



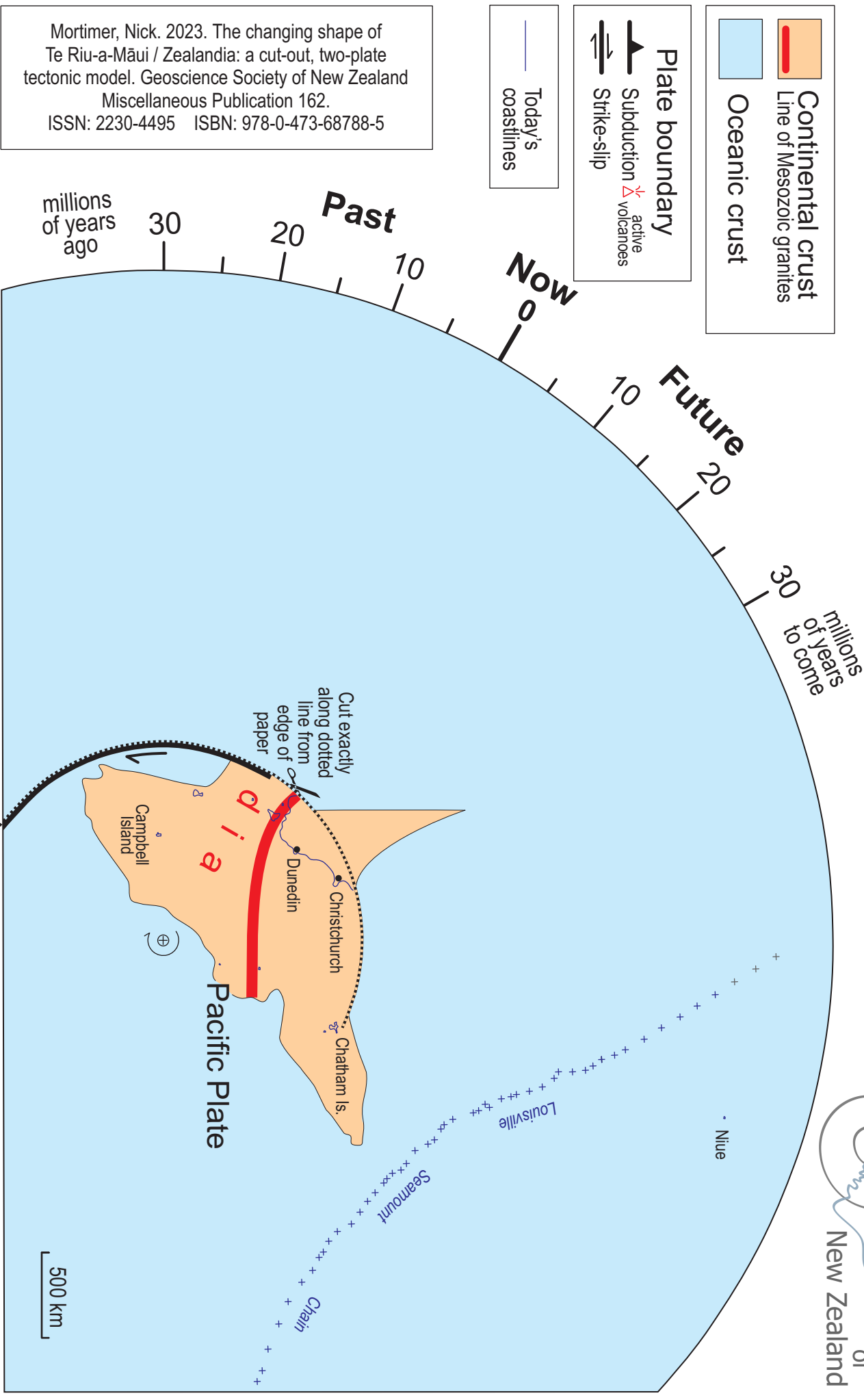
The changing shape of Te Riu-a-Māui / Zealandia



 Continental crust
 Line of Mesozoic granites
 Oceanic crust

Plate boundary
 Subduction active volcanoes
 Strike-slip

 Today's coastlines



Mortimer, Nick. 2023. The changing shape of Te Riu-a-Māui / Zealandia: a cut-out, two-plate tectonic model. Geoscience Society of New Zealand Miscellaneous Publication 162. ISSN: 2230-4495 ISBN: 978-0-473-68788-5

The changing shape of Te Riu-a-Māui / Zealandia

Earth's tectonic plates, sea-levels, climates, plants and animals are constantly changing.

Te Riu-a-Māui / Zealandia is Earth's eighth continent. It is five million square km in area and 95% submerged. Some of the continent sits on the Australian Plate, and some on the Pacific Plate; the plate boundary cuts Zealandia in half.

This very simplified two-plate, one-pole tectonic model shows the changing shape of Zealandia in geological time: from 30 million years in the past to 30 million years in the future.

