

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17508 - L2 Version 1
Chandra X-Ray Center

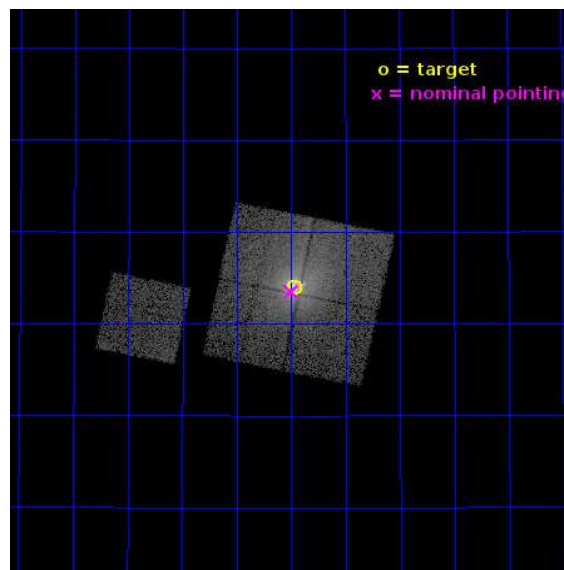
L2 Processing Date : Oct 28 2015

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1 Front

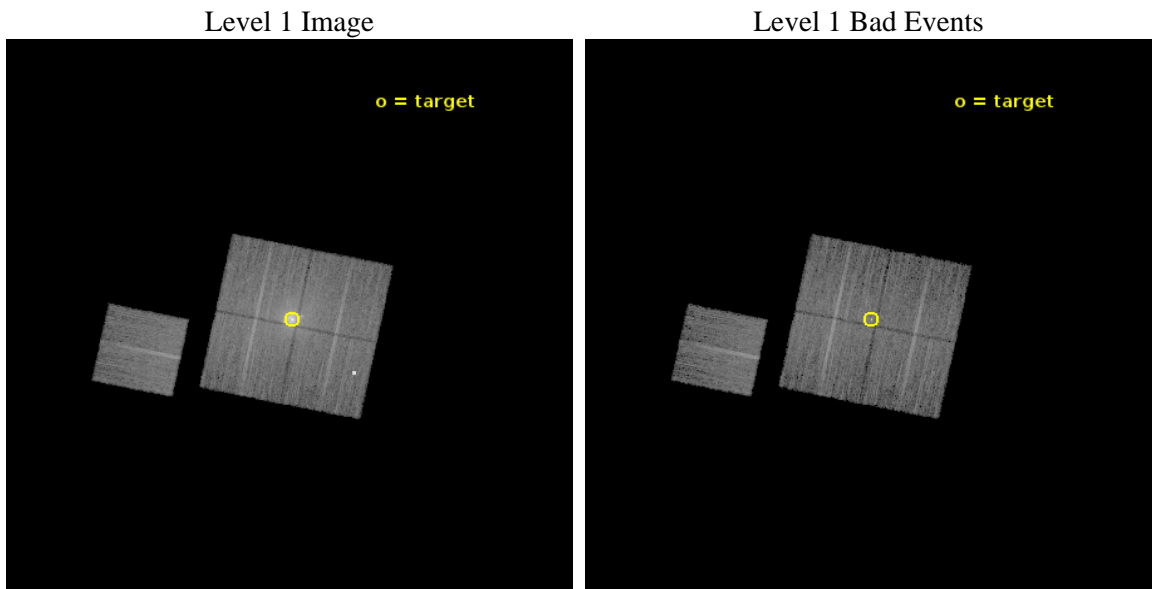
seq_num	703131	Sequence number
obs_id	17508	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - Nucleus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.867917	Observer's specified target RA [deg]
dec_targ	40.733889	Observer's specified target Dec [deg]
ra_nom	299.87474072705	Nominal RA [deg]
dec_nom	40.725254313158	Nominal Dec [deg]
roll_nom	281.70427372941	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15074.773280501	Sum of GTIs [s]
livetime	14877.810269705	Livetime [s]
ontime0	15071.509150386	Sum of GTIs [s]
ontime1	15074.691200495	Sum of GTIs [s]
ontime2	15074.732240558	Sum of GTIs [s]
ontime3	15074.773280501	Sum of GTIs [s]
ontime6	15074.609120488	Sum of GTIs [s]
l2events	116459	Number of level 2 events



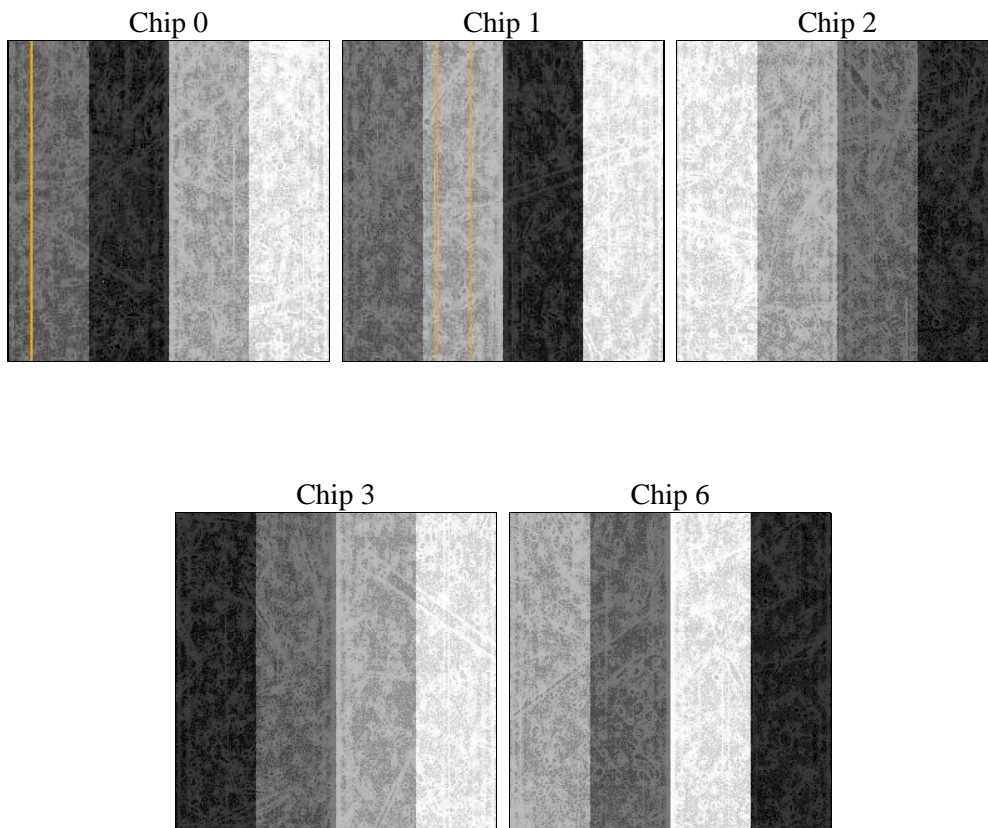
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	15074.773280501	Sum of GTIs [s]
caldbver	4.6.10a	 	ontime0	15071.509150386	Sum of GTIs [s]
date	2015-10-29T02:22:29	Date and time of file creation	ontime1	15074.691200495	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	15074.732240558	Sum of GTIs [s]
			ontime3	15074.773280501	Sum of GTIs [s]
			ontime6	15074.609120488	Sum of GTIs [s]
			l1events	493698	Number of level 1 events

