Descartes Labs

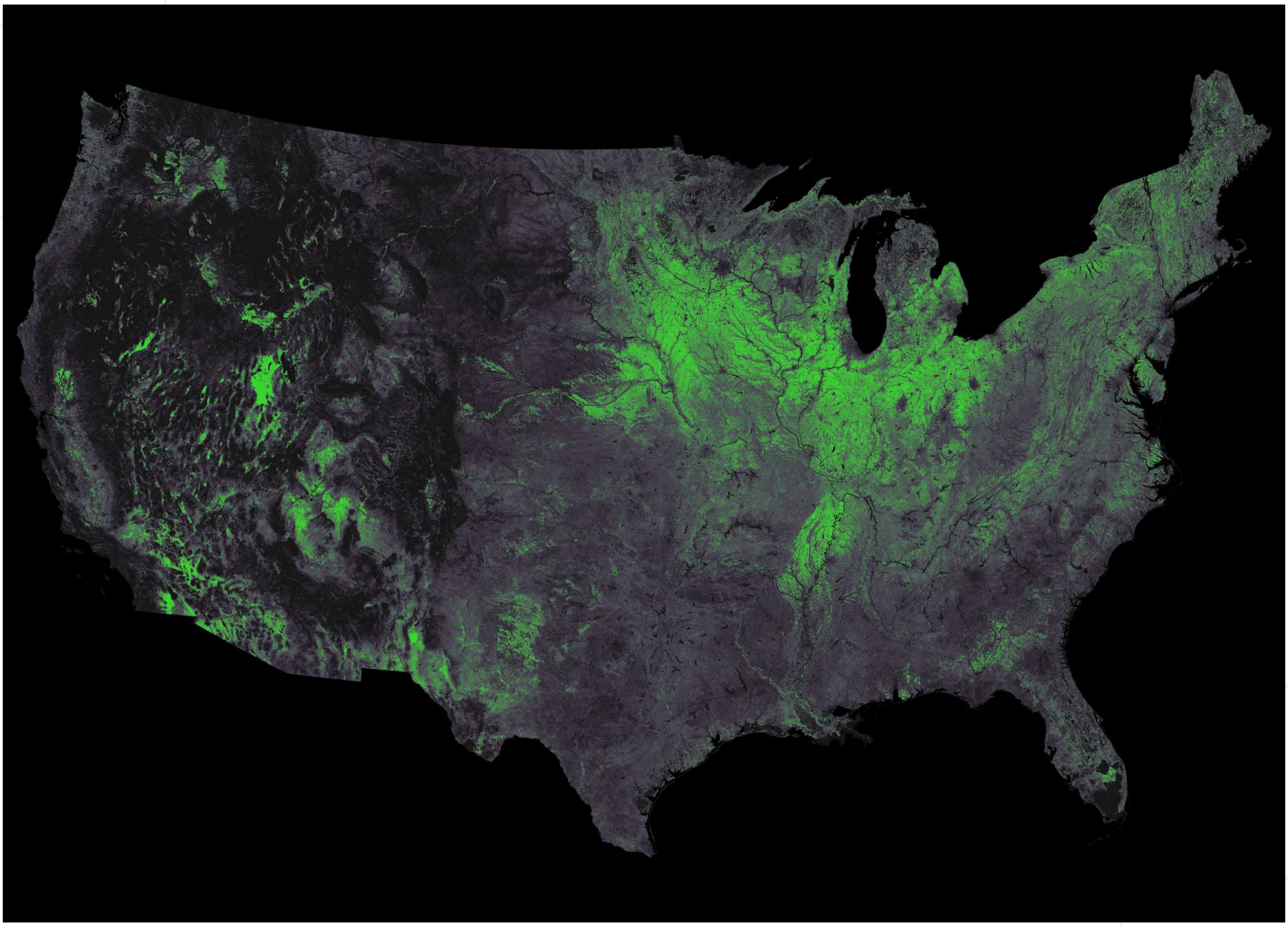
Agriculture

## USE CASE:

# Corn and Soy Yield Monitoring

### Datasets

Sentinel 2 | NAIP | historical yield and acreage data | weather data (Global Surface Summary of the Day)



*Copernicus Sentinel data 2020*

## Summary

The Descartes Labs crop classification uses ground-truth data to train a random forest algorithm using NAIP, Sentinel 2 or other optical imagery. The classification data and other inputs are used during the active growing season to feed into an end-of-season crop yield model. Typically these are statistical models that leverage historical yield data to model the relationship between weather and/or satellite observations and yield. Biophysical (also called process-based or simulation) models, which rely on known relationships between plant physiology and environmental conditions, are also used.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