

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20906 - L2 Version 1
Chandra X-Ray Center

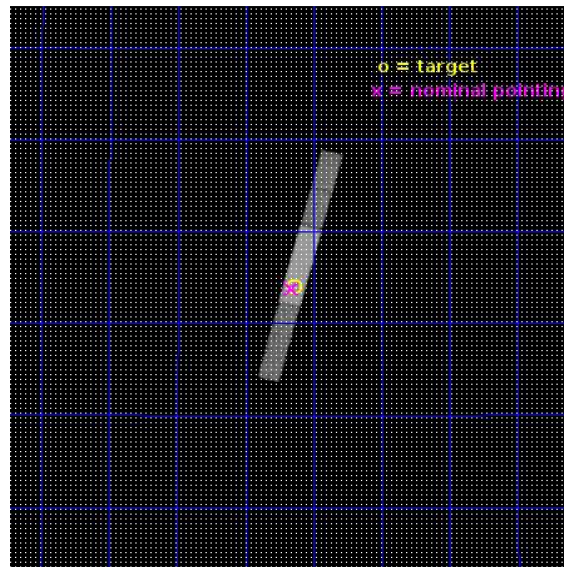
L2 Processing Date : Dec 28 2017

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1 Front

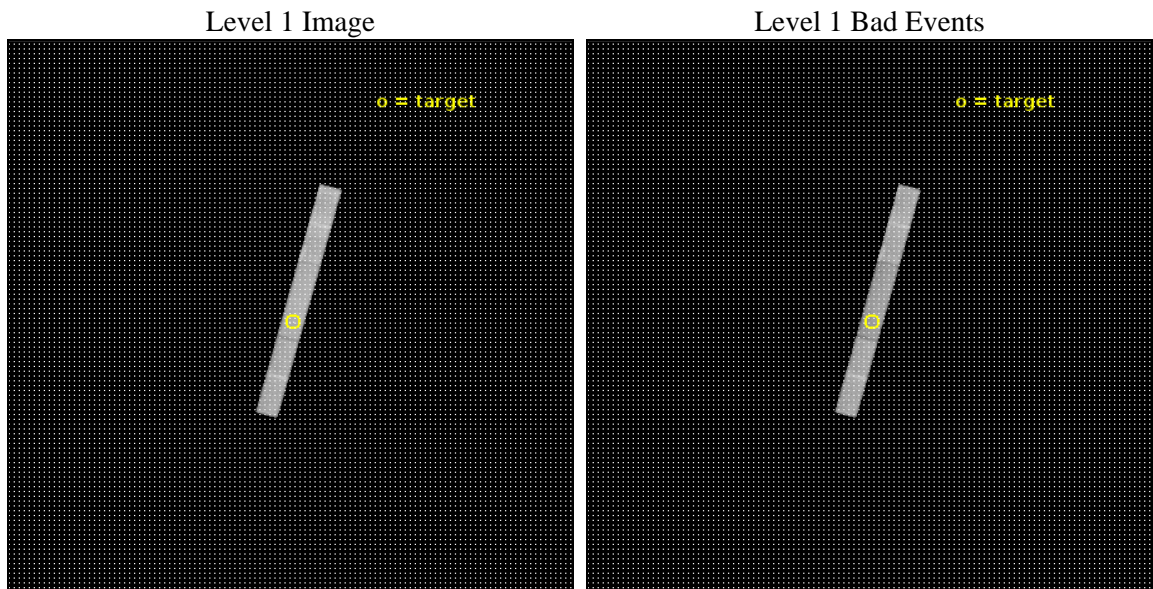
seq_num	201108	Sequence number
obs_id	20906	Observation id
title	The HL Tau Jet and X-ray Irradiated Protoplanetary Disk	Proposal t
observer	Stephen Skinner	Principal investigator
object	HL Tau	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	67.91	Observer's specified target RA [deg]
dec_targ	18.232667	Observer's specified target Dec [deg]
ra_nom	67.915675844345	Nominal RA [deg]
dec_nom	18.22989058908	Nominal Dec [deg]
roll_nom	285.15485318044	Nominal Roll [deg]
revision	1	Processing version of data
ontime	37636.199002862	Sum of GTIs [s]
livetime	35994.834547496	Livetime [s]
ontime6	37634.310703635	Sum of GTIs [s]
ontime7	37636.199002862	Sum of GTIs [s]
ontime8	37635.210683584	Sum of GTIs [s]
l2events	59885	Number of level 2 events



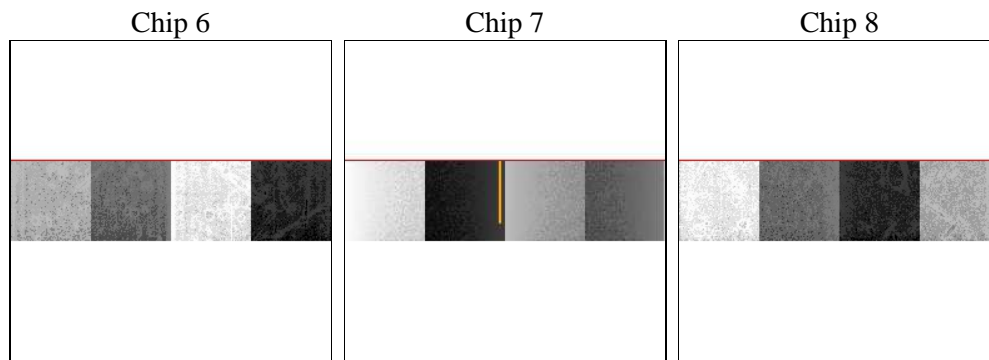
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	37551.850000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	37636.199002862	Sum of GTIs [s]
caldbver	4.7.7	 	ontime6	37634.310703635	Sum of GTIs [s]
date	2017-12-28T14:54:38	Date and time of file creation	ontime7	37636.199002862	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	37635.210683584	Sum of GTIs [s]
			l1events	287499	Number of level 1 events

2.1.4 Events

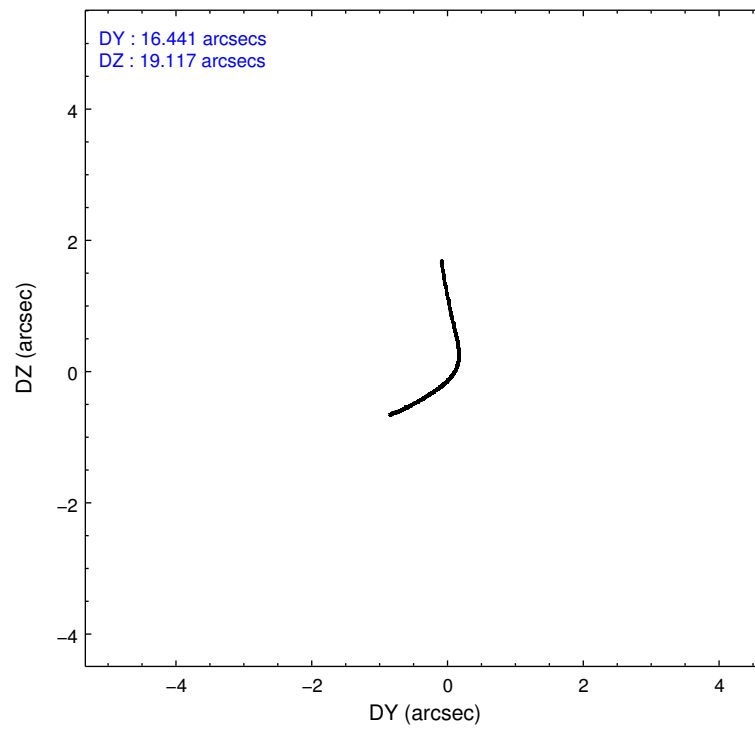
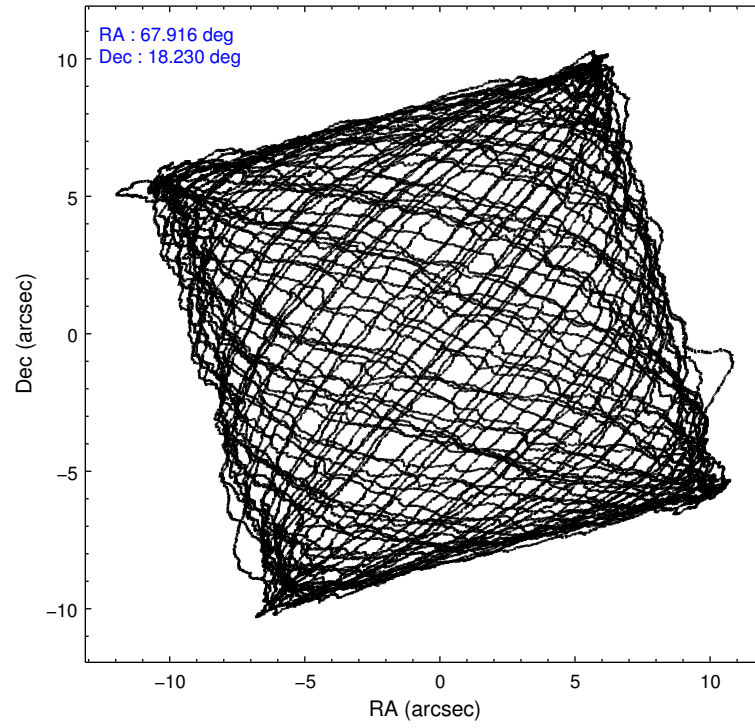
	ccd 6	ccd 7	ccd 8
level 1 events	82461	95541	109497
rejected events	73277	50051	83203
rejected %	88%	52%	75%

