



# CropSHIFT - Climate Change impact on crop growing patterns in Europe

GeoVille

Supported by FORSCHUNGS FÖRDERUNGSGESELLSCHAFT mBH





## Crop risk model

- Agricultural Risk Information System
- Weather & soil data
- Daily timesteps
- 1 km resolution



## EO-based insights

- Sentinel based phenology param.
- Crop/variety specific
- Field scale
- 5y timeseries



## Climate change scenarios

- ECMWF
- Historical data
- Future scenarios
- 5km resolution, downscaled to 250m



## Yield information

- Yield impact assessment
  - Relative yield
  - Absolute after calibration

**DestinE**

# CropShift Service

Risk management toolkit for agricultural planning

- Identify crop growing risks
- Predict shifts of crop growing areas
- Estimate impact on yield



EO-calibrated



High-resolution



Crop-specific risk scenarios



Spatially explicit

# CropShift Service

Present  
2020-2024



Predict changes in  
temperature &  
precipitation



Quantify heat &  
drought stress

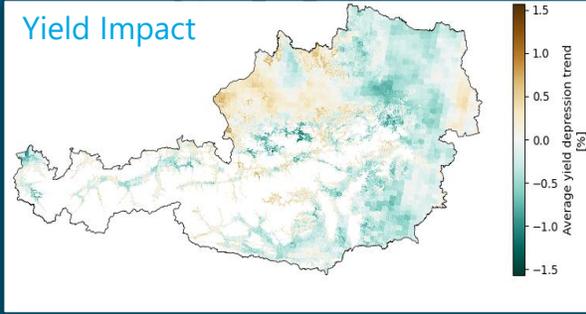
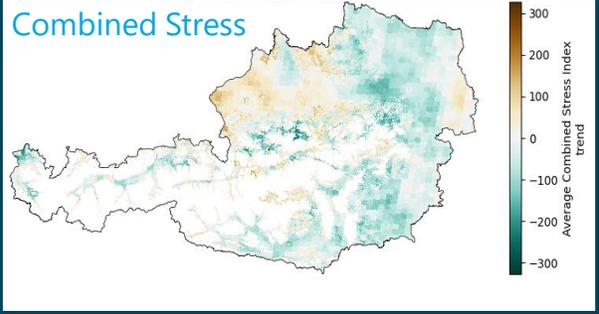
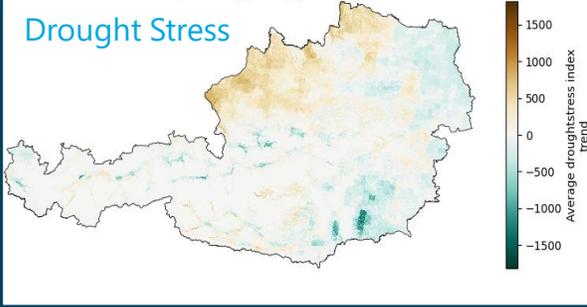
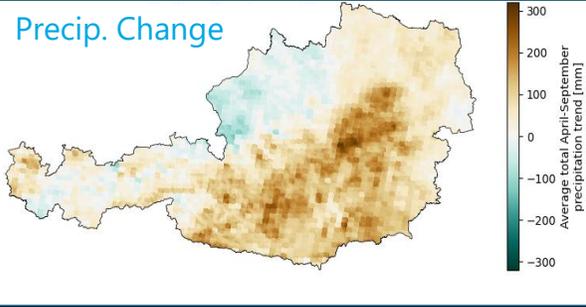
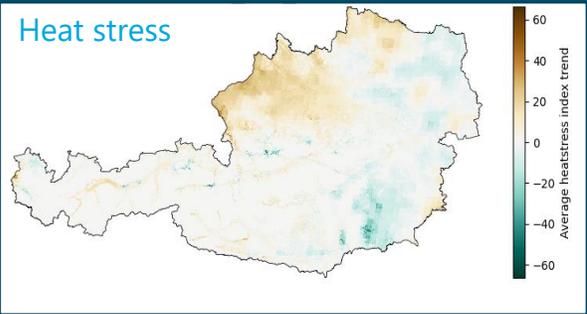
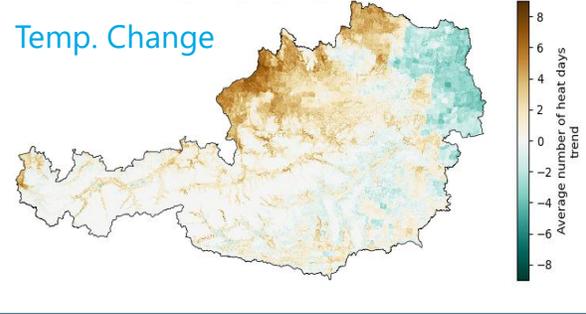


Quantify  
combined stress



Future  
2035-2039

Assess  
yield impact





Stakeholders



Information Systems and  
Data Processing GmbH

# Climate Change impact on agriculture

## Get in Touch!

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