Astronomy in Iran*

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Abstract. This paper summarizes the present situation concerning astronomy in Iran. Shiraz University introduced astronomy in the mid-1960s and established the Biruni Observatory. Astronomy is also carried out at Tabriz University and in Meshed, Zanjan, Tehran, Babol and other places. The Astronomical Society of Iran is flourishing, and is about 30 years old. Site-testing is underway for a National Observatory of Iran, which will be equipped with a 2-m class optical telescope. Iran publishes Nojum, the only astronomical monthly magazine of the Middle East, which is presently in its fifteenth year.

Keywords. Astronomy in Iran

1. Introduction

In spite of her renowned pivotal role in the advancement of astronomy on the world scale during 9th to 15th centuries, Iran's rekindled interest in modern astronomy is a recent happening. Serious attempts to introduce astronomy into university curricula and to develop it into a respectable and worthwhile field of research began in the mid 60's. The pioneer was Shiraz University, which should be credited for the first few dozens of astronomy- and astrophysics-related research papers in international journals, for training the first half a dozen of professional astronomers and for creating the Biruni Observatory. Here, I take the opportunity to acknowledge the valuable advice of Bob Koch and Ed Guinan, then of the University of Pennsylvania, in the course of the establishment of this observatory.

At present the astronomical community of Iran consists of about 65 professionals, half university faculty members and half MS and PhD students. The yearly scientific contribution of its members has, in the past three years, averaged to about 15 papers in reputable international journals, and presently has a healthy growth rate. Among the existing observational facilities, Biruni Observatory with its 51-cm Cassegrain, CCD cameras, photometers and other smaller educational telescopes, is by far the most active place. Tusi Observatory of Tabriz University has 60 and 40 cm Cassegrains, and a small solar telescope. A number of smaller observing facilities exist in Meshed, Zanjan, Tehran, Babol and other places.

The Astronomical Society of Iran (ASI), though some 30 years old, has expanded and institutionalized its activities since early 1990's. ASI sets up seasonal schools for novices, organizes annual colloquia and seminars for professionals and supports a huge body of amateur astronomers from among high school and university students. Over twenty of ASI members are also members of IAU and take active part in its events.

*This paper was presented by Dr E. Guinan, Villanova University, USA, as Dr Sobouti was unable to be present in person.

148 Y. Sobouti

2. The National Observatory of Iran

In the past five years, astronomers of Iran have staged an intensive campaign to have a National Observatory of their own (NOI). Initial planning is for a state-of-art 2 m telescope with CCD-based instrumentation. The project is approved and will be funded by the government in the course of five years.

The site selection for NOI, however, is already in its third year and has been and is being generously funded by the government. Initially, four sites were selected for further testing from 33 candidate sites using geophysical, local and meteorological criteria. Seeing measurements were carried out at the sites with Differential Image Motion Monitors (DIMM). After the analysis of three years of DIMM measurements, the list is now shortened to the following two sites:

- Kolahbarfi Mountain in Kashan (Height: 3220 m, Long.: 51° 26′ E, Lat.: 33° 38′ N)
- Fordoo Mountain in Qom (Height: 3150 m, Long.: 50° 58′ E, Lat.: 34° 11′ N)

Further information can be found in two articles in the Persian language in the Iran J. of Physics by Nasiri et al. (2003) and Darudi et al. (2005)

3. Nojum: Iran's monthly astronomical magazine

Last, but not least, Nojum, the only astronomical monthly magazine of the Middle East, is presently in its fifteenth year. It has a good readership among both professionals and amateurs of Farsi speaking communities within the country and abroad.

References

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