
Subject: Re: map projection question

Posted by [Liam E. Gumley](#) on Tue, 09 Jul 2002 18:48:25 GMT

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"J. Li" wrote:

- > I have a small strip of satellite image, centered around the
- > International Date Line +/-5, i.e the longitudes range from -175 to 175.
- >
- > How do I limit the MAP_SET to the smaller portion of the Earth, say -175
- > LON -> dateline -> +175 LON instead of the larger -175 LON -> Prime
- > Meridian -> +175 LON? I cannot find a keyword that will let me to choose
- > which portion to map. LIMIT keyword alone seems to be insufficient.

How about something like this?

```
window, /free, xsize=200, ysize=800
map_set, 0, -180, scale=50e6, /cont, /grid
```

Cheers,

Liam.

Practical IDL Programming

<http://www.gumley.com/>

Subject: Re: map projection question

Posted by [James Kuyper](#) on Tue, 09 Jul 2002 19:35:25 GMT

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"J. Li" wrote:

- >
- > Hi,
- >
- > I have a small strip of satellite image, centered around the
- > International Date Line +/-5, i.e the longitudes range from -175 to 175.
- >
- > How do I limit the MAP_SET to the smaller portion of the Earth, say -175
- > LON -> dateline -> +175 LON instead of the larger -175 LON -> Prime
- > Meridian -> +175 LON? I cannot find a keyword that will let me to choose
- > which portion to map. LIMIT keyword alone seems to be insufficient.

The limit keyword is sufficient. Compare:

This one covers 175 -> 180 -> -180 -> -175:

```
map_set, 0, 180, /hires, limit=[60, 175, 70, -175], /isotropic
```

This one covers -175 -> 0 -> 175:

```
map_set, 0, 0, /continents, limit=[-60, -175, 70, 175], /isotropic
```

The key things are the change in the center longitude, and in the positions of the 175 and the -175, the other differences are purely cosmetic. I chose 'isotropic' to keep the coastline shapes recognizable. Since the first plot is much narrower than the second, I chose to make it much shorter from north to south as well. The larger plot doesn't need / hires, but the smaller one looks much better with it.

Subject: Re: map projection question

Posted by [Robert Stockwell](#) on Tue, 09 Jul 2002 21:54:58 GMT

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J. Li wrote:

> Hi,
>
> I have a small strip of satellite image, centered around the
> International Date Line +/-5, i.e the longitudes range from -175 to 175.
>
> How do I limit the MAP_SET to the smaller portion of the Earth, say -175
> LON -> dateline -> +175 LON instead of the larger -175 LON -> Prime
> Meridian -> +175 LON? I cannot find a keyword that will let me to choose
> which portion to map. LIMIT keyword alone seems to be insufficient.
>
> thanks very much in advance
>
> JYL

map_set, 0, -180, limit=[-40,175,40,-175], /cont, /grid,label=1,hires=1

note the order of the 175 and the -175

cheers,
bob

PS that's a nice stretch of ocean!

Subject: Re: map projection question

Posted by [Mark Hadfield](#) on Tue, 09 Jul 2002 22:08:44 GMT

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"Robert Stockwell" <rgs1967@hotmail.com> wrote in message
news:3D2B5BB2.9030903@hotmail.com...

> map_set, 0, -180, limit=[-40,175,40,-175], /cont, /grid,label=1,hires=1
>
> ...

>
> PS that's a nice stretch of ocean!

Indeed, one of my favourites. But there is some nice land in it, too

--
Mark Hadfield "Ka puwaha te tai nei, Hoesa tatou"
m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)
