

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7210 - L2 Version 3
Chandra X-Ray Center

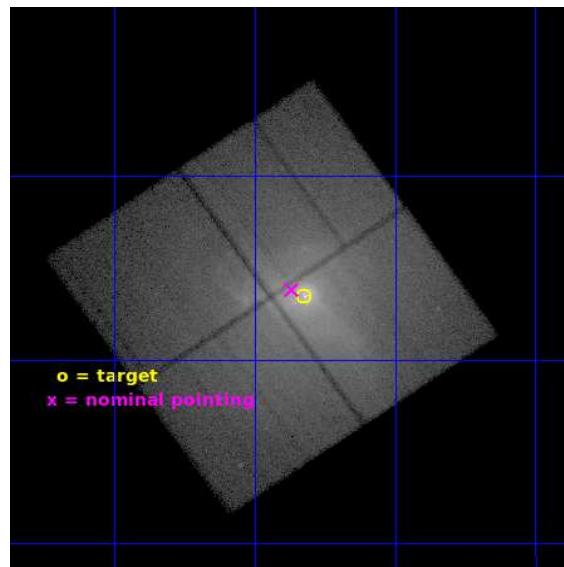
L2 Processing Date : Oct 11 2020

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1 Front

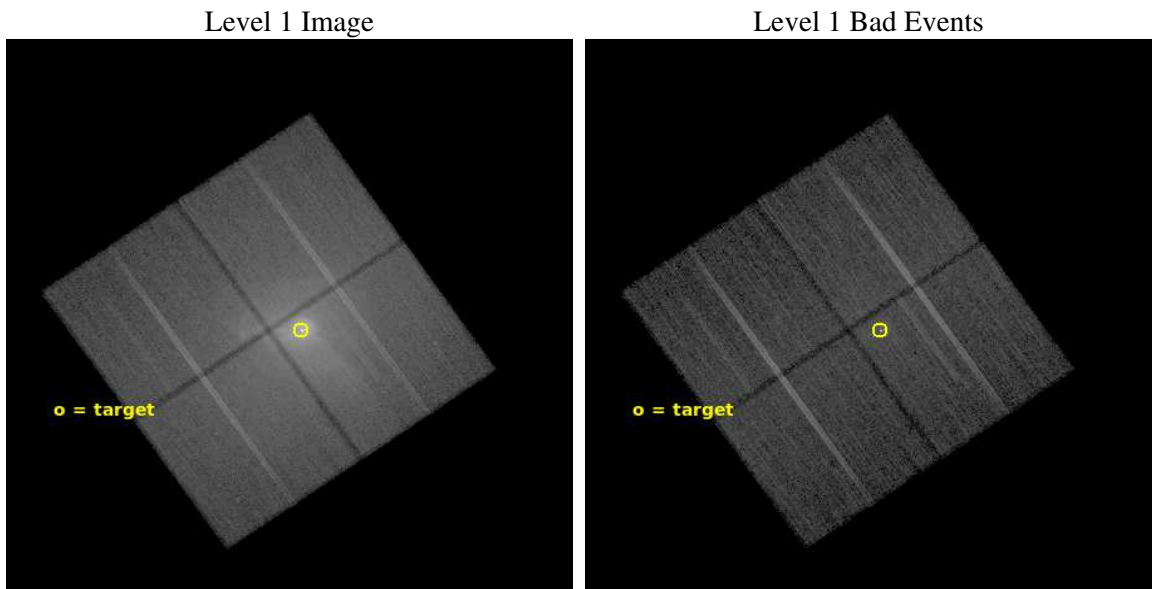
seq_num	800538	Sequence number
obs_id	7210	Observation id
title	The History of AGN Activity in M87 and the Interaction of Nuclear Outbursts with the Surrounding Atmosphere	Proposal title
observer	William Forman	Principal investigator
object	M87	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.70625	Observer's specified target RA [deg]
dec_targ	12.391111	Observer's specified target Dec [deg]
ra_nom	187.71694595907	Nominal RA [deg]
dec_nom	12.397164621736	Nominal Dec [deg]
roll_nom	55.204354833323	Nominal Roll [deg]
revision	3	Processing version of data
ontime	31117.67699942	Sum of GTIs [s]
livetime	30711.101640922	Livetime [s]
ontime0	31123.958969891	Sum of GTIs [s]
ontime1	31117.677039266	Sum of GTIs [s]
ontime2	31120.817979634	Sum of GTIs [s]
ontime3	31117.67699942	Sum of GTIs [s]
l2events	1120858	Number of level 2 events



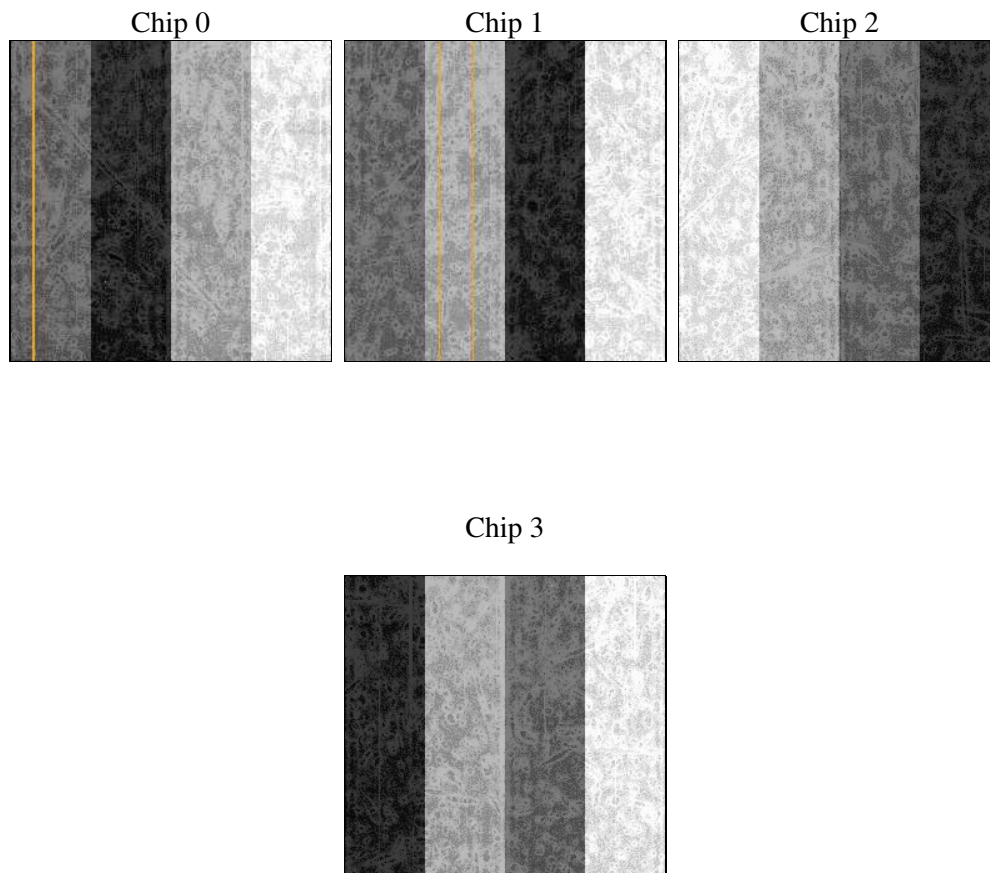
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	31117.67699942	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	31123.958969891	Sum of GTIs [s]
date	2020-10-11T13:44:34	Date and time of file creation	ontime1	31117.677039266	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	31120.817979634	Sum of GTIs [s]
			ontime3	31117.67699942	Sum of GTIs [s]
			l1events	1997705	Number of level 1 events

