

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17274 - L2 Version 1
Chandra X-Ray Center

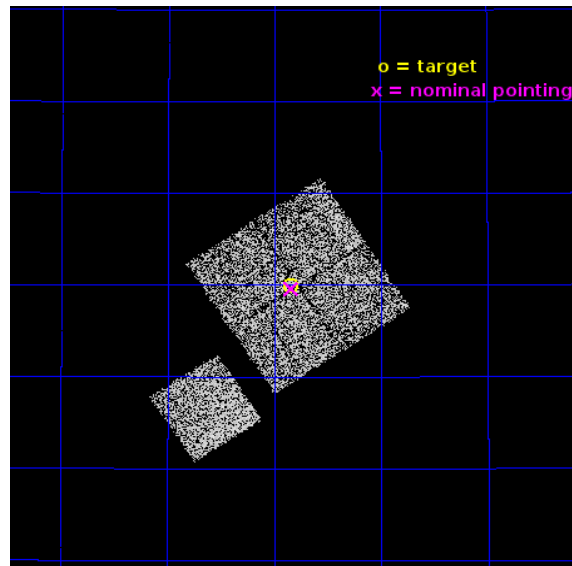
L2 Processing Date : Dec 10 2015

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1 Front

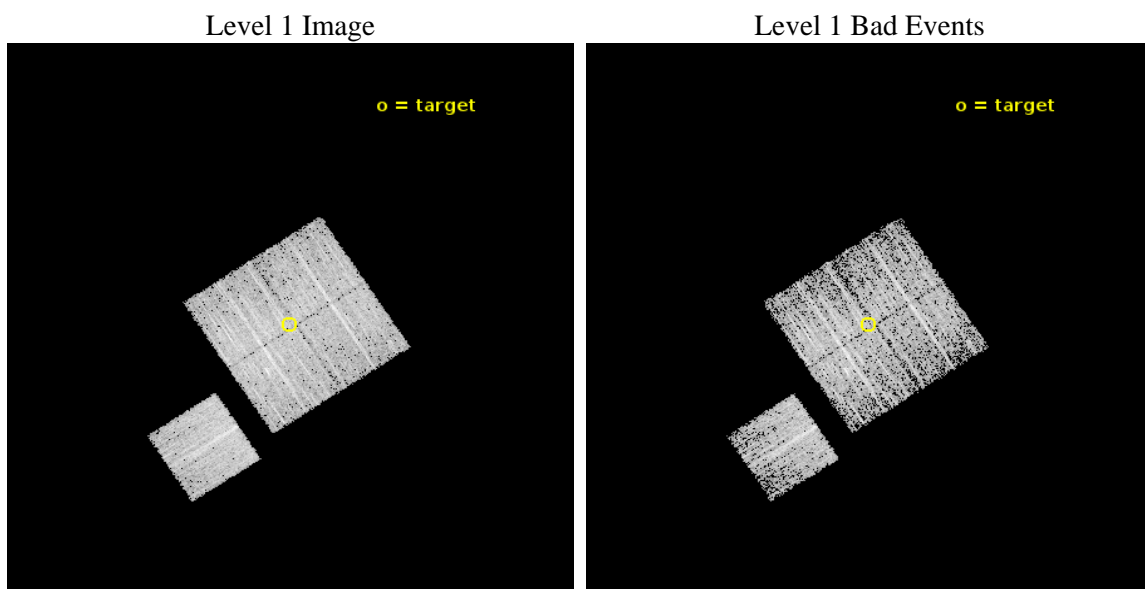
seq_num	801519	Sequence number
obs_id	17274	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	50.21137	Observer's specified target RA [deg]
dec_targ	41.999581	Observer's specified target Dec [deg]
ra_nom	50.209762339073	Nominal RA [deg]
dec_nom	41.993387378194	Nominal Dec [deg]
roll_nom	236.72696996444	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5062.300039053	Sum of GTIs [s]
livetime	4996.1573622317	Livetime [s]
ontime0	5062.300039053	Sum of GTIs [s]
ontime1	5062.300039053	Sum of GTIs [s]
ontime2	5059.1590188742	Sum of GTIs [s]
ontime3	5062.300039053	Sum of GTIs [s]
ontime6	5062.300039053	Sum of GTIs [s]
l2events	18684	Number of level 2 events



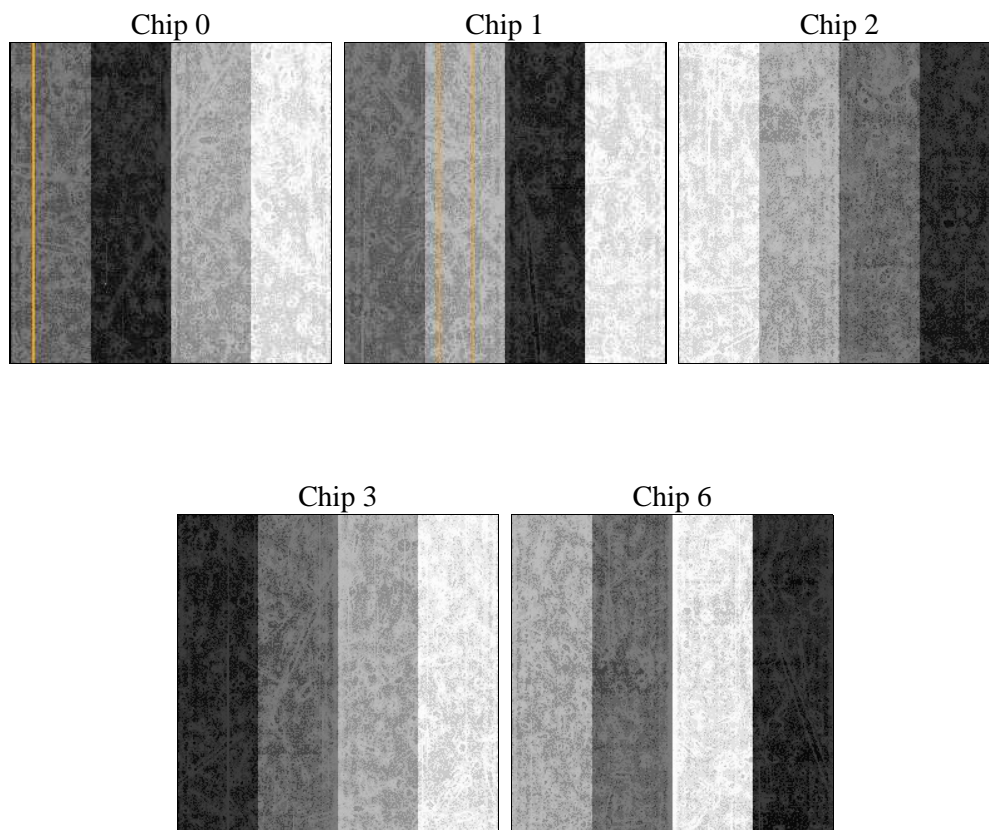
2 OBI

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	5062.300039053	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	5062.300039053	Sum of GTIs [s]
date	2015-12-10T13:02:28	Date and time of file creation	ontime1	5062.300039053	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5059.1590188742	Sum of GTIs [s]
			ontime3	5062.300039053	Sum of GTIs [s]
			ontime6	5062.300039053	Sum of GTIs [s]
			l1events	140673	Number of level 1 events

