

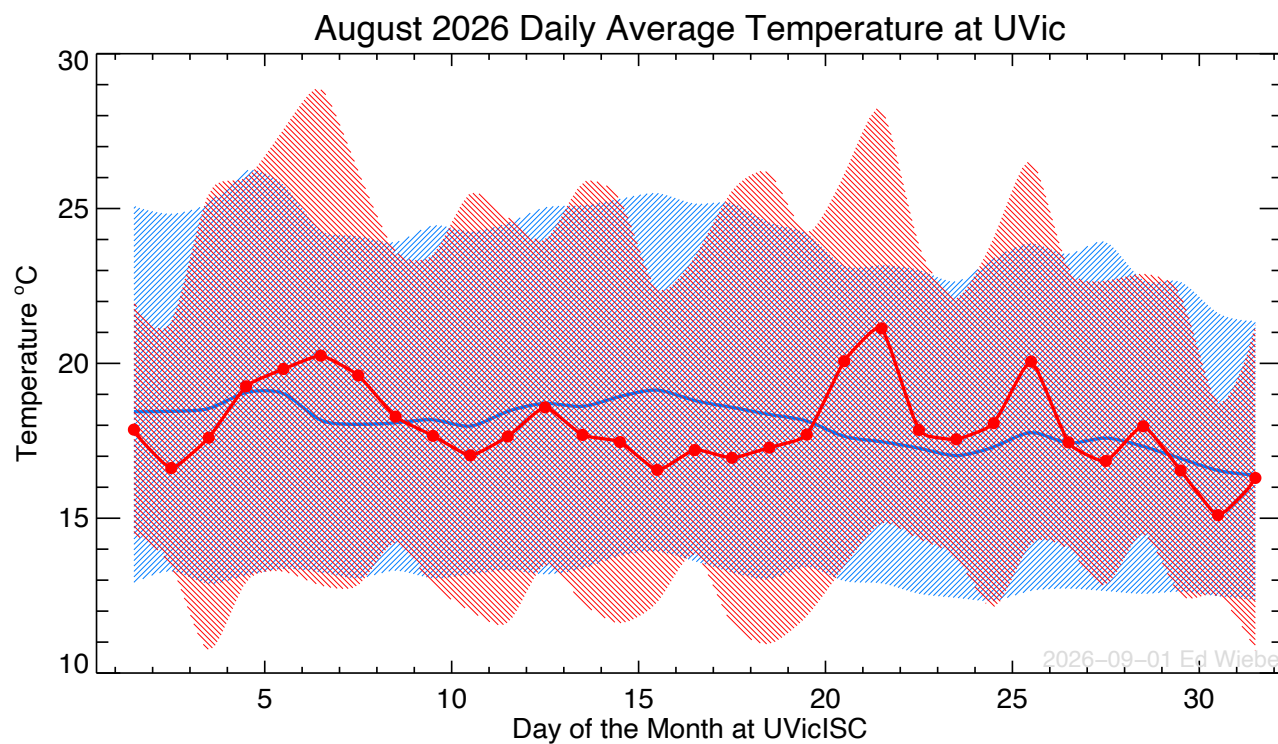


Figure 1: August temperatures.

August 2026

Temperature

The monthly average temperature in August 2026 was 17.93°C, basically the same as the 24 year average of 18.0°C. Figure 1 shows the day-to-day variation over the historical daily averages. This month had a good share of pleasant days and a couple of hot ones. Overall it felt, to me, cool and unexceptional.

