

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20503 - L2 Version 2
Chandra X-Ray Center

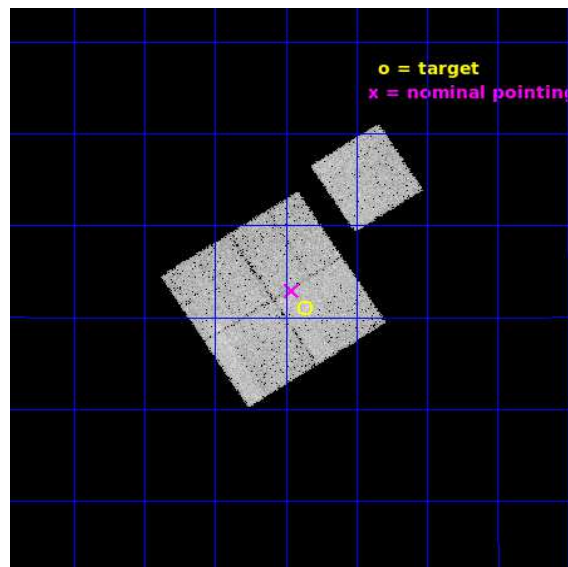
L2 Processing Date : Oct 28 2020

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1 Front

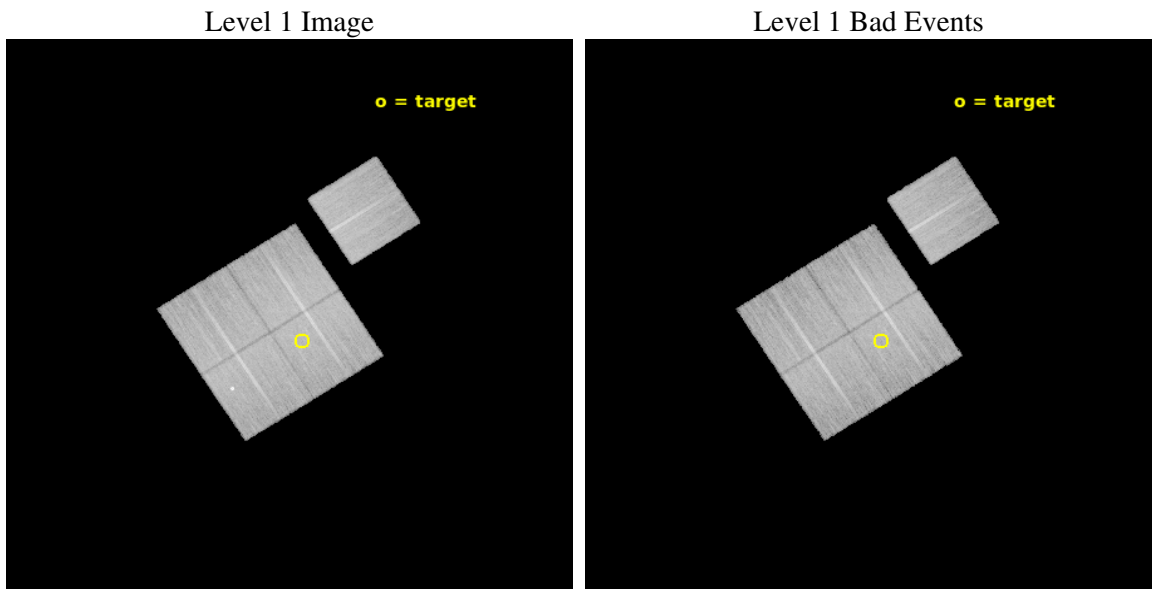
seq_num	801717	Sequence number
obs_id	20503	Observation id
title	Enabling precision cosmology with optically selected galaxy clusters	
observer	Roger Morris	Principal investigator
object	CIG J114820+102108	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.09125	Observer's specified target RA [deg]
dec_targ	10.350222	Observer's specified target Dec [deg]
ra_nom	177.11408560425	Nominal RA [deg]
dec_nom	10.381803743775	Nominal Dec [deg]
roll_nom	57.193542750944	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23066.031262636	Sum of GTIs [s]
livetime	22764.656583225	Livetime [s]
ontime0	23065.908142567	Sum of GTIs [s]
ontime1	23069.090172648	Sum of GTIs [s]
ontime2	23069.131212711	Sum of GTIs [s]
ontime3	23066.031262636	Sum of GTIs [s]
ontime6	23065.867251754	Sum of GTIs [s]
l2events	84268	Number of level 2 events



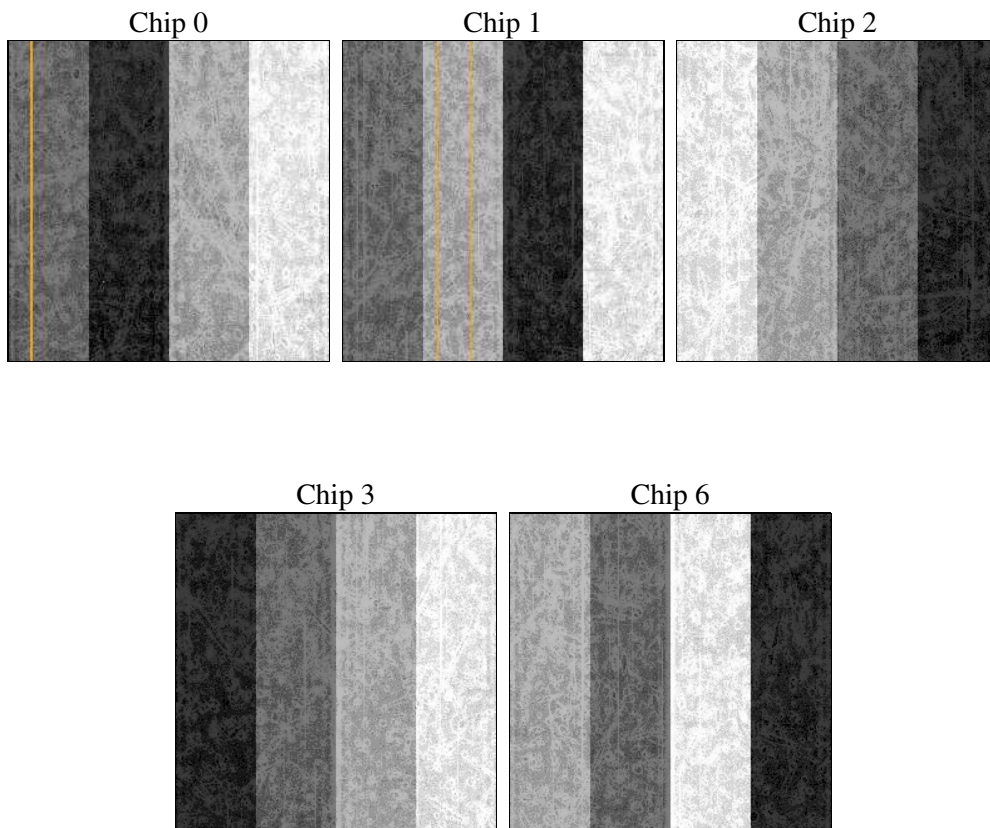
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	23066.031262636	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	23065.908142567	Sum of GTIs [s]
date	2020-10-28T04:03:21	Date and time of file creation	ontime1	23069.090172648	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23069.131212711	Sum of GTIs [s]
			ontime3	23066.031262636	Sum of GTIs [s]
			ontime6	23065.867251754	Sum of GTIs [s]
			l1events	837265	Number of level 1 events

