

4～10世紀における気候変動と人間活動

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Climatic Change and Human Activities in the 4th to 10th Centuries

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Abstract

The global climate is known to have been relatively warm during the period from the 4th to 10th centuries, although there were slightly different fluctuation patterns locally and regionally. The present article addresses these differences, analyzing the results of previous studies. The warm period is known in Europe as the Medieval Warm Period.

Evidence in Japan is also found from the 4th century to the 11th century. Because historical age divisions differ between Europe and Japan, the peak of the Warm Period from the 7th to the 10th century is classified as part of the ancient period in Japan. Therefore, the Warm Period in Japan has been proposed to be called the Nara-Heian Warm Period, Heian Warm Period or Little Climatic Optimum.

Based on the water level changes of Lake Shinji in Shimane Prefecture, the present article discusses the warmer climatic conditions in the Heian Period. It also examines old agricultural settlements in the Tohoku District, northern Honshu. People came from Hokkaido or northern Honshu and cultivated rice in the northeastern-most part of Honshu in the 1st century B.C. It is thought that the effect of the warm current branch flowing along the Japan Sea Coast and emerging on the Pacific side through the Tsugaru Strait had an influence on the distribution of rice cultivation at this early stage.

Finally, the article shows that the northward shift of the power front of the Central Government (Yamato Chotei) during the 7th to the 9th centuries occurred about 70-80 years earlier in Dewa, an ancient state on the Japan Sea side of Tohoku District, than in Mutsu, also an ancient state on the Pacific side. It is interesting to note, however, that the speed of the northward shift was almost the same on both sides, even though there were different political powers, situations and problems on either side. It is suggested that the northward shift was affected by the warming on the broader space scale.

Key words : ancient culture of Japan, historical climatology, human activities, Medieval Warm Period, northward shift of power front

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