

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21087 - L2 Version 2
Chandra X-Ray Center

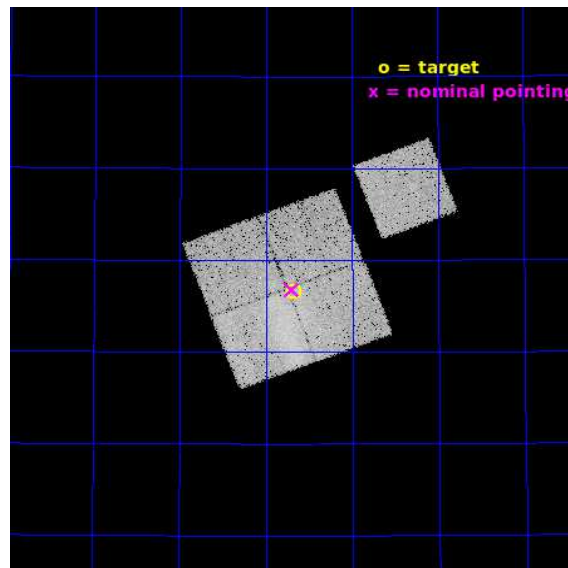
L2 Processing Date : Oct 25 2020

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1 Front

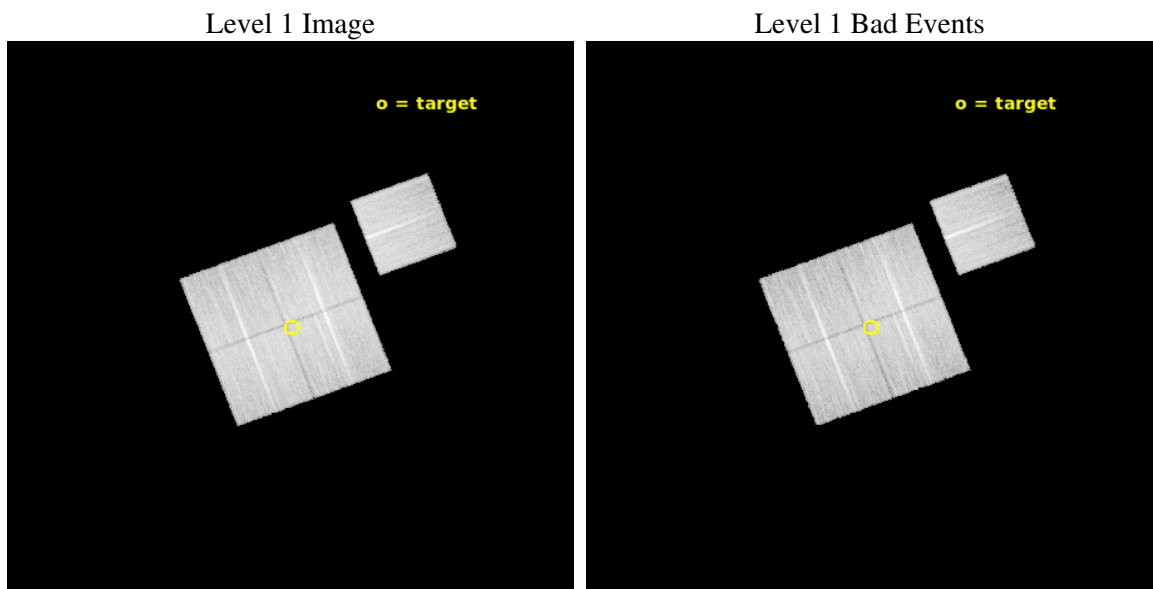
seq_num	801784	Sequence number
obs_id	21087	Observation id
title	A POSSIBLE FIRST DETECTION OF INVERSE COMPTON EMISSION FROM A GALAXY CLUSTER	Proposal title
observer	Maxim Markevitch	Principal investigator
object	CIZA J2242.8+5301	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	340.67	Observer's specified target RA [deg]
dec_targ	53.11	Observer's specified target Dec [deg]
ra_nom	340.67494047367	Nominal RA [deg]
dec_nom	53.113232447005	Nominal Dec [deg]
roll_nom	69.199750526626	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21069.645077586	Sum of GTIs [s]
livetime	20794.3546534	Livetime [s]
ontime0	21063.2399472	Sum of GTIs [s]
ontime1	21069.56299758	Sum of GTIs [s]
ontime2	21066.463037491	Sum of GTIs [s]
ontime3	21069.645077586	Sum of GTIs [s]
ontime6	21066.339957356	Sum of GTIs [s]
l2events	84306	Number of level 2 events



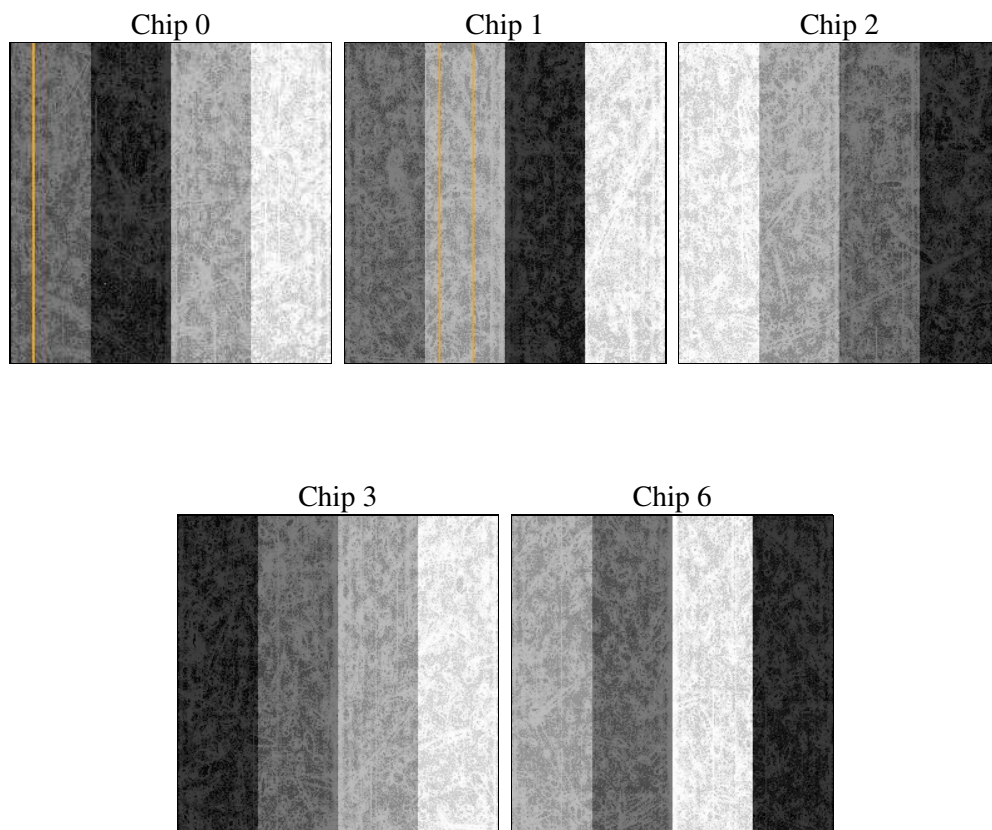
2 OBI

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	21069.645077586	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	21063.2399472	Sum of GTIs [s]
date	2020-10-25T20:25:26	Date and time of file creation	ontime1	21069.56299758	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	21066.463037491	Sum of GTIs [s]
			ontime3	21069.645077586	Sum of GTIs [s]
			ontime6	21066.339957356	Sum of GTIs [s]
			l1events	775982	Number of level 1 events

