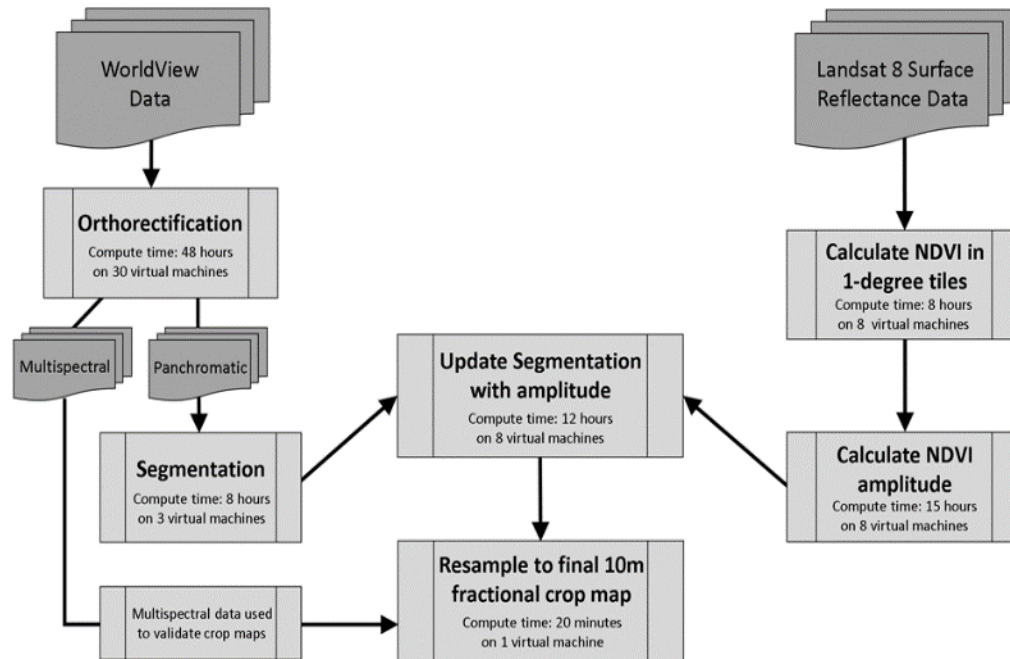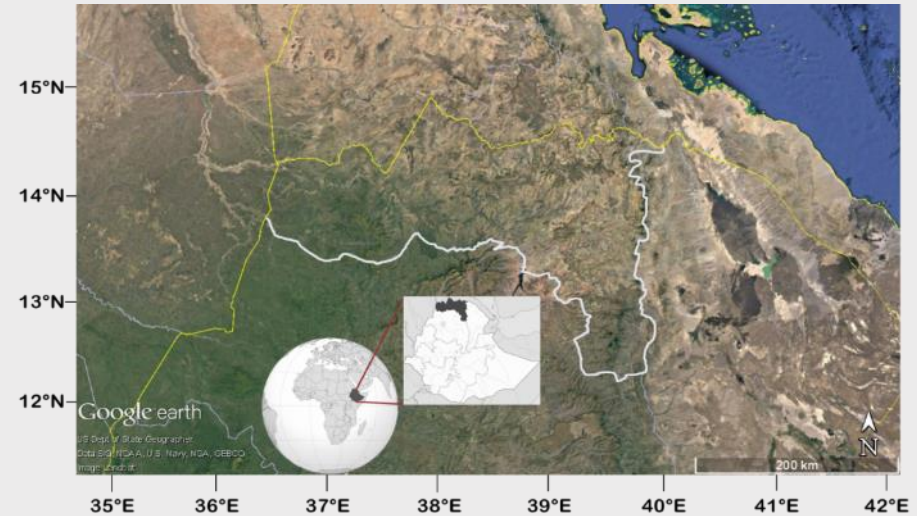# Jessica McCarty-Kern

