Mapbox Studio: How to Create a Map from a Dataset and Tile Set.

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## Mapbox Studio: Exploring Datasets.

The following section has been designed for users who wish to alter their data within Mapbox Datasets. If you already have data that you wish not to adjust, please scroll to the section "Mapbox Studio: Creating a Map." Thank you.

**Step 01.** Open the following URL path <u>https://studio.mapbox.com/datasets/</u> to open the Mapbox Studio's Datasets website page.

To start the process of creating a dataset, click on the following 'Upload Dataset.'



Figure 1.

**Step 02.** Click, 'Select a File' and from your local network choose the file you wish to upload. If the correct the file has been upload, click 'Confirm.'

Please note, the only files currently supported by Mapbox Studios are GeoJSON, JSON and CSV.



Figure 2.

|            | New Dataset   | Blank dataset Upload |  |
|------------|---|----------------------|--|
| Datasets   |   | <u> </u>             |  |
|            | 1 file selected for upload.                                     |                      |  |
| Q Search   | BLT Active Surveillance Results (2013-2019).csv<br>191 features | 10 KB                | hat is a dataset?  |
| Filter by: |   |                      | lataset is an editable collection of                                 |
|            | Select a different file   | nfirm                | oJSON features. Use Mapbox Studio's                                  |
|            |   |                      | ate and edit datasets. Datasets must be                              |
|            | WI I  | th                   | ported to <u>Tilesets</u> in order to be styled in<br>a style editor |
|            |   |                      |  |
| Y          | ou haven't created any datasets yet.                            | F                    | Ready to visualize your data now?                                    |
|            | Upload dataset  |                      | lata to a tileset.   |
|            |   |                      |  |
|            |   |                      |  |
|            |   |                      |  |
|            |   |                      |  |

Figure 3.

**Step 03.** If the user chooses too, they have the option of changing the default name of the dataset to a new name. Click, 'Create' when or if satisfied with the dataset's name. A green bar should appear and read '100% complete.'

| Datasets        | Dataset name  |   |                      |
|-----------------|---|---|----------------------|
|                 | BLT Active Surveillance Results (2013-2019)                           |   |                      |
| <b>Q</b> Search |   | nat is a dataset:   |                      |
| Filter by:      | BLT Active Surveillance Results (2013-2019).csv<br>10 KB 191 features | lataset is an editable collection   | of<br>udio's         |
|                 | Select a different file   | create and edit datasets. Datasets Arri<br>ate and edit datasets. Datasets<br>ported to <u>filesets</u> in order to be<br>style editor. | must be<br>styled in |
|                 | You haven't created any datasets yet.<br>Upload dataset               | Go to the <u>tilesets page</u> to conver<br>data to a tileset.  | ow?<br>t your        |
|                 |   |   |                      |
|                 |   |   |                      |

To start editing the data select 'Start Editing.'



| Datasets  | New Dataset                                | Blank dataset Upload |  |
|---|--|----------------------|--|
|   | BLT Active Surveillance Results (2013-2019 | l.csv                | and the second second  |
| Q Search  | 191 features imported                      | 100 %                | hat is a dataset?  |
| Filter by:  | 100% coi                                   | nplete               | lataset is an editable collection of   |
| BLT Active Surveillance Results (2013-)<br>Created less than a minute ago | View details                               | Start editing        | olSON features. Use Mapbox Studio's<br>taset editor or the <u>Datasets AP</u> I to<br>ate and edit datasets. Datasets must be<br>ported to <u>Tilesets</u> in order to be styled in<br>a style editor. |
|   |  |                      | Ready to visualize your data now?<br>Go to the <u>tilesets page</u> to convert your<br>data to a tileset.  |
|   |  |                      |  |
|   |  |                      |  |

Figure 5.

**Step 04.** After selecting 'Start Editing', the following screen should appear, please refer to Figure 6. To zoom in on a specific point, please using the '+' sign located on the bottom of the top right legend – as seen in Figure 7.



Figure 7.

**Step 05.** After zooming in on the specific dot, point or location you have chosen, click on it. On the left-hand side, a new side bar should appear. In this side bar, it allows users to edit and delete their data according to their preference. As well, add other properties within their data if they wish to do so.



For this example, we will be deleting each 'Year(s)', except for 2019.

Figure 8.

**Step 06.** In the lower portion of the side bar, the following should appear 'Overlapping Features.' The user may click on each layer and the properties of the sidebar will change correlating to the data. If the user wishes to delete a layer, they can choose the trash can icon beside the x and y coordinates of the sidebar, as seen highlighted in red, in Figure 9. The user may continue deleting layers with this method, until they have completed the process.



