

General Theme 4

4.10

Sediment transport affects river, coastal or estuarine environments, and modifies the landscape. In the context of climate change and the accelerating trends on erosion or sedimentation, the scientific community needs to revisit existing theories, models or methods in order to improve reliability for predictions of future evolution.

In order to foster new ideas on this topic, this session aims at gathering together observers, and physical and numerical modellers of sediment transport, of both cohesive and non-cohesive sediments. Hence, the session welcomes contribution that reports observations or simulations of sediment transport study in laboratory (e.g., acoustic, imaging and scanning techniques) and field conditions (e.g., drone or satellite). The session also welcomes contributions on both non cohesive sediments (like sand, gravel or rocks) and cohesive sediments (mud), in order to gather sediment communities that have often taken separated research path and offer a common place to share knowledge on different aspects of sediment transport.

Examples of topics that are welcome in this session are: (i) turbulence interaction between water and sediment by two-way or four-way coupling; (ii) interaction between vegetation and sediment such as trapping or scouring effects; (iii) scour erosion near anthropogenic obstacles such as transportation (bridge) or energy (marine turbine) structures, but any other topic on sediment transport is welcome.