

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 18683 - L2 Version 1
Chandra X-Ray Center

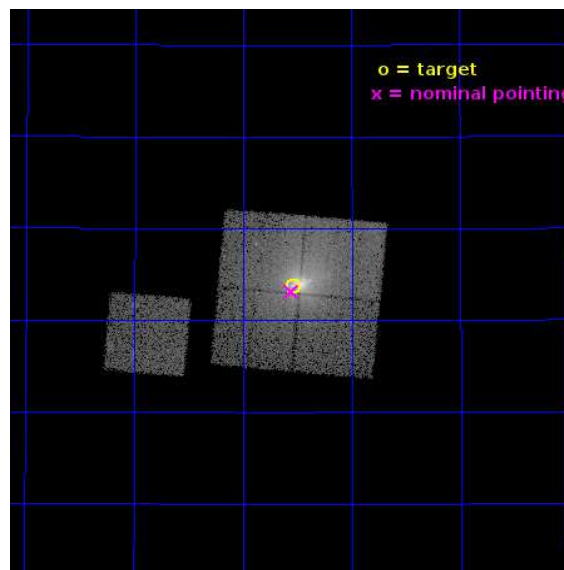
L2 Processing Date : Oct 19 2015

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1 Front

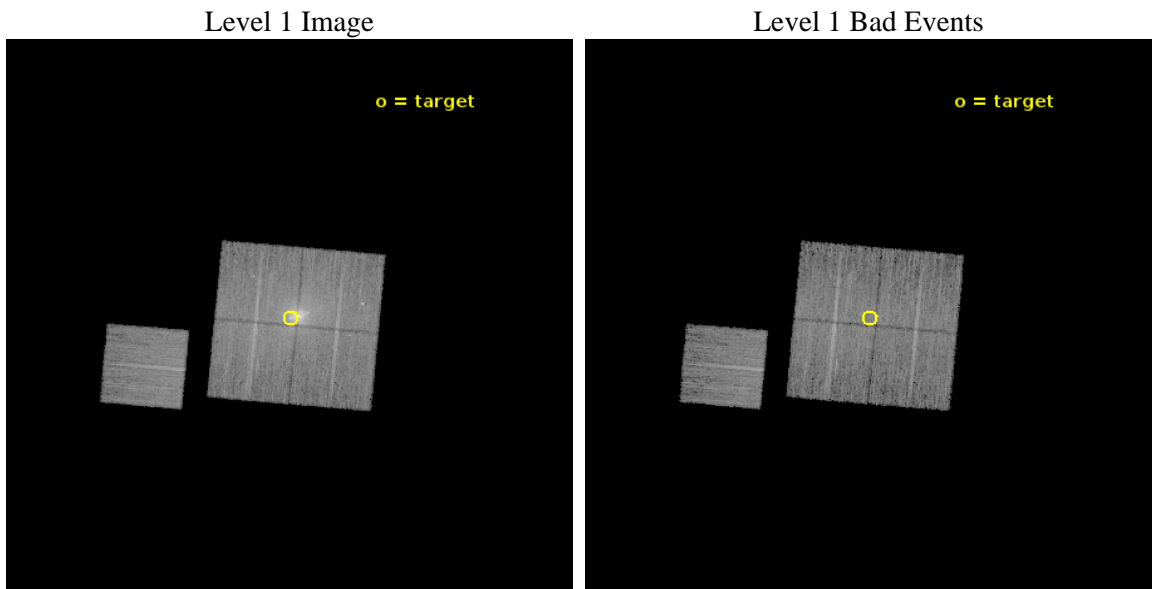
seq_num	703133	Sequence number
obs_id	18683	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - E Hotspot	Source name
dtcycle	0	
cycle	P	events from which 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	299.88875382281	Nominal RA [deg]
dec_nom	40.718736883838	Nominal Dec [deg]
roll_nom	275.20515367902	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15813.100121737	Sum of GTIs [s]
livetime	15606.490327211	Livetime [s]
ontime0	15809.877037764	Sum of GTIs [s]
ontime1	15813.05907774	Sum of GTIs [s]
ontime2	15809.959147453	Sum of GTIs [s]
ontime3	15813.100121737	Sum of GTIs [s]
ontime6	15809.836017489	Sum of GTIs [s]
l2events	121306	Number of level 2 events



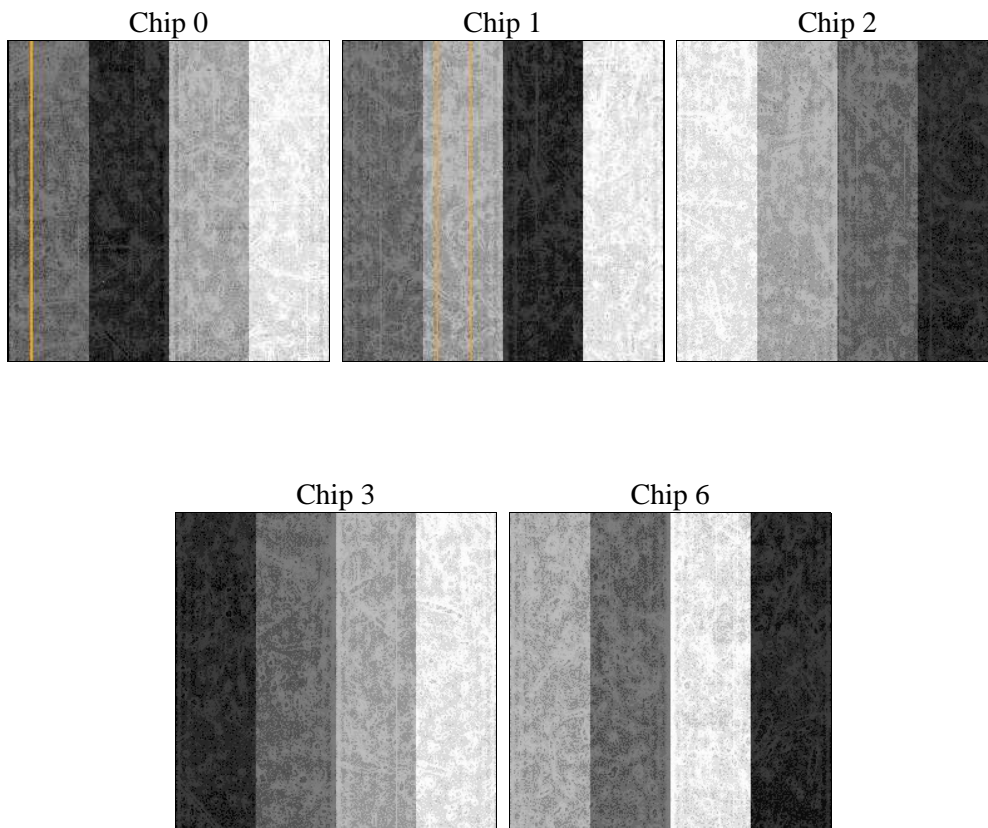
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15739.147000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	15813.100121737	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	15809.877037764	Sum of GTIs [s]
date	2015-10-19T13:40:19	Date and time of file creation	ontime1	15813.05907774	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	15809.959147453	Sum of GTIs [s]
			ontime3	15813.100121737	Sum of GTIs [s]
			ontime6	15809.836017489	Sum of GTIs [s]
			l1events	504183	Number of level 1 events

