

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19683 - L2 Version 3
Chandra X-Ray Center

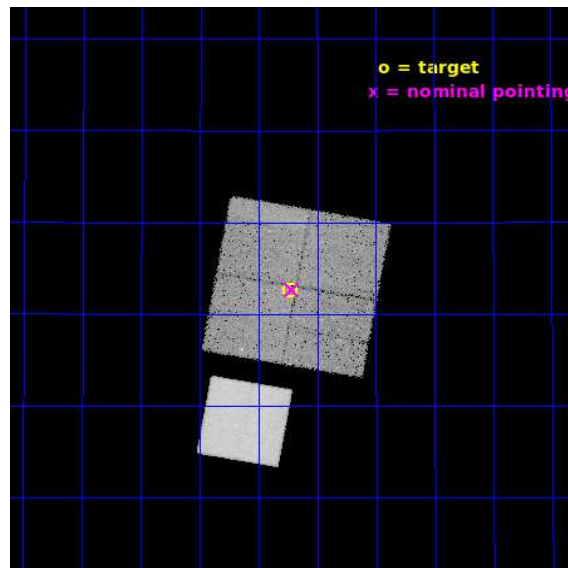
L2 Processing Date : Oct 25 2020

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1 Front

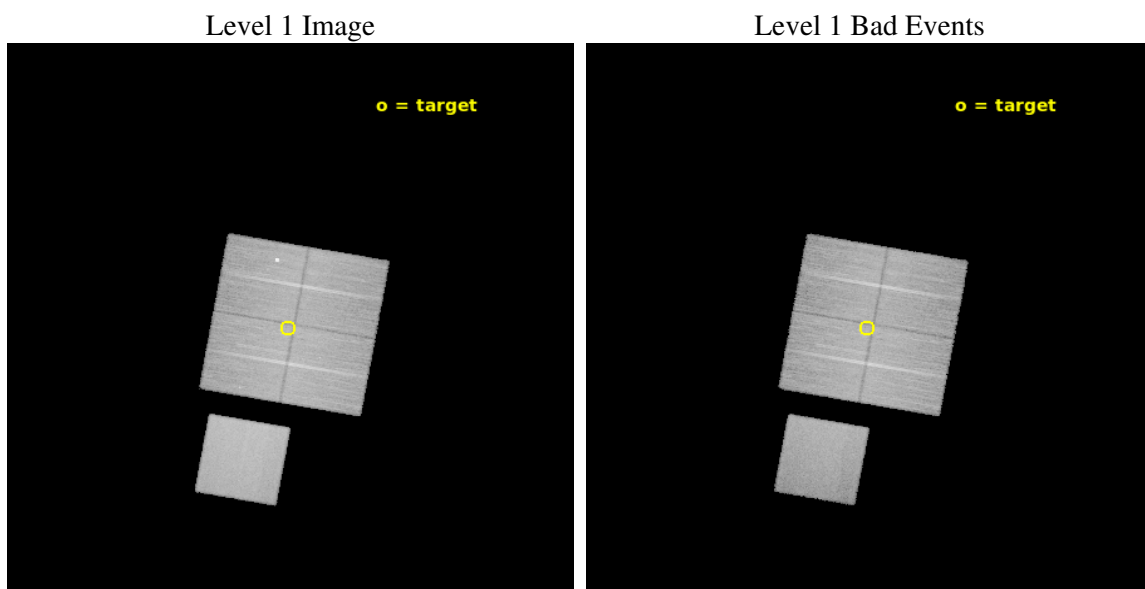
seq_num	901390	Sequence number
obs_id	19683	Observation id
title	The Chandra Deep Wide-Field Survey: Completing the new generation of Chandra extragalactic surveys	Proposal title
observer	Ryan Hickox	Principal investigator
object	Xbootes (CDWFS)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	218.93305	Observer's specified target RA [deg]
dec_targ	35.210786	Observer's specified target Dec [deg]
ra_nom	218.92879262502	Nominal RA [deg]
dec_nom	35.211599974486	Nominal Dec [deg]
roll_nom	190.20665437457	Nominal Roll [deg]
revision	3	Processing version of data
ontime	27050.559167862	Sum of GTIs [s]
livetime	26697.123698002	Livetime [s]
ontime0	27053.700208187	Sum of GTIs [s]
ontime1	27050.559158206	Sum of GTIs [s]
ontime2	27050.559188008	Sum of GTIs [s]
ontime3	27050.559167862	Sum of GTIs [s]
ontime7	27053.700208187	Sum of GTIs [s]
l2events	181536	Number of level 2 events



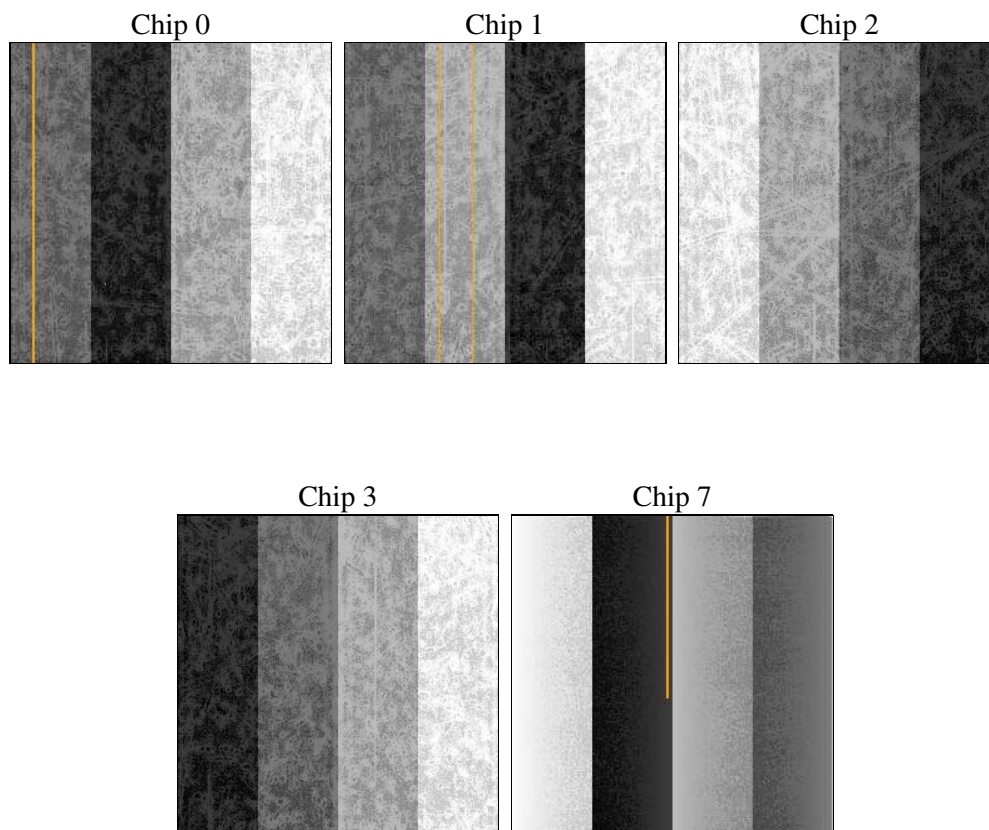
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	27050.559167862	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	27053.700208187	Sum of GTIs [s]
date	2020-10-25T22:49:25	Date and time of file creation	ontime1	27050.559158206	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	27050.559188008	Sum of GTIs [s]
			ontime3	27050.559167862	Sum of GTIs [s]
			ontime7	27053.700208187	Sum of GTIs [s]
			l1events	1054428	Number of level 1 events

