

NASA Successfully Launches a New Eye on the Sun

February 11 2010



This NASA TV video grab shows the Solar Dynamics Observatory (SDO) and its Atlas V rocket at Cape Canaveral, Florida. An Atlas V rocket carrying a US solar observatory into space blasted off from Kennedy Space Center in Florida.

(PhysOrg.com) -- NASA's Solar Dynamics Observatory, or SDO, lifted off Thursday from Cape Canaveral Air Force Station's Launch Complex 41 on a first-of-a-kind mission to reveal the sun's inner workings in unprecedented detail. The launch aboard an Atlas V rocket occurred at 10:23 a.m. EST.

The most technologically advanced of NASA's heliophysics spacecraft, SDO will take images of the sun every 0.75 seconds and daily send back about 1.5 terabytes of data to Earth -- the equivalent of streaming 380 full-length movies.

"This is going to be sensational," said Richard R. Fisher, director of the Heliophysics Division at NASA Headquarters in Washington. "SDO is going to make a huge step forward in our understanding of the sun and its effects on life and society."

The sun's dynamic processes affect everyone and everything on Earth. SDO will explore activity on the sun that can disable satellites, cause power grid failures, and disrupt GPS communications. SDO also will provide a better understanding of the role the sun plays in Earth's atmospheric chemistry and climate.

SDO is the crown jewel in a fleet of NASA missions to study our sun. The mission is the cornerstone of a NASA science program called Living With A Star. This program will provide new understanding and information concerning the sun and solar system that directly affect Earth, its inhabitants and technology.

The SDO project is managed at NASA's Goddard Space Flight Center in Greenbelt, Md. NASA's Launch Services Program at Kennedy Space Center managed the payload integration and launch.

Provided by NASA

Citation: NASA Successfully Launches a New Eye on the Sun (2010, February 11) retrieved 27 April 2024 from <https://phys.org/news/2010-02-nasa-successfully-eye-sun.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.