

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 17143 - L2 Version 1
Chandra X-Ray Center

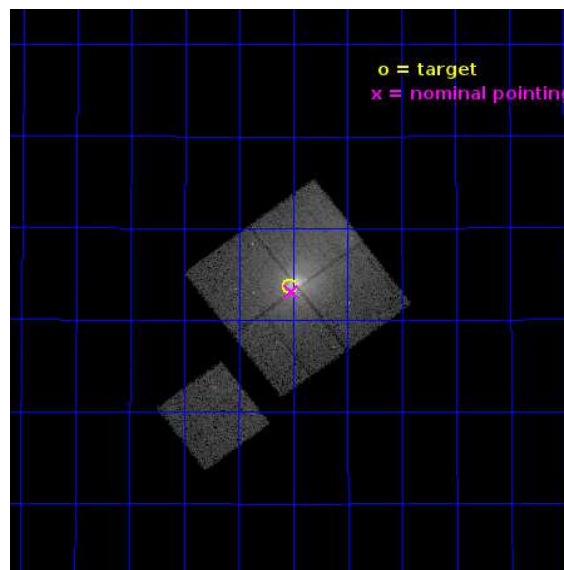
L2 Processing Date : Sep 3 2015

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1 Front

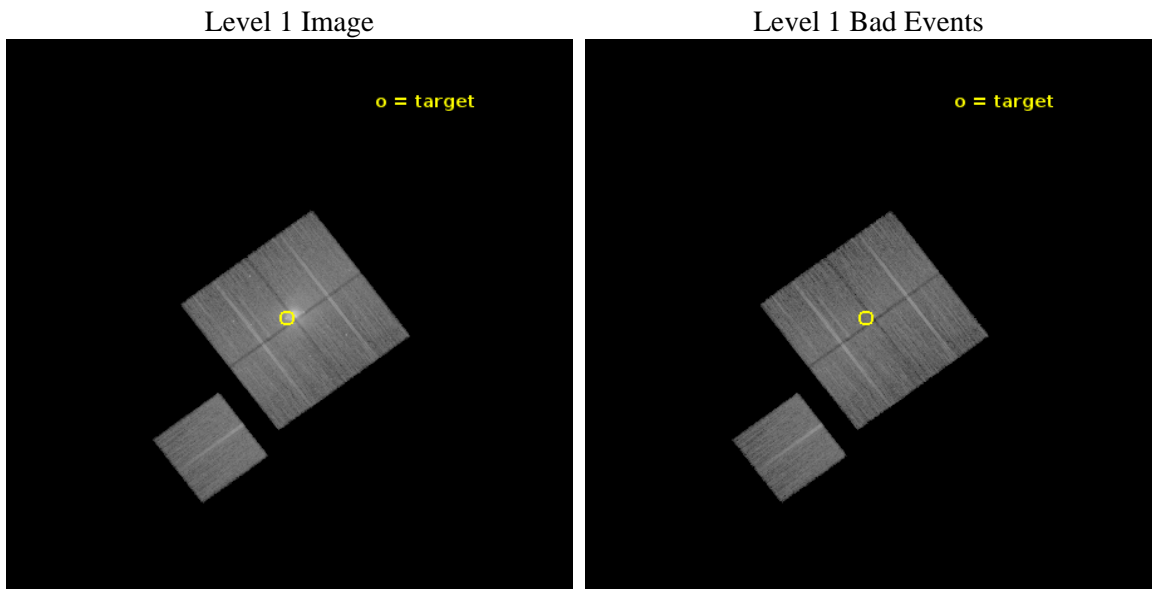
seq_num	703133	Sequence number
obs_id	17143	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - E Hotspot	Source name
dtcycle	0	
cycle	P	events from which 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	299.87928450156	Nominal RA [deg]
dec_nom	40.718313802389	Nominal Dec [deg]
roll_nom	233.21134411478	Nominal Roll [deg]
revision	1	Processing version of data
ontime	27419.500211	Sum of GTIs [s]
livetime	27061.244254801	Livetime [s]
ontime0	27419.500211	Sum of GTIs [s]
ontime1	27419.500211	Sum of GTIs [s]
ontime2	27410.077150106	Sum of GTIs [s]
ontime3	27419.500211	Sum of GTIs [s]
ontime6	27419.500211	Sum of GTIs [s]
l2events	200766	Number of level 2 events



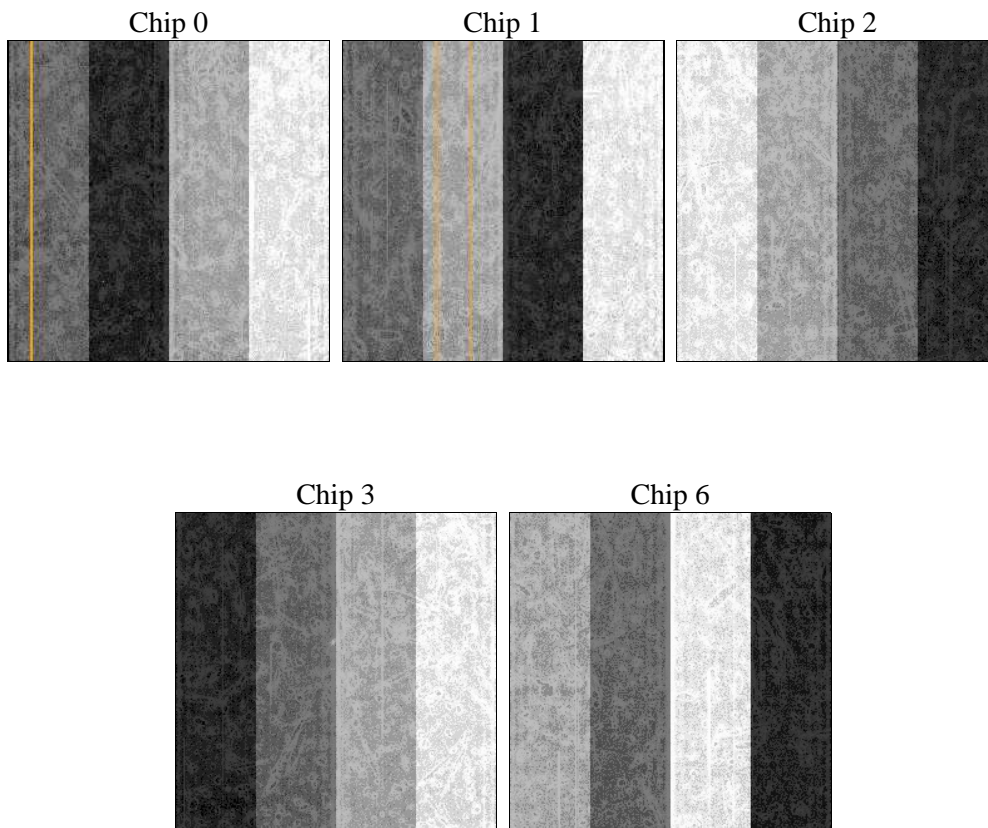
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	27362.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	27419.500211	Sum of GTIs [s]
caldbver	4.6.8	 	ontime0	27419.500211	Sum of GTIs [s]
date	2015-09-04T03:08:48	Date and time of file creation	ontime1	27419.500211	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	27410.077150106	Sum of GTIs [s]
			ontime3	27419.500211	Sum of GTIs [s]
			ontime6	27419.500211	Sum of GTIs [s]
			l1events	864447	Number of level 1 events

