

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5828 - L2 Version 3
Chandra X-Ray Center

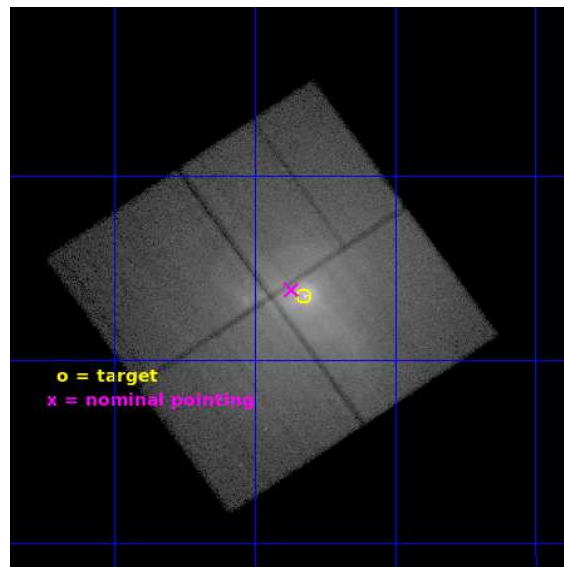
L2 Processing Date : Oct 11 2020

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1 Front

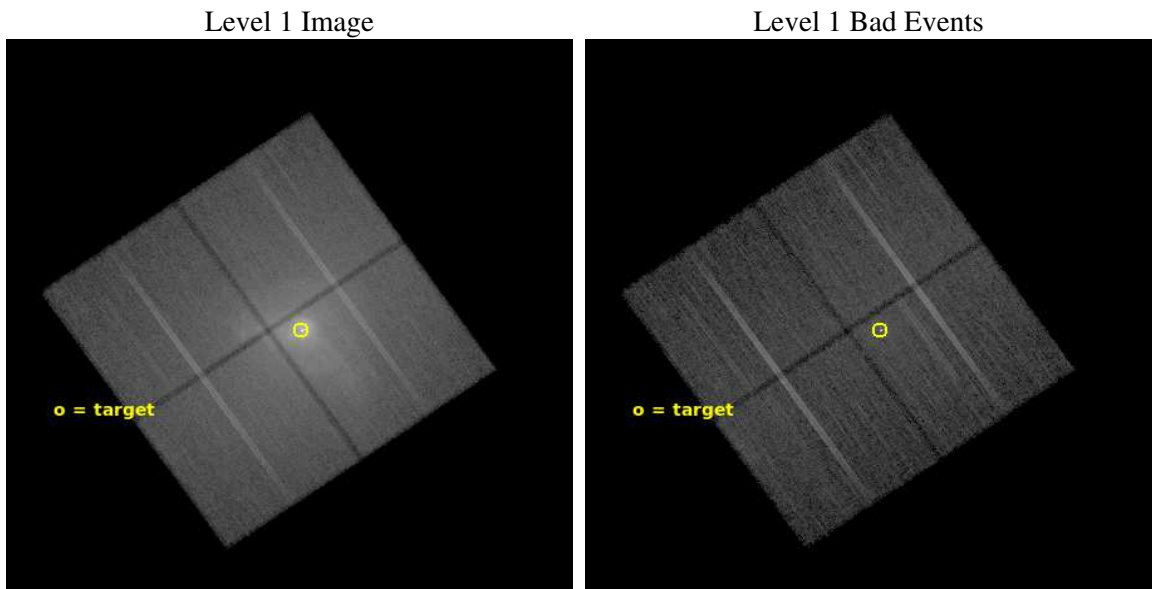
seq_num	800538	Sequence number
obs_id	5828	Observation id
title	The History of AGN Activity in M87 and the Interaction of Nuclear Outbursts with the Surrounding Atmosphere	Proposal title
observer	William Forman	Principal investigator
object	M87	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.70625	Observer's specified target RA [deg]
dec_targ	12.391111	Observer's specified target Dec [deg]
ra_nom	187.71696629822	Nominal RA [deg]
dec_nom	12.396918325694	Nominal Dec [deg]
roll_nom	55.203877613104	Nominal Roll [deg]
revision	3	Processing version of data
ontime	33424.158945531	Sum of GTIs [s]
livetime	32987.447702399	Livetime [s]
ontime0	33424.158945531	Sum of GTIs [s]
ontime1	33427.299935699	Sum of GTIs [s]
ontime2	33421.018005192	Sum of GTIs [s]
ontime3	33424.158945531	Sum of GTIs [s]
l2events	1199301	Number of level 2 events



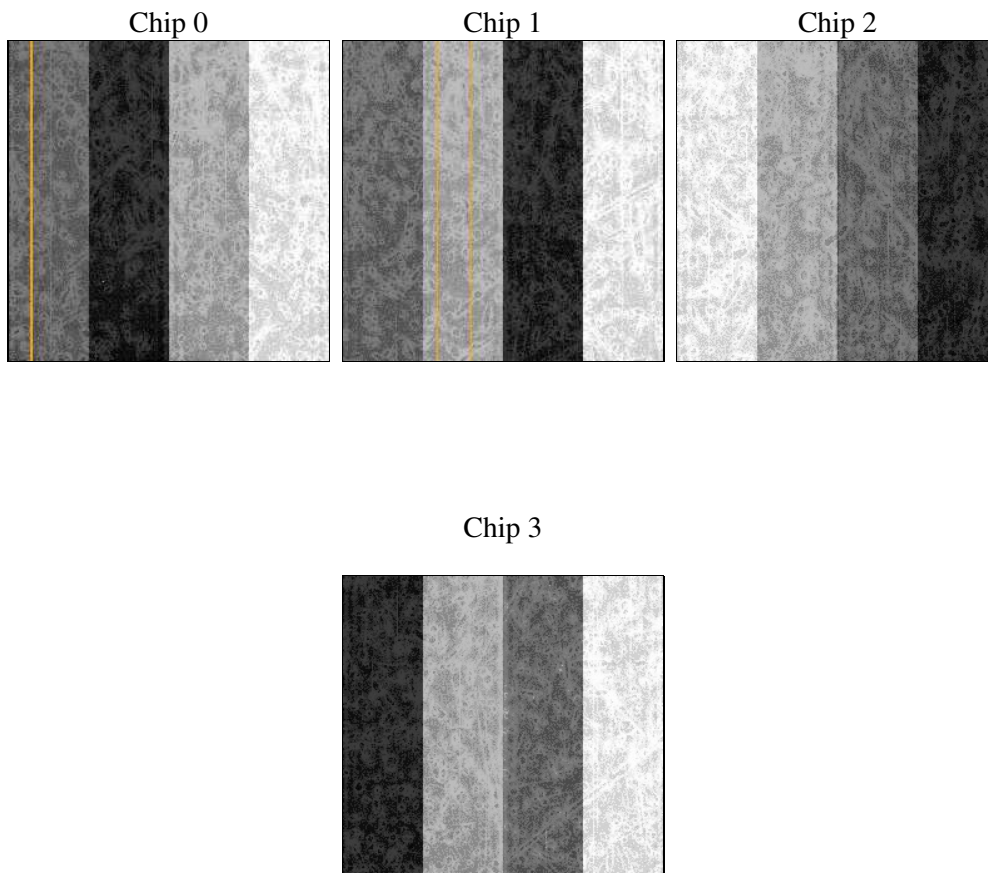
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33300.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	33424.158945531	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	33424.158945531	Sum of GTIs [s]
date	2020-10-11T15:58:38	Date and time of file creation	ontime1	33427.299935699	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	33421.018005192	Sum of GTIs [s]
			ontime3	33424.158945531	Sum of GTIs [s]
			l1events	2137283	Number of level 1 events

