

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5814 - L2 Version 6
Chandra X-Ray Center

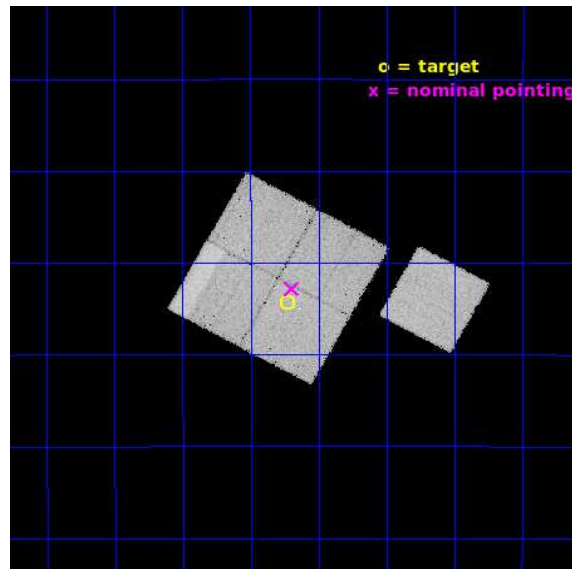
L2 Processing Date : Oct 7 2020

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1 Front

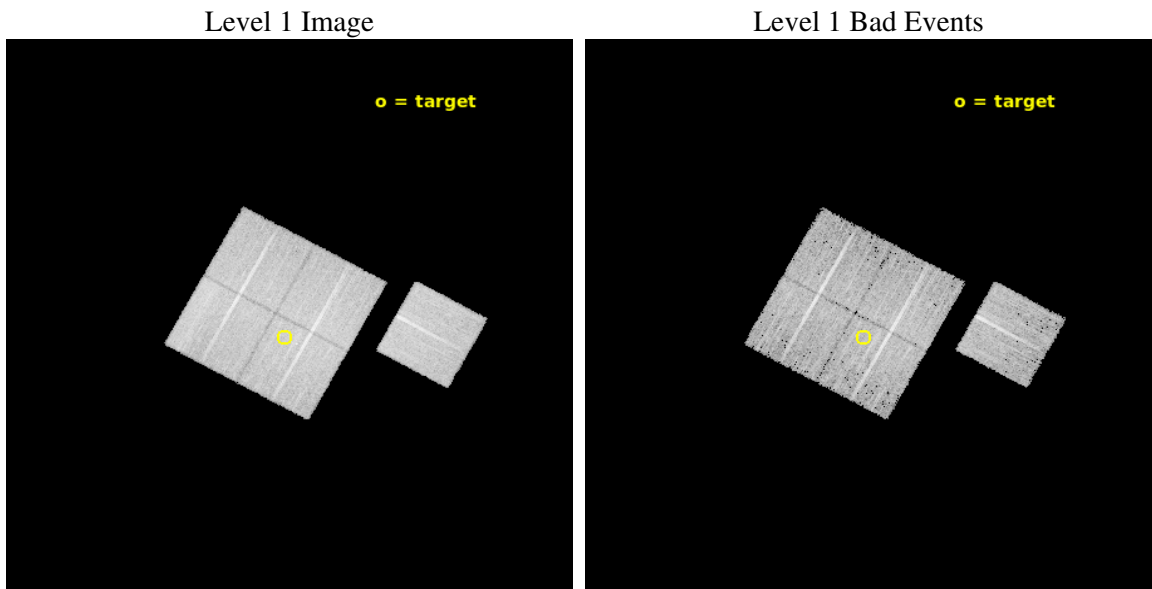
seq_num	800527	Sequence number
obs_id	5814	Observation id
title	MACS: The most massive galaxy clusters at $z > 0.3$	Proposal title
observer	Harald Ebeling	Principal investigator
object	1RXS J221909.4-184454	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	334.806833	Observer's specified target RA [deg]
dec_targ	-18.739	Observer's specified target Dec [deg]
ra_nom	334.79885697351	Nominal RA [deg]
dec_nom	-18.713838739721	Nominal Dec [deg]
roll_nom	118.78003490024	Nominal Roll [deg]
revision	6	Processing version of data
ontime	8542.8133737445	Sum of GTIs [s]
livetime	8431.1952278888	Livetime [s]
ontime0	8542.6902537346	Sum of GTIs [s]
ontime1	8545.8722539842	Sum of GTIs [s]
ontime2	8542.7723038197	Sum of GTIs [s]
ontime3	8542.8133737445	Sum of GTIs [s]
ontime6	8542.6491838396	Sum of GTIs [s]
l2events	153646	Number of level 2 events



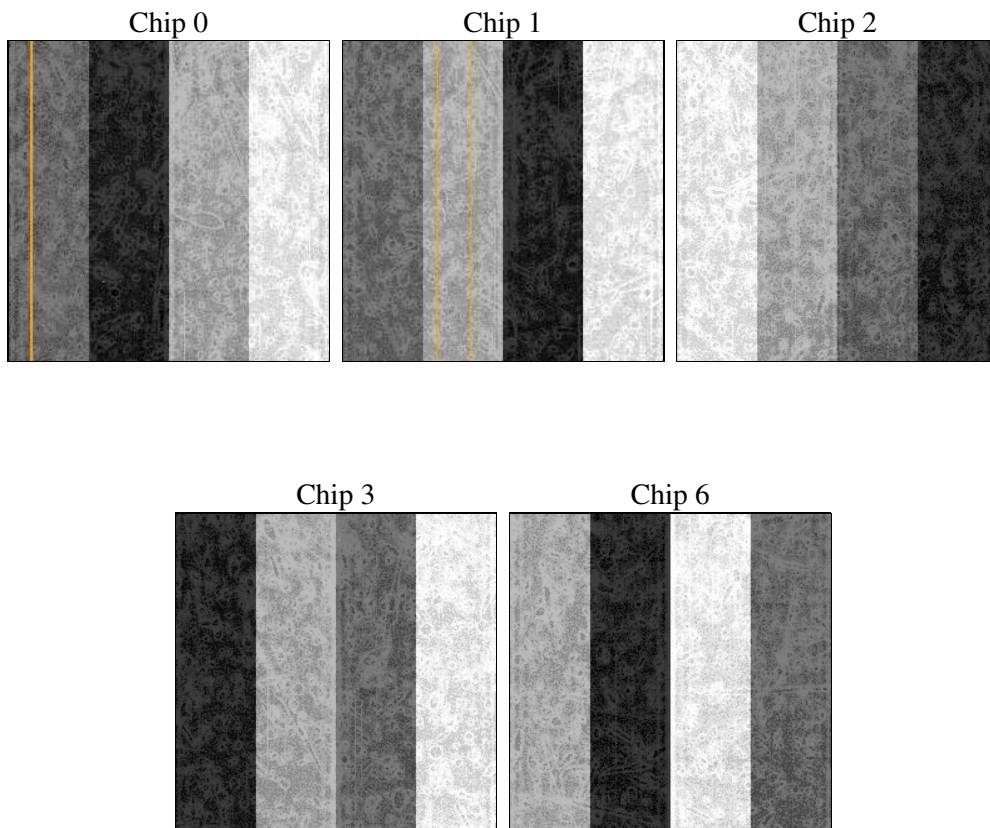
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10900.345000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8542.8133737445	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	8542.6902537346	Sum of GTIs [s]
date	2020-10-07T16:23:12	Date and time of file creation	ontime1	8545.8722539842	Sum of GTIs [s]
revision	6	Processing version of data	ontime2	8542.7723038197	Sum of GTIs [s]
			ontime3	8542.8133737445	Sum of GTIs [s]
			ontime6	8542.6491838396	Sum of GTIs [s]
			l1events	423480	Number of level 1 events

