

UAMN Virtual Early Explorers: Northern Skies

The Magnetic Earth and Sun

The Earth is a giant magnet! Just like smaller magnets, it has North and South Poles. Invisible lines of magnetic energy connect the poles through the Earth's atmosphere.

Right: Earth's magnetic field Image: Wikimedia Commons.

The Sun produces an incredible amount of energy. It emits this energy as charged particles that travel across the solar system, called solar wind. The Earth's magnetic field protects us from the solar wind by deflecting most of it back into space. But some particles get caught in Earth's magnetic field, and follow the magnetic field lines toward the North and South Poles. The particles crash into gases in the atmosphere, creating the colorful lights of the aurora.