2.1.4 Events

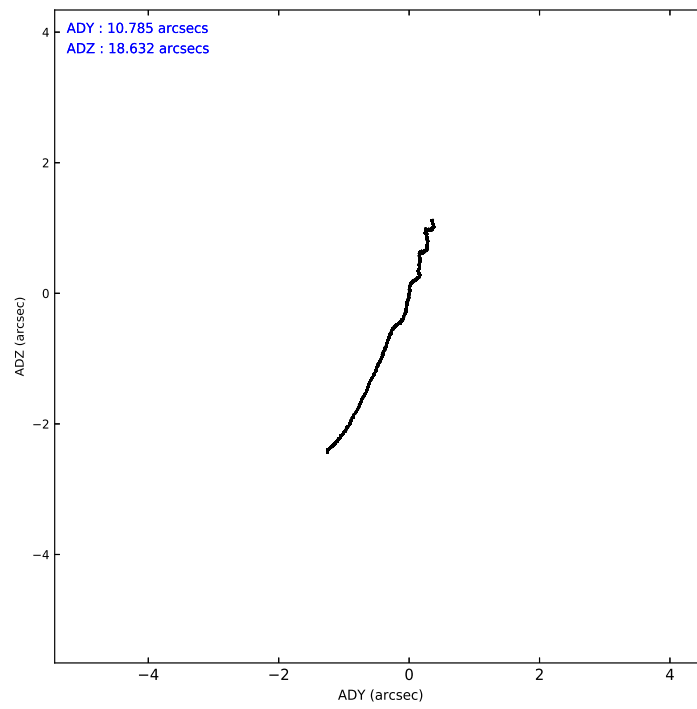
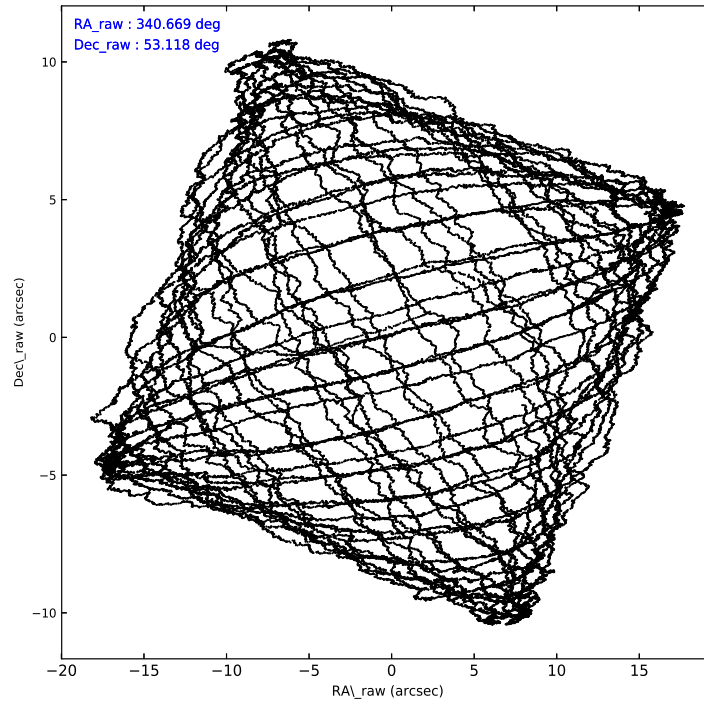
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	141827	154711	164013	156650	158781
rejected events	124016	127050	147080	137344	141515
rejected %	87%	82%	89%	87%	89%

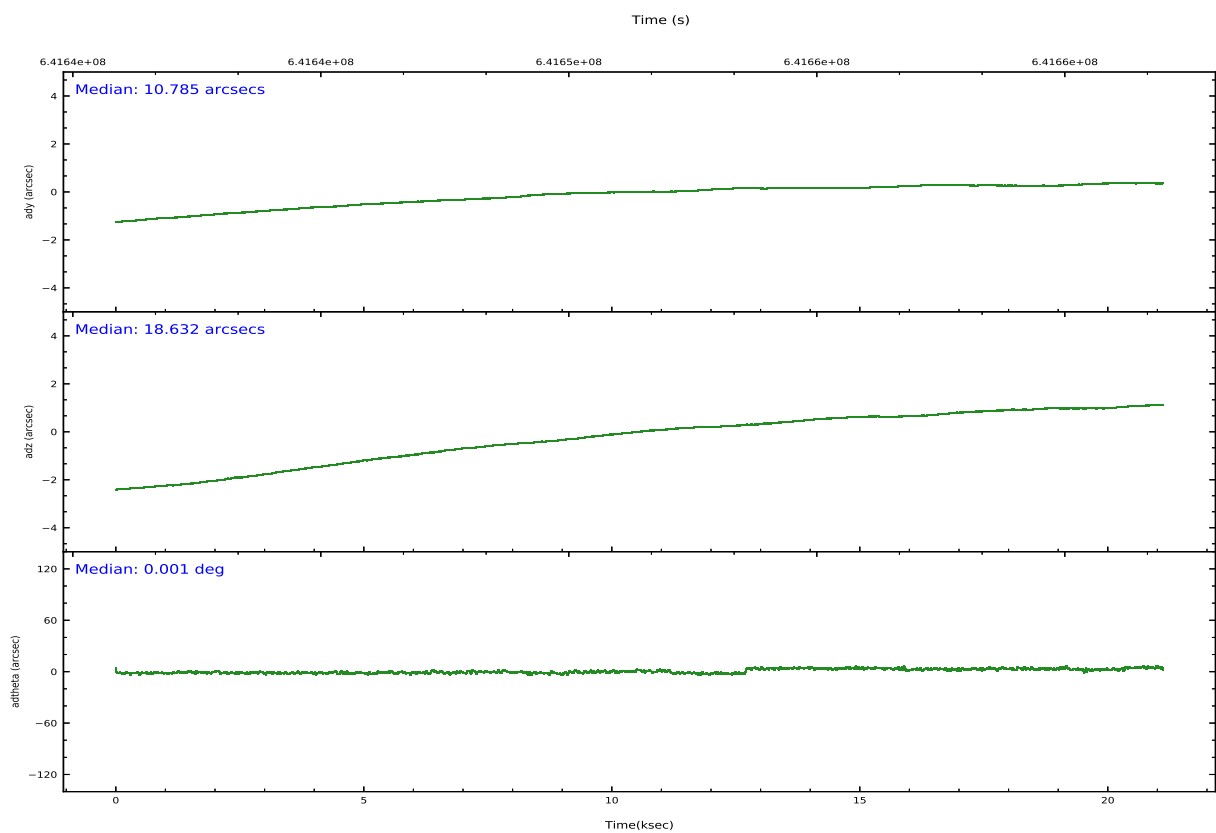
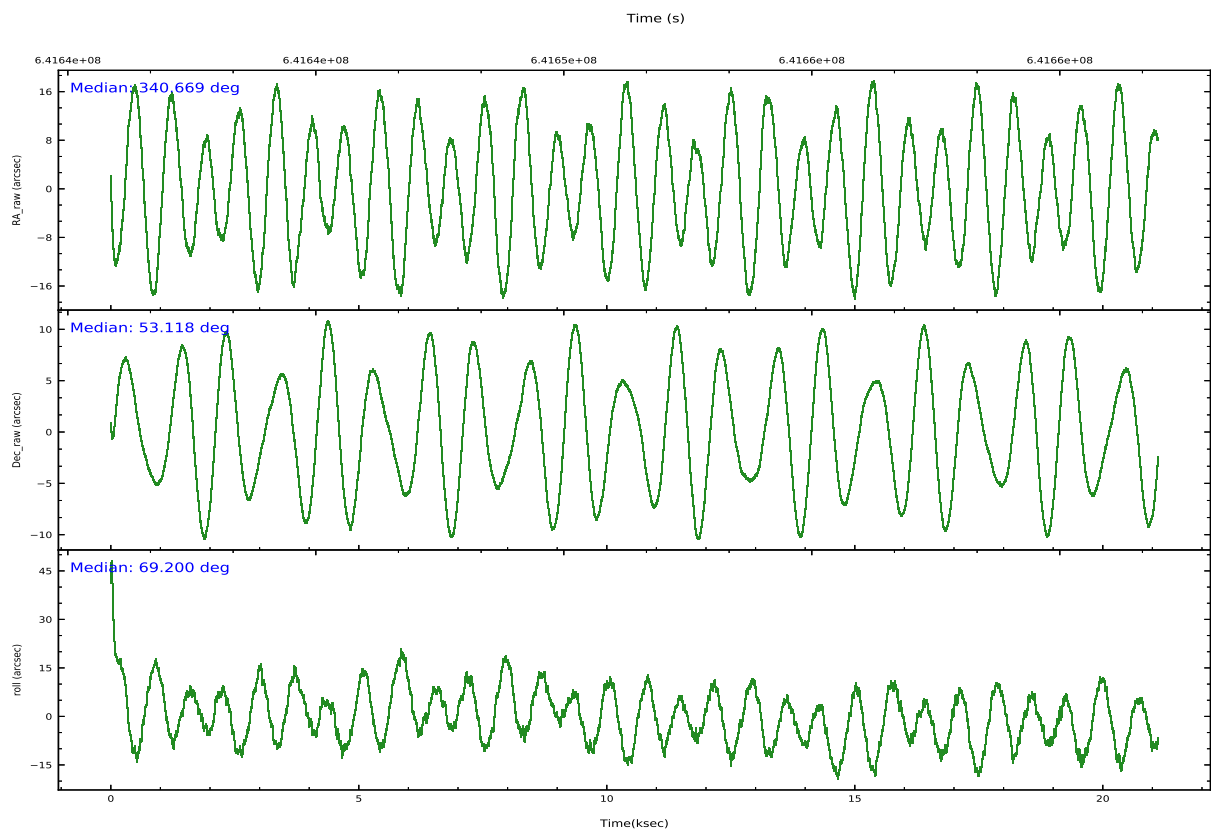
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6296	12805	6020	8091	5659
	4%	8%	3%	5%	3%
grade 1 events	90	99	103	97	75
	0%	0%	0%	0%	0%
grade 2 events	4478	6080	4320	3942	4000
	3%	3%	2%	2%	2%
grade 3 events	1772	2111	1700	1902	1723
	1%	1%	1%	1%	1%
grade 4 events	1635	2030	1672	1781	1661
	1%	1%	1%	1%	1%
grade 5 events	6642	7027	6194	7510	6831
	4%	4%	3%	4%	4%
grade 6 events	3634	4639	3227	3590	4227
	2%	2%	1%	2%	2%
grade 7 events	117280	119920	140777	129737	134605
	82%	77%	85%	82%	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	340.675992	340.67494047367	CCD I2 on	Y	Y
[deg] Pointing Dec	53.090772	53.113232447005	CCD I3 on	Y	Y
[deg] Pointing Roll	68.995213	69.199750526626	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	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	641640984.184000	641639857.33272	CCD S5 on	N	N
Observation start date	2018-05-02T09:35:15	2018-05-02T09:17:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	641661984.184000	641662856.28408	On-chip summing requested	N	N
Observation end date	2018-05-02T15:25:15	2018-05-02T15:40:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



