



*The Educational Activities of the
European Geosciences Union*

Carlo Laj

Chairman

EGU Committee on Education

*Port Elizabeth, February
2014*

The Committee on Education of EGU was created in 2002 with the purpose of developing educational activities at EGU.

1) Geosciences Information for Teachers (GIFT) workshops

(At the EGU General Assemblies and more recently at Alexander von Humboldt topical Conferences)

2) Educational sessions at EGU General Assemblies (teachers and scientists and sciences educators)

3) Gift Distinguished Lectures series

4) Teachers at sea

5) Foster collaborations between schools

Typically:

80 participants

20 countries

8-9 conferences

2 half-days practical works with ESA experts

4 oral teacher-to-teachers communications

40-45 teachers' posters

1 visit to local institutions in Vienna (UNOOSA, IAEA...)

Visit and reception at the Vienna Museum of Natural History







<http://gift.egu.eu/gift-symposia.html>

2009

Topic: The Earth from Space

Programme Presentations Brochure Web Conferences

2008

Topic: The Carbon Cycle

Programme Presentations Brochure

2007

Topic: Geosciences in the city

Programme Presentations Brochure

2006

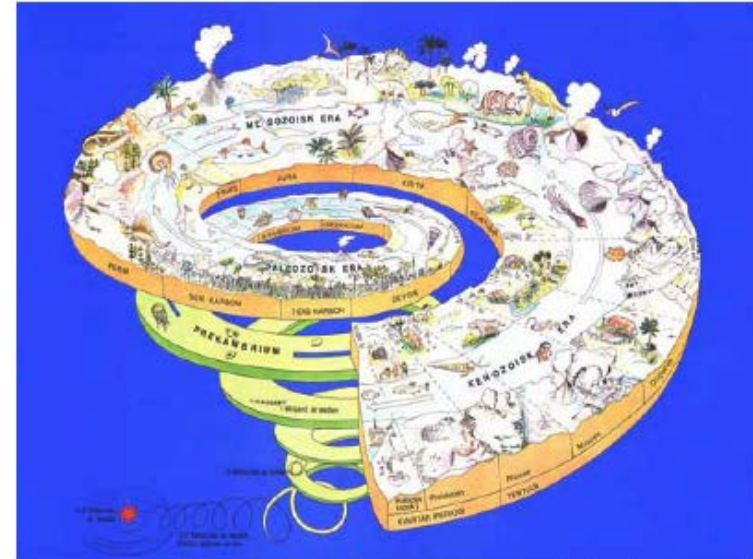
Topic: The Polar Regions

Programme Presentations Brochure

2005

Topic: The History of the Earth

Programme Presentations Brochure



*The time spiral, ©Sveriges geologiska undersökning (SGU)
Permission 30-109/2005 from the Geological Survey of Sweden*

GIFT - 2005

The History of the Earth

Geophysical Information for Teachers Workshop

Vienna, Austria, 26-27 April 2005



European Geosciences Union

<http://gift.egu.eu/gift-symposia.html>

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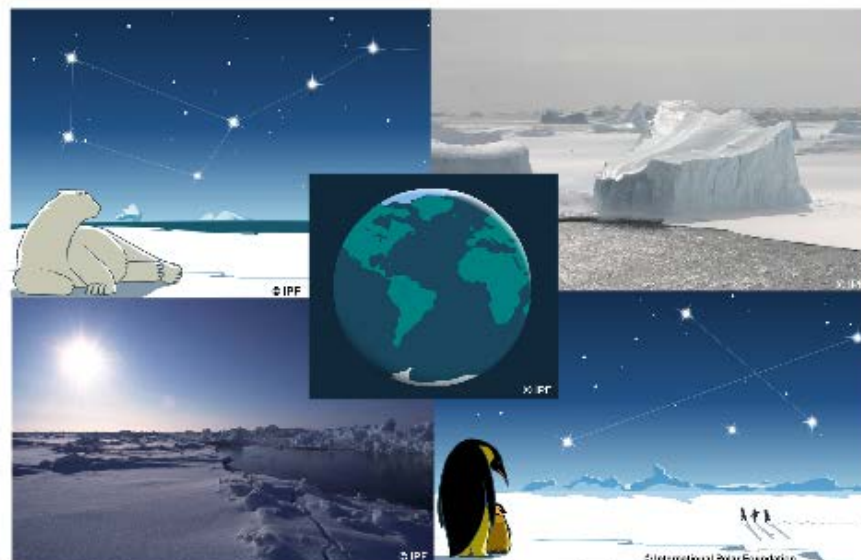
Topic: The Polar Regions

Programme Presentations Brochure

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Topic: The History of the Earth