2.1.4 Events

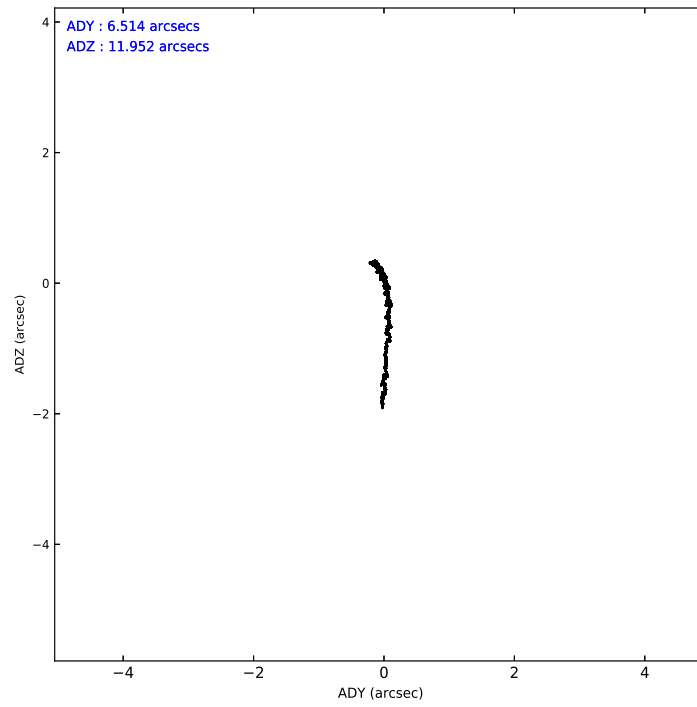
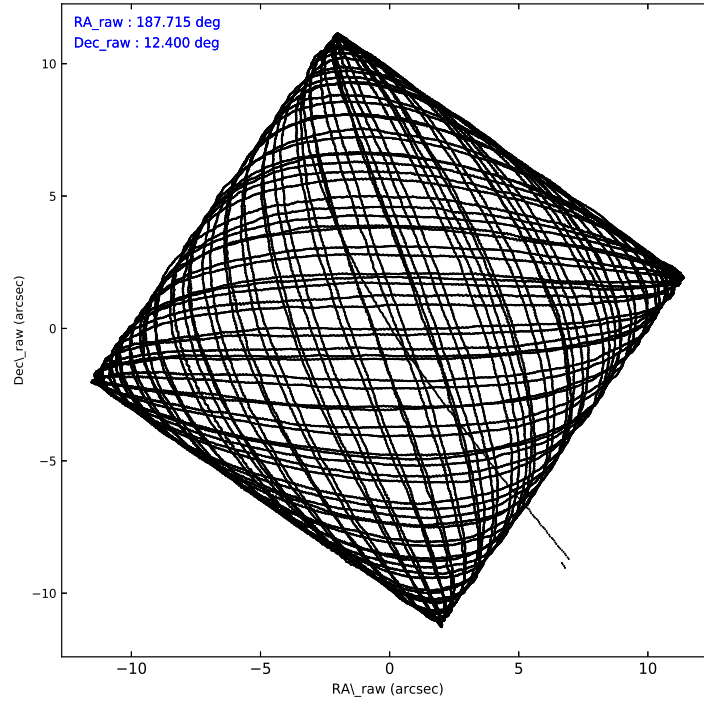
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	383530	453210	503329	797214
rejected events	201074	198013	231179	236534
rejected %	52%	43%	45%	29%

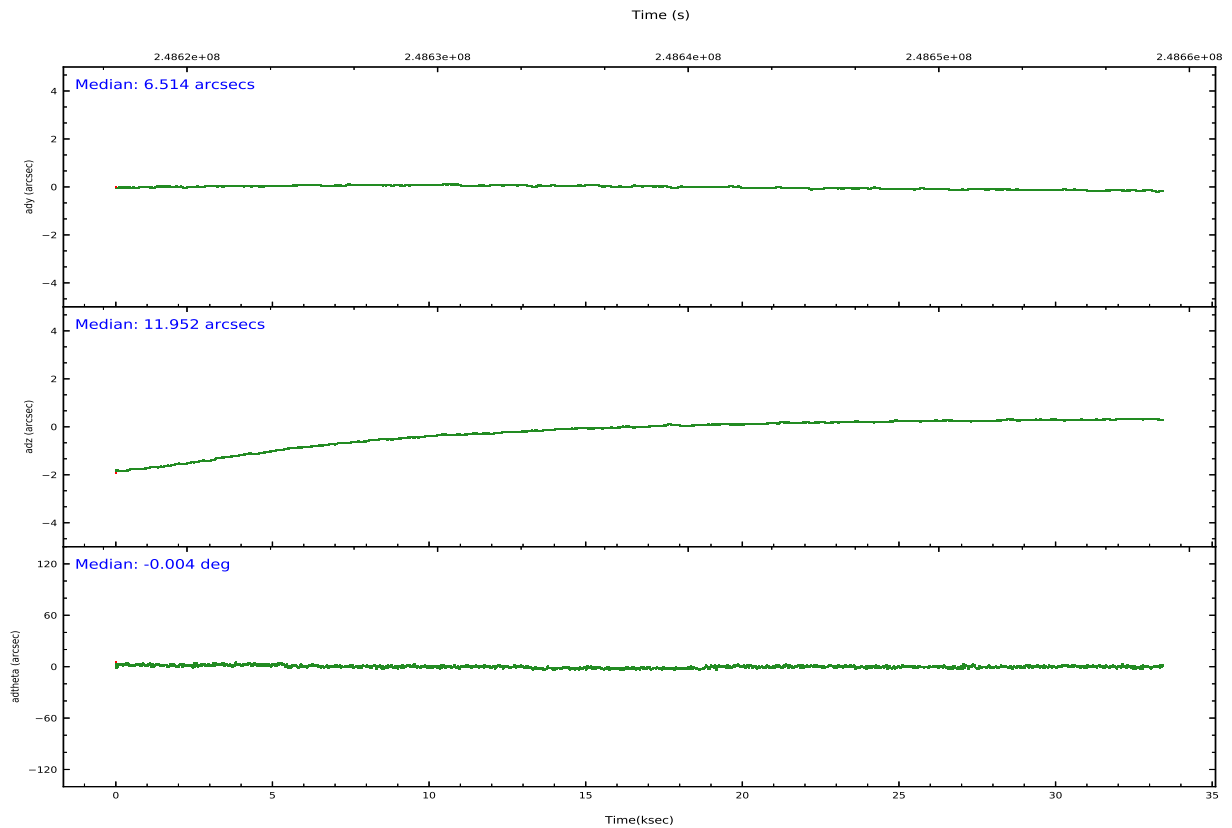
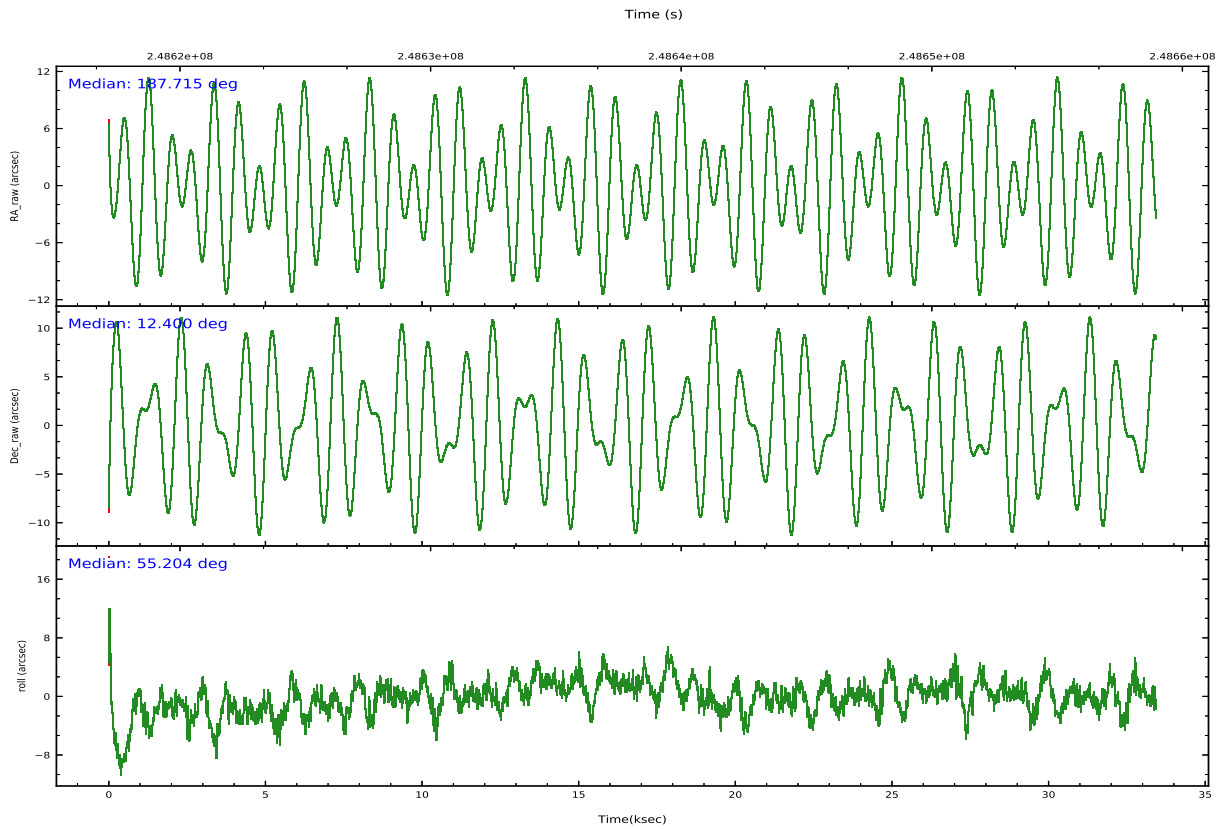
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	143283	203546	220719	466111
	37%	44%	43%	58%
grade 1 events	781	926	1362	4732
	0%	0%	0%	0%
grade 2 events	20167	27240	27400	51765
	5%	6%	5%	6%
grade 3 events	6819	8941	8932	16183
	1%	1%	1%	2%
grade 4 events	6613	8749	9020	16277
	1%	1%	1%	2%
grade 5 events	8240	9511	8128	13752
	2%	2%	1%	1%
grade 6 events	7164	9054	8193	13925
	1%	1%	1%	1%
grade 7 events	190463	185243	219575	214469
	49%	40%	43%	26%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-0123	ACIS-0123	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	187.712927	187.71696629822	Subarray requested	NONE	NONE
[deg] Pointing Dec	12.373119	12.396918325694	Alternating exposures requested	N	N
[deg] Pointing Roll	54.998567	55.203877613104	[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	-231.592463	-231.5960967419932			
[mm] SIM translation stage offset	-2	-1.996356260936523			
[s] Observation start time (MET)	248621860.184000	248620626.28836			
Observation start date	2005-11-17T13:36:36	2005-11-17T13:17:06			
[s] Observation end time (MET)	248655160.184000	248655947.27749			
Observation end date	2005-11-17T22:51:36	2005-11-17T23:05:47			
Read mode	TIMED	TIMED			

