

## Electronic Supplementary Material (ESM)

- Model validation per each section (temperature, humidity and velocity)

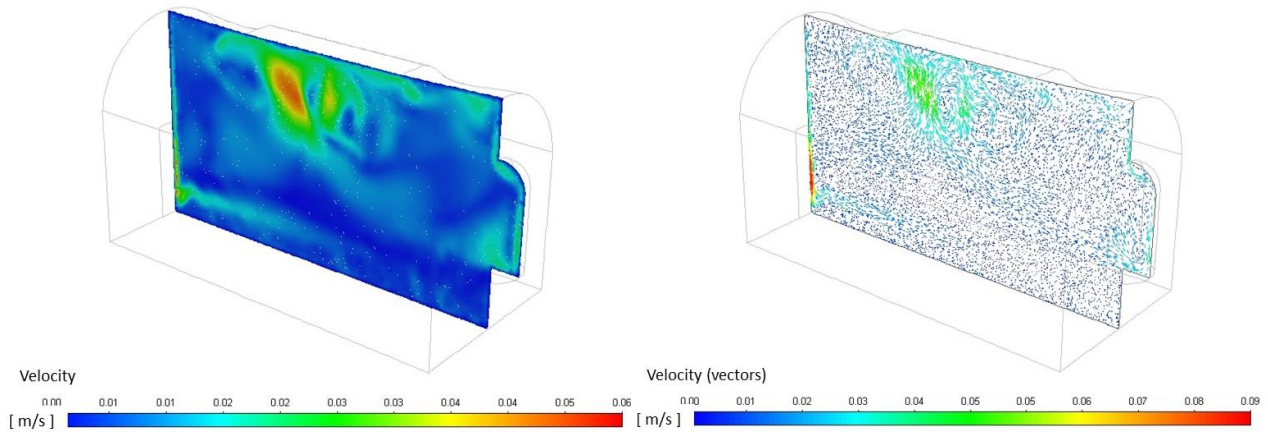


Figure S1 – Model validation simulation: Velocity (left) and velocity magnitude (right) fields on the longitudinal plane.

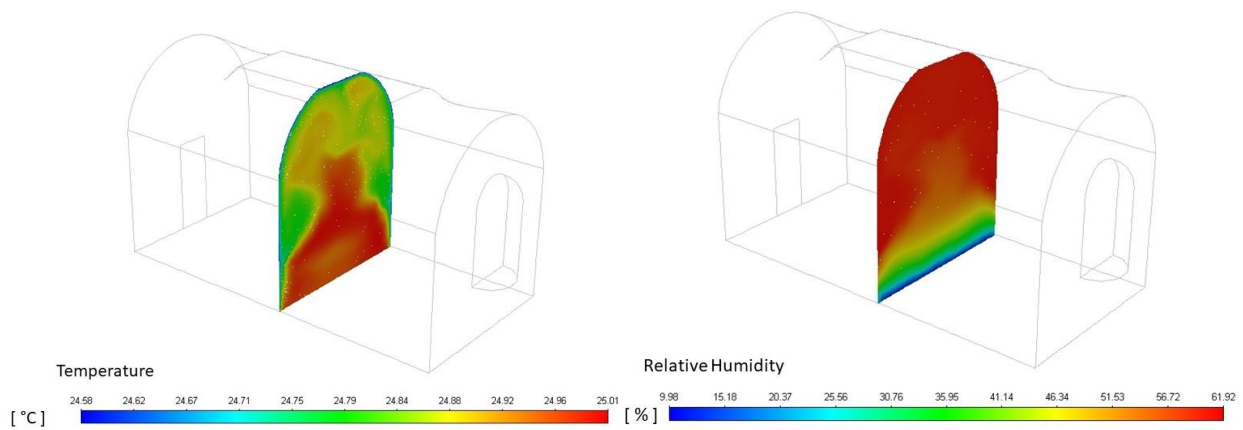


Figure S2: Temperature (left) and relative humidity (right) results on the transversal section.

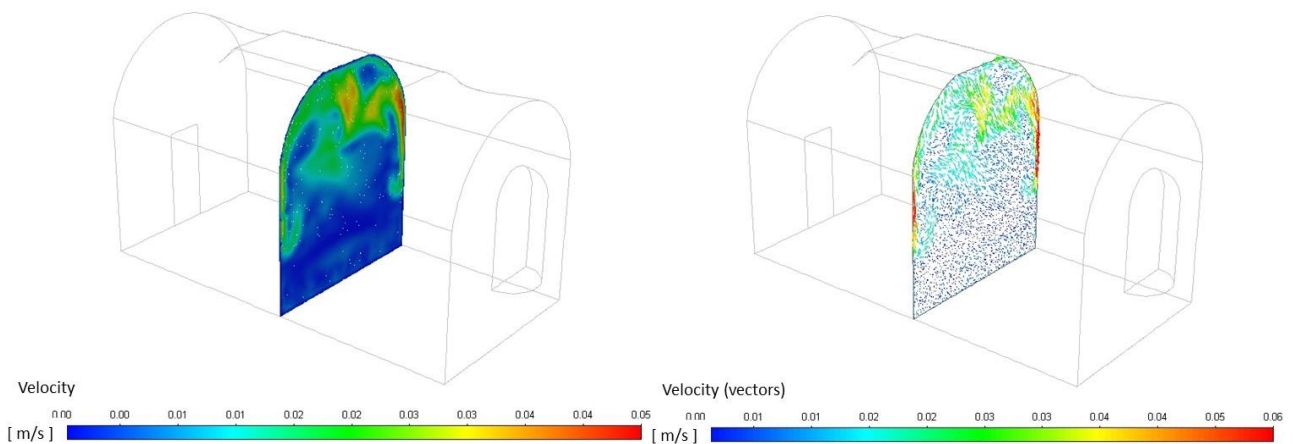


Figure S3– Model validation simulation: Velocity (left) and velocity magnitude (right) fields on the transversal plane.

- Sensors results of simulations O-1 (open cabin) with a mass flow rate of 1100 m<sup>3</sup>/h.

