

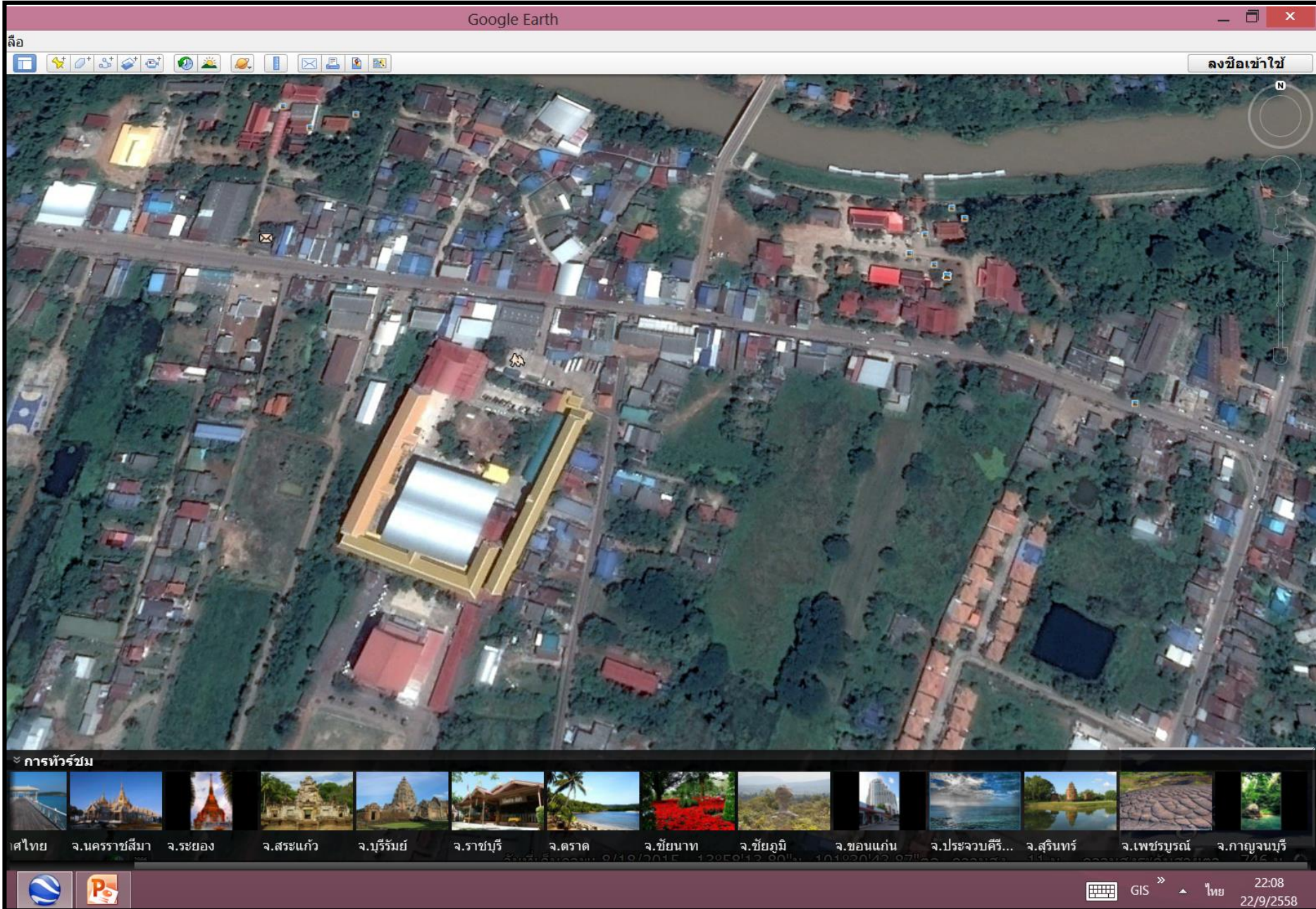
ภูมิสารสนเทศสำหรับโรงเรียน (Geo-Informatics for Schools)

คัดสรรมาฝากให้คุณครูยุค AEC
@โรงเรียนมัธยมวัดใหม่คลอง

โดย... ผศ.ดร.สมบัติ อยู่เมือง (ศิษย์เก่าฯ รุ่นที่ 16)

...ด้วยรักและผูกพัน...

