

Defrost and Antifreeze Predictions & Technical Solutions

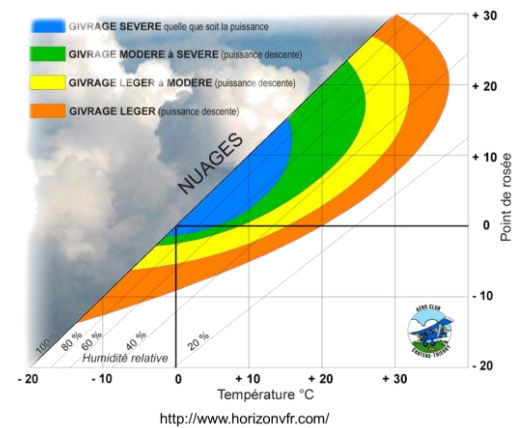
Consequences of icing phenomena

- ✓ In energy, considerable damage to electrical equipments, wind turbines, cables and transportations
- ✓ In the food industry, problems with reading labels at low temperatures,
- ✓ In aeronautics, engine damage, loss of lift and maneuverability, loss of information (probes).



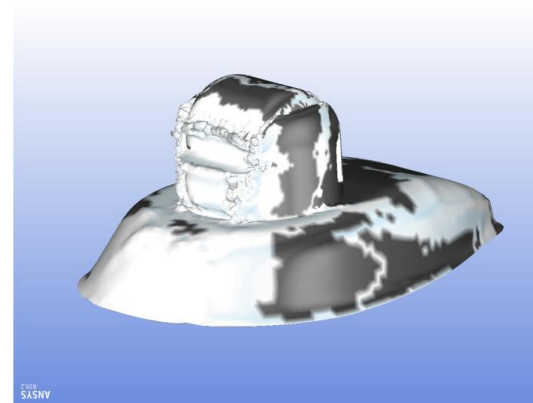
Prediction and Simulation of Icing Phenomena

- ✓ Identification of climatic and atmospheric conditions leading to the formation of frost,
- ✓ Taking into account the quantity of water captured, drop size, wind, etc.
- ✓ Impact of the nature of the terrain (obstacles) on the formation of frost.



Added value

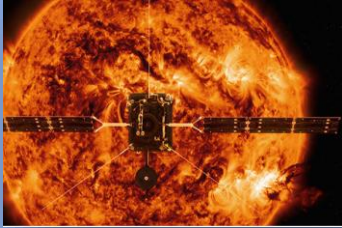
- ✓ Development of predictive numerical models:
 - *Estimation of the shape and thickness of the frost according to the icing conditions considered,*
- ✓ Comparison of the results of simulations to tests (specification, definition, monitoring and operation):
 - *Calibration of digital models.*
- ✓ Proposal of frost protection systems (anti-icing or defrost):
 - *Numerical validation before operational deployment*



To know...

- Intervention in support of studies or technical assistance,
- 12 years of collaboration with the Airbus deicing service,
- Numerical coupling and tests,
- Development of regulatory documents related to safety (certification)

Company founded in 1992 to conduct studies in the space sector, EPSILON is developing in Europe and Morocco at the convergence of physical, software and finally system engineering. scientist.



BUSINESS AREAS

AERONAUTICS / SPACE / ENERGY

MAIN ISSUE EPSILON

SIMULATION FOR DESIGN / TESTS / OPERATION

OFFERS

OWNER SERVICES AND PRODUCTS

Our know-how

Physical

Modeling, simulation, analysis, optimization, from component to system, throughout the life of the product

Computer science

Development of processing software, analysis and enhancement of technical and scientific data, piloting of test benches and monitoring of means of production

System

Design and supply of scientific equipment, test benches and fault detection devices by Non-Destructive Testing



Physics



Digital



System



Consulting