



Aqua Case Musselculture area- Chalastra Thessaloniki

Exercise

Find the appropriate distance between mussel socks based on the mussel condition index

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The subject

- The farmers of Chalastra hang the suspended socks densely, leaving < 40 cm between them.
- This operation exhausts the carrying capacity of the mussel farm area producing underfed mussels.
- Mussel **quality declines**
- The **future sustainability** of the mussel activity in Chalastra is questionable.

The challenge

- To find the most appropriate distance between socks for the Chalastra environment.
- To help farmers understand why they have to change their practices.

Questions to answer:

- In a mussel culture area, is the expression "more effort, more production" true?
- How do we find the best distance between socks (e.g. 50, 60 or 90 cm)?
- Which simple condition index is representative?

Learning goals

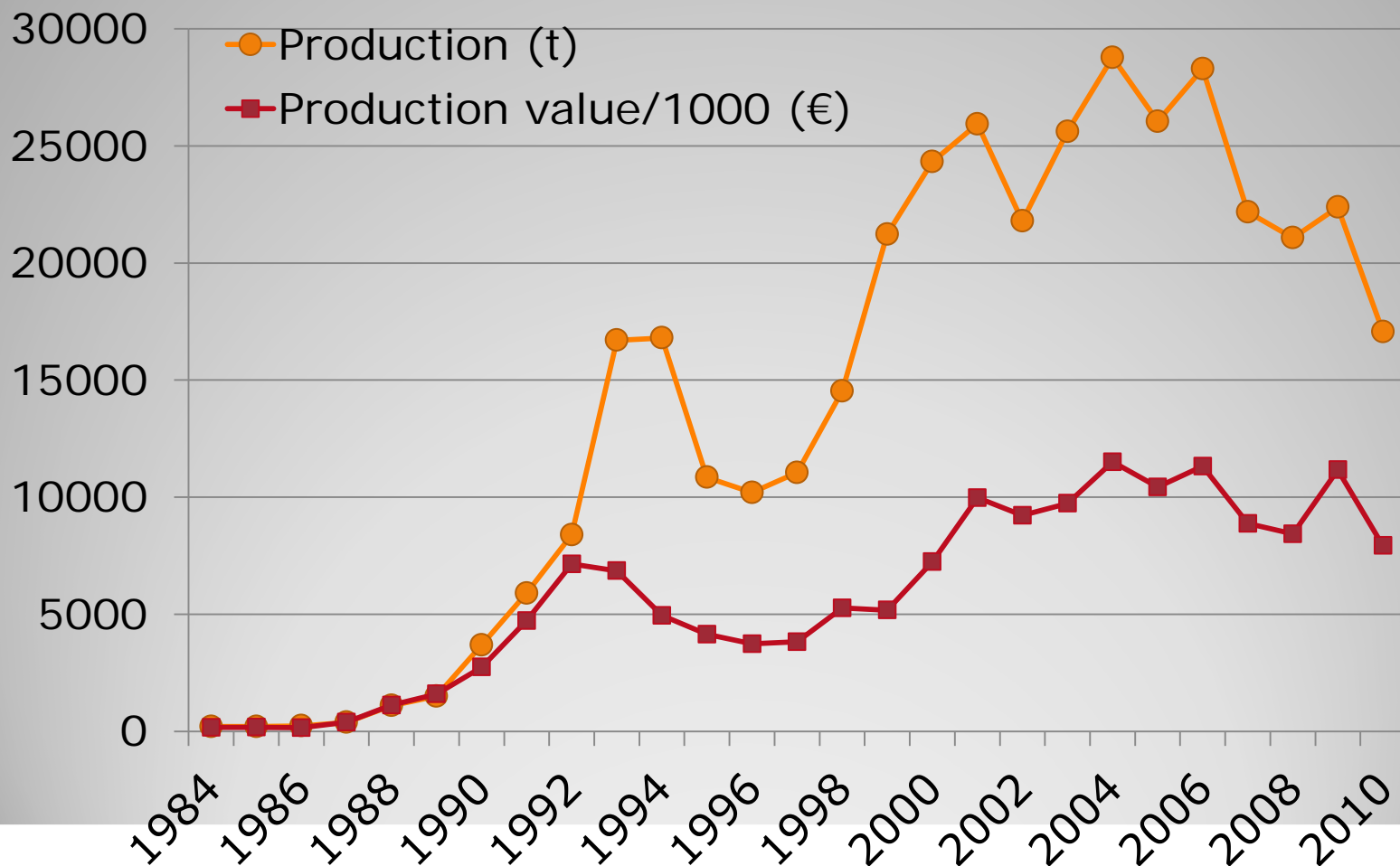
- To understand the connection between **production quality** and **farming practices**.
- To identify **mussel quality** in terms of condition index, using **different distances** between **socks**.
- To understand the **temporal variability** of **the mussel** condition index for production quality.
- To estimate the **benefits of different practices on** yields and production costs.

