

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 17142 - L2 Version 1
Chandra X-Ray Center

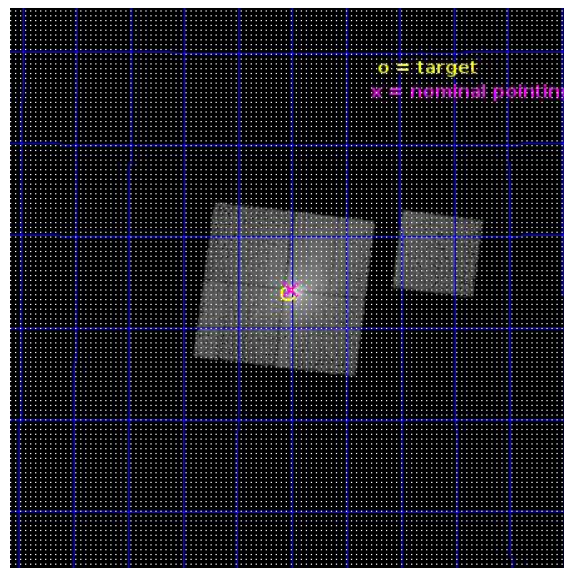
L2 Processing Date : Apr 21 2017

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1 Front

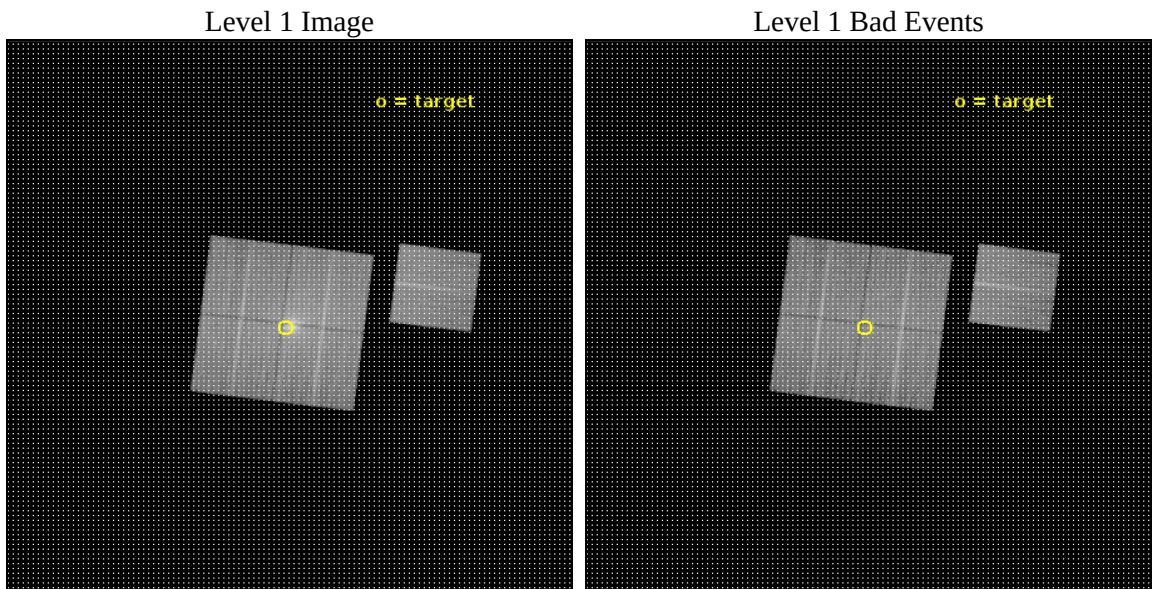
seq_num	703133	Sequence number
obs_id	17142	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - E Hotspot	Source name
dtcycle	0	
cycle	P	events from which 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	299.87634221818	Nominal RA [deg]
dec_nom	40.736387544249	Nominal Dec [deg]
roll_nom	97.213267876163	Nominal Roll [deg]
revision	1	Processing version of data
ontime	23572.221122742	Sum of GTIs [s]
livetime	23264.232700156	Livetime [s]
ontime0	23572.098002791	Sum of GTIs [s]
ontime1	23568.99803257	Sum of GTIs [s]
ontime2	23572.180082798	Sum of GTIs [s]
ontime3	23572.221122742	Sum of GTIs [s]
ontime6	23572.056962729	Sum of GTIs [s]
l2events	188690	Number of level 2 events



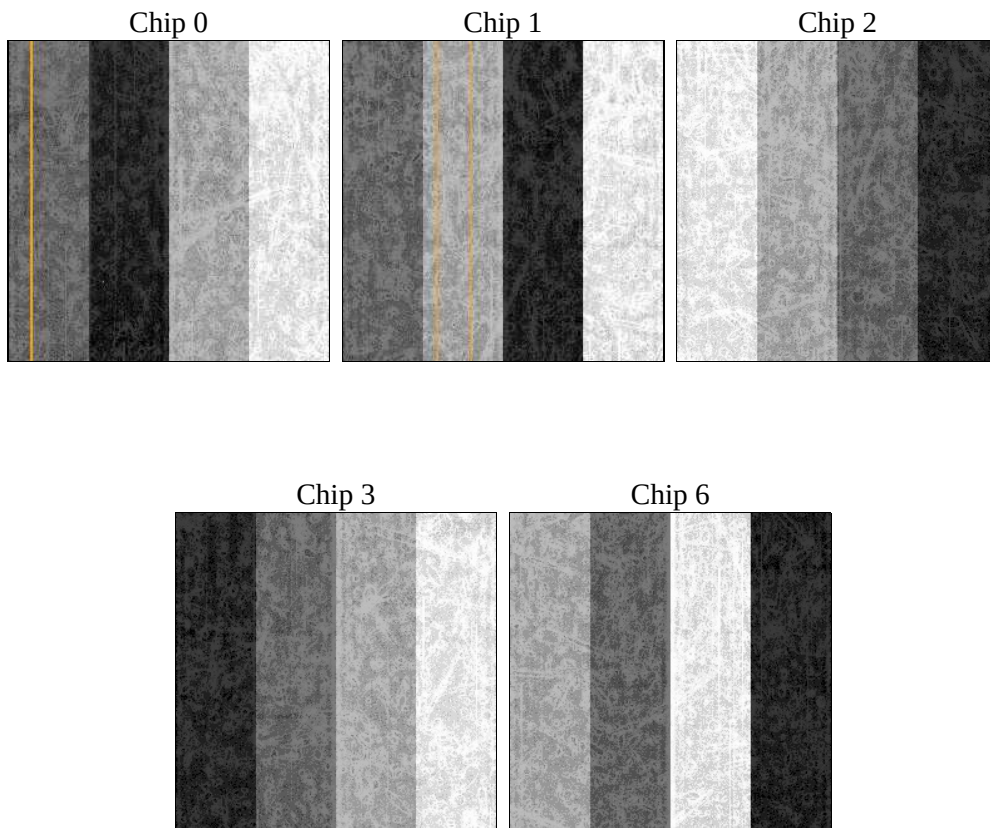
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23500.249000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	23572.221122742	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	23572.098002791	Sum of GTIs [s]
date	2017-04-21T04:33:19	Date and time of file creation	ontime1	23568.99803257	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	23572.180082798	Sum of GTIs [s]
			ontime3	23572.221122742	Sum of GTIs [s]
			ontime6	23572.056962729	Sum of GTIs [s]
			l1events	934442	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	164582	169647	219937	209281	170995
rejected events	134258	139144	155965	145435	149346
rejected %	81%	82%	70%	69%	87%

