

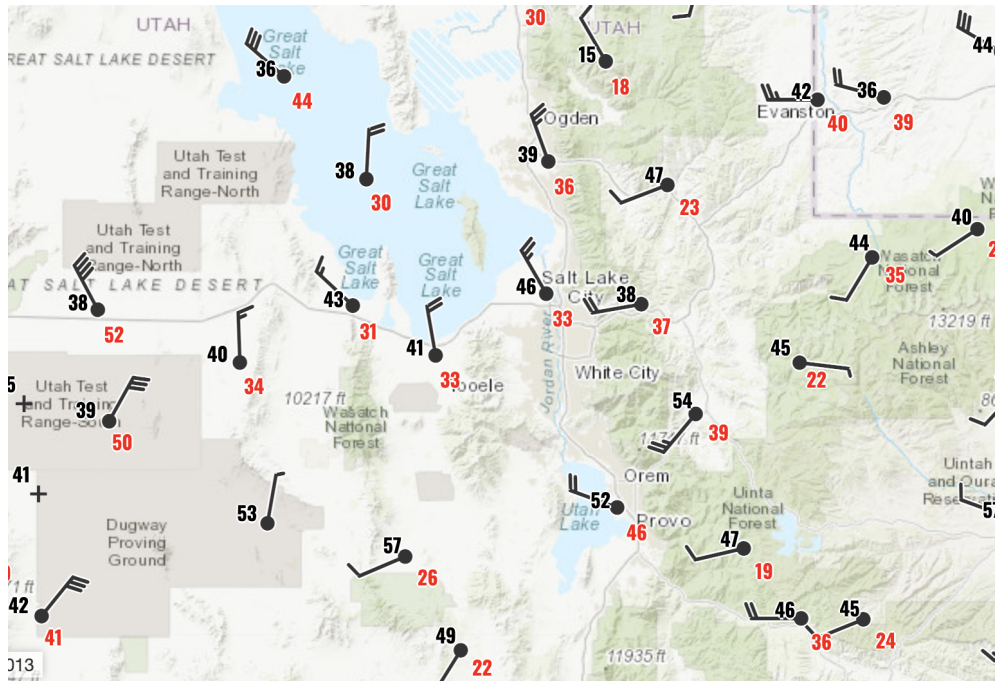
Forecast Guidance for Monday, March 29

700mb temperature 12Z today: 2C

700mb temperature 12Z tomorrow (fsct): -15C

Then and Now:

After a mild weekend, a dry cold front passed through the Salt Lake Valley around 15Z this morning. Behind the front, winds are gusting to as high as 45mph, lofting a bit of dust. From the obs below, you can infer the position of the front, draped northeast-southwest just south of the valley.



Other than some gusty winds, clouds, and much cooler temps, this feature won't bring a ton in the way of sensible weather.

Short Term Forecast:

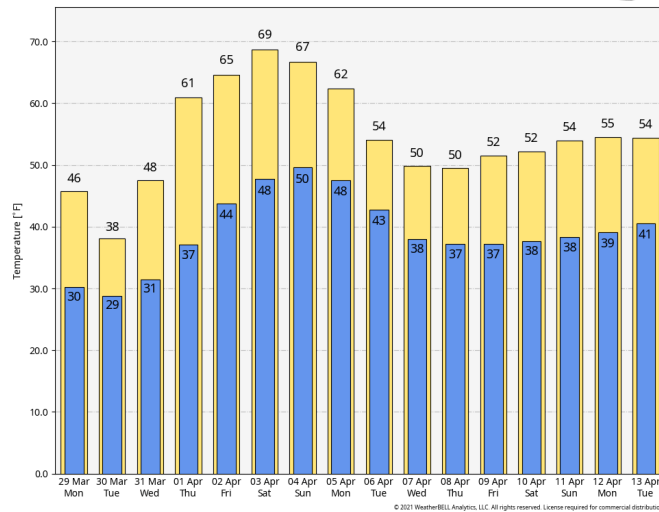
Expect the gusty winds to subside quickly after frontal passage. A period of cloudiness should persist through the early afternoon, but I expect no real precip today beyond perhaps a trace in the highest terrain.

The main story for the next couple days is a cooler airmass. 700mb temperatures will plummet to around -15C by Tuesday morning, which is an impressive 17C cooler than today's 12Z sounding. As such, surface temps around Northern Utah will remain depressed until Wednesday, when ridging builds in aloft and begins a warming trend once again.

In typical Utah fashion, we'll rebound all the way from the cool conditions to the warmest weather of 2021 by later in the week.

Longer Range:

GEFS Ens 0.5° Init 06z 29 Mar 2021 • Daily High/Low Temperature (°F)
Salt Lake City International Airport • KSLC [40.7884°N, 111.978°W]



I like the GEFS meteograms to show the scope of the temperature swing we'll see this week - chilly on Tuesday but legitimate t-shirt weather by late in the week.

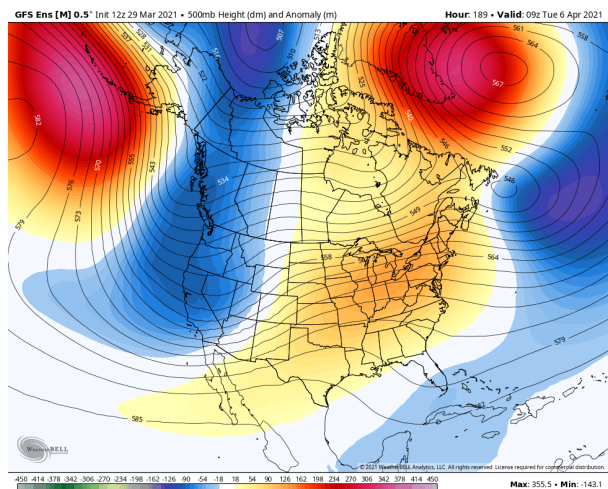
The warming will happen underneath shortwave upper ridging, embedded in somewhat southwesterly flow. The combined effects of subsidence and warm advection will bring 700mb temperatures above zero once again by Wednesday night.

It does look like there's some potential for more unsettled weather in early April. Both the EC ensemble and GEFS advertise some kind of trough developing over the West by the 6th of April:

I won't hold my breath for powder skiing, but I'll keep an eye on that.

With that, I'll conclude today's guidance. A relatively boring forecast, for once. Enjoy the nice weather later this week!

- Nathan



Sources:

<https://maps.weatherbell.com/>

<https://www.wrh.noaa.gov/map/?obs=true&wfo=slc>