

LANDSAT Mosaic

The original Earth Resources Technology Satellite (E.T.R.S.) was launched by the United States' National Aeronautics and Space Administration in July 1972. Like its predecessors, the present satellite, named LANDSAT, operates in a sunsynchronous, near-polar orbit at an elevation of about 800 km (orbital period 103 minutes). Thus it crosses the equator, following a nearly north-south path, at the same time each day. It completes fourteen orbits a day, and its trajectory is adjusted so that its ground trace repeats itself every eighteen days. Four of the daily orbits cross Canadian space.

LANDSAT carries two kinds of imaging sensors, a three-camera Return Beam Vidicon and a Multispectral Scanner. The former is comparable to a television camera. The latter is receptive to several distinct portions of the visible and near-visible spectrum. The mosaic reproduced here combines images derived from the Multispectral Scanner (M.S.S.) System. It scans across the orbital path of the satellite to generate a continuous image.