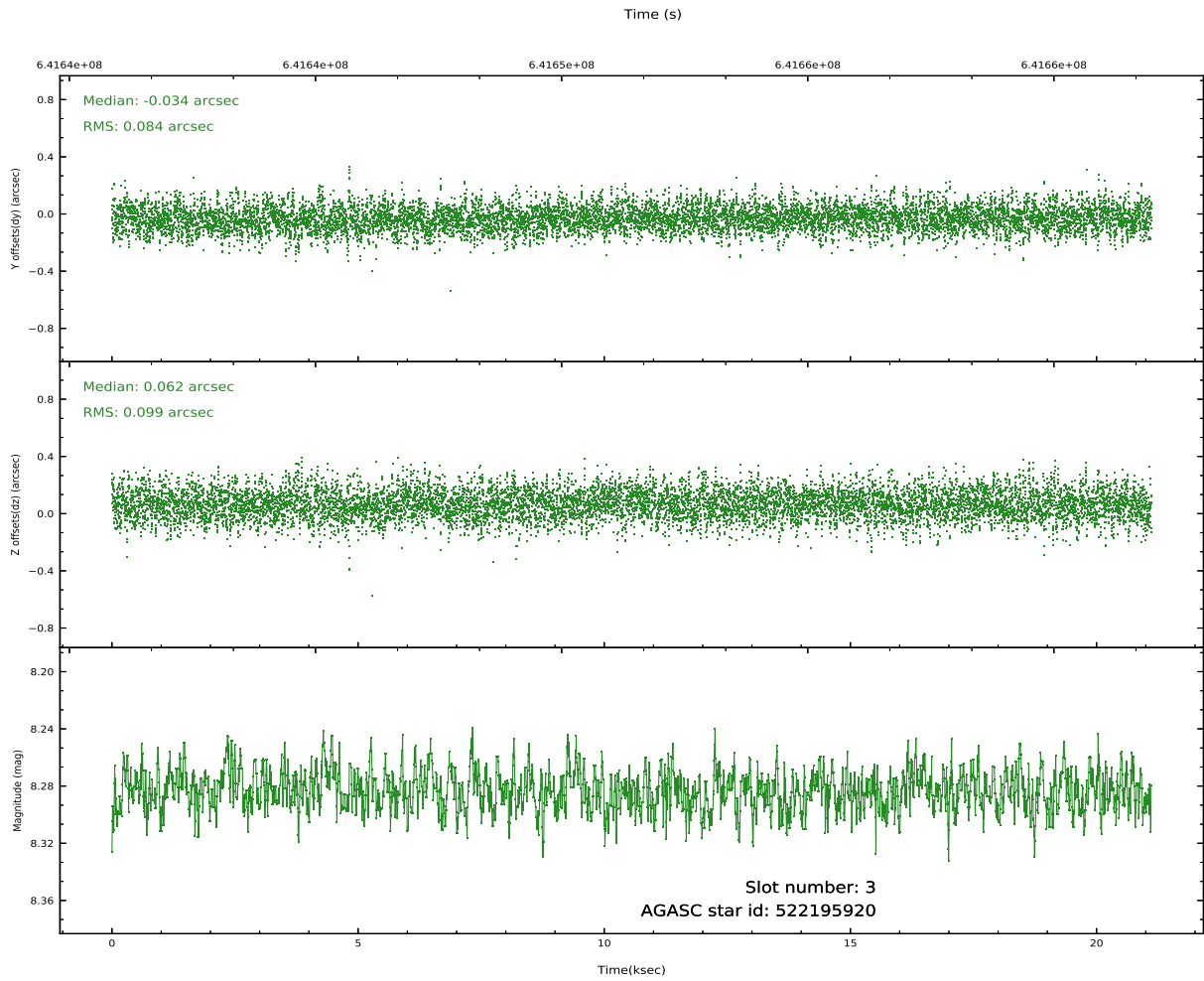
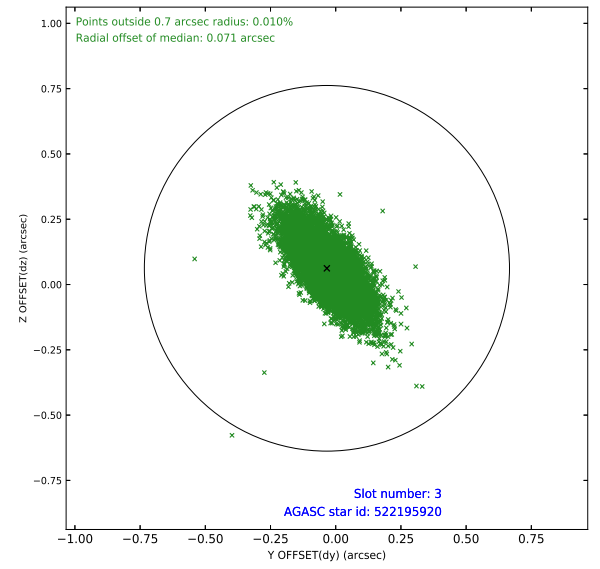
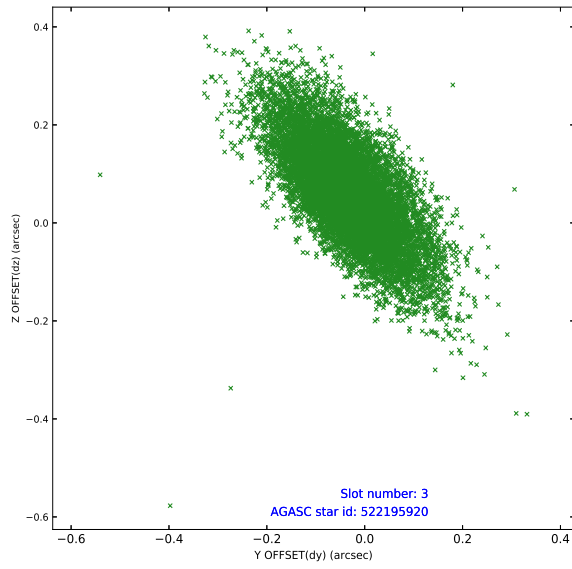


