

30 - Year Normals

Our normal temperatures, rainfall, snowfall, wind, etc., whether daily, monthly, or seasonal, are calculated from 30 years of data. This is the standard time period that the National Weather Service uses to establish normals. The normals that we currently use for Glasgow are from the 1971-2000 time period. These normals are updated every ten years, so the next set of normals, which will be calculated with 1981-2010 data, will be issued sometime during the year 2011.

The 30 years is a compromise between having enough data to have realistic normals, and not having too many years of older data, which might not reflect recent trends enough. At newer stations, which haven't yet had 30 years of data, normals can still be calculated, but will show more random variation, and will also be more heavily influenced by a few extreme or unusual weather events .

Some interesting changes were noted when the Glasgow normal temperatures were updated from the 1961-1990 data period to the 1971-2000 period. Winter and Spring became significantly warmer, that is all months from December through May gained as much as 1.6 degrees. Summer average temperatures didn't change much, but the Fall months of October and November were noticeably cooler. The overall impression may be that winter arrives earlier and leaves earlier than it had in the past.

One change that might be a surprise to many people, was that the average annual rainfall in Glasgow gained 0.27 inches for the year. The greatest gains were in the months that turned colder too: October and November. June also became wetter, while August got quite a bit drier. Not surprisingly, the average annual snowfall also gained more than 2 inches also, our normal now at 30.0 inches.

Long periods of observations do reflect well the continually changing climate we live in. The changing of observation equipment as instrument technology advances can also show up in climate data as well. Even small moves in the location of a stations' instruments can have a significant effect on data. Changing land at or nearby the weather instruments will also have an effect.