

SnowClim: Snow climate monitoring for Europe

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Snow cover, particularly its depth and its frequency, is a very essential climate element. It influences the earth's surface radiation budget considerably due to its reflectivity properties and also it has large impact on economy and daily life (e.g. traffic, tourism). Although a lot of research and many national activities of snow monitoring have been done, there are very few products describing an integrated snow monitoring for whole Europe.

In the light of a foreseen future Regional Climate Centre on Climate Monitoring (RCC-CM), the German Meteorological Service (Deutscher Wetterdienst, DWD) has established some first operational snow climate monitoring activities for the WMO Region VI (Europe and the Middle East). First selected key elements are the number of snowdays with a snow cover > 1 cm, the mean and the maximum snow depth per month. Results are presented in form of monthly and climatological maps, tables and diagrams of time series starting in 1981. Data presently are taken from observations at synoptical stations, received by the Global Telecommunication System. A first quality control based on threshold tests has been developed.

The snow climate monitoring products are currently under further development. New evaluations will be carried out also on a daily data basis, additional satellite data, and also the quality control procedure will be extended.

Some operational SnowClim products are available on the DWD web site: www.dwd.de/snowclim