The University of Nebraska-Lincoln (UNL) has been a UCAR member since 1979. The Department of Earth and Atmospheric Sciences (EAS) and the School of Natural Resources Applied Climate Science Program (ACS) are the primary UCAR-related units within the University. UCAR-related research activities are also conducted with the Departments of Biological Sciences, Biological Systems Engineering, Chemistry, Civil Engineering, Mathematics, and Mechanical Engineering. The renewal application packet submitted by UNL focuses on the two primary units.

The renewal application packet demonstrates EAS’s commitment to its UCAR-related program of studies and research. EAS has 19 faculty members engaged in UCAR-related work. Moreover, EAS is conducting a search to fill a newly-added faculty line in atmospheric sciences. And, EAS is developing contemporary additions to its UCAR-related curriculum. EAS offers a BS degree in Meteorology-Climatology which meets the American Meteorological Society guidelines for a bachelor’s degree in atmospheric science as well as meets the requirements of the GS 1340 Meteorology Series. EAS also offers BS and BA degrees in Geology. EAS BS and BA students are provided with opportunities to conduct faculty-mentored undergraduate research. In addition, EAS offers MS and PhD degrees in Earth and Atmospheric Sciences with specializations in UCAR-related subjects (Meteorology-Climatology, Hydrogeology, and Environmental Studies). Currently, there are 75 undergraduate students majoring in Meteorology-Climatology with 95 degrees granted in the last eight years and 35 undergraduate Geology majors with 54 degrees granted in the last eight years. There are currently 45-50 graduate students with 58 MS degrees and 26 PhD degrees granted in the last eight years, the majority of which were on UCAR-related subjects.

The renewal application packet also provides evidence of EAS’s commitment to progress in the atmospheric sciences. EAS’s UCAR-related research specializations fall into three groups: Meteorology-Climatology; Sedimentary Geology and Paleontology (including paleoclimatology); and Hydrosphere Geosciences. The faculty have a solid history of producing refereed publications and funded research proposals, and have many connections with national and international collaborators. EAS’s facilities are typical of a research-oriented department and include workstations, servers, meteorological field equipment, and geoscience laboratories.

ACS has 20 faculty members engaged in UCAR-related work. ACS complements BA and BS degrees in Environmental Studies with a newly-implemented emphasis in Applied Climate Science (four degrees granted since 2005). ACS supports MS and PhD degrees in Natural Resources with specializations in Climate Assessment and Impacts (two MS degrees granted and one PhD degree granted since 2005) and Bio-Atmosphere Interactions (two MS degrees granted since 2005). Finally, ACS supports MS and PhD degrees in Agronomy with a specialization in Agricultural Meteorology (no degrees granted since 2005). ACS has identified several initiatives focused on program improvement (e.g., the development of a new major in applied climate science and development of climate change variability education and outreach efforts). These data from the renewal application packet indicate ACS’s commitment to its UCAR-related program of studies and research.
Similarly, data within the renewal application packet reveal ACS’s commitment to progress in the atmospheric sciences. ACS’s UCAR-related research specializations fall into four categories: climate monitoring and data utilization; climate and crop modeling; carbon, water, and energy exchanges; and the human dimension. The program enjoys a healthy refereed publication rate, a strong history of successful proposal writing, and numerous relationships with national and international collaborators. Facilities include an off-campus agrometeorology laboratory and many on-campus resources, such as a hydroclimate laboratory and computer classrooms.

The renewal application packet shows that both EAS and ACS faculty are heavily invested in participation in the activities of UCAR. Examples include UNIDATA User’s Committee membership, the employment of UNIDATA and COMET resources for undergraduate and graduate education, the organization of several NCAR workshops, and attendance at annual meetings.

The UCAR Membership Committee concludes that membership criteria are fulfilled, and recommends to the Members’ Representatives that the membership of the University of Nebraska-Lincoln be continued as provided by the bylaws.