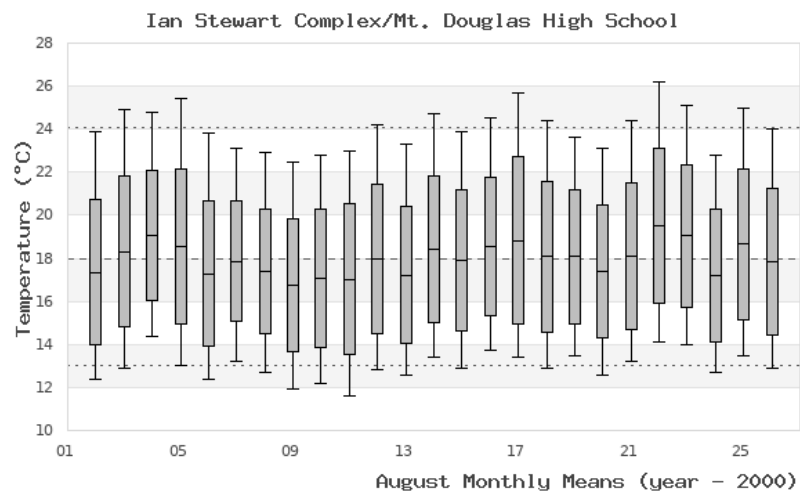


Figure 2: Monthly average temperatures in August.

Rain

This year August was very dry. As seen in Fig. 3, only 5.8 mm of rain was observed, spread over four days (in mm: 1.0, 0.25, 4.1, 0.54). The long-term August average is 16 mm over five days. However, rainy Augusts have seen as much as 50 mm and had as many as 11 rainy days. One interesting note is that in 24 years it has only rained once on 18 August (2024).

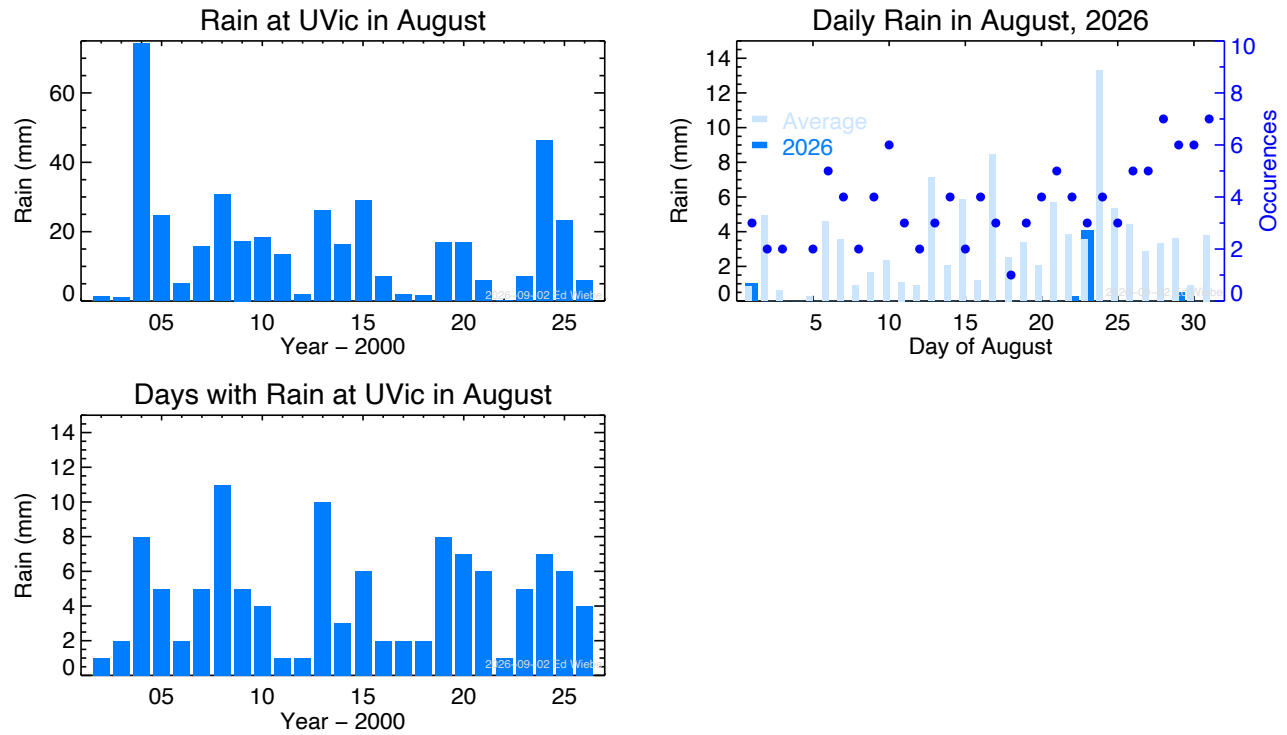


Figure 3: August rain.

