

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7169 - L2 Version 3
Chandra X-Ray Center

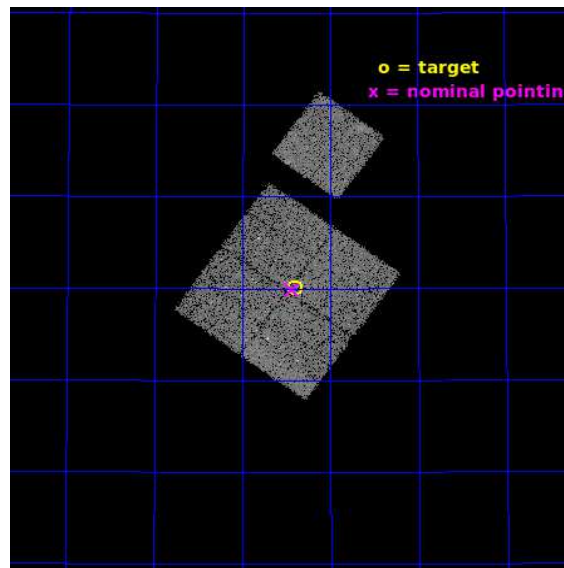
L2 Processing Date : Oct 11 2020

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1 Front

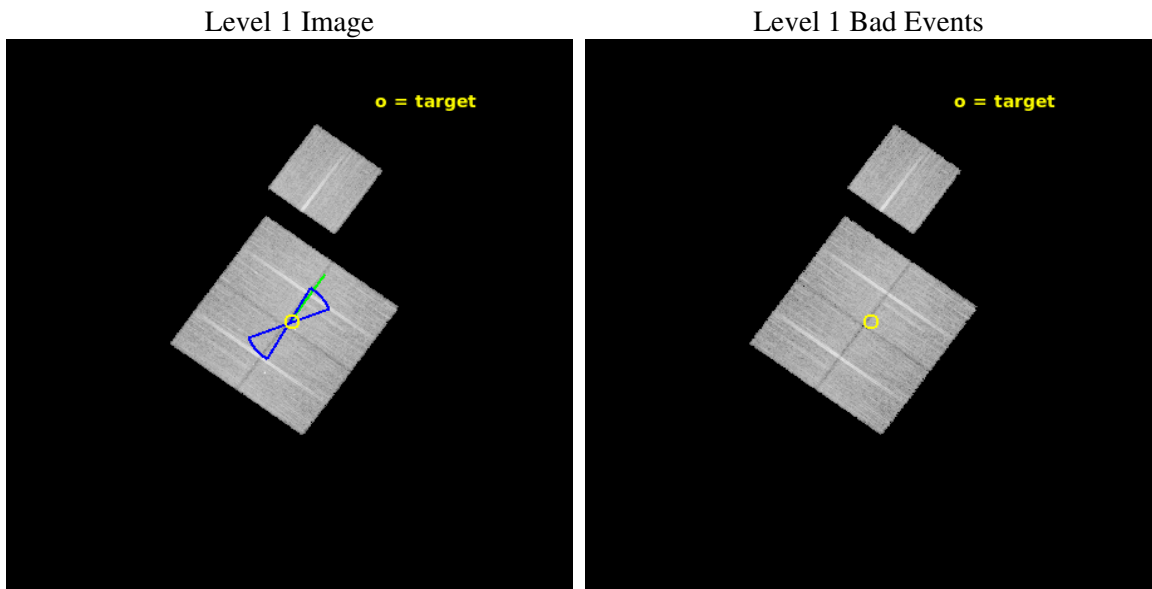
seq_num	900353	Sequence number
obs_id	7169	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	Extended Groth Strip (EGS)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.102079	Observer's specified target RA [deg]
dec_targ	52.334053	Observer's specified target Dec [deg]
ra_nom	214.10976708734	Nominal RA [deg]
dec_nom	52.331354917065	Nominal Dec [deg]
roll_nom	35.737717112122	Nominal Roll [deg]
revision	3	Processing version of data
ontime	16243.958998501	Sum of GTIs [s]
livetime	16031.719715557	Livetime [s]
ontime0	16243.959008455	Sum of GTIs [s]
ontime1	16247.099968731	Sum of GTIs [s]
ontime2	16247.099968731	Sum of GTIs [s]
ontime3	16243.958998501	Sum of GTIs [s]
ontime6	16247.099968731	Sum of GTIs [s]
l2events	46032	Number of level 2 events



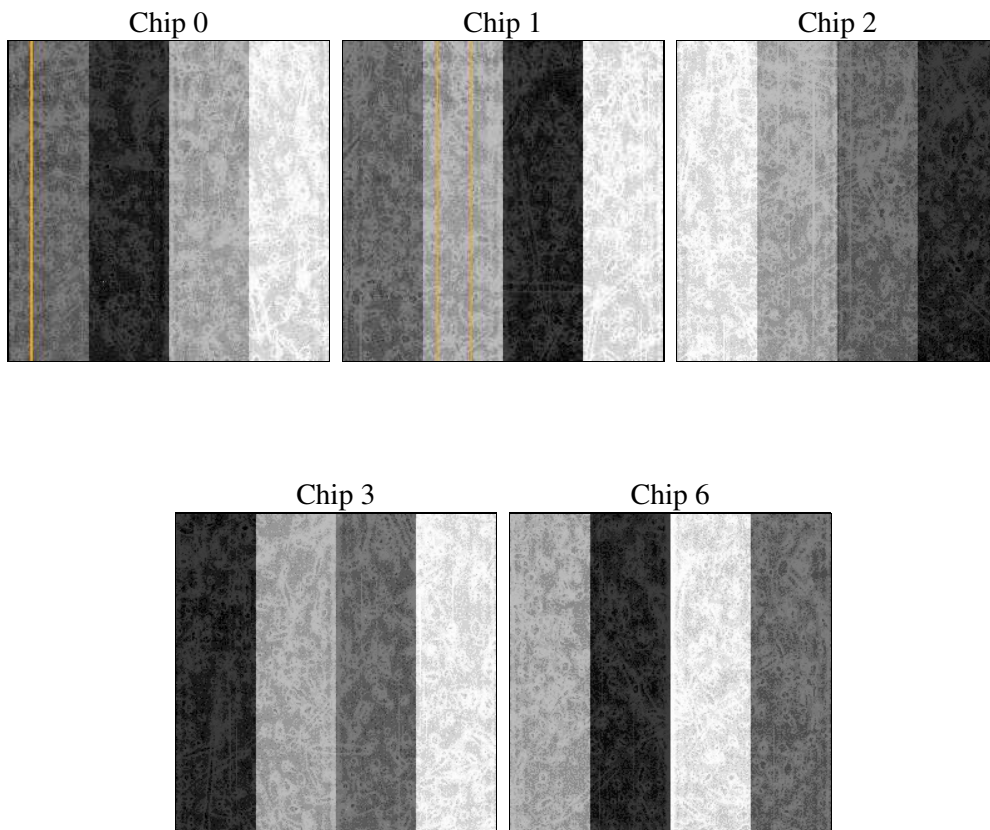
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16100.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	16243.958998501	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	16243.959008455	Sum of GTIs [s]
date	2020-10-12T02:45:02	Date and time of file creation	ontime1	16247.099968731	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	16247.099968731	Sum of GTIs [s]
			ontime3	16243.958998501	Sum of GTIs [s]
			ontime6	16247.099968731	Sum of GTIs [s]
			l1events	548752	Number of level 1 events

