Globular Cluster Program Chair:

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Introduction

Welcome to the Astronomical League's Globular Cluster Program. The purpose of this observing program is to introduce observers to some of the finest globular clusters in the heavens. You may use any telescope, although an 8 inch is probably necessary for light polluted skies. This program is meant to allow you to enjoy comparing one type of celestial object to each other, not test your equipment.

The Globular Cluster Program is supported by the membership of the Longmont Astronomical Society, of Longmont, Colorado. Our program is dedicated to observing the night sky and educating the community. The Globular Cluster Observing Program is just an extension of our club and we hope that you will enjoy it.

To obtain your certificate and award pin for this program, purchase the Guide to the Globular Cluster Observing Program from the AL Bookstore specifically written to support this observing program.

This observing guide explains in great detail the Regular and Challenge Observing Lists. Included in these lists are the RA, Declination and accurate magnitudes (provided by Brian Skiff of Lowell Observatory) of 190 galactic and extra-galactic Globular Clusters along with reference page numbers for both sets of Uranometria 2000.0 star atlases.

This observing guide is different from other Astronomical League publications with respect of its content. Most amateurs have access to pictures of these globular clusters as well as programs that can print detailed finder charts for these objects. This observing guide instead includes the most up-to-date information about each of the 190 globular clusters, including information about their discovery and by whom, and other interesting facts about these objects. Much of this information was provided by Barbara Wilson, a highly skilled Texas amateur who has observed 137 of the globular clusters listed in this program.

This program is more than just observing globular clusters and recording your observations. This program wishes you to apply a concentration classification to each globular cluster you observe. By doing this, you will be repeating what the famous British astronomer William Herschel did in the late 18th century, and has since been repeated by many other professional astronomers.

This concentration classification is called the Shapley-Sawyer Concentration Class. The observing guide provides reference pictures of globular clusters and their concentration class, along with an explanation of how to determine the concentration class of each globular you observe by using these pictures.

Rules and Regulations

To qualify for the AL's Globular Cluster Certificate and pin, you need only be a member of the Astronomical League, either through an affiliated club or as a Member-at-Large. If you are not a member now, click here to view information on becoming a member.

The goal of this program is to get you to observe and compare globular clusters, and to that end, you can use manual (finder scopes and star hopping techniques), digital setting circles or any other computer aided GOTO systems.

For the Astronomical League's Globular Cluster Observing Program, the observer is required to observe 50 globular clusters, with at least 1 globular cluster from the Challenge List. This program is completely customizable to the observer's interests and their equipment. The observer chooses just 50 globulars they are interested in observing from the list of 190 globular clusters listed in the observing guide.

Since comparison is a principal goal of this program, if possible, all observations should be done with the same telescope. It is recommended that one eyepiece (power of magnification) be chosen for consistency, one that at least shows all of M13 in the field of view. If multiple telescopes are used to observe the globular clusters you have selected for your program, try to use the same power of magnification that is consistent with each telescope.

For each globular cluster, the observer needs to record all of the data usually required for Astronomical League observing programs, along with the concentration class of each object observed. The observing guide has pages you can copy to help you record this information.

To receive your Globular Cluster Certificate and Award Pin, send a copy of your observations, along with your name, address, email address, and society affiliation, to:

Bob Kerr 8516 Virginia Road Bloomington, MN 55438 952-944-7743

Email: <u>kerr_comm@hotmail.com</u>

Upon verification of your observations, your certificate and award pin will be sent to you or your society's Awards Coordinator, whomever you choose.