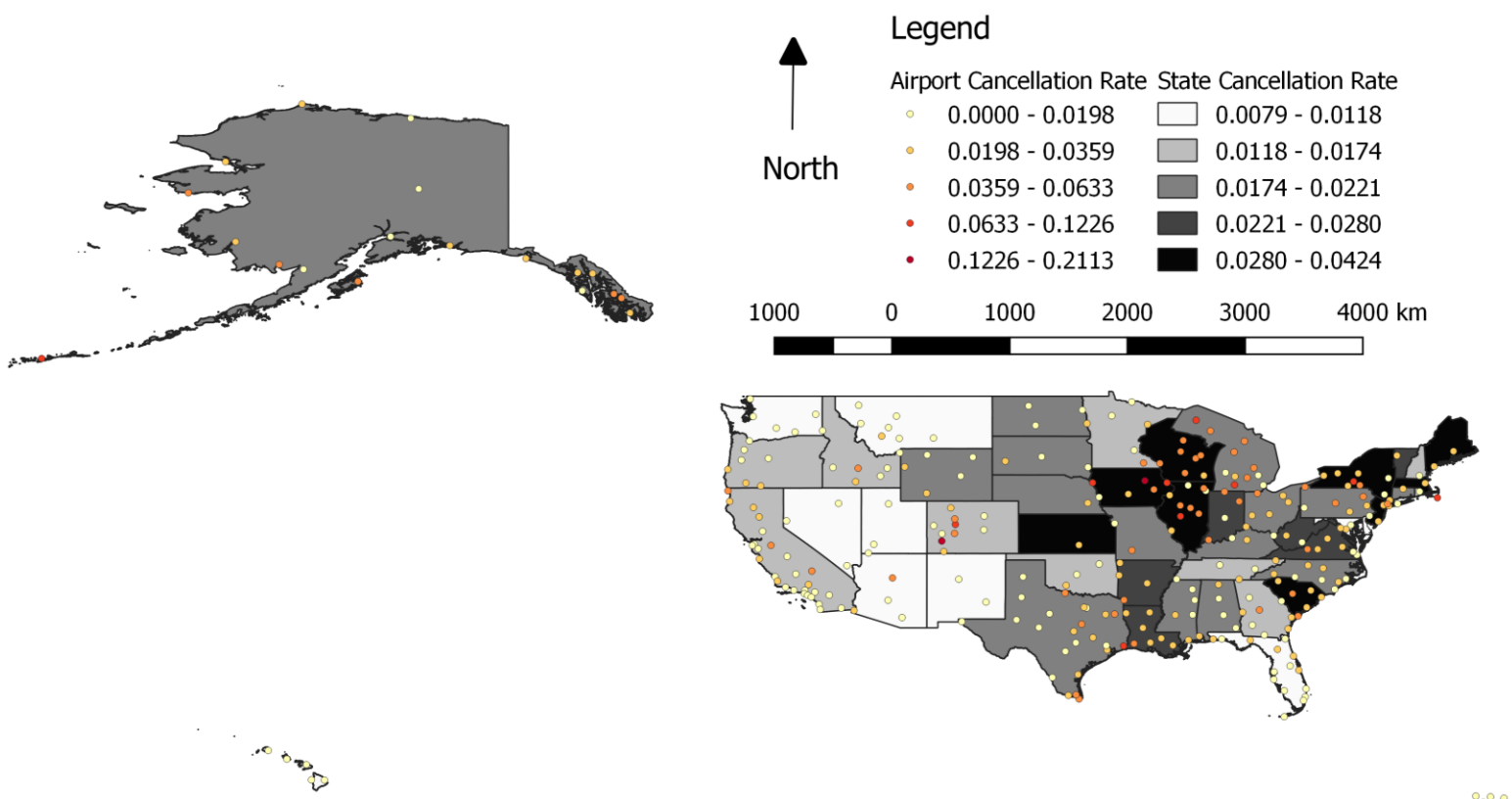
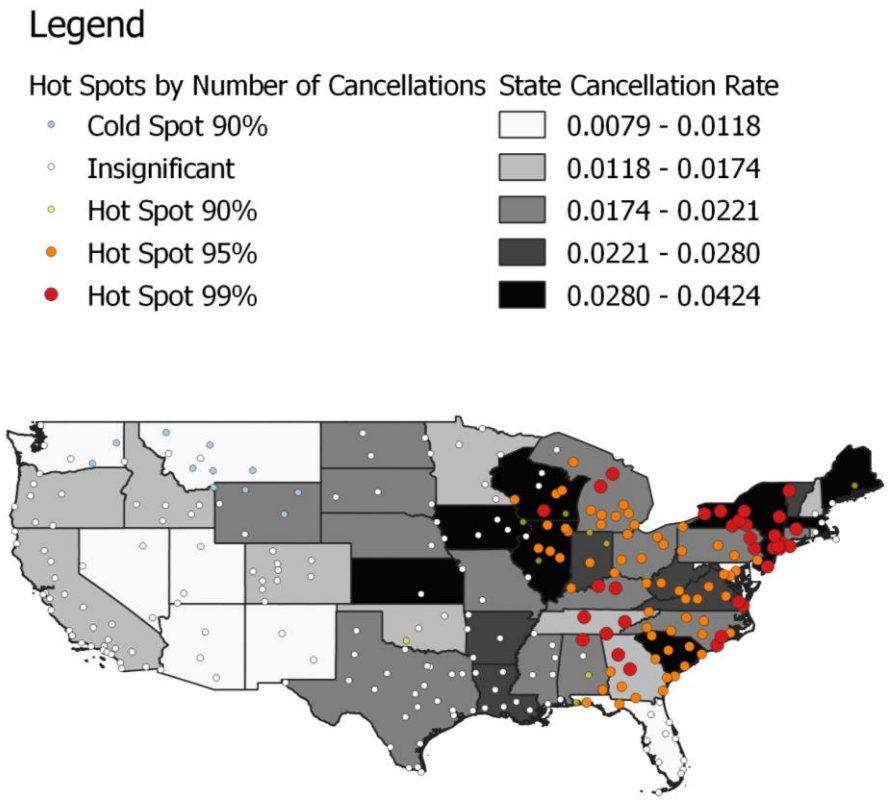
High- and Low-Cancellation Airport Clusters

