

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5822 - L2 Version 3
Chandra X-Ray Center

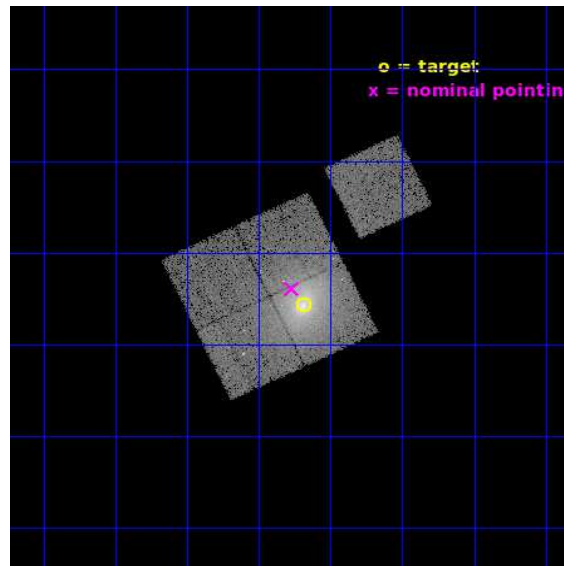
L2 Processing Date : Oct 11 2020

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1 Front

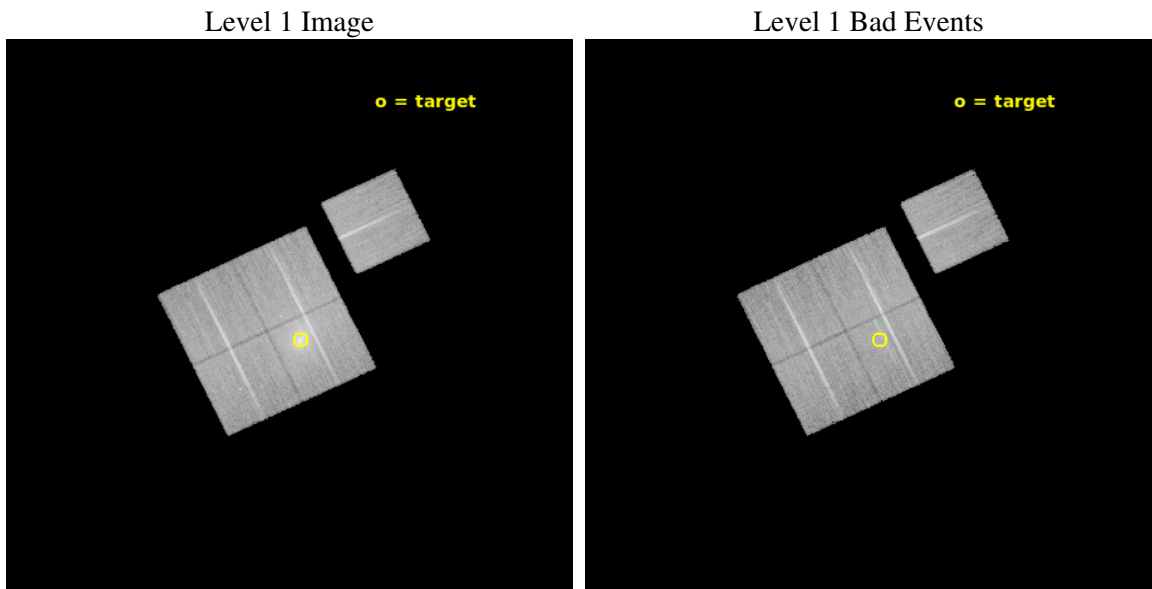
seq_num	800535	Sequence number
obs_id	5822	Observation id
title	A Deep Observation of a Radio-Quiet Cooling Flow	Proposal title
observer	Megan Donahue	Principal investigator
object	Abell 1650	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.672083	Observer's specified target RA [deg]
dec_targ	-1.761389	Observer's specified target Dec [deg]
ra_nom	194.69233312131	Nominal RA [deg]
dec_nom	-1.731773719212	Nominal Dec [deg]
roll_nom	64.330356741392	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20146.899961233	Sum of GTIs [s]
livetime	19883.665881308	Livetime [s]
ontime0	20146.899961233	Sum of GTIs [s]
ontime1	20143.758971035	Sum of GTIs [s]
ontime2	20143.759000987	Sum of GTIs [s]
ontime3	20146.899961233	Sum of GTIs [s]
ontime6	20146.899961233	Sum of GTIs [s]
l2events	119951	Number of level 2 events



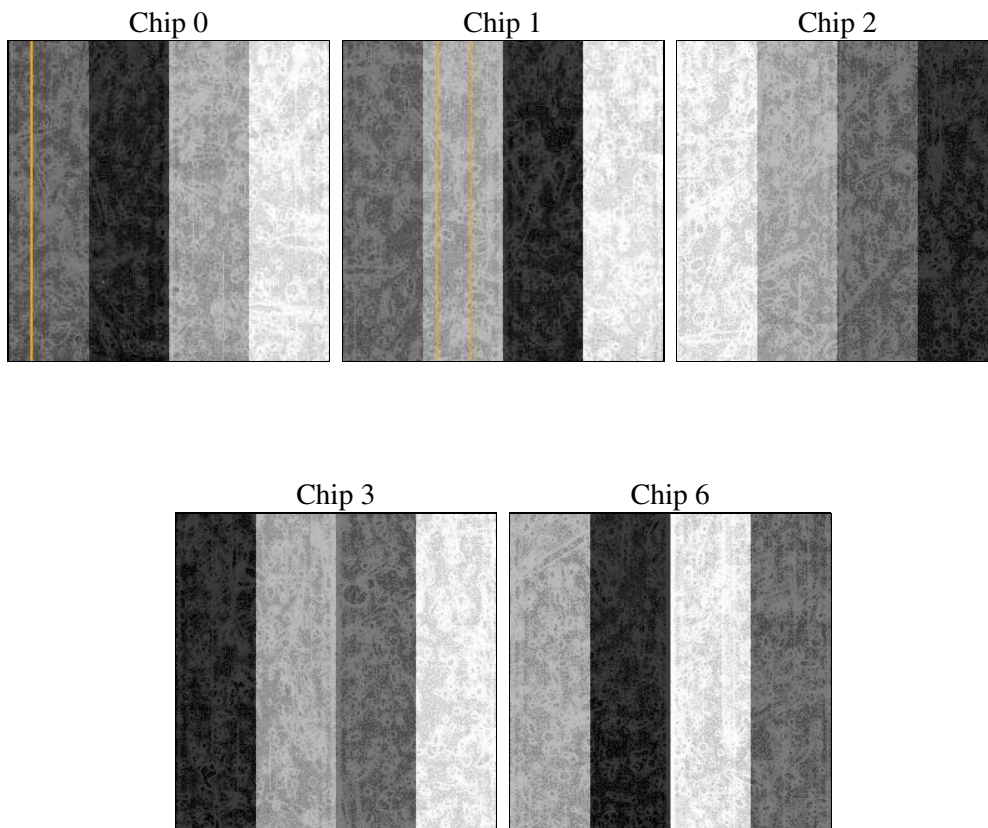
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	20146.899961233	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	20146.899961233	Sum of GTIs [s]
date	2020-10-11T17:45:03	Date and time of file creation	ontime1	20143.758971035	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	20143.759000987	Sum of GTIs [s]
			ontime3	20146.899961233	Sum of GTIs [s]
			ontime6	20146.899961233	Sum of GTIs [s]
			l1events	746354	Number of level 1 events

