Subject: Re: Plotting with colorbar
Posted by David Fanning on Sun, 19 Jan 2014 19:18:25 GMT
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fischertc13@gmail.com writes:

>
>>
>> Try this:
>>
>>
>>
>> time=LINDGEN(86400) ; in seconds
>>
>> tmp_data=REPMAT([-9,1,2,3,4],20,86400)
>>
>> data=tmp_data[0:98,*]
>>
>> missingIndices=WHERE(data EQ -9, missingCount)
>>
>> IF missingCount GT 0 THEN data[missingIndices]=0
>>
>> img=Byte(data)
>>
>> TVLCT, cgColor('WHITE',/Triple),0 ; Background color
>>
>> TVLCT, cgColor(['DARK RED','RED','SKY BLUE','BLUE'],/Triple),1
>>
>> cgimage, Transpose(data), /axes, axkeyword={xtitle:'Time'}
>>
>> END
>>
>>
>>
>> Cheers,
>>
>>
>>
>> David
>>
>>
>>
>> --
>>
>> David Fanning, Ph.D.
>>
>> Fanning Software Consulting, Inc.
>>

>> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
>>
>> Sepore ma de ni thue. ("Perhaps thou speakest truth.")
>
> Hi all,
>
> I have a similar question where I have populated a 2D field with velocity measurements that are assigned a rainbow of colors and want array points that do not have a value to be whited out (or preferably not shown at all). I assign all points without a velocity a NaN value, but that just ends up assigning these points the 0 value in the Rainbow color table I am using.
>
> I can get the valueless array points to be white by instead assigning them some high velocity (i.e. 999999) in the Rainbow+White color table, but I when I try to plot the image as a postscript it instead uses the 254 value right before white which is instead red. Additionally, this puts a white bar at the top of my color bar which is a bit annoying.
>
> Here is what I'm using right now:
>
>
> i = WHERE(field EQ 0.000, count)
> IF (count GT 0) THEN array1[i] = !VALUES.F_NAN
>
> set_plot, 'ps'
> !p.font=0
> device, filename='vel_center.eps',bits_per_pixel=8,/portrait,/inches , $
> xsize = 7.2, ysize = 6.,/encapsulated,/color,xoffset=1.0,yoffset=1.0
>
> !p.noerase=1
>
> loadct,39 ;rainbow
>
>   tvim,array1,range=[-300,300],POSITION=[.08,.05,.83,.95],/noa xis
>
>   fsc_contour,image,levels=levels,/overplot,color='black',labe l=0
>
> loadct,0 ; b & w
>
> loadct,39 ;rainbow
>
> FSC_COLORBAR, POSITION=[0.83,0.05,0.88,0.95], Divisions=4, Minor=5, Format='(F5.0)', Range=[-300, 300],title='Velocity (km/s)',/vertical,/right
>
> device, /close
> set_plot, 'x'
> loadct,0 ; b & w
>
> Any comments are appreciated!

I'm just about to get on a plane, so I can elaborate, but I would update your Coyote Library (it is about 5 years out of date) and then investigate the transparency keywords available in cgImage. This will be simple to do. You can find entire articles written about it on my web page. :-)

Cheers,

David
--
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