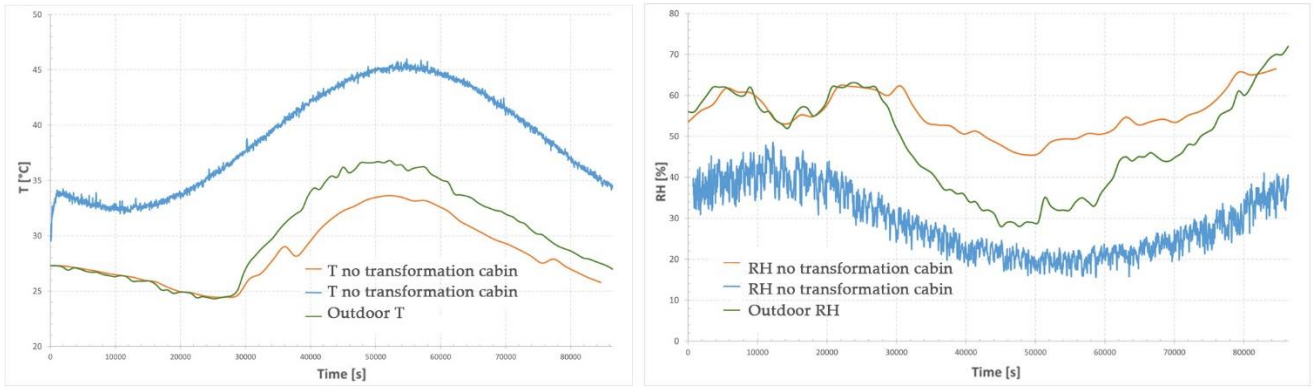


Figure S4 – Simulation O-1, Sensor 72: temperature (left) and relative humidity (right) results.

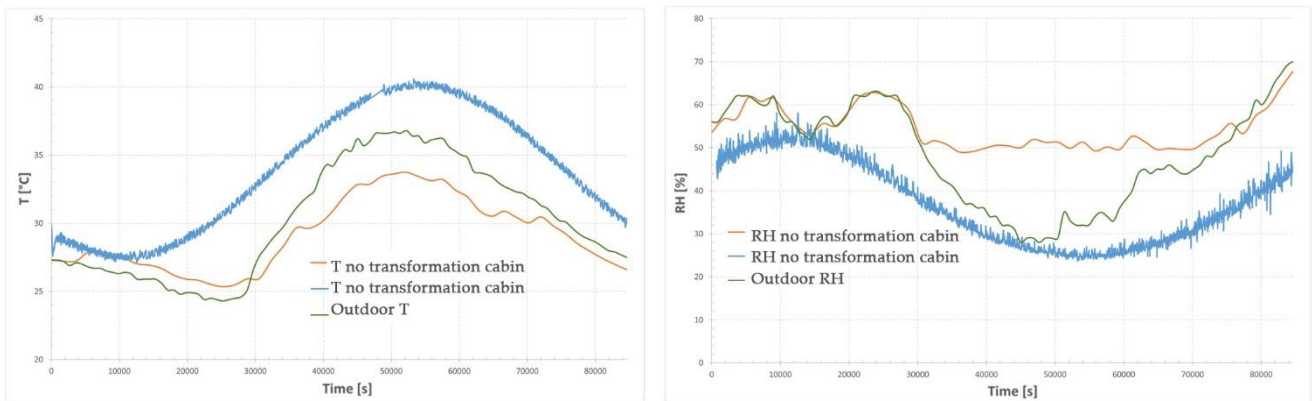


Figure S5 – Simulation O-1, Sensor 84: temperature (left) and relative humidity (right) results.

- **Results of simulations O-1 (open cabin) with a mass flow rate of 1100 m<sup>3</sup>/h (velocity, temperature and humidity)**

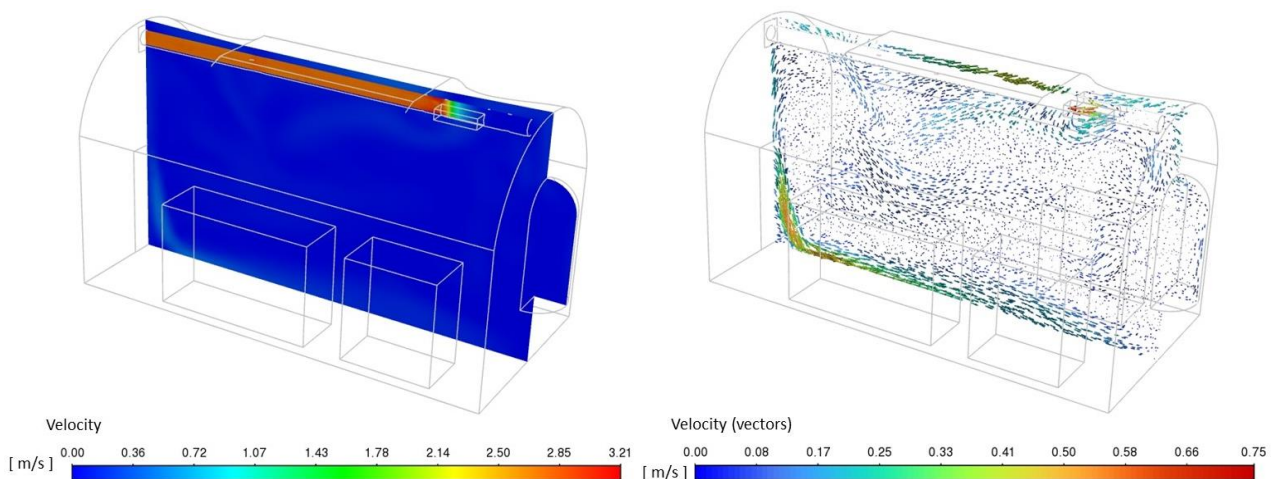


Figure S6 - Simulation O-1: Velocity (left) and velocity magnitude (right) fields on the longitudinal plane.

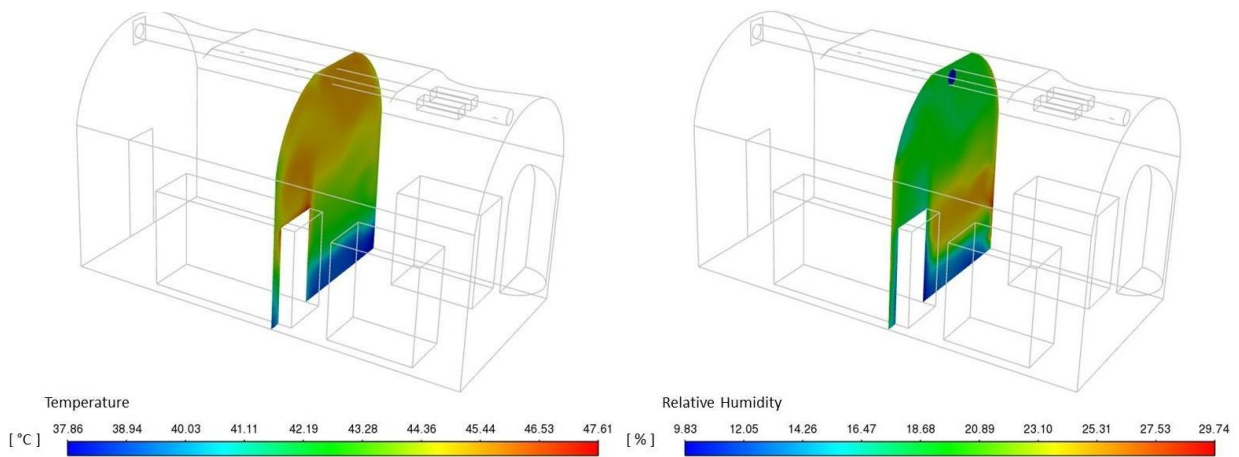


Figure S7- Simulation O-1: Temperature and relative humidity fields on the frontal plane.

