Dataset title: regional_climate_dataset.mat

Principal investigator: Veronica Nieves, veronica.nieves@uv.es

Contact: Cristina Radin, cristina.radin@uv.es

Dataset variables:
The dataset (.mat) contains the spatio-temporal patterns of climate variability, identified using the k-means clustering algorithm, across the analyzed period.

- cluster_map: regional clusters generated by applying the k-means clustering algorithm to multidimensional temperature anomaly data spanning from 1955 to 2022. The dataset dimensions include longitude (lon), latitude (lat), variable type, and temporal scale.
- lat: 'latitude' (degrees north).
- lon: 'longitude' (degrees east).

Reference: Radin, C., Nieves, V. Unveiling Regional Climate Patterns Through Global Subsurface Ocean Temperature Data: An AI Multi-Layer Analysis Framework. Earth Syst Environ (2024). https://doi.org/10.1007/s41748-024-00409-w