Physicochemical data of the Belgian River Meuse from 1972 to 2010

Adrien Latli, DG03 Service Public de Wallonie, Patrick Kestemont, RIWA & CIM-Meuse
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¹ University of Namur, Namur, Belgium; corresponding author: adrien.latli@unamur.be
² SPW-DG03, Namur, Belgium
³ RIWA, Belgium
⁴ CIM-Meuse, Belgium


Keywords
Meuse, river, physicochemical

Short description of the dataset/summary

Three sites, covering the Belgium 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: Physicochemical data of the Belgian River Meuse from 1972 to 2010
full name of the dataset: Meuse River physicochemical dataset
dataset short name: 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)
- ** exchanged 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:**

- **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: University of Namur - URBE
- address: Rue Bruxelles, 61
- postal code, city: 5000 Namur
- country: Belgium

**technical contact person:**
- first, last name: Adrien Latli
- phone: 081 72 42 87
- email: adrien.latli@unamur.be

**scientific contact person:**
- first, last name: Adrien Latli
- phone: 081 72 42 87
- email: adrien.latli@unamur.be
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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:
  number: multiple

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.

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):
  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.
General data specifications

regional coverage 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
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


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.

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References