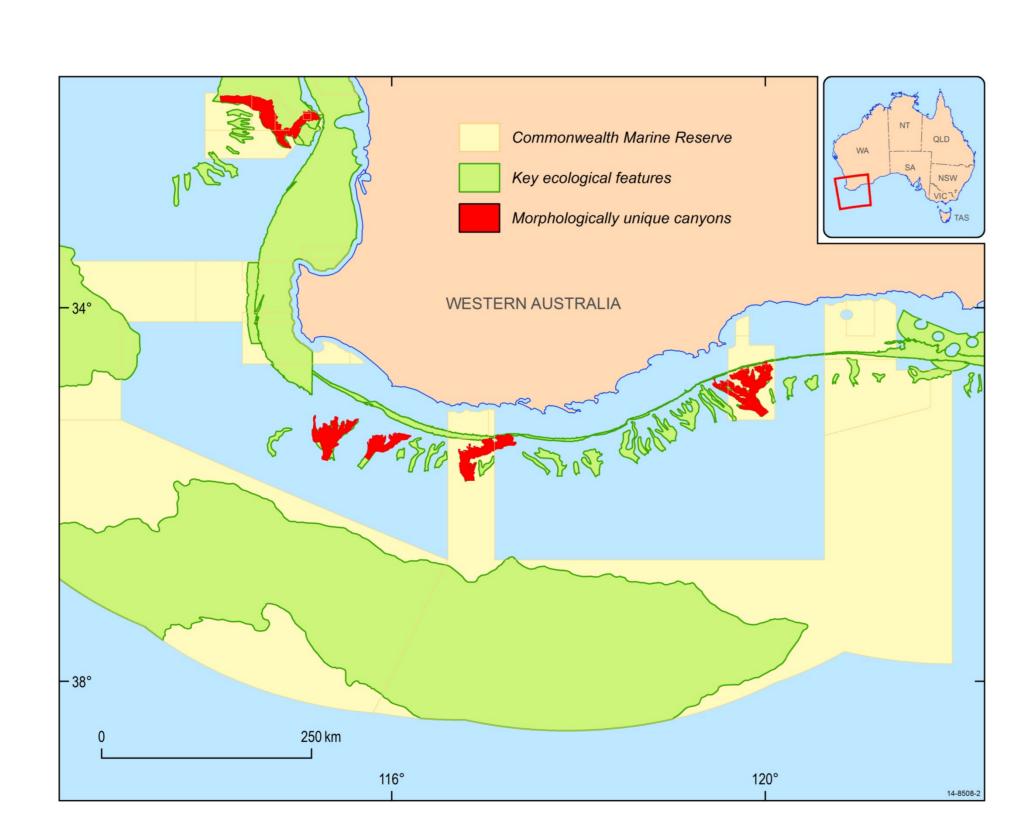
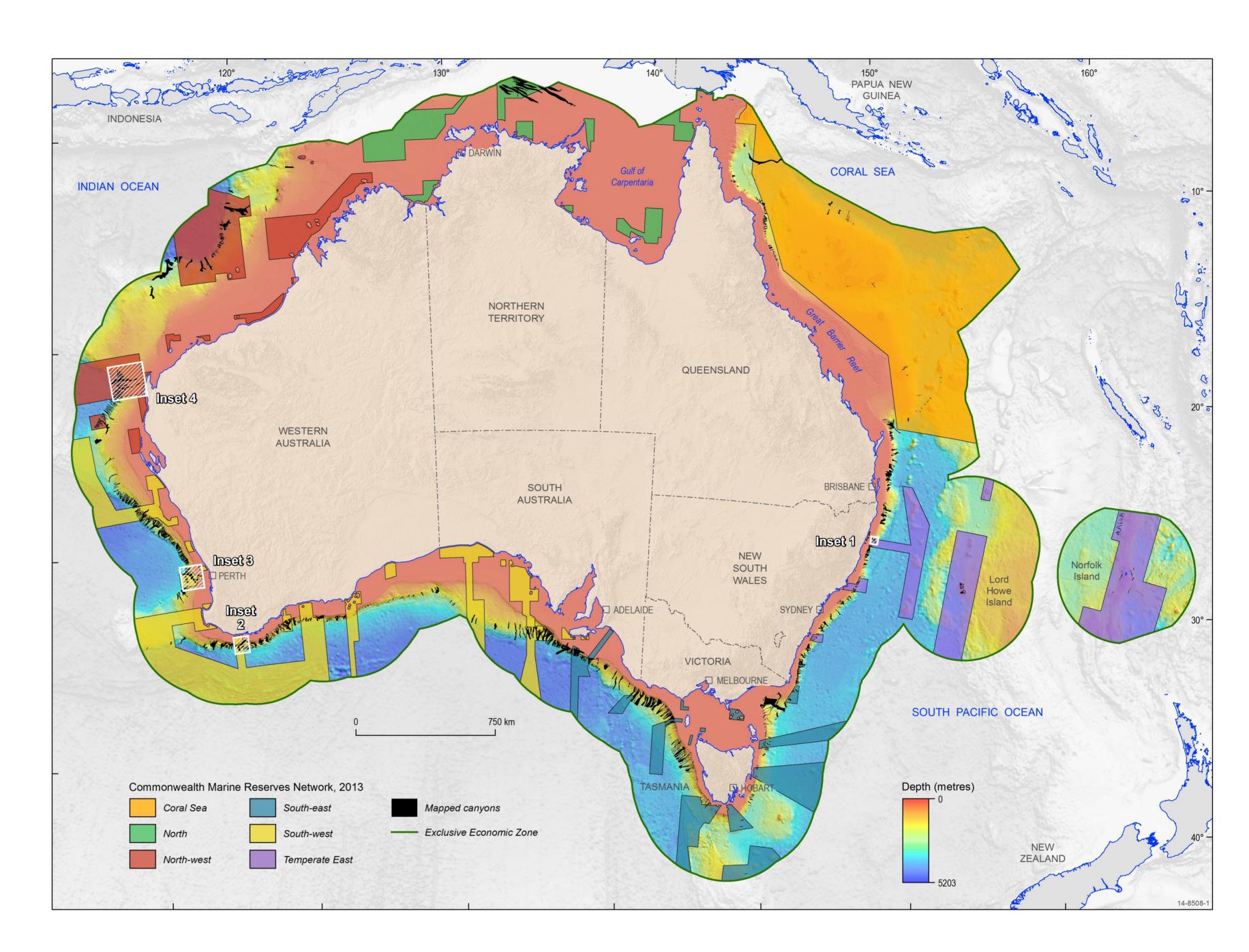
Submarine Canyon Mapping