Figure 9.

**Step 07.** Another way the user can delete layers from their data, is by clicking 'Search Dataset', located on the top right hand of the page. The user may sort the data by the property or field they wish to select.

Again, for this example, we will be deleting each data point that does not fall under the 'Year(s)' 2019.



Figure 10.

**Step 08.** Click on the property you wish to delete; the map will zoom in on the location chosen. Then as previously shown in Step 6 and Figure 9, select the trash can icon beside the x and y coordinates of the left-hand sidebar to delete the chosen layer. The user may continue deleting layers with this method, until they have completed the process.





**Step 09.** In the top right-hand corner, choose the blue 'Save' button, to save the dataset. A pop will appear illustrating what has been added, modified, and deleted. Once more, the user should click on the blue 'Save' button, now located at bottom of the pop up to save their dataset.

The user now has a new saved dataset, as shown in Figure 13.









*Note:* The user may browse their previous history, by clicking on 'History', located in the top right-hand corner. They may also undo, and redo deleted layers.



Figure 14.

*Note:* The user may change the background style of their map. Again, in the top right-hand corner, select 'Background Style' to choose a new style of map.





## Mapbox Studio: Exporting a Tile Set.

The following section has been designed for users who wish to create a tile set within MapBox Tilesets. If you already have a tile set prepared, please scroll to the section "Map Studio: Creating a Map." Thank you.

**Step 01.** Navigate back to the Mapbox Studio's Dataset's web page or the following URL path <u>https://studio.mapbox.com/datasets/</u>. To start creating a tile set, click on the three dotted lines, as highlighted in red, as seen in Figure 16.



Figure 16.

| Datasets   | New dataset    |   |
|--|----------------|---|
| Q Search   | < >            | What is a dataset?  |
| ter by:  | 1 of 1 dataset | A <u>dataset</u> is an editable collection of<br>GeoJSON features. Use Mapbox Studio's  |
| BLT Active Surveillance Results (2013-2019)<br>Created 6 hours ago | ×              | tor or the <u>Datasets AP</u> to<br>edit datasets. Datasets must be<br>toror to tileset<br>toror the <u>Datasets AP</u> to<br>edit datasets. Datasets must be<br>tilesets in order to be styled in<br>itor. |
|  |                | Dataset ID         visualize your data now?           cl287xbkt0a3h2_         0           clccccccccccccccccccccccccccccccccccc   |
|  |                |   |
|  |                |   |

Step 02. A small pop up should appear, with the option to select 'Export to Tileset.'

**Step 03.** Another new pop-up screen should appear, with the dataset's name listed. Click the blue 'Export' button, to export the dataset to a new tile set. The user has the option of changing the name of the new tile set, if they wish to do so.

|   | Export to tileset  |   |
|---|--|---|
| Datasets                                | • Export to a new tileset  | the second se |
| O Search                                | BLT Active Surveillance Results (2013-2019)  | hat is a dataset?   |
| Filter by:                              | ► Update a connected tileset   | lataset is an editable collection of  |
| BLT Active Surveillance Results (2013-2 |  | oJSON features. Use Mapbox Studio's taset editor or the <u>Datasets API</u> to                                  |
| Created 36 minutes ago, modified 14 mir | Studio upload limits: 20 uploads per month   300 MB per upload<br>Uploading data via our APIs allows you to bypass these limits. Use Maphox Tilling Service for<br>vector data or Uploads API for raster data. | eate and edit datasets. Datasets must be<br>ported to <u>Tilesets</u> in order to be styled in<br>style editor. |
| and the second second                   |  | Ready to visualize your data now?   |
|   |  | Go to the <u>tilesets page</u> to convert your data to a tileset.   |
|   |  |   |
|   |  |   |
|   |  |   |

Figure 18.

**Step 04.** If the export was successful, the user should see a notification in the bottom right-hand of their screen stating, "Succeeded Less Than a Minute Ago."



Figure 19.

