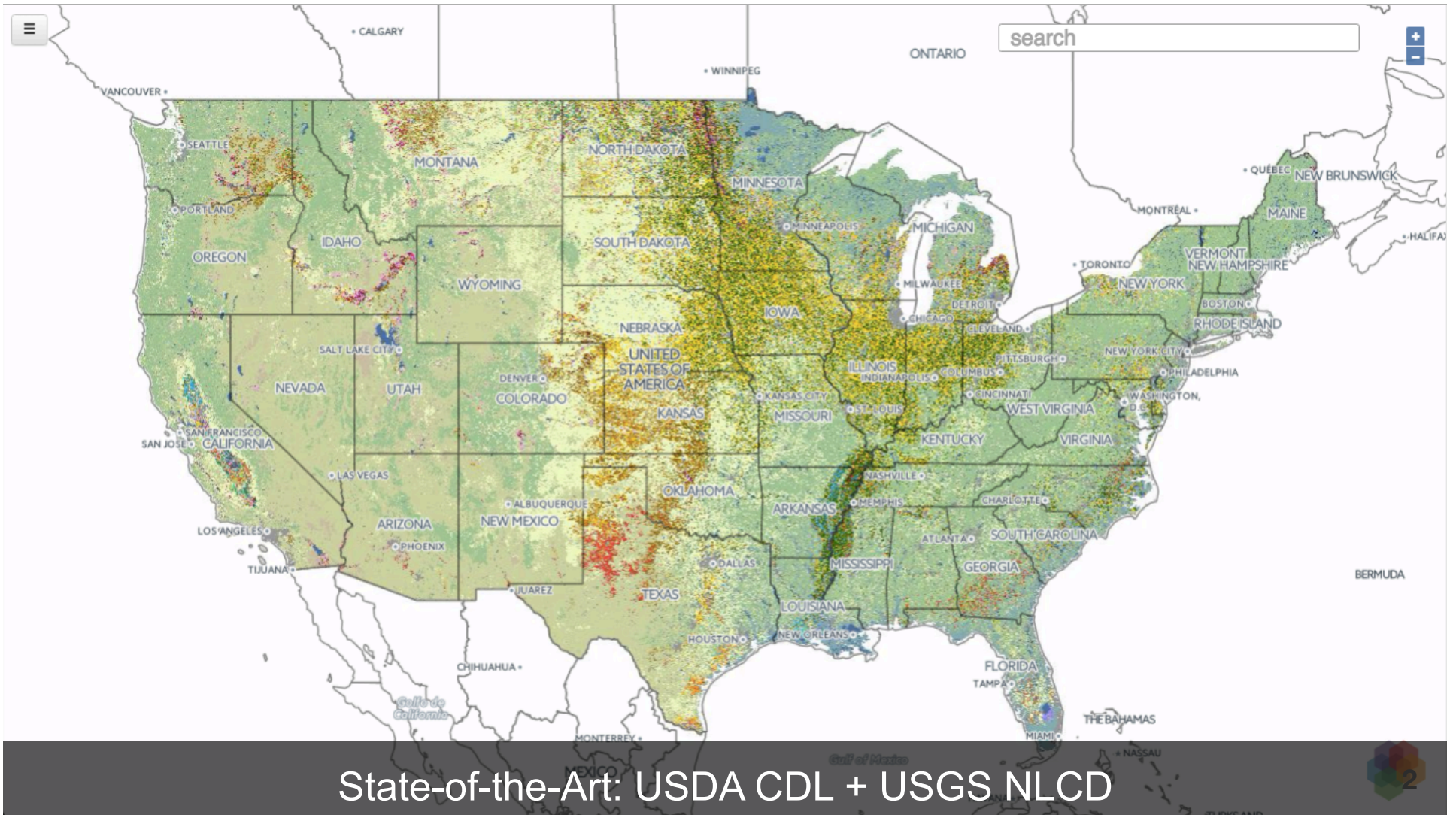
