

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20989 - L2 Version 2
Chandra X-Ray Center

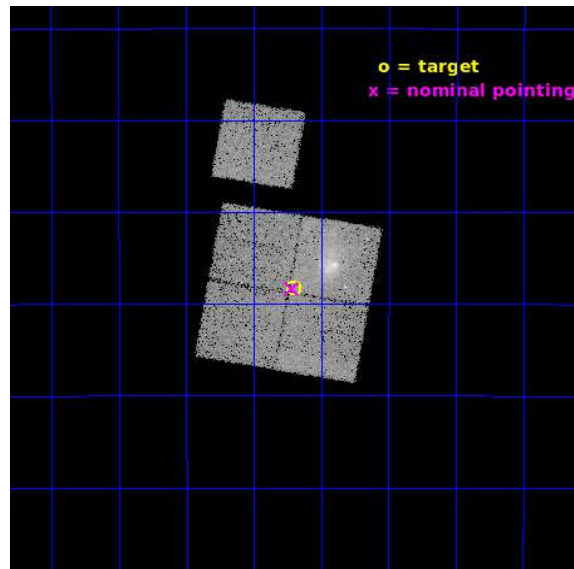
L2 Processing Date : Oct 24 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

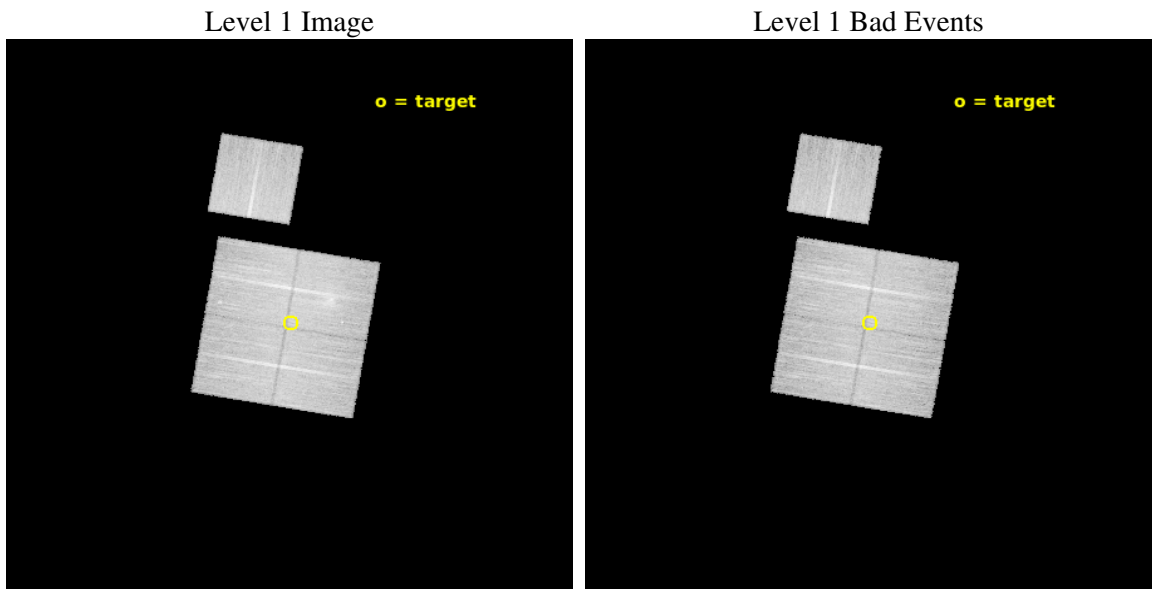
seq_num	801712	Sequence number
obs_id	20989	Observation id
title	Deep observation of a merging cluster with a radio halo and a radio relic	Proposal title
observer	Ralph Kraft	Principal investigator
object	Abell 1300	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	173.050546	Observer's specified target RA [deg]
dec_targ	-19.9715	Observer's specified target Dec [deg]
ra_nom	173.05414971082	Nominal RA [deg]
dec_nom	-19.972416179501	Nominal Dec [deg]
roll_nom	9.7021411550485	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20047.700154305	Sum of GTIs [s]
livetime	19785.762192886	Livetime [s]
ontime0	20047.700154305	Sum of GTIs [s]
ontime1	20044.559164166	Sum of GTIs [s]
ontime2	20047.700154305	Sum of GTIs [s]
ontime3	20047.700154305	Sum of GTIs [s]
ontime6	20047.700154305	Sum of GTIs [s]
l2events	78284	Number of level 2 events



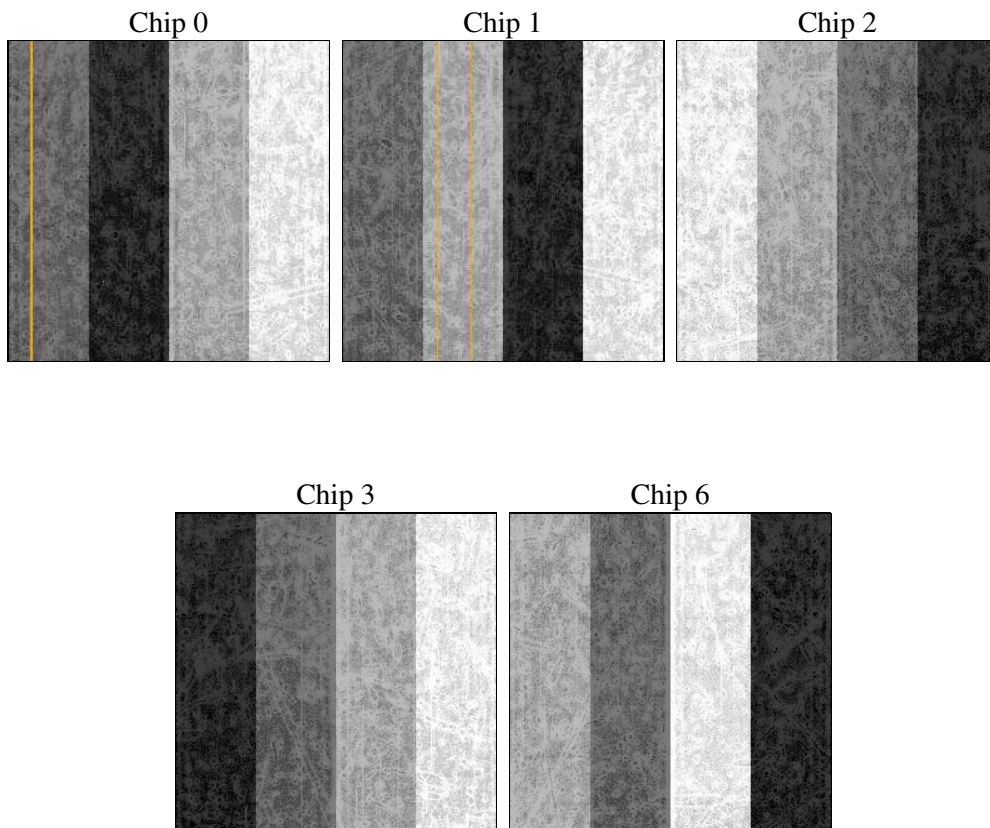
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19975.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	20047.700154305	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	20047.700154305	Sum of GTIs [s]
date	2020-10-25T02:13:54	Date and time of file creation	ontime1	20044.559164166	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20047.700154305	Sum of GTIs [s]
			ontime3	20047.700154305	Sum of GTIs [s]
			ontime6	20047.700154305	Sum of GTIs [s]
			l1events	725901	Number of level 1 events

