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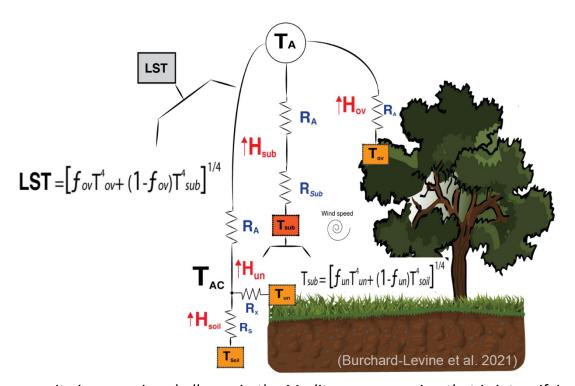
Seminario

From roots to landscape: integrating bio-geophysics with remote sensing to better understand vegetation water stress in agro-ecosystems

Martedì 9 aprile 2024 – ore 16:30, Aula Arduino

Relatore: Benjamin Mary

Institute of Agricultural Sciences - CSIC Spain



Water scarcity is a growing challenge in the Mediterranean region that is intensifying with global change as documented by FAO report. Accurate evapotranspiration (ET) estimation using remote sensing (RS) observations is vital for forest and crop irrigation management but faces challenges from cloud cover and landscape complexity. Combining hydrogeophysics with RS observations has the potential to improve our comprehension of vegetation water stress in agro-ecosystems.

During this talk, I'll demonstrate geophysical non-intrusive techniques like electrical resistivity tomography (ERT) and electromagnetic induction mapping (EMI). These methods are used for tracking subsurface water movements and soil characteristics. Furthermore, I'll illustrate how they can improve our modeling capabilities by integrating them with energy and water balance models across various scales.

Proponente: Giorgio Cassiani