

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5813 - L2 Version 4
Chandra X-Ray Center

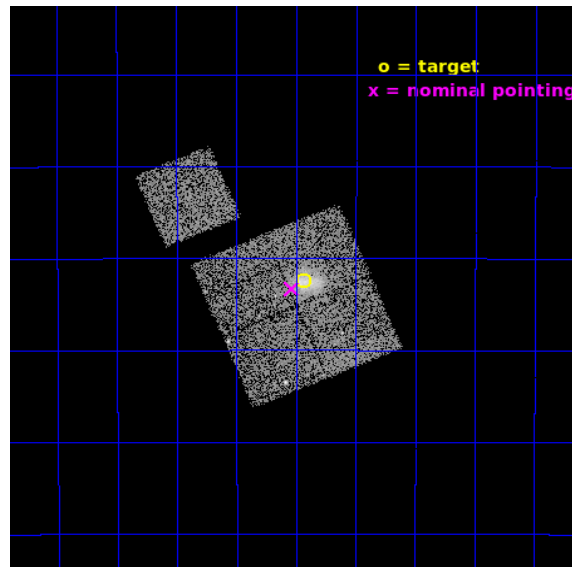
L2 Processing Date : Oct 5 2020

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1 Front

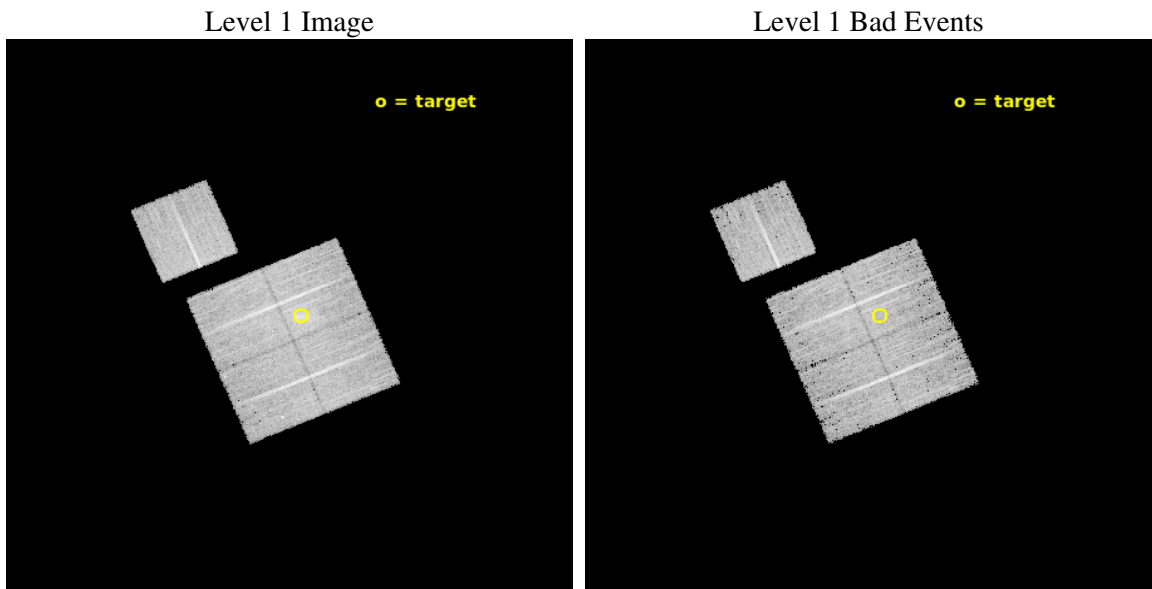
seq_num	800526	Sequence number
obs_id	5813	Observation id
title	MACS: The most massive galaxy clusters at $z > 0.3$	Proposal title
observer	Harald Ebeling	Principal investigator
object	MACSJ0553.4-3342	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	88.357417	Observer's specified target RA [deg]
dec_targ	-33.707806	Observer's specified target Dec [deg]
ra_nom	88.383748474538	Nominal RA [deg]
dec_nom	-33.721933252907	Nominal Dec [deg]
roll_nom	337.08799700808	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10074.999980599	Sum of GTIs [s]
livetime	9943.3626887451	Livetime [s]
ontime0	10071.858970404	Sum of GTIs [s]
ontime1	10074.999980599	Sum of GTIs [s]
ontime2	10074.999980599	Sum of GTIs [s]
ontime3	10074.999980599	Sum of GTIs [s]
ontime6	10074.999980599	Sum of GTIs [s]
l2events	29388	Number of level 2 events



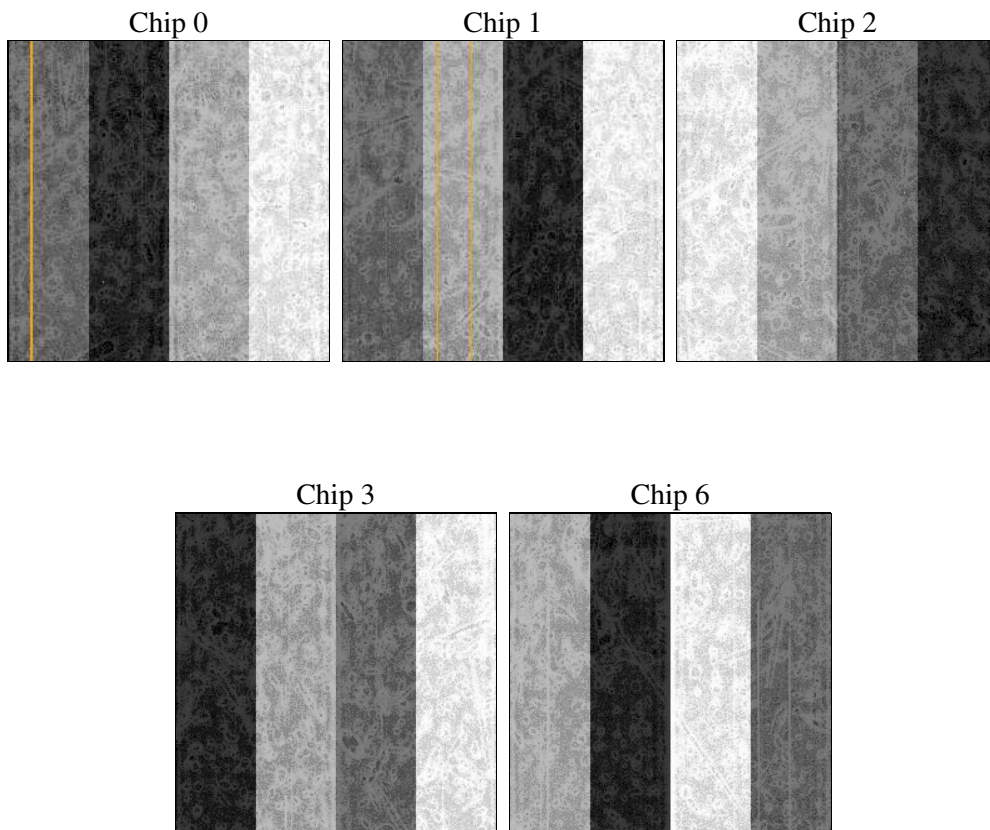
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10300.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10074.999980599	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	10071.858970404	Sum of GTIs [s]
date	2020-10-06T03:18:26	Date and time of file creation	ontime1	10074.999980599	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	10074.999980599	Sum of GTIs [s]
			ontime3	10074.999980599	Sum of GTIs [s]
			ontime6	10074.999980599	Sum of GTIs [s]
			l1events	294006	Number of level 1 events