26 กันยายน 2558



...เพื่อสร้างสรรความคิดและการเรียนรู้ในเชิงพื้นที่
ด้วยภูมิสารสนเทศ
ที่ใช้เป็นองค์รวมในการเรียนข้ามศาสตร์...

ภูมิสารสนเทศ (Geo-Informatics) :

ระบบสารสนเทศภูมิศาสตร์ - **Geographic Information Systems (GIS)**

ระบบข้อมูลภาพจากดาวเทียม - **Remote Sensing (RS) Technology**

ระบบพิกัดตำแหน่งทางภูมิศาสตร์ - **Geo-positioning Systems (GPS)**

...**ข้ามศาสตร์** : เทคโนโลยีสารสนเทศ ภาษาอังกฤษ

วิทยาศาสตร์ (ภูมิศาสตร์ ประวัติศาสตร์ สังคมศาสตร์ คณิตศาสตร์)

ศิลปะศาสตร์

แหล่งข้อมูลเพื่อการเรียนรู้และสร้างความคิด ในเชิงพื้นที่ อย่างเป็นระบบแบบองค์รวม

: แหล่งข้อมูลที่สำคัญ ในประเทศ

GISTHAI (ศูนย์วิจัยภูมิสารสนเทศเพื่อประเทศ
จุฬาลงกรณ์มหาวิทยาลัย)

: แหล่งข้อมูลที่สำคัญ ในต่างประเทศ

- Google Earth
- USGS (U.S.Geological Survey)
- National Geographic Society
- BBC (The British Broadcasting Corporation)
- Ordnance Survey (OS) Great Britain ...

GISTHAI free digital maps

<http://www.gisthai.org/index.html>

ศูนย์วิจัยภูมิสารสนเทศเพื่อประเทศไทย
Geo-Informatics center for Thailand

คณะวิทยาศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
Faculty of Science, Chulalongkorn University

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Google™ Custom Search ค้นหา

Research and Consultancy Solutions

With the application of ...

- Geographic Information System (GIS)
- Remote Sensing Techniques (RS)
- Global Positioning Systems (GPS)
- Advance training of ...
- GIS and RS Applications

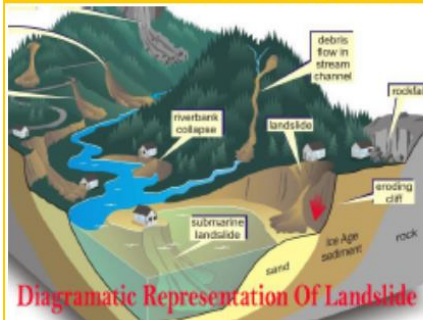
GISTHAI

in spatial analysis and modelling for supporting the management of ...

- Natural Resources
- Environments
- Natural Hazards
- Socio-Economics
- Politics and Administration
- Public Health

