

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5819 - L2 Version 4
Chandra X-Ray Center

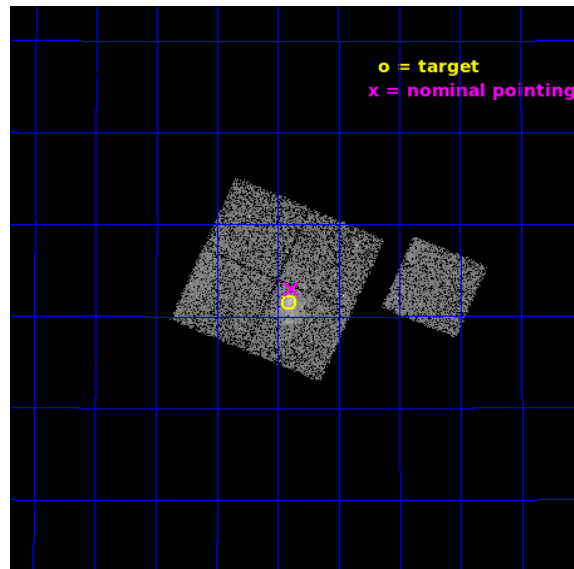
L2 Processing Date : Oct 6 2020

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1 Front

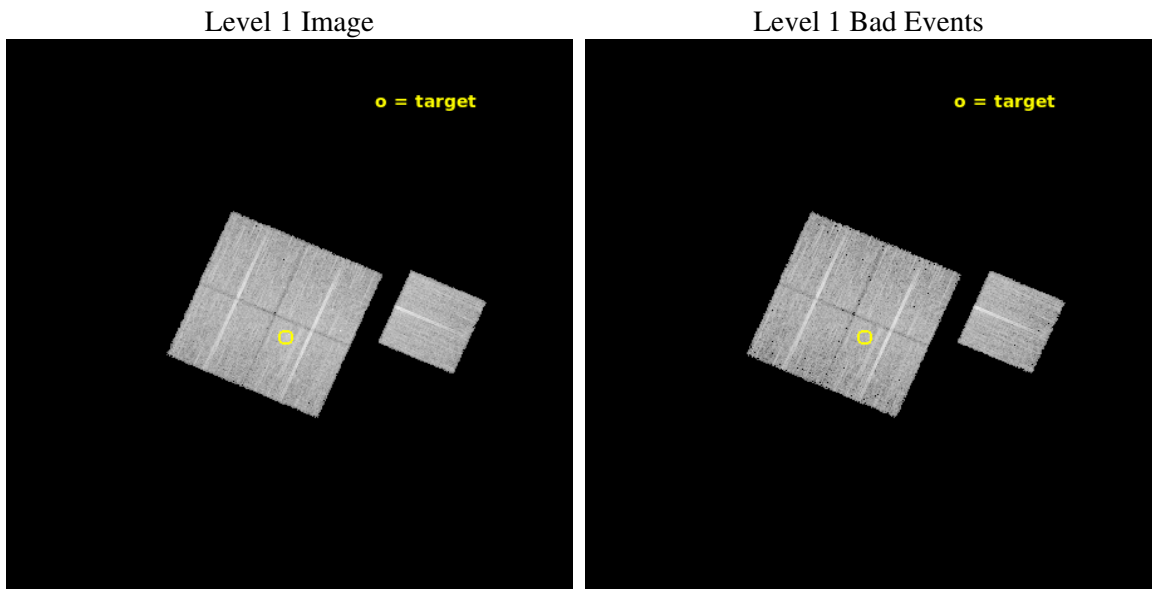
seq_num	800532	Sequence number
obs_id	5819	Observation id
title	MACS: The most massive galaxy clusters at $z>0.3$	Proposal title
observer	Harald Ebeling	Principal investigator
object	MACSJ1006.9+3200	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.727917	Observer's specified target RA [deg]
dec_targ	32.025389	Observer's specified target Dec [deg]
ra_nom	151.72099348975	Nominal RA [deg]
dec_nom	32.050553001289	Nominal Dec [deg]
roll_nom	113.61493276273	Nominal Roll [deg]
revision	4	Processing version of data
ontime	11032.858988494	Sum of GTIs [s]
livetime	10888.706563536	Livetime [s]
ontime0	11035.999978751	Sum of GTIs [s]
ontime1	11035.999978751	Sum of GTIs [s]
ontime2	11032.858988494	Sum of GTIs [s]
ontime3	11032.858988494	Sum of GTIs [s]
ontime6	11035.999978751	Sum of GTIs [s]
l2events	31146	Number of level 2 events



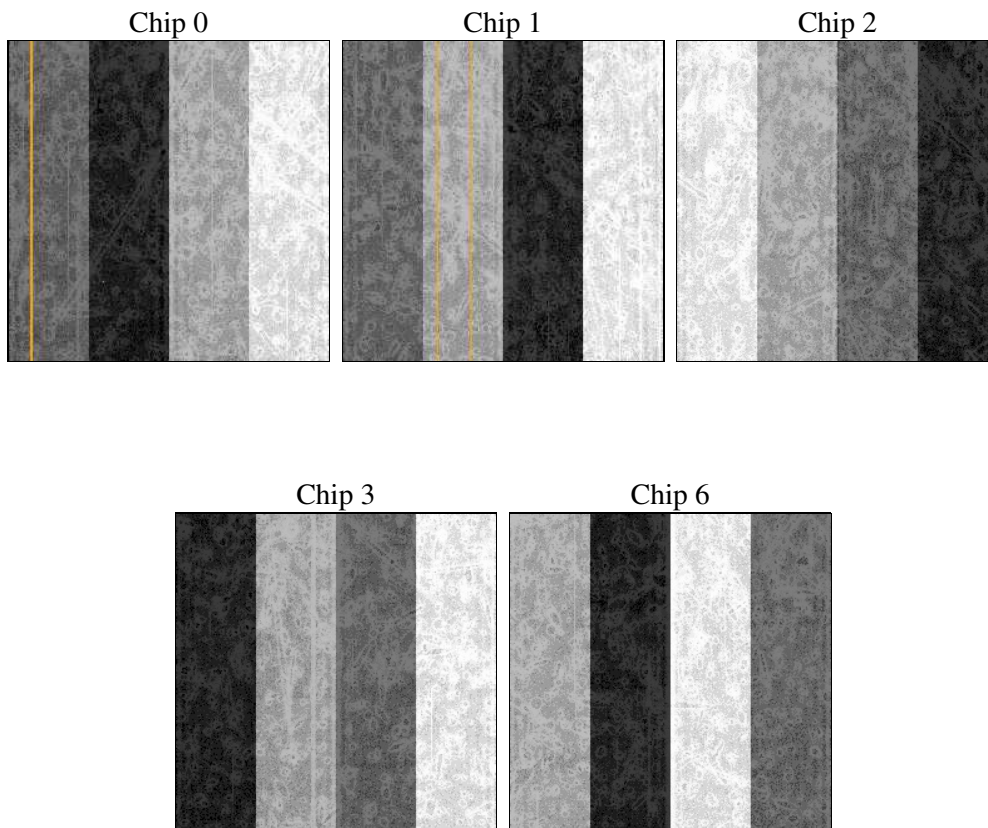
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	11032.858988494	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	11035.999978751	Sum of GTIs [s]
date	2020-10-06T08:40:32	Date and time of file creation	ontime1	11035.999978751	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	11032.858988494	Sum of GTIs [s]
			ontime3	11032.858988494	Sum of GTIs [s]
			ontime6	11035.999978751	Sum of GTIs [s]
			l1events	330992	Number of level 1 events

