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Solar Radiation and Climate Experiment Monthly Newsletter

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Success! **SORCE** is in Orbit!

The SORCE satellite is successfully launched! The launch went exactly as planned, without a hitch. Even the weather cooperated after days of very cold weather in Florida. Spirited cheering could be heard at the Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado, Kennedy Space Center, NASA Goddard Space Flight Center, and Orbital Sciences Corporation as SORCE went into orbit.



Ground crews met early in the day Saturday to prepare the Pegasus for its journey into space.

Late morning the launch management team met at Kennedy Space Center (KSC) to begin the final launch procedures. The 7-person flight crew for the L-1011 started their launch take-off checklist about an hour before the aircraft carrier engines were started at 1:00 p.m. EST. The L-1011 was airborne by 2:16 p.m. EST working to reach the required 40,000-foot elevation necessary to drop the Pegasus. With the responsibility of providing live coverage of the launch, a chase plane took off shortly after the L-1011 to The Pegasus just after Stage 1 ignited. film the drop from behind.

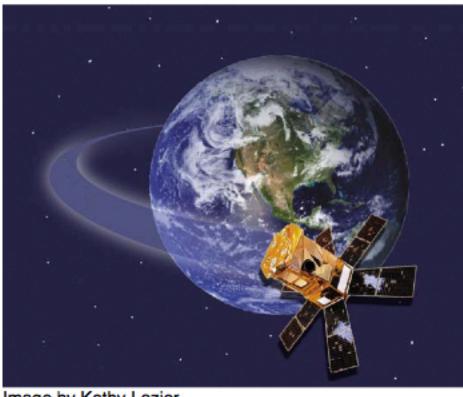


Image by Kathy Lozier.

The L-10ll was approximately 120 miles south-east of Cape Canaveral off the Florida coast when Mission Operations personnel said "3 - 2 - 1 - Drop" and the precious cargo was released. After dropping for approximately 5 seconds, Stage 1 of the rocket ignited. Stage 2 ignited about 90 seconds later, and Stage 3 completed the launch effort by igniting about 6 minutes after that. Spacecraft separation occurred at approximately 1:27 p.m. EST, and the first signal from SORCE came through about a minute later via a NASA tracking satellite. A high data rate contact was successful about 20 minutes later by a ground station in Hartebeesthoek, South Africa. An hour after launch everything was going smoothly - SORCE was in pointing mode, solar arrays were deployed, and all systems were working well.



The SORCE satellite will orbit the Earth every 90 minutes or 15 times daily. Ground stations at Wallops Island, Virginia and Santiago, Chile will provide the communication link to the satellite two times each day. After initial spacecraft checkout and verification after launch, the instruments will be activated one at a time in a well thought out sequence to minimize risk to the instruments and to the spacecraft. After a three-week out-gassing period to reduce self-contamination, the instrument doors will all be open and science operations will begin on February 22. The first real science date will be released approximately two months after the launch.

If people missed the live televised launch, NASA TV will most likely be showing it again. The best place to schedule check the latest NASA ΤV http://spaceflight.nasa.gov/realdata/nasatv/schedule.html. NASA TV is available via satellite or the internet, and more information on viewing options can be found at http://www.nasa.gov/ntv. NASA TV is serviced by several World Wide Web sources through Windows Media Player (on most PCs) or Real Player. The SORCE is also an excel-

lent source for all the information you need -

http://lasp.colorado.edu/sorce.

