# Survey on the use of river run-off data in ocean circulation models

*j.w.nielsen, dmi oct 2019 - on behalf of NOOS*

This survey is carried out as a prerequisite for establishing Best Practice in the implementation of river run-off in ocean circulation models set up to include the North Sea, or parts thereof. You are assumed to be involved in the running of such a model. If not, I would appreciate if you could please pass on to a colleague of yours who is.

The filled-out word document may be returned by mail to me:

[jw@dmi.dk](mailto:jw@dmi.dk)

Preferably before January 1st 2020.

Some questions may have more than one answer.

**Question 1:** Does your ocean model in any way include river run-off? (yes/no)

If no**: Question 1a:** Do you plan to? (yes/no)

If no: you may stop here.

If yes: please proceed.

**Question 2:** Is/are your implementation(s)

* Operational
* Historical / Climatological
* For future climate
* Other

**Question 3:** Which kind of river data do you use?

* Observations
* Model data
* Climatology
* Other / Combination

**Question 4** if observations: How do you obtain the data you need?

* Which is/are your data source(s) ?
* Near real-time
* Data archive

**Question 5** if model data:

* Which is the data source
* Near real-time
* Modelled data archive

**Question 6** if climatology:

* What is the data source
* Do you use
  + Annual climatology
  + Monthly climatology
  + Daily climatology
  + Other time resolution

**Question 7:** How do you get access to data

* + Commercial
  + Co-operation
  + Other (please give details)
  + Not relevant

**Question 8:** How do you ascribe a water temperature to the run-off volume?

* It comes with the data
* I have to figure out something else (please describe)

**Question 9:** How is the implementation of the run-off flux?

* 2-D map of outlets
* Table of outlet points

**Question 10:** How is the run-off distributed vertically at the receiving locations? Details are welcome.

* Surface grid cell
* Whole water column
* Part of the water column
* Other

**Question 11:** How is the run-off time variation in your model run?

* If the run is a short or medium-range forecast
  + Constant throughout
  + Varying in time (please give details)
* If the run is a long-term hind-cast or a projection forward in time
  + Constant in time
  + Time varying, but step-wise constant in segments of [your unit]
  + Time varying on model time step
  + Other

**Question 12:** Are you content with your implementation, or do you plan to change?

* No plans for change
* Plans (please describe in brief)

**Question 13:** Your wishes form the NOOS community to facilitate your work in this respect

**Question 14:** Your comments, anything I forgot to ask about.

Thank you! Your co-operation is much appreciated.