

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20898 - L2 Version 2
Chandra X-Ray Center

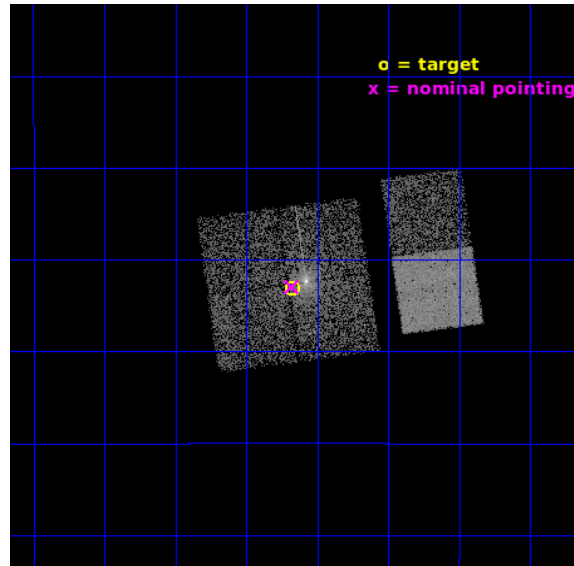
L2 Processing Date : Oct 24 2020

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1 Front

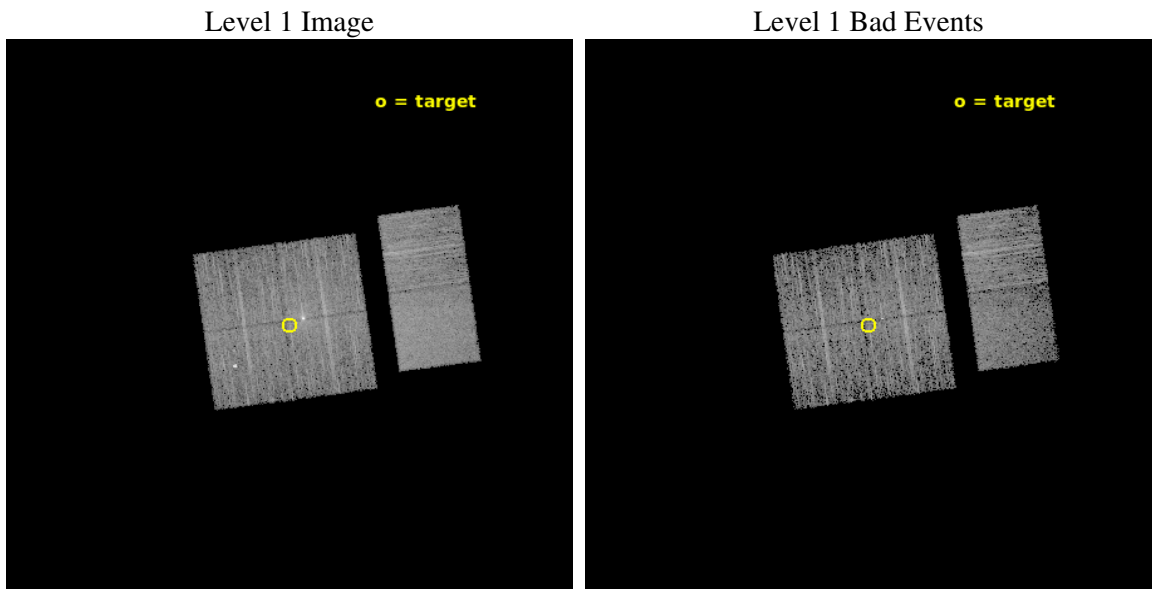
seq_num	402013	Sequence number
obs_id	20898	Observation id
title	Verifying a new candidate transitional millisecond pulsar	Proposal
observer	Arash Bahramian	Principal investigator
object	VLA J185310-084308	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	283.2925	Observer's specified target RA [deg]
dec_targ	-8.718972	Observer's specified target Dec [deg]
ra_nom	283.29464347502	Nominal RA [deg]
dec_nom	-8.7157839706637	Nominal Dec [deg]
roll_nom	82.198874339025	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4949.2221157551	Sum of GTIs [s]
livetime	4886.5520852616	Livetime [s]
ontime0	4949.0989958048	Sum of GTIs [s]
ontime1	4949.1400357485	Sum of GTIs [s]
ontime2	4949.1810758114	Sum of GTIs [s]
ontime3	4949.2221157551	Sum of GTIs [s]
ontime6	4946.0631554127	Sum of GTIs [s]
ontime7	4949.263155818	Sum of GTIs [s]
l2events	43560	Number of level 2 events



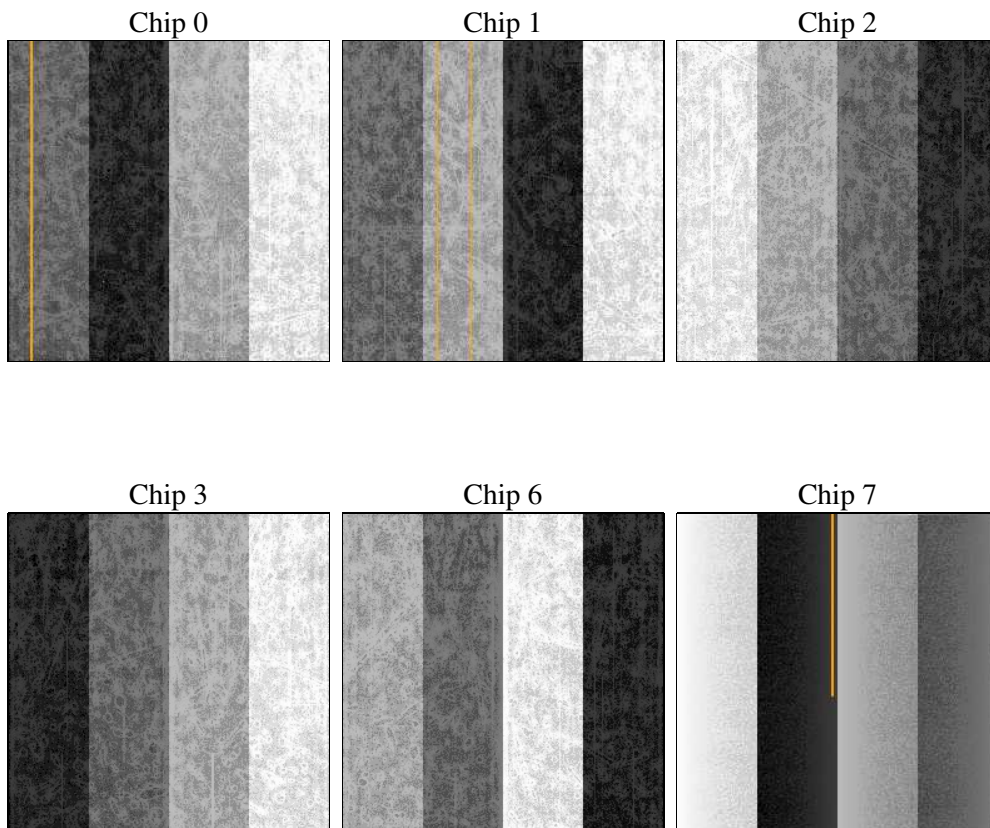
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	4949.2221157551	Sum of GTIs [s]
caldsver	4.9.3	 	ontime0	4949.0989958048	Sum of GTIs [s]
date	2020-10-25T00:25:17	Date and time of file creation	ontime1	4949.1400357485	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4949.1810758114	Sum of GTIs [s]
			ontime3	4949.2221157551	Sum of GTIs [s]
			ontime6	4946.0631554127	Sum of GTIs [s]
			ontime7	4949.263155818	Sum of GTIs [s]
			l1events	232259	Number of level 1 events

