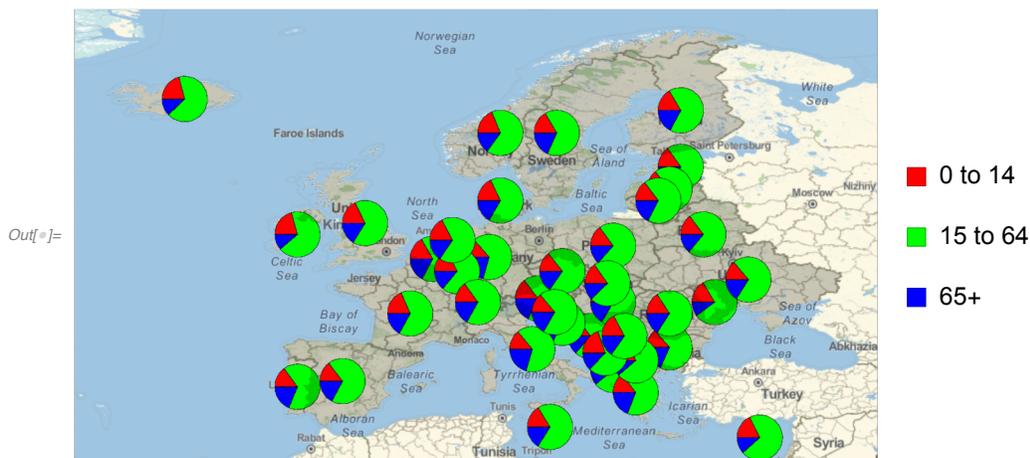


Geography & Climate & Visualization

Computational ClassNotes

dara@lossofgenerality.com

Age distribution mapped to geographical locations



⋮

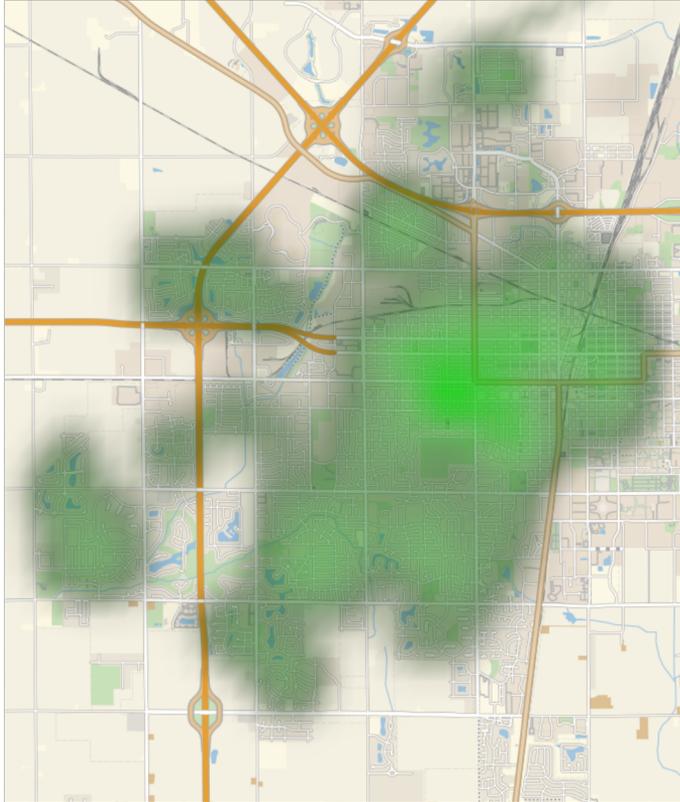
Geographic Timeseries

Tree/vegetation growth

```
In[ ]:= trees = GeoPosition[  Number of points: 26953  
Lat bounds: {40.1, 40.2}  
Lon bounds: {-88.3, -88.2} ];
```

```
GeoSmoothHistogram[trees, ColorFunction -> (RGBColor[0, 0.8 #, 0, 0.8 #] &)]
```

