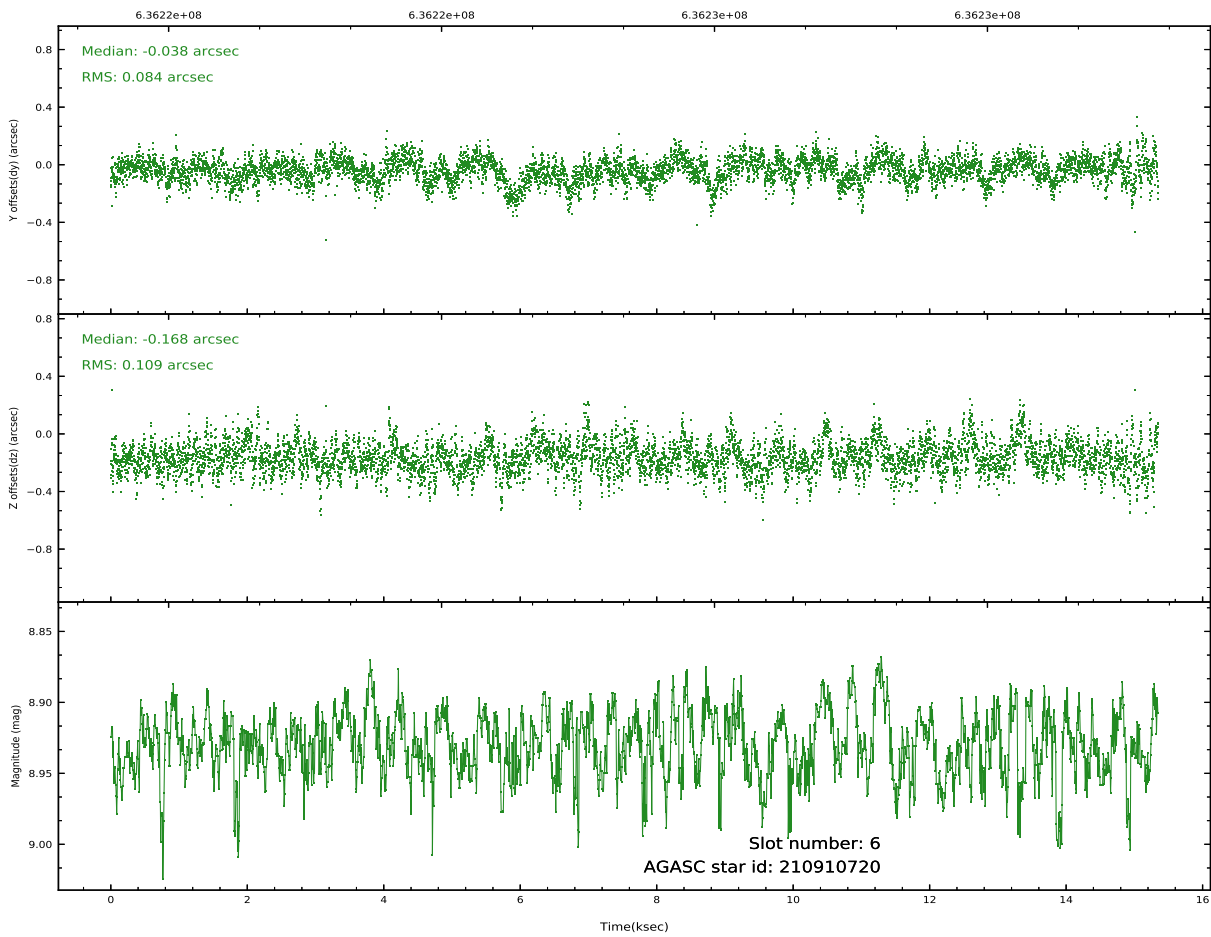
Time (s)



