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Subject: Re: rounding errors

Posted by [Liam E. Gumley](#) on Fri, 27 Apr 2001 14:21:18 GMT

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Randall Skelton wrote:

> For the record, I had no idea that IDL requires you to explicitly state  
> 'a=2.348339d0' instead of a=double(2.348339).

This is a subtle but important point. DOUBLE() is a type conversion function, and

```
a = double(2.348339)
```

shows a FLOAT argument being converted to a DOUBLE. The safest way to 'cast' a double variable is

```
a = 2.348339d
```

or use an array creation function such as DBLARR, DINDGEN, REPLICATE, or MAKE\_ARRAY, e.g.,

```
b = dblarr(10)  
c = dindgen(10)  
d = replicate(1.0d, 10)  
e = make_array(10, /double)
```

Cheers,

Liam.

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