In addition to the case the following information is supplied

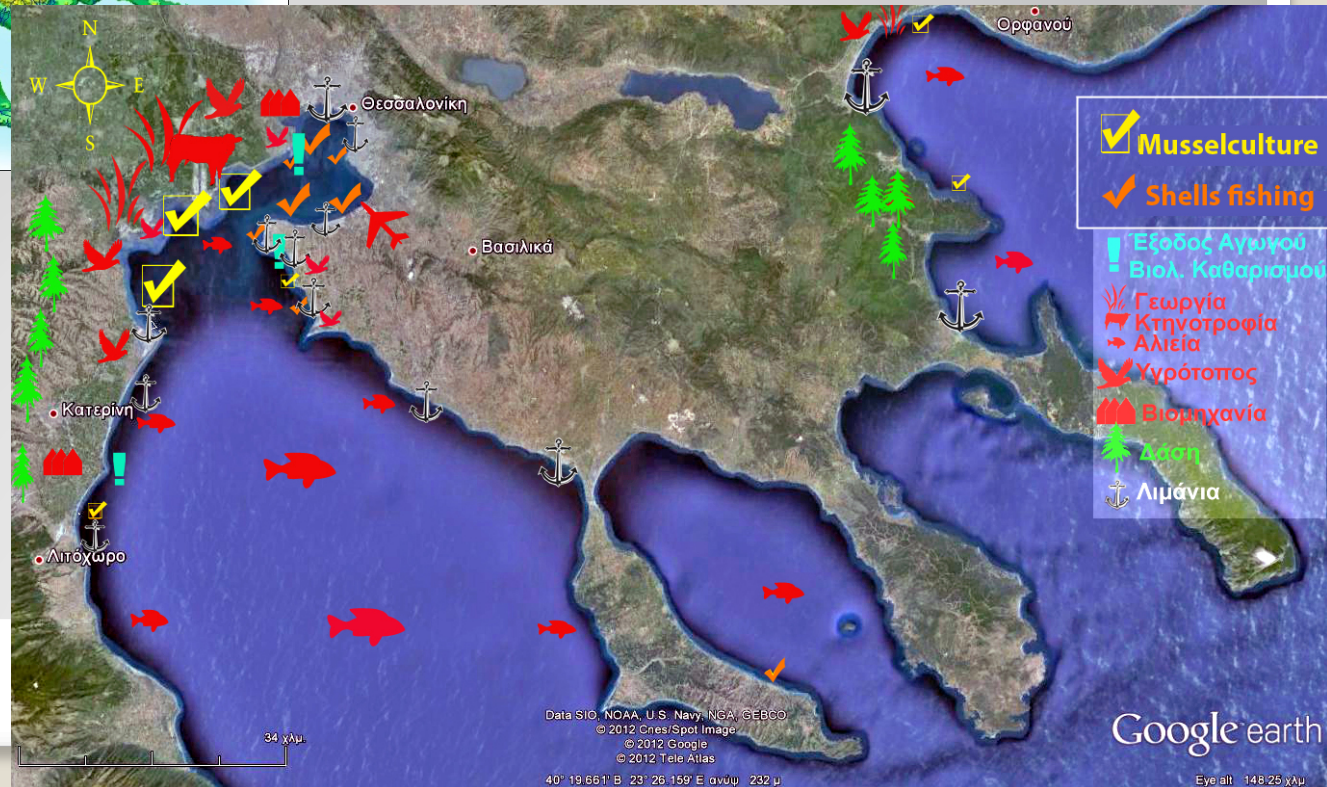
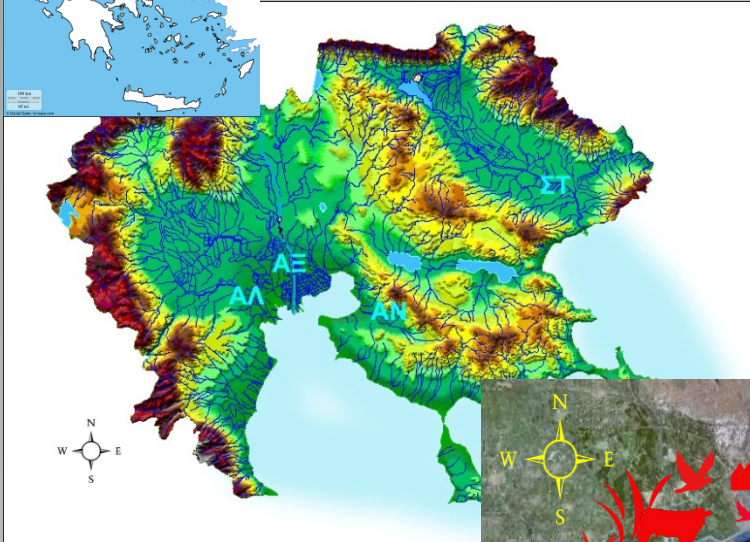
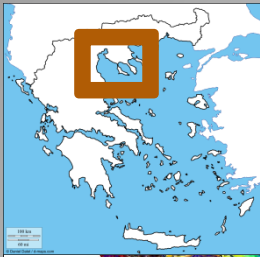
- GRAPH: Temporal variability of Hellenic mussel production and its benefit
- MAP: Water drainage area and human activities
- MAP: The extent of the mussel culture activity in Chalastra
- MAP: The hydrodynamism of the area
- MAP: Levels of chl-*a* in the mussel culture area of Chalastra

