



## **Web-based application for Data INterpolation Empirical Orthogonal Functions (DINEOF) analysis**

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DINEOF (Data INterpolating Empirical Orthogonal Functions) is a powerful tool based on EOF decomposition developed at the University of Liege/GHER for the reconstruction of missing data in satellite datasets, as well as for the reduction of noise and detection of outliers. DINEOF is openly available as a series of Fortran routines to be compiled by the user, and as binaries (that can be run directly without any compilation) both for Windows and Linux platforms.

In order to facilitate the use of DINEOF and increase the number of interested users, we developed a web-based interface for DINEOF with the necessary parameters available to run high-quality DINEOF analysis. This includes choosing variable within selected dataset, defining a domain, time range, filtering criteria based on available variables in the dataset (e.g. quality flag, satellite zenith angle ...) and defining necessary DINEOF parameters. Results, including reconstructed data and calculated EOF modes will be disseminated in NetCDF format using OpenDAP and WMS server allowing easy visualisation and analysis.

First, we will include several satellite datasets of sea surface temperature and chlorophyll concentration obtained from MyOcean data centre and already remapped to the regular grid (L3C). Later, based on user's request, we plan to extend number of datasets available for reconstruction.