
Subject: 2D K-S test

Posted by [ianpaul.freeley](#) on Thu, 25 Oct 2007 16:49:59 GMT

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Can someone point me to some IDL code that can do a 2D Kolmogorov-Smirnov Test? I'm feeling lazy and figure someone else must have ported it from Numerical Recipes by now.

cheers,
I.P. Freeley

Subject: Re: 2D K-S test

Posted by [wlandsman](#) on Fri, 26 Oct 2007 17:46:42 GMT

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On Oct 26, 9:29 am, Loren Anderson <ander...@bu.edu> wrote:

> Hi, I just spent a while working with the K-S test, but I'm confused
> as to what you are trying to do. The K-S test seems to me to be one-
> dimensional by nature. Can you clarify a bit?

This is discussed in the section of Numerical Recipes titled "Do Two-Dimensional Distributions Differ" (Section 14.7 in my edition.)

The idea is to determine if a 2-d distribution of points is consistent with another 2-d distribution (or a model). You are right that one cannot directly generalize the 1-d K-S test because a cumulative probability distribution is only defined in 1d, so one needs to define a surrogate.

Back to the OP's question. I am not aware of any IDL implementations of the code. (I started but never finished working on it.) If you do code it yourself and have an old edition of NR, check out the bug fix reported at <http://www.nr.com/forum/showthread.php?t=576>

--Wayne

Subject: Re: 2D K-S test

Posted by [ianpaul.freeley](#) on Sat, 27 Oct 2007 15:11:03 GMT

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Thanks Wayne. I went and coded it up and wondered about that issue but didn't do anything about it. I'll go back and add some if statements.

-IP

On Oct 26, 12:46 pm, wlandsman <wlands...@gmail.com> wrote:

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