



## Tasks of project partner ZAMG

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**AGROFORECAST 2<sup>nd</sup> general meeting**

**30.11.2021**

**online**



**ZAMG**  
Zentralanstalt für  
Meteorologie und  
Geodynamik

## WP2 Development and validation of downscaled seasonal forecasts



### Objectives

- 02.1: Implement and apply 2 downscaling approaches (statistical, dynamical)
- 02.2: create spatio-temporal homogeneous data sets (1km grid)
- 02.3: validation
- 02.4: ÖKS climate scenarios for 2050s

### Milestones

- M 2.1: Download and pre-process historical and current SEAS5 data for defined cases (Nov 19)
- M 2.2: downscaling algorithms for SEAS5 data are set up and working (May 20)
- M 2.3: a combined 10d + 7m test data set is ready for target regions (Oct 20)
- M 2.4: validation with in-situ measurements (Jun 21)
- M 2.5: provide forecast EPS data and 2050s scenarios to agronomic models (Jan 22)

## WP2 Development and validation of downscaled seasonal forecasts



### INCA

- INCA analyses – provided operational (EODC connectivity issues) [02.1]
- “INCA” forecasts – provided nearly operational [02.1+2.2]
- SEAS5 every month (16 members) > ftp BOKU [02.1+2.2]
- 10day forecast every Monday (deterministic) > ftp BOKU [02.1+2.2]
- Validation ongoing [02.3]

### SURFEX

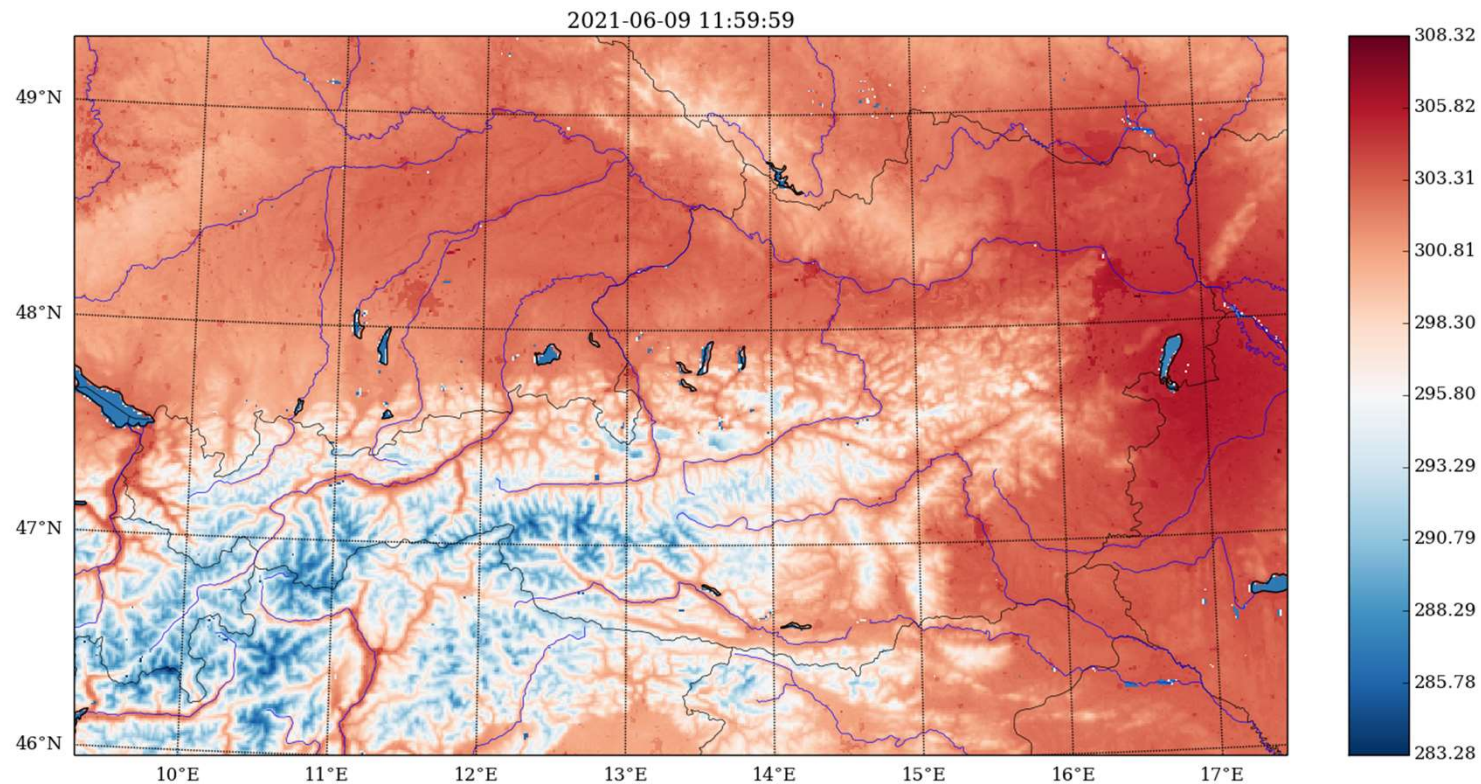
- Approach is tested [02.1]
- Validation still to be done [02.3]

