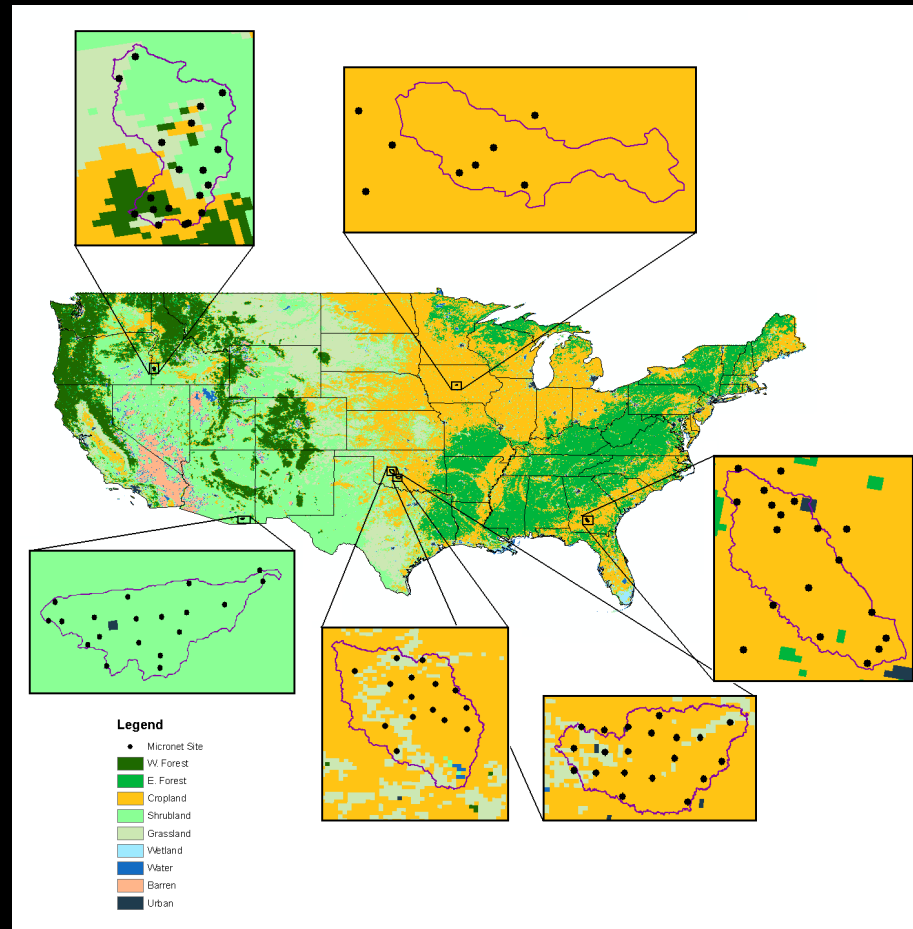


USDA ARS Watersheds



Thomas Jackson, Michael Cosh **and ...**

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Beltsville, MD 20705

Co-Investigators

Pat Starks

Grazinglands Research Laboratory, El Reno, OK

David Bosch

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Northwest Watershed Research Center, Boise, ID

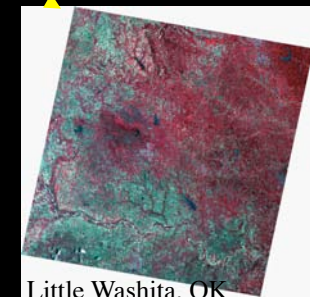
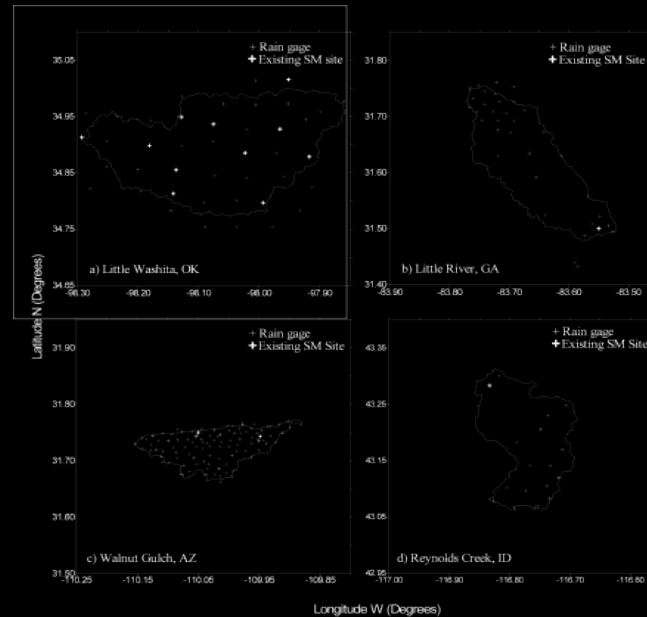
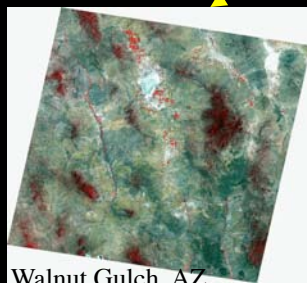
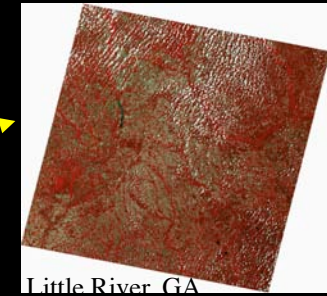
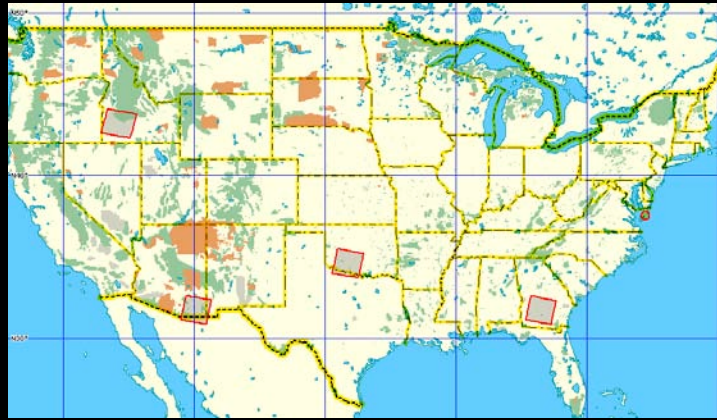
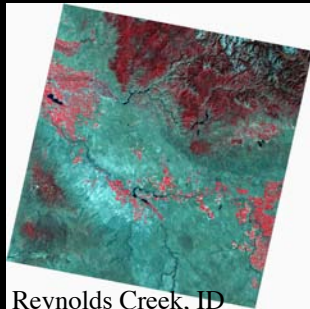
Dave Goodrich and Susan Moran

