

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17277 - L2 Version 1
Chandra X-Ray Center

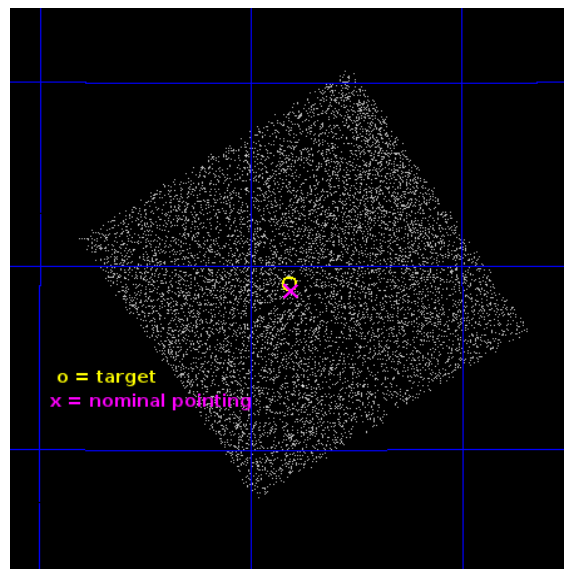
L2 Processing Date : Dec 10 2015

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1 Front

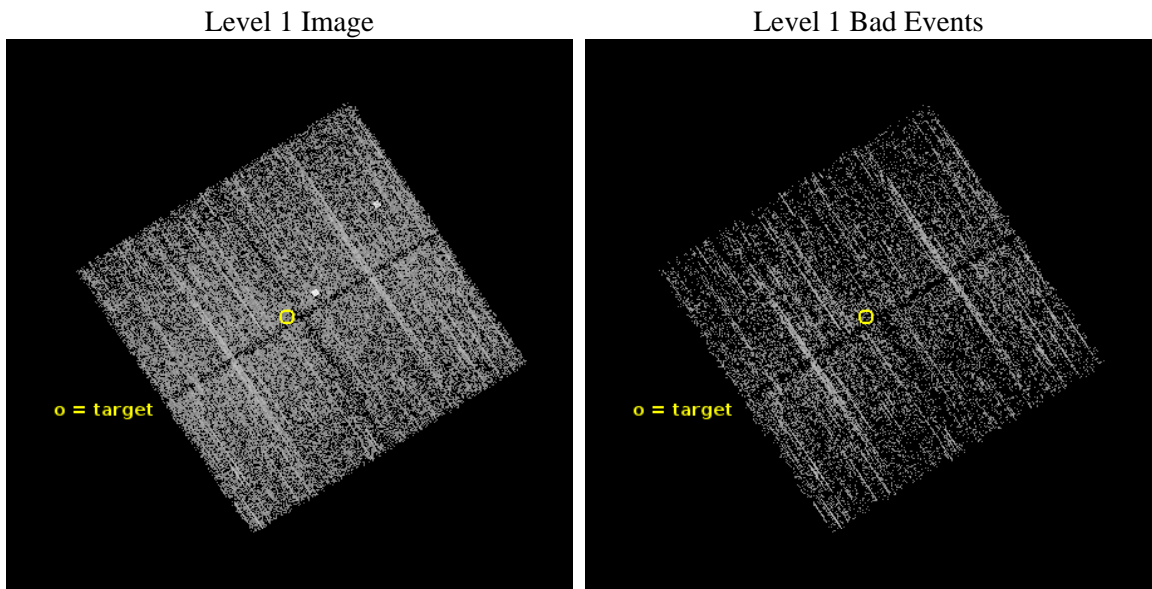
seq_num	801522	Sequence number
obs_id	17277	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.70345	Observer's specified target RA [deg]
dec_targ	42.484108	Observer's specified target Dec [deg]
ra_nom	49.70175608143	Nominal RA [deg]
dec_nom	42.477825689711	Nominal Dec [deg]
roll_nom	237.07979024239	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4789.5000369549	Sum of GTIs [s]
livetime	4726.9216929934	Livetime [s]
ontime0	4789.5000369549	Sum of GTIs [s]
ontime1	4789.5000369549	Sum of GTIs [s]
ontime2	4789.5000369549	Sum of GTIs [s]
ontime3	4789.5000369549	Sum of GTIs [s]
l2events	10515	Number of level 2 events



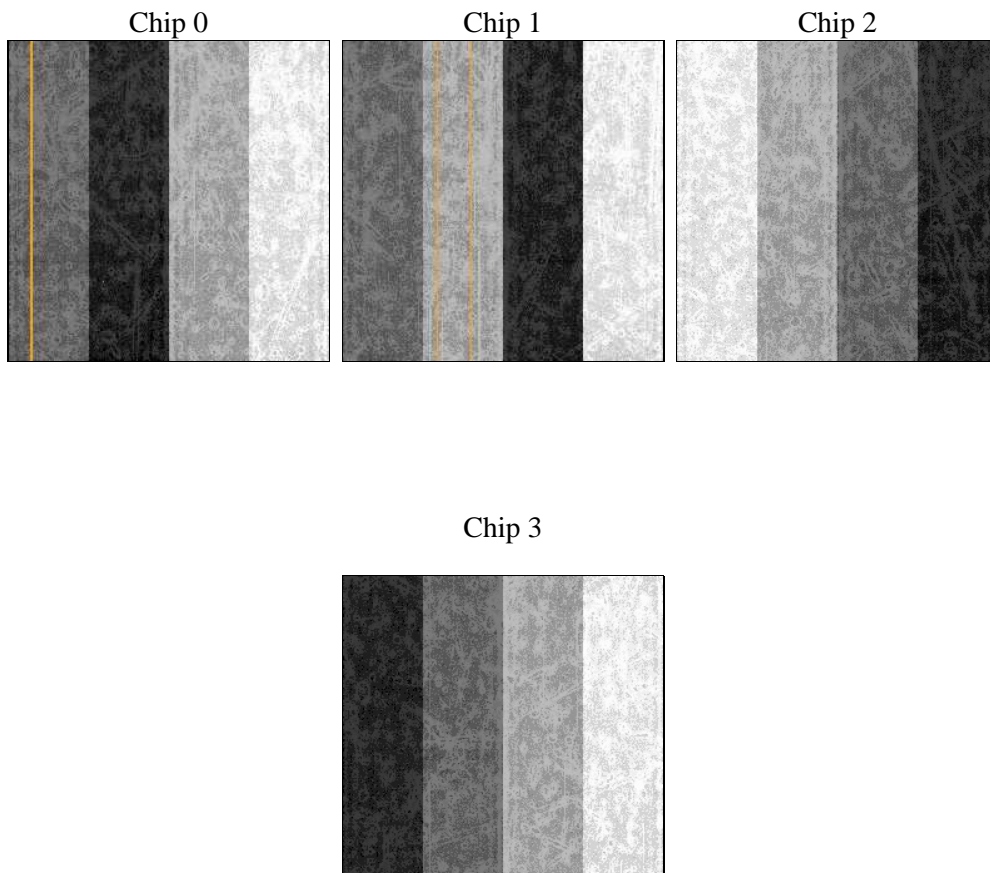
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	4789.5000369549	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	4789.5000369549	Sum of GTIs [s]
date	2015-12-10T14:51:19	Date and time of file creation	ontime1	4789.5000369549	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	4789.5000369549	Sum of GTIs [s]
			ontime3	4789.5000369549	Sum of GTIs [s]
			l1events	100553	Number of level 1 events

