

You are viewing this thread in readonly mode.

Filtering by Year #422

G

Gilbert Yin

5 months ago in **Assignments – Vis 2 Vega-Lite**

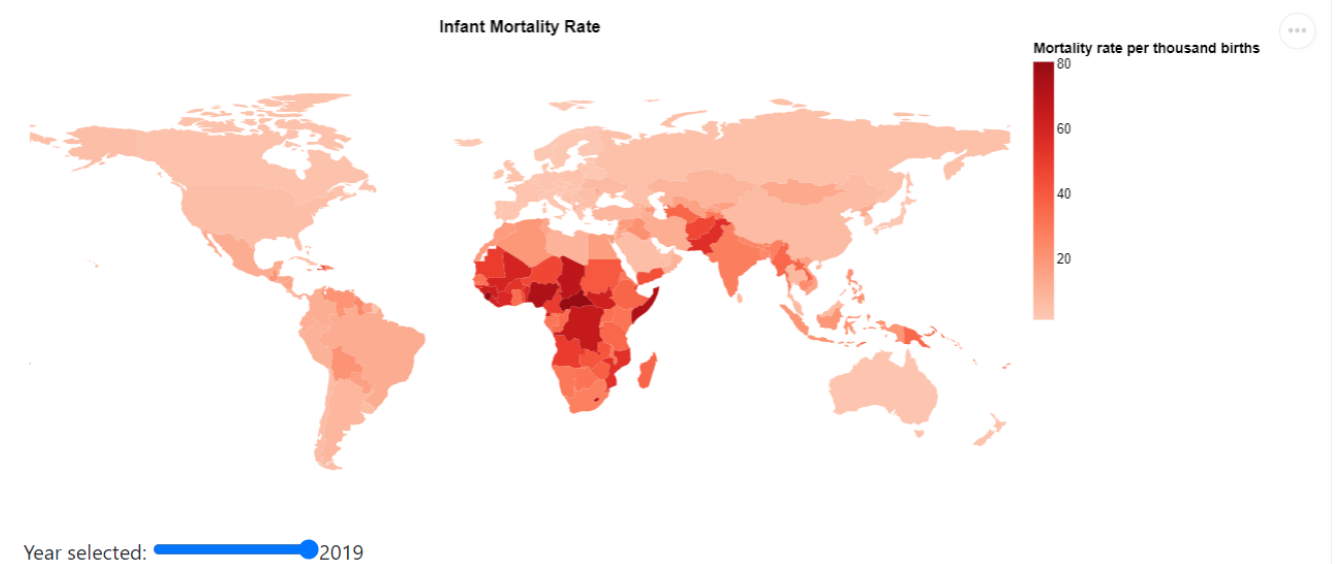
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VIEWS

Hello teaching staff,

I had a question regarding filtering and selection. I understand how to filter based on a specific value (e.g. if the value is above x or selecting the continent based on a continent column). However, after searching around, I have not come up with a solution to select which column to display for the map depending on what year is selected.

What impacts infant mortality?



This is my current visualisation but I would like to change which column of data is being used depending on what year is selected.

1 Answer

K

Kane Li STAFF

5 months ago



Hi Gilbert,

I can not edit your vega lite codes since the data link is a relative path.

Here are two solutions:

1. Long format (csv file): <https://edstem.org/au/courses/6022/discussion/609928> -> this will be discussed in the week-10 tutorial.

2. Wide-format (csv file) - as what you have here.

Pay attention to codes in Lines 6-18, Line 69, and line 75.

```
{
  "$schema": "https://vega.github.io/schema/vega-lite/v5.json",
  "title": "Median house price per suburb (2010-2020)",
  "width": "container",
  "height": 500,
  "params": [
    {
      "name": "Year_selection",
      "value": 2018,
      "bind": {
        "input": "range",
        "min": 2010,
        "max": 2020,
        "step": 1,
        "name": "Year: "
      }
    }
  ],
  "projection": {
    "type": "equiarectangular",
    "center": [145, -37.95],
    "scale": 30000
  },
  "layer": [
    {
      "data": {
        "url":
"https://raw.githubusercontent.com/KaneSec/vega_lite/main/6_advanced_examples/data/VIC_LOC

        "format": {"type": "topojson", "feature": "VIC_LOCALITY_POLYGON_SHP"}
      },
      "transform": [
        {
          "calculate": "'Data is not available in ' + datum.properties.NAME",
          "as": "note"
        }
      ],
      "mark": {
        "type": "geoshape",
        "fill": "#ddd",
        "stroke": "white",
        "strokeWidth": 1
      },
      "encoding": {"tooltip": {"field": "note"}}
    },
    {
      "data": {
        "url":
"https://raw.githubusercontent.com/KaneSec/vega_lite/main/6_advanced_examples/data/house_p
```

```

    },
    "transform": [
      {
        "lookup": "locality",
        "from": {
          "data": {
            "url":
"https://raw.githubusercontent.com/KaneSec/vega_lite/main/6_advanced_examples/data/VIC_LOC

            "format": {
              "type": "topojson",
              "feature": "VIC_LOCALITY_POLYGON_SHP"
            }
          },
          "key": "properties.NAME"
        },
        "as": "geo"
      },
      {
        "calculate": "datum[Year_selection]", "as": "year_price"
      }
    ],
    "mark": { "type": "geoshape", "stroke": "#fff", "strokeWidth": 0.5 },
    "encoding": {
      "shape": { "field": "geo", "type": "geojson" },
      "color": {
        "field": "year_price",
        "type": "quantitative",
        "scale": {
          "domain": [
            400000,
            1800000
          ],
          "scheme": "reds"
        }
      },
      "legend": { "format": ".2s" }
    },
    "tooltip": [
      { "field": "locality", "type": "nominal", "title": "Suburb" },
      {
        "field": "price",
        "type": "quantitative",
        "title": "Median Price",
        "format": ","
      },
      { "field": "year", "type": "quantitative", "title": "Year" }
    ]
  }
},
"config": {}
}

```

I will delete your codes and make this post public.

Cheers,

Kane

G

Gilbert Yin 5mth

Thank you Kane, it worked due to your help.

Regards.

For anyone else wondering, I loaded in all the years with:

```
"fields": [  
    "1985",  
    "1986",  
    "1987",  
    "1988",  
    "1989",  
    "1990",  
    "1991",  
    "1992",  
    "1993",  
    "1994",  
    "1995",  
    "1996",  
    "1997",  
    "1998",  
    "1999",  
    "2000",  
    "2001",  
    "2002",  
    "2003",  
    "2004",  
    "2005",  
    "2006",  
    "2007",  
    "2008",  
    "2009",  
    "2010",  
    "2011",  
    "2012",  
    "2013",  
    "2014",  
    "2015",  
    "2016",  
    "2017",  
    "2018",  
    "2019"  
]
```

And then for everything else I followed Kane's example

...

K

Kane Li STAFF 5mth

Thanks for sharing that, Gibert. Glad you figured that out. Yes, if you are joining the csv with the topojson file, then you need to load all the fields.

If you are joining the topojson file with the csv, then all the fields are loaded by default.

Cheers,

Kan e
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