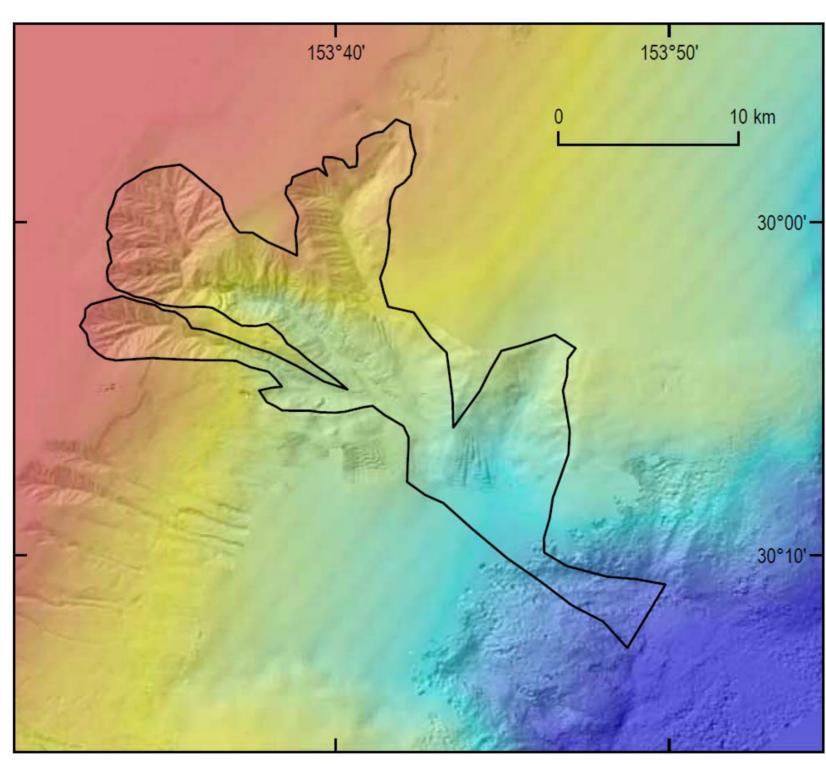
Zhi Huang, Johnathan Kool and Scott Nichol – Environmental Geoscience Division, Geoscience Australia

- New mapping by Geoscience Australia has identified 713 submarine canyons on the Australian margin and an additional 40 within external territorial seas
- Ninety-five canyons are classified as shelf-incising canyons. The remainder are located on the continental slope and are termed 'blind canyons'
- Submarine canyons are well represented in the national network of marine protected areas, with 38% intersecting (either whole or in part) a Commonwealth Marine Reserve
- A range of metrics were derived to describe canyon form and distribution and used to classify canyons into a uniqueness category

