Tutorial 2. Predicting Future DO

Tutorial 2.1. Preprocessing CBP Water Quality Data

2.1.1 Introduction

2.1.2 Data Loading & Inspection

2.1.3 Explore Each Dataset

2.1.4 Clean and Filter Data

2.1.5 Export Cleaned Data

Tutorial 2.2. Preprocessing USGS Discharge Data

2.2.1 Introduction

2.2.2 Set Up API Paths, Data Retrieval *(optional)*

2.2.3 Explore Raw Discharge Data

2.2.4 Calculate Accumulated Flow

2.2.5 Merge Accumulated Discharge Files

Tutorial 2.3. Preprocessing NOAA Meteorological Data

2.3.1 Introduction

2.3.2 Preview Raw Data Files

2.3.3 Load and Clean NOAA Meteorological Data

2.3.4 Convert Wind Direction into Cardinal Sectors

2.3.5 Aggregate Wind by Direction and Time Window

Tutorial 2.4. Merge Preprocessed Data

2.4.1 Introduction

2.4.2 Align and Merge Datasets

Tutorial 2.5. Model Training and Evaluation

Exercise