

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20584 - L2 Version 2
Chandra X-Ray Center

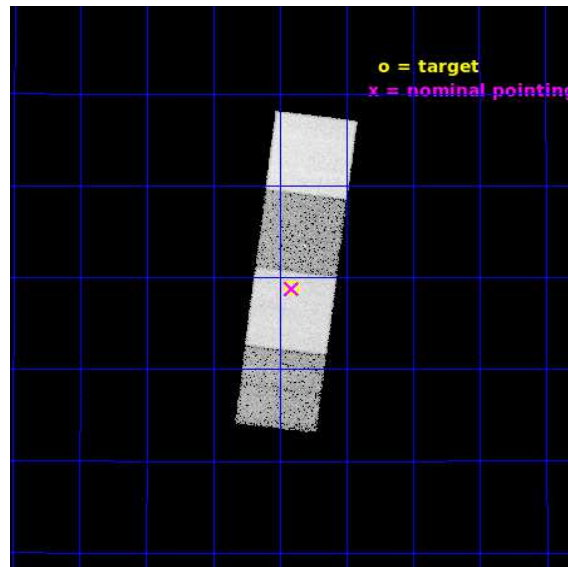
L2 Processing Date : Oct 29 2020

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1 Front

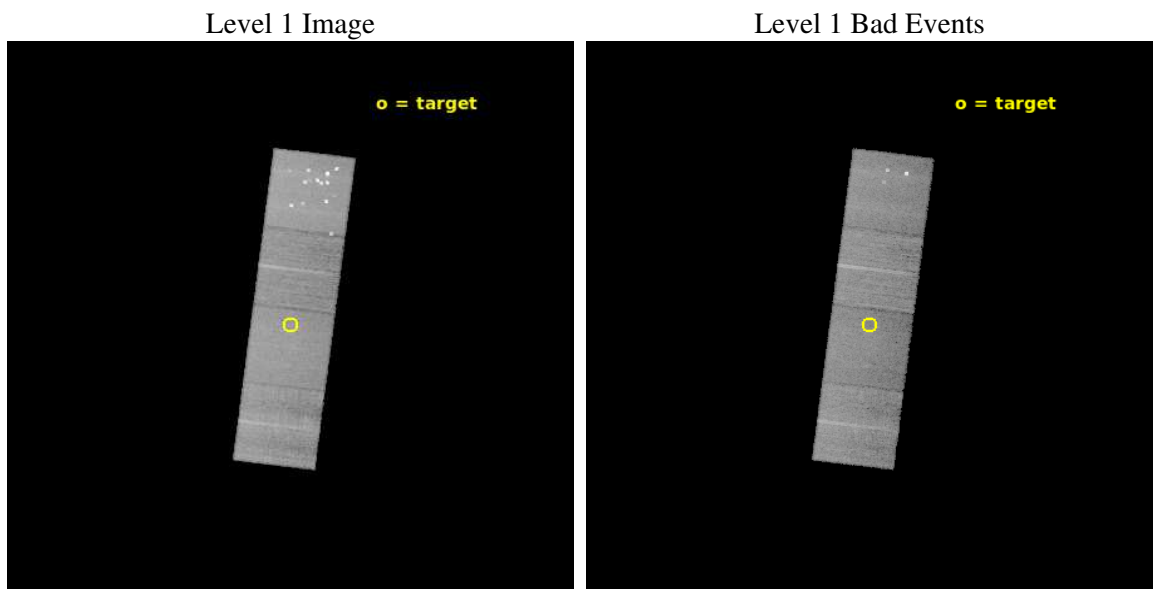
seq_num	801782	Sequence number
obs_id	20584	Observation id
title	Galaxy collisions and shocks in compact groups	Proposal title
observer	Ewan O'Sullivan	Principal investigator
object	HCG57	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	174.475	Observer's specified target RA [deg]
dec_targ	21.981389	Observer's specified target Dec [deg]
ra_nom	174.47718741569	Nominal RA [deg]
dec_nom	21.979632117348	Nominal Dec [deg]
roll_nom	97.148233869213	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15059.293888688	Sum of GTIs [s]
livetime	14862.533127542	Livetime [s]
ontime5	15059.252848744	Sum of GTIs [s]
ontime6	15056.070708394	Sum of GTIs [s]
ontime7	15059.293888688	Sum of GTIs [s]
ontime8	15056.029678464	Sum of GTIs [s]
l2events	165770	Number of level 2 events



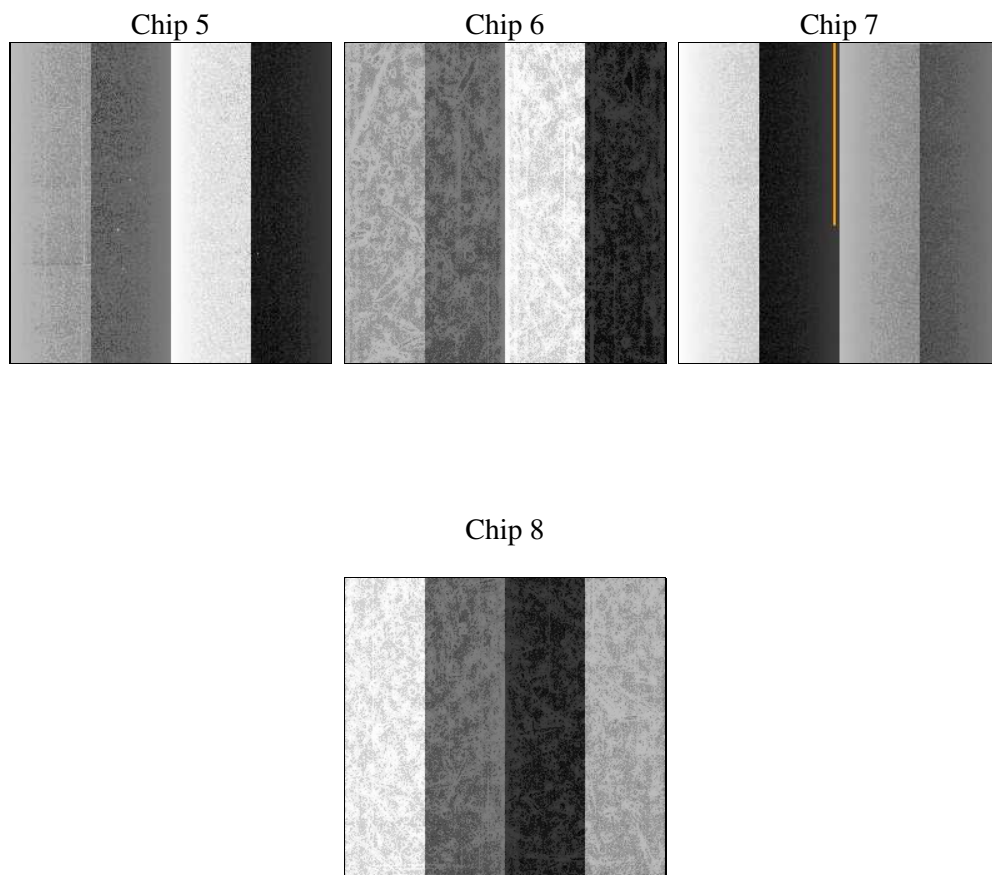
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	15059.293888688	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	15059.252848744	Sum of GTIs [s]
date	2020-10-29T11:59:18	Date and time of file creation	ontime6	15056.070708394	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	15059.293888688	Sum of GTIs [s]
			ontime8	15056.029678464	Sum of GTIs [s]
			l1events	637879	Number of level 1 events

