Planning an Observing Session

1. **Determine what is up in the night sky.**
   - Use a planisphere, the all-sky maps in astronomy magazines or the Observer's Handbook, or computer star charting programs to determine what constellations will be visible on the night you are planning to observe.
   - Note where the Moon will be located and its phase. If you don't plan to be observing the Moon try to avoid nights where it is more than a small crescent.
   - Use the Observer's Handbook monthly events calendar, astronomy magazines and the Internet to learn about date specific events like conjunctions, meteor showers, comets and eclipses that might be of interest.

2. **Develop a list of observing targets.**
   - Using observing articles in the magazines or formal lists like the RASC Explore the Universe observing program develop a list of targets that are of interest and are in the constellations that are visible on the night you plan to be observing.
   - Working on a formal observing program like the RASC observing certificate programs is an excellent way to develop observing skills and see a range of object types like open clusters, globular clusters, galaxies, etc.
   - As you observe objects check them off to record progress on your target list.

3. **Prepare charts for selected targets.**
   - Having organized charts available for your targets ahead of time will allow you to spend valuable time under clear skies observing rather than sorting through charts trying to figure out the best way to locate an object.
   - If possible try to produce finder charts that match your equipment. For example, consider include using mirror-reversed charts for refractors, and having circles on your charts that show the field of view of <u>your</u> eyepieces in <u>your</u> telescope.

4. **Check the sky conditions.**

   Before heading out to set up equipment check on what sky conditions are likely to be like.
   - Check the Clear Sky Chart for a location close to your observing site to get a forecast for clouds, sky transparency and seeing conditions for the next few days.
   - During the final hours before you plan to go out check the satellite picture on the Weather Channel to see if clouds are present or moving in.
   - Finally, look out a window or go outside and look at the sky as the final check to see that the skies are in fact good enough for observing.
   - Note that sky conditions affect types of objects in different ways:
     - Faint fuzzy objects like galaxies, planetary nebulae and emission nebulae are best in moonless, clear and transparent skies. They are not impacted much by poor seeing.
     - Seeing fine planetary details and splitting very tight double stars requires good seeing.
     - Planets, star clusters and double stars are not impacted too much by the Moon if they are not too close to it. They are also less impacted by light pollution so can be observed in the suburbs although they will still be more impressive in dark skies.