

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 207 - L2 Version 4

Chandra X-Ray Center

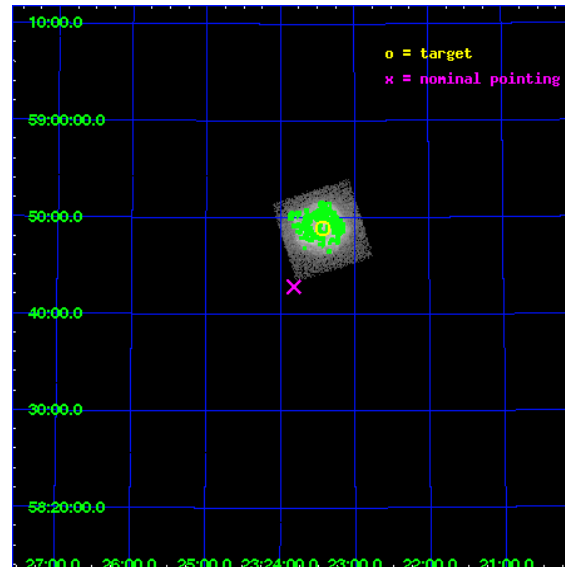
L2 Processing Date : Dec 17 2009

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1 Front

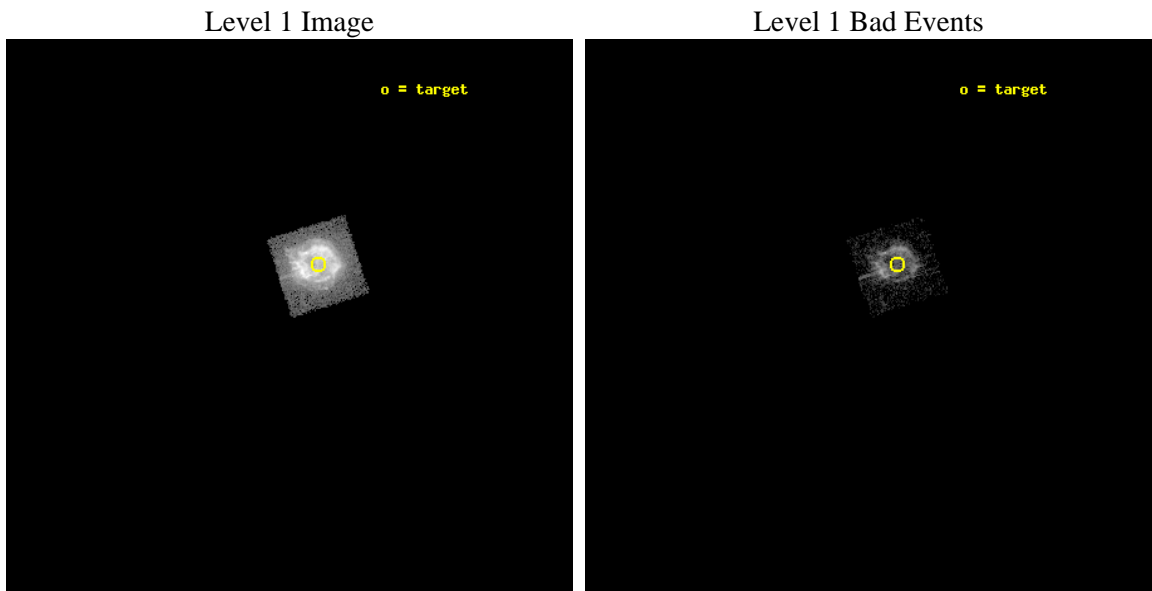
seq_num	590075	Sequence number
obs_id	207	Observation id
title	ACIS CHIP RESPONSE TO CAS A, JAN. 99	Proposal title
observer	DR. CXC CALIBRATION	Principal investigator
object	CAS A [Chip I0, T	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA
dec_targ	58.814833	Observer's specified target Dec
ra_nom	350.95437760617	Nominal RA
dec_nom	58.714128506589	Nominal Dec
roll_nom	162.76757069852	Nominal Roll
revision	4	Processing version of data
ontime	870.7159819603	Sum of GTIs [s]
livetime	859.6904519145	Livetime [s]
ontime0	870.7159819603	Sum of GTIs [s]
ontime1	984.10845965147	Sum of GTIs [s]
ontime2	984.06741964817	Sum of GTIs [s]
ontime3	984.02637965232	Sum of GTIs [s]
ontime6	983.98533964902	Sum of GTIs [s]
ontime7	984.19053965062	Sum of GTIs [s]
l2events	183973	Number of level 2 events



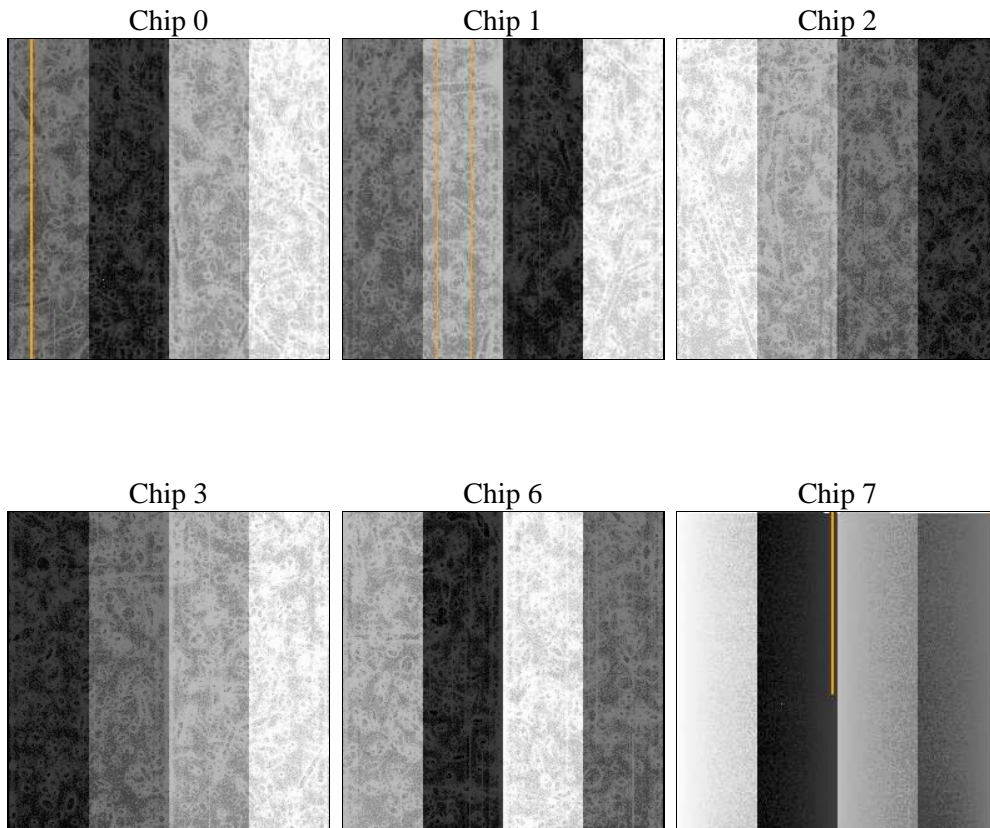
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	2000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	870.7159819603	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	870.7159819603	Sum of GTIs [s]
date	2009-12-17T07:26:09	Date and time of file creation	ontime1	984.10845965147	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	984.06741964817	Sum of GTIs [s]
			ontime3	984.02637965232	Sum of GTIs [s]
			ontime6	983.98533964902	Sum of GTIs [s]
			ontime7	984.19053965062	Sum of GTIs [s]
			l1events	208632	Number of level 1 events