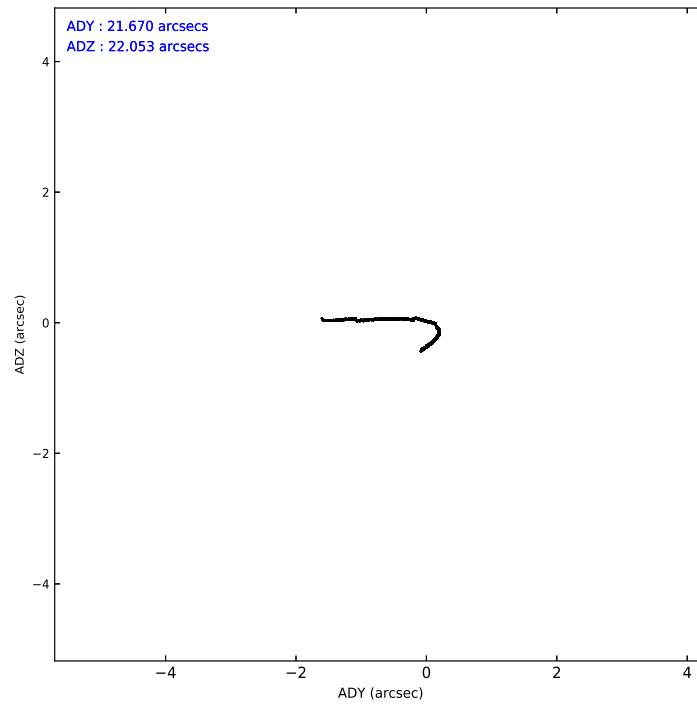
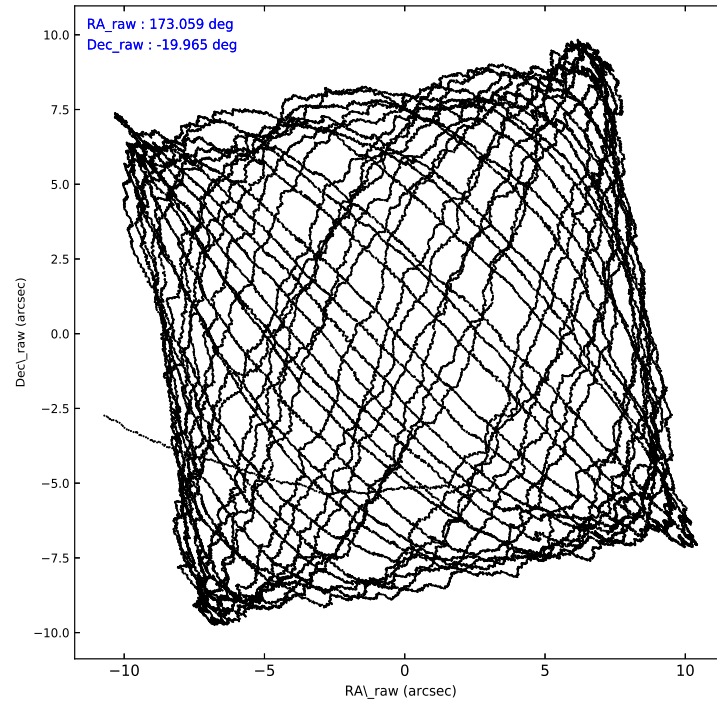
2.1.4 Events

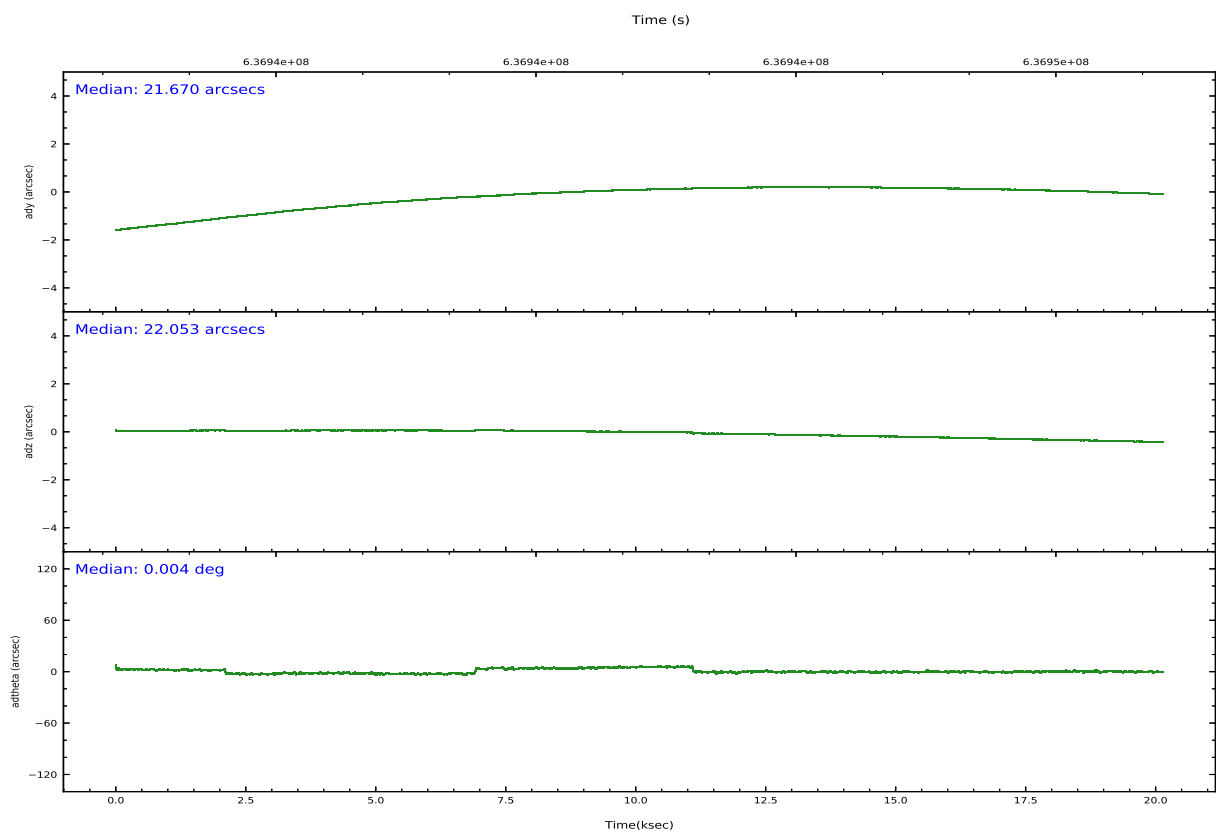
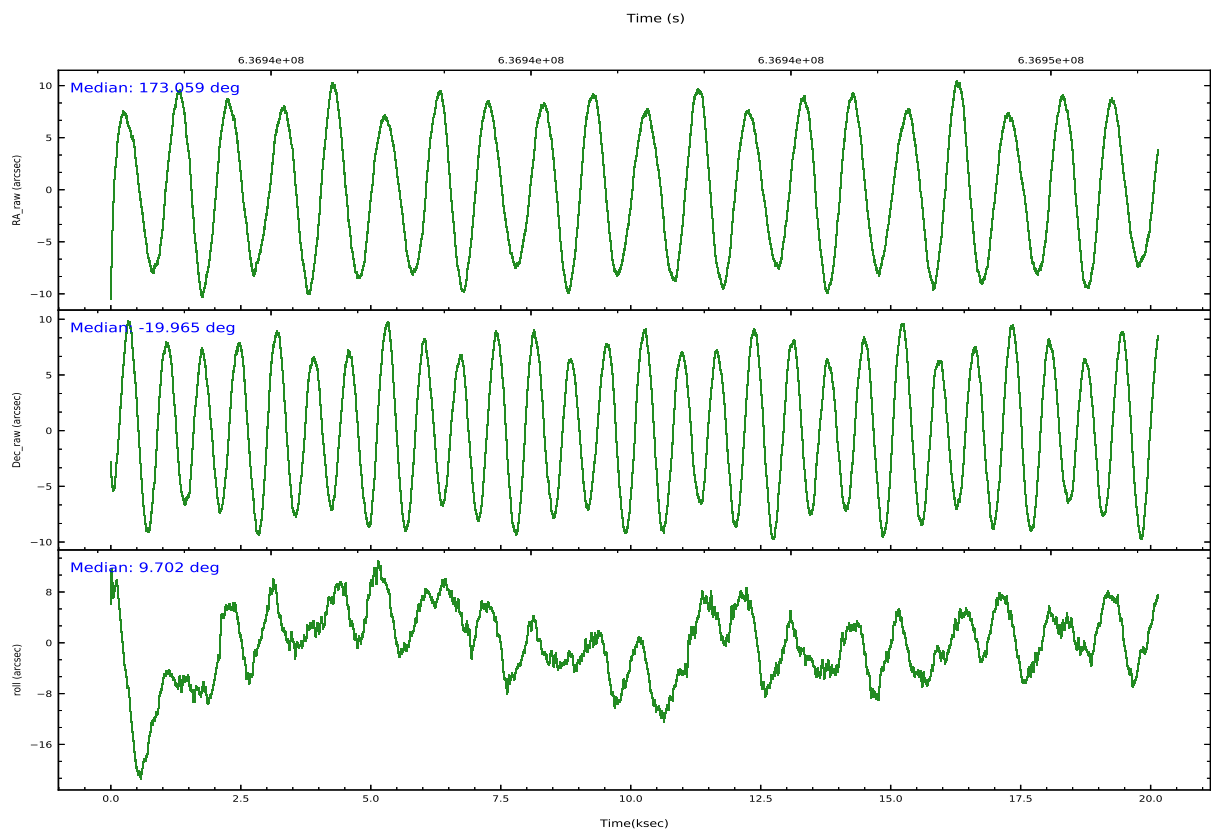
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	135925	139707	154191	152007	144071	grade 0 events	5641	6256	6203	12670	5441
rejected events	119428	121439	137726	127250	127612		4%	4%	4%	8%	3%
rejected %	87%	86%	89%	83%	88%	grade 1 events	84	85	87	118	64
							0%	0%	0%	0%	0%
						grade 2 events	4269	4569	4009	4582	3760
							3%	3%	2%	3%	2%
						grade 3 events	1699	1708	1521	1868	1675
							1%	1%	0%	1%	1%
						grade 4 events	1586	1774	1623	2043	1677
							1%	1%	1%	1%	1%
						grade 5 events	6226	6806	5735	7147	7011
							4%	4%	3%	4%	4%
						grade 6 events	3302	3962	3112	3602	3907
							2%	2%	2%	2%	2%
						grade 7 events	113118	114547	131901	119977	120536
							83%	81%	85%	78%	83%

