Welcome!

To the workshop C9

"Near-term crop yield forecasts to mitigate production risks"

Bernhard Schauberger, Christoph Gornott,
Frank Wechsung, Tobias Conradt

We initiated this workshop to…

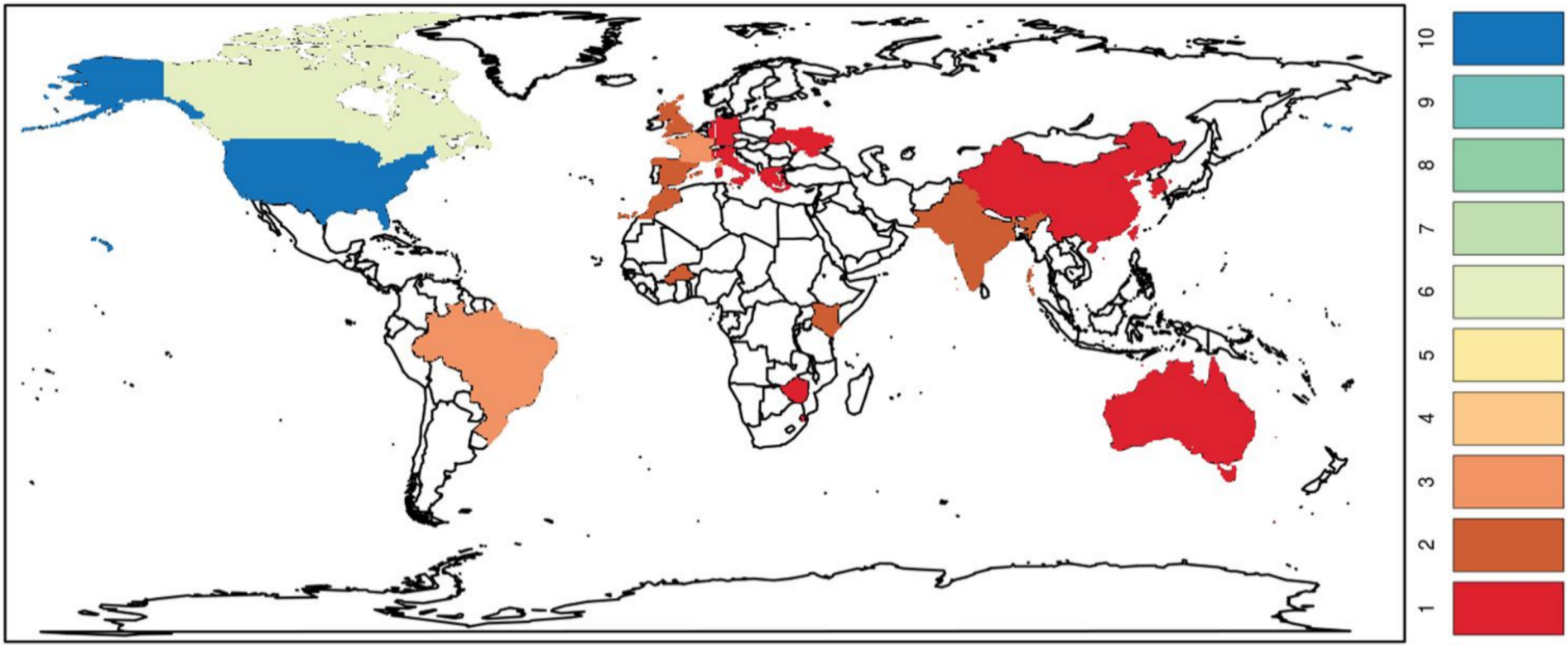
- … exchange ideas on yield forecasting
- … learn about the current status quo on methods
- … getting to know each other
- … appreciate new data sources
- … sparkle discussion about the future of yield forecasting

The workshop is organized as follows

- 60 min: talks (5 min each)
  - Introduction (Bernhard Schauberger)
  - Section 1: Forecasting systems and applications
    - Marijn van der Velde Wheat forecasts under extremes
    - Davide Cammarano Barley forecasts for Scotland
    - Marlene Kretschmer Crop yield forecasting in Morocco
    - Frank Wechsung Wheat yield forecasting in Morocco
    - Qiang Xing Aboveground biomass estimation from RS
    - David Makowski New indices for crop insurances
  - Section 2: Influences of environment on crop growth
    - Tamara Ben-Ari Extreme wheat losses in France 2016
    - Gerard W. Wall TRACE results: cereals under heat
    - Pierluigi Calanca How to improve forecasts under extremes
    - Elena Surovyatkina Forecasting of Indian summer monsoon 2017
    - Jonas Jägermeyr Phenology as key variable under extremes
- 30 min: discussion about the talks

  Key question: How can a practically applicable global forecasting be built?

