

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5158 - L2 Version 4
Chandra X-Ray Center

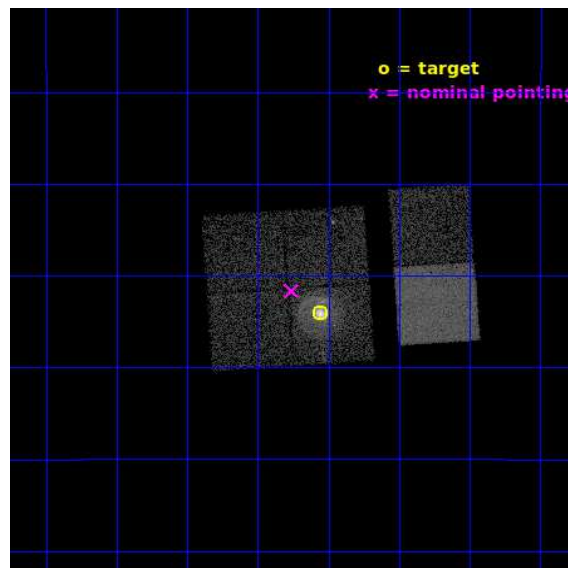
L2 Processing Date : Oct 6 2020

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1 Front

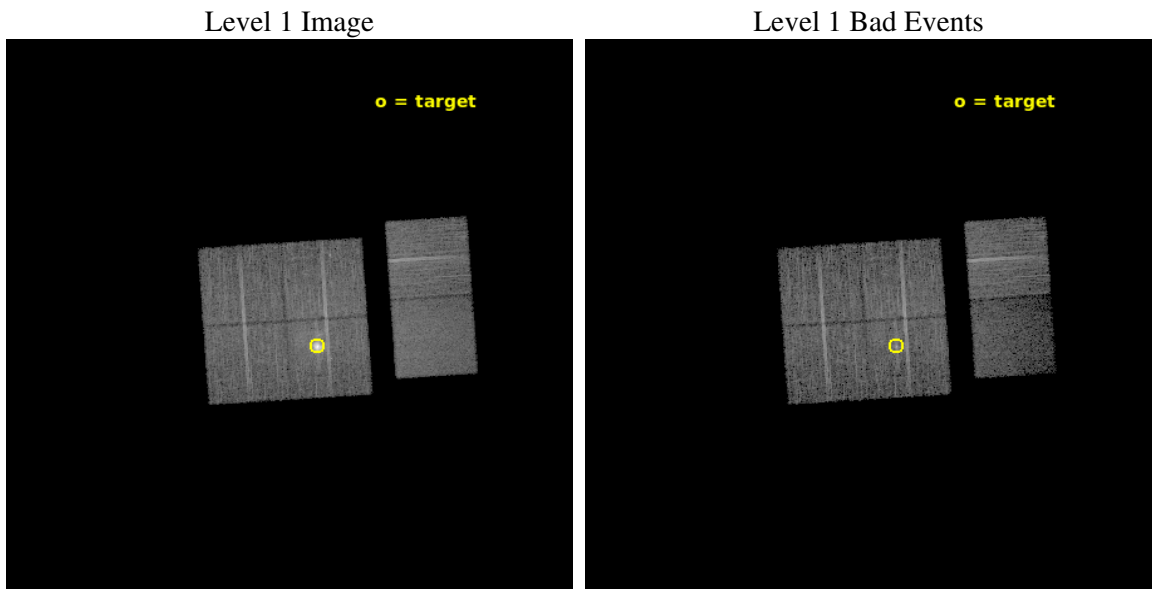
seq_num	590356	Sequence number
obs_id	5158	Observation id
title	AO5B Observations of the Standard Candles Cas A and G21.5-09	Propo
observer	CXC Calibration	Principal investigator
object	SNR G21.5-0.9	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA [deg]
dec_targ	-10.568528	Observer's specified target Dec [deg]
ra_nom	278.43970851557	Nominal RA [deg]
dec_nom	-10.527469688977	Nominal Dec [deg]
roll_nom	86.146268439148	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10127.99996227	Sum of GTIs [s]
livetime	9999.7531283986	Livetime [s]
ontime0	10127.99996227	Sum of GTIs [s]
ontime1	10127.99996227	Sum of GTIs [s]
ontime2	10127.99996227	Sum of GTIs [s]
ontime3	10127.99996227	Sum of GTIs [s]
ontime6	10127.99996227	Sum of GTIs [s]
ontime7	10127.99996227	Sum of GTIs [s]
l2events	81597	Number of level 2 events



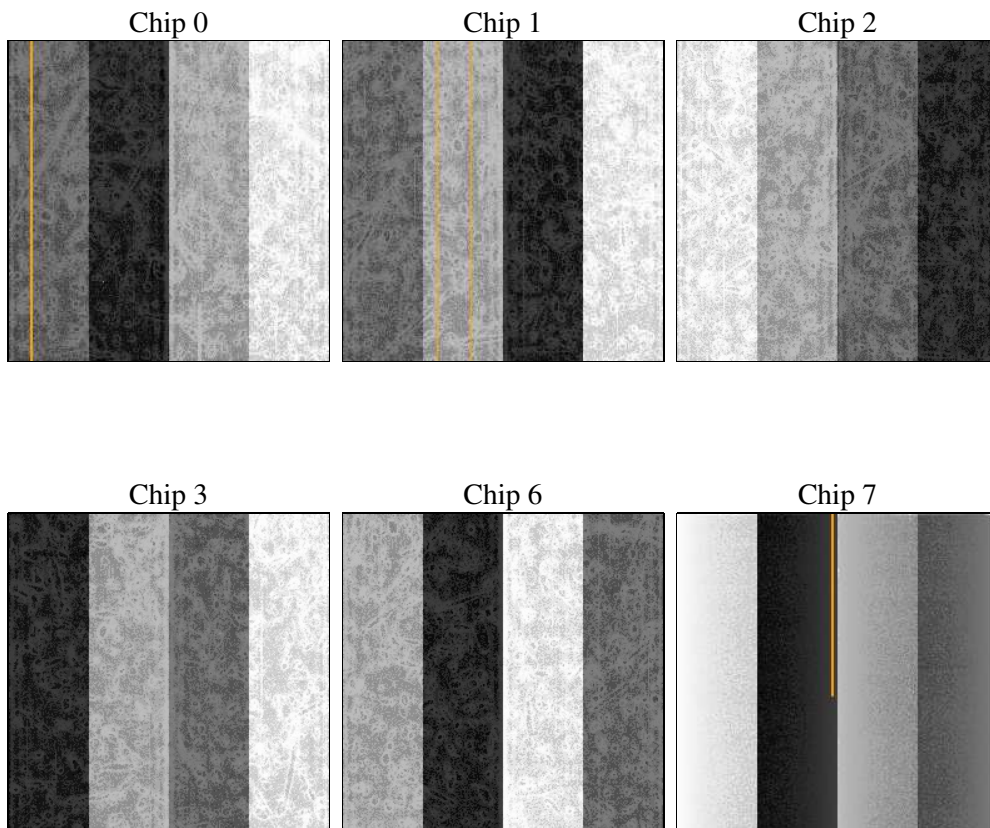
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10127.99996227	Sum of GTIs [s]
caldsver	4.9.2	 	ontime0	10127.99996227	Sum of GTIs [s]
date	2020-10-06T22:43:31	Date and time of file creation	ontime1	10127.99996227	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	10127.99996227	Sum of GTIs [s]
			ontime3	10127.99996227	Sum of GTIs [s]
			ontime6	10127.99996227	Sum of GTIs [s]
			ontime7	10127.99996227	Sum of GTIs [s]
			l1events	397568	Number of level 1 events