2.3 Aspect





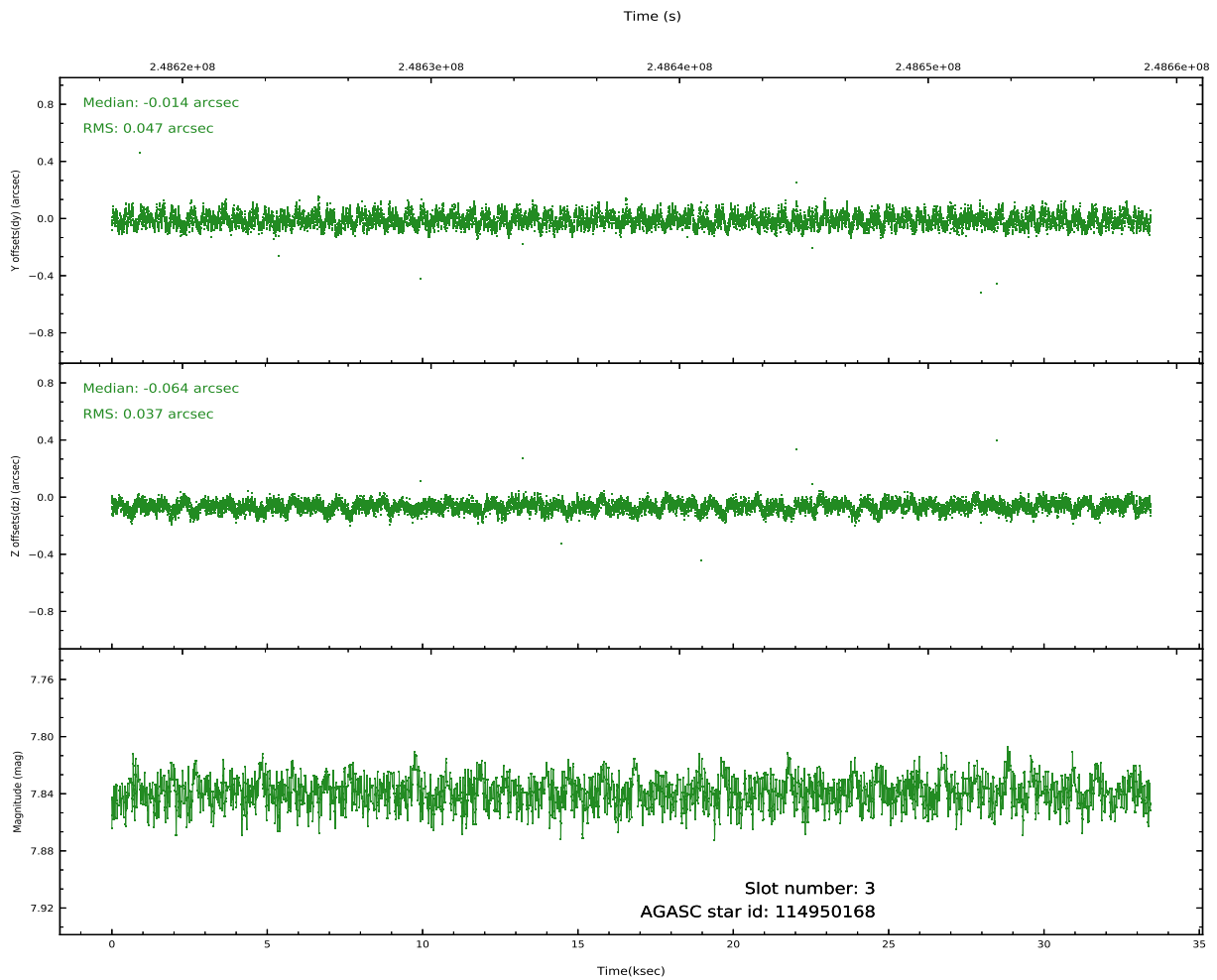
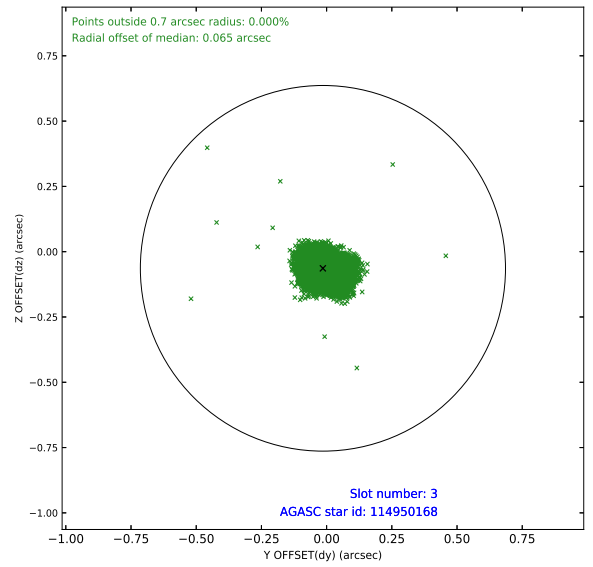
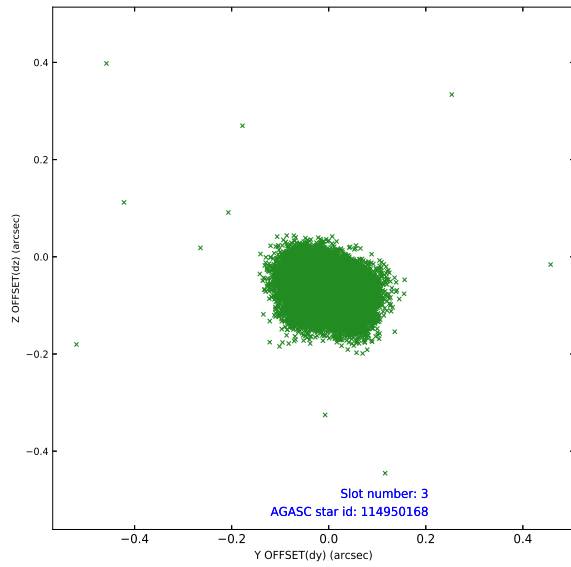
Slot Statistics

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	8155	1.000	-0.041	-0.030	0.031	0.048	0.000000	0.000000	933.16	-876
1	FID		ACIS-I-2	7.15	8153	1.000	-0.172	-0.059	0.015	0.032	0.000000	0.000000	-761.14	-882
2	FID		ACIS-I-4	7.16	8154	1.000	0.114	0.158	0.020	0.026	0.000000	0.000000	2152.99	1024
3	GUIDE	used	114950168	7.84	16300	1.000	-0.014	-0.064	0.063	0.100	187.143398	12.117441	-1902.18	1115
4	GUIDE	used	114950584	9.20	16299	1.000	0.120	0.230	0.087	0.139	187.487323	11.827248	-2065.36	-475
5	GUIDE	used	114952824	8.57	16304	1.000	-0.212	-0.060	0.065	0.102	187.703904	12.486727	316.44	261
6	GUIDE	used	114954440	9.20	16297	1.000	0.071	-0.174	0.096	0.159	186.915066	12.219118	-2060.82	1983
7	GUIDE	used	114955056	8.34	16302	1.000	0.038	0.069	0.065	0.101	187.914001	12.127854	-317.15	-1085

