

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5006 - L2 Version 4
Chandra X-Ray Center

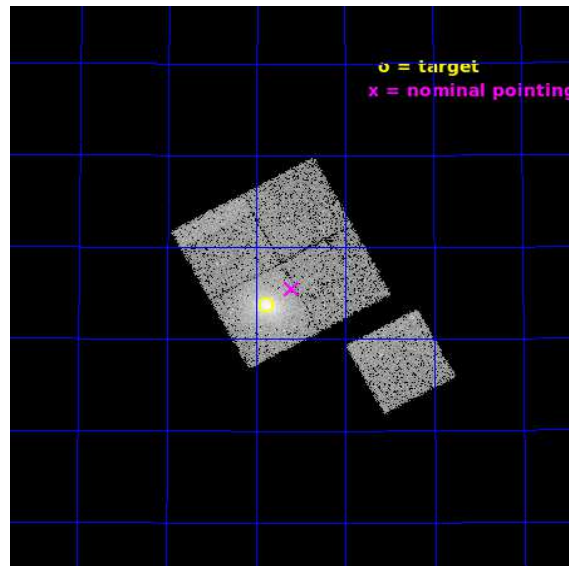
L2 Processing Date : Sep 23 2020

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1 Front

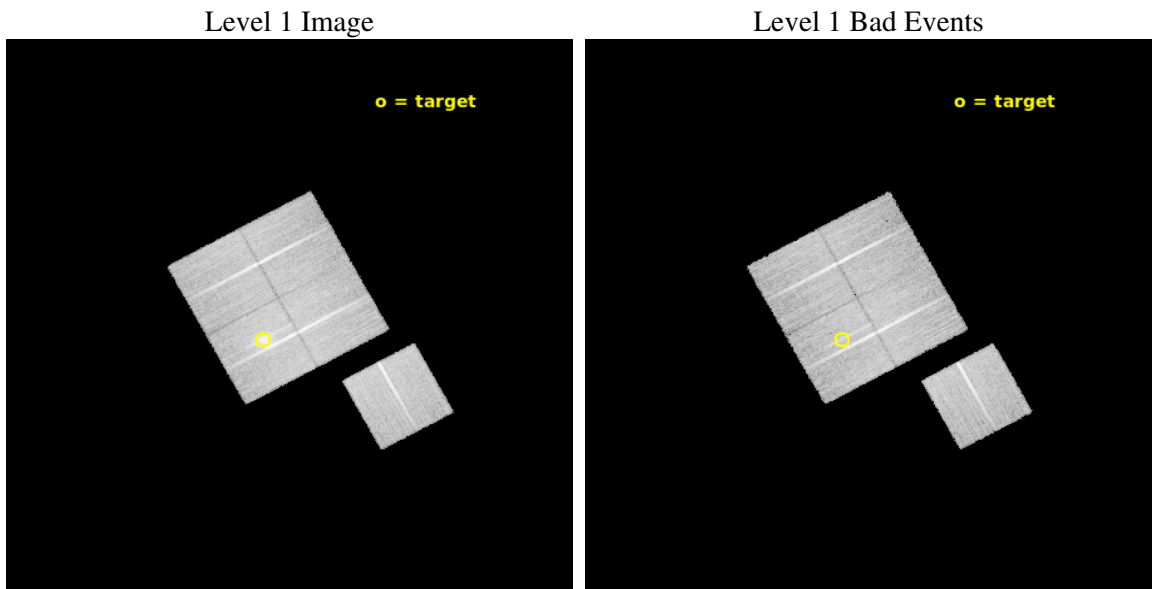
seq_num	800449	Sequence number
obs_id	5006	Observation id
title	Cluster studies: Determination of H0/q0	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	A773	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	139.47125	Observer's specified target RA [deg]
dec_targ	51.728889	Observer's specified target Dec [deg]
ra_nom	139.40000138612	Nominal RA [deg]
dec_nom	51.758241628534	Nominal Dec [deg]
roll_nom	151.40078934058	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20078.65897122	Sum of GTIs [s]
livetime	19816.316510068	Livetime [s]
ontime0	20078.658981144	Sum of GTIs [s]
ontime1	20081.799961358	Sum of GTIs [s]
ontime2	20081.799961358	Sum of GTIs [s]
ontime3	20078.65897122	Sum of GTIs [s]
ontime6	20078.658961236	Sum of GTIs [s]
l2events	64116	Number of level 2 events



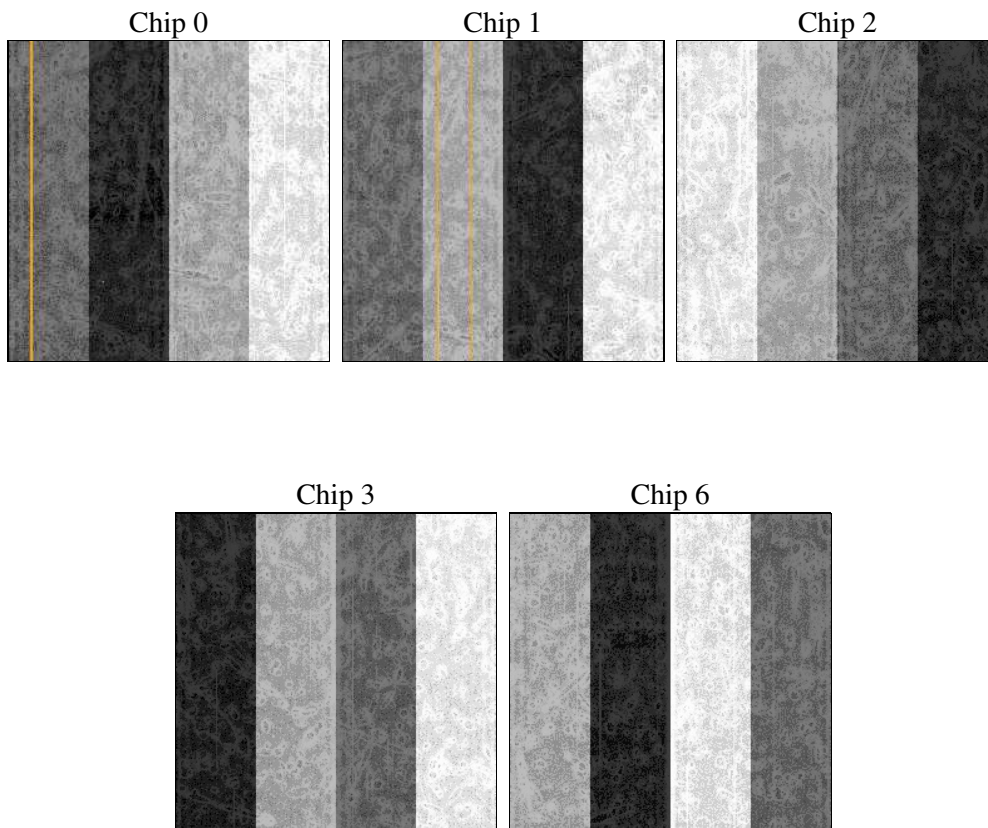
2 OBI

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	20078.65897122	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	20078.658981144	Sum of GTIs [s]
date	2020-09-23T14:42:14	Date and time of file creation	ontime1	20081.799961358	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	20081.799961358	Sum of GTIs [s]
			ontime3	20078.65897122	Sum of GTIs [s]
			ontime6	20078.658961236	Sum of GTIs [s]
			l1events	570991	Number of level 1 events

