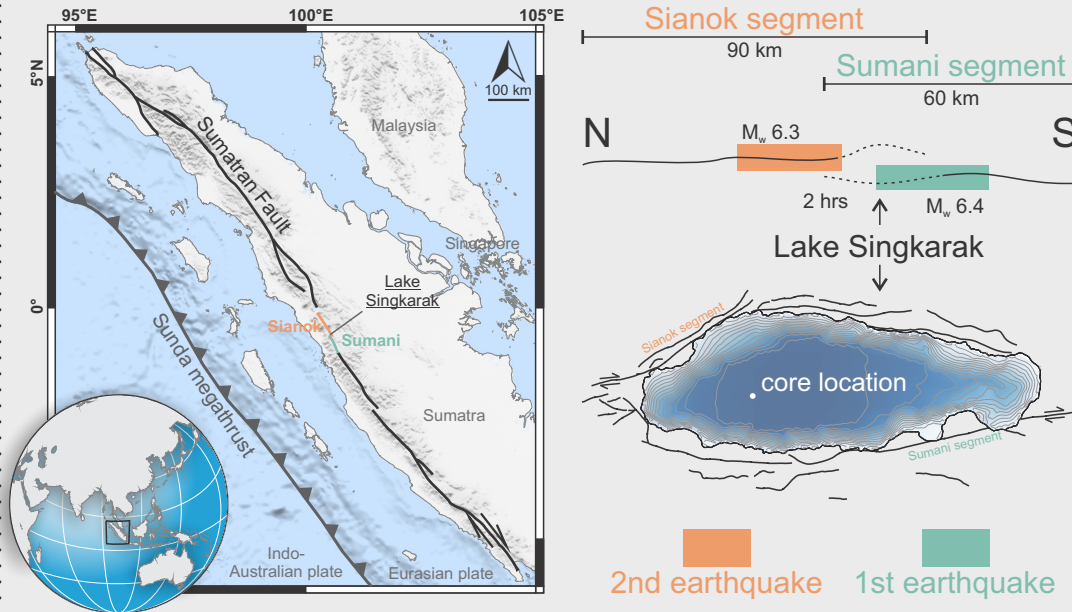


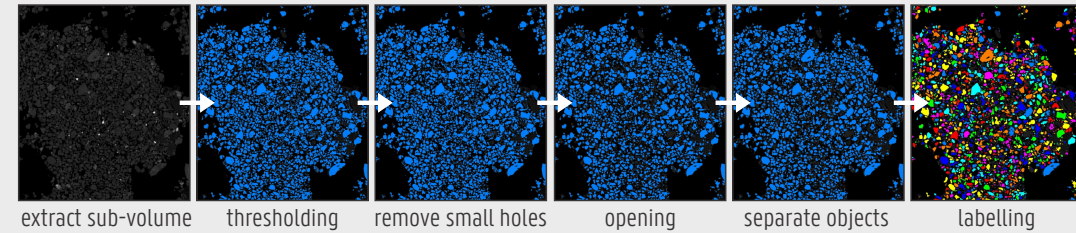
MULTIPLE PULSES IN LACUSTRINE TURBIDITES REVEAL EARTHQUAKE DOUBLET

2007 Sumatra Earthquake Doublet

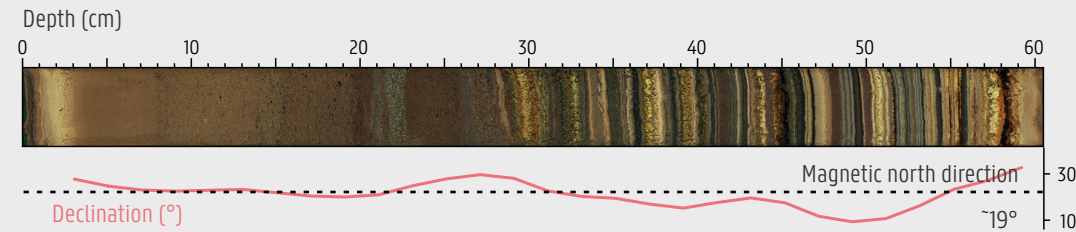


FLOW DIRECTION ANALYSIS

μCT data: 3D processing workflow



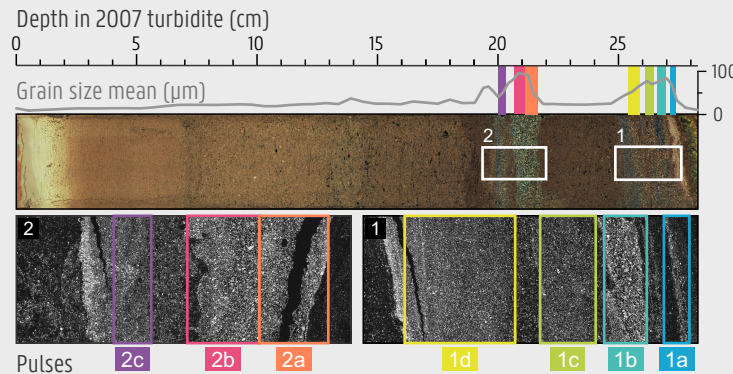
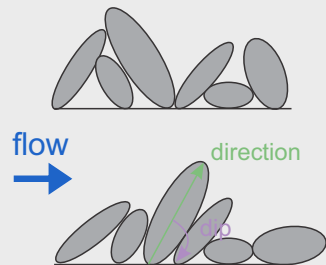
Paleomagnetic analysis



SEDIMENTARY RECORD: A MULTIPULSED TURBIDITE

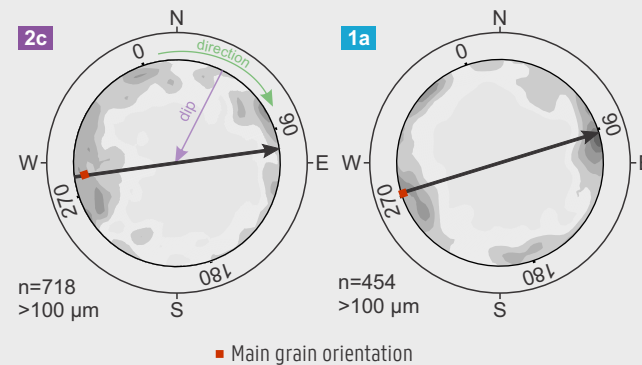
Turbidity current amalgamation: **same source location + delayed arrival = separate trigger**

Flow direction?
→ grain orientation



Grain orientations per turbidite pulse

→ stereoplots



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CONCLUSION

Amalgamated turbidite with stacked appearance

Each earthquake triggered a separate turbidity current, identifiable in the sedimentary record

CONTACT

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