

V&V Reference Report

L2 ASCDS Version : 8.3.2

Observation 473 - L2 Version 4

Chandra X-Ray Center

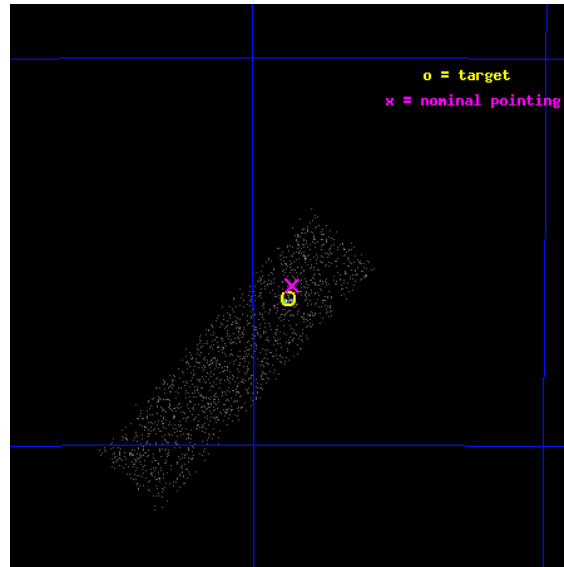
L2 Processing Date : Aug 9 2010

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1 Front

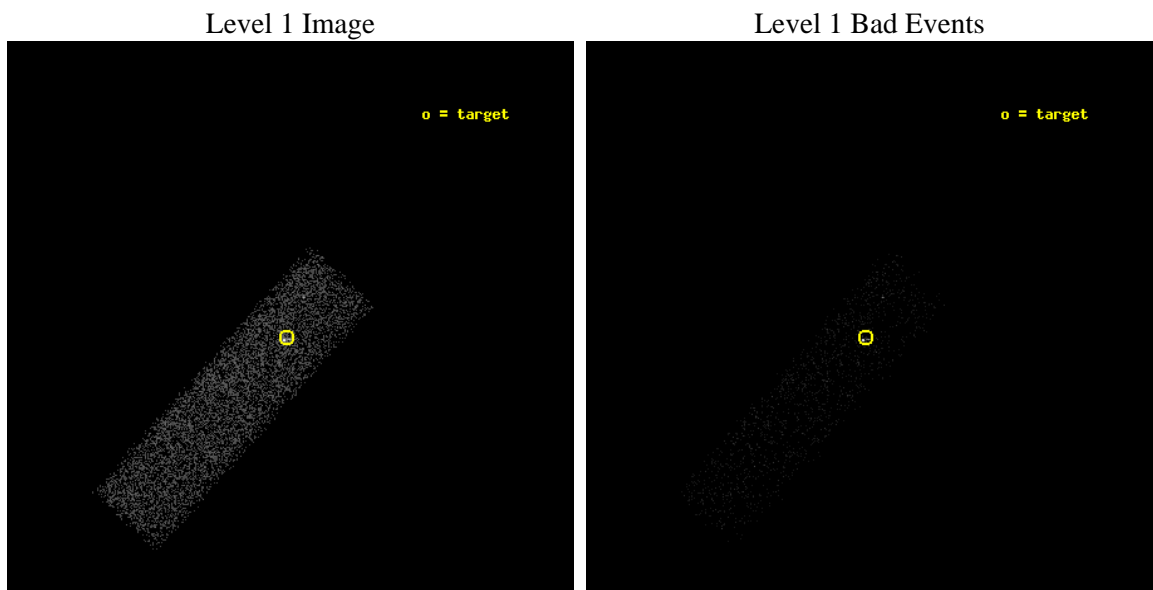
seq_num	790034	Sequence number
obs_id	473	Observation id
title	PKS0637-752, an AGN used for focussing	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0637-752	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.94	Observer's specified target RA
dec_targ	-75.27	Observer's specified target Dec
ra_nom	98.933584379759	Nominal RA
dec_nom	-75.264857209273	Nominal Dec
roll_nom	131.67467127443	Nominal Roll
revision	4	Processing version of data
ontime	3605.3589739501	Sum of GTIs [s]
livetime	3448.1244968919	Livetime [s]
ontime7	3605.3589739501	Sum of GTIs [s]
l2events	2440	Number of level 2 events



2 OBI

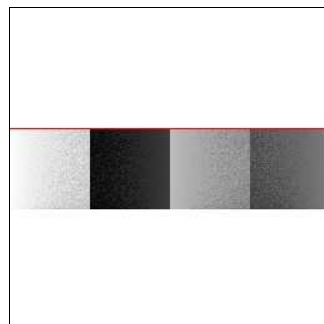
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	Scheduled observation exposure time
ascdsver	8.3.2	ASCDS version number	ontime	3605.3589739501	Sum of GTIs [s]
caldbver	4.3.0	 	ontime7	3605.3589739501	Sum of GTIs [s]
date	2010-08-10T01:27:59	Date and time of file creation	l1events	11795	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

