

An Open Letter to the Youth engaged in the fight against global warming

« We can either save our world or condemn humanity to an infernal future » , UN Secretary-General Antonio Guterres recently told officials from some fifty countries gathered to prepare for COP 26 on climate change.

You are campaigning, with young people around the world, to preserve our environment, and these actions to compel governments and organizations to do more must be encouraged.

There is a domain, abandoned by the rulers, in which your appeals could also become proposals. It's about tropical cyclones, subject of this letter.

Some physics has curiously remained unexplored. It is discovered when a huge amount of energy needs to be quickly dissipated. The circumstances are certainly few but they are crucial for the environment: control and safety valves for power plants, tropical cyclones, etc.

The grandiose but formidable weather events called tropical cyclones, hurricanes or typhoons depending on the region of the globe are mainly due to the excessive rise in the surface temperature of tropical seas during the warm season. Too great an imbalance in temperature between the surface of the oceans and that in altitude can turn a tropical depression into a tropical storm first, then into a hurricane when the system enters chaos.

Recent developments in nonlinear thermodynamics and chaos physics show that order then appears, characterized by an eye and its wall of clouds. The system spectacularly self-organizes and becomes a giant, mobile engine on the ocean surface; engine that gets rid of its motive power by sowing desolation on inhabited lands.

With the current warming, some predict that these tropical cyclones will be more and more numerous and others think that they will be more and more violent.

The "Great Hurricane" of 1780 was one of the most devastating in history. Between 20,000 and 30,000 people lost their lives. Hurricanes nowadays are less deadly because surveillance, warning and prevention systems have developed considerably. Ocean scientists now know how to predict their short-term trajectory. A call for an evacuation of millions of people is sometimes necessary; this mass exodus causes monster disarray and catastrophic situations. Hundreds of thousands of people shelter as they can.

The hurricanes of 2017 were particularly active ; the damage caused is officially estimated at more than 300 billion US dollars by the United States government (about 250 billion euros). These figures are enormous. The cost of hurricane disasters for 2017 and for the USA alone corresponds, roughly, to the price of sixty 1000 MW power plants, which represents, for example, the entire French nuclear fleet.

What can be done in the face of this natural phenomenon? Nothing, we are told, on all sides.

You will be told that you have to be crazy to fight against hurricanes, I console myself knowing that it is even crazier to do nothing.

What? We would be unable to follow a hurricane that does not move faster than a fish and at the same time draw cold water a few tens of meters deep to refresh its base and thus weaken and destabilize it?

We now know enough about these phenomena to sketch a solution to destroy the ordered part of a hurricane, in order to gradually weaken it by downgrading it to a much less aggressive tropical storm and much more useful for the thermal balance of our planet Earth.

A patent has been filed and issued in 2020, which tends to demonstrate the feasibility of such a marine megastructure.

A fleet composed of these structures seems capable, by cumulative effects, of gradually annihilating a hurricane in the open sea, and thus protecting inhabited regions.

Thought experiment today, we show that it could be possible, at the cost of a significant and useful technological leap, to calm these formidable meteorological phenomena that nature builds at sea before our eyes.

We, the human race, have over nature the sublime advantage of being endowed with reason. If we do not use this reason to tame hurricanes, then we will have to suffer more and more of their misdeeds. Thus, in the face of history, we will have refused to understand nature and to rescue it by yielding to its excesses.

« It is not because things are difficult that we do not dare, it is because we do not dare that they are difficult. » (Seneca)

We Don't Have Time. It is now that we must dare! Confidence!

Kind regards.

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