

East Coast LAB (Life at the Boundary)

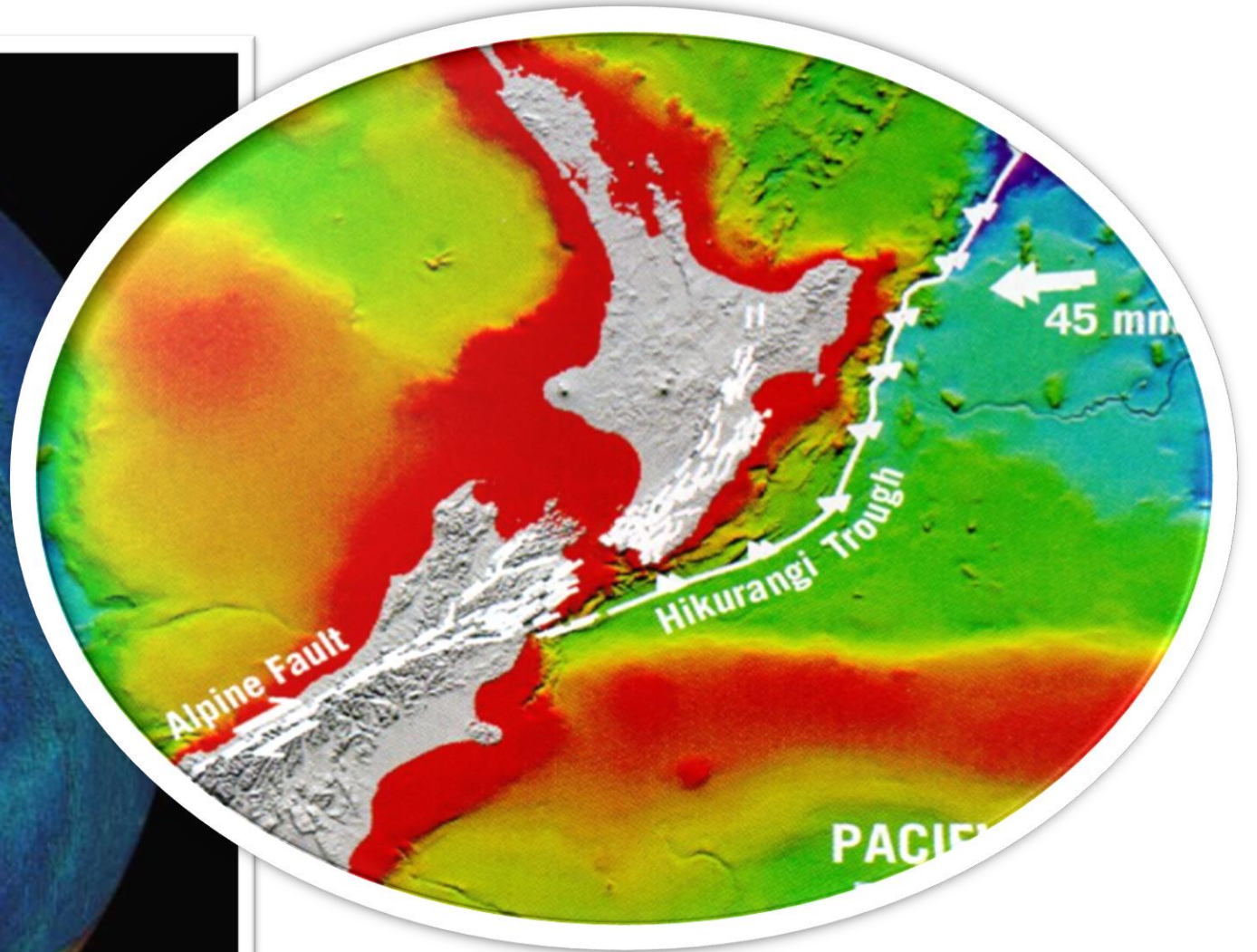