	ccd 7
level 1 events	11795
rejected events	9263
rejected %	78%

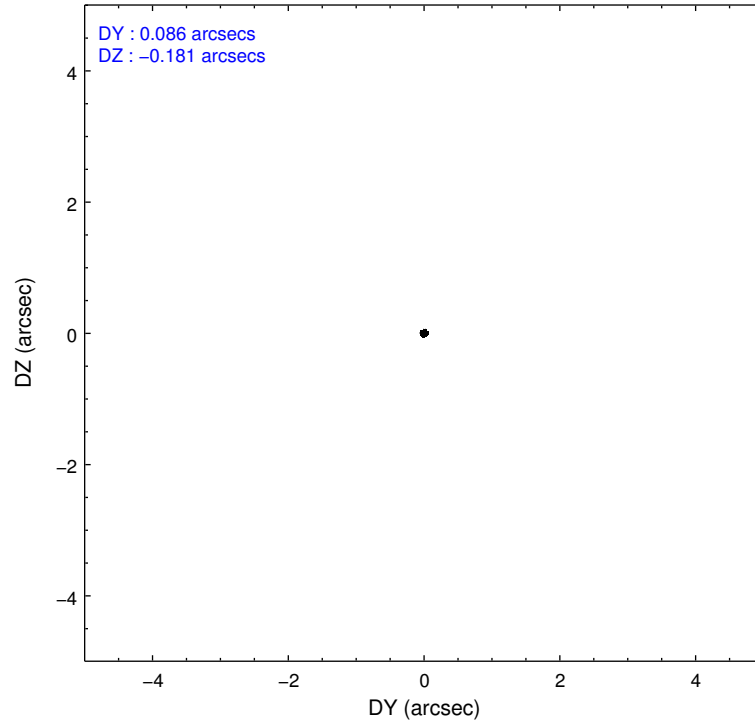
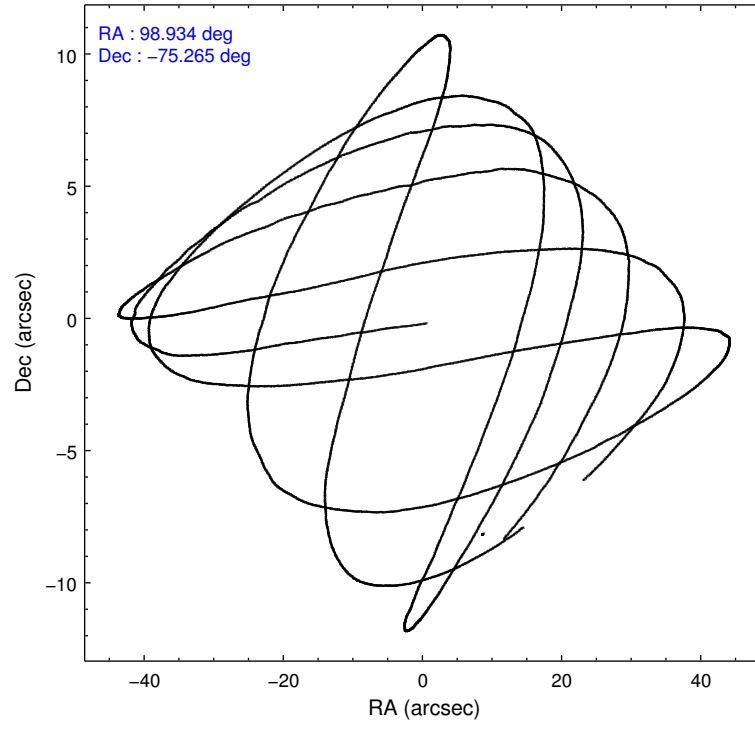
	ccd 7
grade 0 events	326
	2%
grade 1 events	5
	0%
grade 2 events	431
	3%
grade 3 events	330
	2%
grade 4 events	284
	2%
grade 5 events	273
	2%
grade 6 events	1164
	9%
grade 7 events	8982
	76%