2.1.4 Events

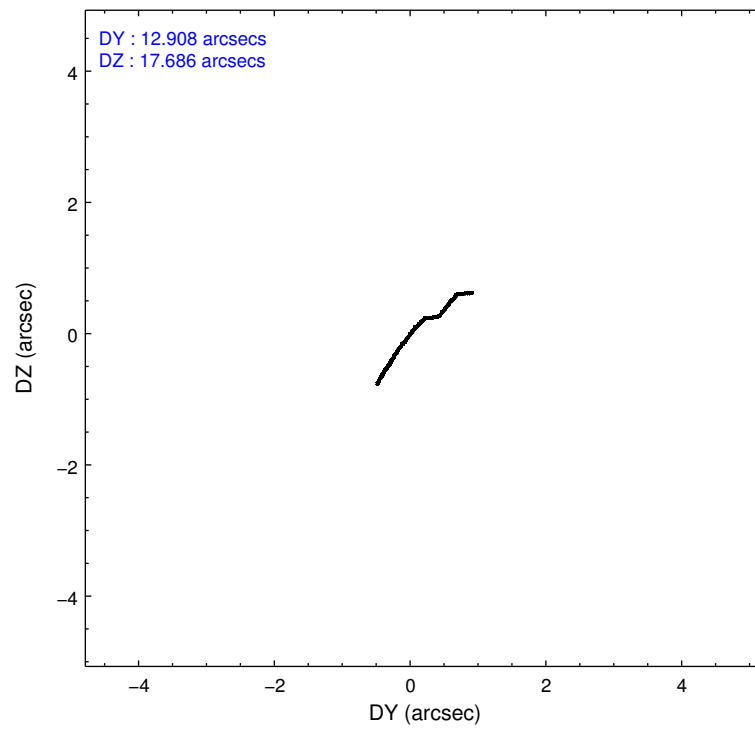
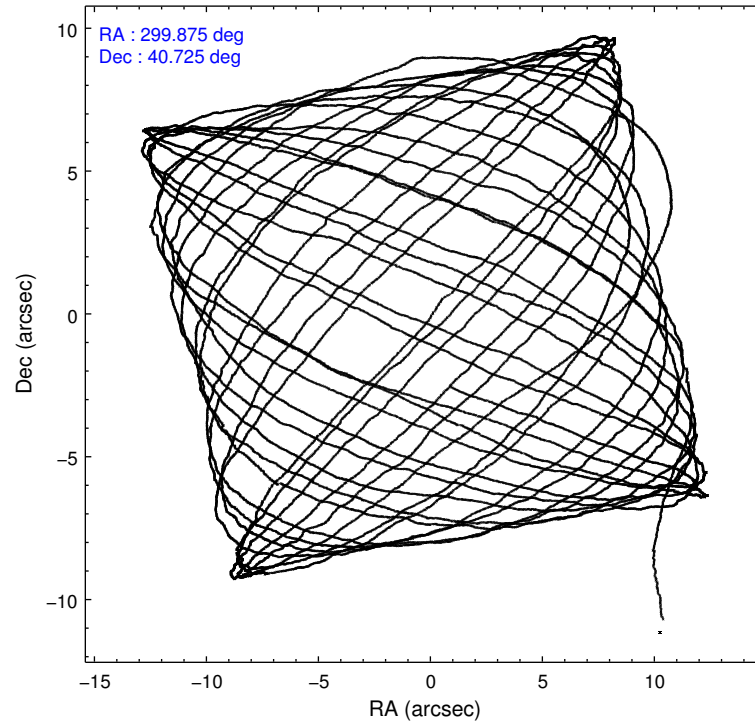
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	92743	93642	95755	128016	83542
rejected events	68616	64749	77441	73541	73628
rejected %	73%	69%	80%	57%	88%

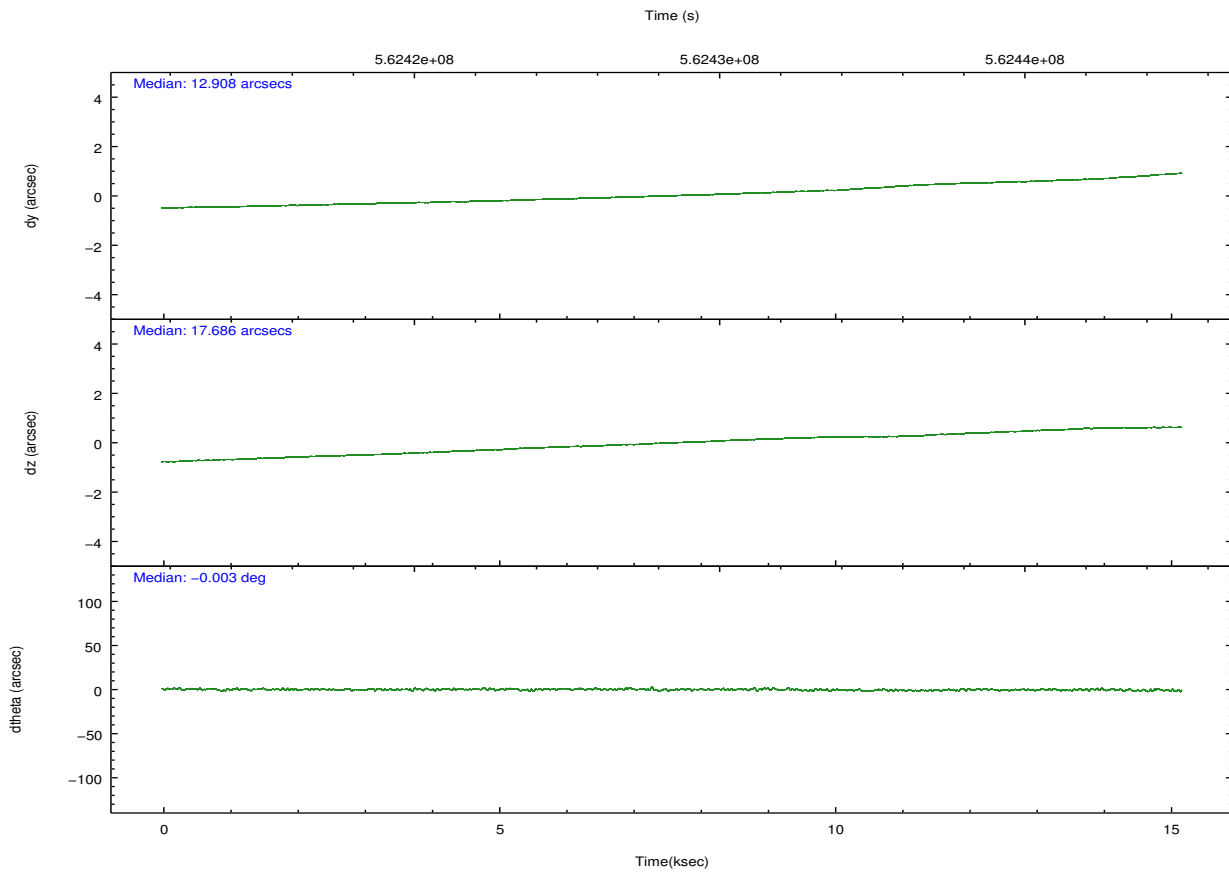
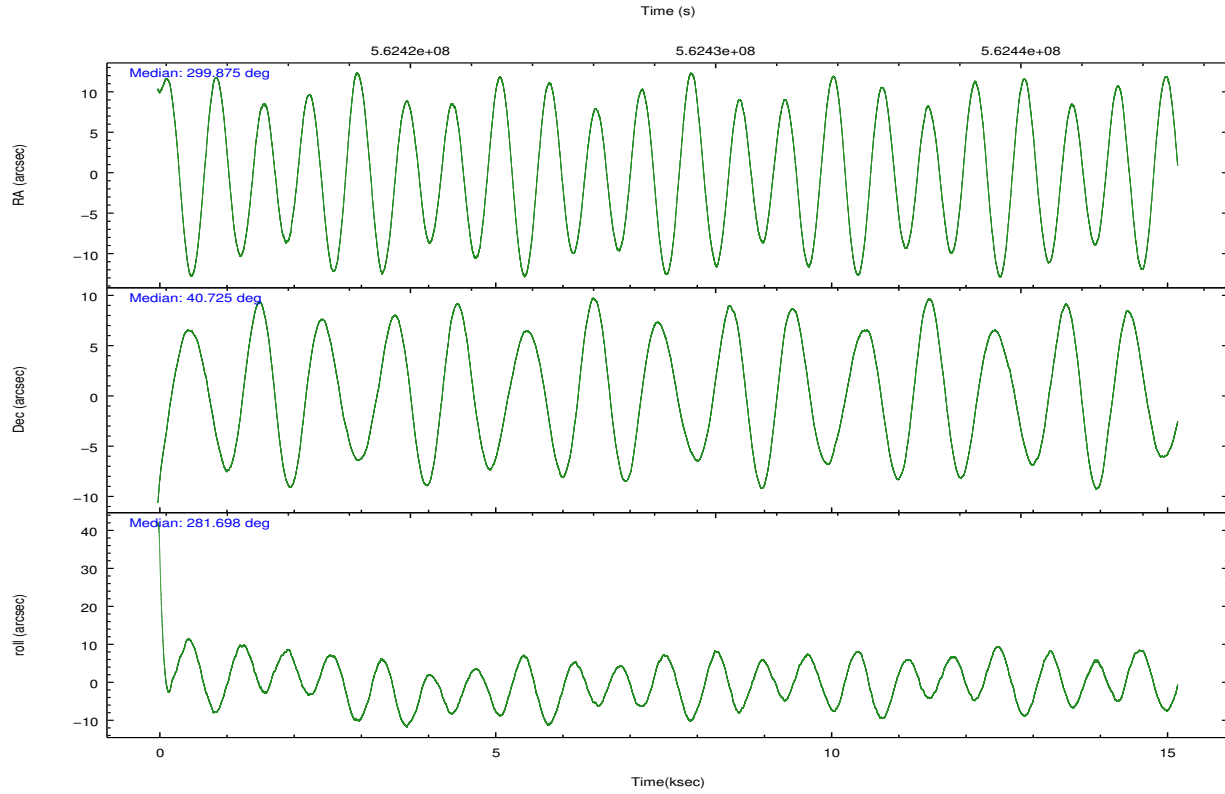
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	16737	17490	10677	38443	3483
	18%	18%	11%	30%	4%
grade 1 events	97	82	80	435	37
	0%	0%	0%	0%	0%
grade 2 events	3018	5223	3111	6904	2239
	3%	5%	3%	5%	2%
grade 3 events	1128	1589	1267	2602	954
	1%	1%	1%	2%	1%
grade 4 events	1088	1555	1224	2488	920
	1%	1%	1%	1%	1%
grade 5 events	3563	3932	3472	4538	3942
	3%	4%	3%	3%	4%
grade 6 events	2169	3057	2042	4064	2323
	2%	3%	2%	3%	2%
grade 7 events	64943	60714	73882	68542	69644
	70%	64%	77%	53%	83%