2.1.4 Events

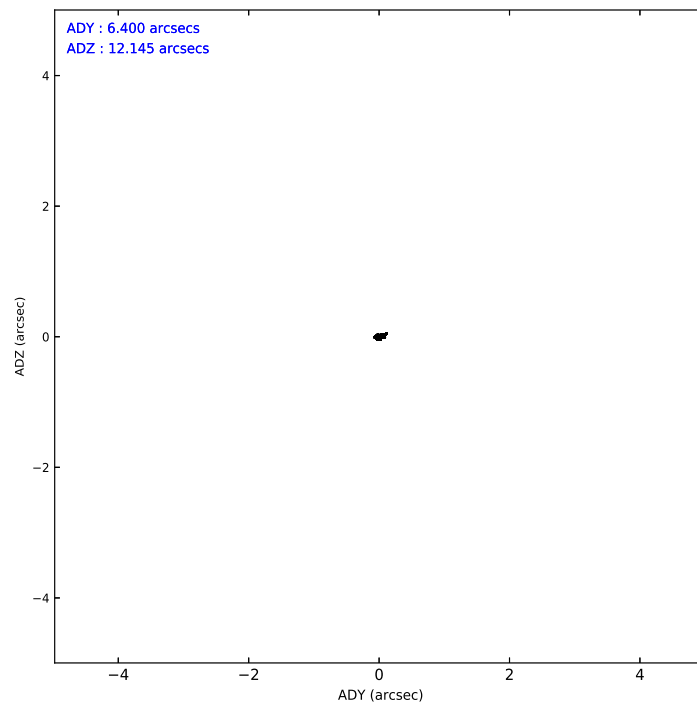
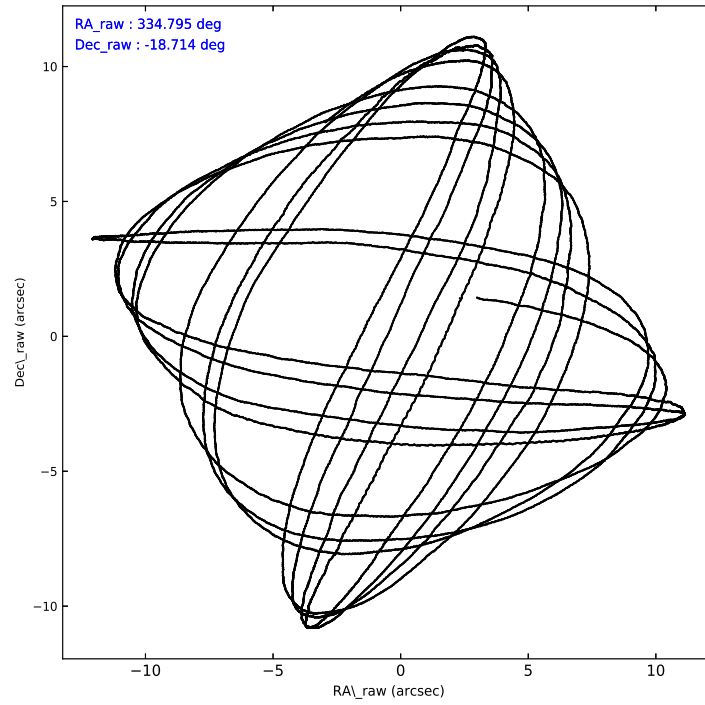
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	79147	88374	85846	84010	86103
rejected events	47737	49693	55585	52776	51559
rejected %	60%	56%	64%	62%	59%

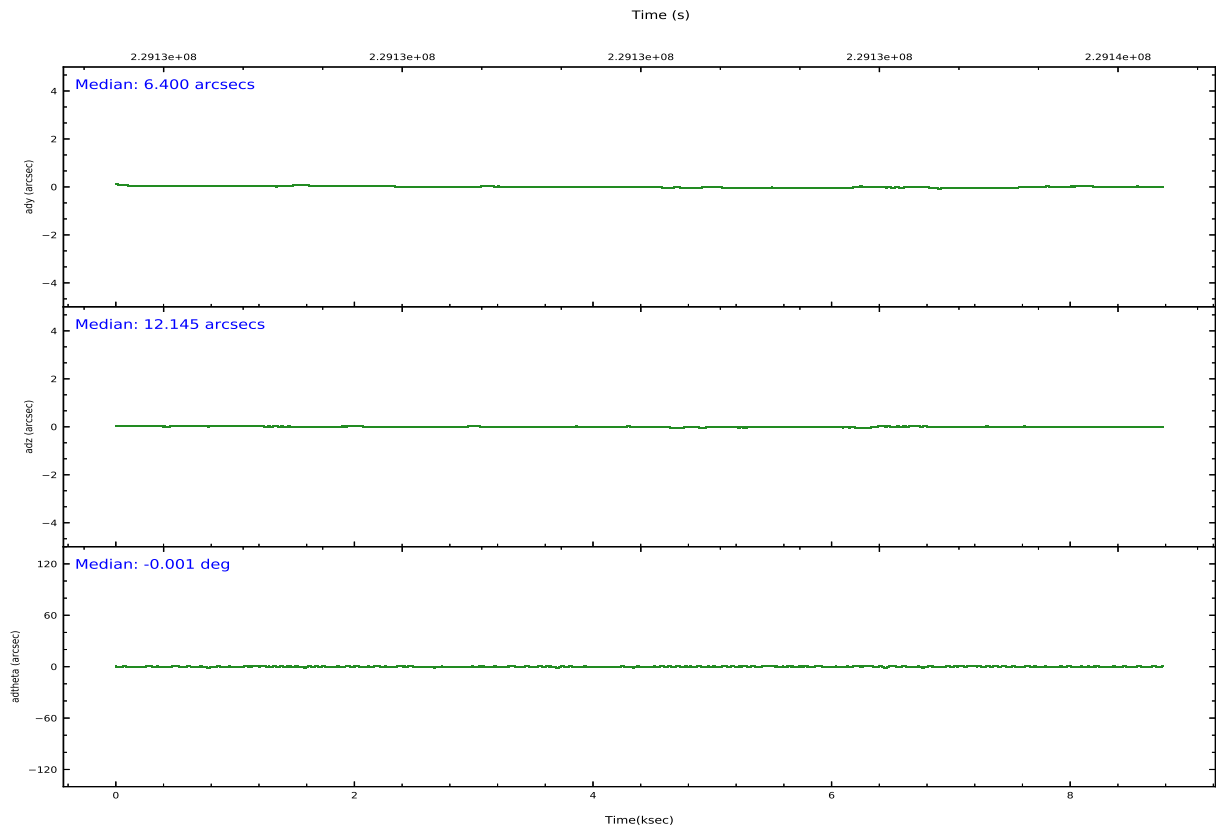
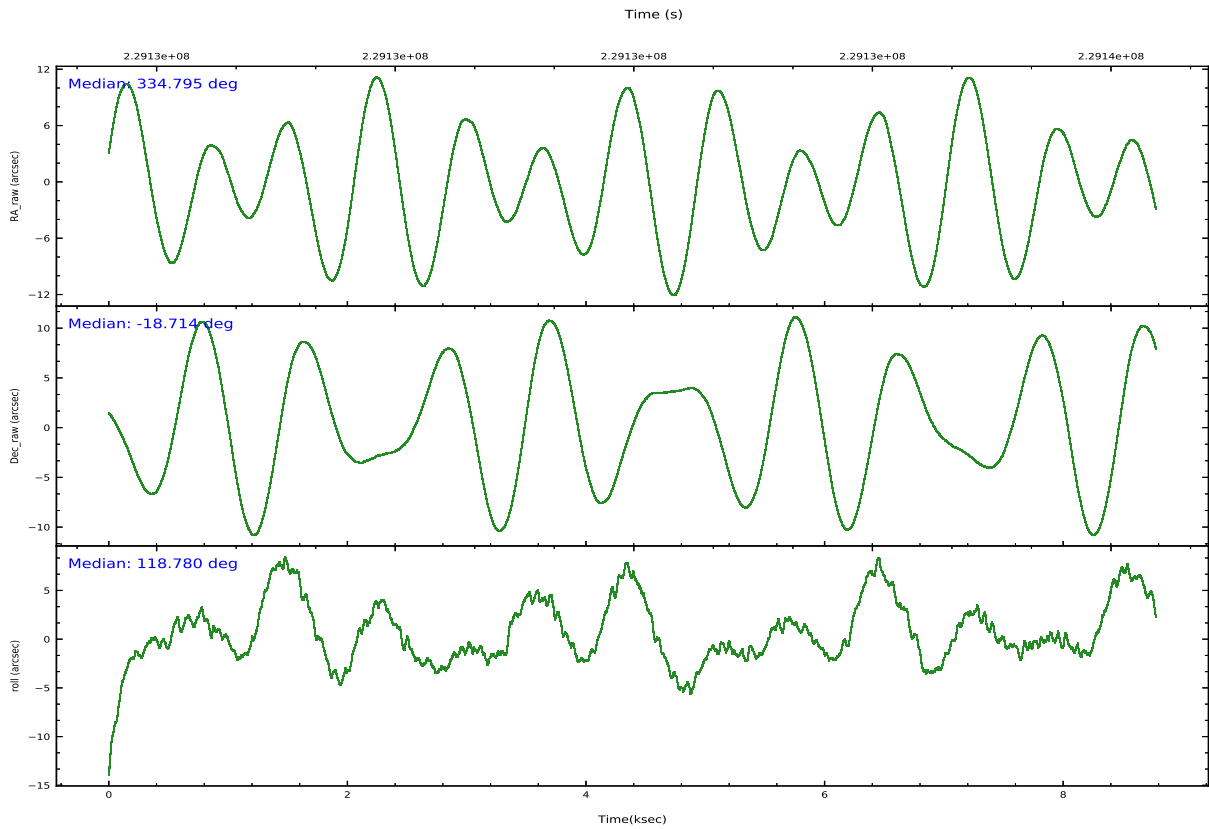
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	17535	23080	17268	18000	19558
	22%	26%	20%	21%	22%
grade 1 events	98	134	127	121	118
	0%	0%	0%	0%	0%
grade 2 events	5010	6374	4624	4700	5074
	6%	7%	5%	5%	5%
grade 3 events	2061	2112	1948	1965	1992
	2%	2%	2%	2%	2%
grade 4 events	1934	2090	1970	2007	2090
	2%	2%	2%	2%	2%
grade 5 events	1991	2170	2022	2254	2360
	2%	2%	2%	2%	2%
grade 6 events	5052	5246	4626	4753	6014
	6%	5%	5%	5%	6%
grade 7 events	45466	47168	53261	50210	48897
	57%	53%	62%	59%	56%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	8	8
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	OVERRIDE	OVERRIDE
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	334.819344	334.79885697351	Subarray requested	NONE	NONE
[deg] Pointing Dec	-18.727989	-18.713838739721	Alternating exposures requested	N	N
[deg] Pointing Roll	118.585928	118.78003490024	[s] Primary exposure time	3.1	3.1
[mm] SIM focus pos	-0.7809083437167272	-0.7809083437167272			
[mm] SIM defocus	0.001439854621705816	0.001439854621705816			
[mm] SIM translation stage pos	-229.4438428438578	-229.4438428438578			
[mm] SIM translation stage offset	-4.148620247574001	-4.148620247574001			
[s] Observation start time (MET)	229127598.184000	229127598.184			
Observation start date	2005-04-05T22:32:14	2005-04-05T22:33:18			
[s] Observation end time (MET)	229136401.000000	229136401			
Observation end date	2005-04-06T01:00:01	2005-04-06T01:00:00			
Read mode	TIMED	TIMED			

