Description:

1584 Weekly Observations of Arabica Coffee from Brasil from January 1, 1991 – July 30, 2018

Input variables: Date, Temperature, Rain, Production, Futures

Target variable: Coffee Rust by week

Curated Dataset has 773 / 1584 missing Rust values (48.8%), considered missing at random

Rust (percentage on leaf- rounded to nearest whole number since lacking more granularity)

1991-1995   
[Chalfoun](https://drive.google.com/file/d/11ecpiEQIYmbn4znbM4bcVMyGOrSWjQWg/view?usp=sharing) Figure 1

1998-2004  
[Japiassu](https://drive.google.com/file/d/1guDBY5GbgLFS-qPwGLmozBQdjlkCDzw7/view?usp=sharing) Figure 1 (low density fodder soil)

October 2005-August 2006  
[Lopes](https://drive.google.com/open?id=1YAexT8zbNqx_5wHIYcu16BJAd8ZM23ZV) figure 1 (organic)

December 2007 – November 2008  
[Lopes](https://drive.google.com/open?id=1YAexT8zbNqx_5wHIYcu16BJAd8ZM23ZV) figure 1 (organic)

January 2018-July 2018

[Matiellow](https://www.cafepoint.com.br/noticias/tecnicas-de-producao/controle-da-ferrugem-tardia-do-cafeeiro-exige-mudancas-de-conceitos-96613n.aspx) Tables 1 and 2

All other missing years

kNN data imputation method described by Gustavo Batista et al. <http://conteudo.icmc.usp.br/pessoas/gbatista/files/his2002.pdf>

Other references: <http://principo.org/pdi--plano-de-desenvolvimento-institucional-escola-agrotcnica.html?page=17>

Temperature, Rainfall (C, mm – four decimal places)

1991-2015

World Bank Climate Change Knowledge Portal: <http://sdwebx.worldbank.org/climateportal/index.cfm?page=downscaled_data_download&menu=historical>

2016-2017

Used historical data from 2015 since no other data available

2018

Precipitation – Matiello Tables 1-2; Temp data – used historical data from 2015 since no other data available

Limits: Temperature and rainfall is average amount for entire country, not just coffee growing regions

Coffee Production (1000 - 60 kg bags)

1991-2018: <http://www.ico.org/new_historical.asp?section=Statistics> (Supply data)

Limits – Brasil is in the April group so the statistics run from April to April each calendar year.

The statistics include both Arabica and robusto varieties.

Amounts are only measured by export year - dived by 12 to extract monthly number and rounded to two decimal places)

Coffee Futures (in respective year’s USD per pound – values not modified for inflation)

1991 -2018: <https://www.macrotrends.net/2535/coffee-prices-historical-chart-data>

Limits – Closing price from that day of the week