Southwest Watershed Research Center, Tucson, AZ

John Prueger

National Soil Tilth Laboratory, Ames, IA

AMSR-E U.S. Soil Moisture Validation Sites

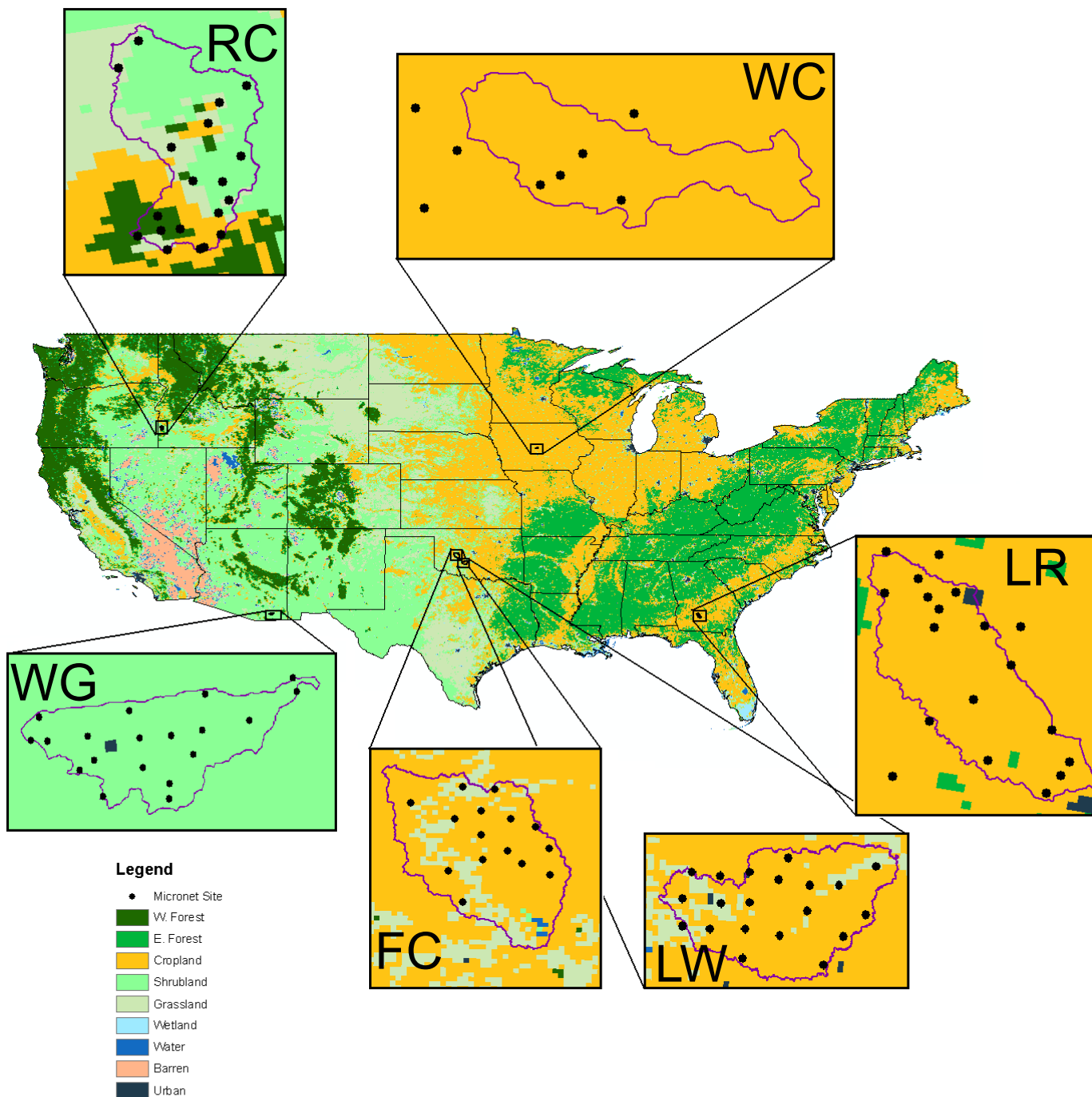


Expanding the Networks

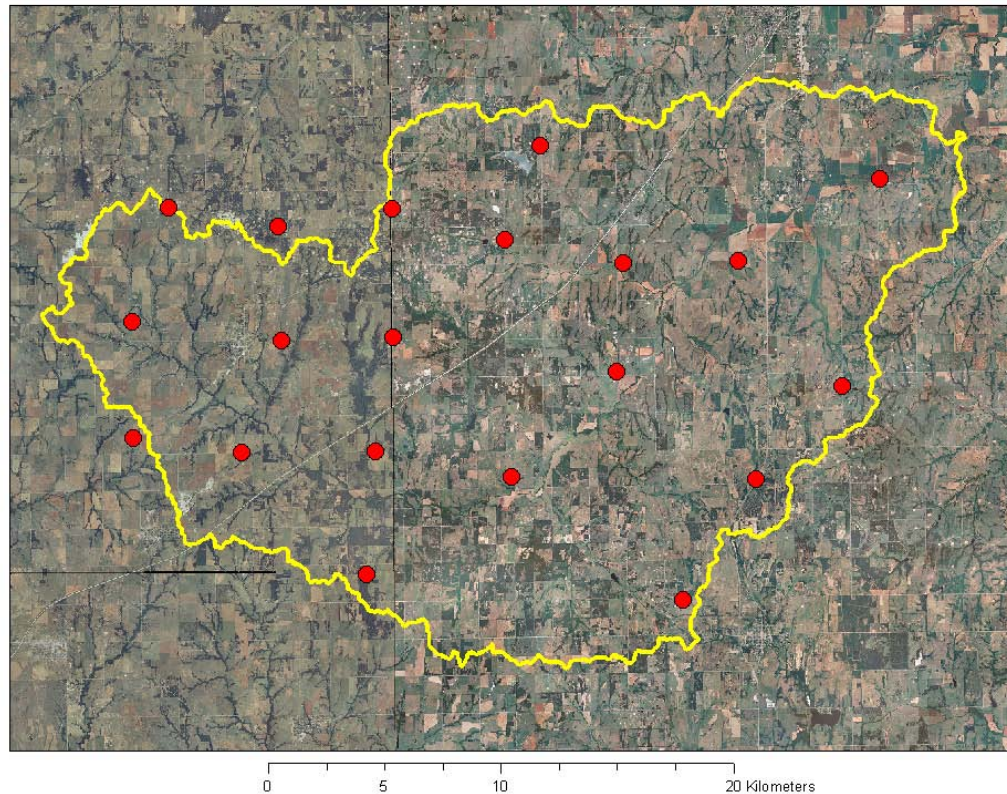
<u>Watershed</u>	<u>Type</u>	<u># Sensors</u>	<u>Reporting</u>
Walnut Gulch, AZ	Semi-Arid	19 (21)	20 min
Reynolds Creek, ID	Mountainous	16	1 hour
Little River, GA	Forest	19 (++)	30 min
Little Washita, OK	Grazingland	20	30 min
<i>Fort Cobb, OK</i>	<i>Cropland</i>	<i>15</i>	<i>30 min</i>
<i>Walnut Creek, IA</i>	<i>Cropland</i>	<i>10</i>	<i>30 min</i>
<i>St. Joseph's, IN</i>	<i>Cropland</i>	<i>pending</i>	

