

GEOMORPHOLOGY OF KASUMI ROCK ON THE PRINCE OLAV COAST,
EAST ANTARCTICA (ABSTRACT)

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Kasumi Rock is a small and hilly ice-free area below 50 m asl formed by ice sheet erosion. The freshness of this glaciated feature suggests the retreat of ice sheet occurred during considerably later period than the other areas of the Coast. Glacial striation shows the direction N35-45°W.

The following topographic features are observed from the southern ice margin toward the northern sea: (1) Ice sheet margin with shear planes dipping 5°S. (2) Narrow till field where patterned ground, especially polygons as large as 5 m in diameter, are well developed. (3) Undulating bedrock surface 35 to 45 m high where stoss-and-lee topography is covered with scattered erratics. (4) Undulating bedrock surface 25 to 35 m high. Stoss-and-lee topography also develops but erratics are rarely found. (5) Hilly topography with jagged bedrock surface excavated by weathering such as tafoni. (6) Steep break stretching in the W-E direction 20 m in relative height, (7) Smoothed flat bedrock surface like a strandflat lower than 10 m asl with patches of beach deposits. Marine sand is recognized up to 6 m asl.

Several ridges of lateral moraine rising about 5 m in relative height demarcate the western margin of this area. They show that the lateral margin of Itime Glacier, an outlet glacier, retreated westward by 50 to 100 m during recent time.

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