Subject: Re: IDL's handling of LOGICAL quantities (WHERE)
Posted by Liam Gumley on Tue, 12 Oct 1999 07:00:00 GMT
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Liam Gumley wrote:
> To filter out non-finite values in an array, I'd use a function:

Now that I think about it, you might want to check an array subset. The
version below will handle an array subset.

```
FUNCTION CHECK_FINITE, DATA, VALUE=VALUE

;- Check arguments
if n_params() ne 1 then message, 'Usage: RESULT = CHECK_FINITE(DATA)'
if n_elements(data) eq 0 then message, 'DATA is undefined'
if n_elements(value) eq 0 then value = 0.0

;- Set any non-finite elements to VALUE
index = where(finite(data) eq 0, count)
result = data
if count gt 0 then result[index] = value

;- Return the result
return, result

END
```

For example:

```
IDL> a = findgen(5)
IDL> a[0:2] = 1.0/0.0
% Program caused arithmetic error: Floating divide by 0
IDL> print, a
        Inf         Inf         Inf     3.00000     4.00000
IDL> a[0:2] = check_finite(a[0:2])
% Compiled module: CHECK_FINITE.
IDL> print, a
     0.00000     0.00000     0.00000     3.00000     4.00000
```

Cheers,
Liam.

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