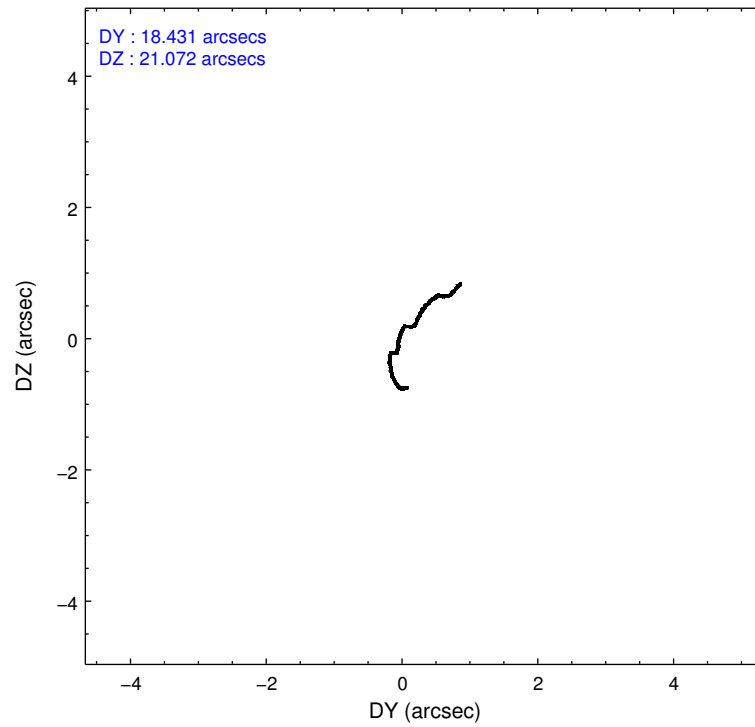
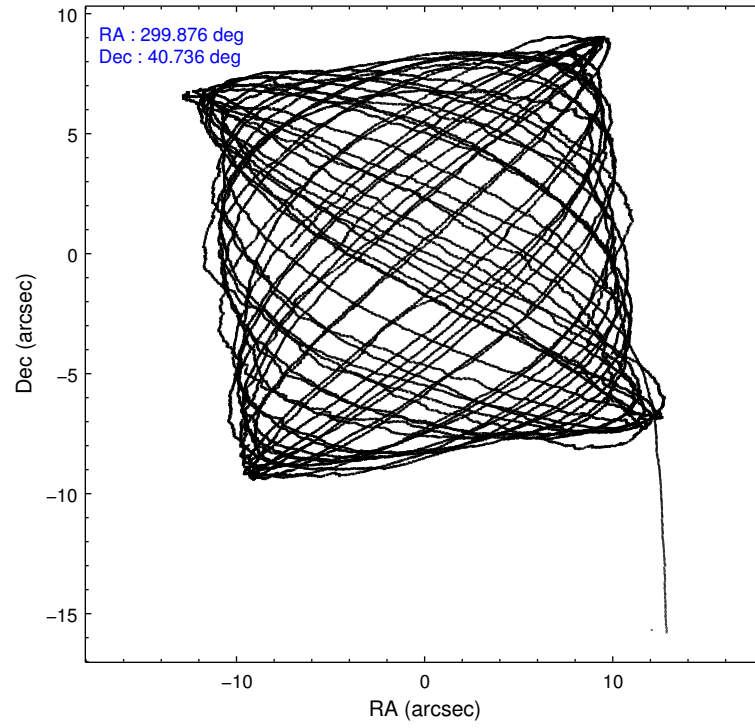
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	15347	14411	41811	42016	8468
	9%	8%	19%	20%	4%
grade 1 events	125	118	315	486	86
	0%	0%	0%	0%	0%
grade 2 events	6157	6526	9821	8983	4700
	3%	3%	4%	4%	2%
grade 3 events	2326	2420	3348	3483	1985
	1%	1%	1%	1%	1%
grade 4 events	2210	2232	3551	3485	1895
	1%	1%	1%	1%	1%
grade 5 events	7093	7548	6741	8371	7726
	4%	4%	3%	3%	4%
grade 6 events	4286	4916	5446	5888	4606
	2%	2%	2%	2%	2%
grade 7 events	127038	131476	148904	136569	141529
	77%	77%	67%	65%	82%

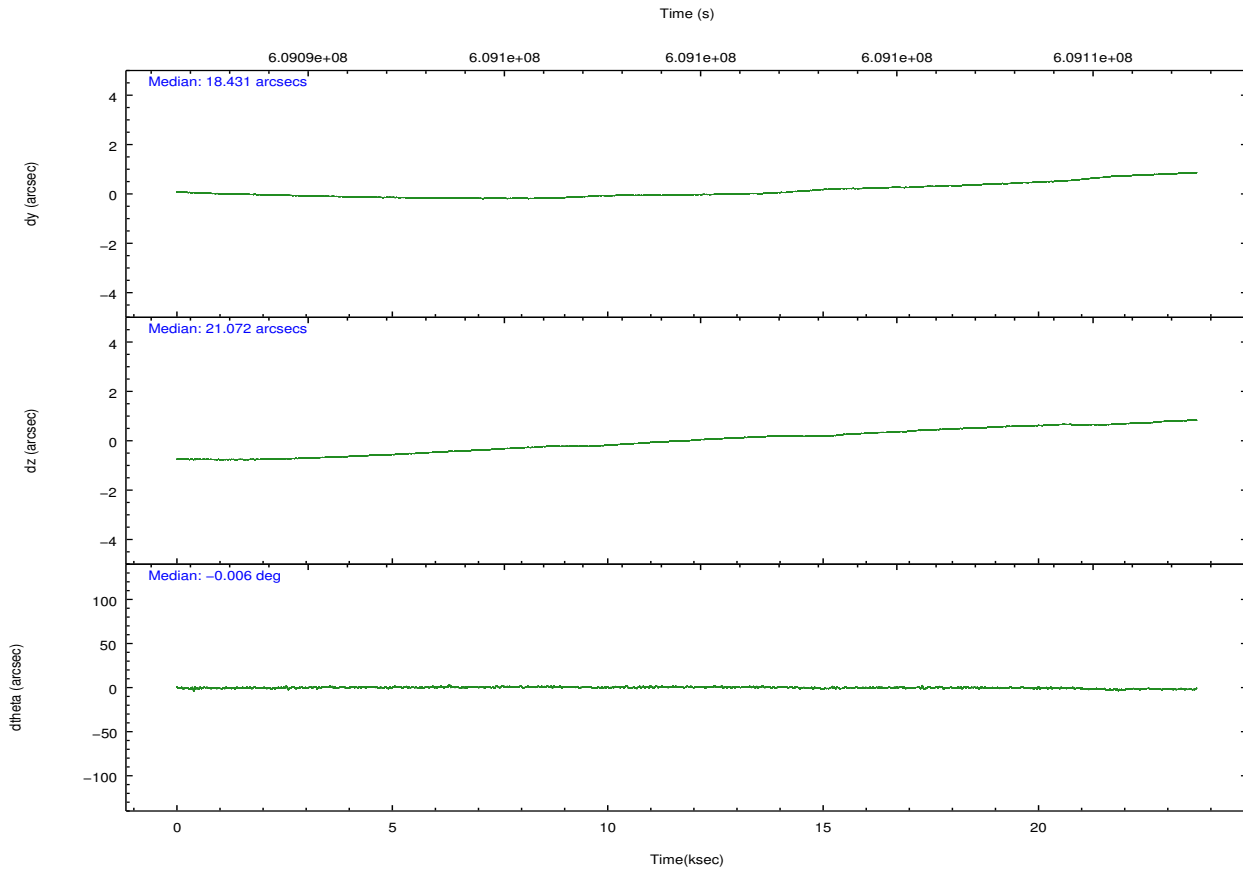
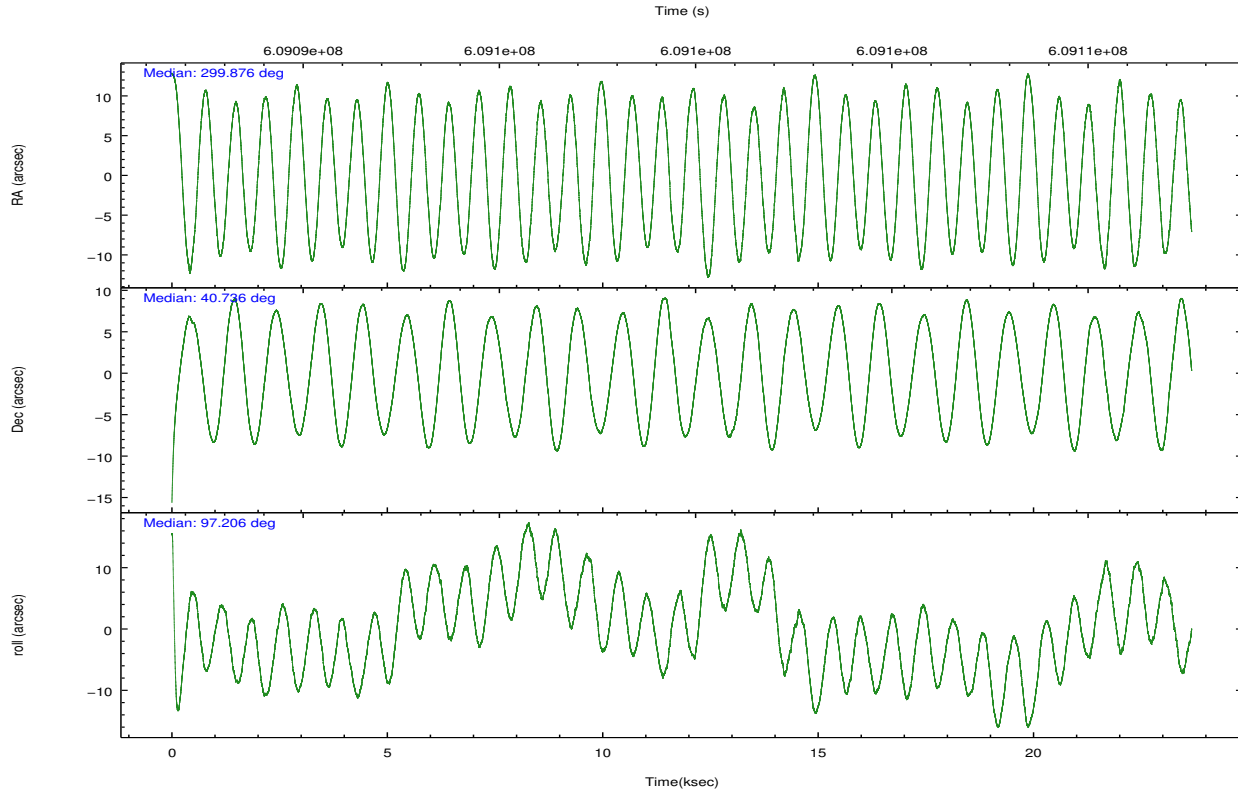
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	299.898456	299.8763422181792
[deg] Pointing Dec	40.714459	40.73638754424925
[deg] Pointing Roll	96.990135	97.21326787616324
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	609087978.184000	609086886.57496
Observation start date	2017-04-20T15:05:09	2017-04-20T14:48:06
[s] Observation end time (MET)	609111478.184000	609111713.6138999
Observation end date	2017-04-20T21:36:49	2017-04-20T21:41:53
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



