

Diversity of Indonesian corals in the Miocene

Nadia Santodomingo

Supervisors:

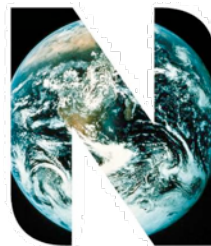
Dr. Ken Johnson (NHM)

Prof. Dr. Lucas J. Lourens (UU)

Dr. Willem Renema (Naturalis)



Universiteit
Utrecht



NATURAL
HISTORY
MUSEUM



THROUGHFLOW



MARIE CURIE
ACTIONS



SEVENTH FRAMEWORK
PROGRAMME

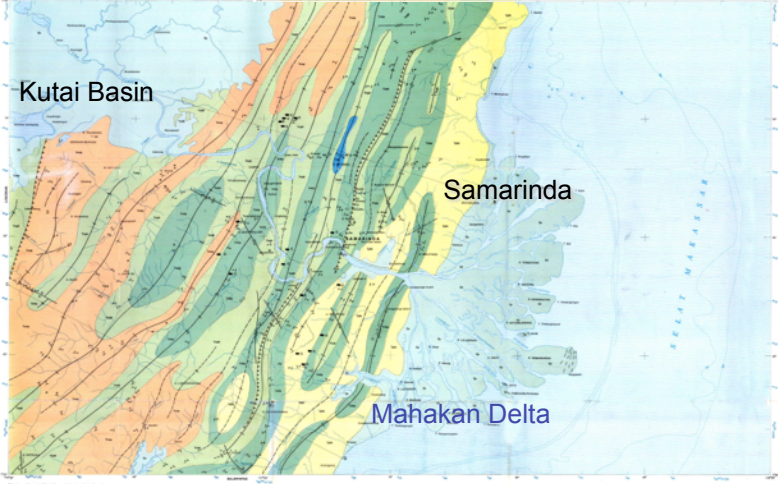
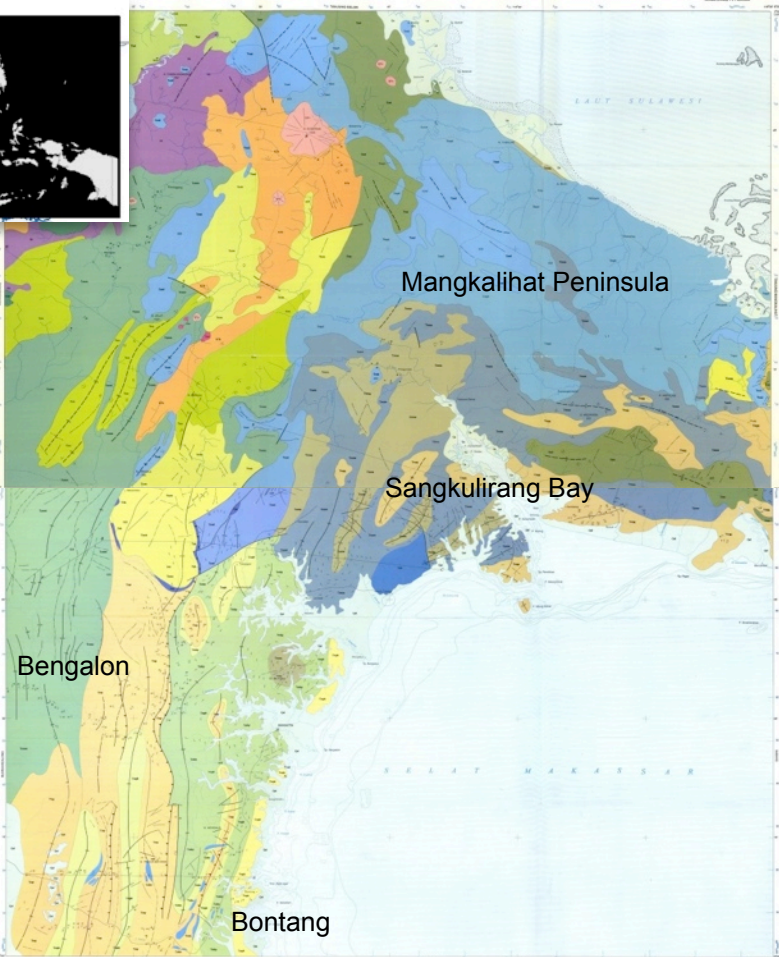
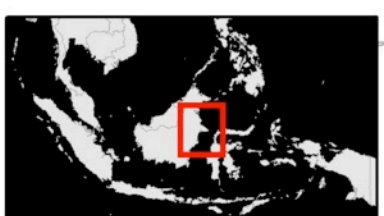
Contents

