

Hello Everyone,

This week's 9 October 2011 Earth Science Sites of the Week feature the following resources:

Editor's Picks: *1) Interactive U.S. Immigration Map, 2) ScienceCast Short Science Videos from NASA, 3) The Black Hole - Comical, **4) Comet Smashing into Sun Caught on Video, **5) NOAA Photo Library's Photostream – Some Spectacular Images, 6) World's Highest Webcam brings Everest to Internet, 7) Radiation Dose Chart, *8) The Lion Whisperer - If you are on a Safari, Definitely don't try this!

Geosphere

1. Interactive U.S. Immigration Map
2. New Children's Book Introducing Young Kids to Plate Tectonics

Water

1. Video Gallery – Videos of Various Sea Life 1. Lab
2. Aquifer Model in a Tank – Inquiry for Ground Water Systems
3. Ice Formations with Daily (Diurnal) Freeze/Thaw Cycles

Weather

1. Educational Global Climate Modeling

Space

1. ScienceCast Short Science Videos from NASA
2. The Black Hole – video
3. Forming a Planetary Gap – complete with a video

General

1. NOAA Photo Library's Photostream – Some Spectacular Images
2. World's Highest Webcam brings Everest to Internet

Environment

1. Radiation Dose Chart

Teaching

1. Snowglobe Strategy – Tying Concepts to Images

Demo

1. A Glacier in a Milk Jug and Creation of Landforms
2. Snowglobe Strategy

Humor

1. The Lion Whisperer – Video of a Man who Communicates with Lions

Computer Tips

1. Science On a Sphere – free downloads for Google Earth
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Geosphere

Site Name	Interactive U.S. Immigration Map
Site URL	http://www.nytimes.com/interactive/2009/03/10/us/20090310-immigration-explorer.html
Site Author	NY Times
Suggested By	GISetc
Description	“In 2009, the New York Times published a wonderful interactive map of immigration to the U.S. from 1880 to 2000. The spatial dimension of that immigration process is emphasized by showing a nicely projected map of the 50 states down to the county level. Lots of questions with spatial dimension could be asked after exploring the distribution patterns, even over time.”

Site Name	New Children's Book Introducing Young Kids to Plate Tectonics - Published by Geological Society of America.
Site URL	http://www.geosociety.org/bookstore/default.asp?oID=0&catID=31&pID=OUTSIDE

Site Name	New Children's Book Introducing Young Kids to Plate Tectonics - Published by Geological Society of America.
Site Author	Charles Barker
Suggested By	Charles Barker
Description	<i>From the Outside looking In</i> is a new Children's Book published in Sept. by the Geological Society of America (GSA's first Children's Book). GSA book description: "Too sick to go to school, Sean is entertained when his fisherman puppet comes to life and they leave the Earth to see it from the outside looking in. This book, which is told mainly in rhyme, introduces young readers (ages 4–8) to plate tectonics. The detailed black-and-white pencil drawings are sure to delight readers of all ages."

Water

Site Name	Video Gallery - Videos of Various Sea Life
Site URL	http://www.neptunecanada.ca/news/multimedia-gallery/
Site Author	NEPTUNE Canada
Suggested By	Jim Rice
Description	"A high definition (720p!) video of the sensor technology, scientific exploration, sea floor, sea life, methane hydrates bubbling out and poly-metal sulfide spewing vents! You can find several interesting videos here."

Site Name	Lab 1: Aquifer Model in a Tank
Site URL	http://www.beg.utexas.edu/education/aquitank/tank01.htm
Site Author	Bureau of Economic Geology
Suggested By	Mark Francek
Description	<p>“This simple model is intended for student inquiry into ground-water systems. Have your students try things (within the context of the model), observe what happens, and record and interpret their observations. After this inquiry they will better understand aquifers and the issues of climate, spring flow, environmental protection, and water use that are so hotly debated in Austin and elsewhere in Texas.”</p>

Site Name	Ice Formations with Daily (Diurnal) Freeze/Thaw Cycles
Site URL	http://my.ilstu.edu/~jrcarter/ice/diurnal/
Site Author	James R. Carter
Suggested By	James R. Carter