2.1.4 Events

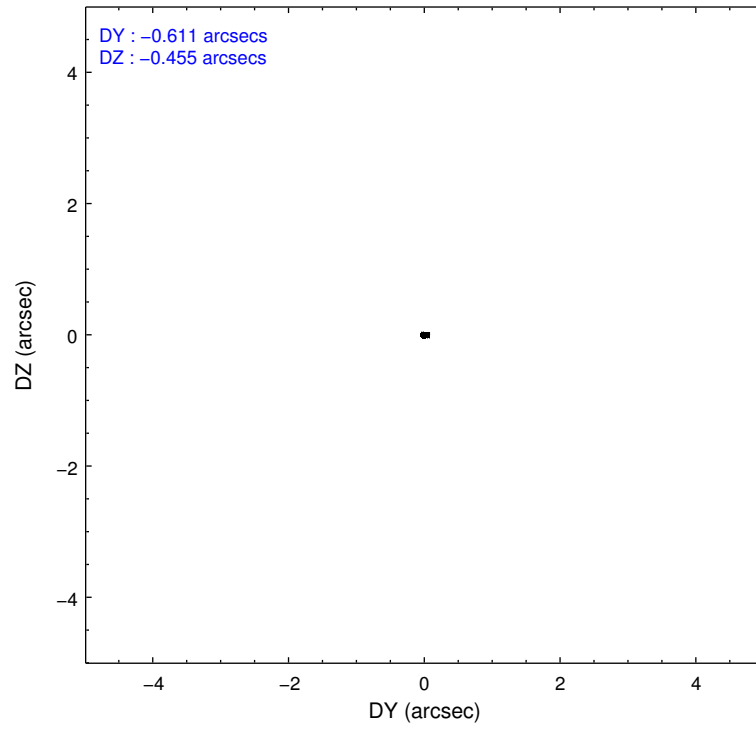
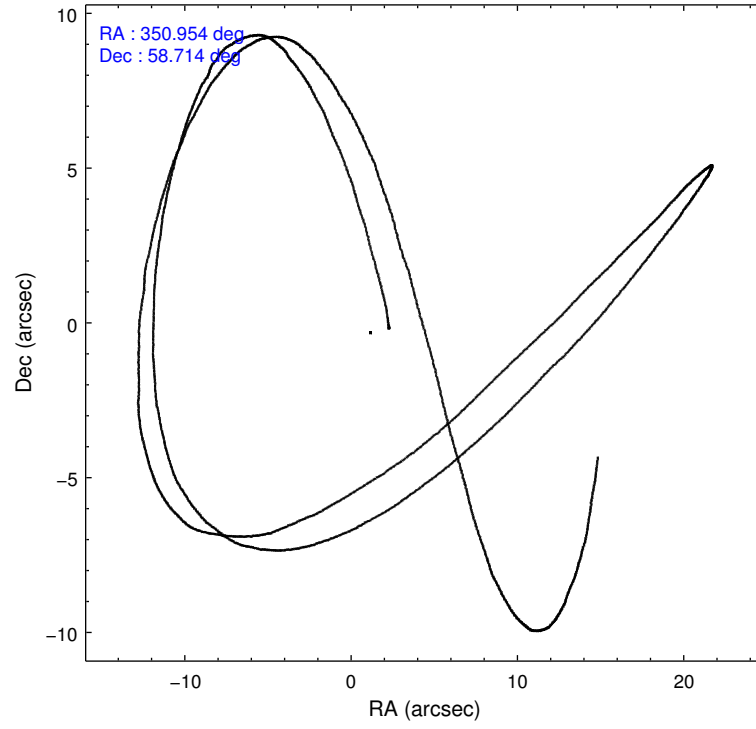
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	208632	0	0	0	0	0
rejected events	23392	0	0	0	0	0
rejected %	11%	0%	0%	0%	0%	0%