2.1.4 Events

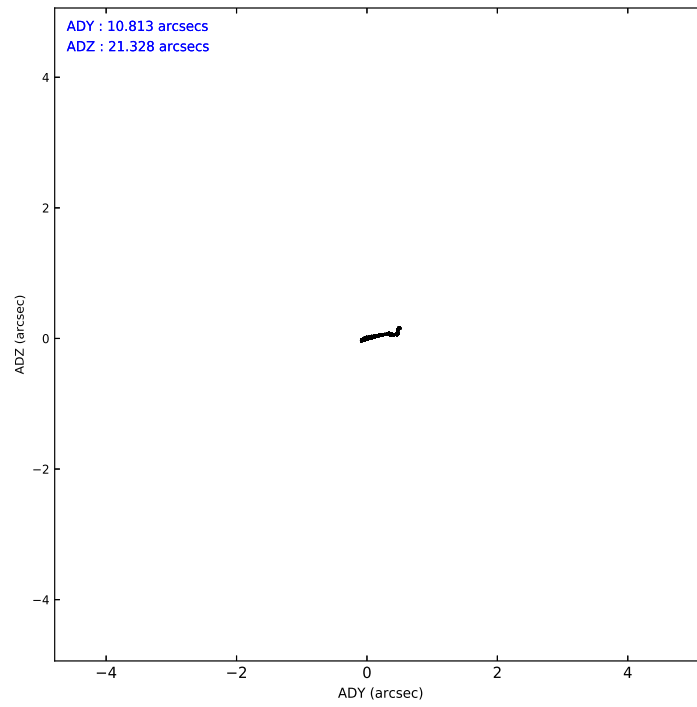
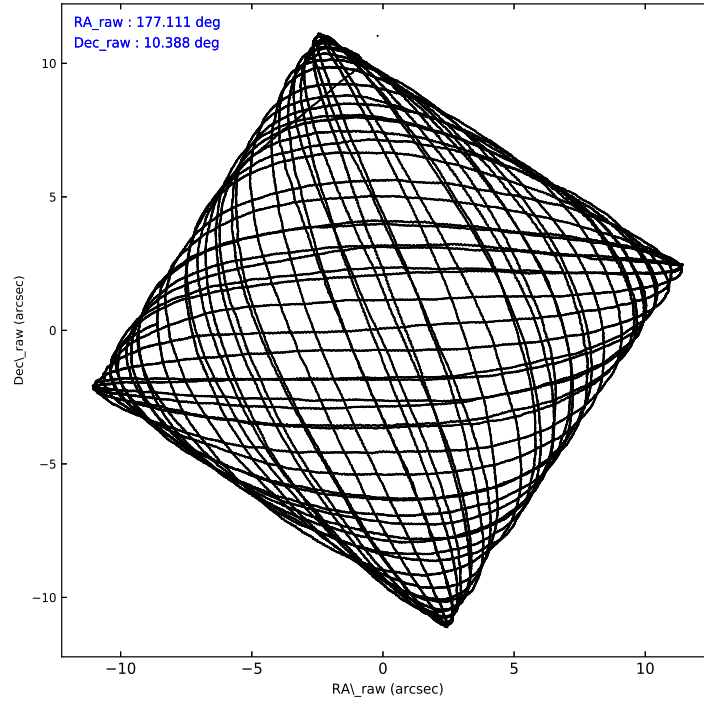
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	158253	165587	170422	171157	171846
rejected events	138172	141538	150984	151573	152427
rejected %	87%	85%	88%	88%	88%

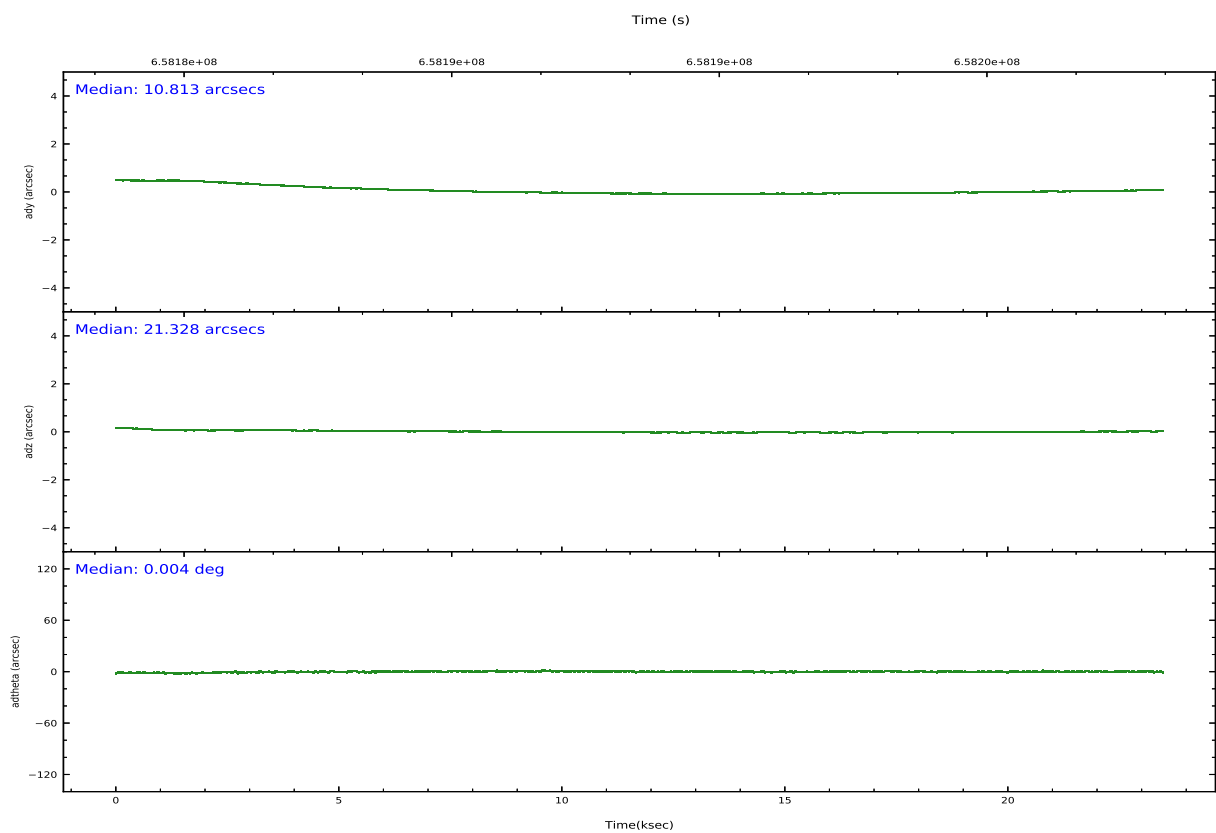
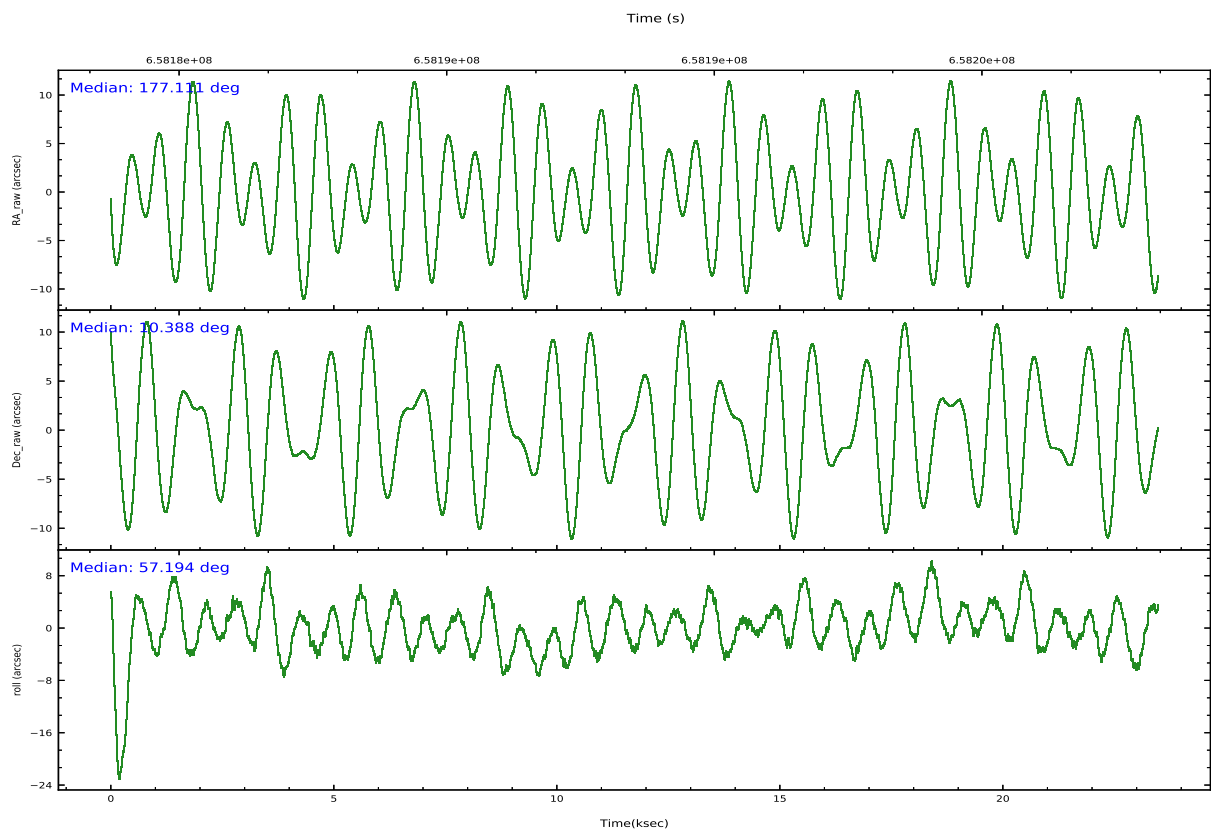
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6937	9706	6688	7620	6500
	4%	5%	3%	4%	3%
grade 1 events	110	115	121	103	91
	0%	0%	0%	0%	0%
grade 2 events	5196	5559	4959	4200	4508
	3%	3%	2%	2%	2%
grade 3 events	2087	2088	1887	1895	1958
	1%	1%	1%	1%	1%
grade 4 events	1813	2013	2006	1974	1911
	1%	1%	1%	1%	1%
grade 5 events	7634	7791	7122	8543	7974
	4%	4%	4%	4%	4%
grade 6 events	4051	4687	3900	3896	4545
	2%	2%	2%	2%	2%
grade 7 events	130425	133628	143739	142926	144359
	82%	80%	84%	83%	84%