2.1.4 Events

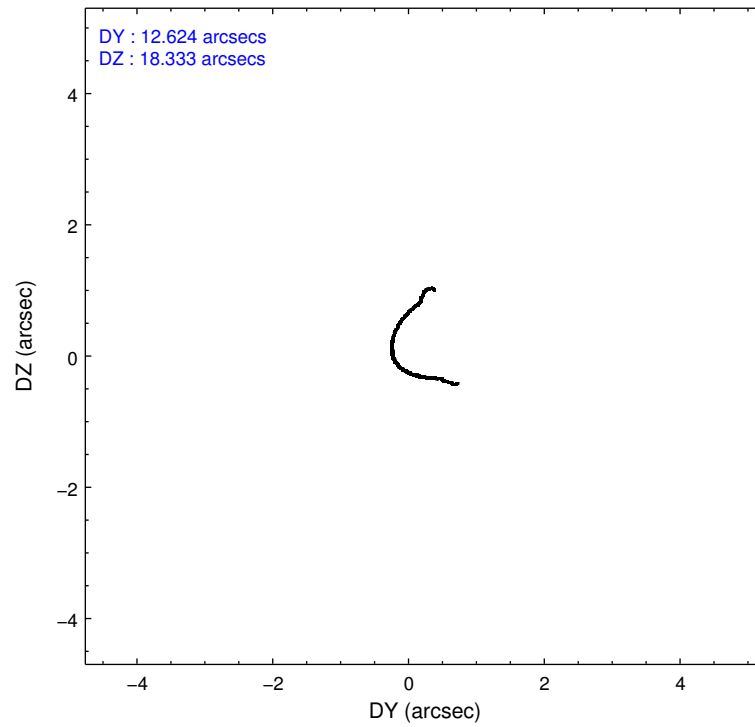
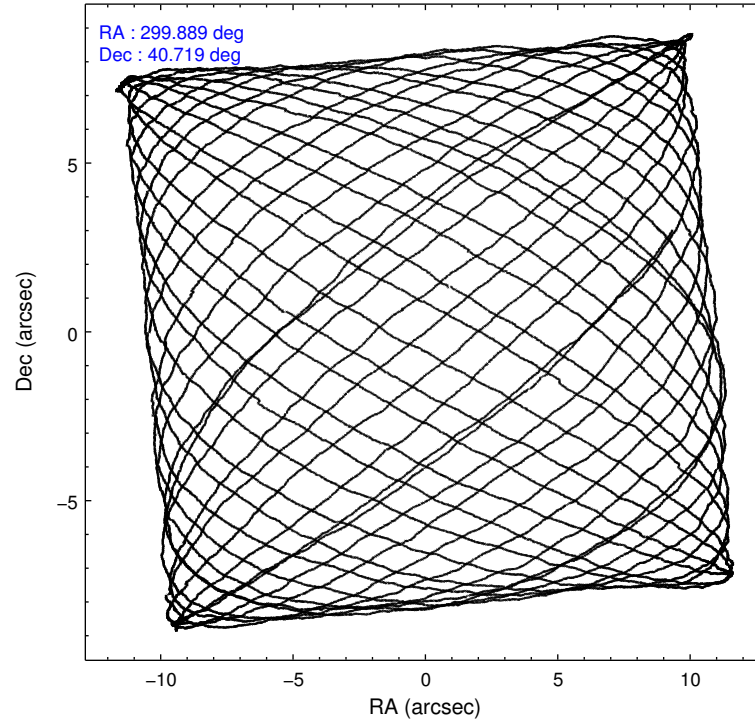
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	84904	122507	95074	112481	89217
rejected events	67959	72541	77887	73836	77451
rejected %	80%	59%	81%	65%	86%

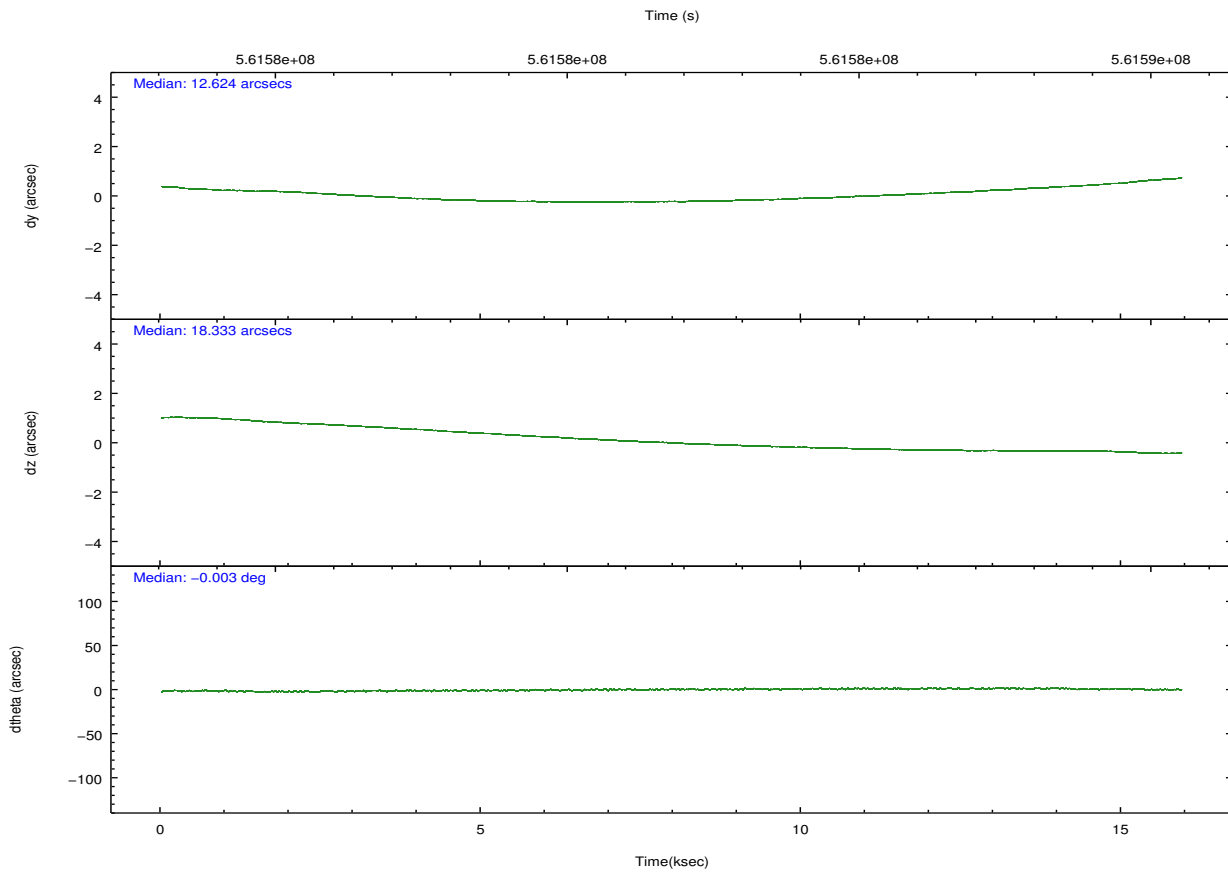
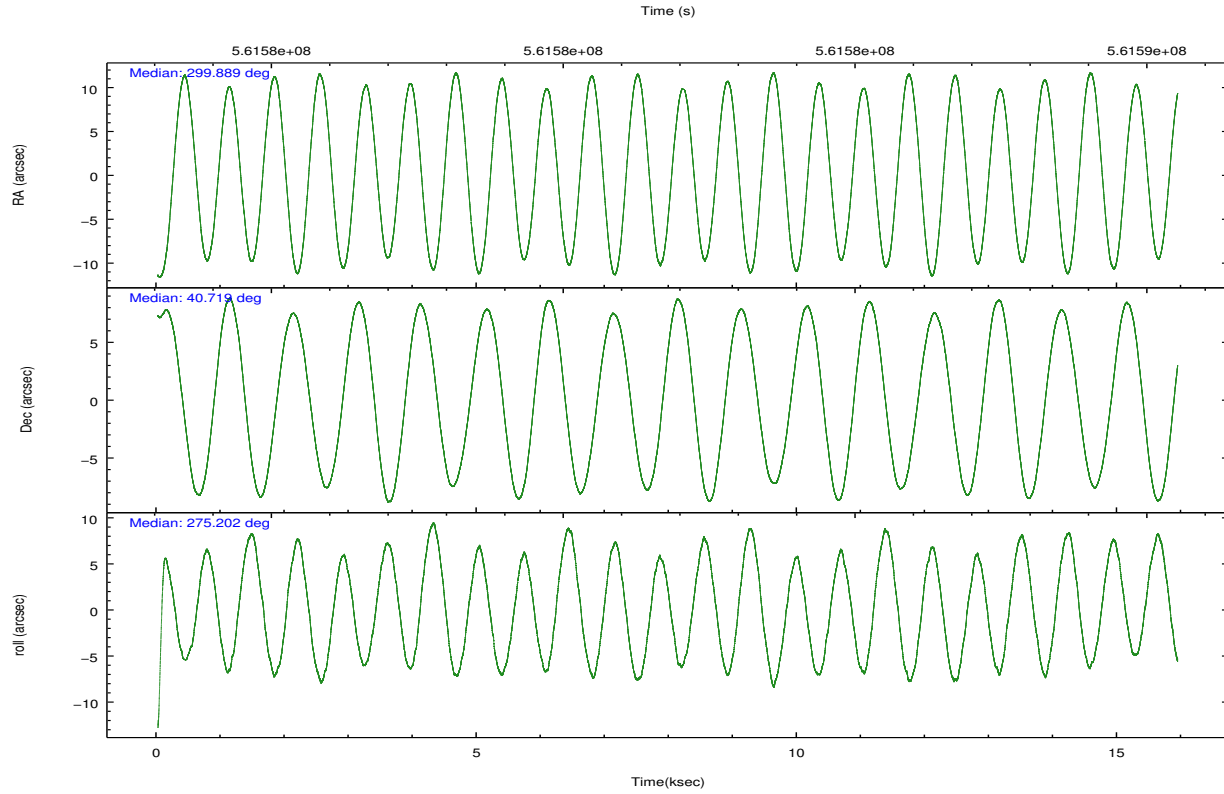
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8662	32903	9271	26402	4742
	10%	26%	9%	23%	5%
grade 1 events	63	238	80	150	44
	0%	0%	0%	0%	0%
grade 2 events	3411	7991	3231	5222	2505
	4%	6%	3%	4%	2%
grade 3 events	1271	2453	1206	1997	1093
	1%	2%	1%	1%	1%
grade 4 events	1233	2359	1304	2000	1031
	1%	1%	1%	1%	1%
grade 5 events	3826	4356	3558	4372	4180
	4%	3%	3%	3%	4%
grade 6 events	2374	4284	2184	3043	2402
	2%	3%	2%	2%	2%
grade 7 events	64064	67923	74240	69295	73220
	75%	55%	78%	61%	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	299.867661	299.8887538228106	CCD I2 on	Y	Y
[deg] Pointing Dec	40.741228	40.71873688383793	CCD I3 on	Y	Y
[deg] Pointing Roll	275.010229	275.2051536790194	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)	561574041.184000	561572833.12614	CCD S5 on	N	N
Observation start date	2015-10-18T16:46:13	2015-10-18T16:27:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	561589780.184000	561590017.7646101	On-chip summing requested	N	N
Observation end date	2015-10-18T21:08:32	2015-10-18T21:13:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





