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GENERAL INFORMATION

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1. Title of Dataset: Table S1. Supporting Data for “Quantitative link between sedimentary chlorin and sea-surface chlorophyll-a”

2. Authorship:

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DESCRIPTION

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1. Dataset language: English

2. Abstract:  
This dataset contains supporting information for "Quantitative link between sedimentary chlorin and sea-surface chlorophyll-a". The dataset consists of global oceanic biogeochemical data from sea-surface, water column and surface sediments. The dataset includes sedimentary chlorin and sea-surface chlorophyll concentration, total organic carbon content, oxygen concentration and mass accumulation rate, among other biogeochemical parameters.

3. Keywords:

[Chlorophyll](https://ddd.uab.cat/search?f=keyword&p=Chlorophyll&sc=1&ln=ca) ; [Chlorin](https://ddd.uab.cat/search?f=keyword&p=Chlorin&sc=1&ln=ca) ; [Sediment](https://ddd.uab.cat/search?f=keyword&p=Sediment&sc=1&ln=ca) ; [Ocean](https://ddd.uab.cat/search?f=keyword&p=Ocean&sc=1&ln=ca) ; [Total organic carbon](https://ddd.uab.cat/search?f=keyword&p=Total%20organic%20carbon&sc=1&ln=ca) ; [Paleoclimate](https://ddd.uab.cat/search?f=keyword&p=Paleoclimate&sc=1&ln=ca) ; [Proxy](https://ddd.uab.cat/search?f=keyword&p=Proxy&sc=1&ln=ca) ; [Remote sensing](https://ddd.uab.cat/search?f=keyword&p=Remote%20sensing&sc=1&ln=ca) ; [Biogeochemical](https://ddd.uab.cat/search?f=keyword&p=Biogeochemical&sc=1&ln=ca)

4. Date of data collection (single date or date range):

1997-2017

5. Date of dataset publication:

2022-04-02

6. Funding sources:

Funding agency: Spanish Research Ministry

Project number: CTM2013-43006-P

Funding agency: Maria de Maetzu Unit of Excellence

Project number: MDM-2015-0552

Funding agency: Maria de Maetzu Unit of Excellence

Project number: CEX2019-000940-M

7. Geographic location/s of data collection: Global oceanic database

ACCESS INFORMATION

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1. Creative Commons License of the dataset: CC0

2. Dataset DOI: [10.5565/ddd.uab.cat/257609](https://doi.org/10.5565/ddd.uab.cat/257609)

3. Related publication:

Raja, M., & Rosell-Melé, A. (2022). Quantitative link between sedimentary chlorin and sea-surface chlorophyll-a. Journal of Geophysical Research: Biogeosciences, 127, e2021JG006514. https://doi.org/10.1029/2021JG006514

METHODOLOGICAL INFORMATION

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A suite of 140 core-top sediments were compiled, generally corresponding to the upper 2 cm of the sediment core. Total chlorin in sediments were estimated by solvent microwave accelerated extraction and absorbance/fluorescence detection. Sea-surface chlorophyll-a concentrations were extracted from the Globcolour Project (<http://globcolour.info>)for the time period 1997-2017. Chlorin mass accumulation rates were estimated by multiplying chlorin concentration by sedimentation rate and dry bulk density. Sedimentation rates were extracted from two global maps (Dunne, Hales, & Toggweiler, 2012; Jahnke, 1996). Oxygen concentrations in bottom waters were obtained from NOAA database (World Ocean Atlas 2013 version 2: volume fraction of oxygen in sea water, annual 1.00 degree). Total organic carbon contents were determined using a Flash 1112 Elemental Analyzer coupled to a Delta V Advantage IRMS (Thermo). Further information on data collection-generation can be found on https://doi.org/10.1029/2021JG006514