2.1.4 Events

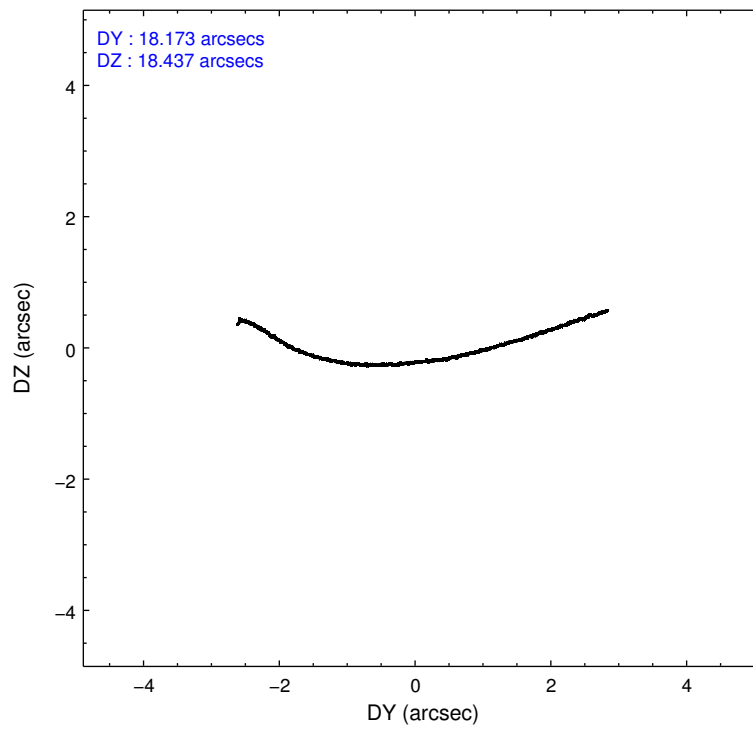
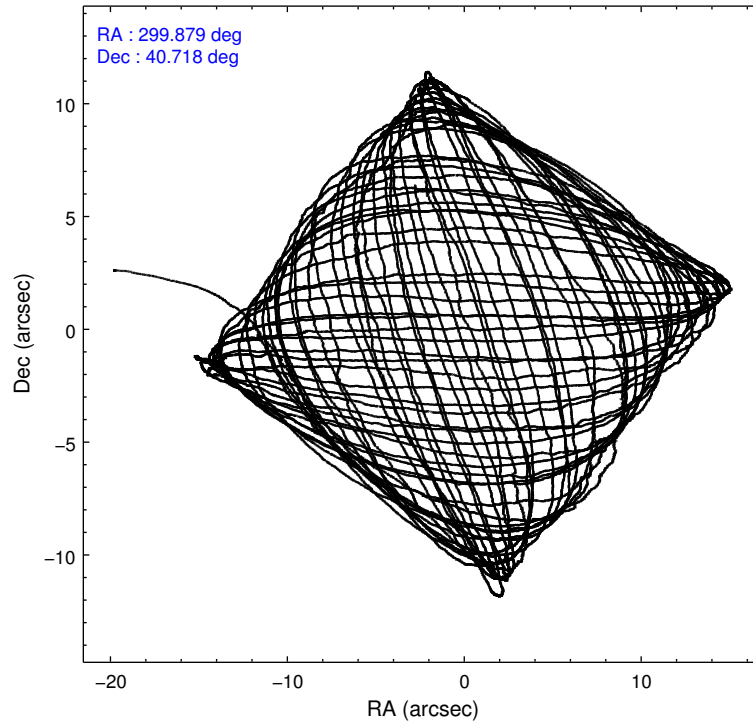
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	161383	210583	164430	180103	147948
rejected events	122590	124601	133175	131133	129902
rejected %	75%	59%	80%	72%	87%

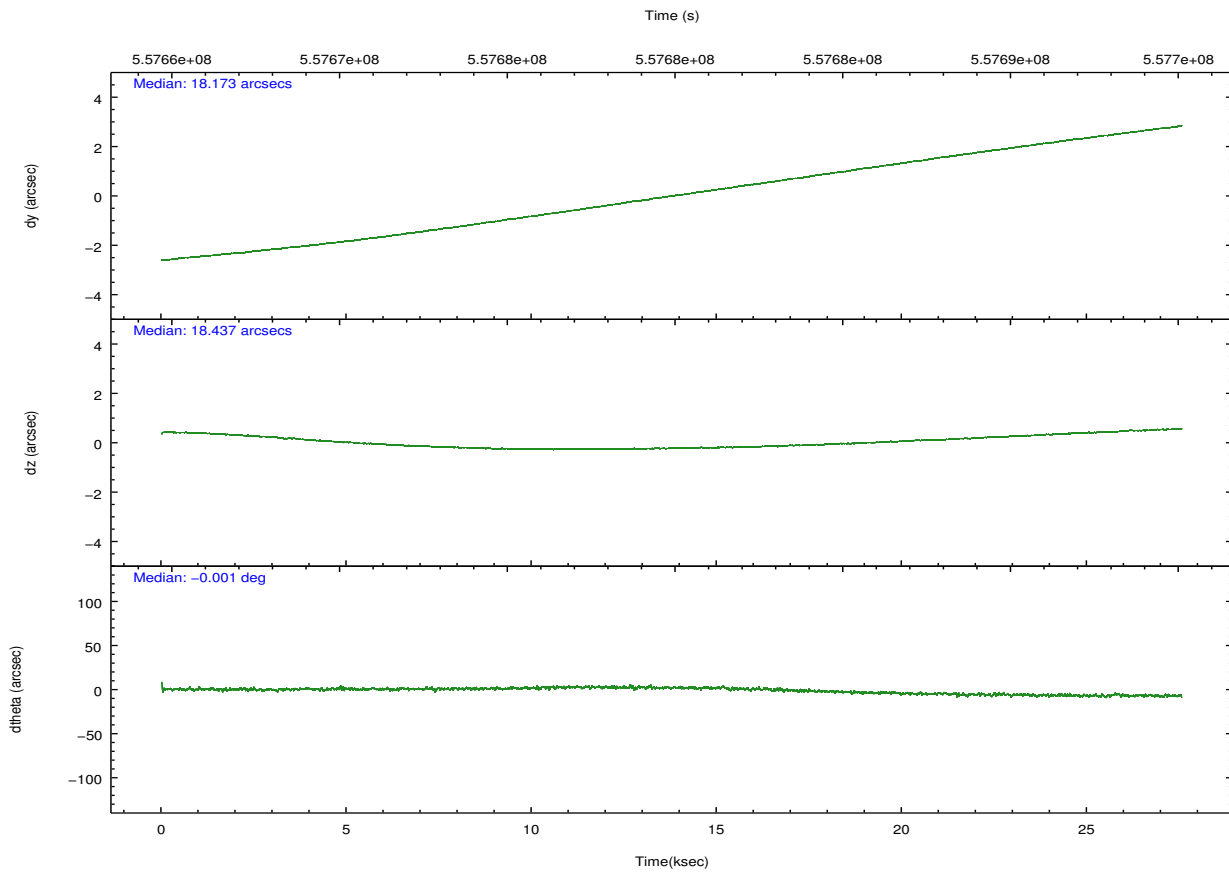
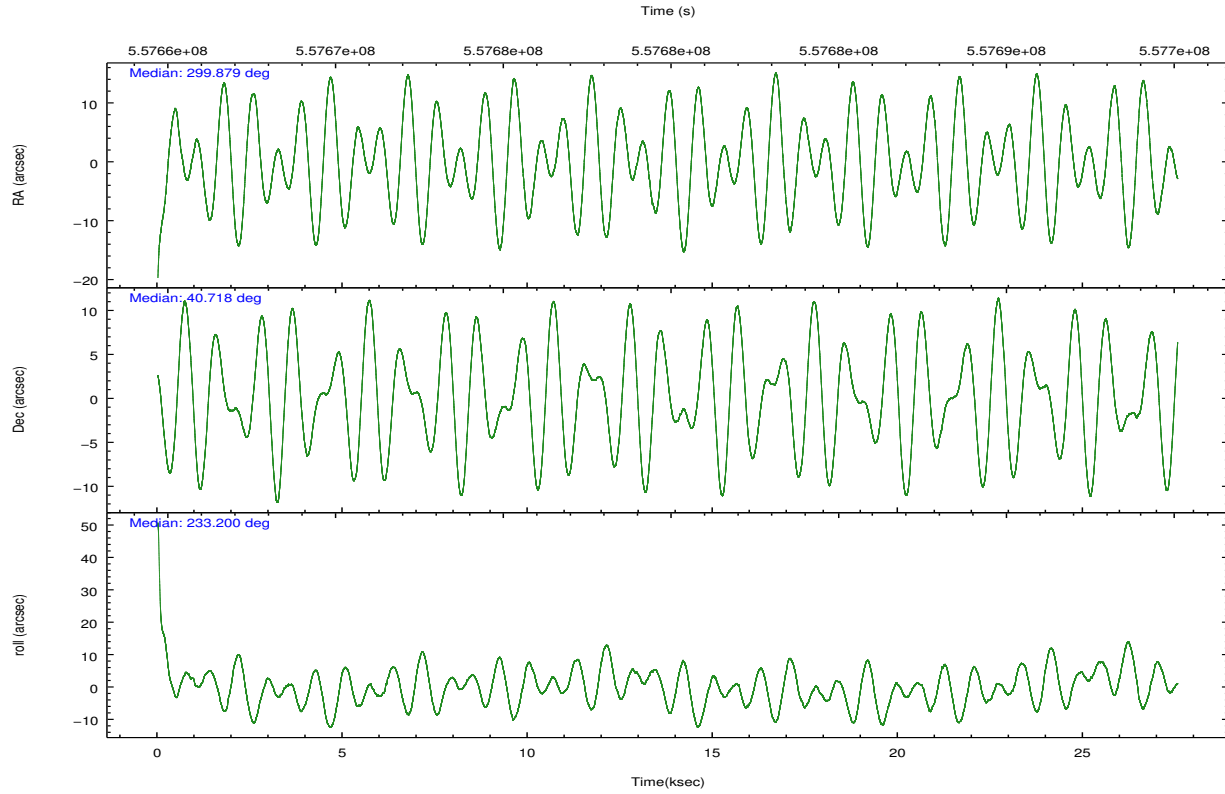
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	22853	55769	17746	31461	6428
	14%	26%	10%	17%	4%
grade 1 events	156	452	155	204	78
	0%	0%	0%	0%	0%
grade 2 events	6684	14245	5685	7151	4076
	4%	6%	3%	3%	2%
grade 3 events	2491	4191	2072	2891	1815
	1%	1%	1%	1%	1%
grade 4 events	2435	4162	2106	2899	1684
	1%	1%	1%	1%	1%
grade 5 events	6889	7925	6483	7777	7510
	4%	3%	3%	4%	5%
grade 6 events	4333	7623	3648	4575	4044
	2%	3%	2%	2%	2%
grade 7 events	115542	116216	126535	123145	122313
	71%	55%	76%	68%	82%

