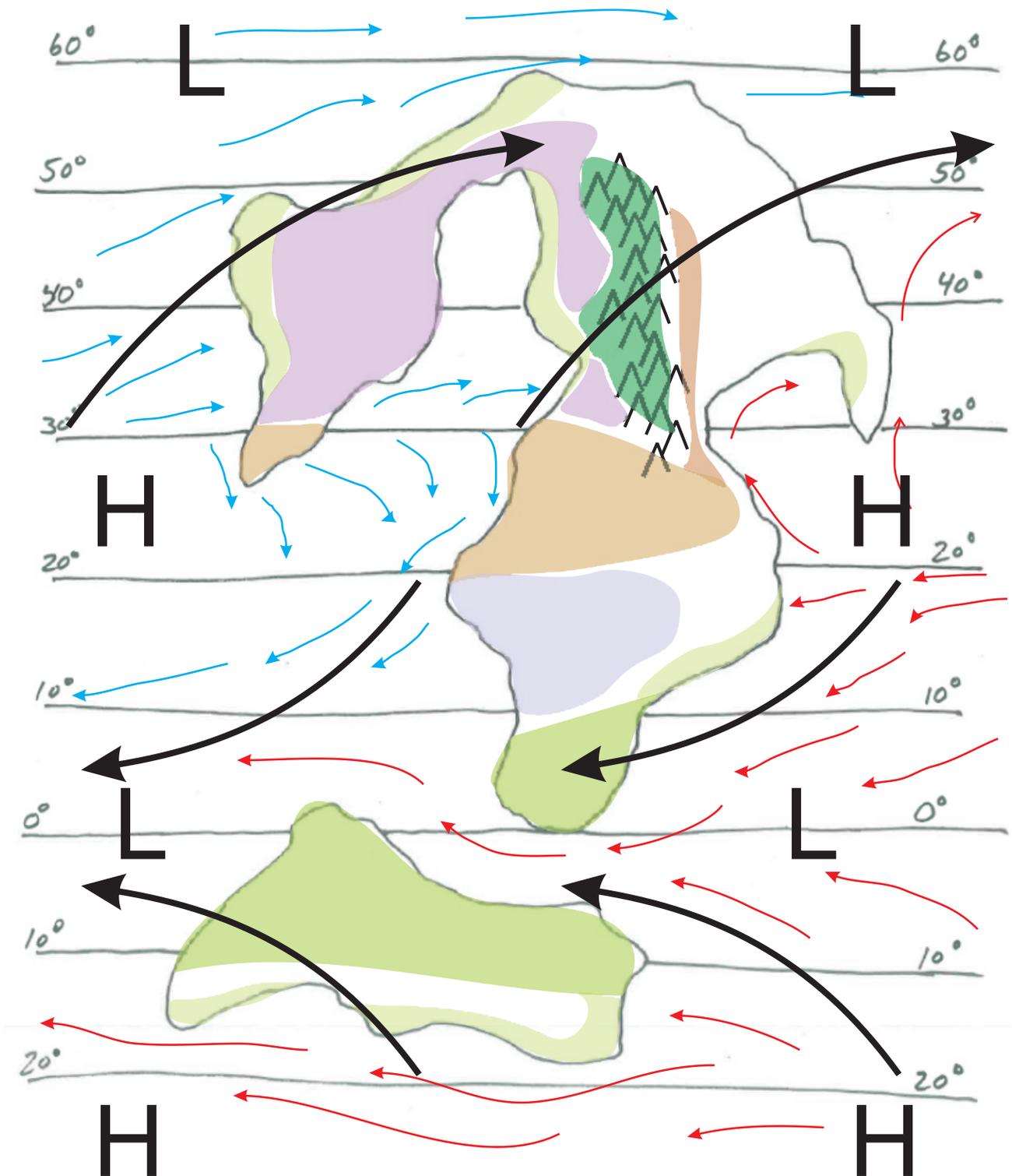


# The Climates of Ghotiland



High and Low Pressure Belts H L

Prevailing Winds →

Warm Ocean Currents ←

Cold Ocean Currents ←

Year-Round Rainforest

Year-Round Desert

Coastal Wet

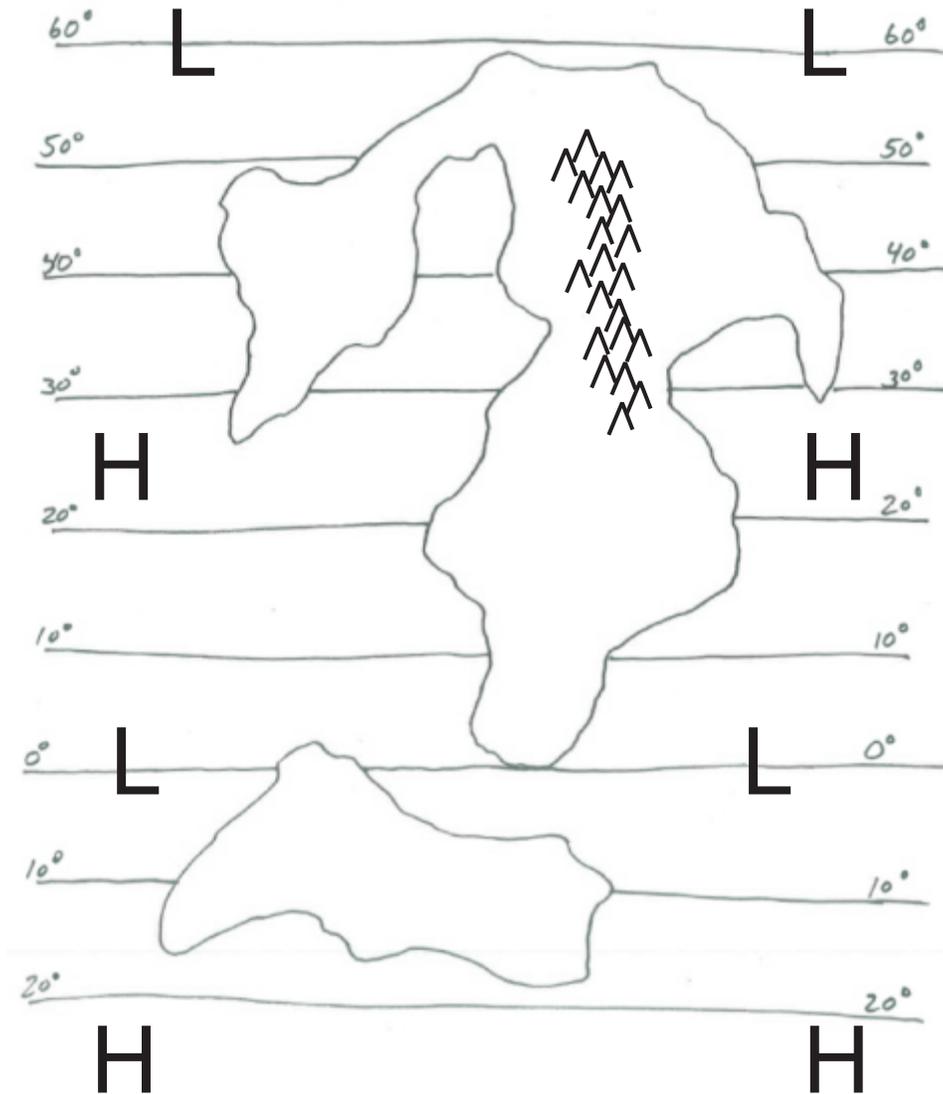
Rainshadow Wet

Rainshadow Dry

Summer Wet/Winter Dry

Summer Dry/Winter Wet

# Pressure Belts

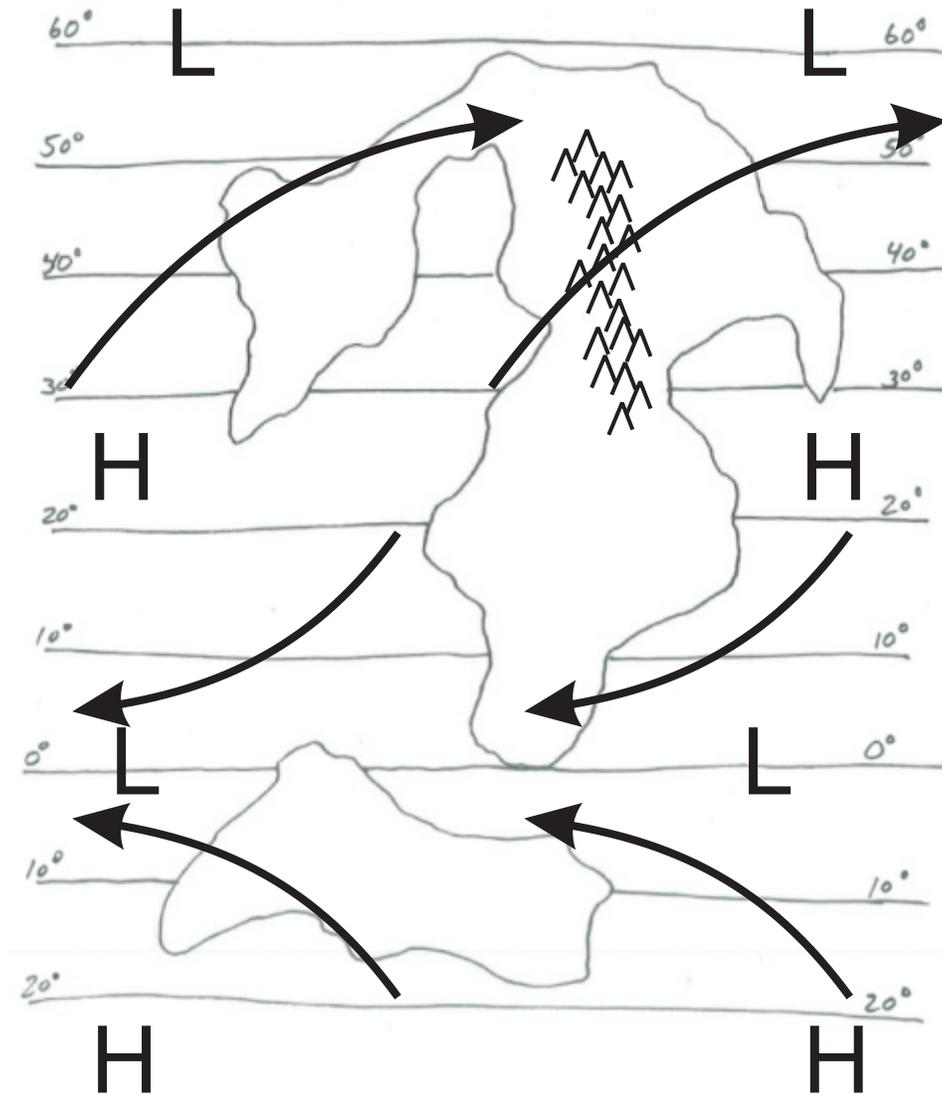


## How are these pressure belts created?

Pressure belts are caused by the pattern of rising and sinking air in the Earth's atmosphere. High pressure belts occur in regions where air from high in the atmosphere sinks downward to the Earth's surface. Low pressure belts are found in regions of rising air.

One of the most prominent pressure belts is the Doldrums. Located on the Equator, the Doldrums is a hot place. This hot air rises, creating the low pressure at the Equator.

