The University of Wisconsin, Madison was a founding member of UCAR in 1959. The Department of Atmospheric and Oceanic Sciences (AOS) at the University of Wisconsin offers B.S., M.S., and Ph.D. degrees in atmospheric and oceanic sciences. There is a wide range of courses offered for both undergraduate and graduate students. The courses include survey courses for students outside of the department in topics such as Weather and Climate, Oceanography, etc. The set of courses would prepare undergraduate students for careers in weather forecasting and further graduate study in atmospheric or oceanic sciences. The department academic faculty consists of 15 members, with an additional 7 adjunct and affiliate faculty. In the past 8 years, the department has awarded 123 B.S. degrees, 56 M.S. degrees, and 42 Ph.D. degrees.

AOS employs state-of-the-art teaching and research laboratory facilities contained within a dedicated 15 story building. This building includes several research centers, including SSEC (Space Science and Engineering Center), CIMMS (Cooperative Institute for Meteorological Satellite Studies), CCR (the Center for Climate Research), and SAGE (The Center for Sustainability and the Global Environment). SSEC focuses on space based observing systems, CIMSS on weather remote sensing systems, CCR on a broad range of climate questions with participants from all over campus, and SAGE focuses on global problems stemming from interactions between human activities and the environment. Several faculty and many graduate students have strong collaborations and affiliations within these centers. These research centers have particular expertise in space-base observing systems and the development and applications of weather remote sensing systems.

Research facilities include a variety of software for satellite, radar, data analysis and modeling with departmental computers connecting to campus and national networks. Other research facilities include laboratories for paleoclimatology and field measurements.

The core atmospheric sciences faculty have very active and productive scientific research programs publishing over 40 journal articles in 2009. The majority of AOS faculty are also active participants in UCAR activities. This includes participation in governance, collaborative research, and workshops and as model users. They have participated in field campaigns, served in UCAR governance, helped to organize NCAR workshops, participated in leadership roles on NCAR scientific committees, and the faculty includes one NCAR faculty fellow awardee.

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