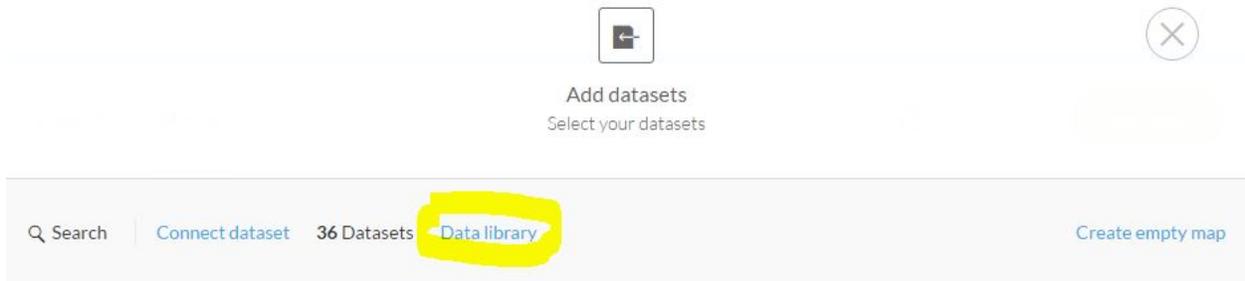


Intro to Web Mapping with CartoDB

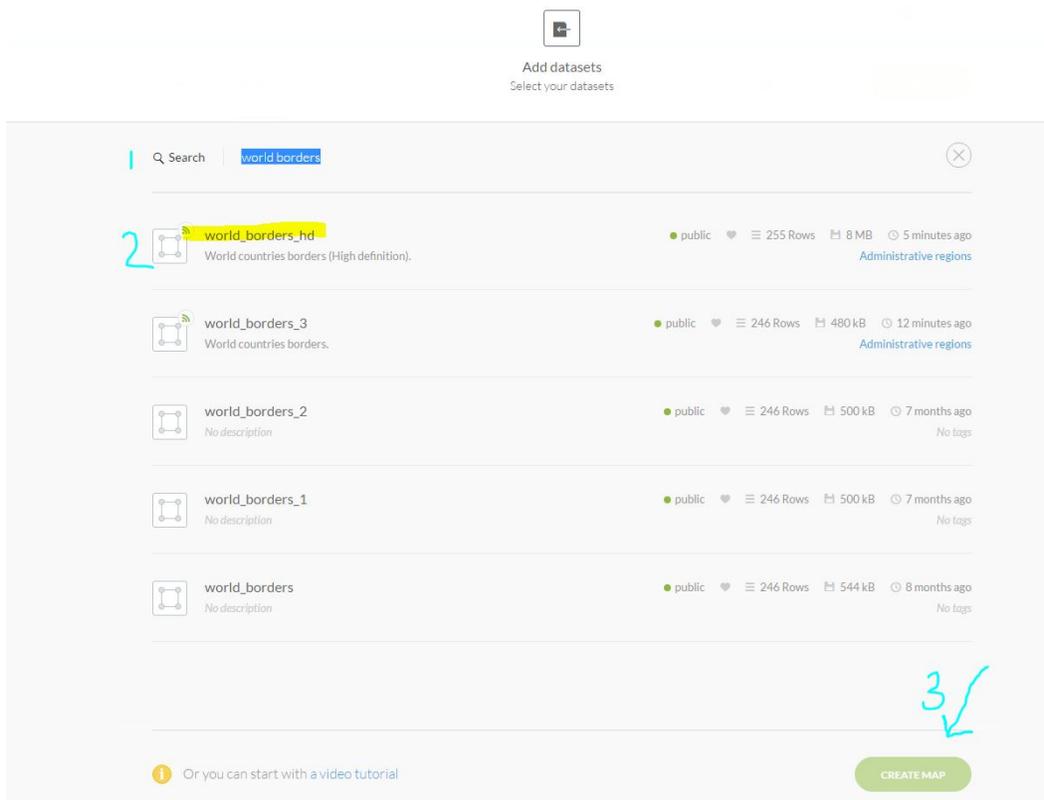
1. Open Google Chrome and navigate to <https://iu.box.com/cartodb> download the demo_point_layer file.
2. Open a new tab and navigate to <https://cartodb.com/> and “Sign Up” to create a free account. Once you’re logged in, click “New Map” to get started.



