

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20142 - L2 Version 2
Chandra X-Ray Center

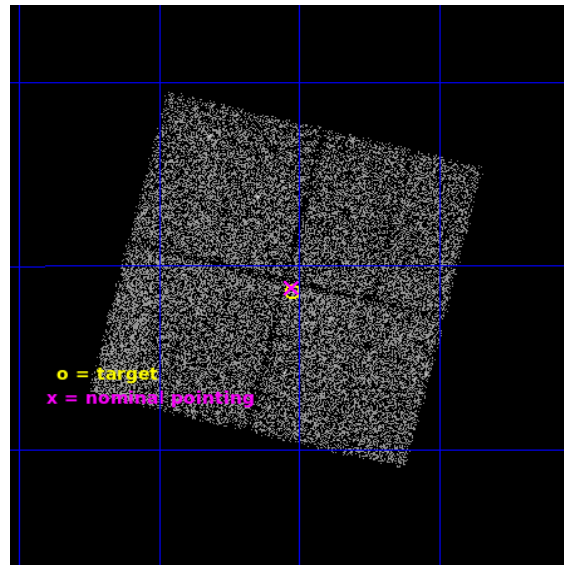
L2 Processing Date : Oct 25 2020

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1 Front

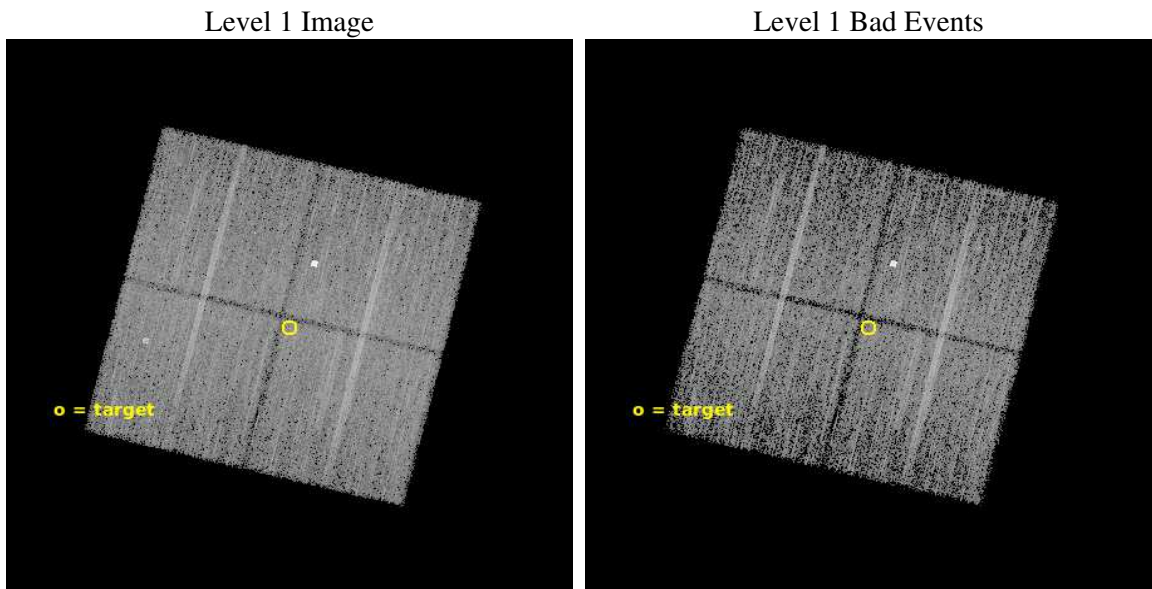
seq_num	201164	Sequence number
obs_id	20142	Observation id
title	LONG-OVERDUE X-RAY OBSERVATIONS OF THE EXTRAORDINARY MASSIVE ECLIPSING BINARY RY SCUTI	Proposal title
observer	Jon Mauerhan	Principal investigator
object	RY Sct	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	276.380833	Observer's specified target RA [deg]
dec_targ	-12.690028	Observer's specified target Dec [deg]
ra_nom	276.38139588747	Nominal RA [deg]
dec_nom	-12.686488032214	Nominal Dec [deg]
roll_nom	103.91147831689	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13028.837676167	Sum of GTIs [s]
livetime	12858.606320238	Livetime [s]
ontime0	13025.573475361	Sum of GTIs [s]
ontime1	13031.896656275	Sum of GTIs [s]
ontime2	13031.937696338	Sum of GTIs [s]
ontime3	13028.837676167	Sum of GTIs [s]
l2events	38605	Number of level 2 events



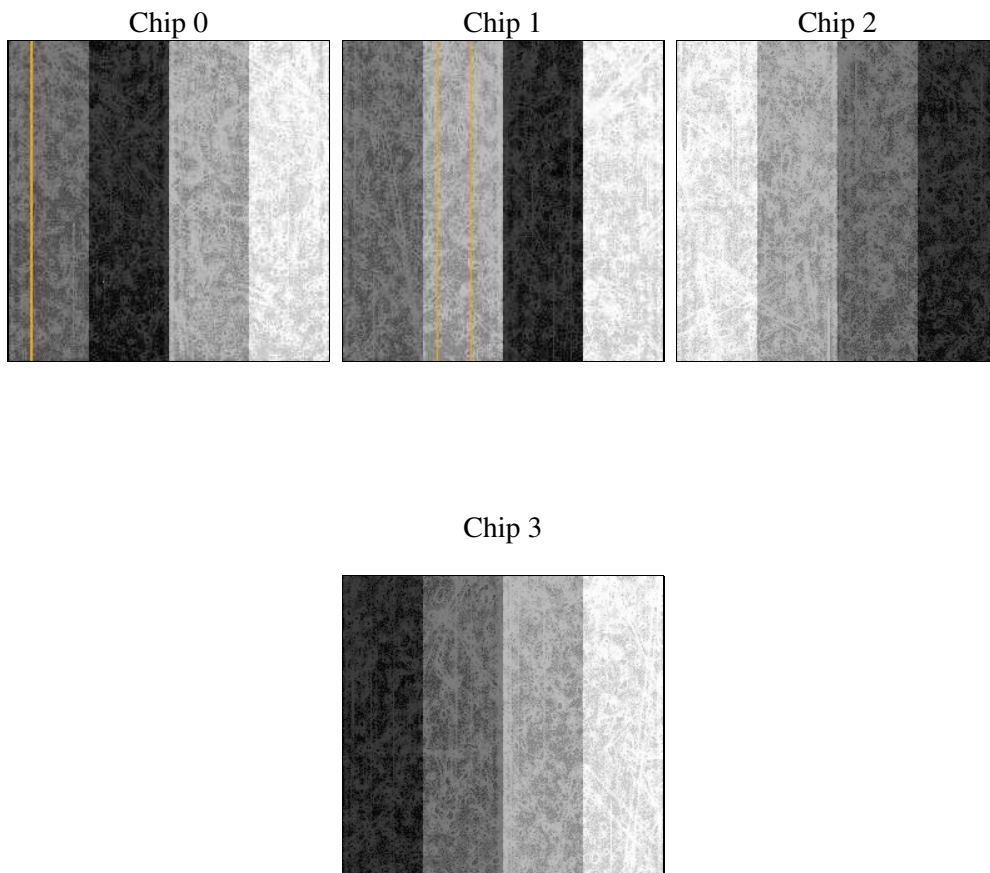
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12954.130000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	13028.837676167	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	13025.573475361	Sum of GTIs [s]
date	2020-10-25T22:41:23	Date and time of file creation	ontime1	13031.896656275	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	13031.937696338	Sum of GTIs [s]
			ontime3	13028.837676167	Sum of GTIs [s]
			l1events	389222	Number of level 1 events