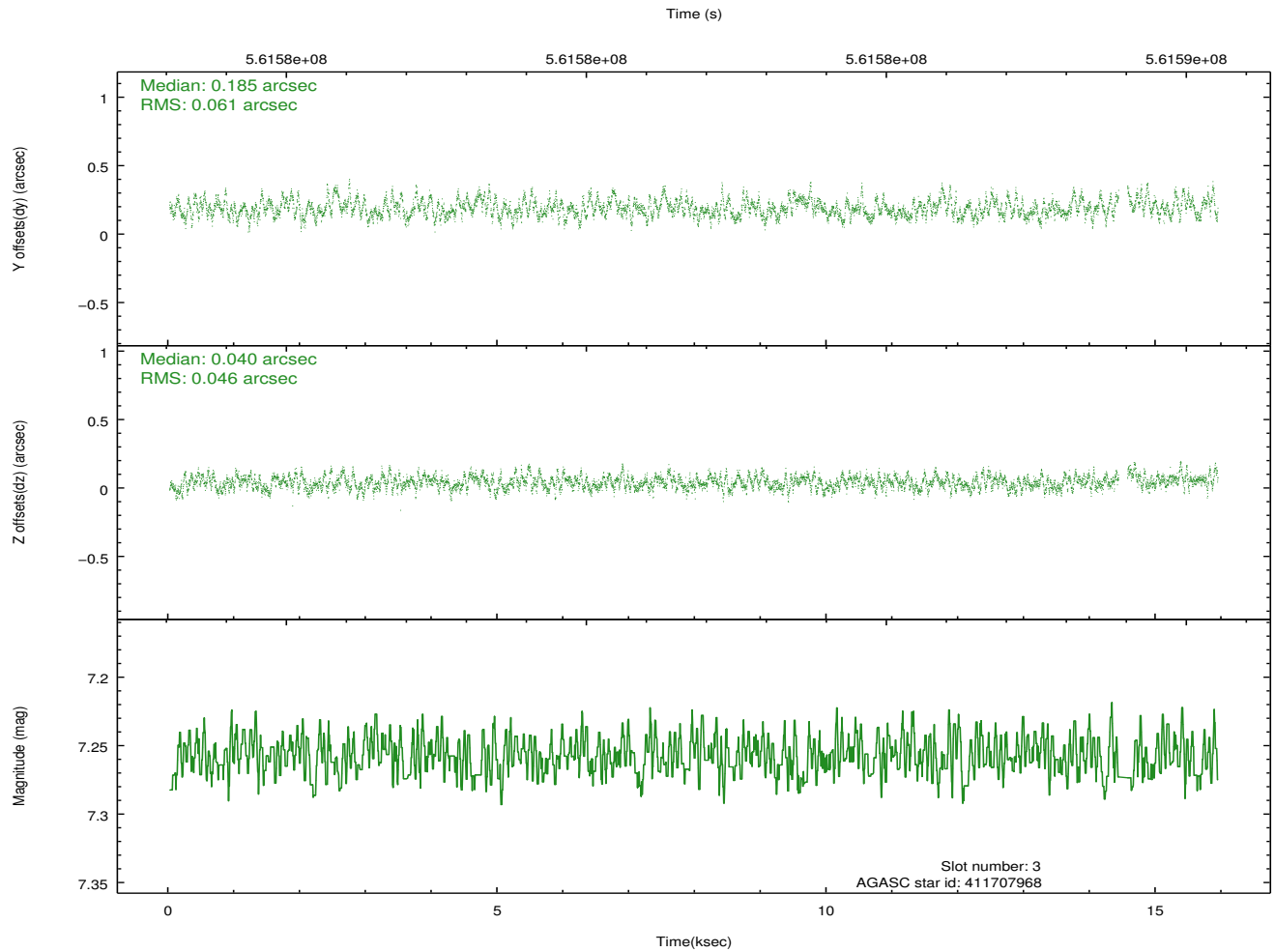
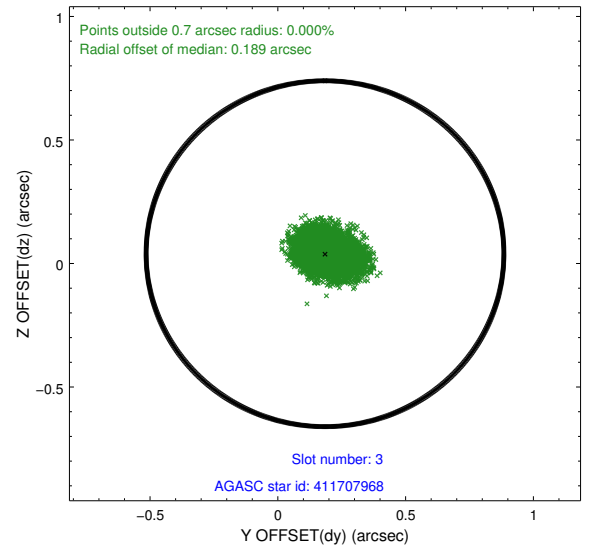
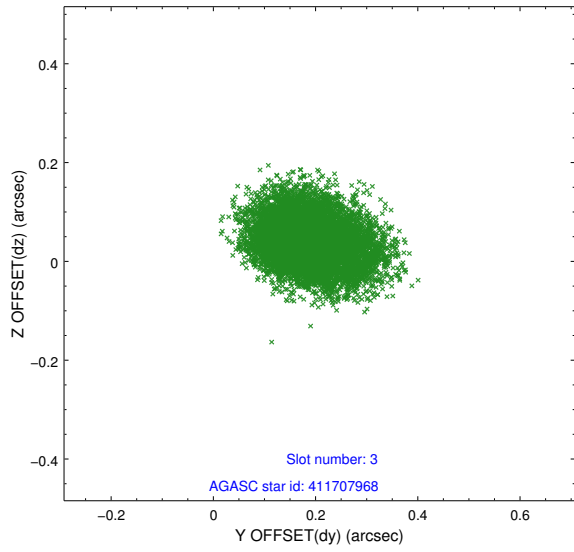
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	3885	0.079	-0.030	0.014	0.022	0.000000	0.000000	926.95	-842.17
1	FID		ACIS-I-5	7.25	3883	-0.302	0.059	0.011	0.016	0.000000	0.000000	-1821.44	1055.20
2	FID		ACIS-I-6	7.25	3885	0.131	0.040	0.011	0.019	0.000000	0.000000	392.18	1700.05
3	GUIDE	used	411707968	7.26	7704	0.185	0.040	0.081	0.132	299.509933	40.926839	-752.60	-910.38
4	GUIDE	used	413421016	8.69	7764	-0.012	-0.138	0.093	0.146	300.612426	40.446254	1227.41	1940.46
5	GUIDE	used	413425016	7.97	7769	0.206	-0.047	0.123	0.188	300.758532	40.173167	2239.33	2264.02
6	GUIDE	used	413929808	8.46	7769	-0.382	0.102	0.093	0.154	300.621353	41.348826	-2010.16	2221.43
7	GUIDE	used	413936784	8.72	7766	-0.009	0.043	0.095	0.158	300.698470	41.281929	-1753.92	2410.40

