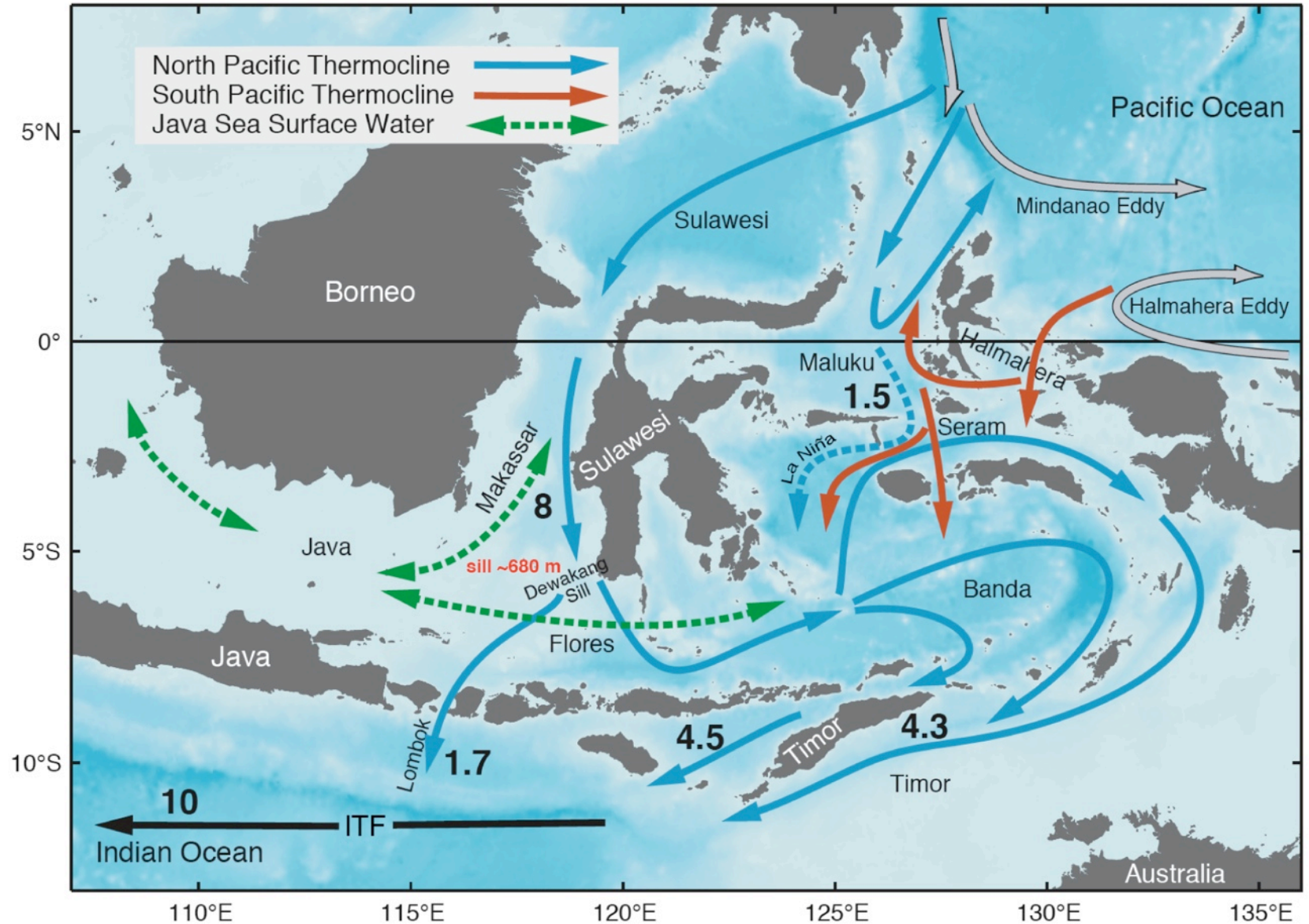


Geochemical proxy calibration along the Indonesian Throughflow (ITF) pathway.

