

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19650 - L2 Version 2
Chandra X-Ray Center

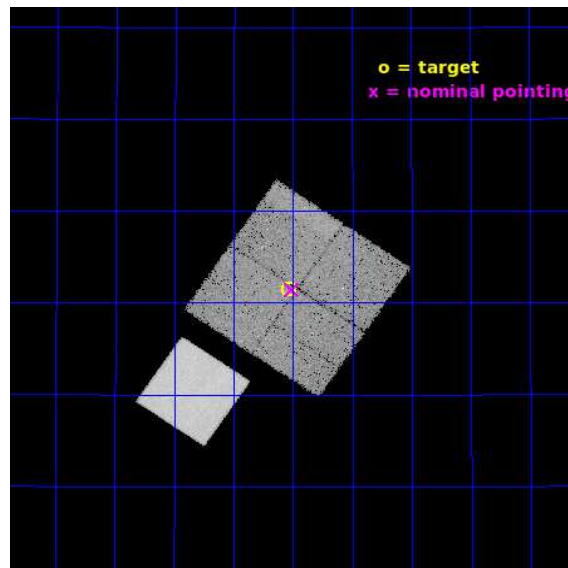
L2 Processing Date : Oct 26 2020

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1 Front

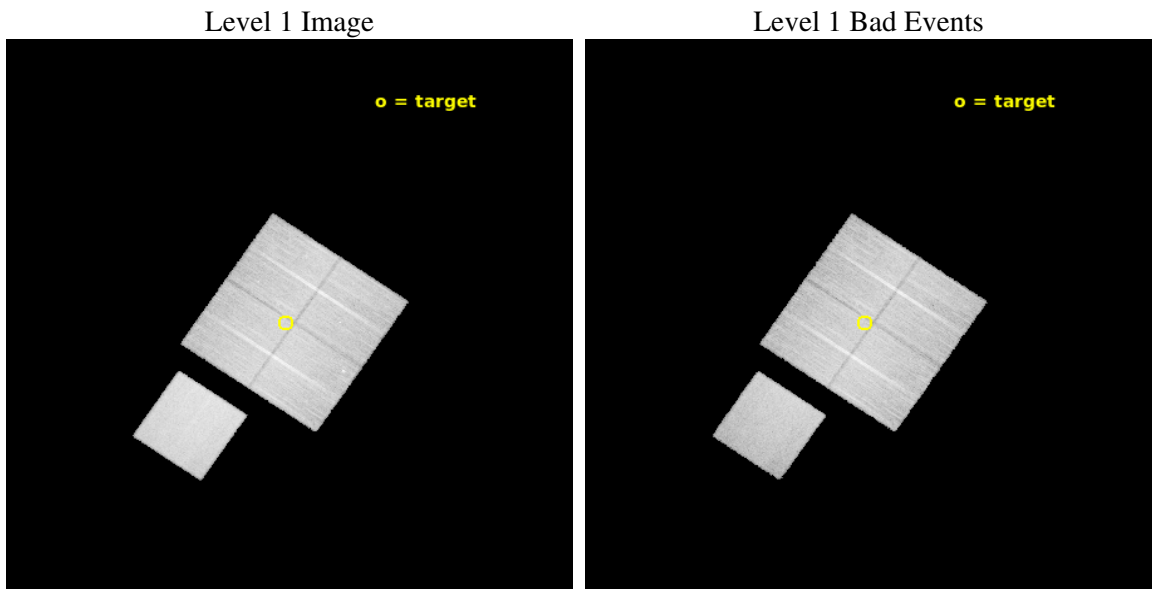
seq_num	901357	Sequence number
obs_id	19650	Observation id
title	The Chandra Deep Wide-Field Survey: Completing the new generation of Chandra extragalactic surveys	Proposal title
observer	Ryan Hickox	Principal investigator
object	Xbootes (CDWFS)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	218.88285	Observer's specified target RA [deg]
dec_targ	34.358235	Observer's specified target Dec [deg]
ra_nom	218.8774442025	Nominal RA [deg]
dec_nom	34.357388933928	Nominal Dec [deg]
roll_nom	214.201750138	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25057.056378722	Sum of GTIs [s]
livetime	24729.667490398	Livetime [s]
ontime0	25056.933258653	Sum of GTIs [s]
ontime1	25056.974298716	Sum of GTIs [s]
ontime2	25057.015338659	Sum of GTIs [s]
ontime3	25057.056378722	Sum of GTIs [s]
ontime7	25057.097418666	Sum of GTIs [s]
l2events	171686	Number of level 2 events



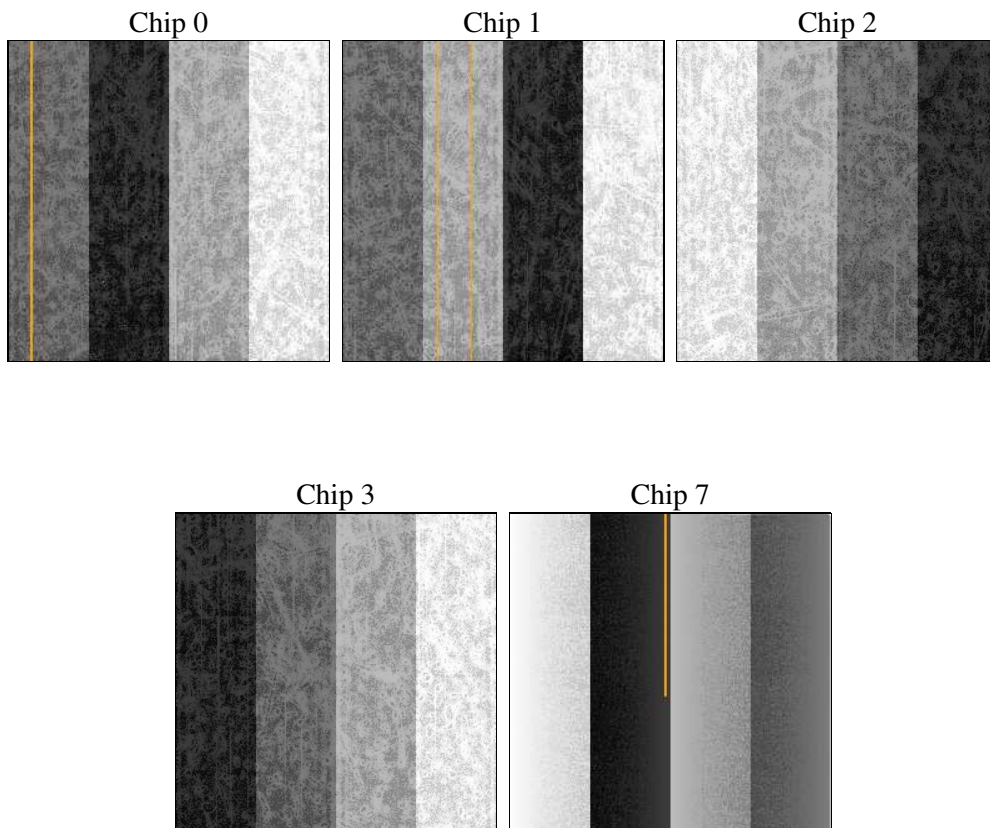
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	25057.056378722	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	25056.933258653	Sum of GTIs [s]
date	2020-10-26T09:49:49	Date and time of file creation	ontime1	25056.974298716	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	25057.015338659	Sum of GTIs [s]
			ontime3	25057.056378722	Sum of GTIs [s]
			ontime7	25057.097418666	Sum of GTIs [s]
			l1events	943210	Number of level 1 events

