

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 17710 - L2 Version 1
Chandra X-Ray Center

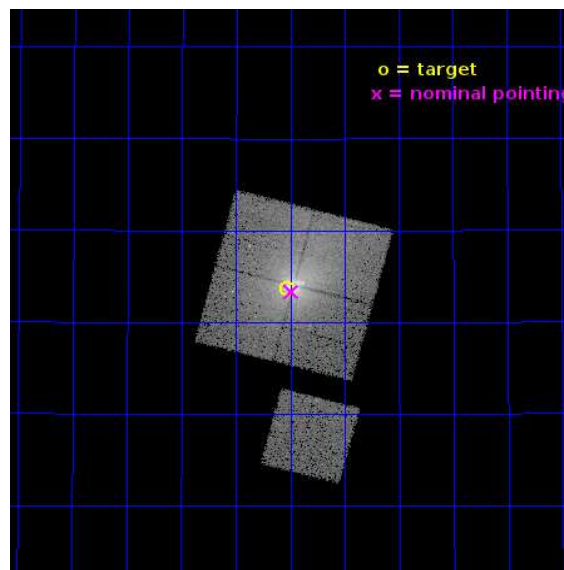
L2 Processing Date : Aug 8 2015

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1 Front

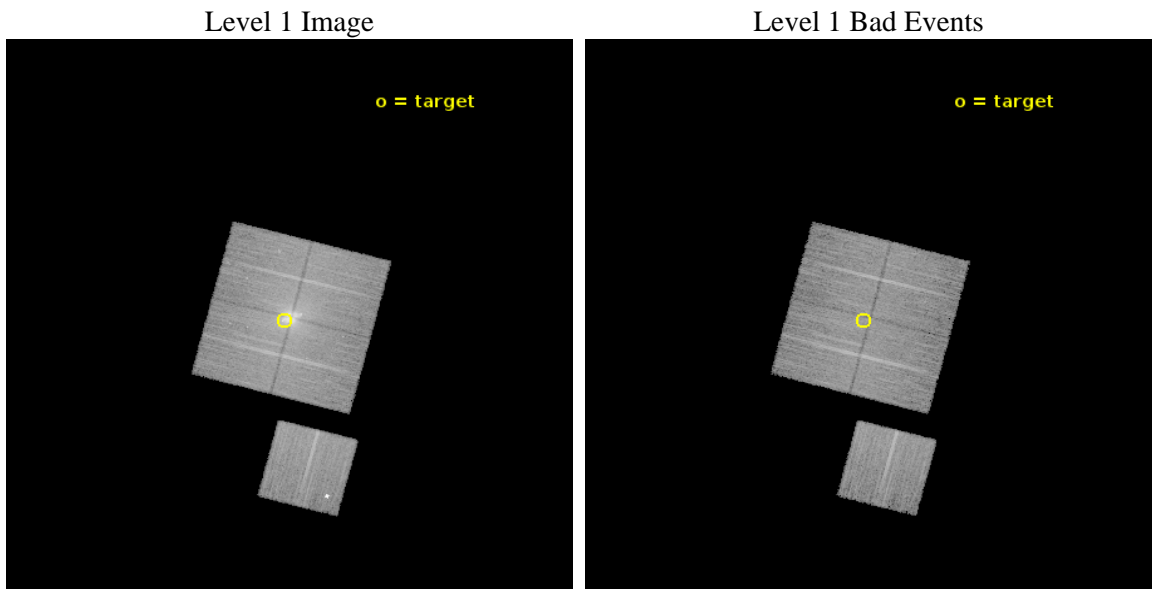
seq_num	703133	Sequence number
obs_id	17710	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - E Hotspot	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.883333	Observer's specified target RA [deg]
dec_targ	40.727889	Observer's specified target Dec [deg]
ra_nom	299.87231675541	Nominal RA [deg]
dec_nom	40.722332294957	Nominal Dec [deg]
roll_nom	194.71588734254	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20075.600154519	Sum of GTIs [s]
livetime	19813.297659058	Livetime [s]
ontime0	20072.356976509	Sum of GTIs [s]
ontime1	20075.539046645	Sum of GTIs [s]
ontime2	20072.439056516	Sum of GTIs [s]
ontime3	20075.600154519	Sum of GTIs [s]
ontime6	20072.315946341	Sum of GTIs [s]
l2events	140316	Number of level 2 events



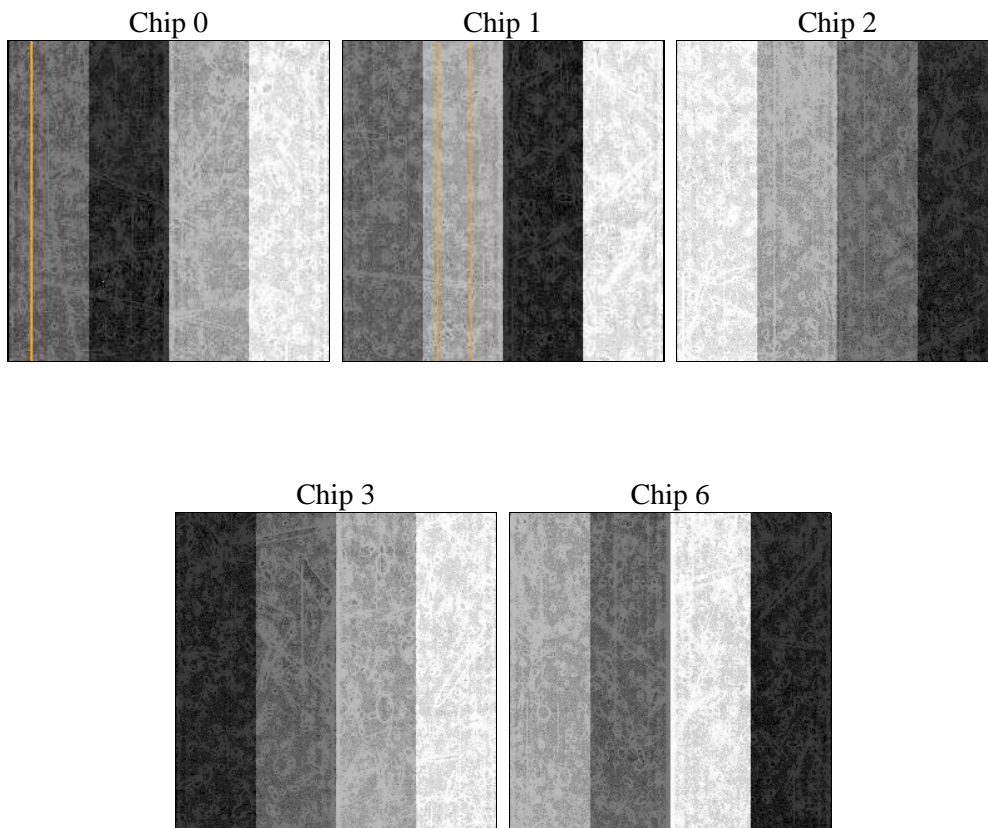
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	20075.600154519	Sum of GTIs [s]
caldbver	4.6.8	 	ontime0	20072.356976509	Sum of GTIs [s]
date	2015-08-08T06:51:07	Date and time of file creation	ontime1	20075.539046645	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	20072.439056516	Sum of GTIs [s]
			ontime3	20075.600154519	Sum of GTIs [s]
			ontime6	20072.315946341	Sum of GTIs [s]
			l1events	626287	Number of level 1 events

