

Why is the Sky Blue?

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The sky appears blue due to [Rayleigh scattering](#), where sunlight interacts with molecules in the Earth's atmosphere. When sunlight enters the atmosphere, shorter blue and violet wavelengths scatter more than longer red and orange [wavelengths](#). As a result, our eyes perceive the scattered blue light coming from all directions, making the sky appear blue.

Additionally, our eyes are more sensitive to blue light than violet light. This sensitivity enhances our perception of the sky as predominantly blue. However, it's important to note that the appearance of the sky can change throughout the day.

Sunlight travels through a greater portion of the atmosphere during sunrise or sunset, and more scattering occurs. This scattering disperses the shorter blue and violet wavelengths even more, allowing the longer red and orange wavelengths to dominate the sky's colour, resulting in the vibrant hues we often associate with sunrise or sunset.

In summary, the sky appears blue because of the scattering of shorter blue and violet wavelengths of sunlight by the molecules in the Earth's atmosphere. This phenomenon, known as Rayleigh scattering, creates the iconic blue colour of the sky we observe during daylight hours.