2.1.4 Events

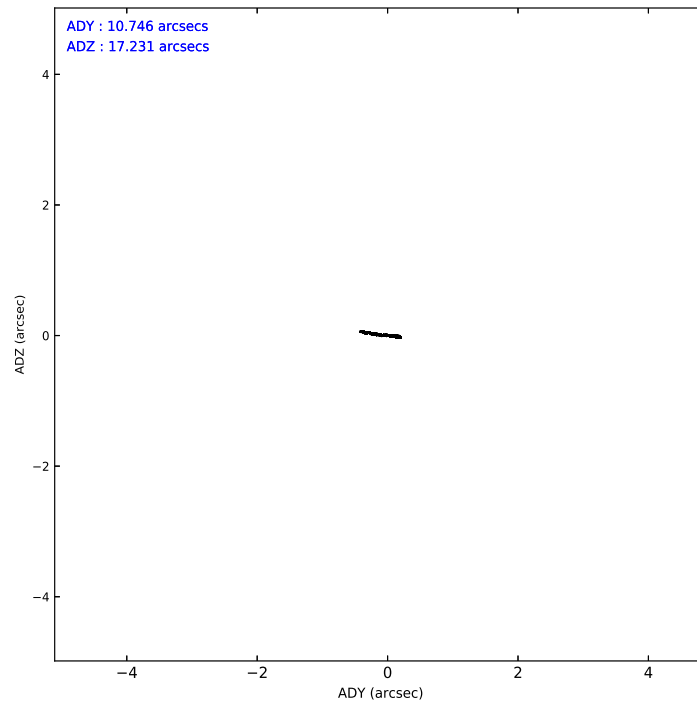
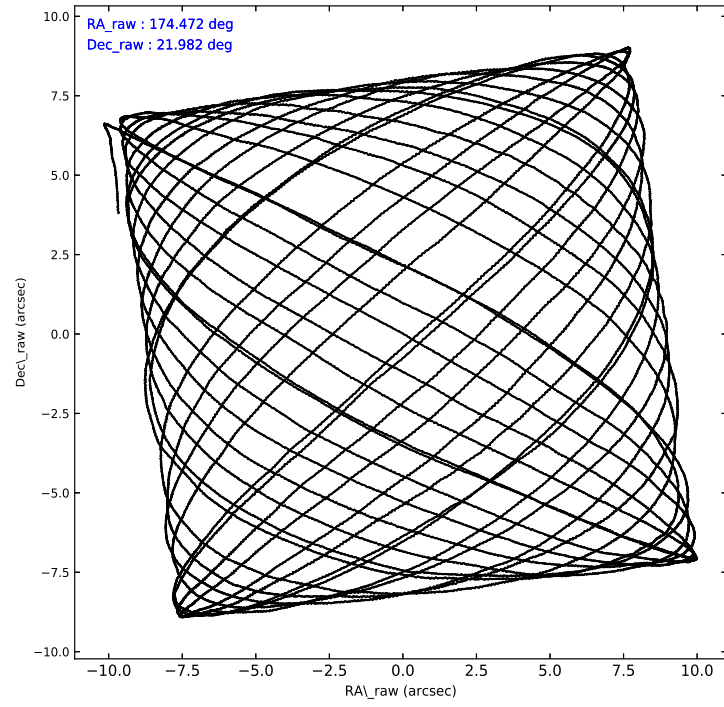
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	222820	120674	148220	146165
rejected events	101924	107832	84999	109201
rejected %	45%	89%	57%	74%

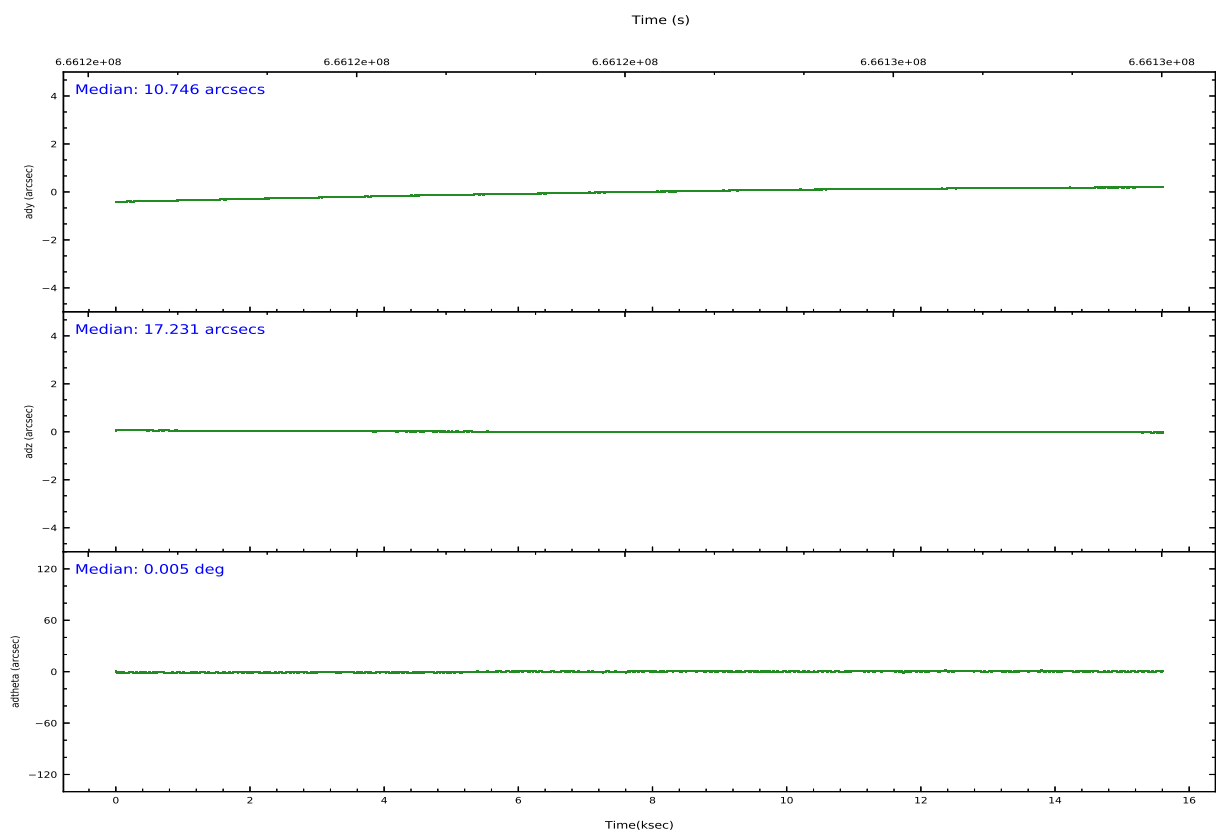
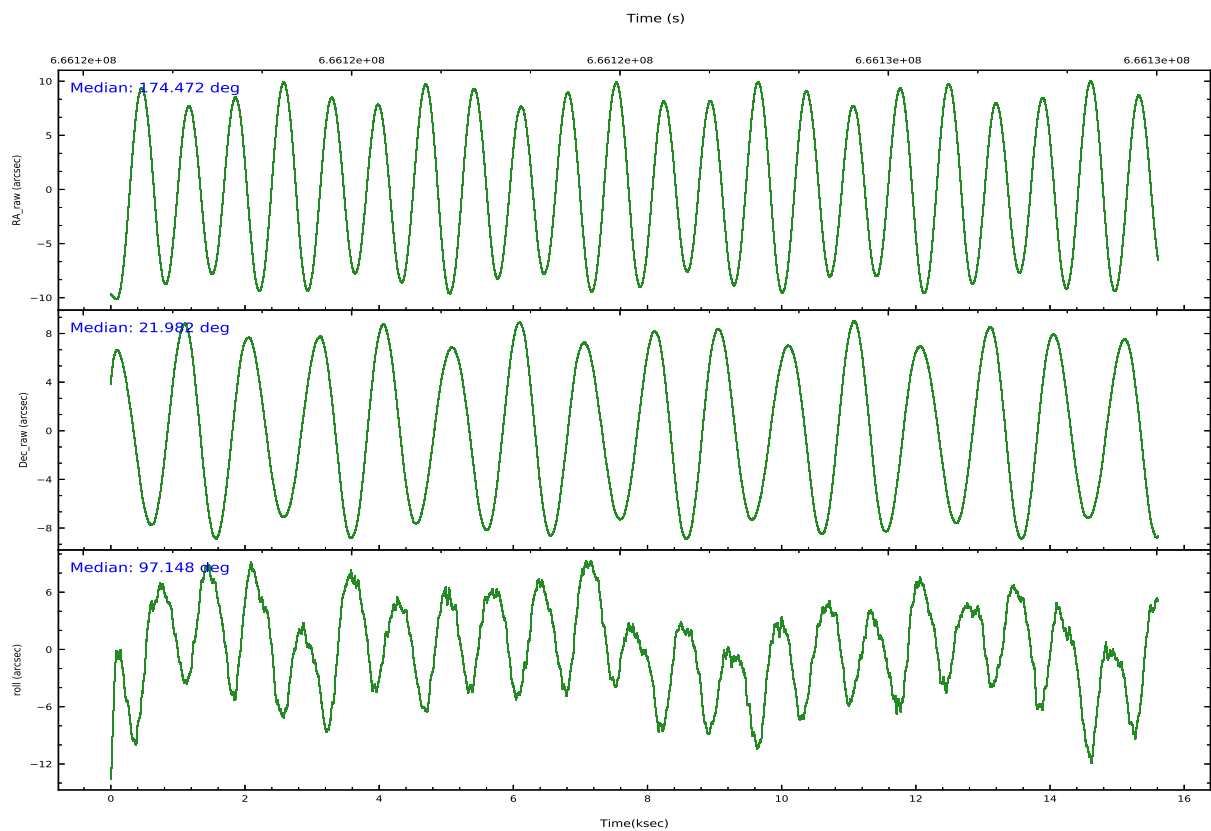
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	30482	3733	5249	10139
	13%	3%	3%	6%
grade 1 events	503	51	230	101
	0%	0%	0%	0%
grade 2 events	34967	3470	13106	9172
	15%	2%	8%	6%
grade 3 events	3123	1081	4981	3663
	1%	0%	3%	2%
grade 4 events	3383	1124	4821	3445
	1%	0%	3%	2%
grade 5 events	12519	4790	14126	7702
	5%	3%	9%	5%
grade 6 events	48992	3441	35084	10571
	21%	2%	23%	7%
grade 7 events	88851	102984	70623	101372
	39%	85%	47%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	174.489653	174.47718741569	CCD I2 on	O1	N
[deg] Pointing Dec	21.960438	21.979632117348	CCD I3 on	O2	N
[deg] Pointing Roll	96.994517	97.148233869213	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	666117023.184000	666115779.54186	CCD S5 on	N	N
Observation start date	2019-02-09T16:29:14	2019-02-09T16:09:39	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	666132023.184000	666133033.36789	On-chip summing requested	N	N
Observation end date	2019-02-09T20:39:14	2019-02-09T20:57:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



