



The answer is blowin' in the wind

NASA uses science to study and explain climate change

Hurricane Harvey's recent record-breaking ravaging of Texas put the weather on everyone's radar. As with any extreme weather event in recent years, it brought up the topic of climate change.

Most climate scientists won't attribute an individual storm to climate change, but they predict that the world is in for more frequent, intense and wetter storms — like Harvey — because of it.



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InSites

The National Aeronautics and Space Administration uses an array of high-tech tools to keep an eye on climate change, which is perhaps the most important issue facing the world today. NASA has a website, climate.nasa.gov, that shows the planet's vital signs and explains causes, effects and possible solutions.

The site explains in plain English the cutting-edge science used to analyze various aspects of the planet's health. It clearly lays out the case for how human activities drive climate change.

Articles explain how scientists gather historical climate data from ice cores, coral, sedimentary rock and other sources to

chart the Earth's past warming and cooling cycles. It touches on the physics of how greenhouse gases warm the planet and covers measurements of symptoms, such as carbon dioxide concentration in the atmosphere, global temperatures, land and sea ice coverage, and sea level.

Worldwide impact

The site also describes the effects we can expect from climate change. Some areas of the world actually may benefit from it, and some areas won't see dramatic change, but the net result will be negative. Sea level rise, ocean acidification, changing sea currents and generally

warming temperatures will alter coastlines, impact food chains, cause extinctions of species and large migrations of people, change weather patterns and cost massive amounts of money in mitigation attempts. The site details many solutions and adaptations we can implement to lessen the impact — if we can find the political will.

Pictures, videos, graphics, interactive displays and animations accompany the text. Before-and-after satellite pictures dramatically show the impact climate change has made so far. The imagery is stunning and, in some cases, literally out of this world. NASA is one of the few

organizations that can study the problem from outer space.

According to the ancient Greek philosopher Heraclitus, "the only thing that is constant is change." Some people embrace change, some fear it, and some deny it. It can be for the better, for the worse or just for the sake of it. Change can be gradual and almost imperceptible, or sudden and dramatic. It can occur by natural forces or by the hand of man.

Climate change is here, and we need to manage it.

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