

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5341 - L2 Version 4
Chandra X-Ray Center

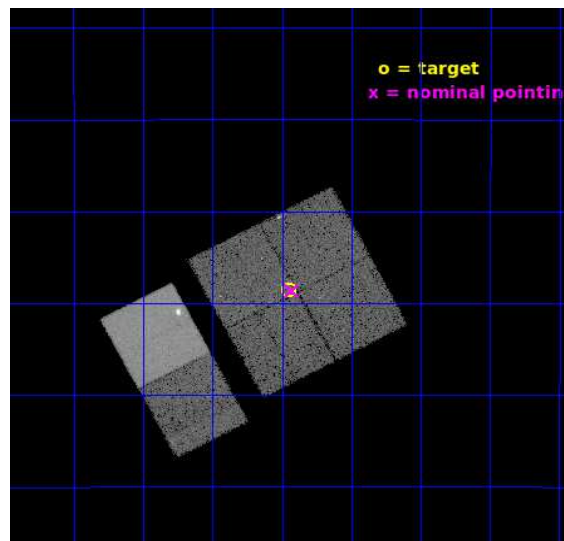
L2 Processing Date : Sep 27 2020

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1 Front

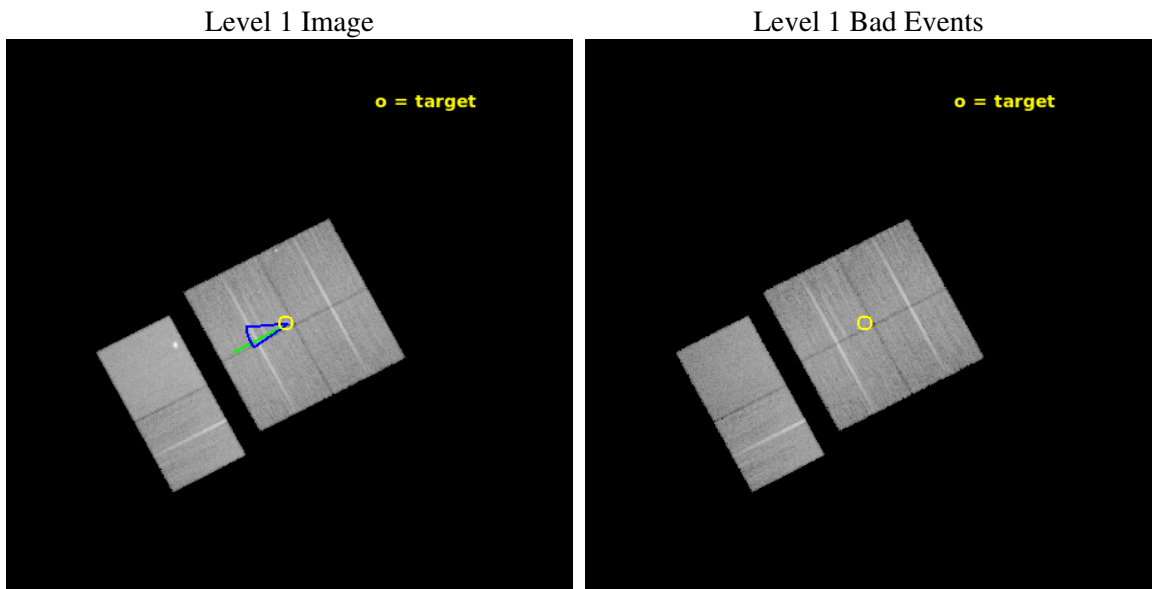
seq_num	500425	Sequence number
obs_id	5341	Observation id
title	Center-filled Supernova Remnant G16.85-1.05 and its surroundings	P
observer	Gordon Garmire	Principal investigator
object	LS 5039	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	276.3625	Observer's specified target RA [deg]
dec_targ	-14.810556	Observer's specified target Dec [deg]
ra_nom	276.3570215514	Nominal RA [deg]
dec_nom	-14.810628020731	Nominal Dec [deg]
roll_nom	242.2068152926	Nominal Roll [deg]
revision	4	Processing version of data
ontime	18185.599932253	Sum of GTIs [s]
livetime	17955.322915858	Livetime [s]
ontime0	18185.599932253	Sum of GTIs [s]
ontime1	18185.599932253	Sum of GTIs [s]
ontime2	18185.599932253	Sum of GTIs [s]
ontime3	18185.599932253	Sum of GTIs [s]
ontime6	18182.358932078	Sum of GTIs [s]
ontime7	18185.599932253	Sum of GTIs [s]
l2events	156819	Number of level 2 events



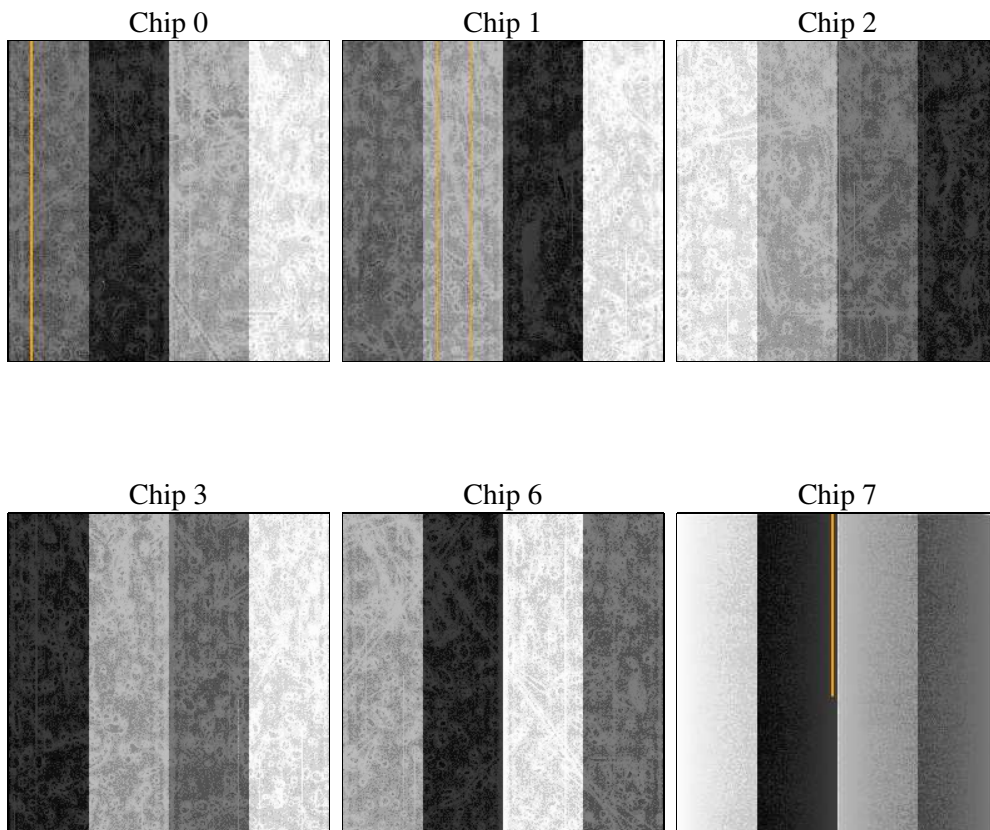
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	18185.599932253	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	18185.599932253	Sum of GTIs [s]
date	2020-09-27T04:02:04	Date and time of file creation	ontime1	18185.599932253	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	18185.599932253	Sum of GTIs [s]
			ontime3	18185.599932253	Sum of GTIs [s]
			ontime6	18182.358932078	Sum of GTIs [s]
			ontime7	18185.599932253	Sum of GTIs [s]
			l1events	876986	Number of level 1 events

