

## Prof. Efrat Morin, Associate Professor in Geography

### LIST OF PUBLICATIONS: (January 2013)

1. **Morin E.**, Enzel Y., Shamir U. and Garti R. (2001) The Characteristic Time Scale for Basin Hydrological Response Using Radar Data. J. Hydrol., 252, 85-99.
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3. **Morin E.**, Georgakakos K. P., Shamir U., Garti R. and Enzel Y. (2002) Objective, Observational-based, Automatic, Estimation of the Catchment Response Time Scale. Water Resour. Res., 38(10), 1212-1227.
4. **Morin E.**, Krajewski W. F., Goodrich D. C., Gao X., and Sorooshian S. (2003) Estimating Rainfall Intensities from Weather Radar Data: The Scale Dependency Problem. J. Hydrometeorol., 4(5), 782-797.
5. **Morin E.**, Georgakakos K. P. Shamir U., Garti R., and Enzel Y. (2003) Investigating the Effect of Catchment Characteristics on the Response Time Scale Using Distributed Model and Weather Radar Information. In: Y. Tachikawa, B. E. Vieux, K. P. Georgakakos & Eiichi Nakakita (eds). Weather Radar Information and Distributed Hydrological Modeling . IAHS Publ. no. 282. p. 177–185.
6. BenDavid-Novak H., **Morin E.** and Enzel Y. (2004) Modern Extreme Storms and the Rainfall Thresholds for Initiating Debris Flows on the Hyperarid Western Escarpment of the Dead Sea, Israel. Geol. Soc. Am. Bull., 116, 718-728.
7. Amitai E., Nystuen J. A., Liao L., Meneghini R., and **Morin E.** (2004) Uniting Space, Ground, and Underwater Measurements for Improved Estimates of Rain Rates. IEEE Geoscience and Remote Sensing Letters, 1(2), 35-38.
8. Shamir E., Imam B., **Morin E.**, Gupta H. V. and Sorooshian S. (2005) The Role of Hydrograph Indices in Parameter Estimation of Rainfall-Runoff Models. Hydrol. Process., 19, 2187–2207.
9. **Morin E.**, Maddox R. A., Goodrich D. C., and Sorooshian S. (2005) Radar Z-R Relationship for Summer Monsoon Storms in Arizona. Weather Forecast, 20(4), 672-679.
10. **Morin E.**, Goodrich D. C., Maddox R. A., Gao X., Gupta H. V., and Sorooshian S. (2005) Rainfall Modeling for Integrating Radar Information into Hydrological Model. Atmospheric Science Letters, 6(1), 23-30.

11. **Morin E.**, Goodrich D. C., Maddox R. A., Gao X., Gupta H. V., and Sorooshian S. (2006) Spatial Patterns in Thunderstorm Rainfall Events and their Coupling with Watershed Hydrological Response. Adv. Water Resour., 29, 843–860.
12. Dayan U. and **Morin E.** (2006) Flash Flood-producing Rainstorms over the Dead Sea: A Review. In: Enzel, Y., Agnon, A., and Stein, M., (Editors). New Frontiers in Dead Sea Paleoenvironmental Research, Geological Society of America Special Paper 401, 53-62.
13. Karklinsky M. and **Morin E.** (2006) Spatial Characteristics of Radar-derived Convective Rain Cells over Southern Israel. Meteorol. Z., 15(5), 513-520.
14. **Morin E.** and Gabella M. (2007) Radar-based Quantitative Precipitation Estimation over Mediterranean and dry Climate Regimes. J. Geophys. Res. 112, D20108, doi:10.1029/2006JD008206.
15. **Morin E.**, Harats N., Jacoby Y., Arbel S., Getker M., Arazi A., Grodek T., Ziv B. and Dayan U. (2007) Studying the Extremes: Hydrometeorological Investigation of a Flood-causing Rainstorm over Israel. Adv. Geosci., 12, 107–114.
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17. **Morin E.**, Grodek T., Dahan O., Benito G., Kulls C., Jacoby Y., Van Langenhove G., Seely M., and Enzel Y. (2009) Flood Routing and Alluvial Aquifer Recharge Along the Ephemeral Arid Kuiseb River, Namibia. J. Hydrol., 368, 262-275.
18. Bahat Y., Grodek T., Lekach J., and **Morin E.** (2009) Rainfall-runoff Modeling in a Small Hyper-arid Catchment. J. Hydrol., 373, 204-217.
19. Kurtzman D., Navon S. and **Morin E.** (2009) Improving interpolation of daily precipitation for hydrologic modeling: spatial patterns of preferred interpolators. Hydrol. Process., DOI: 10.1002/hyp.7442.
20. Yair Y., Lynn B., Price C., Kotroni V., Lagouvardos K., **Morin E.**, Mugnai A. and Llasat M. C. (2010) Predicting Lightning Density in Mediterranean Storms Based on the WRF Model Dynamic and Microphysical Fields. J. Geophys. Res., 115, D04205, doi:10.1029/2008JD010868.
21. Gerardo B., Rohde R., Seely M., Kulls C., Dahan O., Enzel Y., Todd S., Botero B., **Morin E.**, Grodek T. and Roberts C. (2010) Management of Alluvial Aquifers in Two Southern African Ephemeral Rivers: Implications for IWRM Water Resour. Manage., 24, 641–667, DOI 10.1007/s11269-009-9463-9.
22. Sheffer N. A., Dafny E., Gvirtzman H., Navon S., Frumkin A. and **Morin E.** (2010) The Hydrometeorological DReAM (Daily Recharge Assessment Model) for the Western Mountain Aquifer (WMA), Israel. Water Resour. Res., VOL. 46, W05510, doi: 10.1029/2008WR007607.
23. Rozalis S., **Morin E.**, Yair Y., and Price C. (2010) Flash flood prediction using an uncalibrated hydrological model and radar rainfall data in a Mediterranean watershed under changing hydrological conditions. J. Hydrol., 394, 245–255.
24. Gabella M., **Morin E.** and Notarpietro R. (2011) Using TRMM Spaceborne Radar as a Reference for Compensating Ground-based Radar Range Degradation: Methodology Verification Based on Rain

