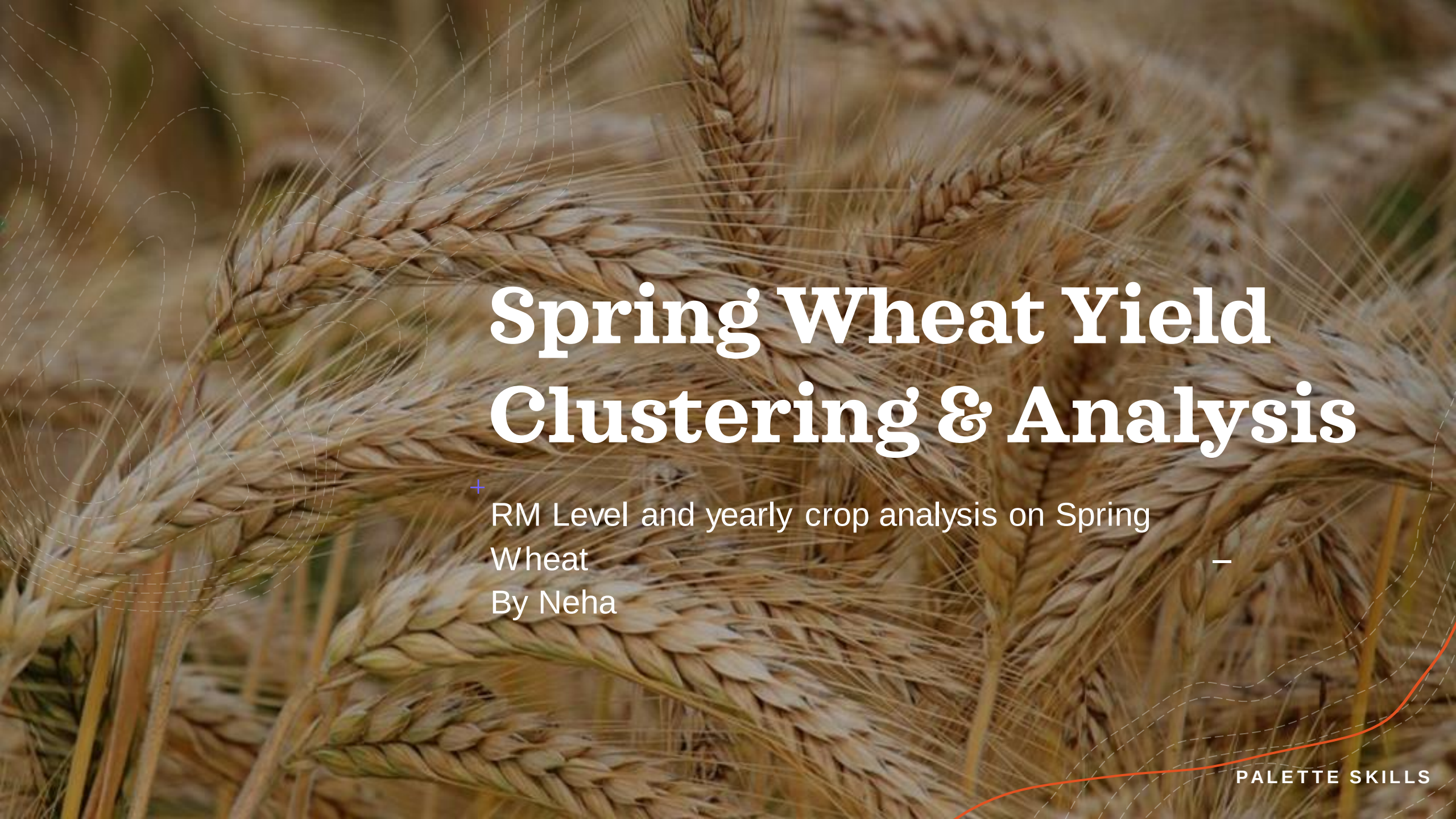

Spring Wheat Yield Clustering & Analysis

RM Level and yearly crop analysis on Spring Wheat

By Neha