what's new

เอกสารประกอบการบรรยาย โครงการประยุกต์ใช้และบริหารข้อมูลเพื่อการจัดการสาธารณภัย



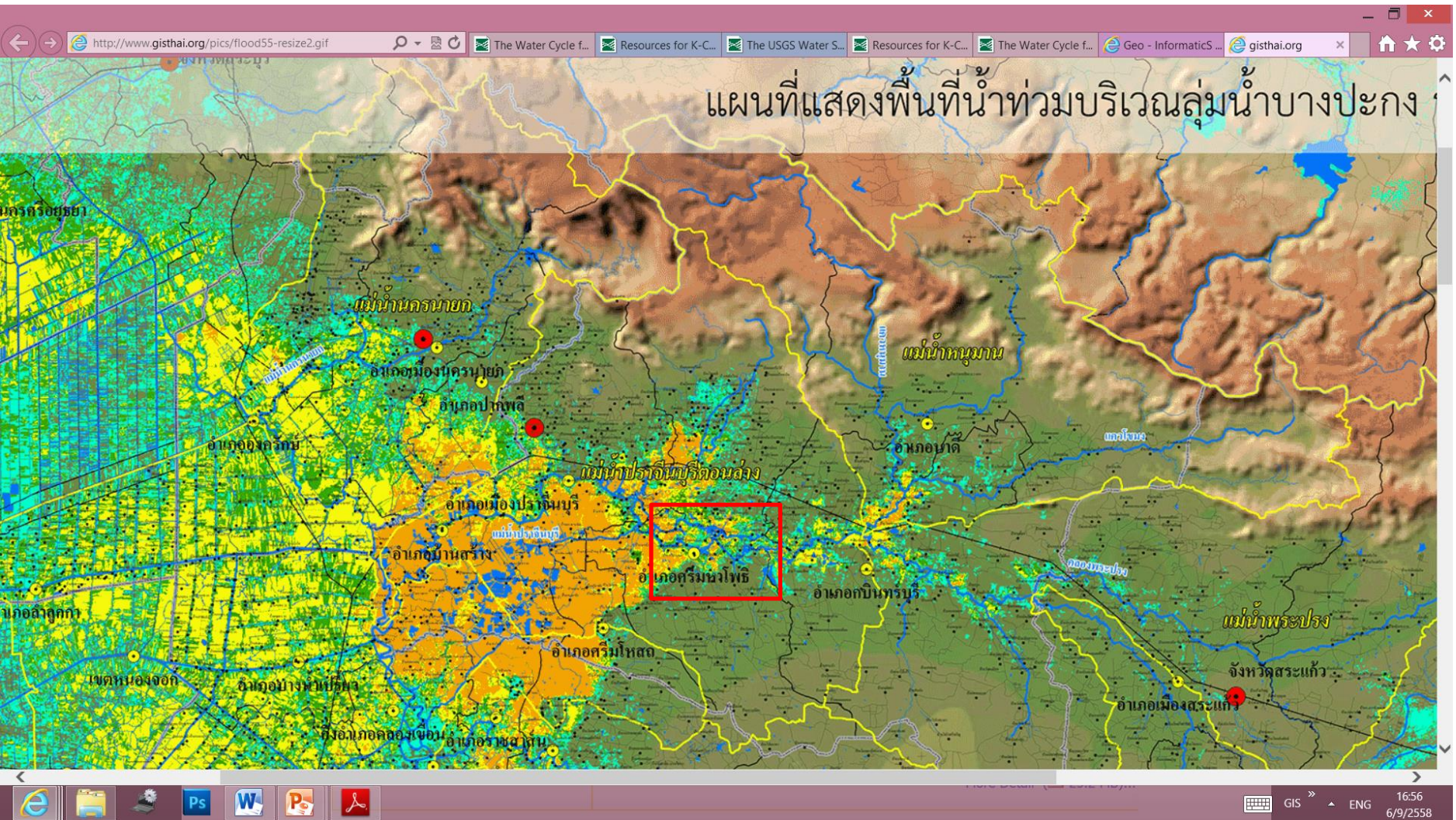
โดย ผศ. ดร. สมบัติ อยู่เมือง
ศูนย์วิจัยภูมิสารสนเทศเพื่อประเทศไทย www.gisthai.org
ภาควิชาธรณีวิทยา คณะวิทยาศาสตร์
จุฬาลงกรณ์มหาวิทยาลัย
12 กุมภาพันธ์ 2558

Part I : กรอบแนวคิดในการบริหารจัดการเพื่อลดความเสี่ยงจากภัยพิบัติภัยธรรมชาติ แนวทางการใช้ข้อมูลเชิงพื้นที่เพื่อการบริหารจัดการและการลดความเสี่ยงภัยพิบัติภัยธรรมชาติ
Part II : กรณีศึกษาการใช้ข้อมูลเชิงพื้นที่ในการบริหารจัดการภัยพิบัติภัยธรรมชาติในพื้นที่เสี่ยงดินโคลนถล่มและอุทกภัย
Part III : โครงการประยุกต์ใช้และบริหารข้อมูลเพื่อการจัดการสาธารณภัย