2.1.4 Events

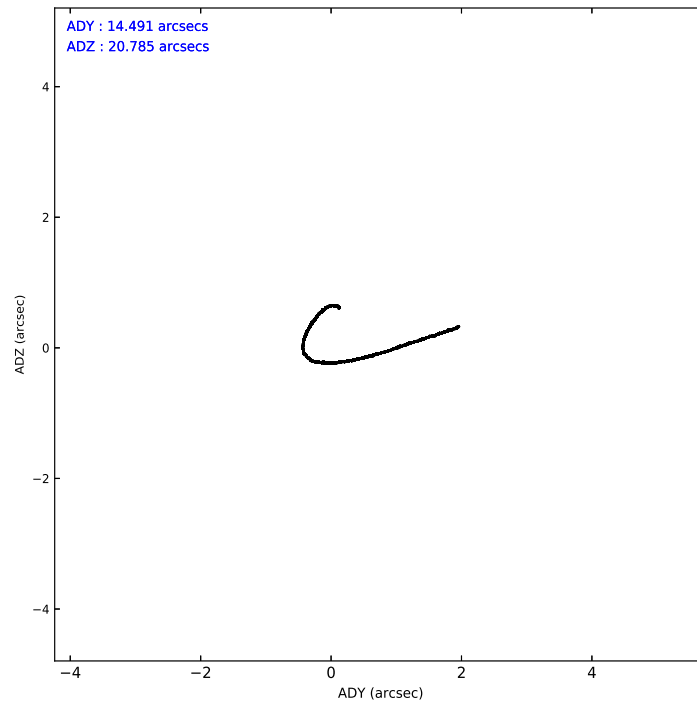
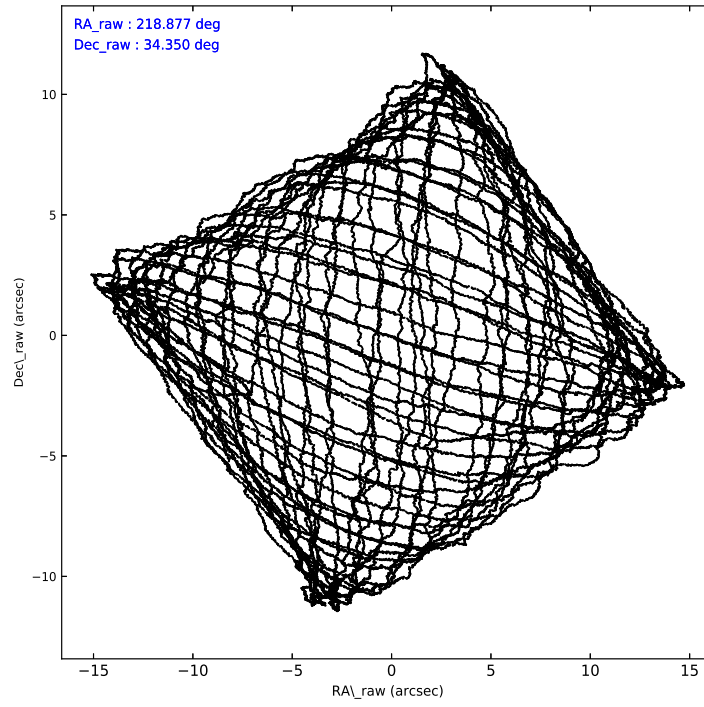
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	168076	173525	189077	172630	239902
rejected events	147358	149934	168024	153002	134796
rejected %	87%	86%	88%	88%	56%

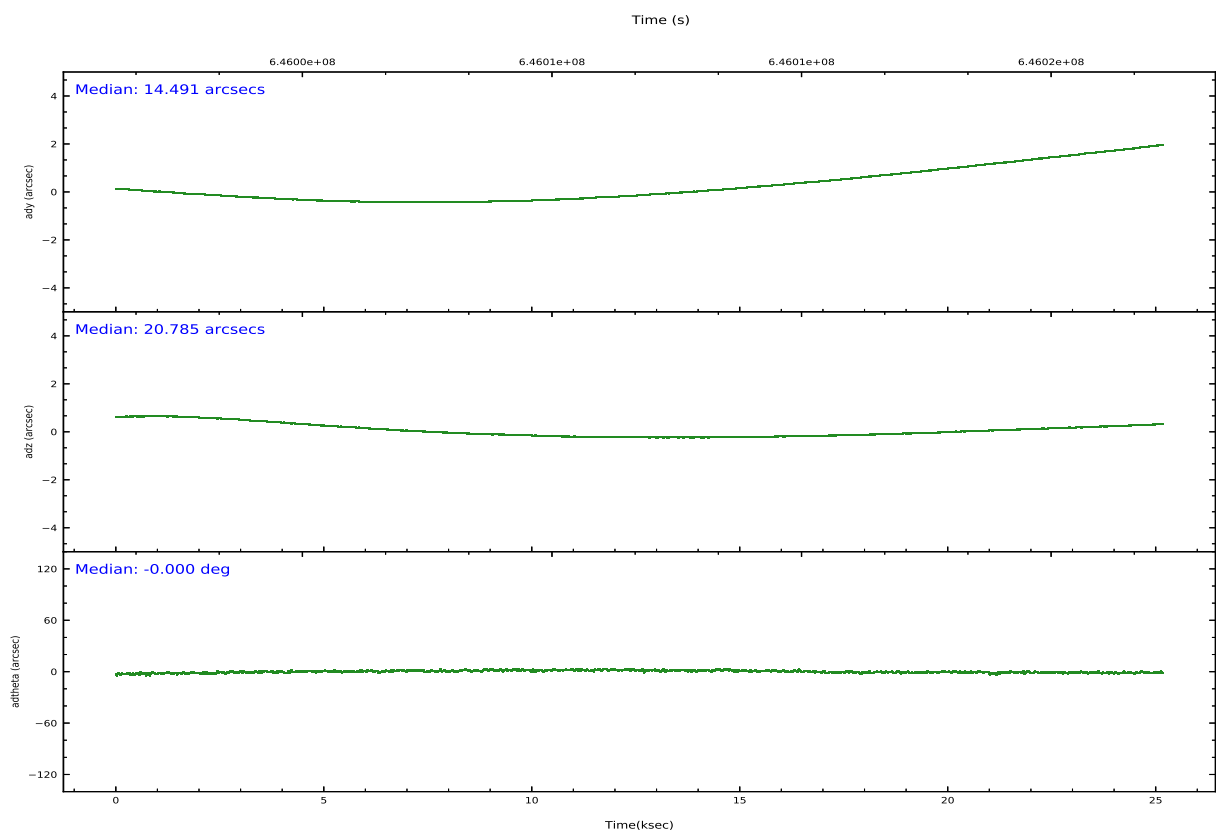
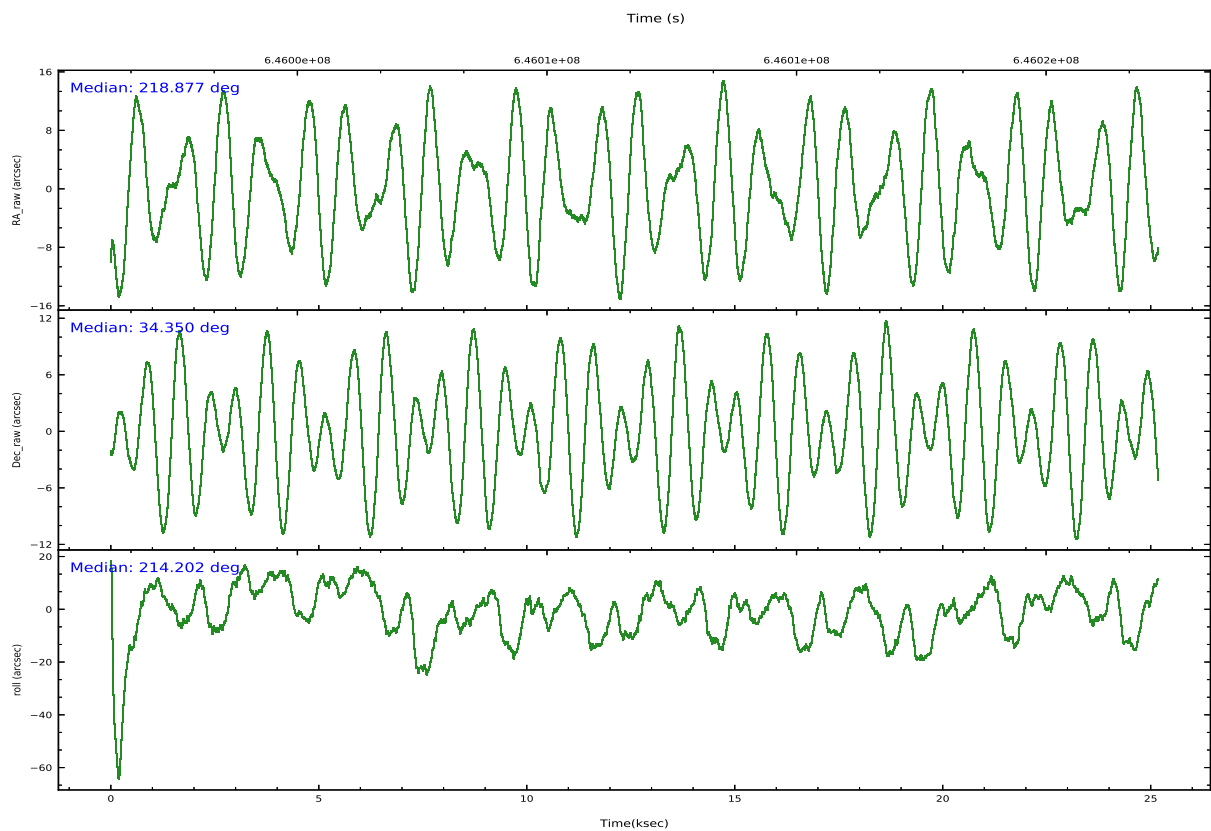
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	7037	8314	7669	7143	8959
	4%	4%	4%	4%	3%
grade 1 events	112	135	105	105	347
	0%	0%	0%	0%	0%
grade 2 events	5316	5856	5241	4303	22404
	3%	3%	2%	2%	9%
grade 3 events	2173	2227	1907	2023	8549
	1%	1%	1%	1%	3%
grade 4 events	1971	2230	2046	2073	8457
	1%	1%	1%	1%	3%
grade 5 events	8219	8404	7355	8933	24327
	4%	4%	3%	5%	10%
grade 6 events	4227	4971	4194	4092	56762
	2%	2%	2%	2%	23%
grade 7 events	139021	141388	160560	143958	110097
	82%	81%	84%	83%	45%