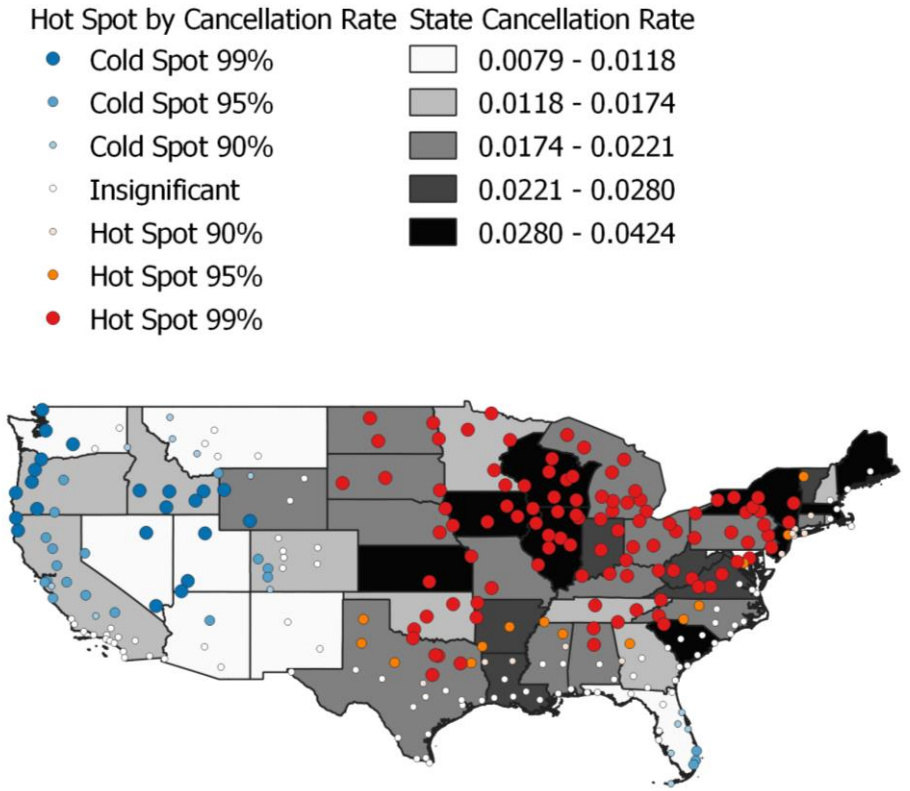
Audience: airlines operating in the U.S.A

