

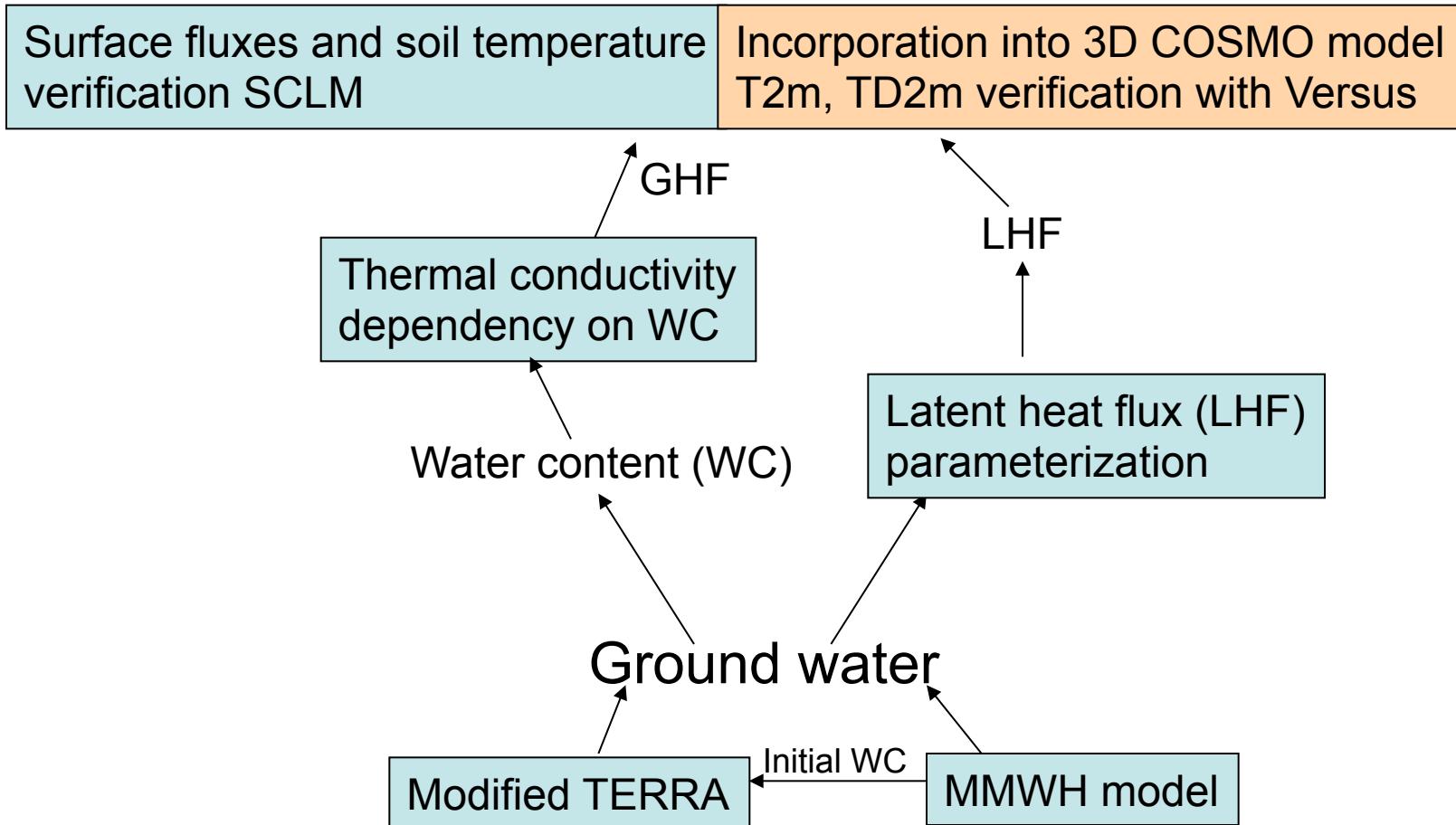


Verification of mire parameterization with VERSUS

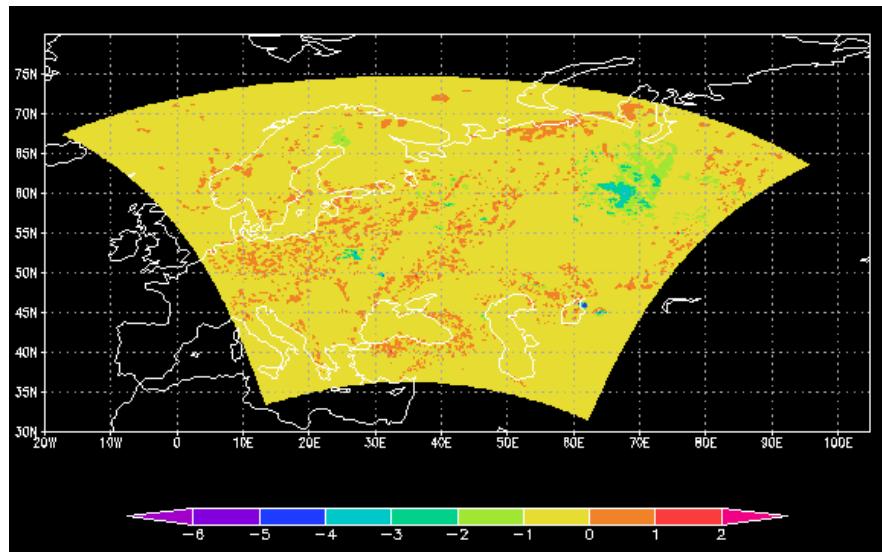
Alla Yurova
Hydrometcentre of Russia



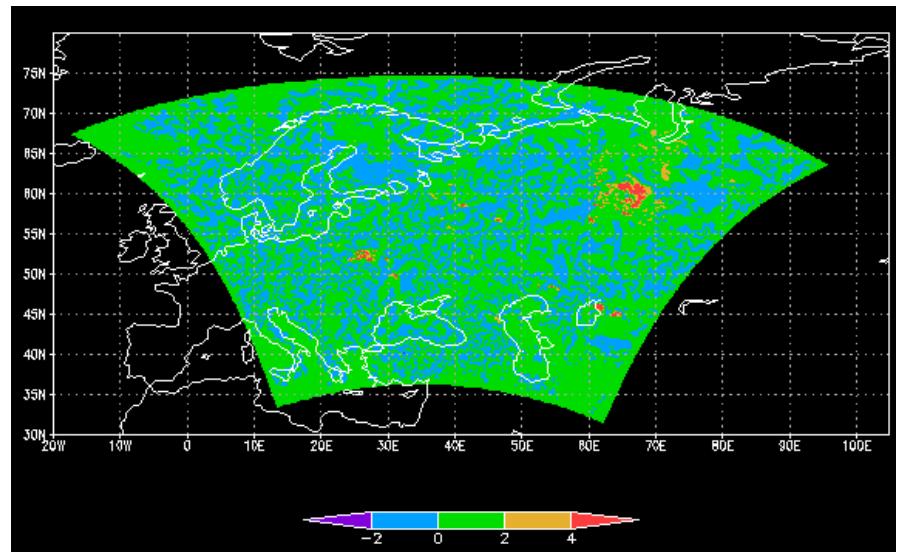
