Antarctic warming event derived by AWS data and satellite microwave observation over East Antarctica

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Automatic Weather Stations (AWS) in the Antarctica provide important weather data especially in inland of the Antarctica. Japanese Antarctic Research Expedition (JARE) has been operating AWS both of ARGOS system and CMOS type. The archived data is almost 20-years long. Inland AWS sites available in the present study are Dome F, Relay Station, Mizuho and JASE2007. Warm years are recorded by AWS in 2009/2010. This area expand large area as inland to the coast. Ice shelf melting can be identified as a daytime melting type and continuous melting type. 2009, 2010 were warm year and melting of iceshelf surface was observed over large area and long time.

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