

DESCRIPTION OF THE A.D. 1680 COMET OBSERVED IN MEXICO BY THE CROATIAN JESUIT IVAN RATKAJ

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Abstract. A short biography of the croatian Jesuit and missionary Ivan Ratkaj (1647-1683) and his description of the comet observed in 1680 from northern Mexico are presented.

Ivan Ratkaj, a member of an eminent croatian noble family was born in Ptuj on May 22, 1647. In his childhood he has been a page at the court of the Emperor Leopold I in Vienna where he also attended the Jesuit gymnasium. He joined the Jesuit order in 1664 and finished the studies of philosophy and theology in Graz in 1677. The General of the Jesuit order sought in 1678 missionaries for the West Indies (America and Philippines) from the Central European Countries and Ratkaj applied. The twenty candidates for the missions sailed from Genua to Cádiz. Due to a storm they arrived too late to join the spanish fleet which was already well underway. So the missionaries had to wait for almost two years in Seville for the next opportunity to embark.

In July 1680 they joined a fleet headed by the new viceroy of Mexico and landed in the mexican harbour Veracruz. Ratkaj was sent to the province of Tarahumara (now in the mexican state Chihuahua) where the Jesuits have founded their missions several years earlier. He learned the native language in a few months and was entrusted to work at a small mission in Tutuaca. He

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organised the erection of a small church there, and after one month he had baptized about fifty Indians. Afterwards he was assigned to the well organized mission of Jesus Charichic where he baptized several hundreds natives in three years.

Ratkaj walked around in old and worn-out clothes, distributed everything he possessed among the native population and taught the children and adults twice a day about the questions of faith. He also regularly visited three neighbouring settlements belonging to the mission. Ratkaj tried to eradicate the nightly drinking and exuberant festivities of the Indians, which in turn poisoned him and he died on December 26, 1683. Ratkaj was an attentive observer of his surroundings and sent three detailed reports to Europe containing antropological, etnographical and geographical surveys of Tarahumara including a map of the province marking the missionary stations and spanish fortresses (Korade, Aleksić and Matoš, 1992).

The first two letters were published by the Jesuit Joseph Stöcklein (1726) in German, and in Croatian by Iveković (1906). Parts of the third letter have been published by Rodriguez (1982), and the complete third letter in Croatian by Korade (1993).

In his second letter written at the borders of New Mexico on February 25, 1681 Ratkaj describes his observations of the comet from 1680. (In European scientific circles the appearance of this comet has raised large interest and Newton and Halley have discussed the nature of its path).

..."On november 17, 1680 I left Mexico City with the honorable pater Thomas de la Harza, the present rector of the Collegium in Patras, and for security we have been accompanied by a group of indian bowmen. We went so eagerly forwards that we travelled 108 miles in twenty days and arrived at the silver mines of Zacatecas on December 7, 1680. On this trip I did not see anything so miraculous as a big tailed star, which showed up for the first time at the end of November at four o'clock in the morning in Spica Virginis with a long tail extending towards the west. The tail was dark at first, but brightened from day to day. The motion of the star was directed from west towards the

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east, but so fast that after two days the star stood forty degrees to the east and closer to the Sun. After three or four weeks, when the star passed the southern hemisphere, it showed up again after sunset with a horrifying tail which had a length up to fifty degrees; the body of the advancing star was small and now moved towards the west and the tail was oriented towards the east for some time, and quickly afterwards towards the north, until the star itself turned towards midnight, but the tail turned towards mid-day and everything faded slowly away. I leave the meaning of this to God. However, I am afraid that this tailed star means nothing good for West Europe i.e. for the Spanish monarchy."

References

- Iveković, F.: 1906, *Katolički list*, **38**, 454.
 Korade, M.: 1993, *Gazophylacium*, 1-2, 105.
 Korade M., Aleksić, M. and Matoš, J.: 1992, *Most/The Bridge*, **15**, 193.
 Rodriguez, L.G.: 1982, *Tarahumara. La Sierra y el hombre*, Mexico, 182.
 Stöcklein, J.: 1726, *Der Neue-Welt Bote mit allerhand Nachrichten der Missionariorum Soc. Jesu*.

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IVANA RATKAJA OPIS KOMETA IZ 1680. GODINE

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Sažetak. Ukratko se prikazuje životopis hrvatskog jezuita i misionara Ivana Ratkaja (1647. - 1683.) te njegov opis pojave kometa opažanog 1680. godine iz sjevernog Meksika.