Gravity Mission

Dateline: July 25, 2003 -

Newly released data from the joint NASA-German Aerospace Center Gravity Recovery and Climate Experiment, or GRACE, mission are giving oceanographers the Earth’s gravity field and new insights into our understanding of ocean circulation and its effects on climate.

A preliminary gravity model produced by Grace improves the accuracy of Earth’s gravity model by a factor of between 10 and nearly 100. Oceanographers can now separate ocean surface topography, which provide a gauge of ocean heat storage and global ocean circulation.

Grace senses minute variations in gravitational pull from local changes in Earth’s mass by precisely measuring, to a tenth of the width of a human hair, changes in the separation of two identical spacecraft following the same orbit approximately 137 miles apart.

Grace will map the variations from month to month, following changes imposed by the sea-short-term climate change.

For more information on the project click on the link below.

GRACE -

© 2002 WINK-TV / Fort Myers Broadcasting - All Rights Reserved
REFID 5025