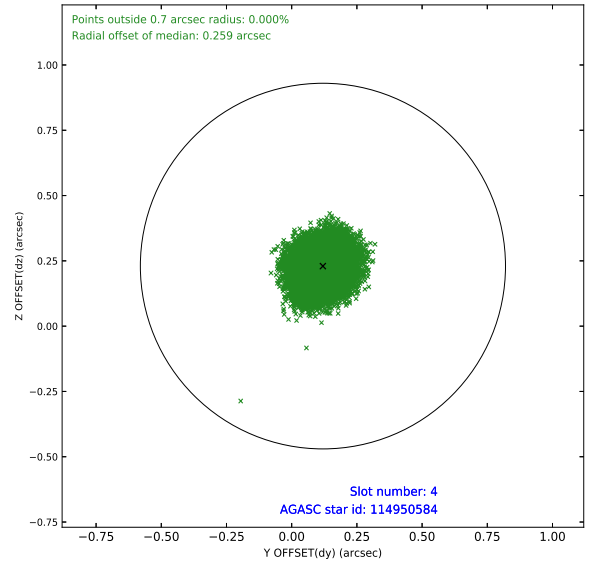
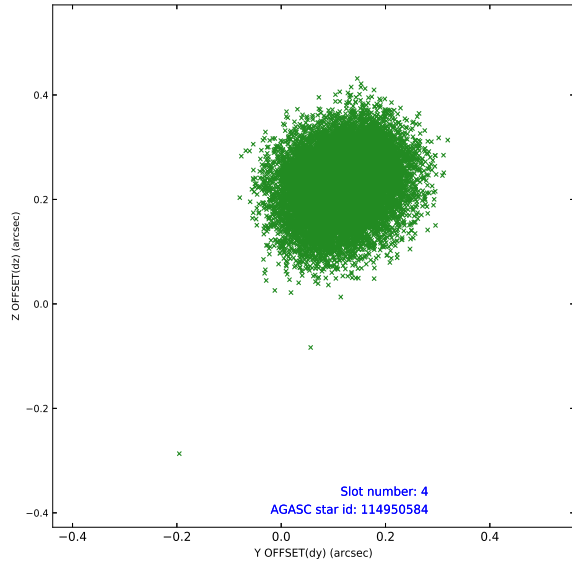
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2.4 Star Slots

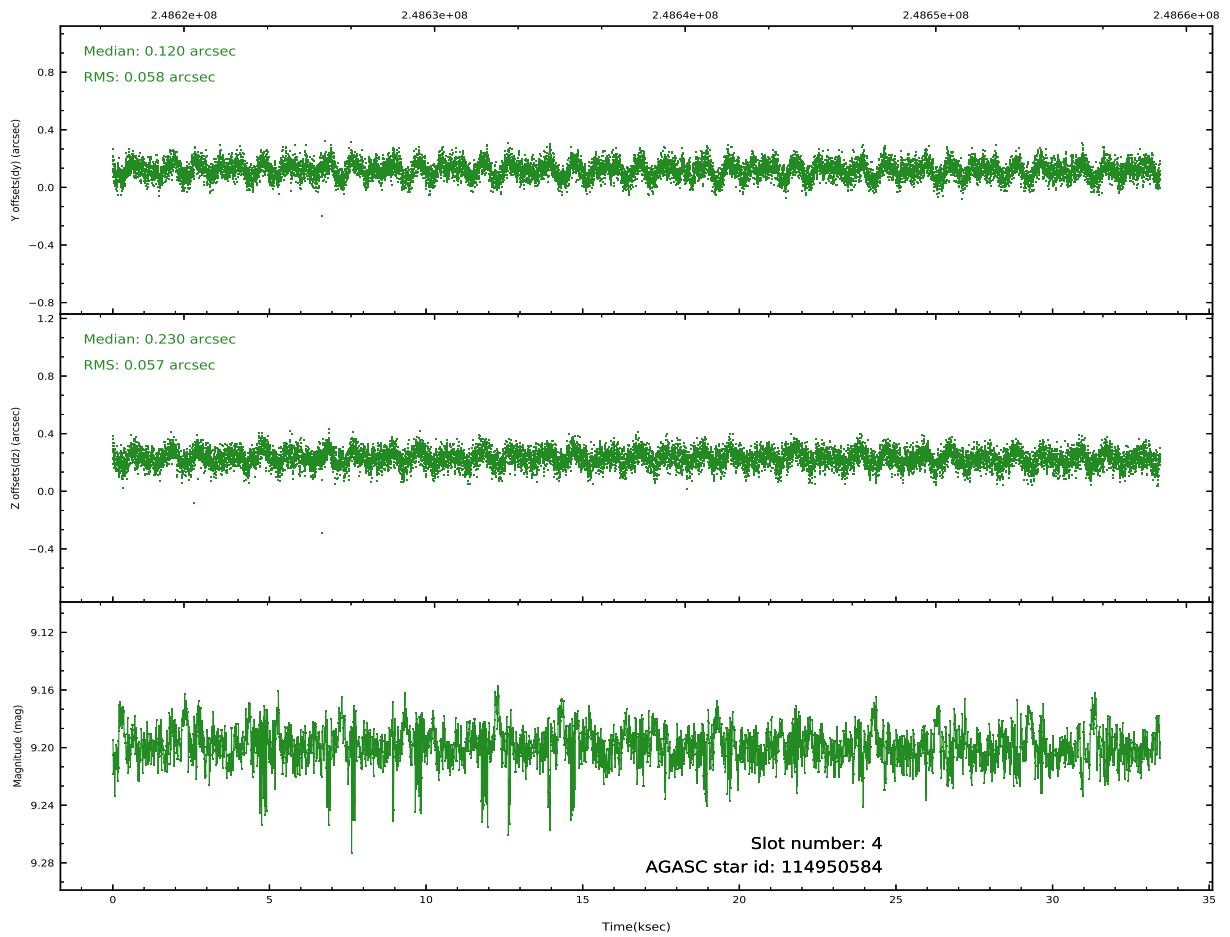
2.4.1 Slot 3



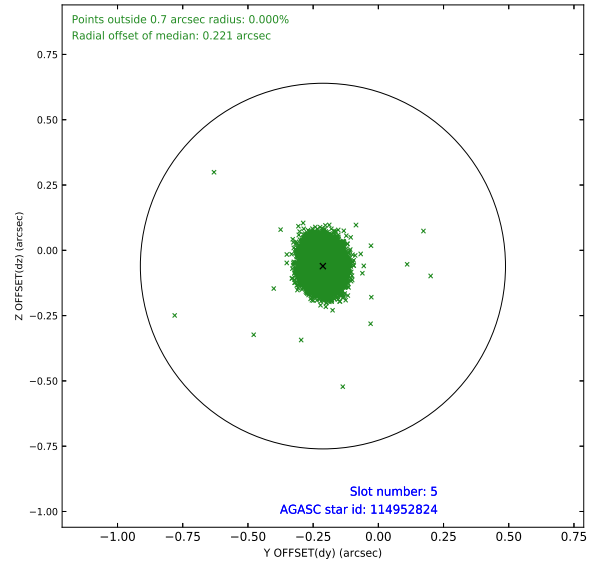
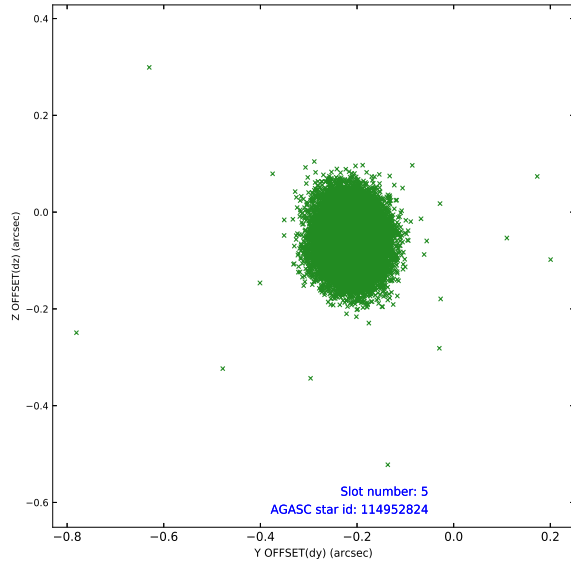
2.4.2 Slot 4