2.1.4 Events

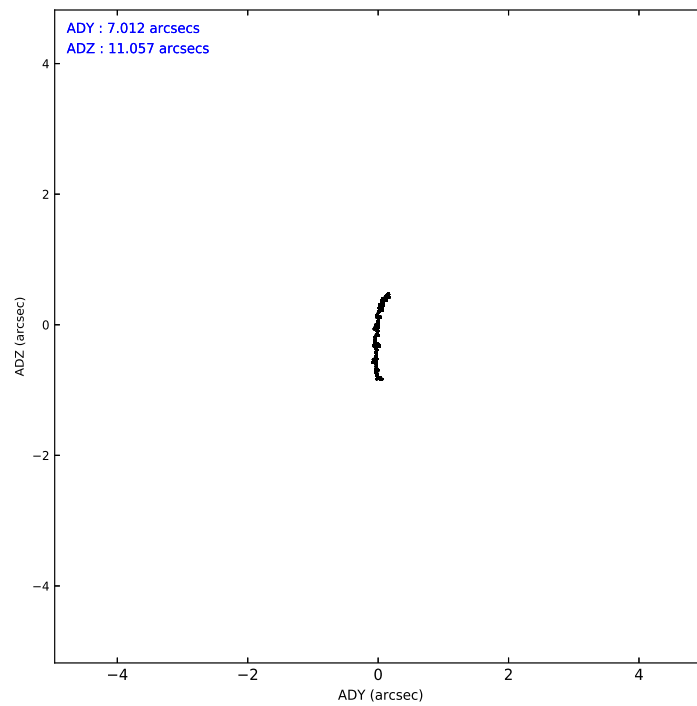
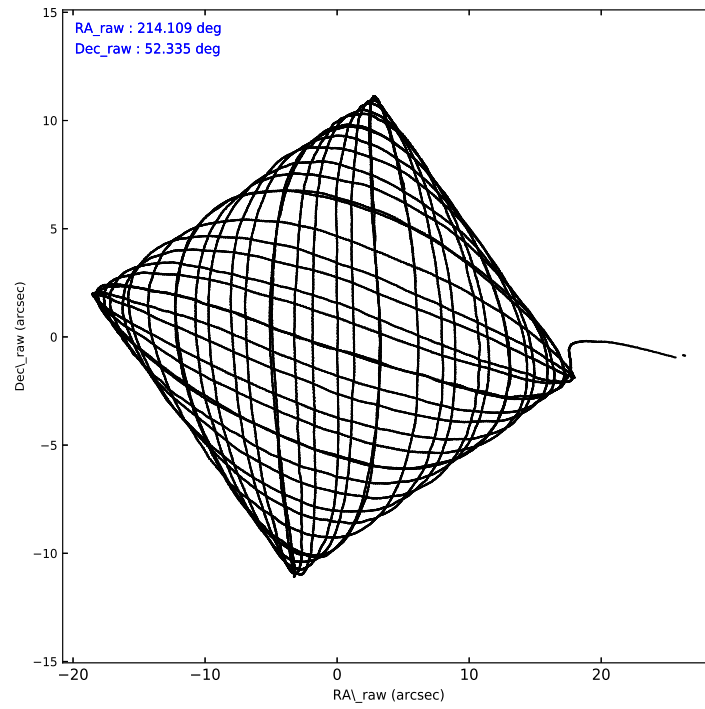
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	106012	105280	114815	111911	110734
rejected events	94999	92768	104061	101624	99496
rejected %	89%	88%	90%	90%	89%

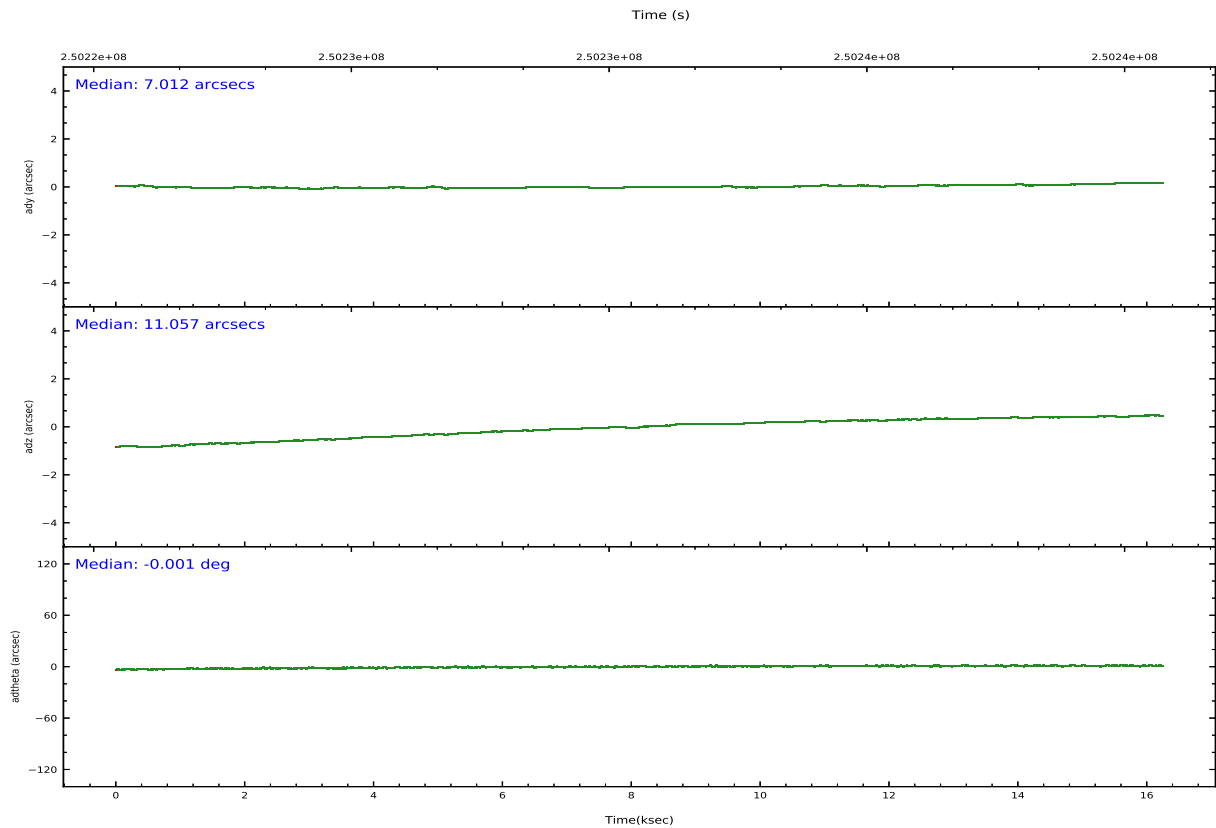
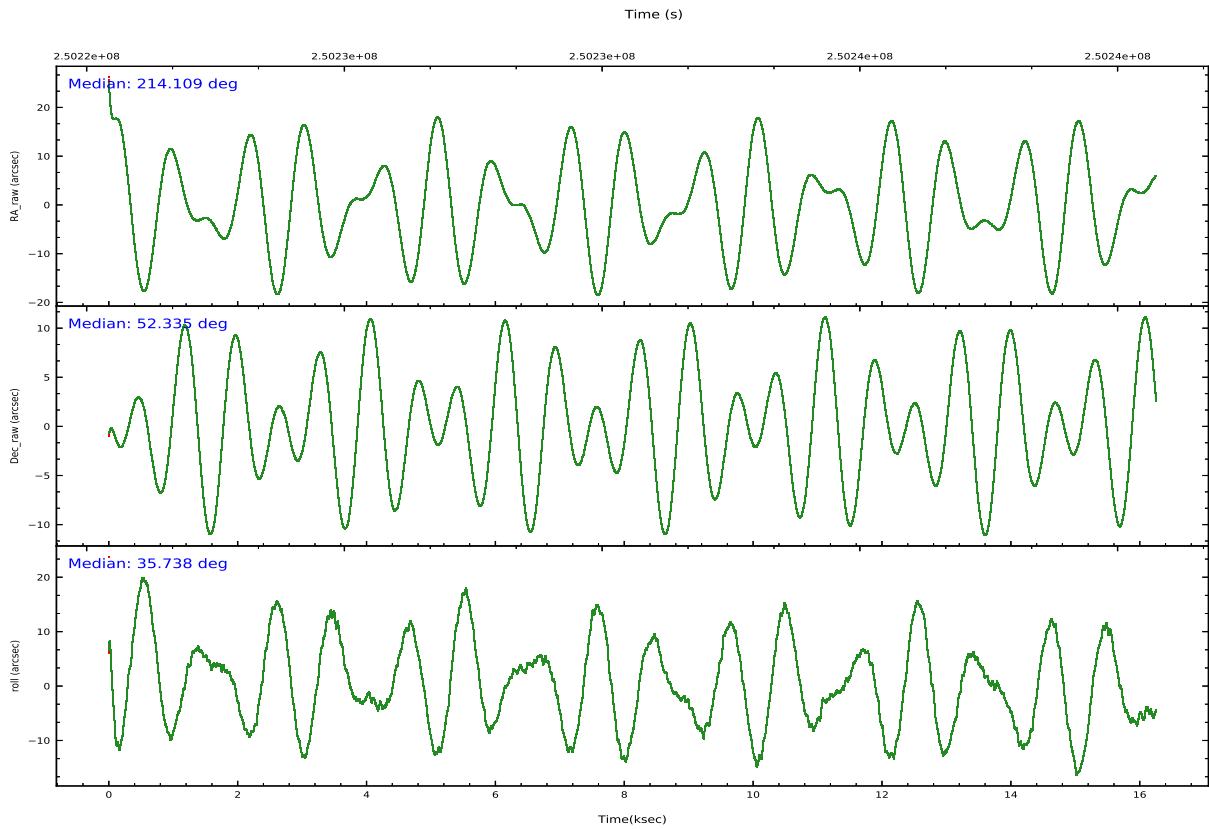
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3891	4733	3913	3815	4003
	3%	4%	3%	3%	3%
grade 1 events	54	66	63	61	47
	0%	0%	0%	0%	0%
grade 2 events	2686	2801	2664	2176	2399
	2%	2%	2%	1%	2%
grade 3 events	1278	1357	1229	1186	1323
	1%	1%	1%	1%	1%
grade 4 events	1177	1285	1182	1205	1286
	1%	1%	1%	1%	1%
grade 5 events	3822	4293	3597	4413	4410
	3%	4%	3%	3%	3%
grade 6 events	2164	2524	1935	2068	2440
	2%	2%	1%	1%	2%
grade 7 events	90940	88221	100232	96987	94826
	85%	83%	87%	86%	85%