3. For the first map, we’ll use some data from CartoDB’s data library to get us started. Click on “Data Library”.



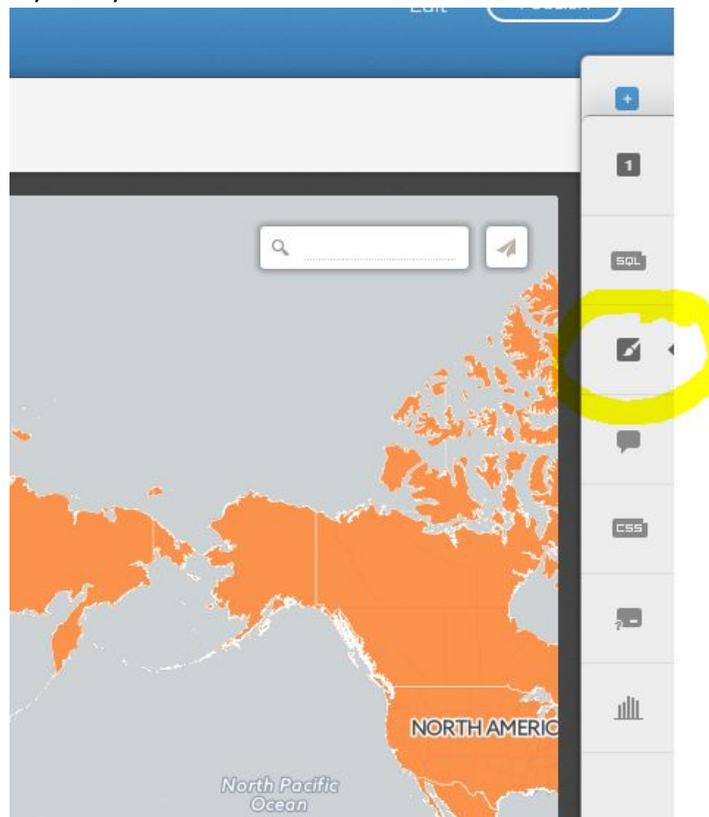
4. Type “world borders” into the search bar, then hit the enter key. The dataset we’re using is world_borders_hd. Click on the dataset, then chose “Create Map”.



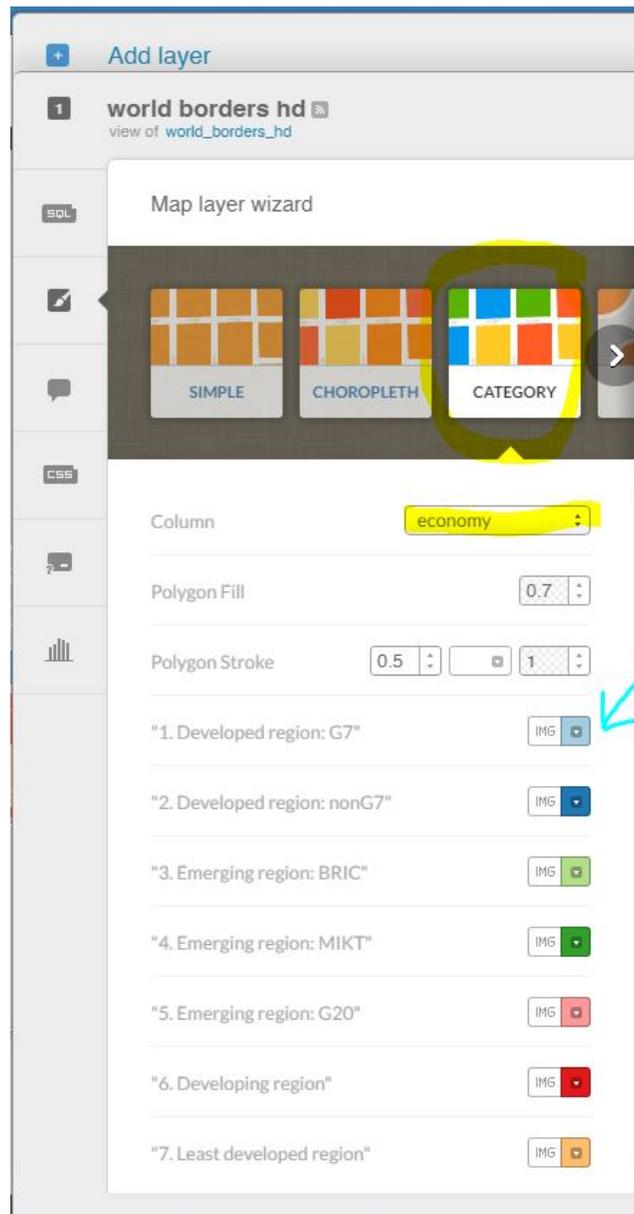
- Before we make our map, we need to know what the data look like! Toggle over to “Data View” to explore the data table. Note the tables called “economy” and “pop_est”. What type of data are they? String (text), or number? Flip back over to Map View when you’re done.