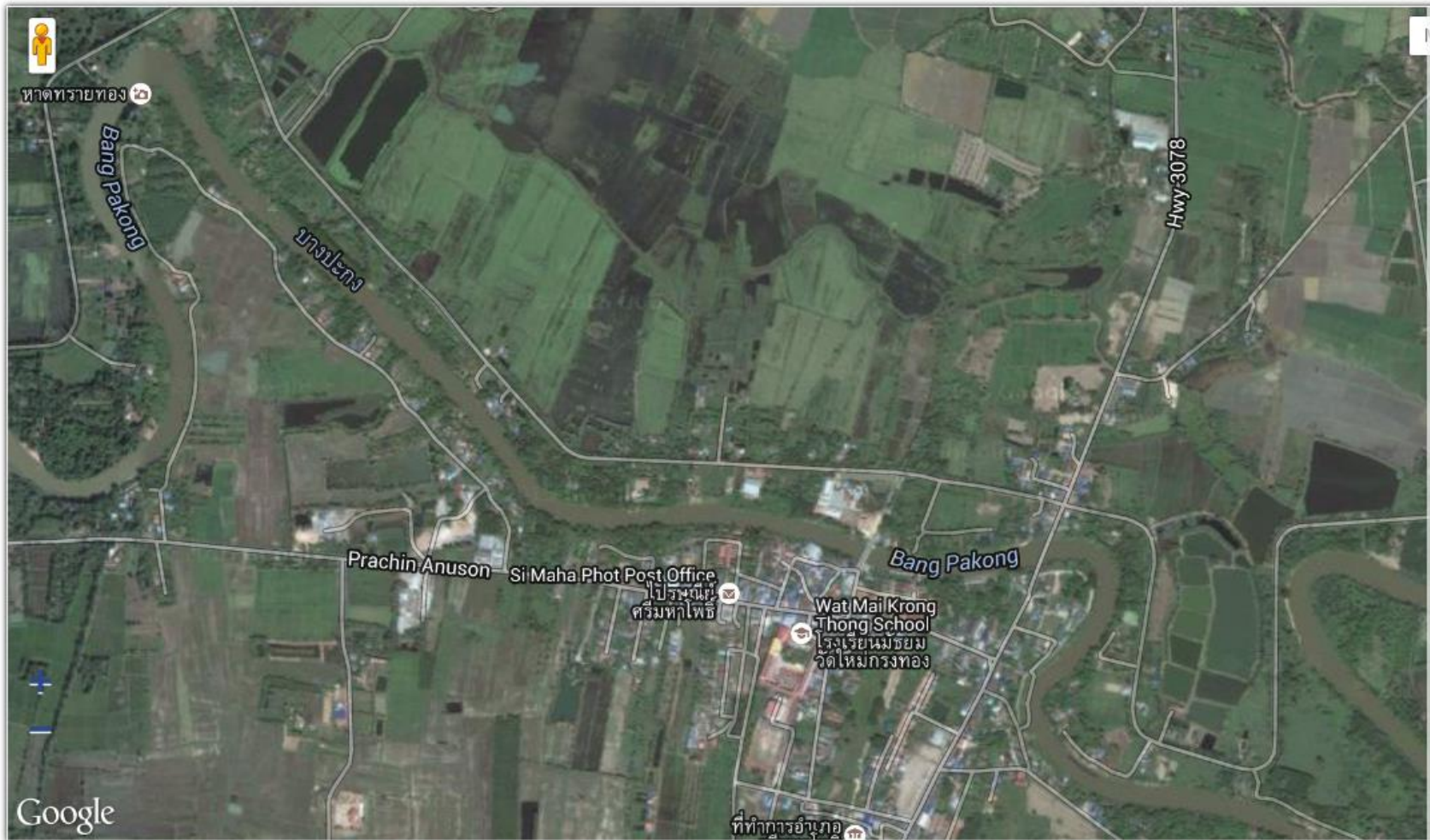
[More Detail](#) (25.2 MB)...