2.3 Aspect





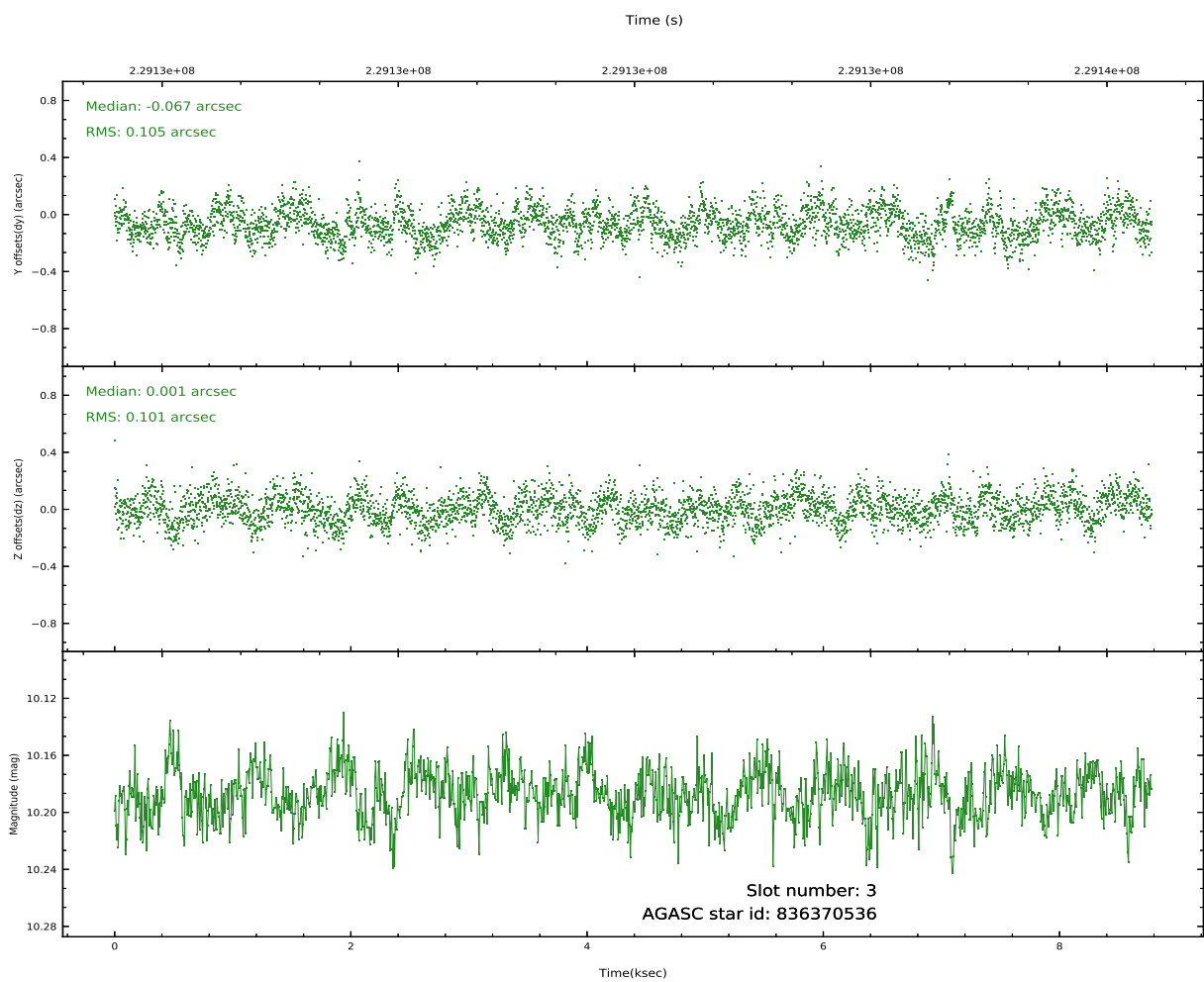
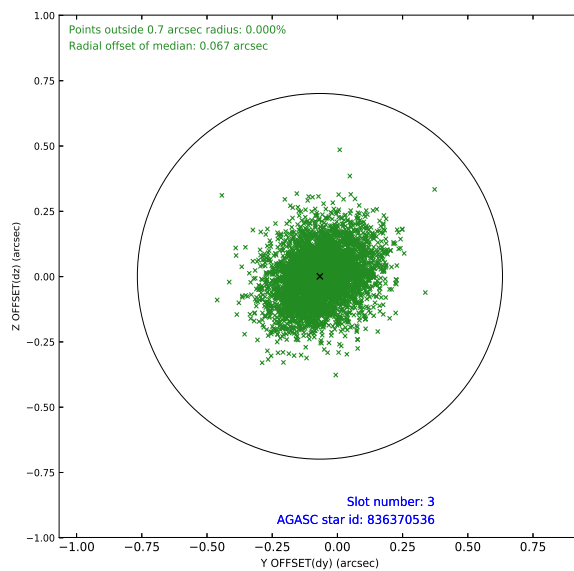
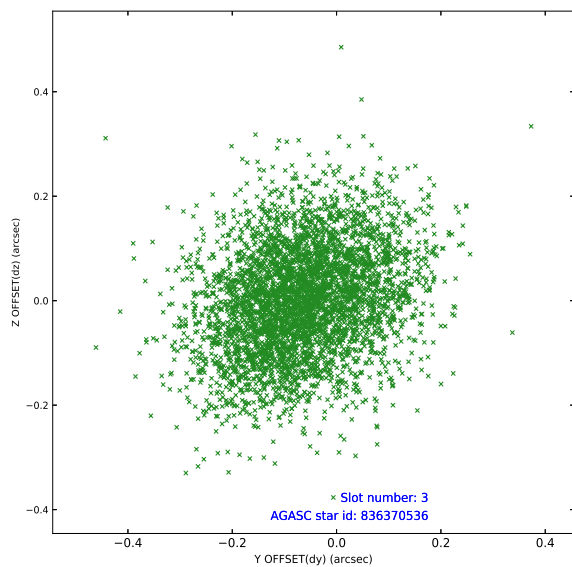
Slot Statistics