2.1.4 Events

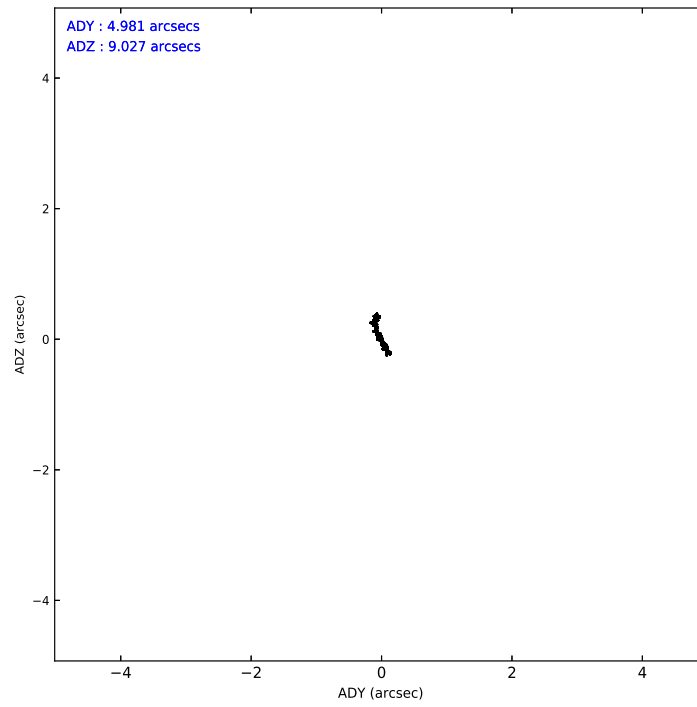
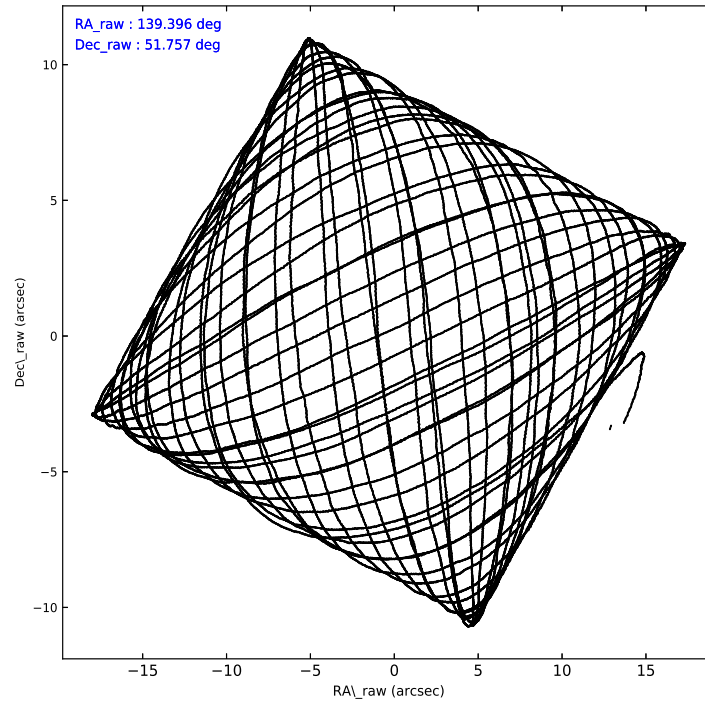
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	103701	106351	117152	129109	114678
rejected events	92096	92787	104450	101907	102328
rejected %	88%	87%	89%	78%	89%

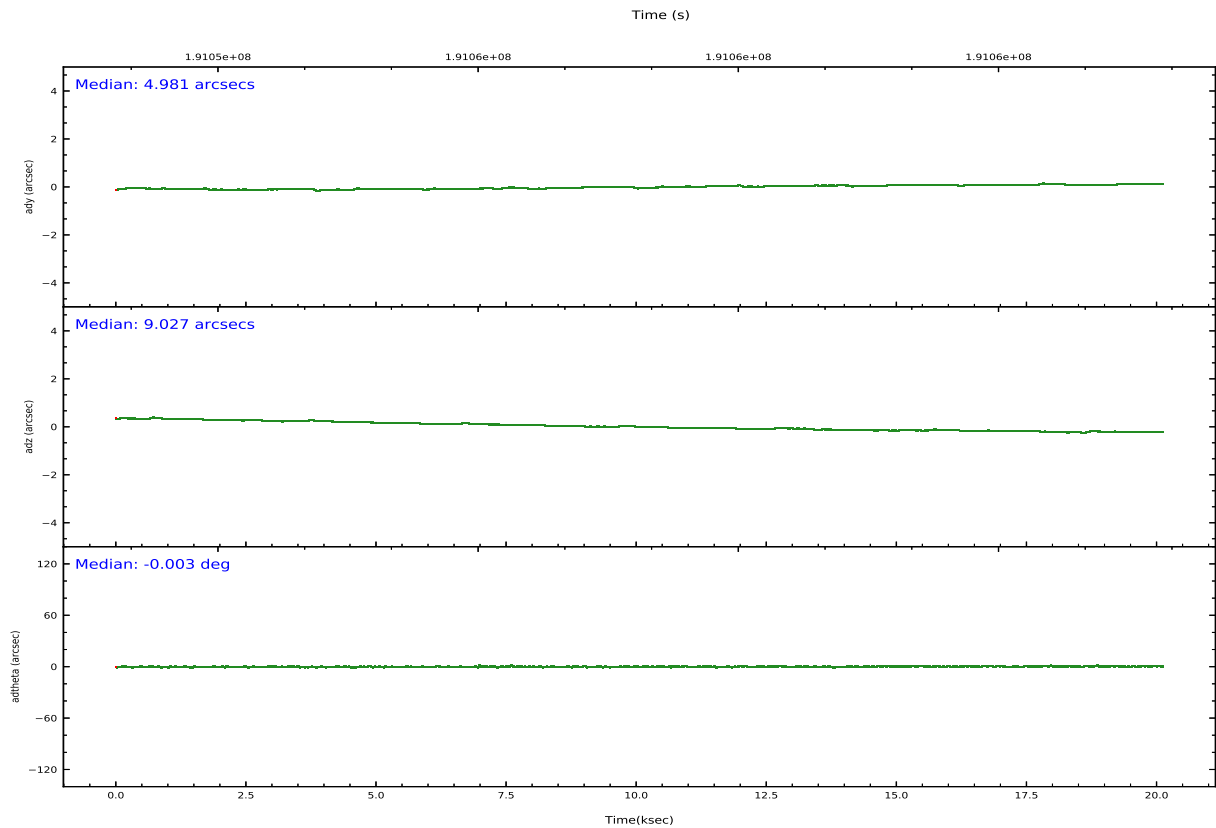
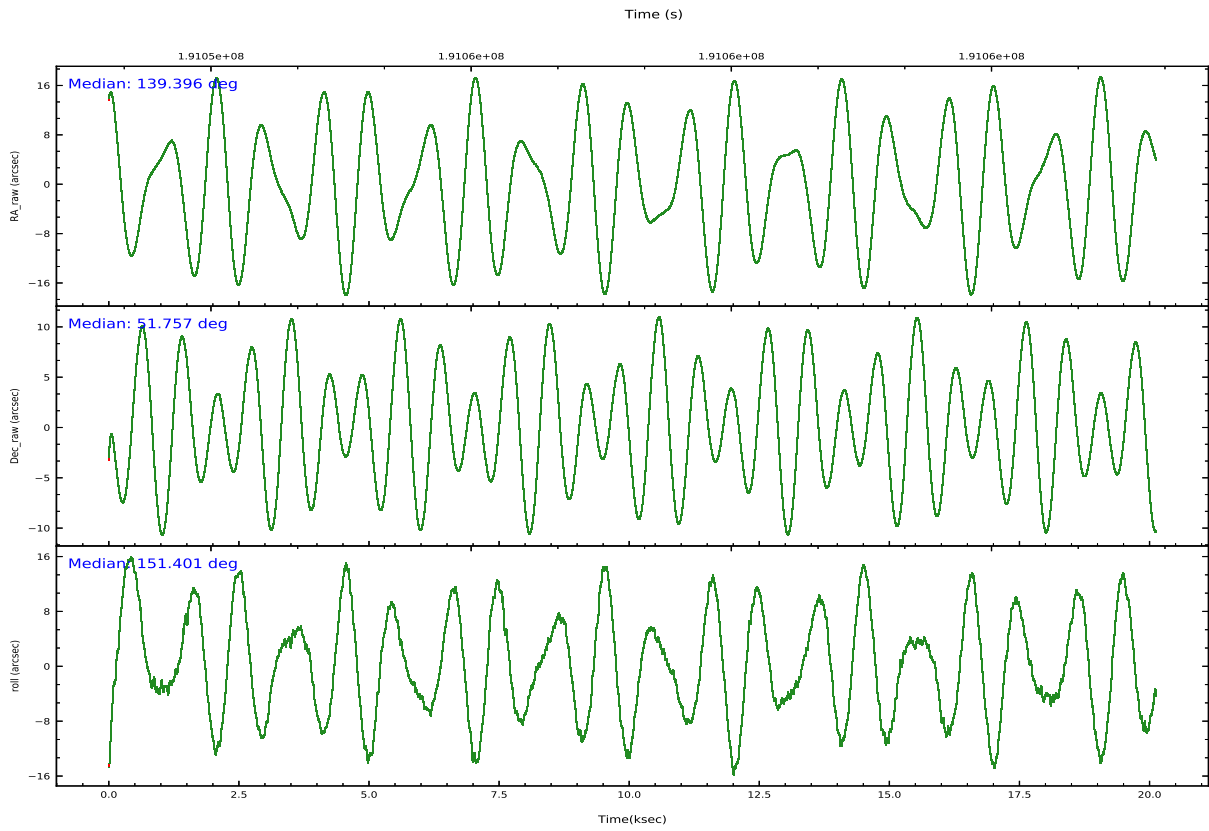
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4320	5162	5458	17357	4776
	4%	4%	4%	13%	4%
grade 1 events	53	55	82	129	63
	0%	0%	0%	0%	0%
grade 2 events	2763	2941	2722	3982	2688
	2%	2%	2%	3%	2%
grade 3 events	1302	1445	1116	1709	1304
	1%	1%	0%	1%	1%
grade 4 events	1145	1385	1407	1684	1261
	1%	1%	1%	1%	1%
grade 5 events	3795	4107	3556	4421	4339
	3%	3%	3%	3%	3%
grade 6 events	2079	2633	2002	2475	2326
	2%	2%	1%	1%	2%
grade 7 events	88244	88623	100809	97352	97921
	85%	83%	86%	75%	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	139.440084	139.40000138612	Subarray requested	NONE	NONE
[deg] Pointing Dec	51.757415	51.758241628534	Alternating exposures requested	N	N
[deg] Pointing Roll	151.161228	151.40078934058	[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	-225.840463	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	191048163.184000	191047233.67395			
Observation start date	2004-01-21T04:54:59	2004-01-21T04:40:33			
[s] Observation end time (MET)	191068163.184000	191068793.01239			
Observation end date	2004-01-21T10:28:19	2004-01-21T10:39:53			
Read mode	TIMED	TIMED			