2.1.4 Events

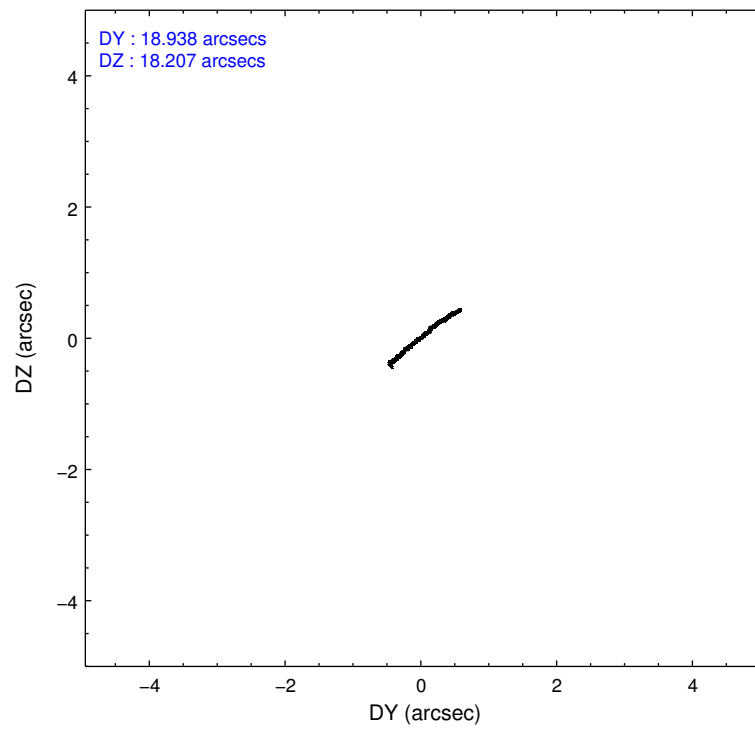
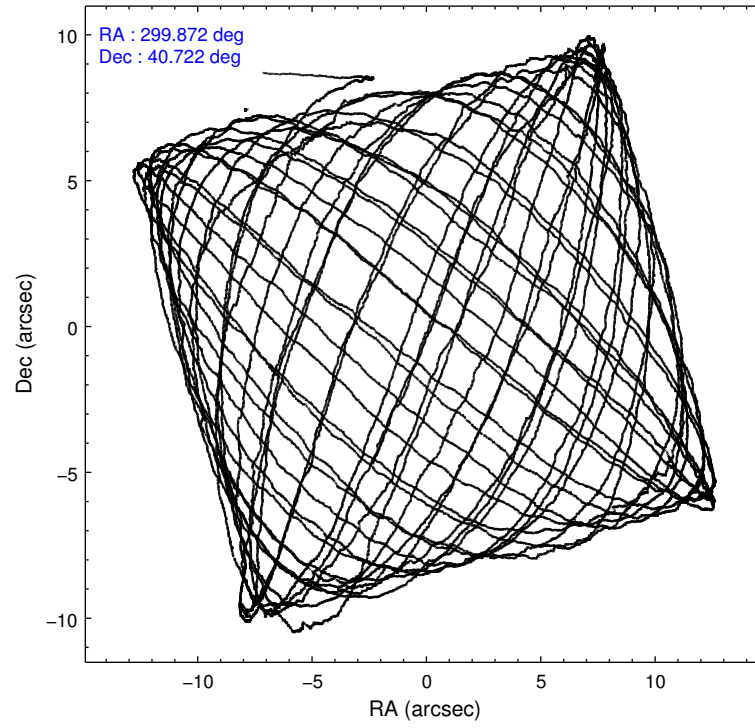
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	129228	126119	124798	131405	114737
rejected events	87879	88310	94941	97671	96072
rejected %	68%	70%	76%	74%	83%

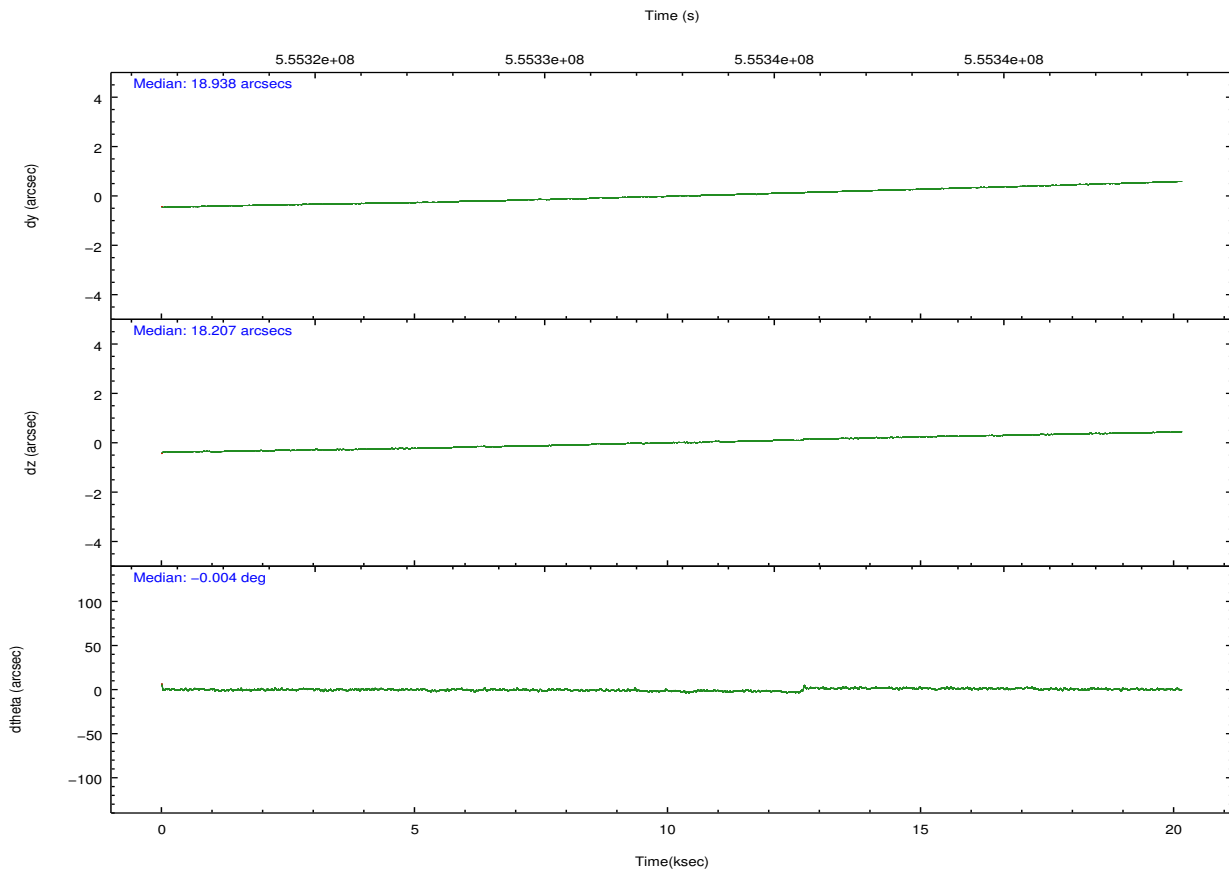
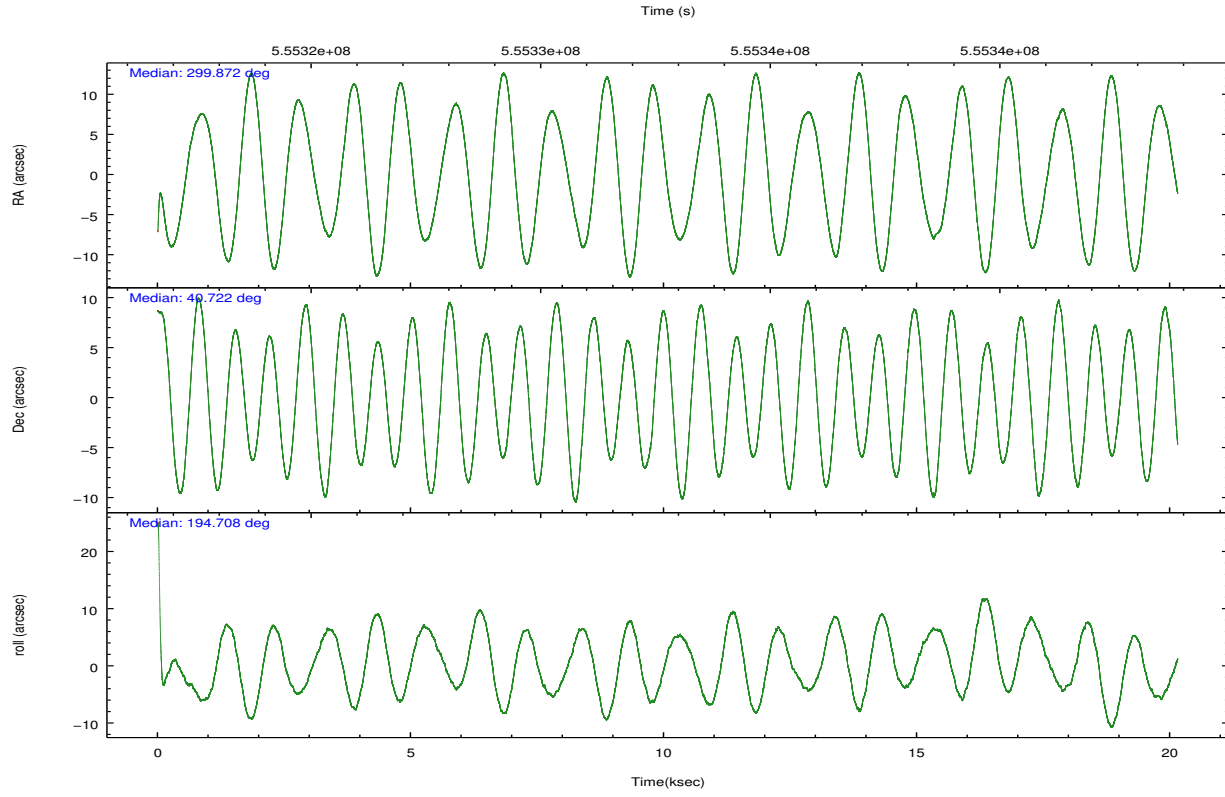
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	26563	22906	18510	21590	4623
	20%	18%	14%	16%	4%
grade 1 events	135	97	135	148	54
	0%	0%	0%	0%	0%
grade 2 events	6580	6739	4851	5010	8421
	5%	5%	3%	3%	7%
grade 3 events	2292	2050	1764	1953	1227
	1%	1%	1%	1%	1%
grade 4 events	2217	2077	1818	1927	1229
	1%	1%	1%	1%	1%
grade 5 events	5070	5187	4588	5655	5194
	3%	4%	3%	4%	4%
grade 6 events	3710	4051	2920	3263	3174
	2%	3%	2%	2%	2%
grade 7 events	82661	83012	90212	91859	90815
	63%	65%	72%	69%	79%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
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	299.898129	299.8723167554116	CCD I2 on	Y	Y
[deg] Pointing Dec	40.741810	40.72233229495682	CCD I3 on	Y	Y
[deg] Pointing Roll	194.490342	194.715887342535	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)	555322847.184000	555321532.25914	CCD S5 on	N	N
Observation start date	2015-08-07T08:19:39	2015-08-07T07:58:52	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	555342847.184000	555343920.3104	On-chip summing requested	N	N
Observation end date	2015-08-07T13:52:59	2015-08-07T14:12:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