2.1.4 Events

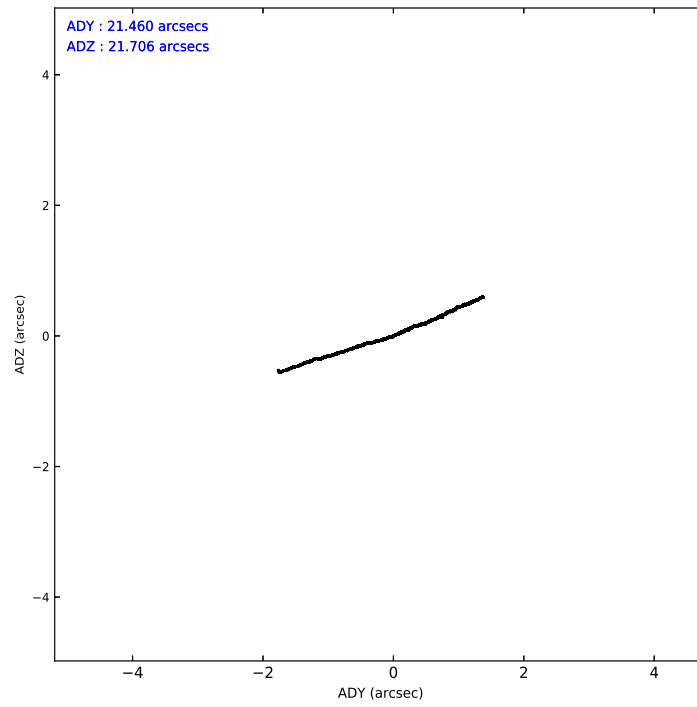
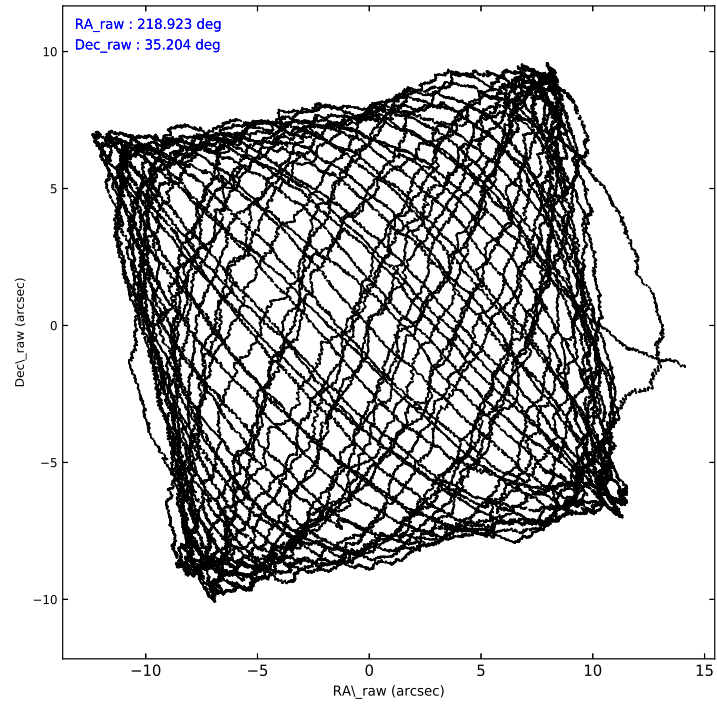
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	184739	194252	212549	204261	258627
rejected events	162544	166345	191569	183469	147199
rejected %	87%	85%	90%	89%	56%

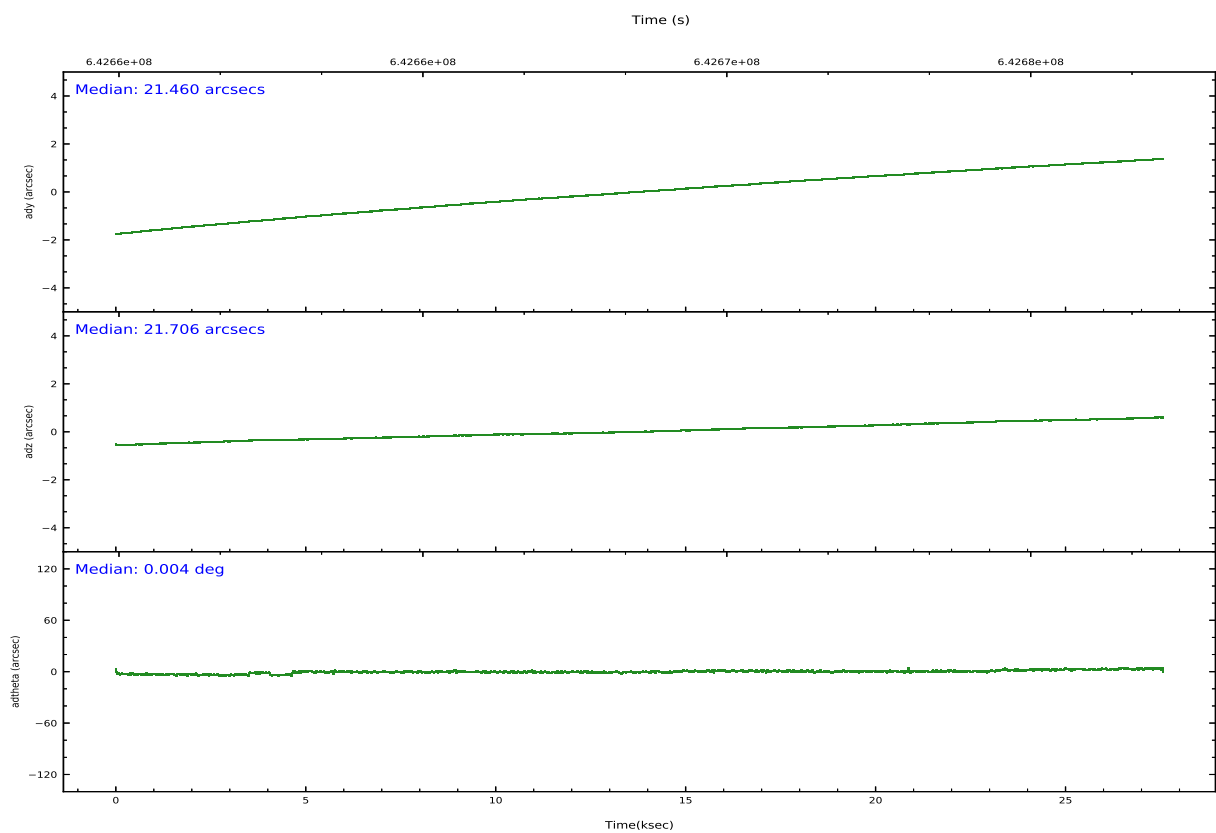
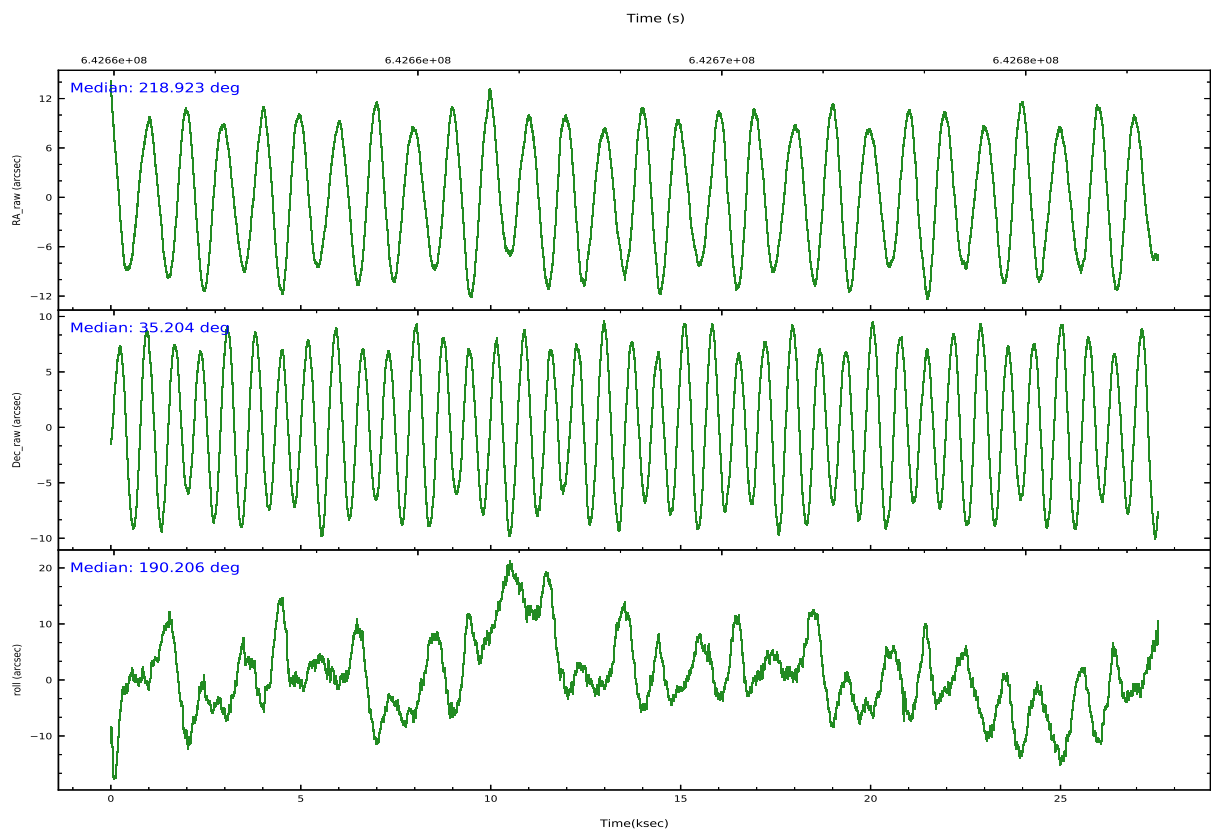
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	7255	11192	7310	7195	9312
	3%	5%	3%	3%	3%
grade 1 events	115	109	123	110	368
	0%	0%	0%	0%	0%
grade 2 events	5690	6592	5159	4700	23204
	3%	3%	2%	2%	8%
grade 3 events	2332	2196	2100	2198	8914
	1%	1%	0%	1%	3%
grade 4 events	2110	2234	2184	2077	8718
	1%	1%	1%	1%	3%
grade 5 events	8249	8425	8025	9343	25525
	4%	4%	3%	4%	9%
grade 6 events	4814	5701	4230	4625	61307
	2%	2%	1%	2%	23%
grade 7 events	154174	157803	183418	174013	121279
	83%	81%	86%	85%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	218.948329	218.92879262502	CCD I2 on	Y	Y
[deg] Pointing Dec	35.222206	35.211599974486	CCD I3 on	Y	Y
[deg] Pointing Roll	189.991188	190.20665437457	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	642656485.184000	642655352.56771	CCD S5 on	N	N
Observation start date	2018-05-14T03:40:16	2018-05-14T03:22:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	642683485.184000	642684489.73193	On-chip summing requested	N	N
Observation end date	2018-05-14T11:10:16	2018-05-14T11:28:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



