

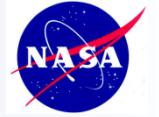


Lessons Learned

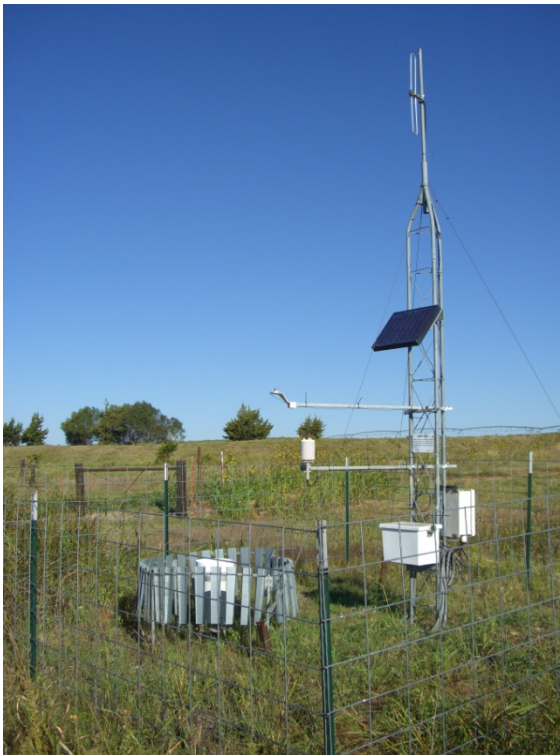
Mike Cosh
USDA ARS



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- Ground Truth is defined as gravimetrically collected volumetric soil moisture.



- But we can use proxies, provided calibration

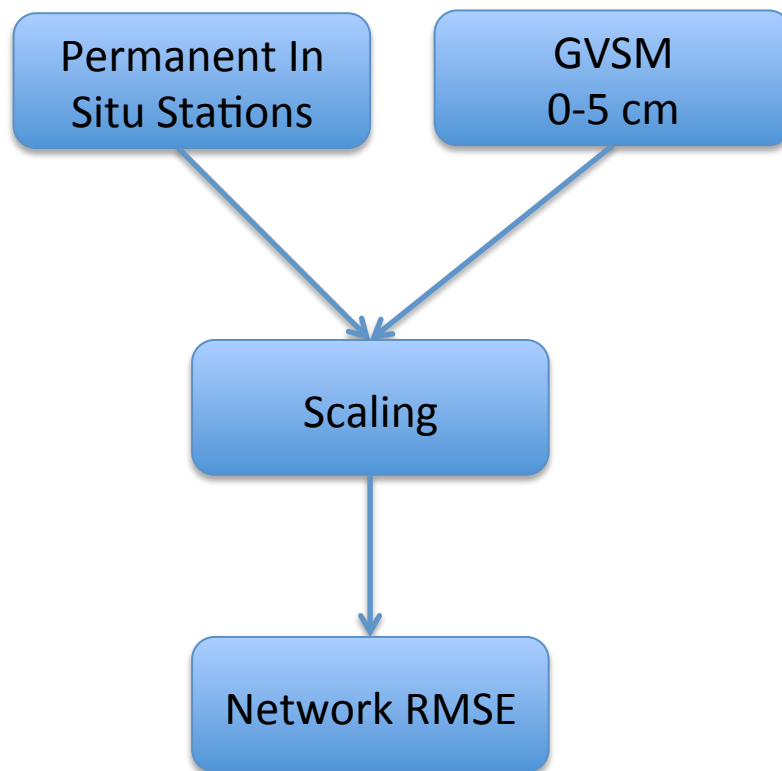


- Common installations are at 5 cm, but not required, as long as the calibration is to a 0-5 cm GVSM with minimal error



