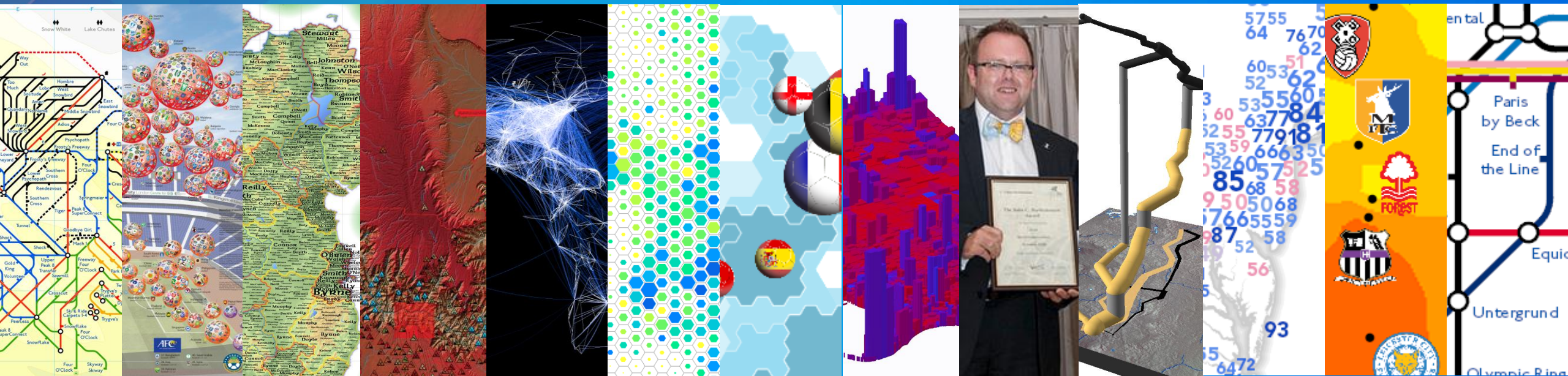




# FULL THROTTLE MAPPING

Kenneth Field and Damien Saunder

# Kenneth Field (@kennethfield)





Damien Saunderson  
(@damiensaunderson)



