

# **SPOTTER NEWSLETTER**

NWS PHOENIX SKYWARN NEWSLETTER

SEPTEMBER 2020



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#### Summer Heat

The weather story of this Summer has been the heat. Looking at meteorological summer (June-July-August) for our Phoenix station, it was the hottest on record. This is pretty much by all measures: high temperature, low temperature, and average temperature (records go back to 1896). Looking at the three month average from some other stations in our territory, Yuma had it's 11th warmest (records back to 1878), and El Centro had it 7th warmest (records back to 1925).



A combination of things has factored into why Phoenix has been so hot. The positioning of high pressure hasn't been in a good location to import humidity into the region. Plus, there are a lot of man-made surfaces that retain heat (e.g. asphalt). Another factor is the long term trend we've seen in both urban and more rural areas that is associated with climate change.



This summer has been been unusually hot elsewhere in the Southwest. The map below depicts how unusually hot June-July-August was. The darkest red shading is within the top 1% of records for a given station; the next warmest shade is within the top 5%; and the next shade is within the top 33%.



We will have a wrap up of the Monsoon season in an upcoming newsletter.

#### **Balloon Soundings**

Many people have heard of weather balloons. Have you wondered what they are and how we use them? At select NWS offices around the country (and at other locations around the world), balloons are launched twice per day such that the flight time is centered around 0000 hrs UTC and 1200 hrs UTC (Universal Coordinated Time aka Greenwhich Mean Time). That translates to 5pm MST/4pm PST and 5am MST/4pm PST respectively.

The balloons are a way to carry an instrument pack, known as a rawinsonde, vertically through the atmosphere. This enables us to take in-situ measurements of temperature, humidity, pressure, and winds. The data are transmitted back to the ground station in real time by a built in radio transmitter. The data obtained from these soundings gives us highly valuable information about what is happening in the atmosphere above the surface. The video at the link below has more information and shows an actual balloon launch from our office.

https://www.youtube.com/watch?v=5K00CtzAgAU&t=3s

## **STAYING CONNECTED**

### SOCIAL MEDIA

Be sure to stay up to date with the weather and our other programs by following us on social media.



/NWSPhoenix



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#### HAS YOUR INFORMATION CHANGED?

If your email, phone number, or address has changed since your last class, please click the link to help us keep that information up to date.

#### GOOGLE FORM TO CHANGE CONTACT INFORMATION

#### FORGOT YOUR SPOTTER ID?

It happens to the best of us! Send Austin an email he will email you back with your information.

<u>AUSTIN.JAMISON@NOAA.GOV</u>

#### **NO LONGER WANT TO BE A SPOTTER?**

If you would no longer like to be one of our trained weather spotters you can fill out this google form and we will remove you from our database of spotters.

GOOGLE FORM TO BE TAKEN OFF SPOTTER DATABASE