

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 16989 - L2 Version 1
Chandra X-Ray Center

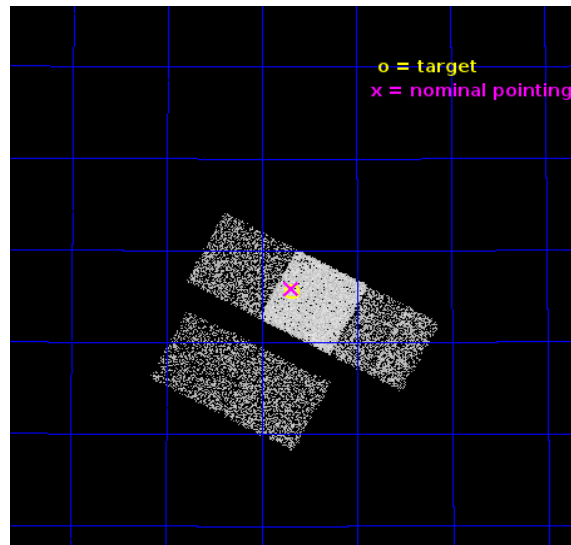
L2 Processing Date : Oct 18 2015

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1 Front

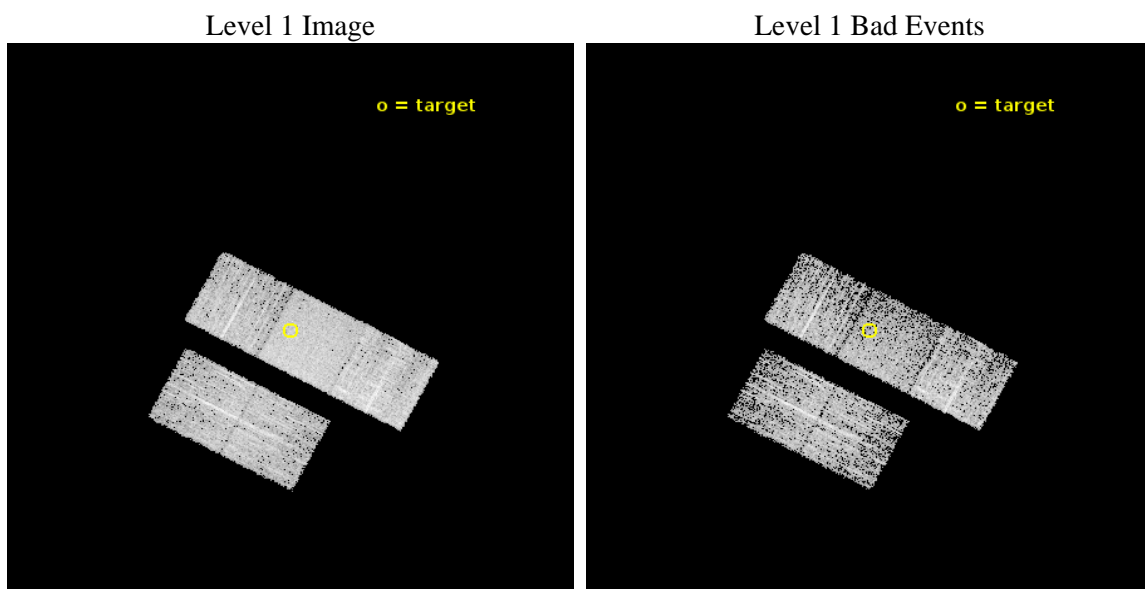
seq_num	601182	Sequence number
obs_id	16989	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC3906	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.41875	Observer's specified target RA [deg]
dec_targ	48.425944	Observer's specified target Dec [deg]
ra_nom	177.42188918426	Nominal RA [deg]
dec_nom	48.430991189683	Nominal Dec [deg]
roll_nom	28.016871112988	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4560.1000351906	Sum of GTIs [s]
livetime	4500.518971134	Livetime [s]
ontime2	4560.1000351906	Sum of GTIs [s]
ontime3	4560.1000351906	Sum of GTIs [s]
ontime6	4560.1000351906	Sum of GTIs [s]
ontime7	4560.1000351906	Sum of GTIs [s]
ontime8	4560.1000351906	Sum of GTIs [s]
l2events	24359	Number of level 2 events



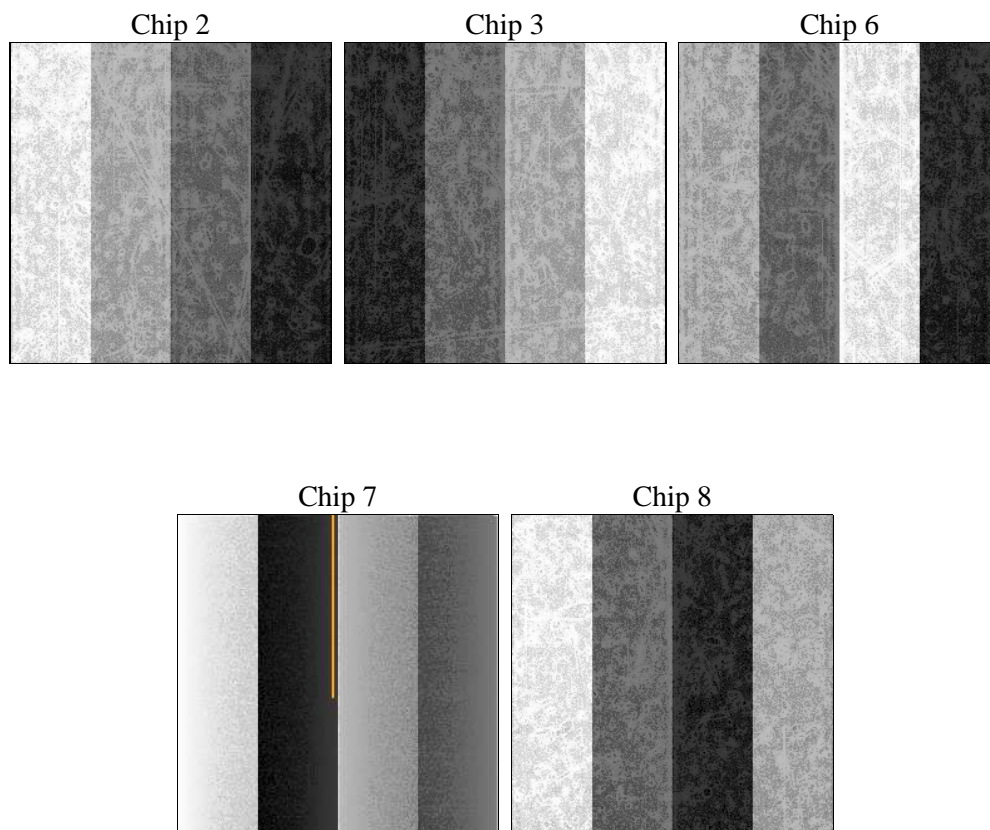
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4500.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	4560.1000351906	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime2	4560.1000351906	Sum of GTIs [s]
date	2015-10-18T04:15:06	Date and time of file creation	ontime3	4560.1000351906	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	4560.1000351906	Sum of GTIs [s]
			ontime7	4560.1000351906	Sum of GTIs [s]
			ontime8	4560.1000351906	Sum of GTIs [s]
			l1events	138939	Number of level 1 events

