

In the presented work we deal with the possibility of thunderstorm forecasting. Convective storms are probably the most serious consequences of severe weather in the Czech Republic. Even through the big progress in numerical weather prediction methods, the forecast of their occurrence and intensity estimation remains very difficult when issuing warning information for the given area. Knowledge of nowadays possibilities of strong convection forecasting is included. To study the success of the thunderstorm prediction we chose the set of thunderstorm events with significant convective phenomena identified in the Czech Republic. Data from numerical weather prediction models, aerological stations and remote sensing of Earth were used. These selected cases were assessed with respect to practical using in the Integrated Warning System in the Czech Hydrometeorological Institute.