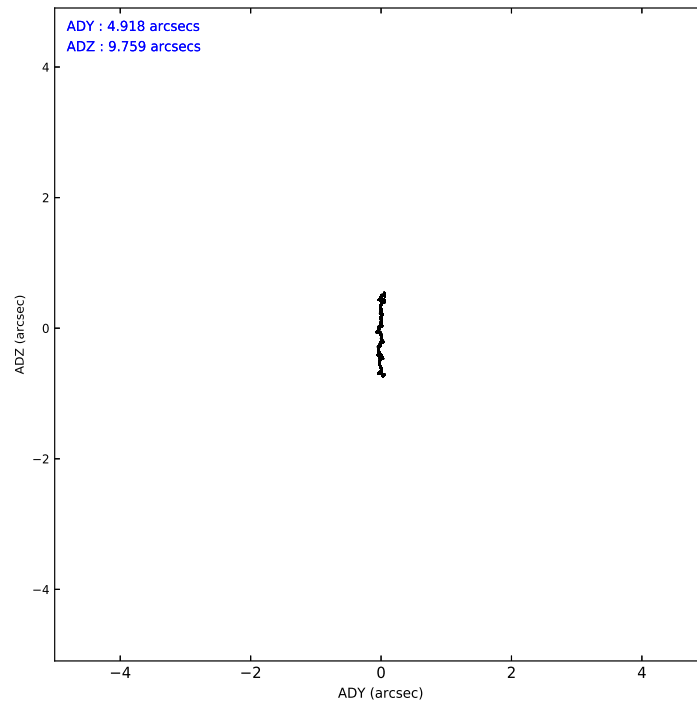
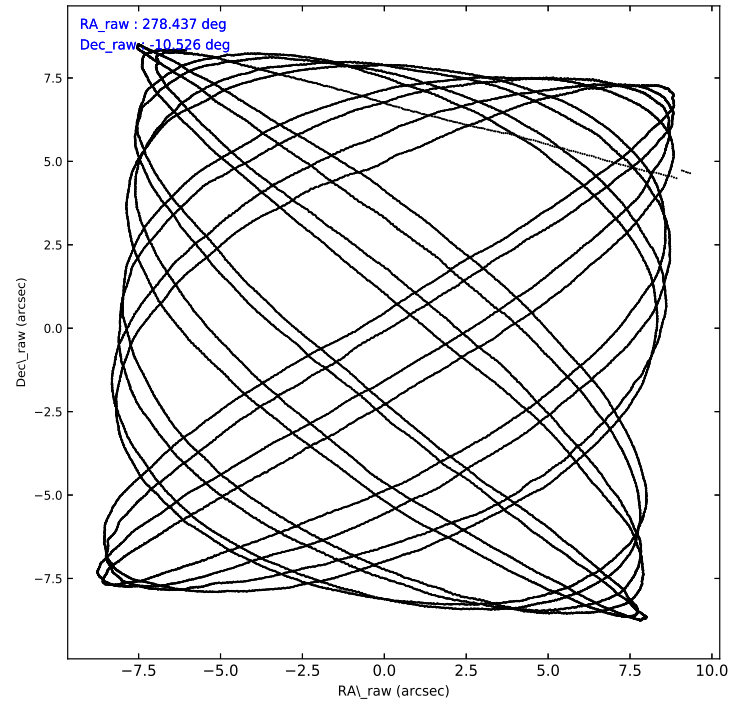
2.1.4 Events

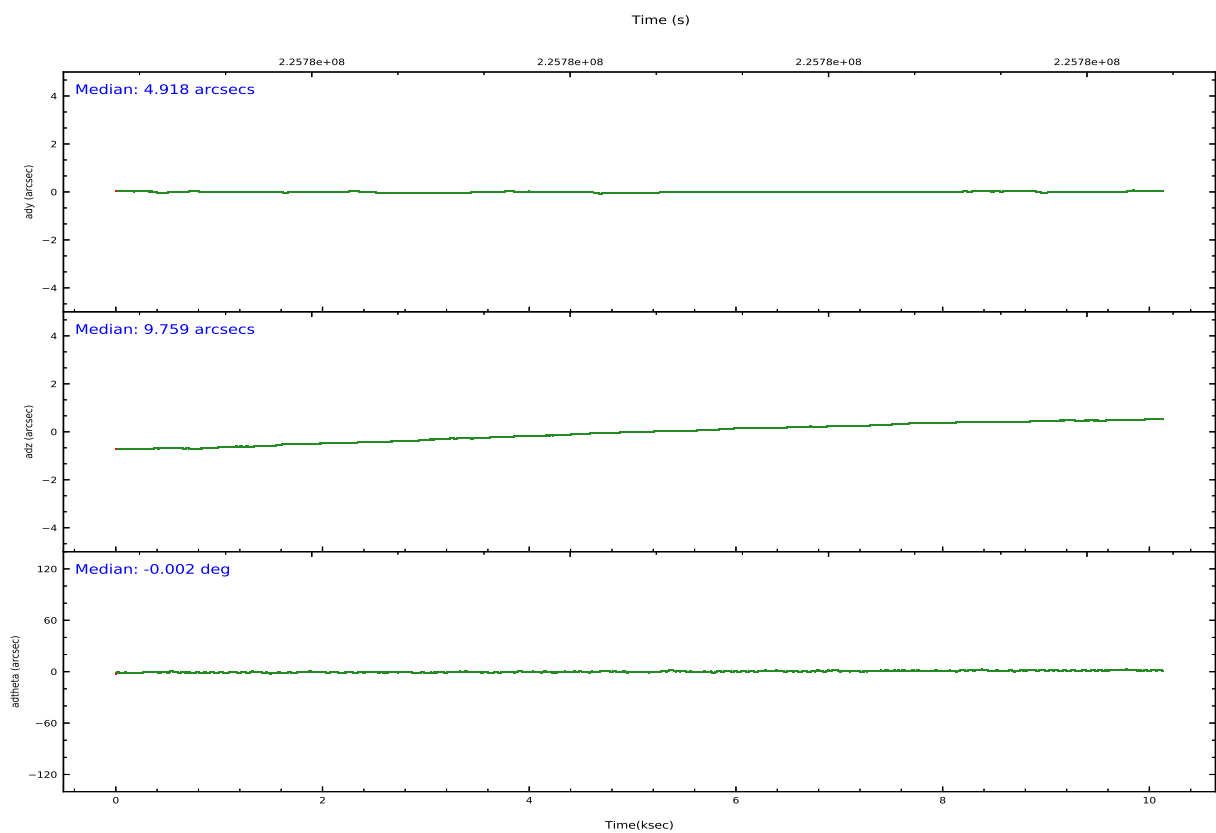
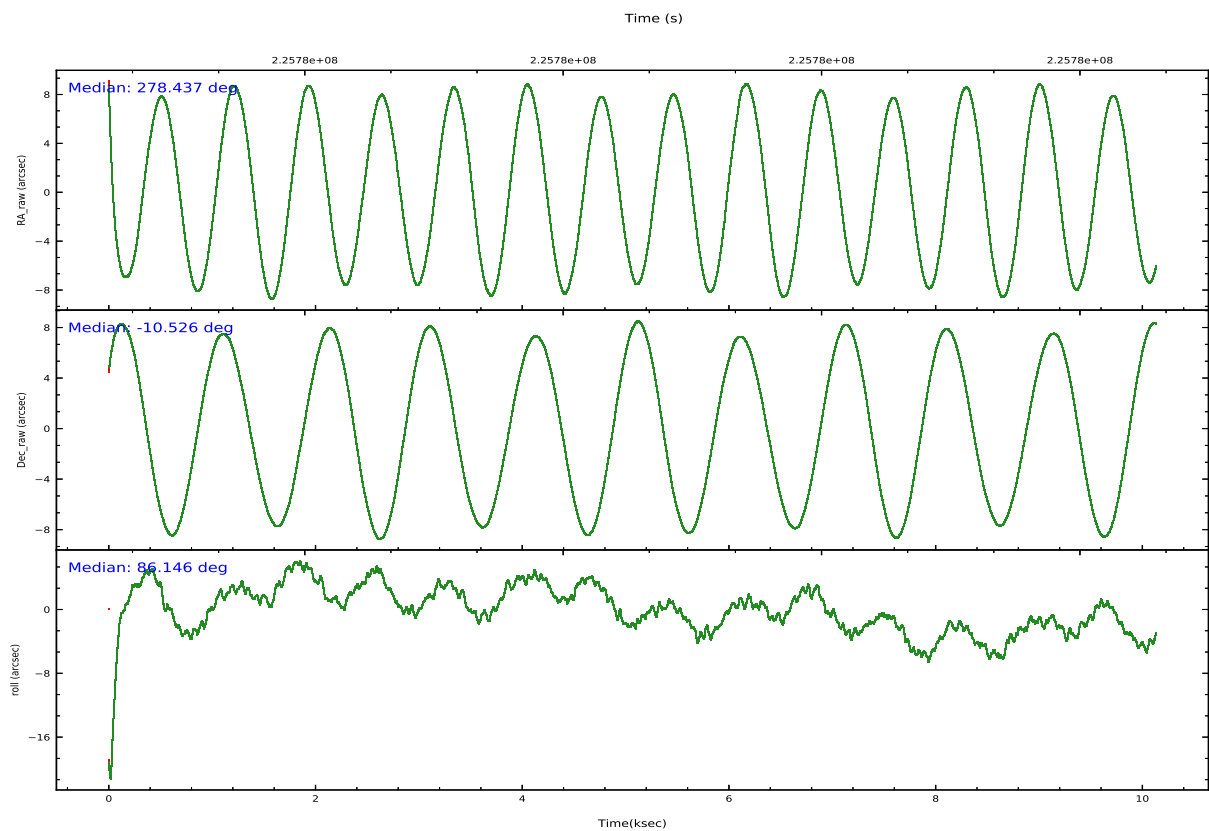
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	59105	58167	66067	90998	64246	58985	grade 0 events	2478	2676	3228	25376	2606	2858
rejected events	52902	51522	59134	55112	57939	31173		4%	4%	4%	27%	4%	4%
rejected %	89%	88%	89%	60%	90%	52%	grade 1 events	22	24	35	286	31	55
								0%	0%	0%	0%	0%	0%
							grade 2 events	1606	1502	1609	5057	1387	6233
								2%	2%	2%	5%	2%	10%
							grade 3 events	697	846	710	1880	748	2922
								1%	1%	1%	2%	1%	4%
							grade 4 events	646	783	725	1961	700	2851
								1%	1%	1%	2%	1%	4%
							grade 5 events	1830	2042	1773	2148	2207	6533
								3%	3%	2%	2%	3%	11%
							grade 6 events	1091	1321	1020	2479	1205	14423
								1%	2%	1%	2%	1%	24%
							grade 7 events	50735	48973	56967	51811	55362	23110
								85%	84%	86%	56%	86%	39%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	278.449371	278.43970851557	Subarray requested	NONE	NONE
[deg] Pointing Dec	-10.550322	-10.527469688977	Alternating exposures requested	N	N
[deg] Pointing Roll	85.936344	86.146268439148	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	212976064.184000	212976064.184000			
[s] Window stop time (MET)	228614464.184000	228614464.184000			
[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)	225775737.184000	225774419.71858			
Observation start date	2005-02-26T03:27:53	2005-02-26T03:06:59			
[s] Observation end time (MET)	225785737.184000	225785871.0191			
Observation end date	2005-02-26T06:14:33	2005-02-26T06:17:51			
Read mode	TIMED	TIMED			

