



European Snow Booklet

Anna Haberkorn and Charles Fierz

WSL Institute for Snow and Avalanche Research SLF Davos, Flüelastrasse 11, Davos Dorf, Switzerland

Practitioners and researchers worldwide have developed different best practices for snow-related in-situ measurements. These regional practices lack harmonization and thus hamper further developments, for example, of numerical weather prediction models, remote sensing applications and homogenization of long-term records needed for hydrological and climatological applications. Indeed, homogenizing long-term data series of snow depth are scientifically challenging mostly because of the marked spatial variability of this essential climate variable. Beside the need of harmonizing practices across borders, there is a strong interest from both the operational and the scientific communities to rely on data that can be interpreted globally the same way. Consistency is essential! The European Union COST action ES1404 “HarmoSnow” aims therefore at harmonizing practices and standards applied to snow measurements as well as to build a better connection between snow measurements and models and between observers and researchers. Since we not even know which European countries operationally measure snow, not to mention which snow variables, a book of reference will be produced in the framework of the COST action “HarmoSnow”. The so called “European Snow Booklet” aims at improving the knowledge about basic snow measurements in Europe. An inventory on current operational snow observations and methods in Europe will be the core of the book. So far numerous institutions of 38 European countries provided detailed information on their operational snow station networks. Similarities and differences between the countries of i.e. the spatial and altitudinal station distribution or the methods applied are pointed out, indirectly showing the relevance of snow for each country.

We thank all institutions who contributed with data and the participants of the COST action ES1404 (harmosnow.eu) for their valuable contributions.