



Cooperative Observer Program Updates

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May 2020

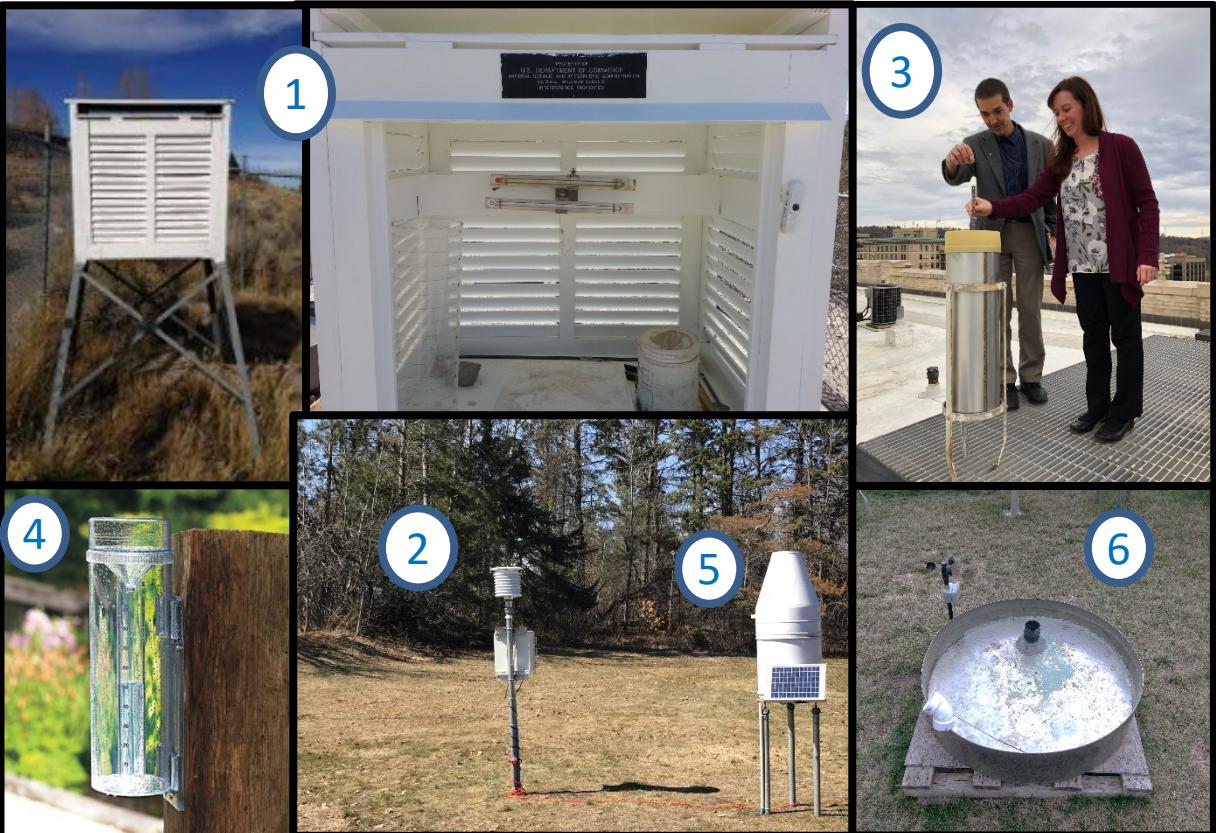


COOP Overview



Equipment used to measure temperature

- 1) Liquid-in-Glass (LIG) thermometers housed in a Cotton Region Shelter (CRS)
- 2) Max/Min Thermometer System (MMTS)



Equipment used to measure precipitation

- 3) Standard 8" Rain Gauge (SRG)
- 4) Plastic 4" Rain Gauge
- 5) Fisher-Porter Rain Gauge

Other equipment used to measure snowfall, snow depth, evaporation (6), and other hydrological elements



COOP Overview





NWS COOP Program Updates



1. Recent Activities:

- Baseline program
- Creating plan for future of COOP
- Restock equipment and supplies
- Separating Hail from Snow Reports

2. Gather input!





NWS COOP Program Recent Activity



Baseline COOP Program – Unofficial COOP sites (UCOOP):

- 682 UCOOP sites identified
- Best performers will transition to “Official” COOP sites (~100)
- 75 inactive/closed and will be removed
- 80 support sub-daily reports (synoptic reporting for field offices)
- 300 Change program designation (Fire Weather, Hydrology, etc)
- **77 to other programs (CoCoRaHS, Wx Spotter, etc)**





