

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20502 - L2 Version 2
Chandra X-Ray Center

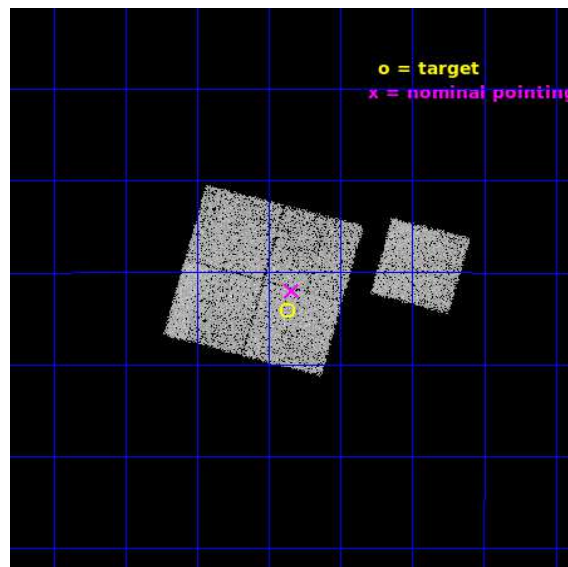
L2 Processing Date : Oct 27 2020

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1 Front

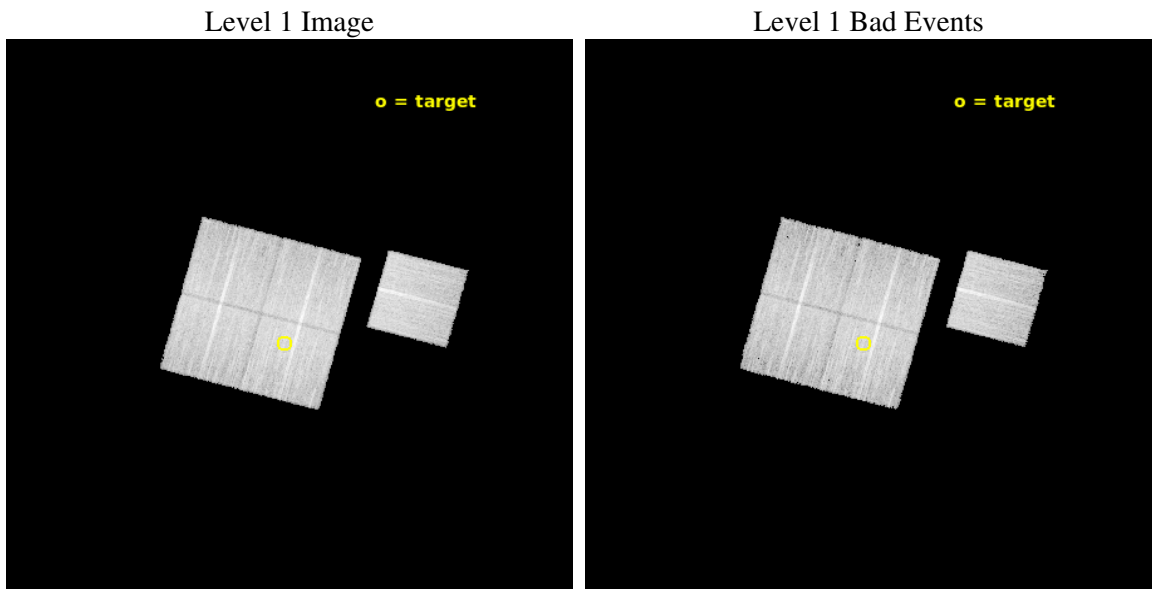
seq_num	801716	Sequence number
obs_id	20502	Observation id
title	Enabling precision cosmology with optically selected galaxy clusters	
observer	Roger Morris	Principal investigator
object	CIG J010301-023316	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	15.717917	Observer's specified target RA [deg]
dec_targ	-2.568611	Observer's specified target Dec [deg]
ra_nom	15.709960250469	Nominal RA [deg]
dec_nom	-2.5328404969035	Nominal Dec [deg]
roll_nom	105.20481888851	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13100.600100875	Sum of GTIs [s]
livetime	12929.431116035	Livetime [s]
ontime0	13097.459080696	Sum of GTIs [s]
ontime1	13100.600100875	Sum of GTIs [s]
ontime2	13100.600100875	Sum of GTIs [s]
ontime3	13100.600100875	Sum of GTIs [s]
ontime6	13100.600100875	Sum of GTIs [s]
l2events	47453	Number of level 2 events



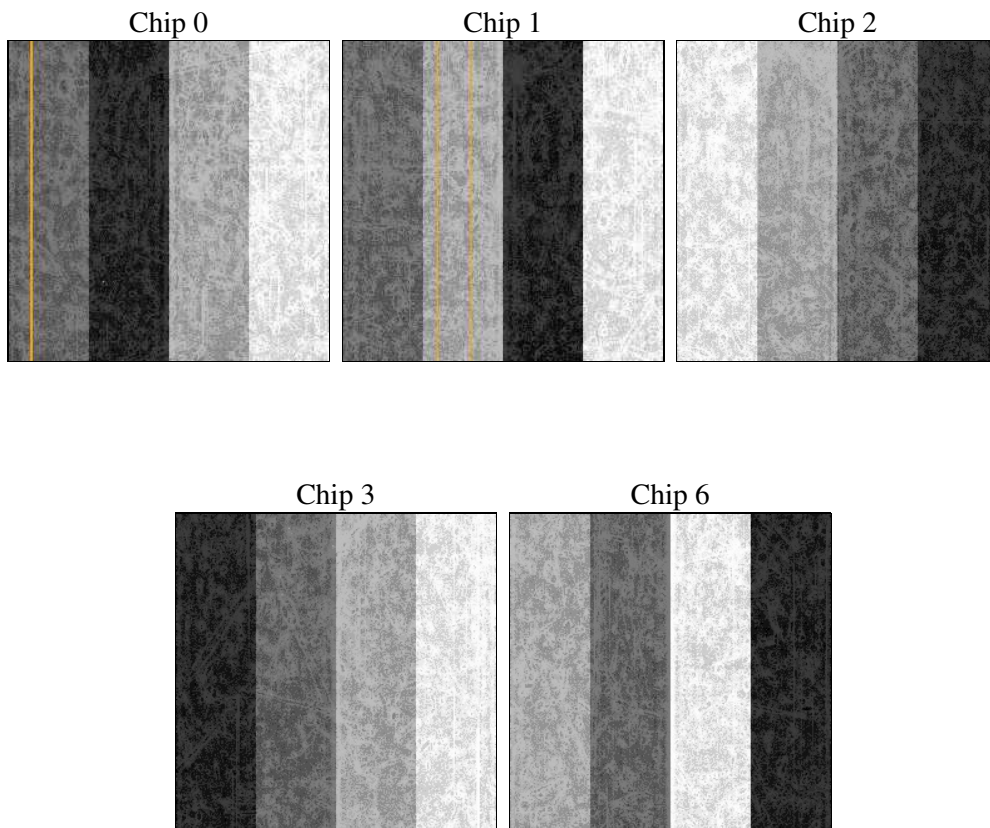
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13210.419000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	13100.600100875	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	13097.459080696	Sum of GTIs [s]
date	2020-10-27T17:59:17	Date and time of file creation	ontime1	13100.600100875	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	13100.600100875	Sum of GTIs [s]
			ontime3	13100.600100875	Sum of GTIs [s]
			ontime6	13100.600100875	Sum of GTIs [s]
			l1events	479026	Number of level 1 events

