
Subject: Re: Yet again, The Sky is Falling!
Posted by [R.Bauer](#) on Fri, 09 Mar 2007 12:18:59 GMT
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Hi Paolo

that is correct. It shows perfectly how arg_present works

cheers
Reimar

Paolo Grigis wrote:

```
> Here's a simple example of a routine that returns different
> values if it is called by value or by reference.
>
> pro pg,a,b
>
> b=arg_present(a)
>
> end
>
>
> IDL> x=1
> IDL> pg,x,b
> IDL> print,b
>    1
>
> IDL> pg,x+0,b
> IDL> print,b
>    0
>
> IDL> pg,x[0],b
> IDL> print,b
>    0
>
>
> Ciao,
> Paolo
>
>
> David Fanning wrote:
>
>> yp writes:
>>
>>> You can download the code from
>>> www.research.plymouth.ac.uk/casix/temp/test_morel_LUT.pro
```

```
>>>
>>> You will also need the LUT (morel_fq.dat) to run the code.
>>> www.research.plymouth.ac.uk/casix/temp/MOREL_FQ.DAT
>>
>>
>> Well, I haven't tracked the actual culprit down yet, but
>> the calculations in INT_LUT are doing *something* to the
>> variables that are being passed in by reference. If I pass everything
>> in by value, then there is no difference:
>>
>>
>> IDL> int_LUT,412.5D, 1D, 0.0D, 0.0D, 0.0D, 0.03D, result3
>> IDL> int_LUT,412.5D+0, 1D+0, nul+0, nul+0, nul+0, 0.03D+0, result4
>> IDL> print,'RESULT 3: ', result3[*]
>> IDL> print,'RESULT 4: ', result4[*]
>>
>> RESULT 3: 0.090100000 0.00000000 0.00000000
>> 0.00000000 0.00000000 0.00000000 0.00000000
>>
>> RESULT 4: 0.090100000 0.00000000 0.00000000
>> 0.00000000 0.00000000 0.00000000 0.00000000
>>
>> I suspect there is a calculation in there that sets one
>> of the values very nearly to what you expect it to be,
>> but not quite.
>>
>> Still weird, but more believable. :-)
```

```
--
Reimar Bauer
```

```
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a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html
```