



## CLIMATE CHANGE AND METEOROLOGICAL HAZARDS

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### Ianos: a severe medicane in Greece

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Mediterranean Tropical-like Cyclones, or commonly named Medicanes are a special type of cyclones which develop over the Mediterranean Sea. They follow the development process of subtropical or tropical cyclones which form over the higher latitude subtropical areas of the Atlantic Ocean: they mainly originate from extratropical lows or small-scale baroclinic disturbances, which cut off from the main westerlies and gradually acquire subtropical and then tropical characteristics if they remain long enough over relatively warm waters. These types of cyclones are officially classified by the National Hurricane Center in the Atlantic region, and nowadays some meteorological services, for example the UK Met Office already admit the medicanes as subtropical or tropical cyclones, too. In September 2020 a unique and strong medicane developed over the Central Mediterranean Sea, named “Ianos” by the Greek Meteorological Service. The cyclone made landfall in the western parts of the country with winds equivalent to a category 1 to 2 hurricane, causing severe damages in the Ionian Islands. The cyclone also produced heavy rainfall across the country, leading to mudslides in higher altitudes and major floods, especially in Thessaly, destroying many roads, bridges and railway lines. This cyclone, along with many others, is an example of how destructive a medicane can be, despite its small size and limited strength. Some studies also show that the intensity of such lows is likely to increase due to the climate change, since as the sea becomes warmer, convection and precipitation may become more intense. It would therefore be useful to raise awareness about medicanes even in Hungary, even though these cyclones do not affect our county, but many people travel to the affected regions for holiday.