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	299.883470	299.8792845015644	CCD I2 on	Y	Y
[deg] Pointing Dec	40.745751	40.71831380238868	CCD I3 on	Y	Y
[deg] Pointing Roll	232.999914	233.2113441147785	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)	557666324.184000	557665080.60379	CCD S5 on	N	N
Observation start date	2015-09-03T11:17:36	2015-09-03T10:58:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	557693686.184000	557694769.7304699	On-chip summing requested	N	N
Observation end date	2015-09-03T18:53:38	2015-09-03T19:12:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





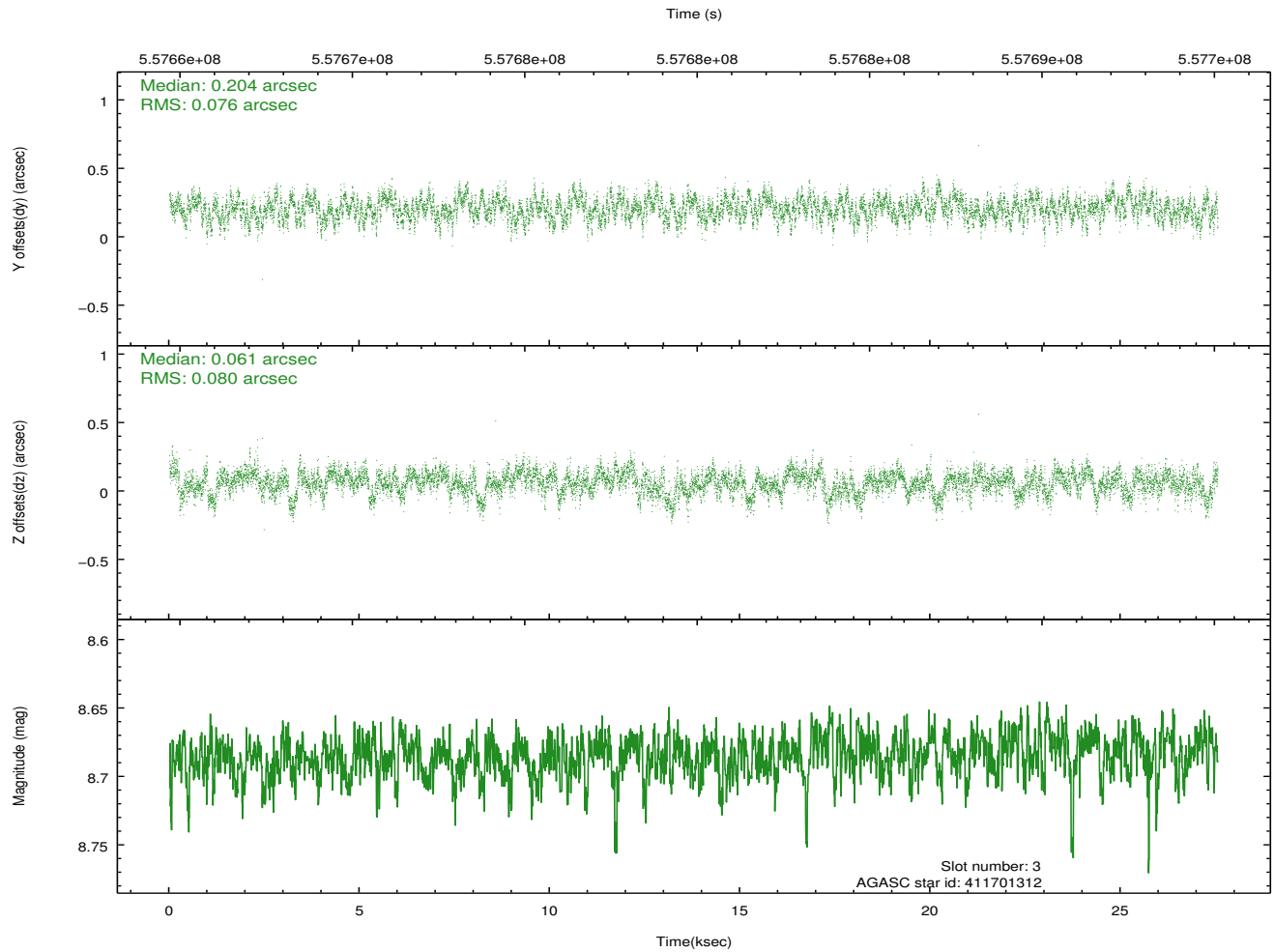
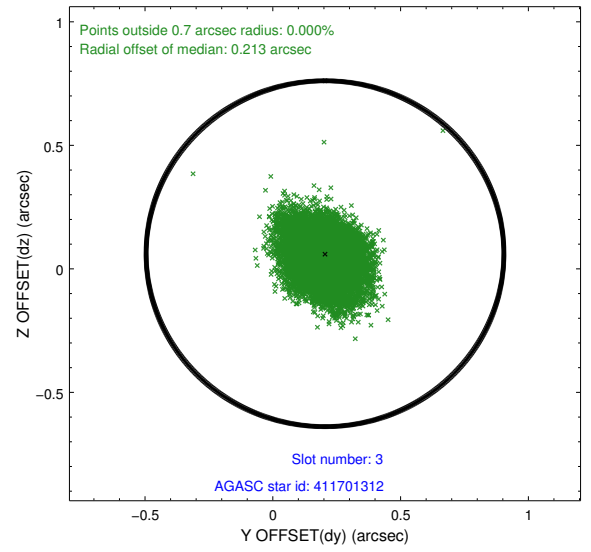
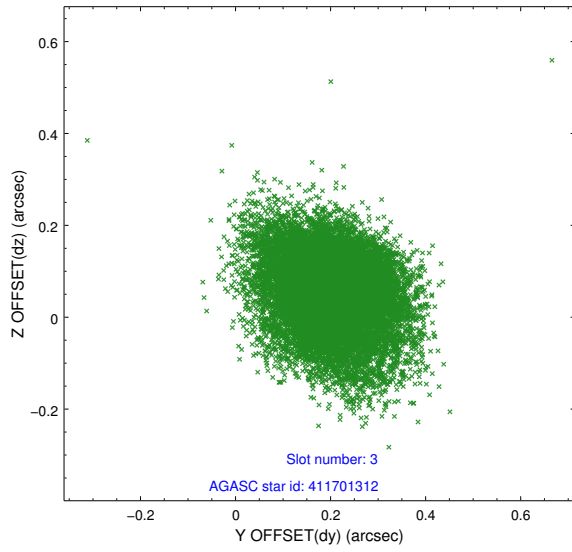
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	6719	-0.059	0.036	0.018	0.038	0.000000	0.000000	921.11	-842.15
1	FID		ACIS-I-2	7.14	6719	-0.221	-0.126	0.020	0.030	0.000000	0.000000	-773.10	-848.77
2	FID		ACIS-I-4	7.18	6718	0.185	0.161	0.023	0.055	0.000000	0.000000	2141.22	1057.71
3	GUIDE	used	411701312	8.69	13434	0.204	0.061	0.116	0.193	298.889956	40.820220	1403.28	-2331.49
4	GUIDE	used	411707968	7.25	13438	-0.100	-0.079	0.080	0.133	299.509933	40.926839	89.31	-1204.95
5	GUIDE	used	412240768	8.26	13434	-0.020	0.437	0.089	0.148	299.999696	41.280279	-1725.79	-906.71
6	GUIDE	used	413412048	9.03	13427	-0.027	-0.015	0.086	0.143	300.720827	40.967507	-2016.25	1330.77
7	GUIDE	used	413421016	8.71	13433	-0.064	-0.397	0.097	0.159	300.612426	40.446254	-347.58	2238.84