2.1.4 Events

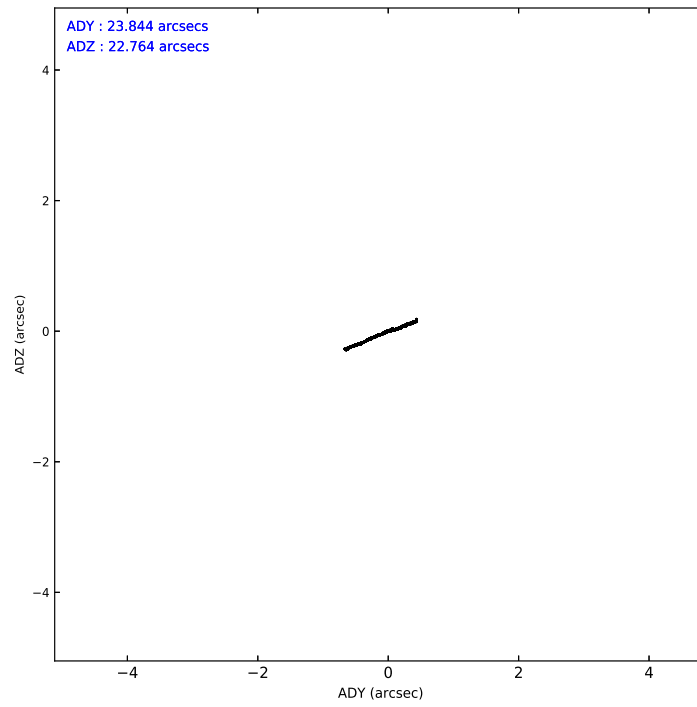
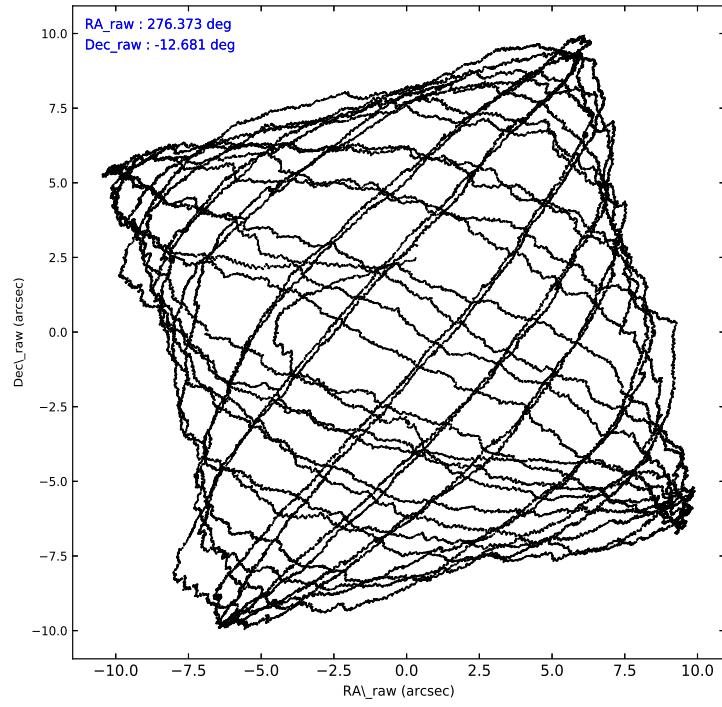
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	91237	93554	105324	99107
rejected events	79692	80538	93360	88224
rejected %	87%	86%	88%	89%

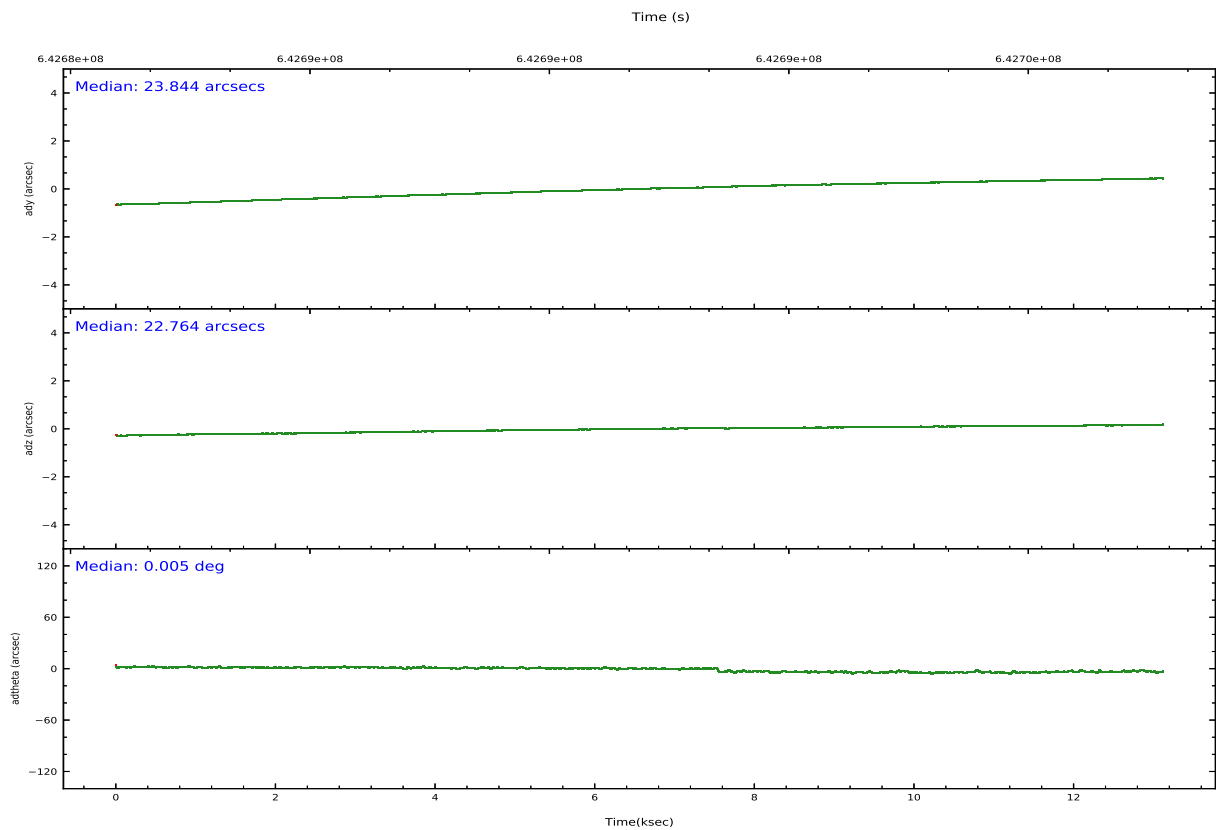
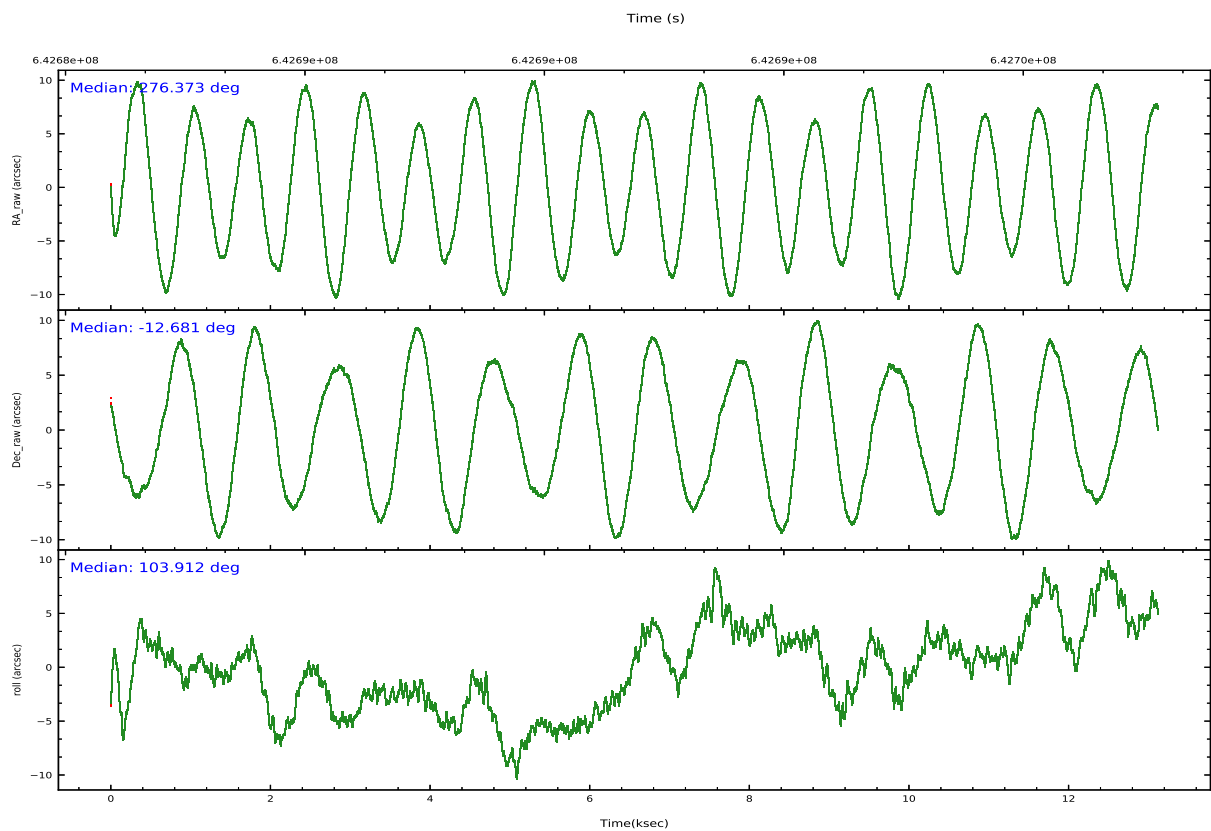
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4162	4988	4181	4151
	4%	5%	3%	4%
grade 1 events	42	58	3937	48
	0%	0%	3%	0%
grade 2 events	2796	3189	3620	2261
	3%	3%	3%	2%
grade 3 events	1136	1077	1056	1141
	1%	1%	1%	1%
grade 4 events	1075	1088	1080	1130
	1%	1%	1%	1%
grade 5 events	3902	4098	3781	4504
	4%	4%	3%	4%
grade 6 events	2381	2675	2028	2204
	2%	2%	1%	2%
grade 7 events	75743	76381	85641	83668
	83%	81%	81%	84%

