

Japan's First Variable Star Observer, Dr. Naozo Ichinohe

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Abstract This paper gives a brief account of the astronomical career of a pioneer in Japanese astrophysics, Dr. Naozo Ichinohe, 1872–1920.

1. Discussion

Dr. Naozo Ichinohe (Figure 1) was born in 1872, more than 100 years ago, in Aomori prefecture, the northern part of mainland Japan. After graduating from the University of Tokyo, he studied under E. B. Frost, E. E. Barnard, and S. W. Burnham during 1905–1907 at the Yerkes Observatory, where he measured the radial velocities of spectroscopic binaries. Ichinohe was a pioneer of astrophysics in Japan. He made about 12,000 visual observations of variable stars, and all of his observations were archived by the Variable Star Observers League in Japan (VSOLJ). They are a valuable contribution to the study of long period variation.

After he returned to Japan, he was an instructor at the University of Tokyo and astronomer at Tokyo Observatory. A sample of Dr. Ichinohe's astronomical publications for 1907 is given in Table 1 (also see Figure 2). He planned Taiwan Observatory at the top of Mt. Yui (3997m above sea level). At that time, Taiwan was occupied by Japan. He twice explored the construction site. Initially, the main telescope was to be a 30-inch by Grubb. His final plan was enlarged to have two telescopes, a 36-inch reflector and 33-inch refractor. Due to financial problems, however, the plan was not realized. He was forced to retire from the University and Observatory in 1911. The Director of the Observatory at that time considered Dr. Ichinohe "crazy" because he made plans without any consideration of expense.

After he retired from the University of Tokyo, he was the editor of the monthly magazine *Gendai no Kagaku (Modern Science)*, which he founded on the model of *Nature*. He was also a pioneer of science journalism in Japan. He died in 1920 at the age of 48.

Dr. Ichinohe's dream, a larger telescope—farther south and at a greater elevation—was realized by the "Subaru" telescope at Mauna Kea 80 years after his death.

Table 1. Sample of publications by Dr. Naozo Ichinohe in 1907.

<i>Article</i>	<i>Reference</i>
“Orbit of the spectroscopic binary kappa Cancri”	<i>Astrophys. J.</i> , 25 , 315
“Orbit of the spectroscopic binary mu Sagittarii”	<i>Astrophys. J.</i> , 26 , 157
“The spectroscopic binary eta Virginis”	<i>Astrophys. J.</i> , 26 , 282
“On the period of variable star 120.1906 (DM+47° 692) [= RY Persei]”	<i>Astron. J.</i> , 25 , 128
“The variable star 120.1906 [= RY] Persei”	<i>Astron. Nach.</i> , 174 , 315
“Observations of right ascensions of the fundamental stars with a transit micrometer”	<i>Astron. Nach.</i> , 175 , 261
“The period and light curve of the variable star 87.1906 [= RW] Draconis”	<i>Astron. Nach.</i> , 175 , 293
“Note on the variable 26.1907 [= RZ] Draconis”	<i>Astron. Nach.</i> , 176 , 203
“Maximum of o Ceti in 1906”	<i>Astron. Nach.</i> , 176 , 311
“The Algol Variable 24.1907 Monocerotis”	<i>Astron. Nach.</i> , 174 , 349
“On the Variable Star RY Cassiopeiae”	<i>Astron. J.</i> , 25 , 140



Figure 1. Dr. Naozo Ichinohe, ca. 1915.

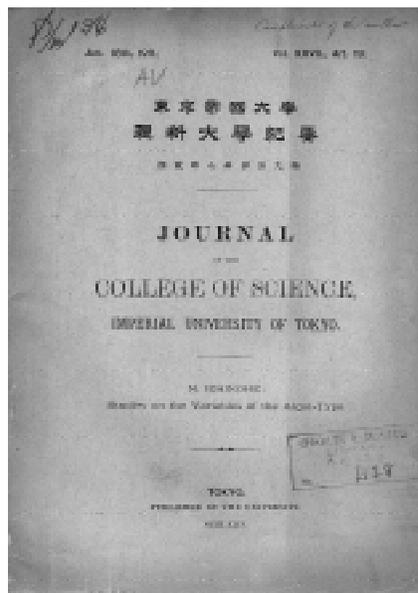


Figure 2. A copy of variable star observations published by Dr. Ichinohe in 1911, from the C. Y. McAteer Library of the AAVSO.