

Double Star Observing Program

Double Star Observing Program Coordinator:

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Introduction

Welcome to the Astronomical League's Double Star Observing Program. The purpose of the Double Star Observing Program is to introduce observers to 100 of the finest double and multiple stars systems in the heavens. You don't need a large, expensive apochromatic refractor to view the objects on this list since a small refractor, Newtonian reflector, or Schmidt-Cassegrain will do just fine. All objects on this list were originally observed with a three-inch refractor using between 75X and 150X. Again, this program is meant to allow you to enjoy a different aspect of our wonderful hobby, and not to test your equipment.

Quick View of Requirements	
Double Star Observing Program	
Uses Eyes	
Uses Binoculars	
Uses Telescopes	Yes
Must be an AL Member	Yes
Date Deadline for Submission	
Minimum Instrument Size	3 inch
Manual Observations Required	
Go-To Telescopes Allowed	
Remote Telescopes Allowed	
Number of Observations	100
Option for Imaging	
Special Equipment Required	
Equipment Must Be Constructed	
Observations Must Be Submitted to an On-Line Database	

Double star observing can be very forgiving. You don't need the darkest skies, the clearest skies, or even a moonless night to observe many of these objects. Some can be observed from your backyard under moderate light pollution; some can be observed under less than transparent skies, and some can even be observed with the moon up. However, as usual in astronomy, the best results will be obtained under optimum conditions. The point is, always try for the best conditions, but if you don't have them, don't worry about it. You can still enjoy this Observing Program.

Rules and Regulations

To qualify for the Astronomical League's Double Star certificate and pin, you need only be a member of the Astronomical League, either through an affiliated club, as a Member at Large, or as an International Member at Large, and observe the 100 selected objects on the included list. Any telescope may be used, but one with an objective 60mm in diameter or larger is recommended. It is preferred that the stars be found by star hopping and not by Go-To or Push-To methods, although we will not insist on this if the rest of the observations are well done. Too often I find the recording by those who use Go-To's is hurried and unclear. Since the equipment requirements for this program are so modest, the use of remote telescopes or observatories for this program is not allowed.

Observation Requirements	
Double Star Observing Program	
Object Name/Number	Yes
Observer's Latitude	Yes
Observer's Longitude	Yes
Observer's Location (City)	
Observer's Altitude	
Date of Observation (LT or UT)	Yes
Time of Observation (LT or UT)	Yes
Description of Object	Yes
Sketch of Object	Yes
Seeing	Yes
Transparency	Yes
Sky Conditions	
Size of Instrument Used	Yes
Power/Magnification	Yes
Filters Used	

I also encourage you to look at the stars with varying powers as some of these doubles are very close and require substantial power to get a clean separation of the stars. (Gamma Virginis, for instance, is currently separated by a bit more than an arc second now opening from about 0.3 arc seconds around 2007. It may require more power and not everyone will be able to split it. Just do the best you can and log what you observe.)

To record your observations, you may use the log sheet provided in the "Observe..." booklet or in the Double Star pages at the Astronomical League website; or you may use one or your own log sheet as long as it includes all the required information. If you use your own log sheets, they should include: objectname, date and time (local or UT), Latitude and Longitude, power(s), Seeing and Transparency, instrument used, and a drawing of the double or multiple star system. Yes, you are required to draw the double star. But, before you panic, how hard is it to draw two dots in the box provided, with the size of the dot indicating magnitude, and the distance between the dots representing separation? **Please show North and either East or West in your drawing and make sure your depiction of the primary star is clear to a viewer of the sketch.** A part of this exercise is to teach celestial directions so the position angles of the stars will be judged by your denotation of the directions. There is a line for a description, but this is optional and not required, although encouraged. This is included so that if you are inspired by any one double star, you can write your thoughts or feelings down for later reference.

You must be a member of the Astronomical League to receive this certificate.

Submitting for Certification

To receive your Double Star certificate and pin, simply mail a **COPY** (please don't send originals) of your observations along with your name (as you want it to appear on your certificate), mailing address, email address, phone number, society affiliation, and to whom the certification should be sent. Observation logs should be sent to the Double Star Observing Program Coordinator for review and approval.

Submission Requirements	
Double Star Observing Program	
Observer's Name	Yes
Observer's Mailing Address	Yes
Observer's Club Affiliation	Yes
Observer's Phone Number	Yes
Observer's E-Mail Address	Yes
Information for Person to Send the Award To For Presentation	Yes

I really love to see what other folks have done. It is my greatest reward as an Observing Program Coordinator. However, if mailing the observations seems impractical and there is another member in your club who has already received the Double Star Award, we will accept a recommendation from that person via email after they have reviewed and approved your observations. If your Awards Coordinator has not received the Double Star Award, she or he must submit the observations to me or another Double Star Awardee for verification.

If you have any questions or problems please contact me by mail, phone, or email at the following address:

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