

V&V Reference Report

L2 ASCDS Version : 10.5.1.1

Observation 17517 - L2 Version 1
Chandra X-Ray Center

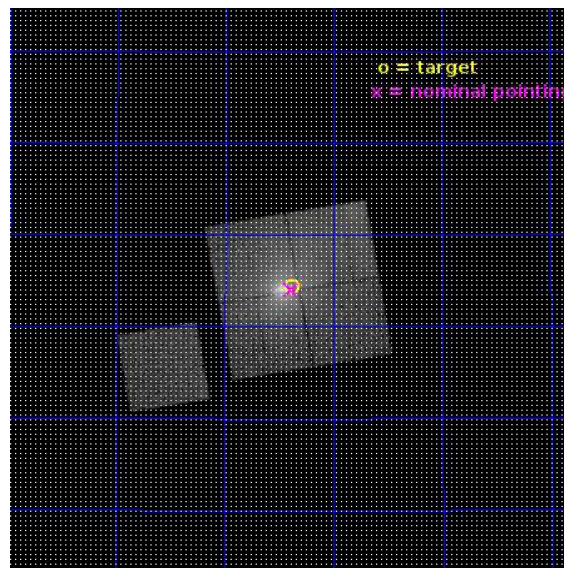
L2 Processing Date : Sep 18 2016

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1 Front

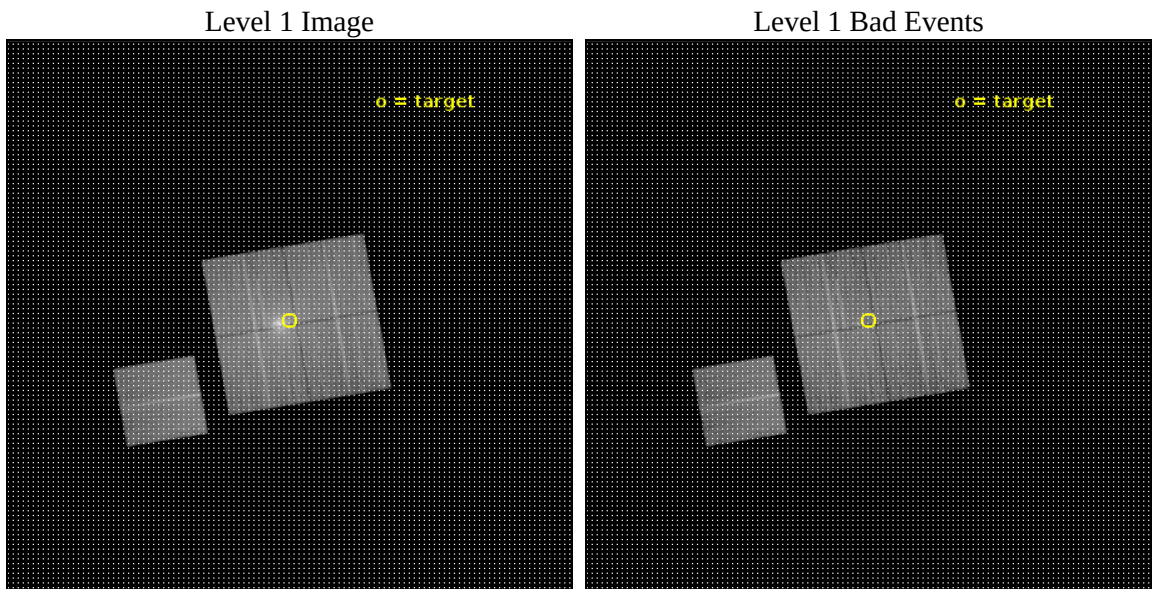
seq_num	703132	Sequence number
obs_id	17517	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - W Hotspot	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.845	Observer's specified target RA [deg]
dec_targ	40.740361	Observer's specified target Dec [deg]
ra_nom	299.84707534679	Nominal RA [deg]
dec_nom	40.734152641843	Nominal Dec [deg]
roll_nom	260.20734974425	Nominal Roll [deg]
revision	1	Processing version of data
ontime	27041.300208092	Sum of GTIs [s]
livetime	26687.985713357	Livetime [s]
ontime0	27038.159167886	Sum of GTIs [s]
ontime1	27041.300208092	Sum of GTIs [s]
ontime2	27038.159167886	Sum of GTIs [s]
ontime3	27041.300208092	Sum of GTIs [s]
ontime6	27041.300208092	Sum of GTIs [s]
l2events	218783	Number of level 2 events



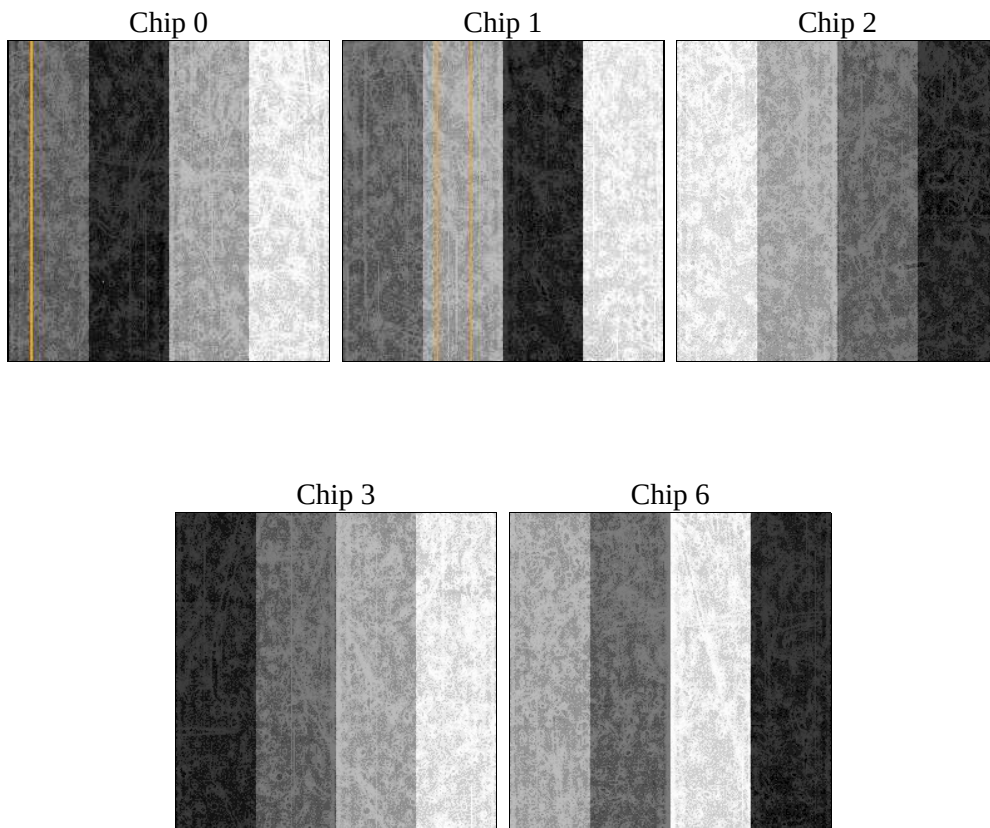
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.1.1	Processing system revision	ontime	27041.300208092	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	27038.159167886	Sum of GTIs [s]
date	2016-09-18T14:16:23	Date and time of file creation	ontime1	27041.300208092	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	27038.159167886	Sum of GTIs [s]
			ontime3	27041.300208092	Sum of GTIs [s]
			ontime6	27041.300208092	Sum of GTIs [s]
			l1events	1022793	Number of level 1 events