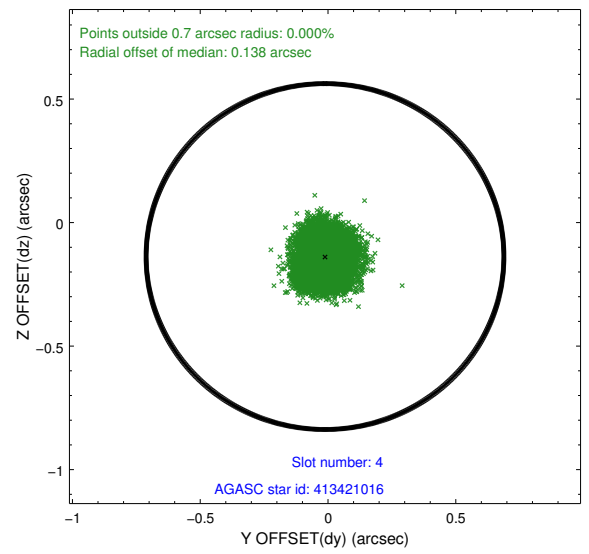
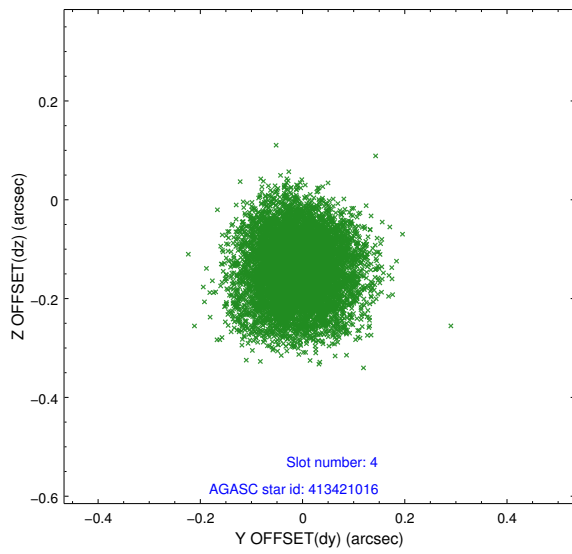
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2.4 Star Slots

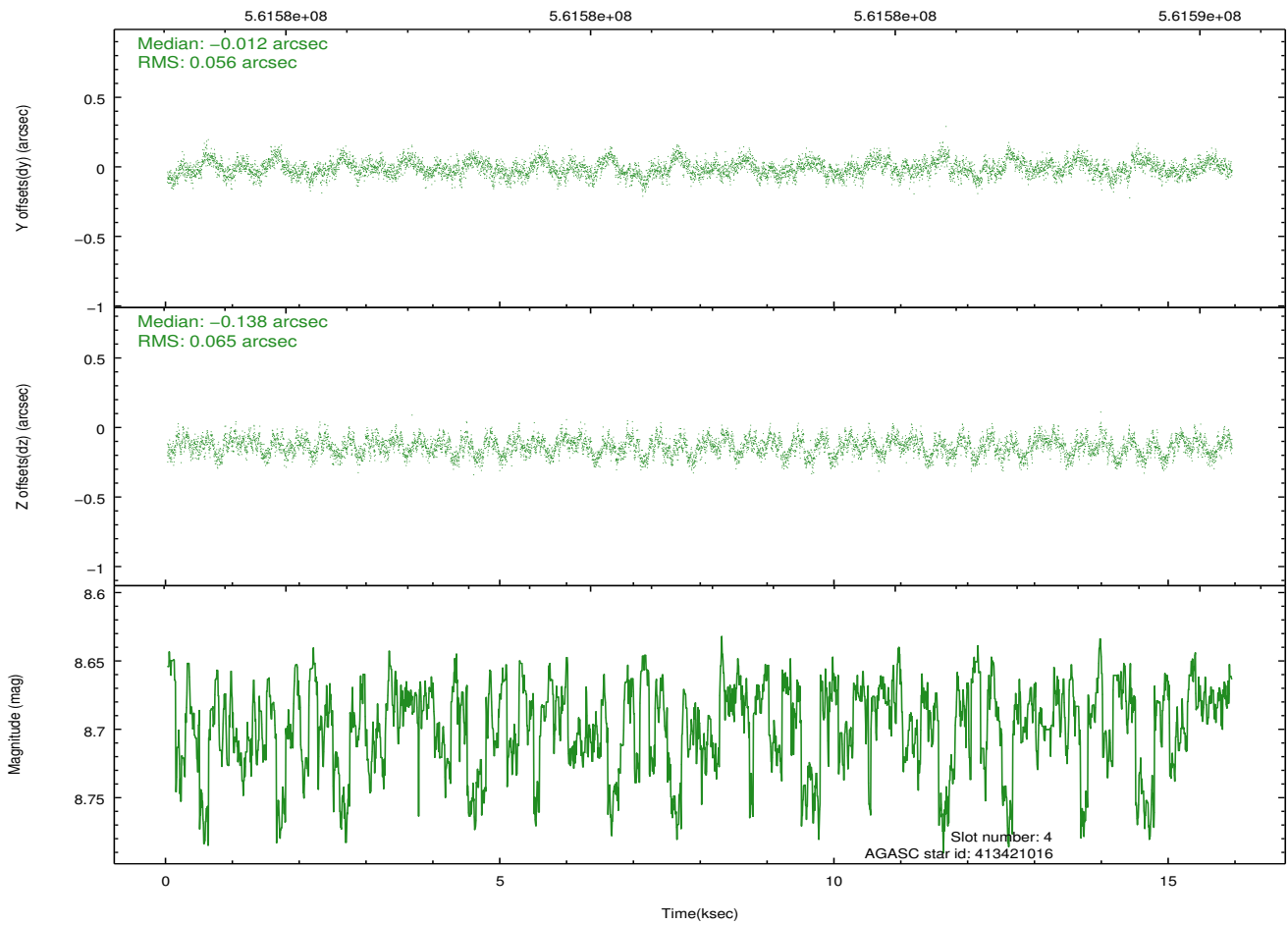
2.4.1 Slot 3



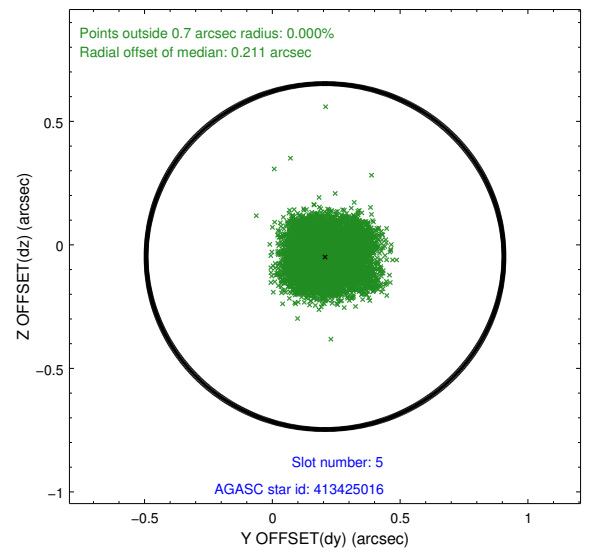
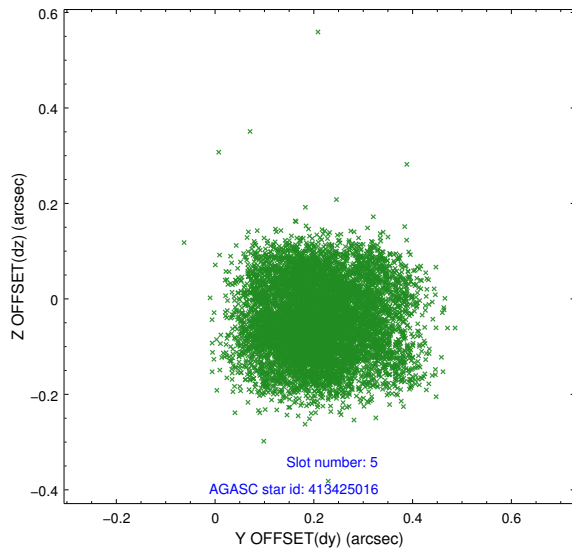
2.4.2 Slot 4



