Sonoma Water

Advanced Quantitative Precipitation Information Project Update

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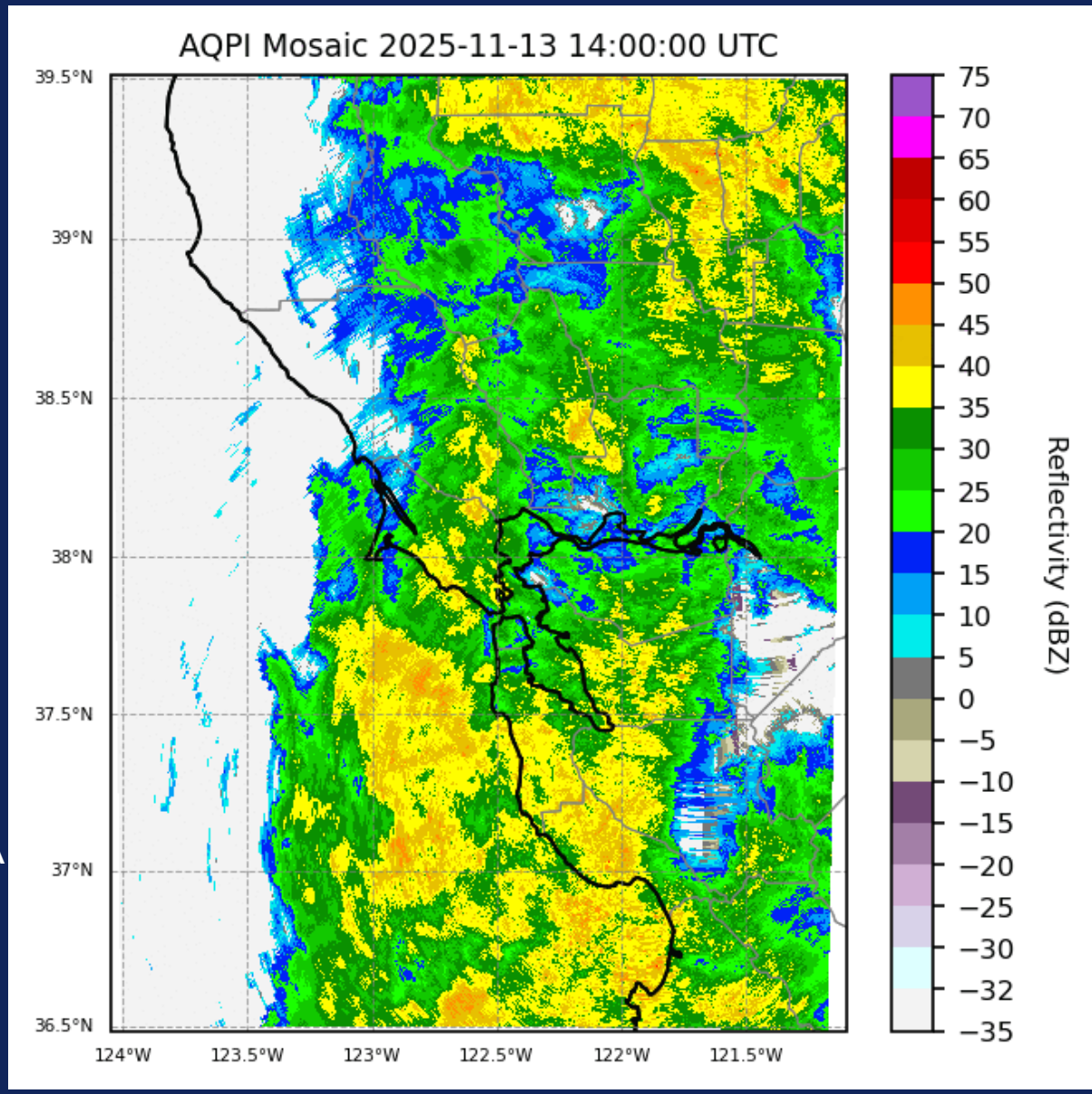
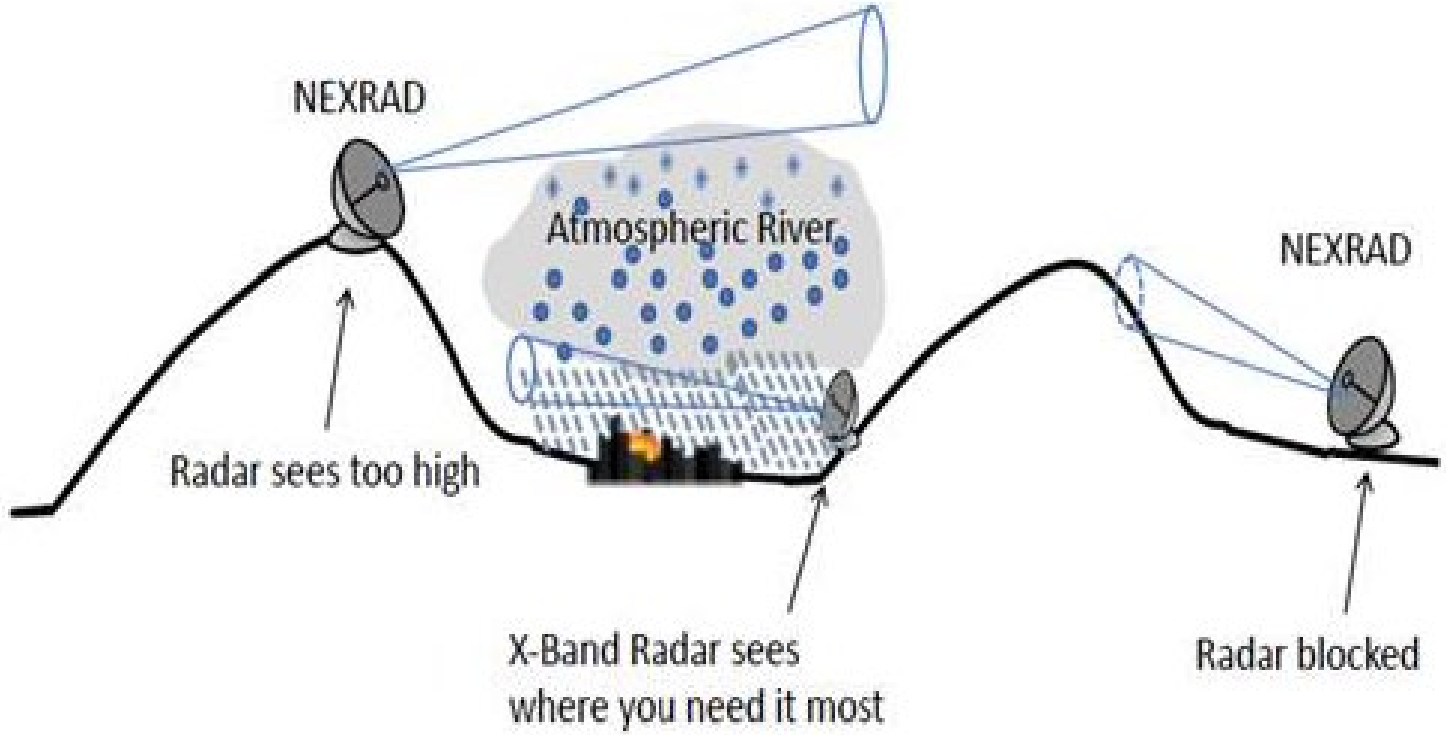