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	214.091246	214.10976708734	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.310070	52.331354917065	Alternating exposures requested	N	N
[deg] Pointing Roll	35.553547	35.737717112122	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	50.756000	50.756000			
[deg] Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	250224498.184000	250223386.57491			
Observation start date	2005-12-06T02:47:14	2005-12-06T02:29:46			
[s] Observation end time (MET)	250240598.184000	250241959.06327			
Observation end date	2005-12-06T07:15:34	2005-12-06T07:39:19			
Read mode	TIMED	TIMED			

2.3 Aspect





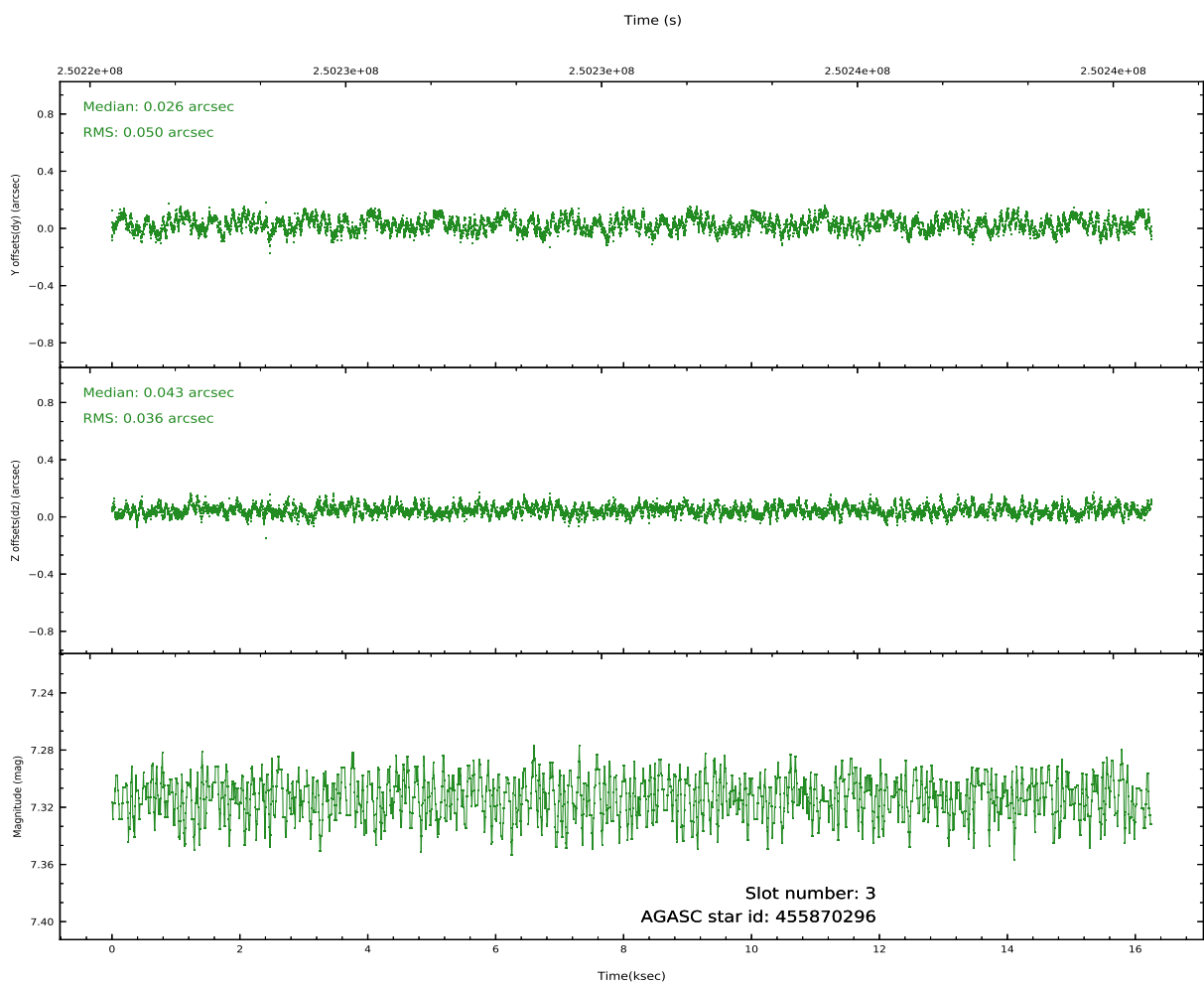
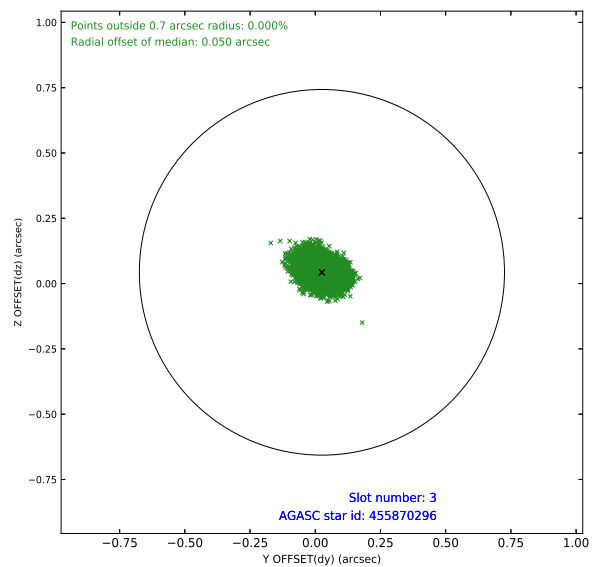
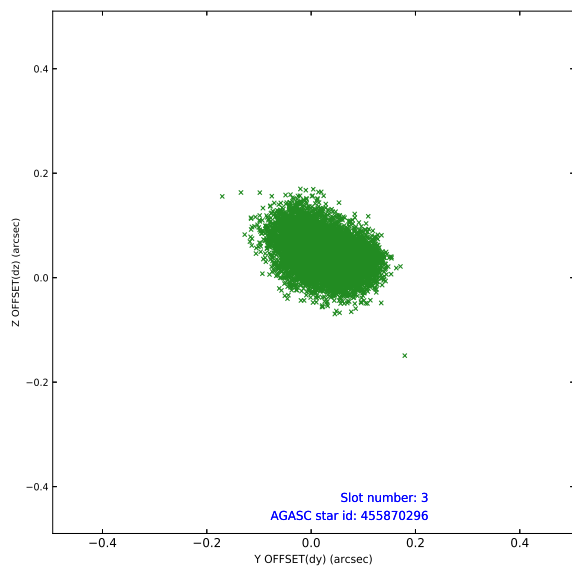
Slot Statistics

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	3965	1.000	0.048	-0.048	0.015	0.039	0.000000	0.000000	932.69	-834
1	FID		ACIS-I-5	7.23	3965	1.000	-0.204	0.047	0.013	0.025	0.000000	0.000000	-1815.50	1062
2	FID		ACIS-I-6	7.25	3965	1.000	0.066	0.071	0.011	0.021	0.000000	0.000000	397.99	1707
3	GUIDE	used	455870296	7.31	7926	1.000	0.026	0.043	0.067	0.104	214.629779	52.033323	394.06	-1500
4	GUIDE	used	455871352	8.12	7927	1.000	-0.118	0.189	0.072	0.114	215.099961	52.172669	1533.69	-1684
5	GUIDE	used	505806936	7.01	7928	1.000	0.069	0.006	0.090	0.147	213.820815	52.535927	-8.19	1006
6	GUIDE	used	505812376	7.58	7930	1.000	-0.150	-0.076	0.059	0.095	214.039537	52.937930	1222.54	1904
7	GUIDE	used	504894728	8.83	7926	1.000	0.168	-0.164	0.080	0.123	213.220892	52.722550	-673.78	2320