พื้นที่น้ำท่วม...อำเภอศรีมหาโพธิและบริเวณข้างเคียง

ในช่วงปี 2549-2554 (www.gisthai.org)



โรงเรียนมัธยมวัดใหม่กรทอง @ Google Earth



Google Earth



<http://earthshots.usgs.gov/earthshots/>



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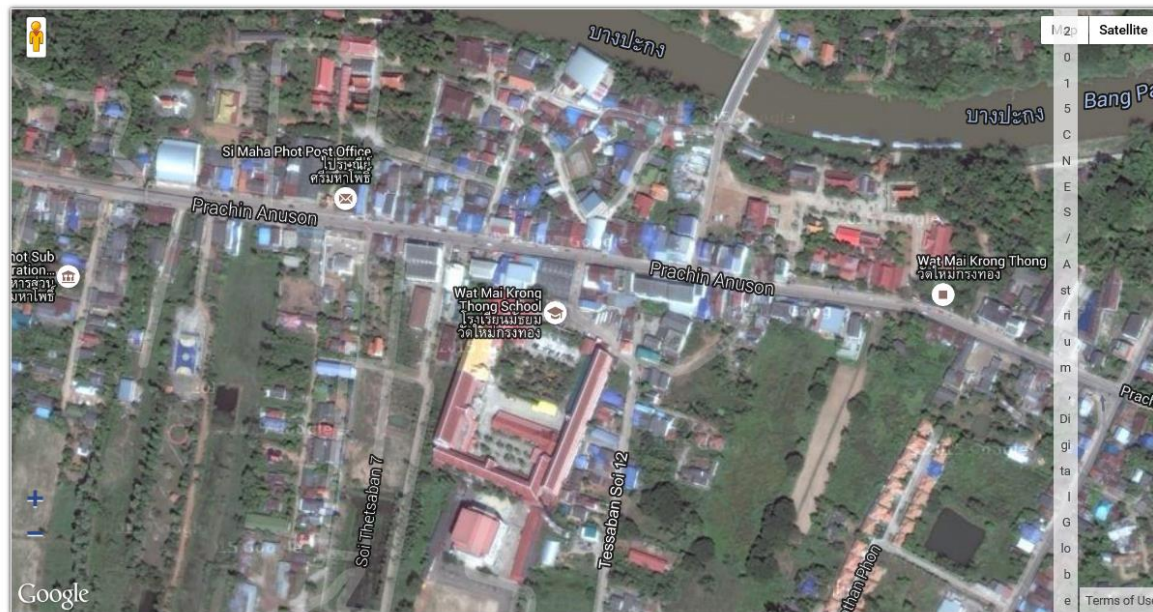
Earthshots: Satellite Images of Environmental Change

Table Of Contents

Earthshots introduces remote sensing by showing how satellite imagery is used to track change over time.

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- Agriculture
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- Deserts
- Forests
- Glaciers
- Meteorology
- Mining
- Mountains
- Natural Disasters
- Water
- Wildlife
- View All on Map





Site Locations New Locations Updated Locations



<http://earthshots.usgs.gov/earthshots/>



<http://education.usgs.gov/>



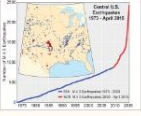
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Featured Topic

Yes, Humans Really Are Causing Earthquakes



How is human activity impacting the number of earthquakes that are occurring in parts of the central United States, like Oklahoma and Kansas? Get the latest information in a new, [archived public lecture](#) about induced seismicity.

Explore additional resources on our [Induced Earthquakes](#) website.

Be sure to try our tools for making [Custom Hazard Maps](#) and [Custom Earthquake Probability Maps](#) for the area around your school (though they don't, at this time, incorporate induced seismicity).

[Featured Topics Archive](#)

What's New and Interesting

Denali Poster


[Download](#) a beautiful new poster showing the location of the recently re-named Denali on a satellite image.

Education Resources


Biology, Geography, Geology, Water, and much more...

[Grades K-6](#)[Grades 7-12](#)[Undergraduate](#)


Frequently Visited Resources




Videos and Animations




Online Lectures



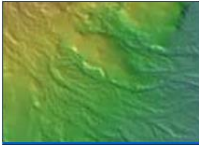
Citizen Science




Find a Map!





Find an Image!