2.1.4 Events

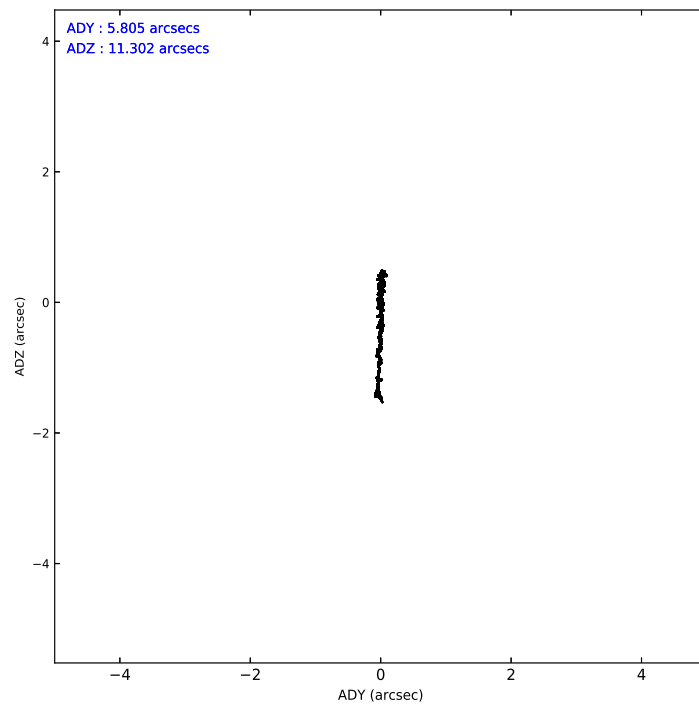
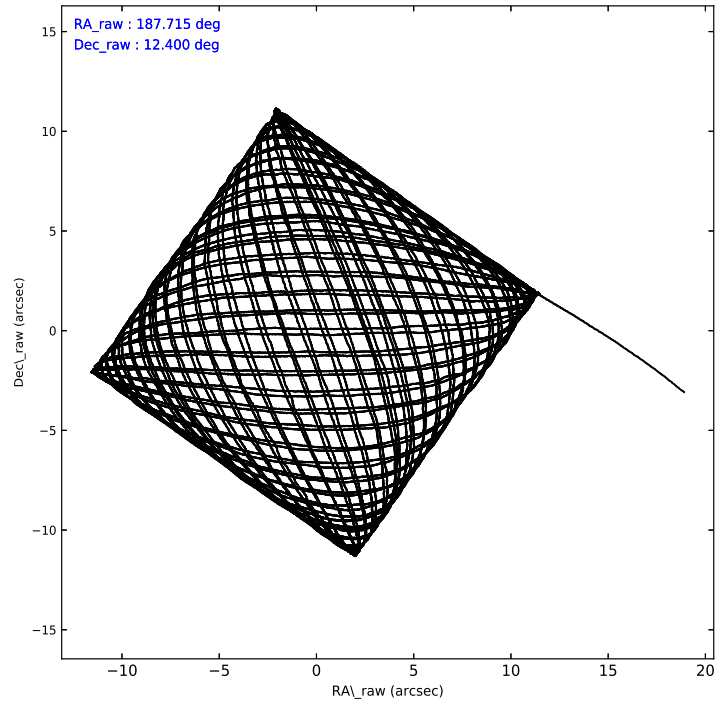
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	359299	424684	468822	744900
rejected events	189424	184221	215588	220952
rejected %	52%	43%	45%	29%

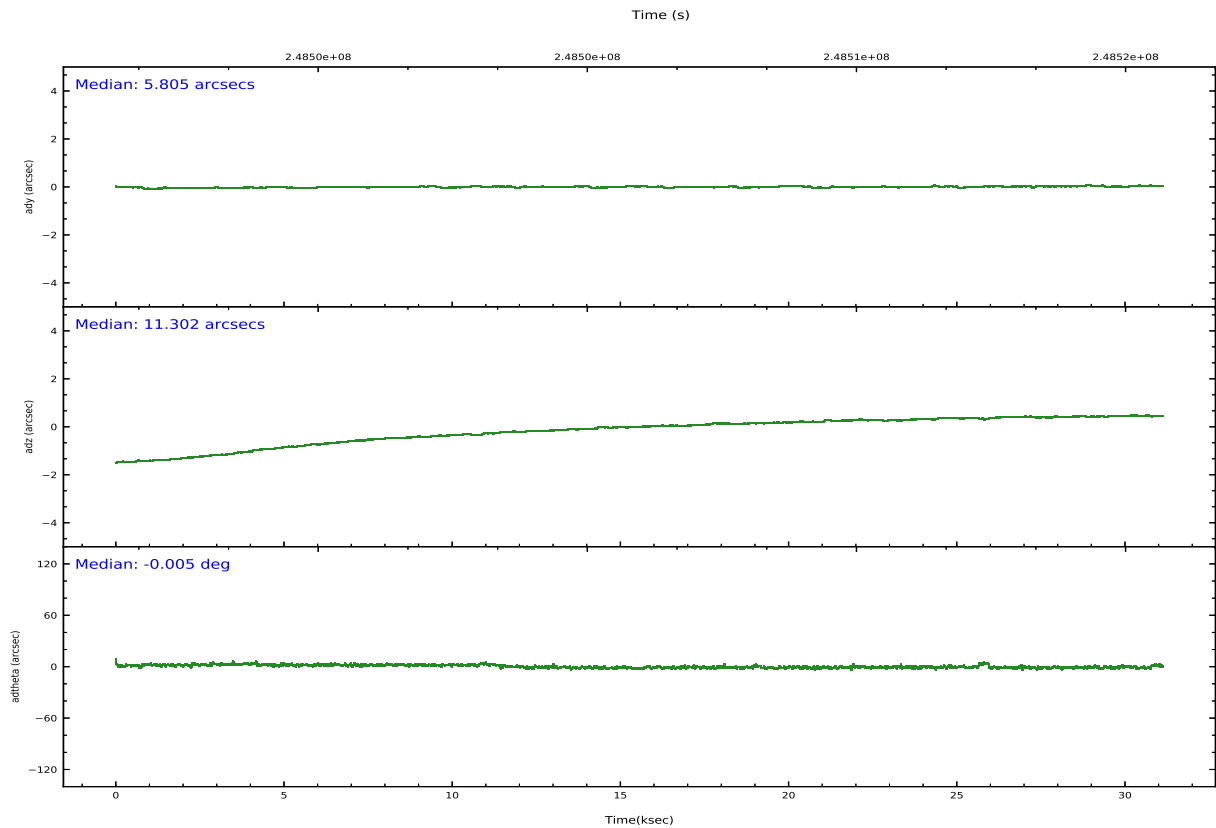
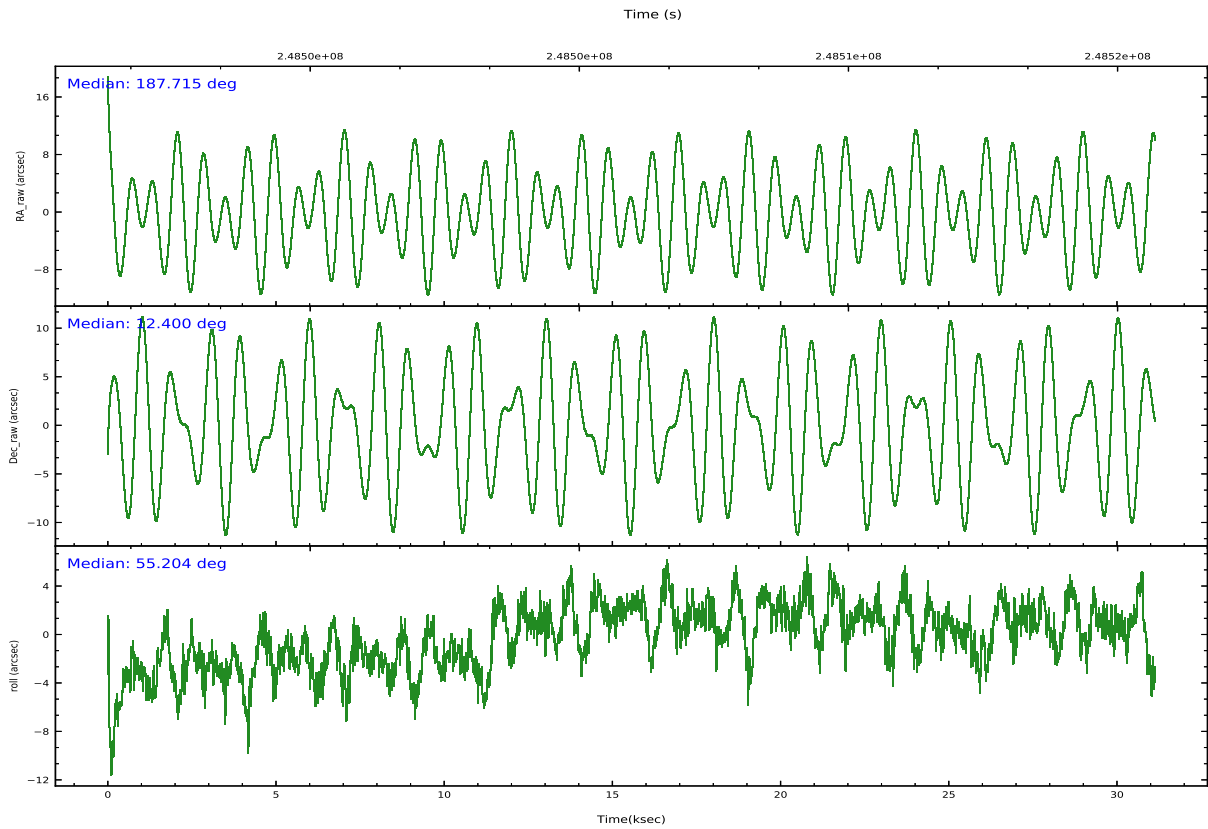
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	133403	191486	205451	436572
	37%	45%	43%	58%
grade 1 events	761	870	1325	4292
	0%	0%	0%	0%
grade 2 events	19027	25640	25276	48047
	5%	6%	5%	6%
grade 3 events	6327	8497	8384	15226
	1%	2%	1%	2%
grade 4 events	6122	8269	8448	14961
	1%	1%	1%	2%
grade 5 events	7817	8954	7595	12707
	2%	2%	1%	1%
grade 6 events	6682	8769	7704	12920
	1%	2%	1%	1%
grade 7 events	179160	172199	204639	200175
	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	187.71694595907	Subarray requested	NONE	NONE
[deg] Pointing Dec	12.373119	12.397164621736	Alternating exposures requested	N	N
[deg] Pointing Roll	54.998567	55.204354833323	[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	-231.5986110572947			
[mm] SIM translation stage offset	-2	-1.993841945634955			
[s] Observation start time (MET)	248490117.184000	248488883.03227			
Observation start date	2005-11-16T01:00:53	2005-11-16T00:41:23			
[s] Observation end time (MET)	248521117.184000	248522217.05881			
Observation end date	2005-11-16T09:37:33	2005-11-16T09:56:57			
Read mode	TIMED	TIMED			

