



Climate Change: Earth Surface Temperature Data

Global temperature data from 1750 - 2017

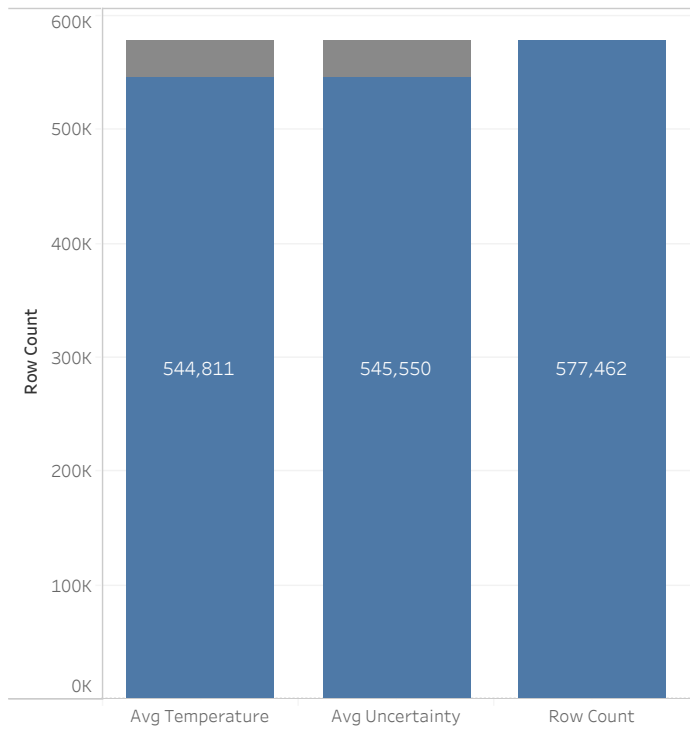
Kaggle Source: <https://www.kaggle.com/berkeleyearth/climate-change-earth-surface-temperature-data>

Data Exploration through Tableau

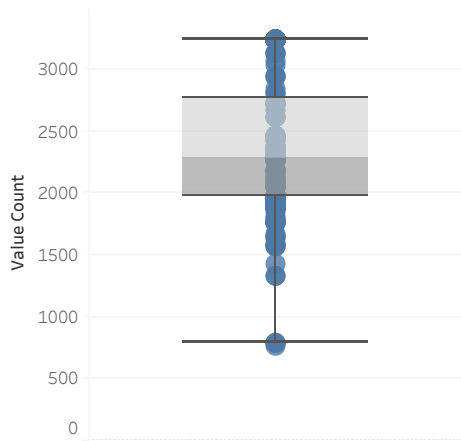


Preliminary statistical summary:
The features have > 95% valid entries and contain closely grouped data

