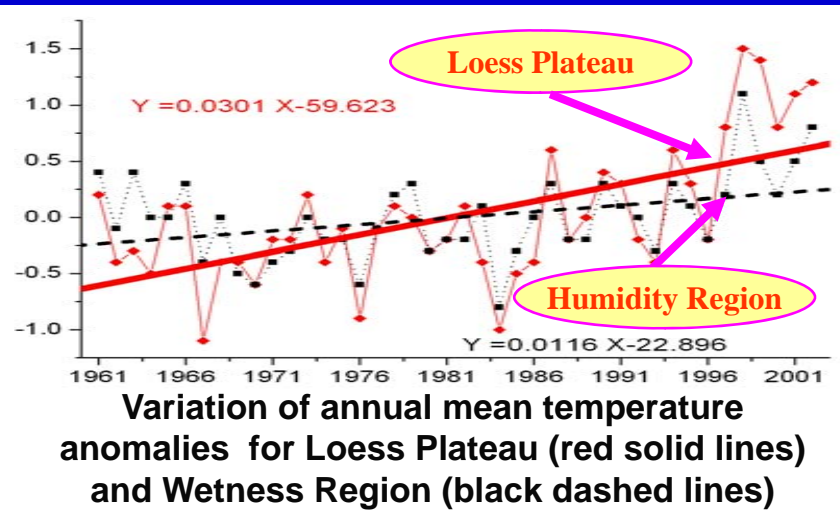
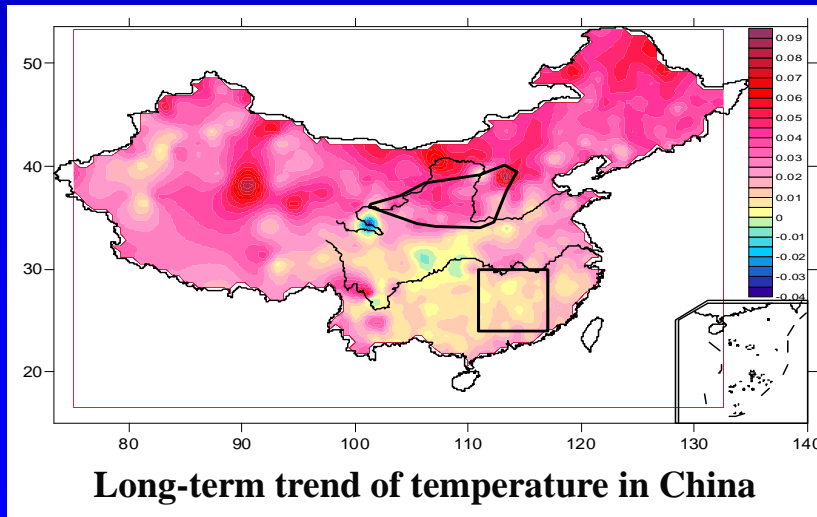


Observation of semi-arid climate change over Northwest China

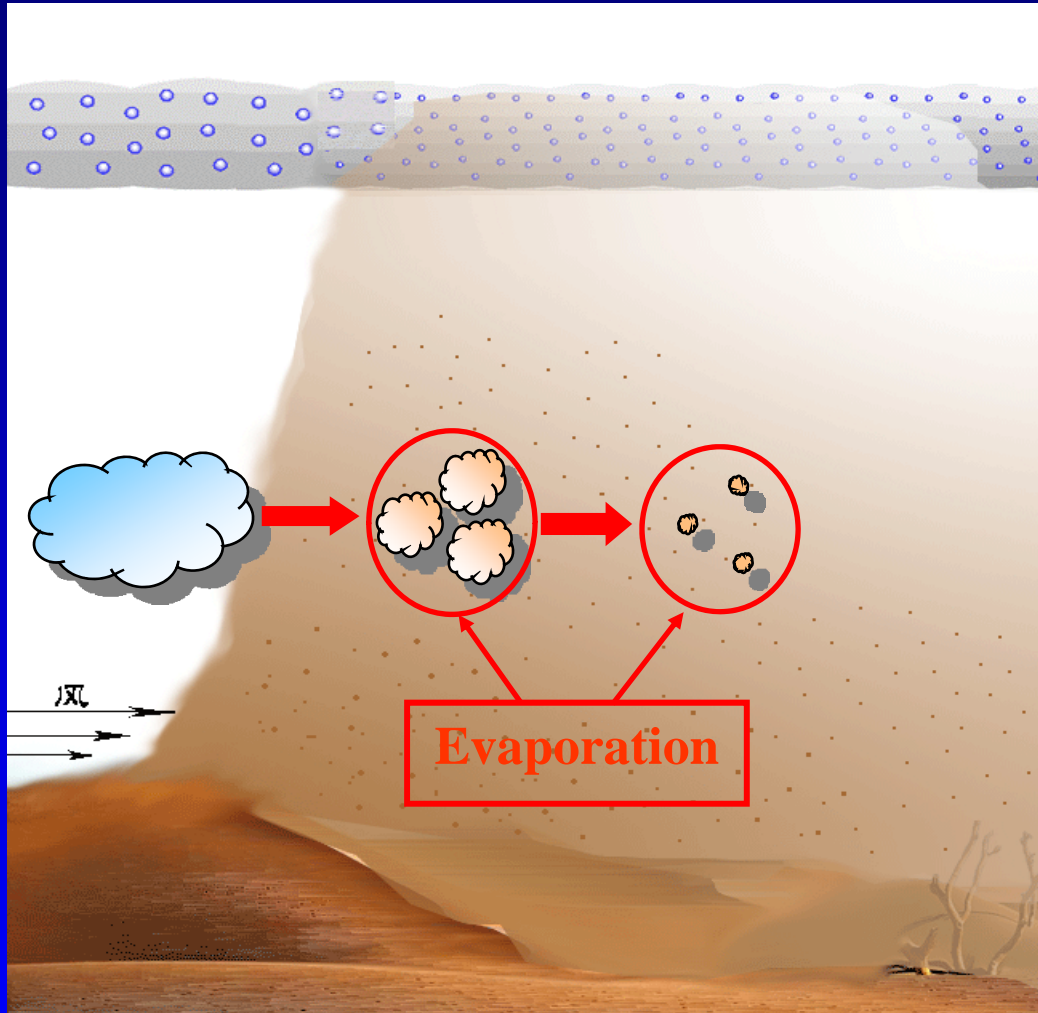
J. Huang et al.



A research observatory (SACOL) has been established since 2005 for understanding semi-arid climate change over Loess Plateau.



Semi-arid region of Northwest China is one of the fast warming area over global continental.



- Dust aerosol can cause:
- ❖ heating atmosphere
 - ❖ evaporate cloud droplets
 - ❖ reduce cloud water path and optical depth
 - ❖ reduce cloud cooling effect lead to warm local climate
 - ❖ lower precipitation rate

Absorbing aerosol (dust & black carbon) may speed warming and drying semi-arid climate over Northwest China.