2.3 Aspect





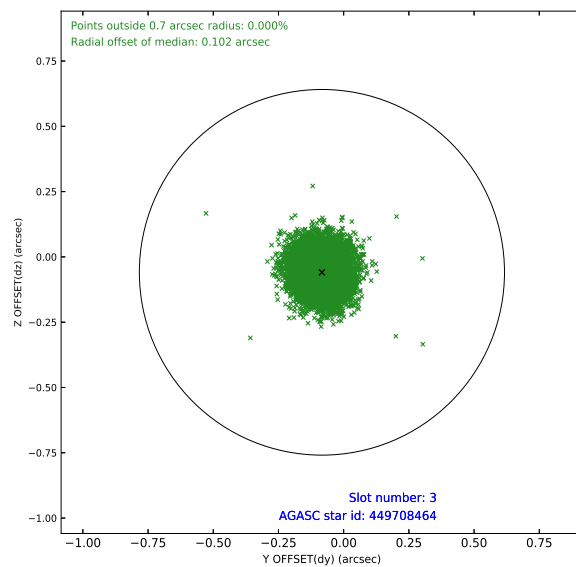
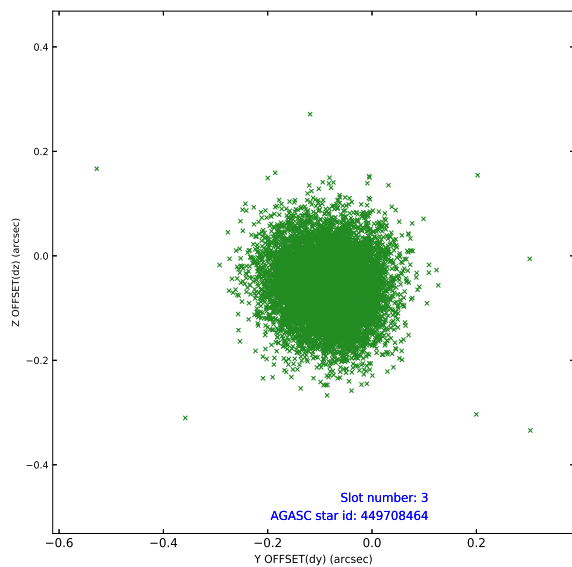
Slot Statistics

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	7.22	4910	1.000	0.091	-0.083	0.007	0.011	0.000000	0.000000	934.72	-991
1	FID		ACIS-I-5	7.22	4910	1.000	-0.280	0.066	0.007	0.011	0.000000	0.000000	-1813.67	905
2	FID		ACIS-I-6	7.24	4910	1.000	0.097	0.088	0.007	0.013	0.000000	0.000000	400.04	1550
3	GUIDE	used	449708464	9.51	9815	1.000	-0.083	-0.059	0.087	0.142	140.342196	51.951871	-1409.30	-1589
4	GUIDE	used	449708784	9.26	9816	1.000	-0.034	0.054	0.087	0.138	139.281247	51.322176	-442.40	1544
5	GUIDE	used	498865336	9.20	9814	1.000	0.107	-0.008	0.092	0.148	139.050858	52.564533	2149.48	-2135
6	GUIDE	used	498869616	9.45	9816	1.000	0.079	-0.066	0.124	0.204	139.075460	52.600055	2163.45	-2274
7	GUIDE	used	449713472	9.47	9810	1.000	-0.073	0.081	0.124	0.195	140.340736	52.203366	-959.63	-2375

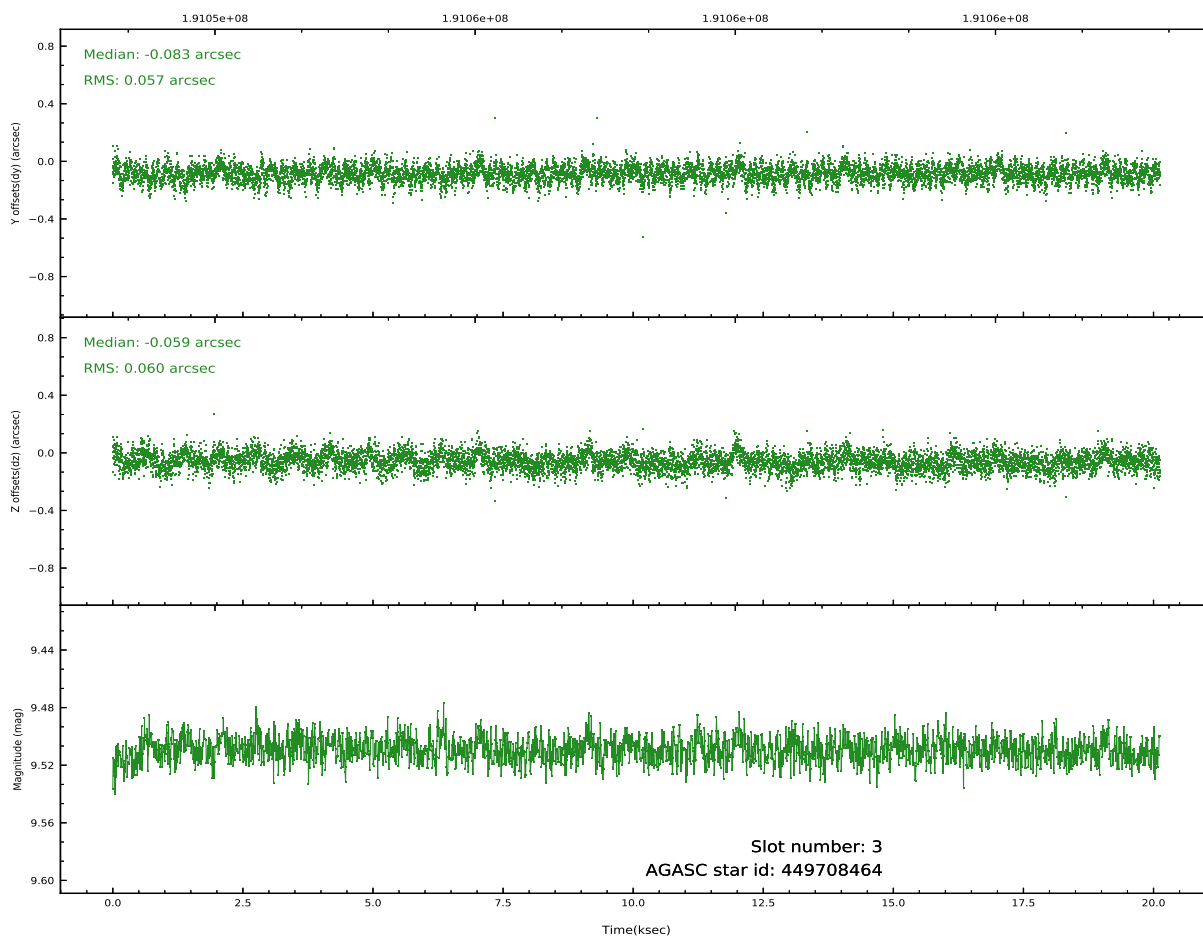
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2.4 Star Slots