2.1.4 Events

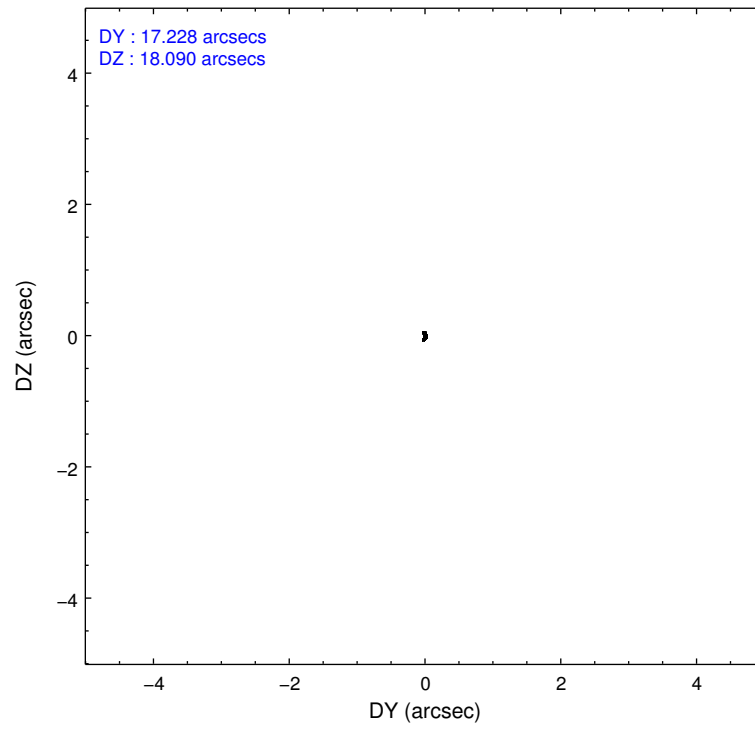
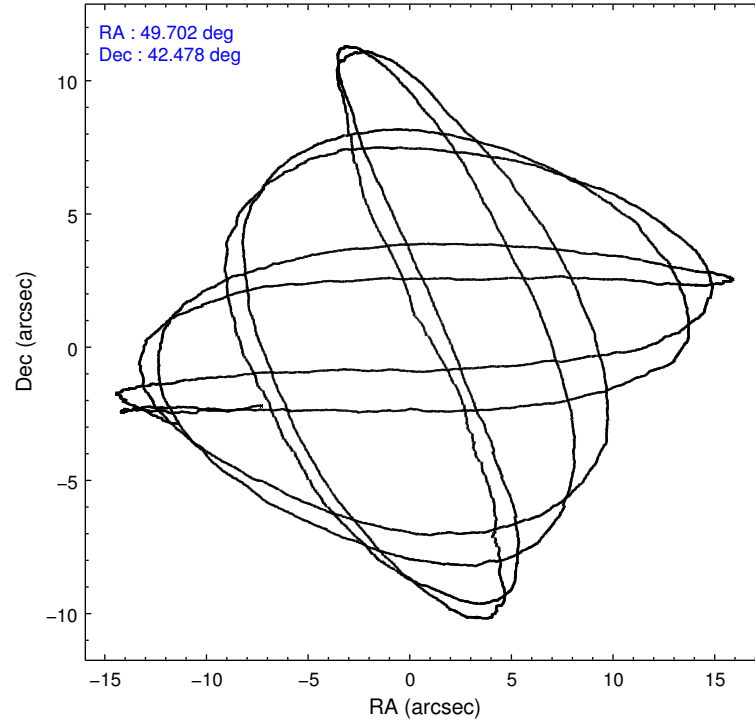
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	23982	25980	25928	24663
rejected events	20911	20503	22819	21772
rejected %	87%	78%	88%	88%

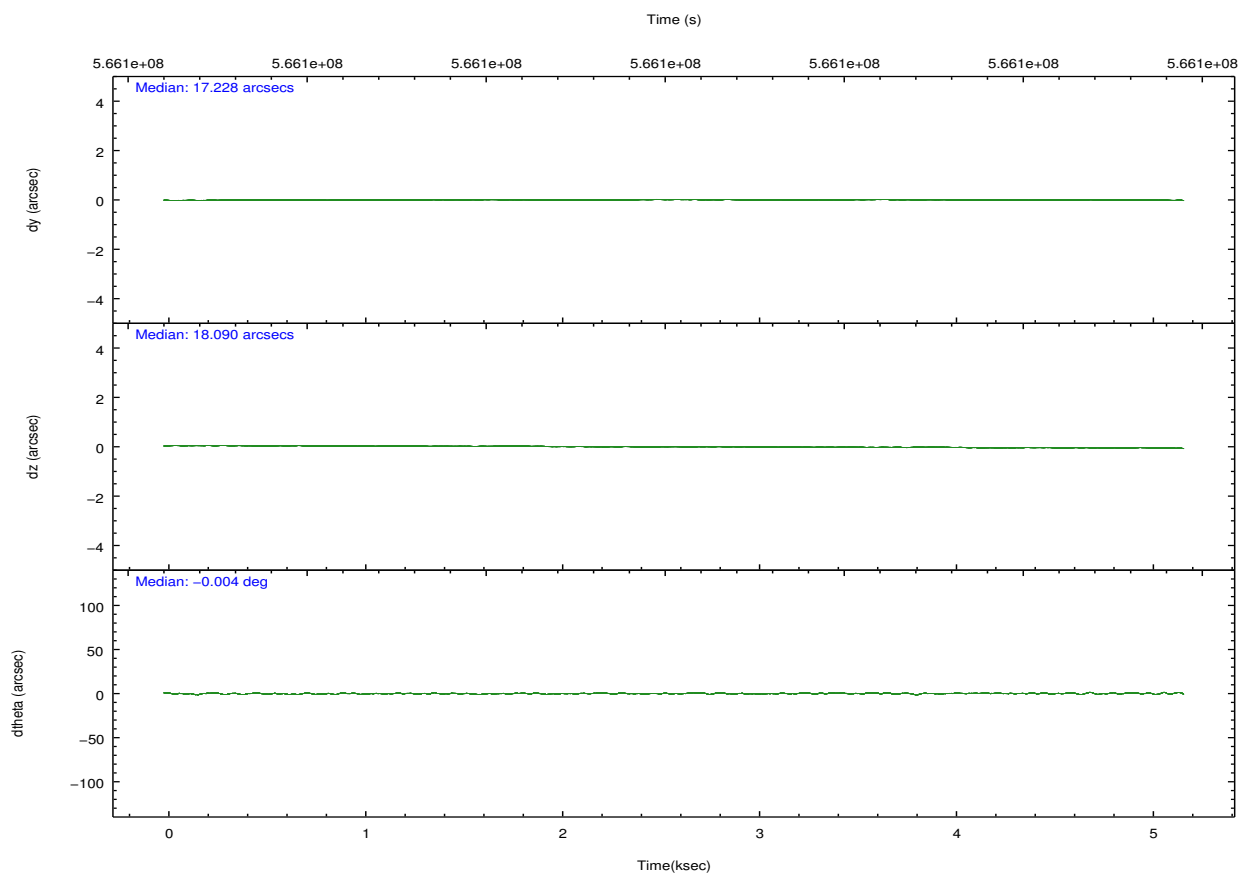
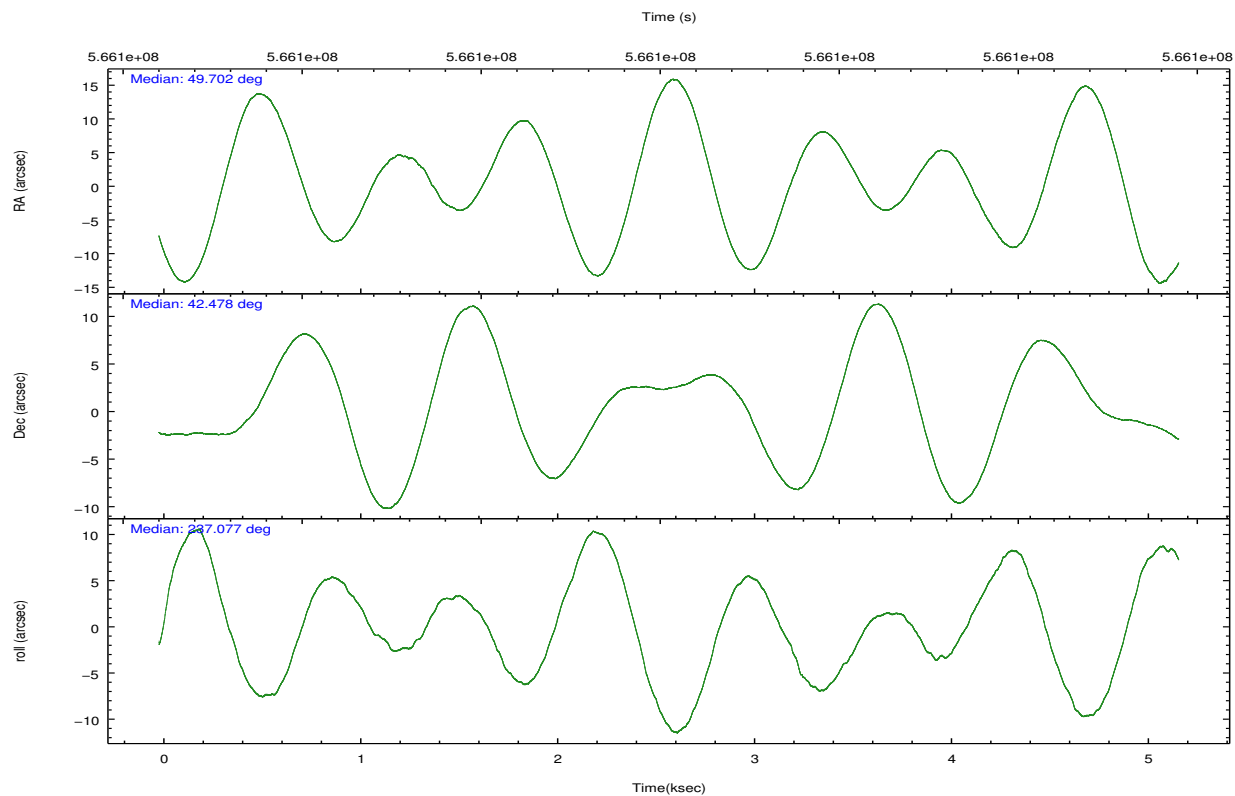
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	1080	3260	1233	1059
	4%	12%	4%	4%
grade 1 events	17	13	8	13
	0%	0%	0%	0%
grade 2 events	763	816	761	606
	3%	3%	2%	2%
grade 3 events	323	322	294	317
	1%	1%	1%	1%
grade 4 events	290	318	296	320
	1%	1%	1%	1%
grade 5 events	1160	1250	1047	1362
	4%	4%	4%	5%
grade 6 events	617	766	526	590
	2%	2%	2%	2%
grade 7 events	19732	19235	21763	20396
	82%	74%	83%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	49.703631	49.70175608143033	CCD I2 on	Y	Y
[deg] Pointing Dec	42.505431	42.47782568971134	CCD I3 on	Y	Y
[deg] Pointing Roll	236.869833	237.0797902423949	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	N
[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)	566099610.184000	566099234.4074	CCD S5 on	N	N
Observation start date	2015-12-10T01:52:22	2015-12-10T01:47:14	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	566104610.184000	566104755.57022	On-chip summing requested	N	N
Observation end date	2015-12-10T03:15:42	2015-12-10T03:19:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