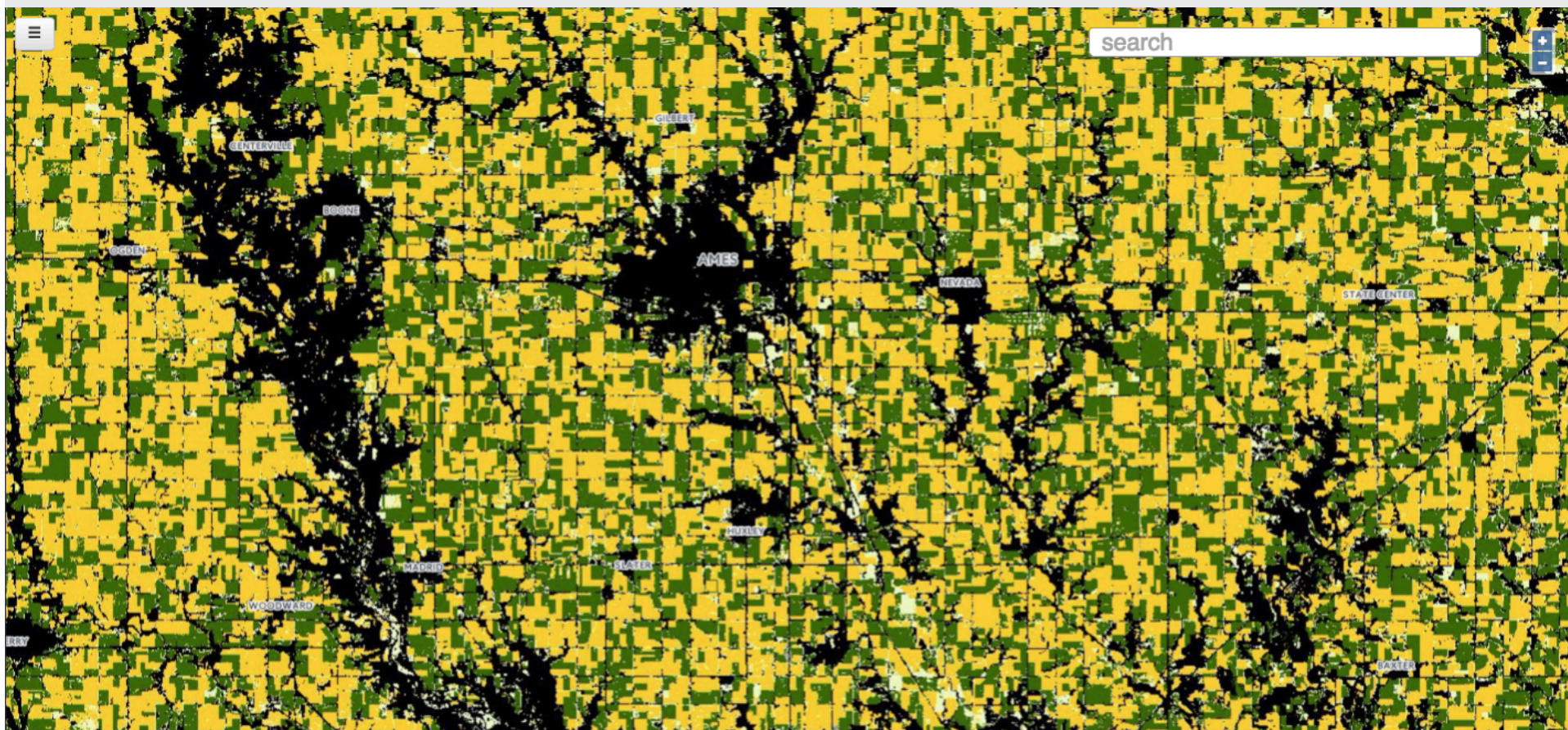


