Subject: Re: curtain plot

Posted by Vince Hradil on Thu, 10 Jul 2008 14:04:39 GMT

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On Jul 10, 6:51 am, maffie <matthias.demuz...@geo.kuleuven.be> wrote:

> Hi all,

>

- > I would like to produce a curtain plot, which shows a sequence of
- > daily vertical profiles. Time should be on the X-axis, height on the Y-
- > axis, and the value that corresponds to each time-height location
- > should be in colour, with the color range in a nice colour bar next to
- > the plot...

>

- > Probably it is not that difficult, but I can't seem to find the trick
- > to handle this?

>

- > Thanks,
- > Matthias

You mean like this: http://tinyurl.com/5bw3jc

Subject: Re: curtain plot

Posted by matthias.demuzere on Thu, 10 Jul 2008 14:18:13 GMT

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yes, that is exactly what I mean...

Subject: Re: curtain plot

Posted by matthias.demuzere on Thu, 10 Jul 2008 14:20:42 GMT

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Really nice plots by the way. This is how I would like to produce mine, also with the same colors...

Subject: Re: curtain plot

Posted by Vince Hradil on Thu, 10 Jul 2008 14:40:09 GMT

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On Jul 10, 9:20 am, maffie <matthias.demuz...@geo.kuleuven.be> wrote:

- > Really nice plots by the way. This is how I would like to produce
- > mine, also with the same colors...

Yes, they are nice plots - I don't have any specific advice, except you might want to look at David's Colorbar stuff and start from there:

Subject: Re: curtain plot

Posted by Brian Larsen on Thu, 10 Jul 2008 14:46:19 GMT

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For a bit of (useful?) specific advice. I think this is easiest done with spectro_plot.pro. I wrote a wrapper around this using David's colorbar routine. My wrapper is imagesc.pro, I have used it with time on the axis with good success in the past. Have a look at imagesc, colorbar, tvimage, spectro_plot and see if the combination suits your needs.

imagesc.pro

http://people.bu.edu/balarsen/Home/IDL/Entries/2007/12/18_imagesc_(updated_18Dec2007).html spectro_plot.pro

http://sohowww.nascom.nasa.gov/solarsoft/gen/idl/display/spe ctro_plot.pro

Let us know if you find a really good solution.

Brian

Brian Larsen
Boston University
Center for Space Physics
http://people.bu.edu/balarsen/Home/IDL

Subject: Re: curtain plot

Posted by matthias.demuzere on Thu, 10 Jul 2008 22:48:03 GMT

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Hi all,

After some searching, I found the following manual on the internet: "An introduction to using IDL in meteorology", but can probably be interesting in many other fields...

http://ncas-cms.nerc.ac.uk/component/option,com_docman/task, doc_download/gid,100/http://ncas-cms.nerc.ac.uk/component/option,com_docman/task, doc_download/gid,99/

Probably, a lot of things mentioned in there are known by the community, but it helped my quite a lot, as most the examples from the course can be downloaded from the National Center for Atmospheric Science:

http://ncas-cms.nerc.ac.uk/component/option,com_dbquery/Item id,245/

In to answer my own curtain plot question:

This does the trick: myT,mytime, mylev3, /CELL_FILL,...

followed with a separate definition of the axes: AXIS, XAXIS=0, XTITLE='Time', TICKLEN=myticklen,\$ XTICKS=3, XTICKNAME=myticks, XTICKV=mytickvals

AXIS, YAXIS=0, YTITLE='Pressure (mb)', TICKLEN=myticklen,\$ YTICKS=6, YTICKNAME=yticks, YTICKV=float(yticks)

With many thanks to Andy Heaps for his help with this!!!