2.1.4 Events

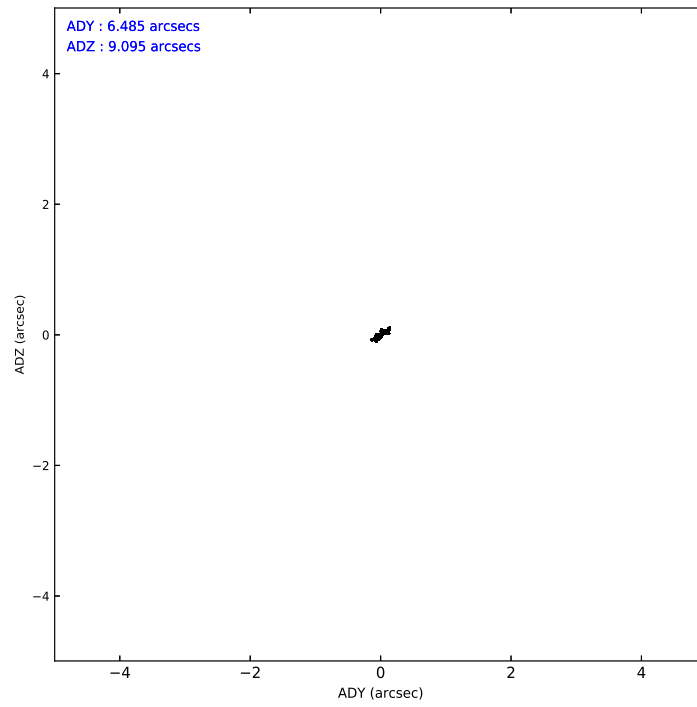
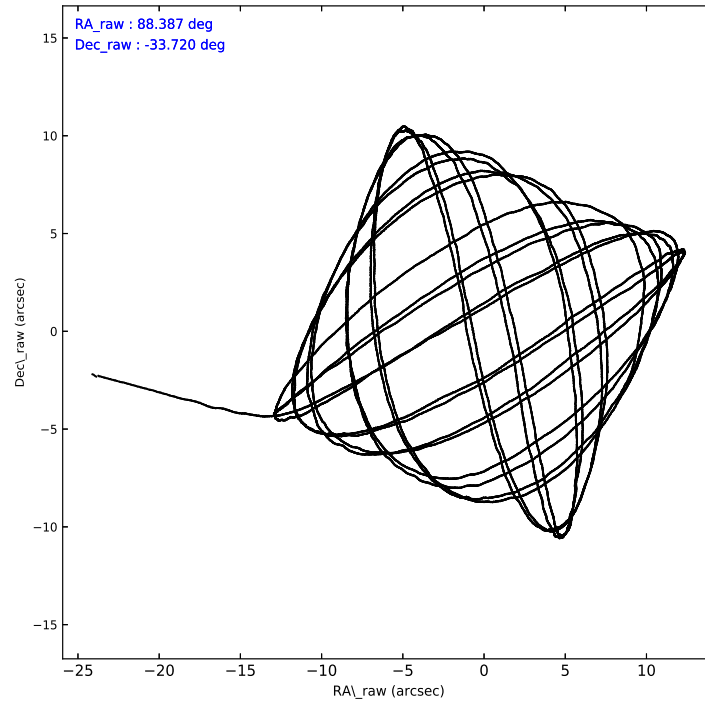
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	53920	56144	61066	63620	59256
rejected events	47587	49353	54946	53873	53394
rejected %	88%	87%	89%	84%	90%

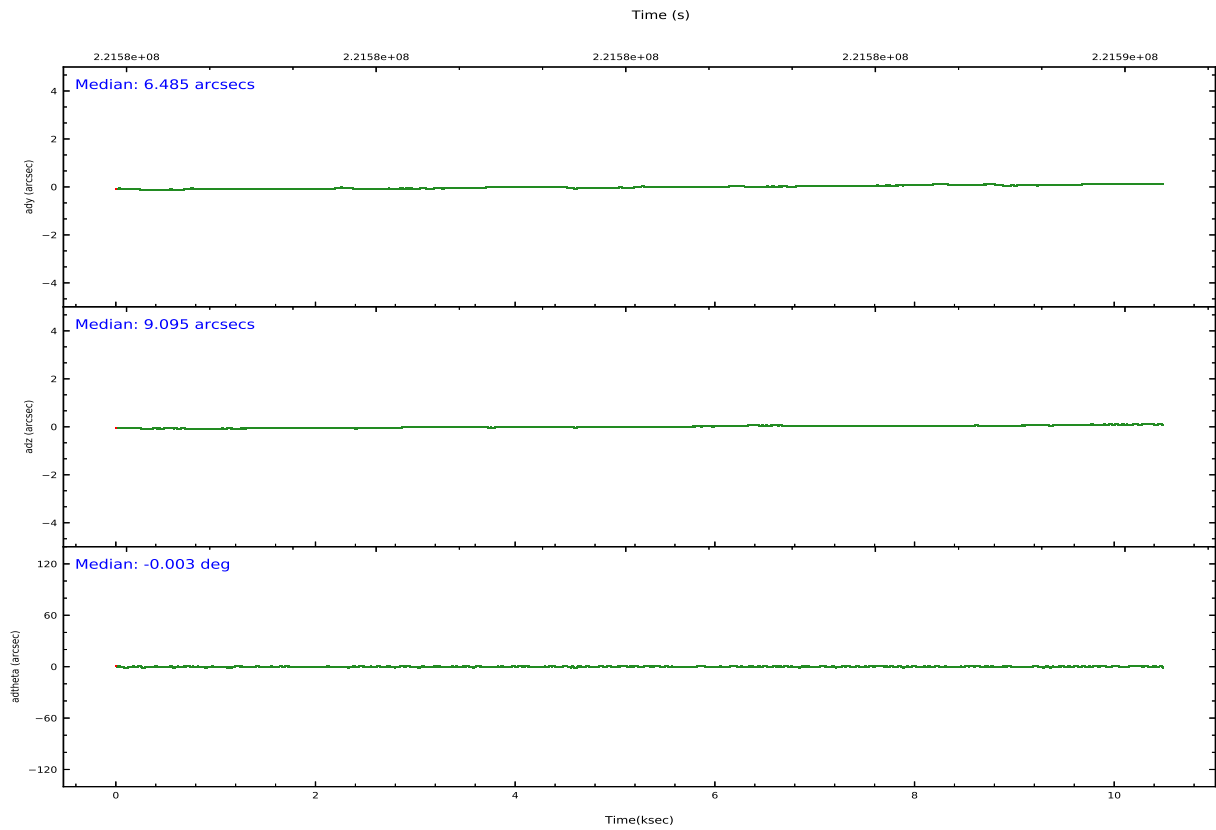
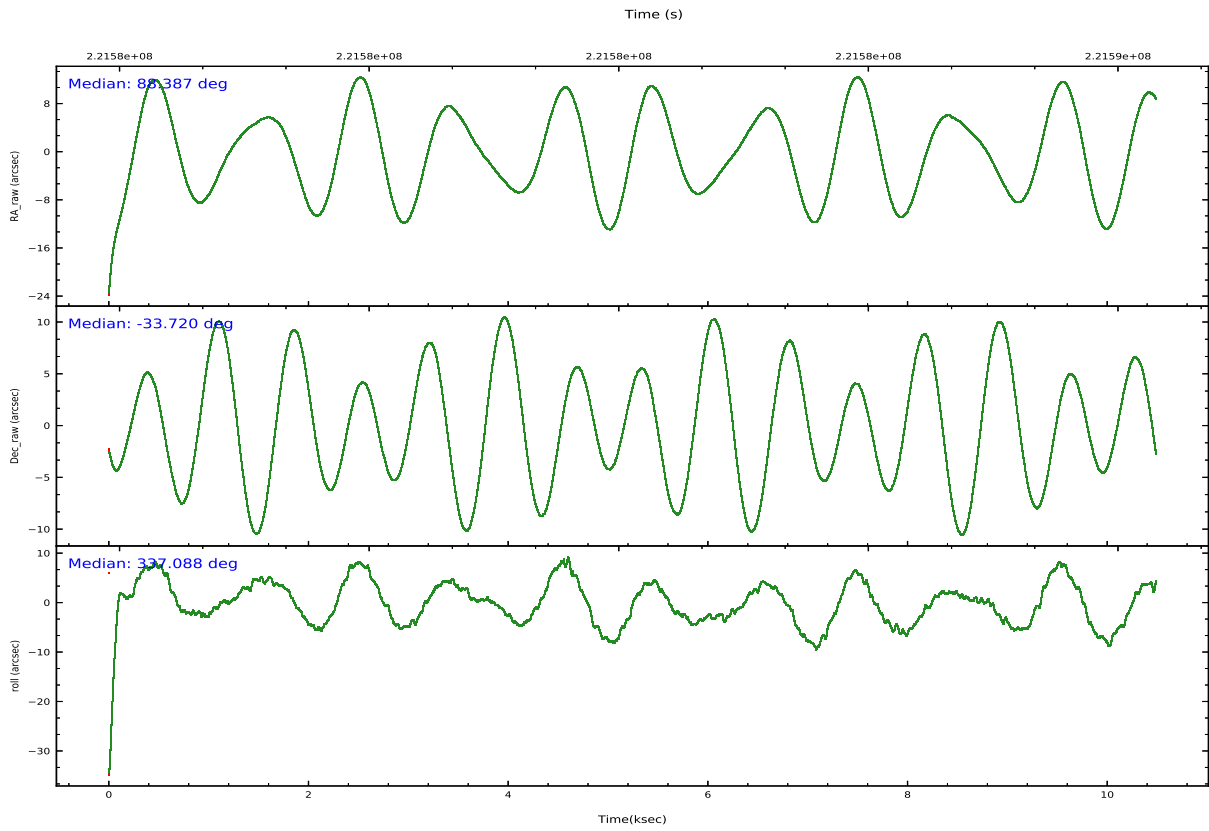
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2387	2492	2303	5385	2102
	4%	4%	3%	8%	3%
grade 1 events	21	31	23	55	15
	0%	0%	0%	0%	0%
grade 2 events	1417	1442	1389	1645	1218
	2%	2%	2%	2%	2%
grade 3 events	691	761	710	772	668
	1%	1%	1%	1%	1%
grade 4 events	662	736	641	738	668
	1%	1%	1%	1%	1%
grade 5 events	2069	2169	2026	2373	2232
	3%	3%	3%	3%	3%
grade 6 events	1178	1367	1079	1210	1210
	2%	2%	1%	1%	2%
grade 7 events	45495	47146	52895	51442	51143
	84%	83%	86%	80%	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	88.354438	88.383748474538	Subarray requested	NONE	NONE
[deg] Pointing Dec	-33.723793	-33.721933252907	Alternating exposures requested	N	N
[deg] Pointing Roll	336.864446	337.08799700808	[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)	221577582.184000	221576627.86638			
Observation start date	2005-01-08T13:18:38	2005-01-08T13:03:47			
[s] Observation end time (MET)	221587882.184000	221588887.37943			
Observation end date	2005-01-08T16:10:18	2005-01-08T16:28:07			
Read mode	TIMED	TIMED			

