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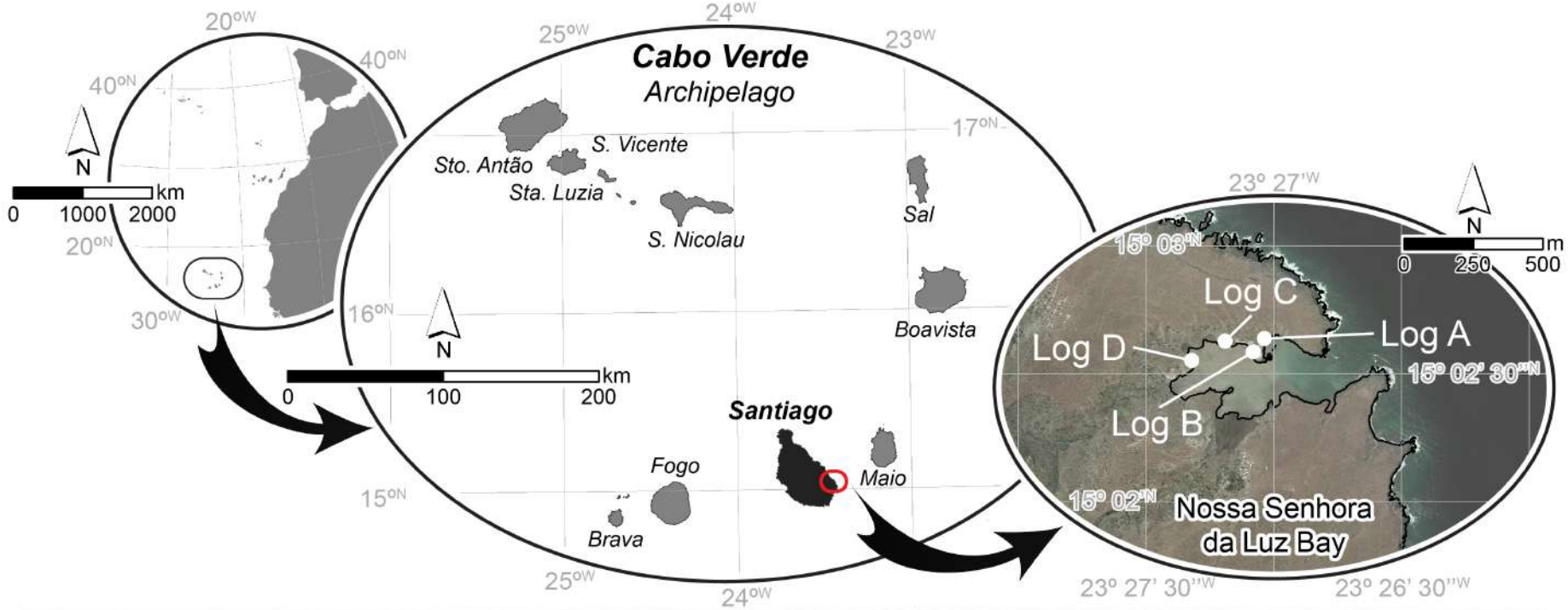
EGU General Online Assembly 2020

Last Interglacial fossiliferous sequences from Santiago Island (Cabo Verde):

palaeoecology of Nossa Senhora da Luz Bay, a rare example of a protected bay in volcanic oceanic islands

C.S. Melo, J. Madeira, R.S. Ramalho, A.C. Rebelo, M. Rasser, E. González, A. Uchman, P. Madeira, E. Rolán , L. Silva, C.M. da Silva, D. Ryan, A. Rovere, M. Cachão, and S.P. Ávila

