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Letter from the President of JAHIGEO

Hirokazu Kato, President of JAHIGEO

First, on behalf of JAHIGEO (The Japanese Association for the History of Geological Sciences) constituted in 1994, I would like to offer our congratulations to INHIGEO (The International Commission on the History of Geological Sciences), which celebrated its 50th anniversary in 2017

Although JAHIGEO has supported INHIGEO in many of its activities, one of its most important contributions has been the holding of the 2011 INHIGEO conference in Toyohashi, Aichi Prefecture, in central Japan.

On 11 March of that year, at the time JAHIGEO was preparing for this conference, a major earthquake with a magnitude of 9.1 occurred off the coast of northeastern Japan. Together with the tsunami it generated, the earthquake devastated large parts of the countryside and built-up areas across 20 prefectures, resulting in the death of 15,895 inhabitants and injured 6,156, with a further 2,539 residents declared missing. The tsunami also caused a serious nuclear accident in the Fukushima Prefecture, which necessitated the evacuation of many residents. This natural disaster is now variously referred to as the '2011 Tōhoku earthquake', the '3.11 earthquake' or the 'Great East Japan Earthquake'.

In view of the magnitude of this event and its tragic consequences, JAHIGEO seriously debated if the conference could be held as planned and, above all, if foreign participants might be prepared to attend the meeting. However, the encouragement JAHIGEO received from individuals and institutions, both in Japan and from overseas, led to the decision to hold of the conference as scheduled.

Consequently, the 36th Symposium of INHIGEO was held from the 2nd to the 5th of August at Aichi University, Toyohashi Campus. Over 60 participants, including accompanying members from 15 countries attended and 50 papers were presented, in both oral and poster form. I greatly appreciated the scientific and financial support provided by participants and institutions.

The conference's two main themes were well chosen to demonstrate and illuminate the history of geological study in the island-arc country. The first theme, "Visual Images and Geological Concepts", focused on the various kinds and scales of geological maps, paintings, photographs and illustrations. The second dealt with the "History of Seismology, Volcanology and Geotectonics", an appropriate topic, given the active tectonic setting of the Japanese Islands. The mid-conference excursion to the Shitara area, Aichi Prefecture and the post-conference excursion to the Kii Peninsula, in the southwest of Japan, were also highly appreciated by the participants. In 2012, many of the contributions to the conference were published in Proceeding of INHIGEO

2011, Japan, titled “Visual Images and Geological Concepts”.

Finally, JAHIGEO reaffirms its continuing support for INHIGEO through its own activities and wishes that INHIGEO may carry on its work to allow it to celebrate its centenary.

Henry Batson Joyner (1839-1884), weather observer in England, Japan and Brazil

YAMAMOTO Akira, Meteorological Research Institute, Japan Meteorological Agency

The earliest known meteorological record of the Japanese National Meteorological Service in Tokyo was printed with a description of “(signed) HENRY B. JOYNER” in 1875 (Imperial Meteorological Observatory, 1875-1880). Henry Batson Joyner (1839-1884) established and made weather observation for this Meteorological Service. An obituary by an unknown writer (Anonymous, 1885) provides the only information available to us on Joyner’s life and work. Extracts from the obituary are shown in *italics* and underlined in the text below.

(1) 1839-1870 – England

Henry Batson Joyner was born on July 9th, 1839, the eldest son of Henry St. John Joyner (about 1810–1882), in Northwick, Harrow, England. Henry Joyner Sr. was a tenant farmer, occupying 1000 acres of land (Anonymous, 1844). He was also an enthusiastic weather observer, an interest which he will most likely have passed on to his son (*ibid*, 1844). After the younger Joyner had served a pupilage he worked as Assistant Engineer on the Parsonstown and Portumna Railway, as a Resident Engineer of the Cwm-Orthin Railway and Tunbridge Wells, from 1862 to 1870. At that time, some reports about remarkable weather events appeared in the journals *British Rainfall* (BR) and *Symons’s Monthly Meteorological Magazine* (MM). Both BR and MM were published by the amateur weather observer, George Symons (1838-1900) on a private basis. He was a member of the Royal Meteorological Society from 1856 and its president in 1880. He organized the collection of weather data by amateur observers for publication in BR and MM. Joyner Sr., for example, contributed a report on a storm he witnessed in February of 1869 (Joyner, 1869).