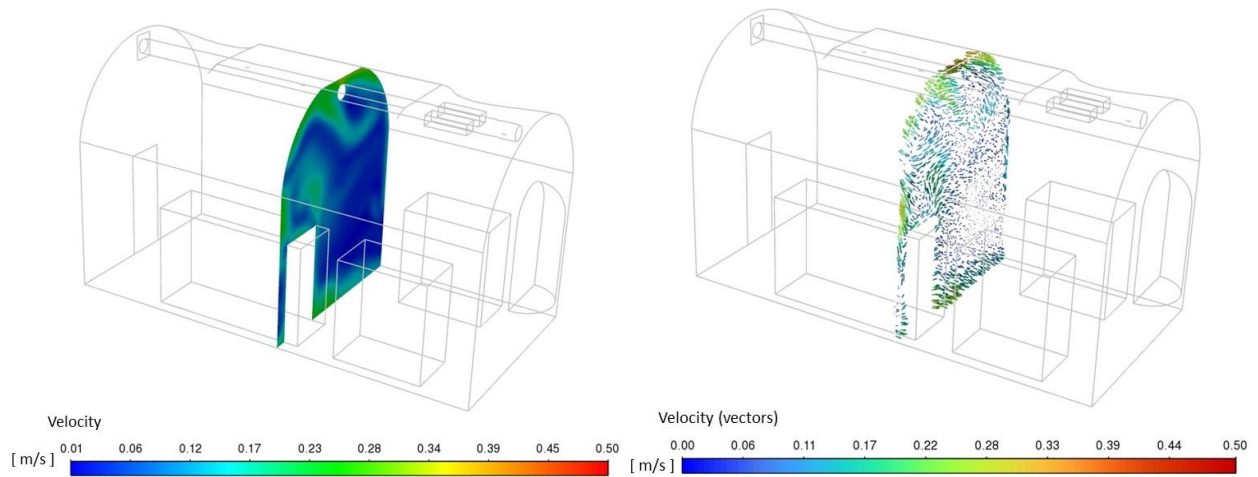


Figure S8- Simulation O-1: Velocity (left) and velocity magnitude (right) fields on the transversal plane.

- **Sensors results of simulations O-2 (open cabin) with a mass flow rate of 2200 m<sup>3</sup>/h.**

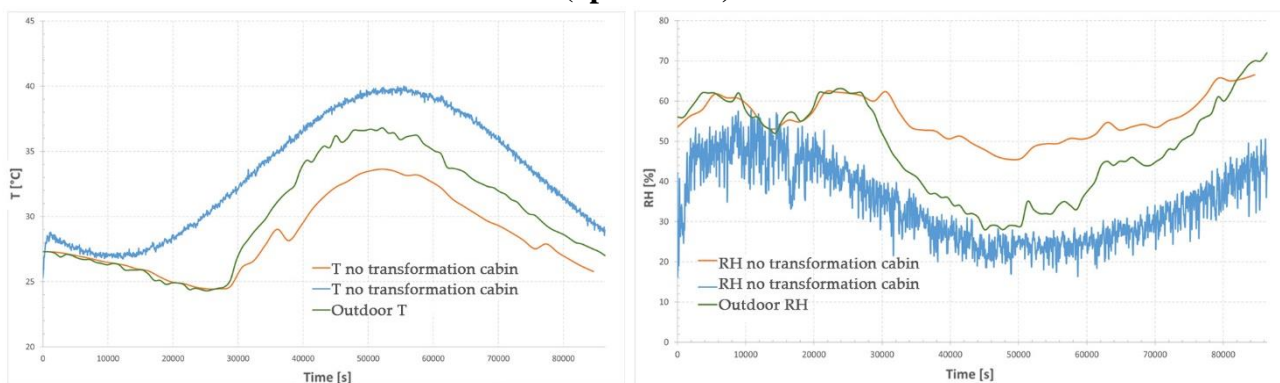


Figure S9 – Simulation O-2, Sensor 72: temperature (left) and relative humidity (right) results.

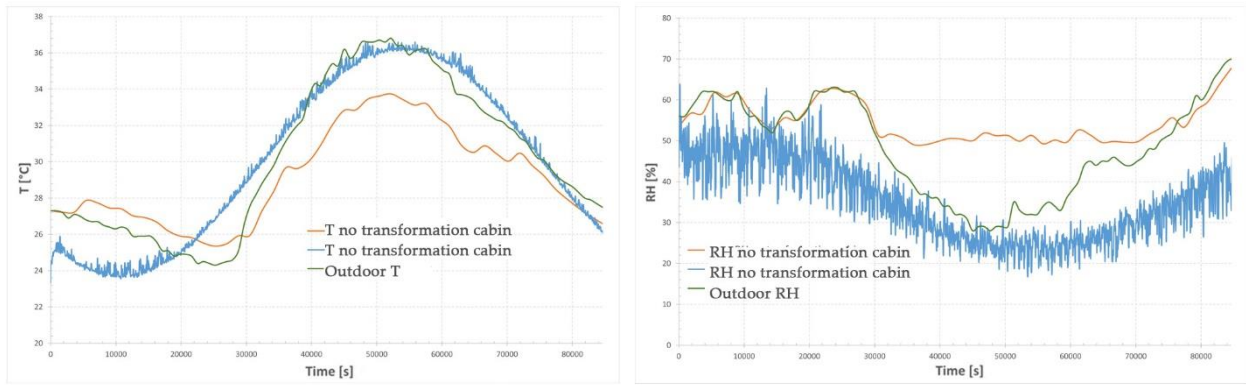


Figure S10 – Simulation O-2, Sensor 84: temperature (left) and relative humidity (right) results.