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	177.109392	177.11408560425	CCD I2 on	Y	Y
[deg] Pointing Dec	10.360268	10.381803743775	CCD I3 on	Y	Y
[deg] Pointing Roll	56.996736	57.193542750944	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	O1	Y
[mm] SIM translation stage pos	-228.472463	-228.4783457680588	CCD S3 on	N	N
[mm] SIM translation stage offset	-5.12	-5.114107234870914	CCD S4 on	N	N
[s] Observation start time (MET)	658178951.184000	658177861.83085	CCD S5 on	N	N
Observation start date	2018-11-09T19:28:02	2018-11-09T19:11:01	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	658201951.184000	658202541.26982	On-chip summing requested	N	N
Observation end date	2018-11-10T01:51:22	2018-11-10T02:02:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



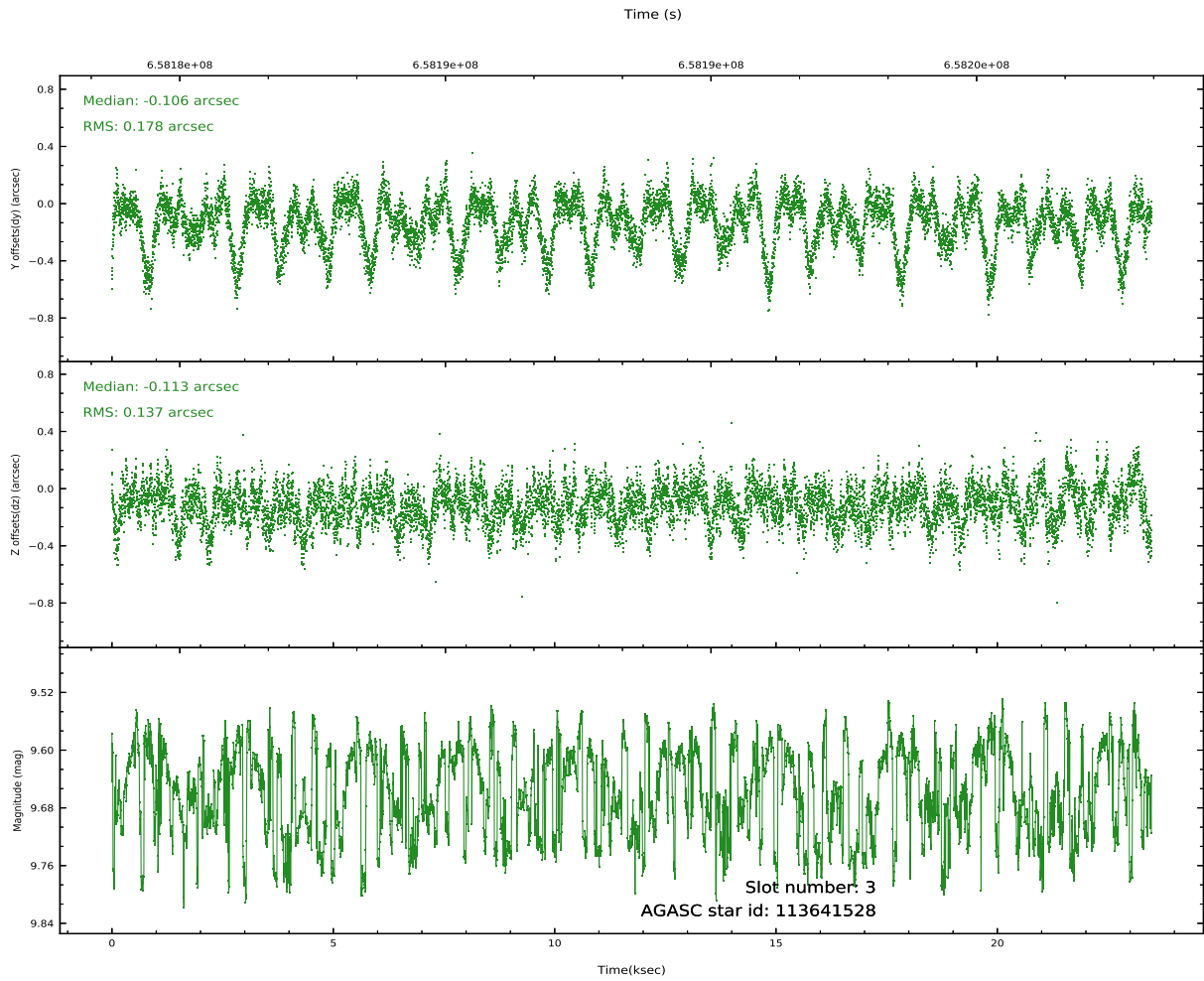
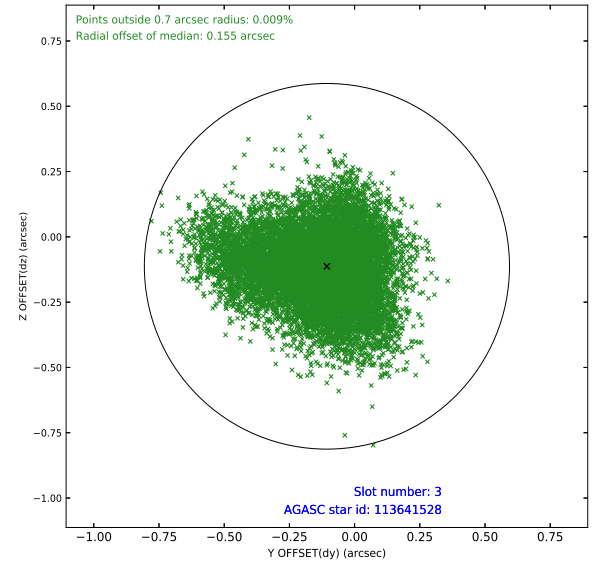
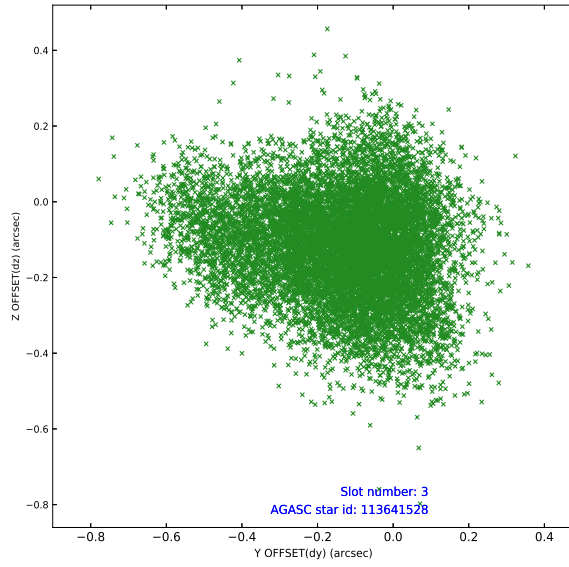


