

E-Zones

Under a classification system devised by the Food and Agriculture Organization (FAO) of the United Nations, forests are classified into five basic climate groupings, or domains, according to temperature. Within each domain are forests with different levels of precipitation, ranging from very wet (rain-

forest) to very dry (desert). The FAO has identified 20 different Global Ecological Zones, each with distinctive precipitation patterns and vegetation types. Higher elevations can affect temperature and vegetation, and mountain forests are considered to be a separate ecological zone within each domain.

Domain		Global Ecological Zone	
Name	Criteria	Name	Criteria
Tropical	Mean monthly temperature greater than 18° C (64° F) all months of the year	Tropical rainforest	Annual precipitation: >1500 mm (60 in), often >2000 mm (80 in); 0-3 months of year dry ¹ (during winter)
		Tropical moist deciduous forest	Annual precipitation: 1000-2000 mm (40-80 in); 3-5 months dry (during winter)
		Tropical dry forest	Annual precipitation: 500-1500 mm (20-60 in); 5-8 months dry (during winter)
		Tropical shrubland	Annual precipitation: 200-500 mm (8-20 in); evaporation greater than precipitation
		Tropical desert	All months dry
		Tropical mountain systems	Approximately >1000 m (3300 ft) altitude (with local variations)
Subtropical	Mean monthly temperature of more than 10° C (50° F) at least 8 months of the year	Subtropical humid forest	Annual precipitation: >1000 mm (40 in); humid, no dry season
		Subtropical dry forest	Annual precipitation: 400-900 mm (16-36 in); winter rains, dry summer
		Subtropical steppe	Annual precipitation: varies; evaporation greater than precipitation
		Subtropical desert	All months dry
		Subtropical mountain systems	Approximately > 800-1000 m (2600-3300 ft) altitude
Temperate	Mean monthly temperature of more than 10° C (50° F) between 4 and 8 months of the year	Temperate oceanic forest	Annual precipitation: from 400-800 mm (16-32 in) up to 2000-3000 mm (80-120 in); coldest month more than 0° C (32° F)
		Temperate continental forest	Continental climate; coldest month less than 0° C (32° F)
		Temperate steppe	Annual precipitation: 200-400 mm (8-16 in); evaporation greater than precipitation
		Temperate desert	All months dry
		Temperate mountain systems	Approximately > 800 m (2600 ft) altitude
Boreal	Mean monthly temperature of more than 10° C (50° F) one to 4 months of the year	Boreal coniferous forest	Annual precipitation: generally less than 500 mm (20 in); dense coniferous forest dominant
		Boreal tundra woodland	Annual precipitation: generally less than 500 mm (20 in); permafrost throughout; woodland and sparse forest dominant
		Boreal mountain systems	Approximately > 600 m (2000 ft) altitude
Polar	Mean monthly temperature of less than 10° C (50° F) all months of the year	Polar	Same as domain level

1 A dry month is defined as a month in which the total precipitation expressed in millimeters is equal to or less than twice the mean temperature in degrees Celsius.