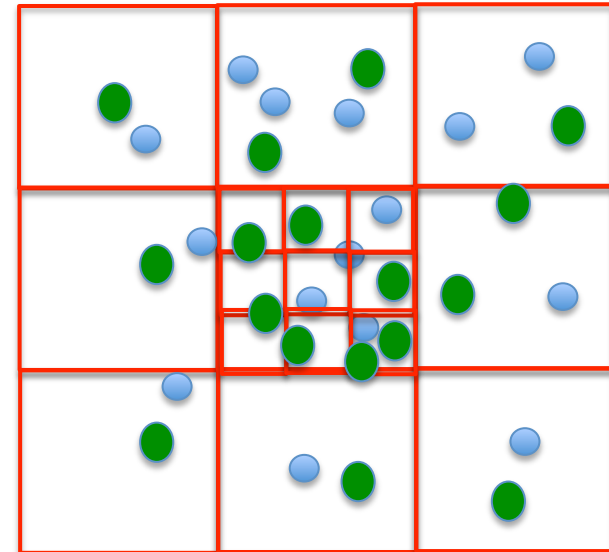
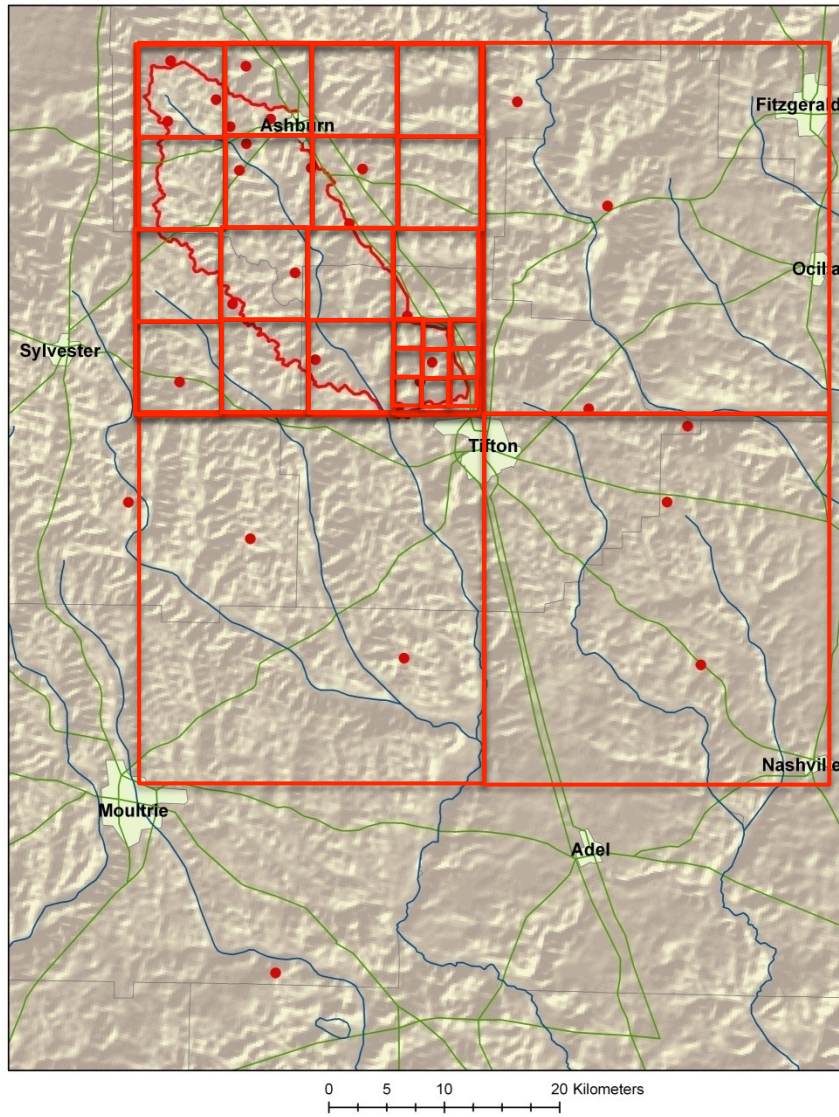