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	276.392892	276.38139588747	Subarray requested	NONE	NONE
[deg] Pointing Dec	-12.701220	-12.686488032214	Alternating exposures requested	N	N
[deg] Pointing Roll	103.715949	103.91147831689	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	642685736.184000	642684489.73193			
Observation start date	2018-05-14T11:47:47	2018-05-14T11:28:09			
[s] Observation end time (MET)	642698690.184000	642699062.1578			
Observation end date	2018-05-14T15:23:41	2018-05-14T15:31:02			
Read mode	TIMED	TIMED			

2.3 Aspect



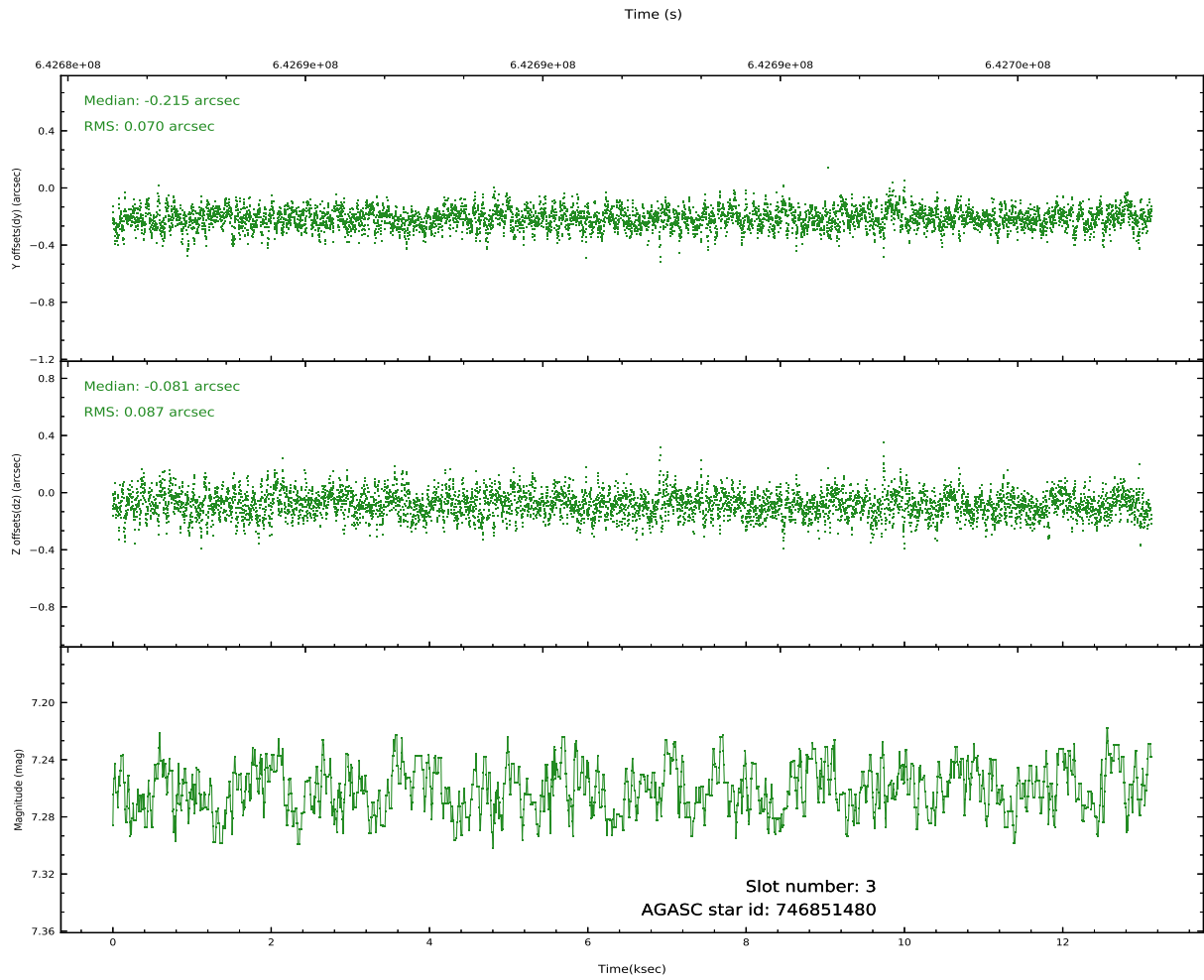
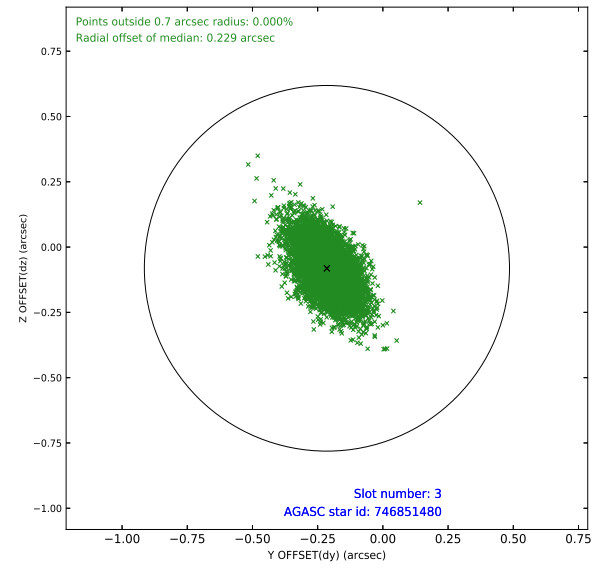
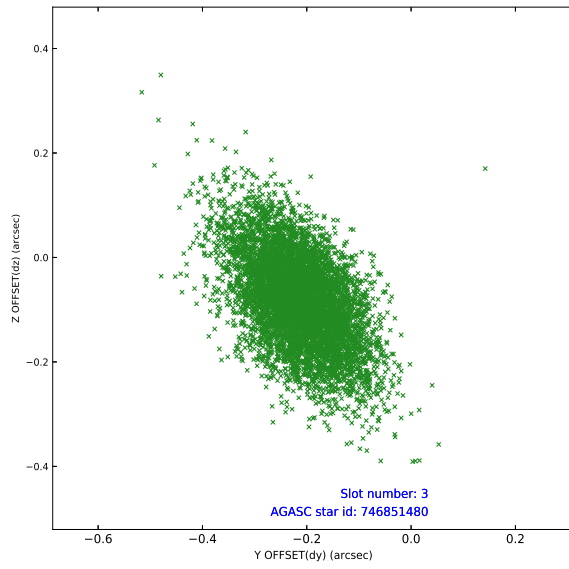


