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FROM:      Dr. William H. Bauman III
Chief, Aviation and Space Weather Services Branch

Subject:   NOAA DSCOVR spacecraft to replace NASA ACE at the
Space Weather Prediction Center (SWPC) effective
July 27, 2016

Beginning at 1600 Coordinated Universal Time (UTC) on Wednesday,
July 27, 2016, the National Centers for Environmental Prediction
(NCEP) Space Weather Prediction Center (SWPC) will begin using
data from the Deep Space Climate Observatory (DSCOVR) spacecraft
in its operations.

DSCOVR replaces data currently used operationally at SWPC from
NASA's aging research satellite, the Advanced Composition
Explorer (ACE). DSCOVR was launched on February 11, 2015, and
reached final orbit on June 8, 2015. DSCOVR is 1 million miles
from Earth where the gravitational influence of the Sun and the
Earth are in equilibrium. From that point, DSCOVR serves as a
distant early-warning sentinel, like a tsunami buoy in space, to
alert NOAA of incoming eruptions from the Sun.

DSCOVR's primary space weather sensors are the Faraday Cup
plasma sensor, which measures the speed, density and temperature
of the solar wind, and a magnetometer, which measures the
strength and direction of the solar wind magnetic field.
Together, the instruments provide SWPC forecasters with the
necessary information to issue geomagnetic storm warnings.

Data from DSCOVR's instrumentation will provide better
information to forecasters and allow existing and future
forecast models to run more reliably. The improvements will also
open new opportunities for researchers to better understand
coronal mass ejections along with high-speed solar wind and
shocks, and to find ways to improve space weather forecasting.

DSCOVR data will be available in real-time at:

http://www.swpc.noaa.gov/products/real-time-solar-wind

From the webpage above, users can download data, create plots,
and find links to other ways to access real-time and archived data. These links are currently populated with NASA ACE data. On July 27, the links will be populated with data from DSCOVR.

Achieved data from DSCOVR (data older than 1 day) will be available at the NOAA Satellite and Information Service (NESDIS) National Centers for Environmental Information (NCEI) site located at:

http://www.ngdc.noaa.gov/dscovr/

For questions regarding the transition to DSCOVR please contact:

Doug Biesecker
NCEP SWPC/Boulder, Colorado
303-497-4474
doug.biesecker@noaa.gov

National Service Change Notices are online at:

http://www.weather.gov/os/notif.htm

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