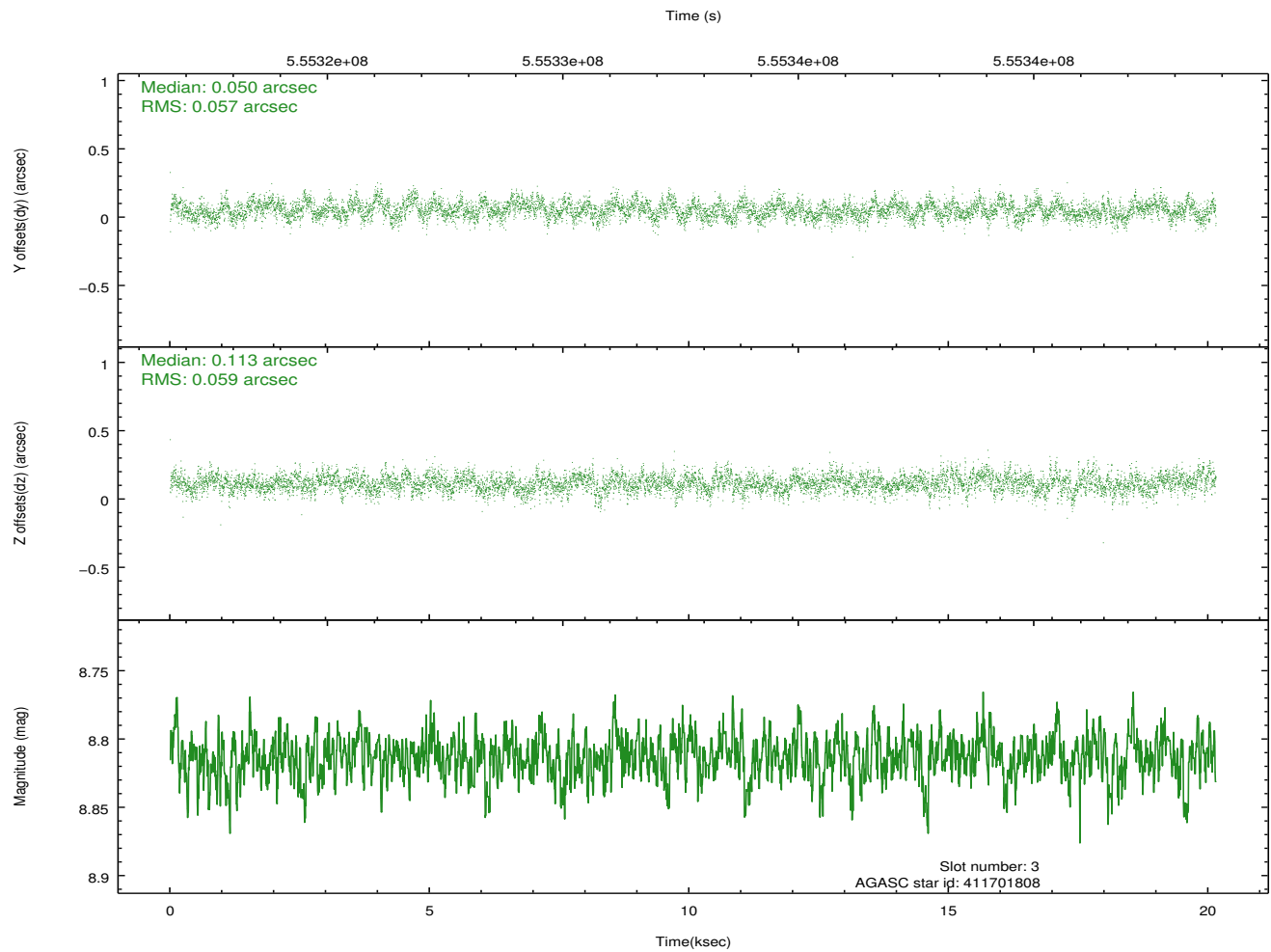
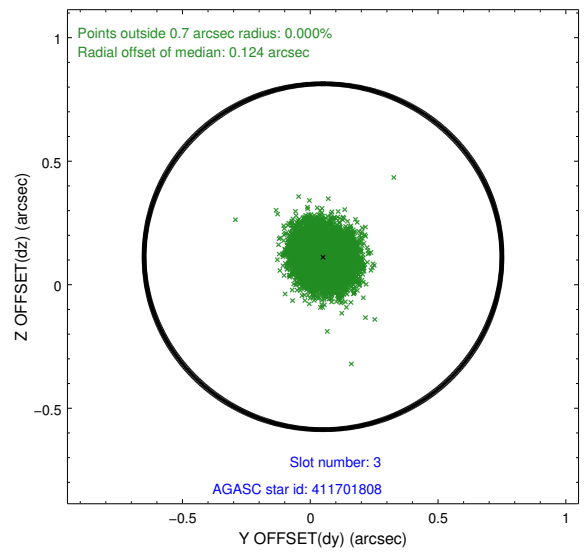
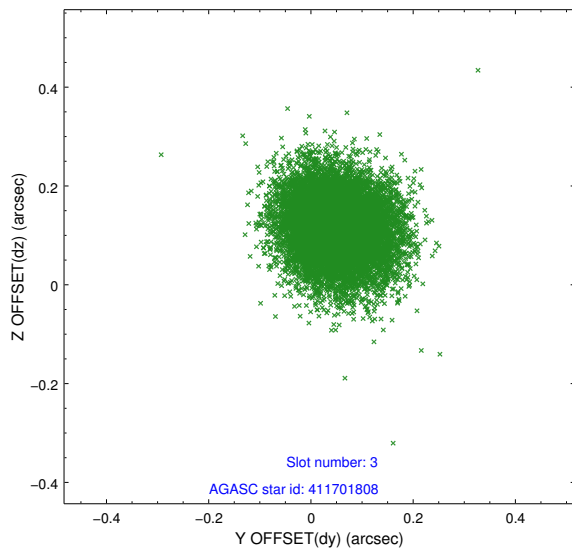