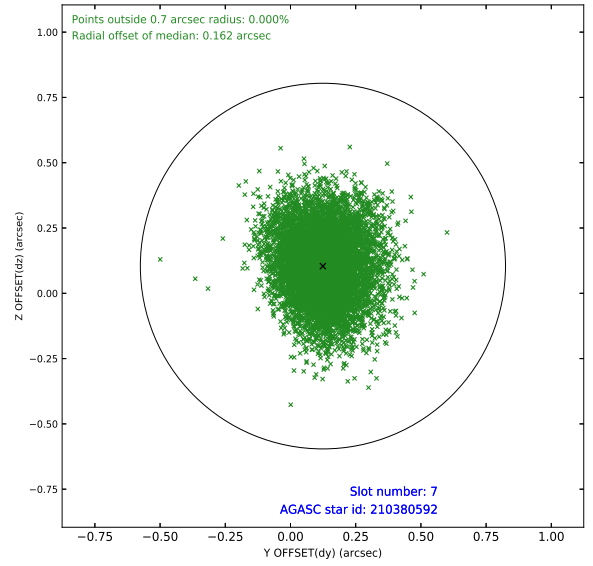
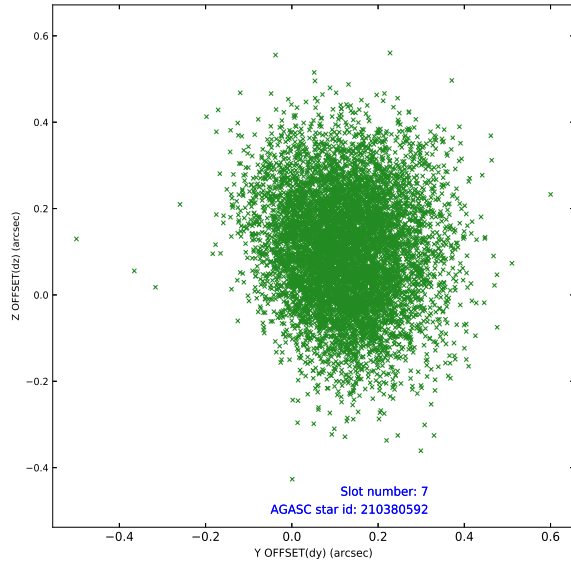
2.4.4 Slot 6



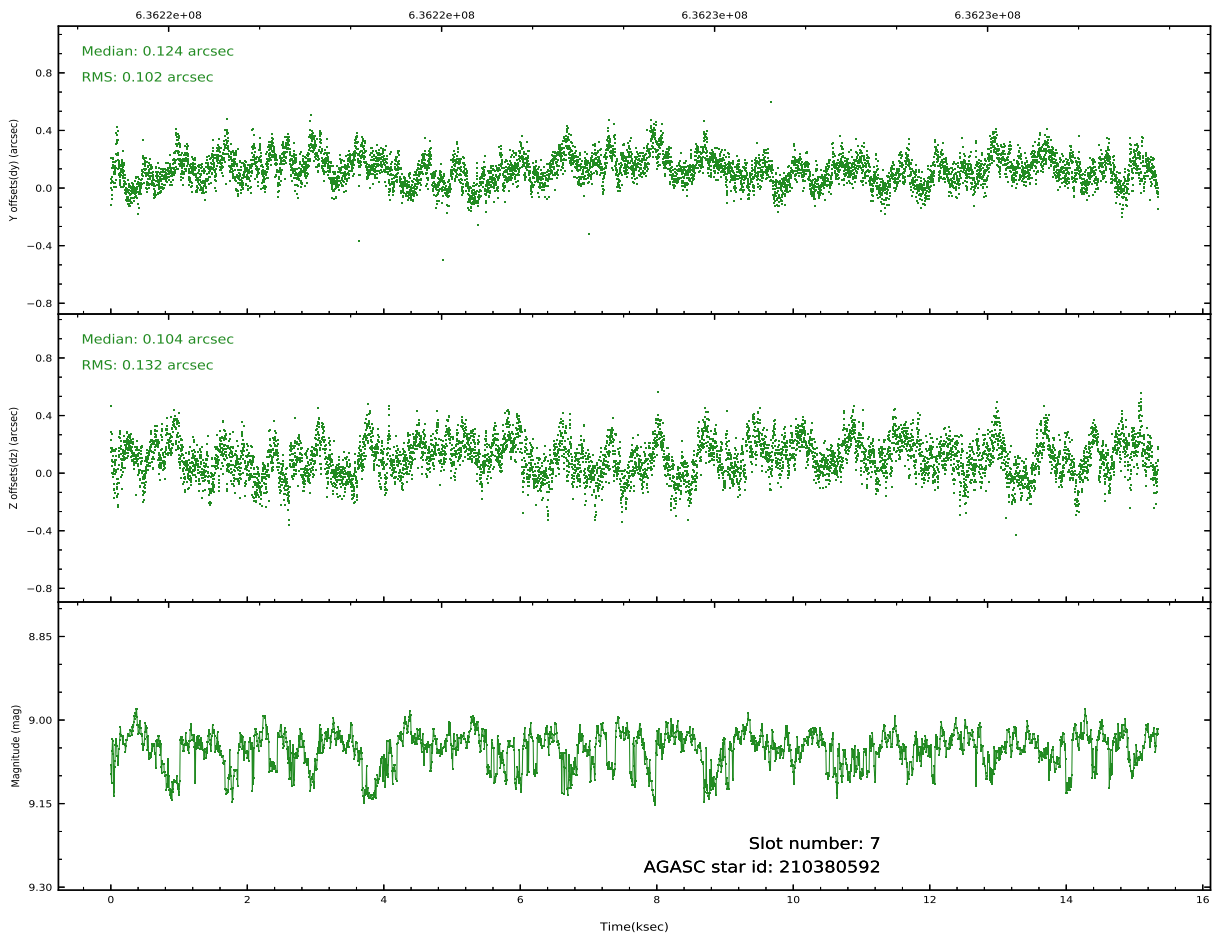
Time (s)