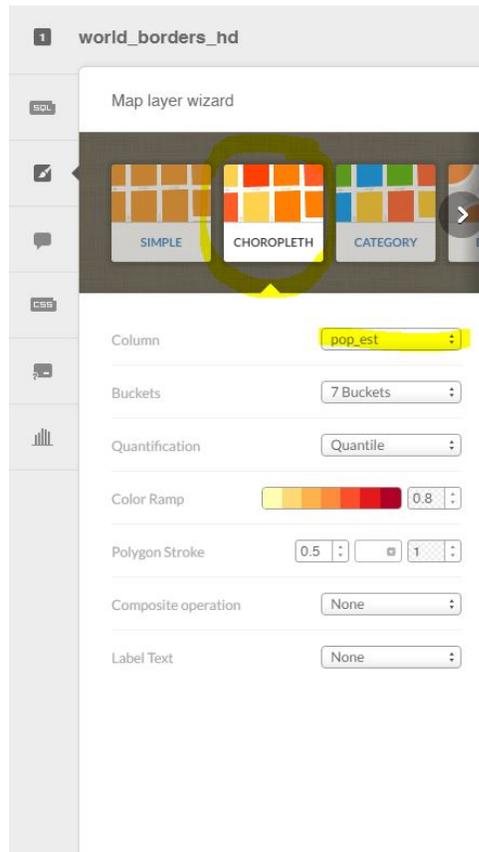
- Now that we know what our data look like, we can start to edit our map. Click on the Wizard tool (it looks like a paintbrush) to expand the layer tray.



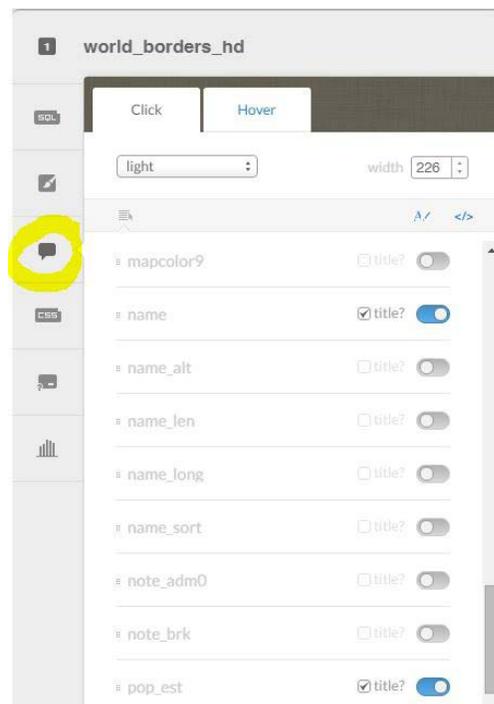
- First, we’ll make a category map based on the economy classification. Once you have that set up, click on the colors next to each level to customize your map. You can also choose an image to fill your map by clicking on the “IMG” option. Take a few minutes to explore these options. *You can also style your map manually under the CSS tab. We won’t cover that today, but feel free to explore.*



- Next we'll make a choropleth map! Notice that under the Category option we were able to choose string values (economy). Our choropleth map will use a number value (pop_est). There is slightly different functionality between these two options. Choose the Choropleth option, and select pop_est as the column. Explore the different options for displaying this data.