- Research questions
 - Planning
 - Preliminary results
- 3D reef



Questions



1. Which coral species were present during the Miocene in SE Asia (East Kalimantan)? Extinct vs. Extant
2. How were the environmental conditions where coral assemblages developed in the Miocene?
3. Can these fossil species contribute in the understanding of the evolutionary history of Scleractinia? (Tie to molecular phylogenies and calibration of molecular clocks)

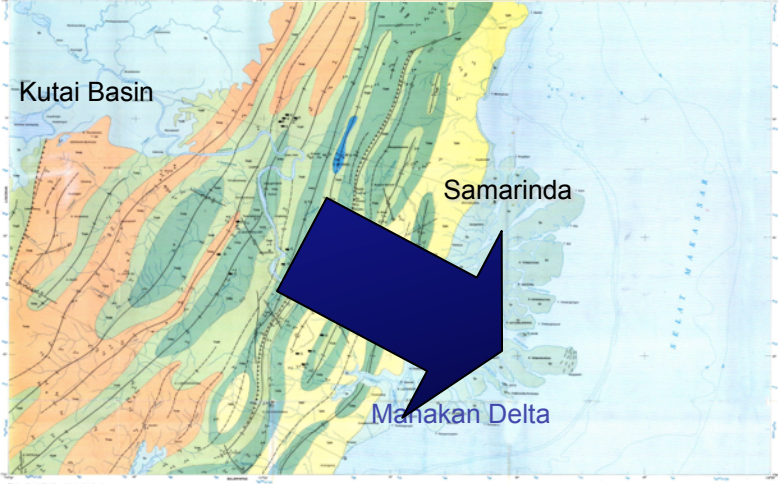
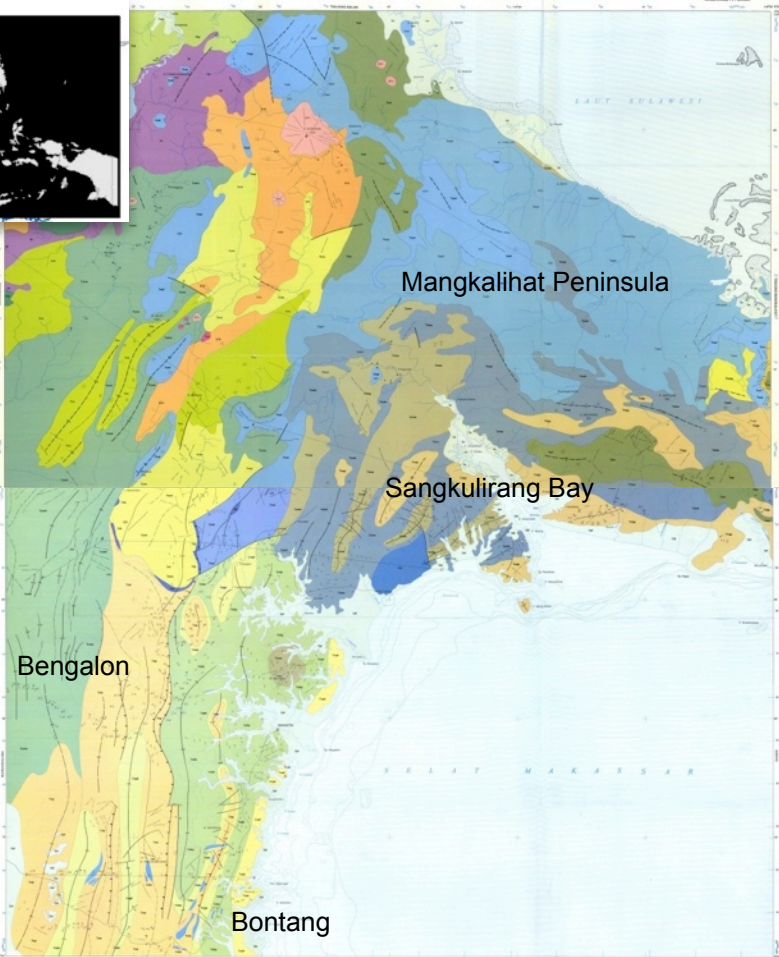
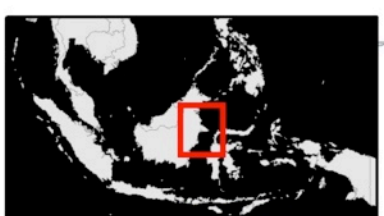