2.1.4 Events

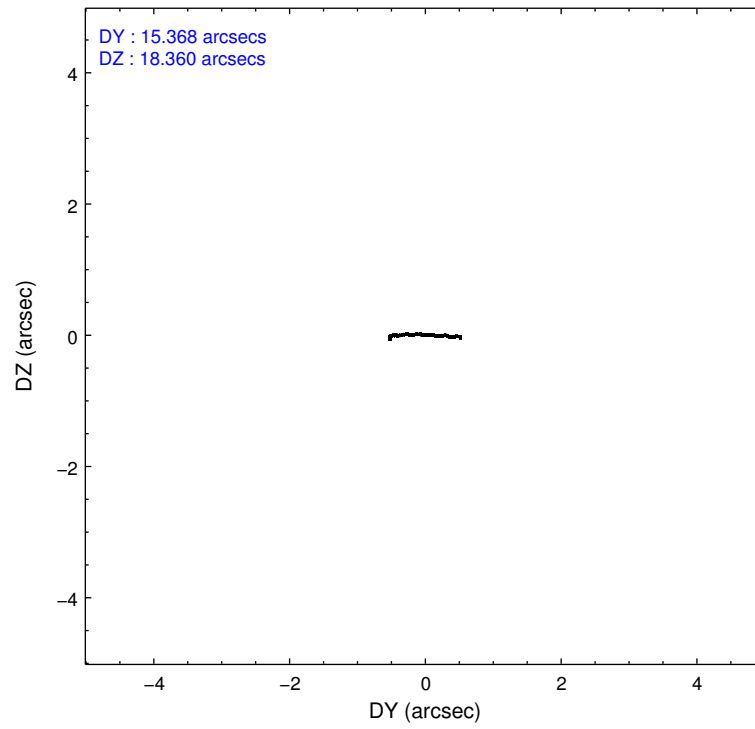
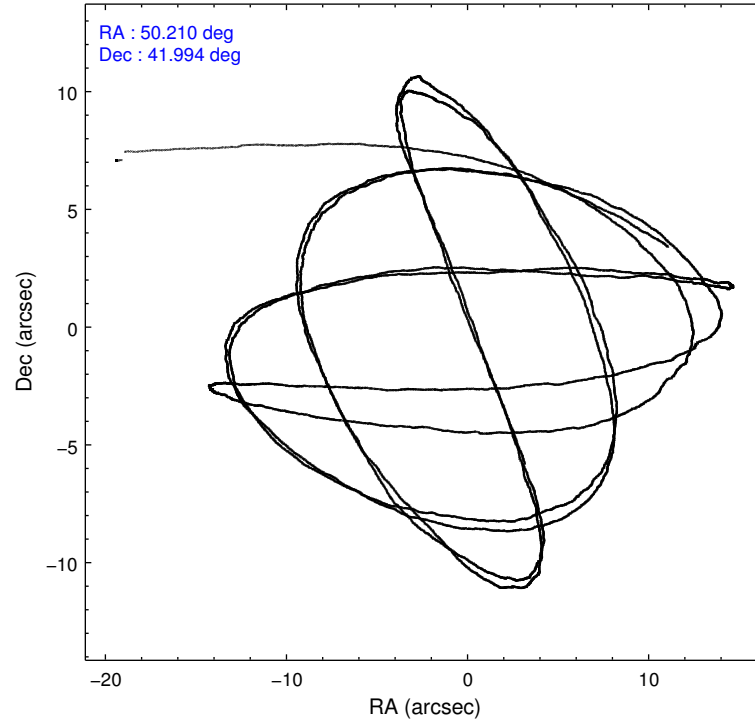
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	25477	25948	29175	29342	30731
rejected events	21292	21894	24744	25755	25547
rejected %	83%	84%	84%	87%	83%

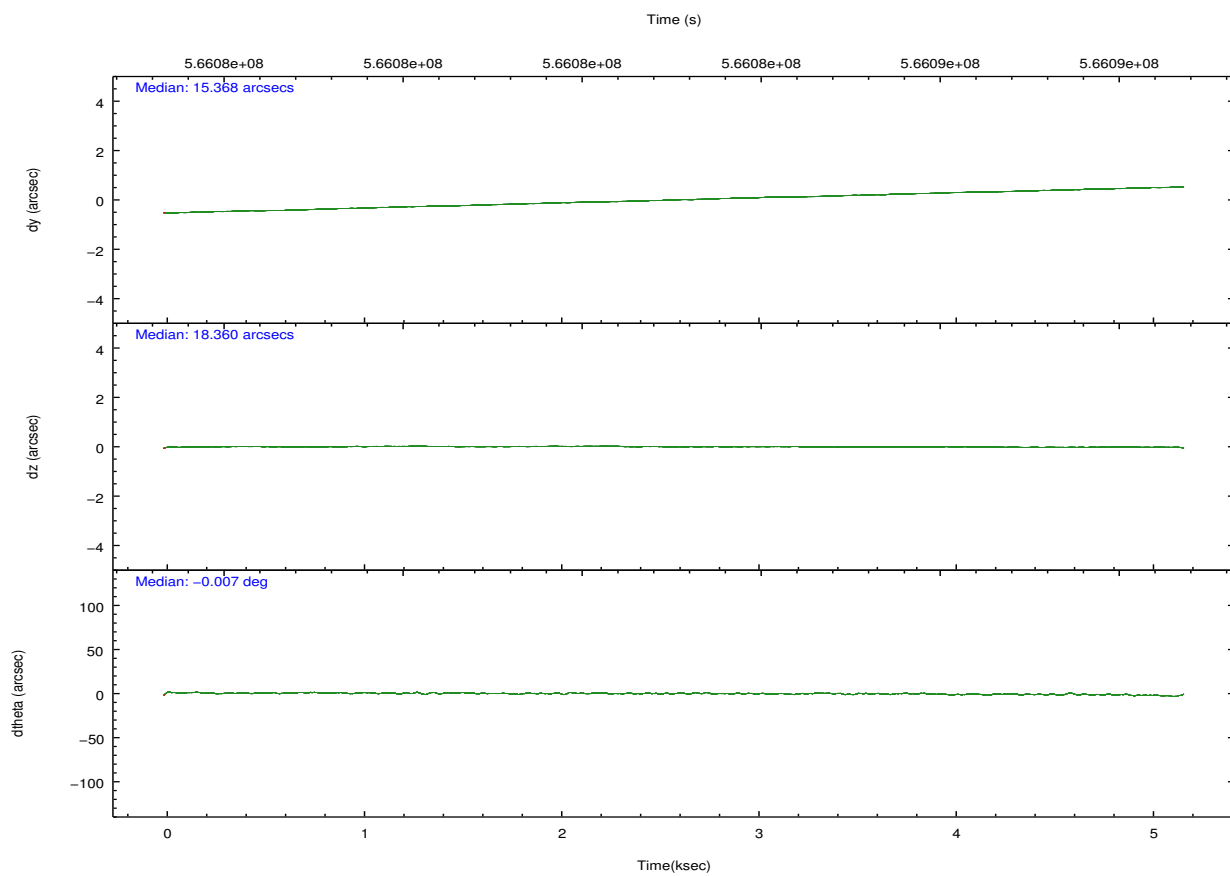
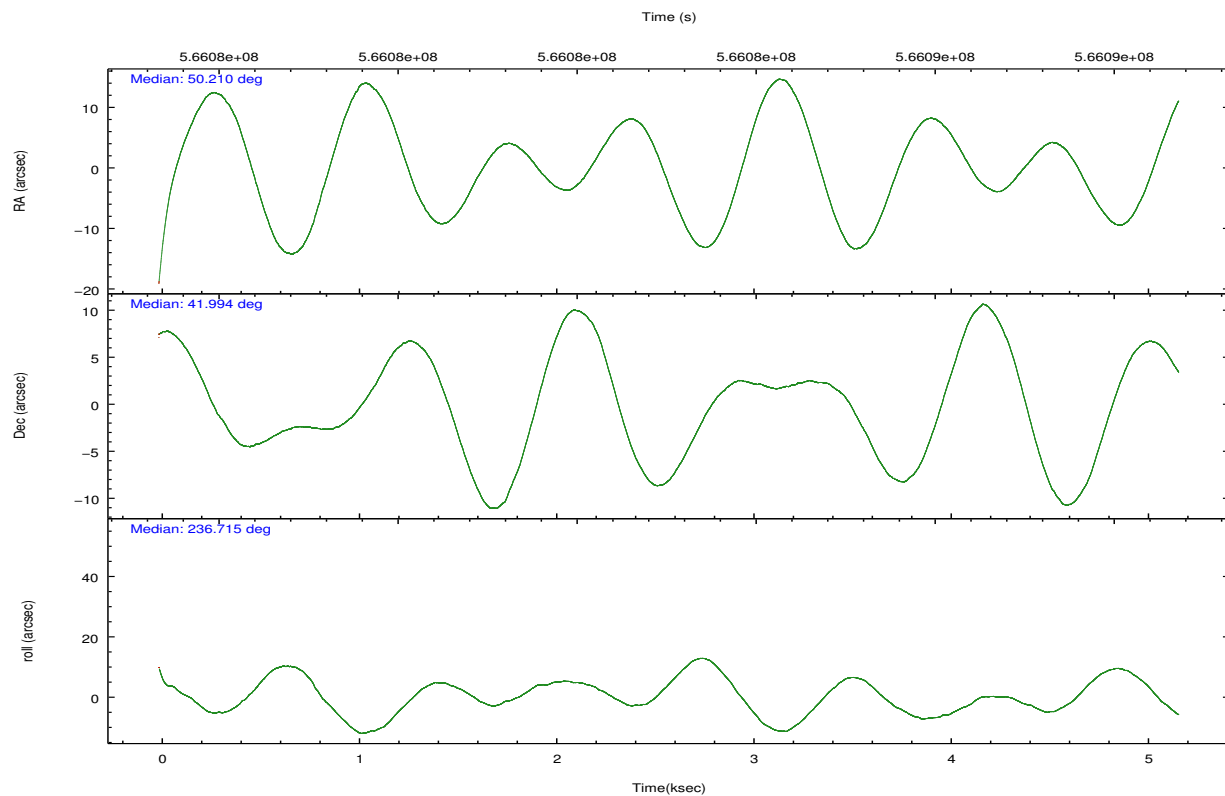
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1837	1573	2113	1529	2709
	7%	6%	7%	5%	8%
grade 1 events	20	17	22	24	22
	0%	0%	0%	0%	0%
grade 2 events	934	948	960	739	899
	3%	3%	3%	2%	2%
grade 3 events	374	377	365	343	374
	1%	1%	1%	1%	1%
grade 4 events	372	396	355	333	381
	1%	1%	1%	1%	1%
grade 5 events	1248	1330	1179	1462	1391
	4%	5%	4%	4%	4%
grade 6 events	672	763	643	645	828
	2%	2%	2%	2%	2%
grade 7 events	20020	20544	23538	24267	24127
	78%	79%	80%	82%	78%