Slot Statistics

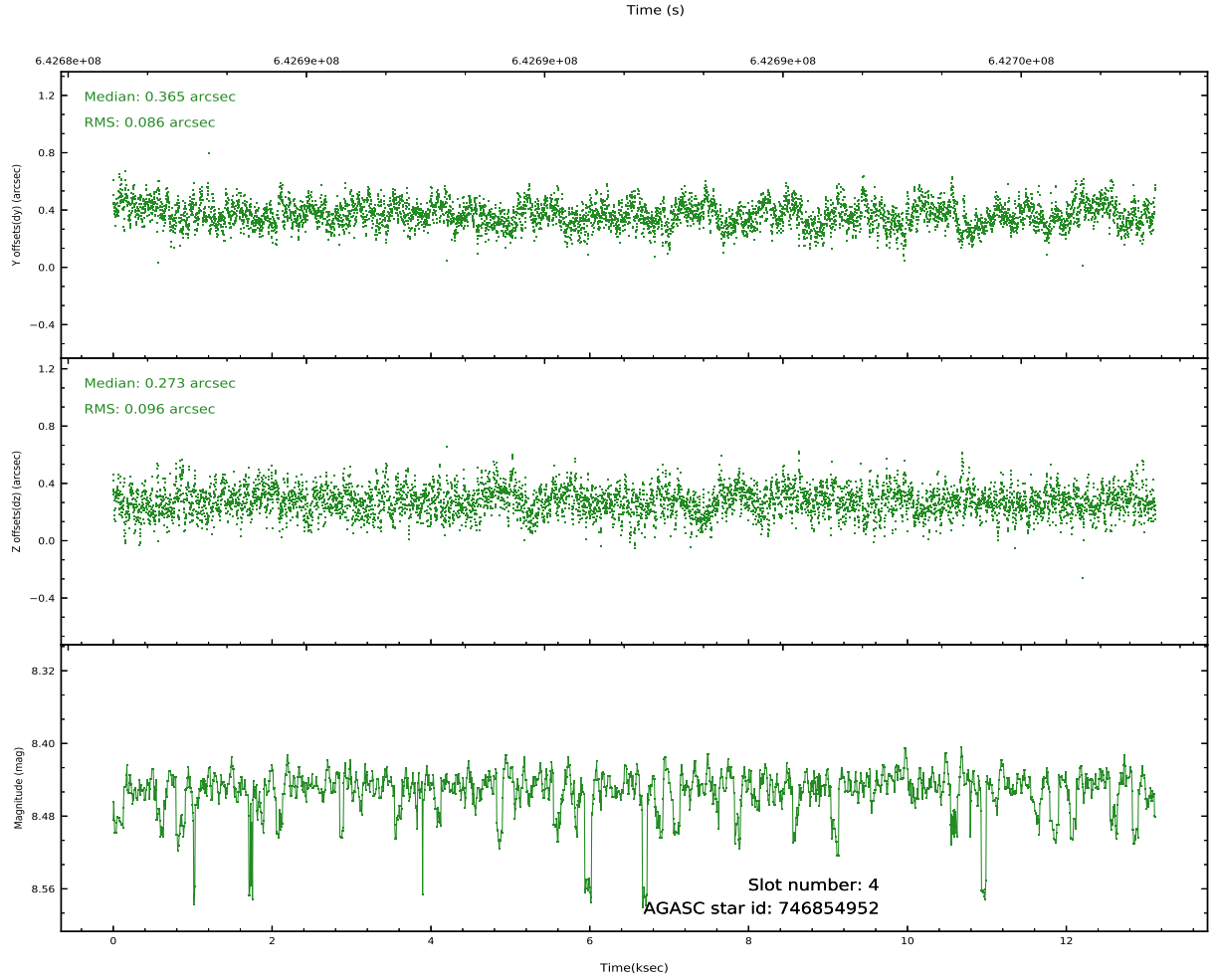
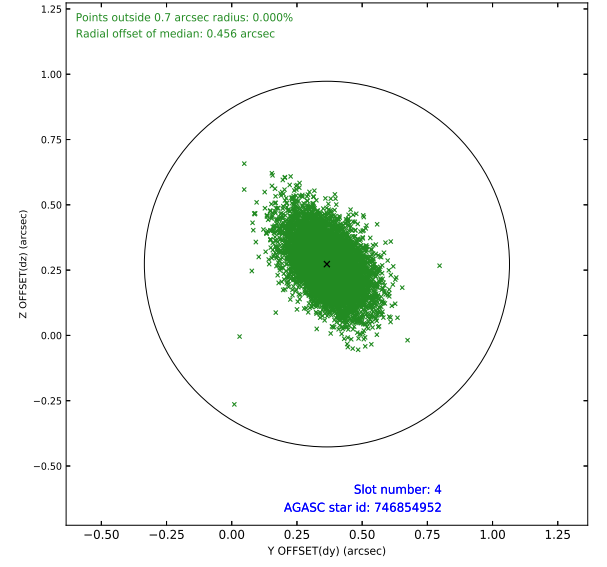
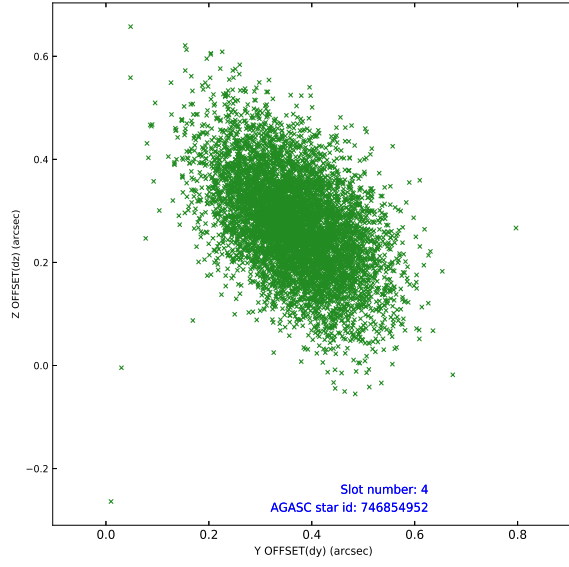
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.25	3198	1.000	0.204	-0.073	0.020	0.035	0.000000	0.000000	915.51	-846
1	FID		ACIS-I-4	7.21	3201	1.000	0.109	-0.024	0.023	0.037	0.000000	0.000000	2135.89	1052
2	FID		ACIS-I-5	7.22	3200	1.000	-0.412	0.168	0.018	0.035	0.000000	0.000000	-1832.40	1051
3	GUIDE	used	746851480	7.26	6402	1.000	-0.215	-0.081	0.114	0.201	275.998802	-12.584966	733.89	1246
4	GUIDE	used	746854952	8.45	6399	1.000	0.365	0.273	0.133	0.231	276.590453	-12.990635	-1175.95	-425
5	GUIDE	used	746872264	7.39	6402	1.000	-0.122	-0.148	0.111	0.194	276.174051	-12.475071	972.96	554
6	GUIDE	used	746883888	7.65	6398	1.000	-0.105	-0.117	0.126	0.223	275.829811	-12.300383	1869.53	1582
7	GUIDE	used	746890840	7.87	6399	1.000	0.075	0.075	0.120	0.219	276.049030	-12.214006	1990.67	760