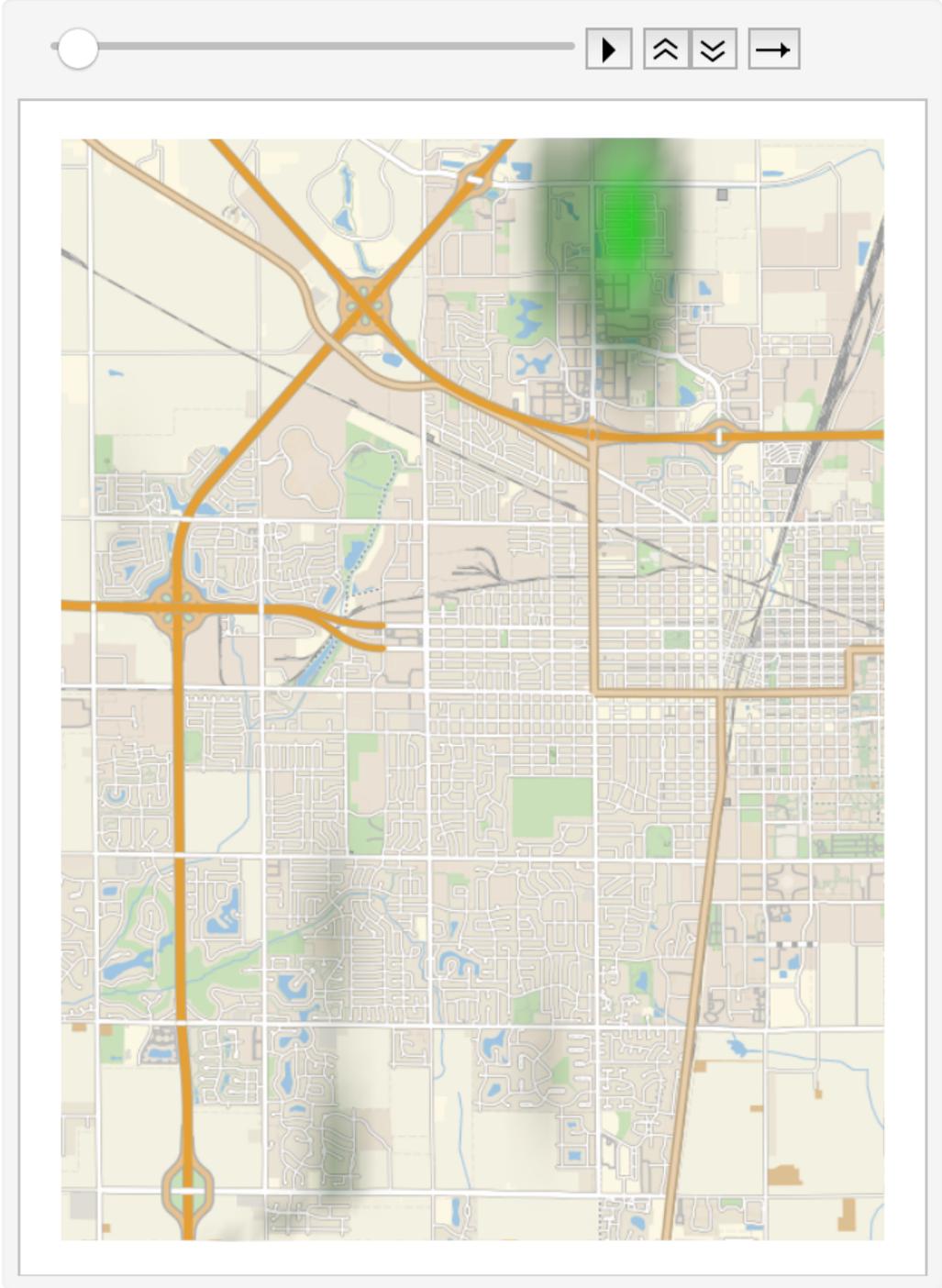
Out[]:=