# Prevailing Winds



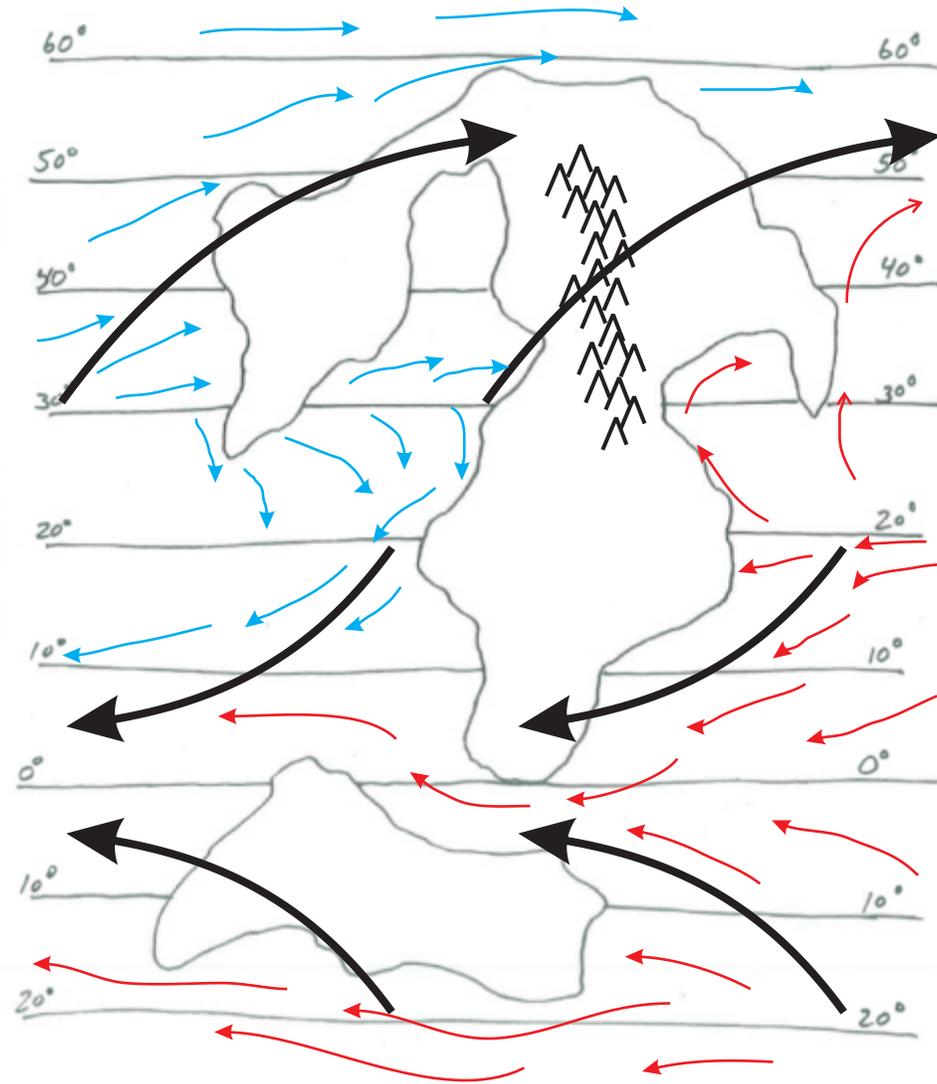
## Why does Ghotiland have this pattern of prevailing winds?

The prevailing winds of the Earth are caused by differences in pressure. Winds blow from regions of high pressure to regions of lower pressure.

The Earth's prevailing winds curve due to the Coriolis Effect. In the Northern Hemisphere...

