Environmental numerical codes

Component
École Nationale Supérieure d'Électrotechnique d'Électronique

In brief

- **Code:** N9EM11D
- **Open to exchange students:** No

Presentation

Objectives

From a list of proposed problems, apply the scientific approach to the use of modeling tools specific to the themes introduced in the Environmental Fluid Mechanics courses given as part of the "Environmental Flows" U.E. of the Water and Environmental Sciences option (Aerosols, Atmospheric Boundary Layer, Coastal Hydrodynamics, Transport and Mixing, Sedimentary Transport and Morphodynamics).

Models on offer include: Fluent/Starccm+ codes (interface tracking modules, particle tracking, variable density fluids, etc.), specific modules from the Telemac suite (Artemis, Tomawak, Sysiphe, passive floats/tracers), Hysplit atmospheric dispersion code, etc.

Description

10 classroom sessions using aerodynamic and environmental codes such as Fluent, StarCd, Cormix, Comsol or others. Creation of a website presenting the work carried out.