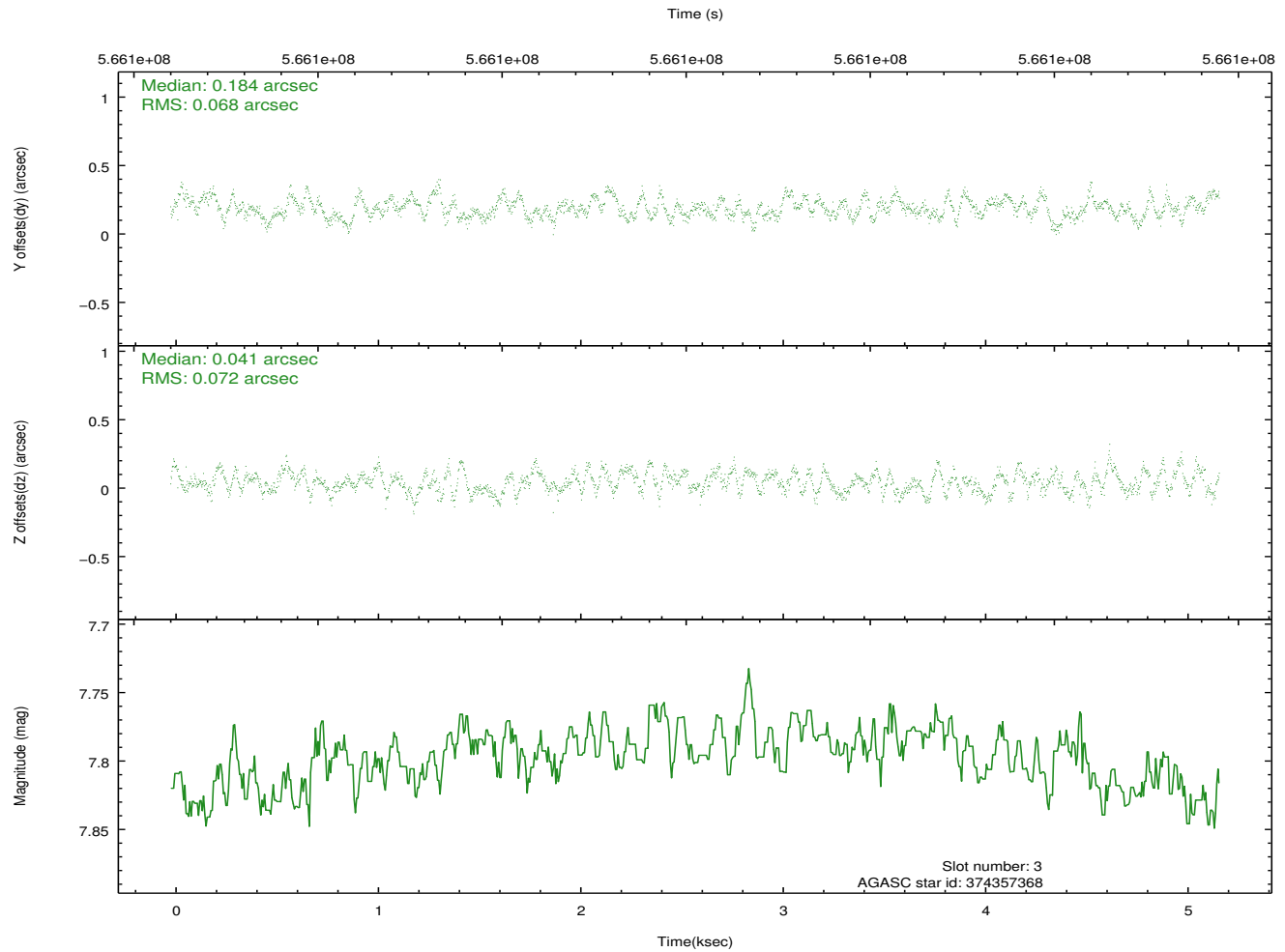
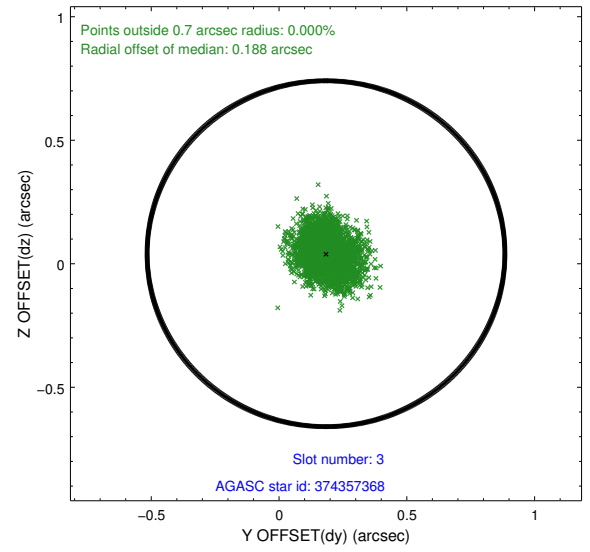
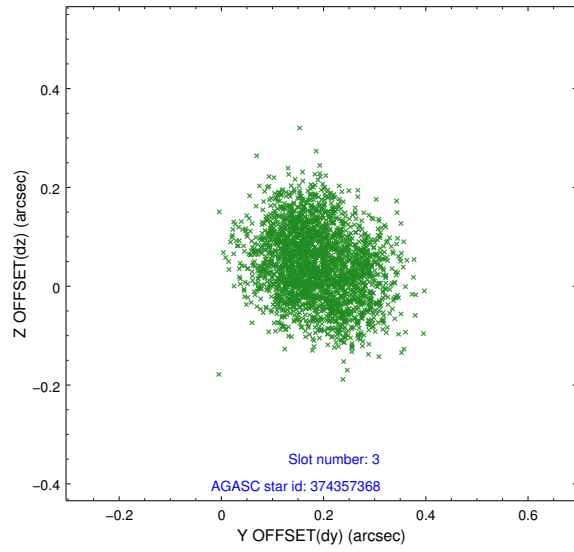