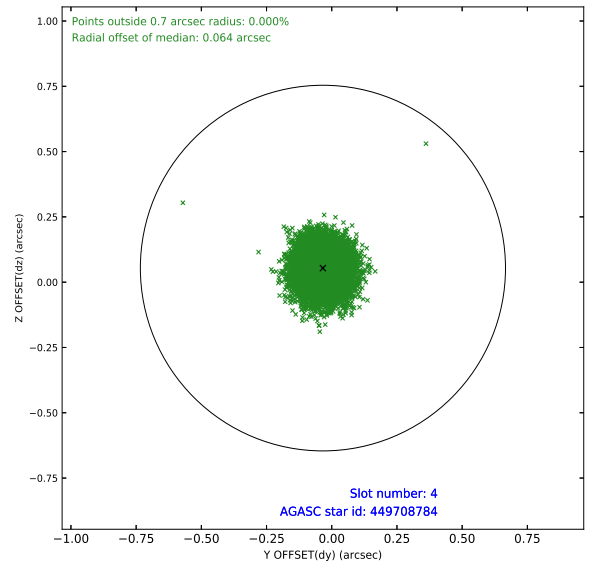
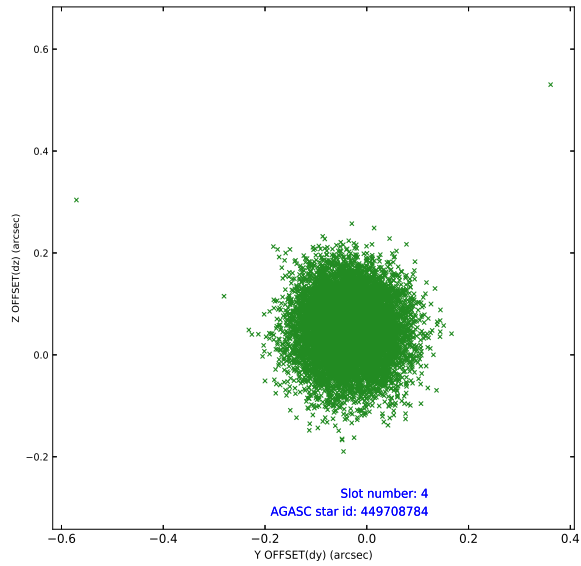
2.4.1 Slot 3



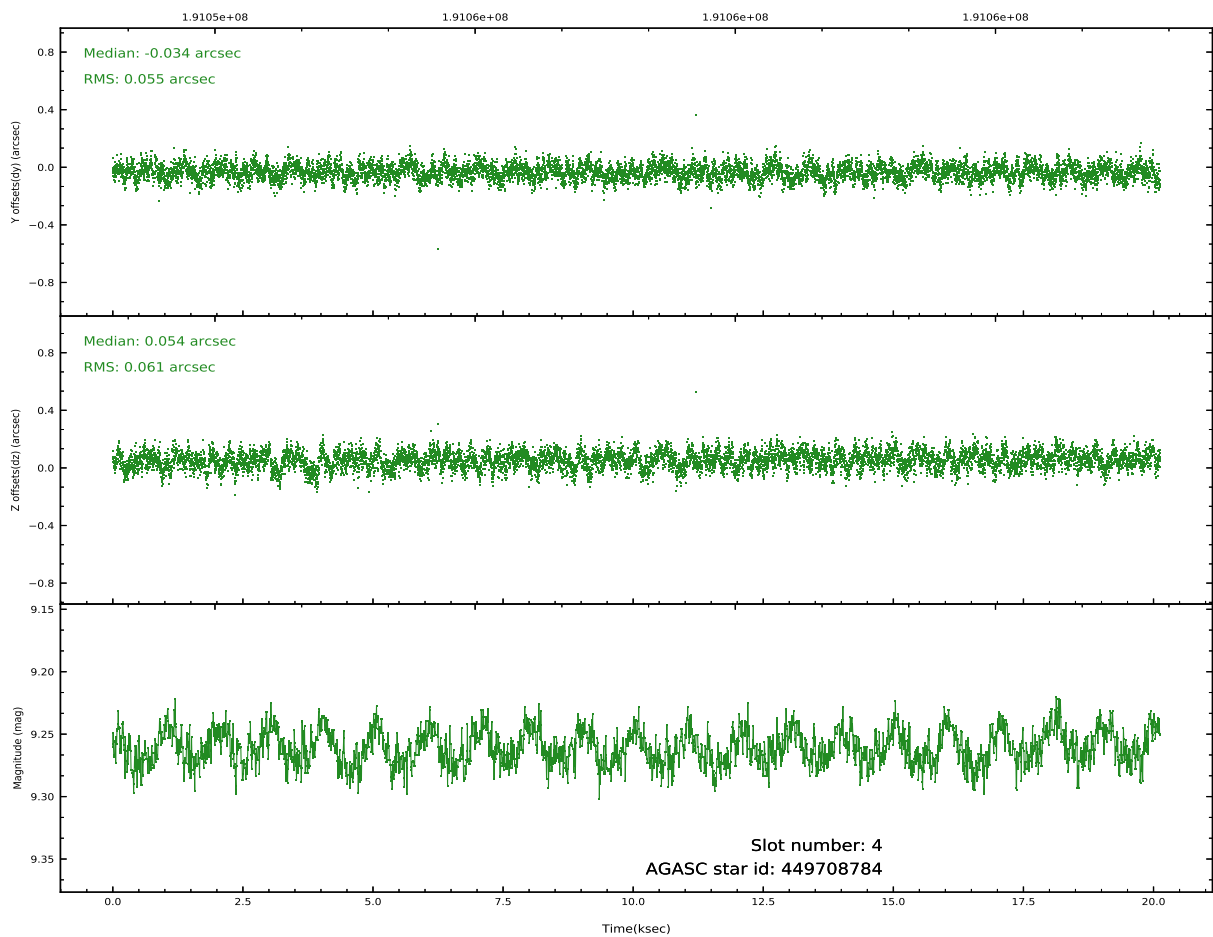
Time (s)



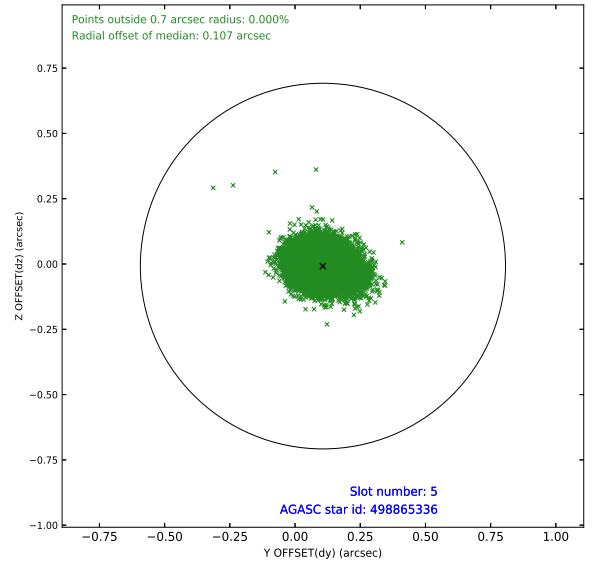
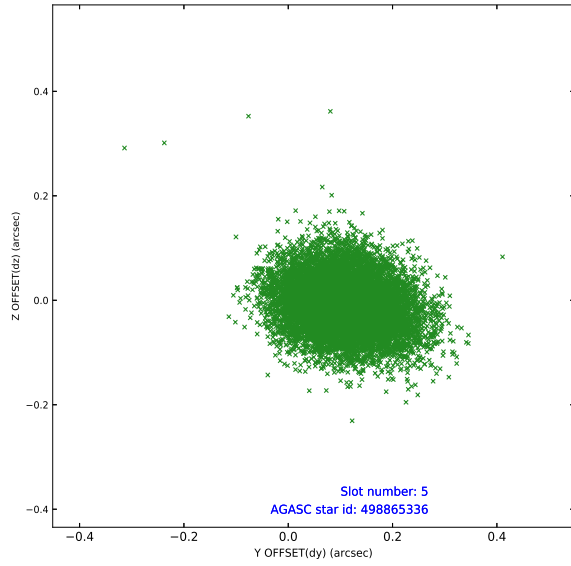
2.4.2 Slot 4