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	50.211725	50.20976233907257	CCD I2 on	Y	Y
[deg] Pointing Dec	42.020893	41.99338737819444	CCD I3 on	Y	Y
[deg] Pointing Roll	236.516978	236.726969964441	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)	566082073.184000	566081040.14387	CCD S5 on	N	N
Observation start date	2015-12-09T21:00:05	2015-12-09T20:44:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	566087073.184000	566087207.5692199	On-chip summing requested	N	N
Observation end date	2015-12-09T22:23:25	2015-12-09T22:26:47	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



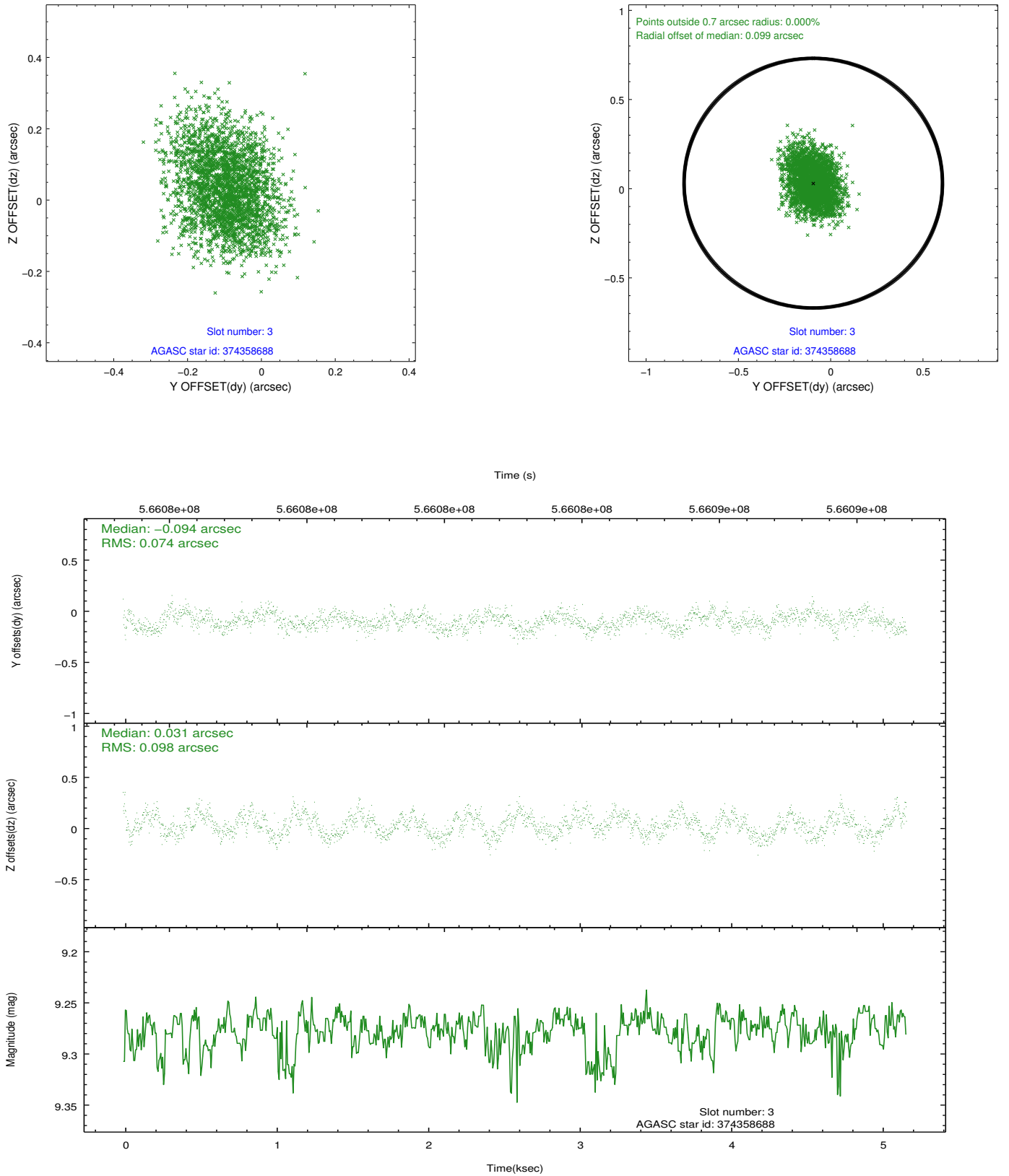


Slot Statistics

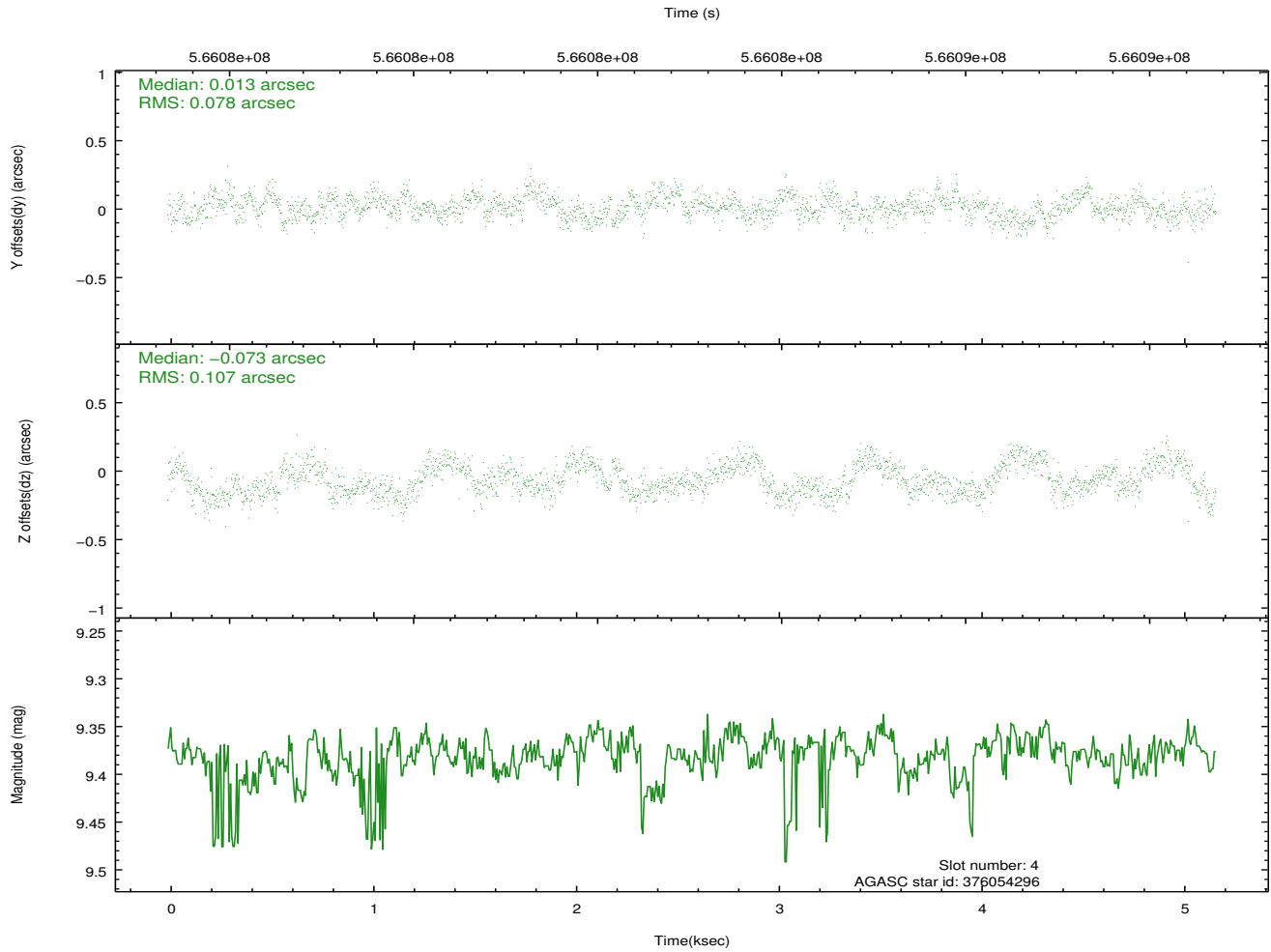
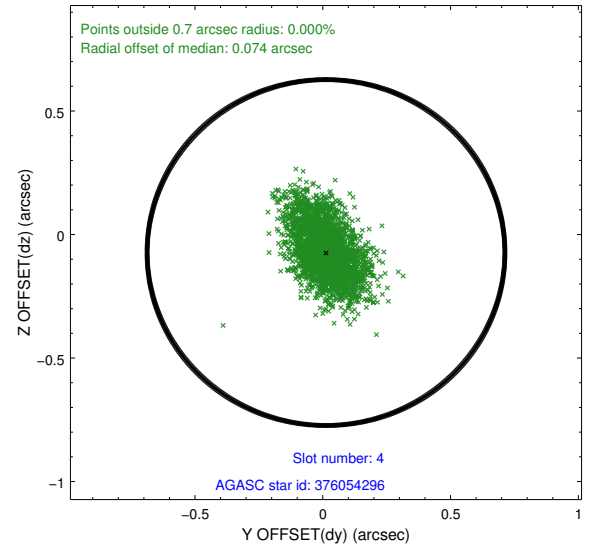
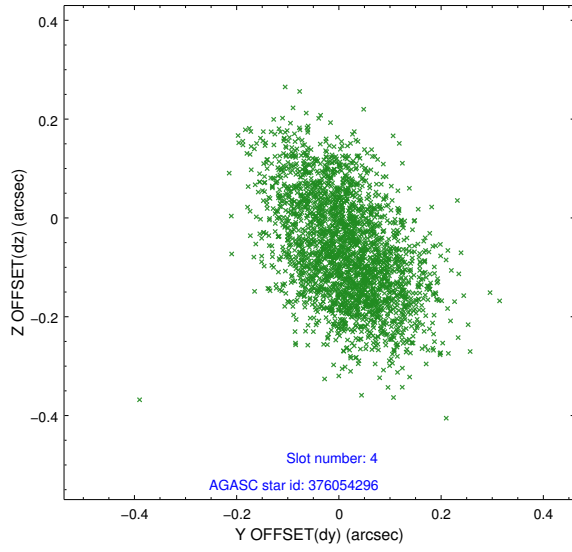
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	1261	0.170	-0.054	0.008	0.013	0.000000	0.000000	924.32	-842.03
1	FID		ACIS-I-2	7.15	1262	-0.110	0.006	0.014	0.023	0.000000	0.000000	-769.40	-849.13
2	FID		ACIS-I-5	7.25	1262	-0.153	0.119	0.014	0.024	0.000000	0.000000	-1824.96	1054.82
3	GUIDE	used	374358688	9.28	2521	-0.094	0.031	0.132	0.209	49.259903	42.100043	1154.26	-2285.00
4	GUIDE	used	376054296	9.38	2520	0.013	-0.073	0.141	0.230	51.304444	42.123131	-1931.16	2222.85
5	GUIDE	used	376057824	8.33	2521	0.052	-0.053	0.080	0.128	50.665569	41.926280	-389.22	1201.62
6	GUIDE	used	376070040	8.41	2523	-0.064	0.054	0.092	0.150	50.072031	41.897206	578.23	-65.58
7	GUIDE	used	374357808	8.67	2521	0.097	0.019	0.123	0.193	49.921429	42.176083	-38.64	-954.38

