Subject: IDL's handling of LOGICAL quantities (WHERE)
Posted by James Tappin on Tue, 12 Oct 1999 07:00:00 GMT
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\begin{rant}
I've finally decided to have a public moan about one of the weaknesses of IDL's handling of logical operations: to boot -- that the WHERE function follows a C-like interpretation while most other things are Fortran-like.

for example suppose we have an array (m) some of whose values are NaN then the (inefficient) loop:
for j=0, n_elements(m) do if not finite(m(j)) then m(j)=0
will set all non-finite elements of m to 0.
However:
m(where(not finite(m))) = 0
will zero out the whole array since where sees (not 1) as a Yes.
[The correct solution is of course:
m(where(finite(m) ne 1)) = 0
]

Or a simpler example:
```
IDL> a = [0, 1, 0, 1]
IDL> print, where(a eq 0)
           0           2
IDL> print, where(not (a ne 0))
           0           1           2           3
```

I guess the proper answer isto have aproper logical or boolean type and functions like FINITE and logical operations should return it, and of course WHERE should accept it.

\end{rant}

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Subject: Re: IDL's handling of LOGICAL quantities (WHERE)
Posted by Mirko Vukovic on Tue, 19 Oct 1999 07:00:00 GMT
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In article <MPG.126cfe683b63903f989913@news.frii.com>,
davidf@dfanning.com (David Fanning) wrote:

> James Tappin (sjt@star.sr.bham.ac.uk) writes:
>
>> \begin{rant}
>> \end{rant}
>
> Uh, right. Whatever.
>
> Cheers,
>
> David
>
> P.S. I *think* it was IDL code.

nope, it was LaTeX, one of the better ways of producing
really great-looking text.

Mirko

\PS{P.S. I am very biased here, don't take my opinions too
seriously.}