There are no prevailing winds in the Horse Latitudes (20-30 degrees north and south), and there are no prevailing winds in the Doldrums (near the equator). There are no prevailing winds in these areas because...

# Ocean Currents



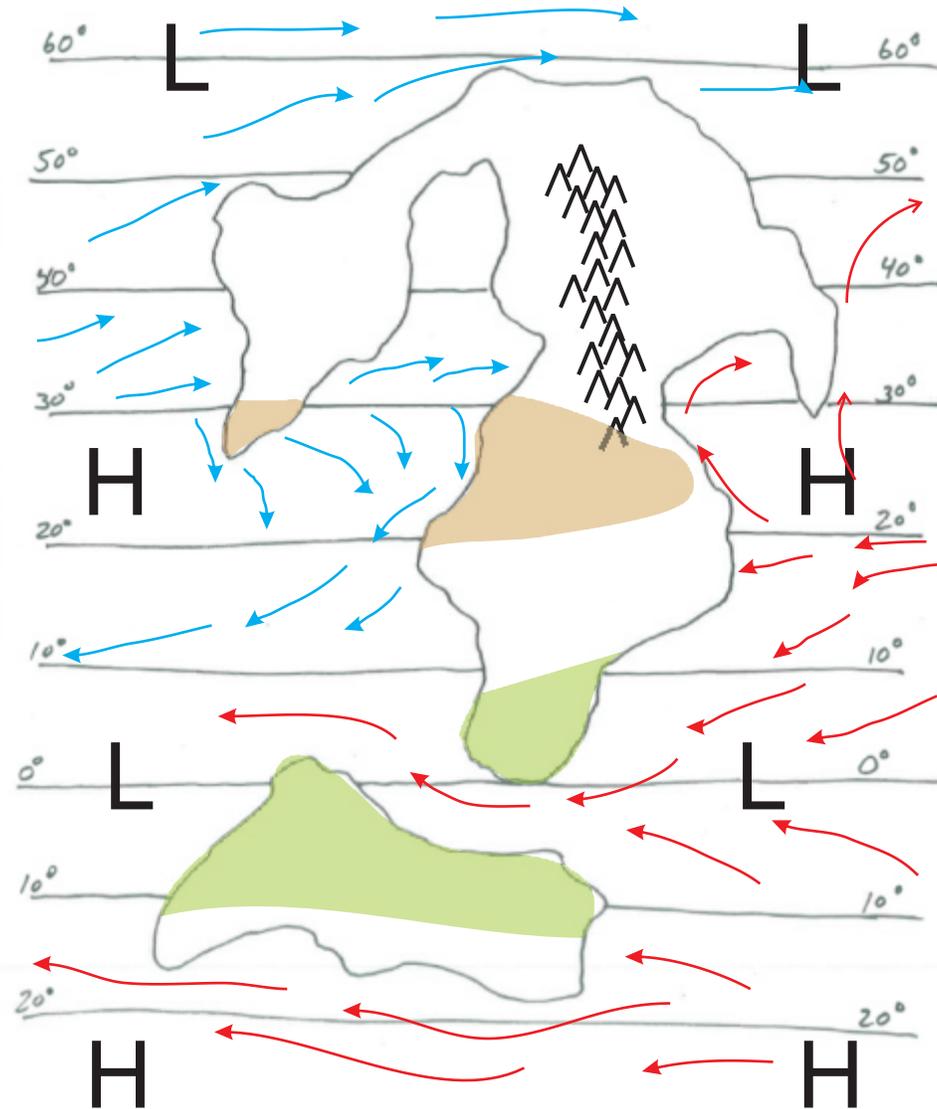
## What creates this pattern of ocean currents?