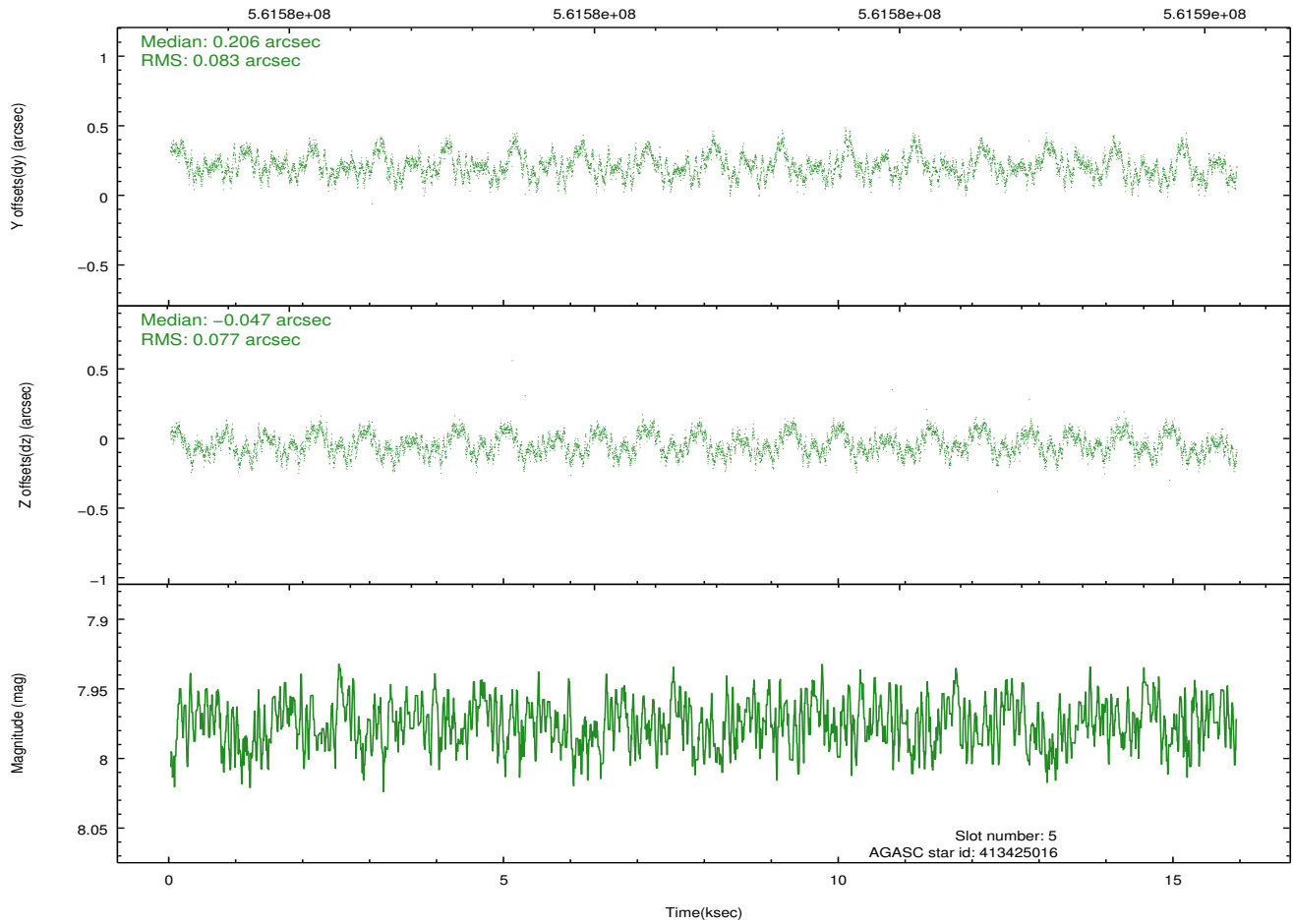
Time (s)



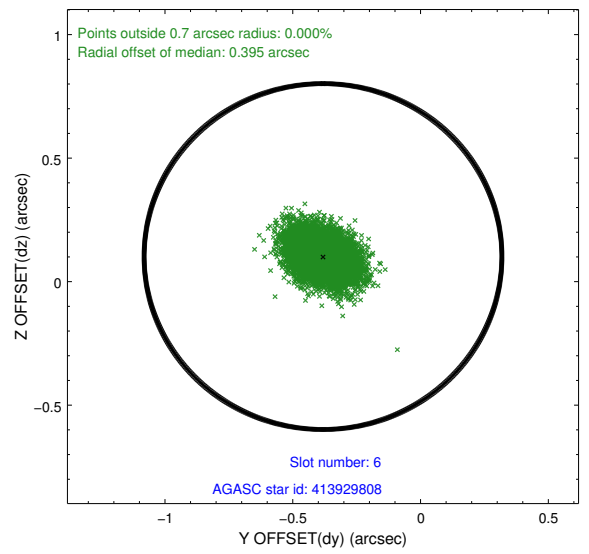
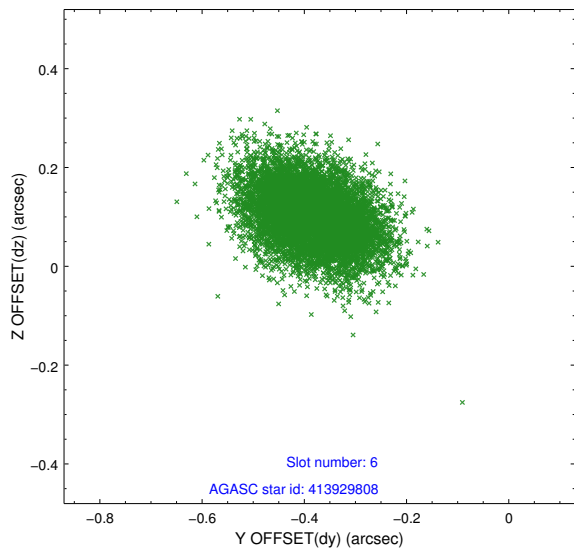
2.4.3 Slot 5



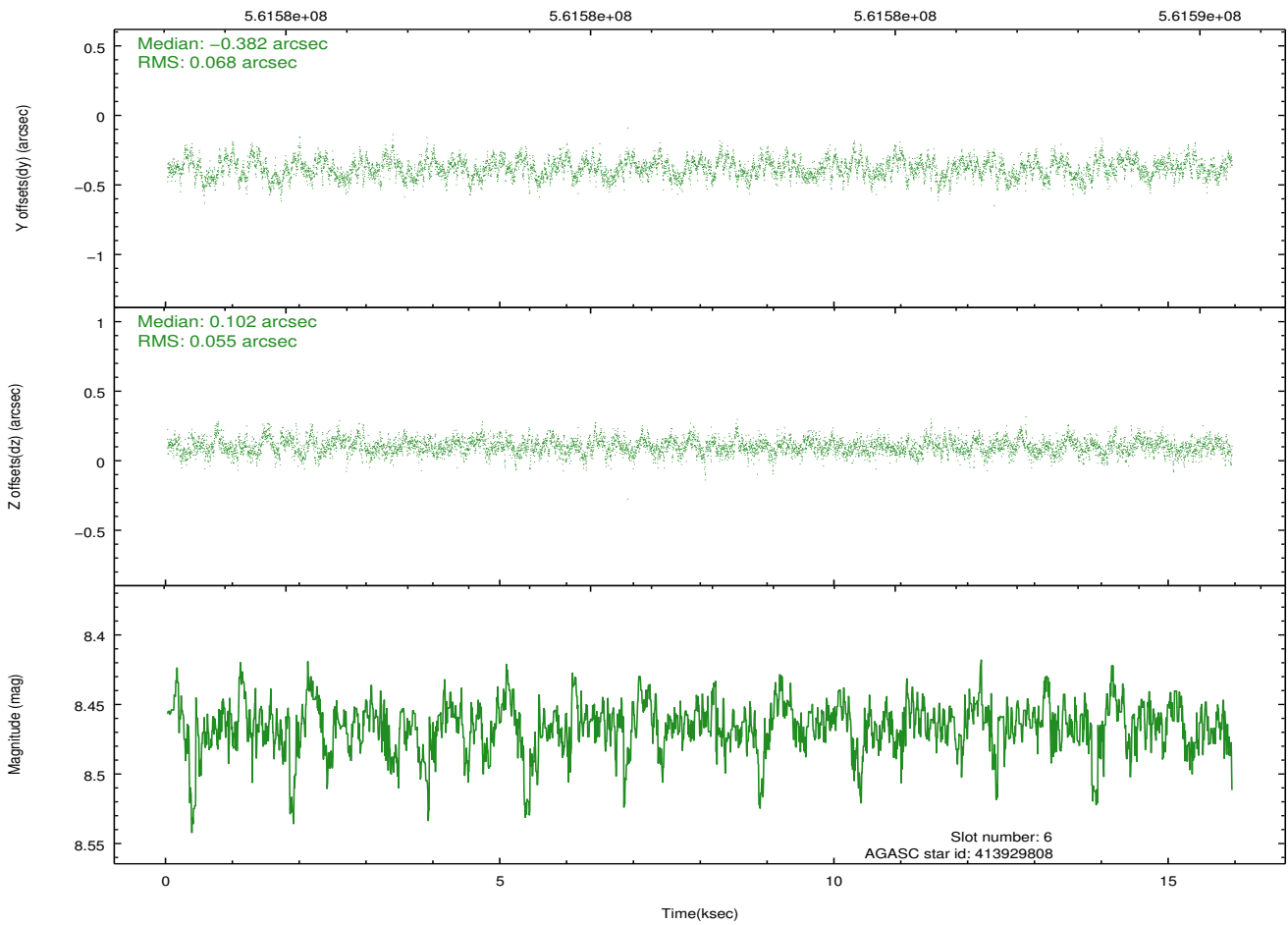
Time (s)