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	299.850355	299.8747407270479	CCD I2 on	Y	Y
[deg] Pointing Dec	40.745804	40.72525431315795	CCD I3 on	Y	Y
[deg] Pointing Roll	281.511467	281.7042737294052	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)	562421783.184000	562420142.76156	CCD S5 on	N	N
Observation start date	2015-10-28T12:15:15	2015-10-28T11:49:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	562436783.184000	562437476.53754	On-chip summing requested	N	N
Observation end date	2015-10-28T16:25:15	2015-10-28T16:37:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





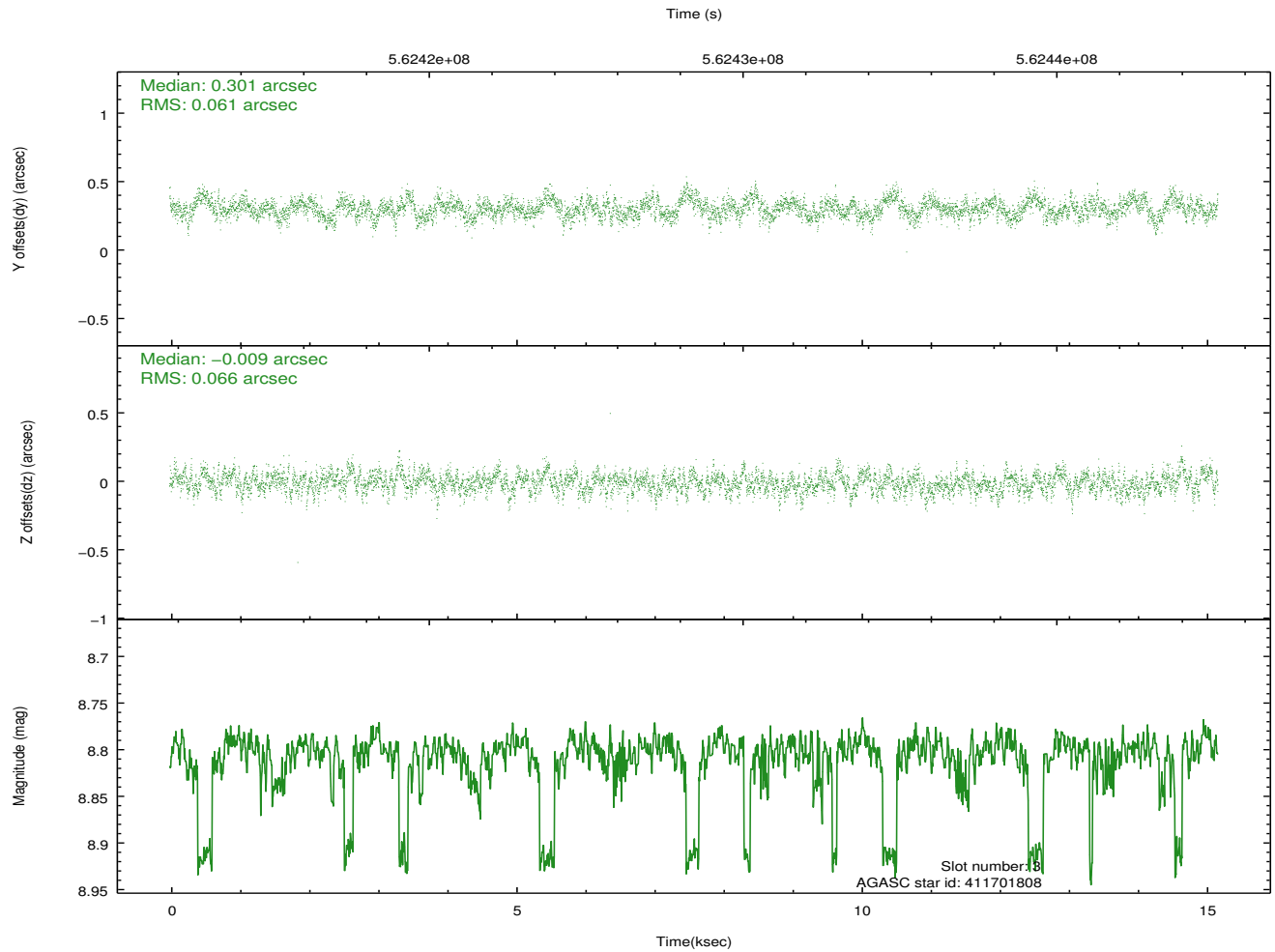
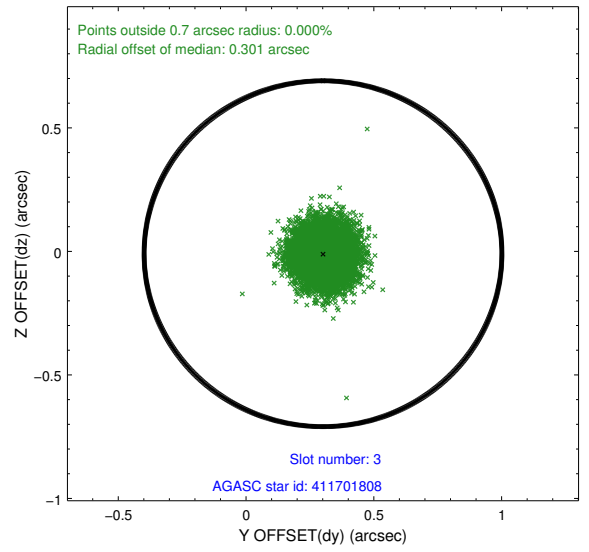
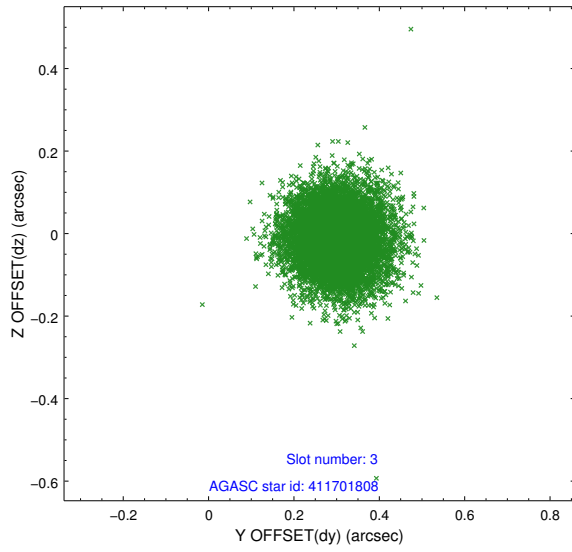
Slot Statistics

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	3703	-0.146	-0.089	0.023	0.040	0.000000	0.000000	926.39	-841.41
1	FID		ACIS-I-4	7.17	3703	0.171	0.149	0.012	0.018	0.000000	0.000000	2146.89	1058.50
2	FID		ACIS-I-6	7.25	3703	-0.122	0.005	0.022	0.037	0.000000	0.000000	392.67	1700.86
3	GUIDE	used	411701808	8.80	7406	0.301	-0.009	0.096	0.153	299.419536	40.880184	-710.10	-1051.93
4	GUIDE	used	411707968	7.26	7405	-0.050	0.114	0.094	0.148	299.509933	40.926839	-825.08	-776.72
5	GUIDE	used	412240768	8.26	7403	-0.024	0.191	0.074	0.117	299.999696	41.280279	-1804.96	779.96
6	GUIDE	used	413421624	8.69	7401	-0.062	-0.099	0.105	0.168	300.399768	40.893051	-225.85	1572.06
7	GUIDE	used	413421016	8.67	7399	-0.152	-0.195	0.103	0.170	300.612426	40.446254	1464.66	1832.53

