

Erosione costiera e cambiamento climatico

Capire il passato > guardare al futuro

Conferenza Finale del Progetto MAREGOT

Martedì 26 e Venerdì 29 Maggio 2020

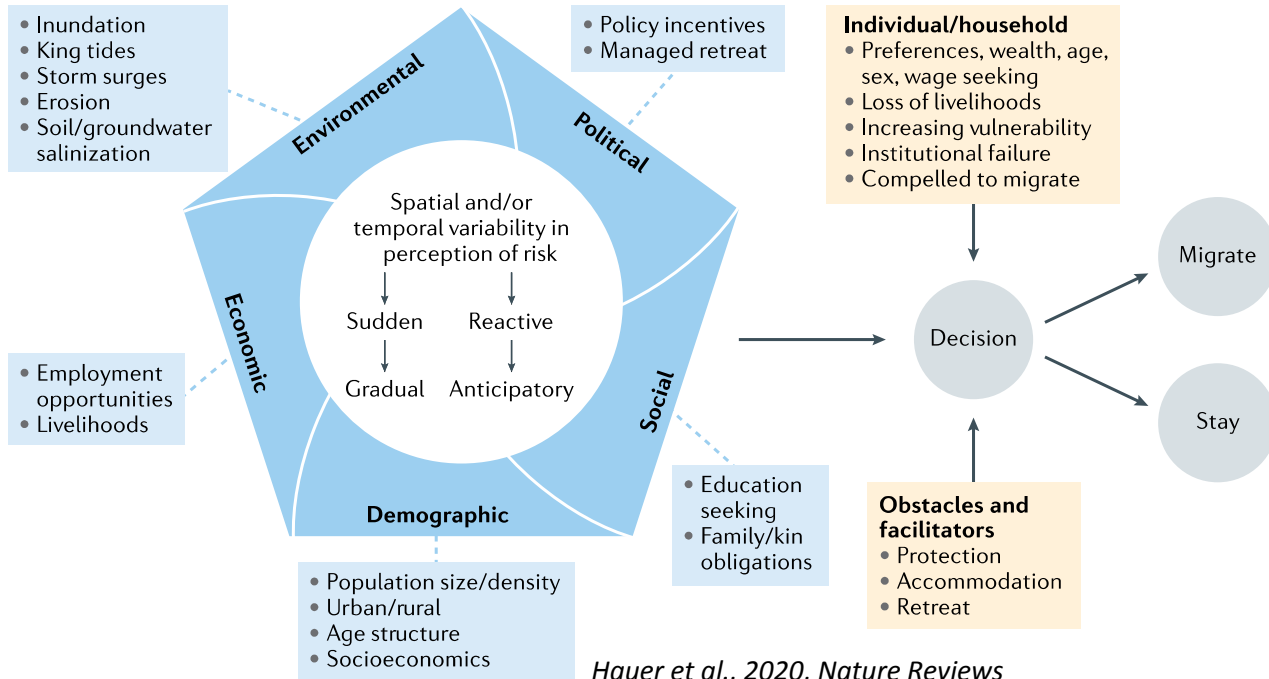
125'000 anni di variabilità climatica lungo le coste del Mediterraneo.
Problemi aperti e prospettive nel contesto del cambiamento climatico attuale

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Cambiamento climatico e aree costiere

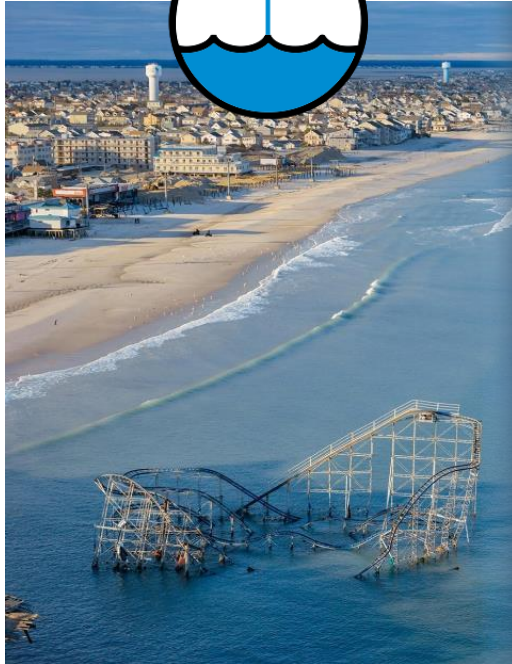


Hauer et al., 2020, Nature Reviews



Le domande ambientali chiave per interpretare gli impatti dei cambiamenti climatici sulla costa

How much?