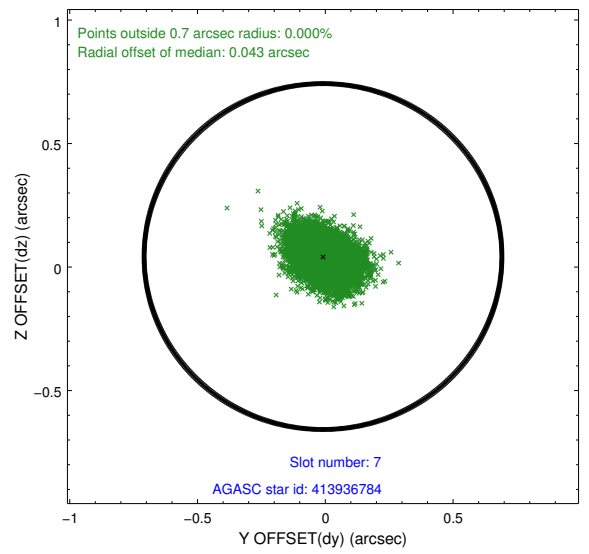
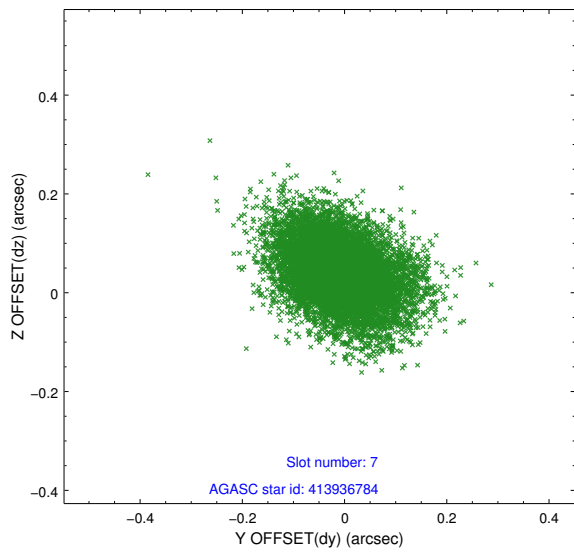
2.4.4 Slot 6



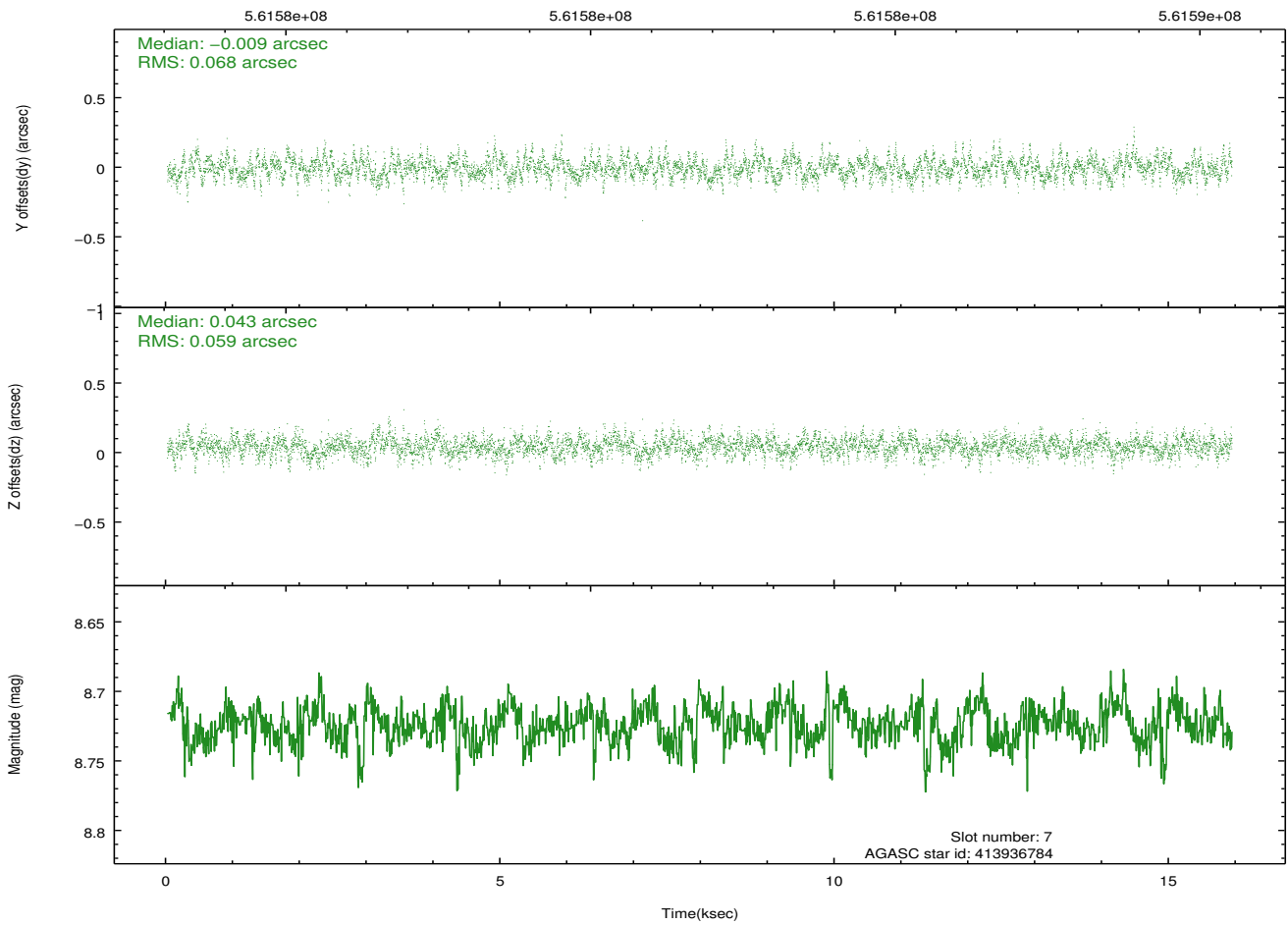
Time (s)