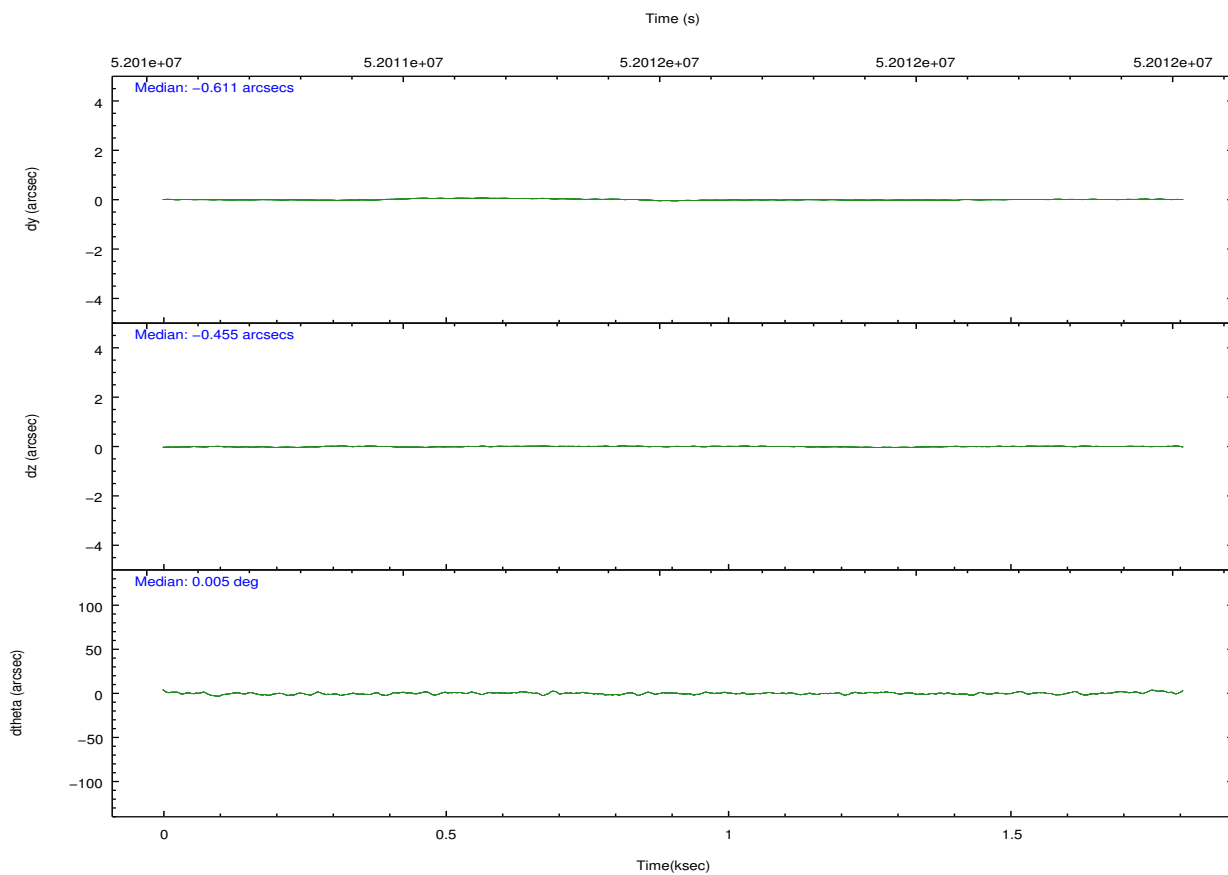
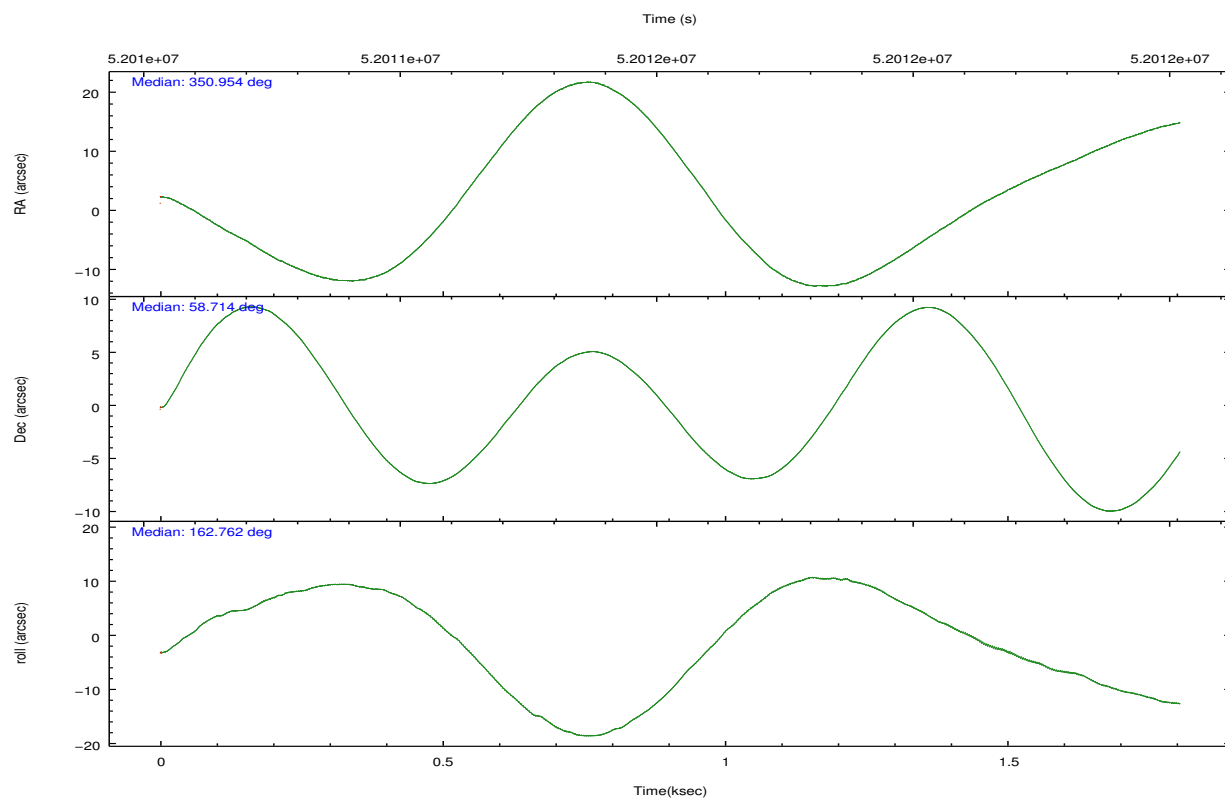
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	154227	0	0	0	0	0
	73%	0%	0%	0%	0%	0%
grade 1 events	2385	0	0	0	0	0
	1%	0%	0%	0%	0%	0%
grade 2 events	21651	0	0	0	0	0
	10%	0%	0%	0%	0%	0%
grade 3 events	6703	0	0	0	0	0
	3%	0%	0%	0%	0%	0%
grade 4 events	6712	0	0	0	0	0
	3%	0%	0%	0%	0%	0%
grade 5 events	1432	0	0	0	0	0
	0%	0%	0%	0%	0%	0%
grade 6 events	4839	0	0	0	0	0
	2%	0%	0%	0%	0%	0%
grade 7 events	10683	0	0	0	0	0
	5%	0%	0%	0%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	OVERRIDE	OVERRIDE
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	350.8575	350.9543776061714	Alternating exposures requested	N	N
Pointing Dec	58.814833	58.71412850658921	Primary exposure time	3.2	3.2
Pointing Roll	162.513605	162.7675706985219			
Window start time	49852864.184000	49852864.184000			
Window stop time	55036864.184000	55036864.184000			
SIM focus pos (mm)	-0.73623565999634	-0.73623565999634			
SIM defocus (mm)	0.04611253834209306	0.04611253834209306			
SIM translation stage pos (mm)	-233.5874344608	-233.5874344608			
SIM translation stage offset (mm)	-0.005028630631784381	-0.005028630631784381			
Observation start time	52010621.8558315	52010621.8558315			
Observation start date	1999-08-25T23:23:42	1999-08-25T23:23:41			
Observation end time	52012429.95589653	52012429.95589653			
Observation end date	1999-08-25T23:53:50	1999-08-25T23:53:49			
Read mode	TIMED	TIMED			