# Context and Content

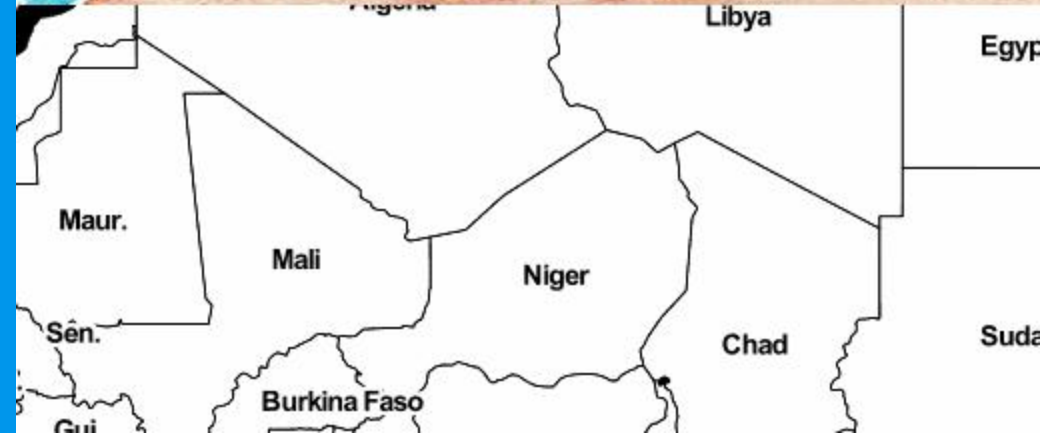
Making a compelling map





# Basemap styling

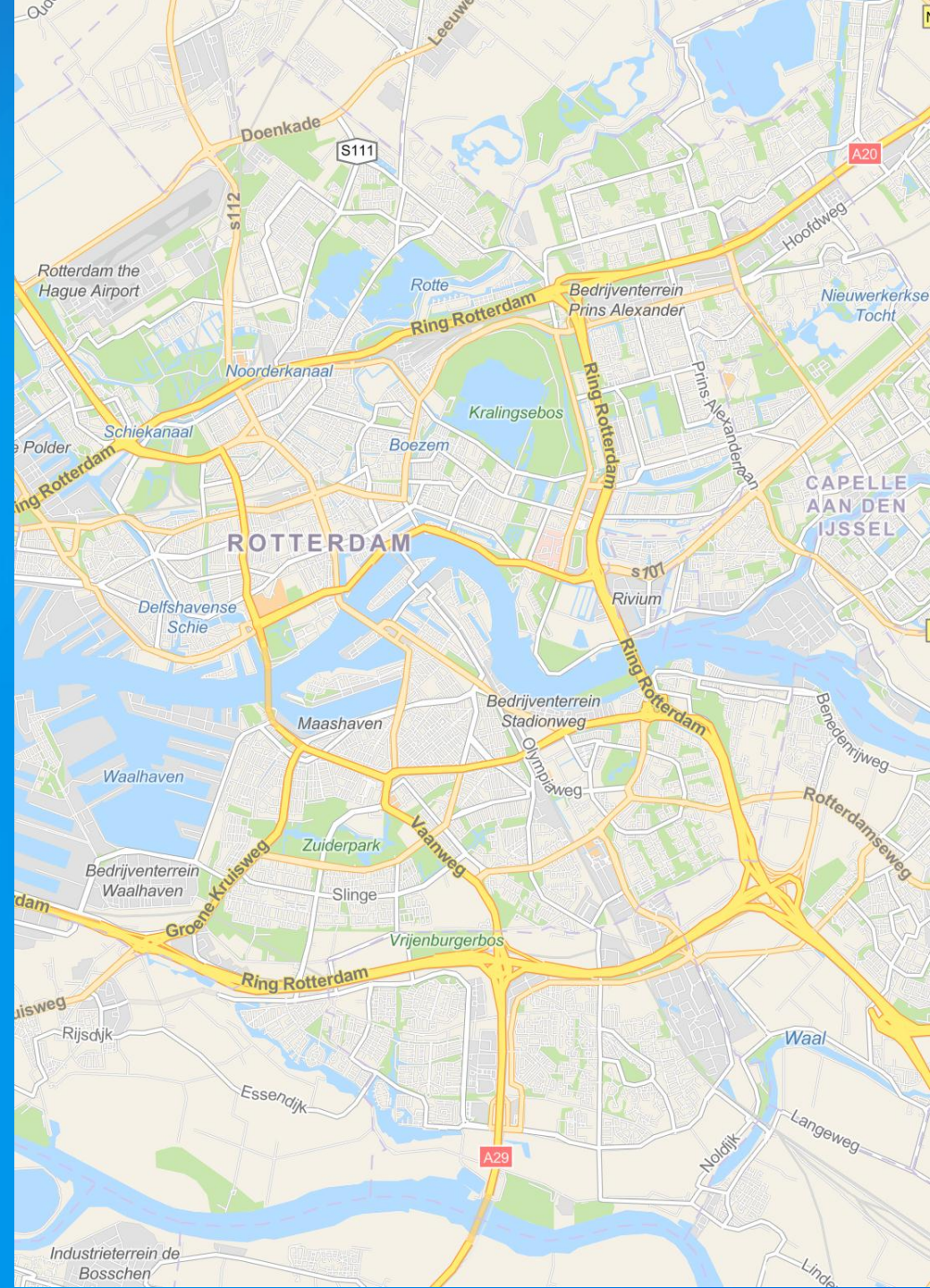
Kenneth Field





# Vector basemaps

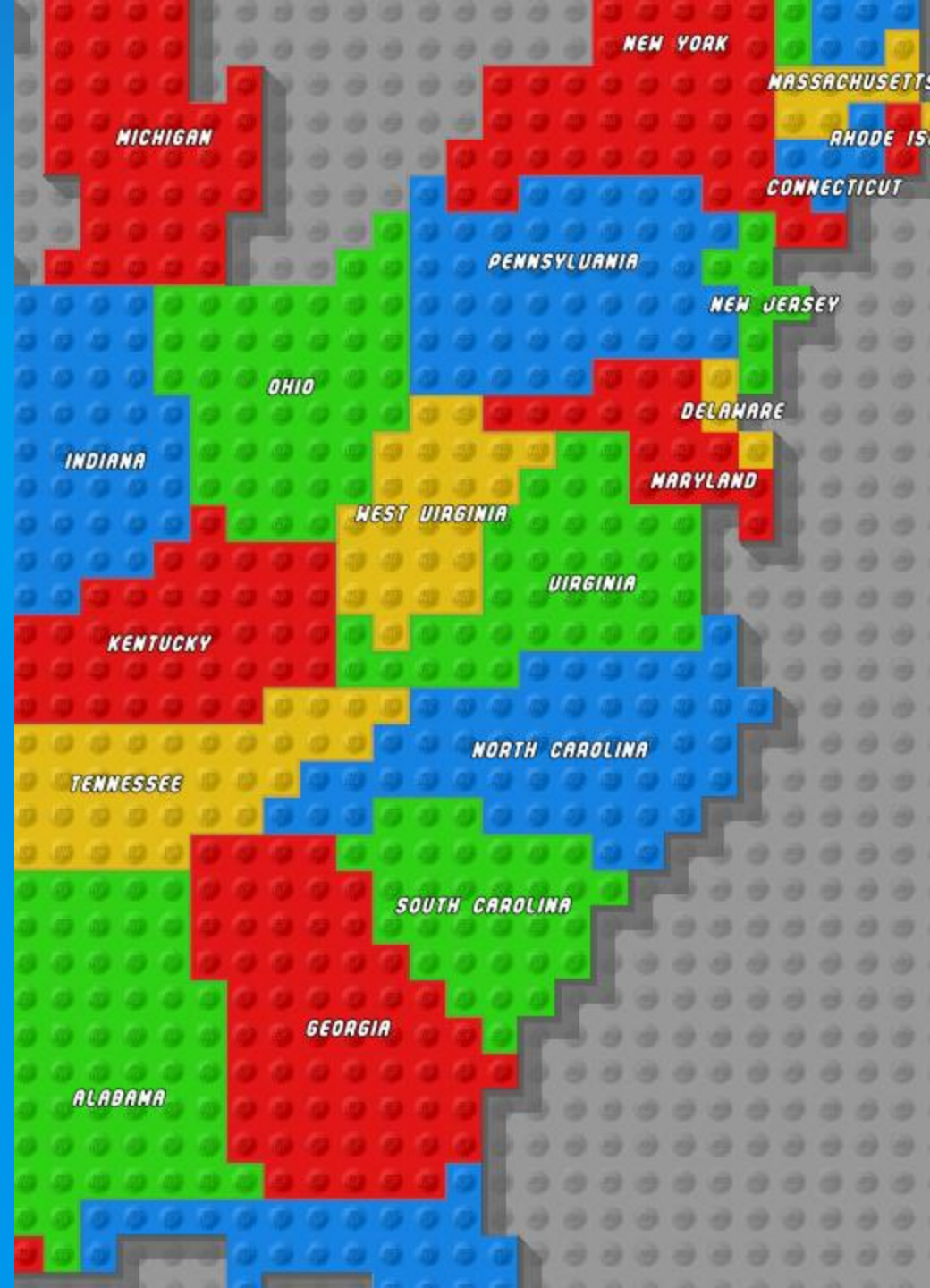
Damien Saunder





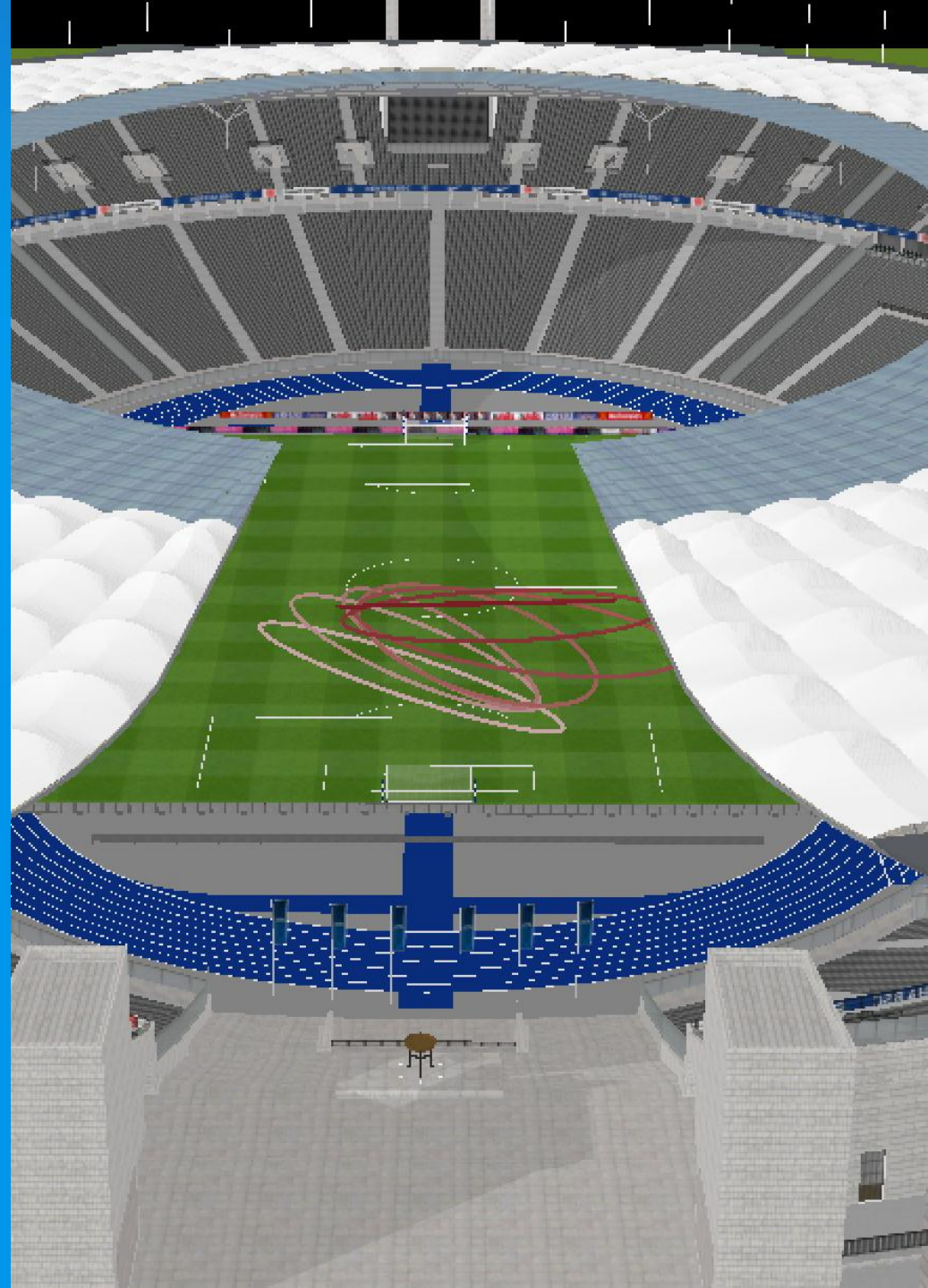
# Non Web Mercator

Kenneth Field