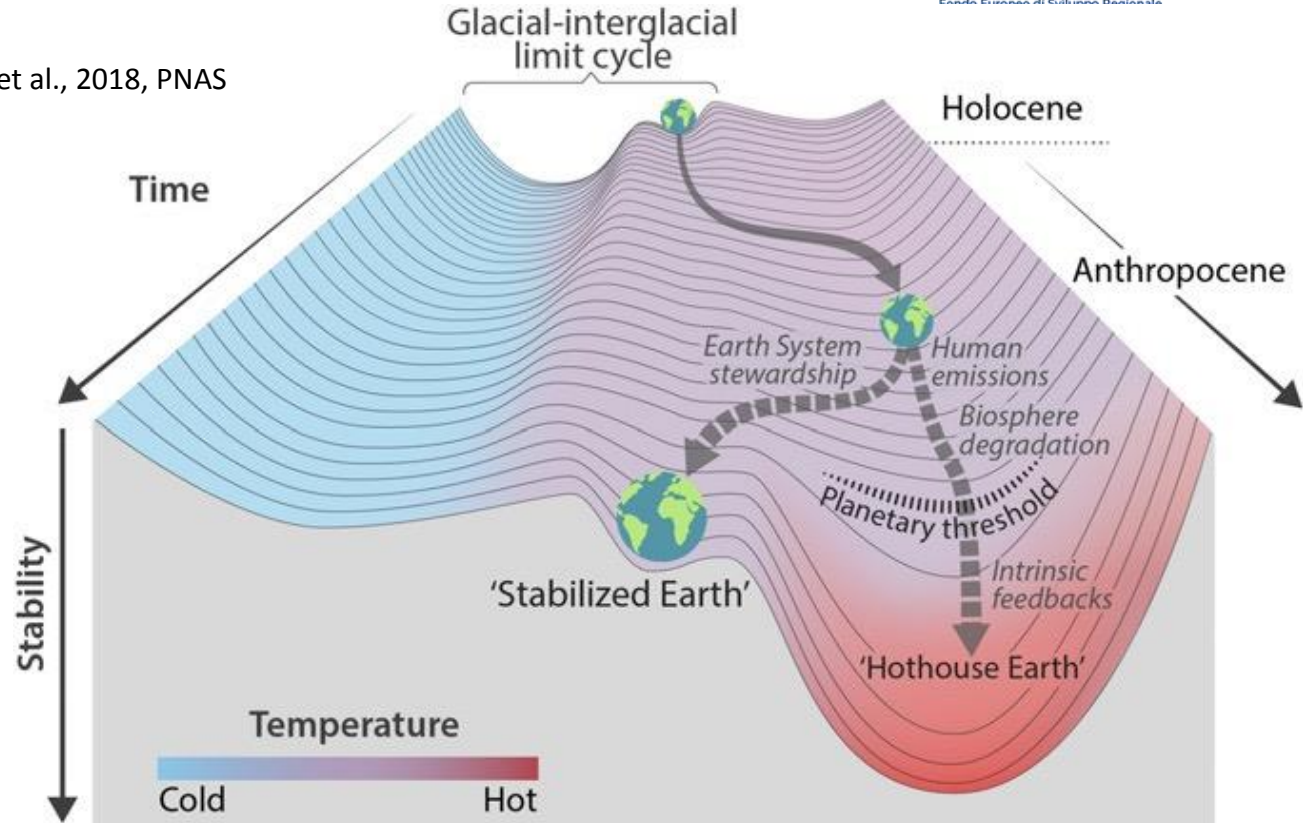


How fast?

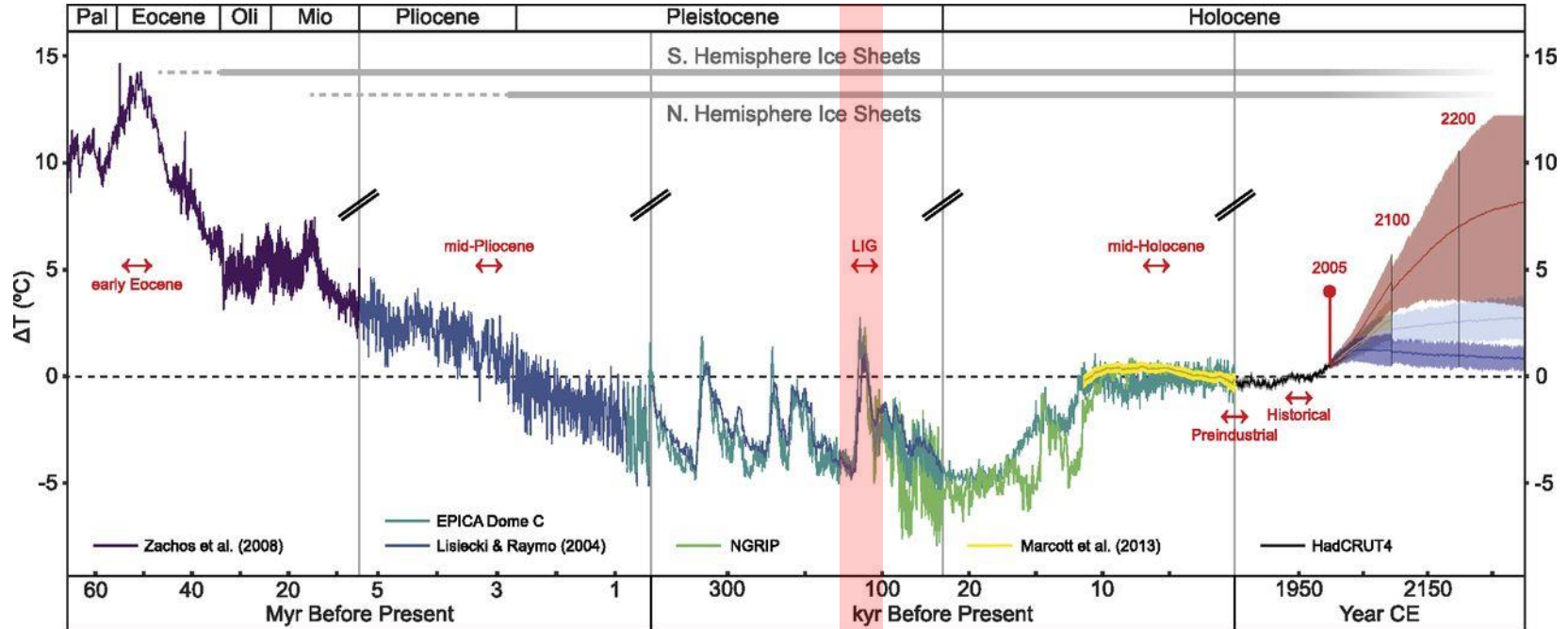


Rovere, 2020: Sea level and extreme waves in a past warmer world. ERC Warmcoast

Steffen et al., 2018, PNAS



Burke et al., 2018 PNAS





→ (ca. +8.0 m)

Arctic atmospheric temperature
+4-8°C



Global atmospheric temperature
+1°C

Atmospheric CO₂
287 ppm

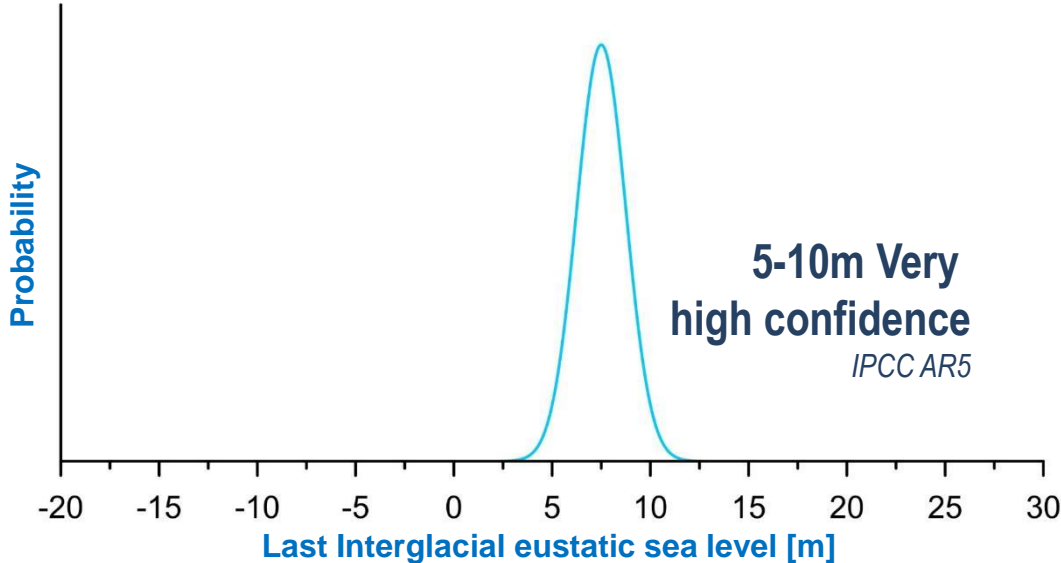
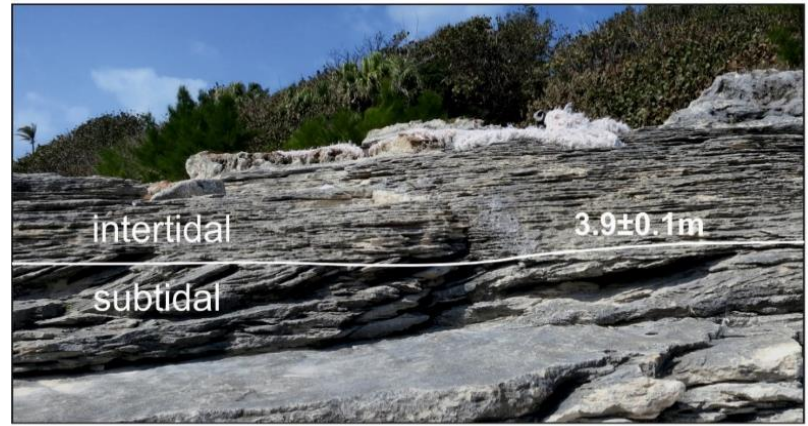
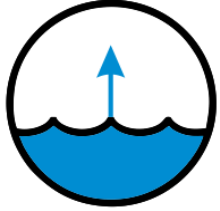
Oggi 416 ppm

