THWAITES GLACIER TERMINUS & VICINITY

Walgreen Coast, Marie Byrd Land

Map by the Polar Geospatial Center, 2026
Cartography by Alaina Portoghese

1:800,000 scale when printed at 24 by 36 inches
250-meter contour interval above EGM2008 geoid (MSL)

WGS84 Antarctic Stereographic Projection, Central Meridian 107°W
Lines of longitude incidate True North

In Marie Byrd Land, West Antarctica, Thwaites Glacier drains ice from the West Antarctic Ice Sheet into the Amundsen Sea. With an ice front spanning approximately 120 kilometers (75 miles), it is considered to be the widest glacier in the world.

In part due to underlying topography and warming ocean water making contact with Thwaties Glacier's large ice-ocean interface, Thwaites Glacier has seen substantial and increasing ice loss over the past several decades.[1]

Currently, Thwaites Glacier contributes approximately four percent of overall sea level rise, assuming 3.5 millimeters of sea level rise annually.[2] Draining an area larger than Florida, if Thwaites Glacier were to collapse completely, global sea levels would climb 65 centimeters (25.5 inches).[1,3]

Because of uncertainty surrounding how imminent a full collapse of Thwaites Glacier may be, it has become a topic of extensive research for numerous fields of study, including polar and climate sciences.

ICE VELOCITY (M/YR)
0 — 4000

Data Sources:

Contours, hillshade, peak elevations, and ice boundaries derived from the Reference Elevation Model of Antarctica (REMA), provided by the Polar Geospatial Center (PGC)

Ice flow lines and ice velocity derived from the MEaSUREs InSAR-Based Antarctica Ice Velocity Map V2 (Rignot et al., 2017), provided by the National Snow and Ice Data Center (NSIDC)

Place names from the Gazetteer of the Antarctic, provided by the US Board on Geographic Names

Rock outcrop and land boundary data derived from the Antarctic Digital Database, provided by the Scientific Committee on Antarctic Research (SCAR)

[1]Steig, E. J., Ding, Q., Battisti, D. S., & Jenkins, A. (2012). Tropical forcing of Circumpolar Deep Water Inflow and outlet glacier thinning in the Amundsen Sea Embayment, West Antarctica. Annals of Glaciology, 53(60), 19-28. doi:10.3189/2012AoG60A110

[2]Morlighem, M., Rignot, E., Binder, T. et al. Deep glacial troughs and stabilizing ridges unveiled beneath the margins of the Antarctic ice sheet. Nat. Geosci. 13, 132-137 (2020). https://doi.org/10.1038/s41561-019-0510-8

[3]Morlighem, M. (2026). MEaSUREs BedMachine Antarctica, Version 4. NASA NSIDC DAAC.