2.3 Aspect



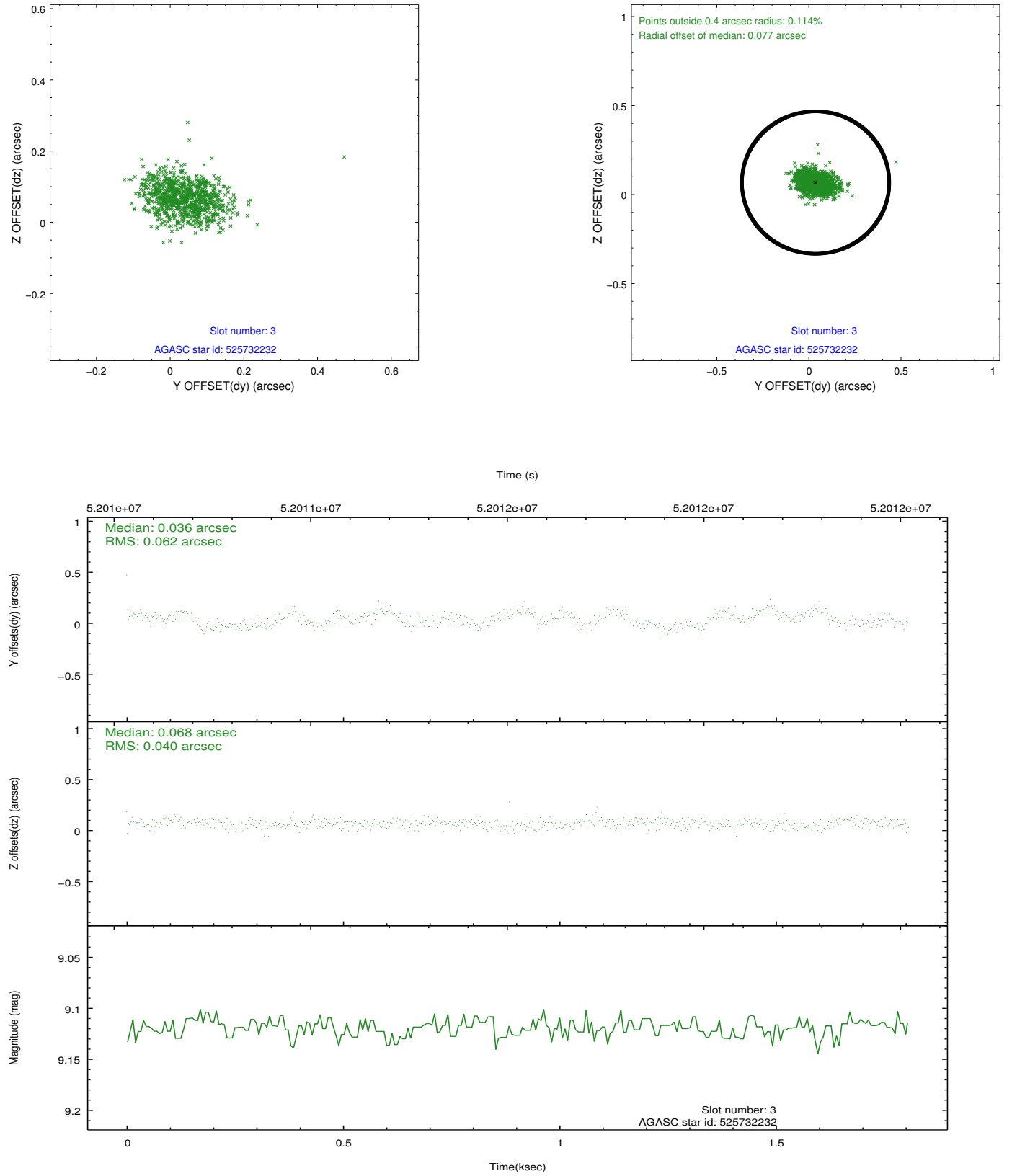


Slot Statistics

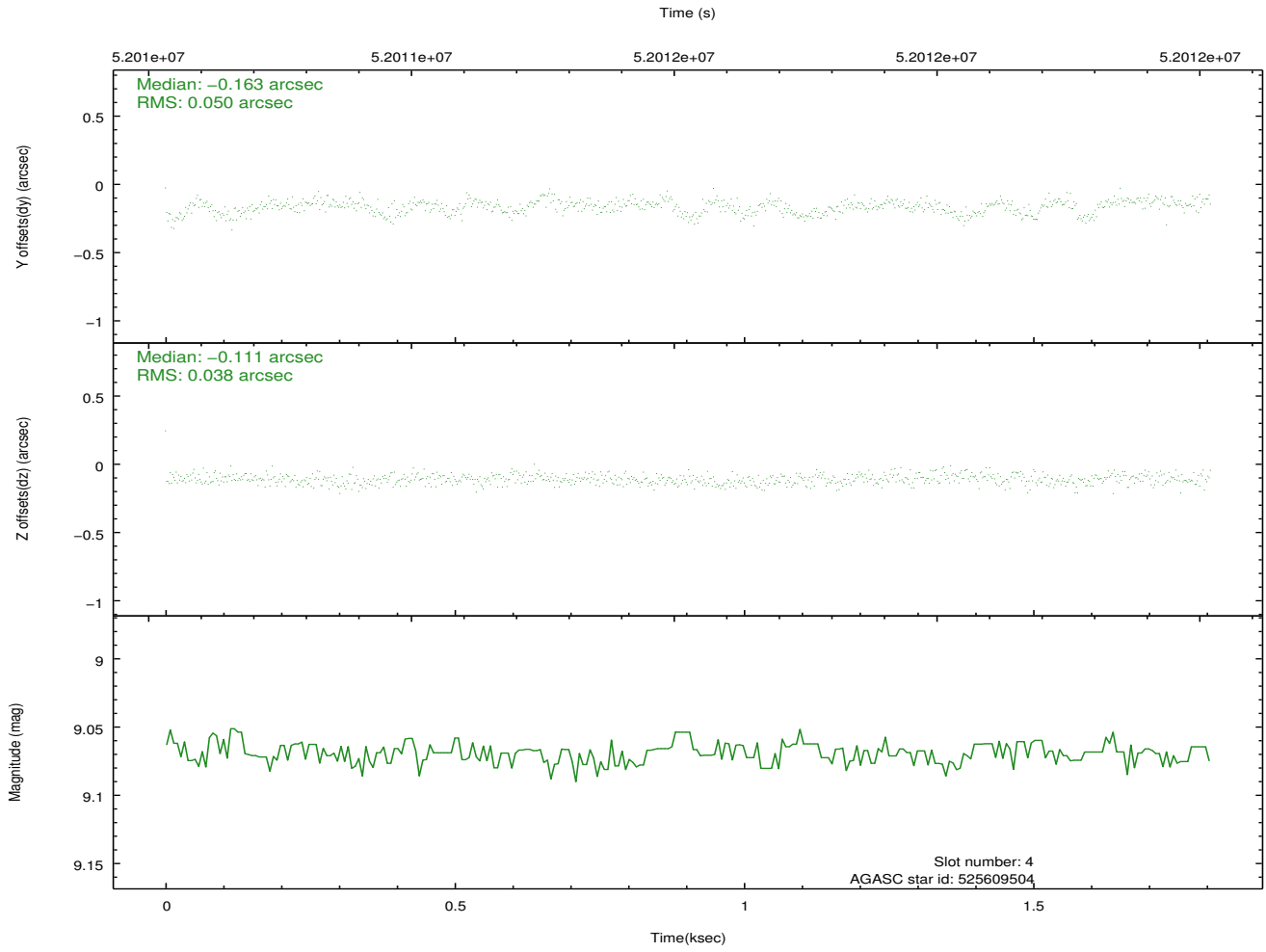
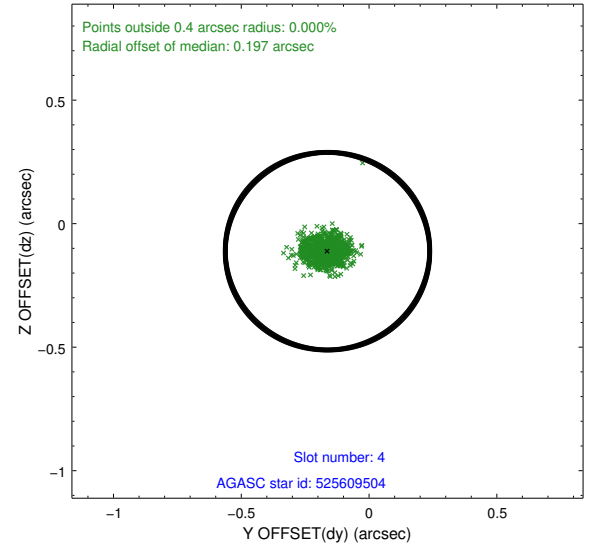
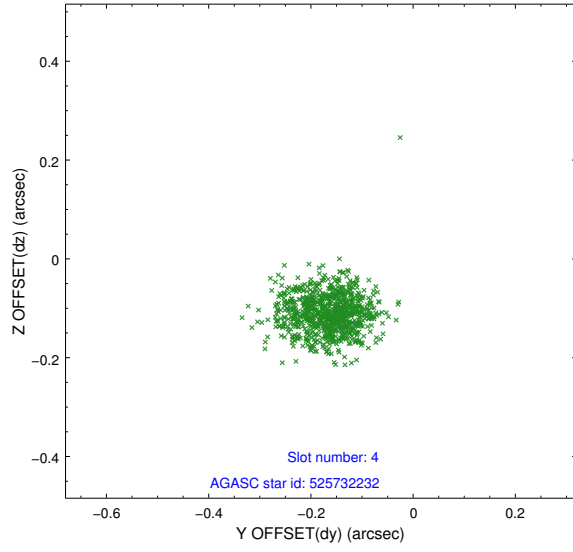
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.26	882	0.003	0.074	0.006	0.011	0.000000	0.000000	940.40	-822.78
1	FID	ACIS-I-4	7.24	882	-0.069	-0.029	0.006	0.011	0.000000	0.000000	2161.60	1075.91
2	BAD	ACIS-I-5	7.23	882	-0.388	-0.332	0.019	0.035	0.000000	0.000000	-1805.51	1075.96
3	GUIDE	525732232	9.12	881	0.036	0.068	0.078	0.124	351.669550	58.757012	-1137.58	-505.92
4	GUIDE	525609504	9.07	882	-0.163	-0.111	0.066	0.104	349.896632	58.356658	1611.04	1859.46
5	GUIDE	525207384	9.73	879	0.147	-0.058	0.123	0.194	351.880308	58.083642	-2268.33	1676.01
6	GUIDE	525739240	9.62	882	-0.039	0.028	0.088	0.139	350.642893	59.099564	1051.04	-1101.94
7	GUIDE	525737880	9.75	881	0.020	0.064	0.103	0.166	351.070641	59.208299	418.07	-1714.29

