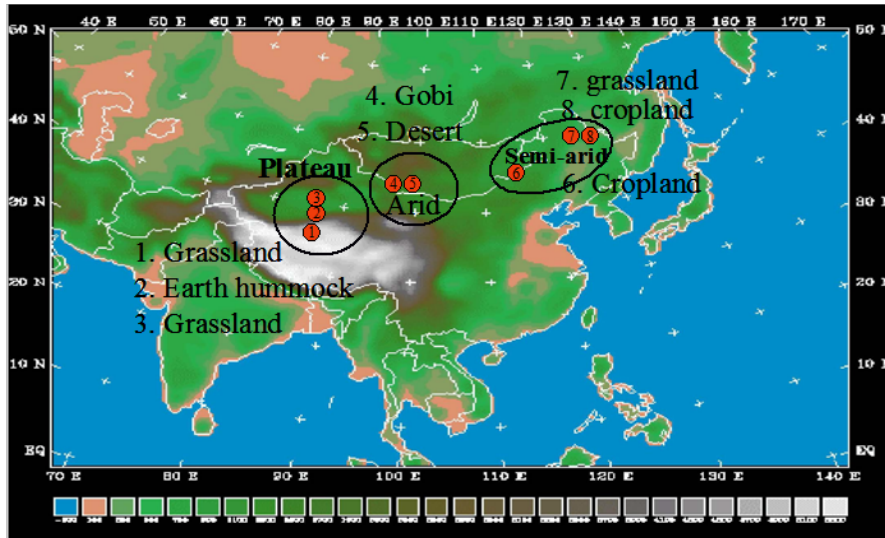
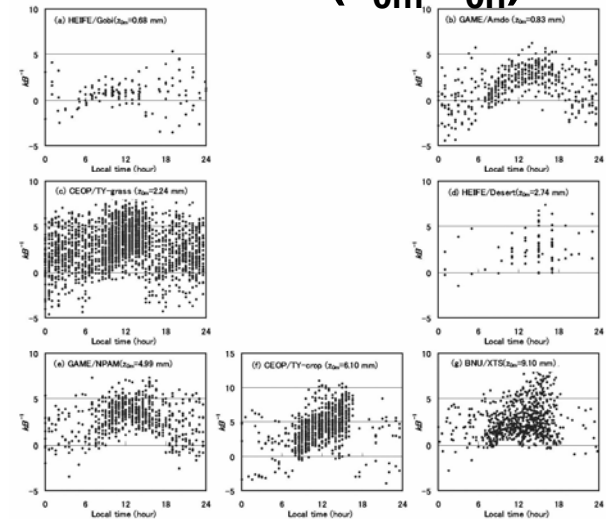


Turbulent Flux Transfer Over Bare-soil Surfaces: Characteristics and Parameterization (Yang et al., 2008, JAMC)



$$kB^{-1} = \ln(z_{0m}/z_{0h})$$



- There is no robust basis to parameterize z_{0h} from z_{0m} , although it is widely used.
- Diurnal variations of z_{0h} are common for all bare-soil surfaces.
- Diurnal variations of z_{0h} cause large excessive heat transfer resistances during the day, neglecting which heat flux may be over-estimated by 50% or more.
- $z_{0h} > z_{0m}$ are often observed for aerodynamically rough surfaces, requiring theoretical explanations.