Wellington's location used to be close to Dunedin. In the future it will move towards the Chatham Islands, and so will the mountains of the continent-continent collision zone.

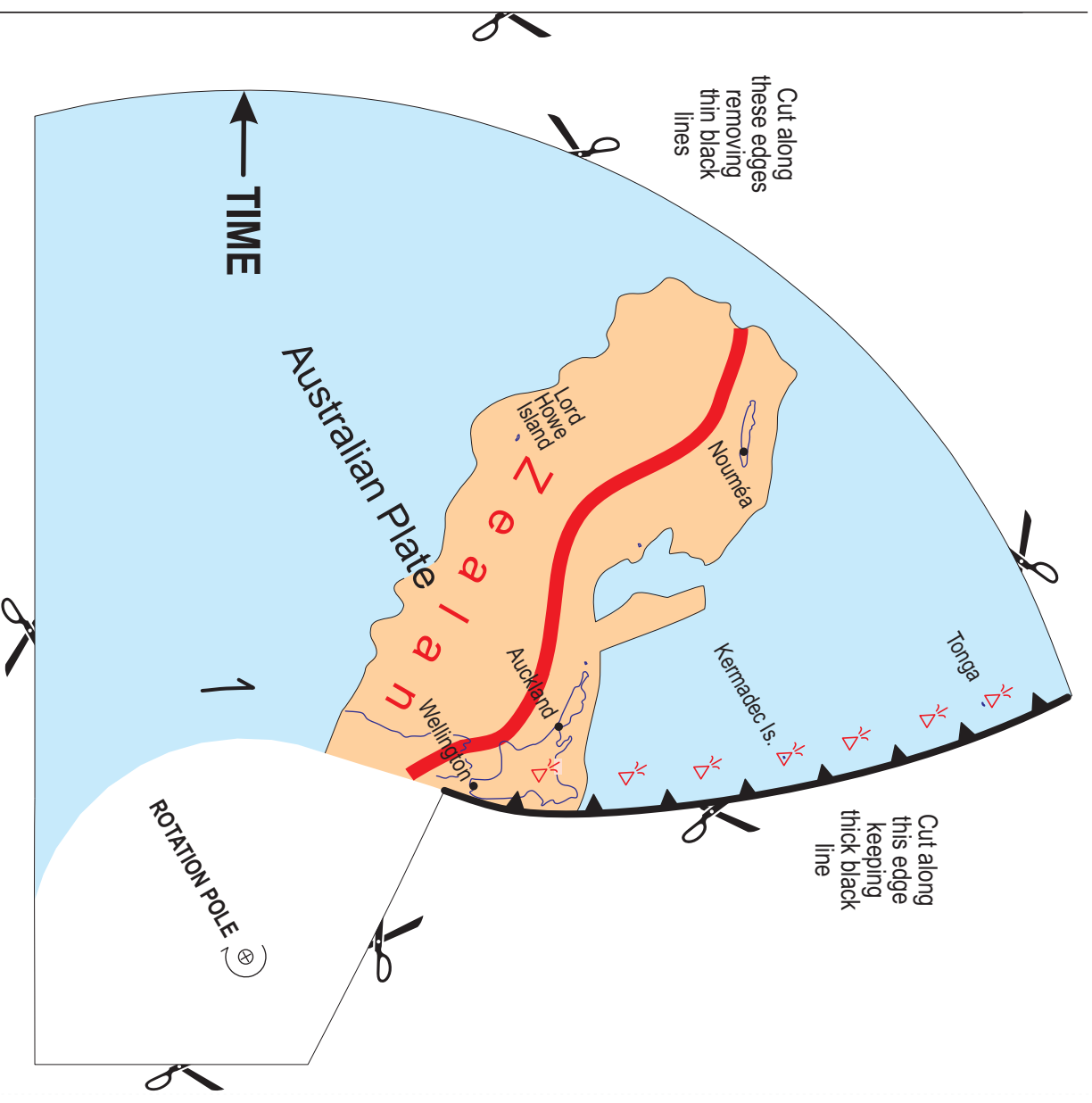
Geoscience Society of New Zealand

<https://gsnz.org.nz>

For online maps and more about Zealandia

<https://data.gns.cri.nz/tez>

Inspired by Harold Wellman's 1980s five-plate tectonic model of New Zealand. Supported by a Royal Society Te Apārangi James Cook Research Fellowship.



Two-minute assembly instructions

- Print to fit on one side of A4 paper or thin card
 - Get some scissors, tape and a drawing pin
 - Carefully cut along all marked lines
 - Tape over the cut along the bottom edge of Pacific Plate
 - Using a drawing pin, punch holes exactly through the rotation poles of both plates
 - Tuck Australian Plate rotation pole under Pacific Plate pole
 - Hold poles together from the back with a drawing pin, or use a paper fastener or snap stud
- Printing the model on one A4 page saves paper. Printing it larger on two A4 pages makes cutting easier.