Physicochemical data of the Belgian River Meuse from 1972 to 2010

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Keywords

Meuse, river, physicochemical

Short description of the dataset/summary

Three sites, covering the Begium Meuse River had been homogeneously monitored for a longest period of time (1972-2010). Dissolved oxygen, water temperature, suspended matter, nitrates, ammonium, dissolved reactive phosphorus, chlorophyll-a and water discharge were measured by public institutions. For each site and each parameter, annual average values were calculated (mean, min and max).

Fish and invertebrate data of the River Meuse are also available as separate datasets.

General information

dataset entry ID: SF_3

name of the dataset:

full name of the dataset: Physicochemical data of the Belgian River Meuse from 1972 to 2010

dataset short name: Meuse River physicochemical dataset

type of dataset: environmental characteristics database

data type: point data/observation data

science keywords according to GCMD:

topic: Climate Indicators, Terrestrial Hydrosphere

ISO topic category according to ISO 19115:

Environment

INSPIRE keywords according to GEMET:

	Environmental monitoring facilities, Habitats and biotopes
own science keywords:	physico-chemical, long-term measurements, River Meuse, global warming, chlorophyll-a decrease
related project:	Planctonic resources decrease, and habitat alterations, which consequences for the functioning of communities? University of Namur
funding:	We would like to thank the SPW (Belgium) for providing the data corresponding to their Meuse River monitoring programs. This work was funded by the University of Namur.

Technical and administrative specifications

data format:	Excel
operating system:	Win 7
data language:	English
current access level:	web (public)
web address:	http://www.riwa-maas.org/nc/en/quality-measurements.html
currently available through GBIF:	yes
exchange planned:	yes
data in data repository:	no

Do you plan to publish the data on the Freshwater Biodiversity Data Portal:

	already published through the Freshwater Biodiversity Data Portal
update level:	completed, others/specify
others/details:	Could be updated in the future by the partners.
documentation:	
type:	scientific paper
language:	English

contact details:

metadata contact person:	
first, last name:	Adrien Latli
phone:	081 72 42 87
email:	adrien.latli@unamur.be
institution:	Univeristy of Namur - URBE
address:	Rue Bruxelles, 61
postal code, city:	5000 Namur
country	Belgium
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first, last name:	Adrien Latli
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scientific contact person:	
first, last name:	Adrien Latli
phone:	081 72 42 87
email:	adrien.latli@unamur.be

Intellectual property rights and citation

dataset creator (data compiler):

contact name:	Latli Adrien
contact email:	adrien.latli@unamur.be; patrick.kestemont@unamur.be
contact institution:	University of Namur

data contributors to/owners of this dataset:

	multiple
number:	3

data contributor/owner 1:

contact name:	SPW-DGARNE
contact email:	dgarne@spw.wallonie.be
contact institute:	SPW-DGARNE
criteria for using this part of the dataset:	
	The dataset needs to be requested from dataset creator with specific conditions of use.

data contributor/owner 2:

contact name:	RIWA
contact email:	vanhoutem@riwa.org
contact institute:	RIWA
criteria for using this part of the dataset:	
	The dataset is publicly available (data portal, data archive) and can be used without restrictions, but must be acknowledged and cited correctly.
other/additional criteria:	http://www.riwa-maas.org/nc/en/quality-measurements.html

data contributor/owner 3:

contact name:	CIM-Meuse
contact email:	secr@meuse-maas.be
contact institute:	CIM-Meuse
criteria for using this part of the dataset:	
	The dataset needs to be requested from dataset creator with specific conditions of use.

citation of this dataset:

author(s):	Latli, A., Service Public de Wallonie - DG03, RIWA-Maas, CIM-Meuse
title and journal (name, number, pages):	
	Physicochemical evolution of the Belgian River Meuse from 1972 to 2010.
year:	2017
doi:	https://doi.org/10.13148/evwxv1

citation of the metadata:

author(s):	Latli A., Service Public de Wallonie , Kestemont P., RIWA & CIM-Meuse
title and journal (name, number, pages):	
	Physicochemical data of the Belgian River Meuse from 1972 to 2010. Freshwater Metadata Journal 32: 1-5
year:	2018
doi:	https://doi.org/10.15504/fmj.2018.32

dataset related references:

reference 1:

author(s):	Latli, A., Descy, J.-P., Mondy, C., Floury, M., Viroux, L., Otjacques, W., Marescaux, J., Depiereux, E., Ovidio, M., Usseglio-Polatera, P. & Kestemont, P.
title:	Long-term trends in trait-structure of riverine communities facing predation risk increase and trophic resource decline. Ecological Applications 27(8): 2458-2474.

year: 2017
doi: https://doi.org/10.1002/eap.1621

General data specifications

regional coverage of the dataset:
spatial extent of the dataset: regional
continents: Europe
spatial extent (bounding coordinates):
southernmost latitude [°]: 4° 52' 54.7"
northernmost latitude [°]: 5° 34' 40.1"
westernmost longitude [°]: 50° 23' 52.5"
easternmost longitude [°]: 50° 37' 53.9
minimum altitude: 57 metres
maximum altitude: 82 metres
countries: Europe: Belgium
world climatic regions according to Köppen:
Group C: temperate/mesothermal climates
freshwater ecoregions of the world (FEOW) according to WWF:
Europe: Central & Western Europe
European ecoregions according to Illies (WFD):
Western Plains (ER13)
ecosystem type: rivers
covered timeframe: 1972 - 2010

Site specifications

coordinate system/grid data: latitude/longitude, format: DMS
projected, UTM
datum (e.g. WGS84): WGS84
grid data available: no
site coding available: no
number of sites: <100
exact number of sites: 3

Climate and environmental data

climate related data:
available parameters per site:
mean annual temperature January, July
data source: https://doi.org/10.1002/eap.1621
mean discharge
data source: https://doi.org/10.1002/eap.1621
environmental data:

available parameters per catchment:
catchment size
data source: https://doi.org/10.1002/eap.1621
hydrological regime/flow regime

data source: https://doi.org/10.1002/eap.1621

available parameters per site: river length
data source: https://doi.org/10.1002/eap.1621
distance to source
data source: https://doi.org/10.1002/eap.1621
slope
data source: https://doi.org/10.1002/eap.1621
altitude
data source: https://doi.org/10.1002/eap.1621
discharge
data source: https://doi.org/10.1002/eap.1621

comments: Latli, A., Descy, J.-P., Mondy, C., Floury, M., Viroux, L., Otjacques, W., Marescaux, J., Depiereux, E., Ovidio, M., Usseglio-Polatera, P. & Kestemont, P. (2017): Long-term trends in trait-structure of riverine communities facing predation risk increase and trophic resource decline. Ecological Applications 27(8): 2458-2474.

physico-chemical data: ortho P, nitrate, ammonium, water temperature, chlorophyll, suspended solids

availability of physico-chemical data, if there is more than one sample per site:
per sample

stressors influencing the sites: no stressor data available

Other specifications

GIS layers, shape files related to the dataset:
no data available

availability of photos: no

availability of maps: no

quality control procedures:

Were any quality control procedures applied to your dataset?
yes

quality control protocols and comments:
We performed a number of systematic checks using the OpenRefine software.

Acknowledgements

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References

Latli, A., Descy, J.-P., Mondy, C., Floury, M., Viroux, L., Otjacques, W., Marescaux, J., Depiereux, E., Ovidio, M., Usseglio-Polatera, P. & Kestemont, P., 2017. Long-term trends in trait-structure of riverine communities facing predation risk increase and trophic resource decline. Ecological Applications 27(8): 2458-2474. https://doi.org/10.1002/eap.1621