2.4 Star Slots

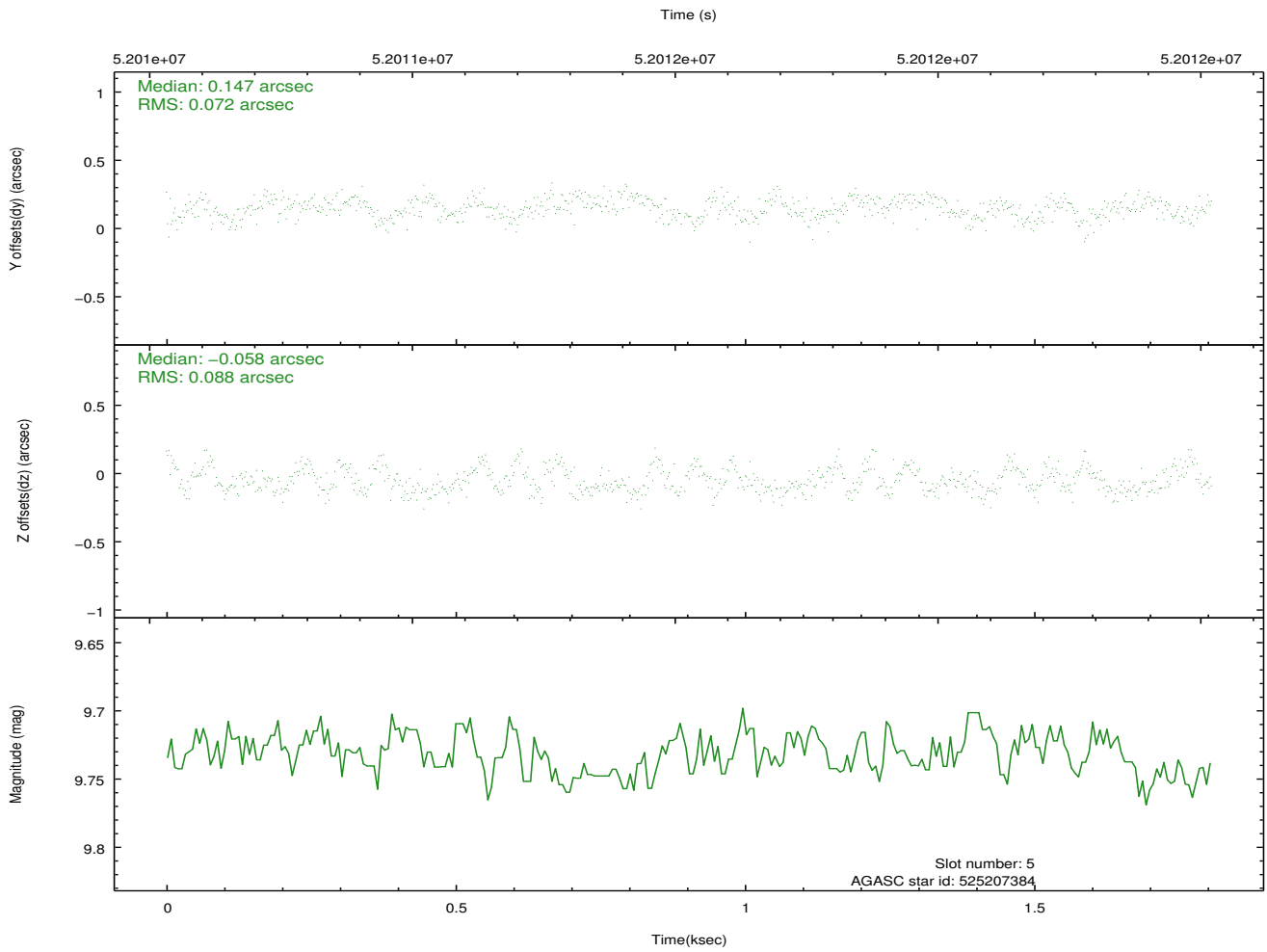
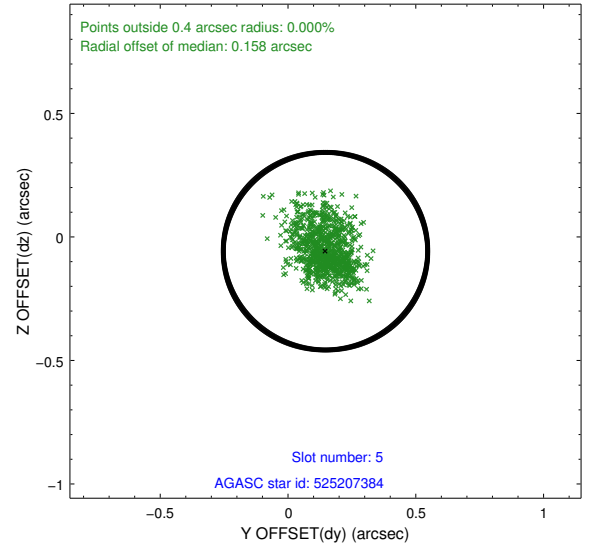
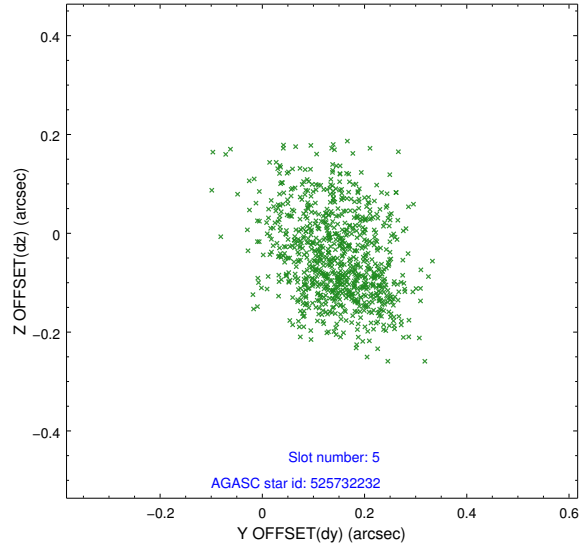
2.4.1 Slot 3



