## Subject: Generate Same Sequence of Random Numbers in IDL and C Posted by sweiss1993 on Mon, 21 Jul 2014 16:11:29 GMT

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I am in the process of developing a C version of a program originally written in IDL. The programs generate arrays with random number generators. I use gsl\_rng\_uniform and gsl\_ran\_poisson in the C version, and both random number generators use the gsl\_rng\_mt19937 algorithm. From attempting to read GDL's source code, I noticed GDL happens to use the same functions.

I would like to compare the two versions of the program by running them with the same fixed sequence of random numbers. The rng parts of the programs are in a loop, so a new array is generated with each iteration. I would like a different set of random numbers for each iteration. So, each iteration has a different set of generated numbers, but the i-th iteration in the programs should match each other.

I could not figure out exactly how GDL sets the seed by reading the source code. Would someone be so kind as to show me how to seed the rng functions in IDL and C such that the above conditions are met? Thanks!