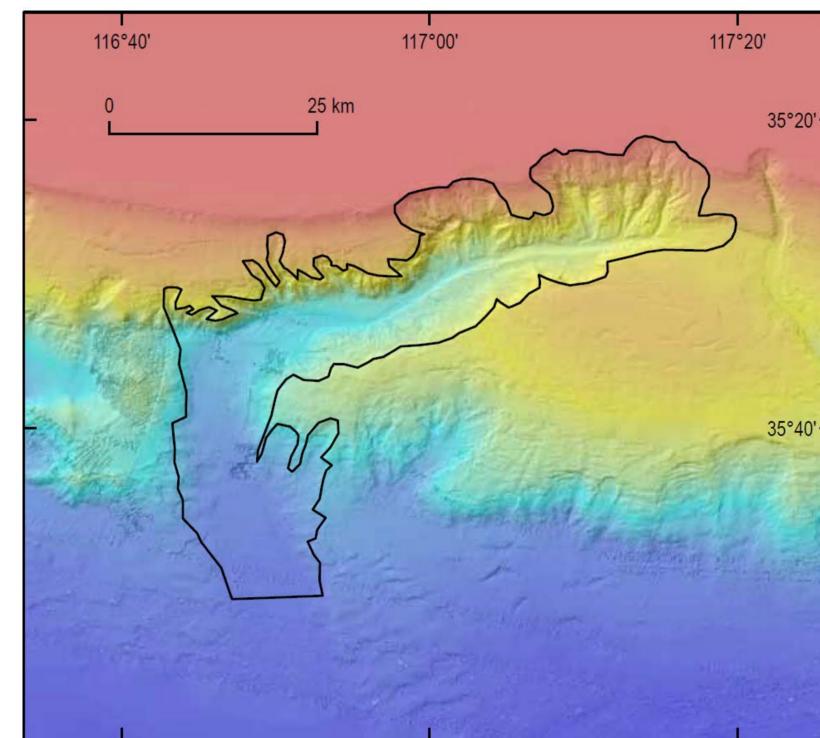


 This new information is being used in the analysis of largescale connectivity patterns between canyons and in turn will support the management of the marine reserve network

