

Medicanes

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In news : According to experts, human-induced climate change may increase Medicanes

What is Medicanes?

- Extra tropical storms in the Mediterranean Sea are known as 'Medicanes' or 'Mediterranean Hurricanes'
- It is a term that is being used more often that refers to a strong storm system across the Mediterranean Sea
- Medicanes is a combination of the two words "Mediterranean" and "hurricane." Although it is not official terminology, the name separates the regional differences that these storms have, compared to tropical storms, cyclones or hurricanes.
- A medicanes is more of a tropical stormlike cyclone.
- They form when a non-tropical storm feeds off the warm waters of the Mediterranean.
- The storm can then begin to strengthen and develop tropical storm characteristics.

Which areas experience medicanes?

The area that typically experiences a medicanes is central Mediterranean countries like Greece, Italy or Turkey, for example.

How is medicanes different from other systems?

- Medicanes occur more in colder waters than tropical cyclones, hurricanes and typhoons. Hence, the cores of these storms are also cold, as compared to the warm cores of tropical cyclones.
- Warmer cores tend to carry more moisture (hence rainfall), are bigger in size and have swifter winds.
- Sometimes, warm-cored tropical cyclones transform into

cold-cored extratropical cyclones and in rare cases, the opposite can also happen, according to the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), an intergovernmental organisation created through an international convention agreed by 30 countries that are part of the European Union.

- The rare event of an extra tropical cyclone becoming a tropical cyclone happens because of warmer-than-usual waters in the Mediterranean Sea
- They are short-lived and very rare
- Typically, they are not big.
- They can quickly spin up within a 24-hour period
- Medicanes, however, do not typically progress into anything more severe.
- The odds of a medicane developing into a major hurricane-strength system are extremely small
- There is not a classified system with categories [for medicanes].
- Very rarely do they produce anything over 120-130 mph, equivalent to a Category 3 or 4 hurricane
- Although a medicane is not a hurricane, many times they try to form an eye that could resemble one of a hurricane. They also spin like other tropical systems.

Ianos medicane

On September 18, 2020, a medicane named Ianos made landfall along the coast of Greece and caused heavy rainfall and flooding on the islands of Zakynthos, Kefalonia and Ithaca. The wind speeds reached upto 100 kilometres per hour (km / hr).

What did the experts say?

- Even though many media outlets reported it to be a rare occurrence and one of the strongest such storms on record, scientists said medicanes are not as rare but might become more frequent owing to global warming due

to anthropogenic climate change.

- According to experts, these storms are not that rare and there have been about 70 of them in the past 70 years, so let's say one per year. Both, 2018 and 2019, had one each as well
- Two of these storms, one in 2005 and another in 2012, even formed over the Black Sea, which is a much smaller water body than the Mediterranean Sea.