There are three file folders in the “data\_code\_WLSTM”:

1. “algorithm”: Contains the main codes for different study cases.

图形用户界面, 应用程序

描述已自动生成

2. “data”: Contains the raw data (for LSTM and MLPs) and the wavelet-transformed data (for WLSTM).

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图片包含 文本

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3. “optimal \_hyperparameter”: Contains tuned model hyperparameters for different study cases, the same as we provided in "Table\_S2\_optim\_keeper".

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描述已自动生成

To replicate our results:

1) you need to change the “myseed”, “time\_lag”, and “resolution” in the “input\_parameter”, according to our study cases (see the below chart);

2) read in corresponding data;

3) read in corresponding tuned hyperparameters.

电脑游戏的截图

描述已自动生成

Configure list

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| case | algorithm | data | optimal\_hyperparameter | resolution | time\_lag | my\_seed |
| Lake Mendota | wlstm\_mendota.py | hour\_mendota.mat | Wlstm\_mendota\_optim\_keeper.xlsx | hour | 0 | 1 |
| day\_mendota.mat | day | 0 | 0 |
| month\_mendota.mat | month | 0 | 0 |
| lstm\_mendota.py | hour\_mendota.csv | lstm\_mendota\_optim\_keeper.xlsx | hour | 0 | 132 |
| day\_mendota.csv | day | 0 | 92 |
| month\_mendota.csv | month | 0 | 25 |
| dnn\_mendota.py | hour\_mendota.csv | dnn\_mendota\_optim\_keeper.xlsx | hour | 0 | 1 |
| day\_mendota.csv | day | 0 | 1 |
| month\_mendota.csv | month | 0 | 20 |
| Lake Mendota | wlstm\_tuesday.py | day\_tuesday.mat | Wlstm\_tuesday\_optim\_keeper.xlsx | day | 0 | 1 |
| day | 1 | 1 |
| day | 2 | 1 |