2.1.4 Events

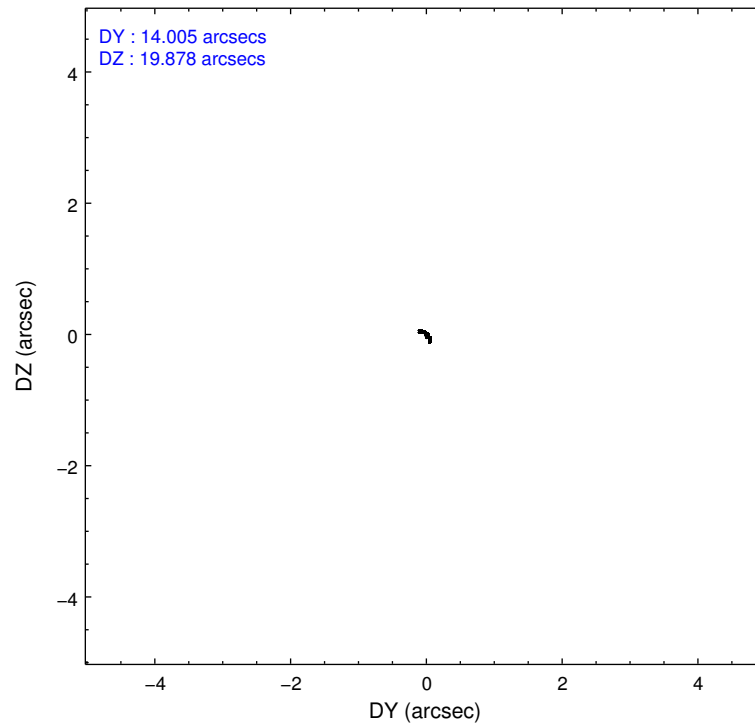
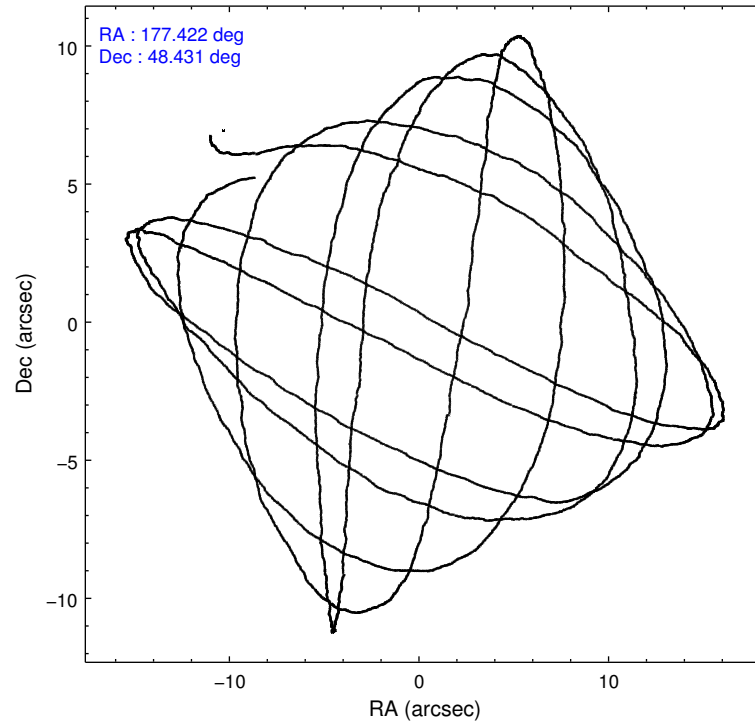
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	23882	23964	24164	32612	34317
rejected events	21232	21180	21212	18530	25442
rejected %	88%	88%	87%	56%	74%

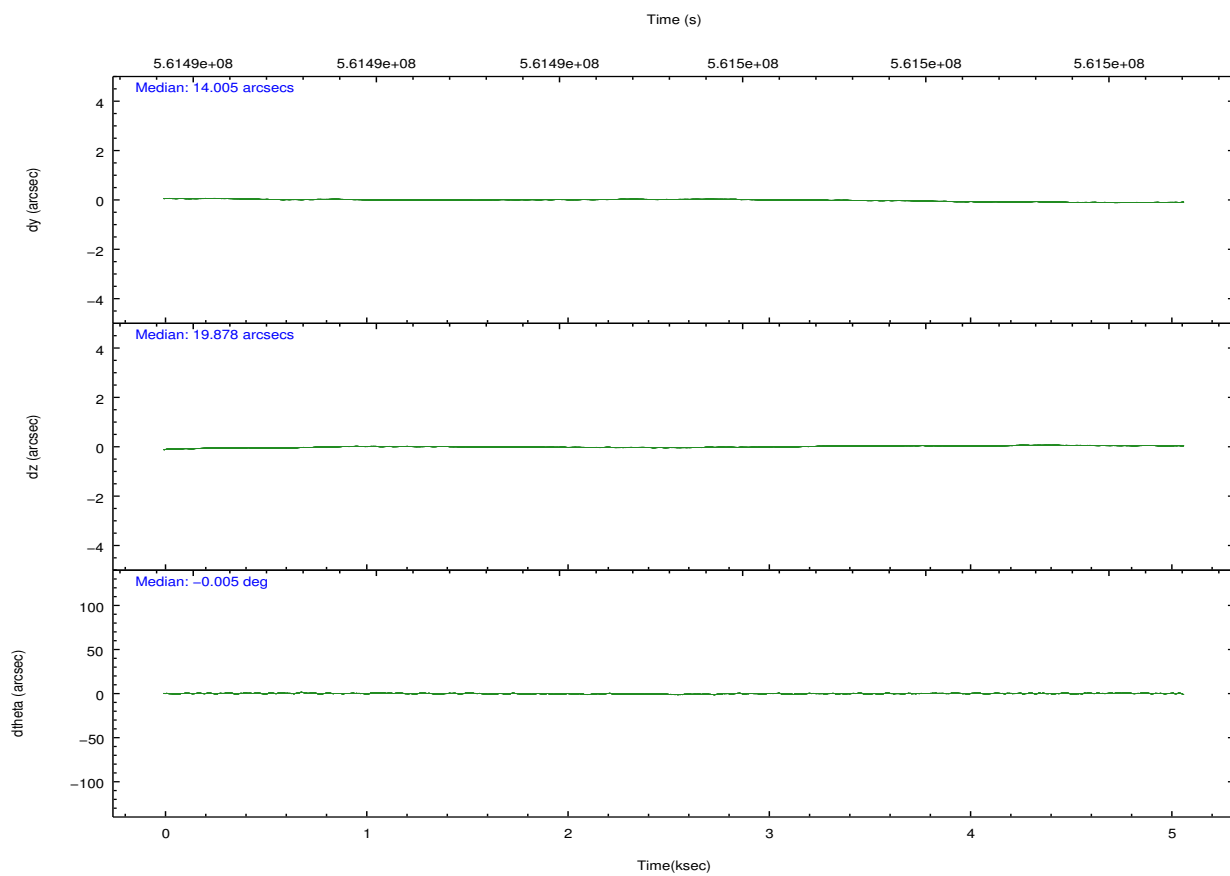
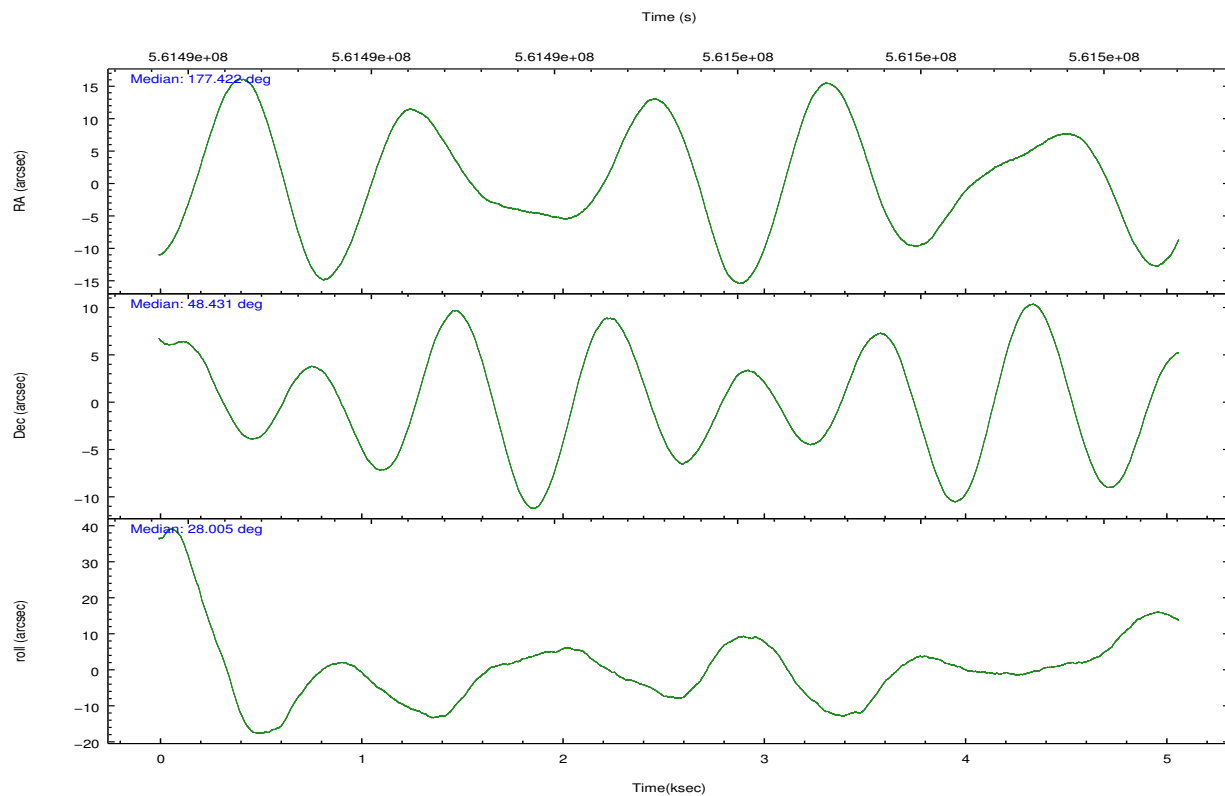
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	893	1001	983	1258	2611
	3%	4%	4%	3%	7%
grade 1 events	16	22	7	37	19
	0%	0%	0%	0%	0%
grade 2 events	670	608	694	2931	2132
	2%	2%	2%	8%	6%
grade 3 events	278	298	283	1184	876
	1%	1%	1%	3%	2%
grade 4 events	266	261	279	1137	848
	1%	1%	1%	3%	2%
grade 5 events	953	1261	1269	3316	1822
	3%	5%	5%	10%	5%
grade 6 events	543	616	714	7579	2412
	2%	2%	2%	23%	7%
grade 7 events	20263	19897	19935	15170	23597
	84%	83%	82%	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	177.400513	177.4218891842577	CCD I2 on	O2	Y
[deg] Pointing Dec	48.407473	48.43099118968342	CCD I3 on	O1	Y
[deg] Pointing Roll	27.876262	28.01687111298837	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	561492656.184000	561491523.45904	CCD S5 on	N	N
Observation start date	2015-10-17T18:09:48	2015-10-17T17:52:03	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	561497156.184000	561498094.73441	On-chip summing requested	N	N
Observation end date	2015-10-17T19:24:48	2015-10-17T19:41:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