NWS COOP Program Future



Creating plan for future of COOP

- **Equipment**

- Stop gap measures and cost efficiencies (4" plastic rain gauge)
- Research new technologies (RFI posted April 1 to June 30)
- **Site Priority Selection**

- **Software Systems**

- SIS
- WxCoder
- IV-ROCS

- **People**

- Distribution of workload
- Role for volunteers



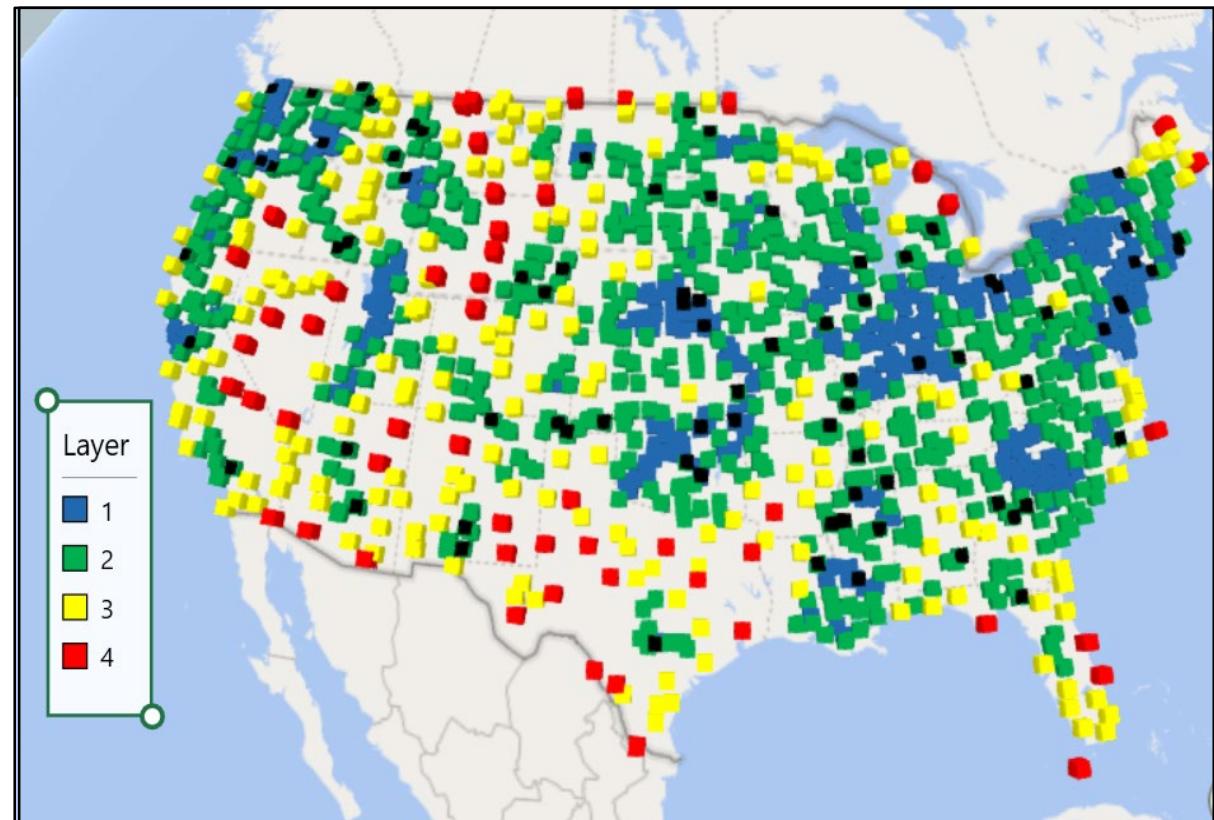


NWS COOP Program Future



Priority Option 1 – SIF USHCN:

- Using Spatial Importance Factor (SIF) on USHCN (1218 sites)
- Prioritize by nearest neighbor (high SIF):
 - Cat 1 (blue) lots of neighbors – 408 sites
 - Cat 2 (green) some neighbors – 561 sites
 - Cat 3 (yellow) few neighbors – 196 sites
 - Cat 4 (red) very few neighbors – 53 sites
- Begin with isolated sites, and sites at risk/in need of rehabilitation (274 sites black)



