

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19570 - L2 Version 3
Chandra X-Ray Center

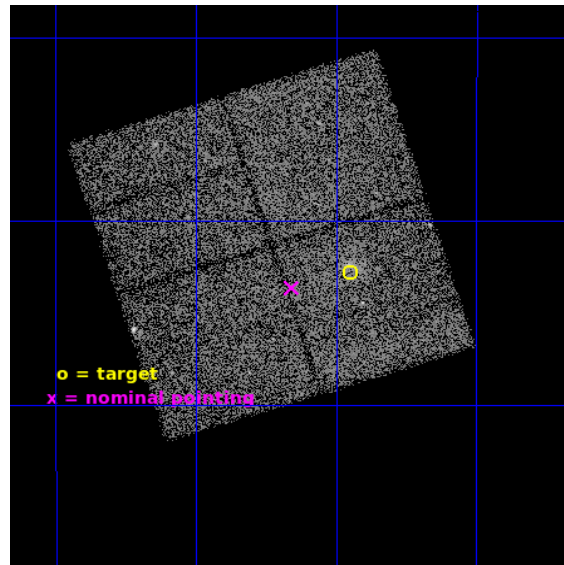
L2 Processing Date : Oct 24 2020

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1 Front

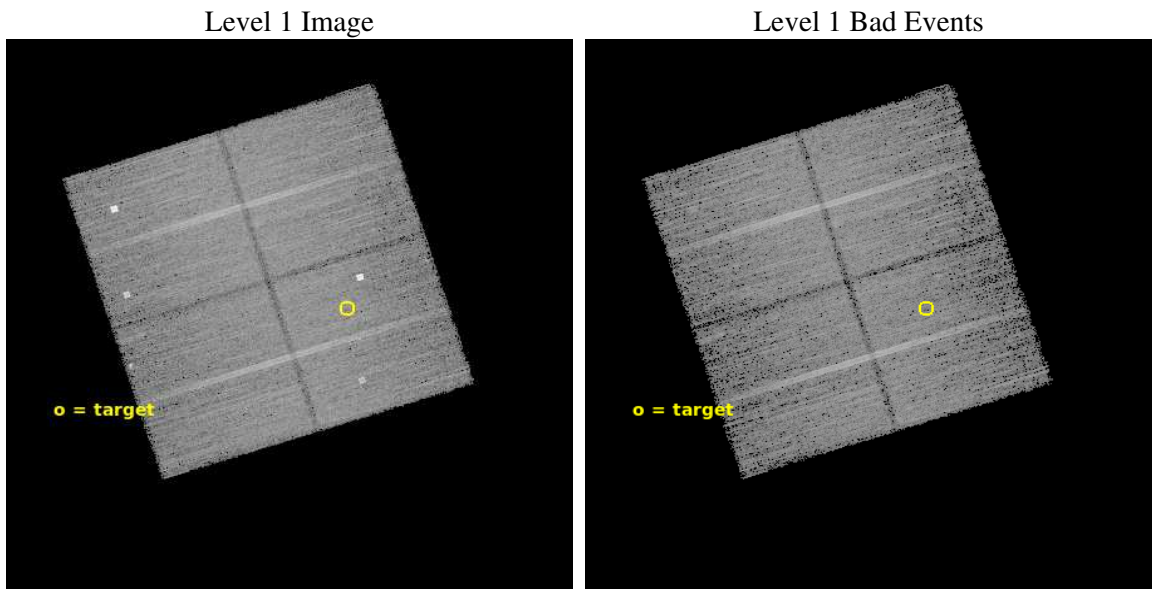
seq_num	801663	Sequence number
obs_id	19570	Observation id
title	THE SPECTACULAR CASE OF A RAM-PRESSURE STRIPPED GALAXY GROUP IN THE OUTSKIRTS OF HYDRA A/A780	Proposal title
observer	Sabrina De Grandi	Principal investigator
object	LEDA 87445	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	139.6125	Observer's specified target RA [deg]
dec_targ	-12.379722	Observer's specified target Dec [deg]
ra_nom	139.66443514248	Nominal RA [deg]
dec_nom	-12.393708408592	Nominal Dec [deg]
roll_nom	342.2259182966	Nominal Roll [deg]
revision	3	Processing version of data
ontime	21078.60065341	Sum of GTIs [s]
livetime	20803.193218033	Livetime [s]
ontime0	21075.4185431	Sum of GTIs [s]
ontime1	21078.60065341	Sum of GTIs [s]
ontime2	21078.641693473	Sum of GTIs [s]
ontime3	21078.682733417	Sum of GTIs [s]
l2events	60036	Number of level 2 events



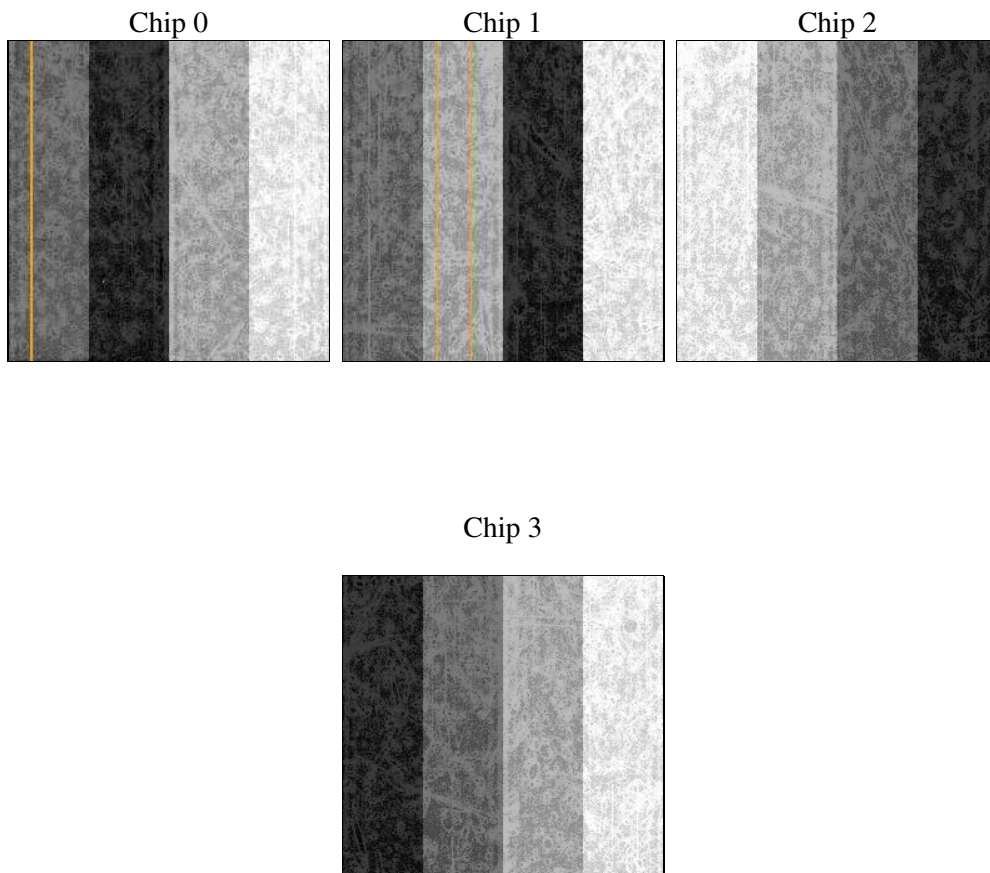
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	21078.60065341	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	21075.4185431	Sum of GTIs [s]
date	2020-10-24T16:42:42	Date and time of file creation	ontime1	21078.60065341	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	21078.641693473	Sum of GTIs [s]
			ontime3	21078.682733417	Sum of GTIs [s]
			l1events	634476	Number of level 1 events