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	7.24	2142	1.000	0.080	-0.024	0.006	0.010	0.000000	0.000000	933.29	-920
1	FID		ACIS-I-5	7.22	2142	1.000	-0.234	0.080	0.006	0.010	0.000000	0.000000	-1814.77	976
2	FID		ACIS-I-6	7.25	2142	1.000	0.062	0.014	0.006	0.010	0.000000	0.000000	398.16	1621
3	GUIDE	used	836370536	10.19	4273	1.000	-0.067	0.001	0.155	0.253	333.932921	-18.493199	2183.72	2257
4	GUIDE	used	836372744	10.91	4276	1.000	-0.117	-0.196	0.289	0.453	334.489408	-18.590277	973.77	752
5	GUIDE	used	836372896	9.78	4281	1.000	0.180	-0.114	0.159	0.238	334.569486	-19.201028	-1089.04	1561
6	GUIDE	used	836381144	9.80	4277	1.000	0.038	0.117	0.209	0.303	334.947885	-18.243865	1320.21	-1218
7	GUIDE	used	836382088	7.81	4282	1.000	-0.036	0.189	0.082	0.125	335.350410	-18.505750	-166.40	-1973

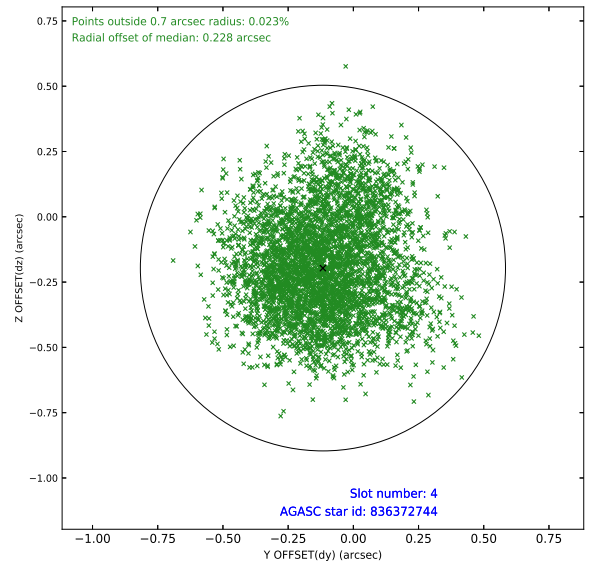
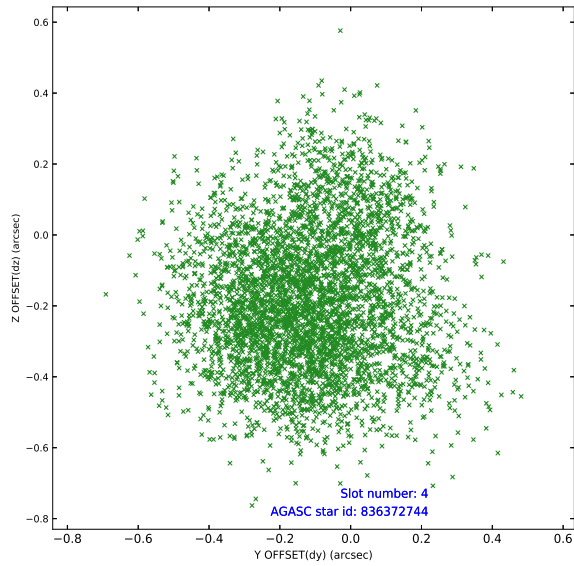
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2.4 Star Slots

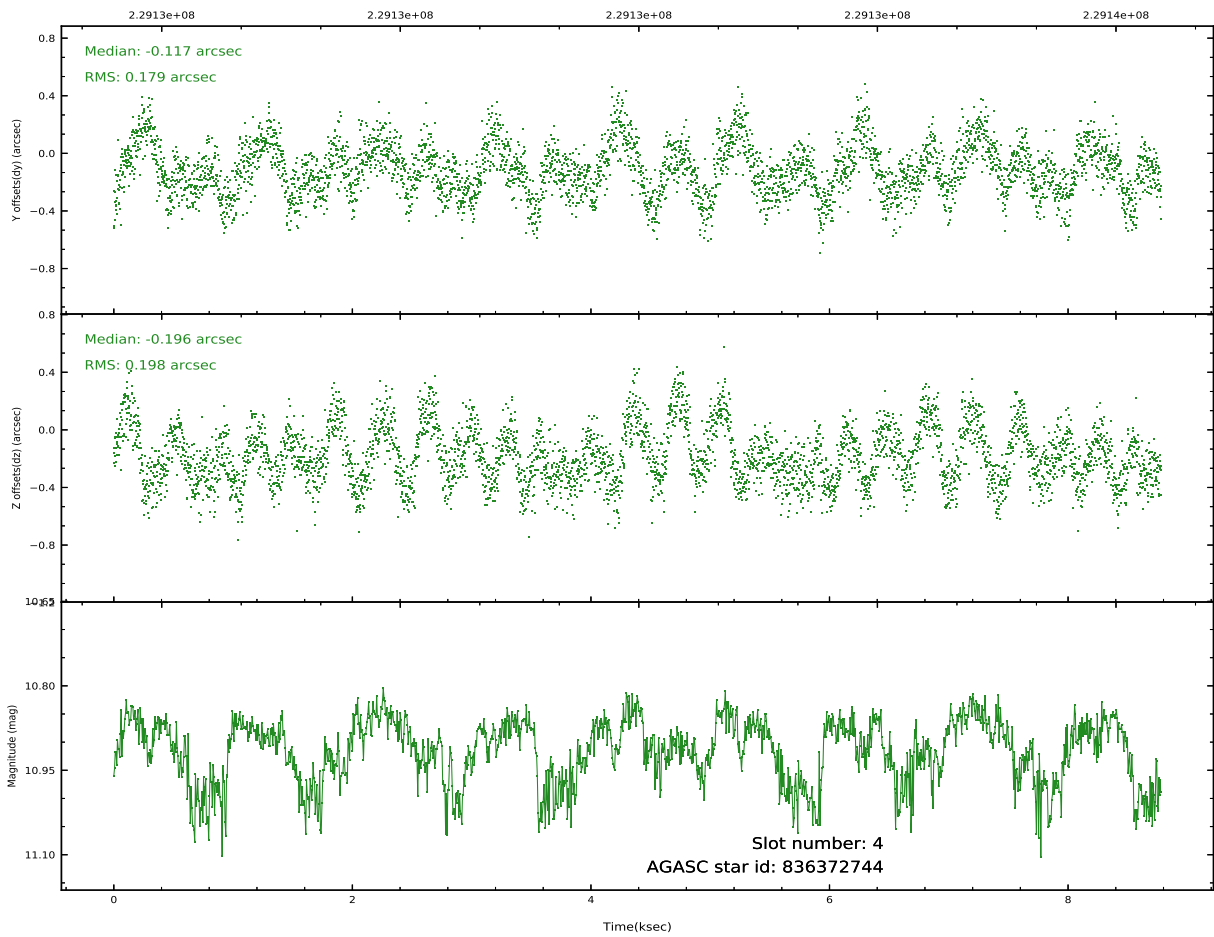
2.4.1 Slot 3



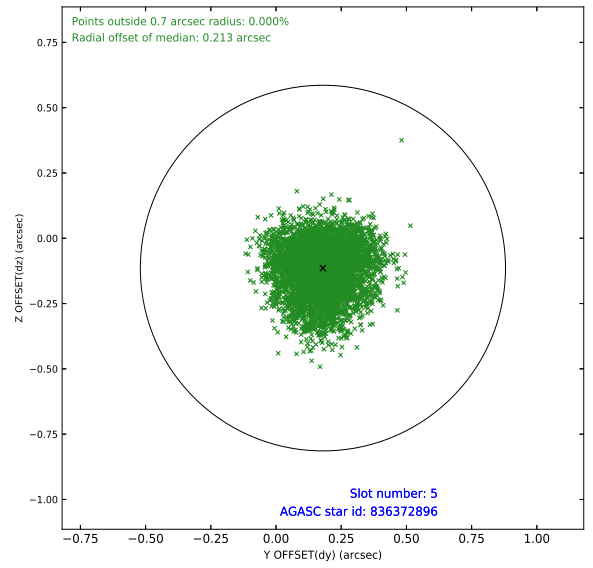
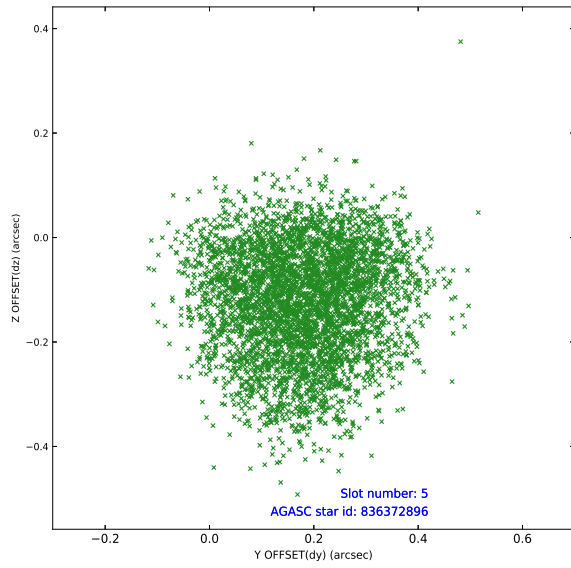
2.4.2 Slot 4



