



THE FOUNDERS OF THE SCIENCE OF ASTRONOMY AT THE ASTRONOMICAL AND METEOROLOGICAL OBSERVATORY IN BELGRADE

IN ANTICIPATION OF THE 140TH ANNIVERSARY OF THE FOUNDING OF THE ASTRONOMICAL AND METEOROLOGICAL OBSERVATORY

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The Astronomical and Meteorological Observatory

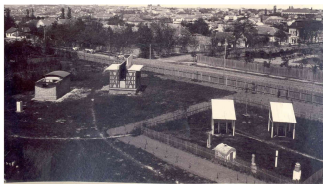


Photo from the roof of the Observatory:
 left: astronomical pavilions; right: meteorological station

The Astronomical and Meteorological Observatory began their activity in 1887. Since their inception, their work has focused primarily on meteorology, with a lesser emphasis placed on astronomy. This was not due to the lack of professional staff, as the observatories employed those with a focus on astronomy, such as Milan Nedeljković, Djordje Stanojević, Wenceslas Jardeitzky and Jelenko Mihailović, but rather it was that the Observatory decided that a focus on meteorology would be more valuable for Serbia.

The director of the Astronomical and Meteorological Observatory in 1899/1900 was the physicist and astronomer Djordje Stanojević (Negotin, 1858 – Paris, 1921), a cadet of the Ministry of Defense, who also studied and worked in the most famous observatories, including Potsdam, Meudon, Greenwich, Pulkov, and several others. Due to his significant output, he received an invitation from the Paris Observatory to participate in a scientific research expedition to Siberia in 1887, the same year when the Observatory in Belgrade was founded. Two years later, he traveled to the Sahara to study phenomena of the Sun. During expedition, Stanojević recorded findings on photographic plates. Additionally, Stanojević wrote several scientific papers in astrophysics, published by the Paris Academy of Sciences.



*Djordje Stanojević
 Vojvodina, 1858 – Paris, 1921*



Photo: Stanojević, 1887, Russia.
 Obtained from the Historical Museum of Serbia



Some of Djordje Stanojević's publications



Djordje Stanojević prepared the first annual publication with the results of meteorological measurements at the Astronomical and Meteorological Observatory in Belgrade, "Bulletin Météorologique de l'observatoire astronomique et météorologique de Belgrade (Serbia), Janvier – Juin 1900". He presented the publication at the World Exhibition held in Paris from April 14 to November 12, 1900. During the exhibition, the International Congress of Meteorology was organized from 10 to 17 September 1900.



*Wenceslas Jardeitzky
 Odessa, 1896 – Elkins, USA, 1962*

Wenceslas Jardeitzky (Vjacheslav Jarlečki) graduated from the Faculty of Physics and Mathematics in Odessa and specialized in astrophysics. After graduation, he worked at the Odessa Observatory and the Pulkovo Observatory in St. Petersburg, for a short time. Jardeitzky arrived in Belgrade in January 1920, and his value as a promising scientist was quickly noticed. In March 1920, Milan Nedeljković employed Jardeitzky as an assistant at the Astronomical and Meteorological Observatory. After only a year, in March 1921, Jardeitzky was appointed to work at the University, as he was elected to be an assistant at the Department of Applied Mathematics at the Faculty of Philosophy in Belgrade. He was a close associate and friend of Milutin Milanković. Jardeitzky retired in Belgrade during WWII; in 1943 he moved to the University of Graz (Austria) and in 1949 he moved to the United States where he became professor of geophysics at Columbia University in New York.



*Milan Nedeljković
 Beograd, 1857 – c. 1950*

The most intimate letter Nedeljković received was from Maurice Loewy, whom he had known since his time at the Paris Observatory. Maurice Loewy was an assistant at the Vienna Observatory, and came to Paris in 1860, where he continued his astronomical work at the Paris Observatory. The director of the Paris Observatory was also Urban Le Verrier (1811 – 1877), whose equations Milutin Milanković later used in his calculations.