2.4 Star Slots

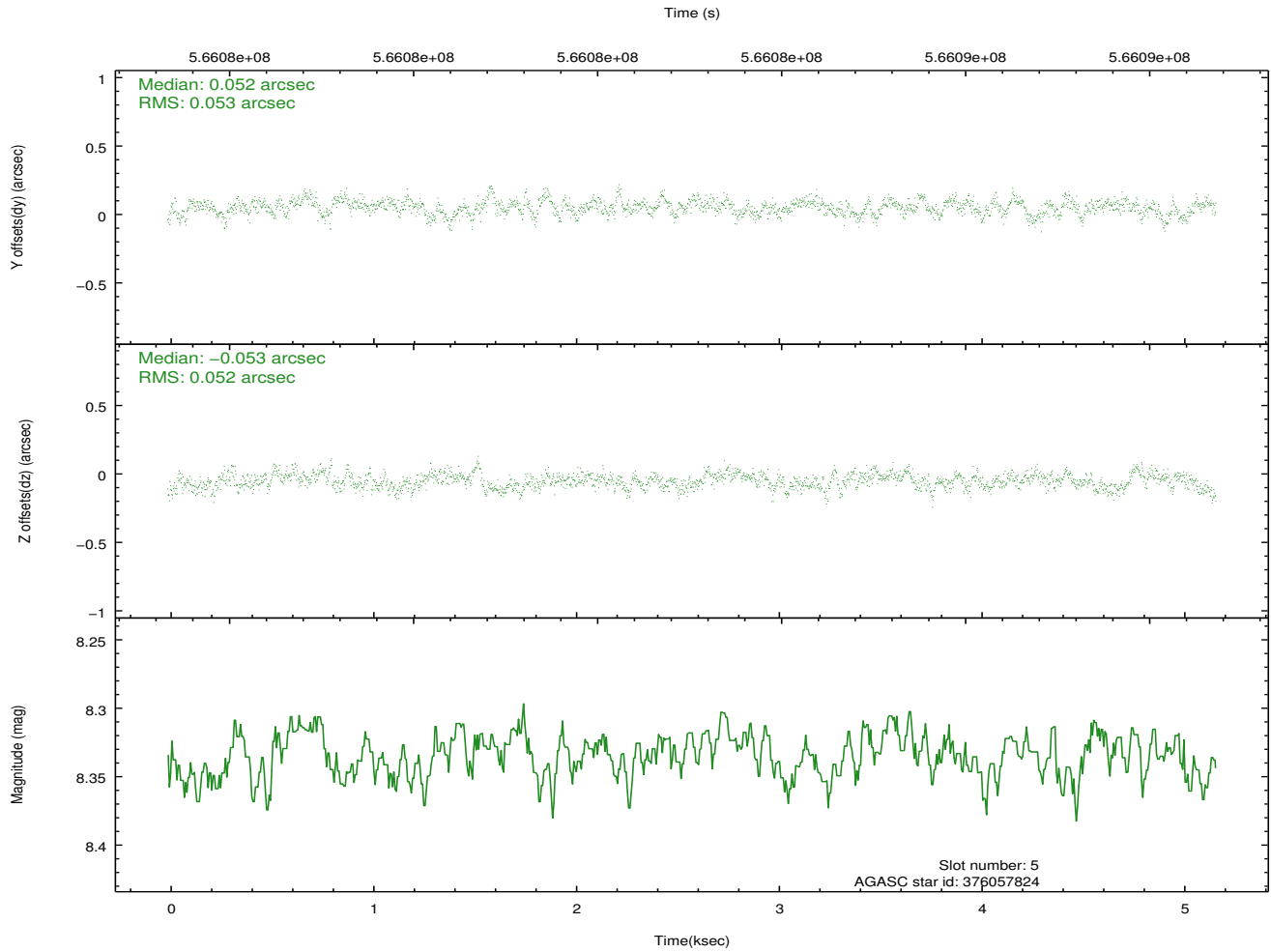
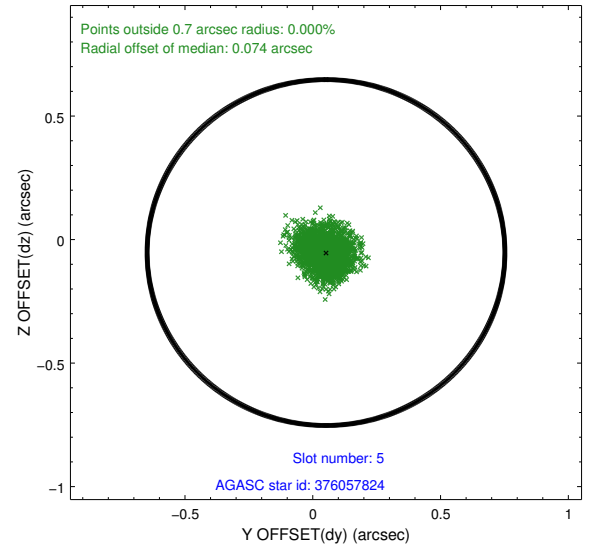
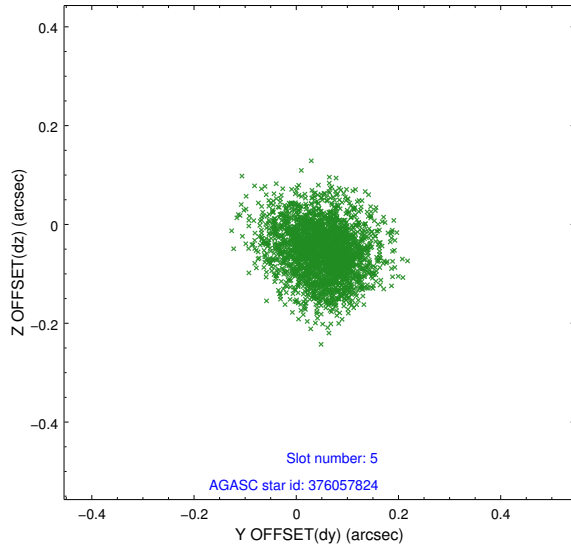
2.4.1 Slot 3



