A Scott Tent

Credit: Josh Veitch-Michaelis, IceCube/NSF

A Scott tent sits pitched on the ice under a clear blue sky. This one is near McMurdo Station on Antarctica’s coast, but winterovers at the South Pole have occasionally erected Scott tents (and slept in them!). This type of tent is named for explorer Robert Falcon Scott, who raced to be first to reach the South Pole in the early 1900s, missing the mark by a few short weeks. The tent’s design is a simple pyramid, with double walls that help insulate against the cold and wind.
The South Pole has only two seasons—summer and winter, with roughly six months of daylight followed by six months of darkness. Crews working at the Pole for the summer generally arrive in October or November and depart in January or February. Here a Basler plane, one of the smaller aircraft for Pole departures, is boarded by a small group of summer personnel headed home.

**Credit:** Martin Wolf, IceCube/NSF
The flags flying at the ceremonial South Pole represent the twelve countries that made up the original signatories of the Antarctic Treaty, signed in 1959, which protects Antarctica as a place for peaceful, scientific explorations. However, nothing protects Antarctica from the wind, highest in the coastal regions but still felt at the South Pole.

**Credit:** Benjamin Eberhardt, IceCube/NSF
April 2022

Sunset at the South Pole

Credit: Kathrin Mallot, IceCube/NSF

The sun sets once per year at the South Pole, at the end of March. But even after the sun falls below the horizon, light lingers in the atmosphere. This twilight period can last for weeks, with the sky taking on amazing colors depending on which direction you’re facing.

Here, the IceCube Laboratory admires the setting sun’s golden glow.
May 2022

A Lunar Eclipse

**Credit:** Martin Wolf, IceCube/NSF

A super blood moon was seen from all parts of the world, including the South Pole.

Here it is seen as a clear, bright object hanging high in the dark sky above the IceCube Laboratory.
With arms up, it appears that this winterover is pointing out the magnificence of the skies overhead. But no help is needed for the viewer to recognize a breathtaking view, including not only sweeping auroras but also a clear image of the Milky Way.

The structure on the ice is one of several South Pole satellite domes.
One of the best parts of working at the South Pole all winter is being able to see the aurora australis, also known as the southern lights. Auroras occur when charged particles from the sun interact with gases in Earth’s atmosphere: oxygen emits green and red light while nitrogen creates the blue and purple glow.

Auroras are usually only visible at high-latitude regions, like the north or south polar regions.

Credit: Martin Wolf, IceCube/NSF
When the moon is out in winter, the dark skies can brighten considerably, sometimes to the point of not needing to rely on headlamps when walking outdoors.

Here the moon is setting, and the auroras are bright enough to just be visible again.

The IceCube Laboratory is the tiny building on the horizon just below the moon.

Credit: Kathrin Mallot, IceCube/NSF
For the benefit of research projects that monitor the sky during winter darkness, outdoor lighting at the South Pole is minimized and kept to a red spectrum, which reduces interference.

The frosty exterior of the South Pole station's main entrance is still bathed in red at twilight.
Every year, the National Oceanic and Atmospheric Administration (NOAA) measures the composition of the ozone layer using measurements from a balloon-borne device called an ozonesonde.

IceCube winterovers sometimes help the NOAA team to launch the weather balloons carrying ozonesondes, which sample ozone levels vertically through the atmosphere.
South Pole Station

Credit: Yuya Makino, IceCube/NSF

The Amundsen-Scott South Pole Station is one of the main structures at the South Pole.

Shaped like an E, it has room for up to 150 people in the summer and about 45 in the winter, and it features a gymnasium, music room, galley, greenhouse, and more.
The South Pole generally refers to the geographic location of the southernmost point on the surface of the Earth that intersects its axis of rotation.

The location shifts each year due to movement of the polar ice sheet. A sign and a decorative marker—a new one each year—identify the spot.

Credit: Martin Wolf, IceCube/NSF