
Subject: Re: Comparing 2 arrays

Posted by [Allan Whiteford](#) on Tue, 28 Aug 2007 16:10:46 GMT

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David Fanning wrote:

> Jean H. writes:

>

>

>> to get back to a previous discussion we had a few month ago about being

>> "sufficiently close to zero", shouldn't it be (data1.A - data2.B) LT

>> epsilon * data1.A , with epsilon=(machar()).eps?

>

>

> OK, I found that discussion and read it eight or ten times until

> I finally understood it. (Probably why I forgot it before.)

>

> I've put a significantly edited discussion of this

> problem here:

>

> http://www.dfanning.com/code_tips/comparearray.html

>

> In my preferred solution now, I choose a number that

> is "sufficiently close" to zero like this:

>

> epsilon = (MACHAR()).eps

> NUMBER = (array_1 > array_2) * epsilon

>

> Then, the comparison between arrays is done like this:

>

> IF Total(Abs(array_1 - array_2) LT NUMBER) EQ N_Elements(array_1) \$

> THEN RETURN, 1 ELSE RETURN, 0

>

> Additional comments welcome if you want to argue further. :-)

>

> Cheers,

>

> David

David,

Not that I wish to argue but... this looks like it will fail on elements
which are identically zero.

Changing the 'lt' to 'le' will probably sort it.

Thanks,

Allan
