Metadata

B-BLOOMS2

General information

name of the dataset:

full name of the dataset: *B-BLOOMS2*

dataset short name: *B-BLOOMS2*

type of dataset (more information): *species (taxonomic group) per site database including environmental information*

data type: *point data/observation data*

short description of the dataset/summary:

The B-BLOOMS2 dataset resulted from the monitoring of 4 Belgian reference lakes during the bloom seasons in 2007 and 2008. It is composed of 278 sample events for which 17 environmental parameters are available, as well as HPLC based pigment analysis, zooplankton counting, proportion of cyanobacterial populations (from genus to species), and MC-LR concentrations determined by ELISA. Molecular data acquired during this project are also available (http://hdl.handle.net/2268/213145).

These data were acquired with the financial support of BELSPO in the frame of the Science for a Sustainable Development programme funding the project B-BLOOMS2 (SD/TE/01).

The final report is available at:
http://www.bblooms.be/BBLOOMS2_FinalReport.pdf

keywords according to GCMD:

topic: *Biosphere, Biological Classification, Terrestrial Hydrosphere*

ISO topic category according to ISO 19115:

Biota, Environment, Inland Waters

INSPIRE keywords according to GEMET:

own science keywords: *cyanobacteria, blooms, eutrophic lakes, genetic diversity, monitoring, cyanotoxins, modelling*

Technical and administrative specifications

data format: *MySQL*
operating system: *all operating systems*
data language: *English*
current access level: *web (public)*
web address: *http://www.bblooms.be/protected/data.htm*
currently available through GBIF: *no*
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: *update planned*
documentation:
type: *scientific paper*
language: *English*

contact details:

metadata contact person:
first, last name: *Yannick Lara*
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institution: *University of Liège*
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country *Belgium*

technical contact person:
first, last name: *Yannick Lara*
phone: *003243665260*
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scientific contact person:
first, last name: *Annick Wilmotte*
phone: *003243663387*
email: *awilmotte@uliege.be*

Intellectual property rights and citation

(if the dataset is already published):

dataset creator (data compiler):

contact name: *Jean Pierre Descy*
contact email: *jpdescy@gmail.com*

data contributors to/owners of this dataset:

multiple
number: *4*

provider 1:

provider institute: *University of Liège*
contact name: *Annick Wilmotte*
contact email: *awilmotte@uliege.be*
criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but dataset creator/data contributors must be informed prior to publication. Data must be acknowledged and cited correctly.

provider 2:

provider institute: *--*
contact name: *Jean Pierre Descy*
contact email: *jpdescy@gmail.com*
criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but dataset creator/data contributors must be informed prior to publication. Data must be acknowledged and cited correctly.

provider 3:

provider institute: *VUB*
contact name: *Ludwig Triest*
contact email: *ltriest@vub.ac.be*
criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but dataset creator/data contributors must be informed prior to publication. Data must be acknowledged and cited correctly.

provider 4:

provider institute: *University of Gent*
contact name: *Wim Vyverman*
contact email: *Wim.Vyverman@UGent.be*
criteria for using the data in a publication/scientific analysis:
The dataset is publicly available (data portal, data archive) and can be used without restrictions, but dataset creator/data contributors must be informed prior to publication. Data must be acknowledged and cited correctly.

citation of this dataset:

author(s): *Verniers, G., Pirlot, S., Viroux, L., Leporcq, B., Vanormelingen, P., Van Wichelen, J., Van der Gucht, K., Peretyatko, A., Teissier, S., Lara, Y., Lambion, A., Reilly, M., Menzel, D., Wojnicz, A., Everbecq, E., Codd, G.A., Triest, L., Vyverman, W., Wilmotte, A. & Descy, J.P.*

title and journal (name, number, pages):

Cyanobacterial blooms: toxicity, diversity, modelling and management "B-BLOOMS2"

year: *2017*

doi (if applicable): *https://doi.org/10.15468/e3zw1e*

citation of the metadata:

author(s): *Lara Y., De Wever A., Verniers G., Pirlot S., Viroux L., Leporcq B., Vanormelingen P., Van Wichelen J., Van der Gucht K., Peretyatko A., Tessier S., Lambion A., Reilly M., Menzel D., Wojnicz A., Codd G.A., Triest L., Vyverman W., Descy J.-P. & Wilmotte A.*

title and journal (name, number, pages):

Metadata compilation for the B-BLOOMS2 dataset: Cyanobacterial bloom monitoring. Freshwater Metadata Journal 28: 1-8

year: *2017*

doi (if applicable): *https://doi.org/10.15504/fmj.2017.28*

General data specifications

regional coverage of the dataset:

spatial extent of the dataset: *national*

continents: *Europe*

spatial extent (bounding coordinates):

southernmost latitude [°]: *51.42*

northernmost latitude [°]: *49.68*

westernmost longitude [°]: *2.84*

easternmost longitude [°]: *5.95*

countries: *Europe: Belgium*

Site specifications

coordinate system/grid data:	*latitude/longitude* *projected*
datum (e.g. WGS84):	*WGS84*
grid data available:	*no*
site coding:	
site coding available:	*yes* *alphanumerical*
number of digits:	*8*
example:	*IXP1; FAL; Donkmeer*
number of sites:	*<100*
exact number of sites:	*5*