Slot Statistics

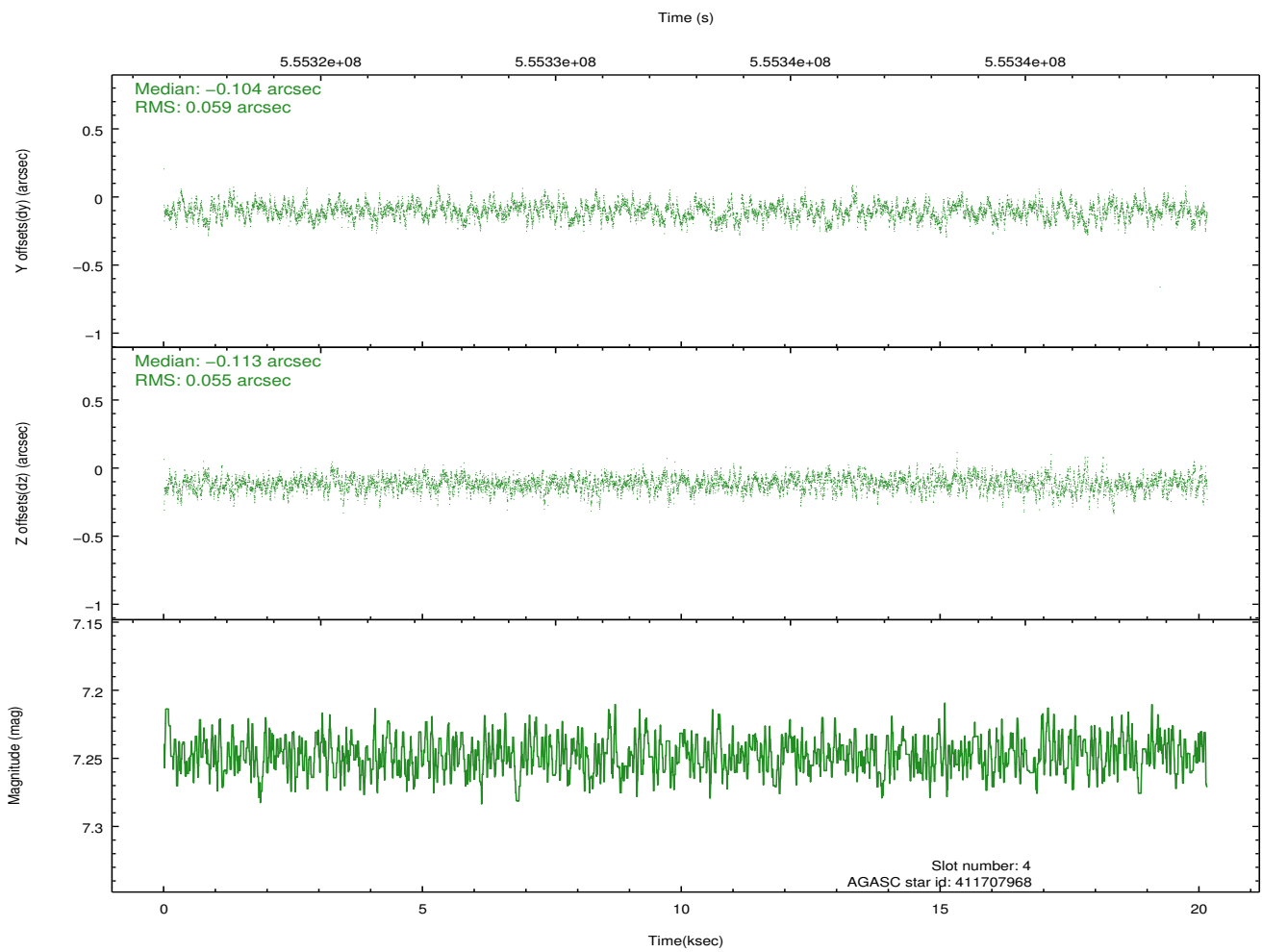
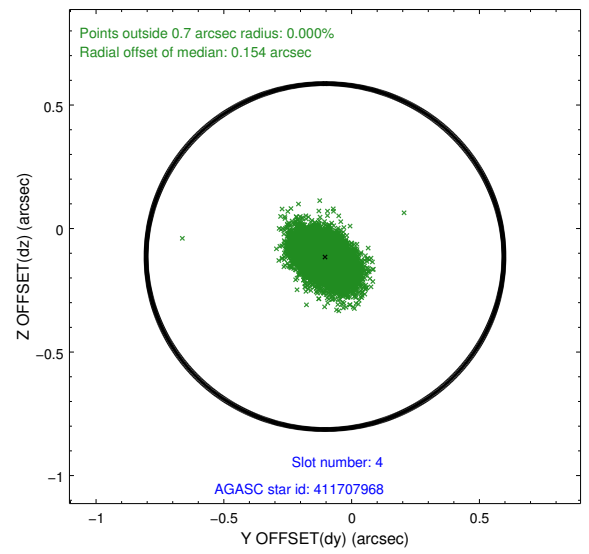
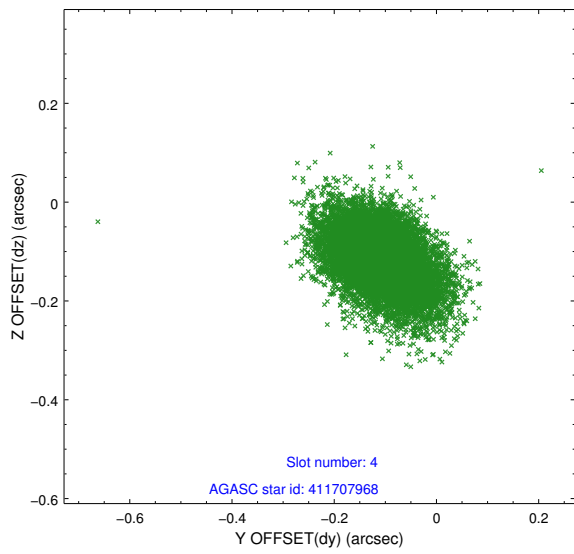
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.10	4913	-0.161	-0.083	0.024	0.035	0.000000	0.000000	-773.90	-848.37
1	FID		ACIS-I-4	7.14	4915	0.400	0.113	0.014	0.023	0.000000	0.000000	2140.56	1058.01
2	FID		ACIS-I-5	7.20	4914	-0.342	0.039	0.017	0.025	0.000000	0.000000	-1827.75	1055.84
3	GUIDE	used	411701808	8.81	9824	0.050	0.113	0.086	0.141	299.419536	40.880184	1136.19	-811.03
4	GUIDE	used	411707968	7.25	9830	-0.104	-0.113	0.084	0.141	299.509933	40.926839	855.30	-911.27
5	GUIDE	used	413421016	8.69	9829	-0.096	-0.293	0.101	0.160	300.612426	40.446254	-1630.18	1512.06
6	GUIDE	used	413421624	8.70	9827	0.113	0.086	0.077	0.129	300.399768	40.893051	-1458.82	-189.01
7	GUIDE	used	413412048	9.03	9821	0.029	0.213	0.112	0.182	300.720827	40.967507	-2370.86	-237.01