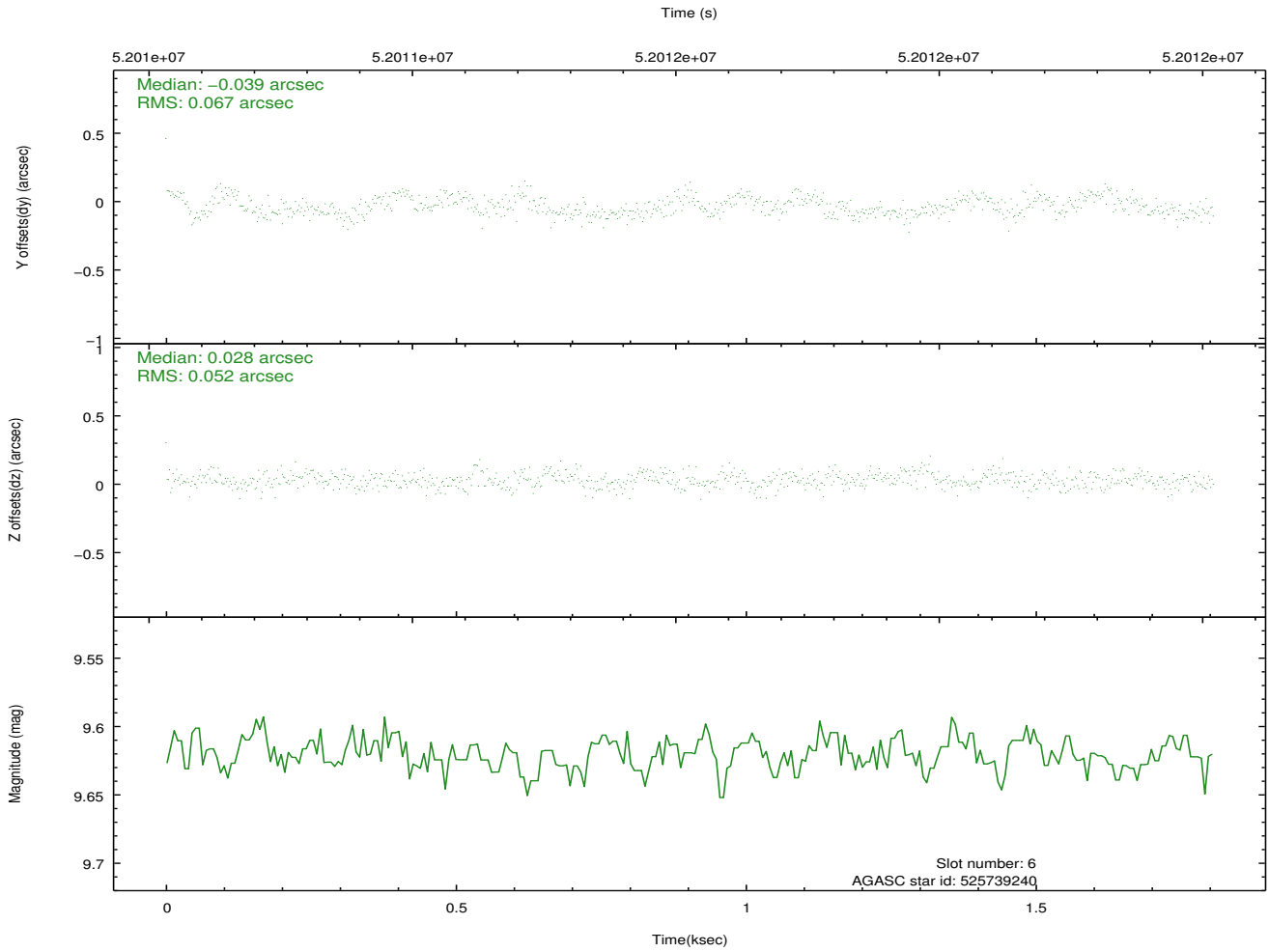
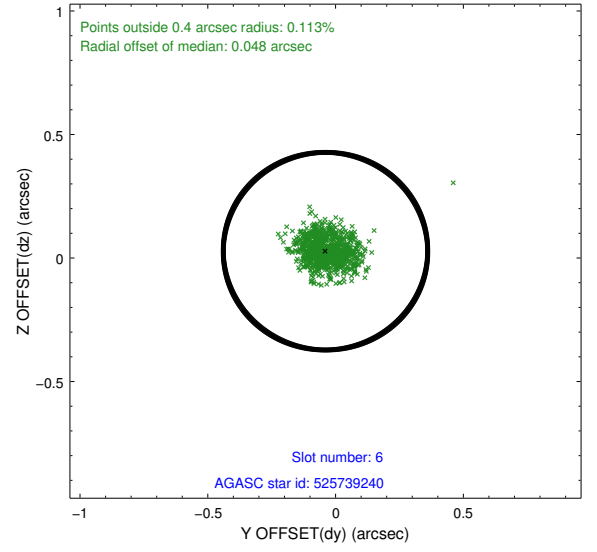
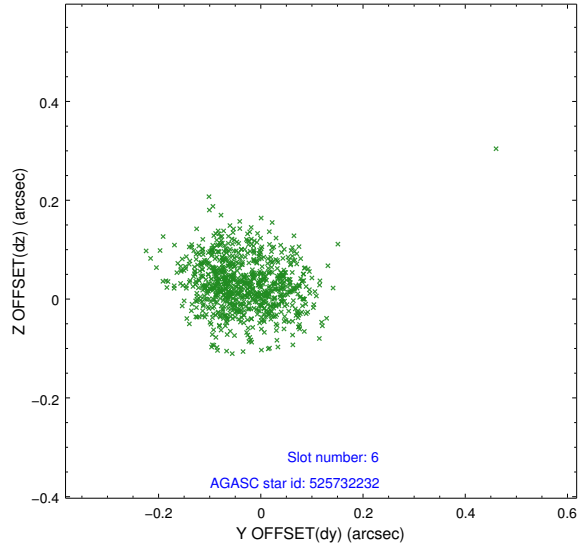
2.4.2 Slot 4