Slot Statistics

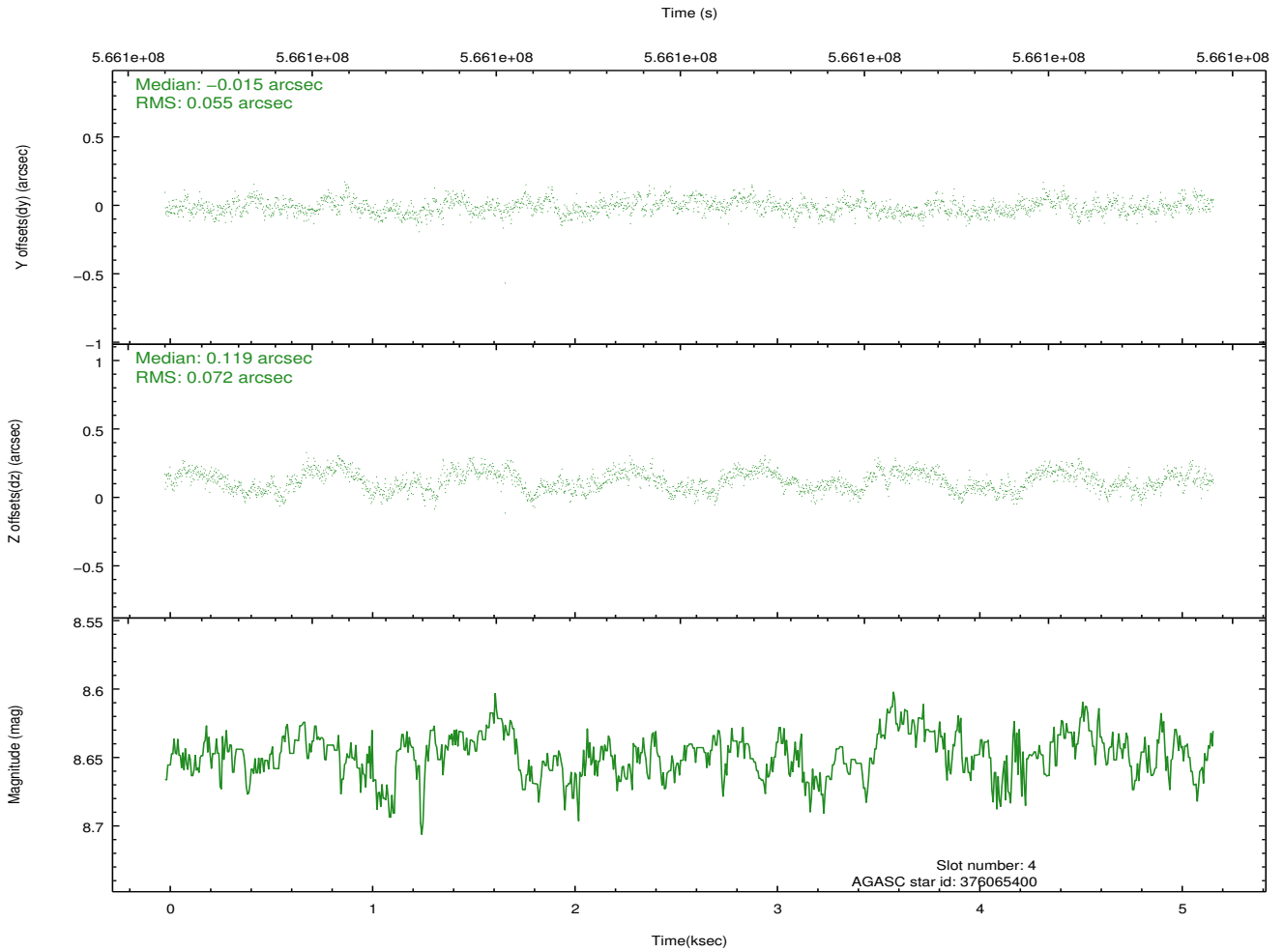
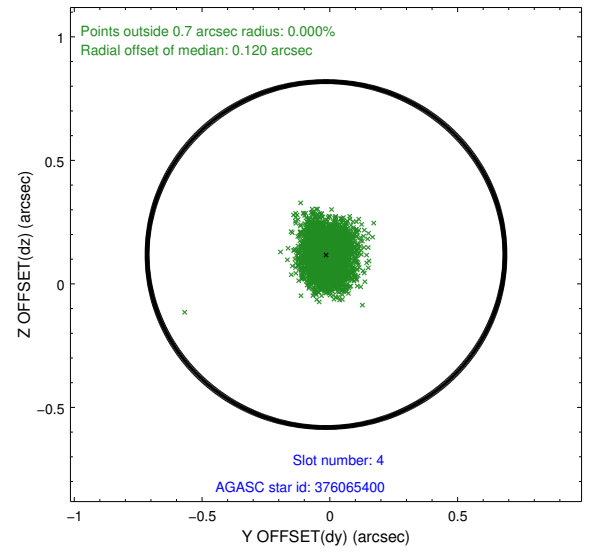
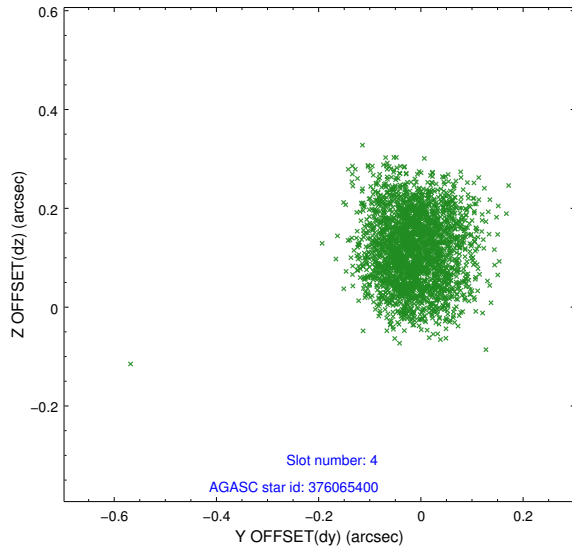
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	1264	0.061	0.005	0.006	0.012	0.000000	0.000000	922.27	-841.73
1	FID		ACIS-I-5	7.24	1264	-0.344	0.034	0.007	0.012	0.000000	0.000000	-1825.68	1055.09
2	FID		ACIS-I-6	7.26	1264	0.191	0.032	0.008	0.013	0.000000	0.000000	386.56	1701.01
3	GUIDE	used	374357368	7.80	2528	0.184	0.041	0.107	0.163	49.396079	42.675115	-67.63	-1015.33
4	GUIDE	used	376065400	8.65	2528	-0.015	0.119	0.098	0.152	50.458177	42.859008	-2161.60	967.48
5	GUIDE	used	376066648	7.71	2528	-0.145	0.104	0.091	0.159	50.550240	42.822138	-2186.72	1244.61
6	GUIDE	used	376070040	8.39	2528	-0.189	-0.318	0.091	0.144	50.072031	41.897206	1291.31	2023.13
7	GUIDE	used	374358688	9.30	2524	0.149	0.051	0.111	0.183	49.259903	42.100043	1868.02	-195.37