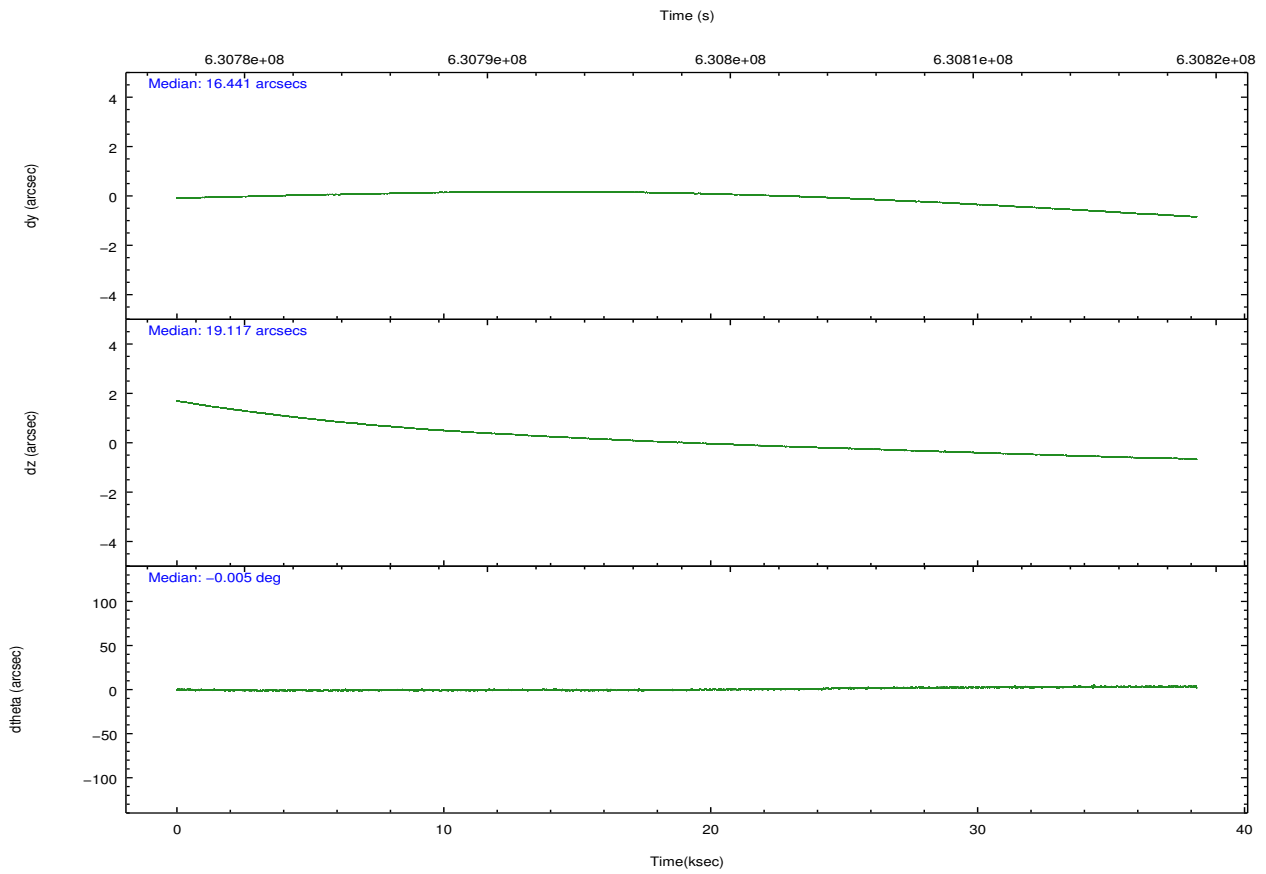
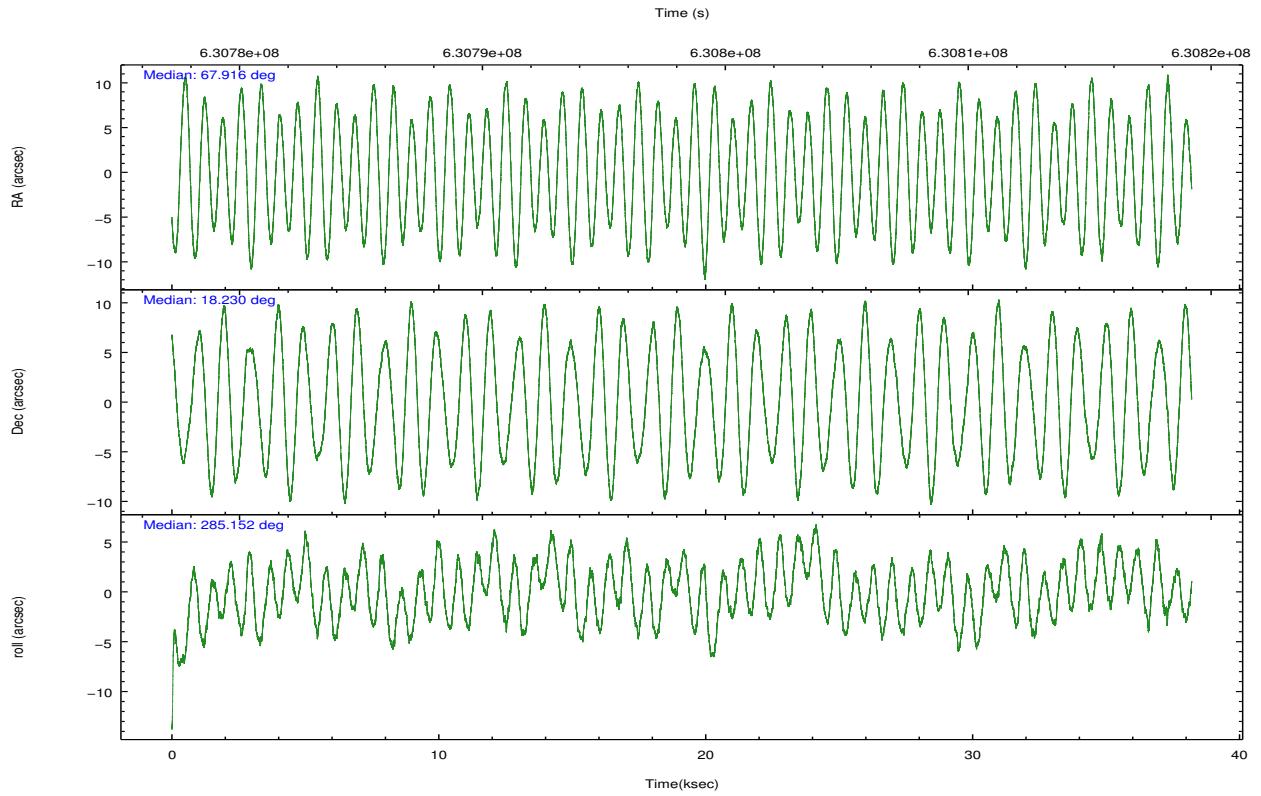
	ccd 6	ccd 7	ccd 8
grade 0 events	2634	4763	6781
	3%	4%	6%
grade 1 events	22	153	63
	0%	0%	0%
grade 2 events	1833	9579	5775
	2%	10%	5%
grade 3 events	1410	4934	3255
	1%	5%	2%
grade 4 events	1350	4677	3055
	1%	4%	2%
grade 5 events	3354	9734	4849
	4%	10%	4%
grade 6 events	1958	21540	7429
	2%	22%	6%
grade 7 events	69900	40161	78290
	84%	42%	71%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	67.894915	67.91567584434529	CCD I2 on	N	N
[deg] Pointing Dec	18.248977	18.22989058908	CCD I3 on	N	N
[deg] Pointing Roll	285.004718	285.154853180442	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	O2	Y
[s] Observation start time (MET)	630779760.184000	630778892.6301	CCD S5 on	N	N
Observation start date	2017-12-27T16:34:51	2017-12-27T16:21:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	630817311.184000	630818270.5699199	On-chip summing requested	N	N
Observation end date	2017-12-28T03:00:42	2017-12-28T03:17:50	Subarray requested	CUSTOM	1/4
Read mode	TIMED	TIMED	Subarray start row	385	385
			Subarray row count	256	256
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.9