Slot Statistics

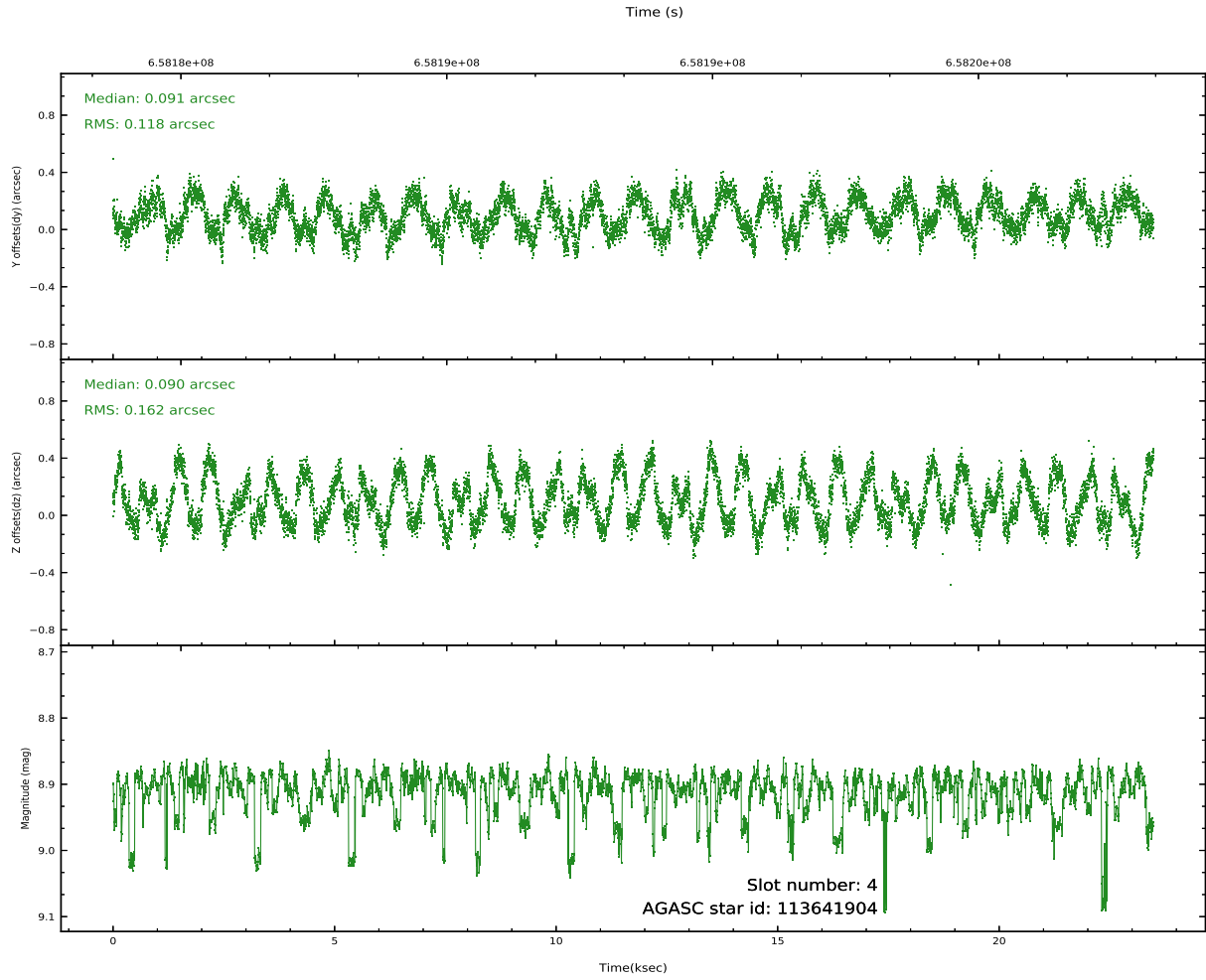
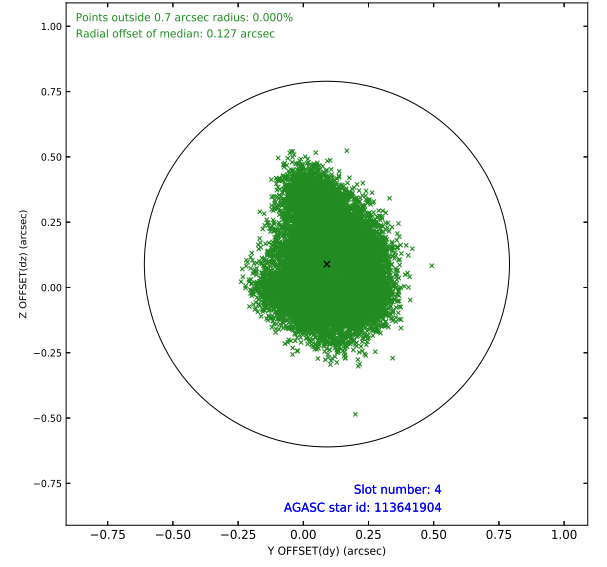
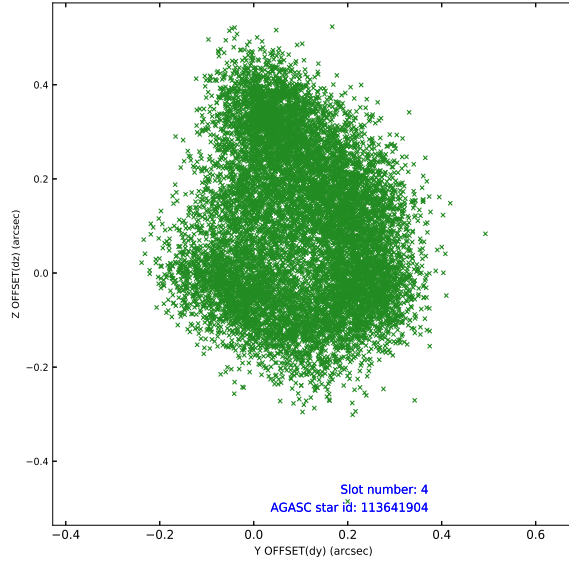
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.10	5727	1.000	0.329	-0.244	0.008	0.014	0.000000	0.000000	928.81	-950
1	FID		ACIS-I-5	7.08	5727	1.000	-0.368	0.274	0.007	0.012	0.000000	0.000000	-1819.71	947
2	FID		ACIS-I-6	7.09	5728	1.000	-0.052	0.041	0.007	0.012	0.000000	0.000000	394.10	1592
3	GUIDE	used	113641528	9.66	11429	1.000	-0.106	-0.113	0.235	0.401	176.838241	10.551192	52.62	1178
4	GUIDE	used	113641904	8.91	11448	1.000	0.091	0.090	0.221	0.308	176.833560	10.457267	-238.72	1009
5	GUIDE	used	113643168	8.95	11451	1.000	0.024	-0.188	0.186	0.312	177.215906	10.683894	1182.36	319
6	GUIDE	used	113643904	8.71	11448	1.000	0.048	0.262	0.134	0.216	177.587369	10.067301	39.15	-1992
7	GUIDE	used	113647184	9.60	11434	1.000	-0.001	-0.058	0.193	0.306	176.579844	10.210837	-1471.73	1281

