



# LandsatFacts

## About Landsat

The Landsat series of Earth observing satellites began continuous observations of our planet in 1972. Newer versions of Landsat satellites are in orbit today, and work is underway to continue this legacy of critically important data and imagery with the launch of the next Landsat satellite in 2011.

## Why should people care about Landsat?

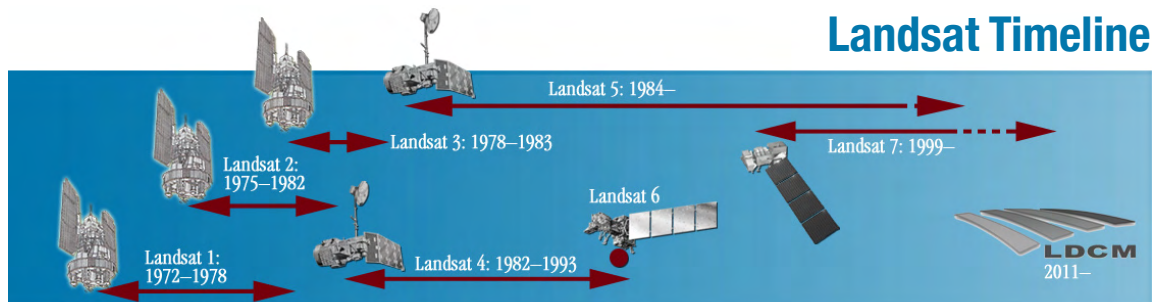
The value of Landsat extends well beyond the study of Earth's South Pole. Since 1972, Landsat has been improving and expanding an unparalleled record of Earth's changing landscapes for the benefit of everyone.

Landsat data are highly useful for examining changes on Earth brought about by human activity and by other causes, including climate change and natural disasters. Investigating change over time with Landsat is made possible by the consistency and high quality of the data. Pixel by pixel, Landsat sensors gather information about our planet, every season, every year, providing data unmatched in quality, detail, coverage, and value. These data are then used to provide essential maps for understanding the places we live and work.

### People use Landsat to:

- » study urban growth and its impacts on people and the landscape
- » analyze wildfire effects and plan mitigation efforts
- » examine the consequences of natural disasters, such as Hurricane Katrina and the 2004 Asian Tsunami
- » quantify the extent and effects of volcanic eruptions
- » map the extent of deforestation
- » predict outbreaks of insect borne disease
- » map changes in glaciers, coral reefs, and wetlands
- » provide accurate estimates of national and foreign crop production
- » provide comprehensive data about inaccessible and remote locations, such as Antarctica
- ...and much more.

For stunning images and brief articles about the societal benefits of Landsat visit: [http://landsat.gsfc.nasa.gov/news/soc\\_articles.html](http://landsat.gsfc.nasa.gov/news/soc_articles.html)



## Useful Links

### The Landsat Program Home Pages

NASA is responsible for designing, building and launching the Landsat satellites. NASA also hosts the Landsat 7 Project Science Office, and provides a robust education and outreach effort for the program.

<http://landsat.gsfc.nasa.gov>

The U.S. Geological Survey (USGS) is responsible for Landsat 5 and 7 satellite operations, Landsat data archival, and data distribution. At this Web site, one can find technical documentation of calibration files, definitive ephemeris, data acquisition, international ground stations, image processing, and more.

<http://landsat.usgs.gov>

### Landsat Data Continuity Mission

The Landsat Data Continuity Mission (LDCM) is the name of the next Landsat satellite mission. The latest information about the LDCM project can be found on this Web site. <http://ldcm.gsfc.nasa.gov>

### Landsat 7 Science Data Users Handbook

The Landsat 7 Science Data User's Handbook is a living document prepared by the Landsat Project Science Office at NASA's Goddard Space Flight Center in Greenbelt, MD. It provides a basic understanding of the joint NASA/USGS Landsat 7 program and serves as a comprehensive resource for Landsat 7 data use. <http://landsathandbook.gsfc.nasa.gov/handbook.html>

### The Future of Land Imaging

"The Future of Land Imaging" study will explore options for operational U.S. land imaging satellites and how these satellites can better serve society. NASA and USGS are participating in this Federal interagency working group.

<http://www.landimaging.gov>

### Our Earth as Art

This Web site offers a feast for the eyes. See the aesthetic side of Landsat imagery here.

<http://earthasart.gsfc.nasa.gov>



*Landsat images of Dubai in 1973 (left), 1990 (middle), and 2006 (right). The famous man-made Palm Islands are easily discernible on the 2006 Landsat image. Today, Dubai is home to more than 1.2 million people and it is one of the world's most rapidly growing cities. Not long ago, Dubai was considered a small fishing and pearl diving village, but its rapid expansion has turned Dubai into a modern metropolis (as evidenced from the Landsat images above).*