Georgia Peanut Commission Final Report 2020

Project Title: SUPPORT OF UGA WEATHER NETWORK
Principal Investigator: Ms. Pamela Knox

Total budget for 2020: $5,000.00

The UGA Georgia Weather Network provides weather information to growers in the State of Georgia from a network of 87 automated weather stations, including one new station added in 2020 at Glennville. Weather data gathered and disseminated by the Georgia Weather Network, as well as information derived from that data such as drought severity provide a critically-needed resource to peanut producers in the state of Georgia.

The UGA weather network continues to be maintained at a high level of functionality and overall the weather network continues to provide high quality weather information in a timely manner. We are especially proud that our network of automated weather stations is one of the best maintained weather mesonets in the United States, with visits to nearly every station each month. Data are also quality-controlled on a daily basis. This allows us to monitor station accuracy and keep the stations going with few breaks. We are also pleased to say that we managed to maintain a regular schedule of visits to each station during the pandemic shutdown in 2020, enabling us to continue to provide high-quality weather data throughout the growing season. Funding from the Georgia Peanut Commodity Commission helped pay for the regular maintenance of the network, and we appreciate your support!

Overall, the network performed at a very high level in 2020 due to the high level of maintenance. Over 3 million observations were made at our network of stations this year. Data outages were few and most of them were caused by temporary loss of cell modem services; the data collected during these outages was stored in the data loggers and recovered once cell service was restored. We are continuing to work towards migrating the database to an online cloud server with Amazon Web Services and building a new web site to support that connection, but have been delayed by the loss of our web programmer to private industry and a hiring freeze across most of the University of Georgia which has limited our ability to get that done. We received over 100 data requests from agricultural users of our data that were completed within a few days, and provided data for numerous student and scientific projects both within Georgia and across the United States. We will continue these efforts into 2021. In the next year, we hope to put together a series of maps which will show the average soil temperature data on different dates across the state to assist with planning for planting of peanuts and other crops.