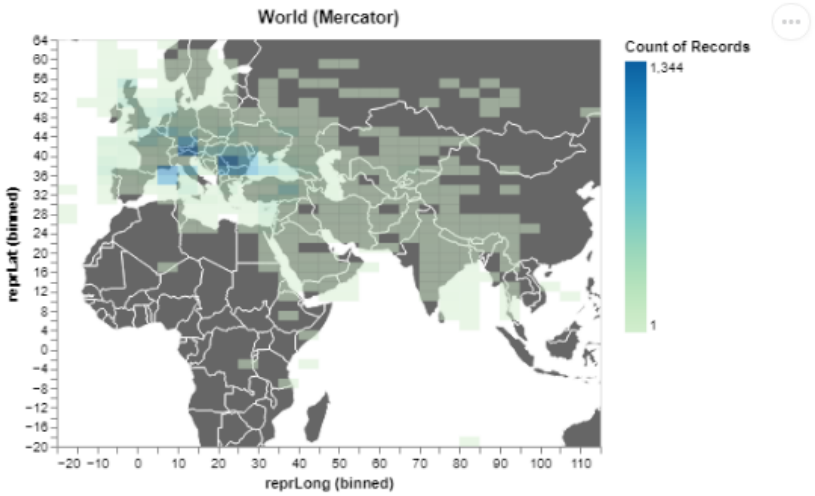
What can we learn from the visualization?

Observing frequency of buildings in data set creating a density plotting graph showing what is more frequent where

What is the name for the type of visualization(s) used?

binned heatmap with GeoMap background

```
import pandas as pd
import altair as alt
from vega_datasets import data

locations_table = pd.read_csv(r"https://raw.githubusercontent.com/SwanseaU-TTW/csc337_coursework1/master/pleiades-locations-latest.csv")
pd.set_option('display.max_columns', None)
alt.data_transformers.disable_max_rows()
locations_table.head()

countries = alt.topo_feature(data.world_110m.url, 'countries')
selector = alt.selection_single(empty='all', fields=['featureType'])
colours_condition = alt.condition(selector,'featureType:N',alt.value('#666666'))

# Used world cropping map of World inspired from https://stackoverflow.com/questions/61135952/vega-lite-altair-how-to-center-or-crop-a-map-of-europe
background = alt.Chart(countries).mark_geoshape(
    fill='#666666',
    stroke='white'
).project(
   type= 'mercator',
    scale= 155,                         # Magnify
    center= [50,27],                    # [lon, lat]
).properties(
    title='World (Mercator)',

)
binned_heatmap = alt.Chart(locations_table).mark_rect(
    fillOpacity=0.5
).encode(
    alt.X('reprLong:Q', bin=alt.Bin(maxbins=60)),
    alt.Y('reprLat:Q', bin=alt.Bin(maxbins=60)),
    alt.Color('count(featureType):Q', scale=alt.Scale(scheme='greenblue')),
).properties(
    title='World (Mercator)',

)



background + binned_heatmap
```



What are all visual mappings used?

x position

latitude of location

y position

longitude of location

Was there any special data preparation done?

Data was agregated by count of records

What are the limitations of your design?

Data easy to read on what is the most frequent ares but not what is the least frequent area. Boxes in the binned heatmap are too big to show particularly denser areas.