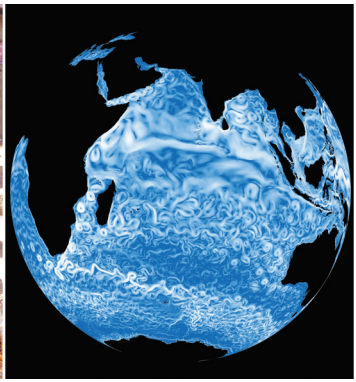
Global Learning Opportunities for Regional Indian Ocean Adaptation (GLORIA)


About the project:

The oceans are not warming evenly. In some fast warming areas the challenges will be felt earlier and more acutely. One such 'hotspot' covers the seas south and west of Madagascar.

There are no simple solutions for adapting to climate change. Finding appropriate options requires scientific understanding on a global scale, regional expertise, and local understanding of social and environmental contexts.

The GLORIA approach developed with teams from Madagascar, Australia, Brazil, Kenya, UK and USA can be applied in marine resource dependent coastal communities in other low income countries around the world.

This novel interdisciplinary methodology tightly links together ocean modelling, marine ecology and biodiversity, social and economic sciences.

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The GLORIA approach considers the interests of the poorest members of coastal communities, and the way warming oceans change may affect the ecosystem services on which they depend for their livelihoods and wellbeing.

High resolution ocean modelling projections

Anthropogenic climate change is a global phenomenon. However, its impacts on living marine resource and dependent communities is local and often unique. Information from global ocean models is immensely complex and includes a multitude of environmental characteristics.

Long term trends of these variables are of limited value for planning local climate change adaptation unless the model output is translated into a form that meets local needs.

Within the GLORIA project NOC modellers pioneered a participatory approach which combines climate modelling with local data and knowledge to identify impacts on species critical to the livelihoods and wellbeing of the communities involved.

The NOC's leading-edge future projections of ocean physics, biogeochemistry and ecosystems at high resolution underpinned the project's efforts to identify marine resources likely to be affected by climate change.

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