2.1.4 Events

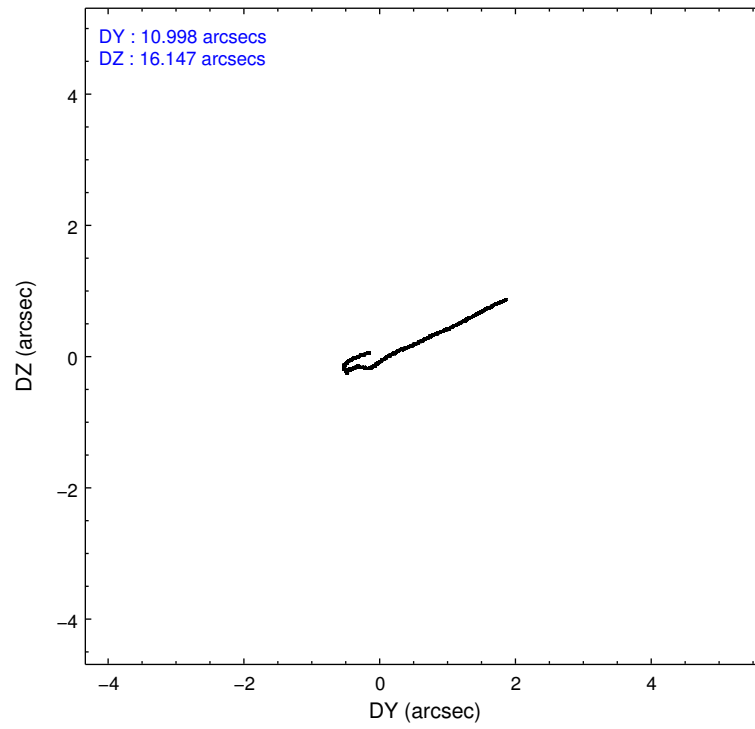
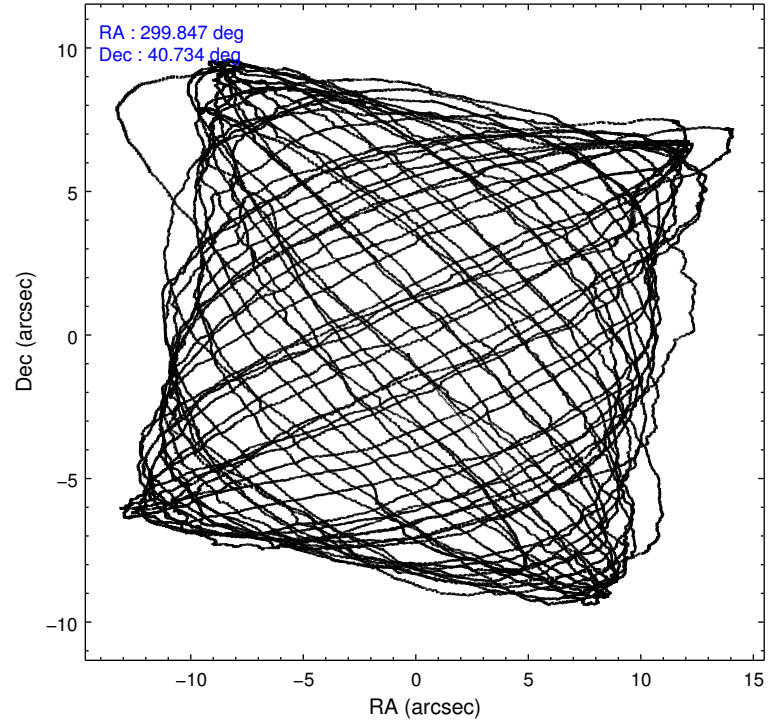
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	173968	196145	216196	255562	180922	grade 0 events	13306	27667	30527	63679	7310
rejected events	145591	147341	167087	162664	160174		7%	14%	14%	24%	4%
rejected %	83%	75%	77%	63%	88%	grade 1 events	108	162	226	774	87
							0%	0%	0%	0%	0%
						grade 2 events	5926	9034	7797	12286	4791
							3%	4%	3%	4%	2%
						grade 3 events	2429	3066	3012	4836	1959
							1%	1%	1%	1%	1%
						grade 4 events	2153	3023	2971	4802	1972
							1%	1%	1%	1%	1%
						grade 5 events	7599	8095	7247	9290	8171
							4%	4%	3%	3%	4%
						grade 6 events	4566	6027	4813	7315	4724
							2%	3%	2%	2%	2%
						grade 7 events	137881	139071	159603	152580	151908
							79%	70%	73%	59%	83%

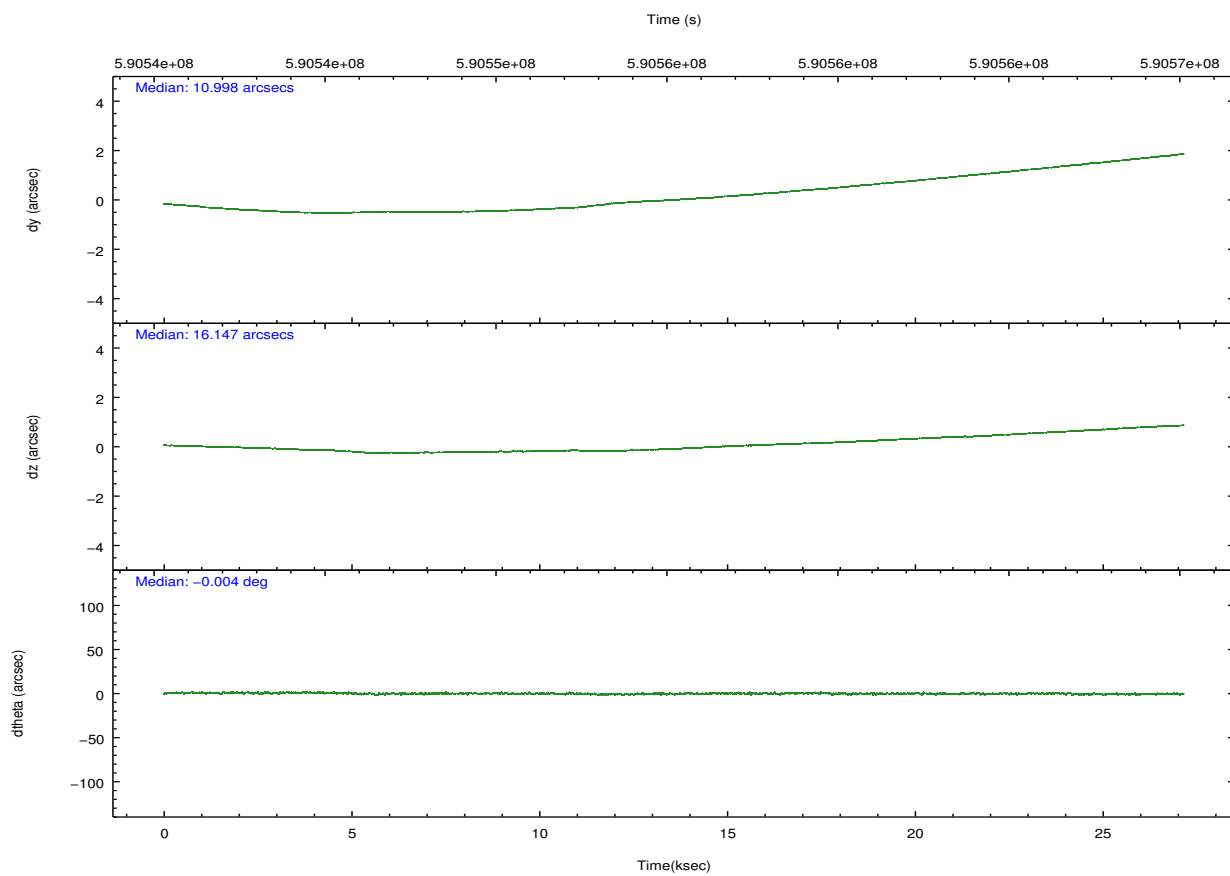
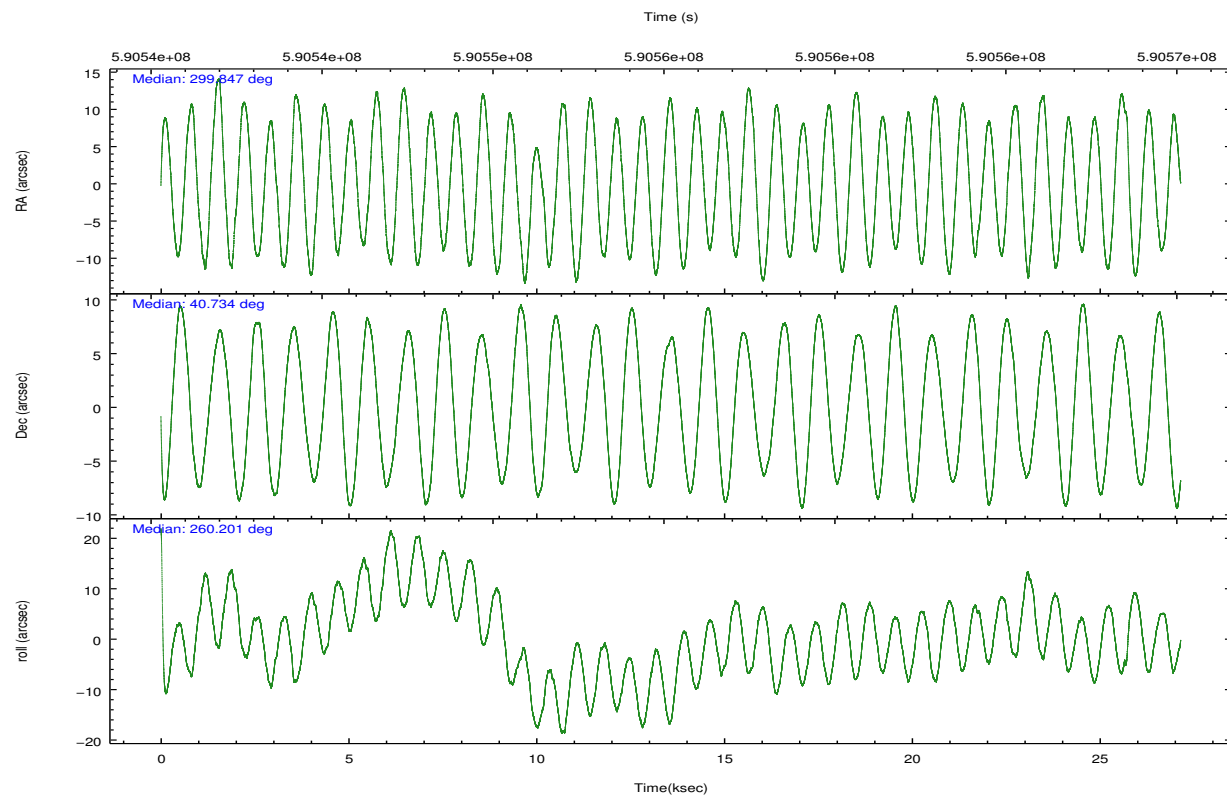
2.2 Compared Parameters