2.4 Star Slots

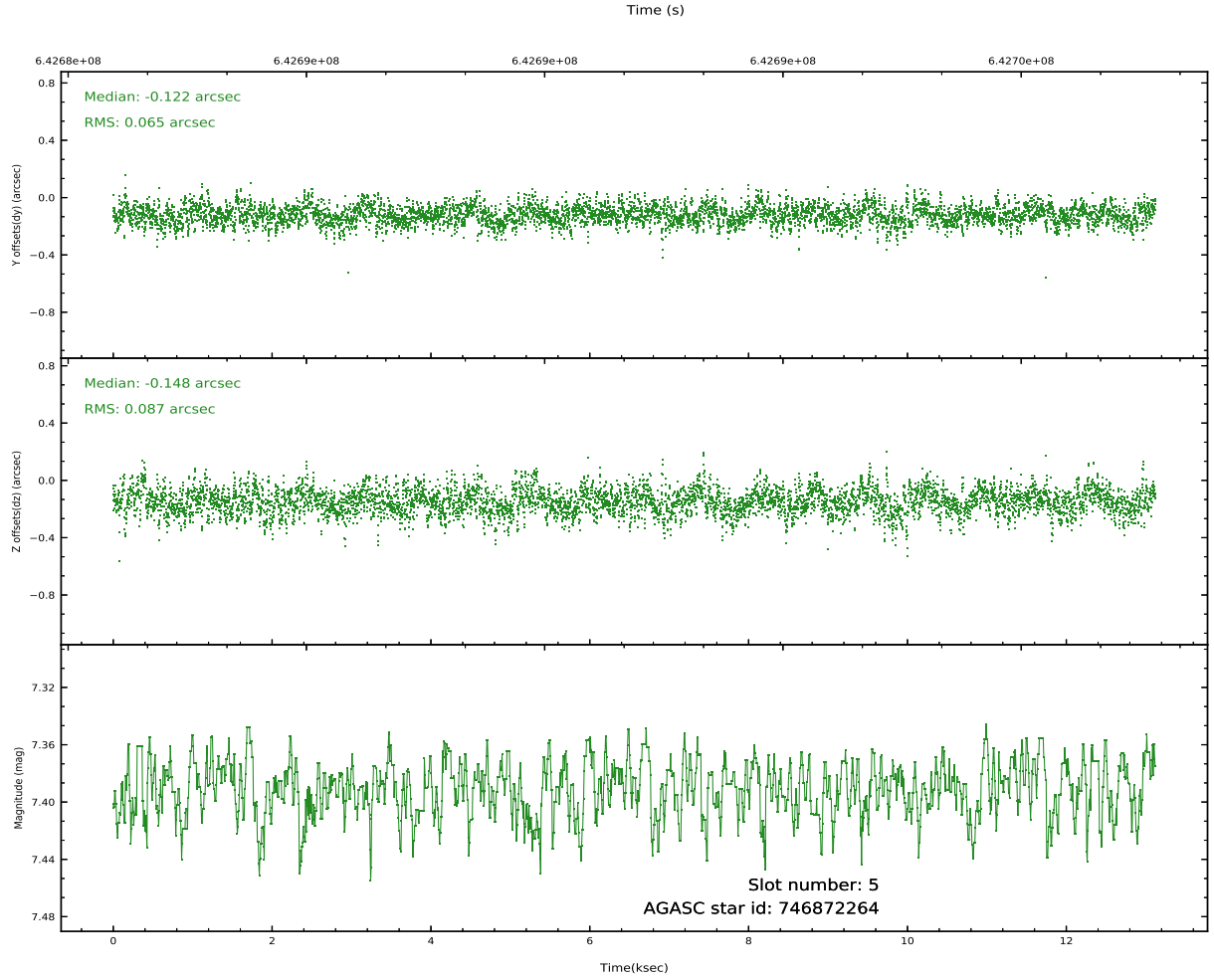
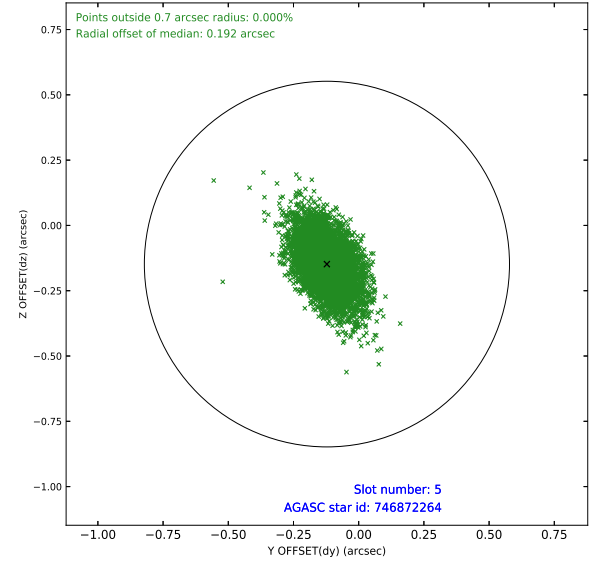
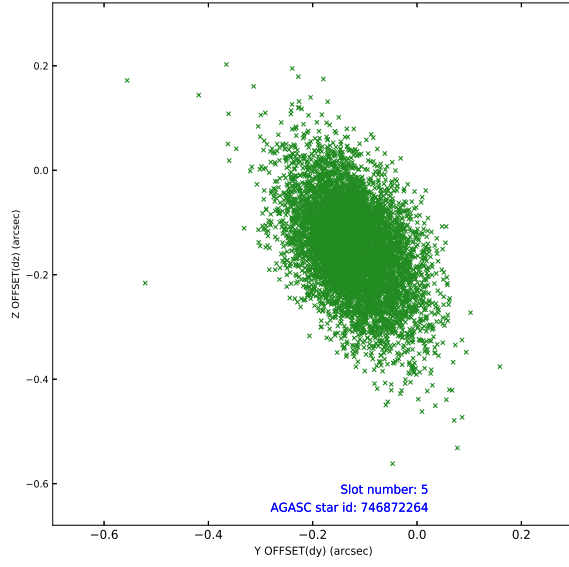
2.4.1 Slot 3



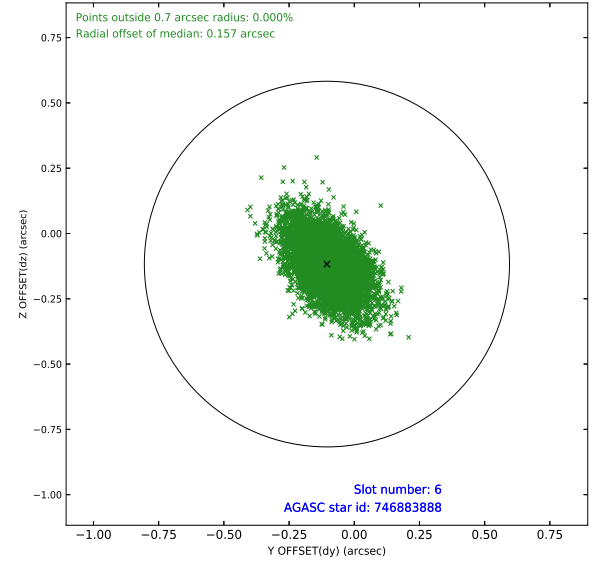
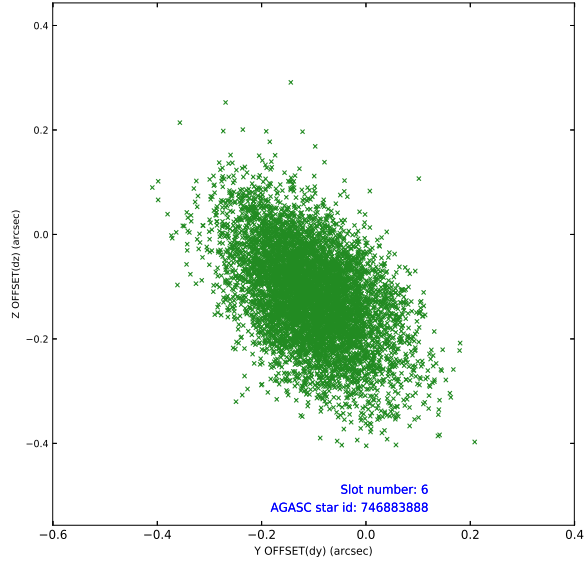
2.4.2 Slot 4



