

1st Annual report of the IACS Joint Body “Status of Mountain Snow Cover (JB-SMSC)”

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The Joint Body on the Status of Mountain Snow Cover (hereinafter referred to as JB) was adopted by the IACS Board in December 2021 and started its first activities in February 2022.

1. Member recruitment

The first steps included the call for contributions and the identification of members for the four work packages. In line with the JB's partner structure, the call was initiated via Cryolist and WMO permanent representatives to include both the research community (e.g. universities) and the service community (e.g. national meteorological and hydrological services). Given the structure of the three supporting organisations, the recruitment process was slower than planned and the establishment of the work packages was delayed.

Key activities of the recruitment process included:

- 1) Negotiation with partner organization to set up the JB and to integrate the partner's interest (Zoom-meeting), provision of webform for Expression of Interest on the MRI website
- 2) 1st call for Expression of Interest of WP members via Cryolist on April 27 2022
- 3) 2nd call for Expression of Interest of WP members via Cryolist on May 27 2022
- 4) Invitation of potential contributors via GCW-WMO to the national permanent representatives with WMO (this process was time consuming, because of WMO internal decisions, but important as support for the JB)

Feedback from the research community and interest in the JB was large. In total, almost 100 researchers expressed their interest in contributing to the JB and the four work packages. The list of contributing researchers is attached to the report. In particular, WP1 (*Mountain snow data quality control and homogenization for use in climatology and hydrology*) and WP2 (*Status of snow cover multi-decadal changes in mountain regions of the world*) attracted a lot of interest, with a total of about 50 researchers each willing to contribute, and WP3 (*Snow accumulation processes*) and WP4 (*Snow ablation processes - research gaps in mountain snow modelling*) attracted around 30 researchers each. While the interest in the JB is high, the search for WP leads has taken some time and is still ongoing. In order not to further delay the implementation of JB activities, the JB chairs decided to provide guidance to the WPs with single lead or without leads and to recruit people to lead a WP at a later stage. The kickoff meeting for all WPs was agreed to take place in early October 2022.

Meetings of JB chairs were all organized as Zoom-meetings.

2. Outreach activities

In addition to the recruitment phase via calls, the activity of JB included also organizing a session on the topic of the JB at the International Mountain Conference 2022 in Innsbruck (in September 2022). The session was well attended and demonstrated the high level of interest in mountain snow cover changes (in particular given the fact of additional sessions on mountain snow). Details of the session

can be found here: <https://www.imc2022.info/sessions/id10-changes-in-snow-cover-in-mountainous-regions-of-the-earth/>

In addition to the session for the IMC2022, a session related to the JB topics (Mountain snow cover under climate change: from past to future) was proposed for the IUGG GA 2023 in Berlin:

<https://cryosphericssciences.org/iugg-berlin-2023/>

Meanwhile, the JB was invited to contribute to a side event through the Cryosphere Pavilion by the International Cryosphere Climate Initiative (ICCI) in the upcoming COP27 UNFCCC. After Chair's meeting, JB has determined to accept the invitation.