

For additional content, images,
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EARTHTIME

"EarthTime is a means to tell stories. The impact of humanity can be seen globally and in individual communities. You really can't understand climate change, migration or major social and political trends without examining their connections across time, across space and between each other. EarthTime enables you to do that."

- Illah Nourbakhsh, Director – CREATE Lab

ABOUT the TOOL

EarthTime, stitching together and animating high-definition satellite imagery, ties together diverse data layers to show the patterns and connections behind some of the major social and political trends of the past two decades – and how they are inscribed into fast-changing landscapes. The platform has already been used in public outreach in schools and museums, and to inform world leaders at World Economic Forum events of major environmental and geo-economic shifts, from air pollution to inequality. It uses images captured by NASA satellites since 1984.

The vision, and long-term goal, is to better inform everyone – including individuals, business heads and policy-makers – about the lives we lead, the decisions we make and the impact we have on the planet.

ABOUT our LAB:

The Community Robotics, Education and Technology Empowerment Lab (CREATE Lab) explores socially meaningful innovation and deployment of robotic technologies. We specifically aim to:

- Empower a technologically fluent generation through experiential learning opportunities in and outside of school. We define technology fluency as the confidence to author / creatively configure technology to pursue individual and collective goals.
- Empower everyday citizens and scientists with affordable environmental sensing and documentation instruments, and powerful visualization platforms for sense-making and sharing of gathered scientific data - to promote evidence-based decision making, public discourse and action.

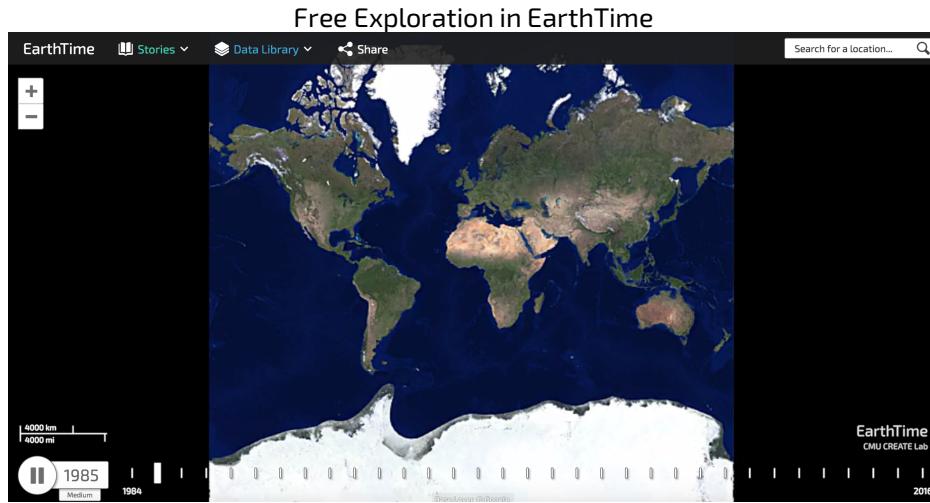
ABOUT our PROCESS

Our data comes from respected sources around the world that are dedicated to collecting, researching, and publishing information about human and Earth change over time. Our partners range from government agencies like NASA and the US Census, to non-governmental agencies like the Igarape Institute and the United Nations, and to university research programs at Oxford, Harvard, University of Maryland. In each case, we have forged relationships with data providers that give us the right to freely share their data with you through EarthTime visualizations. Our data sources vary dramatically and share one common thread: a desire to understand our one home.

