

Graduate Physics Seminar 24 March 2014 from 15:00 University of Nova Gorica - Ajdovščina Campus Vipavska 11, Ajdovščina Amphitheatre

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Bora Wind in Slovenia

Abstract

A phenomenon of a strong, gusty, downslope wind, where the cold air flowing over an orographic barrier sinks and accelerates as it encounters warm air at the lee side is generally referred to as Bora wind. This seminar provides an overview of Bora wind effects, synoptic situations that lead to its occurrence, classification of Bora wind events and mathematical formalism of airmass motion needed for its analytic description. In its second part, we focus on experimental devices and techniques applicable to the wind field measurements, in particular on in-situ measurements using anemometers and remote sensing measurements using lidars. In its final part we present a case study of Bora wind events in the Vipava valley in April 2012, its preliminary results and the prospect for future research.