
Subject: Arrow and vectors

Posted by [zolile mtumela](#) on Tue, 08 May 2012 05:23:13 GMT

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Hi all

In this program I want to show vector arrows on the map. I got cities and colorbar, Next to cities I want to plot an Arrow vector of amplitudes for the given time and plot another arrow vector for phase angle and show the rotation of phase. I tried but I am not winning. If I can manage to solve this, I will display those values with colors on the colorbar. Any help will be highly accepted.

The program is like this

```
loadct,33
```

```
cgtext=[1.0,1.5,2.0,2.5,3.0,3.5,4.0,4.5,5.0,5.5,6.0]
```

```
;levels=[1.0,1.5,2.0,2.5,3.0,3.5,4.0,4.5,5.0,5.5,6.0]
```

```
map_set, 72.5,-45,/orthographic,/isotropic, limit=[55,-75,90,-15],/  
continents,/grid
```

```
;lons=[-42.68,-38.56,-37.56,-36.66,-40.25,-37.56,-38.72,-41. 87,-39.46,-41.11,-32.05,-28.35]
```

```
;lats=[65.22,66.92,69.52,70.98,72.18,73.56,74.83,75.97,78.57 ,80.35,82.71,84.46]
```

```
lons=[314.56,310.32,308.27,307.10,309.28,306.43,306.47,307.8 7,303.85,302.82,294.90,290.77]
```

```
lats=[61.16,62.00,64.17,65.42,67.02,67.93,69.25,70.68,72.78, 74.57,76.02,77.47]
```

```
!p.charsize=0.8
```

```
cgplot,lons,lats,psym=6,/overplot
```

```
time=[5.,28.,48.,68.,88.,112.,132.,152.,172.,192.,212.,238., 258.,278.,298.,322.,342.]
```

```
amplitude=[0.20,0.21,0.22,0.23,0.22,0.20,0.16,0.14,0.15,0.18
```

```
,0.22,0.25,0.26,0.25,0.22,0.21,0.20]
```

```
phase=[5.,28.,48.,68.,88.,112.,132.,152.,172.,192.,212.,238. ,258.,278.,298.,322.,342.]
```

```
;lot,time,amplitude
```

```
;
```

```
;for i=0,n_elements(amplitude)-1 do
```

```
;stop
```

```
;cgArrow,time,amplitude,.....,/data
```

```
;
```

```
;plots,67.28,309.43
```

```
cities=['NAQ','FHB','GHB','SKT','STF','ATU','GDH','UMQ','UPN ','KUV','SVS','THL']
```

```
citycolor=['navy','blue','royal blue','lime green','green','lawn  
green','chartreuse','green yellow','tomato', $
```

```
'orange red','red','crimson']
```

```
for j=0,n_elements(cities)-1 do  
cgtext,lons(j),lats(j),cities(j),color=citycolor(j)
```

```
labels=['NAQ','FHB','GHB','SKT','STF','ATU','GDH','UMQ','UPN ','KUV','SVS','THL']
```

```
;labels=['1.0','1.5','2.0','2.5','3.0','3.5','4.0','4.5','5. 0','5.5','6.0','7']
```

```
cgDCBar,citycolor,labels=labels,/vertical, title='Amplitude',rotate=45
```

```
;cgDCBar,citycolor,labels=labels,  
vertical,position=[0.9,0.15,0.90,0.9], title='Phase angle',rotate=45
```

```
xyouts,337,61.23,'*GOOSE BAY',charthick=1.2,charsize=1,/data
```

```
end
```

I will be happy if you can help me to achieve this
many thanks
Zolile