2.1.4 Events

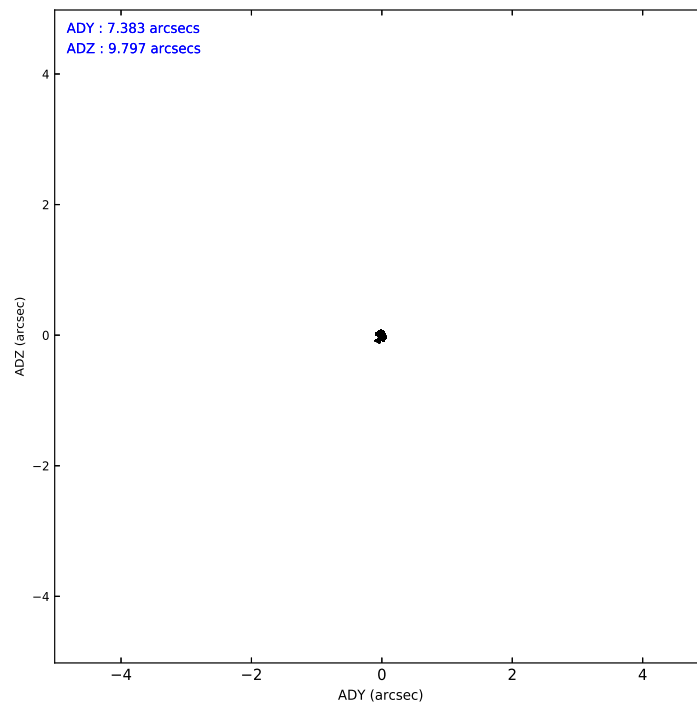
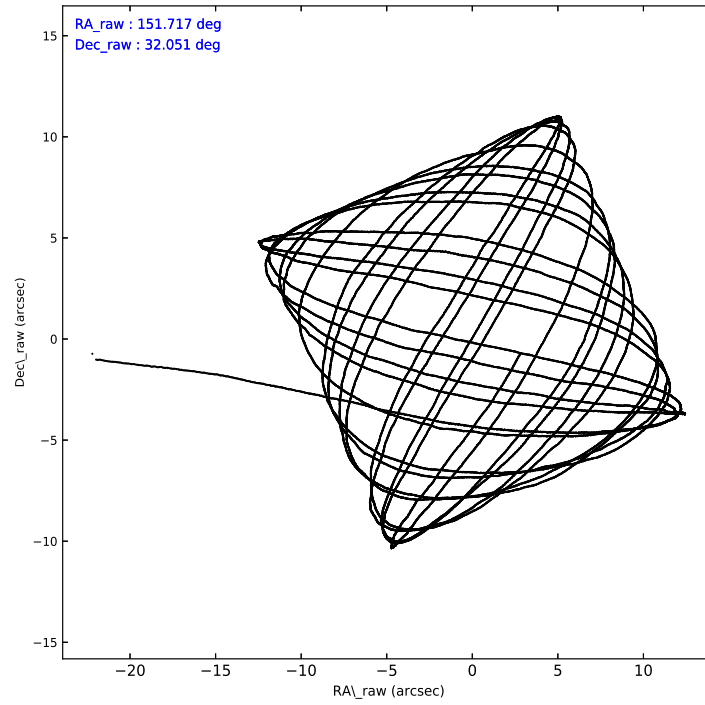
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	63708	62112	69244	66843	69085
rejected events	56905	54482	62053	58170	62188
rejected %	89%	87%	89%	87%	90%

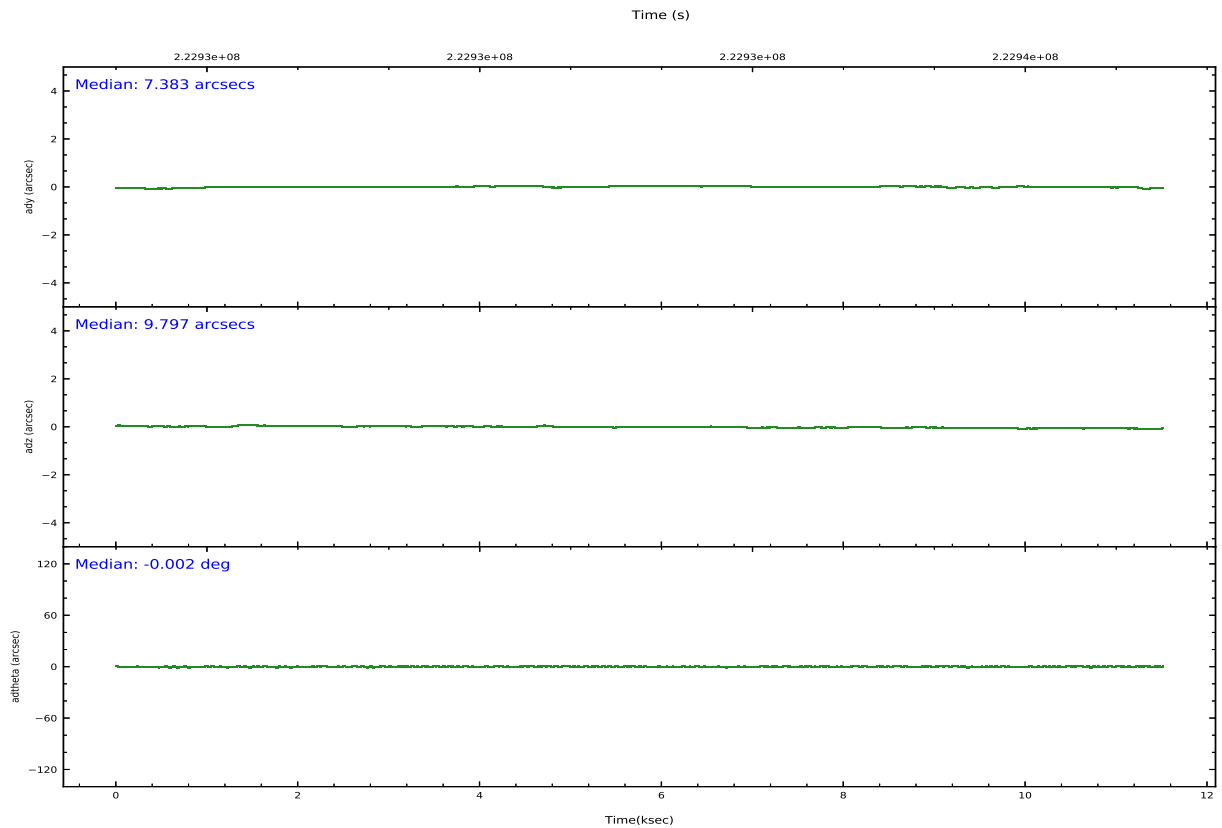
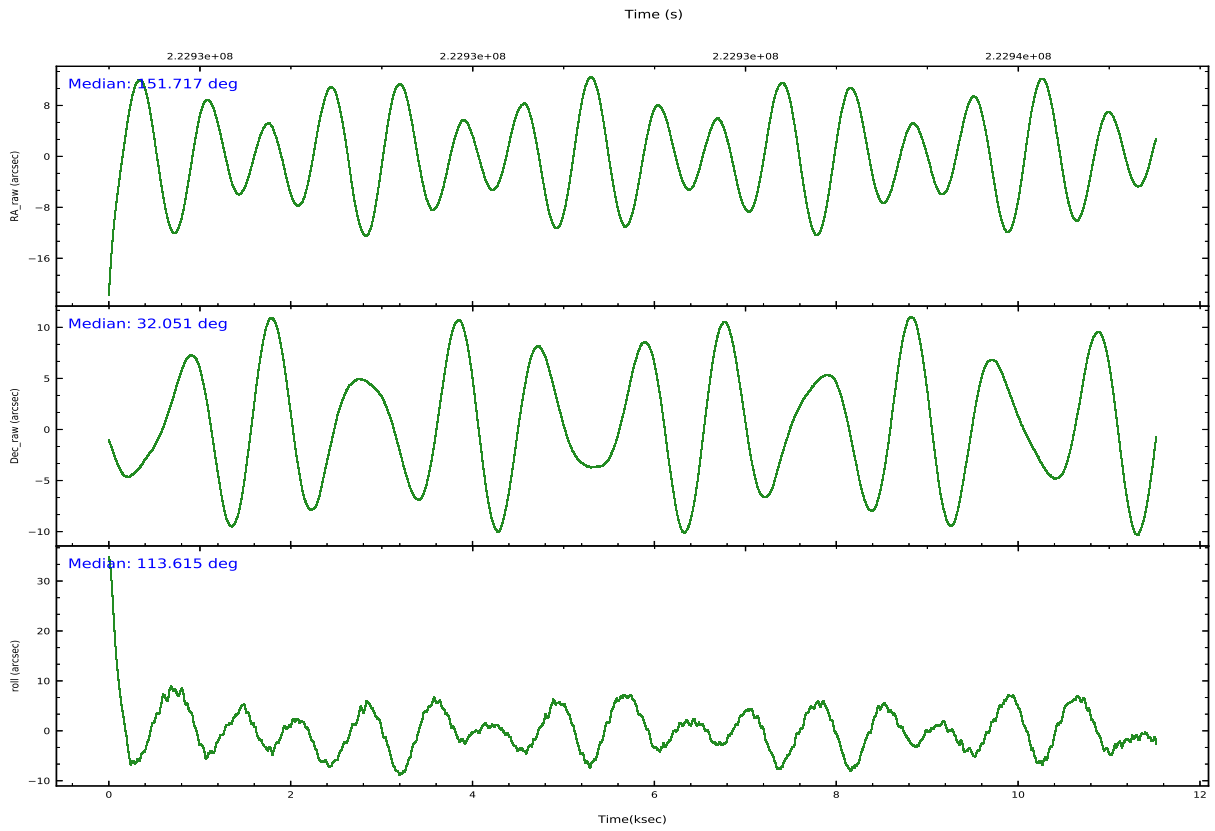
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2511	2825	2908	4256	2490
	3%	4%	4%	6%	3%
grade 1 events	38	29	39	45	34
	0%	0%	0%	0%	0%
grade 2 events	1510	1700	1554	1530	1439
	2%	2%	2%	2%	2%
grade 3 events	752	845	728	793	782
	1%	1%	1%	1%	1%
grade 4 events	706	764	733	790	757
	1%	1%	1%	1%	1%
grade 5 events	2258	2470	2150	2613	2527
	3%	3%	3%	3%	3%
grade 6 events	1326	1497	1268	1307	1431
	2%	2%	1%	1%	2%
grade 7 events	54607	51982	59864	55509	59625
	85%	83%	86%	83%	86%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	151.743006	151.72099348975	Subarray requested	NONE	NONE
[deg] Pointing Dec	32.035282	32.050553001289	Alternating exposures requested	N	N
[deg] Pointing Roll	113.393033	113.61493276273	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-229.442463	-229.4438428438578			
[mm] SIM translation stage offset	-4.15	-4.148610159071865			
[s] Observation start time (MET)	222927516.184000	222926419.67725			
Observation start date	2005-01-24T04:17:32	2005-01-24T04:00:19			
[s] Observation end time (MET)	222938516.184000	222939732.89035			
Observation end date	2005-01-24T07:20:52	2005-01-24T07:42:12			
Read mode	TIMED	TIMED			