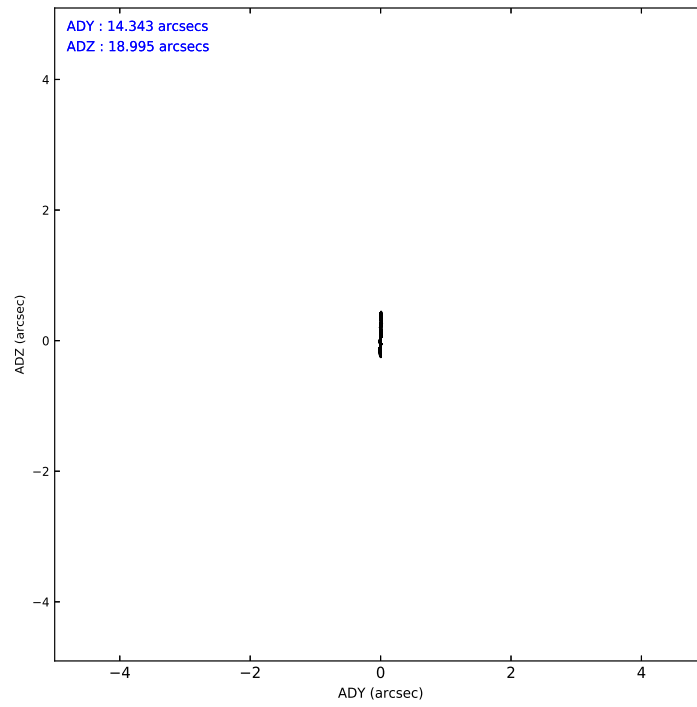
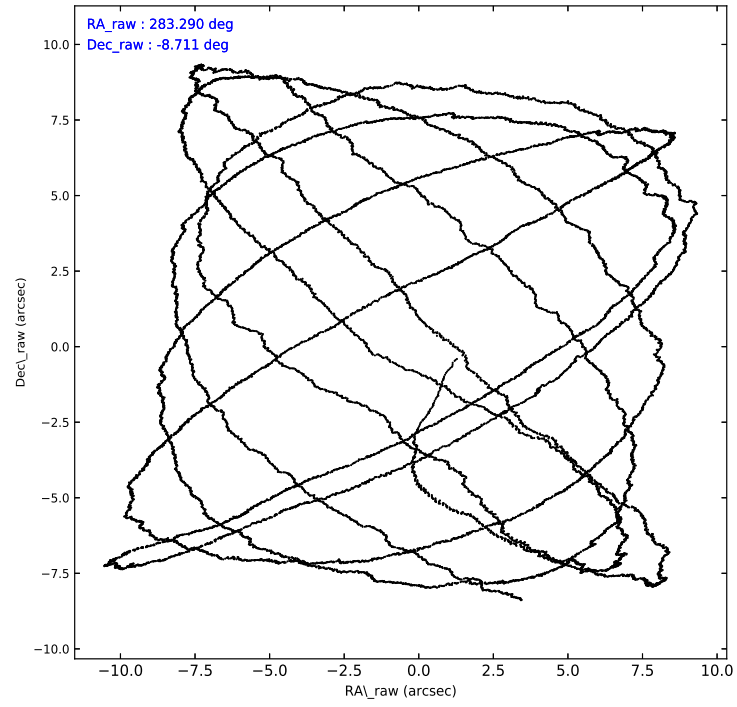
2.1.4 Events

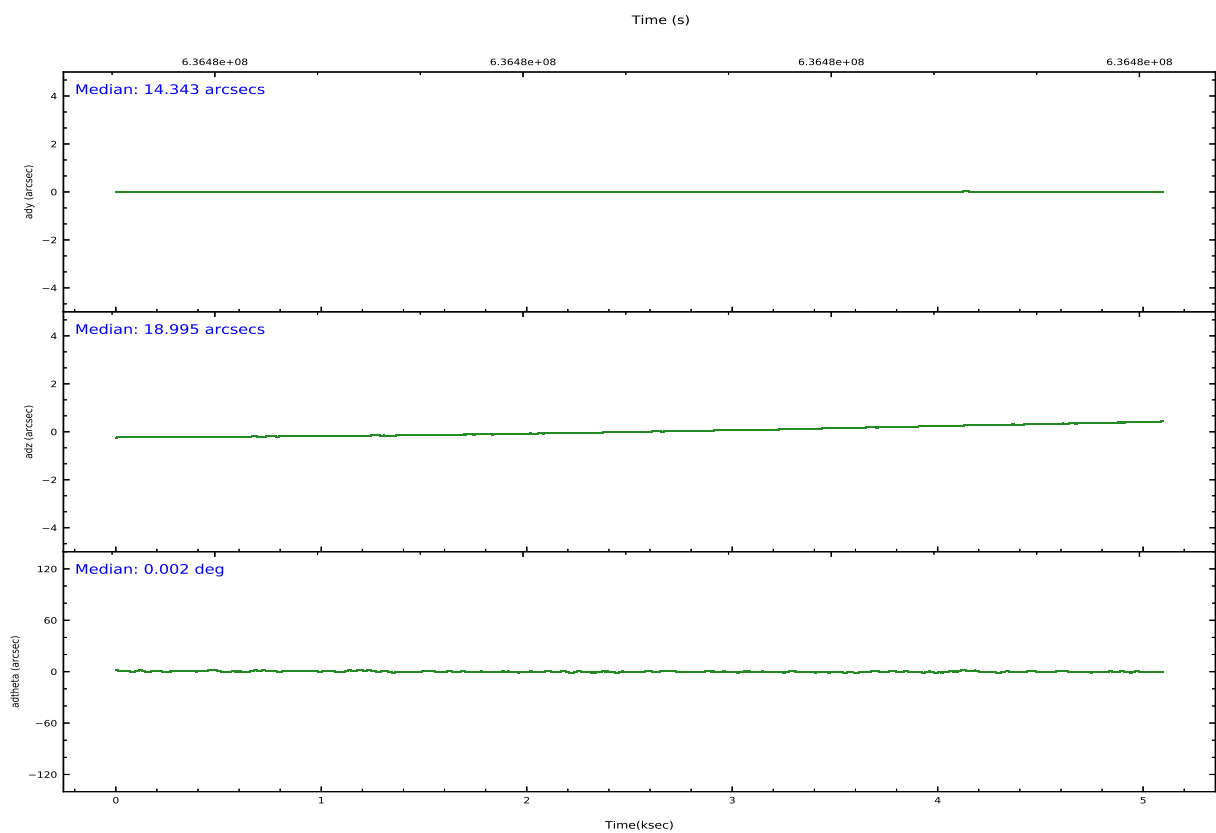
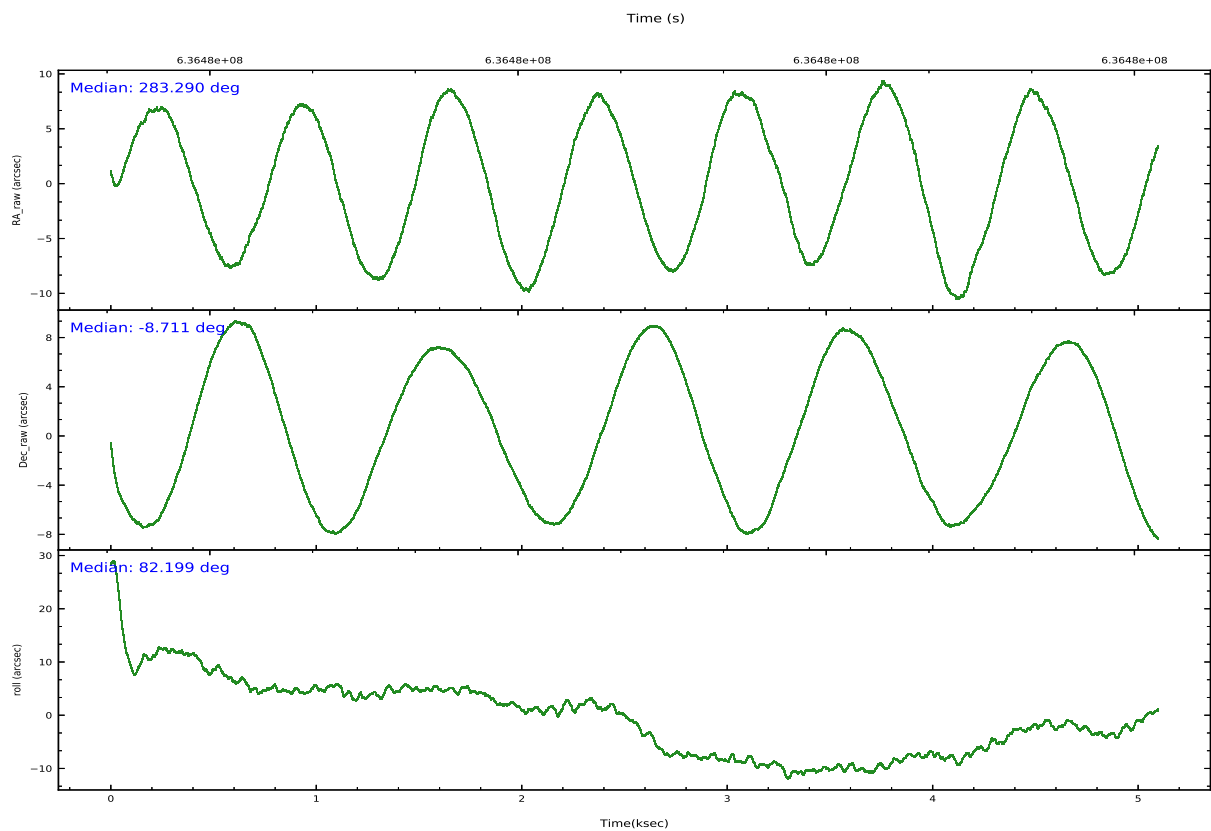
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	33062	35488	40015	36931	39186	47577	grade 0 events	1677	3288	4186	2909	1391	1799
rejected events	28687	29173	32501	31123	34874	26611		5%	9%	10%	7%	3%	3%
rejected %	86%	82%	81%	84%	88%	55%	grade 1 events	15	26	119	32	13	55
								0%	0%	0%	0%	0%	0%
							grade 2 events	1011	1236	1340	1003	1081	4428
								3%	3%	3%	2%	2%	9%
							grade 3 events	409	432	506	454	423	1664
								1%	1%	1%	1%	1%	3%
							grade 4 events	381	434	554	522	398	1628
								1%	1%	1%	1%	1%	3%
							grade 5 events	1568	1607	1508	1732	1695	4588
								4%	4%	3%	4%	4%	9%
							grade 6 events	901	937	941	925	1023	11487
								2%	2%	2%	2%	2%	24%
							grade 7 events	27100	27528	30861	29354	33162	21928
								81%	77%	77%	79%	84%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	283.300289	283.29464347502	CCD I2 on	Y	Y
[deg] Pointing Dec	-8.736458	-8.715783970663701	CCD I3 on	Y	Y
[deg] Pointing Roll	82.001180	82.198874339025	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	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	636474615.184000	636473276.36536	CCD S5 on	N	N
Observation start date	2018-03-03T14:29:06	2018-03-03T14:07:56	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	636479615.184000	636480761.9408	On-chip summing requested	N	N
Observation end date	2018-03-03T15:52:26	2018-03-03T16:12:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



