

# WELCOME!

Dr. Vernon Morris  
Director and Professor  
NCAS

(Dr. Wayne A. I. Frederick sends his well wishes)



# The University At A Glance



**HOWARD**  
**UNIVERSITY**

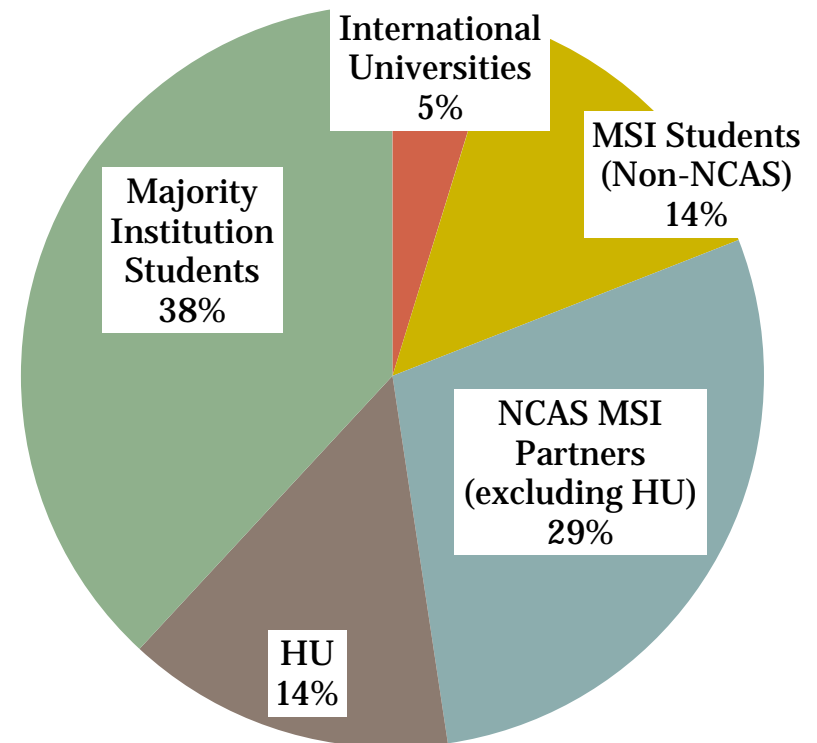
- ◆ Howard University is a comprehensive research university, with a commitment to educating youth for leadership and service to our nation and the global community established on March 2, 1867 by a congressional mandate
- ◆ Howard University offers degrees at the undergraduate level in 80 fields, master degrees in 61 fields and doctorate degrees in 26 fields.
- ◆ The university is subdivided into five colleges (Arts and Science; Dentistry; Engineering, Architecture, and Computer Sciences; Medicine; and Pharmacy, Nursing, and Allied Health Sciences) and nine schools (Business, Communications, Continuing Education, Divinity, Education, Graduate, Law, Pharmacy, and Social Work).
- ◆ Current enrollment is approximately 3,400 graduate and professional students and 6,500 undergraduate students. Our faculty of 1300 is about equally divided amongst the ranks and represents the largest concentration of black scholars of any university in the world.

# HU Program in Atmospheric Sciences

## Program

- ◆ Interdisciplinary Graduate Program involving faculty from Chemistry, Mathematics, Physics, and Engineering
- ◆ Measurably improving national production of minority Ph.D.s in Atmospheric Sciences:
- ◆ 2006 – 2012 #1 producer of minority PhDs in atmospheric sciences
- ◆ 98% of our graduates have found employment in a technical field related to their study

