New Zealand has a total ice-covered area of more than 1100 km². Even though the available observations are spatially well distributed, long-term and continuous measurement series are sparse.

Available series

Front variation observations

- First obs. year: 1600
- Last obs. year: 2014

Glaciological MB measurements

- First obs. year: 1957
- Last obs. year: 2014

Geodetic MB measurements

- First obs. year: 1957
- Last obs. year: 2014

Glacier inventories

- First obs. year: 1978
- Last obs. year: 2014

A comparatively high number of front variation series is available in New Zealand, since the 1980s, with a peak in the 1990s. Long-term glaciological mass balance measurements are available for one glacier only and thickness change measurements are not available at all. Glacier inventories are provided by GLIMS and cover about 98% of the glaciated area.

Key statistics

- Total glaciated area: 1'162 km²
- Total coverage WGI: 47 %
- Total coverage GLIMS: 98 %
- Number of series:
  - Front Variation: 104
  - Mass Balance: 5
  - Thickness Change: 0
- Average length [years]:
  - Front Variation: 19
  - Mass Balance: 3
  - Thickness Change: 0
- Average number of observations:
  - Front Variation: 10
  - Mass Balance: 4
  - Thickness Change: 0

Present state

- Nationally coordinated glacier monitoring, glacier monitoring activities by several research groups.

Future potential/needs

- Continue and expand national monitoring programme.
- Ensure continuation of long-term mass measurement programme.
- Continue and extend mass balance network, aim for good coverage of different regions.
- Elaborate up-to-date inventory, digitize and make available earlier inventories.

Spatial distribution of series

Glaciers in New Zealand occur in the Southern Alps on the South Island. The history of glacier monitoring in New Zealand is rather young, as is the history of the country. The available observations are well distributed over the region, but are mostly short.