2020


Cabo Verde
Archipelago
S. Vicente
Sto. Antão
Sta. Luzia
S. Nicolau
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Santiago
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20°N
30°W
17°N
16°N
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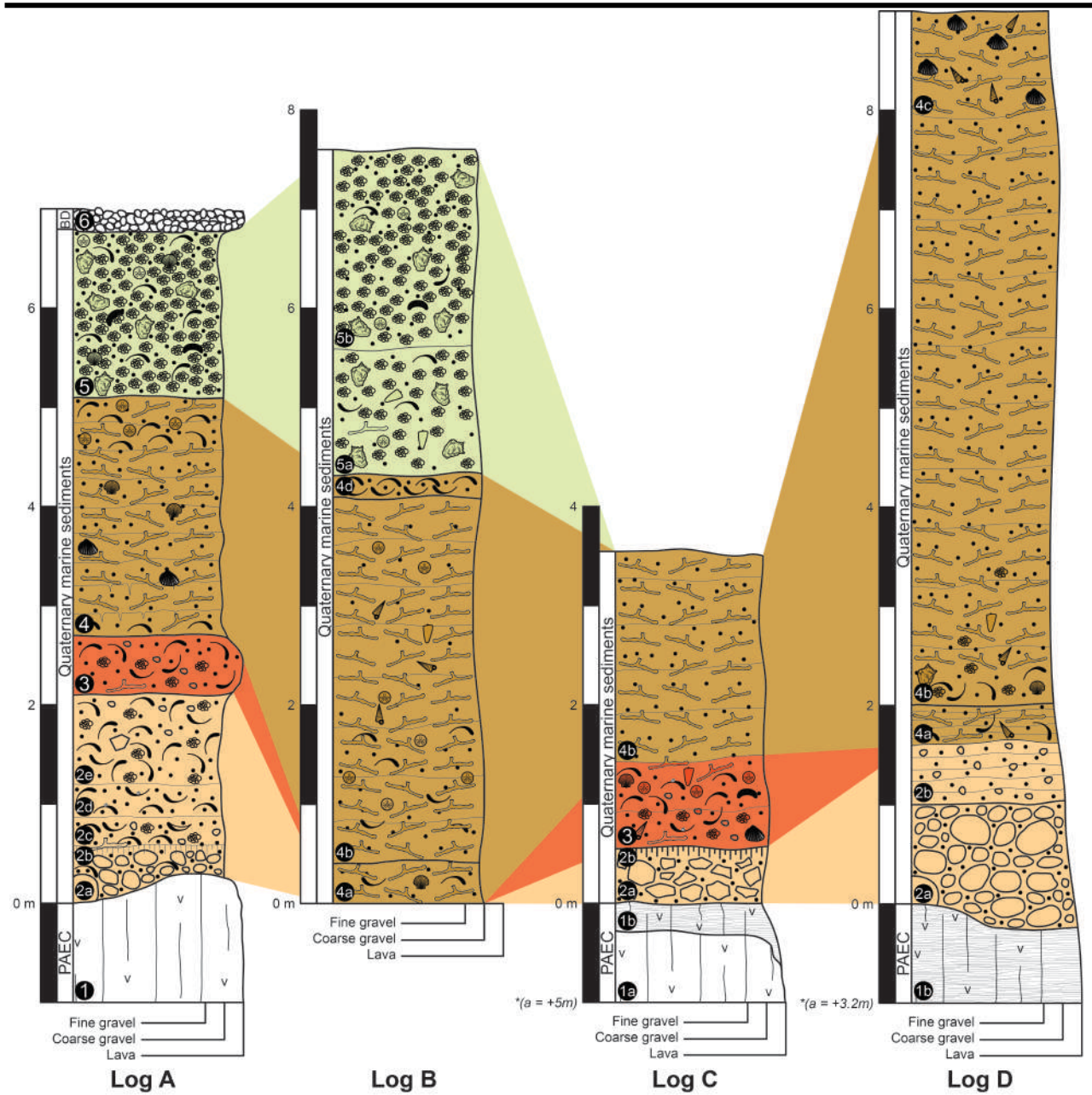
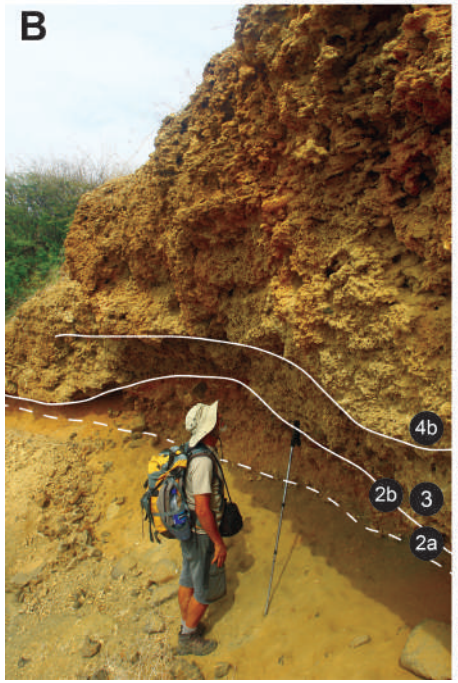
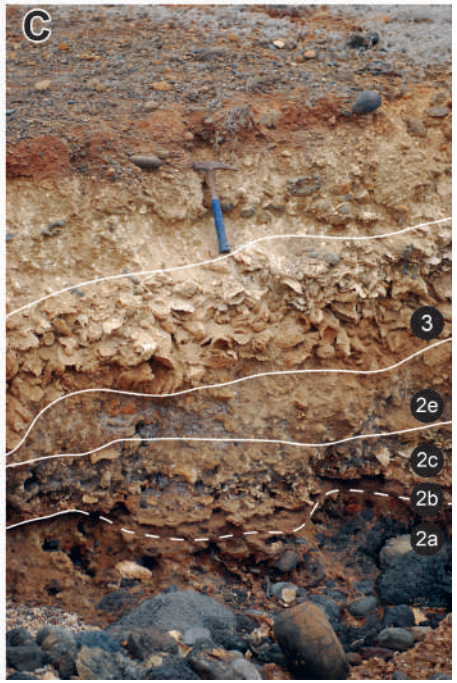
23° 27'W
15° 03'N
15° 02' 30''N
15° 02'N
23° 27' 30''W
23° 26' 30''W
m
0 250 500
Log C
Log A
Log D
Log B
Nossa Senhora
da Luz Bay