(2) 1870-1877 Japan

In 1870, Henry Batson Joyner left England to take up an appointment under the Imperial Government of Japan (Oyatoi), being employed first in the Public Works

Department, in the construction of the earliest railway in that empire [Japan]. Research carried out by this writer found that Joyner carried with him meteorological instruments, including a rain gauge and a thermometer, which had been presented to him by English donors (Joyner, 1873). With the aid of these he made weather observations in Tokyo over a two-year period as a citizen observer and sent reports of his observations to England for publication in MM (Joyner, 1873,1875). On the completion of the first section of the earliest railway, namely from Yokohama to Yedo, he was transferred to the Home Department, where his professional ability had a wider field. Among his chief labors were the trigonometrical survey of Japan, and also the survey of the capital, and other works of public utility. Following his early work, it is believed that he organized and developed in Japan the Imperial Department of Meteorology, that is the National Meteorological Service (NMS) of Japan, the present Japan Meteorological Agency (JMA), and that Joyner was initially the sole observer collecting data for the Japanese NMS. However, further research of the records is required to confirm this. While he was undoubtedly the first to make weather observation at Tokyo Observatory, there is evidence of a plan made by another person to install up-to-date instruments in the Tokyo Observatory, to prepare it for the collection of meteorological data. However, when this did not eventuate, Joyner resumed making his own weather observation, at first informally, but then on an official basis, after his position with NMS had been confirmed. He began to perform training and instructing the native students in a thorough knowledge of that science, which provided the basis for the future work of the service. In 1875, Joyner established Five-day Meteorological Records, to record weather data, which was published at the end of 1880 (Imperial Meteorological Observatory, 1875-1880). A complete set of these records is held in the National Meteorological Archive of the United Kingdom Met Office (those held at JMA are incomplete). Joyner, alongside Japanese observers, continued to contribute to the collection of weather data until his departure from Japan. The author of this article recognized his handwriting among entries in the untitled meteorological records of 1877, held in the library of the Japan Meteorological Agency.

His great interest in the subject of Meteorology, and the benefit that he felt would accrue to Japan from the development of that science, caused him to write a non-official pamphlet, entitled, "The Progress and ultimate results of Meteorology, especially considered in reference to Japan." (Joyner,1876a?), He presented here the Protocols of the International Meteorological Congress held in Vienna, in 1873, and the International Conference on Maritime Meteorology in London, in 1874. This was translated into Japanese with the title: "SOKKO RONSETSU" (Joyner, 1876b?) and was widely read among Japanese Meteorologists. The author found the original pamphlet written in English, from which the translation into the Japanese language

version was made.

For unknown reasons, Joyner was honored by the naming of some new species of marine fauna after him. These are *Cynoglossus joyneri* (Akasitahirame in Japanese), a sole, *Mugil joyneri* (maybe Bora in Japanese), a flathead mullet, and *Metapenaeus joyneri* (Shibaebi in Japanese), a shrimp. All are commonly found in Japanese waters.

(3) 1878-1884 Brazil

He left Japan in 1877 and, after a short stay in England, proceeded at the latter end of 1878 to Sao Paulo, Brazil, as Engineer in-Chief for the planning and construction of the extensive water supply and sewerage system of the city. During his stay in that country he continued to make weather observation and to send reports of his work to the Meteorological Office in England. He also published summaries of his observations in local newspapers. His activities in this field in Brazil did not, however, lead to the founding of a National Meteorological Service. Further studies are needed to reveal details about the kinds of observation he made in Brazil, including the instruments he used and the locations in which he placed them, as well as about his co-workers in the field of meteorological data gathering.

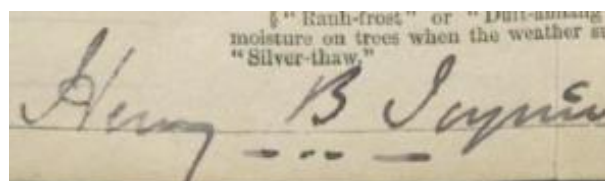
On the completion of his works as Engineer in-Chief, in May 1884, he returned to England hoping to recruit [restore] his somewhat impaired health. However, it deteriorated further and led to his death on the 23rd of November. A summary of Joyner's observations at Sao Paulo was published posthumously in the Quarterly Journal of the Royal Meteorological Society (Joyner, 1885).

He was buried in the Kensal Green Cemetery, in London (Vivian-Neal, 2005).

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The signature of Joyner (below) on a meteorological observation table at Sao Paulo, of February 1879, was found in the National Meteorological Archives of the United Kingdom Met Office. His 'signatures' on the Japanese Reports are only in printed form. No portrait or photograph of Joyner has so far been found.



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