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Verification of seasonal forecasts of sea surface temperature and sea ice characteristics based on the INM RAS Earth system model / Resnyanskii Yu.D., Zelenko A.A., Stepanov V.N., Strukov B.S., Khan V.M., Volodin E.M., Gritsun A.S., Tarasevich M.A., Bragina V.V. // Hydrometeorological Research and Forecasting, 2024, no. 4 (394), pp. 6-38.

The accuracy of seasonal forecasts of sea surface temperature (SST) and sea ice characteristics is assessed. Forecast skill scores are calculated for two versions of the INM RAS Earth system model (INM-CM5 and INM-CM6) differing in the horizontal resolution of the atmospheric and aerosol modules and in some parameterizations of physical processes: cloudiness, indirect aerosol effects, snow cover evolution.

It is shown that in most cases the skill scores of SST and ice characteristics forecasts based on the INM-CM6 version are higher than those for the INM-CM5. The scores are comparable with those in foreign centers, confirming the compliance of the forecasting system based on the INM RAS model with the world level of accuracy of seasonal forecasts.

Keywords: Earth system model, sea surface temperature, sea ice, seasonal forecasts, verification

Tab. 21. Fig. 4. Ref. 17.