2.4 Star Slots

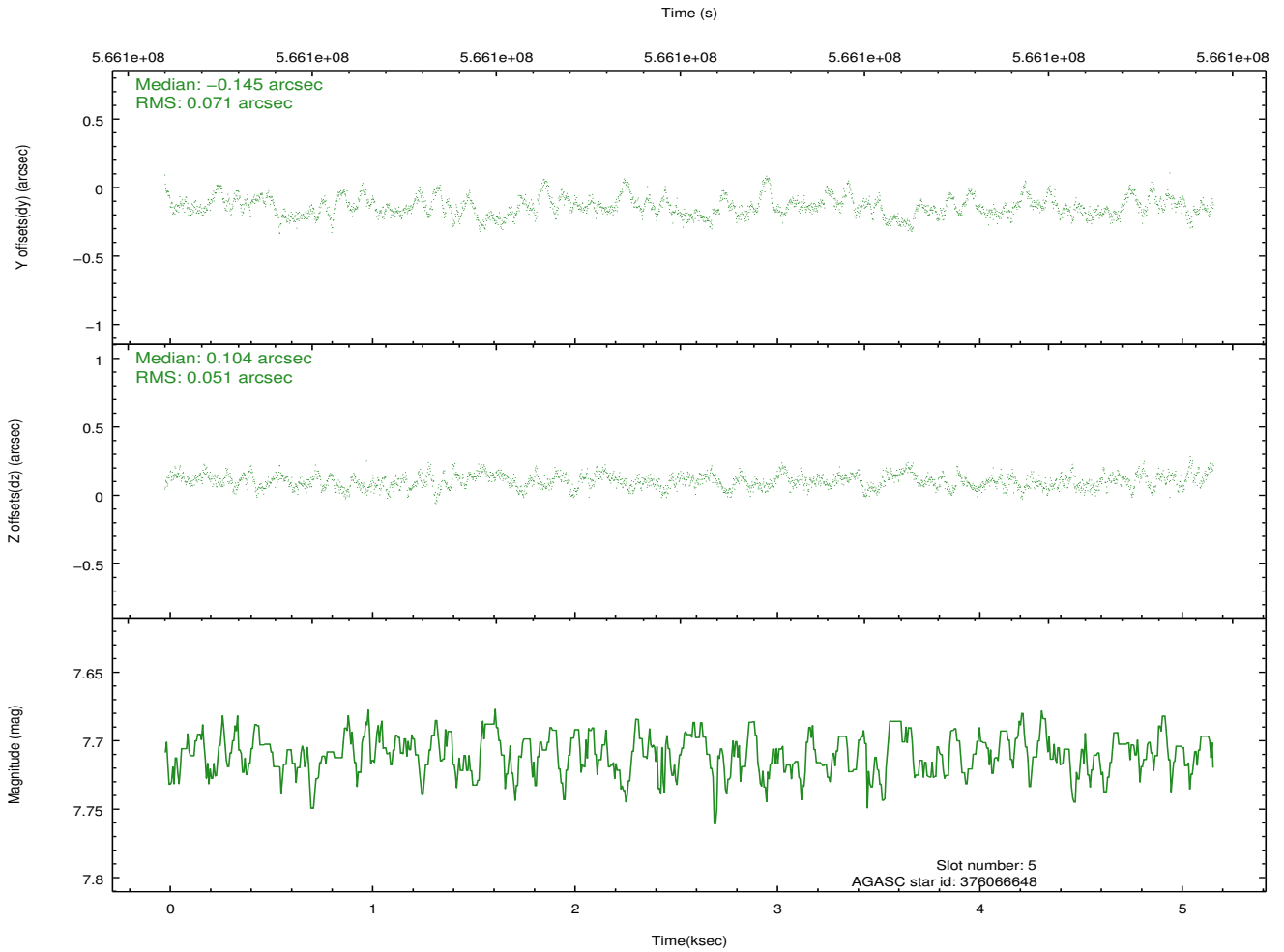
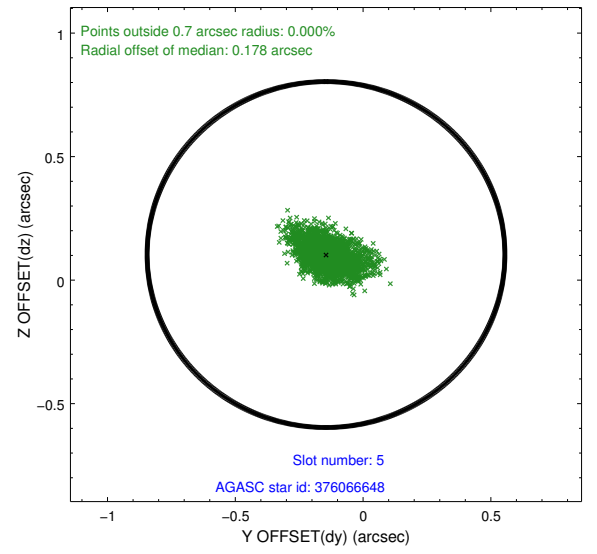
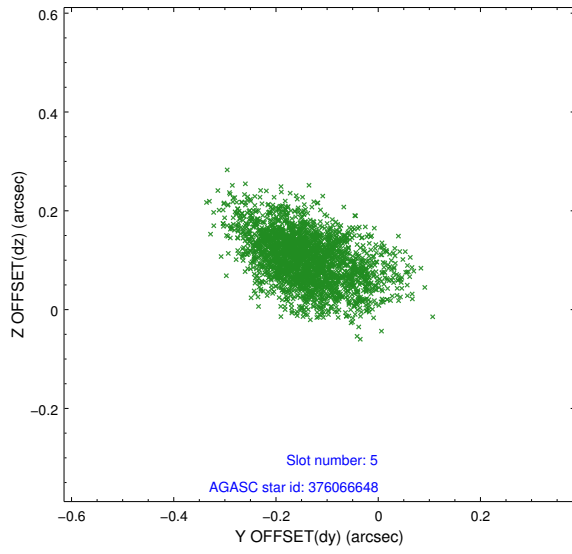
2.4.1 Slot 3