SF Bay Area AQPI – A New Technology to Respond to Extreme Weather



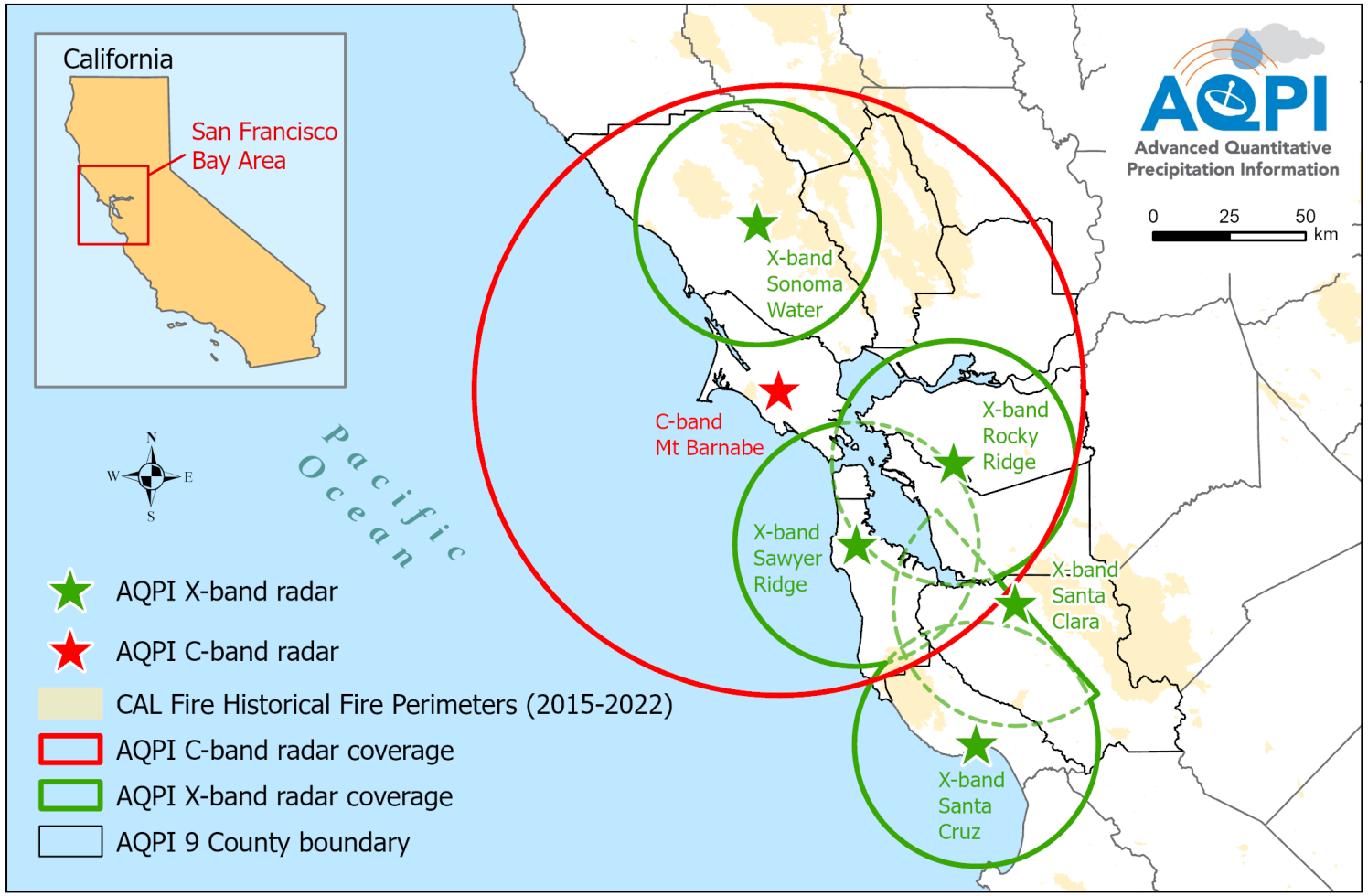
Why is it needed?