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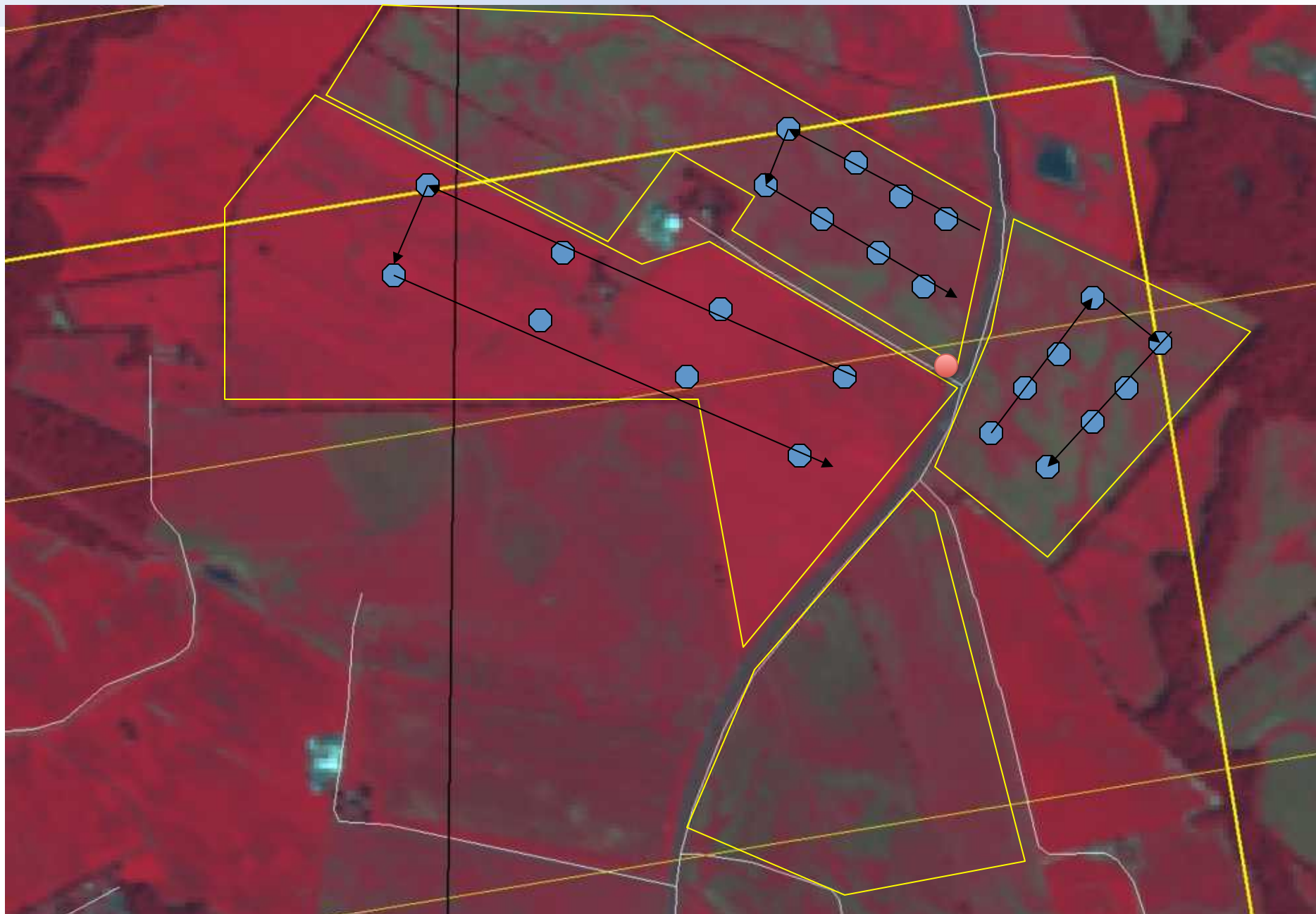
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Footprints
36 km
9 km
3 km