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	173.037049	173.05414971082	CCD I2 on	Y	Y
[deg] Pointing Dec	-19.982903	-19.972416179501	CCD I3 on	Y	Y
[deg] Pointing Roll	9.495384	9.702141155048499	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)	636932088.184000	636931058.30485	CCD S5 on	N	N
Observation start date	2018-03-08T21:33:39	2018-03-08T21:17:38	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	636952063.184000	636953404.84367	On-chip summing requested	N	N
Observation end date	2018-03-09T03:06:34	2018-03-09T03:30:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



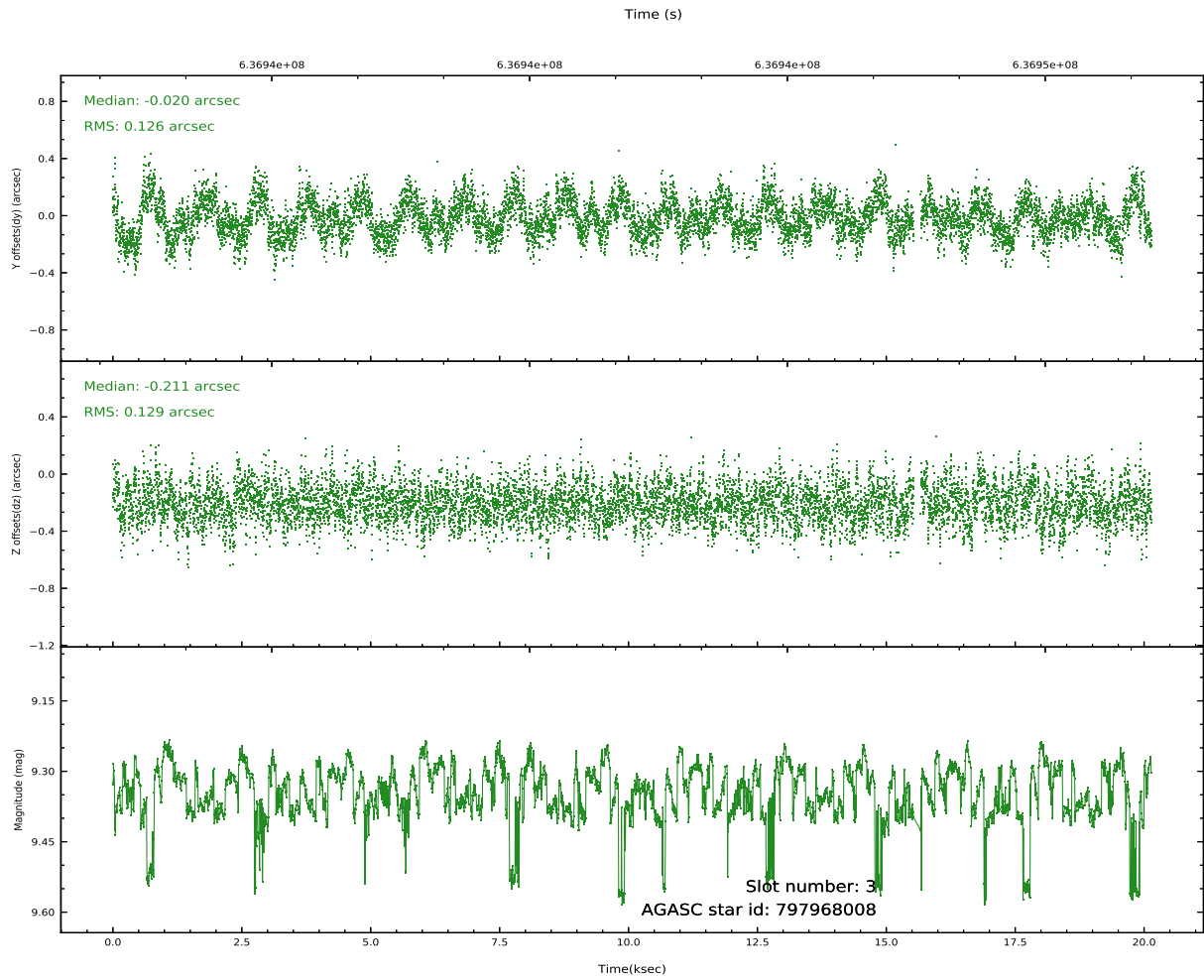
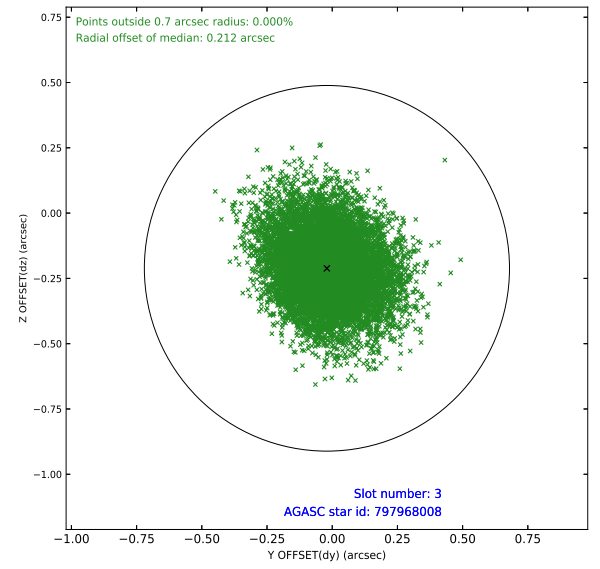
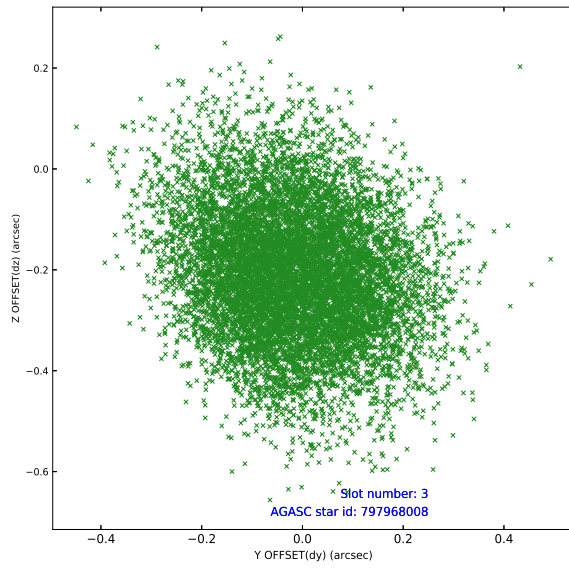