2.1.4 Events

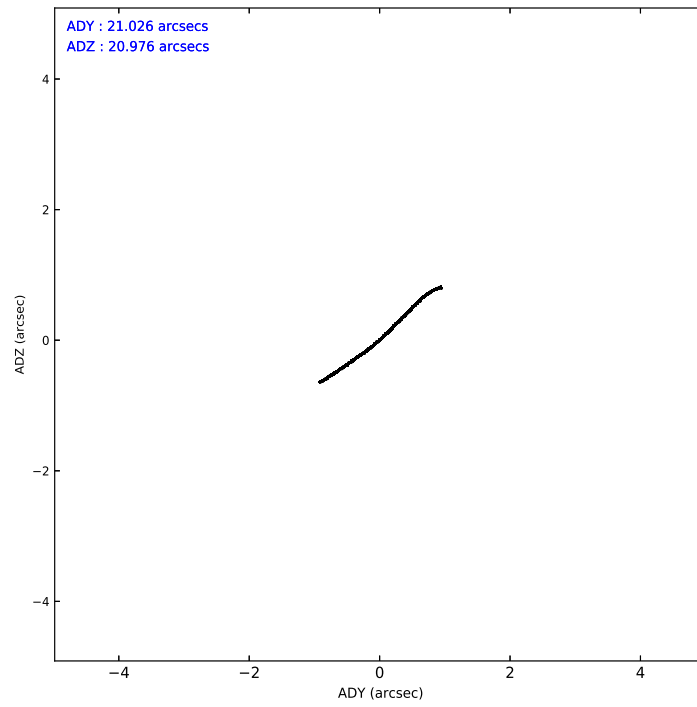
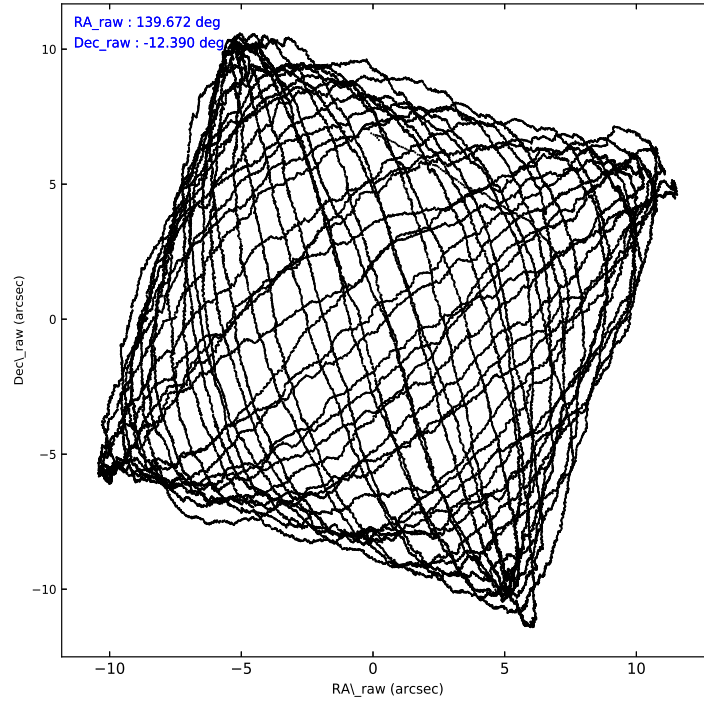
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	145022	158439	170678	160337
rejected events	127205	130842	145490	143212
rejected %	87%	82%	85%	89%

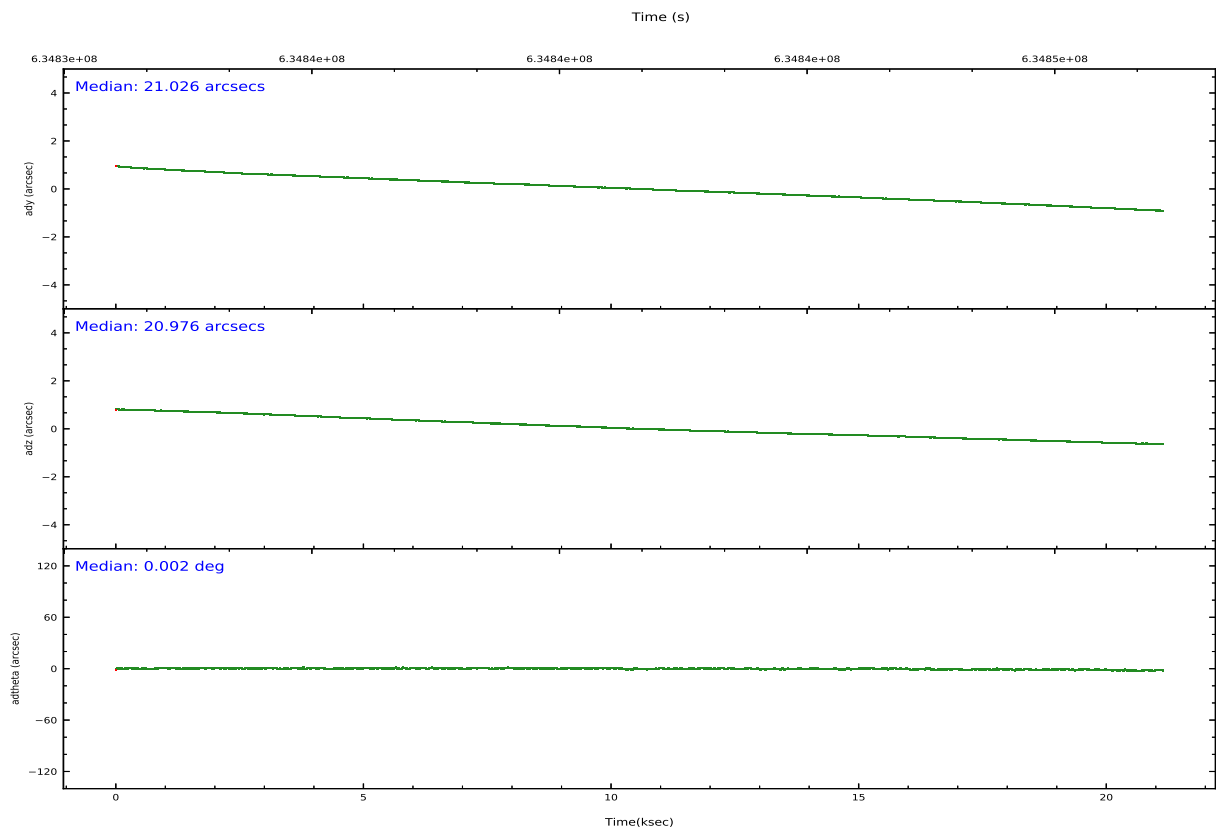
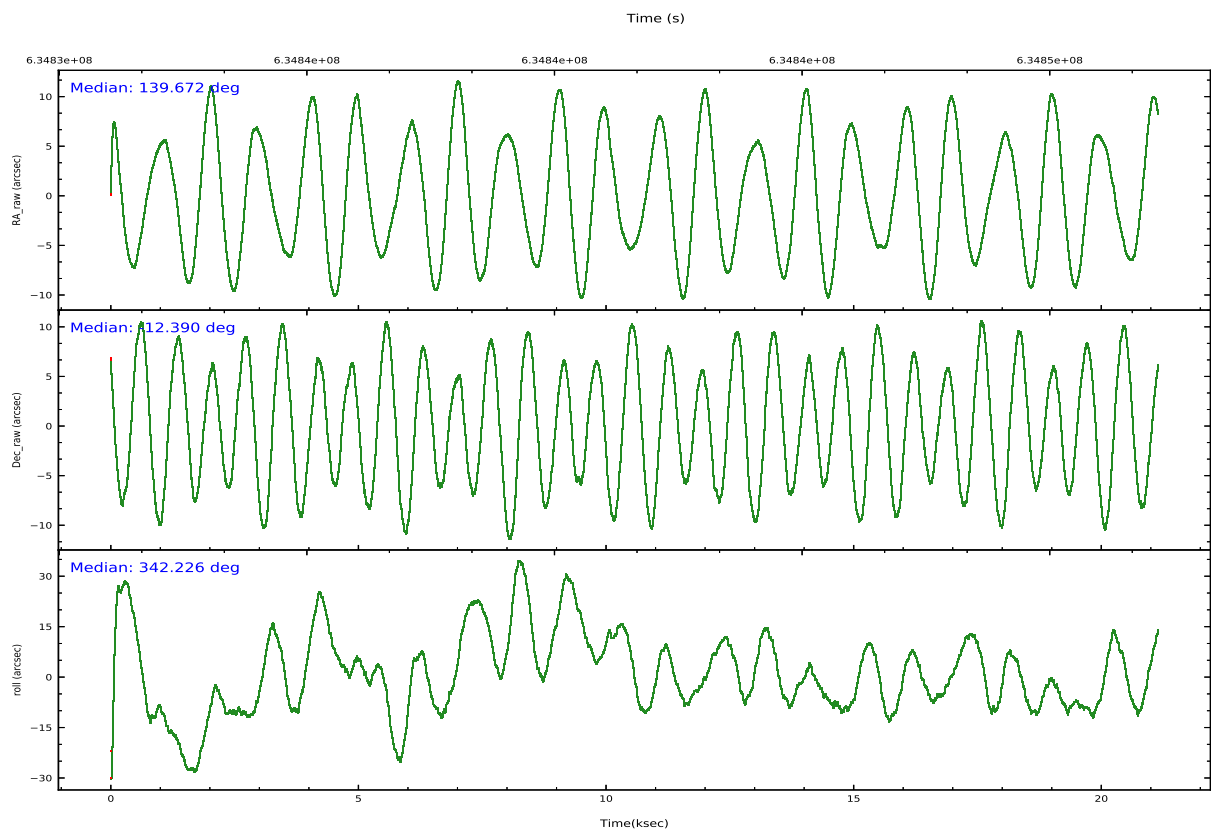
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	6241	15005	14357	6351
	4%	9%	8%	3%
grade 1 events	104	122	156	95
	0%	0%	0%	0%
grade 2 events	4412	4608	4135	3723
	3%	2%	2%	2%
grade 3 events	1798	1754	1697	1769
	1%	1%	0%	1%
grade 4 events	1723	1764	1698	1749
	1%	1%	0%	1%
grade 5 events	6656	6916	6062	7445
	4%	4%	3%	4%
grade 6 events	3648	4473	3306	3536
	2%	2%	1%	2%
grade 7 events	120440	123797	139267	135669
	83%	78%	81%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-0123	ACIS-0123	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	139.644572	139.66443514248	CCD I2 on	Y	Y
[deg] Pointing Dec	-12.395612	-12.393708408592	CCD I3 on	Y	Y
[deg] Pointing Roll	342.006866	342.2259182966	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	N	N
[mm] SIM translation stage pos	-242.342463	-242.3372517102575	CCD S3 on	O1	N
[mm] SIM translation stage offset	8.75	8.744798707327789	CCD S4 on	N	N
[s] Observation start time (MET)	634831189.184000	634829803.05601	CCD S5 on	N	N
Observation start date	2018-02-12T13:58:40	2018-02-12T13:36:43	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	634852189.184000	634853119.24489	On-chip summing requested	N	N
Observation end date	2018-02-12T19:48:40	2018-02-12T20:05:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