Slot Statistics

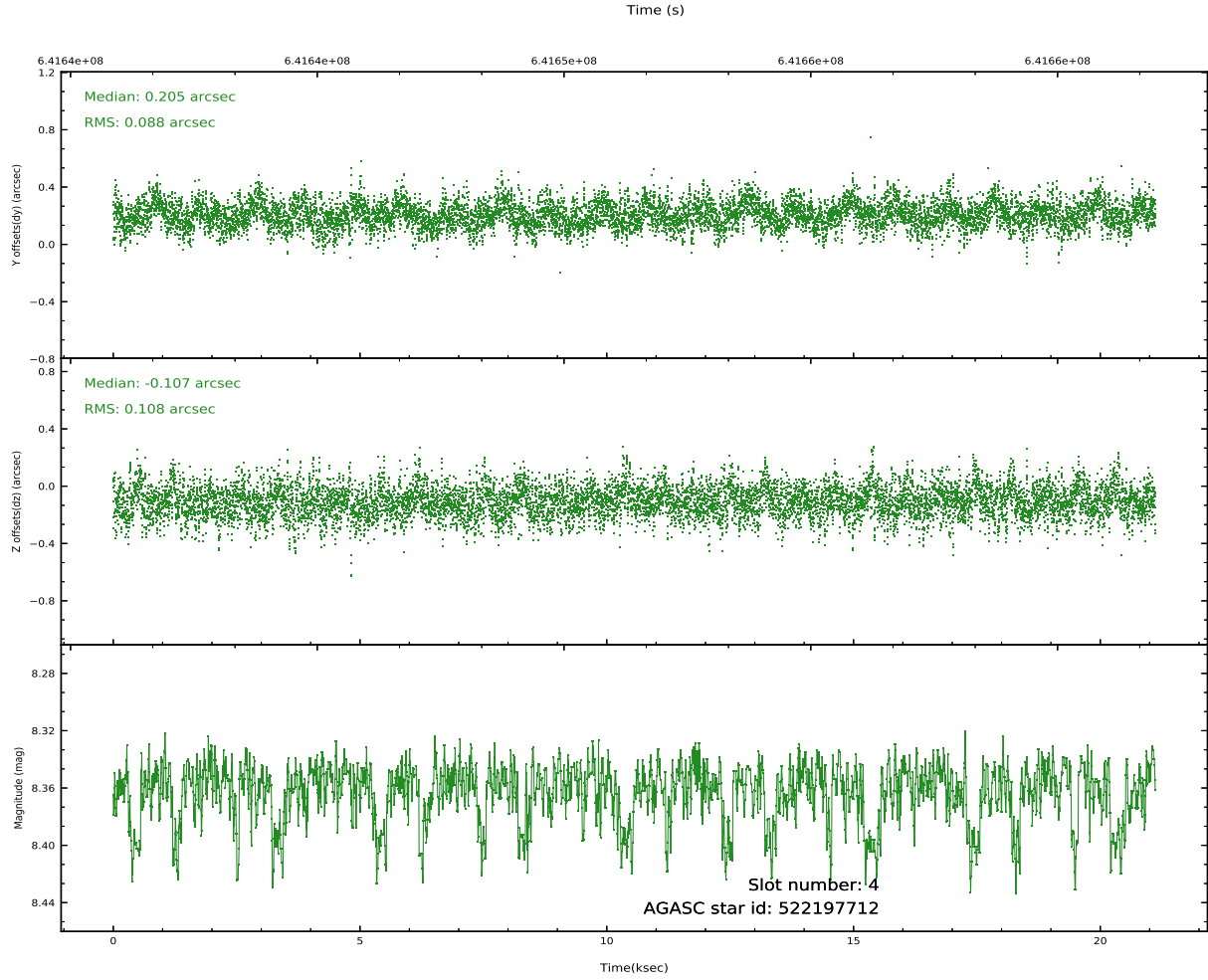
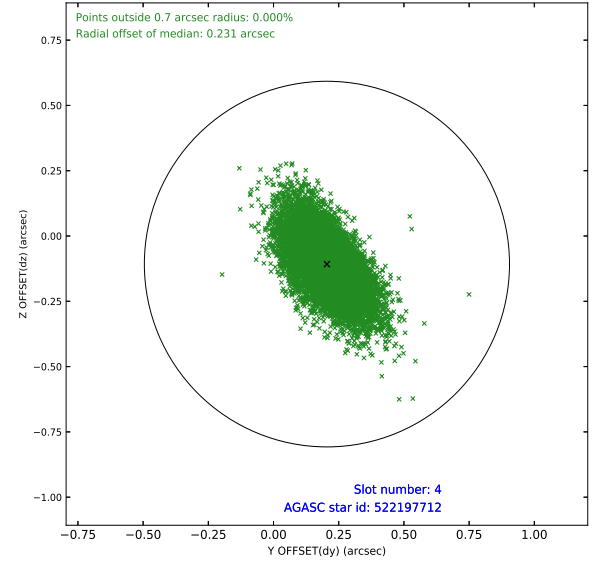
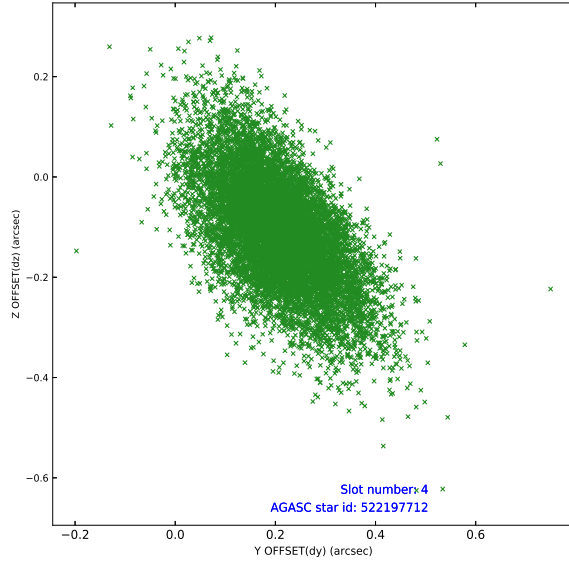
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	5151	1.000	0.053	-0.048	0.025	0.037	0.000000	0.000000	928.95	-842
1	FID		ACIS-I-2	7.08	5150	1.000	-0.155	0.022	0.041	0.055	0.000000	0.000000	-765.26	-848
2	FID		ACIS-I-4	7.11	5149	1.000	0.005	0.090	0.046	0.068	0.000000	0.000000	2148.83	1057
3	GUIDE	used	522195920	8.28	10298	1.000	-0.034	0.062	0.129	0.241	340.534111	52.561582	-1889.27	-392
4	GUIDE	used	522197712	8.36	10293	1.000	0.205	-0.107	0.140	0.255	341.160967	52.624062	-1184.83	-1590
5	GUIDE	used	522204136	7.18	10300	1.000	-0.155	0.100	0.132	0.248	341.384669	53.374616	1506.69	-1051
6	GUIDE	used	522200440	8.88	10294	1.000	0.055	-0.060	0.145	0.260	340.183364	53.917345	2406.70	2042
7	GUIDE	used	522202320	6.94	10300	1.000	-0.078	0.008	0.128	0.241	341.199728	53.302639	1120.02	-776

2.4 Star Slots

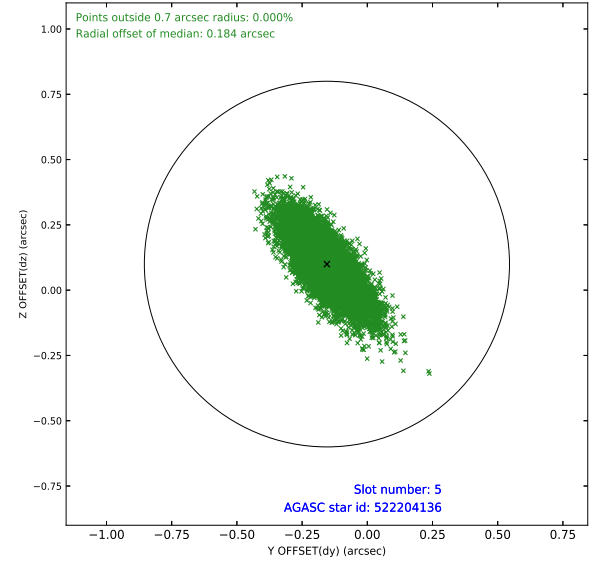
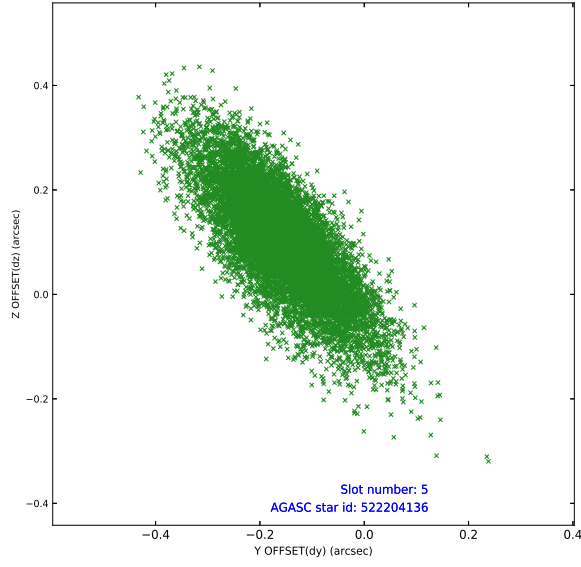
2.4.1 Slot 3