2.3 Aspect





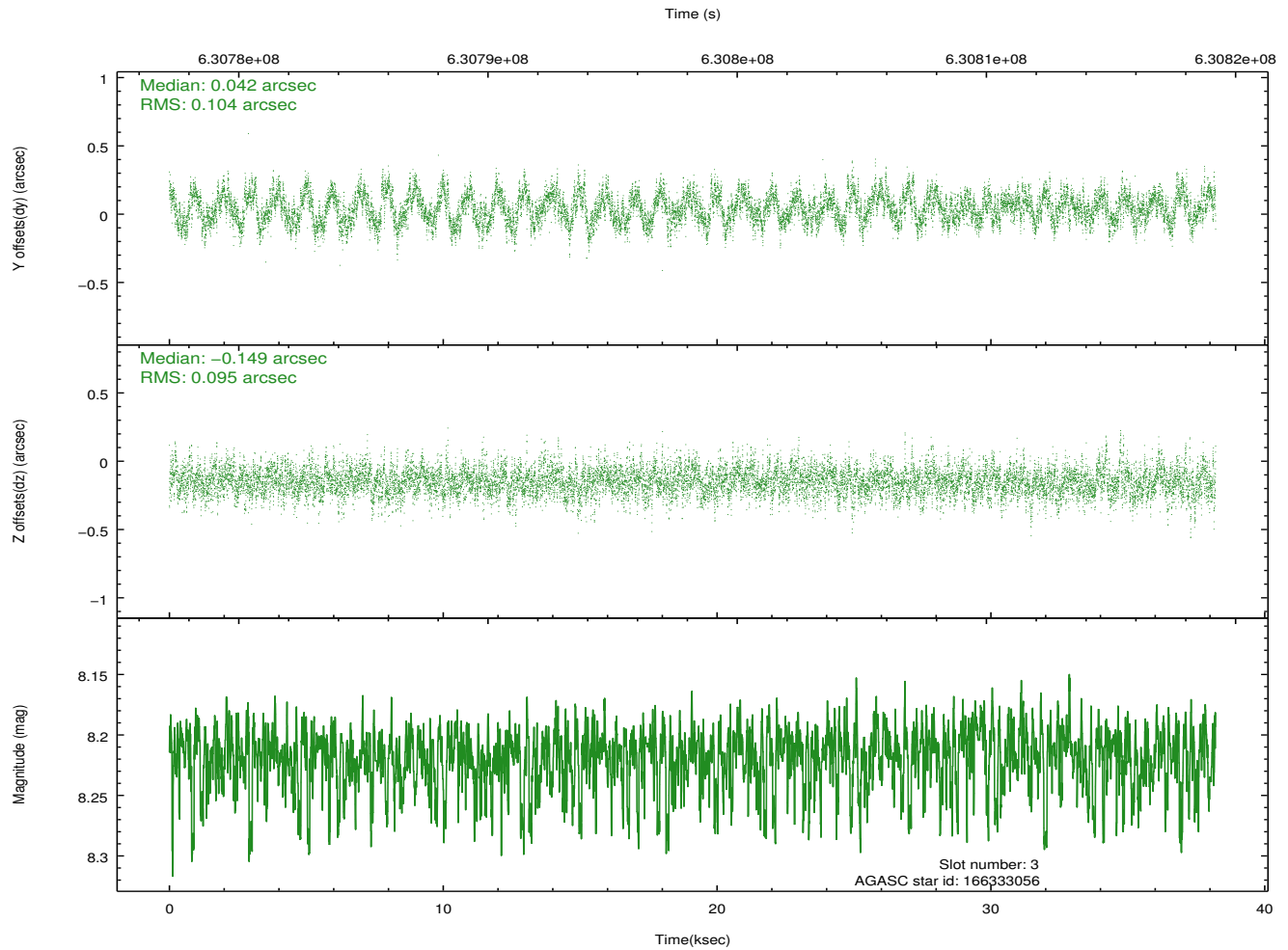
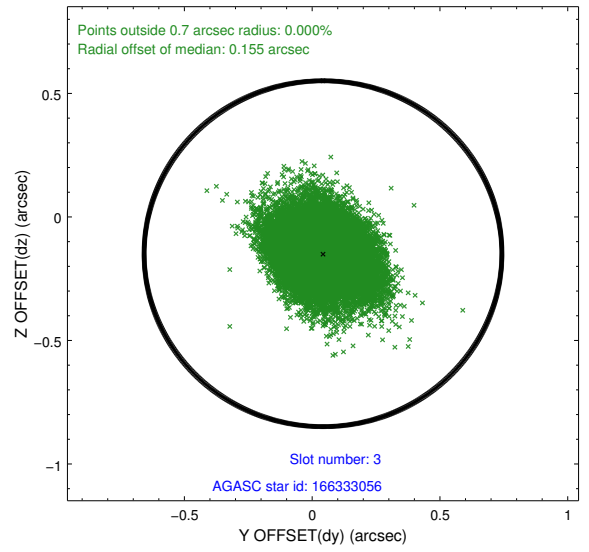
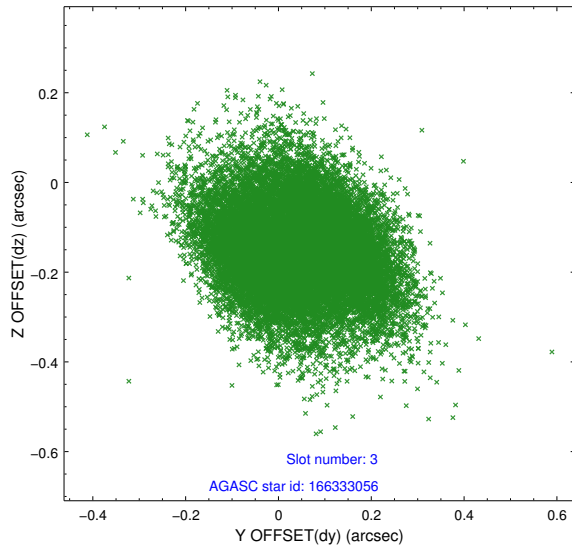
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	9318	-0.209	-0.100	0.022	0.033	0.000000	0.000000	-769.52	-1740.87
1	FID		ACIS-S-4	7.17	9319	0.490	0.128	0.014	0.025	0.000000	0.000000	2144.41	167.86
2	FID		ACIS-S-5	7.16	9318	-0.310	-0.020	0.026	0.038	0.000000	0.000000	-1822.46	161.36
3	GUIDE	used	166333056	8.22	18626	0.042	-0.149	0.150	0.240	67.813257	17.557208	2333.06	-915.45
4	GUIDE	used	166334824	7.09	18638	0.123	0.223	0.134	0.221	67.376458	17.863163	880.78	-2072.90
5	GUIDE	used	166995216	7.86	18628	-0.037	0.045	0.110	0.202	68.200288	18.935370	-2118.38	1644.36
6	GUIDE	used	166996584	9.08	18628	0.117	0.049	0.146	0.251	68.020035	18.861675	-2020.23	982.97
7	GUIDE	used	166467888	8.06	18627	-0.240	-0.165	0.142	0.230	68.675864	17.748180	2429.86	2122.21

