

Left: University of Puerto Rico-Mayaguëz student *Erick Garcia* describing research conducted to improve wind speed forecasts in the Rio Grande Valley. **Right:** University of Puerto Rico-Mayaguëz student *Jose Algarín-Ballesteros* discussing severe weather climatology across the Rio Grande Valley with a rapt visitor.

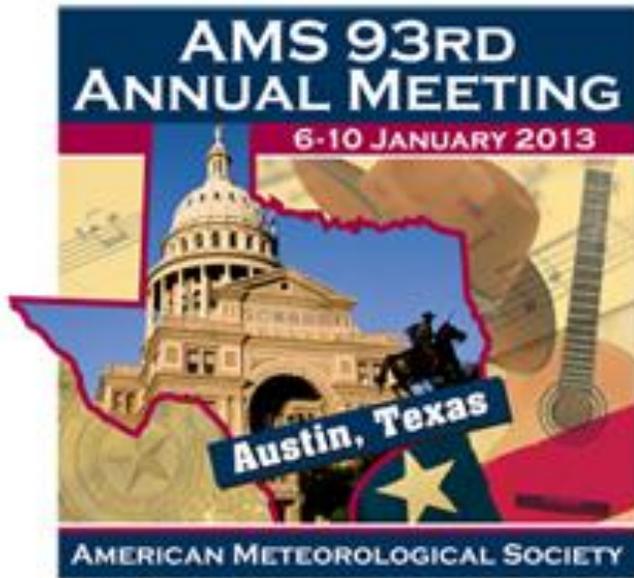
Making our Mark at Weather Meeting in Austin NWS Brownsville/RGV Students, Staff Shine at National Event

AUSTIN – Warning Coordination Meteorologist *Barry Goldsmith* and summer students *Erick Garcia* and *Jose Algarín-Ballesteros* from the University of Puerto Rico-Mayaguëz attended and presented at the [93rd Annual Meeting of the American Meteorological Society](#). The Meeting’s theme, “Taking Predictions to the Next Level: Expanding Beyond Today’s Weather, Water, and Climate Forecasting and Projections”, was on target for each presentation. Mr. Garcia and Mr. Algarín-Ballesteros’ presented at the **12th Annual Student Conference**. Mr. Garcia’s poster, “The Correlation between Radar Velocity Profile Data and Wind Advisory Verification (conducted with Forecaster *Jason Straub*), assessed the relationship of velocity azimuth display (VAD) wind profile (VWP) data and upper air wind data from radiosonde observations at the Brownsville office, with observed surface wind speeds in cases where forecast decisions were required for a wind advisory (30 to 39 mph 1-minute observed wind for 2 hours or more, or frequent gusts between 40 and 57 mph). Wind advisory conditions can blow loose items around, such as portable basketball hoops, trash containers, lawn furniture, and holiday decorations; cause difficult driving conditions, and leave power out in some areas.

Mr. Algarín-Ballesteros’ poster, “Severe Weather Climatology for the WFO Brownsville County Warning Area”, described the number of straight line wind, hail, and tornado events and their time of occurrence (month and hour of the day) for reports dating back to 1950. The research can be used to help current and future forecasters build knowledge on when the most favored opportunities exist for dangerous thunderstorm outbreaks.

Two of those outbreaks included the McAllen hailstorms of [March 29th](#) and [April 20th](#), which left up to \$500 million in insured property damage from hail, wind, and urban flash flooding in March 29th – and dumped hailstones the size of softballs on April 20th. Mr. Goldsmith (right) was invited to present at the **9th Symposium IMPACTS: Major Weather Events and Impacts of 2012** on how each event affected the mid Valley. In addition to an overview of the event, Goldsmith described how the March 29th was feared by residents with little or no experience with a storm of such magnitude. The location of the worst of the storm in the more affluent section of McAllen, and how that influenced damage values, was also discussed.





The Annual Meeting of the American Meteorological Society brings a cross section of educators, students, public, and private sector participants together to meet, network, and begin or continue efforts to improve how the weather enterprise can provide information for public safety and enhance the economy across America and around the world. The 93rd Meeting included 37 Conferences and Symposia on topics ranging from Environmental Information Processing Technologies to the 1st Symposium on Building a Weather Ready Nation.

A special Town Hall meeting on Hurricane Sandy showed how much improvement has occurred in the state of meteorological science and prediction, from a nearly perfect track forecast more than four days from landfall, to a three dimensional model of the atmosphere inside and outside of the Superstorm. The Town Hall also showed how much we still need to improve in communicating risk, threat, and potential impact to

people in harm's way. Other Town Hall meetings included a discussion on the [Weather Coalition](#) and the possibility for a U.S. Weather Commission to galvanize the community into political clout, and a unique discussion on how Spirituality informs weather and climate knowledge.

“The opportunity to meet with stakeholders in the Weather and Climate Enterprise each year is critical”, said Goldsmith. “Sharing ideas and building relationships for future collaboration, from the Rio Grande Valley to across the Nation, will ensure that we continue to improve our mission to save life and property, and protect livelihoods, from more extreme weather in a changing world.”

For more information on the American Meteorological Society, click [here](#).