

About the activity program of the citizens using astronomical telescope "MIRUERU"

Shunji Mouri^{1*}

¹Faculty of Education & Human Studies

Introduction

The astronomical telescope was newly set up in the astronomical observatory Faculty of Education & Human Studies of The Akita University, in July, 2009. An astronomical event is executed in the astronomical observatory every month, for the citizens. The effect expected the activity program intended for the citizens enforceable by the use of a new astronomical telescope is examined.

New astronomical telescope and astronomical event

In the astronomical telescope newly set up, the effective aperture is 45 cm, the focal length is 3000 mm, and the optical system is reflecting telescopes. The observational equipment has cooling CCD camera and the single lens reflex digital camera. It advertised for the name to the grade-schooler to be familiar with the citizens and it was named, "MIRUERU".

An astronomical event of a celestial observation association and an astronomical lecture meeting and an astronomical course is executed in the astronomical observatory for the citizens at nighttime. The following has been understood from the result of the questionnaire of the participant to an astronomical event. Schoolchildren are sequentially hoping for the observation of the planet, the solar eclipse, the eclipse of the moon, and the nebula and the star cluster. It has a lot of hope more than the high school student also in another who is sequentially hoping for the observation of the planet, the nebula, the star cluster, and the solar eclipse and the eclipse of the moon, a special astronomical phenomenon, and other observations. It is necessary to develop the activity program using a new astronomical telescope to make an astronomical event a more effective event corresponding to the hope of each citizens, and to execute it.

Content of activity program

The citizens plan the activity program that can participate independently with a new astronomical telescope and it executes it. The activity program is done at the time of the celestial observation association at nighttime, and the time of an astronomical course and the time for which the citizens hope.

The operation that turns the astronomical telescope astronomical object is done with the personal computer chiefly, and can be executed even by the grade-schooler. An easy manual is made, and it prepares it so that everyone may operate it. There is astronomical object not seen easily.

Therefore, it is necessary to confirm how to see it.

It is thought that the citizens' understanding to astronomical object deepens if it is possible to record by the hoped astronomical object not only is observed but also printing on the photograph. In cooling CCD camera, it is for taking a picture of the nebula and the star cluster, and the single lens reflex digital camera is for taking a picture of the moon and the planet. As for the method using the observation equipment, because the operation is complex, it can do more than the high school student. Schoolchildren can execute taking a picture of the moon and the planet and an easy picture processing and the prints with a compact digital camera.

Expected effect

It is expected that the chance of an astronomical education and the lifelong study can be offered to the citizens through the activity program. The child student can observe the moon and the planet studied at the school, the high school student and the university student become the course in the future and the chance of the vocational choice, and the citizens can support the management of the astronomical observatory by exhibiting in the astronomical observatory besides the observed heavenly body can be left as my record, and placing in the homepage. It is thought that new astronomical telescope "MIRUERU" is used, each citizens executes the activity according to hope, and it is possible to manage it as an astronomical observatory that near the citizens or more and is friendly.

Keywords: astronomical telescope, astronomical facilities, star party at nighttime, astronomical education, lifelong study