21BDS0340 – Abhinav Dinesh Srivatsa

21BCE3039 – Chadalawada Siva Bala Krishna Chowdary

Embedded Systems

**Repository Links**

1. Telemetry
   1. <https://github.com/weatherman-org/telemetry>
2. Dashboard
   1. <https://github.com/weatherman-org/dashboard>
3. Model
   1. <https://github.com/weatherman-org/model>
4. Deployment (Houses complete deployment from scratch with optional building)
   1. <https://github.com/weatherman-org/deployment>

**Building the Project**

1. git clone <https://github.com/weatherman-org/deployment>
2. make build\_deploy

**Model Training and Details**

Dataset API: <https://archive-api.open-meteo.com/v1/archive>

API Params:

{

"latitude": 12.9184,

"longitude": 79.1325,

"start\_date": "2003-01-01",

"end\_date": "2024-01-01",

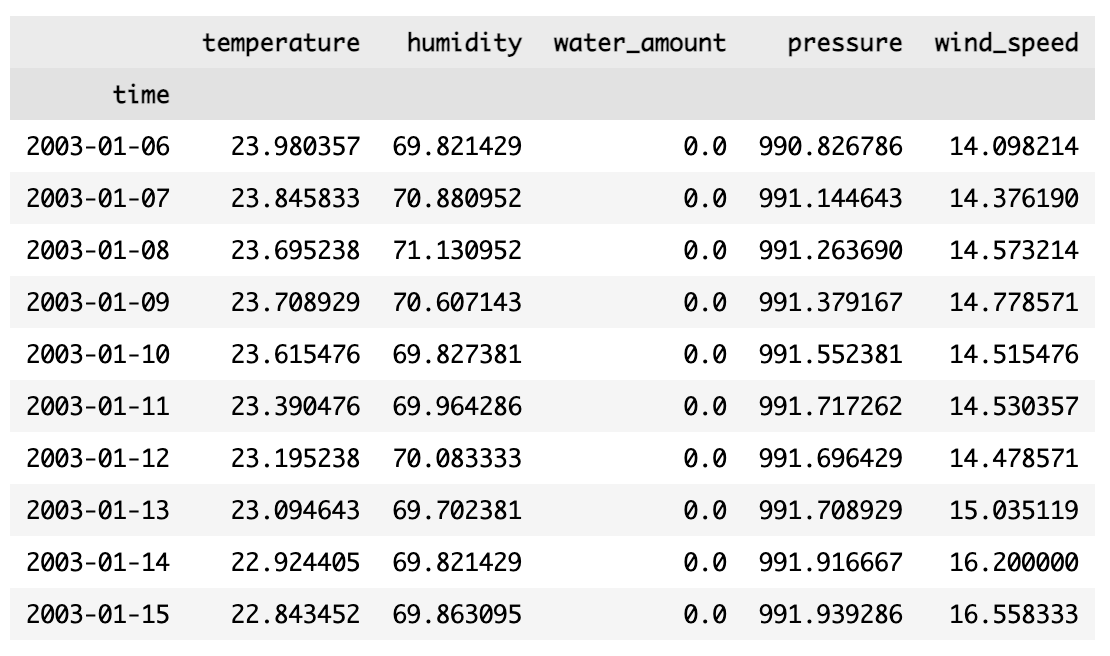
"hourly": "temperature\_2m,relative\_humidity\_2m,rain,surface\_pressure,wind\_speed\_100m,wind\_direction\_100m",