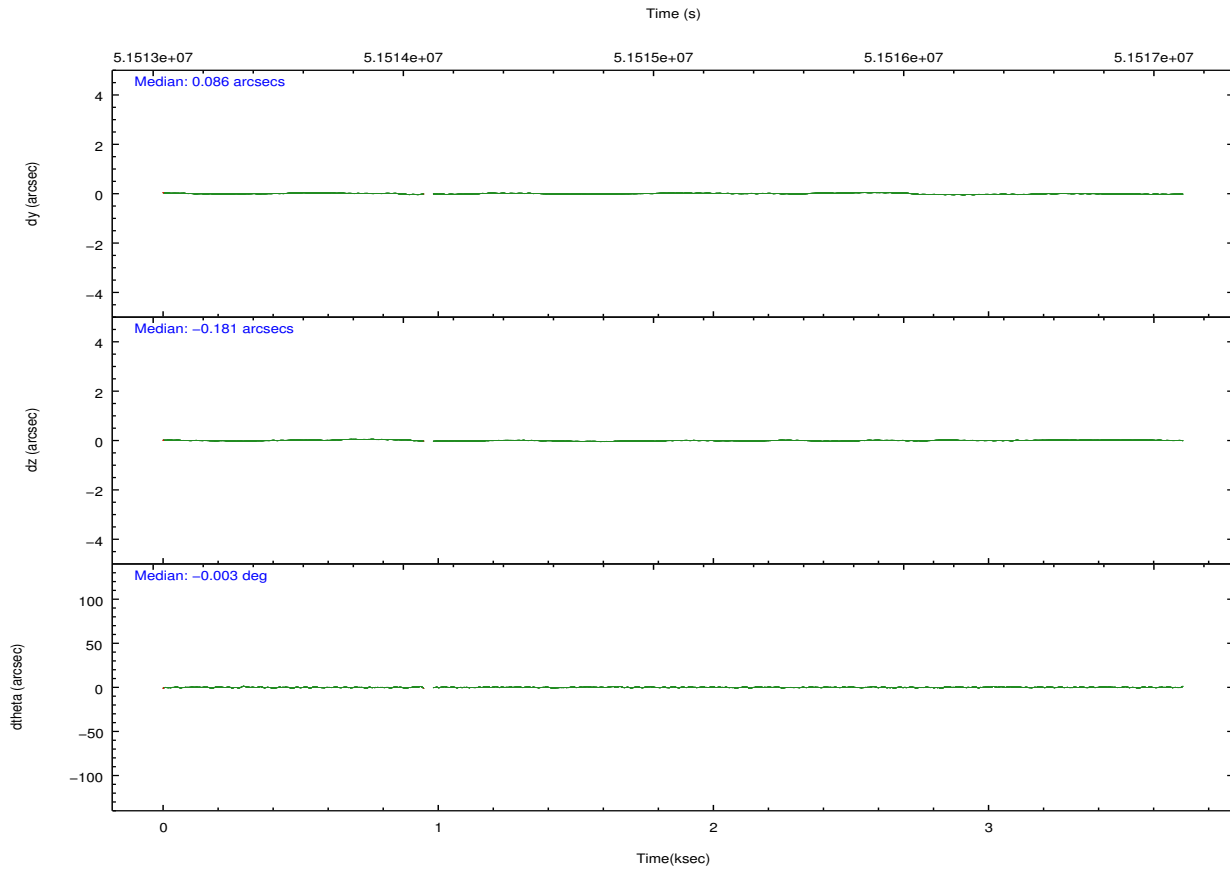
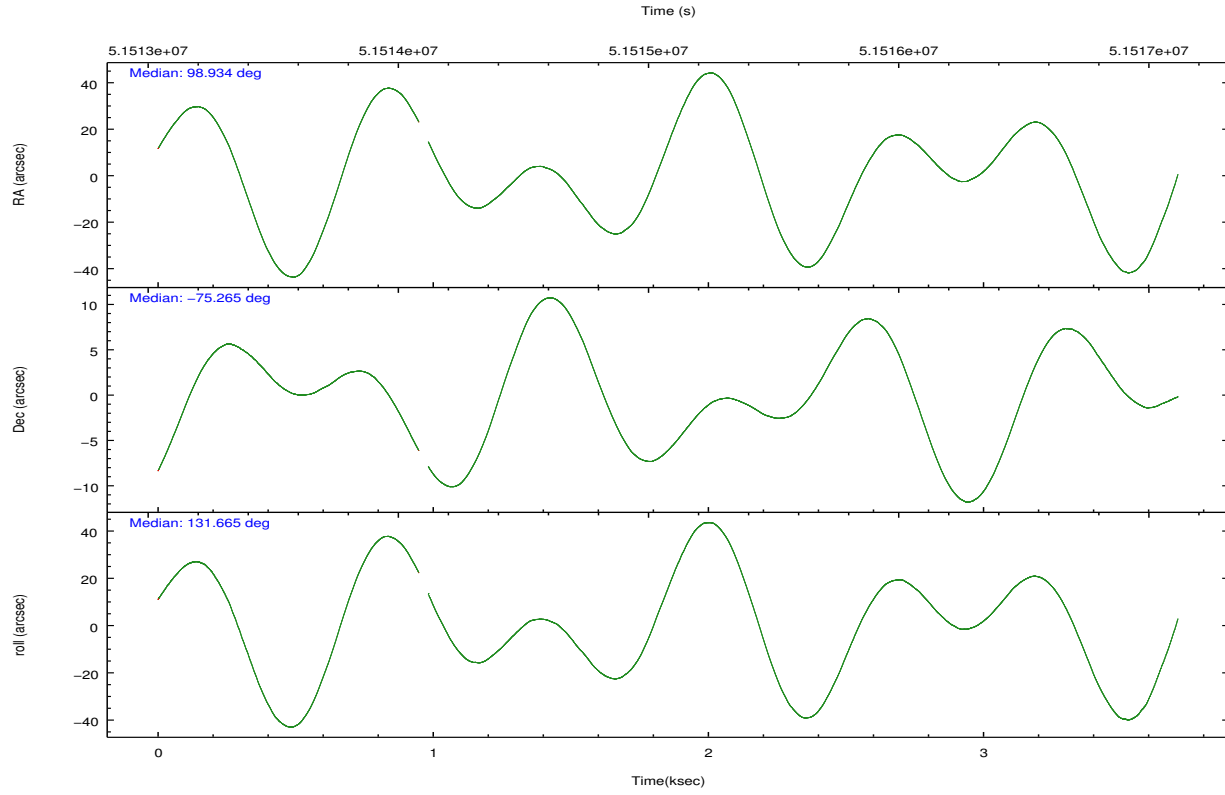
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
Pointing RA	98.93367271944896	98.93358437975857
Pointing Dec	-75.26488439012451	-75.26485720927326
Pointing Roll	131.6747861282049	131.6746712744284
SIM focus pos (mm)	-0.6394396079644659	-0.6394396079644659
SIM defocus (mm)	0.04482785903139486	0.04482785903139486
SIM translation stage pos (mm)	-190.1199515274594	-190.1199515274594
SIM translation stage offset (mm)	-0.01257157650780982	-0.01257157650780982
Observation start time	51513223.20035475	51513223.20035475
Observation start date	1999-08-20T04:51:06	1999-08-20T05:13:43
Observation end time	51517112.013356	51517112.013356
Observation end date	1999-08-20T06:14:26	1999-08-20T06:18:32
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	OVERRIDE	OVERRIDE
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	1/4	1/4
Subarray start row	384	384
Subarray row count	256	256
Alternating exposures requested	N	N
Primary exposure time	0.9	0.9