Initially, ocean currents are created by the prevailing winds. As you can see in the diagram above, where there are prevailing winds, the ocean currents always flow in the same direction as those prevailing winds...

Ocean currents are created by winds, but ocean currents still exist in areas of the world that do not generally have prevailing winds...

Some ocean currents are warmer and some are cooler. The relative temperatures of ocean currents can be determined by...

# Year-Round Rainforests and Deserts



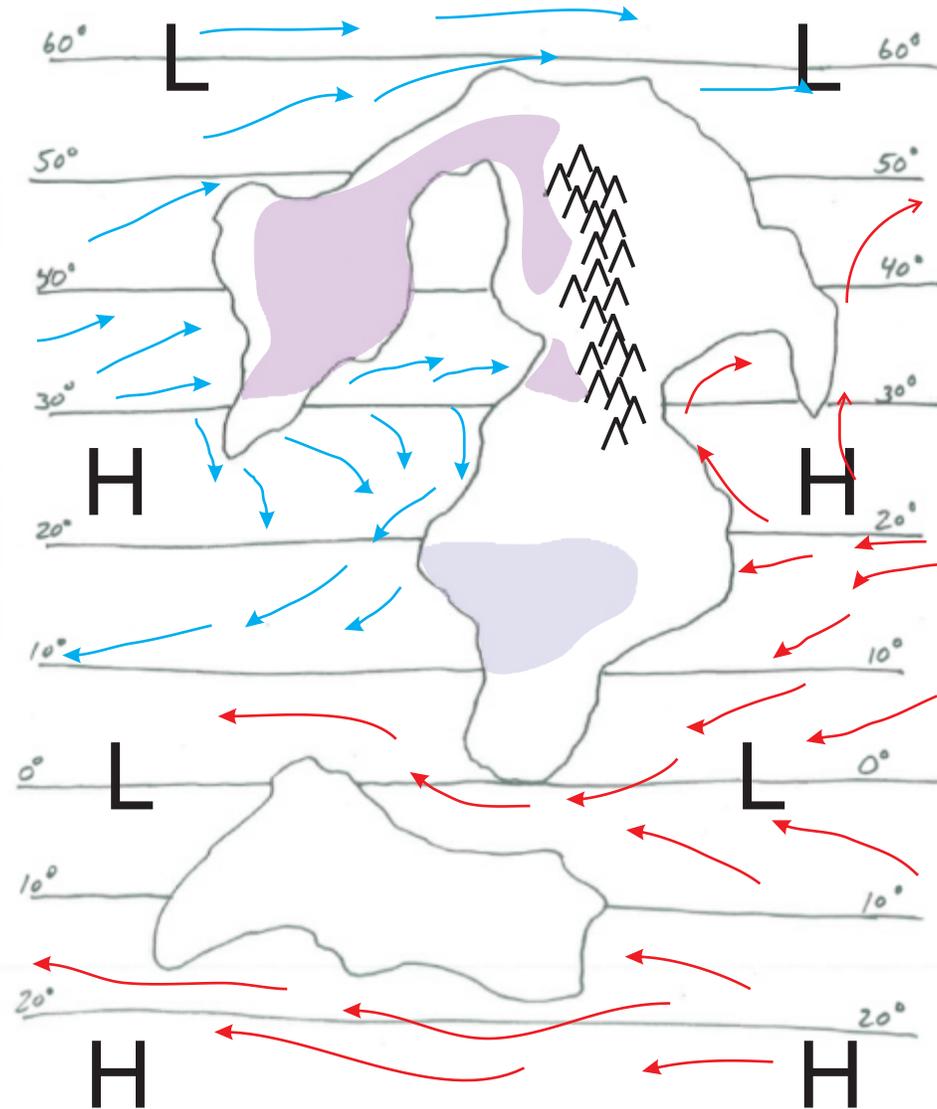
**What accounts for the shapes and positions of year-round rainforests and deserts?**

