

Remote sensing of interactions between vegetation and hydrology

Chat time: Thursday, 7 May 2020, 08:30–10:15

Monitoring of vegetation and hydrology interactions with radar

08:30 - 09:05 AM | Mariette Vreugdenhil and Tim van Emmerik

1. D305 | EGU2020-9955
C-band microwave sensors reflect the spring water uptake of temperate deciduous broadleaf trees
Isabella Pfeil, Wolfgang Wagner, Mariette Vreugdenhil, Matthias Forkel, and Wouter Dorigo
2. D306 | EGU2020-21439
Biomass estimation based on hyperspectral and SAR data: an experimental study in South Tyrol, Italy
Eugenia Chiarito, Francesca Cigna, Giovanni Cuozzo, Ludovica De Gregorio, Giacomo Fontanelli, Simonetta Paloscia, Mattia Rossi, Emanuele Santi, Deodato Tapete, and Claudia Notarnicola
3. D307 | EGU2020-1005
Detecting changes in root zone soil moisture from radar vegetation backscatter
Coleen Carranza, Tim van Emmerik, and Martine van der Ploeg
4. D308 | EGU2020-8161
Interpreting Vegetation Optical Depth (VOD) using detailed destructive vegetation sampling of a corn canopy
Saeed Khabbazan, Ge Gao, Paul Vermunt, Susan Steele-Dunne, Jasmeet Judge, and Mariette Vreugdenhil

Phenology dynamics and its relation to hydrological variables

09:05 - 09:35 AM | Brianna Pagan and Julia Green

1. D309 | EGU2020-3861
Greening dynamics and shrubland extent from remote sensing data using NDVI and NARI Indices: case study of the George River basin (Nunavik, Canada).
Dr. Jean-Pierre Dedieu, Johann Housset, Arthur Bayle, Esther Lévesque, and José Gérin-Lajoie
2. D310 | EGU2020-18215
Exploring the relationship between phenology and hydrology using Sentinel-2 and terrestrial photography in Mediterranean grasslands
Pedro Jesús Gómez-Giráldez, María José Pérez-Palazón, María José Polo, and María Patrocinio González-Dugo
3. D311 | EGU2020-15936
Which hydro-meteorological variables control large-scale photosynthesis?
Wantong Li, Mirco Migliavacca, Yunpeng Luo, and René Orth

Impact of land cover on vegetation and hydrology

09:35 - 09:50 AM | Tim van Emmerik and Mariette Vreugdenhil

1. D313 | EGU2020-12236
Assess the impacts of different land cover datasets on land surface hydrological process in Community Earth System Model (CESM)
Shaoqiang Ni and Hui Lu
2. D314 | EGU2020-21216
Evaluation of Forest Water Storage by changing Land Cover in Korea Peninsula
Youngjin Ko, Hyun-Woo Jo, Sujong Lee, Halim Lee, Chul-Hee Lim, Joon Kim, and Woo-Kyun Lee

The use and development of indices for monitoring vegetation and water stress

09:50 - 10:15 AM | Julia Green and Brianna Pagan

1. D315 | EGU2020-12308
A new Remote Sensing-based vegetation water stress index: -Temperature Vegetation Water Stress Index (TVWSI)
Rakesh Chandra Joshi, Dongryeol Ryu, Gary J. Sheridan, and Patrick N.J. Lane
2. D316 | EGU2020-18800
Development of satellite-based Surface water stress index considering surface water balance
Ye-Seul Yun and Yang-Won Lee
3. D317 | EGU2020-21154
Strong linkage between irrigation and land surface cooling in India
Anukesh Krishnankutty Ambika and Vimal Mishra