## ZVERYWHERE.







## Dandelion.

Feeling the wind blow and seeing its effects is a very common occurrence on Earth. Here, the seeds of a dandelion are distributed over a field by a gentle breeze. If particles are light enough, winds can suspend them and even scatter them aloft as dust or haze, like smog, or the dust spread over long distances in the atmosphere after volcanic eruptions.

(Credits: Wikimedia Commons)

## **Comet Tail.**

There is a stream of charged particles flowing off the Sun known as the solar wind. Comets have two tails: one that is mainly dust, and another that is composed of charged particles called ions. Scientists have found that the ion tail is always pointing directly away from the Sun, no matter which way the comet itself is going. This is because the solar wind forces the ion tail to point in the direction where the solar wind is heading. The dust tail is composed of heavier particles that are less affected by the solar wind, and generally points away from the motion of the comet. (Credits: Wikimedia Commons)

## **Galactic Winds.**

When galaxies experience bursts of star formation, the most massive of the stars race through their evolution and explode as supernovas. If the rate of supernovas is high enough, the combined effects of many supernova shock waves drives a galactic-scale wind that blows gas out of the galaxy. These superwinds were likely the main way that carbon, nitrogen, oxygen, iron and other heavy elements formed in supernovas were spread throughout the Universe.

(Credits: NASA/CXC/Wesleyan/R.Kilgard et al.)

WHERE THE WIND BLOWS Winds can move particles from one place to another. On Earth, winds can blow briefly during a storm, and over long time scales, as in the jet stream. Winds have also been detected on other planets, in the space between stars, and in galaxies.

http://hte.si.edu/wind

BECAUSE WHAT HAPPENS HERE, HAPPENS THERE, HAPPENS EVERYWHERE.



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