Antarctic atmospheric temperature
+4-5°C

Linee di riva dell'ultimo interglaciale

Rovere, 2020: Sea level and extreme waves in a past warmer world. ERC Warmcoast

How much?



Abbiamo attualmente un quadro piuttosto chiaro di quali siano stati i picchi del livello del mare nell'ultimo interglaciale in molte zone del mondo

How fast?

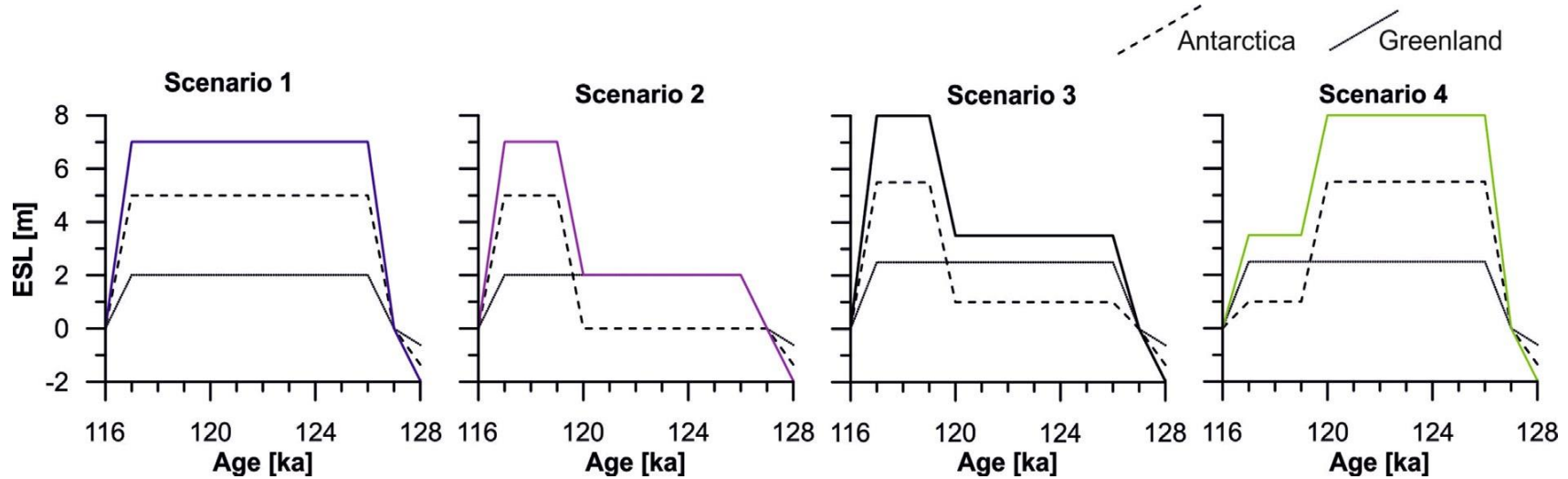


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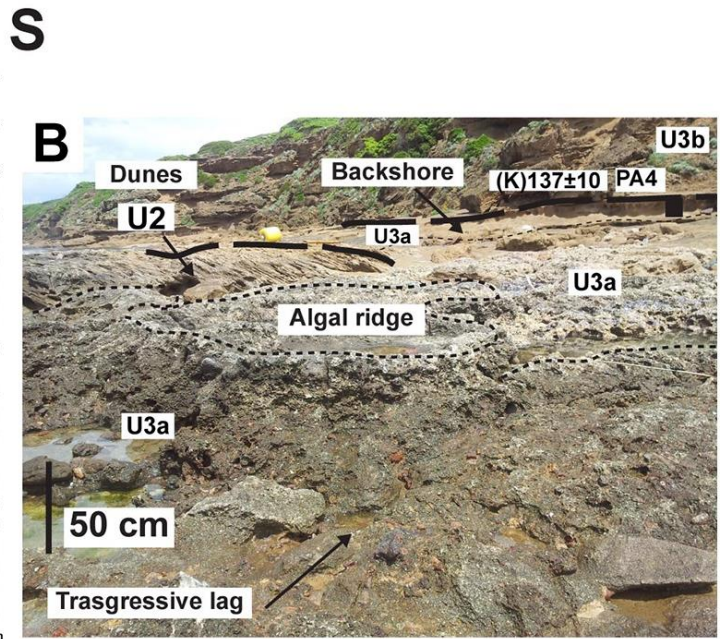
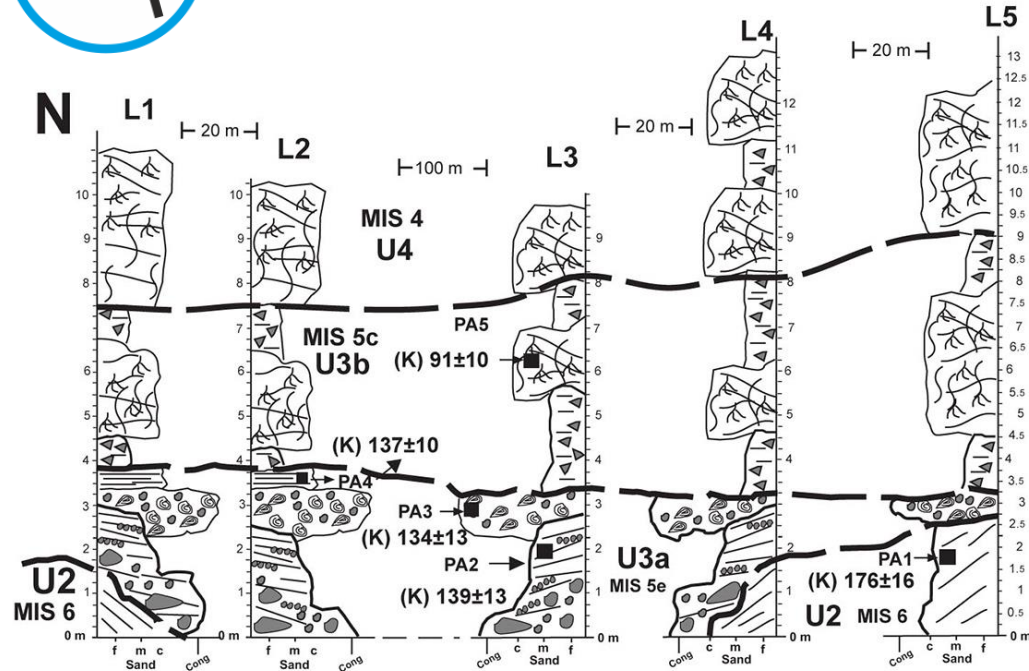
Fonds européen de développement régional
Fondo Europeo di Sviluppo Regionale