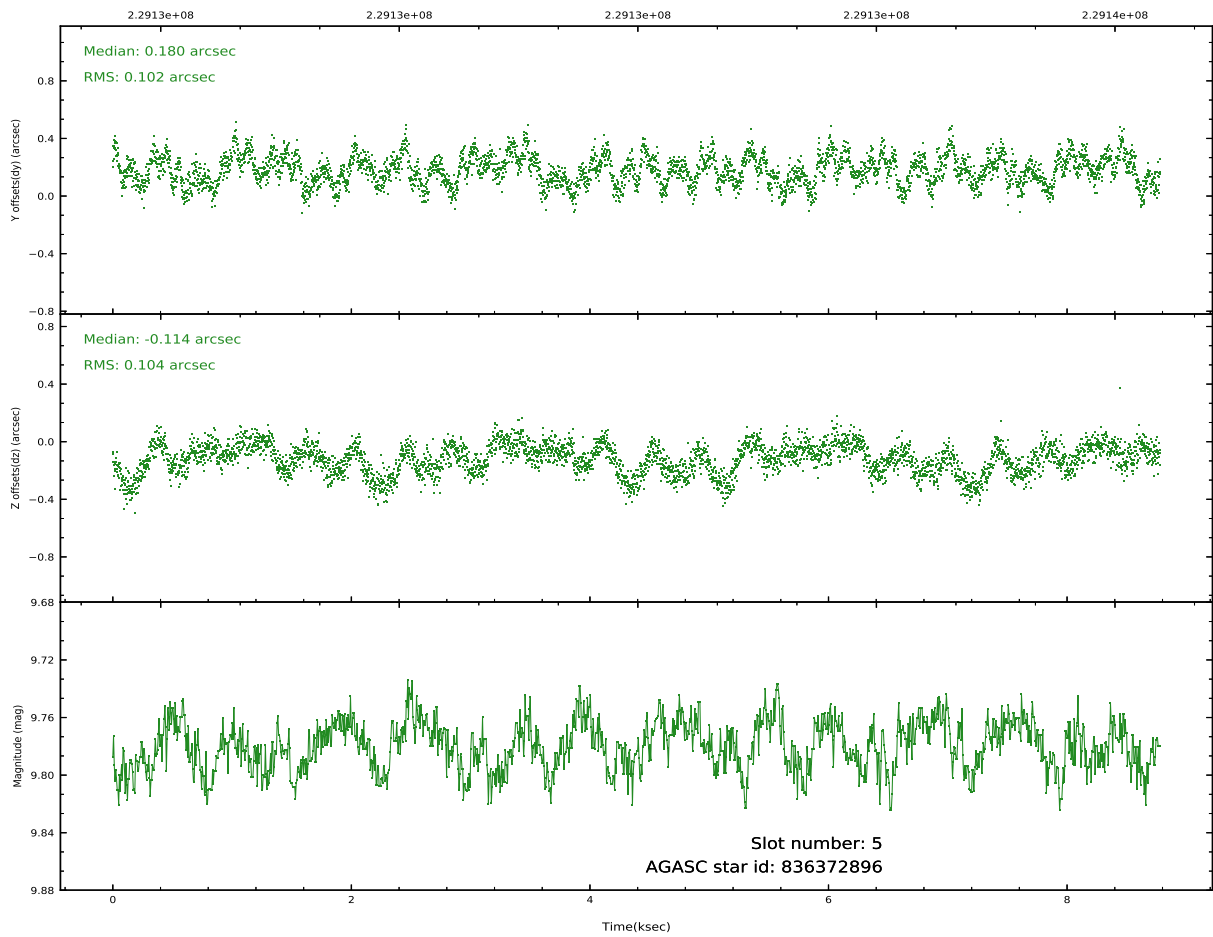
Time (s)



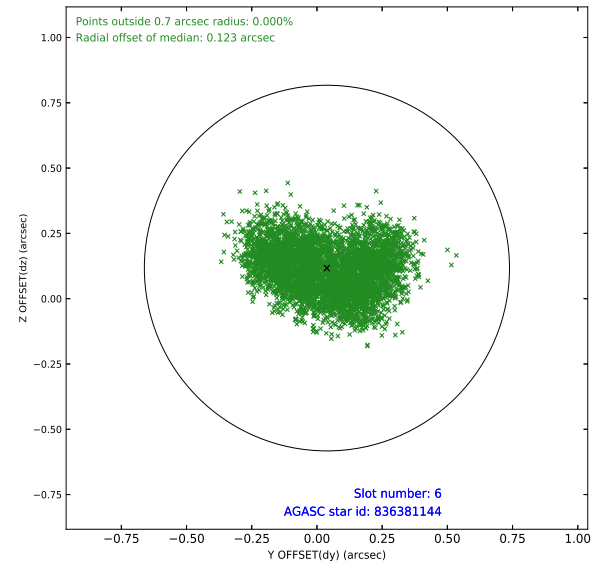
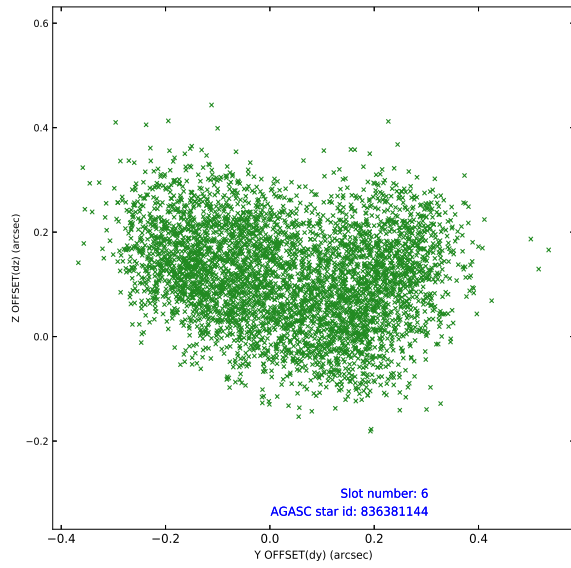
2.4.3 Slot 5



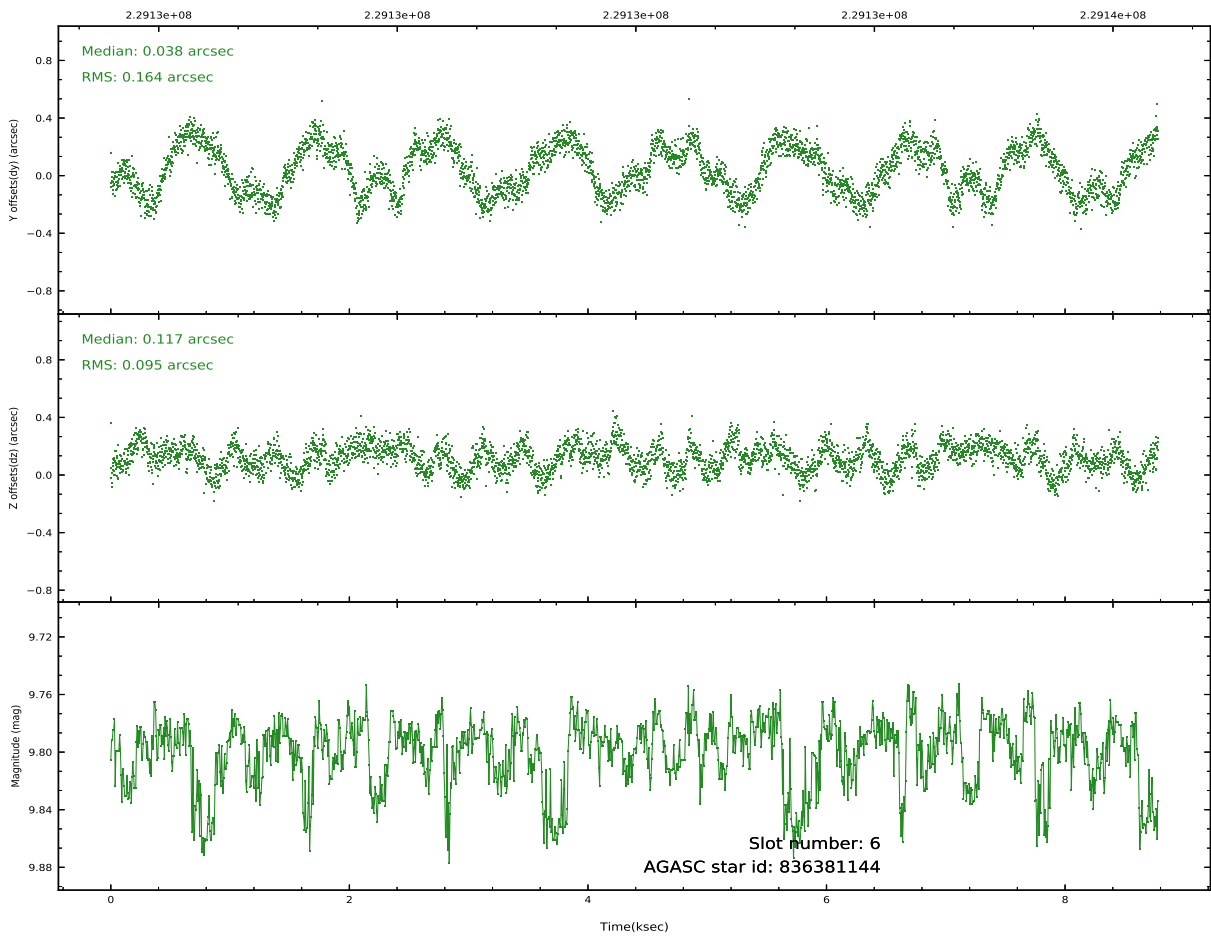
Time (s)



