
Subject: Randomu Period

Posted by [jargoogle](#) on Fri, 30 Apr 2004 23:59:49 GMT

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Hello,

Does anyone know the actual period of the randomu uniform pseudorandom number generator? I'm using IDL 5.3 and IDL5.6 and the online documentation references a paper in an ACM journal. I'm on my way to the library to check that now.

Does anyone know if RSI implemented the algorithm described in that paper exactly? That is, can I expect the article in the journal to describe an algorithm which takes a 36 element long array as seed? If not, where can I get information about the exact period (repetition cycle) after which the pseudorandom numbers will begin to repeat?

The documentation also notes the Numerical Recipes routine. That routine uses a simple 2 byte seed to get a period around $2^{16}-1$. Does that mean IDL gets something like $2^{1152}-1$?!!! That'd be nice, but I'm interested in something more than wishful thinking. What's the real period?

Anybody know?

I'll probably give RSI an email or call.

Thanks,

JG.
