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# Dry Farm Vineyards in Napa

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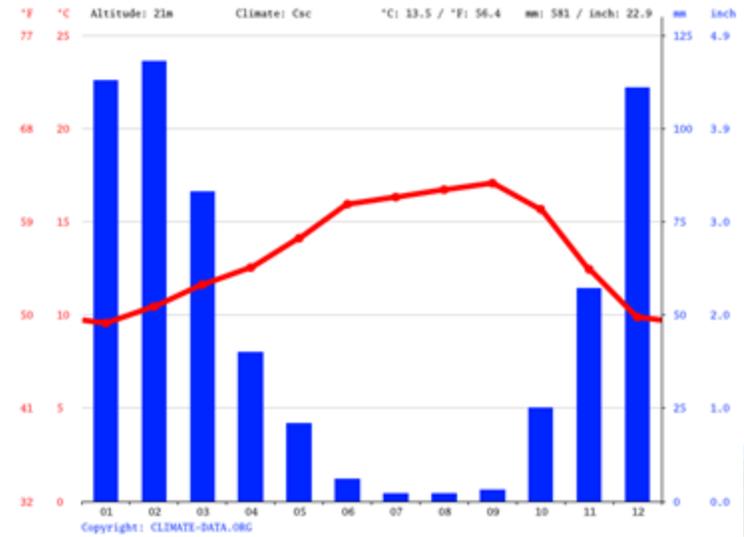
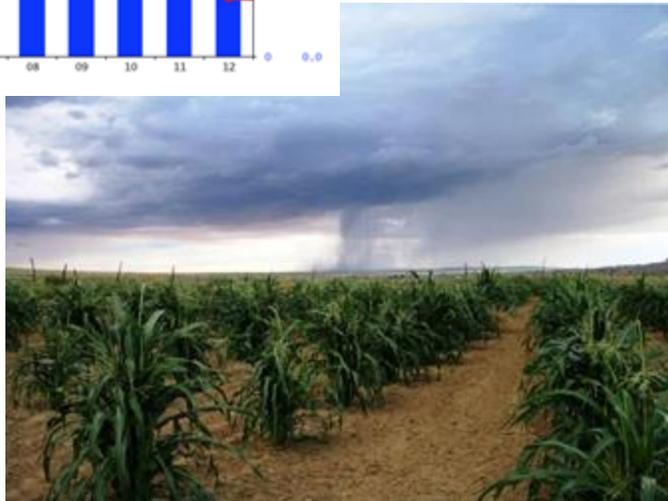
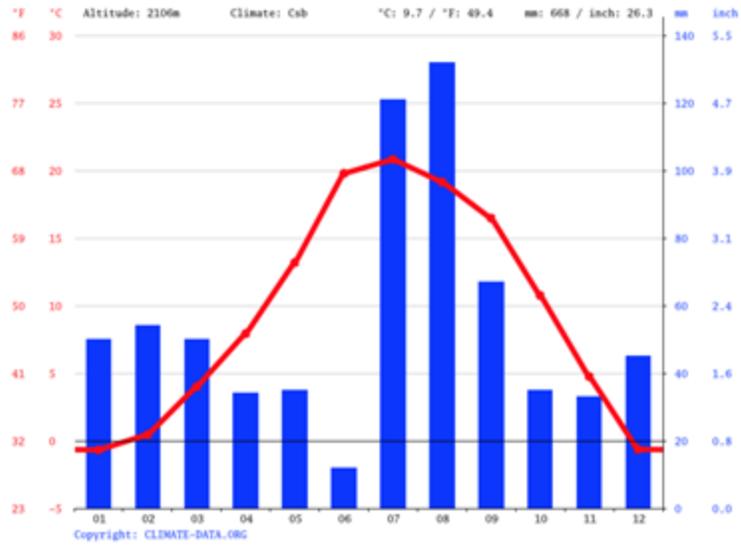
CALIFORNIA  
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# WATER IN CALIFORNIA AGRICULTURE



# DRY FARMING



## Definition of Dry Farming in Coastal California Vineyards

Dry Farming is a farming technique that relies solely on utilizing the water naturally present in the soil, captured by the rain, to meet the needs of an established vine, without irrigation. In a Mediterranean climate, with dry summers, this requires capturing winter and spring rain. This long-standing practice encourages deep root growth, resulting in high quality grapes that reflect the terroir of the vineyard.

