Oceanographic Observation in the Refreezing Warm Chukchi Sea during 2018 Mirai Cruise

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In November 2018, R/V Mirai entered Chukchi Sea to conduct observations with special attention to the Marginal Ice Zone (MIZ). Based on satellite SST measurements over Chukchi Sea, it is found that Chukchi Sea has a clear warming trend in the last decade. The warm Chukchi Sea enabled R/V Mirai to conduct rare observations in November to measure the refreezing ocean. The preliminary results of the hydrographic and velocity observation are presented. The repeated measurements along an observation line toward MIZ north of Hana Shoal showed temperature and salinity changes largely over the Chukchi slope compared to the shallow shelf.

Keywords: R/V Mirai, MIZ