2.3 Aspect





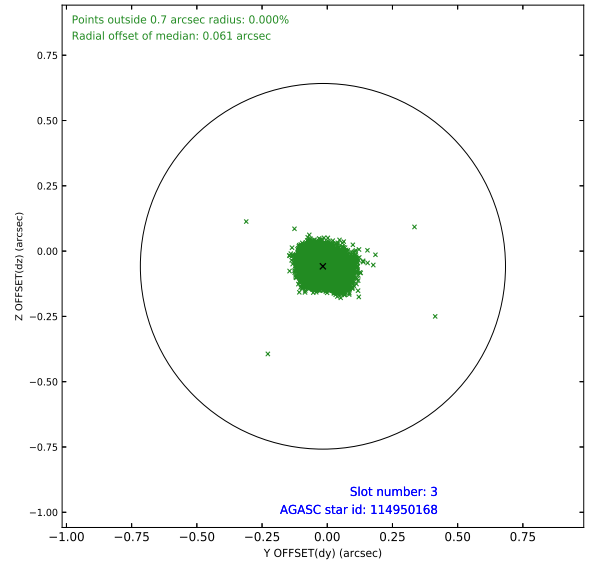
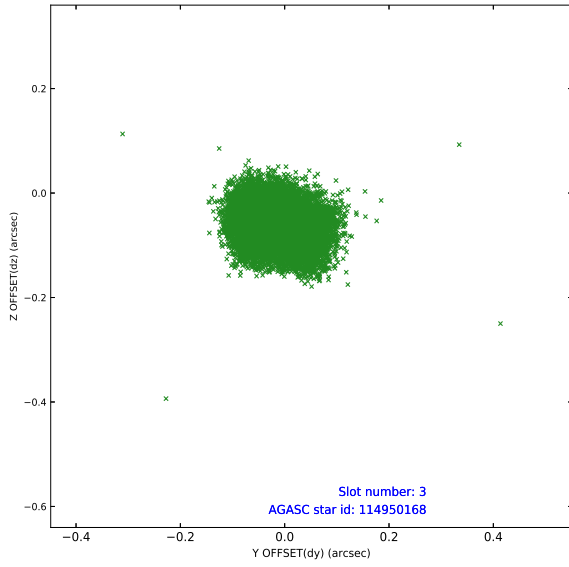
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	7594	1.000	-0.028	-0.059	0.019	0.029	0.000000	0.000000	933.90	-875
1	FID		ACIS-I-2	7.15	7593	1.000	-0.181	-0.041	0.011	0.018	0.000000	0.000000	-760.41	-881
2	FID		ACIS-I-4	7.16	7593	1.000	0.110	0.166	0.012	0.018	0.000000	0.000000	2153.68	1024
3	GUIDE	used	114950168	7.84	15123	1.000	-0.017	-0.058	0.062	0.097	187.143398	12.117441	-1902.19	1115
4	GUIDE	used	114950584	9.20	15177	1.000	0.116	0.222	0.080	0.130	187.487323	11.827248	-2065.35	-475
5	GUIDE	used	114952824	8.57	15186	1.000	-0.209	-0.059	0.065	0.105	187.703904	12.486727	316.46	261
6	GUIDE	used	114954440	9.19	15174	1.000	0.066	-0.159	0.098	0.161	186.915066	12.219118	-2060.80	1983
7	GUIDE	used	114955056	8.34	15186	1.000	0.046	0.055	0.065	0.100	187.914001	12.127854	-317.12	-1085