GIS Lab







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<http://education.usgs.gov/>

<http://water.usgs.gov/edu/watercycle-kids-beg.html>

USGS
science for a changing world

The Water Cycle - USGS Water Science School

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The Water Cycle for Schools: Beginner ages

The water cycle describes how Earth's water is not only always changing forms, between liquid (rain), solid (ice), and gas (vapor), but also moving on, above, and in the Earth. This process is always happening everywhere.

Back to the [water cycle diagram for students](#).

Versions available:

- Beginner
- Intermediate
- Advanced

The water cycle describes how Earth's water is not only always changing forms, between liquid, solid (ice), and gas (vapor), but also moving on, above, and in the Earth. This process is always happening everywhere.

SUN

CONDENSATION

EVAPORATION

PRECIPITATION

SNOWMELT


RUNOFF


RIVERS

SPRINGS

OCEANS

The Water Cycle

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Teaching Resources







Under the Sea

Explore underwater geology in your classroom this week


Grades K-2



Ideas




Activities



Lessons


Grades 3-5

Education Trends



National Geographic and the Common Core

Find out how the National Geographic Society is connecting to the Common Core State Standards for English Language Arts.




STEM Education

Find National Geographic's interdisciplinary STEM resources for Grades K-12.

Educator Favorites

- [Activity Ideas](#)
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Teaching & Learning



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Collections

Map Skills for Elementary Students

Spatial Thinking in Grades preK-6



Photograph by Winn Brewer, National Geographic

Spatial Thinking and Maps Skills in Young Children

Spatial thinking allows students to comprehend and analyze phenomena related to the places and spaces around them—and at scales from what they can touch and see in a room or their neighborhood to a world map or globe. Spatial thinking is one of the most important skills that students can develop as they learn geography, Earth, and environmental sciences. It also deepens

Mapping Concepts and Skills



Spatial Thinking

Learn more about the development of concepts and skills across the early years.



Activity Summary

[Click here](#) for a downloadable summary of all activities in the Map Skills for Elementary Students collection and the learning objectives and spatial thinking concepts targeted in each activity.

Large-Format Maps




State Tabletop Maps

Dive into state geography learning with printable, tiled tabletop maps.



World Map for Kids

National Geographic's The World for Kids wall map is an enticing and engaging world map perfect



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Education

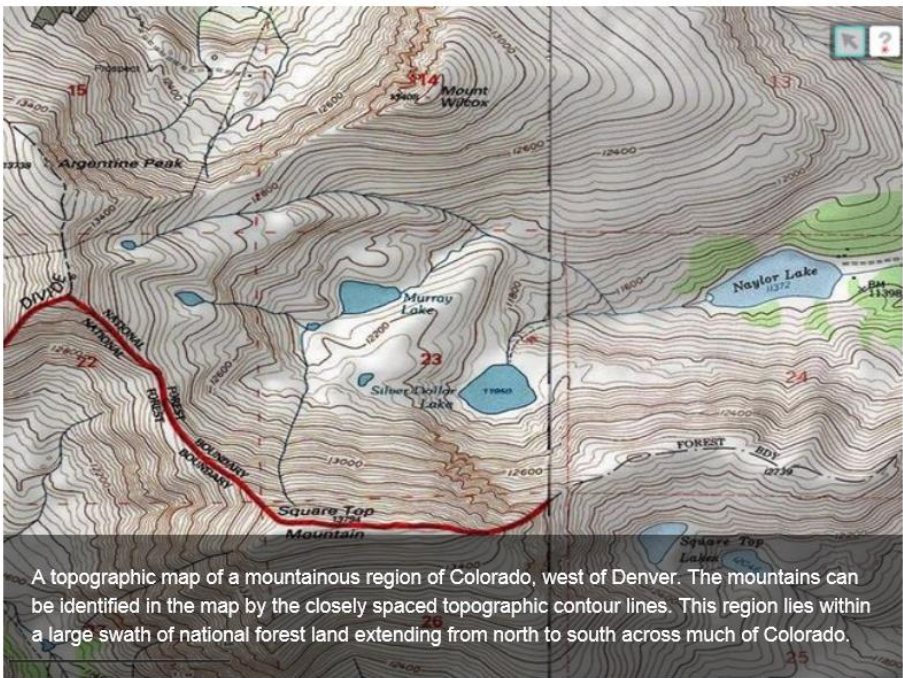
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Collection

maps

This collection contains a selection of content from NG Education about maps. Use search to find more.






