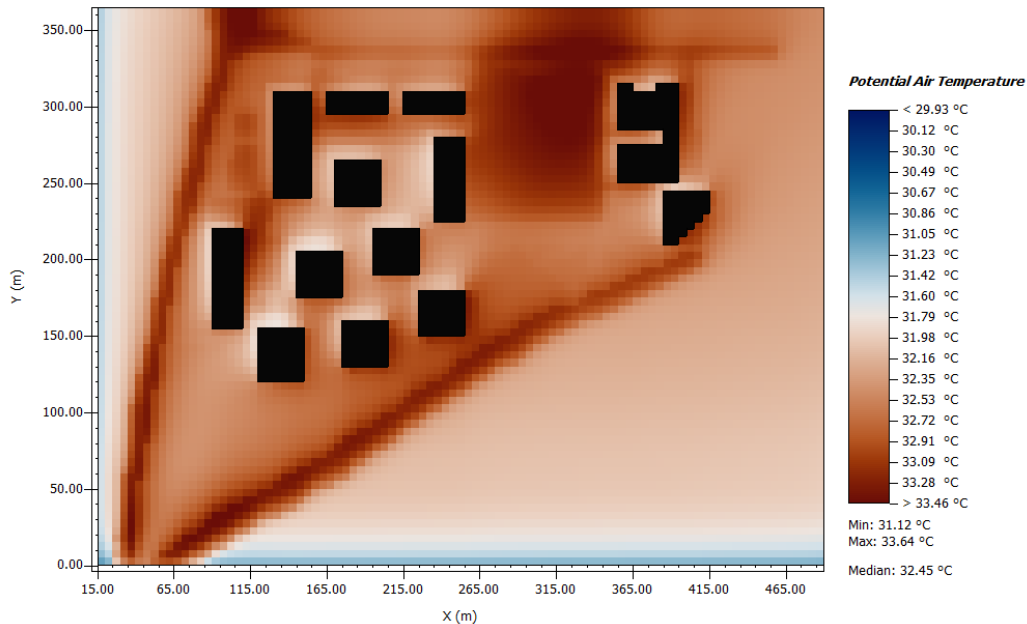


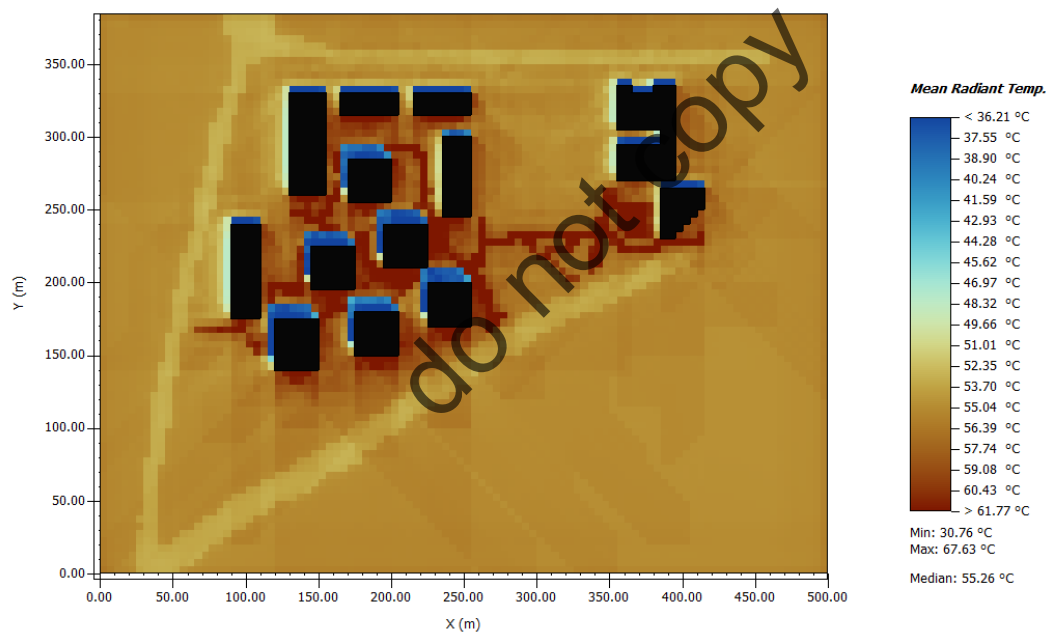
Envi-met visualisation quick guide

1. Single plot

Figure 1: Potential Air Temperature 12pm 30.06.2021
z=1.5m



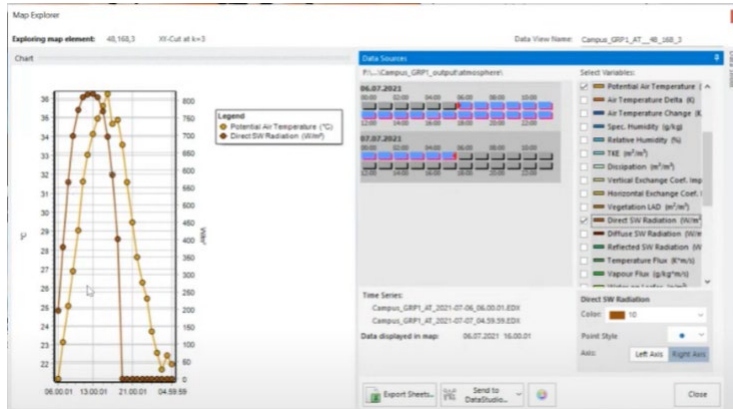
MRT 12.00.01 30.06.2021
z=1.5000 m



Steps:

- Load data from output folder.
- Select relevant variable for visualisation.
- Set height for 2D map.

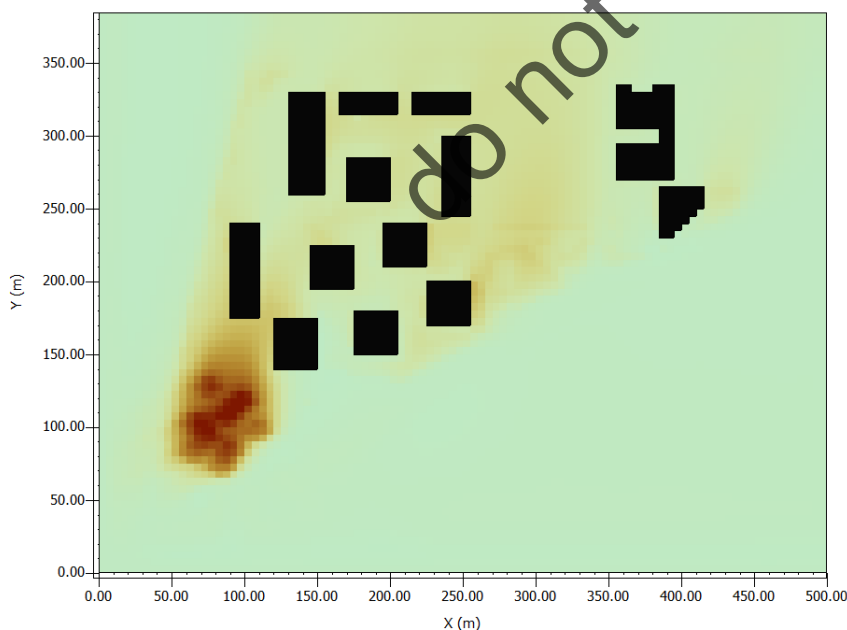
- Set colour palette on the left panel (e.g., for temperature, *Vik*, humidity, *roma inverted*, set start of colour from 20 colours, set number of colours to 20, step size and first value).
 - Adjust x, y axis and other format.
- 2. Single location time series data**



Steps:

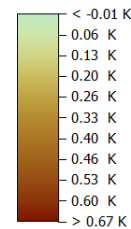
- Select any locations of interest from map by right click and explore grid.
- In the pop-up window, you can select different variables and time duration, it also works for multiple variables at the same time, and it allows for two y axis at the same time.
- Possible to export to excel for further analysis.

3. Compare two scenarios:



Air temperature comparison
site without vegetation and
actual site 12.00.01
30.06.2021
z=1.5000 m