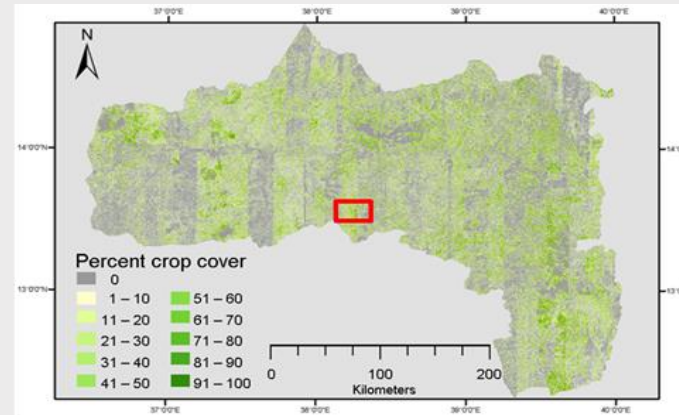## Mapping Small(holder) Farms Using Big Data

Globally sub-hectare fields/food production critical to food security.

Over 2,700 VHR WorldView-1, -2 images, ~ 4 TB of data.

Advanced Data Analytics Platform (ADAPT) at NASA GSFC's NCCS in 1 week (http://www.nccs.nasa.gov/services/adapt).
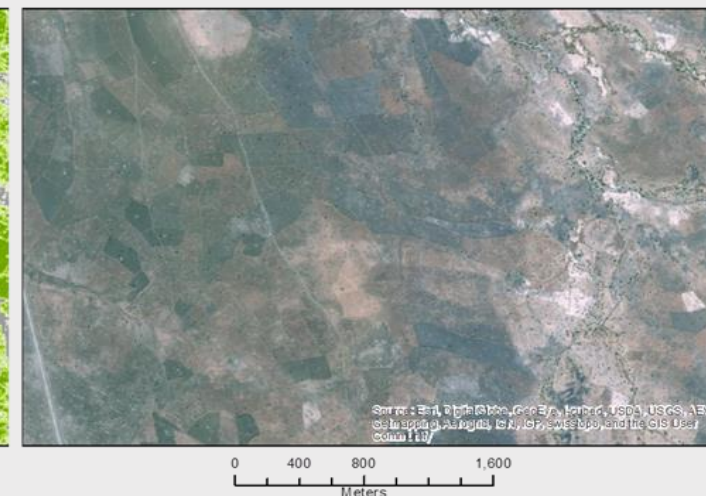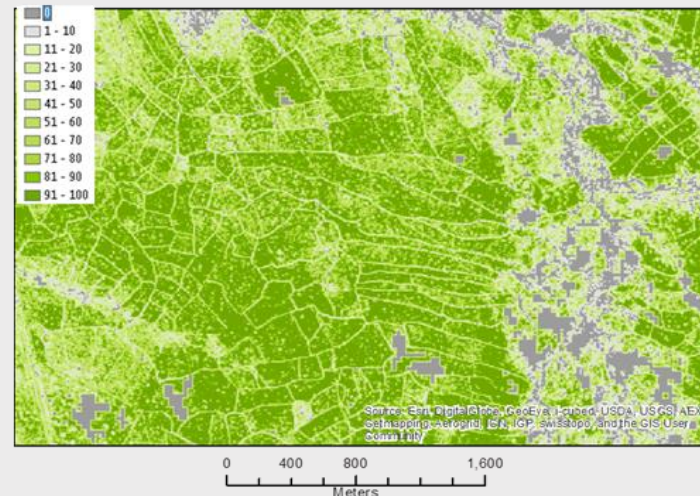
Scholarly Contributions

Percent crop at 10m

RGB imagery from ArcGIS

McCarty, J.L., Neigh, C.S.R., Carroll, M.L., & Wooten, M.R. (2017). Extracting smallholder cropped area in Tigray, Ethiopia with wall-to-wall sub-meter WorldView and moderate resolution Landsat 8 imagery *Remote Sensing of Environment, in revision.*