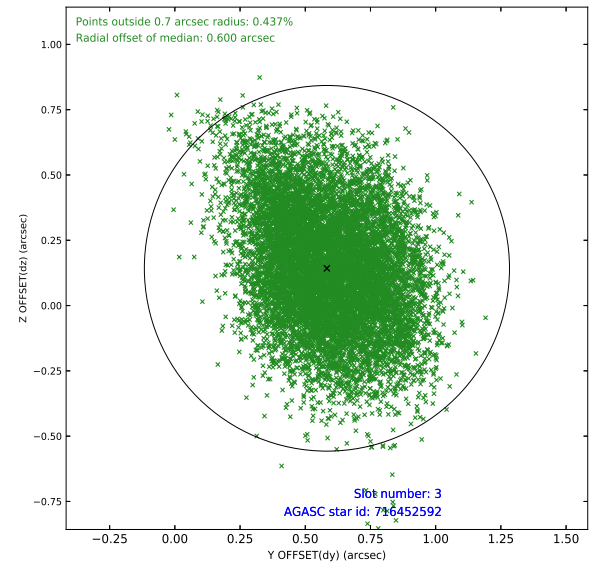
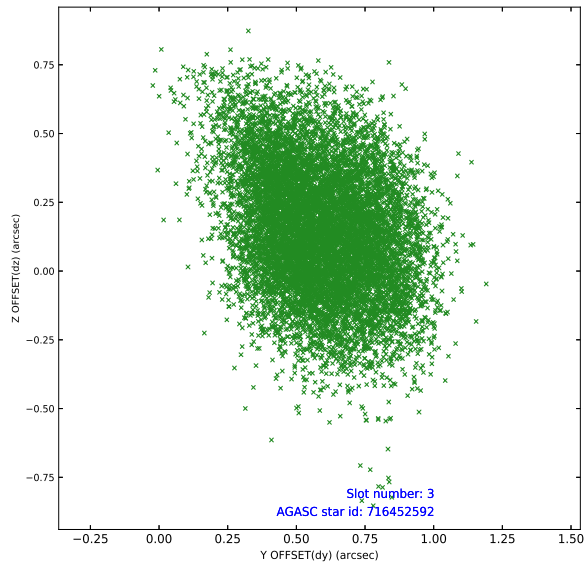


