

NanoFASE Deliverable D2.1

Specification for the NanoFASE model

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Research Report Summary

This report outlines the proposed structure of the NanoFASE water-soil-organism fate model for engineered nanomaterials (ENM). It describes the proposed spatial structure of the model and how this will be broken down into distinct components (“classes”) which will each handle ENM transport and transformations within a specific part of the environment. The structure and hierarchy of these classes within each environmental compartment under consideration (soil, river, lake/reservoir, estuary, coastal sea) are described, along with an outline of the modelling approach to be taken within each. A generic description of the approach to ENM form, state and transformations within each compartment is given, along with a description of the transport and transformation algorithms that are separated within the model structure and integrated at runtime. A description of the proposed model structure for biotic uptake is also given. Finally, the next steps in model development within NanoFASE WP2, which will build upon this model structure description, are laid out.



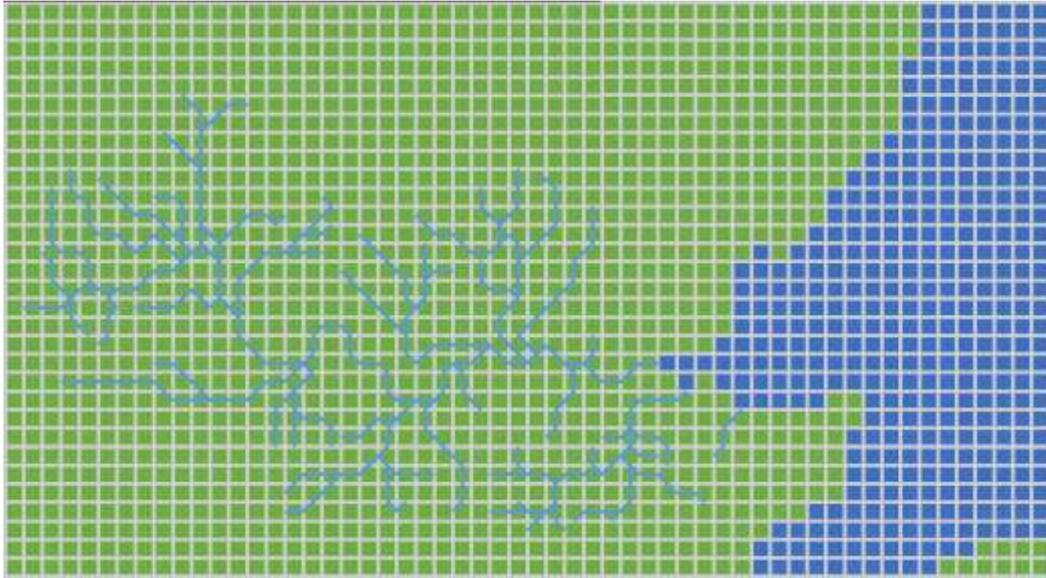


Figure 1. Example of gridded structure of river catchment for the NanoFASE model

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