

ROYGBIV Earth User Manual

Written and coded by Mauro Chavez

1. Working with ROYGBIV Earth user interface

ROYGBIV Earth, a global graphing tool	
Graph Title	Provide graph title here
Data label	Provide data type here
Graph output file name	ROYGBIVEarthOut
<i>Please specify which percent of countries should fall in each category where Red is the top 16 percent of countries and Orange is the next top 14 percent...</i>	
Percentage in red	16
Percentage in orange	14
Percentage in yellow	14
Percentage in green	14
Percentage in blue	14
Percentage in indigo	14
Percentage in violet	14
Click Browse button to select data file	
Browse	
Exit	Create Graph

After starting the program ROYGBIV_Earth.app, this window will pop up. The following describes what each field is used for and how to set up the parameters that direct the creation of your graph.

Pink Box:

In the first row of the section highlighted by the pink box you can enter the title of your graph that will appear above the map of the world.

The second row allows you to provide a key word or phrase that describes the data being graphed. This will appear above the ROYGBIV color key.

The third row is where you should write the name of the graph file itself that is created by the app. This file will have “.html” added to it and will automatically open after you click create graph.

Blue Box:

In this field you can define the percentages of countries that will occupy each of the ROYGBIV color categories. For example, 14 in the “Percentage in organge” box means that 14 % of countries will show up in orange where the orange countries are the second highest grouping of values in the data set. In this setting, the top 16 % of values would show up as red and the next 14% would show up as orange...

Red Box:

Click “Browse” to open up a file browser. Find the .csv file that you have created that contains county names (saved as a Windows Comma Separated file) and their corresponding values to be graphed. See part 2 and part 3 for more details on how the .csv file should look.

Green Box:

Clicking “Create Graph” will use all the currently showing/entered parameters in the window and create your graph as an HTML file. This file will be automatically opened by your default internet browser but does not require an internet connection to be functional.

	A	B	C	D	E
1	Tokelau	30			
2	Nauru	24.1			
3	Mauritius	22.3			
4	Cook Islands	21.5			
5	Marshall Islands	21.3			
6	Palau	20.9			
7	Qatar	20			
8	Saudi Arabia	20			
9	Kuwait	20			
10	New Caledonia	19.6			
11	Bahrain	19.6			
12	French Polynesia	19.4			
13	United Arab Emirates	19.3			
14	Guam	18.7			
15	Kiribati	18.6			
16	Malaysia	17.9			
17	Seychelles	17.4			
18	Tuvalu	17.3			
19	Egypt	16.7			
20	Vanuatu	16.6			
21	Belize	16.5			
22	Solomon Islands	16.4			
23	Micronesia [Fed. States of]	16.3			
24	Mexico	15.8			
25	Réunion	15.8			
26	Papua New Guinea	15.3			
27	Niue	14.9			
28	Oman	14.8			
29	British Virgin Islands	14.5			
30	Fiji	13.8			
31	Tonga	13.7			
32	Brunei Darussalam	13.7			

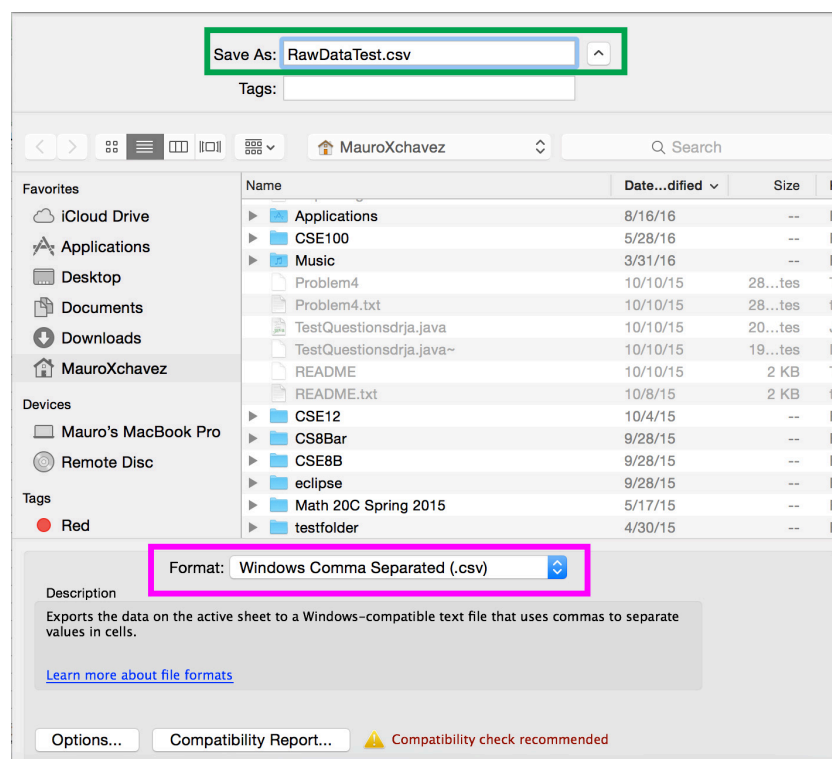
2. Setting up your data

The image on the left shows how you should format your data so that it can be read by ROYGBIV_Earth. You can use any spreadsheet program capable of saving .csv files. In the example I use Excel. The first column should contain country names. The app is fitted with an extensive dictionary so local, official and common versions of a county's name should be picked up. To ensure accuracy in reading country names, capitalize them appropriately. The second column should contain the value of whatever data you wish to graph that corresponds to the country on the same row in the left column.

The countries and corresponding values do not need to be in any particular order and no column labels are required.

3. Saving your data

Once your data is formatted as described above, save it as a .csv file. The green box on the image to the right shows where you can enter the name of the file. The pink box shows HOW you should save your data file. **Make sure to save your data as a Windows Comma Separated (.csv) file to ensure that it works with ROYGBIV_Earth.app**



4. Getting Images of your graph

Below is an example of a filled out ROYGBIV_Earth window.

Map Builder

ROYGBIV Earth, a global graphing tool

Graph Title: Cancer Across The Earth

Data label: Cancer Rates

Graph output file name: CancerGraph

Please specify which percent of countries should fall in each category where Red is the top 16 percent of countries and Orange is the next top 14 percent...

Percentage in red: 20

Percentage in orange: 10

Percentage in yellow: 10

Percentage in green: 10

Percentage in blue: 10

Percentage in indigo: 10

Percentage in violet: 30

Click Browse button to select data file

Browse

/Users/MauroXchavez/MapBuilder/dataRAW.csv

Exit Create Graph

The above window will create the below graph. There are a few things to notice here.

- The URL of this webpage shows where on your computer the output file was stored
- In the top right you can save the graph as a Mac image file

While it is possible to download the graph as a .png image, I recommend using your mac's screen shot feature to snap a picture of the graph. This allows for a higher quality image.

To screen shot your graph hold command + left shift + 4 and drag the box over the area of the graph. Make sure to include the name and color key. This image by default gets put on your desktop as a .png file.