9. What if someone looking at our map wanted to know the exact figure for a country? Let's make some popup windows to help them explore the data more closely. Chose the infowindow button in the layer tray. Notice that we have different options for how our windows behave. We'll set up popup windows that appear when one clicks on a specific area. Turn on the name, pop_est, and lastcensus buttons.

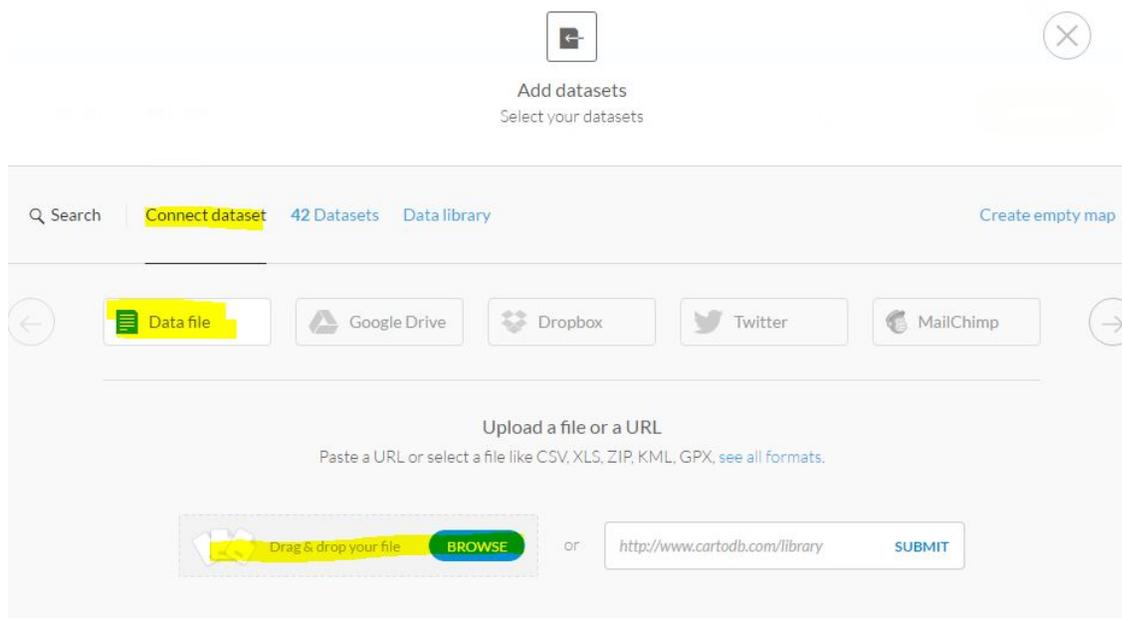


10. We're ready to share our map! Click Visualize in the top right corner, then click "ok, create map" if prompted. Now we can set some options for how users will interact with our map. We can change the basemap, add a title element or image, and control the options that a user sees. Take a few minutes to set these how you like. When you're done, click "Publish" in the top right corner to see options for sharing your map.

