
Subject: ATAN inconsistencies

Posted by [bowman](#) on Fri, 12 Nov 1999 08:00:00 GMT

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Here's a platform dependency that took me quite a while to track down.

The SGI (IRIX) version of IDL returns 0.0 when you try to take the arctan(0/0). The Alpha version (properly) returns a NaN.

Ken Bowman

IDL Version 5.1 (IRIX mipseb). Research Systems, Inc.

```
IDL> print, atan(0.0, 0.0)
0.00000
```

IDL Version 5.1 (OSF alpha). Research Systems, Inc.

```
IDL> print, atan(0.0, 0.0)
NaNQ
```

% Program caused arithmetic error: Floating illegal operand

--

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Replace AT with @

Subject: Re: ATAN inconsistencies

Posted by [bowman](#) on Mon, 15 Nov 1999 08:00:00 GMT

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In article <383028E8.B9B90A11@astro.estec.esa.nl>, Michael Werger <mwerger@astro.estec.esa.nl> wrote:

```
> IDL 5.2 on Solaris 2.7:
>
> IDL> print, atan(0.0, 0.0)
>    0.00000
> ... Any comments about the proper handling? ;-)
```

Well, if $x=y=0$, then $\text{ATAN}(y/x)$ is not defined, so it should return a NaN.

Ken

Subject: Re: ATAN inconsistencies

Posted by [Michael Werger](#) on Mon, 15 Nov 1999 08:00:00 GMT

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"Kenneth P. Bowman" wrote:

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Michael Werger

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