- Existing radar is not optimal for West Coast terrain
- Public safety benefits
- Economic loss minimized

Advanced Quantitative Precipitation Information (AQPI)

- $19.8M DWR grant, 25% match
- Sonoma Water Local Sponsor
- 4 X-band radars (N-S-E-W)
- 1 C-band radar (Ocean facing)
- 20 surface monitoring stations
- Data transmission of radar observations and rain gauges to Colorado State and CW3E for processing and distribution to local water agencies
- Users can integrate AQPI forecasts to better inform operations and resource allocation, increase efficiency, and save money
- Grant requires operation for 20 years
- Contributions from Feds, State, & Locals

A regional weather prediction system that uses enhanced weather radar to track precipitation associated with atmospheric rivers.



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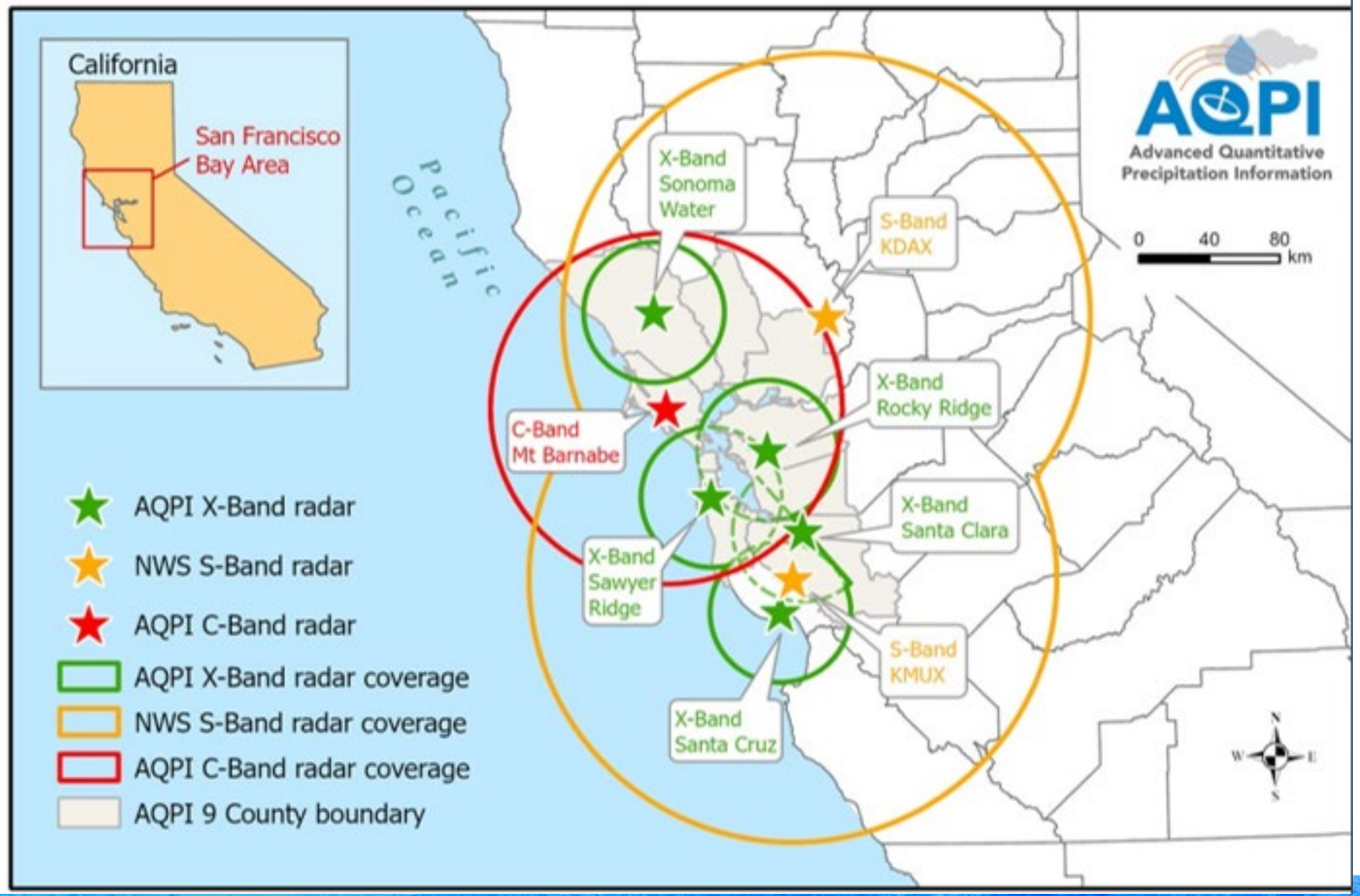
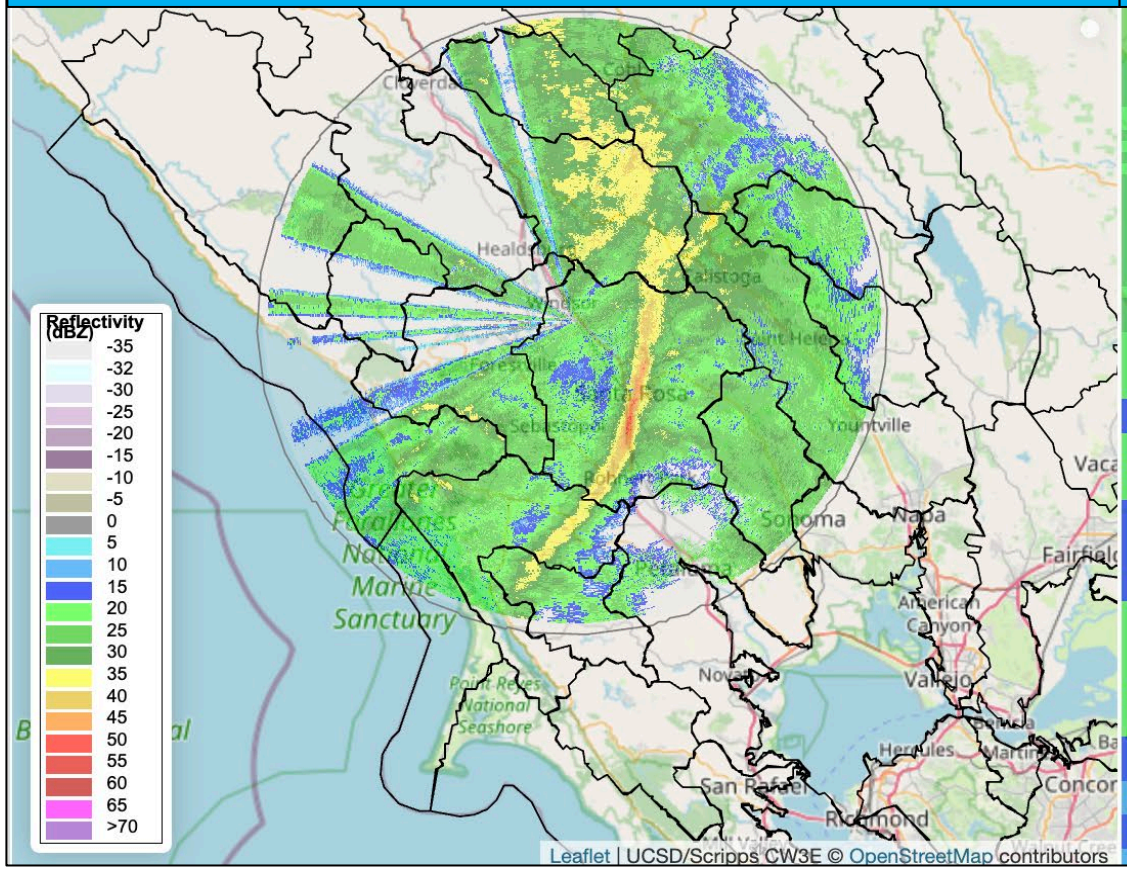
AFTER AQPI NETWORK