- **Results of simulations O-2 (open cabin) with a mass flow rate of 2200 m<sup>3</sup>/h (velocity, humidity and temperature)**

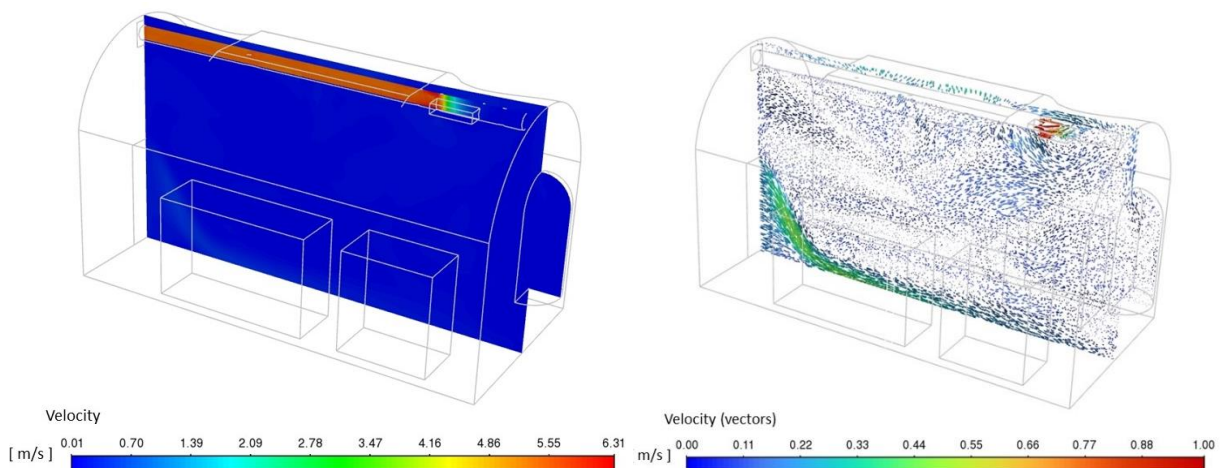


Figure S11 - Simulation O-2: Velocity (left) and velocity magnitude (right) fields on the longitudinal plane.

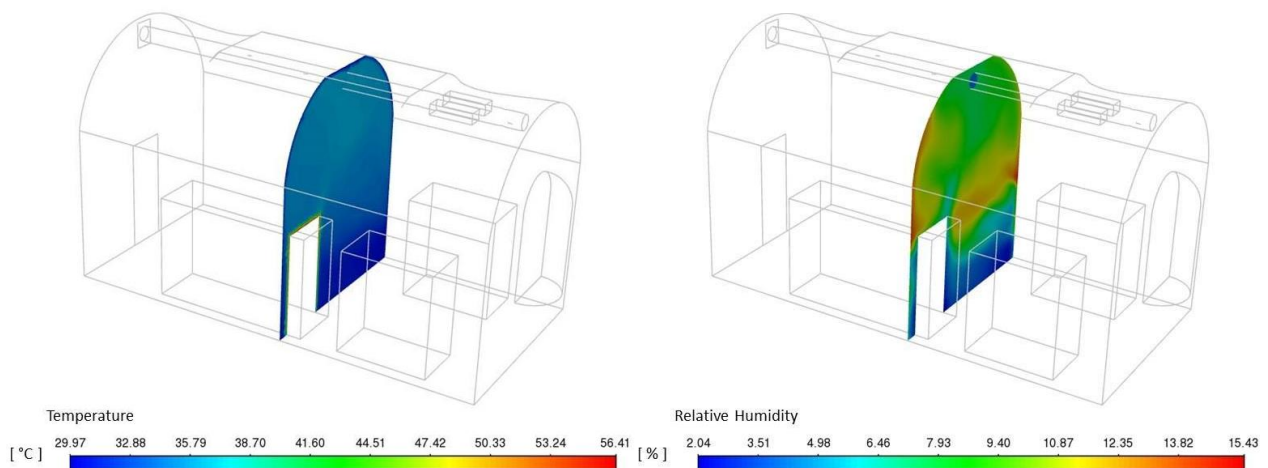


Figure S12 - Simulation O-2: Temperature (left) and relative humidity (right) fields on the transversal plane.

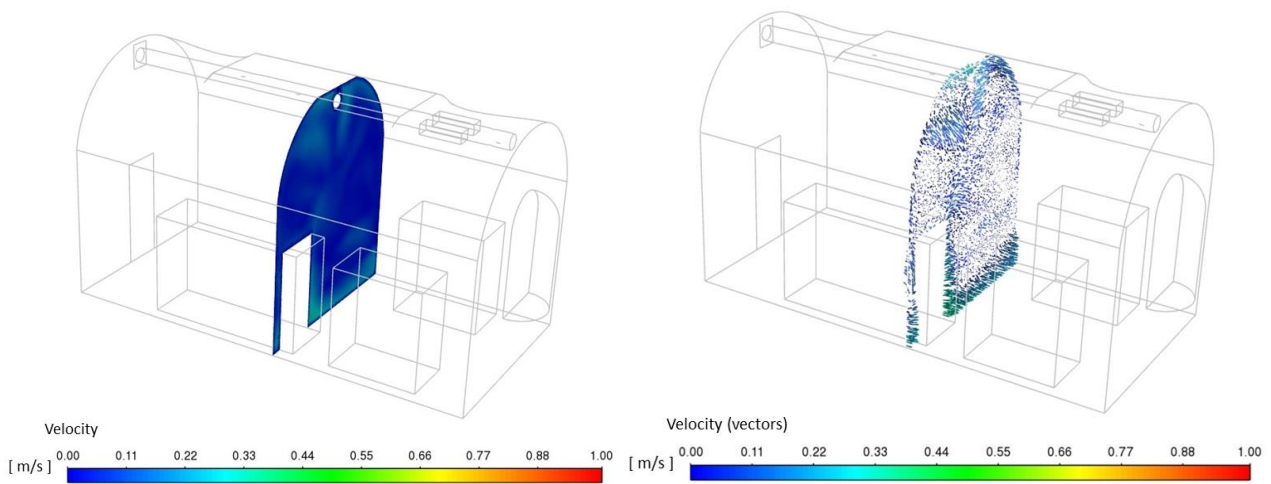


Figure S13 - Simulation O-2: Velocity (left) and velocity magnitude (right) fields on the transversal plane.

- **Results of simulations C-1 (confined cabin) with a mass flow rate of 1100 m<sup>3</sup>/h (minimum flow).**

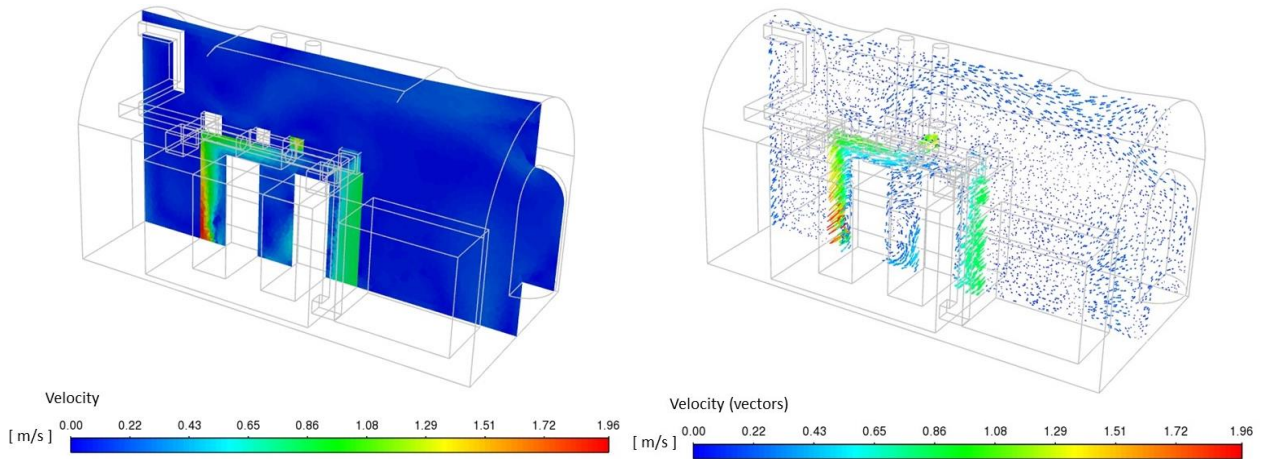


Figure S14 - Simulation C-1: Velocity (left) and velocity magnitude (right) fields on the longitudinal plane.