USDA

WATERSHEDS



Little Washita, OK



Watershed

Little Washita, OK

Type

Grazingland

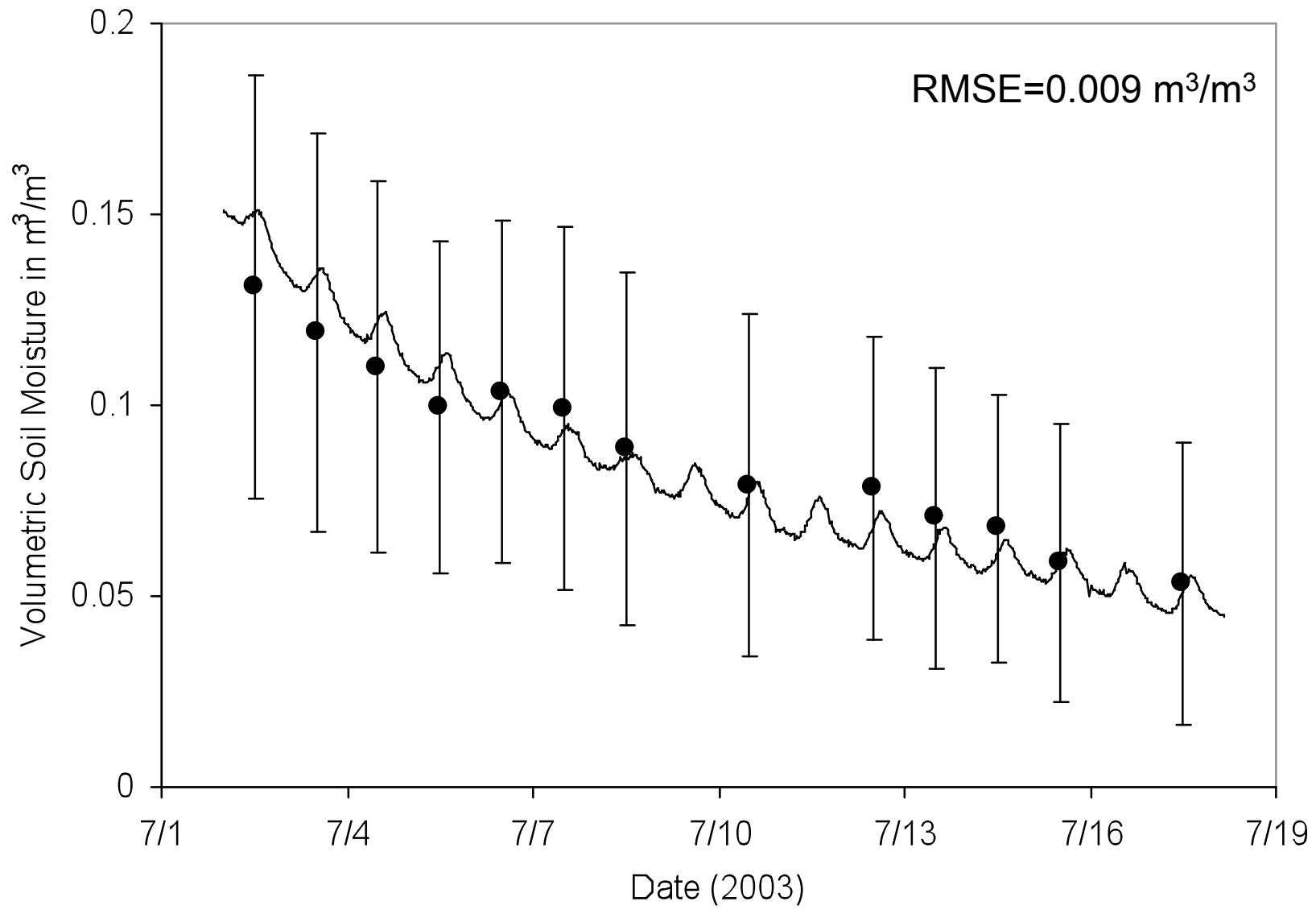
Sensors

20
5, 25, 45 cm

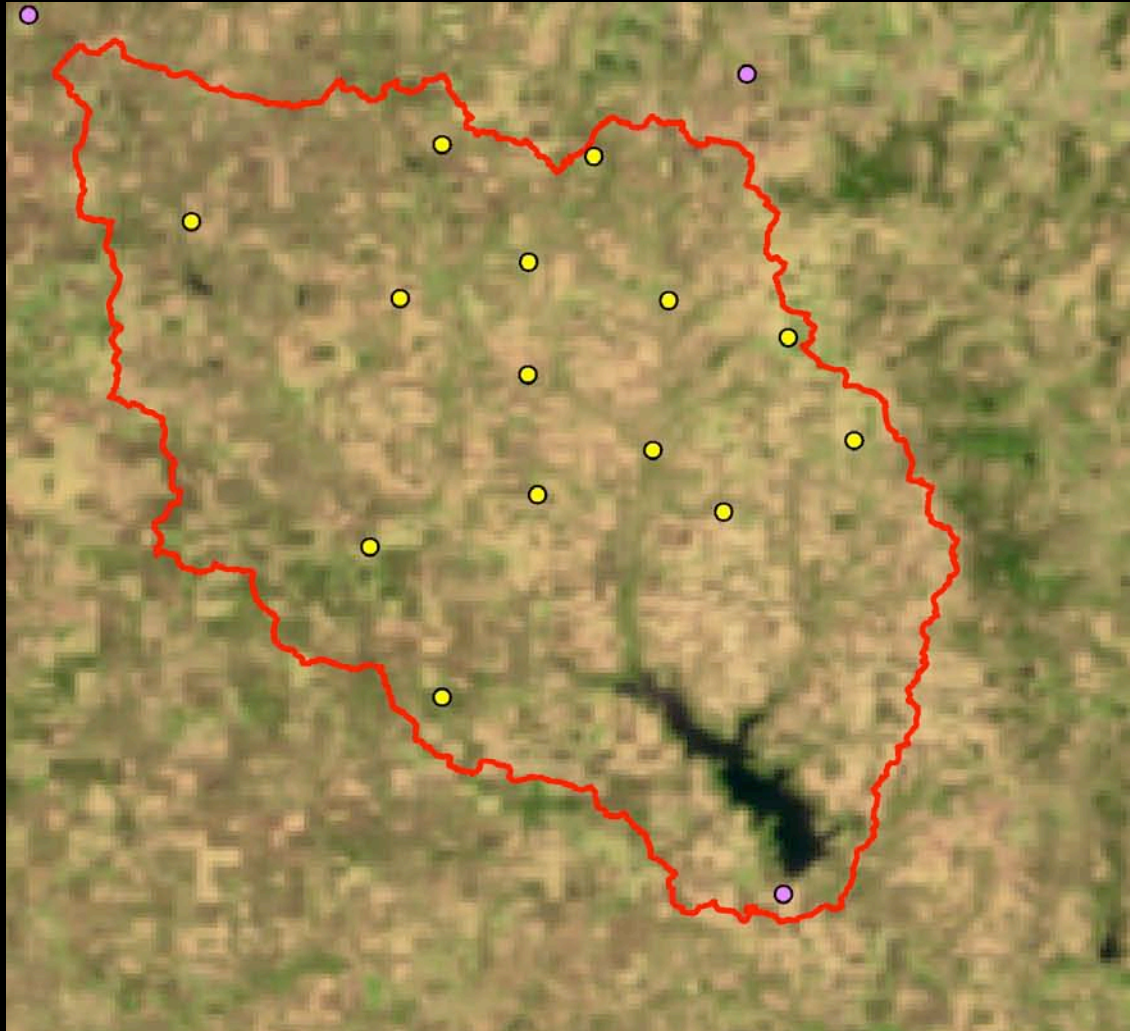
Reporting

30 min

Little Washita-SMEX03 Comparison



