

Cosmoclimatology: The influence of Cosmic rays on Climate

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Changes in the intensity of galactic cosmic rays alter the Earth's cloudiness. A recent experiment and observations has shown how charges liberated by cosmic rays assist in making aerosols, the building blocks of cloud condensation nuclei. Variations in the cosmic-ray influx due to solar magnetic activity account well for climatic fluctuations on decadal, centennial and millennial timescales. Over longer intervals, the changing galactic environment of the solar system has had dramatic consequences.