
Subject: Problems with CHISQR_PDF when moving from IDL 5.2 to 5.4

Posted by [David Williams](#) on Fri, 16 Nov 2001 15:19:38 GMT

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Hi, there.

I've posted to this newsgroup several times about problems my group has encountered after upgrading from IDL 5.2 to 5.4, and I've always got really useful help. So I'm asking for more...!

This is a slightly more specialised problem than the usual general gripes, and it really has a big impact on our group's work, so I'm hoping someone else will have come across the same problem and found a remedy for it.

The code I use depends on the CHISQR_CVF and CHISQR_PDF functions to calculate confidence (or significance) levels for data that we analyse with wavelet transforms. These transforms aren't part of the IDL Wavelet Toolkit, because we've been running our own routines from before the time when wavelets were included in IDL. (If it's any help, the basis of the code is the WAVELET package written by Torrence & Compo, which you can download from <http://paos.colorado.edu/research/wavelets> .)

Our data often consist of thousands of points, and for any more than a few hundred degrees of freedom (and we have thousands of degrees) IDL 5.4 runs into difficulties. The problem we're encountering is that CHISQR_PDF can't return an answer, and the only major difference I can immediately see -- between the version of CHISQR_PDF bundled with 5.2 and that bundled with 5.4 -- is that the newer version calls IGAMMA rather than IGAMMA_PDF. In fact, it's IGAMMA that fails to converge to a value and echoes a message saying this. It's pretty frustrating because 5.2 handled our routines just fine.

Has anyone else (particularly those running similar wavelet analysis routines) run into these difficulties? And/or does anyone have a suggested solution or work-around, short of re-writing the CHISQR_PDF routine?

Many thanks in advance for any help anyone can give.

Dave Williams.

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