2.4 Star Slots

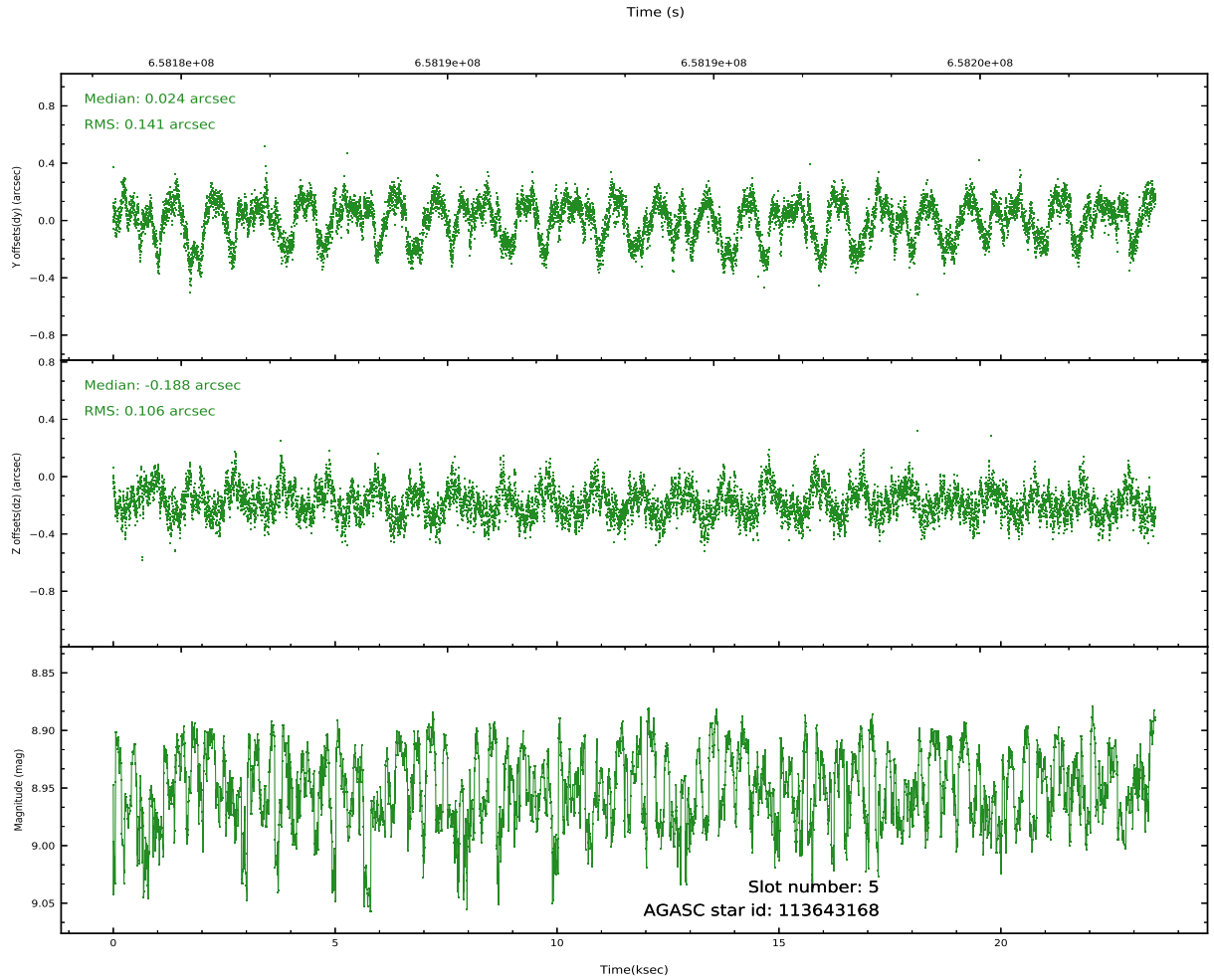
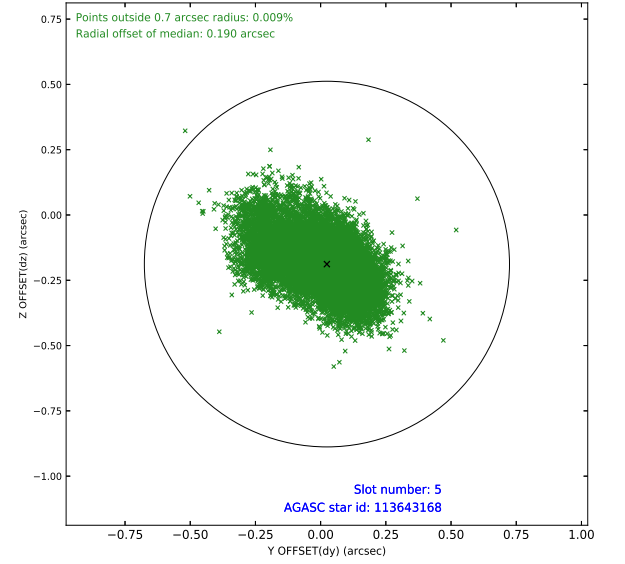
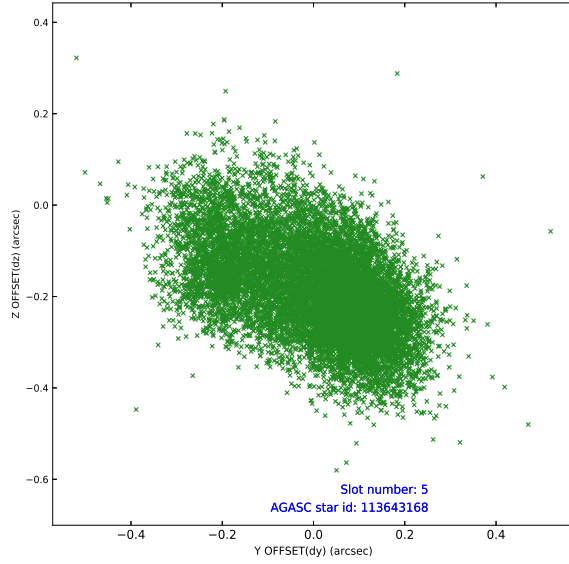
2.4.1 Slot 3



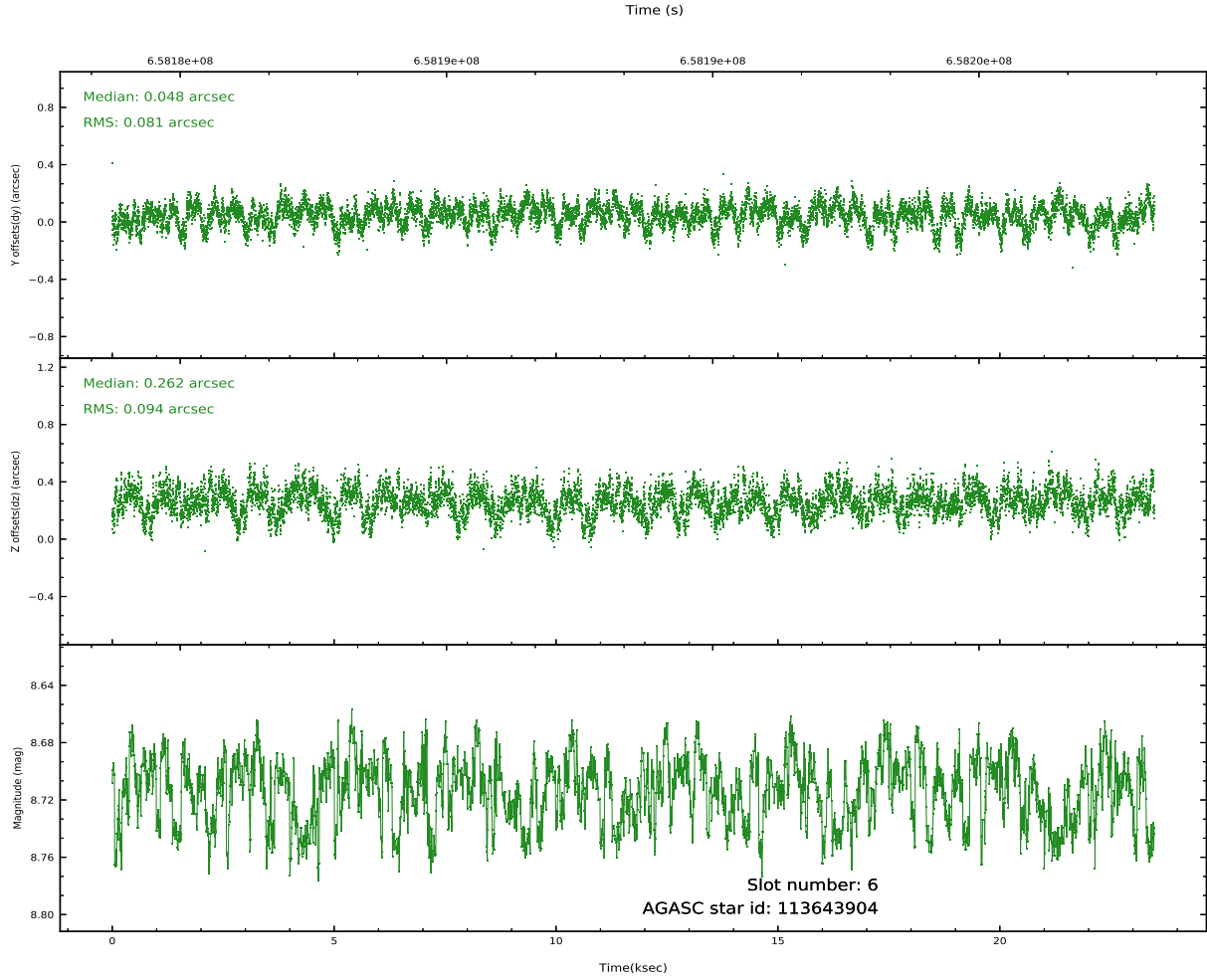
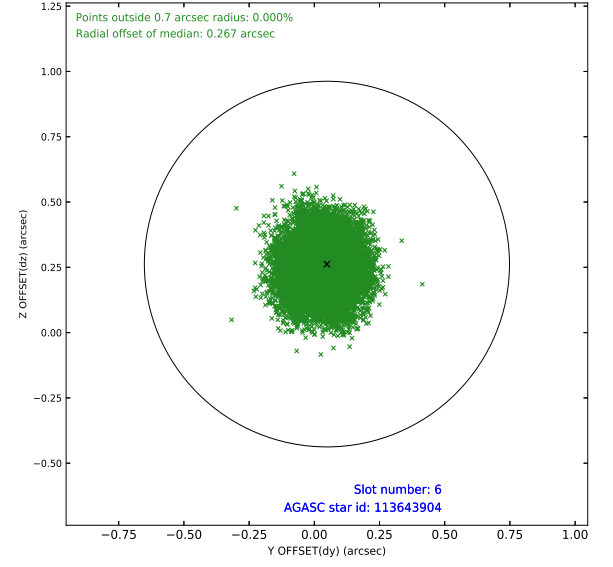
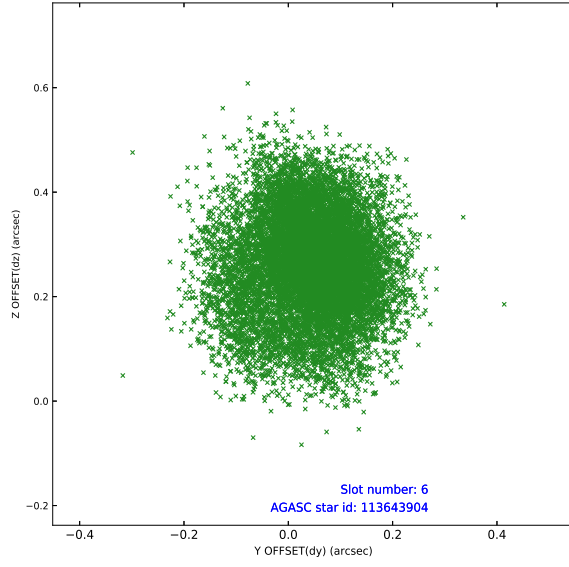
2.4.2 Slot 4