Geology



Mahakan Delta
→ Early Miocene



-  Reef Limestone
-  Sandstone + Clay / Shale + Lst + Coal



Geology



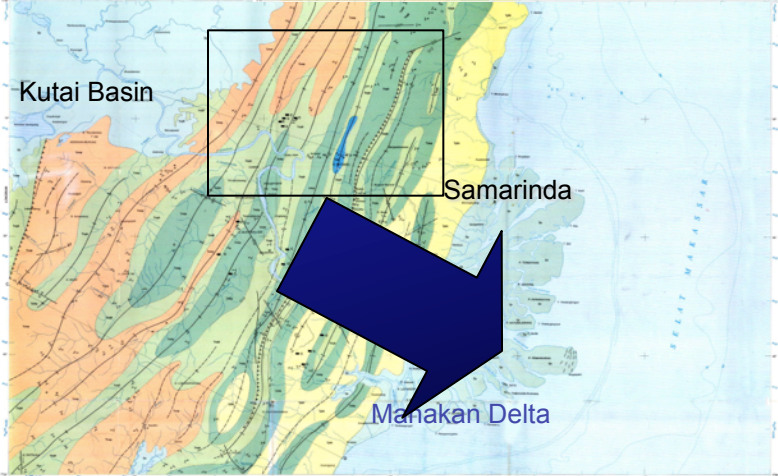
