

Dataset title: slrec_dataset.mat

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File name structure: slrec_RegionName

The dataset (.mat) contains three structures, one for each region: Northeast Pacific Ocean (slrec_nepo), East Indian Ocean (slrec_eio) and Northeast Atlantic Ocean (slrec_neao). Complete list of attributes and variables within each structure as follows:

Attributes and variables:

neurons = Number of hidden units.

initial_year = Initial year of the reconstruction.

time_sl = Date of data expressed as a date number.

sl = Seasonal regional estimate of sea level from satellite observations (in mm).

time_proxy = Date of data expressed as a date number.

sl_proxy = Seasonal regional sea level proxy data (in proxy units).

stations = A structure providing information (from the [PSMSL site](#)) about the individual tide gauge stations for each region:

id = Identification numbers.

name_id = Name of the stations.

tg = Monthly mean sea level records (in mm).

time_tg = Dates of data expressed as a date number.

Reference: Radin, C., & Nieves, V. (2021). Machine-learning based reconstructions of past regional sea level variability from proxy data. *Geophysical Research Letters*, 48, e2021GL095382. <https://doi.org/10.1029/2021GL095382>