The Hellenic mussel production and its benefit

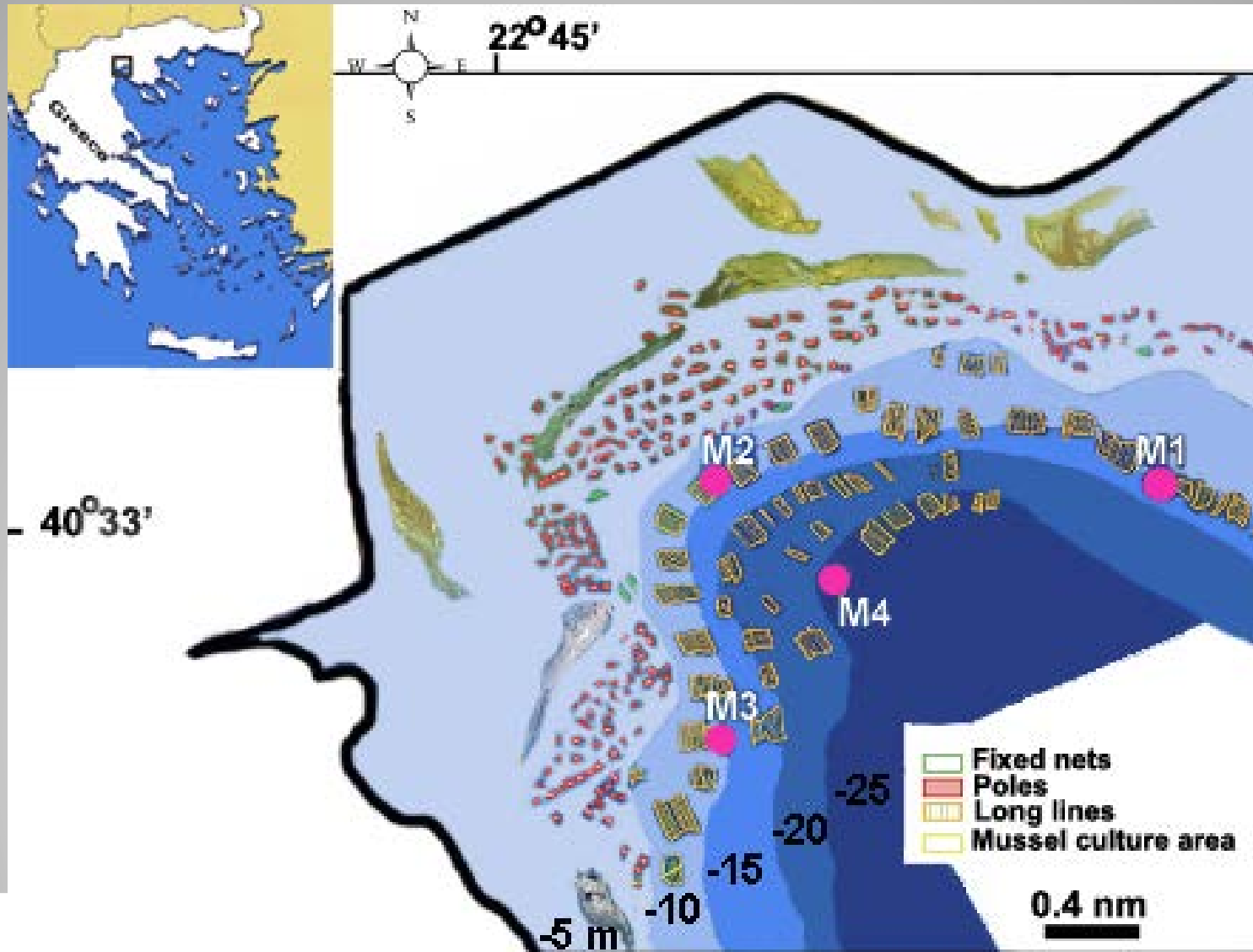
(Source: Eurostat)