Slot Statistics

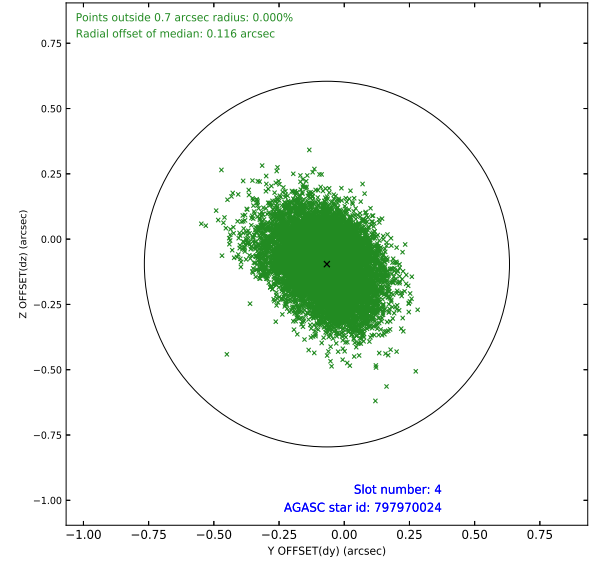
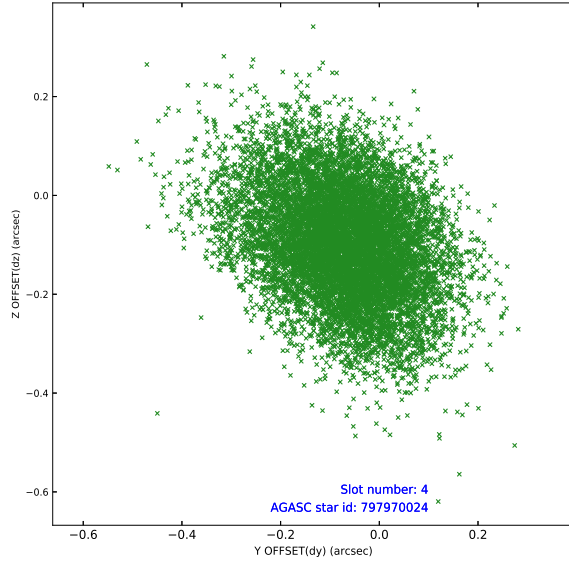
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.15	4914	1.000	0.188	-0.136	0.034	0.073	0.000000	0.000000	917.93	-845
1	FID		ACIS-I-4	7.10	4912	1.000	0.079	0.030	0.034	0.061	0.000000	0.000000	2138.17	1053
2	FID		ACIS-I-5	7.13	4914	1.000	-0.367	0.176	0.026	0.044	0.000000	0.000000	-1830.19	1052
3	GUIDE	used	797968008	9.34	9740	1.000	-0.020	-0.211	0.192	0.309	173.274298	-19.815834	892.05	459
4	GUIDE	used	797970024	9.04	9817	1.000	-0.066	-0.096	0.165	0.268	172.716766	-19.832014	-980.04	713
5	GUIDE	used	798375016	9.24	9748	1.000	0.052	0.178	0.215	0.339	172.536267	-20.217781	-1808.24	-557
6	GUIDE	used	798492464	8.98	9818	1.000	-0.111	0.022	0.206	0.321	173.652158	-20.299483	1860.15	-1470
7	GUIDE	used	798495824	8.68	9818	1.000	0.155	0.112	0.179	0.291	173.403222	-20.546440	882.70	-2205

2.4 Star Slots

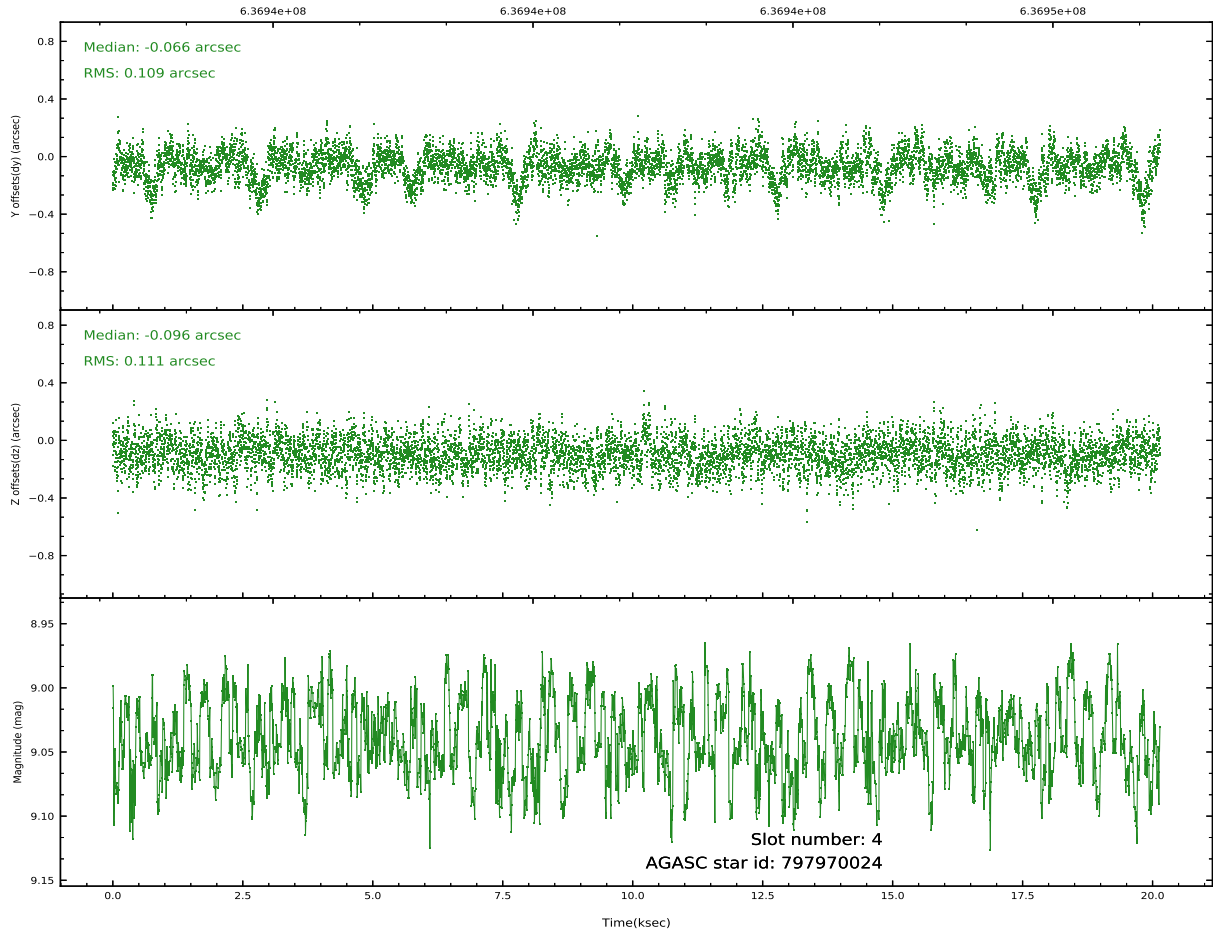
2.4.1 Slot 3



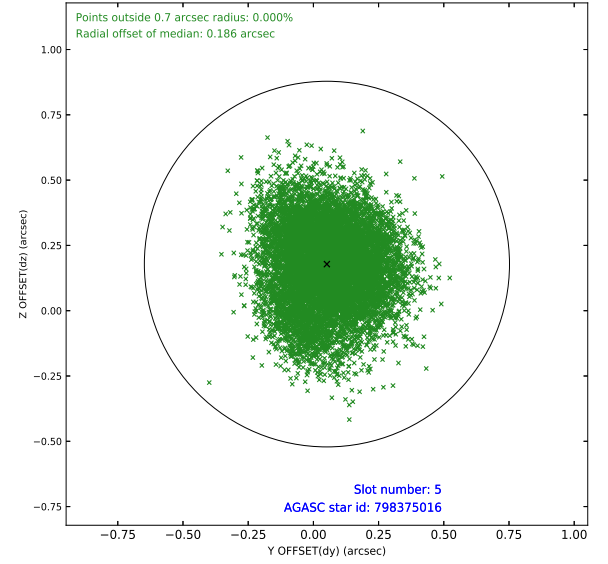
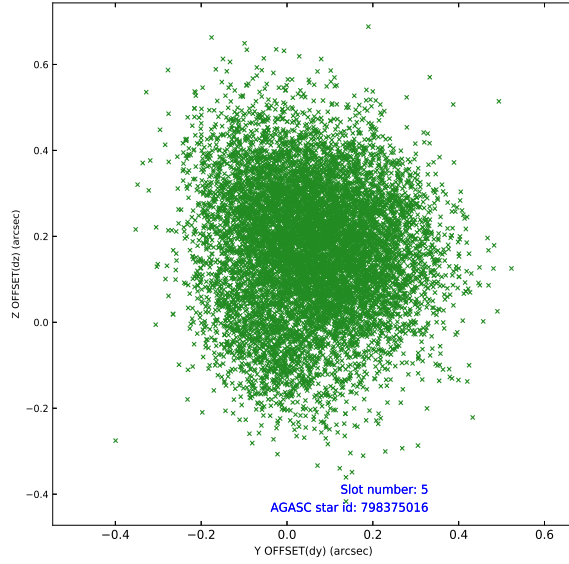
2.4.2 Slot 4