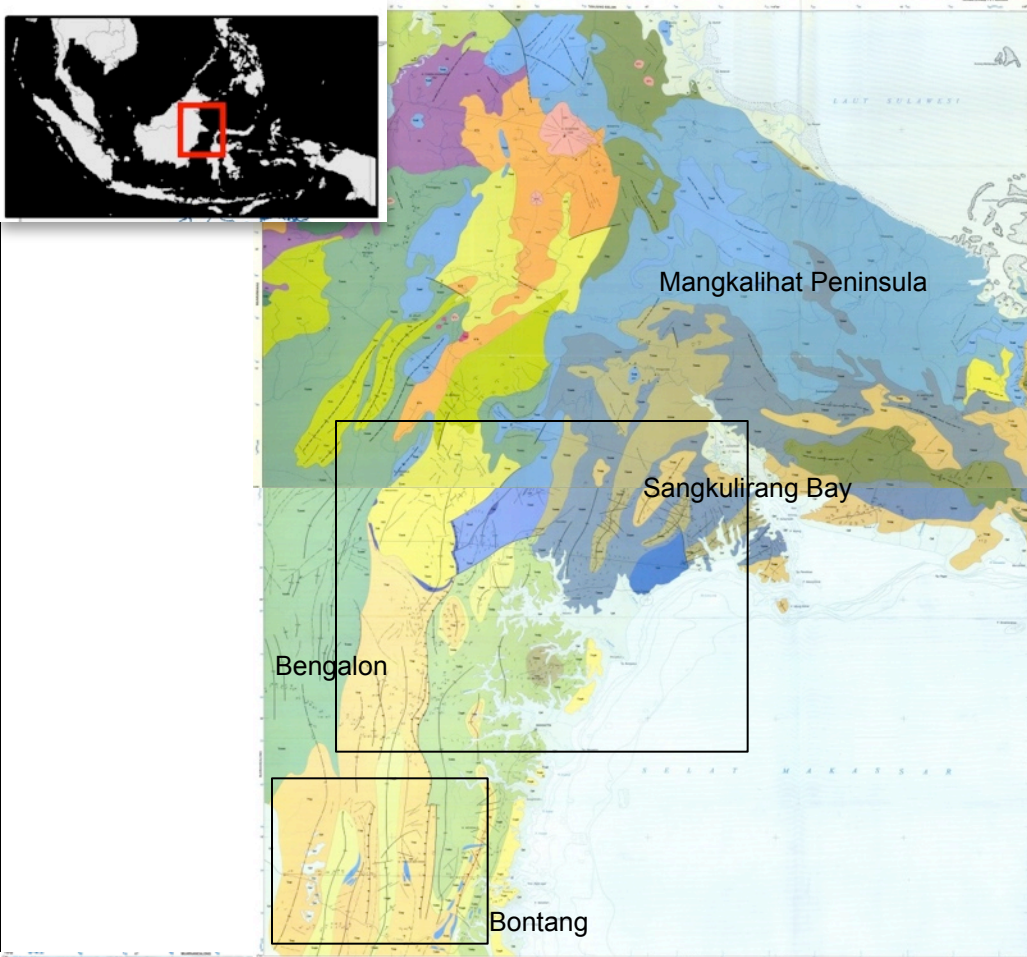
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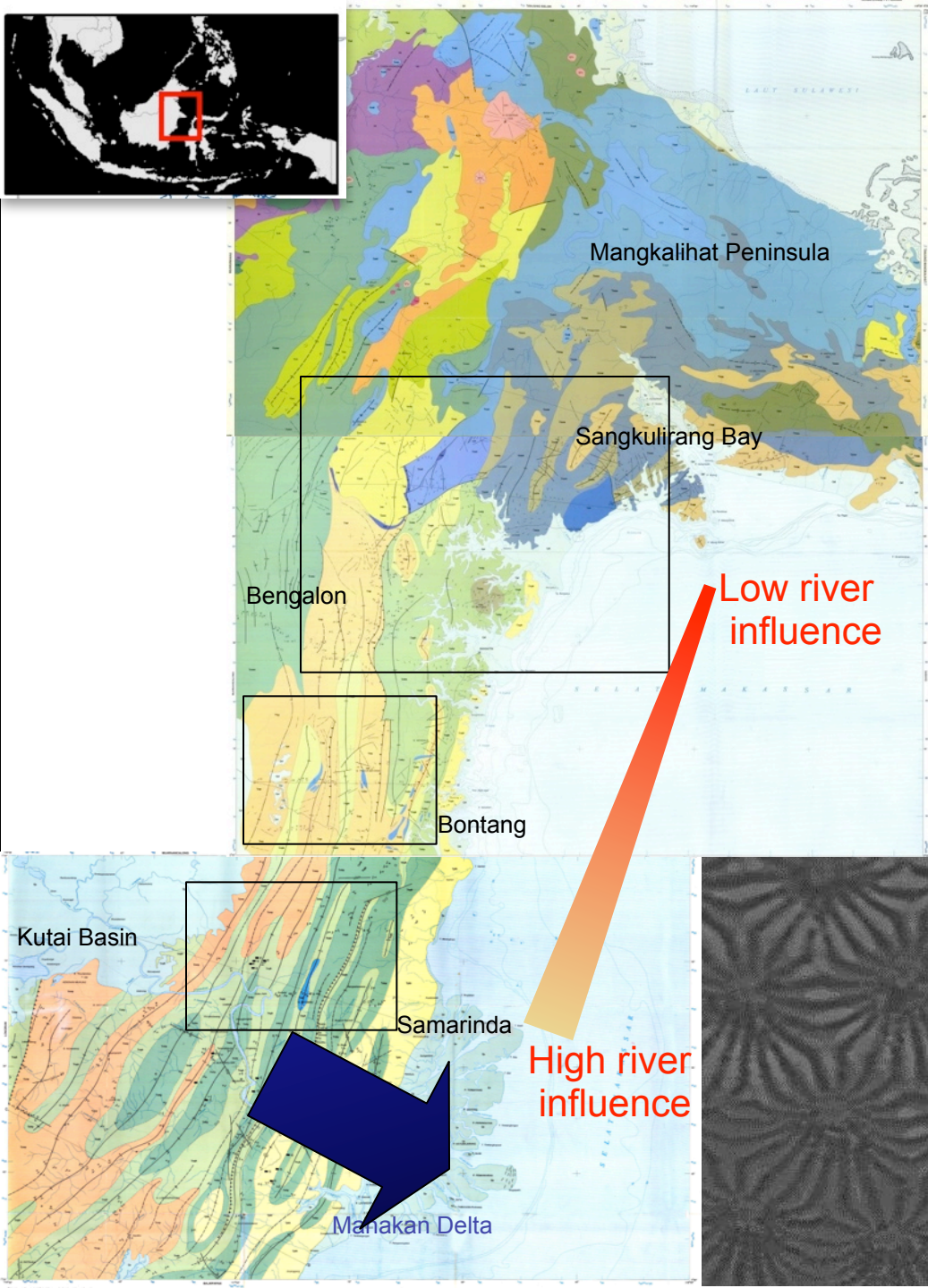