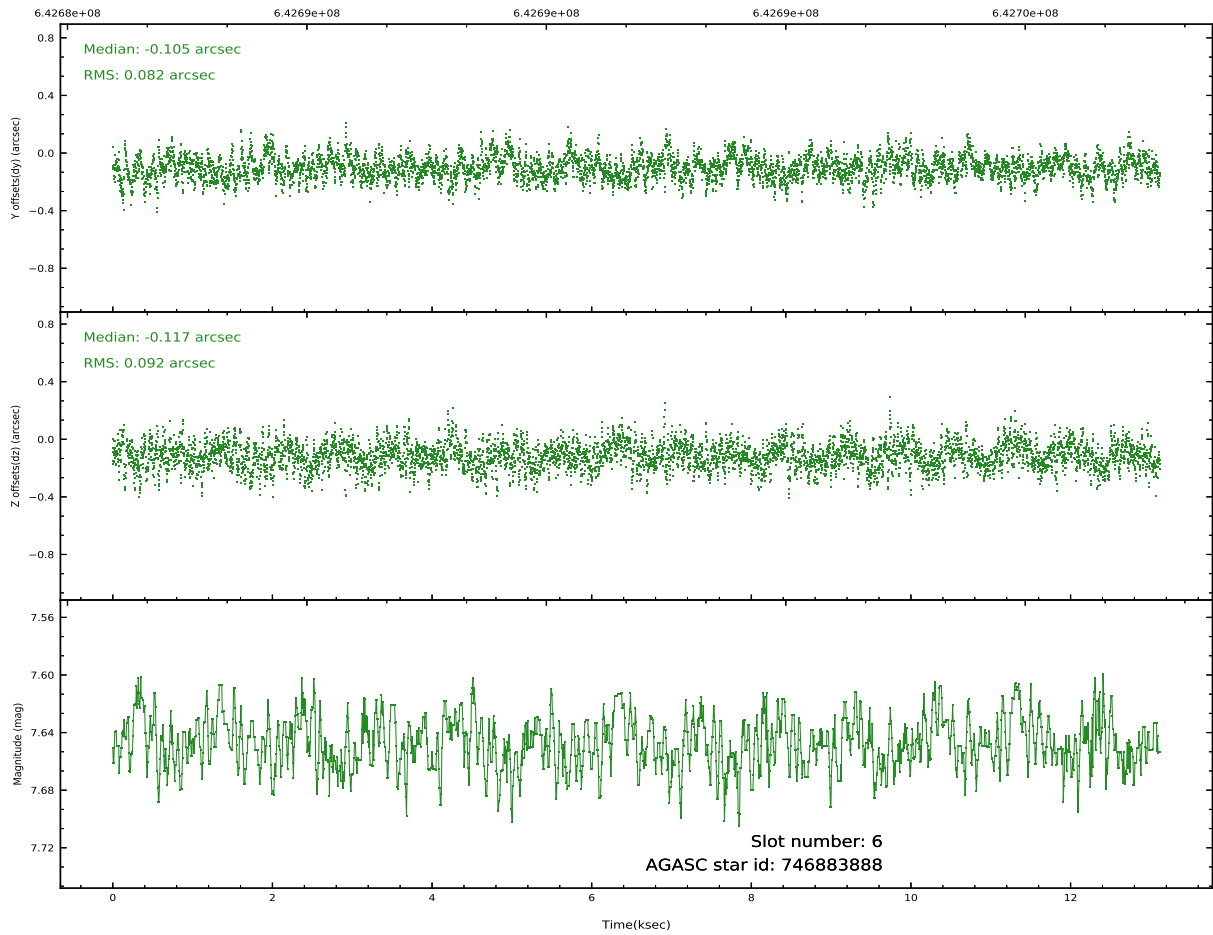
2.4.3 Slot 5



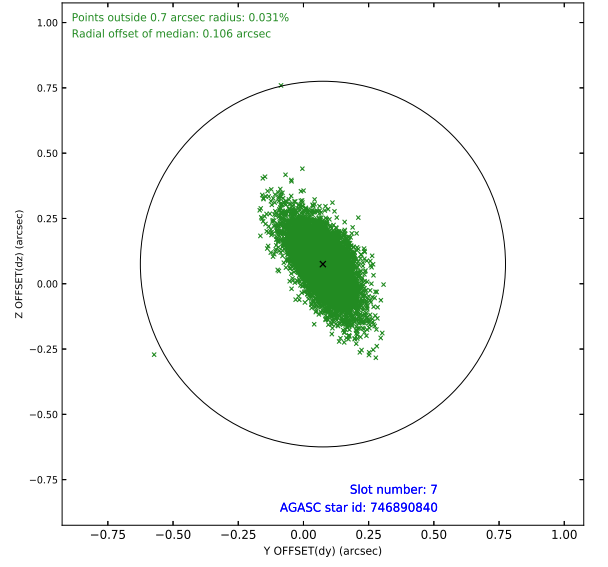
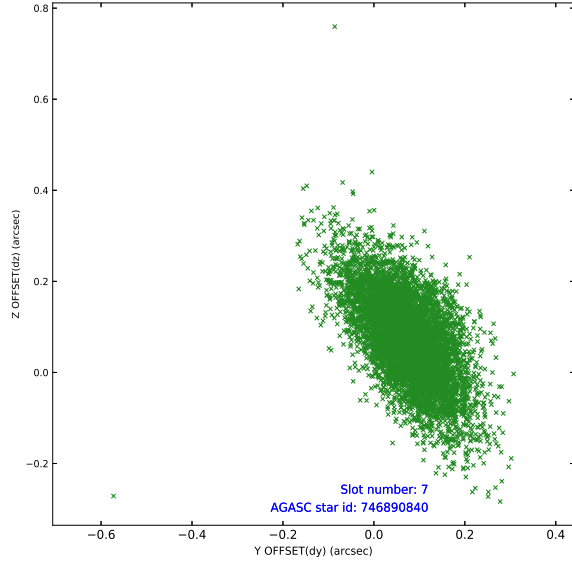
2.4.4 Slot 6



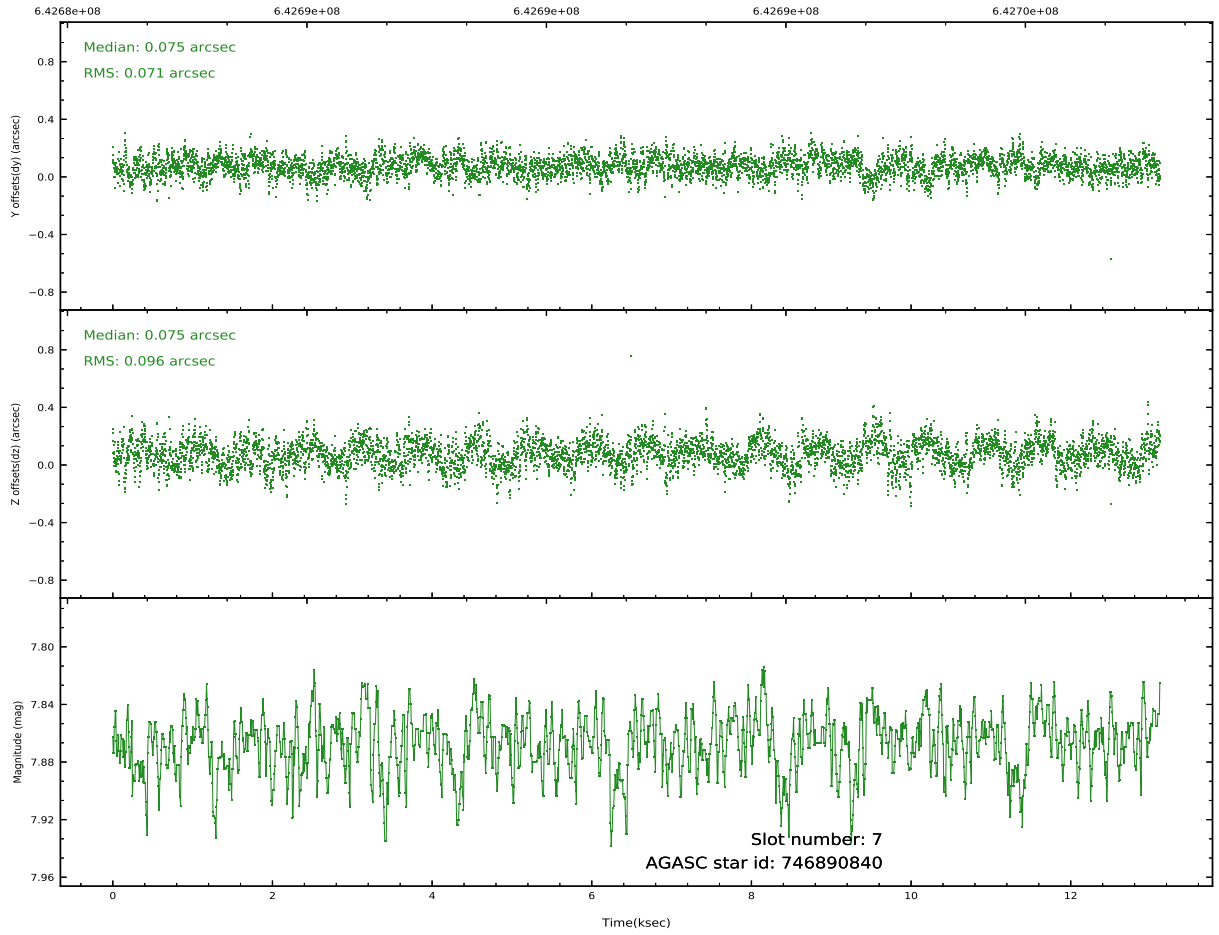
Time (s)



