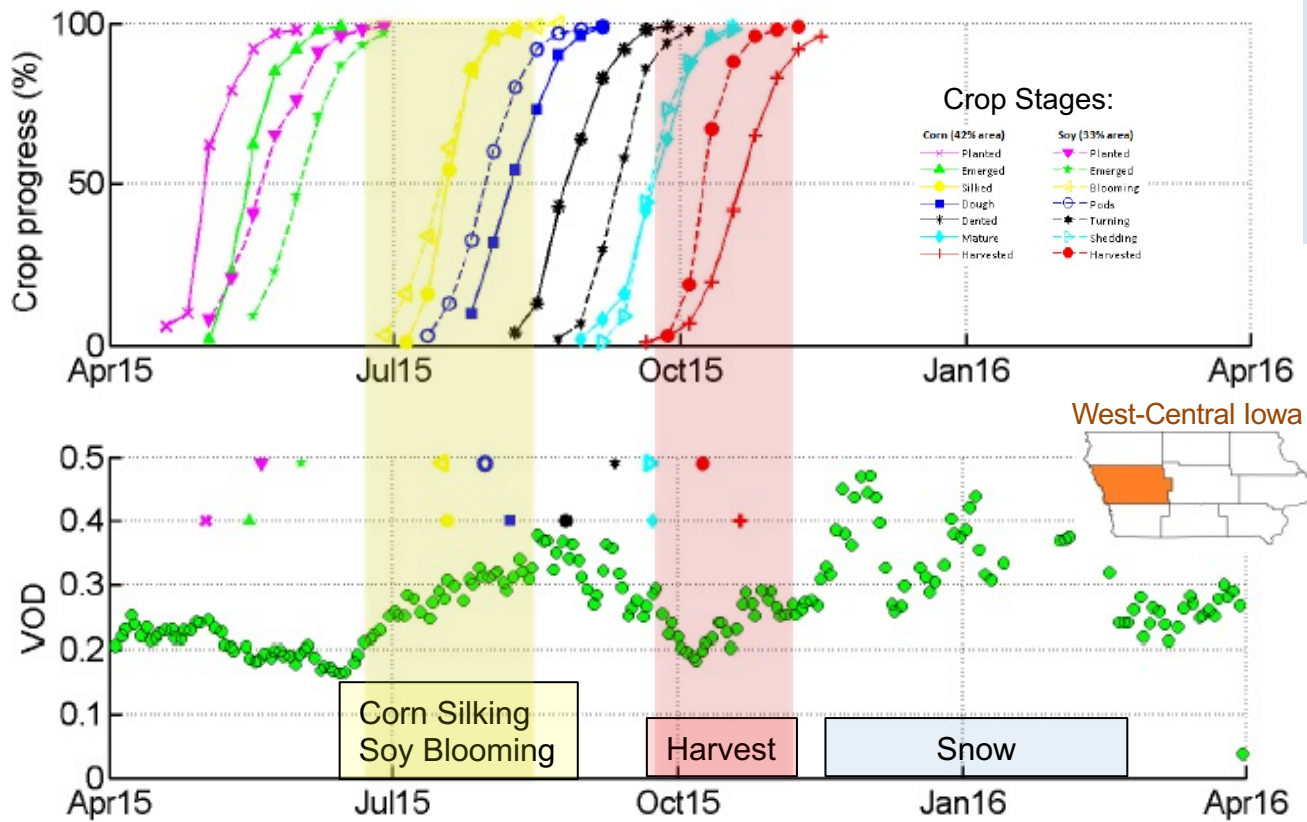
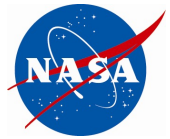


Crop Yields Tracked From SMAP Vegetation Water Content Retrievals



Problem: Crop yield maps needed to assess food production and food security

Finding: The survey-based growth phase of corn and soy crops across West-Central Iowa correspond to SMAP steady rise in retrieved microwave opacity. The harvest period is characterized by sharp drops.

Impact: SMAP maps global crop production and vegetation with accuracy and regardless of clouds and solar illumination, overcoming the limitations of current sensors.

Chaparro, Piles, Vallossera, Camps, Koning, Entekhabi, 2018: L-band vegetation optical depth seasonal metrics for crop yield assessment, *Remote Sensing of Environment*, 2018.