Fort Cobb, OK



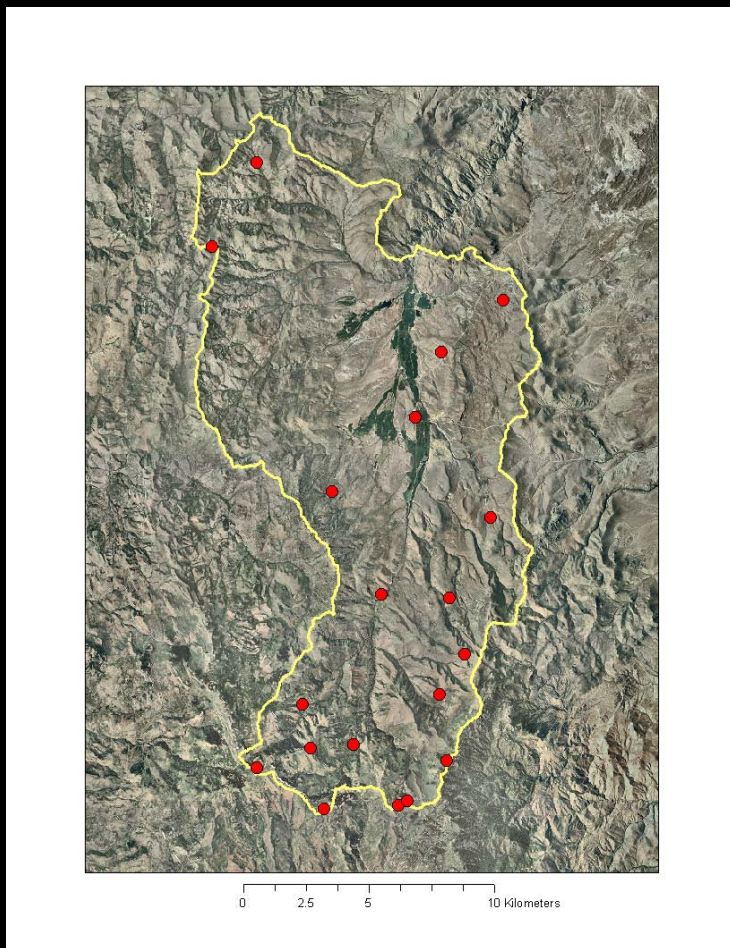
Watershed
Fort Cobb, OK

Type
Agriculture

Sensors
15
5, 25, 45 cm

Reporting
30 min

Reynolds Creek, ID



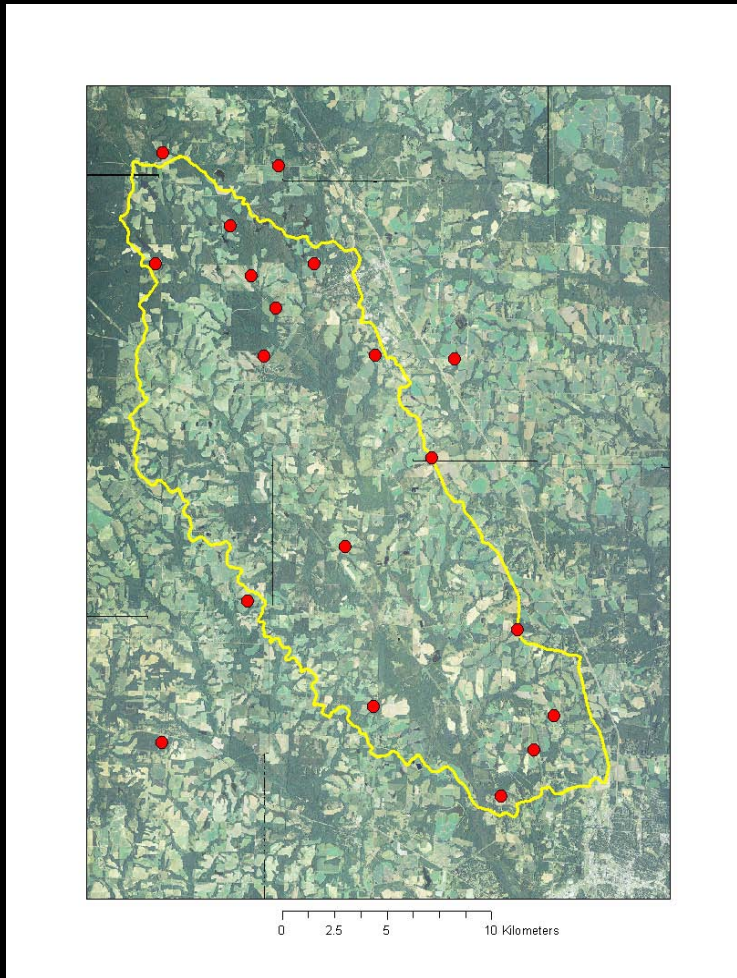
Watershed