2.4.5 Slot 7

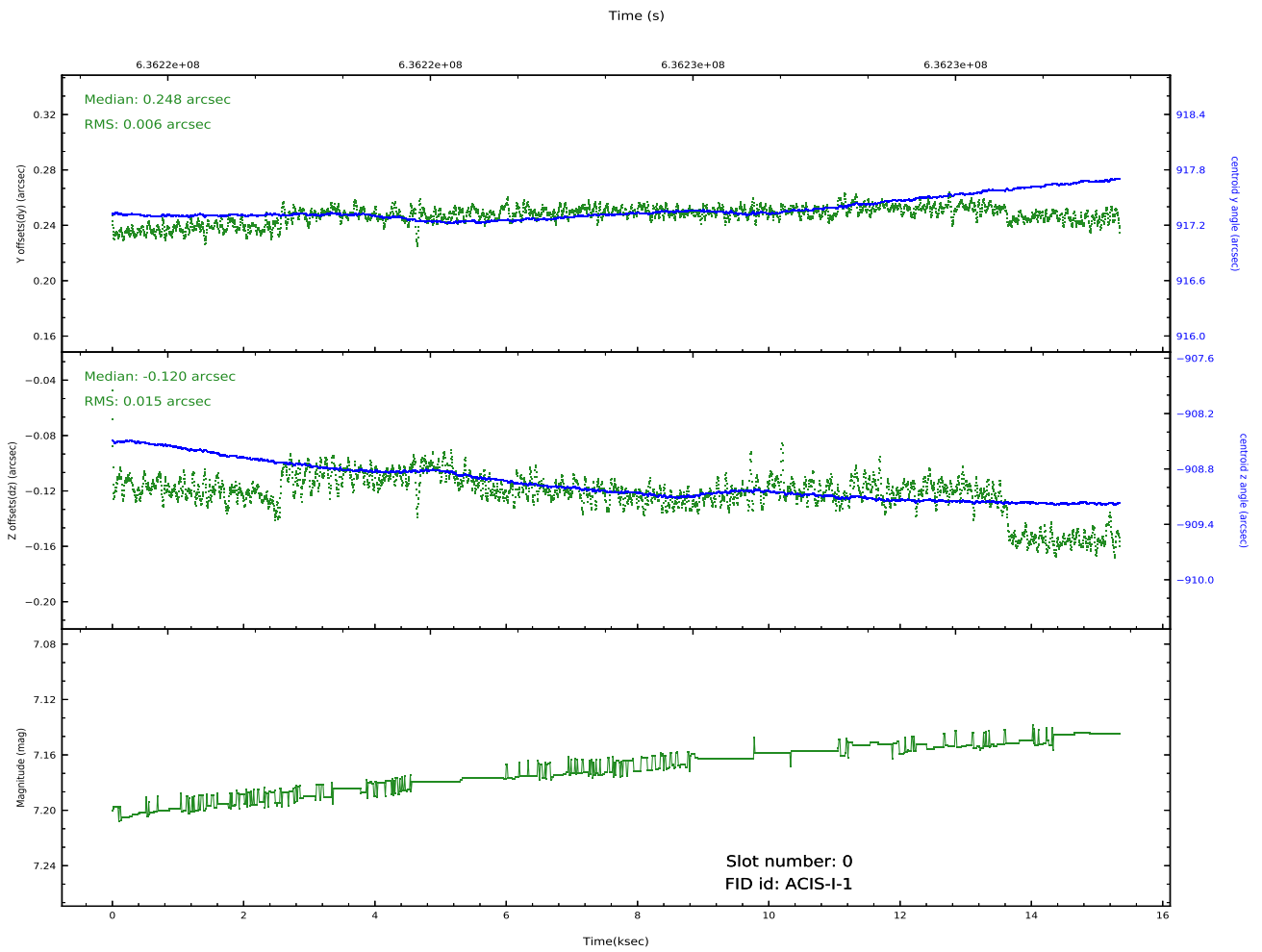
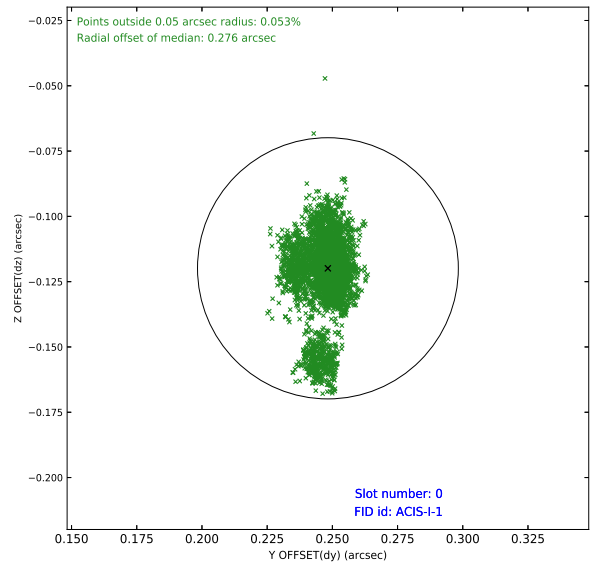
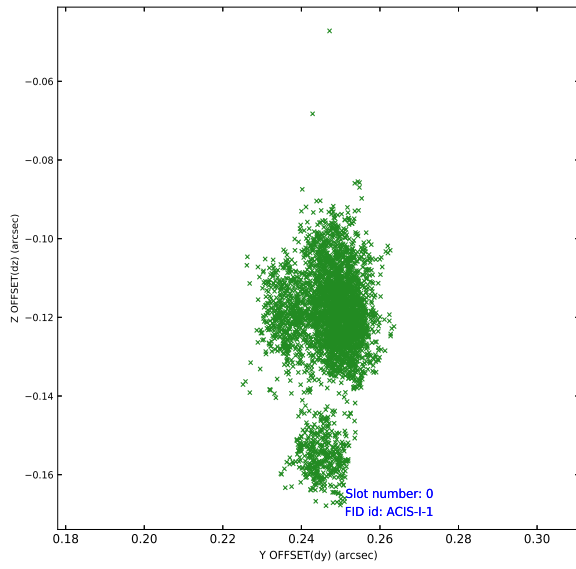


Time (s)

