

Deserts are classified by their geographical location and dominant weather pattern. Here are a few of these categories and their characteristics explained briefly:

Trade wind deserts:

The trade winds are dry winds that move toward the Equator. These winds remove cloud cover, allowing more sunlight to heat the land. Most of the major deserts of the world lie in areas crossed by the trade winds. The world's largest desert, the Sahara of North Africa is a trade wind desert.

Rain shadow deserts:

Rain shadow deserts are formed because tall mountain ranges prevent moisture and clouds from reaching areas on the protected side of the range. As air rises over the mountain, water is precipitated and the air loses its moisture content. A desert is formed in the leeward shadow of the range.

Coastal deserts:

Coastal deserts generally are found on the western edges of continents. They are affected by cold ocean currents that parallel the coast. Because local wind systems dominate the trade winds, these deserts are less stable than other deserts. Winter fogs, produced by upwelling cold currents, frequently cover coastal deserts and block sunshine and heat. Coastal deserts are more complex. Because they are at the meeting point of terrestrial, oceanic, and atmospheric systems.

Polar deserts:

Polar deserts on the Earth cover nearly five million square kilometers and are mostly bedrock or plains. Sand dunes are not prominent features in these deserts. But snow dunes occur commonly in areas where rainfall is locally more common. Temperature changes in polar deserts frequently cross the freezing point of water.