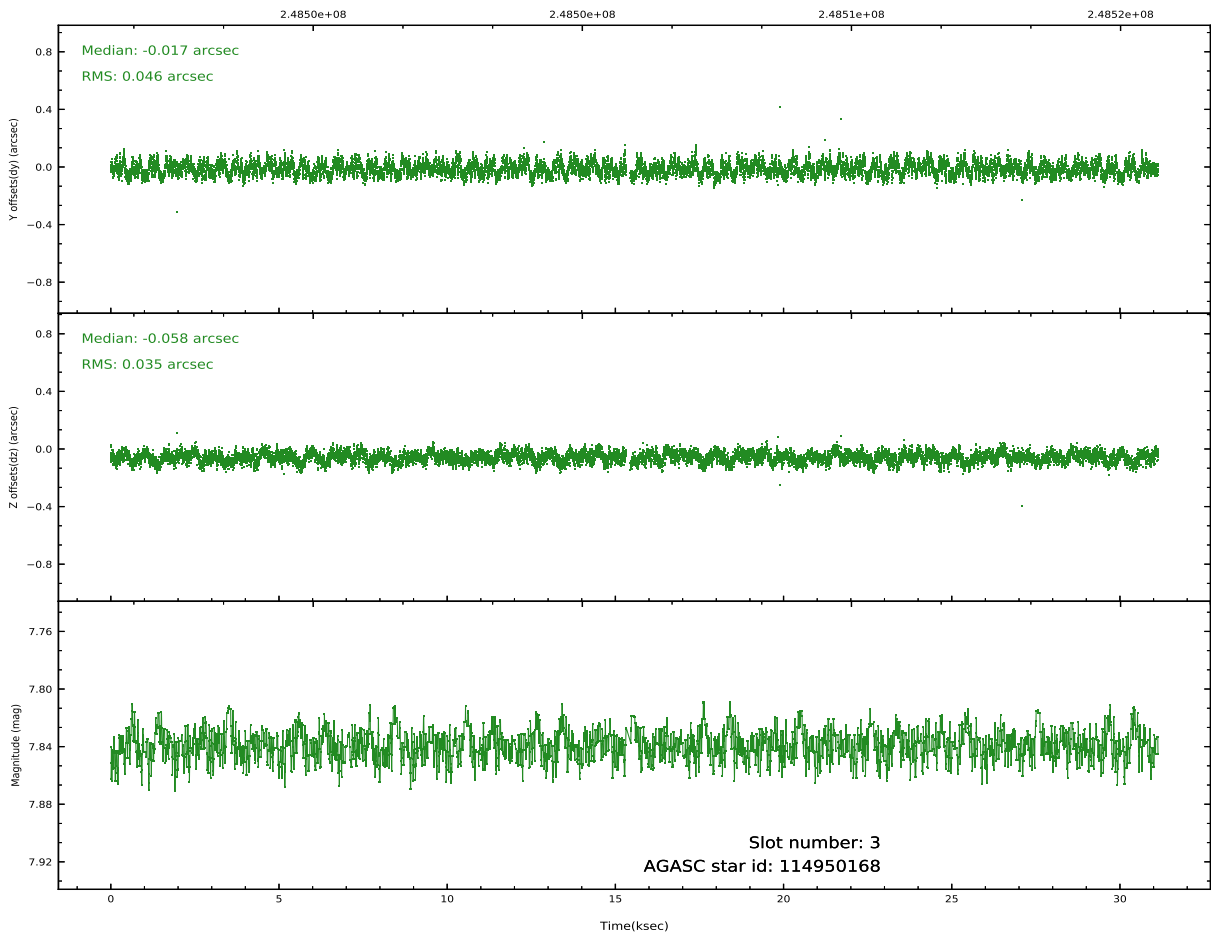
∞

2.4 Star Slots

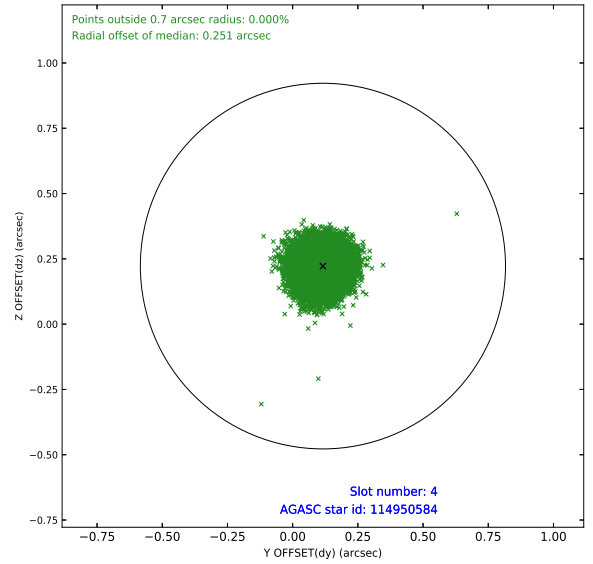
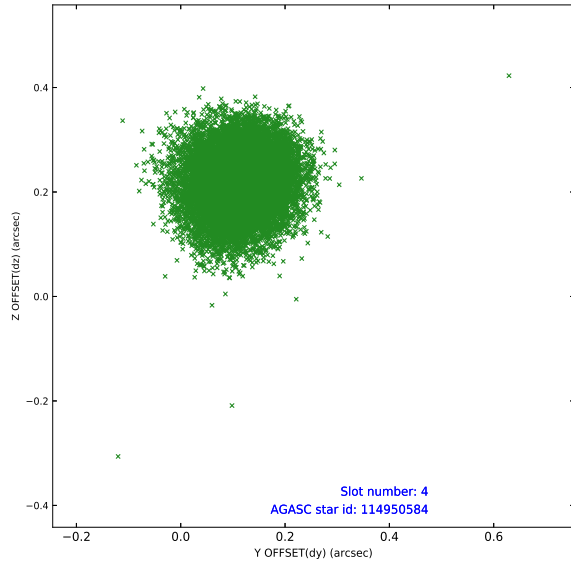
2.4.1 Slot 3



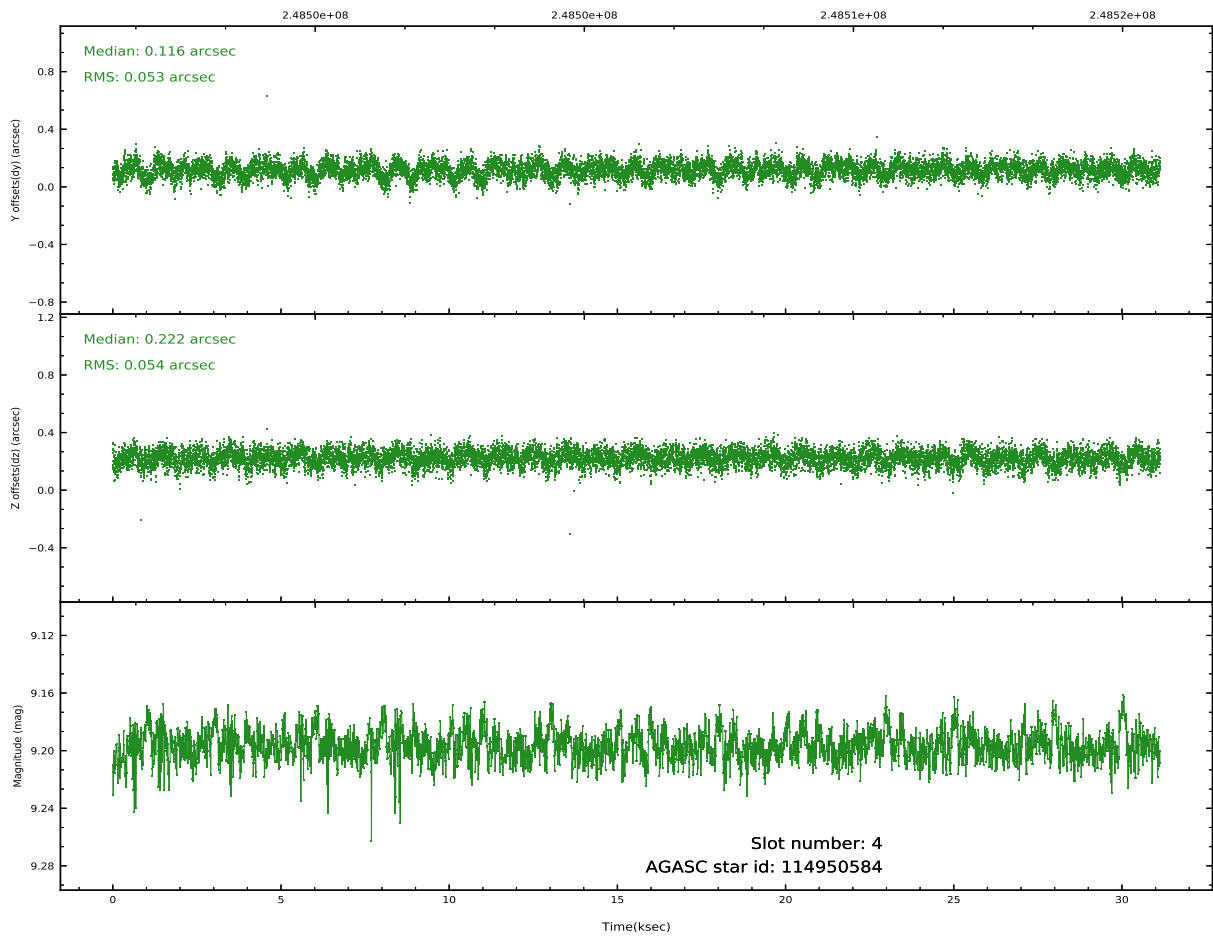
Time (s)



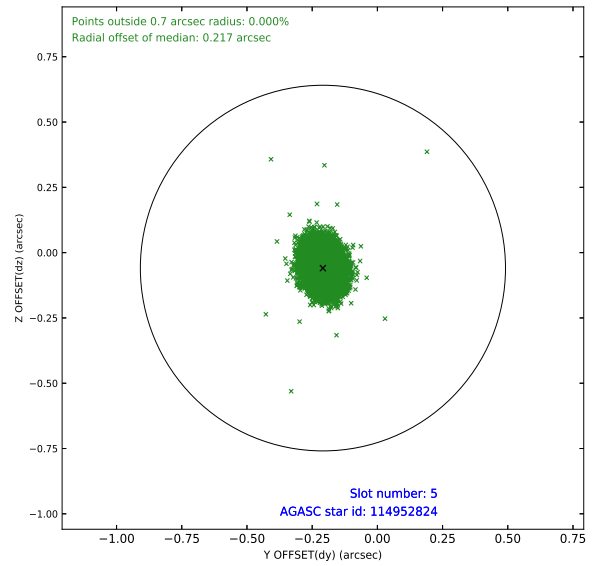
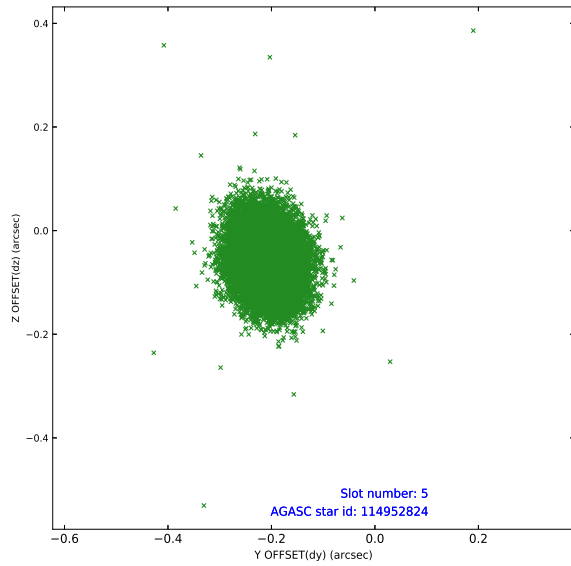
2.4.2 Slot 4