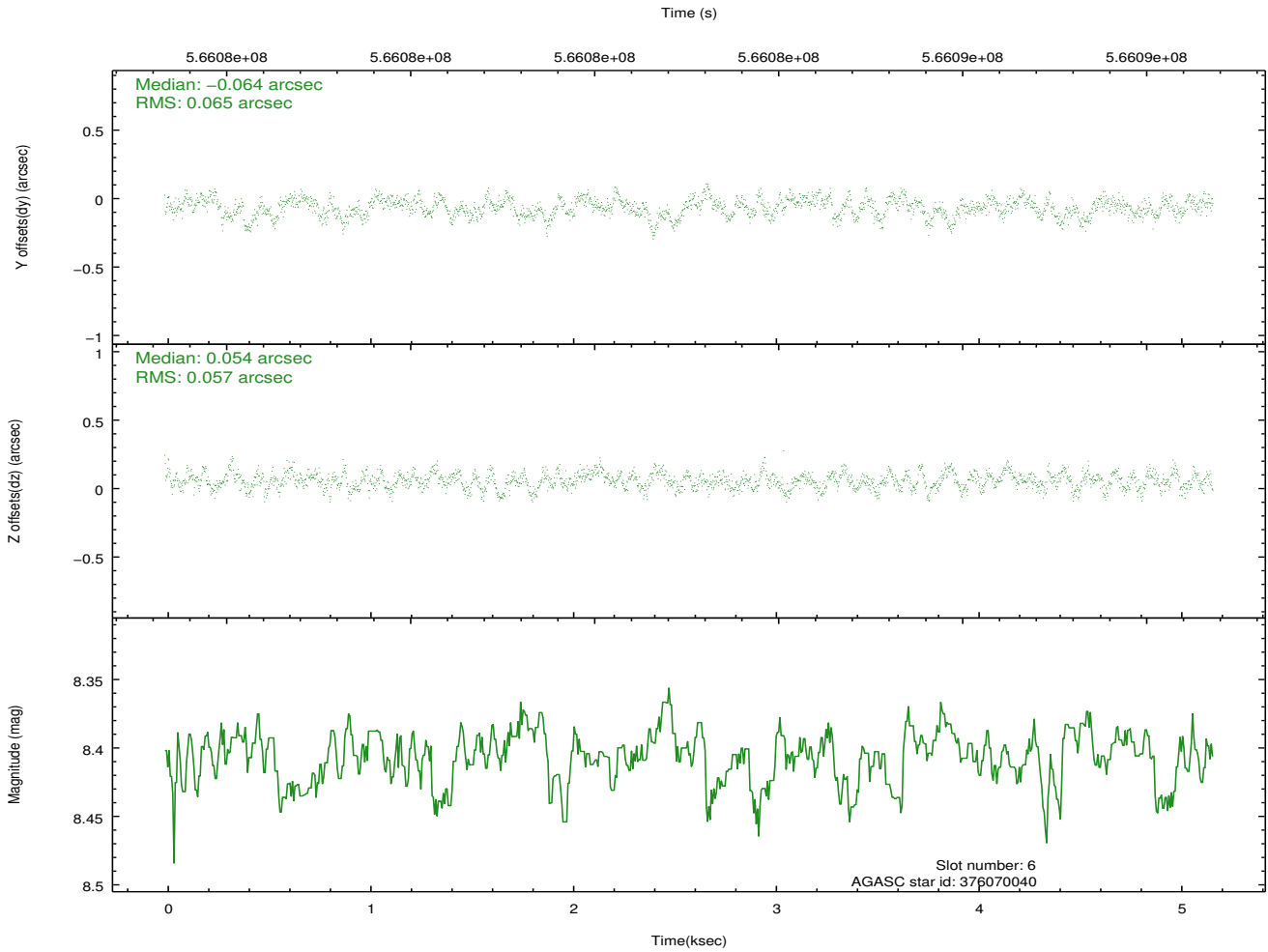
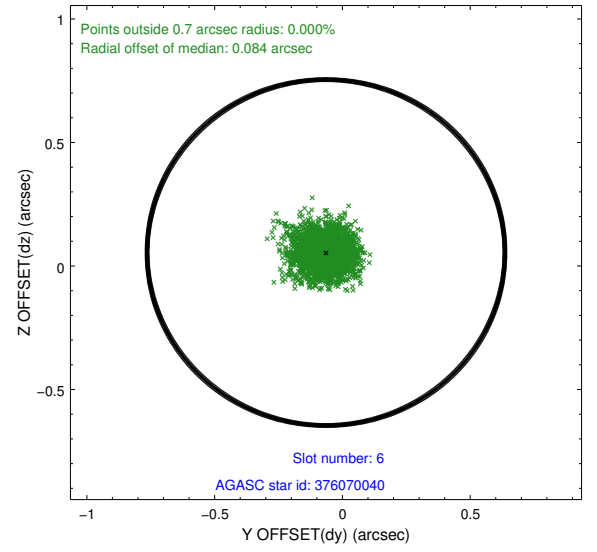
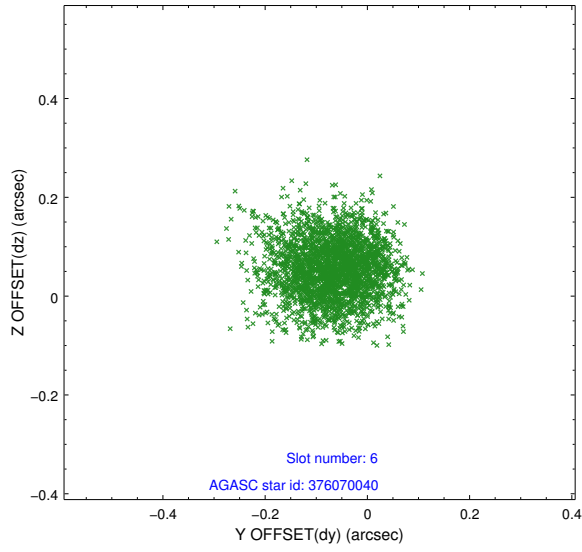
2.4.2 Slot 4