*Maurice Loewy
 1833 – 1907*

The founder, first director, and builder of the Vračar Observatory in Belgrade was Milan Nedeljković. Nedeljković studied astronomy and meteorology in France, at the Paris Observatory, where he gained friends and the respect of fellow astronomers. After completing his education, he returned to Serbia in 1884, though later regretting that after completing his education he did not go to work at the astronomical observatory in Nice, something he expressed to Vojislav Mišković in their correspondence. While in Belgrade, Nedeljković taught astronomy and meteorology at the Great School. After the First World War, he acquired many of the highest quality and most modern pieces of astronomical equipment, via war reparations, which laid the perfect foundation for the later work and development of astronomy in Serbia, as well as for the success of the new Astronomical Observatory located in Belgrade.

My dear colleague,

In spite of myself, I am now called upon to express to you a wish: that is to see your great energy developed in another scientific field, to which I am naturally particularly inclined. You have no doubt understood that this concerns astronomy. A sublime science can be cultivated only by those who possess very high knowledge and an extraordinarily large workforce.

Having seen you at work at the Paris Observatory, it seems to me that you would be particularly capable, with your intellectual abilities and your competence, of inaugurating and developing astronomical science in your country. And I would like your government to provide the necessary means for the accomplishment of your task. In this way, your country would also participate in the great scientific movement of our time, which has enriched civilization with so many beautiful and magnificent discoveries.
Yours sincerely, M. Loewy

Paris, December 24, 1903.

Jelenko Mihailović was coworker of Milan Nedeljković from 1893 up to 1906, that is assistant on the Astronomical and Meteorological Observatory Belgrade. In 1906 Mihailović took a position at the Institute of Geology at the Faculty of Philosophy. In cooperation with Svetolik Radovanović he organized seismological research. Jelenko Mihailović was appointed as the first director at the Institute of Seismology of Serbia.



*Jelenko Mihailović
 Vukovar, 1869 – Belgrade, 1956*

Jelenko Mihailović's papers in the field of astronomy:

- 1896. Komete padalice i meteori. Popularno kritički pregled pisanja o prirodi zemlje.
- 1897. Astronomske opservatorije kao prosvetne i kulturne ustanove u susedstvu.
- 1899. Srpsko nebo.
- 1905. Astronomska terminologija kao metoda za ispitivanje fizičke prirode nebeskih tela
- 1905. Spektroskopija kao metoda za ispitivanje prirode nebeskih tela.
- 1907. Uticaj pomračenja sunca na meteorološke elemente u Beogradu.

After the departure of Wenceslas Jardeitzky from the Observatory to the University in 1921, Milan Nedeljković offered the vacant position of assistant to Vojislav Mišković. Vojislav Mišković was working in Marseille at that time.

Dear Sir, *Belgrade, July 10, 1921.*

Your letter made me happy, because I saw from it that you were at your job. And I had asked myself more than once: What is the matter with you? Because although I had recommended you, and the unseen one, as an assistant at the Observatory – I have neither seen you, nor heard of you since.

My honest answer to your letter is in the Reports of the Observatory, which I am sending you today. – And in writing the same, I have regretted many times, so that you know, that I did not go to the Nice Observatory to serve, after completing my education at the astronomical school at the Paris Observatory, and then, once famous in the world, calmly waited for them to call me, and I will set the conditions. This is how you will read the Reports, I begged, begged, and ---- in the end:
Today we do not have an Astronomical Observatory, I do not have one either, nor does the army. I made a proposal to the Minister of War to build a large Observatory together (in Belgrade) with a calculation bureau, and a small astrophysical one on some island where the air is so clear – but so far nothing!*

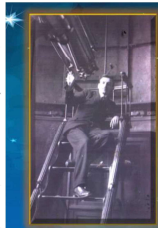
And in Meteorology we are building everything anew now, and it is also huge and we are forced to build the necessary institutions for both the old and the new – without larger funds.

That is my hasty answer to you, and please be kind enough to greet my old comrades and friends Mr. Esnault and Mr. Fabryj
Yours, Nedeljković

() We do not have any of the astronomical instruments*



*Milan Nedeljković's letter
 to Vojislav Mišković*



*Vojislav Mišković
 Pazine, 1892 – Beograd, 1976*
 Observatory in Marseille
 October 1920.