

# Day/Night Lighting Conditions for Photography

## Nautical Twilight

During nautical twilight, the geometric center of the Sun's disk is between 6 and 12 degrees below the horizon.

In clear weather conditions, the horizon is faintly visible during this twilight phase. Many of the brighter stars can also be seen, making it possible to use the position of the stars in relation to the horizon to navigate at sea. This is why it is called nautical twilight... [Wikipedia](#)



Suitable for Galaxy photography, Light Painting, Silhouette et.al.



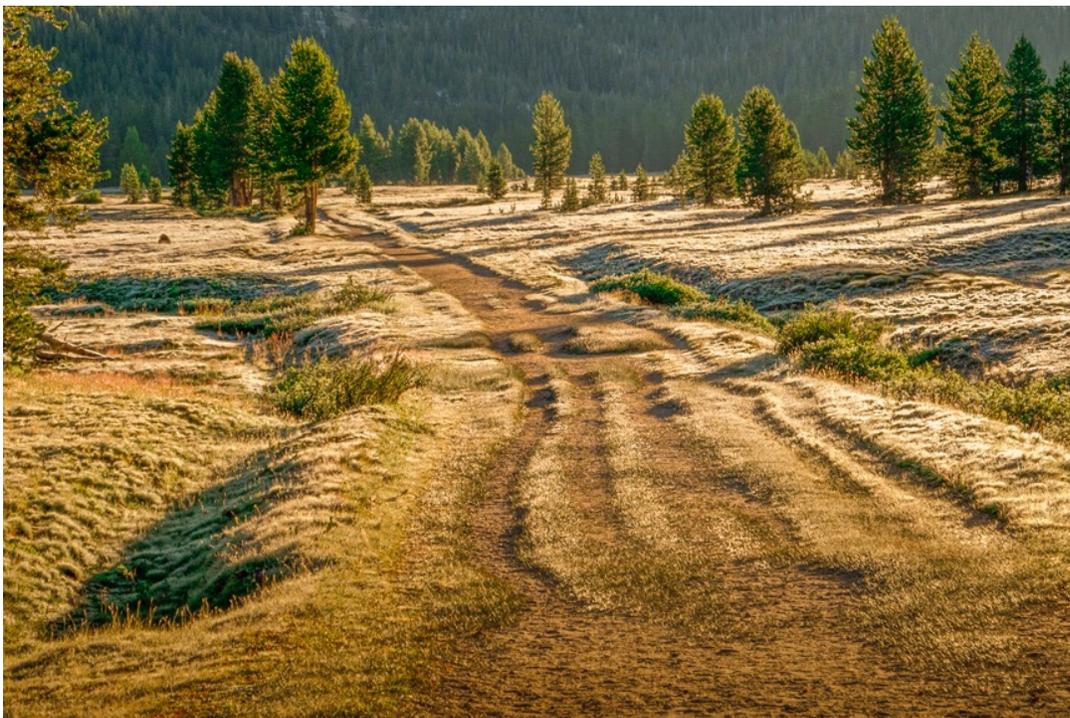
## Blue Hour

The blue hour (from *La hora azul*, in Spanish, or *L'Heure Bleue* in French) is the period of [twilight](#) early in the [dawn](#) each morning and late [dusk](#) each evening when the [sun](#) is at a significant distance below the horizon and the residual, indirect sunlight takes on a predominantly blue hue. This effect is caused by the relative diffusibility of short blue wavelengths of light versus the longer red wavelengths. During the blue "hour" (typically the period is about 40 minutes in length), red light passes straight into space while blue light is scattered in the atmosphere and therefore reaches the earth's surface. Because of the quality of the light, this period is treasured by artists... [Wikipedia](#)



## Golden Hour

In photography, the golden hour (sometimes known as magic hour, especially in cinematography) is a period shortly after sunrise or before sunset during which [daylight](#) is redder and softer than when the Sun is higher in the sky...[Wikipedia](#)



## Alpen Glow

Alpenglow (from German: *Alpenglüh*) is an optical phenomenon in which a horizontal red glowing band is observed on the horizon opposite to the sun. This effect occurs when the Sun is just below the horizon. Alpenglow is easiest to observe when mountains are illuminated but can also be observed when the sky is illuminated through backscattering.

Since the Sun is below the horizon, there is no direct path for the light to reach the mountain. Unlike sunset or sunrise, the light that causes alpenglow is reflected off airborne snow, water, or ice particles low in the atmosphere. These conditions differentiate between a normal sunrise or sunset and alpenglow. Although the term may be loosely applied to any sunrise or sunset light seen on the mountains, true alpenglow is not direct sunlight and is only observed after sunset or before sunrise... [Wikipedia](#)

In the absence of mountains, the aerosols in the eastern portion of the sky can be illuminated in the same way at sunset by the remaining red scattered light straddling the border of the Earth's own shadow (the terminator). This back-scattered light produces a red band opposite the Sun... [Wikipedia](#)



## Belt of Venus

The Belt of Venus or Venus's Girdle is an atmospheric phenomenon seen at sunrise and sunset. Shortly after sunset or shortly before sunrise, the observer is, or is very nearly, surrounded by a pinkish glow (or anti-twilight arch) that extends roughly 10°–20° above the horizon. It is similar to alpenglow as they both are caused by backscattering of reddened sunlight. The only difference is that alpenglow is characterized by afterglow and is a red horizontal band visible just after sunset or before sunrise due to direct illumination of clouds and aerosols low in the atmosphere, whereas the Belt of Venus is a rosy pinkish arch visible long after sunset or long before sunrise, caused by backscattering of refracted sunlight due to fine dust particles high in the atmosphere. In a way, the Belt of Venus is a true alpenglow visible at twilight near the anti-solar point.

Often, the glow is separated from the horizon by a dark layer, the Earth's shadow or "dark segment." The arch's light pink color is due to backscattering of reddened light from the rising or setting Sun. A very similar effect can be seen during a total solar eclipse. The zodiacal light, which is caused by reflection of sunlight from the interplanetary dust in the solar system, is also a similar phenomenon.

The name of the phenomenon alludes to the *cestus*, a girdle or breast-band, of the Ancient Greek goddess Aphrodite, customarily equated with the Roman goddess Venus... [Wikipedia](#)



Blue color is caused by the earth's shadow preventing the pink light from backscattered in the sky.



Belt of Venus - EarthSky.org - Deborah Byrd