

The EROS Program

U.S. Department of the Interior/Geological Survey



Within the technology of the space age lies a key to increased knowledge about the resources and environment of the Earth. This key is remote sensing—detecting the nature of an object without actually touching it. Although the photographic camera is the most familiar remote-sensing device, there are also other instrument systems, such as scanning radiometers and radar, that can produce photographs and images.

On the basis of the potential of this technology, and in response to the critical need for greater knowledge of the Earth and its resources, the Department of the Interior established the Earth Resources Observation Systems (EROS) Program to gather and use remotely sensed data—collected by satellite and aircraft—of natural and manmade features on the Earth's surface.

The EROS Program, administered by the U.S. Geological Survey, works with representatives of departmental bureaus and offices to coordinate research and applications of remote-sensing technology to the day-to-day operations of the department. Most of the research and applications have been made possible by the experimental data-acquisition systems of the National Aeronautics and Space Administration (NASA). In particular, the EROS Program uses data from Landsat, formerly called the Earth Resources Technology Satellite (ERTS), from the Earth Resources Experiment Package (EREP) of Skylab, and from NASA's Aircraft Program.

The potential application of remote-sensing techniques for inventorying and managing the Nation's Earth resources and monitoring our environment has been demonstrated in many ways. Landsat imagery, because of its synoptic coverage, has, for example, identified previously unmapped geologic structures as targets for exploration

for oil, copper, and other minerals and is being used to inventory water impoundment areas. The repetitive coverage of satellite data provides information for land-use planning with a timeliness not previously possible. The capability of detecting changes in land use has proved effective in monitoring surface mining and reclamation of surface mines and for gaging the environmental impact of the construction of the Alaskan pipeline. It is also used for evaluating range conditions over vast areas of the Western United States. The satellite imagery is also useful for updating small-scale maps. The satellite image maps listed on the reverse side of this flier are experimental cartographic products of the Geological Survey.

In addition to meeting the needs of the Department of the Interior, the EROS Program has the responsibility of providing copies of remote-sensing data in response to public demand and of providing a variety of professional services to further the understanding and use of remotely sensed data. The EROS Data Center, established in 1971, and located permanently in 1973 about 25 km (16 miles) northeast of Sioux Falls, South Dakota, serves these functions. The Data Center reproduces and distributes as sale items copies of imagery, aerial photographs, electronic data, and computer products collected by 16 different organizations, including the U.S. Geological Survey and NASA.

Additional information about the EROS Program can be obtained by writing to EROS Program, U.S. Geological Survey, 1925 Newton Square East, Reston, VA 22090, Tel. (703) 860-7871. Descriptions of products available from the EROS Data Center, order forms, and price lists can be obtained from the EROS Data Center, Sioux Falls, SD 57198, Tel. (605) 594-6511. The Data Center will also provide information about training on request.

Satellite Image Maps for Sale by the U.S. Geological Survey

As of June 1978

Send prepaid mail orders to: U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202

| Title | Form | Printing date | Scale | Price |
|--|--|---------------|-------------|--------|
| Landsat | | | | |
| Chesapeake Bay and Vicinity Winter 1976-77 | Color mosaic | 1978 | 1:500,000 | \$2.00 |
| Upper Chesapeake Bay | Color image, enhanced and precision-processed | 1977 | 1:250,000 | \$2.00 |
| Upper Chesapeake Bay | Color image, precision-processed | 1976 | 1:500,000 | \$1.50 |
| Vatnajokull, Iceland | Color image (fall) | 1977 | 1:500,000 | \$1.25 |
| Vatnajokull, Iceland | Black and white image (winter) | 1976 | 1:500,000 | \$1.25 |
| Florida | Color mosaic | 1975 | 1:500,000 | \$3.00 |
| Pensacola Bay | Color image | 1977 | 1:500,000 | \$1.25 |
| Lake Seminole | Color image | 1977 | 1:500,000 | \$1.25 |
| Apalachee Bay | Color image | 1977 | 1:500,000 | \$1.25 |
| Okefenokee Swamp | Color image | 1977 | 1:500,000 | \$1.25 |
| Gulf Hammock | Color image | 1977 | 1:500,000 | \$1.25 |
| Lake George | Color image | 1977 | 1:500,000 | \$1.25 |
| Charlotte Harbor | Color image | 1977 | 1:500,000 | \$1.25 |
| Lake Okeechobee | Color image | 1977 | 1:500,000 | \$1.25 |
| Sanibel Island | Color image | 1977 | 1:500,000 | \$1.25 |
| The Everglades | Color image | 1977 | 1:500,000 | \$1.25 |
| Florida Keys | Color image, precision-processed for water enhancement | 1977 | 1:500,000 | \$1.25 |
| Georgia | Color mosaic | 1976 | 1:500,000 | \$2.00 |
| Antarctica | | | | |
| Ellsworth Mountains | Blue-tone mosaic | 1976 | 1:500,000 | \$2.00 |
| Victoria Land Coast | Blue-tone mosaic | 1976 | 1:1,000,000 | \$2.00 |
| McMurdo Sound Region | Black and white image | 1975 | 1:250,000 | \$1.50 |
| McMurdo Sound Region | Black and white image | 1975 | 1:500,000 | \$1.25 |
| McMurdo Sound Region | Blue-tone image | 1975 | 1:1,000,000 | \$2.00 |
| Arizona | Sepia mosaic, with cultural features | 1975 | 1:500,000 | \$1.75 |
| Arizona | Black and white mosaic | 1975 | 1:500,000 | \$1.25 |
| Phoenix, Arizona | Sepia Mosaic, with cultural features | 1975 | 1:250,000 | \$2.00 |
| New Jersey | Color mosaic | 1973 | 1:500,000 | \$1.25 |
| Skylab | | | | |
| Hartford, Connecticut | Color photomap | 1976 | 1:250,000 | \$2.00 |