Step 05. The tile set is now available under the Mapbox Studio Tileset section. The user may also following the URL path <u>https://studio.mapbox.com/tilesets/</u> to access the tile set section, as well.

| Mapbox tilesets   |   | square tiles at 22 preset zoom levels. <u>Read</u><br>more.  |
|---|---|--|
| Mapbox Countries v1<br>Default tileset  | 1 | How to create tilesets   |
| Mapbox Satellite<br>Default tileset   | i | Click (New tileset) to upload your data.<br>Mapbox renders <u>vector tiles</u> from your<br>data so you can create styles from it.   |
| Mapbox Streets v8<br>Default tileset  | 1 | You can also use Mapbox default tilesets.<br>Read the <u>Vector tiles docs</u> to find out<br>more.  |
| Mapbox Terrain v2<br>Default tileset  |   | How to use tilesets<br>Once your vector tiles are ready, you can   |
| Mapbox Terrain-DEM v1<br>Default tileset  | I | add them to a new or existing style. First<br>open your style in the style editor. Next,<br>you can either create a new layer with this<br>tileset as the source, or you can change an |
| Mapbox Traffic v1<br>Default tileset  | I | existing layer's data source to this tileset.  |
| Custom tilesets   |   |  |
| BLT_Active_Surveillance_Resul-6auv3z Created in Studio • Modified 4 hours ago • Private 1,198 km <sup>2</sup> | i | C C  |
|   |   | Figure 20.   |

## Mapbox Studio: Creating a Map

For the following examples below, the author has decided to show 2013 to 2019 Blacklegged Tick Data. Thank you.

**Step 01.** Navigate to the following URL path <u>https://studio.mapbox.com/</u>, where the 'Style's' page should appear.

Click on the blue 'New Style' button to begin creating a new map. Users already familiar with Mapbox Studio also have the option to upload their own style.



Figure 21.

**Step 02.** The user can select a template of their liking, however for this example, we'll be using the 'Basic Spring' template.

After selecting the template, choose the blue 'Customize Basic' button to begin creating the map.

| Choose a template  |              |   | llois-Perret  |
|--|--------------|---|---|
| of Paris<br>Basic ✓<br>The best way to get started.                        | San Fran     | Monochrome<br>Start with a Monochrome style.                          | 17TH<br>ARRONDISSEMENT  |
| San Francisco<br>A complete basemap, perfer<br>incorporating your own date | ct for<br>a. | Outdoors<br>General basemap tailored to hiking, biking,<br>and sport. | BTH<br>ARRONDISSEMENT<br>9th Arrondissement<br>Bth Arrondissement<br>of Paris |
| Choose a variation   |              |   | NT  |
| Base   | Chilled      | Galaxy  | ARRONDISSEMENT  |
| Overcast   | Seashore     | Spring  | 6TH<br>ARRONDISSEMENT   |
| Cancel   |              | Customize Basic   | ARRONDISSE  |
|  |              |   |   |



**Step 03.** The following map and screen should appear – as seen in Figure 23. On the left-hand side, navigate to the 'Layers' section, as shown in Figure 23 again, highlighted in red.



Figure 23.

Step 04. Select 'Source', and select a tile set for your map. For this example, we will be choosing 'BLT\_Active\_Surveillance.'



Figure 24.

**Step 05.** Remember to select your location setting. In the top right-hand corner, a search bar should appear, type the following 'Toronto, Ontario', hit enter to select.





**Step 06.** A map with your set location, along with your data should appear. There are a multitude of ways to customize the map, such as selecting a new radius for the data points, a new stroke colour and so on. However, we will be keeping this map simplistic for the demonstration.



**Step 07.** Click 'Style Across Data Range', the following pop up should appear. Scroll and select the 'Year #' option.







**Step 08.** For the multiple options, click on '+ Add Another Stop', as highlighted in red, shown in Figure 29. This will allow the user to have option to add each year of their data. We will be adding each year from 2013 till 2019.



Figure 29.

**Step 09.** After completing adding each year to the map, select 'Color' and then select 'Style Across Data Range.' Each year should appear. Style the years to which ever your preference may be. For this example, we styled each year in one colour, but in different shades as seen in Figure 31. As well, we also styled the map, so each year represented a new colour, seen in Figure 32.







Figure 31.