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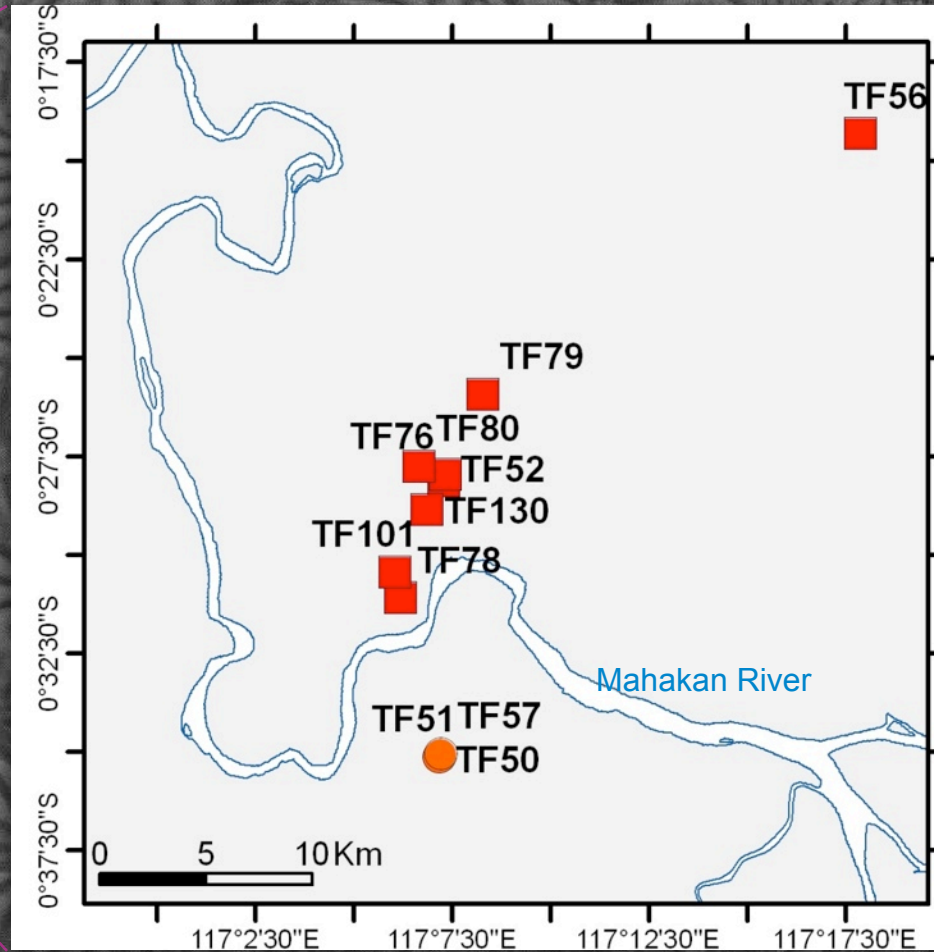
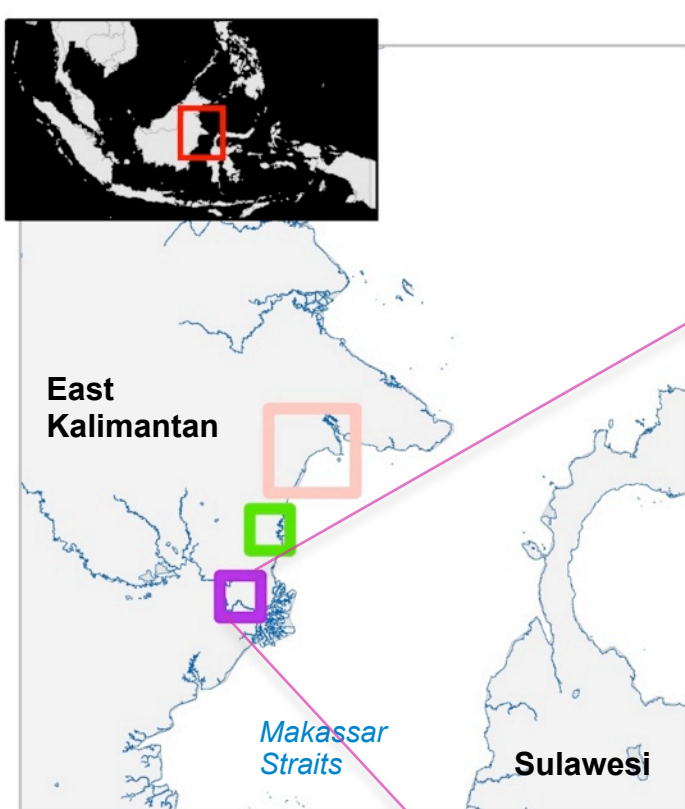