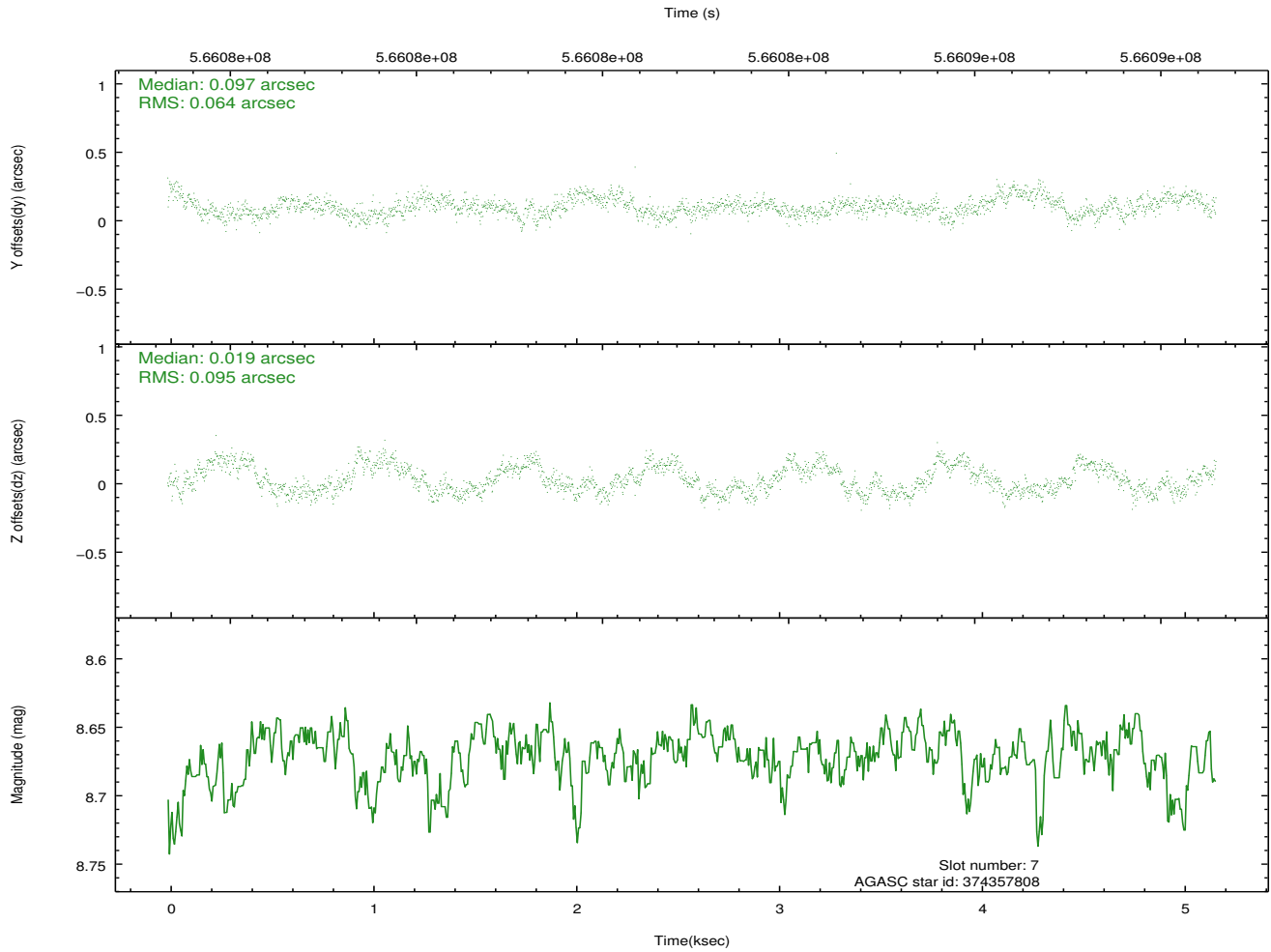
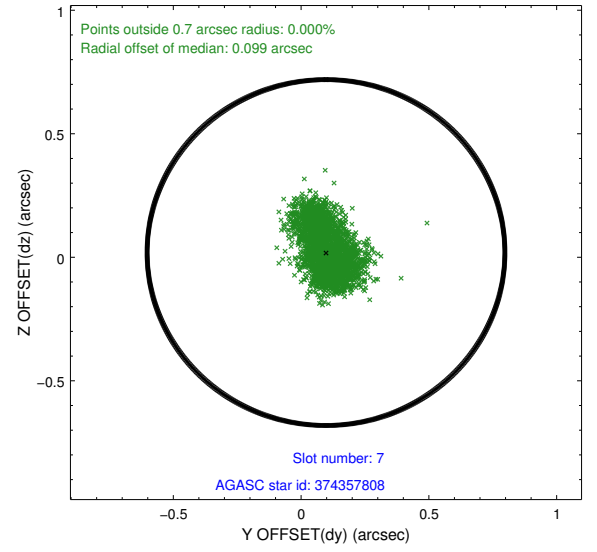
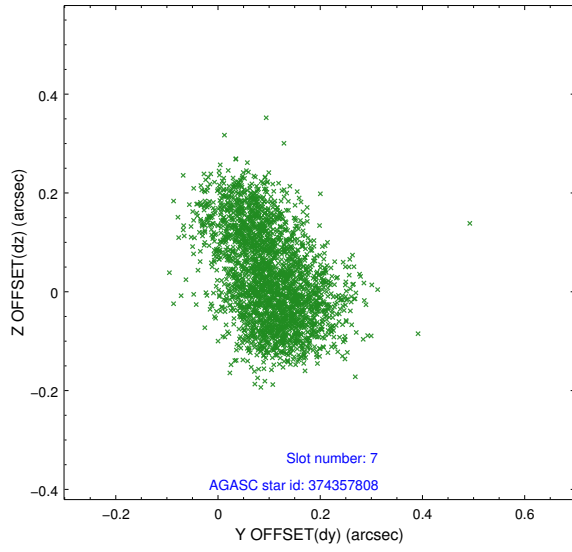
2.4.3 Slot 5