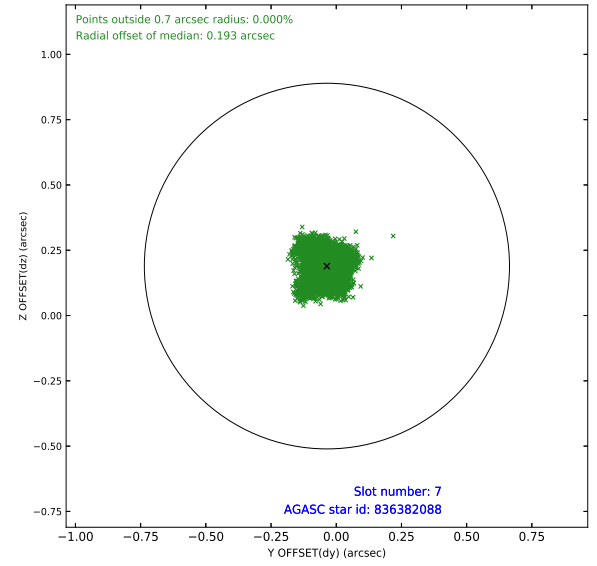
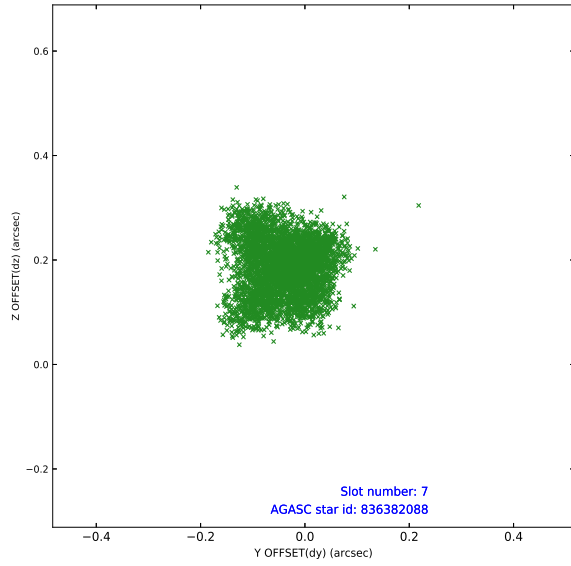
2.4.4 Slot 6



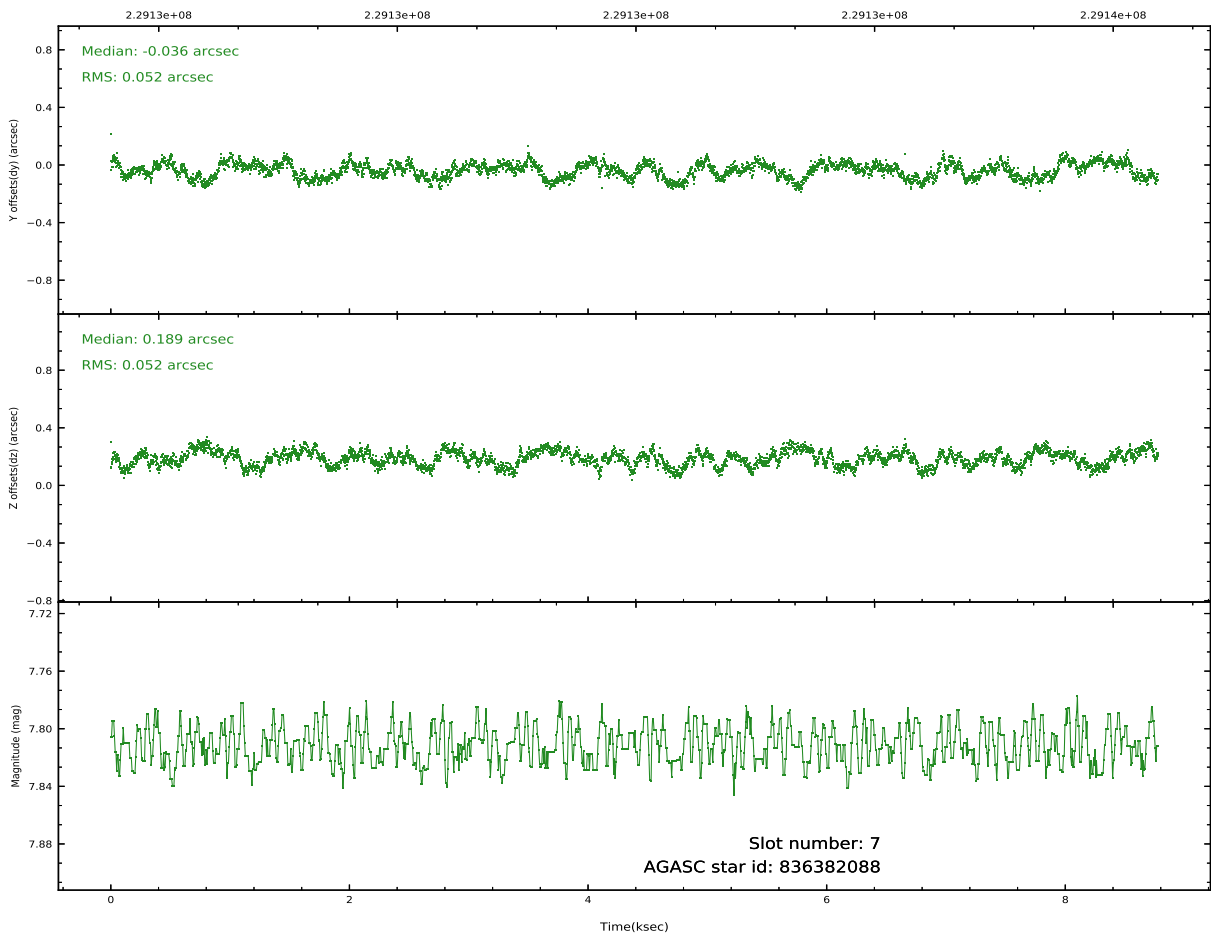
Time (s)