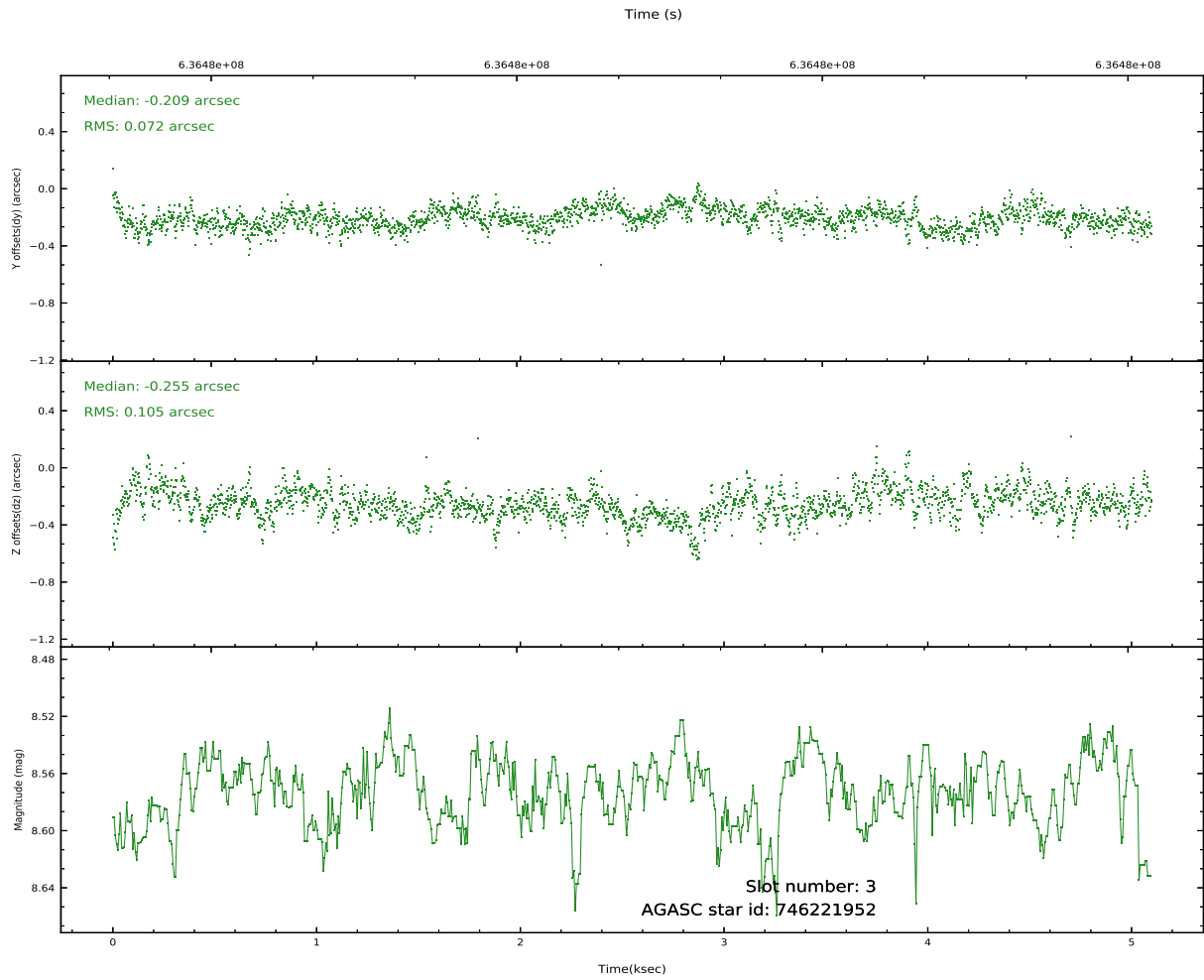
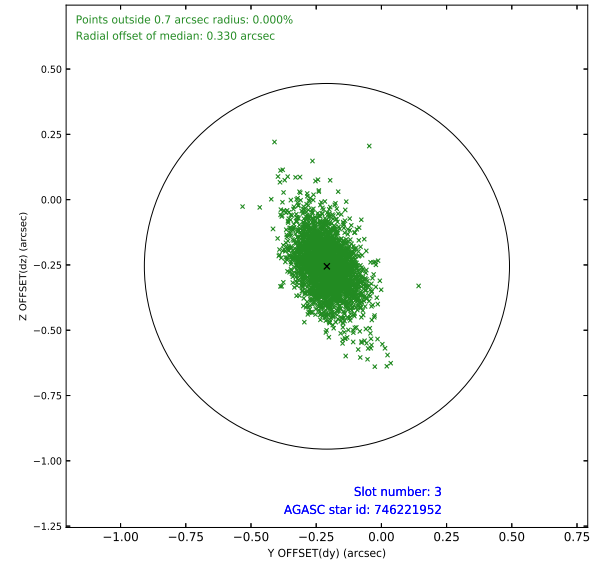
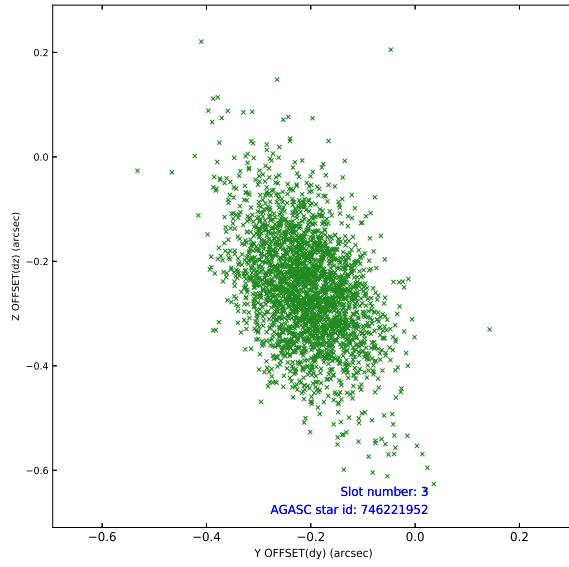


