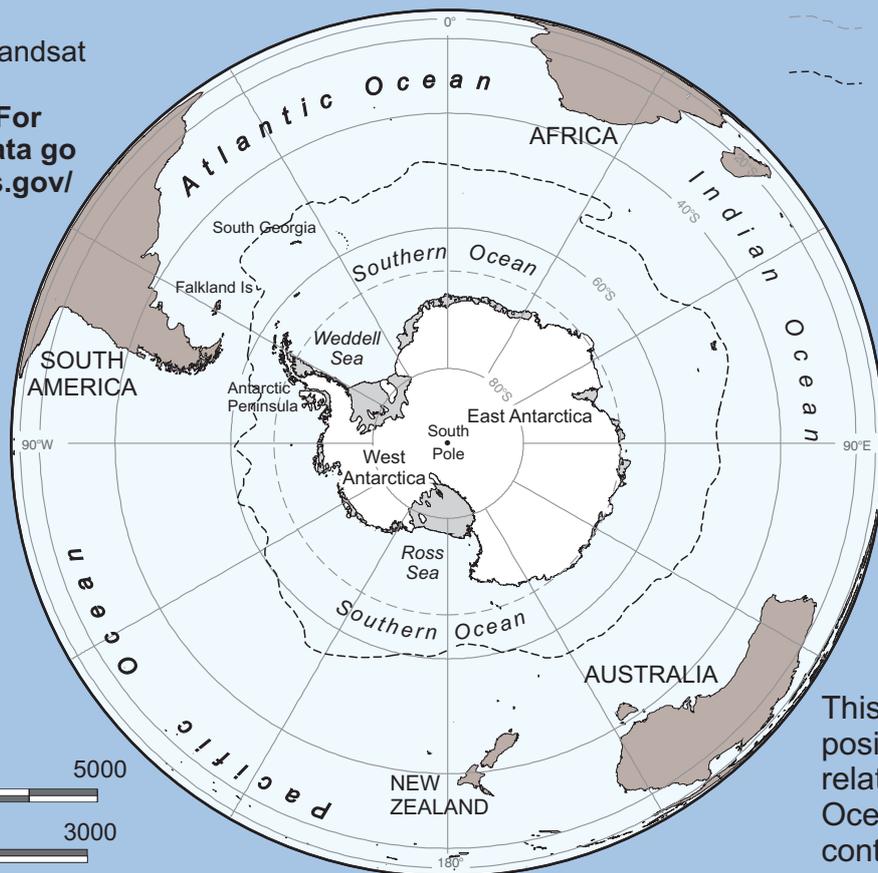


Antarctica in Context

This fact sheet accompanies the Landsat Image Mosaic of Antarctica (LIMA). For access to LIMA data go to <http://lima.usgs.gov/>



Antarctic Circle, 66°34'S
 Antarctic Polar Front (where the cold northward-flowing waters sink beneath the warmer waters of the sub-Antarctic)