A topographic map of a mountainous region of Colorado, west of Denver. The mountains can be identified in the map by the closely spaced topographic contour lines. This region lies within a large swath of national forest land extending from north to south across much of Colorado.


Map courtesy U.S. Geological Survey

Latest Updates for maps




Navigate Jerusalem

Use our interactive "culture goggles" to gain some new perspectives on Jerusalem's Old City.



Travels of Odysseus

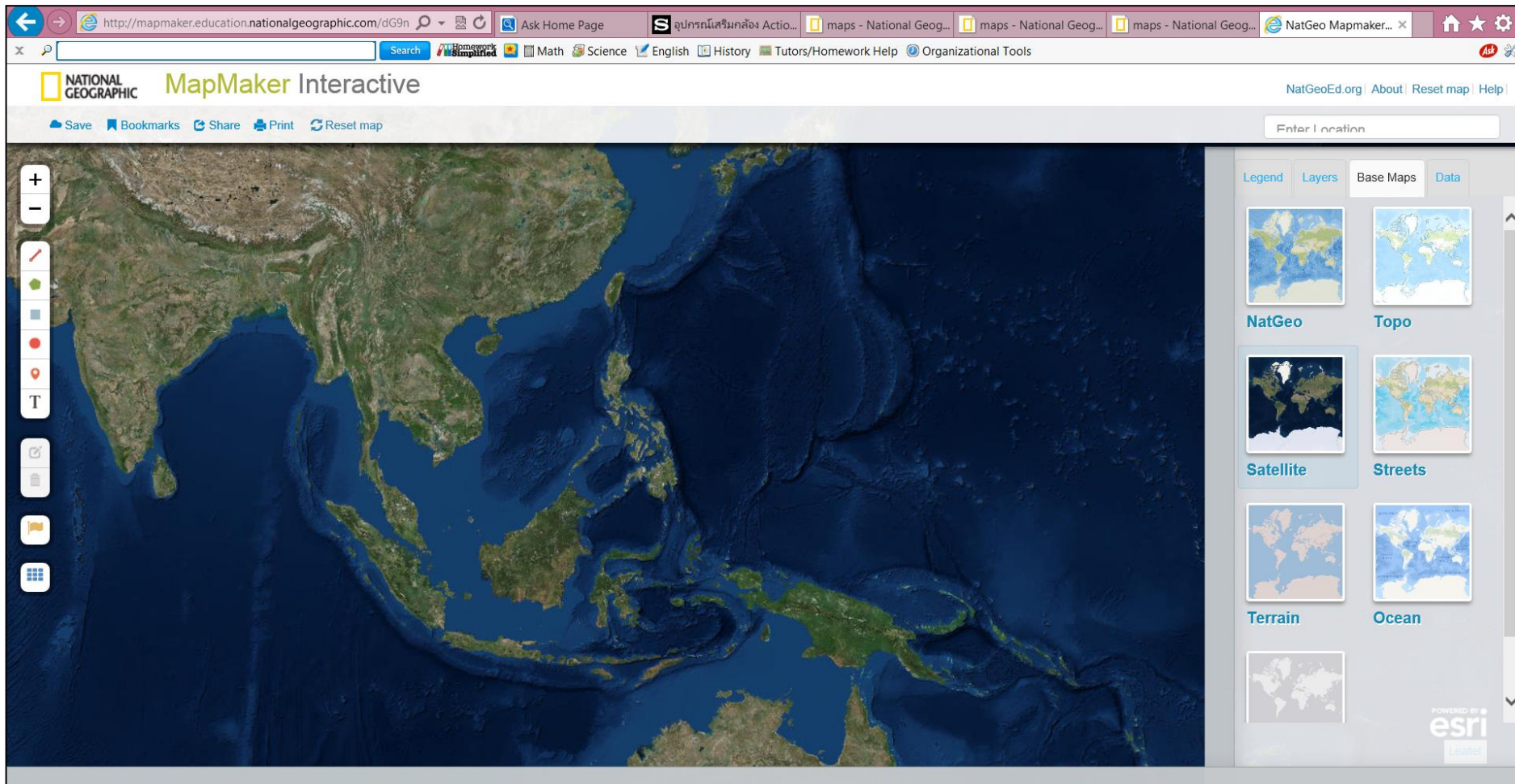
Use this geotour to follow Odysseus and his crew as they encounter nymphs and narcotics, cyclopes and sirens.