Climate and environmental data

climate related data:	*no climate data available*
environmental data:	
	no environmental data per catchment available
available parameters per site:	*wind speed*
physico-chemical data:	*Array*, *Array*, *Array*, *Array*, *Array*, *Array*, *Array*, *Array*, *Array*, *Array*, *Array*, *Array*
stressors influencing the sites:	*no stressor data available*
reference sites available:	*no*

Biological data

biological data origin:

specify project:

specify method:

organism group addressed: *zooplankton, phytoplankton, other group(s): Cyanobacteria*

Sample specifications/sample resolution

zooplankton:

sample information:

covered timeframe:

year from - to: *2007 - 2008*

historical data: *no*

palaeo data: *no*

season: *spring*

temporal resolution/frequency of sampling:

per week

time series data: *yes*

taxonomic resolution:

other taxonomic levels: *suborder*

comments: *calanoids, cylcopoids, nauplii, cladocerans (large and small), rotifers*

taxonomic coding:

coding system: *no coding available*

sample specifications:

replicate samples: *no*

number of samples: *278*

specification of method(s) used for sampling and sorting:

Zooplankton was collected from each lake, using buckets or a Schlindler-Patalas plankton trap. Enumeration was performed using a dissecting microscope for larger taxa (cladocerans, copepodites and adult copepods) and using a microscope for small 'forms' (nauplii, rotifers).

Cladocerans were identified as large or small cladocerans, whereas copepods were identified as calanoids, cyclopoids, and nauplii.

phytoplankton:

sample information:

covered timeframe:

year from - to: *2007 - 2008*

historical data: *no*

season: *spring*

temporal resolution/frequency of sampling:

per week

time series data: *yes*

taxonomic resolution:

other taxonomic levels: *class, phylum*

comments: *chlorophytes, chrysophytes, cryptophytes, cyanobacteria, diatoms, dinoflagellates, euglenophytes*

taxonomic coding:

coding system: *no coding available*

sample specifications:

replicate samples: *yes*

number of samples: *278*

specification of method(s) used for sampling and sorting:

Phytoplankon abundance has been assessed by observation and HPLC using CHEMTAX as described by Descy et al. 2000.

citation: *Descy, J.-P, Higgins, K., Mackey, D.J., Hurley, J.P. & Frost, T.M. (2000).*

Pigment ratios and phytoplankton assessments in north Wisconsin lakes. Journal of Phycology, 36: 274-286

other group(s):

sample information:

covered timeframe:

year from - to: *2007 - 2008*

historical data: *no*

season: *spring*

temporal resolution/frequency of sampling:

per week

time series data: *yes*

comments: *cyanobacteria*

taxonomic resolution:

percentage of species level data: *15*

comments: *taxalist:*
Anabaena spp., Anabaenopsis spp., Aphanocapsa spp., Aphanizomenon flos aquae, Aphanizomenon issathschenkoi, Aphanothece spp., Chroococcus spp., Coelosphaerium spp., Cyanogranis liberia, Gomphosphaeria spp., Limnothrix spp., Merismopedia spp., Microcystis spp., Woronichinia spp., Oscillatoria spp., Pseudanabaena spp., Planktothrix spp., Pannus spp., Snowella spp.

taxonomic coding:

taxalist according to: *Komárek & Anagnostidis (1998), Komárek & Anagnostidis (2005)*

citation: *Komárek, J. & Anagnostidis, K. (1998): Cyanoprokaryota 1. Teil: Chroococcales. - In: Ettl, H., Gärtner, G., Heynig, H. & Mollenhauer, D.(eds): Süsswasserflora von Mitteleuropa 19/1, Gustav Fischer, Jena-Stuttgart-Lübeck-Ulm, 548 pp.*

Komárek, J. & Anagnostidis, K. (2005): Cyanoprokaryota 2. Teil/ 2nd Part: Oscillatoriales. - In: Büdel, B., Krienitz, L., Gärtner, G. & Schagerl, M. (eds): Süsswasserflora von Mitteleuropa 19/2, Elsevier/Spektrum, Heidelberg, 759 pp.

sample specifications:

replicate samples: *no*

number of samples: *278*

specification of method(s) used for sampling and sorting:

For microscopy counting, 250 mL of sample were immediately fixed with lug and concentrated by settling for 24h. Then concentrate samples were preserved by addition of neutral formaldehyde (2-4% final concentration).

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?

no

related information: *Molecular dataset available at: http://hdl.handle.net/2268/213145*