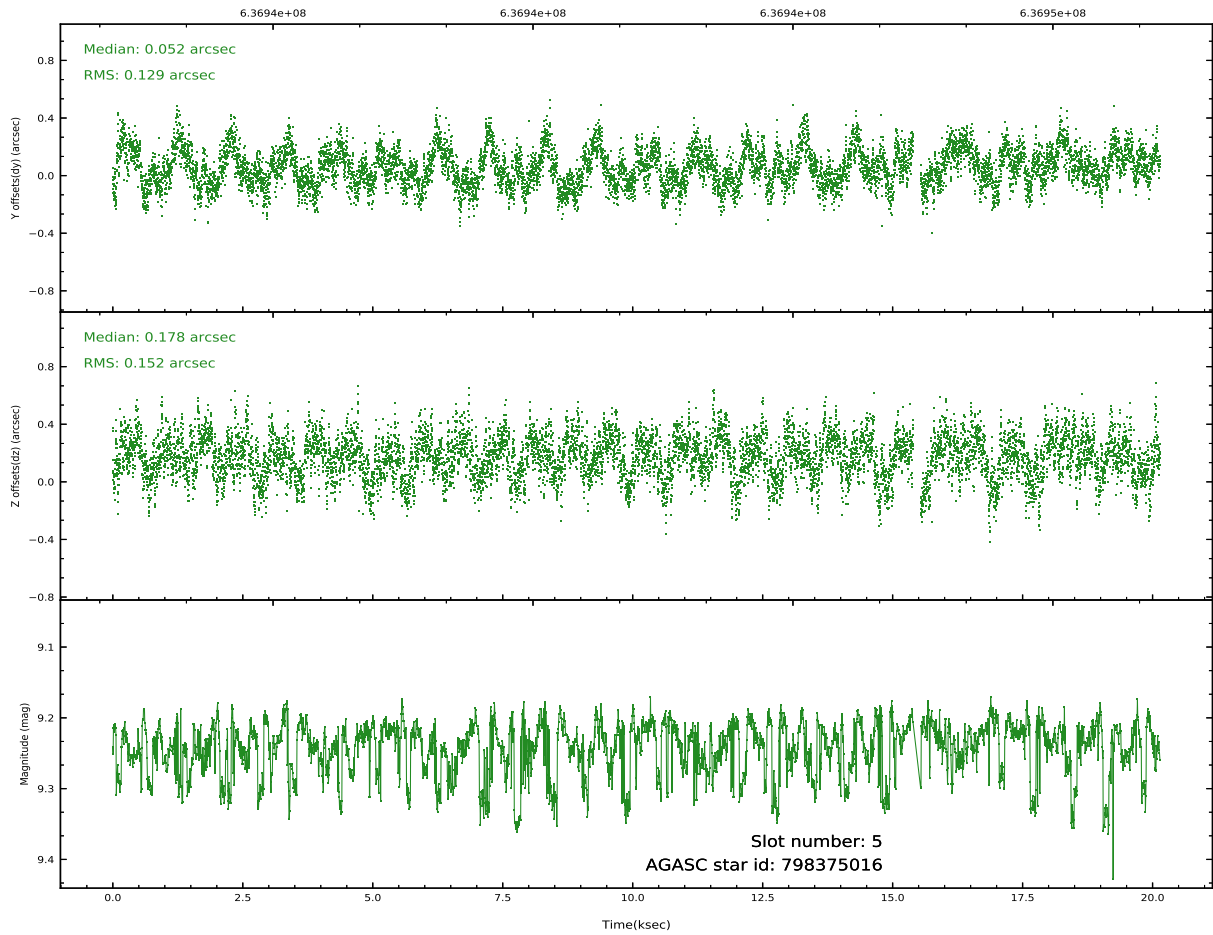
Time (s)



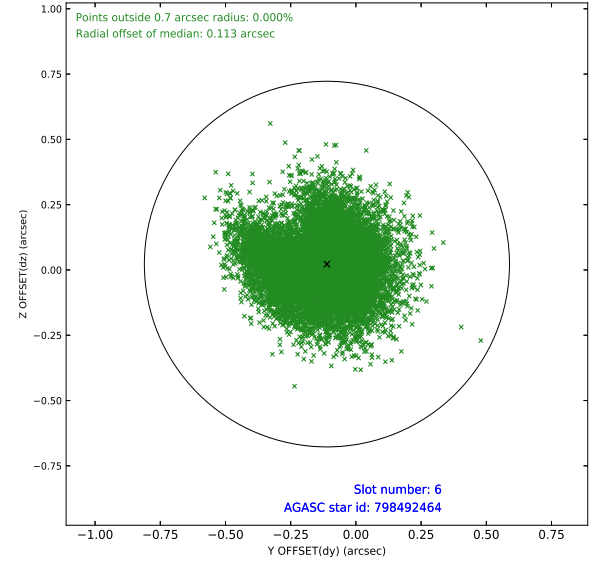
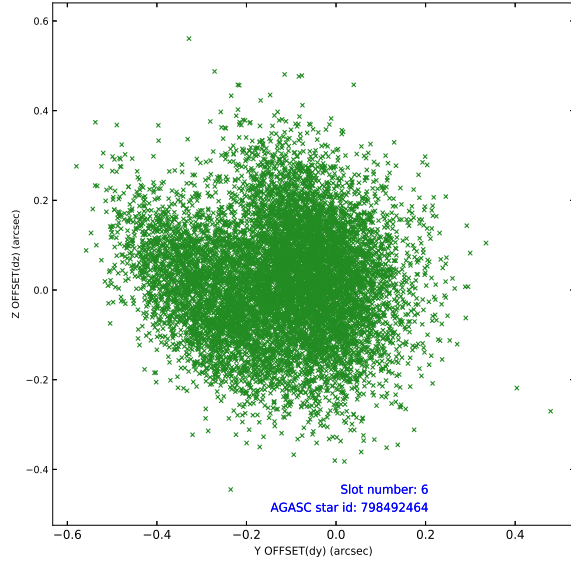
2.4.3 Slot 5



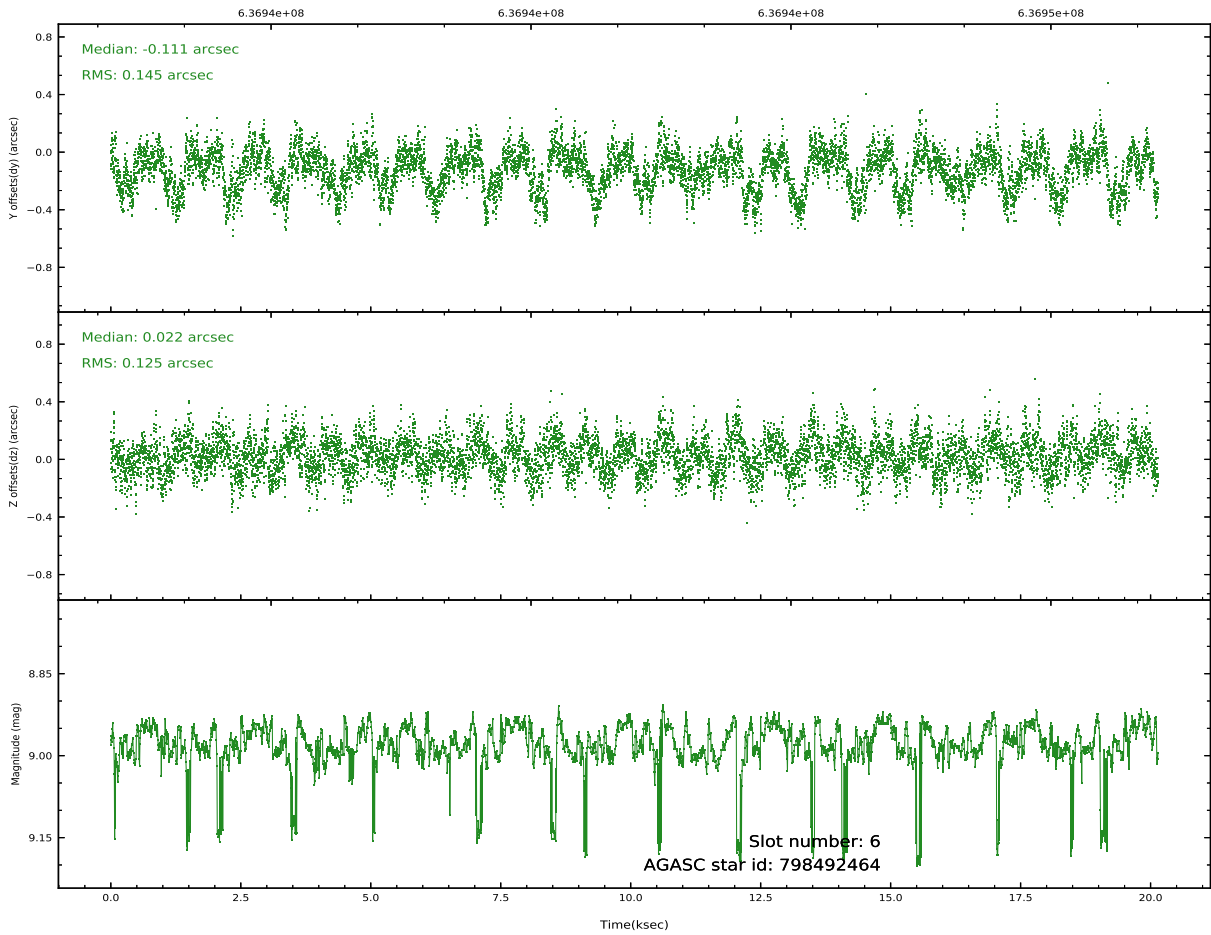
Time (s)



