

AgroClimate App, a Mobile Decision Support Tool for Agriculture

J. H. Andreis¹, C. W. Fraisse¹, W. Pavan²

¹Department of Agricultural and Biological Engineering, University of Florida, Gainesville, FL, USA

²Institute of Geosciences and Exact Sciences, University of Passo Fundo, Passo Fundo, RS, BRA

Introduction

The recent expansion of mobile phones in agricultural areas is causing a revolution in the way information is provided to farmers around the world. There has been considerable interest in the potential role mobile phones have begun to play in the marketing of agricultural outputs and also in providing information with the potential to help increase production and reduce risks. Mobile phones are an effective way to reach farmers at the time decisions are made in the field. With this idea in mind, researchers at University of Florida, USA and University of Passo Fundo, Brazil are cooperating to develop solutions delivered via mobile phones.

Objectives

As result of this cooperation effort, the AgroClimate mobile app was created with the goal of helping farmers in the southeastern USA with their management strategies by delivering valuable weather and crop development information.



AgroClimate app icon.

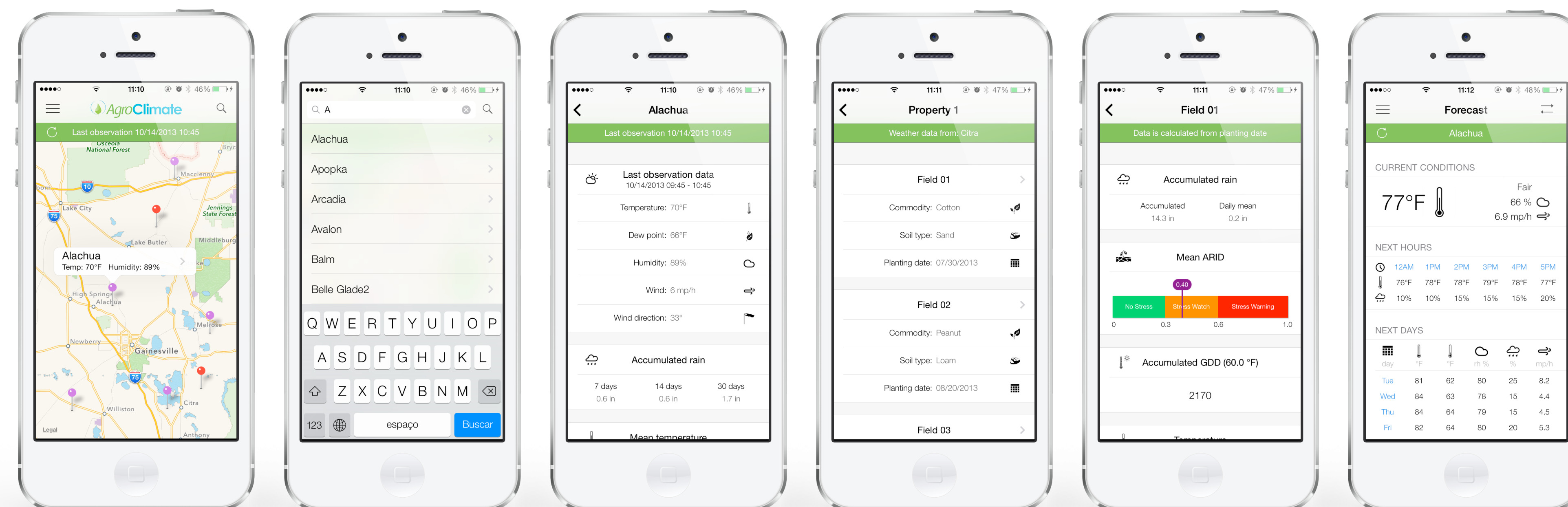
The AgroClimate app is currently available for mobile devices with iOS operating system through the App Store®.

A version of the app for Android operating system is being developed and will be available soon.

The app supports three languages (English, Spanish and Portuguese) and currently covers the state of Florida, USA.