Major rainforests always exist near the equator, from approximately 5 degrees north to 5 degrees south. This is because the equator is a region of low pressure, rising air...

Major deserts...

The shapes of these rainforests and deserts are influenced by warm and cold ocean currents...

# Seasonal Climates



## What accounts for the seasonal climates on this continent?

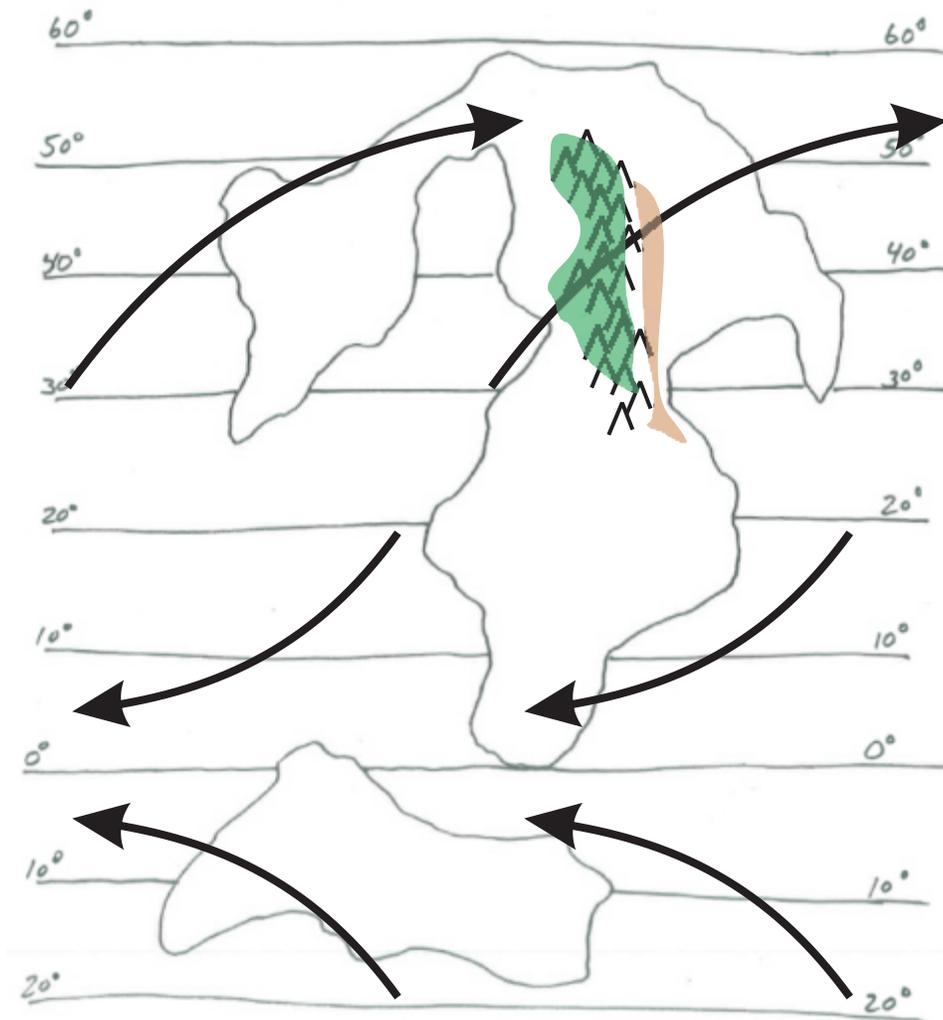
Seasonal climates result from the shifting of the Earth's pressure belts in response to the changing position of the sun. During the spring and fall, the sun is overhead at the equator, resulting in rising equatorial air. This position of the sun produces the high and low pressure belts shown above.