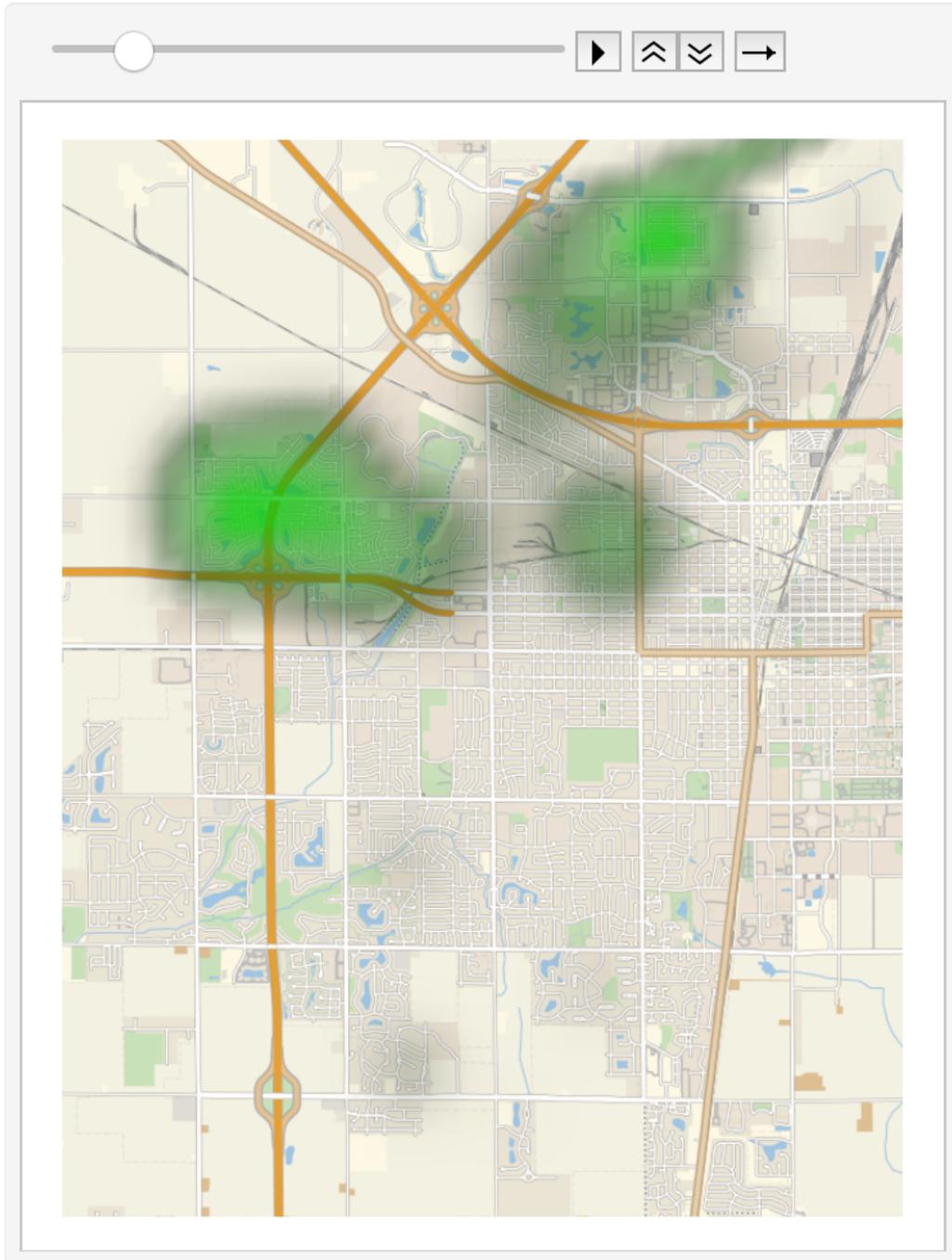


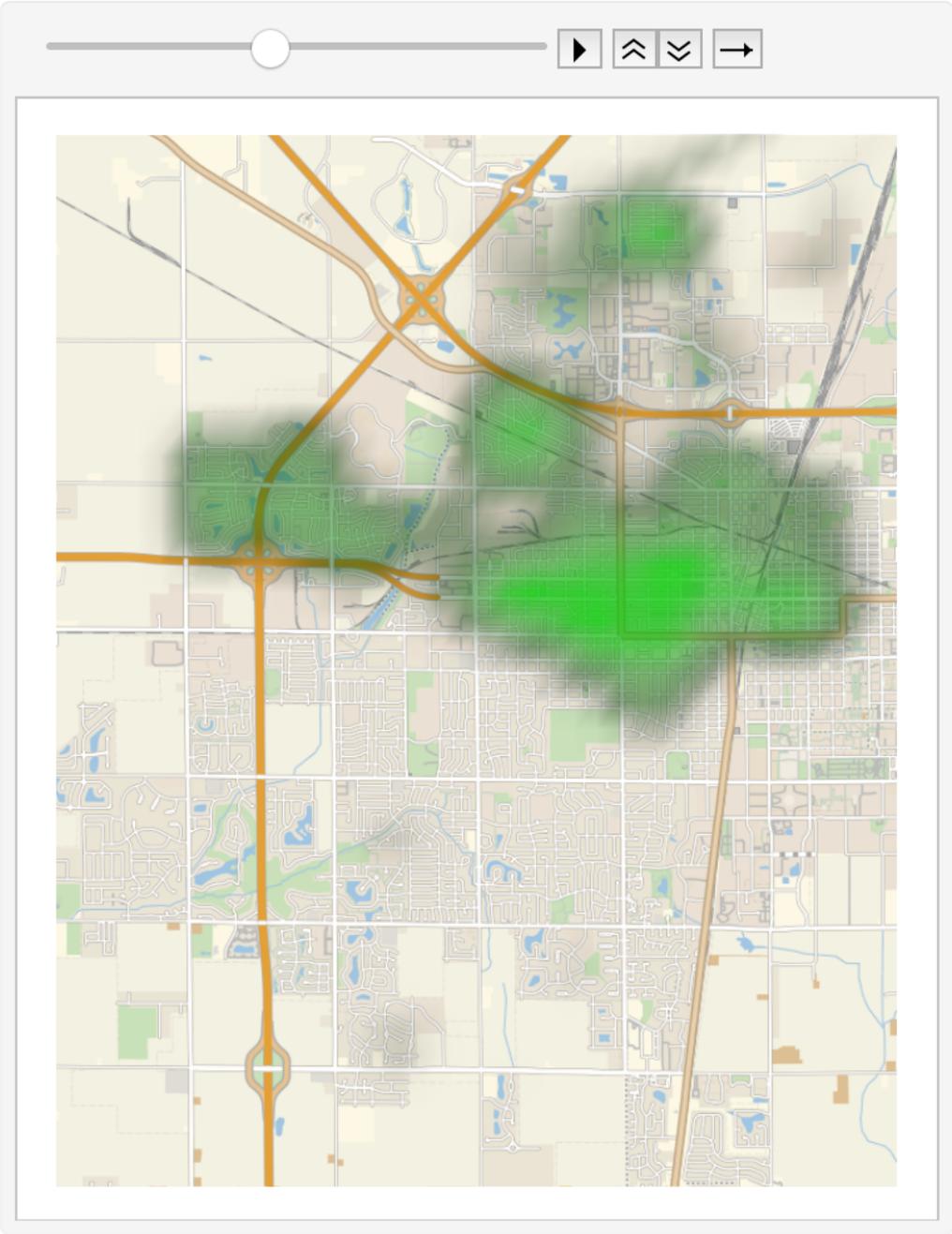
Animate

URL for the animation accessible by all mobile devices:

<https://my.comclassnotes.com/guest/5340/example>



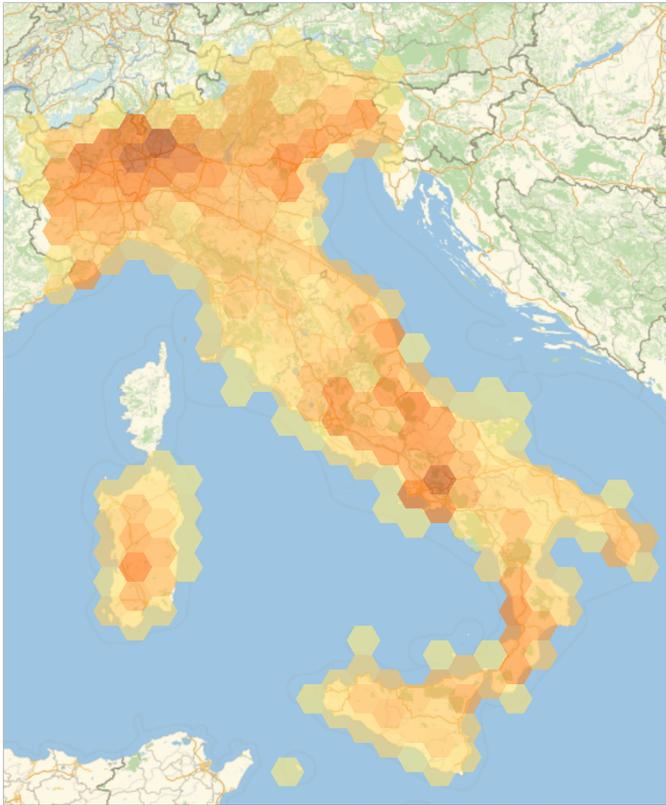




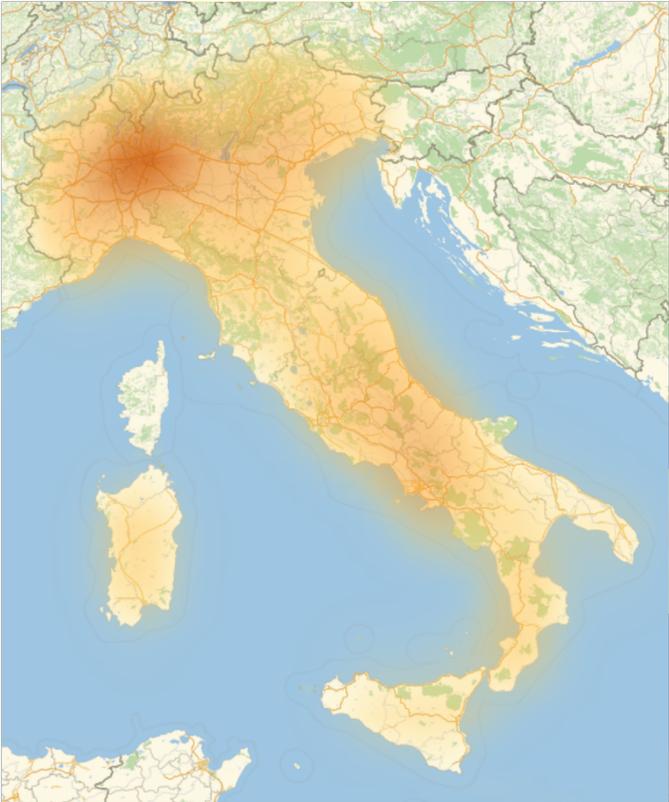
Geographic Histogram

```
In[ ]:= data = GeoPosition[  Number of points: 5915  
Lat bounds: {36.7, 47.}  
Lon bounds: {6.95, 18.5} ] ;
```

