Establishing a website to aid growers in harvesting and irrigation decisions: “Peanut FARM”.

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Previous studies in the southeastern U.S. have shown the utility of using an adjusted growing degree day (aGDD) method for predicting peanut maturity. The method relies on measurements of ambient temperature and the receipt of irrigation and/or rainfall. To make the aGDD method adoptable, it is necessary to launch the tool on a website that allows growers to input weather and irrigation information for individual fields. A second tool that provides irrigation scheduling recommendations will also be available for growers to access on the website. This model was developed at the University of Florida and utilizes a basic checkbook method based on the prediction of crop development and its associated water-use using aGDD’s. Our team is in the process of launching the Peanut FARM (Field Agronomic Resource Manager) website. Growers will be able to establish individual accounts and enter or upload weather data for individual fields. aGDD values will be calculated by the program and will provide: 1) harvest prediction, and 2) irrigation scheduling. Simultaneously, ongoing research will continue evaluating new peanut cultivars, regional variation, and model prediction accuracy for both crop maturity and water-use calculations. Information about the process of utilizing the website and results from research testing the models will be presented.