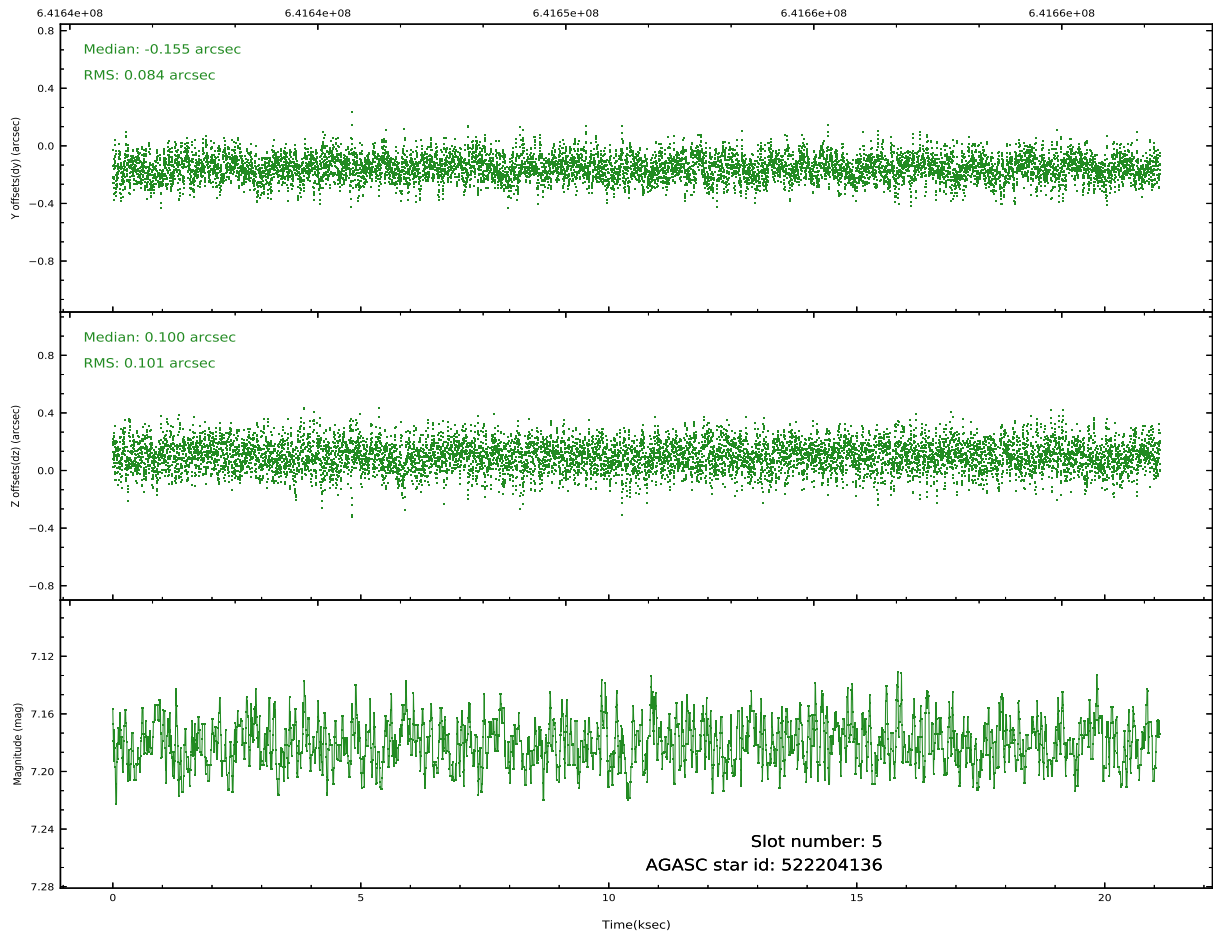
2.4.2 Slot 4



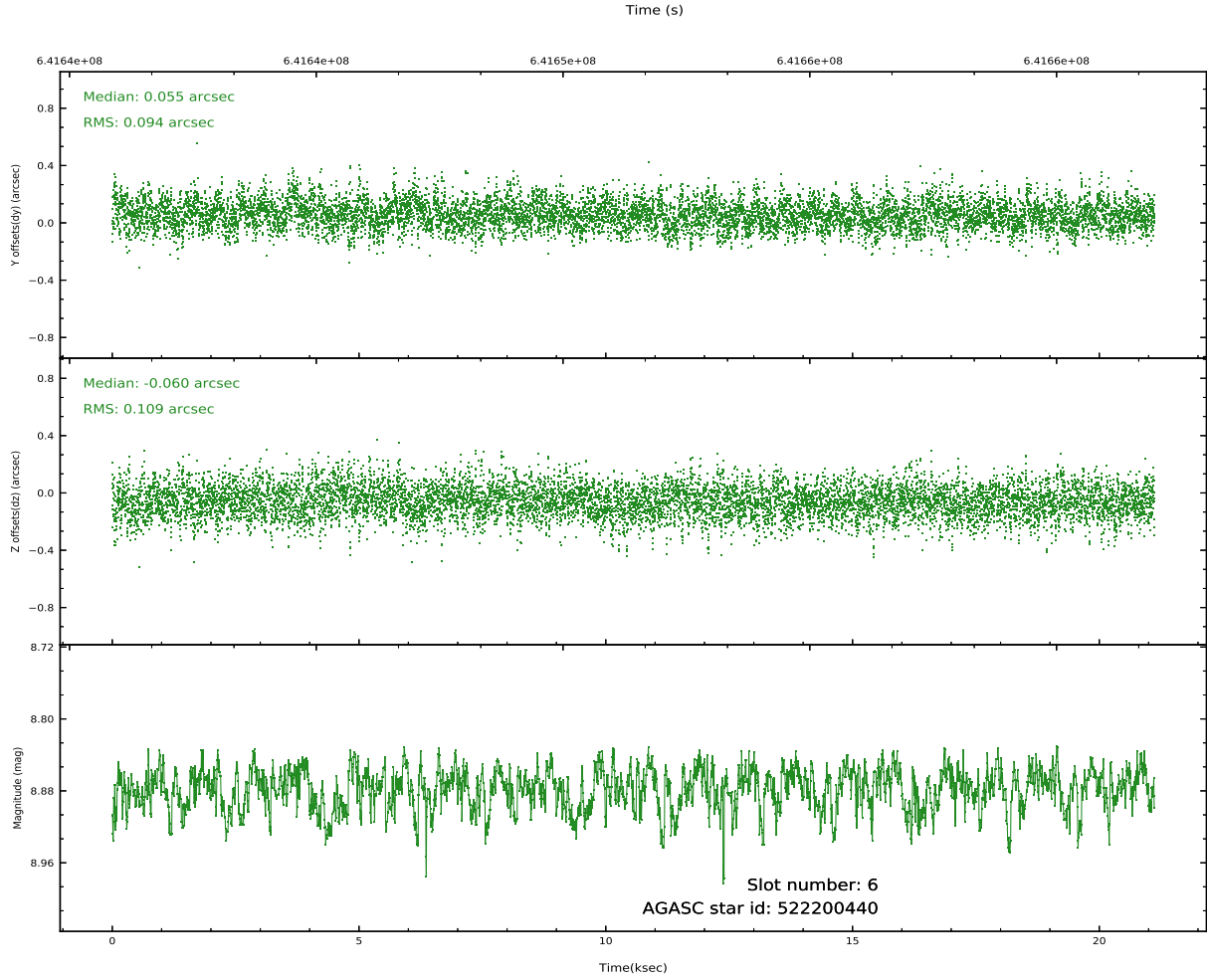
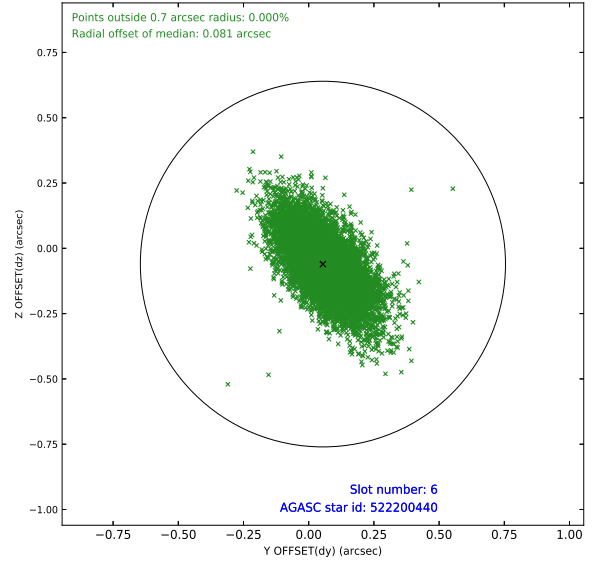
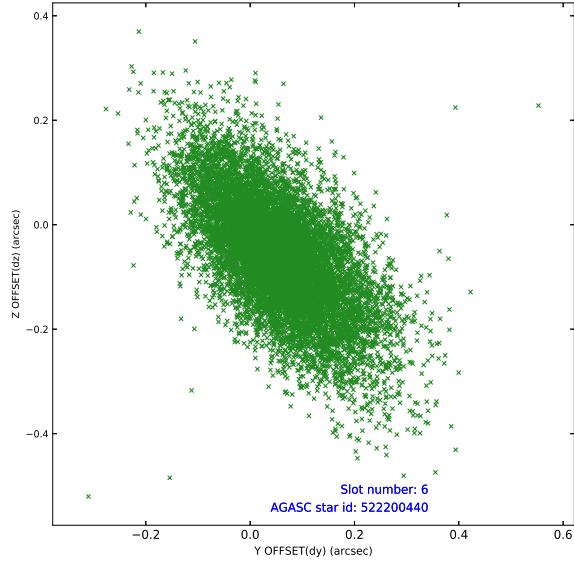
2.4.3 Slot 5



