* Intro
  + climate change is enhancing uncertainty and posing new risks to every sector of business
  + Climate tech is booming. As the effects fo climate change become more evident, decision-makers are realizing that virtually every sector will be affected in some way. In response to this, machine learning and data science si becoming a crucial tool for addressing many of the problems.
  + One example is in agriculture. Name some statistics about how agriculture is extremely dependent upon good forecasts and are sensitive to change.
  + This post will serve as a brief tutorial on how to use machine learning to predict river flow. Specifically, we’ll be using an SVR model. Next well introduce support vector regression. Then we’ll describe the steps needed for building an SVR model, and how SKLEARN can be utilized to streamline this workflow.
* Support Vector Regression Basics
  + Optimization problem
  + Kernel trick
    - Hyperparameters of kernels
  + Advantages
* Necessary steps when developing an SVR model
  + EDA
    - Describe the dataset
    - Plot the variables to look for outliers
    - Plot seasonal averages to gain insight to the problem
  + Feature selection/engineering
    - Test for correlations
    - Create rolling windows
  + Splitting data
    - Final evaluation set
  + Feature transformation
    - Choice of scaler
  + Splitting data again for cross validation with a rolling time window
    - Why a rolling time window is needed
  + Training and hyperparameter tuning
    - CVgridsearch
  + Doing all of this with Pipeline
* Training/testing the model and comparing it with other methods