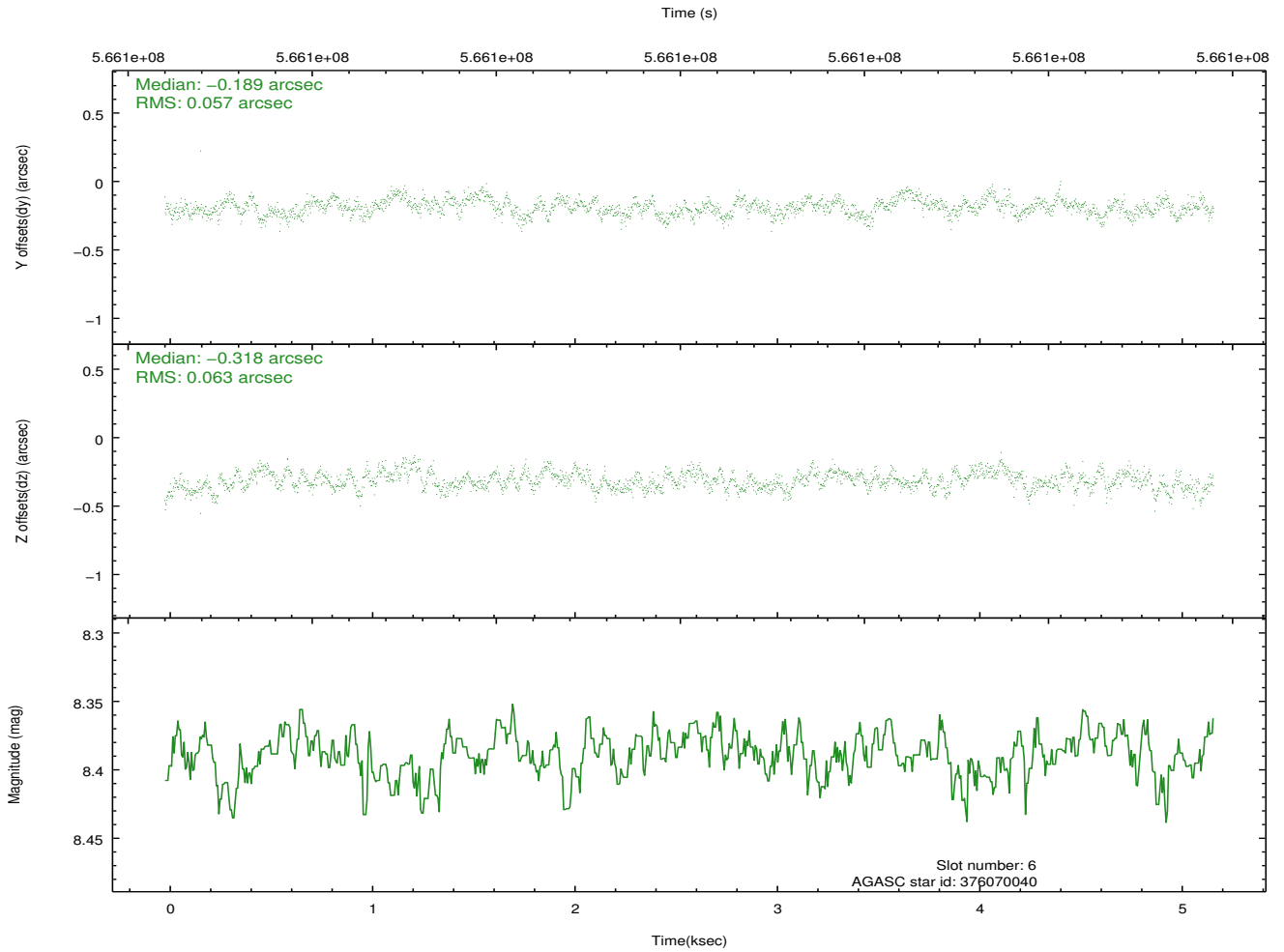
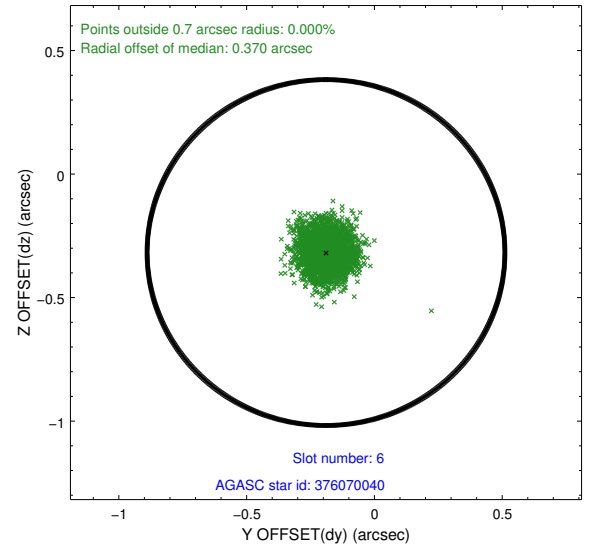
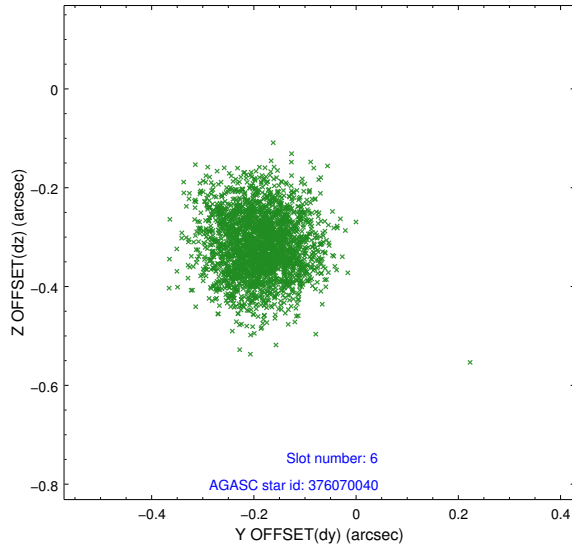
2.4.2 Slot 4