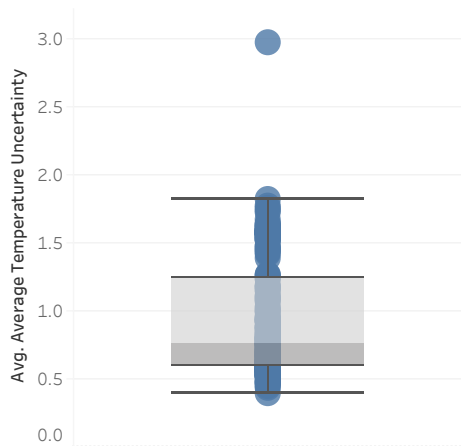
Dataset Feature Usability



Number of Records By Country



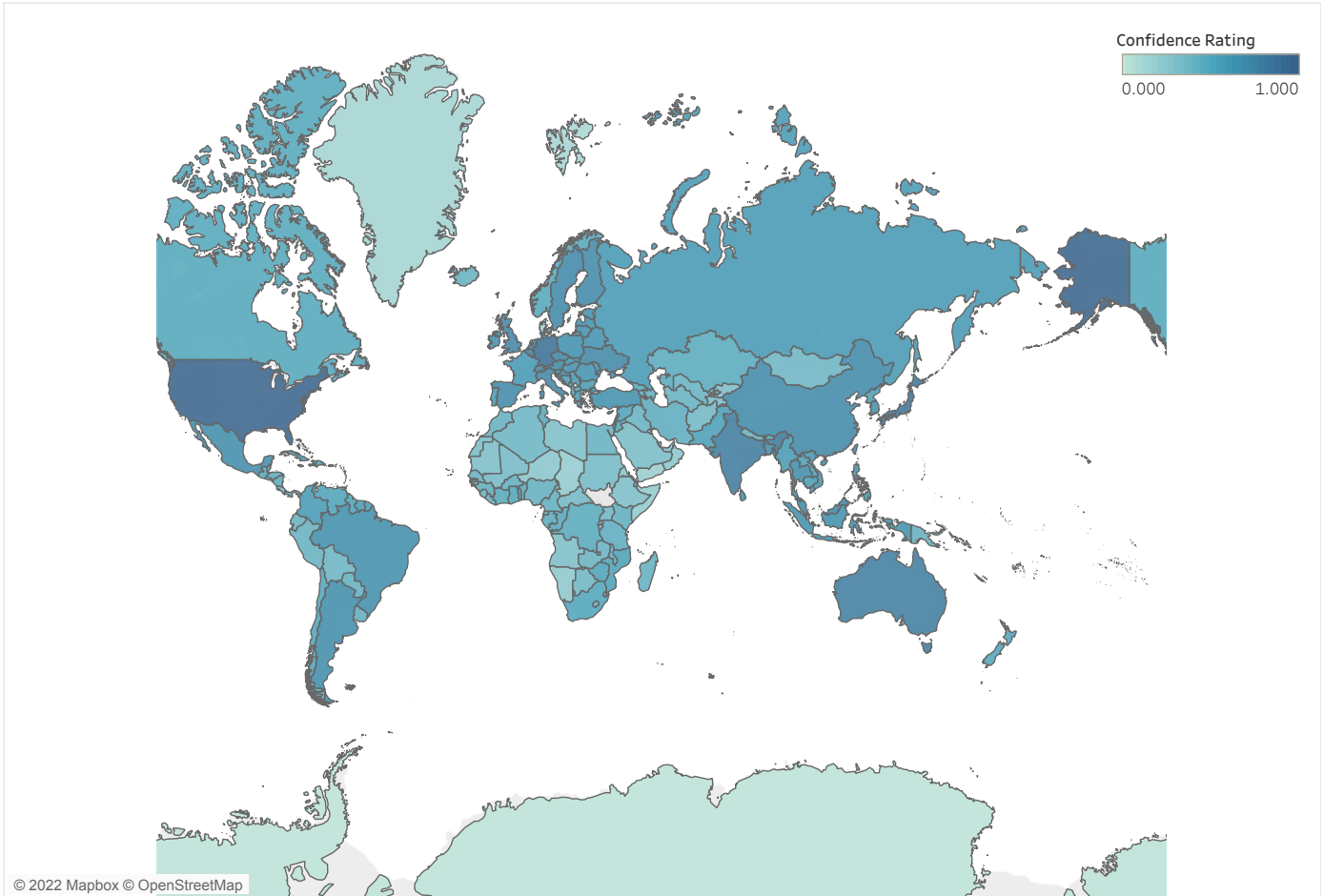
Average Uncertainty By Country



Data Exploration through Tableau

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Assigning relative confidence ratings:
Used a normalized, weighted average between
Temperature Uncertainty and *Record Count* to
quantify the accuracy of each country's data



