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The paper proposes an algorithm for correcting the data of hydrological observations of water temperature and an algorithm for assimilating corrected data for calculations of water body surface temperatures in Russia. The temperatures are used in initial data for computing global medium-range weather forecasts with the new version of the SLAV10 model with a grid spacing of about 10 km. The correction algorithm for hydrological observations of water temperature makes it possible to eliminate ambiguity in temperature coding at most gauging stations. The assimilation of corrected hydrological observations allows reducing water body surface temperature errors in the SLAV10 model initial data as compared to specifying water temperature from the data of the nearest land points.

Keywords: hydrological observations of water temperature, data assimilation, SLAV model

Fig. 3. Ref. 5.