

# Antarctic Conditions Fact Sheet



## Land

Ice and snow cover 98 percent of the continent.

## Climate

Winter extends from May through August. Summer extends from December through February. Temperatures during January and February range from  $-15^{\circ}\text{C}$  ( $5^{\circ}\text{F}$ ) to  $-35^{\circ}\text{C}$  ( $-31^{\circ}\text{F}$ ) inland and reach up to  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ ) along the coast. Antarctica's inland plateau has been called a polar desert. Very little moisture is in the air there, so dehydration can be a major concern for people working on the ice.

## Wind and Wind Chill

Winds range from about 8 km/hr to 64 km/hr (5 mph to 40 mph). Below freezing temperatures and high winds can lower the temperature to  $-100^{\circ}\text{C}$  ( $-148^{\circ}\text{F}$ ) and decrease the visibility to less than 30 m (100 ft).

## Storms

Storms arrive quickly. They can be very localized—the sun might be shining in one area while a severe snowstorm is happening just 80 km (50 mi) away. Blowing snow can create “whiteout” conditions with zero visibility. Low clouds on the horizon contribute to low visibility and make it hard to see crevasses and cracks in the ice. When in unknown territory, it is advised to stay put during a storm.

## Light

Due to the polar location, continuous daylight occurs during the summer, the time when scientists conduct their research.

## Internet Connection

For more on cold weather survival and Antarctica try the following Web sites.

*Outdoor Action Guide to Hypothermia and Cold Weather Injuries*

[www.princeton.edu/~oa/hypocold.html](http://www.princeton.edu/~oa/hypocold.html)

by Rick Curtis, Outdoor Action Program, Princeton University

This site reviews how your body loses heat to the environment, your body's core temperature and its regulation, hypothermia and its treatments, and other cold-related injuries. (19 November 1997)

*Live from Antarctica 2: A Passport to Knowledge Project*

[quest.arc.nasa.gov/antarctica2/index.html](http://quest.arc.nasa.gov/antarctica2/index.html)

This project, produced in part by the National Aeronautics and Space Administration and the National Science Foundation, chronicles an electronic field trip site from a January 1997 Antarctic exploration. The site provides a range of resources, including a teacher's guide, field journals, and links to related Web sites. (19 November 1997)



Source: *Field Manual for United States Antarctic Program* prepared by National Science Foundation, Revised 1995.