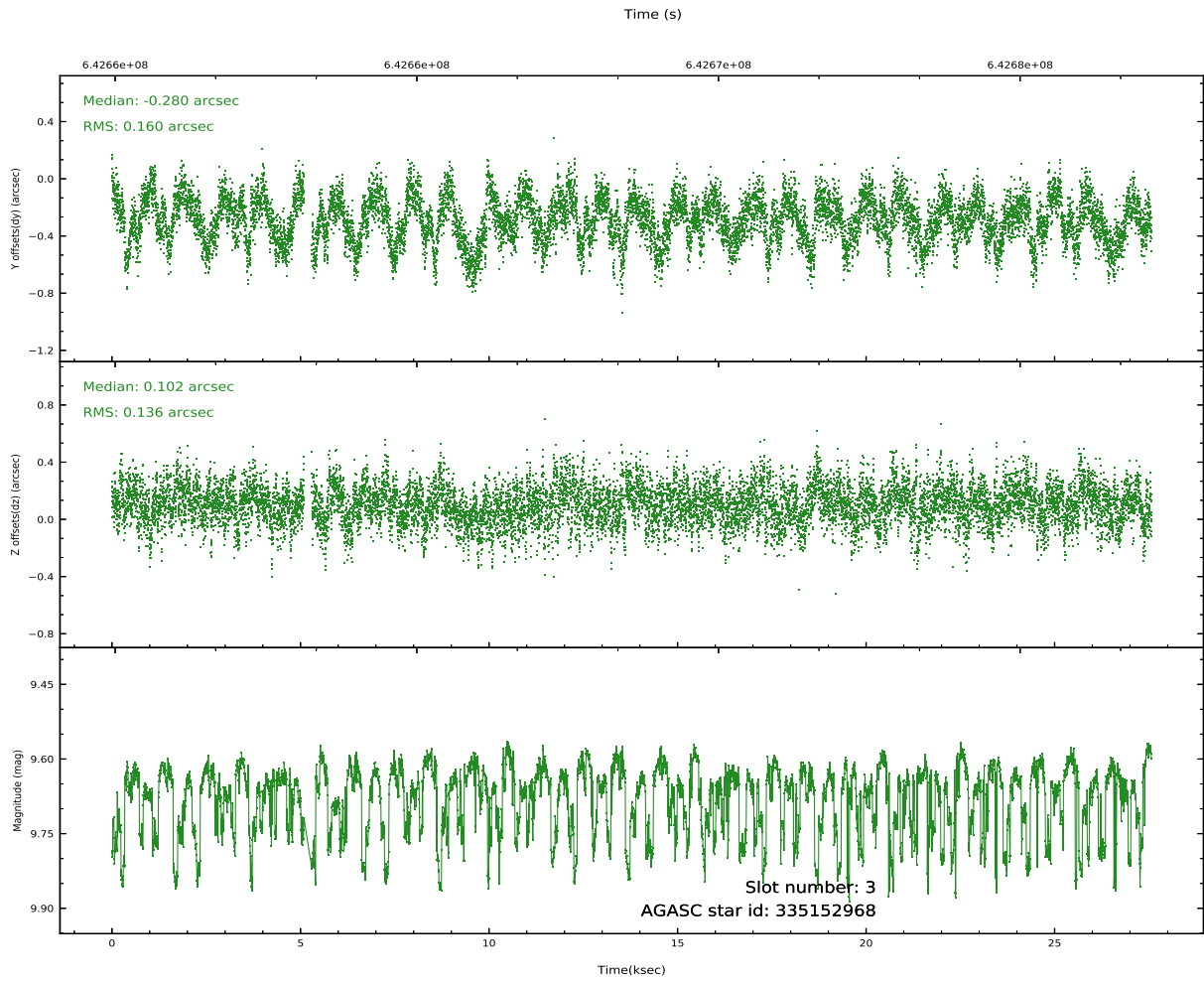
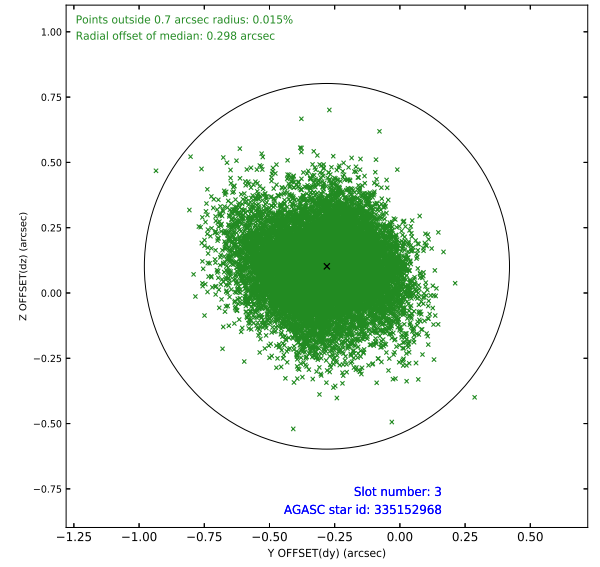
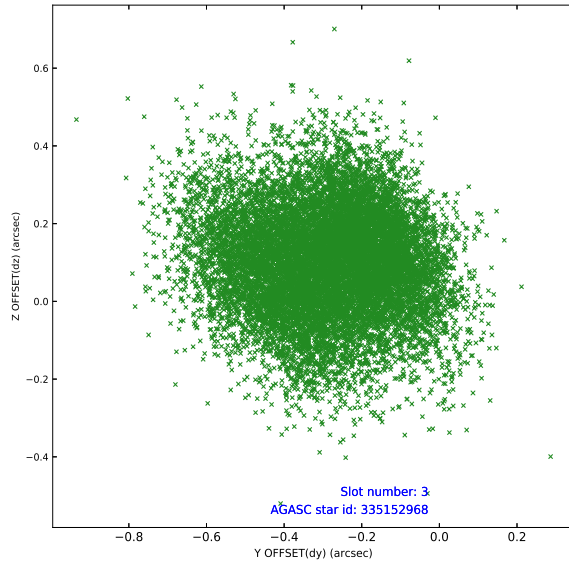


