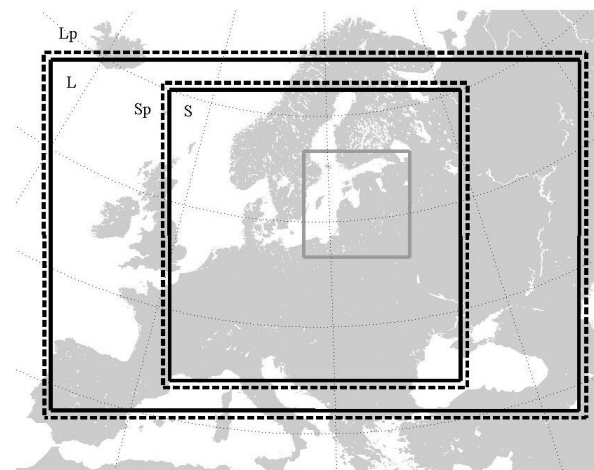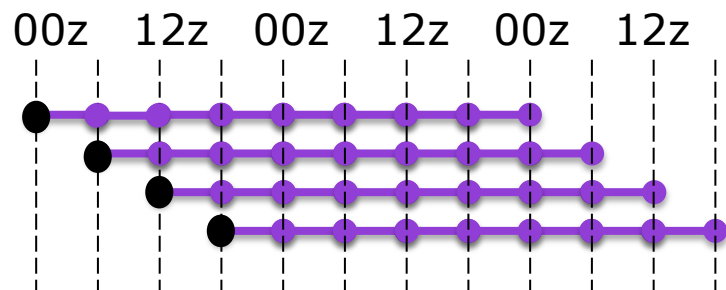# Numerical Weather Modelling of Extreme Events in Latvia 2012 Using WRF

T. Sīle, **J. Seņņikovs, U. Bethers** University of Latvia email: tija.sile@lu.lv
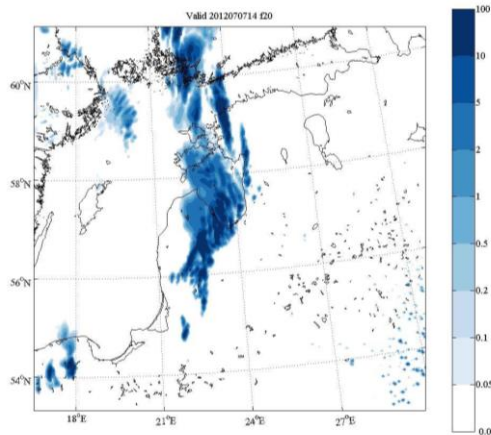

- Two extreme weather events in 2012 were selected for analysis:
  - Intensive summertime precipitation
  - Cyclogenesis bringing first snowstorm of the season
- Numerical modeling using
  - Weather Research and Forecast (WRF) model,
  - ERA-Interim boundary conditions and initial conditions,
  - myOcean sea surface temperature
- Assessing the influence of
  - Calculation domains
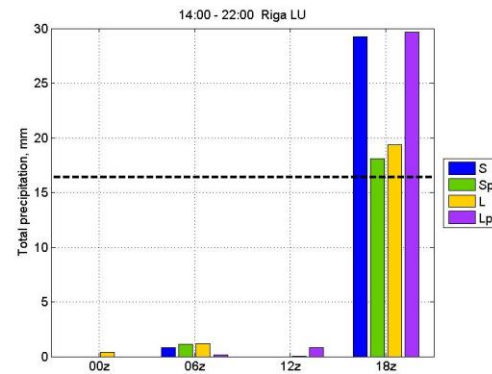 - Initialization times

00z   12z   00z   12z   00z   12z

How well can we describe these events using modelling?
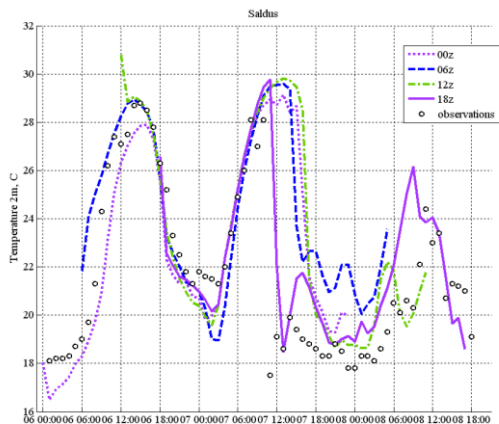
Precipitation

Modelling can describe the large scale structure of events
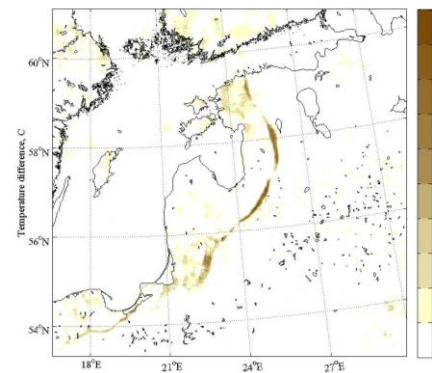

Poor agreement on quantitative values of precipitation

2m Temperature, Saldus obs. station

Results agree on temperature, except when influenced by precipitation

Difference in 2m temperature from results from with different domains

Computational domain can influence the location of precipitation