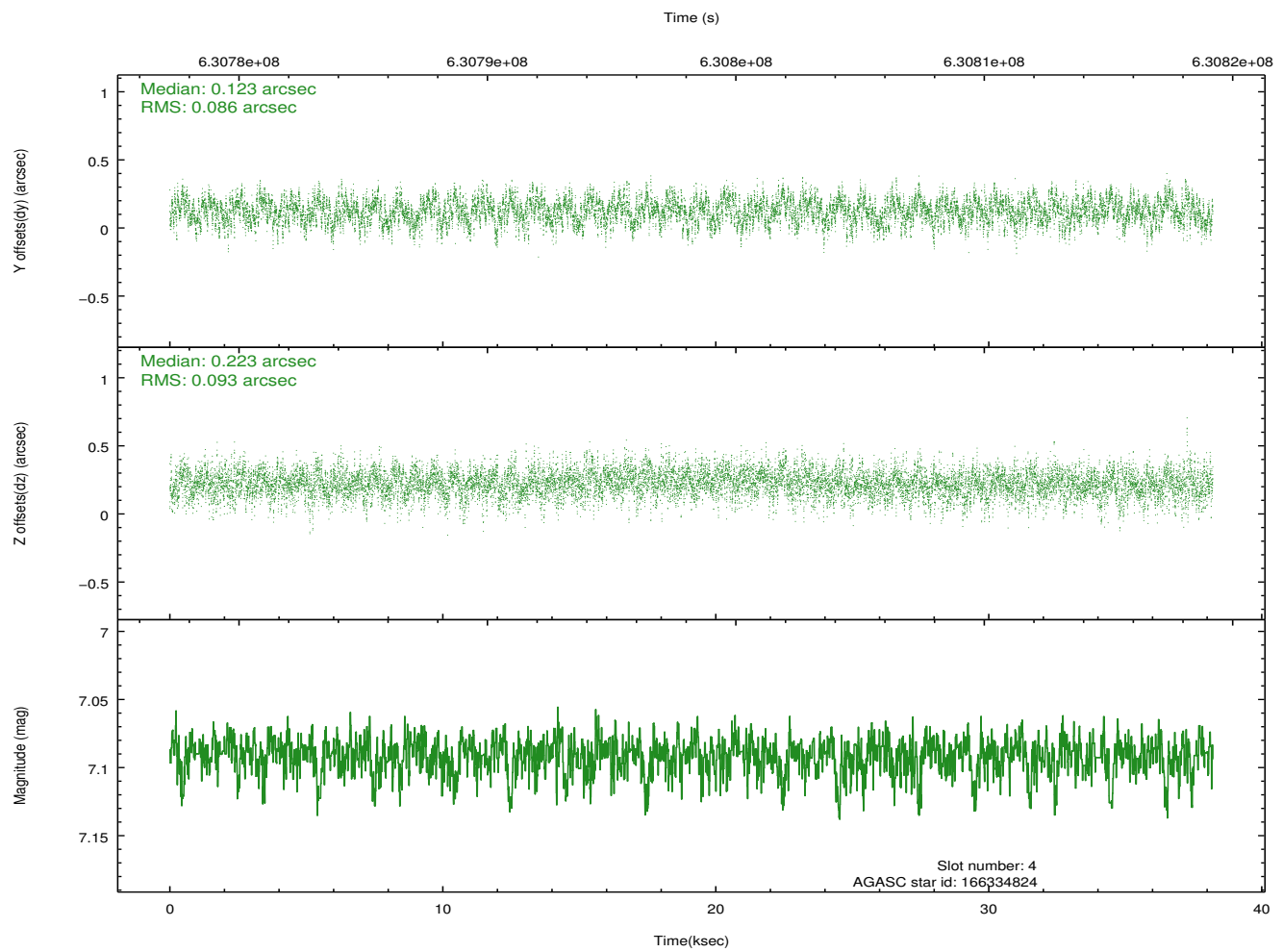
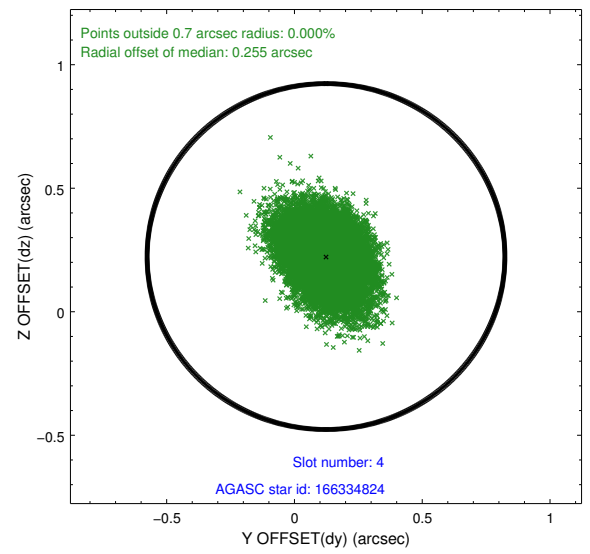
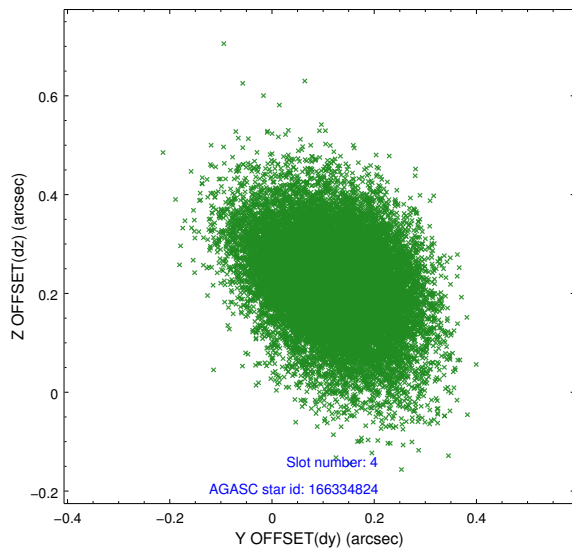
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2.4 Star Slots

