

A Global Cryosphere Watch Initiative to engage the snow community in contributing to the HarmoSnow questionnaires on snow observation and data assimilation



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COST is an intergovernmental framework for European Cooperation and it supports networking activities within the COST action. There is a COST Action on snow: "A European network for a harmonised monitoring of snow for the benefit of climate change scenarios, hydrology and numerical weather prediction". This COST Action on snow (named HarmoSnow) is a 4-year project aimed at building a better connection between snow measurements and models and among snow observers, researchers and forecasters for the benefit of various stakeholders and the entire society. Detailed information on the HarmoSnow action is available at:

http://www.cost.eu/COST_Actions/essem/Actions/ES1404 ; <http://costsnow.fmi.fi/>

HarmoSnow currently has 29 countries participating but COST also welcomes near-neighbour countries and international partners. The HarmoSnow objectives are:

1. **Establish a European-wide science network** on snow measurements for their optimum use and applications benefitting on interactions across disciplines and expertise.
2. **Assess and harmonise practices, standards and retrieval algorithms** applied to ground, air- and space-borne snow measurements.
3. **Develop a rationale and long term strategy** for snow measurements, dissemination and archiving.
4. **Advance snow data assimilation** in European NWP and hydrological models and show its benefit for relevant applications.
5. **Establish a validation strategy** for climate, NWP and hydrological models against snow observations and foster its implementation within the European modelling communities.
6. **Training of a new generation of scientists** on snow science and measuring techniques with a holistic perspective linked with the various applications

A key activity includes questionnaires on observations/instrumentation and on snow data assimilation. The information gathered is not only valuable for HarmoSnow, but also would be extremely useful for GCW, and especially the Snow Watch and the Best Practices Teams. HarmoSnow wishes to extend the questionnaires to the international community seeking responses by September 26 2016.

Recommendation:

Snow Watch strongly encourages the international community to participate to the HarmoSnow questionnaire. Snow Watch therefore ask all the GCW Teams and focal points to engage the snow community, both within and external to the National Meteorology and Hydrology Services, in completing the questionnaires at:

<http://costsnow.fmi.fi/index.php?page=Questionnaires>

The deadline to complete the questionnaire is 26 September 2016 and input from operational and research centres will be highly valuable for meteorology, climate, and hydrology applications.