"timezone": "auto",

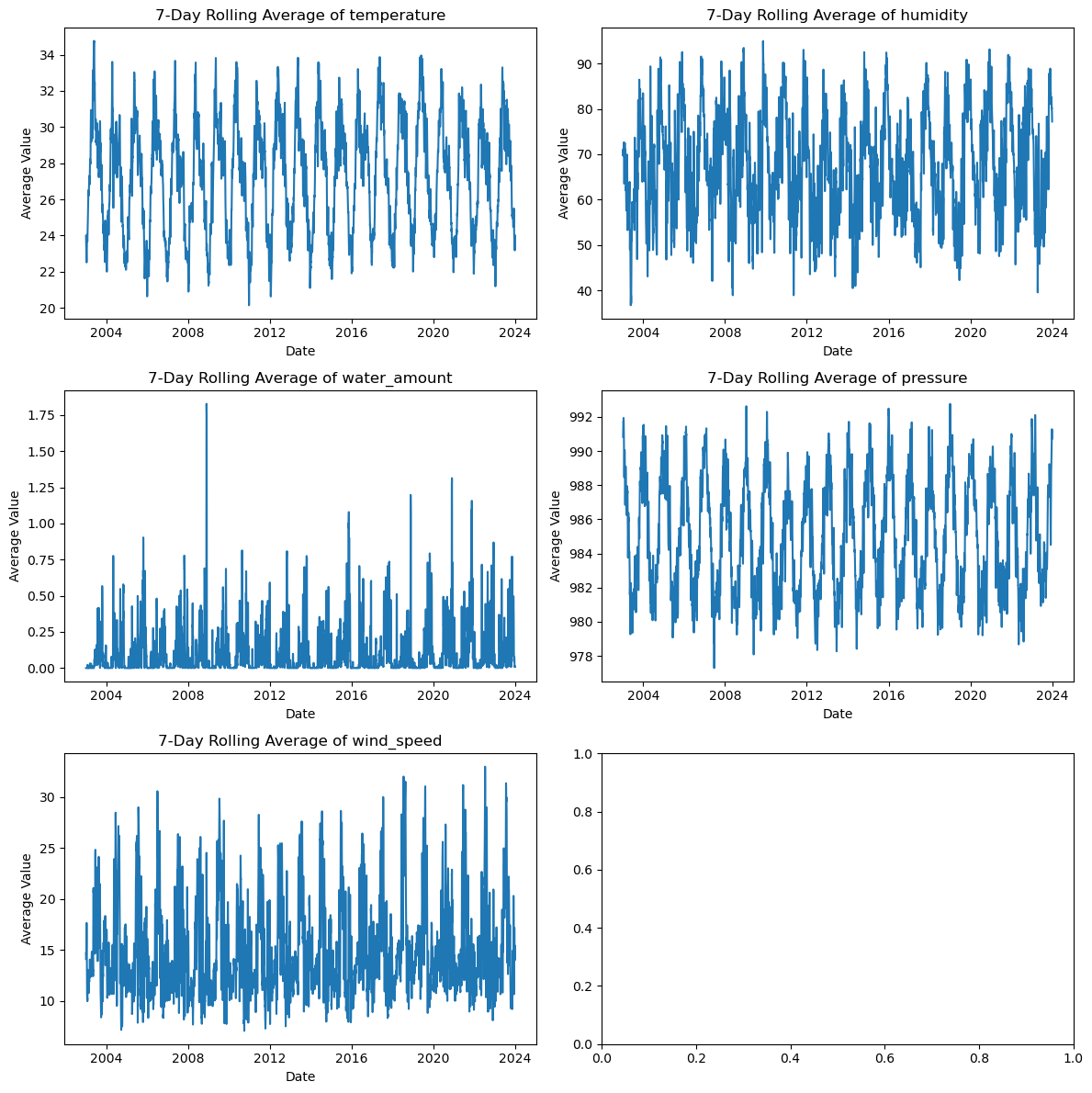
"format": "csv"

}

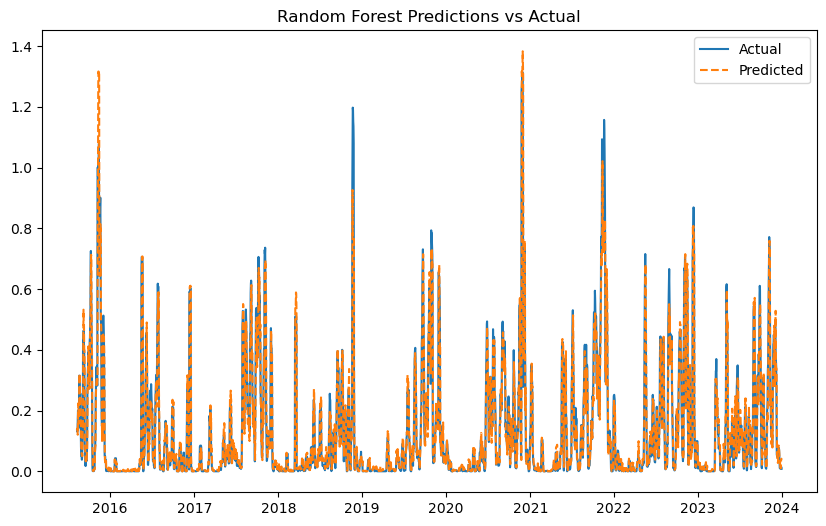
Dataset Example Rows:



7-Day Rolling Averages of Dataset:



Model Prediction (Orange) vs Actual (Blue):



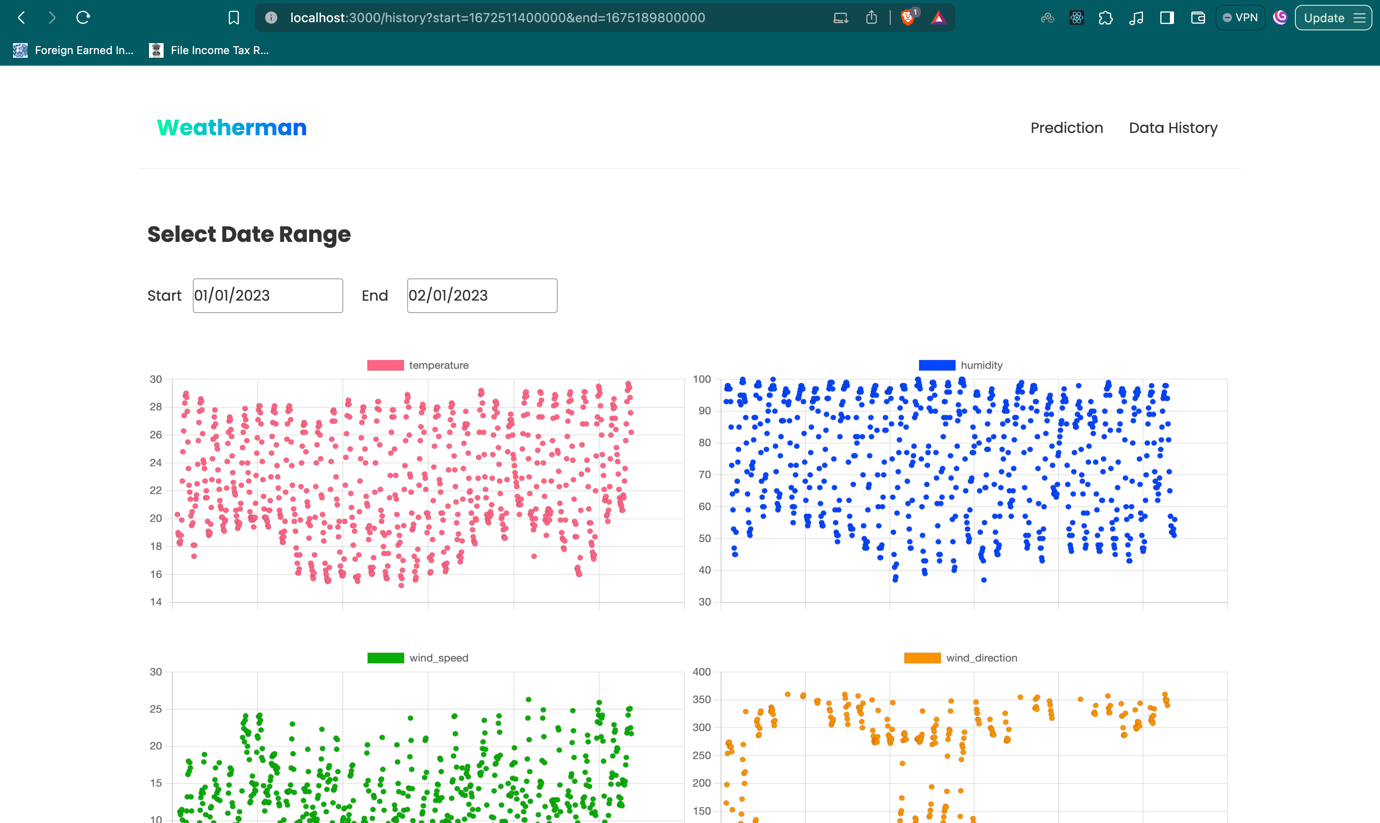
**Dashboard Views**

**Prediction Page**

A screenshot of a computer

Description automatically generated

**Data History Page (Top)**



**Data History