Global tidal variables

SND-ID: ecds0243-1. **Version**: 1.0. **DOI**: https://doi.org/10.5879/c49r-x993

This data description and associated data have been migrated from the ECDS portal to SND's research data catalogue. The level of documentation may therefore differ from other data descriptions in the catalogue. For more information about the migration of data from ECDS to SND click here.

Download data

ECDS0243-001-V1.0.zip *(114.66 MB)*

Citation

Obst, M. (2017) Global tidal variables (Version 1.0) [Data set]. University of Gothenburg. Available at: https://doi.org/10.5879/c49r-x993

Creator/Principal investigator(s)

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Description

This dataset contains global tidal variables in form of GeoTIFF raster layers generated by Vestbo et al (2018). The raster layers were generated using the Finite Element Solution oceanographic model (FES2012), provided by Noveltis, Legos and CLS Space Oceanography Division and distributed by AVISO+ (http://www.aviso.altimetry.fr). FES2012 includes overall 32 tidal constituents distributed on 1/16° grids (amplitude and phase), corresponding to 3.75 arc-minutes.

The dataset contains the following five raster layers, plus the algorithm for calling the FES program (written in C).

(1) Annual average cycle amplitude in cm.
(2) Maximum annual cycle amplitude in cm.
(3) Annual standard deviation of cycle amplitude in cm.
(4) Annual average duration of tidal cycles in hours.
(5) Annual number of cycles.

A detailed description of the data generation procedure is provided in the original paper (Vestbo et al 2018).
References: Vestbo S, Obst M, Quevedo-Fernandez F, Intanai I, Funch P (2018). Present and Potential Future Distributions of Asian Horseshoe Crabs Determine Areas for Conservation. Frontiers in Marine Science. doi: 10.3389/fmars.2018.00164
https://www.frontiersin.org/articles/10.3389/fmars.2018.00164/abstract

The dataset contains the following five raster layers, plus the algorithm for calling the FES program (written in C):
(1) Annual average cycle amplitude in cm
(2) Maximum annual cycle amplitude in cm

(3) Annual standard deviation of cycle amplitude in cm
(4) Annual average duration of tidal cycles in hours
(5) Annual number of cycles

Data contains personal data

No

Data format / data structure

Geospatial

Geographic spread

Geographic description: Global coverage

Responsible department/unit

Department of Marine Sciences

Research area

Earth and related environmental sciences (Standard för svensk indelning av forskningsämnen 2011)

Oceans (INSPIRE topic categories)

Environment (INSPIRE topic categories)

Keywords

Oceans, Tidal components, Tidal height, Tidal range

Publications

Vestbo S, Obst M, Quevedo-Fernandez F, Intanai I, Funch P (2018). Present and Potential Future Distributions of Asian Horseshoe Crabs Determine Areas for Conservation. Frontiers in Marine Science (In Press).
Frontiers in Marine Science

If you have published anything based on these data, please notify us with a reference to your publication(s). If you are responsible for the catalogue entry, you can update the metadata/data description in DORIS.

Polygon (Lon/Lat)

-180, 90

-180, -90

180, -90

180, 90

-180, 90

Accessibility level

Access to data through SND
Data are freely accessible

Use of data

Things to consider when using data shared through SND

License

CC BY 4.0

Versions

Version 1.0. 2017-12-11

Download metadata

DataCite

DDI 2.5

DDI 3.3

DCAT-AP-SE 2.0

JSON-LD

PDF

Citation (CLS)

File overview (CSV)

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