Slot Statistics

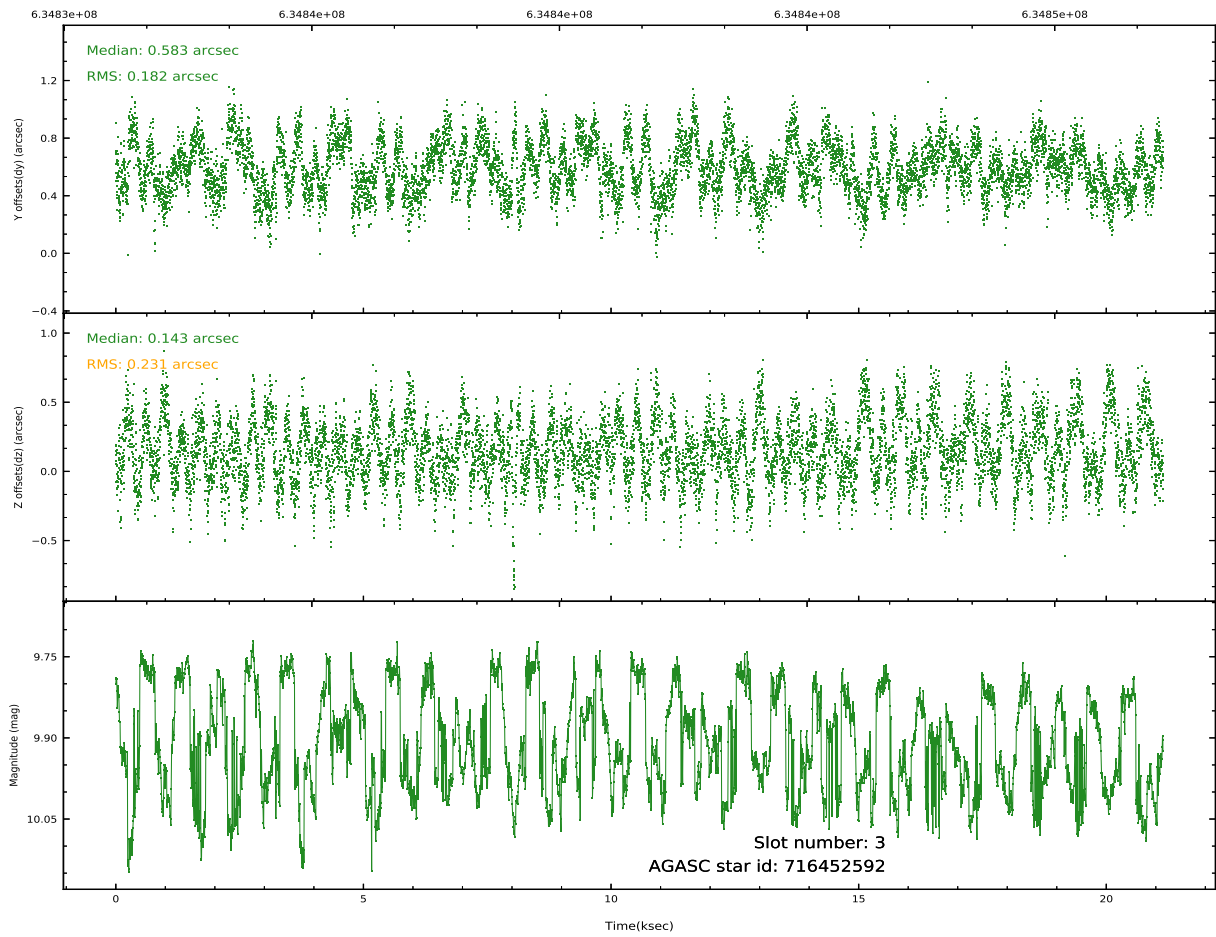
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.23	5157	1.000	0.128	0.018	0.022	0.047	0.000000	0.000000	918.51	-665
1	FID		ACIS-I-5	7.17	5158	1.000	-0.229	0.146	0.010	0.019	0.000000	0.000000	-1829.73	1232
2	FID		ACIS-I-6	7.17	5159	1.000	0.010	-0.093	0.024	0.045	0.000000	0.000000	383.94	1876
3	GUIDE	used	716452592	9.91	10291	1.000	0.583	0.143	0.311	0.507	139.301505	-12.745693	-756.74	-1570
4	GUIDE	used	716571984	9.87	10231	1.000	-0.369	-0.568	0.387	0.646	140.274671	-12.264834	1964.39	1129
5	GUIDE	used	716578792	9.80	10290	1.000	0.044	0.142	0.334	0.499	140.080177	-12.008821	1029.32	1796
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	716453424	9.97	10261	1.000	-0.298	0.284	0.255	0.425	139.175719	-11.750909	-2288.91	1696

2.4 Star Slots

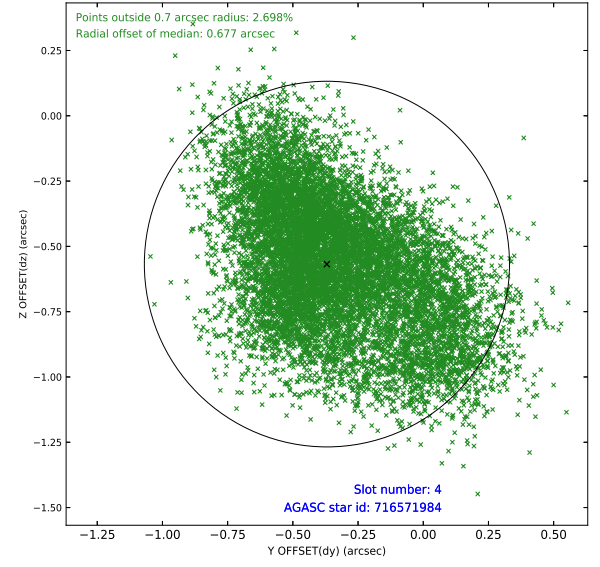
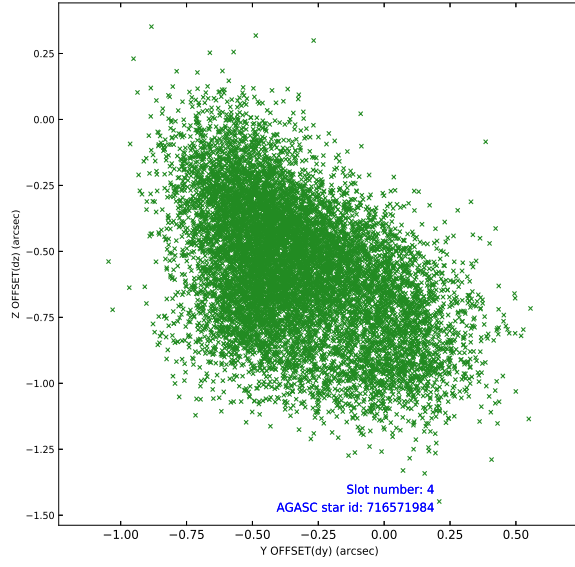
2.4.1 Slot 3



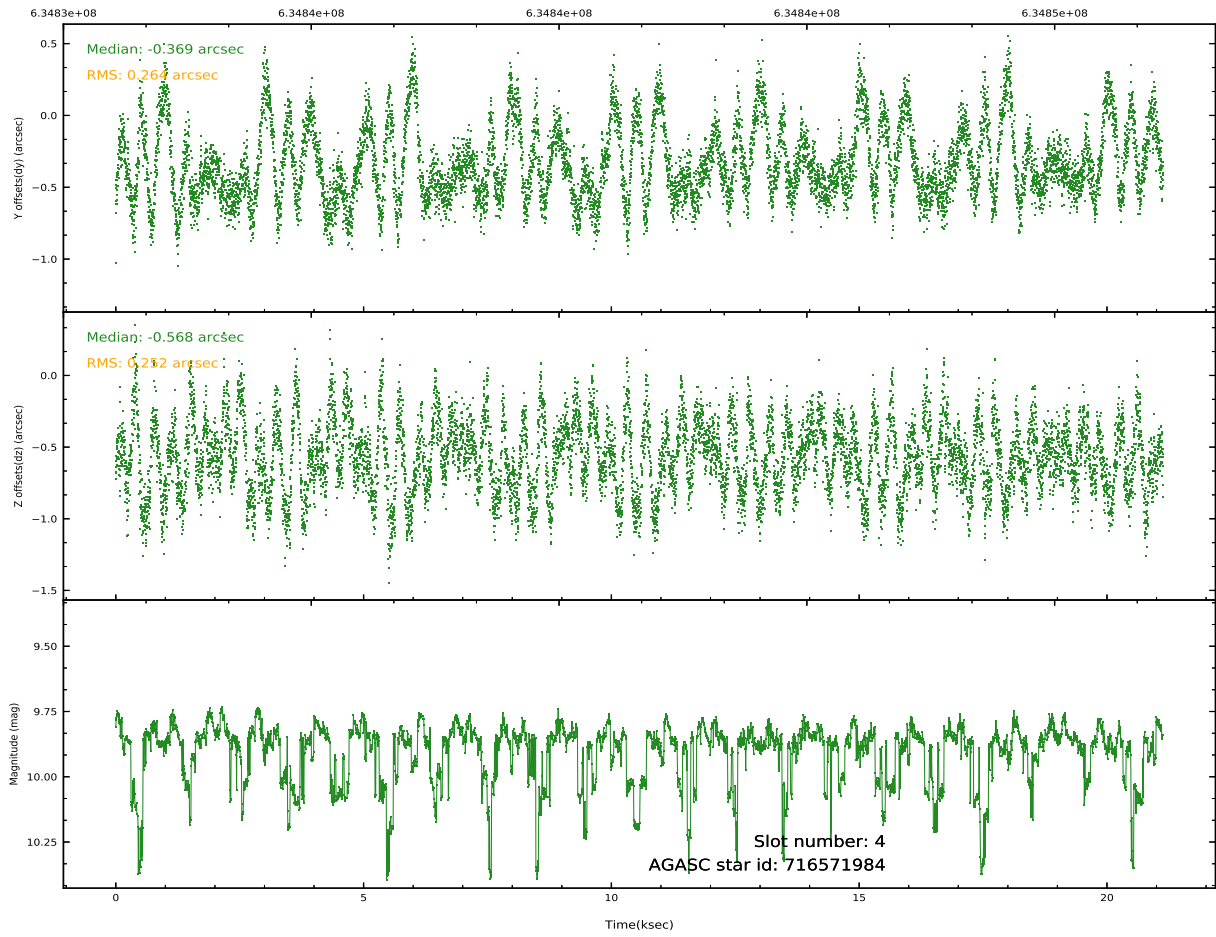
Time (s)



