
Subject: Re: ATAN function with two ARGS

Posted by [Ben Tupper](#) on Tue, 06 Jun 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Ben Tupper wrote:

```
> In comp.lang.idl-pvwave you write:
>
>> Hello,
>
>> I have bumped into a conflict between the IDL documentation and IDL output.
>
>> From the IDL (5.2) docs, the optional argument Y is described as follows:
>
>> -----START
>> Y
>> An optional argument.
>
>> If this argument is supplied, ATAN returns the angle whose tangent
>
>> is equal to Y/X. If both arguments are zero, the result is undefined.
>
>> -----END
>
>> So I tried the following...
>
>> IDL> help, ATAN(0.0,0.0)
>> <Expression>  FLOAT   =    0.00000
>
>> Uhoh! Is it me, or is it Monday morning syndrome?
>
>> Ben
>
> When I try the above command, I get
>
> IDL> help,atan(0.0,0.0)
> <Expression>  FLOAT   =    -NaN
>
> IDL> help,/struct,!version
> ** Structure !VERSION, 5 tags, length=80:
>  ARCH          STRING  'alpha'
>  OS            STRING  'OSF'
>  OS_FAMILY     STRING  'unix'
>  RELEASE       STRING  '5.2'
>  BUILD_DATE    STRING  'Oct 30 1998'
>
> William Thompson
>
```

The above was sent to me by William Thompson. Below is the version info for the platform not returning the undefined value.
I've sent notice of this anomaly to RSI.

Thanks,

Ben

```
IDL> help,!version
<Expression>  STRUCT  = -> !VERSION Array[1]
IDL> help,!version,/str
** Structure !VERSION, 5 tags, length=40:
  ARCH        STRING  'sparc'
  OS          STRING  'sunos'
  OS_FAMILY   STRING  'unix'
  RELEASE     STRING  '5.2'
  BUILD_DATE  STRING  'Oct 30 1998'
IDL> help, ATAN(0.0, 0.0)
<Expression>  FLOAT   =    0.00000
```

--

Ben Tupper

Bigelow Laboratory for Ocean Science
tupper@seadas.bigelow.org

pemaquidriver@tidewater.net