Reynolds Creek, ID

Type
Mountainous

Sensors
16
5 cm +

Reporting
1 hour

Little River, GA



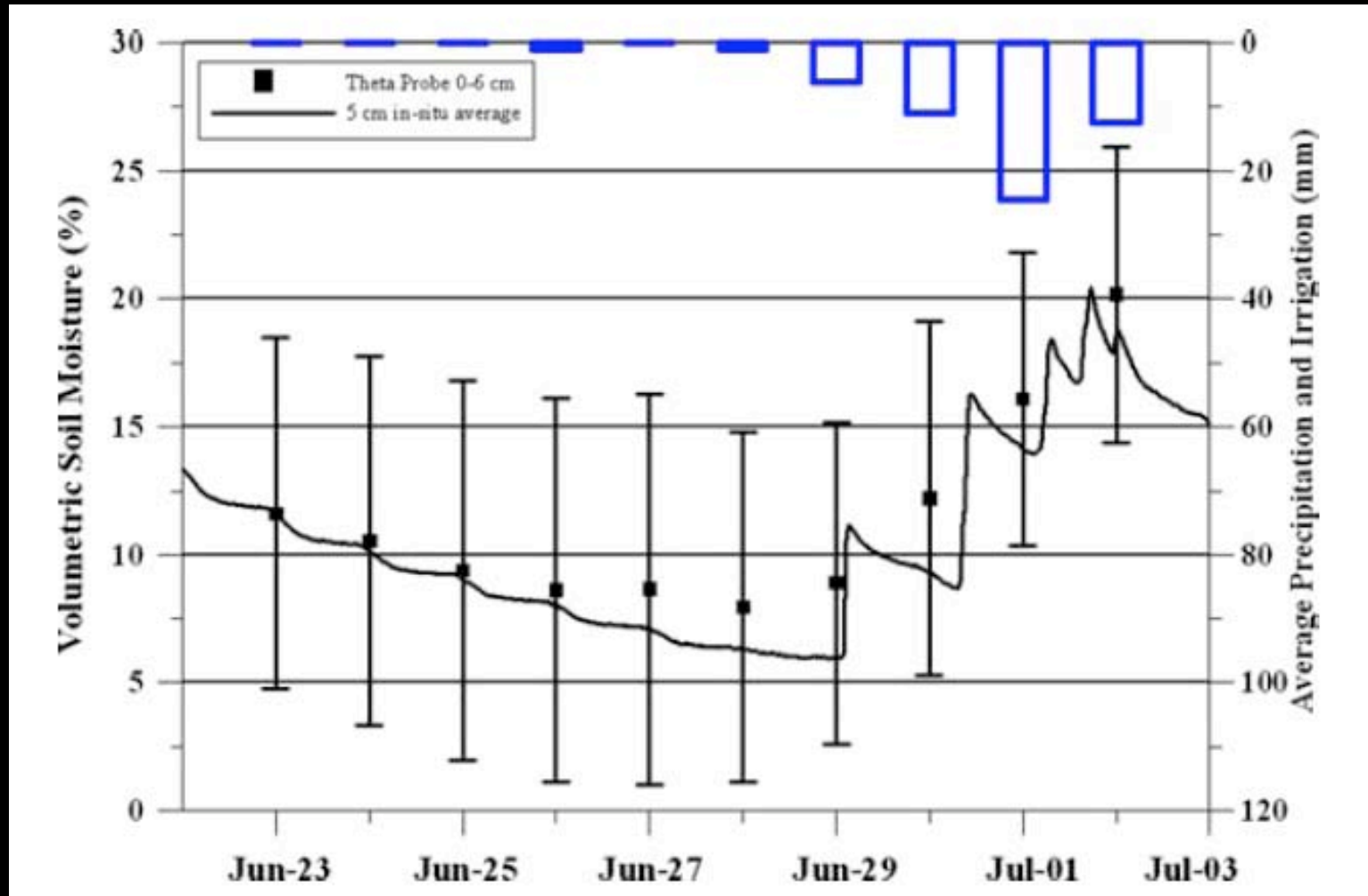
Watershed
Little River, GA

Type
Forest

Sensors
19 +
5, 15, 30 cm

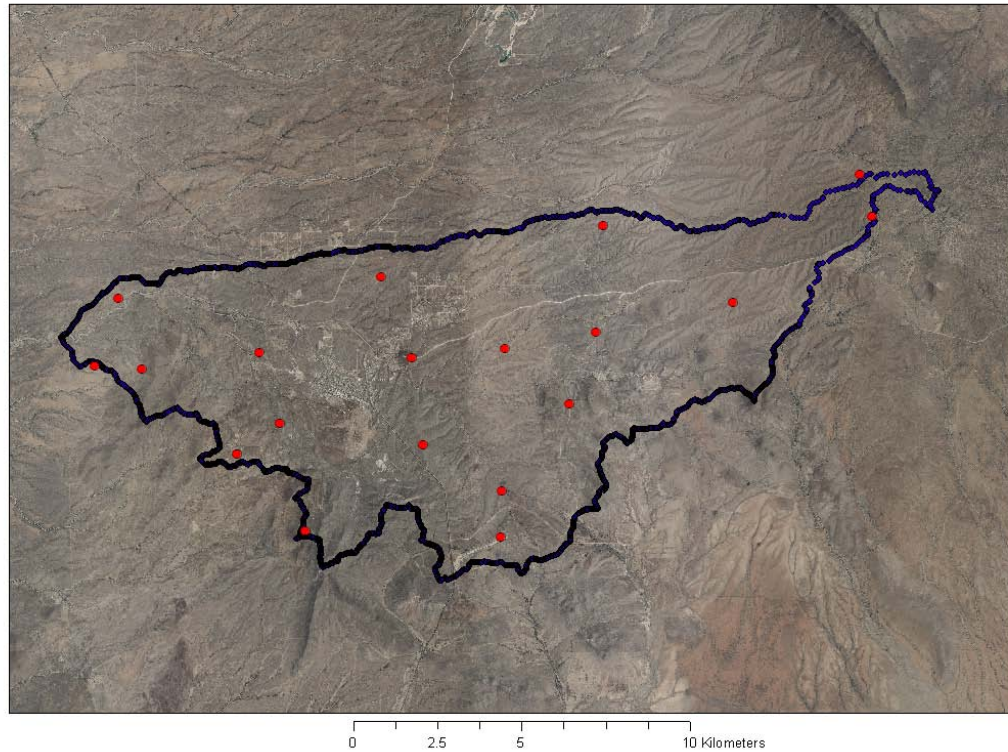