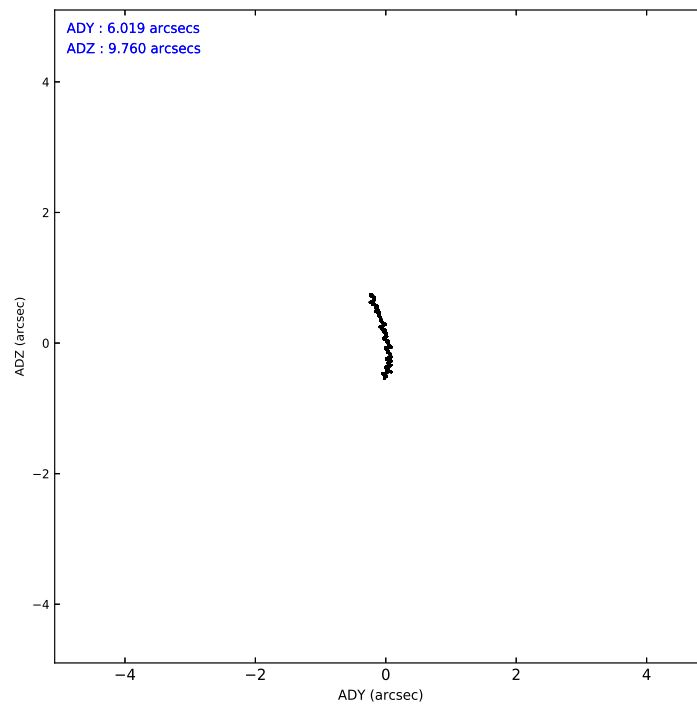
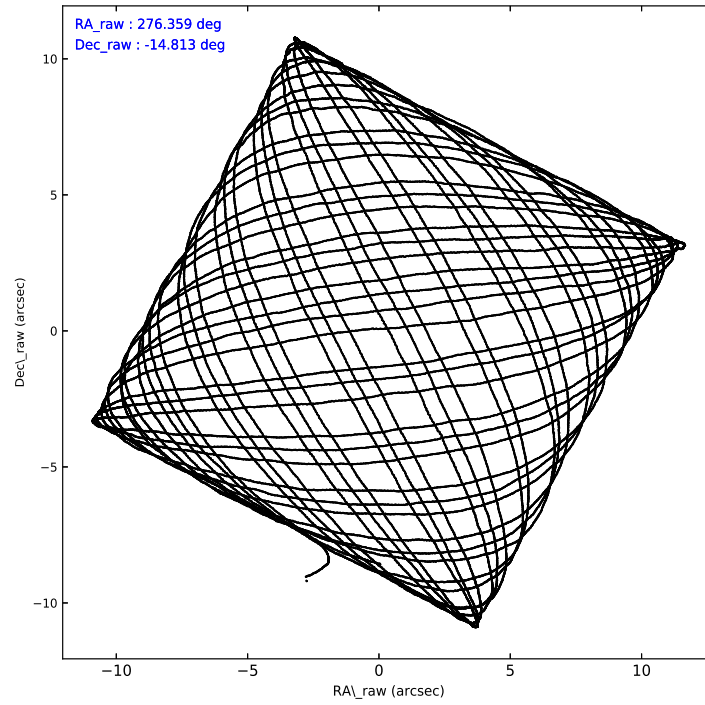
2.1.4 Events

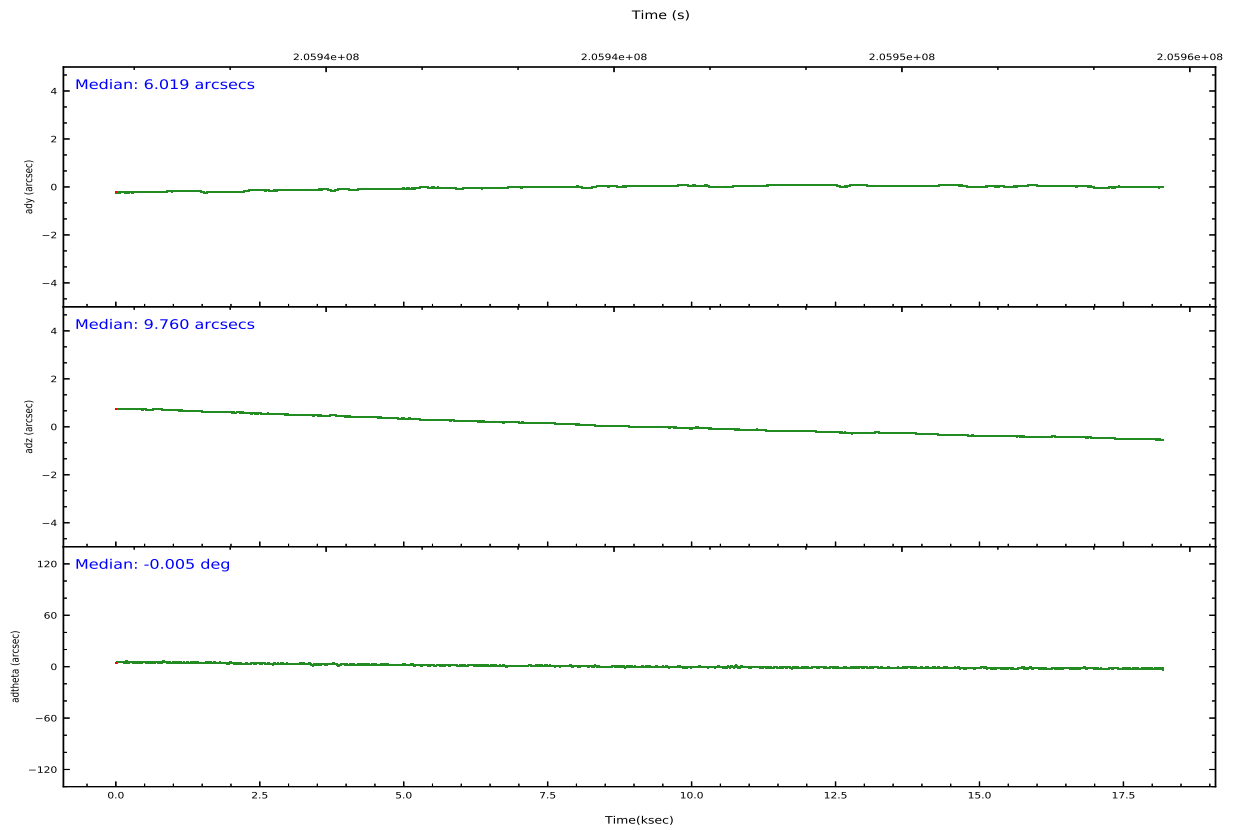
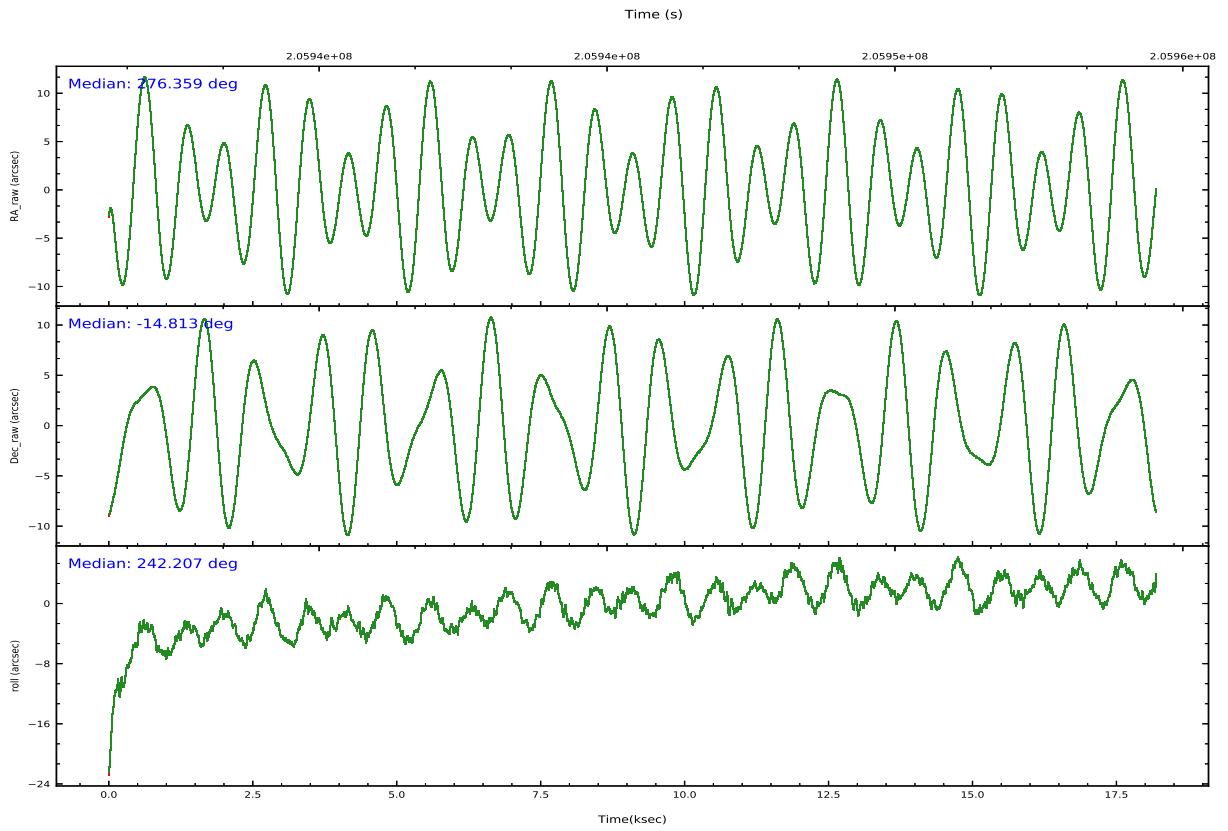
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	127567	131549	136798	140789	145881	194402	grade 0 events	7811	8043	7840	8122	7475	8767
rejected events	110249	112961	119882	123523	128304	110854		6%	6%	5%	5%	5%	4%
rejected %	86%	85%	87%	87%	87%	57%	grade 1 events	74	70	97	105	68	183
								0%	0%	0%	0%	0%	0%
							grade 2 events	3518	3898	3433	3309	3562	17191
								2%	2%	2%	2%	2%	8%
							grade 3 events	1708	1775	1562	1619	1598	7727
								1%	1%	1%	1%	1%	3%
							grade 4 events	1607	1660	1543	1583	1635	7889
								1%	1%	1%	1%	1%	4%
							grade 5 events	5408	5830	5377	6142	6632	18103
								4%	4%	3%	4%	4%	9%
							grade 6 events	2918	3468	2771	2878	3512	43112
								2%	2%	2%	2%	2%	22%
							grade 7 events	104523	106805	114175	117031	121399	91430
								81%	81%	83%	83%	83%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	276.357581	276.3570215514	Subarray requested	NONE	NONE
[deg] Pointing Dec	-14.786127	-14.810628020731	Alternating exposures requested	N	N
[deg] Pointing Roll	241.998752	242.2068152926	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	250.000000	250.000000			
[deg] Roll tolerance	15.000000	15.000000			
Roll constraint allows 180D rotation	N	N			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	205936537.184000	205935342.41671			
Observation start date	2004-07-11T12:34:33	2004-07-11T12:15:42			
[s] Observation end time (MET)	205954537.184000	205955616.40511			
Observation end date	2004-07-11T17:34:33	2004-07-11T17:53:36			
Read mode	TIMED	TIMED			

