

# Transition from Shallow to Deep Convection:

The interaction between cloud and environment

- The mechanism to determine the transition of shallow to deep convection is an important and challenging problem in model development. [Hago and Leung, 2012]
- An idealized simulation of the transition from shallow convection to deep convection by vector vorticity equation model (VVM).
- Semi 3D cloud tracking algorithm
  - Tracking 2D physical variable (liquid water path) and map to 3D cloud objects.