# Using 3D models

Damien Saunder





# Pseudo-Natural

Kenneth Field



# Single Themes

Making the most of simple data



# Data Art

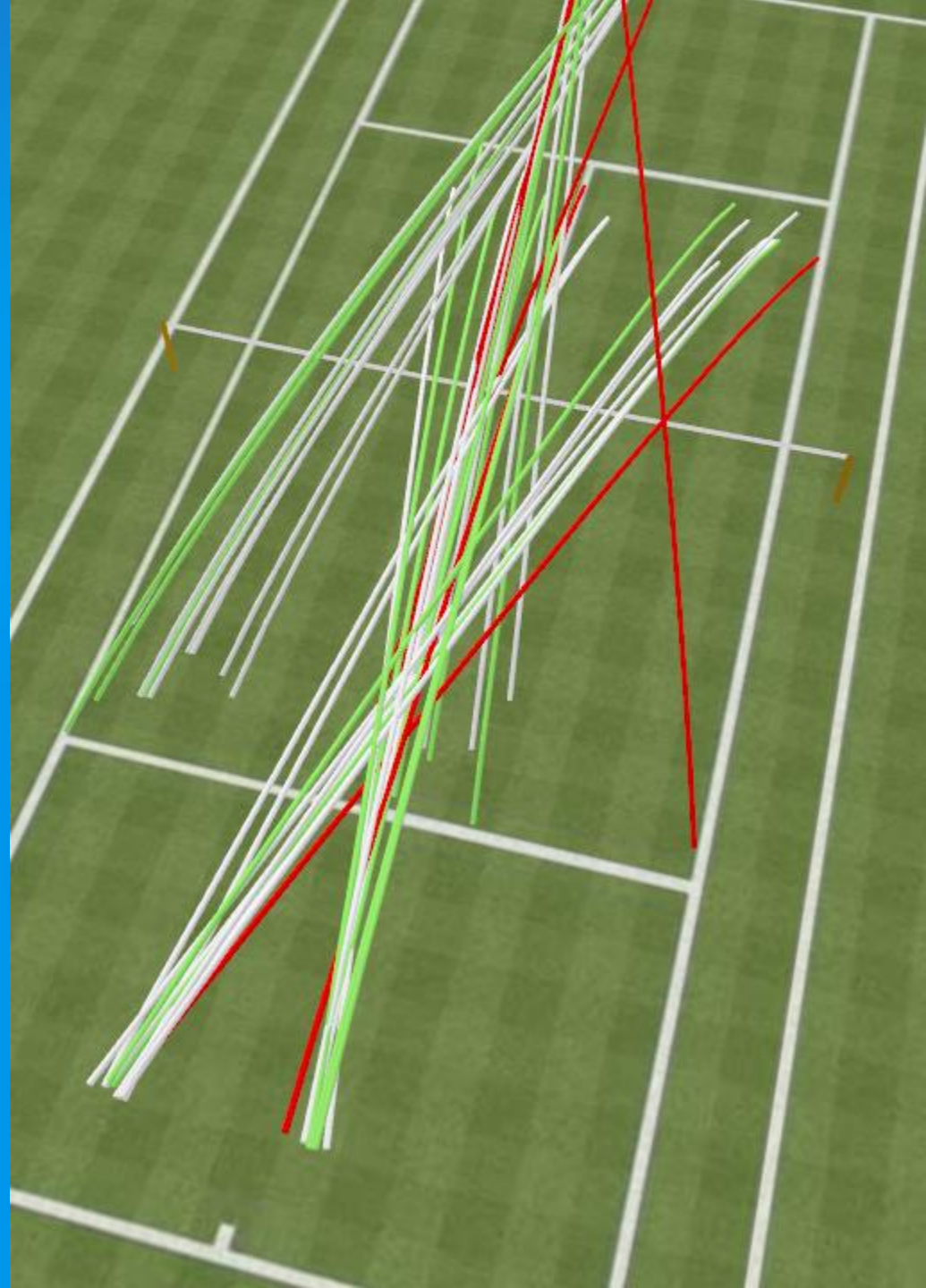
Kenneth Field

Minneapolis St Paul Intl  
Chicago O'Hare Intl  
Lester B Pearson Intl  
Pierre Elliott Trudeau Intl  
Hartsfield Jackson Atlanta Intl  
General Edward Lawrence Logan Intl



