

オーロラと古典籍

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Northern lights written in Japanese historical documents

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Great magnetic storms are recorded as aurora sightings in historical documents. The earliest known example of “prolonged” aurora sightings in Japan was documented on February 21-23, 1204 in Meigetsuki, when a big sunspot was also recorded in China. Before the Meigetsuki event, a significant fraction of a total of two hundreds of possible aurora sightings in Song dynasty (960-1279) of China multiply occurs within a few days and sometimes recurrent approximately with the solar rotation period of 27 days. The prolonged aurora activity events occur only around the solar maximum or in the declining phase as estimated from the 14C analysis of tree rings, and they do not occur during the Oort Minimum (1010-1050). The historical documents therefore tell us useful information to prepare against the space weather hazards in future.

References

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