SELF - Overview

Ice formation

0°C · · · 4°C
T
h(n-1)
Depth

day n
• heat flux (lost)
• strong wind

0°C · · · 4°C
h(n-1)
h(n)

Phase A
Mixing = gain in potential energy

0°C · · · 4°C
h(n)

Phase B
Cooling: change in internal energy → potential energy

day n+1
• heat flux (lost)
• weak wind

0°C · · · 4°C
h(n)
h(n+1)

Phase B

0°C · · · 4°C
h(n)
h(n+1)

Phase A

0°C
Depth

day n
day n+1

Heat flux
Wind speed

day n

day n+1

Time