



## BODC Numerical Model Simulation Metadata Questionnaire

Please fill out as many fields in this questionnaire as possible and with as much detail as possible. Fields marked **in bold** must be completed. This form must be filled out and returned to BODC before the model simulation data files will be accepted and archived.

### Hardware information

This relates to the computing hardware that runs the model code.

QUERIES	NOTES (with examples)	ANSWERS
<b>Hardware platform name</b>	The name of the hardware platform e.g. the NOC Liverpool hardware is called MOBIUS	
<b>Vendor name</b>	The name of the company who made/sold the platform. For NOC Liverpool, the hardware was sold by ClusterVision Bright OS and SuperMicro	
<b>Hardware operating system</b>	The platform operating system. For NOC Liverpool, this is Linux CentOS 5.5	
<b>Hardware processor core</b>	The type of processing core that is used by the platform. The NOC Liverpool MOBIUS platform uses AMD Opteron 2218 Santa Rosa processors.	
Maximum available number of processors	The maximum number of processors that the platform has available for computational use.	
<b>Number of cores in each processor</b>	The number of cores in each of the available processors.	
<b>Memory in each processor core</b>	The amount of memory available in each core (in gigabytes).	
<b>Organisation responsible for hardware</b>	The organisation who maintain the platform i.e. the organisation where the platform is located.	

### Numerical model information

This relates to basic information about the computer model code for each experimental simulation run. If the model code being run is a combination of two separate models, please fill out this section separately for each.

QUERIES	NOTES (with examples)	ANSWERS
<b>Model name</b>	The full name of the model e.g. Nucleus for European Modelling of the Ocean.	
<b>Model acronym</b>	The standard acronym for the model e.g. NEMO.	
<b>Source organisations</b>	The organisation(s) which developed the model code and (if relevant) hold the intellectual	

	property rights to it. If more than one organisation, enter them with lead organisation first.	
Information URL	A URL to a definitive webpage or an online pdf providing details on the design and implementation of the model	
Reference paper	A reference to a peer reviewed and published journal article which describes the model in detail	
Grid type	This describes the type of grid used by the model e.g. Arakawa-B.	
Coupled?	Is the model a coupled model? If so, provide the two component models and also repeat the information in this table for each of the component models.	

### Simulation information

This provides the details of the model experiment simulation. If files are being supplied for more than one simulation, this needs to be filled out each time.

QUERIES	NOTES (with examples)	ANSWERS
<b>Project full name</b>	The full name of the project that the simulation is being undertaken as part of e.g. Coastal Flooding by Extreme Events	
<b>Project Acronym</b>	The accepted acronym for the project that the simulation has been undertaken as part of e.g. CoFEE	
<b>Project/ research funding</b>	The source of the funding for the research that the simulation is being run as part of.	
<b>Simulation description</b>	A concise but clear description of the simulation e.g. POLCOMS-WAM model run in Irish Sea generating surface wave data for the CoFEE project for 11 years from 1996	
<b>Compiler</b>	The software compiler used in coding up the simulation.	
<b>Compiler version</b>	The version number for the compiler	
<b>Geographic coverage of simulation</b>	A brief description of the geographic area covered by the simulation e.g. Irish Sea, Arctic Ocean, world-wide etc.	
<b>Minimum X-direction grid resolution</b>	The minimum length of a model cell along the x-axis, in kilometres	
<b>Maximum X-direction grid resolution</b>	The maximum length of a model cell along the x-axis, in kilometres	
<b>Minimum Y-direction grid resolution</b>	The minimum length of a model cell along the y-axis, in kilometres	
<b>Maximum Y-direction grid resolution</b>	The maximum length of a model cell along the y-axis, in kilometres	
<b>Vertical levels</b>	The number of vertical levels in the model.	
<b>Simulation start</b>	The start date and time for the simulation	

<b>date and time</b>	in UTC.	
<b>Simulation end date and time</b>	The end date and time for the simulation in UTC.	
<b>Simulation interval</b>	The interval between each numerical iteration of the simulation (the frequency at which the model parameters are re-calculated). Also known as the model time step. For iterations of 1 day, this would be 1	
<b>Interval unit</b>	The units which define the frequency for the model iterations (time step) e.g. for iterations of 1 day, this would be day	
<b>Southernmost latitude</b>	The southernmost latitude covered by the simulation grid.	
<b>Westernmost longitude</b>	The westernmost longitude covered by the simulation grid.	
<b>Northernmost latitude</b>	The northernmost latitude covered by the simulation grid.	
<b>Easternmost longitude</b>	The easternmost longitude covered by the simulation grid.	
<b>Simulation reference</b>	A reference to a peer reviewed and published journal article which describes the simulation in detail, including all boundary and setup conditions	

## File information

This provides details on the files that store the data for each simulation.

QUERIES	NOTES (with examples)	ANSWERS
<b>Simulation description</b>	This must be a match to the entry made in the above table, so that there is a clear link between the two sets of information.	
Data volume	The total data volume in gigabytes of the files generated during the simulation.	
File identifiers	The paths of the simulation data files, including their filenames. This is required to ensure the right data files are linked to the right simulations.	
Variable information	Please provide a list of all the variables in the data files for each simulation, a description of what they refer to, the standard_name that is being assigned to them and the SeaDataNet code that is being attributed to them.	