* Special thanks to Tony and Adnan for assistance *





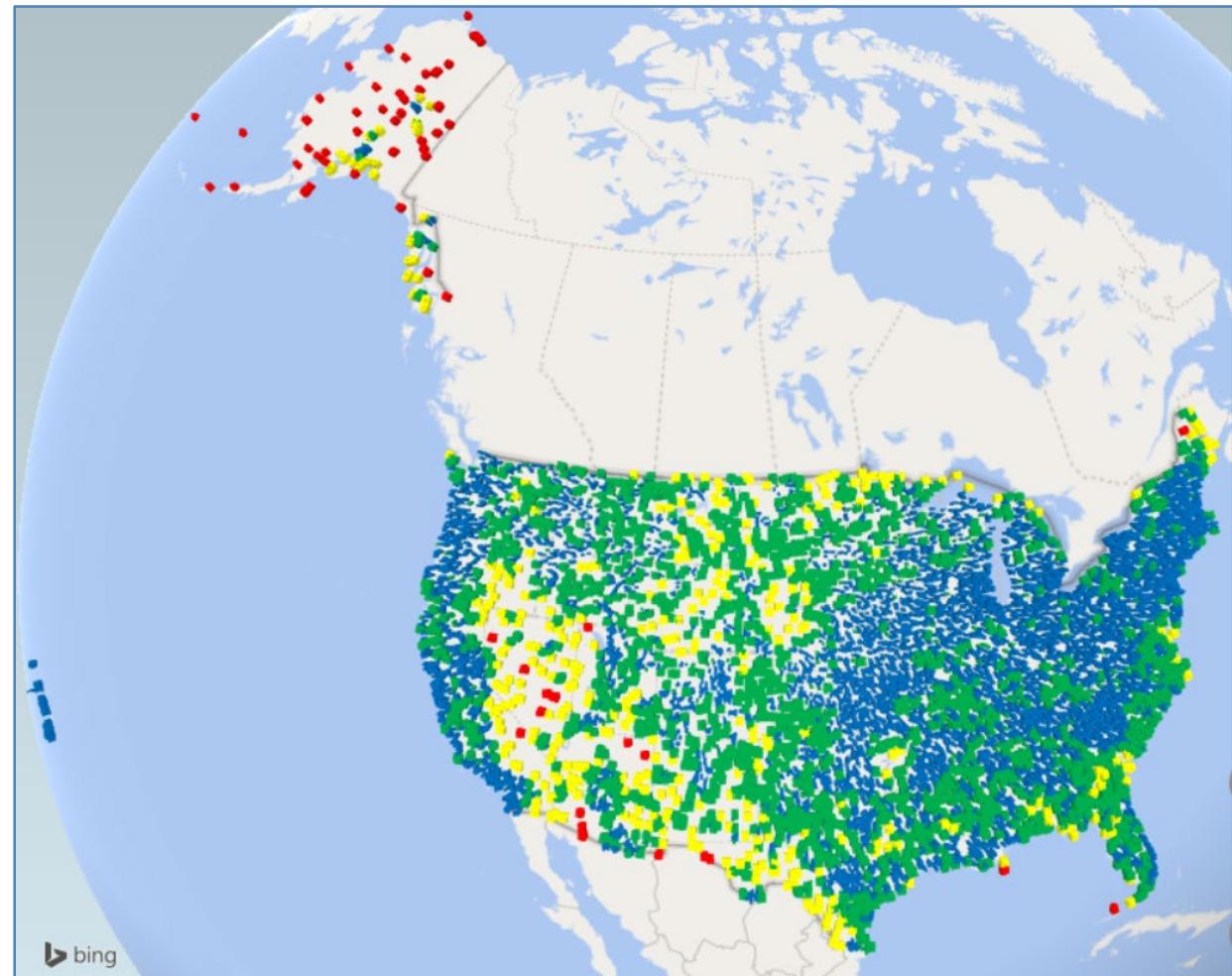
NWS COOP Program Future



Priority Option 2 – SIF COOP:

- Prioritize by entire COOP network (8000+ sites) and nearest neighbor test
 - Cat 1 (blue) lots of neighbors – ~5000 sites
 - Cat 2 (green) some neighbors – ~2000 sites
 - Cat 3 (yellow) few neighbors – 400 sites
 - Cat 4 (red) very few neighbors – 70 sites
- Begin with most isolated sites