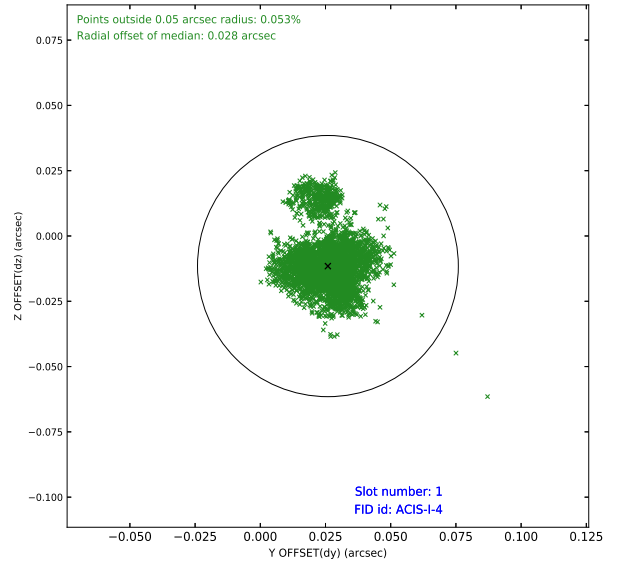
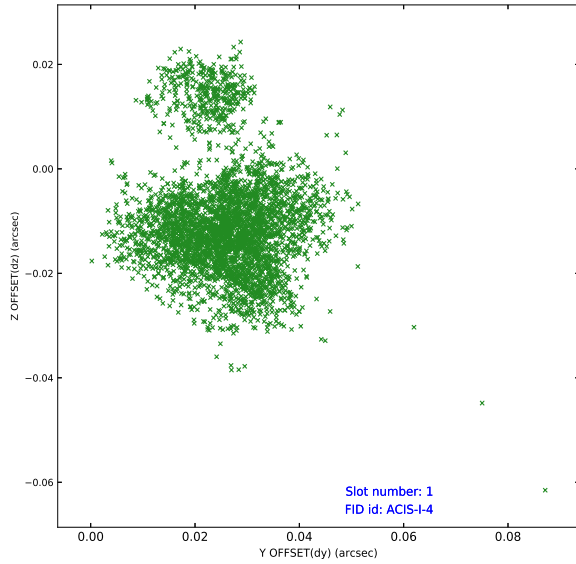


