

V&V Reference Report

L2 ASCDS Version : 10.4

Observation 16994 - L2 Version 1
Chandra X-Ray Center

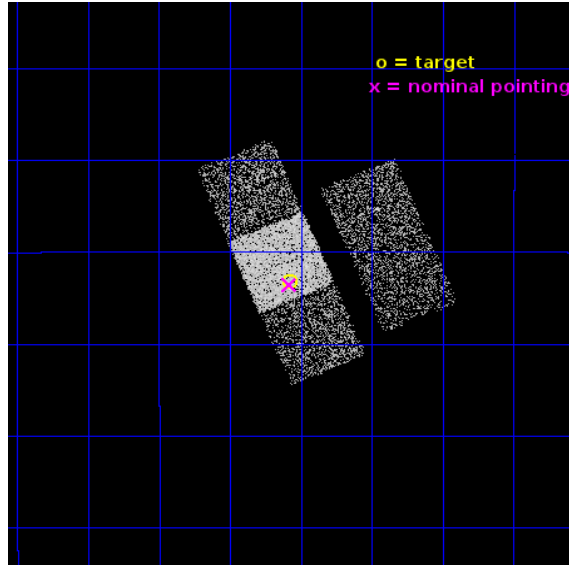
L2 Processing Date : Jul 1 2015

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1 Front

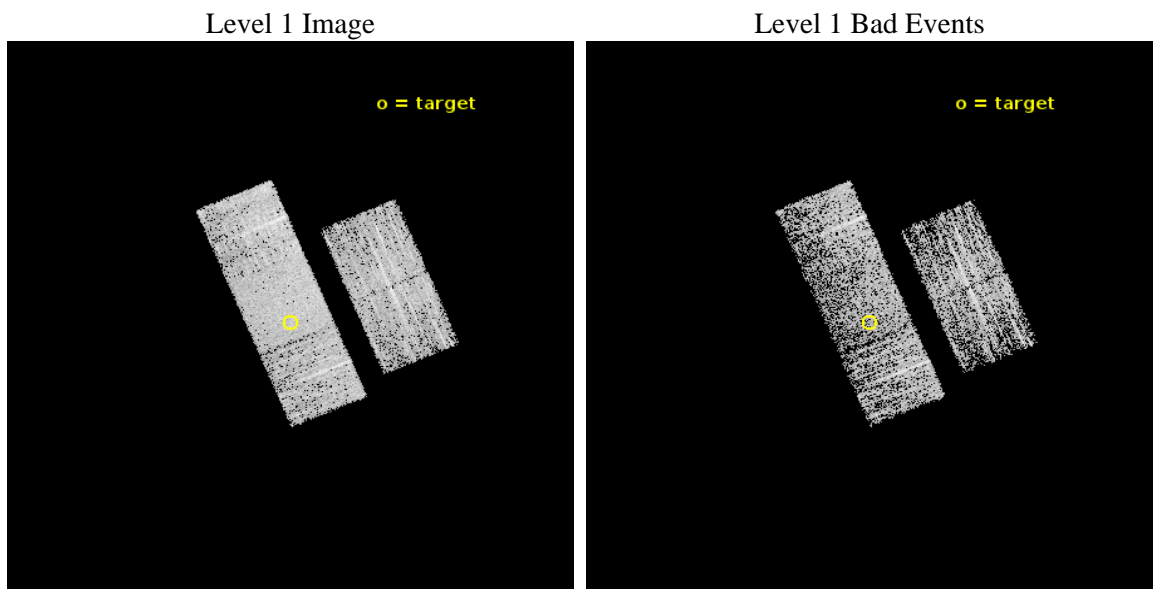
seq_num	601187	Sequence number
obs_id	16994	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC4487	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.76875	Observer's specified target RA [deg]
dec_targ	-8.053889	Observer's specified target Dec [deg]
ra_nom	187.77016817307	Nominal RA [deg]
dec_nom	-8.0593015944597	Nominal Dec [deg]
roll_nom	247.0459340983	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3427.7460678816	Sum of GTIs [s]
livetime	3382.9600420348	Livetime [s]
ontime2	3424.4408875704	Sum of GTIs [s]
ontime3	3424.522967577	Sum of GTIs [s]
ontime6	3424.5640076399	Sum of GTIs [s]
ontime7	3427.7460678816	Sum of GTIs [s]
ontime8	3424.4819276333	Sum of GTIs [s]
l2events	16870	Number of level 2 events



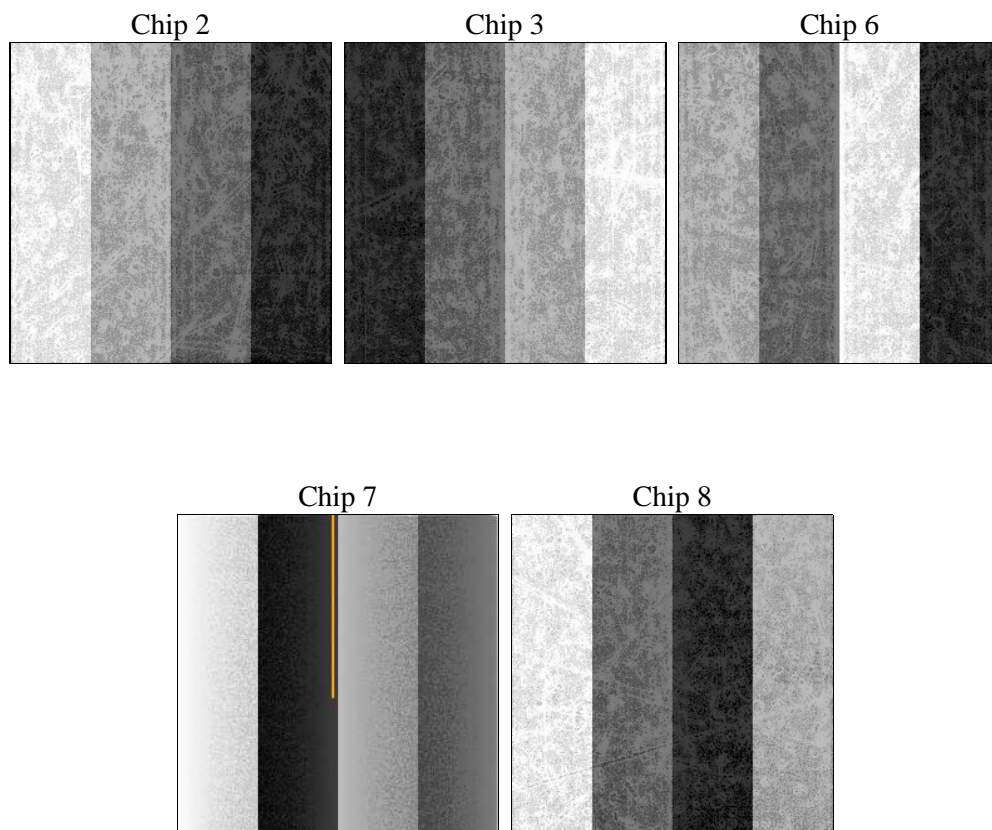
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	3400.000000	[s] Scheduled observation exposure time
ascdsver	10.4	Processing system revision	ontime	3427.7460678816	Sum of GTIs [s]
caldsver	4.6.7	 	ontime2	3424.4408875704	Sum of GTIs [s]
date	2015-07-01T06:33:58	Date and time of file creation	ontime3	3424.522967577	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	3424.5640076399	Sum of GTIs [s]
			ontime7	3427.7460678816	Sum of GTIs [s]
			ontime8	3424.4819276333	Sum of GTIs [s]
			l1events	99871	Number of level 1 events