Site Name	Ice Formations with Daily (Diurnal) Freeze/Thaw Cycles
Description	<p>“When the temperature falls below freezing some very interesting forms of ice appear under the right conditions. A few species of plants produce ice flowers and ribbons from the stems, needle ice comes up from the soil, hair ice grows out from pieces of dead wood and a few rocks serve as conduits to move water from the wet soil to form interesting growths of ice at the surface. With digital cameras and the Internet, we are getting a good image of what is out there in nature and how, when and where it occurs. Spiral rods and ribbons of ice are seen to grow from steel pipes in gates, stair railings and playground equipment. Triangular wedges of ice have been seen in bird baths. The author has been able to replicate the process of such ice growths in some as-built environments. None of this is depositional ice or frost although it often occurs concurrently with frost. Some of these forms of ice were written about in the 19th Century. “</p>

Weather

Site Name	Educational Global Climate Modeling
Site URL	http://edgcm.columbia.edu/
Site Author	EdGCM
Suggested By	Dave Smith

Site Name	Educational Global Climate Modeling
Description	“The EdGCM, Educational Global Climate Model, is a true GCM (NASA GISS model) with a user interface that allows students to generate and interpret their own climate models. It even comes with a module to help students write up their results in the form of a scientific article. This is a great tool for inquiry.”

Space

Site Name	ScienceCast Short Science Videos from NASA
Site URL	http://www.youtube.com/watch?v=ssMdITbvHJk
Site Author	YouTube user: ScienceAtNASA
Suggested By	Bill Dicks
Description	“ScienceCasts are short videos about fun, interesting, and unusual science topics encountered by NASA’s science missions.”

Site Name	The Black Hole - Comical
Site URL	http://www.youtube.com/watch?v=P5_Msrdg3Hk&safety_mode=true&persist_safety_mode=1
Site Author	Phil and Olly

Site Name	The Black Hole - Comical
Suggested By	Heather Renyck
Description	“A video from 2008 where a man uses a black hole to get through things. Comical.”

Site Name	Comet Smashing into Sun Caught on Video
Site URL	http://spaceweather.com/archive.php?month=10&day=03&year=2011&view=view
Site Author	Space Weather
Suggested By	Patricia H. Reiff
Description	<p>“A comet discovered by amateur astronomers on Friday, Sept. 30th, disintegrated in spectacular fashion the very next day when it plunged into the sun. The Solar and Heliospheric Observatory recorded the comet's last hours. The end was punctuated by an unexpected explosion: Watch the movie again. The timing of the CME so soon after the comet dove into the sun suggests a link. But what? There is no known mechanism for comets to trigger solar explosions. Before 2011 most solar physicists would have discounted the events of Oct. 1st as pure coincidence--and pure coincidence is still the most likely explanation. Earlier this year, however, the Solar Dynamics Observatory (SDO) watched another sungrazer disintegrate in the sun's atmosphere. On July 5, 2011, the unnamed comet appeared to interact with plasma and magnetic fields in its surroundings as it fell apart. Could a puny comet cause a magnetic instability that might propagate and blossom into a impressive CME? The question is not so crazy as it once seemed to be.”</p>

General

Site Name	NOAA Photo Library's Photostream
Site URL	http://www.flickr.com/photos/noaaphotolib
Site Author	Flickr
Suggested By	Nancy Ridenour
Description	“NOAA has launched the social media photo sharing website "NOAA Photo Library's Photostream" on Flickr, the premier Internet photo sharing website. Selections of over 4,000 photos have been uploaded onto the NOAA Flickr website, a subset of the 47,000 public domain images presently on the NOAA Photo Library. The photos can be viewed in collections, sets, in slideshow format, and by using the Flickr search engine to search for imagery thematically on this website.”