2.3 Aspect





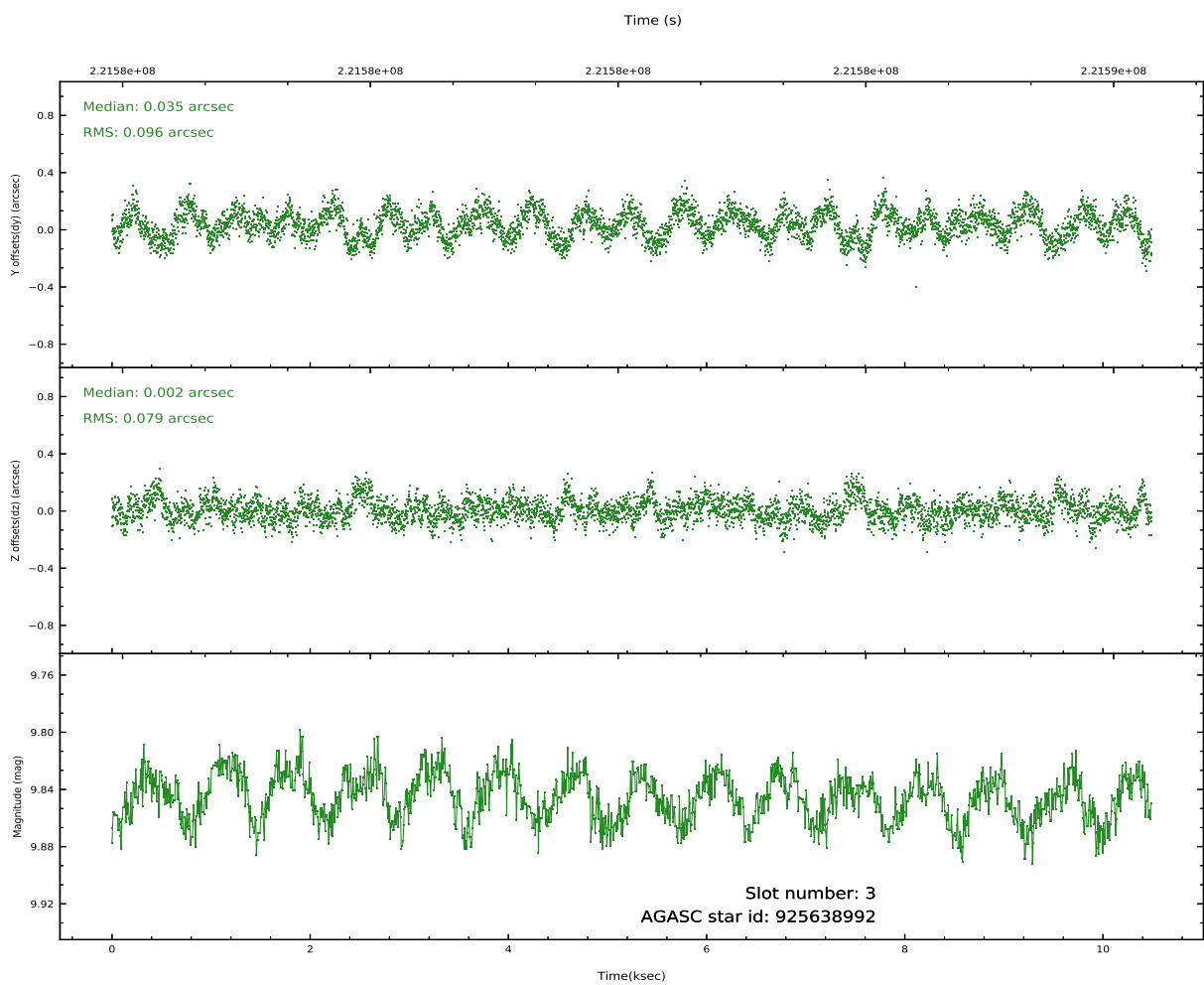
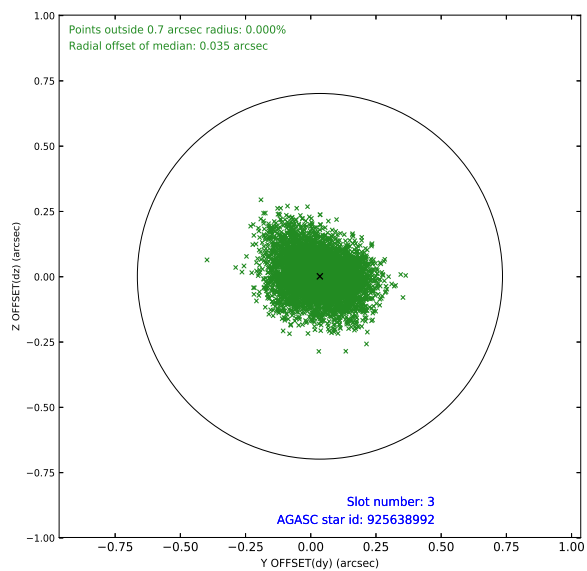
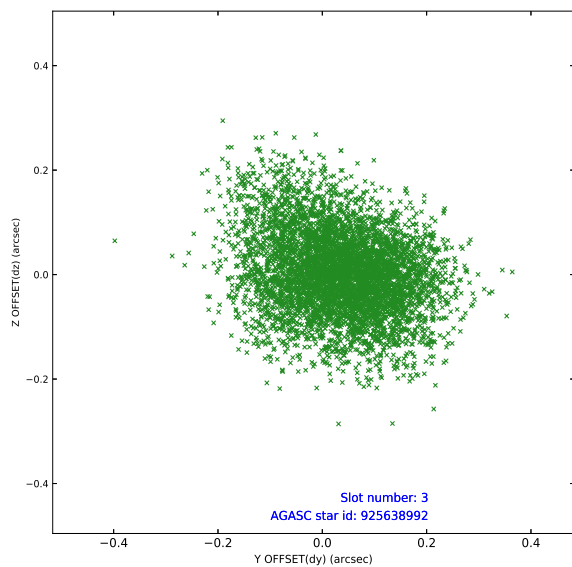
Slot Statistics

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	2559	1.000	0.053	-0.019	0.007	0.013	0.000000	0.000000	933.20	-917
1	FID		ACIS-I-5	7.23	2559	1.000	-0.235	0.050	0.006	0.010	0.000000	0.000000	-1814.94	979
2	FID		ACIS-I-6	7.25	2559	1.000	0.091	0.040	0.007	0.013	0.000000	0.000000	398.21	1624
3	GUIDE	used	925638992	9.85	5113	1.000	0.035	0.002	0.134	0.215	87.997656	-33.668779	-1059.68	-239
4	GUIDE	used	925642880	7.76	5117	1.000	0.017	0.042	0.071	0.111	89.133148	-33.434507	1745.60	1869
5	GUIDE	used	926155024	9.33	5114	1.000	-0.023	-0.025	0.087	0.139	87.823438	-33.822879	-1317.80	-955
6	GUIDE	used	926158216	8.89	5116	1.000	-0.027	0.021	0.075	0.121	88.538121	-34.303744	1323.13	-1705
7	GUIDE	used	926159088	8.02	5116	1.000	0.003	-0.035	0.062	0.099	88.577460	-33.879562	834.19	-254