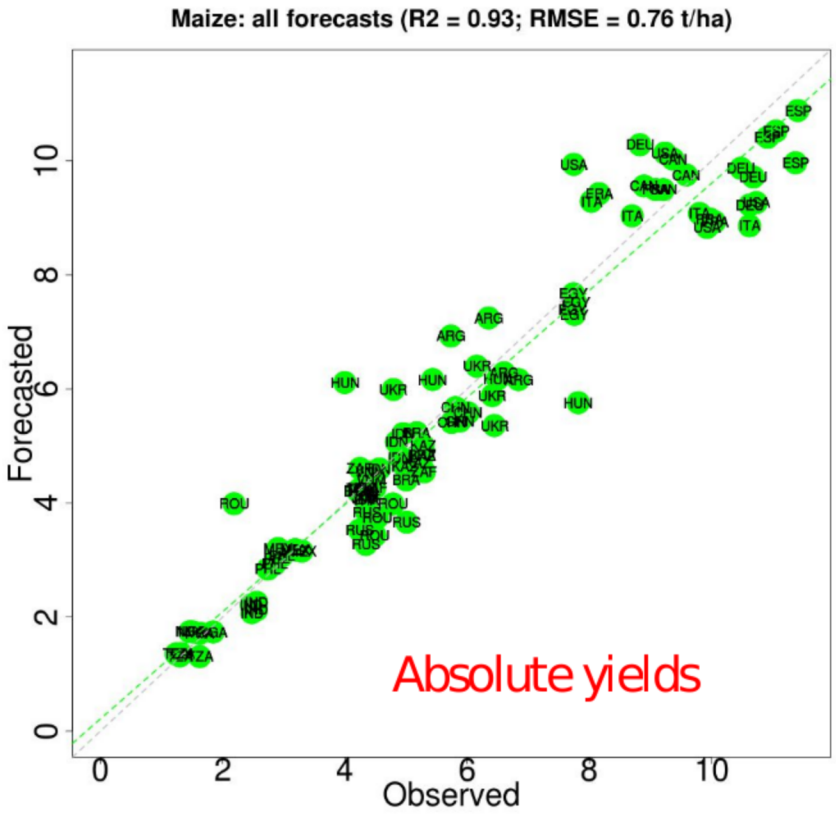
Forecasting systems have much advanced, but there are still many open questions and uncovered regions

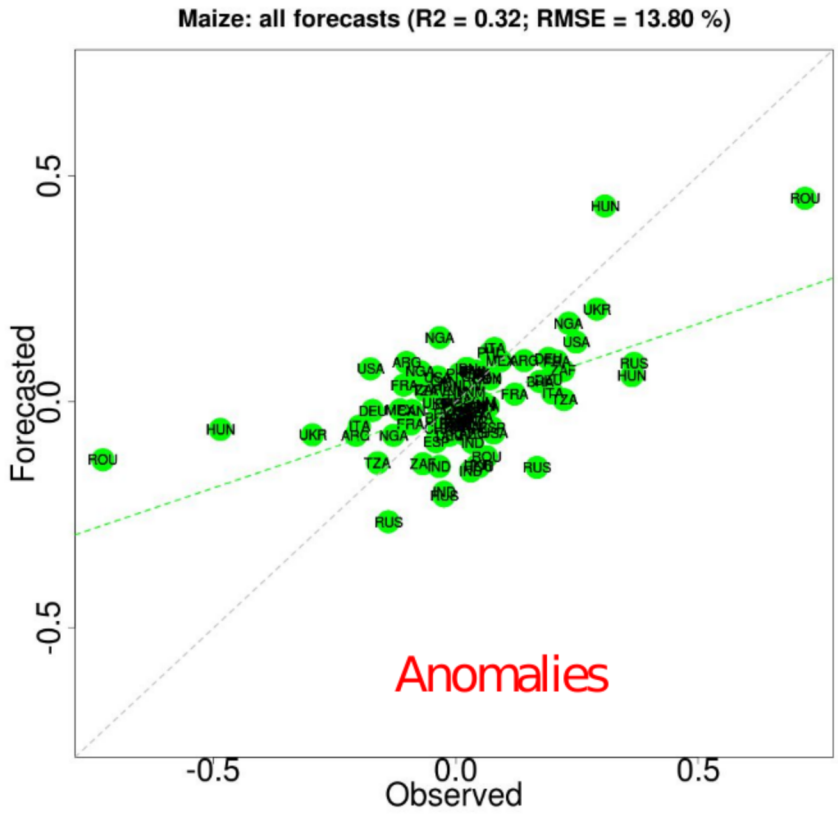


Number of scientific articles about crop yield forecasting (preliminary count)

