TIMING IS EVERYTHING

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BENEFITS OF THE PARTNERSHIP

- Initiated in 2007
- $14.5 M to UA
  - USGS: $12 M ($10 M direct expenditures)
  - Other sources (FWS, NASA, NSF, NOAA, Microsoft): $2.5 M ($2.2 M direct expenditures)
- 18 UA employees over the past 11 years (10 today)
- 23 UA students in 10 years
  - 9 graduate
  - 14 undergraduate
- 5 dissertations at UA & dozens globally
- 5 International visiting scholars
  - Mexico, Netherlands, Bhutan, Switzerland
- 56 peer-reviewed papers have used USA-NPN data or data products
RESEARCH SYNERGIES AT UA

College of Agriculture and Life Sciences
- SWES
- SNRE
- SRER
- AED
- Biosystems Engineering
- Campus Arboretum
- Entomology
- Extension

College of Social and Behavioral Sciences
- School of Geography and Development
- School of Information

Federal Partnerships in AZ
- USFWS Arizona Ecological Services
- SW Climate Adaptation Science Center
- Southwest Desert Research Station
- Fish & Wildlife Coop Desert Southwest CESU

Local Partnerships
- ASDM
- Tohono Chul
- Tucson Audubon
- Mission Gardens
- Ironwood Tree Exp
- Borderlands Restoration
- Tucson Botanical Gardens
- Watershed Management Group

College of Education
- BIO5
- CyVerse
- UA Libraries
- CNRS (France)

College of Public Health
- BIO5
- CyVerse
- UA Libraries
- CNRS (France)

College of Science
- Laboratory for Tree Ring Research
- Tumamoc Hill
- Ecology & Evolutionary Biology
- Biosphere 2

College of Social and Behavioral Sciences
- School of Geography and Development
- School of Information
SCIENCE ADVANCES
SUPPORT DECISION MAKING

- Pheno Forecasts: Short-term forecasts can guide pest insect control activities

- Verifying satellite-based data and data products

Zhang et al., 2018
Remote Sensing of the Environment

(a) VIIRS greenness vs. leaf bud break observations

$R^2 = 0.66$