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	299.834349	299.8470753467946
[deg] Pointing Dec	40.760032	40.73415264184308
[deg] Pointing Roll	260.006955	260.2073497442465
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5899487761303
[mm] SIM translation stage offset	0	-0.002504226799430853
[s] Observation start time (MET)	590541774.184000	590540296.16468
Observation start date	2016-09-17T23:21:46	2016-09-17T22:58:16
[s] Observation end time (MET)	590568774.184000	590570293.8164099
Observation end date	2016-09-18T06:51:46	2016-09-18T07:18:13
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



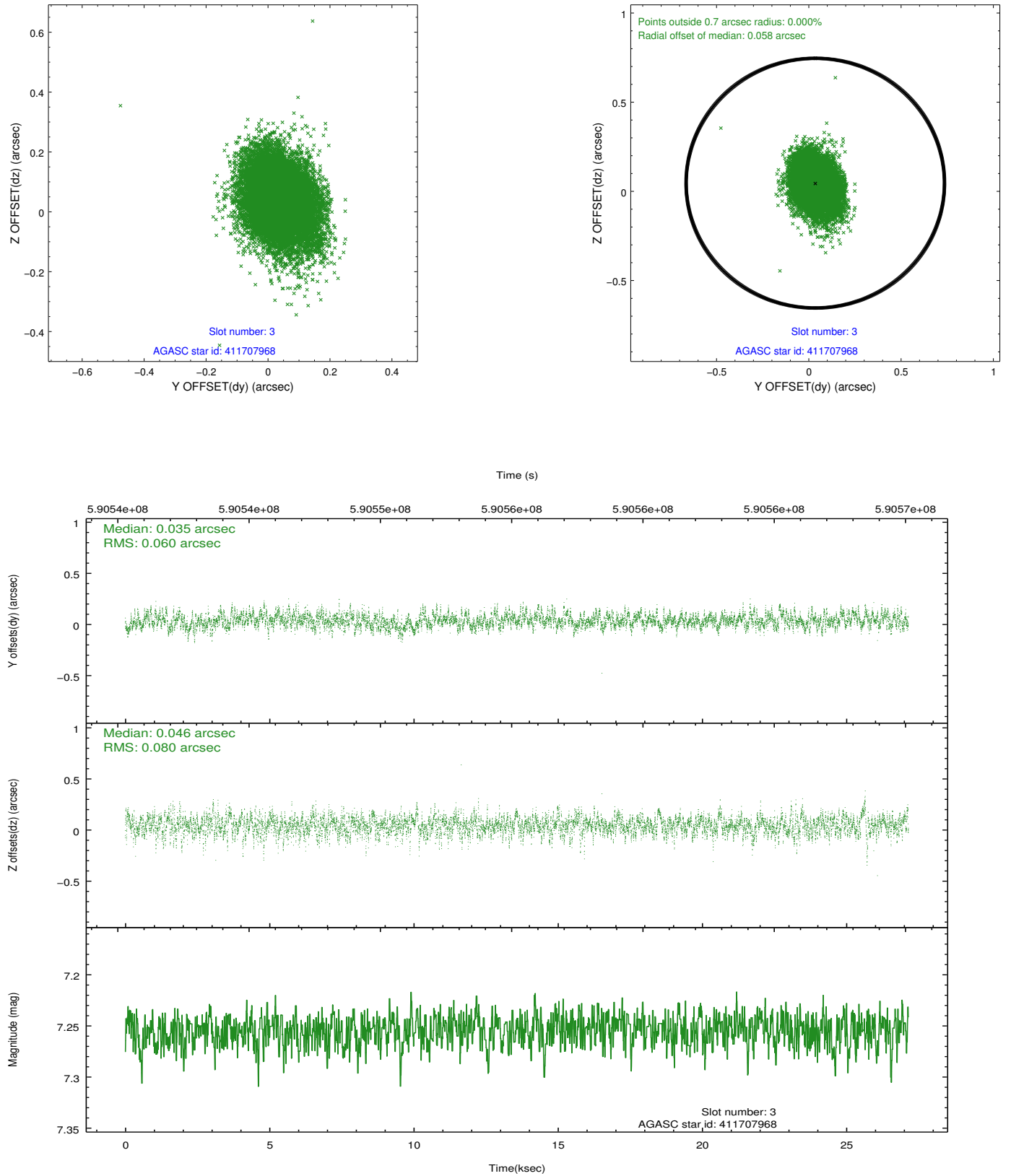


Slot Statistics

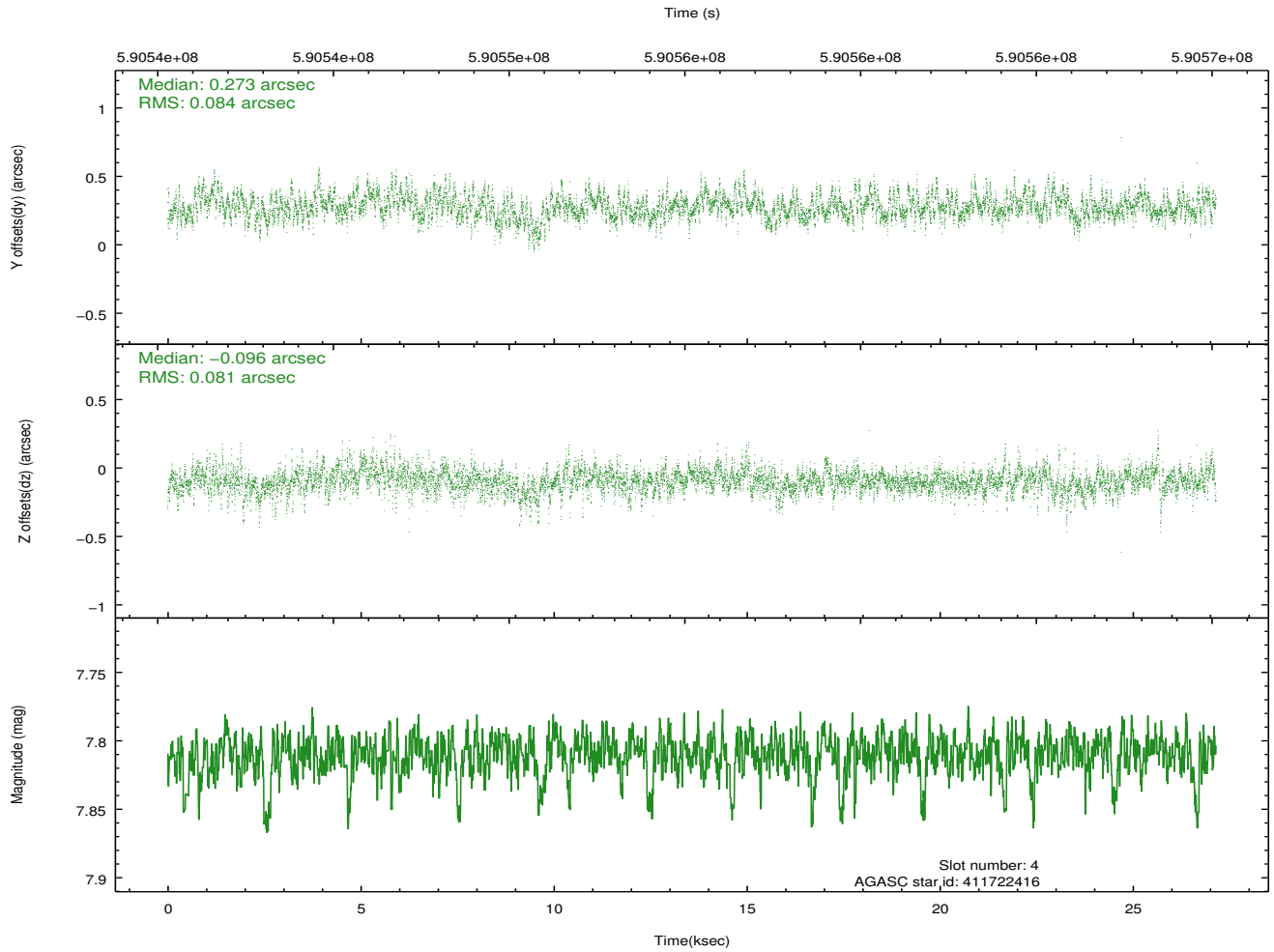
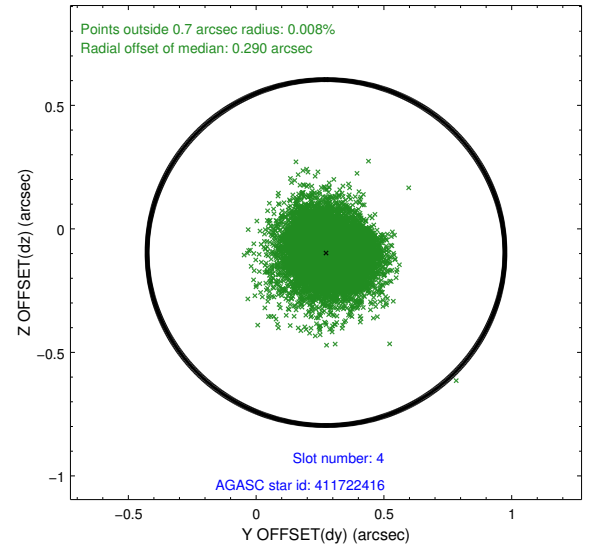
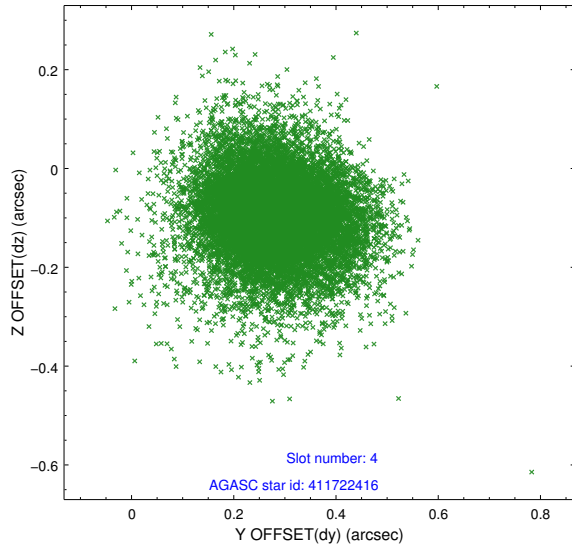
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.18	6622	0.008	-0.118	0.022	0.037	0.000000	0.000000	928.35	-839.93
1	FID		ACIS-I-4	7.11	6622	0.318	0.101	0.019	0.056	0.000000	0.000000	2148.70	1060.10
2	FID		ACIS-I-5	7.17	6622	-0.426	0.087	0.013	0.023	0.000000	0.000000	-1820.03	1057.89
3	GUIDE	used	411707968	7.25	13242	0.035	0.046	0.103	0.177	299.509933	40.926839	-439.74	-973.08
4	GUIDE	used	411722416	7.81	13241	0.273	-0.096	0.121	0.207	298.936507	40.391736	1721.40	-2196.21
5	GUIDE	used	412240768	8.27	13243	0.050	0.176	0.110	0.183	299.999696	41.280279	-1922.05	115.60
6	GUIDE	used	413425232	8.59	13236	-0.120	-0.255	0.100	0.181	300.417382	40.029012	2307.51	2038.99
7	GUIDE	used	413937088	7.99	13242	-0.245	0.141	0.113	0.195	300.780094	41.277874	-2293.68	2194.41