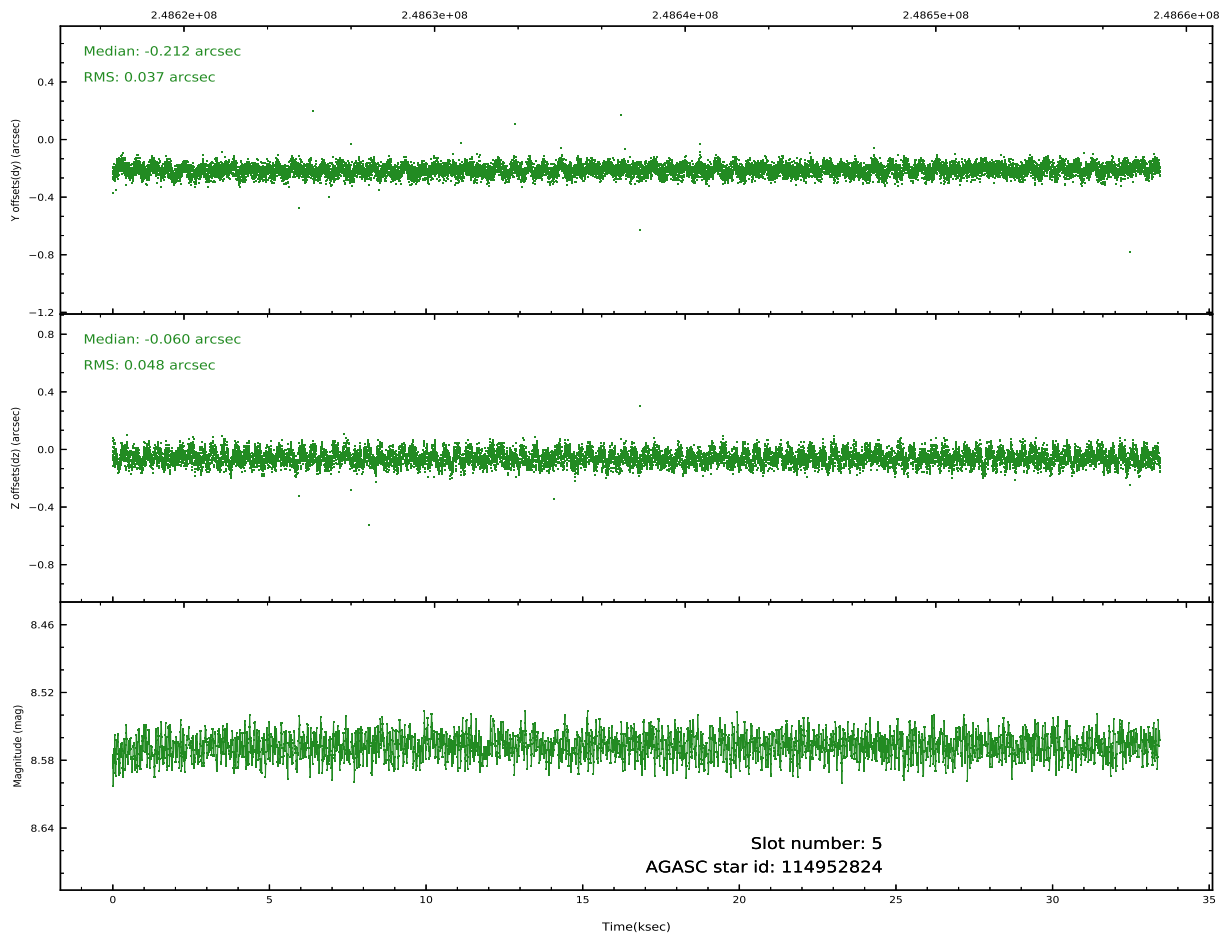
Time (s)



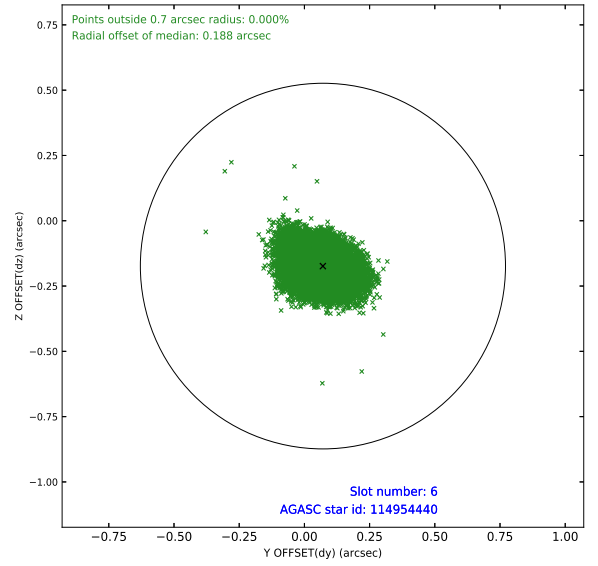
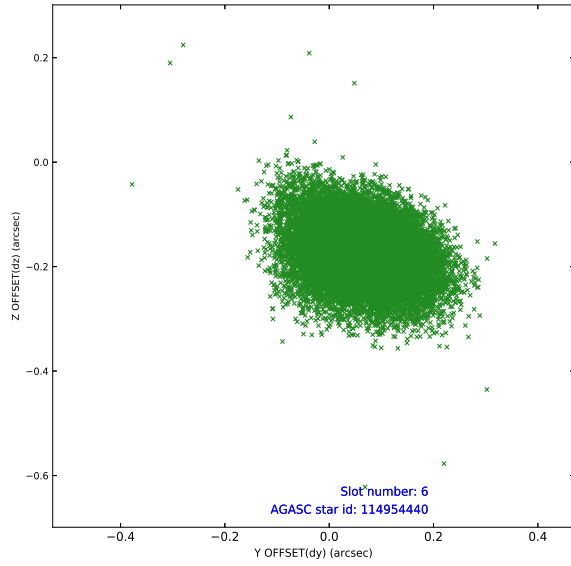
2.4.3 Slot 5



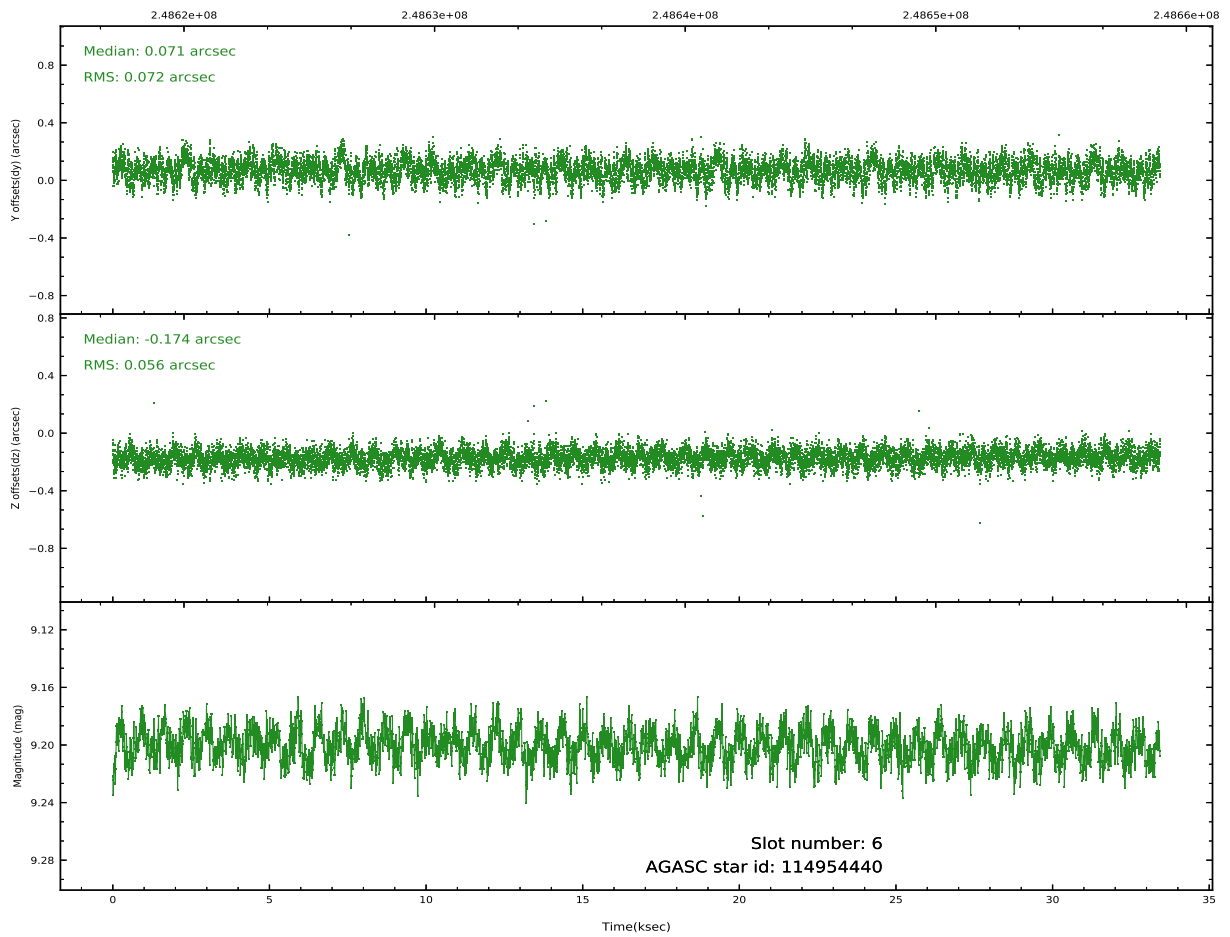
Time (s)



