
Subject: Re: machine precision

Posted by [Wout De Nolf](#) on Mon, 18 May 2009 13:04:05 GMT

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On Mon, 18 May 2009 05:53:36 -0600, David Fanning <news@dfanning.com> wrote:

> Uh, Wox, I think you need to read this article again:

>

> http://www.dfanning.com/math_tips/sky_is_falling.html

Ow boy, sorry for bringing this up again, but in the last example given in your famous article, why is:

```
f=470.0 - (4.70*100)
```

```
d=470d - (4.70d*100)
```

```
print,'Bigger than precision:',f,(machar()).eps
```

```
print,'Smaller than precision:',d,(machar(/double)).eps
```

I understand that when you give 4.7 to a computer, it stores a number close to it. When given 4.70d, the same thing happens, only now we're closer than with single-precision. Why is the machine precision (EPS from machar) not reflecting this?
