A VALLEY GLACIER REMNANT OF THE MAIN TROUGH OF KASEI VALLES, MARS

It appears that the head of the main trough of Kasei Valles contains the remnant of a valley glacier. The region of the main trough shows geomorphology consistent with both ice sheets and valley glaciations, and indicates a change of glacial erosion from areal to slope only. This may reflect a winding down of glacial activity over time as related to Mars climate history. However, the remnant may be of a more recent cold-based glaciation.

TUNNEL VALLEYS AS TERRESTRIAL ANALOGS OF THE INNER CHANNELS OF KASEI VALLES, MARS

The two inner channels of Kasei Valles share several characteristics with tunnel valleys, which are only formed under ice sheets and glaciers. Elevation data also supports the interpretation of the inner channels as tunnel valleys, which supports a glacial interpretation of Kasei Valles, and, as such, they are keystone landforms in the glacial and flood hypotheses debate.