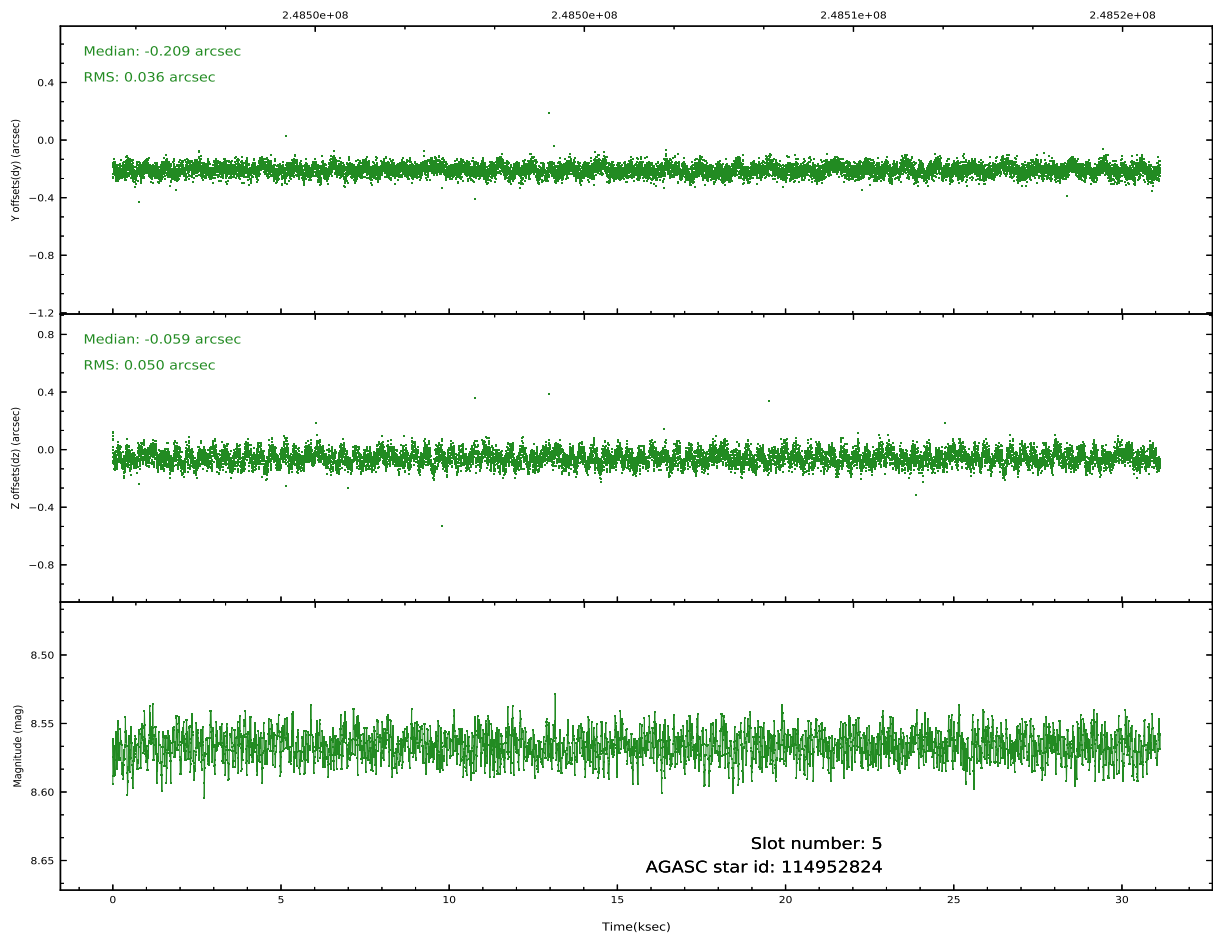
Time (s)



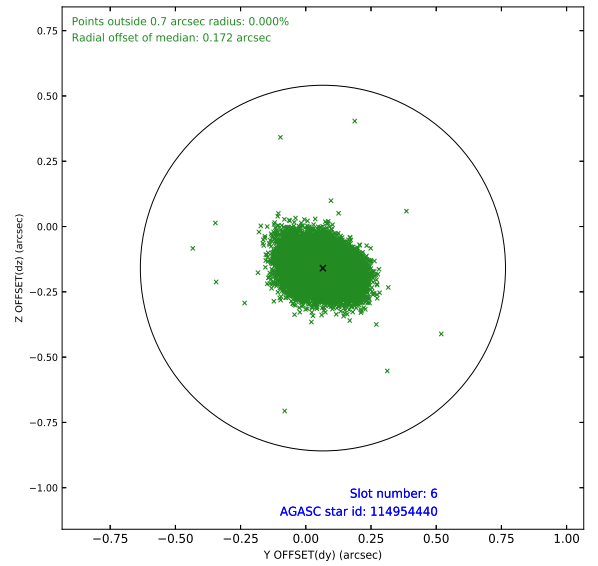
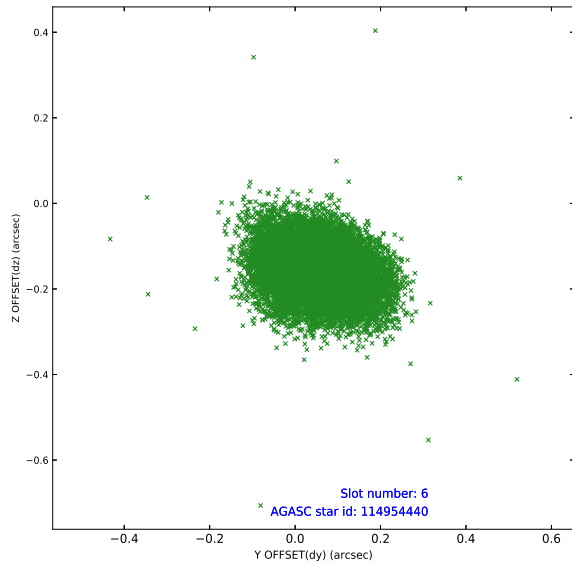
2.4.3 Slot 5



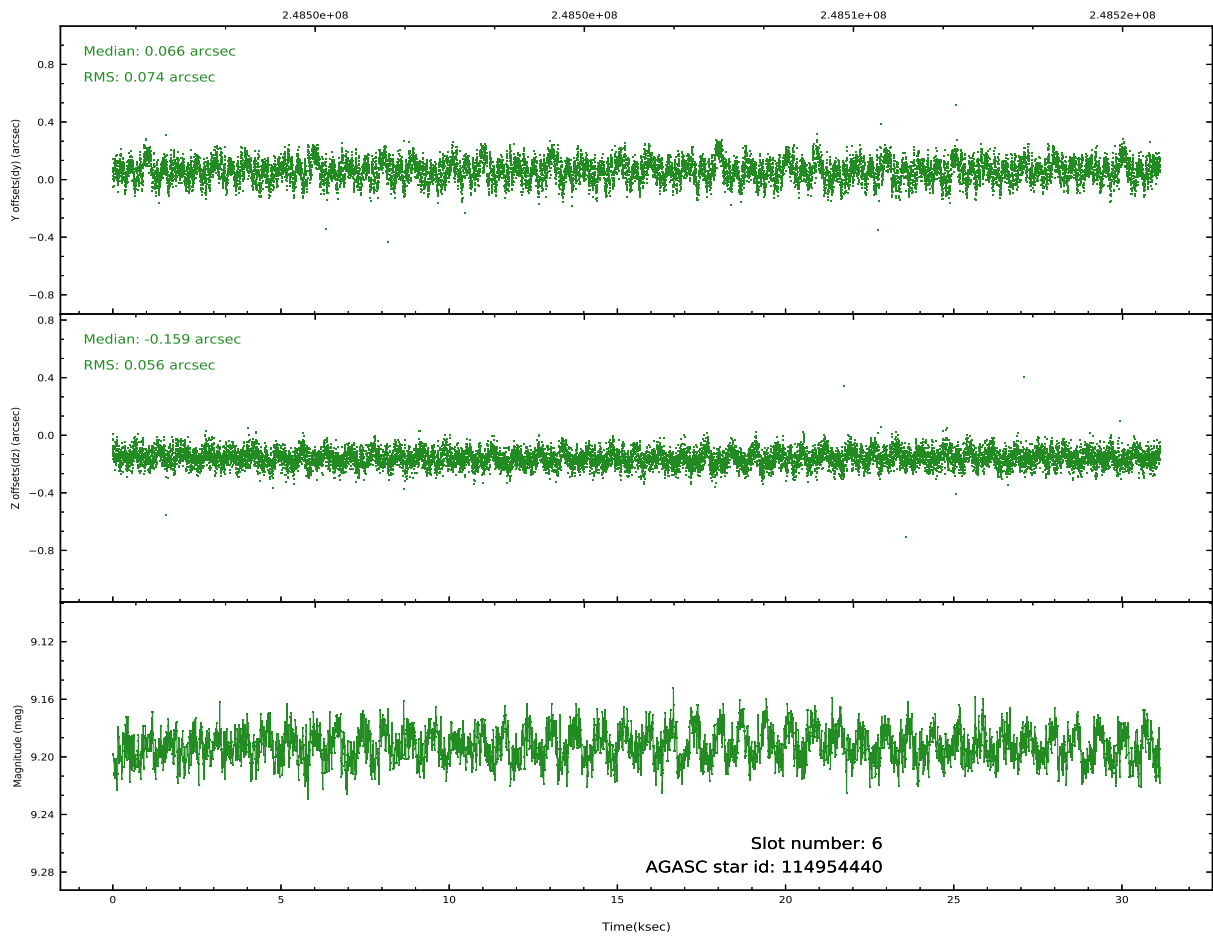
Time (s)



