

The applicant, James Flynn, is a Research Associate Professor in the Earth & Atmospheric Science department at the University of Houston, a Tier 1 Public Research University as designated in 2011 and again in 2016 by The Carnegie Foundation for the Advancement of Teaching. UH is the third largest university in Texas and offers graduate programs in a variety of programs including physical sciences, engineering, and technology, and maintains accreditation through ABET as well as SACS (Southern Association of Colleges and Schools Commission on Colleges).

The proposed research will be contained within the University's Coastal Center campus in La Marque, TX. Dr. Flynn frequently conducts experiments and maintains laboratory space at the Coastal Center and coordinates all activities closely with the Center's Director and Caretaker.

Across the University, UH receives approximately \$110M annually in external funding for extensive research activities which are administered through the Division of Research (<https://www.uh.edu/research/>). For over 20 years, Dr. Flynn's research has collected detailed measurements of atmospheric physical and chemical properties using a variety of fixed and mobile ground based measurements, aircraft, and boats. These measurements have helped inform air quality policy decisions through the application of sound science.

To further this research and support the Department of Energy's upcoming research campaign in Houston, the Tracking Aerosol Cloud Interactions Experiment (TRACER, <https://www.arm.gov/research/campaigns/amf2021tracer>), Dr. Flynn will be deploying a 915 MHz wind profile radar (WPR) (Radiometrics XBS-BL) at the UH Coastal Center to complement the DOE's WPR system which will be at a different location within the Houston metro area. Dr. Flynn's team has assisted the State of Texas in the maintenance and data transmission for their WPR operations for several years as well as having received factory training on the use of the UH XBS-BL system. Additionally, as these operations will be integral to the DOE TRACER campaign measurements, UH will operate the WPR in close collaboration with the DOE team who has extensive experience in WPR operation and utilizes this exact make and model at some of their field sites.