2.1.4 Events

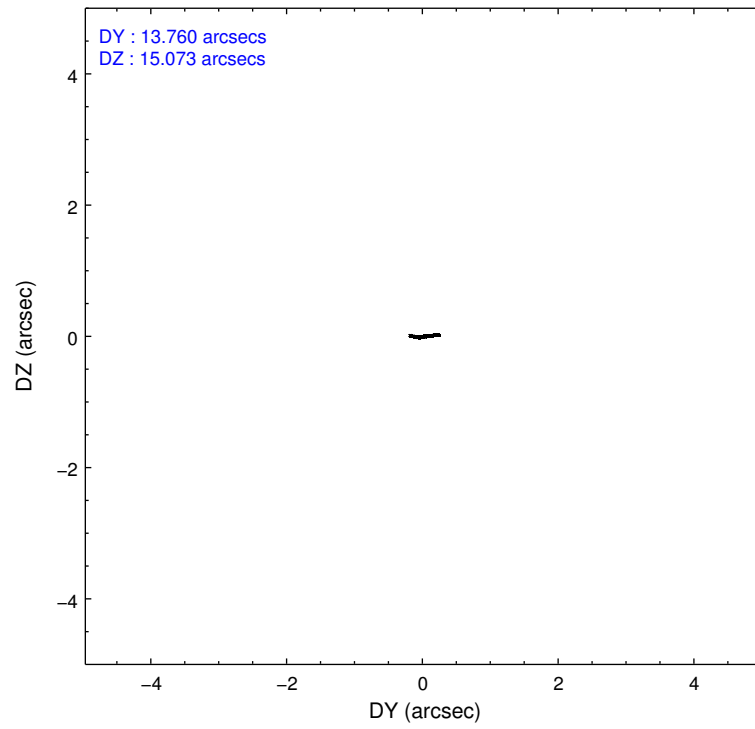
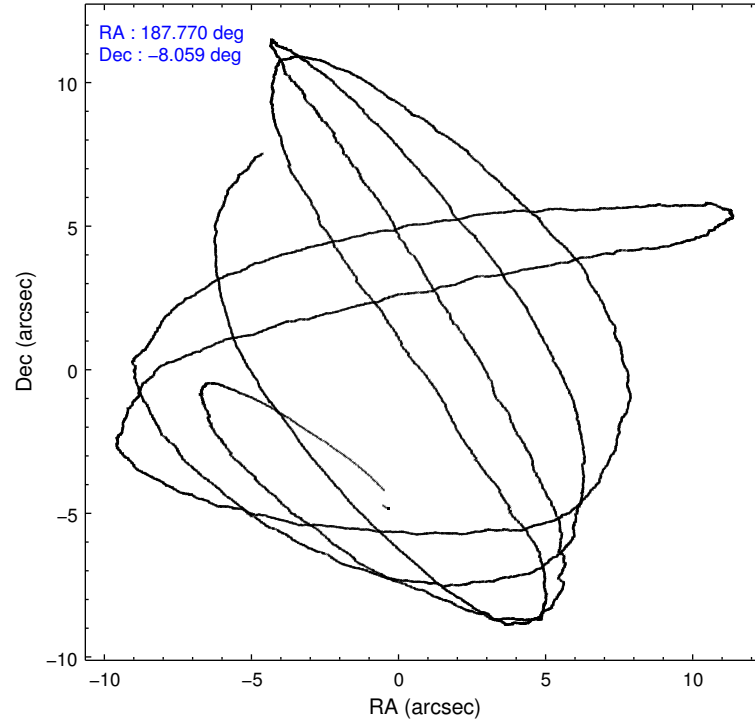
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	16574	17902	18529	23100	23766
rejected events	14746	15951	16403	13093	17646
rejected %	88%	89%	88%	56%	74%

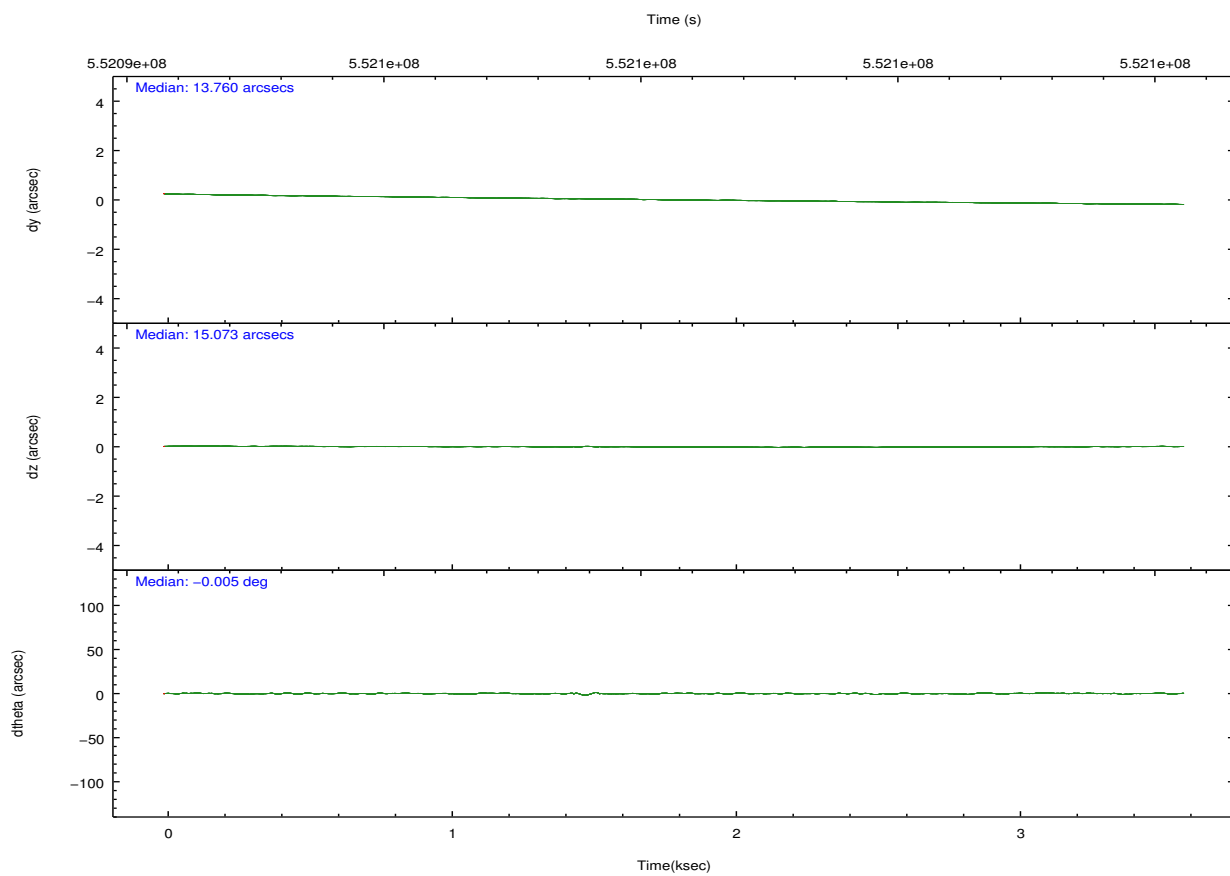
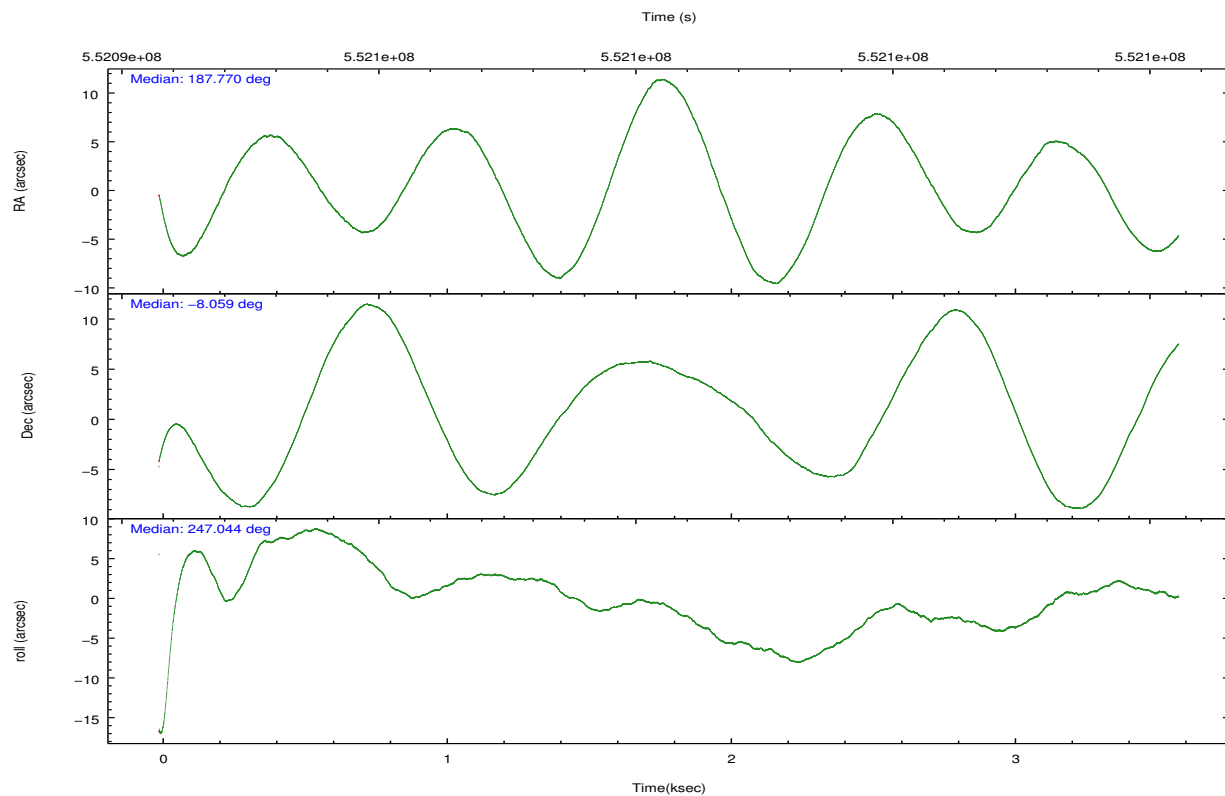
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	657	725	717	865	1749
	3%	4%	3%	3%	7%
grade 1 events	10	4	11	36	24
	0%	0%	0%	0%	0%
grade 2 events	451	387	495	2055	1461
	2%	2%	2%	8%	6%
grade 3 events	206	199	189	743	657
	1%	1%	1%	3%	2%
grade 4 events	177	214	216	773	598
	1%	1%	1%	3%	2%
grade 5 events	699	873	890	2295	1366
	4%	4%	4%	9%	5%
grade 6 events	340	430	513	5588	1661
	2%	2%	2%	24%	6%
grade 7 events	14034	15070	15498	10745	16250
	84%	84%	83%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	187.766500	187.7701681730711	CCD I2 on	O2	Y
[deg] Pointing Dec	-8.031921	-8.05930159445966	CCD I3 on	O1	Y
[deg] Pointing Roll	246.888926	247.0459340982974	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	552094510.184000	552093439.61501	CCD S5 on	N	N
Observation start date	2015-06-30T23:34:03	2015-06-30T23:17:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	552097911.184000	552098598.9528	On-chip summing requested	N	N
Observation end date	2015-07-01T00:30:43	2015-07-01T00:43:18	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