2.4.5 Slot 7

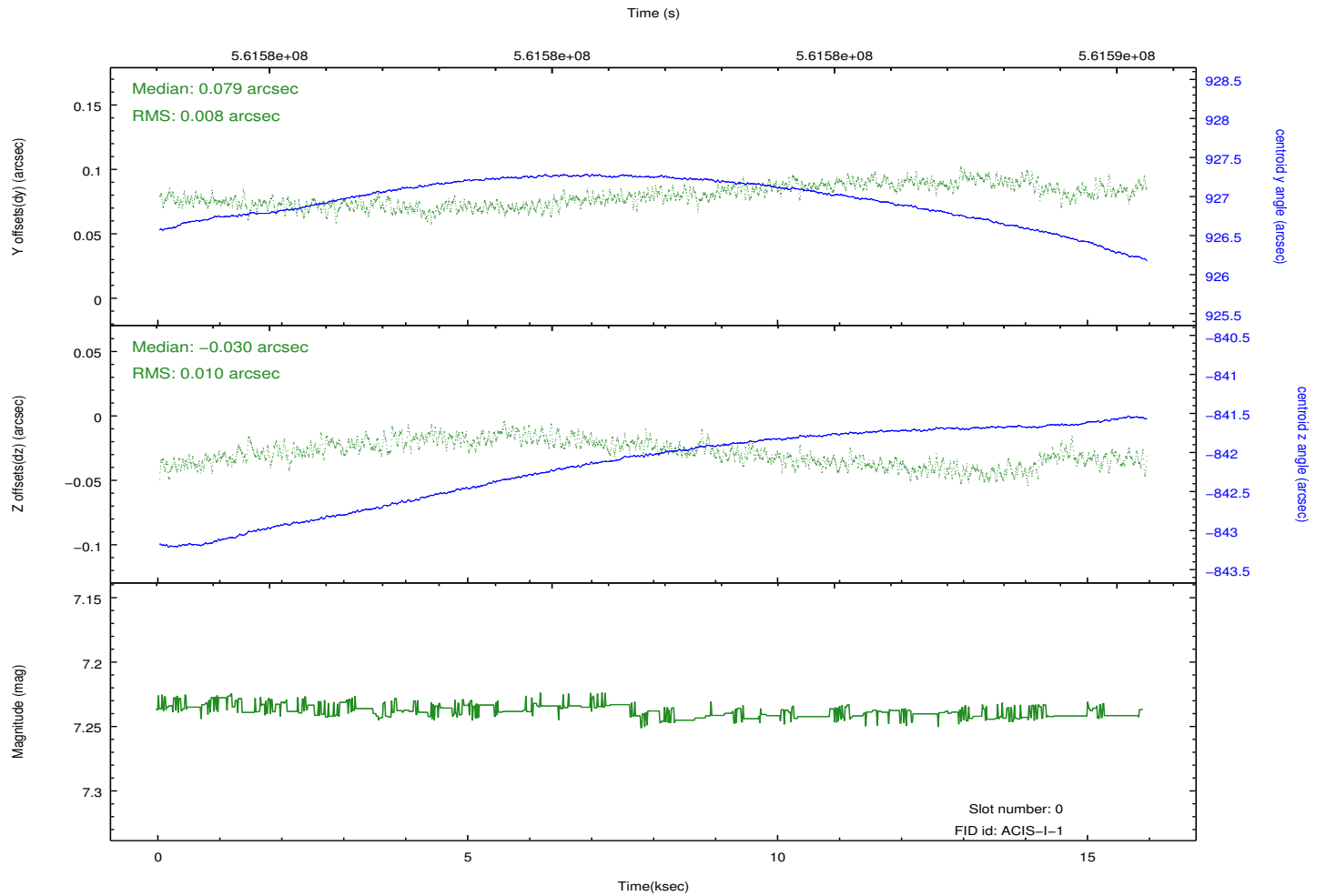
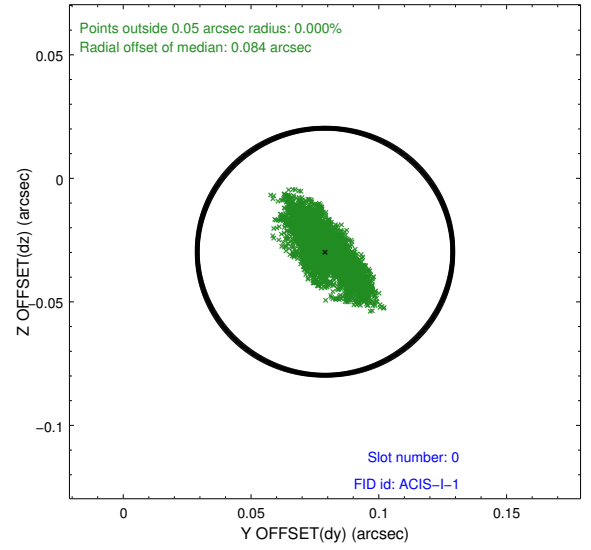
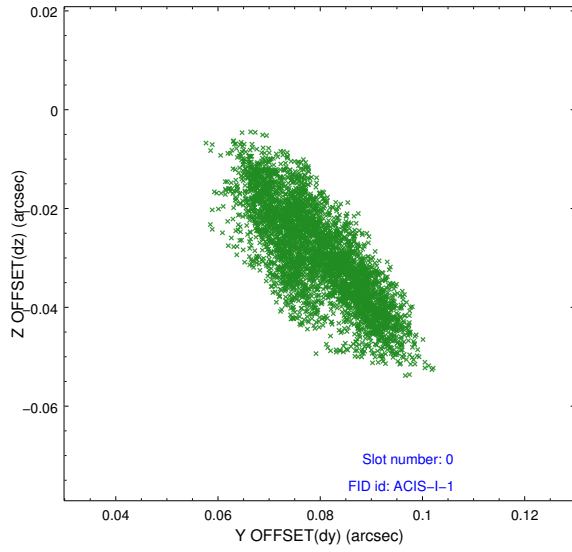


Time (s)

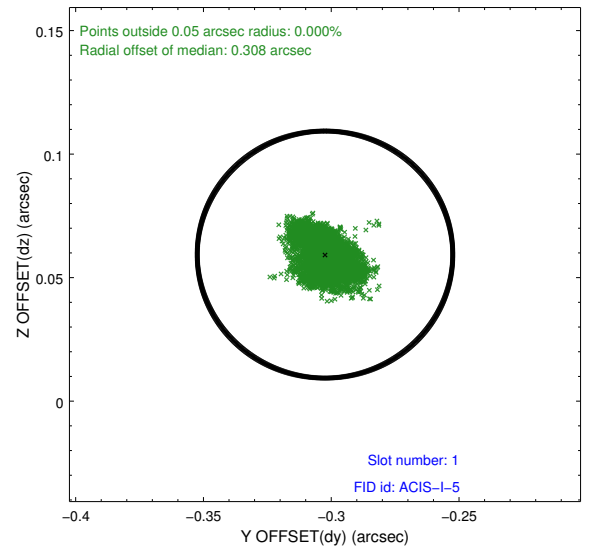
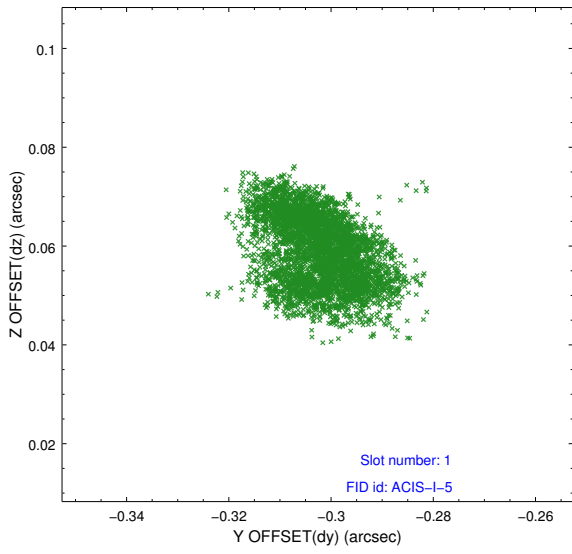