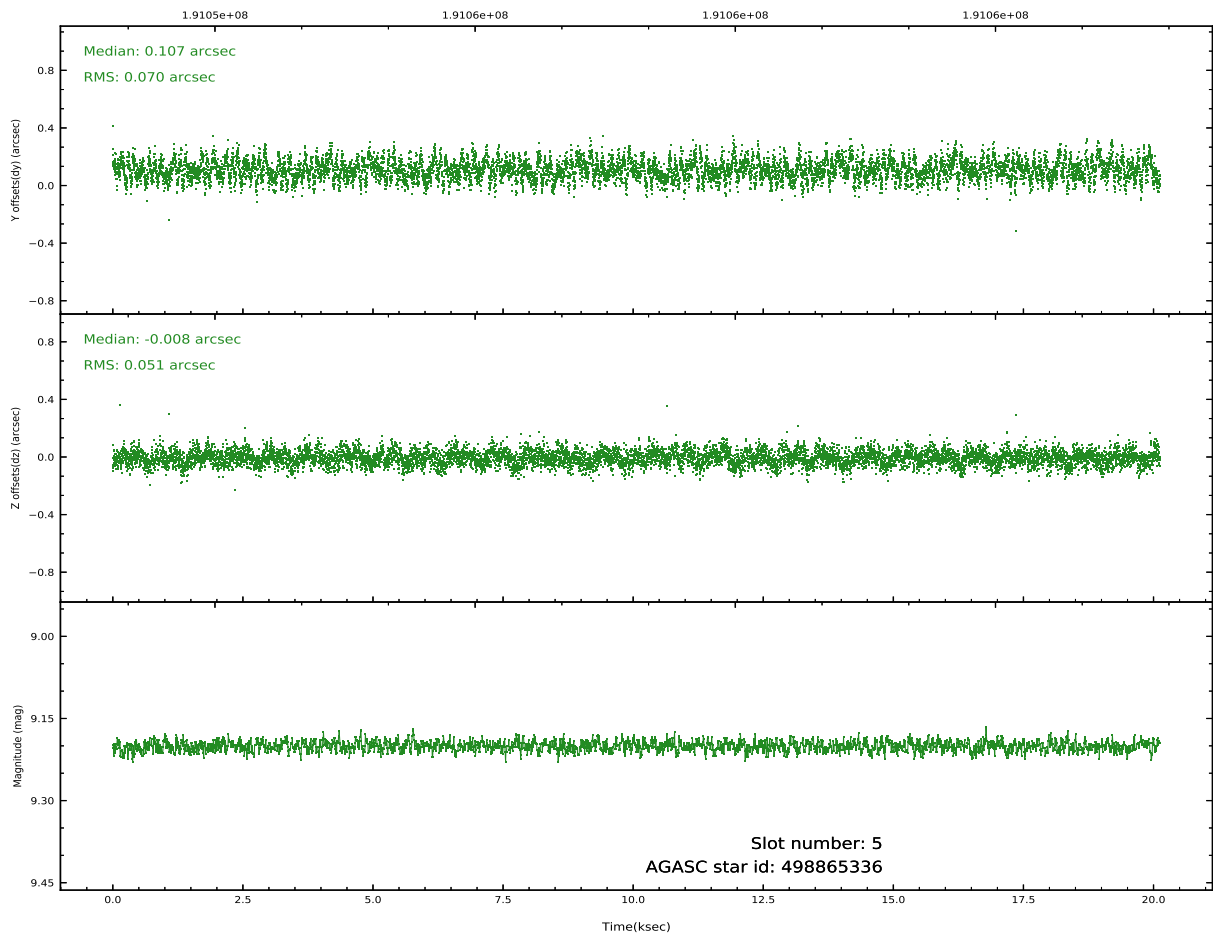
Time (s)



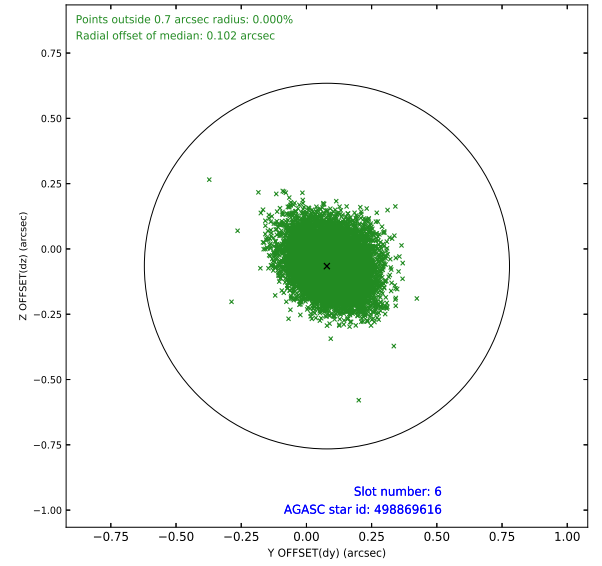
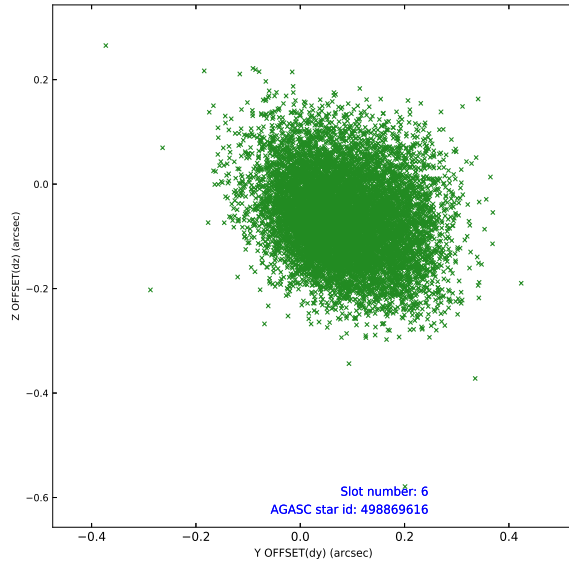
2.4.3 Slot 5



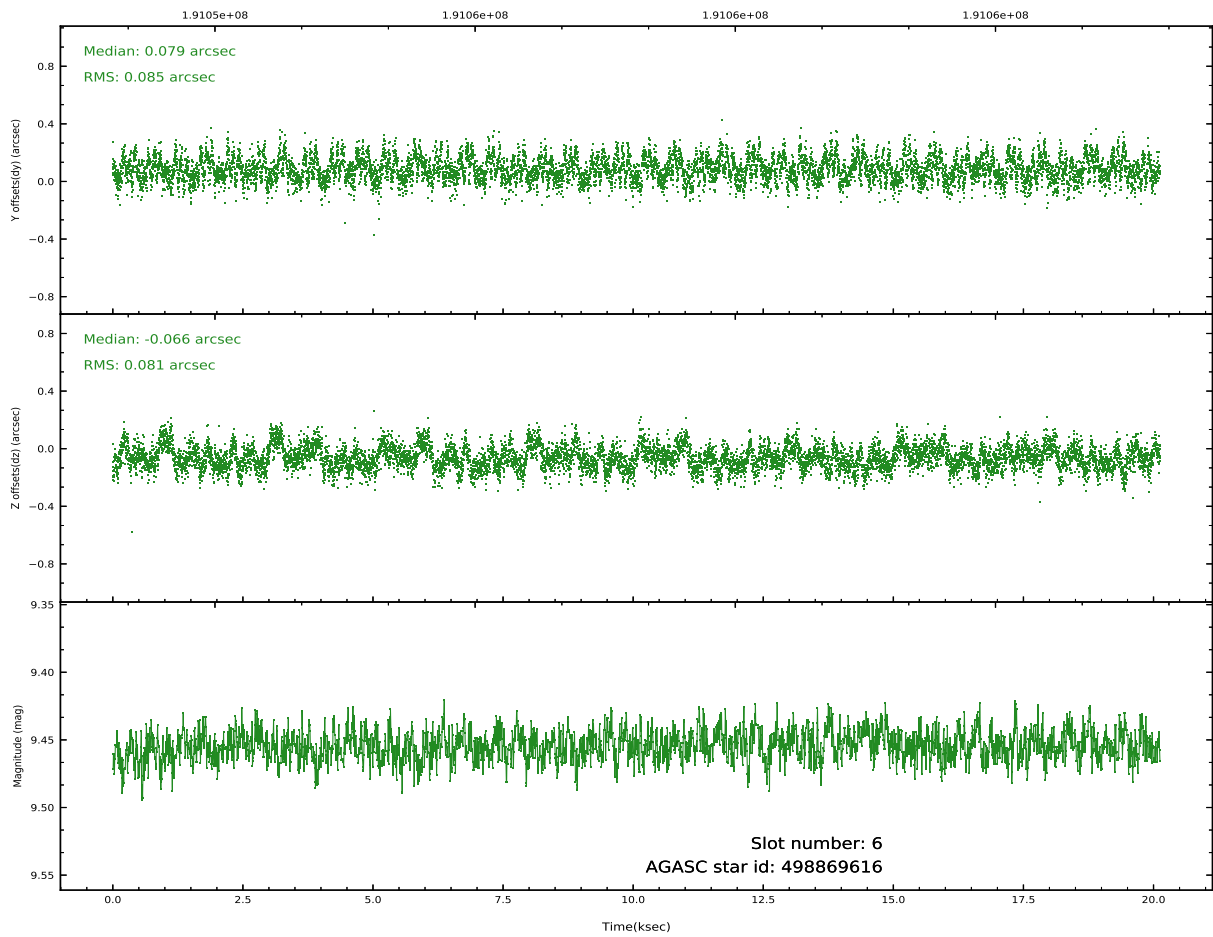
Time (s)