Priority task: mire parameterization



Results of the tests with the mire parameterization in the 3D COSMO-RU model. 08.08.12. Daytime

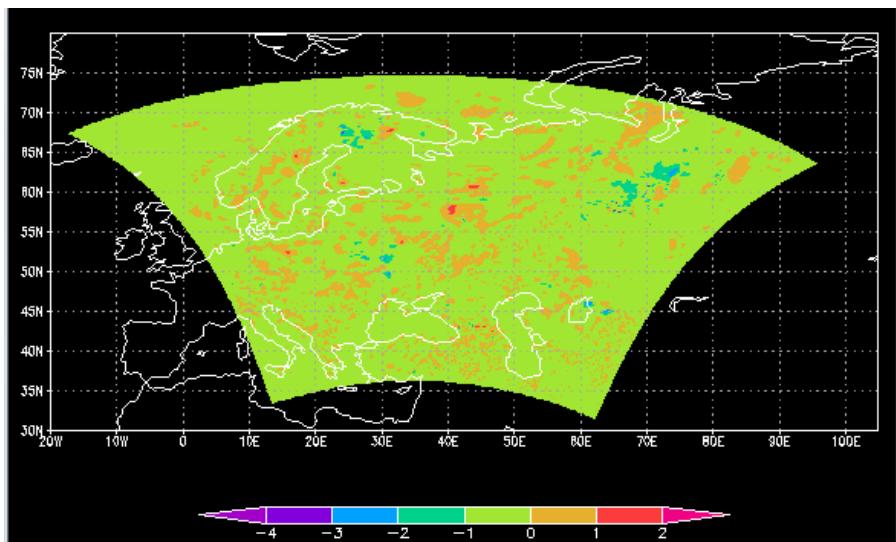


ΔT_{2m} 12:00 (12h)

