The Koeppen Climate Classification System

The Koeppen System has been used for over 100 years

Requirements:

System had to be global, so input data had to be simple, only monthly average temp and precip.

Boundaries of climate regions should coincide with boundaries of vegetation (ecosystem) regions.
The Koeppen Climatic Classification System Has Five Major Climate Groups Each Is Designated with an Alphabetic Letter

A Tropical Wet Climates

B Dry Climates, both desert and semi-desert

C Mesothermal, mid-latitude or subtropical seasonal

D Microthermal, humid continental

E Polar
Wet Equatorial Climate, Group A

Station: Uaupés, Brazil  
Lat/long: 0°08' S 67°05' W  
Total Ann. Precip.: 291.7 cm (114.8 in.)  
Elevation: 86 m (282.2 ft)  
Population: 7500

Ann. Temp. Range: 2°C (3.6°F)  
Ann. Hr of Sunshine: 2018

(a)
Tropical Monsoon Climate, Group A

Station: Yangon, Myanmar
Latitude: 16°47' N
Longitude: 96°10' E
Avg. Ann. Temp.: 27.3°C (81.1°F)
Total Ann. Precip.: 252.7 cm (99.5 in.)
*(Formerly Rangoon, Burma)

Elevation: 23 m (76 ft)
Population: 2,458,700
Ann. Temp. Range: 5.5°C (9.9°F)

Map of Myanmar

(a) Bar chart showing precipitation and temperature over months.
(b) Image of tropical vegetation.

MYANMAR

Equator

INDIAN OCEAN

0 500 MILES

0 500 KILOMETERS
Tropical Wet and Dry Climate, Group A

Station: Mérida, Mexico
Lat/long: 20°59' N 89°39' W
Avg. Ann. Temp.: 26°C (78.8°F)
Total Ann. Precip.: 93 cm (36.6 in.)

Elevation: 22 m (72.2 ft)
Population: 400,000
Ann. Temp. Range: 5°C (9°F)
Ann. Hr of Sunshine: 2379

Graph showing temperature and precipitation data.

Map of Mexico with Mérida marked.
Humid Subtropical Climate, Croup C

- Station: Nagasaki, Japan
- Elevation: 27 m (88.6 ft)
- Lat/long: 32° 44' N 129° 52' E
- Population: 449,000
- Avg. Ann. Temp.: 16°C (60.8°F)
- Ann. Temp. Range:
  - Total Ann. Precip.: 195.7 cm (77 in.)
- Ann. Hr of Sunshine: 2131
Subtropical Monsoon Climate, Group C

Station: Chengdu, China  Cwa
Lat/Long: 30°40' N 104°04' E
Avg. Ann. Temp.: 17°C (62.6°F)
Total Ann. Precip.: 114.6 cm (45.1 in.)
Elevation: 498 m (1633.9 ft)
Population: 2,260,000
Ann. Temp. Range: 20°C (36°F)
Ann. Hr of Sunshine: 1056
Cool Marine West Coast Climate, Group C
Marine West Coast Climate in the Highest Mountains of the Appalachians, Group C
Mediterranean Climate

Warm, Dry Summers
with
Cool Moist Winters,
Group C
Mediterranean Climate Often Associated with Chaparral Vegetation
Humid Continental Climate, Group D - Warm Summers
Humid Continental Climate, Group D with Hint of Monsoon Effects – Strong Seasonality of Temp and Dry Winters
Humid Continental Climate in Indiana, Soybean Field
Humid Continental, Mild Summer, Group D
Extreme Continental in Canada, Not as Extreme as Siberia, Cool Summers and Cold Winters, Group D
Environment Typical of the Great Northern Forest of Alaska, Canada and Russia, Group D
Extreme Continental in Northern Siberia, Winter Dry Because of Extreme Cold, Group D
Arctic Tundra, Group E
Polar Climate, Group E

(a)
Hot, Dry Climate, Subtropical Desert, Group B
Desert of Southern Arizona
Hot, Semi-desert, Group B

Station: Walgett, New South Wales, Australia
BSb
Elevation: 133 m (436 ft)
Population: 2160
Avg. Ann. Temp.: 20°C (68°F)
Ann. Temp. Range: 17°C (31°F)
Total Ann. Precip.: 45.0 cm (17.7 in.)

(a) Graph showing temperature and precipitation

(b) Image of the desert landscape

(c) Map of Australia with Walgett location

(d) Image of the sky with clouds
Hot, Semi-desert in India
Cool Desert, Great Basin of Nevada, Group B
Scrub and Sagebrush in Cool Desert Climate Group B
Desert of Western U.S.
Cool Grassland or Steppe – Short Grass Prairie, Group B
Cool Grassland or Steppe, in Kazakstan, Group B
South Australia Near Coast