BASEMENT Users Meeting 2024

Date: January 25, 2024
Location: OST Campus Rapperswil-Jona (Switzerland) and online via Zoom
Organizers: Laboratory of Hydraulics, Hydrology and Glaciology (VAW), ETH Zurich
Institute for Construction and Environment, Eastern Switzerland University of Applied Sciences (OST)

Welcome and Introduction

09:00	-	09:15	Registration	
09:15	-	09:20	Welcome address	Robert Boes, Davood Farshi
09:20	-	09:45	Current and future developments	David Vetsch
09:45	-	10:30	Coffee break	

Session 1 - Flood risk assessment and management

10:30	-	11:00	Sensitivity of flood impact in the main rivers and lakes of Switzerland	Markus Mosimann
11:00	-	11:30	BASEMENT 2-D application in the territorial planning of mountainous areas - from the design of hydraulic defence works to the definition of hazard maps	Marika Righetto
11:30	-	12:00	Investigation of friction coefficients for the 2D modeling of forest areas along rivers	Dany Suter
12:00	-	13:30	Lunch break	

Session 2 - River restoration and morphodynamics

13:30	-	14:00	A Step-pool sequence, an environmentally friendly grade control structure as an alternative to old-style-concrete check dams: an application in the Wester Italian Alps using BASEMENT as designing supporting tool	Nicola Groff, Silvia Simoni, Francesco Comiti
14:00	-	14:30	Morphodynamic simulations of complex river morphologies based on the lab results of the physical model of the Alpine Rhine	Gabriel Zehnder
14:30	-	15:00	Downstream propagation of water and sediment hydrographs due to the hypothetical failure of a real earthen dam	Andrea Antonella Graziano
15:00	-	15:45	Coffee break	

Session 3 - News from the BASEMENT team

15:45	-	16:05	Tsunami wave generation mechanisms	Jana Schierjott
16:05	-	16:25	Temperature transport model	Davide Vanzo
16:25	-	16:45	Lagrangian transport model	Francesco Caponi, Daniel Conde
16:45	-	17:05	Mixed-size sediment transport model for BASEHPC	Matthias Bürgler
17:05	-	17:15	Summary	David Vetsch