**Table S13.** Evaluation of prediction results of IPSO-LSTM and LSTM models, comparing PSM and ridge regression.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Prediction Models** | **Stocks** | **MAPE** | **RMSE** | **MAE** | **R2** |
| IPSO-LSTM | Huahai\_independent | 0.0043 | 0.1292 | 0.0893 | 0.9782 |
| Huahai-Haizheng | 0.0039 | 0.1146 | 0.0817 | 0.9829 |
| Huahai-Renfu | 0.0037 | 0.0955 | 0.0754 | 0.9881 |
| LSTM | Huahai\_independent | 0.0203 | 0.5590 | 0.4243 | 0.5922 |
| Huahai-Haizheng | 0.0144 | 0.4475 | 0.3003 | 0.7386 |
| Huahai-Renfu | 0.0144 | 0.3993 | 0.2976 | 0.7919 |

Note: Root Mean Square Error, RMSE; Mean Absolute Error, MAE; Mean Absolute Percentage Error, MAPE; coefficient of determination, R2.