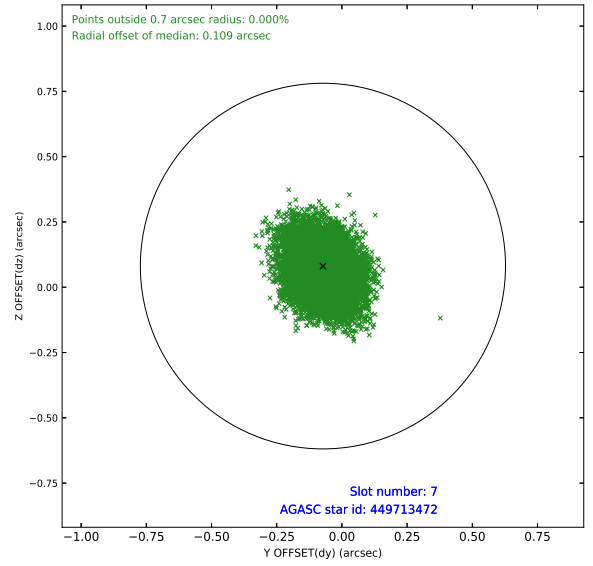
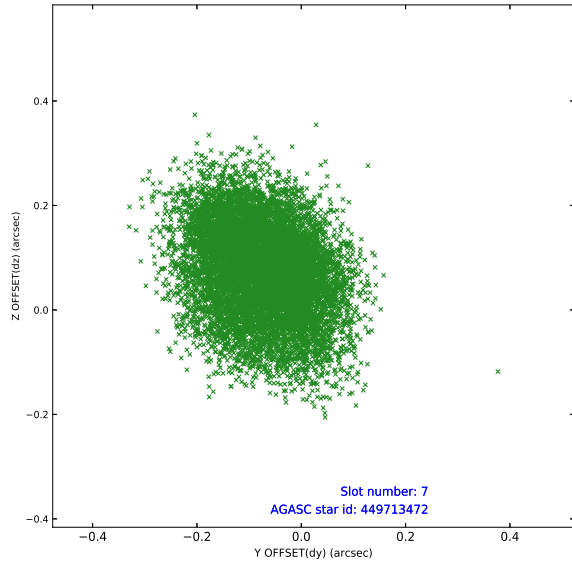
2.4.4 Slot 6



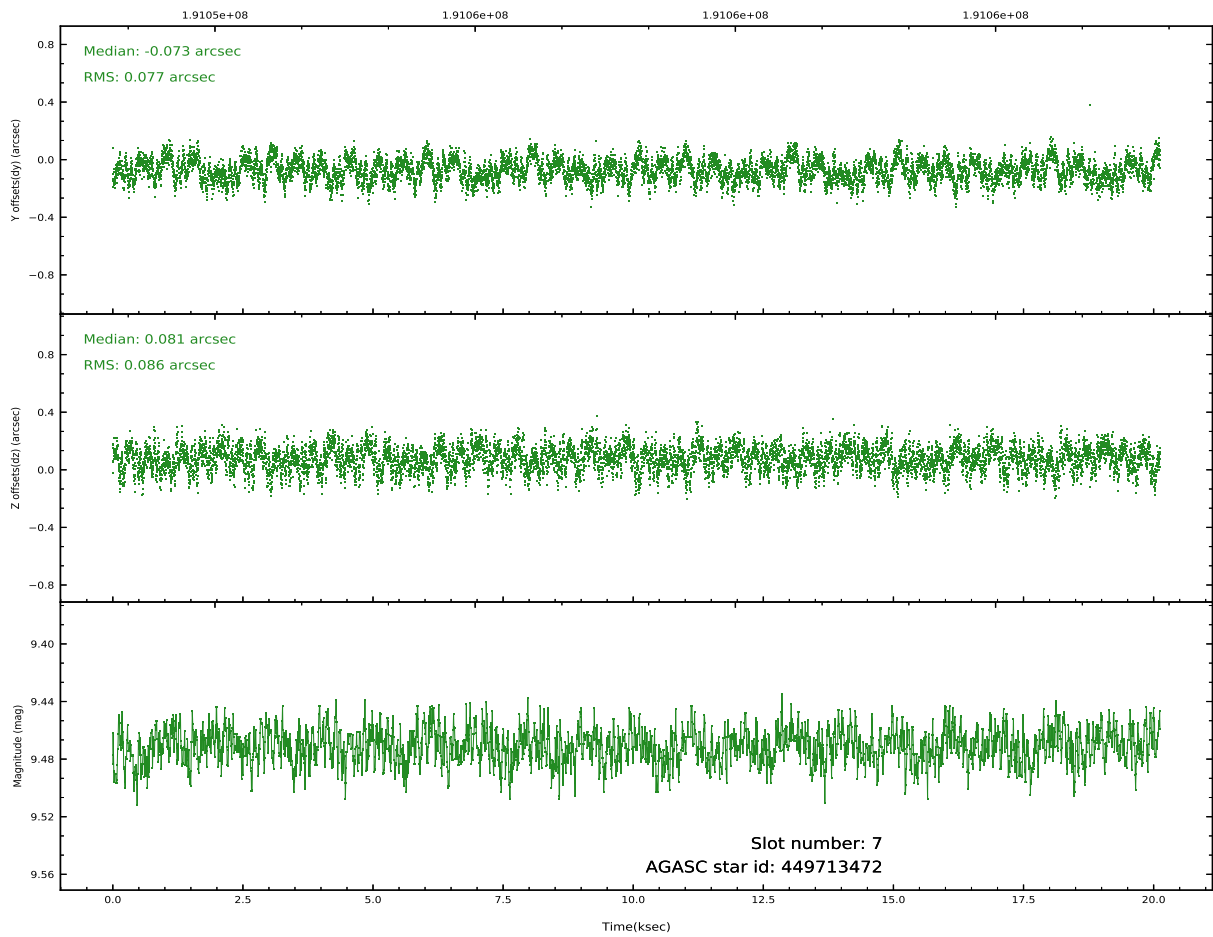
Time (s)