Programme Presentations Brochure



Courtesy of the International Polar Foundation

GIFT - 2006

The Polar Regions

Geophysical Information for Teachers Workshop

Vienna, Austria, 3-5 April 2006



European Geosciences Union

<http://gift.egu.eu/gift-symposia.html>

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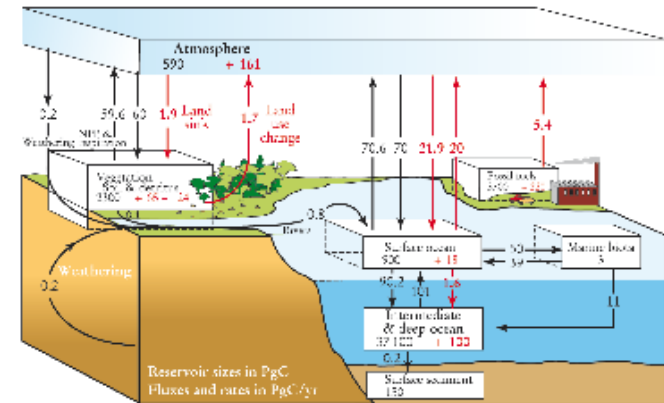
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Programme Presentations Brochure

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Programme Presentations Brochure



Reprinted with permission from: Sarmiento and Gruber, *Physics Today*, 55 (8), 2002
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GIFT - 2008

The Carbon Cycle

Geosciences Information for Teachers Workshop

Vienna, Austria, 14 - 16 April 2008

GIFT - 2010

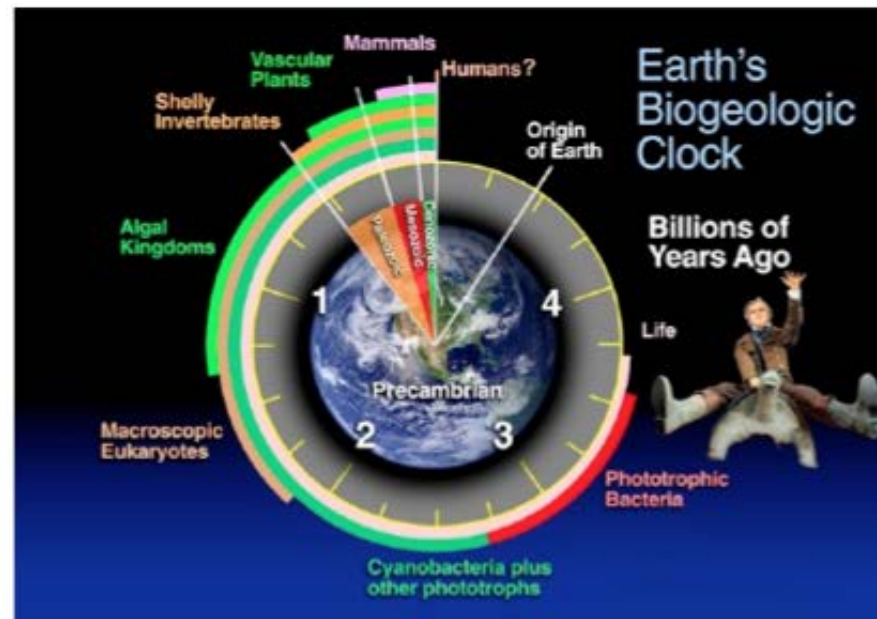
« Energy and sustainable development »





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GIFT - 2011

Evolution and Biodiversity

Geosciences Information for Teachers Workshop

Vienna, Austria, 3-6 April 2011



European Geosciences Union
GIFT – Geosciences Information For Teachers



GIFT - 2013

Natural Hazards

Geosciences Information for Teachers Workshop
Vienna, Austria, 7-10 April 2013



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Committee on Education



GIFT - 2012

Water!