2.1.4 Events

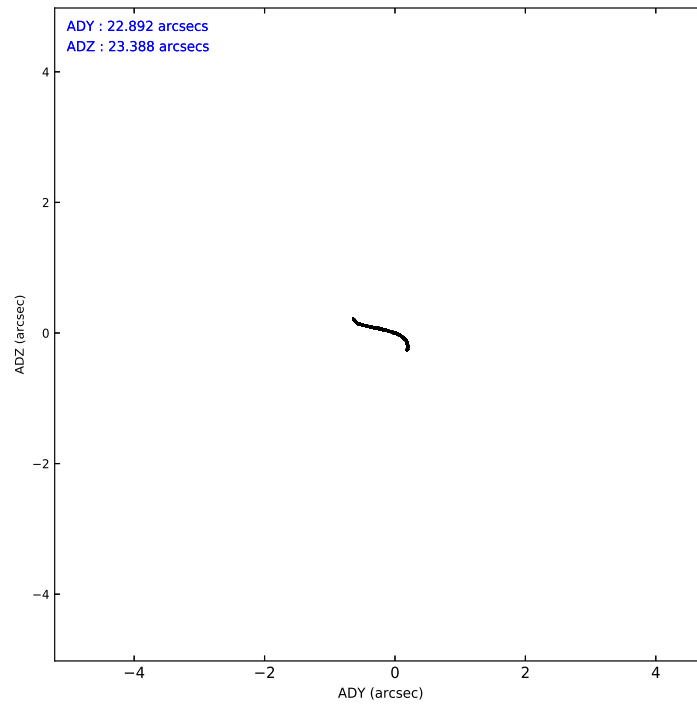
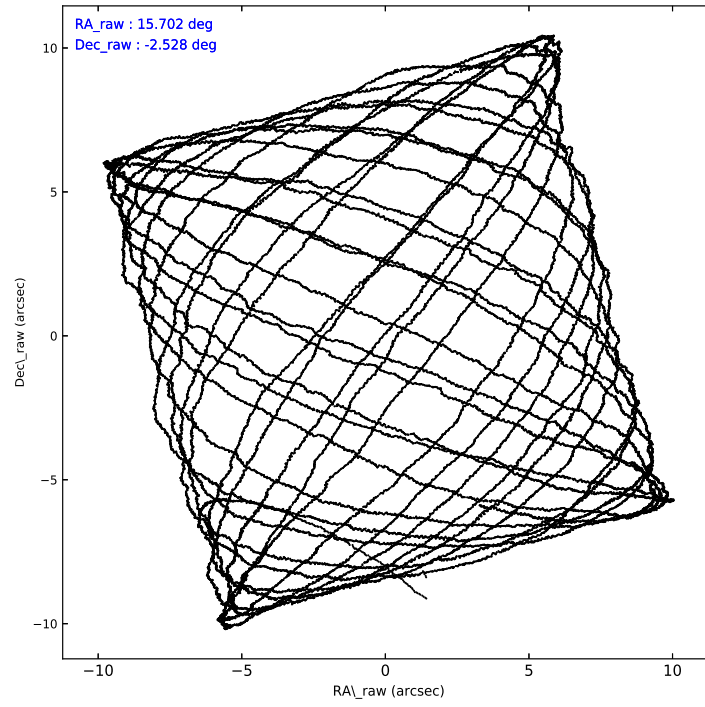
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	88965	91764	97833	100952	99512
rejected events	77550	79347	87058	90121	88482
rejected %	87%	86%	88%	89%	88%

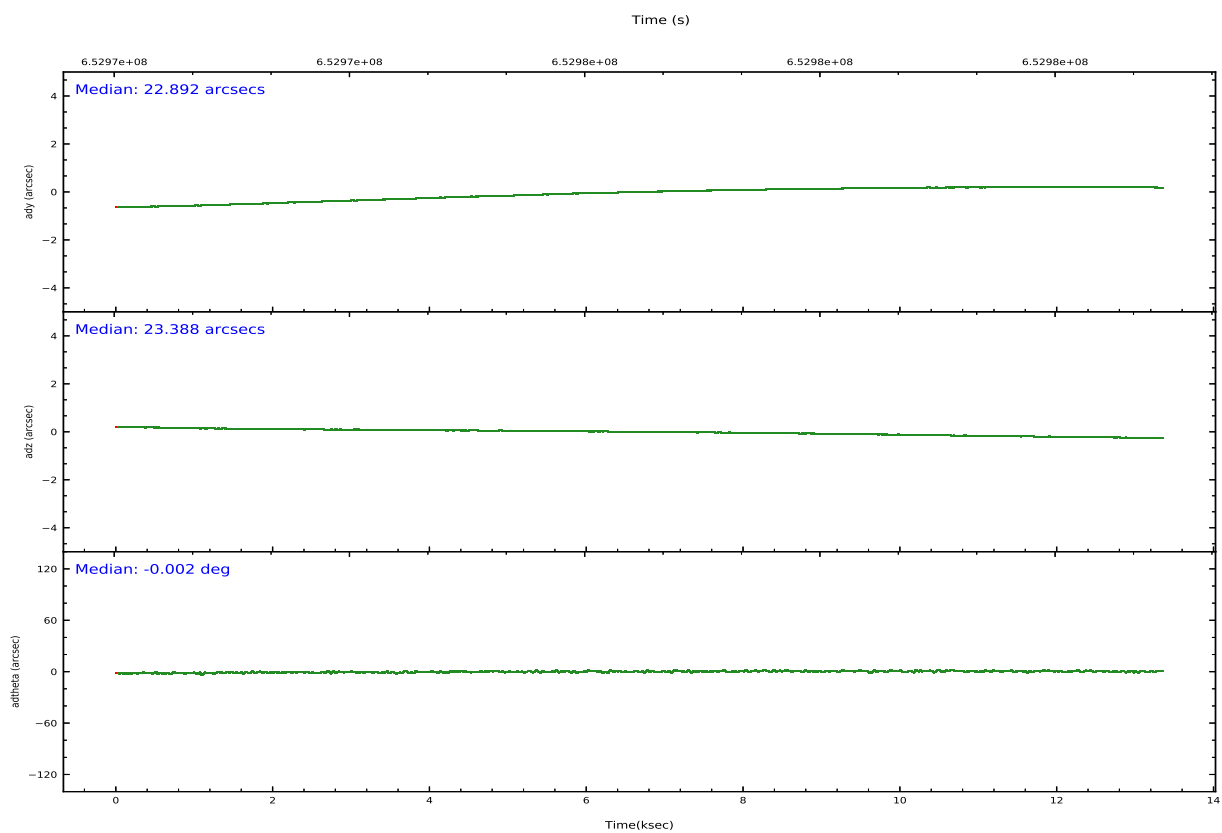
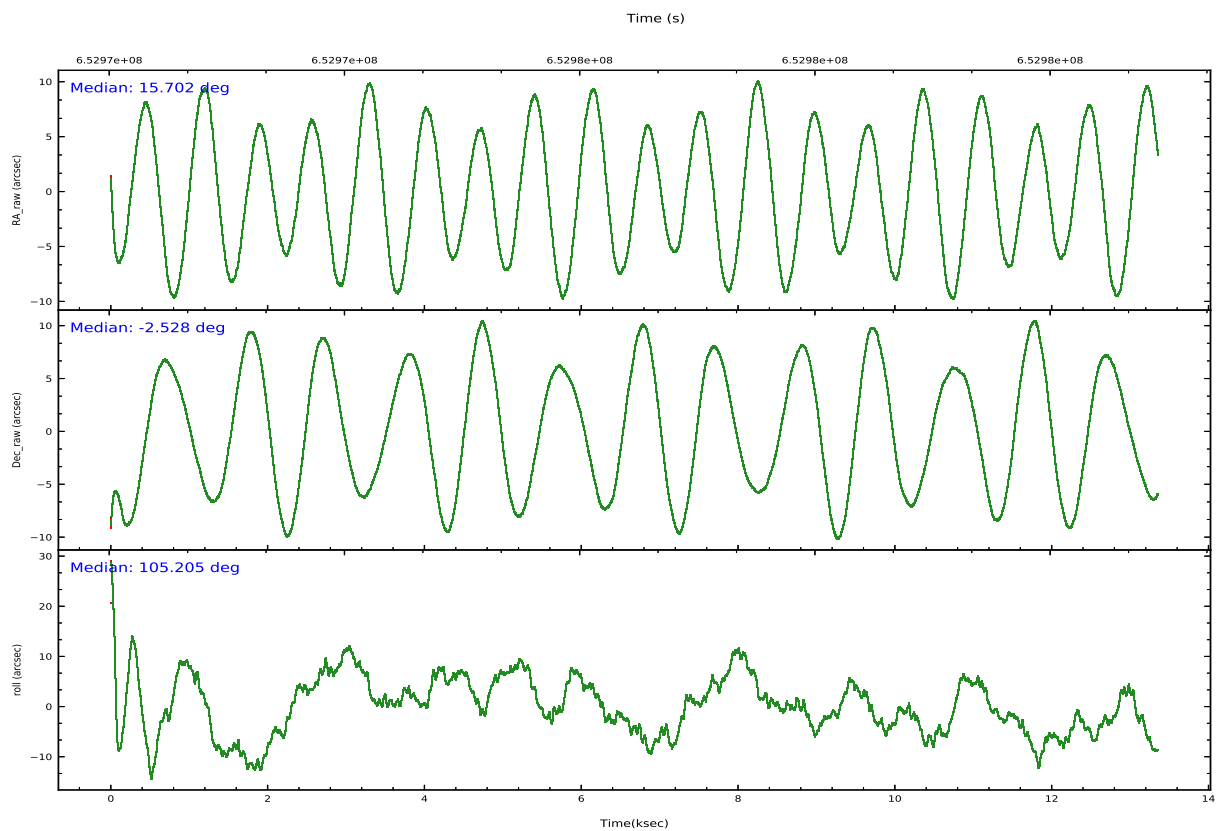
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3957	4177	3843	4014	3597
	4%	4%	3%	3%	3%
grade 1 events	47	54	70	67	34
	0%	0%	0%	0%	0%
grade 2 events	2892	3129	2761	2350	2576
	3%	3%	2%	2%	2%
grade 3 events	1179	1190	1090	1108	1080
	1%	1%	1%	1%	1%
grade 4 events	1001	1180	1047	1195	1109
	1%	1%	1%	1%	1%
grade 5 events	4302	4424	3976	4753	4597
	4%	4%	4%	4%	4%
grade 6 events	2392	2743	2041	2169	2670
	2%	2%	2%	2%	2%
grade 7 events	73195	74867	83005	85296	83849
	82%	81%	84%	84%	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	15.721432	15.709960250469	CCD I2 on	Y	Y
[deg] Pointing Dec	-2.547512	-2.5328404969035	CCD I3 on	Y	Y
[deg] Pointing Roll	105.000151	105.20481888851	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	-225.402463	-225.4033381542509	CCD S3 on	N	N
[mm] SIM translation stage offset	-8.19	-8.189114848678798	CCD S4 on	N	N
[s] Observation start time (MET)	652969167.184000	652968200.5412	CCD S5 on	N	N
Observation start date	2018-09-10T12:18:18	2018-09-10T12:03:20	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	652982377.184000	652982658.16706	On-chip summing requested	N	N
Observation end date	2018-09-10T15:58:28	2018-09-10T16:04:18	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