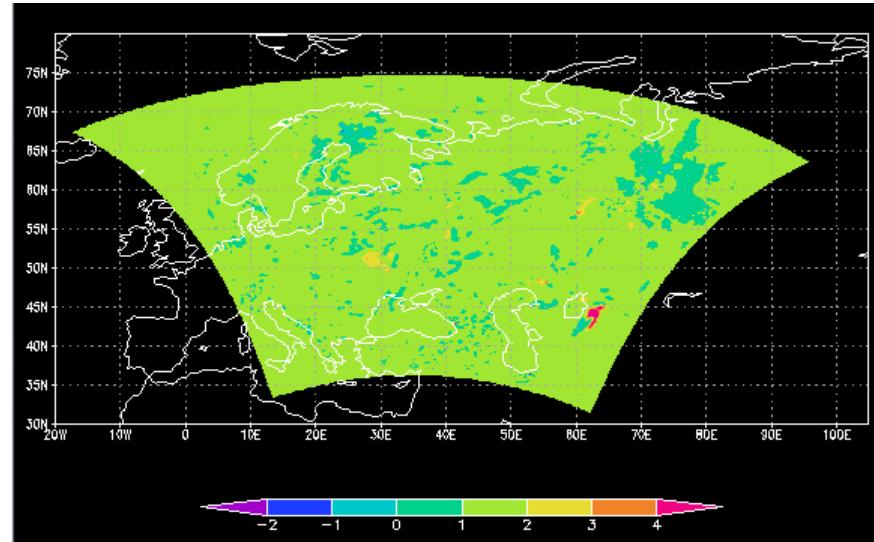


ΔTD_{2m} 12:00 (12h)

Results of the tests with the mire parameterization in the 3D COSMO-RU model. 08.08.12. Nighttime



ΔT_{2m} 0:00 (24h)

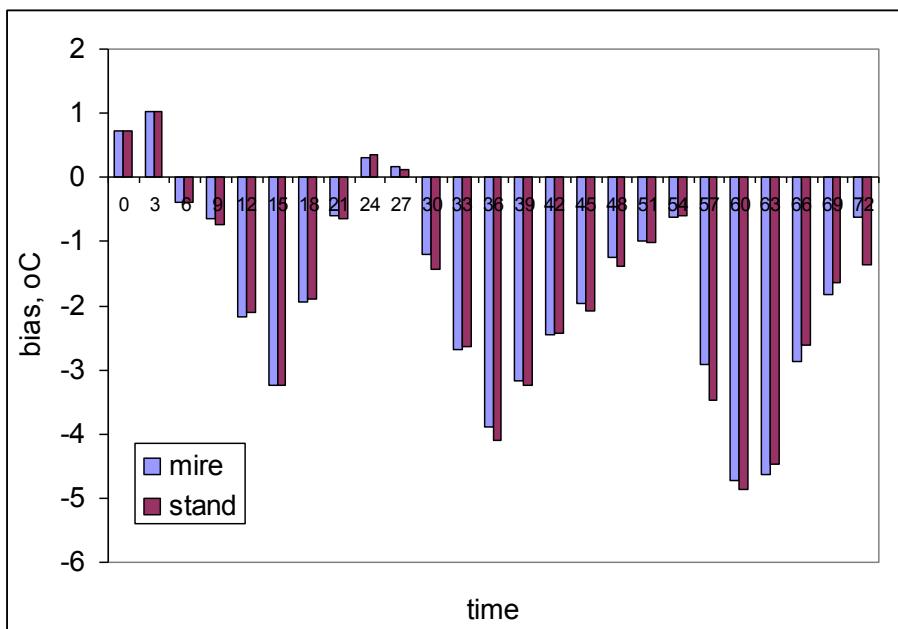


ΔTD_{2m} 0:00 (24h)