2.4 Star Slots

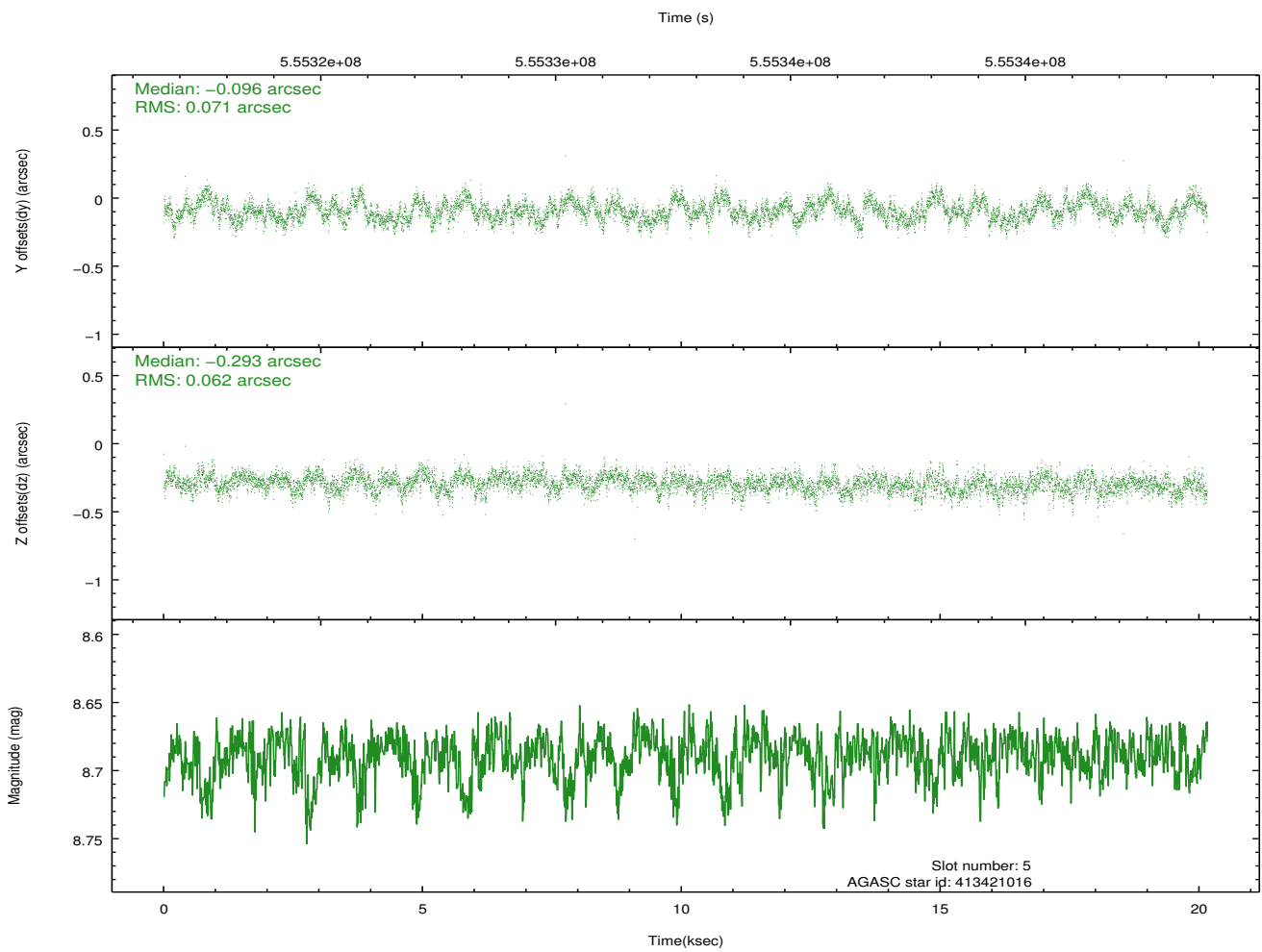
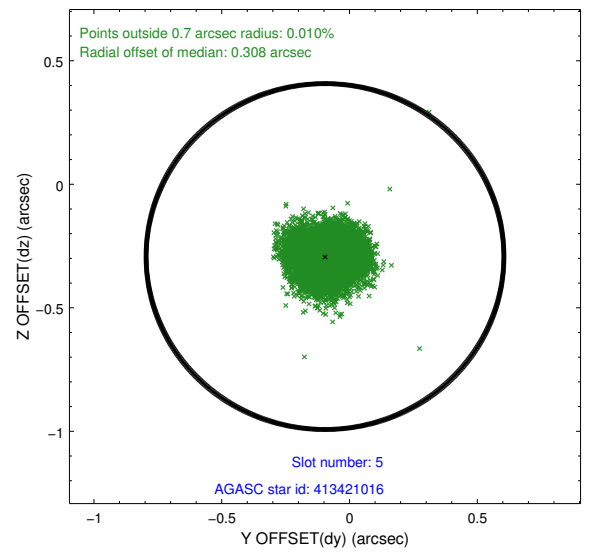
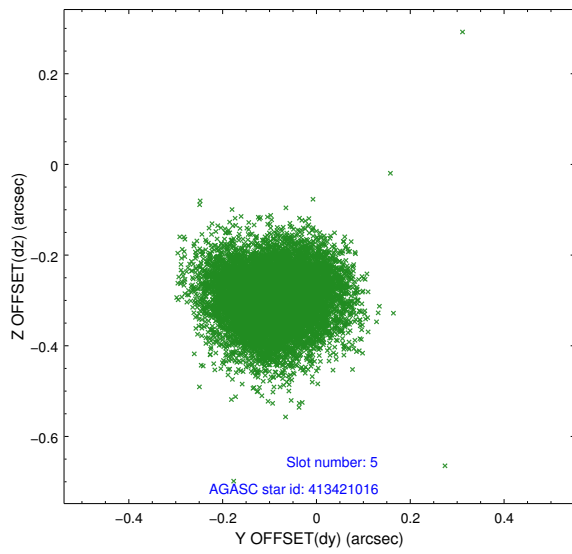
2.4.1 Slot 3



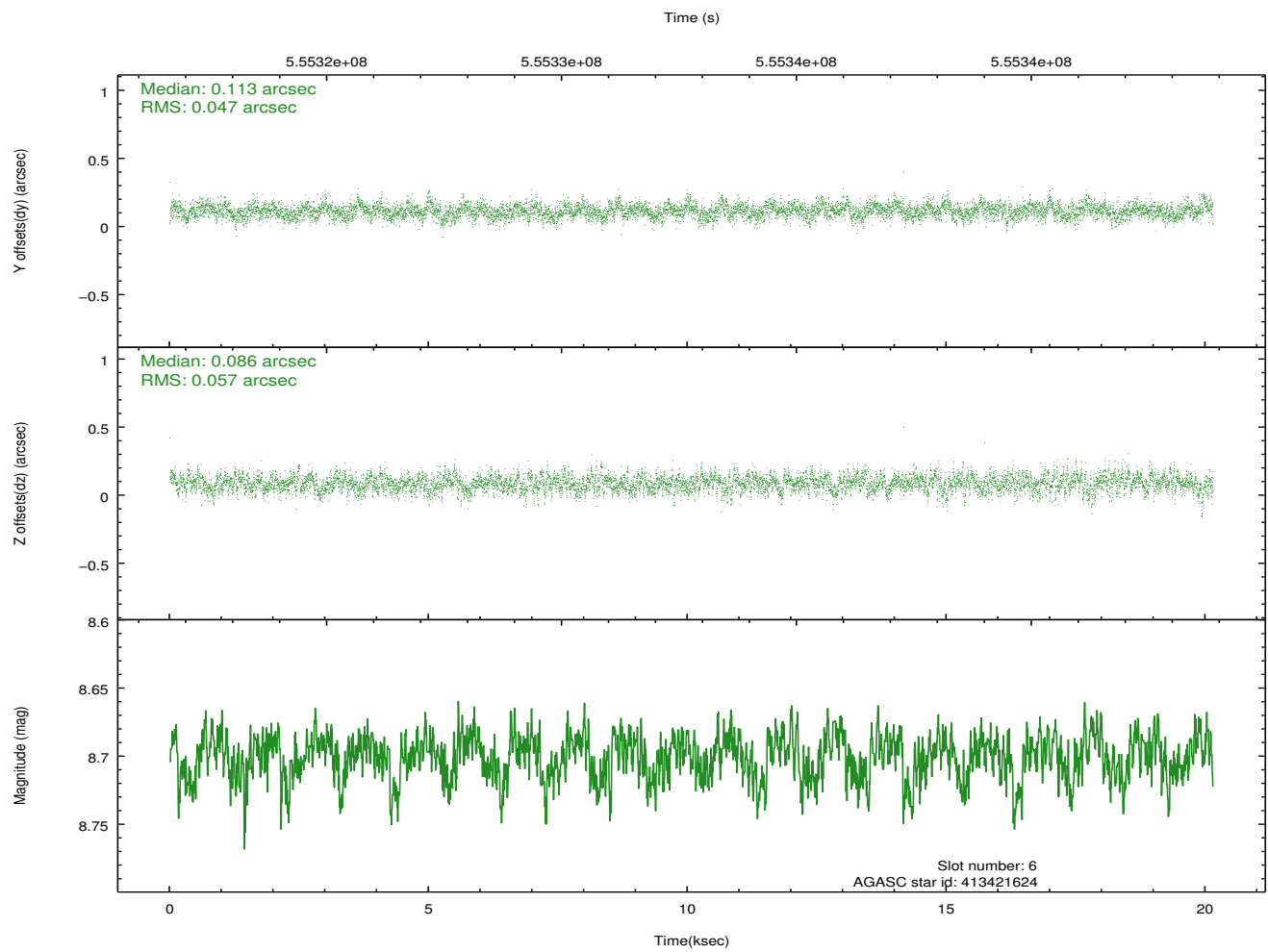
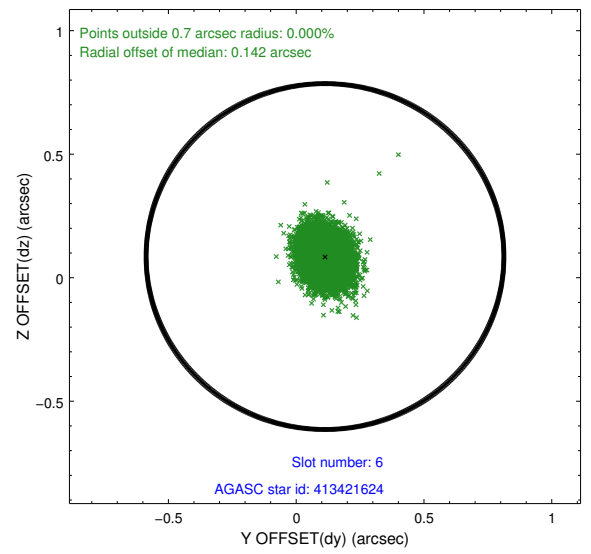
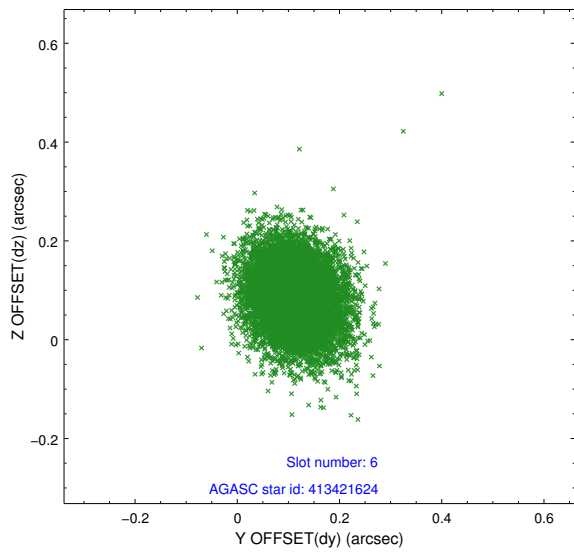
2.4.2 Slot 4