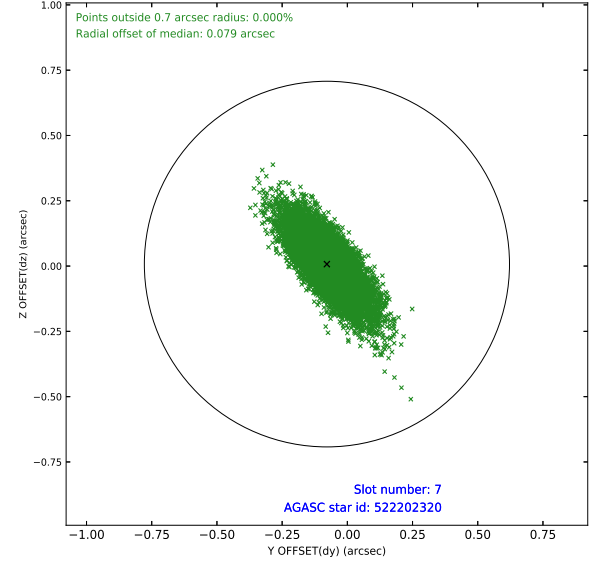
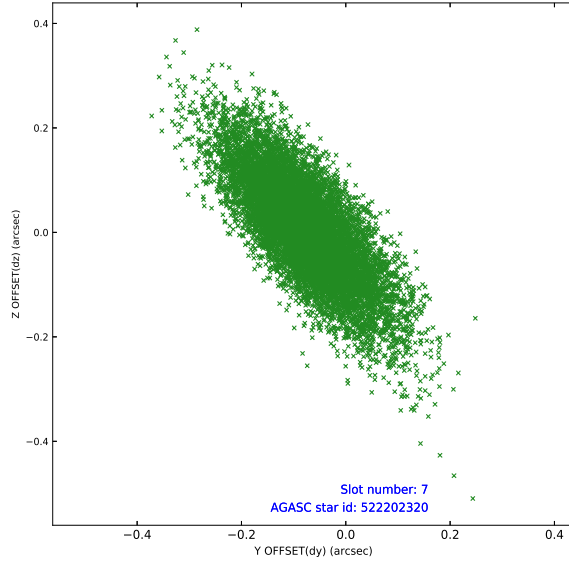
Time (s)



