

THE ISLAMIC CALENDAR AND ASTRONOMY

In this article, extracted from "Sources of the Astronomical and mathematical inheritance's history in Arab", written by Dr. Enes Kujunxhic, there are evidenced facts on the existence of many works or at least fragments of works by Arab and non-Arab authors dealing with astronomical; issues. As it is stated in this writing, despite the fact that these astronomical researches are rather carried out aiming the practical application in the religious aspect, their achievements were great and far-reaching. The author classifies these achievements in authentic theoretical-astronomical works, mathematical fundamentals, tables or instructive manuals for astronomical observations; writings on the observation astronomical instruments and instructions for their application etc. Also, there are introduced the researching achievement related to different astronomical fields such as: chronology, spherical trigonometry, planets' movement, parallaxes, eclipses, systems of earthly of celestial coordinates in relation with the determination of the planets and stars' position. The practical application of this knowledge was the compilation of calendars-*takwims*, by the means of which there were determined the payer times or the beginning of lunar months, where a special importance was paid to the first day of the Month of Ramadan or that of the new lunar year. Also, of great importance was considered the determination of Kiblah' direction, which was carried out at that time very accurately from any point in the surface of the earth. Here, Dr. Kujunxhic brings into evidence the researches of tenths of western authors known in the world, who highly evaluate the contribution govern in the field of astronomy by Arab authors from the 8th century by reaching the culmination in the 13th and 14th centuries. As the author states, "The end of this astronomy came with the destructions in Damascus by Mongols in 1402 as well as a century later with the ottoman invasion of Cairo in 1517. In this time, the centre of the astronomical activity moved to Istanbul..."

We emphasise that manuscripts in Arab on the astronomical inheritance are preserved in Balkan countries as well, and it is not to be surprised if any of them exists also in Albania. We should carry out researches about them.

Translated by Dr. Ibrahim Gashi