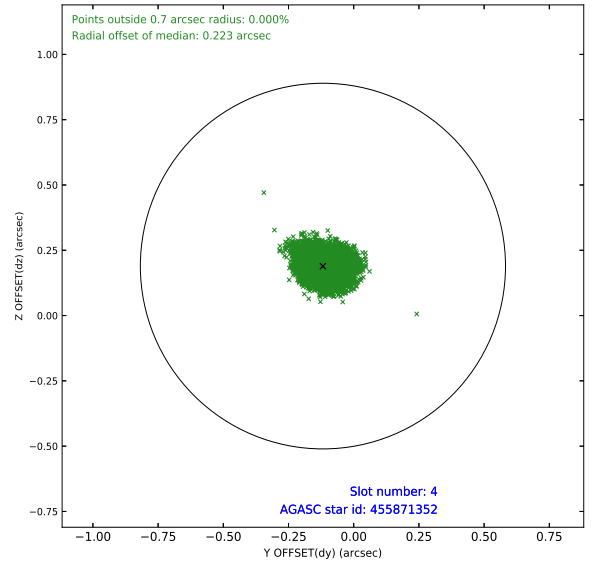
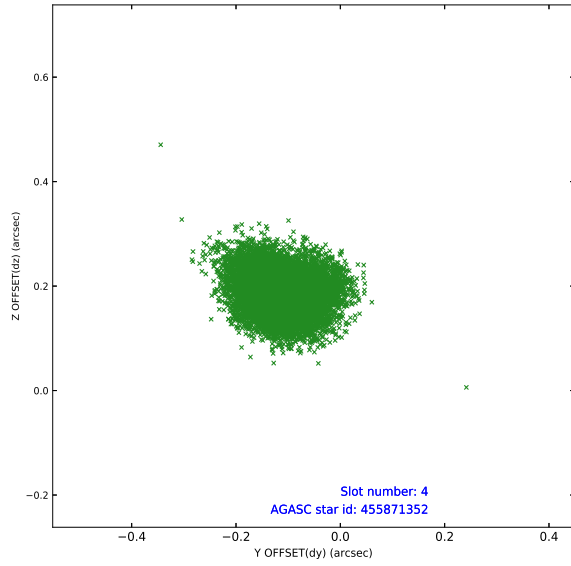
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2.4 Star Slots

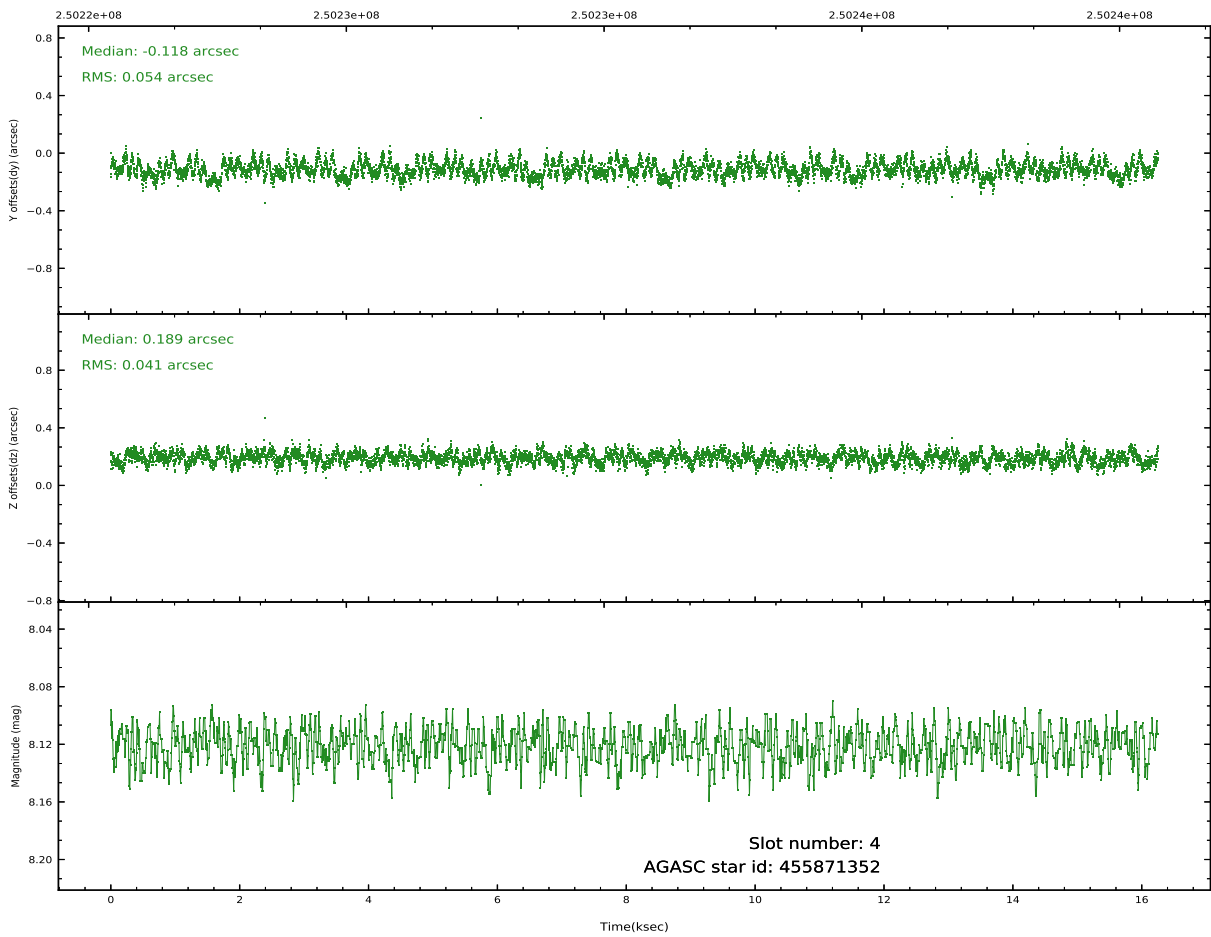
2.4.1 Slot 3



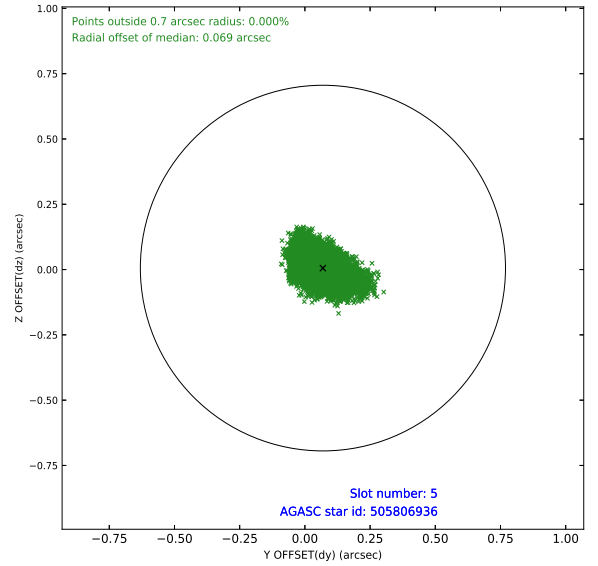
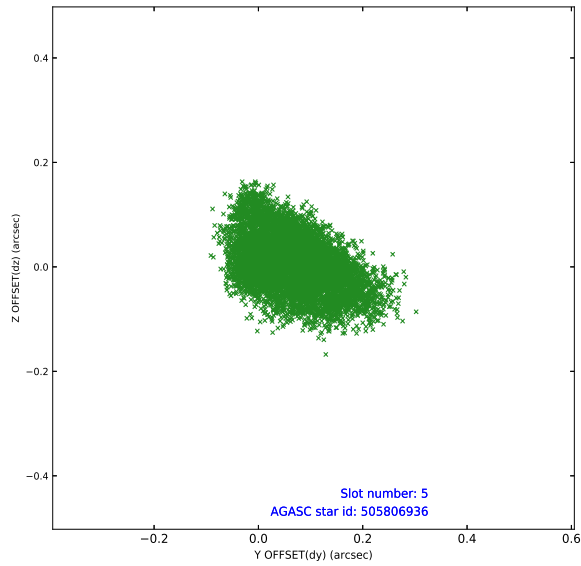
2.4.2 Slot 4



