
Subject: Re: Random testing

Posted by news.verizon.net on Tue, 02 Jan 2007 15:24:13 GMT

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Joshua wrote:

- > Does anybody know how to test
- > a binary mask for spatial randomness?
- > All I'm trying to do is see whether the 1's are spatially random
- > or systematic.

I assume that you are refering to a 2-d mask. You might want to look at Section 14.7 of "Numerical Recipes" titled "Do Two-Dimensional Distributions differ?", which provides code for the 2-d K-S test.

Their example model function (quadv1) is a uniform 2-d random distribution. Unfortunately, I am not aware of an IDL implementations of this code. (Also check the bug fix at low number counts given in

<http://www.numerical-recipes.com/forum/showthread.php?t=576>).

You could also just test the 1-d distributions of X and Y for randomness, for example, by using the ksone.pro procedure at <http://idlastro.gsfc.nasa.gov/ftp/pro/math/>. But this will not rule out any non-random correlation between X and Y. --Wayne