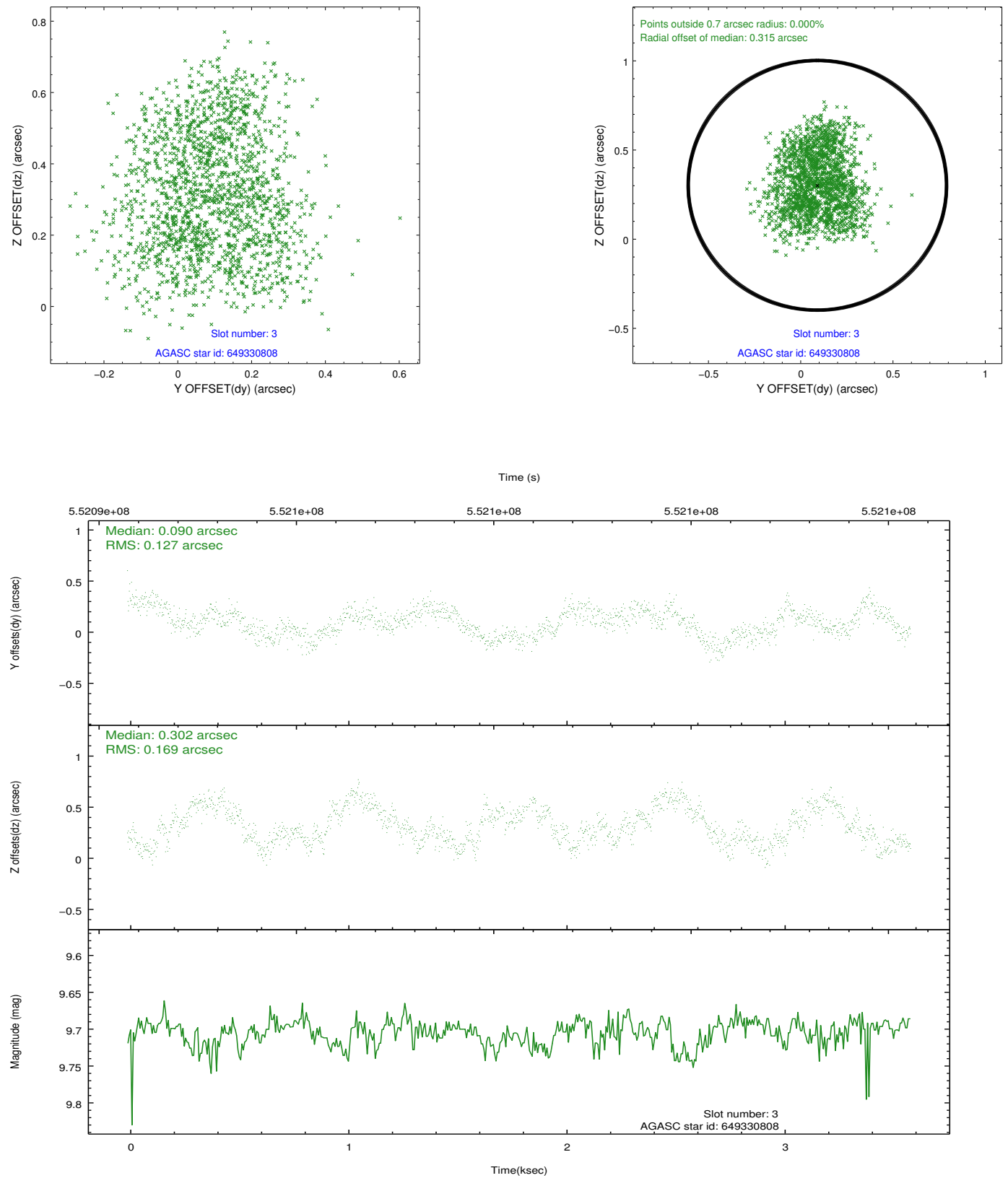


Slot Statistics

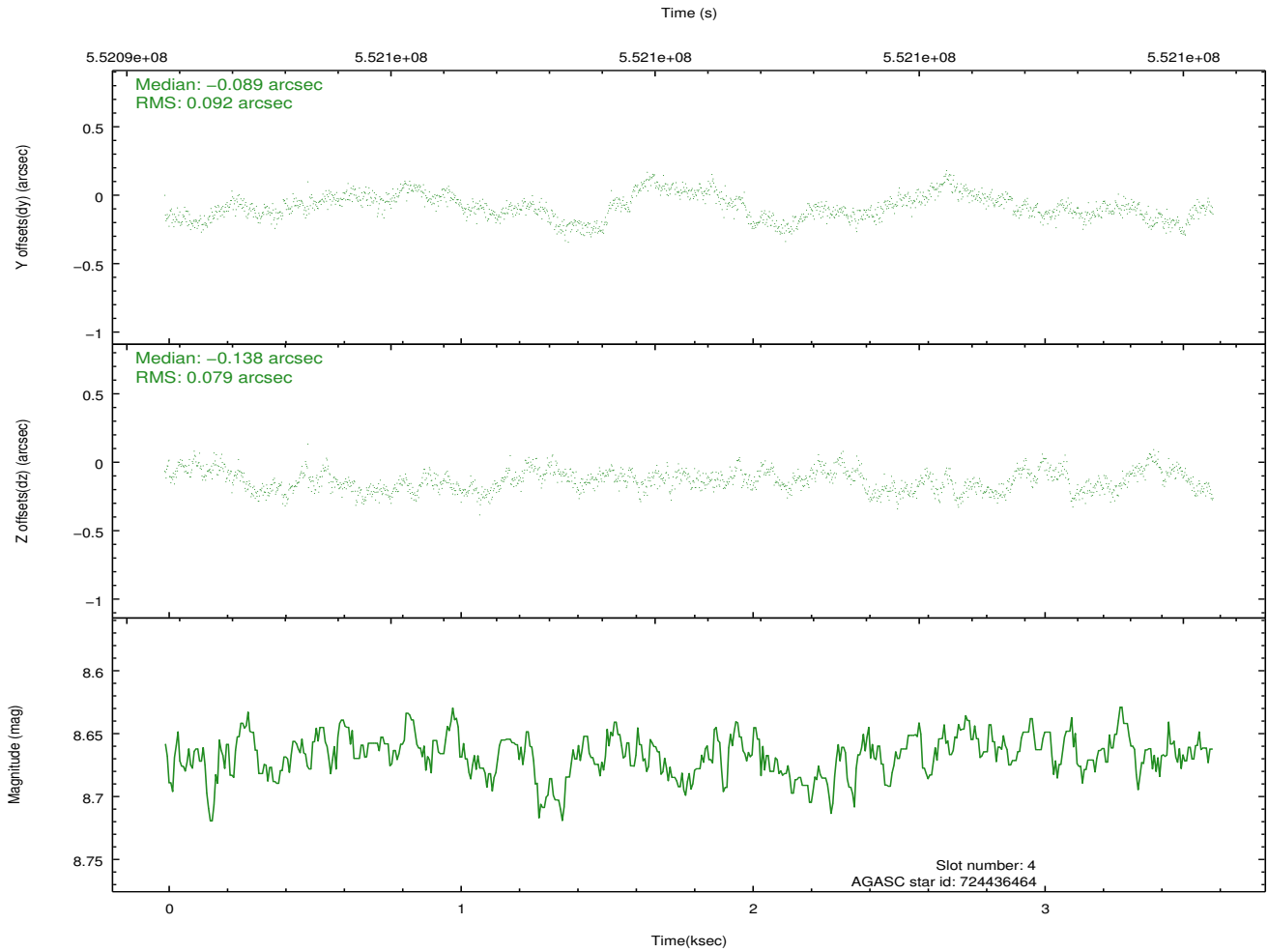
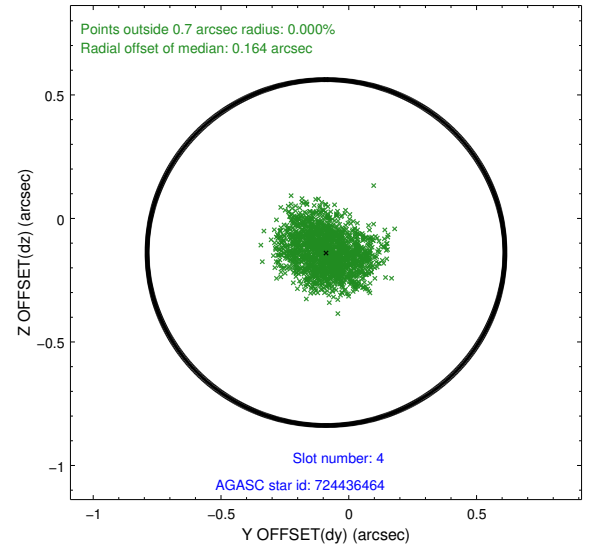
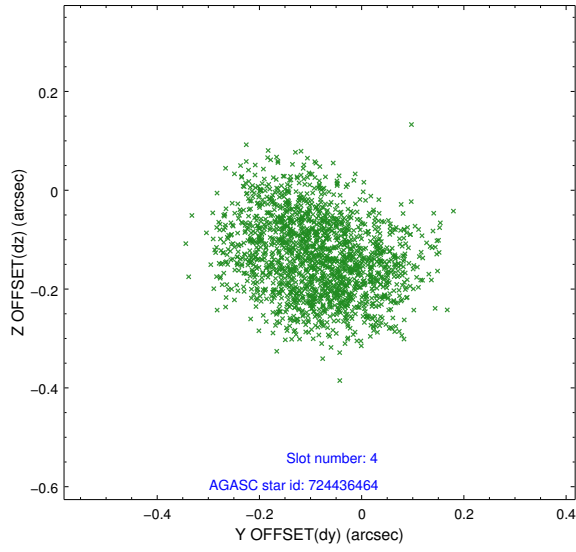
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.05	875	-0.094	-0.027	0.010	0.016	0.000000	0.000000	-766.77	-1736.44
1	FID		ACIS-S-4	7.15	875	0.303	0.053	0.008	0.014	0.000000	0.000000	2146.06	170.35
2	FID		ACIS-S-5	7.17	875	-0.240	-0.018	0.009	0.014	0.000000	0.000000	-1817.54	165.88
3	GUIDE	used	649330808	9.70	1738	0.090	0.302	0.234	0.345	187.646580	-7.384568	-1975.86	-1307.98
4	GUIDE	used	724436464	8.67	1750	-0.089	-0.138	0.132	0.199	187.862768	-8.158474	282.78	493.99
5	GUIDE	used	724438424	9.41	1748	0.127	0.242	0.156	0.258	187.820638	-7.665423	-1289.01	-339.61
6	GUIDE	used	724444400	9.55	1749	0.004	-0.036	0.178	0.270	187.886348	-8.667856	1936.93	1291.56
7	GUIDE	used	724435504	9.77	1743	-0.138	-0.396	0.183	0.291	188.510066	-7.941206	-1338.53	2311.76