Slot Statistics

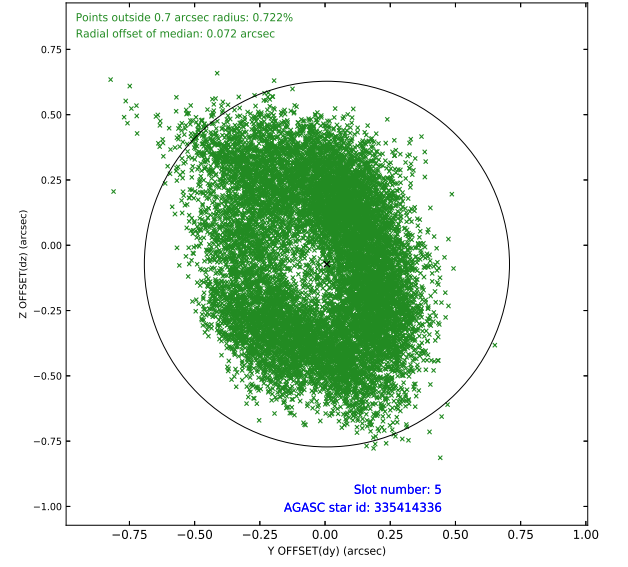
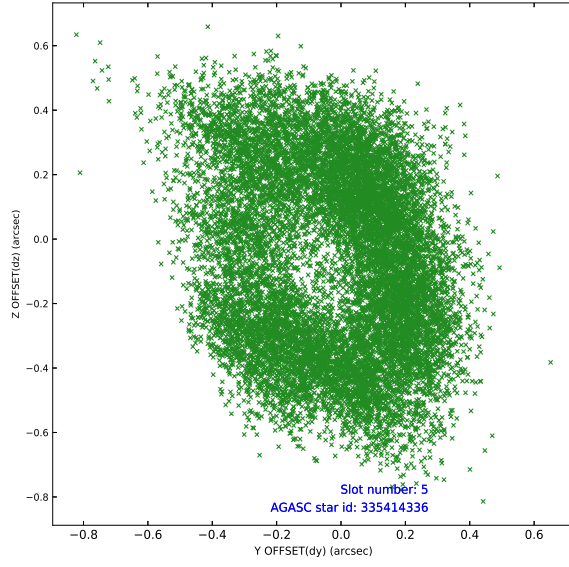
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	6724	1.000	0.200	-0.168	0.020	0.051	0.000000	0.000000	917.98	-845
1	FID		ACIS-I-4	7.18	6723	1.000	0.103	0.044	0.021	0.044	0.000000	0.000000	2138.17	1054
2	FID		ACIS-I-5	7.21	6724	1.000	-0.400	0.194	0.015	0.024	0.000000	0.000000	-1830.31	1052
3	GUIDE	used	335152968	9.66	13308	1.000	-0.280	0.102	0.225	0.356	219.446087	34.867883	-1227.24	1508
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	335414336	8.90	13433	1.000	0.007	-0.072	0.387	0.558	218.979022	35.090910	-6.50	481
6	GUIDE	used	335549864	7.51	13446	1.000	-0.184	0.283	0.227	0.369	219.286726	35.929745	-1412.64	-2338
7	GUIDE	used	335421696	8.93	13436	1.000	0.503	-0.306	0.264	0.454	218.045699	35.772449	2251.23	-2419