2.1.4 Events

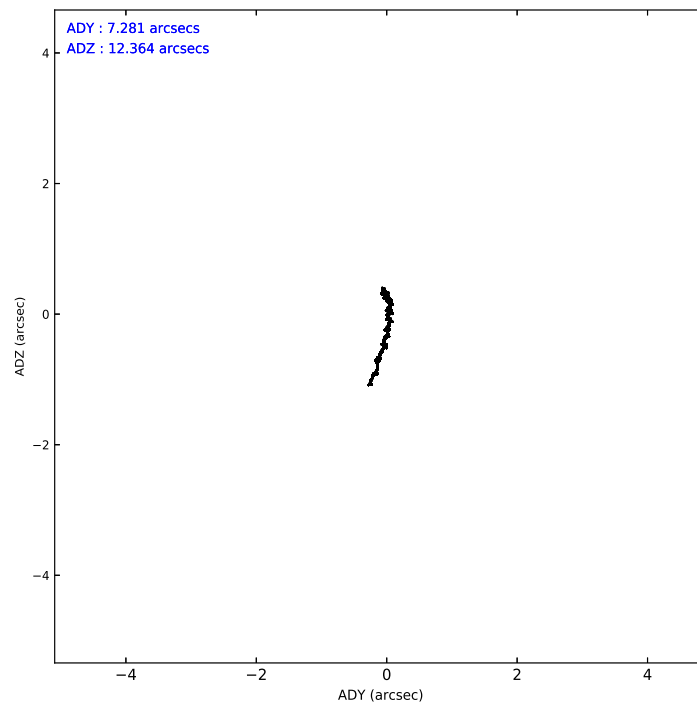
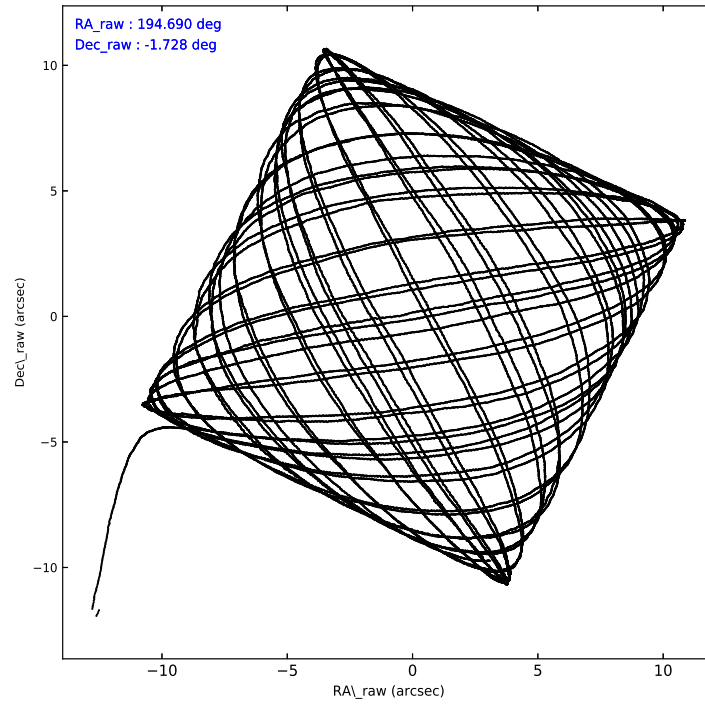
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	128945	133643	152538	190744	140484
rejected events	114585	113021	132794	125444	126265
rejected %	88%	84%	87%	65%	89%

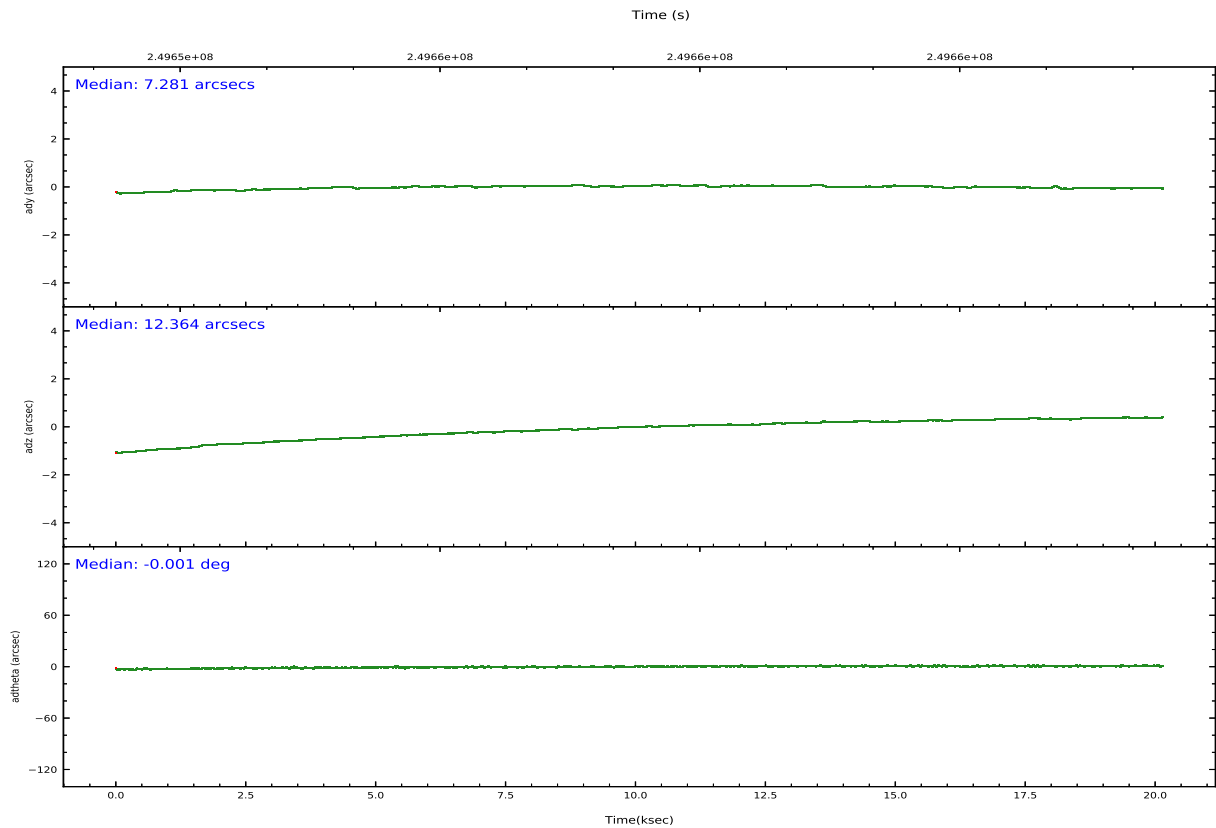
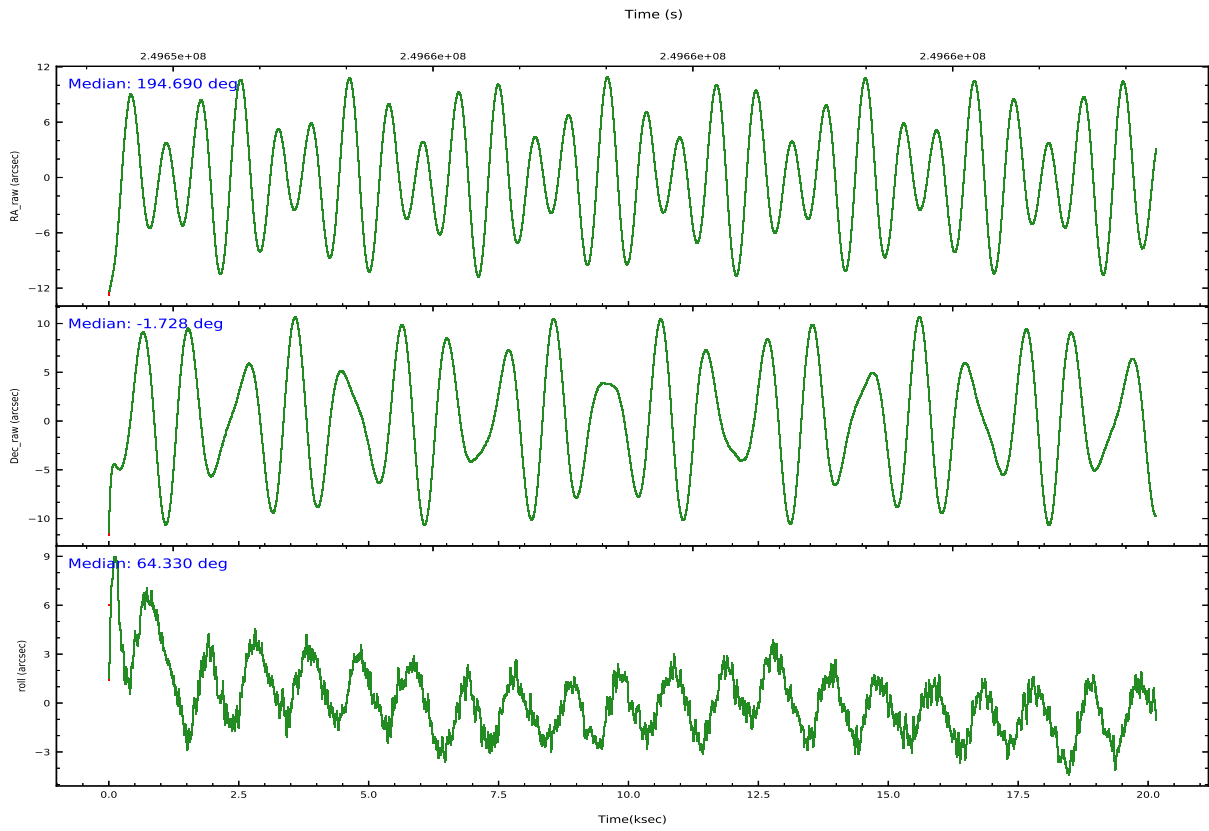
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5687	10081	10180	47949	5118
	4%	7%	6%	25%	3%
grade 1 events	82	65	121	332	66
	0%	0%	0%	0%	0%
grade 2 events	3189	3910	3817	7882	3032
	2%	2%	2%	4%	2%
grade 3 events	1597	1845	1684	3051	1599
	1%	1%	1%	1%	1%
grade 4 events	1454	1772	1611	3045	1559
	1%	1%	1%	1%	1%
grade 5 events	4696	5146	4433	5772	5472
	3%	3%	2%	3%	3%
grade 6 events	2543	3147	2587	3752	3036
	1%	2%	1%	1%	2%
grade 7 events	109697	107677	128105	118961	120602
	85%	80%	83%	62%	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	194.692300	194.69233312131	Subarray requested	NONE	NONE
[deg] Pointing Dec	-1.755635	-1.731773719212	Alternating exposures requested	N	N
[deg] Pointing Roll	64.121629	64.330356741392	[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	-227.592463	-227.5933067819097			
[mm] SIM translation stage offset	-6	-5.999146221020027			
[s] Observation start time (MET)	249648914.184000	249647877.2358			
Observation start date	2005-11-29T10:54:10	2005-11-29T10:37:57			
[s] Observation end time (MET)	249668914.184000	249669096.27428			
Observation end date	2005-11-29T16:27:30	2005-11-29T16:31:36			
Read mode	TIMED	TIMED			