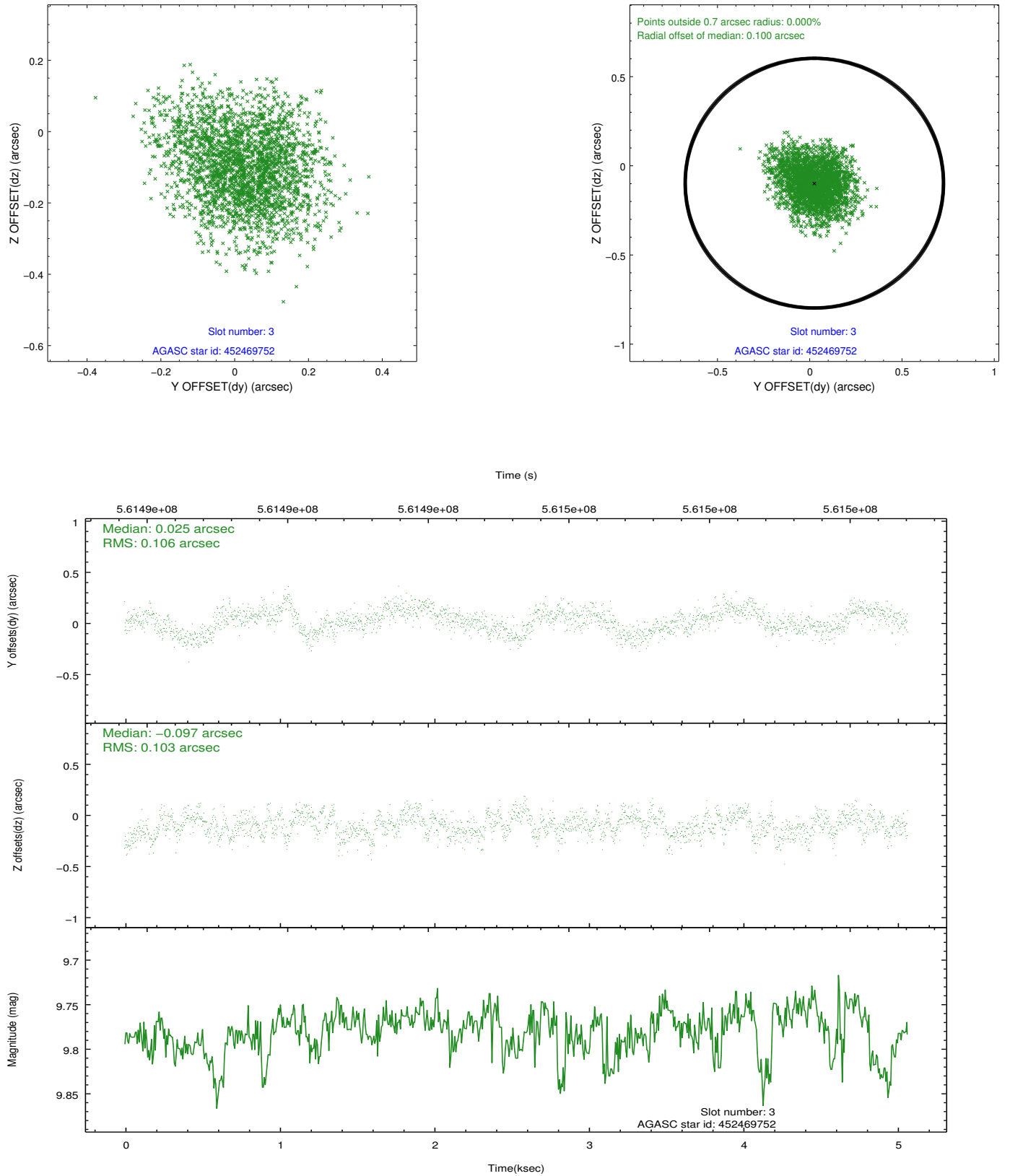


Slot Statistics

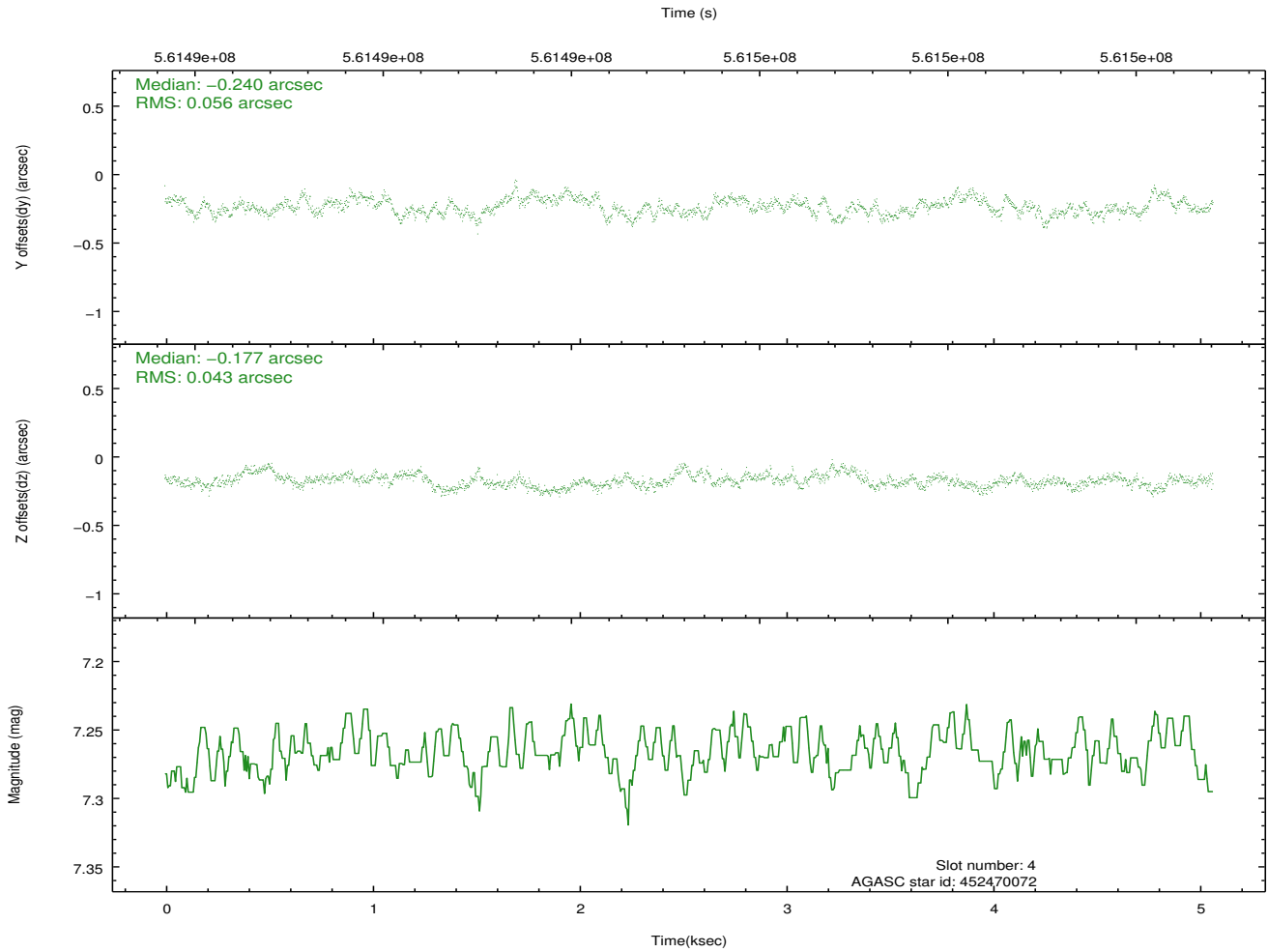
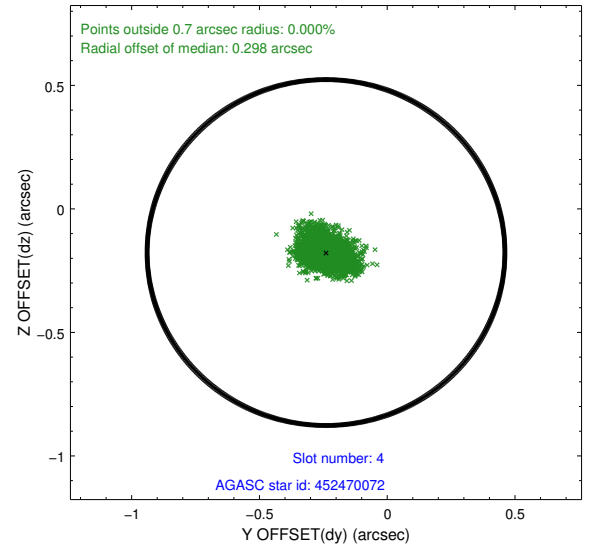
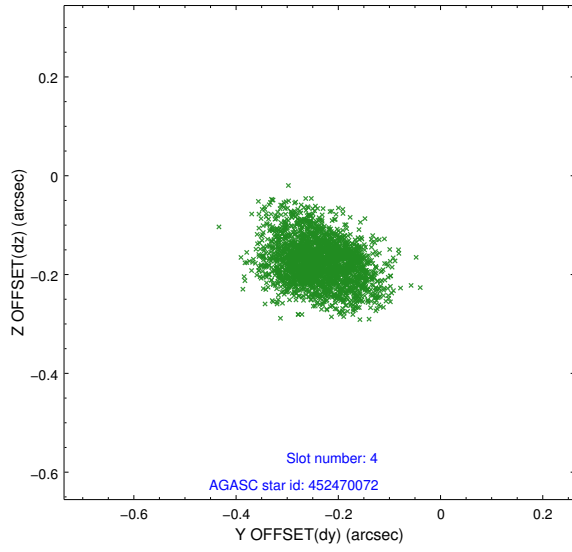
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	1236	-0.167	-0.084	0.007	0.012	0.000000	0.000000	-767.08	-1741.48
1	FID		ACIS-S-4	7.20	1236	0.426	0.103	0.006	0.011	0.000000	0.000000	2146.22	165.97
2	FID		ACIS-S-5	7.23	1236	-0.290	-0.011	0.007	0.012	0.000000	0.000000	-1818.53	160.85
3	GUIDE	used	452469752	9.78	2467	0.025	-0.097	0.161	0.251	176.817055	48.563795	-962.92	1151.39
4	GUIDE	used	452470072	7.27	2473	-0.240	-0.177	0.075	0.124	177.061194	48.523768	-518.96	750.06
5	GUIDE	used	452471120	9.47	2472	-0.050	-0.031	0.121	0.203	177.758695	48.063121	183.28	-1496.45
6	GUIDE	used	452472552	8.98	2473	-0.021	0.065	0.093	0.160	178.062313	48.221427	1093.69	-1328.30
7	GUIDE	used	452470432	9.78	2427	0.305	0.237	0.189	0.314	176.712094	47.890435	-2336.24	-862.85