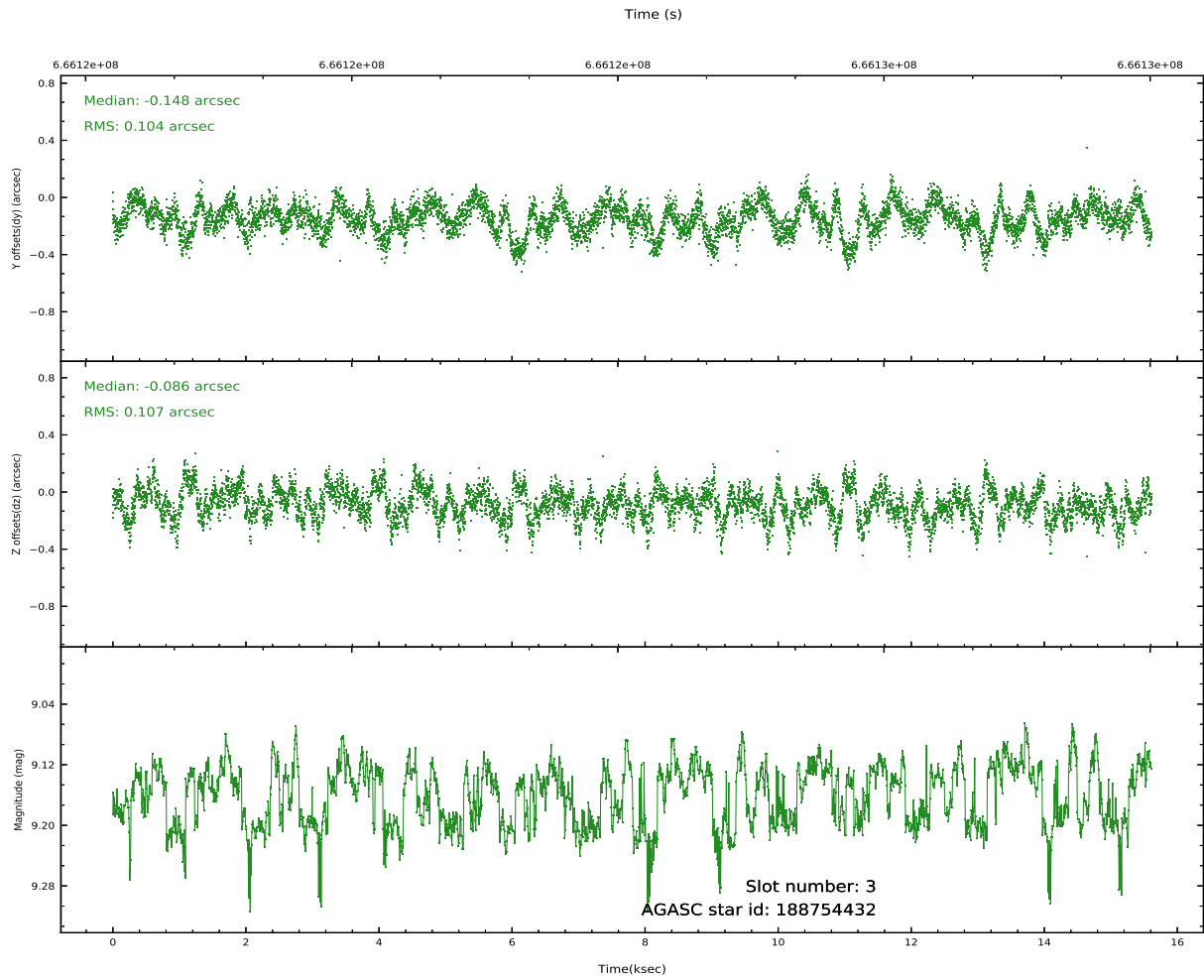
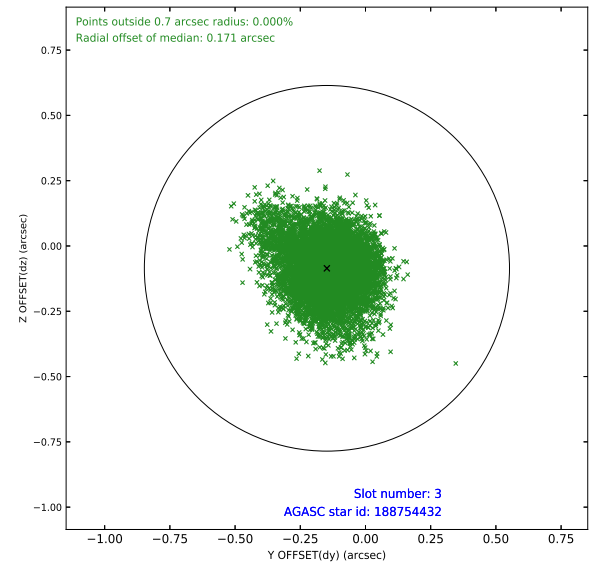
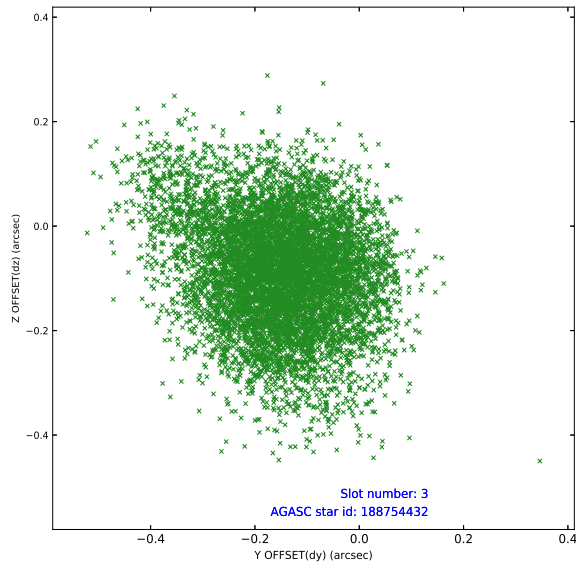