Out[]:=



Out[]=



Geographic Bubble Chart

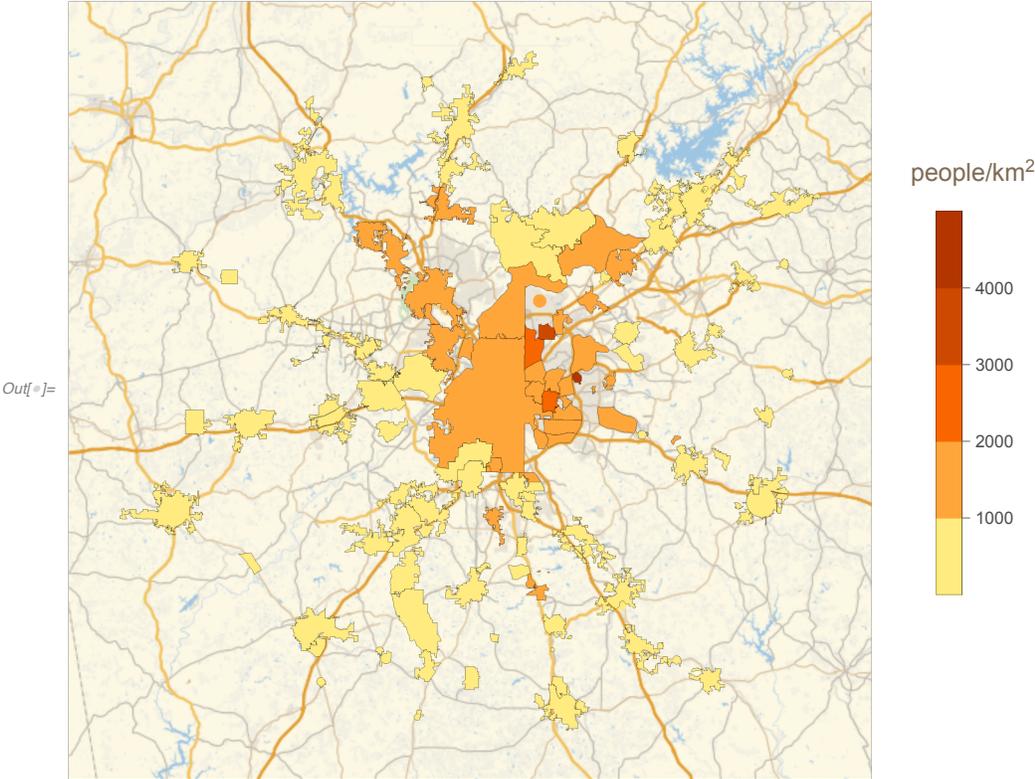
Population of 40 cities in Ireland

Out[]=



Geographic Region Plot

Boundary maps of Atlanta and Population Density

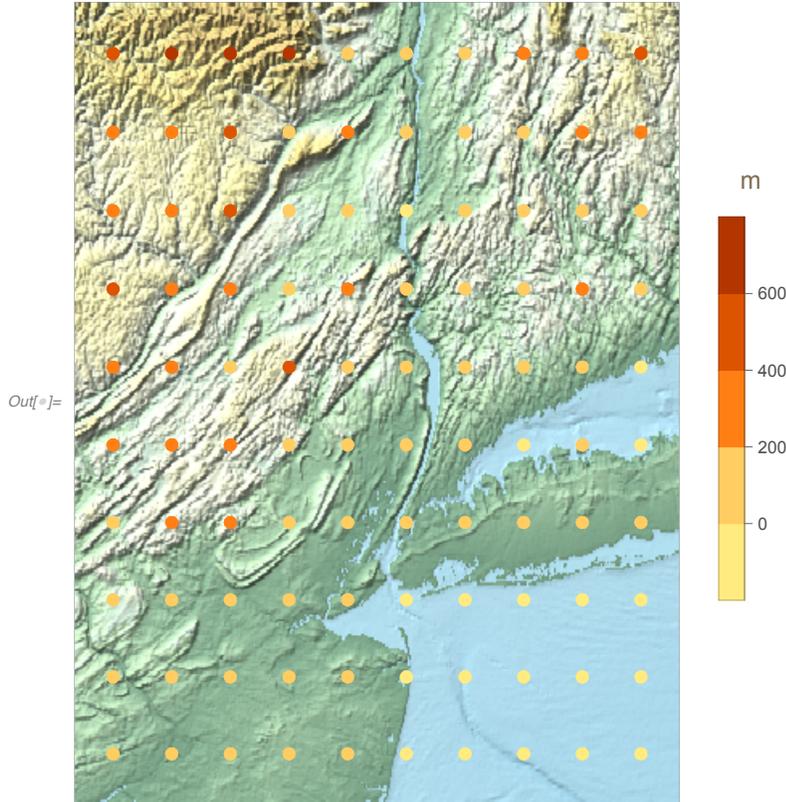


Show land elevations and water depths in the region of New York City with color and tooltips:

```

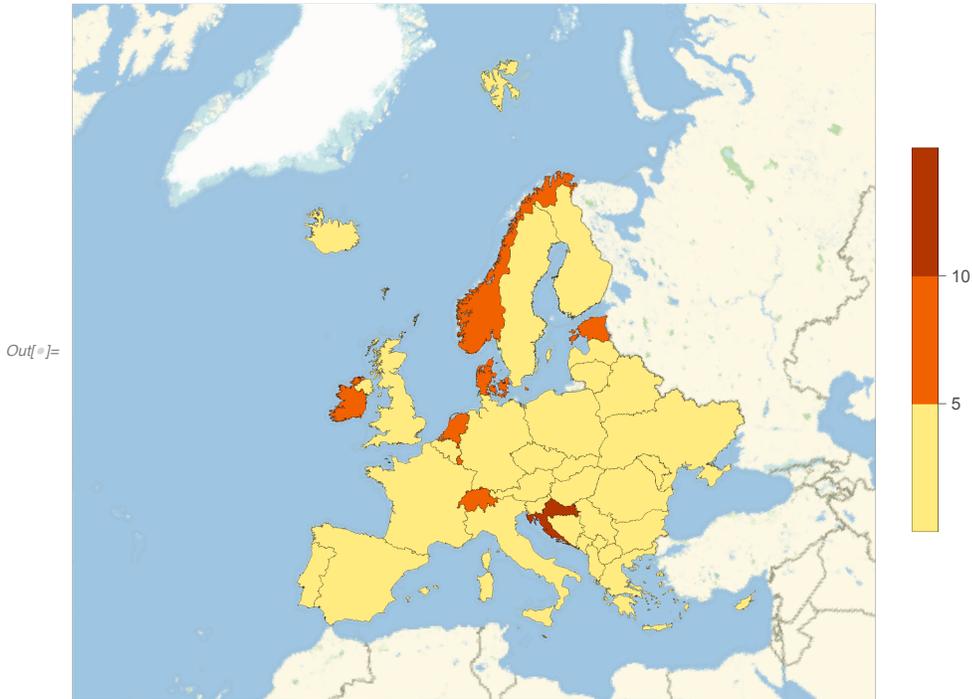
In[ ]:= data = MapThread[Rule, {#, Map[GeoElevationData[#] &, #, {2}]}], 2] &[
