

Inside Wallops

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NASA Satellite Captures First View of 'Night-Shining Clouds'

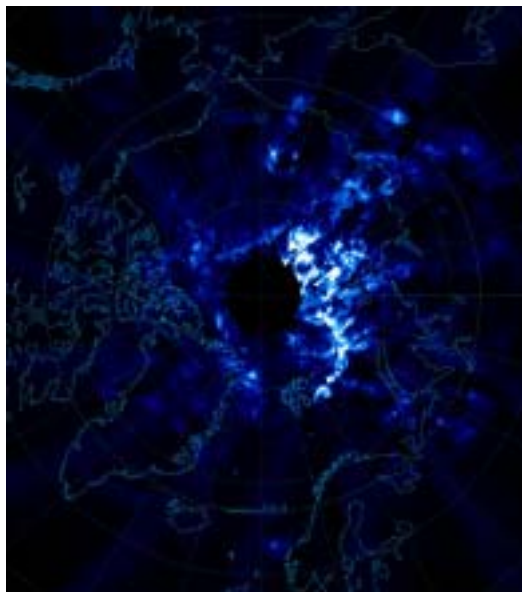
For the first time, a NASA satellite has captured an occurrence of mysterious shiny polar clouds that form 50 miles above the Earth's surface.

The first observations of the "night-shining" clouds by the satellite, AIM, (Aeronomy of Ice in the Mesosphere) occurred above 70 degrees north latitude on May 25. Observations of the clouds from the ground began on June 6 over Northern Europe. AIM is the first satellite mission dedicated to the study of these unusual clouds.

These mystifying polar mesospheric clouds when viewed from space are referred to as "night-shining" clouds and called noctilucent clouds when viewed by observers on Earth.

The clouds form in the mesosphere, an upper layer of the Earth's atmosphere, during the Northern Hemisphere's summer season that began in mid-May and extends through the end of August. They are being seen by AIM's instruments more frequently as the season progresses.

Very little is known about how these clouds form over the poles, why they are being seen more frequently and at lower latitudes than ever before or why they have been growing brighter.



On June 11 the AIM satellite returned some of the first data documenting noctilucent clouds over the Arctic regions of Europe and North America.

AIM will observe two complete cloud seasons over both poles and document an entire life cycle of the shiny clouds.

"It is clear that these clouds are changing, a sign that a part of our atmosphere is changing and we do not understand how, why or what it means," stated AIM principal investigator James Russell, III of Hampton (VA) University.

"These observations suggest a connection with global change in the lower atmosphere and could represent an early warning that our Earth environment is being changed," Russell added.

AIM is providing scientists with information about the number of these clouds there are around the world as well as how different they are including the sizes and shapes of the tiny particles that make them up.

Scientists believe that the shining clouds form at high latitudes early in the season and then move to lower latitudes as time progresses.

They hope to understand why these clouds form and vary and if they may be related to global change.

Once the summer season ends in the Northern Hemisphere around mid- to late August, AIM will begin watching for shining clouds in the Southern Hemisphere over a period from November through mid-March.

AIM is managed at NASA's Goddard Space Flight Center, Greenbelt, MD. The AIM Project Data Center is located at Hampton University.

Wallops Shorts.....

Congratulations

NASA Glenn Research Center recently presented a NASA Honor Award to the team working on the Great Lakes Environmental Mission. Brian Hall, NASA Range and Mission Management Office, and Anthony Guillory, NASA Aircraft Office, were included in the group.

Balloon Launches

A NASA scientific balloon was launched from Palestine, Texas, on July 19. The four million cubic foot balloon was a test flight to verify operation of the Micro

Instrumentation Package (MIP) and the MIP interface with the Low Energy Electron (LEE) instrument. Dr. Paul Evenson, University of Delaware, and Jill Juneau, Columbia Scientific Balloon Facility, were co-investigators for this mission. The flight was highly successful. Total flight time was 6 hours 29 minutes.

Another scientific balloon was launched from Palestine on July 23. The 24.47 million cubic foot balloon carried the Faint Intergalactic Redshifted Emission Balloon (FIREBall), a high resolution UV integral field spectrograph. Dr. Christopher Martin,

California Institute of Technology, was the principal investigator. The flight was an operation and science success. Total flight time was 6 hours, 35 minutes.

TC-4 Mission

The first flight for the Tropical Composition, Cloud and Climate Coupling (TC-4) science mission was very successful with all objectives met. These included cloud chemistry, boundary layer runs, and volcanic plume analysis and cloud penetrations to mention a few. The TC-4 mission using NASA's DC-8 aircraft is taking place in Costa Rica.

