

# January 25, 2005 - ISS EarthKAM Program Joins Forces with JASON Expedition to Study Disappearing Wetlands

## ISS EarthKAM Program Joins Forces with JASON Expedition to Study Disappearing Wetlands

January 25, 2005

A collaboration of innovative educational programs will merge space age research capabilities with down-to-Earth field research to help students develop a better understanding of the world's disappearing wetland systems.

Students participating in JASON Expedition: Disappearing Wetlands will use NASA's International Space Station (ISS) EarthKAM camera to take high quality digital pictures of wetlands from space. JASON Expedition: Disappearing Wetlands is an innovative, inquiry-based, hands-on learning program that connects students with renowned researchers to study the ecology and geology of Louisiana's wetlands and their interactions with human systems. ISS EarthKAM is NASA's groundbreaking educational initiative that gives students direct access to, and control of, a digital camera flying on board the International Space Station with which they can take their own pictures of Earth.

The next ISS EarthKAM operational mission occurs February 1-4, concurrent with the JASON Expedition: Disappearing Wetlands live broadcast taking place in three comparative wetland locations in Louisiana, January 31 - February 5.

Some of the schools involved in the JASON Disappearing Wetlands Expedition will simultaneously participate in the ISS EarthKAM project to take images of wetlands from space. These schools will identify wetlands around the world that the ISS orbits over and then direct the ISS EarthKAM camera to take photographs of these wetland areas. Students will download their wetland images within a few hours after being taken and then use them to enhance the entire Expedition's understanding of wetlands.

Dr. Robert Ballard, Founder and Chief Scientist of the JASON Foundation for Education, highlighted the significance of this educational and research partnership. "JASON is thrilled to be able to have our network of students and teachers participate in NASA's International Space Station EarthKAM educational program. Through the process of requesting and taking their own images of wetlands from the International Space Station, students around the world will gain a better understanding of these important wetland systems at local, regional and global scales. Utilizing remote technologies to acquire real-time data is what JASON is all about and would not be possible without partners like NASA."

The JASON Foundation for Education aims to inspire students in grades 4-9 to become curious, disciplined, and passionate learners. During the JASON Expedition: Disappearing Wetlands live broadcast, a team of scientists and select students and teachers ("Argonauts") lead schools across the world on a week-long journey to explore Louisiana's wetlands. Satellite and Internet technologies create a 'telepresence' that brings students and teachers in classrooms around the world into real-time contact with these scientists.

The ISS EarthKAM (Earth Knowledge Acquired by Middle school students) program, which is the brainchild of America's first woman astronaut, Dr. Sally Ride, strives to inspire middle-school students' interest in science, math, technology, and geography. Students participating in ISS EarthKAM identify places on Earth to photograph from space; they then use the ISS EarthKAM Web-based interface to calculate exactly when the ISS EarthKAM digital camera should take its pictures. Students use their digital images of Earth to study a wide variety of topics such as changes on Earth's surface, human land use patterns, geologic processes, and in this instance, wetland ecosystems and river deltas. Many schools will collect and use ISS EarthKAM imagery to examine the impact of the recent Indian Ocean tsunami. Since its inception, over 17,000 scientifically valuable, high-quality digital images of Earth have been taken by thousands of middle-school students from across America, as well as from other participating ISS countries.

Funded by NASA, ISS EarthKAM is coordinated through a partnership between the University of California at San Diego, NASA's Jet Propulsion Laboratory in Pasadena, Texas A&M University, and TERC, a non-profit education research and development organization based in Cambridge, Massachusetts.

The JASON Foundation for Education is a not-for-profit organization that works in collaboration with NASA, other government organizations and academic institutions, and corporate sponsors to bring high quality science and math curriculum and professional development to schools and districts. Since its start in 1989 JASON Expeditions has grown to include over 33,000 teachers and 1.7 million students around the world.

ISS EarthKAM Web site: [www.earthkam.ucsd.edu](http://www.earthkam.ucsd.edu).

JASON Disappearing Wetlands Expedition Web site: [www.jason.org](http://www.jason.org).