2.5 FID Slots

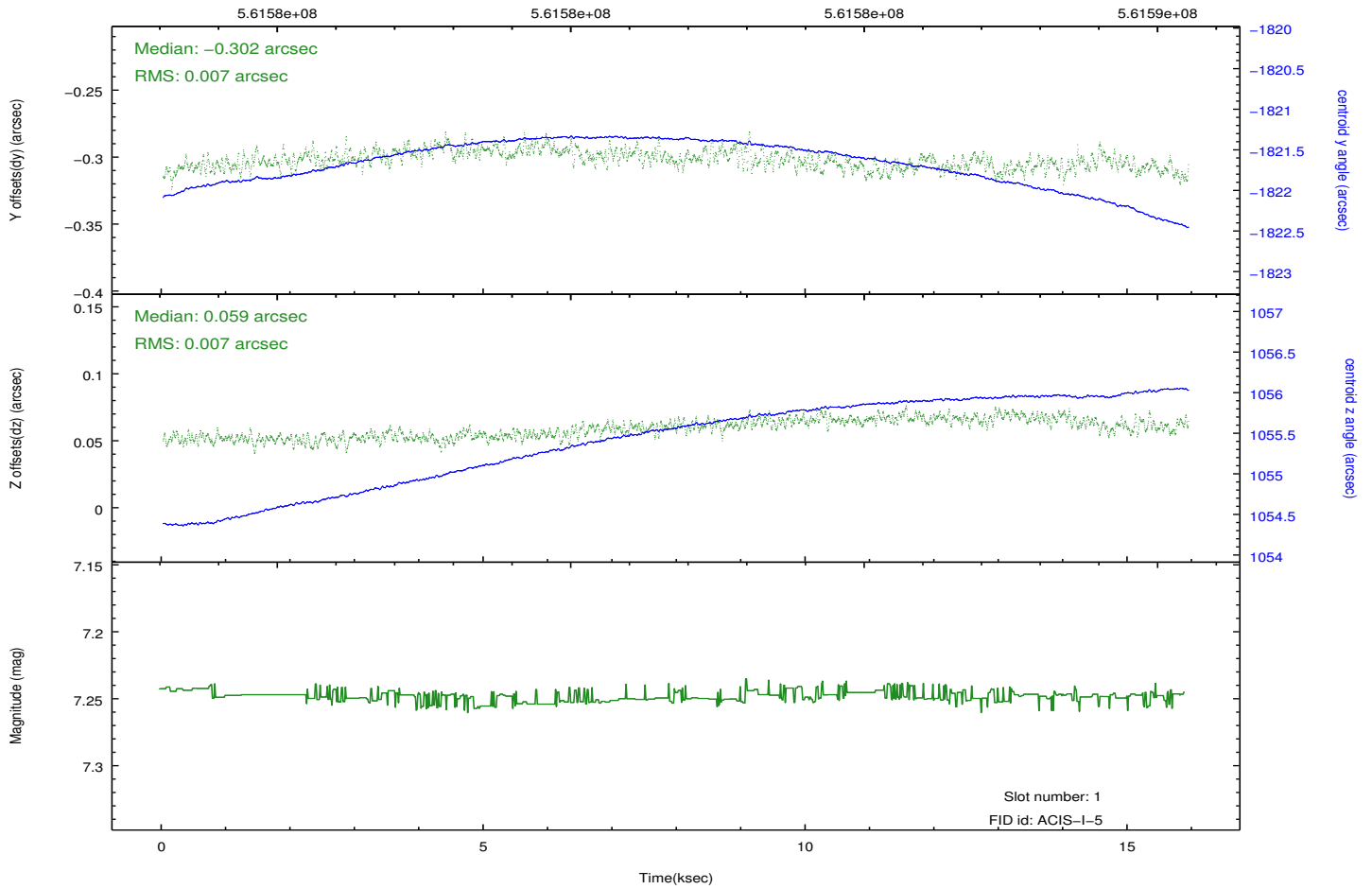
2.5.1 Slot 0



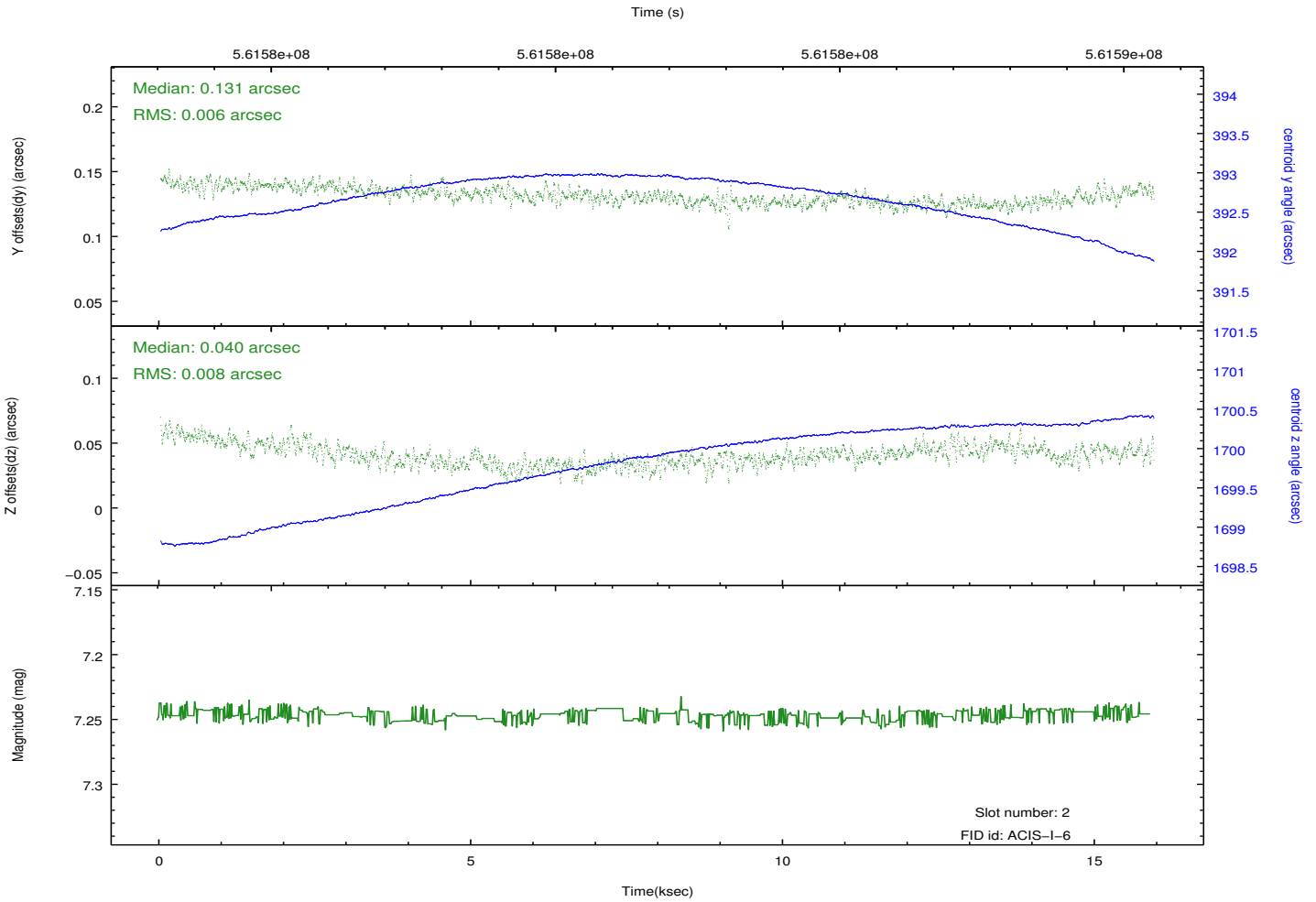
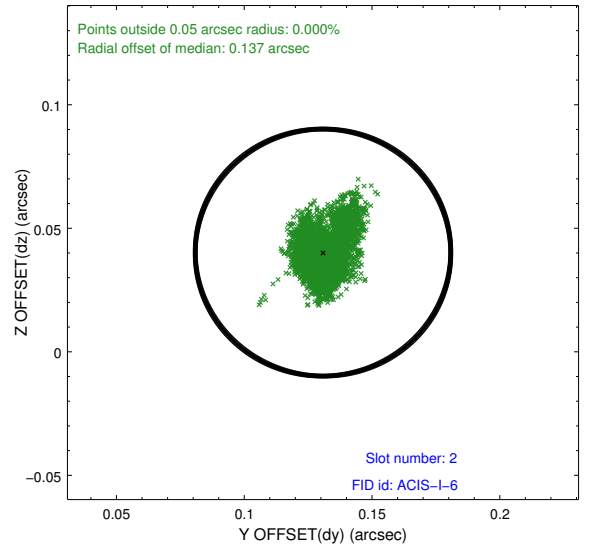
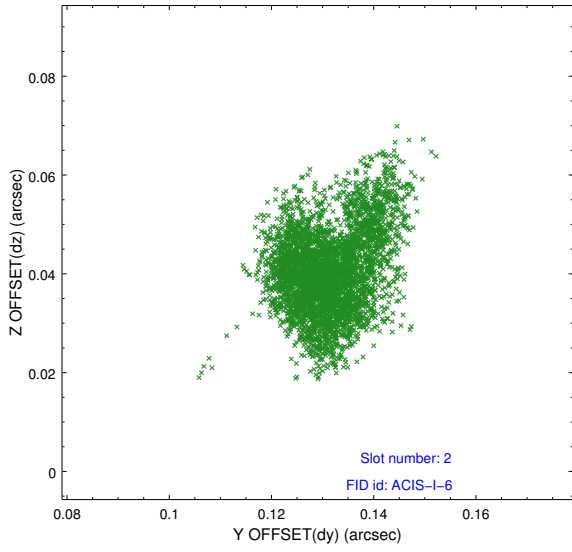
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2015.10.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.813100121737

A.2 Comments