* Special thanks to Tony and Adnan for assistance *





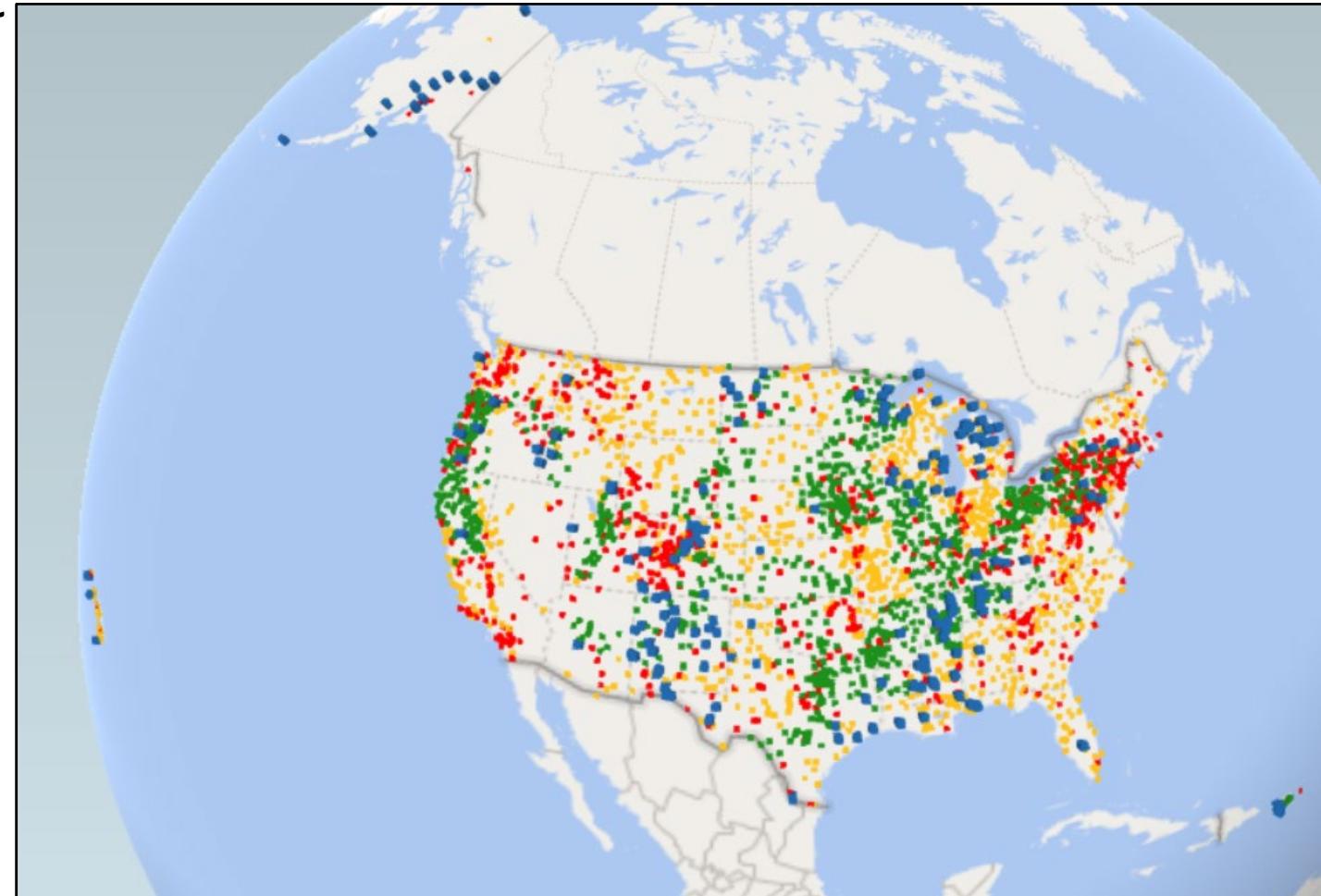
NWS COOP Program Future



Priority Option 3 – Equipment

- Cotton Region Shelters (Blue, 206 sites)
- F&P Punch tape (Red, 694 sites)
- FPR-D (Yellow, 895 sites)
- FPR-E (Green, 814 sites)

Site selection will likely be a hybrid of all of these and a few other criteria such as climatology, age, value chain, performance, etc.





NWS COOP Program Restocking Supplies



1. Restocking Supplies and Equipment

- 4" plastic rain gauge
- Snow Sticks??





NWS COOP Program Updates – Coming soon?



Separation of Hail from Snow reports

- Effort started several years ago
- NWS Leadership interest
- Formulating Team
 - **Request assistance – who would like to join the team??**
- Investigating resource requirements
 - Software upgrades
 - Training for volunteers





NWS COOP Program Collaboration



Gathering Input

- NWS
- Other Agencies
 - USDA – “Farm Bill”
 - NIDIS – Reauthorization Act



We look to you!

- CoCoRaHS Community
- AASC