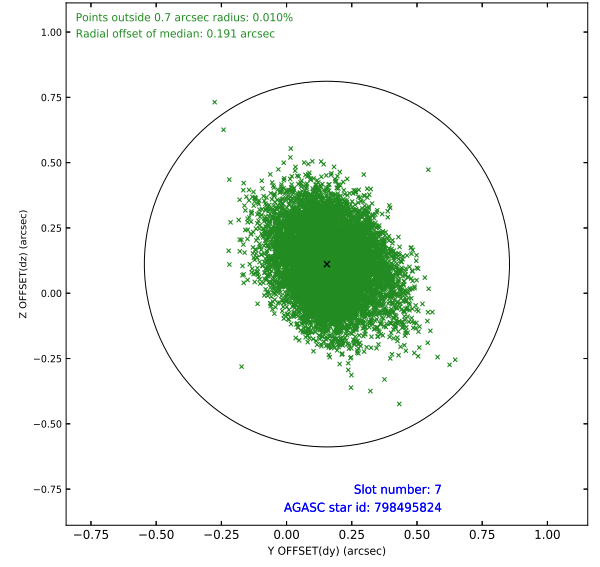
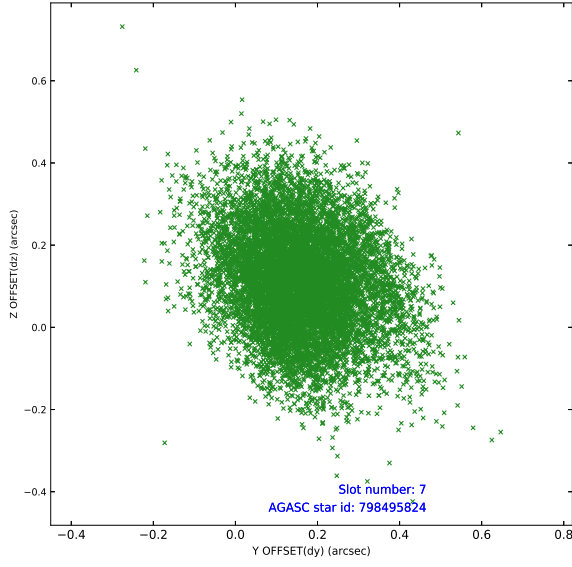
2.4.4 Slot 6



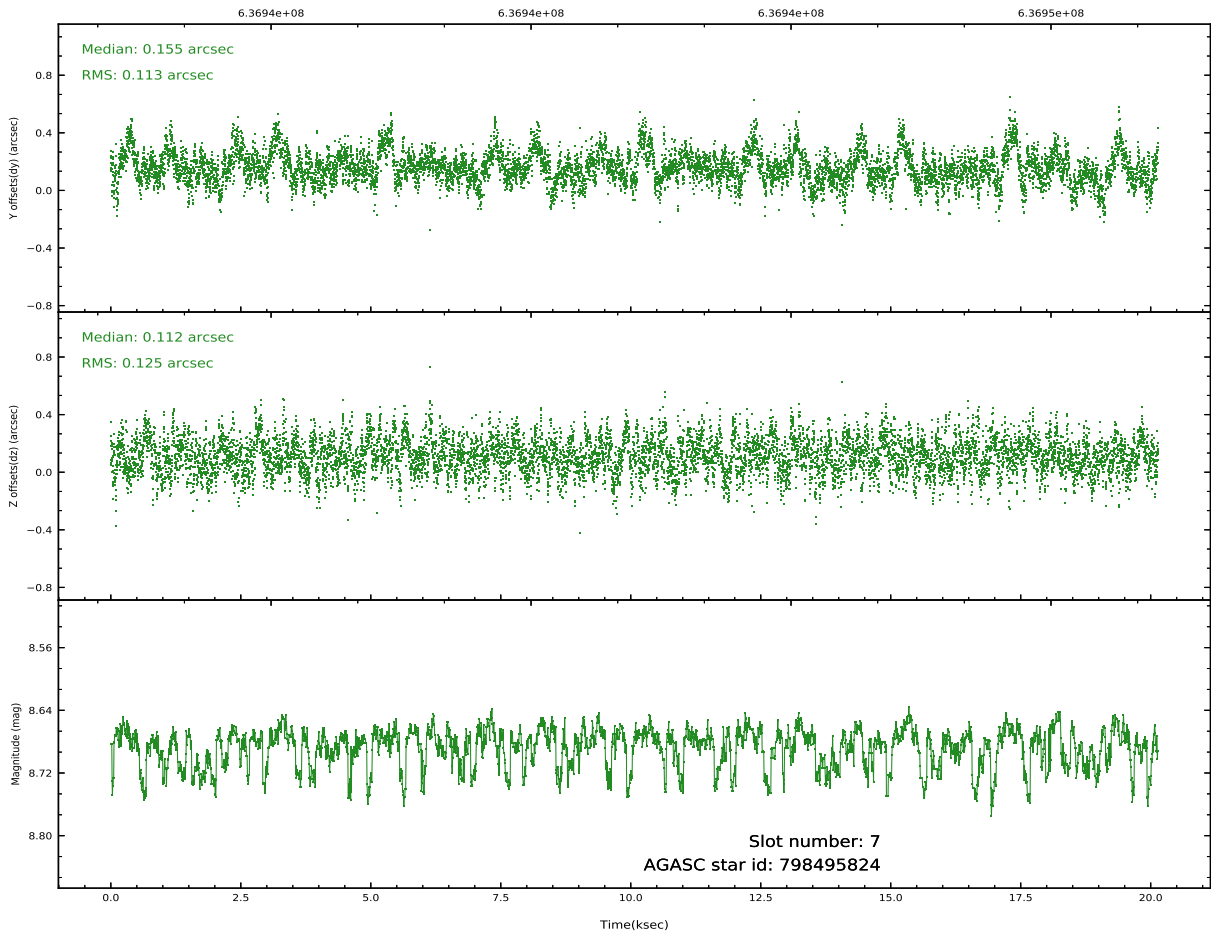
Time (s)



