Subject: Re: Expand Polar Contour
Posted by David Fanning on Wed, 07 Jul 2004 21:48:19 GMT

Patrick writes:

> I am curious whether there is a way to expand a polar contour plot. I
> have some data that is in polar coordinates that needs to be overlayed
> onto a geographic map. The data must remain in polar coordinates so
> that no resolution is lost. I have tried using the overplot keyword
> in the call to plot_contour, but I get an error while in the
> polar_contour procedure:
> Internal error: Border sort
> I am guessing this may to do with being in geographic mapping
> coordinates prior to the call to plot_contour. Any suggestions?

Am I getting old, or is this article just a bit
jumbled? PLOT_CONTOUR vs. POLAR_CONTOUR, polar coordinates
vs. geographic mapping coordinates!?

Hard to say *what* is going on here. :-(

Cheers,

David

P.S. Perhaps you could "think your question a few times"
before posting. :-)

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Expand Polar Contour
Posted by patrick.gatlin on Thu, 08 Jul 2004 14:35:03 GMT

I thought I read it several times, but I guess my eyes are going bad.
I never intended to state plot_contour...what I meant was
polar_contour. I was thinking one thing and typing another. Guess
the mind/hand coordination was a little off that day. Sorry.

Subject: Re: Expand Polar Contour
Posted by David Fanning on Thu, 08 Jul 2004 15:23:13 GMT

Patrick writes:

> I thought I read it several times, but I guess my eyes are going bad.
> I never intended to state plot_contour...what I meant was
> polar_contour. I was thinking one thing and typing another. Guess
> the mind/hand coordination was a little off that day. Sorry.

Oh, well, it happens. :-)

Now, what coordinate system is your data in? Polar coordinates
(theta, R) or map coordinates (lat/lon)?

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Expand Polar Contour
Posted by patrick.gatlin on Fri, 09 Jul 2004 19:07:12 GMT

David Fanning <davidf@dfanning.com> wrote in message
news:<MPG.1b5714c8e9ee84a89897cd@news.frii.com>...
> Now, what coordinate system is your data in? Polar coordinates
> (theta, R) or map coordinates (lat/lon)?
>

The data I am using is radar data, which is in polar coordinates. I
am ovelaying this data onto a map, which is in lat/lon and centered on
the radar so that the both have the same origin. But the result is
that the radar data does not "expand out" over the map domain; instead
it is centered about the origin (the radar) and much smaller than the
map domain, which has been configured to match the calculated lat/lon
limits of the radar data. Sorry for the confusion.
Thanks,

Patrick

Subject: Re: Expand Polar Contour

Posted by David Fanning on Fri, 09 Jul 2004 19:41:20 GMT

Patrick writes:

> The data I am using is radar data, which is in polar coordinates. I
> am ovelaying this data onto a map, which is in lat/lon and centered on
> the radar so that the both have the same origin. But the result is
> that the radar data does not "expand out" over the map domain; instead
> it is centered about the origin (the radar) and much smaller than the
> map domain, which has been configured to match the calculated lat/lon
> limits of the radar data. Sorry for the confusion.

Humm. This seems right. You don't have some kind of
axis autoscaling going on, do you? You have set your
axes to exact scaling? And you have set the X and Y
scales for your data plot? And you have positioned your
map and plot into the same place in the window with the
POSITION keyword, right? If you have done all that, I think
it should work.

I've never used POLAR_CONTOUR. If it were me, I would have
probably converted my polar radar data into map coordinates
and just laid it on the map directly. I think that is what
I've done in the past when I was displaying NexRad radar data.
I'd have to check.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Expand Polar Contour
Posted by patrick.gatlin on Mon, 12 Jul 2004 17:30:24 GMT

David Fanning <davidf@dfanning.com> wrote in message
news:<MPG.1b58a2c9678444719897d0@news.frii.com>...
> Humm. This seems right. You don't have some kind of
> axis autoscaling going on, do you? You have set your
> axes to exact scaling? And you have set the X and Y
> scales for your data plot? And you have positioned your
> map and plot into the same place in the window with the
> POSITION keyword, right? If you have done all that, I think

> it should work.
>
> I've never used POLAR_CONTOUR. If it were me, I would have
> probably converted my polar radar data into map coordinates
> and just laid it on the map directly. I think that is what
> I've done in the past when I was displaying NexRad radar data.
> I'd have to check.

Everything checked out alright. I thought it was correct, but I guess
it's just not going to work. So I'll convert to Cartesian. That will
make things a whole lot easier. Thanks for the help David!

-Patrick