

# The second GABLS model intercomparison project

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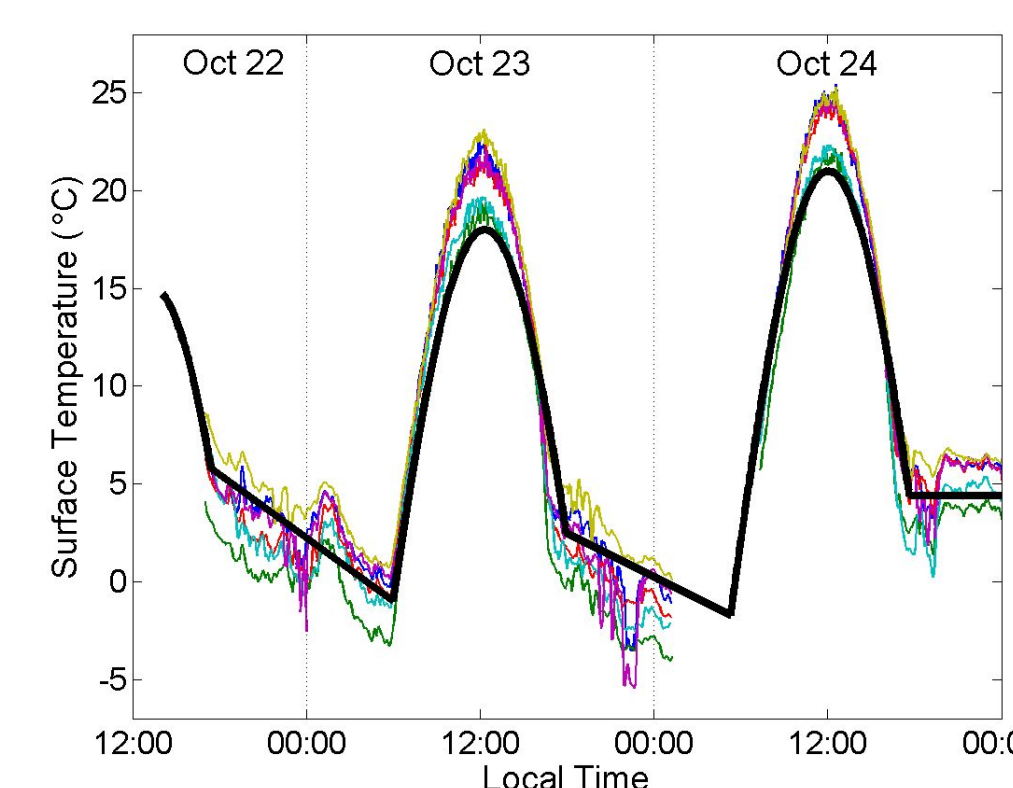
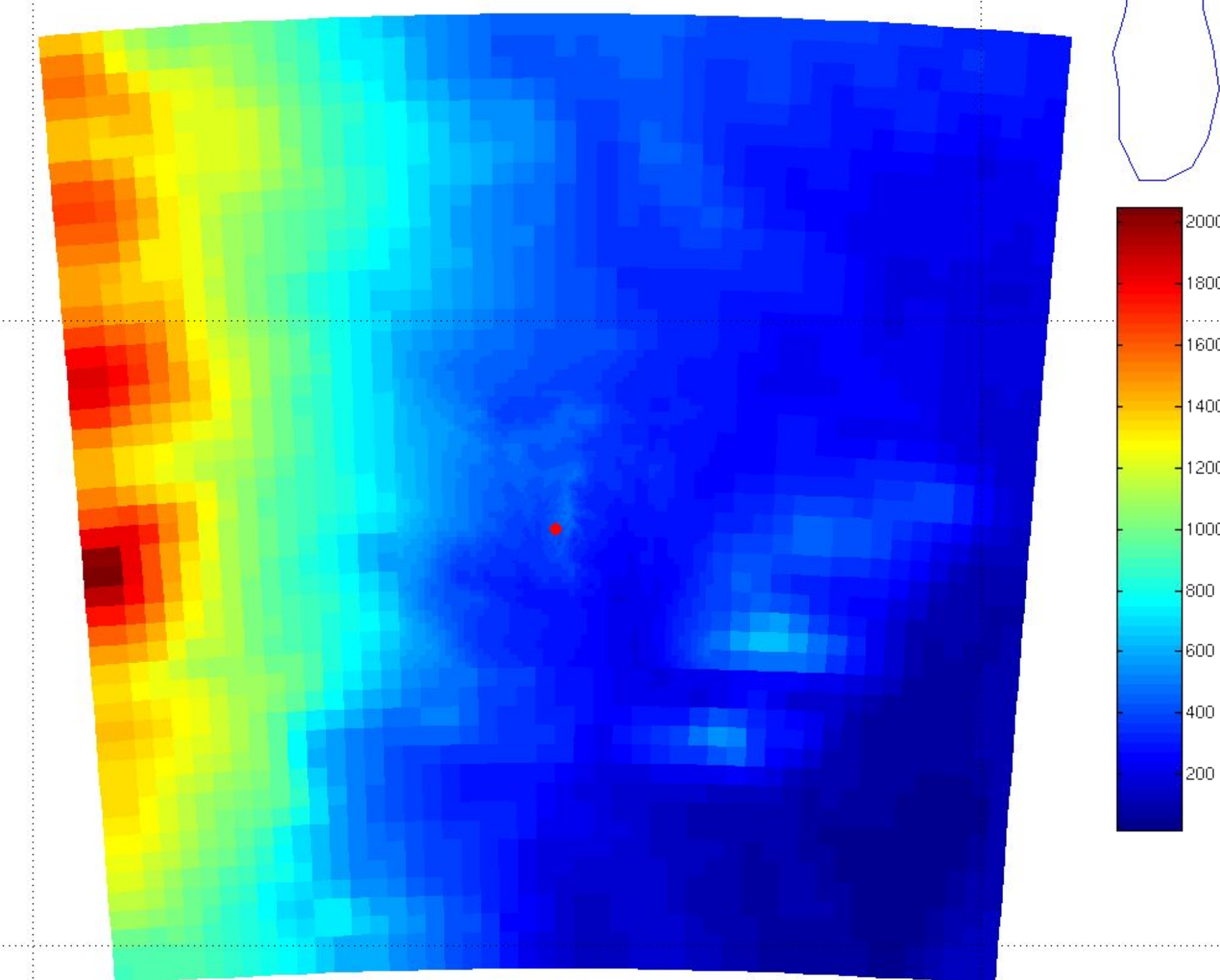