Slot Statistics

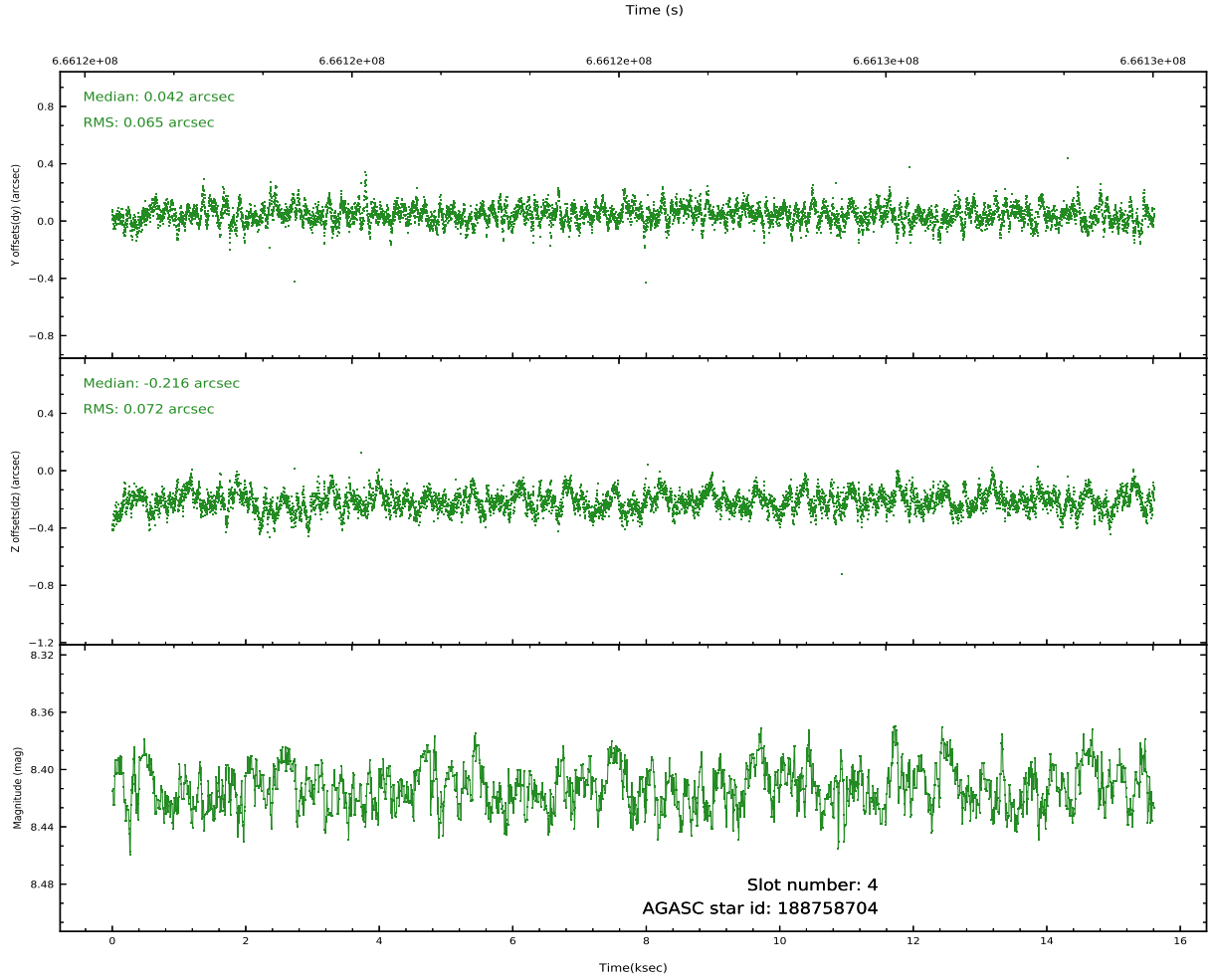
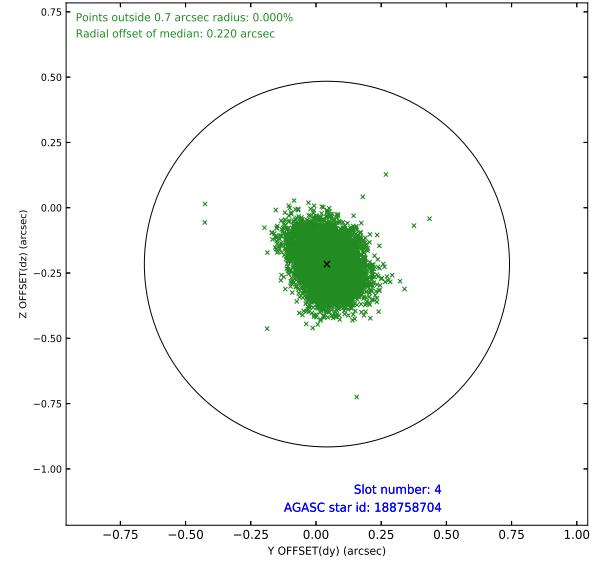
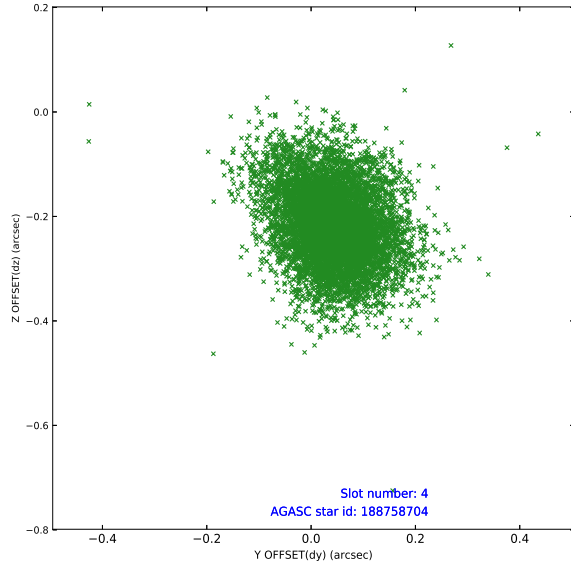
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	3808	1.000	0.177	-0.126	0.013	0.022	0.000000	0.000000	-763.68	-1738
1	FID		ACIS-S-4	7.25	3807	1.000	0.140	-0.051	0.011	0.018	0.000000	0.000000	2149.74	169
2	FID		ACIS-S-5	7.22	3808	1.000	-0.344	0.184	0.011	0.019	0.000000	0.000000	-1816.37	163
3	GUIDE	used	188754432	9.15	7603	1.000	-0.148	-0.086	0.157	0.264	174.164183	22.388902	1663.83	887
4	GUIDE	used	188758704	8.41	7613	1.000	0.042	-0.216	0.101	0.171	174.474570	21.745106	-762.73	144
5	GUIDE	used	188759672	9.04	7604	1.000	0.196	0.232	0.132	0.216	175.058616	21.386094	-2280.85	-1640
6	GUIDE	used	188760112	7.74	7613	1.000	-0.042	0.185	0.107	0.172	174.548855	21.871657	-341.55	-156
7	GUIDE	used	188760296	9.11	7610	1.000	-0.031	-0.113	0.188	0.309	174.426696	21.691710	-934.68	327

