Citizen Science Ocean Climate Change Monitoring

Jan Freiwald, Reef Check
Kristy Kroeker, UCSC
Yui Takeshita, MBARI
Emily Donham, UCSC
Kate Vylet, Reef Check
Reef Check staff
Reef Check Volunteers

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Reef Check California

Trains volunteer scuba divers, as citizen scientists, to monitor rocky reefs and kelp forests to:

- Provide data to inform marine management and policy
- Foster an educated constituency supportive of science–based management and ocean stewardship

Ocean Acidification and Hypoxia Program

- Co-locate OAH monitoring with long-term ecological monitoring
- Develop standardized citizen science approaches for OAH monitoring
- Create better interpretation of MPA effectiveness and detection of ecological responses to global change
OAH Sensors

- Hobo temperature sensors
- MiniDOT dissolved oxygen sensors
- Durafet based pH sensors developed at MBARI (miniFet)
Reef Check
Citizen Science Monitoring Program

- Ecological data inside and outside of MPAs since 2006:
  - 100 sites
  - 75 species

- OAH data since 2018:
  - six locations for pH and $O_2$
  - 60+ sites for temperature
Temperature Data

The image shows a map of California with various cities marked, including Crescent City, Eureka, Ukiah, Santa Rosa, San Francisco, Santa Cruz, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and San Diego. The map is accompanied by three graphs indicating temperature data over time for different regions of California, labeled as Northern CA, Central CA, and Southern CA. The x-axis represents the months from January to October 2018, and the y-axis represents temperature in degrees Celsius (TC).
pH Data
Thank you!

jfreiwald@reefcheck.org
reefcheck.org