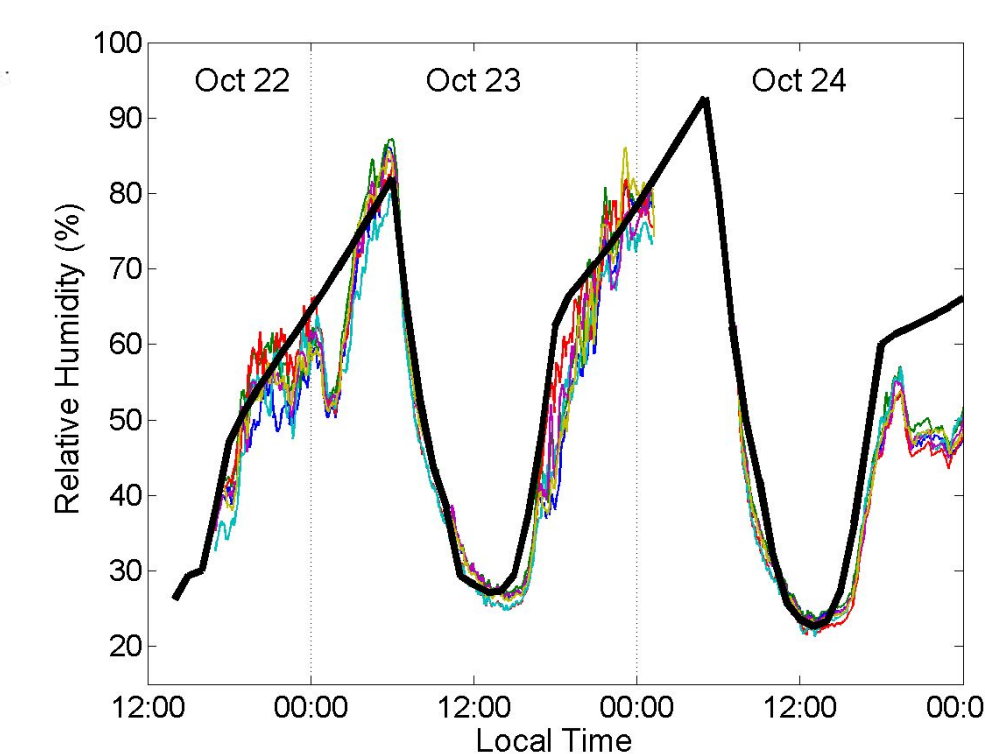
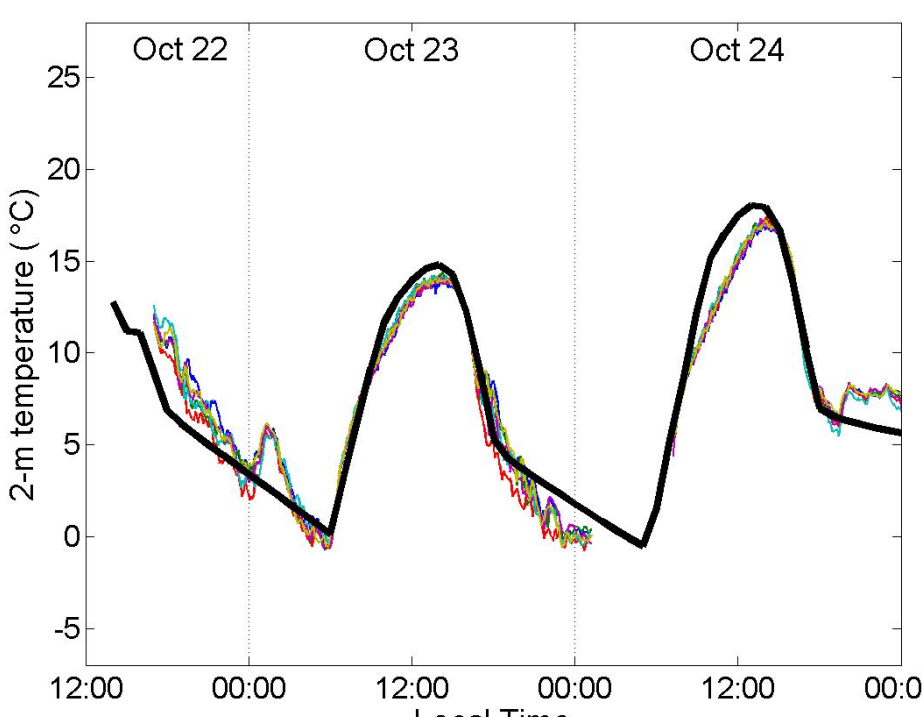