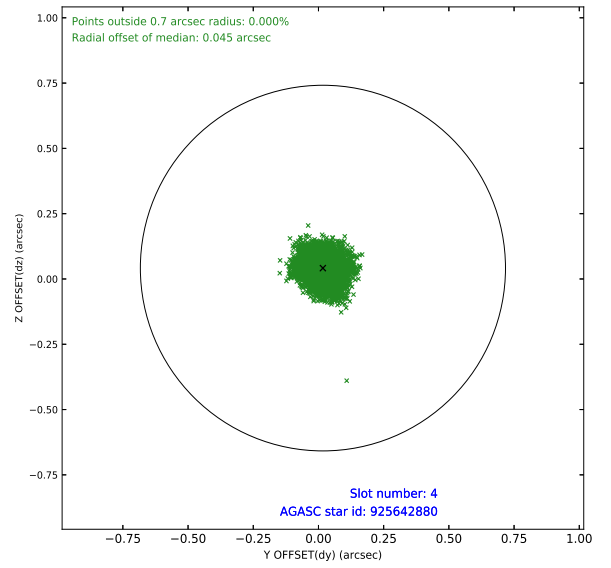
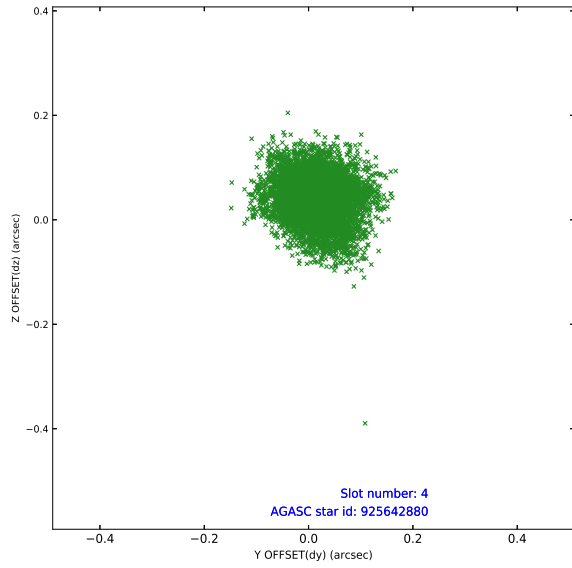
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2.4 Star Slots