2.4 Star Slots

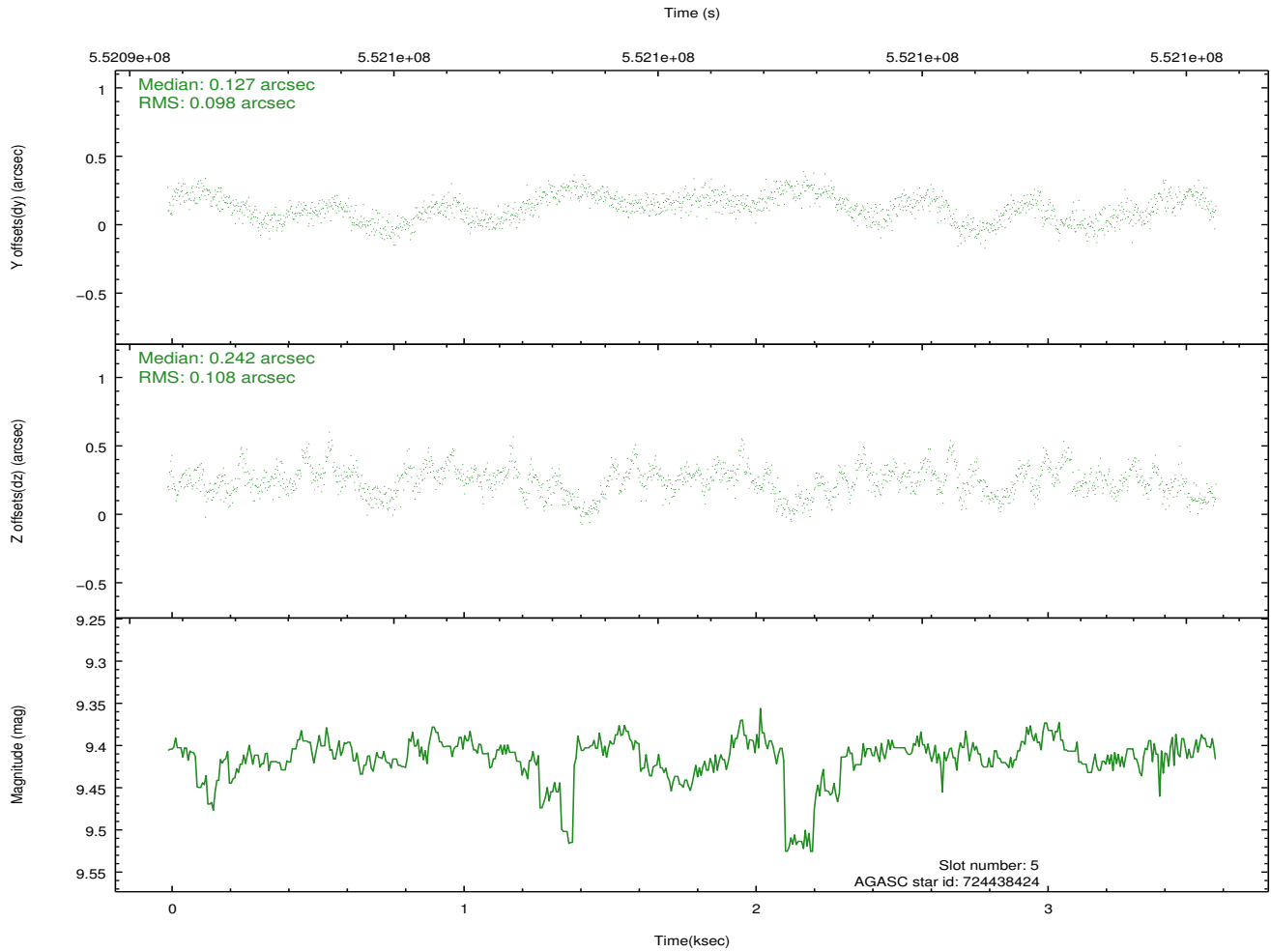
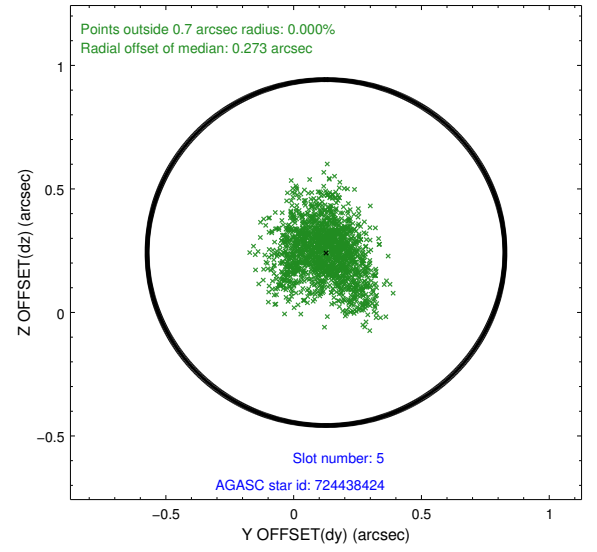
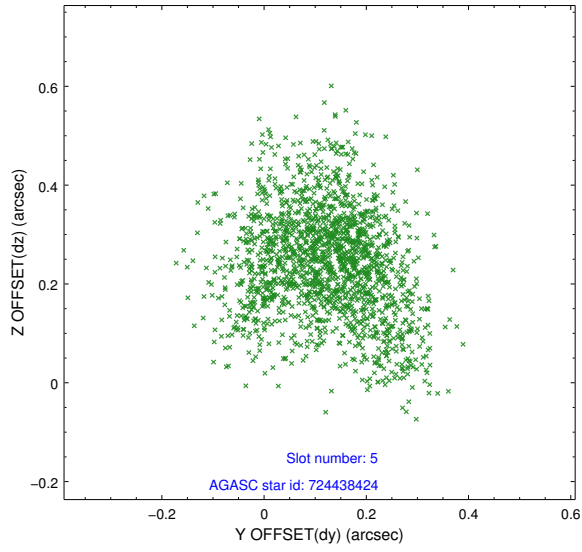