N
Log D
Log C
Log A
Log B

Last Interglacial fossiliferous sequences from Santiago Island (Cabo Verde): palaeoecology of Nossa Senhora da Luz Bay, a rare example of a protected bay in volcanic oceanic islands





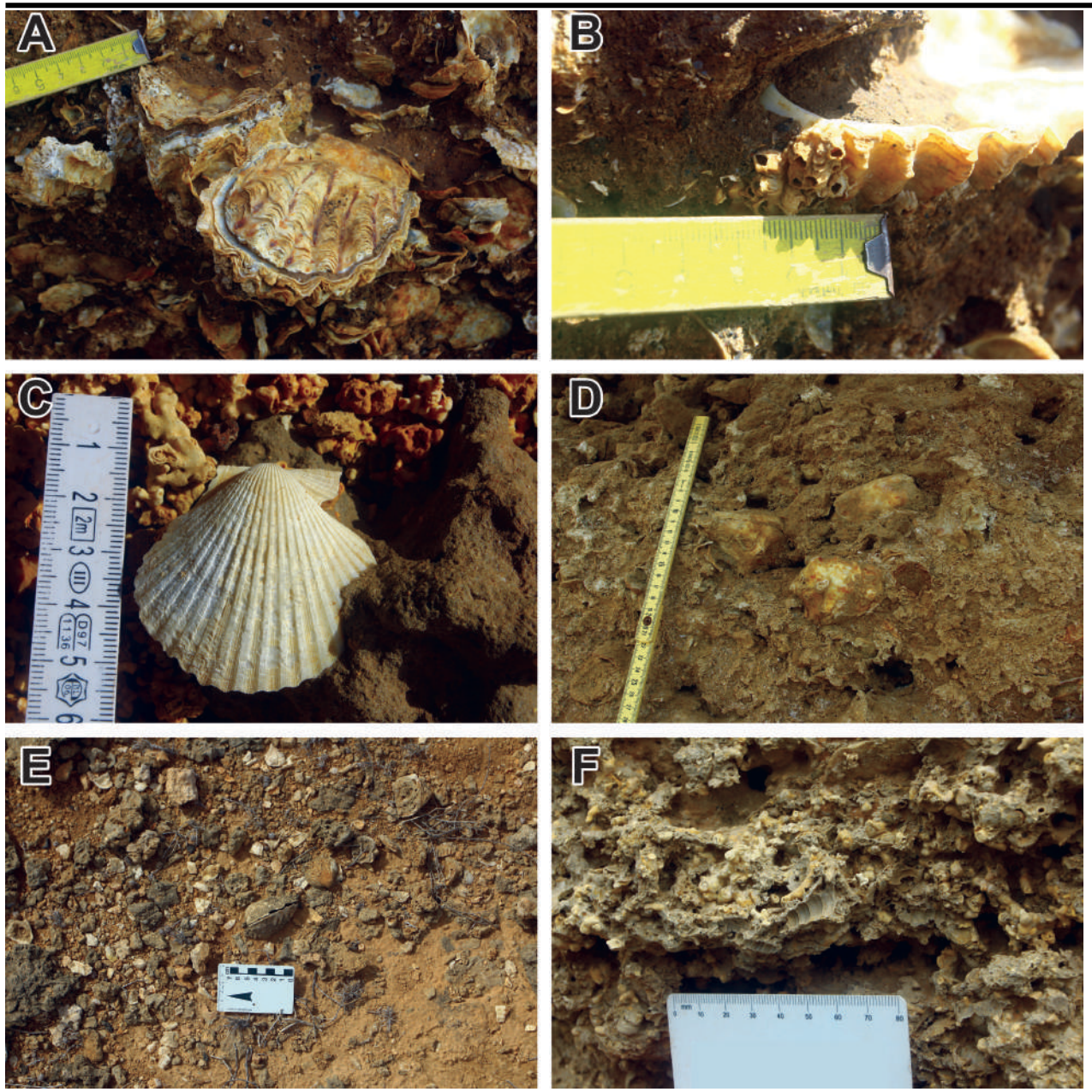


Rhodolith · Strombidae · Ostreidae · Hexacorallia · Fluid escape structures · Conglomerate/ Breccia · Laminated sandstone with pebbles

