Drone Demo for Improved Agriculture Management

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The small Unmanned Aerial Systems (sUAS), also called drones, have shown as a promising technology for precision agriculture management, with recent miniaturization of commercial electronics and sensors as well as advances in remote sensing technologies. We will showcase a few drone systems and execute a flight mission to collect multi-spectral imagery over the Russell Ranch alfalfa fields.

- Key components of a drone system will be introduced with examples.

- A brief summary will be presented about the FAA regulations, sUAS license, and safety.

- We will demonstrate how to plan a drone flight mission using flight planning apps on tablets, and execute a test flight to collect imagery.

- The processed images will be posted online.