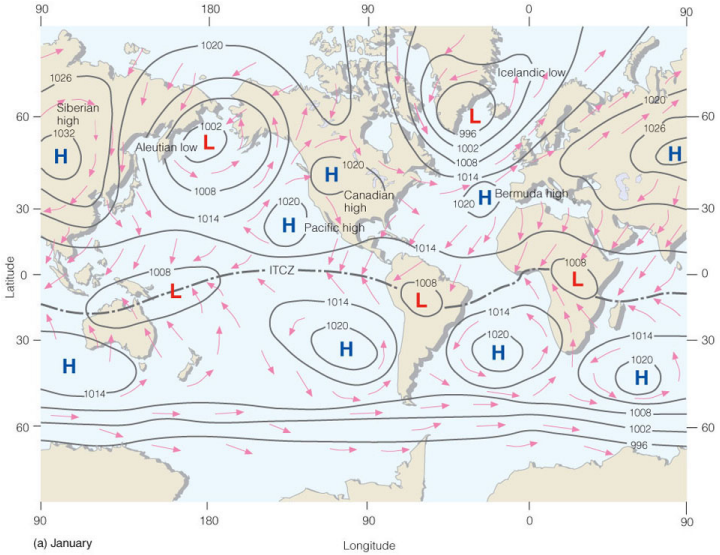
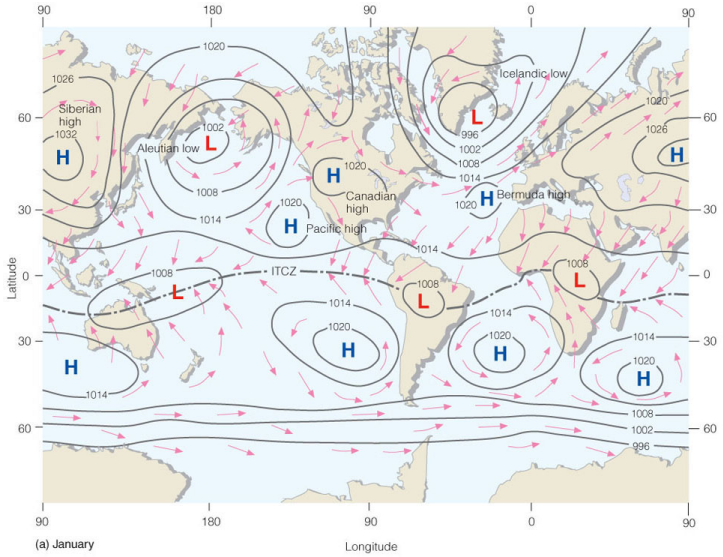
The Real World?

Climatological sea-level pressure and surface wind-flow patterns for January



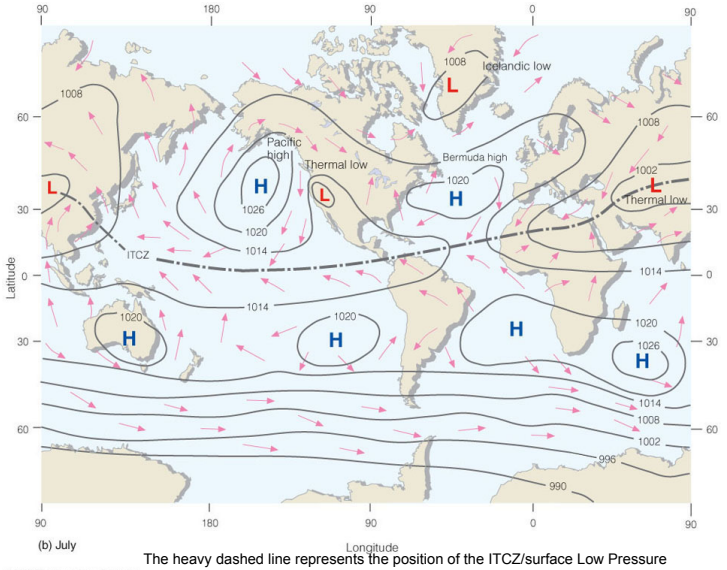
The heavy dashed line represents the position of the ITCZ/surface Low Pressure