2.4 Star Slots

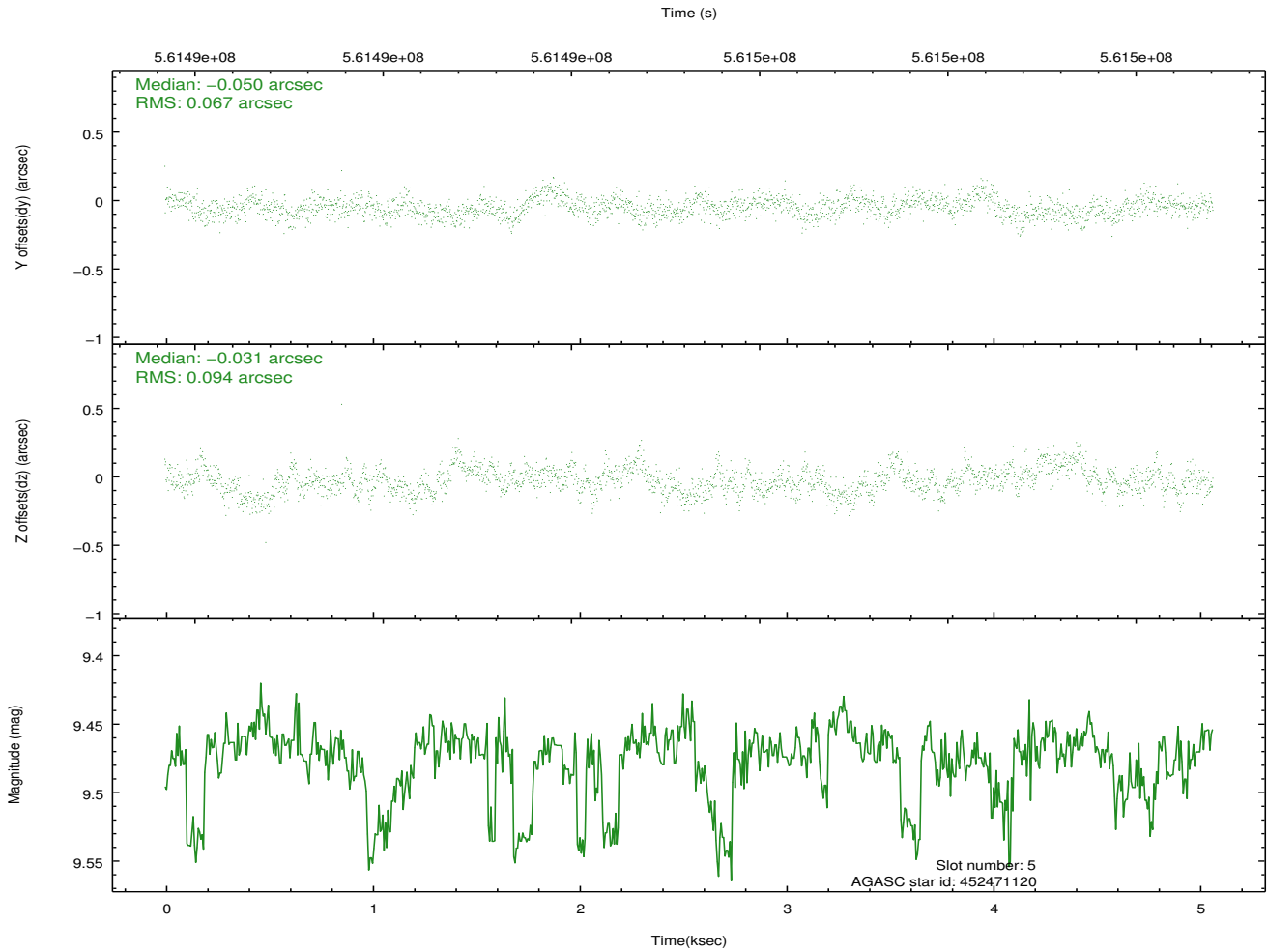
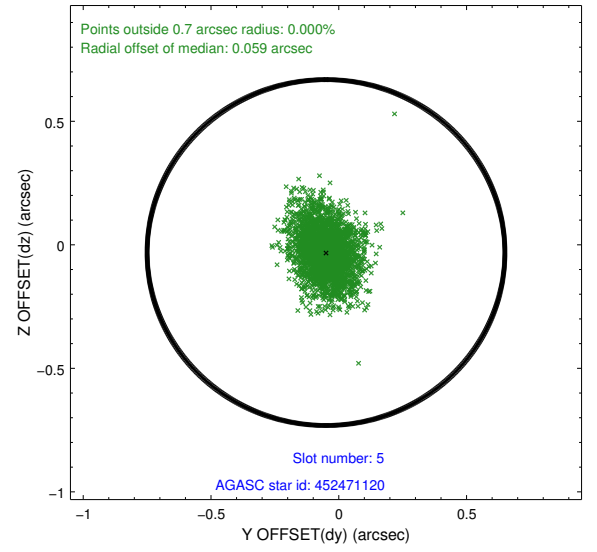
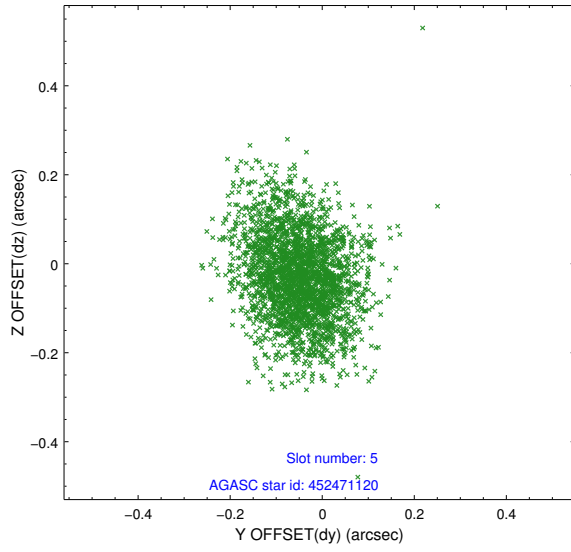
2.4.1 Slot 3