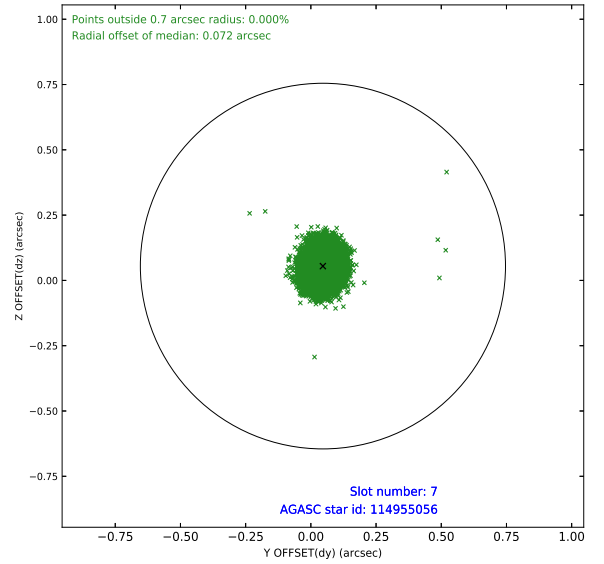
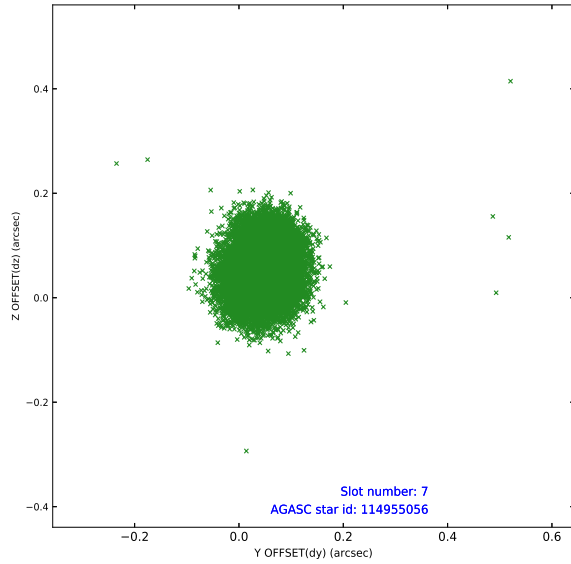
2.4.4 Slot 6



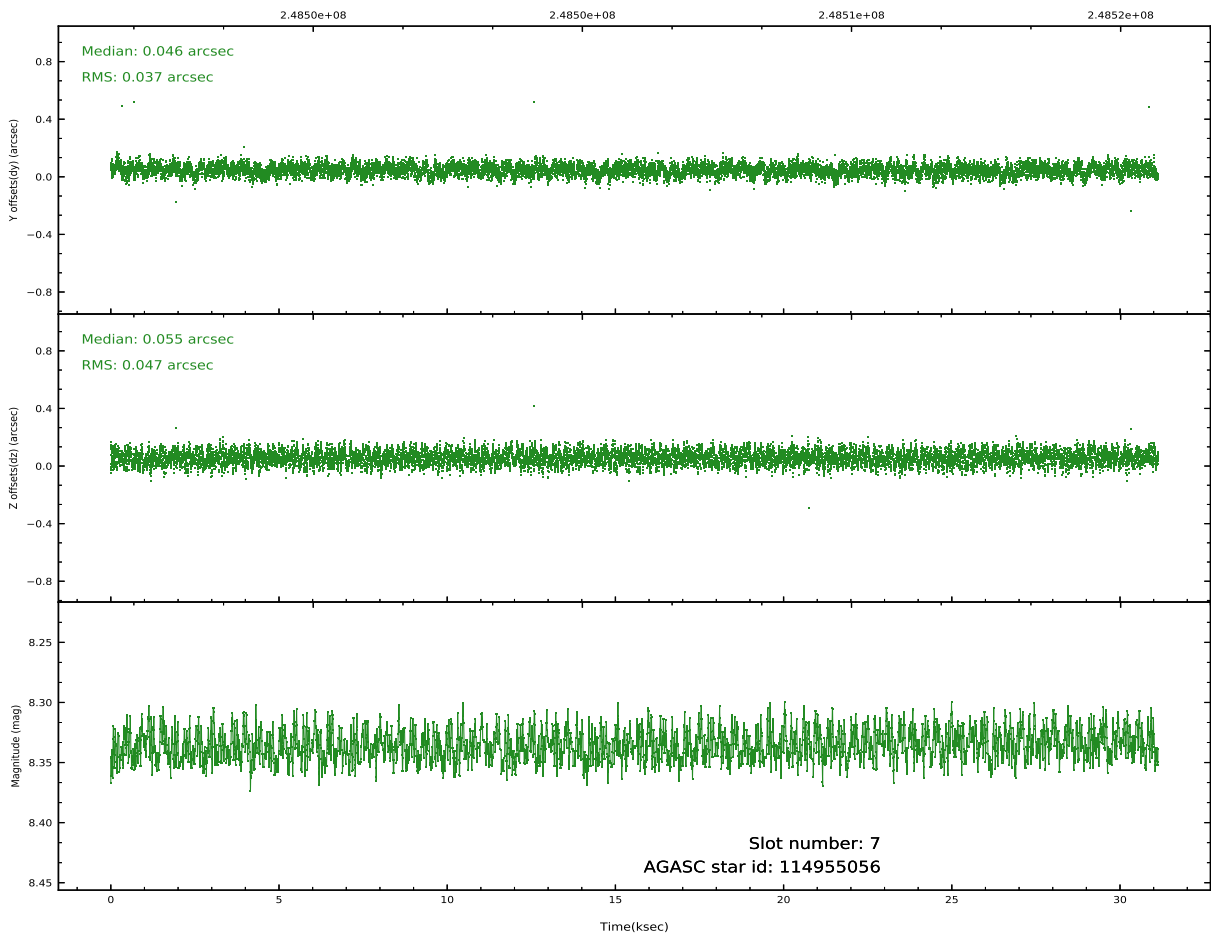
Time (s)