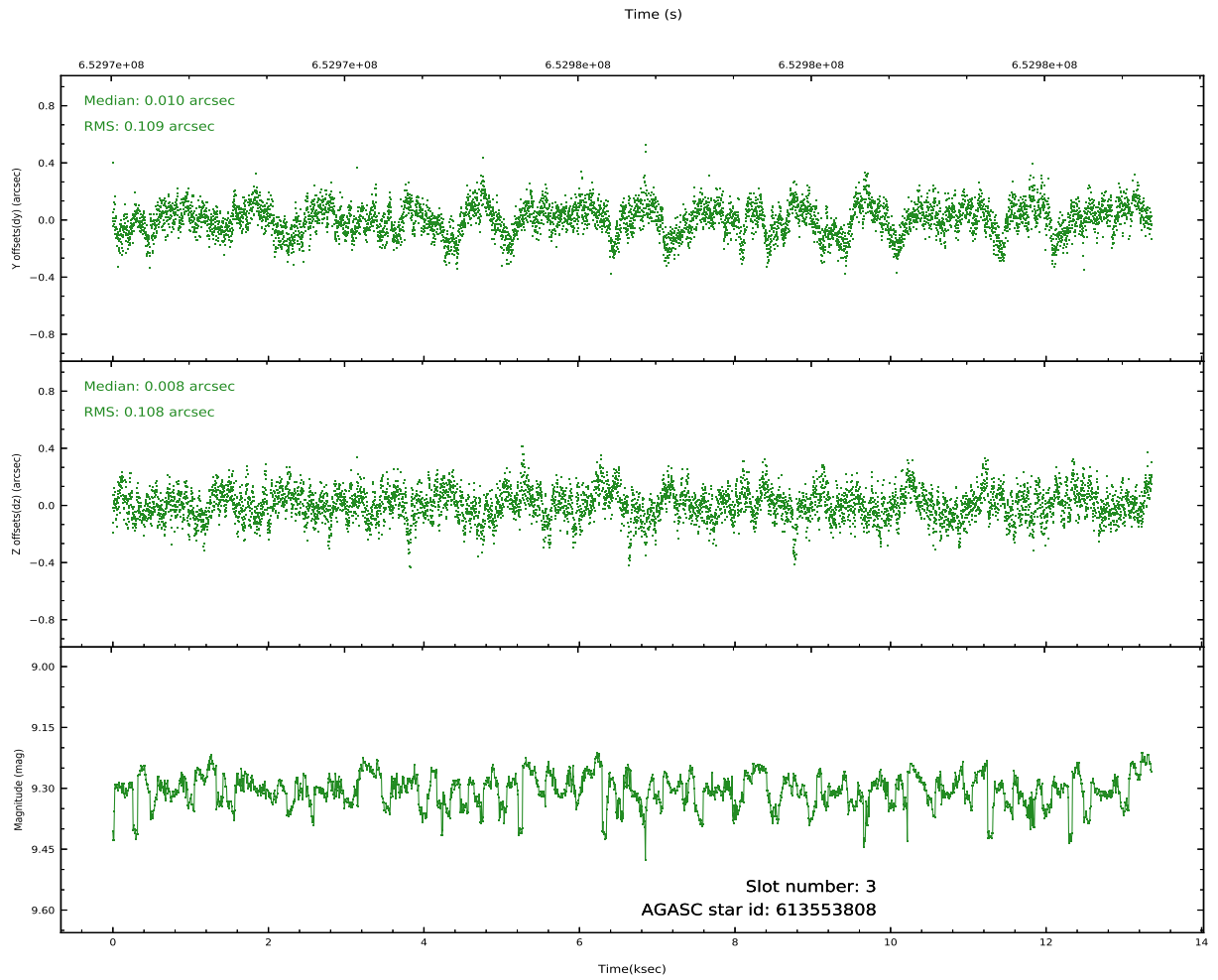
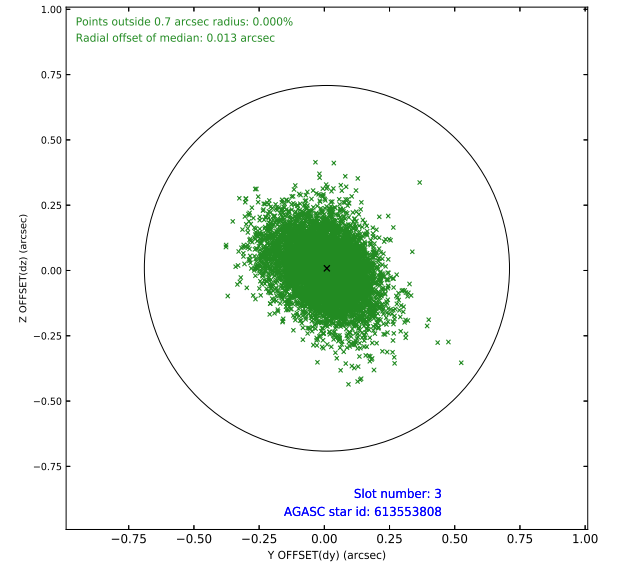
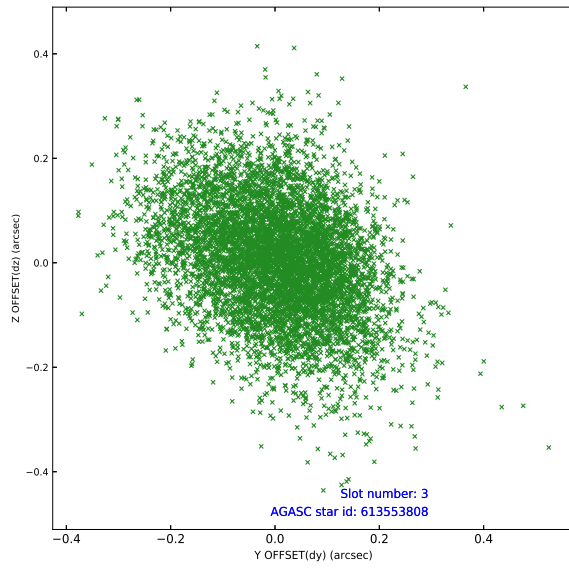