2.3 Aspect





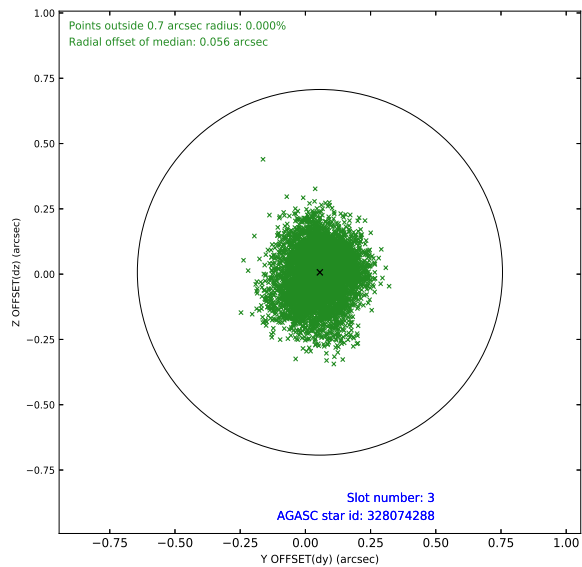
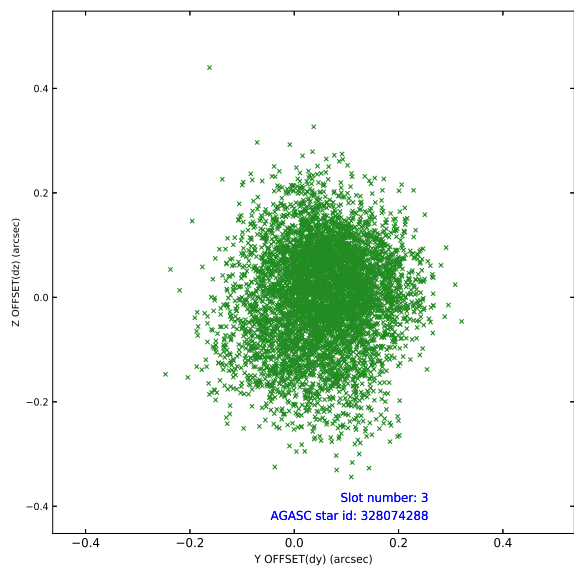
Slot Statistics

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	7.25	2810	1.000	0.066	-0.043	0.006	0.011	0.000000	0.000000	932.28	-918
1	FID		ACIS-I-5	7.23	2810	1.000	-0.228	0.062	0.006	0.010	0.000000	0.000000	-1815.88	978
2	FID		ACIS-I-6	7.25	2810	1.000	0.070	0.051	0.007	0.011	0.000000	0.000000	397.34	1623
3	GUIDE	used	328074288	9.80	5606	1.000	0.056	0.007	0.135	0.218	151.851051	32.207832	440.01	-548
4	GUIDE	used	328075240	6.45	5620	1.000	-0.062	0.103	0.064	0.107	152.066191	31.604067	-1816.66	-293
5	GUIDE	used	328075864	7.18	5620	1.000	-0.196	-0.056	0.060	0.099	151.066991	32.452445	2199.38	1286
6	GUIDE	used	328077552	9.54	5612	1.000	0.106	-0.106	0.103	0.176	151.705157	31.641393	-1254.30	669
7	GUIDE	used	328083000	9.64	5609	1.000	0.098	0.044	0.141	0.217	152.384129	31.587113	-2255.85	-1165

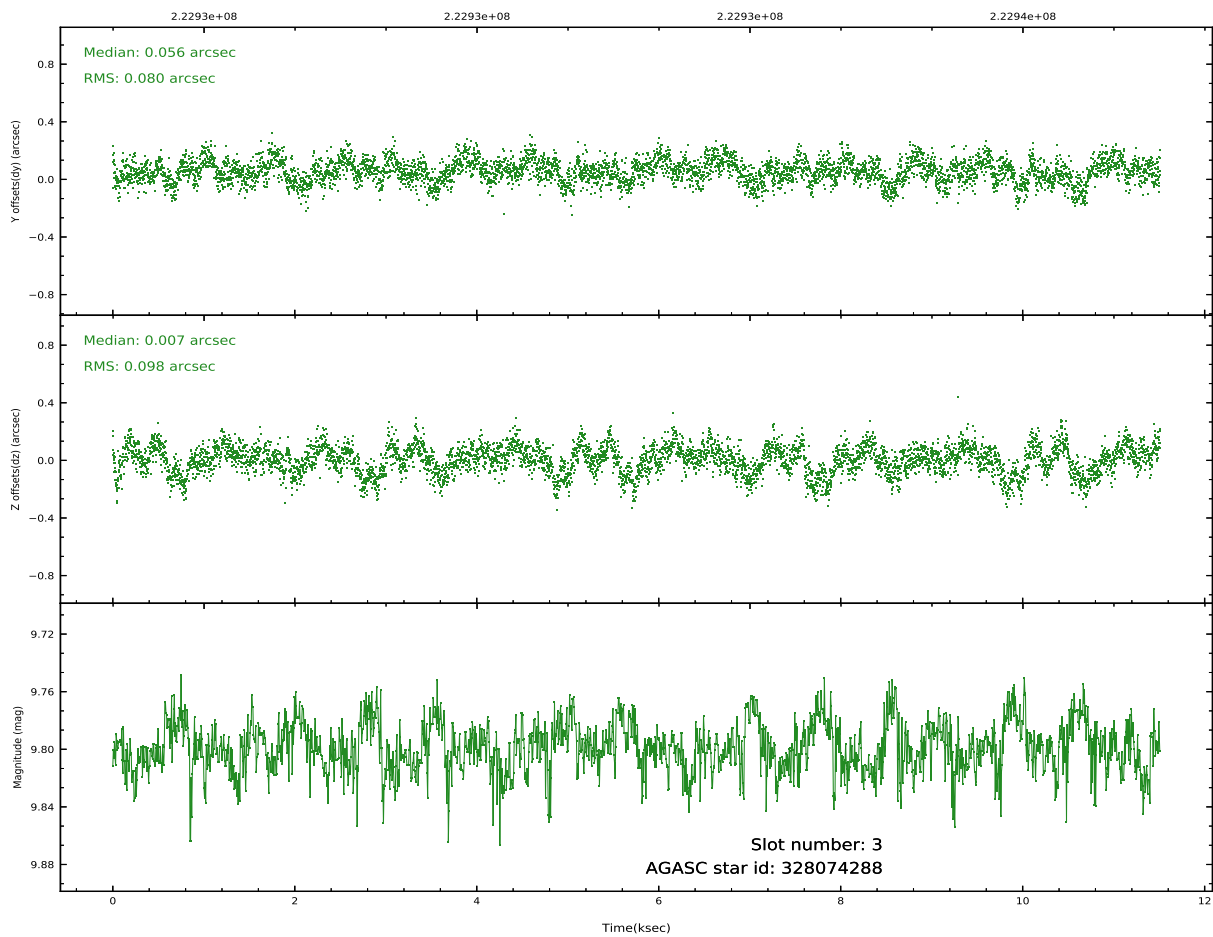
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2.4 Star Slots