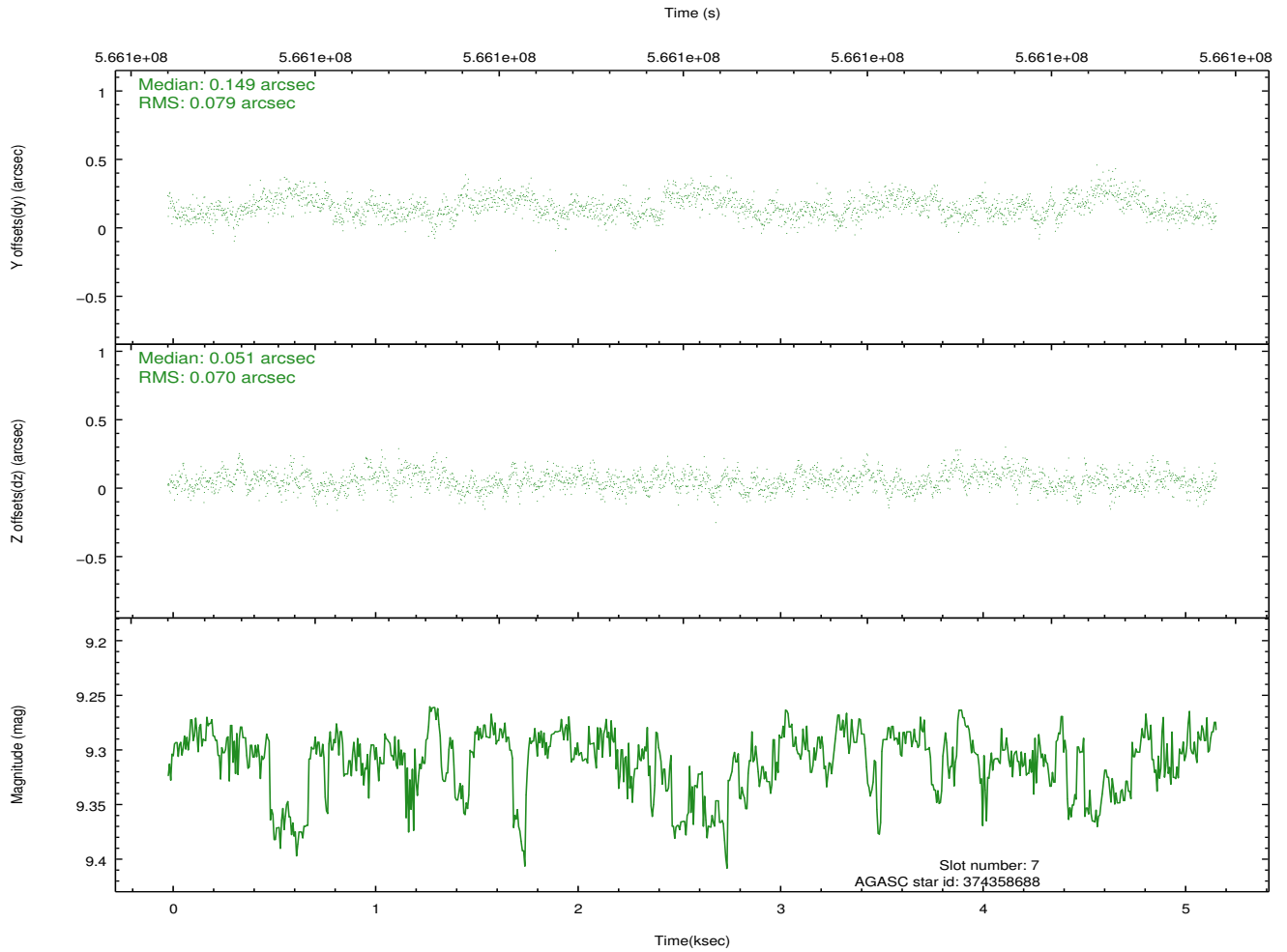
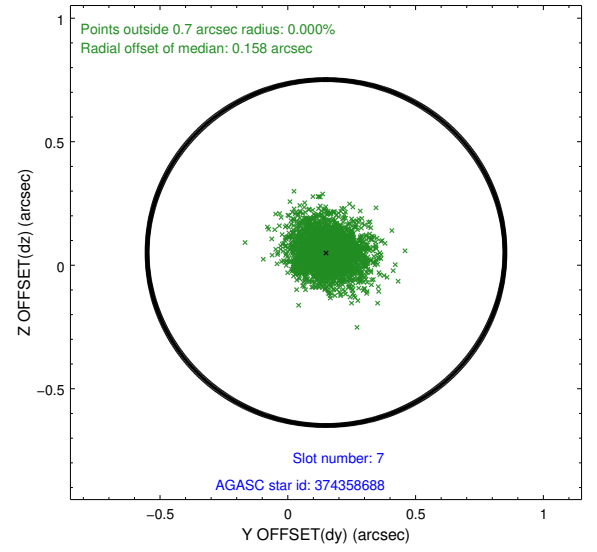
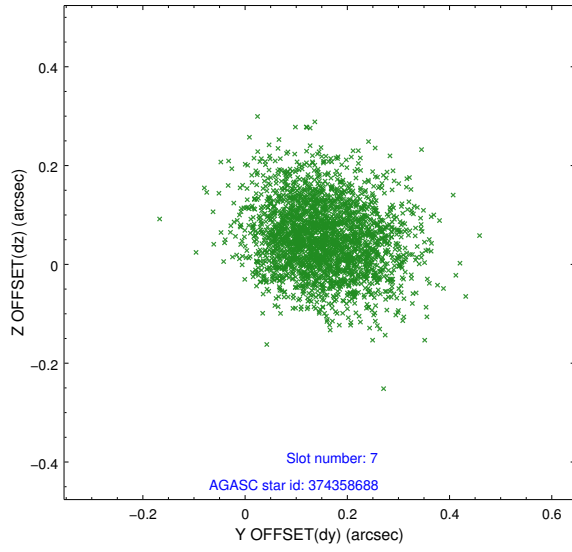
2.4.3 Slot 5