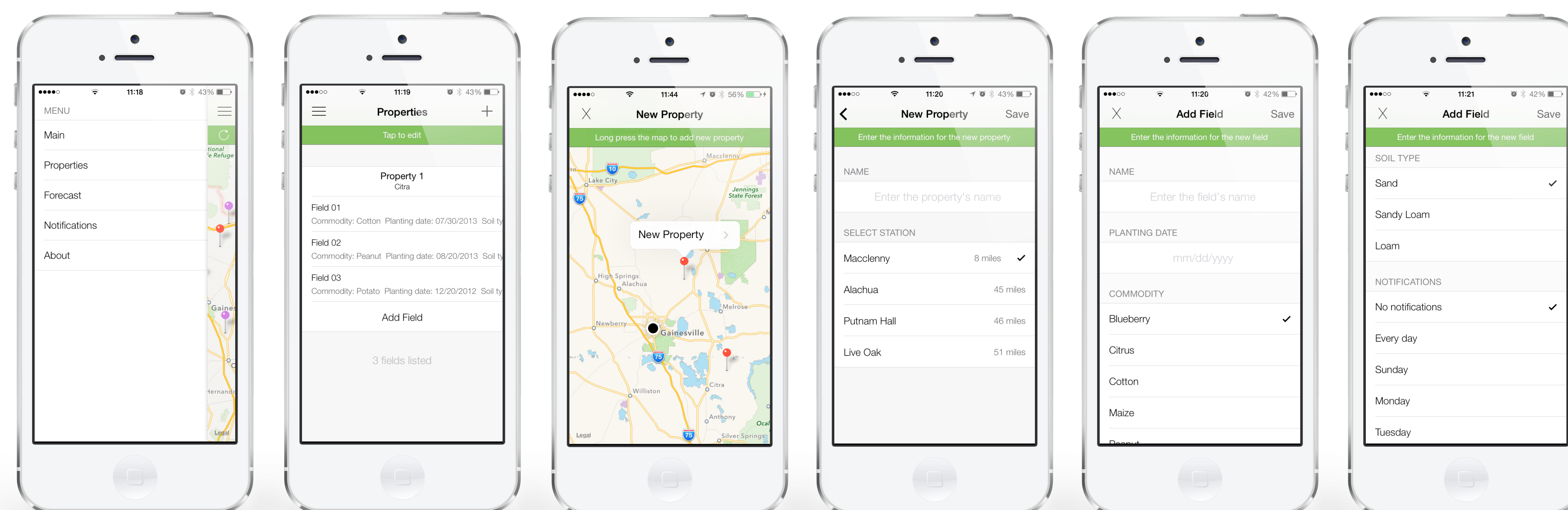
The App

After downloading the app, users can tap the app icon to open it and a login screen will be presented. Users can either login with their AgroClimate account or create a new free account for accessing the app. After signing in, the main screen will present all FAWN's automated weather stations. Users can select a station from the map or use the search input in the top bar to find a specific weather station by name. After selecting a weather station, the app will present current and observed weather data from that location. The current weather data presented includes temperature, dew point temperature, humidity, wind speed and wind direction along with observed accumulated rainfall, mean temperature and accumulated growing degree days (50°F base temperature) for the last seven, fourteen and thirty days.



Map view with geo-located stations presented. Search stations feature for easy reference. Observed weather data for the selected location. Fields registered by the user. Specific weather information for the selected field. Current conditions and weather forecast for the next hours and days.

Users can also register and manage properties in the app by selecting the Properties option in the app menu. By registering properties and fields, producers can start tracking specific weather and crop development information starting at planting date.



AgroClimate app menu. Properties and fields registered. Adding a new property. (selecting the location) Adding a new property. (inputting name and selecting the station) Adding a new field. (inputting name, planting date and selecting a commodity) Adding a new field. (selecting the soil type and the days to receive notification updates)

Notifications

The AgroClimate app has an option for users to schedule days of the week when to receive updates of observed weather and crop development information for their fields.

The updates are sent to users via push notifications which work like text messages. However, push notifications are sent through a internet connection and do not incur in to any charges to be sent or received.

Users can also check all recent notifications received.



Push notification received.

All recent notifications received by the user.

References

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