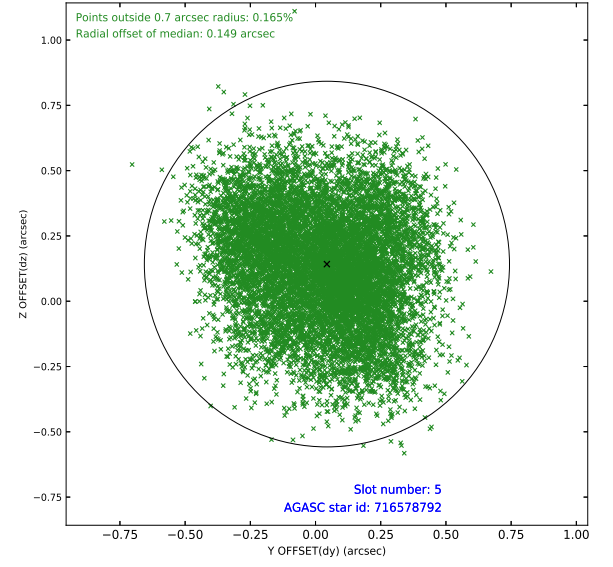
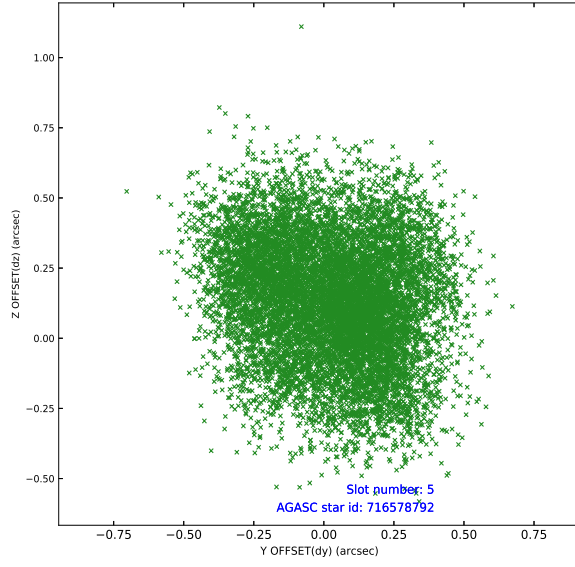
2.4.2 Slot 4



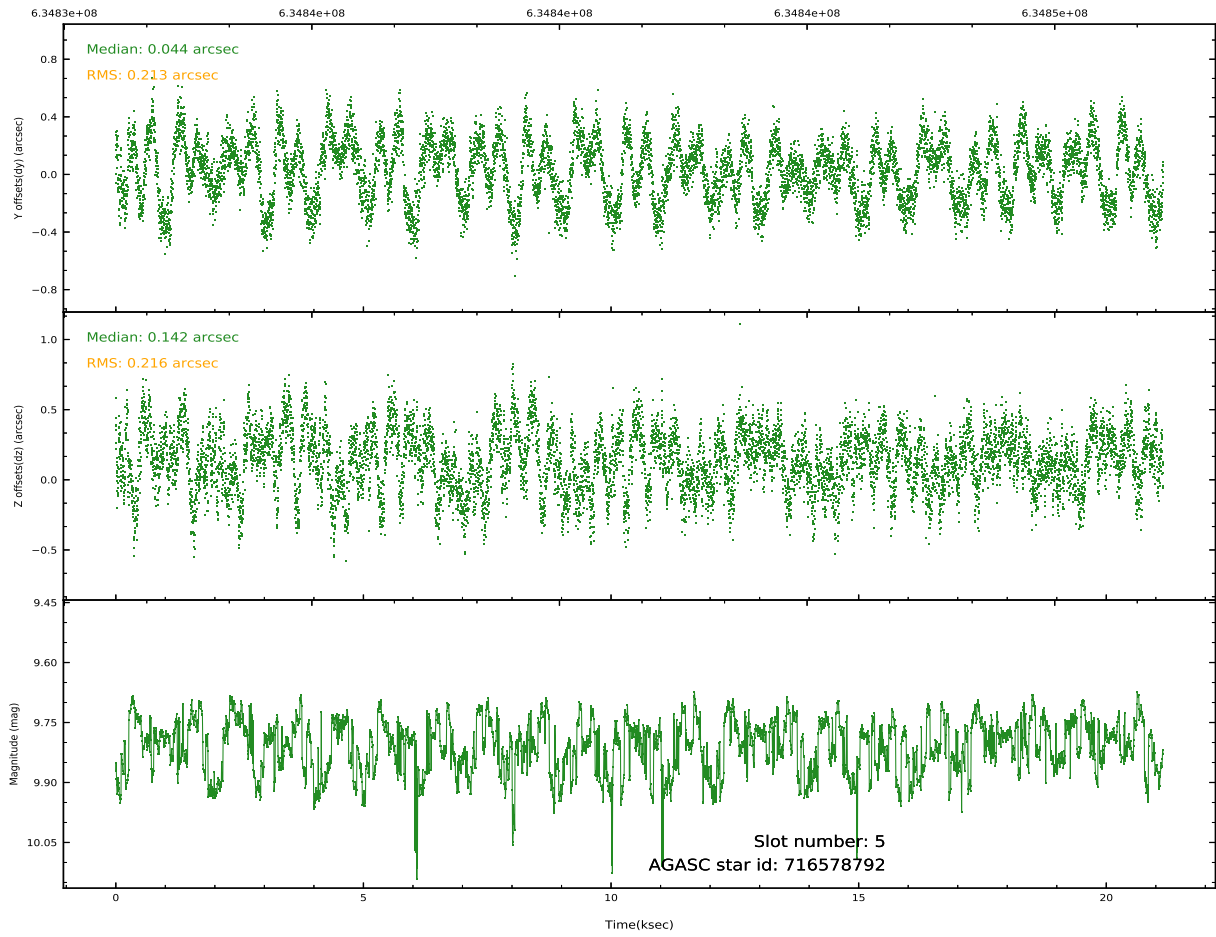
Time (s)



