

## Is it Possible to Describe the History of Geophysics?: Geophysics Institutionalized in Japanese Universities, 1918-1958

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In spite of the remarkable contributions of Japanese geophysicists, there has been few description of the history of geophysics as a whole. Surveying the process of institutionalization of geophysics in universities from WWI to IGY, I wish to give answer the following questions: Did there on earth exist geophysics as a single discipline? Or is it possible to write the integrated history of geophysics?

In 1937, Professor Nomitu Takaharu, Department of Geophysics, Kyoto Imperial University, published the journal entitled CHIKYUBUTSURI [GEOPHYSICS], in which he introduced that geophysicist Shida Toshi had originally founded the department and institute, intending to develop the discipline. The journal, however, ceased to be published in 1954 whereas divided disciplines such as seismology, meteorology, oceanography, and geodesy flourished until then.

Although the idea of geophysical studies would be traced back to the advocates of theories of Earth in the seventeenth century, we could not imagine the modern geophysics without the basis of physical theories armed with analytical mathematics. Consequently, it was natural that the pioneers of geophysics were almost physicists who turned their interests to In 1918, physicist Shida was appointed as professor chair for the division of general geophysics in the Department of Physics, Kyoto Imperial University. The section became independent geophysics department from 1920 including marine physics which was taught by Nomitu. Afterwards, divisions of meteorology, applied geophysics (volcano and hot spring), and terrestrial electromagnetism were added to the department until 1957. On the other hand, Terada Torahiko of Tokyo Imperial University, who had studied under Emil Johann Wiechert, published a textbook for geophysics in 1915, which covered the fields of solid geophysics.

In the meantime, Tokyo Imperial University began to reorganize the division of seismology to make the geophysics department of five sections, 1941-1954: seismology, meteorology, oceanography, geodesy, and terrestrial electromagnetism. Also Tohoku Imperial University started geophysical divisions of seismology, terrestrial electromagnetism, and meteorology in 1945, and Hokkaido University, being shocked with the Great Tokachi-oki Earthquake of 1952, prepared the geophysical department for limnology, seismology and volcanology, meteorology, and applied geophysics.

This brief historical sketch tells us that geophysics was institutionalized as a department of Science Faculty in Japanese universities during 1918-1958. Certainly, it would be accepted, as the historian of science Hiroshige Tetsu once maintained, that the process was heavily regulated by the militaristic interests on the one hand. But at the same time we should note the public request against natural disasters on the other. Anyway in writing the history of geophysics which requires the wide spread observatory networking, we could not go without external methods or approaches.

terrestrial phenomena.