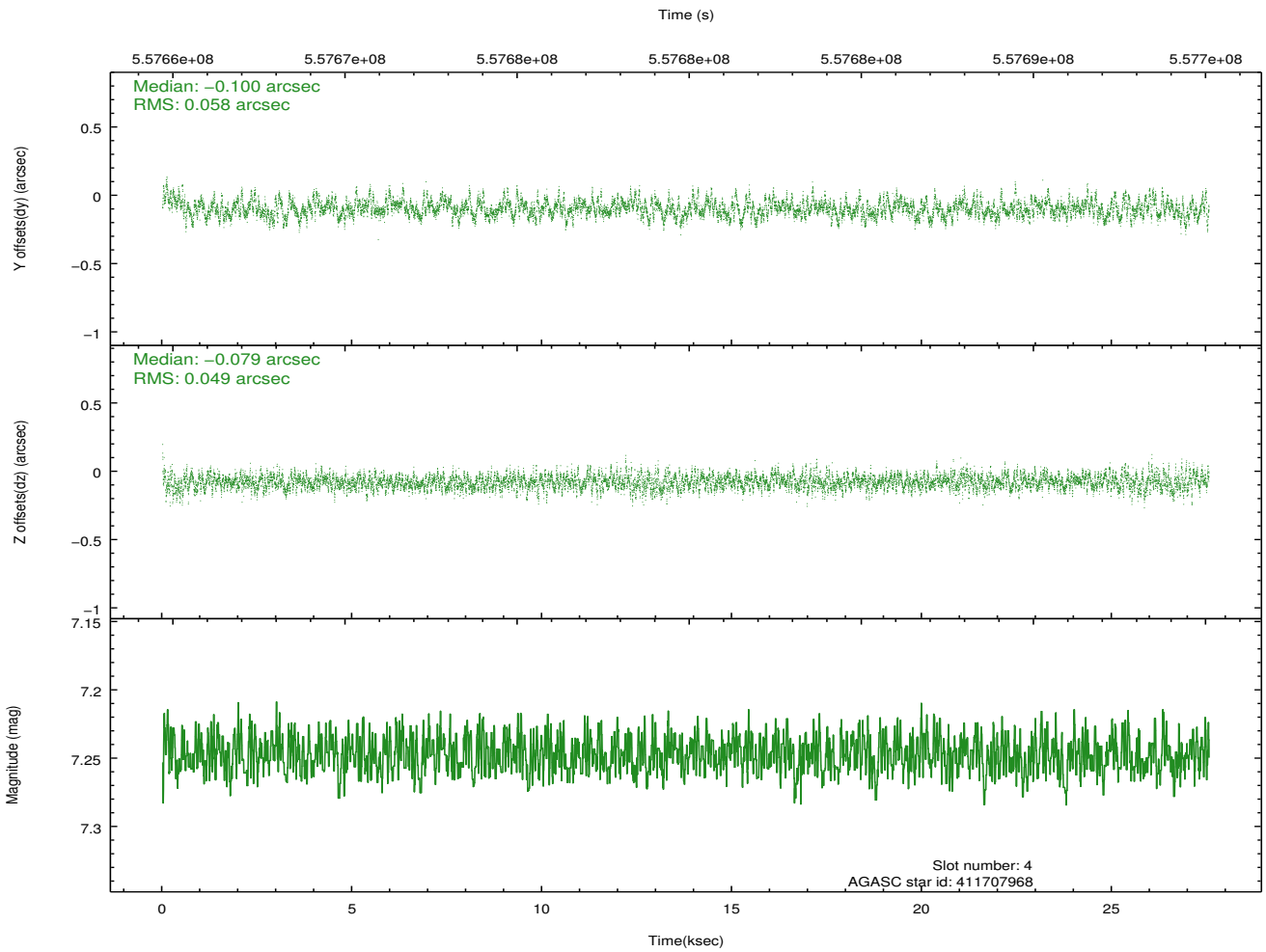
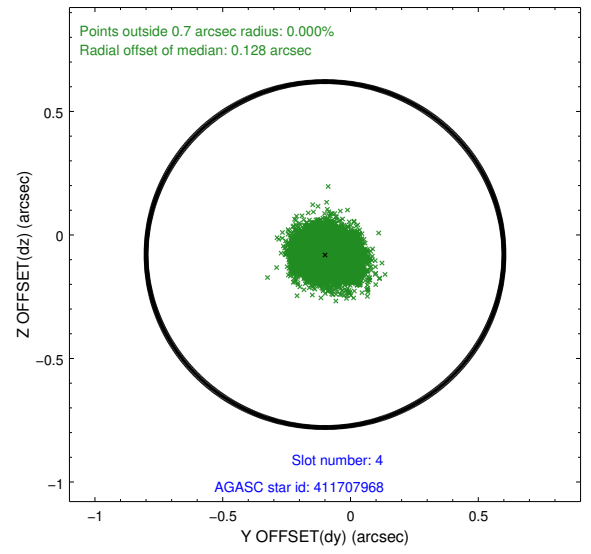
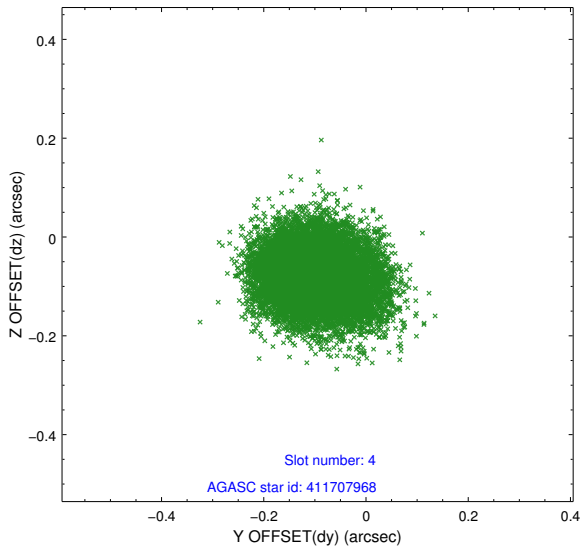
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2.4 Star Slots