Slot Statistics

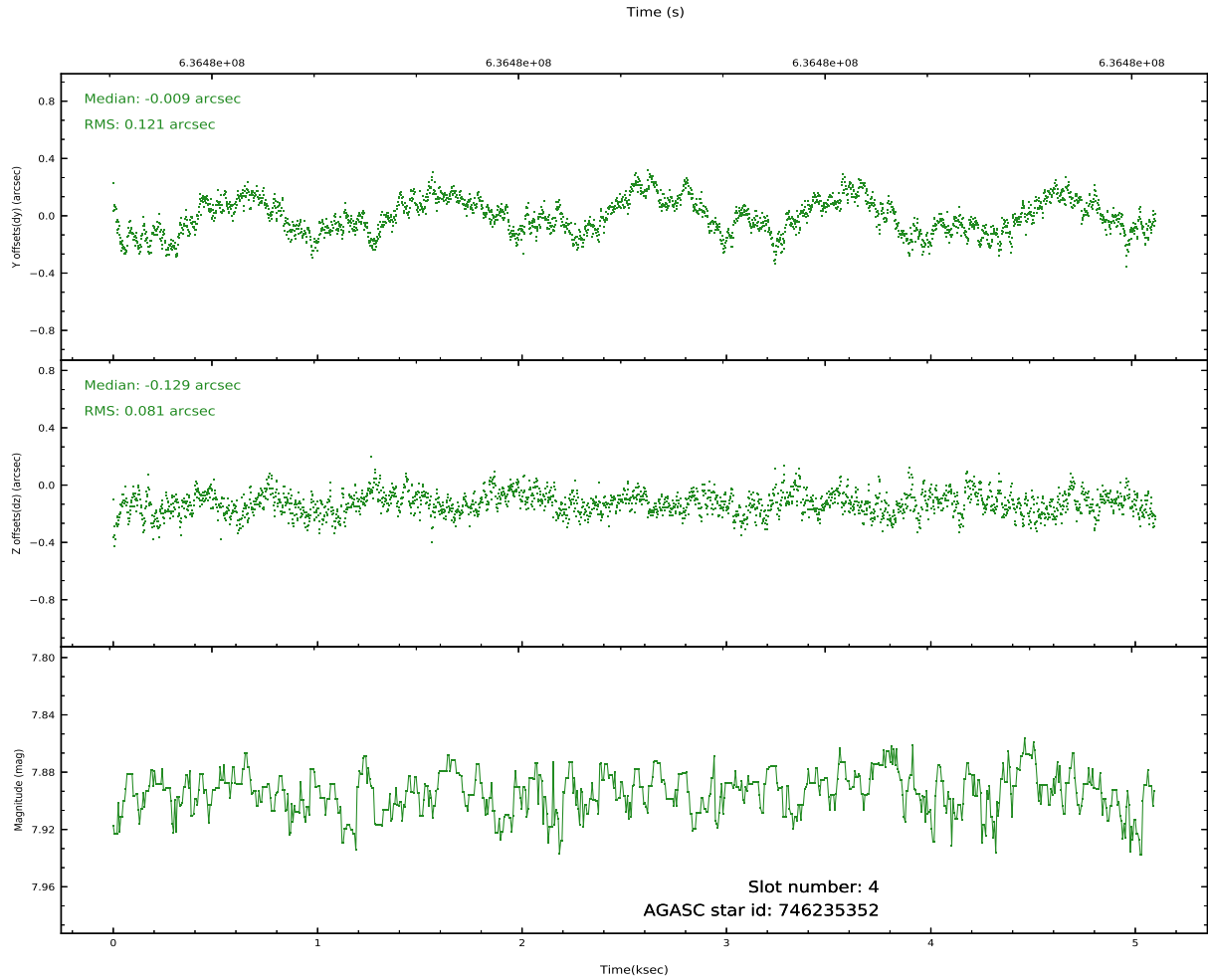
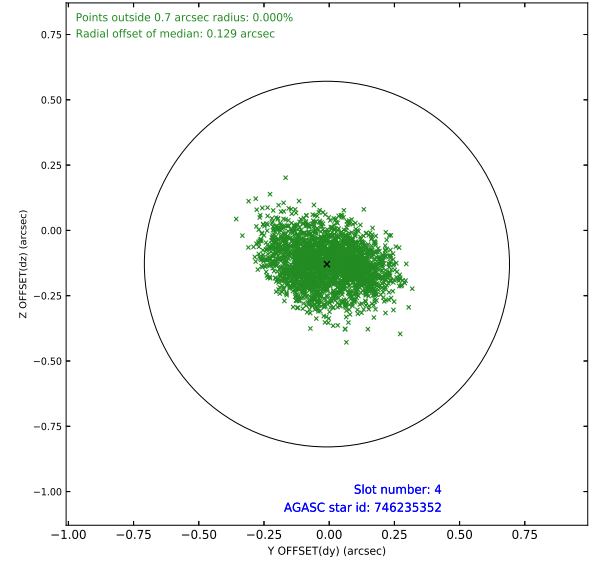
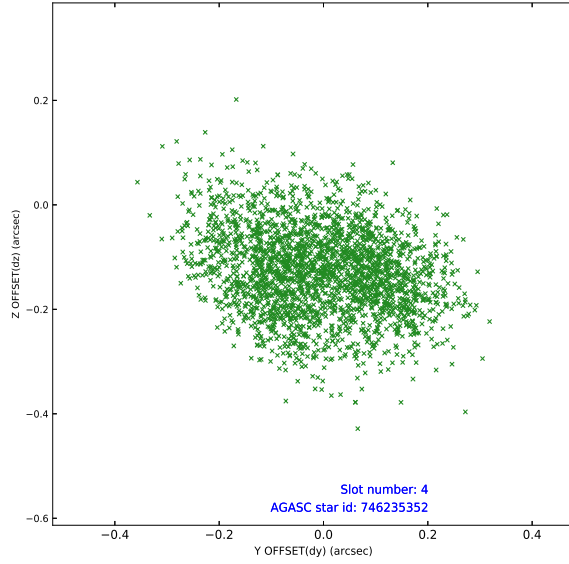
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-2	7.09	1244	1.000	0.064	0.023	0.012	0.023	0.000000	0.000000	-769.04	-849
1	FID		ACIS-I-5	7.18	1244	1.000	-0.235	0.077	0.009	0.015	0.000000	0.000000	-1823.85	1054
2	FID		ACIS-I-6	7.19	1244	1.000	0.077	-0.031	0.008	0.014	0.000000	0.000000	389.56	1699
3	GUIDE	used	746221952	8.57	2488	1.000	-0.209	-0.255	0.125	0.226	283.010159	-8.460584	838.59	1161
4	GUIDE	used	746235352	7.89	2488	1.000	-0.009	-0.129	0.158	0.244	283.027477	-9.082655	-1369.10	787
5	GUIDE	used	746239504	8.31	2488	1.000	0.126	-0.246	0.128	0.219	282.830293	-9.257290	-2090.66	1393
6	GUIDE	used	747897648	7.21	2488	1.000	0.088	0.310	0.128	0.224	283.483122	-9.370309	-2169.93	-959
7	GUIDE	used	747914792	7.17	2487	1.000	-0.001	0.321	0.127	0.216	283.972099	-8.794515	123.15	-2396

