Waves in airglow structure and density of atomic oxygen measured as part of WAVE2004 campaign.

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The rocket experiment was carried out successfully on the 18th of January, 2004 as part of the WAVE2004 campaign, the goal of which was to clarify ultimately the mechanism involved in the formation of wavy structures observed within the airglow. We measured atomic O densities, OH, oxygen molecule and 558nm airglow emission rates as well as electron densities within the 70-140km region.

In this study, preliminary results of atomic oxygen density and airglow emission rates within the atmospheric wave are discussed.