Jiachen Wei

QGIS







Hot spot: a high-cancellation airport that is surrounded by other high-cancellation airports
Cold spot: a low-cancellation airport that is surrounded by other low-cancellation airports

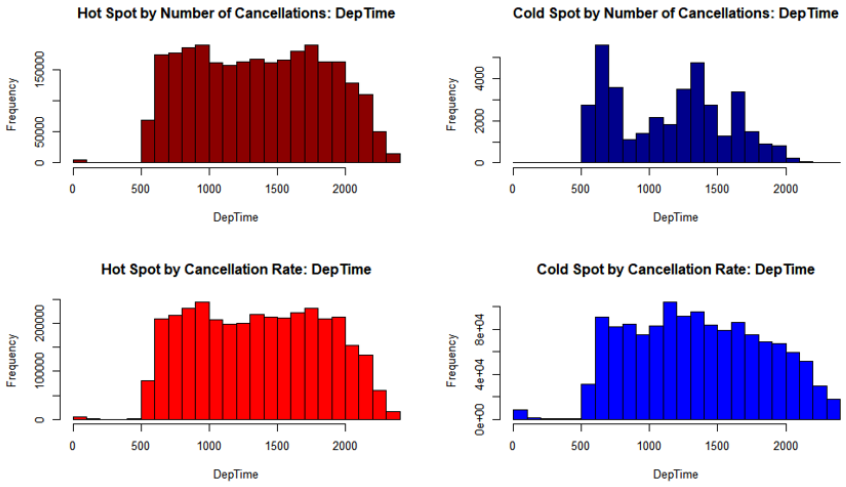
The Getis-Ord Gi* statistic: a single high value or low value is not significant (it might be an outlier).

Histogram: Hot Spots vs Cold Spots

Histograms for Hot Spots and Cold Spots

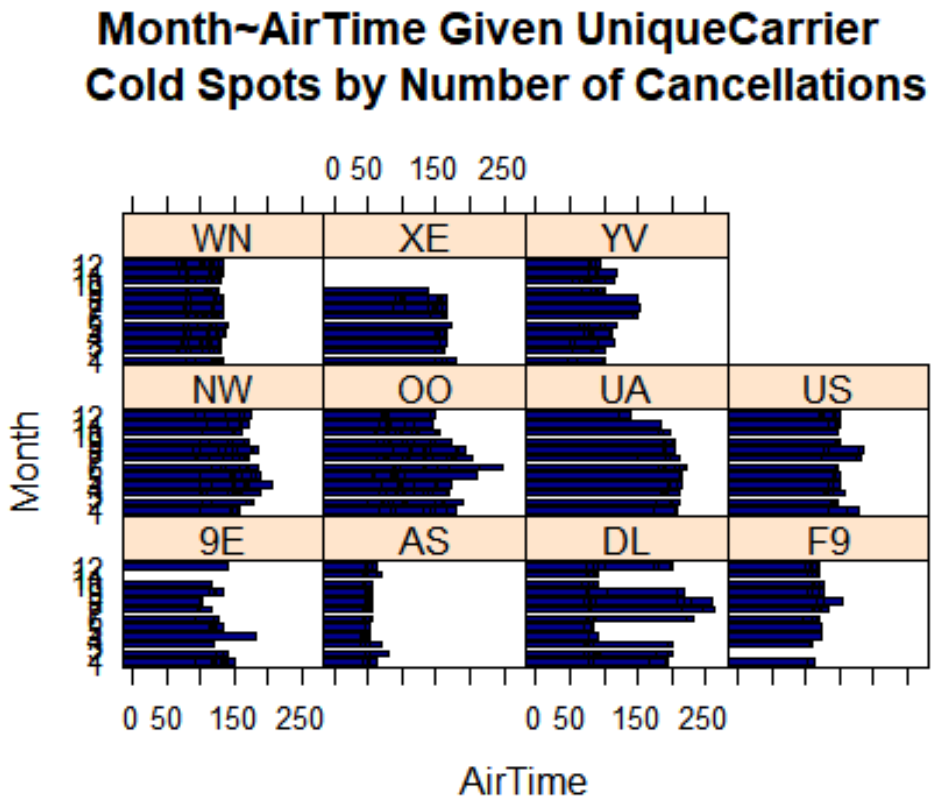
Enter the name of the column to be visualized:

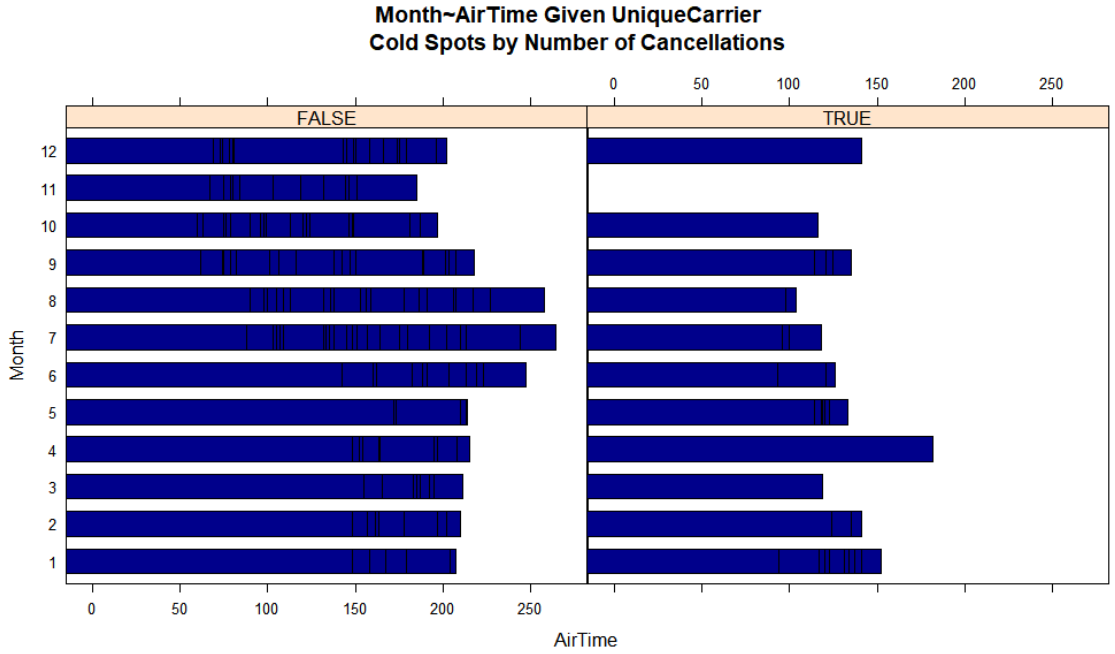
DepTime



	HS by #	CS by #	HS by %	CS by %
Month		More flights May-Aug		Less flights Sept-Oct
DoW	Less fights on Sat		Less fights on Sat	
DepTime	↓ after 19	5-7am; ↓ after 15	↓ after 19	↓ after 16
AirTime	Most <100	Most <150	Most <100	Most <150

Conditional Barplot: 9E vs others





Thank you

Cancellation rate = sum(Cancelled) / sum(Number of Departures)

HotSpot Analysis in QGIS
https://plugins.qgis.org/plugins/HotspotAnalysis/

U.S.A. Administrative Boundaries (GADM database)

http://www.diva-gis.org/datadown