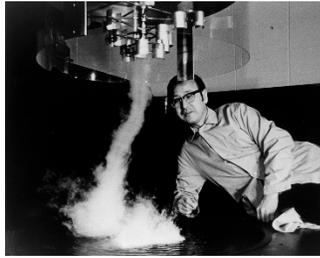


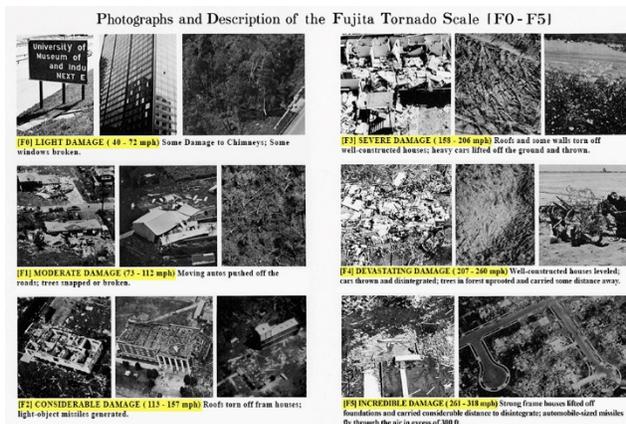
Dr. Ted Fujita, Severe Weather, and the Holdings of the Southwest Collection
by Robert Weaver



Dr. Tetsuya Theodore “Ted” Fujita (1920-1998) was a world-renowned meteorological researcher whose work changed the way the scientific community and the public understand and deal with severe weather. The Southwest Collection houses the “Tetsuya Theodore ‘Ted’ Fujita Papers,” a comprehensive collection of his professional work that encompasses over one hundred boxes, including thousands of photographs documenting decades of U.S. and international tornadoes, severe storms, and their aftermath. It also contains drafts and published copies of his scientific articles and reports, supported by a large volume of research material ranging from detailed, hand-drawn charts and graphs, to photographic slides and motion-picture film. Reams of correspondence, hundreds of maps, and similar items round out the holdings.

Dr. Fujita was born in Kitakyushu, Japan. After receiving his doctorate from Tokyo University in 1950, he began his career as an associate professor at the Kyushu Institute of Technology. In 1953 he transitioned to the University of Chicago where he served as a professor for almost forty-five years. There his research focused on meteorology, especially severe weather, such as tornadoes, hurricanes, and microbursts, both in the United States and internationally.

An observationalist working well before the era of digital recording devices and DOPPLER radar, Fujita pioneered new techniques for documenting severe storms, including aerial photography and the use of satellite radar images and film. This allowed him prove the existence of microbursts and downbursts, as well as multiple-vortex tornadoes long before either were captured on film. He is most famous, however, for creating the Fujita Scale, or F-scale, for assessing tornadic intensity based on a storm’s wind speed and the extent of damage that it caused. To define this scale, Fujita methodically documented physical damage, loss of life, and the social effects of tornadoes and hurricanes on communities. Much of this research was performed within large-scale projects that Dr. Fujita led or participated in, such as the National Severe Storms Project (NSSP) and the creation of the Wind Science and Engineering Research (WISE) Center at Texas Tech University.



The most widely-used materials in the collection pertain to 1974’s Super Outbreak of tornadoes, at the time the largest tornado outbreak on record for a twenty-four hour period. One hundred forty-eight vortices occurred in thirteen states in the Midwest, South, the Eastern seaboard, and the Canadian province of Ontario. The Super Outbreak’s death toll of three hundred was not exceeded until another outbreak in April 2011. The granularity of his investigation

into this event cannot be overstated. It consists of hundreds of photographs, reams of research

data and resulting publications, and a variety of maps and charts, created by Fujita, and a comprehensive collection of newspaper articles from local communities affected by the storms.

The capstone of his published work was the Satellite and Mesometeorology Research Project (SMRP), a massive international research collaboration that produced over two hundred reports that defined the modern understanding of weather. This research not only led to changes in building codes and improved early detection methods, but also attracted the interest of government agencies including NASA, the United States Navy, and the National Oceanic and Atmospheric Administration. The Southwest Collection has digitized the entirety of the SMRP reports, and have made them available at <http://hdl.handle.net/10605/298>. The finding aid for the collection is also available through Texas Archival Resources Online (TARO) at <http://www.lib.utexas.edu/taro/ttusw/00271/tsw-00271.html>.