

Polaris (North Star)

Polaris, also known as Alpha Ursae Minoris or the North Star, is a somewhat bright star that is almost straight above Earth's north pole. Because of this, when it is seen from Earth, it looks like it always stays in the same place in the sky. This is different than other stars which look like they move in a circle in the sky because of the Earth's rotation. Because Polaris is always straight above the north pole, looking for it in the sky is an easy way to tell which way is north. Many years ago, sailors used Polaris to help them figure out where they were on the ocean and what way they were moving.

Polaris is about 430 light years from the Earth and has an apparent magnitude of 1.97 and an absolute magnitude of -3.64. Polaris is actually a triple star, but you need some binoculars or a small telescope to see the second star and a very powerful telescope to see the third star.

Even though Polaris is the North Star today, this has not always been the case. The place in the sky that the Earth's north pole points at changes slowly over time. This movement is called stellar precession. In 3000 BC, a faint star called Thuban in the constellation of Draco was the North Star. Polaris did not become the North Star until about AD 500. It will get closer to straight above the Earth's north pole until sometime in 2102. Then it will move away again. It will be the closest star to the pole until about AD 3000.