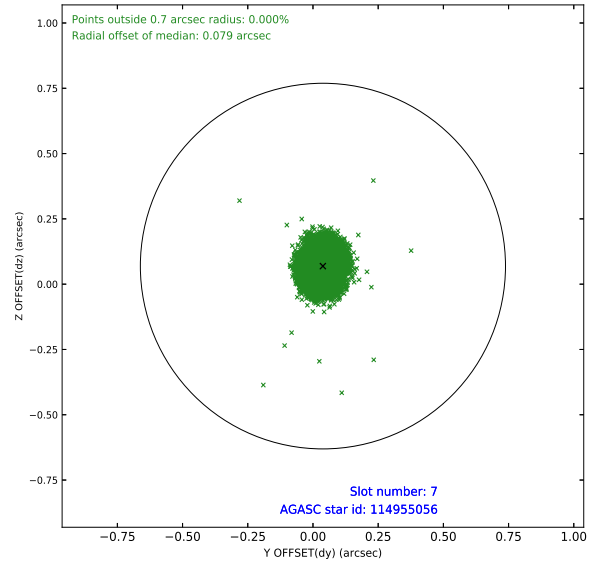
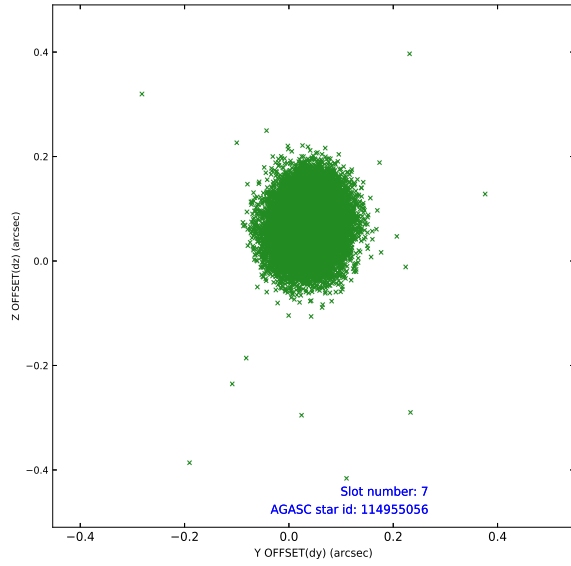
2.4.4 Slot 6



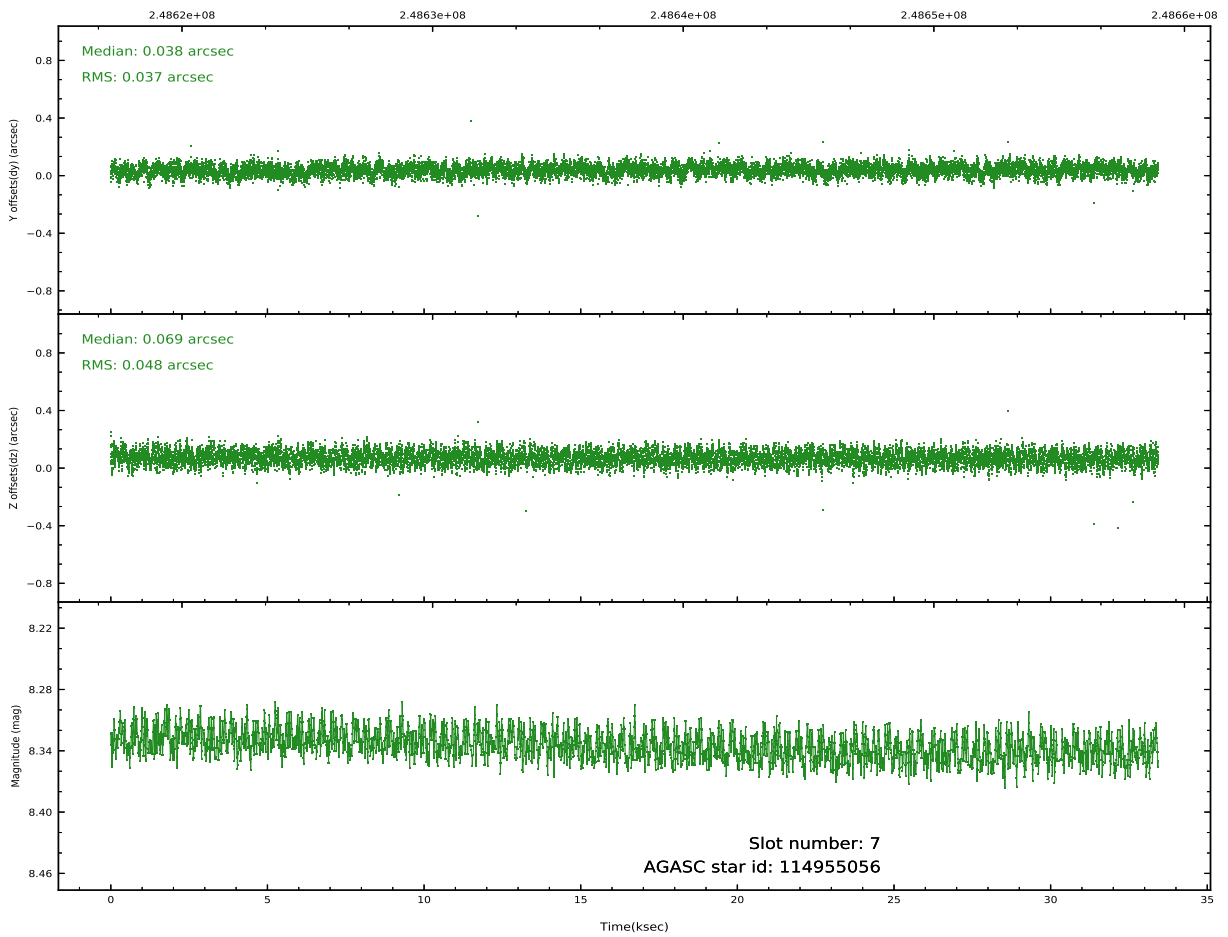
Time (s)