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	218.891757	218.8774442025	CCD I2 on	Y	Y
[deg] Pointing Dec	34.374765	34.357388933928	CCD I3 on	Y	Y
[deg] Pointing Roll	213.994969	214.201750138	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)	645995694.184000	645994745.87771	CCD S5 on	N	N
Observation start date	2018-06-21T19:13:45	2018-06-21T18:59:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	646020694.184000	646021768.97931	On-chip summing requested	N	N
Observation end date	2018-06-22T02:10:25	2018-06-22T02:29:28	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



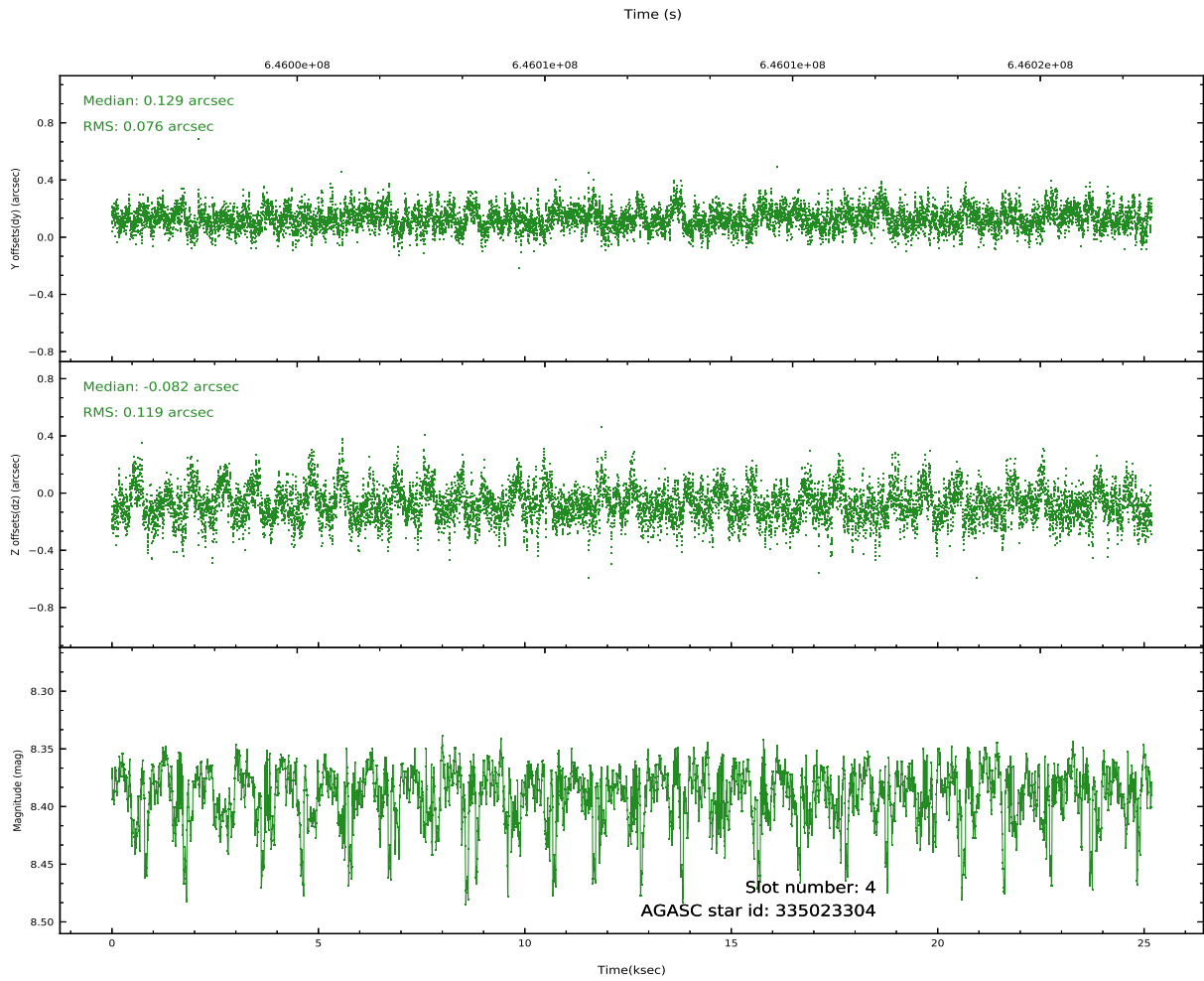
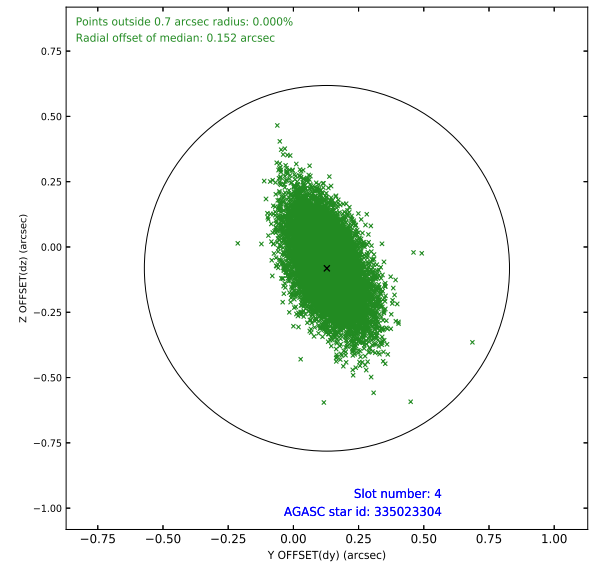
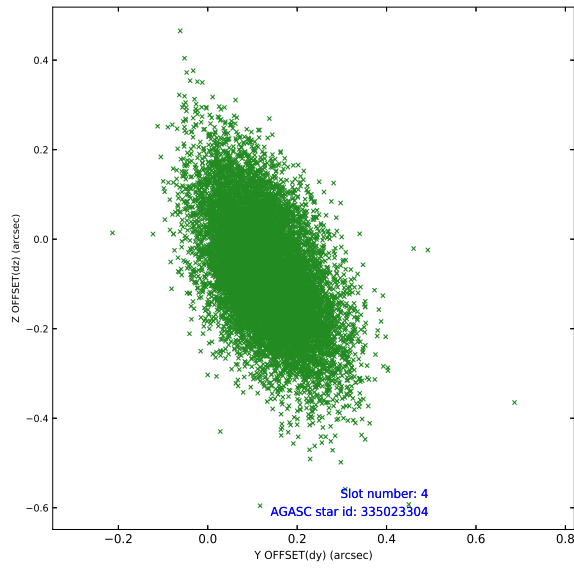