Slot Statistics

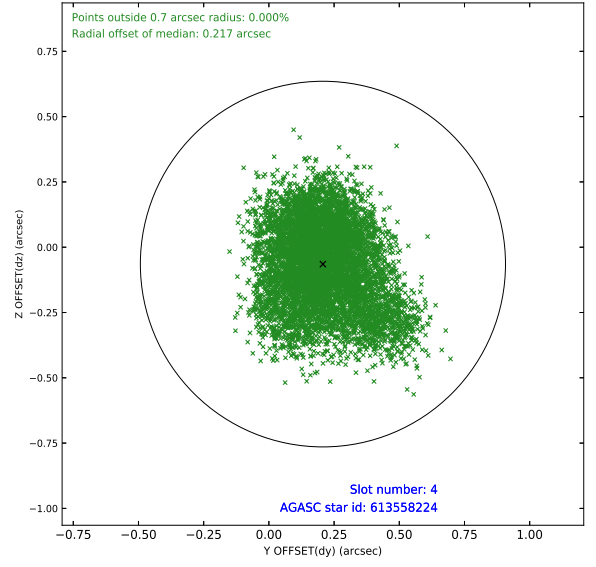
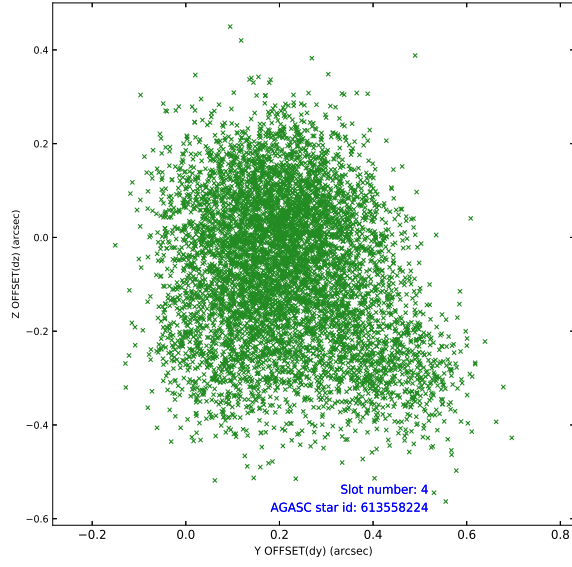
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.15	3259	1.000	0.022	-0.064	0.010	0.017	0.000000	0.000000	916.31	-1015
1	FID		ACIS-I-4	7.05	3259	1.000	-0.026	-0.029	0.010	0.016	0.000000	0.000000	2136.04	885
2	FID		ACIS-I-6	7.14	3259	1.000	-0.093	0.160	0.008	0.014	0.000000	0.000000	382.56	1527
3	GUIDE	used	613553808	9.30	6500	1.000	0.010	0.008	0.160	0.272	15.804109	-2.020754	1754.96	-777
4	GUIDE	used	613558224	9.43	6509	1.000	0.207	-0.065	0.227	0.357	15.897576	-2.505292	-15.94	-651
5	GUIDE	used	613559296	9.05	6502	1.000	-0.010	0.090	0.203	0.339	16.110297	-2.366600	266.24	-1515
6	GUIDE	used	613560248	9.93	6477	1.000	-0.155	-0.065	0.296	0.476	15.829161	-2.210685	1071.23	-688
7	GUIDE	used	613562880	9.36	6495	1.000	-0.108	0.055	0.266	0.434	15.981099	-1.887889	2052.44	-1516

2.4 Star Slots

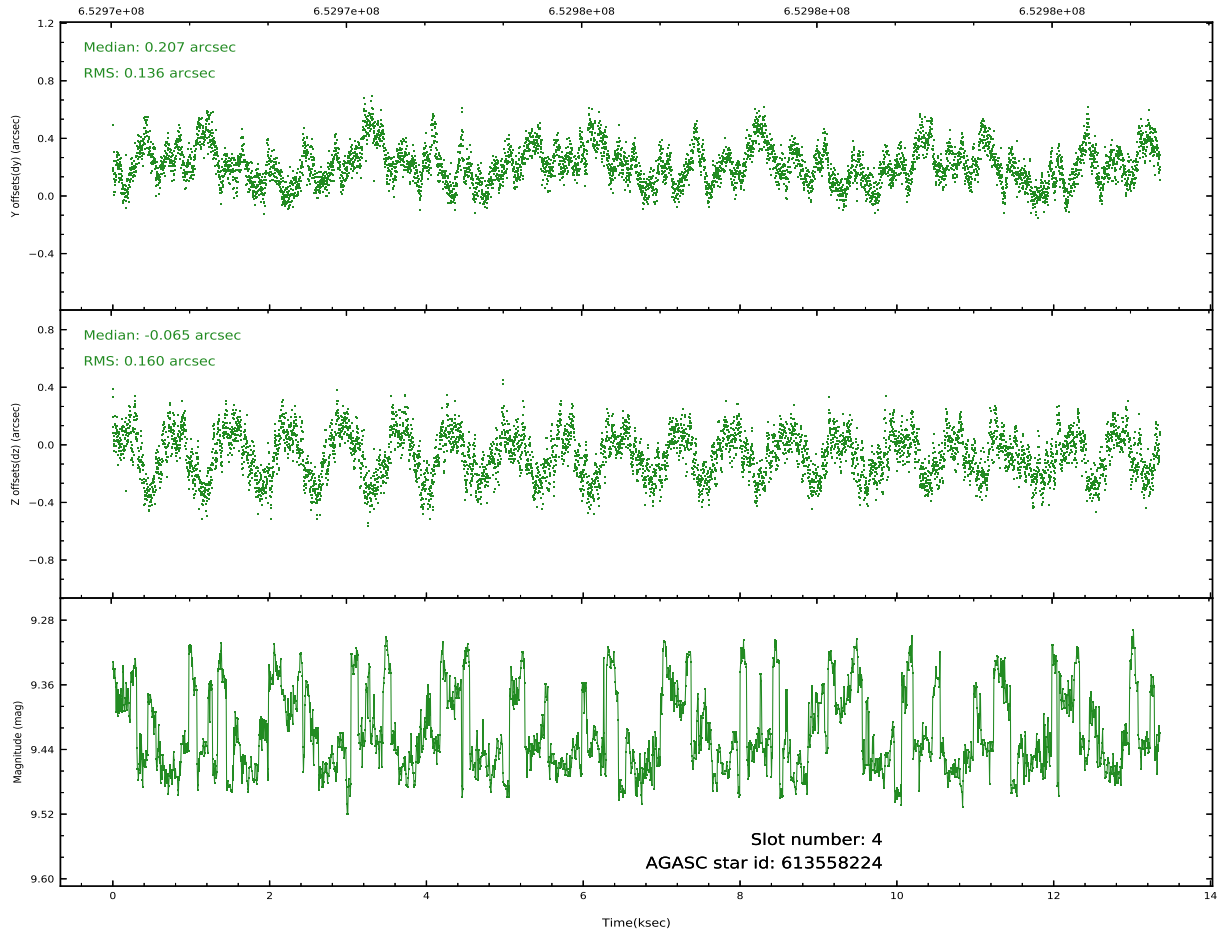
2.4.1 Slot 3



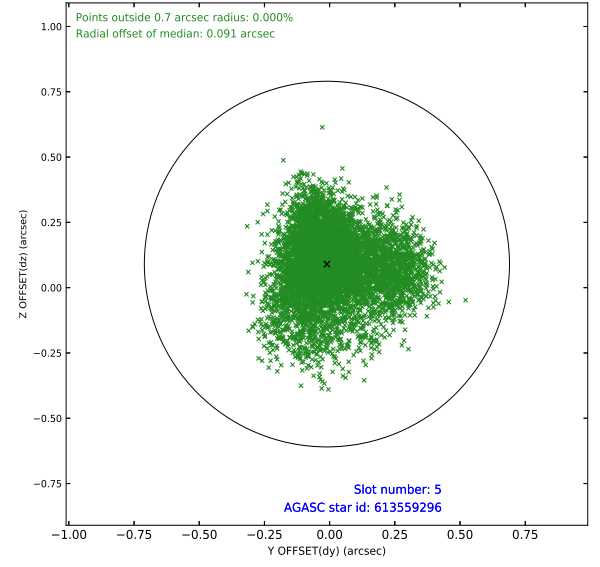
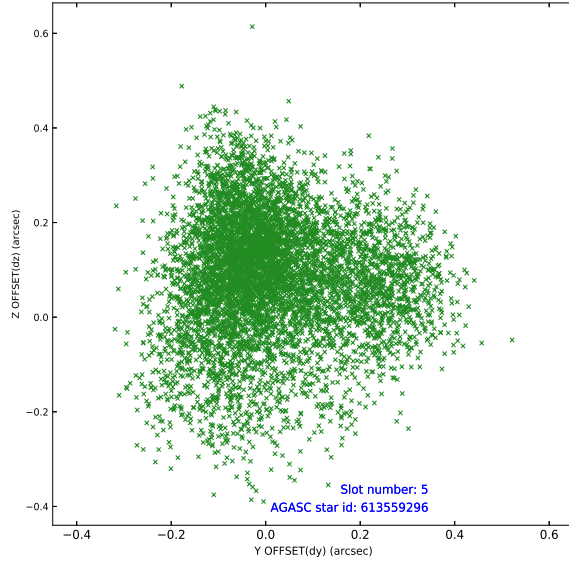
2.4.2 Slot 4