# 3D trajectories

Damien Saunder





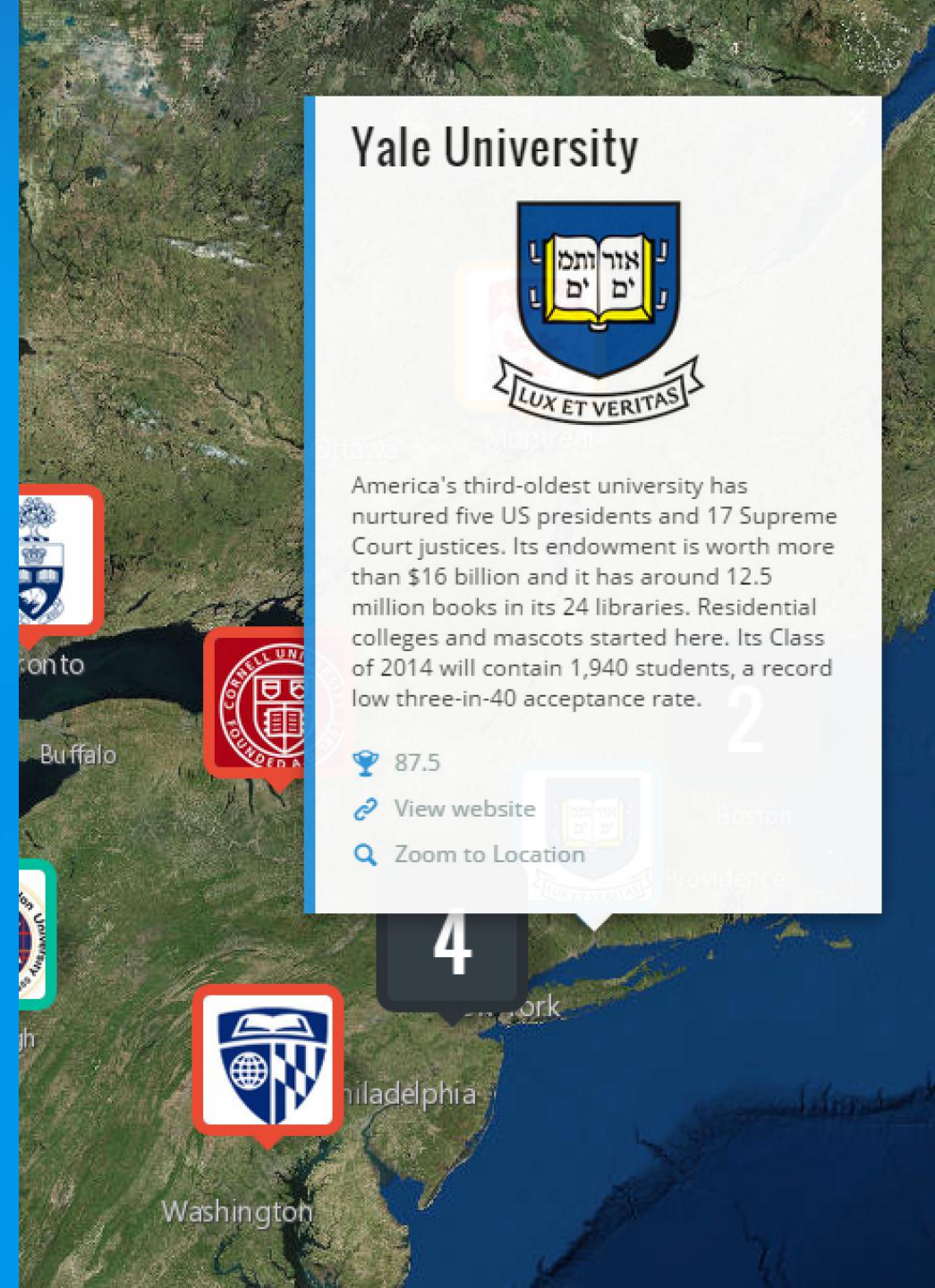
# Proportional pictorial

Kenneth Field



# Clusters

Damien Saunder



## Yale University



America's third-oldest university has nurtured five US presidents and 17 Supreme Court justices. Its endowment is worth more than \$16 billion and it has around 12.5 million books in its 24 libraries. Residential colleges and mascots started here. Its Class of 2014 will contain 1,940 students, a record low three-in-40 acceptance rate.

87.5

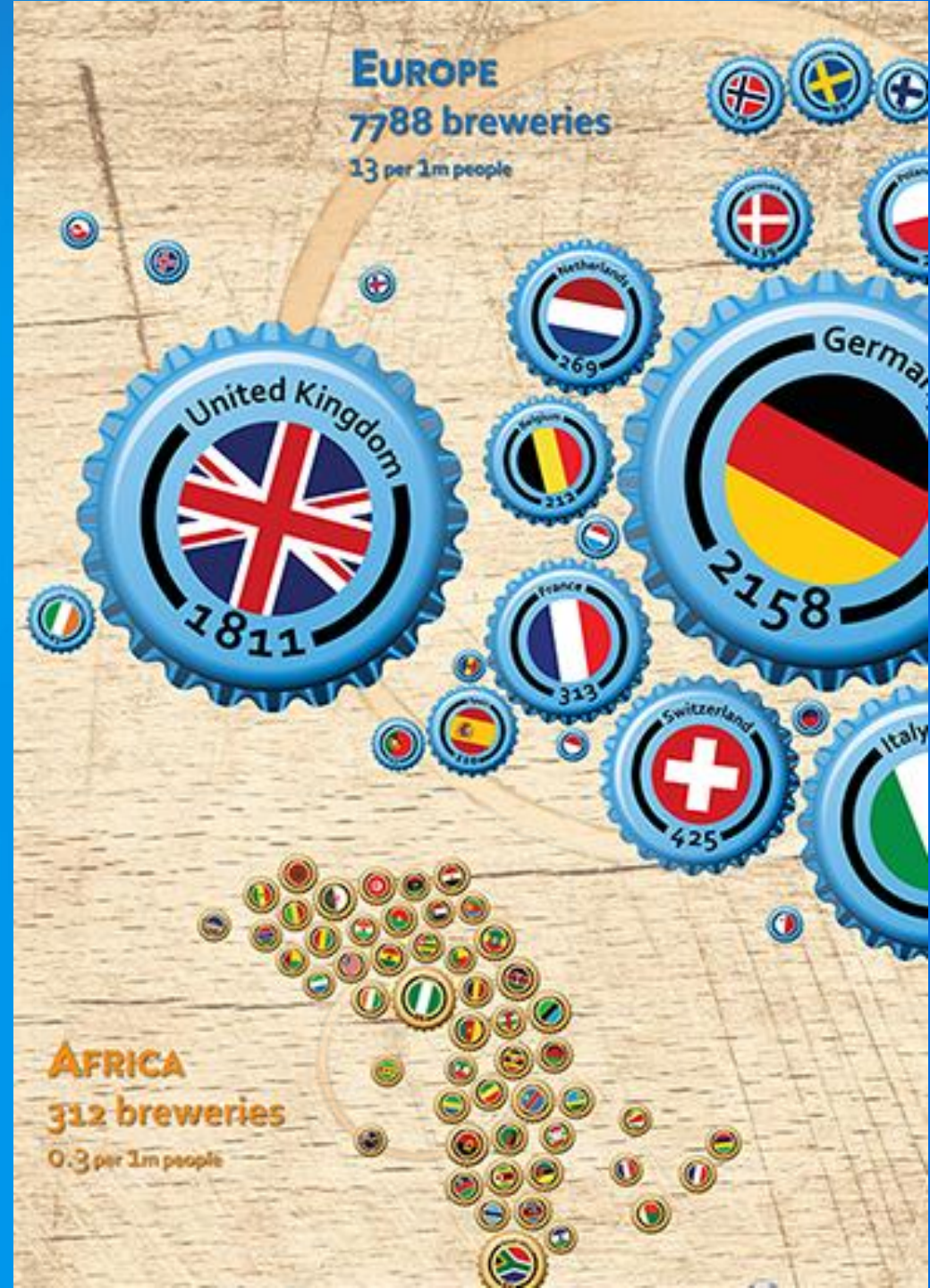
[View website](#)

[Zoom to Location](#)



# Cartograms

Kenneth Field



# Media map

Damien Saunder

ars of Tennis

os qualifying, 2015





# Small multiples

Kenneth Field

# socio-economic tectonics

how do neighbours compare? explore the differences between adjacent countries on key global indicators and discover the socio-economic plates and fracture zones

thicker city borders denote greater ratio of difference  
1:1 on line  
up to 1:5  
up to 1:100  
1:1,000 or higher