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### SURFEX downscaling

- uses T30m, RH30m, prec, lw+sw radiation, CO<sub>2</sub>, 30m wind, p surf of SEAS5 as forcing
- full physical soil model -> additional output parameters (e.g. soil temperature)
- to be validated

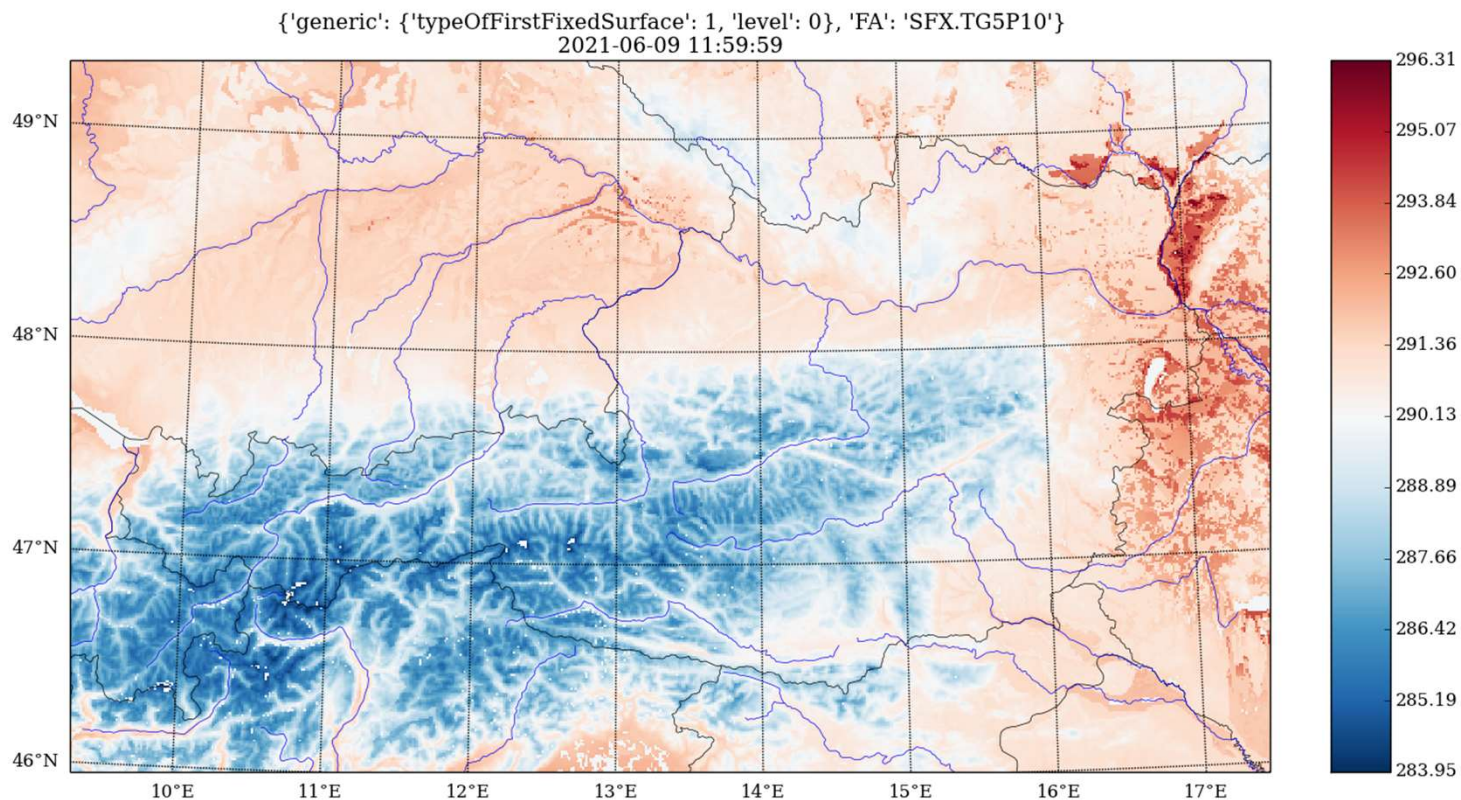




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### SURFEX downscaling