2.3 Aspect





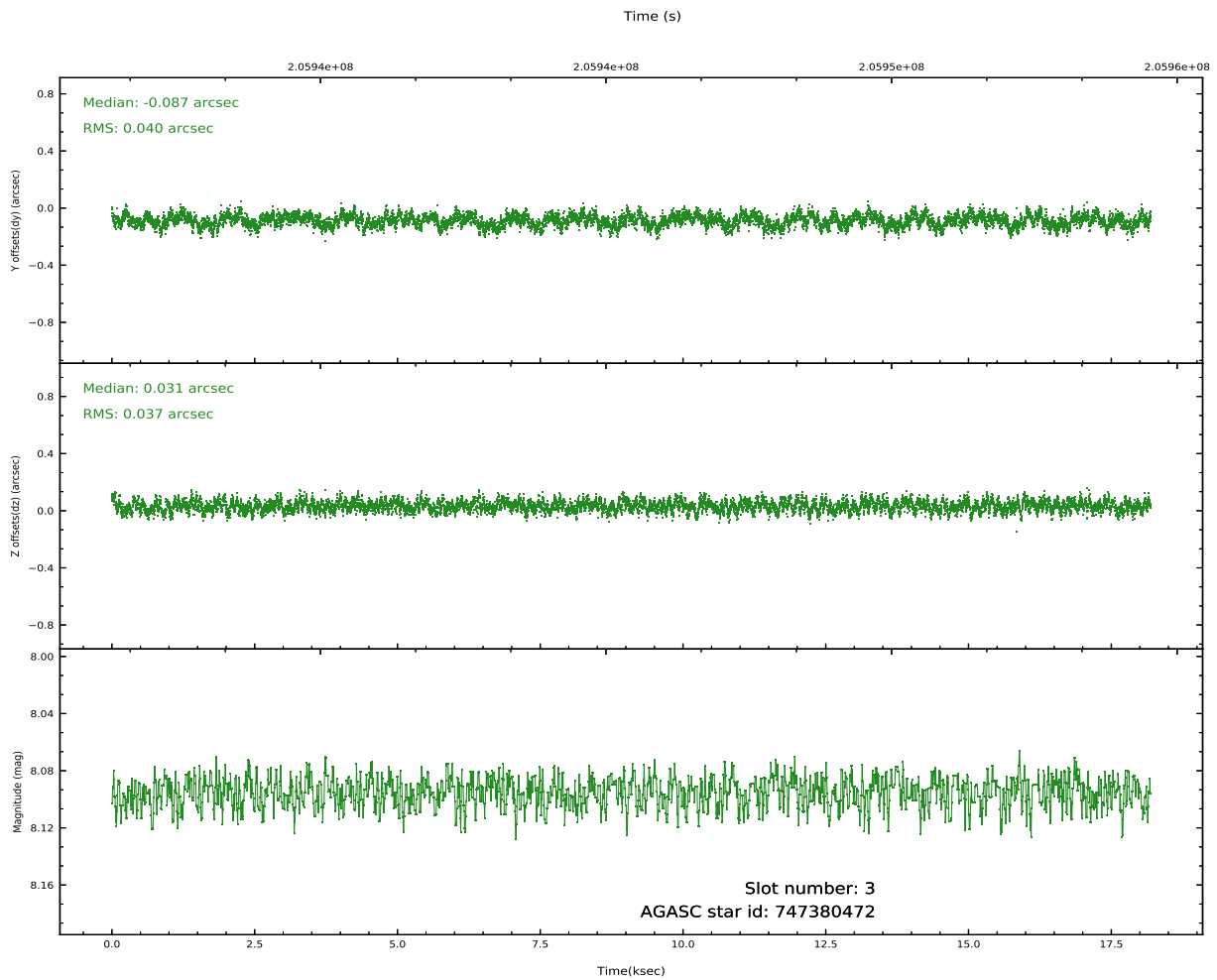
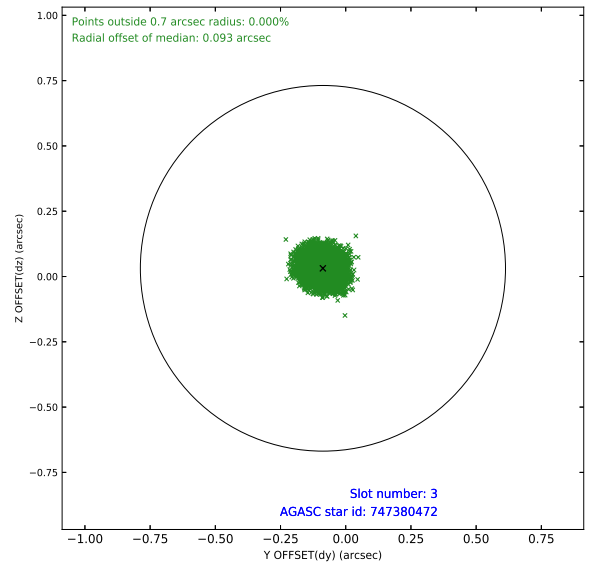
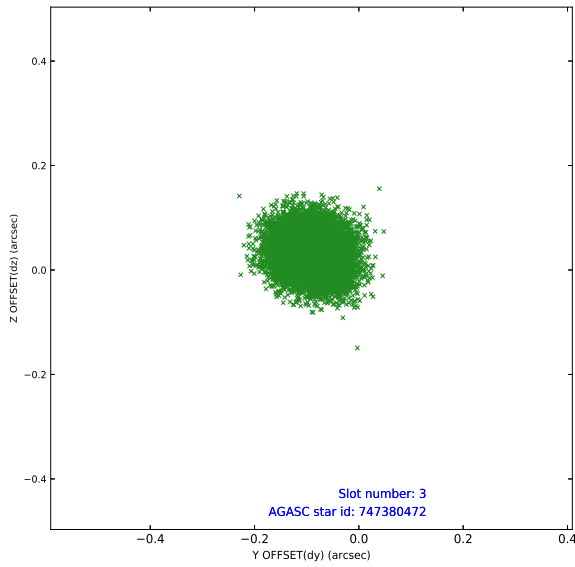
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.25	4435	1.000	0.044	-0.030	0.011	0.020	0.000000	0.000000	933.80	-833
1	FID		ACIS-I-5	7.22	4437	1.000	-0.086	0.080	0.020	0.037	0.000000	0.000000	-1814.40	1064
2	FID		ACIS-I-6	7.24	4436	1.000	-0.048	0.021	0.025	0.038	0.000000	0.000000	398.91	1708
3	GUIDE	used	747380472	8.09	8873	1.000	-0.087	0.031	0.059	0.092	276.808218	-14.697222	-1017.99	1236
4	GUIDE	used	747394680	7.42	8810	1.000	-0.073	-0.037	0.061	0.092	276.275759	-14.649373	-300.88	-482
5	GUIDE	used	821297448	7.46	8874	1.000	-0.025	-0.129	0.052	0.084	276.406695	-15.152775	1085.35	770
6	GUIDE	used	821318160	7.74	8865	1.000	0.131	0.148	0.052	0.088	276.598709	-15.630197	2291.16	2165
7	GUIDE	used	747380456	8.61	8870	1.000	0.051	-0.011	0.055	0.089	276.136187	-14.775528	329.00	-697