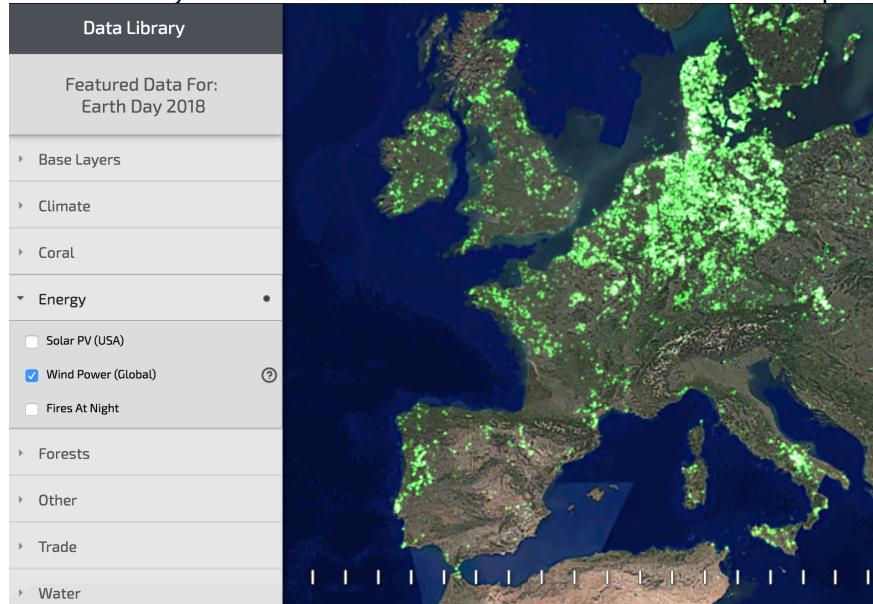
We pre-process massive data sets using new big-data techniques to create animated visualizations of high-resolution information at different time scales. Relying on many of the same strategies used by video game designers, EarthTime uses GPU's in your computer to create a new capability for interactively exploring extreme-sized data.

Our data comes from many sources and might therefore have its own unique timespan. In some cases, such as certain trade flows and financial numbers, our data precedes 1900. In other cases, such as Landsat satellite imagery, our data starts Landsat 5's launch in 1984, up until the present. We try our best to ensure that the most recent data will be added to our visualizations as soon as possible.

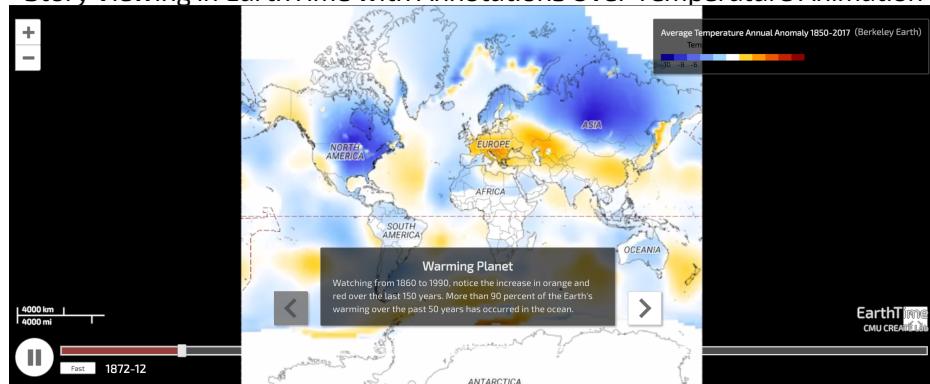
SELECTED images



Data Library Viewer with Wind Power Animation of Western Europe



Story Viewing in EarthTime with Annotations Over Temperature Animation



<u>Date</u>	<u>Source - Title</u>
1/23-26/2018	WEF - Geospatial Technology Unleashed (video)
1/23-26/2018	WEF - Mapping the Arab World: The Long View (video)
1/23-26/2018	WEF - Putting an End to Modern Slavery
1/23-26/2018	WEF - From Growth to Prosperity (video)
1/23-26/2018	Techonomy - Geospatial Tech Unleashed
1/23-26/2018	WEF - From Famine to Food Security (video)
12/13/2017	NYT - In Pittsburgh, the Airport Is a Destination
12/7/2017	CMU - Airport Visitors Travel in Time
11/12/2017	WEF - Reality Check: The World in 2017
09/2017	TED Global - The Biggest Risk Facing Cities
06/14/2017	InfoMigrants - Interactive Map Shows Global Refugee Flow
06/06/2017	Mashable - Interactive Map Shows the Global Refugee Crisis Like You've Never Seen It Before
06/02/2017	Medium - Cities, not nation states, will determine our future survival. Here's why.
05/31/2017	Fast Company - Watch the Movements of Every Refugee on Earth Since 2000
05/21/2017	EvoNews - Maps Depict Global Refugee Flow in Past
01/20/2017	WEF - The Future Humanitarian Response
11/29/2016	TIME - Time and Space