



MEASURING THE EARTH

THE SCIENCE OF GEODESY

A red arrow points from the word "EARTH" to the "O" in "GEODESY".

ATMOSPHERIC MOISTURE The amount of water vapor in the atmosphere determines the weather that may occur. GPS can be used to measure water vapor in the atmosphere because signals from GPS satellites to ground-based GPS receivers are delayed by water vapor. This information is used to better forecast severe weather, as well as to study the hydrologic cycle and climate change. International networks, such as COCONet in the Caribbean, allow for data collection across national boundaries.

Photo: Clouds over the Great Basin in east-central Nevada by Dylan Cembalski, UNAVCO

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a monthly series on the how and why of geodesy