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DISCOVERY OF THE 2001 OUTBURST OF WZ SAGITTAE

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I found WZ Sagittae at $m_{\rm vis} = 9.7$ in the rising phase of the historical outburst on 2001 July 23. This article vividly reports the very exciting situation at the discovery.

WZ Sge is one of the most famous cataclysmic variables (CVs), and forms the WZ Sge sub-class with several other enigmatic SU UMa-type dwarf novae. The unusual characteristics of the WZ Sge stars are rare superoutbursts, large amplitudes, and no (or only few) normal outbursts. As to WZ Sge itself, the outburst cycle is over 10000 days in average. The outburst amplitude is 8 magnitude. Its magnitude is around 15th in quiescence.

I had observed variable stars for 6 years with my 78-mm refractor. My house that I lived in until the 2003 spring has a drying space, where almost all of the directions of the sky are visually accessible. This place was my first observatory. In 1998, I came accross a kind of encyclopedia "Material on CVs" summarizing the relevant literature in a bulletin of Japan Variable Star Association. This article enchanted me with the dramatic variabilities and the curious nature of CVs, to make me start monitoring outbursts of dwarf novae. The target list included WZ Sge.

In 2001, I was in the second grade of Ena High School, Gifu. It wasn't rainy on July 23, but the sky was not very clear. I was reluctant to make observations, to be exact, to carry my heavy telescope out of my room. So, actually, I was enjoying a music TV program in the early evening. Then, I happened to decide to start observations at 21 o'clock (local time). I had a custom to choose stars setting in the west horizon as the initial targets. The first object in that night was CH UMa. Following this, I observed a number of variables, a half of which were CVs. They didn't show any irregular states, however.

A few minutes before 22:30, I turned my telescope to the constellation of Sagitta. It was at 22:33 when I checked WZ Sge. It had been fainter than 13.2 mag 3 days before. At that time, however, I found something wrong, an irregular pattern! I first doubted my identification, and turned the telescope to WZ Sge again. But the situation didn't change. I checked my chart, then. There certainly existed an unfamiliar star brighter than 10th mag! Its position corresponded with the circle labeled "WZ" on my chart!

I considered someone had already noticed the outburst before my observation, since it was already 22:30. I wanted to be convinced that my observation was right. I rushed into my house, and looked up the address list. Then I called Kenji Hirosawa, who is a secretariat of the Variable Star Observers League in Japan (VSOLJ). But he was out then. So I left the message with his wife, and called Tsutomu Watanabe, who was one of the most diligent CV observers in Japan. He had just arrived at his house. My words "WZ Sagittae appear bright" seemed to make surprised him. I agreed him on contributing this news to VSNET.

That night I was excited to wanted to continue the observation all the night. However, I had to stop the observation at 23 o'clock against my will. Why? It was because a class of the sternest teacher waited me in the next morning. On the next day, I looked over my mail box as soon as the classes were over. It was filled with e-mails entitled as "WZ Sagittae". Reading the mails, I got really excited again at realizing that I'm the first observer of this historical outburst not only in Japan, but also in the world! While the weather was relatively fine during the next couple of days, clouds hindered my observation after that. It was very cloudy summer. When the clear sky returned, WZ Sagittae had already become pretty faint. This long-awaited early detection led to a continuous stream of observations with satellites and ground-based huge telescopes, and many professional works, as exemplified by Ishioka et al. (2002). This luck has brought me many great awards, such as the honorary citizen from the Gifu prefecture, "the Citizen of the Year" from a famous clock company in Japan, and The ASJ Award for the Outstanding Achievement by Amateur.

And now, two years later, I entered Kyoto University. My apartment house doesn't have a drying place with broad view, but I resumed my observation from a small balcony. I intend to continue visual observations, and hope to start the professional study of variable stars.

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REFERENCES

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