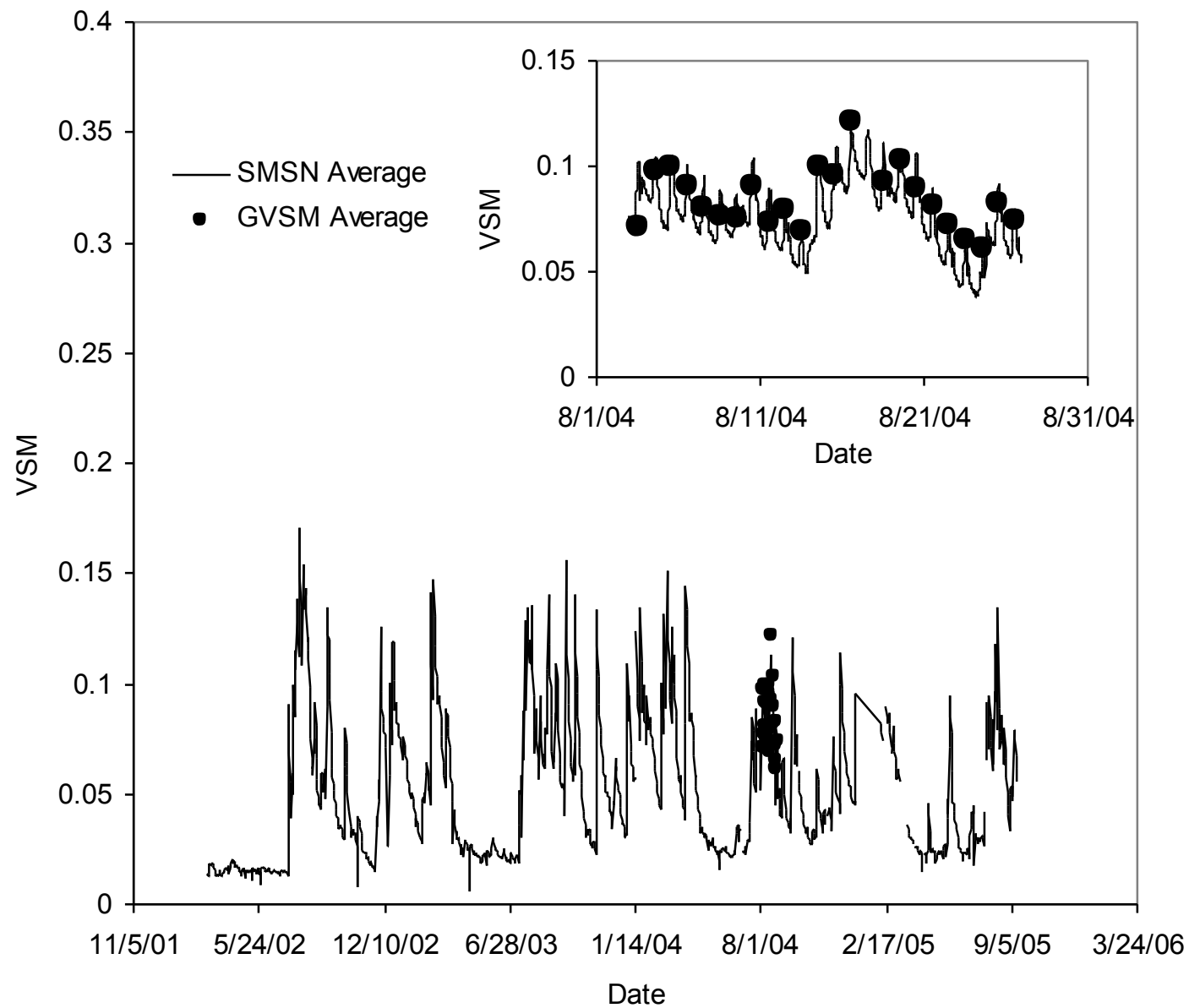
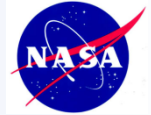


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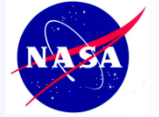


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USDA-Agricultural Research Service Lessons Learned



Goal is to provide gravimetrically based volumetric soil moisture estimates scaled to desired SMAP scales.

Via short campaigns, sensors networks can be scaled to satellite footprints with simple statistics.

Sensor calibration and scaling are crucial