2.4.1 Slot 3



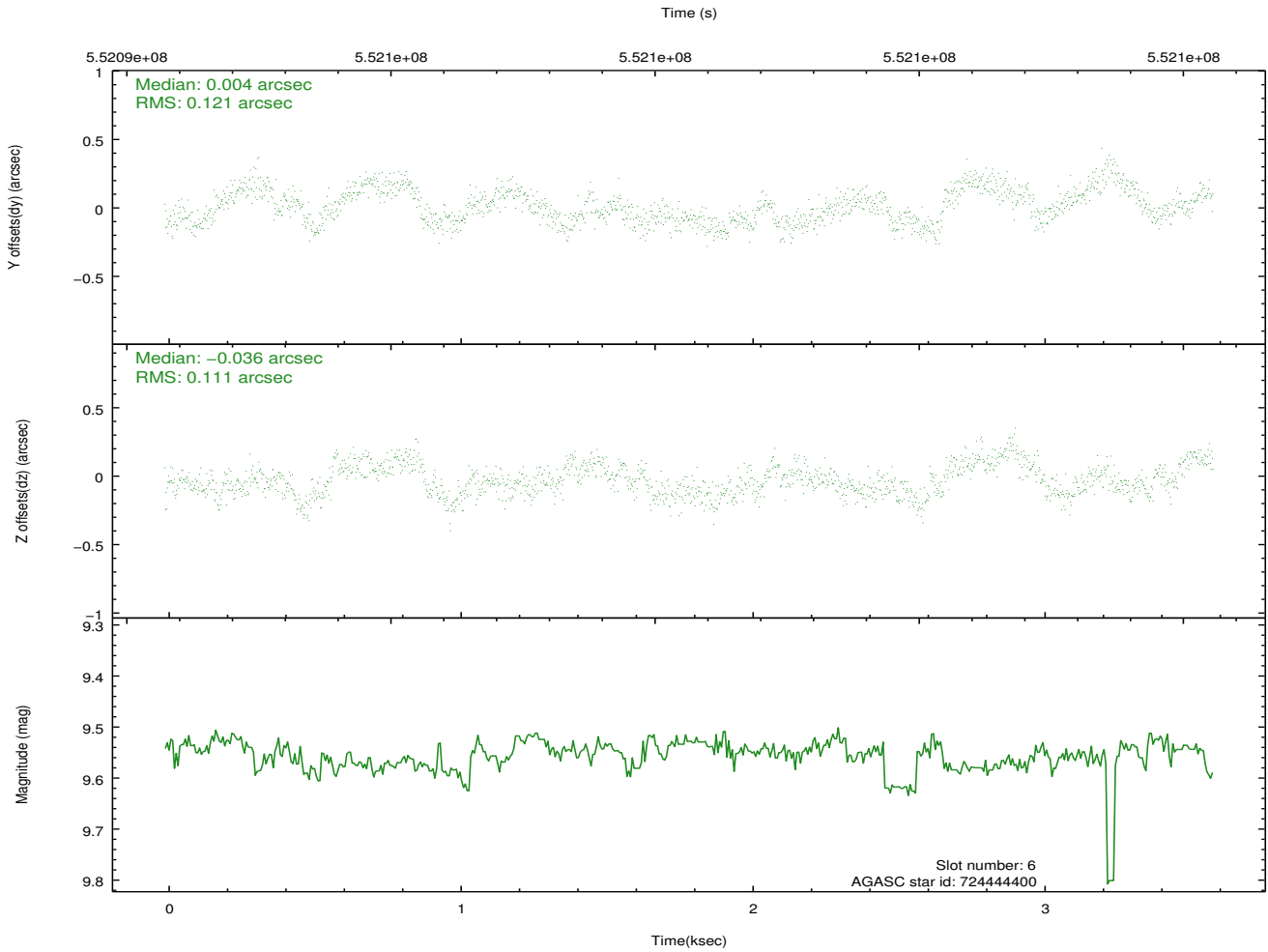
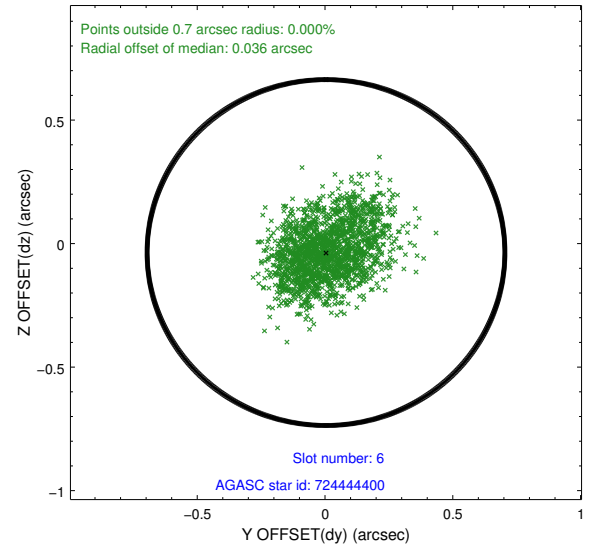
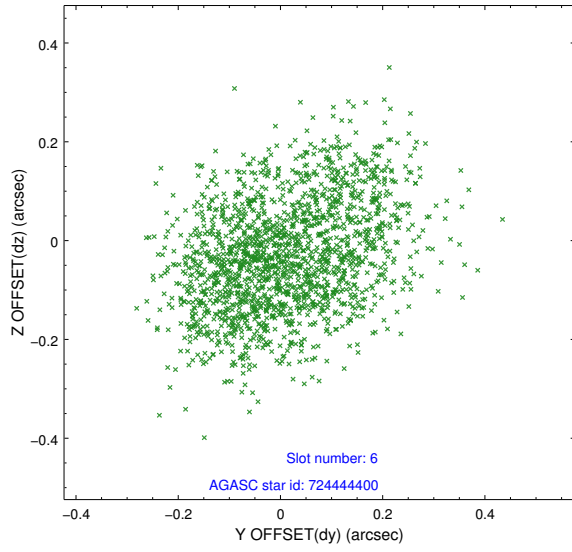
2.4.2 Slot 4