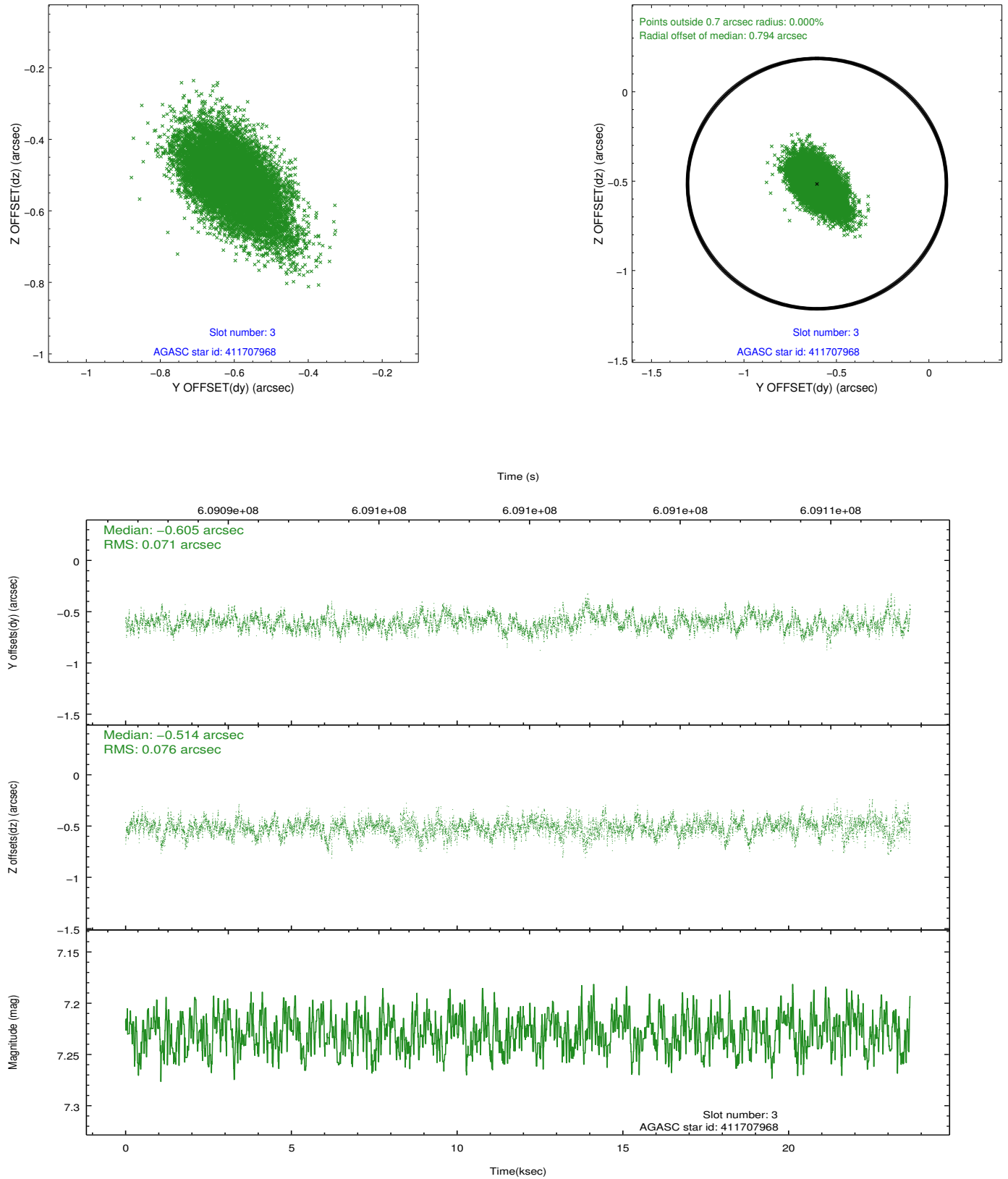


Slot Statistics

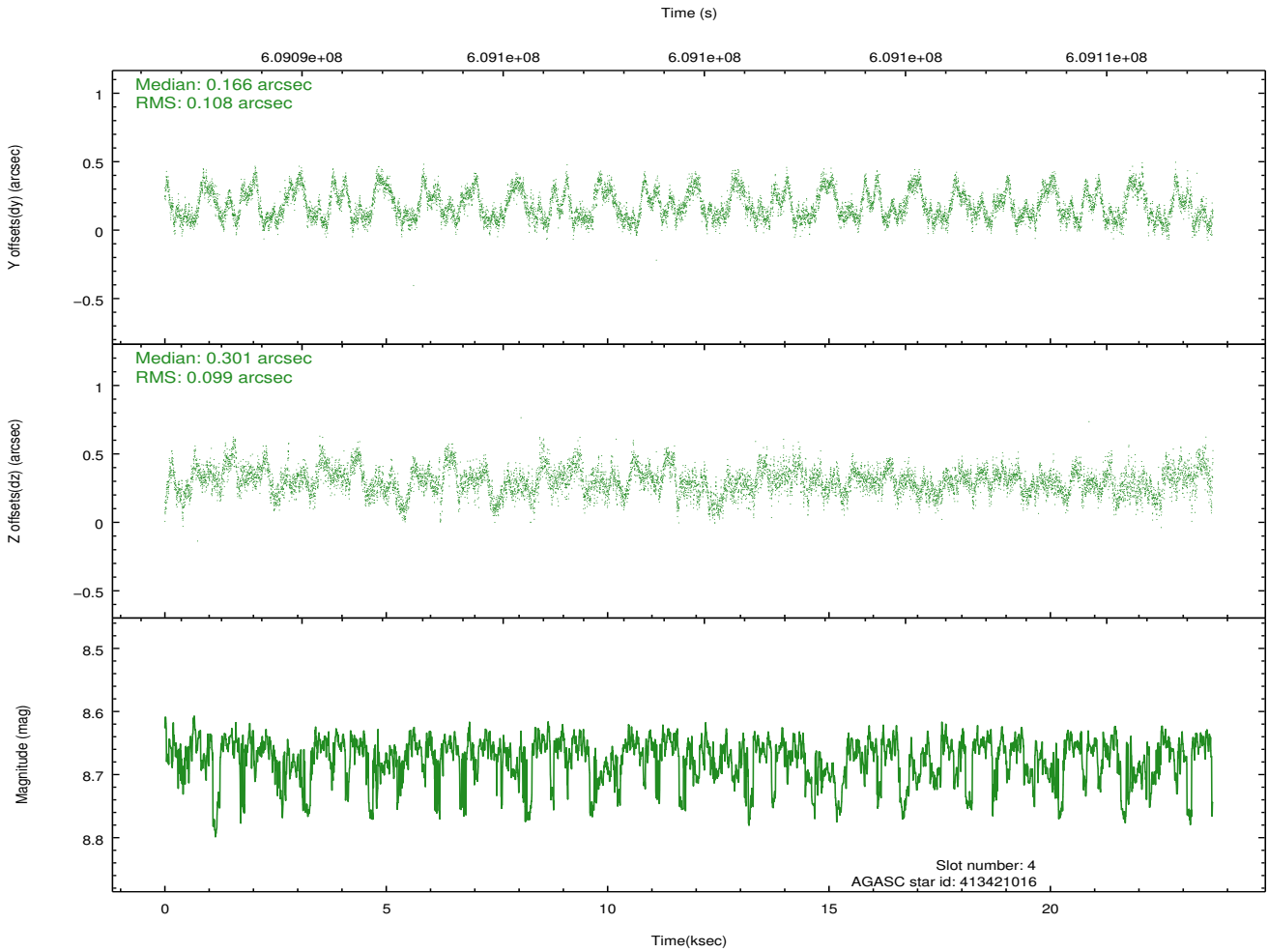
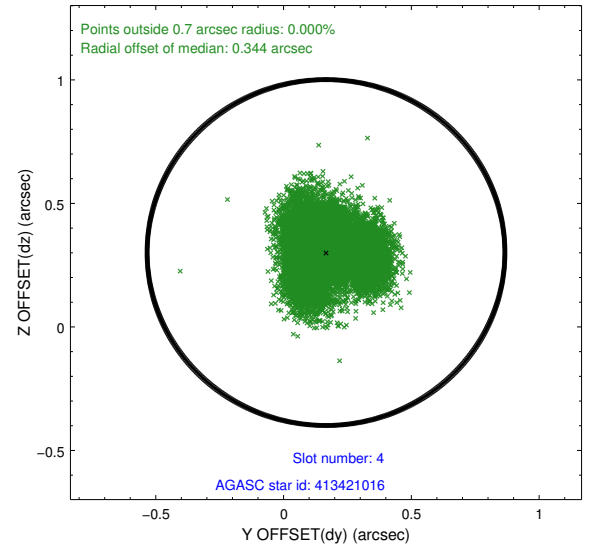
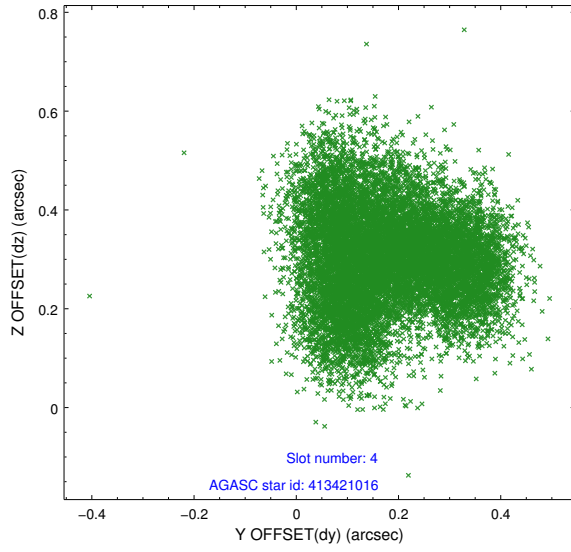
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.12	5774	-0.088	-0.110	0.024	0.039	0.000000	0.000000	920.77	-844.86
1	FID		ACIS-I-4	7.06	5771	0.461	0.142	0.019	0.029	0.000000	0.000000	2141.31	1055.20
2	FID		ACIS-I-5	7.10	5774	-0.472	0.038	0.013	0.019	0.000000	0.000000	-1827.57	1052.83
3	GUIDE	used	411707968	7.23	11548	-0.605	-0.514	0.106	0.189	299.509933	40.926839	889.76	955.29
4	GUIDE	used	413421016	8.67	11542	0.166	0.301	0.161	0.241	300.612426	40.446254	-1187.83	-1824.28
5	GUIDE	used	413425016	7.96	11544	0.121	0.343	0.121	0.191	300.758532	40.173167	-2210.13	-2112.16
6	GUIDE	used	413929808	8.44	11540	0.269	-0.122	0.164	0.270	300.621353	41.348826	2037.88	-2217.87
7	GUIDE	used	413936784	8.70	11535	0.009	-0.007	0.176	0.288	300.698470	41.281929	1775.13	-2397.75

