# From Observation to Model to Fire Risk: The Need for Statewide Weather and Climate Data Enterprise

Lessons Learned From: Weather and Climate Informatics for the Electricity Sector: Sub-Daily Observations and the Predictability of Extreme Heat Event (EPC-15-036)

Wildfire Mitigation Workstream Meeting #1

September 23, 2020 - 3:39 to 3:45pm







### **Principle Investigators:**

**Owen Doherty** 

Eagle Rock Analytics
Sacramento, CA

Phone: (631)-766-7406

owen@eaglerockanalytics.com

#### Amato Evan

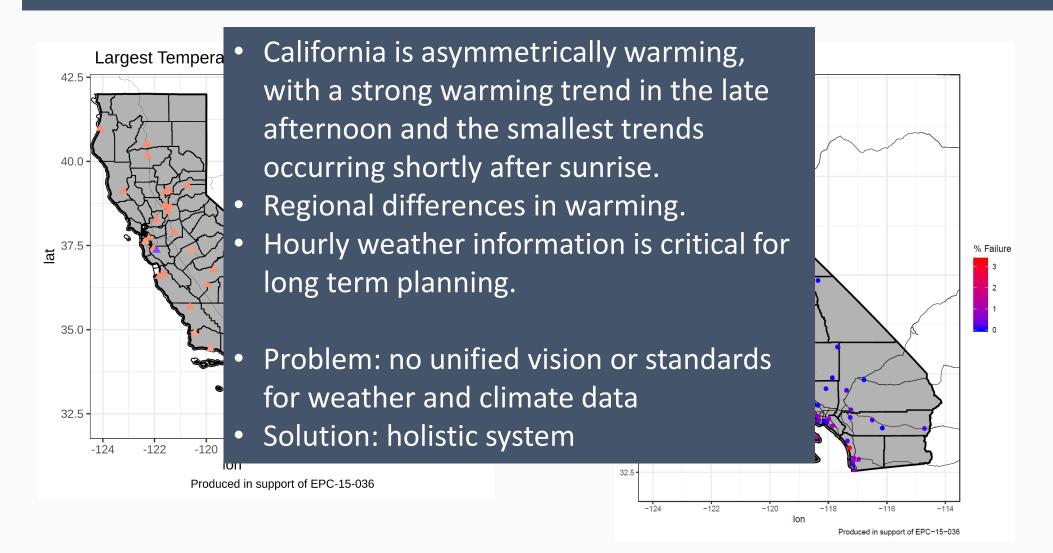
University of California, San Diego La Jolla, CA

Phone: (858)-822-6882

aevan@ucsd.edu



### **Key Results**





### Lessons Learned from EPC-15-036

- Disadvantaged & low-income communities poorly observed
- Weather and climate data are developed in silos
- Models and tools require interdisciplinary data
- A need for holistic vision for climate data for modeling efforts

Observations Gridded Products Climate Projections Models and Analytics Fire Risk

# Case Study: Onboarding Climate and Weather Data to Cal-Adapt

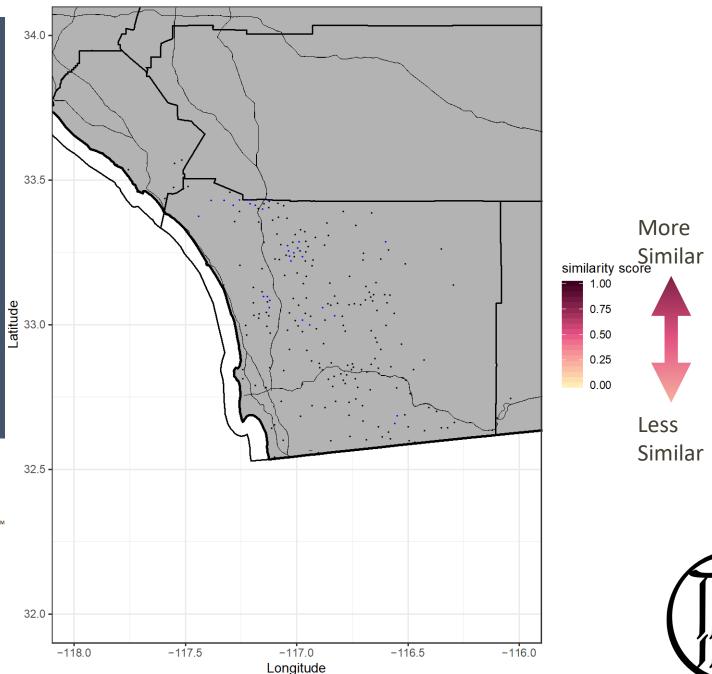


PIR-17-014





# Case Study: Optimization Weather Stations



SDG&E Station Similarity



EPC-18-026



More

Less

Similar

0.75 0.50 0.25 0.00

## Solution: A California Climate Data Enterprise



Models and Tools (Analytics) CEC **EPIC** Electric Climate Specific Projections Metrics **CA Climate** Assessments Observations: Historical & Real Time

Image Source: NOAA

### Contact and Acknowledgements

Contact Owen: <a href="mailto:owen@eagelrockanalytics.com">owen@eagelrockanalytics.com</a>

### Acknowledgments and Thanks:

CEC: Susan Wilhelm (CAM) & Martine Schmidt-Poolman (Cal-Adapt CAM)

Cal-Adapt: Nancy Thomas (UCB/GIF)

Pyregence: David Saah (PI – USF/SIG), Shane Romsos (PM - SIG), Janice Coen

(Team Lead - UCAR/USF)

Co-Production Engagement: Andy Jones (UCB/LLNL)