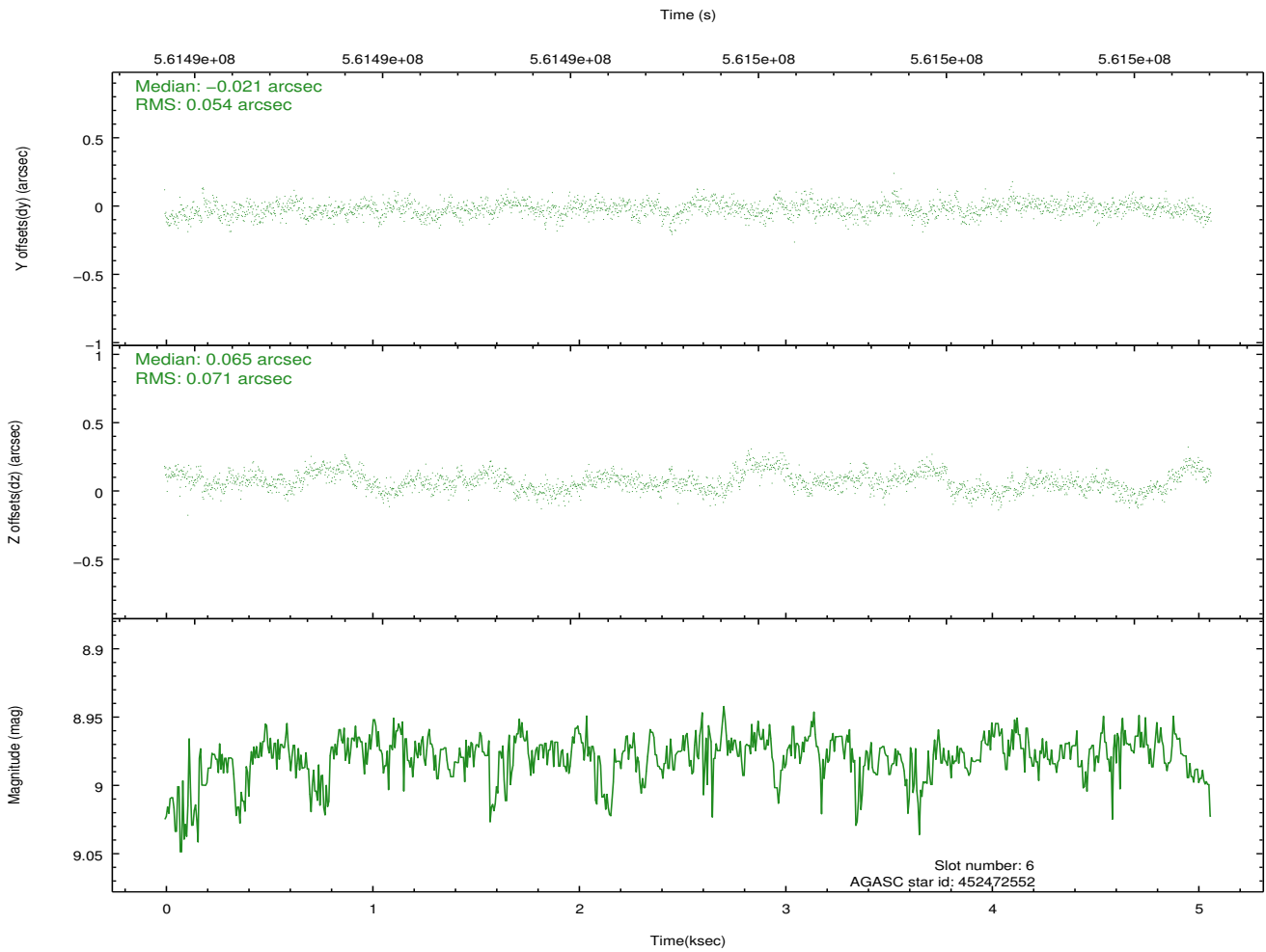
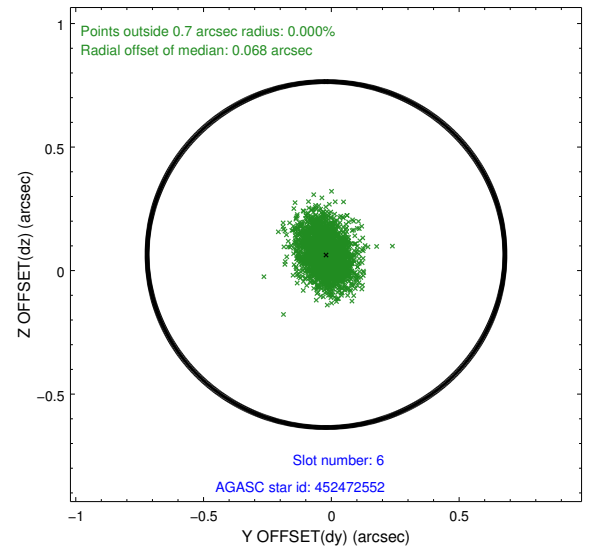
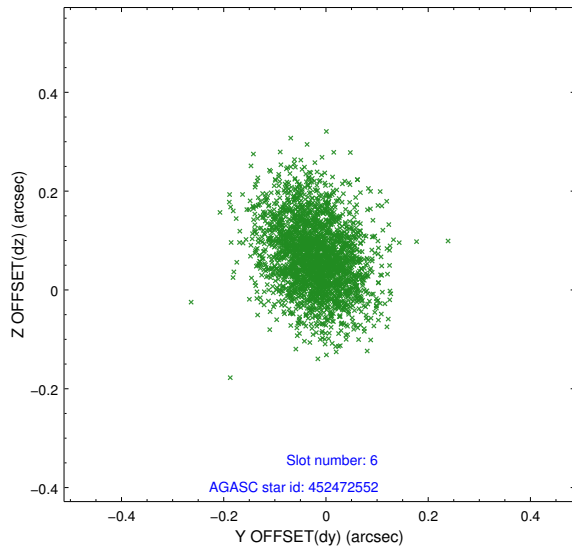
2.4.2 Slot 4



