

ERB2022 Program

Conference venue: **Airone Hotel, Località San Giovanni Portoferraio, Elba Island**

www.hotelairone.info

Two swimming pools and a private beach are available to the participants...don't forget your swimming suit!

Presentation duration, template, and poster size

The duration of each oral presentation must be between **10 and 12 minutes**. Two to four minutes will be used for questions, and one minute for changing speaker. Please, strictly respect the allocated time. There is no slide template. Accepted file formats: .ppt, .pptx, .pdf.

The poster orientation must be **vertical**, and the poster size must be **A0 (84 x 119 cm)**. The posters will be hanged from dedicated wires, so please use this size only. Please, leave two cm of blank space on the top and the bottom of the poster.

Tuesday, 7 June 2022

16:00-19:30 Registration

17:30-19:00 ERB Steering Committee meeting (for Steering Committee members)

19:30 Icebreaker Happy Hour

21:00 ERB Medal lecture by Francesc Gallart

Wednesday, 8 June 2022

8:45 Welcome

9:00-10:30 Oral session 1 (Hydrological and ecohydrological monitoring techniques – part 1)

09:00	Almeida	Water stress index analysis using infrared thermography and computer vision to perennial crops in a small basin in the Brazilian semiarid
09:15	de Carvalho	Spatio-temporal dynamics of the vegetation index related to basin scale rainfall in the Brazilian semiarid region
09:30	Gelsinari	Estimating Recharge to the Groundwater in Transient Ecosystem by Integrating multisensor observations
09:45	Noto	Innovative observations to monitor ephemeral streams in a Mediterranean headwater catchment
10:00	Isidoro	Towards harmonization in the use of rainfall simulators – On the pursuit of better and more comparable experimental results
10:15	Kohl	Assessing and measuring Subsurface Storm Flow (SSF) by Artificial Rainfall Simulation (ARS)

10:30-11:00 Coffee break

11:00-12:30 Oral session 2 (Hydrological and ecohydrological monitoring techniques – part 2)

11:00	Castelli	Four years of stream discharge and rainfall continuous monitoring in wildfire-affected watersheds: Instrumentation network structure and preliminary results from the continuous monitoring
11:15	Nigro	Impacts of a large wildfire on hydrologic behaviour and water resources quality in the Pisano Mount area (northwestern Tuscany): preliminary results
11:30	Rotenberg	Ecosystem ET dependent on a leaf scale energy management; The Yatir forest case at the desert edge
11:45	Verdone	Throughfall spatio-temporal dynamics at the hillslope scale
12:00	Chattopadhyay	Impact of a summer flood on ecological status of a temperate, lowland river
12:15	Koch	Introduction of experimental catchment of Magyaregregy

12:30-14:00 Lunch break

14:00-15:30 Oral session 3 (Hydrological and ecohydrological modelling – part 1)

14:00	Addisu Yemer	Assessing the impact of climate change on coastal catchment (Bruna – Italy) using SWAT+gwflow
14:15	Martinetti	WaldLab: Measuring and modelling the soil-plant-atmosphere continuum
14:30	Camporese	Reproducing streamflow diel fluctuations in a small agricultural catchment with an integrated surface-subsurface hydrological model

14:45	D'Amato	A new look into vegetation: GEOSPACE 1D for modelling the soil-plant-atmosphere continuum
15:00	De Girolamo	Modelling flow regimes of a temporary river with limited data availability
15:15	Herrnegger	Event-based runoff simulations show forest roads enhancing floods

15:30-16:00 Coffee break

16:00-17:30 Oral session 4 (Hydrological and ecohydrological modelling – part 2)

16:00	Li	Assessing hydrological connectivity of a small agricultural catchment by process-based modelling
16:15	Schiavo	Probabilistic identification of Preferential Groundwater Networks
16:30	Sipéc	Influence of vegetation type and soil properties on soil water dynamics in the Šumava Mountains
16:45	Stecher	Modelling processes leading to diurnal discharge fluctuations in forested microwatersheds
17:00	Achleitner	Natural and artificial runoff and irrigation experiments in an alpine torrential catchment –building the basis to improve hydrological modelling
17:15	Basso	Critical processes in burned areas. A comparison between an event based and a continuous model under post-fire conditions

17:30 Poster session

20:00 Conference Dinner

Thursday, 9 June 2022

8:45-10:30 Oral session 5 (Environmental tracers in hydrological and ecohydrological studies)

8:45	Montemagno	Gradual ^{18}O and ^2H enrichment in xylem water in the pathway from roots to branches in <i>Fagus sylvatica</i> L.: potential impacts in ecohydrology
09:00	Keim	Fine-scale variability in clay soil-water isotopic composition driven by recharge mechanism and in-situ fractionation
09:15	Zuecco	Which water sources are used by beech and chestnut trees? An application of stable isotopes in a small catchment in the Italian pre-Alps
09:30	Latron	Precipitation fate and transport in a Mediterranean catchment through models calibrated on plant and stream water isotope data
09:45	Płaczowska	Unexpected changes in ionic composition of stream water in a small headwater catchment after partial deforestation
10:00	Zehsaz	Using a fluorescent quinine tracer to estimate overland flow velocities: laboratory and field experiments
10:15	van Meerveld	COST Action WATSON: WATER isotopeS in the critical zONE: from groundwater recharge to plant transpiration

10:30-11:00 Coffee break

11:00-12:30 Oral session 6 (Evapotranspiration and drought)