Data Exploration through Tableau

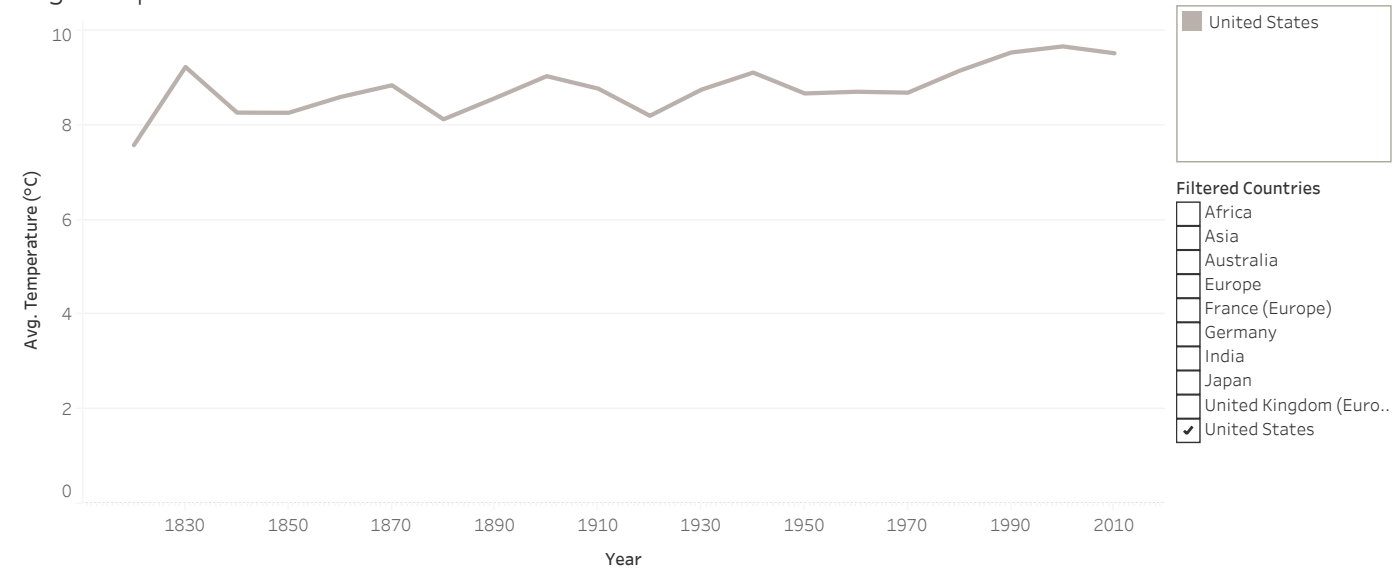


Top Countries By Confidence

	Avg. Uncertainty	Record Count	Confidence Rating
Asia	0.574	2,370	1.000
United States	0.831	2,941	0.982
Europe	1.420	3,239	0.920
Germany	1.571	3,239	0.895
Japan	0.601	2,073	0.851
United Kingdom (Europe)	1.551	3,239	0.833
India	0.758	2,613	0.809
Africa	0.396	1,965	0.808
France (Europe)	1.534	3,239	0.803
Australia	0.479	1,935	0.793

Selecting a subset for inspection:
The 10 countries with the largest *Confidence Rating* were extracted to allow for closer inspection and guarentee maximum accuracy

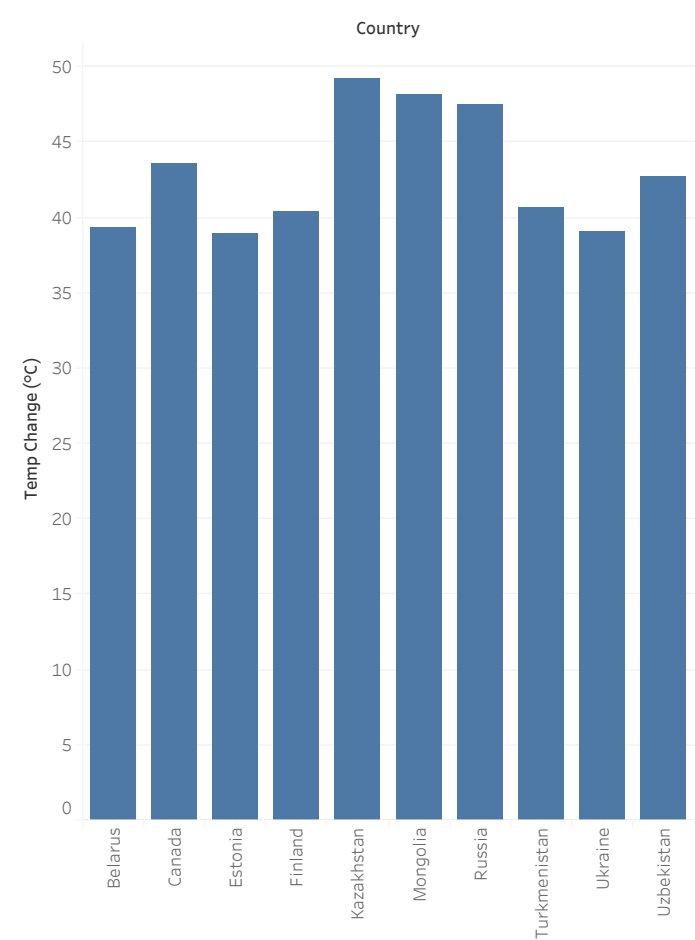
Avg. Temperature of Most Confident Countries



Data Exploration through Tableau

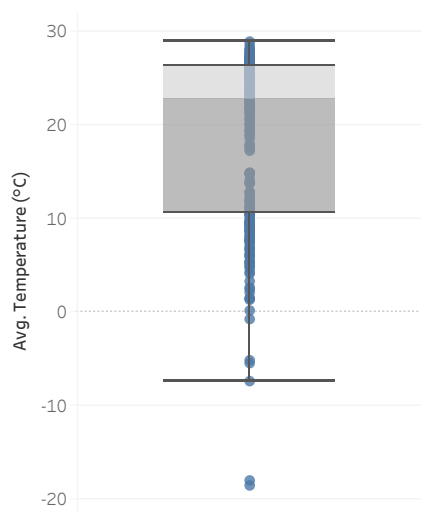
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Largest Temperature Changes (1750 - 2017)



