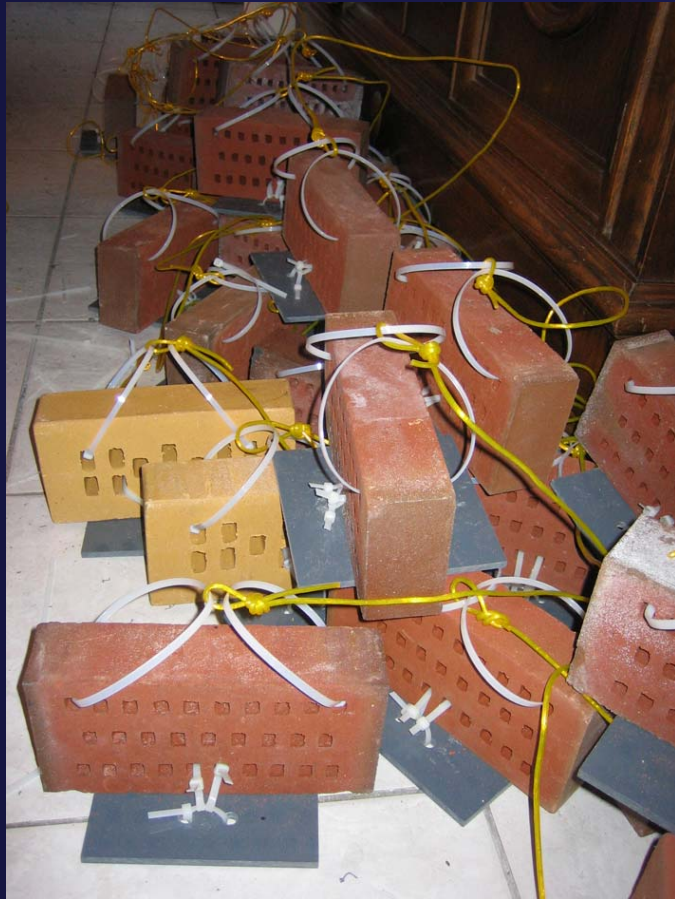


A marine fouling community study: The SETL-project



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National Museum of Natural History Naturalis, Leiden, The Netherlands

Where?