2.3 Aspect



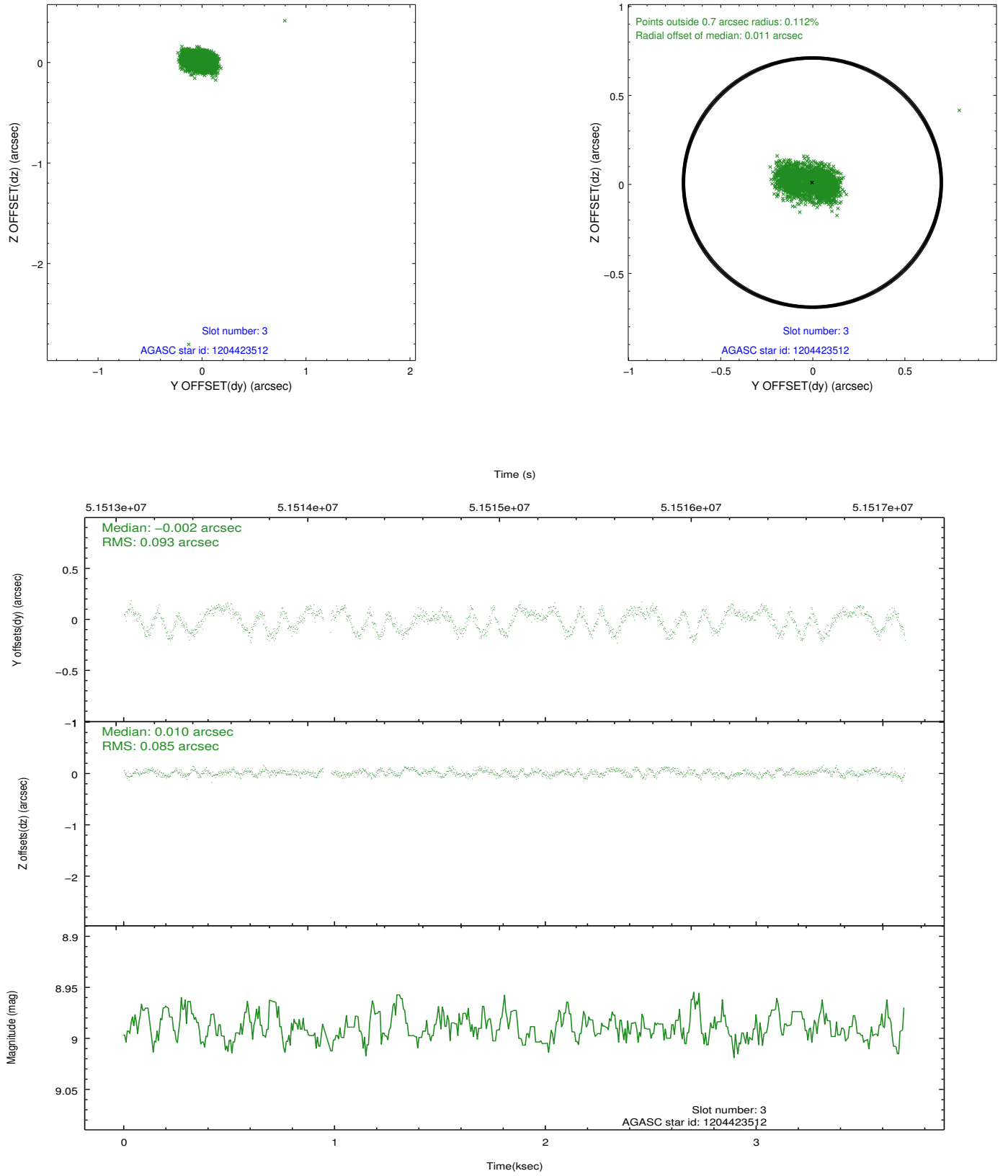


Slot Statistics

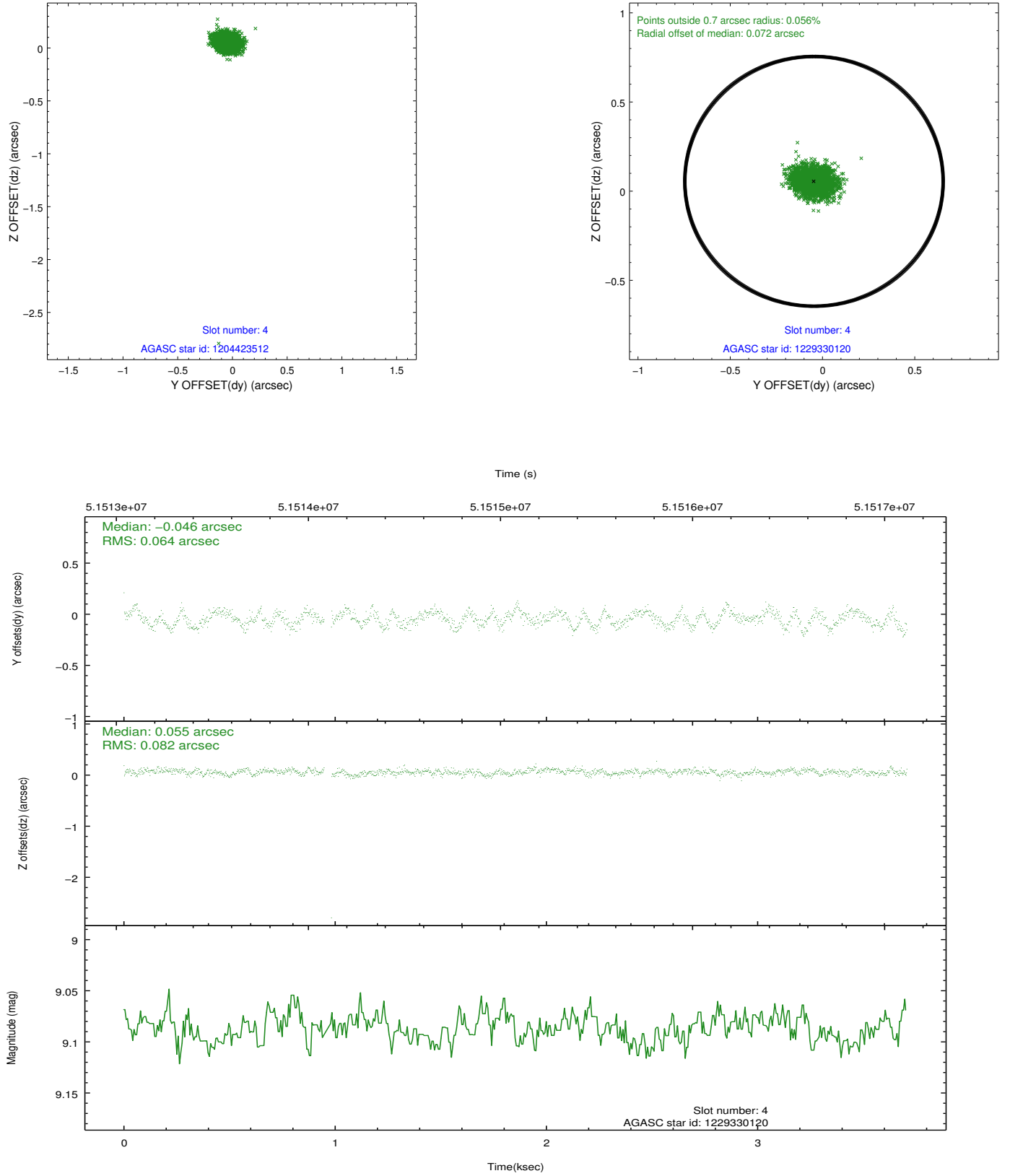
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	1793	-0.033	0.036	0.007	0.011	0.000000	0.000000	60.47	-1850.24
1	FID	ACIS-S-4	7.21	1793	0.139	0.002	0.006	0.010	0.000000	0.000000	2160.89	186.36
2	FID	ACIS-S-5	7.25	1793	-0.134	-0.028	0.006	0.011	0.000000	0.000000	-1804.62	181.06
3	GUIDE	1204423512	8.99	1791	-0.002	0.010	0.116	0.180	100.368786	-74.674048	762.82	-2372.33
4	GUIDE	1229330120	9.09	1793	-0.046	0.055	0.086	0.132	98.874898	-75.821050	-1377.47	1413.34
5	GUIDE	1229331616	9.91	1793	0.006	-0.004	0.122	0.188	96.182998	-75.347362	1480.06	2160.17
6	GUIDE	1204425200	9.79	1789	0.041	-0.061	0.137	0.230	100.052994	-74.556368	1279.60	-2437.23
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