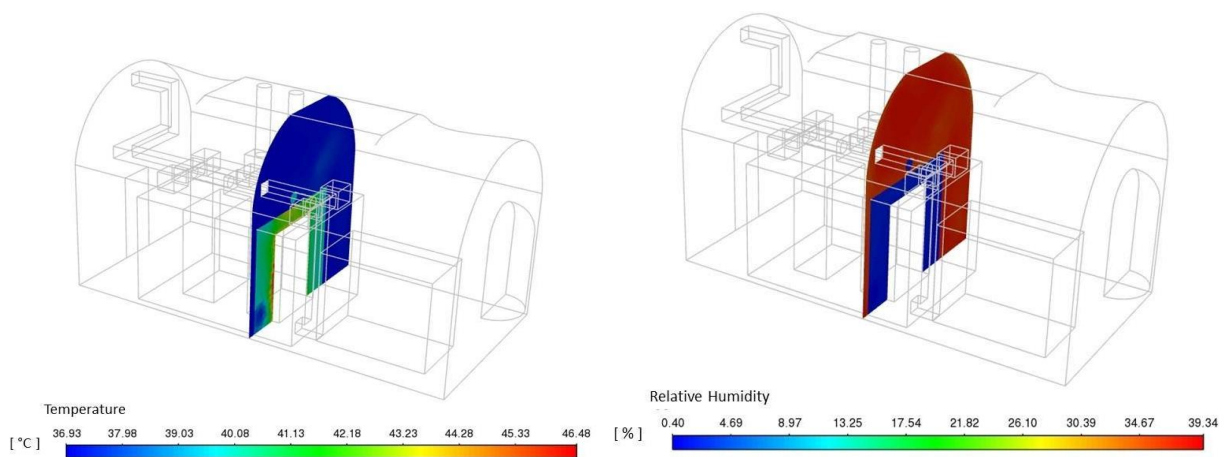


Figure S15: Simulation C-1: Temperature (left) and relative humidity (right) fields on the transversal plan.

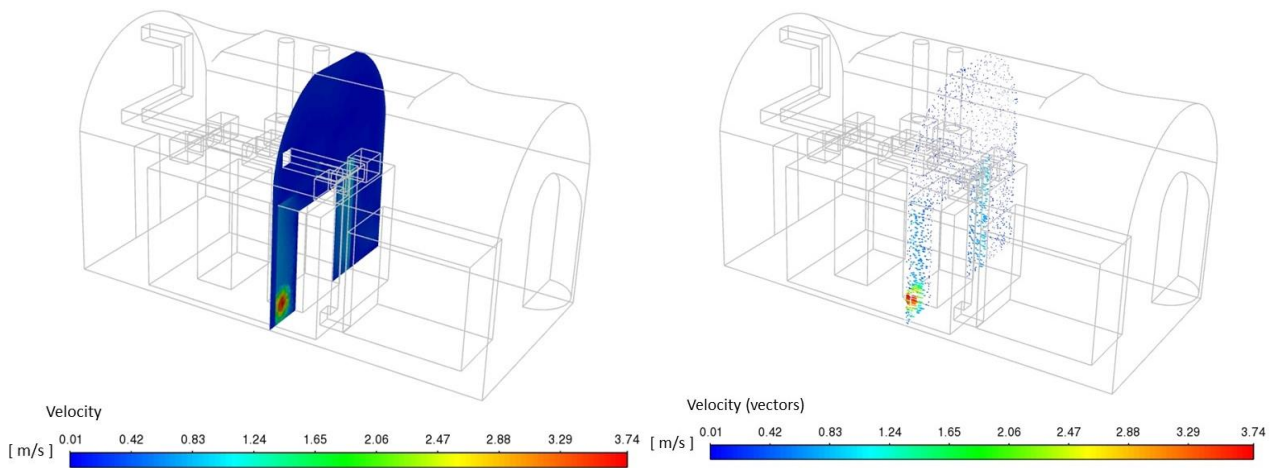


Figure S16- Simulation C-1: Velocity (left) and velocity magnitude (right) fields on the transversal plane.

- **Results of simulations C-4 (confined cabin) with a mass flow rate of 2200 m<sup>3</sup>/h (maximum flow).**

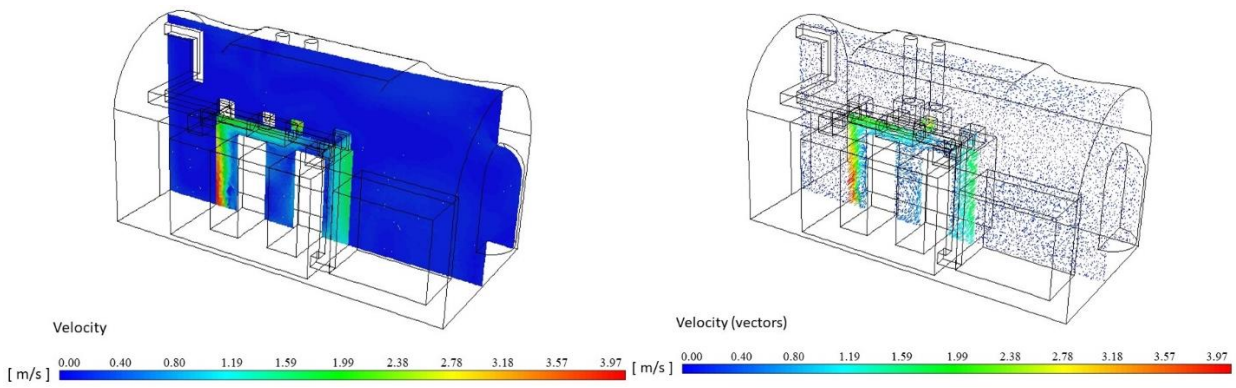


Figure S17- Simulation C-4: Velocity (left) and velocity magnitude (right) fields on the longitudinal plane.