From Pixels to Answers  
Building a Living Map of the World  
Steven Brumby [steven@descarteslabs.com](mailto:steven@descarteslabs.com)

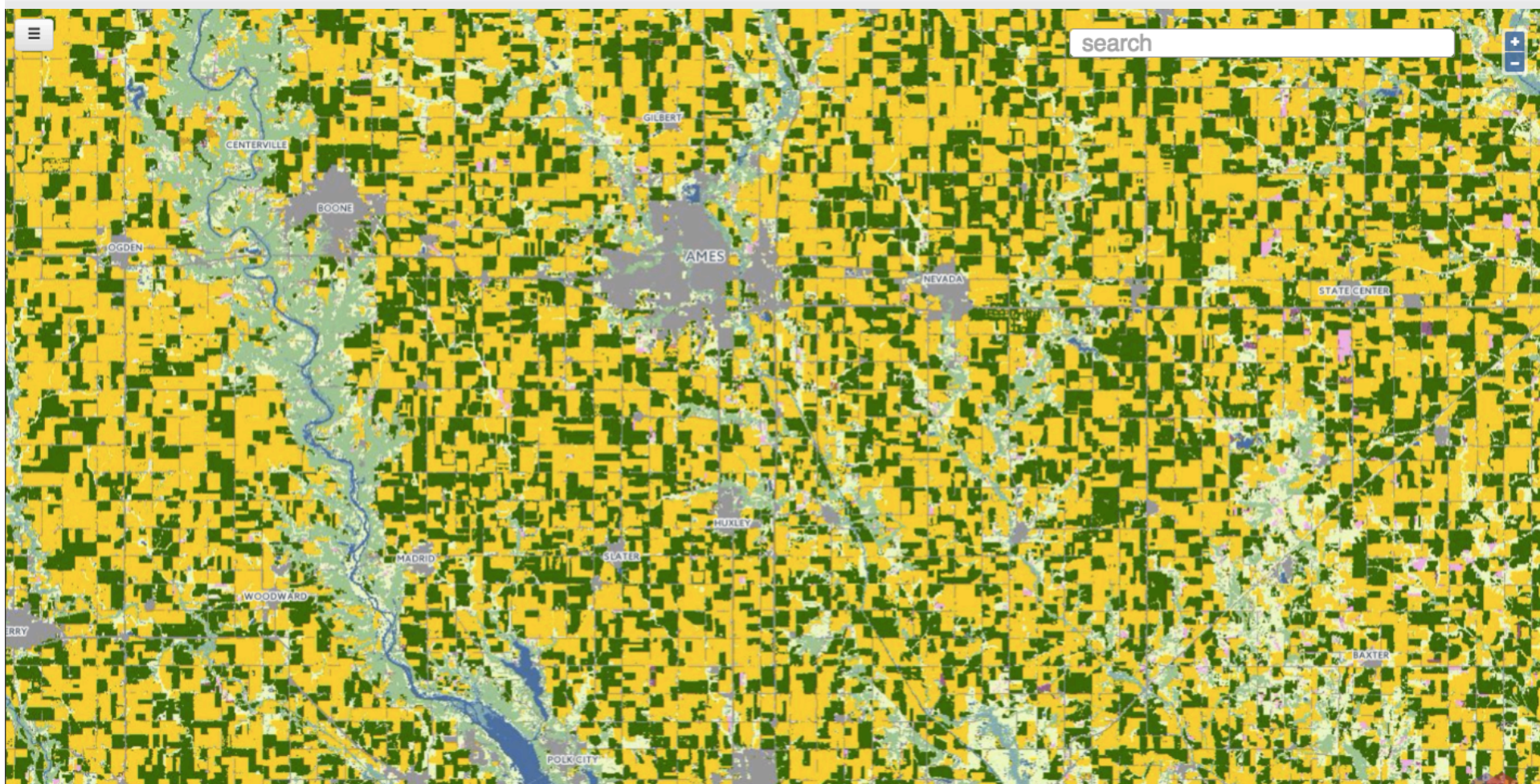






Descartes System: Descartes-CID2015 >90% match to USDA produced in season, trained using historical imagery +USDA CDL



