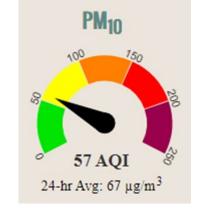
Hourly Forecast Website Help Tips

Air quality hourly forecasts are available for Douglas, Flagstaff, Hayden, Miami, Nogales, Phoenix, Prescott, Rillito, Tucson, and Yuma. Once you select a location, you can view the forecast Air Quality Index (AQI) — click on each day to view their forecast. Scroll down further to view a summary table of the forecasts as well as a forecast discussion and decision flags for the Air Quality Flag Program.

AQI Dials

The dial needles indicate the forecast Air Quality Index (AQI) for ozone, PM_{10} , and/or $PM_{2.5}$, for the selected day. The colors in the dial represent the different AQI categories. The forecast AQI number is included below the dial, along with its corresponding concentration value.



How is the AQI determined?

The AQI for ozone is calculated by taking the maximum 8-hour average concentration of the day. The AQI for PM_{10} and $PM_{2.5}$ is calculated by taking the 24-hour average concentration of the day.

See the table below for how the AQI categories are determined based on the concentration values for ozone, PM_{10} and $PM_{2.5}$.

Air Quality Index	Air Quality Index	Ozone (ppb)	PM ₁₀ (μg/m ³)	$PM_{2.5} (\mu g/m^3)$
Category	Value	Max 8-hour Average	24-hour Average	24-hour Average
		Concentration	Concentration	Concentration
Good	0-50	0-54	0-54	0-12
Moderate	51-100	55-70	55-154	12.1-35.4
Unhealthy for	101-150	71-85	155-254	35.5-55.4
Sensitive Groups				
Unhealthy	151-200	86-105	255-354	55.5-150.4
Very Unhealthy	201-300	106-200	355-424	150.5-250.4
Hazardous	301-400		425-504	250.5-350.4
Hazaruous	401-500		505-604	350.5-500.4

Hourly Bar Graphs

The bar graphs to the right of the dials show the forecast ozone, PM₁₀, or PM_{2.5} concentrations for each hour of the selected day. The different colors of the bars help to highlight the hours of the day when air quality is expected to be worse (or better) than other hours. The colors are based on the colors of the Air Quality Index (AQI) scale, though they do not represent the AQI in themselves.

In the example below, the PM_{10} hourly forecast bar graph has three hours of concentrations in the Unhealthy for Sensitive Groups (USG) AQI category (orange) in the morning. But, since most of the day is forecast to have concentrations below the USG category, the AQI for the day is

only forecast in the Moderate category (yellow on the dial). Hover over an individual bar to see the hourly forecast concentration value (shown in the figure below).



Health Statement Dots

If the button for a given day has a red dot in the top-left, a High Pollution Advisory (HPA) is in effect. If a day has an orange dot, a High Pollution Watch (HPW) is in effect. Click each day to view the health statement and for more detailed information. The example below shows an Ozone High Pollution Advisory in effect for Tuesday and a High Pollution Watch for Thursday.



Pollutant Table

This table gives you a quick snapshot of the forecast air quality for each pollutant. Numbers represent the forecast Air Quality Index (AQI) for each pollutant and the colors of the table cells indicate the corresponding AQI category.

Forecast Discussion

Weather and air quality discussion for the air quality forecast period.

Flags

The flag symbols are for participants of the Air Quality Flag Program. They indicate the correct flag to fly on the given days.