

# DEPARTMENT OF ATMOSPHERIC, OCEANIC AND EARTH SCIENCES

Phone: 703-993-5394  
Website: [aoes.gmu.edu](http://aoes.gmu.edu)

## Administration

- Mark D. Uhen, Chair
- Cristiana Stan, Associate Chair
- Natalie Burls, Graduate Program Director for Climate
- Geoff Gilleaudeau, Graduate Program Director for Geology
- Bohua Huang, Undergraduate Coordinator for Climate
- Barry Klinger, Graduate Coordinator for Climate
- Stacey Verardo, Undergraduate Coordinator for Geology

Scientists and students in the Department of Atmospheric, Oceanic, and Earth Sciences (AOES) are working to better understand our planet in myriad ways, from improving numerical model predictions of next year's atmospheric temperature to explaining geological strata laid down in previous eras, from monitoring water transport through the atmosphere to modeling water movement at the bottom of the ocean.

AOES is home to active research programs, including doctoral programs in Climate Dynamics (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/climate-dynamics-phd/>) and Geology and Earth Science (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/geology-earth-sciences-phd/>), and master's programs in Climate Science (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/climate-science-ms/>) and Earth Systems Science (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/earth-systems-science-ms-aoes/>). Undergraduate programs include Atmospheric Science (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/atmospheric-sciences-bs/>) and the Geology (BA (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/geology-ba/>) and BS (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/geology-bs/>)). The department also offers undergraduate minors in Atmospheric Science (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/atmospheric-science-minor/>), Climate Resilience and Adaptation (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/climate-resilience-adaptation-minor/>), Earth Science (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/earth-science-minor/>), Geology (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/geology-minor/>), Ocean and Estuarine Science (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/ocean-estuarine-science-minor/>), and Paleontology (<https://catalog.gmu.edu/colleges-schools/science/atmospheric-oceanic-earth-sciences/paleontology-minor/>). The department has close ties to the Center for Ocean-Land-Atmosphere Studies (COLA) (<http://cola.gmu.edu/>).

## Faculty

### Department Faculty

#### Professors

DeSole, Dirmeyer, Hinnov, Huang, Kinter, Mattiotti, Stan, Straus, Uhen, Verardo

#### Associate Professors

Burls, Boybeyi, Gilleaudeau, Klinger, Tong

#### Assistant Professors

Du, Goldspiel, Ortiz

#### Research Faculty

Buckley, Cash, Shin, Swenson

#### Affiliate Faculty

Houser, Light, Summers

#### Emeriti

Chiu, Diecchio, Schneider, Schopf, Shukla

## Programs

- Atmospheric Science Minor
- Atmospheric Sciences, BS
- Climate Dynamics, PhD
- Climate Resilience and Adaptation Minor (ATMS)
- Climate Science, MS
- Earth Science Minor
- Earth Systems Science, MS (AOES)
- Geology Minor
- Geology and Earth Science, PhD
- Geology, BA
- Geology, BS
- Ocean and Estuarine Science Minor
- Paleontology Minor