2.4.5 Slot 7

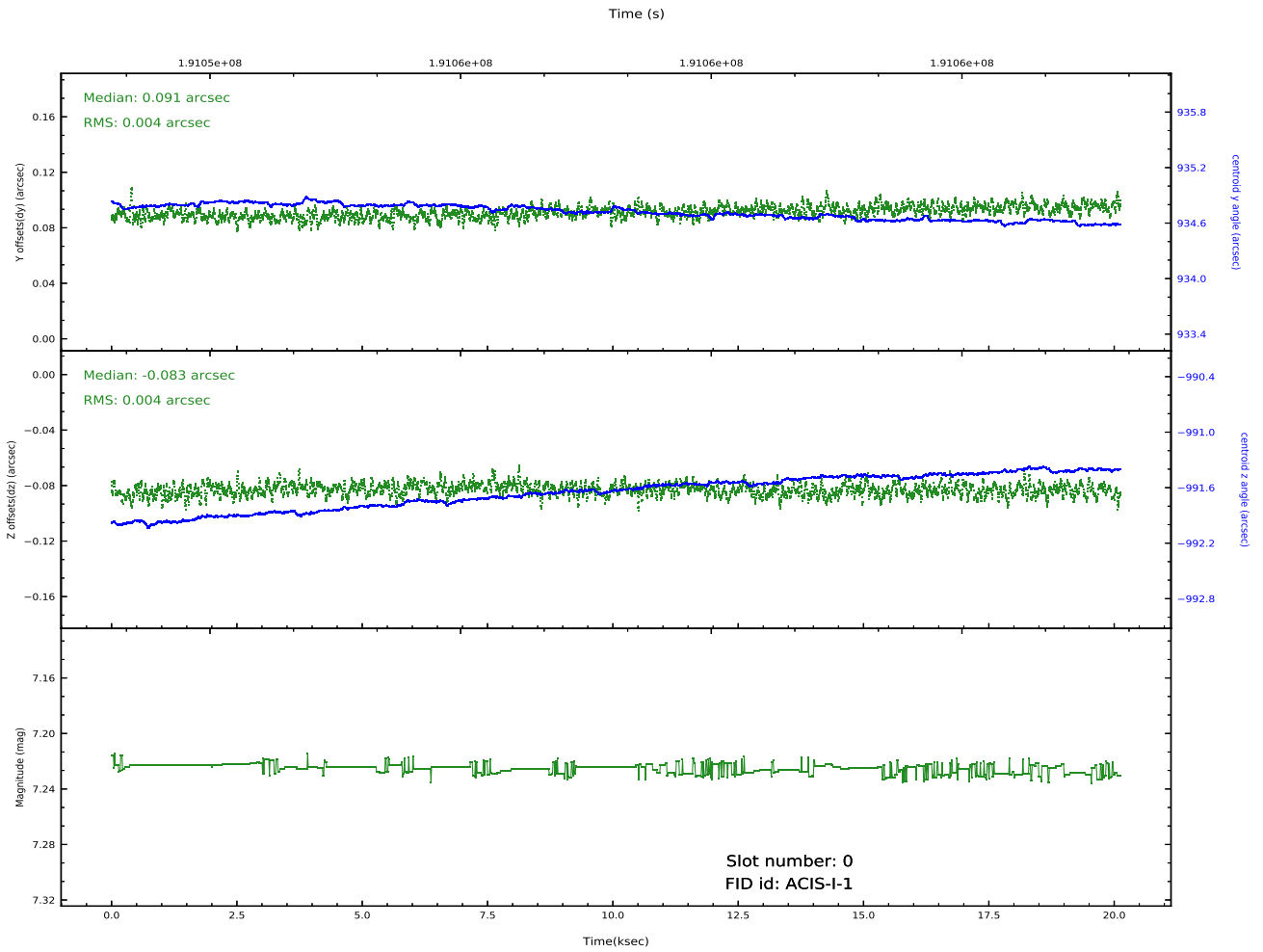
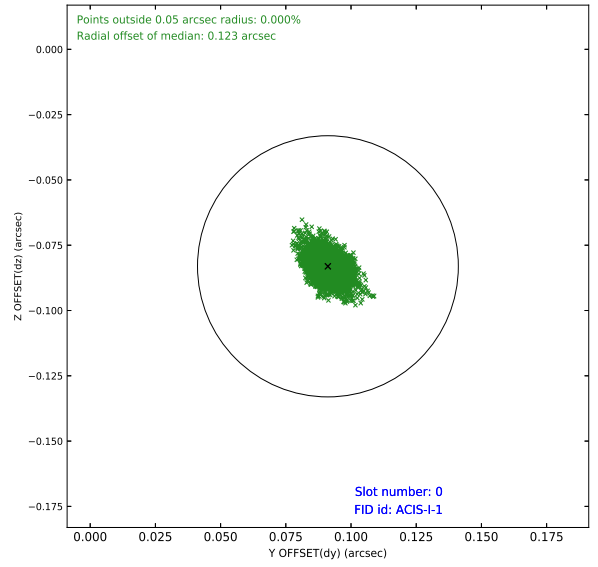
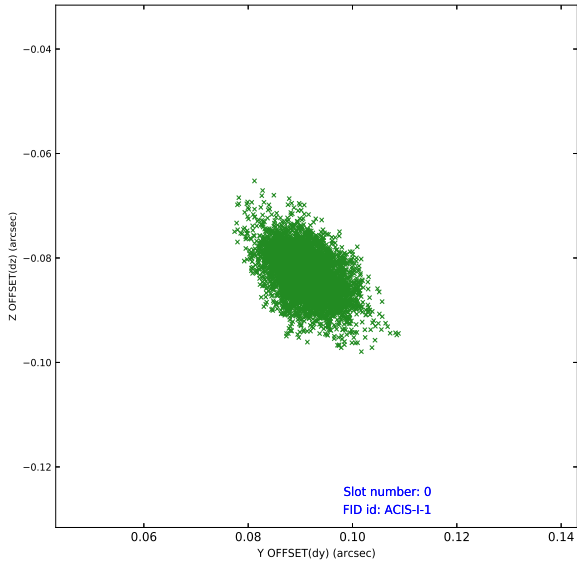


Time (s)

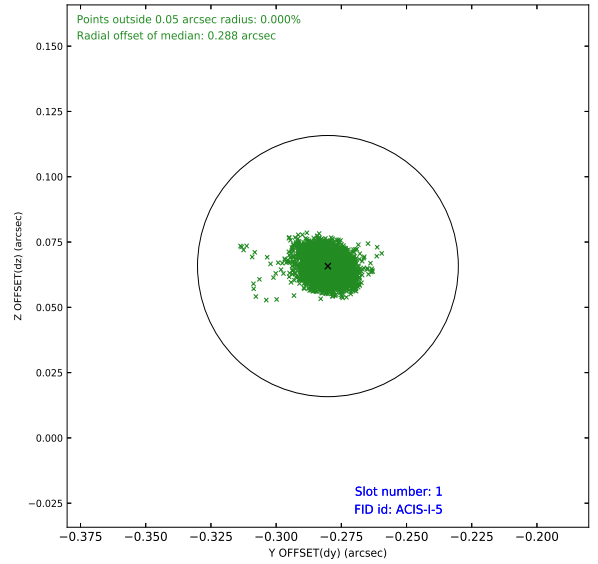
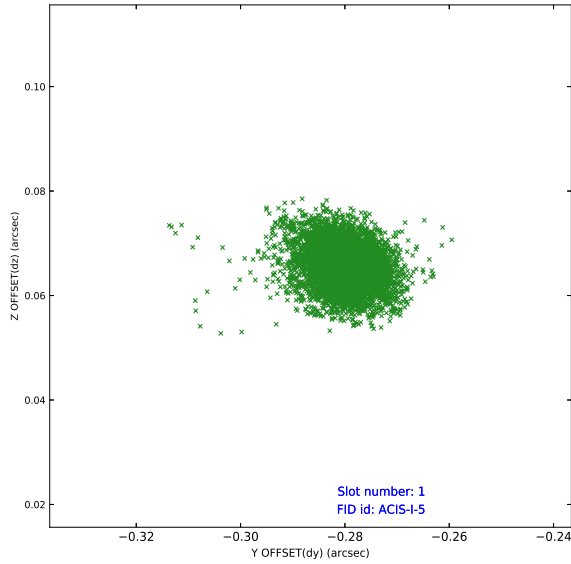


