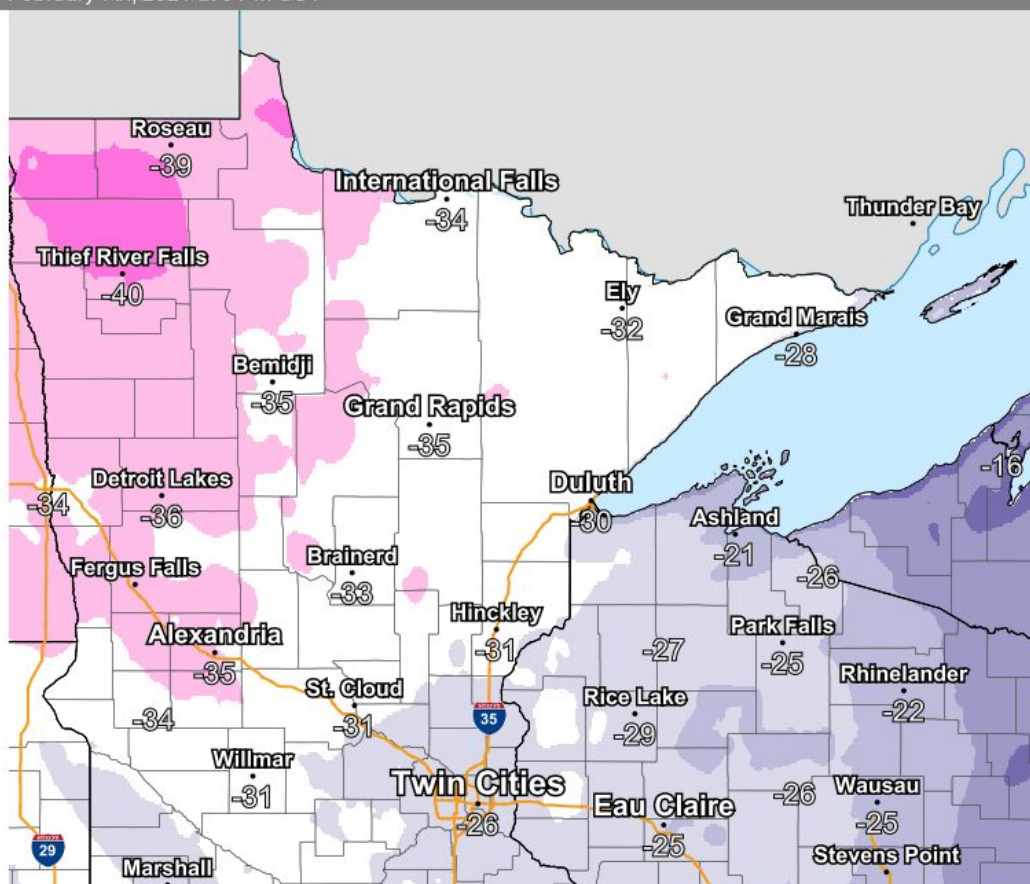
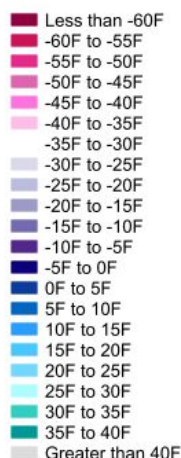


Extreme Cold Expected in Coming Weeks



Coldest Wind Chill Sunday Feb 7 Morning

Valid Ending Sunday February 7th, 2021 at 6 PM CST



Graphic Created
February 1st, 2021
1:54 PM CST

- Life-threatening cold conditions are expected this upcoming weekend into early next week (Feb 6-9)
- The weather pattern over the coming weeks will be favorable for additional rounds of dangerously cold temperatures and wind chills