2.5 FID Slots

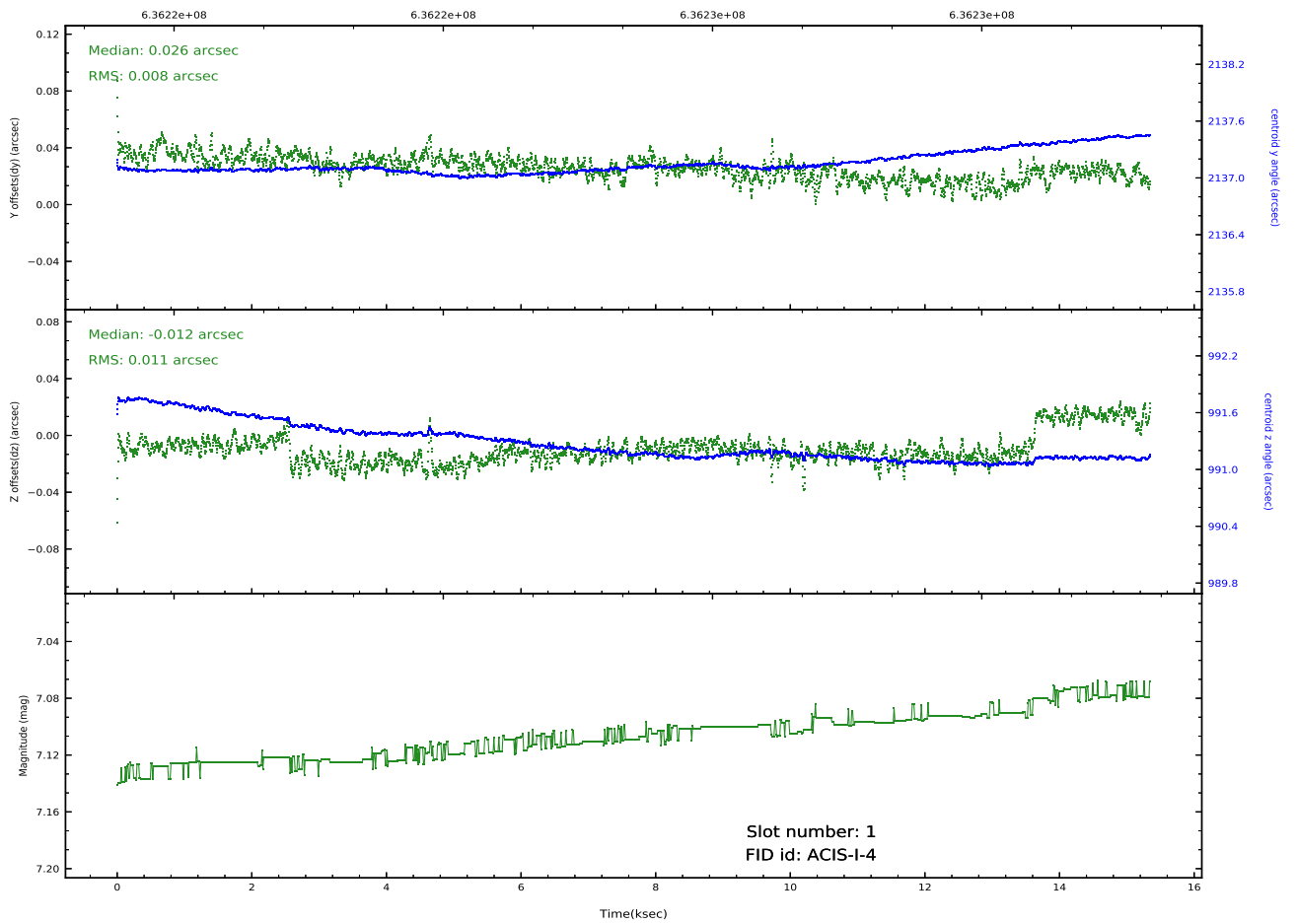
2.5.1 Slot 0



