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MEDIA ADVISORY

UNH Research Institute To Celebrate, Detail New Multimillion Dollar Space Mission

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Sept. 26, 2005

WHAT: The Institute for the Study of Earth, Oceans, and Space (EOS) at the University of New Hampshire will celebrate and give details of a new \$8-plus million “operational” satellite project that will involve scientists, engineers, and students at the university for years to come.

WHEN: 1:30 p.m., Thursday, September 29, 2005.

WHERE: EOS, Morse Hall, Durham campus. Parking will be available behind Morse Hall, 39 College Road.

BACKGROUND: Astrophysicist James Connell’s Angle Detecting Inclined Sensor or ADIS is the heart of an instrument being designed at UNH for a new generation of weather satellites. ADIS will be central to the High Energy Particle Sensor (HEPS) that will fly on upcoming National Polar-orbiting Operational Environmental Satellite System or NPOESS missions.

The HEPS-ADIS instrument will identify high-energy, heavy ions (charged particles) in space that can bombard, damage, and disable spacecraft electronics, and can be a danger to humans in space or on polar-route aircraft. UNH has a long, rich history of building hardware for space missions doing pure investigative science. HEPS-ADIS will be the first so-called operational mission, meaning that the instrument will be collecting data to be used in real-time. In addition, an operational mission implies that more instruments will be built (and possibly improved upon) for future missions as spacecraft age and are replaced.

NPOESS is a multi-agency, multibillion-dollar program that consolidates existing polar-orbiting, Earth-observing satellite systems under a single, ongoing national program. These next-generation satellites will collect and disseminate data on Earth's weather, atmosphere, oceans, land, and near-space environment. The polar orbiters are able to monitor the entire planet and provide data for long-range weather and climate forecasts. In addition, they are able to monitor the forces that control “space weather” – coronal mass ejections from the sun and disturbances in the Earth's magnetic field.

The UNH team will build two identical HEPS instruments for delivery sometime in the 2010-11 timeframe.

Editors: After a brief presentation on the mission details, UNH scientists involved in the mission, EOS director Berrien Moore, and others will be available to answer reporters' questions.