## economy



## disease and death



## people and environment



## technology



## health



# Revealing Complexity

Rich data: rich cartography





# Space and time

Damien Saunder

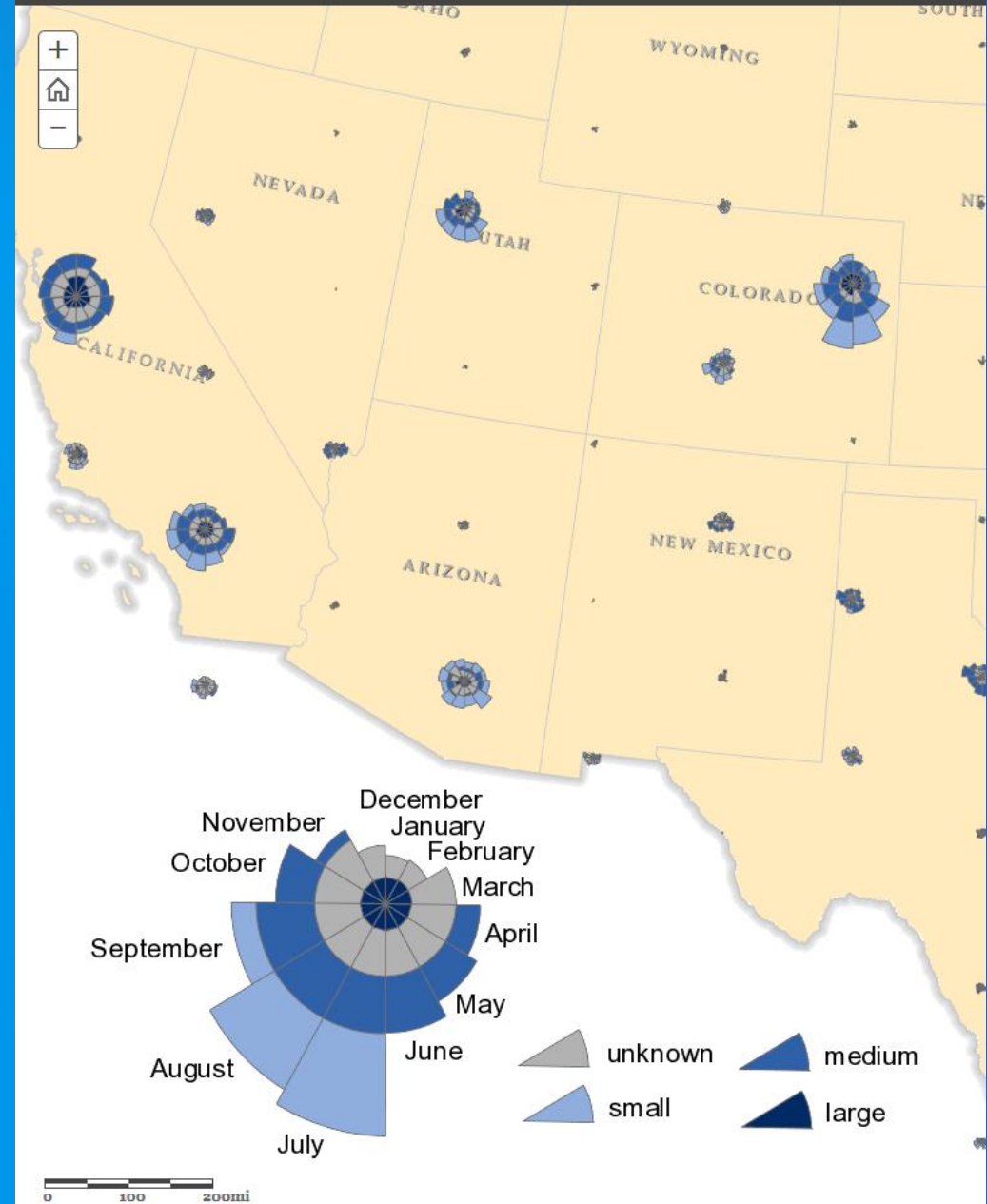


# Coxcombs

Kenneth Field

## Wildlife Strikes by month

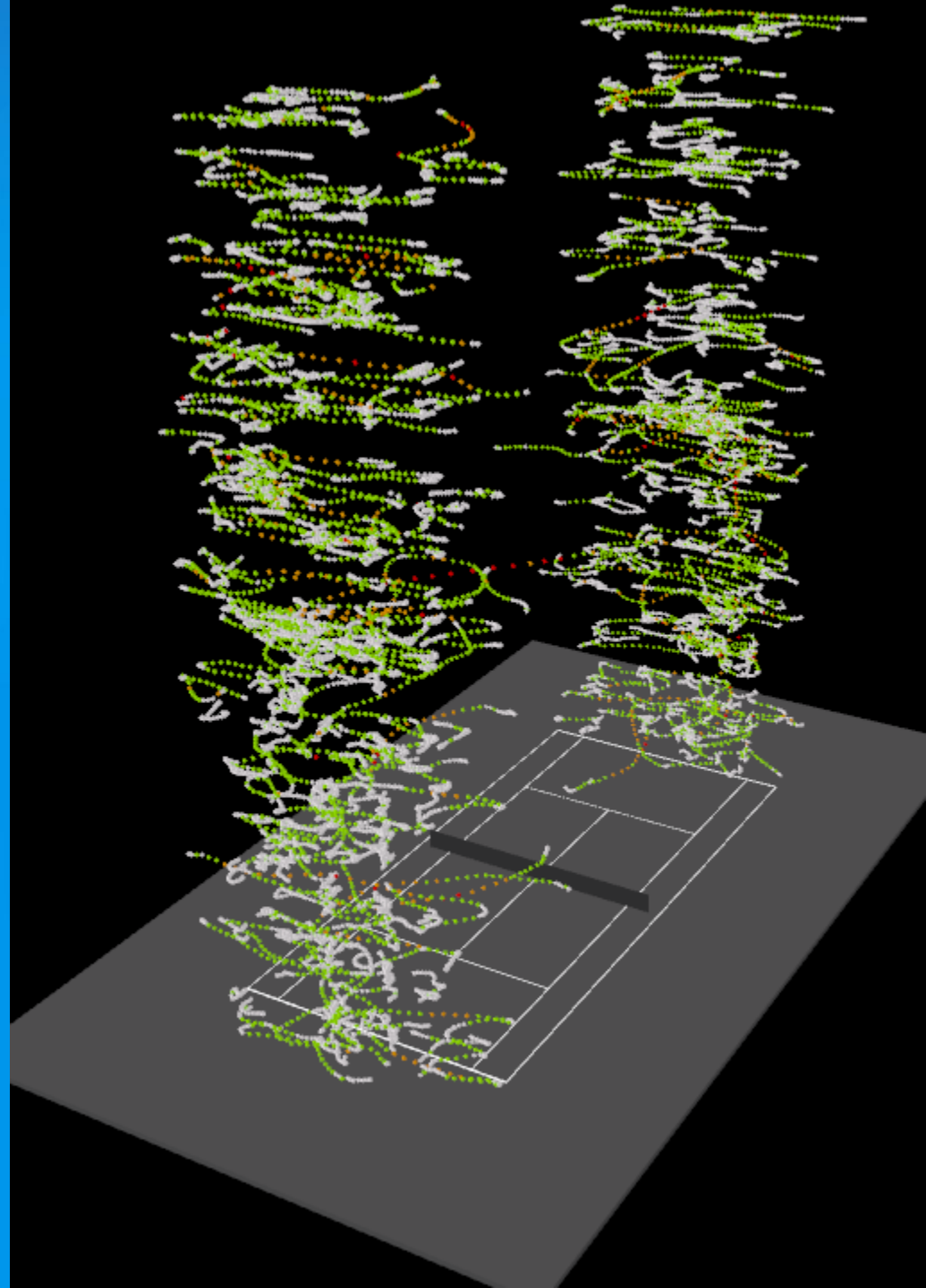
Aviation-related wildlife strikes by month and size





