Subject: IDL Statistical Tests

Posted by Heather Cegla on Thu, 19 Jul 2012 20:21:49 GMT

I was wondering if anyone has had any trouble with getting realistic results from some of IDL's built-in statistical tests. I seem to be getting nonsensical answers when using fv_test, tm_test, kstwo, and r_correlate.

I am using the F, T, and KS tests to try to determine if two populations are distinct. From looking at their histograms they appear very similar, but their significance values from the F, T, KS tests are very very near zero which implies they should be obviously distinct (I believe).

Similarly, I am trying to see if here is a correlation between two properties and when I plot one against the other the result is a scatter plot. However, the r_correlate function produces significance values again very near zero, implying there is a strong correlation (I believe).

Does anyone have any idea why these tests might seem to be failing? Are there any limitations to them?

Many thanks for any solutions, suggestions, comments!