EQUA
SIMULATION TECHNOLOGY GROUP

EKVÜ
ESTONIAN SOCIETY OF HEATING AND VENTILATION ENGINEERS

Co-operative training session

New things in April 

17 December 2024

Tallinn, TalTech

Mika Vuolle

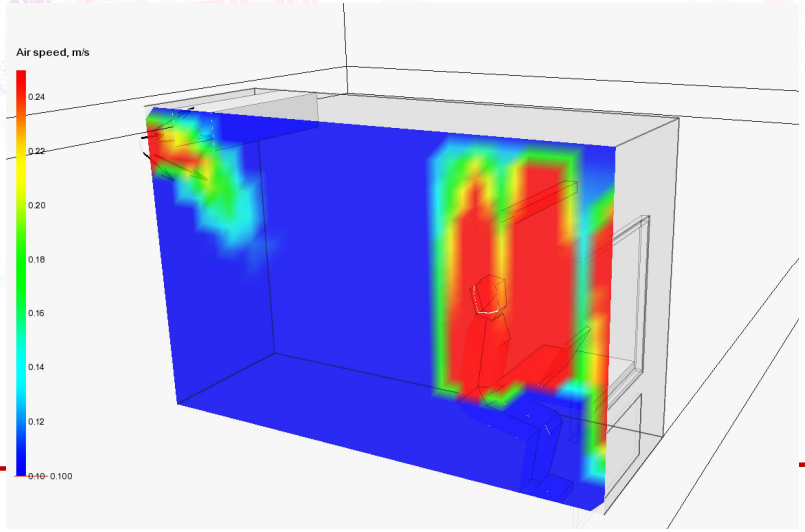
CEO, EQUA Simulation Finland Oy

Stratified Zone Model

small-scale comparison

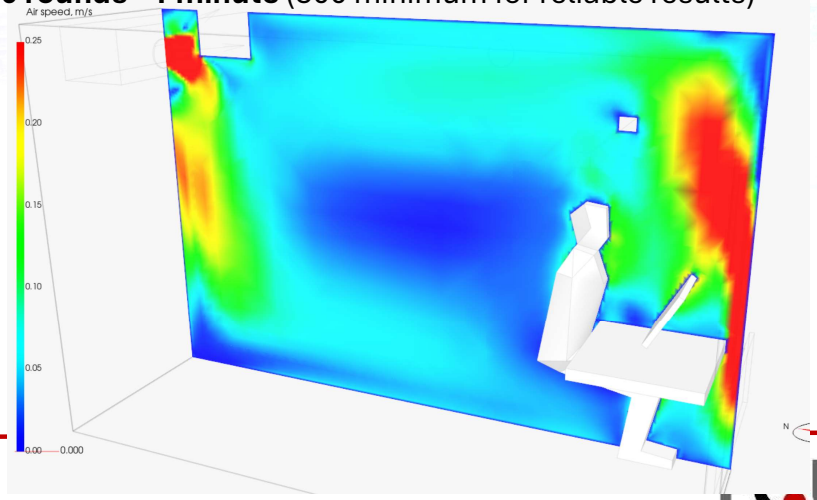
SZM in an office

- **Separate** plumes and jets from the terminal, equipment, occupant, window and radiator – **no collision or interaction** anywhere
- Only the location is considered, not the geometry of the loads
- No imported/extruded objects make any difference
- **4 air layers**, 0.1m cell sizes
- **Pre-defined jet profile** (k-value) and **minimum air speed** (0.1 m/s)
- **8 seconds** to simulate



CFD in an office

- **Interacting** plumes and jets from the terminal, equipment, occupant, window and radiator
- **500k cells**, default size (0.16m, resolution level: 3)
- **Entire geometry** is considered, **no minimum air speed**, no jet type estimation used
- Different (from SZM) final air speed and projections due to the interactions
- **100 rounds ~1 minute** (500 minimum for reliable results)



Other new things

- Whole year daylight simualtions
- 64 bit visualization
- Usability improvements
- Etc.

Courses in the near future

- 14th of January: Basic course 8:30-16:30 live in Tallinn
  - location will be annouced later
- 15 th of January: Optimization course 8:30-16:30 live in Tallinn
- 12th of February PV-panel simulation 8:30-14:00 in Teams

Summit 2025!

Save the date: Summit 2025

Hi EQUA (all)
The reservation for the Summit 2025 is done:
31st August - 5th September
https://www.glattalphuette.ch/



see more



Winter 2024/ 2025 Winterraum ist erst ab Samstag 8. November 2024 offen. Ab 10. Mai...

www.glattalphuette.ch