

# Summary of Break-out Session Discussion

# Synthesising GeoPRISMS: Activities & Products

Textbook or summary document:

- 1) Basic characteristics of different margins
- 2) Are there useful generalisations from what we've learnt?
- 3) Overarching questions

Living document versus invited review

Importance of a concrete plan to make this happen

# Knowledge Gaps



# Knowledge Gaps

- Longer term behaviour (uplift rates, strain rates)
- Integration of the exhumed rock record
- Transferability of results:
  - 1) Are we undersampled (e.g. forearcs) ?
  - 2) Can we extrapolate to other places with predictive power?
  - 3) Along-strike variability
  - 4) Can we predict longer-term past behaviour (~10 Ma)?
- Data-led versus process-led approaches
- Deformation partitioning and rheology
- Reaction kinematics
- Volumetric fluxes
- What does the megathrust do to the upper plate?

# Community Infrastructure



- IODP drilling program
- Offshore GPS and pressure gauges
- Long-term revisiting of drill holes
- OBS pool
- Co-located EM data
- NSF facility for geochemical analyses (standardised)
- Continued excellent database curation

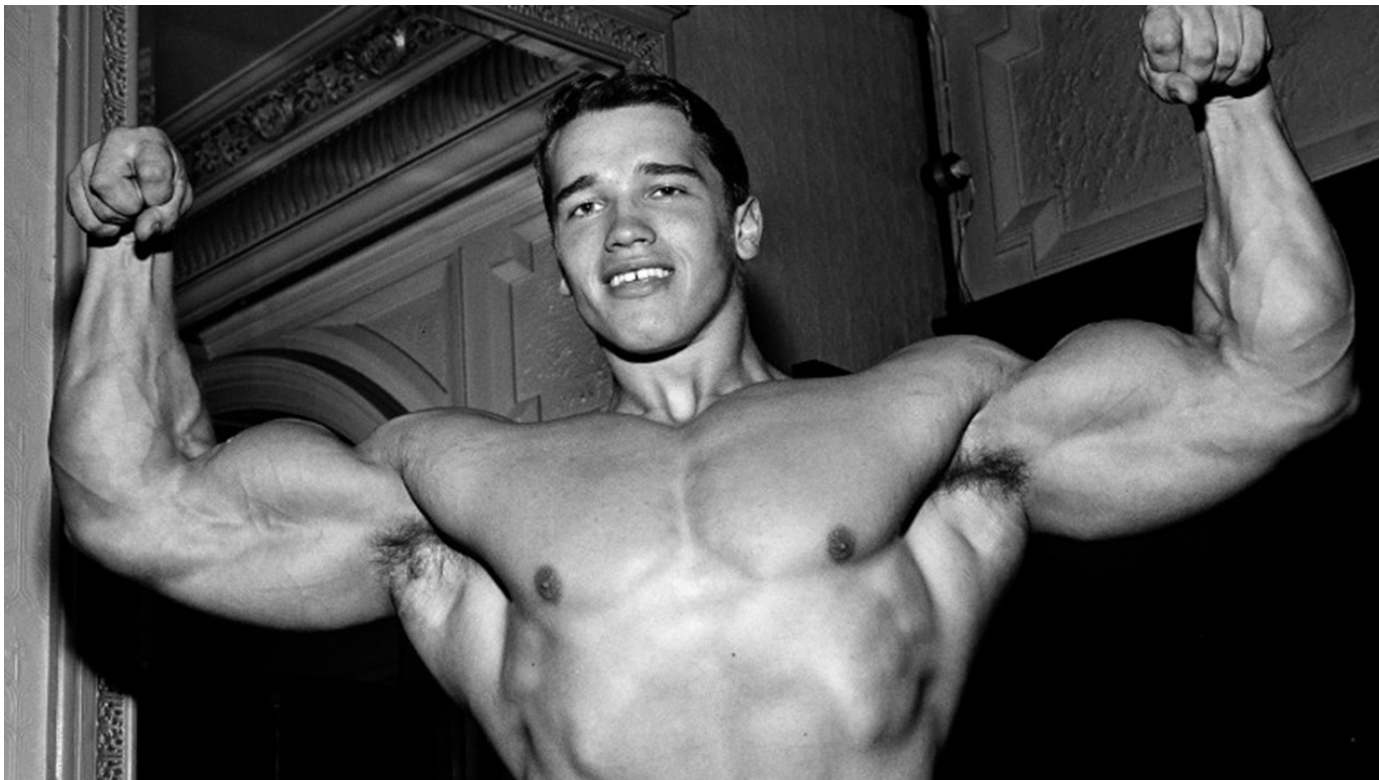
Many of the studies here use active source seismic data:

Our community must maintain the capability to collect this data.