2.4 Star Slots

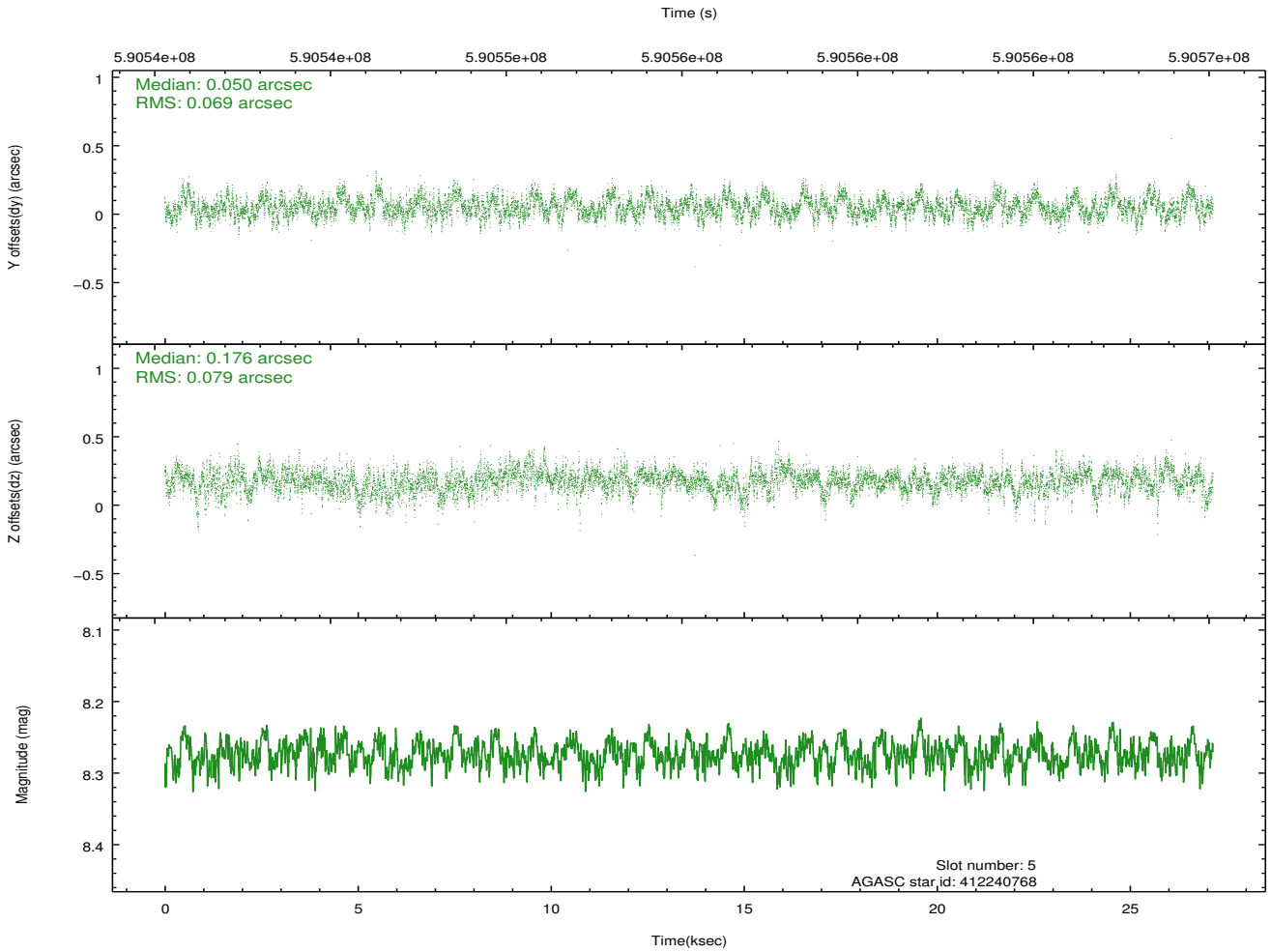
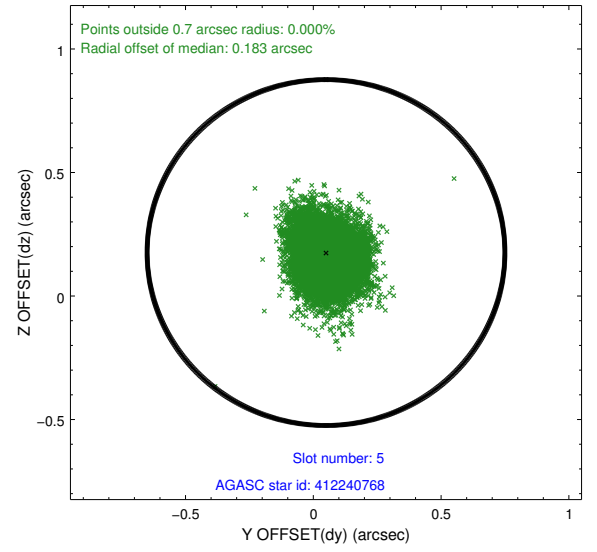
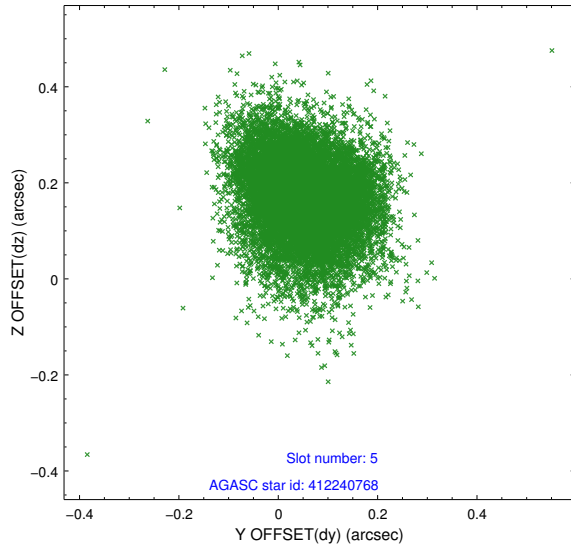
2.4.1 Slot 3