**Goals of the SETL-project of
the ANEMOON foundation**

Material & methods

Where

The Netherlands

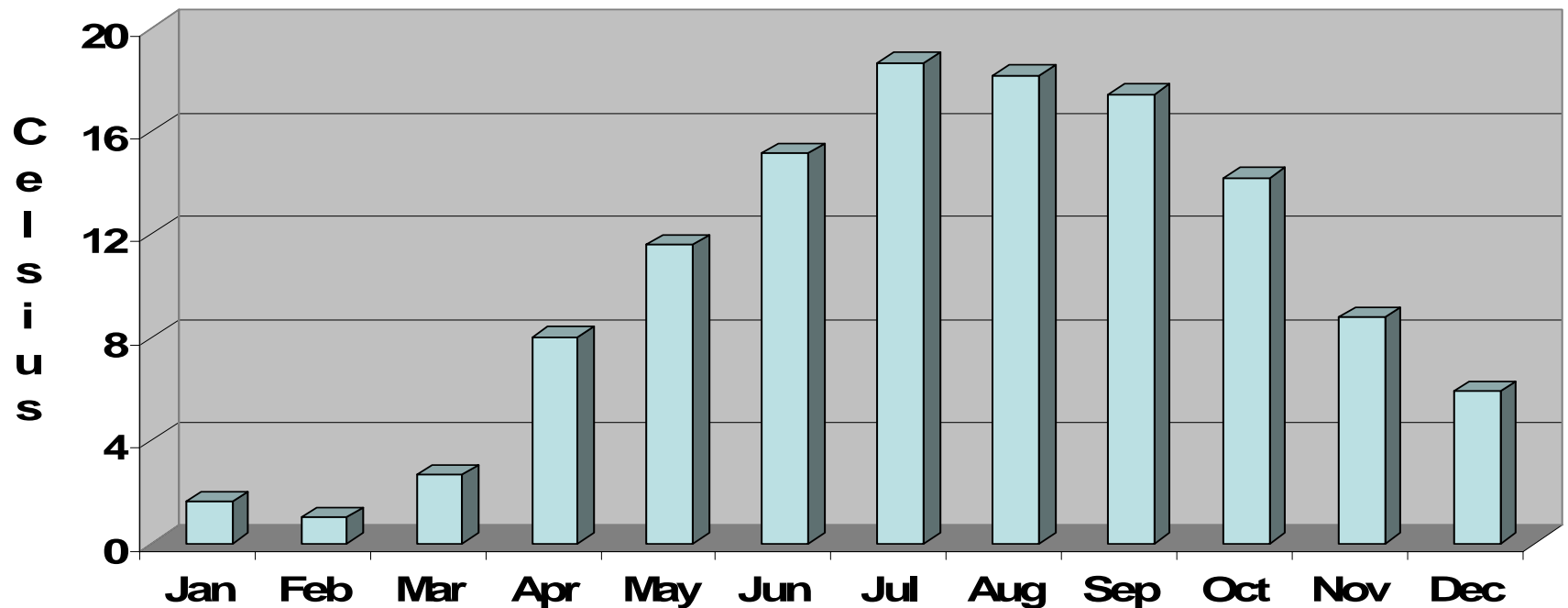


Temperate waters

1° to 18° Celsius

-3° to 25° Celsius (extremes)

