Group C6

STAT 443

Dr. Dunham

2 April 2020

Group Project Proposal, Time Series Analysis

1. Data
2. Raw data
   1. Main data - daily precipitation in (Metro?) Vancouver
   2. Only for bivariate – mid-day temperature
3. Data manipulation [?]
   1. Number days of heavy rains
4. Theme Question / Hypothesis
5. Questions
   1. Is there any hope that we can see more sunny days in the coming years?
   2. Is there any “climate cycle” for rain? More rainy days / heavier rains in some year?
   3. Is the precipitation correlated with temperature? – part of climate change?
6. Tentative conclusion
   1. No, actually there could be fewer
   2. There is some kind of cycle
   3. It is correlated
7. Division of Work (4 people)
8. Description of Data
   1. Collect the data [?]
   2. Where the data come from
   3. How we collected the data
   4. How the data are recorded, e.g. time interval
   5. Basic description of Data, e.g. trend, period, stationary, mean…
   6. Basic data cleaning, e.g. make the data ready for analysis
9. Analysis of Data – Hongkai
   1. Modelling
   2. Forecasting
   3. Extension
   4. Answer the theme question
10. Introduction & Conclusion
    1. Introduce our theme question
    2. Why we chose the topic
    3. What we found, other comments
11. Documentation
    1. Merge the document into a big R Markdown
    2. Do all transition paragraphs. Make the report look good
    3. Double check any issues
    4. Formatting
    5. Grammar check

Hongkai Yu