

Operational river runoff on a pan-european scale

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The main objective of the project is to provide river runoff data, both forecast and hindcast, from the pan-European hydrological model, E-HYPE, to the MyOcean Monitoring and Forecasting Centres (MFC) for use as input to their operational model systems. The data may also be made available to external MyOcean users, such as agencies responsible for coastal management and operational shelf sea models in the regions.

For forecasting, daily updated 10-day prognostic data will be provided. For reanalysis applications, a 30-year hindcast data set, based on ERAMESAN forcing, will be produced. The data sets will include freshwater volume fluxes to the sea for all European rivers and runoff from land areas between river outlets. For some regions, it is possible to supply estimates of nutrient concentrations as well. Data will be accessible by ftp.

The proposed project is a first phase, focusing on two regions: the Baltic and Northwest Shelf. Partners from the two MFC's (BAL, NWS) will be responsible for validation of the E-HYPE data against measured runoff and for the assessment of the impacts of this new input data on the ocean models. The impact assessment will address both the fresh water content in physical models and the effect on ecological models. Real-time prognostic data and offline hindcast data will be available for the whole of Europe, but, due to the limited resources, the validation is restricted to the two regions.