

## Atmospheric circulation

- Uneven temps

## Pressure

- Force/unit area exerted by weight of atm
- Heating expands atm

## Pressure differences

- Wind
- Turbulence
- Speed
- direction
  - From
  - Compass or azimuth

## Driving Forces

- Pressure Gradient
- Coriolis force
- Friction

## Pressure gradient (pgf)

- Unequal heating =

- Degree of  $\Delta$  is gradient

- Steep gradient

- Isobars

- Low P

- High P

Coriolis

- Deflection due to earth rotation

- Rotates E

- Geostrophic winds

- Why not lower level?

friction

- Friction counters CE

- Out of H into L

- Anticyclone

- Cyclone

#### Local winds

- Land and sea breezes
  
- Opposite at night
  
- Mountain and valley breezes
  
- Daytime warm breeze