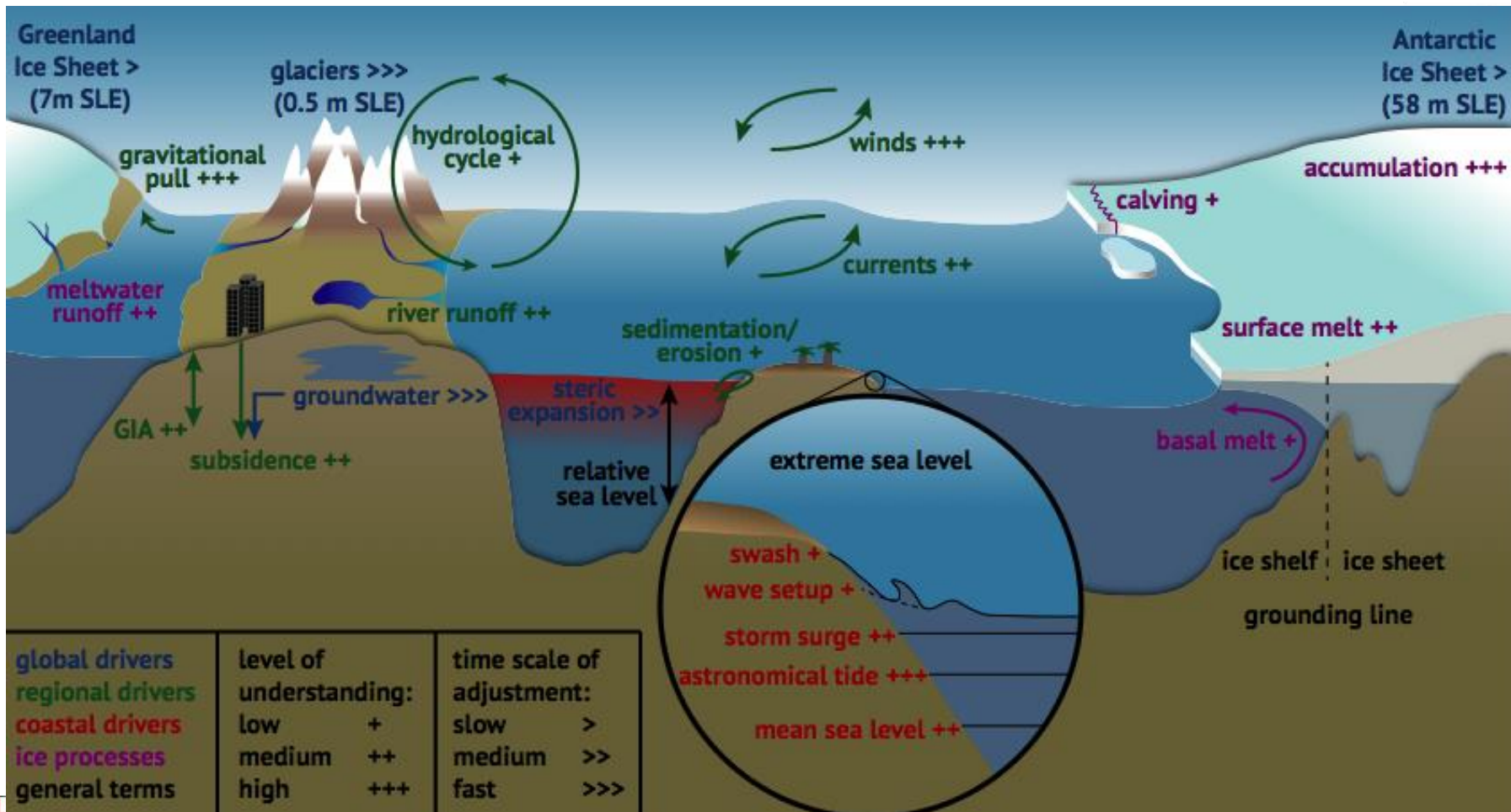
Stocchi, Vacchi et al., 2018, Quat. Sc. Rev.