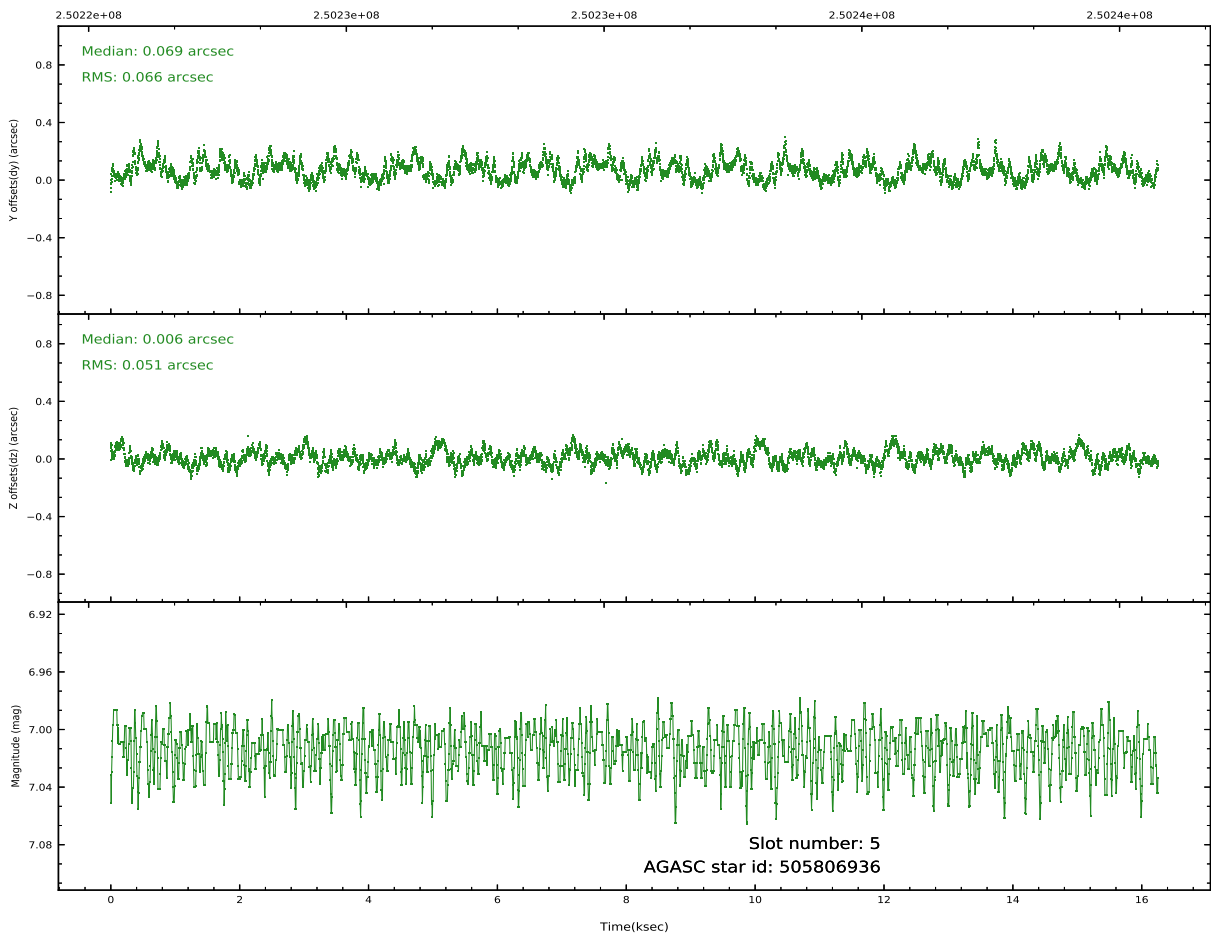
Time (s)



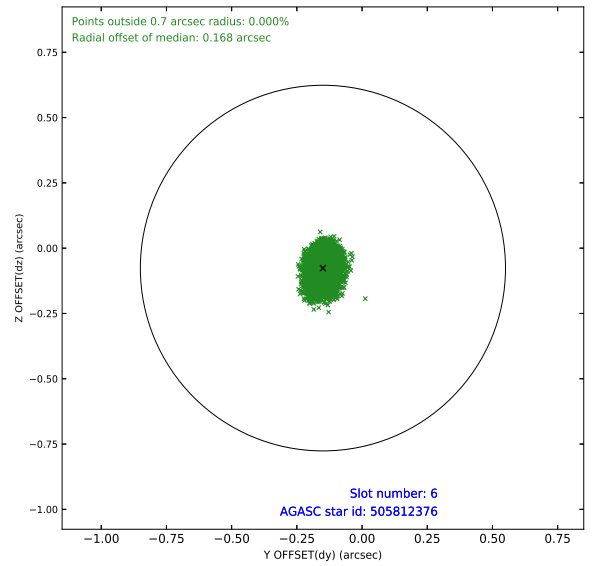
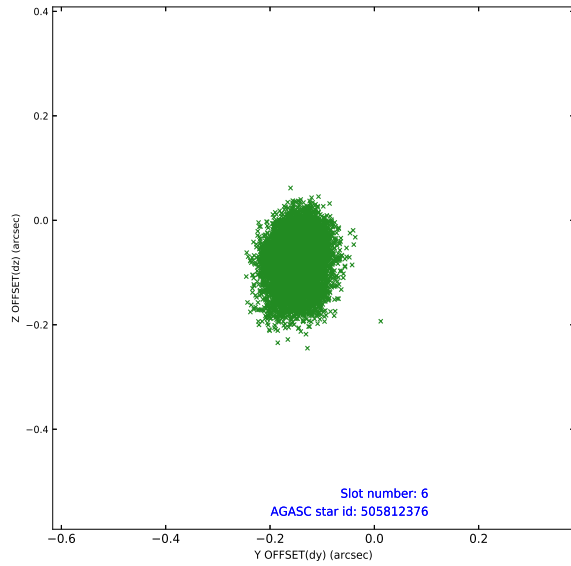
2.4.3 Slot 5



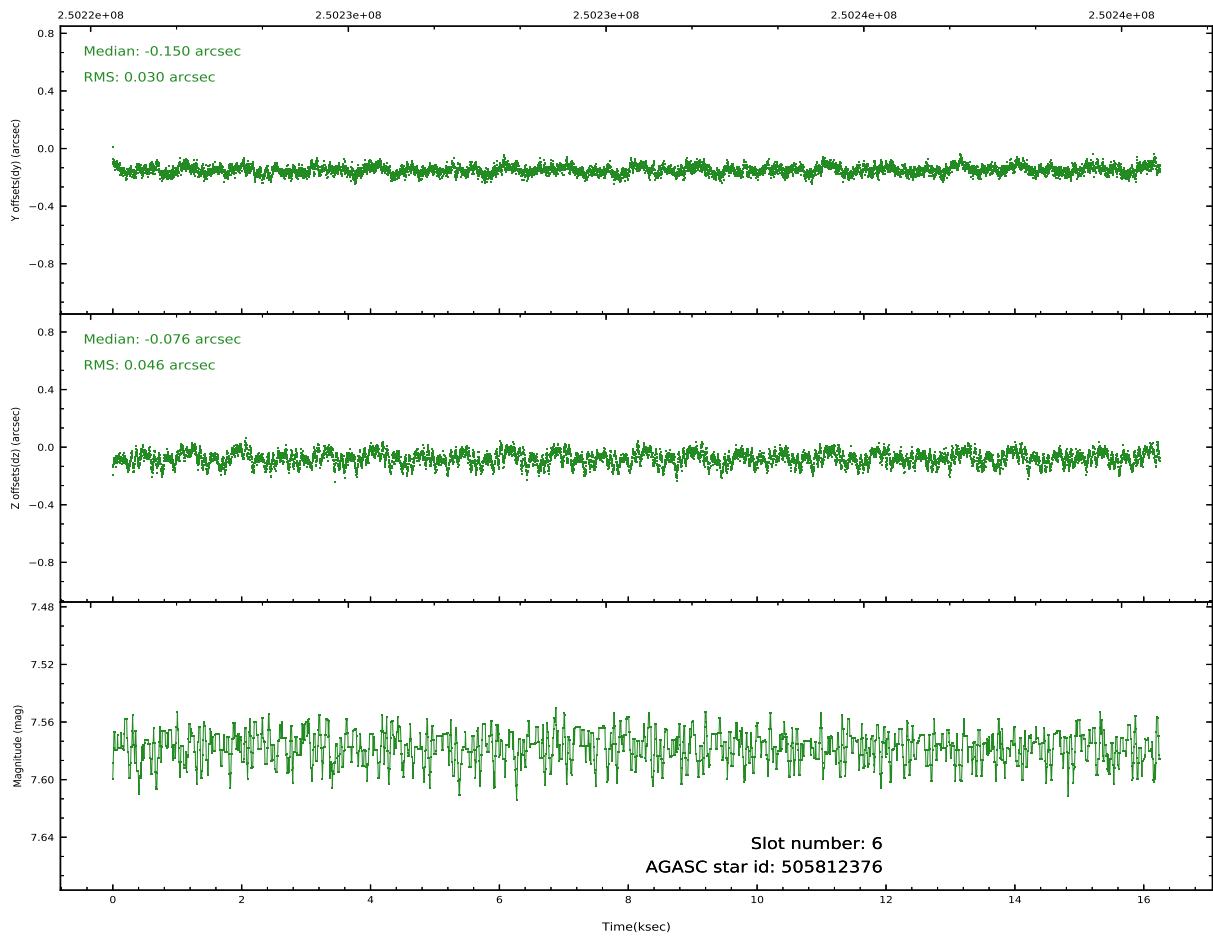
Time (s)