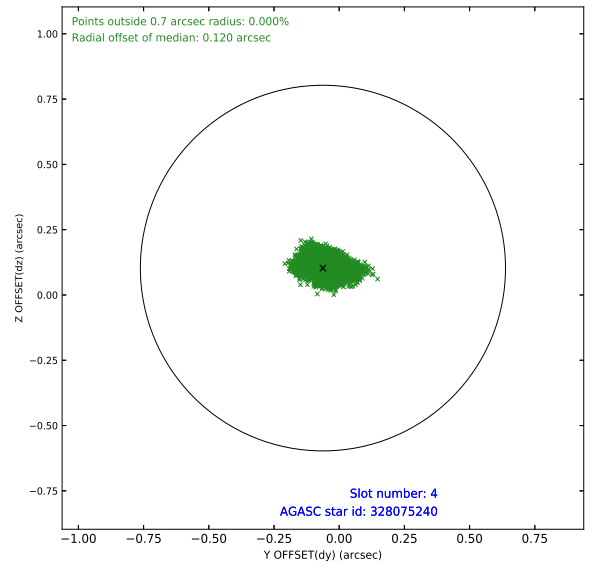
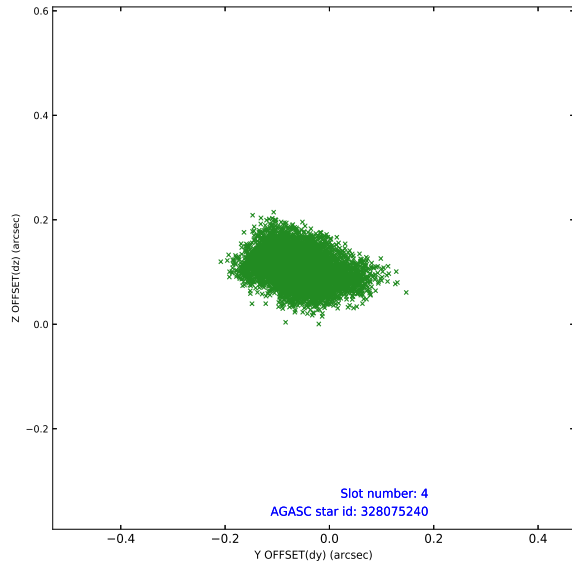
2.4.1 Slot 3



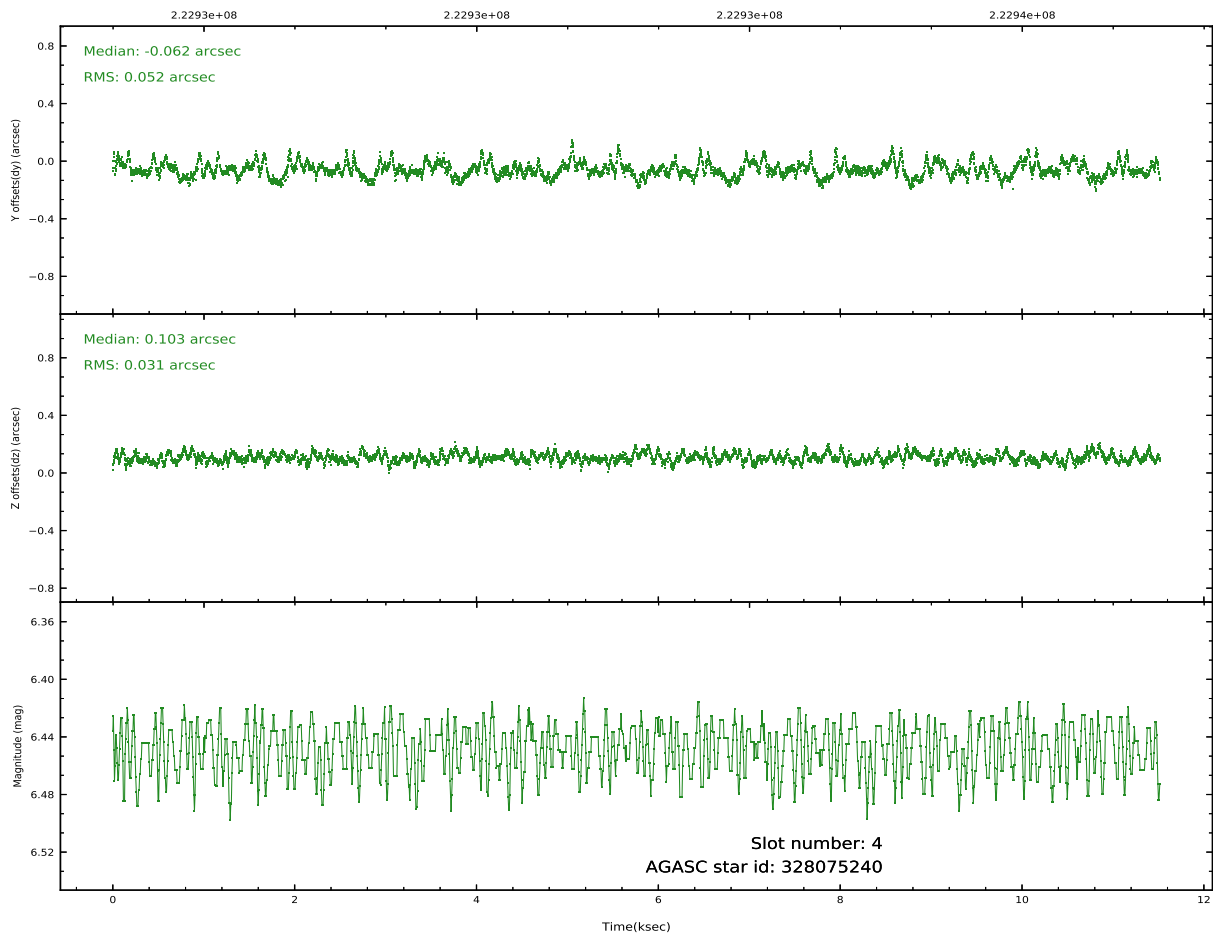
Time (s)



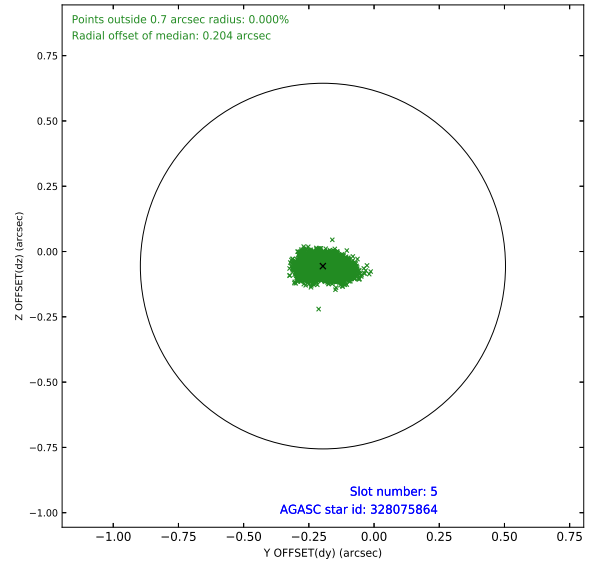
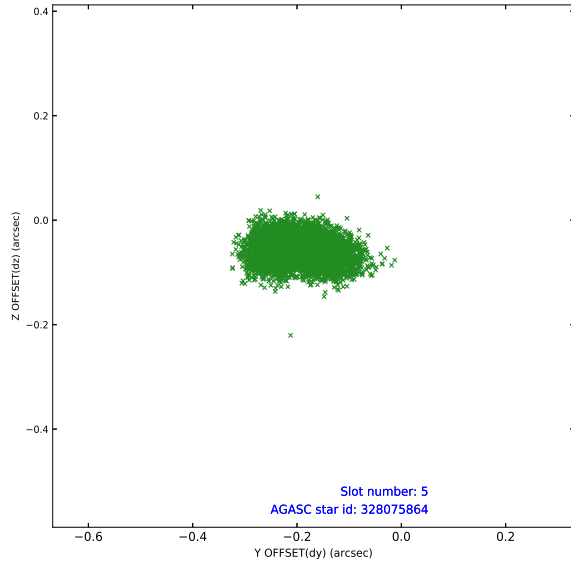
2.4.2 Slot 4