**absolute difference Potential
Air Temperature**

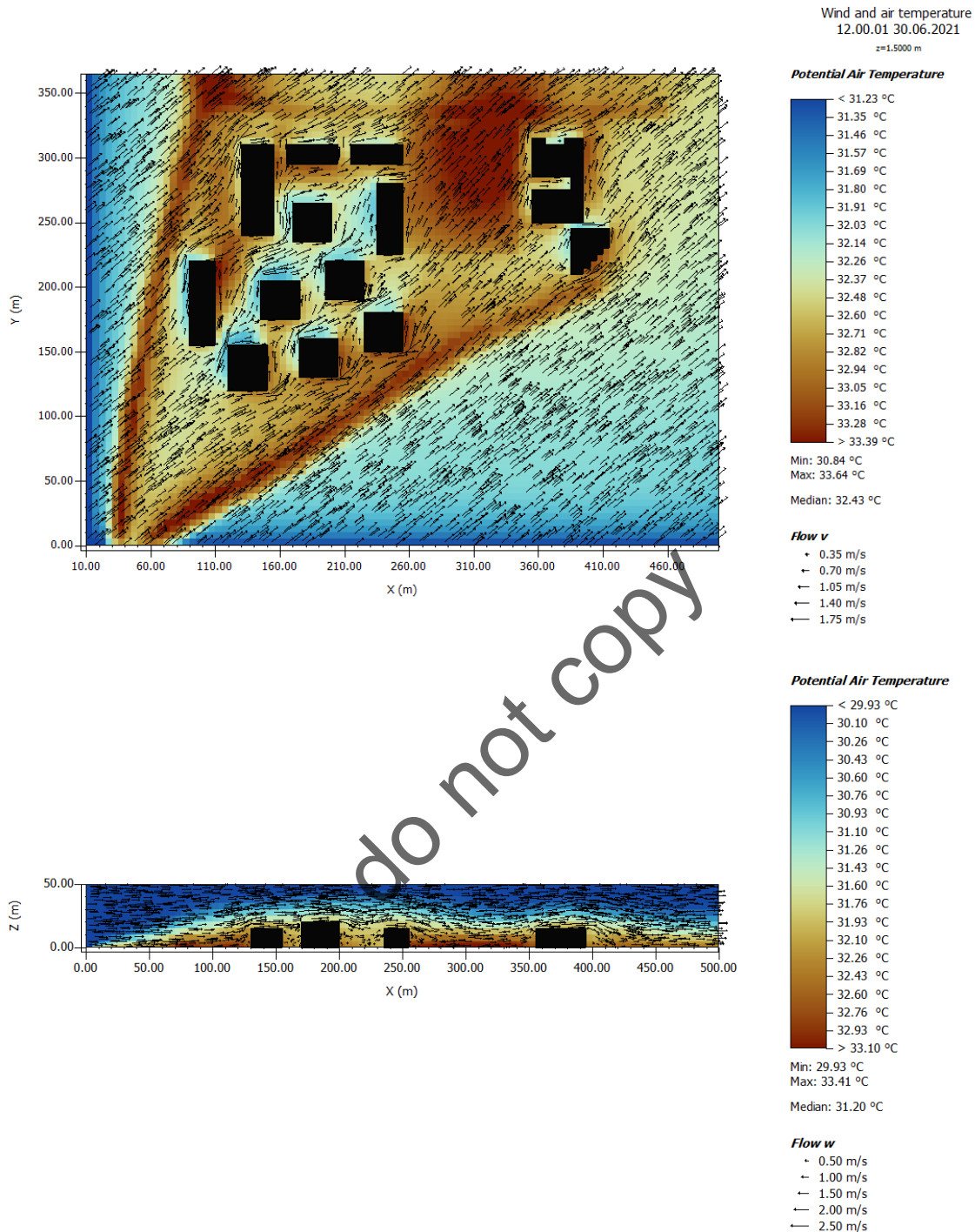


Min: -0.01 K
Max: 0.73 K
Median: 0.00 K

Steps:

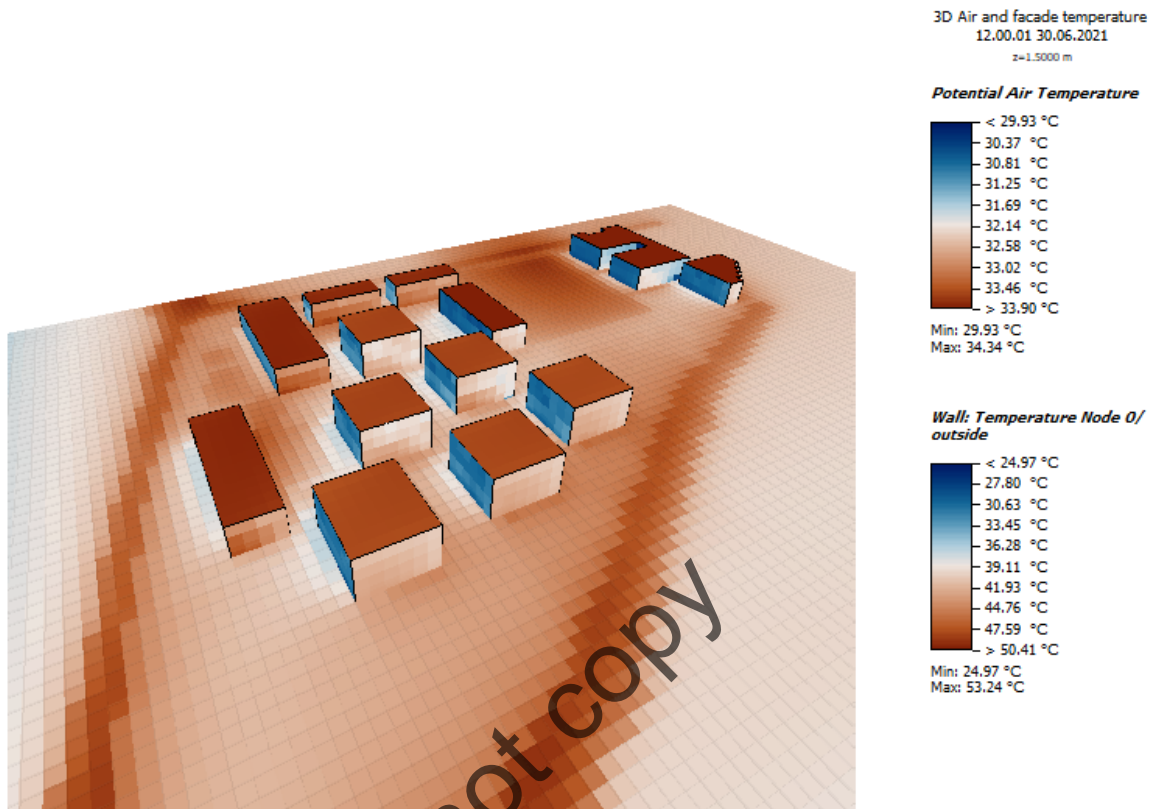
- Select data for File set A and B (Make sure the model areas are the same).
- Extract data to map, select variable of interest.
- Set height and click *compare 2D*. Difference = A – B.
- Adjust colour scale in *data layer legend*, starting from colour index 0, 20 colours, step size= absolute minimum value/10, first value = min value.