2.3 Aspect





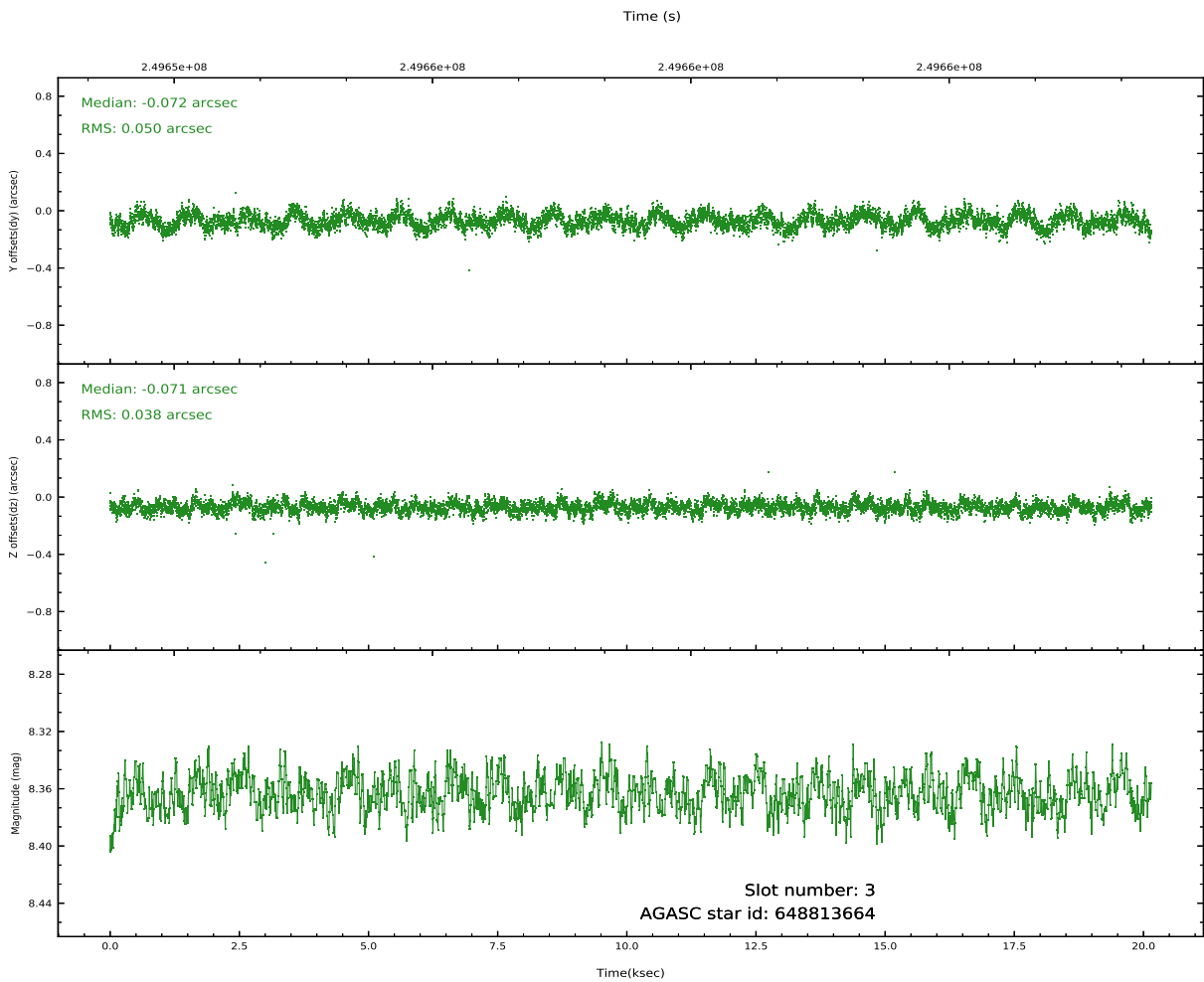
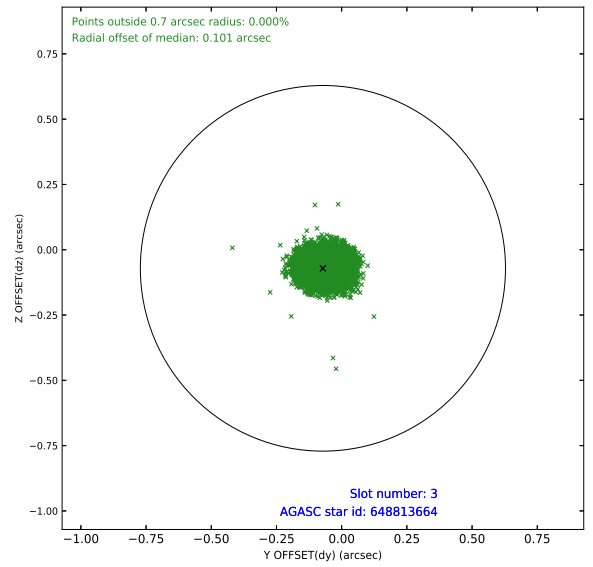
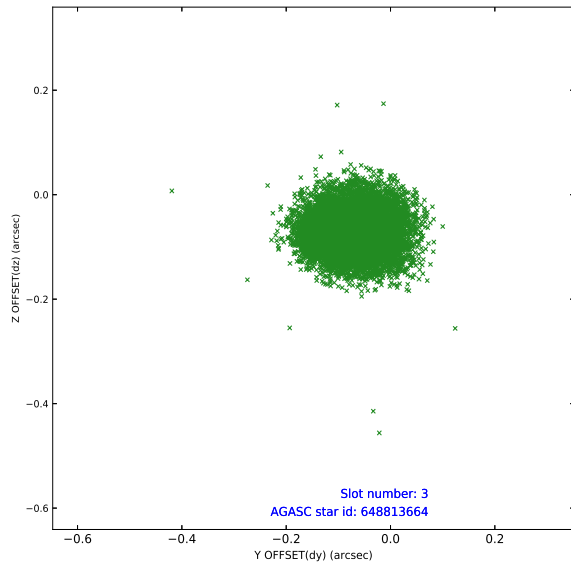
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.24	4916	1.000	0.124	-0.121	0.011	0.025	0.000000	0.000000	932.42	-959
1	FID		ACIS-I-5	7.22	4915	1.000	-0.274	0.096	0.010	0.022	0.000000	0.000000	-1815.97	938
2	FID		ACIS-I-6	7.25	4915	1.000	0.060	0.099	0.013	0.020	0.000000	0.000000	397.72	1583
3	GUIDE	used	648813664	8.36	9829	1.000	-0.072	-0.071	0.067	0.107	194.615044	-1.051809	2158.58	1356
4	GUIDE	used	648813840	9.24	9823	1.000	0.141	0.128	0.109	0.165	194.717621	-1.945504	-574.82	-380
5	GUIDE	used	648814560	8.79	9828	1.000	-0.121	-0.157	0.067	0.108	194.841018	-1.130344	2259.06	500
6	GUIDE	used	648815800	9.56	9818	1.000	0.219	-0.061	0.083	0.137	194.475560	-2.052849	-1302.13	234
7	GUIDE	used	649730488	7.85	9767	1.000	-0.173	0.159	0.062	0.097	195.031921	-1.185947	2378.82	-204

