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Subject: Plotting with colorbar

Posted by [atmospheric physics](#) on Thu, 16 Jan 2014 15:41:05 GMT

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Hello,

I have a data matrix with 99 columns and 86400 rows (each row represents time in seconds). The whole of the data matrix is arranged with only 5 numbers = [-9, 1, 2, 3, 4]. I wanted to make a color bar with 4 colors = ['DARK RED','RED','SKY BLUE', 'BLUE'] representing numbers [1, 2, 3, 4] respectively and -9 represents a missing value (assigned 'WHITE' color)

Below are my lines in the code for synthetic data:

```
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=BytScl(data,MIN=0,MAX=4,/NAN)
```

```
TVLCT, cgColor('WHITE',/Triple),0 ; Background color
TVLCT, cgColor(['DARK RED','RED','SKY BLUE','BLUE'],/Triple),1
```

```
???
```

```
???
```

Now my problem is ... I want X-axis with time, Y-axis with data column indices (i.e., indgen(99)) where I wanted to place colored dots (basing on the colorbar) for each of the data point column wise for all the time points. Can anyone suggest me how shall I proceed after the above steps in simplest way?

Thanks in advance

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