2.4 Star Slots

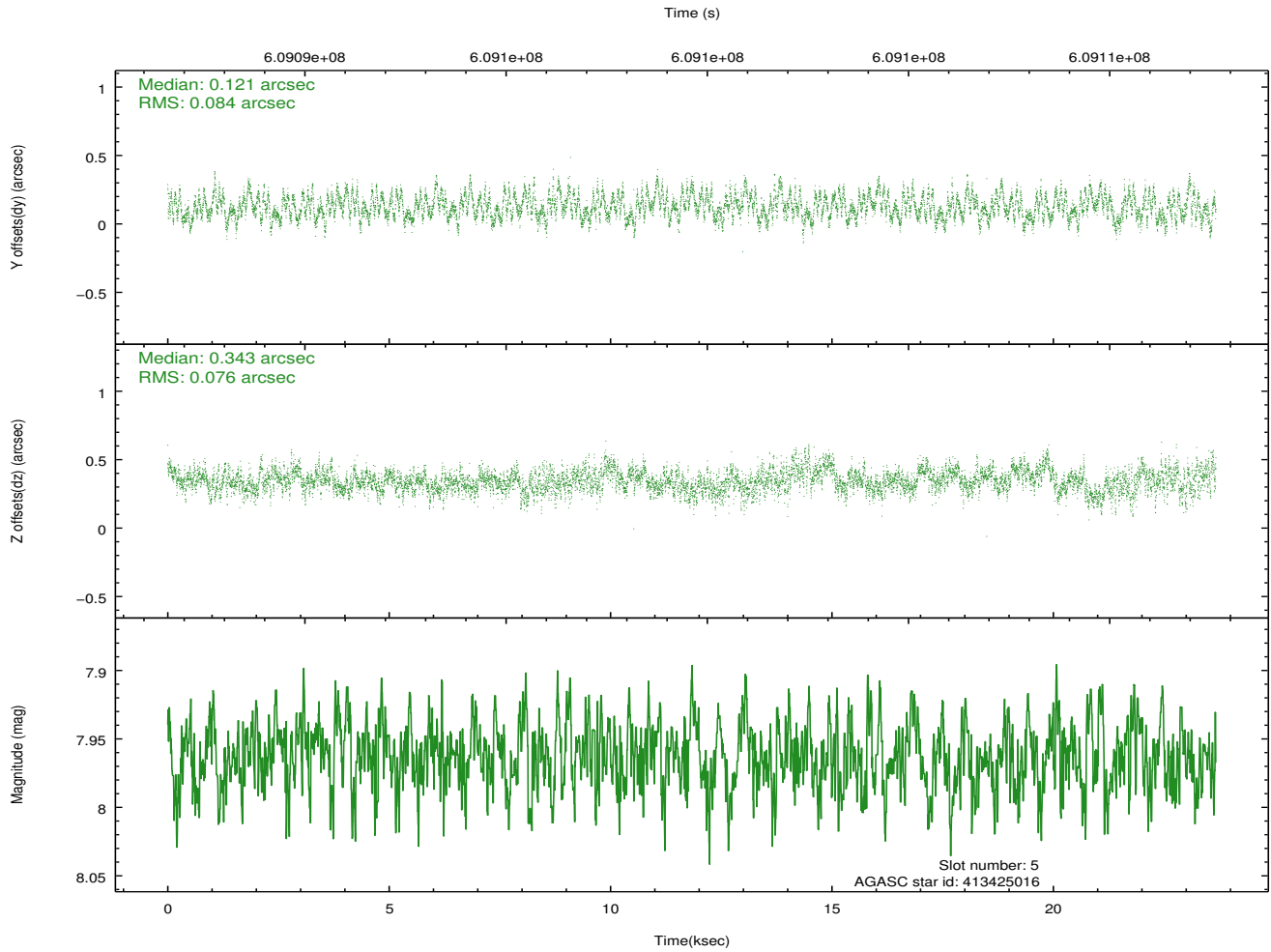
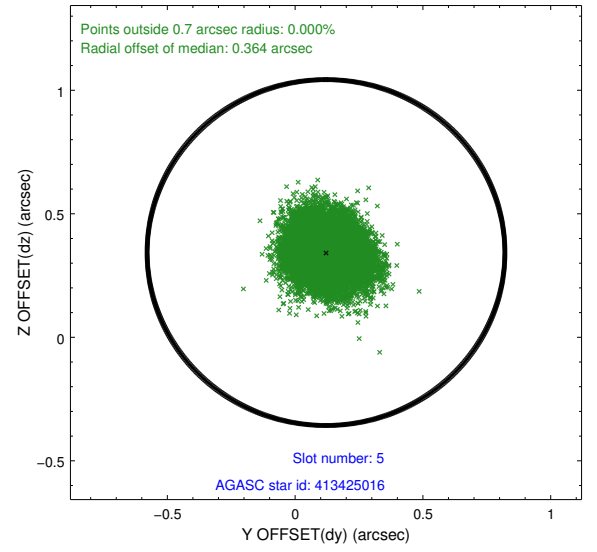
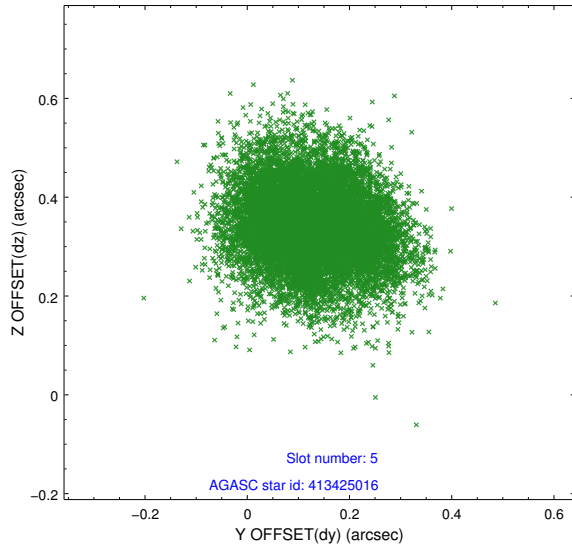
2.4.1 Slot 3