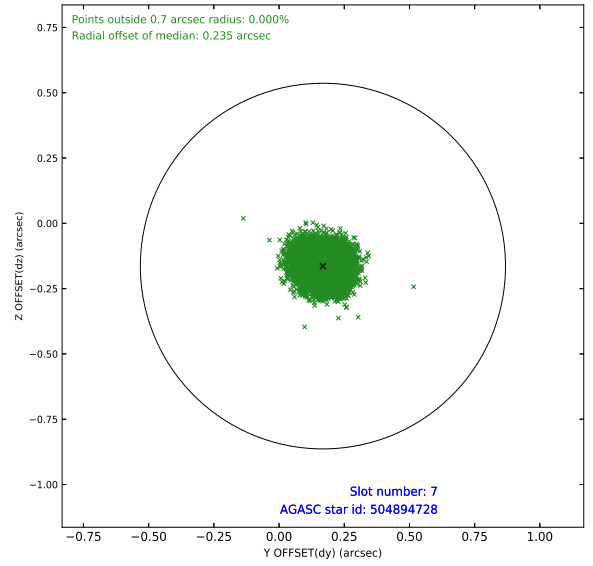
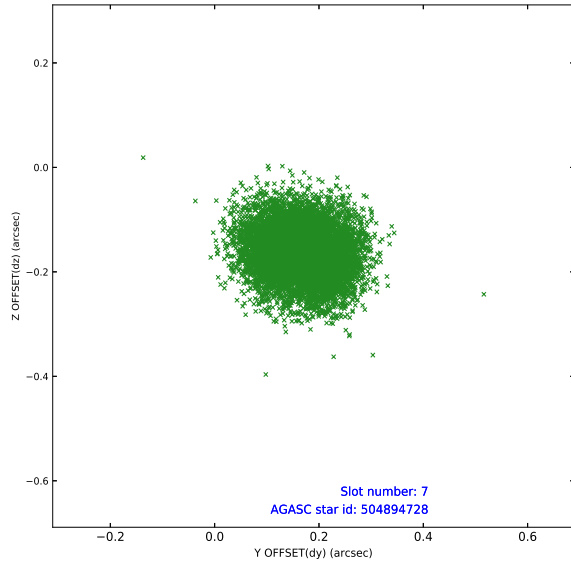
2.4.4 Slot 6



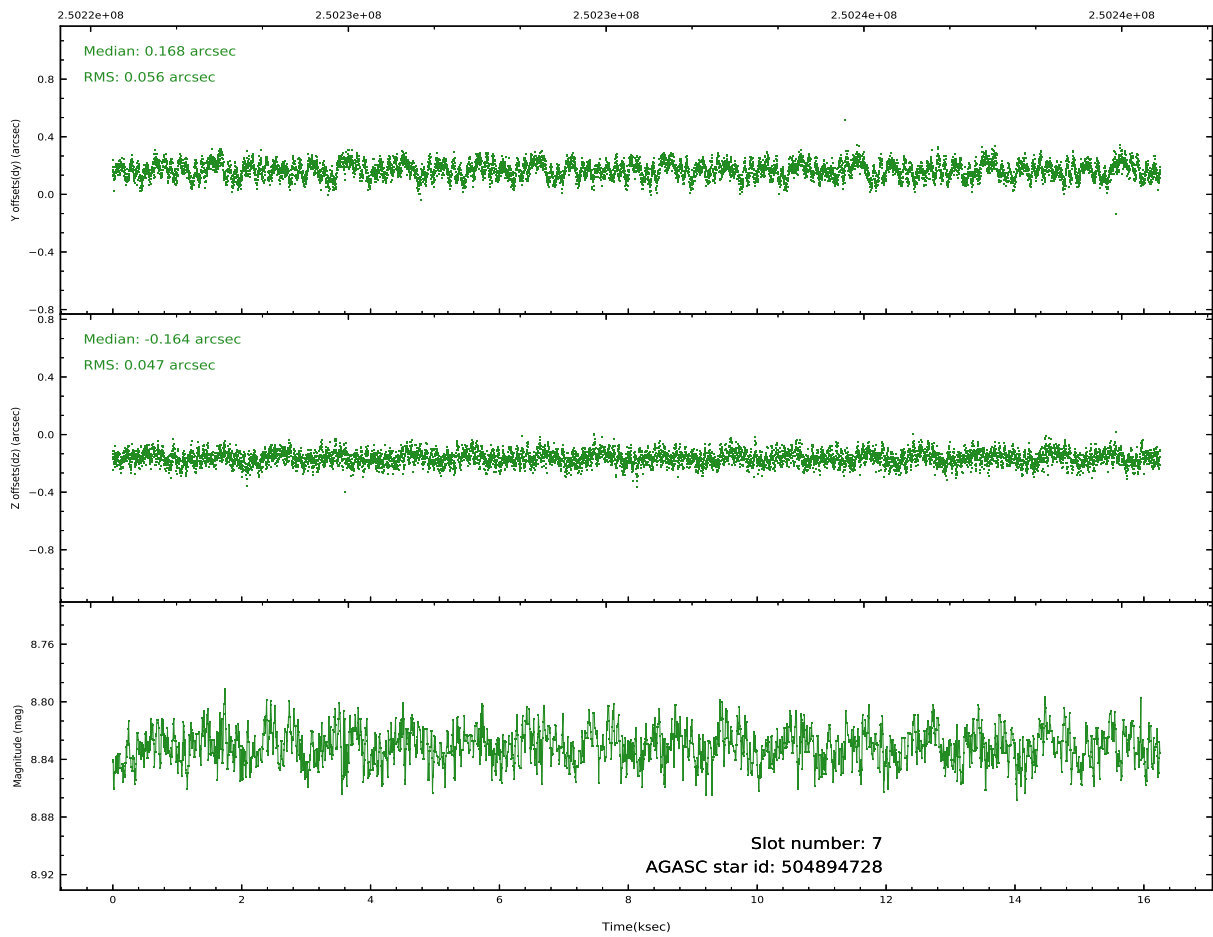
Time (s)



