

Yagmur Derin

University of Connecticut
Civil and Environmental Engineering
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EDUCATION

PhD	University of Connecticut, Storrs CT, USA Civil and Environmental Engineering, Expected June 2019 Advisor: Prof. Dr. Emmanouil Anagnostou
MSc	Middle East Technical University, Ankara, Turkey Geological Engineering, Graduated June 2014 Thesis Title: “Advancement of Satellite-Based Rainfall Applications for Basin-Scale Hydrologic Modeling” Advisor: Prof. Dr. Koray K. Yilmaz
BSc	Middle East Technical University, Ankara, Turkey Geological Engineering, Graduated June 2011 Design Project: “Water Supply Design for Industrial Complex in Anamur Plain”

EMPLOYMENT/ RESEARCH EXPERIENCE

2014/08-Present	Graduate Research Assistant University of Connecticut, Civil and Environmental Engineering - Passive microwave rainfall error analysis using high-resolution X-band dual-Polarization radar observations over complex terrain. <i>Supervisor of the project:</i> Prof. Dr. Emmanouil Anagnostou - Multi-regional satellite precipitation products evaluation over complex terrain. <i>Supervisor of the project:</i> Prof. Dr. Emmanouil Anagnostou
2011/06 – 2014/06	Graduate Research Assistant Middle East Technical University, Geological Engineering - Advancement of satellite rainfall applications for hydrologic modeling with emphasis on flood monitoring, funded by EU FP7 Marie Curie International Reintegration Grant. <i>Supervisor of the project:</i> Prof. Dr. Koray K. Yilmaz

TEACHING EXPERIENCE

Spring 2018	Instructor, Probability and Statistics in Civil Engineering (CE 2251) (72 students) University of Connecticut, Civil and Environmental Engineering
Fall 2017	Teaching Assistant, Probability and Statistics in Civil Engineering (CE 2251) University of Connecticut, Civil and Environmental Engineering <i>Instructor:</i> Prof. Dr. Christine Kirchhoff
Spring 2016	Teaching Assistant, Environmental Modeling (CE/ENVE-4310) University of Connecticut, Civil and Environmental Engineering <i>Instructor:</i> Prof. Dr. Marina Astitha

AREAS OF RESEARCH INTEREST

- Hydrometeorology, hydrology
- Radar and satellite remote sensing, retrieval, validation and application of precipitation and surface properties.
- Radar meteorology and radar hydrology.
- Precipitation process, microphysics and variability
- Application of remote sensing in hydrology
- Surface water hydrology, land-atmosphere interaction

TRAINING

2013/05	BOOST H2O: Hydrogeology Workshop University of Georgia <i>Advisors:</i> Prof Adam Milewski and Prof Alan Fryar
2013/06	Principles and Applications of GIS, Remote Sensing and Hydrological Modeling BOOST H2O: Field training activities in hydrologic science, Iznik Lake, Turkey <i>Advisors:</i> Prof Adam Milewski and Prof Alan Fryar

TECHNICAL EXPERIENCE

Computer Skills	<i>Programming Languages:</i> Matlab, FORTRAN, R <i>Hydrologic Modeling Packages:</i> MIKE SHE, MIKE 11, Visual MODFLOW, SWAT <i>GIS Packages:</i> ArcGIS, MapInfo
Foreign Languages	English (TOEFL IBT 96/120) Japanese (Beginner)

AWARDS

2016/02	Pre-Doctoral Fellowship for the Spring 2016, in Civil and Environmental Engineering, University of Connecticut
2013/06	European Geosciences Union (EGU) Hydrological Sciences Outstanding Student Poster (OSP) Award

PROFFESIONAL AFFILIATIONS

2013-Present	American Geophysical Union (AGU), member
2012-Present	European Geosciences Union (EGU), member
2015-Present	Member of AGU's Precipitation Technical Committee

PUBLICATIONS

Peer-Reviewed Journal Publications

- [1] Derin, Y., Anagnostou E., Anagnostou M. N., Kalogiros J., Casella D., Marra A. C., Panegrossi G., and Sano P., 2018: Passive Microwave Rainfall Error Analysis Using High-Resolution X-Band Dual-Polarization Radar Observations in Complex Terrain. *IEEE Transactions on Geoscience and Remote Sensing*, 56:5, 2565-2586; 10.1109/TGRS.2017.2763622
- [2] Derin, Y., E. Anagnostou, A. Berne, M. Borga, B. Boudevillain, W. Buytaert, C-H. Chang, G. Delrieu, Y. Hong, Y. C. Hsu, W. Lavado-Casimiro, B. Manz, S. Moges, E. I. Nikolopoulos, D. Sahl, F. Salerno, J-P. Rodríguez-Sánchez, H. J. Vergara and K. K. Yilmaz, 2016: Multi-regional Satellite Precipitation Products Evaluation over Complex Terrain, *J. Hydrometeorology*, 17, 1817-1836.
- [3] Derin Y., and K. K. Yilmaz, 2014: Evaluation of multiple satellite-based precipitation products over complex topography, *J. Hydrometeorology*, 15, 1498–1516.