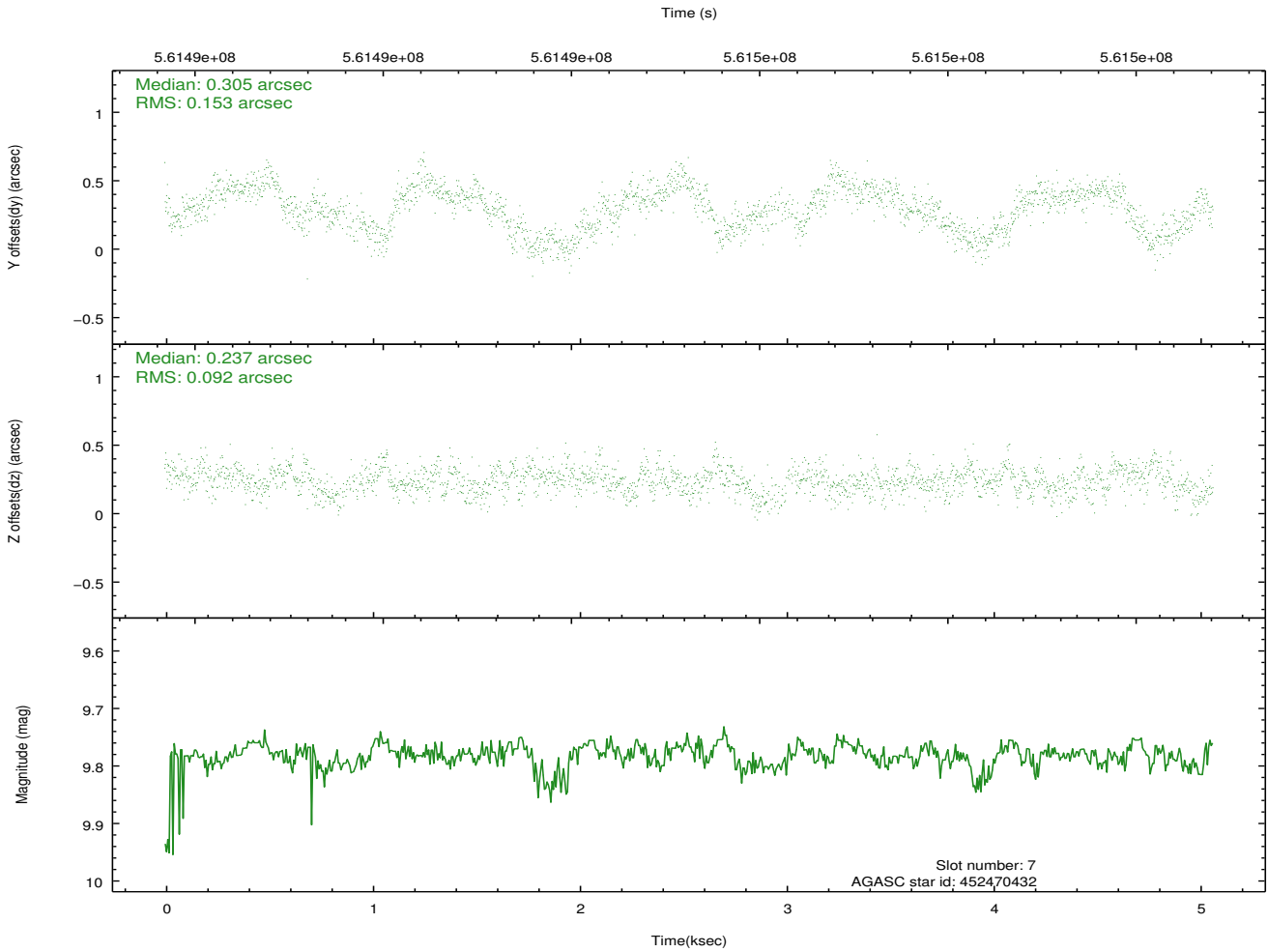
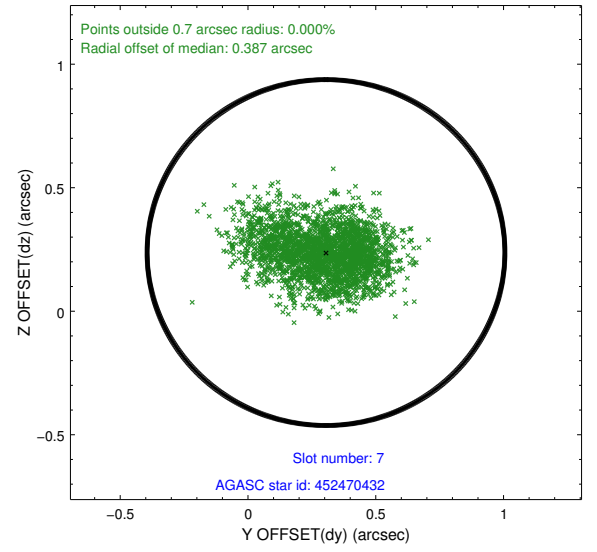
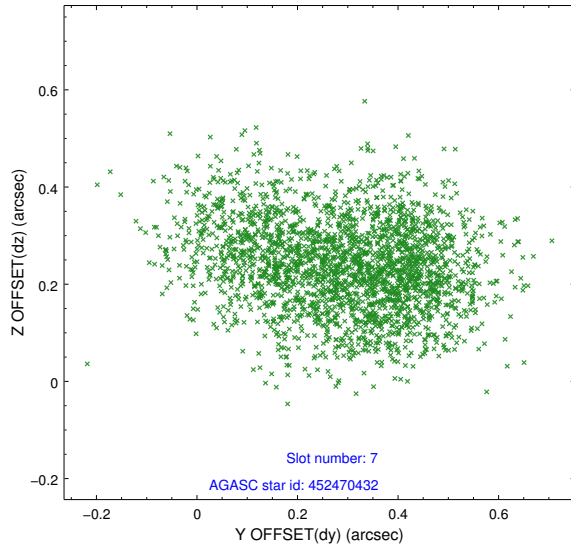
2.4.3 Slot 5



