

# OUR CHANGING PLANET

THE FY 2002  
U.S. GLOBAL CHANGE RESEARCH PROGRAM



A Report by the Subcommittee on Global Change Research,  
Committee on Environment and Natural Resources  
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## On the Front Cover: True-color Earth image

MODIS Views Earth as a System. The Moderate Resolution Imaging Spectroradiometer (MODIS) can see the Earth in the same colors our eyes see (i.e., red, green, and blue), as well as in 33 other spectral bands. This radiative information can be used to derive information about an unprecedented number of parameters related to global change, including ocean plant life, land vegetation cover, cloud properties, atmospheric particulates (aerosols), and surface temperature. This image shows the Earth in true color as it appears to the MODIS instrument on the Terra spacecraft.

Terra, the flagship of the Earth Observing System (EOS) satellite series, was launched in December 1999. Other instruments on Terra are providing information about clouds, aerosols, trace gases, additional land surface and ocean properties, and the Earth's radiation budget. Data from Terra will make important contributions to USGCRP-supported investigations of climate change, atmospheric composition, the global water cycle, the global carbon cycle, and changes in ecosystems.

Source: NASA MODIS instrument team