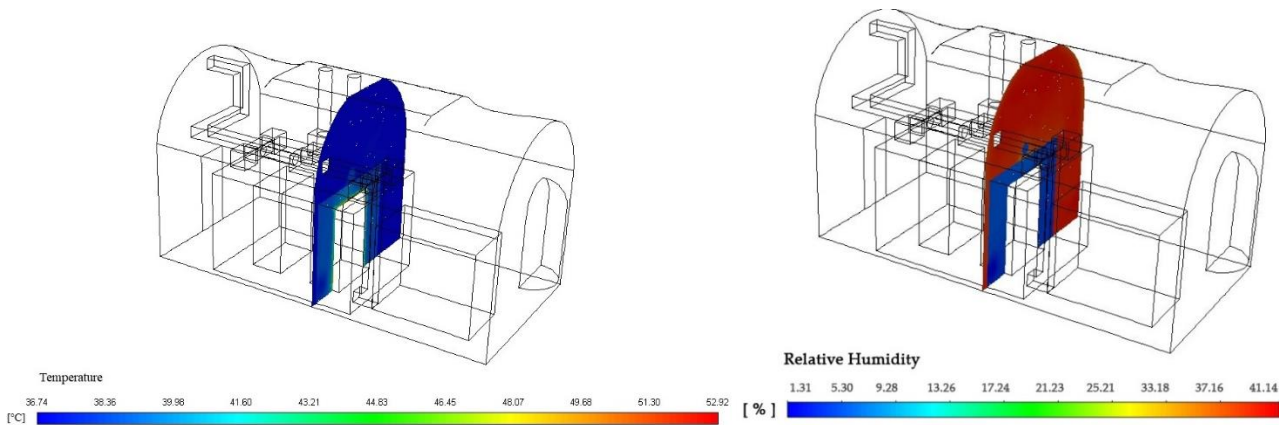


Figure S18- Simulation C-4: Temperature (left) and relative humidity (right) fields on the transversal plan.

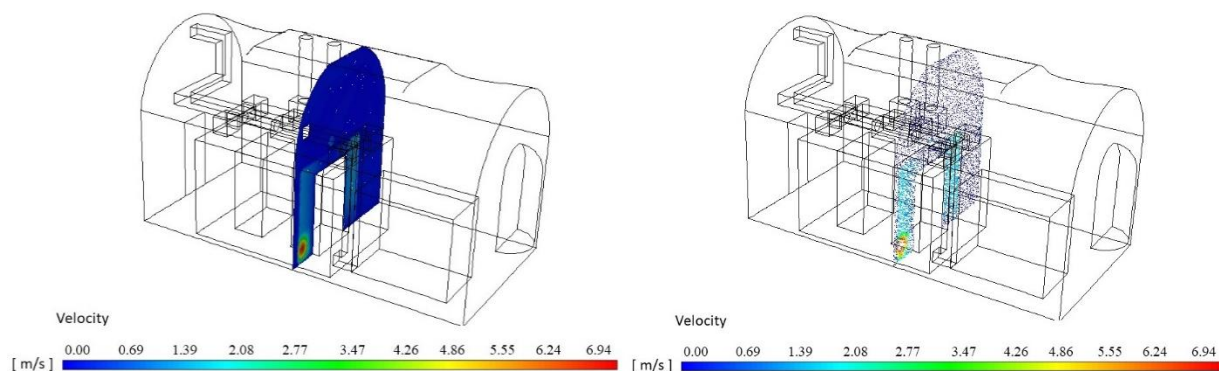


Figure S19 - Simulation C-4: Velocity (left) and velocity magnitude (right) fields on the transversal plane.

- **Results of simulations C-2 (confined cabin) with a mass flow rate of 1650 m<sup>3</sup>/h.**

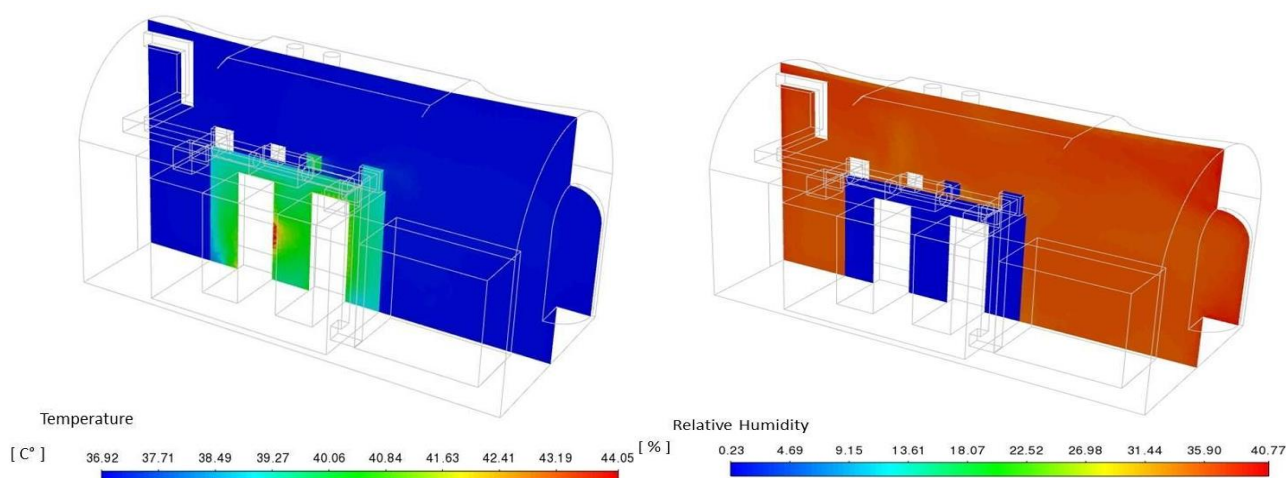


Figure S20 - Simulation C-2: Temperature (left) and relative humidity (right) fields on the longitudinal plane.

