

# Rating the Night Sky

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Conditions will change over the course of an observing session. It's a good habit to re-evaluate conditions on a regular basis. The visual limiting magnitude charts will help you determine transparency. Use a mid power eyepiece to help determine seeing.

## Transparency Scale

- 1 - Very Poor - More than 50% of the sky is cloudy.
- 2 - Poor - Partly cloudy or heavy haze. 2<sup>nd</sup> Magnitude stars visible.
- 3 - Somewhat Clear - Cirrus or moderate haze. 4<sup>th</sup> Magnitude stars visible.
- 4 - Partly Clear - Slight haze. Milky Way visible only in brighter regions.
- 5 - Clear - Milky Way is more obvious. 5<sup>th</sup> Magnitude stars visible.
- 6 - Very Clear - Milky Way and M31 visible. 6<sup>th</sup> Magnitude stars visible.
- 7 - Extremely Clear - The Milky Way is very wide and bright throughout.

## Pickering Seeing Scale

- 1 - Star image is usually about twice the diameter of the third diffraction ring.
- 2 - Image occasionally twice the diameter of the third ring.
- 3 - Image about the same diameter as the third ring and brighter at the center.
- 4 - The central disk often visible; arcs of diffraction rings sometimes seen.
- 5 - Disk always visible; arcs frequently seen.
- 6 - Disk always visible; short arcs constantly seen.
- 7 - Disk sometimes sharply defined; rings seen as long arcs or complete circles.
- 8 - Disk always sharply defined; rings as long arcs or complete but in motion.
- 9 - Inner ring stationary. Outer rings momentarily stationary.
- 10- Complete diffraction pattern is stationary.

## Dark Sky Scale

- 1 - Illumination is equivalent to, or greater than, the full moon.
- 2 - Sky somewhat light, bright glow on horizon. Visible stars to 4.0 magnitude.
- 3 - Overhead appears dark, faint glow on horizon. Visible stars to 5.0 magnitude.
- 4 - Sky is very dark, minimal glow on horizon. Visible stars to 6.0 magnitude.
- 5 - There is a total absence of moonlight and artificial lighting in the sky.