

# Northern Lights

There is a lot of activity in our night sky, from the full moon to falling stars to eclipses. In the Northern Hemisphere, one spectacle that sometimes appears on the northern horizon is a light-show known as the Northern Lights or *Aurora borealis*. This light-show can also be seen in the Southern Hemisphere where it is known as the Southern Lights or *Aurora australis*.

These light-shows are caused when particles from the sun, travelling at 1,600km per second, are thrown against the Earth by solar wind. When these particles collide with the Earth's atmosphere, the energy of the particles turns into colourful light, which appear like dancing lights in the sky.

The particles from the sun are directed north and south by the Earth's magnetic field, toward the two magnetic poles. There are two areas of aurora activity and these lie about 20 to 25 degrees from each pole.

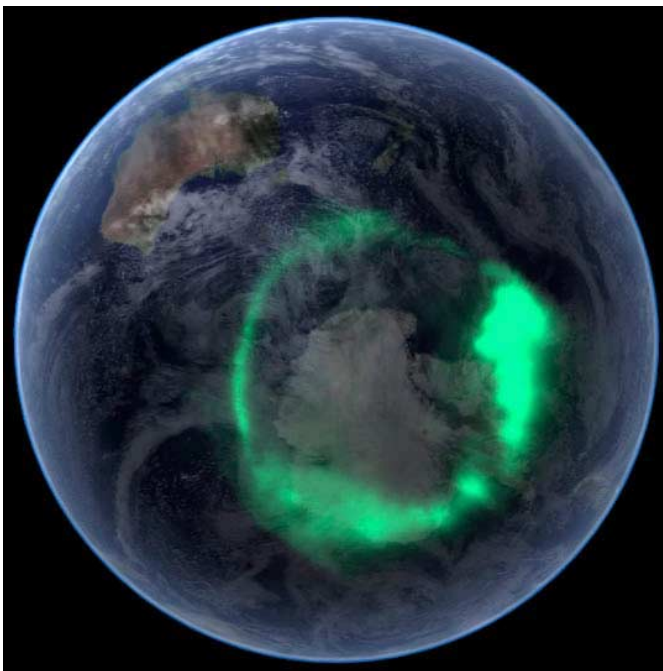


Photo © Robbie Murphy



Sherkin Island, Co Cork, is far enough north to catch a glimpse of the Northern Lights. This photograph was taken by Robbie Murphy in November 2003.

So the further north you live, the better chance you have of seeing the Northern Lights. During times of intense activity, the northern lights have been seen as far south as Athens and Mexico City, and the southern lights have been seen as far north as Brisbane in Australia. The best time to view the Northern Lights is from September to October and from March to April. Check out [www.northern-lights.no](http://www.northern-lights.no) for more information and for details of when the lights are most active.

From space, the aurora is a crown of light that circles each of Earth's poles. NASA's IMAGE satellite captured this view of the *Aurora australis* (Southern lights) on September 11, 2005. It appeared four days after a record-setting solar flare sent plasma—an ionised gas of protons and electrons—flying towards the Earth. From the Earth's surface, the ring would appear as a curtain of light shimmering across the night sky.

[http://earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img\\_id=17165](http://earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=17165)

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