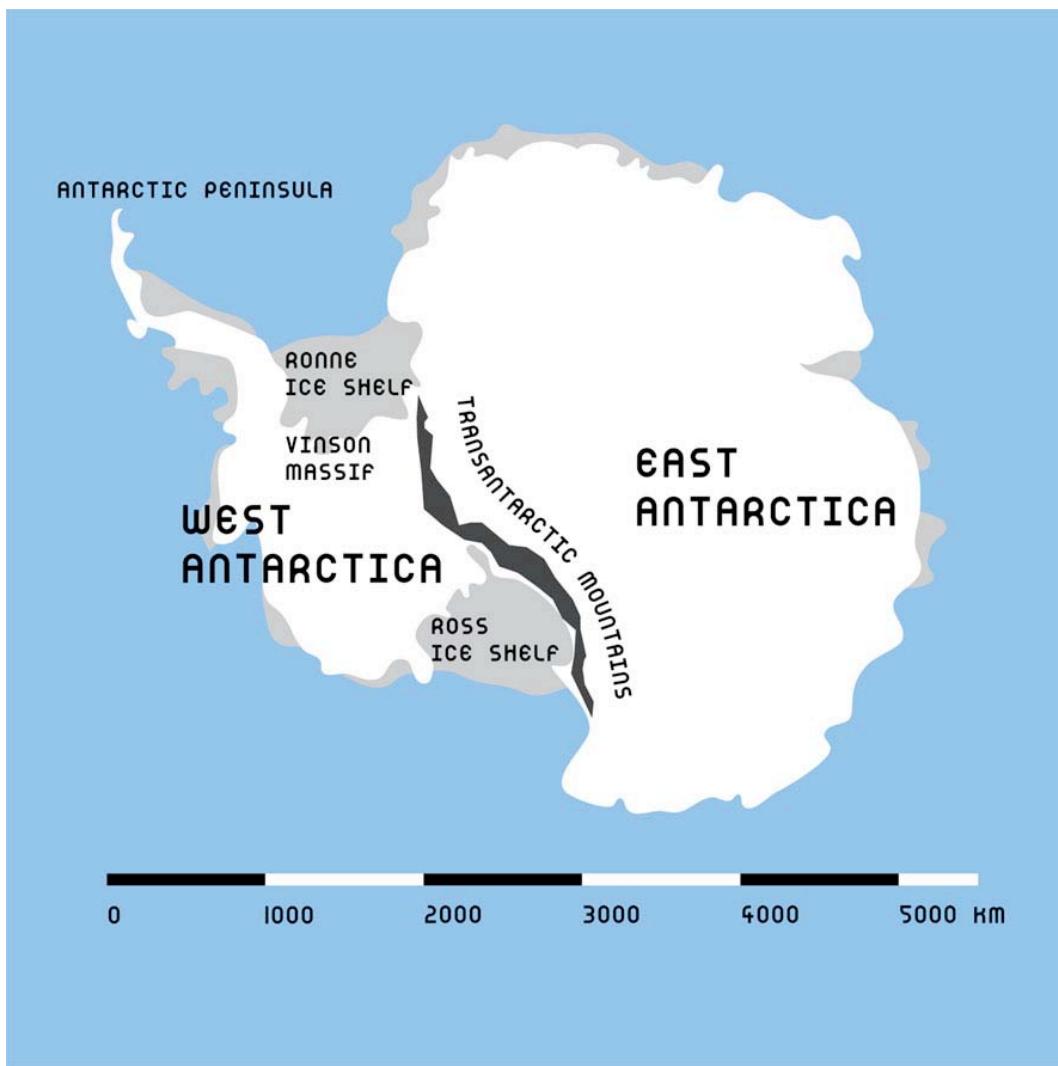


Antarctica: The frozen continent



Antarctica is the world's last great wilderness.

It is a continent almost entirely buried by snow and ice. It is so hostile and remote that it has **no permanent residents**. Surrounded by the Southern Ocean, Antarctica covers nearly 9% of the Earth's land, and is 25% bigger than Europe, making it the **fifth largest continent**. It is also the **least polluted** of all the continents.



Antarctica is divided into **two main areas** - East Antarctica (sometimes called Greater Antarctica), and West Antarctica (Lesser Antarctica) separated by the **Transantarctic Mountains** that stretch 3,540 kilometres across the continent. West Antarctica is the smallest of the two and has a peninsula that sticks out nearly 1,000 kilometres from the South Pole towards the southern tip of South America.



About 99% of Antarctica is covered with a vast ice sheet. It is the largest single mass of ice on Earth and is bigger than the whole of Europe. At least 3 million years old (and possibly as much as 30 million years old in places), the ice sheet averages 2,450 metres deep and holds about 70% of the world's fresh water. With such a thick layer of ice, Antarctica is the **highest** of all the continents. The average altitude is about 2,300 metres above sea level, although in places, the bottom of the ice can be as much as 3,000m below sea level. If they weren't filled with ice, large parts of Antarctica would be under the sea.. **Vinson Massif** is Antarctica's highest point, rising to a height of 4,897 metres.

Antarctica's ice sheet is constantly on the move. Huge **rivers of ice** known as glaciers are pulled slowly by gravity from the interior towards the sea. Along the way, the ice cracks, breaks and is ruptured by underlying rock. **Crevasses** up to hundreds of metres deep can form on the surface.



On reaching the sea, the glaciers spill out over the water's surface and create gigantic floating blocks of ice called ice shelves. The largest, the **Ross Ice Shelf**, is the size of France. Sometimes pieces of an ice shelf break off to form icebergs. Beyond the ice shelves, much of the surrounding ocean freezes over during the winter. With this extra sea winter sea-ice, Antarctica almost **doubles in size**.