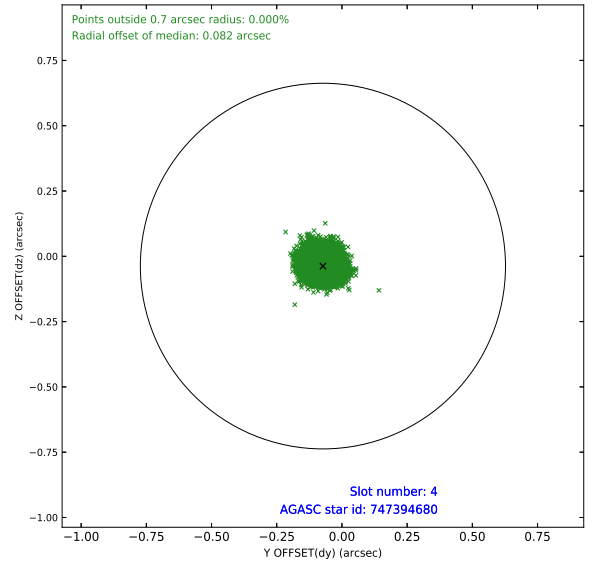
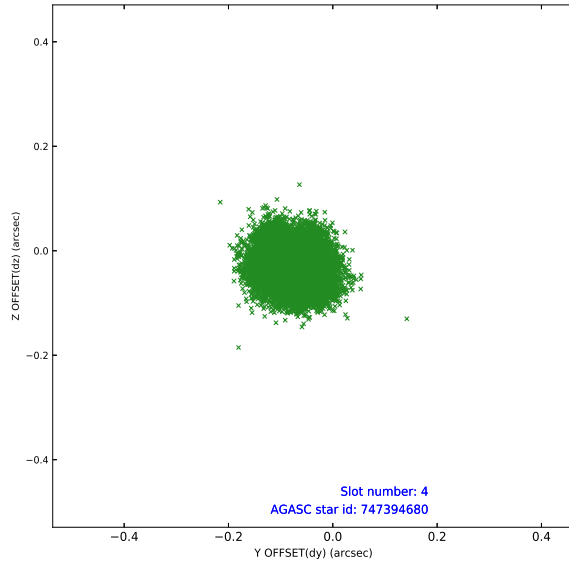
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2.4 Star Slots

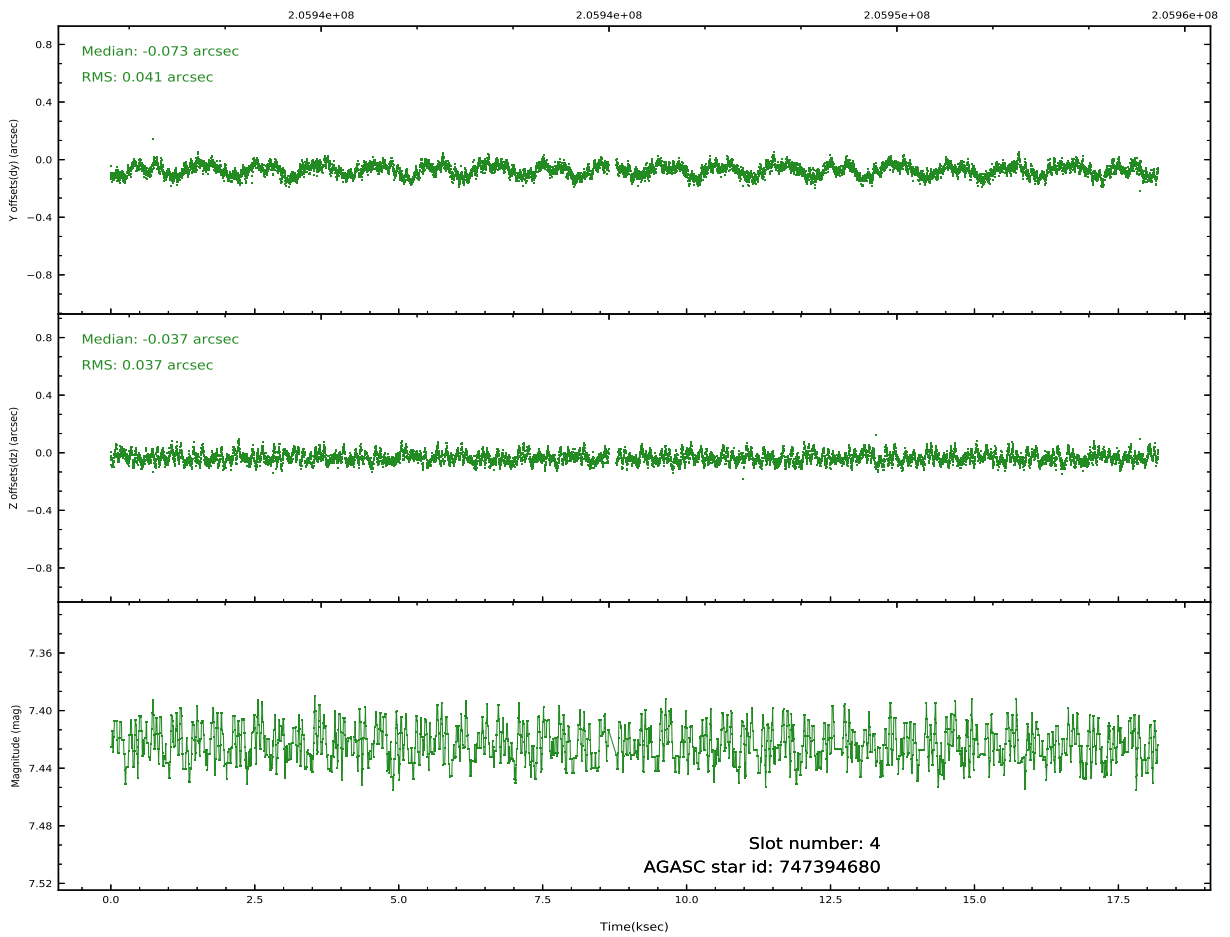
2.4.1 Slot 3



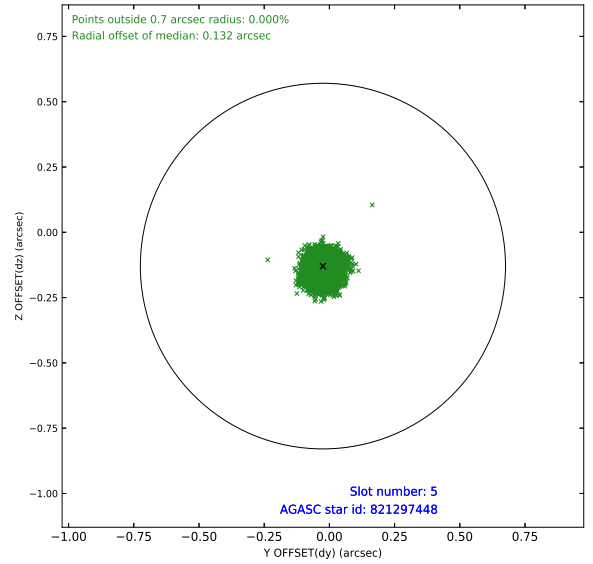
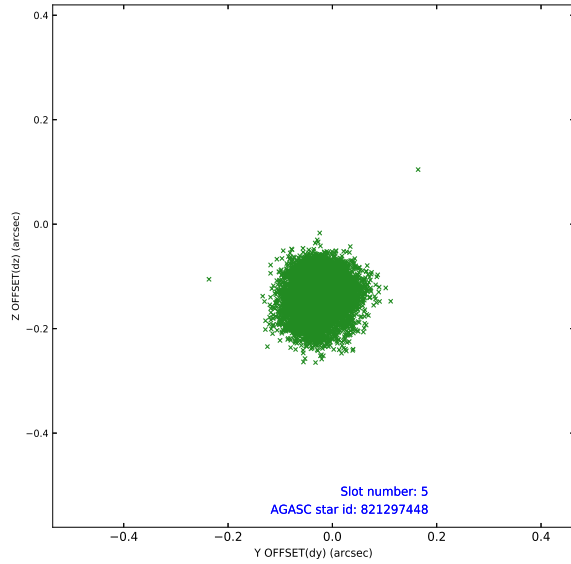
2.4.2 Slot 4