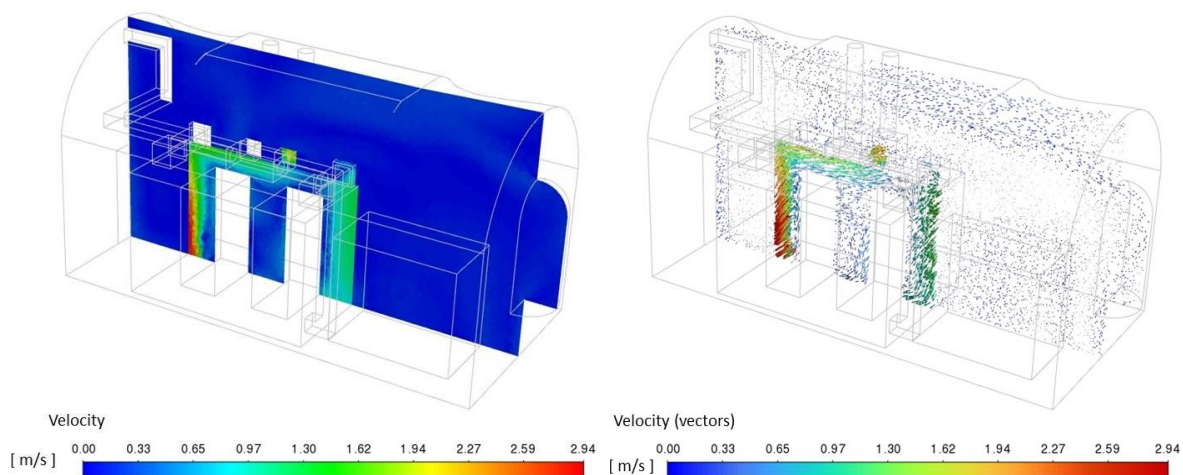


Figure S21 - Simulation C-2: Velocity (left) and velocity magnitude (right) fields on the longitudinal plane.

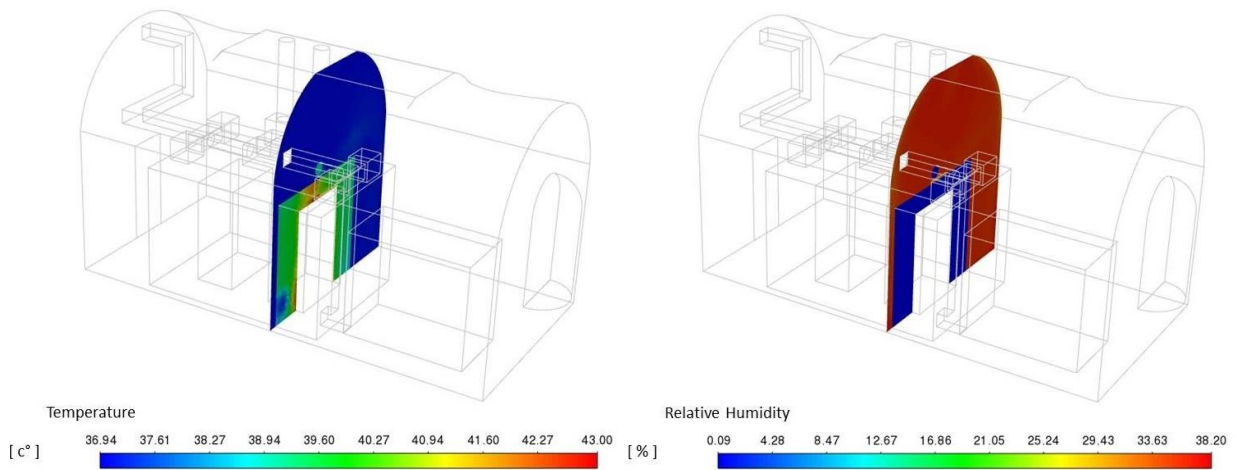


Figure S22- Simulation C-2: Temperature (left) and relative humidity (right) fields on the transversal plane.

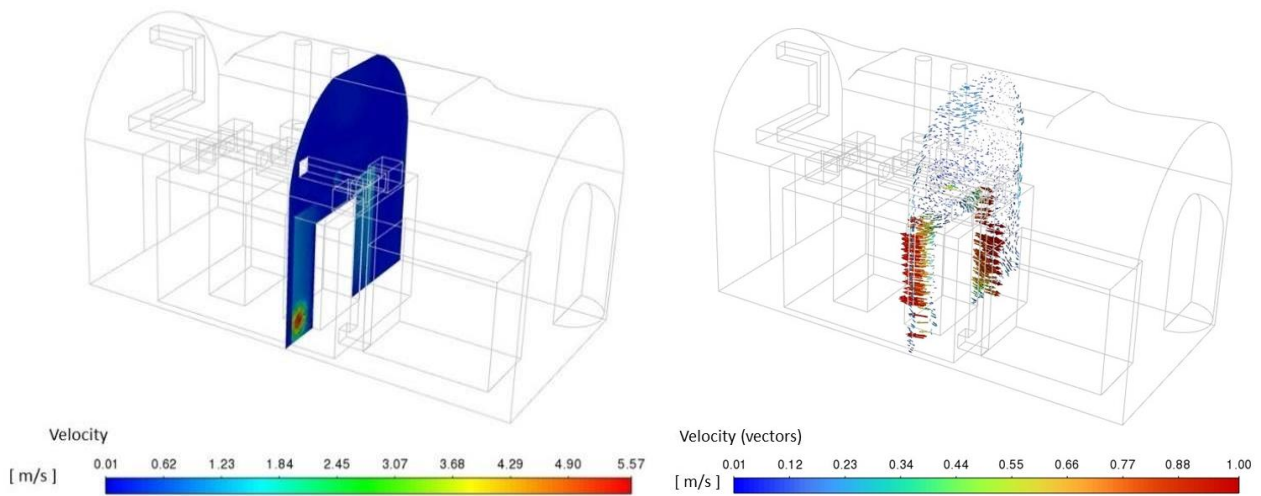


Figure S23- Simulation C-2: Velocity (left) and velocity magnitude (right) fields on the transversal plane.

- **Results of simulations C-3 (confined cabin) with a mass flow rate of 1225 m<sup>3</sup>/h.**

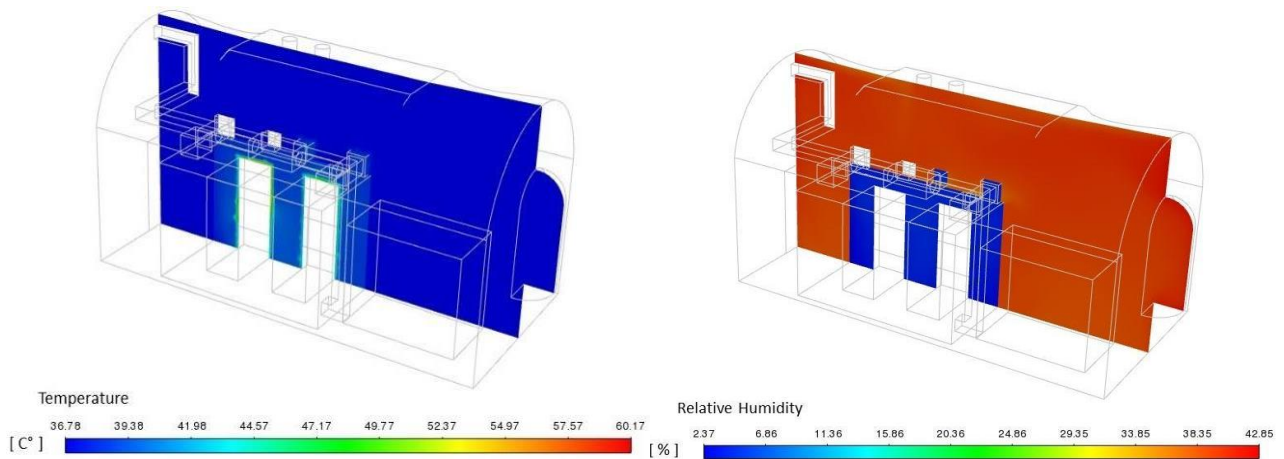


Figure S24 - Simulation C-3: Temperature (left) and relative humidity (right) fields on the longitudinal plane.