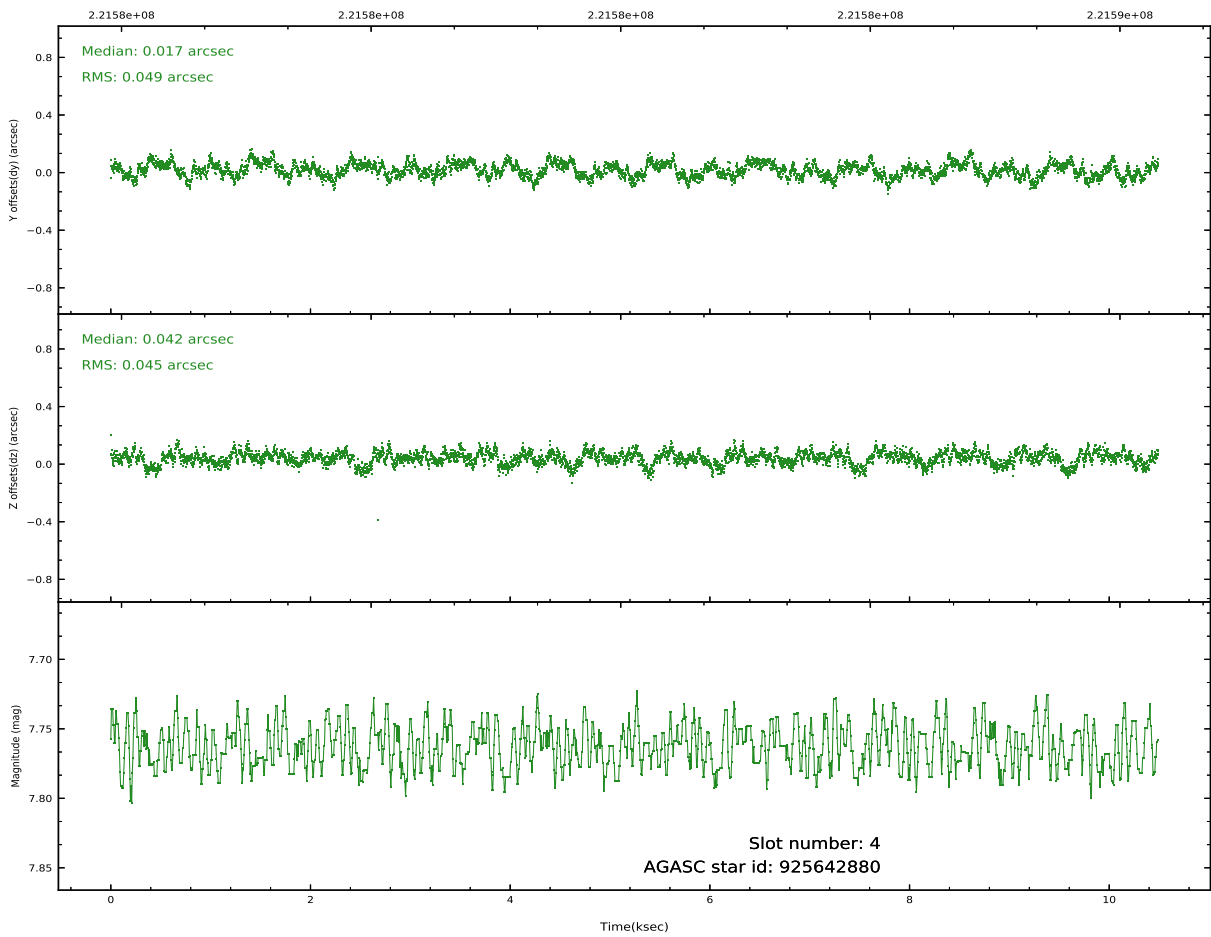
2.4.1 Slot 3



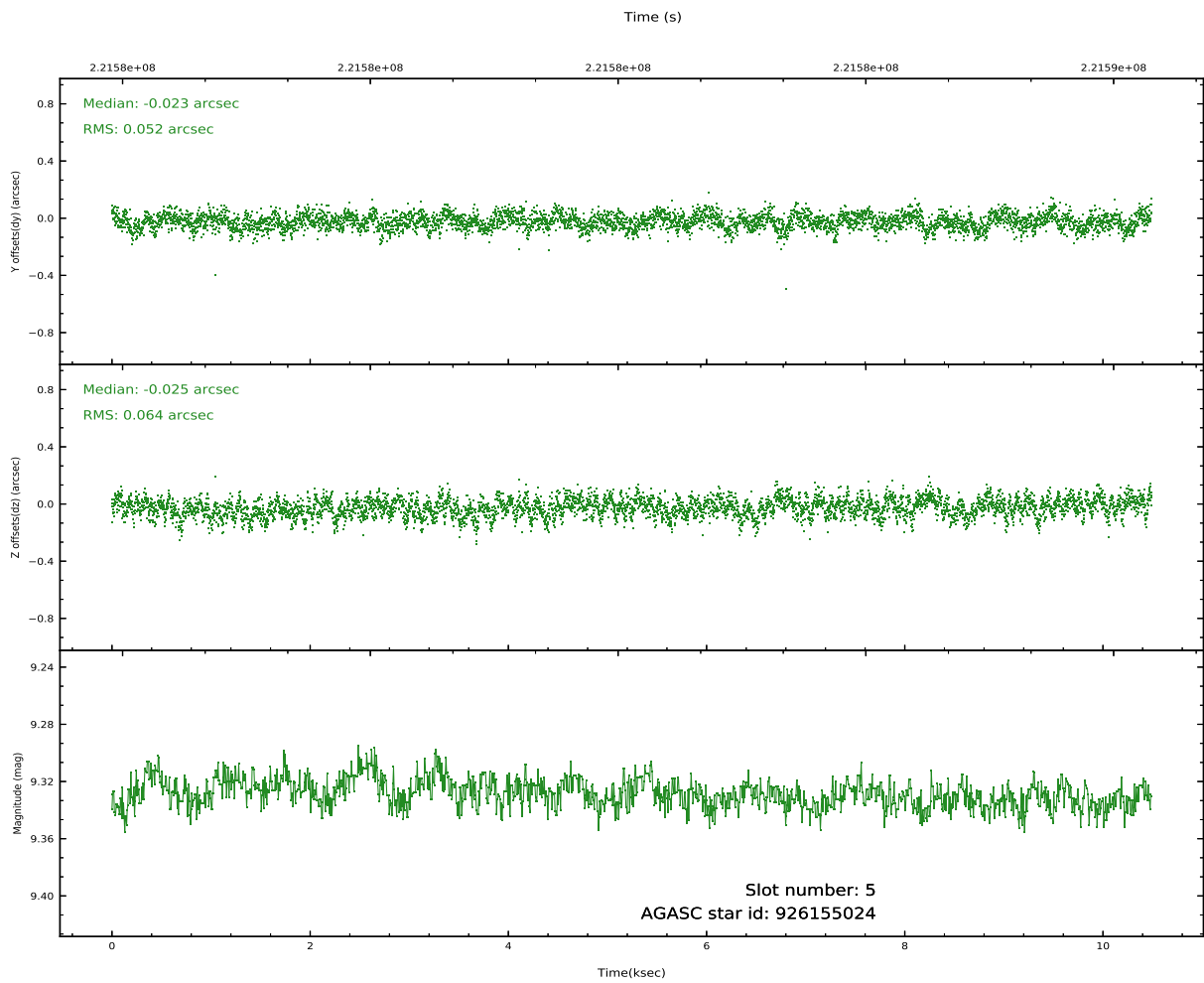
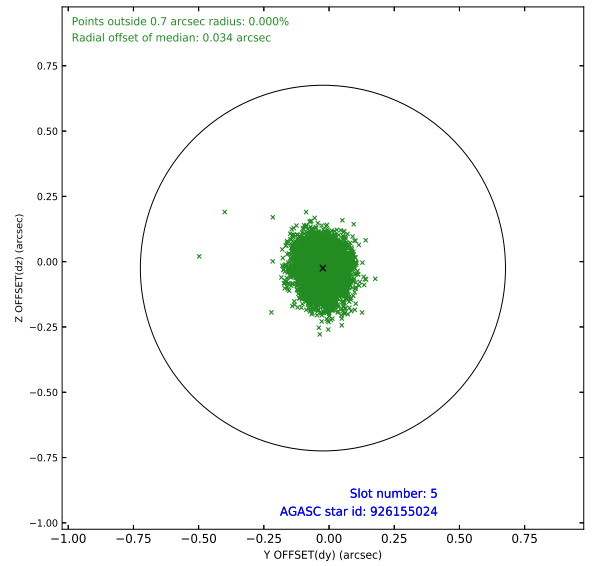
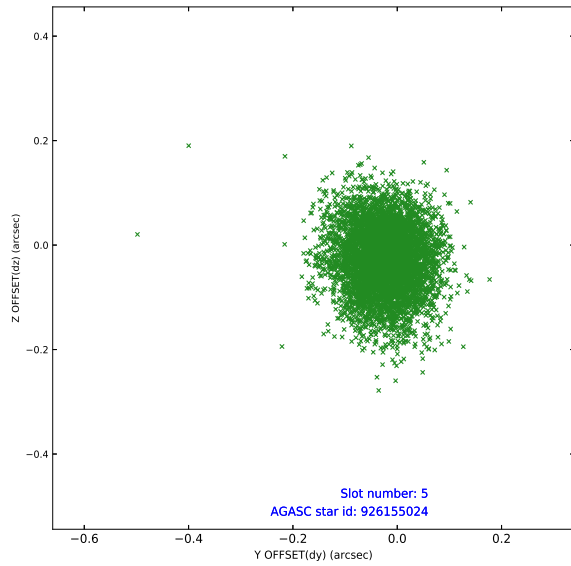
2.4.2 Slot 4



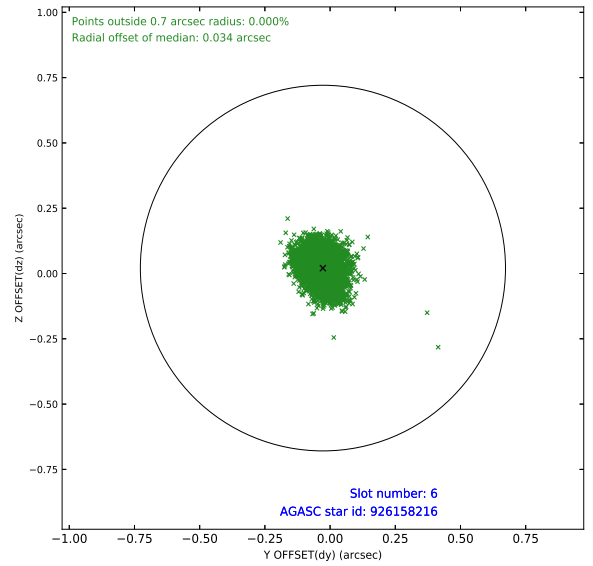
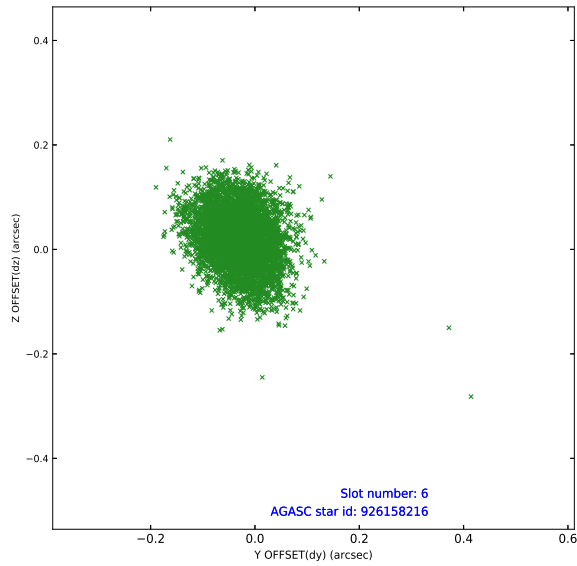
Time (s)