2.4.5 Slot 7

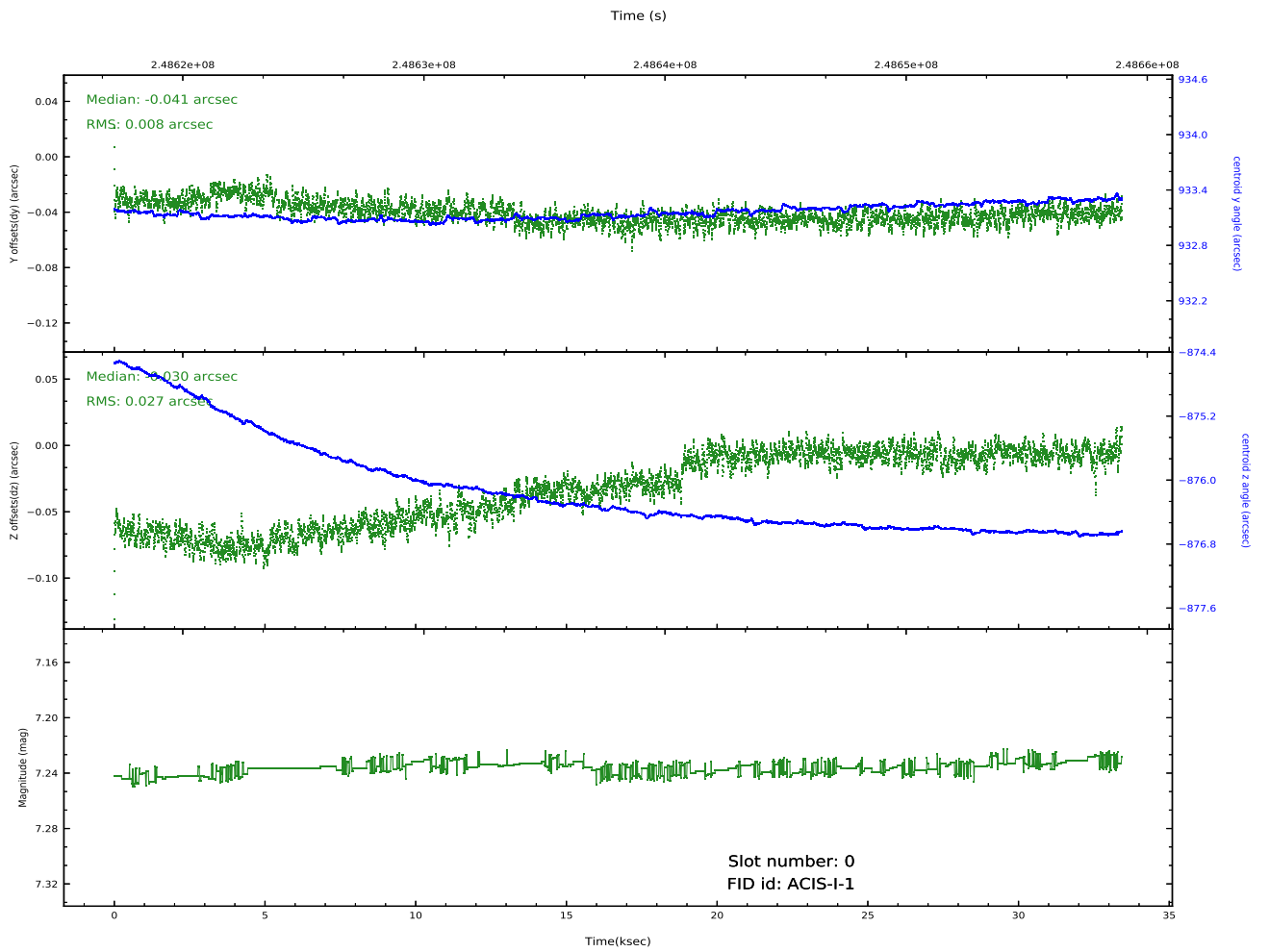
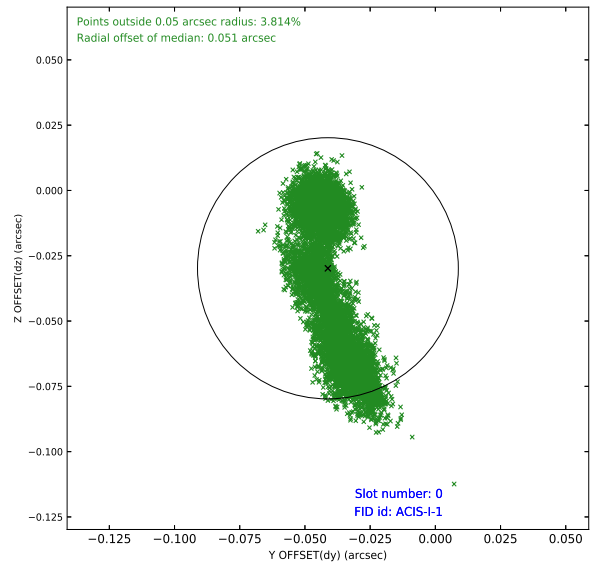
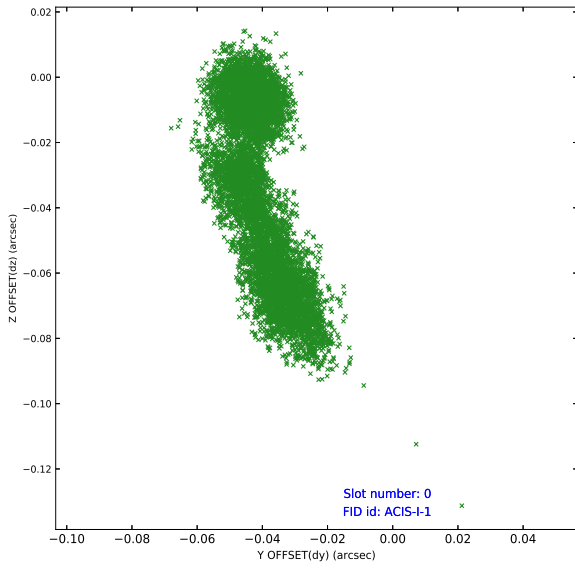


Time (s)

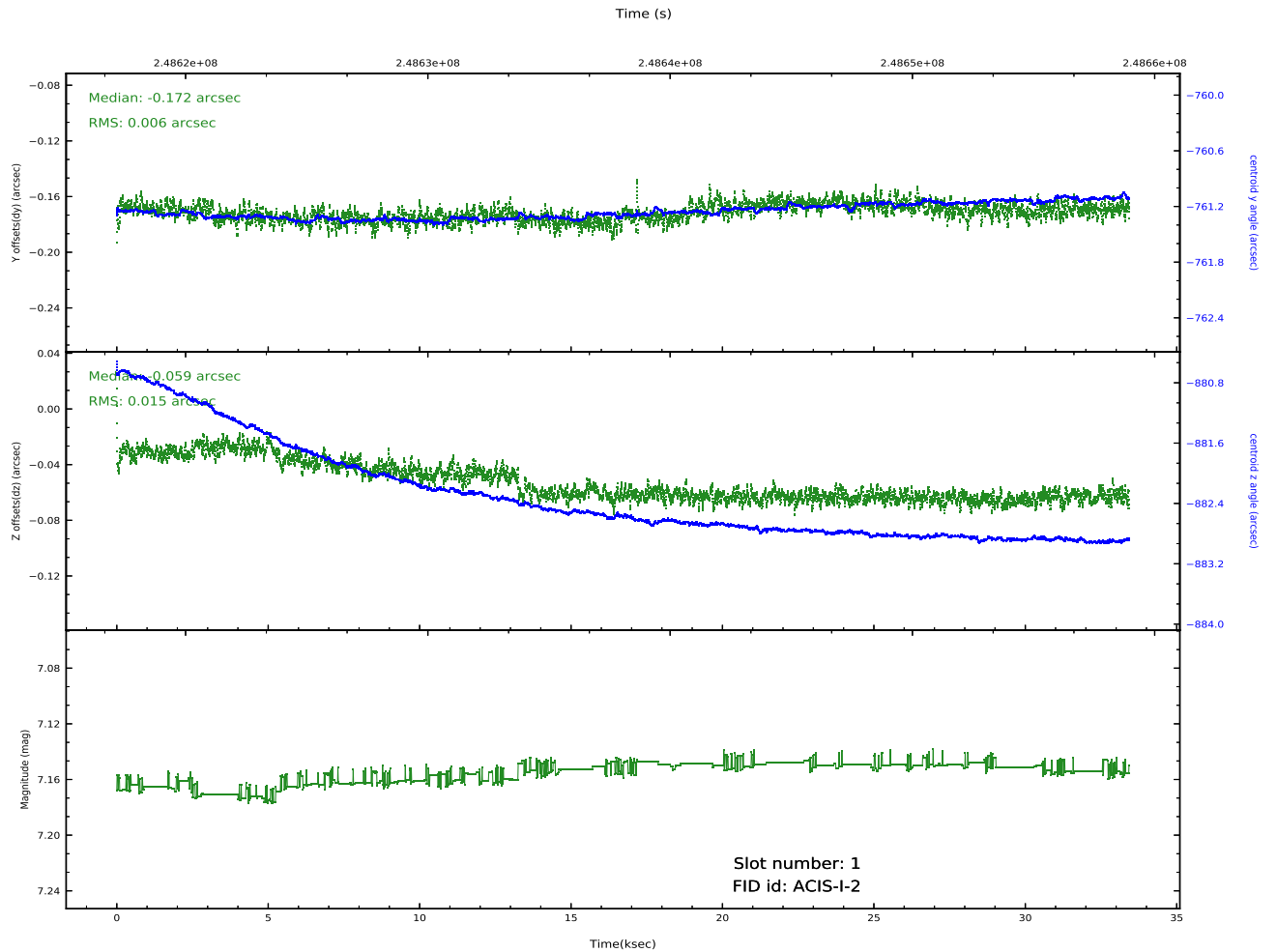
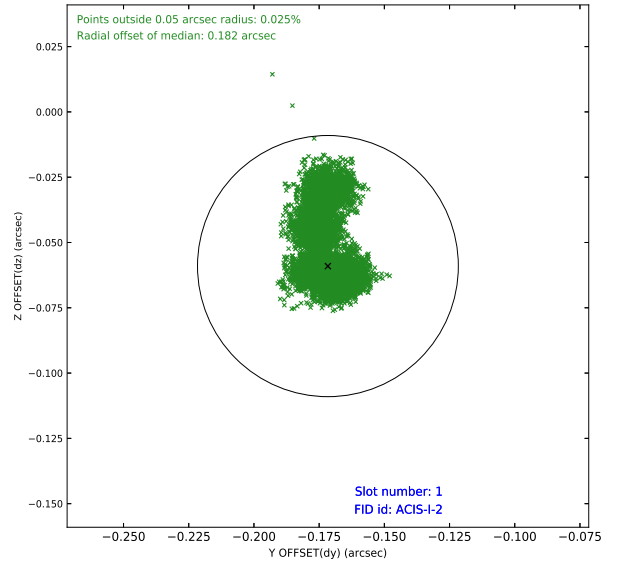
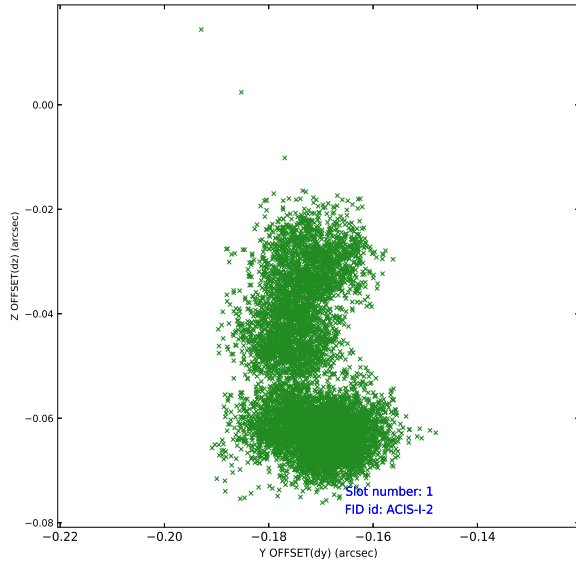