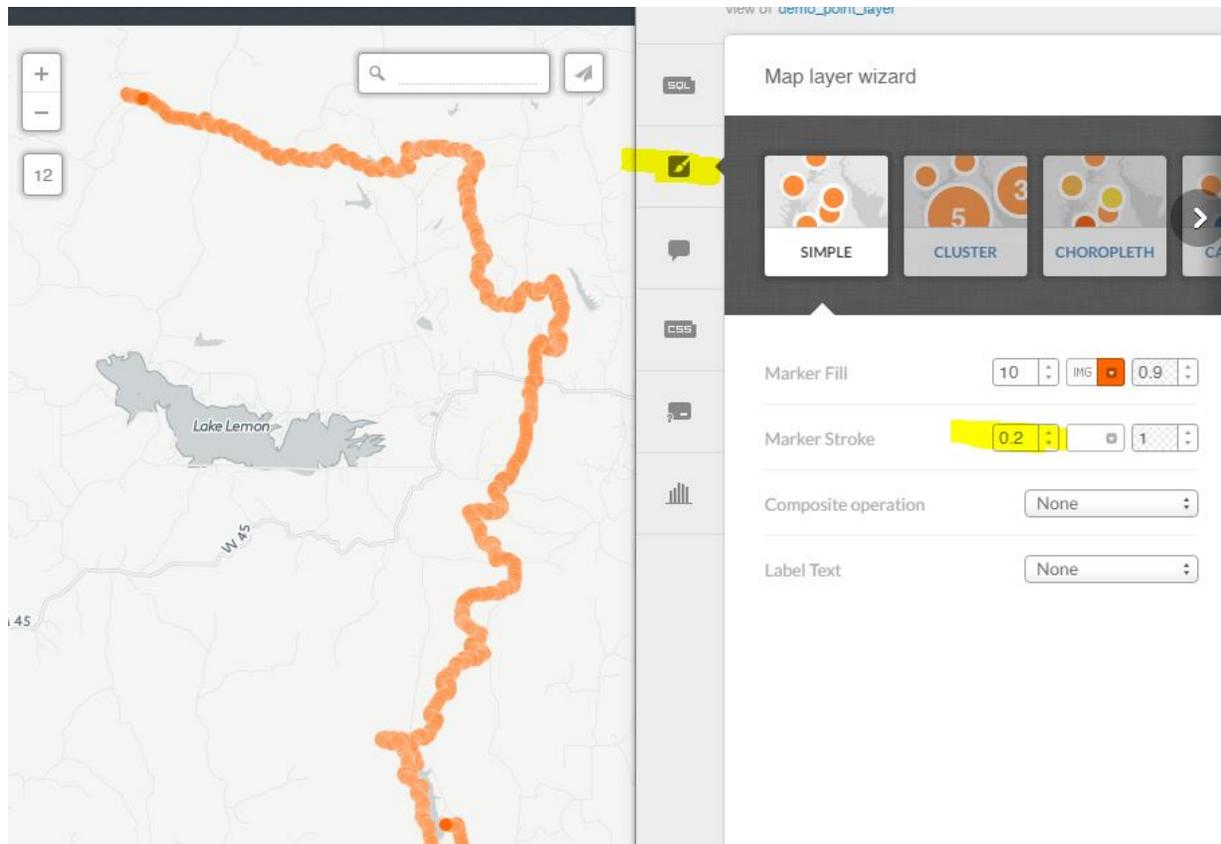


You made a map!
But what if you want to use your own data?

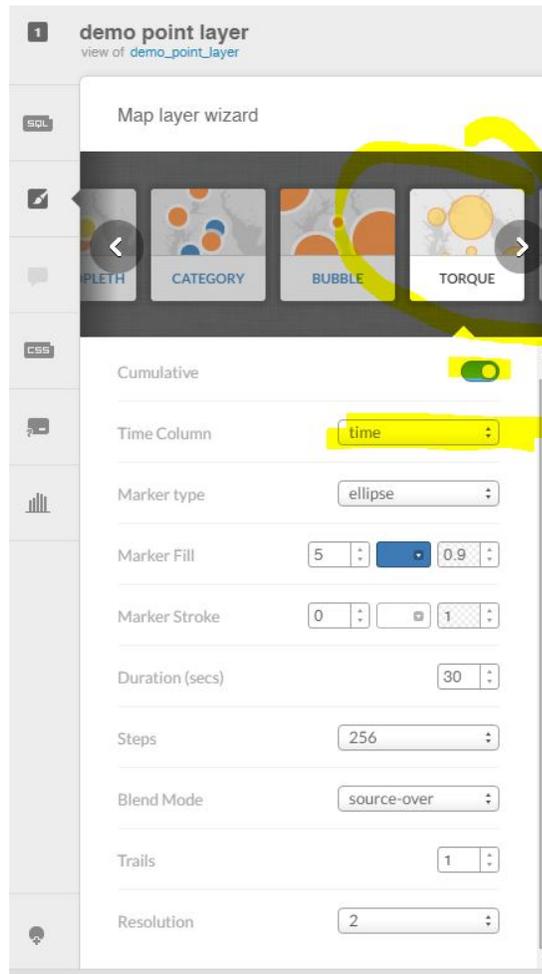
11. Back in CartoDB, navigate back to your dashboard and choose "New Map". This time, we'll choose "Connect dataset" and upload the demo_point_layer file that you downloaded earlier.