2.4.4 Slot 6

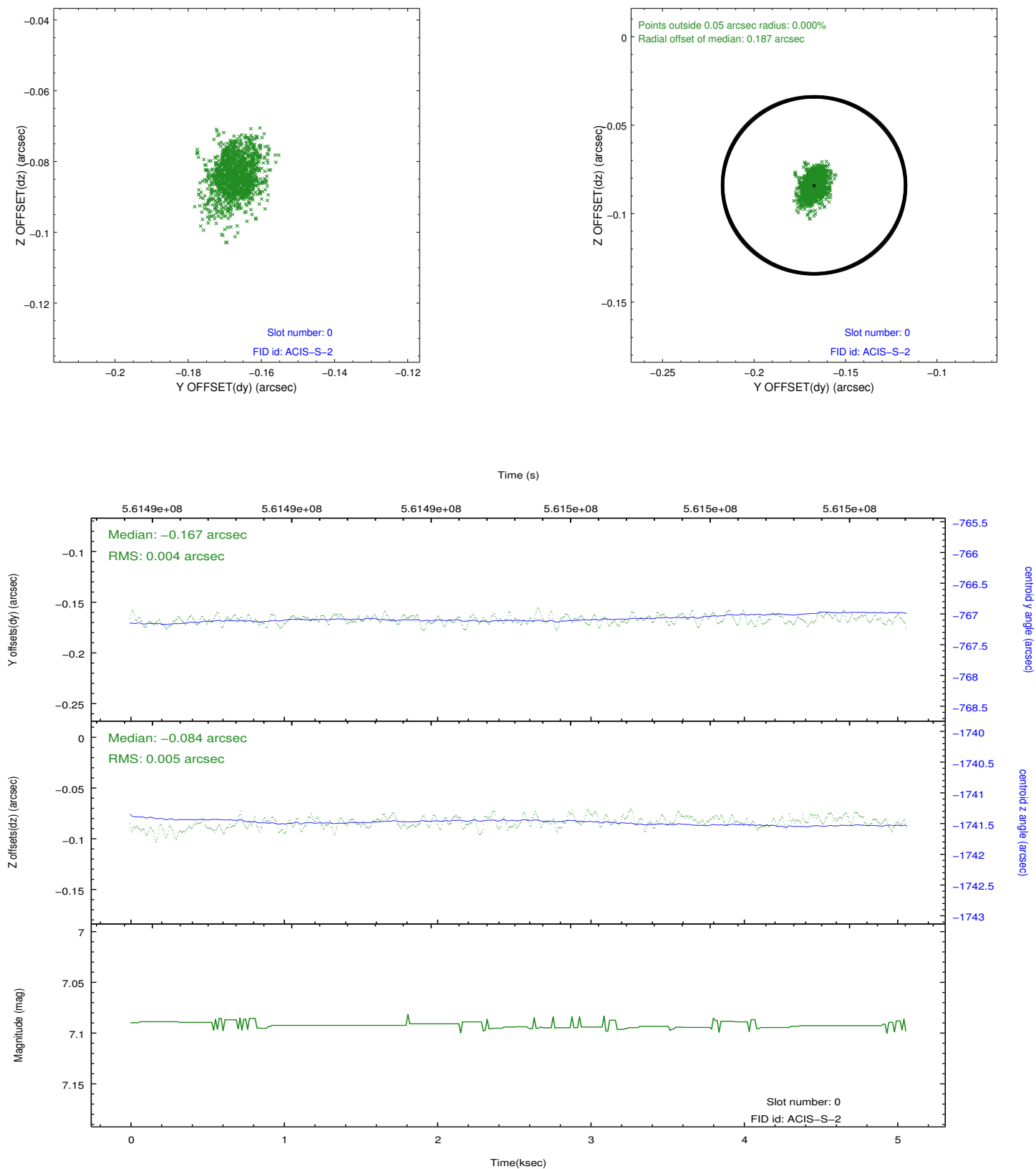


2.4.5 Slot 7

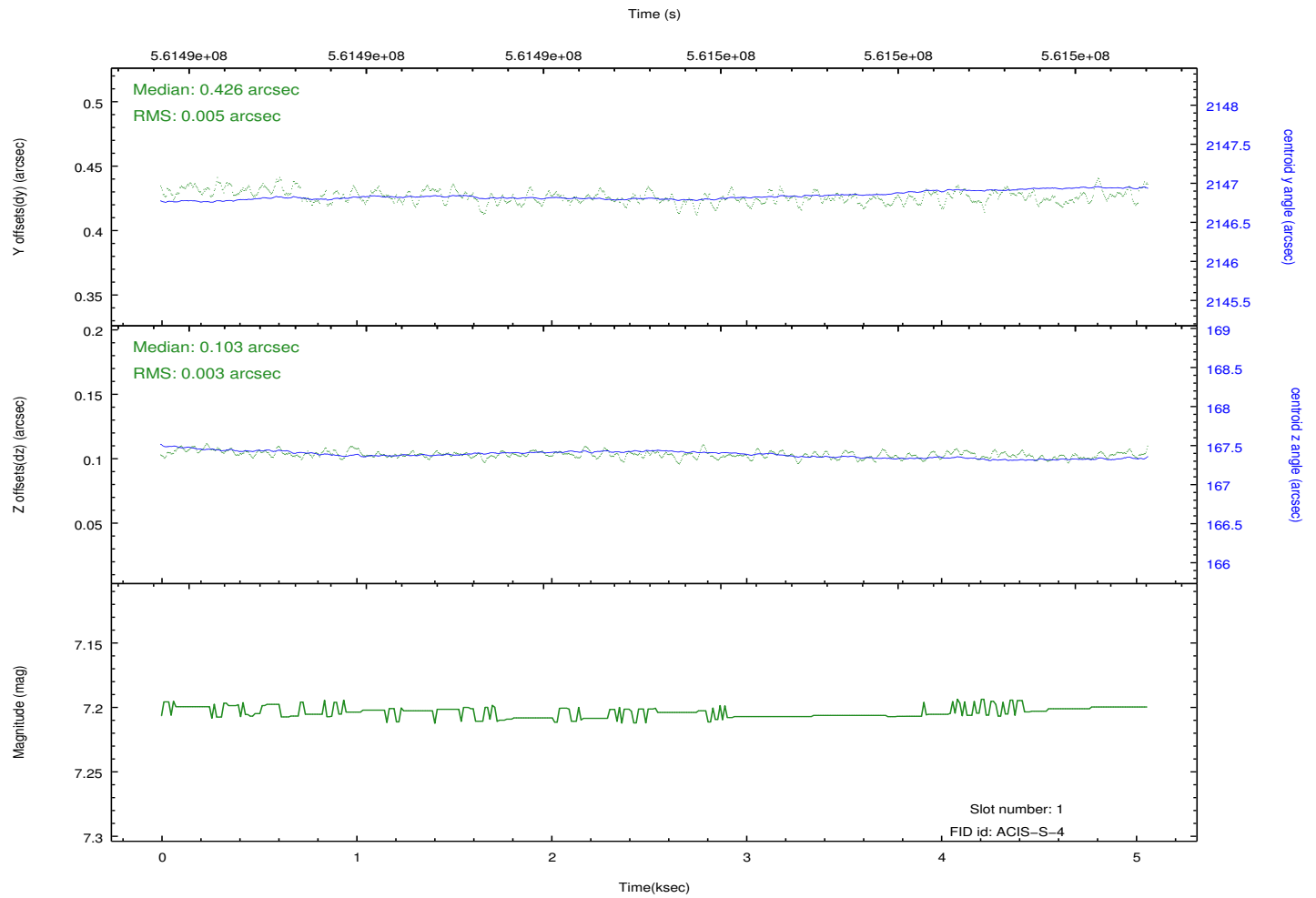
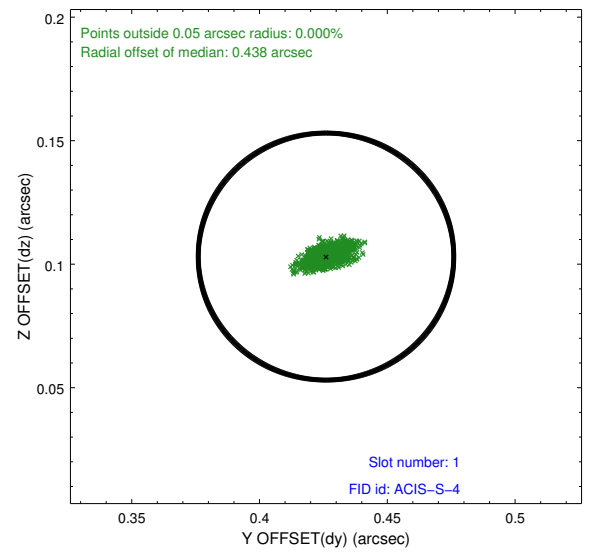
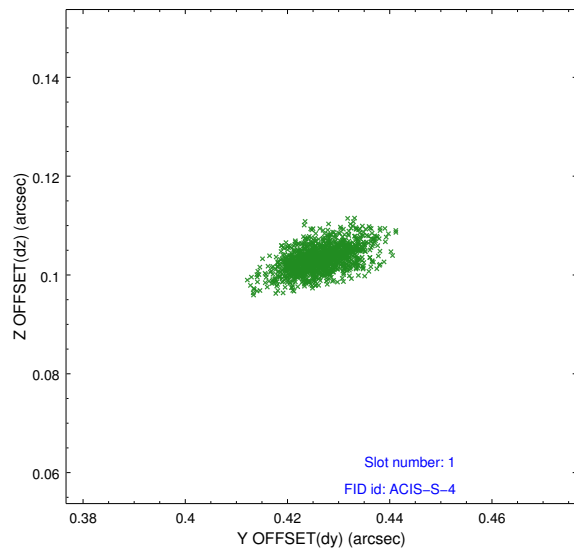


2.5 FID Slots

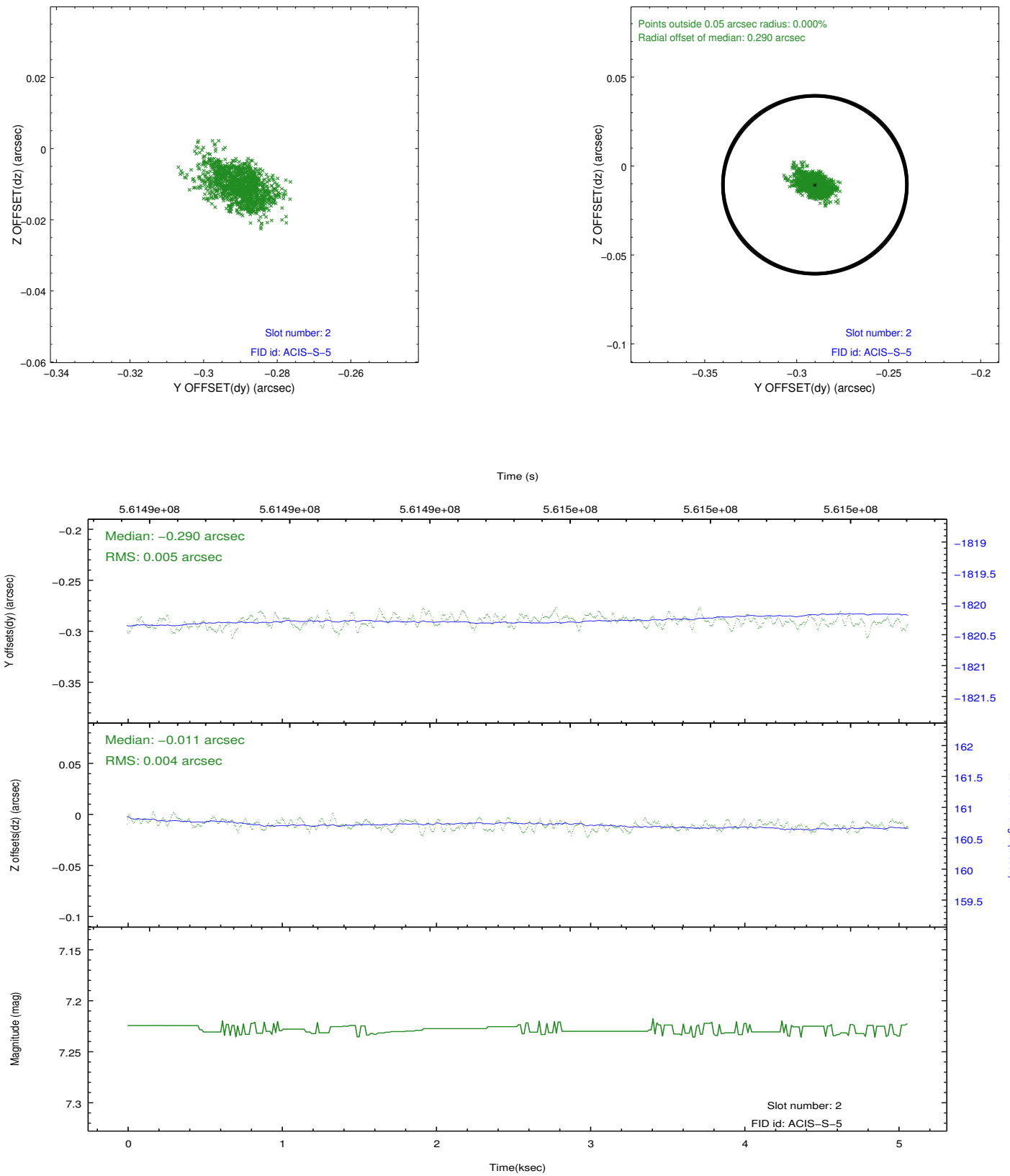
2.5.1 Slot 0



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)	2015.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.5601000351906

A.2 Comments

Slot 1 radial offset is OK for aspect solution, per Aspect Review.