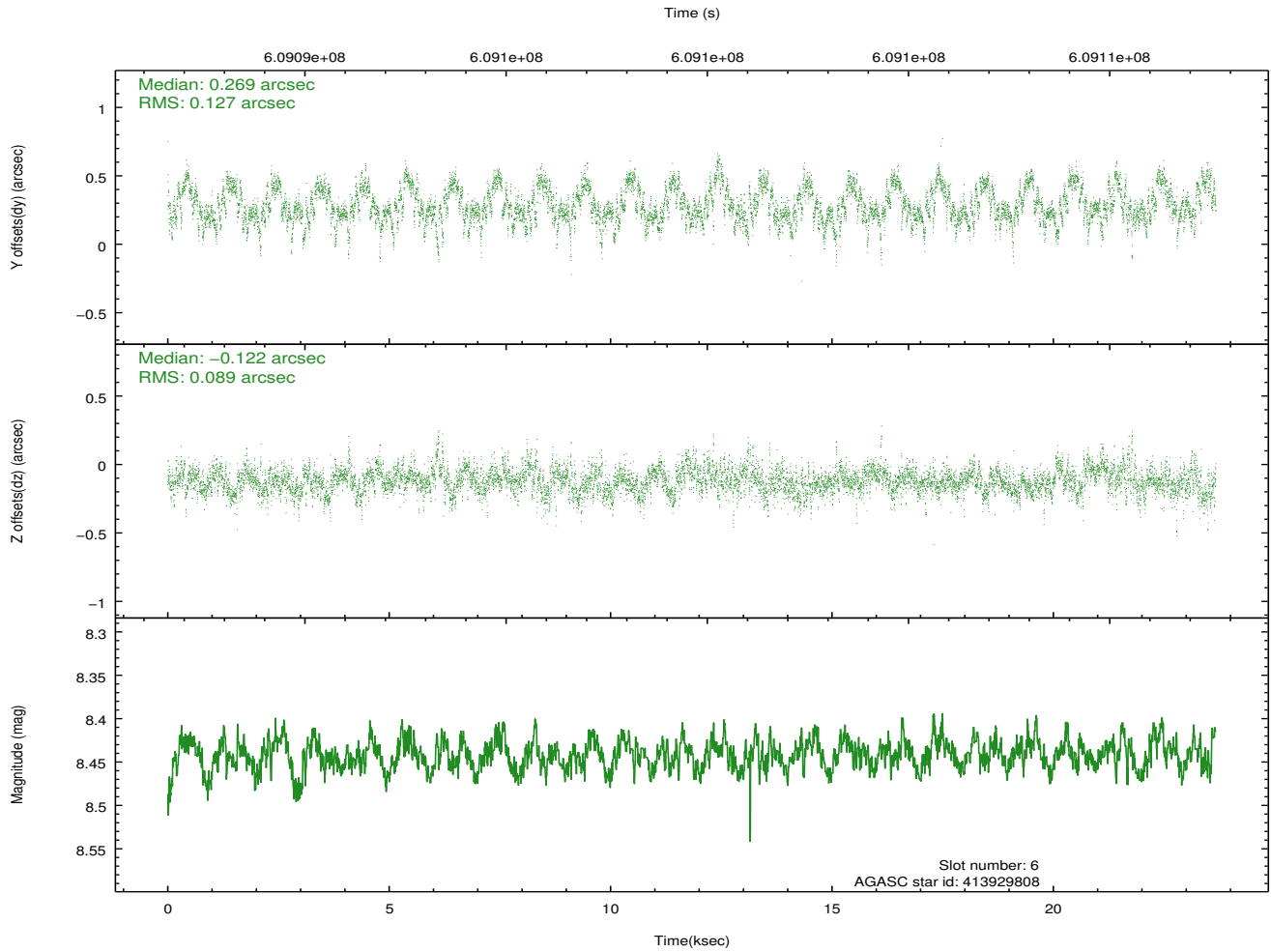
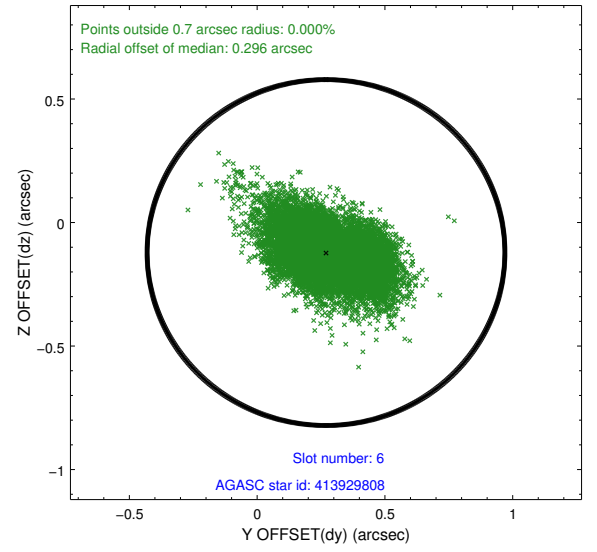
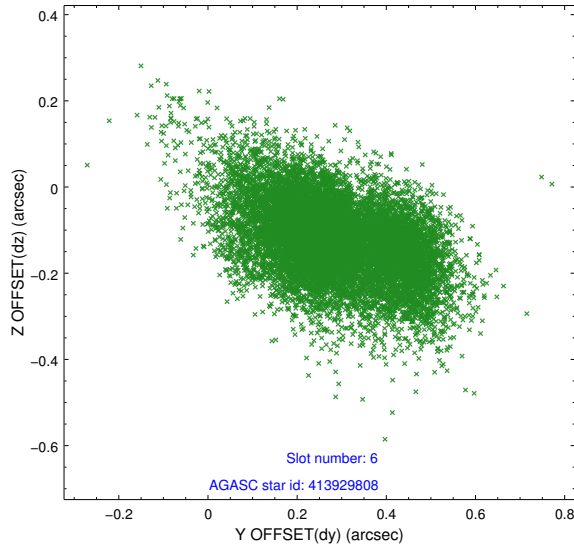
2.4.2 Slot 4