2.4.5 Slot 7

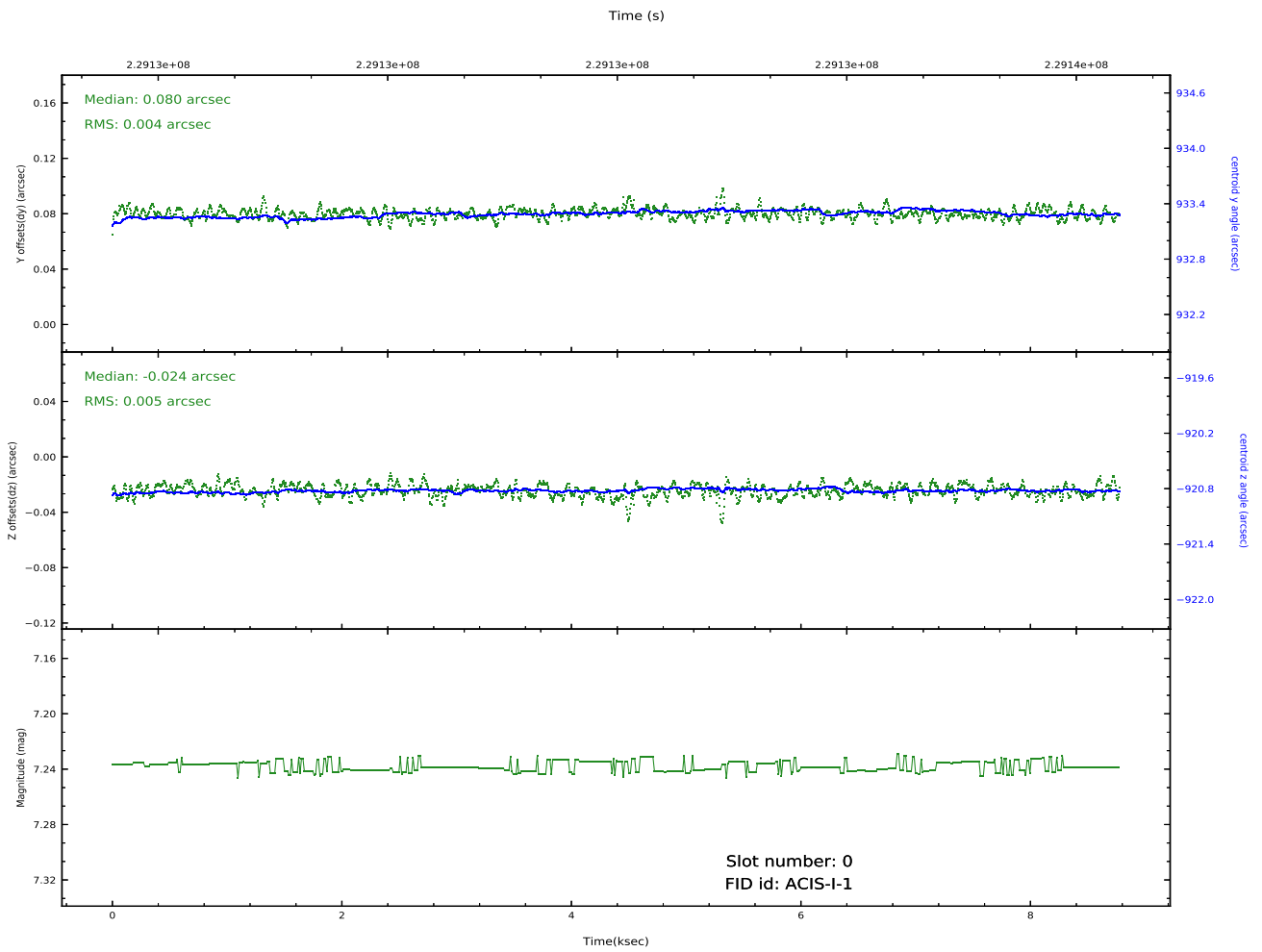
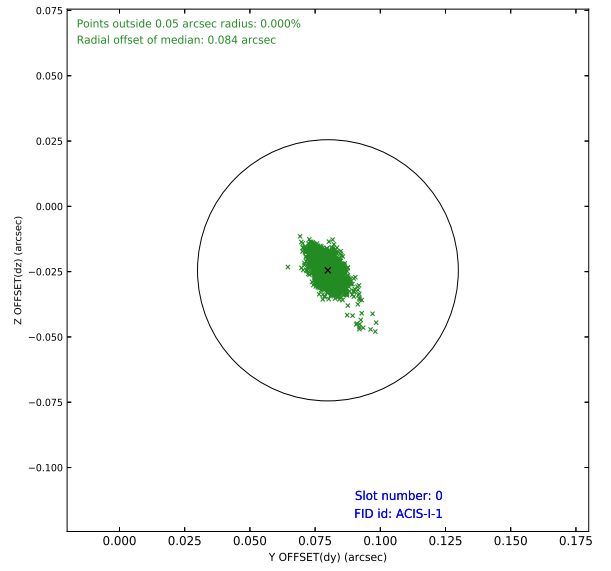
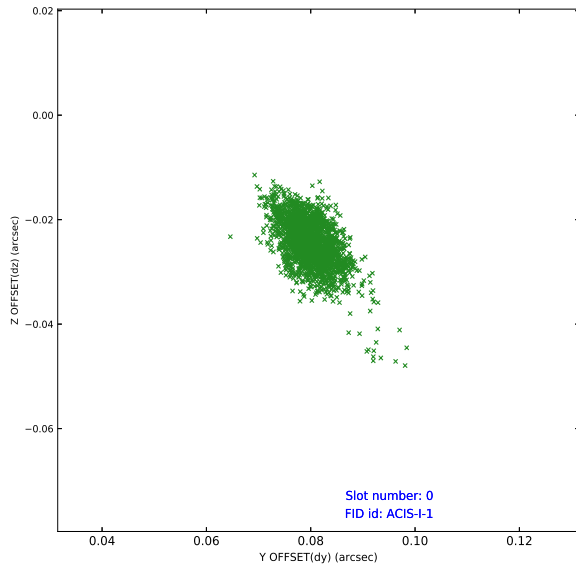


Time (s)

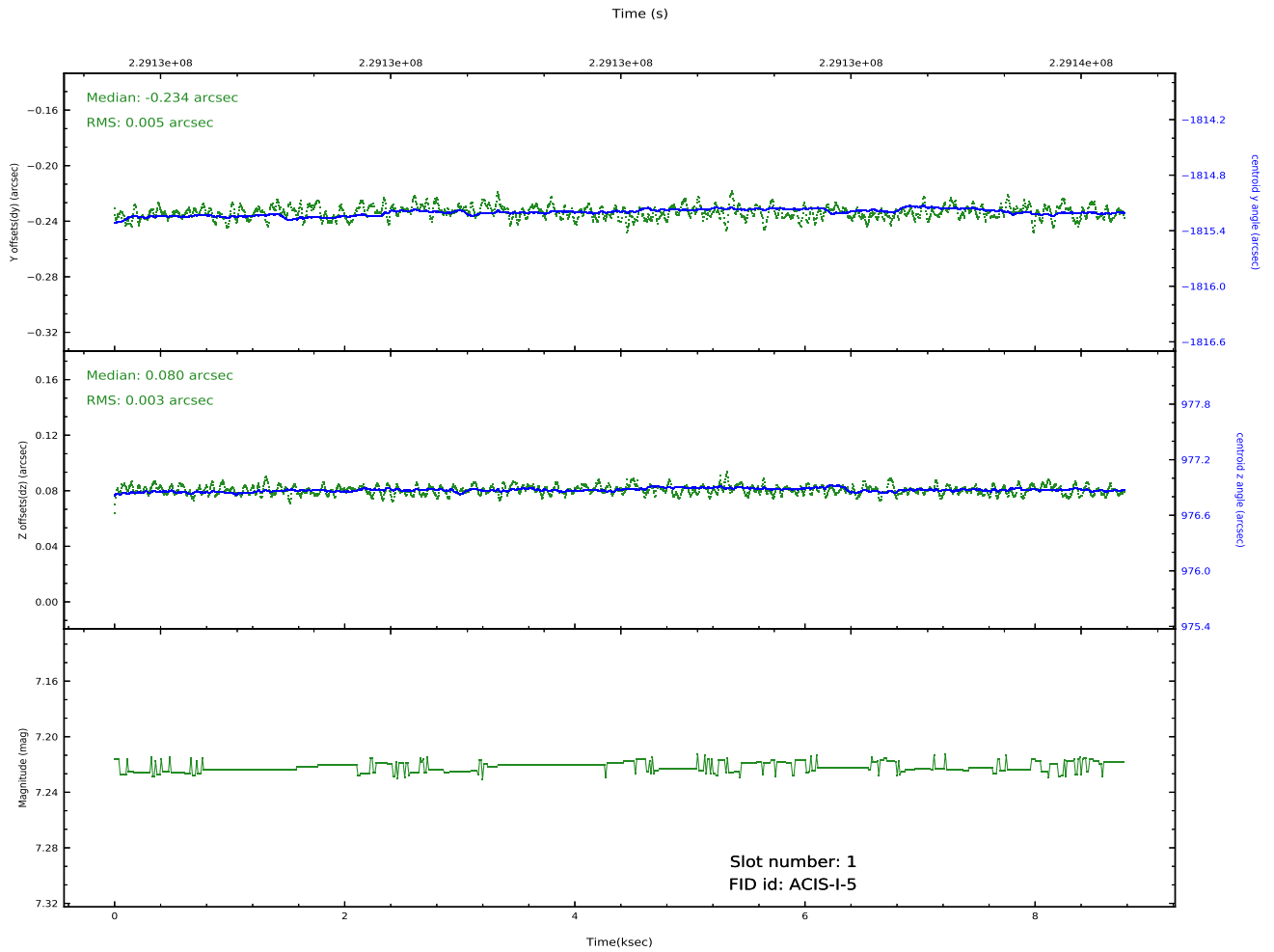
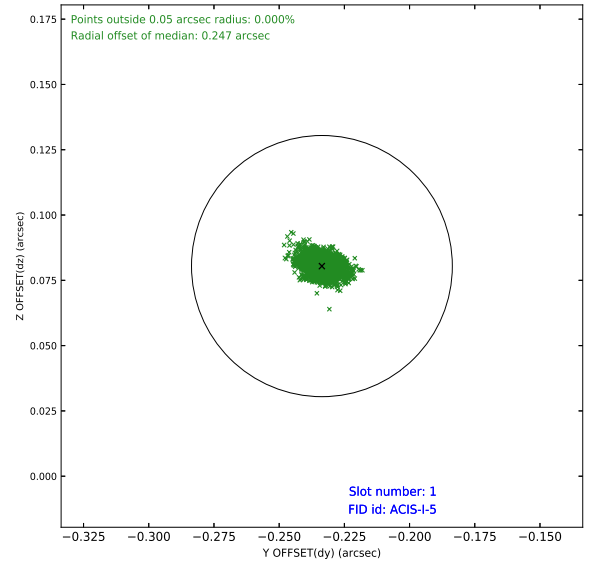
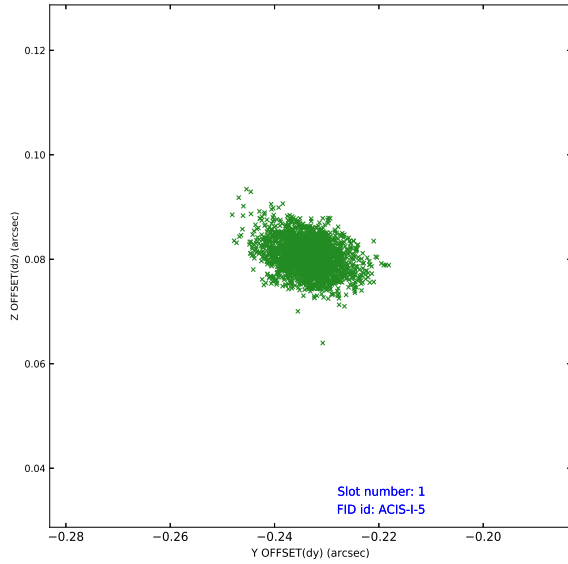


