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Proposal for a 1-year extension of the IACS Working Group on the “Randolph Glacier Inventory and infrastructure for glacier monitoring”

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The term of the Working Group (WG) runs out in 2018. Here, we propose an extension of the WG until the end of 2019.

1. MOTIVATION

The WG has released several new versions of the RGI dataset since its inception, including updated glacier outlines in many regions and addition of other attributes in various regions. The RGI has proven highly valuable and has been used extensively. The RGI continues to be in high demand greatly exceeding initial expectations, and the WG has been contacted regularly by glaciologists from around the world who offer newly digitized outlines for inclusion in upcoming versions. According to an analysis in Web of Science, Pfeffer et al. (The Randolph Glacier Inventory: a globally complete inventory of glaciers, *Journal of Glaciology*, doi: 10.3189/2014JoG13J176) has been cited 376 times since its publication in 2014, which shows that the RGI has been received well and further supports the case for longer-term curation of the inventory.

While GLIMS includes and hosts the RGI dataset we recognize a need for continuation of the RGI as a distinct data product. GLIMS contains multi-temporal outlines for the world’s glaciers, but the RGI provides a snapshot of globally complete outlines easily downloadable as one single product and including a clearly defined data product. While the former allows analyses of changes in glacier area, length etc., the RGI dataset is primarily useful for regional to global-scale glacier assessments and modeling. It allows glacier modeling groups to standardize their experiments for direct comparison. For example, the modeling groups participating in the Targeted Activity of the *Global Glacier Model Intercomparison Project* (GlacierMIP) rely on the latest RGI version as input (<http://www.climate-cryosphere.org/activities/targeted/glaciernip>).

2. OBJECTIVES

During the 1-year extension we plan

A) to release a new version of the RGI (version 7.0).

Significant improvements of the dataset are currently underway including outlines in Argentina, Chile, Bolivia, and the Karakoram/Pamir. Also an updated inventory for High Mountain Asia is in preparation (GAMDAM) for possible inclusion in the next version.

B) to evaluate the best way to maintain and develop the RGI as a resource for global/regional-scale mass-balance assessments and projections.

The WG has provided medium-term support of the RGI, however, longer-term other alternatives may be more practical to serve the community. We will evaluate a possible transition of the WG to an IACS Standing Group to serve the goals of the RGI in a longer-term perspective. We plan to include WGMS, GLIMS and GTN-G in this discussion. The IUGG conference in Montreal in July 2019 will provide a timely opportunity to discuss the future of the RGI with representatives from these organizations, some of whom have committed to chairing sessions at the conferences.

3. BUDGET

We tentatively ask for \$3000 to support a WG meeting in Montreal in July 2019 (travel/participation costs).