Average Water temperatures



The Delta Area



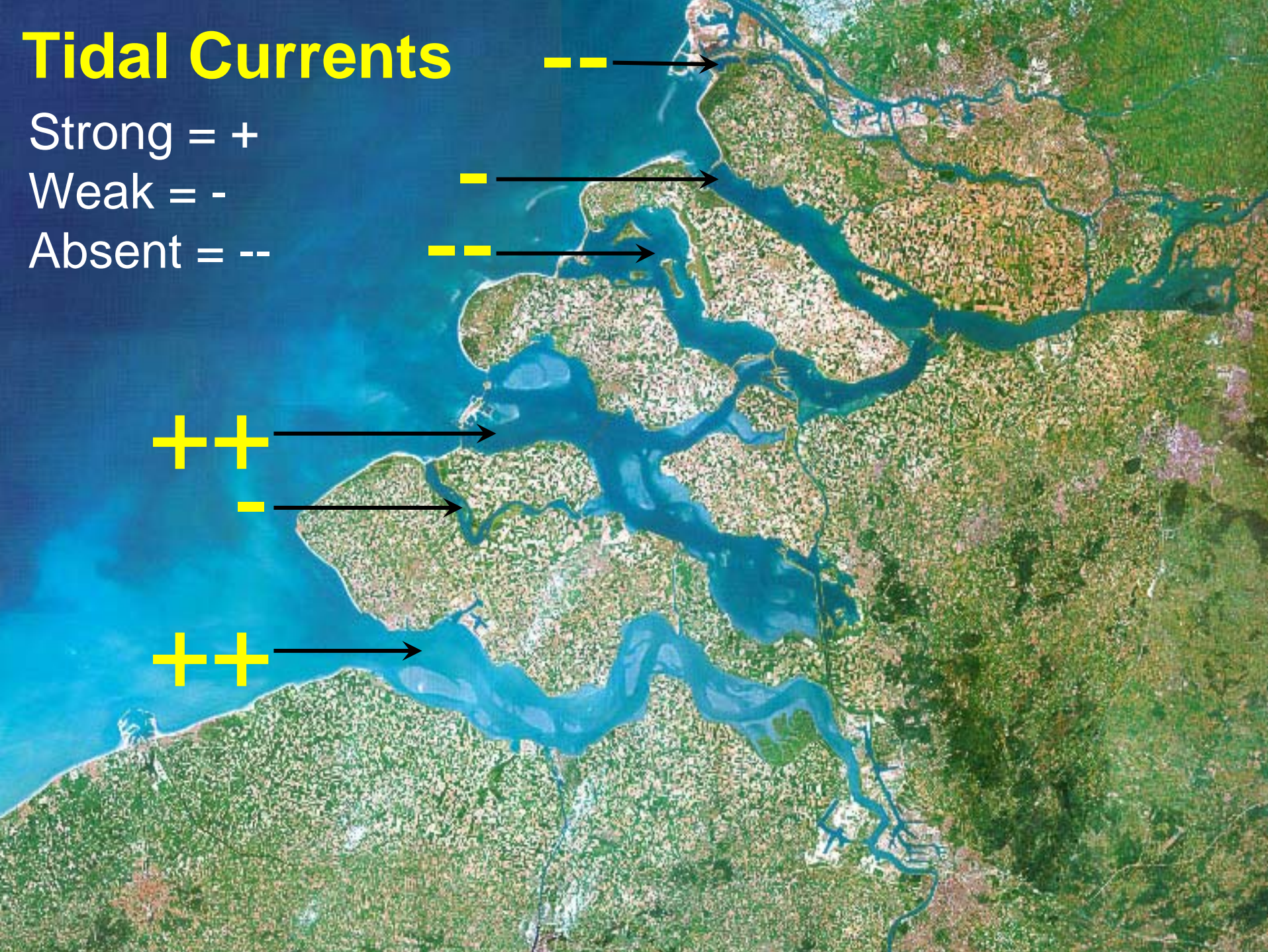
Delta area

Tidal Currents

Strong = +

Weak = -

Absent = --

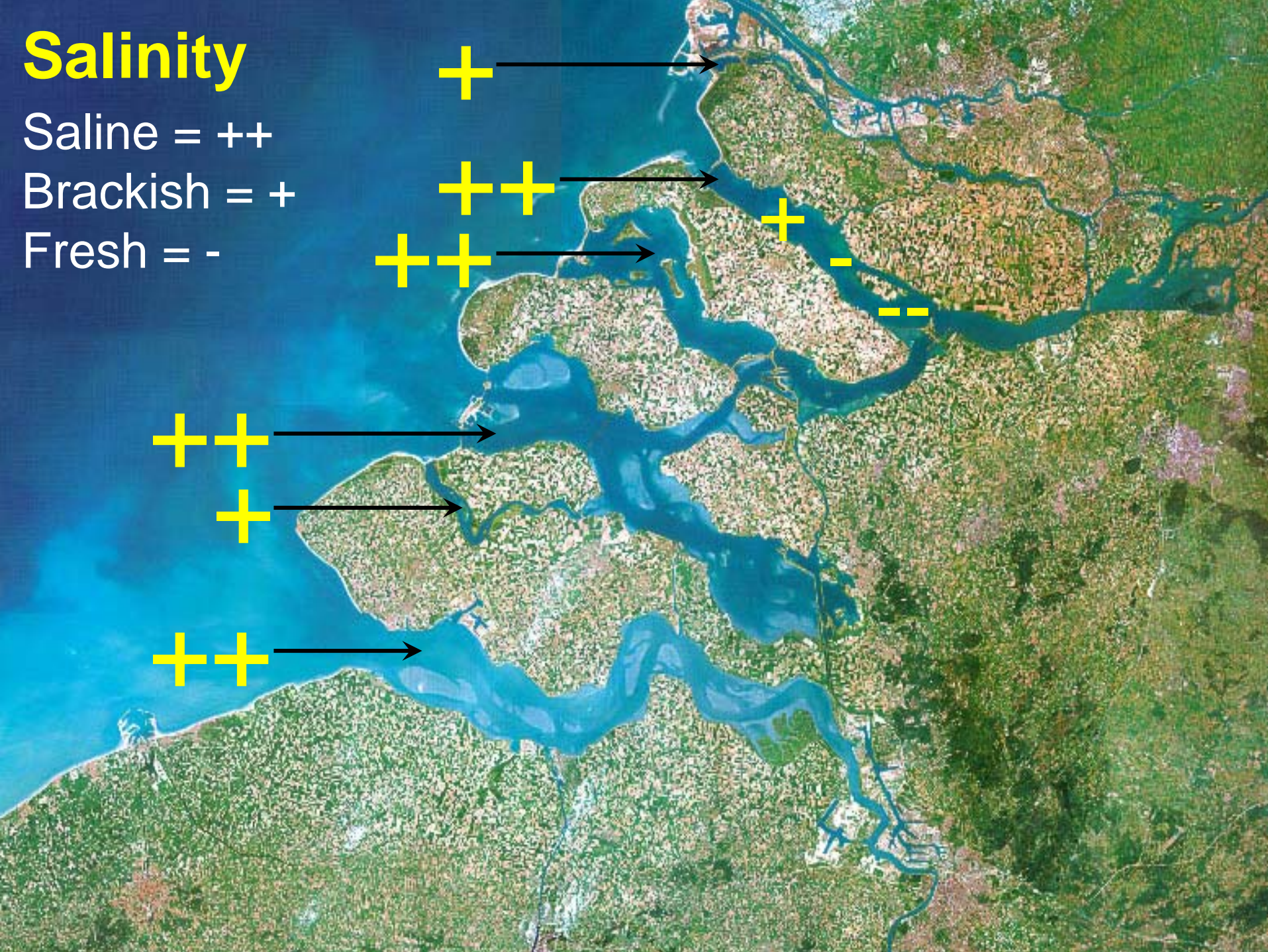


Salinity

Saline = ++

Brackish = +

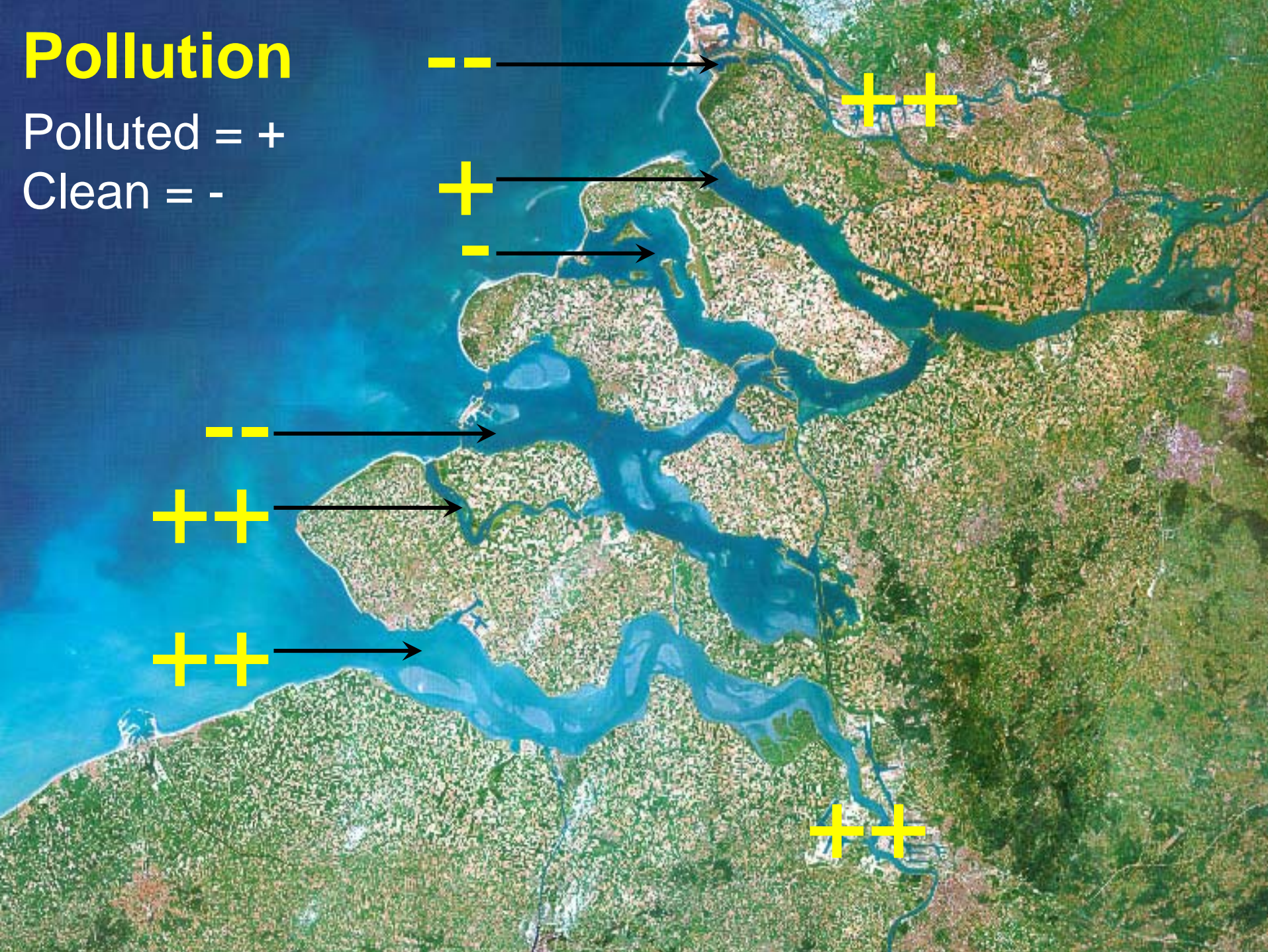
Fresh = -

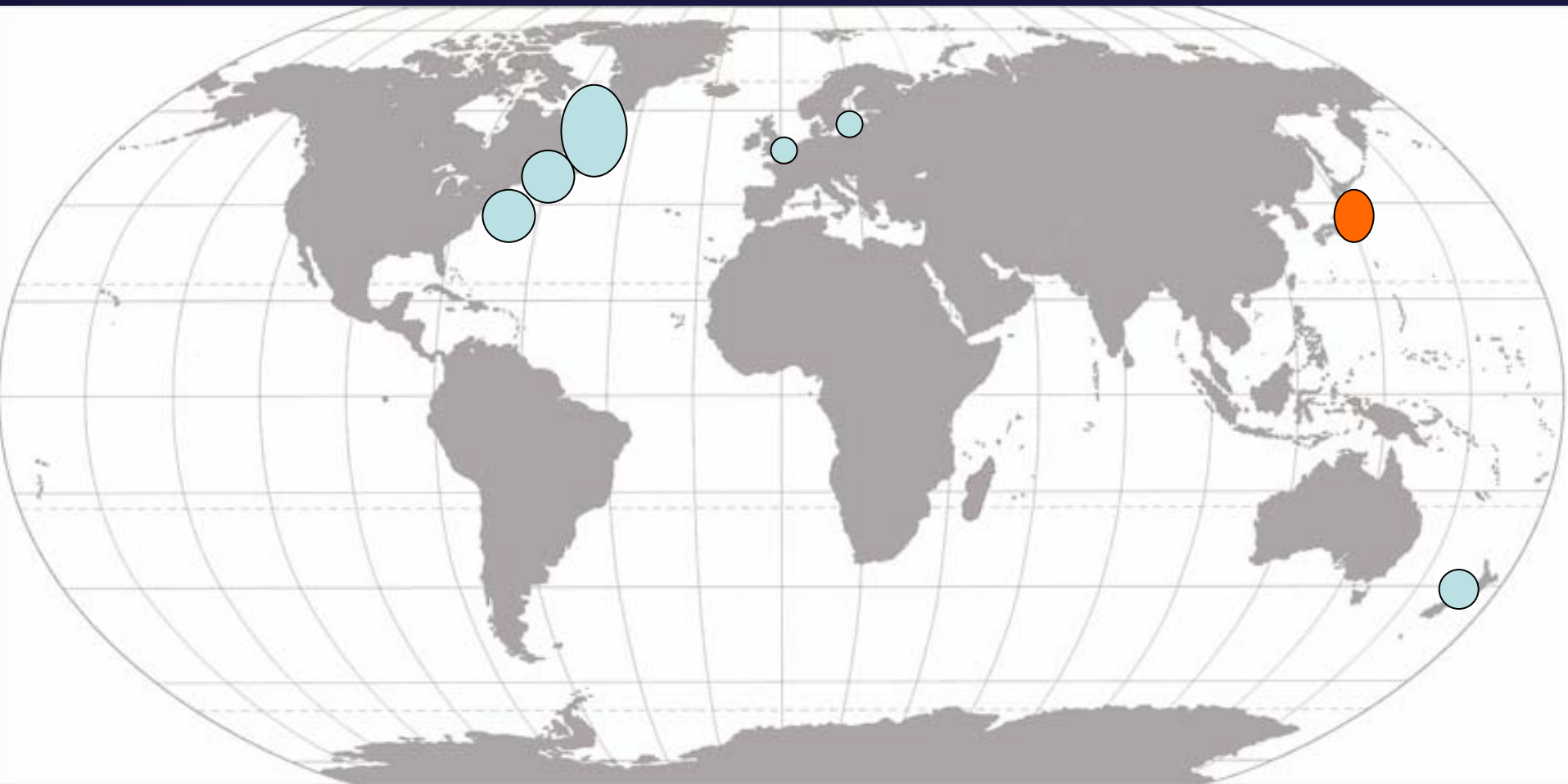


Pollution

Polluted = +

Clean = -





Goals of the SETL-project

A fouling community study that goes on indefinitely

Quick detection of marine invasive species

Concentrating on
ports, shell-fish farms and extreme environments

Comparable results with those of the Western Atlantic =

Copy the material & methods of
the Smithsonian Marine Invasions Laboratory of Greg Ruiz
(Smithsonian Environmental Research Center)

Material & methods

A fouling community study that goes on indefinitely
check every three months

Low cost
material cost only

Use volunteers
e.g. students

Coordinated by professionals:

From e.g.

National Museum of Natural History Naturalis, The Netherlands
Smithsonian, USA

Benefits

- The standardized fouling plates, materials, depths, monitoring forms, etc.
- The volunteer that does the monitoring does not have to be a taxonomist
- Volunteers/students do most of the work.
- Material costs are kept as low as possible = ~ 75,00 EUR / SETL-locality
- The project may go on indefinitely.

- To reduce costs for participating international organizations, The ANEMOON database can also be used to store the monitoring data from institutions in other countries
- Data input and output is arranged by an internet interface in connection with the ANEMOON foundation database.
- International cooperation.
- After e.g. each five years, the participating organizations may write a joined application for funding to make a more detailed analysis of all data collected.