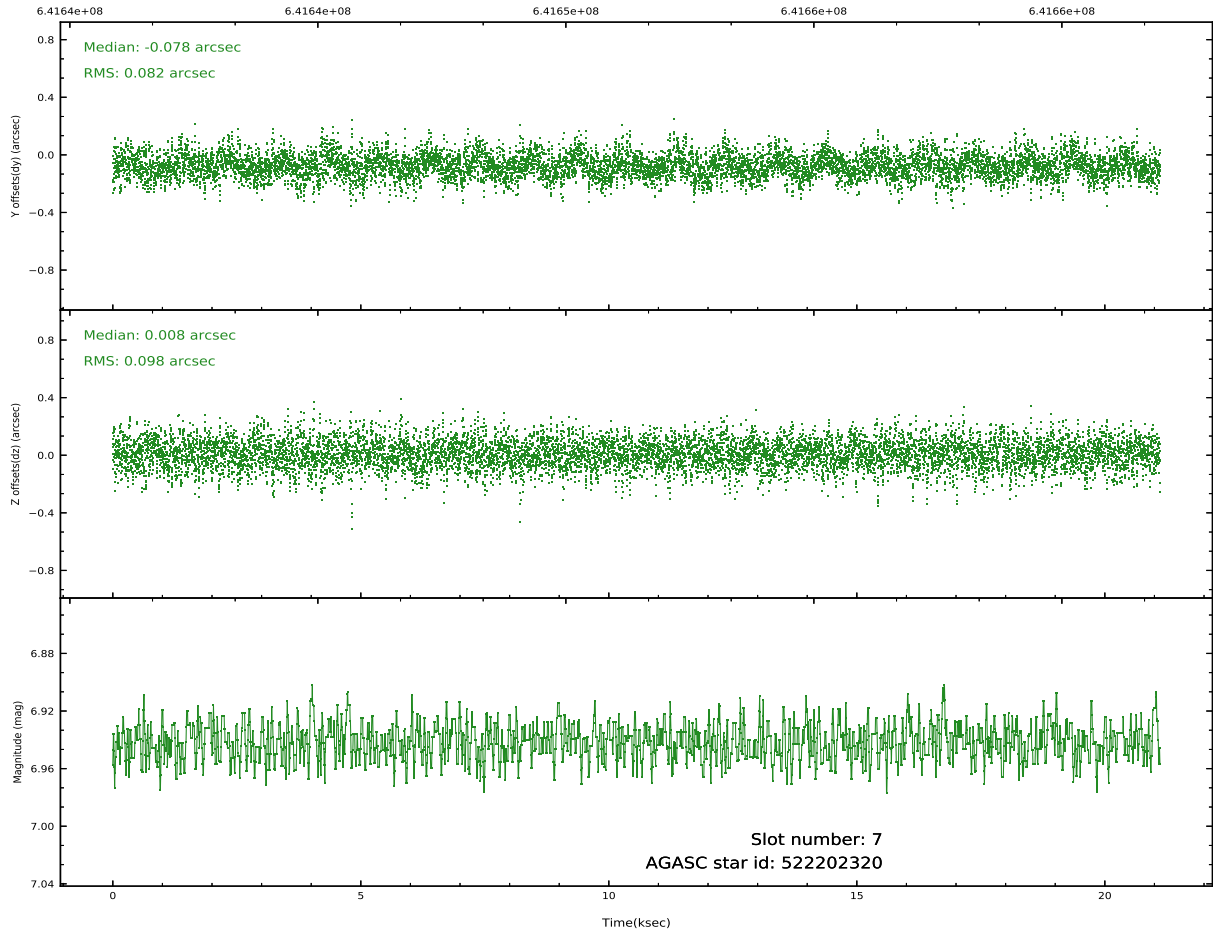
2.4.4 Slot 6



2.4.5 Slot 7

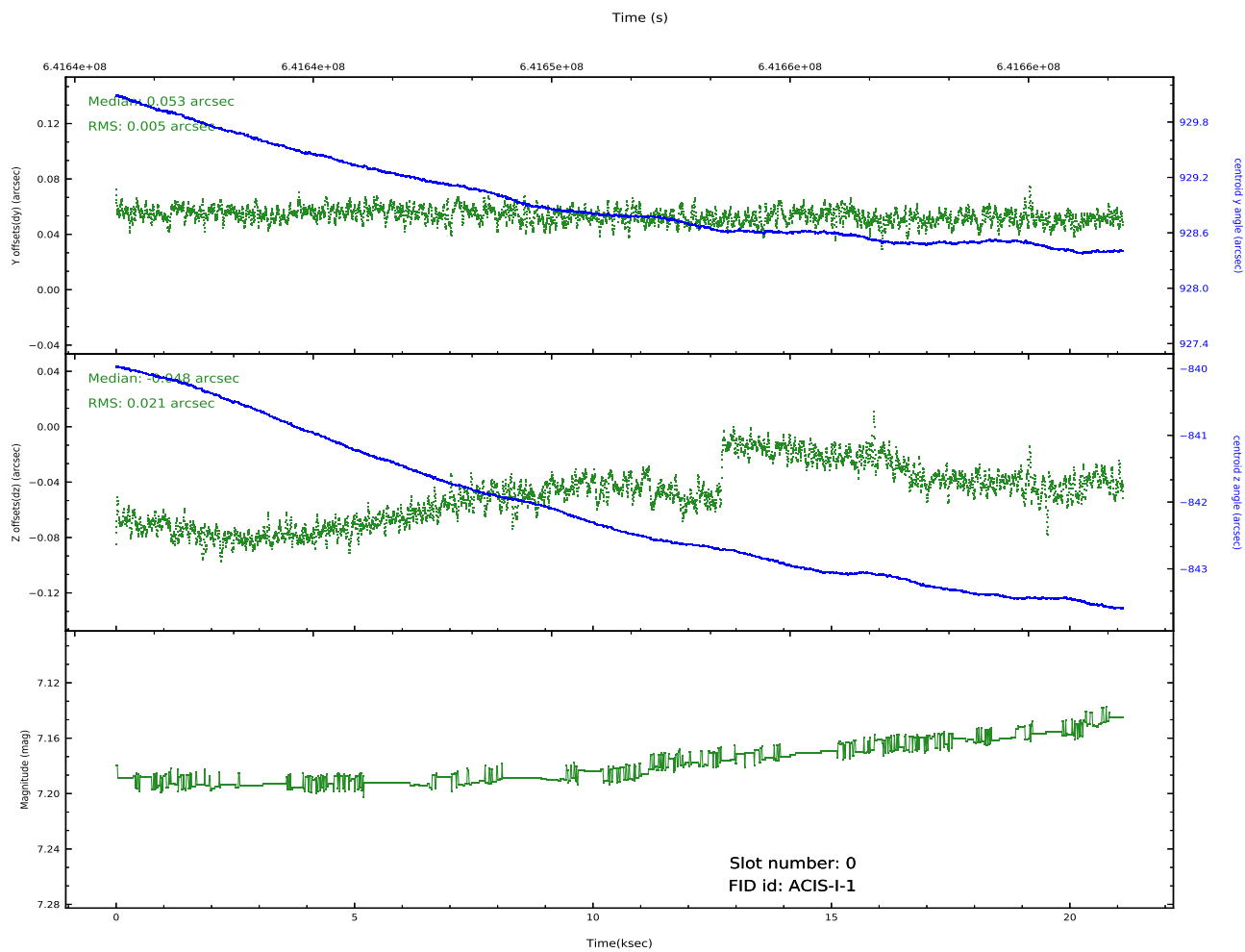
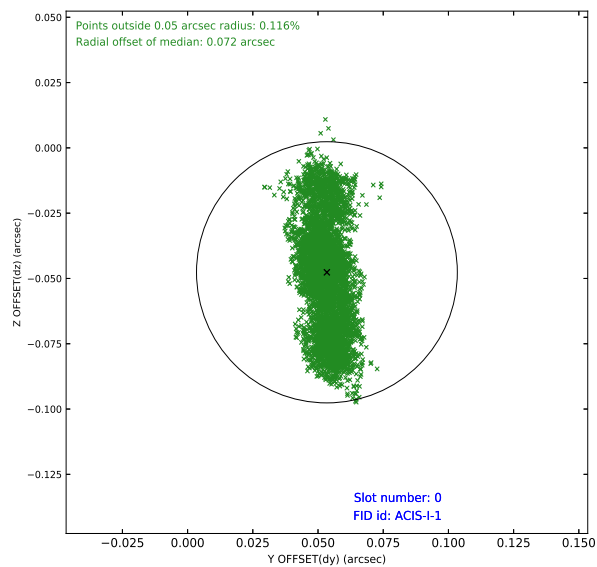
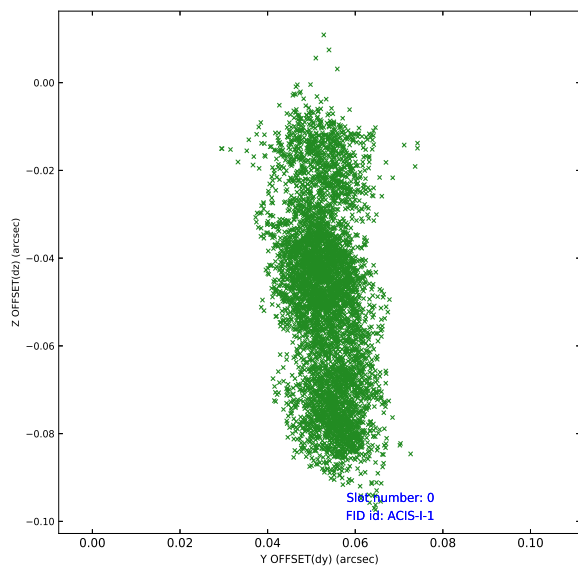


Time (s)

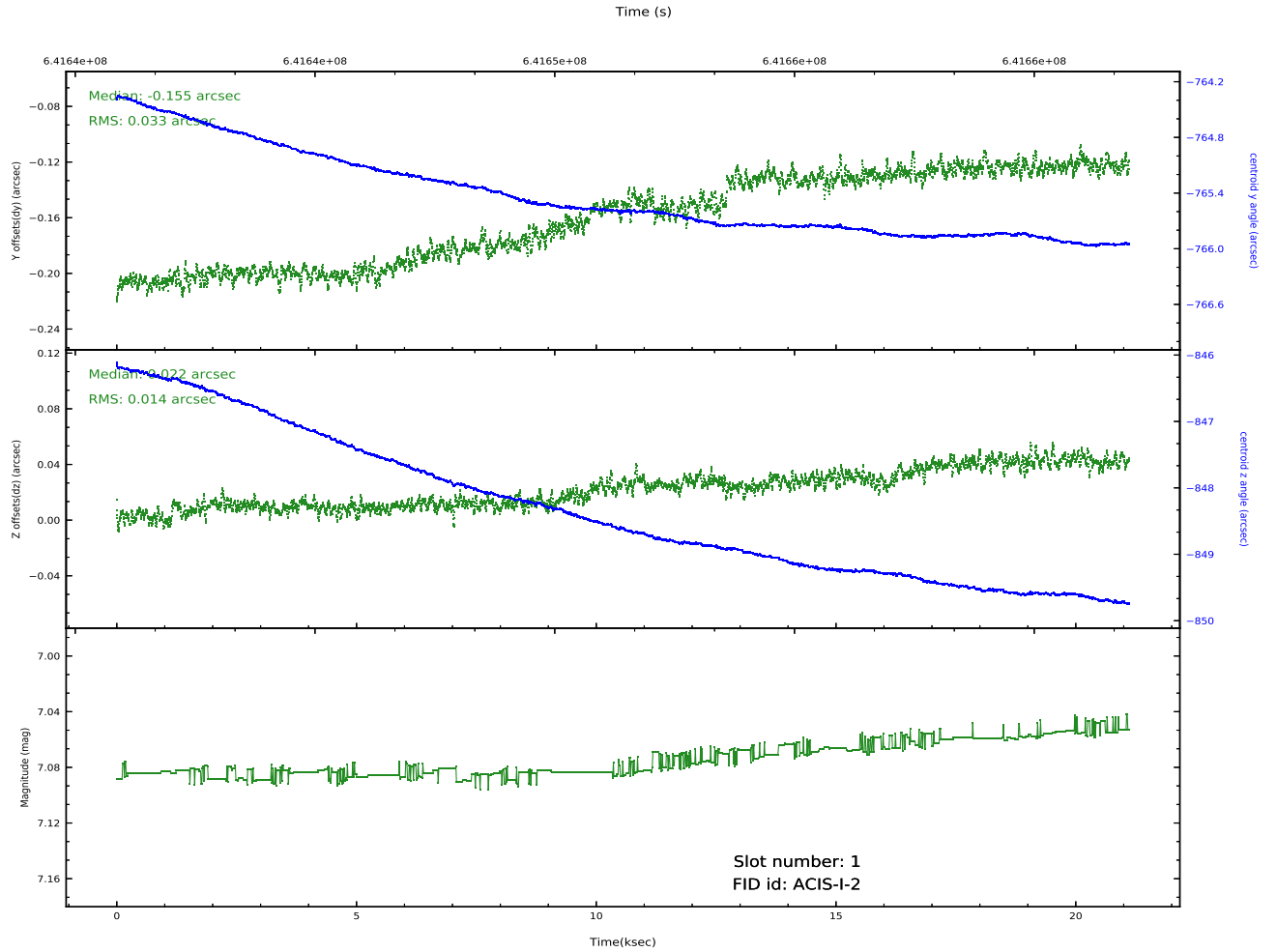
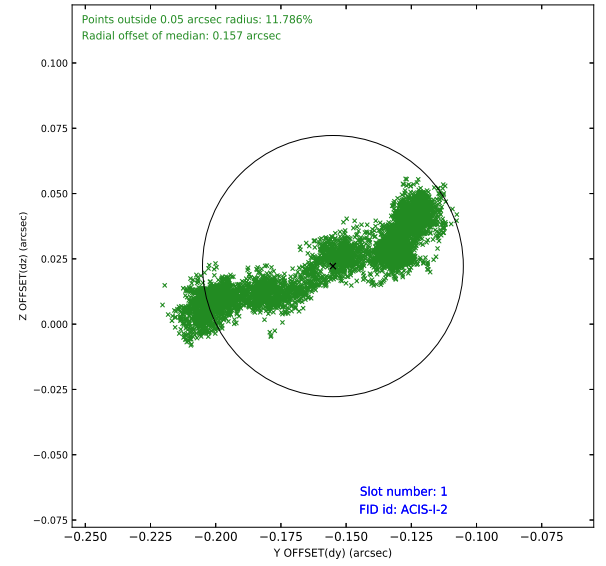
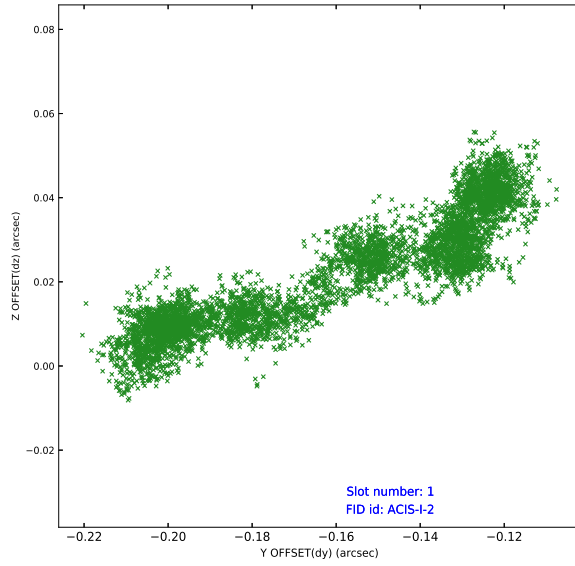


