

Have you seen these common, but often unnoticed phenomena just before and after sunset?

Alpenglow, Belt of Venus, and Earth's Shadow



Alpenglow

- Red/orange glow cast on mountains that are opposite the sun shortly before sunset.
- Caused by forward scattered sunlight off particulates in the atmosphere.

Belt of Venus

- Red/orange/pink glow opposite the sun near sunset and stretches along the horizon.
- Becomes apparent 5 minutes before sunset until 10 minutes after sunset.
- Caused by back scattered sunlight off particulates in the atmosphere.
- Not as pronounced if the atmosphere has few particulates and is very clear.

Earth's rising shadow

- Begin looking very low in the East opposite the sun 2-3 minutes after sunset.
- The shadow appears as a thin dark band opposite the set sun.
- By ten minutes after sunset, it has thickened, with its leading edge reaching 10° above the horizon. At that time, the shade of leading edge nearly matches that of the darkening sky.
- Caused by Earth's horizon blocking the sunlight that reflects particulates in atmosphere.