2.4.4 Slot 6

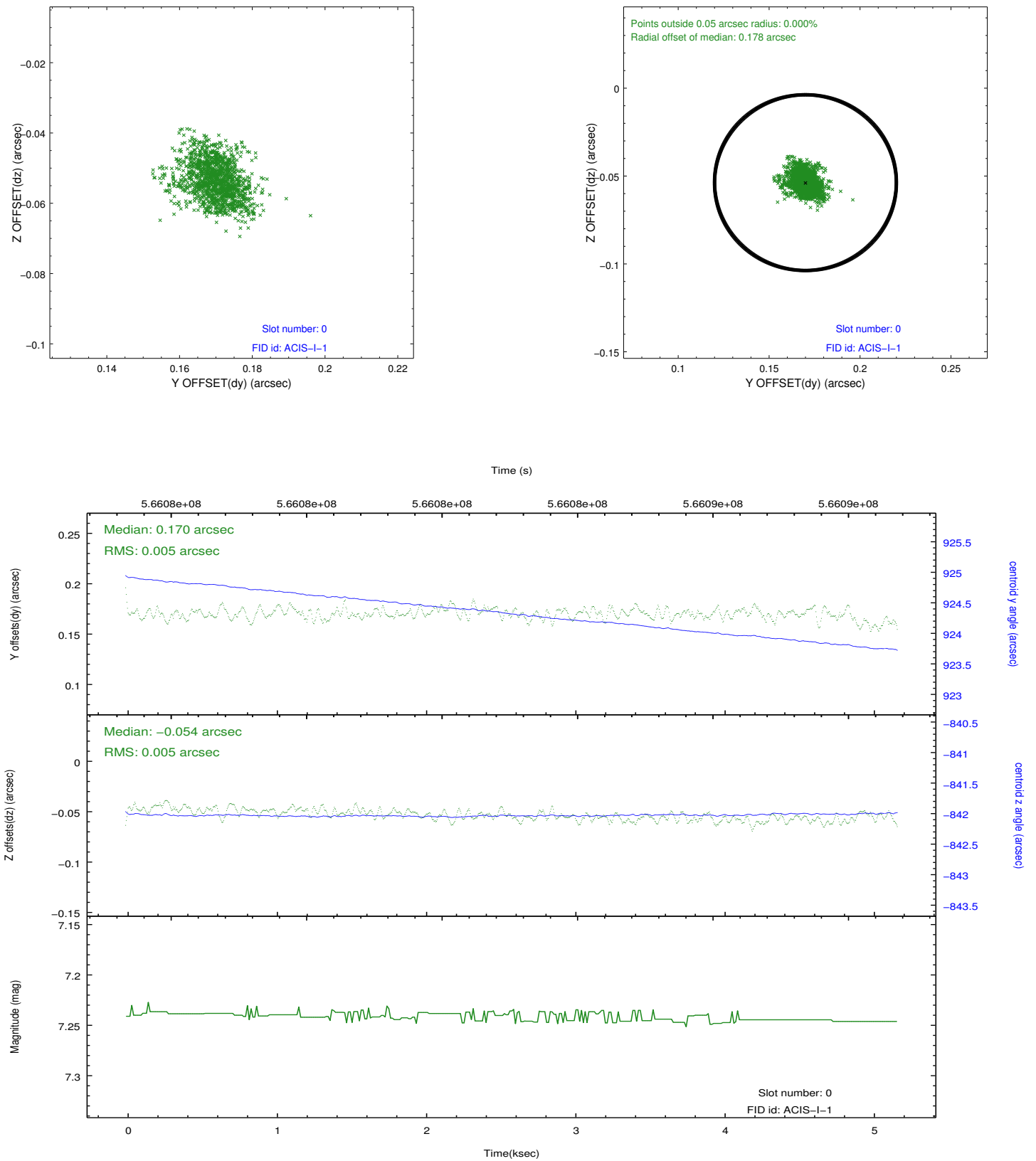


2.4.5 Slot 7

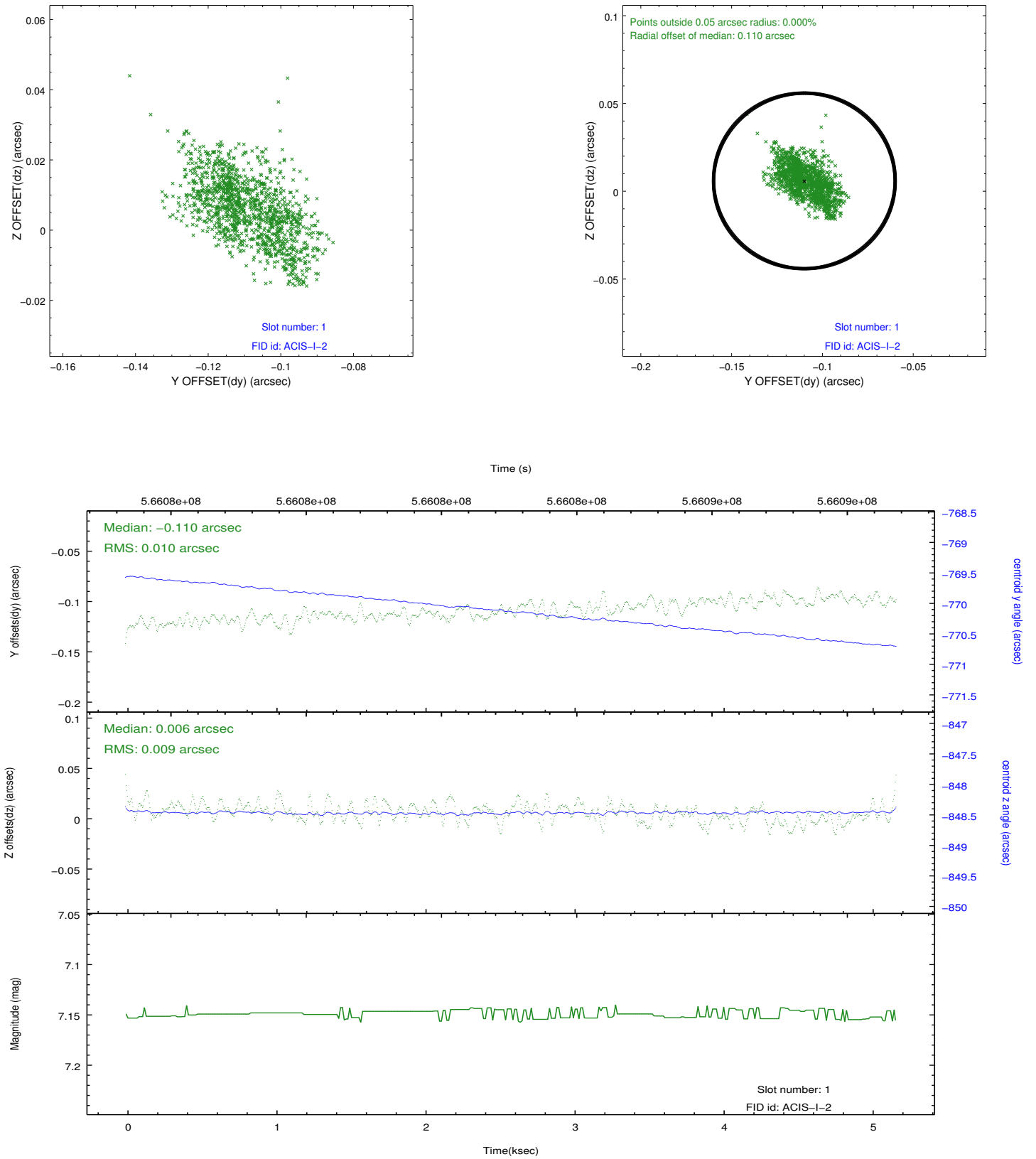


2.5 FID Slots

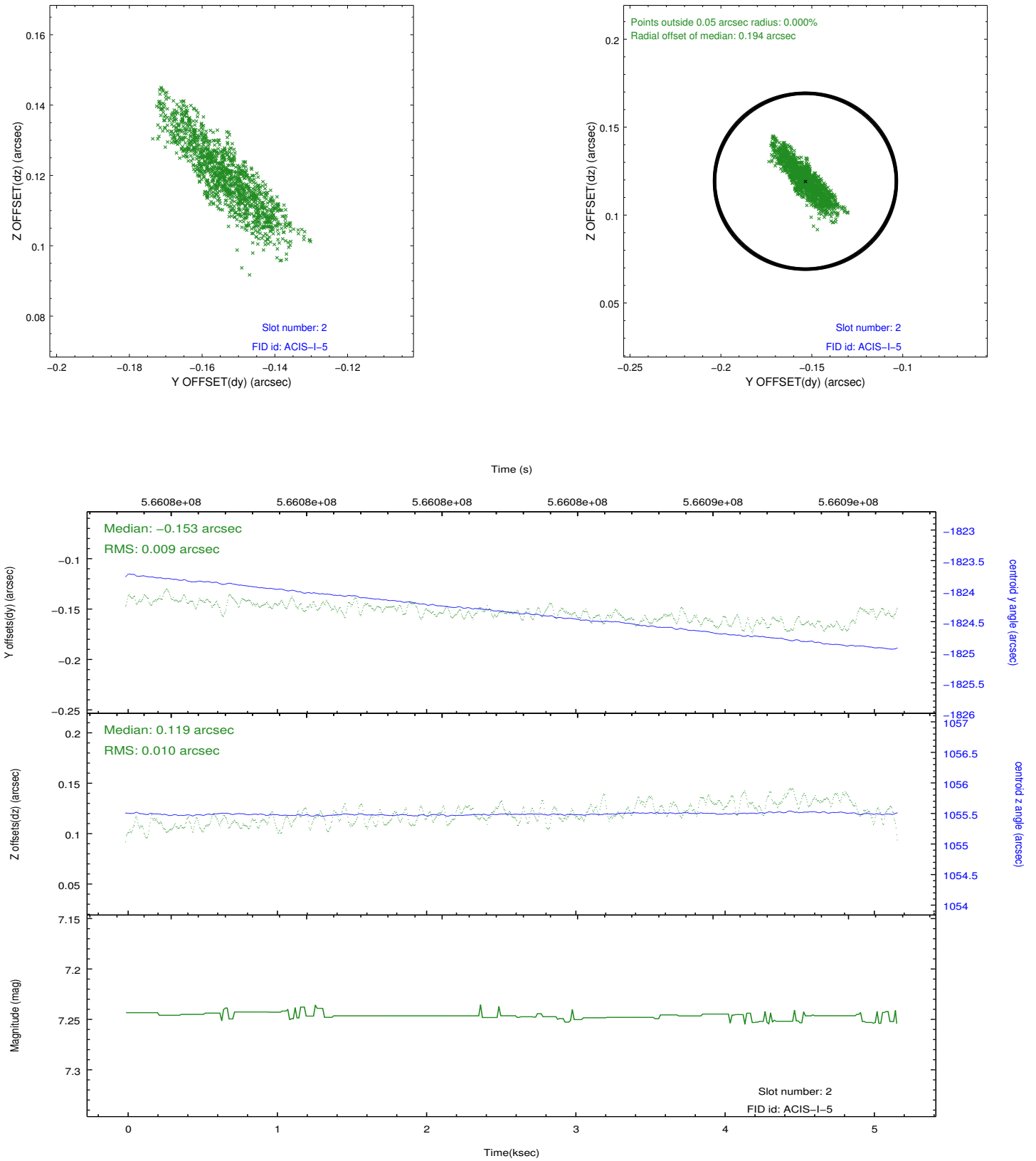
2.5.1 Slot 0



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)	2015.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.062300039053

A.2 Comments