2.4.5 Slot 7

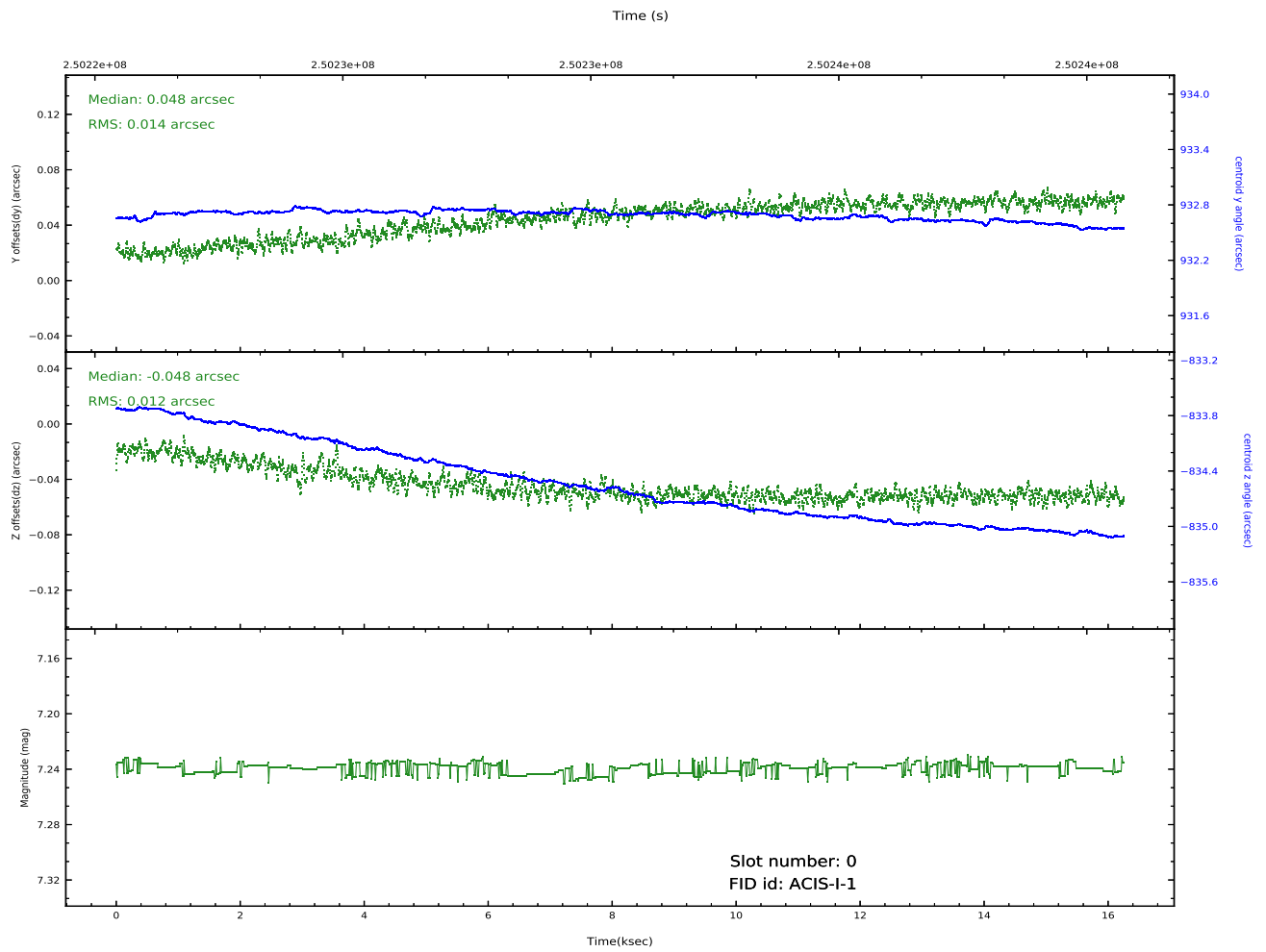
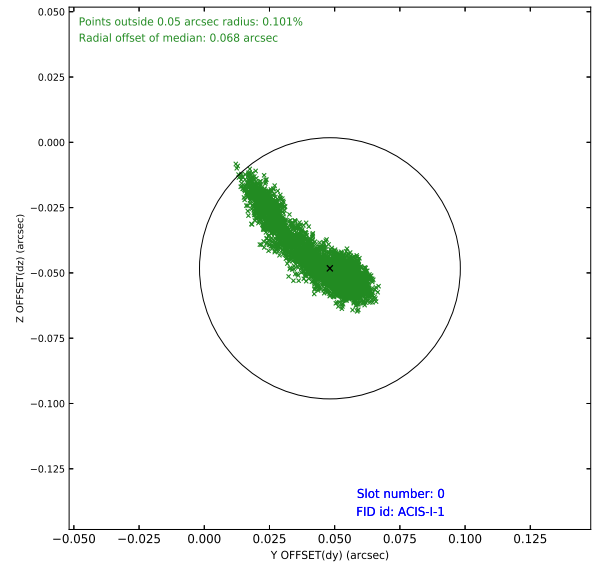
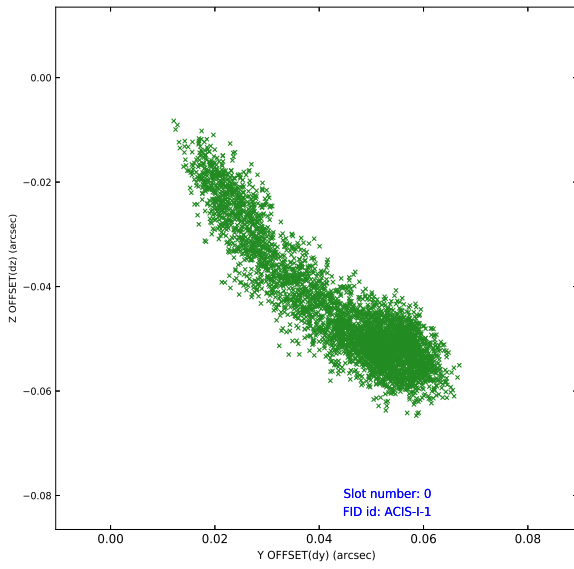


Time (s)

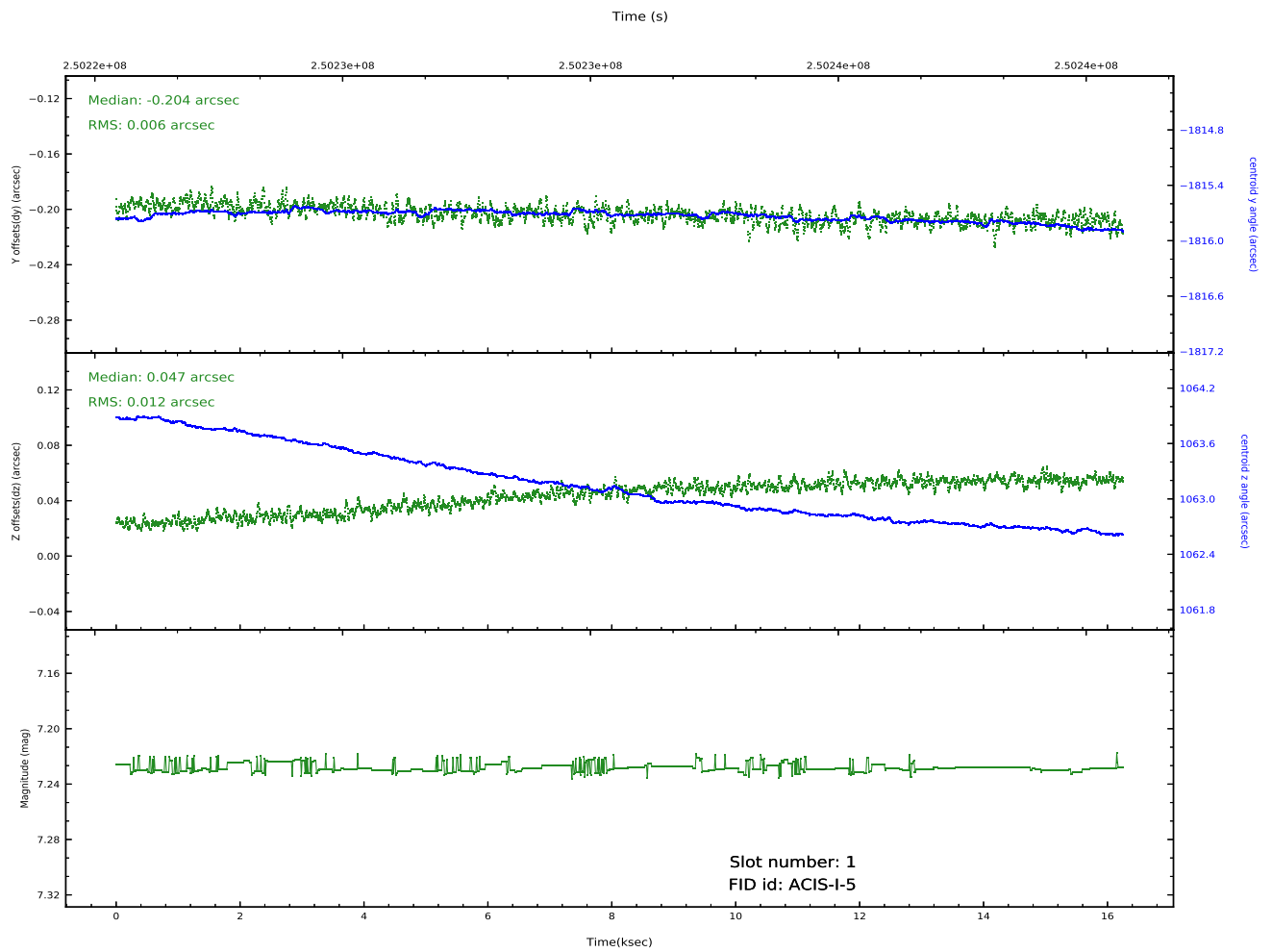
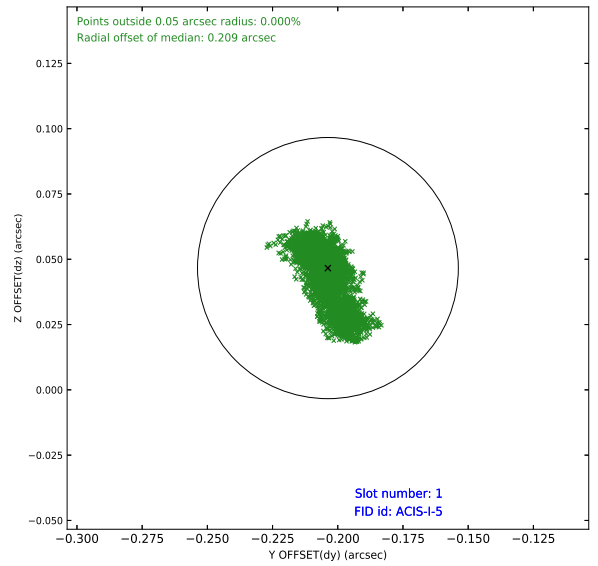
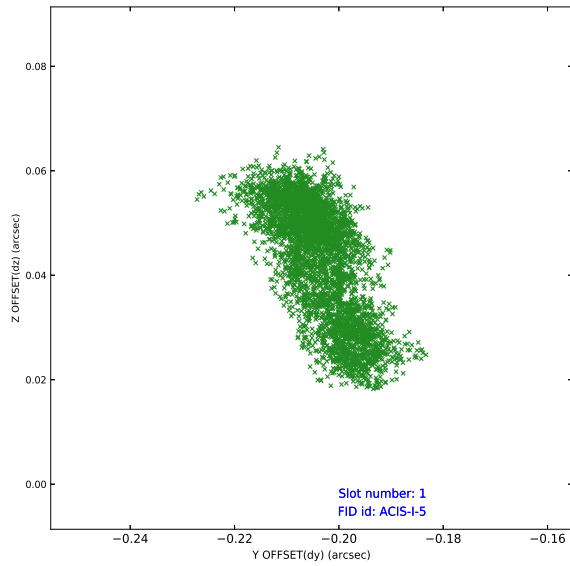