2.4 Star Slots

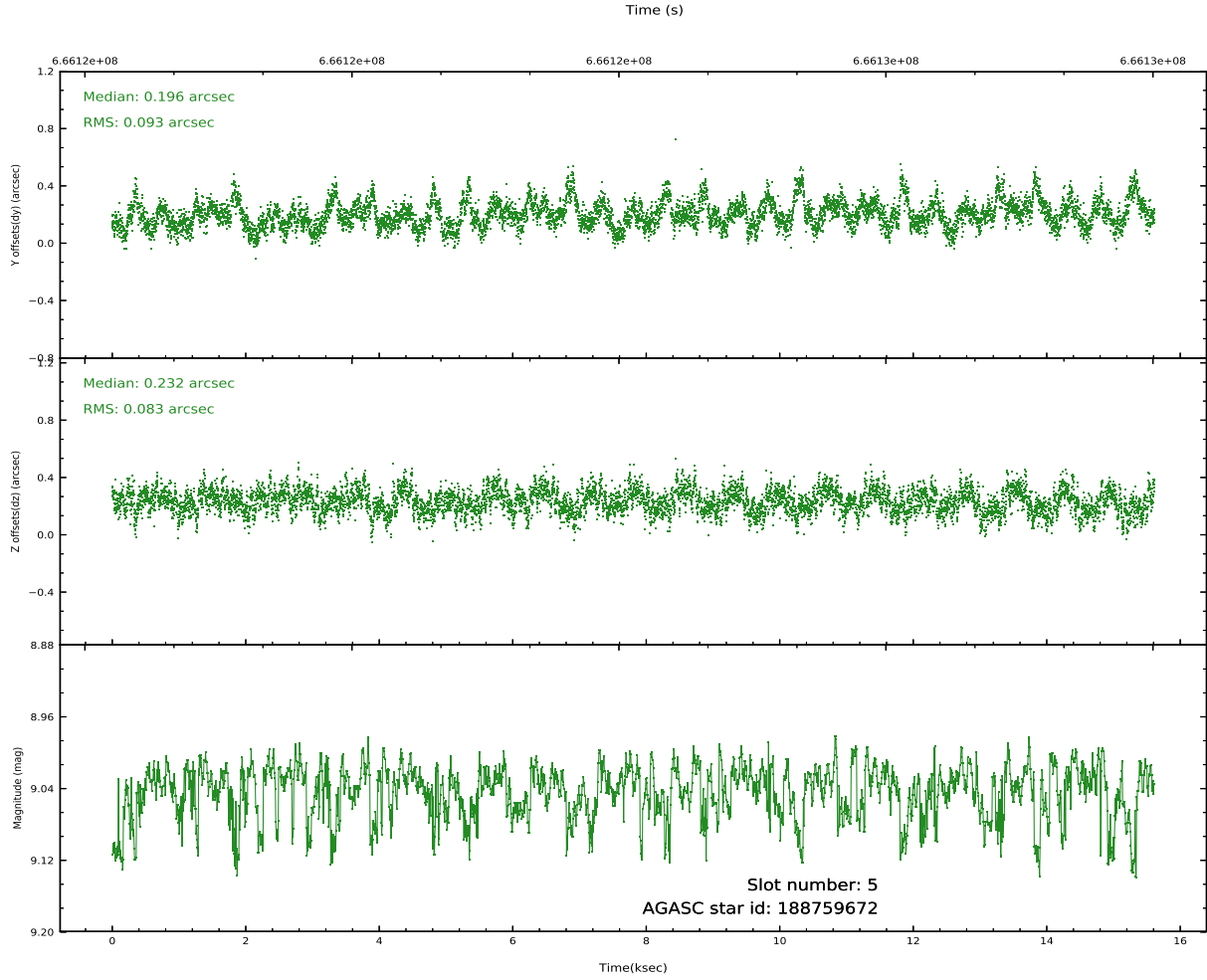
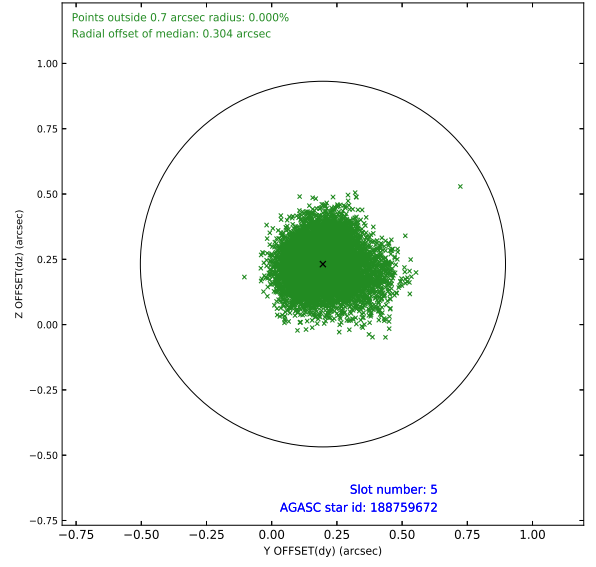
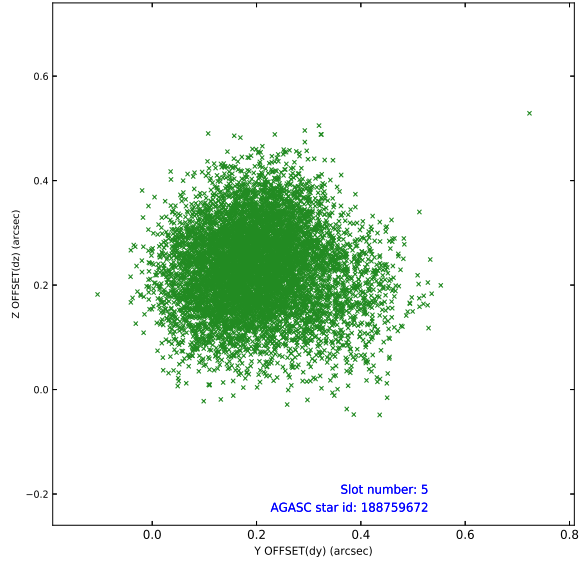
2.4.1 Slot 3



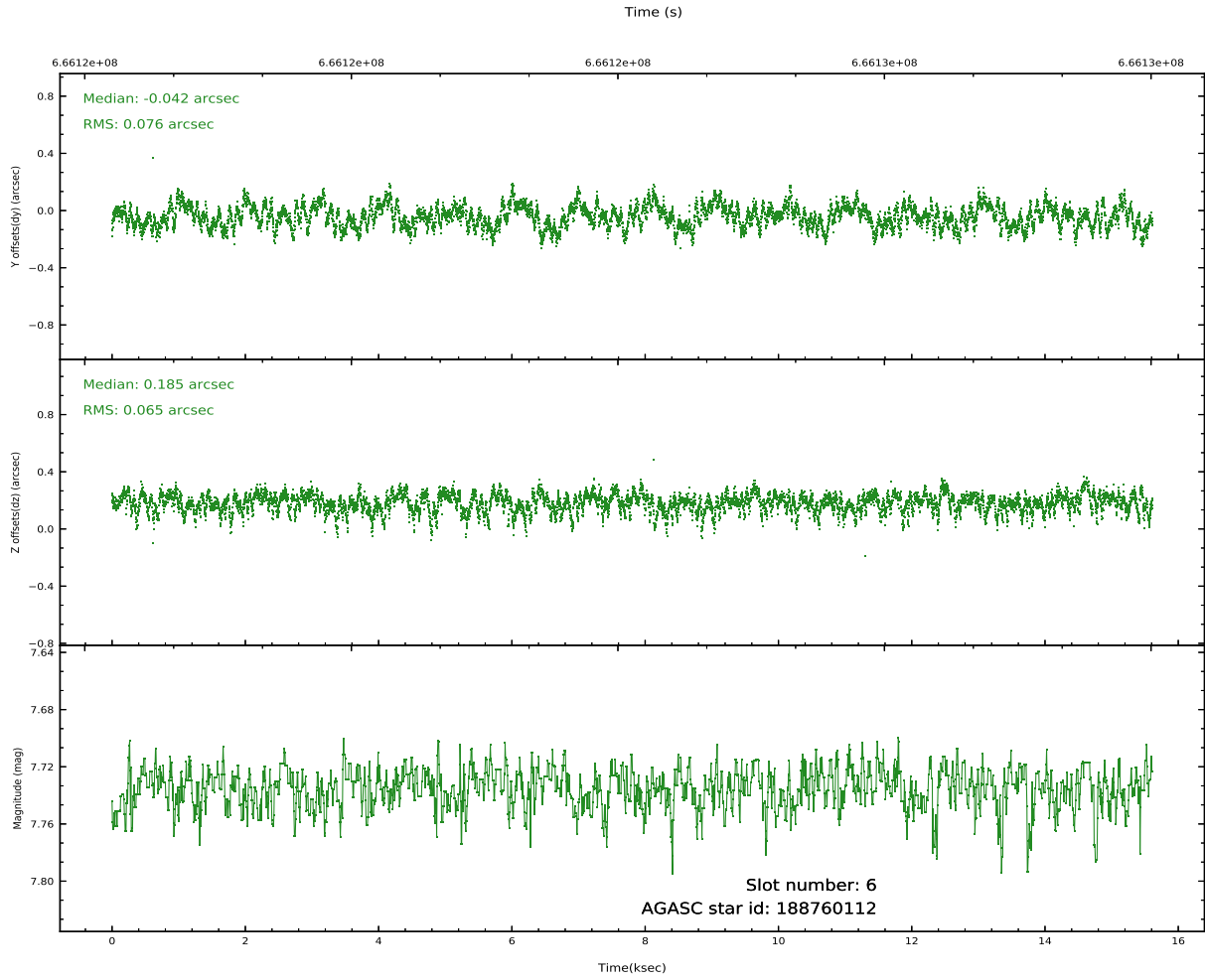
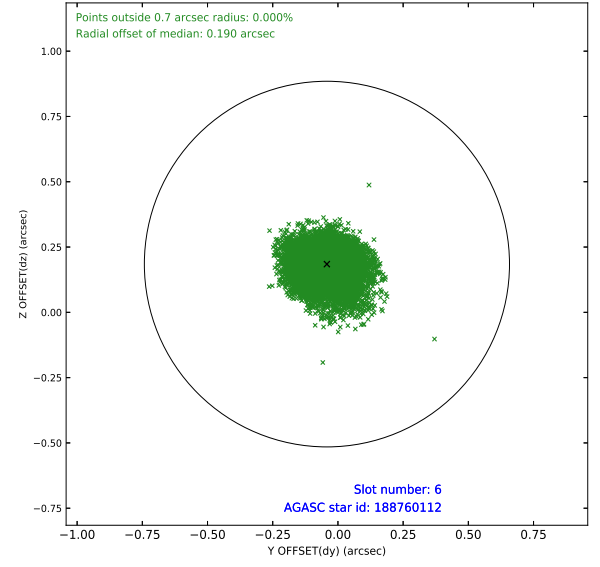
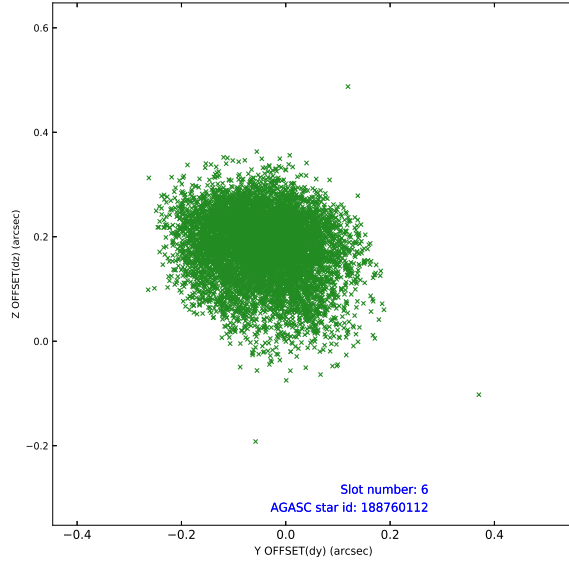
2.4.2 Slot 4