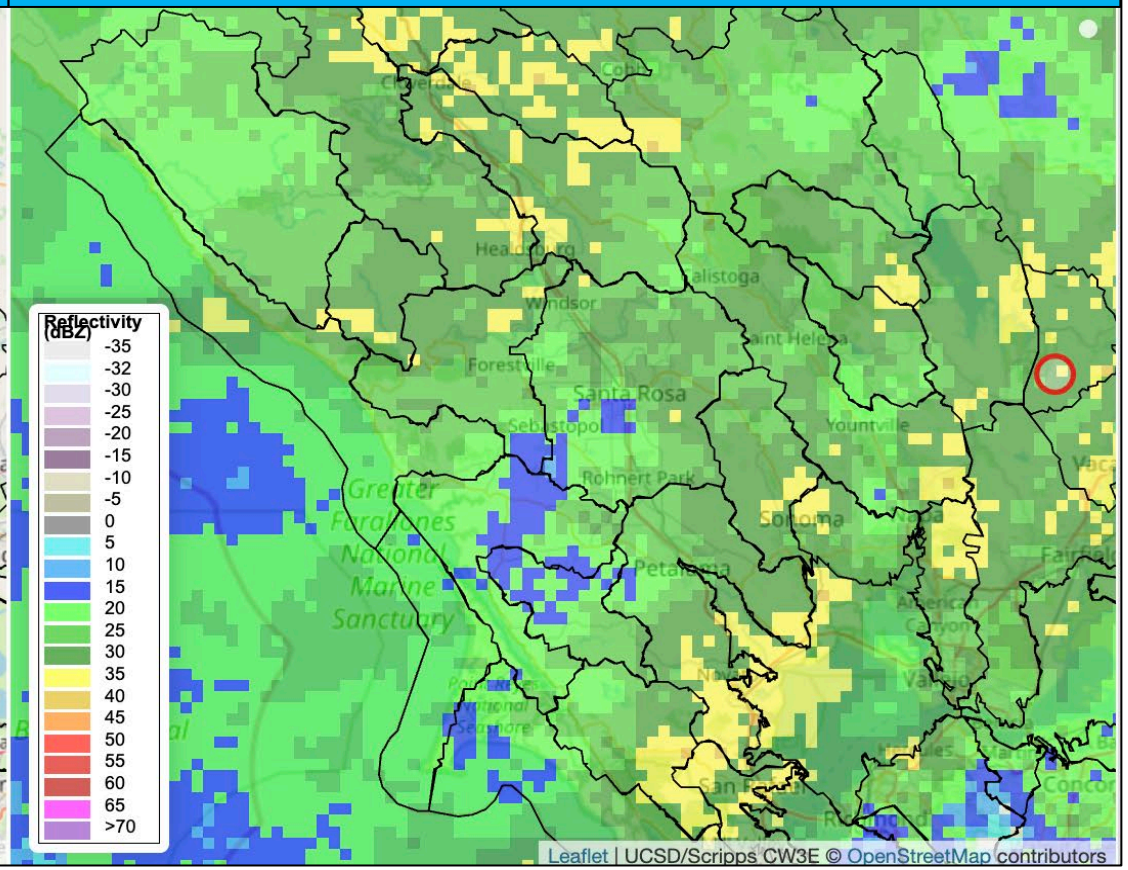


North Bay Narrow Cold Frontal Rainband, 05 Nov 2025

AQPI radar detects the NCFR over Sonoma County



Legacy (NWS) radar *does not* detect the NCFR



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CW3E
Center for Western Weather and Water Extremes

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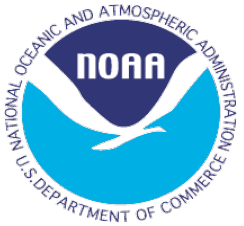
SF Bay Area AQPI Project Partners and Supporters



Next Steps

- Partners agreed to transition operation to Scripps/CW3E
- Agreement with local entities to fund Scripps/CW3E via BACWA
- Agreements other local agencies to re-imburse Sonoma Water for C-band radar costs.
- Put the system to use: Integrate AQPI forecasts to better inform water, wastewater, flood control operations and resource allocation, increase efficiency, and save money

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