## **Climate Change**



# **User Manual**

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Version 1.0

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### 1. Introduction

We are pleased that you have chosen Team Climate Change for your project. Our web map application can provide the user interaction to let users easily see the CO2 emission changes in the U.S. such as search location, change layer function etc.. And our ranking page and download page are used to support the map page to let users easily see the ranking of different emission statistics as well as download the data used.

The purpose of this user manual is to help you, the client, successfully install, administer, and maintain the website product in your actual business context going forward. Our aim is to make sure that you are able to use our product and let more people get to know about emissions for many years to come!

#### 2. Installation

For delivery, we will put all the code in one folder, all you need to do is put this folder into your service, and create three links in your own web page, and link it to our map, ranking, and download page.

It can be easy to do with this line of html:

<a href="<link to file>"> <the name or short introduction> </a>

#### 3. Configuration and Daily Operation

Gmail:

account: nauclimatechange@gmail.com

password: nau123456

Mapbox:

account: TeamClimateChange

password: nau123456

3.1. Data

All the layers will be converted by the Python tool called GDal to color it. The color range used to convert it will be calculated by the percentage (for the percentage, in each sources we using 1 for the year's layer which has the highest Max\_Value) in data\_values.csv file which calculate by Max\_Values in the layer, the data\_values.csv file, and all sixty six color range text data files will be turned in with this user manual.

3.2. Mapbox studio

The sixty six converted layers has been uploaded into Mapbox Studio Tilesets, and the origin data used to show information are in the Mapbox Studio Datasets and has been loaded into Mapbox Studio Tilesets. All these raster layers in Mapbox Studio Tilesets are being used in our map in Mapbox Studio Styles.

#### 4. Maintenance

#### 4.1. data

If you want to add in more data to the map like add 2016's data in map, these 11 sources' color range in all years need to recalculate what 2016's Max\_value in that source was highest, and using GDAL to re-convert it.

#### 4.2. Mapbox studio

If you want to add in more data to the map, you need to add a converted raster layer in Mapbox Studio Tilesets, and when you upload the file, the file name has to be <source name>-<year>. And the data for the show information function need also be named as: data<year>, as the data name used needs to be the same as what we have right now. Then, you can just copy a map in Mapbox Studio Styles, rename the map with the year, and replace the raster layer.

#### 4.3. Code

All the code for the map page has been combined into one HTML file called map.html.

If you want to add in more data into the map, for example the data for 2016, once you complete what you should do for data and Mapbox Studio, first copy the same things, replace 2015 with 2016, and replace the map API links :

```
<label>For 2 0 1 5</label>
<input id="mapbox://styles/teamclimatechange/ck8fn6150562g1jmokwmyl1et" type="radio" name="rtoggle"
value="light" />
```

Then, add all rasters layer with its source links like this:

```
// layer for 2015
map.om('load', function () {
    map.addLayer({
        'id': 'total',
        'type': 'raster',
        'source': 'mapbox://teamclimatechange.4wgl54x5',
        'layout': {
            'visibility': 'none'
        }
    });
```

## 5. Troubleshooting

• The map will not update after you modified on Mapbox Studio:

Check if you forget to click the publish button.



• If the map does not work at all:

Check on the Mapbox account, since we only have limited free access each month, if there are too many visitors, there will be charges.



## 6. Conclusion

We are honored to help you solve the problem, and hope the product will work well in the future. While we are all moving on to professional careers, we would be happy to answer short questions in the coming months to help you get the product deployed and operating optimally in your organization.