

## GREAT UZBEK ASTRONOMER

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### Abstract

The article talks about Mirzo Ulugbek, a bright representative of the Timurid dynasty, a great scholar, a great astronomer, and a scientist. It talks about his possibility and his incomparable contribution to science during his lifetime. It tells about the reign, birth and scientist.

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Great personalities are not born every day and all the time. In order to become great, a person must have a lot of hard work and some special ability. One of the factors that lead a person to greatness is this hidden or surface ability. The following hero has been remembered as a great person for centuries due to his past work, ability, and aspirations. We are talking about this person.

Mirza (later Sultan) Muhammad ibn Shahrukh ibn Temur Ulugbek Koragon is the ruler of the Timurid state, the son of Shahrukh. Great Uzbek astronomer and mathematician.

Mirzo Ulughbek was born on March 22, 1394 in Sultaniya, Iran. From 1411 to 1449, he ruled today's Uzbekistan, Tajikistan, Turkmenistan, Kyrgyzstan, Southern Kazakhstan, Iran, and Afghan Turkestan.

Mirza Ulughbek was the grandson of the fifteenth century, the favorite grandson of Amir Temur and the son of Shahrukh Mirza, whose real name was Muhammad Taragai. From his youth, he was called "Great Grandfather" and the young prince was later known by this name. The foundations of literacy, religious and worldly sciences were not foreign to young Muhammad Taragai. He was a Great Astrologer and a mathematician, he knew the Holy Quran by heart. Although Ulugbek's mother was Gavharshod Begum, according to the tradition prevailing in Temur's palace, the prince was entrusted to the upbringing of the master's elder wife, Mrs. Saraymulk. At the age of 3-4, Sheikh Arif Azari was appointed as his coach. He spent most of his youth in the Middle East and India, and after the death of Amir Temur, he settled in Samarkand, that is, according to Mahmud of Koshghar, in Samizkent. Later, when his father Shahrukh Mirza appointed Herat as the capital of his state, the sixteen-year-old Ulugbek became the head of Samarkand in 1409, and in 1411 he became the free ruler of Movarounnahr Khanate.

After the death of Timur, the struggle for power between the Timurids began. As a result of the struggle, two independent states emerged in Khurasan and Mowarounnahr. In 1409, Ulugbek became the ruler of Movarounnahr, whose center was Samarkand. Ulugbek did not conduct military campaigns like his grandfather. After defeating Shermuhammad Khan in 1425 and being defeated by Baraq Khan

in 1411, he did not conduct a military campaign for 20 years.

Samarkand flourished during the reign of Mirzo Ulugbek. By his order, madrasas were established in Bukhara in 1417, in Samarkand in 1420, and in Gijduvan in 1433. Charitable institutions were built in the city of Marv. The constructions of the Bibi Khanim Mosque, Amir Temur Mausoleum, Shahi Zinda Ensemble have been completed. Also, Ulugbek built many public buildings, such as caravanserai, tim, chorsu, bathhouse. Ulugbek Observatory is one of the rare examples of 15th century architecture in Samarkand. This structure was built on Kohak Hill in 1428-1429 by order of Ulugbek.

Ulugbek is famous in the world of science as a great astronomer. The greatest work he did in this regard is the astronomical table called "Zizhi jadidi Koragoniy". Ulugbek was interested in medicine and music, he also wrote poems. Alisher Navoi's work "Majolis un-nafois" contains examples of his poems. We have inherited 4 works from the scientist:

- 1) "Zizhi jadidi Koragoniy" - about astronomy;
- 2) "Treatise on determining the sine of a degree" - related to mathematics;
- 3) "Risolayi Ulugbek" - dedicated to the stars;
- 4) "Tarihi arba' ulus" (History of the Four Nations) - about history.

In 1437, he arranged a set of 1018 stars in the work "Zizhi Sultani", which is still considered one of the world's greatest works in the field of star science. This work was reprinted in Oxford in 1665 by Thomas Hyde, in 1843 by France Bailly, and in 1917 by Edward Ball Knobel. After that, Ulugbek defined a year as 365 days, 5 hours, 49 minutes and 15 seconds. Ulugbek was only 25 seconds wrong in this calculation. Apart from him, Ulugbek defined the earth's central inclination as 23.52 degrees, and this was considered the most correct and accurate measurement for hundreds of years.

After the death of his father, Shahrukh Mirza, Ulugh Beg marched to Balkh, because Mirza Alawudavla ibn Boysunqur Mirza claimed the Timurid rule in Herat. Ulugh Beg won this battle in Murghab and marched towards Herat, but he was defeated in a battle with Alaud Dawla's brother Mirza Abul Qasim Babur. After returning to Balkh, his son Abdullatif was assassinated near Samarkand on October 27, 1449, at the age of 55.[2] ]. Abdullah, one of Ulugbek's relatives, brought him to the shrine of Amir Temur's mausoleum in Samarkand. In 1830, astronomer Johann Heinrich von Mädleroy named one of the craters as Ulugbek.

#### References:

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