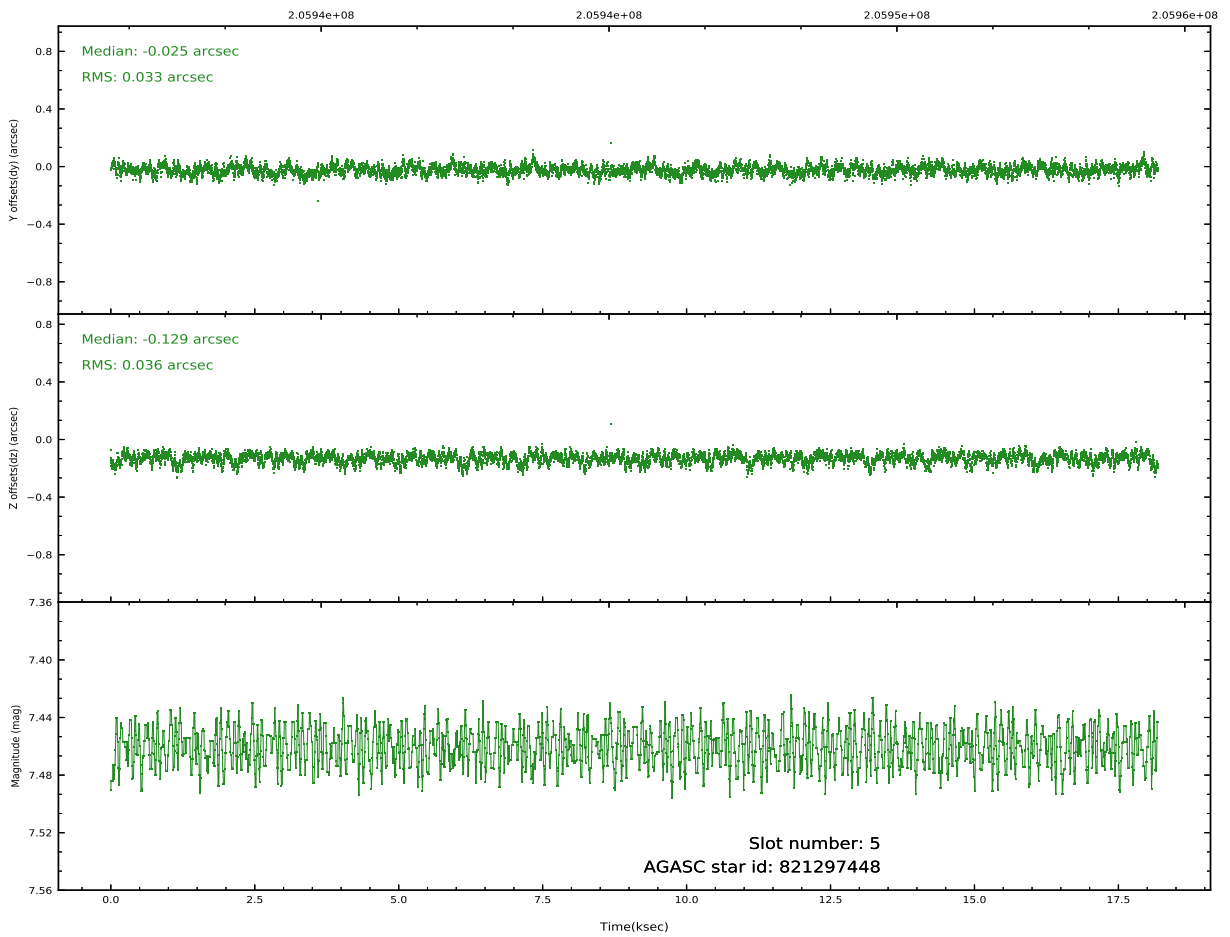
Time (s)



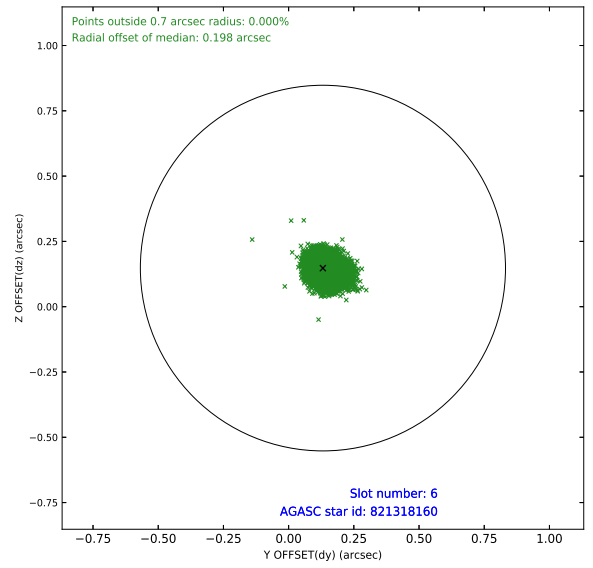
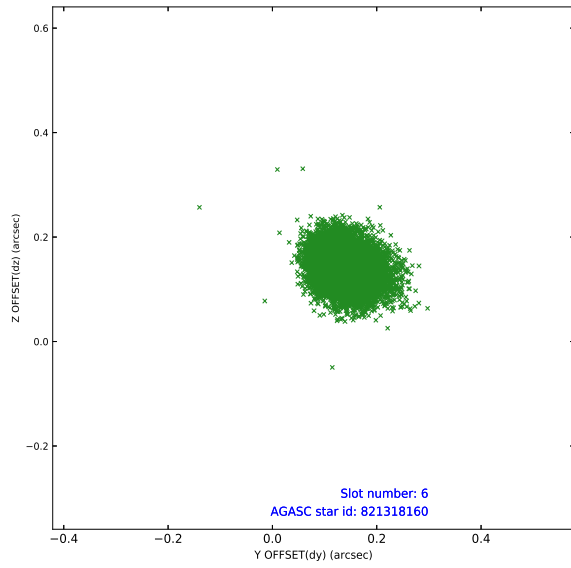
2.4.3 Slot 5



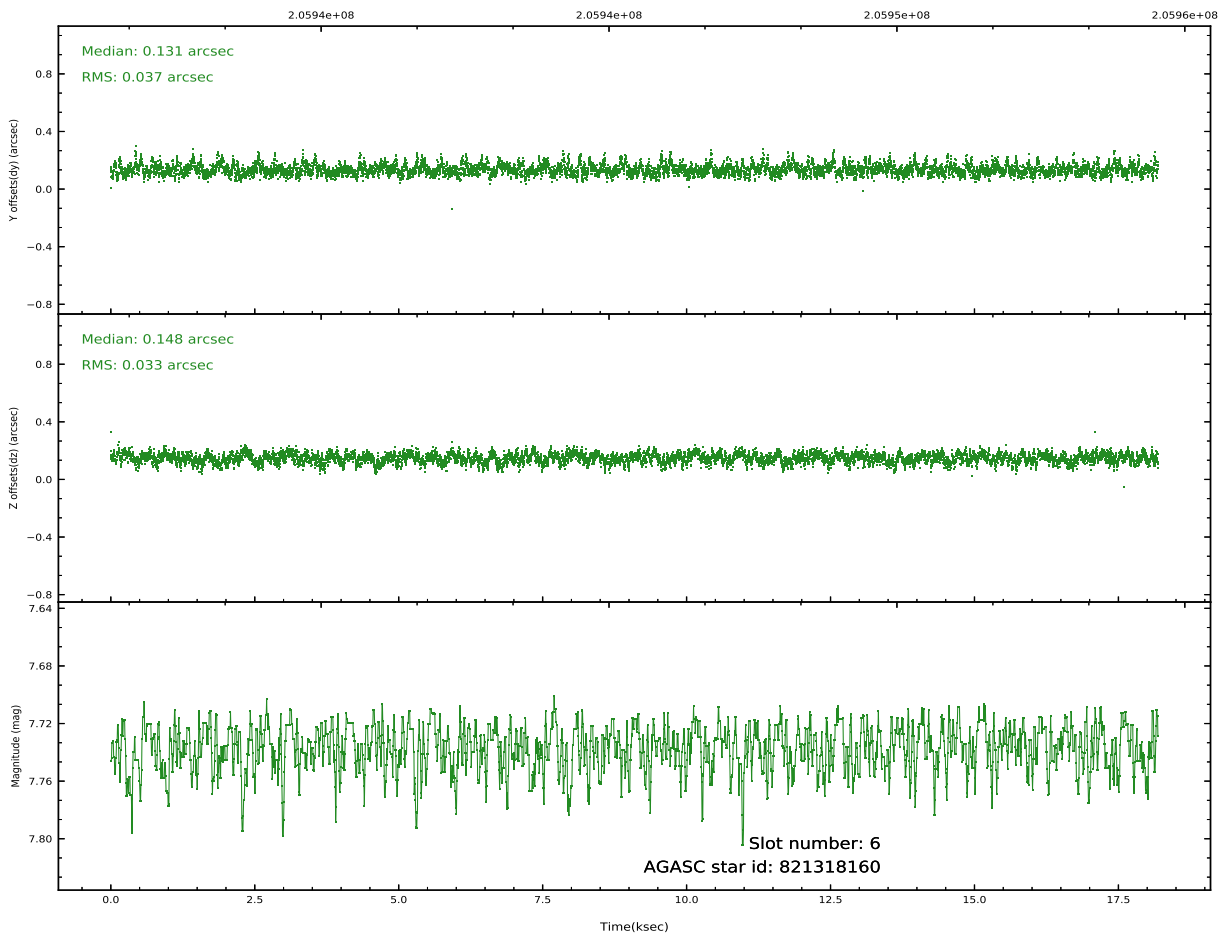
Time (s)