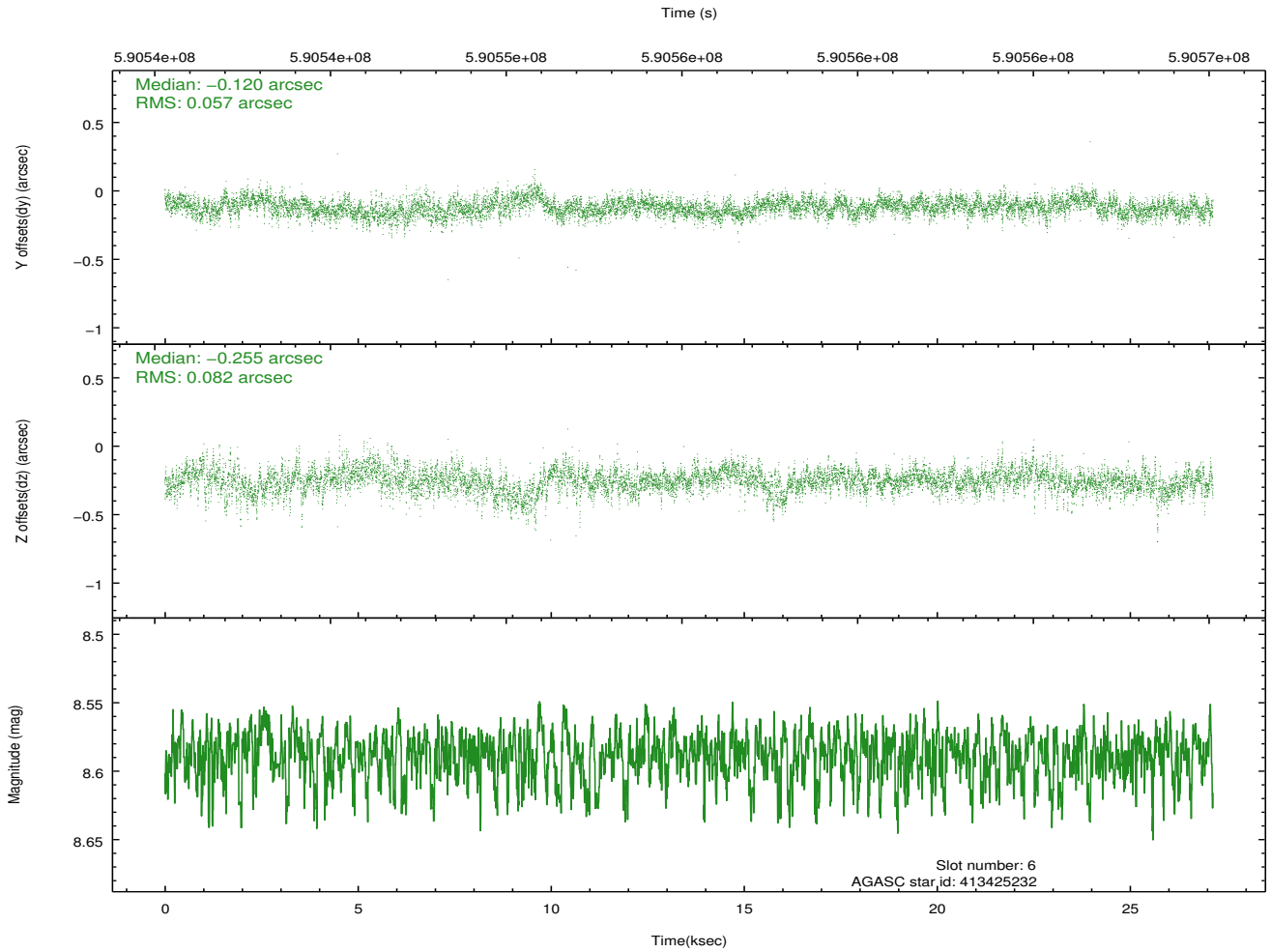
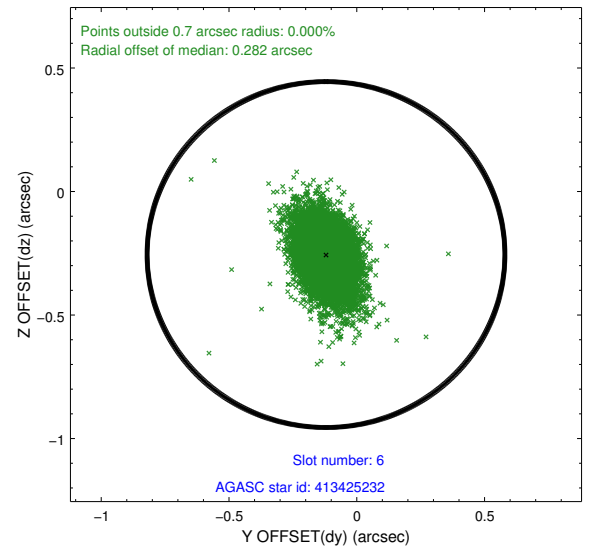
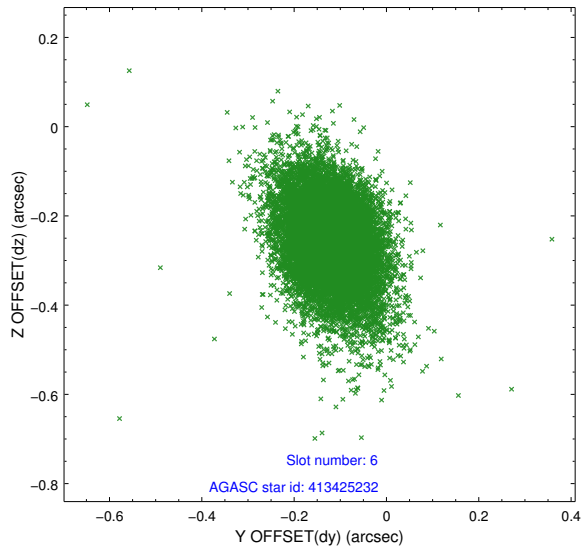
2.4.2 Slot 4