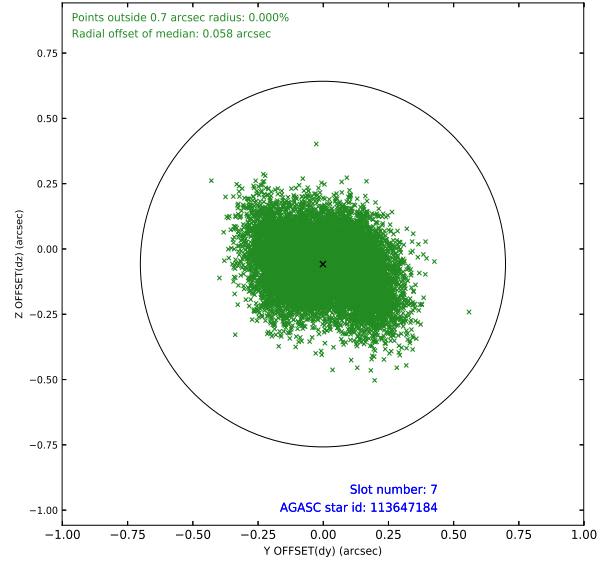
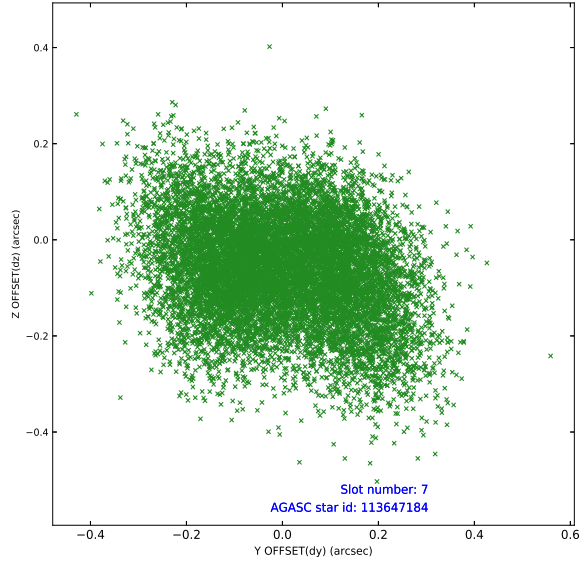
2.4.3 Slot 5



