

# Acoustic Gravity Waves Generated by the Atmospheric Storm

Thursday, 22 June 2023 10:06 (1 minute)

Observational data on atmospheric-pressure variations at the land surface have been obtained at the network of four microbarographs located in the Moscow region and processed. The analysis of data has made it possible to determine the characteristics (coherence, azimuths, and propagation velocities) of the basic arrivals of acoustic gravity waves from the atmospheric storms within a wavelength range of a few to hundreds of kilometers. The tendency for an increase in the amplitudes of pressure jumps before the atmospheric storms with increasing the amplitudes of pressure variations in the wave precursors of the front arrival is clearly seen.

## E-mail

e.v.golikova@gmail.com

## Promotional text

An unique complex has been developed in Moscow and its region in order to continuously record internal and infrasound waves. This complex makes it possible to record wave disturbances of different scales in the field of atmospheric pressure.

## Oral preference format

**Primary author:** Ms GOLIKOVA, Elena (A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences)

**Co-authors:** Mr CHUNCHUZOV, Igor (A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences); Mr KULICHKOV, Sergey (A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences); Mr POPOV, Oleg (A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences); Mr PEREPELKIN, Vitaly (A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences)

**Presenter:** Ms GOLIKOVA, Elena (A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences)

**Session Classification:** Lightning talks: P1.1, P3.3

**Track Classification:** Theme 1. The Earth as a Complex System: T1.1 The Atmosphere and its Dynamics