ET Investigations involving METRIC/Landsat -- Applications for Water Management

University of Idaho and Associates/Partners

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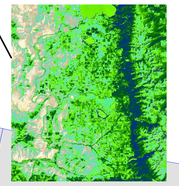
UI: University of Idaho
IDWR: Idaho Department of Water Resources
SAG: Spatial Analysis Group (Morse)
NMT: New Mexico Tech.
UNL: University of Nebraska, Lincoln
DRI: Desert Research Institute

RTI: Riverside Technologies, Inc, Fort Collins CO
SHA: Soil Hydrology Associates, Los Lunas NM (Hendrickx)
MDNRC: Montana Department of Natural Resources and Cons
OSE: Office of State Engineer
NRD: Natural Resource District

ET+: Evapotranspiration Plus, Twin Falls ID (Allen)
MBMG: Montana Bureau of Mining and Geology
SNA: SEBAL North America
NMSU: New Mexico State University
CSU: Colorado State University

Flathead Valley, MT



Yakima River Basin -- calibration of large scale energy balance models for assessing climate change. (Univ. Wash.)

Flathead Indian Reservation -- irrigation water consumption for managing streamflows (UI for MDNRC)

Klamath Basin -- water for grazing and local ecosystem interactions, ground water balance, irrigated areas (UI, ET+ for USGS, USFS)

Ground water recharge estimation in four basins: Helena, White Sulpher Springs, Dillon, and Bozeman. (UI for USGS, MBMG)

Lemhi River -- irrigation management for salmon recovery (IDWR, UI for IDWR)

Green River/Upper Colorado River (UWYO, SHA, RTI, ET+ for WY-OSE)

IDWR

Boise River Valley -- agricultural to urban land use change. (IDWR for IDWR)

Richard Allen
University of Idaho

Upper North Platte -- water decree compliance (RTI, ET+)

Ogallala aquifer -- ground water management, mitigation and Riparian ET (UNL, UI for NRD's)

Central Iowa -- ET from Agriculture (USDA-ARS, UI)

Justin Huntington
DRI

Eastern Snake Plain -- irrigation transfers, ground water model calibration (UI for IDWR)

Tim Martin
RTI

Ayse Irmak
UNL

Bear River -- Interstate Compact (UI for IDWR)

South Platte -- conjuctive management of ground water and surface water (RTI, UI)

Central Nebraska -- comparison to measured ET (UNL)

Owens Valley -- ET of Desert (NMSU)

Western Neveda -- water transfers between irrigated agriculture, municipalities, and playas. (DRI, UI, NV-OSE for NV-OSE)

Arkansas River -- assessment of water shortage and salinity impacts (CSU)

Middle Rio Grande -- water consumption by invasive vegetation (UI for USDOJ)

Imperial Irrigation District - impacts of water conservation measures, salinity, and timing of ET (UI, SNA)

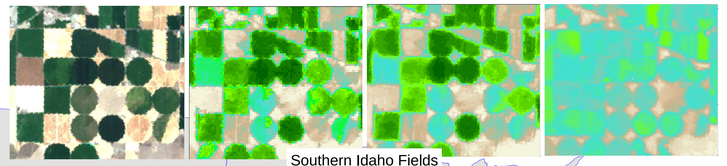
Lower Rio Grande -- water use by irrigated agriculture (NMSU, UI, for NM-OSE)

Jan Hendrickx
NMT

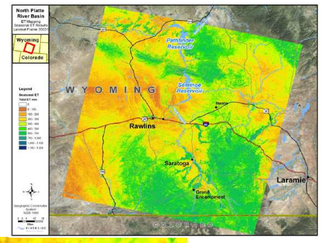
Palo Verde Irrigation District - intercomparison of ET methods (USU, USGS, USBR, UI)

Amarillo Area (USDA-ARS, UI)

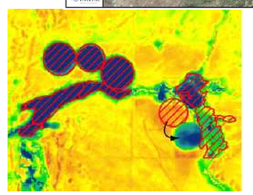
Lubbock Region (SHA)

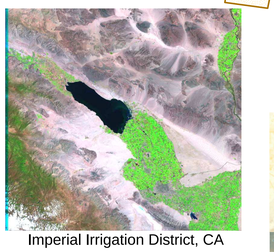


Southern Idaho Fields

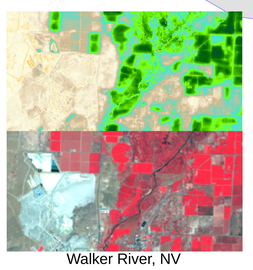


Upper North Platte River, WY

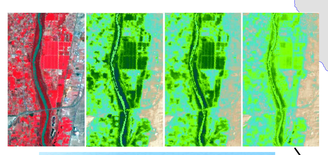




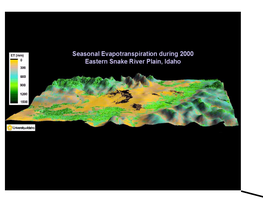
Imperial Irrigation District, CA

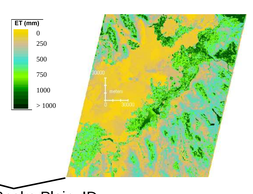


Walker River, NV

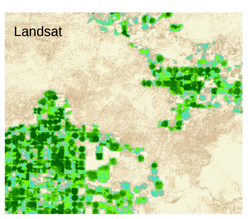


Middle Rio Grande, NM

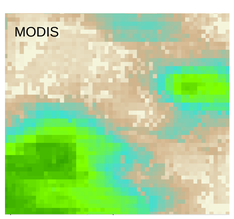




Eastern Snake Plain, ID



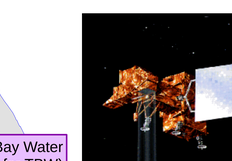
Landsat



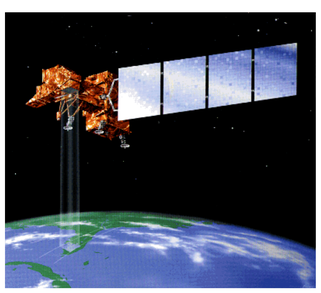
MODIS

Minidoka, ID

Tampa Bay Water (ET+ for TBW)



Tampa Bay Area, FL



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Nebraska
Iowa
Illinois
Indiana
Ohio
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West Virginia
Virginia
Kentucky
Missouri
Kansas
Oklahoma
Texas
Arkansas
Louisiana
Mississippi
Alabama
Georgia
Florida
South Carolina
North Carolina
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