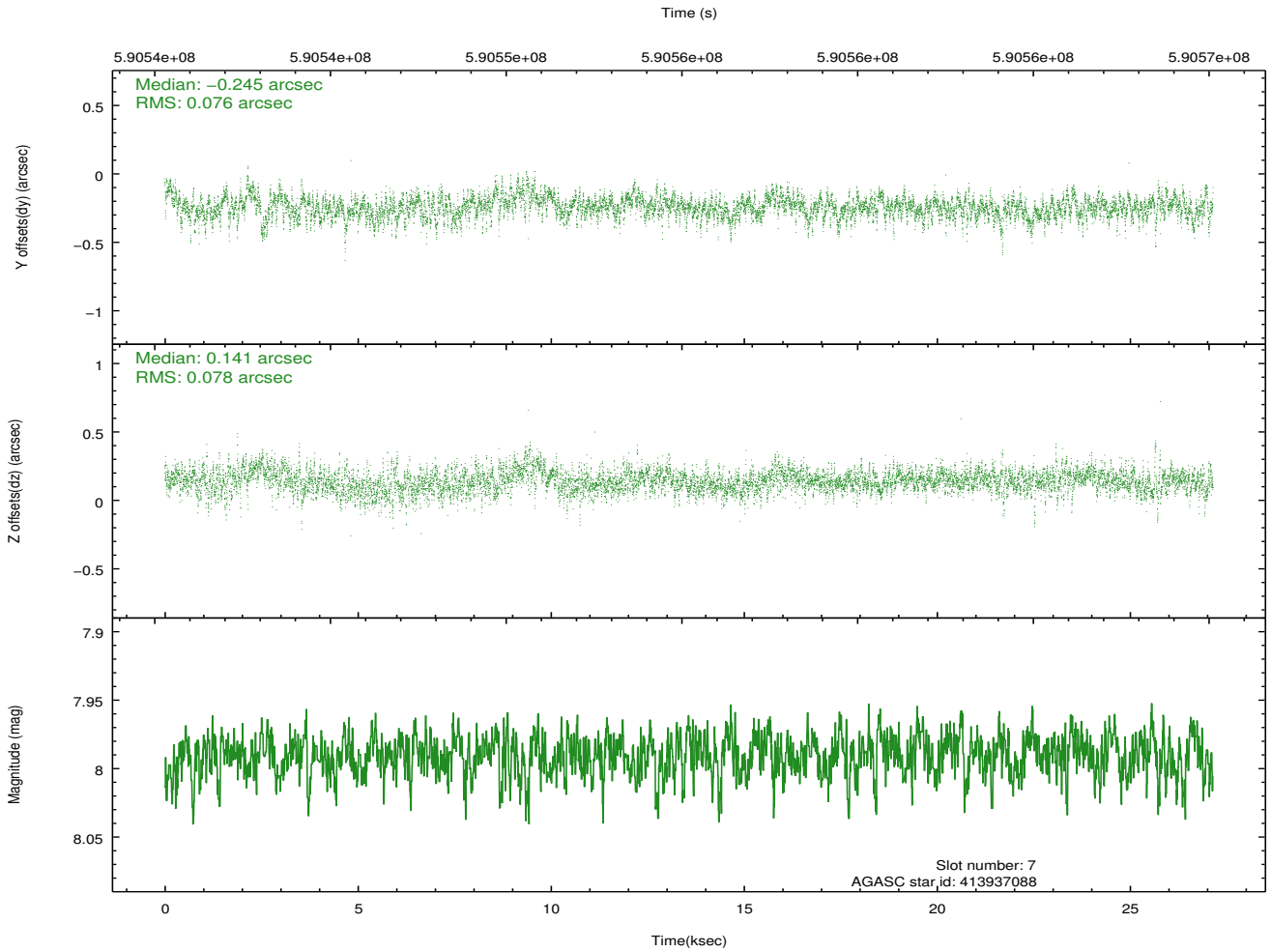
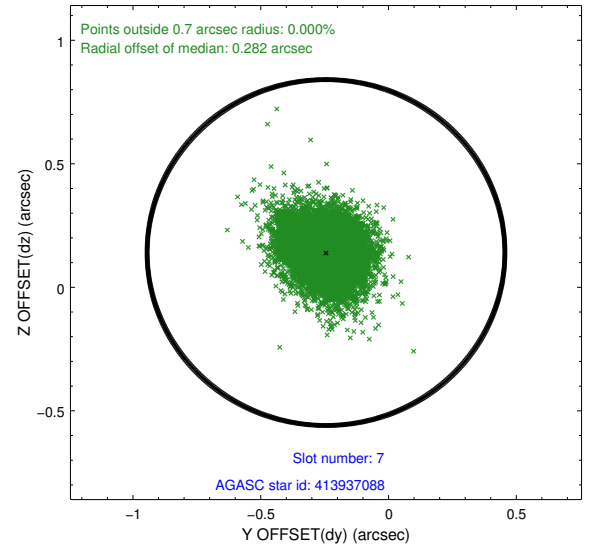
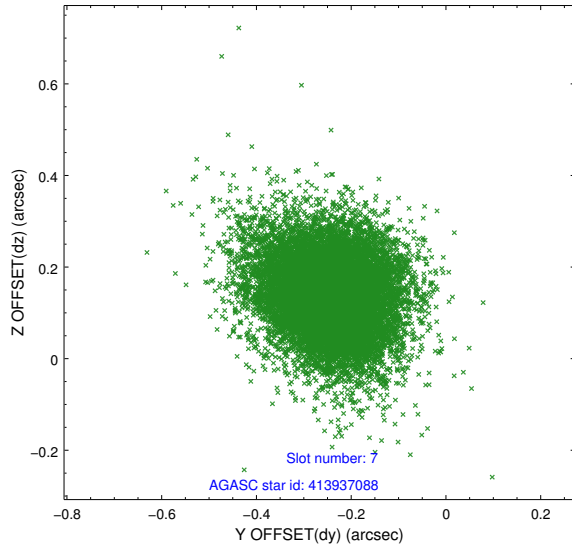
2.4.3 Slot 5



