

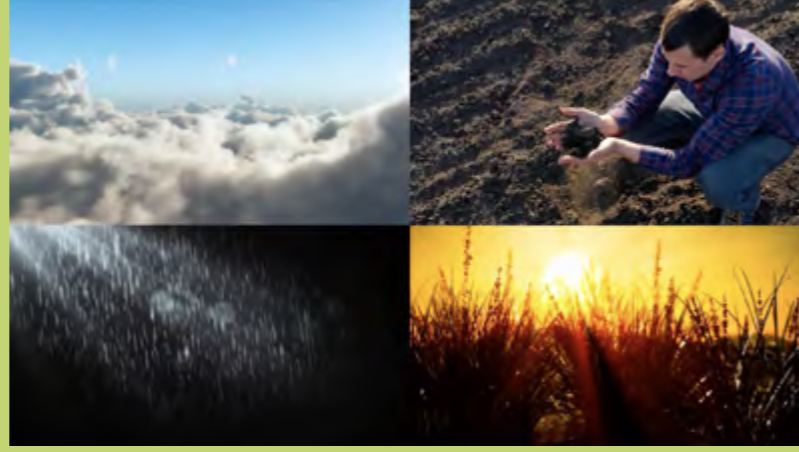
# NASA + AGRICULTURE Land + Crops

For decades NASA satellites have orbited Earth, gathering data on land use changes, the health of plants, the temperature of the land and a slew of other data - all information that can be put to use by our nation's farmers.



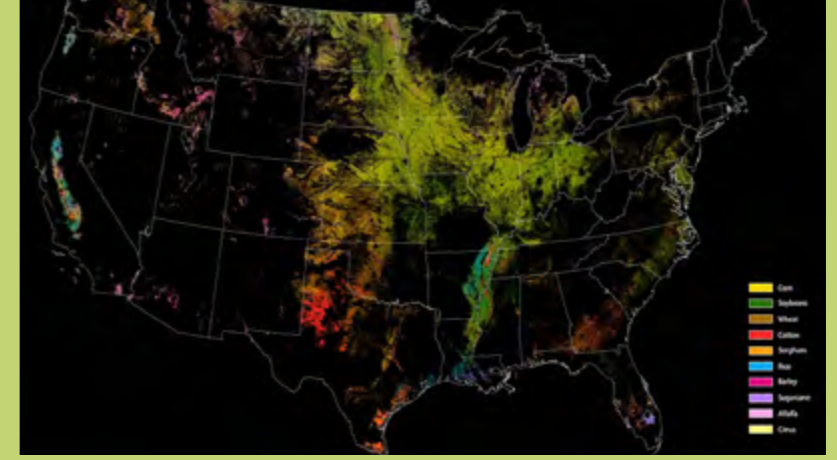
## Landsat: Farming Data From Space

See how decades of Landsat satellite data are used to monitor water, predict yields of crops like corn, wheat, rice, cotton, and soy. [+VIDEO](#)



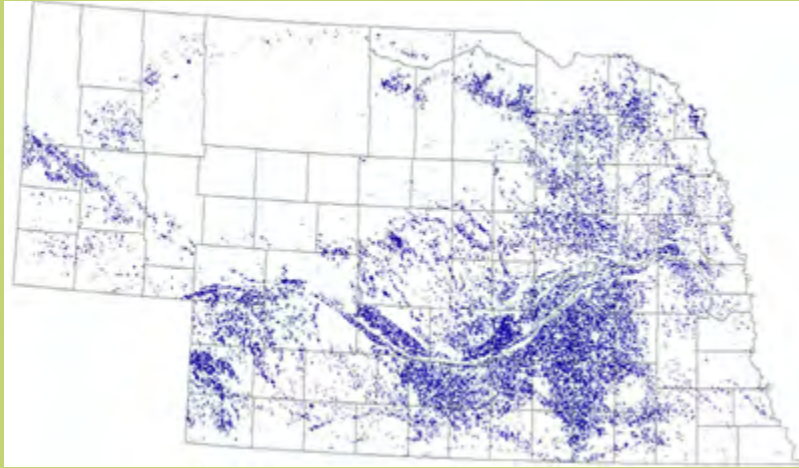
## Food Security: Monitoring Crops from Space