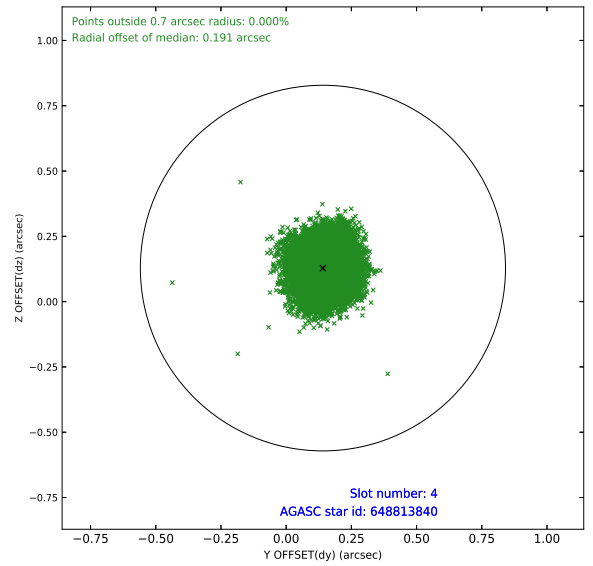
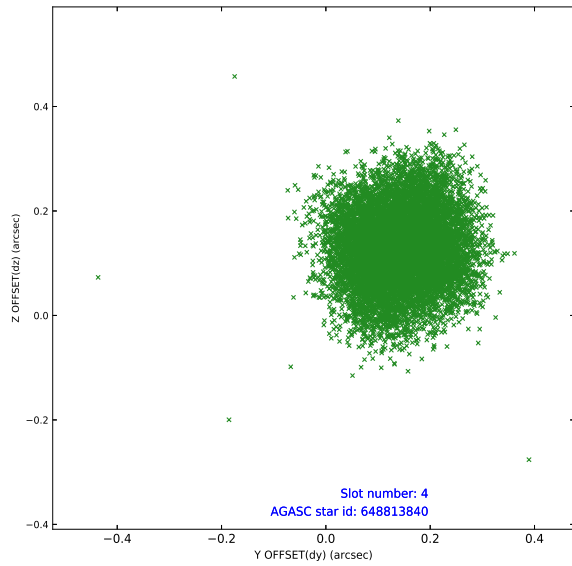
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2.4 Star Slots

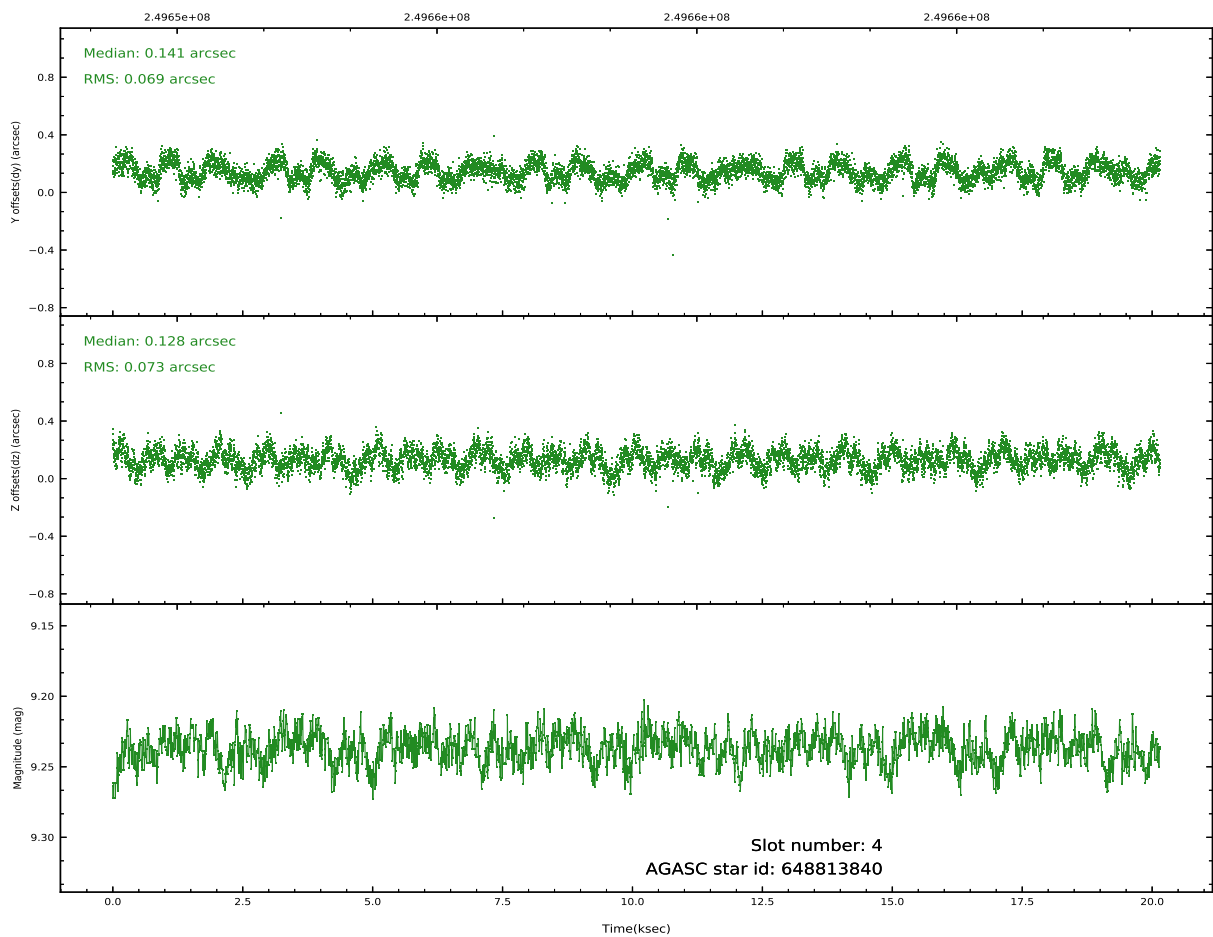
2.4.1 Slot 3



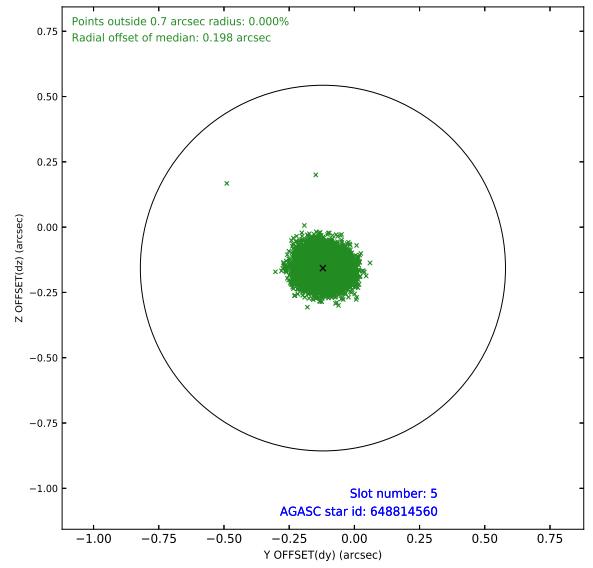
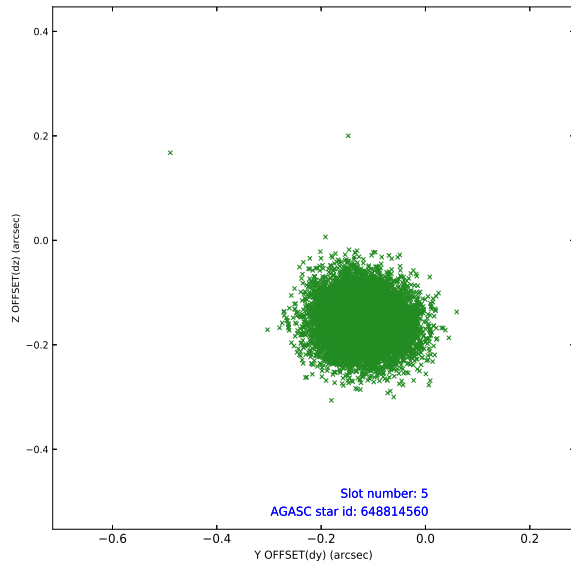
2.4.2 Slot 4