2.3 Aspect



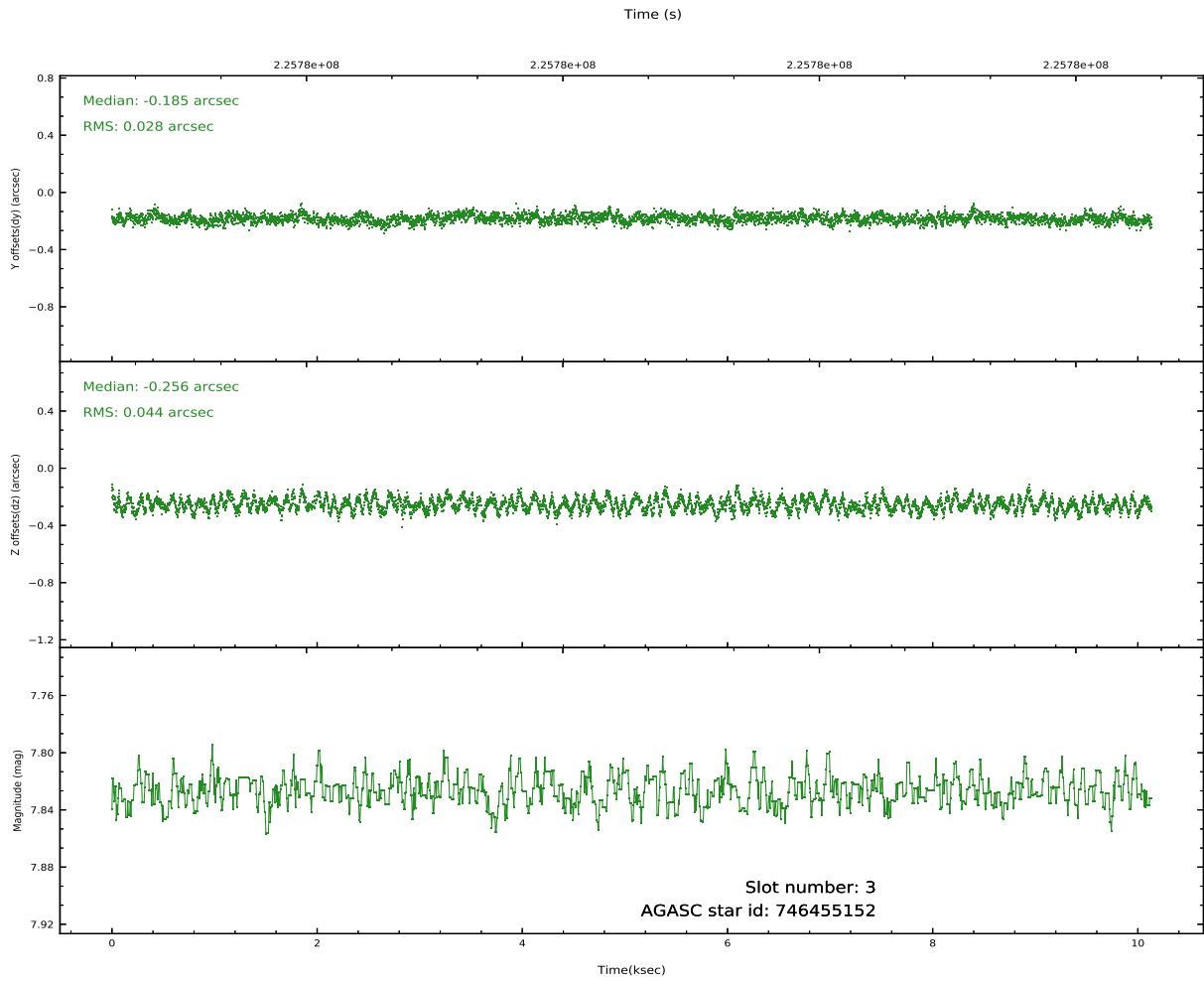
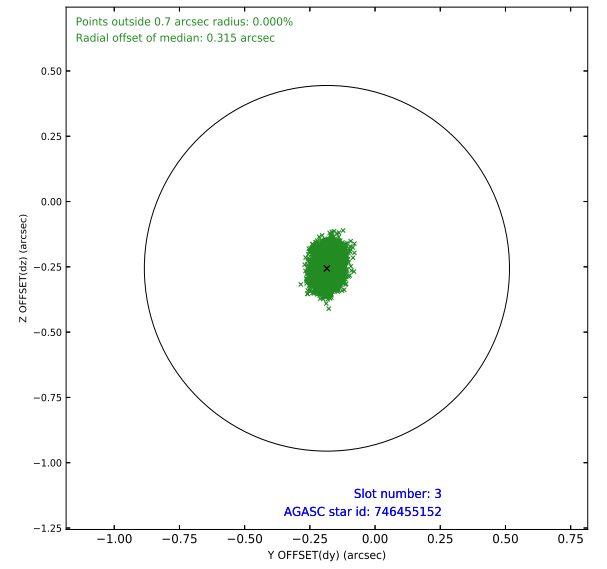
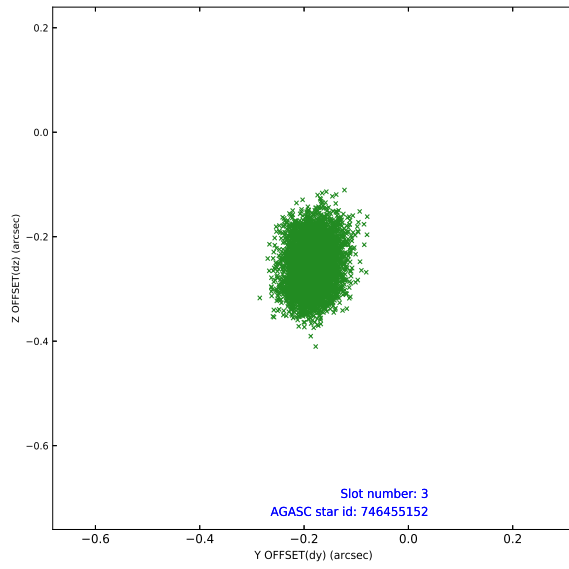