# DRY FARMING EDUCATION FOR COASTAL WINEGRAPES

- Project Objectives
  - Build Dry Farming Expertise and Networks
  - Work Directly with Growers for Site-Specific Education & Implementation Assistance
  - Develop Dry Farming Case Studies
  - Develop Other Educational Resources
  - Host Educational Workshops, Webinars and Field Days
  - Communicate and Promote Adoption of Dry Farming Practices

## Dry Farming Practices in Napa

- Establishing a dry farmed vineyard
  - Rootstock selection
  - Spacing
  - Watering for the first 2 years
- Promoting an environment that increases the soil's capacity to hold water
  - Mow, Disc, Cultivate
  - Create a “sponge” to capture water in the winter and spring

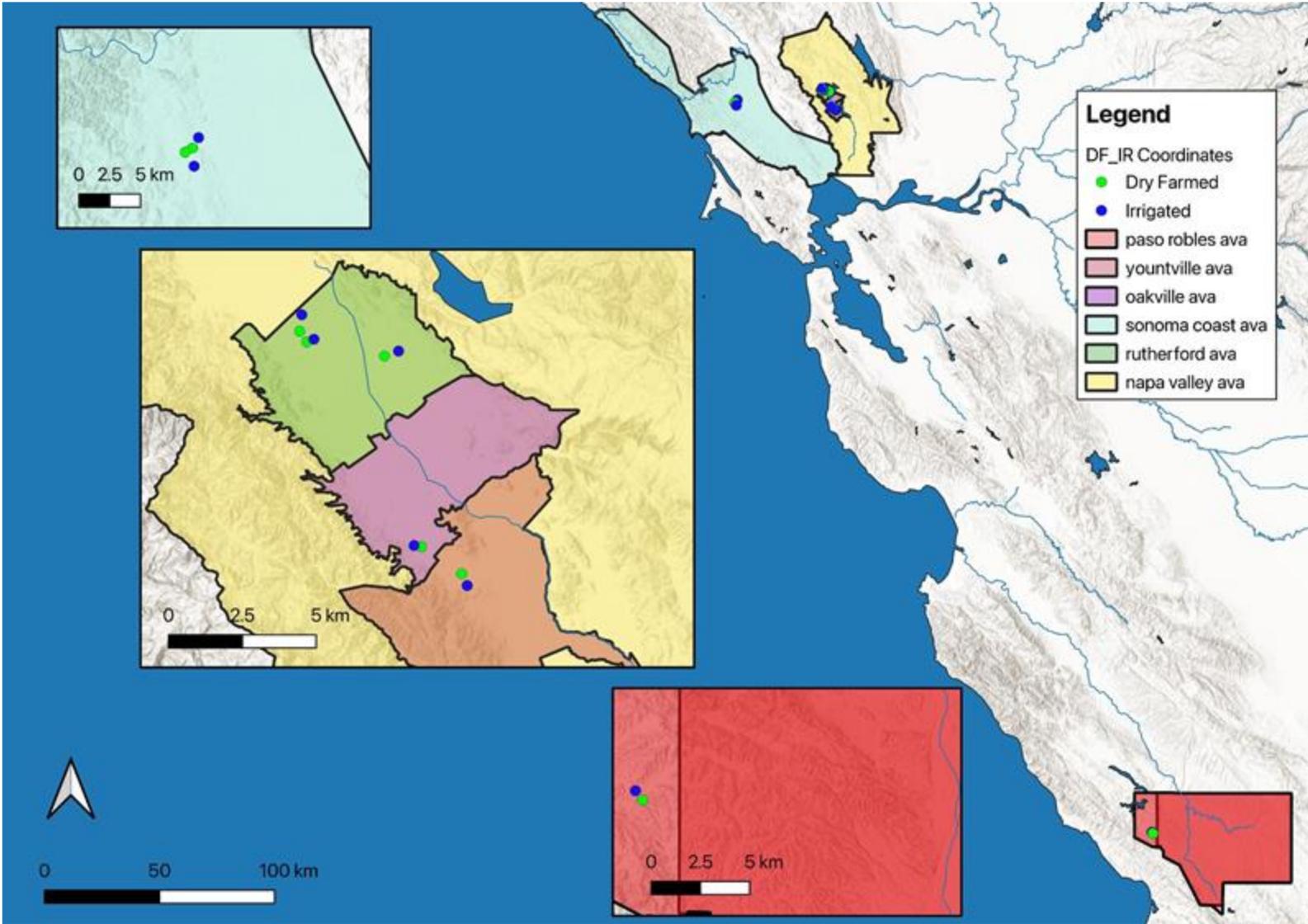




How much water is being used in dry farmed vs irrigated vineyards?

What is the relationship between water use and carbon accumulation in vineyards?

Does dry farming vs irrigation lead to different harvest outcomes?