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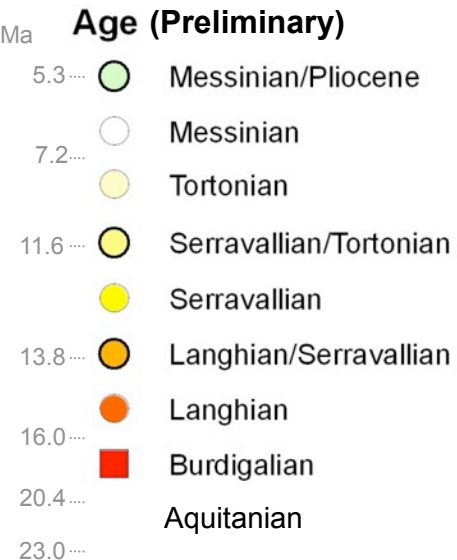
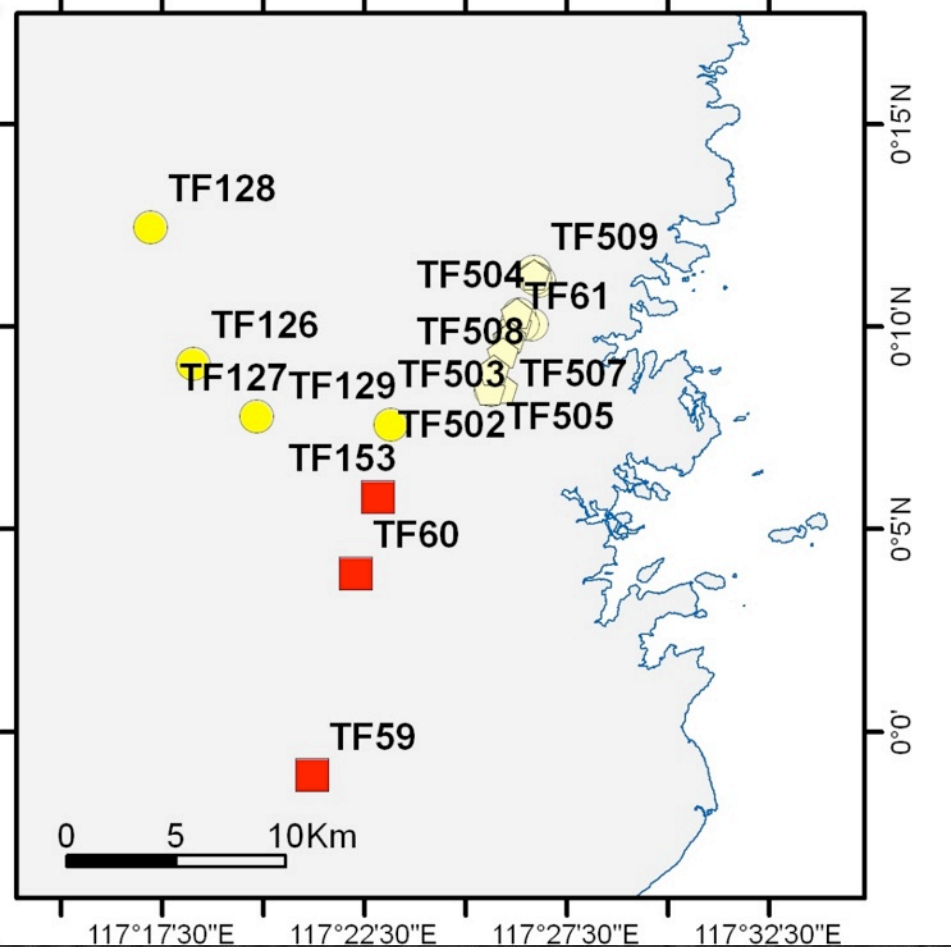
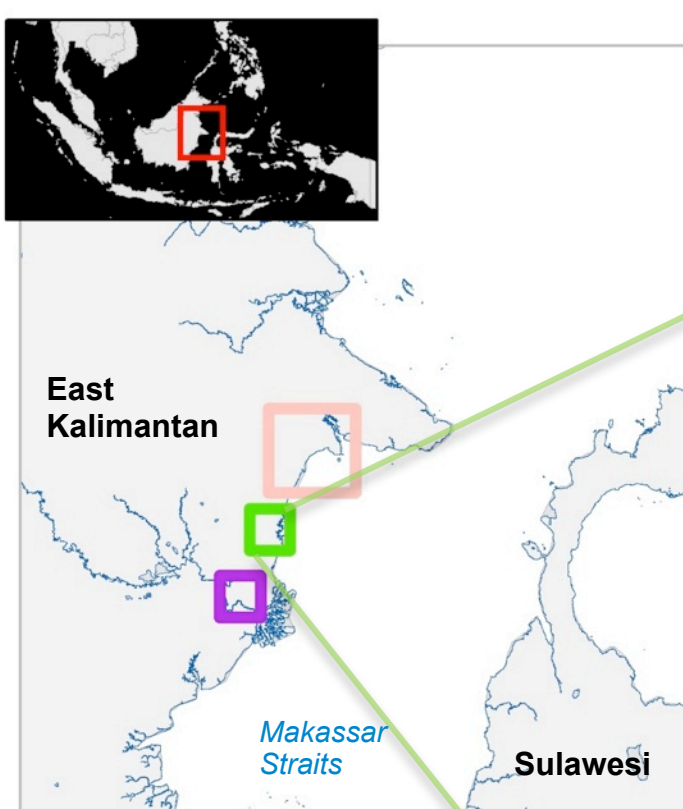