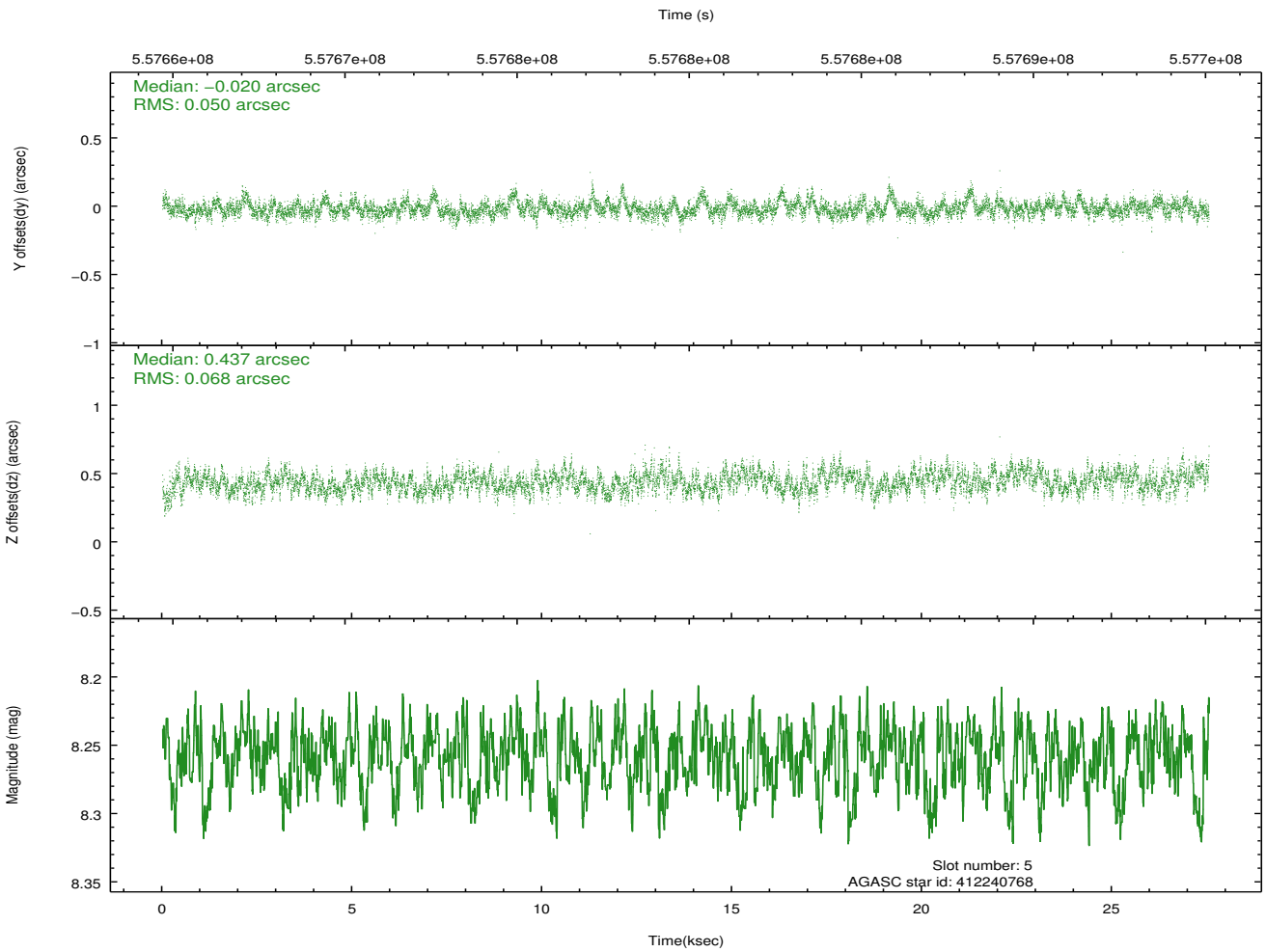
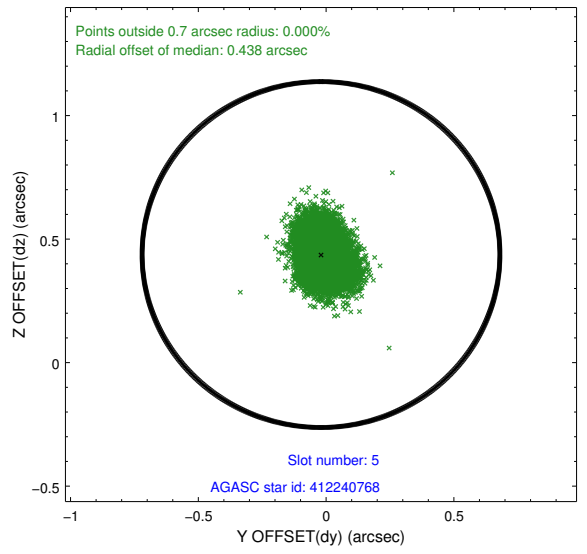
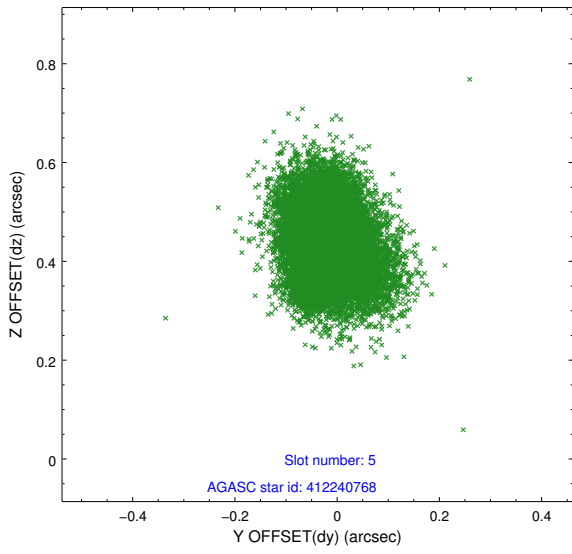
2.4.1 Slot 3



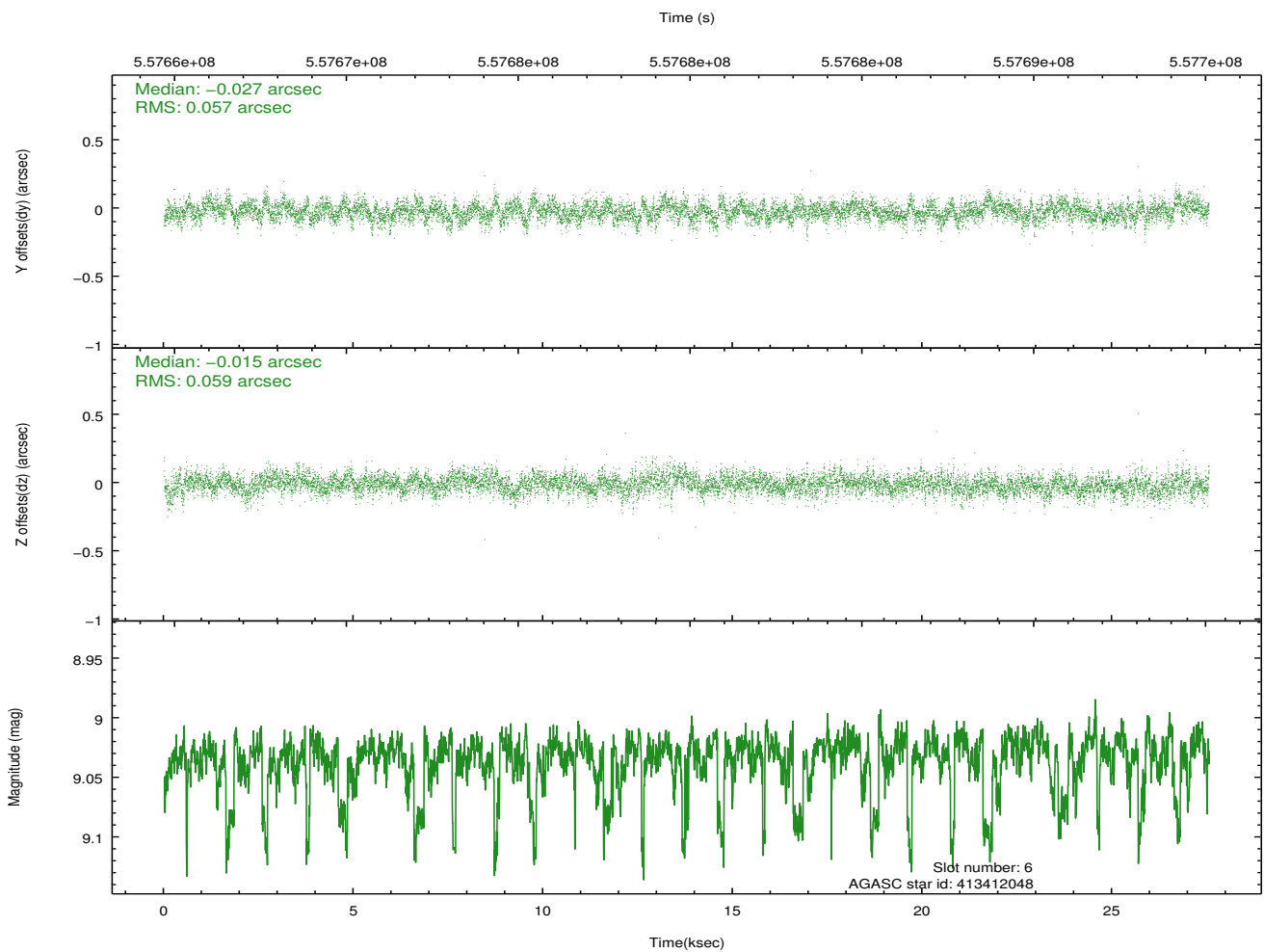
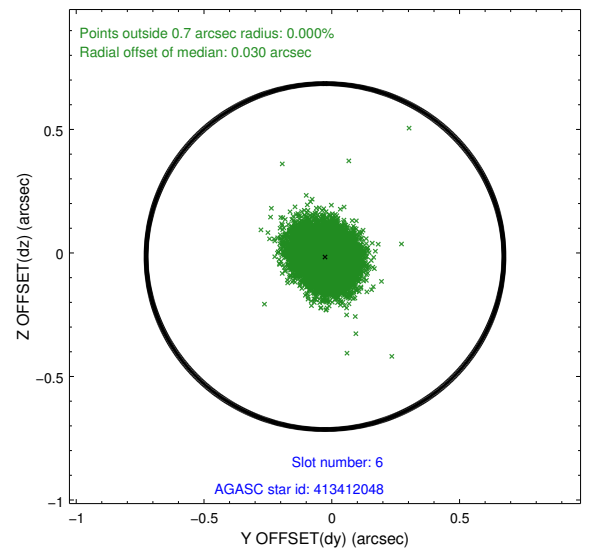
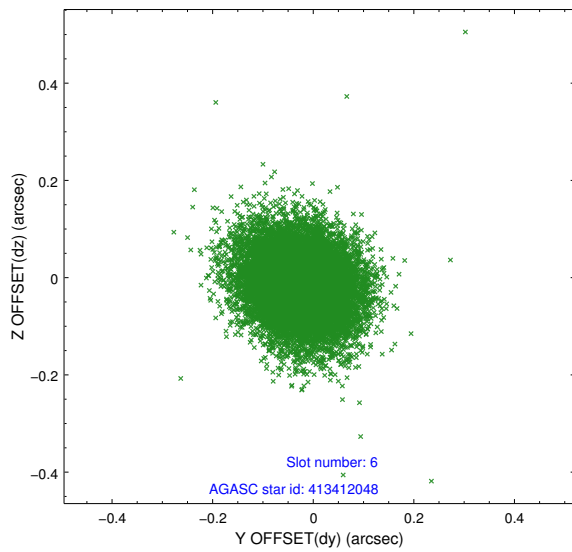
2.4.2 Slot 4