Slot Statistics

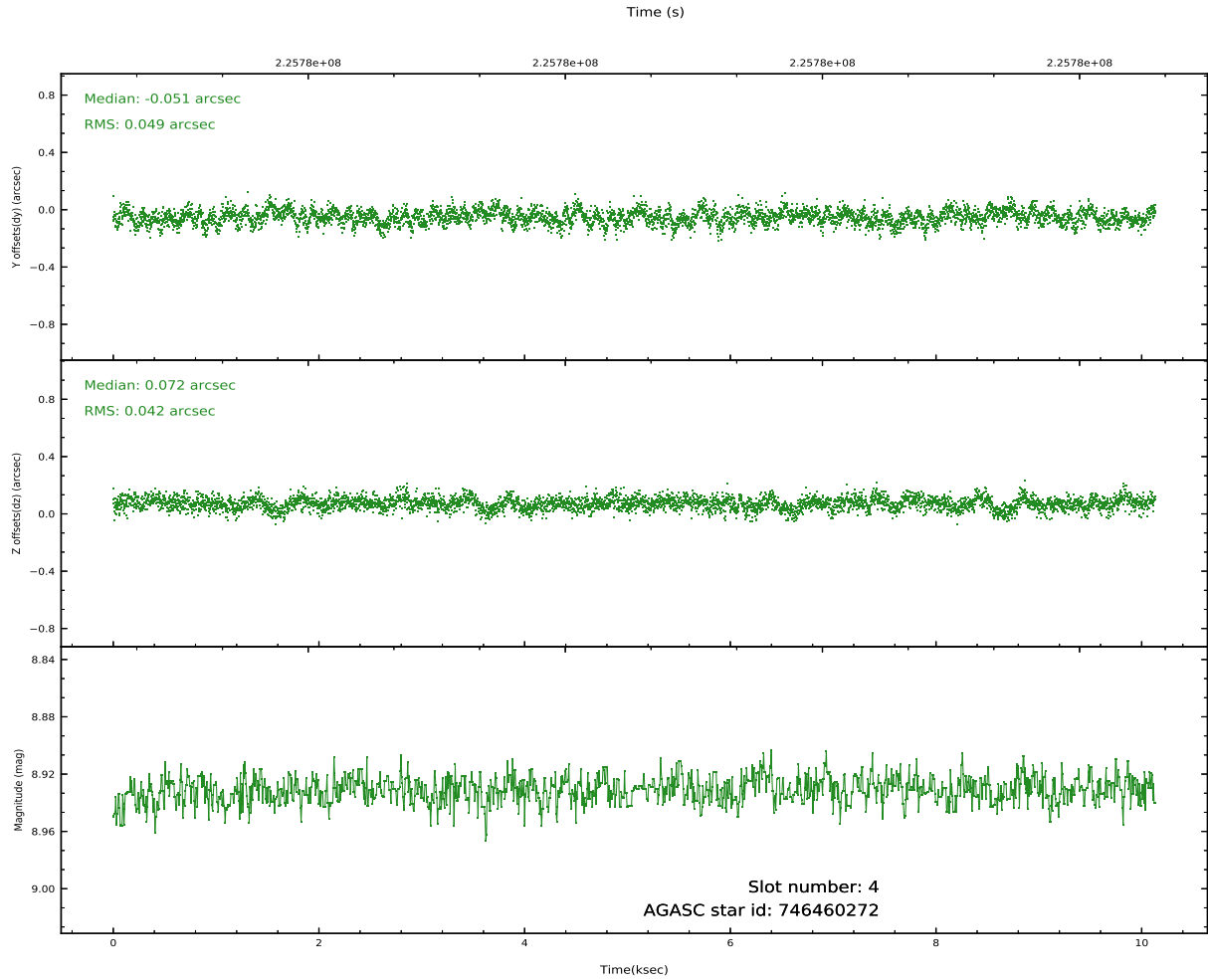
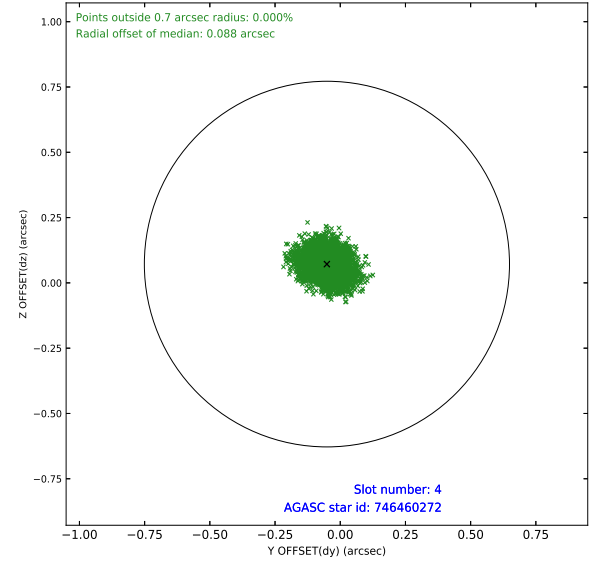
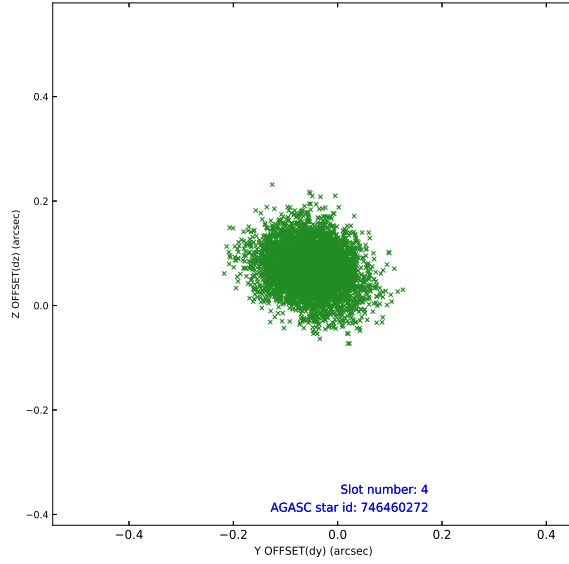
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	2472	1.000	0.026	0.002	0.016	0.025	0.000000	0.000000	934.85	-833
1	FID		ACIS-I-5	7.22	2472	1.000	-0.217	0.030	0.008	0.012	0.000000	0.000000	-1813.22	1064
2	FID		ACIS-I-6	7.25	2472	1.000	0.099	0.039	0.016	0.026	0.000000	0.000000	399.89	1709
3	GUIDE	used	746455152	7.83	4944	1.000	-0.185	-0.256	0.056	0.090	278.447893	-9.976732	2059.54	151
4	GUIDE	used	746460272	8.93	4939	1.000	-0.051	0.072	0.068	0.113	278.847488	-10.152127	1529.75	-1305
5	GUIDE	used	746462392	8.52	4943	1.000	0.148	0.126	0.074	0.119	279.038421	-10.890715	-1076.91	-2164
6	GUIDE	used	746462456	8.39	4941	1.000	0.120	-0.019	0.057	0.092	278.652171	-10.530173	122.60	-711
7	GUIDE	used	746460328	9.83	4940	1.000	-0.033	0.084	0.117	0.193	278.603974	-9.898096	2380.82	-380