2.4.5 Slot 7

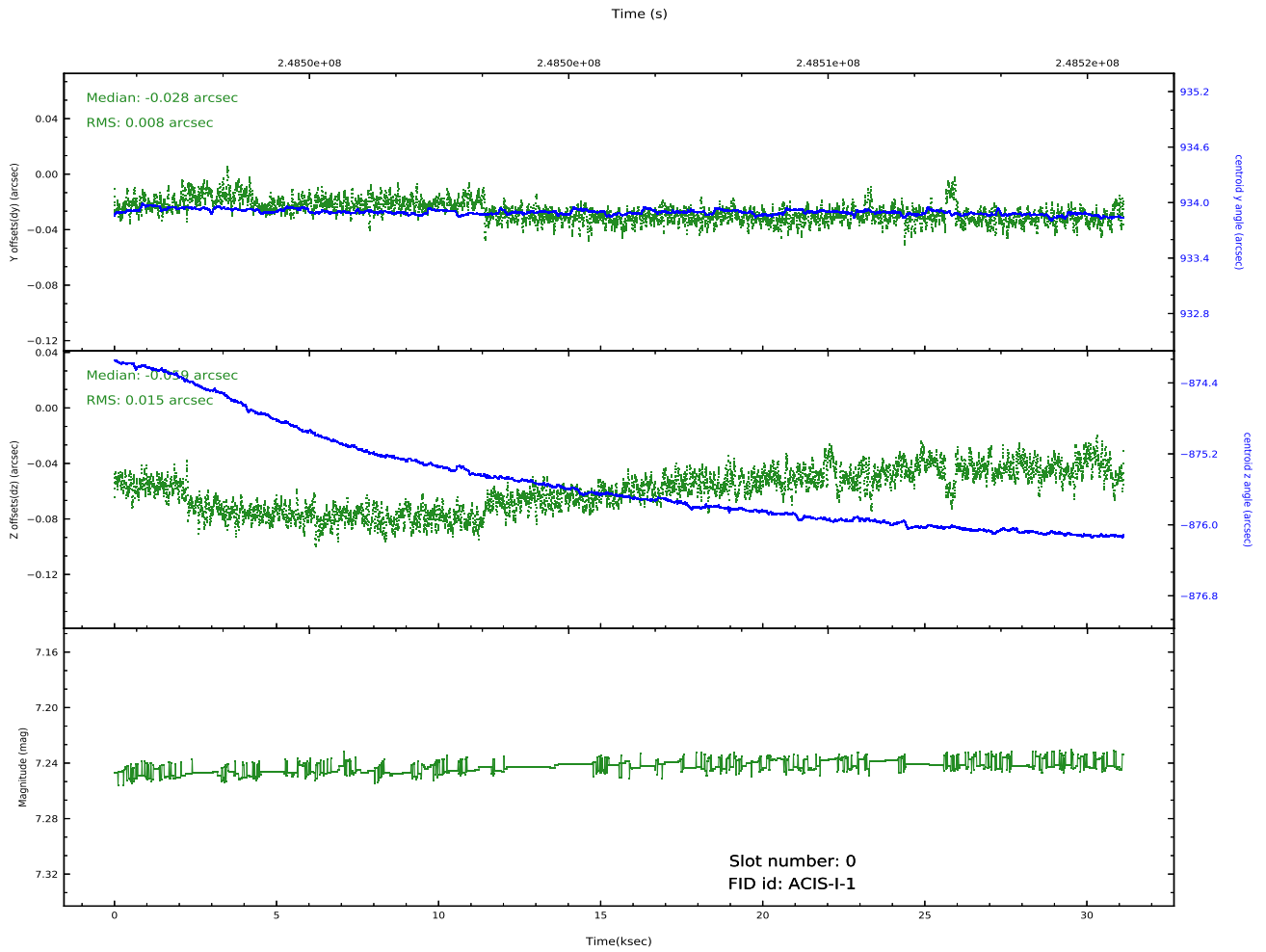
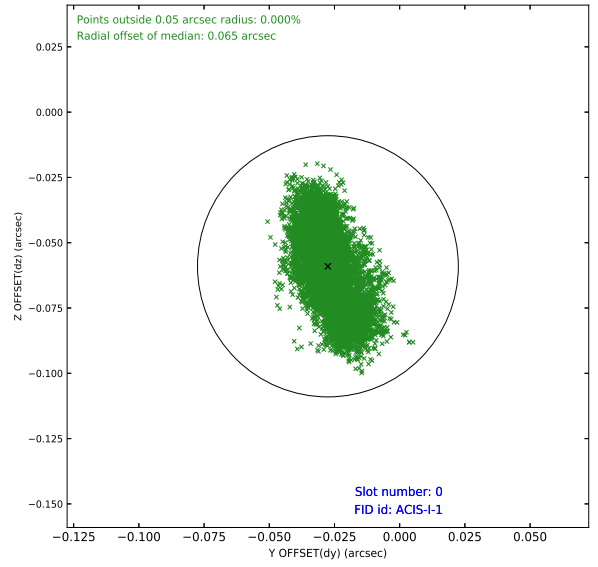
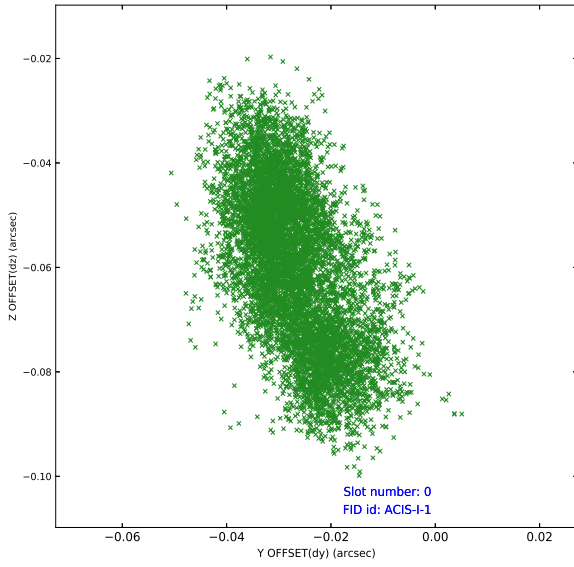


Time (s)

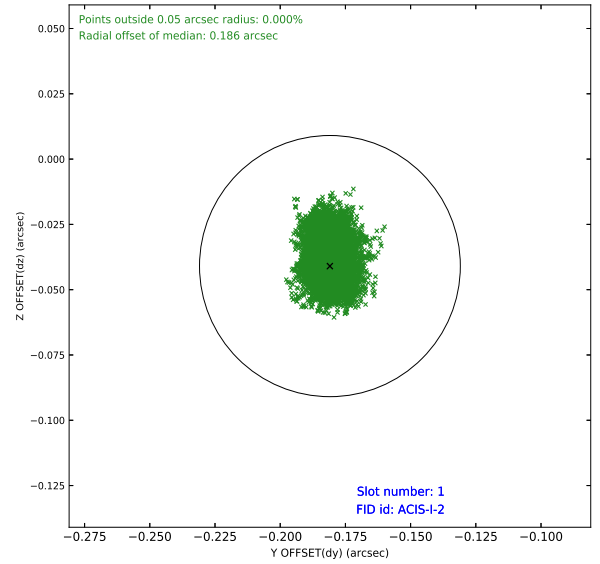
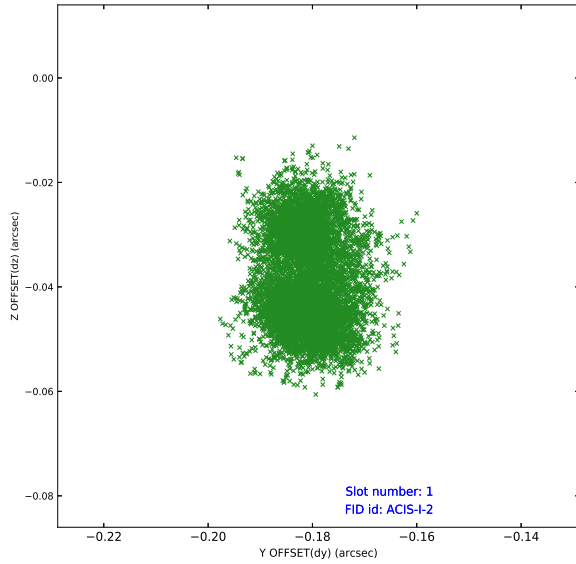