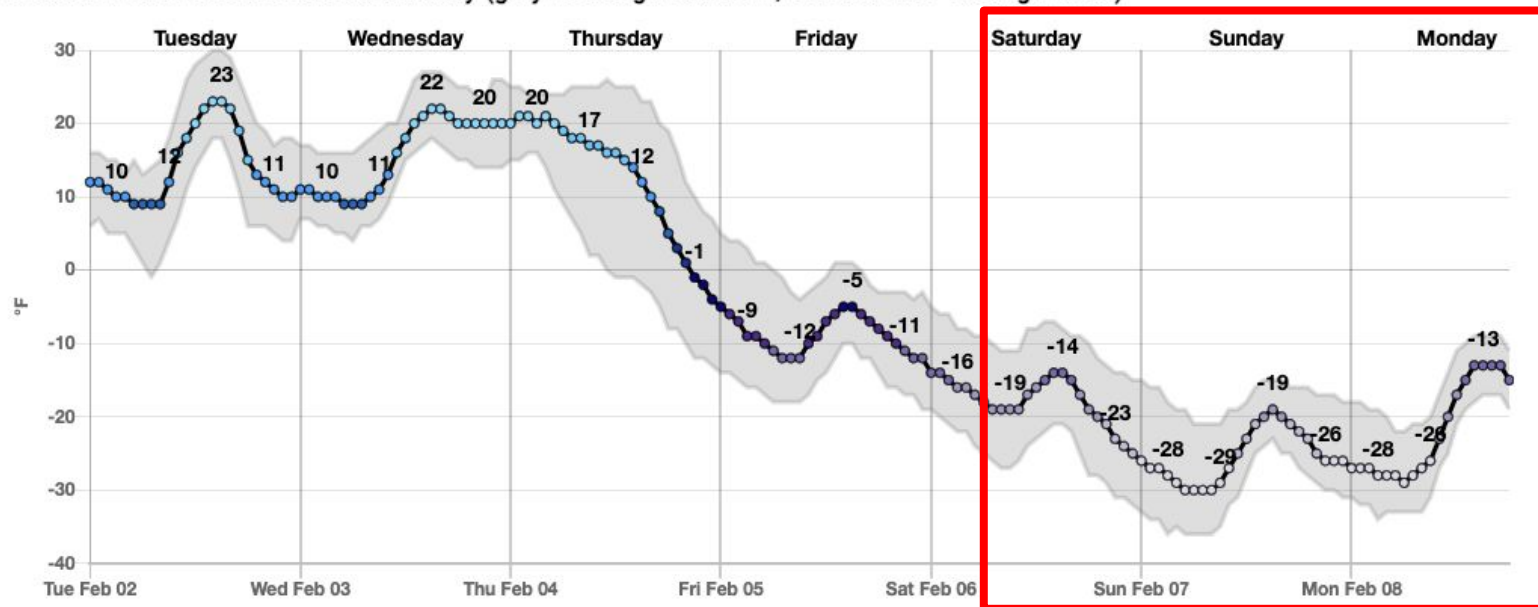
Important Forecast Changes

- This is a special one-time heads-up briefing on the cold weather expected over the upcoming weeks.

NEW

Life-Threatening Cold Possible Feb 6-9, 2021

Minimum Wind Chill Forecast Variability (gray fill=range of values; colored dots=average value)



