
Subject: Re: Comparing 2 arrays

Posted by [David Fanning](#) on Tue, 28 Aug 2007 18:56:15 GMT

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Paul van Delst writes:

```
> I think you should also pass a scaling factor, ala,
>
> FUNCTION FLTARRAYS_EQUAL, array_1, array_2, ULP=ulp
>   ....
>   IF ( N_ELEMENTS(ulp) EQ 0 ) THEN ulp=1.0
>   ....
>   NUMBER = (array_1 > array_2) * epsilon * ulp
>   ....
> END
>
> Also, there needs to be differentiation for singel and double precision so you can
> determine epsilon correctly and set ulp to a suitable default (1.0 or 1.0d0).
```

I usually save these extra touches for programs I add to the Coyote Library and document heavily, not for ones I throw away into the Tip Examples pile. But I have a feeling this one is destined for the Library anyway.

I've seen you use ULP as a variable name before. Is this something like VEGEMITE? Or does it actually mean something to you? I'd probably call it FUDGE if I was making up the name myself. :-)

Can double precision *possibly* make a difference in this program in practice?

Cheers,

David

--

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

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