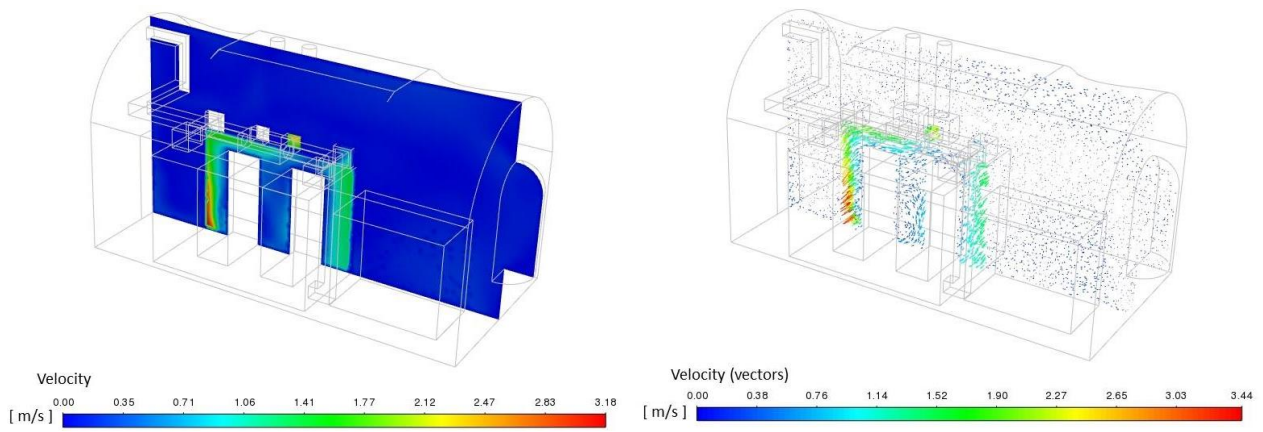


Figure S25- Simulation C-3: Velocity (left) and velocity magnitude (right) fields on the longitudinal plane.

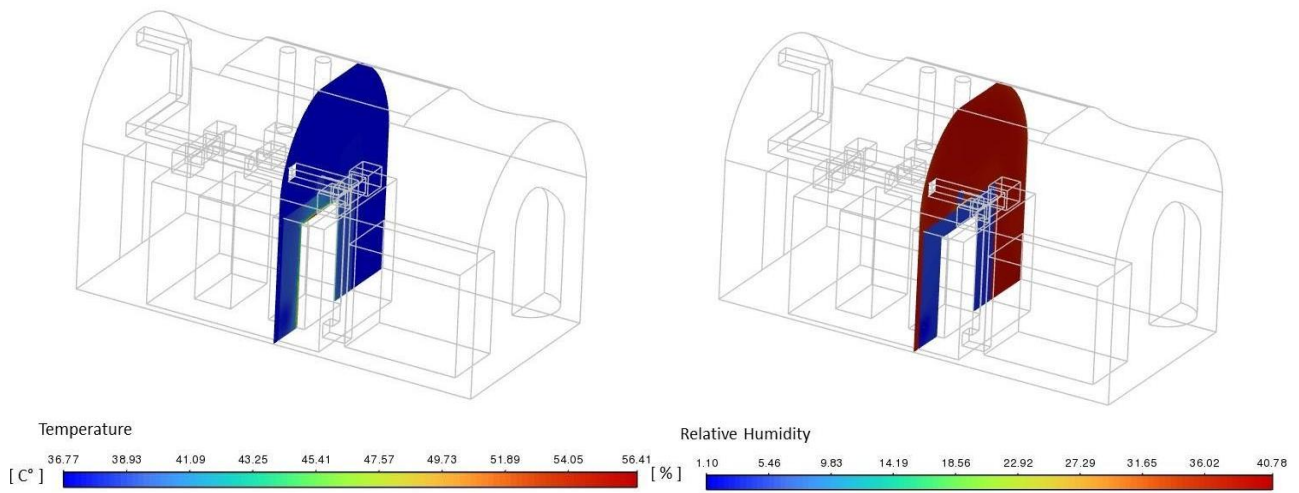


Figure S26 - Simulation C-3: Temperature (left) and relative humidity (right) fields on the transversal plane.

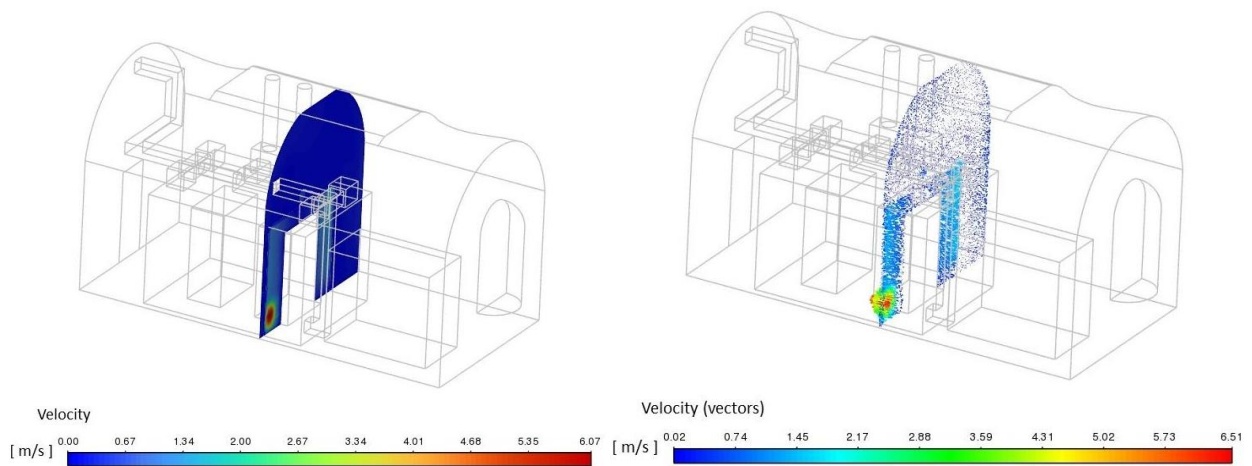


Figure S27 - Simulation C-3: Velocity (left) and velocity magnitude (right) fields on the transversal plane.