Reporting
30 min

Little River-SMEX03 Comparison



Bosch et al. 2006

Walnut Gulch, AZ



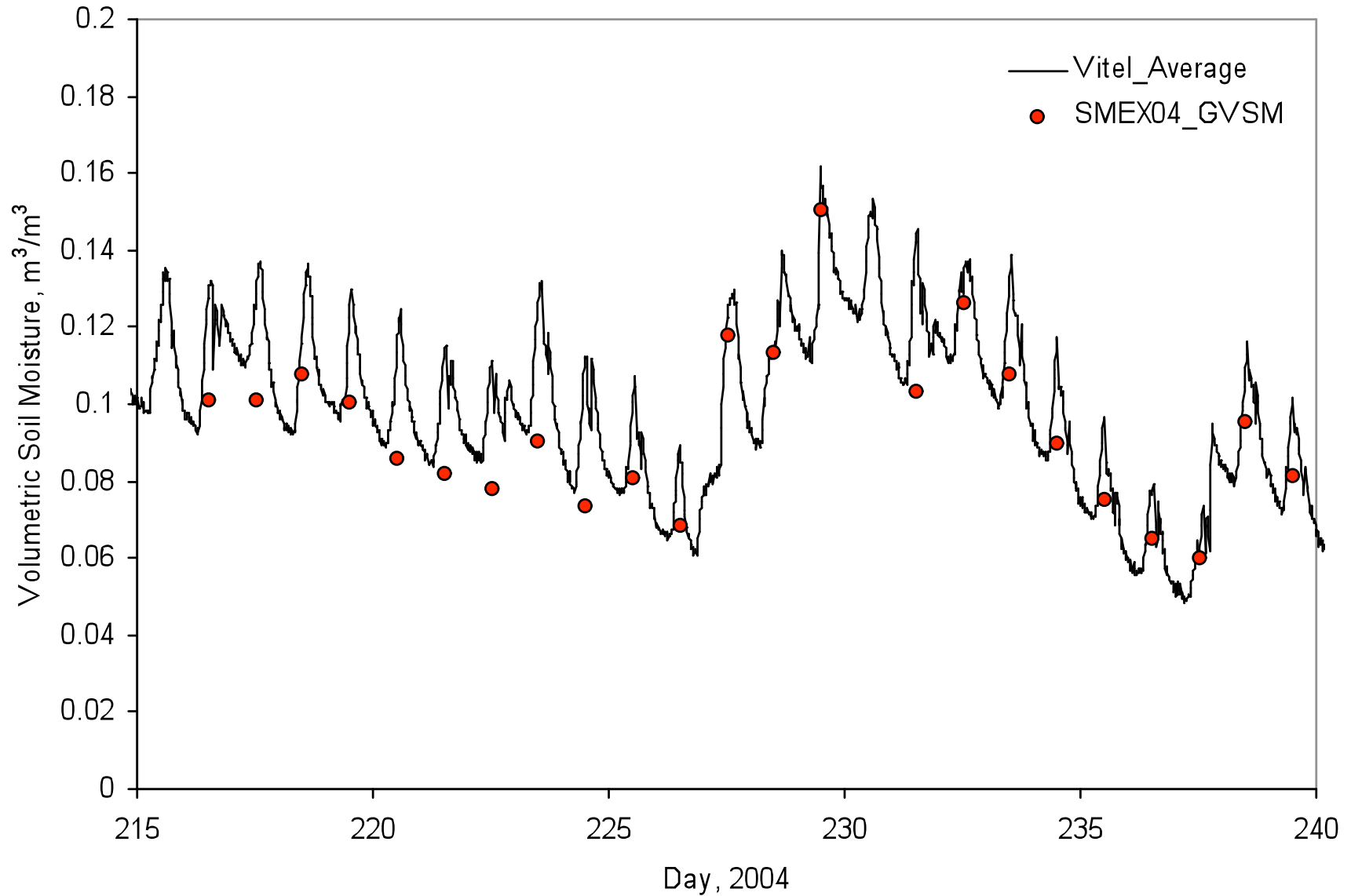
Watershed
Walnut Gulch, AZ

Type
Semi-Arid

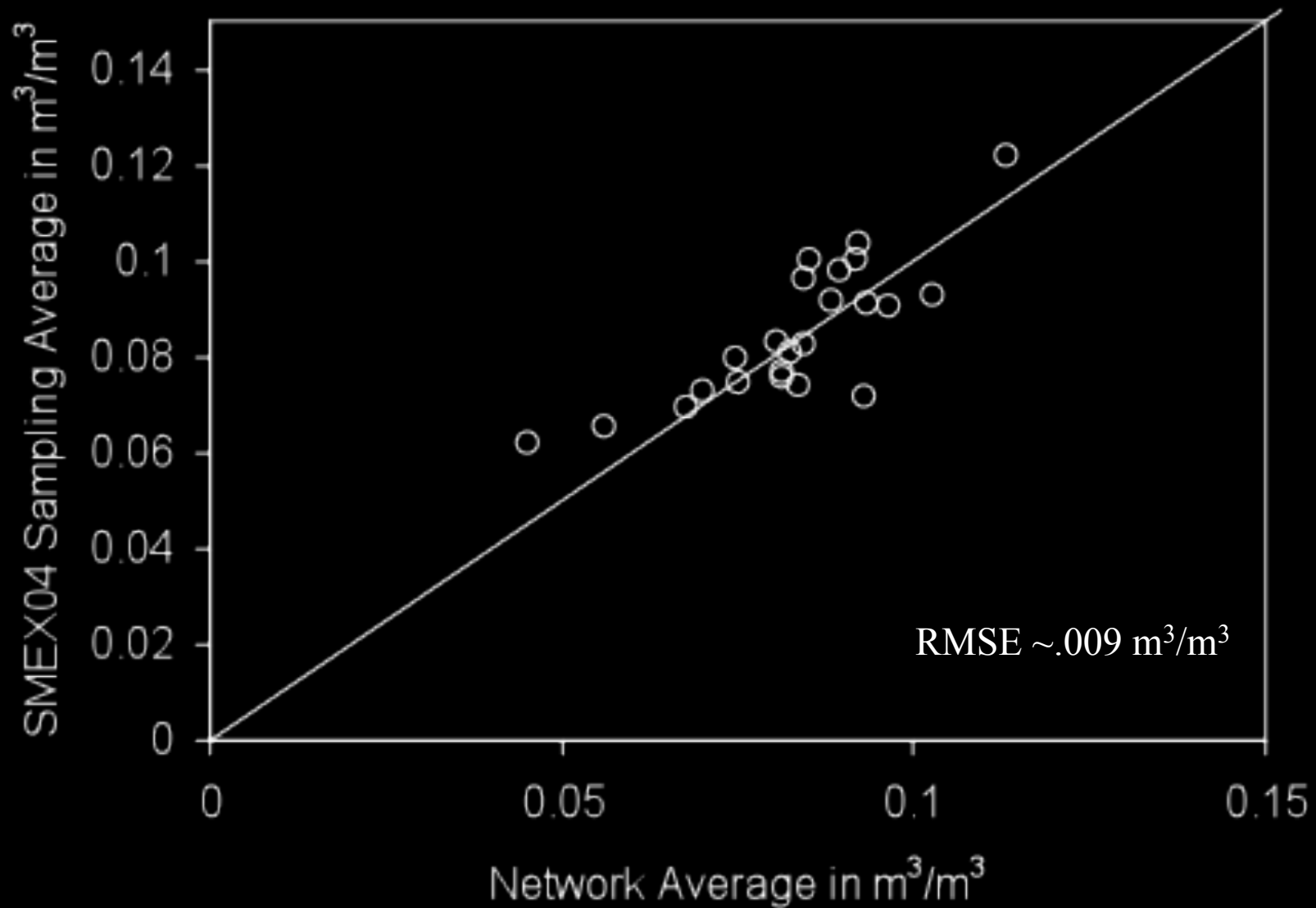
Sensors
19 +
5 cm *

