About McDonald Observatory

McDonald Observatory, a research unit of The University of Texas at Austin, is one of the world's leading centers for astronomical research, teaching, and public education and outreach. Observatory facilities are located atop Mount Locke and Mount Fowlkes in the Davis Mountains of West Texas, which offer some of the darkest night skies in the continental United States. The Observatory's administrative offices are on the UT-Austin campus. The Observatory works with the University's Department of Astronomy on both research and teaching. McDonald's principal research telescopes are:

The Hobby-Eberly Telescope
With its 9.2-meter (433-inch) mirror, the HET is one of the world's largest optical telescopes. It's optimized for spectroscopy, the decoding of light from stars and galaxies to study their properties. This makes it ideal for searching for planets around other stars, and studying distant galaxies, exploding stars, black holes, and more. The HET, dedicated in 1997, is a joint project of The University of Texas at Austin, The Pennsylvania State University, Stanford University, Ludwig-Maximilians-Universität München, and Georg-August-Universität Göttingen.

The Harlan J. Smith Telescope
Constructed 1966-68, the Smith Telescope has a 2.7-meter (107-inch) mirror, which was the third largest in the world when built. The telescope is used every clear night of the year.

The Otto Struve Telescope
Constructed 1933-39, the Stuve Telescope was the first major telescope to be built at McDonald Observatory. Its 2.1-meter (82-inch) mirror was the second largest in the world at the time. The telescope is still in use today.

Other Telescopes
McDonald also operates a 0.8-meter (30-inch) telescope, and a laser system that measures the distance between Earth and the Moon and tracks the drift of Earth's continents.

Public Education and Outreach
McDonald Observatory operates a multi-faceted international public outreach program. At the Observatory Visitors Center, outreach events include star parties, public tours, K-12 teacher and student activities, and more. McDonald also produces the StarDate and Universo radio programs, StarDate magazine, the StarDate Online and Universo Online web sites, and special programs for hundreds of elementary and secondary teachers across the United States.