2.4.4 Slot 6

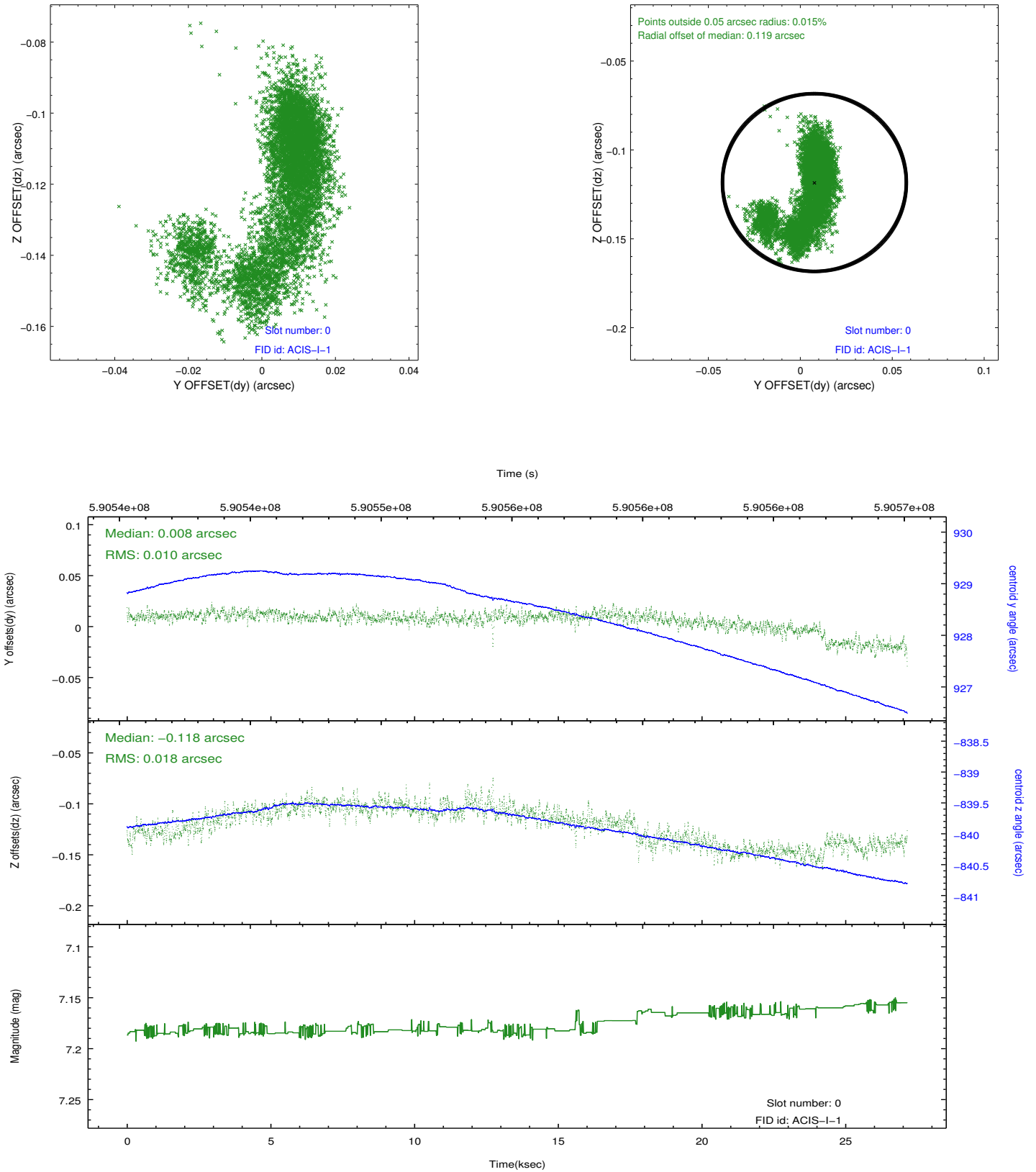


2.4.5 Slot 7

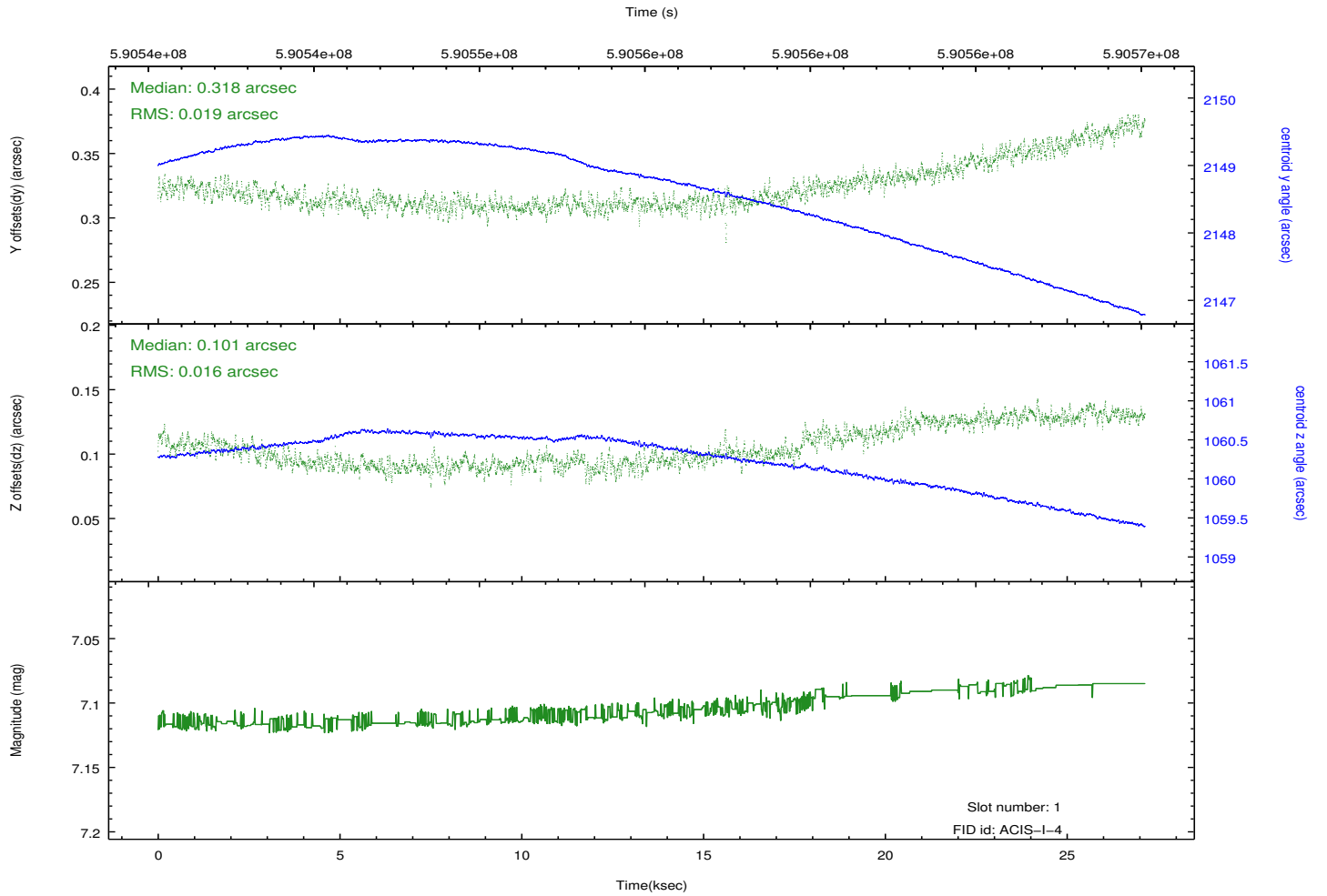
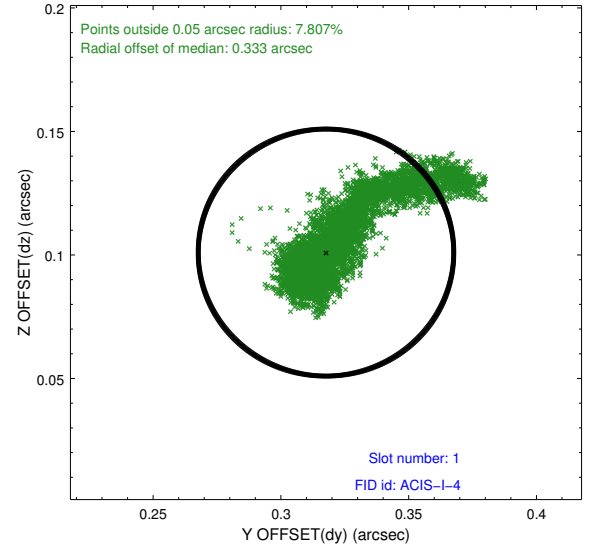
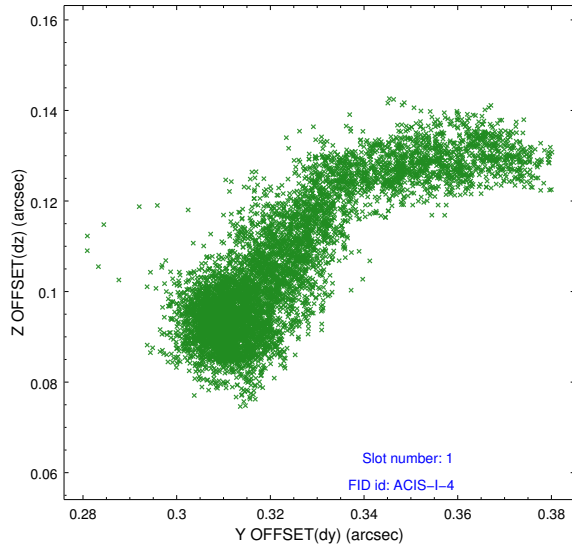


2.5 FID Slots