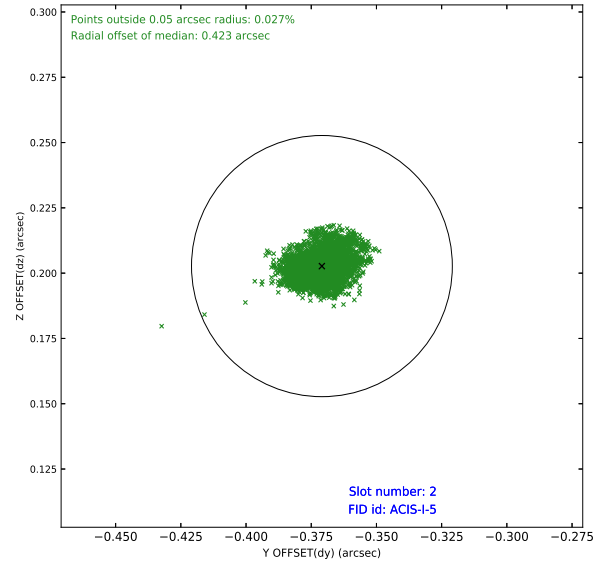
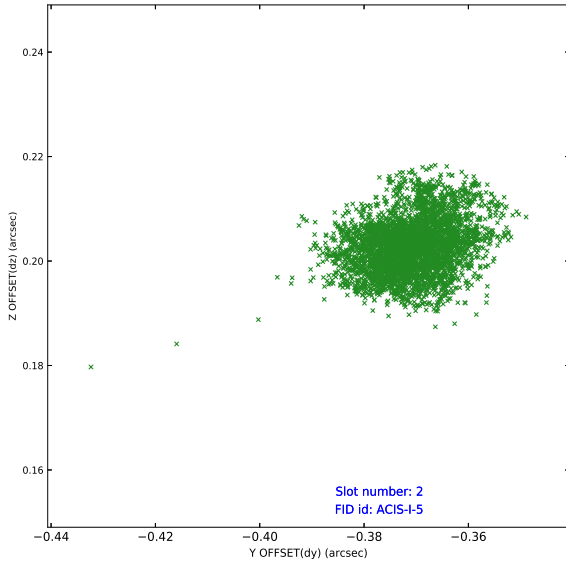
2.5.2 Slot 1