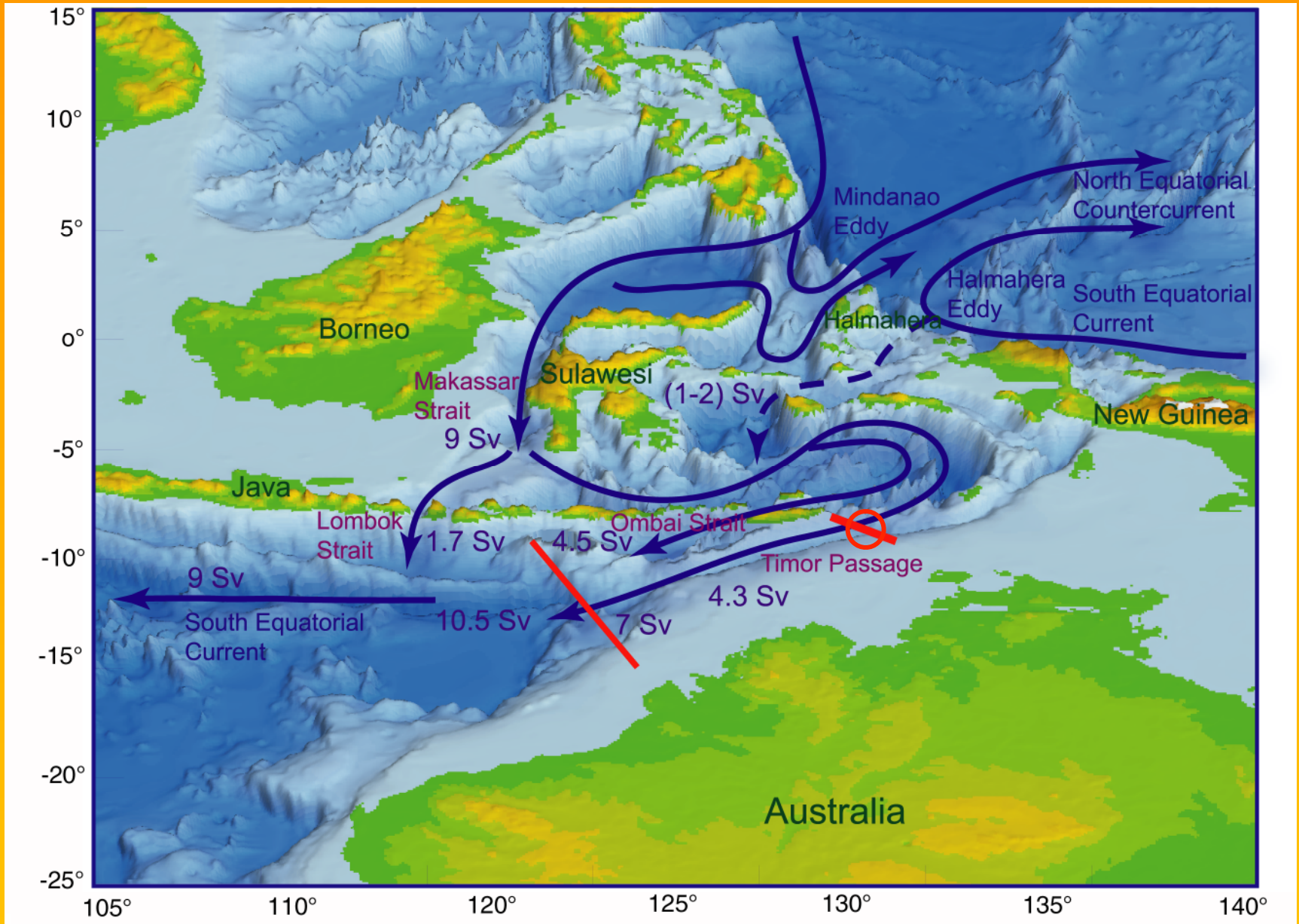
Elena Lo Giudice Cappelli

Institute of Geosciences
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Kiel, Germany

Area of study



Timor Passage: core location



„VITAL“ Sonne 185 Cruise (14 September - 7 October 2005)

On board activities:

- Piston - and Gravity-Coring
 - Core handling

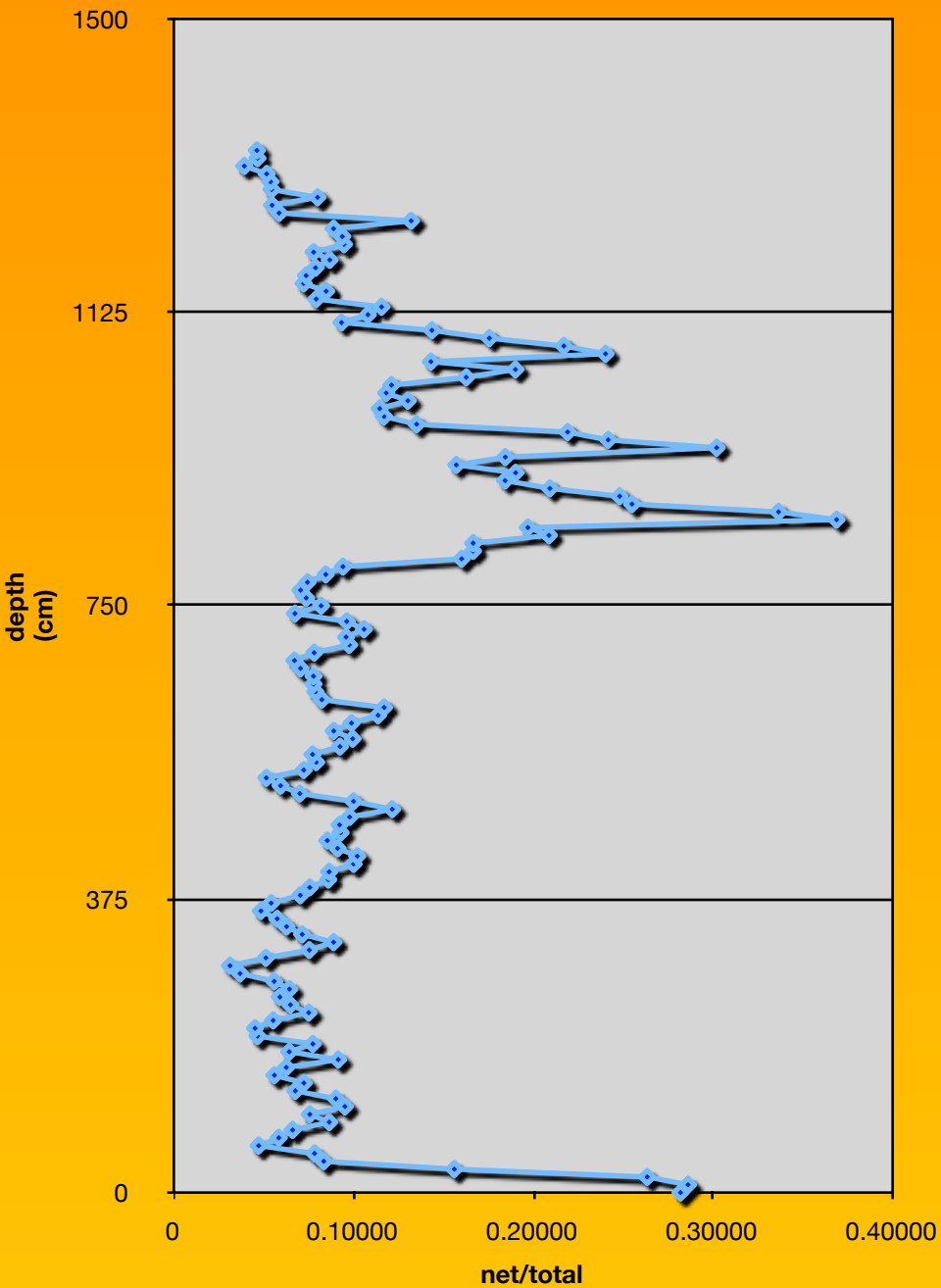
Lab activities:

- Sediment samples processing



Proxies

- AMS ^{14}C dating,
- Surface and thermocline dwelling planktonic foraminiferal $\delta^{18}\text{O}$ and Mg/Ca temperatures: SST and SSS (already available),
- Benthic foraminiferal $\delta^{18}\text{O}$ and Mg/Ca temperatures: thermocline flow,
- XRF-core scanning to monitor terrigenous fluxes from Australia.



Distribution of sediment samples and proportion of fraction over 63 μm along core.

Fieldwork goals

- information about the early/middle Miocene climate using planktonic and benthic foraminifera $\delta^{18}\text{O}$ and Mg/Ca temperature as proxies,
- stratigraphy using the distribution of different species of planktonic foraminifera in time (early/middle Miocene),
- distribution of smaller deep water benthic foraminifera to reconstruct Miocene paleobathymetric evolution.

THANK YOU!



MARIE CURIE

ACTIONS



Christian-Albrechts-Universität zu Kiel