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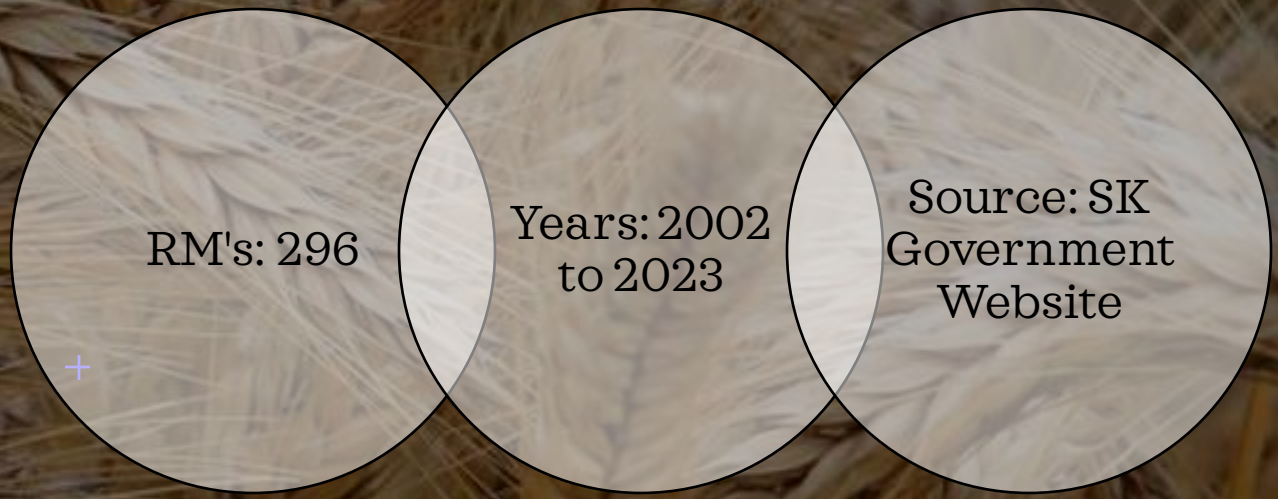
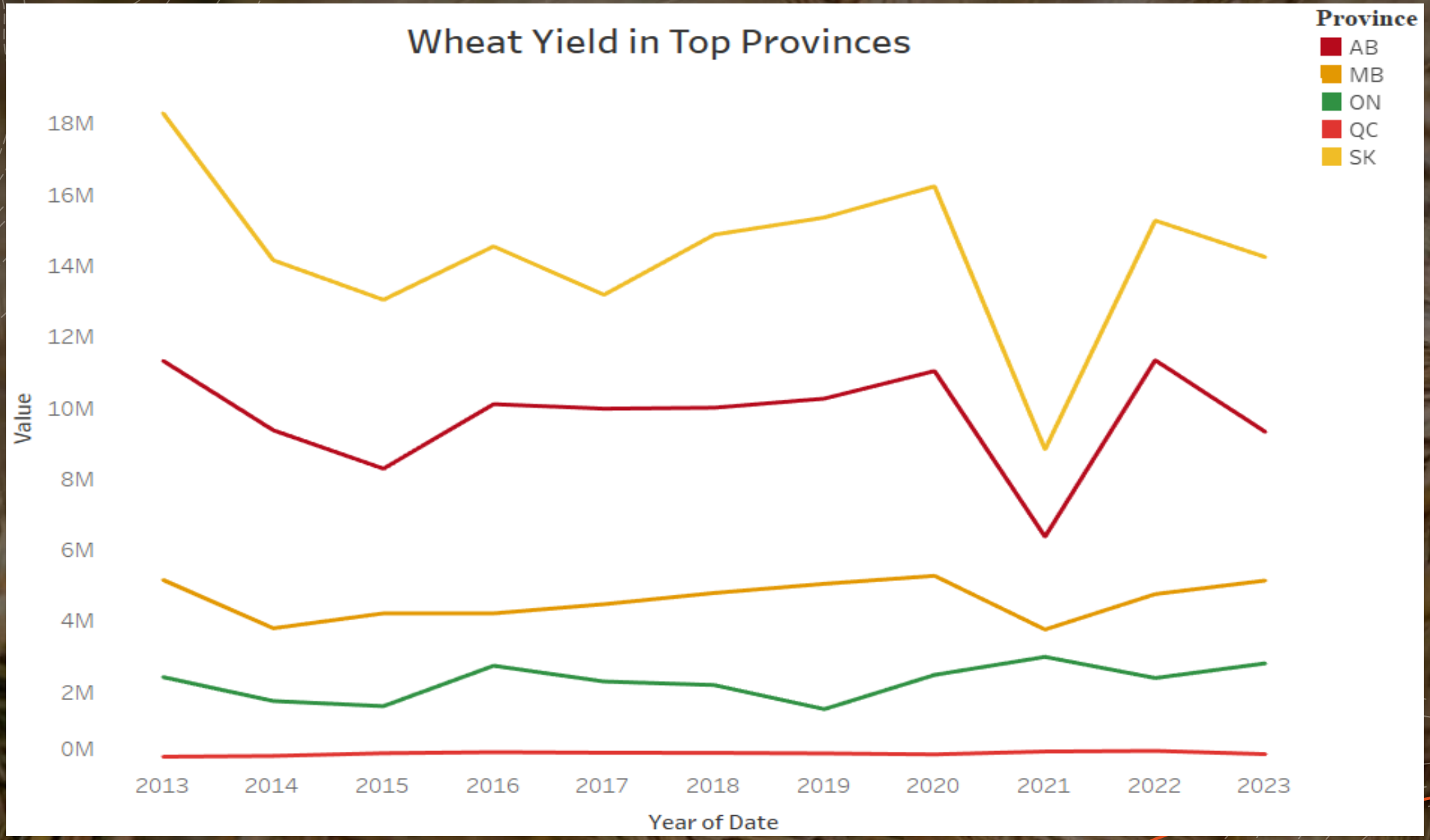
Problem Statement & Data Collection