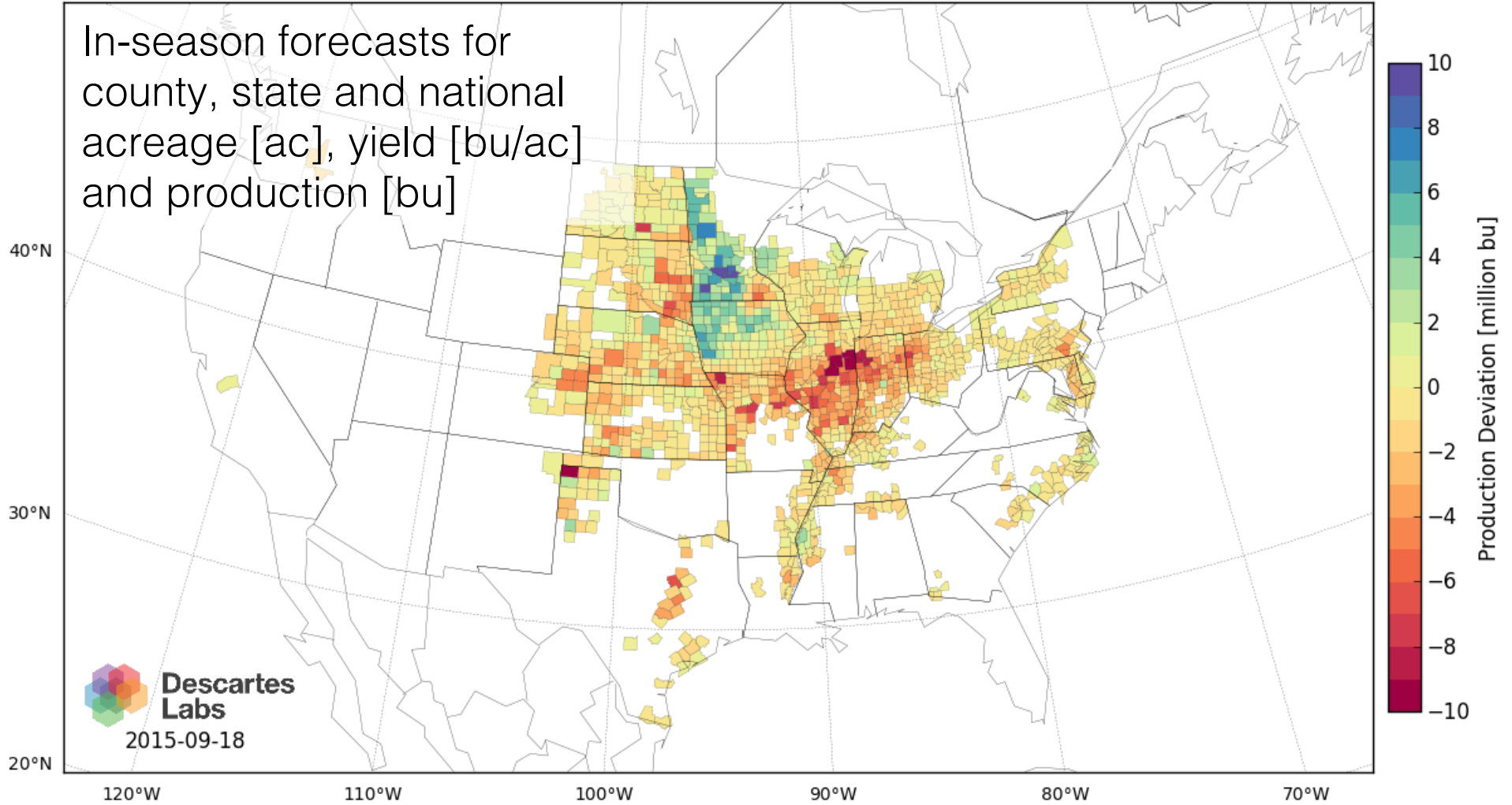


Descartes System: Zoom in on USDA-CDL2015 (released Feb 2016)