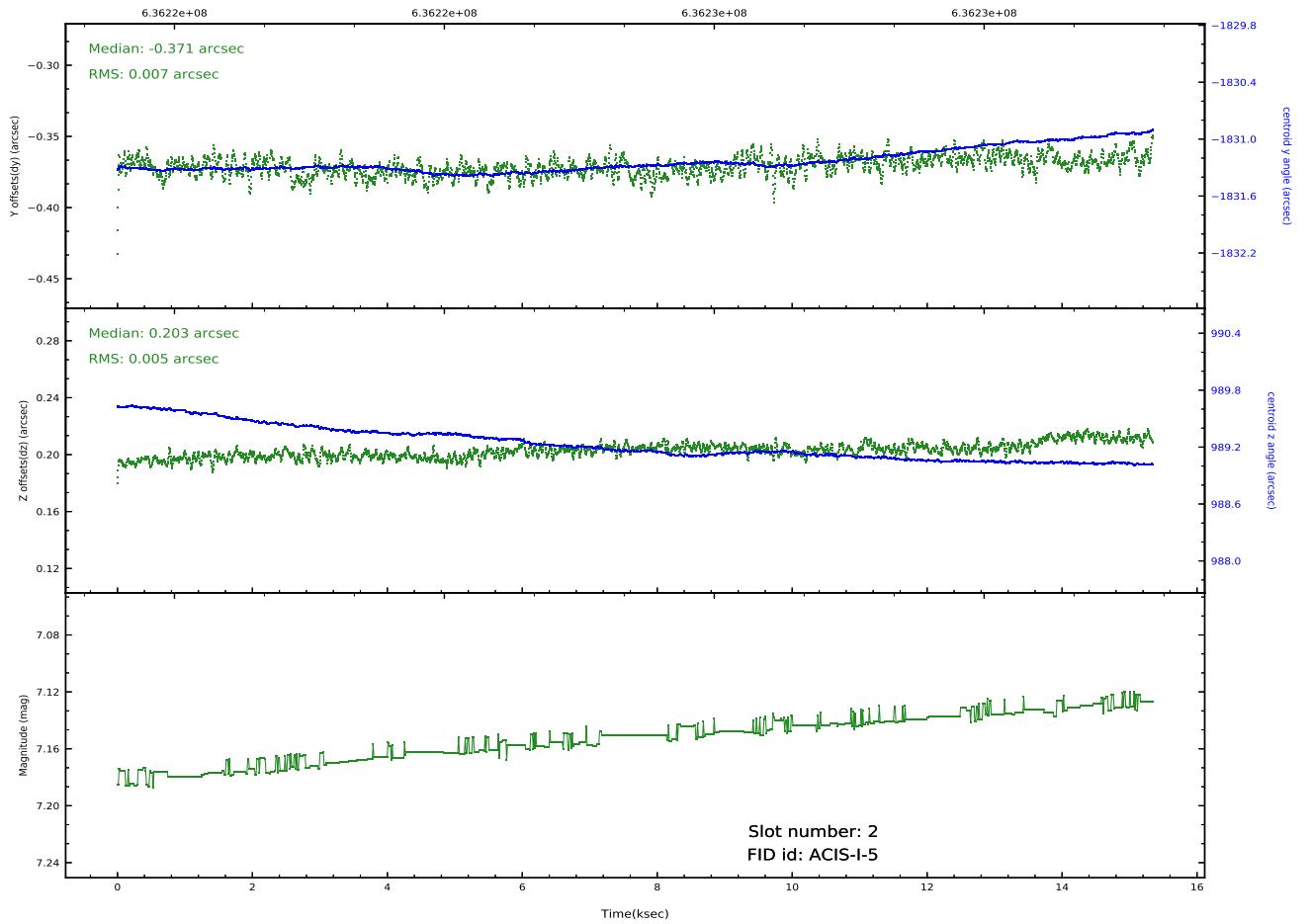
Time (s)



2.5.3 Slot 2



Time (s)



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	15.059178283334

A.2 Comments