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Subject: Re: ATAN function with two ARGS

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

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Ben Tupper wrote:

```
> In comp.lang.idl-pwave 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
```

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