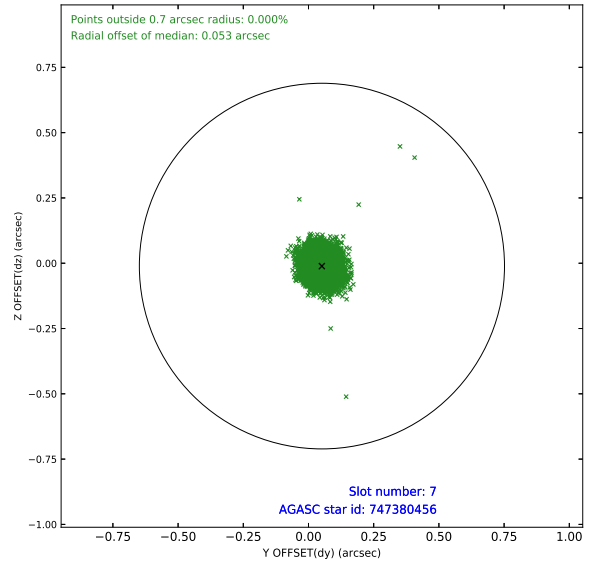
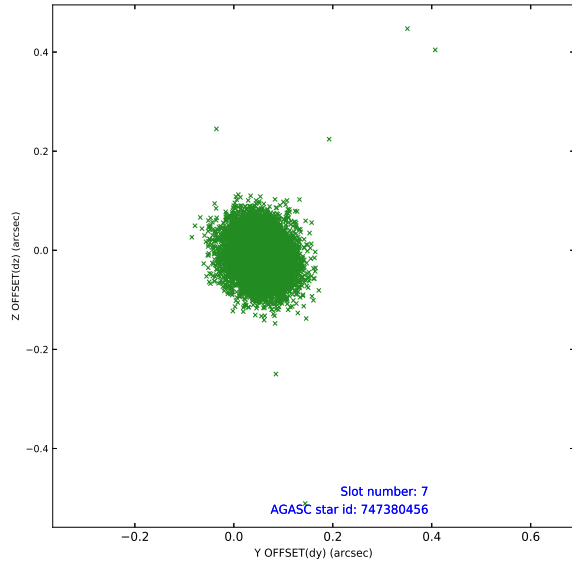
2.4.4 Slot 6



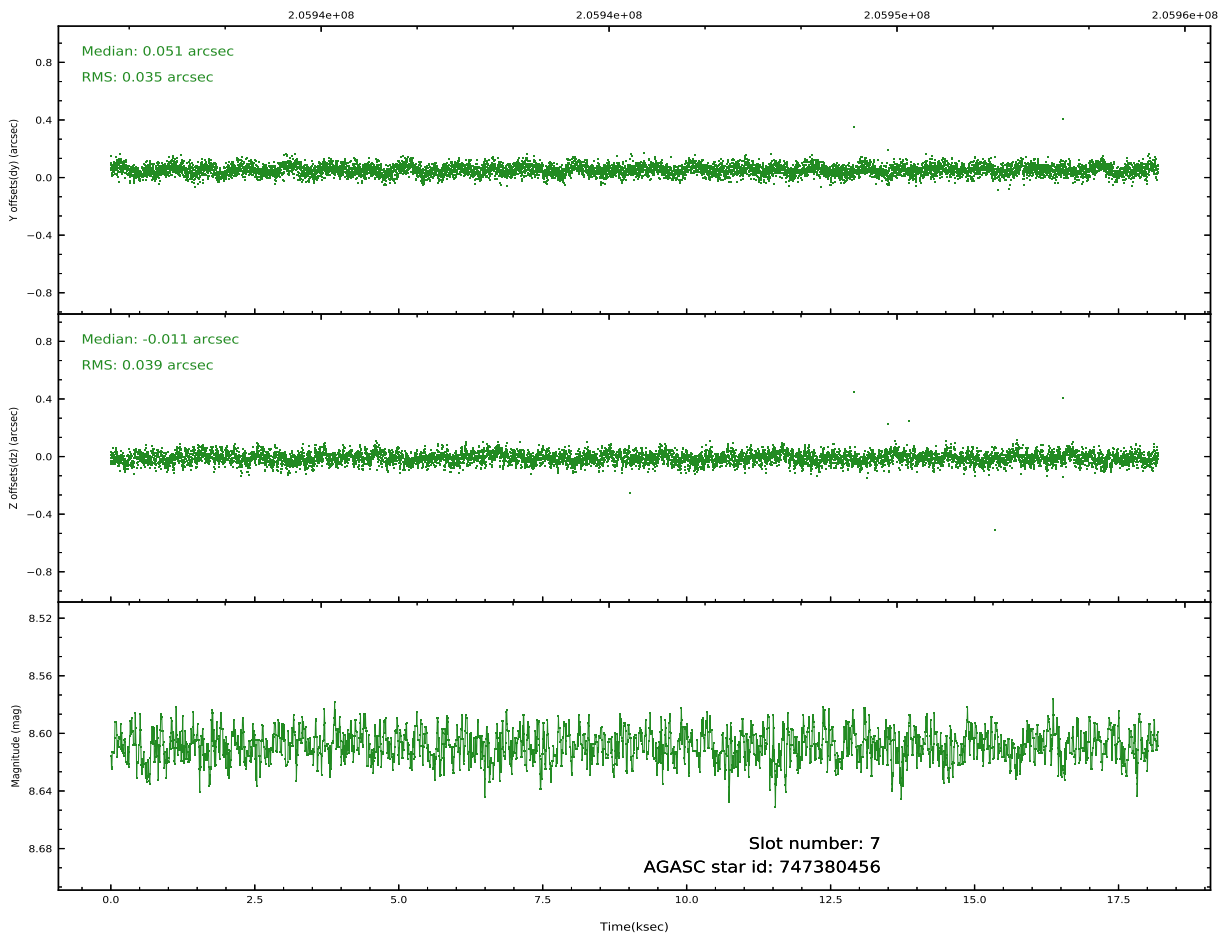
Time (s)



