

Input data

ERA5
reanalysis

*Model
Sublimation*

$\delta^{18}\text{O}$ of snow and
sublimation flux

Snowfall

Sublimation

Vapour deposition

Mass
balance

Snow layers

Δm
 Δt

*Model
Air Parcel*

Backward
trajectories

Vapour $\delta^{18}\text{O}$
along trajectories

Air parcel
1 m³

Rayleigh
distillation

Free troposphere

ABL

Snow

Ocean

ACE
ship