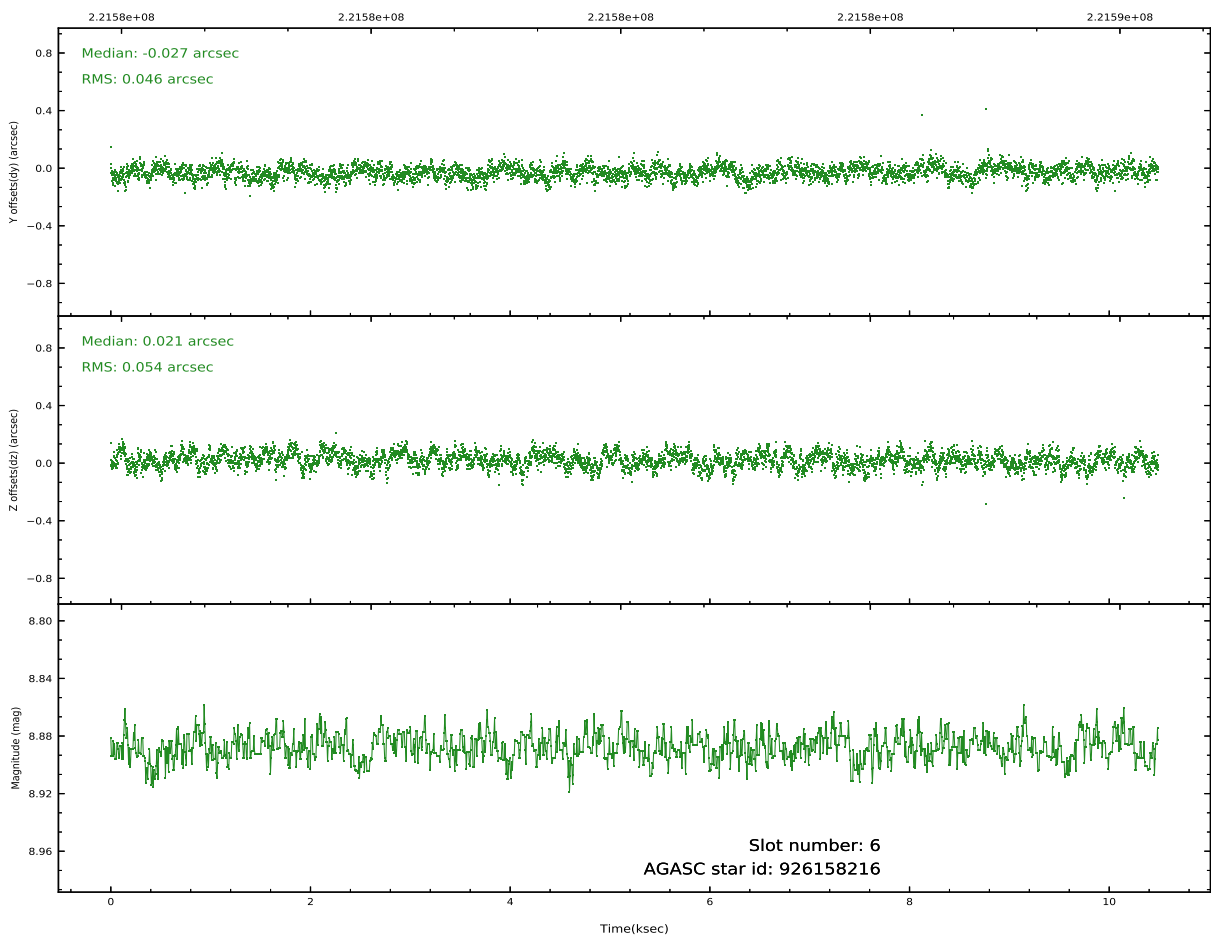
2.4.3 Slot 5



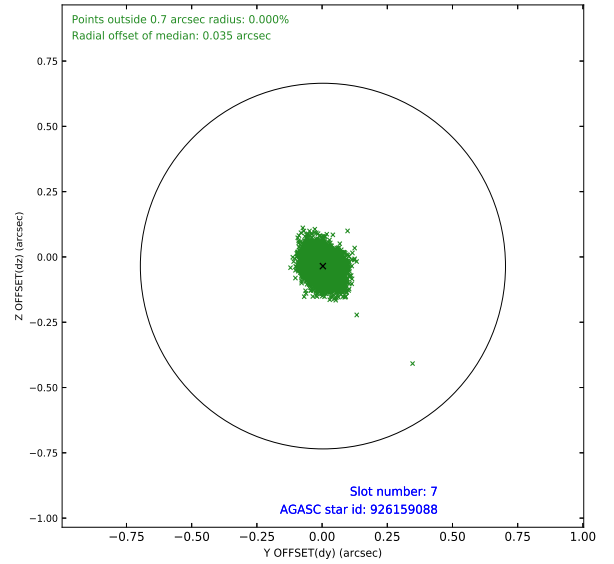
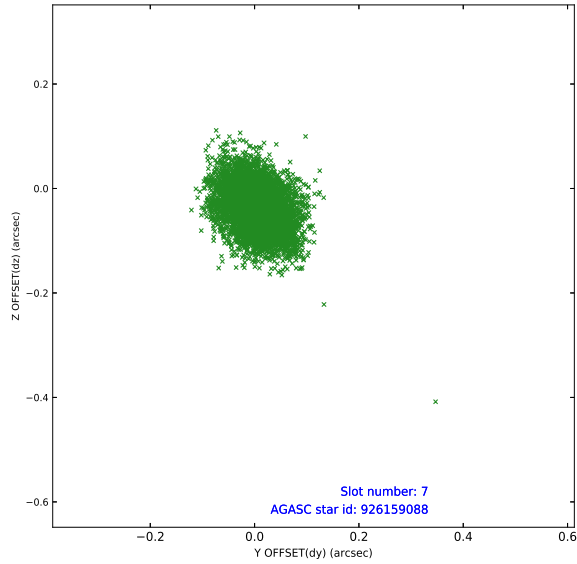
2.4.4 Slot 6



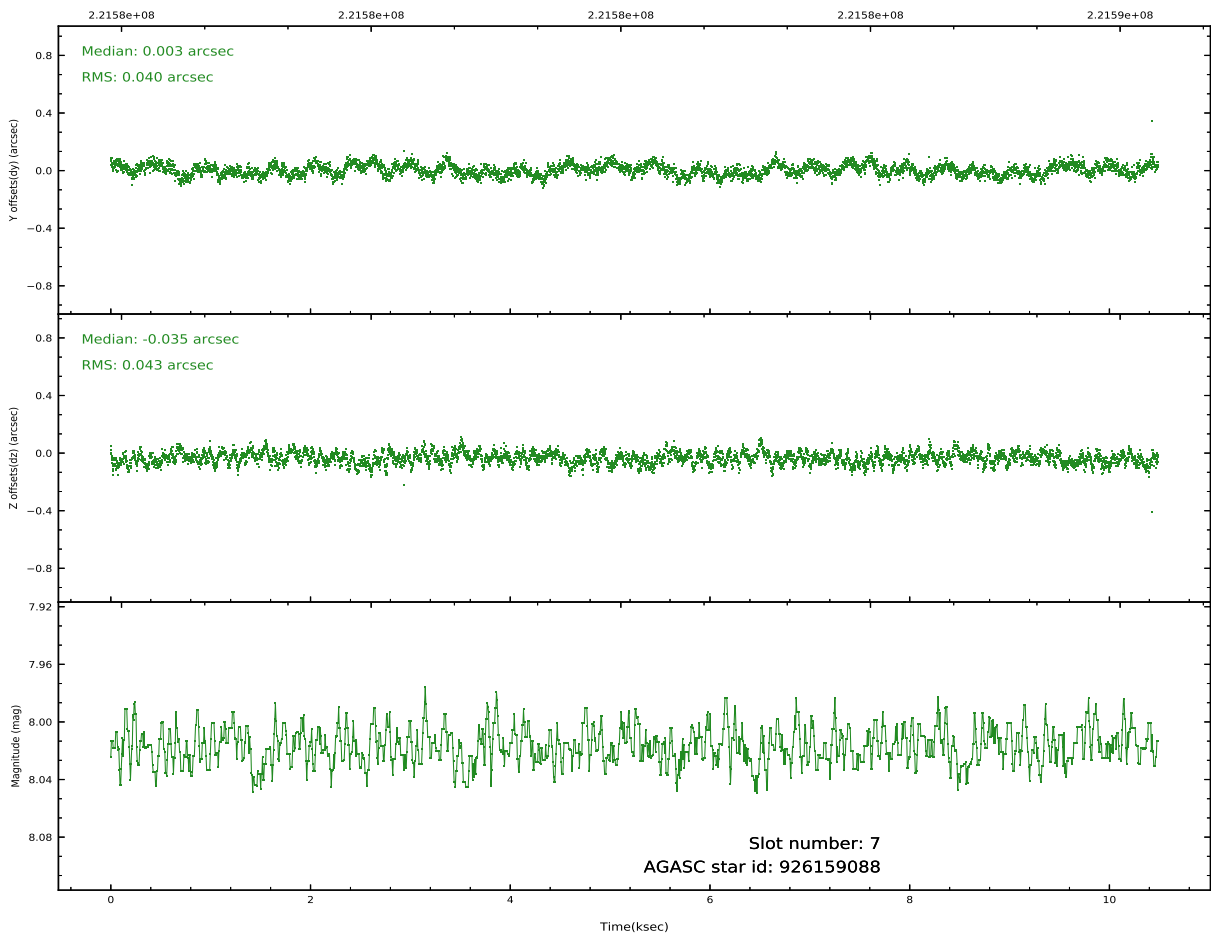
Time (s)



