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Subject: Re: Inaccuracies

Posted by [Andy Loughe](#) on Tue, 14 Nov 1995 08:00:00 GMT

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> L. Paul Mix wrote:

> I'm not sure what you want to do, but expecting perfect math with  
> floats is not generally possible.

I accept the explanation given by Ken Bowman, but it is hard to explain the values assigned to

(1) `findgen(15)*.2 -1.4` versus

(2) `dindgen(15)*(.2D)-(1.4D)`

(3) and, taken separately, the results of using the total function on (1) and (2) matched with the ability to perform "perfect math" with only 13 values.

I am describing a small permutation of inaccuracies here, (1) looks ok, but (2) does not. `total( (1) )` and `total( (2) )` are not accurate for the reasons given by Ken.

BTW one IDL user indicated that there was \*no\* trouble with this math on his VMS system! Now that is interesting.

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