2.4.5 Slot 7

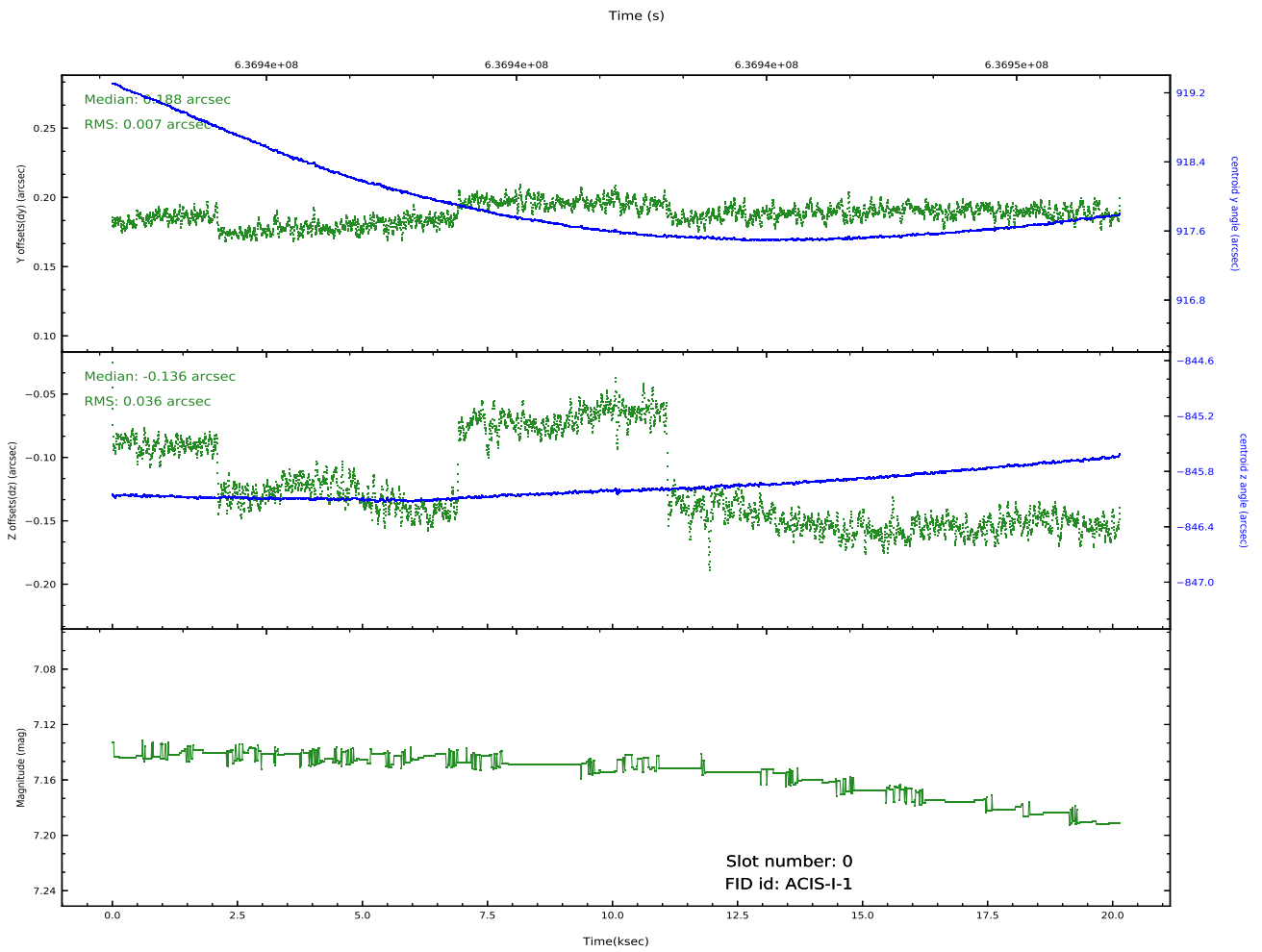
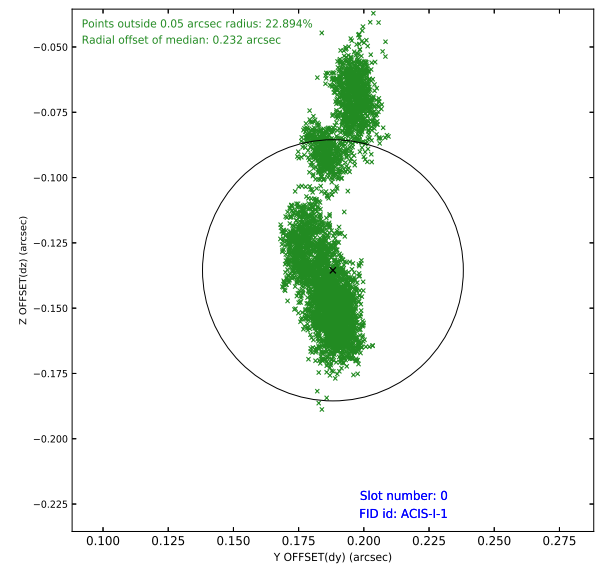
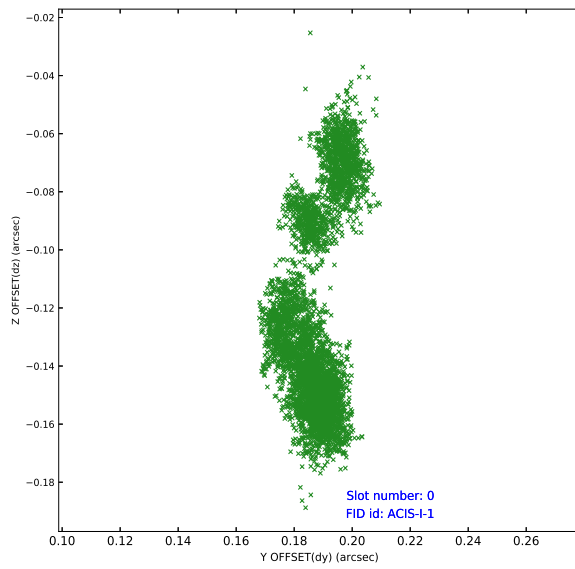


Time (s)

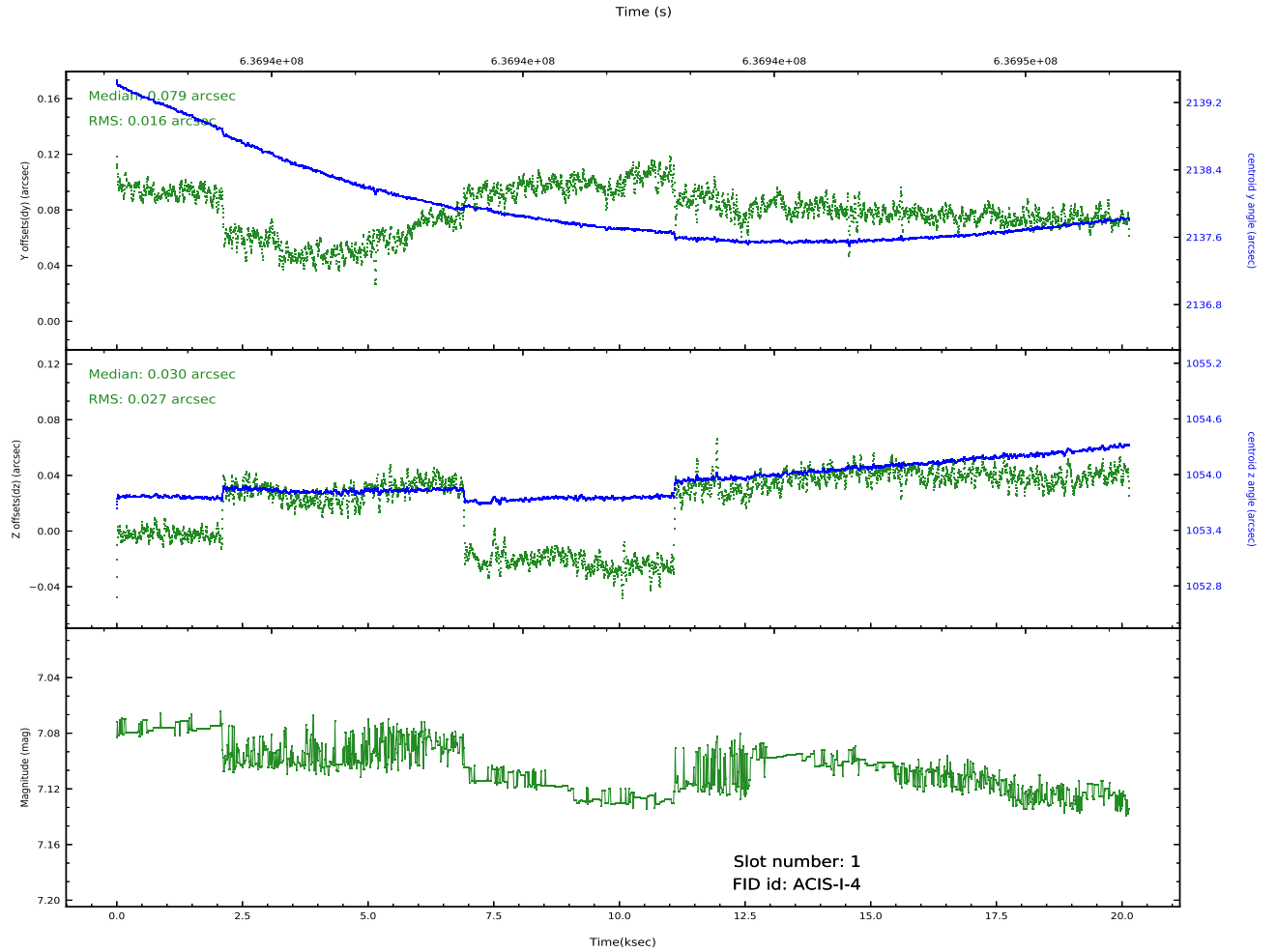
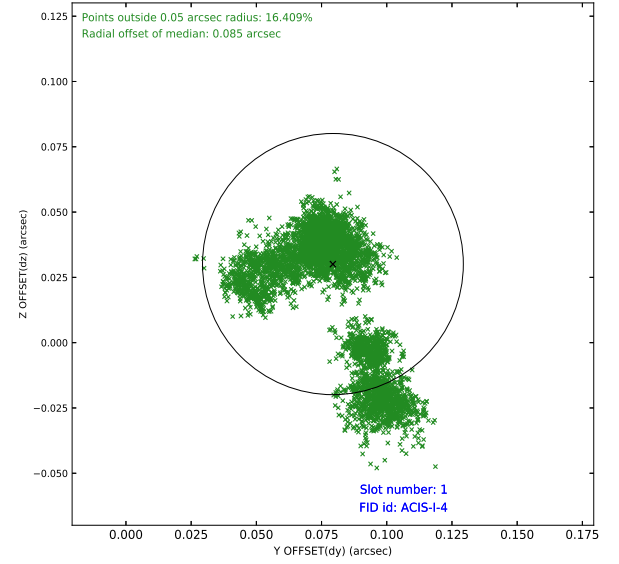
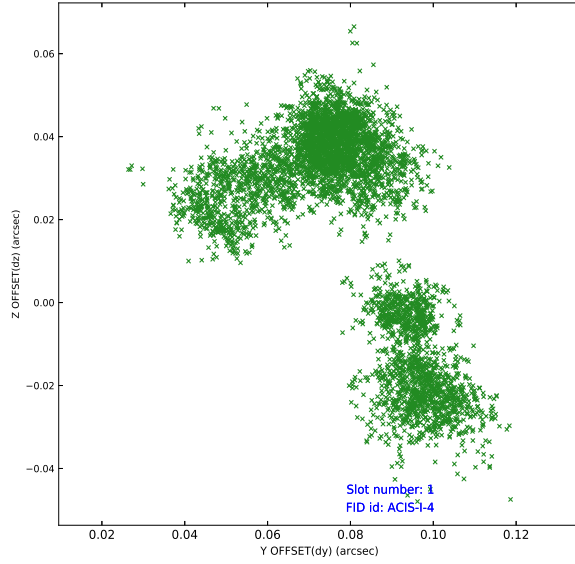