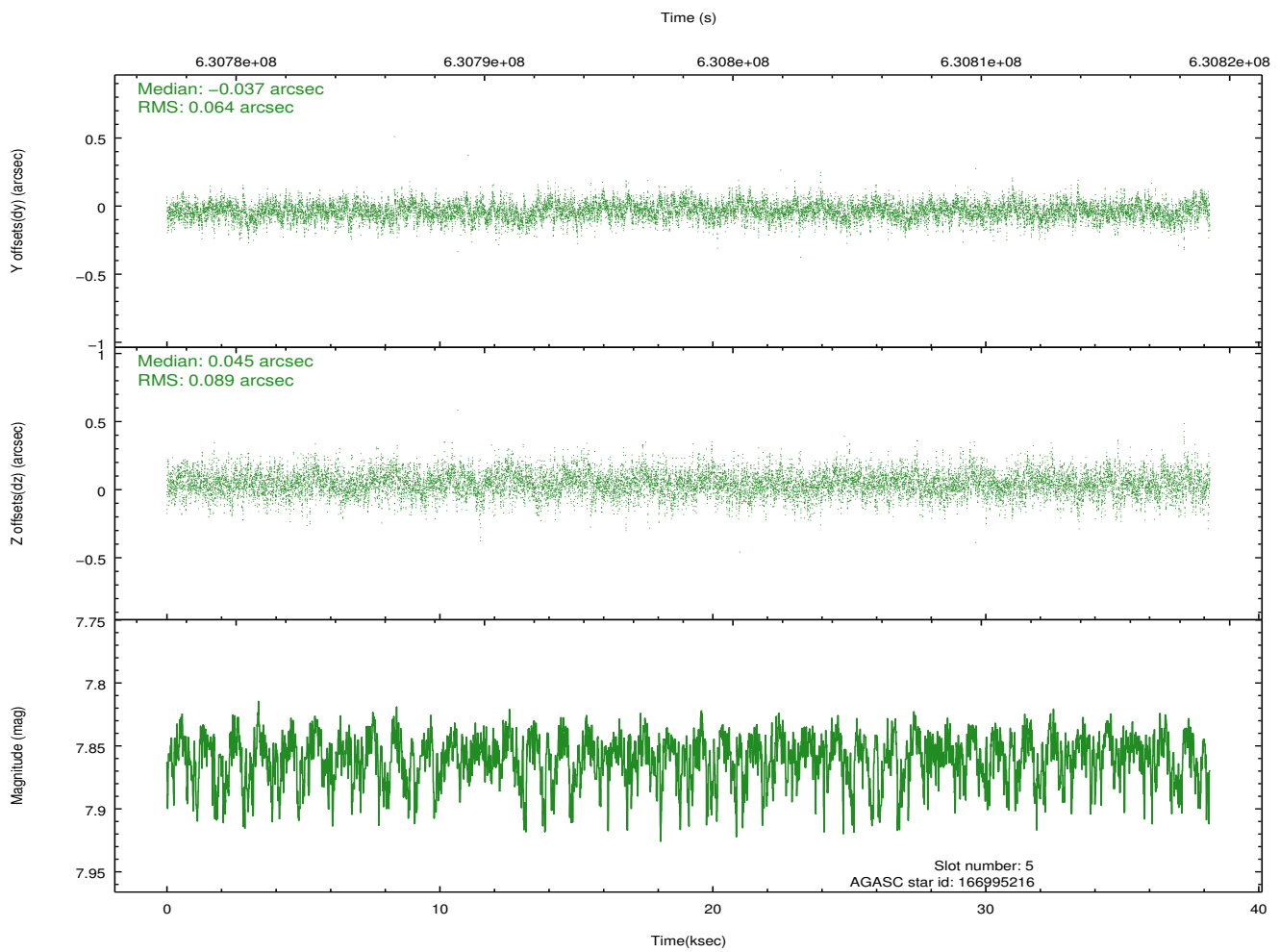
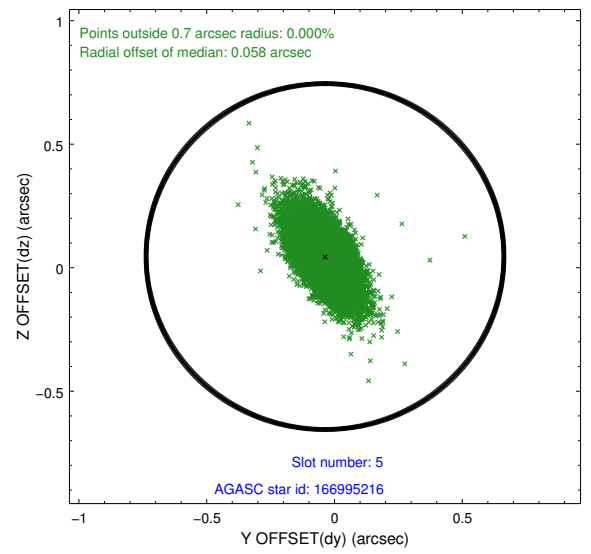
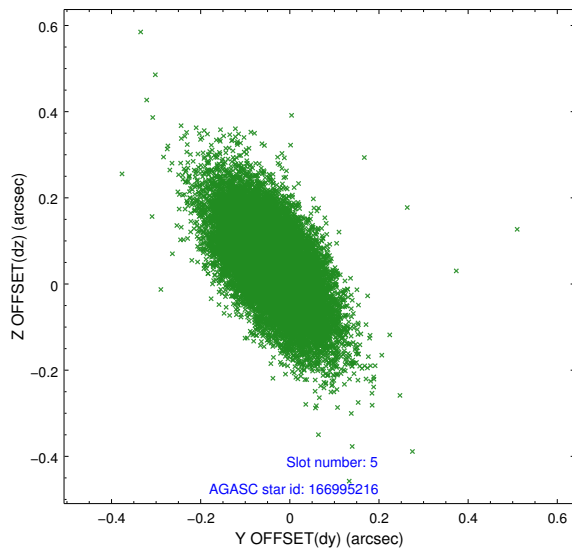
2.4.1 Slot 3



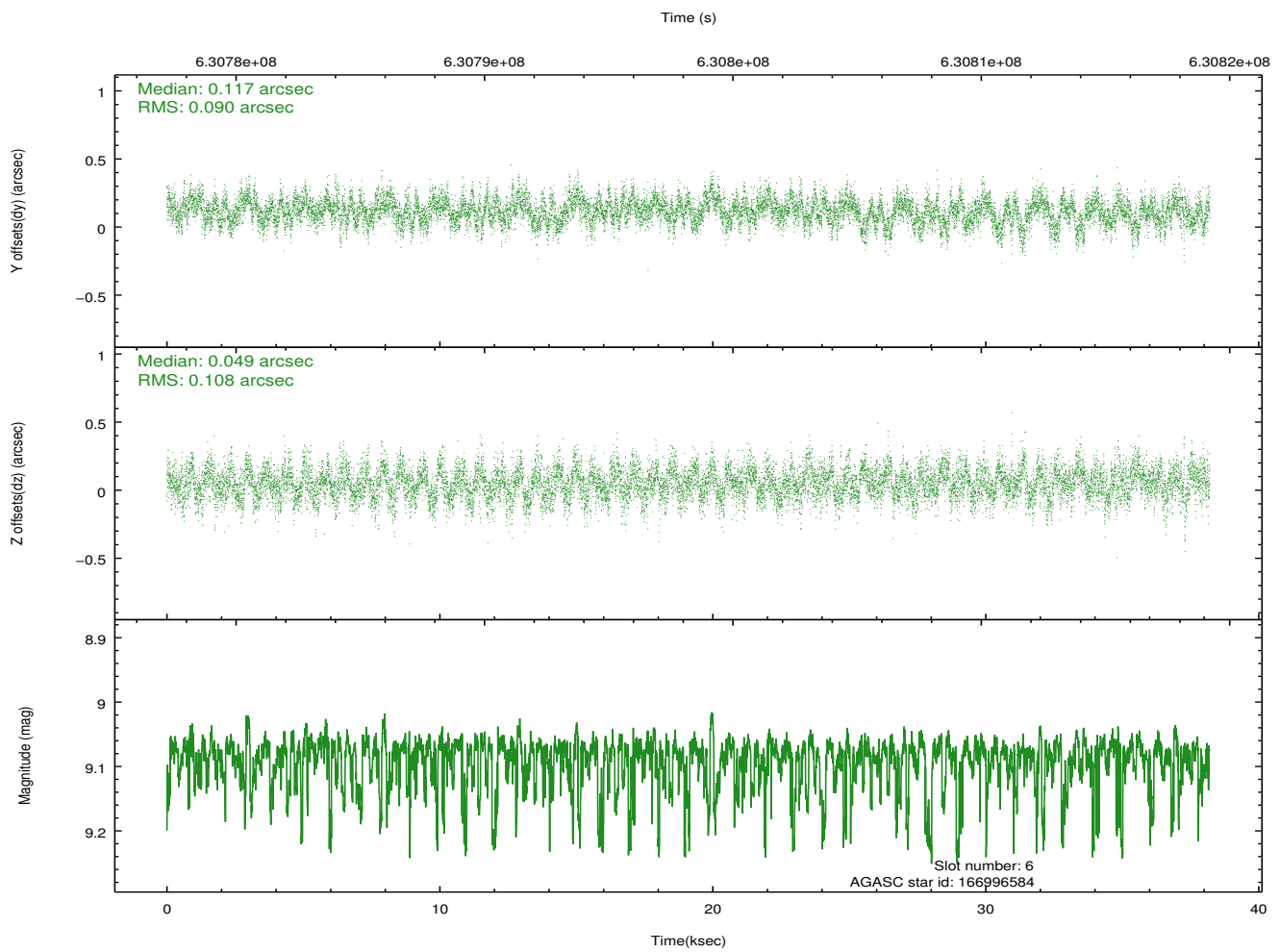
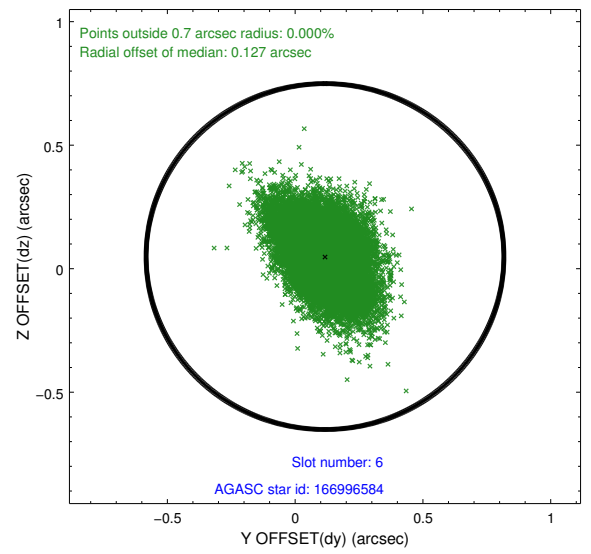
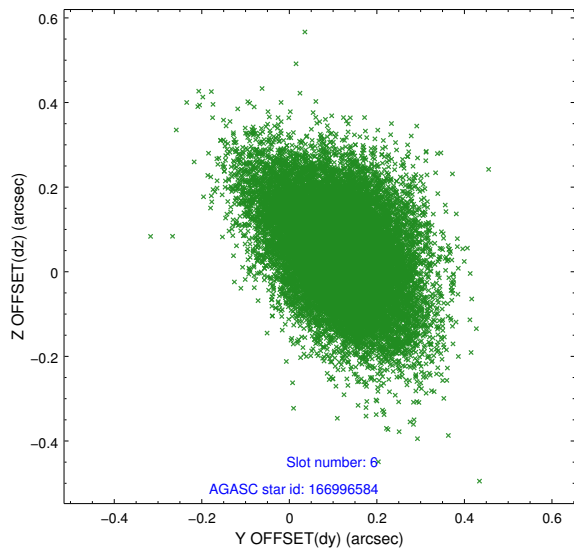
2.4.2 Slot 4