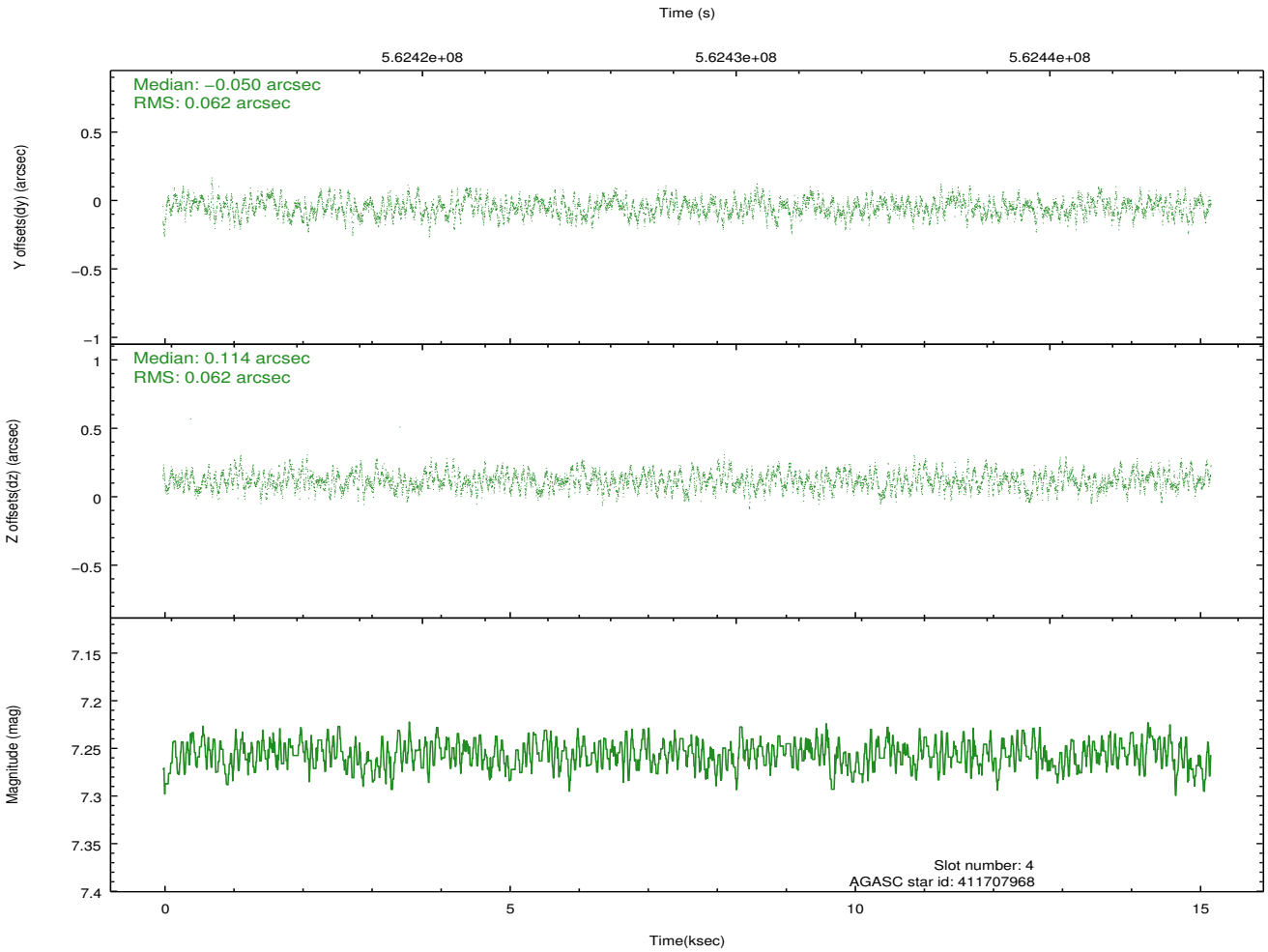
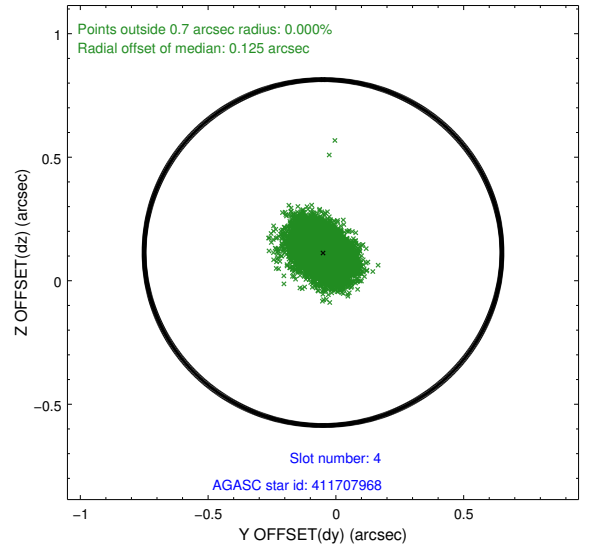
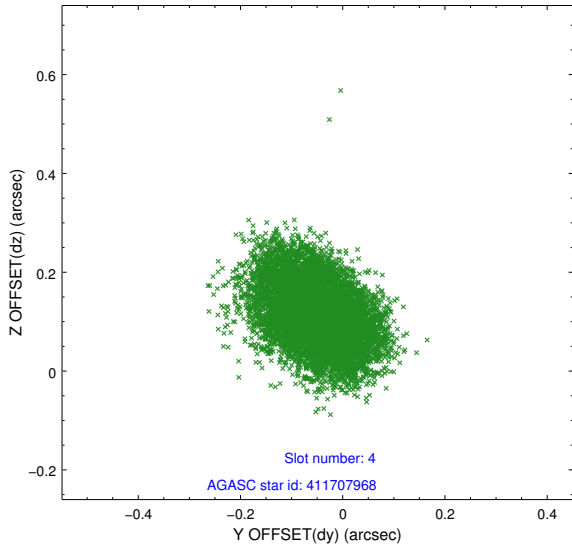
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2.4 Star Slots

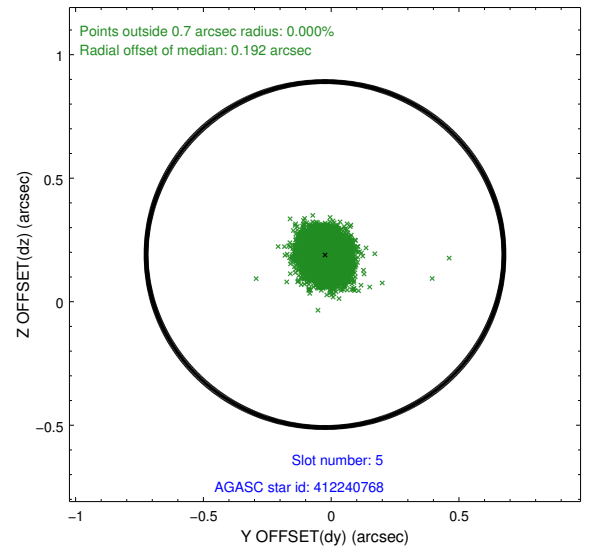
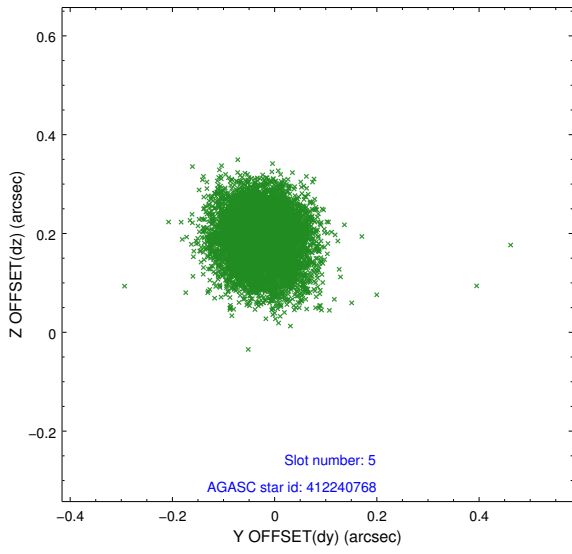
2.4.1 Slot 3