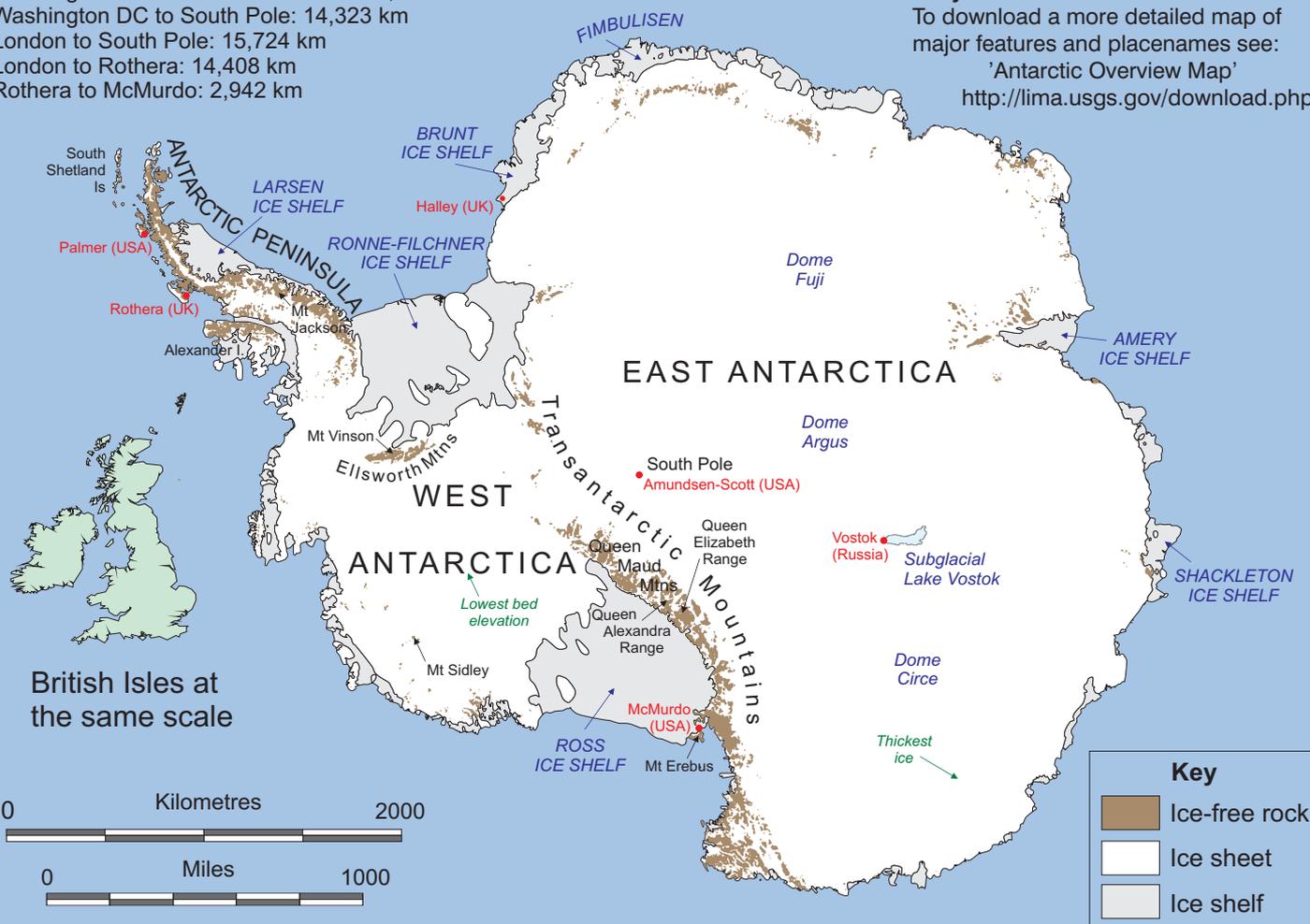


This map shows the position of Antarctica in relation to the Southern Ocean and surrounding continents

Distances across the world to Antarctica:

Washington DC to McMurdo Station: 14,201 km
 Washington DC to South Pole: 14,323 km
 London to South Pole: 15,724 km
 London to Rothera: 14,408 km
 Rothera to McMurdo: 2,942 km

This map shows the names of major features in Antarctica. To download a more detailed map of major features and placenames see: 'Antarctic Overview Map' <http://lima.usgs.gov/download.php>



British Isles at the same scale

Key	
	Ice-free rock
	Ice sheet
	Ice shelf

Antarctic Facts Geographical Statistics

SEA

Area of the Southern Ocean (below the polar front): 31.8 million km² or about 8.8% of the world's ocean area.
Volume of the Southern Ocean (below the polar front): 115.5 million km³ or 8.7% of the world's ocean volume.

CONTINENT

AREAS

		% of total
Antarctica including ice shelves and islands (Around 58 times the size of the UK, or 1.4 times the size of the USA)	13 829 430 km ²	100%
Antarctica excluding ice shelves and islands	12 272 800 km ²	88.74%
Area ice free (approx. the size of Denmark)	44 890 km ²	0.32%
Ross Ice Shelf (approx. the size of France)	510 680 km ²	3.69%
Ronne-Filchner Ice Shelf (approx. the size of California)	439 920 km ²	3.18%

LENGTHS

Antarctic Peninsula 1339 km
Transantarctic Mountains 3300 km

Coastline*		% of total
Ice shelves	18877 km	46%
Rock	5468 km	12%
Ice coastline	20972 km	42%

*note: coastlines are fractal in nature, so any measurement of them is dependant upon the scale at which the data is collected. Coastline lengths here are calculated from the most detailed information available.



HEIGHTS

Average height of Antarctica (including ice shelves) 1958 m
Average height of Antarctica (excluding ice shelves) 2194 m

Highest Mountains:		
1, Mt Vinson (Ellsworth Mts.) (re-surveyed 2004)		4892 m
2, Mt Tyree (Ellsworth Mts.)		4852 m
3, Mt Shinn (Ellsworth Mts.)		4660 m
4, Mt Gardner (Ellsworth Mts.)		4573 m
5, Mt Kirkpatrick (Queen Alexandra Range)		4528 m
6, Mt Elizabeth (Queen Alexandra Range)		4480 m
7, Mt Craddock (Ellsworth Mts.)		4368 m
8, Mt Epperly (Ellsworth Mts.)		4359 m
9, Mt Markham (Queen Elizabeth Range)		4350 m
10, Mt Bell (Queen Alexandra Range)		4303 m