2.4 Star Slots

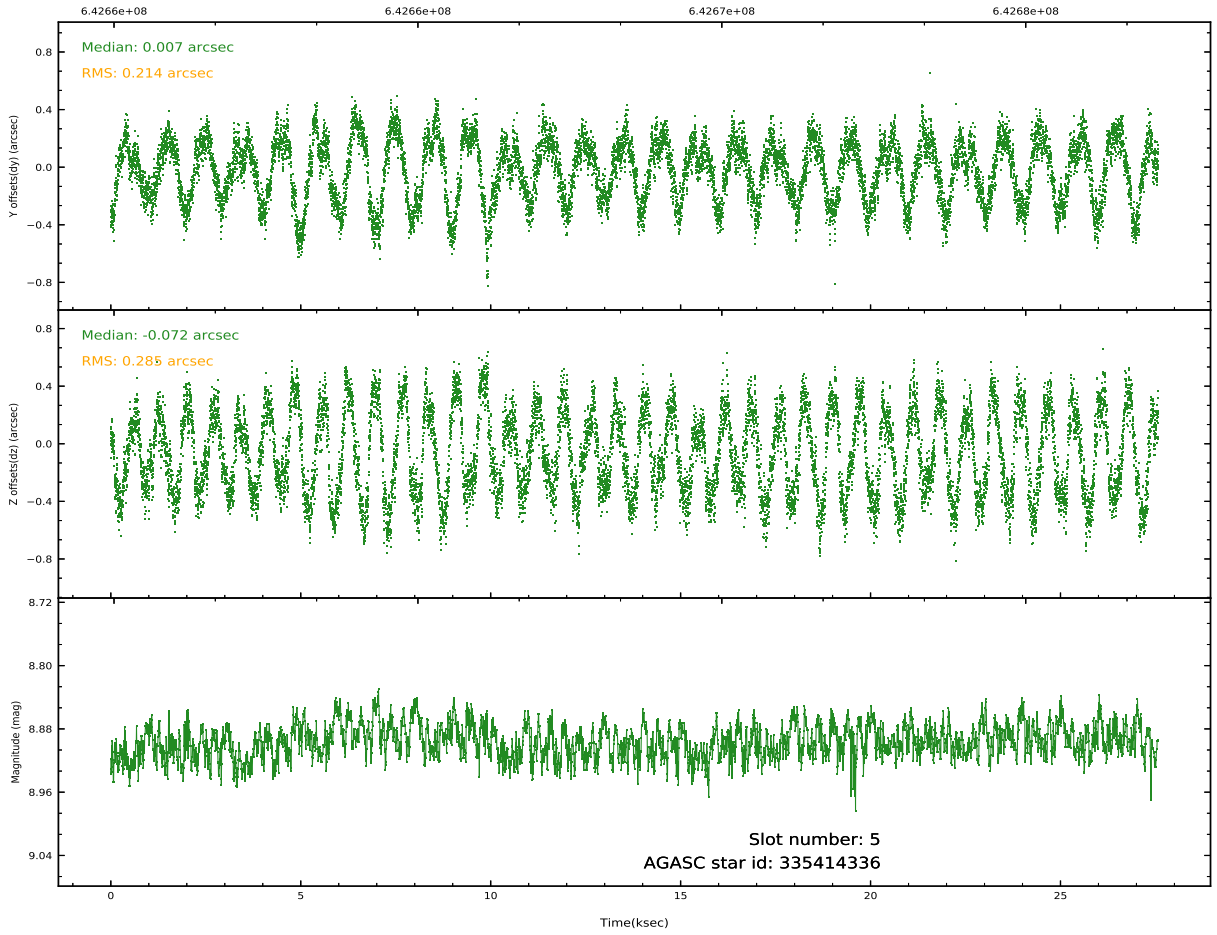
2.4.1 Slot 3



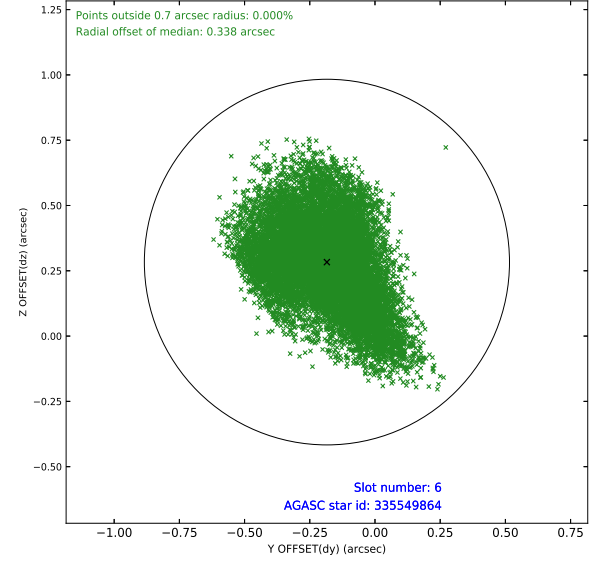
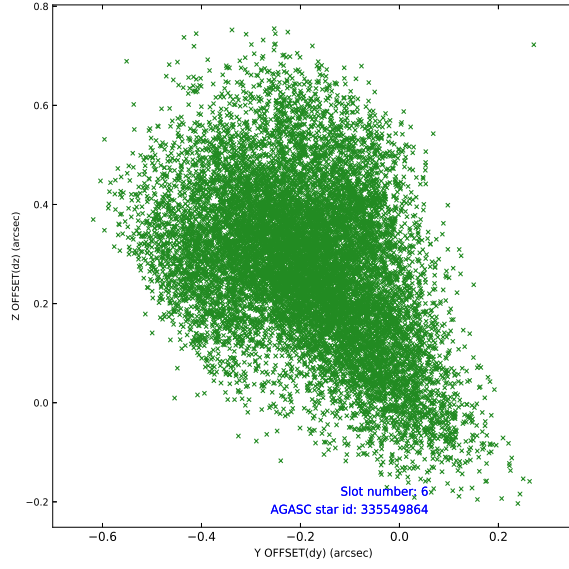
2.4.2 Slot 5



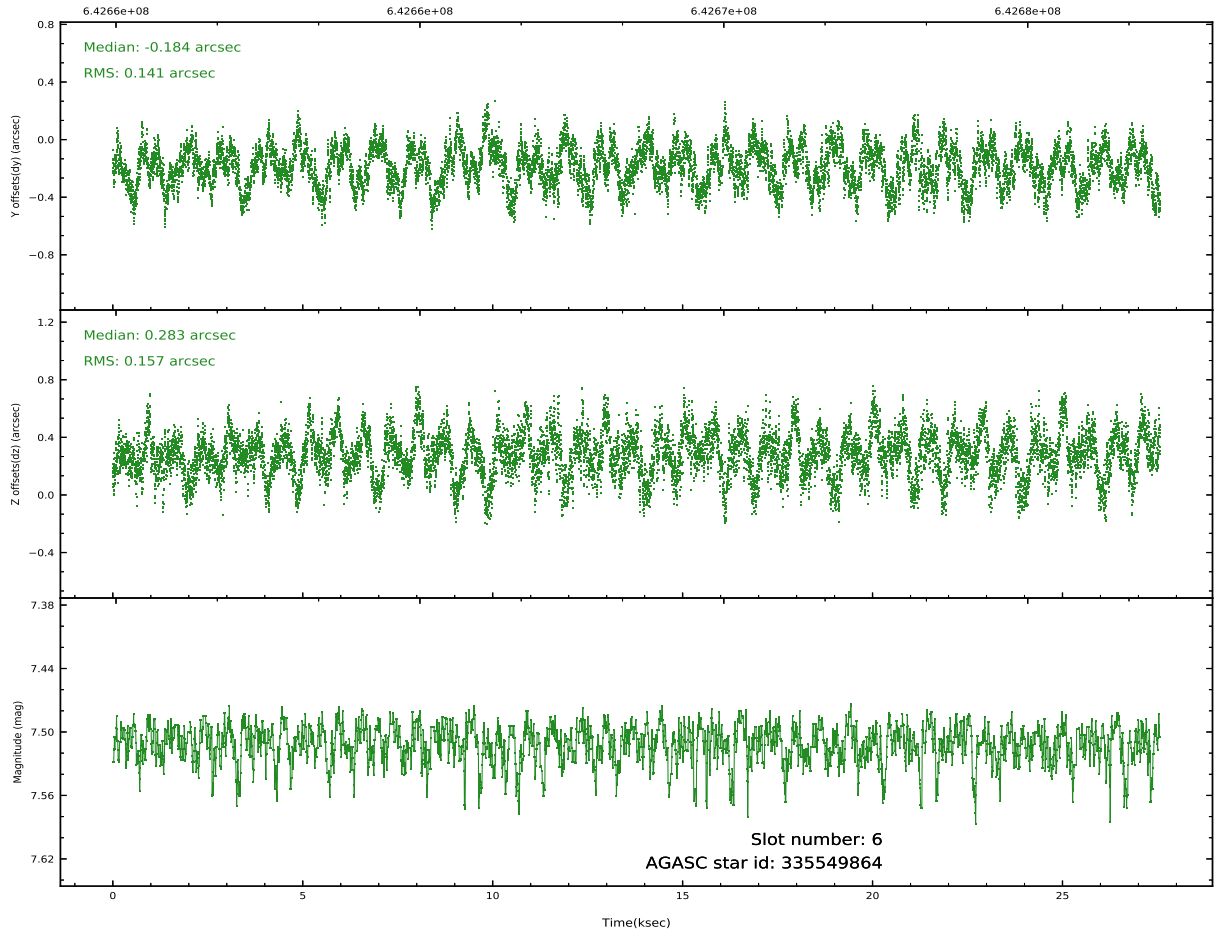
Time (s)