2.4 Star Slots

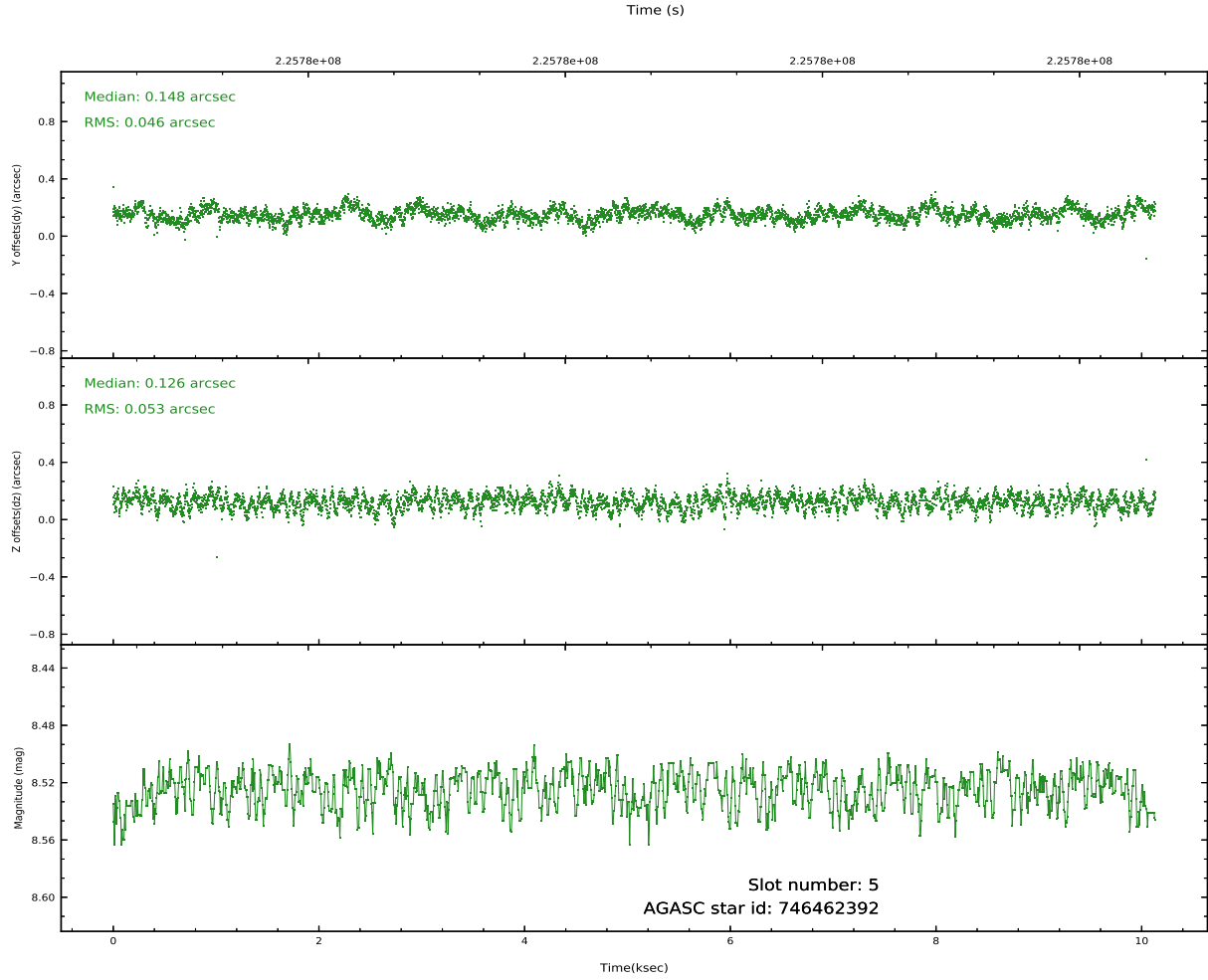
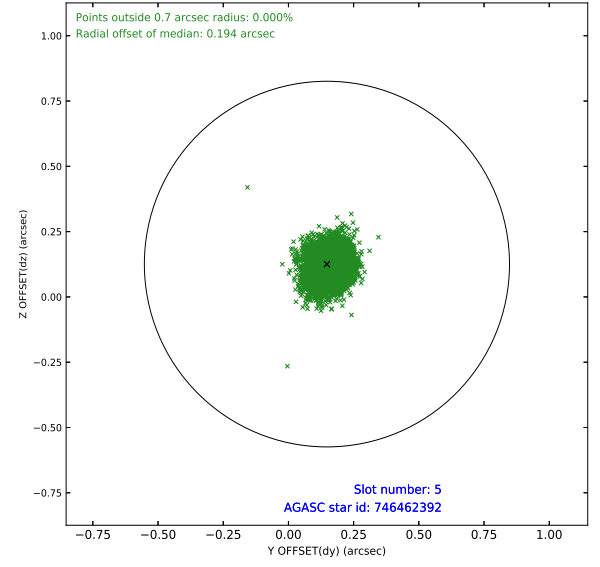
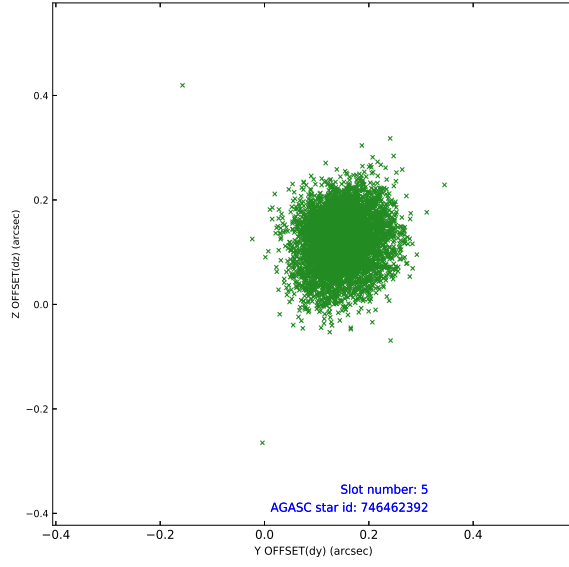
2.4.1 Slot 3



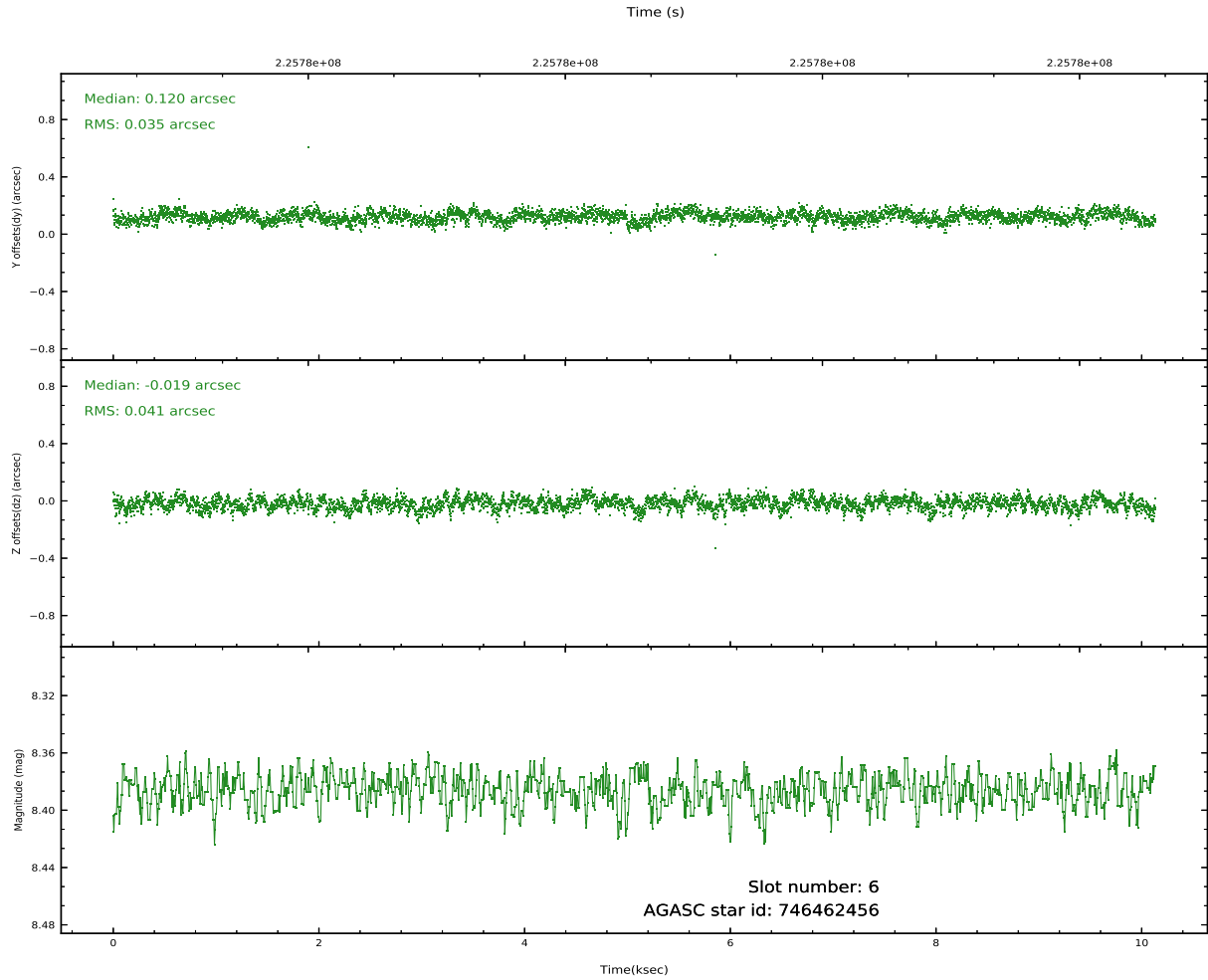
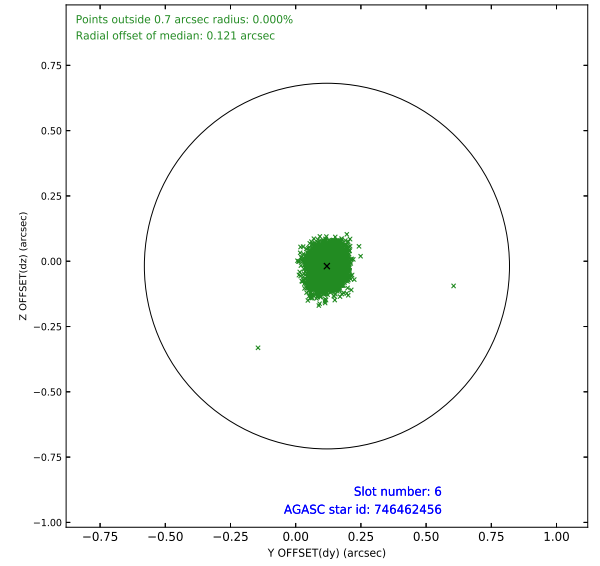
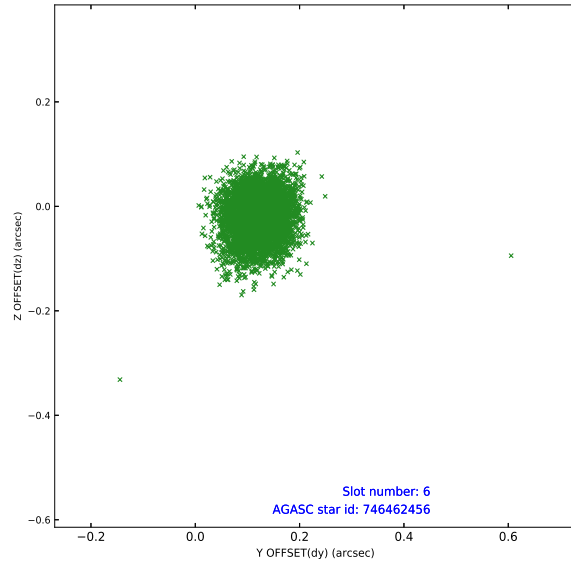
2.4.2 Slot 4