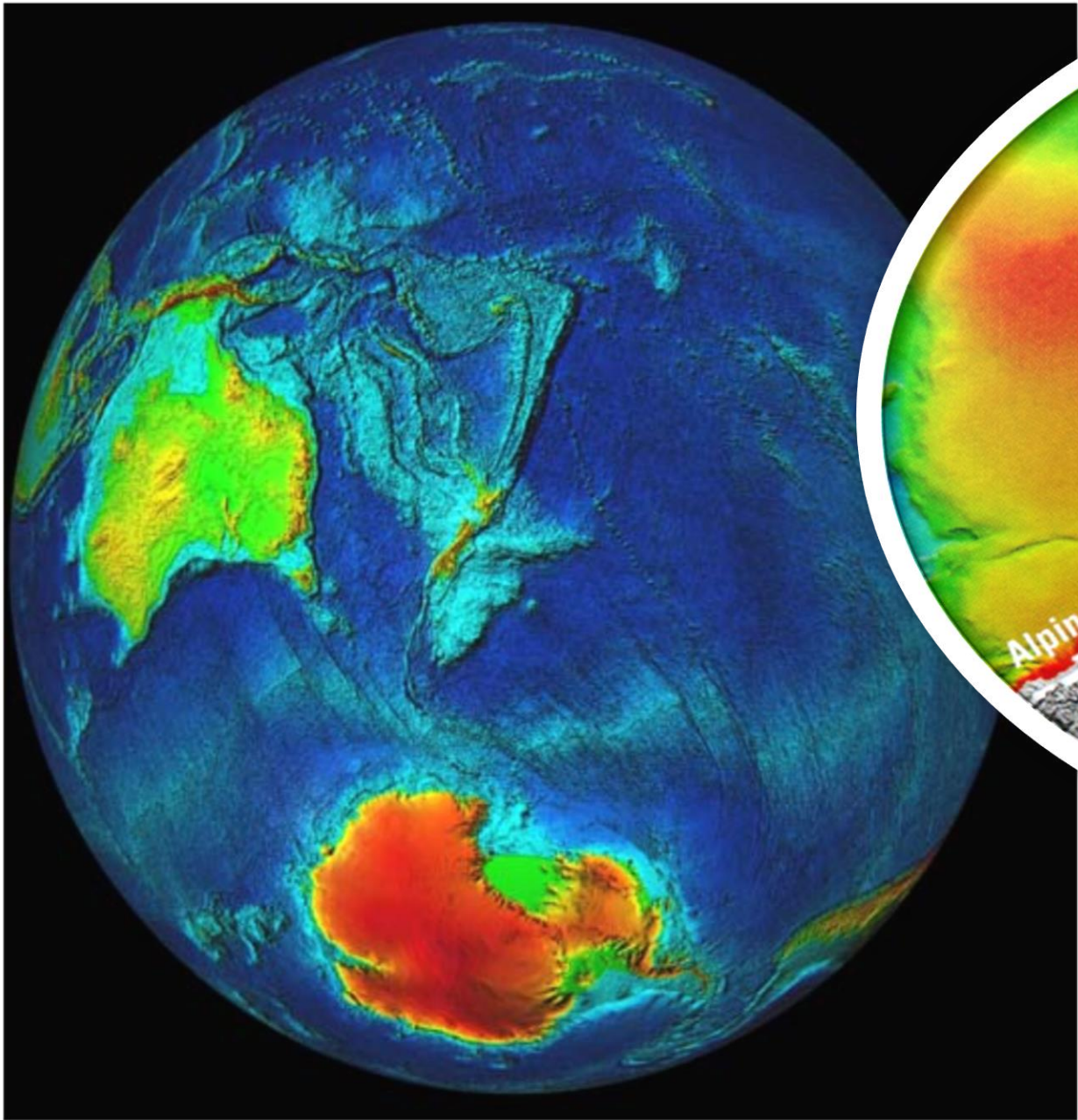
- Living, learning and thriving -