Reporting
20 min

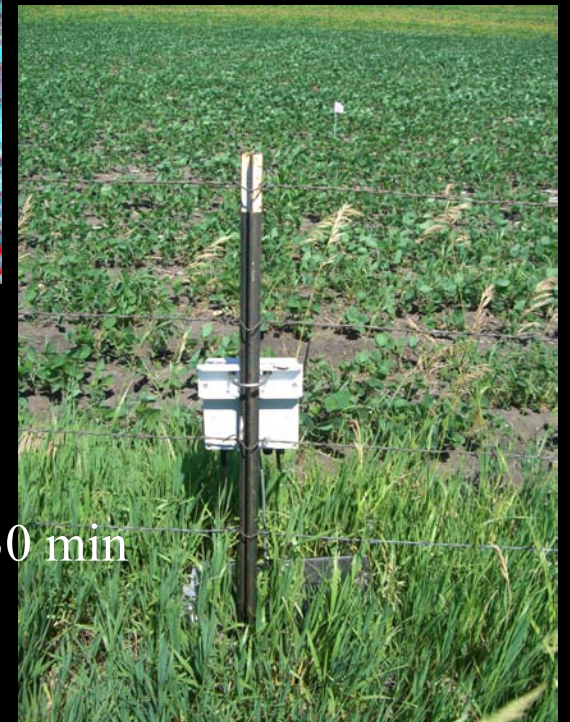
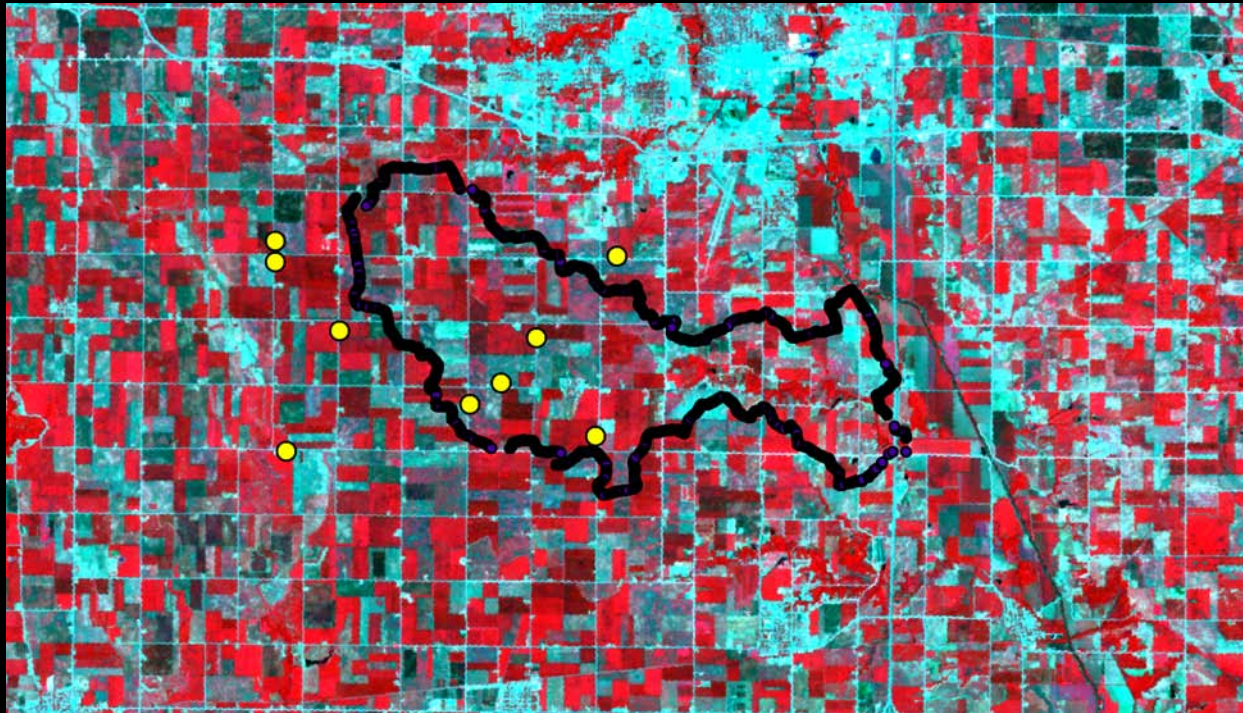
Walnut Gulch SMEX04 Comparison



Walnut Gulch-SMEX04 Comparison



Walnut Creek, IA



<u>Watershed</u>	<u>Type</u>	<u># Sensors</u>	<u>Reporting</u>
Walnut Creek, IA	Plains 5 cm	9	30 min

Since 2006

Latency

Watershed

Time Lag

Little Washita, OK

30 Min

Fort Cobb, OK

30 Min

Reynolds Creek, ID

Daily

Little River, GA

Daily

Walnut Gulch, AZ

Daily

Walnut Creek, IA

Monthly