



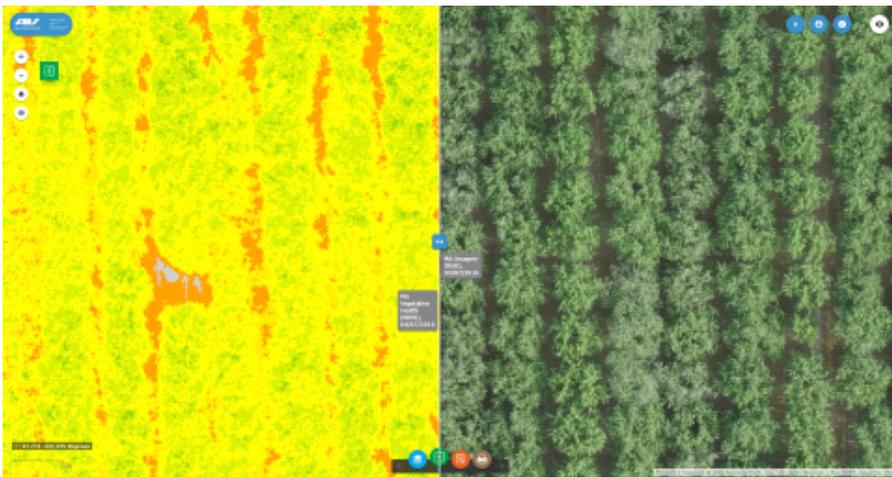
December 7, 2016

## AeroVironment and California State University, Fresno Begin Field Research to Identify Water Stress in Almond Production Using Advanced UAV Data

- 1 AeroVironment and Fresno State to study the correlation between aerial multispectral data and hydration data related to water stress
- 1 Results should identify varying levels of water stress in almond trees and which types of imagery might enable almond producers to make more effective water management decisions
- 1 Project running Dec. 2016 - Aug. 2017; final results to be announced in September 2017

MONROVIA, Calif.--(BUSINESS WIRE)-- [AeroVironment, Inc.](http://www.aerovironment.com) (NASDAQ: AVAV), a global leader in unmanned aircraft systems for both military and commercial applications, today announced it has begun a year-long study with California State University, Fresno to research how unmanned aerial vehicle (UAV) imagery and analytics could potentially detect varying levels of water stress in almond trees and give producers smarter insights to make more effective in-season decisions regarding water management.

This Smart News Release features multimedia. View the full release here:  
<http://www.businesswire.com/news/home/20161207005468/en/>



"Improved crop management is a major goal for all growers, including almond producers," said Jon Self, vice president, AeroVironment Commercial Information Solutions. "Working closely with the plant science experts at Fresno State's globally recognized Jordan College of Agricultural Sciences and Technology, we look forward to developing a reliable and effective means of correlating multispectral data with almond tree hydration data to provide growers with better insight so they can proceed with certainty."

AeroVironment and Fresno State begin field research using advanced drone imagery and data analysis to identify water stress in almond production (Photo: Business Wire)

Almonds represent the state's second largest agricultural commodity, valued at \$5.33 billion in 2015 according to the [California Department of Food and Agriculture](http://www.cdfa.ca.gov/foodsafety/foodandagriculture). The Almond Board of California (ABC) reports that almonds account for approximately 14 percent of California's total irrigated farmland. To assure long-term sustainability, almond producers are increasingly turning to advanced technologies to push the envelope of water use efficiency while serving as good stewards of this limited resource.

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AeroVironment will deploy its Puma™ UAV configured with a 24 megapixels photogrammetric camera and 6-channel multispectral sensor to capture data and aerial imagery of the Fresno State University Agricultural Laboratory (UAL) orchards. AeroVironment's DSS™, a cloud-based analytics platform, will then process and analyze the data for correlation with ground measurements. The team will test several linear and non-linear geospatial data algorithms for statistical correlation and predictability validated by ground-level hydration data. Fresno State researchers and UAL campus farm staff will closely monitor the hydration levels of almond trees as well as environmental and crop conditions using a variety of soil and plant sensors.

Together, the team aims to gain a greater understanding of what types of imagery and data output will allow almond producers to make better decisions regarding the fine balance between water management and the needs of the crop to obtain optimal yield.

Results of the year-long study are expected to be available in September 2017.

Please visit [www.avinc.com/cis](http://www.avinc.com/cis) for more information on AeroVironment Commercial Information Solutions, including its Quantix drone and Decision Support System.

### **About AeroVironment, Inc. (AV)**

AeroVironment (NASDAQ: AVAV) provides customers with more actionable intelligence so they can proceed with certainty. Based in California, AeroVironment is a global leader in unmanned aircraft systems, tactical missile systems and electric vehicle charging and test systems, and serves militaries, government agencies, businesses and consumers. For more information visit [www.avinc.com](http://www.avinc.com).

### **Safe Harbor Statement**

This press release contains "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate or imply future results, performance or achievements, and may contain words such as "believe," "anticipate," "expect," "estimate," "intend," "project," "plan," or words or phrases with similar meaning. Forward-looking statements are based on current expectations, forecasts and assumptions that involve risks and uncertainties, including, but not limited to, economic, competitive, governmental and technological factors outside of our control, that may cause our business, strategy or actual results to differ materially from the forward-looking statements. Factors that could cause actual results to differ materially from the forward-looking statements include, but are not limited to, reliance on sales to the U.S. government; availability of U.S. government funding for defense procurement and R&D programs; changes in the timing and/or amount of government spending; risks related to our international business, including compliance with export control laws; potential need for changes in our long-term strategy in response to future developments; unexpected technical and marketing difficulties inherent in major research and product development efforts; changes in the supply and/or demand and/or prices for our products and services; the activities of competitors and increased competition; failure of the markets in which we operate to grow; failure to remain a market innovator and create new market opportunities; changes in significant operating expenses, including components and raw materials; failure to develop new products; the extensive regulatory requirements governing our contracts with the U.S. government; product liability, infringement and other claims; changes in the regulatory environment; and general economic and business conditions in the United States and elsewhere in the world. For a further list and description of such risks and uncertainties, see the reports we file with the Securities and Exchange Commission. We do not intend, and undertake no obligation, to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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