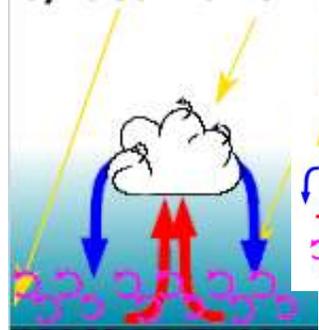


1. Modélisation physique

(a) Modèles conceptuels



Solar radiation
Convective cells
Small scale turbulence

(b) Modèles mathématiques

$$\overline{\rho w' \psi'} = f(\psi_{th} - \psi) - K_z \frac{\partial \psi}{\partial z}$$

$$\frac{dI^+}{d\tau} = \gamma_1 I^+ - \gamma_2 I^- - \pi F \omega_0 \gamma_3 e^{-\tau/\mu_0}$$

(c) Modèles numériques

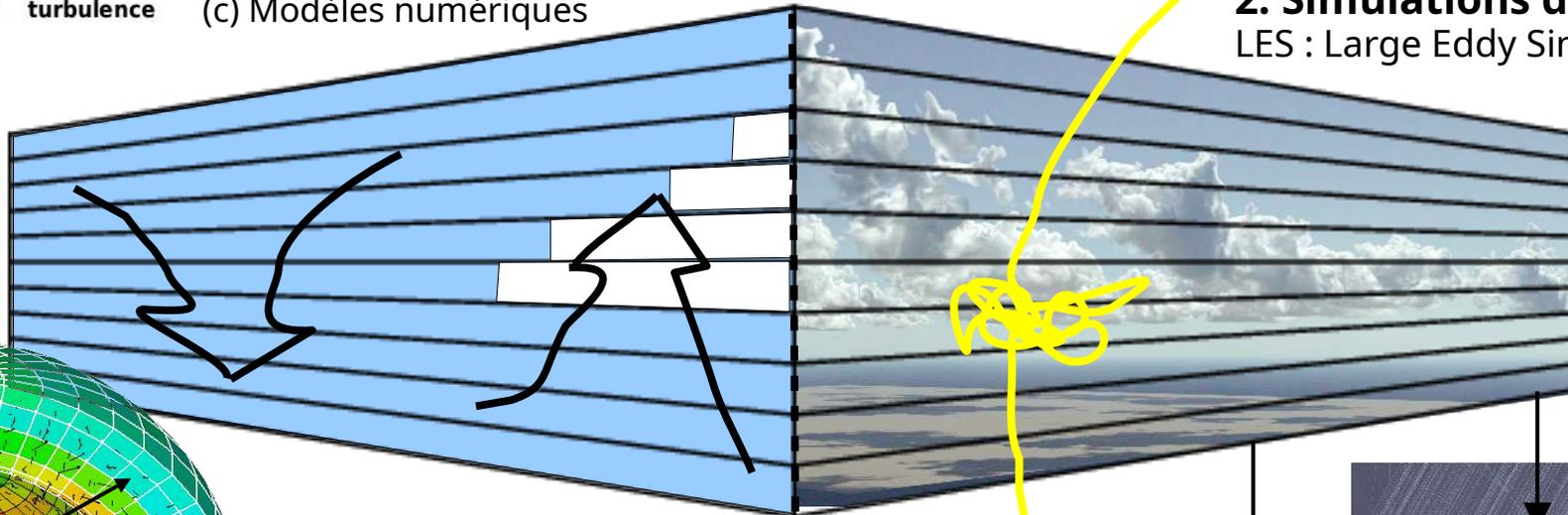
Observations



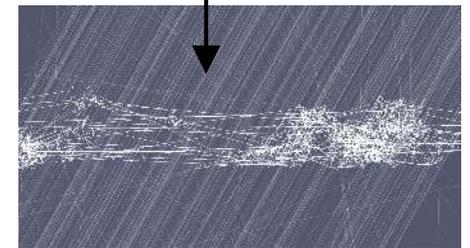
Evaluation

2. Simulations détaillées

LES : Large Eddy Simulation



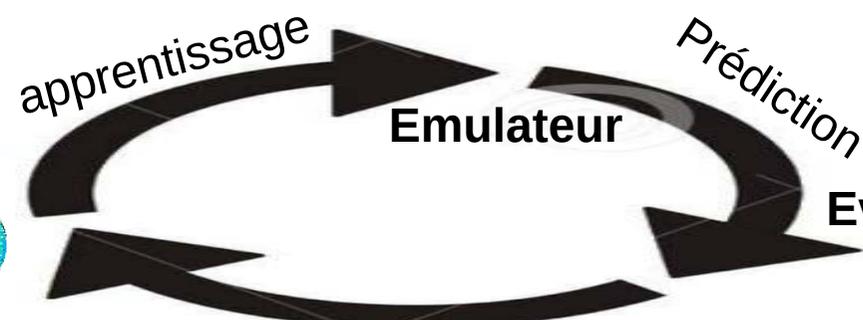
Evaluation



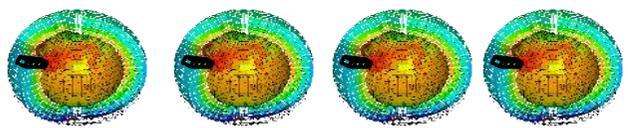
Références

Flux solaire en surface sous des cumulus (W/m2)

3. Evaluation et calibration des modèles



Ensemble de simulations



Réduction de l'espace des paramètres