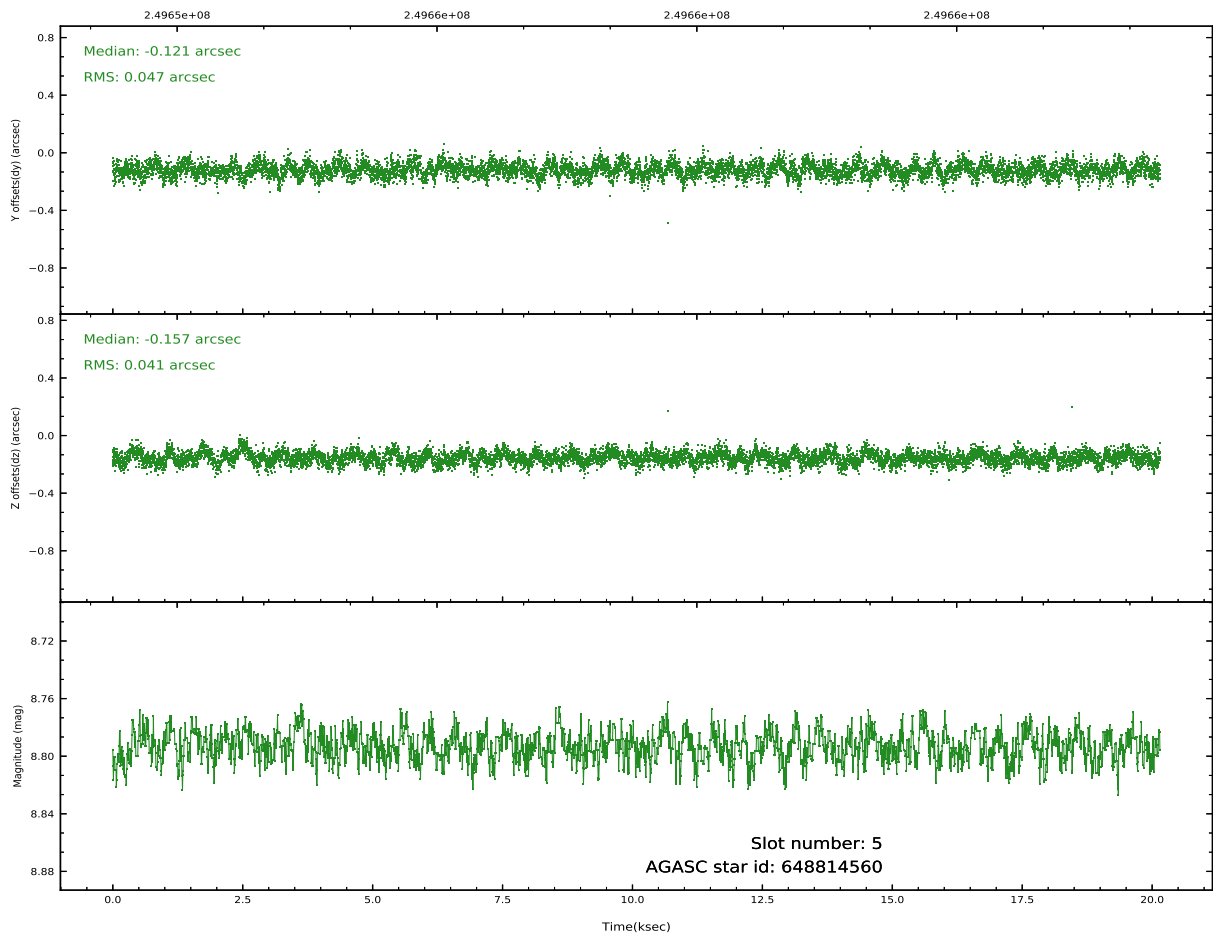
Time (s)



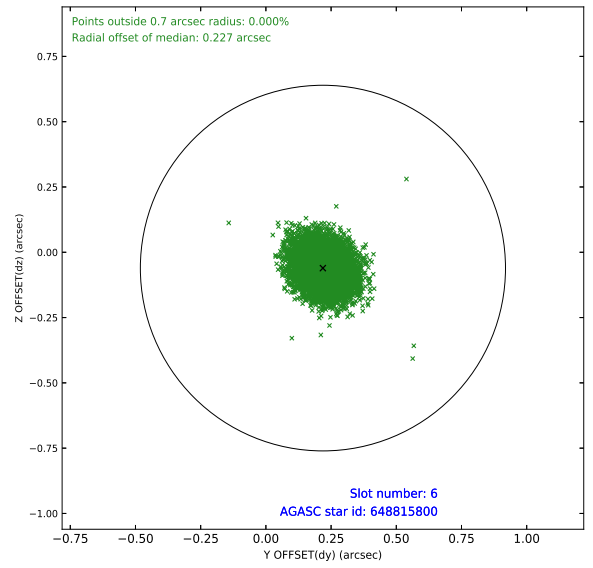
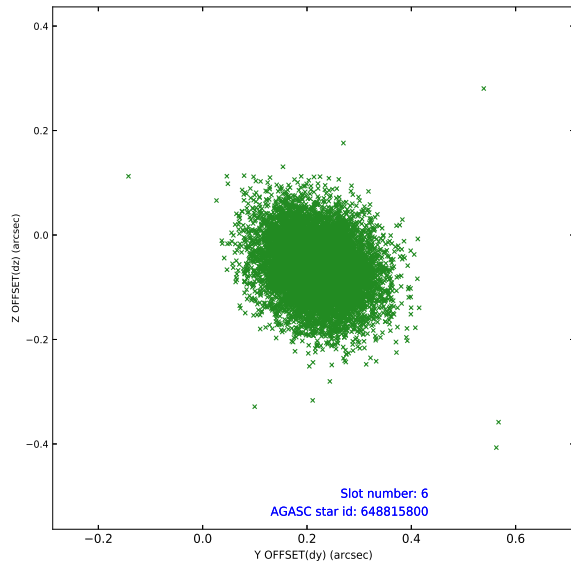
2.4.3 Slot 5



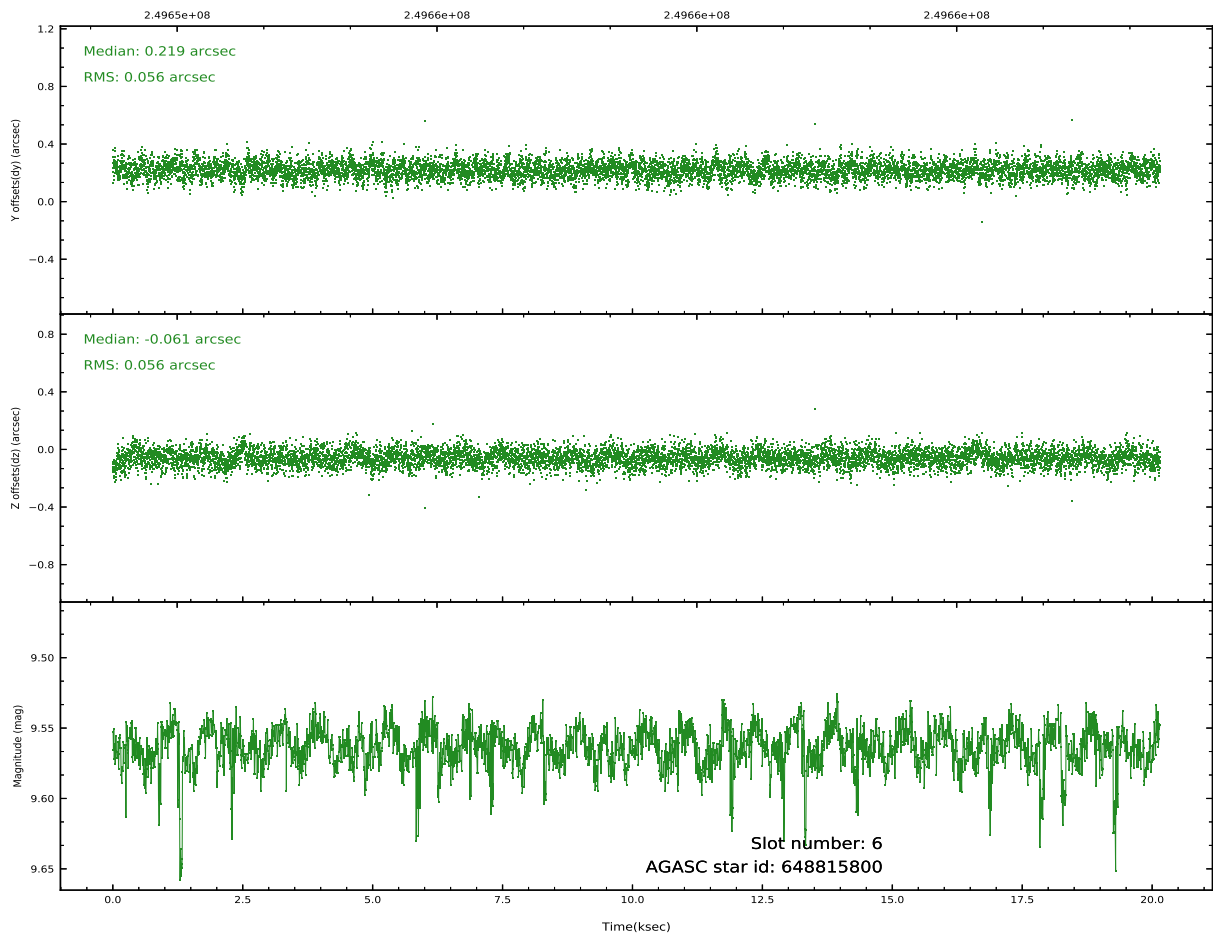
Time (s)



