Subject: Re: Different FFT times for same array size ? Posted by Steve Eddins on Wed, 24 Aug 2005 19:14:18 GMT

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- "R.G. Stockwell" <no@email.please> wrote:
- > "Jan Cami" <jcami@mail.arc.nasa.gov> wrote:
- >> A good look at the different input chunks revealed the problem:
- >> there's a few NaN values in there which apparently slow it down
- >> dramatically. Problem solved!

> interesting! I wasn't aware of that time hit with nans.

Yes. NaNs tend to slow down floating-point computations substantially. This effect isn't specific to IDL. And with FFTs, every output depends mathematically on every input, so even a single NaN in the input results in every output value being NaN. This is pretty slow way to create an all-NaN thing, so the original poster might consider treating inputs with NaNs as a special case and handling them differently.

Steve