

Inside Wallops

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Wallops Supporting CLASIC Mission

NASA's P-3B Orion aircraft, based at Wallops Flight Facility, and a Wallops support team are playing an integral role in the study of cumulus convection as part of the Cloud and Land Surface Interaction Campaign (CLASIC).

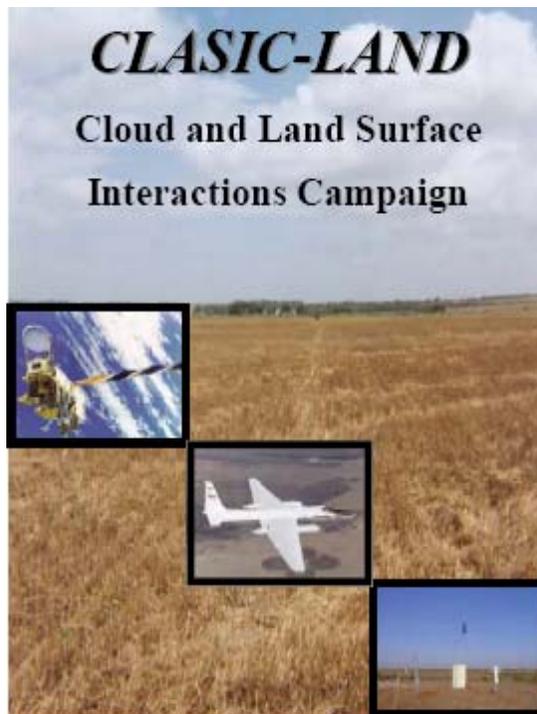
CLASIC will help researchers understand how land surface processes influence cumulus convection. The researchers are particularly interested in the stages between cumulus humilis (fair weather clouds) and cumulus congestus (storm clouds).

Human-induced changes in the land surface structure associated with plowing, crop rotation, and irrigation can induce changes in the surface latent heat flux, sensible heat flux, albedo, and carbon flux. These changes in surface energy balance and moisture transport to the boundary layer influence cloud processes.

With the use of five NASA aircraft and four commercial aircraft, satellites, and surface-based instrumentation performing simultaneous measurements, changes in clouds and atmospheric structure will be documented and subsequently evaluated.

The polarimetric scanning radiometer is one of the dozens of measurement platforms that will be operating during the three week-long mission. This instrument's role is to provide results of surface emissivity and soil moisture. Originally, this platform was to be carried on

NASA Dryden Research Center's ER-2 aircraft. Due to a loading issue with that aircraft, Wallops' P-3 aircraft was called into duty. With less than two weeks' notice, the team prepared the aircraft and personnel for the mission.



The CLASIC mission is taking place in Oklahoma, where highly variable weather patterns serve as a perfect setting for climate studies. Oklahoma is also a viable setting as it is one of the largest agricultural producers in the United States.

The mission is a cross disciplinary interagency research effort that includes the U.S. Department of Agriculture, Department of Energy, NASA, NOAA, Oklahoma Climatological Survey, Texas A&M University, University of Tokyo, Duke University, University of South Carolina and the University of Iowa.

Personnel from Wallops will be supporting CLASIC through the first of July. They are Eric McIntyre, Marian Klein, Pete Peyton, Cate Fairchild, Mike Singer, Kevin Moore, Shane Dover, John Doyle and John Valiant.

Wallops Environmental Office Works to Protect Wallops Shore Line



Photo by Les Wright

T. J. Meyer and Susan Dunn, EGG, plant beach grass on Wallops Island.

In February, geotubes were placed along what will eventually span approximately 4,600 feet of shoreline on the south end of Wallops Island. The tubes are fabric bags up to 200 feet in length filled with a mixture of 90% water and 10% sand. After filling, they are oval in cross-section and quite massive and hard.

In an effort to protect and maintain Wallops Island's shore line, these geotubes will eventually form the core of a line of man-made, vegetated sand dunes.

To assist in this effort in May a group of 10 volunteers from the Environmental

Office, Facilities Management Branch, and the Operations and Maintenance Branch planted 2,000 stems of American beach grass, which is a native of Virginia barrier islands, on the created dune behind the first geotube.

With the perfect planting weather, it took these volunteers about two hours to plant two stems in each section with approximately 18 inches between sections. The progress of the plantings on this dune will be monitored over the summer. Watch for news of a massive dune grass planting in the fall that will cover 4,600 feet.

Wallops Shorts.....

Balloons

A NASA scientific balloon was launched from Ft. Sumner, N.M., on June 5.