Inspecting global temperature:
The countries' average temperatures over the
past 60 years provide context of global
climate

Avg. Temperature By Country

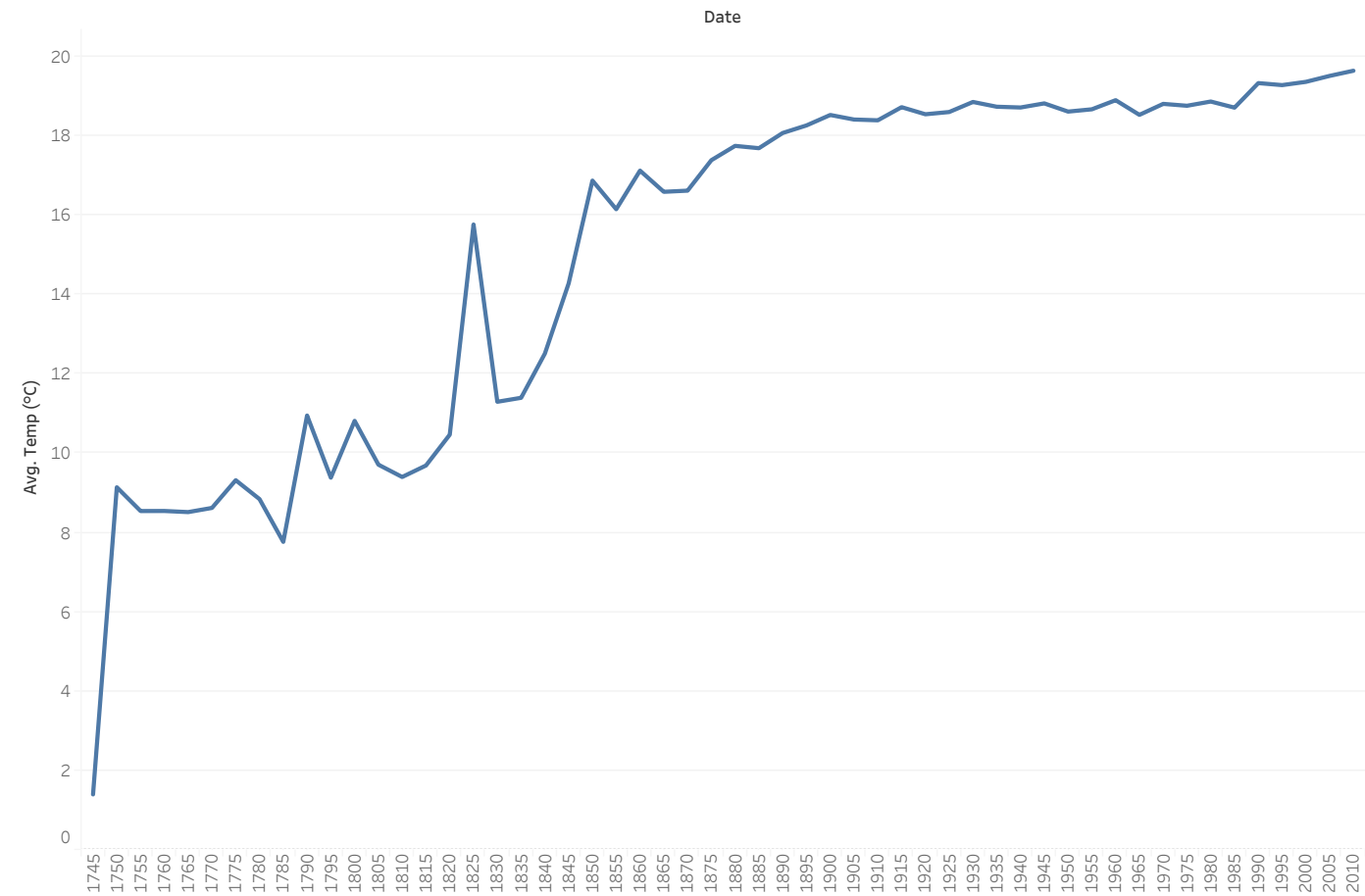


Data Exploration through Tableau

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Global temperature change:
Tracks the cumulative change in *average global*
temperature over the past 60 years

Avg. Temperature Timeline



Data Exploration through Tableau

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Visualizing temperature change:
Illustrates the change of each countries' average
temperature from 1950 - 2017

Average Temperature By Country