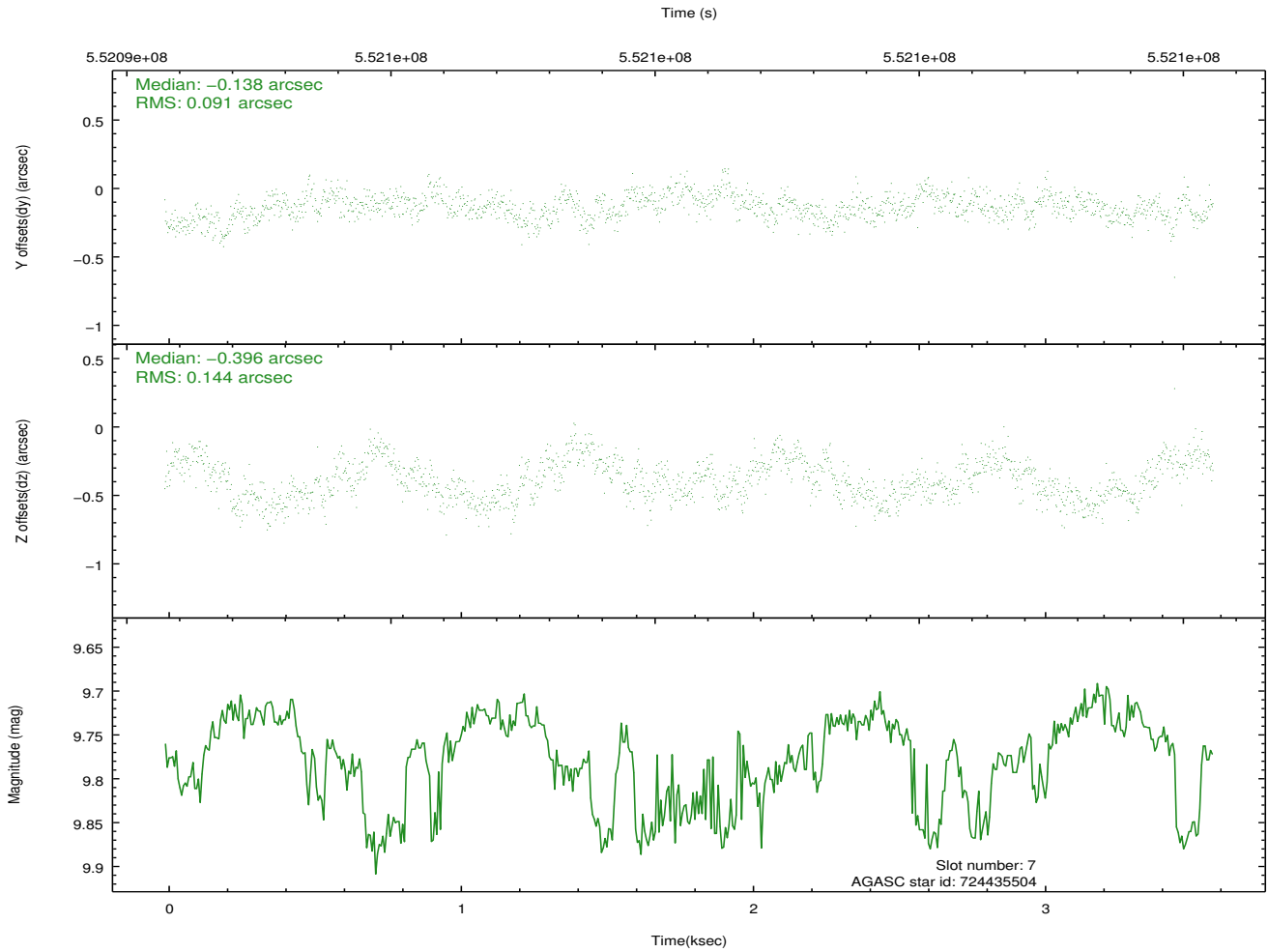
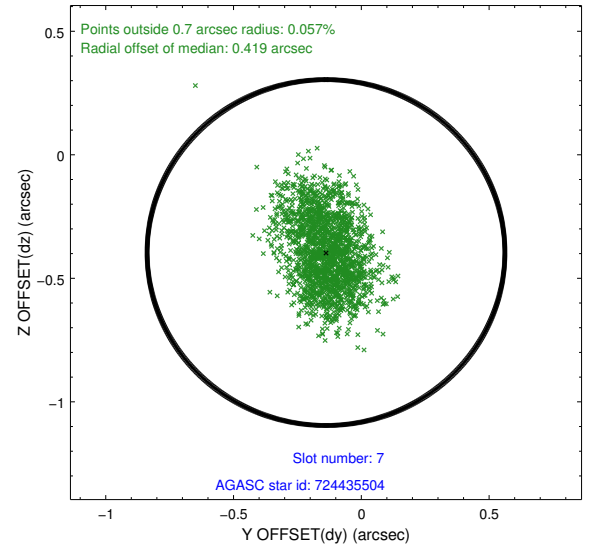
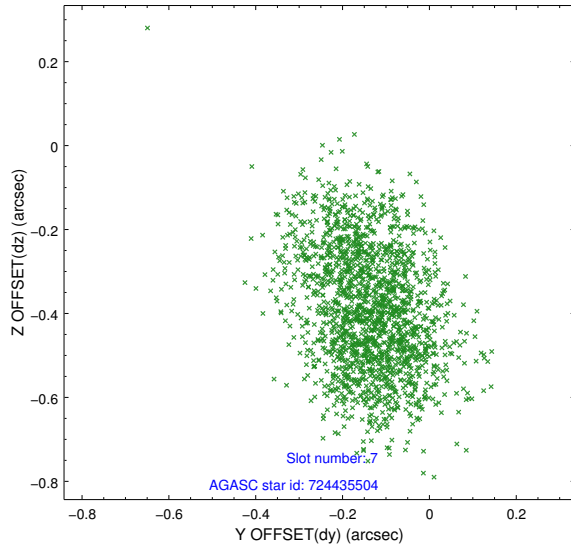
2.4.3 Slot 5