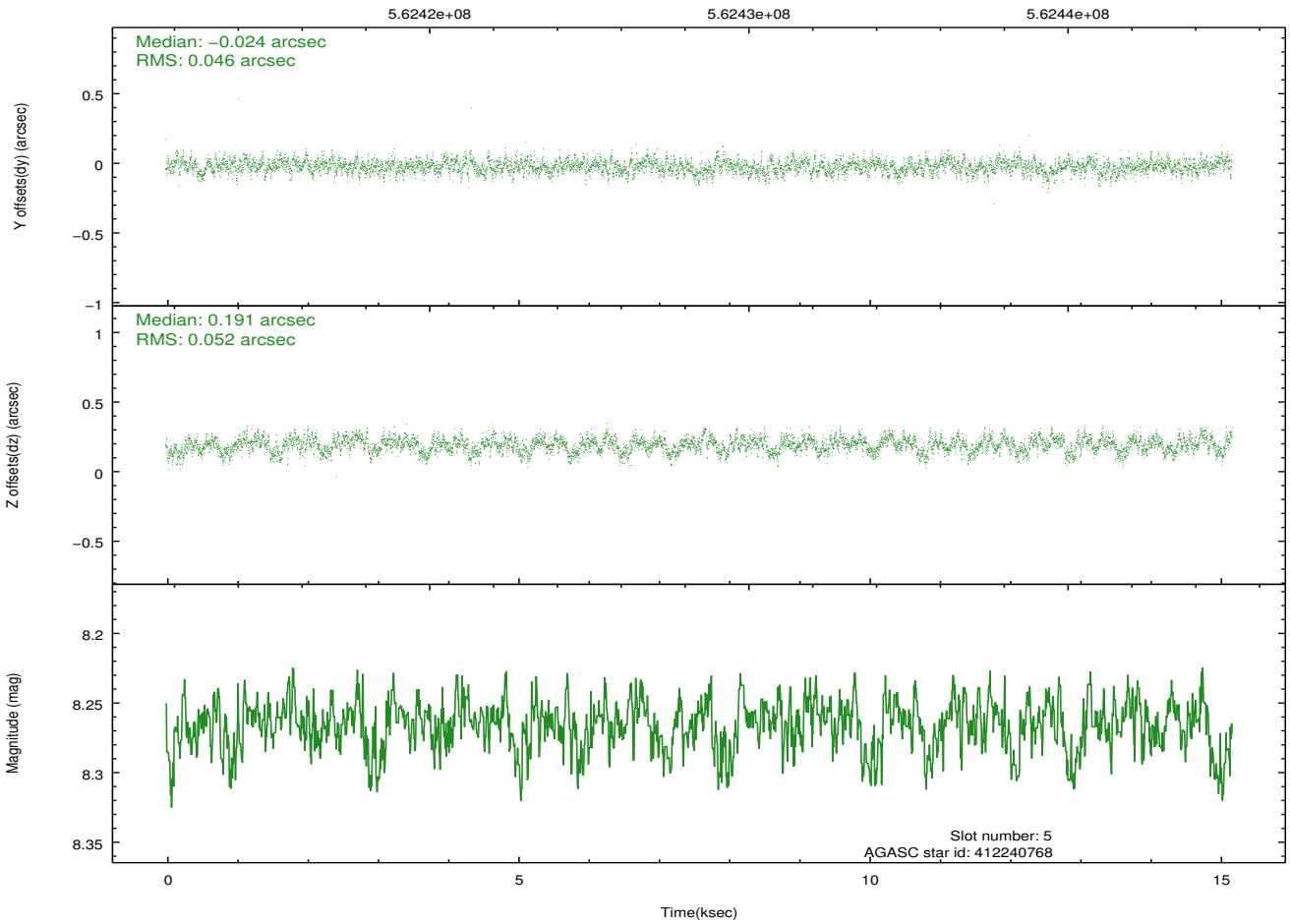
2.4.2 Slot 4



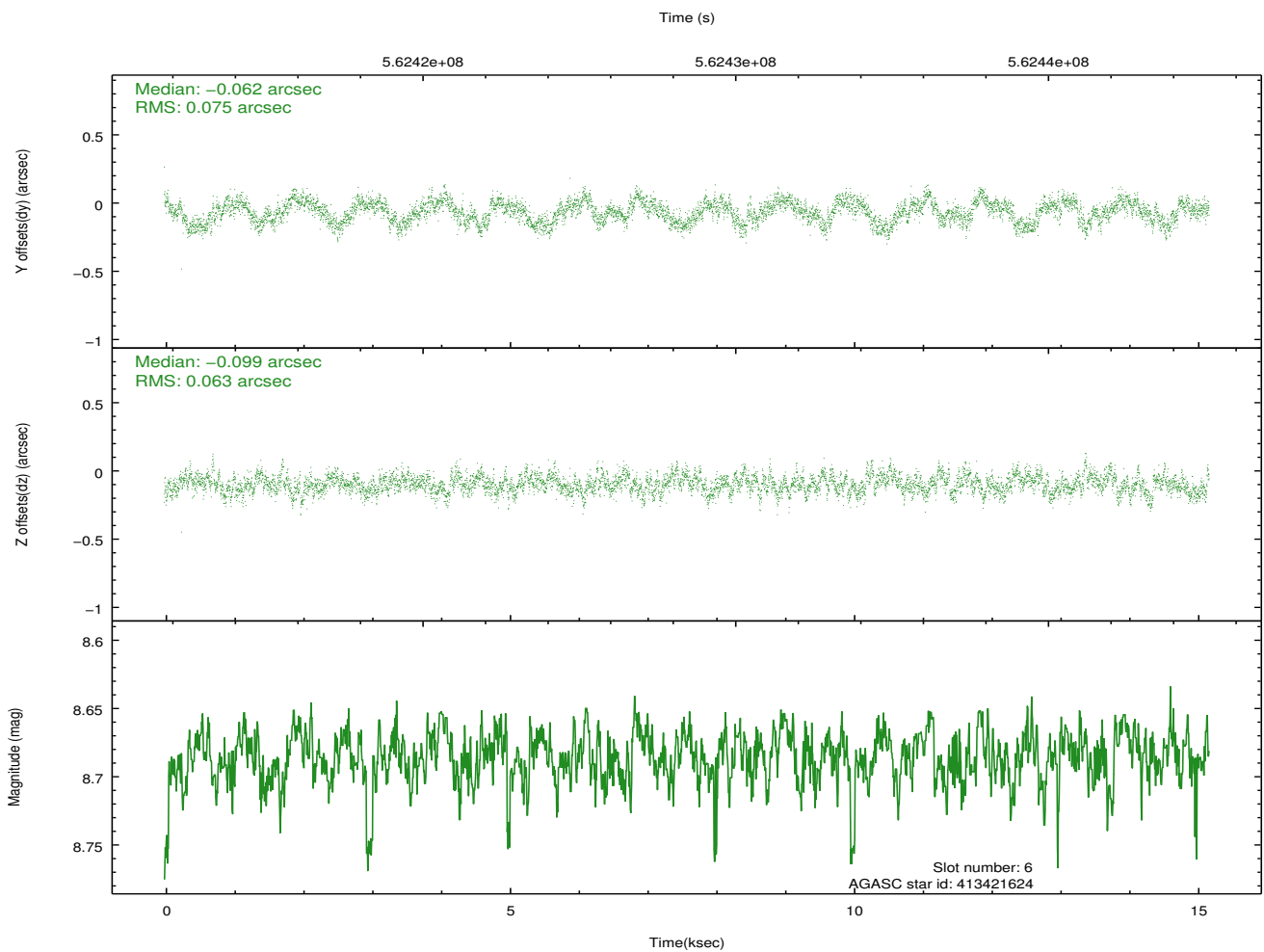
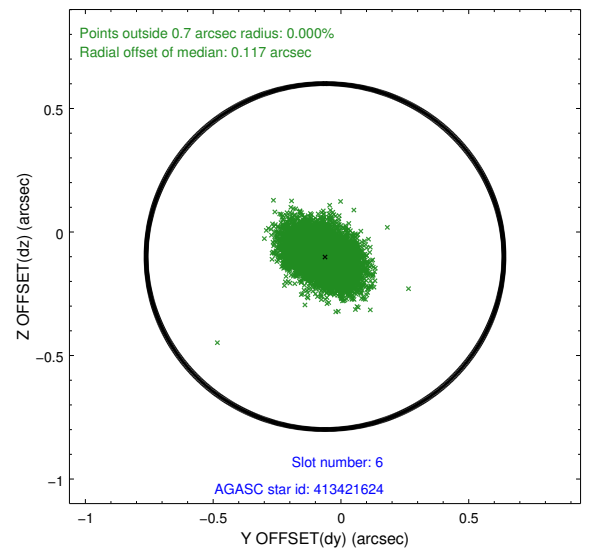
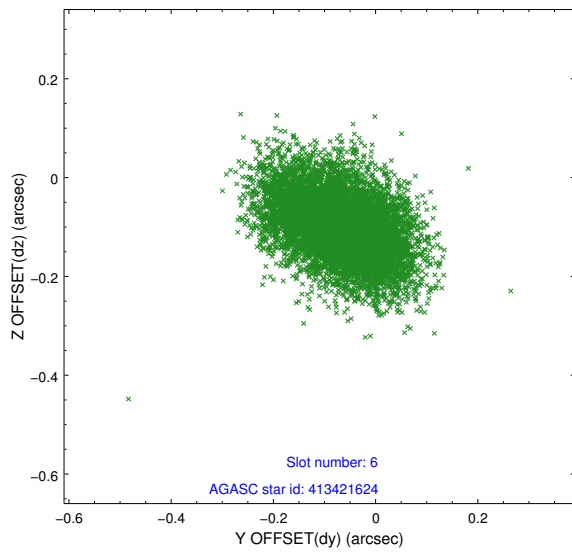
2.4.3 Slot 5



