Reanalysis Datasets (e.g., ERA5)

Station Observation (e.g., DWD)

pyESD

Predictor Selection and Construction

Model Selection

Model training, validation, and evaluation

Future emission scenarios (e.g., RCPs)

GCMs simulated predictors

Downscaled Data

Wind energy

Flooding

Drought

Wildfire

+More

Climate impact Assessment

Modeling routines

Input and output datasets

Applications of the downscaled data