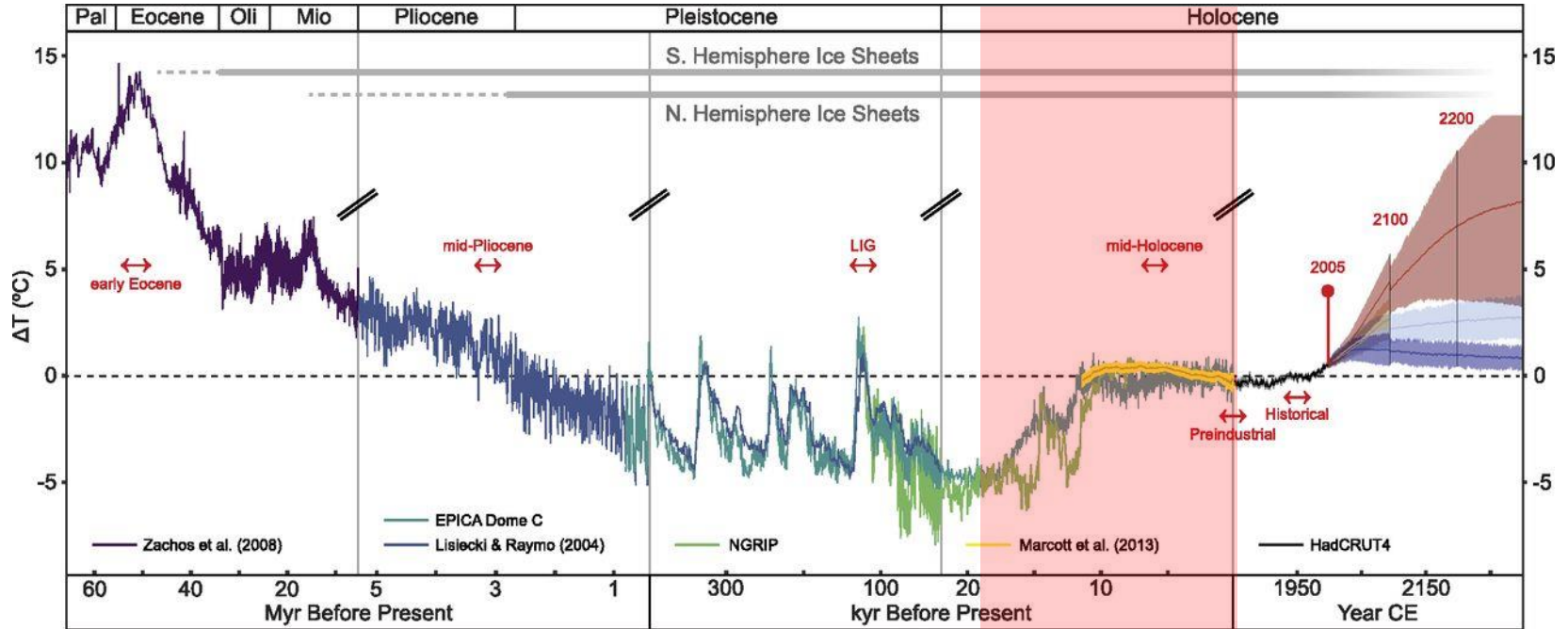
How fast?

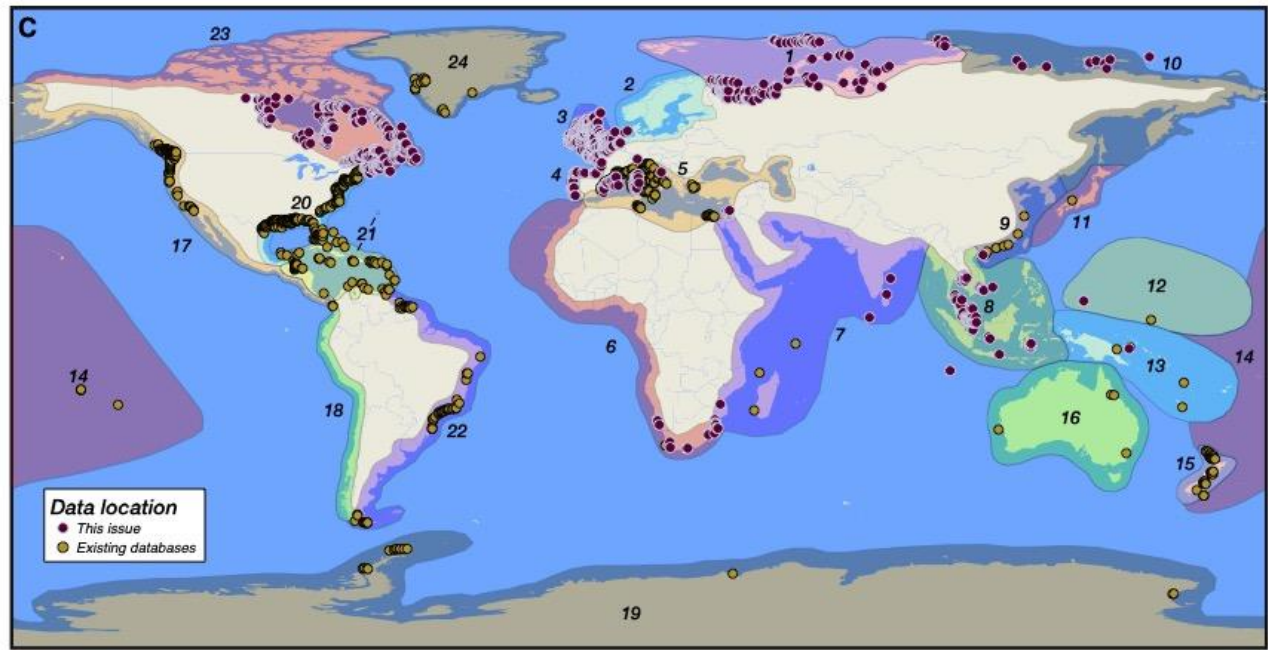
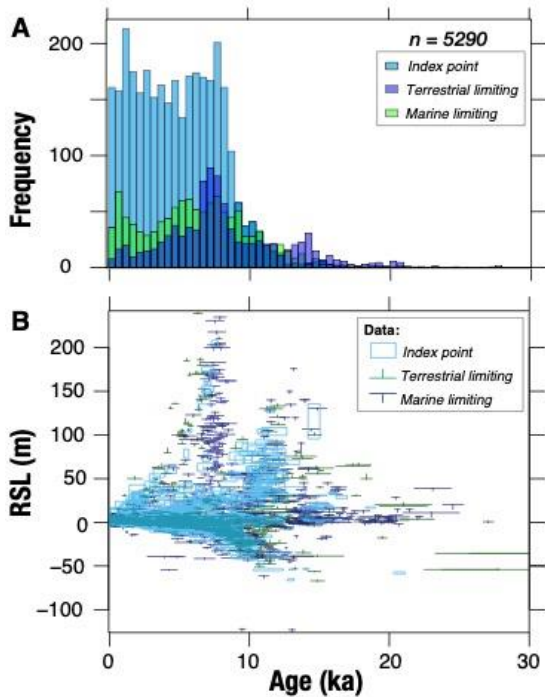


Sechi et al., 2020 Sed.Geo



Burke et al., 2018 PNAS





N.S. Khan, B.P. Horton, S.E. Engelhart, A. Rovere, M. Vacchi, E. Ashe, T.E. Törnqvist, A. Dutton, M.P. Hijma, I. Shennan
Inception of a global atlas of sea levels since the Last Glacial Maximum, *Quat. Sci. Rev.* 2019

Holsea project: INQUA CMP

Un'ampia gamma di indicatori paleoambientali che possono darci informazioni sull'evoluzione del livello del mare



