Subject: Re: tvimage with log axis?
Posted by David Fanning on Thu, 12 Mar 2009 05:03:02 GMT
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R.G. Stockwell writes:

> anyone have a good image display function that can handle
> log axis?
>
> I have a huge image to display, so other routines just don't work
> (contour takes several thousand years to plot for instance), so it
> has to be an image. But I need to plot the y-axis as a log function.
>
> Of course, I could roll my own - probably transform the image
> before calling a display routinem, but i was hoping for a /ylog keyword
> in a function.

Didn't Ben figure this out some time ago?

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: tvimage with log axis?
Posted by R.G. Stockwell on Thu, 12 Mar 2009 05:11:49 GMT
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"David Fanning" <news@dfanning.com> wrote in message
news:MPG.2422456de6f483898a658@news.giganews.com...
> R.G. Stockwell writes:
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>> in a function.
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> Didn't Ben figure this out some time ago?

thanks, googled and found a thread that looks like it discusses it.
BTW, I had websearched and found an ancient tvimage, with a stretch keyword
for log plots, but that just turned out to be scaling the image (not the
axis).

I did figure out how to resample the y axis in the interpolation() call

```
newsry =
max(sry)-reverse(alog10(findgen(max(sry))+1)/alog10(max(sry) )*max(sry))
RETURN, INTERPOLATE(arr, srx, newsry, /GRID, CUBIC=cub)
```

which gives me the scaling i want in the y direction,
but I didn't have it lined up to the plot routine axis correctly.

Thanks for the tip.

Cheers,
bob

Subject: Re: tvimage with log axis?
Posted by R.G. Stockwell on Thu, 12 Mar 2009 05:32:27 GMT
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"R.G. Stockwell" <noemail87@please.com> wrote in message
news:gpa5ho$d06$1@aioe.org...

summary:

pg_plotimage from
http://hea-www.cfa.harvard.edu/~pgrigis/idl_stuff/pg_plotima ge.pro
does the trick. It allows the ylog keyword, and it rescales the image to
have the proper sampling - which is exactly what i needed.
It sounds like for the same reason too, I am plotting local spectra of
hourly winds measured over a 16 year period (145000 time samples).
So one can see annual cycles, seasonal cycles, MJOs, planetary waves,
tides, semidiurnal tides all on one plot.

there is still a bit of a bug, some glitchy areas in the above that are
absent
in tvimage and others. I'll have to dig into it.

FTR "plotimage.pro" does not recscale the image with the ylog keyword.

cheers,
bob

Subject: Re: tvimage with log axis?
Posted by pgrigis on Thu, 12 Mar 2009 13:41:34 GMT
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R.G. Stockwell wrote:
> "R.G. Stockwell" <noemail87@please.com> wrote in message
> news:gpa5ho$d06$1@aioe.org...
>
>
>
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Hi Bob,

please be sure to report all the bugs you find, either
to the list or via private email.

Admittedly, pg_plotimage has been written in probably 10% of the
time that tvimage has, so I am not totally surprised that
it is not that robust ;-)

Ciao,
Paolo

>
> FTR "plotimage.pro" does not recscale the image with the ylog keyword.
>
> cheers,
> bob

Subject: Re: tvimage with log axis?
Posted by David Fanning on Thu, 12 Mar 2009 14:04:57 GMT
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Paolo writes:

> Admittedly, pg_plotimage has been written in probably 10% of the
> time that tvimage has, so I am not totally surprised that
> it is not that robust ;-)

Yes, many, many iterations are needed to make software
truly robust. Longevity is more important than brilliant
design. :-)

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: tvimage with log axis?
Posted by R.G. Stockwell on Thu, 12 Mar 2009 16:55:20 GMT
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"Paolo" <pgrigis@gmail.com> wrote in message
news:d09c44cc-e190-494b-aa92-e6217801a02f@v19g2000yqn.google groups.com...
>
>
> R.G. Stockwell wrote:
>> "R.G. Stockwell" <noemail87@please.com> wrote in message
>> news:gpa5ho$d06$1@aioe.org...
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> time that tvimage has, so I am not totally surprised that
> it is not that robust ;-)
>
> Ciao,
> Paolo

Hi Paolo,
good news, the problem was on my end. There was a gap in the
data that I thought should not have gaps, so the image rendering was
in fact doing what it should be doing.
And. thank you for making the code available!

Cheers,
bob