2.5 FID Slots

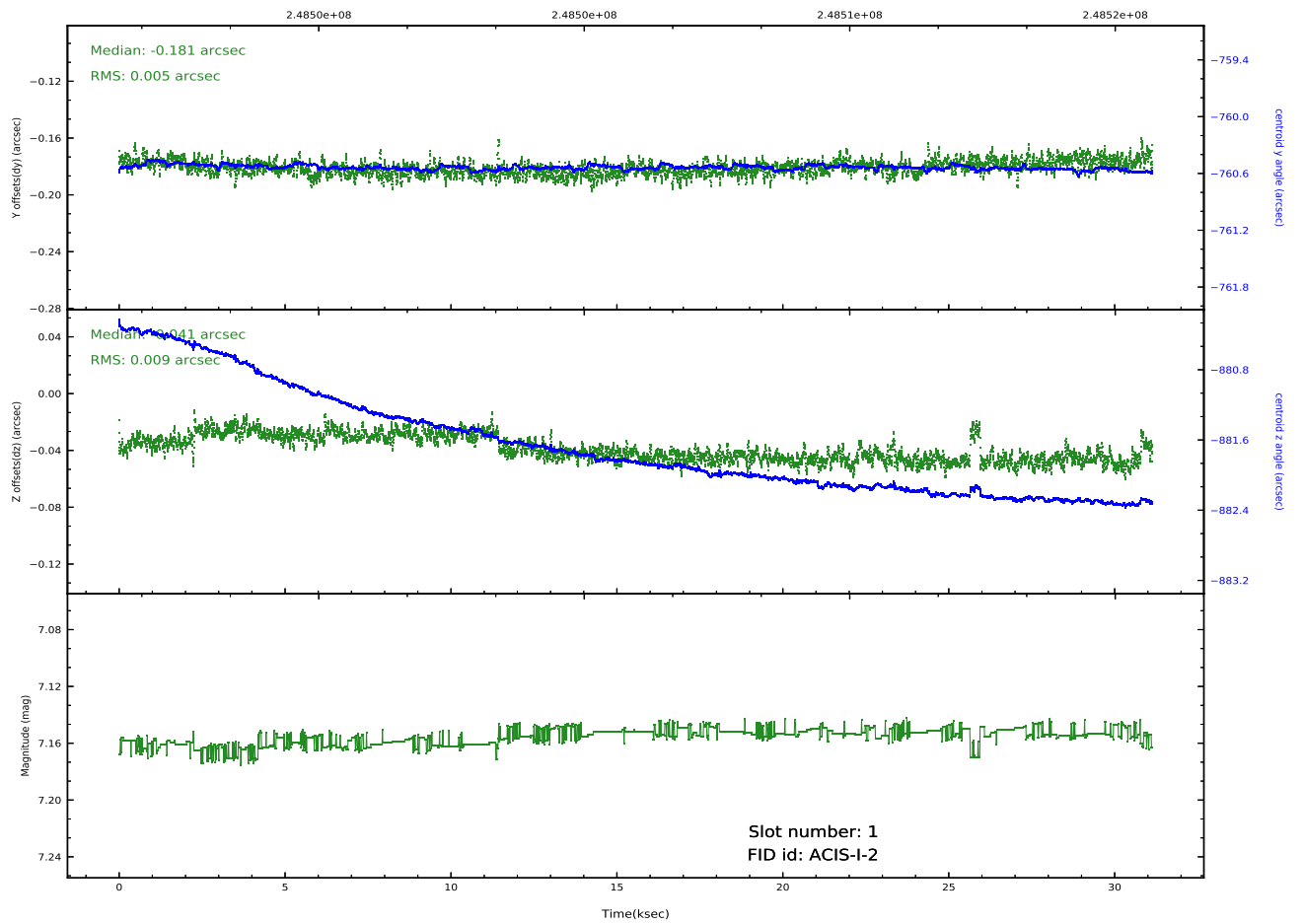
2.5.1 Slot 0



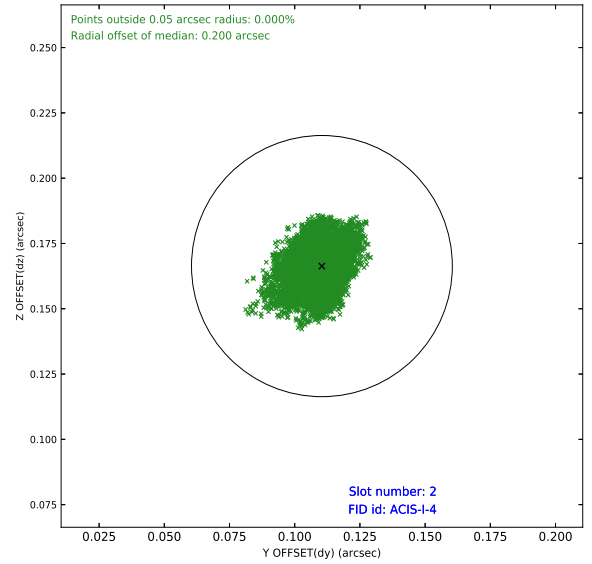
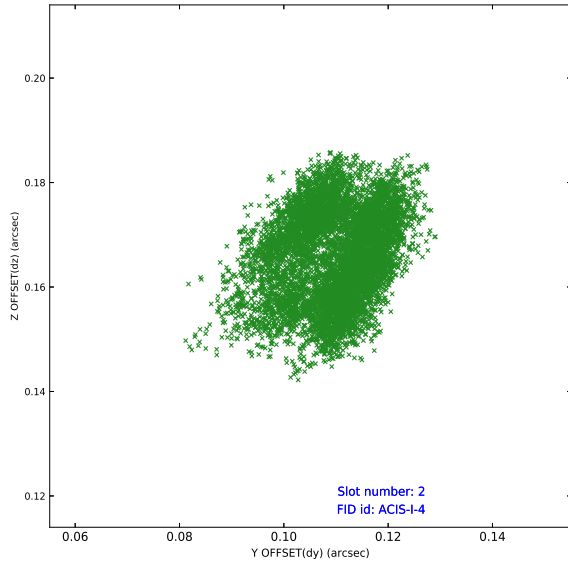
2.5.2 Slot 1



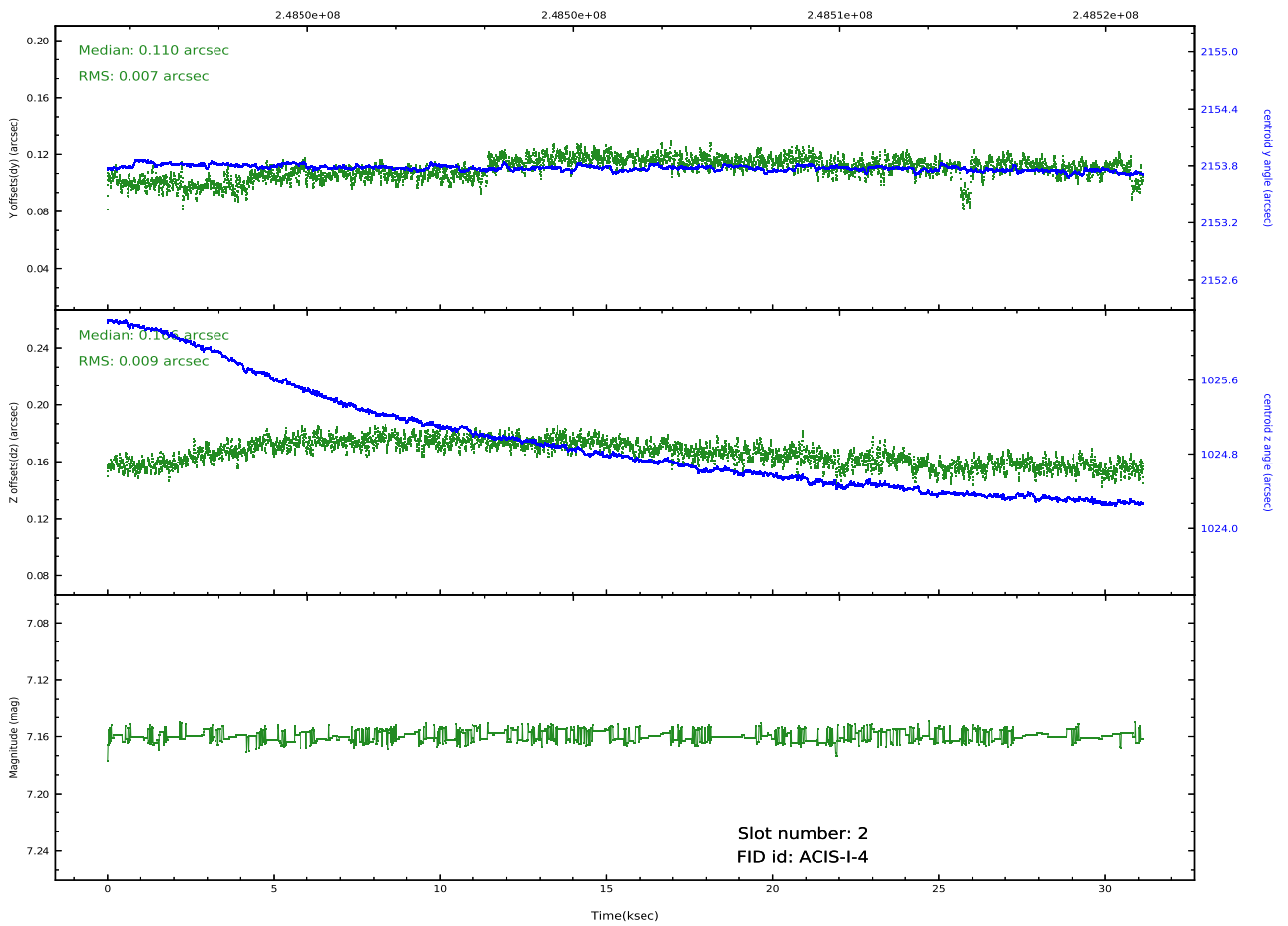
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.11767

A.2 Comments