

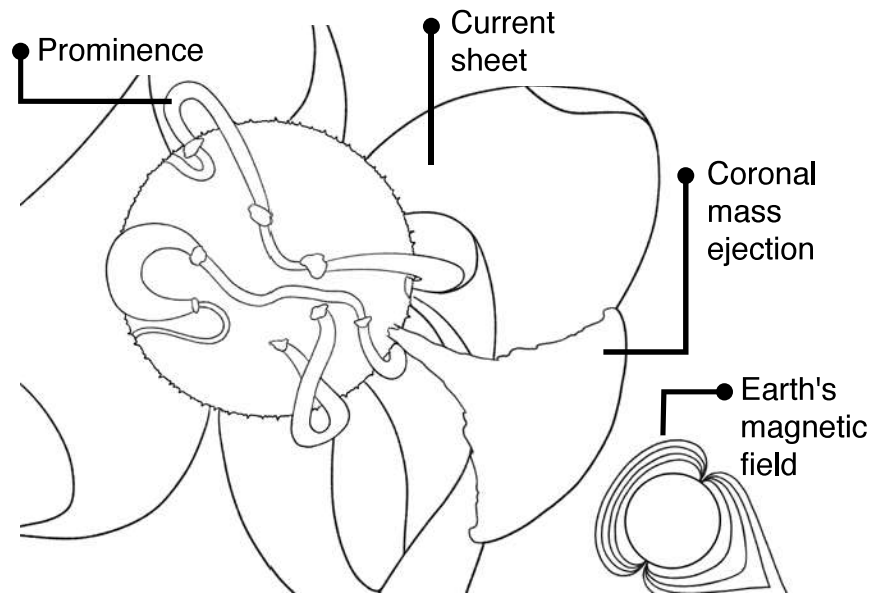
Solar Magnetic Fields

The Sun is filled with invisible magnetic fields, just like the force around a magnet. These magnetic fields shape many exciting features on the Sun.

Sometimes, magnetic fields trap cool, dense clouds of solar gas above the surface, creating dark ribbons called **prominences**. When these are seen with the Sun behind them, they are called filaments. When these magnetic fields stretch and twist, they can form thin layers known as **current sheets**, where magnetic energy is stored and can suddenly be released.

Occasionally, a big explosion called a **coronal mass ejection (CME)** occurs, launching huge clouds of magnetic field and hot gas out into space. If these clouds interact with **Earth's magnetic field**, they can sometimes disrupt technology like satellites and power grids!

The Sun's magnetic influence extends all the way out to the outer edge of our solar system, too. The part of space that falls under this influence is called the heliosphere.



Speaking of the Heliosphere...

Without Earth's magnetosphere, the solar wind will strip away air molecules and erode our atmosphere. NASA scientists study Earth's atmosphere to better understand how the interaction between the solar wind and Earth's atmosphere affects the atmosphere's ability to protect us from the Sun.



The Haida people use the word **sangáay** for *atmosphere*. Use the QR code to learn how to say this and other Sun-related words in Xaad Kíl, the language of the Haida.