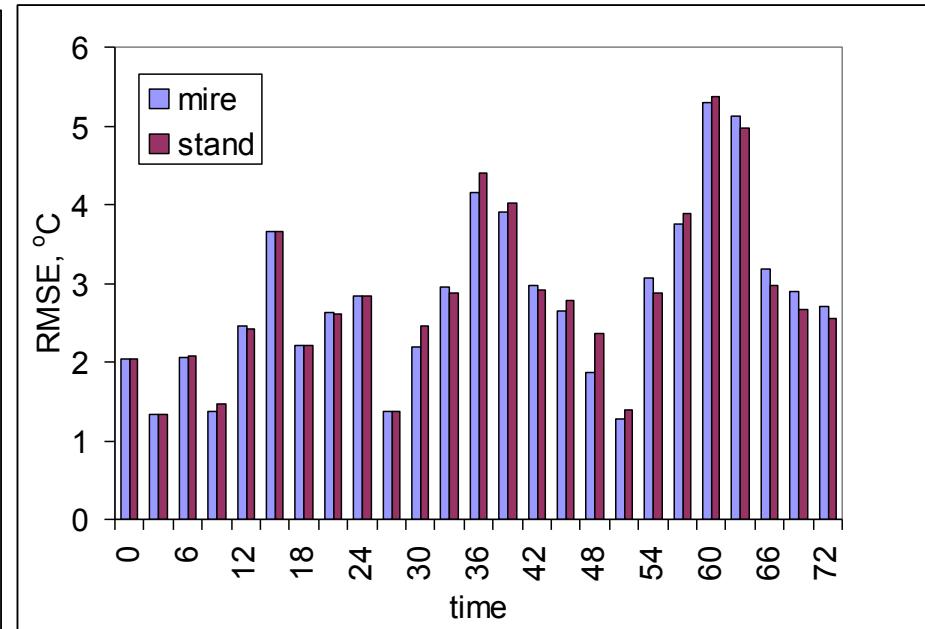
Influence of mosses on the active layer T. Observations in the Bolshezemelskaya tundra

| Moss species | Moss thickness,m | ΔT winter | ΔT summer |
|-------------------|------------------|-------------------|-------------------|
| <i>Pleurozium</i> | 0.3 | 2.0 | -8.8 |
| <i>Sphagnum</i> | 0.2 | 1.6 | -6.4 |
| <i>Pleurozium</i> | 0.1 | 1.4 | -6.2 |
| <i>Pleurozium</i> | 0.2 | 1.8 | -9.6 |
| <i>Sphagnum</i> | 0.3 | 2.2 | -10.1 |
| <i>Pleurozium</i> | 0.2 | 2.5 | -8.5 |
| <i>Sphagnum</i> | 0.2 | 1.0 | -8.0 |