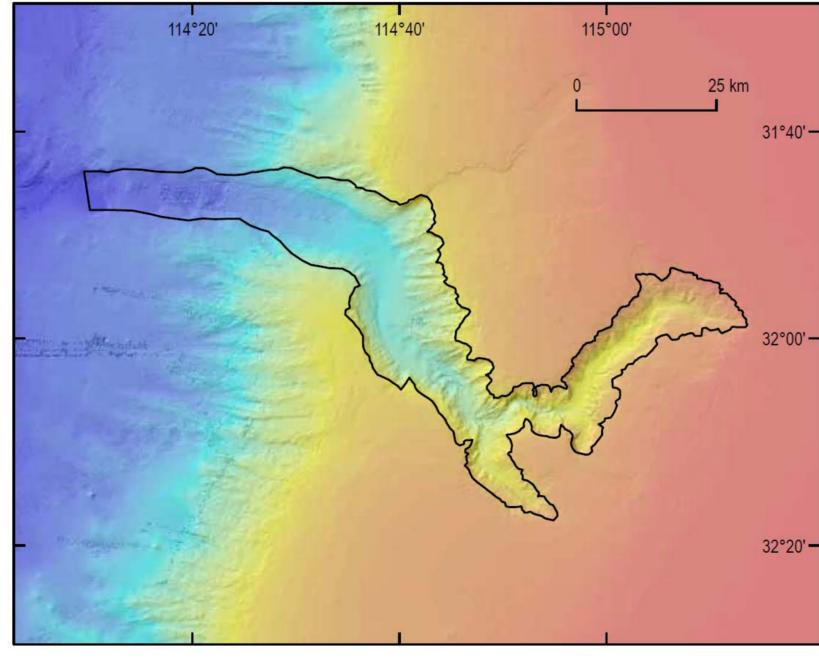




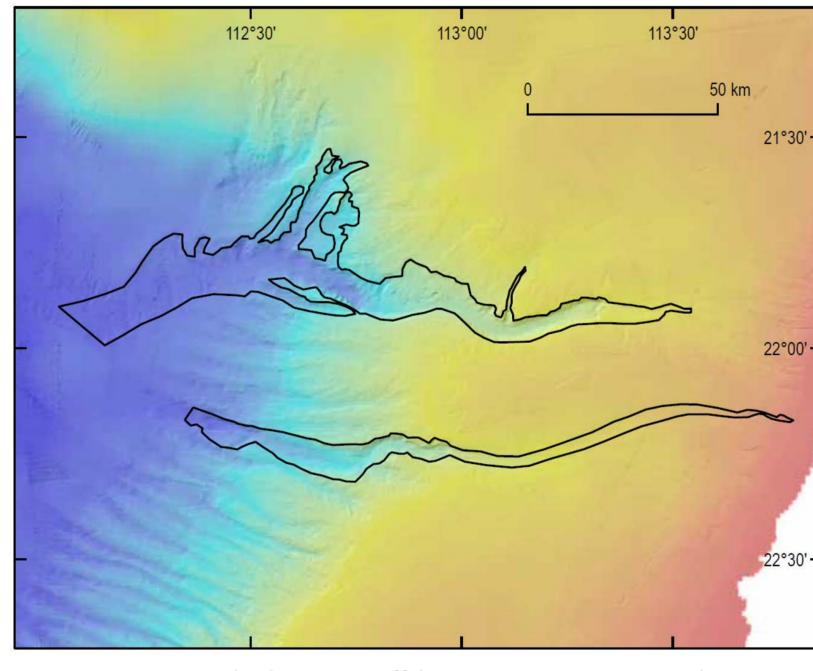
Inset 1: Unnamed shelf incising canyon on the eastern margin



Inset 2: Wilson Canyon in the Albany Canyons Group

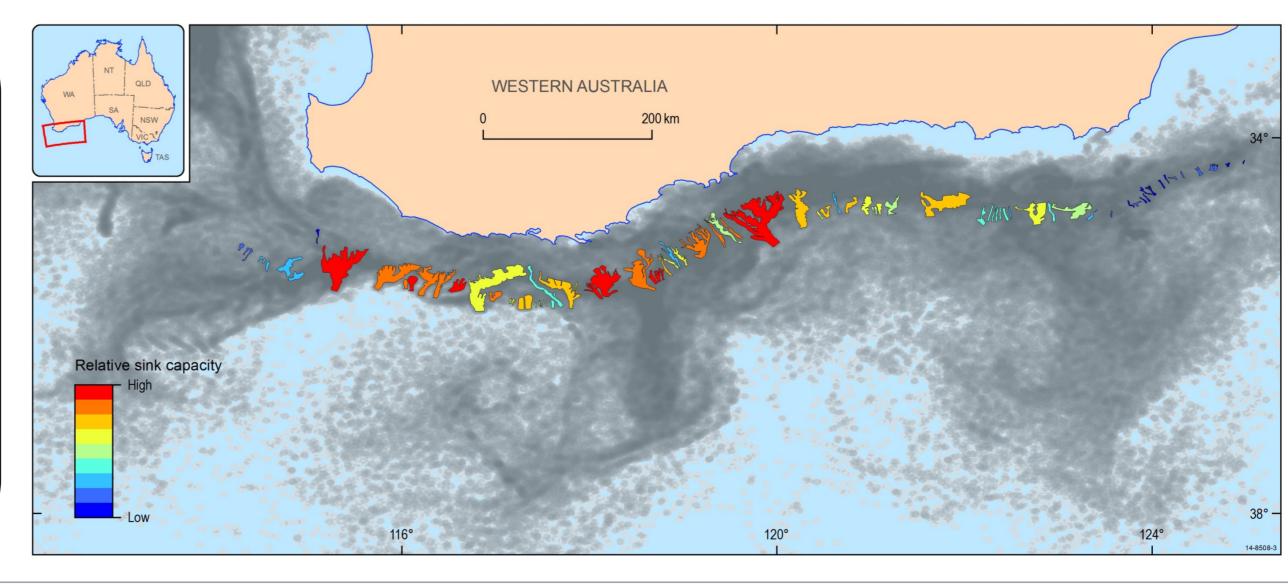


Inset 3: Perth Canyon – an example of a large shelf-incising canyon



Inset 4: Blind canyons offshore Cape Range Peninsula

Connectivity map and larval dispersal cloud (grey scale) for the Albany Canyon Group, WA. Warm colours denote canyons with higher capacity to act as a sink for marine larvae.









Management Authority (AFMA), the Australian Petroleum Production and Exploration Association (APPEA) and the Integrated Marine Observing System (IMOS).

Population and Communities (DSEWPaC). Our goal is to support marine stakeholders in evidence-based decision making for marine biodiversity management. Stakeholders include DSEWPaC, the Australian Fisheries











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