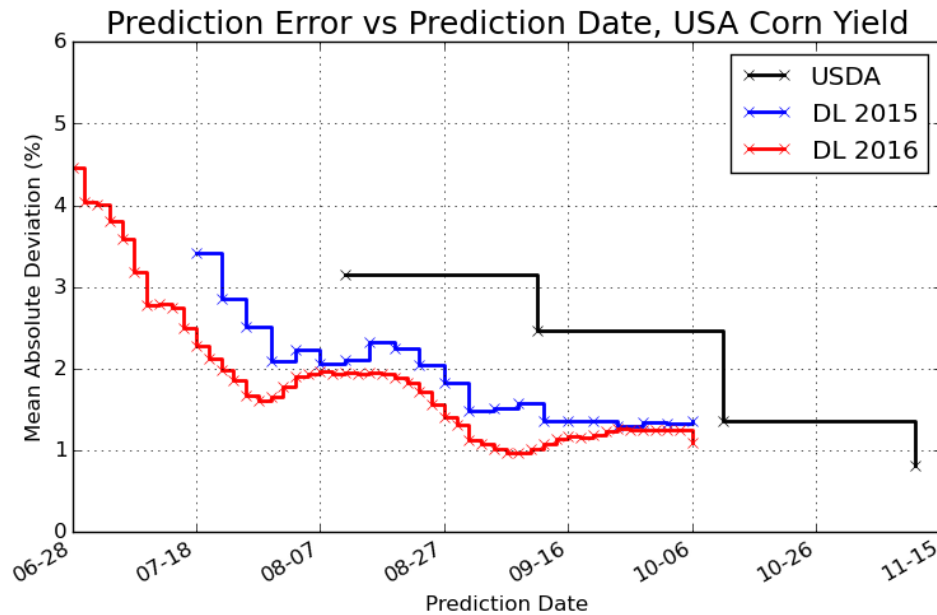


Production, Deviation from 2014

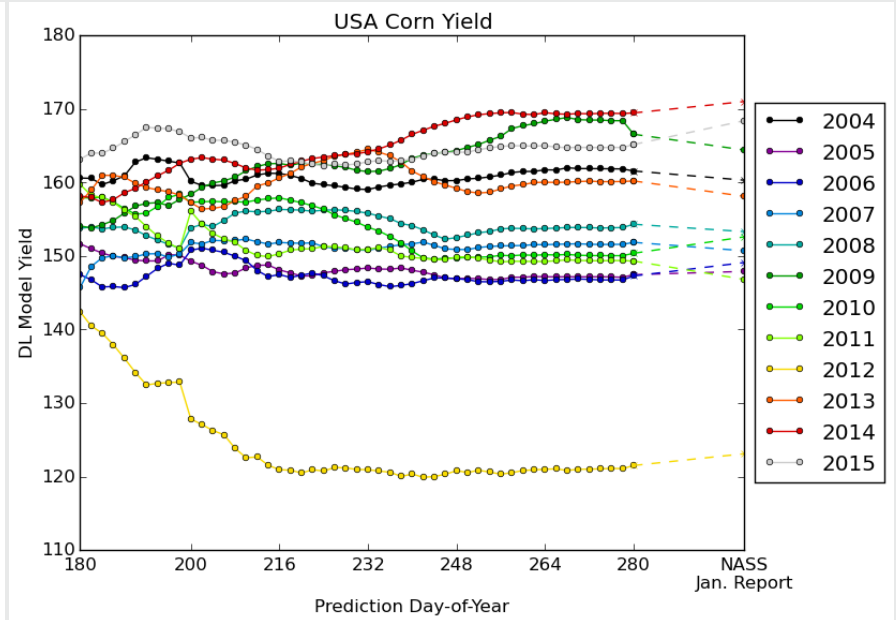
In-season forecasts for county, state and national acreage [ac], yield [bu/ac] and production [bu]







DESCARTES LABS CORN YIELD FORECAST  
EXPECTED ERROR BY DAY-OF-YEAR

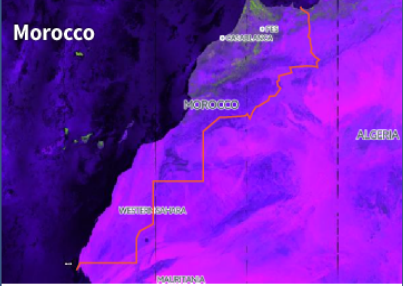
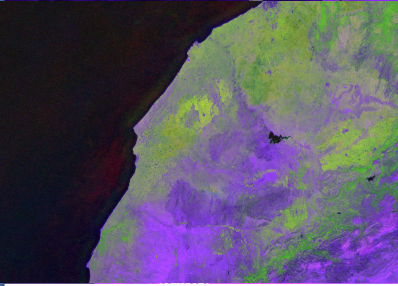


DESCARTES LABS CORN YIELD FORECAST  
BY DAY-OF-YEAR FOR 2004-2015

## Descartes yield models versus USDA NASS ground truth



Morocco
Morocco

Indicators
Images
Analytics

**Famine Indicator**

High

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**Vegetation Stress**      **Reservoir Levels**

High                      Low

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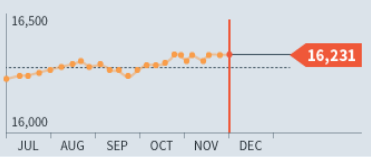
**Drought Conditions**      **In Country Food Stocks**

Moderate                      Average

Wheat      2016

Production	Yield	Acres
16,231	16.92	4,432
1 M METRIC TONS	TONS/HECTARE	1,000 HECTARES
+2.12% YoY	+4.35% YoY	+5.67% YoY
15,357 NASS	165.6 NASS	4,321 NASS

2016 Predictions      Value      %YoY      MAD      RMS





**Descartes  
Labs**

Descartes Global Food Security Terminal – DARPA SBIR Project