2.4.4 Slot 6

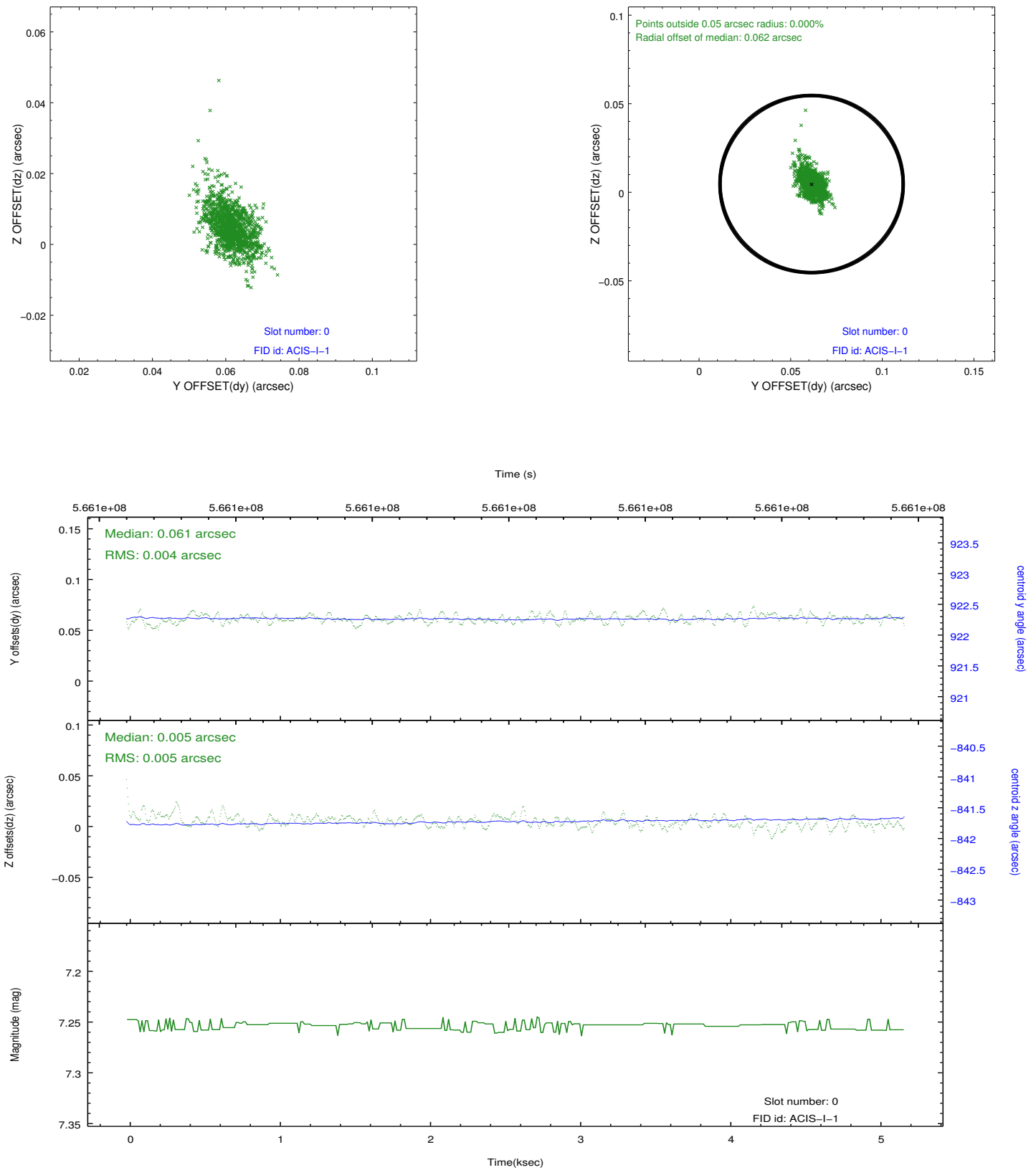


2.4.5 Slot 7

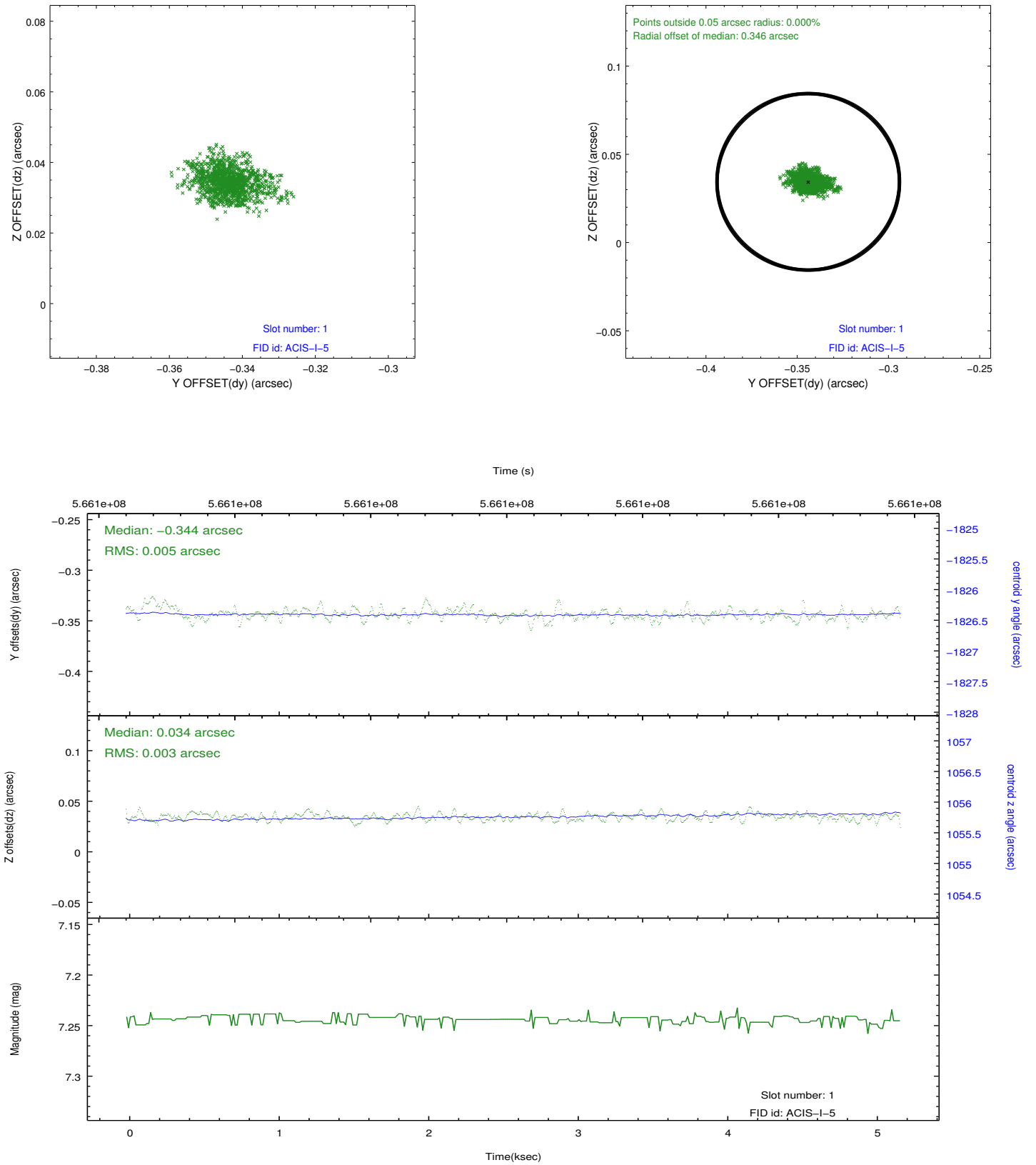


2.5 FID Slots

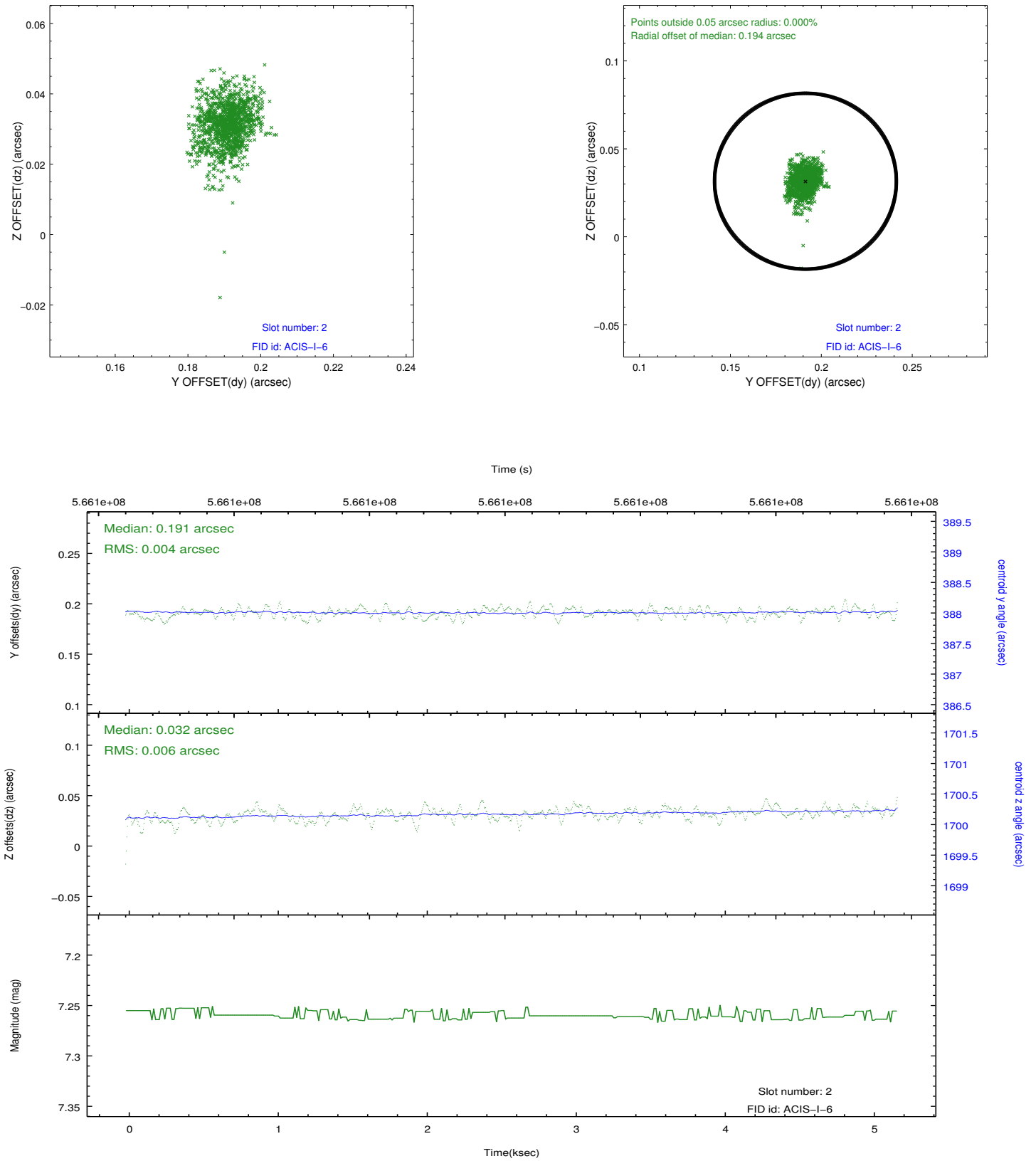
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2015.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7895000369549

A.2 Comments