Material SETL-plate



Brick with holes



Brick with holes



Broken brick



Washing line



Scissors



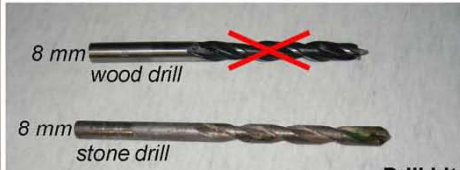
Cable ties



PLiers



Tape measure



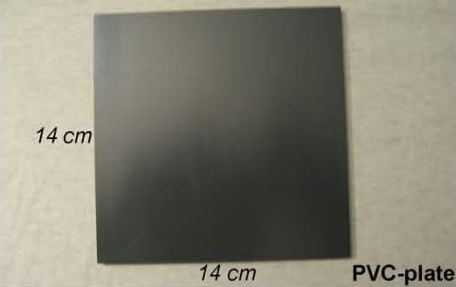
Drill bit



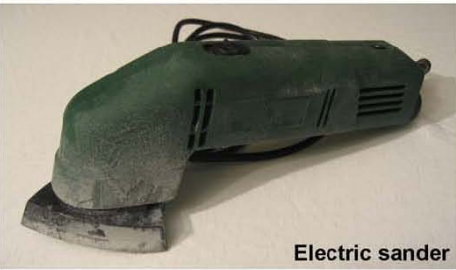
Sanding pad



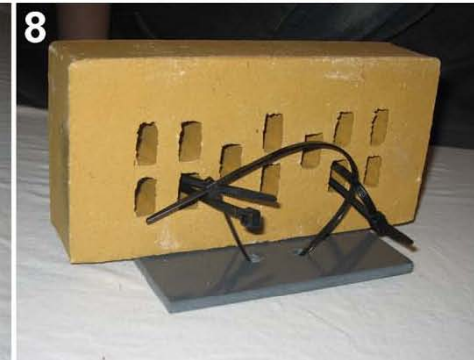
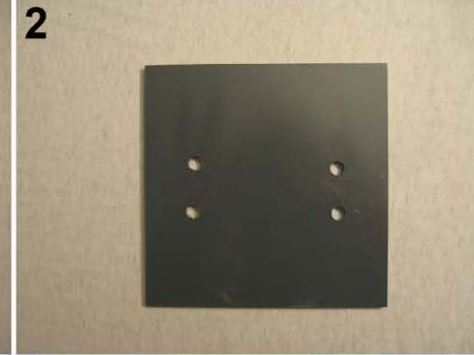
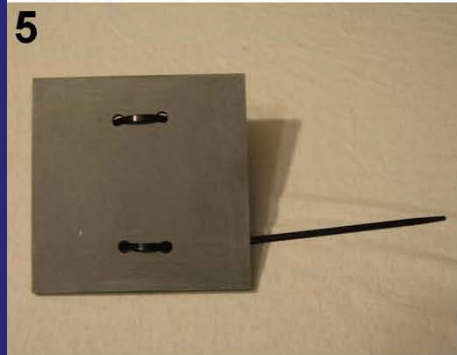
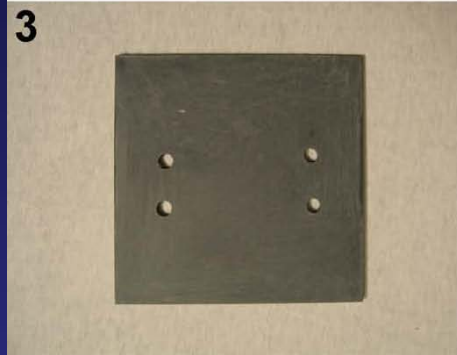
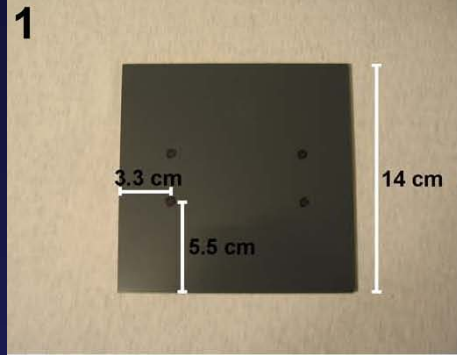
Drill

