

FACILITIES, EQUIPMENT, AND OTHER RESOURCES

The research laboratories used for this project are well equipped with network of personal computers loaded with all necessary software packages (VPI, MATLAB, PSPICE, ArcGIS, etc.). In addition to the research laboratories computing facilities, resources are exclusively available to the students enrolled in the College of Engineering. The Engineering computing facilities include PC lecture room (30 Dell Precision 390), CAD lecture/lab (25 Dell Optiplex 745), several PC Laboratories (more than 100 Dell computers). Computers and data acquisition systems are also available at many other laboratories in the College. Basic application software (word processing, spreadsheet, etc.) are available at all university-wide computer facilities. Some computational software (e.g., MATLAB, LabView, etc.) are also available in the college computation facilities. The PI is a guest scientist at Lawrence Berkeley National Laboratory and a scientific visitor at the National Center for Atmospheric Research. The PI also has access to University of Texas supercomputer, one of the fastest in the nation. Huge computational and data storage capabilities at these institutions are available to the PI when needed.

The College of Engineering at UTSA is housed in three buildings with a total square footage area of more than 350,000. The college is home to four departments (Biomedical Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering and Mechanical Engineering). The Department of Electrical and Computer Engineering holds about 100,000 square feet. Each Department has its own main suit that has offices for Administrative staff. Departments also have individual offices for faculty (average 200 sq ft each), post doctoral and Ph.D. students (average 130 sq ft each). Masters students, who are either Research or Teaching Assistants, are typically housed in individual cubicles with an average space of about 100 sq ft each. All students (including undergraduates) who participate in the research laboratories' activities are provided with a desk and a personal computer in the laboratories.

The PI has a suite of hydrometeorological observation equipment including a K-band **radar**, two **weather stations**, **soil probes**, and tipping-bucket **rain gauges**. His institutional collaborators have other hydrometeorological equipment including a **scintillometer**.