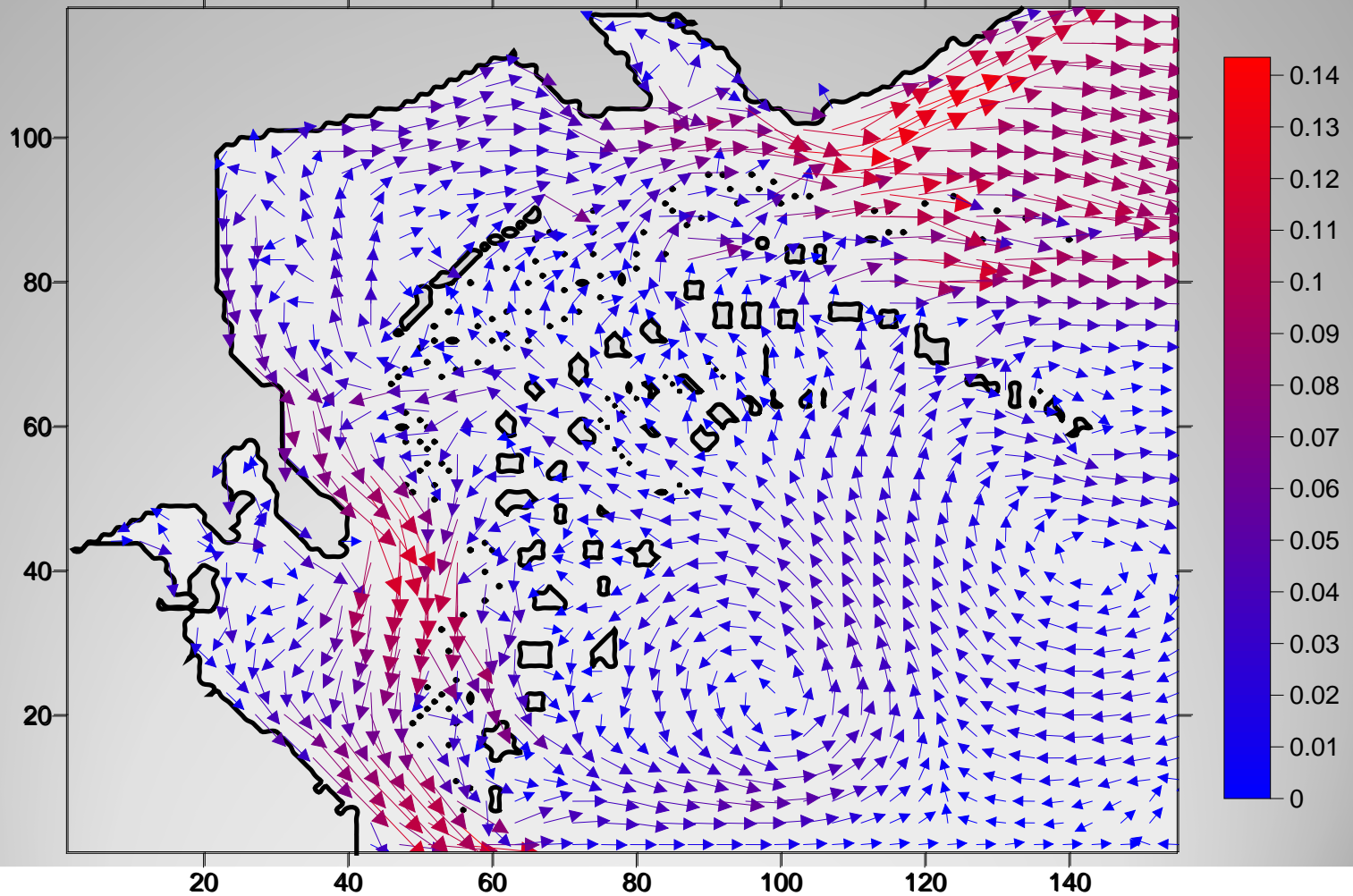
The water drainage area and the human activities