2.5 FID Slots

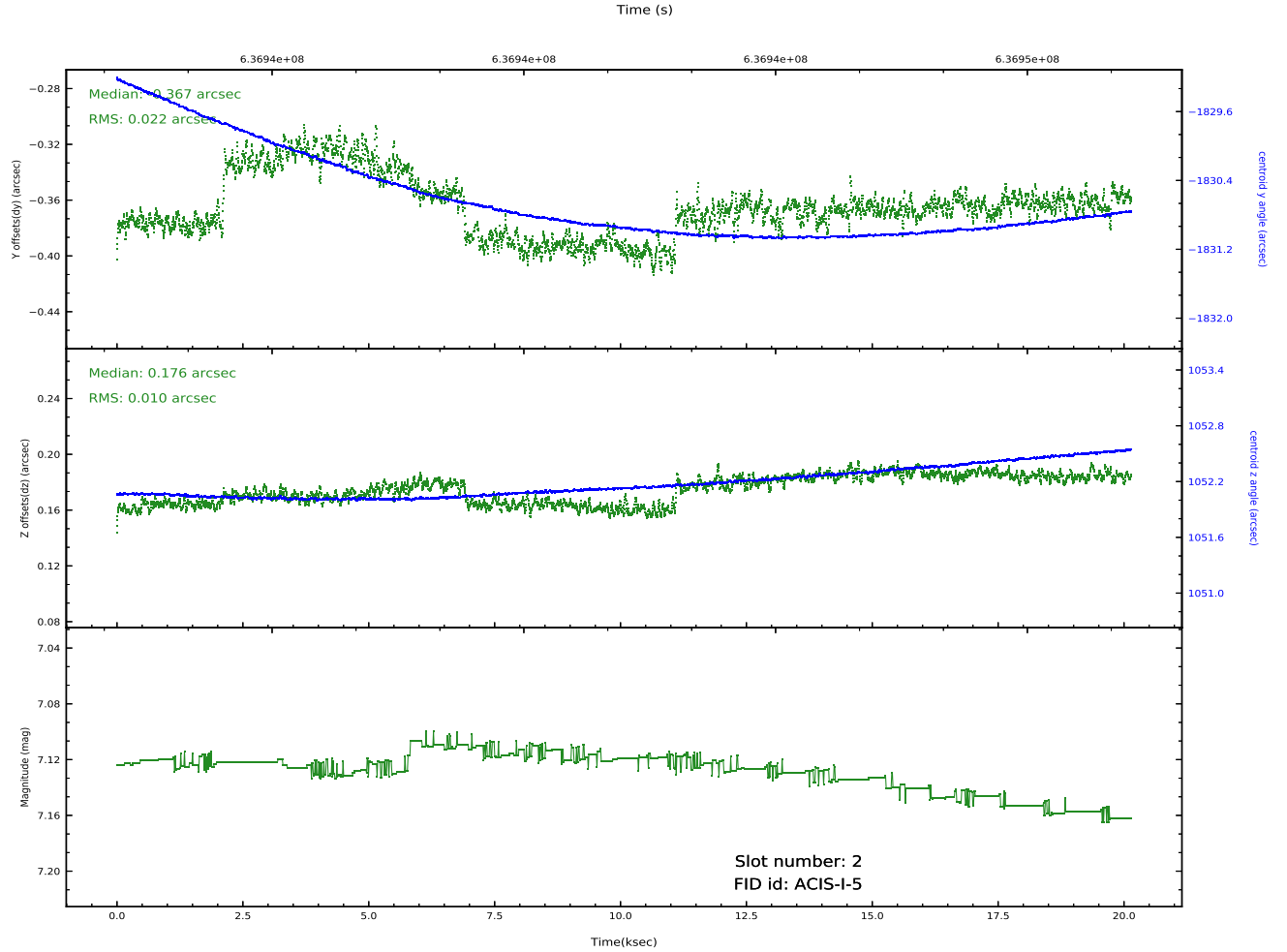
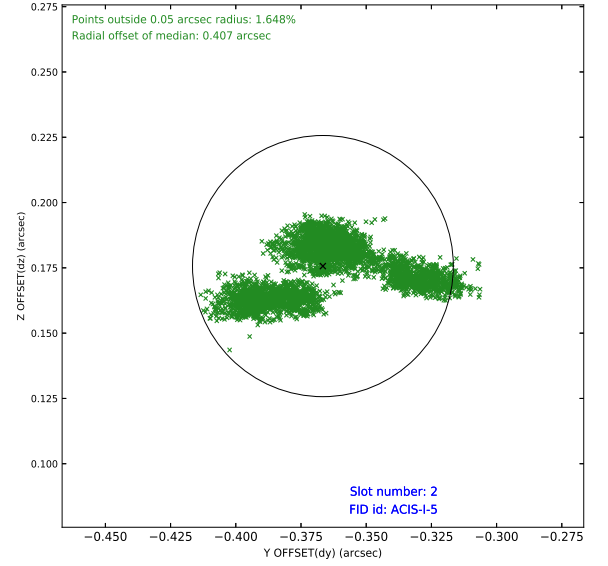
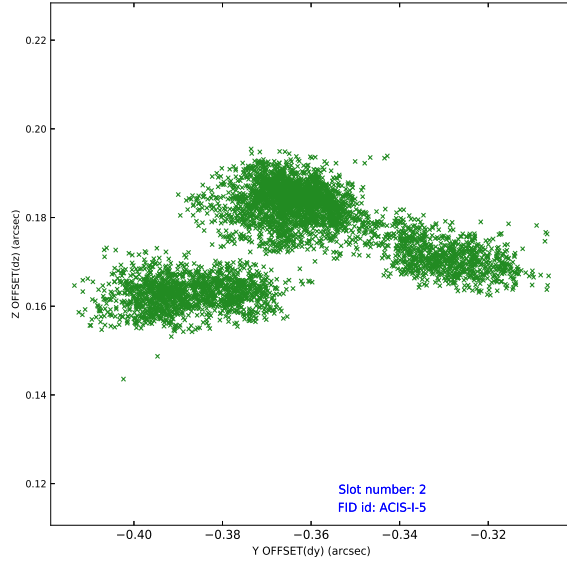
2.5.1 Slot 0



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)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.047700154305

A.2 Comments