2.5 FID Slots

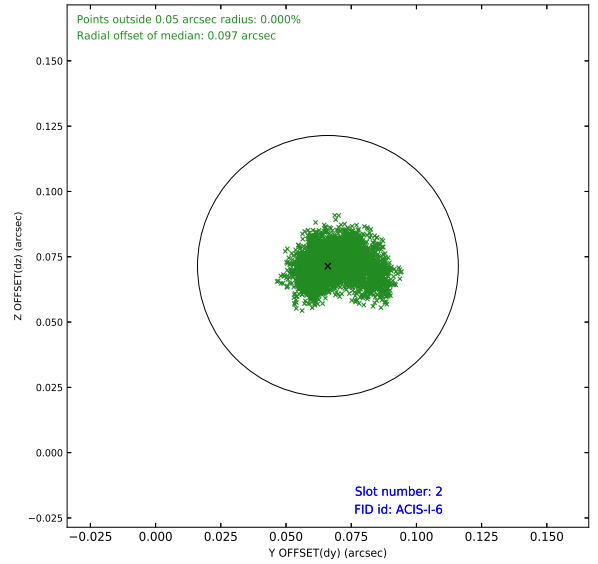
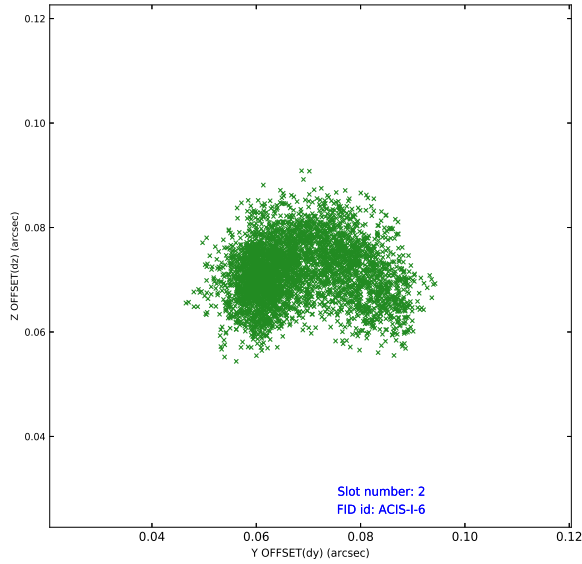
2.5.1 Slot 0



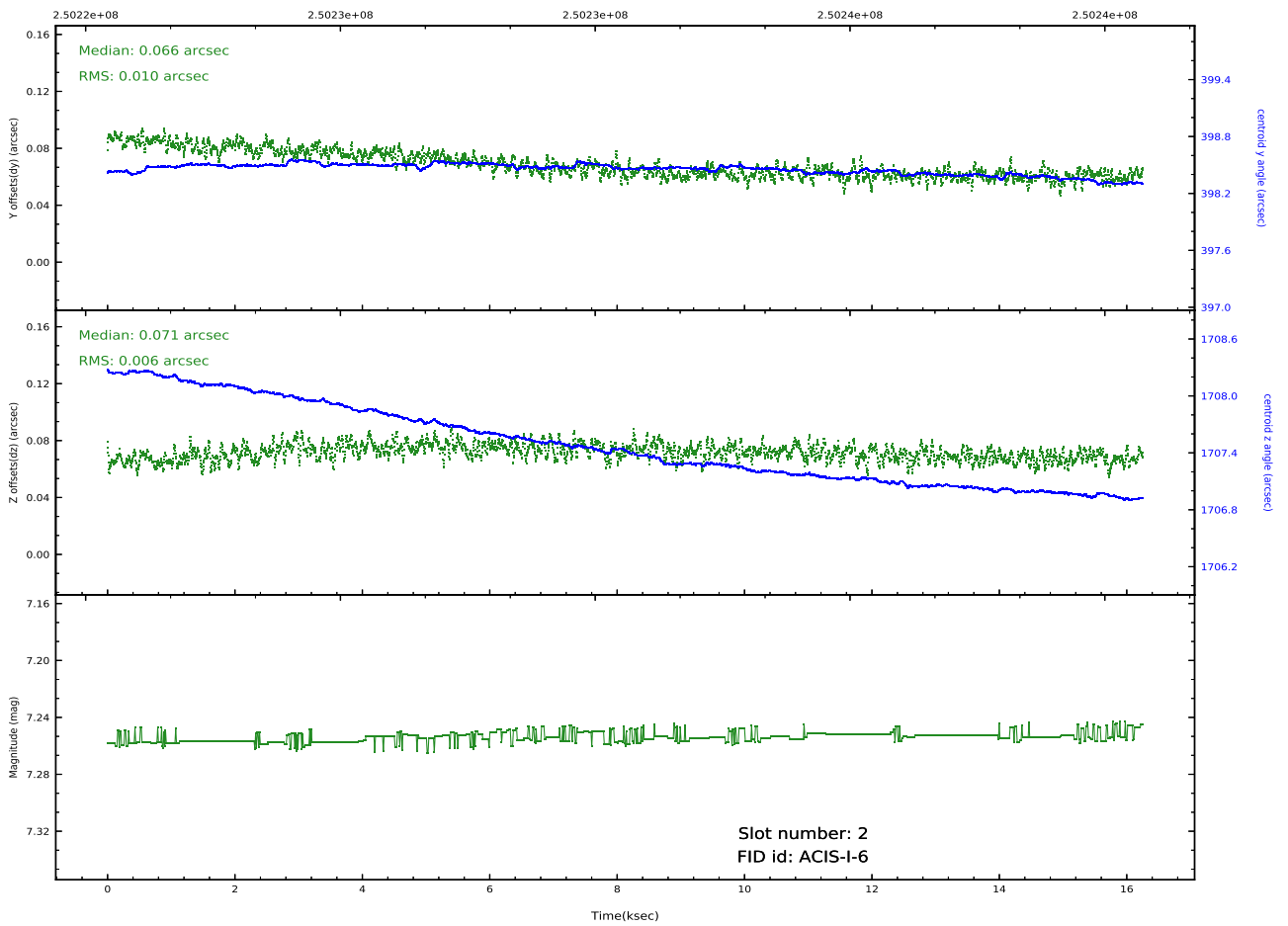
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.24395

A.2 Comments

Roll constraint met.