

Daily ESA CCI SST v2.1
Daily ERA5 AtmV

Data preprocessing

- Time-series over Mediterranean Sea regions (Fig. 1)
- SST and AtmV mutual information analysis

Analysis

For each forecast ensemble:

- RMSE and MHWs skill vs MedFS dynamical model for 2017-2021
- Forecast sensitivity analysis to AtmV

Models

- Long-short term Memory (LSTM)
- Convolutional Neural Network (CNN)
- Random Forest (RForest)

Experiments

For each model and region:

- Ensemble of 15 experiments varying train and test datasets to forecast SST 7 d ahead