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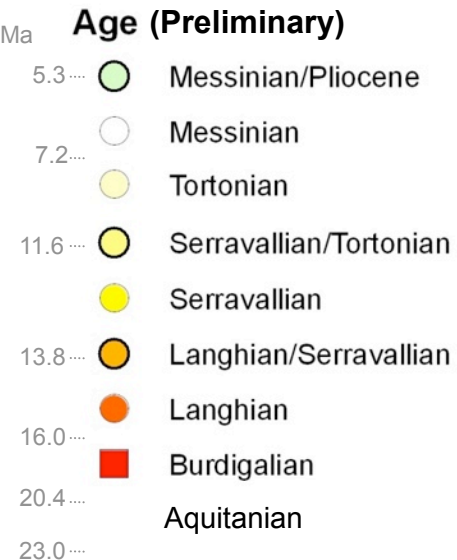
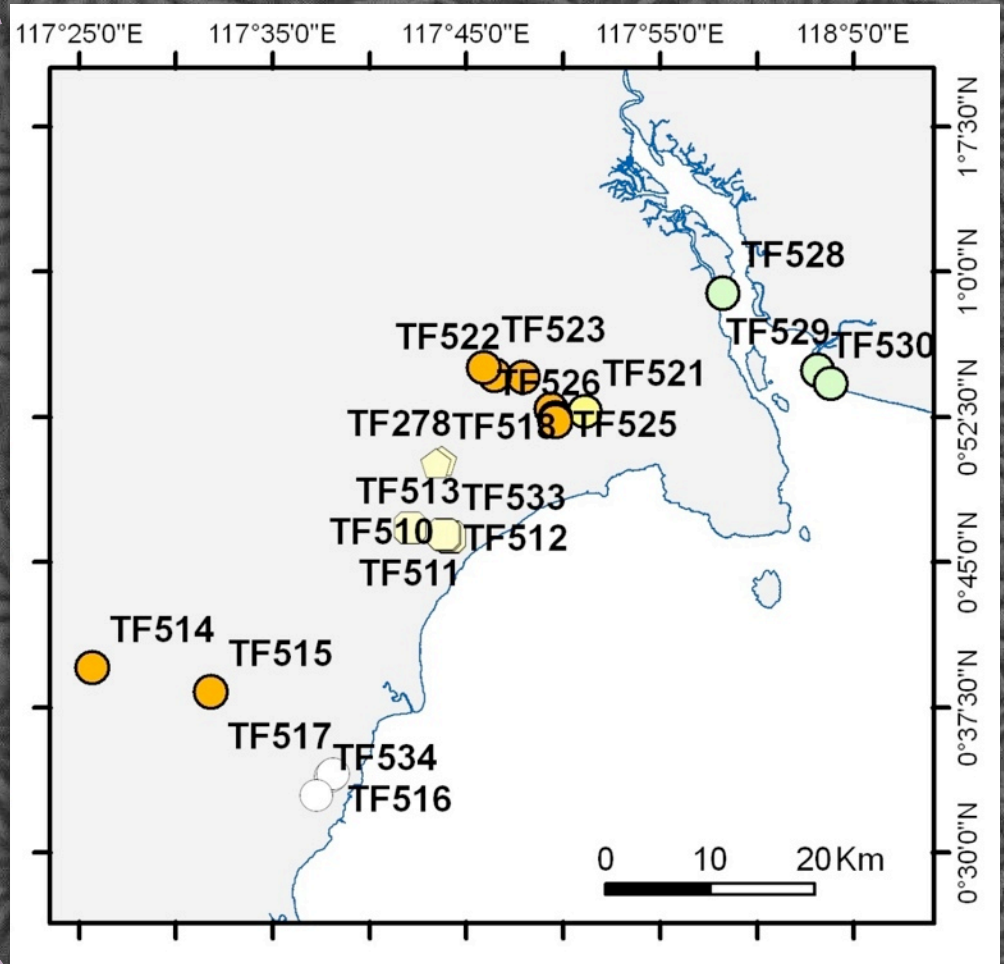
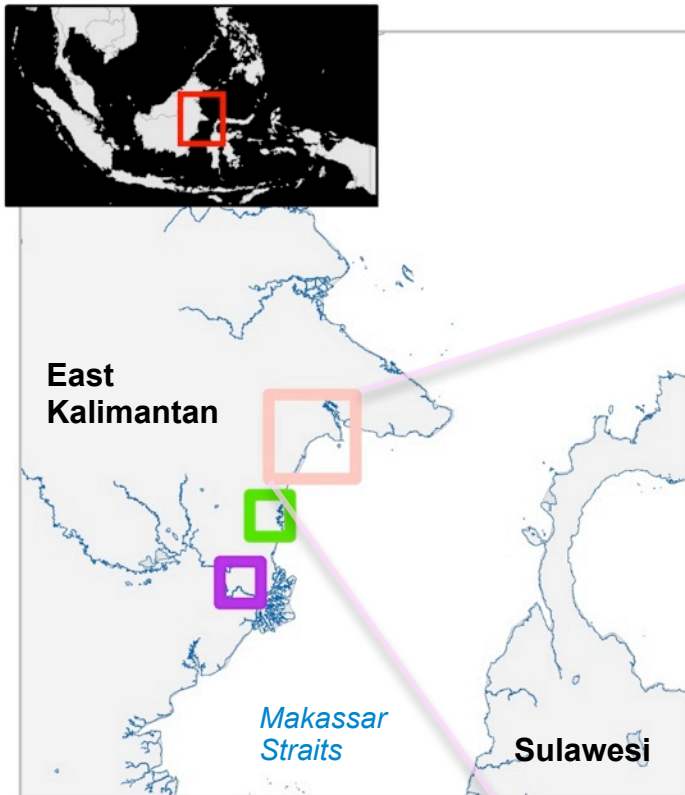
Samarinda