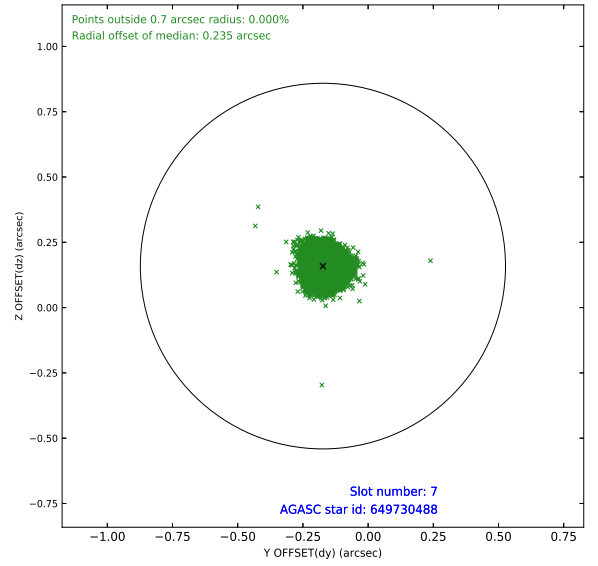
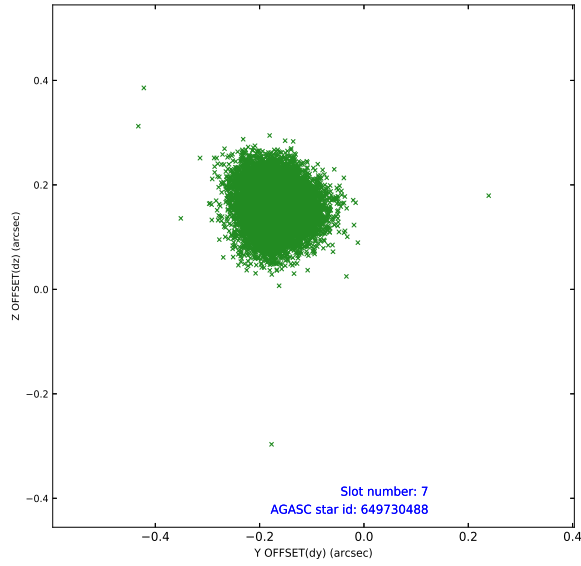
2.4.4 Slot 6



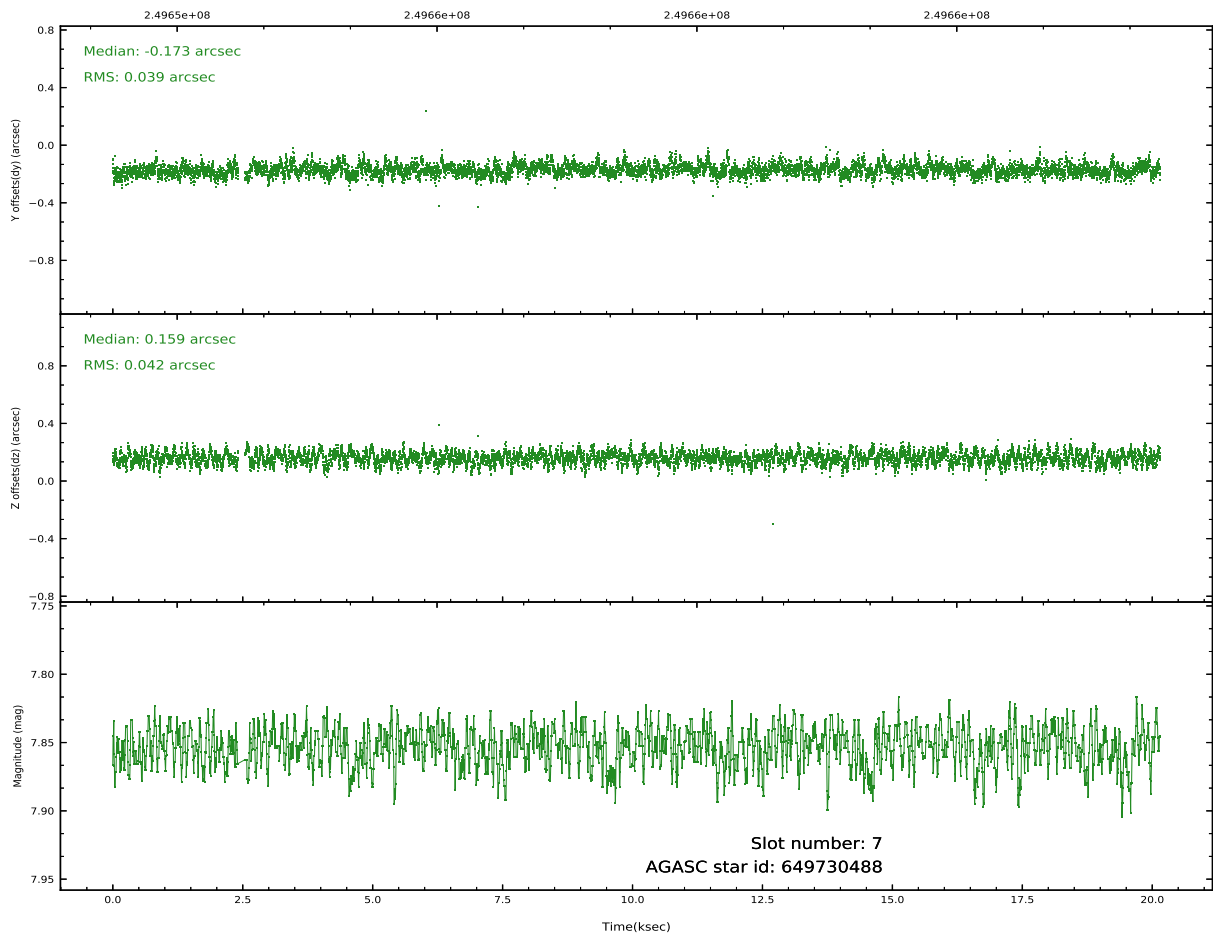
Time (s)



