

Visualize

Explore

Discover

Layerscape

Powered by WorldWide Telescope

Experience Layerscape at layerscape.org

Microsoft®
Research

A cloud-based user experience, Layerscape makes it easy for the Earth-sciences community—including scientific researchers, educators, students and hobbyists—to visualize and analyze large, complex datasets to facilitate the discovery of new environmental insights into Earth.

Through the use of powerful, easy-to-use tools like Microsoft Excel, Layerscape enables you to explore new ways of looking at Earth and oceanic data, and build predictive modeling in areas such as climate change, health epidemics, and oceanic shifts.

VISUALIZE

large and complex data sets by using powerful, everyday tools.

EXPLORE

ways of looking at data above and below the Earth's surface.

DISCOVER

new insights through community collaboration that previously seemed impossible.

FEATURES

"Layerscape offers the opportunity to look at a whole range of variables and overlay them in space and in time—so you can actually see how landscapes change and respond."

Mark Abbott

Dean of the College of Earth, Ocean and Atmospheric Studies, Oregon State University

"When we saw the first demo, we realized we could input our Excel data for the past 150 years of seismic activity. Three minutes later, it was visualized with a timeline—and dazzled everybody here."

Lee Allison

State Geologist of Arizona

"The more rapidly we can share data, the faster can be the pace of scientific understanding and innovation. Layerscape begins to take this to a new level. Not just by sharing the data but potentially sharing the analysis experience."

Jim Bellingham

Chief Technologist, Monterey Bay Aquarium Research Institute

WorldWide Telescope Layerscape Application

- Easily brings your data into a powerful visualization engine
- Transforms your data into information by combining freedom of perspective, spatial/temporal rendering, and playback
- Enables you to visualize your data in 3-D—on, below, or above the Earth
- Allows ephemeral data to appear and disappear as time elapses for more than 500,000 data ports
- Supports point, vector, and raster data—including map overlays, well known text, shape files, Excel spreadsheets, CSV, and more
- Empowers you to create rich, interactive 3-D narratives

WorldWide Telescope Add-in for Excel

- Imports data into Layerscape's visualization environment—browsing your Layerscape content and communities directly from WorldWide Telescope
- Updates your layer in WorldWide Telescope when you manipulate data in Excel
- Takes full advantage of Excel's powerful features, including formulas
- Captures viewpoints (like bookmarks) and publishes your file on Layerscape to share your data

Cloud-Based Community

- Shares data, visualizations, stories, and related files with colleagues, friends, or the general public
- Takes advantage of WorldWide Telescope learnings from existing communities like Astronomy, Oceanography, Climate, and more
- Creates your own community—based on your organization or area of research
- Participate in discussions, ask questions, share hypotheses; even copy, edit, and re-publish content to reflect your own perspective, expertise, and ideas
- Publishes your own WorldWide Telescope visualizations, stories, data, and metadata
- Uses evolving citation tools to credit your data sources

USING LAYERSCAPE

Layerscape consists of the following free elements:

- A powerful application for your PC
- A tool built on Microsoft Excel that makes it easy to manage your data
- A cloud resource you can use for discovery and collaboration

Visit Layerscape's cloud resource at www.layerscape.org to see how Layerscape enables you to visualize and communicate data-driven stories in new ways. Maybe it can help improve the way you research or perhaps you'll be inspired to share what you find with your friends and colleagues.

1. Watch the video to learn how Layerscape works.

- a. Layerscape has an Earth focus while continuing WorldWide Telescope's connection with planetary science and astronomy
- b. Some of the content at Layerscape can be played as video in your browser to enable you to see what Layerscape can do

2. Browse by categories or use the tabs to see what is featured, new, or highly rated.

3. Sign in with your Windows Live ID, which enables you to subscribe to communities, and publish, share and rate content.

4. Install Layerscape to see the communities in action.

- a. Launch the Layerscape installation from the orange button at top center

5. Download and watch a tour in WorldWide Telescope.

- a. From the website, click "View" in WorldWide Telescope under one of the content icons
- b. From Layerscape: sign in and click the "Community" tab to discover tours and more

LEARN MORE

Experience Layerscape: layerscape.org

Visit our project page: research.microsoft.com/layerscape