What happened?

# Plan:

* Combine localized yield data with data for temperature and precipitation.
* Train linear and neural networks on this combined data.
* Predict future localized yield based on predicted future climate data using auto-regression.
* Evaluate multiple future climate scenarios.
* Visualize predicted yield on a fully customizable world map.

# Problems:

* Understanding the data and identifying our feature-of-interest took too long.
* Merging the data was complicated and tricky.
* We didn’t read any literature, but went straight for the code.

# Achievements:

* We can visualize all data on a world map.
* We have upsampled the spatial resolution of our climate data.
* We have merged our data.
* We trained a model on yield data, which had no real learning gain.
* We trained a model on combined climate and yield data which had at least some learning gain.

# What we learned:

* Pandas is awesome!
* We learned something about LSTMs and time series forecasting with Keras.
* Read more papers!
* Neural Networks might not be suited well for this specific problem. They might be too complex / powerful.

# What could have gone better:

* Data understanding
* Data cleaning
* Data merging
* More time for the actual model
* More literature-based knowledge on the topic and the technology