4. Wind map with air temperature



Steps:

- Select data and set variables (data: potential air temperature, vector: u, v, w wind speed).
 - Extract to 2D map, set height.
 - Toggle on vector settings from upperleft panel.
 - Turn on draw random vectors (specify density)
 - change *length scale vector* to adjust visibility of lines,
 - Adjust colour scale for potential air temperature.
5. **3-D visualization (e.g., air temperature, surface temperature)**



Steps:

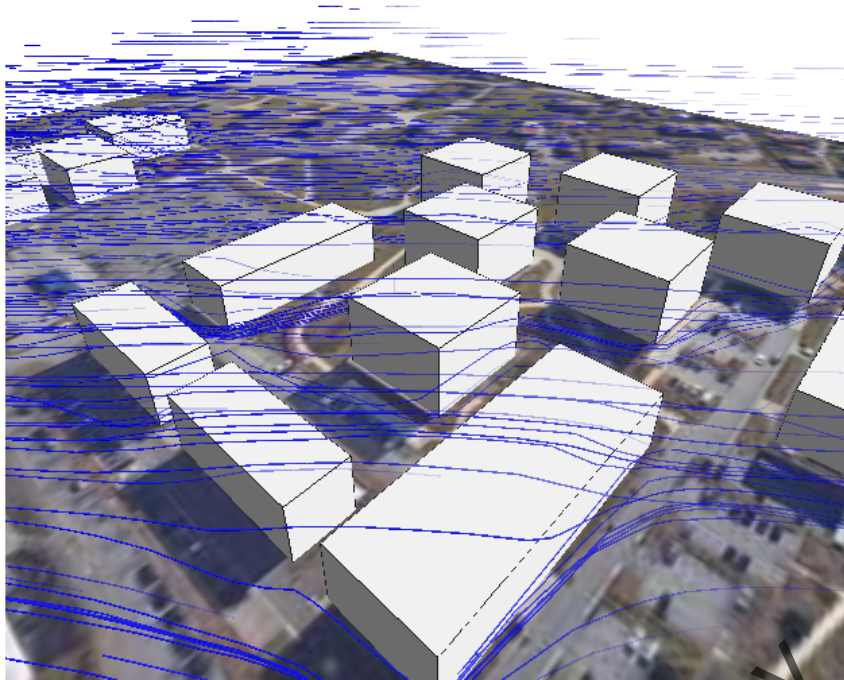
- Extract data set A to 3D map – potential air temperature.
- Enable *datalayer 3D settings and legend*.
- In *filter by location*, adjust height of the 3D (z-axis set to 0-1).

(Overlay *air temperature* with *building simulation outputs*)

- On *data source* pane, set *data* to *unchanged* (this will hold the 3D air temperature data in place).
- Go to file set A, load building data from folder *buildings/dynamic* (choose same time).
- Set *data variable* to *wall temperature node 0/outside* (outer surface temperature of the building).
- Enable *façadelayer 3D* in upper left pane.

- *In 3D settings – light&vision, unclick enable light model.*
 - *Adjust colour scale and legend.*
6. 3D wind map

Figure 1: control_scenario
12.00.01 30.06.2021
z=1.5000 m



Steps:

- *Extract atmosphere data to 3D map.*
 - *In map content pane, turn on tubularbells settings.*
 - *Turn off grid display on floor, adjust floor colour if necessary.*
 - *Adjust colours (possible to use colour from datalayer 3D), tube diameter, number of tubes, according to the desired effect,*
7. Outdoor thermal comfort

