CoCoRaHS in Alaska

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CoCoRaHS in Alaska

- Began in the late 1990s in Colorado:
  CoCoRaHS: originally the Colorado Collaborative Rain, Hail and Snow experiment

- Now:
  Community Collaborative Rain, Hail & Snow Network

State Coordinator: Martin Stuefer, UAF (State Climatologist)

AK Regional Coordinators: Fairbanks, Juneau, Anchorage
CoCoRaHS Alaska

Help measure rain!
CoCoRaHS Alaska
CoCoRaHS in Alaska

- Currently 15-20 observations per day (09-16-2021 shown)
# Anchorage coverage

[![Map](https://via.placeholder.com/150)](https://via.placeholder.com/150)

**Date:** 09/16/2021  
**Country:** USA  
**State:** AK  
**Units:** US Units

<table>
<thead>
<tr>
<th>Oba Date</th>
<th>Oba Time</th>
<th>Station Number</th>
<th>Station Name</th>
<th>Precip (in)</th>
<th>Snowfall (in)</th>
<th>Snow Depth (in)</th>
<th>Snow Depth SWE (in)</th>
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</thead>
<tbody>
<tr>
<td>09/16/2021</td>
<td>07:00 AM</td>
<td>AK-AB-35</td>
<td>Anchorage 7.6 SSE</td>
<td>0.02</td>
<td>0.0</td>
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<td>07:00 AM</td>
<td>AK-FN-15</td>
<td>Fairbanks 5.7 N</td>
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<td>AK-PW-1</td>
<td>Edna Bay 1.3 E</td>
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</table>
NWS COOP network

COOP Temperature Equipment Sites

- CRS sites (1,337)
- MMTS sites (2,963)
- Other Pacific Region sites not shown (34)
- Total Sites (4,334)

- Alaska (149 sites)
- Hawaii (56 sites)
- Guam (5 sites)
- American Samoa
- Puerto Rico & U.S. Virgin Islands (24 sites)

Data from Federal 2009
NWS GIS Design
CoCoRaHS in Alaska
CoCoRaHS in AK

• Other information from CoCoRaHS observations

  Significant weather (anytime during the 24-hr day) Eg. heavy rain or snow, thunderstorm
  Condition Monitoring (eg. general soil moisture conditions
  Hail reports (sizes and recording hailpads)
  Multi-day accumulated precip (eg. observer is out-of-location for a few days)
  Frost and snow crystal type reports
Need for enhancement of participation in AK

- Historically participation has hovered near the same level over the last decade
- Uses:
  - Operations (floods, fire weather, snow forecasts, climate)
  - Emergency Managers
  - Public stakeholders
  - Indigenous communities/tribal members
- This is a volunteer network, with a quantity approach to observations vs. a strict accuracy/instrumentation requirement.
- In collaboration with other NOAA, CEC/LEO, and climate observations, reduces the likelihood of forecast “misses”.
CoCoRaHS Alaska

- Website: www.cocorahs.org
- CoCoRaHS 2021 outreach: Citizens, schools, farmers, tribal communities; anyone interested?

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