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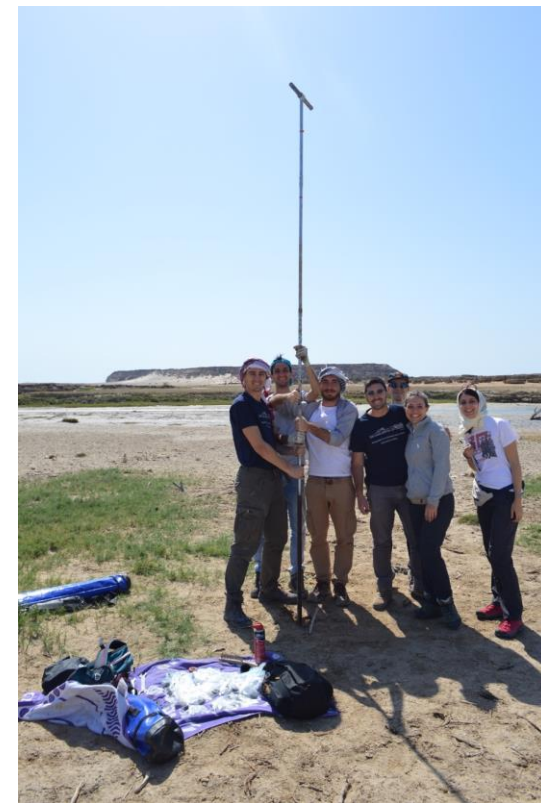


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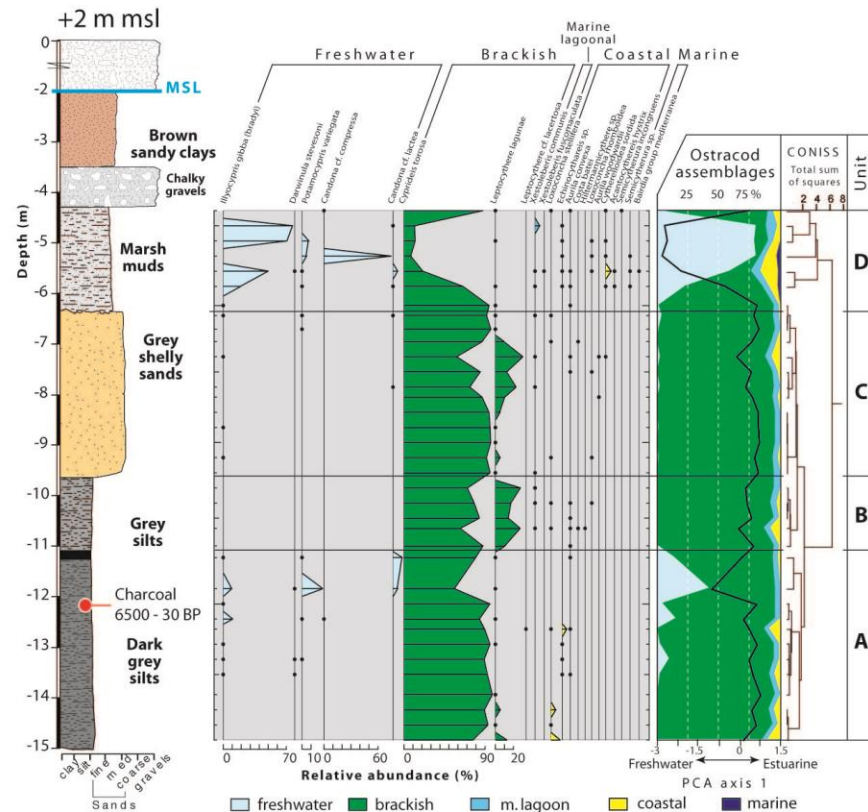
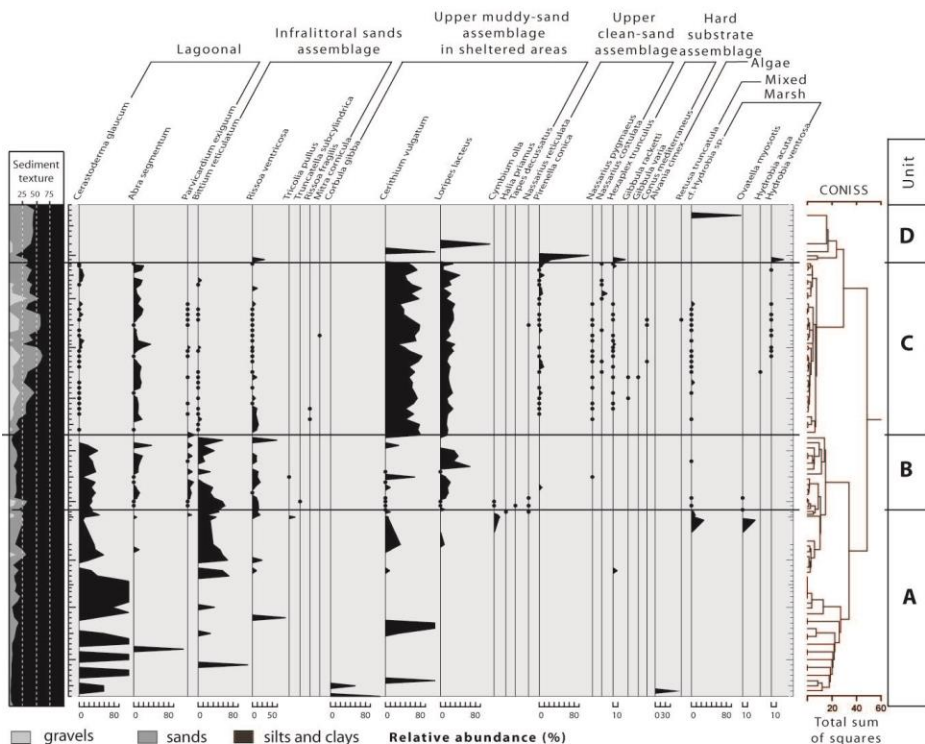


La cooperazione al cuore del Mediterraneo

Ricostruzioni dei paleo-ambienti costieri utilizzando associazioni fossili di micro e macro fauna (e pollini se possibile)