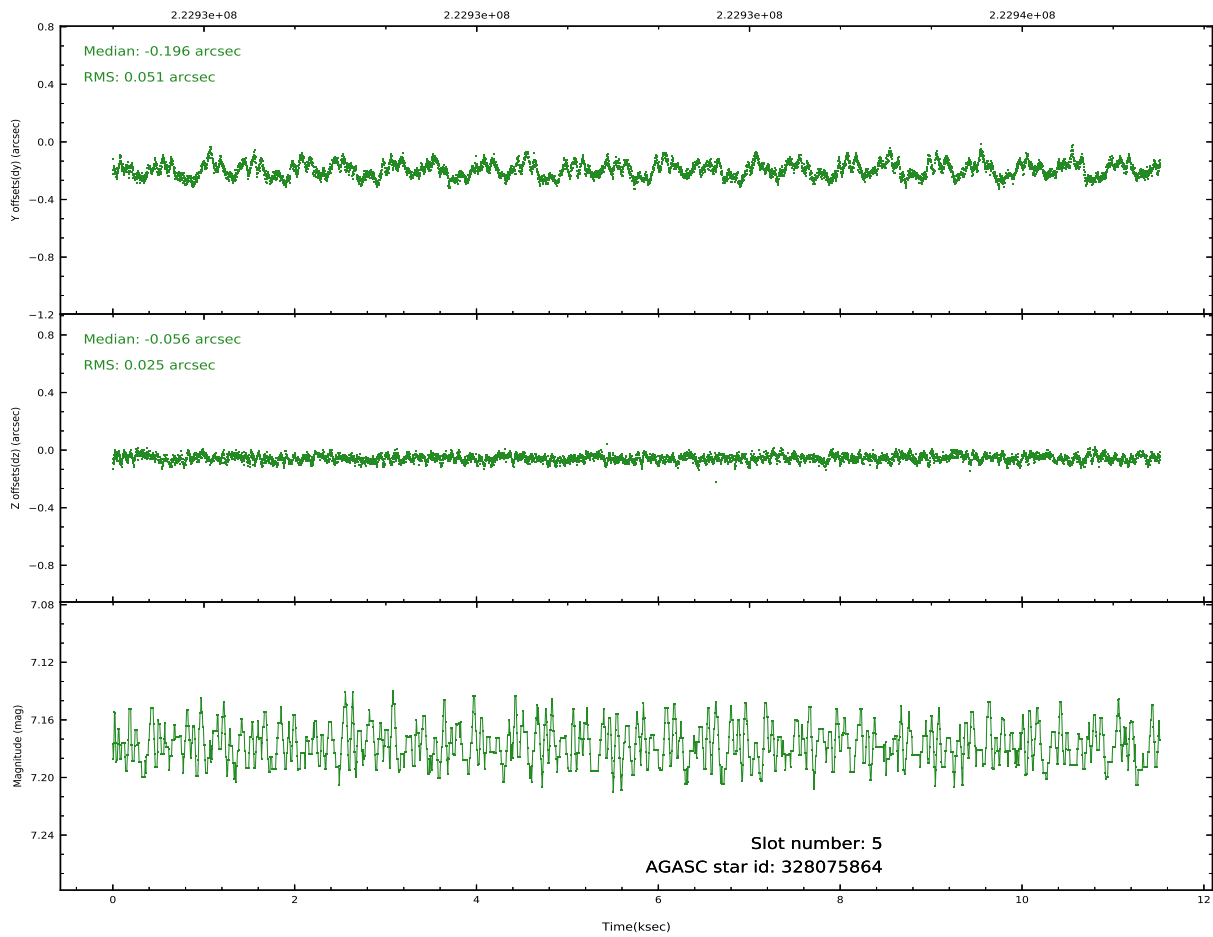
Time (s)



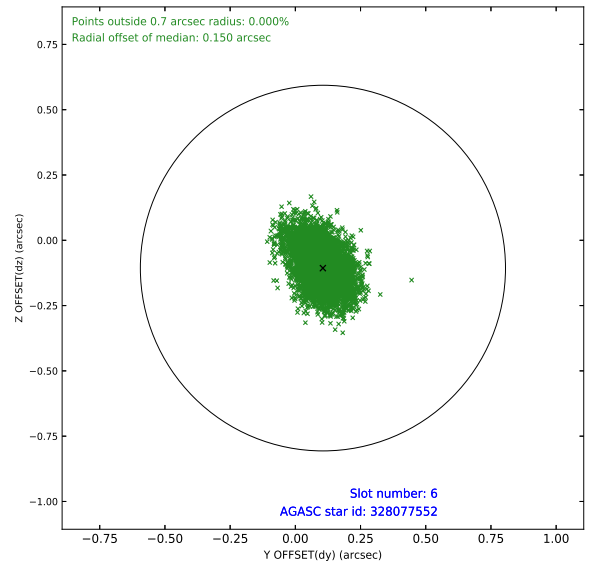
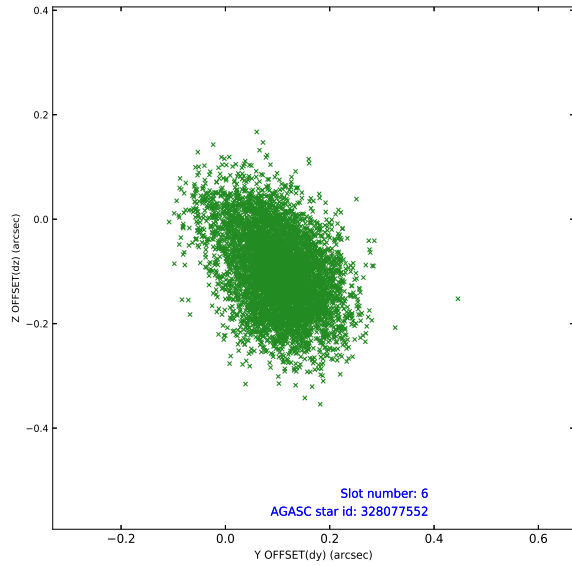
2.4.3 Slot 5



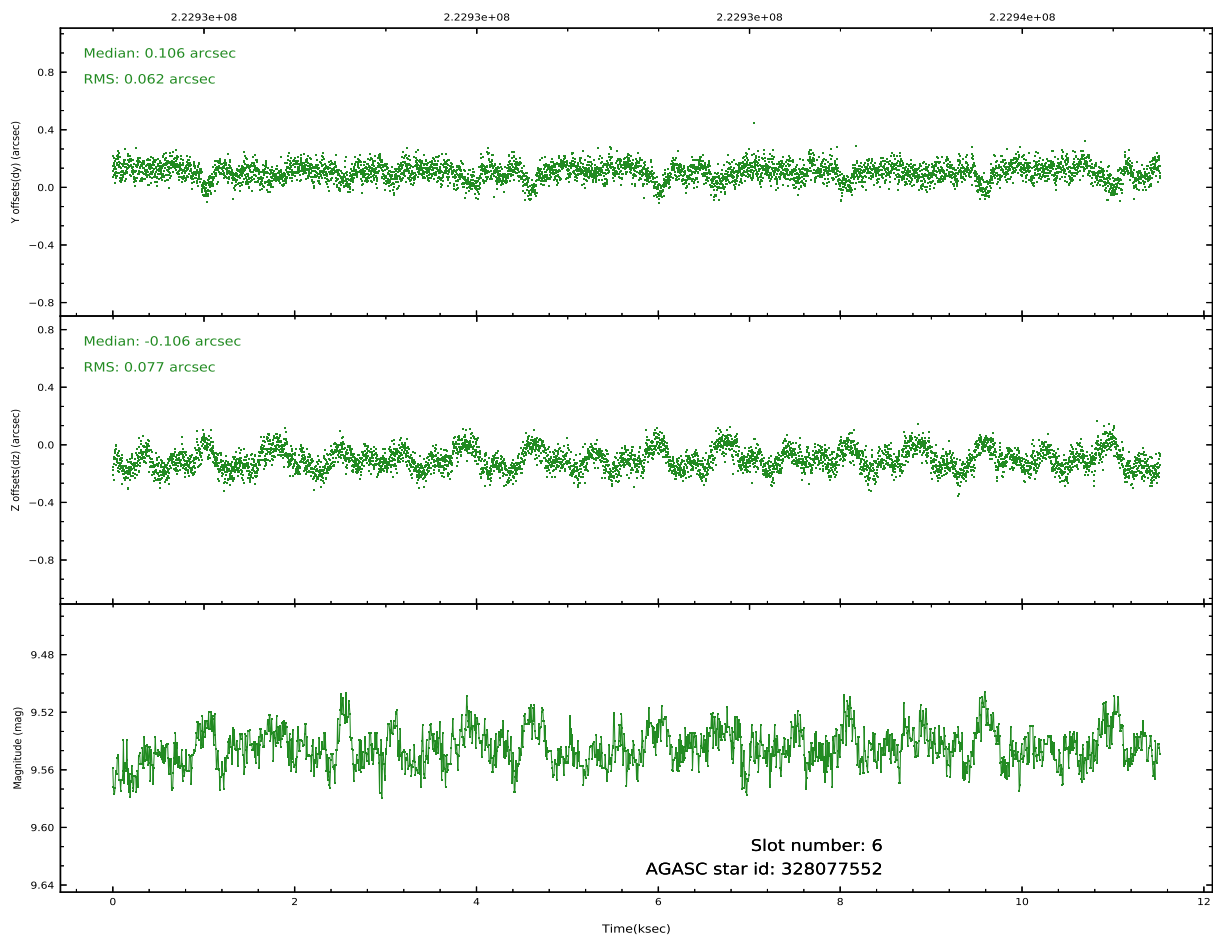
Time (s)