- Gauges in Israel. J. Geophys. Res., 116, D02114, doi:10.1029/2010JD014496.
25. Yakir H. and **Morin E.** (2011) Hydrologic response of a semi-arid watershed to spatial and temporal characteristics of convective rain cells. Hydrol. Earth Syst. Sci., 15, 393–404, doi:10.5194/hess-15-393-2011.
  26. Sheffer N. A., Cohen M., **Morin E.**, Grodek T., Gimburg A., Magal E., Gvirtzman H., Nied M., Isele D., and Frumkin A. (2011) Integrated Cave Drip Monitoring for Epikarst Recharge Estimation in a Dry Mediterranean Area, Sif Cave – Israel, Hydrol. Process., 25(18), 2837-2845, DOI: 10.1002/hyp.8046.
  27. Price C, Yair Y., Mugnai A., Lagouvardos K., Llasat M. C., Michaelides S., Dayan U., Dietrich S., Galanti E., Garrote L., Harats N., Katsanos D., Kohn M., Kotroni V., Llasat-Botija M., Lynn B., Mediero L., **Morin E.**, Nicolaidis K., Rozalis S., Savvidou K., and Ziv B. (2011) The FLASH Project: Using Lightning Data to Better Understand and Predict Flash Floods, Environmental Science & Policy, 14, 898-911.
  28. **Morin E.** (2011) To know what we cannot know: Global mapping of minimal detectable trends in annual precipitation. Water Resour. Res., 47, W07505, doi:10.1029/2010WR009798.
  29. Peleg N., **Morin E.**, Gvirtzman H. and Enzel Y. (2011) Rainfall, spring discharge and past human occupancy in the Eastern Mediterranean, Climatic Change, DOI 10.1007/s10584-011-0232-4.
  30. Price C., Yair Y., Mugnai A., Lagouvardos K., Llasat M. C., Michaelides S., Dayan U., Dietrich S., Galanti E., Garrote L., Harats N., Katsanos D., Kohn M., Kotroni V., Llasat-Botija M., Lynn B., Mediero L., **Morin E.**, Nicolaidis K., Rozalis S., Savvidou K., and Ziv B. (2011) Using Lightning Data to Better Understand and Predict Flash Floods in the Mediterranean, Surv. Geophys. 32, 733–751, doi:10.1007/s10712-011-9146-y.
  31. Shohami D., Dayan U. and **Morin E.** (2011) Warming and drying of the eastern Mediterranean: Additional evidence from trend analysis, J. Geophys. Res., 116, D22101, doi:10.1029/2011JD016004.
  32. **Morin E.** and Yakir H. (2012) The flooding potential of convective rain cells, IAHS Publ. no. 351.
  33. Grodek T., Jacoby Y., **Morin E.** and Katz O. (2012) Effectiveness of exceptional rainstorms on a small Mediterranean basin, Geomorphology, 159–160, 156-168, doi:10.1016/j.geomorph.2012.03.016.
  34. Tarolli P., Borga M., **Morin E.** and Delrieu G. (2012) Analysis of flash flood regimes in the North-Western and South-Eastern Mediterranean regions, Nat. Hazard Earth Sys., 12(5), 1255-1265, doi: 10.5194/nhess-12-1255-2012.
  35. Flaounas E., Drobinski P., Borga M., Calvet J. C., Delrieu G., **Morin E.**, Tartari G. and Toffolon R. (2012) Assessment of gridded observations used for climate model validation in the Mediterranean region: the HyMeX and MED-CORDEX framework, Environ. Res. Lett., 7, 024017, doi:10.1088/1748-9326/7/2/024017.
  36. **Morin E.** and Yakir Y. (2012) Hydrological impact and potential flooding of convective rain cells in a semi-arid environment. Hydrological Sciences Journal, in press.

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38. Gabella M., **Morin E.**, Notarpietro R., and Michaelides S. (2013) Winter precipitation fields in the Southeastern Mediterranean area as seen by the Ku-band spaceborne weather radar and two C-band ground-based radars, Atmos. Res., 119, 120-130, doi: 10.1016/j.atmosres.2011.06.001.