

Cloud Shadow Germany

In November 2012, the Earth Observing-1 satellite acquired this image of a layer of clouds casting a distinctive shadow on another, lower cloud layer. The upper deck was more than 1 kilometer (0.6 miles) above the ground. Both layers were composed of stratus clouds, a low-lying type that tends to be uniform and flat. When the satellite's Advanced Land Imager acquired the image, the clouds were over northeastern Germany near Harz National Park.

While local meteorological conditions affect cloud height, the latitude at which clouds form is also important. Almost all clouds exist in the lowest level of the atmosphere, the troposphere. However, the depth of the troposphere varies by latitude—thinner near the poles than the Equator, so clouds can occur at higher levels in the tropics than they do at high- and mid-latitudes.