Press contact: Donna Urschel (202) 707-1639, durschel@loc.gov

Public contact: Science, Technology and Business Division (2020 707-5664

NASA Goddard Space Flight Center (301) 614-6627

"EARTH'S WATER CYCLE IN A CHANGING CLIMATE" TO BE DISCUSSED BY NASA SCIENTIST, JUNE 4

Water is always cycling, changing from liquid to water vapor to ice – on, under and over the surface of the Earth. A leading NASA scientist will explain how this water cycle is being affected by a warming climate and what we might expect for the future.

Peter Hildebrand, Chief of the Hydrospheric and Biospheric Sciences Laboratory at NASA Goddard Space Flight Center, will discuss "Earth's Water Cycle in a Changing Climate" at the Library of Congress at **11:30 a.m. on Wednesday, June 4**, in the Mary Pickford Theater on the third floor of the James Madison Building, 101 Independence Ave. S.E., Washington, D.C.

The presentation, the third in a series of five programs in 2008, is given through a partnership between the Library's Science, Technology and Business Division and NASA Goddard Space Flight Center. The event is free and open to the public; tickets are not required.

The Earth is warming, particularly over the continents and toward the poles. In the northern hemisphere, the amount of precipitation is increasing, while equatorial regions are experiencing less precipitation in general. Ecosystems are responding to a warming climate by moving poleward, and by moving upward in altitude when mountains are accessible.

Climate change is affecting worldwide food production as well as the accessibility of water for other basic human uses. Current change trends are expected to continue and to increase in intensity. Coupled with human population growth, climate change is likely

to require the migration of large numbers of people. Dr. Hildebrand will discuss and illustrate space-based observations of these global phenomena and the consequences for human society. NASA's observations of the Earth from space will assist the United States and the world to understand and react to these changes, and can help our nation lead the world to a sustainable future.

Hildebrand is chief of the Hydrospheric and Biospheric Science Laboratory at NASA Goddard Space Flight Center, which conducts research concerning all aspects of the Earth's hydrosphere and water cycle. While retaining his laboratory position, Hildebrand was recently promoted to deputy director of the Science and Exploration Directorate at Goddard.

Hildebrand earned his bachelor's, master's and doctorate's degrees in atmospheric sciences at the University of Chicago. He served as a weather officer in the U.S. Navy and also worked for the Illinois State Water Survey and the National Center for Atmospheric Research. He joined NASA in 1999 as head of the Microwave Sensors Branch at Goddard. In 2002 he was appointed chief of the Hydrospheric and Biospheric Laboratory.

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