MONITORING THE DESERT ENVIRONMENT FROM SPACE

Farouk El-Baz,
Research Director, Center for Earth and Planetary Studies, Smithsonian Institution, Washington, D.C.

The immensity, remoteness and inaccessibility of world deserts precludes their detailed study by conventional means. Space platforms provide a unique opportunity to study and monitor the desert environment, especially because deserts must be studied on a regional basis and because climatic conditions favor their observation and photography by manned and unmanned spacecraft.

In addition, space age technology can remedy the lack of meteorological data on the desert environment. Automated stations can be placed in remote areas to collect the necessary data and beam them to orbiting satellites. The latter can in turn transmit the data from orbit to receiving stations on the ground for analysis and synthesis. Monitoring the deserts from space in this way will help us utilize more of the land area of the earth for the benefit of all mankind.