Bontang



Bengalon-Sangkulirang



Samples collected

49 localities



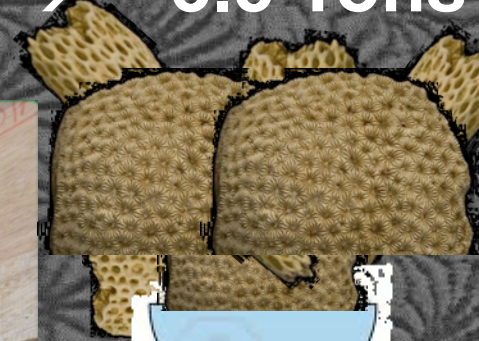
Samples collected

49 localities → 282 samples → 453 bags



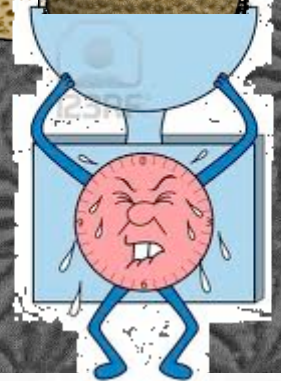
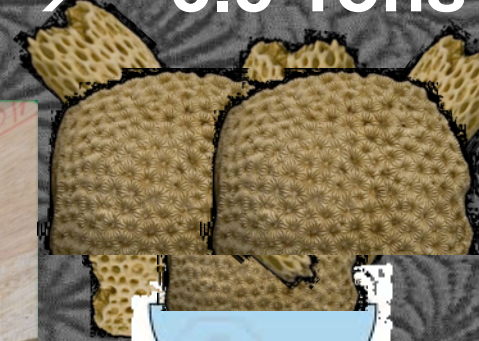
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Processing the samples...

Arrival in UK



Processing the samples...

Arrival in UK



Processing the samples...



Arrival in UK



Washing up ...