# RESEARCH DESIGN

# VINEYARD MEASUREMENTS

## Soils

- Water content
- Texture
- Organic carbon

## Vines

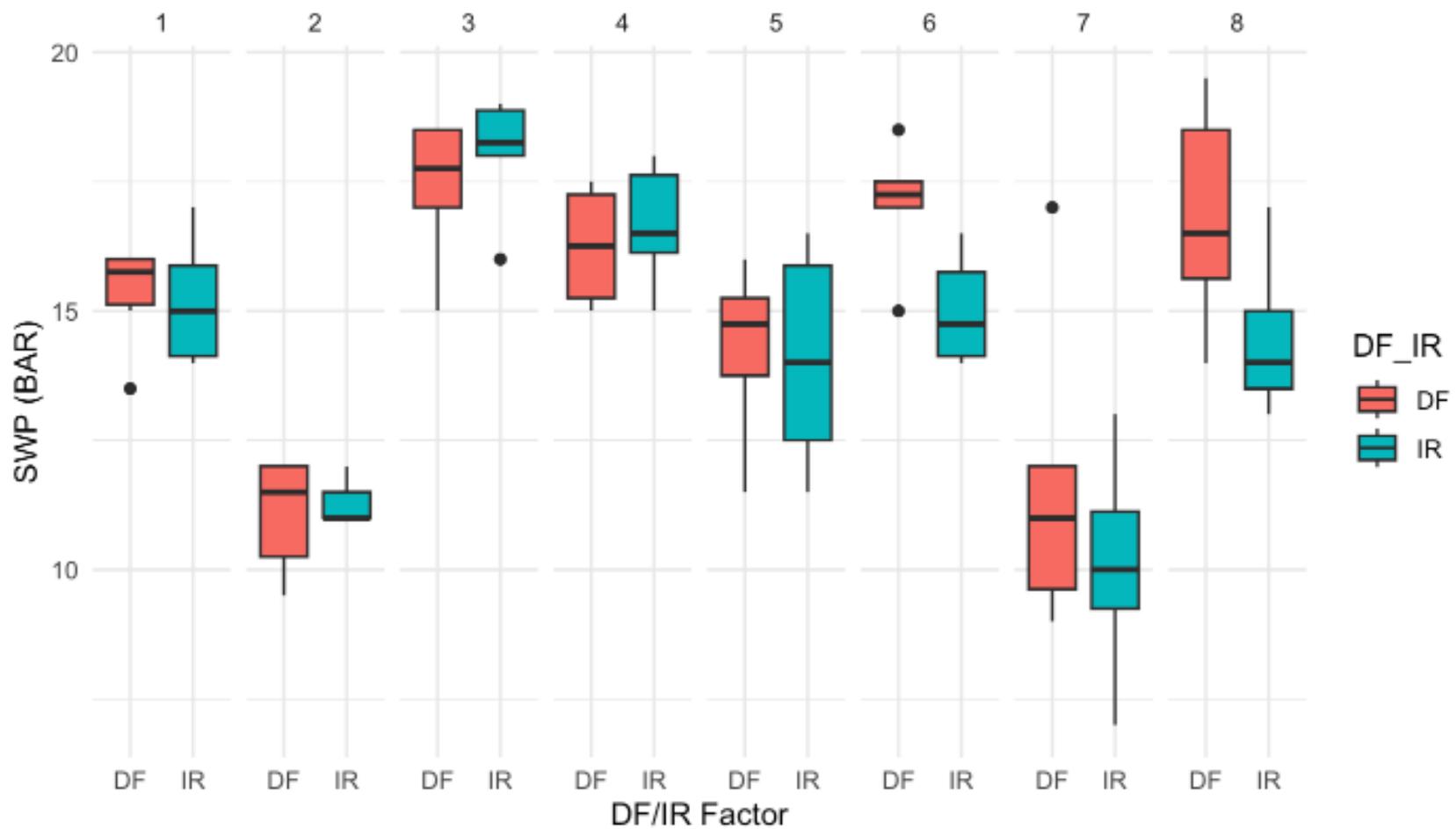
- Water stress
- Evapotranspiration (water use)
- Depth of water extraction
- Water use efficiency

## Grapes

- Yield
- Quality (Brix, pH, etc.)



# PRELIMINARY RESULTS



A photograph of a vineyard with rows of grapevines. In the foreground, a person wearing a white cap and a dark blue shirt is kneeling on the ground, sorting grapes into several white plastic bins. The background shows a dirt path leading through the vines towards rolling hills under a clear sky.

**Questions?**

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