



The Astronomical League

A Federation of Astronomical Societies

Astro Note C2 – Seeing Conditions

Introduction – Seeing is a measure of the stability of the atmosphere. Light from distant astronomical objects must pass through the atmosphere to get to your equipment and ultimately to your eyes. One advantage of placing telescopes in space is that they do not have to deal with atmospheric conditions like seeing.

The stability of the atmosphere affects the clarity of features on your target object. With very stable air, you see more detail, those details are clearer, and there is no wavy effect. With poor seeing, the wavy motion diminishes the detail and makes observing less fulfilling.

It is important to record seeing in your log sheets so that you can compare the views from different nights under different conditions. There are formal and very quantitative means to measure seeing, however there are also simple ways that an amateur astronomer can do while in the field and without special equipment. This is a scale that can be used and is acceptable for all Astronomical League Observing Programs.

The Scale: Seeing – How stable is the sky?

- E (excellent) - The brighter stars are not twinkling at all.
- VG (very good) - The stars are twinkling slightly, but the brighter planets are not twinkling.
- G (good) - The brighter planets are twinkling slightly.
- F (fair) - The brighter planets are obviously twinkling.
- P (poor) - The atmosphere is turbulent. all objects are twinkling to the points where observation is not practical.