

MEASURING THE EARTH

THE SCIENCE OF GEODESY



DROUGHT MONITORING Snow cover, lake levels, soil moisture, and changes in groundwater level can all cause Earth's surface to move up or down. The weight of lakes and snow pushes the surface down. A lack of water at the surface allows the land to rebound, or rise. GPS and gravity measurements record these small movements, allowing scientists, water management organizations, and the agricultural community to track the severity of drought and efficiently conserve water resources.

Photo: Dry lands of northern New Mexico by Beth Bartel, UNAVCO



a monthly series on the how and why of geodesy