2.4 Star Slots

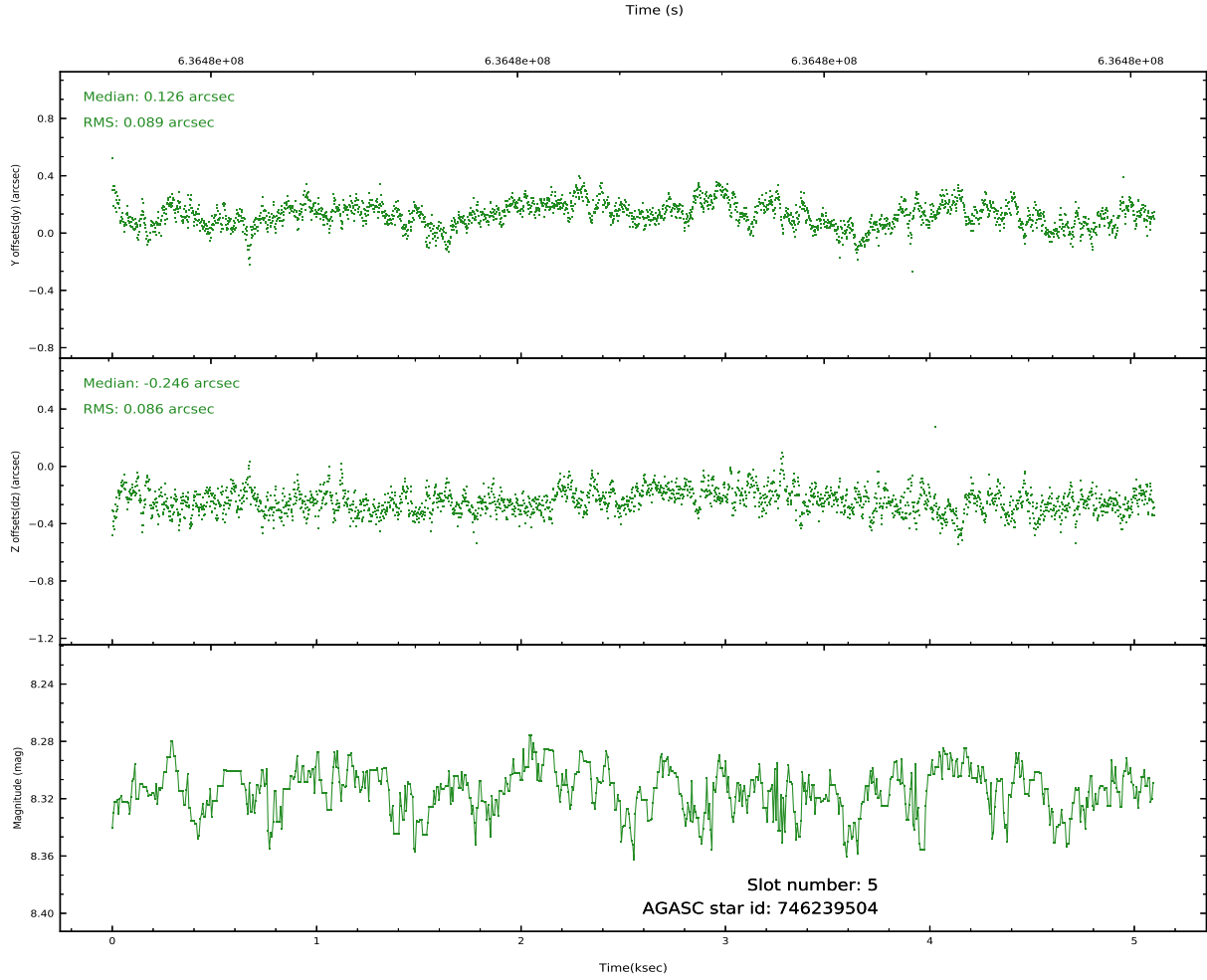
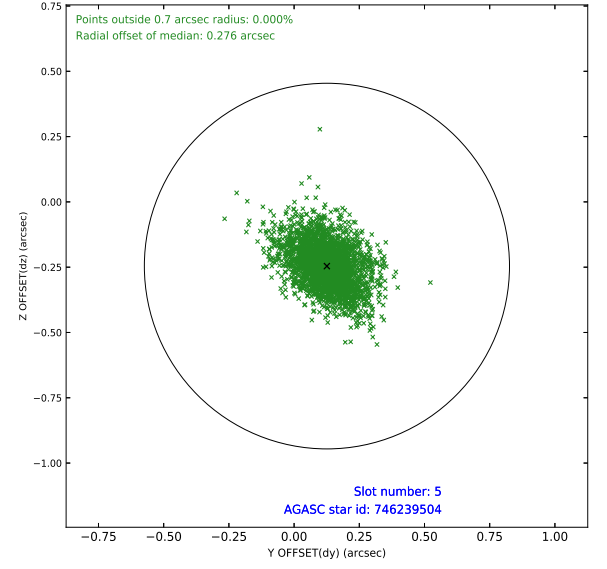
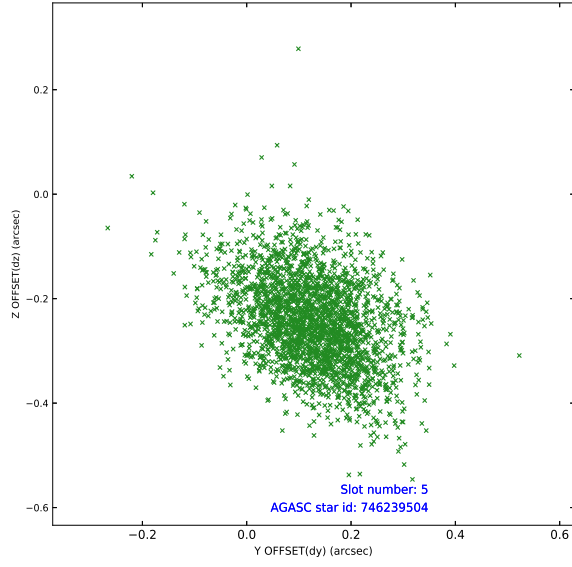
2.4.1 Slot 3



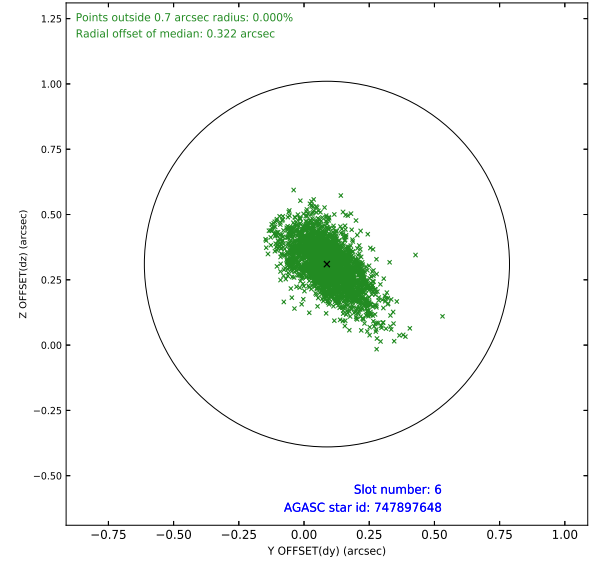
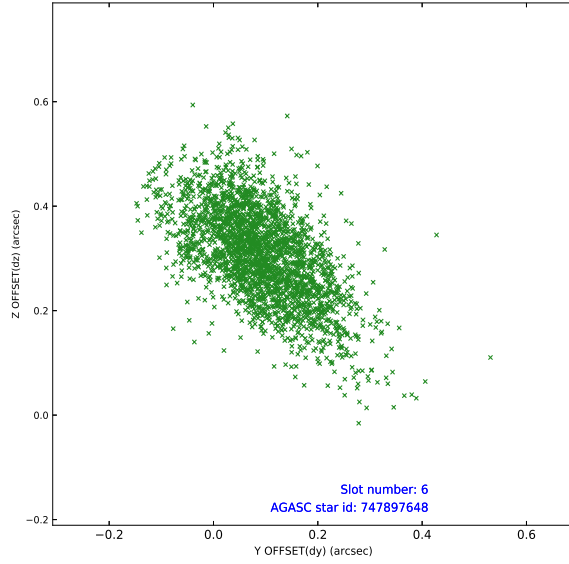
2.4.2 Slot 4



