

SENATE RESOLUTION NO. 126

WHEREAS, The Senate of the State of Texas is pleased to recognize the Geronimo Creek Atmospheric Monitoring Station for 31 years of ongoing measurements of the aerosol optical depth, total precipitable water, and total column ozone in the atmosphere over Guadalupe County; and

WHEREAS, These ongoing measurements have become the longest series of such measurements in the United States since the Smithsonian Astrophysical Observatory measured aerosol optical depth and total precipitable water at Table Mountain, California, from 1926 to 1957; and

WHEREAS, The measured and photographic clarity of the sky over the station has improved despite the periodic arrival of volcanic aerosols from the historic 1991 eruption of Mount Pinatubo in the Philippines, smoke from western states and Mexico, dust from the Sahara Desert, and smog from the Ohio and Tennessee Valleys; and

WHEREAS, The average total water vapor, which is the principal greenhouse gas, has remained stable for 31 years, despite the increase caused by the historic 1997-1998 El Niño effect and the decrease caused by the extraordinarily dry 2010-2011 La Niña effect; these measurements were made by instruments calibrated at Hawaii's high-altitude Mauna Loa Observatory annually from 1992 to 2018; and

WHEREAS, Important discoveries at the Geronimo Creek Atmospheric Monitoring Station led to a 1993 Rolex Award; the station's findings have appeared in leading scientific journals, including an error in the National Aeronautics and Space

Administration's ozone satellite that was published in *Nature* in 1993 and the discovery by Sarah Anna Mims of living microbes in biomass smoke from Yucatan, Mexico, that began the new field of science called pyroaerobiology, published in *Atmospheric Environment* in 2004; and

WHEREAS, Forrest M. Mims III, scientist-in-residence at the station, has described atmospheric conditions over Guadalupe County while representing the county at the Alamo Area Council of Governments; he has also described these conditions in many scientific papers and in many of his science columns for the *Seguin Gazette* and the *San Antonio Express-News*; he has devoted many years to encouraging children, students, and citizen scientists to employ photography and simple instruments he has designed to record the clarity of the atmosphere over Texas; now, therefore, be it

RESOLVED, That the Senate of the State of Texas, 87th Legislature, hereby recognize the Geronimo Creek Atmospheric Monitoring Station as it begins its 32nd year of measurements of aerosol optical depth and total precipitable water, the longest such series in the United States; and, be it further

RESOLVED, That a copy of this Resolution be prepared for the station as an expression of esteem from the Texas Senate.

Campbell

President of the Senate

I hereby certify that the above Resolution was adopted by the Senate on March 9, 2021.

Secretary of the Senate

Member, Texas Senate