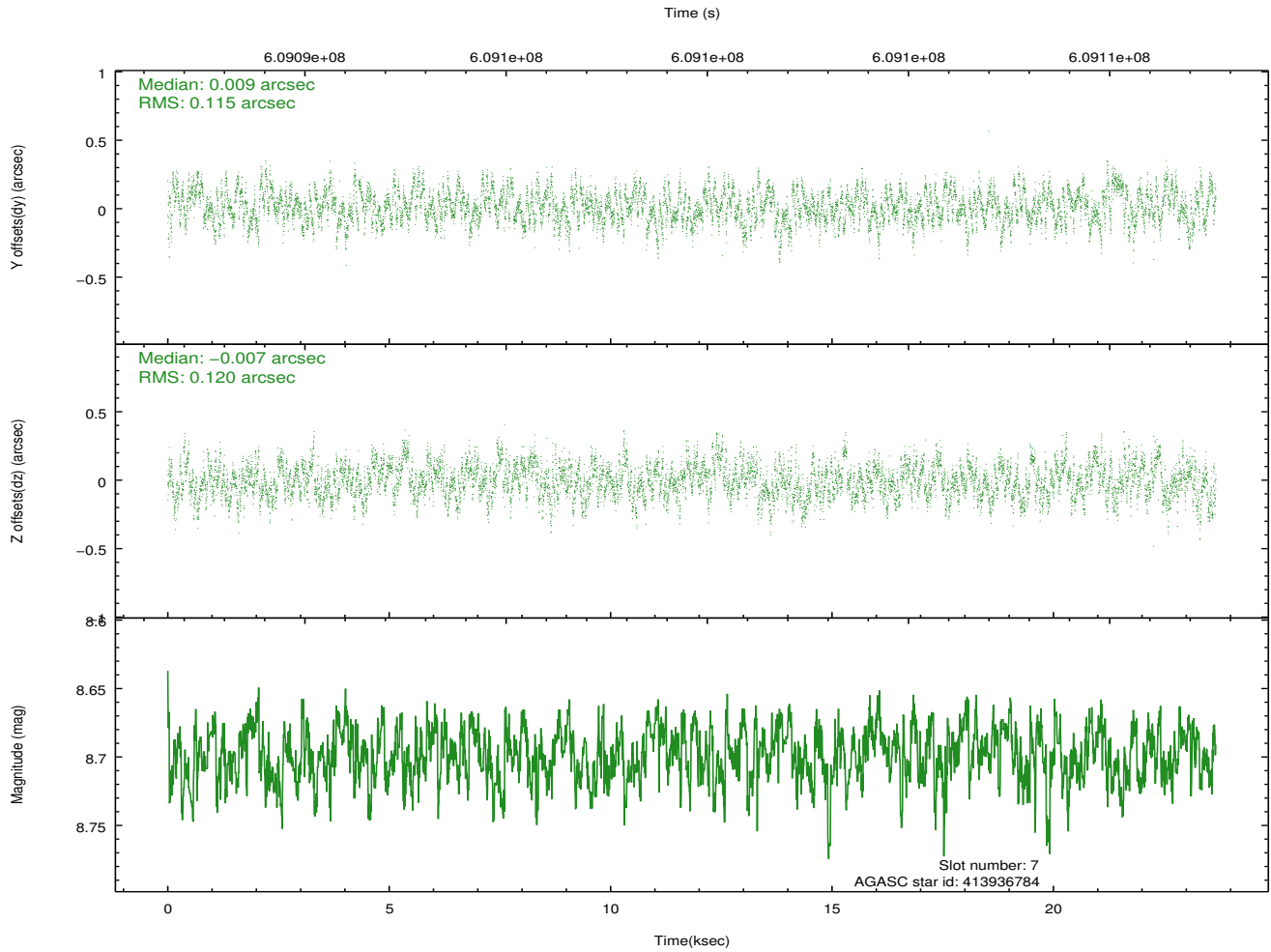
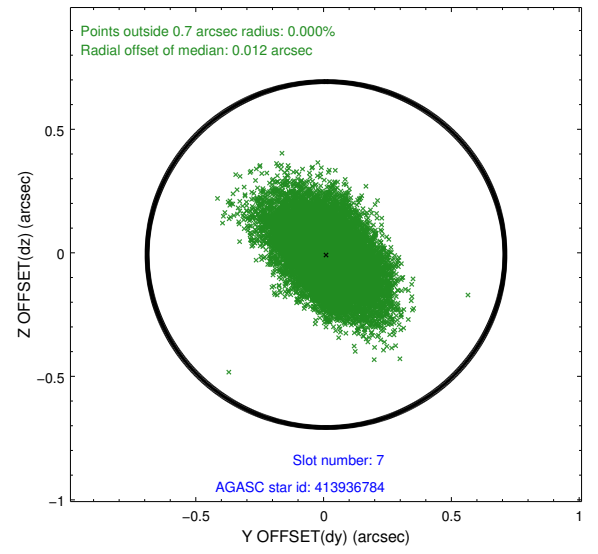
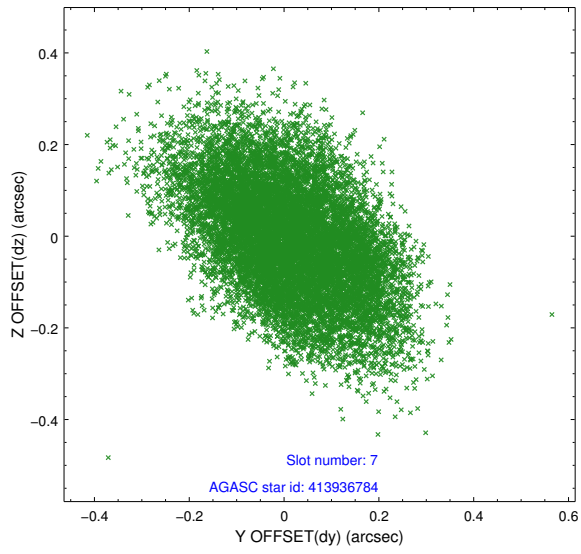
2.4.3 Slot 5