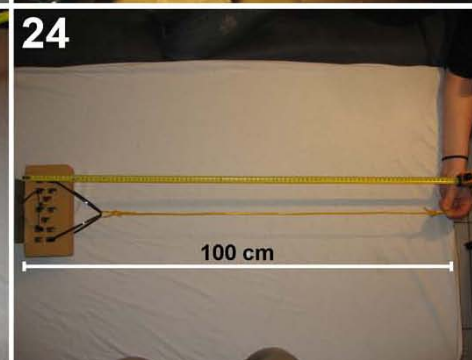
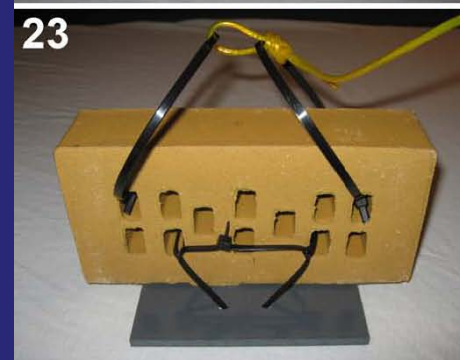
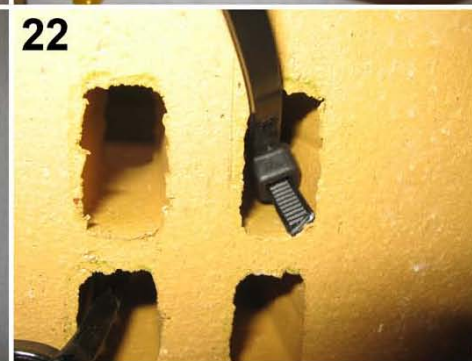
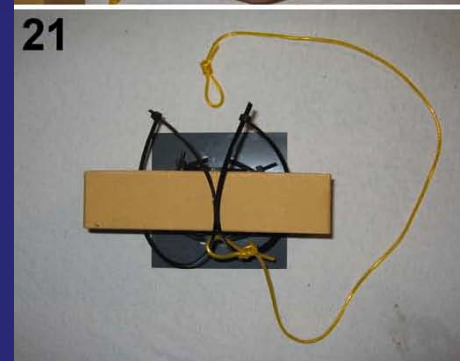
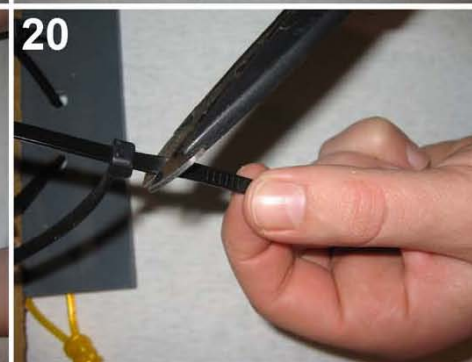
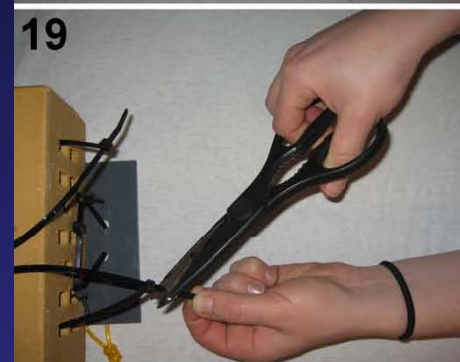


PVC-plate



Electric sander







MONITORING FORM

?	= We cannot recognize the species		(excluded in analysis)
O	= Absent	0	specimens / colonies
Z	= Rare	1-10	specimens / colonies
A	= Common	11-100	specimens / colonies
M	= Abundant	>100	specimens / colonies

Latin name:	Dutch name:	?	O	Z	A	M
<i>Aplidium glabrum</i>	Glanzende bolzakpijp	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Didemnum sp.</i>	Druipzakpijp	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Botryllus schlosseri</i>	Sterretje	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Styela clava</i>	Knotszakpijp	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>















Involved institutes

ANEMOON Foundation

SEA Foundation

Smithsonian Marine Invasions Laboratory of Greg Ruiz
(Smithsonian Environmental Research Center), USA

Massachusetts Bays Program, USA

National Museum of Natural History, Naturalis, The Netherlands

Institute for Environmental Sciences, Leiden University