Page (Bottom)**

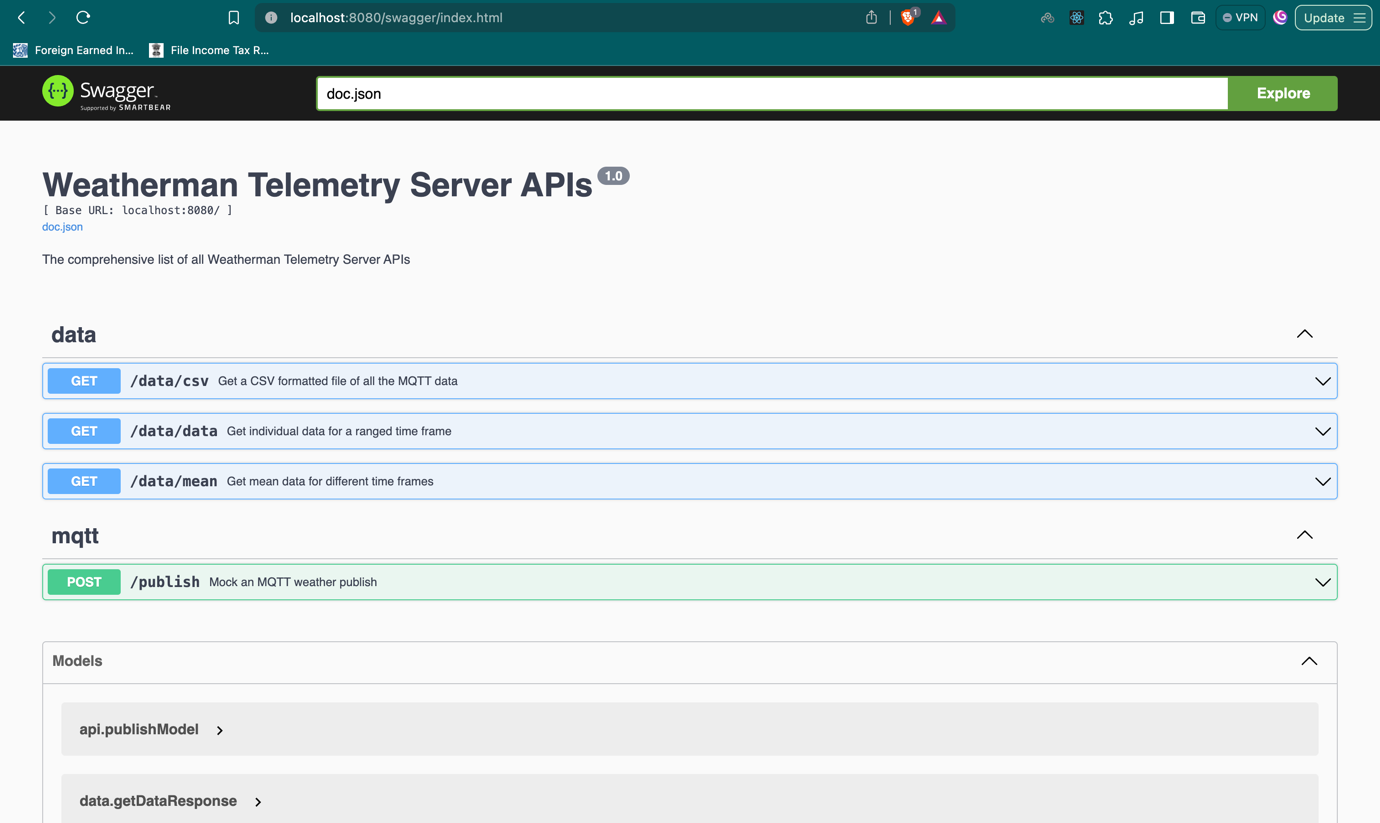


**Specific Graph Page**

A screenshot of a computer

Description automatically generated

**Telemetry Swagger Dashboard**



**Model Swagger Dashboard**

A screenshot of a computer

Description automatically generated