2.4.4 Slot 6

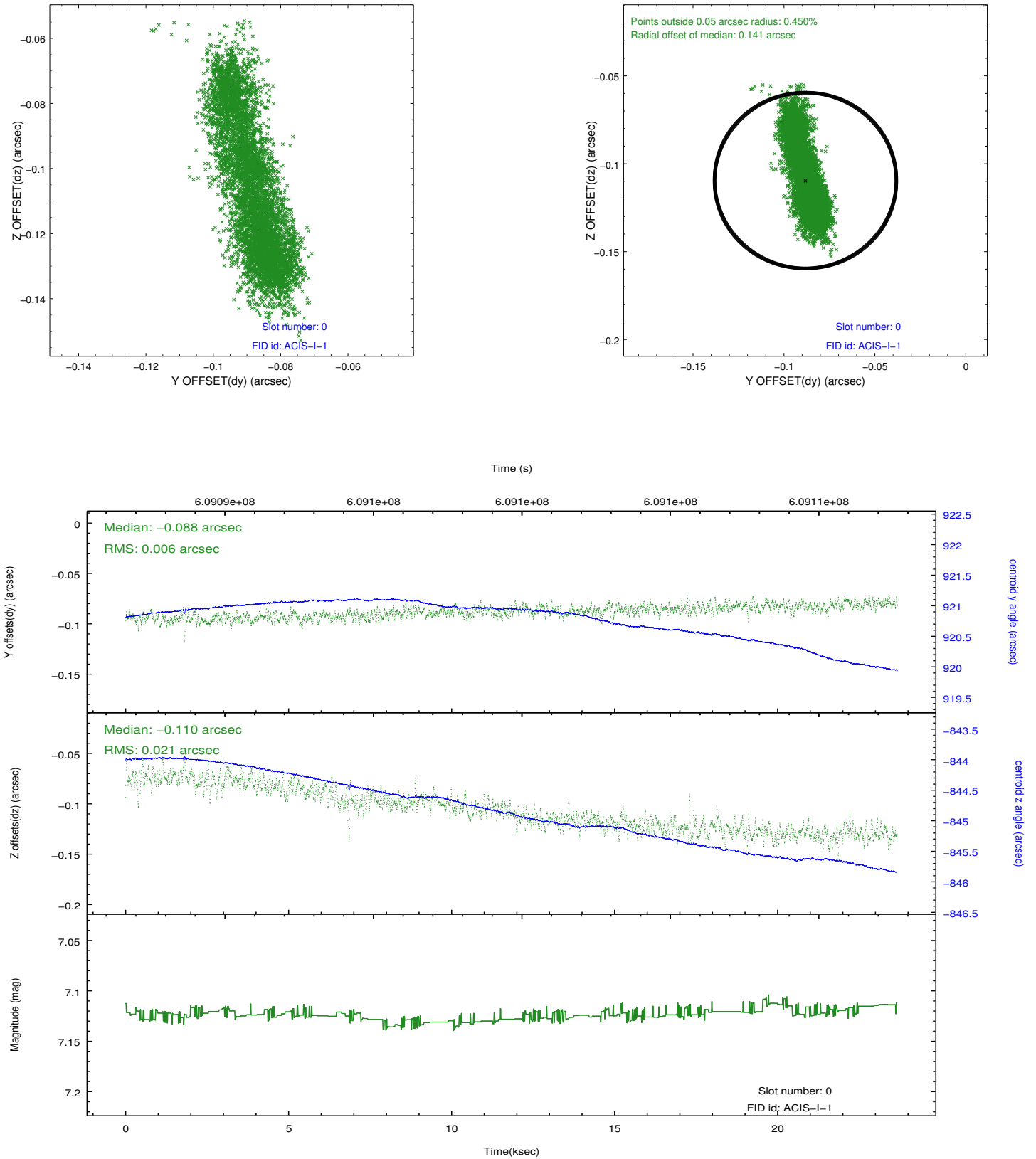


2.4.5 Slot 7

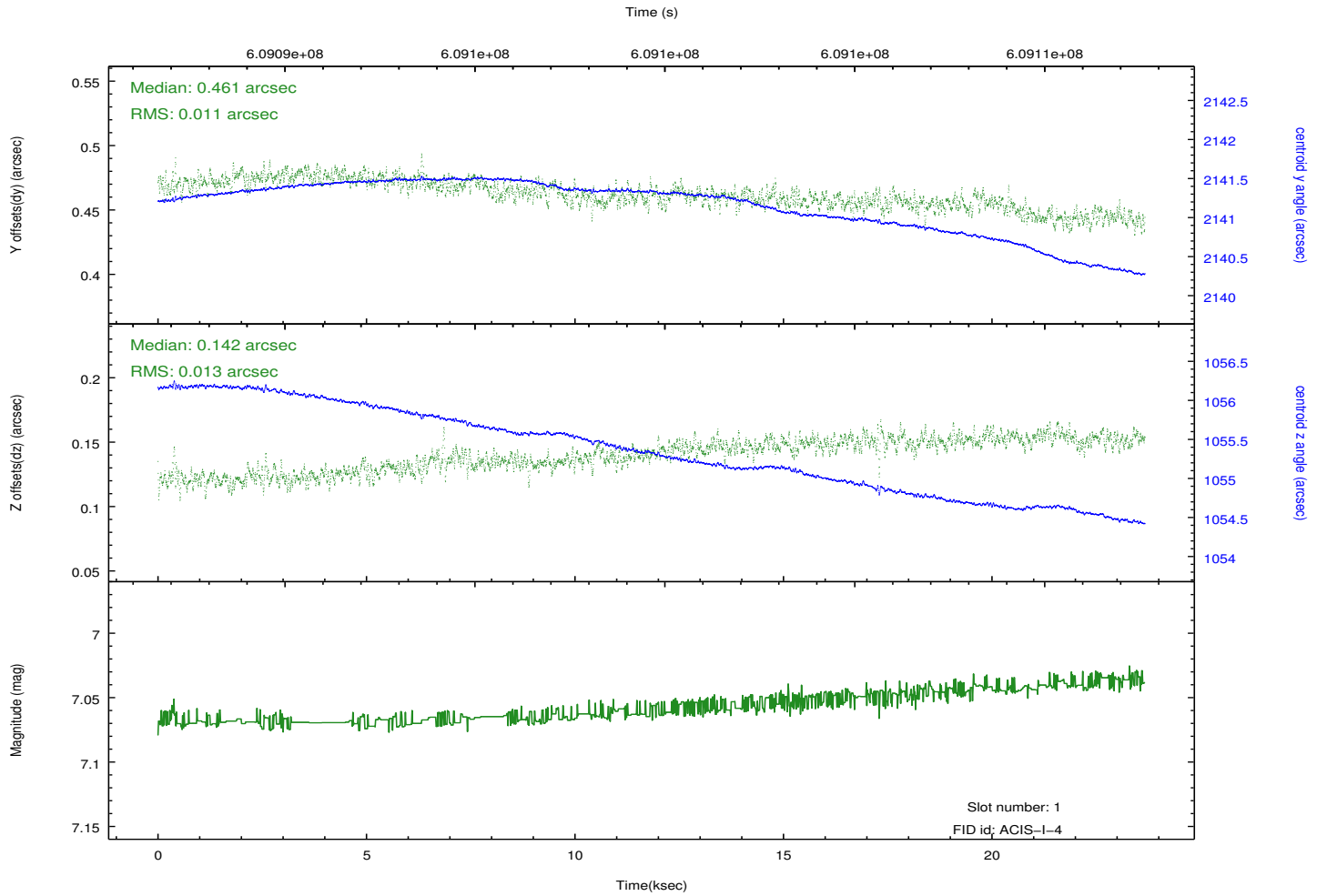
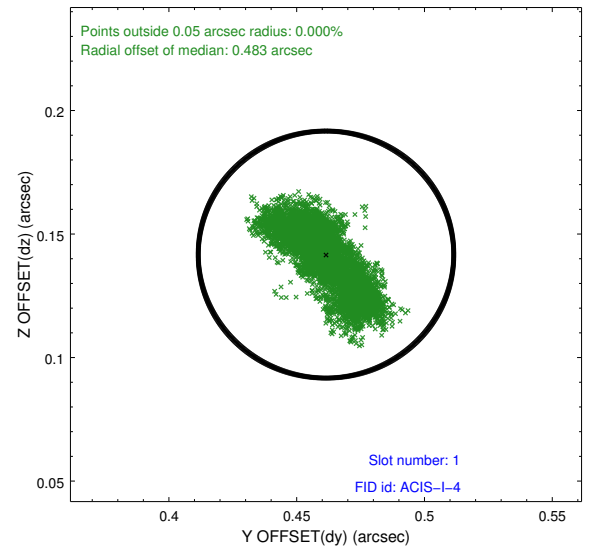
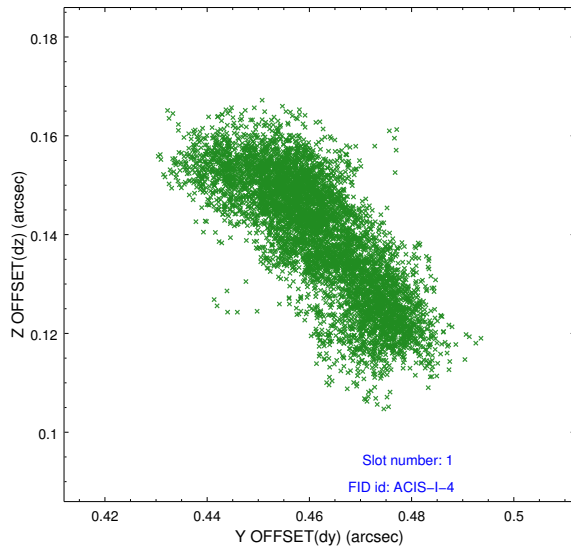