Arcidae · Conidae · Balanidae · Bioturbation

Pectinidae · Turritellidae · Echinoidea · Palaeosol · Subaerial basalt/ Weathered subaerial basalt · Laminated/ non laminated sandstone

PAEC - Pico da Antónia Eruptive Complex | ***BD*** - Boulder Deposit | ***a*** - altitude from present mean sea level



A – *Saccostrea cucullata*

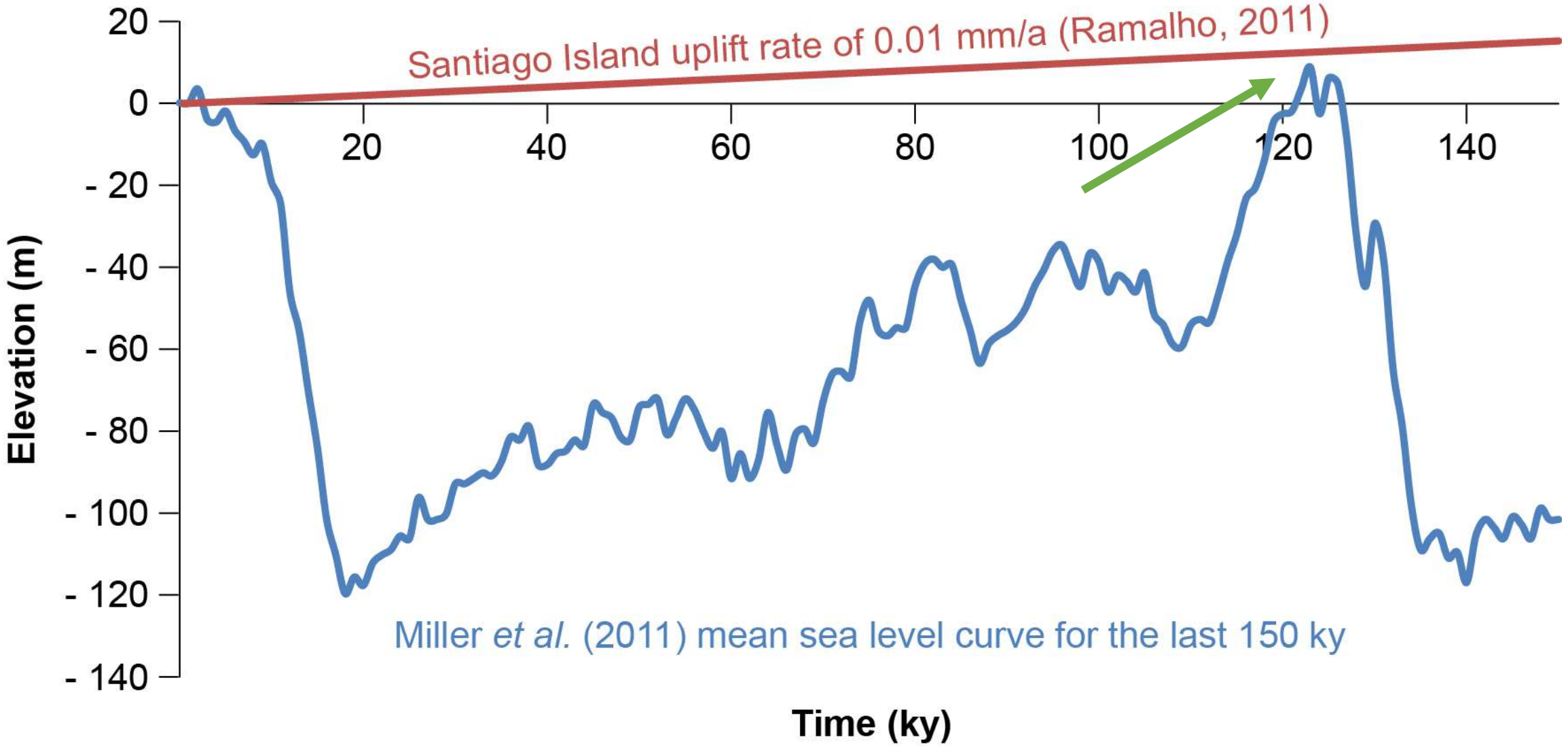
B – Balanidae (over *S. cucullata*)

