Since this is Black History Month, I thought it would be appropriate to talk about some of the prominent contributions by Blacks to understanding and addressing climate change. Blacks are badly underrepresented in STEM fields such as atmospheric science and in environmental groups, but there are some important exceptions.(STEM stands for 'Science, Technology, Engineering, and Math.') I wanted to talk about some of those figures.

Dr. Warren Washington is a long-time <u>leader</u> in atmospheric science at the National Center for Atmospheric Research (NCAR). He was the second Black person to receive a Ph.D in atmospheric science and now has fifty years of research under his belt. He has pioneered computer modeling of climate change. He has received broad recognition for his work. Among his honors, Washington is a member of the National Academy of Engineering, the American Meteorological Society (former president), the American Philosophical Society, and the American Academy of Arts and Sciences.

The director of NCAR, Dr. Everette Joseph, is also Black. Dr. Joseph came to NCAR from SUNY Albany, where he headed a \$30 million research project. Prior to coming to Albany, he led Howard University's Program in Atmospheric Sciences. Joseph recounts a stunning story about his first contact with Dr. Washington at a meeting of climate modelers in the 1990s. According to a news report:

"It was at an event featuring top climate modelers that Joseph attended in the early 1990s, when Washington was introduced to the audience. Joseph looked up at him, and thought 'Oh. My. God.'... He looked like me!' said Joseph, director of the National Center for Atmospheric Research in Boulder, Colorado, a major U.S. climate research hub that trains undergraduates from historically underrepresented communities every summer. 'I was really stunned."

Gregory Jenkins is a professor of meteorology at Penn State and directs the university's Alliance for Education, Sciences, Engineering and Development in Africa. He studies how lightning, mineral dust, and dust storms shape the climate in Africa.

Washington, Joseph, and Jenkins remain the rare exceptions rather than the rule. Geoscience, which includes atmospheric science, reportedly has the least diverse population of Ph.D students of any STEM field. Among faculty, whites are 79%, and Asians account for another 13%. That leaves 8% for everyone else.

The stark lack of diversity in atmospheric science isn't unique. Historically, few environmental law professors have been Black, and the situation in environmental economics may be even worse. This is a problem that all of us in the academy have a

## responsibility for addressing.

There has also been a shortage of Blacks in the mainstream environmental organizations, but some Blacks have been <u>leaders</u> on climate action. Carl Anthony was the founder of the Urban Habitat Program, one of the oldest environmental justice organizations, and the former head of the Earth Island Institute. Kari Fulton led the campaign for the Environmental Justice and Climate Change Initiative. She also co-founded an initiative that trains young people, particularly students at historically black universities. Adrienne Hollis, at the Union of Concerned Scientists, <u>develops</u> programs to track the health effects of climate change on communities of color.

It's important to celebrate the accomplishments of these individuals in the face of great obstacles. At the same time, we must redouble our efforts to ensure that they do not remain isolated exceptions in a sea of white faces.