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Seismicity of the south of the Russian Far East in 2024

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Abstract. The paper continues the series of annual brief reviews of the seismicity in the southern part of the Russian Far East, based on the data from the catalog of the "Yuzhno-Sakhalinsk" Regional Information Processing Center of the Sakhalin Branch of the Federal Research Center "Geophysical Survey of the Russian Academy of Sciences". The main parameters of the seismicity of the studied area in 2024 are given: maps of earthquake epicenters and their maximum macroseismic effects, statistical estimate of the seismicity level SESL'09, Benioff graphs, and density maps of nominal elastic deformation. The information on some of the most significant and interesting for detailed study earthquakes is given. Seismicity of the south of the Russian Far East remains moderate in 2024, within the background level. At the same time, there is a reduced level of crustal and upper mantle seismicity ($h \leq 70$ km). Almost all major earthquakes in 2024 occurred in the interval of deep earthquakes ($h > 70$ km). The strongest earthquake with $Mw = 6.8$ occurred in the middle part of the Kuril Island arc at the depth of $h = 182$ km.

Keywords:
earthquakes, seismicity, seismic activity, Amur region, Primorye, Sakhalin, Kuril-Okhotsk region

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