cE3c centre for ecology, evolution and environmental changes
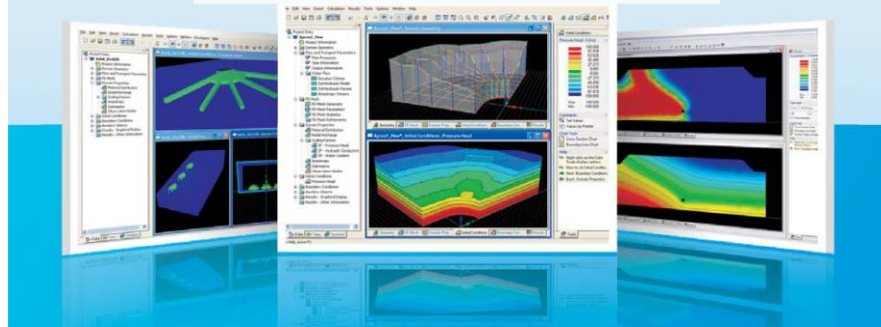
PC-PROGRESS
Engineering software developer

HYDRUS

Software Package for Simulating the One, Two and Three-Dimensional Movement of Water, Heat and Multiple Solutes in Variably-Saturated Media

September 12, 2017, 9:00 – 12: 00

Department of Plant Biology, Faculty of Sciences, University of Lisbon,

Bloco C-2, Floor 2, Room 2.2.24

COURSE OUTLINE

- Conceptual and mathematical description of variably-saturated water flow and solute transport processes, root-water uptake, initial conditions, boundary conditions.

- The HYDRUS-1D software for simulating one-dimensional variably-saturated water flow, Root water uptake and solute transport.

- Review of the hydraulic properties of unsaturated porous media; measurement, description, parameter estimation. RETC and Rosetta codes.

- Application of HYDRUS-1D to a transient water flow and solute transport in a layered soil profile.

- Inverse modeling; application of HYDRUS to laboratory and field experiments.

- Application of HYDRUS (2D/3D) to a simple two-dimensional problem.

- Who should attend: PhD and MSc Students of Plant biology, Agriculture, Soil physics, Water management

- Maximum number of participants: 20

- The participation is free of charge, but please confirm your presence to Lucia Barão: albarao@fc.ul.pt ; or   Sina Besharat: sina323@yahoo.com

Sina Besharat: Researcher, cE3c, University of Lisbon; Assistant professor, Urmia University, Iran.
Lúcia Barão: Post-Doc Researcher, cE3c, University of Lisbon, Portugal.