

JRC Dataset

Extreme Sea level - RCP45

Description:

The Extreme Sea Level (ESL) dataset presents the distribution of the total water level (TWL) design conditions at the European coastline. The TWL is estimated from the dynamical simulation of the major hydrodynamic sea level components (being the mean sea level, tides, storm surges and waves) as derived from an ensemble of 6 climatic models under the RCP45 scenario and for the period from 01/12/2009 to 30/11/2099. The dataset contains the design conditions for both the TWL and the episodic component (storm surge level and wave height) that may affect the coastline during intense storm events. For further information regarding this dataset, the users are referred to the following article Michalis Vousdoukas, Lorenzo Mentaschi, Evangelos Voukouvalas, Martin Verlaan, Luc Feyen (in press 2017). Extreme sea levels on the rise along Europe's coasts. Earth's Future. DOI:10.1002/2016EF000505 <http://onlinelibrary.wiley.com/doi/10.1002/2016EF000505/full>

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Vousdoukas, Michail; Mentaschi, Lorenzo; Voukouvalas, Evangelos; Verlaan, Martin; Feyen, Luc(2016): Extreme Sea level - RCP45. European Commission, Joint Research Centre (JRC) [Dataset] PID: <http://data.europa.eu/89h/e9e42344-119d-479e-9bc7-57400d12a8a2>

Keywords:

Oceanographic geographical features, Sea Level Rise, Sea regions, Storm Surge Level, Total Water Level, Waves

Related resources:

Data access

Extreme Sea Level - RCP45

NETCDF Format.

https://cidportal.jrc.ec.europa.eu/ftp/jrc-opendata/LISCOAST/TWL/LATEST/CoastAIRisk_Europe_ESL_RCP45.nc

Additional information:

Last Modified: 2017-03-27

Issue date: 2016-11-29

Landing page: <https://ec.europa.eu/jrc/>

Temporal coverage: From: 2009-12-01 – To: 2099-11-30

Language: English

Data theme(s): Environment

EuroVoc domain(s): 12 LAW; 36 SCIENCE; 52 ENVIRONMENT

EuroVoc concept(s): maritime area; ocean; oceanography; sea

Identifier: <http://data.europa.eu/89h/e9e42344-119d-479e-9bc7-57400d12a8a2>

Geographic information:

Lineage: This is the official version of the ESL dataset. While the dataset may not be subject to and cannot be validated, this dataset has been created following the current research methodologies.

Geographic bounding box: 71.3589° N, 41.5208° E, 26.9813° S, -29.0571° W