

**Peer-Reviewed
Publications**

GCOM-W AMSR2 Soil Moisture Product Validation Using Core Validation Sites

Bindlish, Cosh, Jackson, Koike, Fujii, Chan, Asanuma, Berg, Bosch, Caldwell, Collins, McNairn, Martinez-Fernandez, Prueger, Rowlandson, Seyfried, Starks, Thibeault, Van Der Velde, Walker, Coopersmith. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing. Dec., 2017. doi: 10.1109/JSTARS.2017.2754293.

Relating Coccidioidomycosis (Valley Fever) Incidence to Soil Moisture Conditions –

Coopersmith, Bell, Benedict, Shriber, McCotter, and Cosh. GeoHealth. Mar., 2017.
doi: 10.1002/2016GH000033. (**First Issue**)

“Lifting” In Situ Soil Moisture Measurements with Machine Learning: A Multi-Depth Analysis of USCRN profiles and an Application for AMSR-E Satellite Validation with ECONet Sensors –

Coopersmith, Cosh, Bell, and Boyles. Advances in Water Resources. Oct., 2016. doi:
10.1016/j.advwatres.2016.10.007

Deploying Temporary Networks for Upscaling of Sparse Network Stations –

Coopersmith, Cosh, Bell, Kelly, Hall, Palecki, and Temimi. Int’l Journal of Applied Earth Obs. and Geoinformation. July, 2016. doi: 10.1016/j.jag.2016.07.013.

Comparison of In Situ Soil Moisture Measurements: An Examination of the Neutron and

Dielectric Measurements within the Illinois Climate Network – *Coopersmith, Cosh, and Jacobs.* Journal of Atmospheric and Oceanic Tech. June, 2016. doi: 10.1175/JTECH-D-16-0029.1.

Multi-Profile Analysis of Soil Moisture within the U.S Climate Reference Network –

Coopersmith, Cosh, Bell, and Crow. Vadose Zone Journal, Oct. 2015. doi: 10.2136/vzj2015.01.0016.

Comparing AMSR-E Soil Moisture Estimates to the Extended Record of the U.S. Climate Reference

Network (USCRN) – *Coopersmith, Cosh, Bindlish, and Bell.* Advances in Water Res., Sept. 2015.
doi: 10.1016/j.advwatres.2015.09.003.

Evaluation of the 2012 Drought with a Newly Established National Soil Monitoring Network –

Bell, Leeper, Palecki, Coopersmith, Wilson, Bilotta, and Emler. Vadose Zone Journal, Aug. 2015.
doi:10.2136/vzj2015.02.0023

Soil Moisture Model Calibration and Validation: An ARS Watershed on the South Fork of the Iowa

River – *Coopersmith, Cosh, Petersen, Prueger, and Niemeier.* Journal of Hydrometeorology, March, 2015. doi: <http://dx.doi.org/10.1175/JHM-D-14-0145.1>

Extending the Soil Moisture Data Record of the U.S. Climate Reference Network (USCRN) and Soil

Climate Analysis Network (SCAN) – *Coopersmith, Cosh, and Bell.* Advances in Water Resources. February, 2015. doi: 10.1016/j.advwatres.2015.02.006

Field-Scale Moisture Estimates Using COSMOS Sensors: A Validation Study With

Temporary Networks and Leaf-Area-Indices – *Coopersmith, Cosh, and Daughtry.* Journal of Hydrology. August, 2014. doi: 10.1016/j.jhydrol.2014.07.060

Using Similarity of Soil Texture and Hydroclimate to Enhance Soil Moisture Prediction –

Coopersmith, Minsker, and Sivapalan. Hydrology & Earth System Sciences. August, 2014.
doi:10.5194/hess-18-3095-2014

Machine Learning Assessments of Soil Drying – *Coopersmith, Minsker, Wenzel, and*

Gilmore. Computers and Electronics in Agriculture. June, 2014.
doi:10.1016/j.compag.2014.04.004

Patterns of Regional Climate Change: An Analysis of Changing Hydrologic Regimes

Coopersmith, Minsker, and Sivapalan. Water Resources Research. March, 2014.

doi: 10.1002/2012WR013320 (**Featured Paper**)

Exploring the Physical Controls of Regional Patterns of Flow Duration Curves: Part 1– Insights from Statistical Analyses – *Cheng, Yaeger, Viglione, Coopersmith, Ye, and Sivapalan*. Hydrology & Earth System Sciences. November, 2012, doi:10.5194/hess-16-4435-2012

Exploring the Physical Controls of Regional Patterns of Flow Duration Curves: Part 2 – Role of Seasonality and Associated Process Controls – *Ye, Yaeger, Coopersmith, Cheng, and Sivapalan*. Hydrology & Earth System Sciences. November, 2012, doi:10.5194/hess-16-4447-2012

Exploring the Physical Controls of Regional Patterns of Flow Duration Curves: Part 3 – A Catchment Classification System Based on Seasonality and Runoff Regime – *Coopersmith, Yaeger, Ye, Cheng, and Sivapalan*. Hydrology & Earth System Sciences. November, 2012, doi:10.5194/hess-16-4467-2012

Exploring the Physical Controls of Regional Patterns of Flow Duration Curves: Part 4 - A Synthesis of Empirical Analysis, Process Modeling, and Catchment Classification – *Yaeger, Coopersmith, Ye, Cheng, and Sivapalan*. Hydrology & Earth System Sciences. November, 2012, doi:10.5194/hess-16-4483-2012.

Understanding and Forecasting Hypoxia Using Machine Learning Algorithms – *Coopersmith, Minsker, and Montagna*, Journal of Hydroinformatics. 2011. doi:10.2166/hydro.2010.015