Subject: Reverse function and degenerate dimensions
Posted by btt on Wed, 25 Aug 2004 15:19:09 GMT
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Hello,

This is an FYI update on IDL's behavior regarding degenerate dimensions (see http://tinyurl.com/452xd) I just bumped into another one of those awkward (and sometimes maddening) situations where IDL drops degenerate dimensions automatically. It maybe old news, but I thought I should post anyway.

Buried in the REVERSE procedure is this nice option to OVERWRITE the array you are manipulating. This works fine unless the dimension you want to reverse is the degenerate one. Here is the line...

b = KEYWORD_SET(overwrite) ? TEMPORARY(a) : a

Here is what happens in each case...

```
IDL> a = REFORM(fltarr(4,3,1), 4,3,1)
IDL> help, a
A               FLOAT     = Array[4, 3, 1]
IDL> b = a
IDL> help, b
B               FLOAT     = Array[4, 3]
IDL> c = temporary(a)
IDL> help, c
C               FLOAT     = Array[4, 3, 1]
```

So, it looks like simply copying the array drops the degenerate dimension but copying with TEMPORARY does not.

My solution is to replace the offending line in REVERSE with ...

b = KEYWORD_SET(overwrite) ? TEMPORARY(a) : Reform(a, size(a, /dim))

Now you might ask why I might want to reverse that particular dimension of such an array - but please don't ask 'cause I can't explain it.

Cheers,
Ben