Slot Statistics

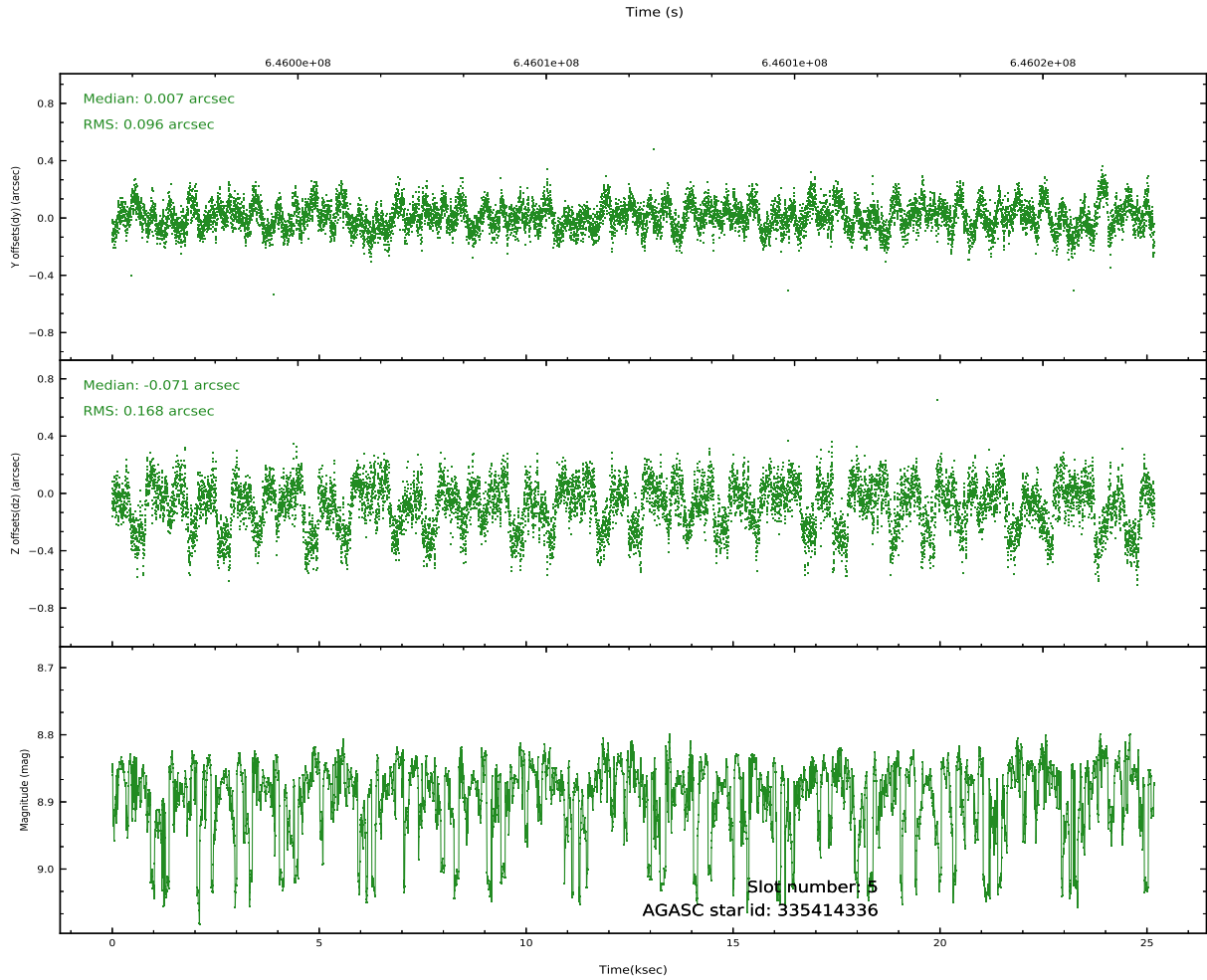
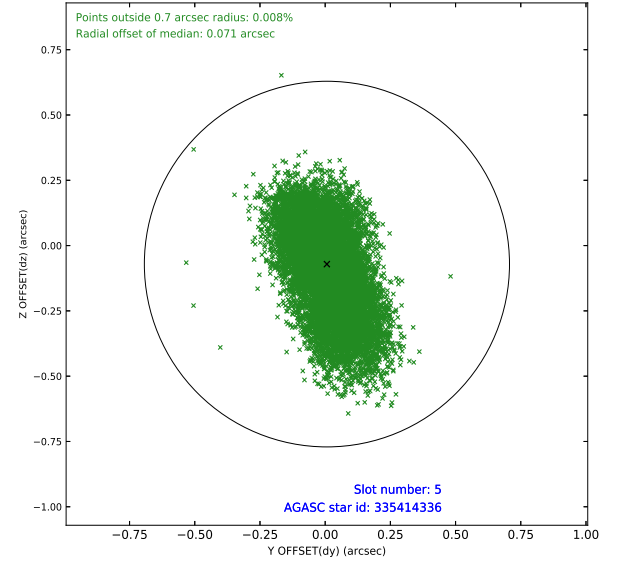
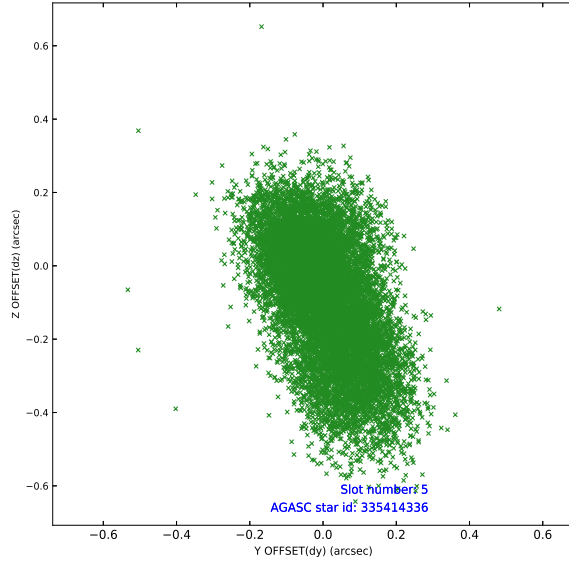
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.08	6142	1.000	-0.029	-0.094	0.014	0.024	0.000000	0.000000	924.64	-844
1	FID		ACIS-I-4	7.05	6139	1.000	0.011	0.041	0.021	0.029	0.000000	0.000000	2144.85	1055
2	FID		ACIS-I-6	7.10	6142	1.000	-0.079	0.118	0.015	0.025	0.000000	0.000000	390.73	1697
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
4	GUIDE	used	335023304	8.39	12280	1.000	0.129	-0.082	0.144	0.259	218.883608	34.686545	-606.95	-943
5	GUIDE	used	335414336	8.88	12269	1.000	0.007	-0.071	0.202	0.349	218.979022	35.090910	-1653.81	-1993
6	GUIDE	used	335155824	8.91	12269	1.000	-0.070	-0.045	0.190	0.304	219.689900	34.035435	-1296.90	2336
7	GUIDE	used	335152968	9.68	12263	1.000	-0.076	0.207	0.210	0.332	219.446087	34.867883	-2352.08	-558