C – *Aequipecten opercularis*

D – *Persististrombus latus*

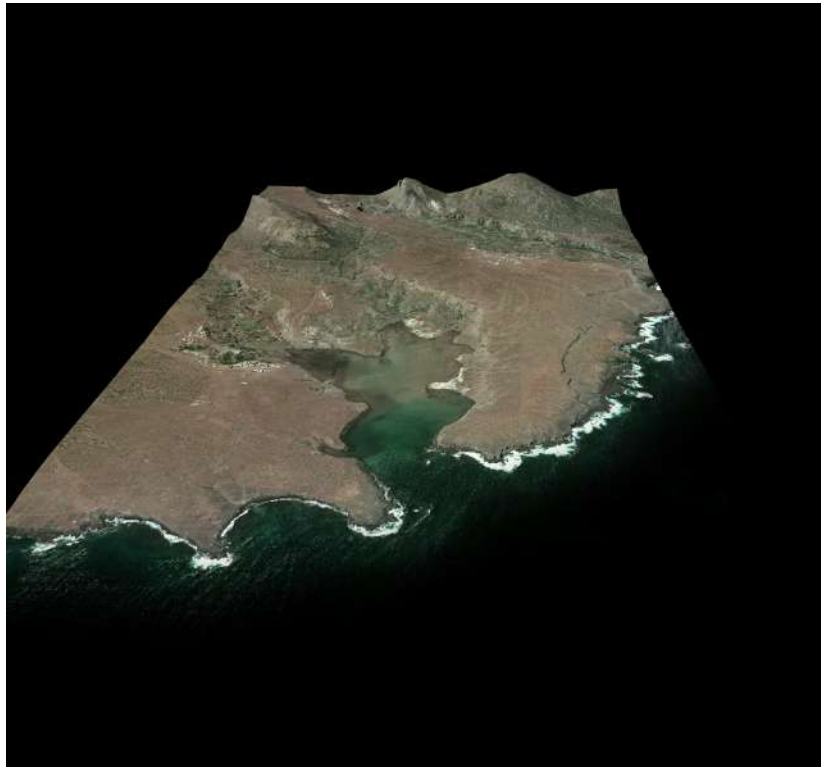
E – *Senilia senilis*
(in life position; photo in plain view)

F – Mould of *Turritella* sp.