## Students

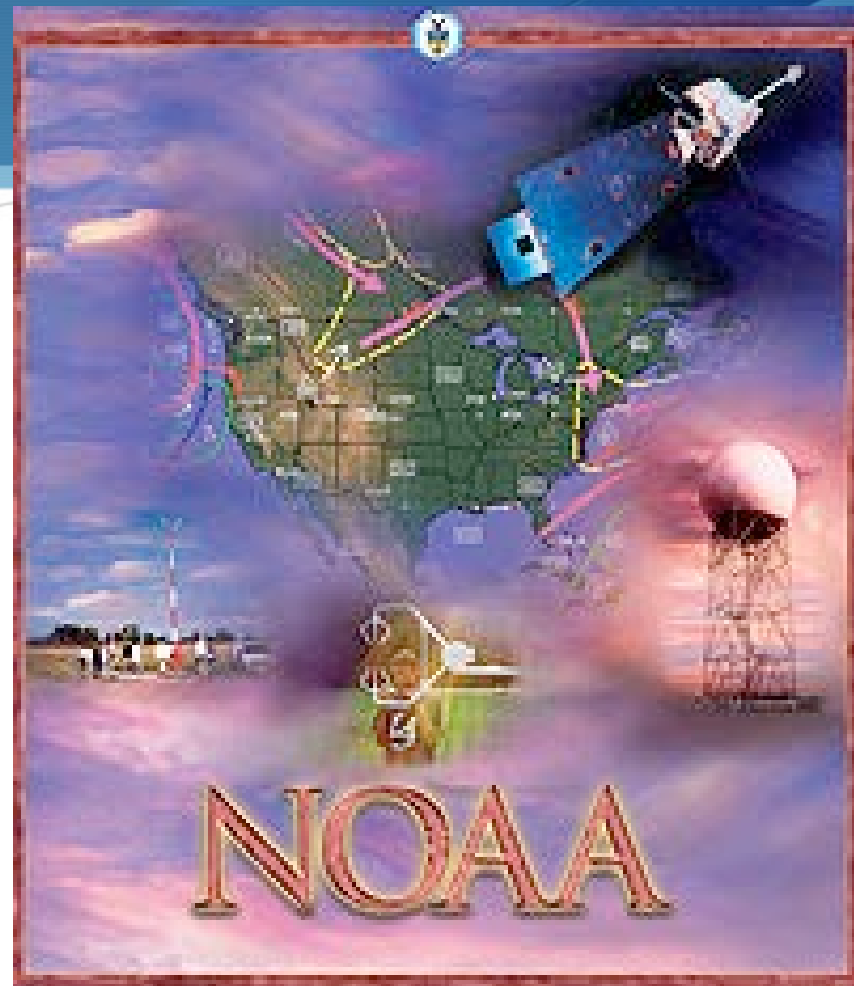




# NCAS

NOAA CENTER  
FOR ATMOSPHERIC  
SCIENCES

- ◆ Howard University (HU) is the lead institution of a six-member consortium including Jackson State University (JSU), the University of Maryland College Park, the University of Puerto Rico at Mayaguez (UPRM), the University of Texas at El Paso (UTEP), and the State University of New York at Albany (SUNYA).
- ◆ Cooperative Agreement with NOAA Education to establish research and training partnerships with NWS, NESDIS, OAR
- ◆ Currently 26 tasks involving 55 NOAA scientists collaborating with 23 faculty and research associates across the six institutions



The NOAA Center for Atmospheric Sciences  
at Howard University



# NCAS

NOAA CENTER  
FOR ATMOSPHERIC  
SCIENCES

University of Puerto Rico - Mayaguez

*The Mission of the NCAS is to conduct research and applications in support of NOAA's National Weather Service (NWS) strategic goals, specifically those in support of "Advancing the Understanding of Air Quality- Climate-Health Interactions and Improving Prediction of Precipitation Through Integrated Measurements, Models, and Data Analyses."*

University of Maryland  
College Park

University of Texas at El Paso



### NOAA Operations

- Weather & Climate Forecast (NCEP)
- Climate Change Projection (NCS)
- Air Quality Forecast (ARL)
- Data Assimilation (NESDIS)

### NOAA Missions

- Weather & Water Forecast
- Climate Prediction

### Regional Climate Prediction

- Seasonal-Interannual Climate Prediction
- Decadal Climate Change Projection
- Impacts/Feedbacks Evaluation

### Research to Operation

Physics Improvement

Chemistry Improvement

### Regional Weather and Water Forecast

- Physics
- Extreme Events
- Precipitation

### Regional Air Quality Forecast

- Chemistry
- Aerosols
- Visibility
- Health Impact

Model Assessment

Impacts Assessment



NCAS Core Research & Education

Observing and Modeling  
**Minority Student Training**

NCAS Partners: HU, JSU, UPRM, UTEP, UMCP, SUNYA

### Data Assimilation

### Social, Behavioral, & Economic Sciences

- Risk Communication Assessment
- Outreach Assessment
- Environmental Literacy

### NOAA EPP

- Workshops
- Weather Camps
- Academic Programs
- Interviews & Surveys

### Engagement & Education

### Evaluation

- Project Management
- External Advisory Board
- Working Group Interaction

### Structure & Coordination

# Support for GRUAN

- ◆ Institutional commitments for GRUAN certification is being worked on with VP's office.
- ◆ Institutional Commitments have also been made to promote and support the development of atmospheric research technology at Beltsville
- ◆ Atmospheric Sciences has been identified as an institutional research focus area
- ◆ Beltsville is the centerpiece of atmospheric sciences capabilities at HU and GRUAN is critical to the continued development at Beltsville
- ◆ The post-fire reorganization is in process and all instruments lost will be replaced and a new bldg installed
- ◆ Special Acknowledgements to:
  - ◆ NOAA/JPSS (Howard Diamond and Mitch Goldberg) for the funding support
  - ◆ NASA/GSFC (David Whiteman) for the Beltsville collaboration work
  - ◆ NWS/Sterling (Jim Fitzgibbon and Mike Hicks and Neal) for collaboration