During June, however, the sun's position shifts northward, causing the pressure belts to shift northward also. At this time, the low pressure from the equator shifts into the "powder blue" region shown between 10 and 20 degrees North, on the map above. This low pressure brings increased precipitation in June. This region experiences summer in June, so this is a "summer wet / winter dry" climate.

The "easter purple" region above is a "summer dry / winter wet" climate. This is because...

On this particular continent, there is no "summer wet / winter dry" climate between 10 and 20 degrees south latitude. This is because...

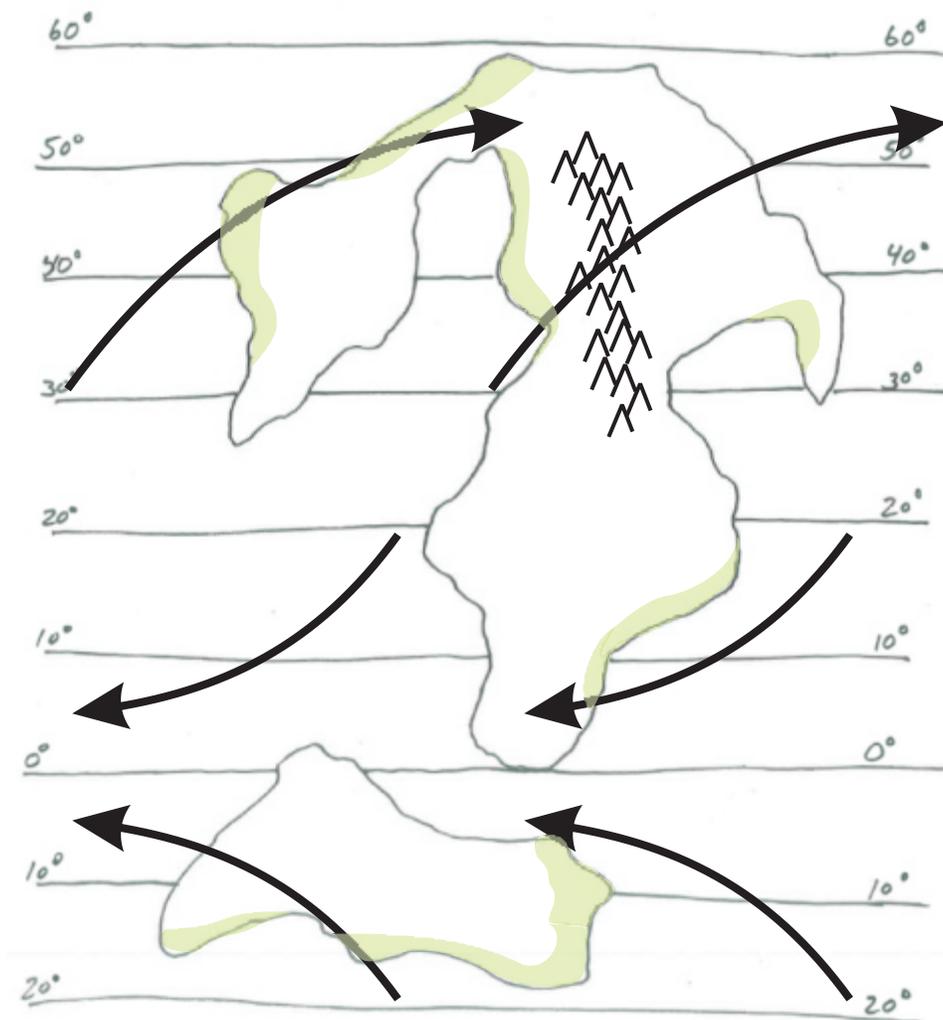
# Rainshadow Effect



**What accounts for the “rainshadow wet” and “rainshadow dry” regions?**

The rainshadow effect occurs wherever a prevailing wind crosses...

# Coastal Wet Climates



**What accounts for the “coastal wet” climates?**

Coastal wet climates occur everywhere...