2.4.5 Slot 7

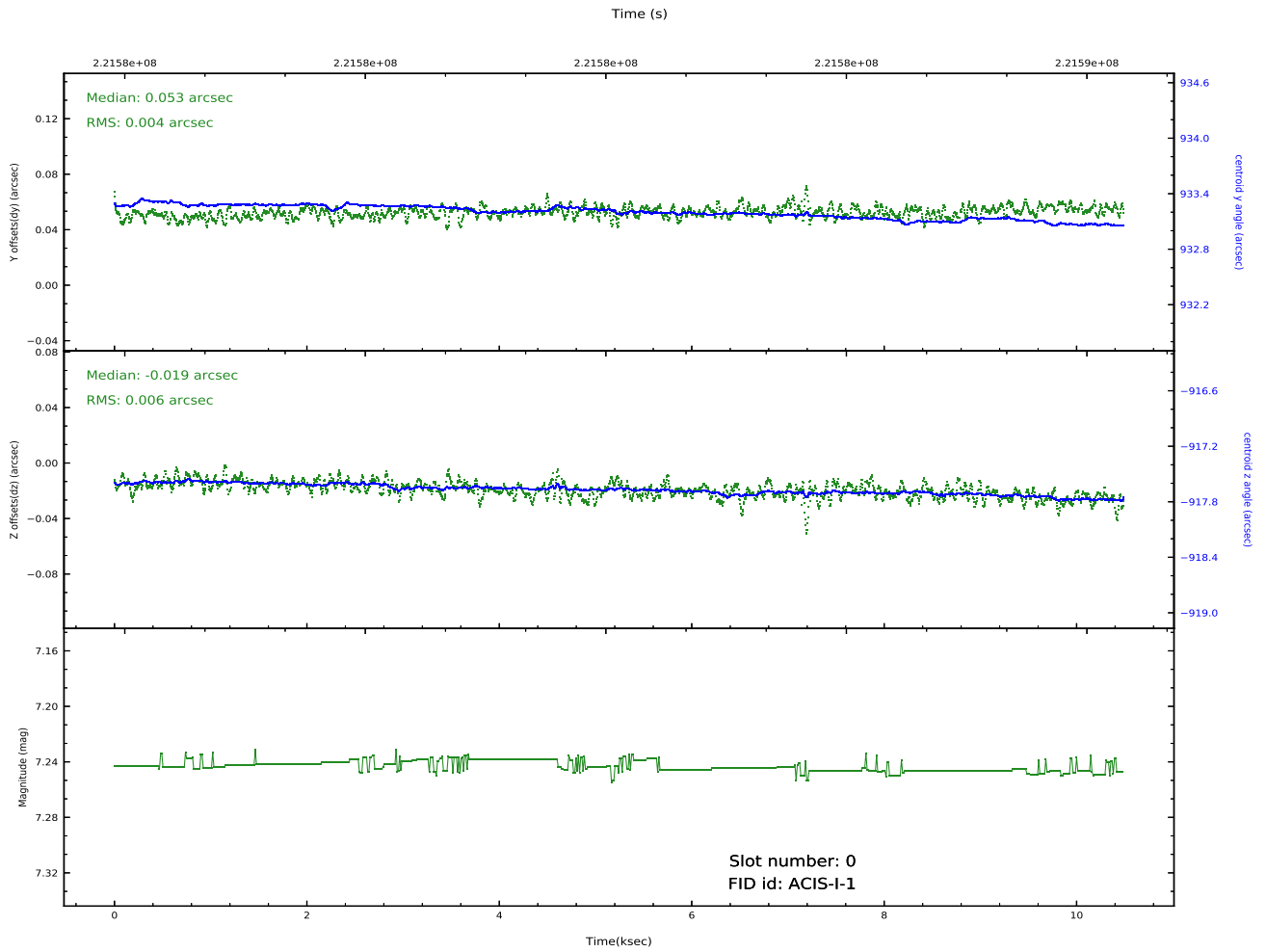
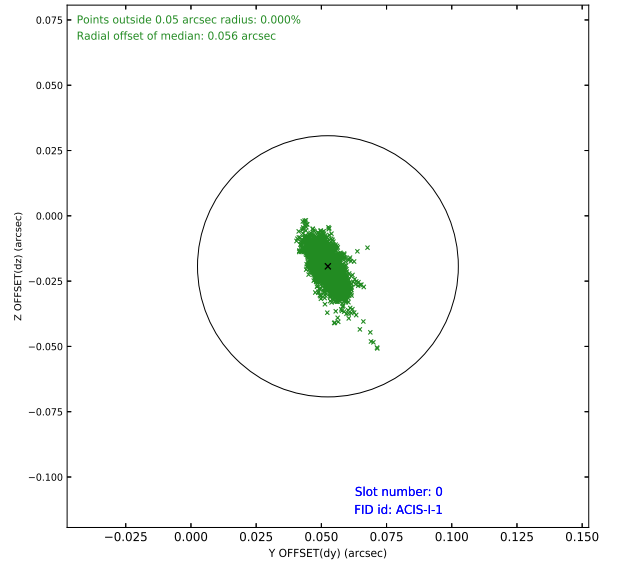
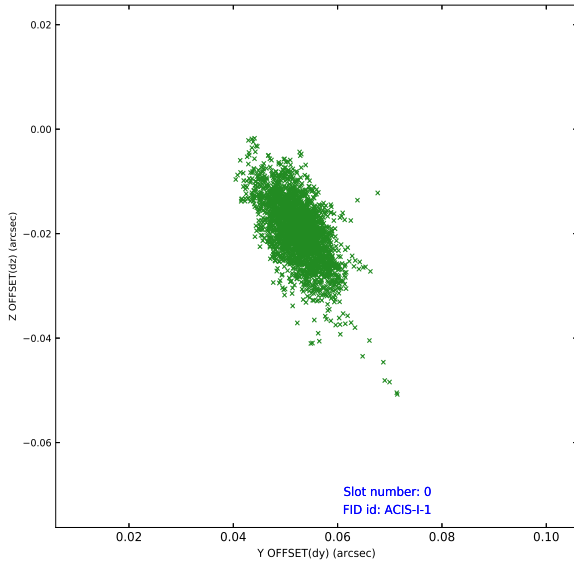


Time (s)

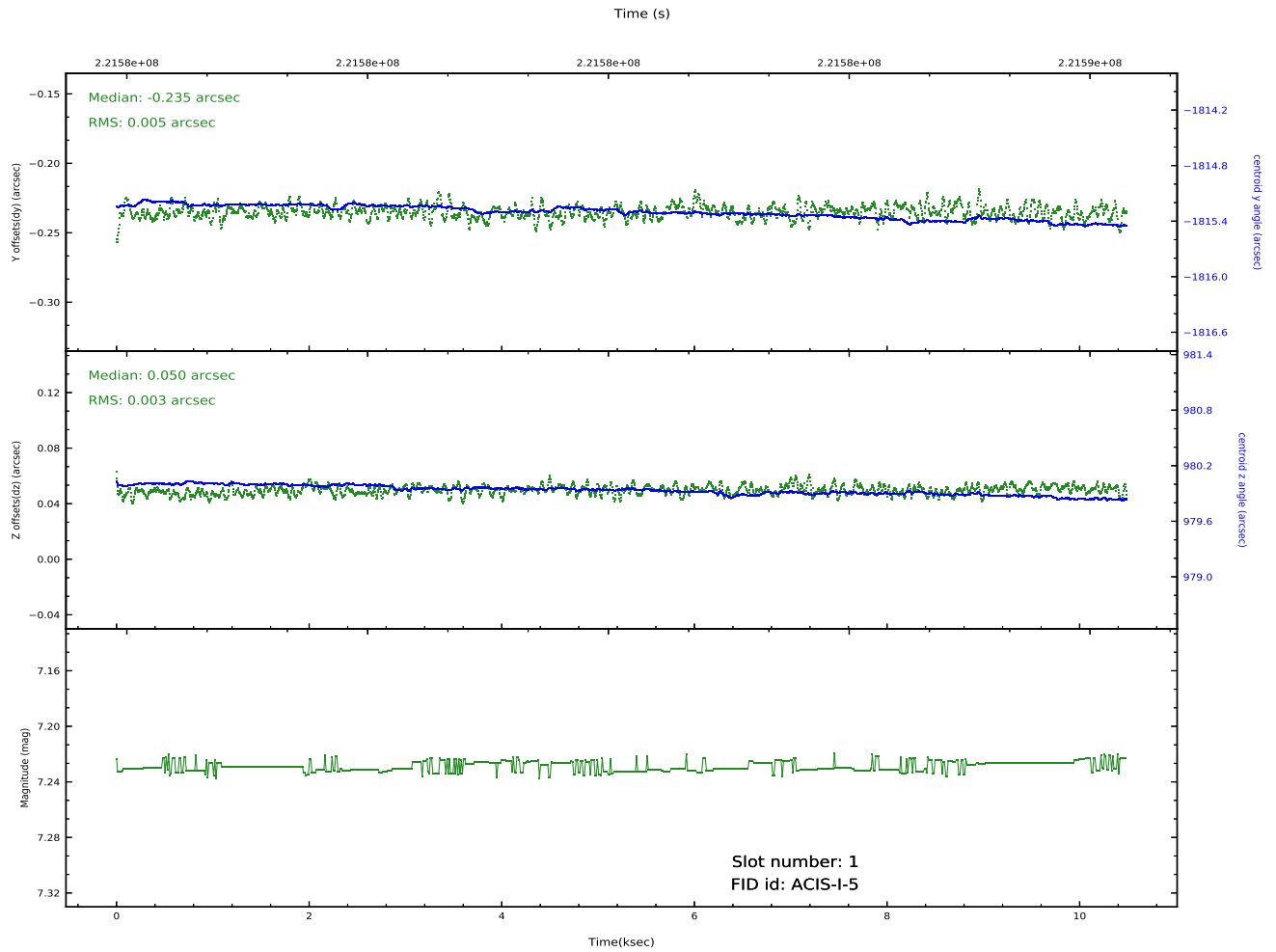
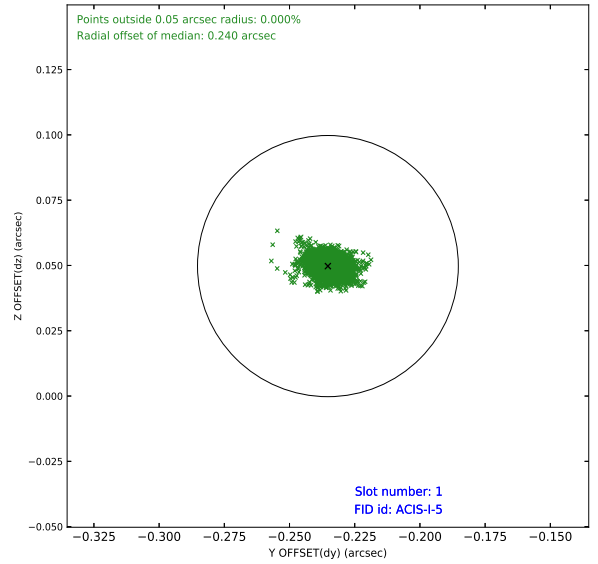
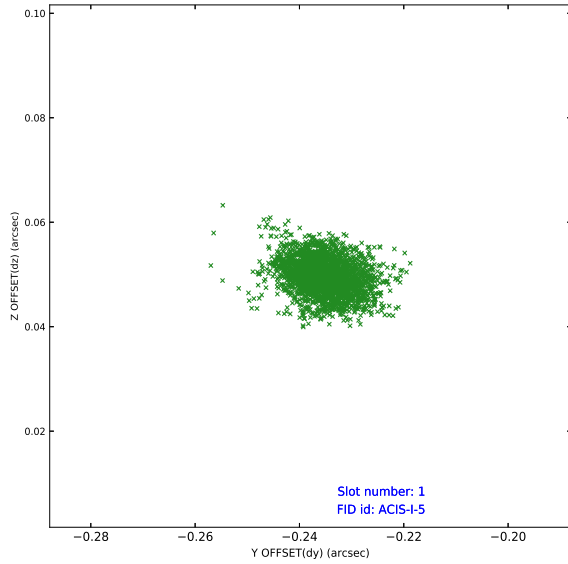