2.4 Star Slots

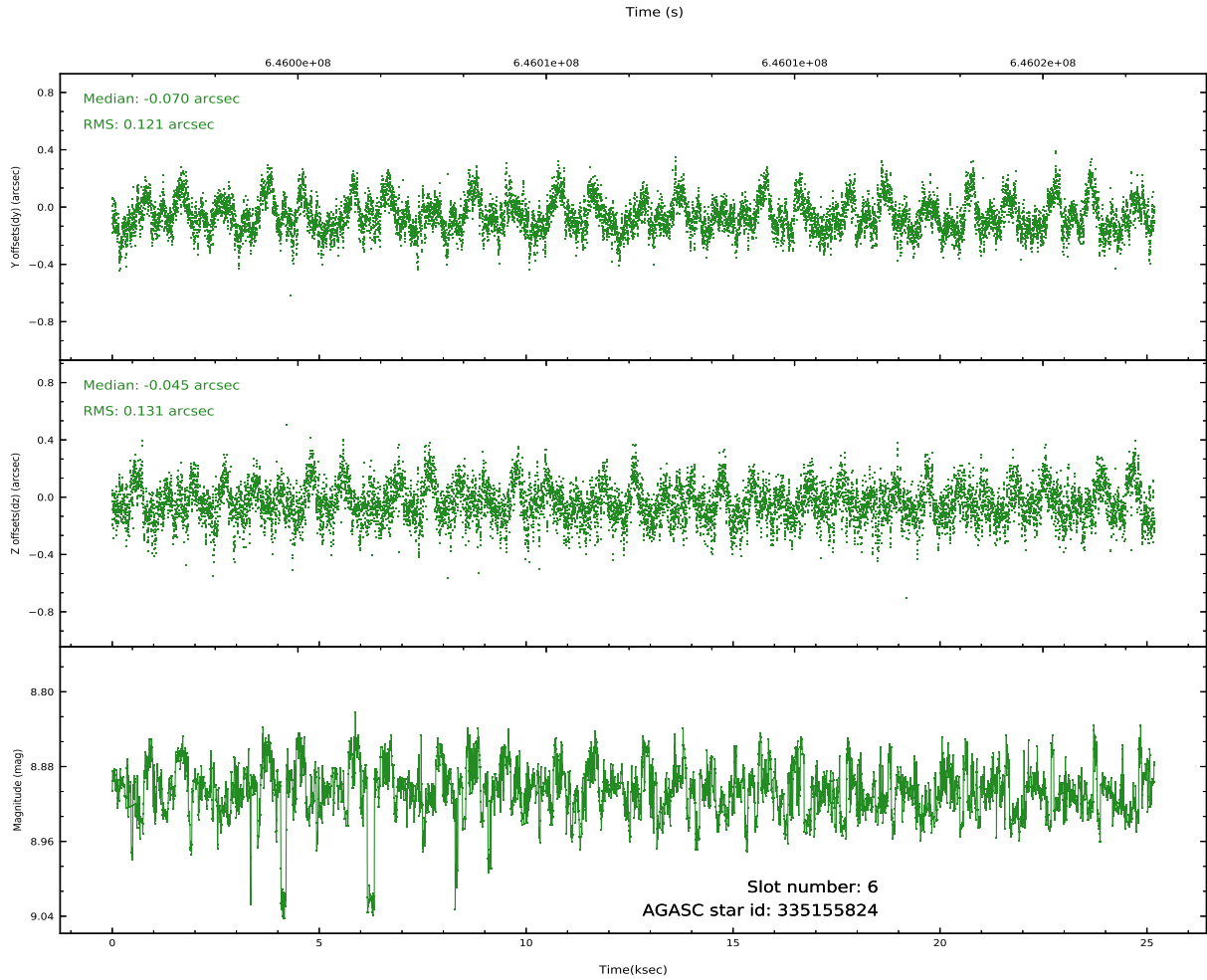
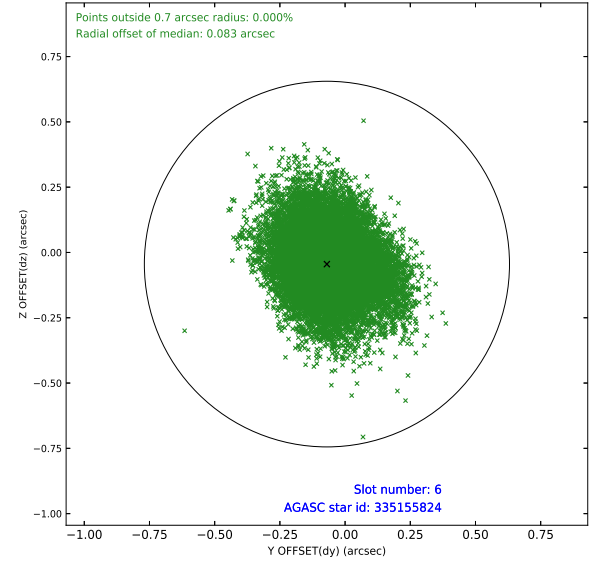
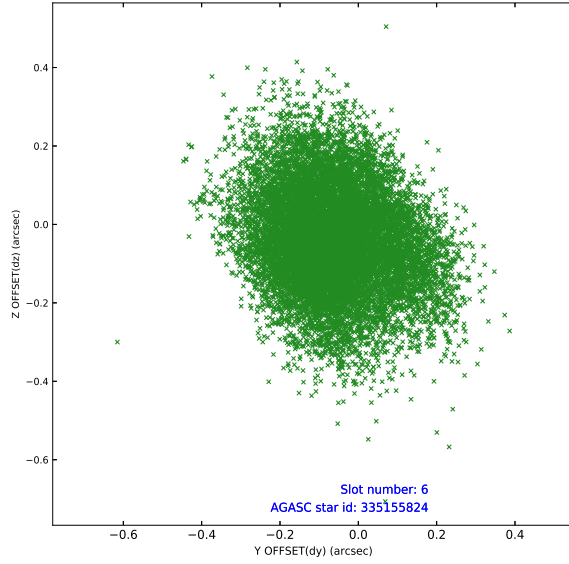
2.4.1 Slot 4