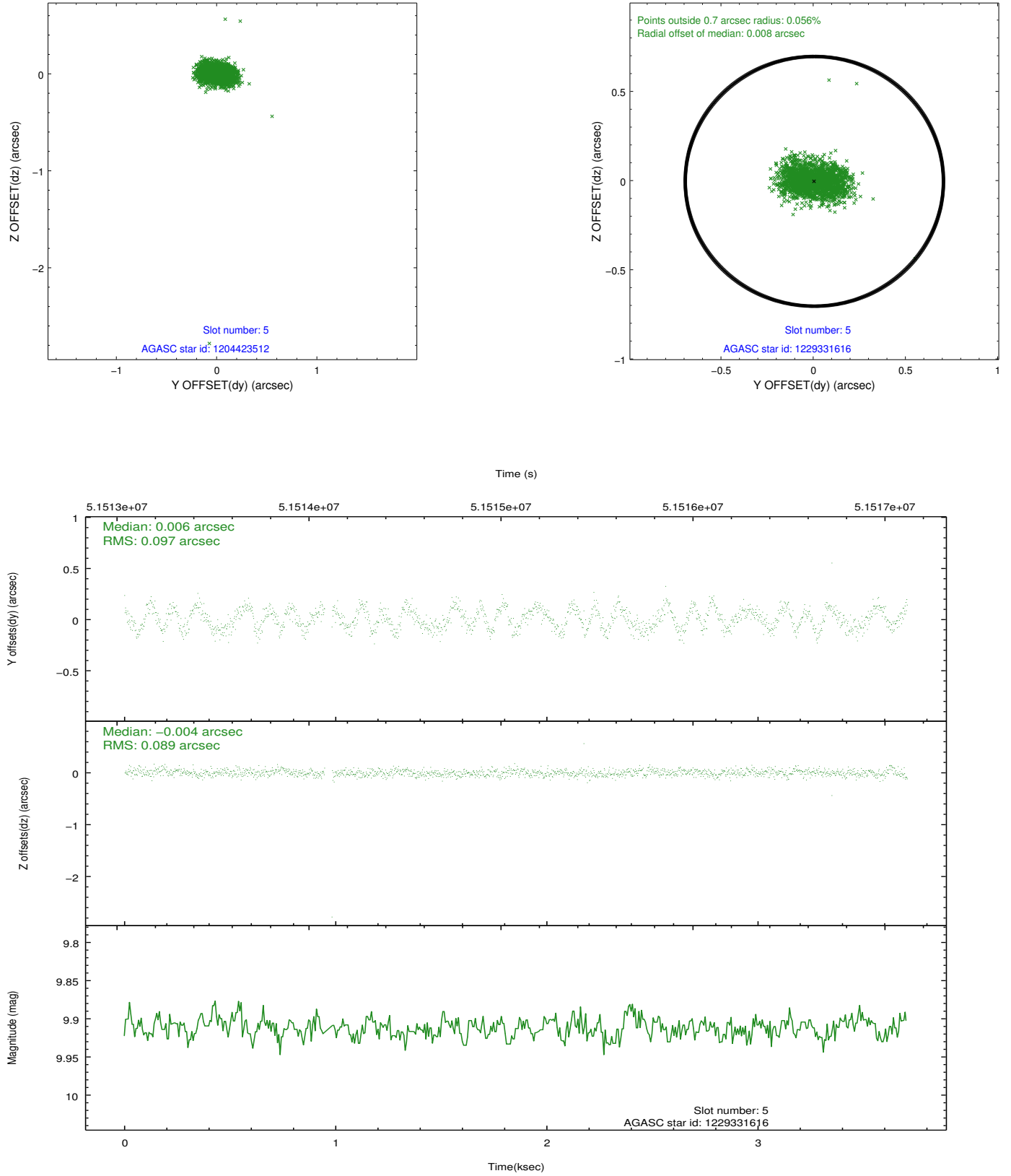
2.4.1 Slot 3



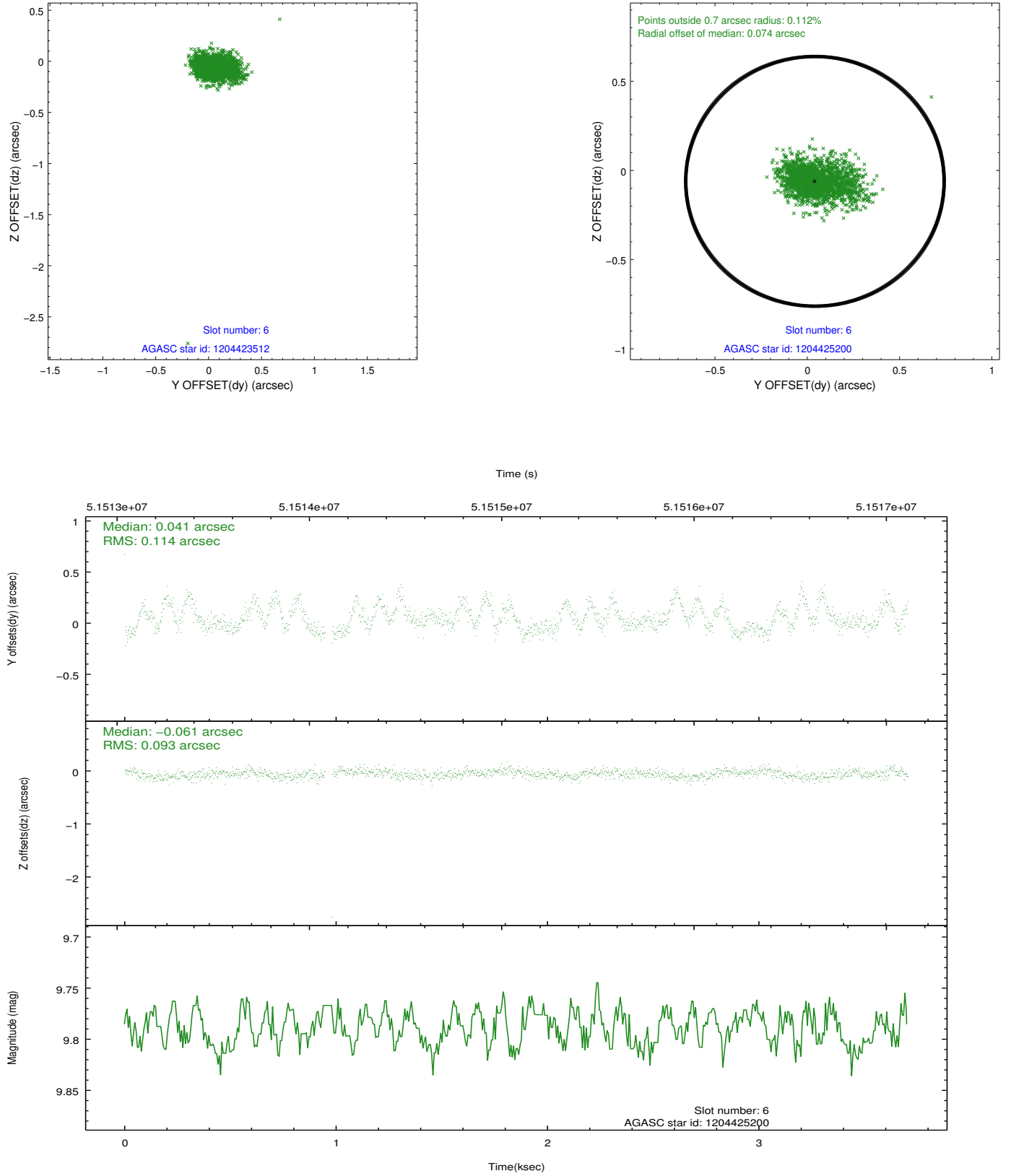
2.4.2 Slot 4



2.4.3 Slot 5

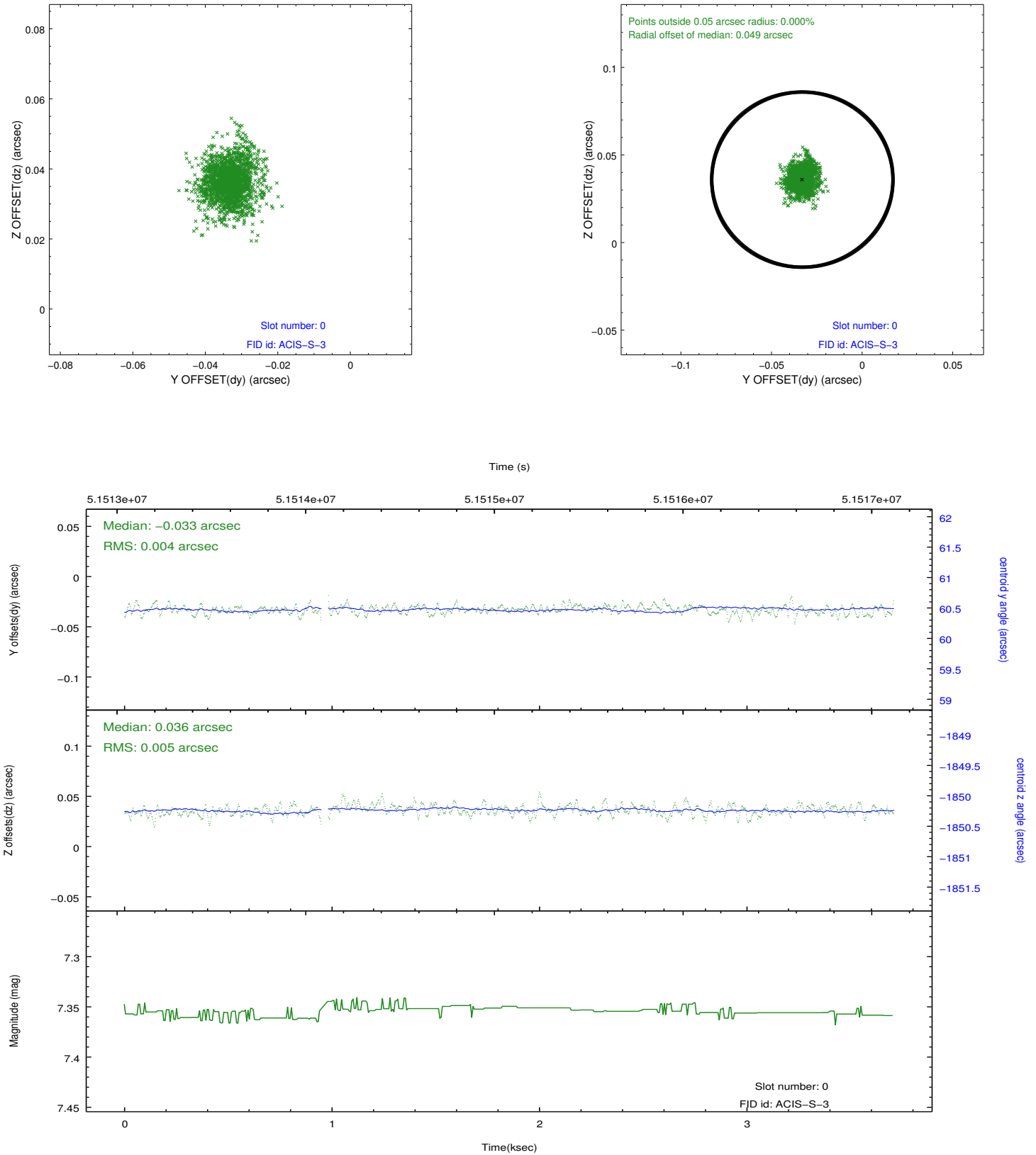


2.4.4 Slot 6

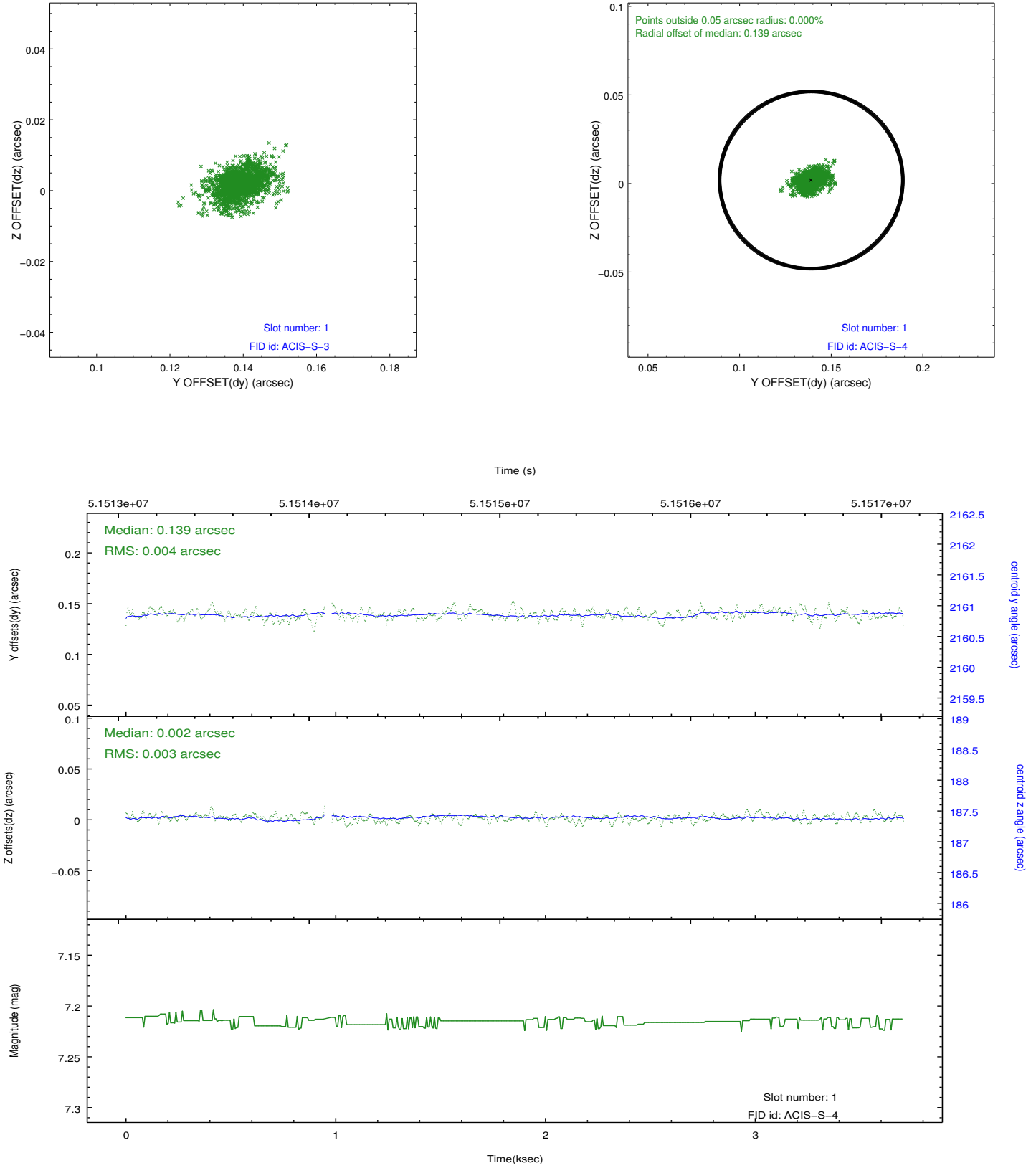


2.5 FID Slots

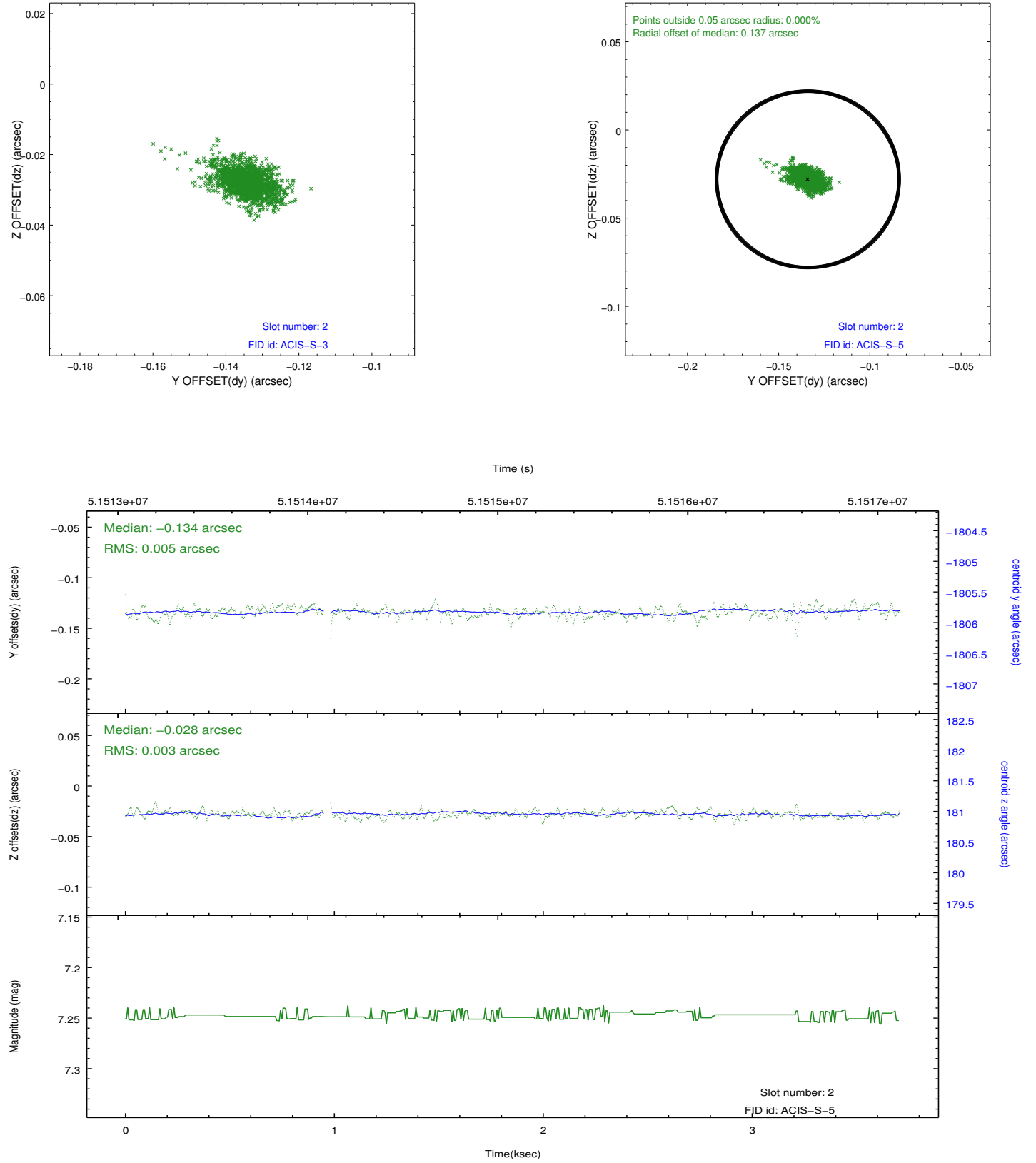
2.5.1 Slot 0



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)	2010.08.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5

A.2 Comments

ACIS-S Plate Focus using PKS 0637-752. SIM FA = -438 (start).

===

Charge time for this ObsId remains at original value of 5.0 ks, although with the current processing the charge time would have been 3.605 ksec.

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Guide star in slot 7 not utilized in this obsid.

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This obsid is part of 'Jeff's SSR Corruption' list. This particular instance of the corrupted dump data has no realtime data to substitute AND has the unfortunate acis start science data for obsid 473 among the corrupt vcdus.

In summary for Repro-I it was decided best way to process was to use two dump files. One dump with gap covering vcdus 400868-407396 to make all strip files except acis and sim. Then a complete dump to create acis and sim strip files. The acis L0 products will have some corrupted fits data rows (things like time and expno jumps) that need to be manually deleted from TP_ADE pipe output files. Then in Repro3 the aspect pipe produces bad slots across the board that cover the first 1800s of eng gap. This is removed by introducing override obspar with new tstart+1800s in repro3.

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Between 0.8 and 1.0 ksec into the observation, a glitch in the telemetered data causes discontinuities in the aspect data. The user may want to remove the segment of the data affected by the corruption.

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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.