Other notable Mountains:

Mt Jackson (highest mountain on the Antarctic Peninsula)	3184 m
Mt Erebus (Ross Island, highest offshore mountain)	3794 m
Mt Sidley (highest peak outside Ellsworth or Transantarctic Mts.)	4285 m



ICE

Average thickness: 1829 m
 Average thickness of grounded ice: 2034 m
 Average thickness of East Antarctic Ice Sheet: 2226 m
 Average thickness of West Antarctic Ice Sheet: 1306 m

Maximum thickness: 4776 m
 (Near Dome C, 69°56' S, 135°12'E: see map)
 Average bed elevation 153 m
 Lowest bed elevation -2496 m
 (Bentley subglacial trench 80°19' S, 110°5' W: see map)

Ice volume:
 Total of ice sheets including ice shelves 25.4 million km³
 (amounting to a global sea level rise of approx. 70 m)
 Grounded ice sheets 24.7 million km³
 Ice shelves 0.7 million km³
 Volume of Peninsula ice 0.1 million km³

Ice Domes (approximate values)				Potential ice depth
	Coordinates	Height	Bed elevation	
Dome A	81°S 77°E	4093 m	1597 m	2486 m
Dome C	75°S 125°E	3264 m	249 m	3015 m
Dome Fuji (Valkyrie)	77°S 37°E	3786 m	963 m	2823 m
Vostok station	77°S 104°E	3529 m	352 m	3177 m
South Pole	90°S 0°E	2771 m	-57 m	2828 m

Lake Vostok (largest subglacial lake in Antarctica)
 Location: 77° 39'S, 104° 30'E
 Area: approx. 10 400 km²
 Ice thickness above lake surface: approx. 4000 m

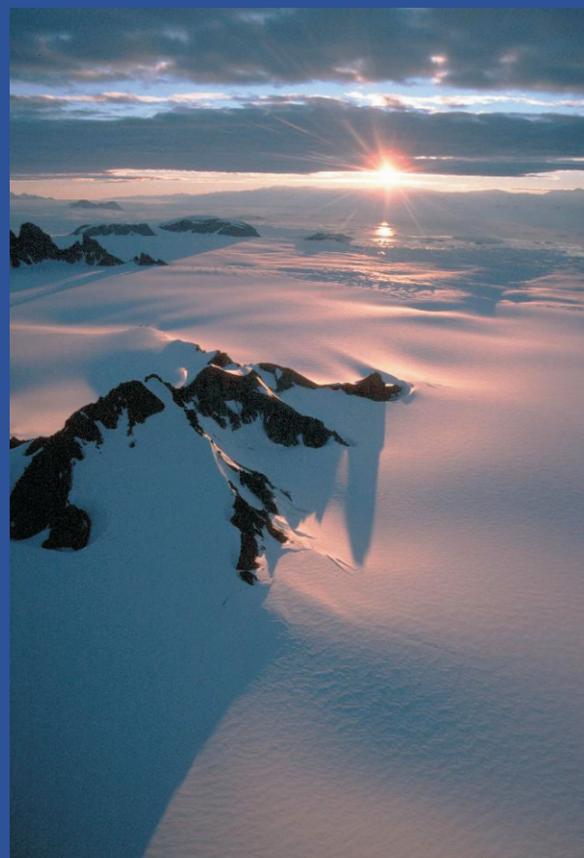
Other Antarctic Facts

Antarctica is the coldest, windiest, highest and driest continent. The coldest temperature ever recorded was -89.2°C, at the Russian station Vostok in 1983.

The Antarctic Treaty, which began in 1961, preserves the continent as a natural reserve, devoted to peace and science. There is no indigenous population. Captain James Cook first crossed the Antarctic Circle in 1773 but the first landings were not made until the 1820s. Since then this vast continent has been a fascinating land of exploration and scientific discovery.

SOURCES

Antarctic Digital Database (ADD), version 4.1: www.add.scar.org
 OSU 200 m digital elevation model
 BAS (Misc) 9 BEDMAP: Bed topography of Antarctica
 General Bathymetric Chart of the Oceans
 Mountain heights from a variety of sources including ADD,
 USGS maps, BAS and Omega Foundation survey points
 Photographs from the British Antarctic Survey image database:
www.photo.antarctica.ac.uk



To download a map of features and placenames in Antarctica:
 'Antarctic Overview Map' <http://lima.usgs.gov/download.php>
To find out more about Antarctica and British Antarctic Survey
research, visit: www.antarctica.ac.uk



British Antarctic Survey

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