

Progress in Cryoseismology –A review of Japanese contribution -

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Majority areas of Antarctica and Greenland are under the thick ice sheet and characterized by evolving cryosphere surroundings. In the polar region, associated with the recent trend on climate change such as global warming, glacier relating earthquakes are increasing during this 21st century. In this paper, a decade of progress in “Cryoseismology” at bi-polar regions will be demonstrated by focusing on the contribution from Japanese researches. In particular, specific cryoseismic events are treated, which occurred in the coastal area of East Antarctica, around the Lutzow-Holm Bay, together with the coast and whole inland area of Greenland. Harmonically frequency-overtone signals are explained by a constant source, suggesting inter-glacial asperities that generate characteristic cryoseismic tremors.