11:00	Fatichi	On the spatiotemporal variability of the transpiration-to-evapotranspiration ratio
11:15	Donnini	Hydrological drought as a result of the interactions between water and carbon cycles within the critical zone: the experimental site of Ussita in the Sibillini National Park
11:30	Lana-Renault	Differences in streamflow after farmland abandonment –a comparative study in four small mountain catchments
11:45	Yakir	Predicted changes in precipitation greatly underestimated the impact on water yield and water availability
12:00	Grosser	Development of drought, low flow and water scarcity over past and future in a German low mountain range basin - a long-term analysis
12:15	Alcamo	Nature-based solutions for drought resilient forests

12:30-14:00 Lunch break

14:00-15:30 Oral session 7 (Erosion and sediment transport)

14:00	Coviello	Continuous monitoring of bedload transport in a glacierized Alpine basin
14:15	Dijkma	Impact of small woody debris jams on local groundwater and surface water flow; case study in the Noor Brook, The Netherlands

14:30	Frouz	The effect of surface heterogeneity of erosion and other transport processes and their potential implication for ecosystem functioning
14:45	Giambastiani	Assessing soil erosion by monitoring hilly lakes silting
15:00	Maxwald	Estimating pre- and post-fire soil erosion in the temperate Andes by adjusting the C-factor within the revised universal soil loss equation (RUSLE).
15:15	Scholand	Automated Determination of Support Practice P-Factor Using Line Detection on Open Remote Sensing Data

15:30-16:30 **General assembly, ERB awards and closure**

20:00 **Dinner (for those who stay for the field trip or leave on Friday morning)**

Friday, 10 June 2022 – Field trip

7:50 Bus pick-up in front of the Airone Hotel

9:00 Start of the guided tour in the mining site

12:15 The bus leaves from the mining site

13:00/13:15 Return to Airone Hotel (the bus can drop people directly to the port).

What to bring for the field trip: sunscreen, hat, hiking shoes. The packed lunch provided to all participants includes two sandwiches, one fruit, one small dessert, and a 0.5-l water bottle.

Poster session

Azimi (Donnini)	Assessing the ability of the GEOframe modeling system for water budget analysis of a challenging carbonate basin in the Apennines chains, Central Italy.
Borga (Zuecco)	WATZON: the Italian network of small experimental catchments for the investigation of the critical zone
Bryła	Effect of geology on seasonal changes of stream water chemistry in a small catchment in the Western Tatras in southern Poland
Carturan	Permafrost distribution and effects on spring water physical characteristics in Val di Sole (Eastern Italian Alps)
De Lima	Use of Copernicus Sentinel-2 data for monitoring rice irrigation: applications in the Central region of Portugal
Fabiani	Contrasting tree water use strategies along hillslopes in forested catchments in Luxembourg and Italy
Fernández-Olloqui	Seasonal streamflow response in a Mediterranean catchment with abandoned agricultural terraces
Frouz	Introducing FALCON array of artificial catchment for large scale ecosystem manipulation
Gauthier	Near Surface flow pathways in a pre-Alpine catchment
Gentile	Hydrological functioning of a high-elevation grassland and a forested catchment in northwestern Italy inferred from isotopic tracers
Gourdol	Plot, slope and catchment scale electrical resistivity tomography of the Weierbach catchment (Luxembourg) for mapping regolith's structures and inferring hydrostratigraphic units
Hissler	Toward the long-term monitoring of water availability to trees: preliminary validation of the Weierbach Experimental Catchment soil moisture database
Hlaváčiková	Preferential flow occurrence in a small mountain catchment inferred from continual soil moisture measurements
Hrušková	How to improve hydrological model forecast using precipitation data from small experimental basin
Iffly	On the added value of multi-parameter and high-frequency monitoring protocols in catchment hydrology
Janco	Overland flow in a changing forest
Krmelová	Underwater Control Points for Multibeam GeoSwath 4R - Solution or a Waste of Time?
Leštianska	Analysis of the hydrometeorological conditions based on 10-year forest biometeorological monitoring in the region of Central Slovakia
Majer	Field measurements on the experimental catchment of Magyaregregy

Míka	Modelling of snow interception in the spruce forest in the Ptaci Brook basin, Sumava Mts., Czechia
Mostowik	Spring recharge patterns in flysch aquifer in the Carpathian Mountains
Nedelcev	Trends in seasonal snowpack and their relation to climate variables in mountain catchments in Czechia
Procházka	Water runoff from small experimental basins under various anthropogenic influences
Saurat	Unravelling hydrological processes in Mediterranean headwater catchments by means of water stable isotopes
Schiavo	The role of different sources of uncertainty on the stochastic quantification of subsurface discharges in heterogeneous aquifers
Siwek	Trends of baseflow in midsize Carpathian catchments in 1970-2019
Skvarenina	Influence of selected hydrometeorological elements on the moisture content of forest litter in relation to the fire danger level
Sleziak	Dynamics of runoff generation in a small mountain catchment
Tesař	Precipitation in the winter season in higher altitudes of the Bohemian Forest under a changing environment conditions: evaluation and use of new techniques
Turk	Freshwater mussels as a proxy for assessing catchment resilience to interdecadal climate variability
van Meerveld	Hydrological trends for three headwater catchments in the Alptal valley, Switzerland
VanZweel	Studying the seasonal variance of end-members in the Critical Zone:
Vido	Dynamics of soil water potential in the territory affected by deep brown coal mining in the Upper Nitra coal basin (Slovakia)
Wacławczyk	European beaver colonization patterns in low-mountains in Magura National Park (Southern Poland)