

JRC Dataset

EMIS - MODEL Monthly climatology Mixed Layer Depth (in m)

Description:

Monthly climatology Mixed Layer Depth (in m) derived from the different GETM hydrodynamic model implementations for EU regional seas. MLD is computed as the depth where potential seawater density (kg/m³) differs by 0.1 from the surface value. It indicates the fraction of the water column where vertical mixing (either by convection or by turbulent diffusion) is possible.

Contributors:

- Stips, Adolf adolf.stips@ec.europa.eu

How to cite:

Stips, Adolf(2016): EMIS - MODEL Monthly climatology Mixed Layer Depth (in m). European Commission, Joint Research Centre (JRC) [Dataset] PID: <http://data.europa.eu/89h/2bf20e0b-4e8a-42fc-b197-02db6fd2af56>

Keywords:

Environmental monitoring facilities, GETM hydrodynamic model, GIS digital format, Mixed Layer Depth, Oceanographic geographical features, Protected sites, climate change, coastal environment, environmental data, marine environment, marine monitoring, sea water protection

Related resources:

Data access

EMIS - Download access (EMIS_L_DEPMX)

Direct NetCDF download

<https://jeodpp.jrc.ec.europa.eu/ftp/public/JRC-OpenData/model/climatology/>

Additional information:

Last Modified: 2013-06-11

Issue date: 2016-08-10

Landing page: <http://emis.jrc.ec.europa.eu/>

Temporal coverage: From: 1997-03-01 – To: 2012-05-31

Language: English

Data theme(s): Environment

EuroVoc domain(s): 36 SCIENCE; 52 ENVIRONMENT

EuroVoc concept(s): environmental monitoring; ocean; oceanography; protected area

Identifier: <http://data.europa.eu/89h/2bf20e0b-4e8a-42fc-b197-02db6fd2af56>

Geographic information:

Lineage: General information: Monthly climatology Mixed Layer Depth (in m) derived from the GTEM hydrodynamic model results. GETM solves the three-dimensional hydrostatic equations of motion applying the Boussinesq approximation and the eddy viscosity assumption (Burchard and Bolding, 2002). A detailed description of the GETM equations could be found in Stips et al. (2004) and at <http://www.getm.eu>. GETM has been successfully applied to different EU regional seas including the Baltic (Lessin et al., 2014), North Sea (Stips et al., 2004), Mediterranean (Macias et al., 2013; 2014a and 2014b) and the Black Sea (Miladinova et al., 2015). Other contextual information: The product is stored in NetCDF data and available for download.

Geographic bounding box: 70.0° N, 42.0° E, 10.0° S, -30.0° W

Coordinate Reference System: ETRS89