2.5 FID Slots

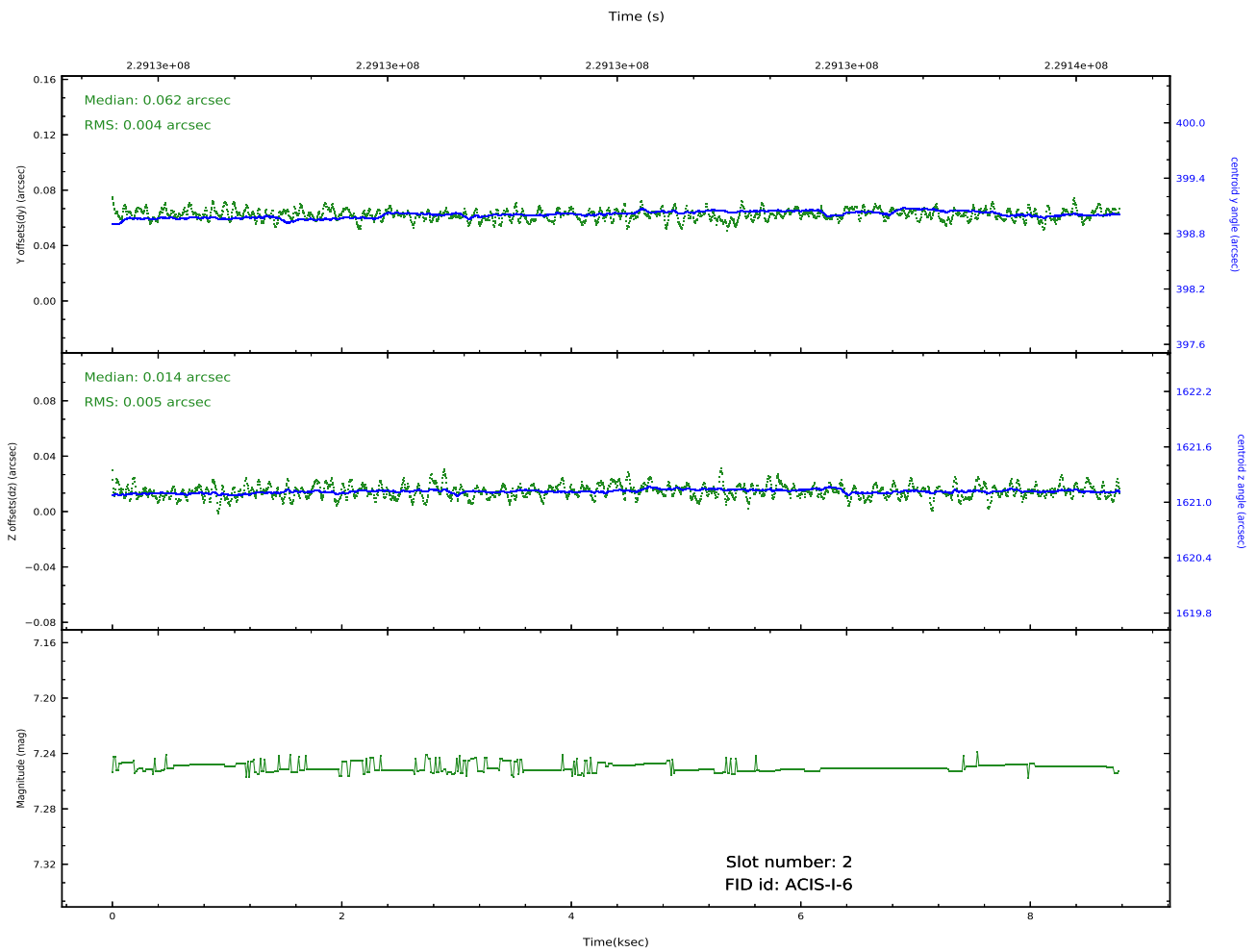
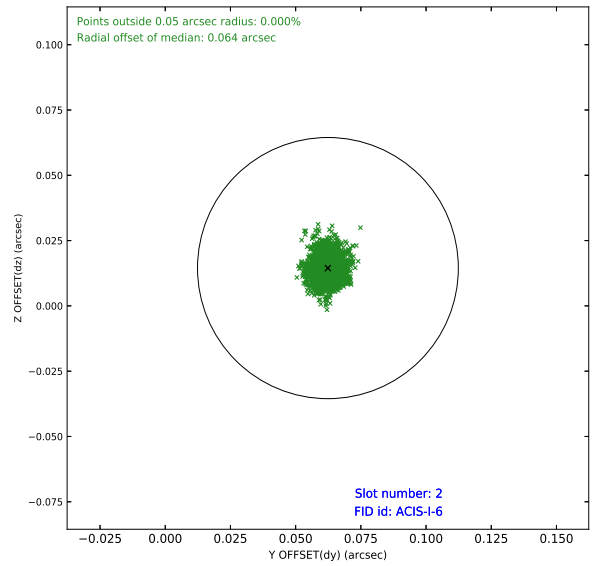
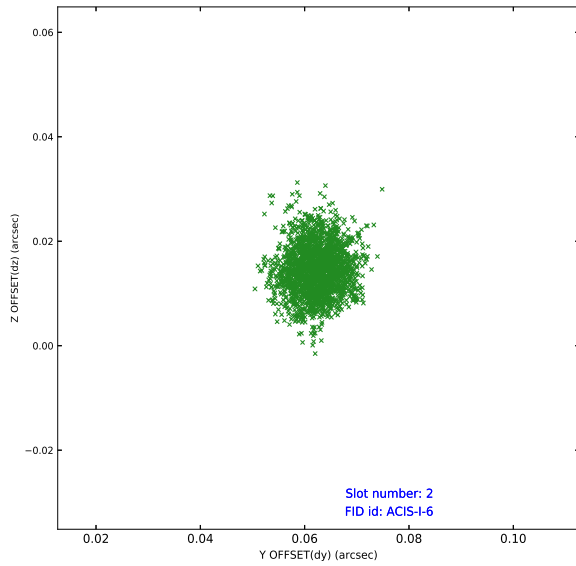
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.571

A.2 Comments

This observation was interrupted by safing of the science instruments due to high solar radiation environment. The observation was interrupted at 2005:096:00:59.

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Charge time for this observation remains at previous value of 8.571 ksec, although with the current processing the charge time would have been 8.54 ksec.