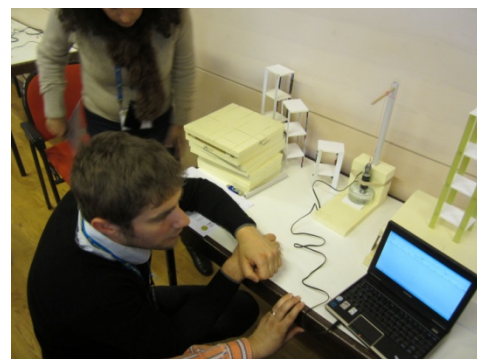
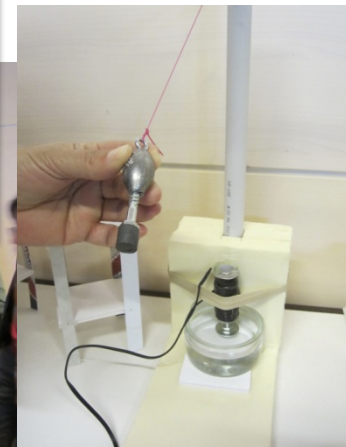
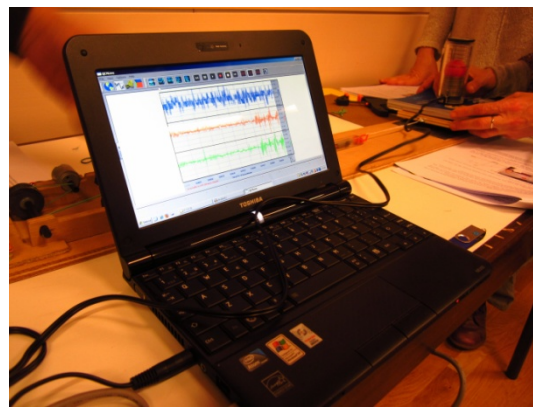
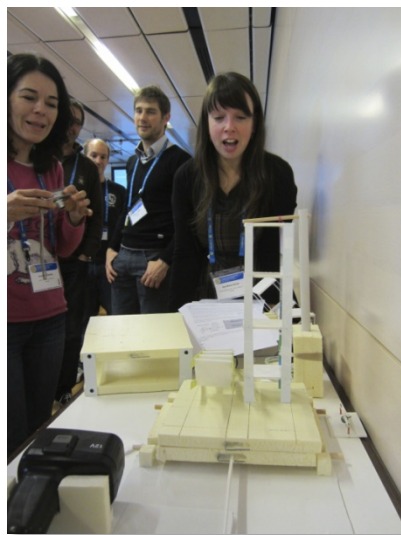
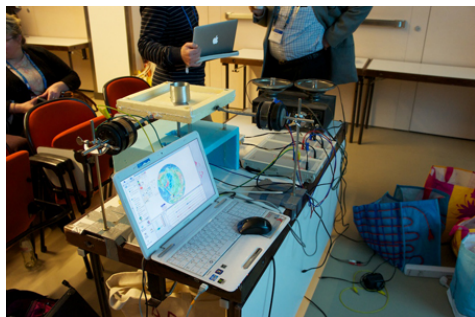
*Geosciences Information for Teachers Workshop
Vienna, Austria, 23-25 April 2012*

Room 29 - Green level



GIFT Workshop

Vienna 7 – 10 abril 2013





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ROCK WEATHERING AND CARBON CYCLE

Patrick Blarez - Loire International Georges Duzy - Luzerne (France)

European educational observatory for environment

CO₂ consumption by Silicate weathering

$$\text{CaSiO}_3 + \text{H}_2\text{O} + 2\text{CO}_2 \rightarrow \text{Ca}^{2+} + \text{SiO}_2 + 2\text{HCO}_3^-$$