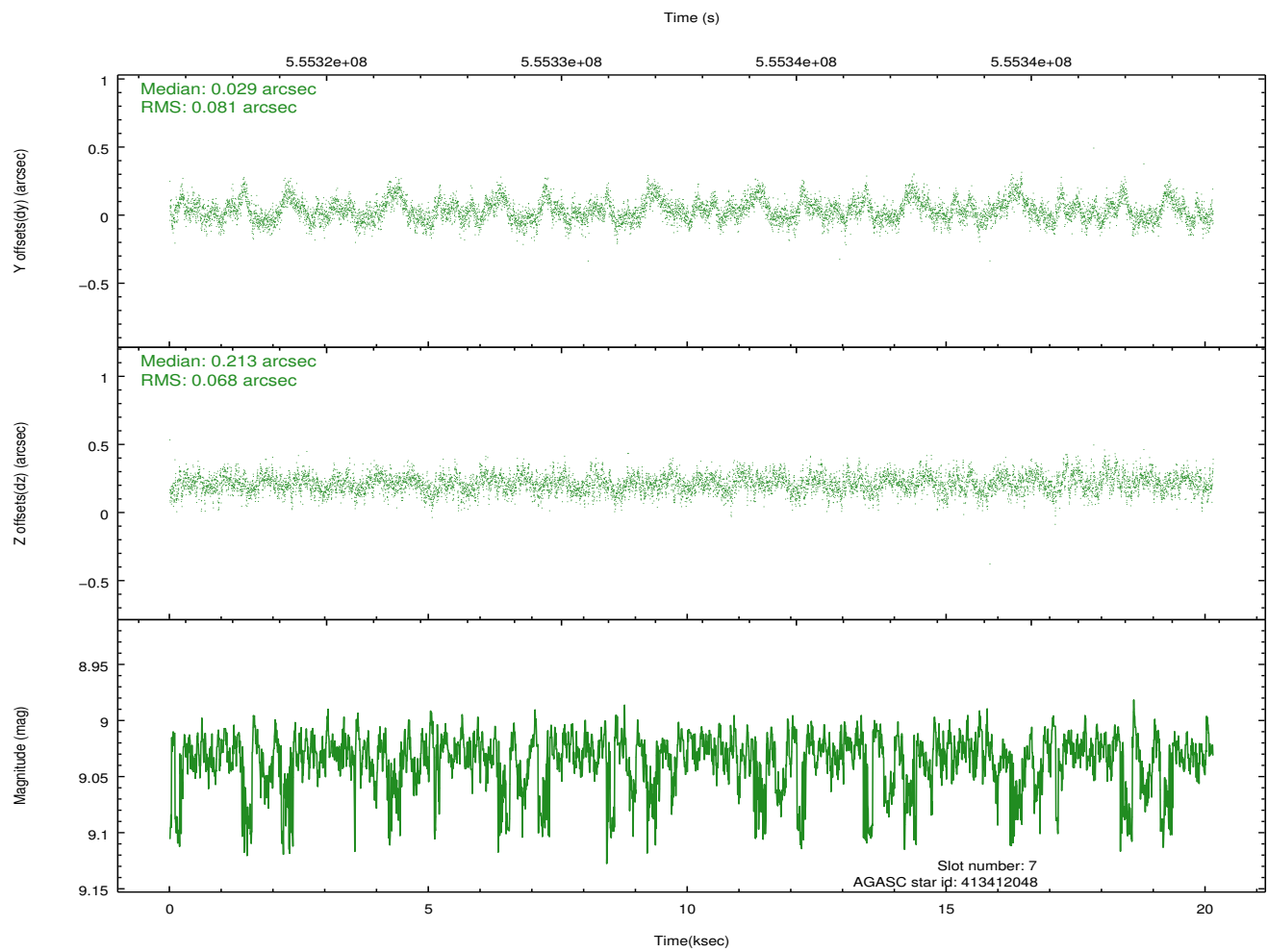
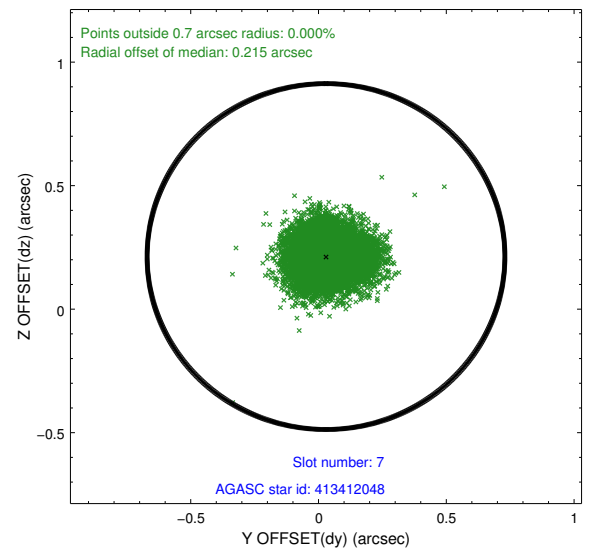
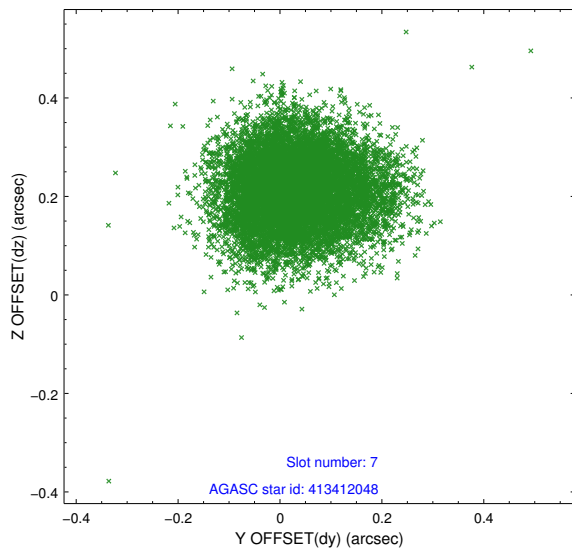
2.4.3 Slot 5