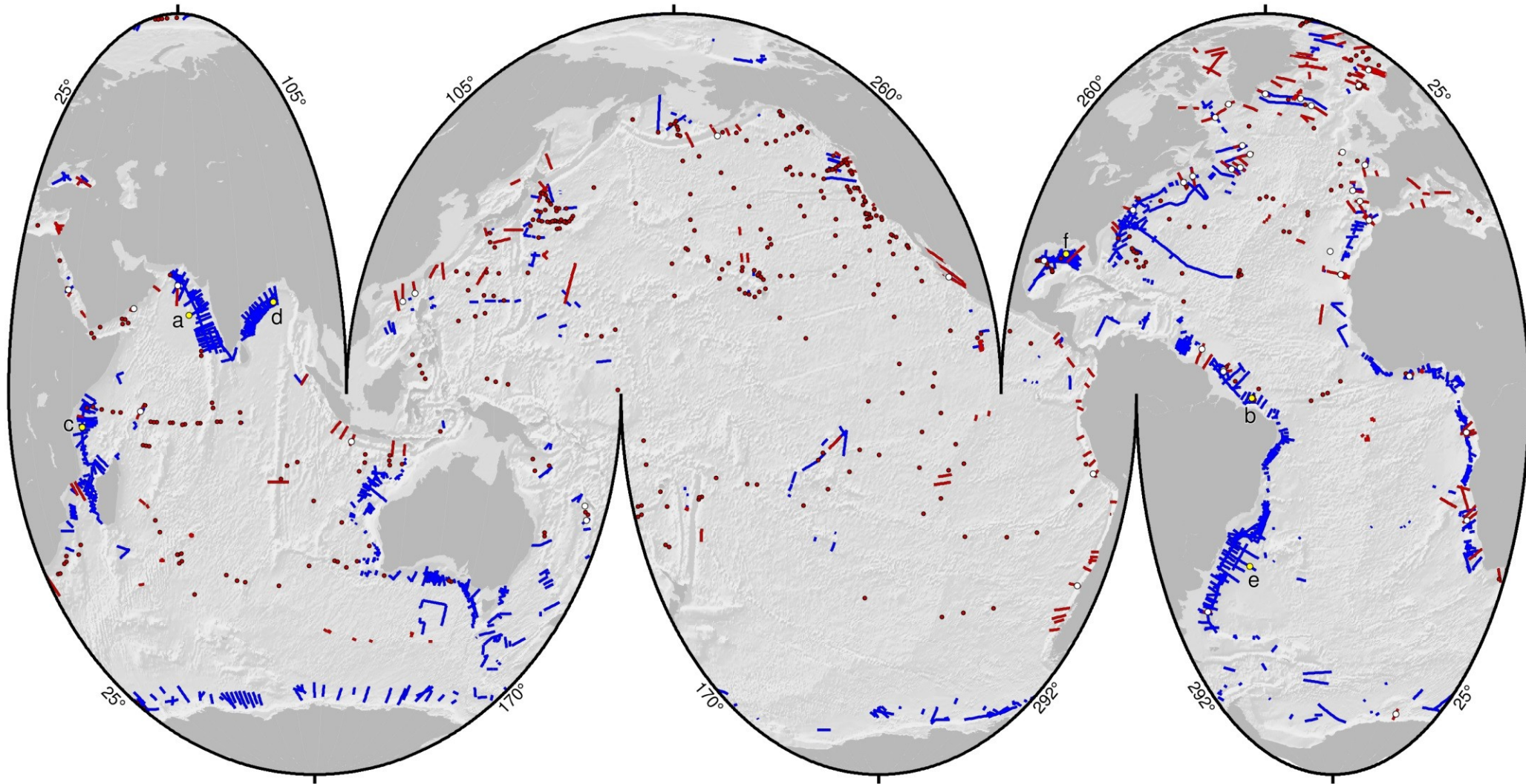


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# Infrastructure



**1240** seismic reflection. **302** wide-angle refraction. **395** vintage slope-intercept.



# Amphibious Research Program?



# Amphibious Program

- Hollistic crossing of the shoreline has yielded much insight
- Shared awareness between different funding programs
- Good space for large-scale proposals with multiple strands
- Integrated site analysis builds productive relationships with locals
- Importance of getting people together – cheap but effective