

PROJECT 1: THE CRONYN OBSERVATORY TELESCOPES

Introduction

The purpose of this project is to introduce you to telescopes.

To do Project 1 you must go on your own to Cronyn Observatory, on campus at the traffic circle near Alumni Hall. Enter the main door and go upstairs to the telescope room. The hours of operation for the project are as follows:

Monday to Thursday from 7:00 p.m. to 8:00 p.m.

Tuesday, Sept. 9 to Thursday, Sept. 25.

The Project

Go to the observatory. You need no special preparation, but bring a pencil and a clipboard or other portable writing surface. Ask the demonstrator for the answer sheet. The demonstrator will explain the operation of the telescopes. Listen to the discussion and ask questions. Fill out the answer sheet, answering the questions, and hand in the sheet before you leave. The answer sheet cannot be turned in later.

This project can be done in any weather conditions.

The project takes about 30 minutes. Sessions start at 7:00 pm and 7:30 pm. At 8:00 pm, the telescope is used for Projects 2 and 3 (weather permitting).

Note: the telescope room is unheated by necessity. Dress appropriately for the outside weather.

Review

Telescopes are discussed in Chapter 9 of Zeilik & Gregory. The optics of the orange-painted Cronyn Telescope resembles that shown in Figure 9-1 (page 180).

Look at the pictures of the radio telescopes in Chapter 9. Can you identify the design, the objective, the focal length, the size?

Do you understand how the mounting of a telescope has to be made to accommodate its geographical location?