

PBS NOVA: Secrets of the Sun

Find and watch the 2012 documentary video (length 52:44).

Consider the following questions based on the content:

1. If the core of the Sun is like a humongous atomic hydrogen bomb, then why doesn't the Sun explode?
2. How much time does it take for energy created in the core of the Sun to undergo changes and reach the Earth in the form of sunlight?
3. Which part of the Sun transports energy faster – the radiation zone or the convection zone? Why?
4. Why are scientists interested in the Coronal Mass Ejection that occurred in 1859? How do we know that it happened? If the same thing happened today how would the results be different and perhaps catastrophic?
5. Why did the CME from 2011 not have a very significant impact on Earth?