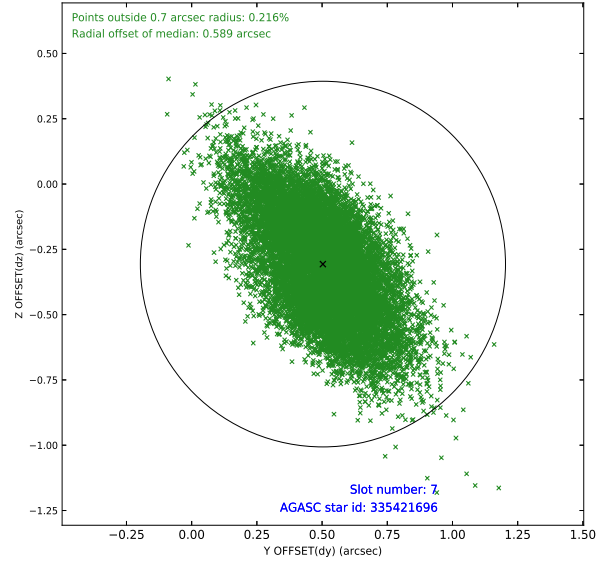
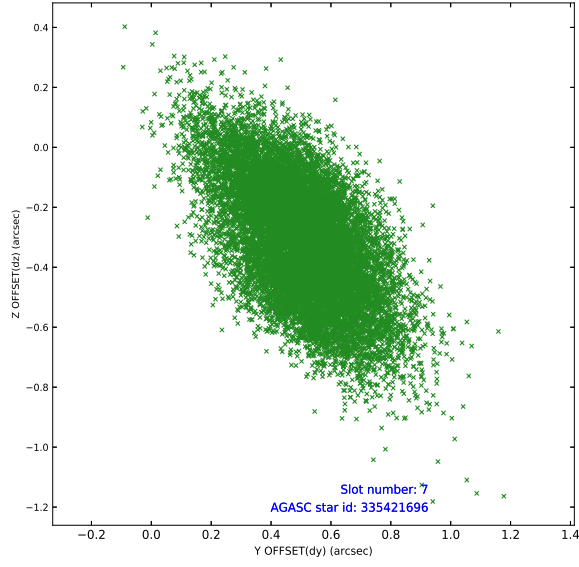
2.4.3 Slot 6



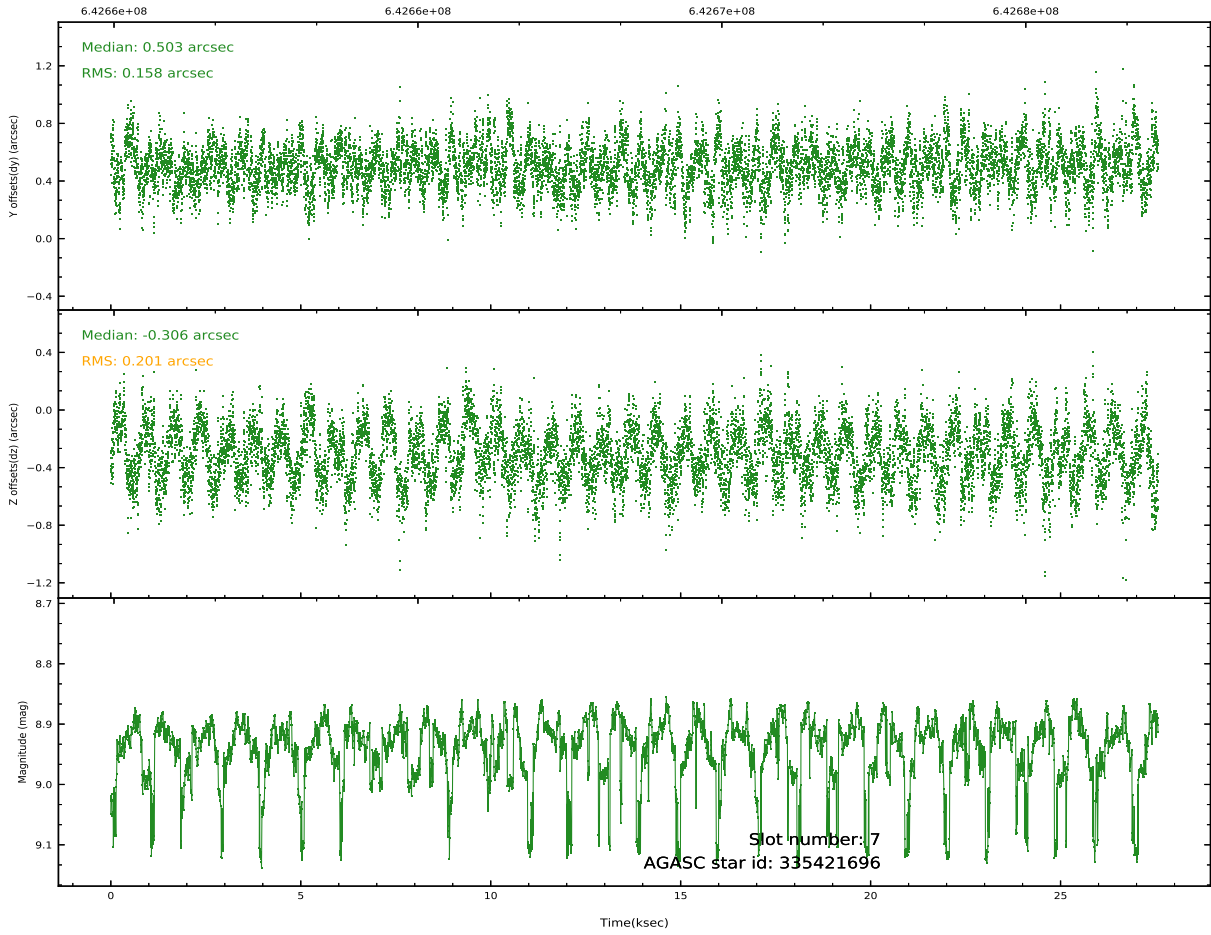
Time (s)