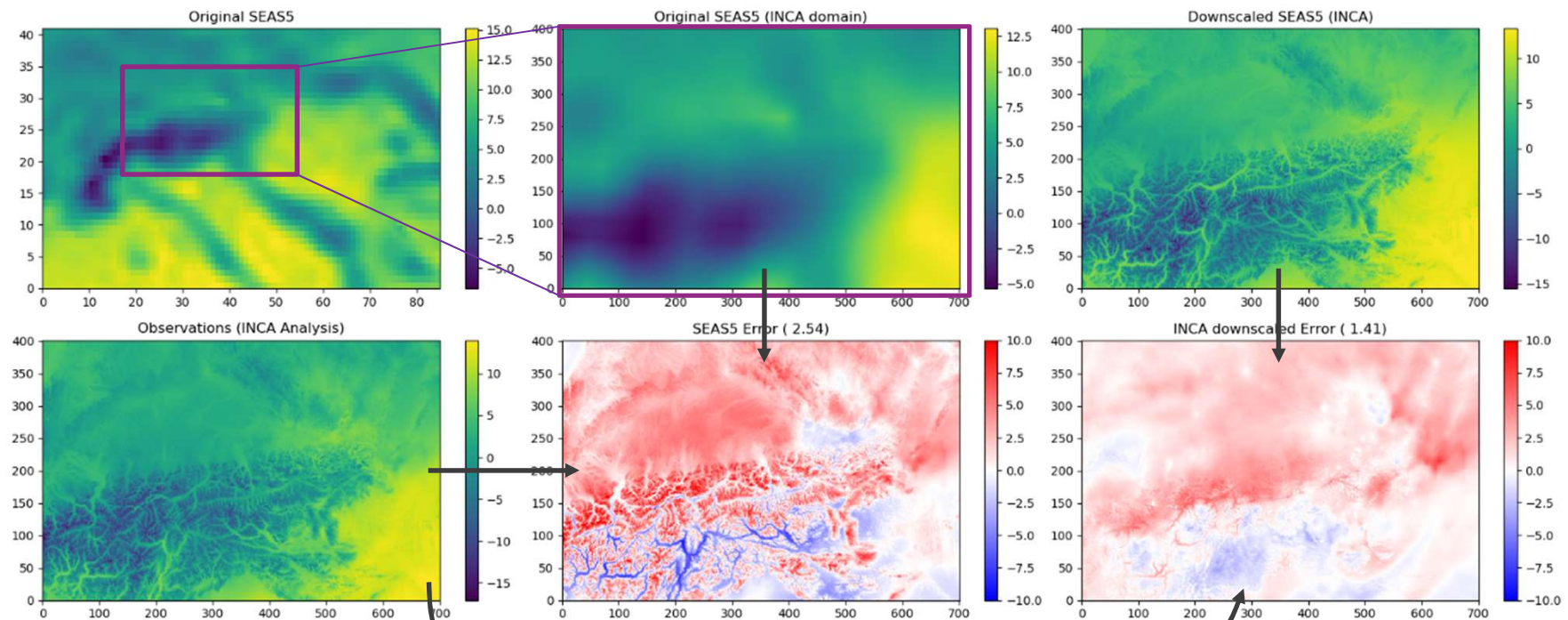
- uses T30m, RH30m, prec, lw+sw radiation, CO2, 30m wind, p surf of SEAS5 as forcing
- full physical soil model -> additional output parameters (e.g. soil temperature)
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## INCA downscaling

- Validation is ongoing (here for Feb, 2nd 2018 )