Presented by Richard Smith, EQC, a project partner of East Coast LAB

National Lifelines Utility Forum Infrastructure Research Day
Theme: Integrating Research into Practice



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Off the East Coast of New Zealand lies the 'Master Fault'– Hikurangi Subduction Zone

East Coast LAB aim and objectives

Improve the **resilience** of East Coast communities to natural hazards associated with the plate boundary and living life on the coast

1. **Research:** Foster well connected & coordinated physical & social science research
2. **Education and engagement:** Encourage communities to become engaged & participate in science research
3. **Risk reduction:** Ensure communities are aware of the risk they face and know how to prepare and respond



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Research

Work Stream Focus is to:

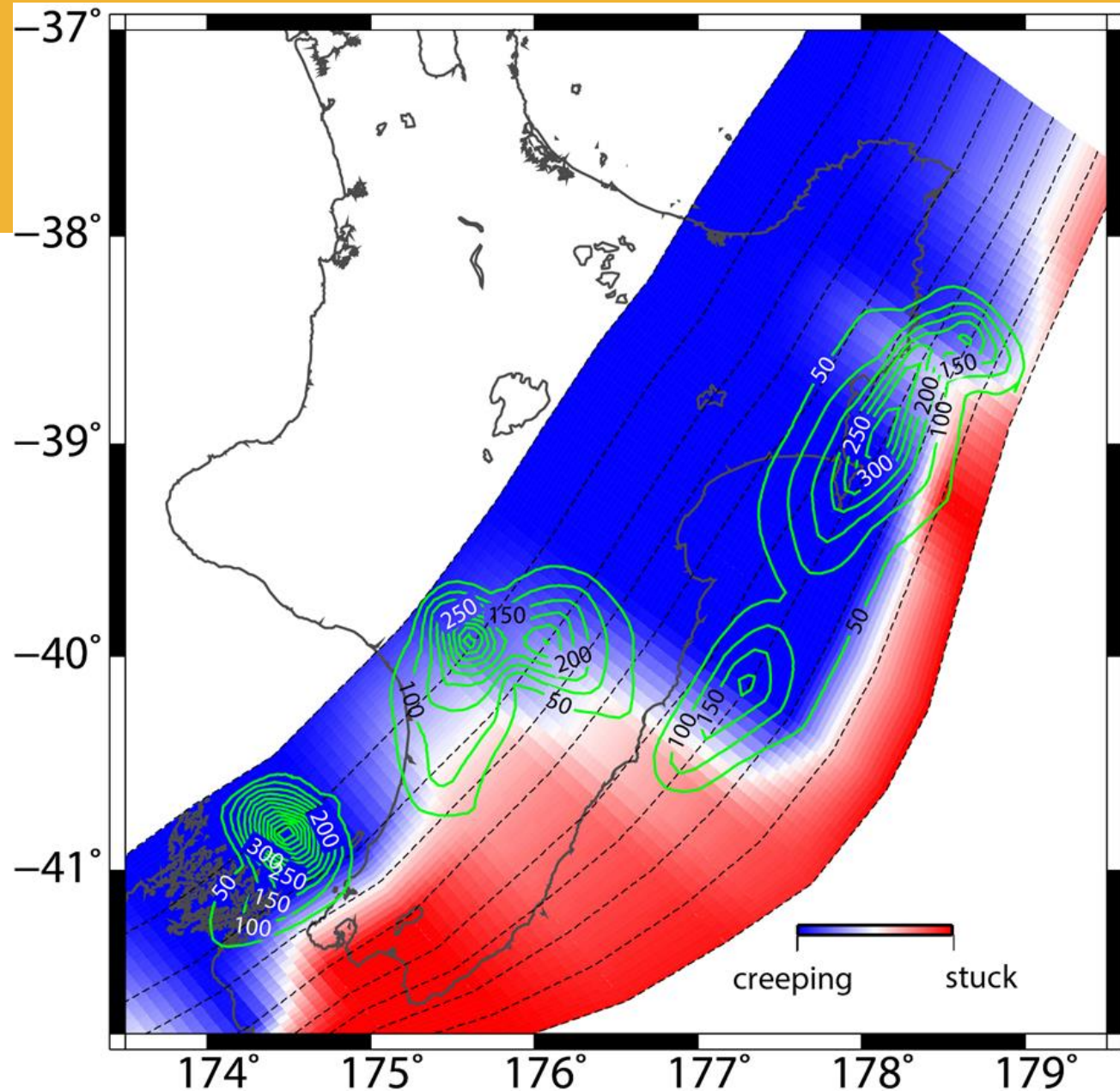
- build upon existing research to better understand the Hikurangi boundary and its associated natural hazards
- foster on-going well connected & coordinated physical & social science research



Research

What causes the subduction zone to be locked-up in the south, while it mostly undergoes slow slip in the north?

Scientists are drilling seafloor to take sediments and set offshore observatories; seafloor sensor deployments; undertaking seismic surveys.



Risk Reduction

Work Stream Focus - learning and capturing research lessons to further develop risk reduction measures - **Integrating Research into Practice**

Involves sustained actions taken to reduce or eliminate the long-term risk to human life and property based on plate boundary risk assessments.

Including:

- planning and zoning to manage development in areas particularly at risk for tsunami
- embracing earthquake/tsunami resistant construction
- protecting critical facilities and infrastructure



Risk Reduction Example: Resilience Workshop

Sponsored Napier workshop, September to consider
“What does a tsunami resilient city look like?”

Recommendations included:

- the city wide development of tsunami signage
- evacuation routes
- making improvements to key infrastructure.
- Identification and construction of vertical evacuation structures in areas where self evacuation is difficult.

A workshop report will be made available on the East Coast LAB website later in the year.



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Risk Reduction example: Hikurangi Response Plan (HRP)

Aim is to develop a coordinated CDEM response plan to Hikurangi subduction zone rupture to assist and enhance community resilience across the East Coast of the North Island

- Five CDEM groups involved: Hawke's Bay, Bay of Plenty, Tairāwhiti, Manawatu-Wanganui and Wellington & ECLAB partners
- 3-year project comparable to Project AF8 managed under the East Coast LAB (Life at the Boundary), funded by MCDEM through the Resilience Fund. Commenced 1 July 2018.
- Based on a M8.9 Hikurangi scenario

Watch out for: Stakeholder workshops to be held in Feb/March 2019 across 5 regions to gain a full understanding of issues and risk.



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