

Torres Strait Inundation Study

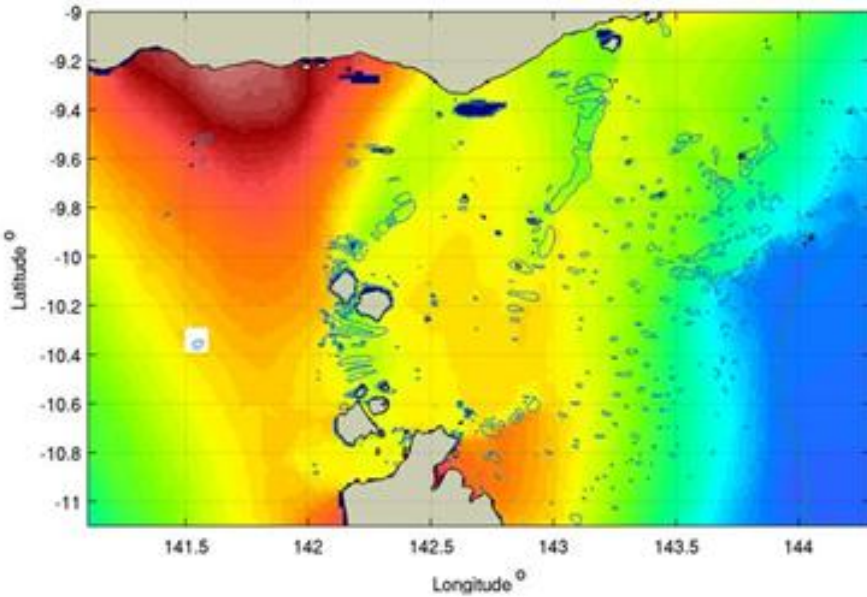


CLIENT:

Torres Strait Regional Authority, 2009-2010

LOCATION

Torres Strait, Australia.



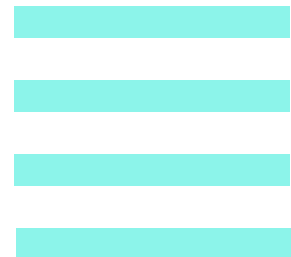
PROJECT DESCRIPTION

From 2009 to 2010, SEA led a multi-disciplinary team undertaking the probabilistic assessment of extreme ocean water levels and inundation hazard in Torres Strait under present and projected future climate conditions. The study was commissioned by the Torres Strait Regional Authority through its Land and Sea Management Unit.

The Torres Strait is a remote region having significant complexity and diversity of geophysical parameters, low levels of reliable in situ information and with a widespread community vulnerable to the impacts of the sea. Although there had been many individual studies over time into various aspects of the geomorphology, oceanography, tides and meteorology of the region, this study for the first time addressed the quantification of the extreme ocean water levels that can possibly occur. This information is now being used to perform detailed community vulnerability mapping and risk assessments as well as forming a rational basis for adaptation planning and assisting in the design of emergency services. The study also significantly improved knowledge of the land-sea elevation datums across the various island communities and provided estimates of the risks from extreme winds.

SEA PERSONNEL PROVIDED

- Tropical cyclone climatology and wind field model;
- Spectral wave modelling;
- Development of parametric storm tide models;
- Statistical modelling.



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