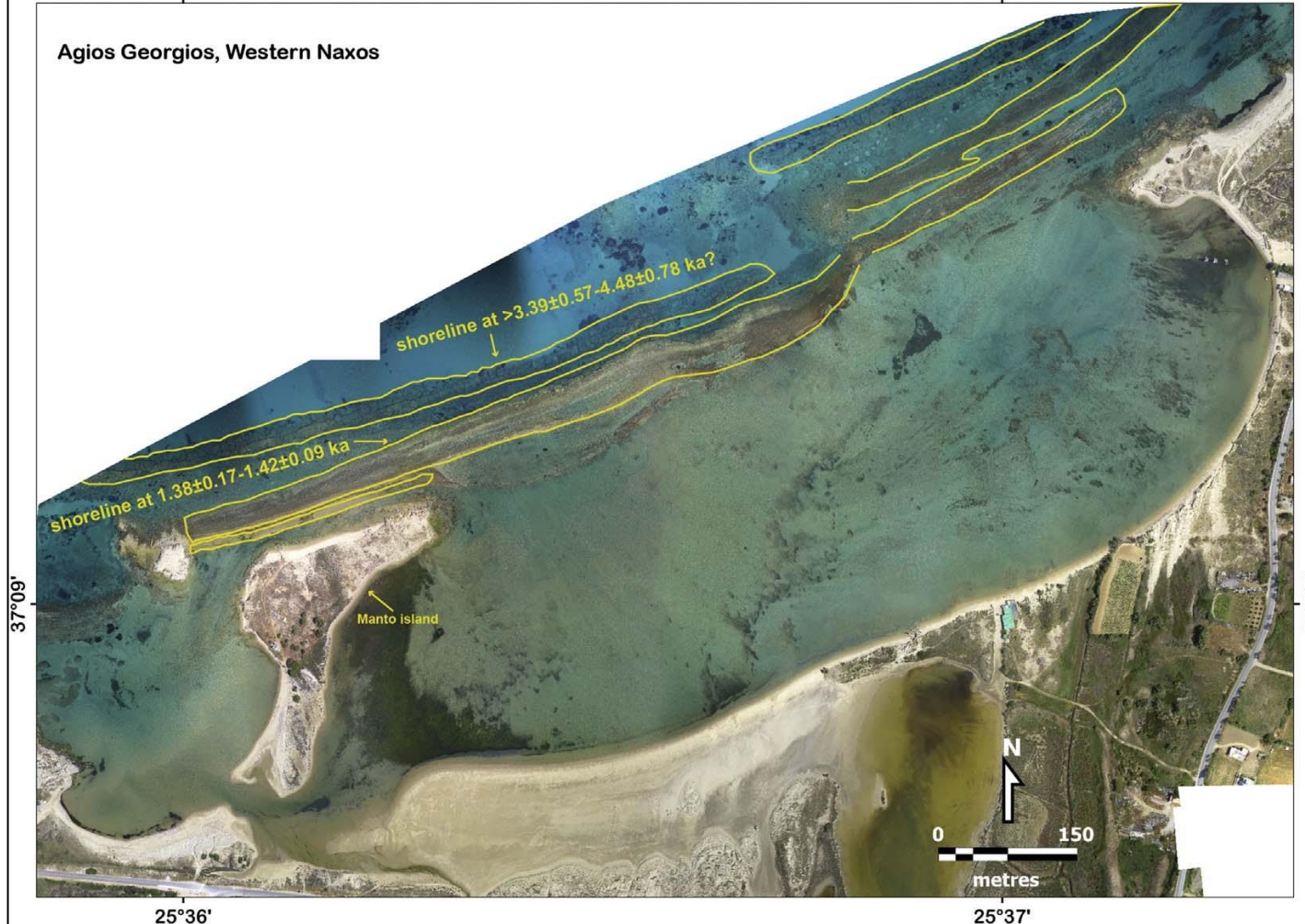
Vacchi et al., 2016 ESR



25°36'

25°37'

Agios Georgios, Western Naxos



rreg



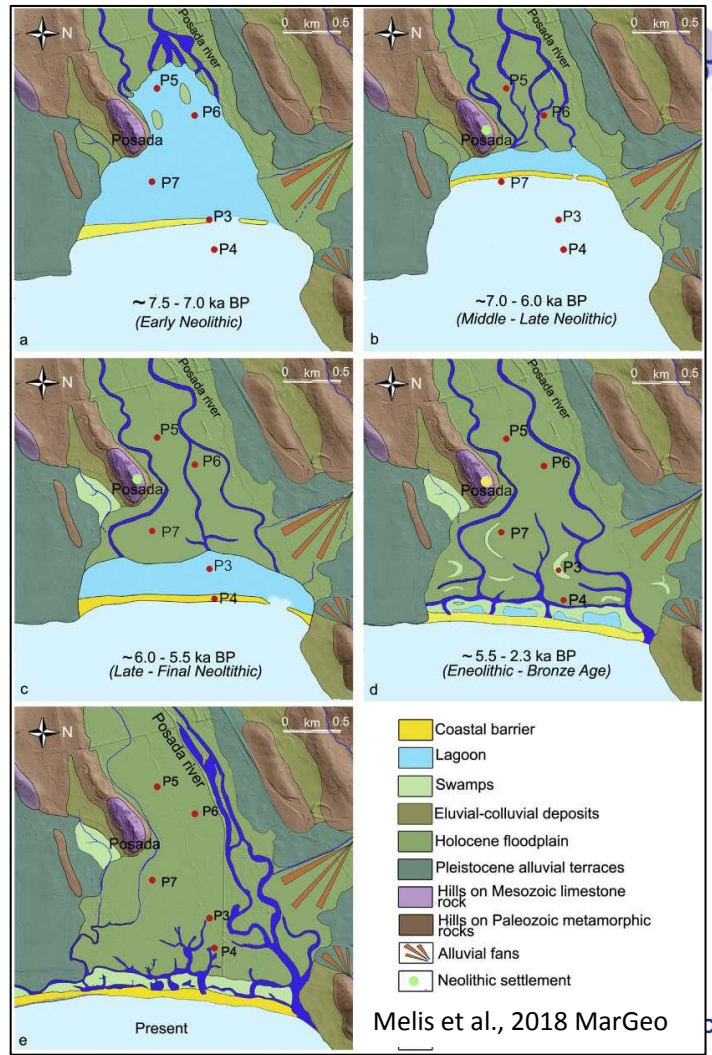
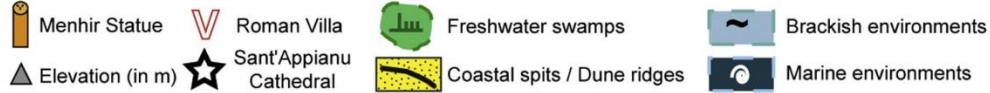
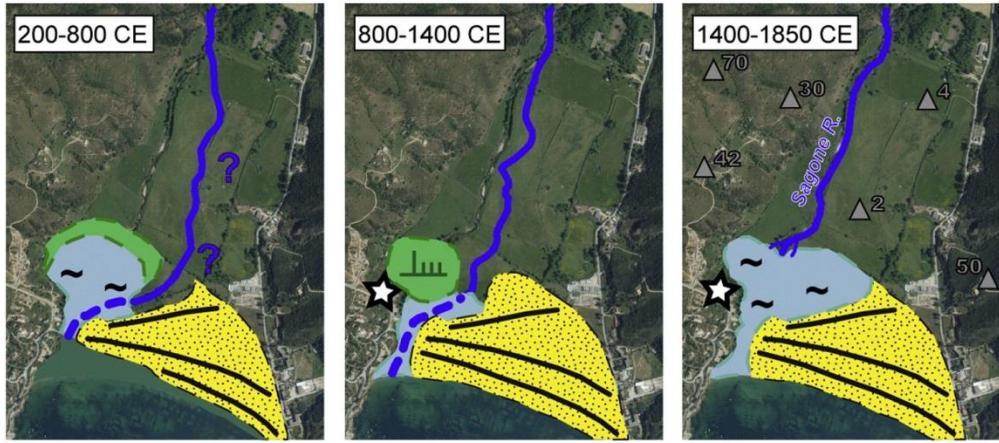
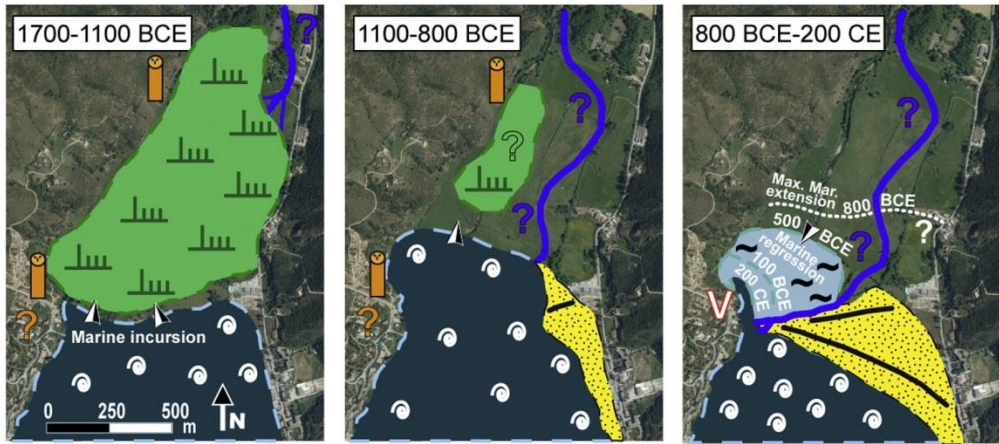
MAREGOT