2.5 FID Slots

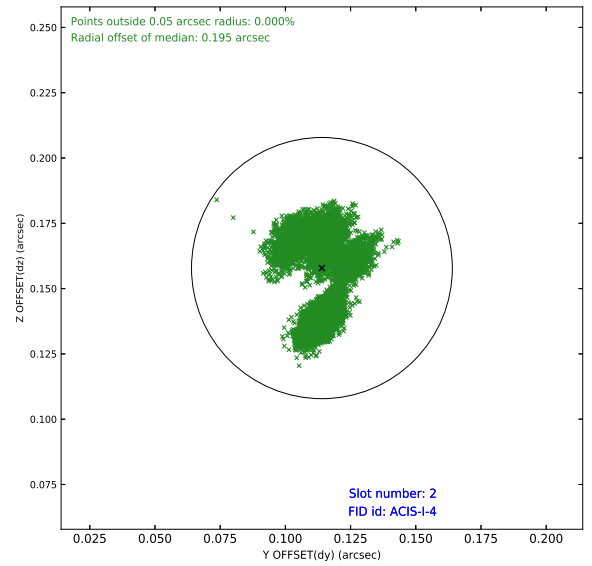
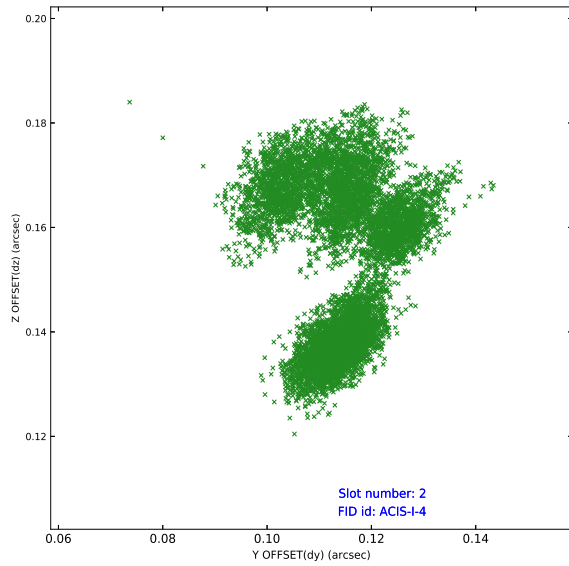
2.5.1 Slot 0



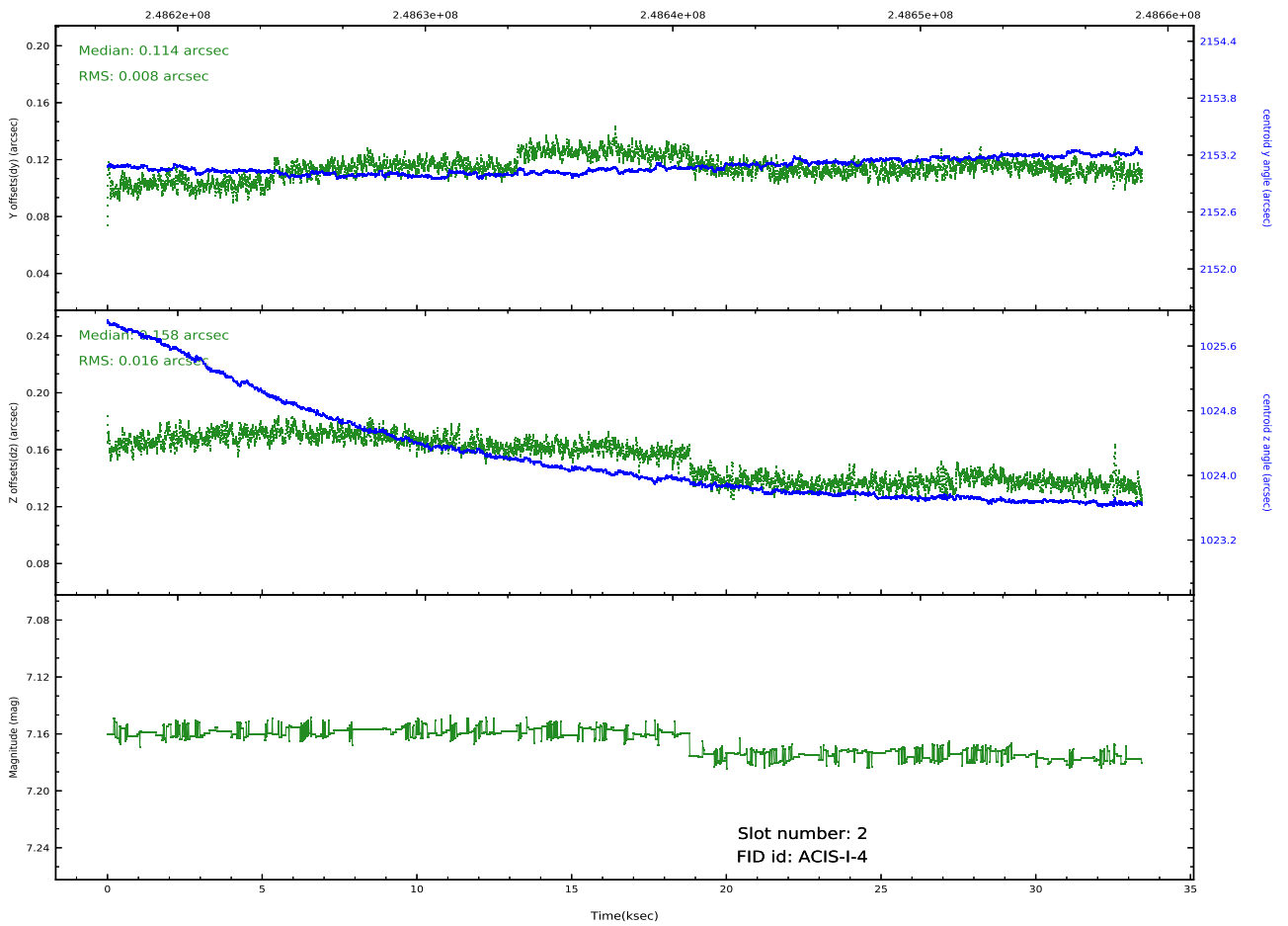
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.42415

A.2 Comments