2.4.4 Slot 7

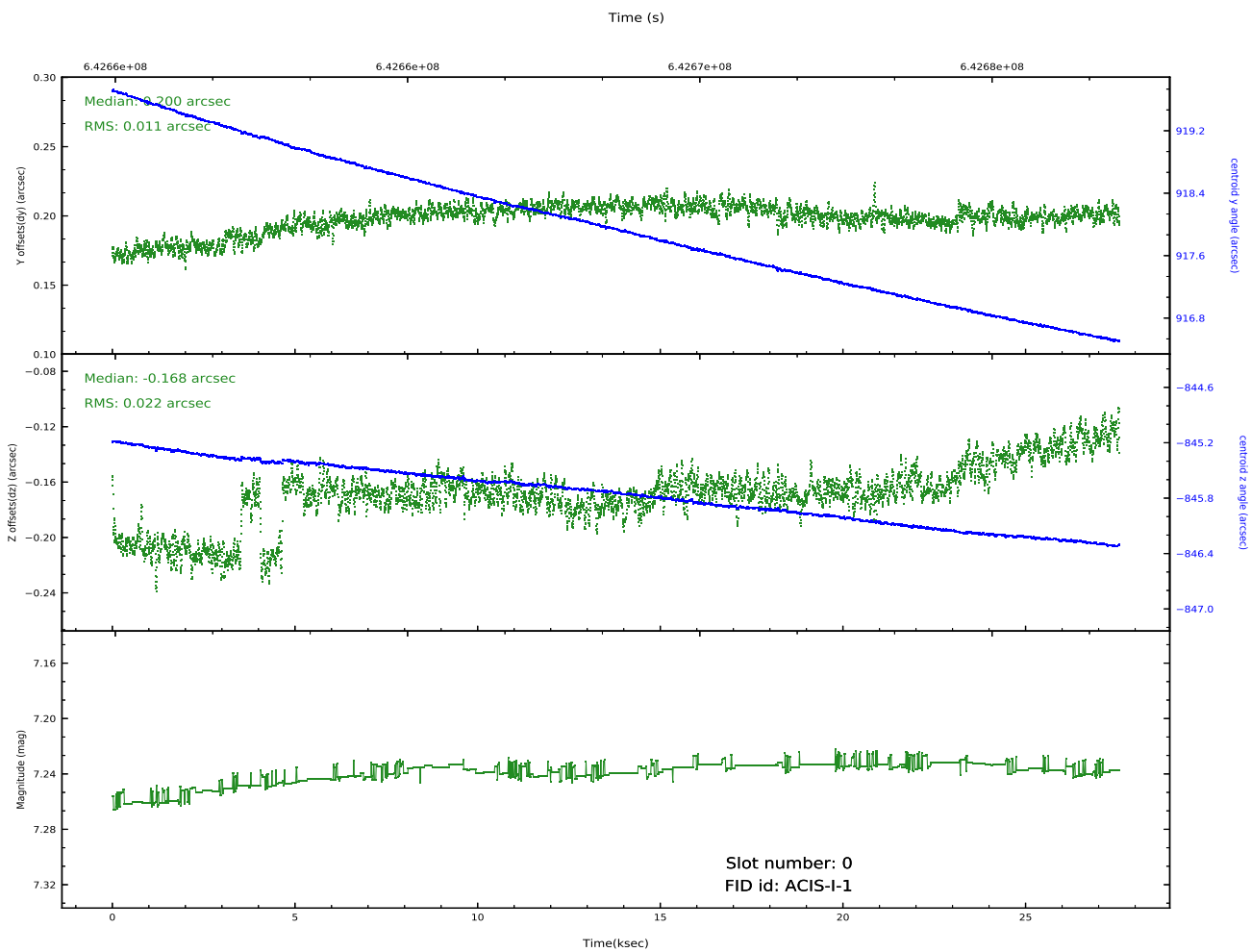
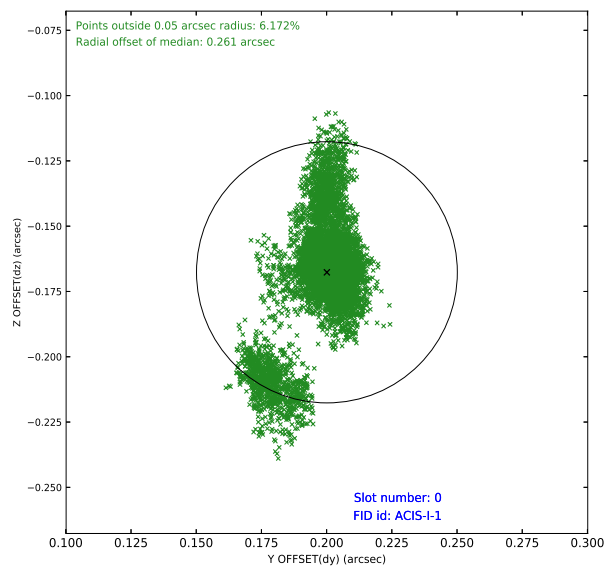
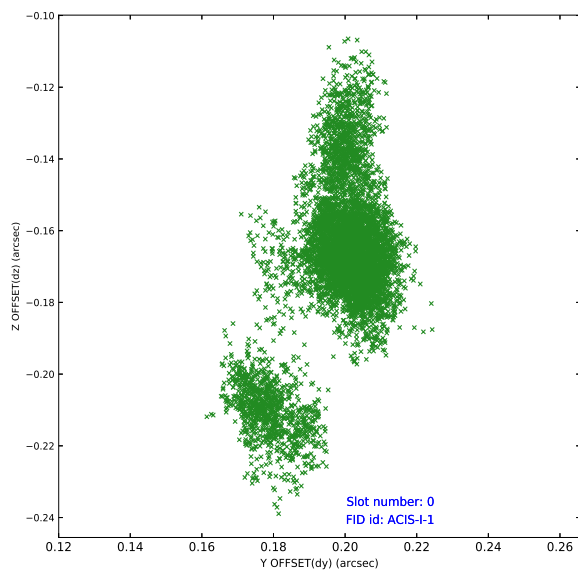


Time (s)

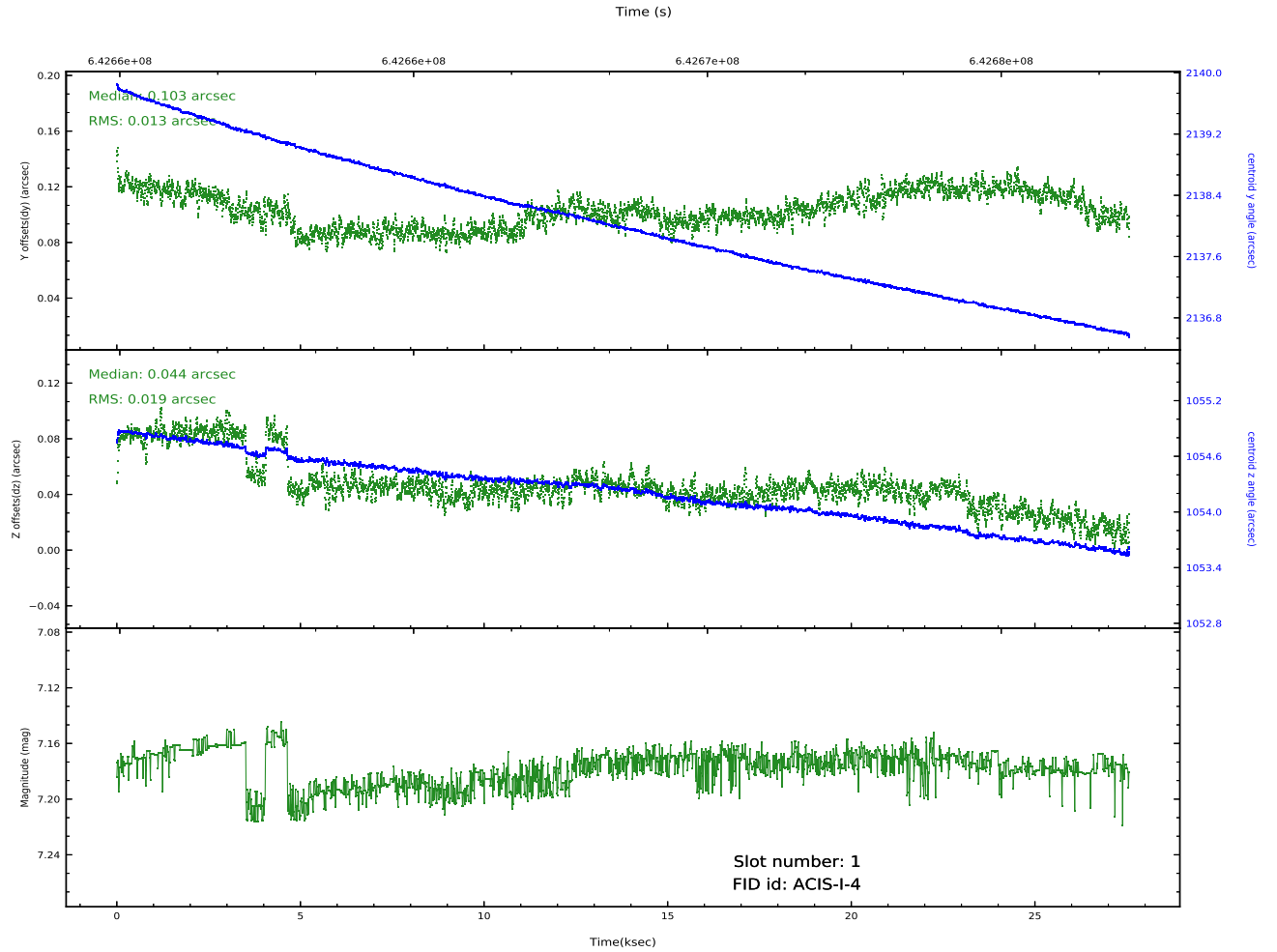
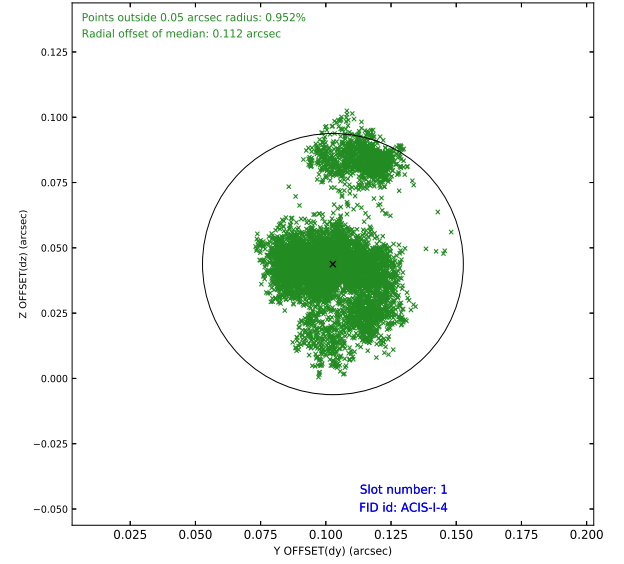
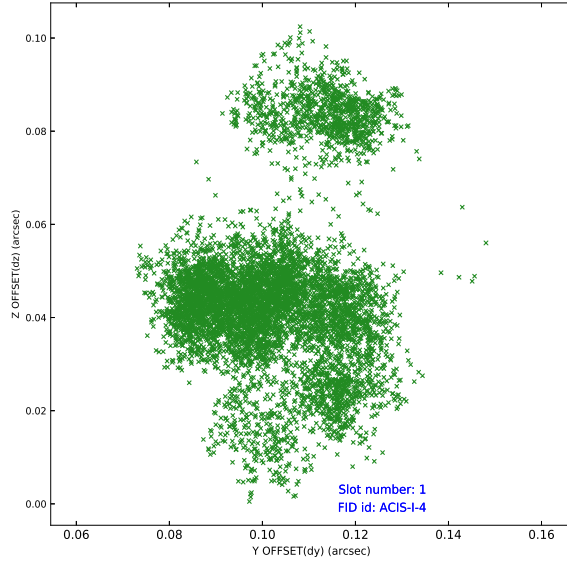