NASA's Earth-observing satellites gather data to monitor plant growth and crop yield to predict food supply and food shortages worldwide in a way that can inform important local decision-making. [+VIDEO](#)



## Satellites Track Status of Nation's Food Supply

Since 2009, USDA NASS has drawn on Landsat data to monitor dozens of crops, including corn, wheat, soy and cotton in the lower 48 states as part of NASS's Cropland Data Layer program. [+VIDEO](#)



## Water Use and Crop Yield Simulator

Working with the USDA, NASA released in January 2020 a modeling framework for assessing water use and simulating crop yields at the regional level. It is a hybrid method that integrates Earth observations into process based crop models. [+ARTICLE](#)



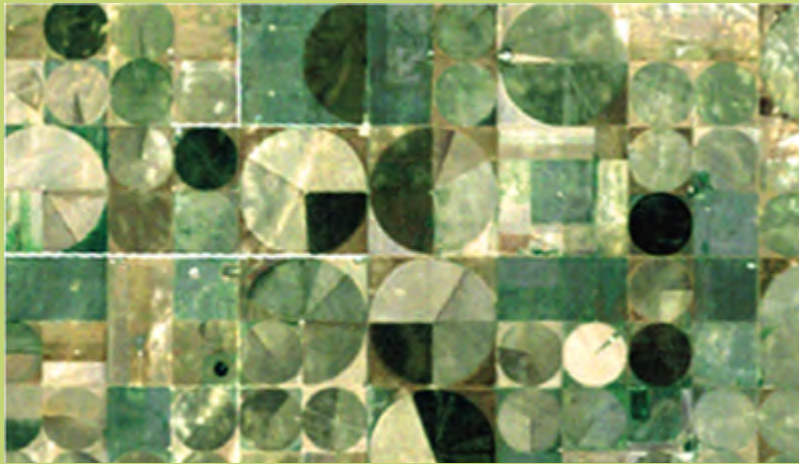
## Shoring up the Corn Belt's Soil Health

Soil is the foundation of our food systems, and sustainable farming depends upon healthy soil, which has impacts far beyond the field. [+ARTICLE](#)



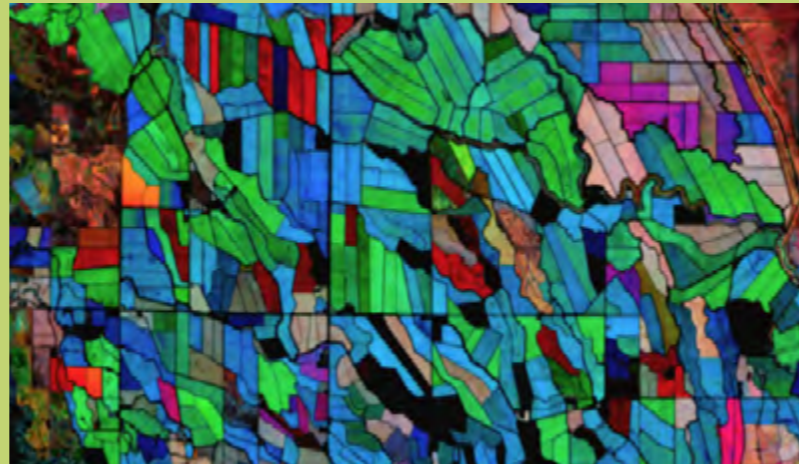
## Earth Images Enable Near-Perfect Crop Predictions

A crop-prediction model that combines current NASA and USGS data streams with historical data and then blends them with a variety of other data sources, including weather models that consistently predicted final 2016 yields on U.S. corn and soy crops ahead of all publicly available in-season forecasts. [+ARTICLE](#)



## Landsat's Critical Role in Agriculture

Factsheet detailing Landsat work in forecasting crop yields, measuring water and fighting crop insurance fraud. [+PDF](#)



## Using NASA's Harmonized Landsat Sentinel-2 Product to Give Farmers Real-Time Crop Health Information

IndigoAg is using HLS data to help fulfill its mission of making farms more profitable and sustainable. [+ARTICLE](#)



## Food Security from Space: Vegetation Health

Factsheet on how Landsat and other NASA satellites and instruments complement each other to monitor vegetation health. [+PDF](#)