2.5 FID Slots

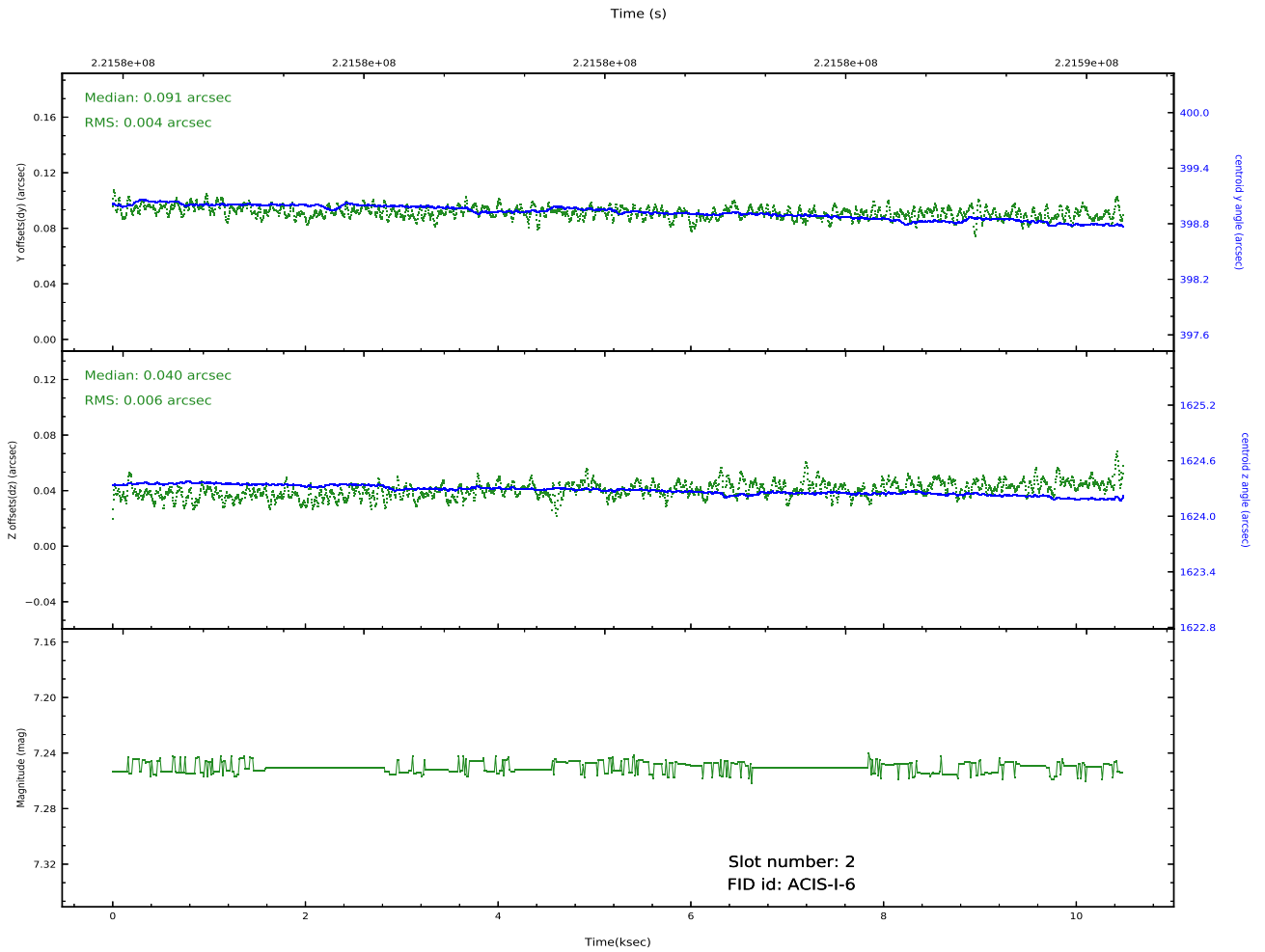
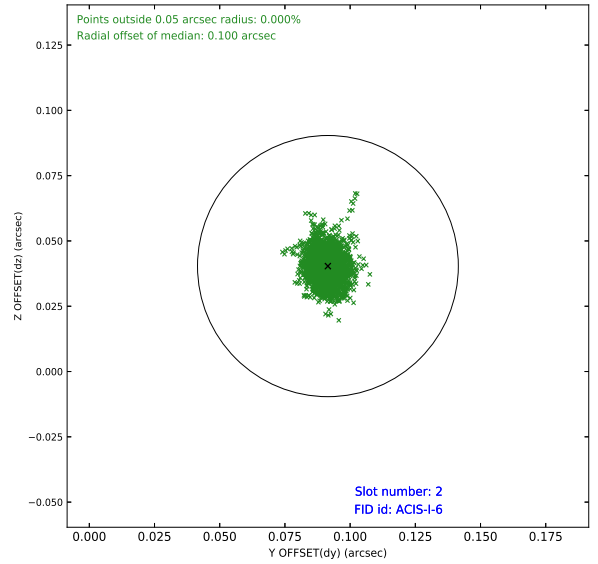
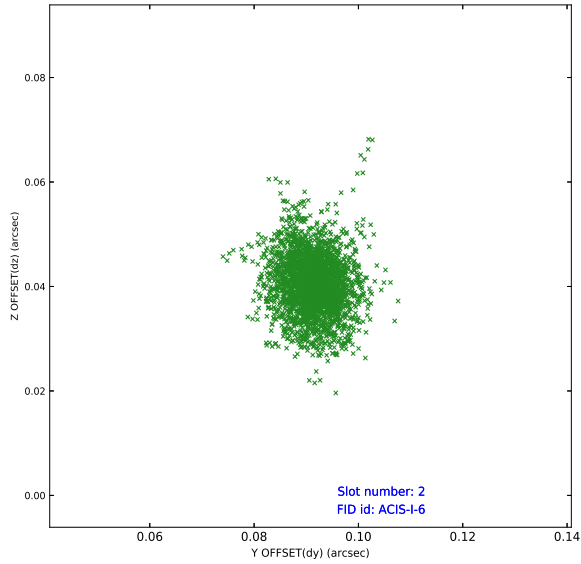
2.5.1 Slot 0



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)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.07499

A.2 Comments