Dataset Legends

To facilitate understanding and ensure the reproducibility of our experiments, the datasets utilized in this study are detailed below.

1. Public Datasets

The following datasets are publicly accessible. For detailed information regarding data fields and additional documentation, please refer to the corresponding official websites or the references cited in this paper.

Table 1. Summary of Public Datasets

Dataset Name	Data Type	Time Span	Sampling Frequency	Description
ECL.csv	User electricity consumption time series	2012-01-01 to 2014-12-31	Hourly	Electricity Load Diagrams 2011-2014. Available at: https://archive.ics.uci.edu/ml/datasets/ElectricityLoadDiagrams20112014
WTH.csv	Meteorological observation data	2010-01-01 to 2013-12-31	Hourly	Weather Dataset. Available at: https://www.bgc-jena.mpg.de/wetter/
Traffic.csv	Traffic spatiotemporal series	2016-07-01 to 2018-07-02	Hourly	Traffic Dataset. Available at: http://pems.dot.ca.gov/
ETTh2.csv	Transformer operation status monitoring data	2016-07-01 to 2018-06-26	Hourly	Merged ETT Dataset for Time Series Forecasting. Available at: https://dx.doi.org/10.21227/36xq-kh47

2. Private Datasets

FMP.csv Dataset

- **Data Type:** Regional wind direction, wind speed, and meteorological monitoring data
- **Time Span:** 2019-01-01 to 2023-06-01
- **Sampling Frequency:** Hourly

Table 2. FMP.csv Field Descriptions

Field Name	Description
jcsj	Monitoring time
press	Standardized air pressure
temp	Standardized temperature
dew	Standardized dew point temperature
wnd_spd	Standardized wind speed
wnd_dir	Standardized wind direction
Grid_Lat	Station latitude
Grid_Lon	Station longitude
station_id	Station ID

WRW.csv Dataset

- **Data Type:** Regional atmospheric pollutant concentration monitoring data
- **Time Span:** 2019-01-01 to 2023-06-01
- **Sampling Frequency:** Hourly

Table 3. WRW.csv Field Descriptions

Field Name	Description
jcsj	Monitoring time
SO2_1xsnd	Standardized SO_2 concentration
NO2_1xsnd	Standardized NO_2 concentration
PM10_1xsnd	Standardized PM_{10} concentration
CO_1xsnd	Standardized CO concentration
O3_1xsnd	Standardized O_3 concentration
PM25_1xsnd	Standardized $PM_{2.5}$ concentration
AQI	Standardized Air Quality Index (AQI)
Grid_Lat	Station latitude
Grid_Lon	Station longitude
station_id	Station ID