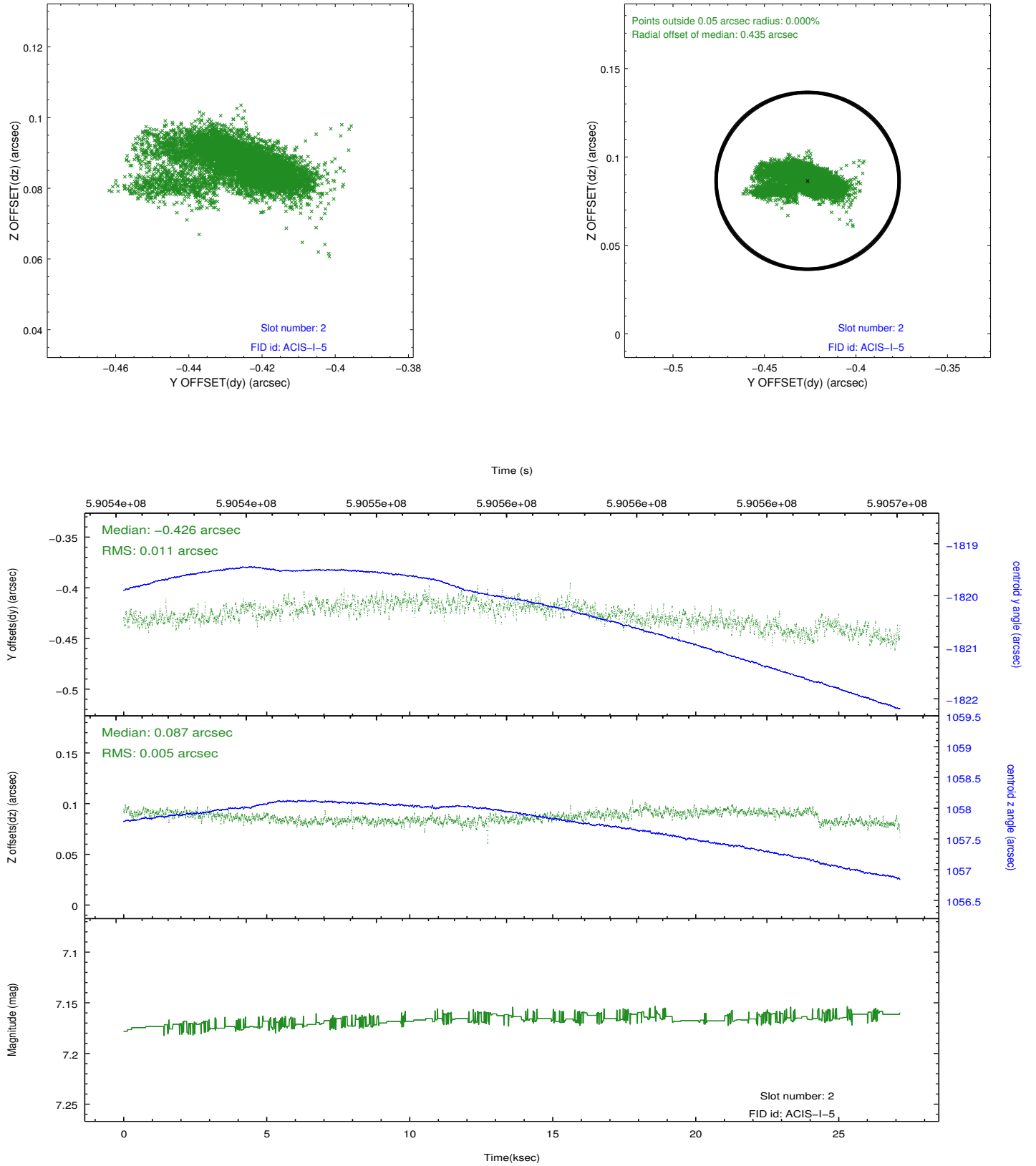
2.5.1 Slot 0



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)	2016.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.041300208092

A.2 Comments