

Peer-reviewed publications using GEOTop

- Kollet, S., Sulis, M., Maxwell, R., Paniconi, C., Putti, M., Bertoldi, G., Coon, E. T., Cordano, E., Endrizzi, S., Kikinzon, E., Mouche, E., Mügler, C., Park, Y.-J., Refsgaard, J. C., Stisen, S. and Sudicky, E. (2017), The integrated hydrologic model intercomparison project, IH-MIP2: A second set of benchmark results to diagnose integrated hydrology and feedbacks. *Water Resour. Res.*, 53, [doi:10.1002/2016WR019191](https://doi.org/10.1002/2016WR019191) .
- Hingerl, L., Kunstmann, H., Wagner, S., Mauder, M., Bliefernicht, J., & Rigon, R. (2016). Spatio-temporal variability of water and energy fluxes - a case study for a mesoscale catchment in pre-alpine environment. *Hydrological Processes*. <https://doi.org/10.1002/hyp>.
- Zi, T., Kumar, M., Kiely, G., Lewis, C., & Albertson, J. (2016). Environmental Modelling & Software Simulating the spatio-temporal dynamics of soil erosion , deposition , and yield using a coupled sediment dynamics and 3D distributed hydrologic model. *Environmental Modelling and Software*, 83, 310–325. <https://doi.org/10.1016/j>.
- Eccel, E., Cordano, E., & Zottele, F. (2015). A project for climatologic mapping of soil water content in Trentino. *Italian Journal of Agrometeorology*, 1(500 m), 5–20. <http>
- Bertoldi, G., Della, S., Notarnicola, C., Pasolli, L., Niedrist, G., & Tappeiner, U. (2014). Estimation of soil moisture patterns in mountain grasslands by means of SAR RADARSAT2 images and hydrological modeling. *Journal of Hydrology*, 516, 245–257. <https://doi.org/10.1016/j>.
- Della Chiesa, S., Bertoldi, G., Niedrist, G., Obojes, N., Endrizzi, S., Albertson, J. D., ... Tappeiner, U. (2014). Modelling changes in grassland hydrological cycling along an elevational gradient in the Alps. *Ecohydrology*, n/a--n/a. <https://doi.org/10.1002/eco>.
- Endrizzi, S., Gruber, S., Dall'Amico, M., & Rigon, R. (2014). GEOTop 2.0: simulating the combined energy and water balance at and below the land surface accounting for soil freezing, snow cover and terrain effects. *Geoscientific Model Development*, 7(6), 2831–2857. <https://doi.org/10.5194/gmd-7->
- Gubler, S., Endrizzi, S., Gruber, S., & Purves, R. S. (2013). Sensitivities and uncertainties of modeled ground temperatures in mountain environments. *Geoscientific Model Development*, 6(4), 1319–1336. <https://doi.org/10.5194/gmd-6->
- Lewis, C., Albertson, J., Zi, T., Xu, X., & Kiely, G. (2013). How does afforestation affect the hydrology of a blanket peatland? A modelling study. *Hydrological Processes*, 27(25), 3577–3588. <https://doi.org/10.1002/hyp>.
- Fiddes, J., & Gruber, S. (2012). TopoSUB: a tool for efficient large area numerical modelling in complex topography at sub-grid scales. *Geoscientific Model Development*, 5(5), 1245–1257. <https://doi.org/10.5194/gmd-5->
- Dall'Amico, M., Endrizzi, S., Gruber, S., & Rigon, R. (2011). A robust and energy-

conserving model of freezing variably-saturated soil. *The Cryosphere*, 5(2), 469–484. <https://doi.org/10.5194/tc-5->

- Bertoldi, G., Notarnicola, C., Leitinger, G., Endrizzi, S., Della Chiesa, S., Zebisch, M., & Tappeiner, U. (2010). Topographical and ecohydrological controls on land surface temperature in an Alpine catchment. *Ecohydrology*, 3(doi:10.1002/eco.129), 189–204.
- Endrizzi, S., & Marsh, P. (2010). Observations and modeling of turbulent fluxes during melt at the shrub-tundra transition zone 1: point scale variations. *Hydrology Research*, 41(6), 471–490. article.
- Gebremichael, M., Rigon, R., Bertoldi, G., & Over, T. M. (2009). On the scaling characteristics of observed and simulated spatial soil moisture fields. *Nonlin. Processes Geophys.*, 16(1), 141–150. Retrieved from <http://www.nonlin-processes->
- Simoni, S., Zanotti, F., Bertoldi, G., & Rigon, R. (2007). Modelling the probability of occurrence of shallow landslides and channelized debris flows using GEOtop-FS. *Hydrological Processes*, doi: 10.10.
- Bertoldi, G., Rigon, R., & Over, T. M. (2006). Impact of Watershed Geomorphic Characteristics on the Energy and Water Budgets. *Journal of Hydrometeorology*, 7, 389–403.
- Rigon, R., Bertoldi, G., & Over, T. M. (2006). GEOtop: A Distributed Hydrological Model with Coupled Water and Energy Budgets. *Journal of Hydrometeorology*, 7, 371–388.
- Zanotti, F., Endrizzi, S., Bertoldi, G., & Rigon, R. (2004). The GEOtop snow module. *Hydrol. Proc.*, 18, 3667–3679. DOI:10.1002/hyp.5794.