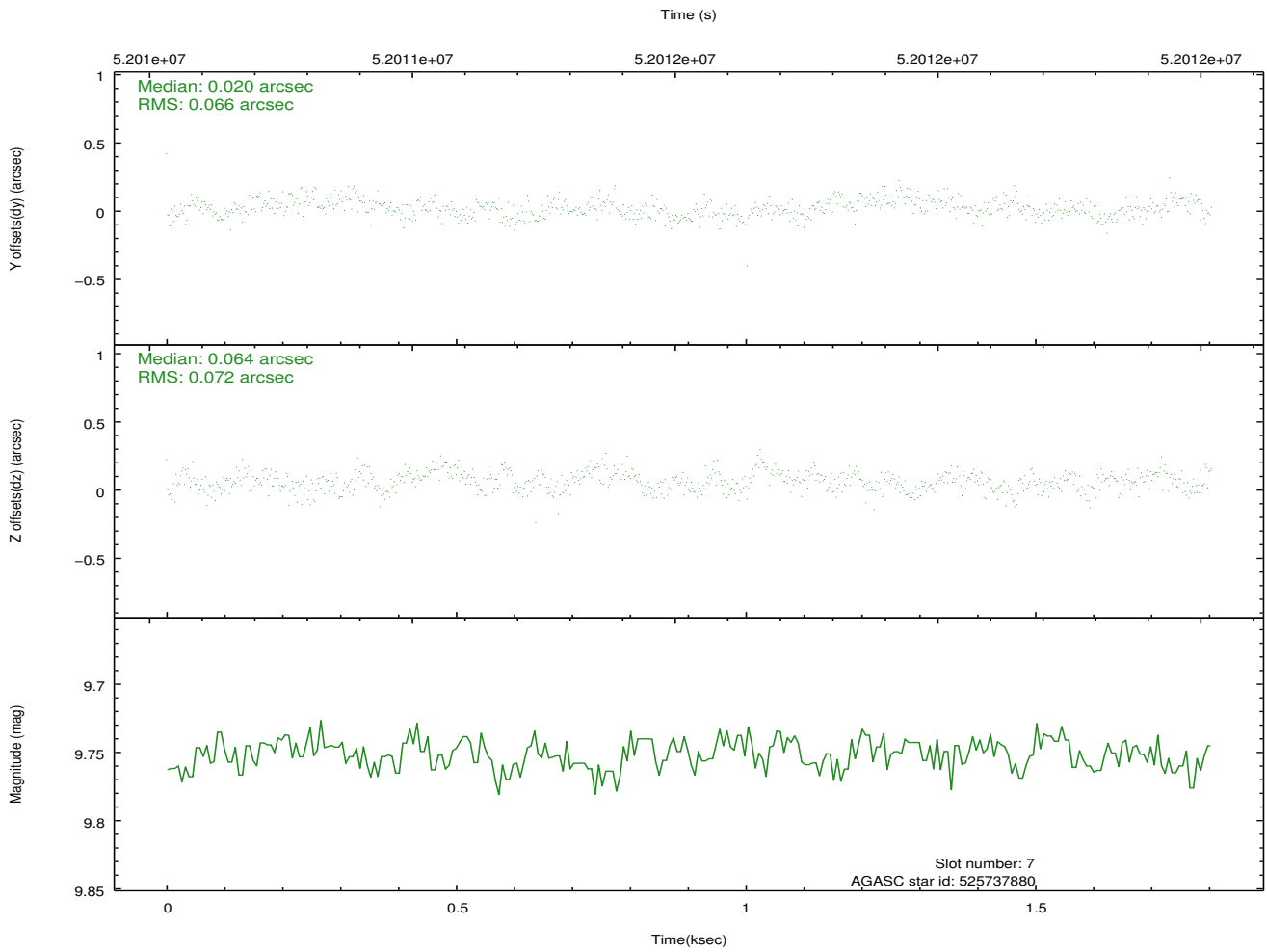
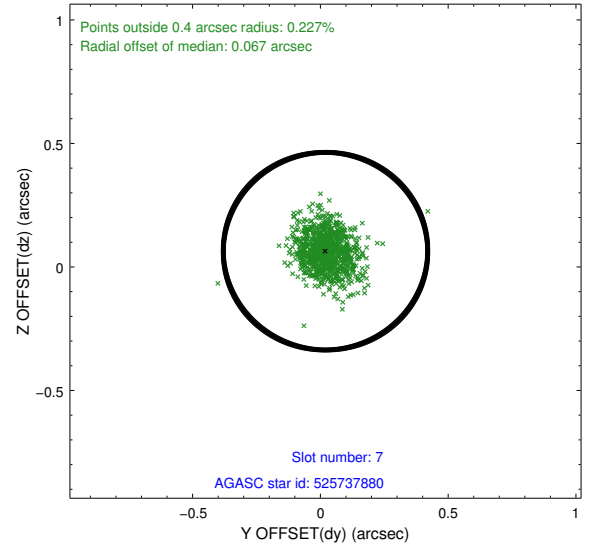
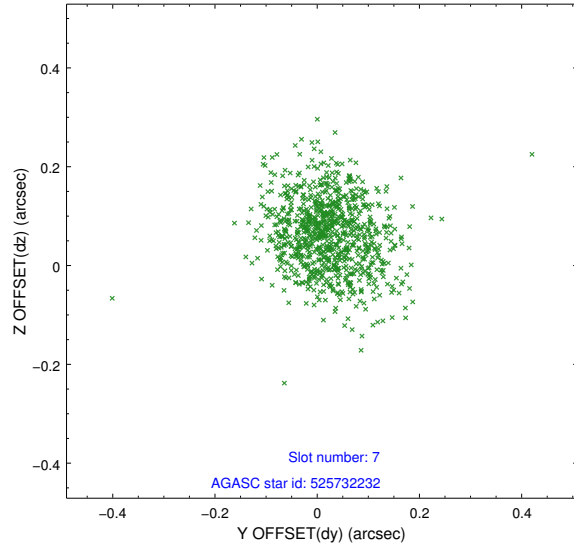
2.4.3 Slot 5