Verifying 2m temperature for the West Siberian lowlands. August 2012

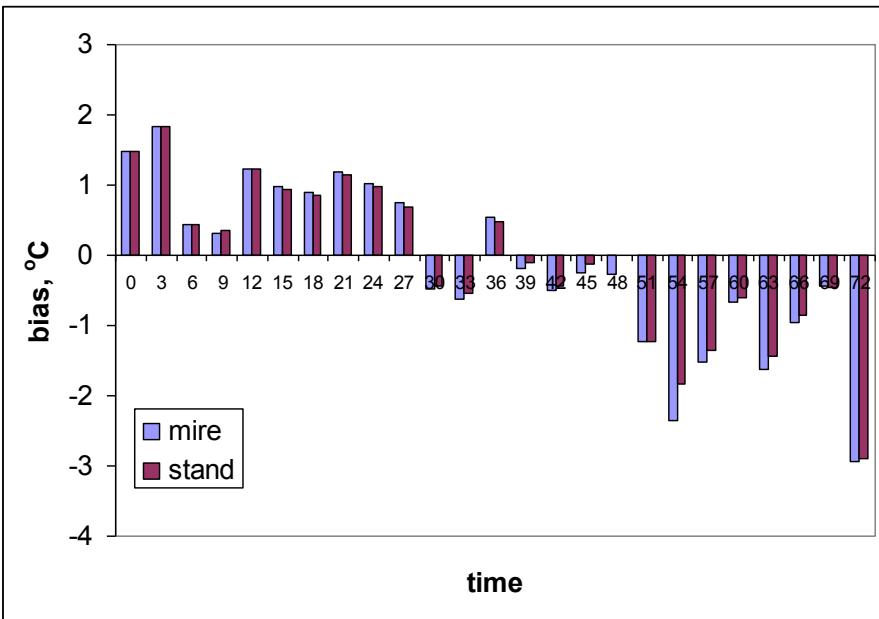


a) Model bias

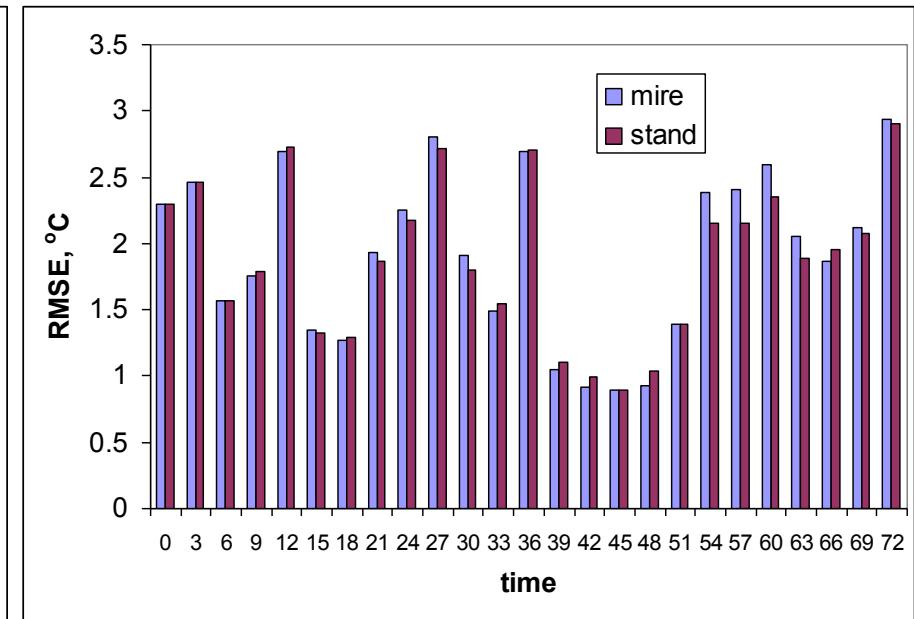


b) RMSE

Verifying dew point temperature for the West Siberian lowlands. August 2012



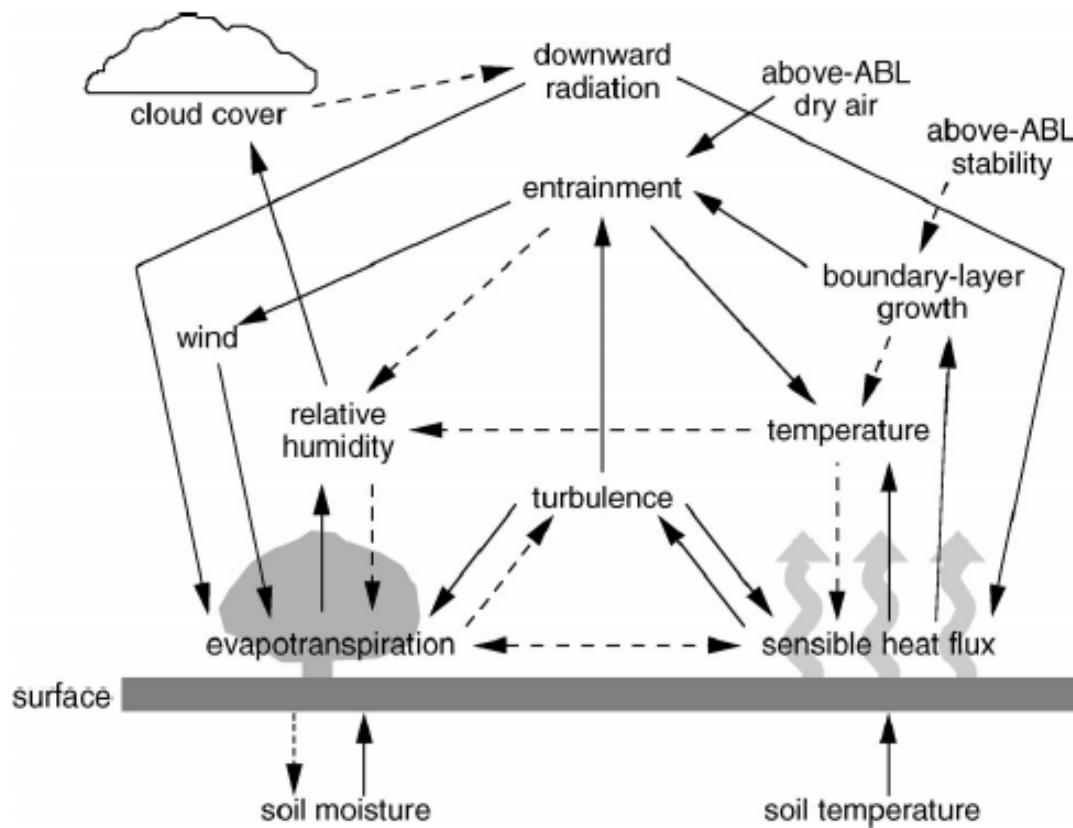
a) Model bias



b) RMSE

Planned work

- Verification for selected mire stations (Western Siberia)
- Case studies. Interaction with synoptic front.



Thanks for your attention!

