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For the planned modification of the air quality forecasting technology due to the transition to the new version of the CHIMERE chemical transport model, the updated EMEP-2020 emission data for the Moscow region were compared with the currently used EMEP-2013 data on emissions of priority pollutants into atmosphere. A 40 % decrease in the total volume of emissions has been revealed over the Moscow region in recent years, their spatial redistribution and changes in the contributions of industry sources to the total emission have been established. In EMEP-2020, as compared to EMEP-2013, the contribution of vehicle emissions and emissions from industrial combustion changed the most: it increased up to 58 and 27%, respectively. The comparison of 2019 and 2020 emissions is of particular interest: the inventory data revealed a slight decrease in total emissions (by 1–6 %) in 2020, which adequately correlates with restrictive measures during the COVID-19 pandemic.

The results of comparisons of the data on emissions into the atmosphere on the territory of Moscow according to Rosprirodnadzor and EMEP-19 are presented and discussed. The coincidence of total emissions was established, with differences in spatial and sectoral distributions. The developed algorithms for the comparative analysis of EMEP and Rosprirodnadzor data are universal and can be used to analyze updated information in any regions.

Keywords: EMEP emissions, chemical transport model, CHIMERE, Rosprirodnadzor, COVID-19 pandemic

Tab. 3. Fig. 5. Ref. 13