2.5 FID Slots

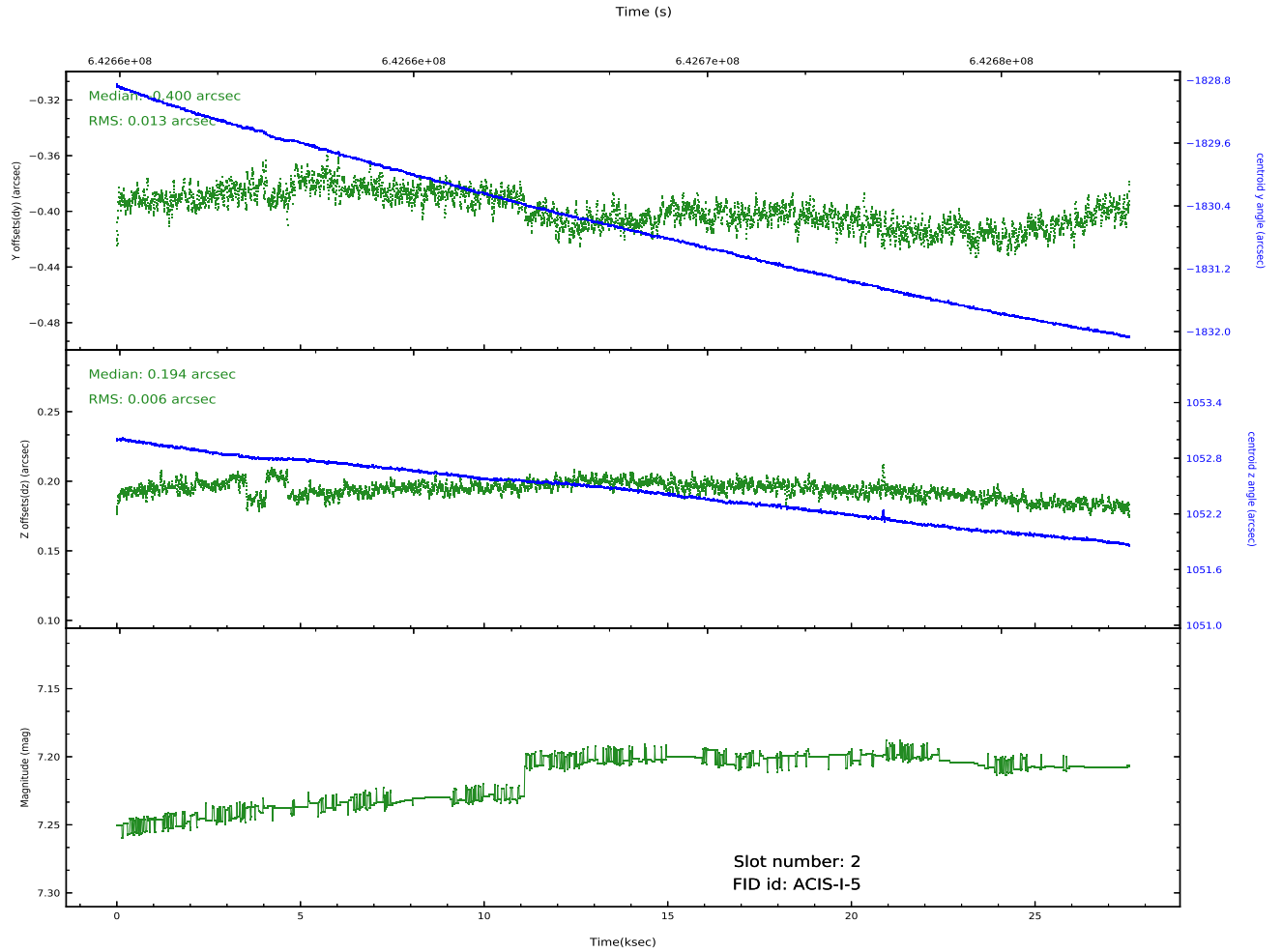
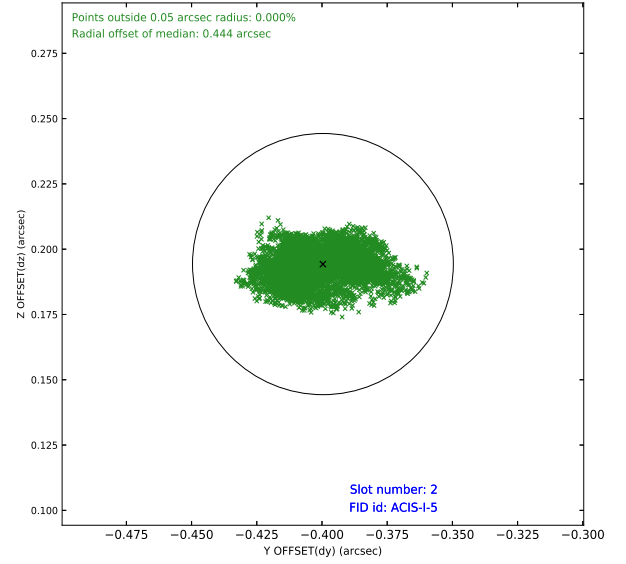
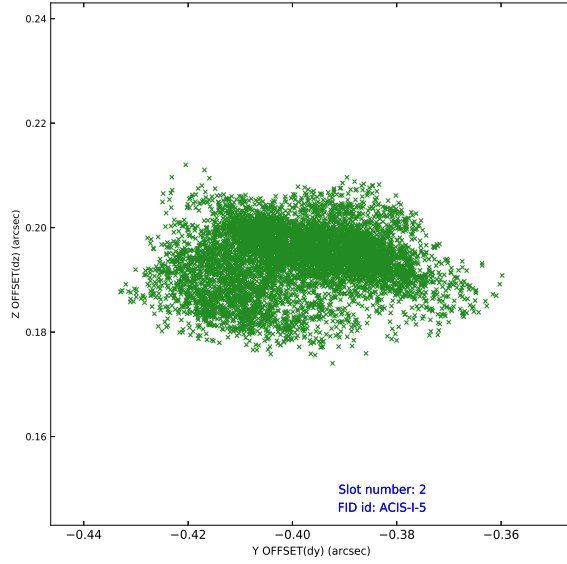
2.5.1 Slot 0



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	27.050559167862

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.