2.4.4 Slot 6

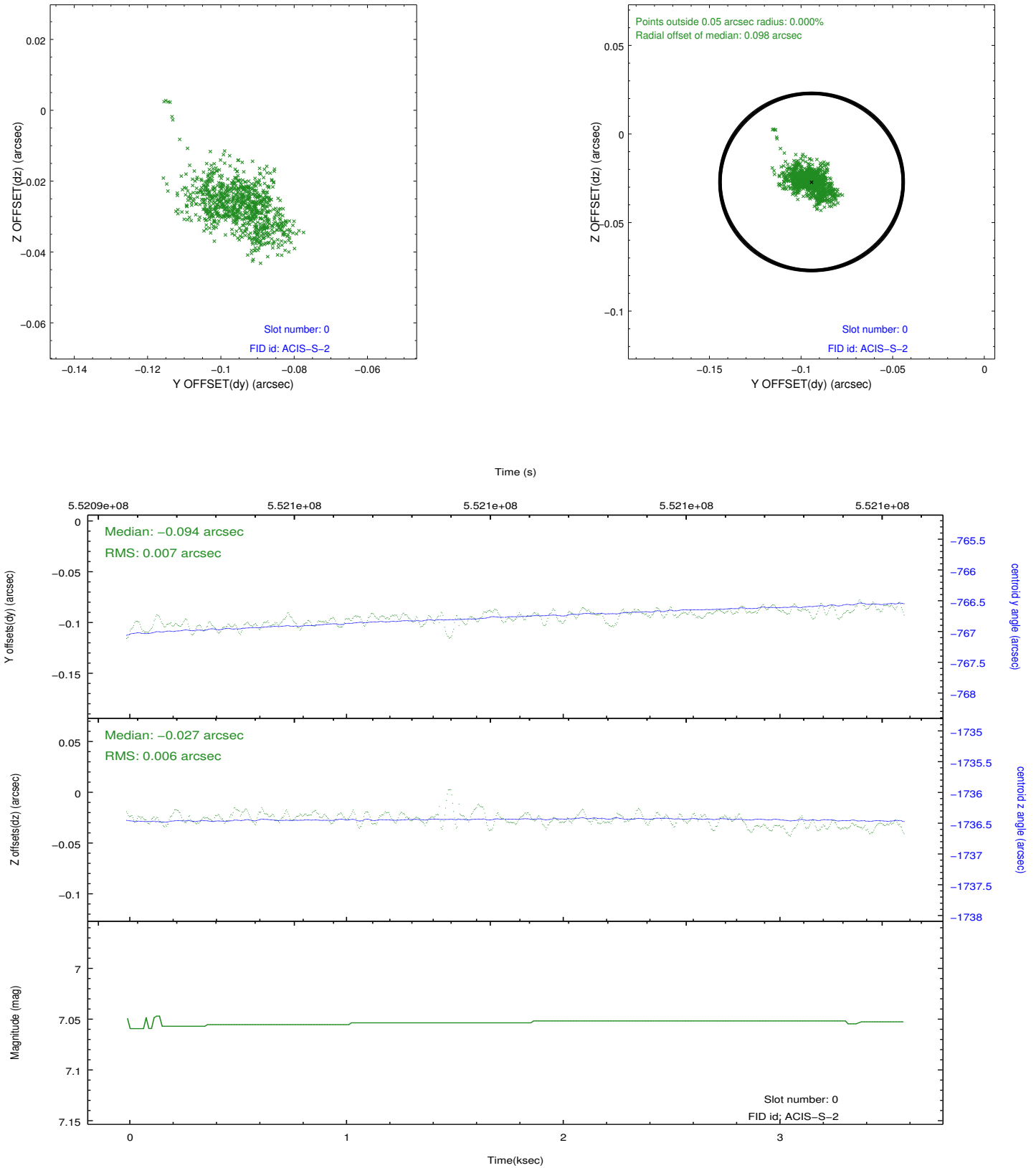


2.4.5 Slot 7

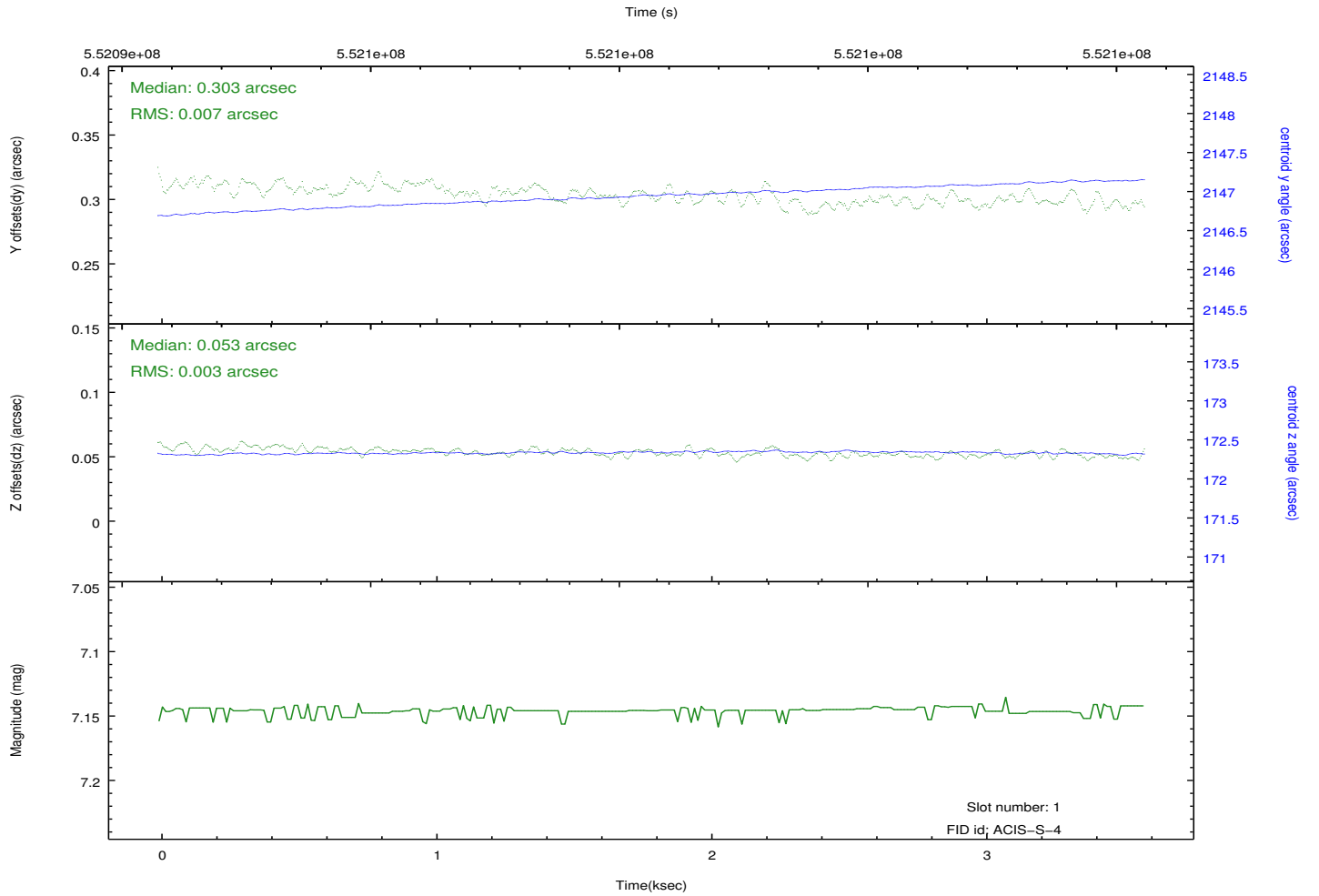
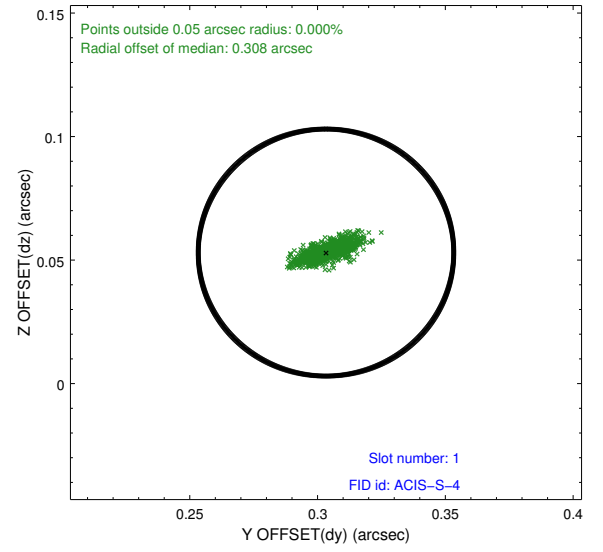
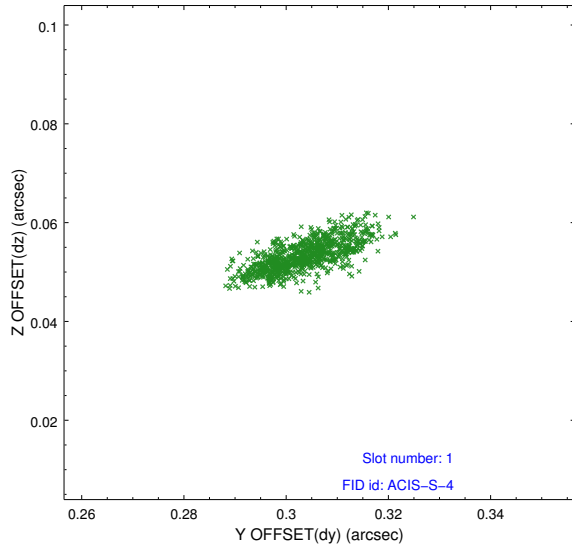