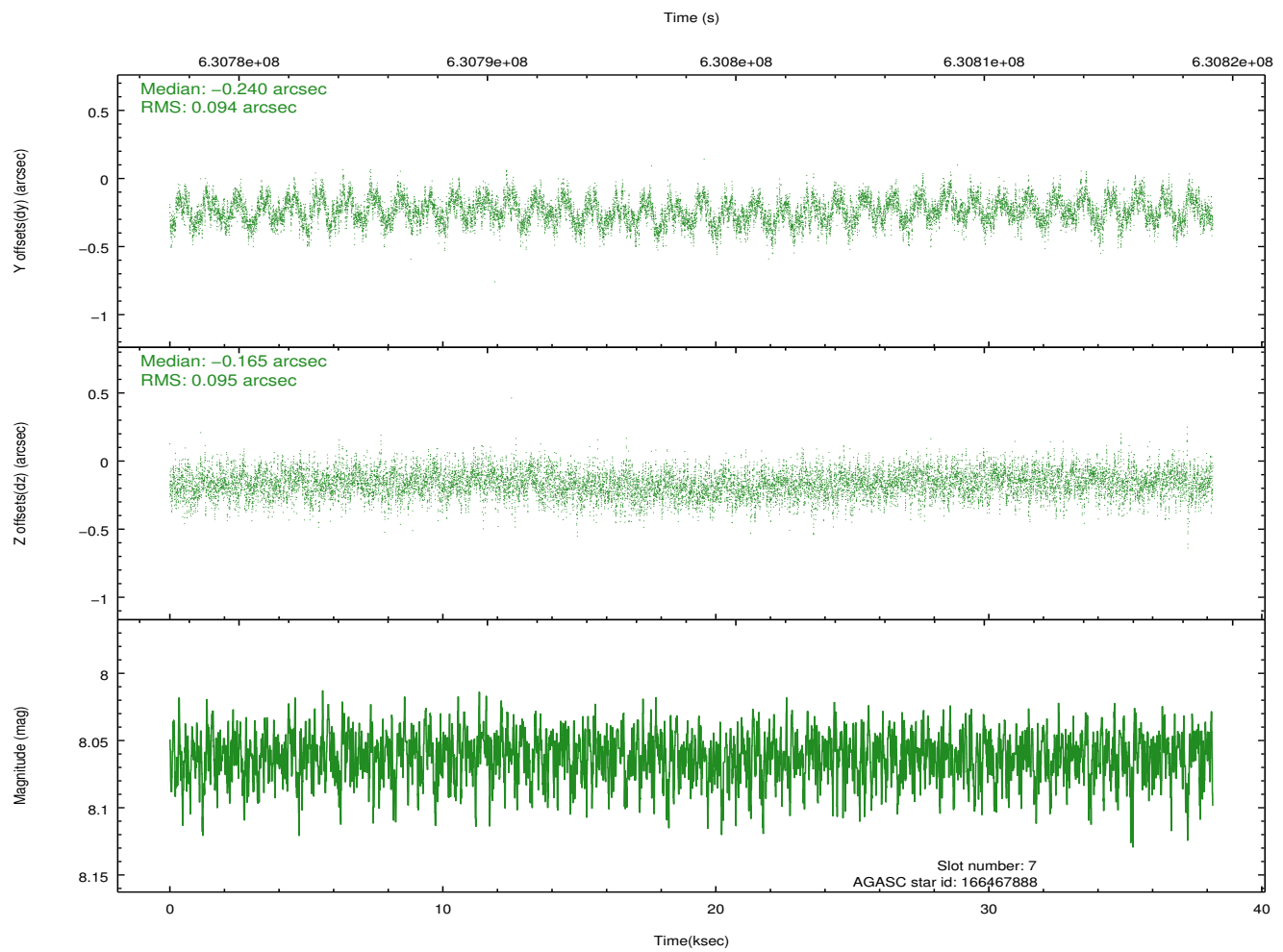
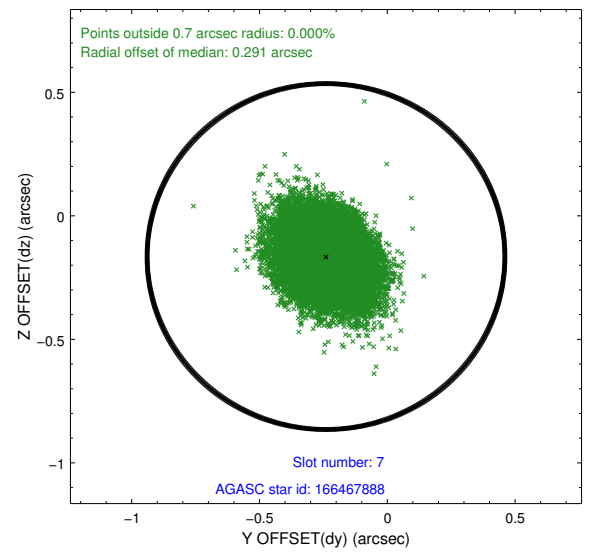
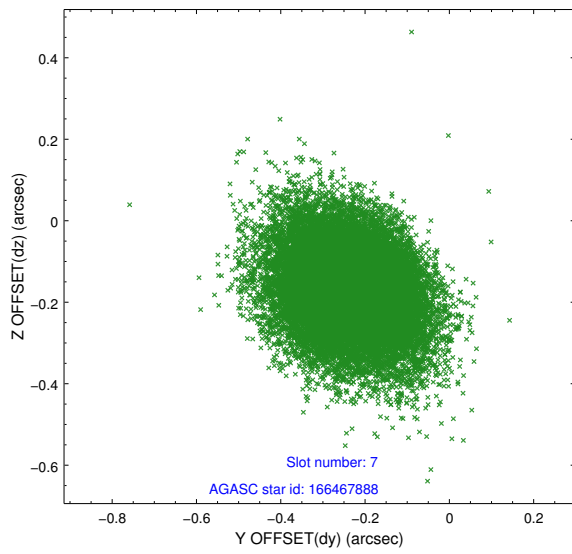
2.4.3 Slot 5