  Table[GeoPosition[{39.945833 + i/5, -72.985833 - j/5}], {i, 1, 10}, {j, 1, 10}]];
GeoRegionValuePlot[(Flatten@data), GeoBackground -> GeoStyling["ReliefMap"],
  GeoLabels -> (Tooltip[#1, #4] &)]

```

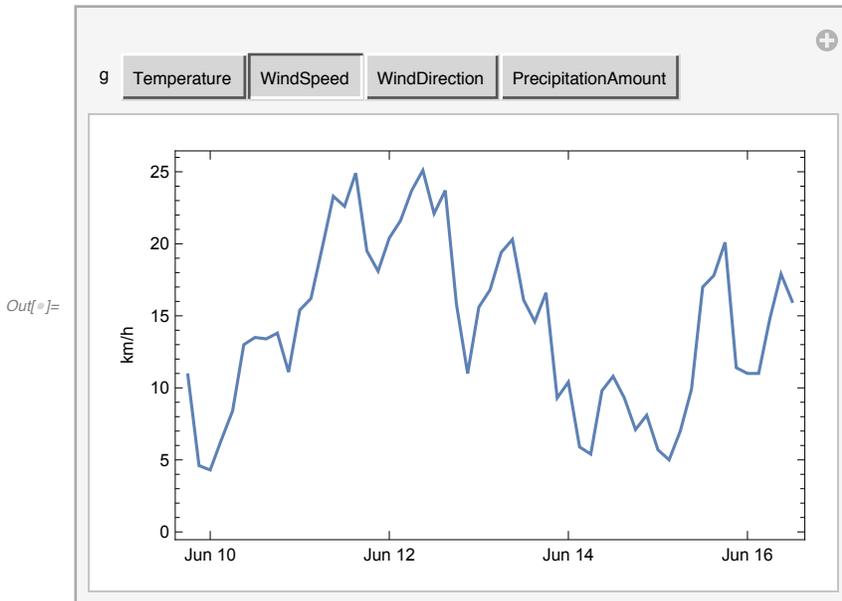


Geography & Climate

Examine total rainfall amounts for capital cities in Europe for the coming week:



Interactive Weather Forecast



Fancy graphics could be added to the output of AI algorithms

Out[]=