| Styles > Basic Edited 1 minute a       | go                |                                 |          | 10.30 43.716,-79.358  | 🕐 Help | Tt Fonts                               | 🛃 Images | 🗄 History | 🖨 Settings | 🖶 Print    | ① Share     | Publish   |
|--|-------------------|---------------------------------|----------|-----------------------|--------|--|----------|-----------|------------|------------|-------------|-----------|
| Components Layers 🗍 🗊 3D               | • blt-active-s    | urveillance-res Style Select d  | ata X    |                       | Tt.    |  | 24       | 1.1       | I MARTIN   | Q Tor      | onto, Ontar | o. Canada |
| + 🖬 🗃 🗞 💼 45/45 🏹                      | Radius            | Circle color Data range         |          | Vaughan               | 1      | NY                                     | 1.5.     | HX-       | A: 4 .     |            | ale -       | AL CA     |
| • blt-active-surveillance-resul-6au    | 5 px              | 0 0 0 0 0                       |          |                       | 1-4    | -                                      | 1:13     | A II      |            | CARBOROUGH | se sg       | REOROUG   |
| Re Place labels place-labels           | Color             | 2k 2k 2k 2k 2k 2k 2k            |          |                       | 10/2   | 15 10                                  | 1.97     |           | T. H.      | NORTH      | 1000        | OUGE PARK |
| Gransit transit-labels                 | (= ••••••         | Rate of change linear           | Edit     |                       | Ser.   |  | 1.01     | 1         | 1.1.1      | . Het      | Carter.     | 12 . A    |
| Point of interest labels poi-labels    | Blur              | Year 2013                       | Edit     | the state             | 23     | · ···································· | 12       | 14        | 14.1       | Hit        |             | Mar 1     |
| Atural features natural-labels         | Omerita           | hsl(29, 87%, 70%)               | ton to   | 120                   | 10     |  | . Fre    | 50        | 1. 1       | 1          | ARBOROUGH-  | 1.30      |
| Walking, cycling, etc. walking-cycling | 1                 | Year 2014                       | Edit     | SHUBBLE               |        | WILLOW                                 | IDACE    | 5.00      | STON       | X          | GUILDWOOD   | 1         |
| Road network road-labels               | Stroke Color      | hsl(186, 51%, 59%)              | HORE     |                       | M.     | 1.13                                   | 1.00     | 124       | CENT       | OUGH RE    |             |           |
| Administrative boundaries admin        | 0                 | Year 2015<br>hsl(275, 50%, 73%) | Edit RTH | HUMBER<br>RIVER-BLACK |        |  |          | 430 ×     |            | 11         | 1.1         |           |
| Road network bridges                   | Stroke Width      | Year 2016                       | Edit     | CREEK L.              | T      | GLINTON-                               | 1.3      |           | FORT       | 3.         | × ••        |           |
| Walking, cycling, etc. barriers-bridge | 0 px              | hsl(334, 40%, 60%)              |          |                       | 1.     | LAWRENCE                               |          | 32.3      |            | ·····      | n           |           |
| Road network surface                   | Stroke Opacity    | Year 2017 Edit                  | Edit     | A State               | k.F-   | IX                                     |          | 1 Ste     | the set    | SCARBORO G |             |           |
| Walking, cycling, etc. surface         |                   | #4da284                         |          | TIPAL                 | 1.1    | 124                                    | 1        | 1 -       | TE         | Z          |             |           |
| Road network tunnels                   | Translate<br>0, 0 | Year 2018 #68abb8               | Edit     | ETOBICOKE<br>CENTRE   | ATT    |  |          | TIT       | EAST YORK  | •          |             |           |
| Walking, cycling, etc. tunnels         | Translate anchor  | Year 2019                       | Edit     |                       | TH     |  | 1.1 B    |           | al el      |            |             |           |
| Buildings built                        | 9                 | #eb7f86                         | 1        | Ta ALL                |        |  | Toronto  | it.       | A.A.       |            |             |           |
| Transit built                          | Pitch Scale       | + Add another stop              | 123      | T. ANT                | •      | 1                                      | PADINA-  | -         |            |            |             |           |
| S Land, water, & sky built             | 0                 |                                 | - 70-1   | St How                | 2      |  |          | 1         |            |            |             |           |
| Cand, water, & sky water               | Pitch Alignment   | (Q Style across zoom range      | 1.10     | 1 1                   |        |  | 1.00     |           |            |            |             |           |
| S Land, water, & sky land              | w later           | 9 Style with data conditions    |          | ETOBICOKE-            |        |  |          |           |            |            |             |           |
|  |                   | ► Details                       |          | LAKESHORE             |        |  |          |           |            |            |             |           |
|  |                   |                                 | 11/1     |                       |        |  |          |           |            |            | г.          |           |

Figure 32.

**Step 10.** Remember to change the map's name, this function is in the top left-hand corner or as highlighted in red, in Figure 33.

Now, we're ready to publish the map. In the top right-hand corner, click the blue 'Publish' button.



**Step 11.** The following pop-up screen should appear, with a comparison of the map, before and after.

Select the blue 'Publish' button, now located in the bottom corner of the pop-up window, to save and publish your map.



Figure 34.