2007 - 2008 Officers for Wallops Toastmasters

The Debedeavon Toastmasters Club at Wallops inducted new officers on Wednesday, July 18.

The new officers are Pat Dworske, President; Barbara Justis, Vice President Education; Brenda Mulac, Vice President Membership; Micaela Barnhill, Vice President Public Relations; Michael Hooks, Secretary; Amy Strong, Treasurer; and Freda Johnson, Sergeant-At-Arms.

The ceremony was presided over by Area Governor, Michele Canopii of Salisbury, MD. Other guests included outgoing Area Governor, Kathy Miles from Rehoboth Beach, DE., and Mike Hoy, Immediate Past President of the Delmarva Toastmasters of Salisbury.



The Wallops Debedeavon Toastmasters Club meets the first and third Wednesday of each month from 11:30 a.m. to 12:30 p.m.

The meetings are open to the Eastern Shore community. Come as a guest on Wednesday, August 1, and learn more about this wonderful chartered club that provides speaking and leadership training.

If you would like to speak with confidence and become an effective communicator, Toastmasters can help you find your voice. The learn-by-doing program allows you to progress at your own pace in a supportive environment.

Let's Take a Trip To New York

Empire State Building
Chrysler Building
Statue of Liberty
Manhattan

Saturday, September 29



The bus departs from the Cropper Center at 4:15 a.m. and then stops at the Walmart Parking Lot, Salisbury, MD.

The cost is \$44 per person. Eighteen seats are still available on the second bus. The deadline for payment is August 6. Contact Janet Rickmond if interested at x1844 or bu email: rickmond_janet@nsroc.net

Lobster Fest

August 24
Building F-3, Rocket Club
Doors open at 4:35 p.m.
Lobster Fest begins at 6 p.m.

Lobster, salad, corn-on-the-cob, baked potato, dessert, iced tea.

Tickets are \$16 per person and are available in the Exchange Store, Building E-2 and the Rocket Club, Building F-3.



Sponsored by the Wallops Exchange and Morale Association, Morale Activities Committee.



Annual Beach Cleanup
September 15

Wallops Nears Completion on HSPD-12

Homeland Security Presidential Directive (HSPD)-12 is a government-wide standard for secure and reliable forms of identification for Agency and contractor employees used for access to Federal facilities and systems.

To comply with HSPD-12, Wallops Flight Facility is required to submit all of its approximately 780 on-site contractors and approximately 100 other NASA affiliates to the Office of Personnel Management (OPM) for background investigations prior to October 27, 2007.

To date, about 501 contract employee background investigations have been submitted. The NASA Sounding Rocket Operations (NSROC) and the Near Earth Network Services (NENS) are the only contracts left to be submitted at Wallops.

Jean Lopez, Cheryl McCready, Pat Dworske and Dolores Jester in the NASA Wallops Security Office began compiling data and submitting it to OPM on May 14. Currently, Wallops has a zero error rate on all employee background investigation paperwork submitted to OPM.

Wallops Security Office

The general telephone number for the Wallops Security Office, (WSO), Building N-161 is x1111. When you call this number, it will be answered 24 hours a day, 7 days a week, by a WSO employee or a Security Force Representative.

If the Security Force Representative is not able to assist you, your call will be transferred to the voice mail of the WSO employee you are trying to reach or the Security Force Representative will take a message and/or contact the WSO employee directly.

Direct telephone lines to the WSO civil service staff are still valid and may be called.

They are:
Sonny Hall, x1357
Cheryl McCready, x1885
Pat Dworske, x2126
Delores Jester, x2260
Jean Lopez, x2536

The phone number for the Receptionist Desk at the Main Base Front Gate Building is x2222.

Badge requests should be mailed to the WSO, Building N-161 or sent via fax. The fax number is x1876. Do not mail, email, or fax badge requests to the Receptionist Desk.

The WSO needs at least 48 hours (2 business days) to verify and approve a badge request prior to a visit. Requests for large groups of visitors or requests for badges for special events must be in the WSO at least five working days prior to the visit to allow time for processing.

For emergency assistance, dial 911 from any Wallops telephone. If using an outside line or cell phone, dial (757) 824-1333.

Diversity Council Words to Live By

“Human diversity makes tolerance more than a virtue; it makes it a requirement for survival.” Rene Dubos

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov
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