2.5 FID Slots

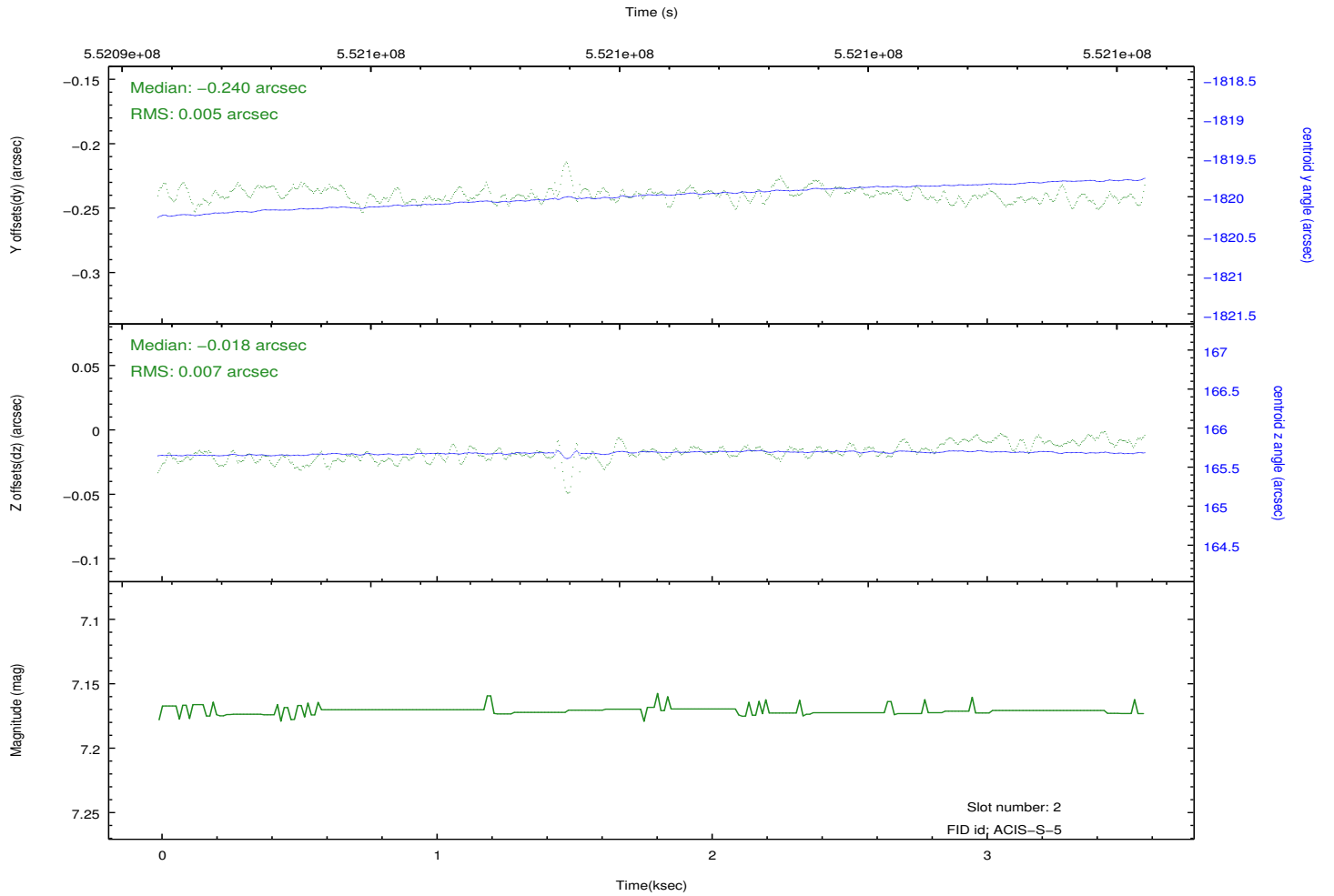
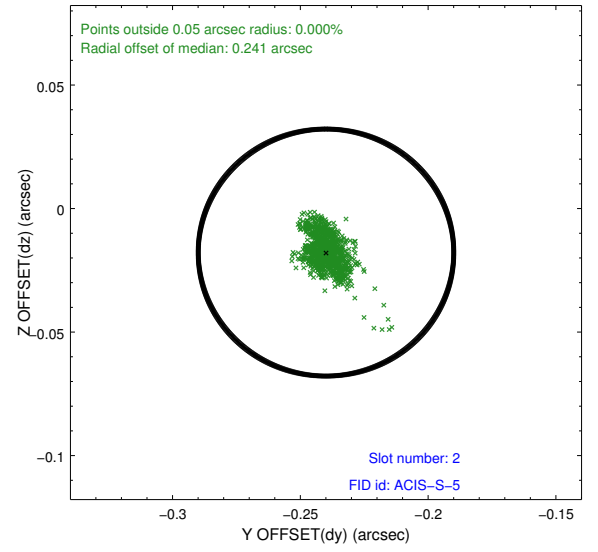
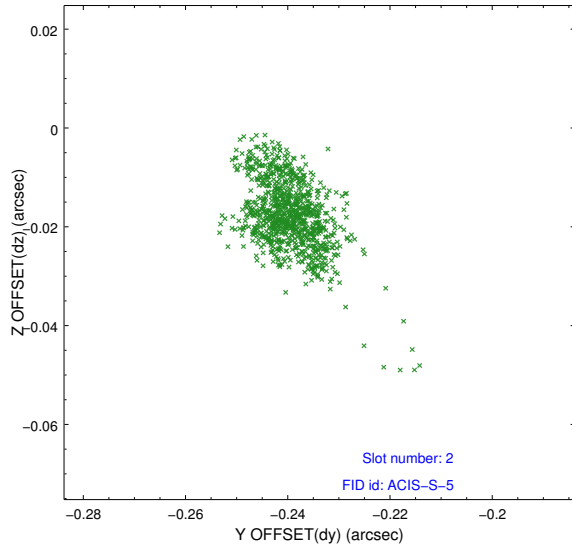
2.5.1 Slot 0



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)	2015.07.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.4277460678816

A.2 Comments