
Subject: West is Where!?

Posted by [David Fanning](#) on Tue, 20 Sep 2011 04:14:15 GMT

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Folks,

Can anyone explain this:

```
data = Dist(360, 180)
i = Image(data, Limit=[-90,0,90,360], grid_units=2, $
  image_dimensions=[360,180], image_location=[0,-90], $
  margin=0.1, map_projection='orthographic')
m = mapcontinents()
```

I always learned that if North was at the top of the map,
West would be to the right and East would be to the left.
Is this, uh, opposite of that!?

Is this because we can't specify longitude as
0 to 360, like most of the rest of the world
outside the US? If that's the case, why don't
we get an error message? Is it possible to label
these lines of longitude with values from 0 to 360?

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: West is Where!?

Posted by [Vincent Sarago](#) on Tue, 20 Sep 2011 09:36:54 GMT

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On 20 sep, 06:14, David Fanning <n...@dfanning.com> wrote:

> Folks,

>

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>

> data = Dist(360, 180)

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> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
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Isn't just because we look at the map from the point 180° longitude
and not 0° longitude ???

If you rotate your map to look at the 0° longitude that should be
OK !!!

If you add, "CENTER_LONGITUDE=0" that's working

Vincent

Subject: Re: West is Where!?
Posted by [Paul Van Delst\[1\]](#) on Tue, 20 Sep 2011 14:50:29 GMT
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Perth, Western Australia. Latitude 31° 1/2 60'S - Longitude 115° 1/2 50' *E*.

You're looking from the backside of the mirror trying to describe why your *absolute* reference
(i.e. the lat/lon grid)
doesn't agree with your relative reference (i.e. up==north, left==west, etc.)

The plot looks o.k. to me.

cheers,

paulv

David Fanning wrote:

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>
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>
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>
> David
>

Subject: Re: West is Where!?

Posted by [David Fanning](#) on Tue, 20 Sep 2011 15:00:28 GMT

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Paul van Delst writes:

> Perth, Western Australia. Latitude 31° 60'S - Longitude 115° 50' *E*.
>
> You're looking from the backside of the mirror trying to describe why your *absolute* reference
> (i.e. the lat/lon grid)
> doesn't agree with your relative reference (i.e. up==north, left==west, etc.)
>
> The plot looks o.k. to me.

Well, if I cross my eyes and stand on my head, I
understand what I am looking at. But what I would
really like under these circumstances is to see
my longitude grid lines labeled from 0 to 360.
Is this possible?

Cheers,

David

--

David Fanning, Ph.D.

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Subject: Re: West is Where!?

Posted by [Vincent Sarago](#) on Tue, 20 Sep 2011 15:35:29 GMT

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From IDL Help (MAP_PROJ_INIT),

LIMIT

Set this keyword to a four-element vector of the form

[Latmin, Lonmin, Latmax, Lonmax]

that specifies the boundaries of the region to be mapped. (Lonmin, Latmin) and (Lonmax, Latmax) are the longitudes and latitudes of two points diagonal from each other on the region's boundary.

Note: If the longitude range in LIMIT is less than or equal to 180 degrees, map clipping is performed in lat/lon coordinates before the transform. If the longitude range is greater than 180 degrees, map clipping is done in Cartesian coordinates after the transform. For non-cylindrical projections, clipping after the transformation to Cartesian coordinates means that some lat/lon points that fall outside the bounds specified by LIMIT may not be clipped. This occurs when the transformed lat/lon points fall inside the cartesian clipping rectangle.

Note: Lonmin should be in the range -180 to +180. Lonmax should be in the range -180 to +540, and must be greater than Lonmin. The total range for the map (Lonmax - Lonmin) must be 360 degrees or less.

So I'm not sur is possible when using the IDL graphic function ...

need to investigate more...

Vincent
