



Metadata

Thames catchment (United Kingdom)

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General information

name of the dataset:

full name of the dataset: *Thames catchment (United Kingdom)*
dataset short name: *Thames_dataset*

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

data type: *point data/observation data, descriptive data*

short description of the dataset/summary:

This database contains climatic, hydrologic, water quality and biological data for the Thames catchments and some of its main tributary in the UK. They were compiled during the European FP7 funded project MARS. The database is a compilation of datasets that contain mostly information on precipitation, potential evapotranspiration, air temperature, solar radiation, river discharge, groundwater levels, nutrient concentration in some rivers, macroinvertebrate of the basin Thames. The data was obtained from UK Met Office, the National River flow Archive and the National Groundwater Level Archive, the Environment Agency and the Centre for Ecology and Hydrology.

science keywords according to [GCMD](#):

topic: *Agriculture, Biosphere, Biological Classification, Climate Indicators*
keywords: *water quality/water chemistry, nutrients, surface water, discharge/flow, rivers/streams, aquatic ecosystems, river/stream habitat, drought indices, macroinvertebrates*

ISO topic category according to [ISO 19115](#):

Farming, Biota, Climatology/Meteorology/Atmosphere, Environment

Technical and administrative specifications

data format: *others/specify*
others/details: *Data is stored in various formats, either ascii/ text files or spreadsheet (Excel).*

operating system: *all operating systems*
others/details: *Data is analysed and stored in both Windows and Linux operating systems.*

data language: *English*

current access level: *internal*
currently available through [GBIF](#): *no*
exchange planned: *no*
data in data repository: *no*

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

no

update level: *update planned*

documentation:

type: *others/specify*
others/details: *No full documentation on the database is available.*

contact details:

metadata contact person:

~~first name:~~ ~~00441191692381me~~
email: *chrp@ceh.ac.uk*
institution: *Centre for Ecology and Hydrology*
address: *Benson Lane, Crowmarsh Gifford,*
postal code, city: *OX10 8BB Wallingford*
province, state: *Oxfordshire*
country: *United Kingdom*

technical contact person:

~~first name:~~ ~~00441191692381me~~
email: *chrp@ceh.ac.uk*

scientific contact person:

~~first name:~~ ~~00441191692381me~~
email: *chrp@ceh.ac.uk*

Intellectual property rights and citation

dataset published (is already published) *not published*

dataset creator (data compiler):

contact name: *Mike Hutchins*
contact email: *mihu@ceh.ac.uk*
contact institution: *Centre for Ecology and Hydrology*

data contributors to/owners of this dataset:

number: *multiple*
2

provider 1:

provider institute: *Centre for Ecology and Hydrology*
contact name: *Mike Bowes*
contact email: *mibo@ceh.ac.uk*
criteria for using the data in a publication/scientific analysis:

The dataset needs to be requested from dataset creator with specific conditions of use.

comments: *Data from the Thames Initiative.*

provider 2:

provider institute: *Environment Agency*
contact name: *Jo-Ann Pitt*
contact email: *jo-anne.pitt@environment-agency.gov.uk*
criteria for using the data in a publication/scientific analysis:

The dataset needs to be requested from dataset creator with specific conditions of use.

comments: *Environment Agency water quality, invertebrate and biology dataset.*

citation of this dataset:

author(s): *Mike Hutchins, Cedric Laize, Mike Bowes*
title: *Thames catchment dataset*
year: *2015*

citation of the metadata:

author(s): *Mike Hutchins, Cedric Laize, Mike Bowes, Christel Prudhomme*
title and journal (name, number, pages):
Metadata to Thames catchment
year: *2015*

comments:

This dataset is for internal use only during the MARS project and cannot be used for any other project. Please contact the dataset creator for enquiries about possible uses.

