

# EURO-CORDEX data in the climate services of the Hungarian Meteorological Service: Validation of a EURO-CORDEX ensemble over Hungary

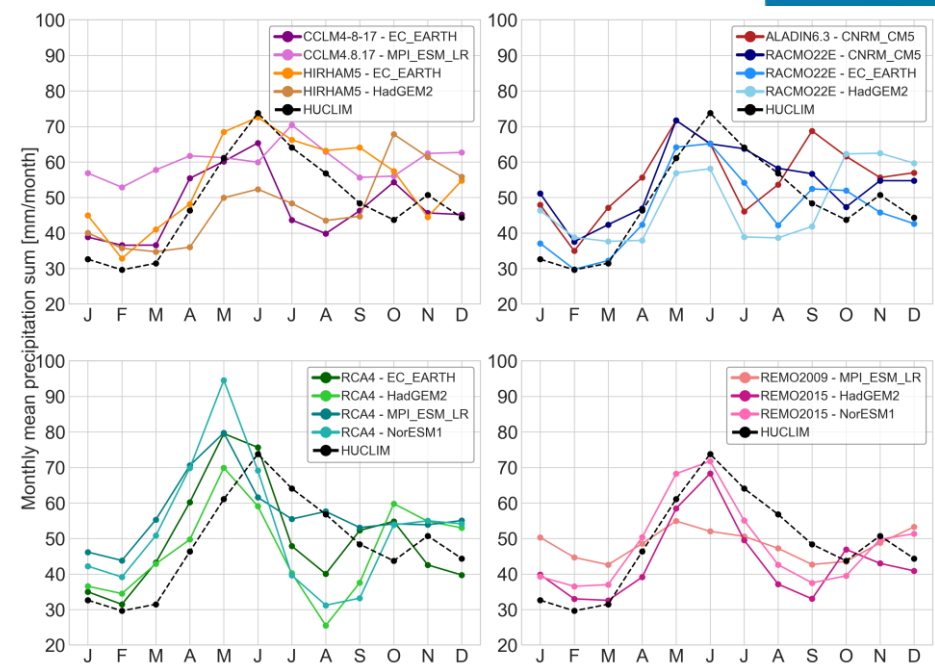
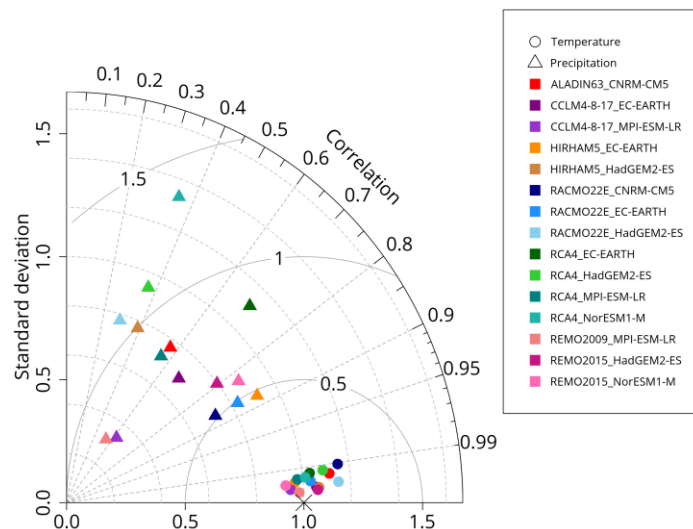
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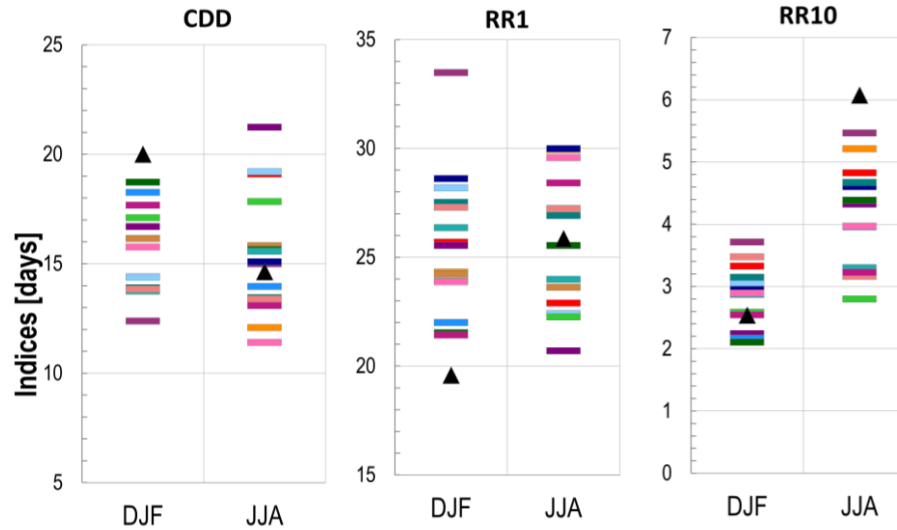
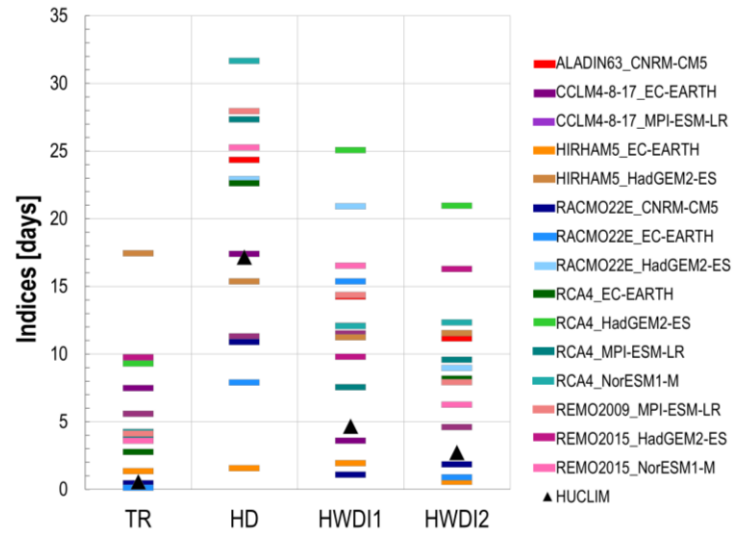
	CNRM-CM5	EC-EARTH	HadGEM2-ES	MPI-ESM-LR	NorESM1-M
ALADIN6.3	x				
CCLM4-8-17		x		x	
HIRHAM5		x	x		
RACMO22E	x	x	x		
RCA4		x	x	x	x
REMO2009				x	
REMO2015			x		x

## Temperature and precipitation

- Well described annual temp. cycle
- Difficulties with representing the annual prec. cycle:
  - Shifted annual maximum from June to May
  - Mostly underestimation in summer ↔ overestimation in spring and winter

- Updated selection in order to supply the best possible quality of climate projection data to our users
- Extend our KLIMADAT information system (currently contains in-house simulations)
- Validation with HUCLIM observational database for 1971-2000 over Hungary





- **REMO2015-HadGEM2** highly overestimates most of the temp. indices
- TR, HWDI1, HWDI2 are highly overestimated by most of the simulations
- The high bias and the low correlation in prec. have a result on prec. indices

### Summary and plans

- **RCA4-HadGEM2** has high bias at most of the parameter, for prec.: low correlation with HUCLIM
- In our climate data service, we mainly provide indices → important to ensure the reliability
- **Further investigation is required for the best selection**