Mongolia: Surface Elevation

An interactive map of surface elevation in Mongolia.

<http://mapmaker.education.nationalgeographic.com/dG9nHTwRyVU7Y2NpN2XO8p/>



<http://education.nationalgeographic.com/encyclopedia/geographic-information-system-gis/>

Archived Information

**U.S. Department of Education
Office of Educational Research and Improvement**

Helping Your Child Learn Geography



20 October 2014
Schools - Primary ages 4-11

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Geography

Sites
Topics



Are You Eco-Friendly?
Join the futuristic Environmental Intelligence Unit and help protect the environment! Tackle a series of interactive missions to learn about saving energy, reducing waste and recycling litter.


4-11 yrs



Barnaby Bear
Supplements geography work in the National Curriculum with interactive games. Children can visit Barnaby's journal page, story book page and his photo album. The website covers the main National Curriculum key areas in a fun and exciting way. The website supports KS1 QCA Geography Unit 5: Where in the world is Barnaby Bear?


4-11 yrs

[Teachers](#)
[Parents](#)



Buildings
Interactive games teach all about buildings: what they look like; where they are found; and what goes on inside them. Become a town planner and choose what should be built in the town, from banks and shops to fire stations and factories.


4-11 yrs



Class Clips - Geography
Looking for help teaching Geography? Stream educational video clips straight into your home or classroom.


4-11 yrs

[Related TV](#)



Homes
Learn about homes with the Happy Gang in this fun interactive site. Play a matching game, listen to the story or print out snap cards and play with them.

4-11 yrs



Living Things

Primary Subject List
[Art](#)
[Citizenship](#)
[Geography](#)
[History](#)
[Languages](#)
[Languages: Native Speakers](#)
[Literacy](#)
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Schools - Secondary ages 11-16

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Geography

Sites **Topics**


11-14 yrs

 **Landscapes Unlocked**
Take a bird's eye view of Northern Ireland with breathtaking aerial photography and a narrative that will encourage a deeper geographical understanding of the landscape. Please note this link will take you to the Northern Ireland Schools section of bbc.co.uk. Use the back button to return to this page.


11-14 yrs

 **Sustainable Development**
Map out your studies of Northern Ireland with our interactive guide to sustainable development. Please note this link will take you to the Northern Ireland Education section of bbc.co.uk. Use the back button to return to this page.


11-16 yrs

 **Class Clips - Geography**
Stream clips from great educational Geography programmes straight into your classroom, and help your students learn about everything from Weather to Tourism.

14-16 yrs

 **Coastline**
A look at geographical features of the North East coast of Scotland, and the processes that create them. Also the issues of Forvie National Nature Reserve, Balmedie Country Park and the Aberdeen offshore windfarm development.

14-16 yrs

 **Development and Health**
Examine the factors which cause the divisions between the developing and developed worlds. Also find out about the major

Secondary Subject List

Art

Business Studies

Citizenship

Design & Technology

Drama

English

Geography

History

ICT

Languages

Maths

Modern Studies

Music

PE

PSHE

RE

Science

Study Skills

Other Subjects

<http://www.ordnancesurvey.co.uk/mapzone/>





P · O · W · E · R



YOU HAVE POWERS YOU NEVER DREAMED OF. YOU CAN DO THINGS YOU NEVER THOUGHT YOU COULD DO.
THERE ARE NO LIMITATIONS IN WHAT YOU CAN DO EXCEPT THE LIMITATIONS OF YOUR OWN MIND.

How do you view aging?

Half-Empty

Growing Older
pessimism, weakness, sadness,
loneliness, fear, regret

Half-Full

Growing Bolder
optimism, adventure,
opportunity, friendship, health,
purpose, passion

It's not about age. It's about attitude.



GrowingBolder.com

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