Climatological sea-level pressure and surface wind-flow patterns for January



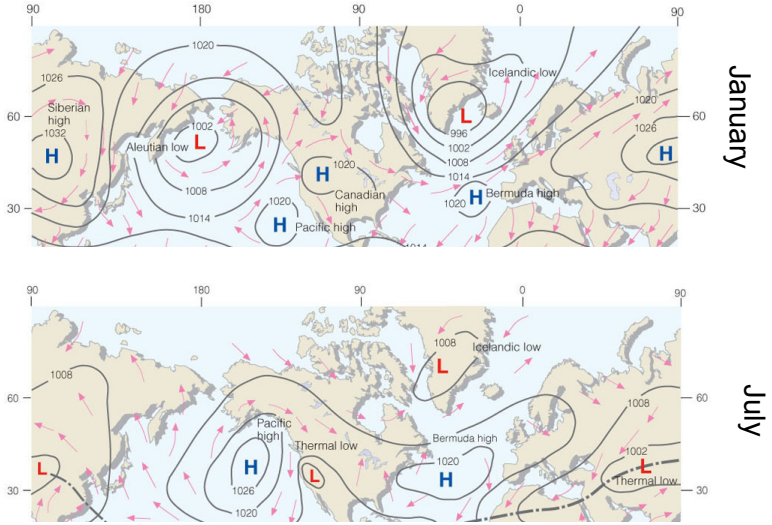
The heavy dashed line represents the position of the ITCZ/surface Low Pressure

Climatological sea-level pressure and surface wind-flow patterns for July



The heavy dashed line represents the position of the ITCZ/surface Low Pressure

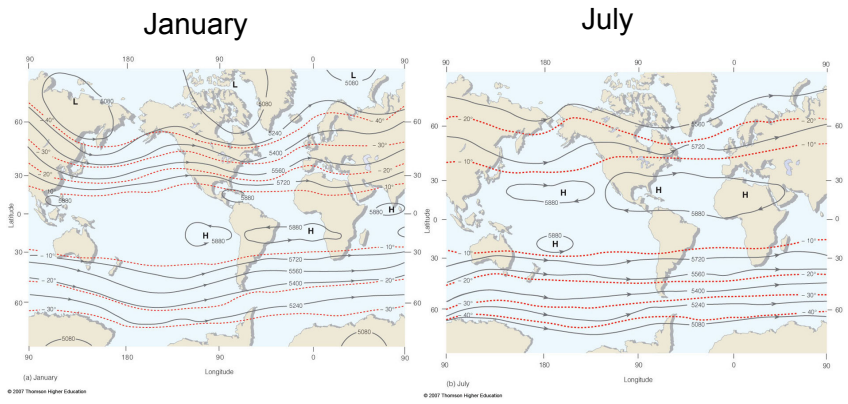
Look at East-West Differences in midlatitude NH



What Season is this?