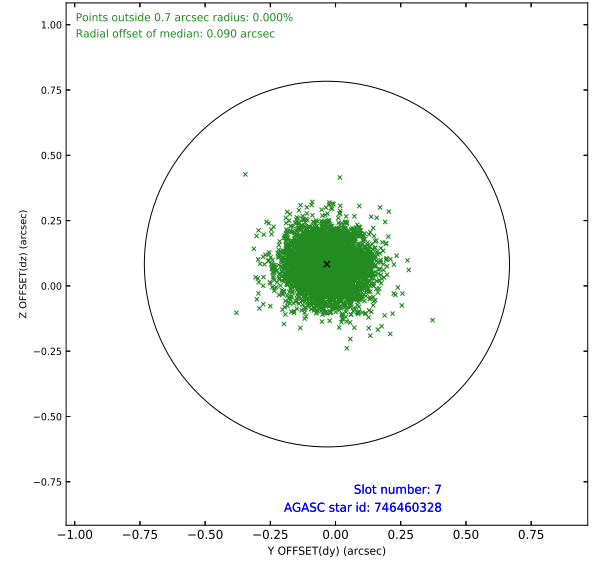
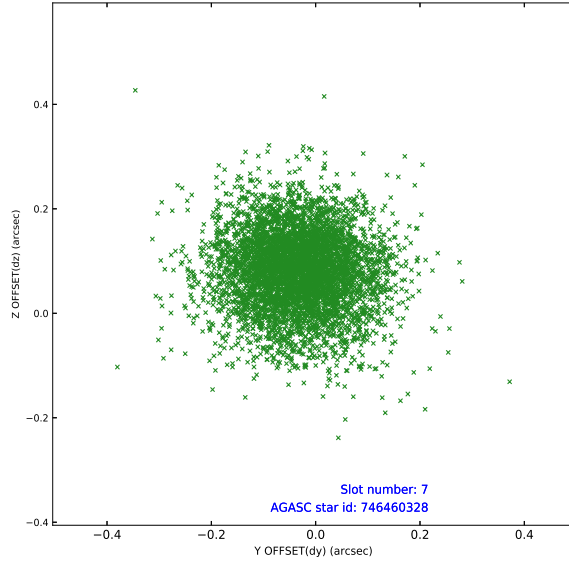
2.4.3 Slot 5