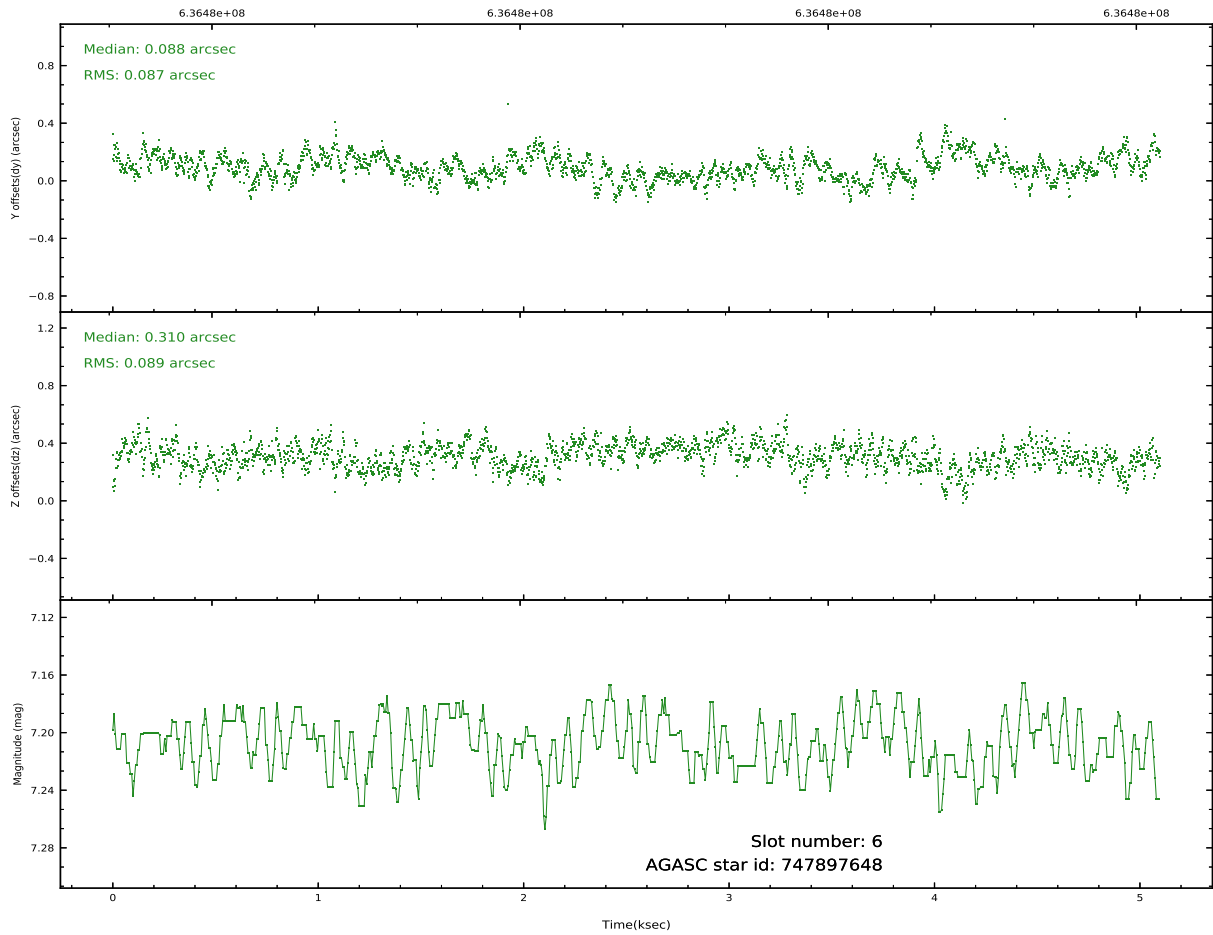
2.4.3 Slot 5



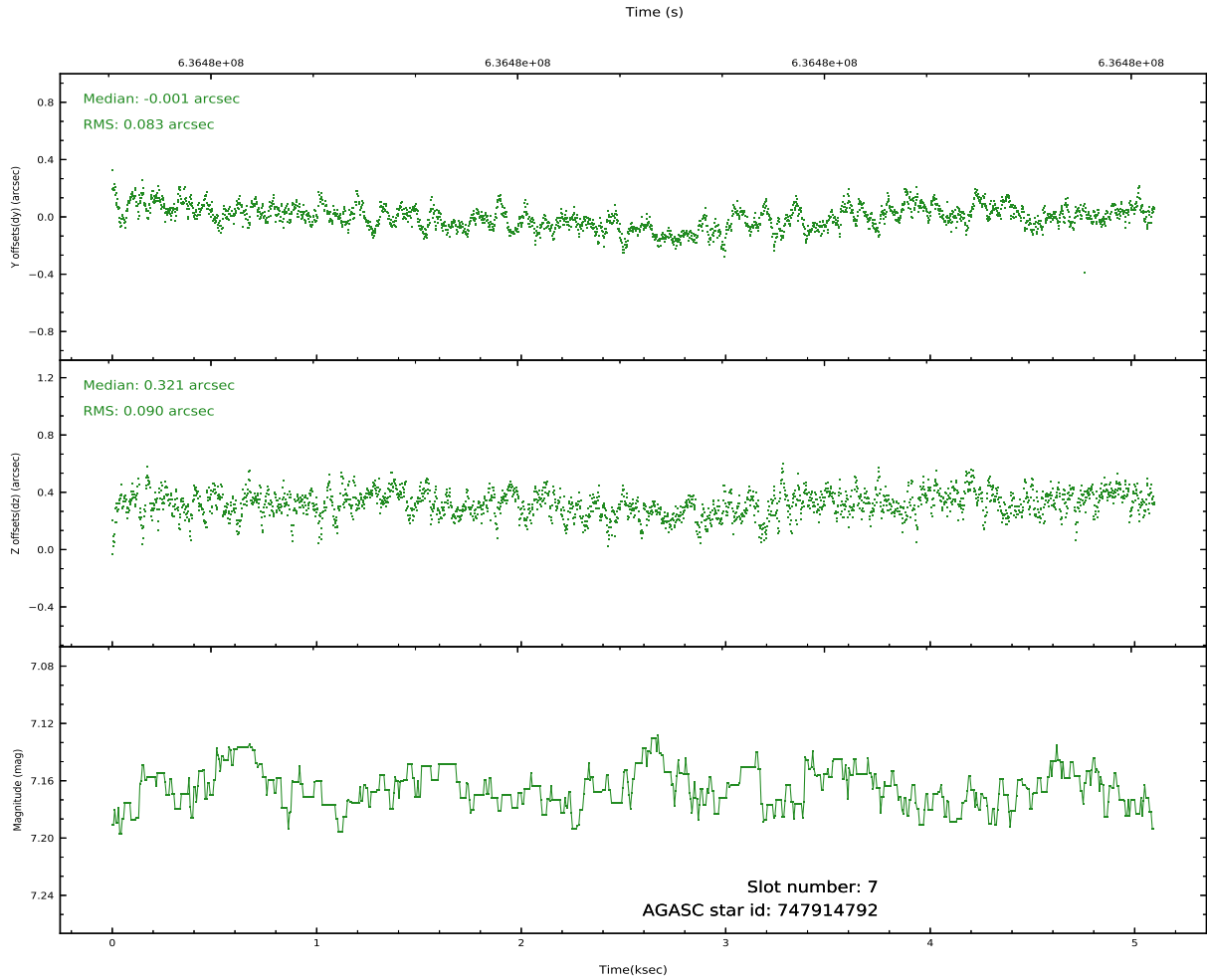
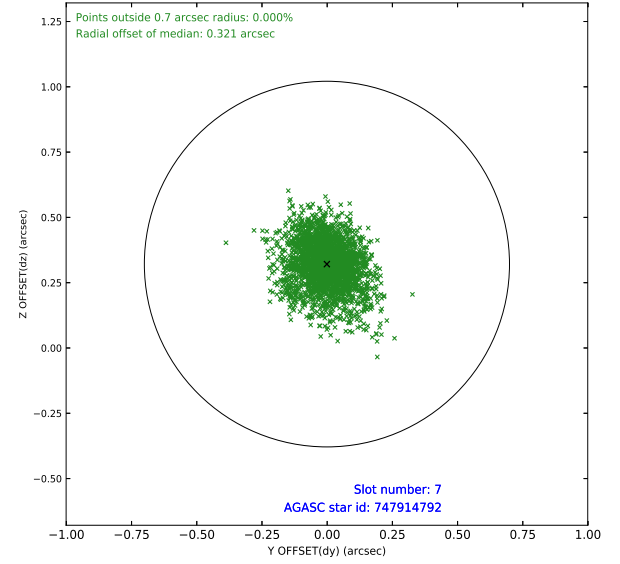
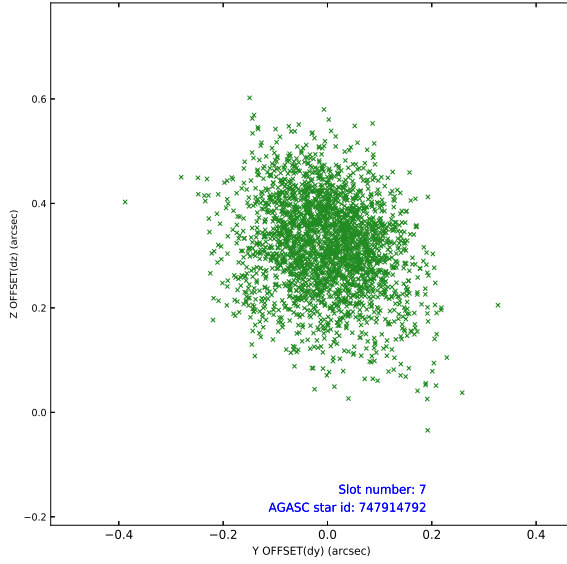
2.4.4 Slot 6



Time (s)

