Subject: random number trap
Posted by peter on Tue, 29 Aug 1995 07:00:00 GMT
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A warning about the random number generator in IDL/PV-Wave (not a bug, per se, but something to watch out for).

As the documentation states, if the seed value given to randomu is undefined, it is derived from the system time. The time only changes once per second, however. So if you repeatedly call a procedure that calls randomu, the return will be the same if the calls occur within a second of each other, but will be different if they are in different seconds.

This can lead to random numbers being a *lot* more structured than you expect. I had naively expected that the seed value would change each microsecond, so this behavior came as a bit of a surprise.

The solution is to place the seed variable in a common block so that it is preserved from call to call, and then each returned sequence will truly be random.

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