2.5 FID Slots

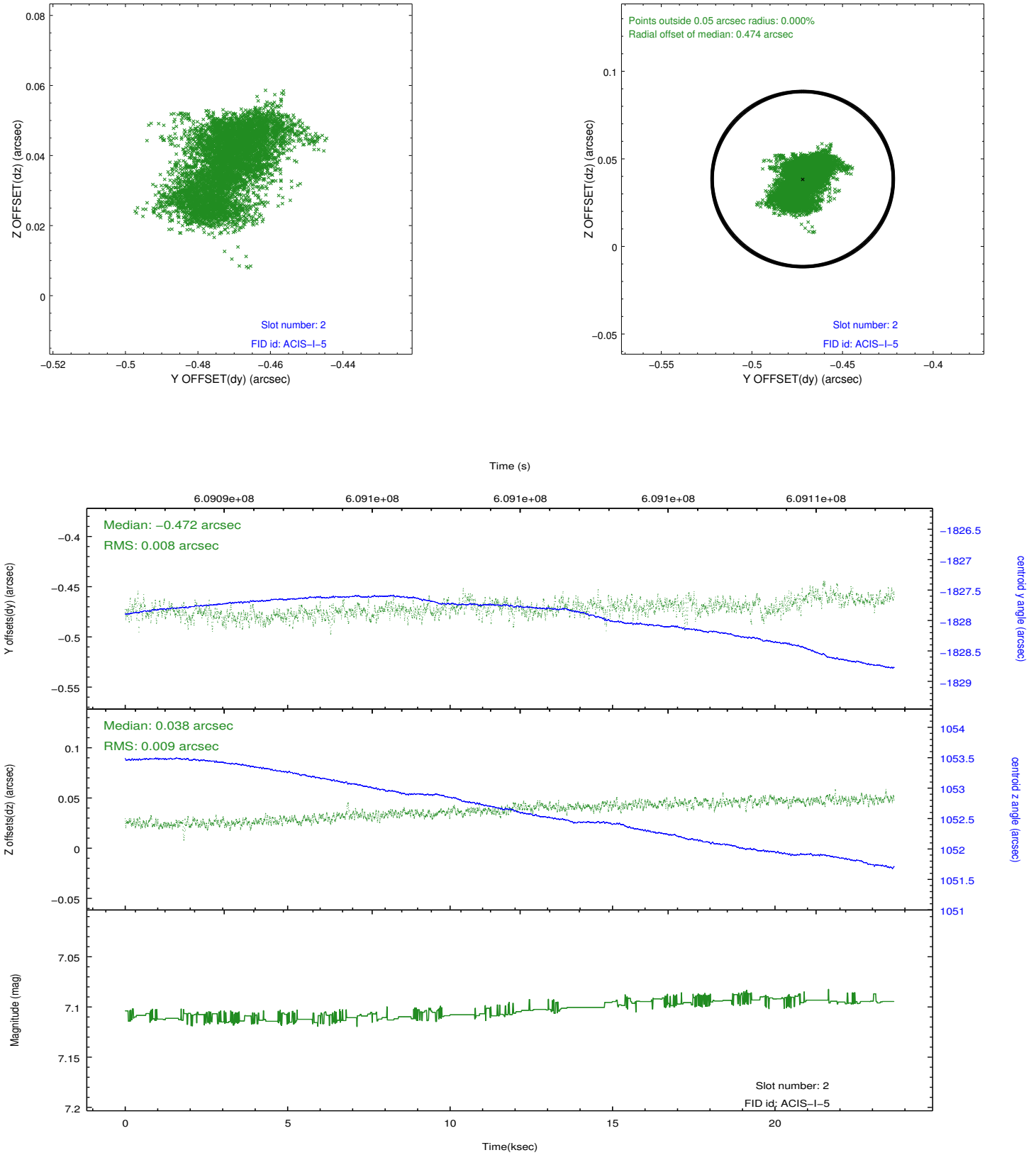
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.04.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.572221122742

A.2 Comments