

## **Abstract**

This presented work deals with a weak thermal convection over the Czech Republic. The main objective is to identify areas and meteorological conditions which determined weak thermal convection in the atmosphere. Another objective is to describe surfaces and situations that are characterized with occurrence of decreasing air currents. This work may be useful for non-motorized aircraft pilots for which the occurrence of weak thermal convection and decreasing air currents will be very dangerous during the flight. In the first part there are described different ways of spreading heat through the atmosphere, this is followed by a general description of thermal convection, its distribution, origin and course. The second part deals with weak thermal convection, describes the decreasing thermal current, meteorological conditions and factors causing weak thermal convection. The third part contains the results of a questionnaire, which was sent among aeroclubs in the Czech Republic. The results of the questionnaire were compared with the information reported in the literature and in most cases they coincide. The cases which differed from the literature are more detailed in the discussion.