

All land regions:

It is *very likely* that all land regions will warm in the 21st century.

Africa:

Warming is *very likely* to be larger than the global annual mean warming throughout the continent and in all seasons, with drier subtropical regions warming more than the moister tropics.

Annual rainfall is *likely* to decrease in much of Mediterranean Africa and the northern Sahara, with a greater likelihood of decreasing rainfall as the Mediterranean coast is approached.

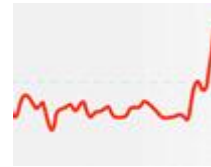
Rainfall in southern Africa is *likely* to decrease in much of the winter rainfall region and western margins. There is *likely* to be an increase in annual mean rainfall in East Africa. It is unclear how rainfall in the Sahel, the Guinean Coast and the southern Sahara will evolve.

Mediterranean and Europe:

Annual mean temperatures in Europe are *likely* to increase more than the global mean. Seasonally, the largest warming is *likely* to be in northern Europe in winter and in the Mediterranean area in summer. Minimum winter temperatures are *likely* to increase more than the average in northern Europe. Maximum summer temperatures are *likely* to increase more than the average in southern and central Europe. Annual precipitation is *very likely* to increase in most of northern Europe and decrease in most of the Mediterranean area. In central Europe, precipitation is *likely* to increase in winter but decrease in summer. Extremes of daily precipitation are *very likely* to increase in northern Europe. The annual number of precipitation days is *very likely* to decrease in the Mediterranean area. Risk of summer drought is *likely* to increase in central Europe and in the Mediterranean area. The duration of the snow season is *very likely* to shorten, and snow depth is *likely* to decrease in most of Europe.

Asia:

Warming is *likely* to be well above the global mean in central Asia, the Tibetan Plateau and northern Asia, above the global mean in eastern Asia and South Asia, and similar to the global mean in Southeast Asia. Precipitation in boreal winter is *very likely* to increase in northern Asia and the Tibetan Plateau, and *likely* to increase in eastern Asia and the southern parts of Southeast Asia. Precipitation in summer is *likely* to increase in northern Asia, East Asia, South Asia and most of Southeast Asia, but is *likely* to decrease in central Asia. It is *very likely* that heat waves/hot spells in summer will be of longer duration, more intense and more frequent in East Asia. Fewer very cold days are *very likely* in East Asia and South Asia. There is *very likely* to be an increase in the frequency of intense precipitation events in parts of South Asia, and in East Asia. Extreme rainfall and winds associated with tropical cyclones are *likely* to increase in East Asia, Southeast Asia and South Asia.



North America:

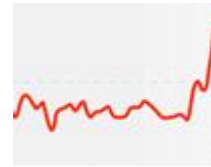
The annual mean warming is *likely* to exceed the global mean warming in most areas. Seasonally, warming is *likely* to be largest in winter in northern regions and in summer in the southwest. Minimum winter temperatures are *likely* to increase more than the average in northern North America. Maximum summer temperatures are *likely* to increase more than the average in the southwest. Annual mean precipitation is *very likely* to increase in Canada and the northeast USA, and *likely* to decrease in the southwest. In southern Canada, precipitation is *likely* to increase in winter and spring but decrease in summer. Snow season length and snow depth are *very likely* to decrease in most of North America except in the northernmost part of Canada where maximum snow depth is *likely* to increase.

Central and South America:

The annual mean warming is *likely* to be similar to the global mean warming in southern South America but larger than the global mean warming in the rest of the area. Annual precipitation is *likely* to decrease in most of Central America and in the southern Andes, although changes in atmospheric circulation may induce large local variability in precipitation response in mountainous areas. Winter precipitation in Tierra del Fuego and summer precipitation in south-eastern South America is *likely* to increase. It is uncertain how annual and seasonal mean rainfall will change over northern South America, including the Amazon forest. However, there is qualitative consistency among the simulations in some areas (rainfall increasing in Ecuador and northern Peru, and decreasing at the northern tip of the continent and in southern northeast Brazil).

Australia and New Zealand:

Warming is *likely* to be larger than that of the surrounding oceans, but comparable to the global mean. The warming is less in the south, especially in winter, with the warming in the South Island of New Zealand *likely* to remain less than the global mean. Precipitation is *likely* to decrease in southern Australia in winter and spring. Precipitation is *very likely* to decrease in south-western Australia in winter. Precipitation is *likely* to increase in the west of the South Island of New Zealand. Changes in rainfall in northern and central Australia are uncertain. Increased mean wind speed is *likely* across the South Island of New Zealand, particularly in winter. Increased frequency of extreme high daily temperatures in Australia and New Zealand, and a decrease in the frequency of cold extremes is *very likely*. Extremes of daily precipitation are *very likely* to increase, except possibly in areas of significant decrease in mean rainfall (southern Australia in winter and spring). Increased risk of drought in southern areas of Australia is *likely*.



Polar regions:

The Arctic is *very likely* to warm during this century more than the global mean. Warming is projected to be largest in winter and smallest in summer. Annual arctic precipitation is *very likely* to increase. It is *very likely* that the relative precipitation increase will be largest in winter and smallest in summer. Arctic sea ice is *very likely* to decrease in its extent and thickness. It is uncertain how the Arctic Ocean circulation will change. The Antarctic is *likely* to warm and the precipitation is *likely* to increase over the continent. It is uncertain to what extent the frequency of extreme temperature and precipitation events will change in the polar regions.