Interesting

I've often noticed how well the hourly forecast tracks the observed temperature at UVicISC. An example is shown in Fig. 4. In the large versions of 24-hour plots on the site, I add grey markers to show the hourly forecasts. There are four forecasts made per day at 00Z, 06Z, 12Z, and 18Z, resulting in four grey dots for each hour.

The day of those observations, 25–26 August, 2026 was mostly clear, there were some patchy clouds for a short while around mid-afternoon. Variations in the temperature between 10:00 and 18:00 are due to changes in wind, mixing air from over the nearby ocean with the air over campus.

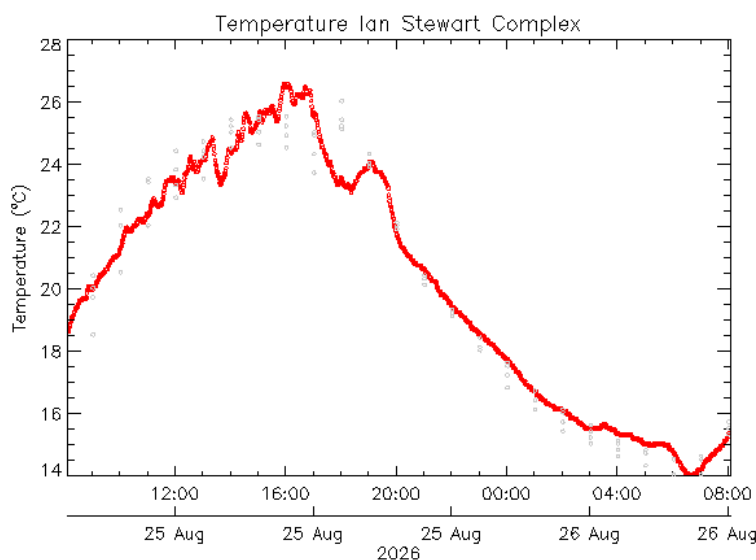


Figure 4: Observed temperatures with hourly forecasts.

The forecast is for a model grid cell that includes UVic (Fig. 5). The forecast is from the HRDPS Continental model at 2.5 km resolution. I get it from SpotWx but that site is *just* accessing publicly available forecast model output.

Figure 6 shows the forecast - average temperature differences for the four hourly forecasts. The points shown are for all Augusts from 2019 to the present. Colours are used to indicate the time of day; a legend is shown in Fig. 7 (which is the same as the lower left panel in Fig. 6).

For each forecast, the point cloud is reasonably aligned with $\Delta T = 0^\circ\text{C}$. There are differences, sometimes large. On each panel of the figure I've added a best-fit line to the points. The negative slope of this

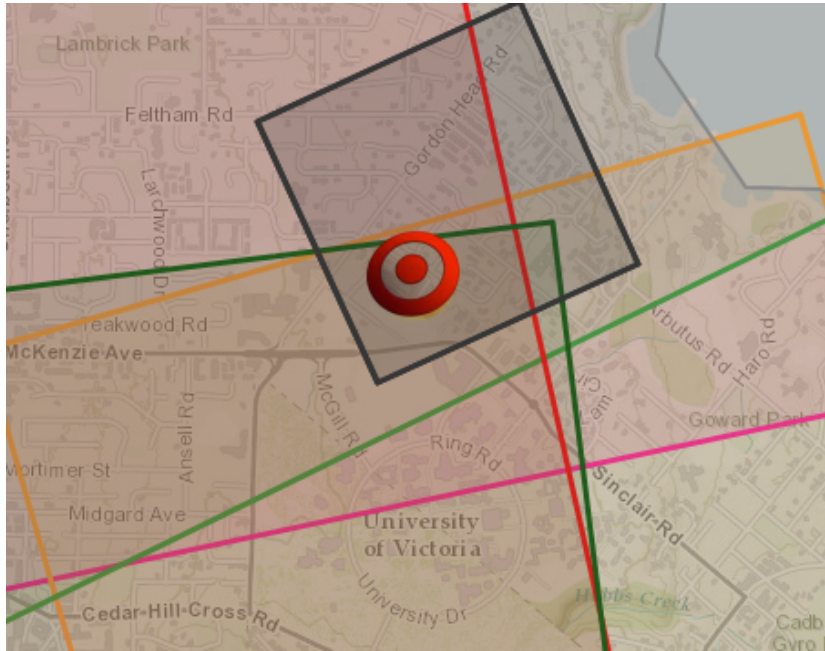


Figure 5: Model grid cell on a map of the area.

line (Tbl. 1) shows us that the forecast varies in accuracy throughout the day. Mornings tend to be forecast to be warmer and evenings cooler than the observations. A lot of this kind of difference is due to small-scale topography and land surface features that it's not possible to include even in a 2.5 km square model grid.

