



## **A case study of a EF1 tornado in eastern Bohemia (Czech Republic) in 2016**

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This case study describes the occurrence of EF1 tornado during the strong thunderstorm at 12:00 UTC on the 24th of May 2016 at small village Červená Hora near Náchod in the northeast of Bohemia. Strong thunderstorms in low pressure area on the occluded front generated more hailstorms and one thunderstorm with non-supercell tornado in the Czech republic. There were several damages during occurrence of tornado on more buildings, trees and crop with no injuries or fatalities.

This study is focused on the meteorological situation in the atmosphere during the event and on the conditions for formation of the tornado. This event is analysed using CHMI radar data, EUMETSAT satellite data and upper-air sounding data from various sources. The occurrence of the tornado is compared to various runs of the NWP model ALADIN. The possibilities for the forecasters are analyzed to determine possible tornado conditions before the event. Cape values were higher than 3000 J/kg, strong wind shear was forecasted and detected.