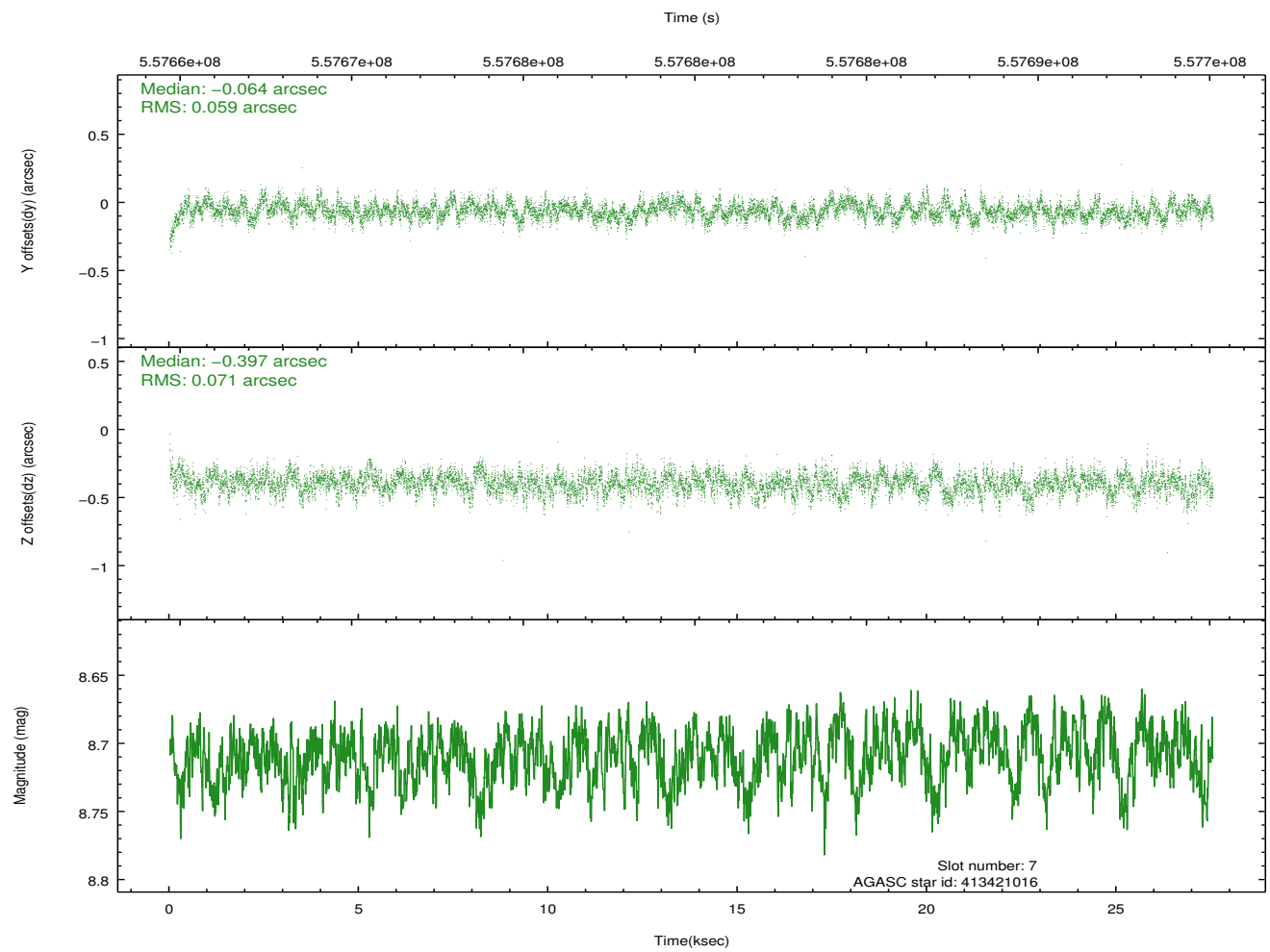
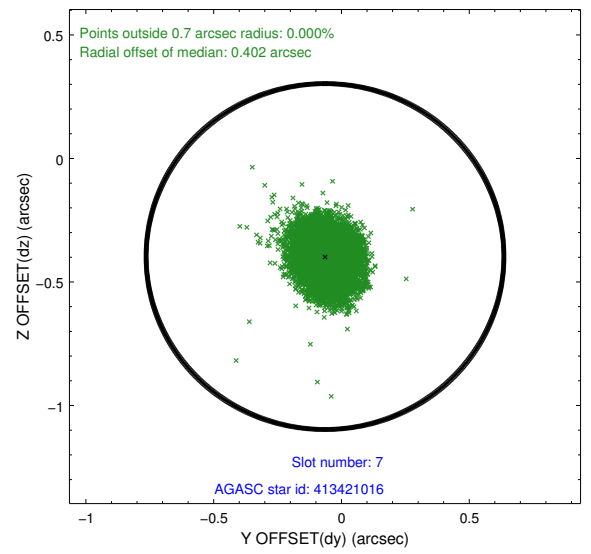
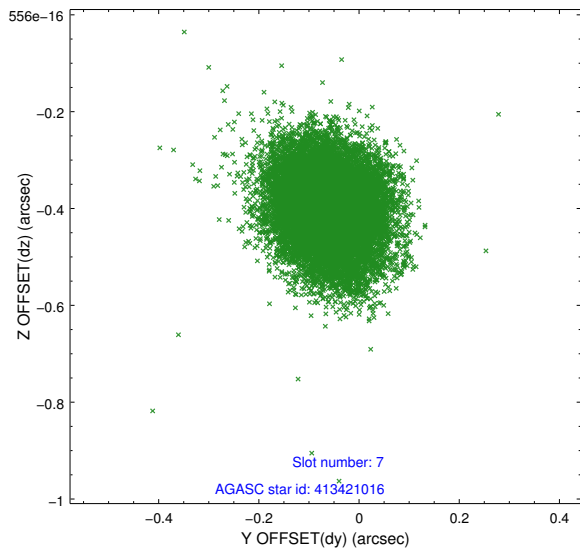
2.4.3 Slot 5