The 36.73 million cubic foot balloon was a flight qualification test of a new balloon design with a new film. The test flight was to demonstrate the ability of the new balloon design constructed with the new film to fly under normal flight conditions at its maximum payload weight.

Debbie Fairbrother, NASA Wallops Flight Facility, was the principal investigator.

The flight was an operations and science success. The balloon performance was normal during inflation, launch, ascent, float and termination. Float altitude was 120,800 feet. Total flight time was 5 hours, 6 minutes.

Successful ARAV Launch

Northrop-Grumman employees from NASA Wallops Flight Facility staged two short-range ballistic missile targets and participated in the Navy's latest Aegis Readiness Assessment Vehicle (ARAV) intercept flight tests on June 15. The two NASA Terrier Orion sounding rockets were launched from the Pacific Missile Range Facility, Barking Sands, Kauai, Hawaii.

The Aegis Ballistic Missile Defense system is the maritime component of the Missile Defense Agency's Ballistic Missile Defense System and is designed to intercept and destroy short to intermediate-range ballistic missiles.

Wallops employees taking part in the mission are Rob Maddox, Tracy Gibb, Chris Bradley, Pat McPhail, Tripp Byrd, Brian Tucker, Karl Haugh and Mark Simko.

Range Activity

The NASA Langley Research Center Generic Transport Model (GTM) AirStar Uninhabited Aerial Vehicle (UAV) project team conducted operations on Monday – Wednesday of last week at the Main Base airport runway 10-28, and at the Island UAV runway.

Objectives were to determine the viability of Main Base operations and to check out the autopilot system and verify autopilot at the Island runway. All objectives were met. In two days of operations at the Main

Base, the KingCat UAV made eight flights within the designated safety area.

The team is currently scheduled to return the week of June 25 for operations with the Mobile Operation System.



Photo by Libby West

In the Field

Libby West, Larry Duffy, Brian Hall, NASA Range and Mission Management Office; John Hickman, Greg Smith, Chuck Brodell, NASA Sounding Rockets Program Office; Don Langley, NASA Electrical Engineering Branch; and Glenn Maxfield, NASA Sounding Rocket Operations Contract, are at the Andoya Range, Andenes, Norway, working on mounting the Athena launcher (pictured above).

NASA 8 Passengers

NASA 8 is now in Hangar N-159. Passengers flying on NASA 8 should now report to N-159 rather than D-1.

On the Road

Betty Flowers, NASA Public Affairs Office, and Ed Parrott, Teacher-on-Loan, conducted a space program on June 7 for 75 participants in a Special Needs Camp held at Camp Occohannock on the Bay, near Belle Haven, Va.

Wallops Federal Credit Union 25th Anniversary Celebration June 18 – 22

NASA Federal Credit Union (FCU) has been a part of the Wallops Flight Facility family for 25 years.

To thank the members they are celebrating all week long!

Stop by the FCU, Building N-133, for food, giveaways and nostalgia. Join in on the festivities and take advantage of limited time special offers.

For further information call x2380.

Professional Development Day 8:30 a.m. to 3:30 p.m.

June 27

Building E-2, Training Room

Guest speaker Rhona Post will discuss the five key steps to mastering excellence in the morning session from 8:30 to 11:30 a.m.

In the afternoon from 1:30 to 3:30 p.m., join guest speakers Pat Dworske and Kathryn Redden as they discuss techniques in developing effective presentation skills. This event is sponsored by the Women of Wallops, Federal Women's Program.

Diversity Council Words to Live By

"Infinite diversity in infinite combinations ...symbolizing the elements that create truth and beauty."

.....Commander Spock, Star Trek

ROPA Mission is Successful

(40.021 - PFRR, Alaska, 2/12/07)

"Credit should be given to the support personnel for their efforts, especially to the ACS group, who were able to lower the voltage on the gyro to keep it cool and let us remain at T-2 for an extended period.....The payload manager, Jay Scott, and the Wallops team really did a great job in every respect. Their expertise, team work and positive attitudes contributed significantly to the success of this mission and it was a real pleasure to work with them. The work of Jim Diehl, in particular, was impressive."

Marc Lessard

University of New Hampshire

Historical Jamestown Cargo Tag Travels on Atlantis

To commemorate this year's 400th anniversary of the founding of Jamestown, Va., the shuttle, STS-117, Atlantis, is carrying a nearly 400-year old metal cargo tag - bearing the words "Yames Towne" - in its middeck floor cargo space. The discarded shipping tag, which identified a crate or trunk that arrived from England around 1611, was discovered at the bottom of a well during an archaeological dig at James Fort.

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