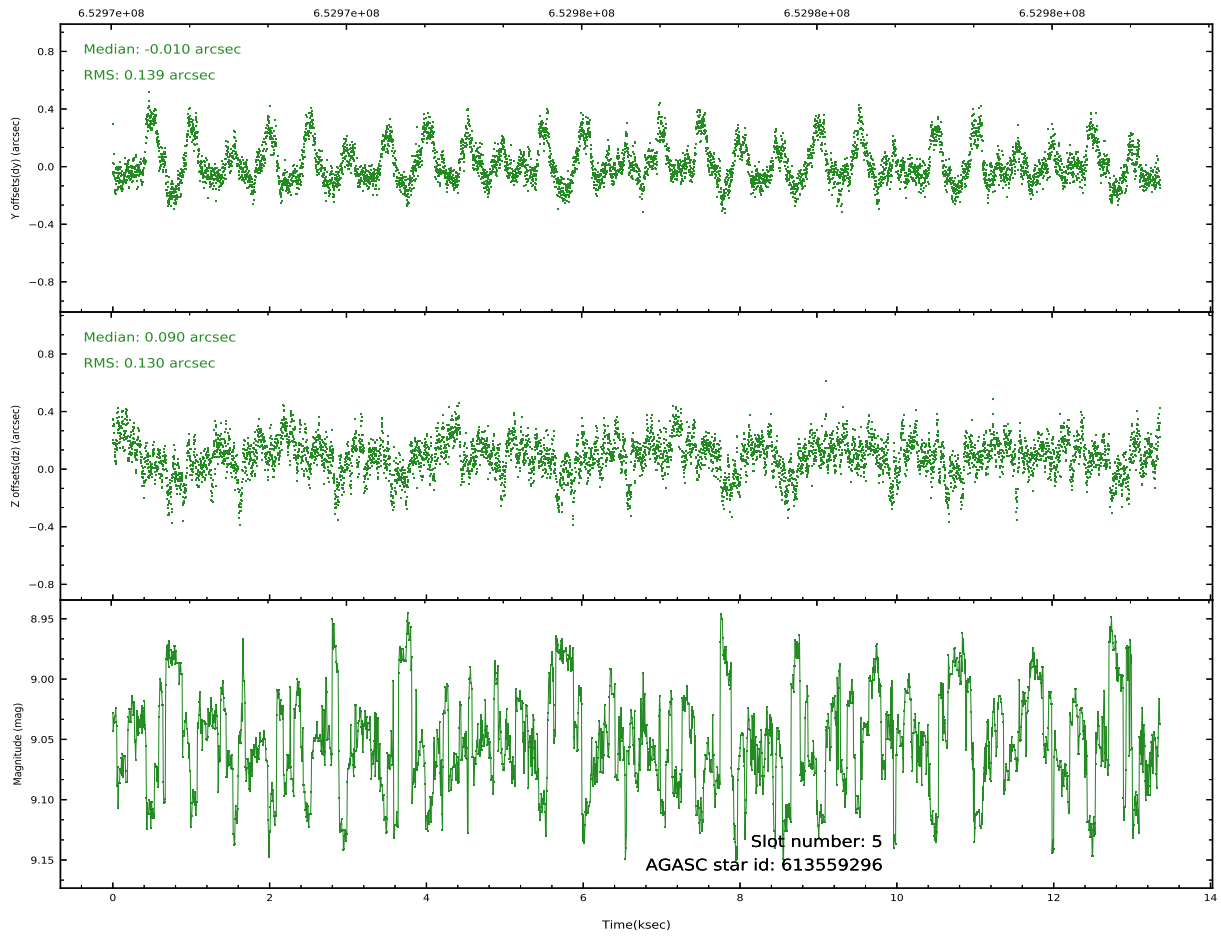
Time (s)



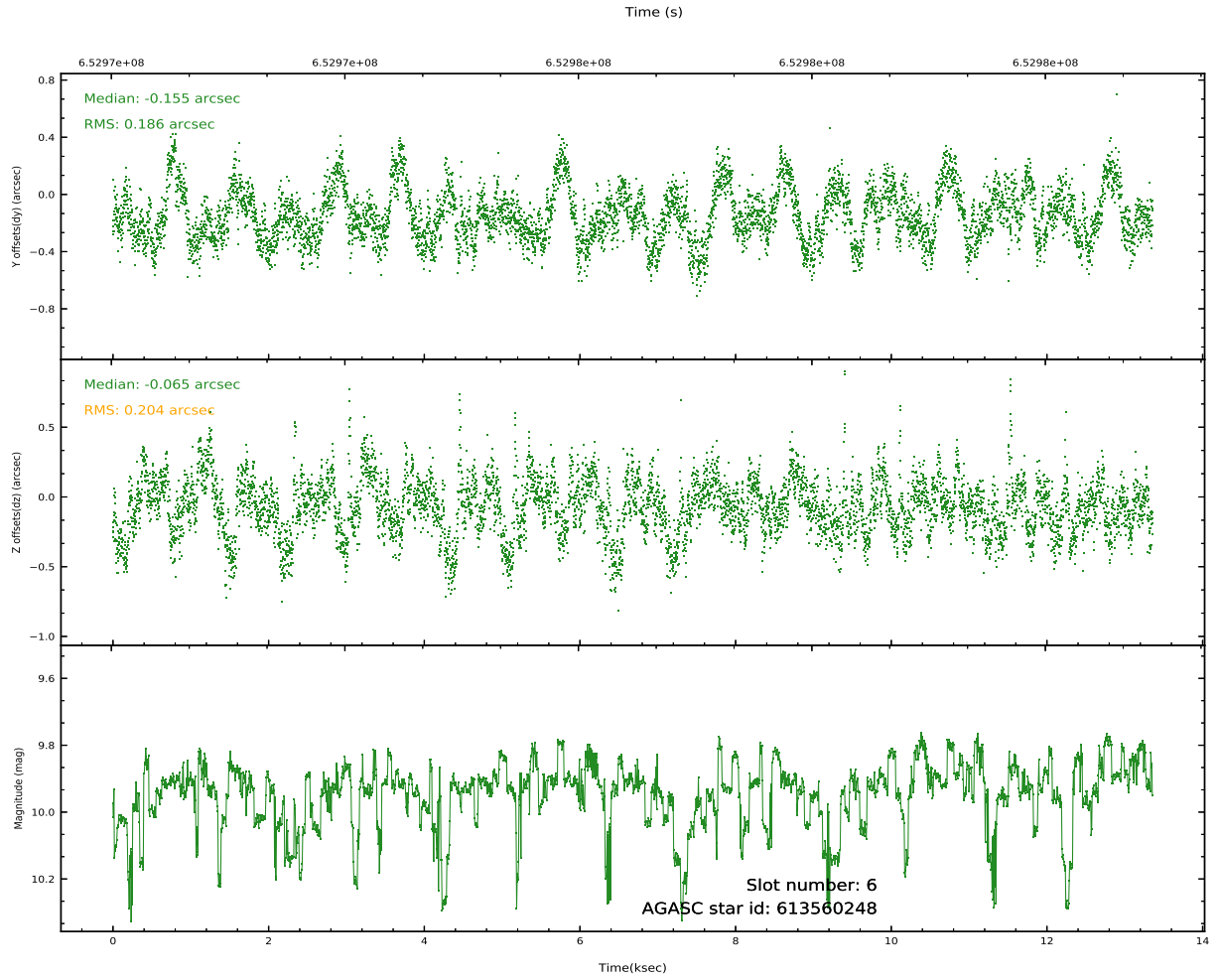
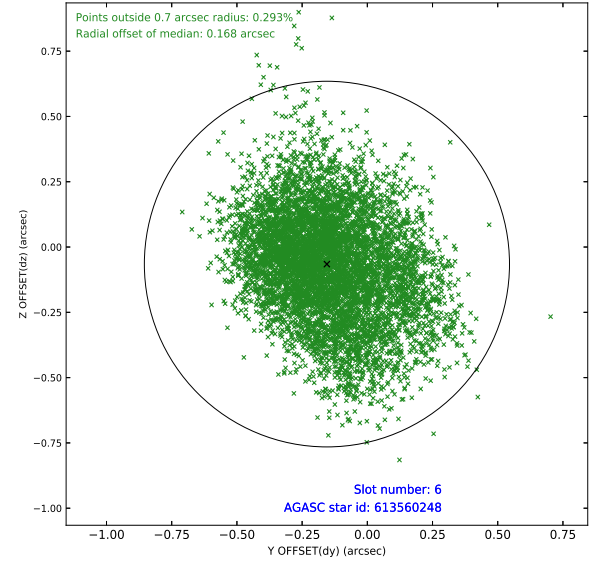
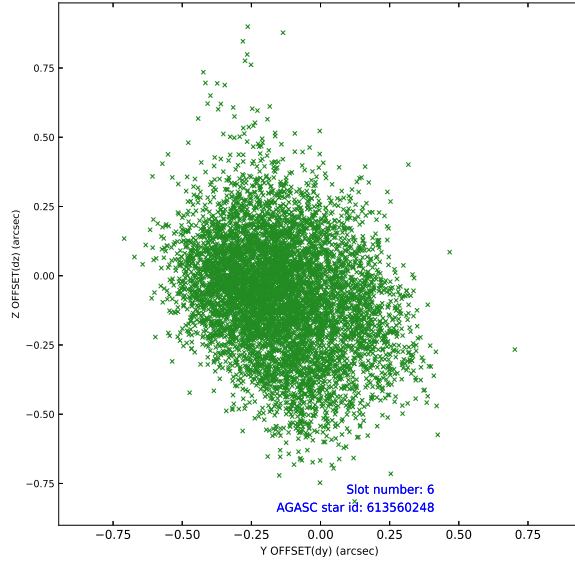
2.4.3 Slot 5