2.4.5 Slot 7

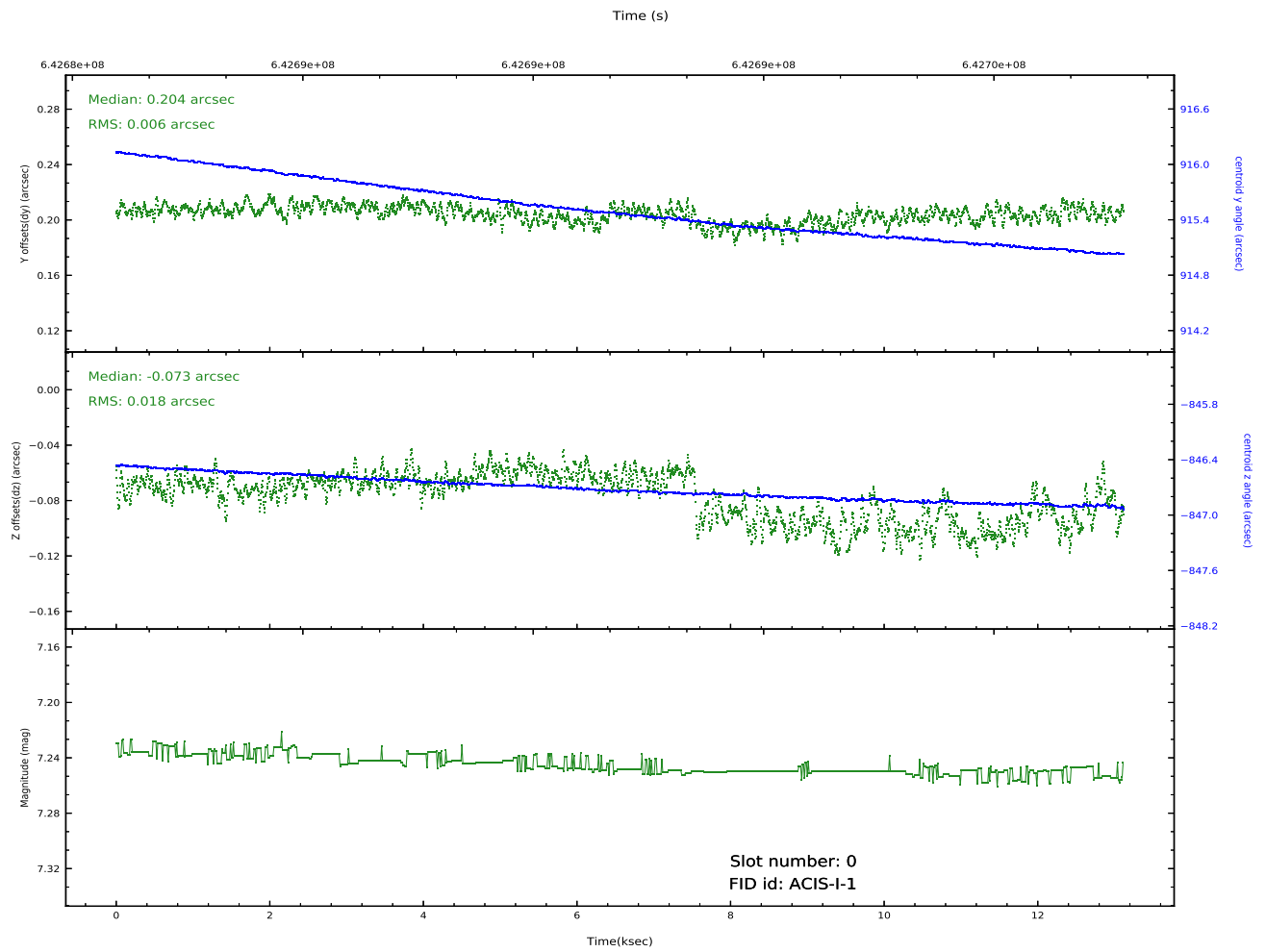
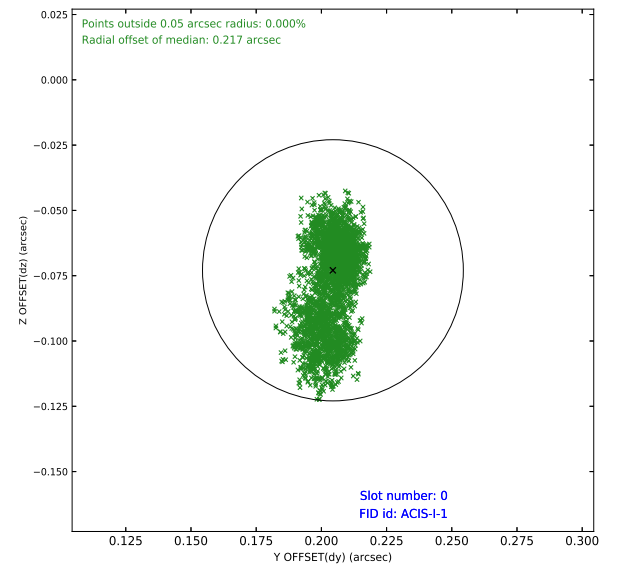
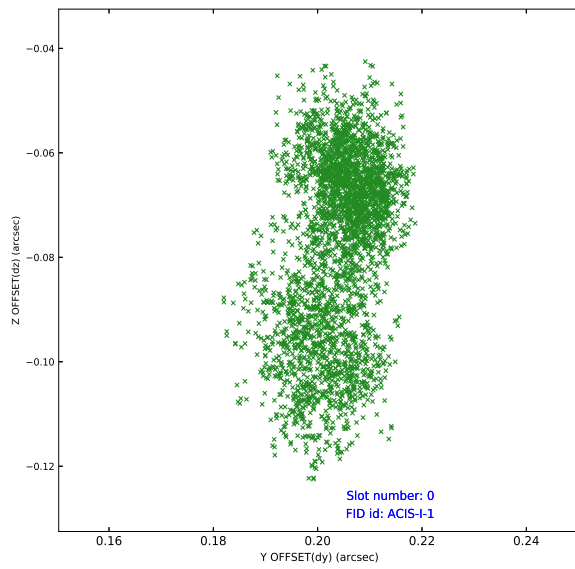


Time (s)

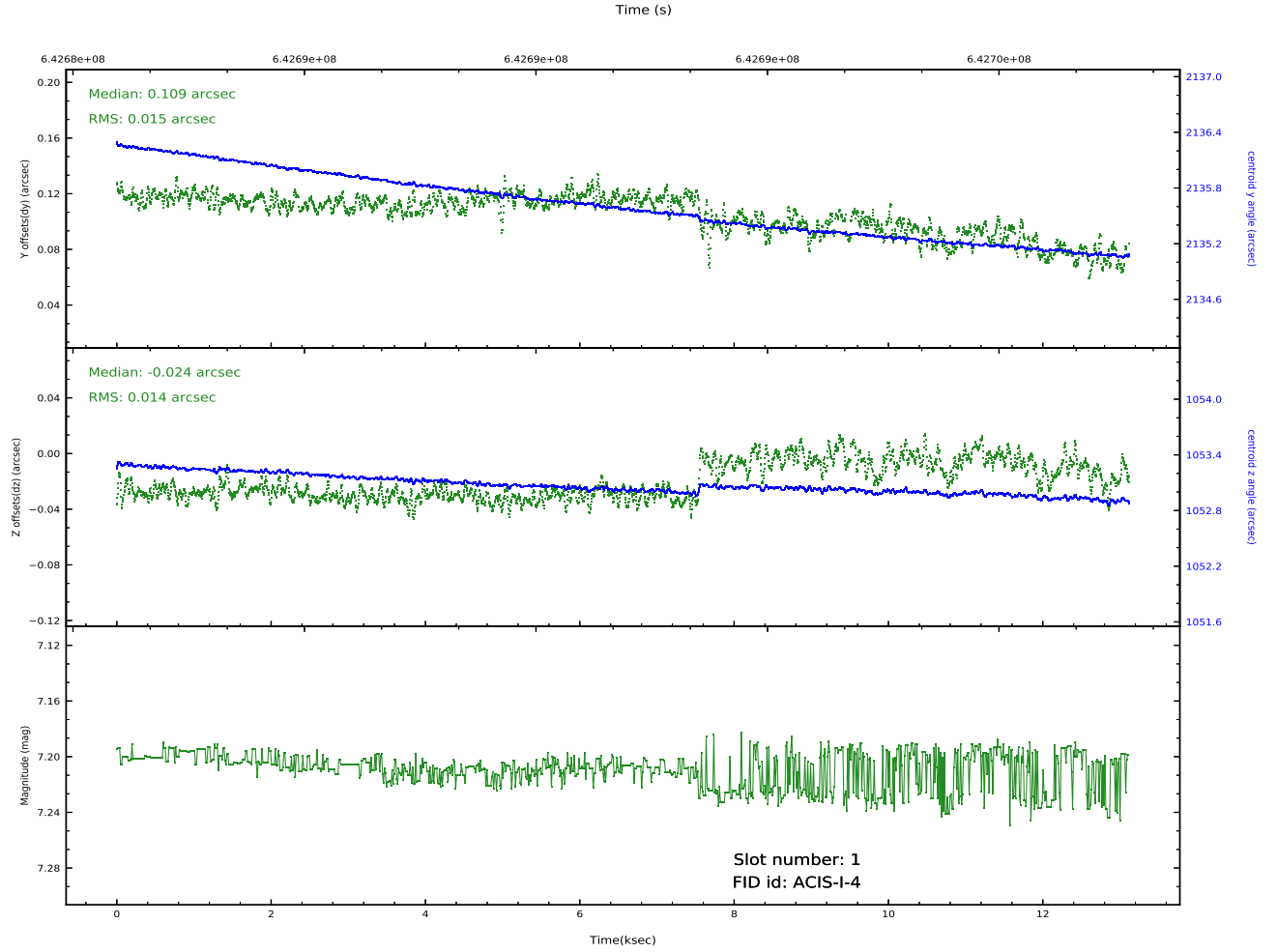
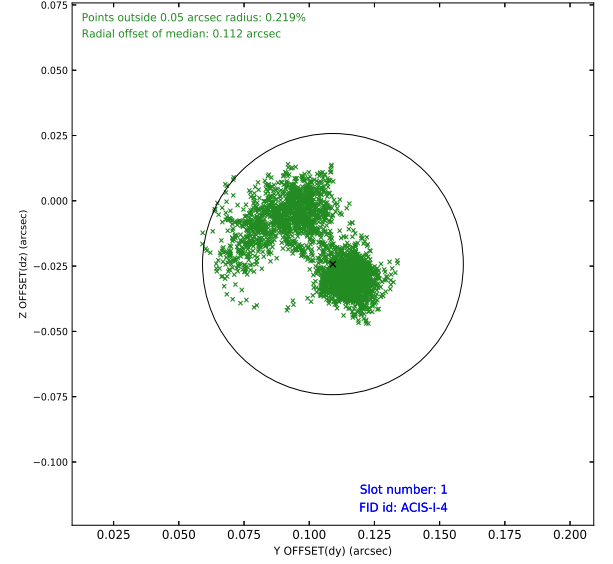
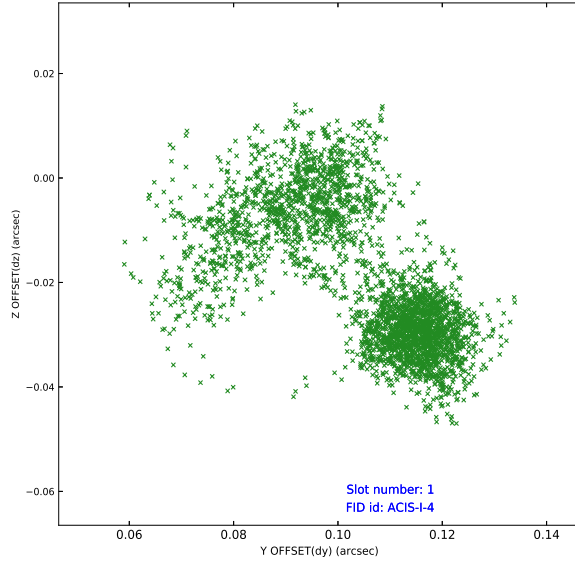


