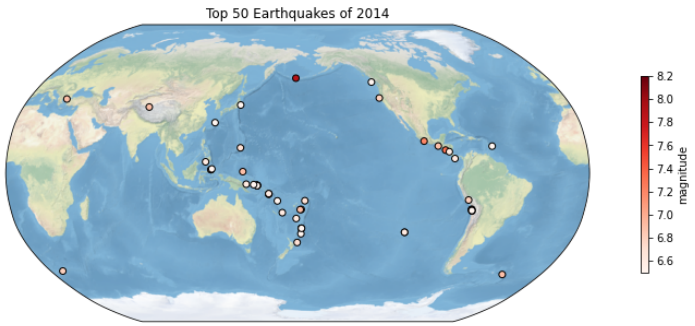
PS4 report

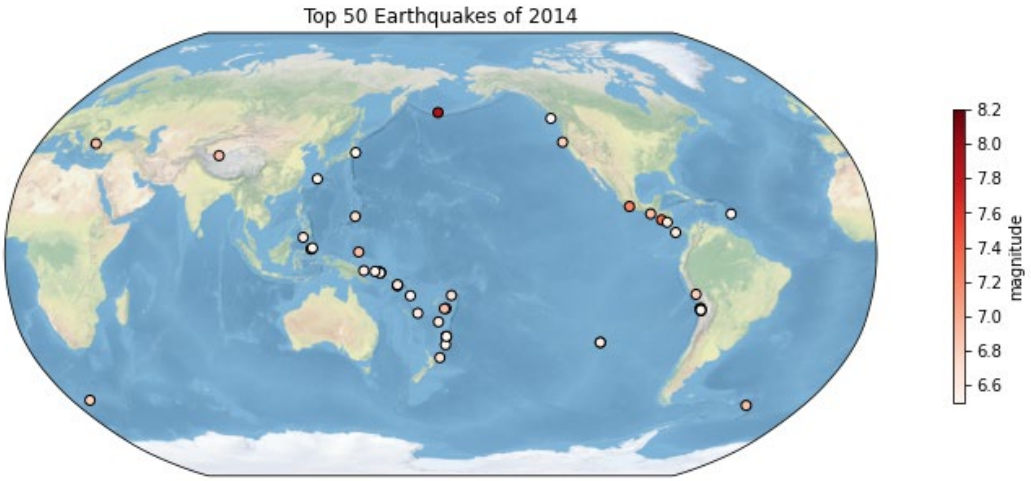
1. Global Earthquakes

```
fig = plt.figure(figsize=(10, 5))

ax = fig.add_subplot(1, 1, 1, projection=ccrs.Robinson(central_longitude=180,globe=None))
ax.set_global()
ax.stock_img()
ax.set_title('Top 50 Earthquakes of 2014')
eq = plt.scatter(df['longitude'].values,df['latitude'].values, marker='o', c=df['mag'], cmap='Reds', edgecolors='k', transform=ccrs.PlateCarree
cb = fig.colorbar(eq,cax=fig.add_axes([0.95,0.25,0.01,0.5]),shrink=0.7)
cb.set_label('magnitude')
```



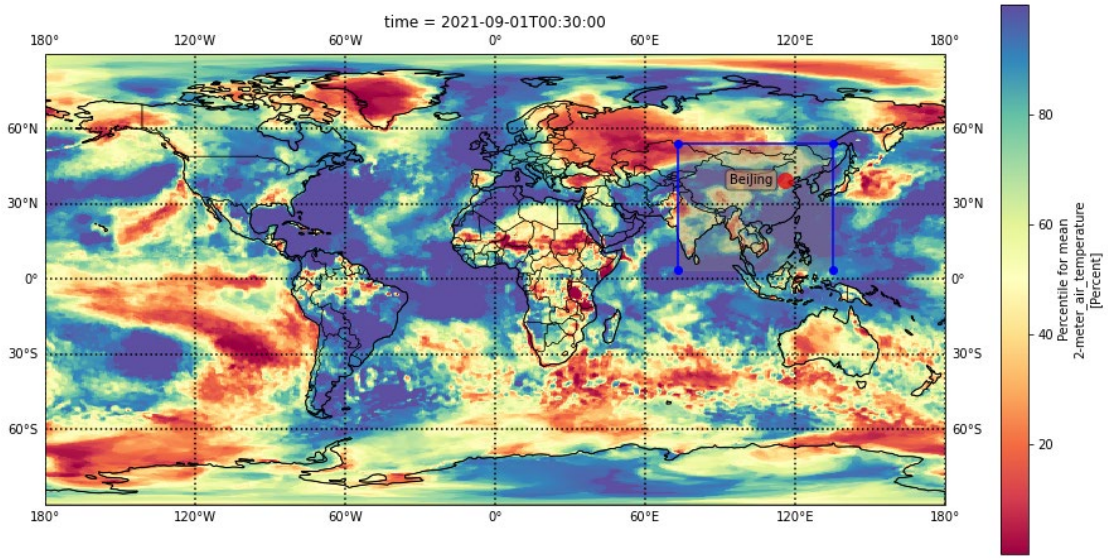
Detail:



2. Explore a netCDF dataset

This data collection provides climate statistics compute using MERRA-2 to assist in the analysis of extreme temperature and precipitation events and the accompanying the large scale meteorological patterns across a time period of over four decades.

2.1 [10 points] Make a global map of a certain variable. Your figure should contain: a project, x label and ticks, y label and ticks, title, gridlines, legend, colorbar, masks or features, annotations, and text box (1 point each**).**



2.2 [10 points] Make a regional map of the same variable. Your figure should contain: a different project, x label and ticks, y label and ticks, title, gridlines, legend, colorbar, masks or features, annotations, and text box (1 point each**).**