Narrator:

You know you're not supposed to stare at the sun, but who could resist a peek at this? A new NASA spacecraft called the Solar Dynamics Observatory, or SDO, will deliver startling images of the sun with ten times more detail than HDTV.

Elizabeth Citrin, SDO Project Manager:

Our mission is to study the Sun. We have three instruments that look at the Sun 24 hours a day, 7 days a week and send down data.

Narrator:

The goal of the mission is to help scientists zoom in on solar activity such as sunspots, solar flares and coronal mass ejections, thus improving forecasts of solar storms.

Dean Pesnell, SDO Project Scientist:

The Sun puts out what we call space weather. Bright flashes of lights that we call flares, particles, what we call radiation here on the Earth. They come and effect both our satellites and our astronauts.

Narrator:

And that's just the tip of the iceberg. Electrical power to our homes, satellite communications and navigation systems can all be disrupted by solar activity.

Elizabeth Citrin:

The Sun is our closest star. It affects our life on Earth more than anything in the Universe.

Narrator:

SDO will provide a close-up look at the Sun that you may not be able to tear your eyes away from.