General data specifications

regional coverage of the dataset:

scale of the dataset: *catchment*
continents: *Europe*

spatial extent (bounding coordinates):

southernmost latitude [°]: *51.0*
northernmost latitude [°]: *52.2*
westernmost longitude [°]: *-2.5*
easternmost longitude [°]: *-0.01*
minimum altitude: *15.0 metres*
maximum altitude: *78.0 metres*
countries: *Europe: United Kingdom*

Site specifications

coordinate system/grid data:	<i>latitude/longitude, format: DD</i>
grid data available:	<i>yes</i>
resolution:	<i>1-km</i>
comments:	<i>Data are at various spatial resolution: from gridded data (precipitation and PET at 1-km; air temperature at 5-km) to point data.</i>
site coding available:	<i>yes</i>
number of sites:	<i><100</i>
exact number of sites:	<i>10</i>
comments:	<i>Site coding varies with dataset (climate, hydrology, water chemistry and biology). It can be numerical and alphanumeric. There is no easy conversion table for different codes as they were done independently.</i>

Climate and environmental data

climate related data:

available per: *per catchment*
 spatial resolution of the data (if not catchment/site related):
others/specify
 others: *temperature: 5-km; PET: 1-km; precipitation: 1-km; mean discharge: at some sites*
 available parameters:

daily air temperatures

~~Data source:~~

evaporation

~~Data source:~~

mean discharge

daily precipitation

~~Data source:~~

comments: *Catchment average and gridded daily precipitation (CEH), air temperature and potential evapotranspiration are available for all Thames sub-basin. Daily river discharge and weekly groundwater levels are available for sub-catchments and boreholes in the basin (NRFA and NGLA).*

environmental data:

available parameters per catchment: *catchment size*
~~Data source:~~
 available parameters per catchment: *catchment geology*
~~Data source:~~
 available parameters per catchment: *catchment land cover/land use*
~~Data source:~~
 available parameters per catchment: *presence of barriers/dams/reservoirs (fragmentation)*
~~Data source:~~
 available parameters per catchment: *hydrological regime/flow regime*
~~Data source:~~
 available parameters per site: *information on groundwater level and amplitude*
~~Data source:~~
 available parameters per site: *information on embankment (incl. information on modification)*
~~Data source:~~
 available parameters per site: *information on water uses (e.g., irrigation, fish ponds)*
~~Data source:~~
 available parameters per site: *river length*
~~Data source:~~
 available parameters per site: *distance to source*
~~Data source:~~
 available parameters per site: *distance to mouth*
~~Data source:~~
 available parameters per site: *hydrological regime/flow regime*
~~Data source:~~
 available parameters per site: *discharge*
~~Data source:~~

physico-chemistry data:

comments: *total P, nitrite, oxygen content, conductivity*
Sampling procedure in Bowes et al., 2012.
Bowes M. J., Gozzard E., Johnson A. C., Scarlett P. M., Roberts C., Read D. S., Armstrong L. K., Harman S. A. & Wickham H. D. (2012) Spatial and

temporal changes in chlorophyll-a concentrations in the River Thames basin, UK: Are phosphorus concentrations beginning to limit phytoplankton biomass? Science of the Total Environment, 426(0), 45-55.

stressors influencing the sites:

reference sites available: *no*

stressor	restored sites available	data before/after restoration available	stressor gradient available	comments
eutrophication	no	no	no	
hydromorphological degradation	no	no	no	

Biological data

biological data origin: *from sampling*
specify project: *various*

organism group addressed: *phytoplankton*

Sample specifications/sample resolution

phytoplankton:

sample information:

covered timeframe:

year from - to: 2009 - 2014

historical data: no

season: spring, summer, autumn, winter

temporal resolution/frequency of sampling:

per week

time series data:

yes

comments:

See sampling procedure in Bowes et al., 2012

Bowes M. J., Gozzard E., Johnson A. C., Scarlett P. M., Roberts C., Read D. S., Armstrong L. K., Harman S. A. & Wickham H. D. (2012) Spatial and temporal changes in chlorophyll-a concentrations in the River Thames basin, UK: Are phosphorus concentrations beginning to limit phytoplankton biomass? *Science of the Total Environment*, 426(0), 45-55.

taxonomic resolution:

order

taxonomic coding:

sample specifications:

qualitative

replicate samples:

no

Other specifications

GIS layers, shapes related to the dataset:

catchments, river-sub-basins

land use

availability of photos:

no

availability of maps:

no

quality control procedures:

Were any quality control procedures applied to your dataset?

no