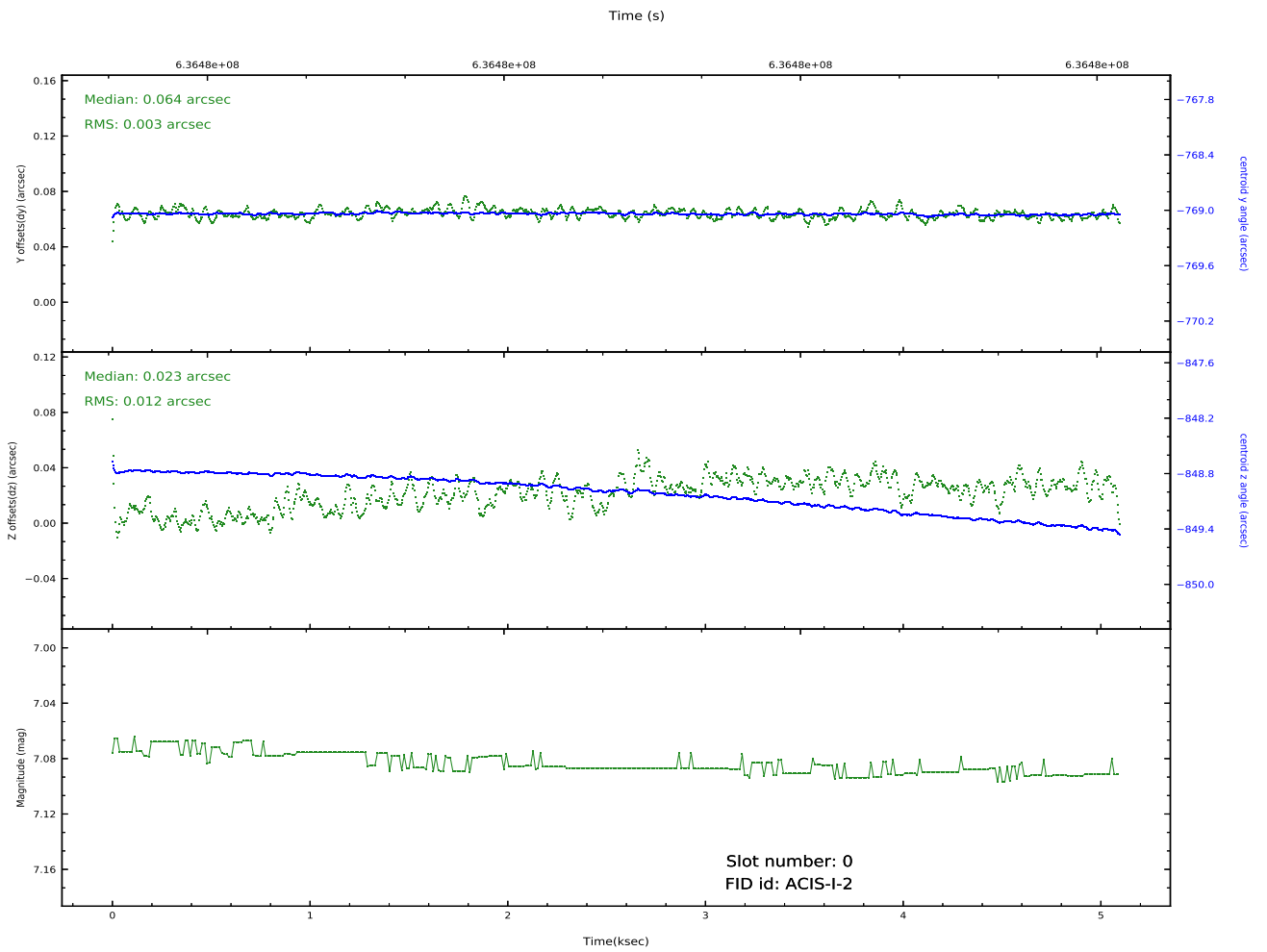
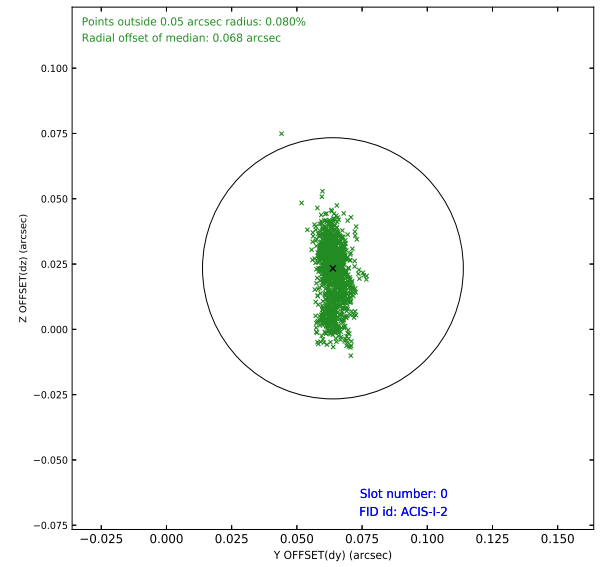
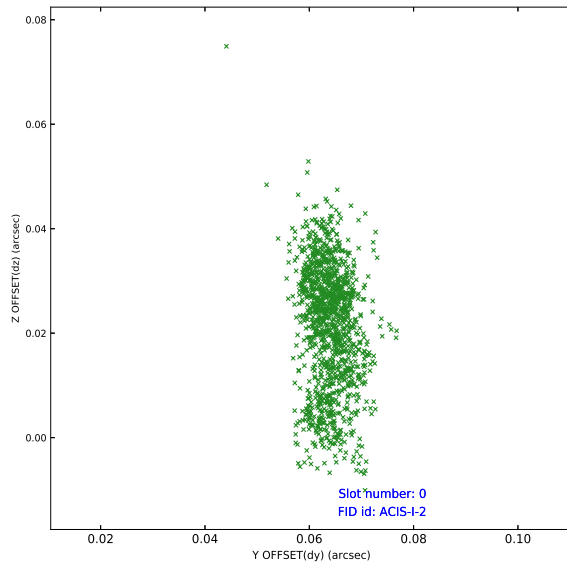


2.4.5 Slot 7

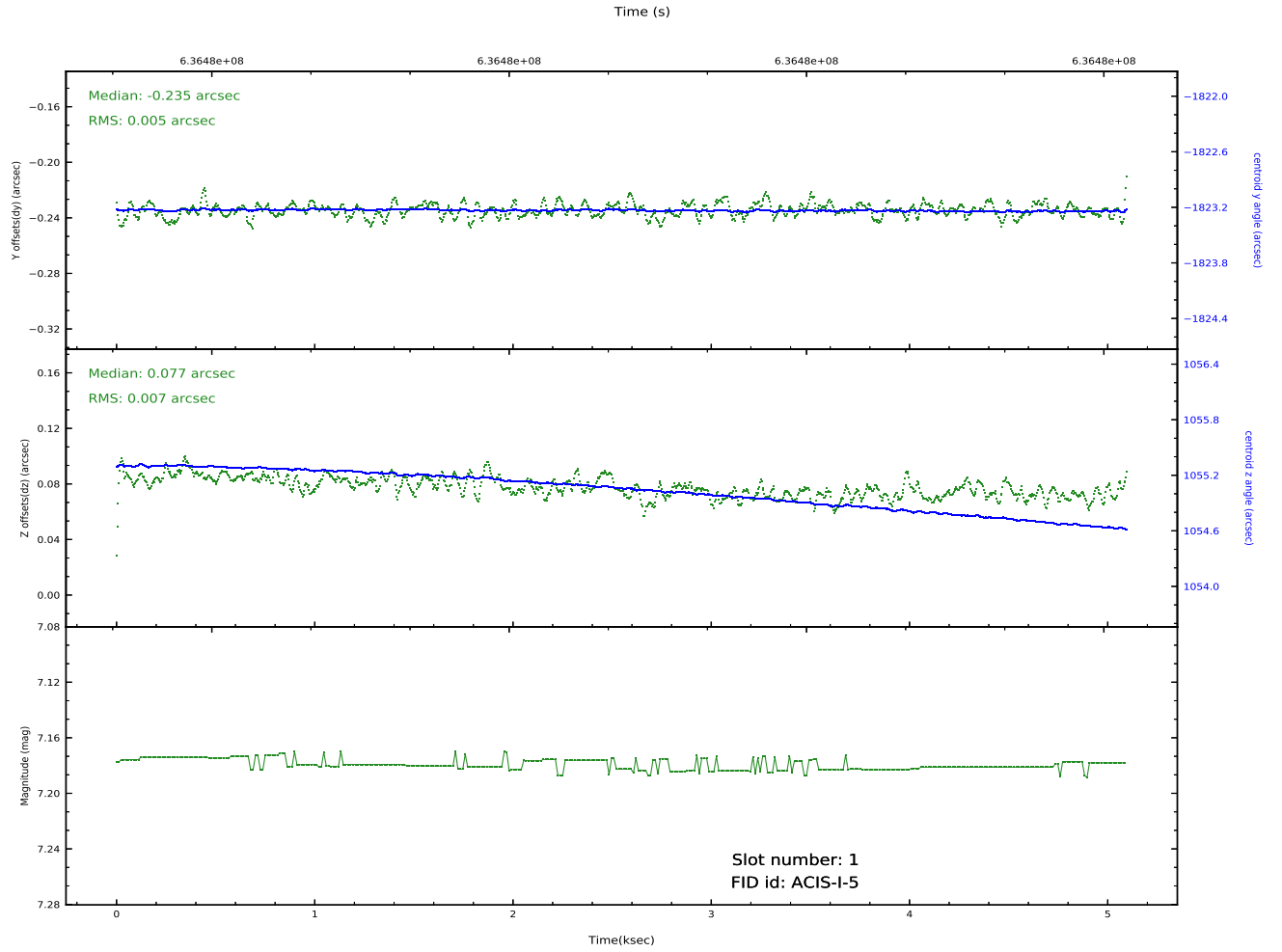
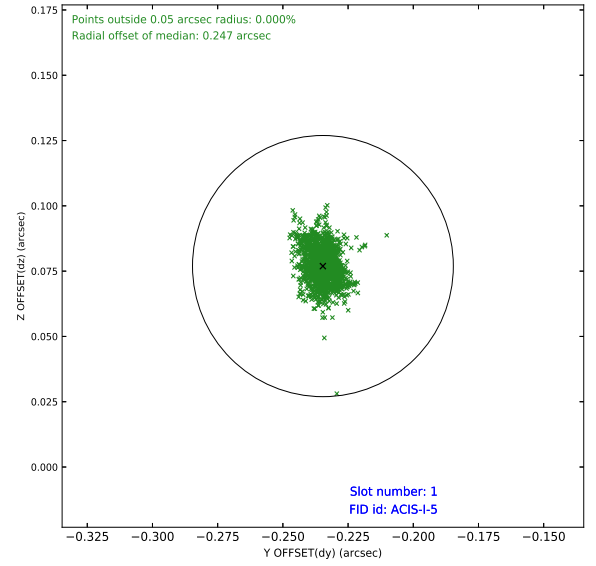
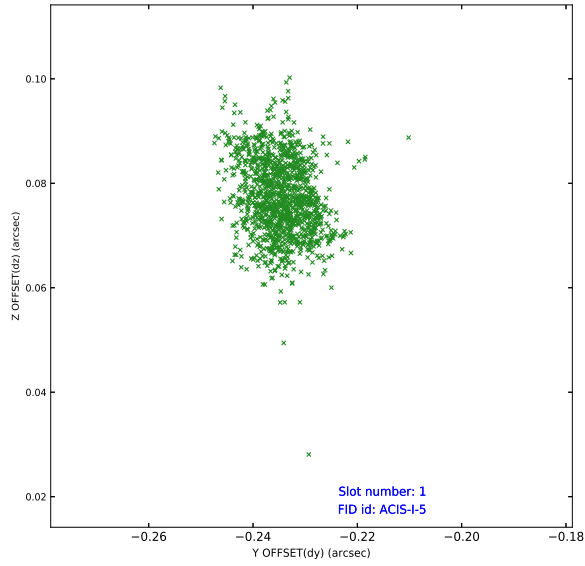