2.4.4 Slot 6

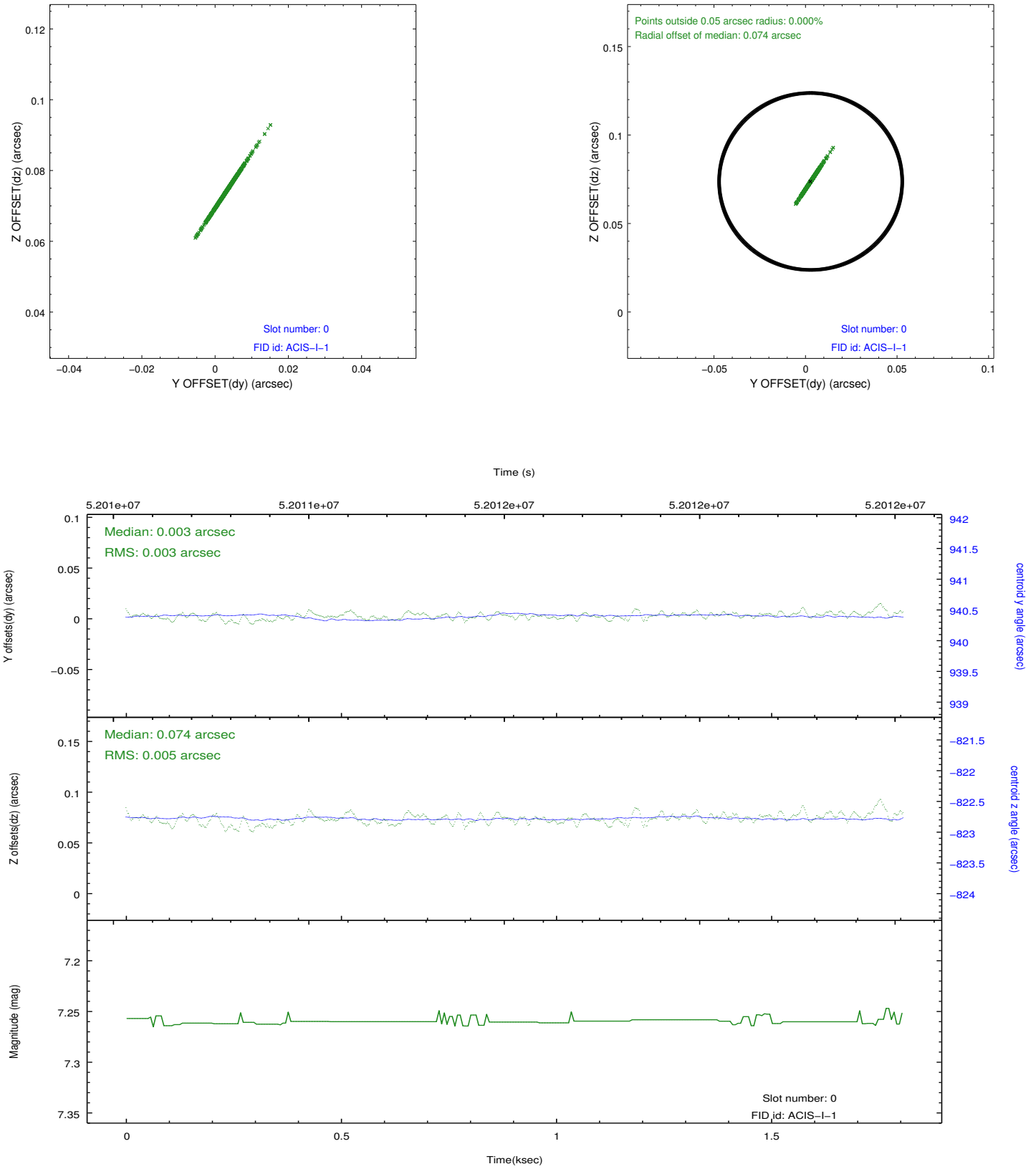


2.4.5 Slot 7

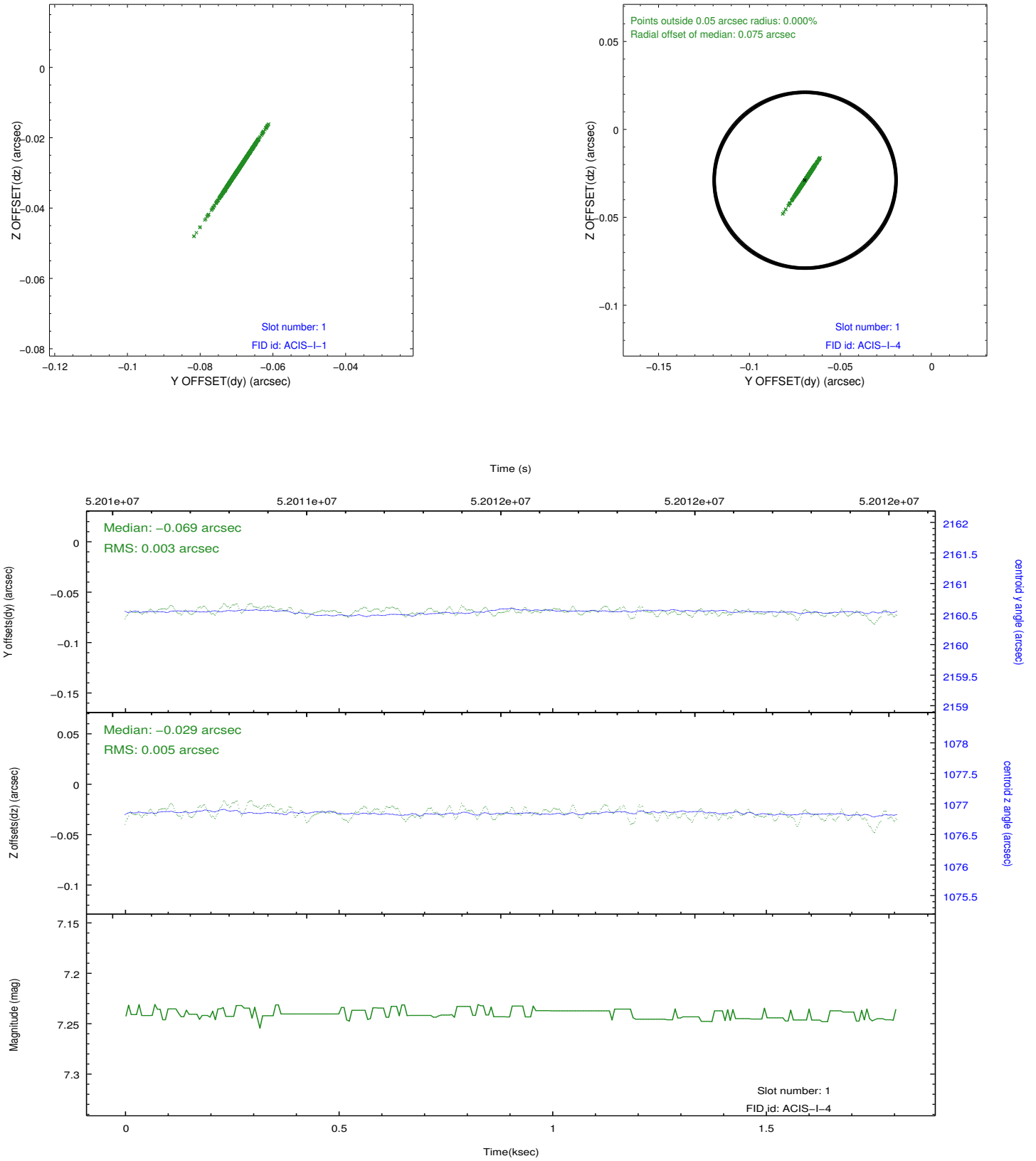


2.5 FID Slots

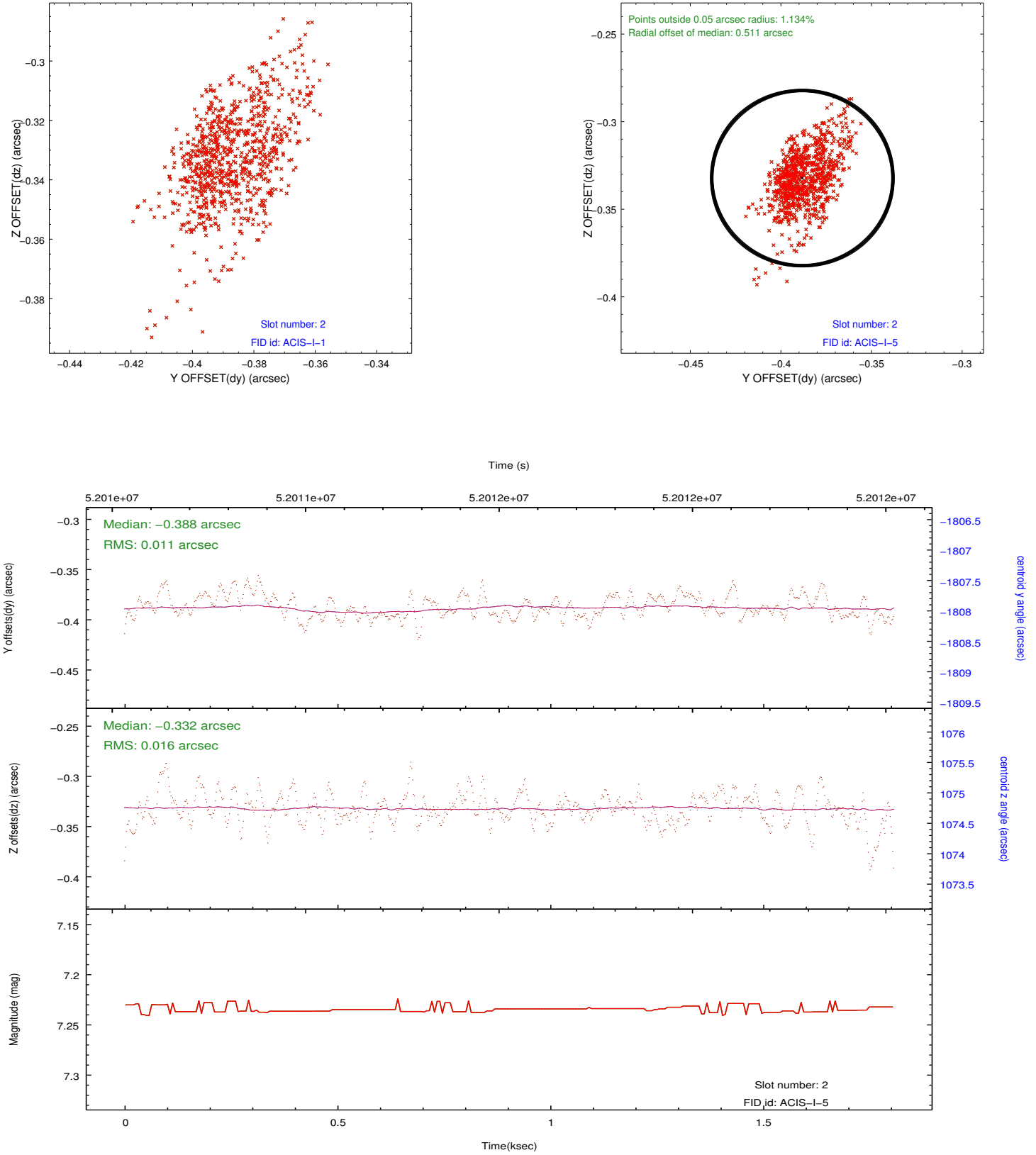
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources

A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	0.871

A.2 Comments

Off-axis ACIS effective area measurement using Cas A on chip I0. Only I0 chip was read out.

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The fid light in slot 2 was excluded from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one fid light or guide star from the solution.

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Pileup throughout most of the observation.

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The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.