

# ESA Opens Landsat Archives



Over 30 years of archived data from the US Landsat Earth-observing satellites are now available, free of charge. The majority of these products are unique to ESA's archive and have never before been accessible anywhere else by the scientific user community. In its archives, ESA holds around two million products that cover Europe and North Africa. The total amount of data available is worth about 450 terabytes, equivalent to about 900,000 hours of audio recorded at CD quality. ESA has been acquiring Landsat data at European stations since the 1970s.

ESA revised its Earth observation data policy in 2010 to adapt to the 'Joint Principles for a Sentinel Data Policy'. This policy was approved by ESA Member States participating in the GMES Space Component Programme, and supports the concept of providing free and open access to data.

By revising the data policy, ESA followed the same path as the US Geological Survey, who began making its Landsat data available free of charge in 2009.

The ESA archives opens access to all products from the Thematic Mapper and Enhanced Thematic Mapper instruments aboard the Landsats. Data from the older Multispectral Scanner will be made available at a later stage.

To access the data, users can go to the Earth Observation Principal Investigator Portal to submit a brief project description and request data.

ESA then assigns the project a quota based on the system's current processing capacity. When the data are ready, the user will receive directions for online retrieval.

In order to allow improved and faster access, ESA will soon begin gradually to process all data into an online archive for users to access independently. Owing to the vast amount of data, this process will take about two years.

The Landsat series goes back to 1972, with Landsat-5 and -7 currently in orbit. Landsat-8 is due for launch by early 2013. The Landsat programme is jointly managed by NASA and the US Geological Survey. ESA supports the Landsat series as a Third Party Mission, meaning it uses its ground infrastructure and expertise to acquire, process and distribute Landsat data to users.