

Revised stratigraphy of the upper Quaternary in Yufutsu Plain and Shikotsu Pyroclastic flow upland, central Hokkaido

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Upper Quaternary stratigraphy in Yufutsu Plain and Shikotsu Pyroclastic Flow Upland, southern Hokkaido is revised based on review of previous studies and three boring core analysis, which includes sedimentary facies, pollen, diatom, shell assemblages and paleomagnetic analysis.

Active folds have been assumed beneath Yufutsu Plain and Shikotsu Pyroclastic Flow Upland because they are located southwest of the active faults along the eastern margin of the Ishikari Lowland, but neither displacement nor continuity of the folds has been specified. The detailed stratigraphy of the Shikotsu Pyroclastic Flow Upland is unknown due to lack of boring surveys for stratigraphic research. To establish subsurface stratigraphy in Yufutsu Plain and Shikotsu Pyroclastic Flow Upland to specify the fold activity, we take three boring cores (BT1, YF1 and CT1). BT1 and YF1 are 4.25 km apart along the coastline, the former is on the Yufutsu anticline axis and the latter is on the west side of the axis. CT1 is in the center of the upland.

In BT1 core we found two characteristic units: First unit is estimated as MIS11 for its abundant *Fagus* pollen, and second unit is estimated as MIS7 for its marine strata which yields cool temperature pollen assemblages. CT1 core is composed MIS7 marine deposits, MIS6 conglomerate, and MIS5 marine deposits. Two unidentified tephra layers found in MIS7 marine deposits in CT1 core may be traceable up to the north of the Shikotsu Pyroclastic Flow Upland.

Keywords: Ishikari lowland, Yufutsu plain, boring survey, Quaternary stratigraphy, Pleistocene