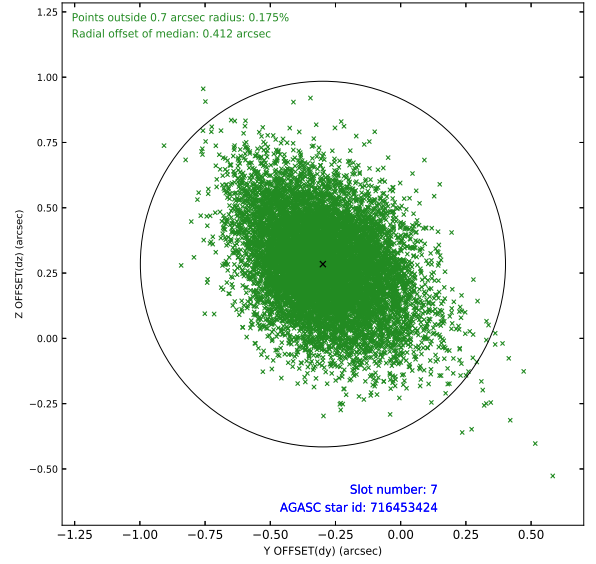
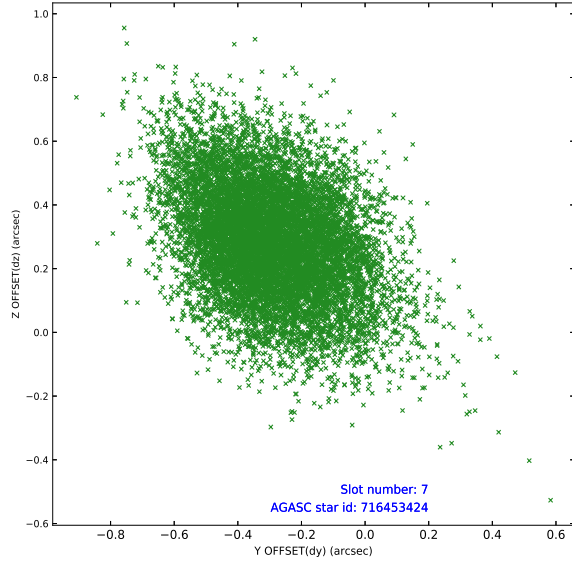
2.4.3 Slot 5



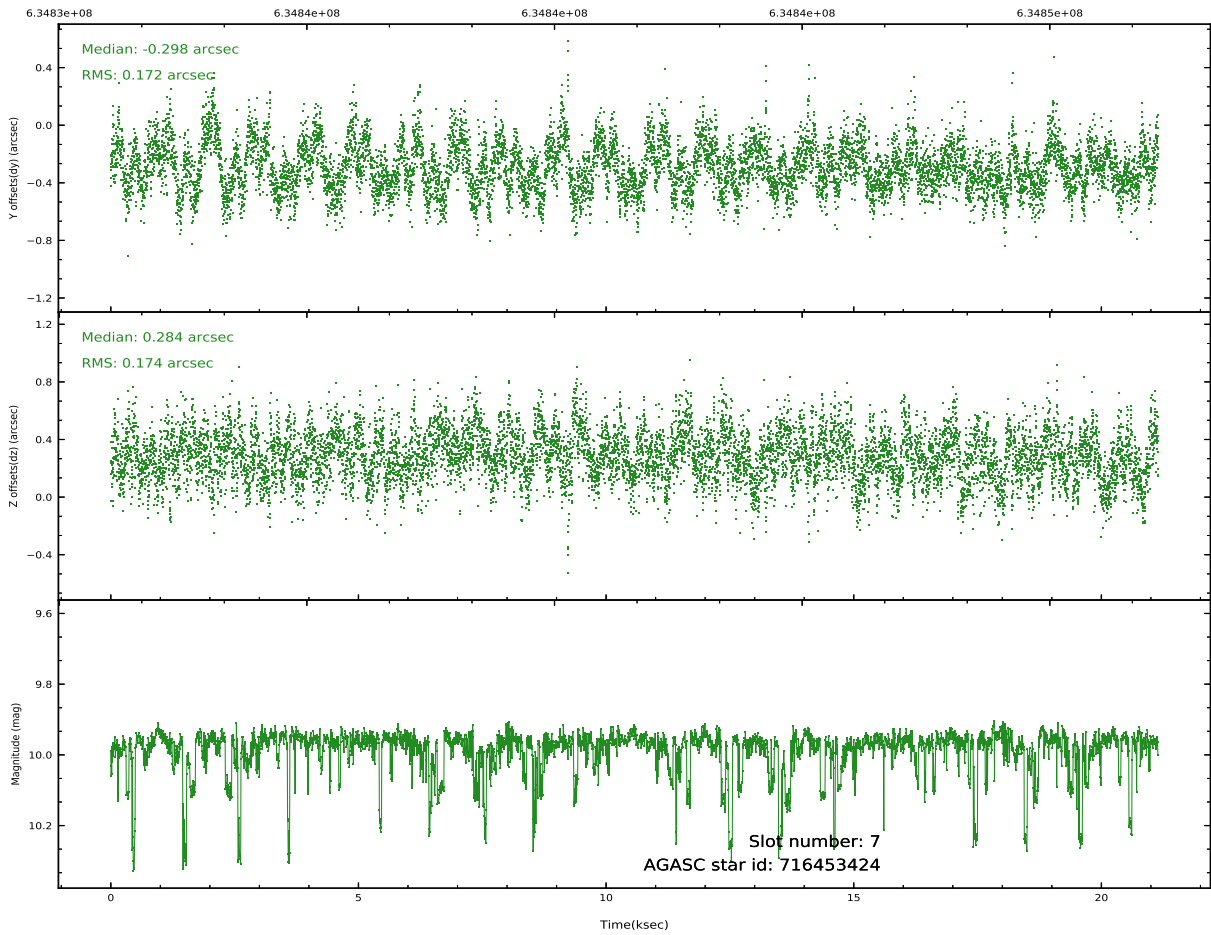
Time (s)