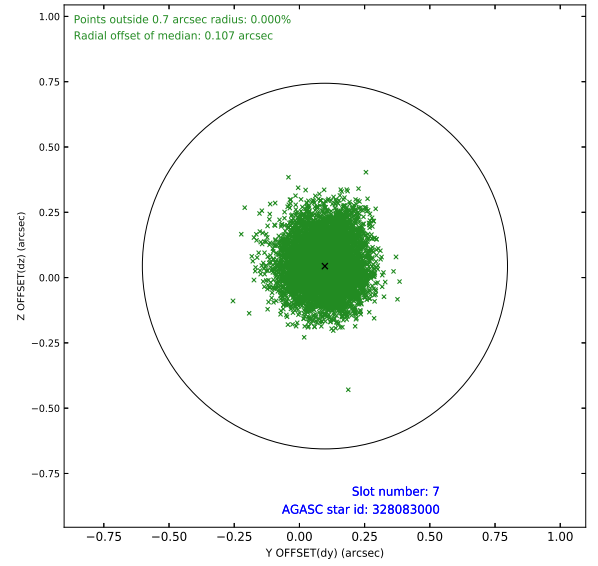
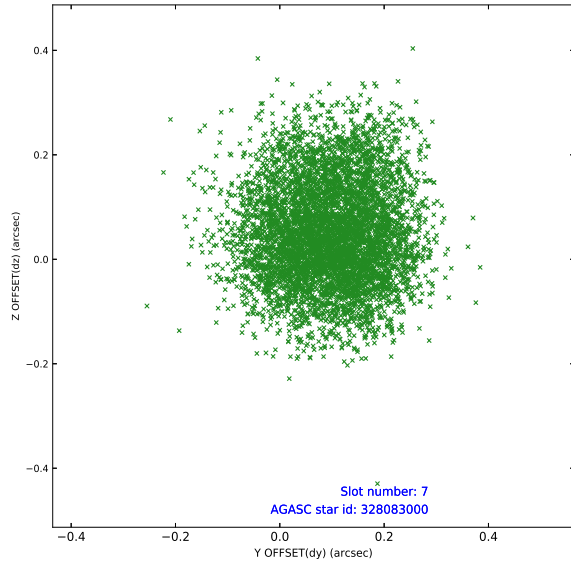
2.4.4 Slot 6



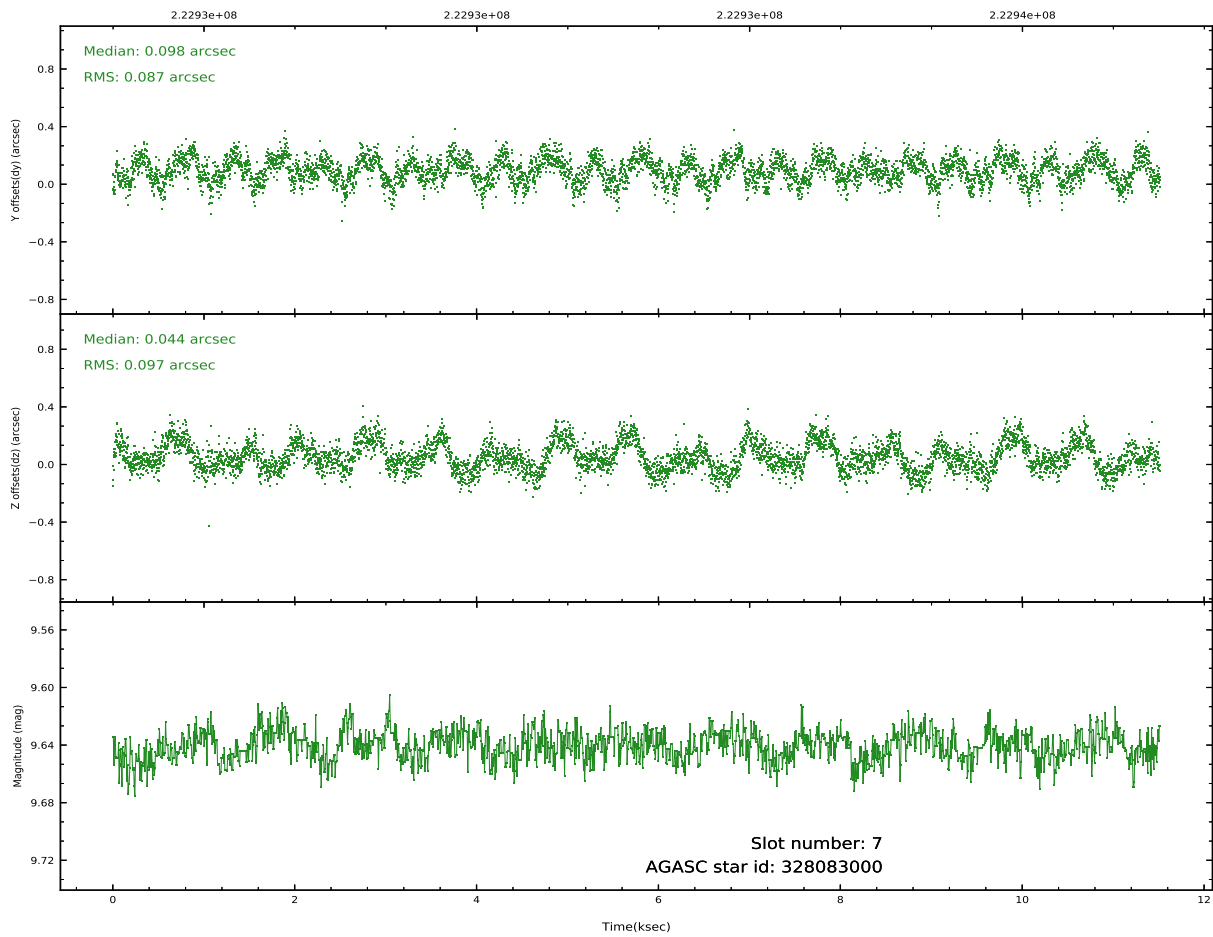
Time (s)



2.4.5 Slot 7

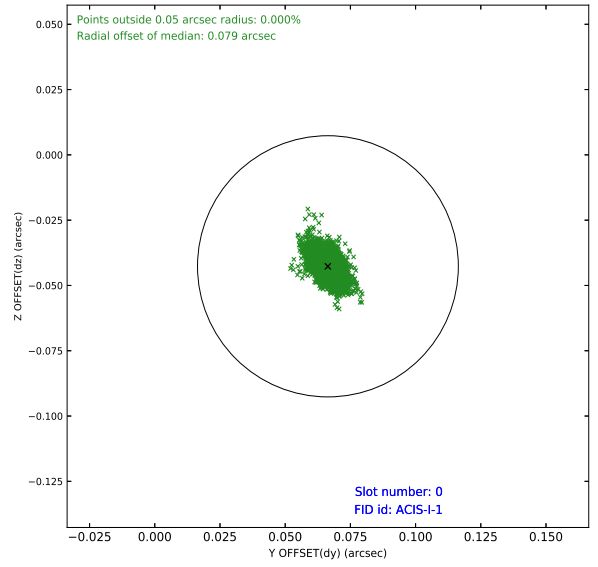
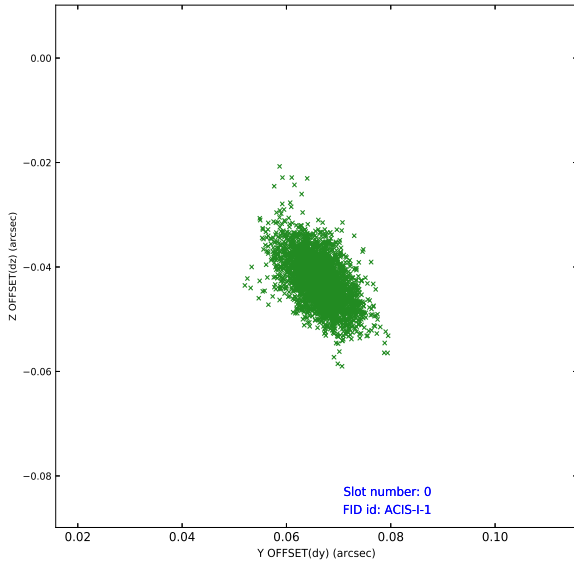


