
Subject: Re: MAP_SET and !P.MULTI?

Posted by [davidf](#) on Fri, 20 Mar 1998 08:00:00 GMT

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Jack Saba (jack@magus.stx.com) writes:

```
> The following code (run with IDL 5.0.2) produces a plot with one image
> in the UL, and three images overplotted in the UR quadrant. Anyone
> understand why MAP_SET does not seem to work in conjunction with
> !P.MULTI?
>
> !p.multi = [0,2,2]
> window,0,xsize=800,ysize=800
> ;      xmin, ymin, xmax, ymax
> map_set, /continents, title='UL', /noerase
> map_set, /continents, title='UR', /noerase
> map_set, /continents, title='  LL', /noerase
> map_set, /continents, title='      LR', /noerase
> print,!p.multi
> end
>
> The code can be made to work of course by using the POSITION keyword
> rather than !P.MULTI, but it seems curious that the code above doesn't
> work.
```

It is curious and certainly looks like a bug. The problem is that !P.Multi[0] is not getting updated properly (among several other curiosities). Rather than using the Position keyword, I fixed the code by doing this:

```
!p.multi = [0,2,2]
window,0,xsize=800,ysize=800
;      xmin, ymin, xmax, ymax
map_set, /continents, title='UL', /noerase
!P.Multi[0] = 3
map_set, /continents, title='UR', /noerase
!P.Multi[0] = 2
map_set, /continents, title='  LL', /noerase
!P.Multi[0] = 1
map_set, /continents, title='      LR', /noerase
print,!p.multi
end
```

I don't know why the NoErase is still needed, except that something else is clearly not working correctly.

Cheers,

David

David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: MAP_SET and !P.MULTI?
Posted by [davidf](#) on Sun, 22 Mar 1998 08:00:00 GMT
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Jack Saba (jack@magus.stx.com) wrote the other day:

```
> The following code (run with IDL 5.0.2) produces a plot with one image
> in the UL, and three images overplotted in the UR quadrant. Anyone
> understand why MAP_SET does not seem to work in conjunction with
> !P.MULTI?
>
> !p.multi = [0,2,2]
> window,0,xsize=800,ysize=800
> ;      xmin, ymin, xmax, ymax
> map_set, /continents, title='UL', /noerase
> map_set, /continents, title='UR', /noerase
> map_set, /continents, title='  LL', /noerase
> map_set, /continents, title='      LR', /noerase
> print,!p.multi
> end
>
> The code can be made to work of course by using the POSITION keyword
> rather than !P.MULTI, but it seems curious that the code above doesn't
> work.
```

And then I wrote some nonsense like this:

```
> It is curious and certainly looks like a bug. The problem is
> that !P.Multi[0] is not getting updated properly (among
> several other curiosities).
```

My friend Andrew Cool at the DSTO in Adelaide, Australia points out in the gentlest manner possible that I ought to take my own advice and read the documentation before I jump in with both feet. He suggests that the ADVANCE keyword to MAP_SET might be just what we are looking for. Sure enough, try this:

```
!p.multi = [0,2,2]
```

```
window,0,xsize=800,ysize=800
;      xmin, ymin, xmax, ymax
map_set, /continents, title='UL', /advance
map_set, /continents, title='UR', /advance
map_set, /continents, title='  LL', /advance
map_set, /continents, title='      LR', /advance
END
```

But I am still left wondering, why ADVANCE?!

"Thanks, Andrew," he said sheepishly.

David

David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: MAP_SET and !P.MULTI?
Posted by [wmc](#) on Mon, 23 Mar 1998 08:00:00 GMT
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In article 70F6@magus.stx.com, Jack Saba <jack@magus.stx.com> writes:

```
> The following code (run with IDL 5.0.2) produces a plot with one image
> in the UL, and three images overplotted in the UR quadrant. Anyone
> understand why MAP_SET does not seem to work in conjunction with
> !P.MULTI?
>
> !p.multi = [0,2,2]
> map_set, /continents, title='UL', /noerase
> map_set, /continents, title='UR', /noerase
> map_set, /continents, title='  LL', /noerase
> map_set, /continents, title='      LR', /noerase
```

You need to say ",/advance". Then it all works fine.

- William

William M Connolley | wmc@bas.ac.uk | <http://www.nbs.ac.uk/public/icd/wmc/>
Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself

Subject: Re: MAP_SET and !P.MULTI?

Posted by [Bob Yantosca](#) on Thu, 26 Mar 1998 08:00:00 GMT

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> It is curious and certainly looks like a bug. The problem is
> that !P.Multi[0] is not getting updated properly (among
> several other curiosities). Rather than using the Position keyword,
> I fixed the code by doing this:

```
>  
> !p.multi = [0,2,2]  
> window,0,xsize=800,ysize=800  
> ;      xmin, ymin, xmax, ymax  
> map_set, /continents, title='UL', /noerase  
> !P.Multi[0] = 3  
> map_set, /continents, title='UR', /noerase  
> !P.Multi[0] = 2  
> map_set, /continents, title='  LL', /noerase  
> !P.Multi[0] = 1  
> map_set, /continents, title='      LR', /noerase  
> print,!p.multi  
> end
```

> I don't know why the NoErase is still needed, except that
> something else is clearly not working correctly.

> Cheers,

> David

```
> -----  
> David Fanning, Ph.D.  
> Fanning Software Consulting  
> E-Mail: davidf@dfanning.com  
> Phone: 970-221-0438  
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
```

For some reason, MAP_SET has never really advanced correctly according to !P.MULTI (even in version 3.6 and 4.1).

What I've done to combat against this is the following
set advance keyword = 0 if !P.MULTI(0) = 0
= 1 otherwise

as is illustrated in the test program below:

```
=====
pro testnew
; prints 4 maps in the UL, UR, LL, LR positions
```

```
!p.multi = [0, 2, 2, 0, 0]
```

```
for I = 0, 3 do begin
```

```
  if (!P.MULTI(0) eq 0) then advance = 0 else advance = 1
```

```
    map_set, 0, 0, 0, /grid, /cont, advance=advance
```

```
  endfor
```

```
end
```

```
=====
```

Regards,

Bob Y.
