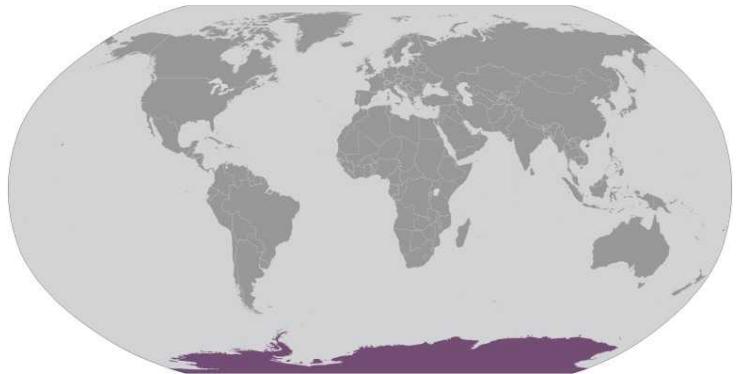
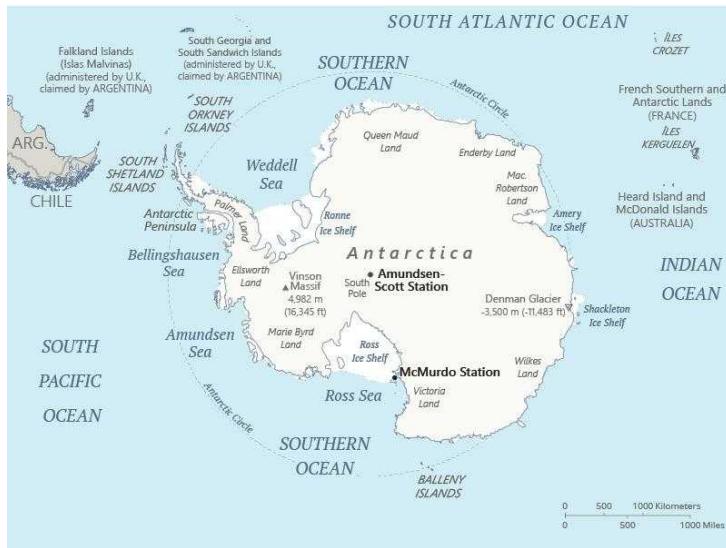




# Antarctica



**Background** Speculation over the existence of a "southern land" was confirmed in the early 1820s when British and American commercial operators and British and Russian national expeditions began exploring the Antarctic Peninsula region and other areas south of the Antarctic Circle. In 1840, it was finally established that Antarctica was indeed a continent and not merely a group of islands or an area of ocean. Several exploration "firsts" were achieved in the early 20th century, but the area saw little human activity. Following World War II, however, the continent experienced an upsurge in scientific research. A number of countries have set up a range of year-round and seasonal stations, camps, and refuges to support scientific research in Antarctica. Seven have made territorial claims, with two maintaining the basis for a claim, but most countries do not recognize these claims. In order to form a legal framework for countries' activities on the continent, an Antarctic Treaty was negotiated that neither denies nor recognizes existing territorial claims; it was signed in 1959 and entered into force in 1961. Also relevant to Antarctic governance are the Environmental Protocol to the Antarctic Treaty and the Convention on the Conservation of Antarctic Marine Living Resources.

**Government type** the Antarctic Treaty and its follow-on agreements govern the use of Antarctica, ensuring it is used only for peaceful purposes and scientific research; signed in 1959 and in force since 1961, the original Treaty bans military activity, weapons testing, and nuclear waste disposal, while allowing military personnel to assist with research or other peaceful efforts; it promotes international cooperation in science, guarantees the free exchange of research, and freezes territorial claims; the Treaty covers all land and ice south of 60° south latitude, and allows Treaty nations to inspect any station or facility

decisions are made by consensus at annual meetings, and member countries implement these decisions through their national laws (see "Legal system"); additional agreements have strengthened the Treaty system, including conventions to protect seals (1972) and other marine life (1980), as well as an environmental protocol (1991, took effect in 1998); the protocol bans mining and includes strict rules on environmental impact, waste, pollution, wildlife, and protected areas; as of December 2024, there are 58 member nations: 29 consultative members, including the 7 claimant countries (Argentina, Australia, Chile, France, New Zealand, Norway, and the UK), and 29 non-consultative members; a permanent Antarctic Treaty Secretariat, established in 2004 in Buenos Aires, supports the system

**Area** total : 14.2 million sq km  
land: 14.2 million sq km (285,000 sq km ice-free, 13.915 million sq km ice-covered) (est.)  
note: fifth-largest continent, following Asia, Africa, North America, and South America, but larger than Australia and the continent of Europe

**Climate** the coldest, windiest, and driest continent on Earth; severe low temperatures vary with latitude, elevation, and distance from the ocean; East Antarctica is colder than West Antarctica because of its higher elevation; Antarctic Peninsula has the most moderate climate; higher temperatures occur in January along the coast and average slightly below freezing; summers characterized by continuous daylight, while winters bring continuous darkness; persistent high pressure over the interior brings dry, subsiding air that results in very little cloud cover

**Natural resources** iron ore, chromium, copper, gold, nickel, platinum and other minerals, and coal and hydrocarbons have been found in small noncommercial quantities; mineral exploitation except for scientific research is banned by the Environmental Protocol to the Antarctic Treaty; krill, icefish, toothfish, and crab have been taken by commercial fisheries, which are managed through the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)

**Population** no permanent inhabitants, but staff is present at year-round and summer-only research stations

note: 56 countries have signed the 1959 Antarctic Treaty; 30 of those operate a number of seasonal-only (summer) and year-round research stations on the continent and its nearby islands; the population varies from approximately 5,000 in summer to 1,100 in winter, with about 1,000 support personnel on ships nearby

as of 2024, peak summer (December-February) maximum capacity in scientific stations - 4,713 total; Argentina 425, Australia 238, Belarus 15, Belgium 55, Brazil 64, Bulgaria 25, Chile 375, China 164, Czechia 32, Ecuador 35, Finland 16, France 136, France and Italy jointly 70, Germany 60, India 72, Italy 150, Japan 130, South Korea 158, New Zealand 85, Norway 60, Peru 30, Poland 41, Russia 211, South Africa 80, Spain 79, Sweden 16, Ukraine 15, United Kingdom 315, United States 1,495 , Uruguay 66 (2024)

winter (June-August) maximum capacity in scientific stations - 1,056 total; Argentina 221, Australia 52, Brazil 15, Chile 114, China 32, France 24, France and Italy jointly 13, Germany 9, India 48, Japan 40, Netherlands 10, South Korea 25, NZ 11, Norway 7, Poland 16, Russia 125, South Africa 15, Ukraine 12, UK 44, US 215, Uruguay 8 (2024)