Time (s)

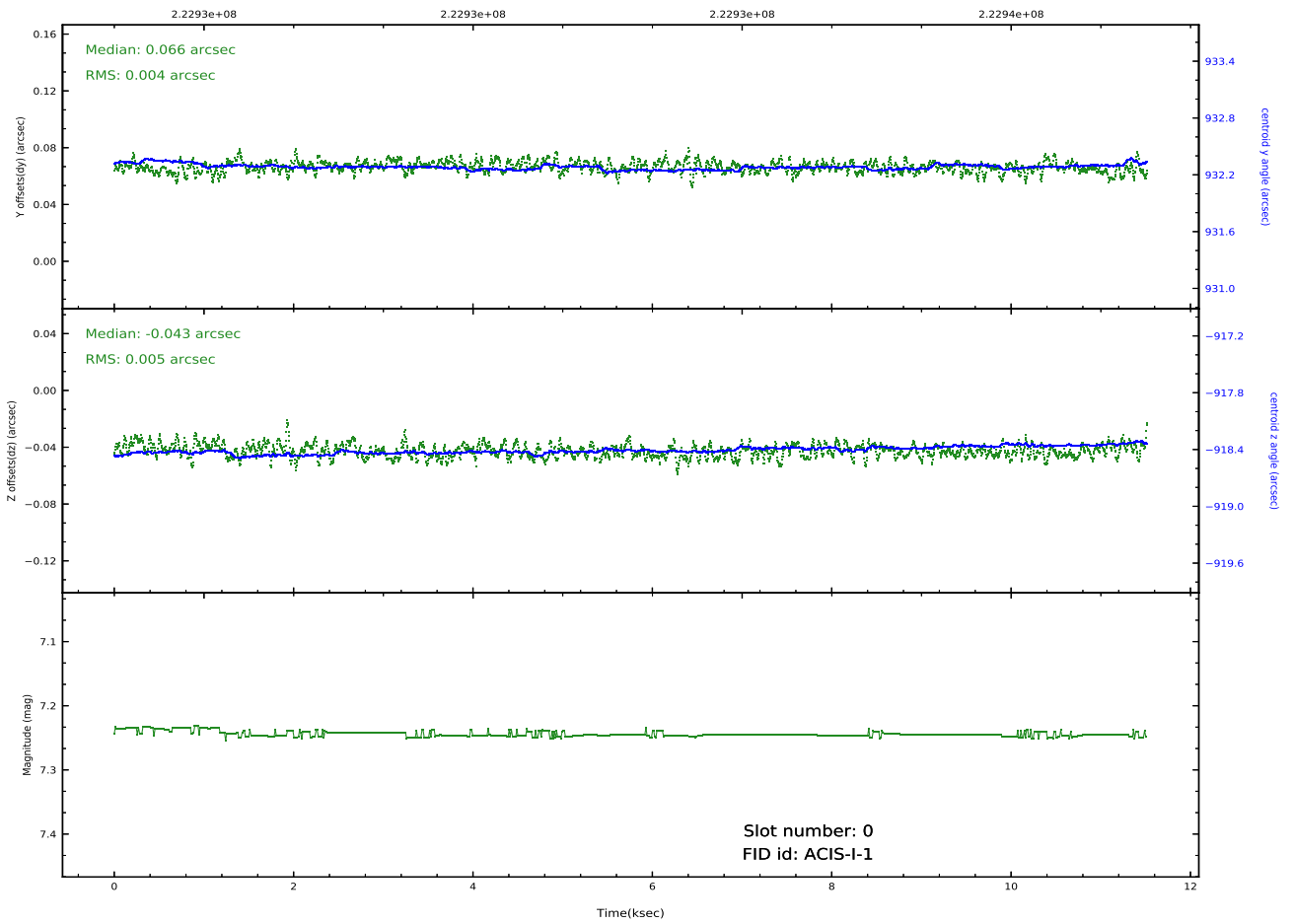


2.5 FID Slots

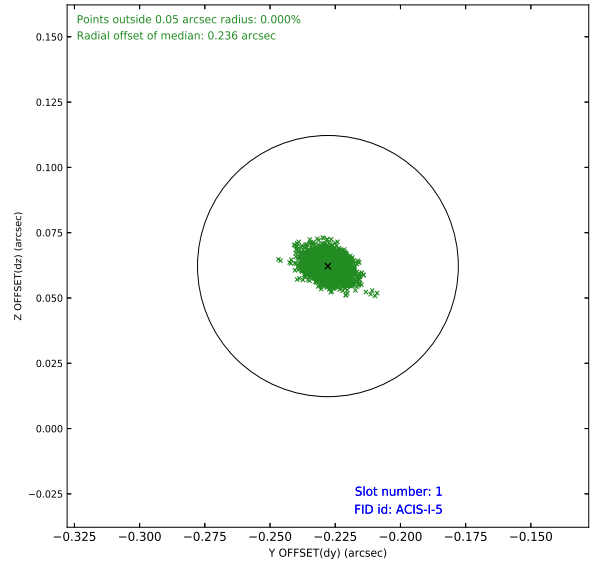
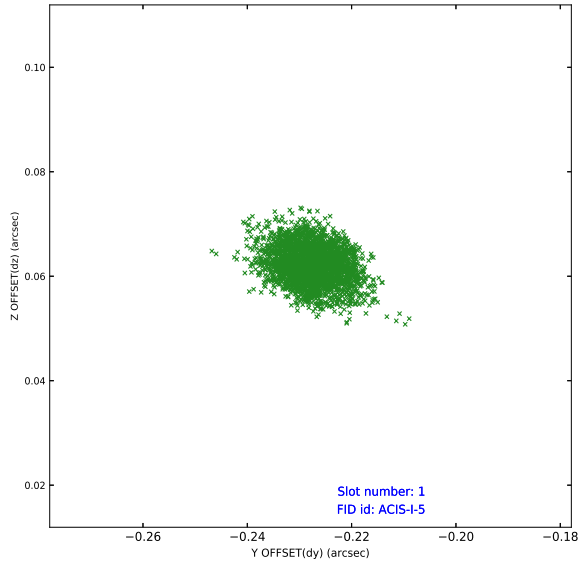
2.5.1 Slot 0