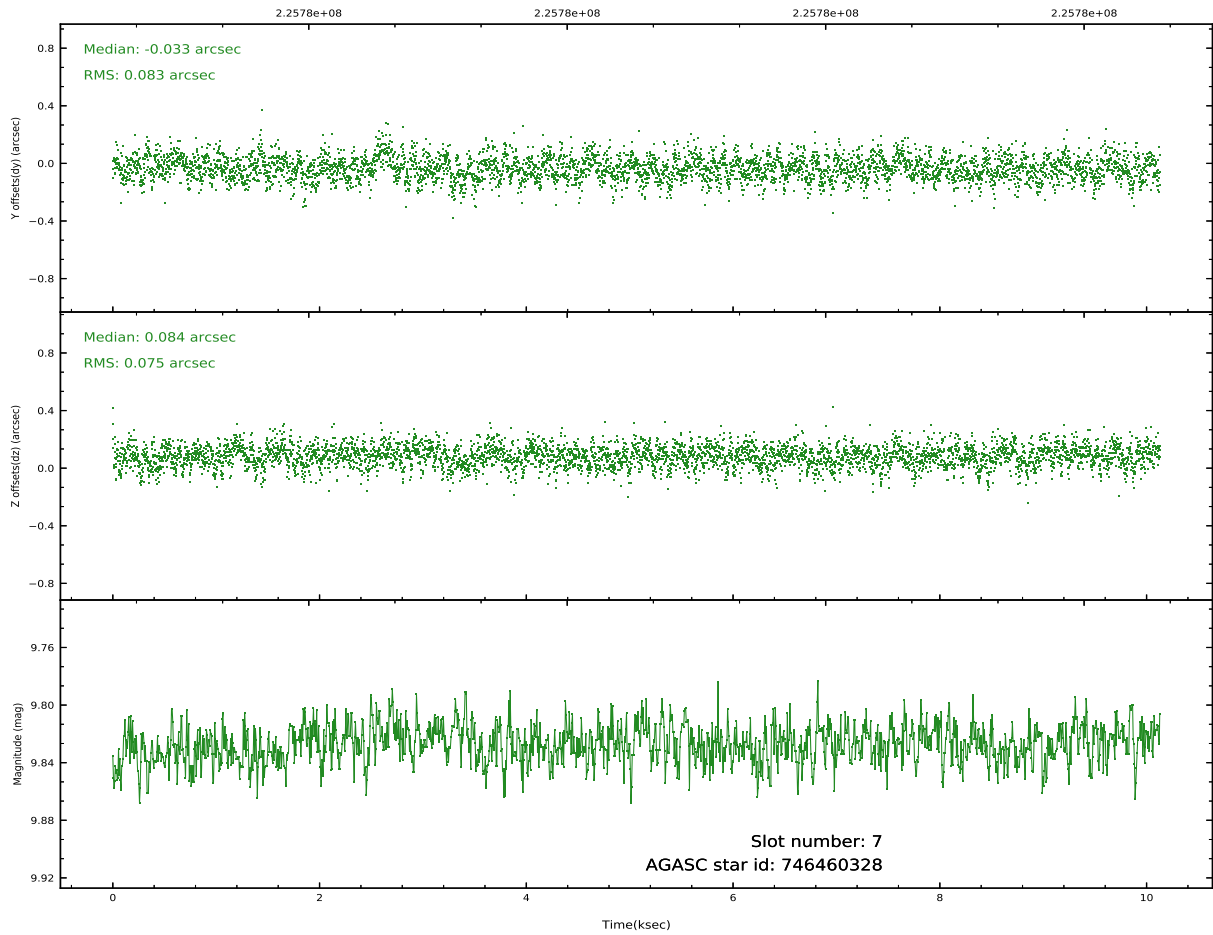
2.4.4 Slot 6



2.4.5 Slot 7

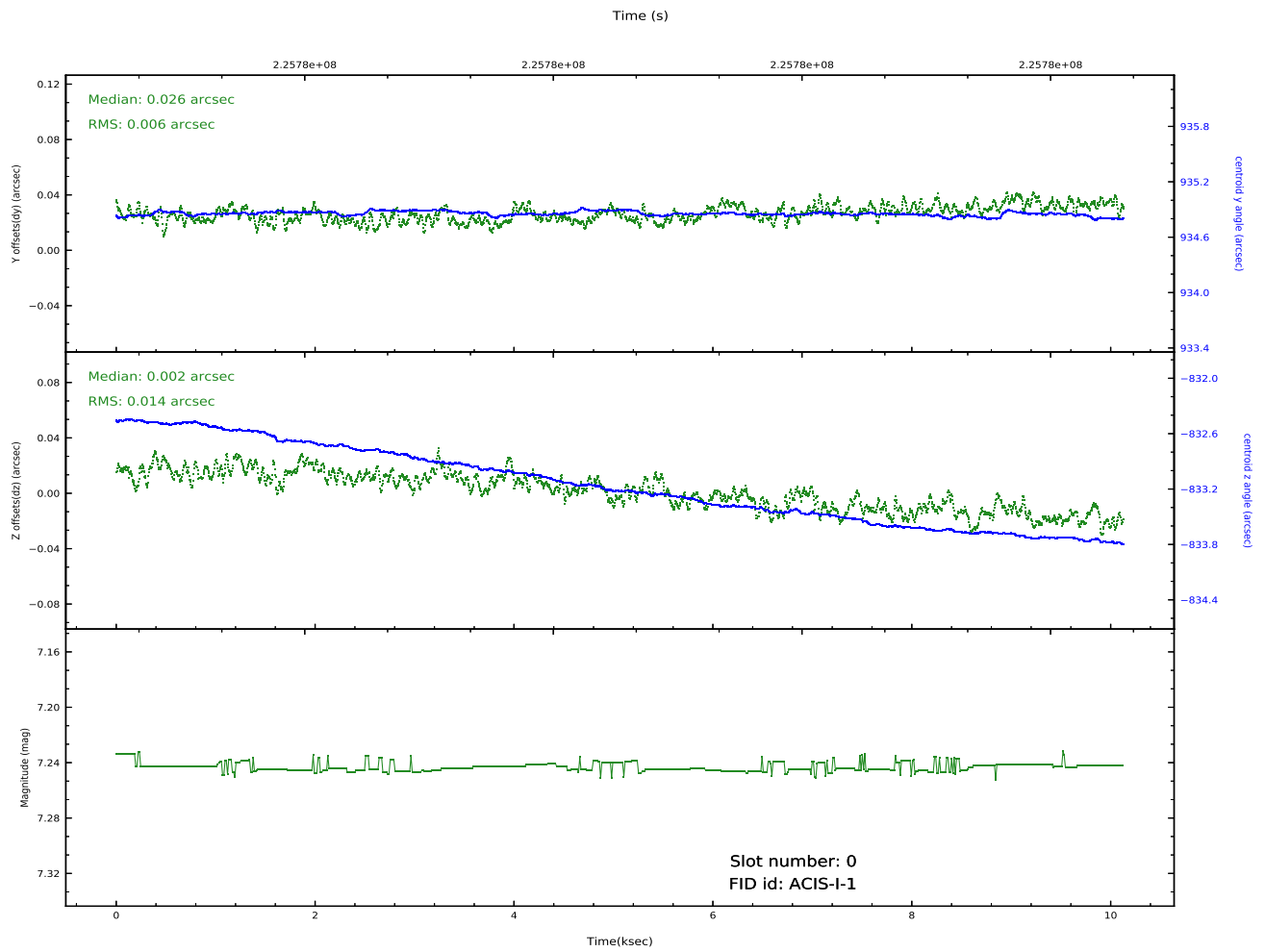
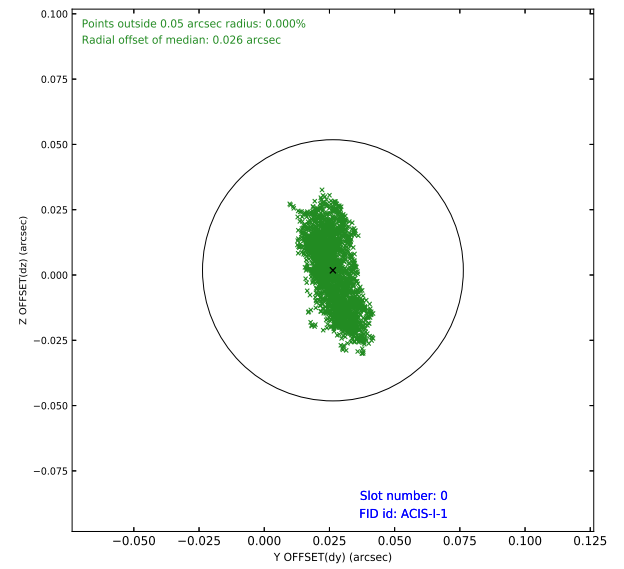
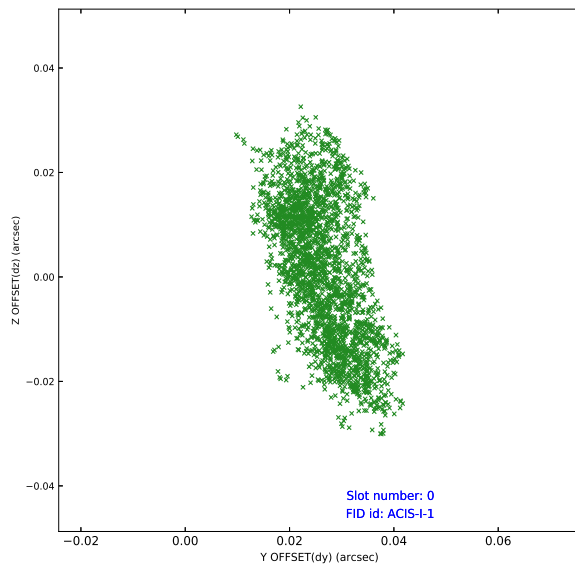


Time (s)

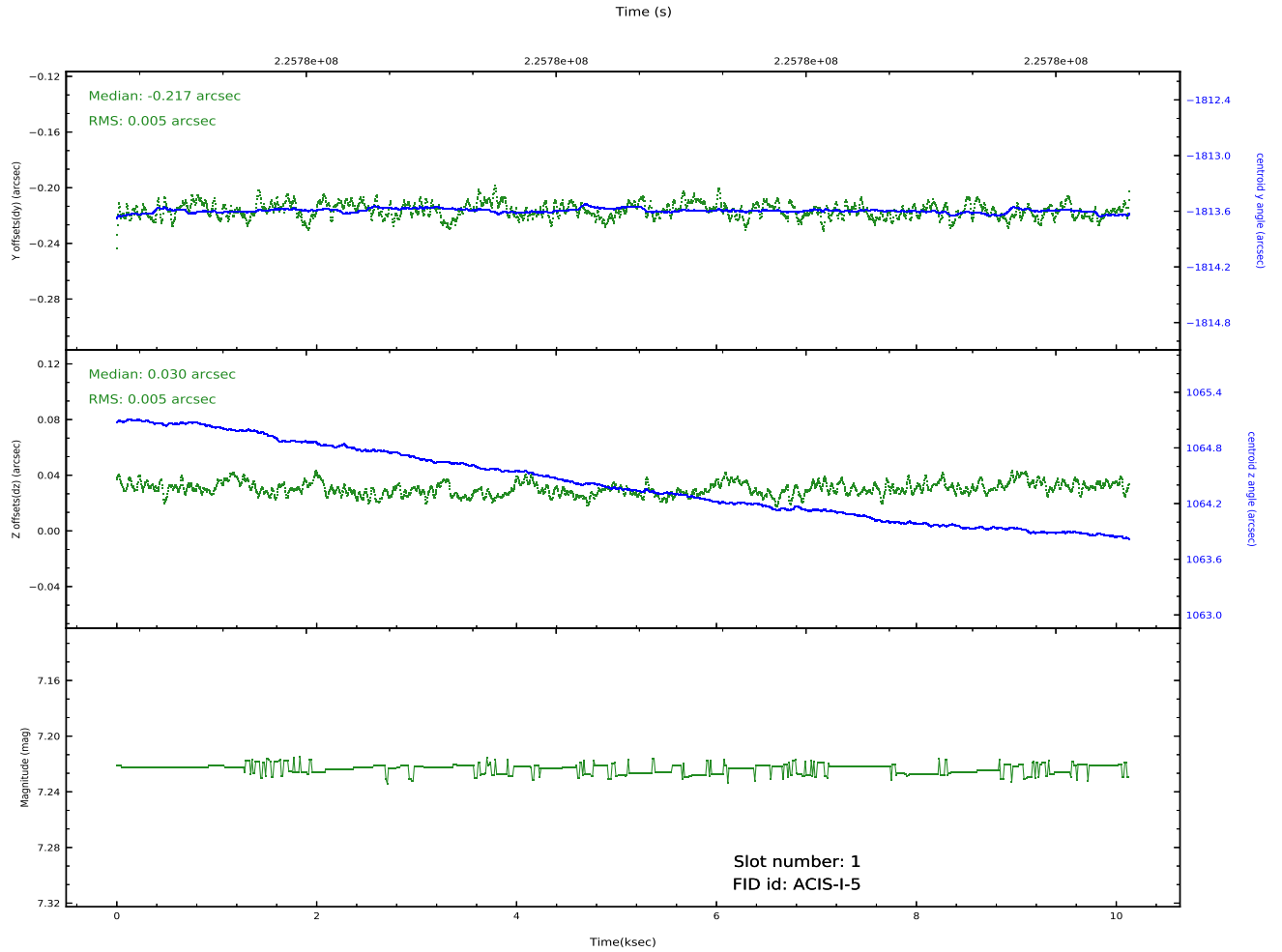
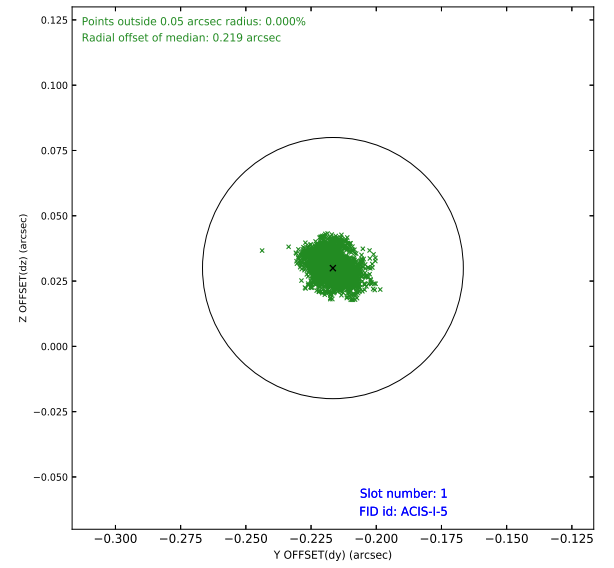
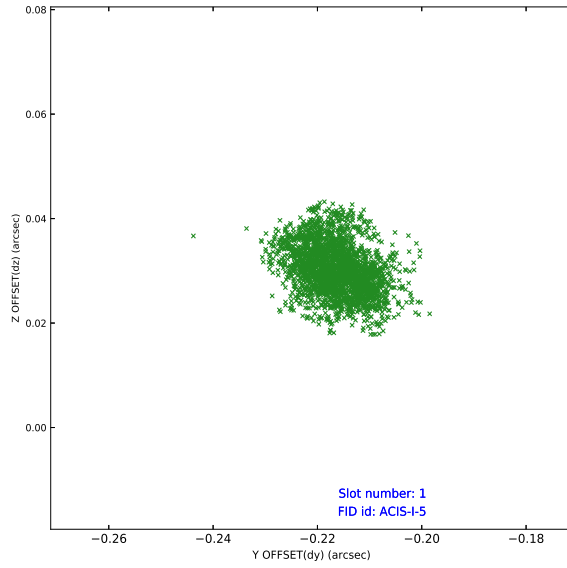