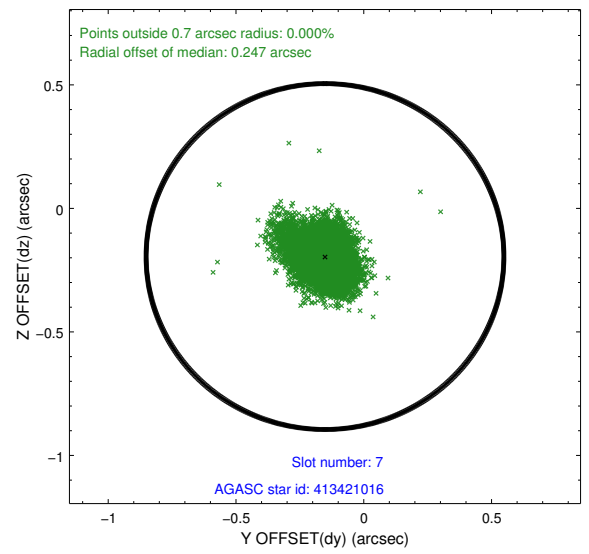
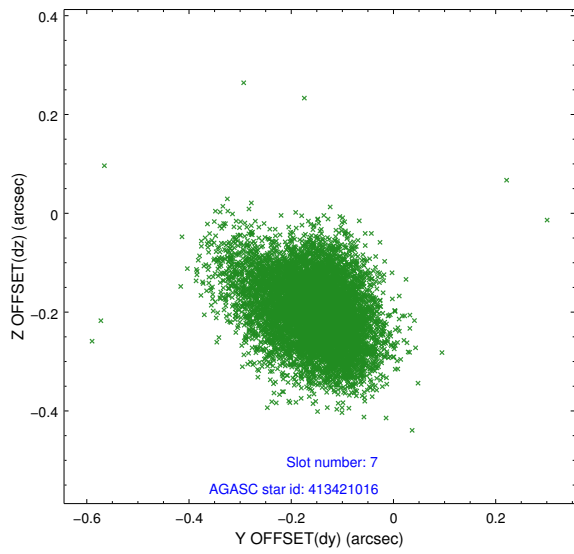
Time (s)



