

Observations from space: NASA environmental data and lung disease

May 18 2008

NASA gathers a tremendous amount of data on the environment that can be helpful in understanding lung disease. In a session at the ATS 2008 International Conference called “Observations From Space: A Unique Vantage Point for the Study of the Environment and Possible Associations with Disease Occurrence,” scientists from NASA, the CDC and the University of Alabama will present research results from NASA projects involving observations of Earth, and discuss their health applications.

The session, on Sunday, May 18th in Toronto, will provide an overview of public health projects that are using data from NASA satellites tracking air quality, climate, vegetation and flooding. In one project, NASA satellites are tracking vegetation and air movement in the southwestern United States, producing information that is being used in studies of pollen and asthma, said session co-chair Douglas Rickman, Ph.D., lead scientist for Applied Science Applications at NASA’s Marshall Space Flight Center. “We can get data on temperature, clouds, rainfall and air quality from satellites, all of which can be added to health data to explore possible linkages,” he said.

NASA is also working with the University of Alabama to add environmental data to a study of 30,000 people across the United States, which is looking for possible reasons for a higher-than-average stroke rate in the southeastern U.S.

One presentation at the ATS session will detail a pilot test project of the

CDC called HELIX-Atlanta, in which environmental data from NASA was successfully linked with health data.

Another presentation will look at the health implications of particulates in Moon dust. “Moon dust contains particles smaller than 2.5 microns, which EPA and OSHA regulate on Earth,” noted Dr. Rickman, who is also NASA Project Scientist for Lunar Simulants. “If astronauts return to the Moon and breathe in this dust, will it be a hazard to them? That’s something we’re trying to find out.”

Source: American Thoracic Society

Citation: Observations from space: NASA environmental data and lung disease (2008, May 18) retrieved 24 April 2024 from <https://medicalxpress.com/news/2008-05-space-nasa-environmental-lung-disease.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.