2.4.4 Slot 6

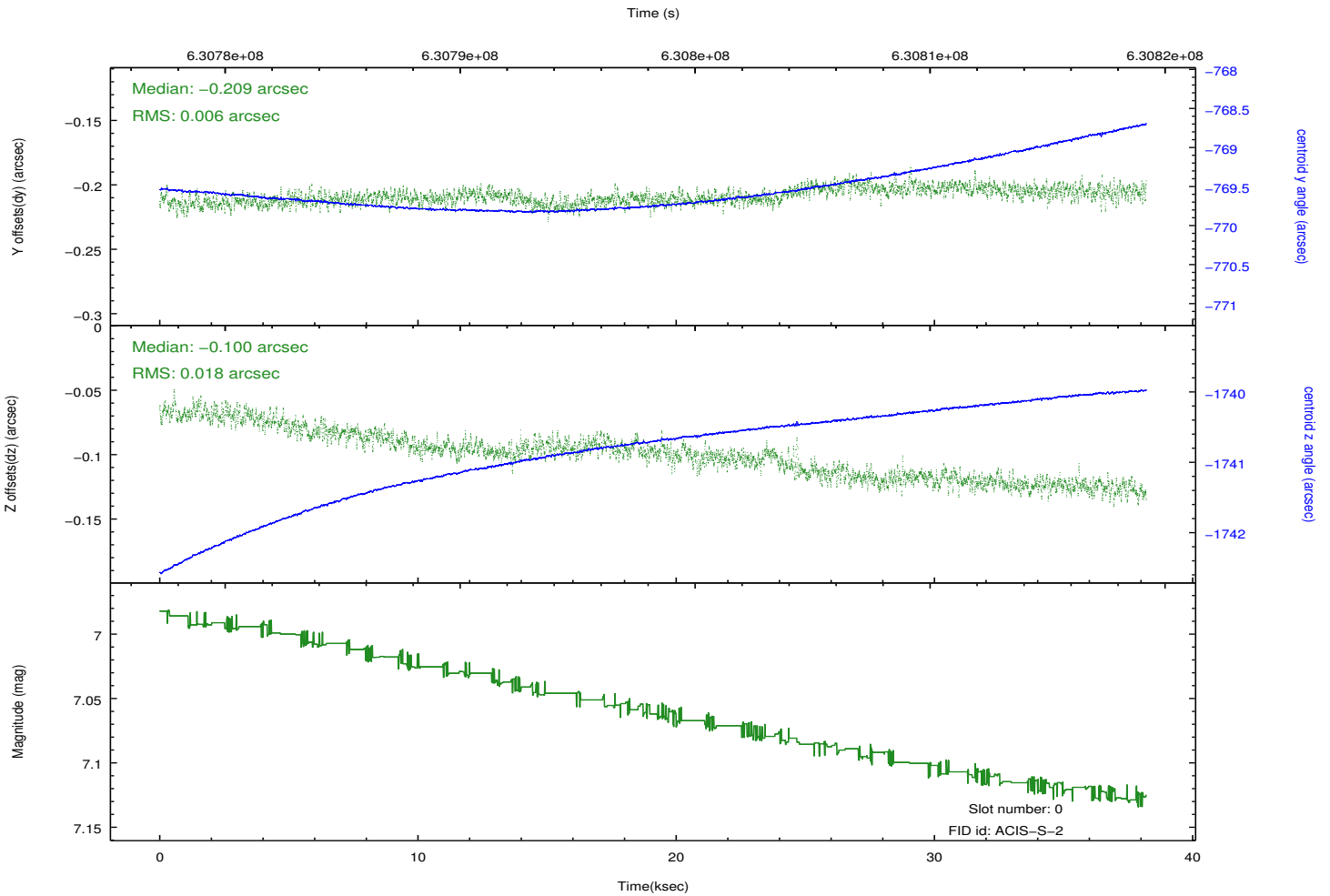
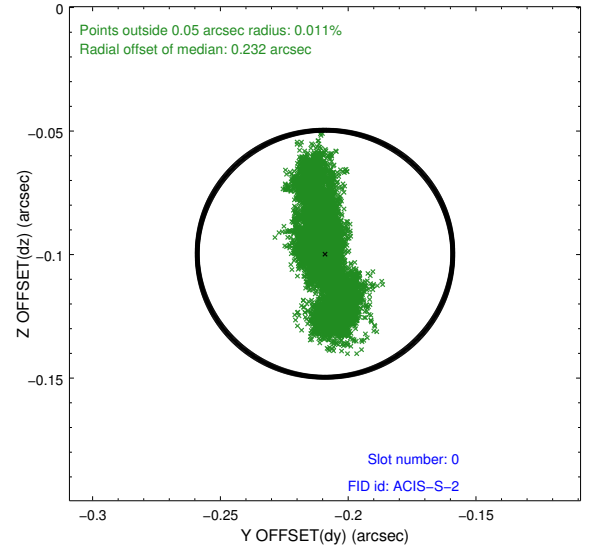
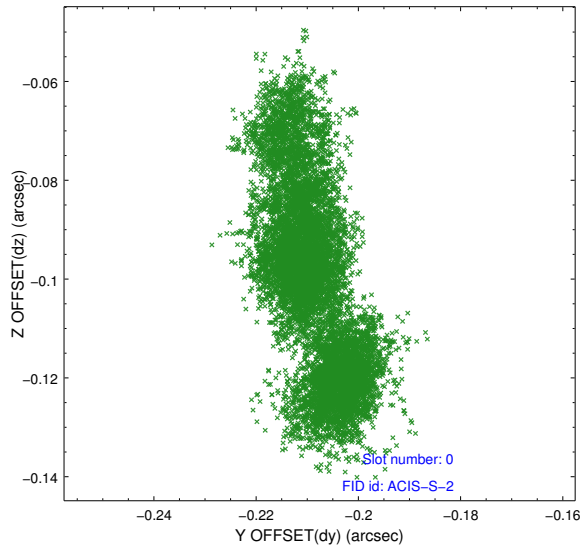


2.4.5 Slot 7

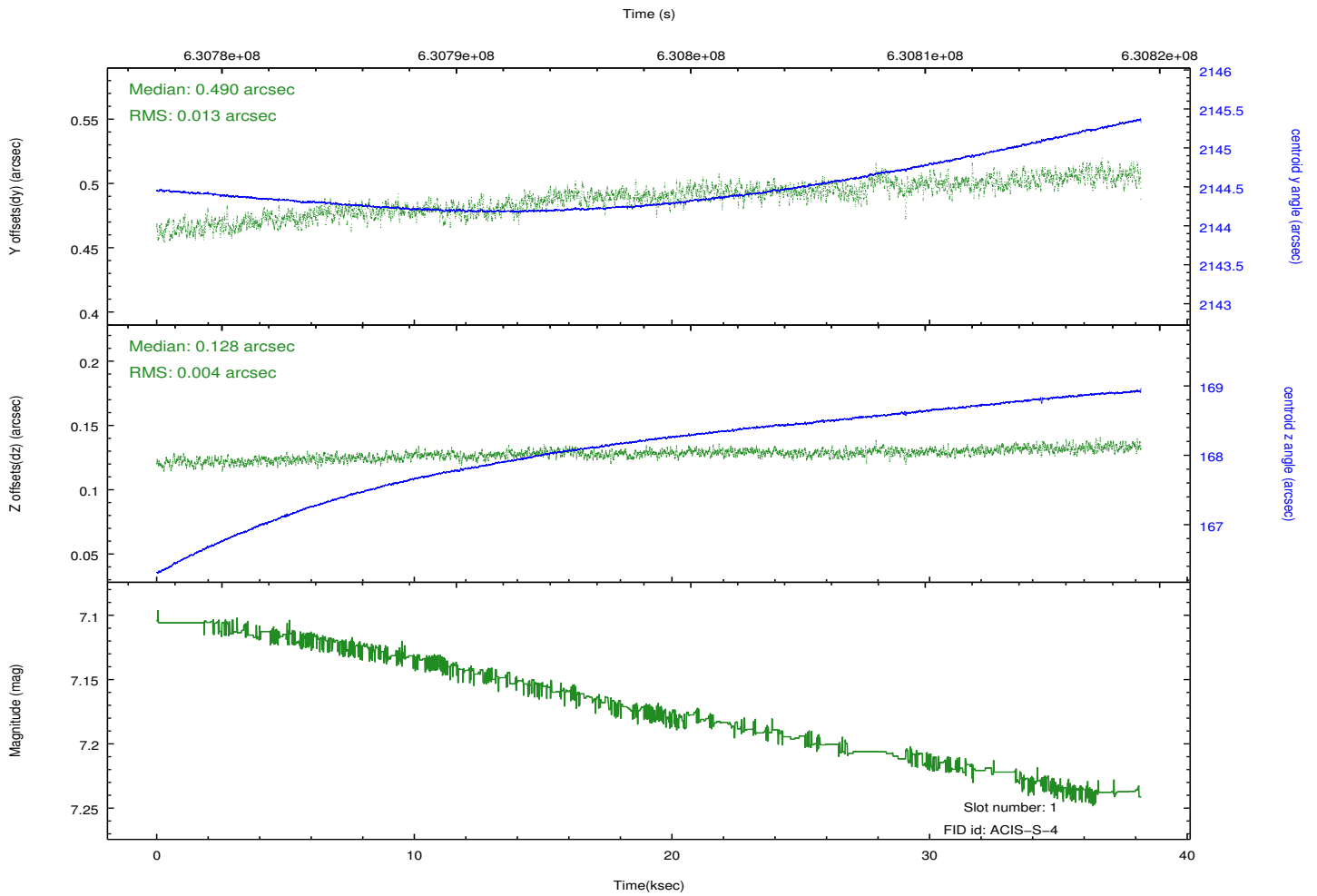
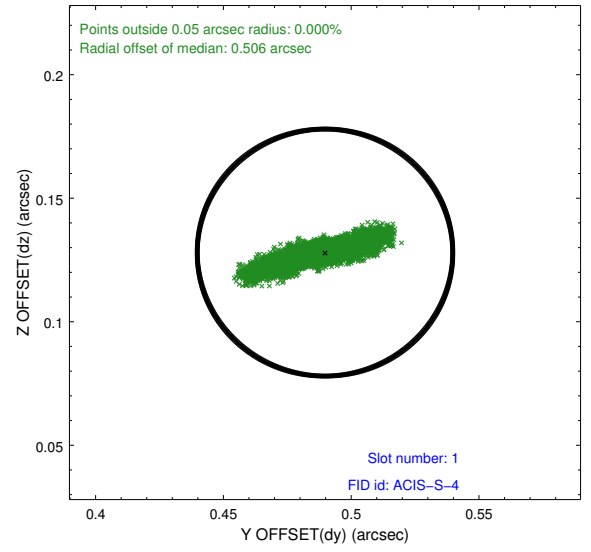
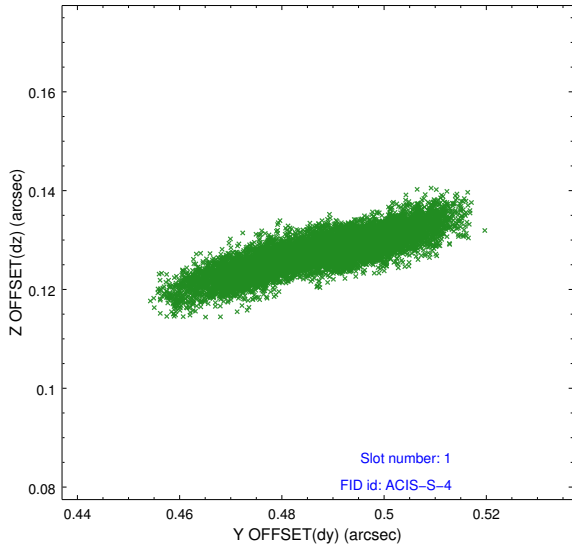