2.5 FID Slots

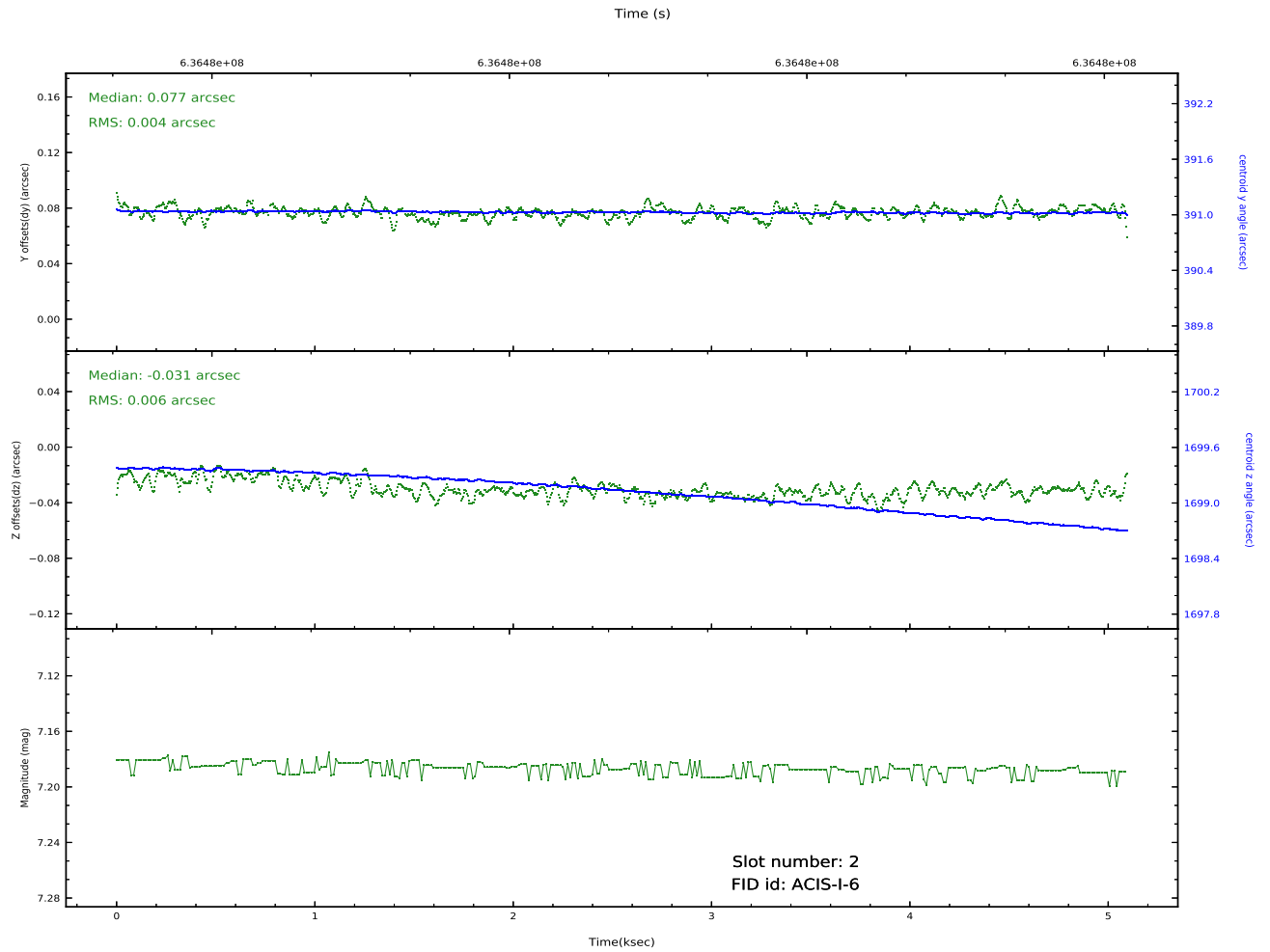
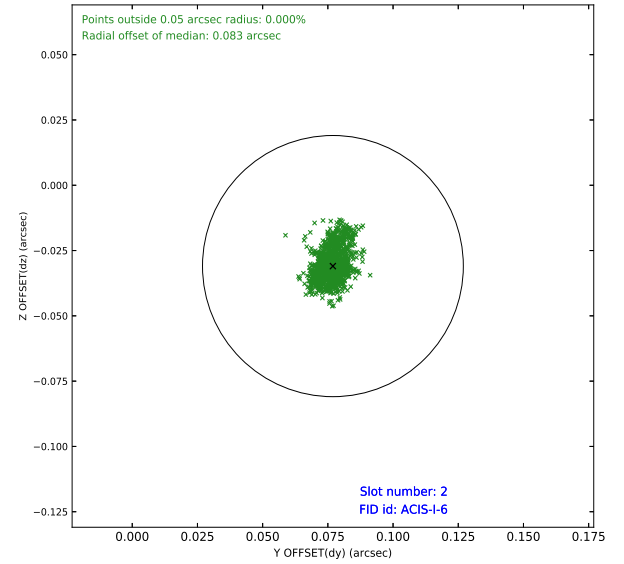
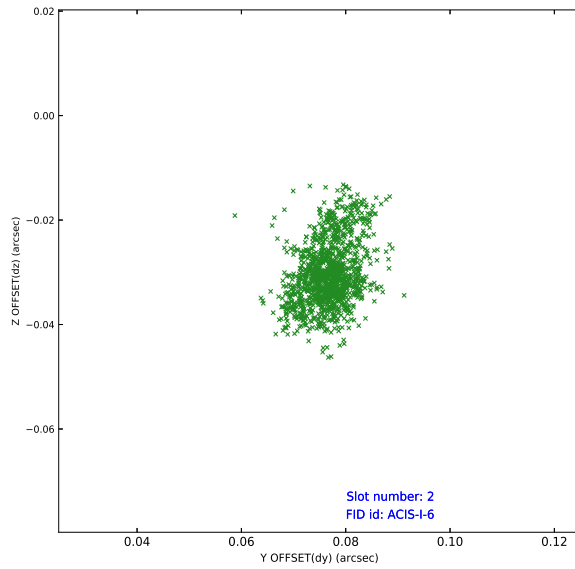
2.5.1 Slot 0



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	4.949222115159

A.2 Comments

Joint proposal with NRAO.