The size of the mussel culture activity in Chalastra

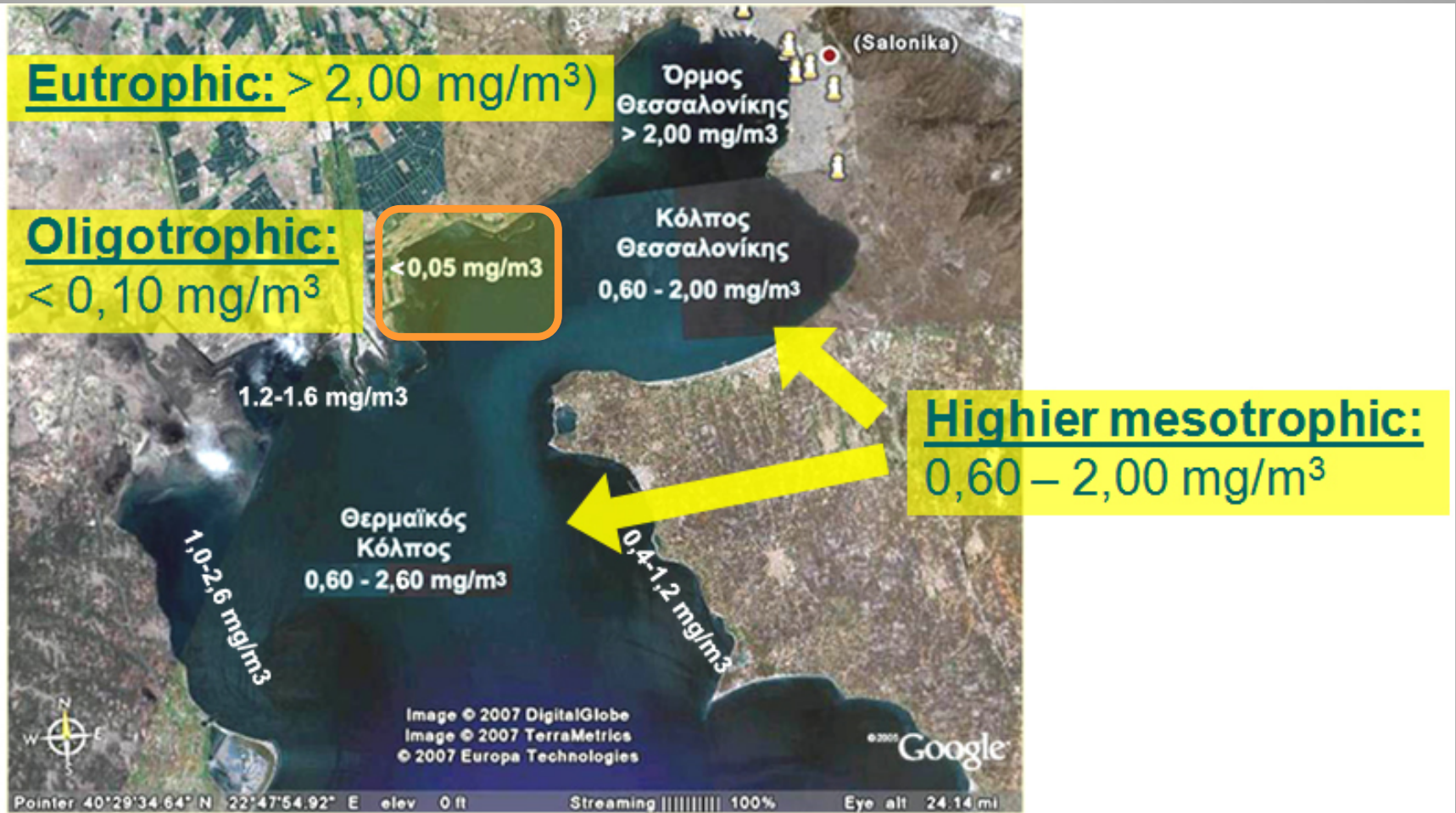


The currents in mussel culture area of Chalasta for NW prevailing winds



ATEITH, 2007

Levels of chl-a in the musselculture area of Chalastra



SoHelMe, 2005 with modification

Notes for teachers

- Current status of the mussel culture activity
- Current local practices vs. legislation
- The authorities plans
- Sociology of the farmers
- Additional Sources/References