2.5 FID Slots

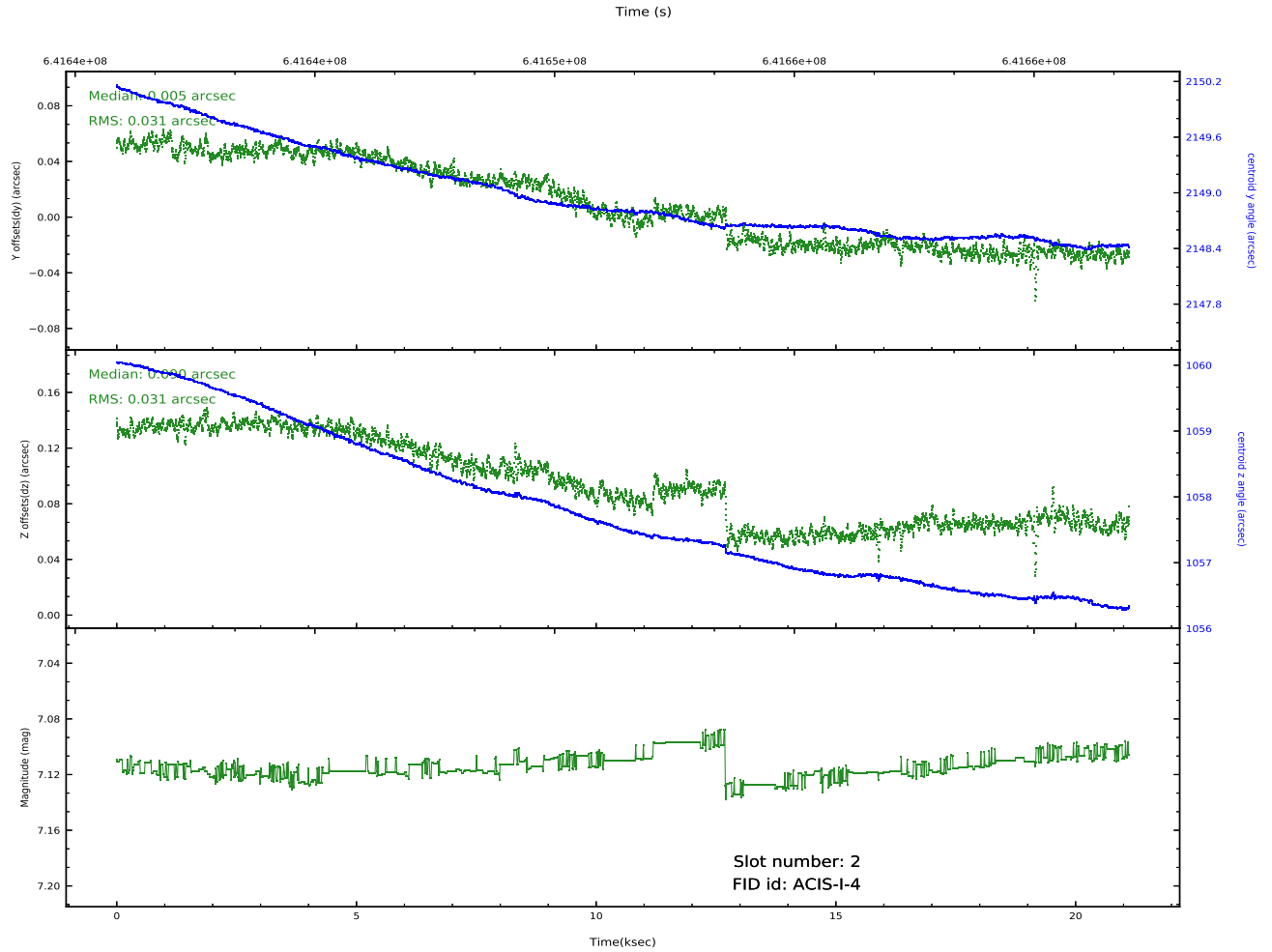
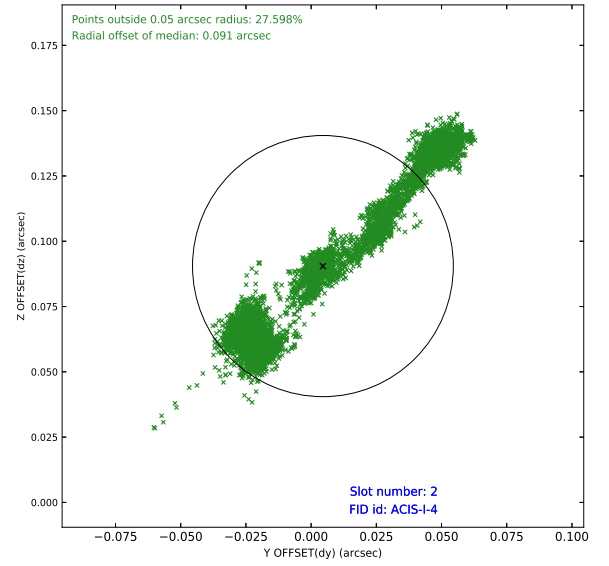
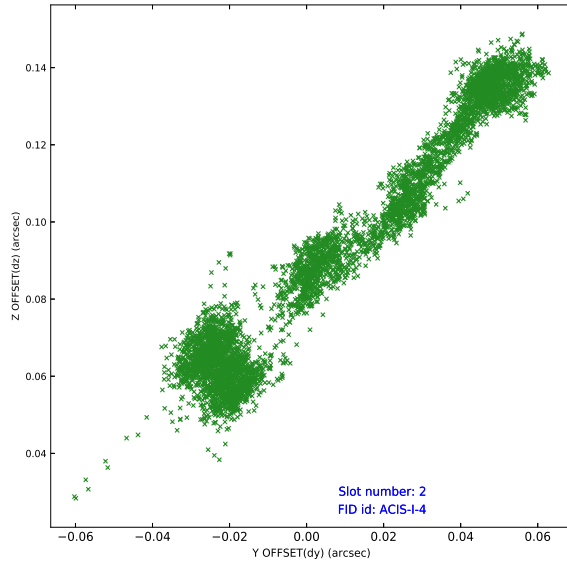
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.069645081043

A.2 Comments