

# **Radiosonde observations of gravity waves in the lower atmosphere over Istanbul (40°.97'N, 29°.08'E), Turkey**

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**Abstract.** One of the most important goals of analyzing gravity waves is to understand the dynamical and thermal structure of waves in the troposphere and lower stratosphere (TLS). In this study, activities of gravity waves in the atmosphere were statistically studied with using height resolution at 100m. The study presents specific days for summer (15 August 2010) and winter (15 January 2010) daily temperature, horizontal winds, and monthly-averaged temperature and horizontal winds (zonal and meridional) from the 00:00 UTC radiosonde observation for 2010. Atmosphere identified in the height range from ground to 10 km. In conclusion, gravity waves statistically extracted for this level for the specific days 15 August and 15 January 2010.