Forecast	Slope ($^{\circ}\text{C}/^{\circ}\text{C}$)
00Z	-0.140
06Z	-0.108
12Z	-0.064
18Z	-0.110

Table 1: Slopes of fit to forecast differences.

In summer in the region around UVic (Greater Victoria really) winds tend to diminish to nothing and under clear skies radiative cooling is strong. That can be seen in Fig. 4 where in the night hours cooling continues steadily until sunrise.

Other specific local effects include sea-breezes that flow upslope from Cadboro Bay. This is likely what caused the large mismatch in forecast temperature on 25 August at 18:00.

Also from the slopes for the four forecasts (Tbl. 1 we find that overall, the 12Z forecast seems to be best over the course of the day. Ideally the slope of the line should be zero. That would indicate that the forecast has the same accuracy at all hours of the day. The 12Z forecast

shows the smallest slope. I don't have a great suggestion for why that would be.

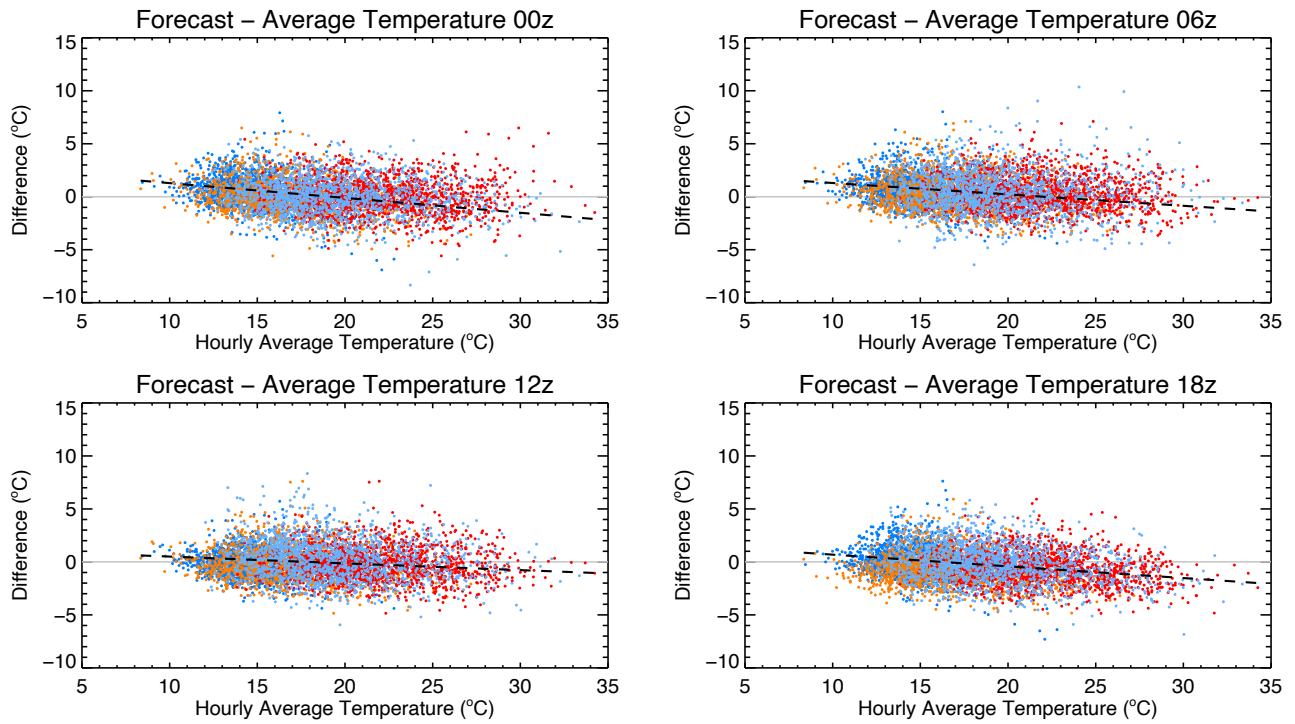


Figure 6: August forecast temperature differences since 2019.