The demand of the wheat crop has been increased in past few years so this analysis will focus on the past yield and locations in Saskatchewan and will forecast the next 2 years yield



- https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/agribusiness-farmers-and-ranchers/crops-and-irrigation/field-crops/cereals-barley-wheat-oats-triticale/wheat-canada-prairie-spring-wheat
- https://dashboard.saskatchewan.ca/business-economy/business-industry-trade/crop-production#by-commodity-tab

Top 5 Provinces of Canada in Wheat Crop Yield



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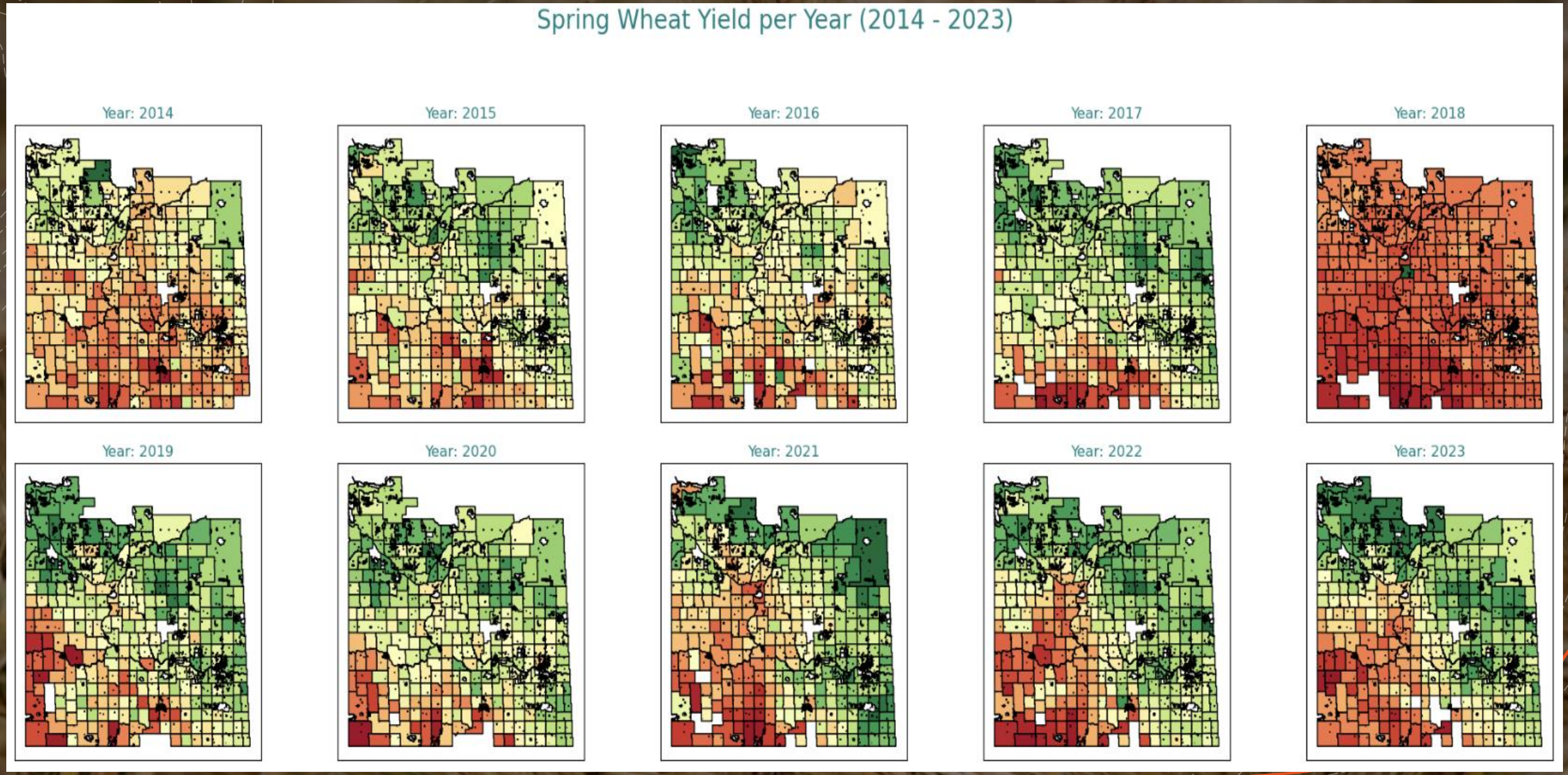
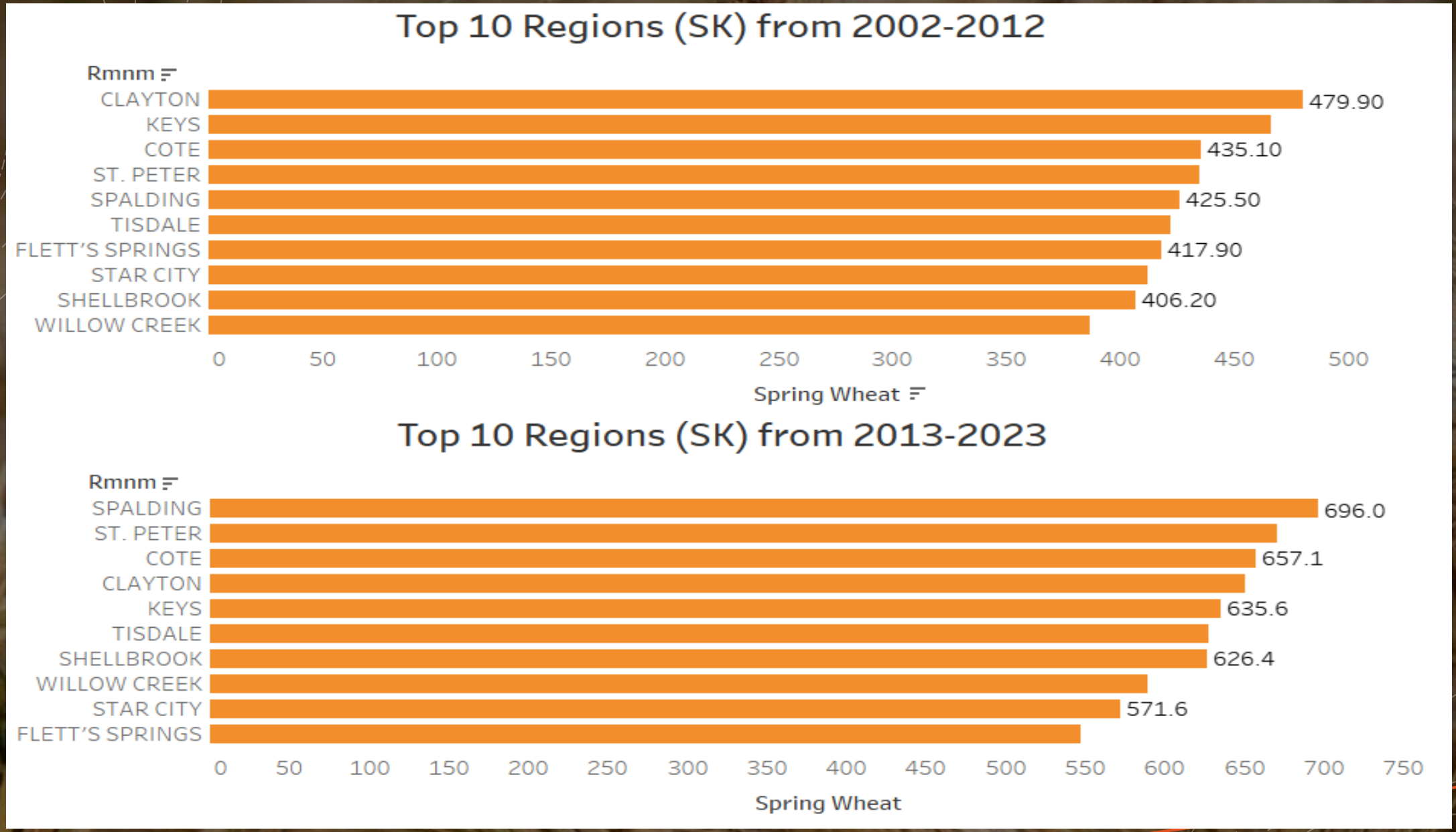
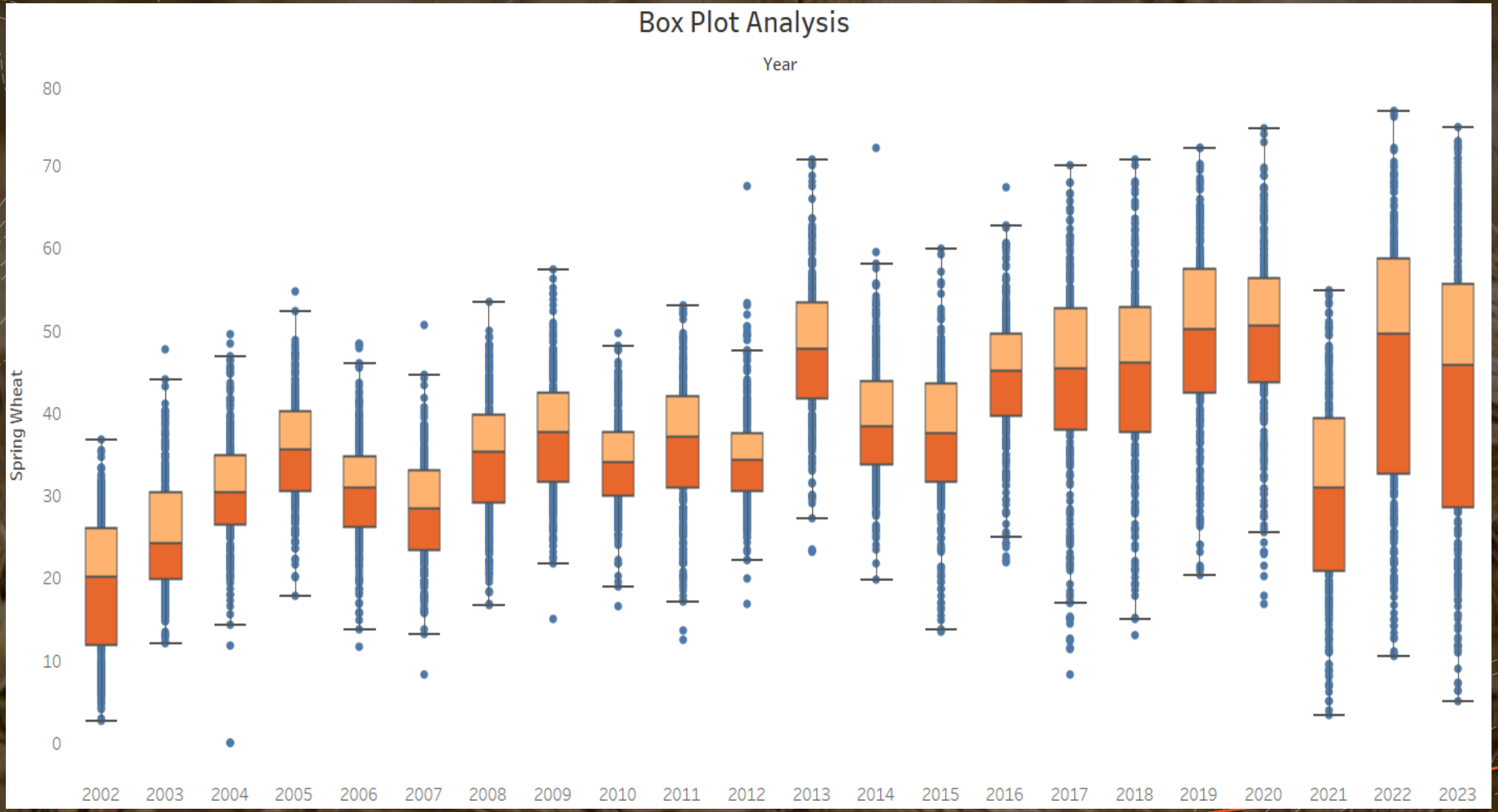
Exploratory Data Analysis



