Lidar sounding the middle atmosphere near Yakutsk. Preliminary results

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From 2004, November near Yakutsk (62N, 129.7E geogr.) began functioning lidar sounding station with next main parameters: laser - NdYAG on 532 nm with pulse energy 190 mJ and frequency of 20 Hz; telescope - Newton system with 60 cm in diameter and 200 cm focal length. The new lidar system proposed to monitoring the atmospheric aerosol layers and temperature stratification up to heights of 60-70 km by means of Rayleigh scattering. There are presented results of validation with radiosounding and satellite data, also the results of layers temperature manifestations.