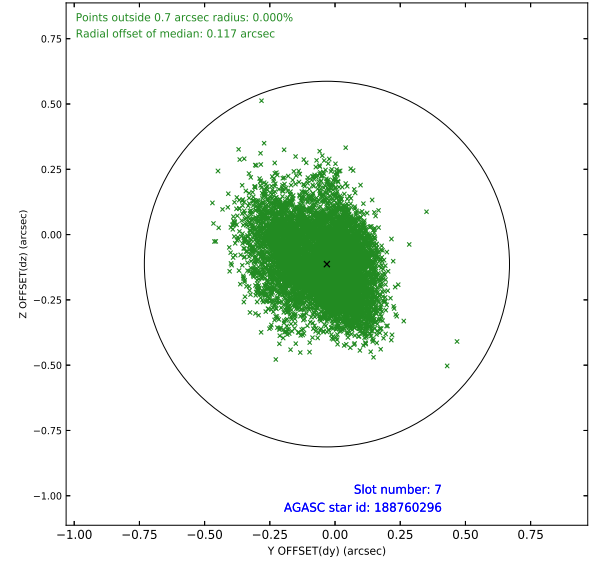
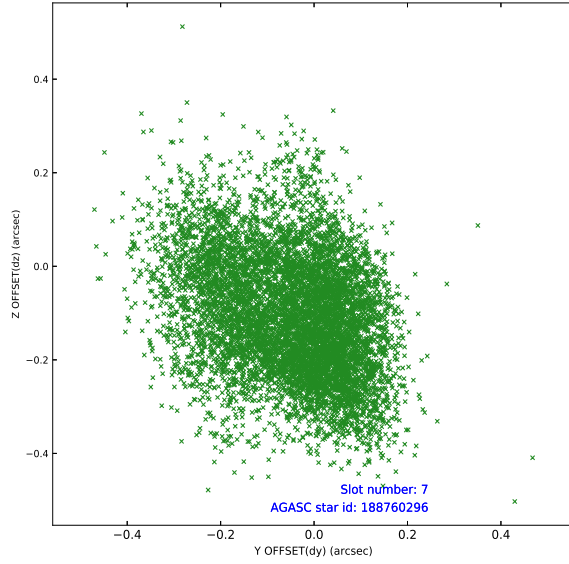
2.4.3 Slot 5