- France 2016 is an egregious example for unreliable forecasts

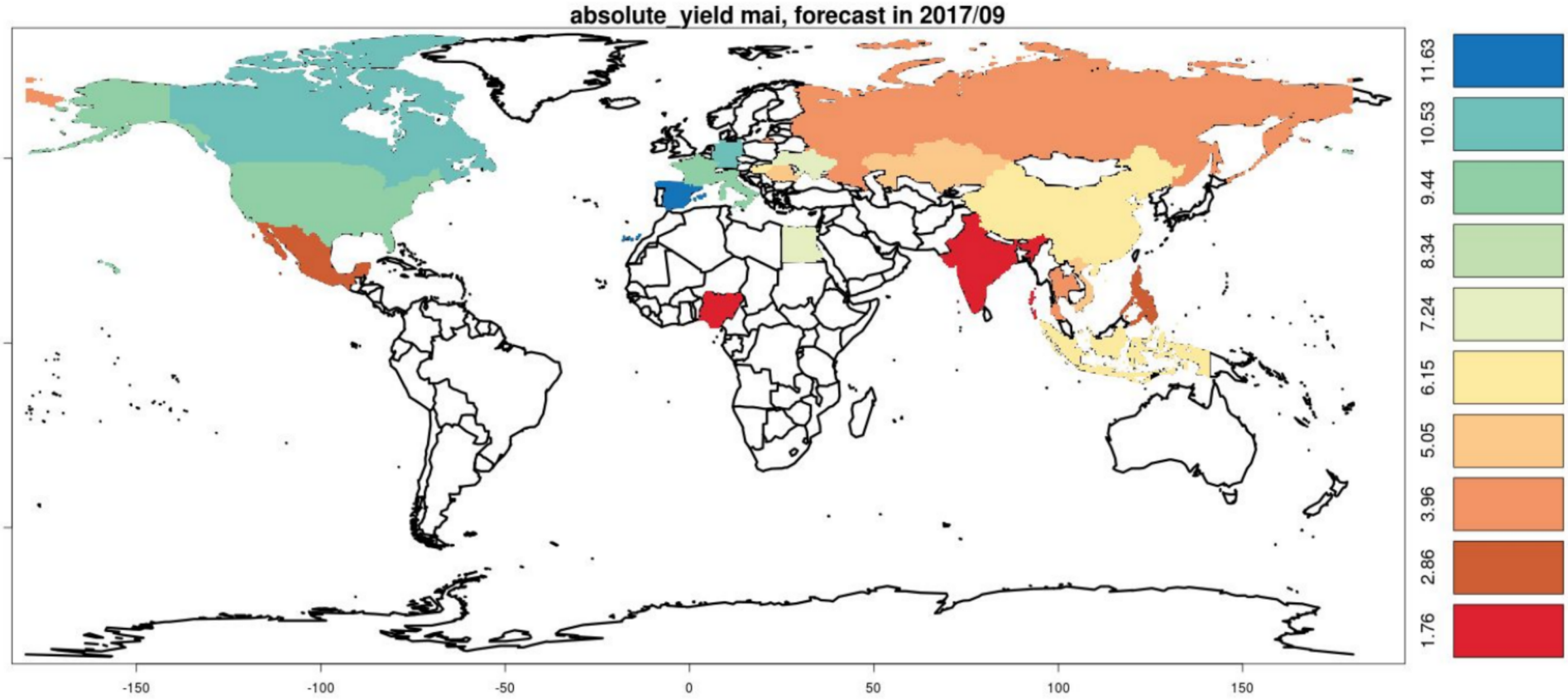
Global forecasting has started





- Maize yield forecasts between 2011 and 2014 for global main producers
- Ensemble of models; the best model is chosen for each crop and country based on historical forecasting performance
- Inter-country differences lead to a “low-hanging” high R2 (left panel), but anomalies are more difficult (right panel)

Global maize yield forecasts for 2017



NOTE: the uncertainty may be tremendous; this is just a map of technical proof

For now I forecast interesting talks…

Thank you all for coming!