2.4.4 Slot 6

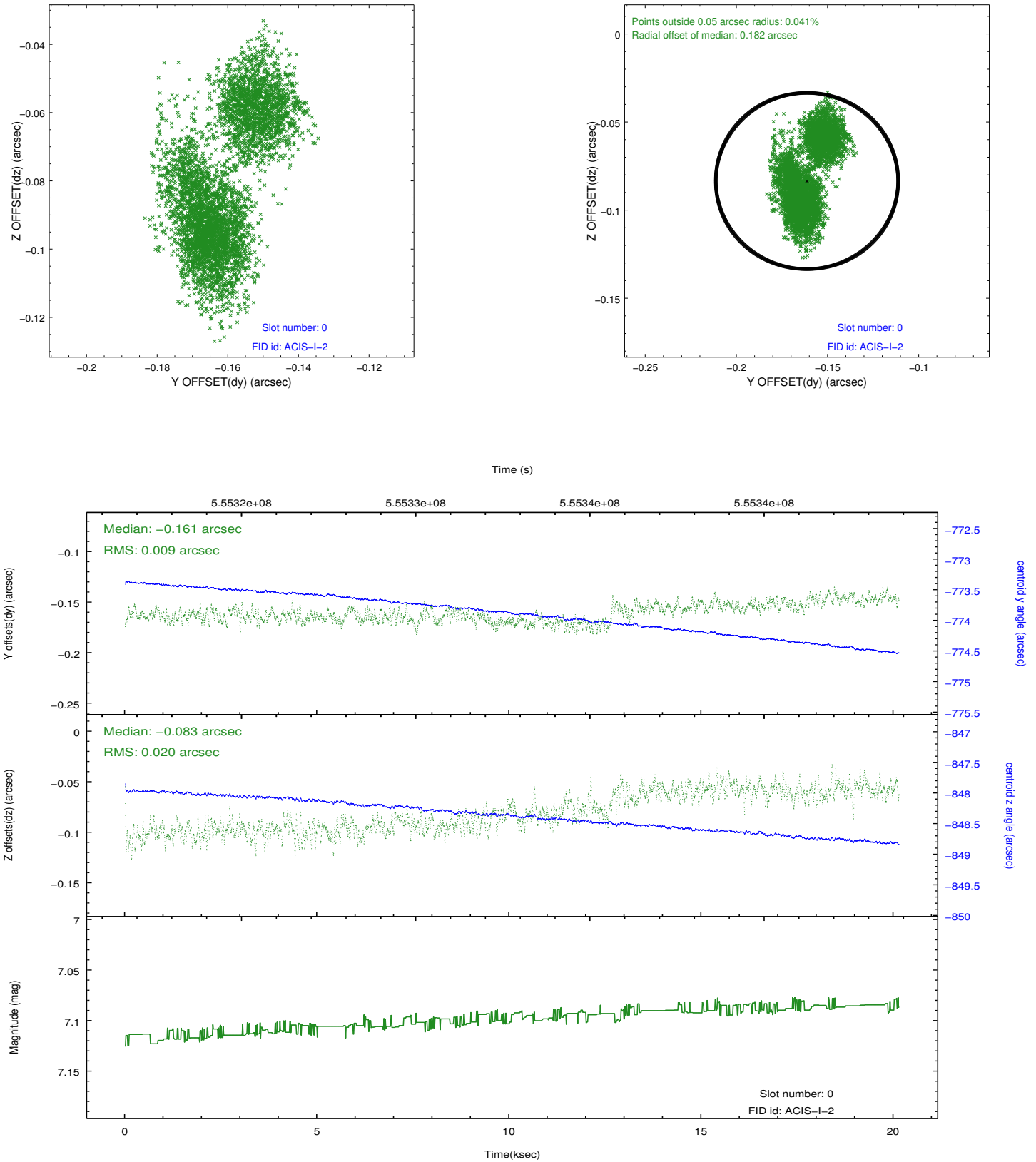


2.4.5 Slot 7

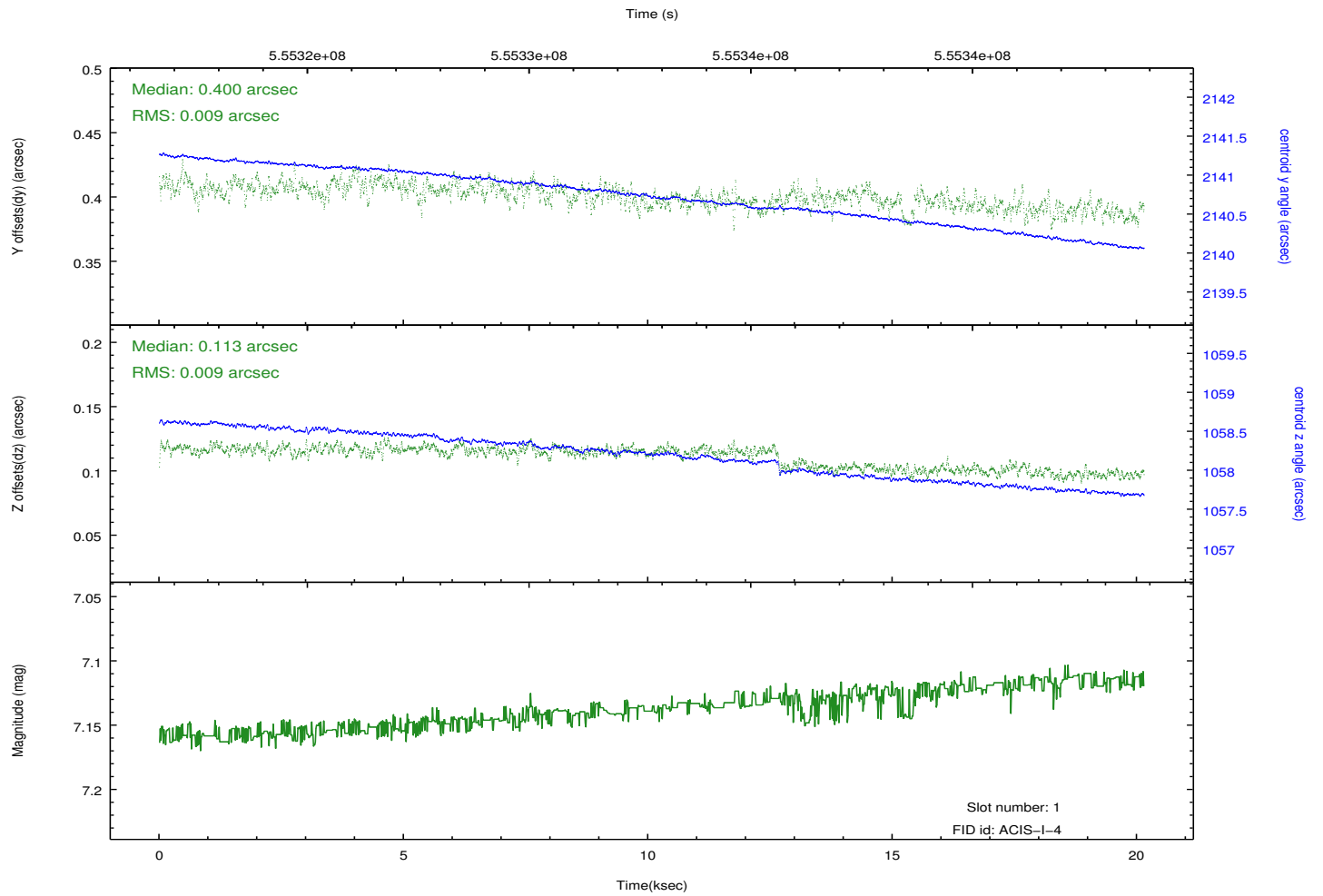
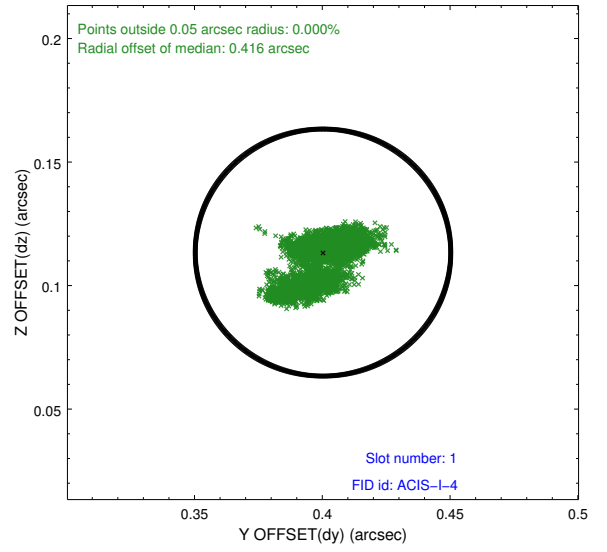
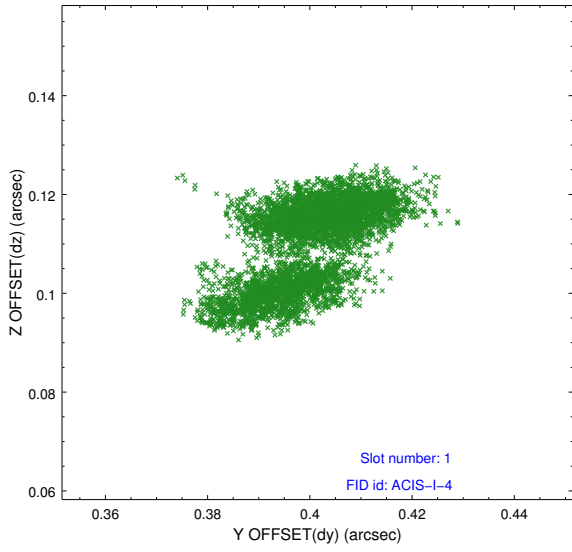


