ASTRONOMICAL LEAGUE

A FEDERATION OF ASTRONOMICAL SOCIETIES
A NON-PROFIT ORGANIZATION

- ★ *To promote the science of astronomy:*
- ★ *By fostering astronomical education;*
- ★ *By providing incentives for astronomical observation and research;*
- ★ *By assisting communication among amateur astronomical societies.*

ASTRO NOTES

Produced by the Astronomical League

Note 3: Observing Data Sheet

Introduction

It is fun to observe the heavens, that is why many of us are amateur astronomers! However, in order to make scientifically useful observations or to compare your own observations over years of observing, it is important to record your observations in some permanent form. You might use a bound or looseleaf notebook to maintain your records. Whatever format you use, certain standard information must be recorded.

The form shown latter on this page is one way to organize that information. It is only a suggestion, but you are free to make copies as you need for recording your own observations.

A few comments follow on certain of the data fields.

Date and Time

Since most astronomical observations are made at night, they can span two calendar dates. This can lead to confusion in your records. There are several ways to avoid this confusion: use Universal Time as reported by radio station WWV and others; specify both standard calendar dates, e.g., January 25-26; just be careful of your observation time and report it properly in civil time, noting the date change after midnight. Just pick a method and use it consistently.

Astronomical Seeing

Many observers forget that the telescope's optical path includes a column of atmosphere equal in diameter to the telescope objective. The air within this column is constantly moving, changing density and composition. These factors combine to degrade the observed image. Some estimate of these "seeing conditions" should be included in your observing report: the "seeing" may be important when interpreting your observation at a later date.

The form includes two provisions for estimating seeing: transparency and steadiness. Various observing programs may specify a particular "seeing scale." Be sure to indicate the basis of your estimates. If transparency is the faintest naked eye star visible, enter it as "5.5 mag." If steadiness is on an arbitrary scale of 1 to 10, 10 best, enter it as "7/10."

Field Size and Orientation

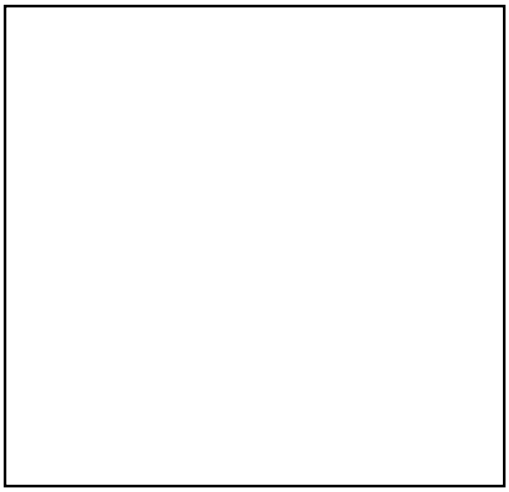
You should include an indication of scale in any sketches or drawings you make. The angular size of the eyepiece field is often convenient for this. You should also include two perpendicular directions in any field sketch: north (or south) and east (or west). Two directions will indicate any field rotation caused by star diagonals or secondary mirrors.

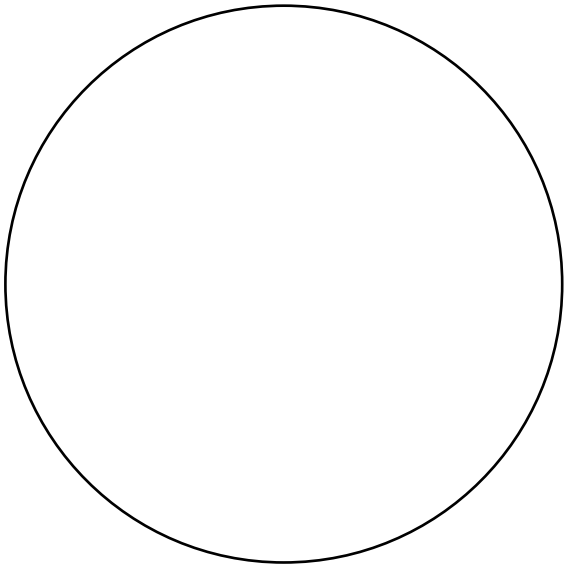
Observing Log

Object:	Date:	UTC/civil
Right Ascension:	Time:	UTC/std/ds
Declination:	Seeing: *Transparency*:	
Constellation:	*Steadiness:*	
Magnitude:	Temperature:	
Size:	Telescope:	
	Eyepiece/Magnification:	
	Filters:	

Notes:

Finder Chart: Field Size:





Observer: _____