- Once it loads, toggle back over to the Data View to look at the table. Notice that this table has a list of coordinates under the `_geom`. This is a point layer! Also take note of the time column. See how the data type is “date”? This is important! Ok, head back over to the Map View.
- Pull out the wizard tool again, and check out the different options. Notice that for a point layer we will see different visualization options than we did with the countries polygon layer.
- This is GPS data from the Tecumseh Trail Marathon, and the points are quite close together. Change the marker stroke so that the outlines are smaller.



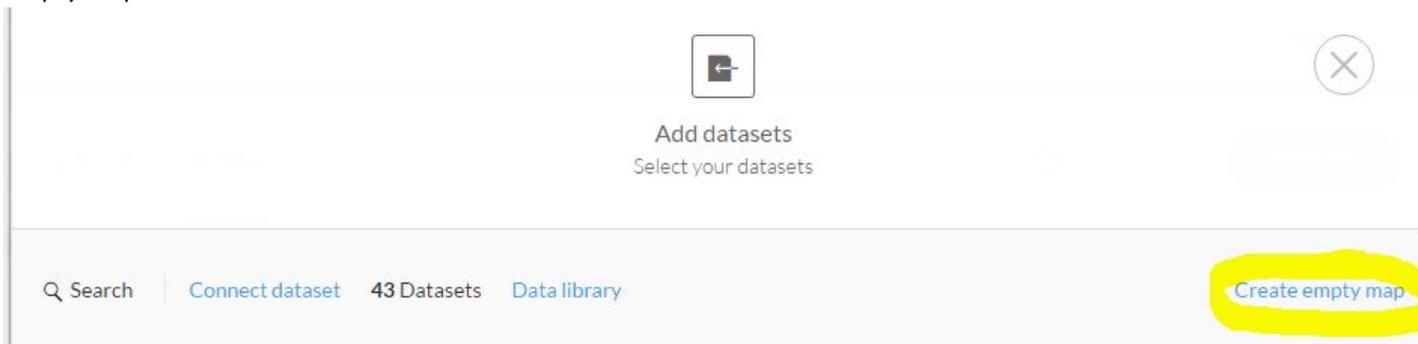
- We can make a couple of different maps with this data. Seeing how we have a time column, let's make an animated map. Choose the Torque option and make sure that the Time Column is set to “time”. I like to turn on the Cumulative option, but try toggling it off and on to see the difference. Explore the other options under the wizard tool.



See how easy that was?!

But what if I just want to make a map from scratch. I don't have any data!

16. Click on the return arrow to get back to your dashboard, then choose New Map again. Next, choose "Create empty map"



17. We've come to the free form portion of the workshop! Choose which type of map you want to make and start drawing! I'll make a point layer. Once you've added a few elements, go to the Data View to see what it looks like. Now you can add some more information to your table. You can also add rows and manually describe shapes. If you choose to add items manually, either by typing in coordinates, a city name, or an address, you will have to georeferenced the layer for it to appear on your map.

cartodb_id ▾ number	the_geom  geometry	description ▾ string
1	70.3125, 33.7243	<i>null</i>
2	39.0000, 86.0000	<i>null</i>

- Export layer
- Georeference layer**
- Duplicate map
- Change privacy
- Lock map
- Delete map