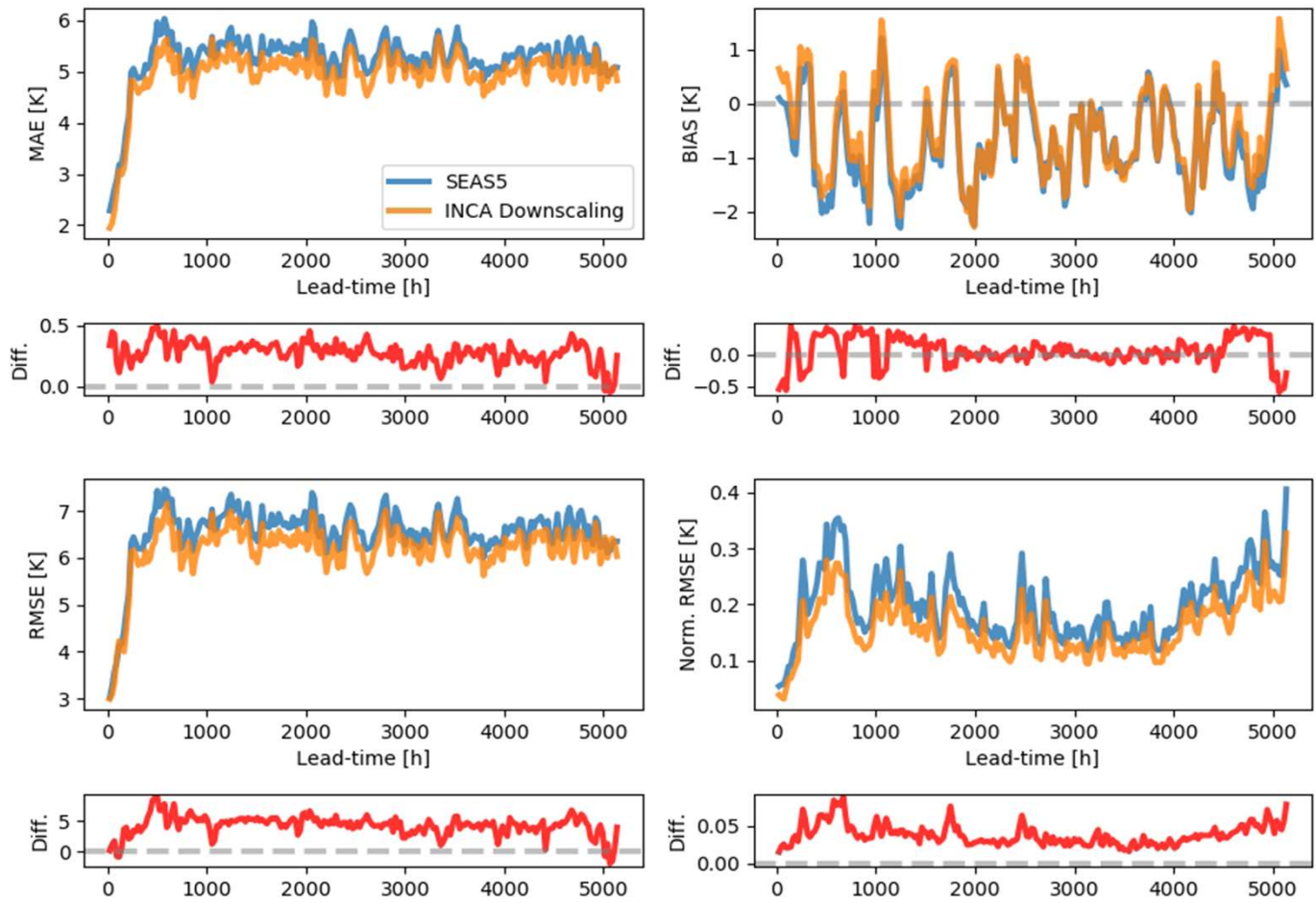


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## INCA downscaling

- Validation is ongoing



## WP2 Development and validation of downscaled seasonal forecasts



M 2.5: provide forecast EPS data and 2050s scenarios to agronomic models (Jan 22)

Status at BOKU for ÖKS scenarios?



## WP4: Dissemination and evaluation of tailored forecasts



### Common publication about forecast impact on crop modelling

- Provide additional SEAS5 runs (2019-01, 2020-01)
- Provide ensemble mean for one run (2019-02)
- Compute statistical scores for 2018/19/20-01 to 07



Thank you for  
your attention!

