

Scientific Discovery/Innovation

Ecology

[Michael Dietze](#)

- Significantly improved understanding over the uncertainty of ecological models
- Significantly improved means of getting data into other models towards more easily using and interconnecting models
- Decision support for backtracking ecological events (e.g. if X happens, Y will happen in the soil, ...)

Hydrology

[Praveen Kumar](#)

- Seamlessly extract patterns from spatial/remote sensing/lidar data that are relevant for analysis, modeling and prediction of complex hydrologic processes and directly integrate them with spatially explicit Critical Zone models

Green Infrastructure

[Barbara Minsker](#), [William Sullivan](#), [Arthur Schmidt](#)

- Understand how patterns of GI implementation vary across all US cities, what other factors (social, economic, hydro-climatic, etc.) are correlated with the patterns observed, and what the results say about how healthy and resilient U.S. cities are