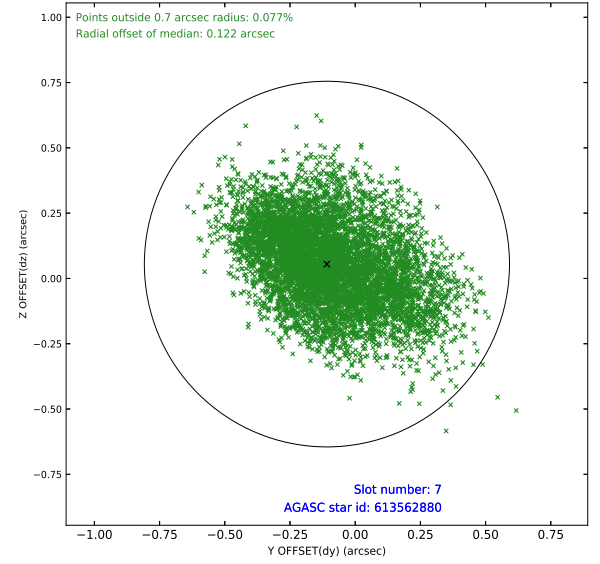
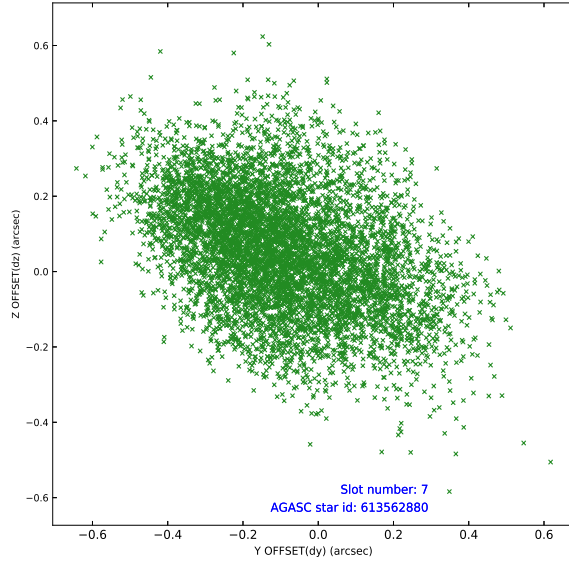
Time (s)