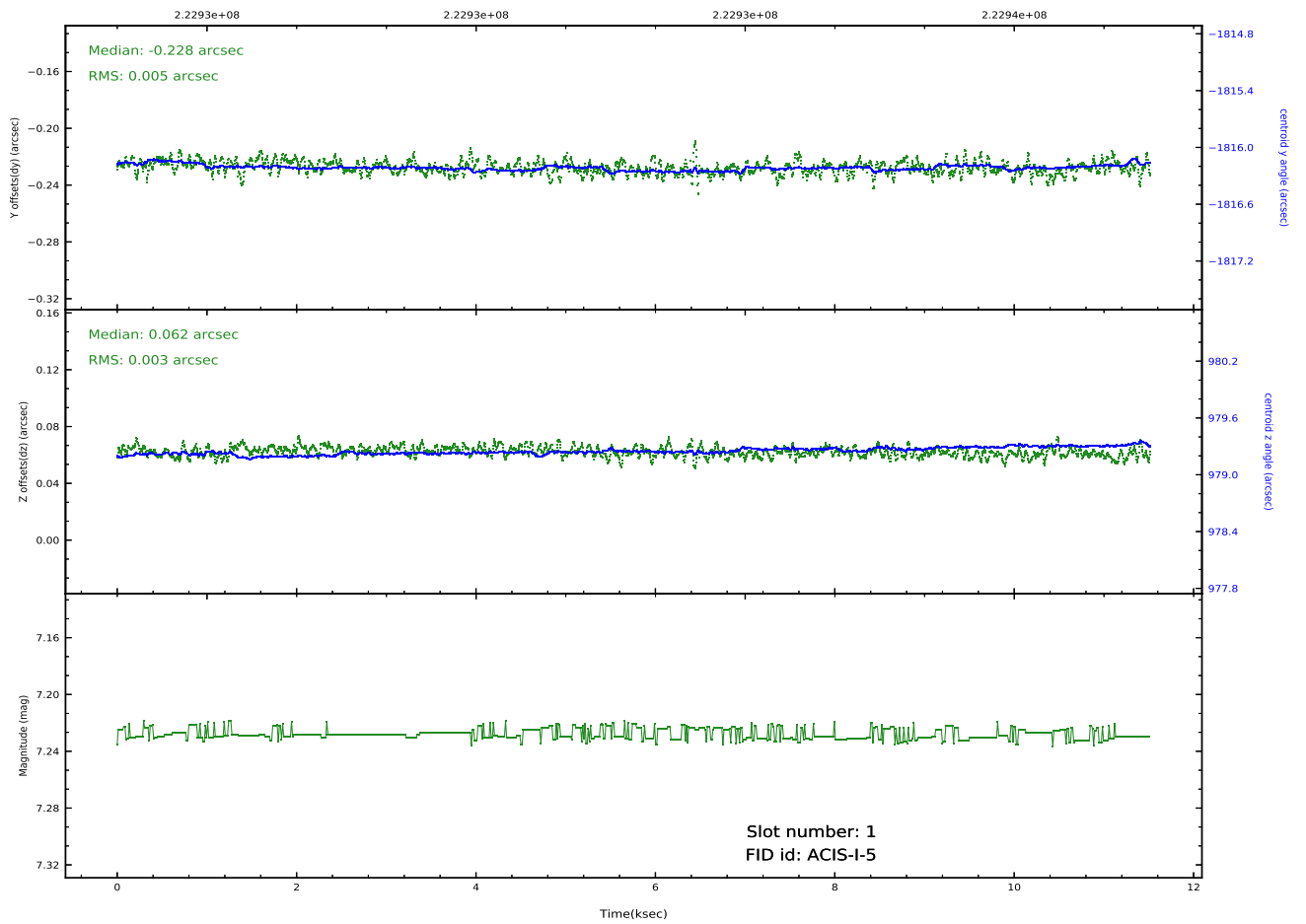
Time (s)



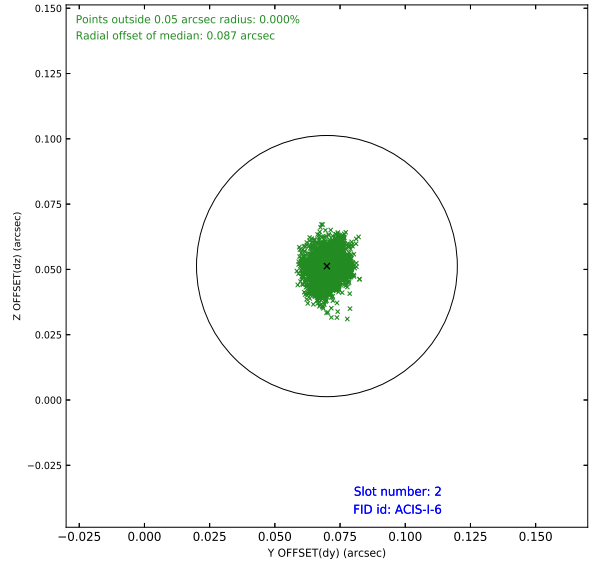
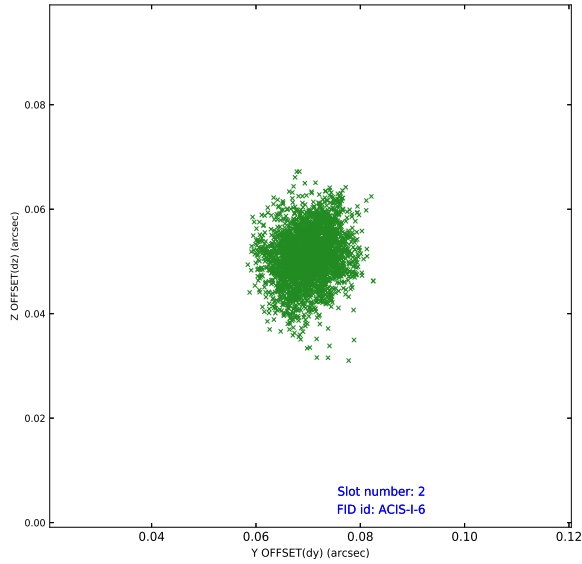
2.5.2 Slot 1



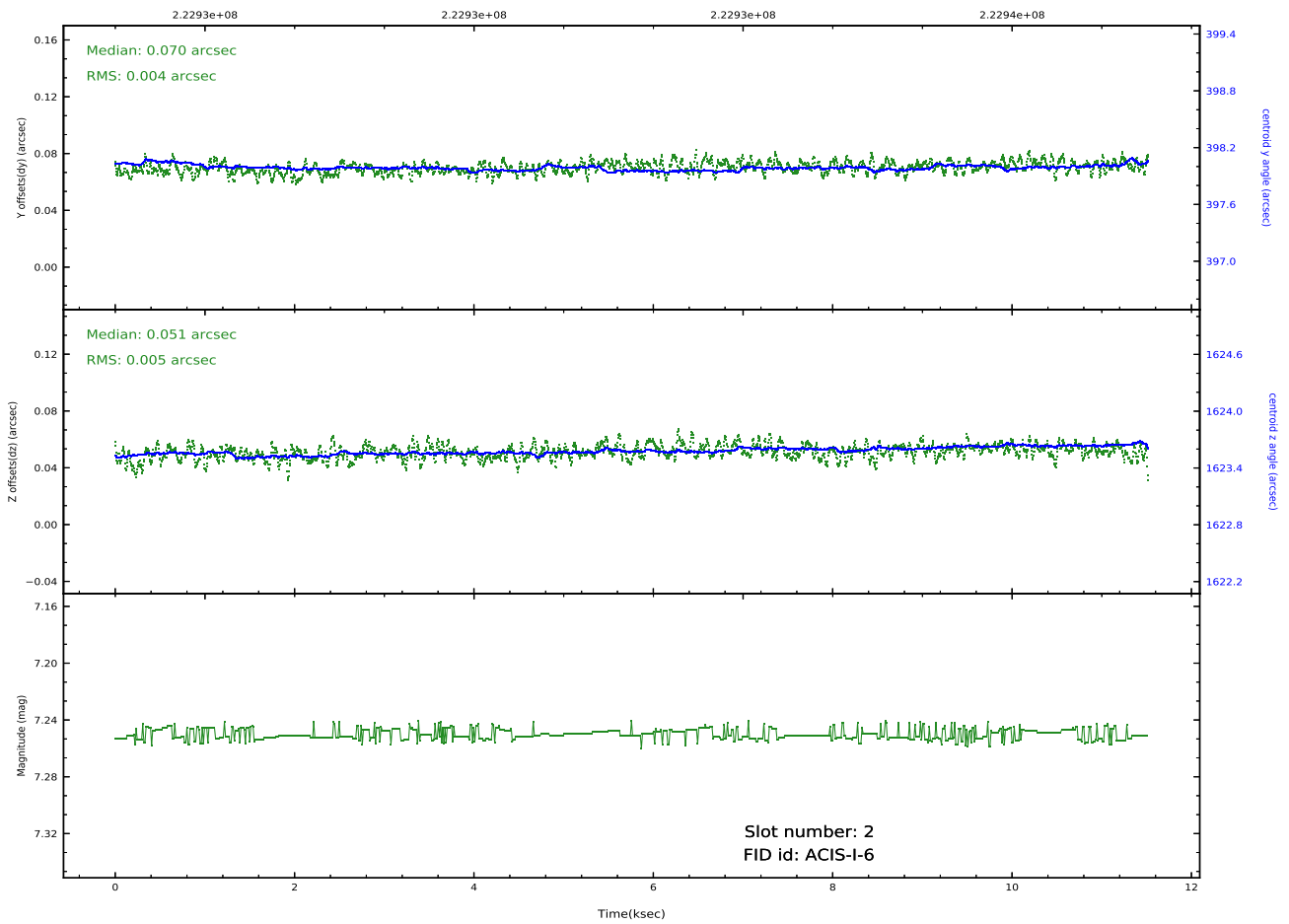
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.03285

A.2 Comments