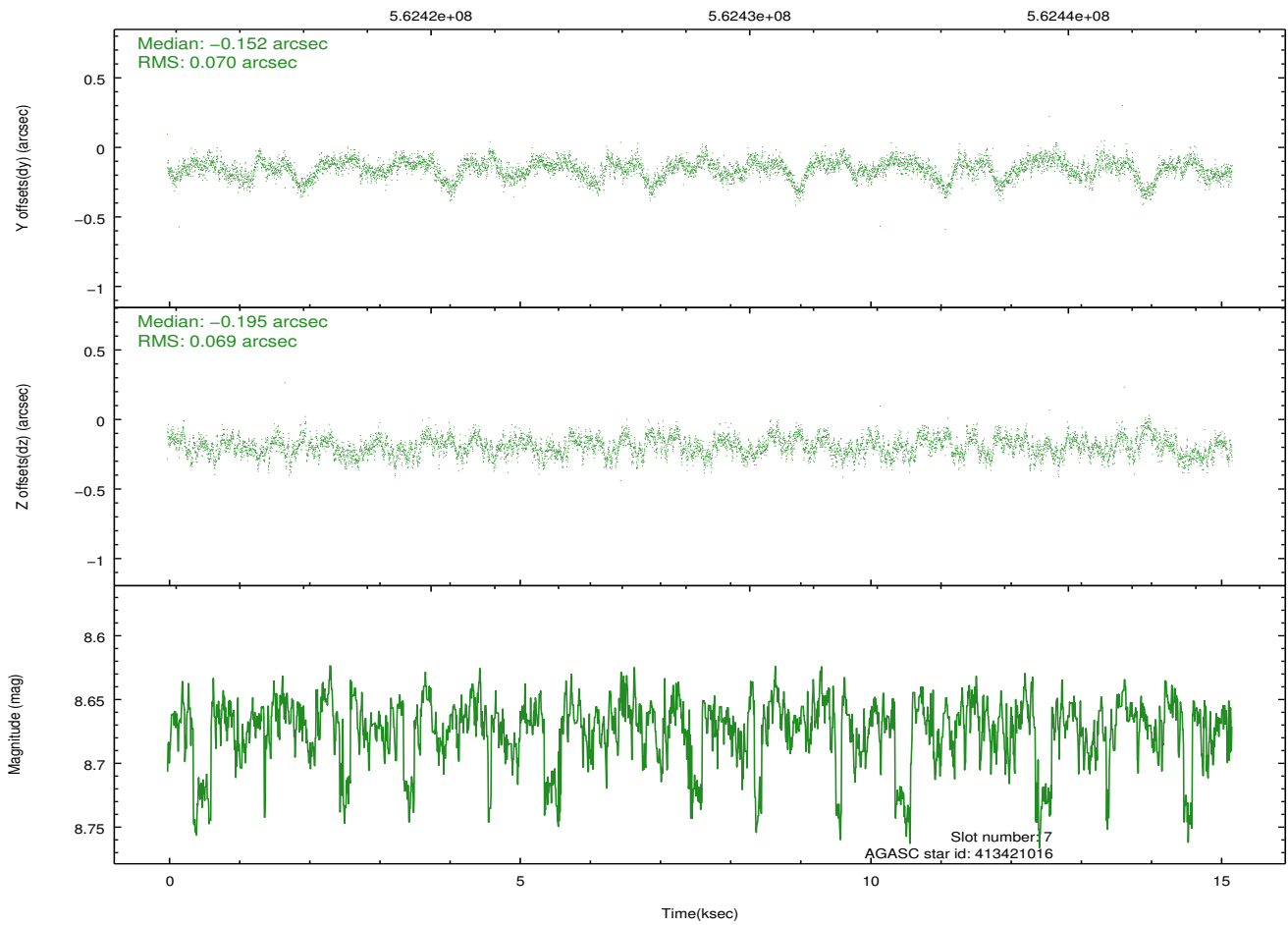
2.4.4 Slot 6



2.4.5 Slot 7

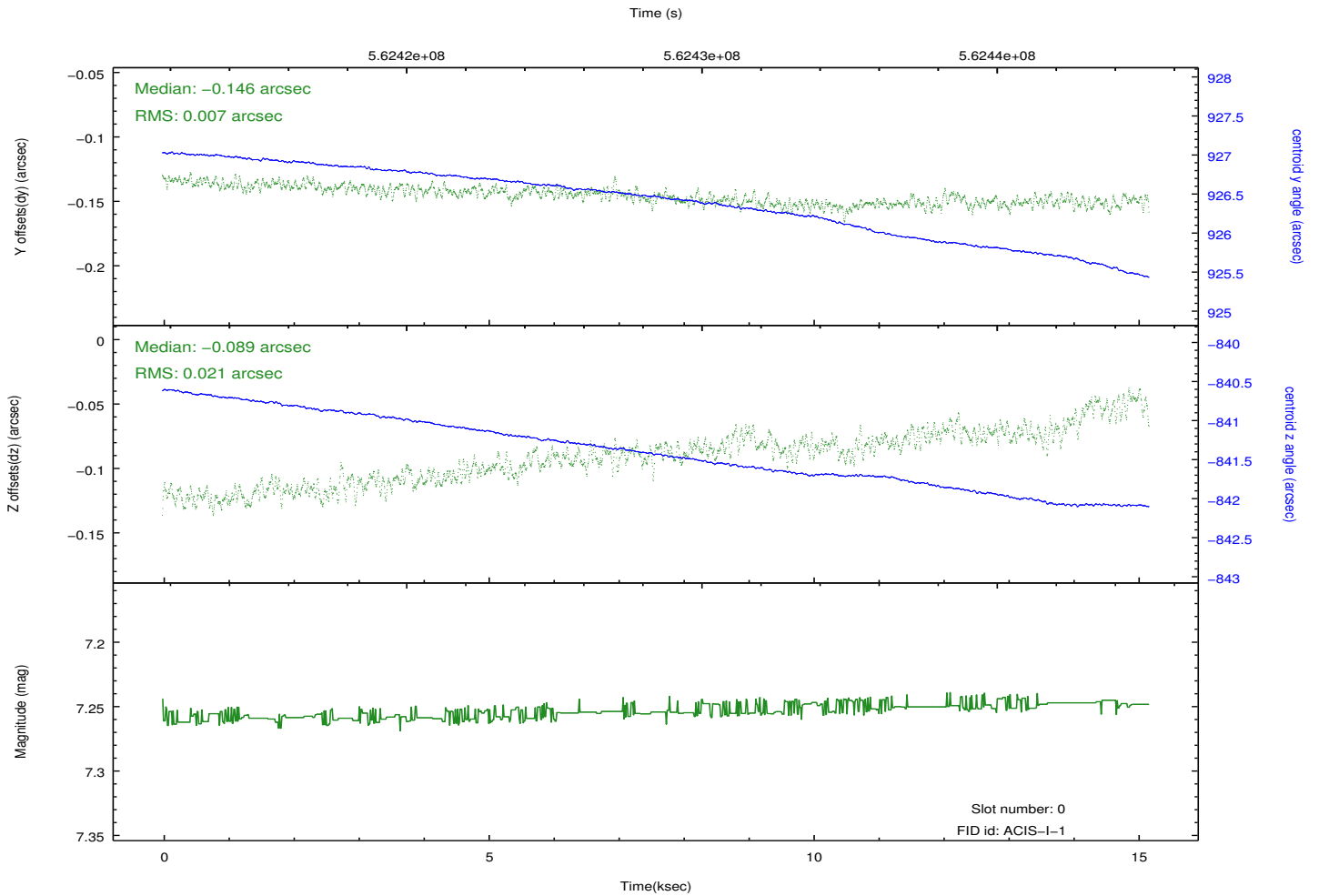
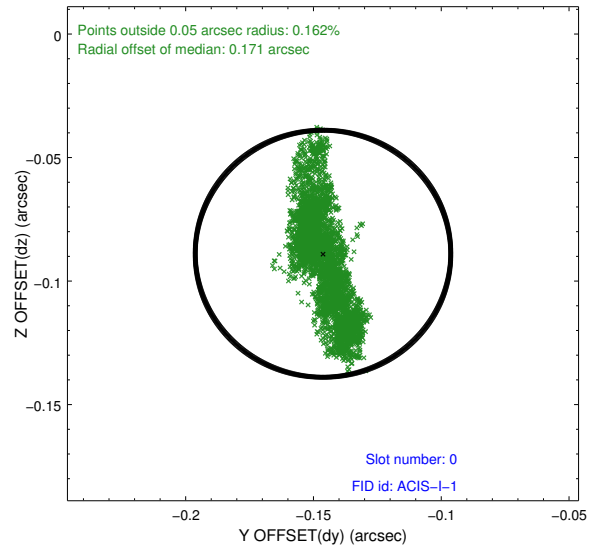
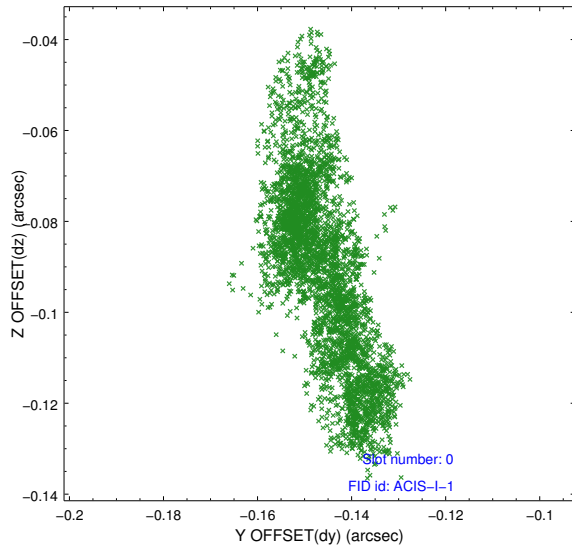


Time (s)

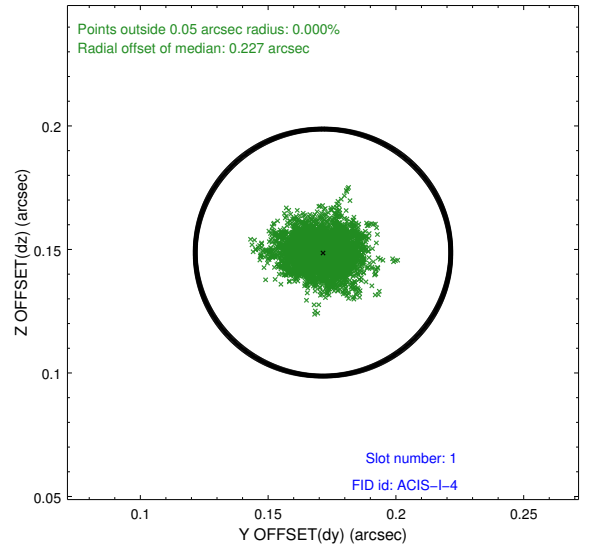
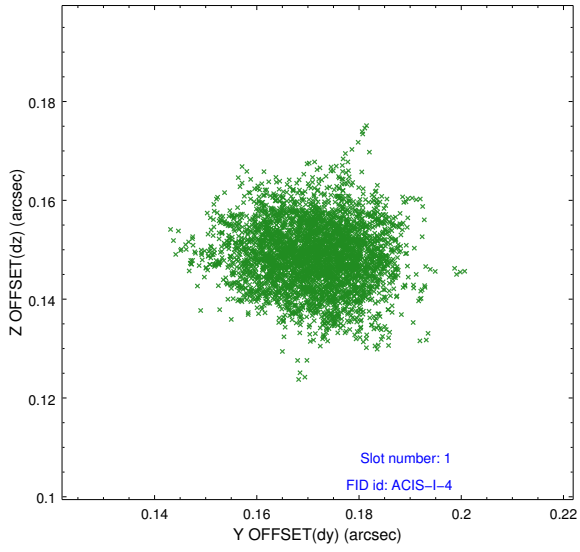