Submitted

[3]

Papers in Preparation

- [4] Derin Y., E. Anagnostou, A. Berne, M. Borga, B. Boudevillain, W. Buytaert, C-H. Chang, G. Delrieu, Y. Hong, Y. C. Hsu, W. Lavado-Casimiro, B. Manz, S. Moges, E. I. Nikolopoulos, D. Sahl, F. Salerno, J-P. Rodríguez-Sánchez, H. J. Vergara and K. K. Yilmaz: Multi-regional Evaluation of Satellite Precipitation Product IMERG over Complex Terrains
- [5] Derin Y., E. Anagnostou, J. Kalogiros, M. Anagnostou: Evaluation of Polarimetric Algorithm of X-Band Radar Observations Against Disdrometer over OLYMPEX
- [6] Derin Y., P. Kirstetter, and E. Anagnostou: Influence of Passive Microwave Field-of-View Characteristics on Validation of Precipitation Estimates
- [7] Derin Y., E. Anagnostou, J. Kalogiros, M. Anagnostou: Passive Microwave Rainfall Error Analysis Using High-Resolution X-Band Dual-Polarization Radar Observations over OLYMPEX

Book Chapters

- [1] Anagnostou., M. N., J. Kalogiros, E. Nikolopoulos, Y. Derin, E. N. Anagnostou, and M. Borga, 2016: Satellite Rainfall Error Analysis with the Use of High-Resolution X-Band Dual-Polarization Radar Observations Over the Italian Alps, *Perspectives on Atmospheric Sciences*, Springer Atmospheric Sciences, DOI 10.1007/978-3-319-35095-0_39

Conference Talks

- [1] Derin Y., E. Anagnostou, J. Kalogiros, M. Anagnostou, A. C. Marra, G. Panegrossi, V. Levizzani, E. Cattani, D. Casella and P. Sanò, (2017). Characterization of Passive Microwave Precipitation Retrieval Uncertainty over Complex Terrain, American Geophysical Union Fall Meeting, San Francisco, 11-15 December 2017.
- [2] Derin Y., E. Anagnostou, J. Kalogiros, M. Anagnostou, A. C. Marra, G. Panegrossi, V. Levizzani, E. Cattani, D. Casella and P. Sanò, (2016). Passive Microwave Rainfall Error Analysis using High-Resolution X-band Dual-Polarization Radar Observations in Complex Terrain, American Geophysical Union Fall Meeting, San Francisco, 12-16 December 2016.
- [3] Derin, Y., Anagnostou, E., Berne, A., Borga M., Boudevillain, B., Buytaert, W., Chang, C., Delrieu, G., Hong, Y., Hsu, Y. C., Lavado-Casimiro, W., Manz, B., Moges, S., Nikolopoulos, E. I., Sahl, D., Salerno, F., Rodríguez-Sánchez, J., Vergara, H. J., Yilmaz, K. K., (2015). Multi-regional Satellite Precipitation Products Evaluation over

Complex Terrain, 7th International Workshop for GPM Ground Validation, Seoul, Korea, 12-14 May 2015.

- [4] Derin, Y., Anagnostou, E., Kalogiros, J., and Anagnostou, M., (2015). Passive Microwave Rainfall Error Analysis using High-Resolution X-band Dual-Polarization Radar Observations in Complex Terrain, European Geosciences Union General Assembly, Vienna, Austria, 12 April – 17 April 2015.
- [5] Yilmaz K.K. and Derin, Y., (2014). Advancement of Satellite-based Rainfall Applications for Hydrologic Modeling in Topographically Complex Regions, European Geosciences Union General Assembly, Vienna, Austria, 27 April – 02 May 2014.
- [6] Derin, Y., Hatipoglu, E., Sunnetci, M. O., Tanyas, H., Ercan, H., Aktuna, Z., Agouridis, C., Fryar, A. E., Milewski, A., Schroeder, P., Ece O. I. and Yilmaz, K. K., BOOST H2O – Field Training Activities for Hydrologic Science near Lake Iznik, Turkey, American Geophysical Union Fall Meeting, San Francisco, 9-13 December 2013.

Conference Posters

- [1] Derin Y., E. Anagnostou, J. Kalogiros, M. Anagnostou, A. C. Marra, G. Panegrossi, V. Levizzani, E. Cattani, D. Casella and P. Sanò, (2015). Passive Microwave Rainfall Error Analysis using High-Resolution X-band Dual-Polarization Radar Observations in Complex Terrain, American Geophysical Union Fall Meeting, San Francisco, 14-18 December 2015.
- [2] Derin, Y., Milewski, A., Fryar, A. E. and Schroeder, P., (2013) An Integrated Approach for Understanding Anthropogenic and Climatic Impacts on Lakes: A Case study from Lake Iznik, Turkey, American Geophysical Union Fall Meeting, San Francisco, 9-13 December 2013.
- [3] Derin, Y. and Yilmaz K.K., (2013). Advancement of Satellite-based Rainfall Applications for Hydrologic Modeling in Topographically Complex Regions, American Geophysical Union Fall Meeting, San Francisco, 9-13 December 2013.
- [4] Derin, Y. and Yilmaz K.K., (2013). Evaluation and Bias Adjustment of Multiple Satellite-based Precipitation Products over Complex Terrain, European Geosciences Union General Assembly, Vienna, Austria, 7 – 12 April 2013.
- [5] Derin, Y. and Yilmaz K.K., (2012). Evaluation of Multiple Satellite-based Rainfall Products over a Topographically Complex Watershed, European Geosciences Union General Assembly, Vienna, Austria, 22 – 27 April 2012.