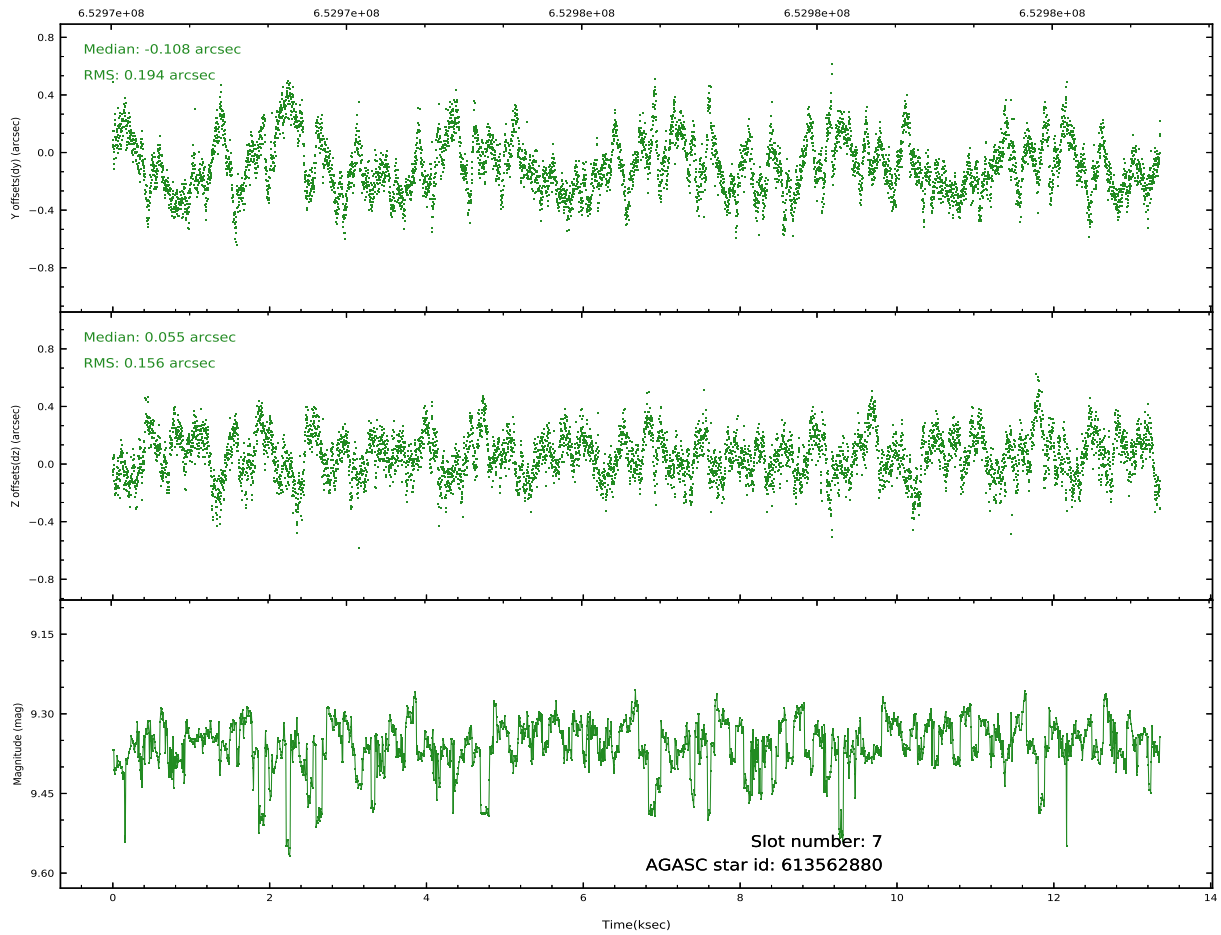
2.4.4 Slot 6



2.4.5 Slot 7

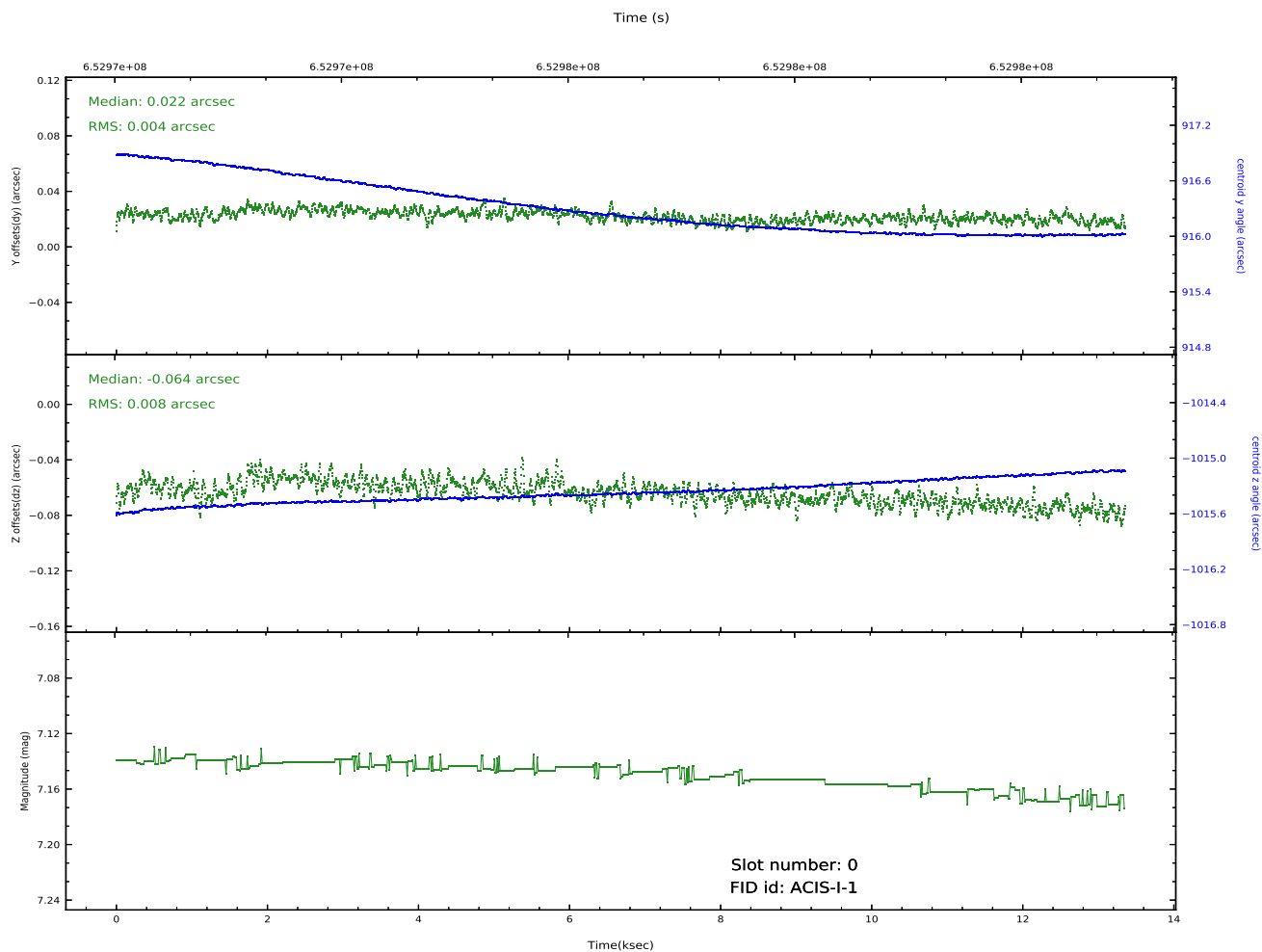
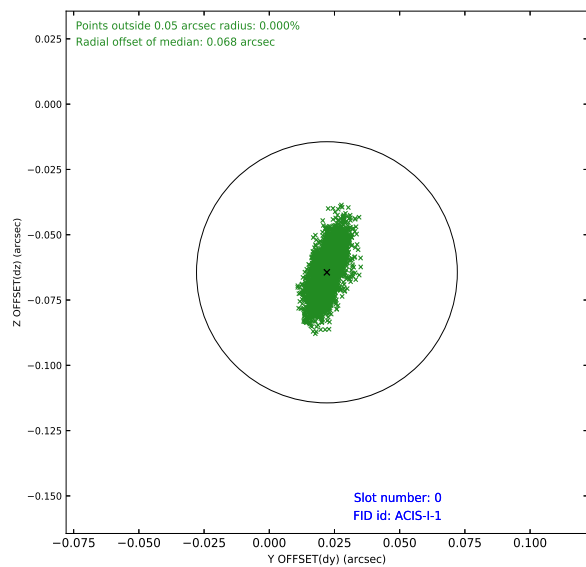
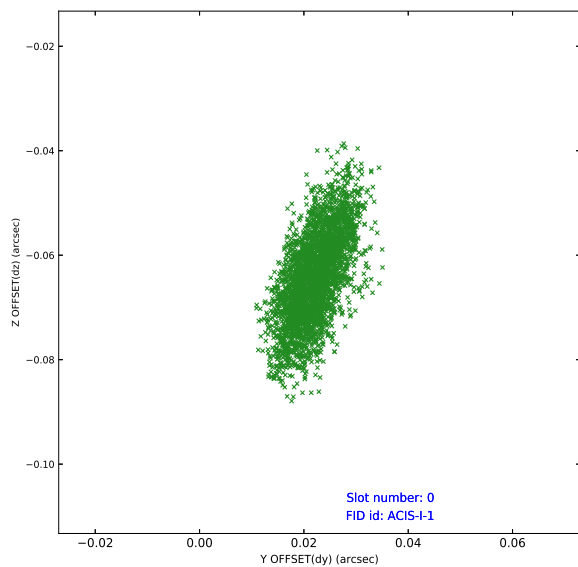


Time (s)

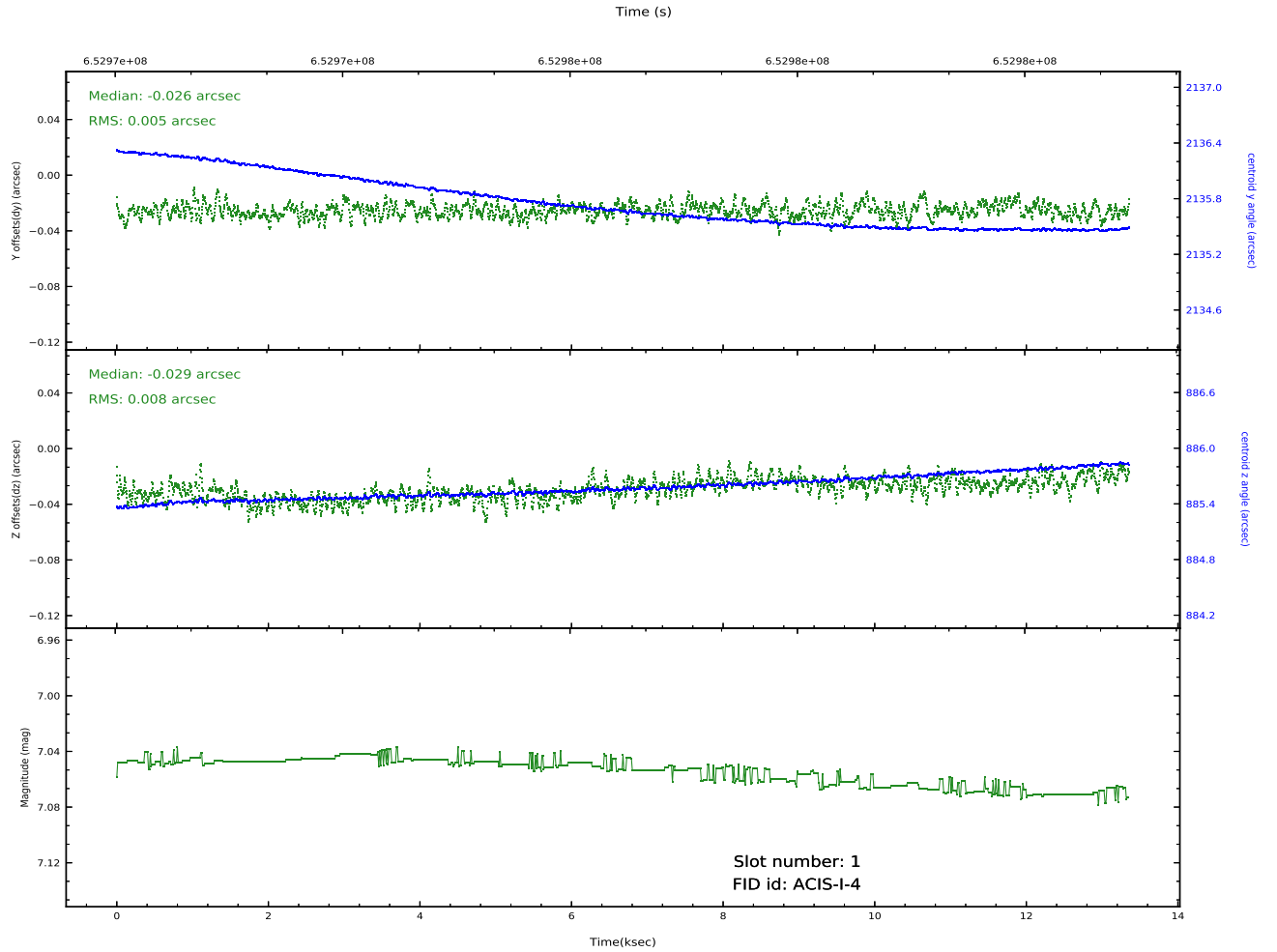
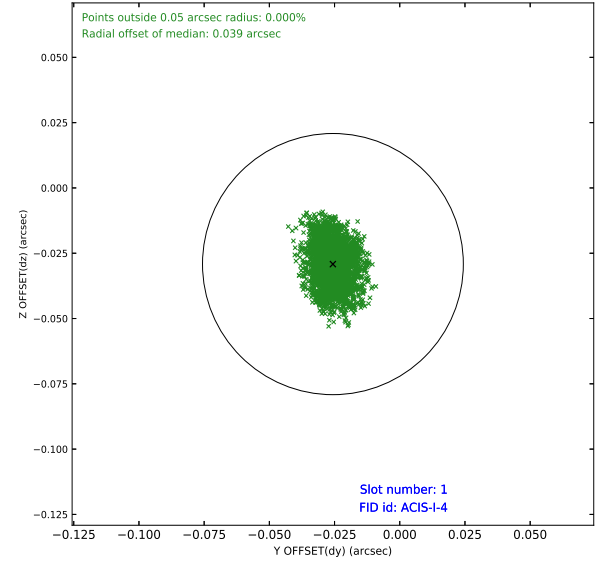
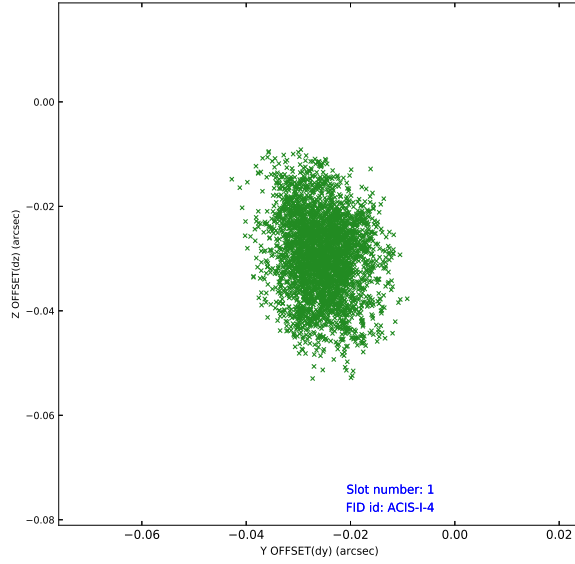