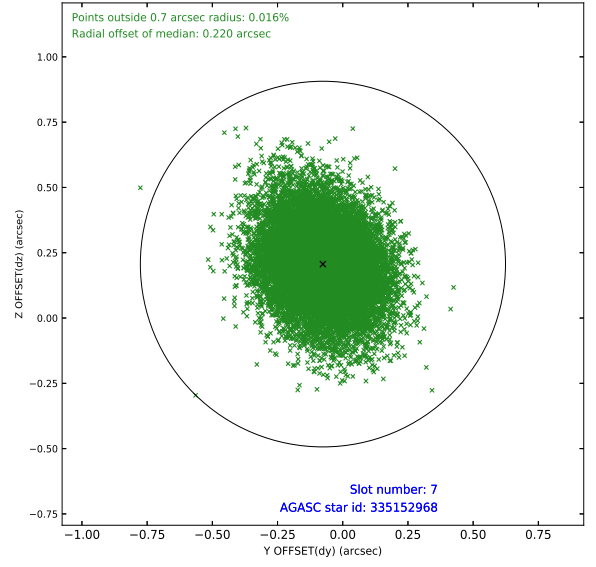
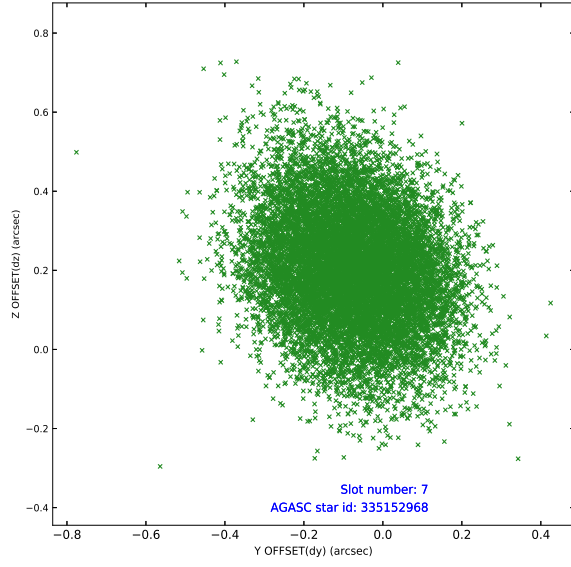
2.4.2 Slot 5