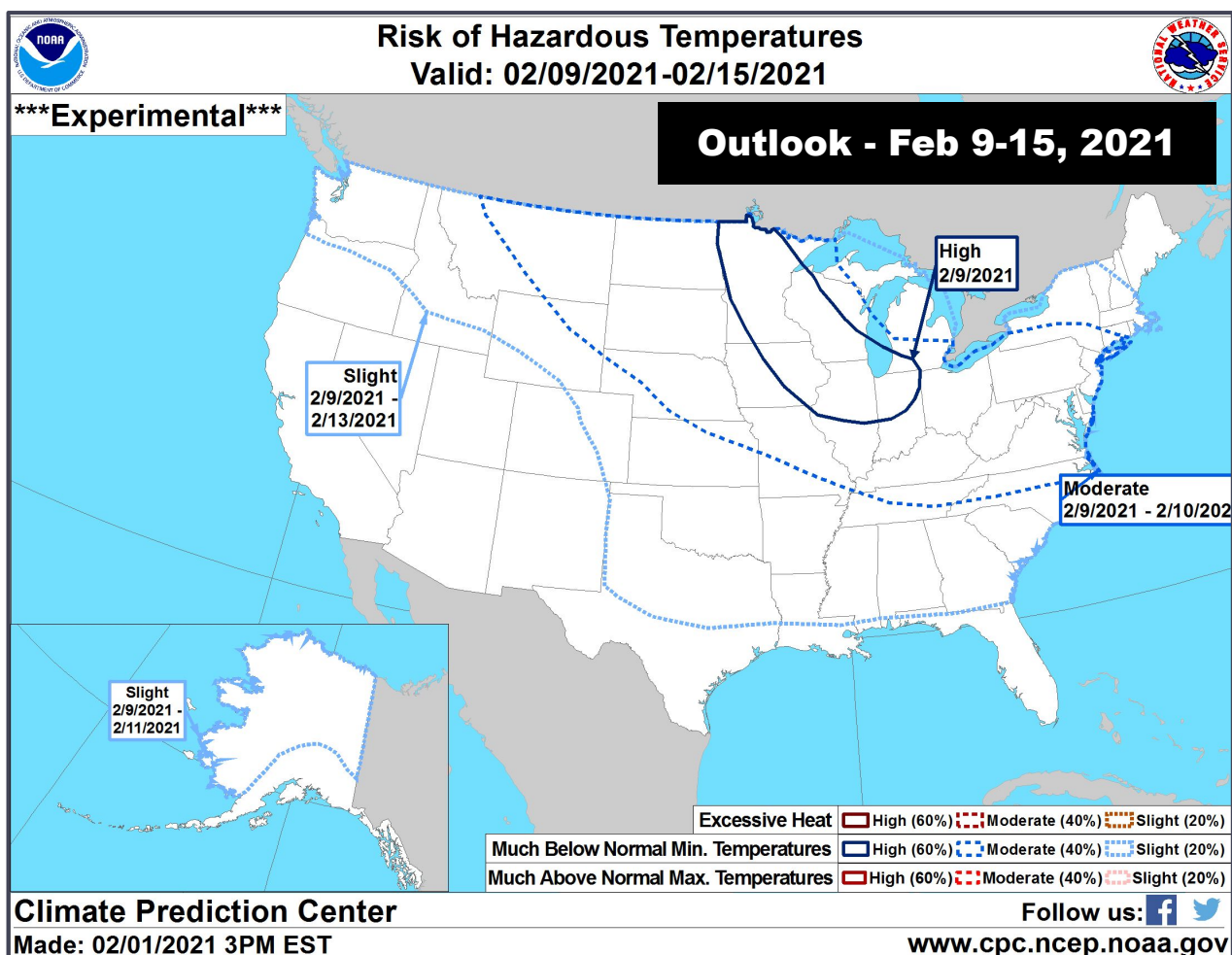
- **WHAT:** Dangerously cold temperatures and life-threatening wind chills possible.
- **WHERE:** Coldest temperatures and wind chills will be in northern Minnesota, but still dangerously cold across northwest Wisconsin, too.
- **WHEN:** This weekend into early next week. Right now Sunday and Monday morning looks like the coldest periods, but this might change.
- **ACTION:** Prepare now for a frigid weekend! In these conditions frostbite can develop on exposed skin in 15-30 minutes or less.

For the current forecast at your location, visit weather.gov/duluth or our experimental forecast points page at weather.gov/forecastpoints