2.4.4 Slot 7

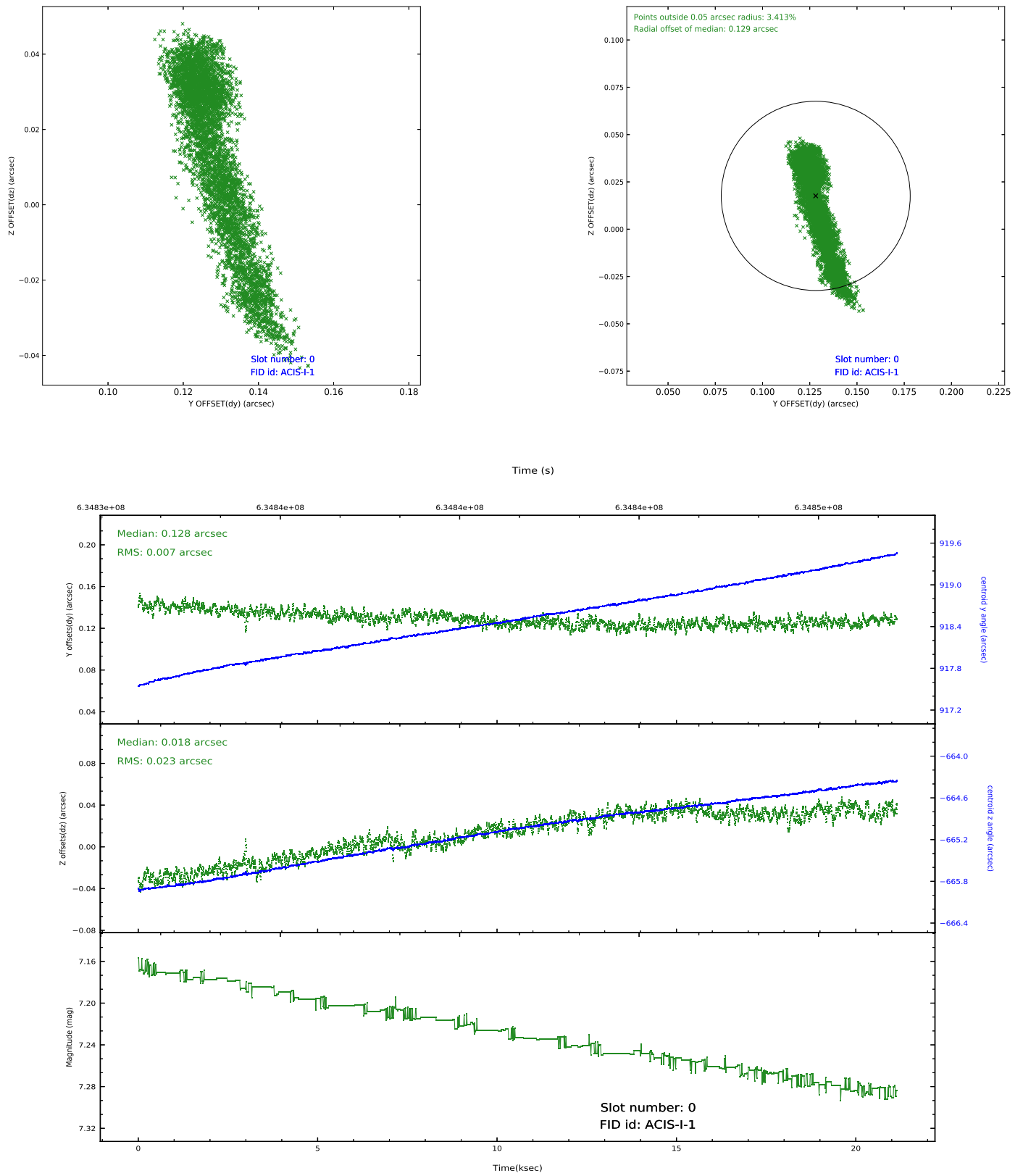


Time (s)

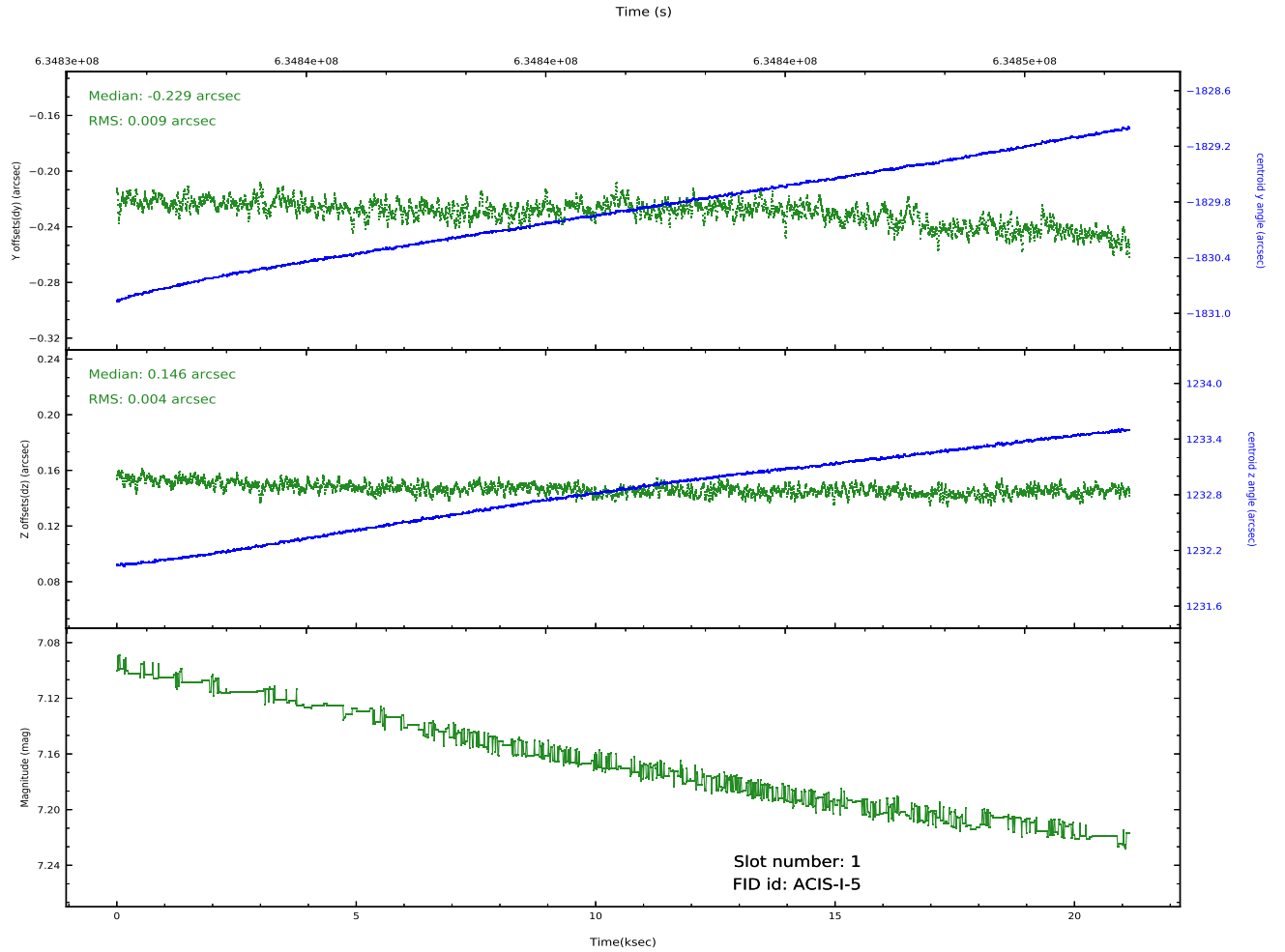
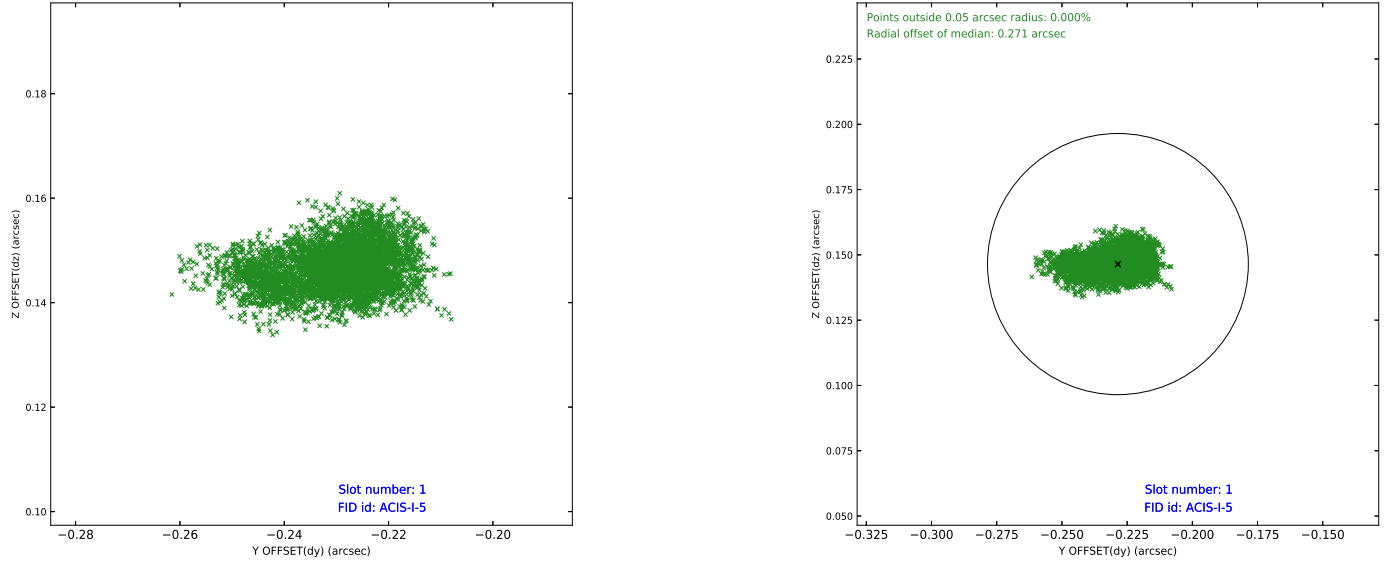