2.4.4 Slot 6

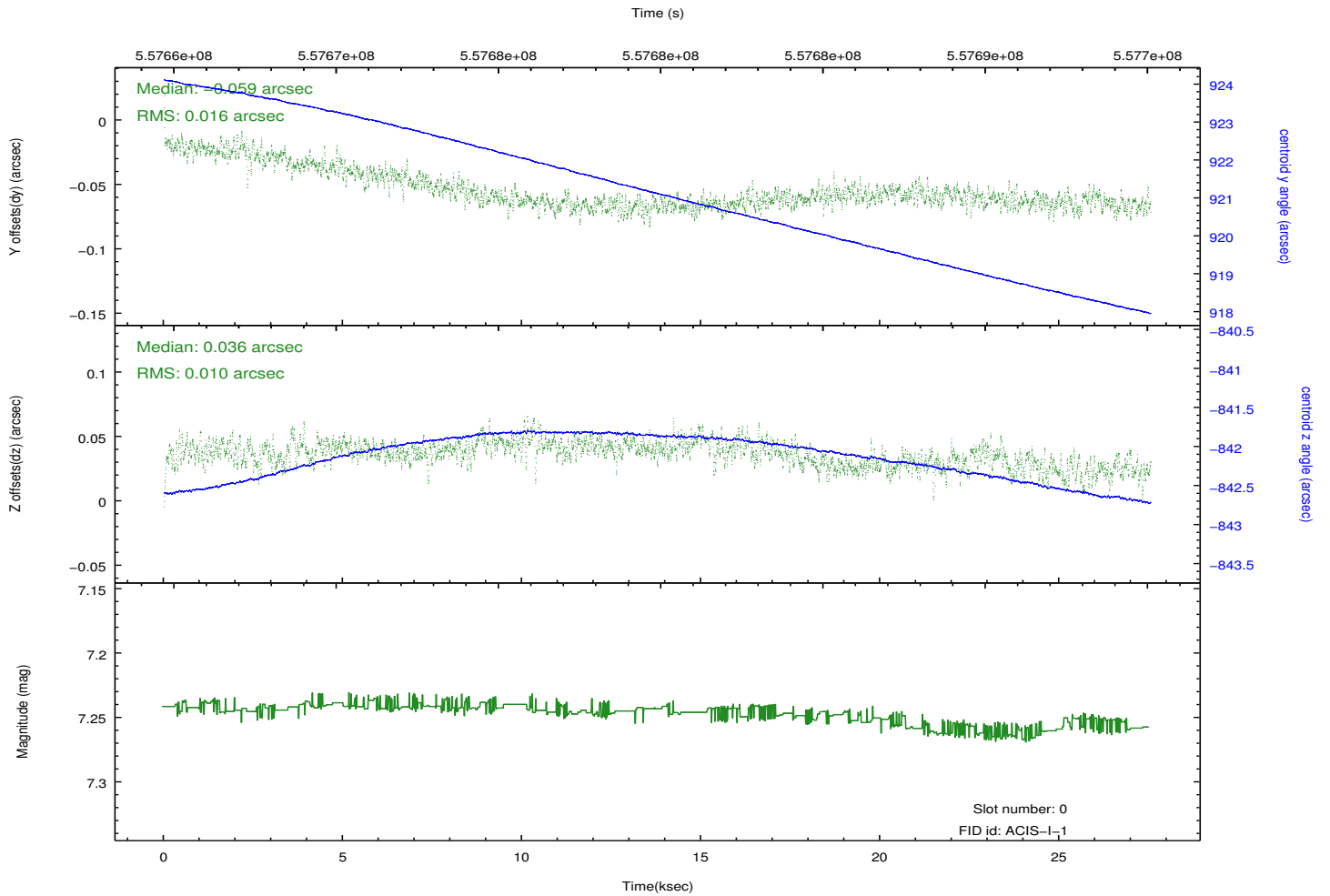
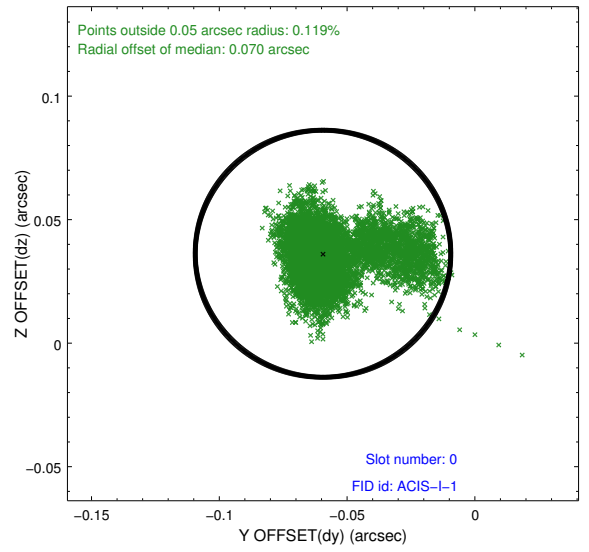
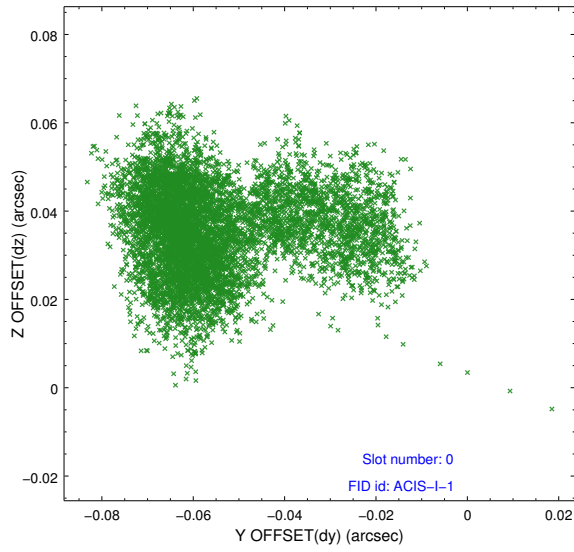


2.4.5 Slot 7

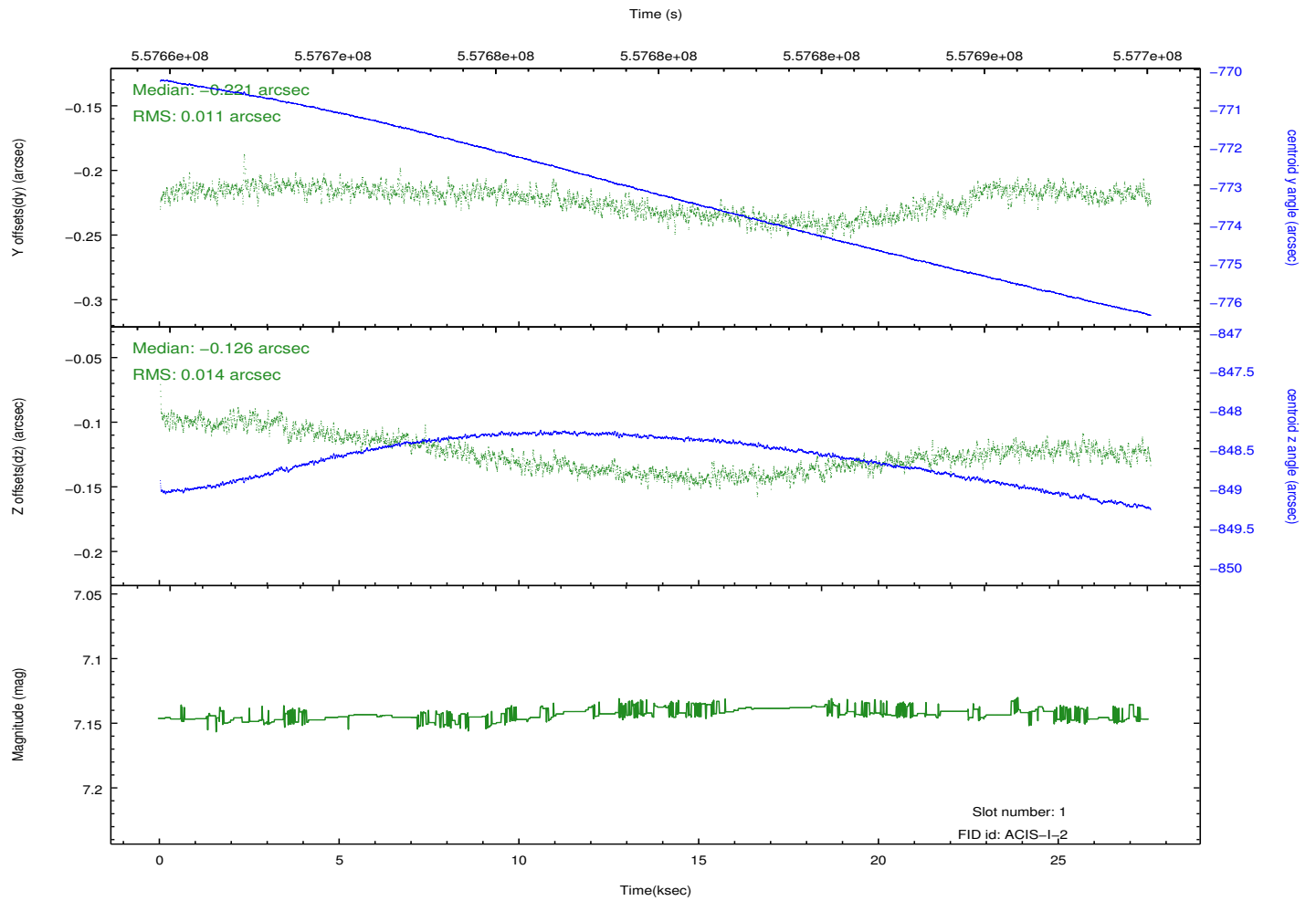
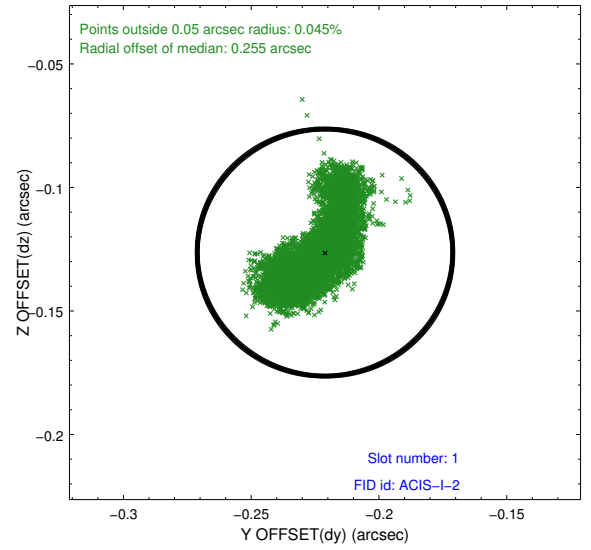
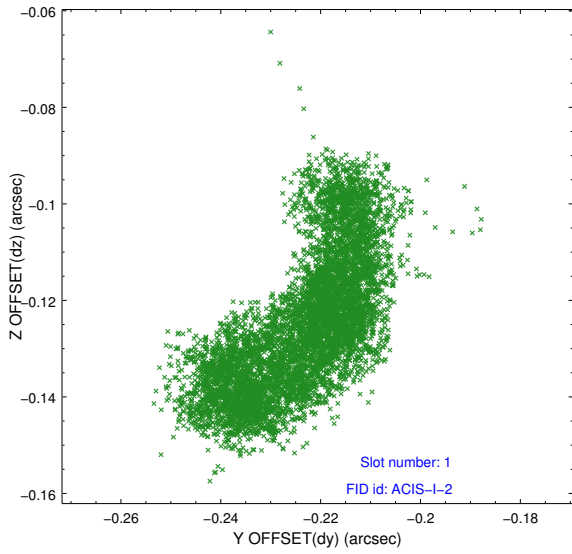