Site Name	World's Highest Webcam brings Everest to Internet
Site URL	http://www.evkc2cnr.org/WebCams/PyramidOne/everest-webcam.html
Site Author	Italian Ministry of Education
Suggested By	Jim McNally

Site Name	World's Highest Webcam brings Everest to Internet
Description	<p>“The world's highest webcam has been installed in the Nepalese Himalayas, beaming live images of Mount Everest back to scientists studying the effects of climate change on the planet's tallest peak. The solar-powered camera, set at 5,675 metres (18,618 feet) on Kala Patthar, a smaller mountain facing Everest, will withstand temperatures as low as minus 30 degrees Celsius (minus 22 Fahrenheit) and operates during daylight hours. The webcam operates from 6:00 am to 6:00 pm Nepalese time (0015 to 1215 GMT) from the Kala Patthar summit, recording stunning images of 8,848-metre Mount Everest as well as the South Col. The image is updated every five minutes, allowing climatologists to track the movement of the clouds around the mountain's summit.”</p>

Environment

Site Name	Radiation Dose Chart
Site URL	http://xkcd.com/radiation/
Site Author	Randall Munroe
Suggested By	Jay Sinclair
Description	<p>“XKCD has a radiation dose chart (with the appropriate disclaimers) that puts the concerns over the Fukushima power plant in perspective. The harm caused by the earthquake and subsequent tsunami far outstrip the damage from the nuclear power plant. This is not to suggest that the situation there is trivial, or to minimize the heroic efforts of those who have put themselves at great personal risk to contain the situation. Proximity to the source of radiation obviously increases the danger.”</p>

Teaching

Title	Snowglobe Strategy – Tying Concepts to Images
Contributor	Molly M Pritchard
Description	“ Students are either given an outline of a snow globe or asked to draw one on a blank piece of paper. Students then are asked to draw symbols or figures (can also use some words) to capture the essence of the concept or story. For example students might create a snow globe of photosynthesis, a constitutional amendment; the scientific method; or the story of <i>The Three Little Pigs</i> . This activity can be done as a group or individually. It is a great way to help students visually summarize what they have read or heard regarding a piece of text or a more abstract concept. It forces students to identify graphic symbols that help them convey the concept or text. It also matches Robert Marzano’s research on the importance of teaching students to summarize in all subjects. AND, it is also a timely strategy for winter in Michigan!”

Demo

Site Name	A Glacier in a Milk Jug And Creation of Landforms
Site URL	http://www.edufy.org/content/show/346 http://www.edufy.org/content/show/152
Site Author	EDUfy
Suggested By	Philip Cooke
Description	“Instructions to demonstrate the creation of landforms by replicating a retreating glacier, and glacial movement. There is a list of various materials including sand water and gravel which are needed to show students how landforms move. The sites are complete with objectives, notes and the procedures.”

Humor

Site Name	The Lion Whisperer - If you are on a safari, definitely don't try this!
Site URL	http://www.flixy.com/lion-whisperer-kevin-richardson.htm
Site Author	Sky News
Suggested By	Larry Claypool
Description	<p>“Kevin Richardson, zoologist and animal behaviourist, raises and trains some of the most dangerous animals known to man. To do this he does not use the common methods of breaking the animal's spirit with sticks and chains, instead he uses love, understanding and trust. With this unusual method of training he has developed some exceptionally personal bonds with his students. He sleeps with lions, cuddles newborn hyenas, swims with lionesses. Kevin can confidently look into their eyes, crouch to the their level and even lie down with them - all taboos in the normal world of wild animal handling - yet he has never been mauled or attacked. Some call him crazy; others shake their heads at his unique method of interacting with the animals. And Kevin's secret - get to know the particular personality of each animal, what makes them angry, happy, upset, irritated - just like a mother with a child.”</p>

Computer Tips

Site Name	Science On a Sphere for Google Earth
Site URL	http://sos.noaa.gov/datasets/ http://sos.noaa.gov/kml/
Site Author	NOAA

Site Name	Science On a Sphere for Google Earth
Suggested By	Brian Tuckett
Description	“NOAA's Science On a Sphere has datasets you can download for free that can be placed in Google Earth for use in the classroom. There are over 250 datasets available. Check it out, and you can always request more KML files.”

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