

Why Our Fall is Warm By: Katherine Ikaunieks

If you haven't noticed in the last few weeks, the temperature around campus has been pretty inconsistent, coming from days where it's 70 degrees to some days where it's just 50 degrees. It should be cooler, but with our warm temperatures and the extreme weather the southern parts of the United States has been facing, it begs the question: Why is our fall warm?

The National Oceanic and Atmospheric Administration (NOAA) released their 'Winter Outlook' on Oct. 17 to help identify the shifts in weather and predict what our weather will look like this year. In the outlook, it says that La Niña is developing and with its formation, it will influence our weather.

La Niña comes from the Pacific Ocean, causing the trade winds to be stronger than normal and pushing cooler water toward California and other coastal states. Now, La Niña also causes a polar jet stream to be more northern, and with that jet stream, it causes the Midwest to be colder and wetter but affects Washington and Oregon to be wetter. In contrast, southern states will be drier, with droughts more likely to happen, and a stronger hurricane season is predicted with warmer temperatures in the southern U.S.

Of course, La Niña isn't the only thing affecting the fall weather, especially if La Niña is supposed to make the northern part of the U.S. colder and the south warmer. Another factor is heat domes. Heat domes have been prevalent since our summer, rampaging heat waves all across the U.S., and are still occurring now. While not as frequent, and not as strong as what was experienced in the summer, a heat dome can answer a bit more to why our fall is warm.

According to NASA, heat domes are caused by high pressure trapped in the higher part of the atmosphere which causes warm air to be pushed to the surface. However, heat domes are able to suppress clouds and precipitation from interfering, which in turn causes lower humidity. But, since there are no clouds the weather will seem nicer by being clear but it allows the sun to impact the area and also raise temperatures.

Heat domes can last for a few days or weeks, which does seem like a better explanation rather than La Niña. Looking at Homecoming week, the weekend and a few days afterward were warm before it started to cool off. But, there's one final explanation that can help solve the mystery: climate change.

CNN released a one-month temperature outlook for the fall season, resulting in Wisconsin's probability of being above the normal fall temperature between 30% and 40%. Every state in the contiguous U.S. has some portion if not their full state in some probability of warmth.

Looking at the Explore Fall website, a fun website to see the predictions of fall weather, it helps to give some insight that our fall foliage, while starting later than usual, is not uncommon based on the 33 years of data this website has. However, climate change causes our summer heat waves to be longer and warmer, which is something we have seen. And with that heat lasting longer, the transition to fall is delayed.

We will be getting our cooler fall weather as early as November, where temperatures will hopefully stay stagnant in diversity. While we are in the middle of our fall, we can look forward to the NOAA releasing another three-month outlook on November 21 to help predict what our winter will possibly look like. Currently, our winter looks like it will have some precipitation, hopefully more than last year.

Now that we've explored all the options, we can gather an idea of why our fall has been so warm. Of course, with all of these factors coming into play, we can't just blame one source because it can't be specified as one particular reason why our fall is so warm. While we can probably put more blame on climate change rather than the heat domes or La Niña, it is still only one factor. However, choosing to relate this issue to climate change would not be entirely wrong as it is becoming a bigger and bigger threat, and with sea ice being at an all-time low, it is causing a shift in our weather. So, while we might be enjoying the cool fall weather right now, we should think about why we have these rises in temperature.

Sources: CNN, Explore Fall, NASA, NOAA