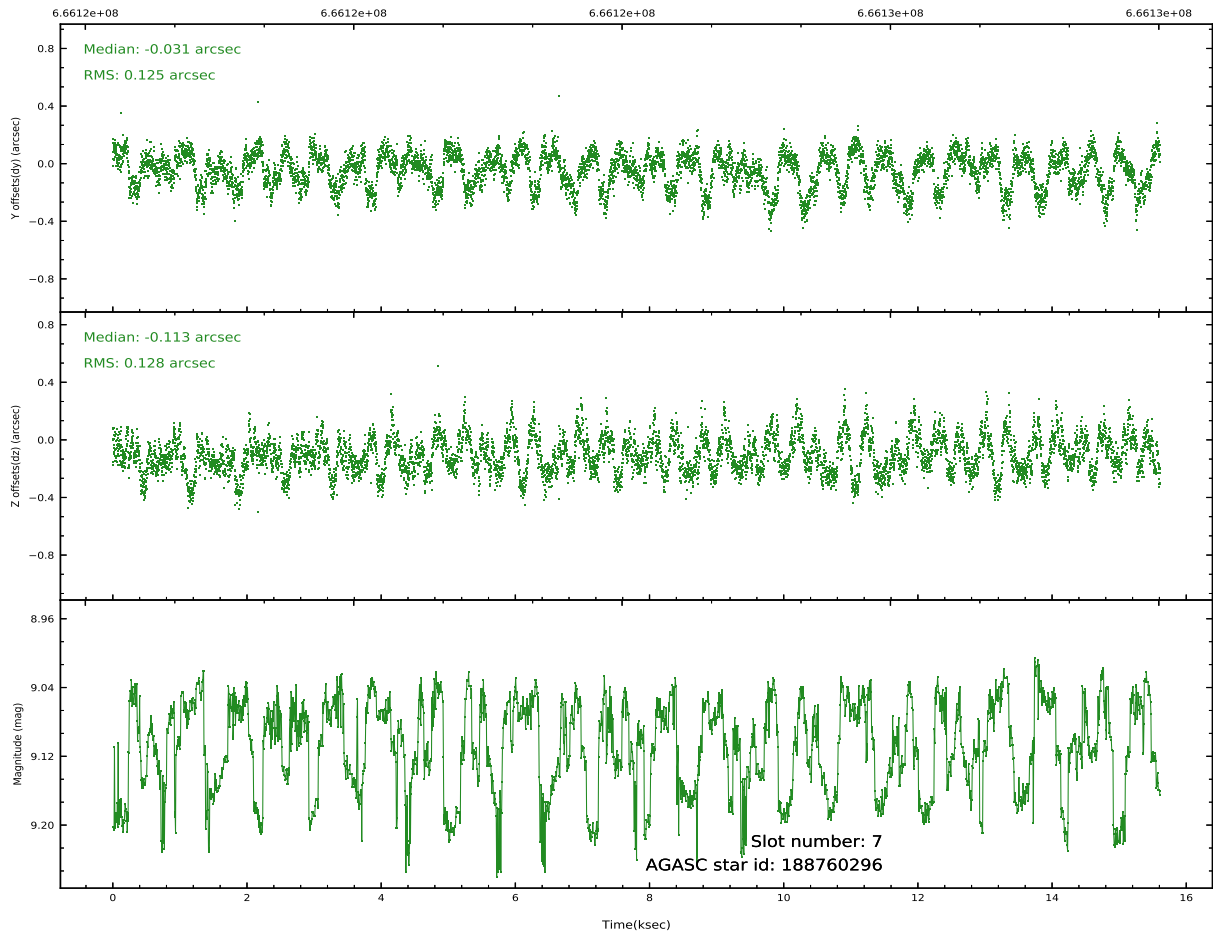
2.4.4 Slot 6



2.4.5 Slot 7

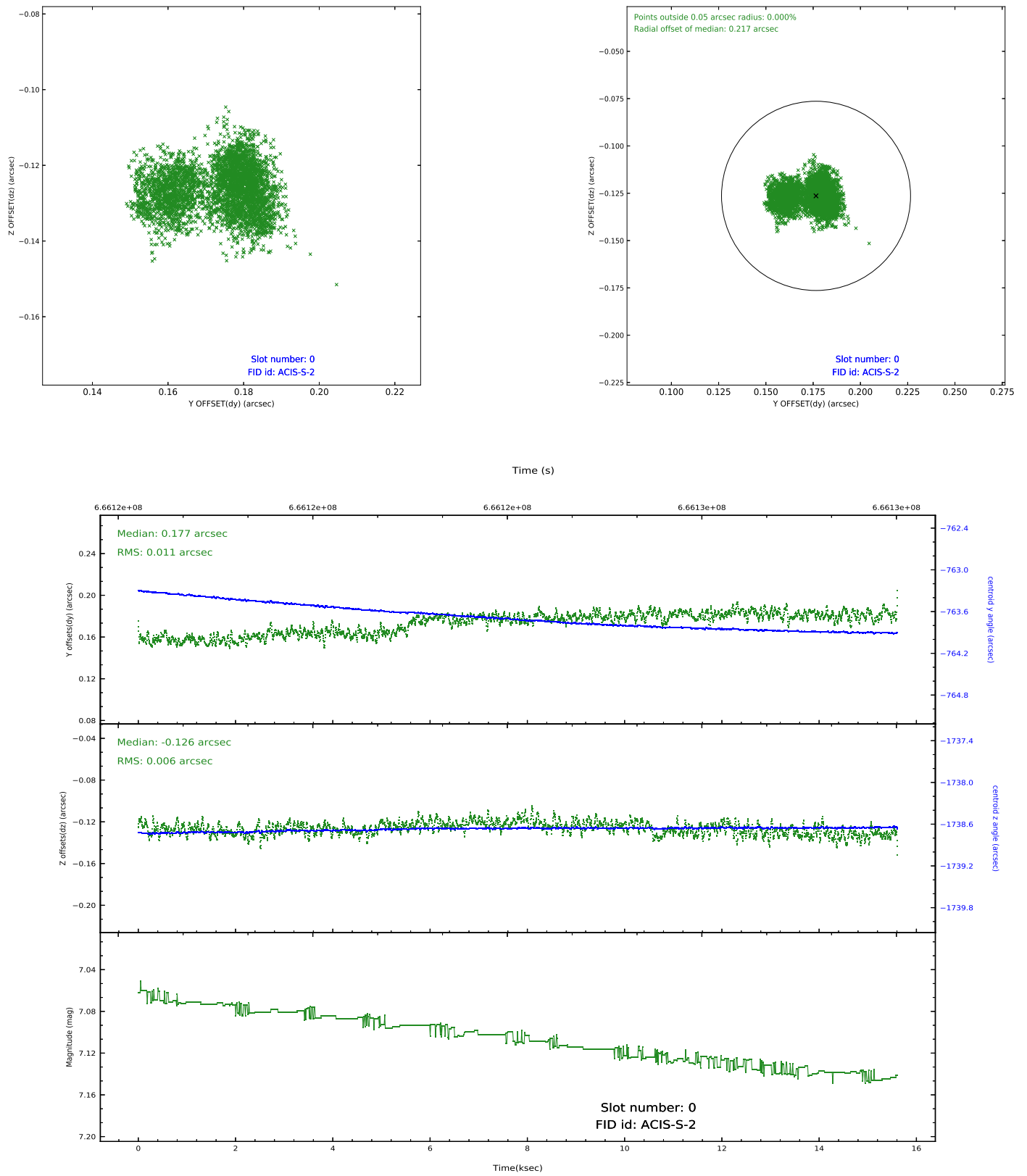


Time (s)

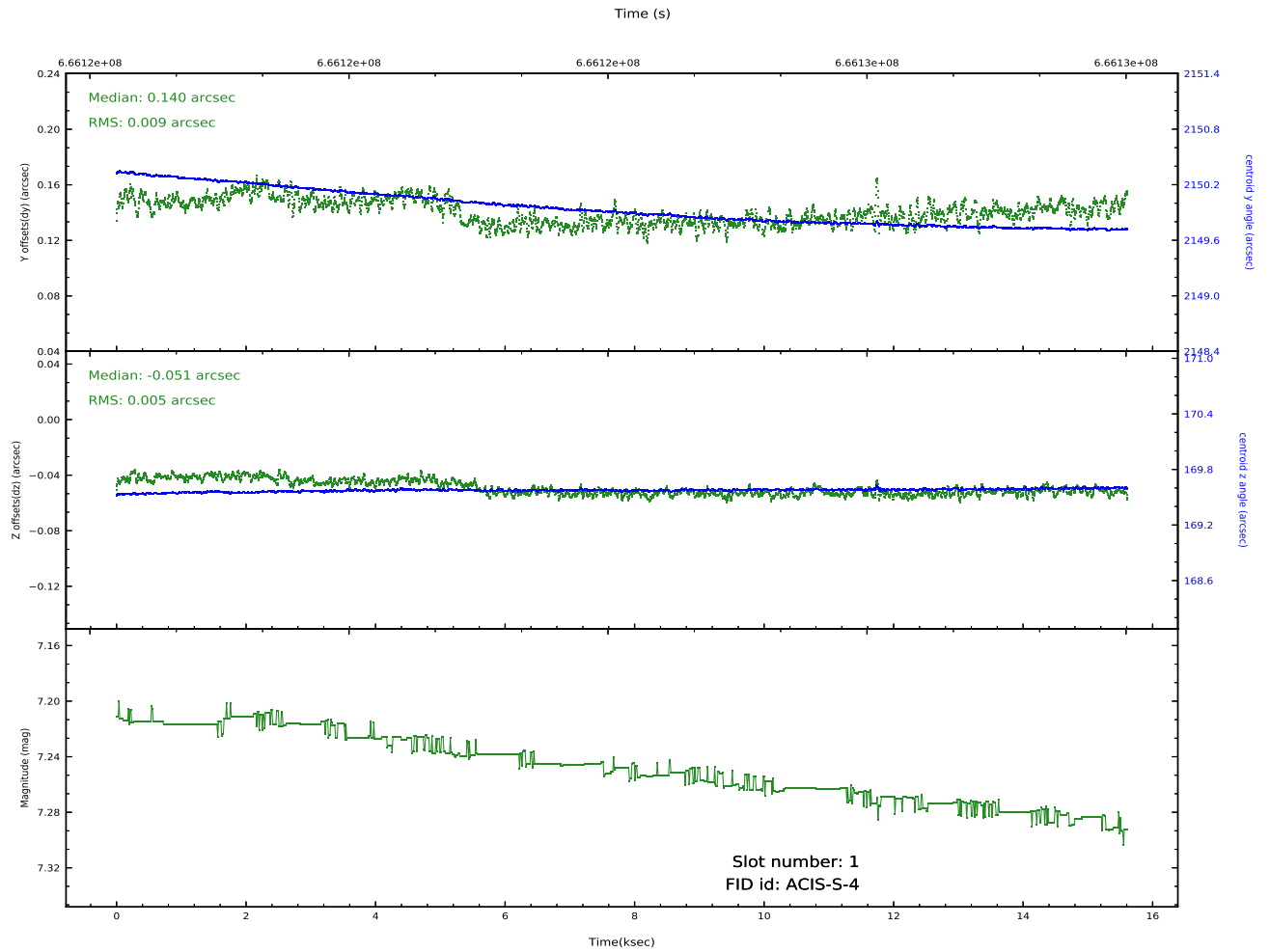
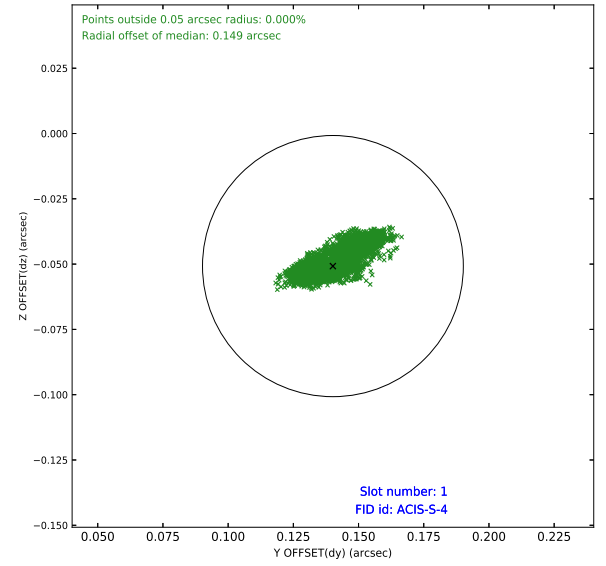
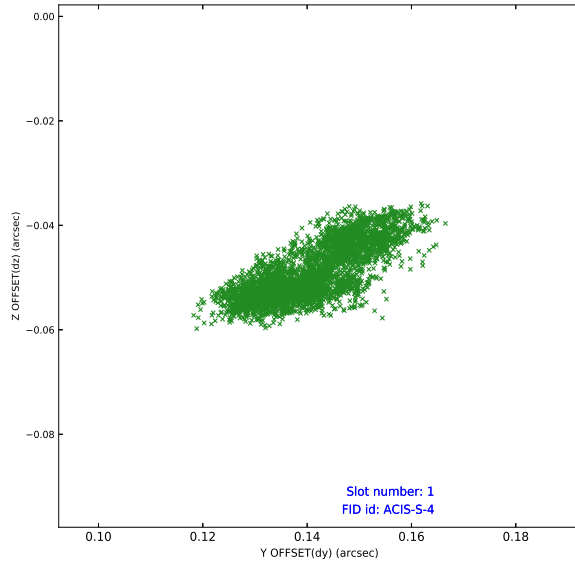