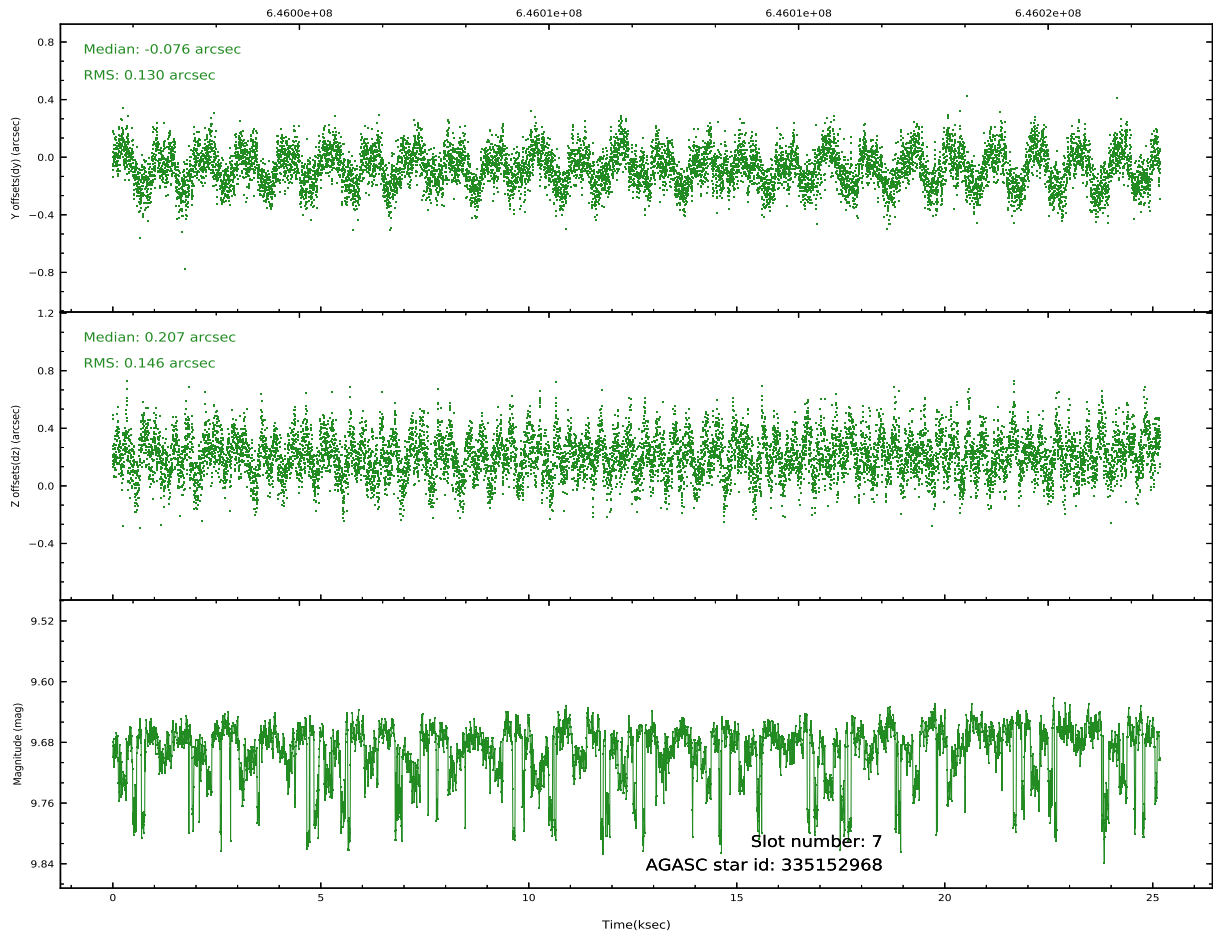
2.4.3 Slot 6



2.4.4 Slot 7

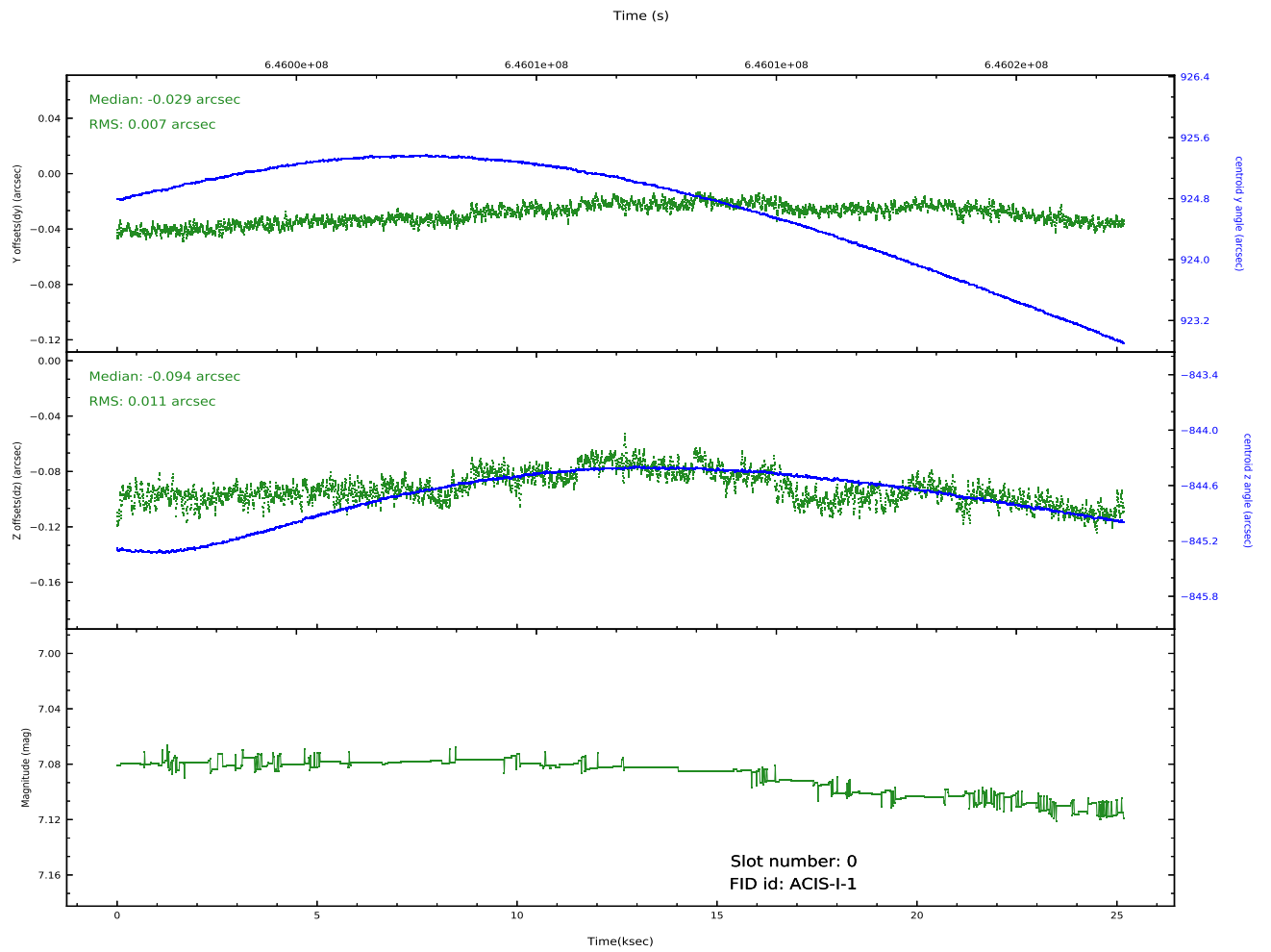
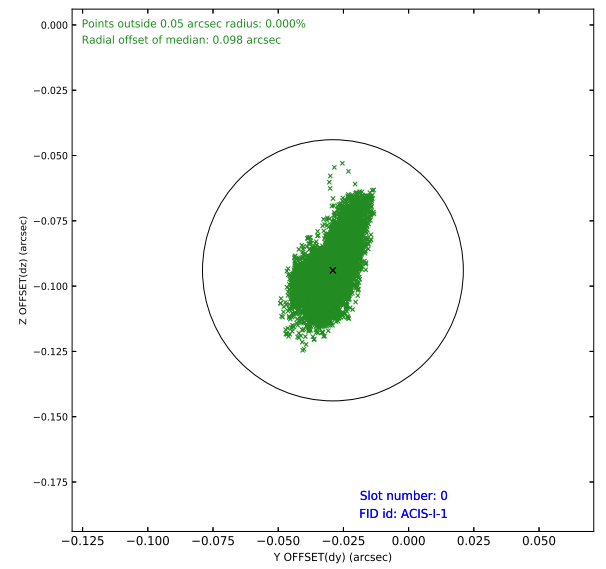
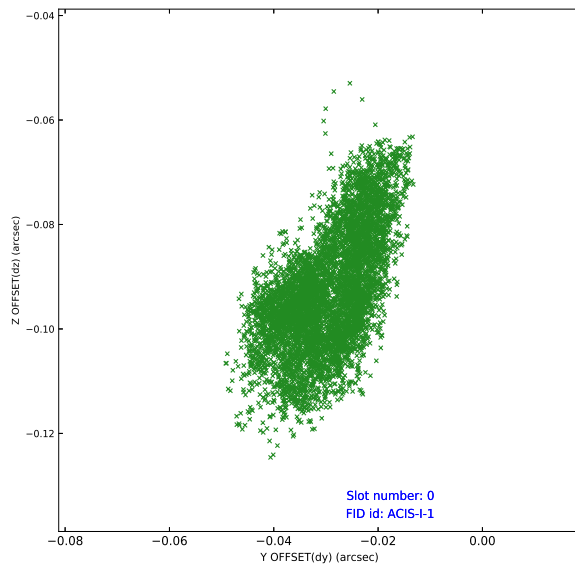


Time (s)

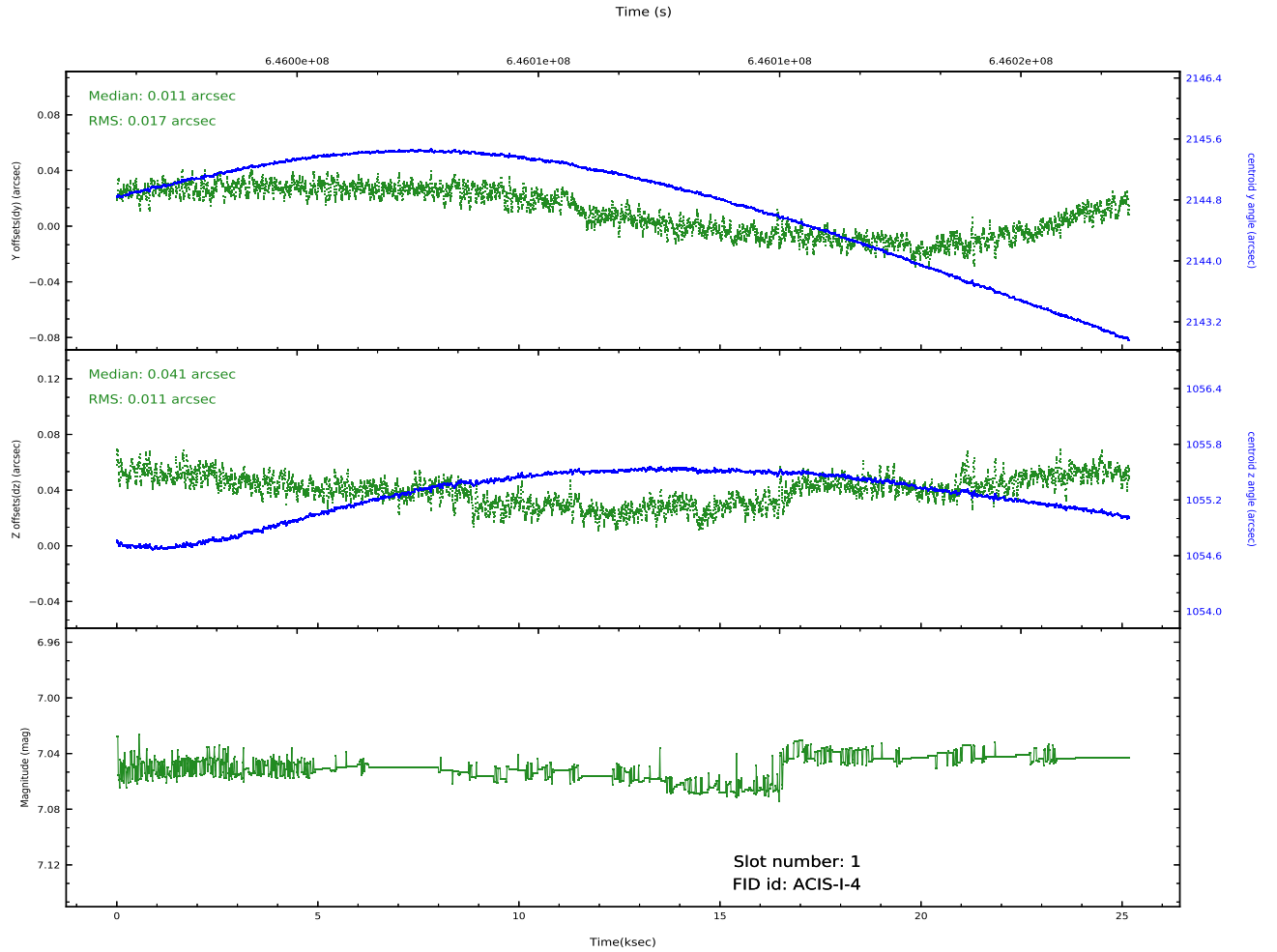
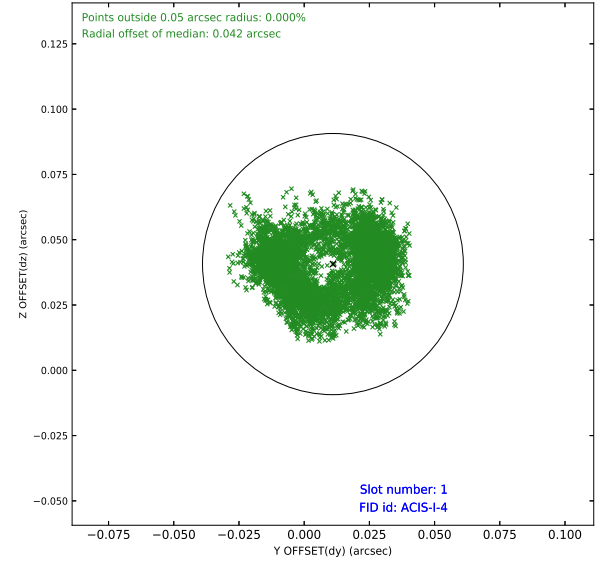
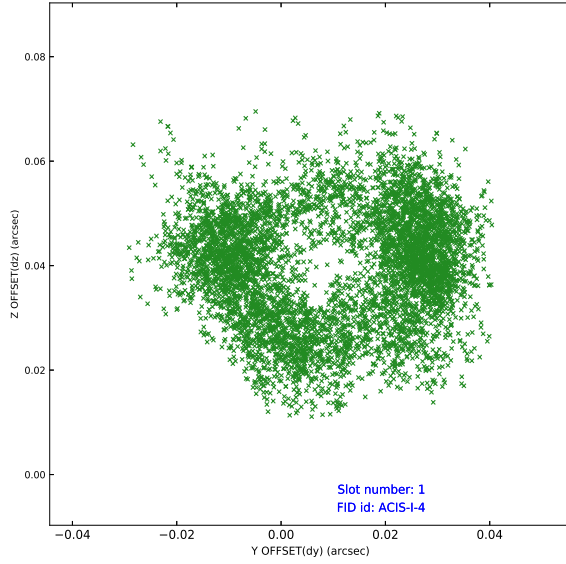


