Improving predictions of extreme sea levels around Australia

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The UWA/BNHCRC project has developed a high-resolution hydrodynamic model for all Australia that was used to simulate sea levels at 1 km resolution over the past 59 years. Extreme value theory was applied to these data to derive sea level statistics, including 100 year Average Recurrence Intervals (ARI), and ARI (Return Period) curves. The results have been made available to the public through an interactive web portal (www.ozsealevelx.org) where you can access detailed extreme sea level information for every beach in Australia.

**WEBSITE:**

- 59 year (1958-2016) hourly sea level time series data for 31,479 sites (every 2 km)
- Average Recurrence Intervals (ARI) for sea level extremes
- Seasonality
- Tidal characteristics

![Graph of predicted extreme sea level statistics around Australia](image)

*An improved understanding of the likelihood and severity of extreme water level heights along the coast as a national dataset remains a high priority issue.*

— Miriam Middleman-Fernandez, lead end-user from Geoscience Australia

* Simulated monthly max sea level near Karumba

![Graph showing 50 years of sea level data](image)