2.5 FID Slots

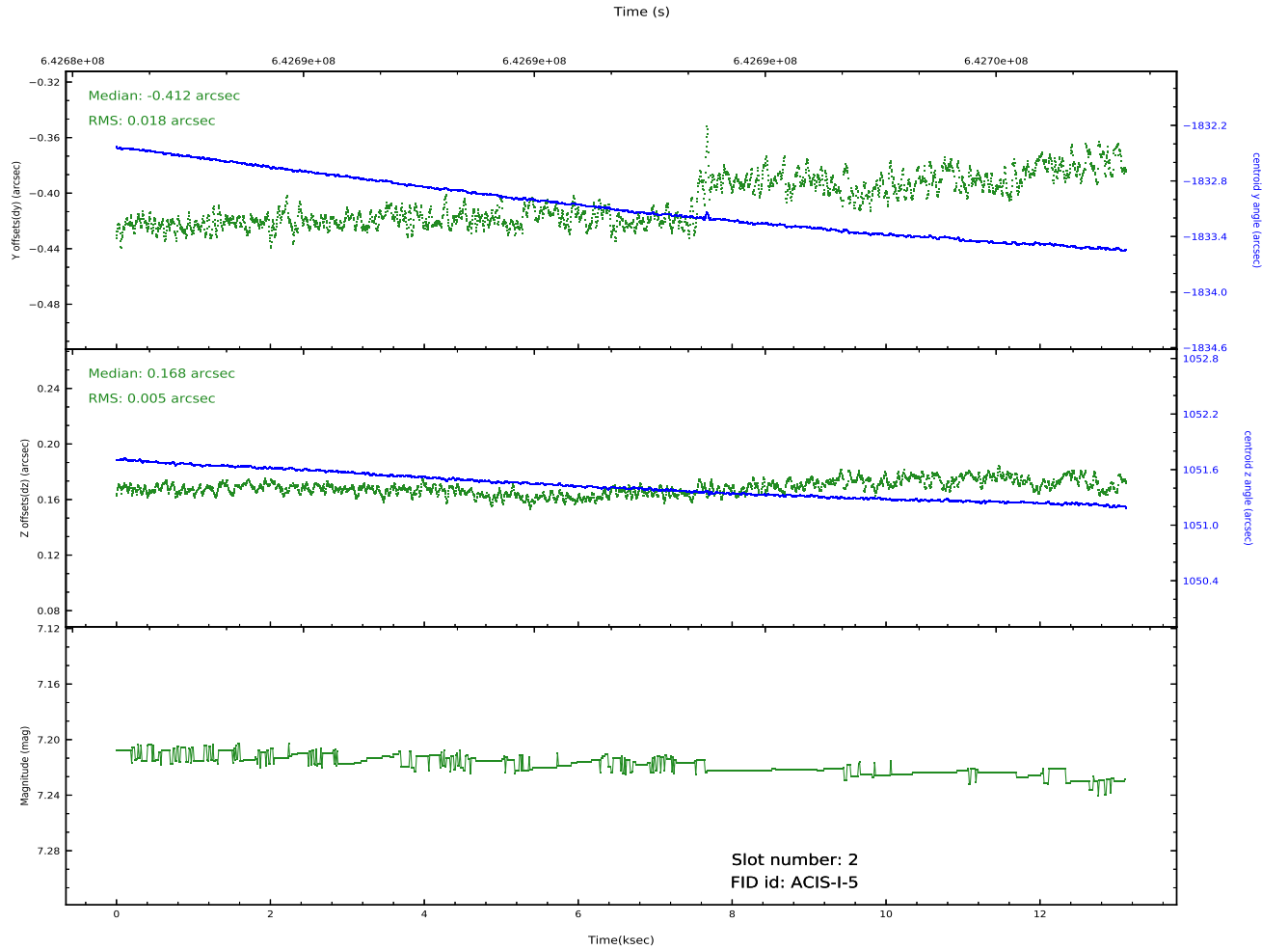
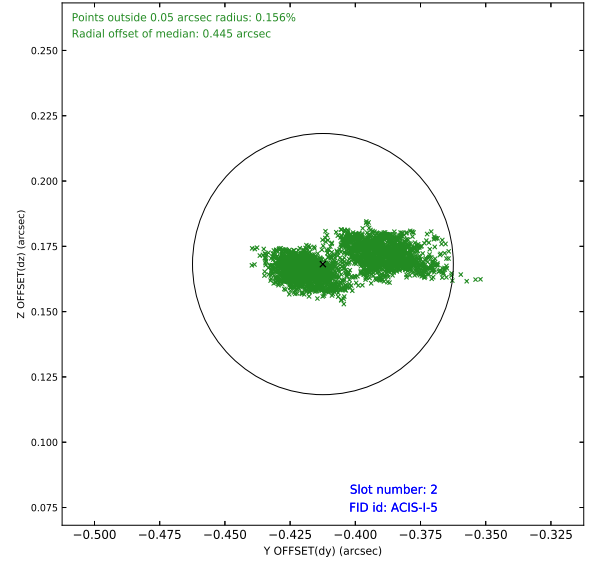
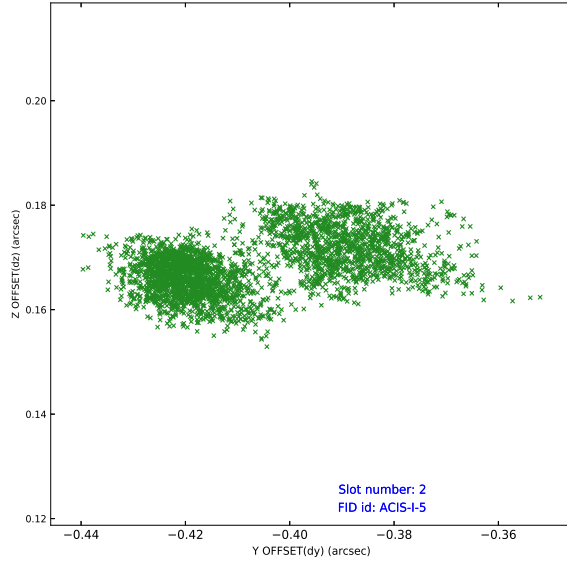
2.5.1 Slot 0



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)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.028837678075

A.2 Comments