2.5 FID Slots

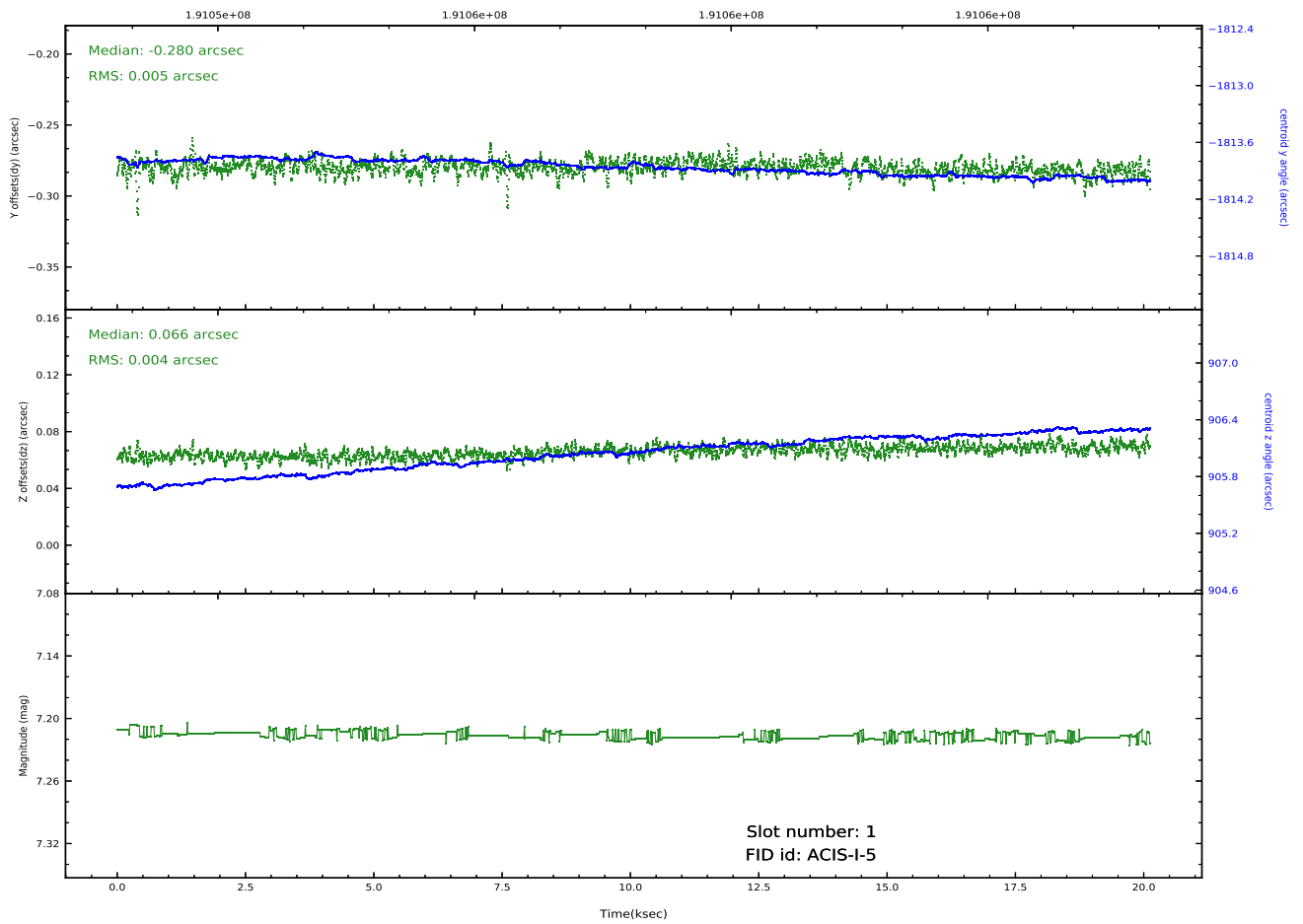
2.5.1 Slot 0



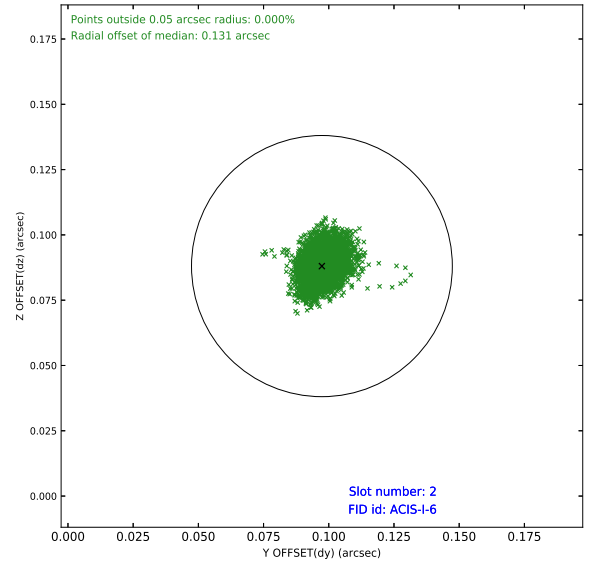
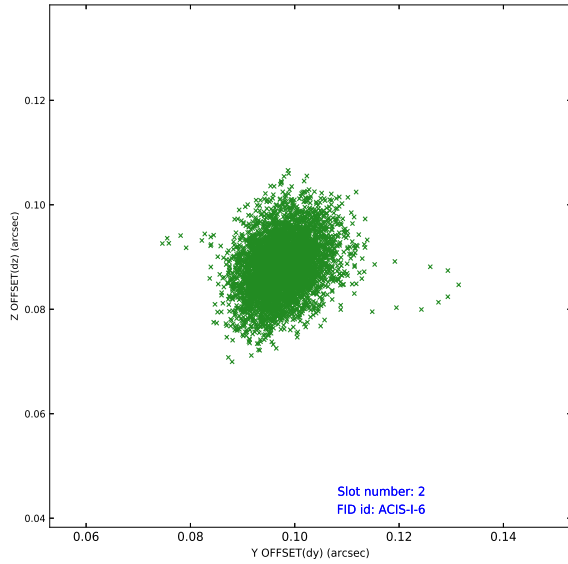
2.5.2 Slot 1



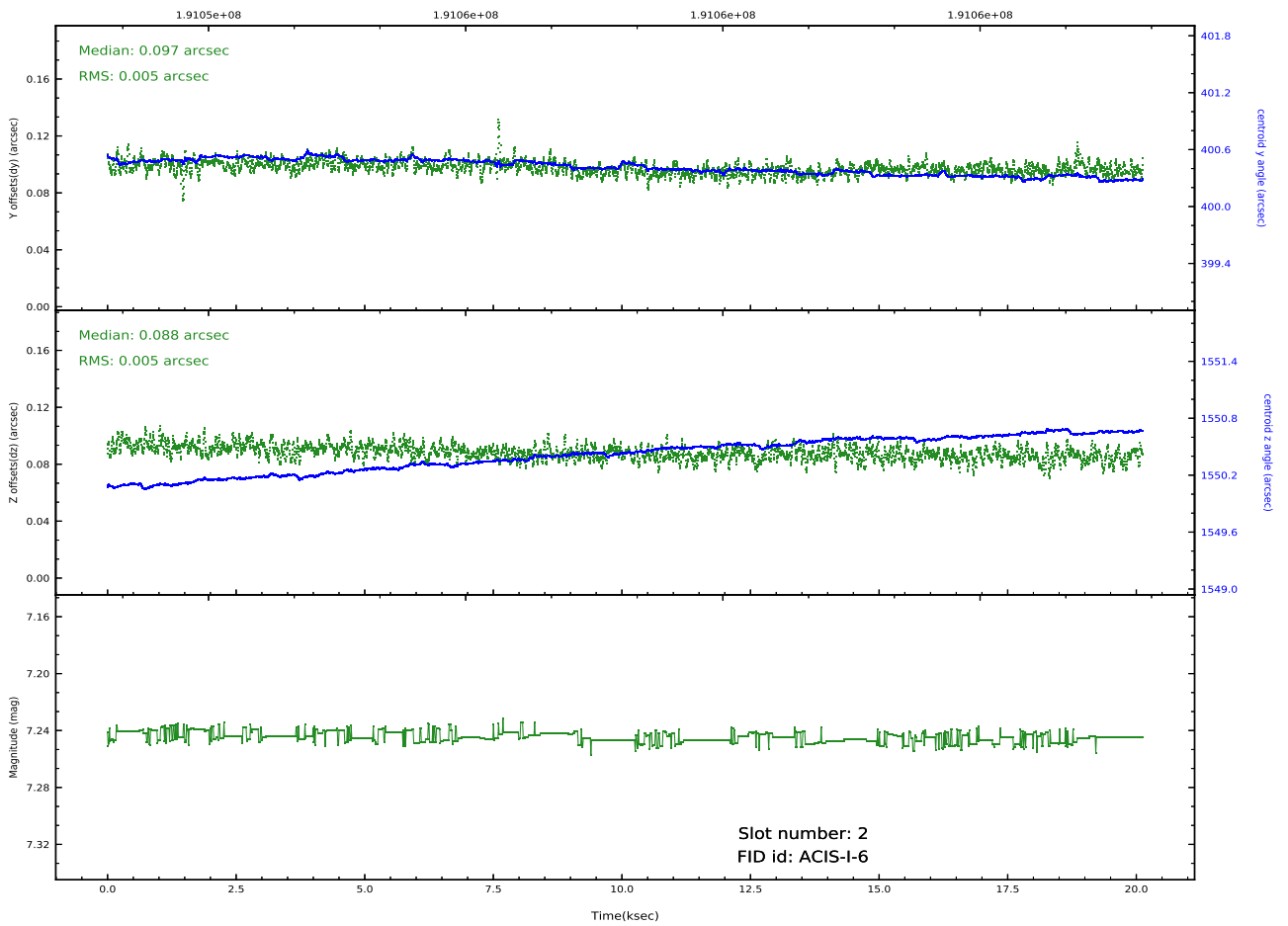
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.081

A.2 Comments