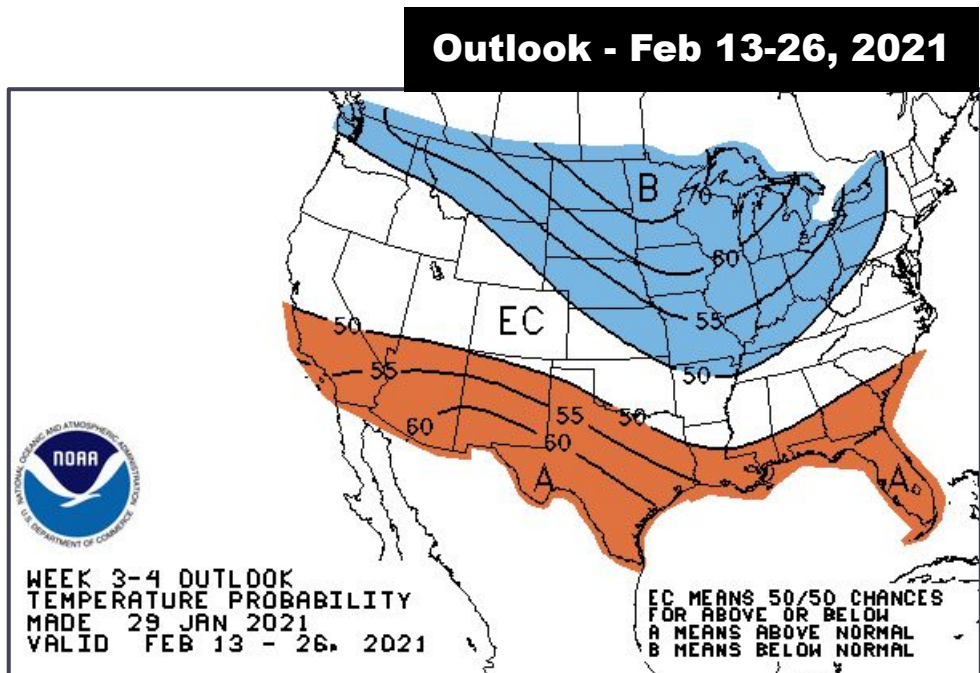


Historical Perspective: The winter so far has been mild - this period of below normal temperatures will be in stark contrast to January which was the 12th warmest January on record for Duluth and second warmest January on record for International Falls.

Periods of Extreme Cold in February



- Beyond this weekend, long-range forecast guidance indicates a few more rounds of extremely cold temperatures throughout the rest of February
- While we don't yet know which days will be the coldest, **prepare for multiple rounds of dangerously cold wind chills over the next 3-4 weeks**



Cold Weather Hazards

Wind Chill Hazards

- A **Wind Chill Watch** means there is a potential for the combination of very cold air and wind to create dangerously low wind chill values (-40F or below) - *Plan ahead!*
- A **Wind Chill Warning** is issued when dangerous, life-threatening wind chills are likely (-40F or below) - *Take action to protect yourself from the cold!*
- A **Wind Chill Advisory** means the combination of cold air and wind will create very cold wind chills (-25 to -40F), which could be dangerous without appropriate preparation - *Use caution!*



Wind Chill Chart



		Temperature (°F)																		
		Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
Wind (mph)	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63	
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72	
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77	
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81	
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84	
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87	
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89	
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91	
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93	
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95	
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97		
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98		

Frostbite Times

30 minutes

10 minutes

5 minutes

Wind Chill (°F) = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})

Where, T= Air Temperature (°F) V= Wind Speed (mph)

Effective 11/01/01

Wind Chill Advisory

= Frostbite in 15-30 minutes

Wind Chill Warning

= Frostbite in 10 min or less!



SPOT



FROSTBITE

A victim is often unaware of frostbite because frozen tissue is numb.



Signs & Symptoms

- Redness or pain in any skin area may be the first sign of frostbite.

Other signs include:

- a white or grayish-yellow skin area
- skin that feels unusually firm or waxy
- numbness

HYPOTHERMIA

Hypothermia often occurs at very cold temperatures, but can occur at cool temperatures (above 40°F), if a person is wet (from rain, sweat or cold water) and becomes chilled.



Signs & Symptoms

Adults:

- shivering
- exhaustion
- confusion
- fumbling hands
- memory loss
- slurred speech
- drowsiness

Infants:

- bright red, cold skin
- very low energy



If a person's temperature is below 95° get medical attention immediately.

Building a Weather-Ready Nation