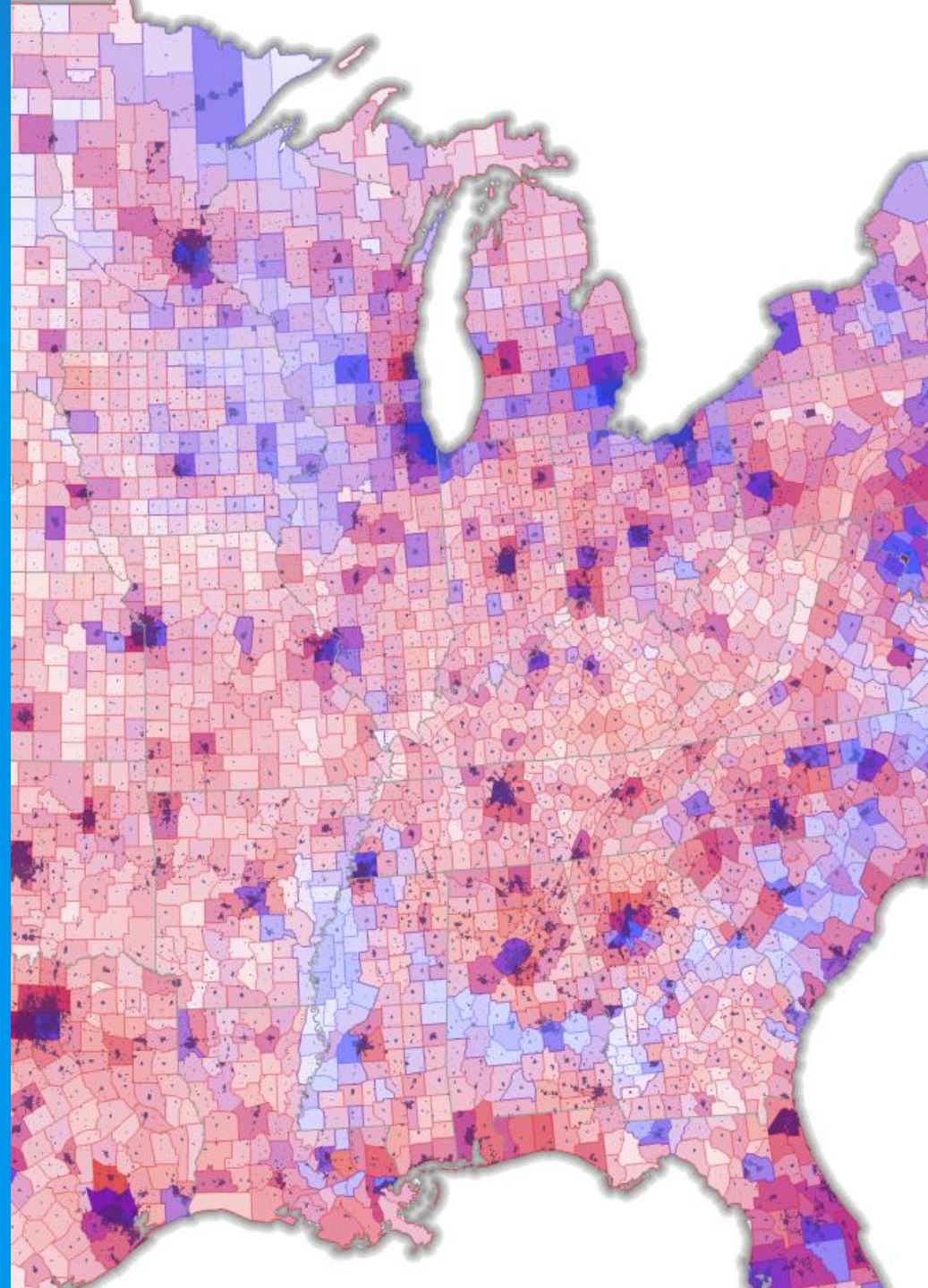
# Space-time cube

Damien Saunderson



# Value-by-Alpha

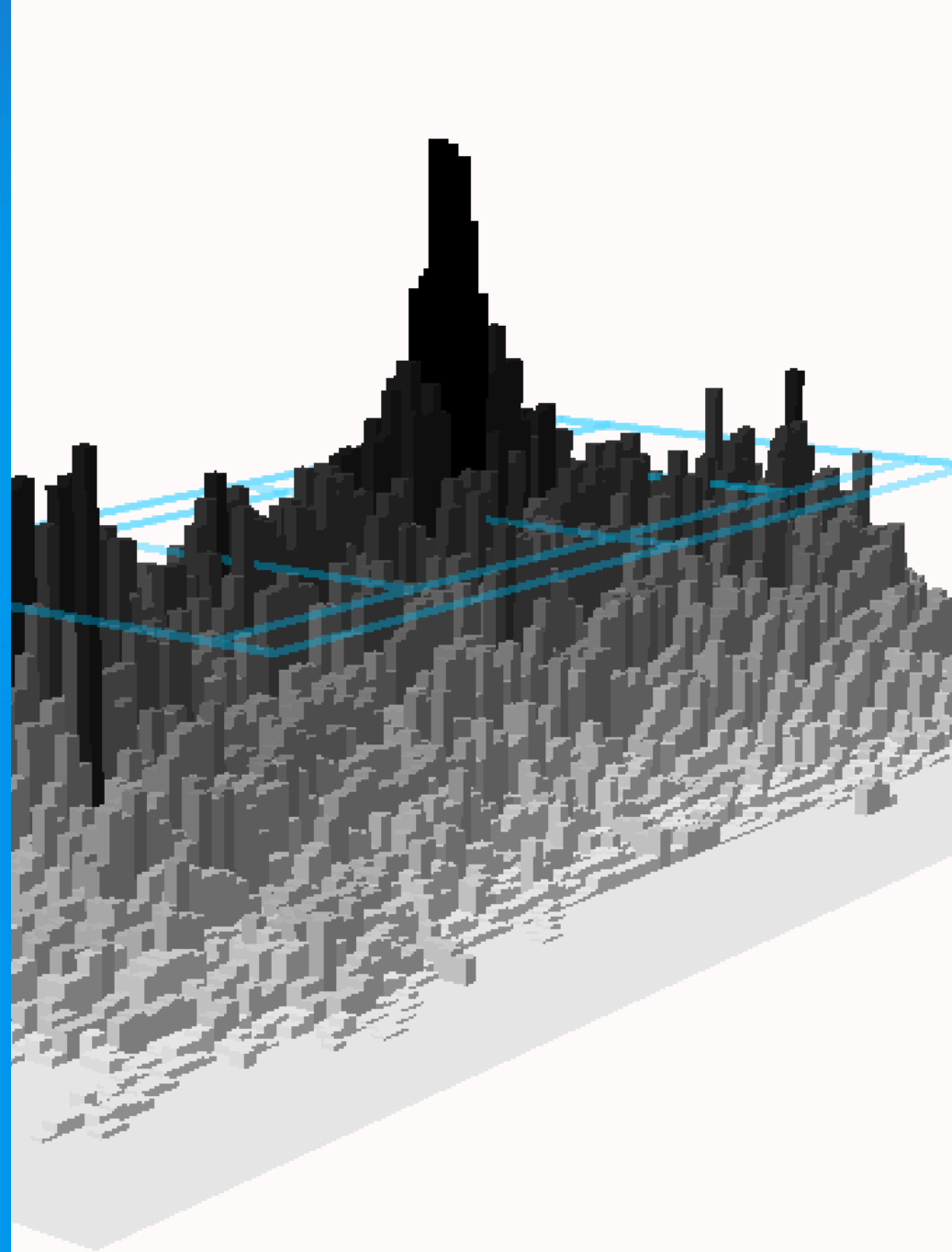
Kenneth Field





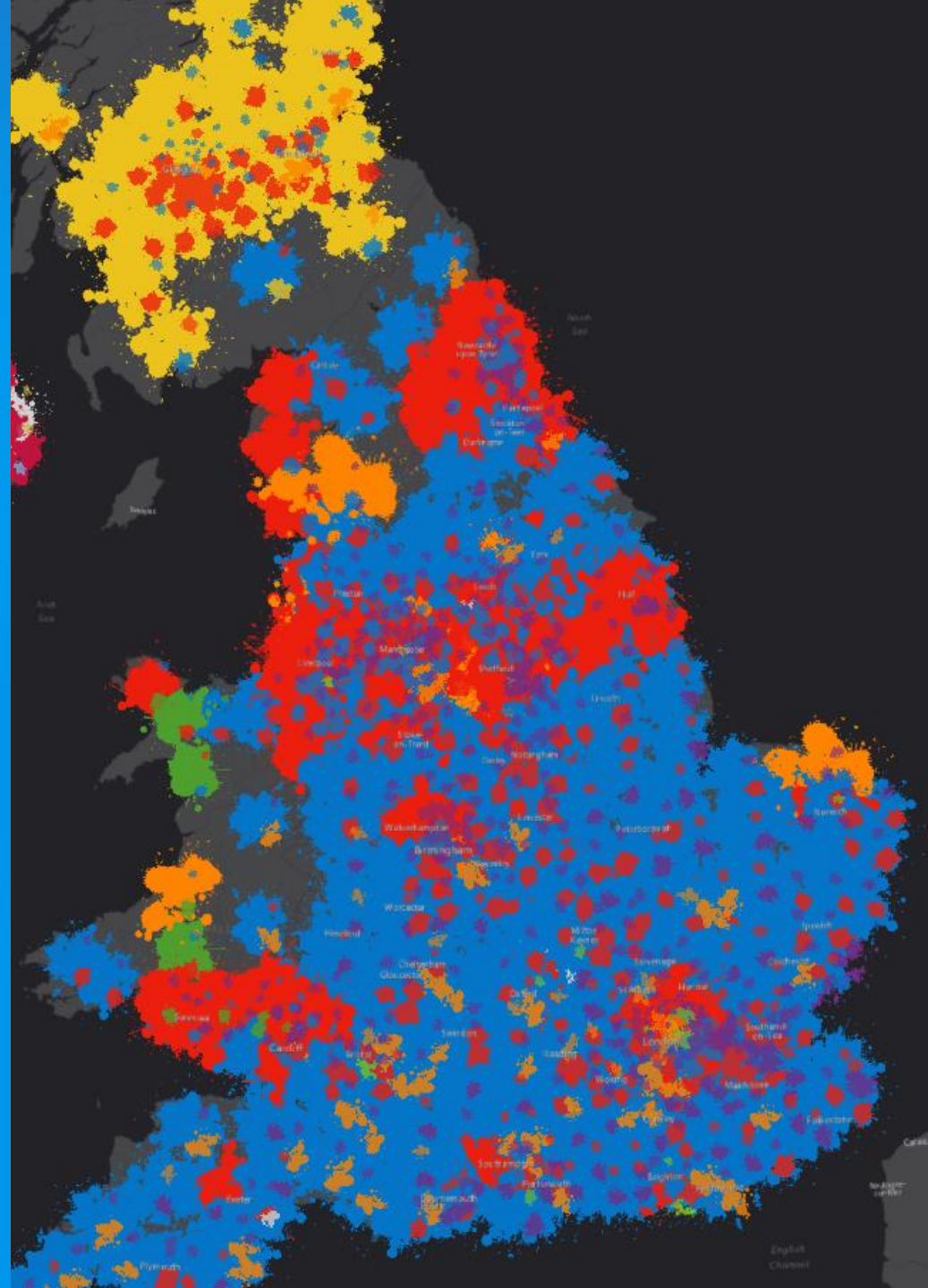
# Density surface

Damien Saunderson



# Jackson Pollock

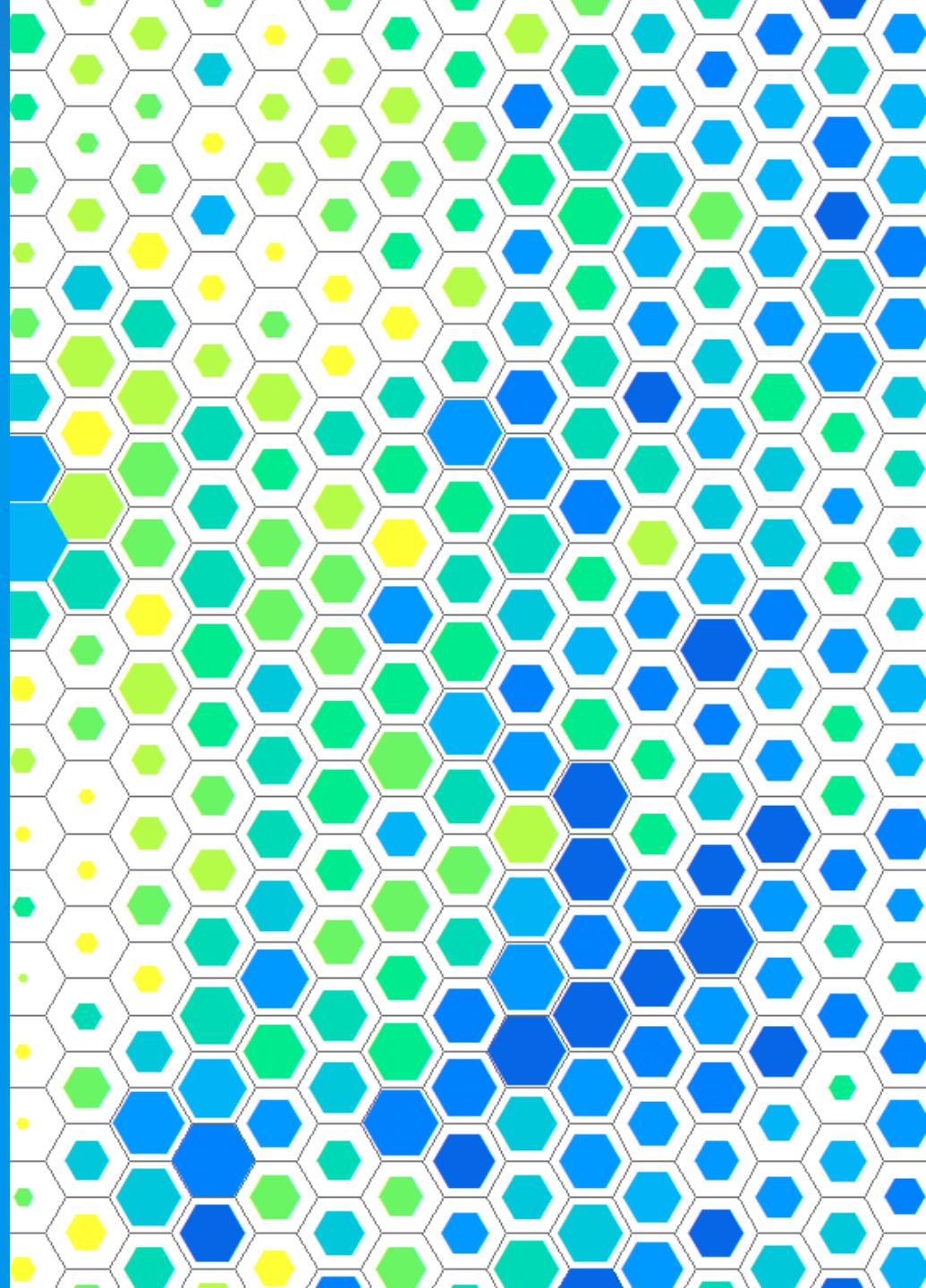
Kenneth Field





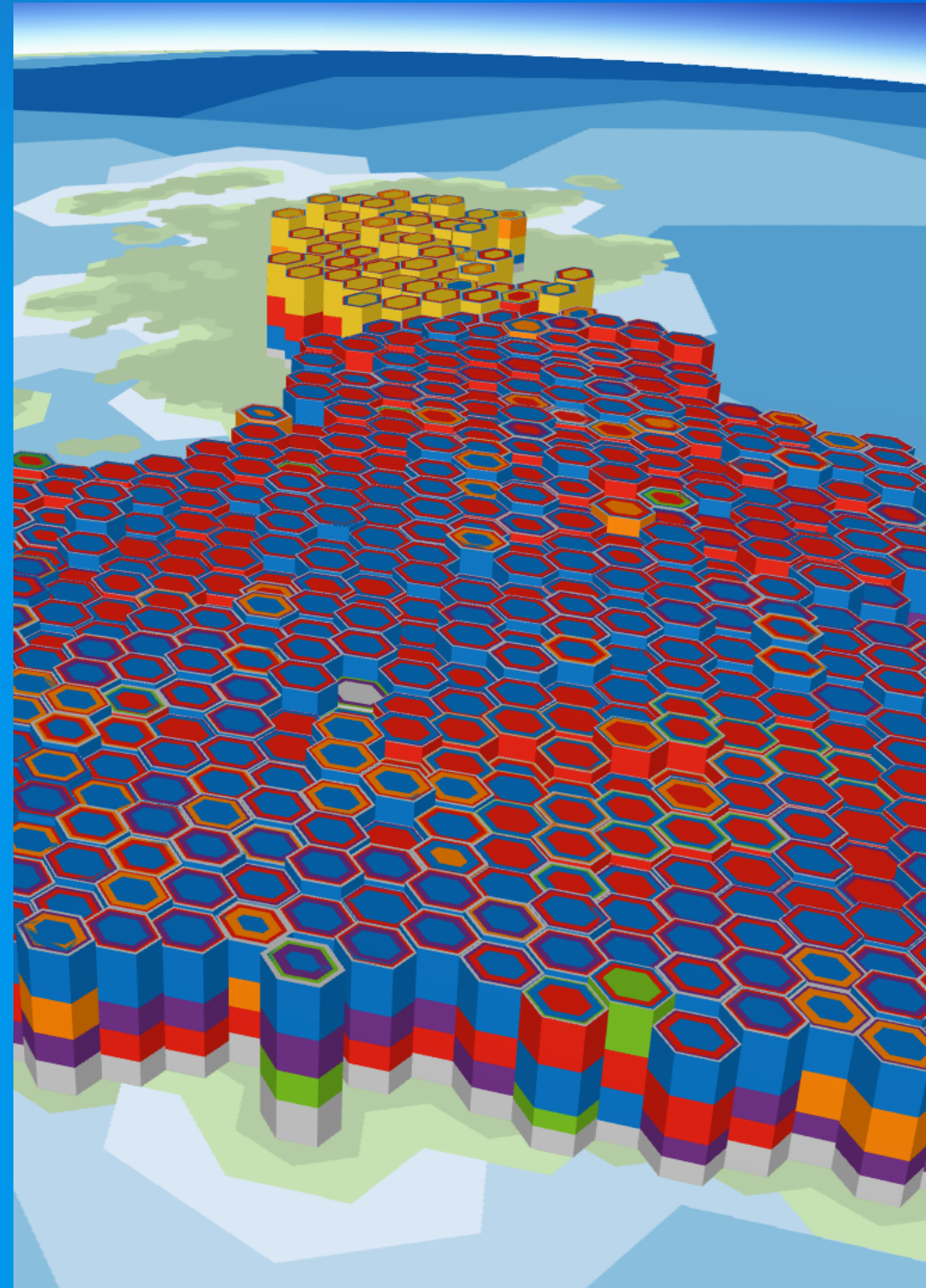
# Hex-binning

Kenneth Field



# 3D hex cartogram

Kenneth Field





# One more thing

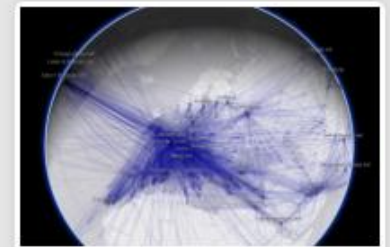
Actually...a few more things

[carto.maps.arcgis.com](http://carto.maps.arcgis.com)

## Compelling Cartography

Map Gallery to showcase examples of high quality map design in an online environment

Search maps





# **“Cartography”** (forthcoming)

**By Kenneth Field and Damien Saunder**

# Other sessions

**Best Practices in Map Design**

**Full throttle Mapping**

**Mapping Statistical Data**

**3D Cartographic Techniques**

**Creating Beautiful Terrain Maps**



# Thank you...

- Please fill out the session survey:

**First Offering ID: 1594**

**Second Offering ID: 1621**

kfield@esri.com  
dsaunder@esri.com



@kennethfield  
@damiensaunder



Understanding our world.