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Latest climate changes in Romania :tornadoes

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As climate change has been considered a research priority in the European Strategy for enduring development , I have done a detailed research with my students of the new climate change that has been going on in Romania for the past decade. More precisely I have studied together with my students the phenomenon of tornadoes that have seriously affected on some occasions some our our country's locations, such as Facaeni, in the county of Ialomita, in August 2002.
A quite unusual phenomenon occurred on that location situated at 44.56 degrees northern latitude and at 27.89 degrees eastern longitude, that caused severe damage to the local environment and three persons lost their lives in the process, as well as other thirty people suffering from bad injuries. The magnitude of that strong phenomenon rose on the Fujita scale at level F3 which implied wing gusts between 252-300 km/ hour .
A main cause of occurrence of such a severe weather was the difference in temperature of two huge air masses, one of Polar origin, and other coming from tropical latitudes . Their crossroads was on that precise territory of Romania. The duration of the worst part of the tornado path lasted only for two minutes, but the consequences of its passage were colossal : total destruction of 33 households, and other 395 were partially damaged, 1,000 people afflicted by the devastation and 100 acres of acacia tree forest ripped off the ground.
The first ever recorded tornado phenomenon in Romania was around 1894-1896, considered at that time " a freak of nature" was seen as a cloud formation abnormality , an uncontrolled force of nature that had a huge impact , and at the same time, it vanished into "thin air " fast. The most affected areas in Romania by tornadoes are the south-eastern planes where the cloud formations can create fast columns of air rotating up to 500 km/hour. The local people compared the cloud funnels created on the planes to "serpents " that eat and spit out roofs, animals, trucks and concrete road poles.
I have minutely searched with my students all the data of that tornado, the direction of wind gusts, we have calculated the force of the impact by studying the photos taken on that occasion. I have also done some research on other tornadoes that have taken place In Movilita and Brezoaele the past years. I have studied the increase of the centrifugal force and that of Coriolis in the context of repetition of such dangerous atmospheric phenomena that showed their apparition as ten per year in Romania. Therefore the average Coriolis parameter is $10{-}4\ s^{-1}$, for a typical atmospheric speed of 10 m/s (22 mph) the radius is 100 km (62 mi), with a period of about 17 hours. The lowering of the air pressure occurring on such occasions has been one of my concerns as well the the speed of the cloud column rotation.
All these phenomena are the effect of the climate change occurring all over our Planet due to pollution. As you can see the devastation produced by such extreme climate lead to spontaneous floods and later desertification on the south-eastern part of our country.

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