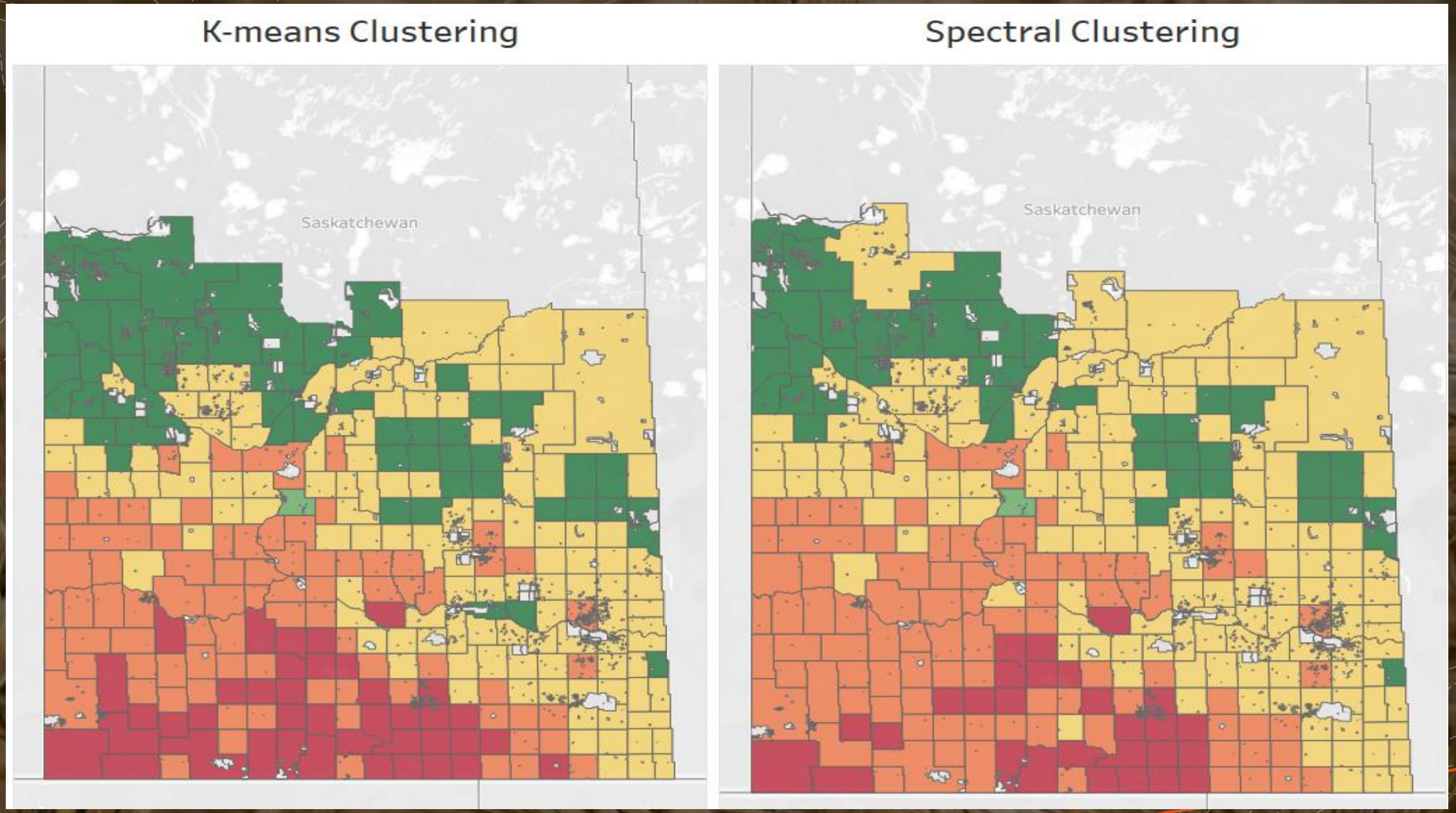
Top 10 Regions in last 20 years comparison



