Program Information:

List the departments and programs at your institution that are engaged in atmospheric and related sciences.

- Physics, Earth and Environmental Sciences, Chemistry, and Environmental Engineering.

Indicate the total number of tenure-track and non-tenure-track faculty in the departments and programs listed above who are involved in atmospheric and related sciences. 24

List the relevant degrees, certificates, and other educational programs offered in the atmospheric and related sciences at your institution.

- BS, MS, and PhD Physics (also BS Physics with Atmospheric Specialty; PhD with dissertation in Atmospheric Physics).

- BS in Environmental Science
- Graduate Certificate, MS and PhD in Hydrology
- PhD in Hydrology

- BS, MS and PhD Chemistry

- BS and MS Environmental Engineering

How many undergraduate degrees were awarded in atmospheric and related sciences during the last eight years? 45
How many graduate degrees were awarded in atmospheric and related sciences during the last eight years? 40

Progress in Atmospheric and Related Sciences:

Indicate your institution's progress and contributions in the atmospheric and related sciences within the last eight years. Check all that apply.

- Produced refereed and/or non-refereed publications
- Produced textbooks or other teaching materials
- Received external funding
- Participated in scientific societies
Briefly describe any additional contributions or information you wish to share with the committee. (optional)

Two new textbooks on introductory physics and modern physics that is now used for our majors courses published by Dave Raymond with the New Mexico Tech Press.

PARTICIPATION IN UCAR ACTIVITIES

How many of the last eight Annual Members Meetings has at least one Member Representative from your institution attended? 8

If applicable, list the UCAR Governance Committees that your faculty and staff have served on during the last eight years.

None, although faculty members and member representatives were nominated for the committees.

If applicable, list the NCAR Advisory Committees or Panels that your faculty and staff have participated in during the last eight years.

Dave Raymond serves on the NCAR/EOL External Advisory Committee.

If applicable, briefly list UCAR/NCAR facilities and/or resources used by your faculty, staff, and students during the last eight years.


Dave Raymond has also used the NCAR G-V and Eldora radars for the PREDICT project (2010) and TCS08 (2008).

Dave Raymond's students have also used the Yellowstone Supercomputer for tropical and other convective models.

Ken Minschwaner has used NCAR computing facilities in order to run the WACCM model.

If applicable, briefly list examples of collaborative research activities with UCAR/NCAR staff by your faculty, staff, and students during the last eight years.

Ken Minschwaner collaborates with Laura Pan, Anne Smith, Gabi Pfister, and John Gille in the ACOM (Atmospheric Chemistry Observations and Modeling) division. Pan: analysis of ozone data in the upper troposphere from aircraft measurements. Smith: using the WACCM model to interpret satellite measurements of nitric oxide and atomic oxygen in the thermosphere. Pfister: analysis of data from FRAPPE (Front Range Air Pollution and Photochemistry Experiment). Gille: application of HIRDLS satellite data for estimating the CFC-11 and CFC-12 global lifetimes.
Ken Minschwaner was also an ASP Visiting Faculty Fellow during August-November, 2015.

If applicable, list participation in any other UCAR/NCAR activities by your faculty, staff, and students during the last eight years that are not already indicated above.

In 2011, Genevieve Vaive (undergraduate student) attended the UCAR Summer Leadership Program.