Initial flow modeling

Initial flow modeling of the inlet for flight was done with Ansys CFX software to guide the design. Results below are for 200 hPa and typical aircraft cruise speed.

Flow velocity

Pressure

Temperature

ΔP ≈ +75 hPa

ΔT ≈ +10 K

5 m/s

Further numerical flow simulations of the actual final inlet geometry for different aircraft altitudes and speeds are required. Only this will allow the adequate regulation of the sample air flows based on pressure and temperature sensors in the inlet.