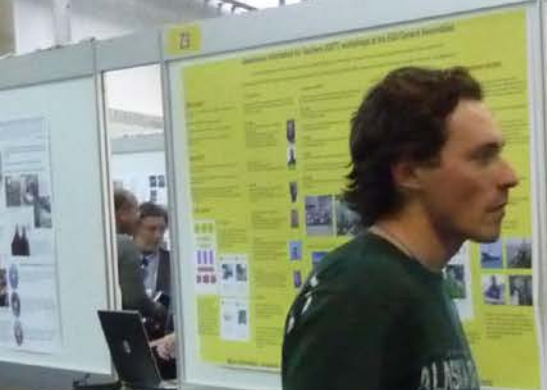
CO₂ release by Carbonate precipitation

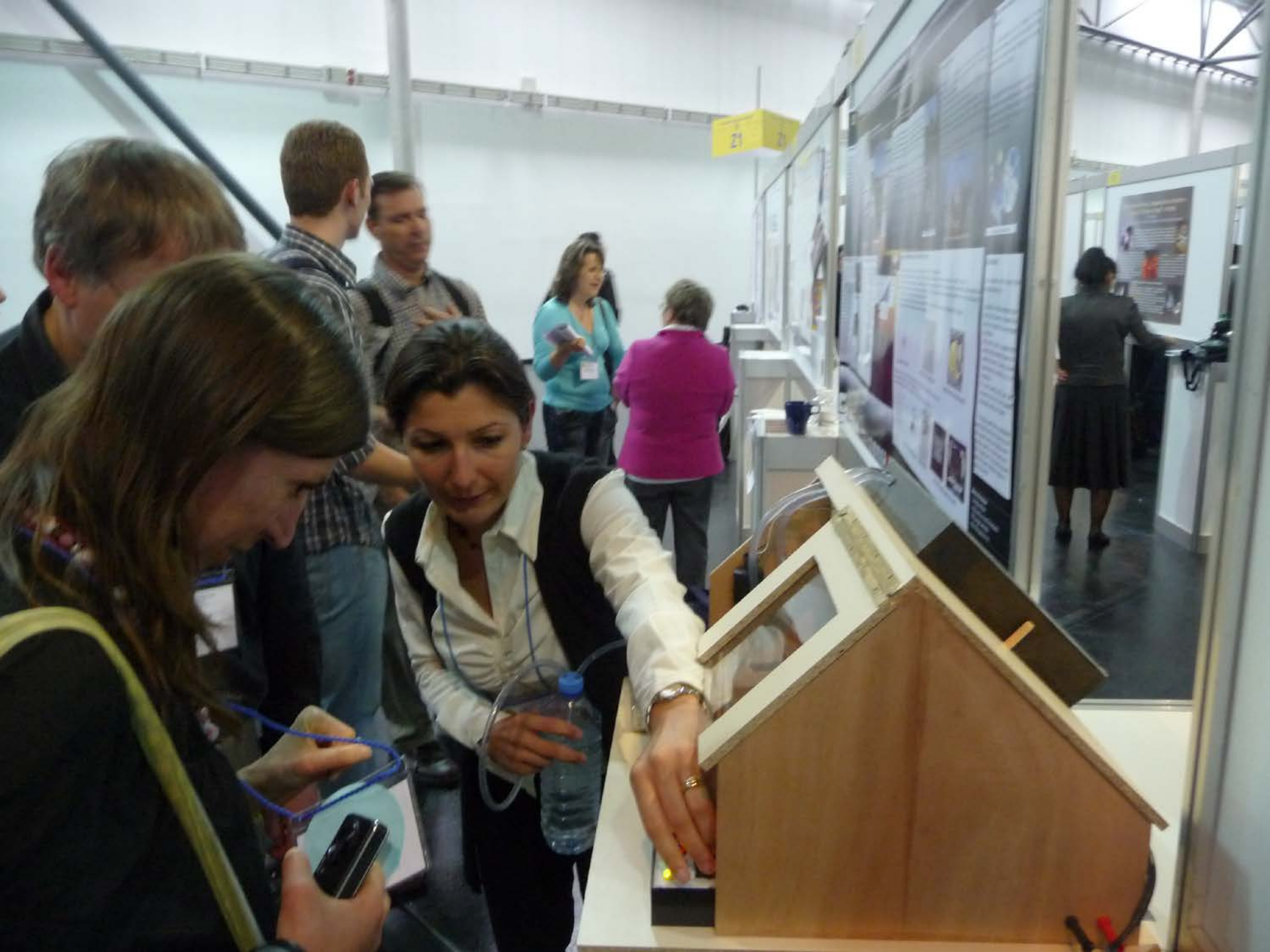
$$2\text{HCO}_3^- + \text{Ca}^{2+} \rightarrow \text{CaCO}_3 + \text{H}_2\text{O} + \text{CO}_2$$

Measurement of HCO₃⁻ concentration

of atmospheric CO₂ that arises from these processes

How can we regulate the Carbon Cycle?







Webstream

<http://www.egu.eu/education/gift/workshops/>

Additional videos



And for 2014...



Earth science education initiative in Africa



ESA



Nelson Mandela Metropolitan University

GIFT AFRICA

Geosciences
Information
for
Teachers

Climate Change and Human Adaptation

February 26-28th 2014
African Earth Observatory Network
Nelson Mandela Metropolitan University
Port Elizabeth
South Africa

A UNESCO-EGU-ESA collaboration



High Impact Natural Hazards Related to the Euro-Mediterranean Regions



Istanbul 1894 Earthquake: the Bazar

Geosciences Information For Teachers Workshop
Istanbul, Turkey, 27-28 March 2014



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Committee on Education



GIFT - 2014

Our Changing Planet

*Geosciences Information for Teachers Workshop
Vienna, Austria, 27-30 April 2014*

- *I am a geoscientist...*

Jane Robb

- *Teachers' corner on the
Education web page*

And for 2015...

GIFT - 2015 Workshop Vienna

« Mineral Resources of the Earth »

<http://www.egu.eu/education/gift/workshops/>

education@egu.eu

EGU Alexander von Humboldt Conference 2015
and associated **EGU–GIFT Workshop**
Addis Ababa (Ethiopia)

Organized by:
European Geosciences Union
Adis Ababa University

Water–Food–Energy
River and Society in the Tropics

Tentative period: **September/October 2015**



ETHIOPIAN INSTITUTE OF
WATER RESOURCES
ADDIS ABABA UNIVERSITY

10th EGU
Alexander von Humboldt International Conference



GIFT - 2015

Water - Food - Energy
River and Society in the Tropics
Geosciences Information for Teachers Workshop

Adis Ababa, Ethiopia, October 2015



10th EGU
Alexander von Humboldt International Conference



GIFT - 2015
Water - Food - Energy
River and Society in the Tropics
Geosciences Information for Teachers Workshop

Adis Ababa, Ethiopia, October 2015

Thank you!

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