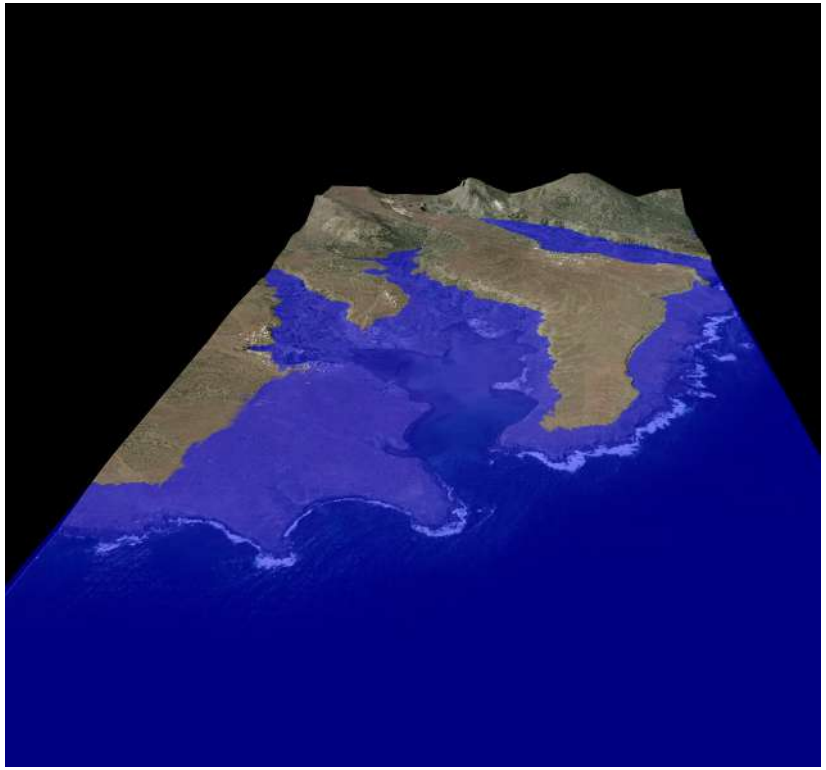
Miller, K.G., Mountain, G.S., Wright, J.D. & Browning, J.V., 2011. A 180-million-year record of sea level and ice volume variations from continental margin and deep-sea isotopic records. Oceanography, 24(2), 40–53; Ramalho, R. S., 2011. Building the Cape Verde Islands. Springer-Verlag Berlin Heidelberg, Berlin, 210 p.

