



To whom it may concern

20 December 2017

Statement of the Advisory Board of the Global Terrestrial Network for Glaciers on minimum sizes in glacier mapping

The Advisory Board of the Global Terrestrial Network for Glaciers (GTN-G) would like to make the following statement regarding international best-practice standards for the development of glacier inventories and minimum sizes used in glacier mapping. Our statement is in direct response to the recent indictment of Dr. Ricardo Villalba and of the National Glacier Inventory of Argentina due to a threshold of glaciers of 0.01 km² applied in the construction of the National Glacier Inventory. While we take no stand on either legal or political issues, we want to state that the application of a minimum area threshold for inclusion of glaciers in national and international inventories is common practice and meets international standards for glacier mapping.

A glacier is generally defined as “a perennial mass of ice, and possibly firn and snow, originating on the land surface by the recrystallization of snow or other forms of solid precipitation and showing evidence of past or present flow” (Cogley et al. 2011). There is no minimum size in the definition of a glacier. However, it is common practice to apply a minimum area threshold both for scientific and practical purposes when producing glacier inventories. The size of the appropriate threshold is dependent on the spatial and temporal resolution of the aerial or satellite imagery used for the mapping of glacier ice. In situ (field based) measurements to map smaller bodies of ice across entire mountain ranges are not practical nor are they a requirement. A size threshold of 0.01 km² as used in Argentina is lower than in many other studies (e.g. Kargel et al 2014), and thus follow the best practices and the recommendations from the international glaciological community.

The Advisory Board of the Global Terrestrial Network for Glaciers (GTN-G) is led by the International Association of Cryospheric Sciences (IACS). GTN-G is the framework for the internationally coordinated monitoring of glaciers and ice caps in support of the United Nations Framework Convention on Climate Change (UNFCCC). The network, authorized under the Global Climate/Terrestrial Observing Systems (GCOS, GTOS), is jointly run by the World Glacier Monitoring Service (WGMS), the U.S. National Snow and Ice Data Center (NSIDC), and the Global Land Ice Measurements from Space initiative (GLIMS). <http://www.gtn-g.ch/>

On behalf of the Advisory Board of the Global Terrestrial Network for Glaciers,

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References:

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