Creating Climographs with Google Sheets

Why use Google Sheets?

When collaborating with others who may have different operating systems, devices, schedules, and varying degrees of familiarity with spreadsheet software, Google Sheets offers a free platform for multiple users to create, edit, and share projects.

Reading Climographs

Monthly precipitation totals are represented with a blue bar graph that corresponds to numbered indices on the **left** hand side of the graph (pictured here to your right). The red horizontal line seen in the upper hemisphere of the data represents changes in temperature. Points on the line correspond to numbered indices on the **right** hand side.

To find average temperature and climate data for a particular time of year, find the data that is directly above the desired month (found at the bottom of the chart). For example, the line directly above Dec. (December) represents the temperature for that month, while the blue bar in the same position represents precipitation.
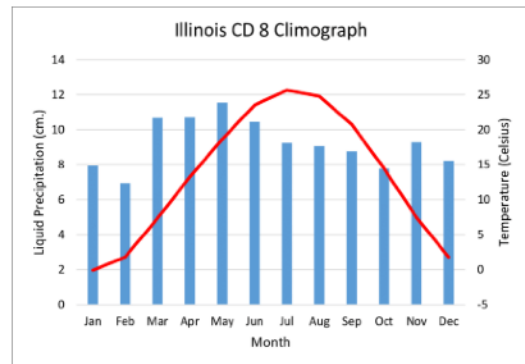
Getting Started

Go to https://sheets.google.com and click on the multicolored plus sign that appears at the top of the screen. Then, begin entering the climate data for your selected location. Column A should be used for months, Column B will correspond to mean temperature, and Column C should be used for average precipitation. <u>Be careful to enter the correct data in the correct column to avoid unnecessary editing later.</u>

	A	B	C
1		Precipitation	Temperature
2	Jan	0.6	70
3	Feb	0.6	70
4	Mar	0.8	68
5	Apr	1.6	65
6	Jun	2.7	54
7	Jul	3.7	54
8	Aug	3.3	55
9	Sept	3	58
10	Oct	1.6	61
11	Nov	0.1	65
12	Dec	0	68
13			

Once your data has been entered, hold down the shift key and click "Jan". **Don't let go of the shift key yet!** While still pressing the shift key, click on the bottom right hand corner of your data until all the text you entered has been highlighted. Tablet users will be able to press the cell containing Jan. until it turns blue, and then drag their finger to the bottom corner of their data to highlight everything.

Once all of your text has been highlighted, it's safe to let go of the shift key.

Using the Chart Editor

At the top right of the toolbar on your screen, click on the chart editor icon (pictured here to your right). Immediately, you'll see a chart appear beside the data you've entered.

Under the Chart Editor menu, the Setup submenu will be visible by default. You can confirm this by finding the green letters reading *Setup* immediately below the Chart Editor heading. Use the 'chart type' dropdown menu located immediately beneath 'setup' and select 'combo chart' (pictured here at your right).
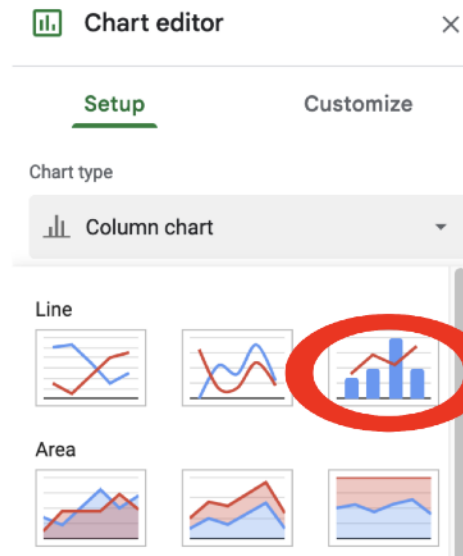
While the number of chart types may seem intimidating at a glance, 'combo chart' will appear at the top of the selections menu (pictured right), and you can hover your cursor over it to reveal a text confirmation that says 'combo chart'.

After you've selected 'combo chart', locate the 'customize' submenu immediately to the right of 'setup', and click on it. Here, you can enter a title for your chart under 'chart axis and titles', as well as ensure that your data is correctly displayed on your chart.

3 Important Steps with the 'Series' Dropdown Menu

Once you've entered your chart and axis titles, you're ready to perform the final steps to complete your chart. It is imperative to complete the following 3 steps correctly, or precipitation data will not be displayed correctly.

Step 1: scroll down to the 'series' dropdown menu and click on the arrow immediately to its left to open it.

Step 2: Ensure that 'Column 1' is visible in the dropdown submenu beneath 'Series.' A blue dot will be visible to the immediate left of Column 1. If not, choose 'Column 1" from the dropdown menu.

Step 3: Immediately beneath the Column dropdown menu from Step 2, you'll see the 'Axis' dropdown menu. Select 'Right Axis' here to complete your graph.
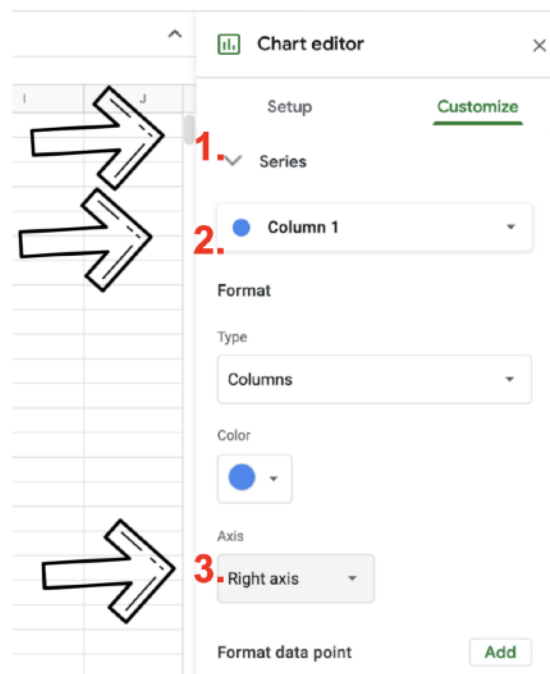
Common Issues and Troubleshooting

Make sure to double check your [climate data](#) and ensure that your climograph displays precipitation and temperature data correctly. With some browser settings, climographs can unexpectedly switch the bar and line graphs to display the other's data. Thankfully, this is easy to correct.

If you find that you have encountered the aforementioned issue, simply switch the data in Columns A and B. Rather than typing it all over again, highlight all of Column B using the method explained in the **Getting Started** section of the first page. Then, cut out the data by holding down the Ctrl key on your PC (or the Command key on a Mac) and pressing 'X'.

Tablet users will be able to cut by selecting all of the aforementioned data and holding their finger down until the 'cut' option appears.

Once you've cut out the precipitation data, it will no longer be visible. Highlight all of the Data in Column C and, using your mouse or trackpad, drag the column C data to the left until it all appears under Column B. Then, click on the topmost empty cell under Column C and paste your precipitation data there by holding down the Ctrl key on your PC (or the Command key on a Mac) and pressing 'V'.

Tablet users will be able to paste by selecting all of the aforementioned data and holding their finger down until the 'paste' option appears.

Additional Resources

For those relying on a smaller screen, a simplified, illustrated version of this tutorial can be found by clicking [here](#). Don't hesitate to e-mail lannaperkins@outlook.com with any questions, concerns, or recommendations you may have.