O-IT FR-MARITIME
sviluppo regionale
Polo Regionale

Modificazioni del
paleo-paesaggio
costiero
legate alla risalita
del livello del mare

Karkani et al., 2017 Mar.Geo

one al cuore del Mediterraneo



1st

85 scientists from 20 countries of the Network of Mediterranean Experts on Climate and Environmental Change (MedECC) present:

SCIENTIFIC ASSESSMENT REPORT ABOUT CLIMATE AND ENVIRONMENTAL CHANGE IN THE MEDITERRANEAN

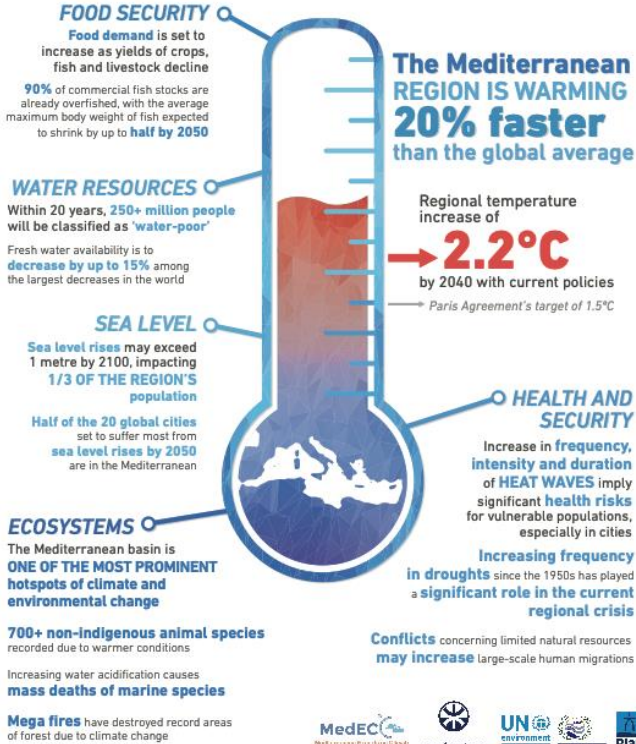


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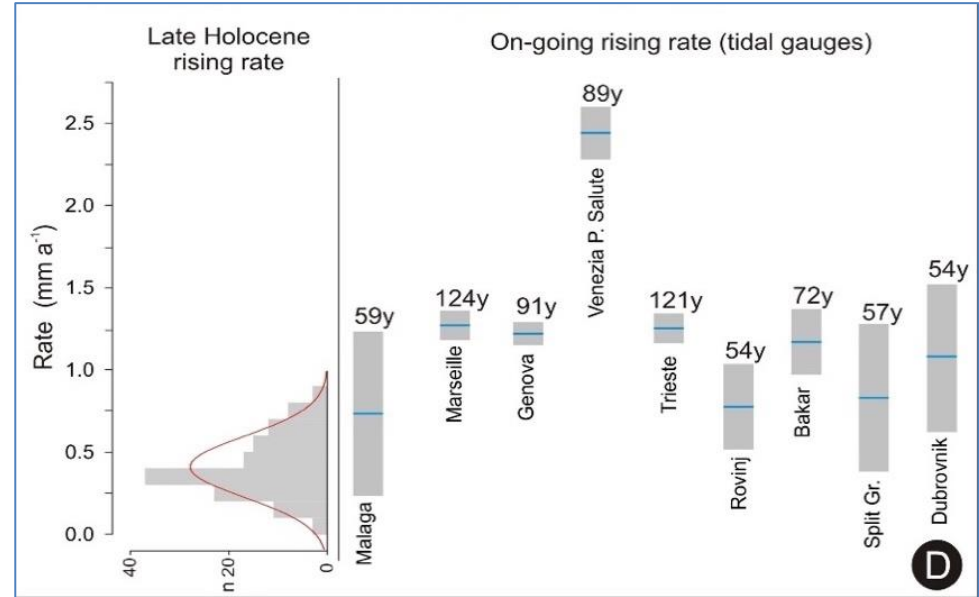


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Previsioni future?



Vacchi et al., 2016 ESR

Grazie per l'attenzione!
E grazie a tutti i collaboratori



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Alessio Rovere



Matthieu Ghilardi



Nick Marriner



Bob Kopp
Kirsten Joyse