2.4.5 Slot 7

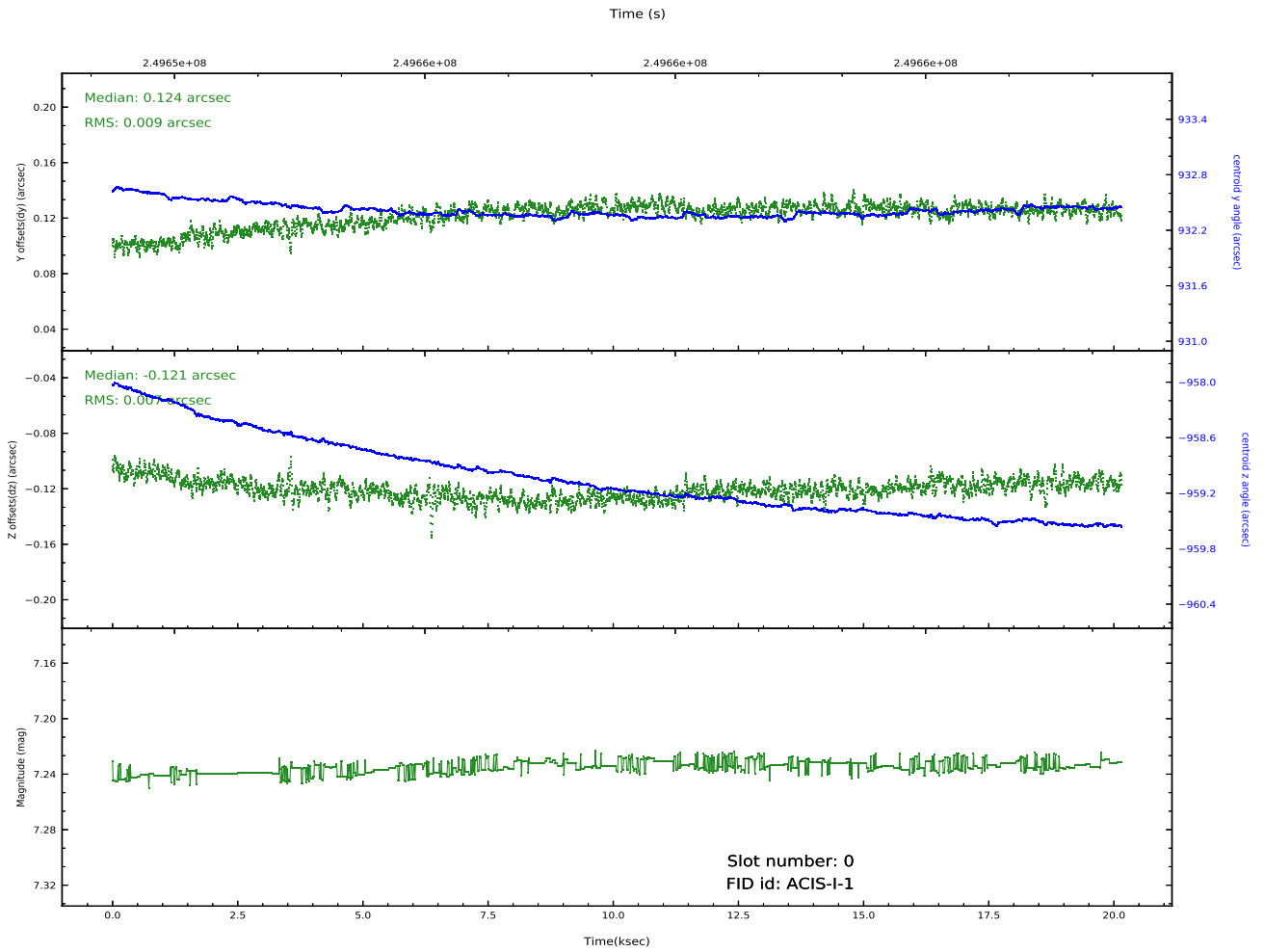
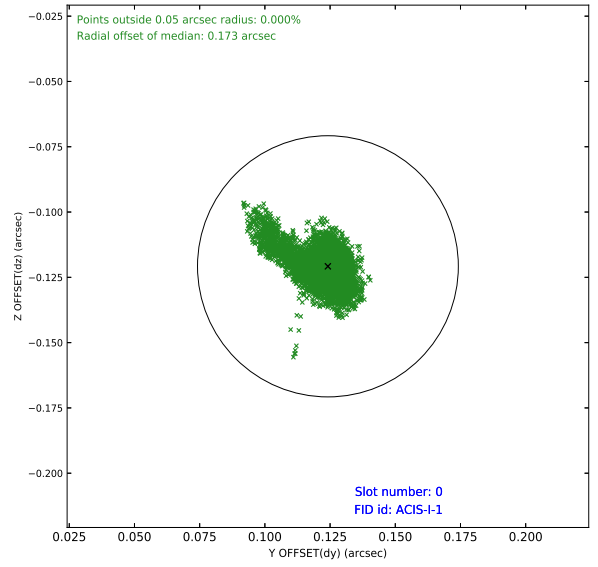
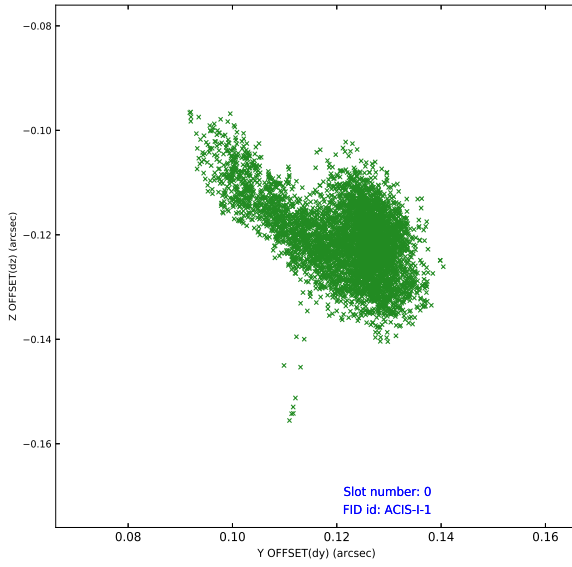


Time (s)

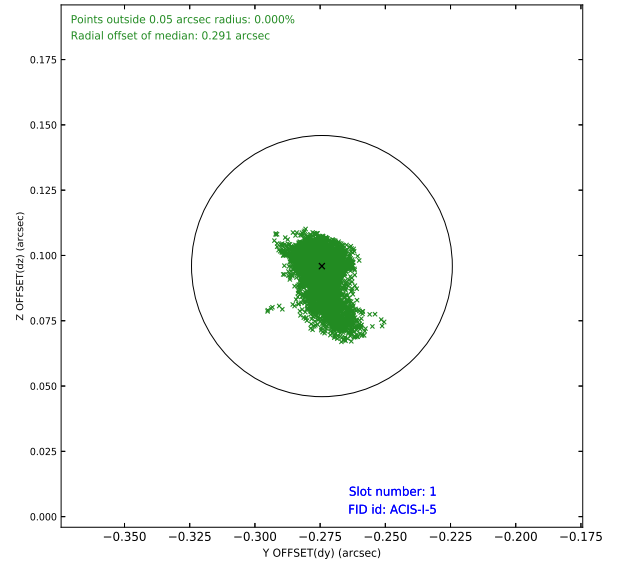
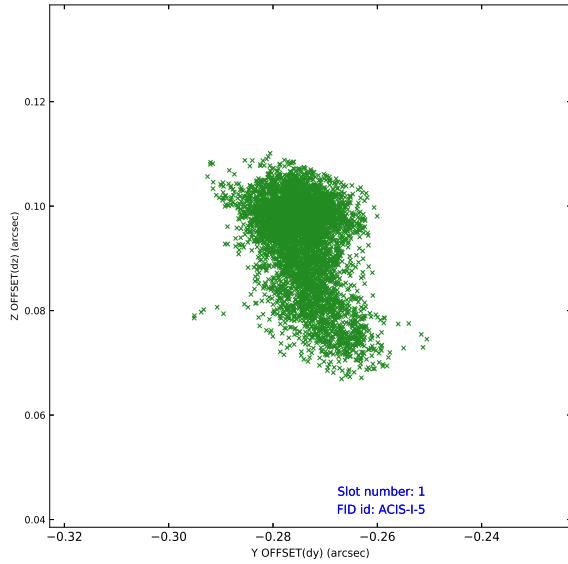