2.5 FID Slots

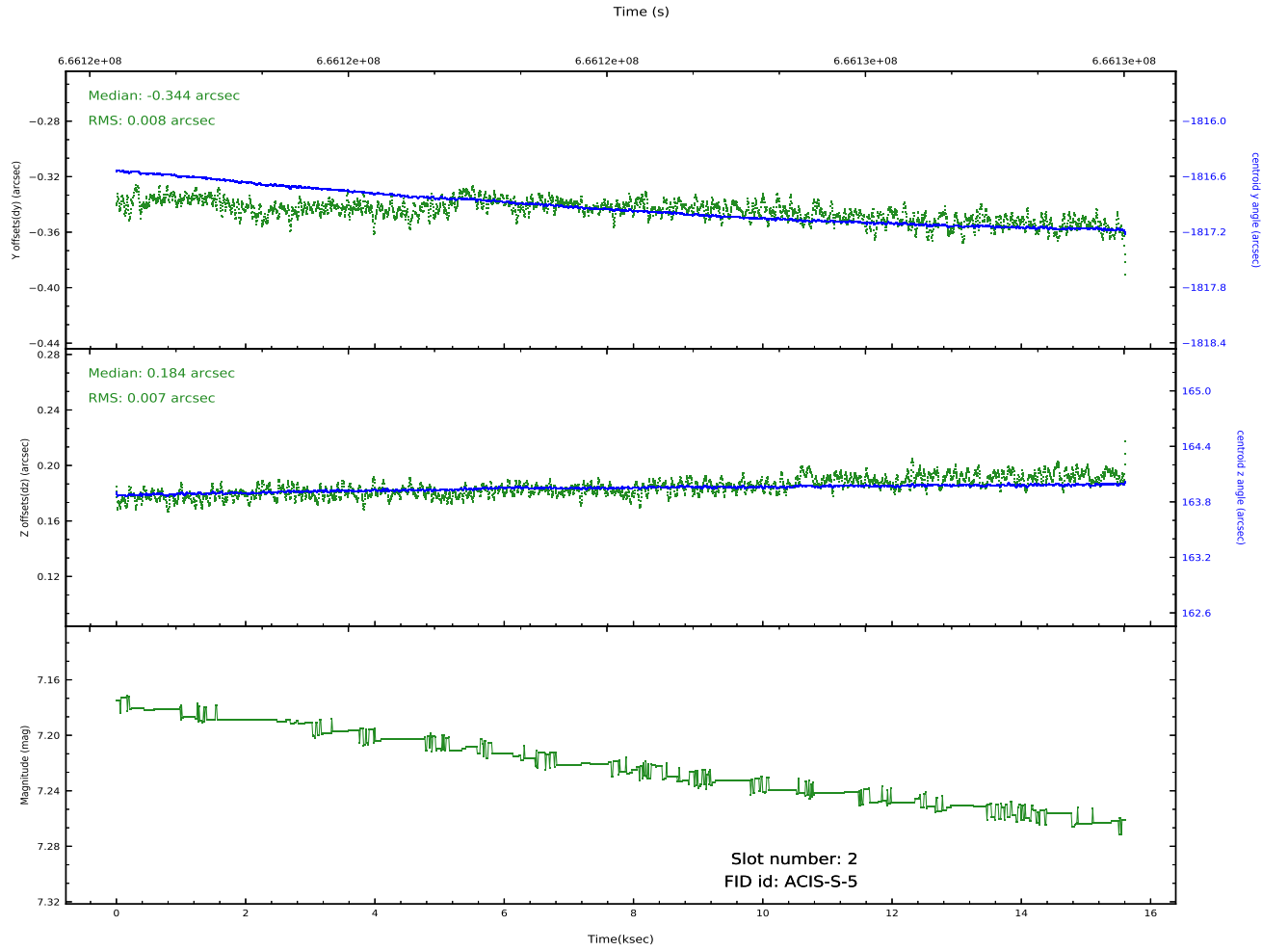
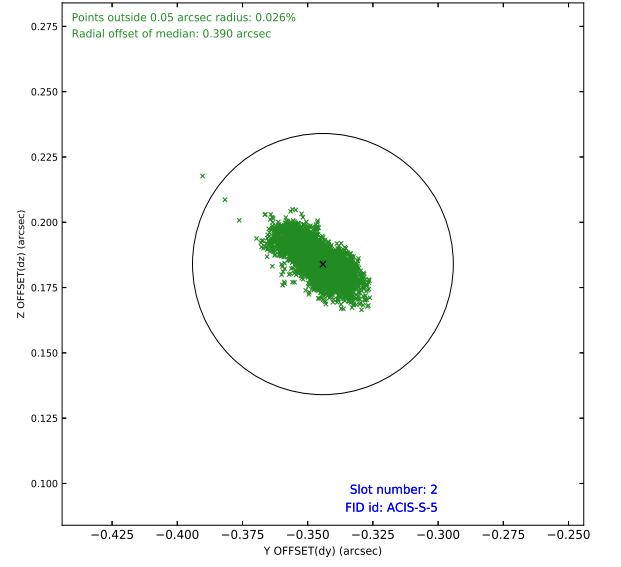
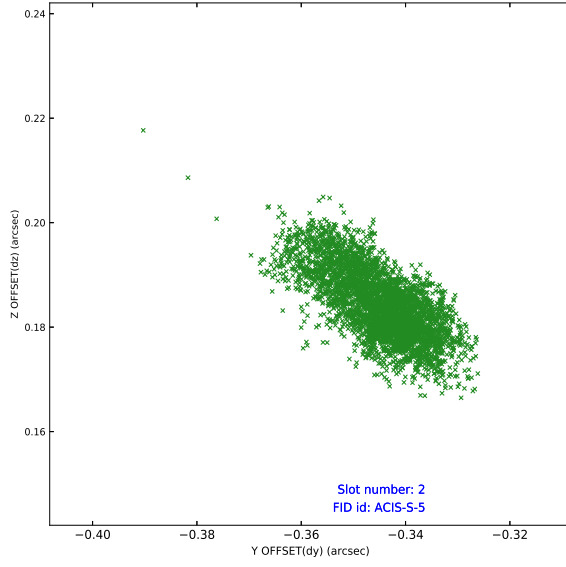
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	15.059293880701

A.2 Comments

Joint Proposal: XMM. Roll preference met. Optional chips I2 and I3 not included.