2.5 FID Slots

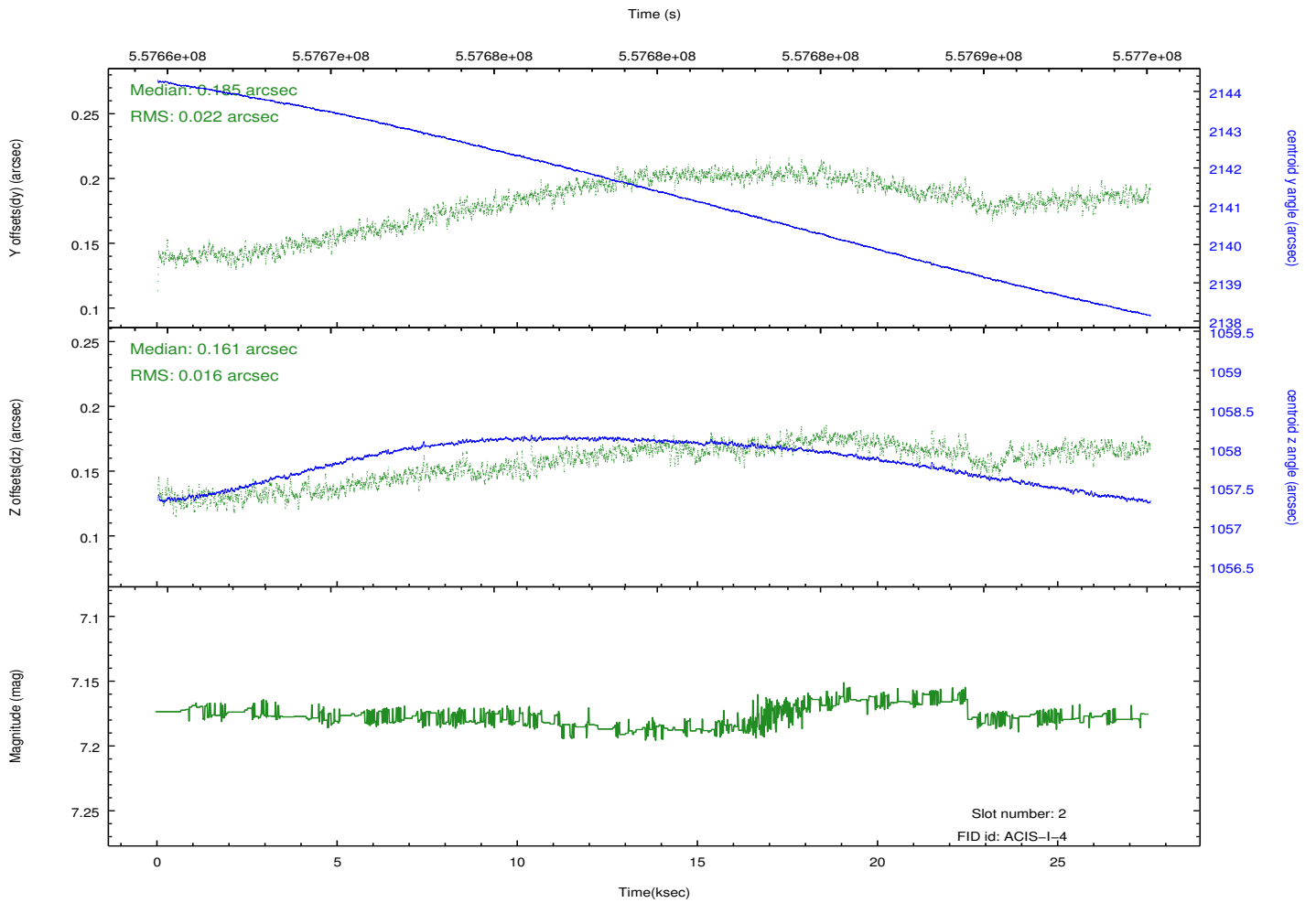
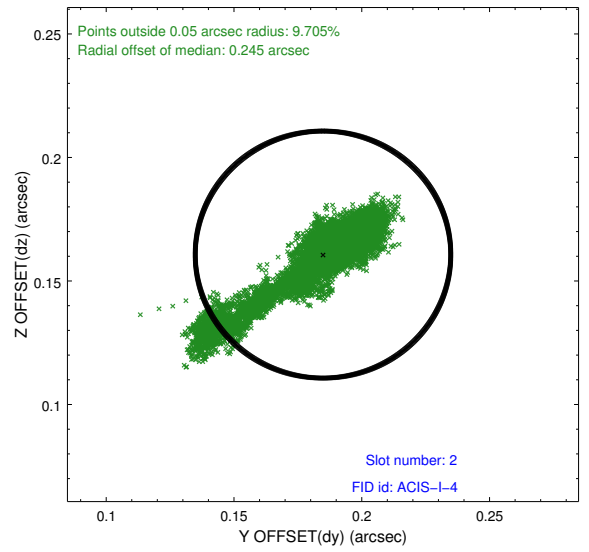
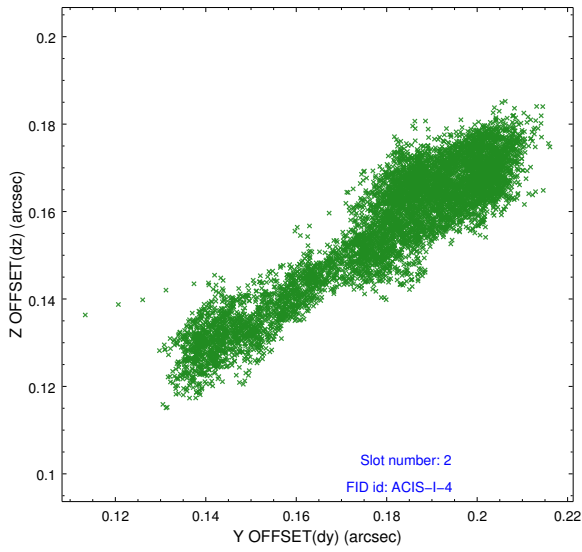
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.09.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.419500211

A.2 Comments