2.5 FID Slots

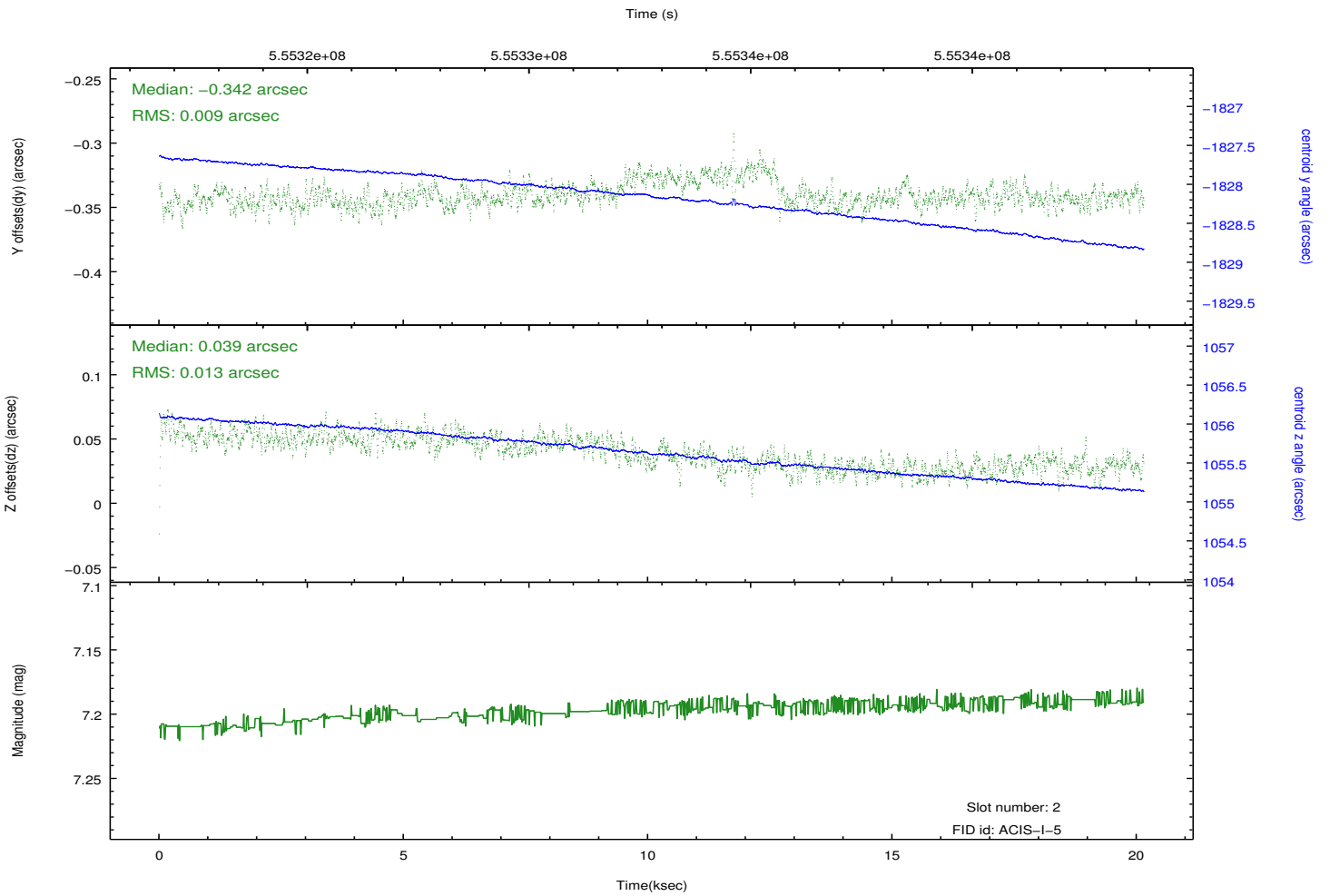
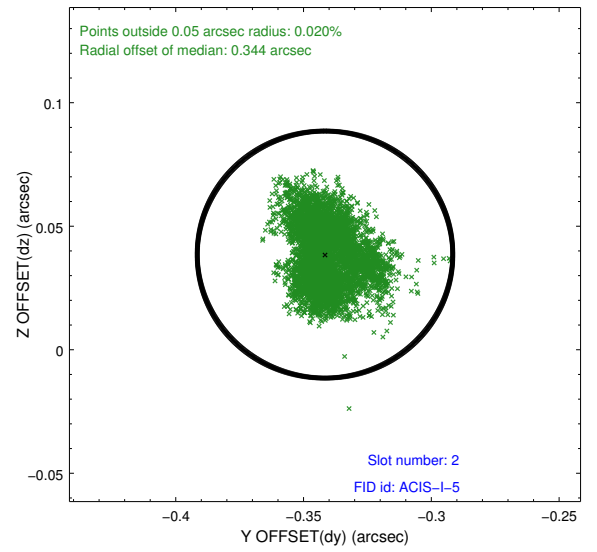
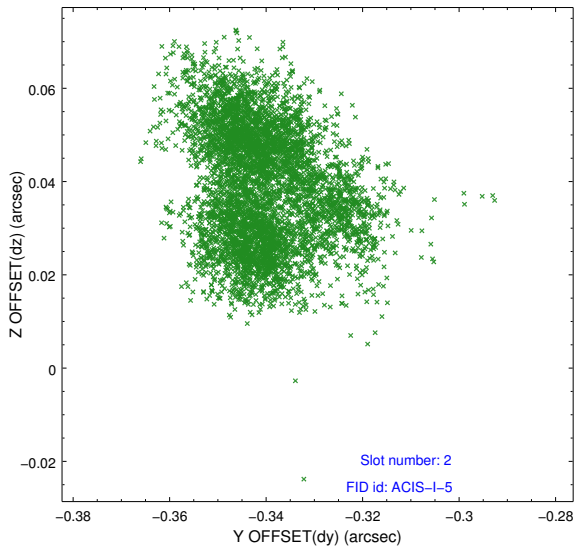
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2015.08.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.075600154519

A.2 Comments