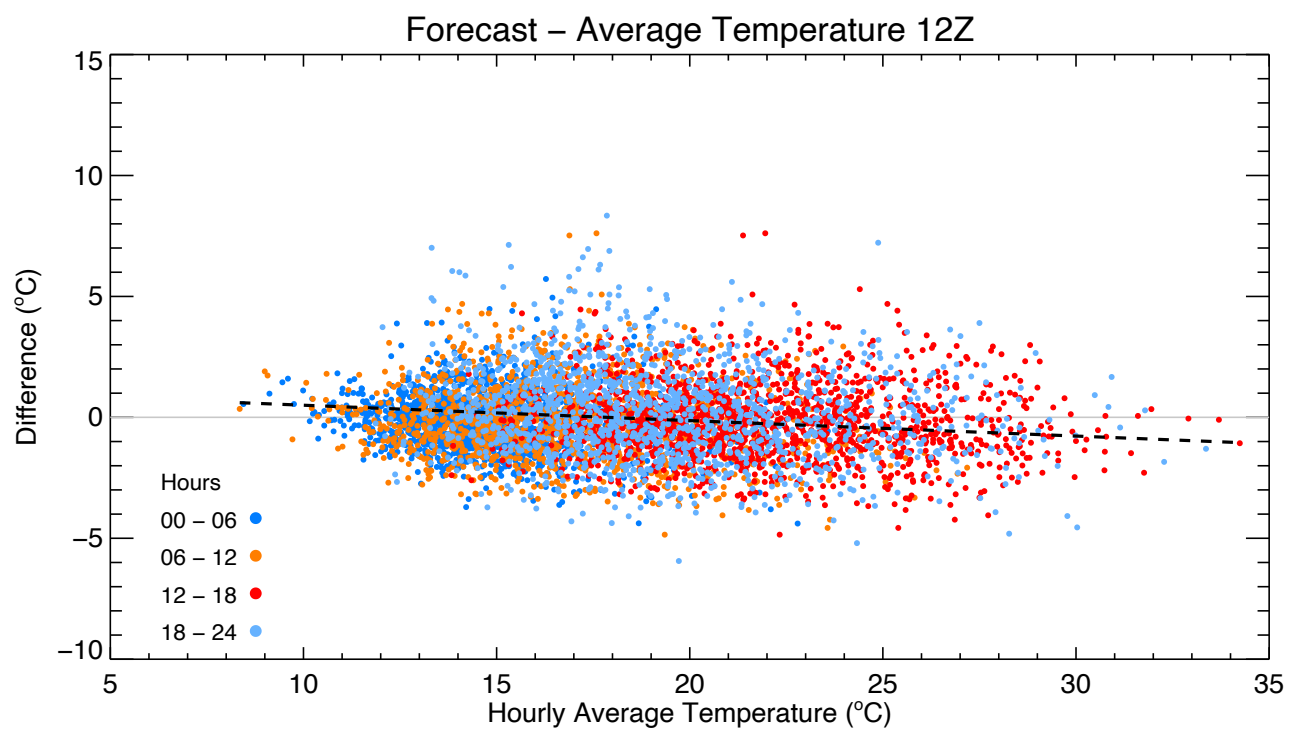


Figure 7: August forecast temperature differences since 2019.

While preparing this report I realised that I was still using coordinates that I set for a larger grid cell and different model. This means that the 2.5 km resolution cell I am using now is actually one over from the one I need. I could update the code to look at a new cell but since the ISC site is scheduled for demolition in the not too distant future I will leave it. Instead I'll start collected forecasts from the cell that includes BWC. I will have to switch to using that site as my primary UVic station in the future.

Figure 8: A figure.

– Ed Wiebe, September 2, 2026