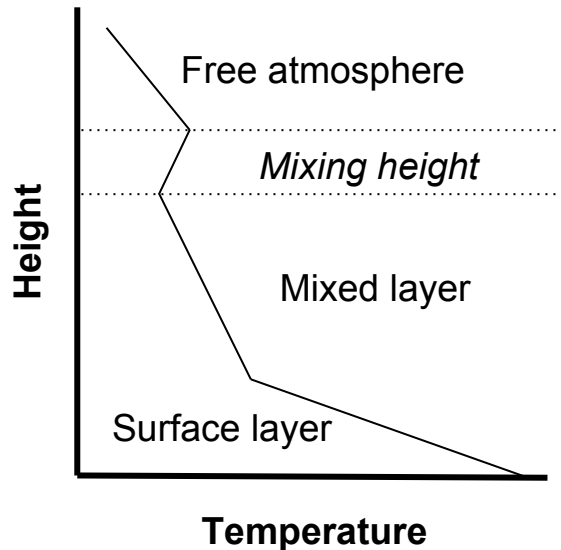


## ***Atmospheric strata***



## ***Fire development stages***

### **Surface stage**

- Fire is low.
- Interaction limited to surface layer.
- Surface winds drive fire spread.
- Surface humidity regulates fuel moisture.

### **Mixing stage**

- Fire energy circulates air into mixed layer.
- Fastest rate of plume growth.
- Upper-level winds might tilt plume.
- Longest duration.
- Downdrafts bring mixed air to affect fuel moisture.

### **Penetration stage**

- Convection reaches mixing height.
- Plume spreads laterally along free atmosphere barrier as stable air blocks convection.