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Comparison of snow cover characteristics according to weather stations and ERA 5-Land reanalysis in the Perm region / Kryuchkov A.D., Kalinin N.A. // Hydrometeorological Research and Forecasting, 2021, no. 2 (380), pp. 95-110.

The consistency of information on the snow depth contained in the ERA 5-Land reanalysis with data of weather stations of the Perm region is analyzed. The study is performed for the period from October 1990 to May 2020. It is shown that the interannual variability of the snow cover is generally successfully reflected by the current version of the reanalysis. Data on the snow availability are more accurately reproduced during the period of formation of the snow cover than during its melt. The performed calculations demonstrate a systematic overestimation of the snow depth in the ERA 5-Land reanalysis relative to the actual observations and a predominantly meridional error distribution on the territory of the Perm region. The maximum values in the seasonal variability of the snow cover occur earlier in the reanalysis than in the actual observations.

Keywords: snow cover, reanalysis, weather stations, seasonal variability, interannual variability

Tab. 2. Fig. 4. Ref. 16.