2.5 FID Slots

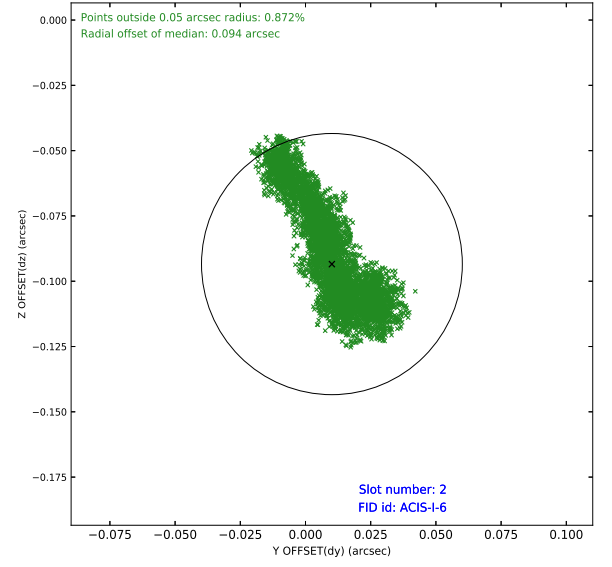
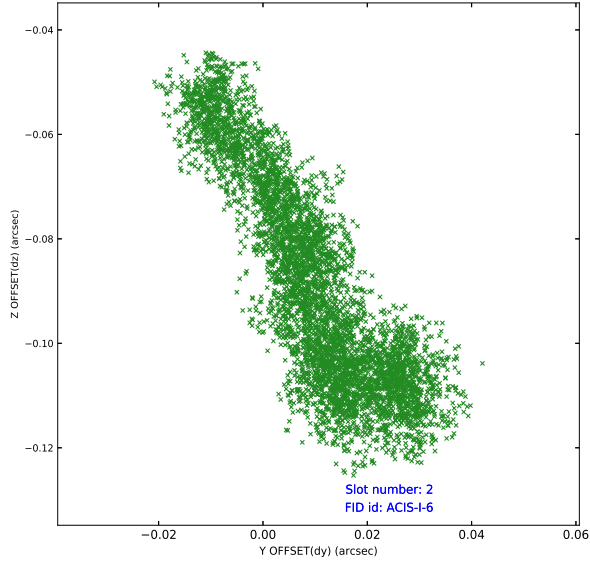
2.5.1 Slot 0



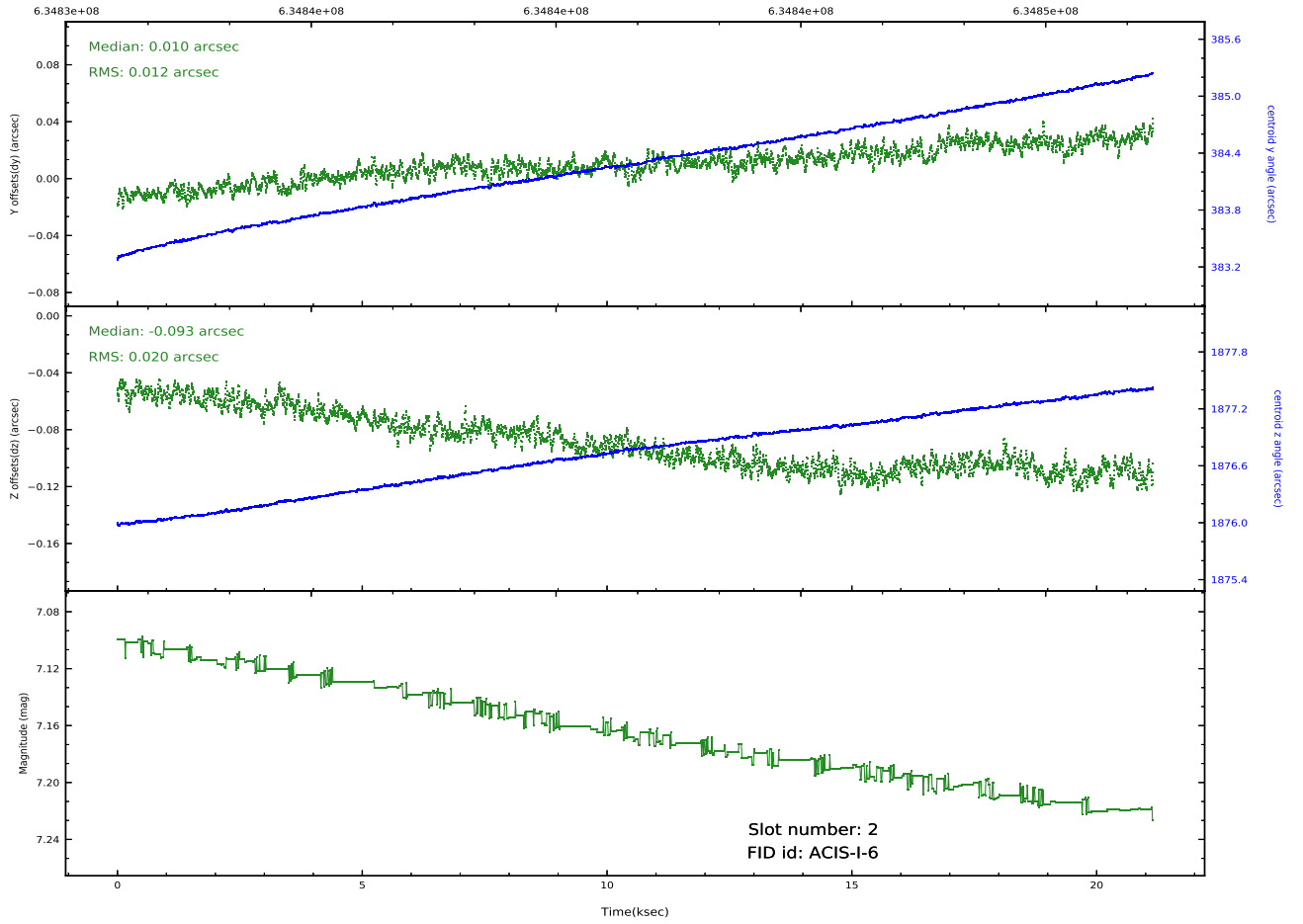
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.07860065794

A.2 Comments

One optional chip was dropped.

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The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.