



## Department of Atmospheric Sciences (ATMO) and the Institute of Atmospheric Physics (IAP)

### THE DEPARTMENT AND INSTITUTE

- We are 10 core faculty, 5 emeritus professors, 9 research scientists, 9 joint faculty and 32 graduate students who teach through ATMO and conduct research through IAP.
- ATMO was one of the first 10 atmospheric science departments established in the U.S. The founding meeting of the University Corporation for Atmospheric Research (UCAR) was held in Tucson in 1959 and led to the creation of the NSF-funded National Center for Atmospheric Research in Boulder, CO, a year later.
- According to the NRC rankings, ATMO is one of the top-ranked departments in the nation (<http://nrc.arizona.edu/node/155>) and also in the UA College of Science, which in turn was ranked 1<sup>st</sup> in the nation in the physical sciences by the National Science Foundation in 2010.
- Federal, State and private sector funding of over \$2M/year support research in satellite remote sensing; radiation; air-sea interactions; tropical meteorology; lightning and atmospheric electricity; weather forecasting, analysis and predictability; climate; atmospheric aerosols; and solar energy, amongst others.
- People in ATMO/IAP actively collaborate with The National Weather Service (collocated on campus); the 25<sup>th</sup> Operational Weather Squadron at Davis Monthan Air Force Base; and Vaisala, the global leader in weather measurement, which has strong ties to ATMO/IAP through our lightning research program.



### NEW DEVELOPMENTS

- **NSF Macrosystems Biology.** ATMO faculty Chris Castro, Francina Dominguez, and Xubin Zeng are co-investigators on a \$3M NSF grant, led by Russell Monson of the UA School of Natural Resources, to understand better the complex processes by which the monsoon influences ecosystems and natural cycles. The team's research is aimed at unraveling the interactions between weather, soil, and plants linked to monsoon phenomenon and the hydrologic cycle in the Southwest.
- **Bachelor of Science in Environmental Science.** ATMO participated in the creation of a revised Bachelor of Environmental Science degree program offered by the Department of Soil, Water and Environmental Science with a new focus area in atmospheric science, amongst others. Courses within this focus area are designed primarily as preparation for a graduate degree in atmospheric sciences at the M.S. or Ph.D. level; or for employment as a meteorologist. [http://ag.arizona.edu/swes/students/handbooks/envs\\_guidelines\\_11\\_12.pdf](http://ag.arizona.edu/swes/students/handbooks/envs_guidelines_11_12.pdf)
- **American Meteorological Society.** Professor Xubin Zeng was elected Fellow of the American Meteorological Society in 2011.
- **NASA Reduced Gravity Student Flight Opportunities Program** Atmospheric Science undergraduate research students, Kyle Rine and Jana Pence, were members of one of two teams from the University of Arizona chosen to participate in this year's NASA Reduced Gravity Student Flight Opportunities Program. Their research team attempted to repeat the famous Miller-Urey experiment on the chemical origins of life. Video slide show at: [http://www.youtube.com/watch?v=JZKDgRAI2f8&feature=player\\_detailpage](http://www.youtube.com/watch?v=JZKDgRAI2f8&feature=player_detailpage)



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