2.5 FID Slots

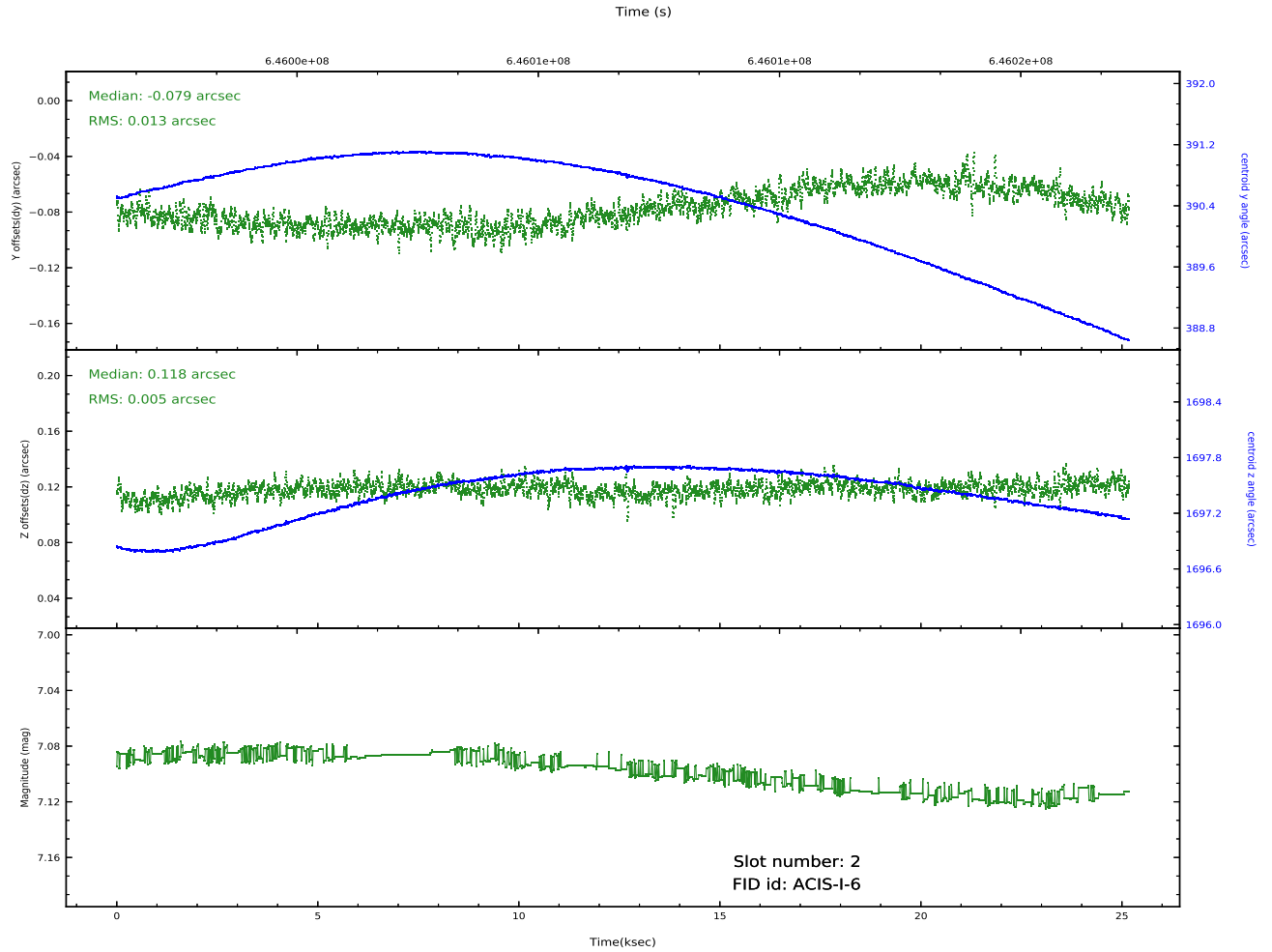
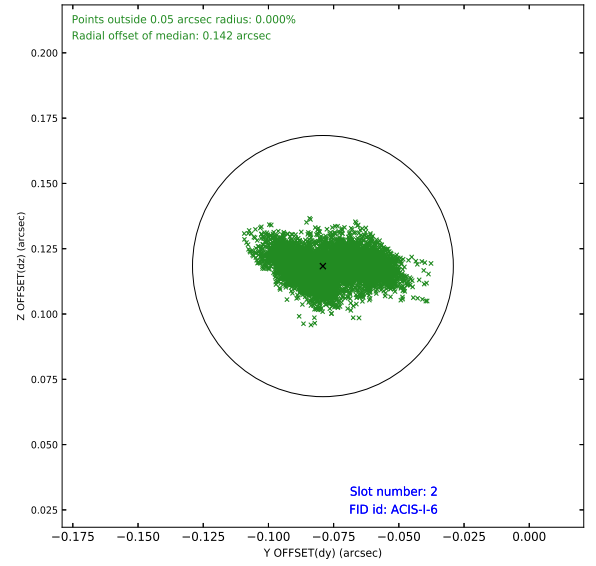
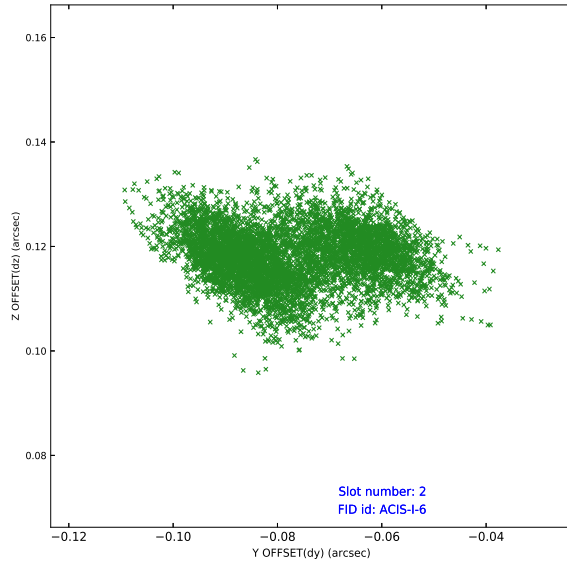
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.057056378961

A.2 Comments

The guide star in slot 3 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.