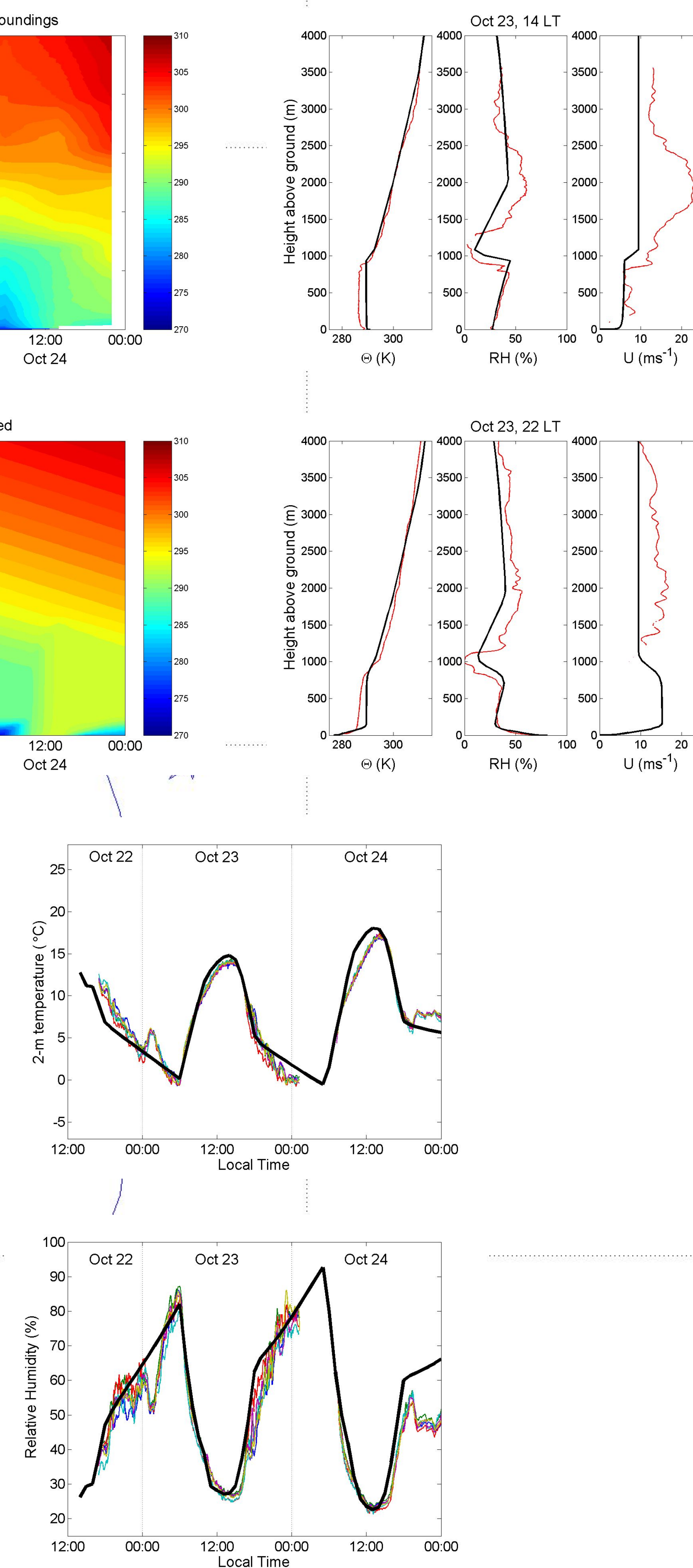
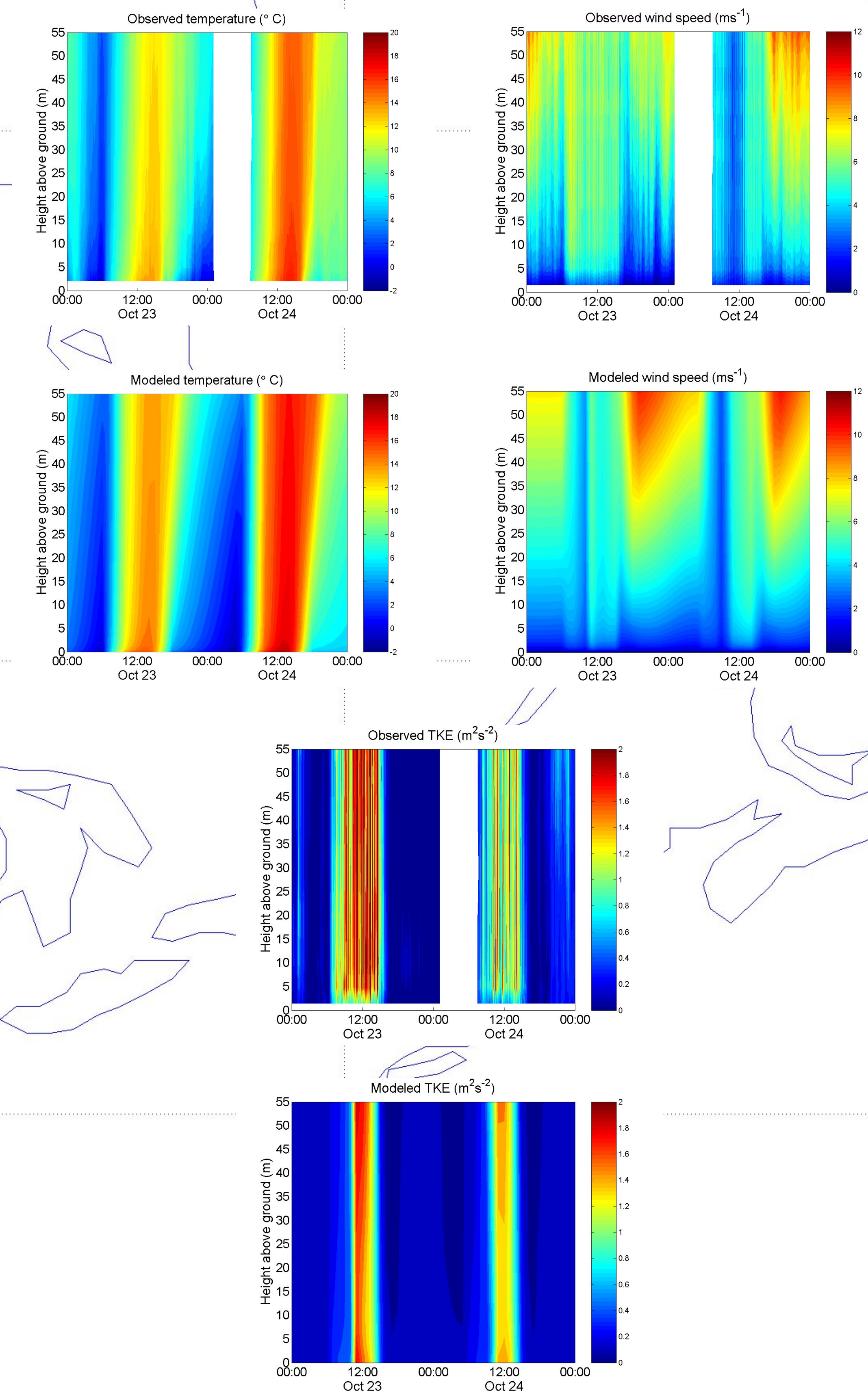


