# Martian flow features, moraine-like ridges, and gullies: Terrestrial analogs and interrelationships

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Ridges that resemble terrestrial moraines are commonly visible at the foot of many mid-latitude crater walls in Mars Global Surveyor Mars Orbiter Camera images. These moraine-like ridges are often associated with hillside gullies, mantling material, and glacier-like flows, and are usually in contact with crater fill, suggesting possible interrelationships. We consider terrestrial glacier systems that may be analogs of martian moraine-like ridges and glacier-like flows and suggest that the formation of some gullies and crater fill is intimately tied to ice deposition, ice flow, and rock-glacier processes. Upper limits on age suggest the possibility that many of these features formed during the last, or last few, high obliquity cycles.

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