Subject: Re: Comparing 2 arrays
Posted by David Fanning on Mon, 27 Aug 2007 15:06:08 GMT
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Conor writes:

- > Hmm... I think Jean might be on to something. After all, the error in
- > question hear is the rounding error of the computer, and that rounding
- > error is always an error on the last 'bit' of a floating point
- > number. So for instance if you had two floating point numbers:

>

- > 1.1123453e15
- > and
- > 1.1123454e15

>

- > These might be the same number (to within the rounding error) but the
- > difference between them is about 6.7e07. That's assuming of course
- > that I'm properly understanding floating point representation (I'm an
- > astronomer, not a computer engineer).

I guess I'm thinking more about how a number got INTO the array in the first place. If it got there as a result of some kind of calculation, accumulative rounding errors could be a great deal larger than machine precision. And yet, you might still want these numbers to be "equal" for analysis purposes.

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/