Present

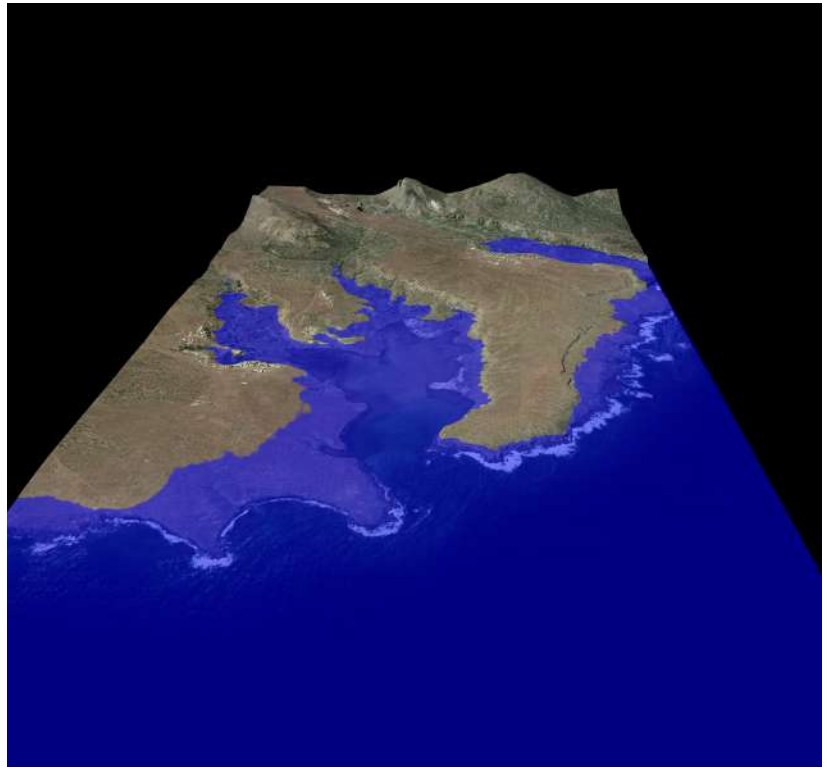


Present day mean sea level

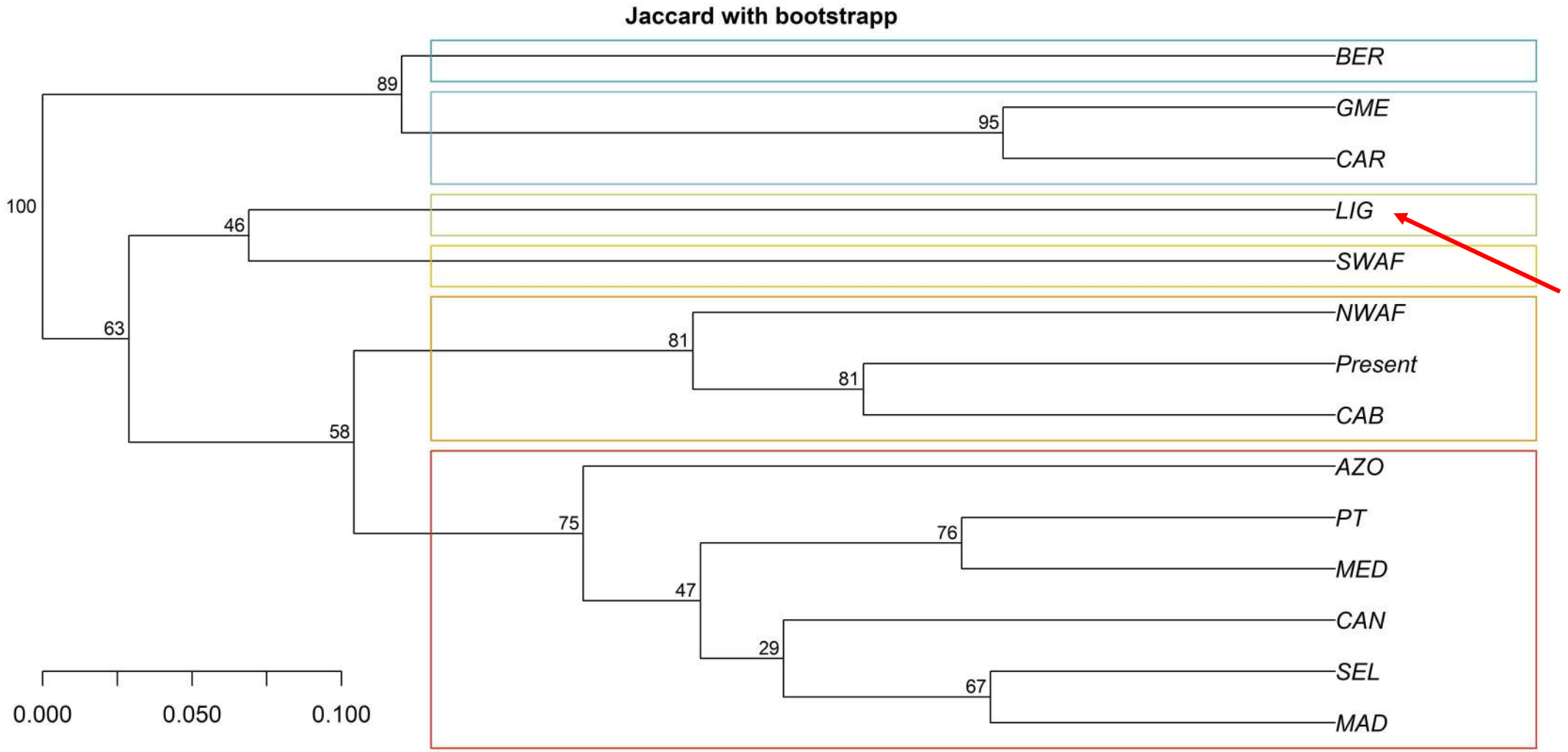
Last Interglacial



Sea level: +8 m
Uplift rate: 10 m/100ky (Ramalho, 2011)



Sea level: + 8 m
Uplift rate: 3 m/100 ky


Jaccard with bootstrapp
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OBRIGADO!

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