

Local Winds

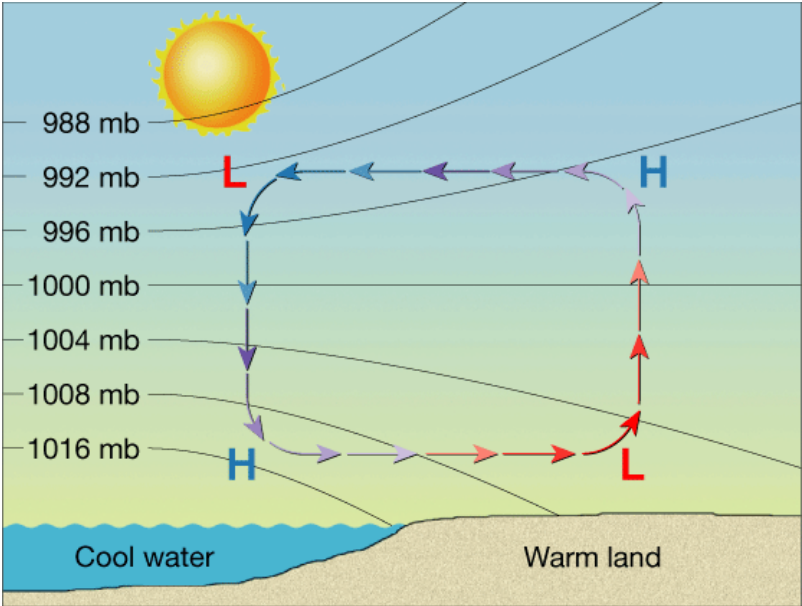
Local Wind Formation

- Local winds are caused by:
 - Topographic effects
 - Differences in land vs. water

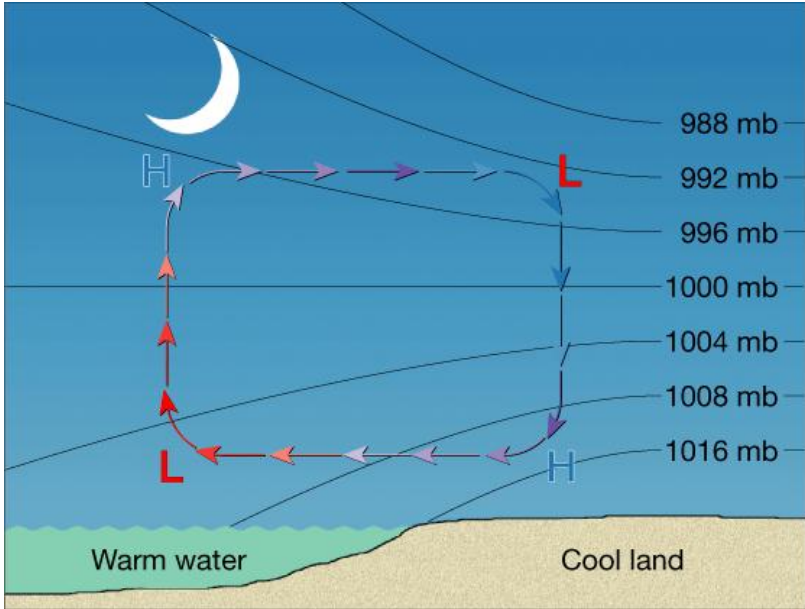
Land vs. Sea Breezes

- **Sea Breeze**=In coastal areas during the warm summer months, the land surface is heated more intensely during the daylight hours than the ocean
- As a result, the air above the land surface heats, rises, and expands. The cool air above water rushes into to take its
- At night the reverse takes place= **Land Breeze**

Sea Breeze



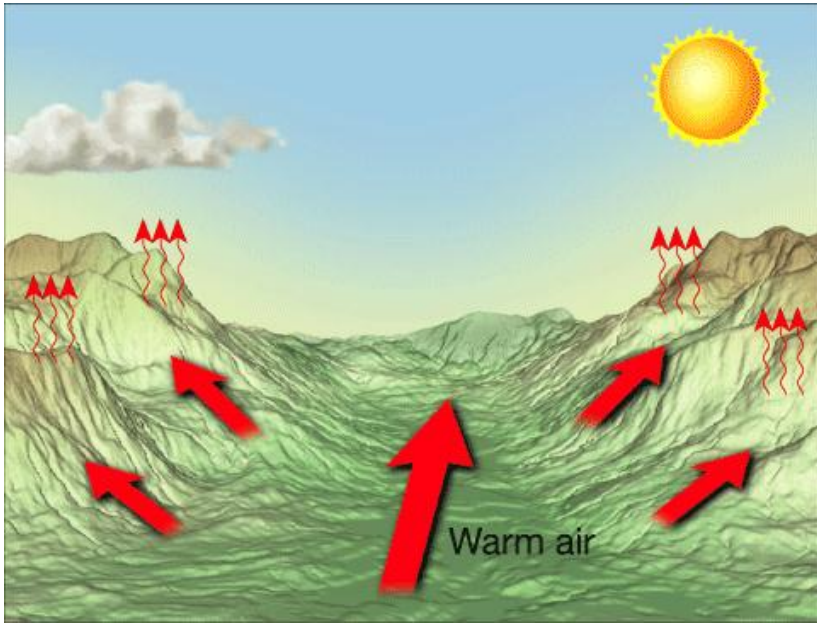
Land Breeze



Valley vs. Mountain Breezes

- During the day, the sun heats up valley air rapidly.
- Convection causes the warm air to rise, causing a **valley breeze**.
- At night, the process is reversed. Mountain air cools rapidly at night and "falls" downslope, causing a **mountain breeze**.

Valley Breeze



Mountain Breeze