2.5 FID Slots

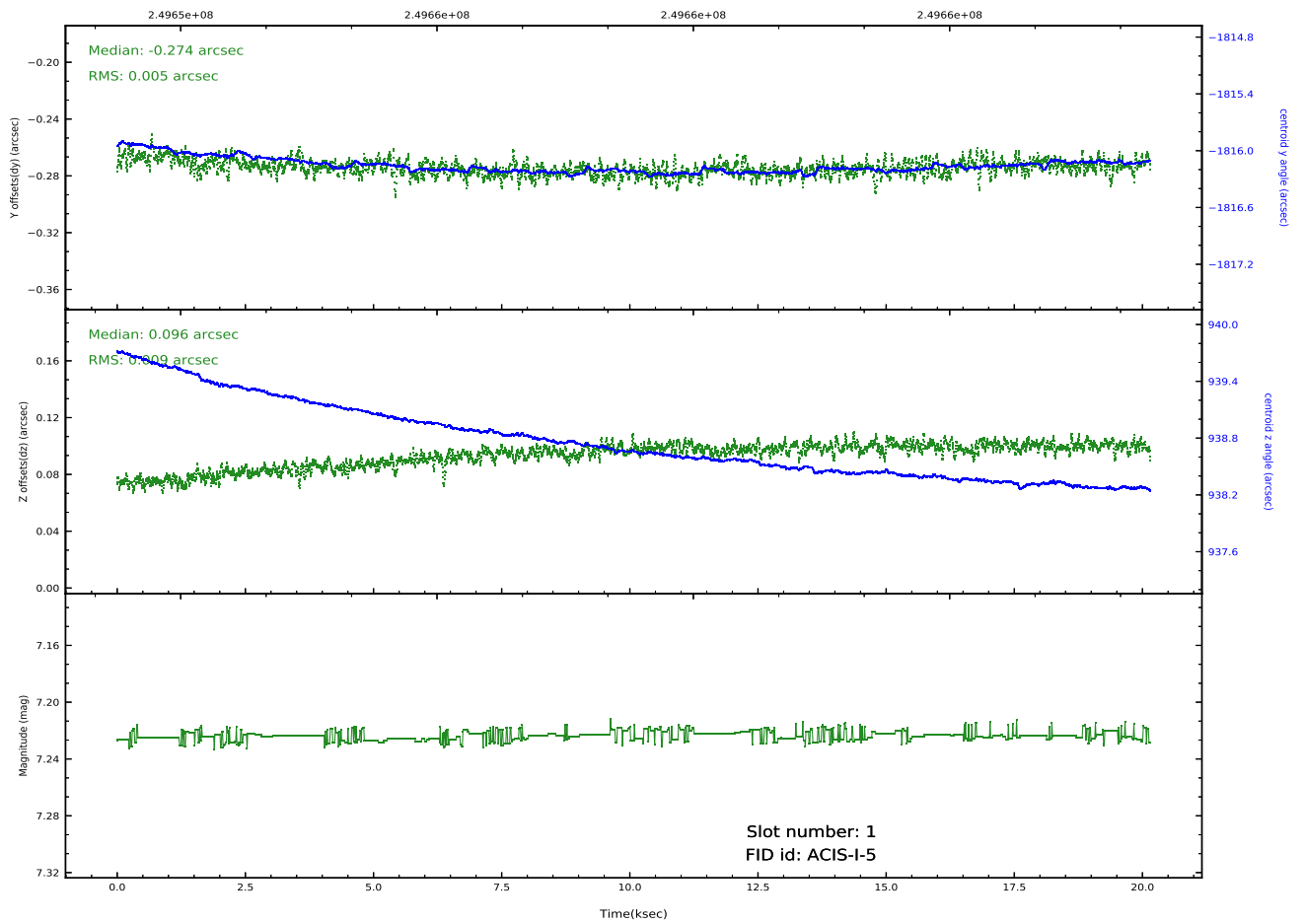
2.5.1 Slot 0



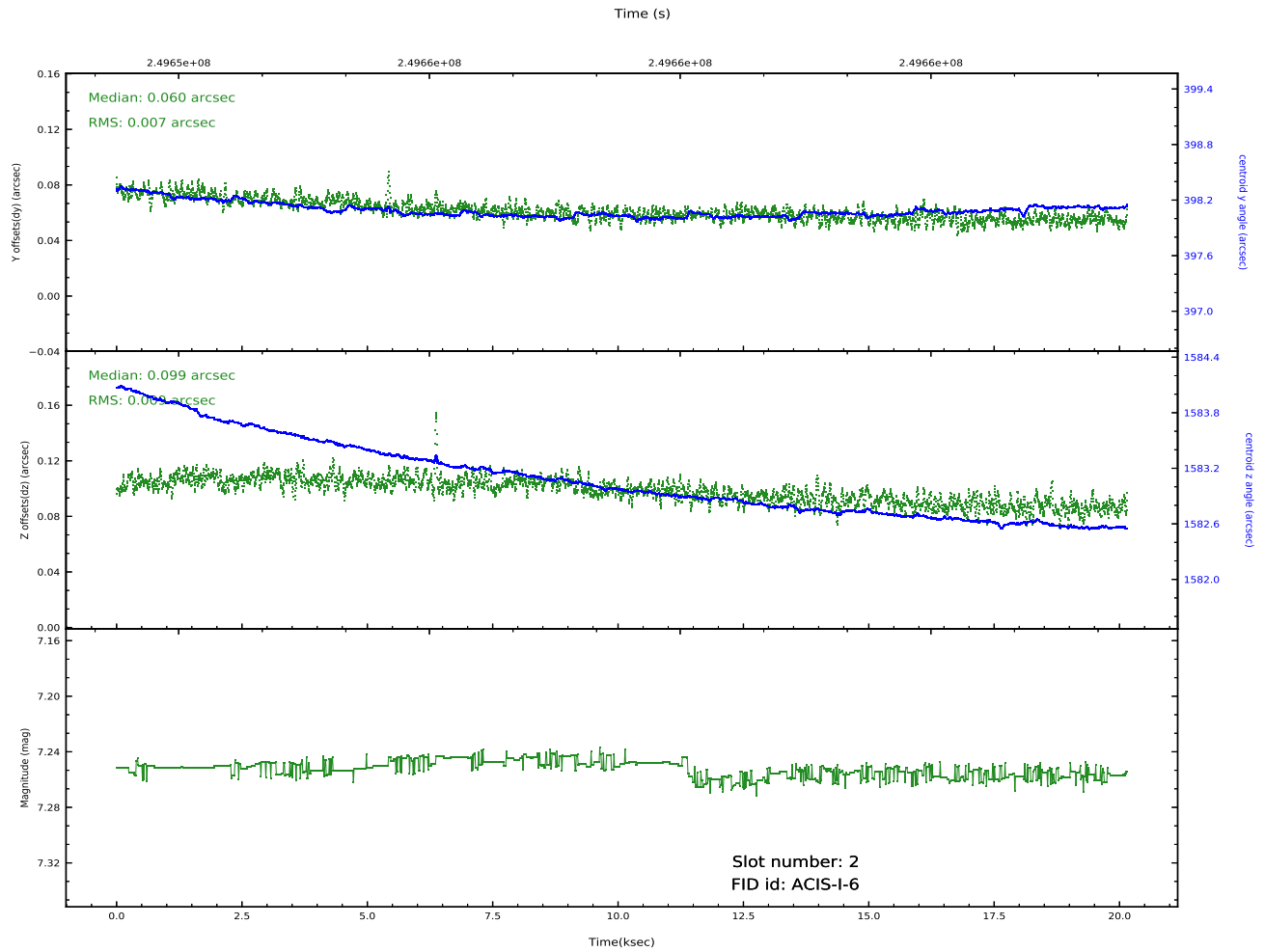
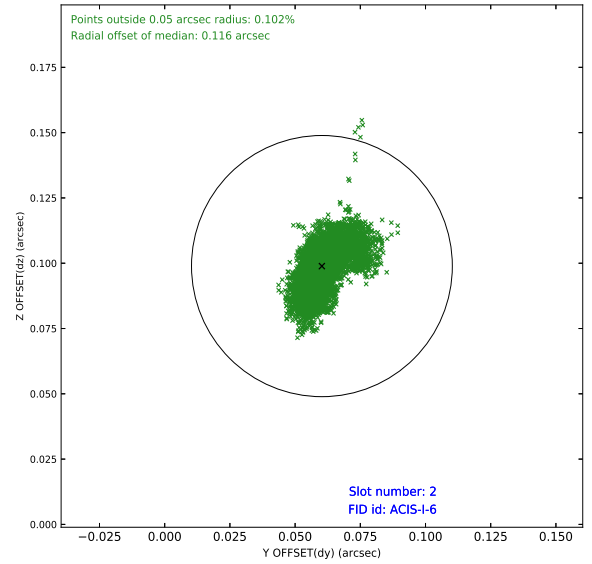
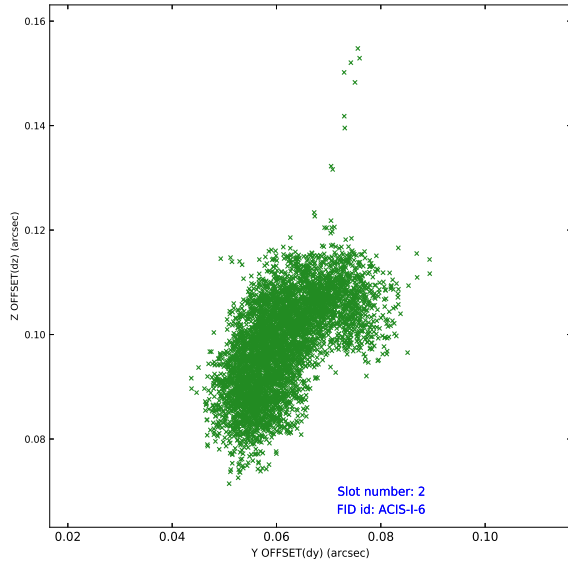
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.14689

A.2 Comments

Preference for uninterrupted observation not met. Preference for exposure time in multiples of 8.9 ksec not met.