2.5 FID Slots

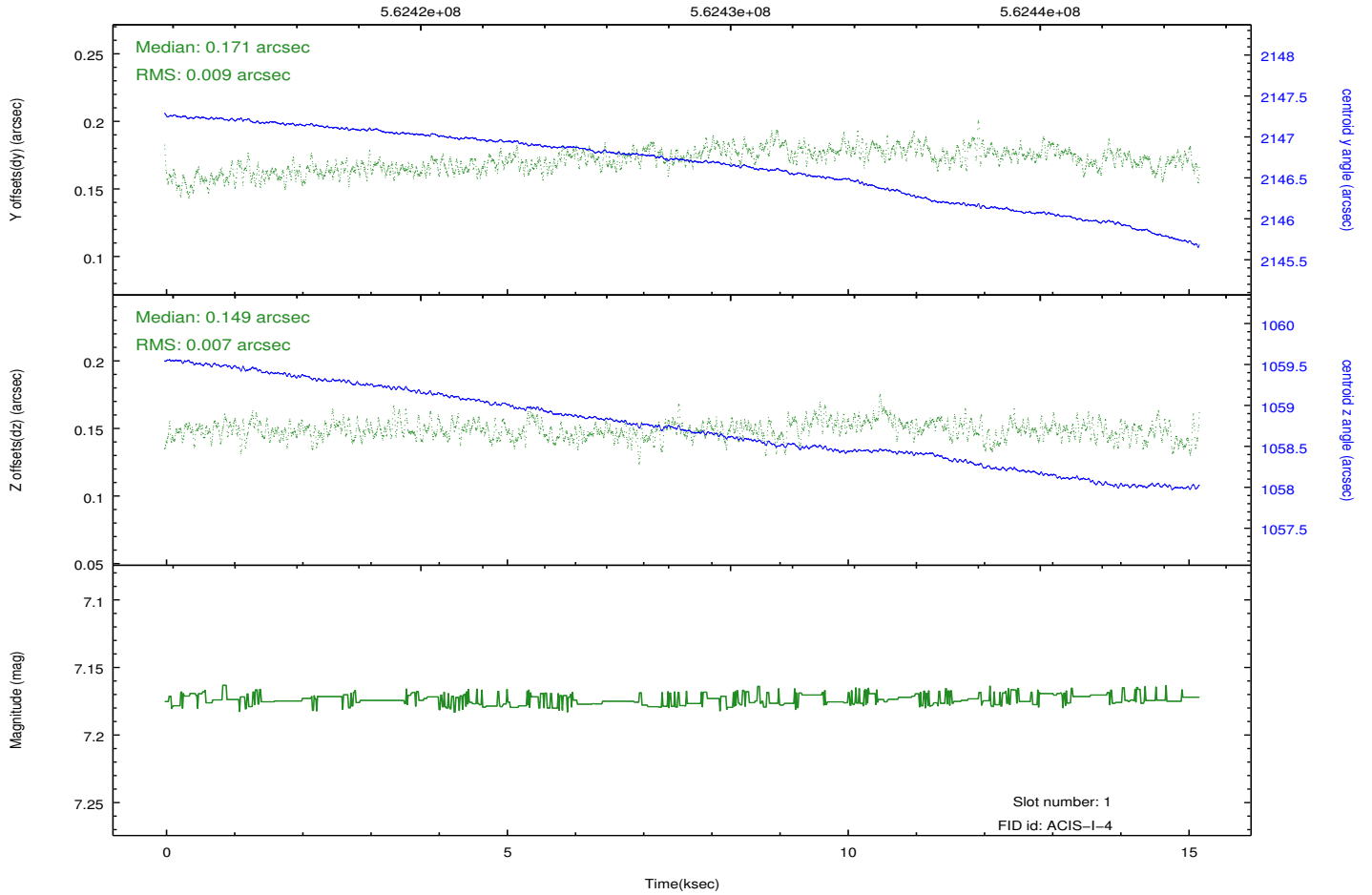
2.5.1 Slot 0



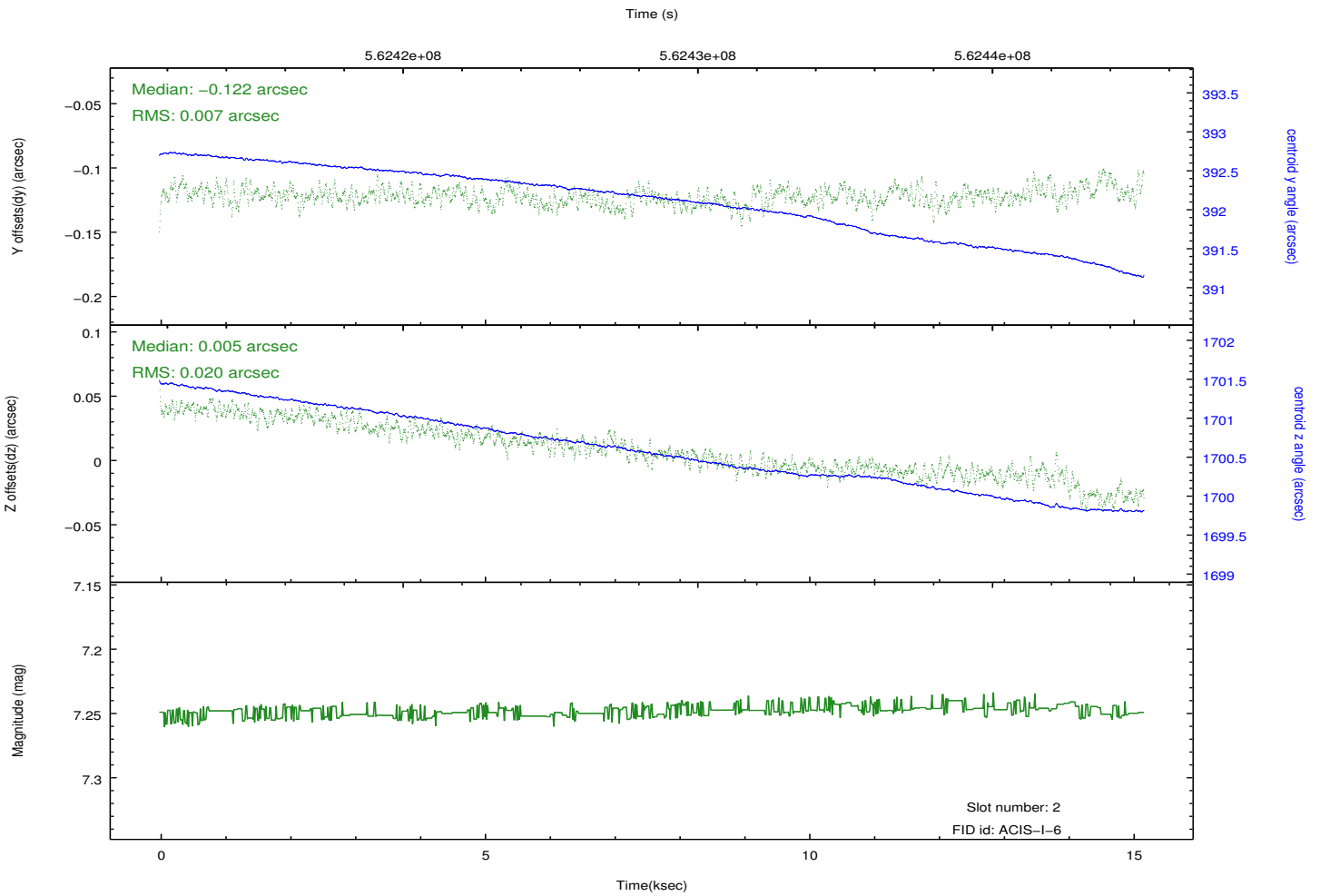
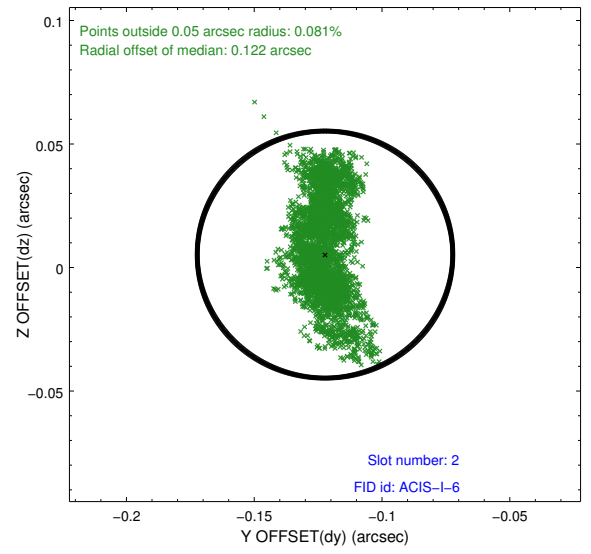
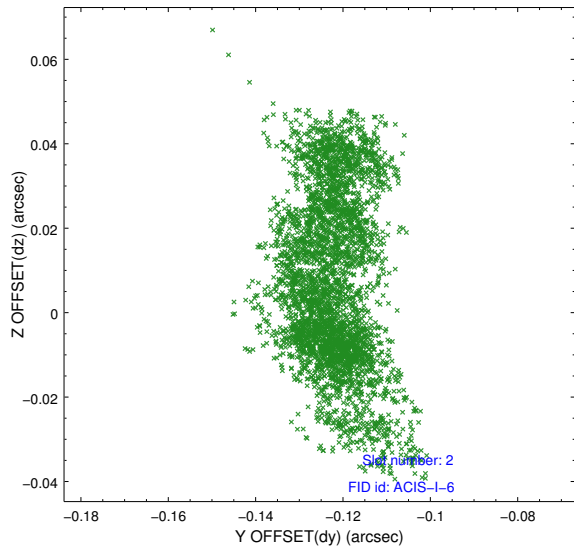
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.074773280501

A.2 Comments