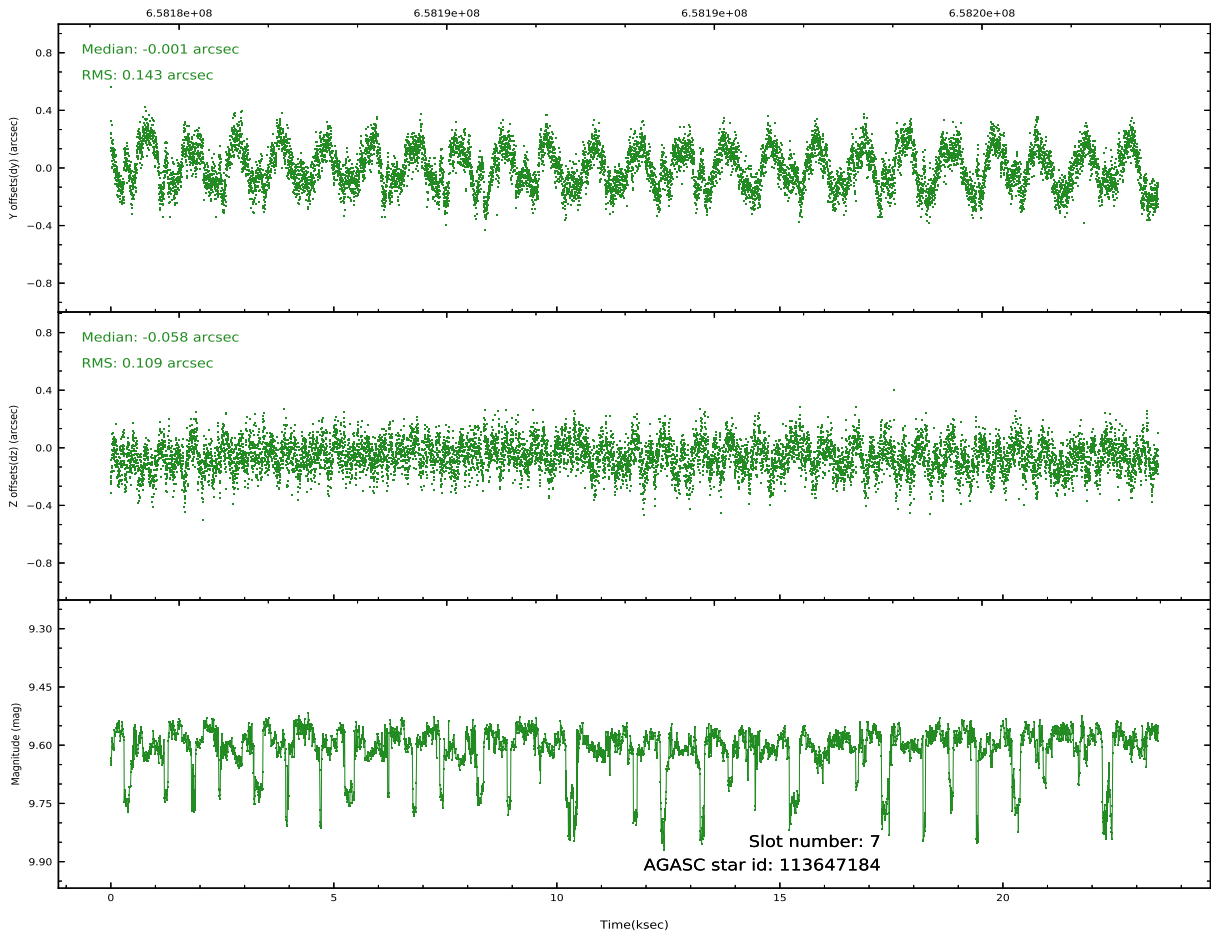
2.4.4 Slot 6



2.4.5 Slot 7

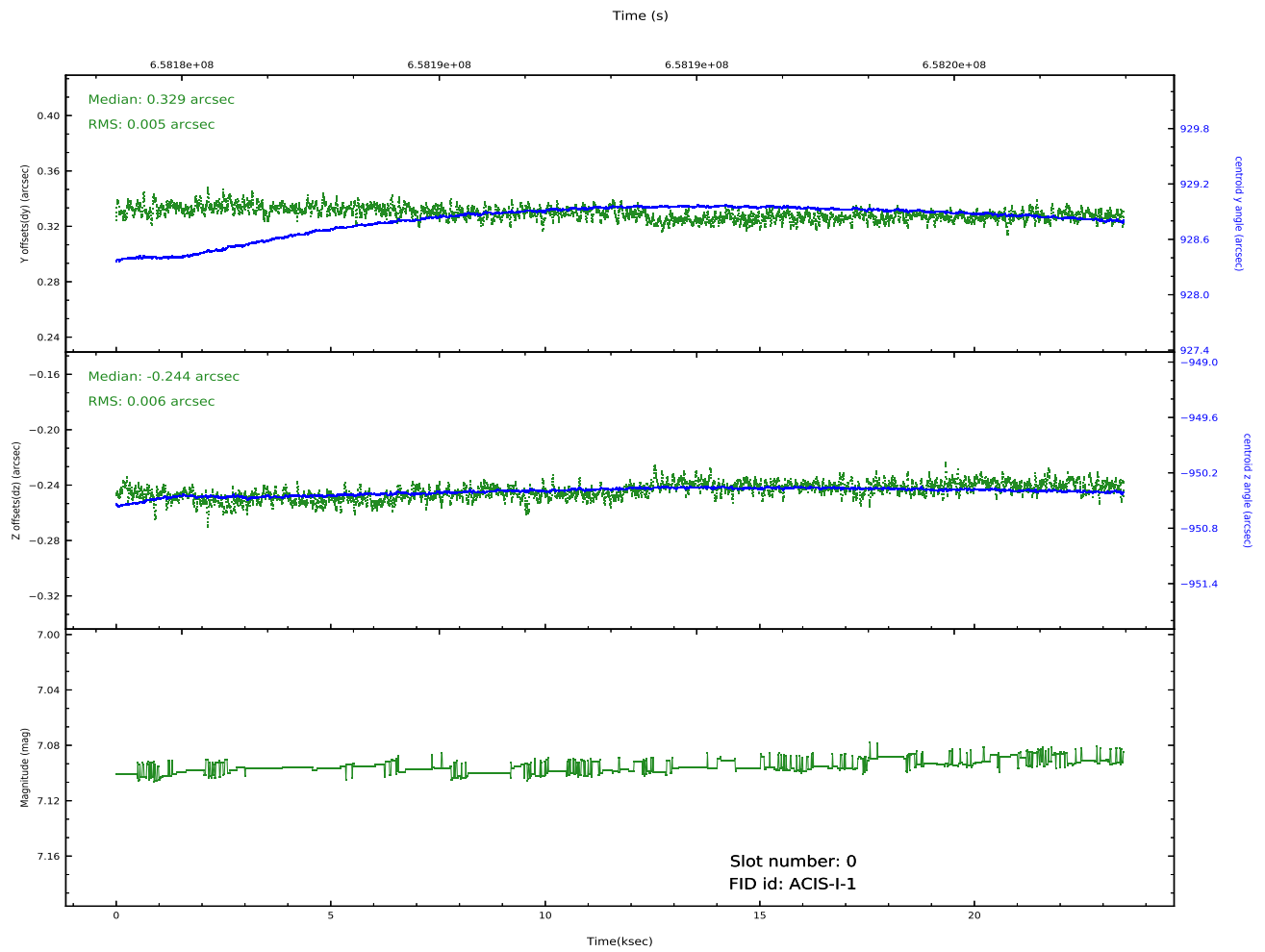
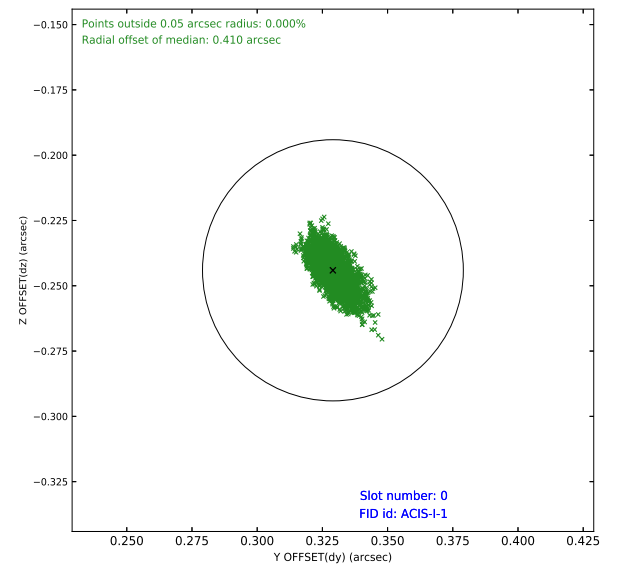
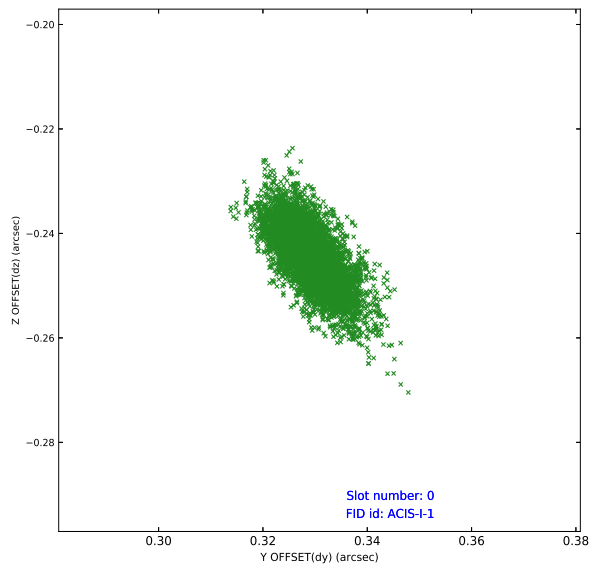


Time (s)

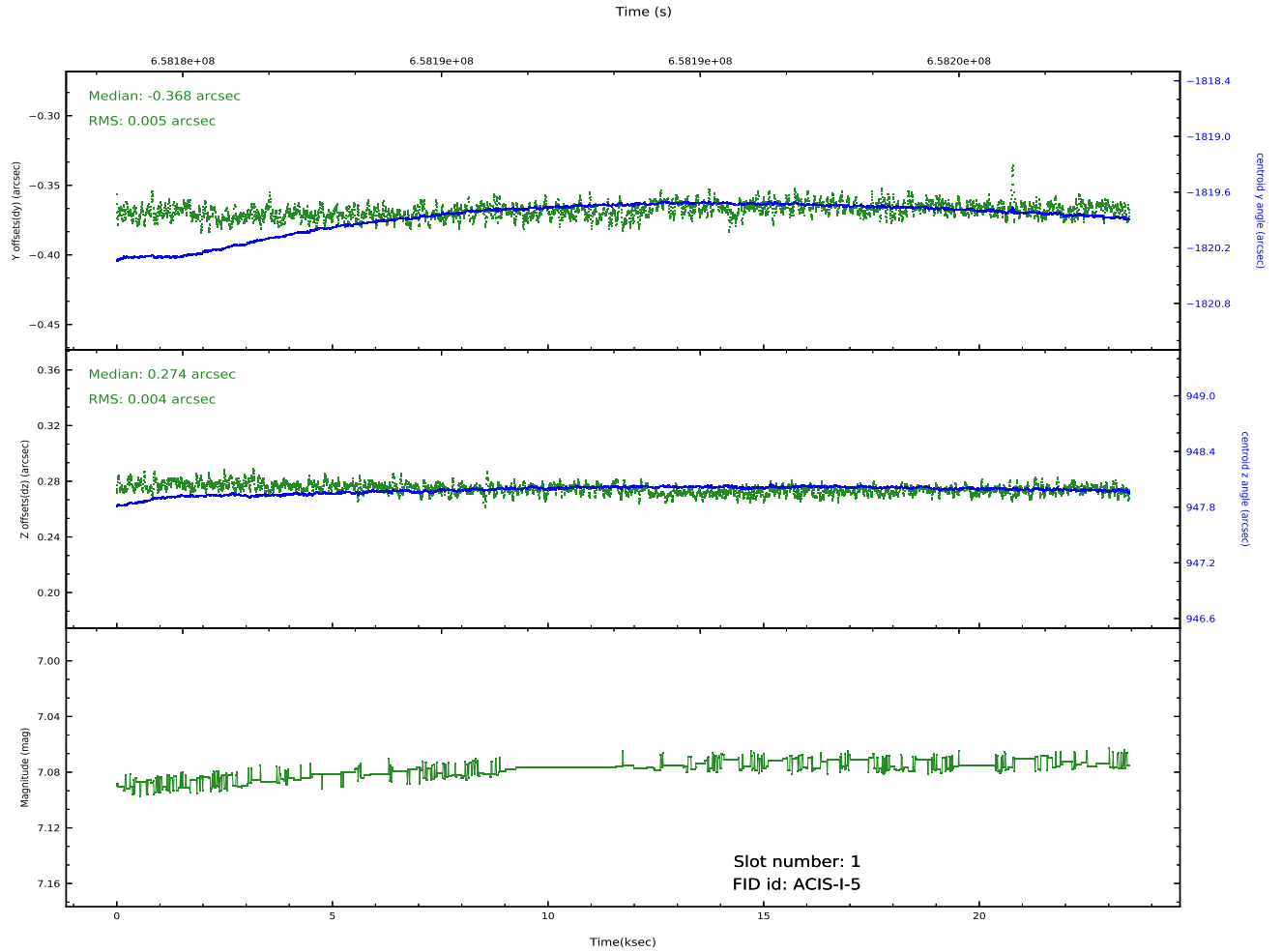
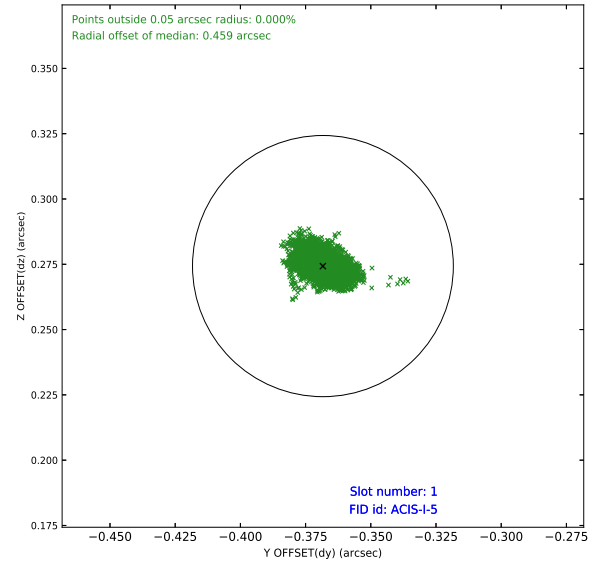
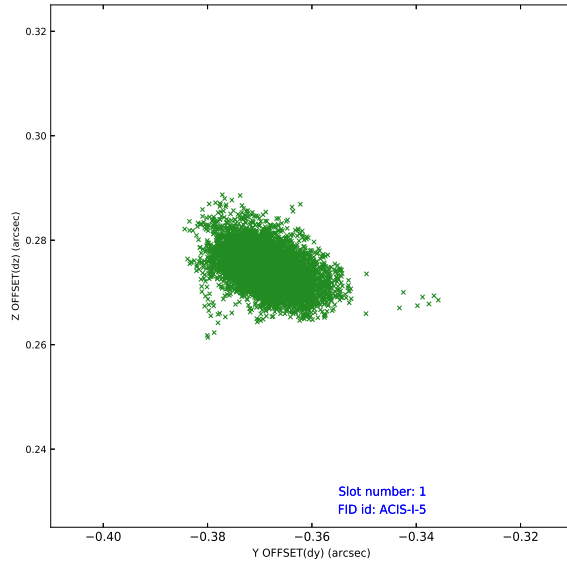