2.5 FID Slots

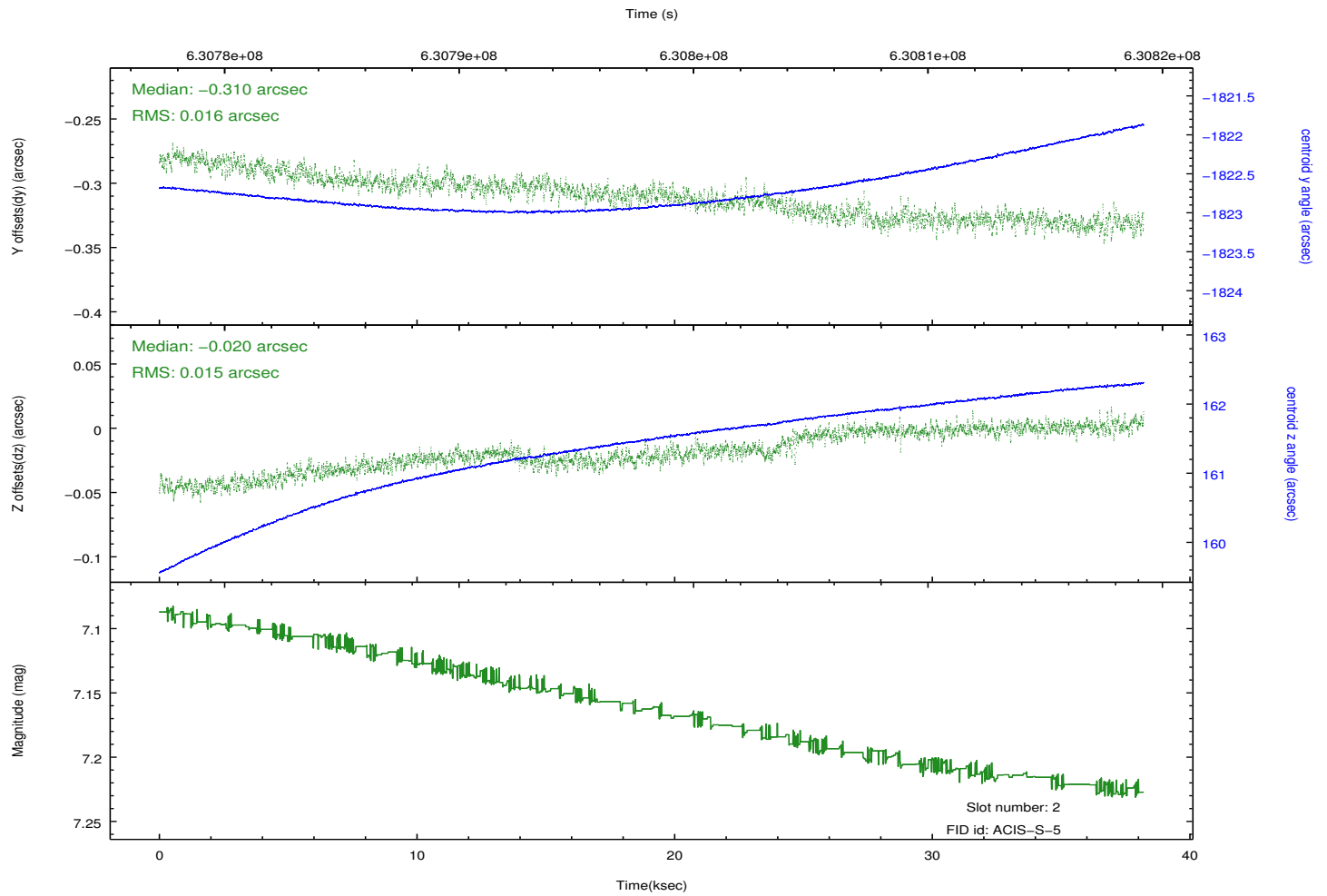
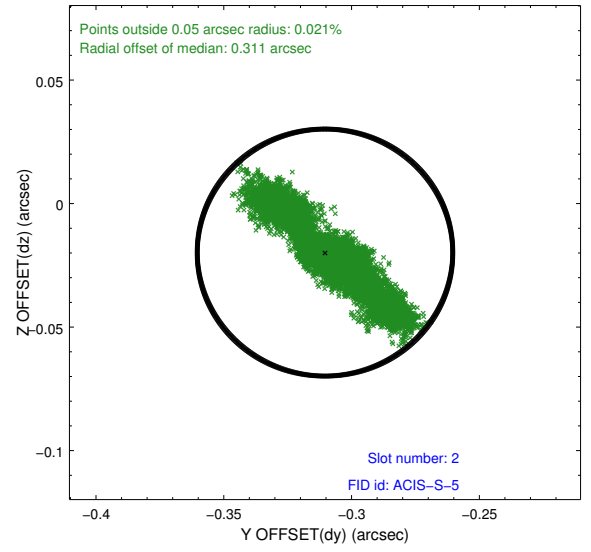
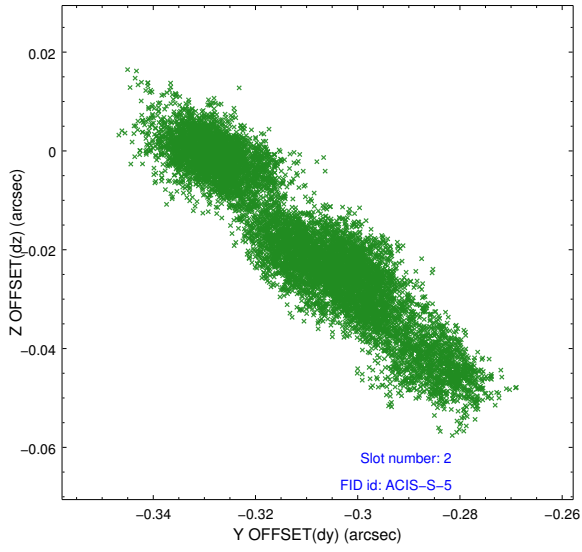
2.5.1 Slot 0



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)	2017.12.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.636199002862

A.2 Comments