Being prepared is an important factor when it comes to living in Alaska. Many live in communities that are only accessible by air or water. This can make getting people and supplies in or out difficult. Transportation can be delayed by hours or even weeks depending on the circumstances.

Preparedness: Are you ready?

The National Weather Service has several Seasonal Safety Campaigns and for Alaska the focus for our springtime:

- Tsunami Preparedness week March 20-26
- Flood Safety Preparedness Week April 10-16.
- National Safe Boating Week May 21-27

The National Spring Weather Safety includes Hazards that aren’t much of a hazard for Alaska, like Tornadoes or Heat. But since most Alaskans take vacations out of state, so it is good to be knowledgeable of all hazards.

Spring Weather Hazards

- Rip Currents & Beach Hazards
- Tornadoes
- Thunderstorms
- Lightning
- Flooding
- Tsunamis
- Heat

Enjoy!
Inside this issue:

<table>
<thead>
<tr>
<th>Introduction</th>
<th>Front Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>River Break Up</td>
<td>3</td>
</tr>
<tr>
<td>Looking up Station Data</td>
<td>4-6</td>
</tr>
<tr>
<td>A Winter to Remember</td>
<td>7-8</td>
</tr>
<tr>
<td>Why ZEROs are important</td>
<td>9</td>
</tr>
<tr>
<td>Resources/Links</td>
<td>10</td>
</tr>
</tbody>
</table>
The APRFC uses webcams, satellites, and observer reports to keep our breakup map as up to date as possible.

Submit observations by:

- Email: nws.ar.aprfc@noaa.gov
- Phone: 907-266-5160

Keep up to date with breakup:
https://www.weather.gov/aprfc/breakupMap
The data that observers collect is important, but how can we see it?

The 3 Weather Forecast Office in Alaska web sites look a little different, but we start at the same place from each of their main pages:

Next, to get to the data here is how to from each page:
Now you should be on the Climate page:

1. Select Station
2. What to see
3. When
4. GO

A separate GUI will pop up to show the product you have selected.

Next page has a few examples.
Southeast

Daily data for a month is shown below

Have fun looking around at all the different sites and products you can look up

Climate Normals can also be found
This issue we get a gem from the Alaska Center for Climate Assessment and Policy, International Arctic Research Center. The Weather Service and many Universities work together, and this is a great friendship and cooperative relationship.

A snow and ice storm of historical proportions affected much of western and central Alaska December 25 to 27, 2021. This followed what had already been a snowy month. Rain and freezing rain were widespread from Delta Junction westward, and in the Interior the rain was preceded by heavy snow. In the Fairbanks area, 8 to 12 inches of snow was followed by an inch or more of rain. This resulted in widespread power outages, some lasting for more than 48 hours, road conditions so icy that Alaska State Troopers closed the Parks Highway between Nenana and Healy for 12 hours and business closures that lasted for several days. In Delta Junction, the weight on the rain-soaked snow caused the roof to collapse on the only large grocery store in town. The total precipitation for December 26 at Fairbanks of 1.93 inches is the third highest daily total on record and the two-day total of 2.45 inches is the highest anytime except in July or August. This was followed by another 8-14 inches of snow on December 28 and 29. It is difficult to say exactly how much rain fell, though in the Fairbanks area it’s a safe estimate that more than an inch of rain fell. At many locations during the afternoon of the 26th precipitation repeatedly changed from rain to wet snow and back again, with extended periods of both rain and wet, partially melted snow falling at the same time. However, the end result was a multi-inch layer of ice that produced icy roads and walkways for months afterward, and that ice layer is still clearly evident in the slowly melting late April snowpack.

A Storm to Remember
Many longtime residents remarked that they could not recall anything quite like this storm. In the Fairbanks area, the Thanksgiving Week 2010 storm brought similar rain amounts and ice conditions but hardly any snow. Looking back through climate records, the only approximately similar stormy period in Fairbanks occurred in January 1937. Amazingly, that month had two major mixed snow and ice storms. The storm of January 18-20 was the larger of the two and was similar to this past December’s storm. During the 1937 storm there was about two feet of snow that was followed by about an inch of rain.

Volunteer cooperative and CoCoRaHS observers were absolutely critical for getting an accurate assessment of this historic event. The graphic shows the total precipitation (rain plus the melted snow) observed for the storm by volunteers (automated observations not included). The consistency of the observations is astounding given the very difficult conditions: heavy snow to wade through and ice to navigate as well as precipitation gauges that, in some cases, overtopped, necessitating extra work to get accurate readings. For this effort the entire climate community is grateful. You can be assured that in 100 years the value of your work during the storm will be recognized by people not yet born as they marvel at the great storm of December 2021.
**REMINDER** concerning CoCoRaHS data: Please include zeros when reporting your rainfall or snowfall observations. It is tempting (particularly when using a phone app to report) to just report liquid when you get a cold rain in the cool season. This happens frequently even during wintertime, especially at our coastal locations. But, it is important to report “0” for snowfall in this situation, to let everyone know that you got all rain and no snow.

Remember: **your Os are very important** no matter what type of precipitation you got, and no matter whether you got precipitation!!!
Resources

Cooperative Observer Program: https://www.weather.gov/coop/

CoCoRaHS: https://www.cocorahs.org/state.aspx?state=ak

Voluntary Observing Ship Program: https://www.vos.noaa.gov/

Weather Forecast Offices

Alaska Region: https://www.weather.gov/alaska/  
WFO Anchorage: https://www.weather.gov/anchorage/  
Sea Ice Program: https://www.weather.gov/afc/ice  
WFO Fairbanks: https://www.weather.gov/fairbanks/  
Alaska-Pacific RFC: https://www.weather.gov/aprfc/  
WFO Juneau: https://www.weather.gov/juneau/  
Climate Prediction Center: https://www.cpc.ncep.noaa.gov/  
National Centers for Environmental Information: https://www.ncei.noaa.gov/