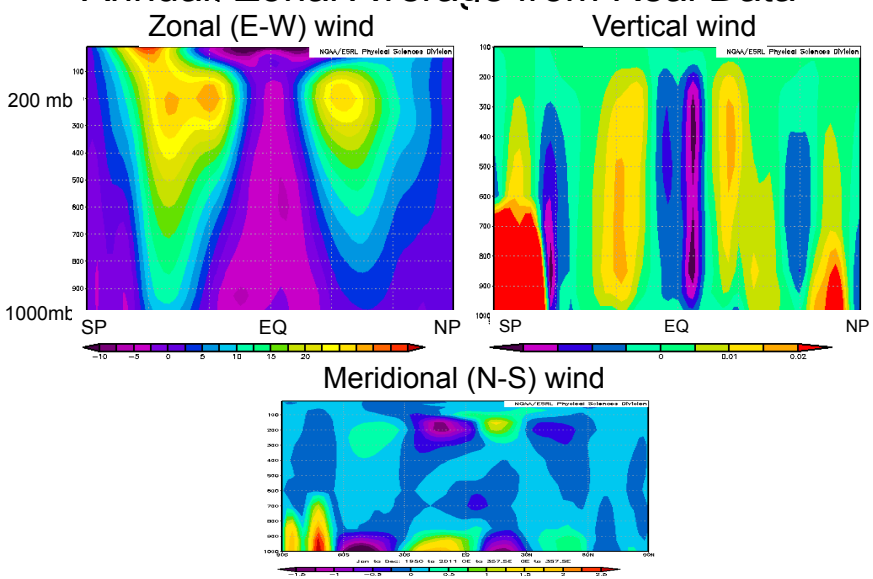
Fig. 10-6, p. 263

Climatological height of 500mb surface, temperature at 500mb, and wind direction

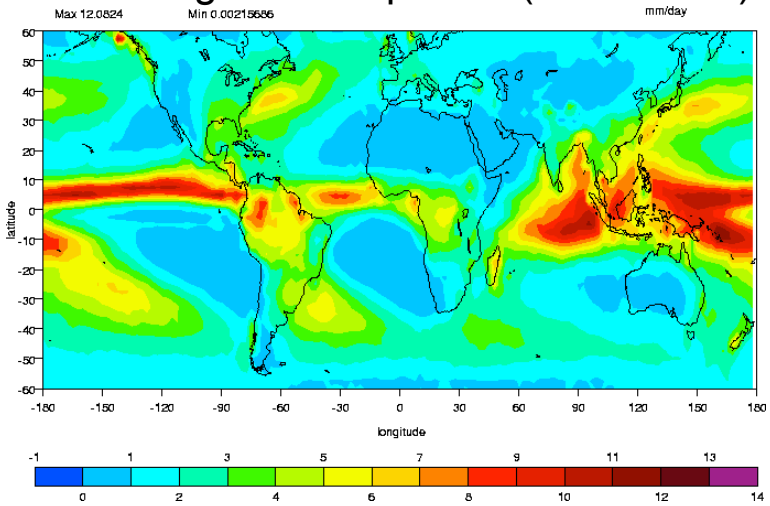


Largest temperature gradients (elevation gradients) in winter months. Hence, strongest westerlies in midlatitudes of *both* hemispheres in winter!

Annual, Zonal Average from Real Data

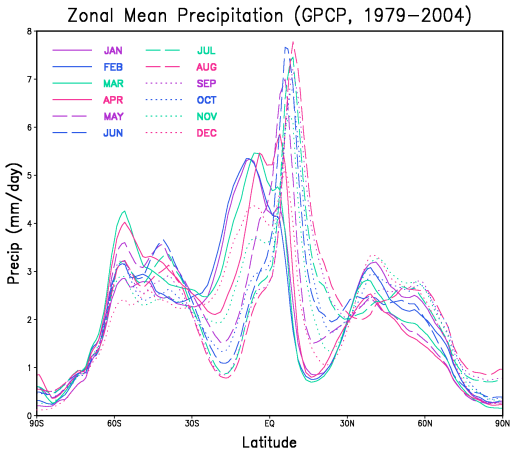


Climatological Precipiation (annual ave)



Where are the deserts? Where are the wet regions?

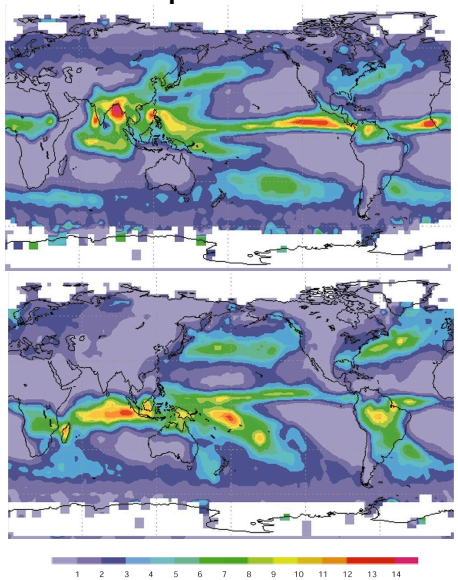
Precipitation Climatology (zonal average)



Climatological Precipiation

July

January



Note monsoons in india, south china, australia, amazon, itcz vs spcz

Note dry polar regions year-round

Ocean circulation (and therefore ocean heat transport) is largely due to the forcing by the wind