2.5 FID Slots

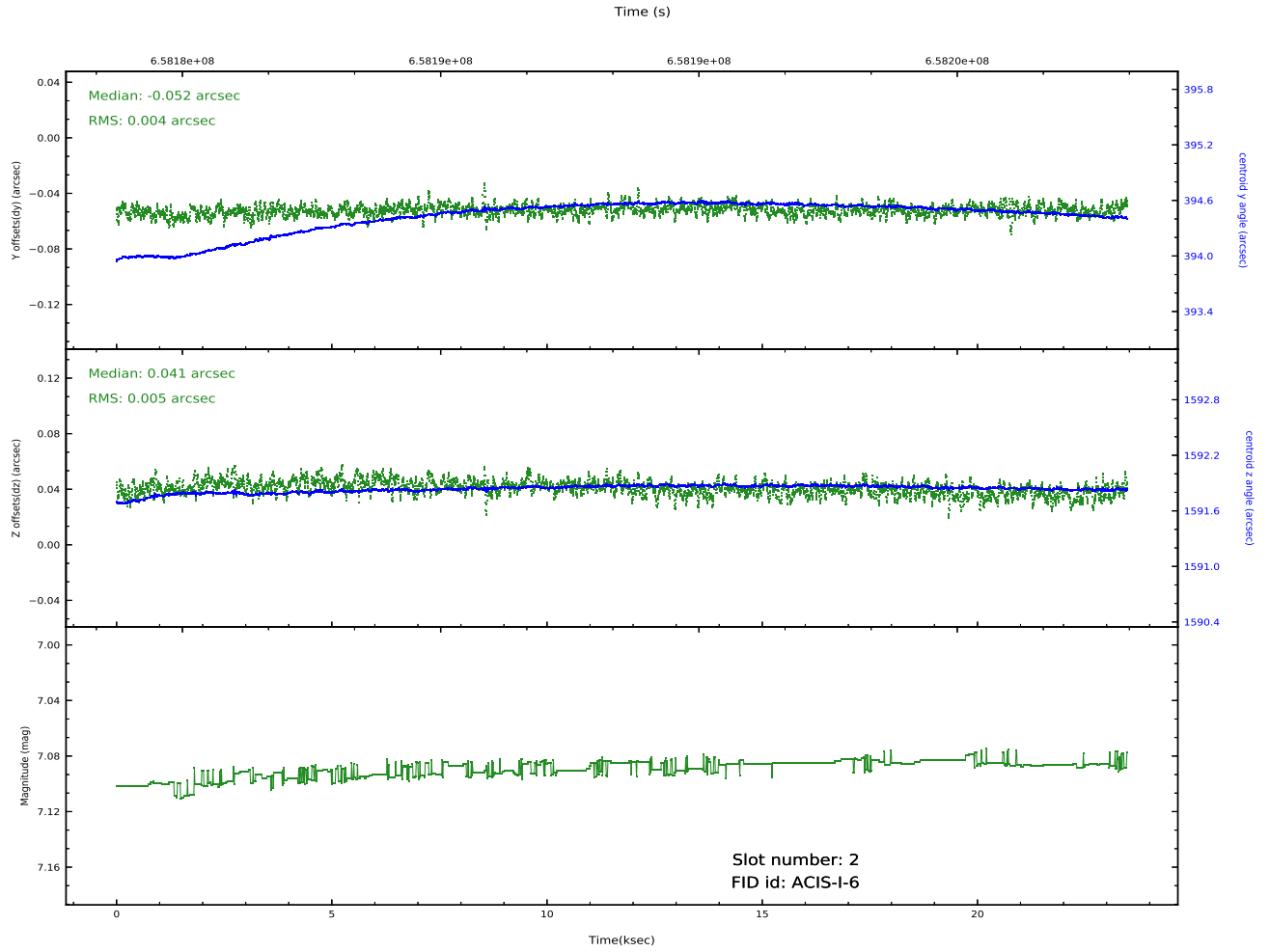
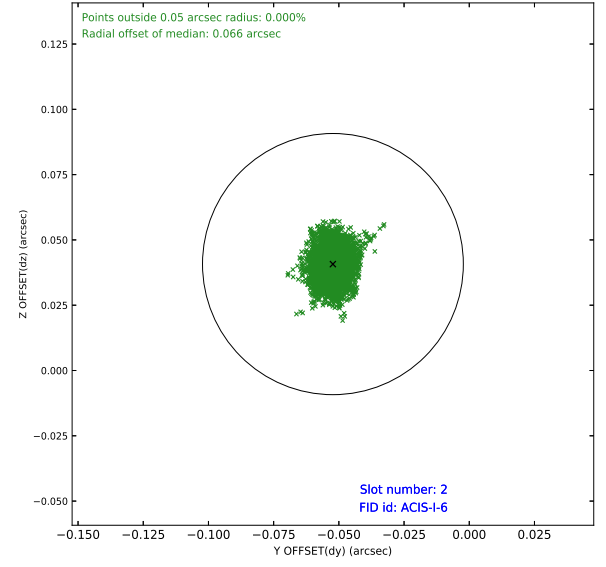
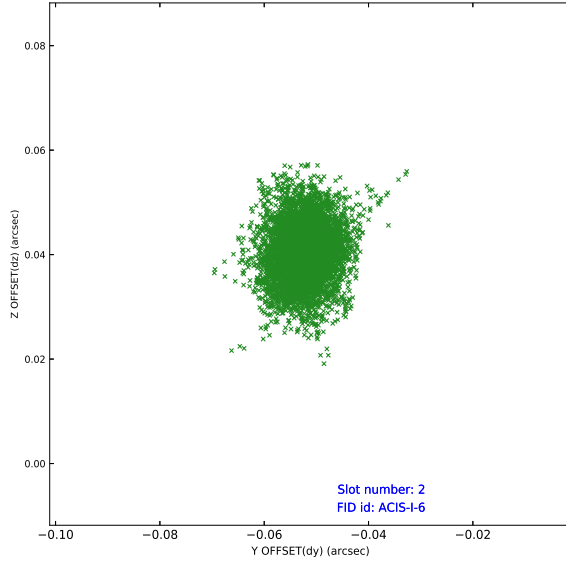
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.066031261802

A.2 Comments