2.4.5 Slot 7

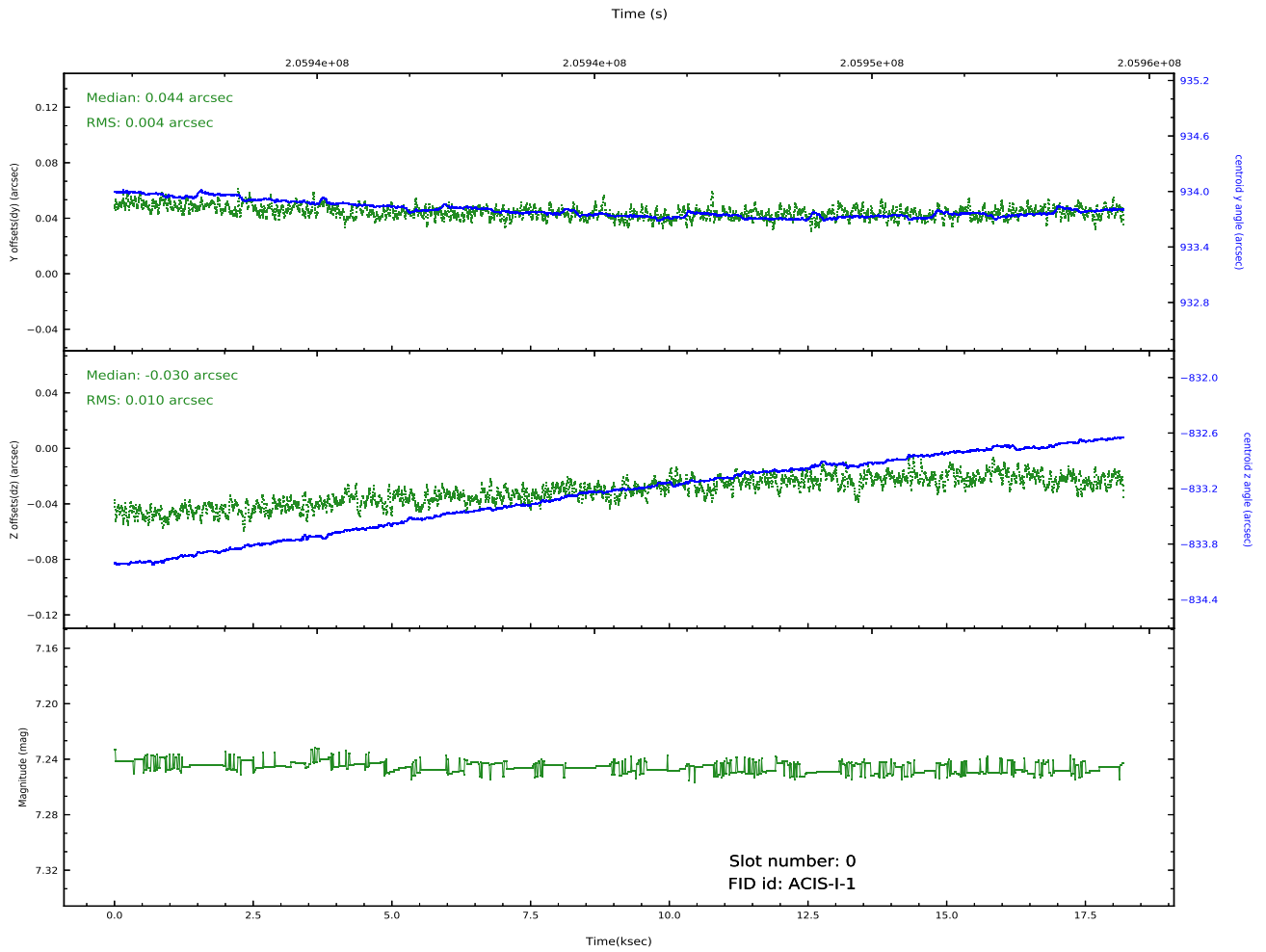
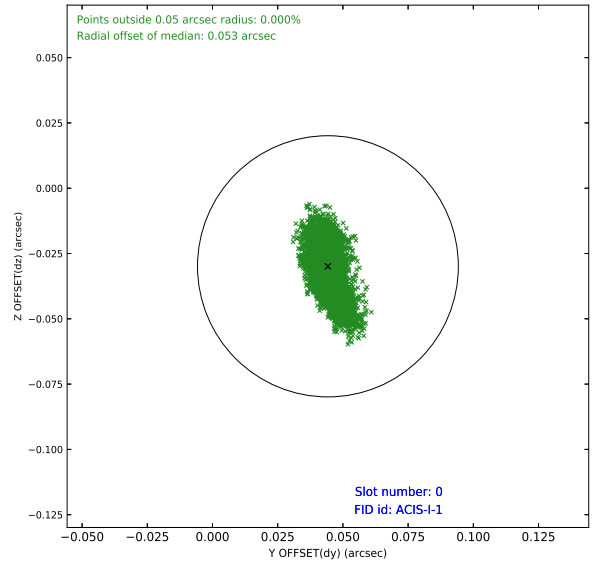
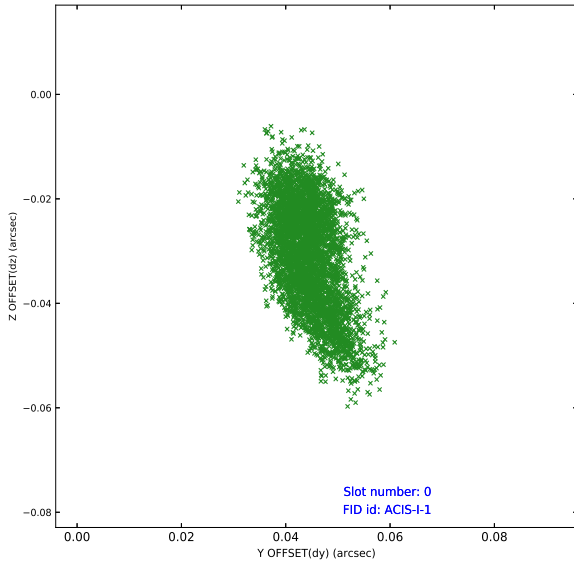


Time (s)

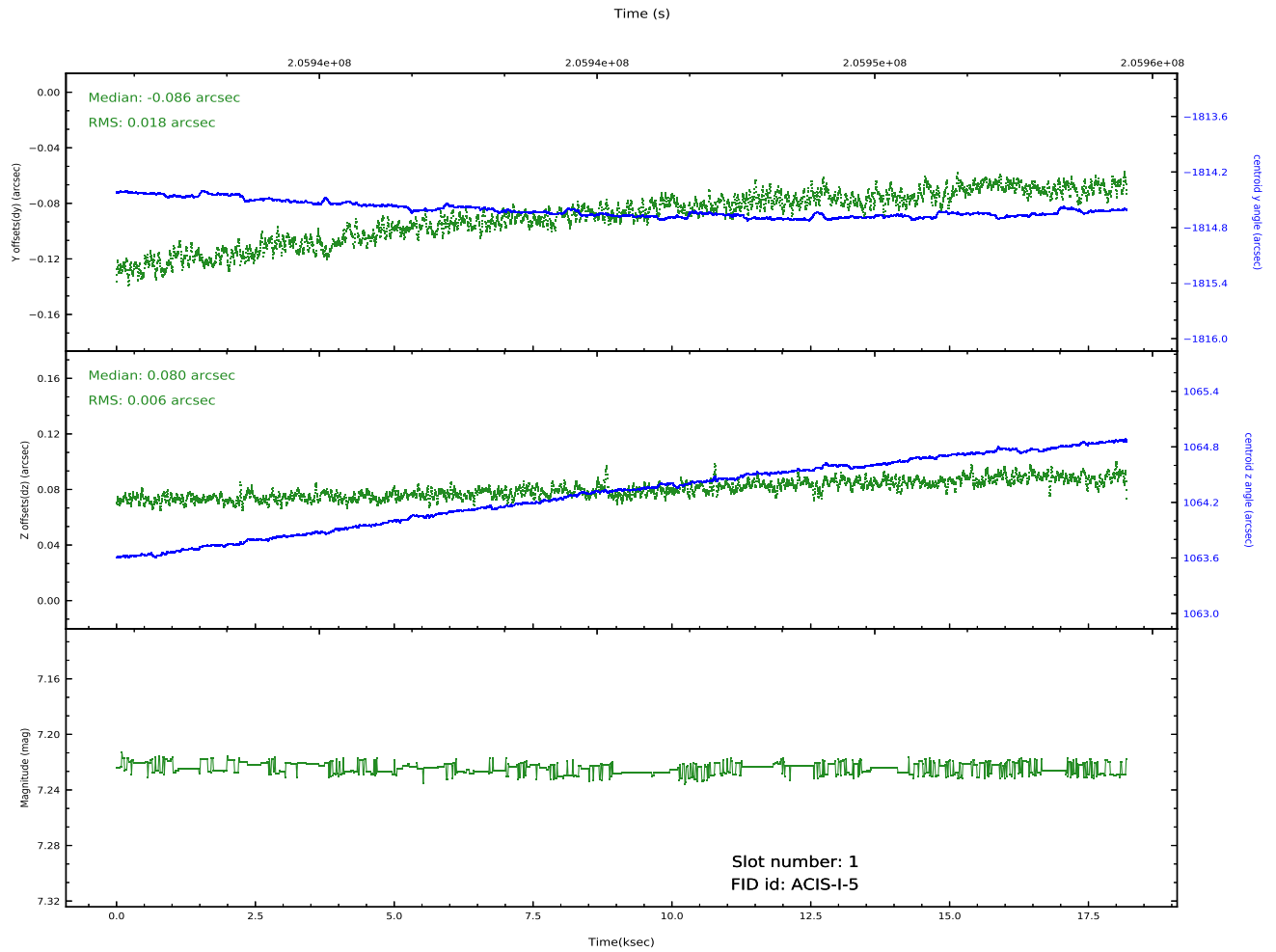
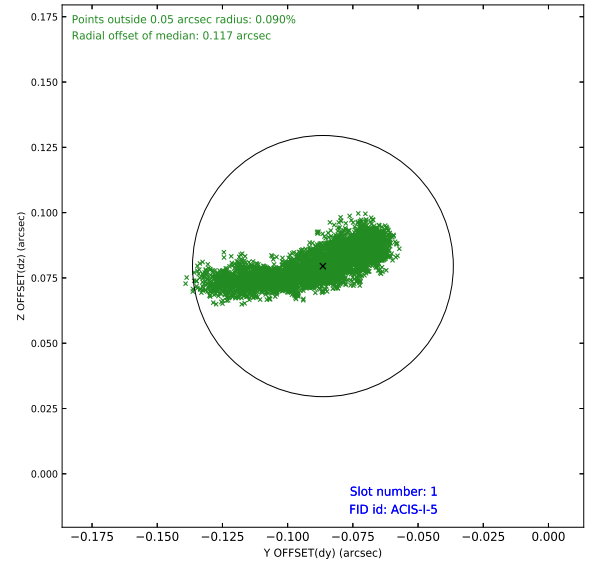
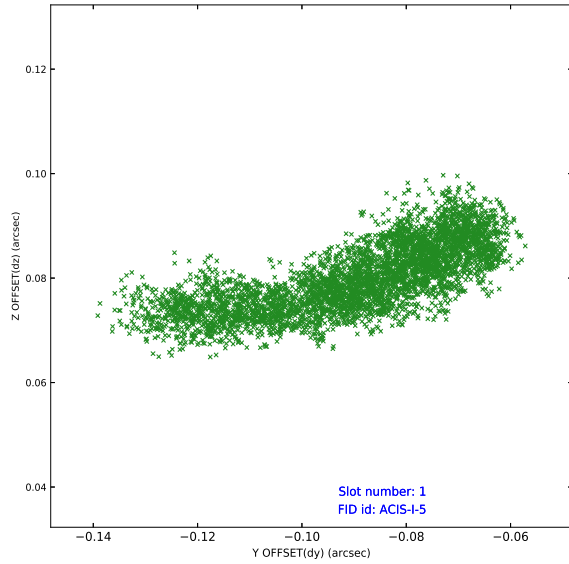