2.5 FID Slots

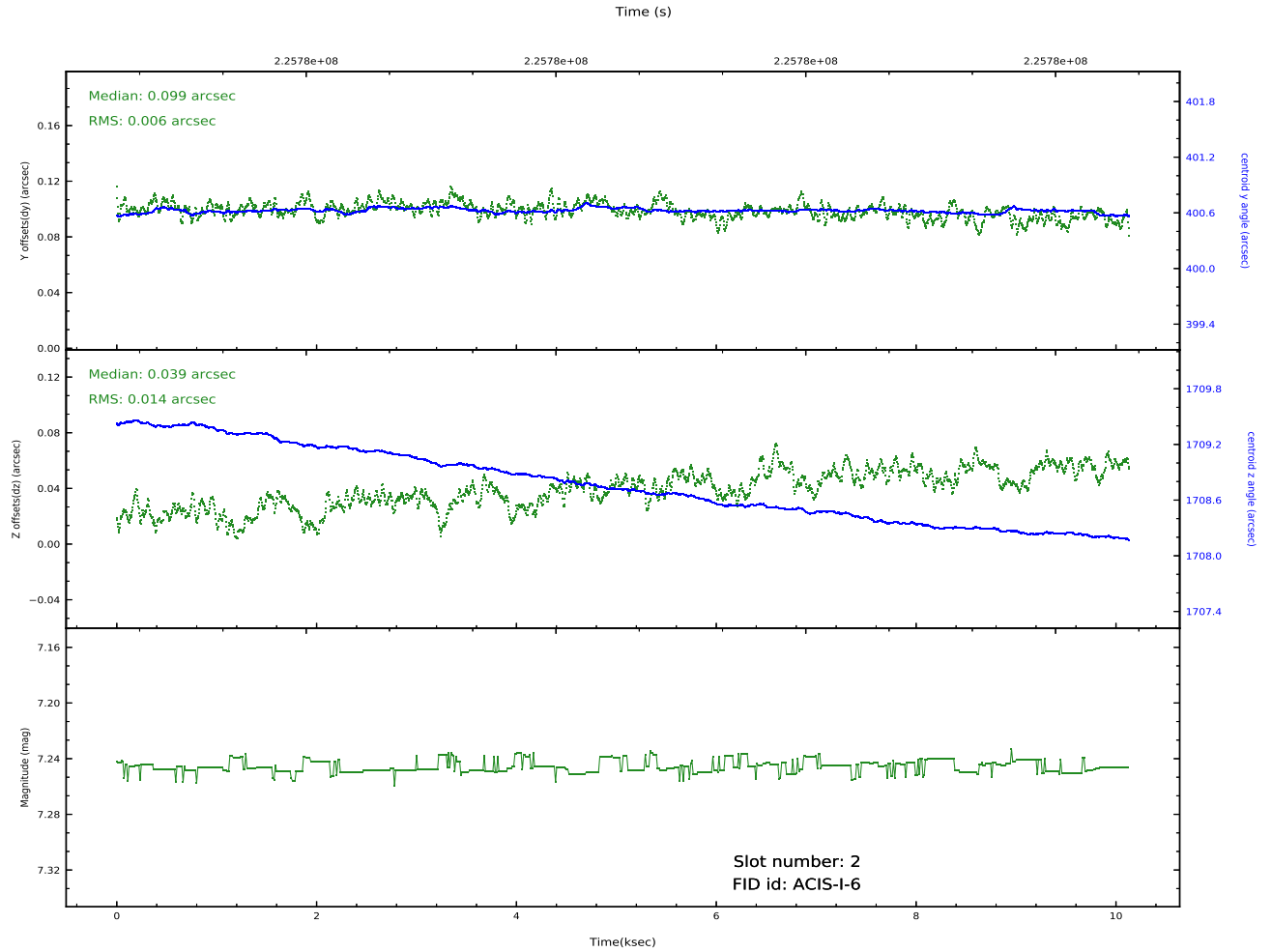
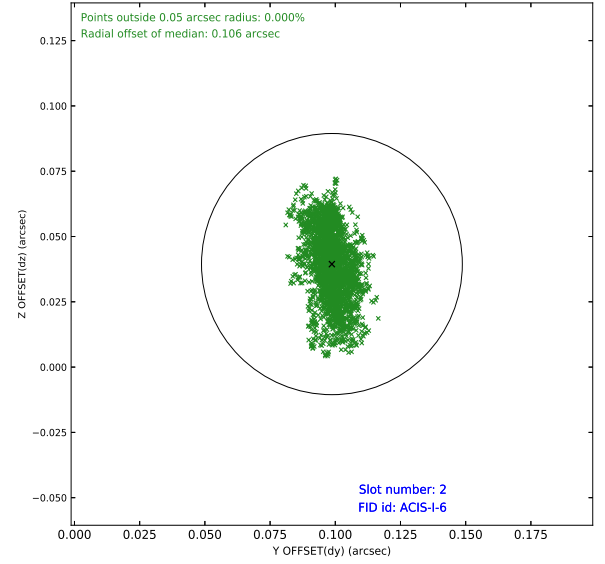
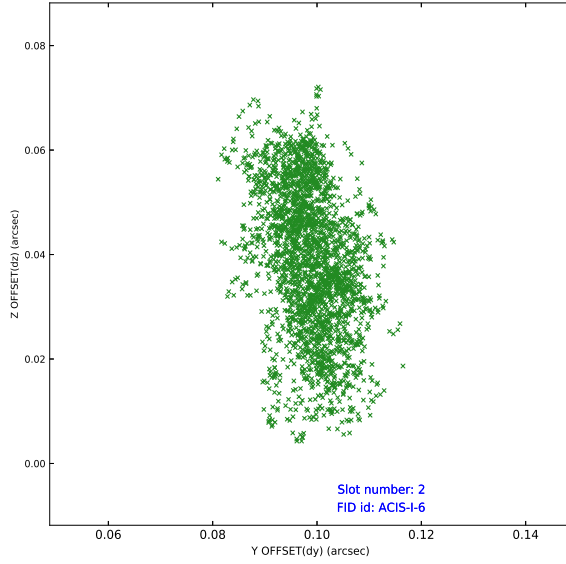
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.12799

A.2 Comments

Window constraint was met.