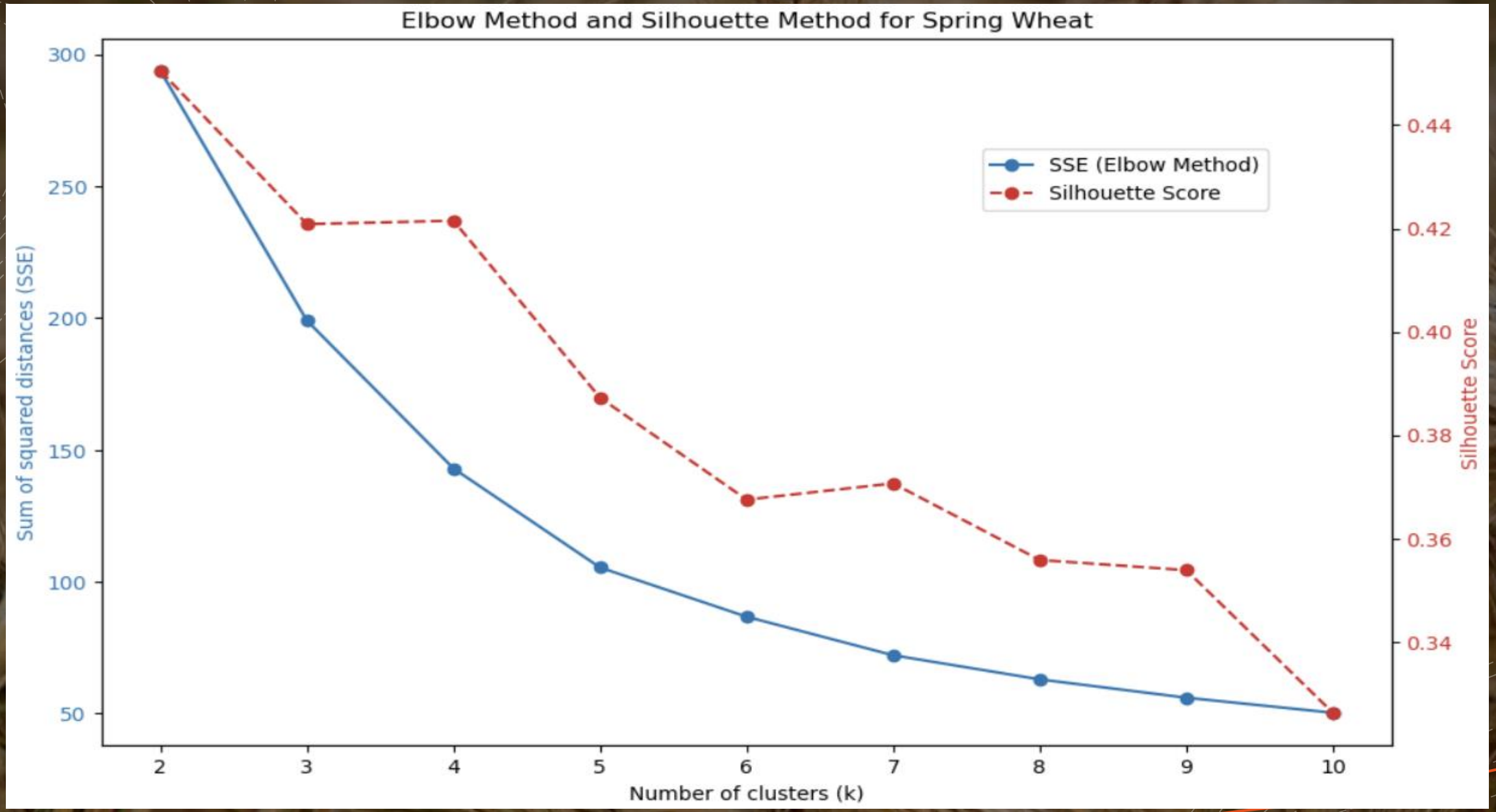
Box Plot Analysis for last 20 years



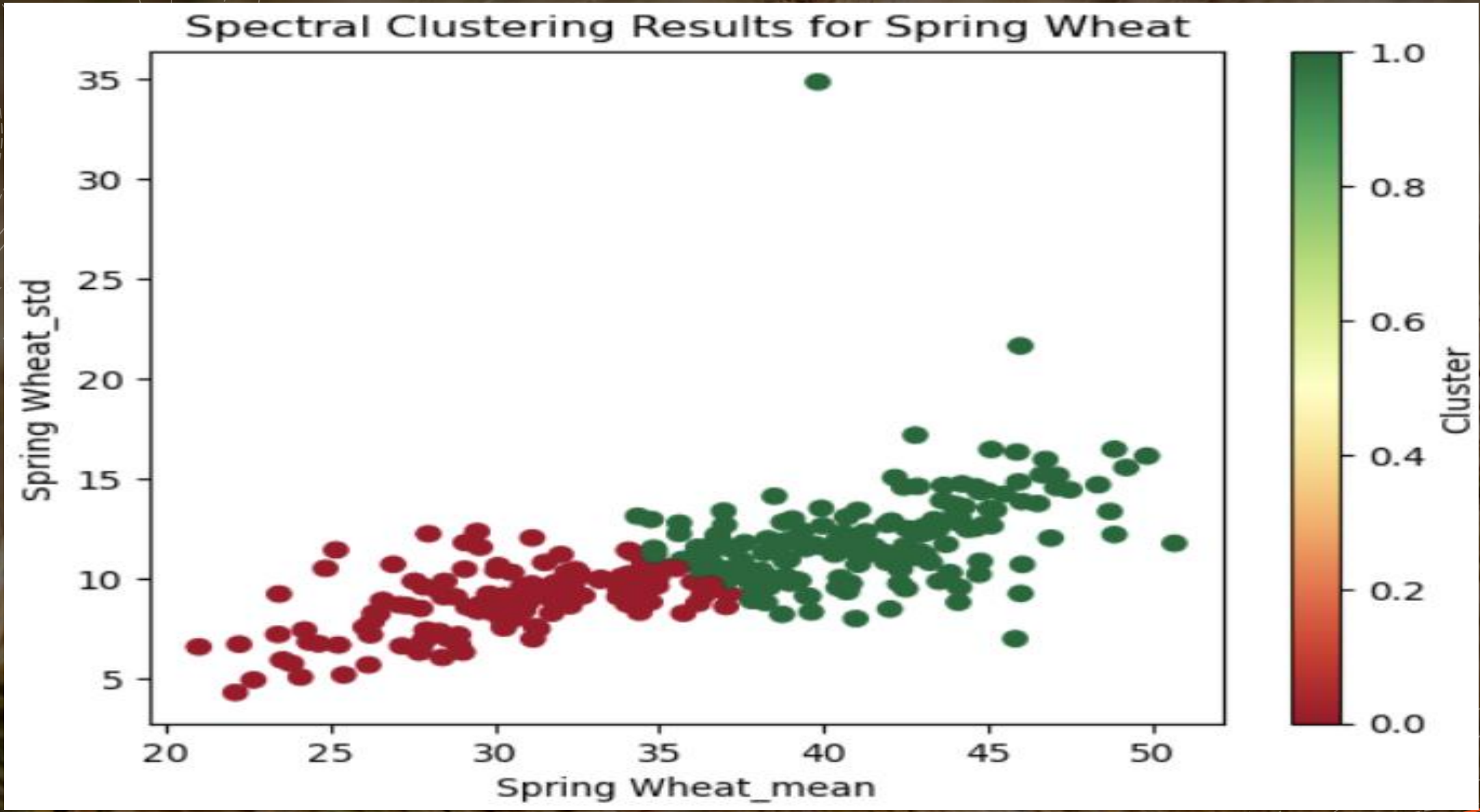
Unsupervised Machine Learning



Unsupervised Machine Learning

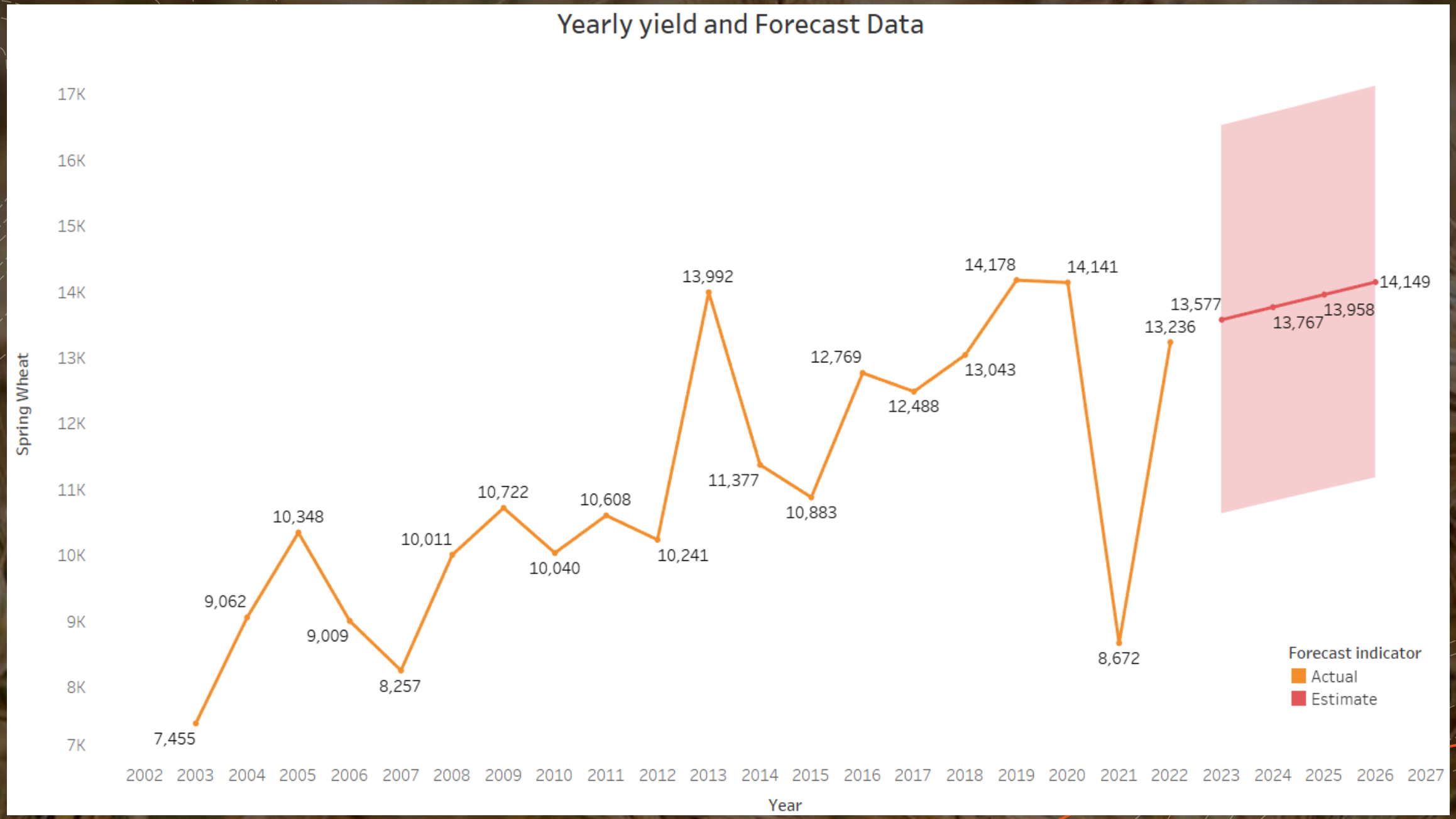


Unsupervised Machine Learning



Optimal number of clusters for Spring Wheat: 2

Yearly Yield Data and Forecast Analysis



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Conclusion

+ As per analysis, only few of the regions are growing the Wheat crop so other areas should also take that opportunity as it can lead to crop rotation also.

+ Spalding is one of the top city in wheat production in overall Saskatchewan.

+ Saskatchewan is still the top province in Spring Wheat crop yielding after the widespread drought decreased production in overall Canada by 38%.

Thank You
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