2.5 FID Slots

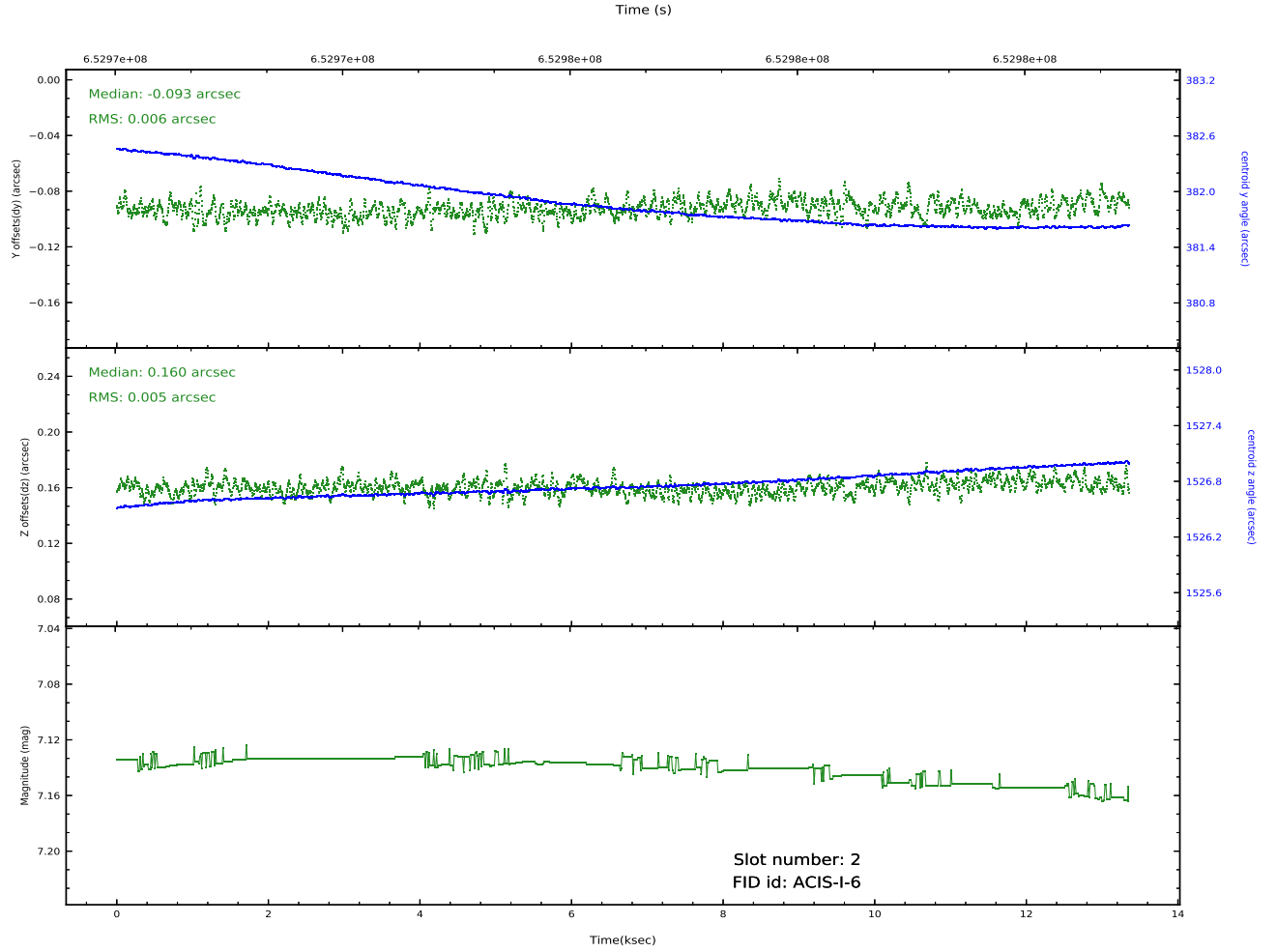
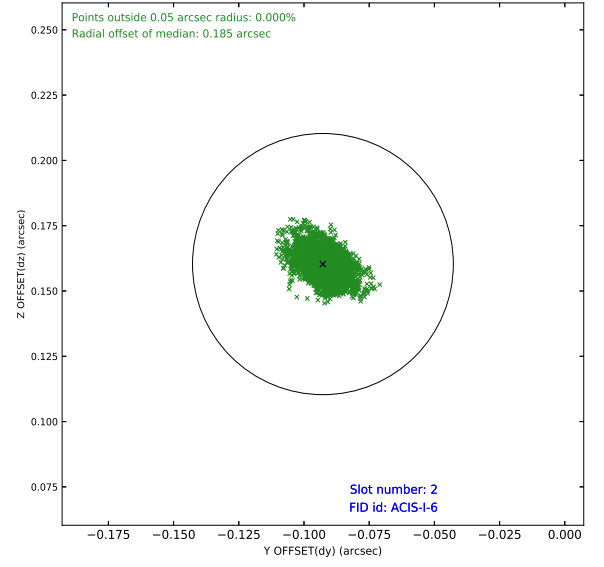
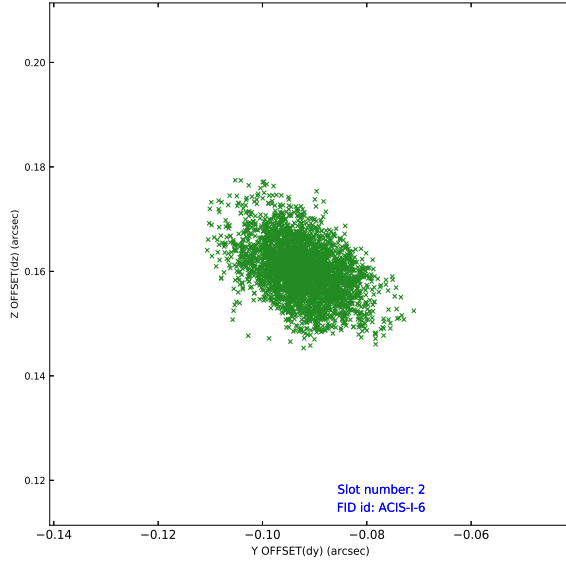
2.5.1 Slot 0



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	13.100600100875

A.2 Comments