2.5 FID Slots

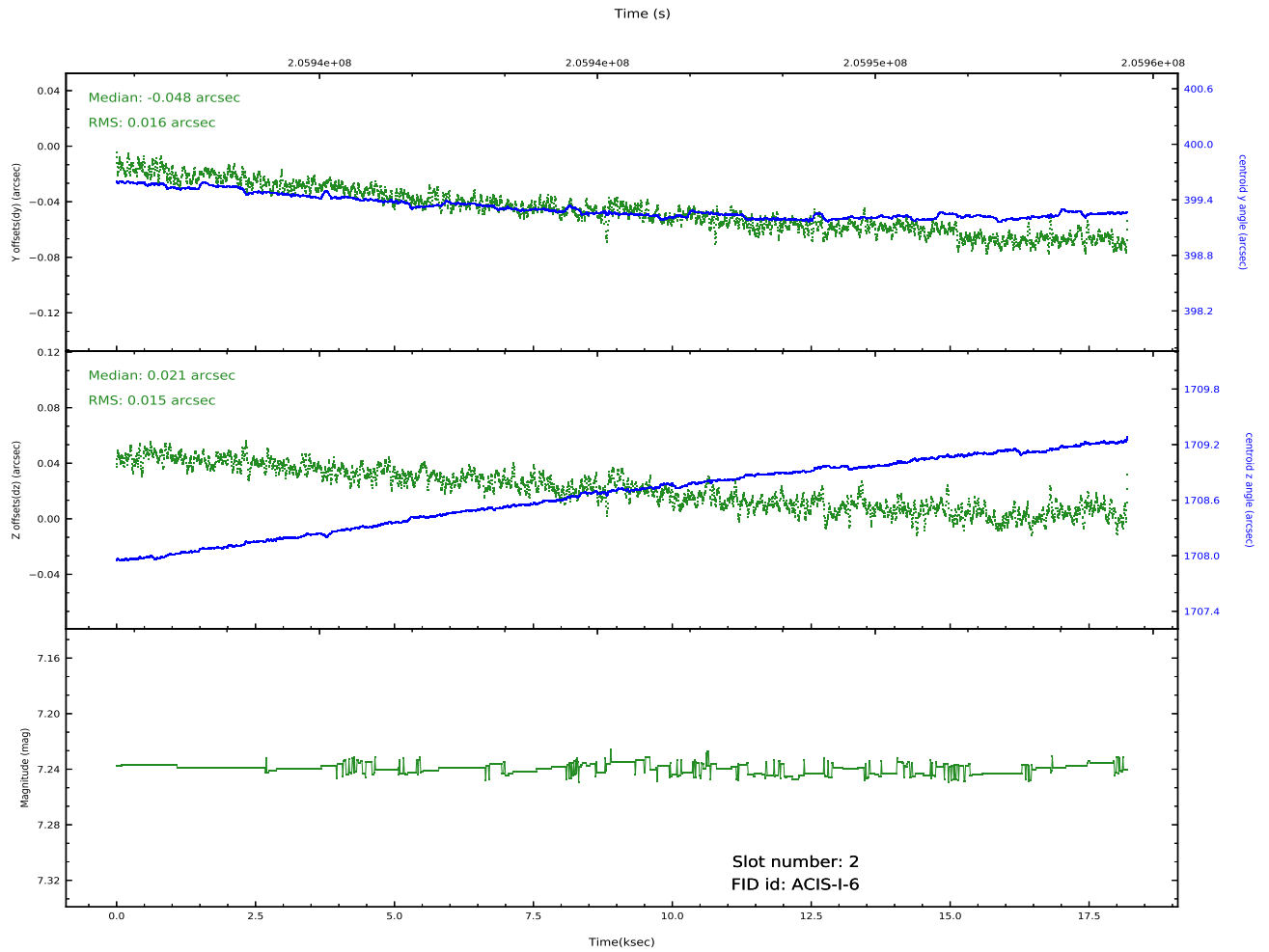
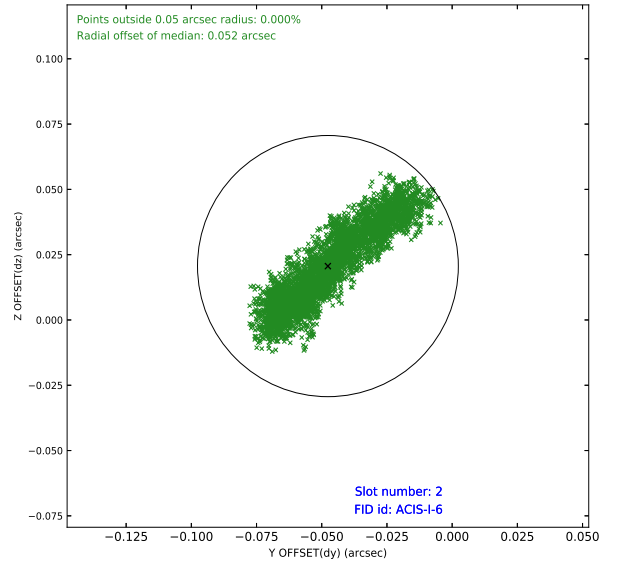
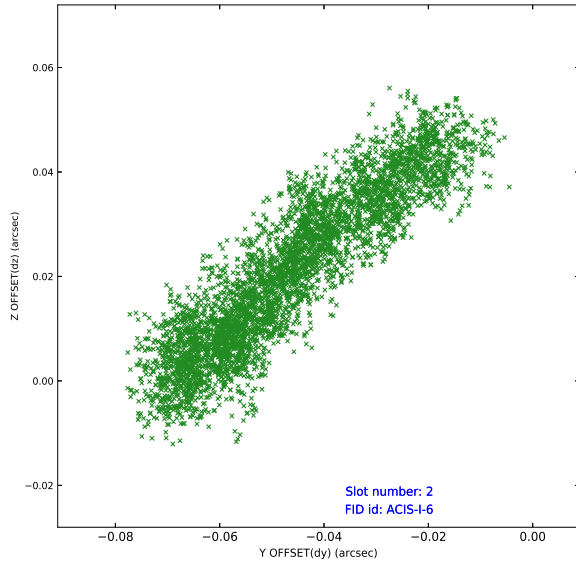
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.185

A.2 Comments

Roll constraint met.