## Objectives

The purpose of the second GABLS inter-comparison project is to study the diurnal cycle of the mid-latitude continental boundary layer.

- 1) The main aim is to compare the models with each other. Therefore as simple as possible initial conditions and external forcings are used.
- 2) At the same time the conditions are 'similar' to the observed during the comprehensive campaign CASES-99.
- 3) Both LES and 1D models can participate.

Submission date is August 15, 2005 and a workshop will be held in the Netherlands September 15-19, 2005.



## Experiment setup

Prescribed initial and surface conditions:

- 1) Initial profiles of temperature, wind and humidity.
- 2) Surface temperature.
- 3) Geostrophic wind and large scale forcing.

The position is the CASES-99 site in Kansas, US at 37.6° latitude, -96.7° longitude. The area is relatively flat prairie grassland.

The experiment period starts at 19UTC, i.e. 14LT, on October 22 and proceeds for 59 hours. The model results presented here are from a simulation with a second order closure model (Andren, 1990).

Andrén, A., 1990: Evaluation of a turbulence closure scheme suitable for air-pollution applications, Journal of Applied Meteorology, 29, 224 - 239.

## GABLS

The overall objective of the GEWEX Atmospheric Boundary Layer Study (GABLS) is to improve the understanding and the representation of the atmospheric boundary layer in regional and large-scale climate models. GABLS aims to provide a platform in which scientists working on boundary layers at different scales will interact. To find out more about this go to:

[www.gewex.org](http://www.gewex.org)

## Acknowledgements

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