

# Class 4b: Precipitation

# Clouds

- Collections of tiny drops or ice crystals
- Source of all precipitation

# Clouds

- Cirriform: thin and wispy (ice)

# Clouds

- Stratiform: grey and low

# Clouds

- Cumuliform: white, flat-bottomed, puffy

# Fog

- A cloud on the ground

Fog

# Precipitation: rain

- Collision and coalescence in the tropics
- Ice crystals elsewhere



# Precipitation

- Rain:
- Snow:
- Sleet:
- Glaze or freezing rain:

# Atmospheric lifting

- Four ways a parcel of air might rise
- Convective lifting

# Atmospheric lifting

- Orographic lifting (mountains)

# Atmospheric lifting

- Frontal lifting
- Convergent lifting



# Global distribution of precipitation

- Tropics: generally very rainy

# Global distribution of precipitation

- Subtropics: generally very dry

# Global distribution of precipitation

- Midlatitudes: wide variation