

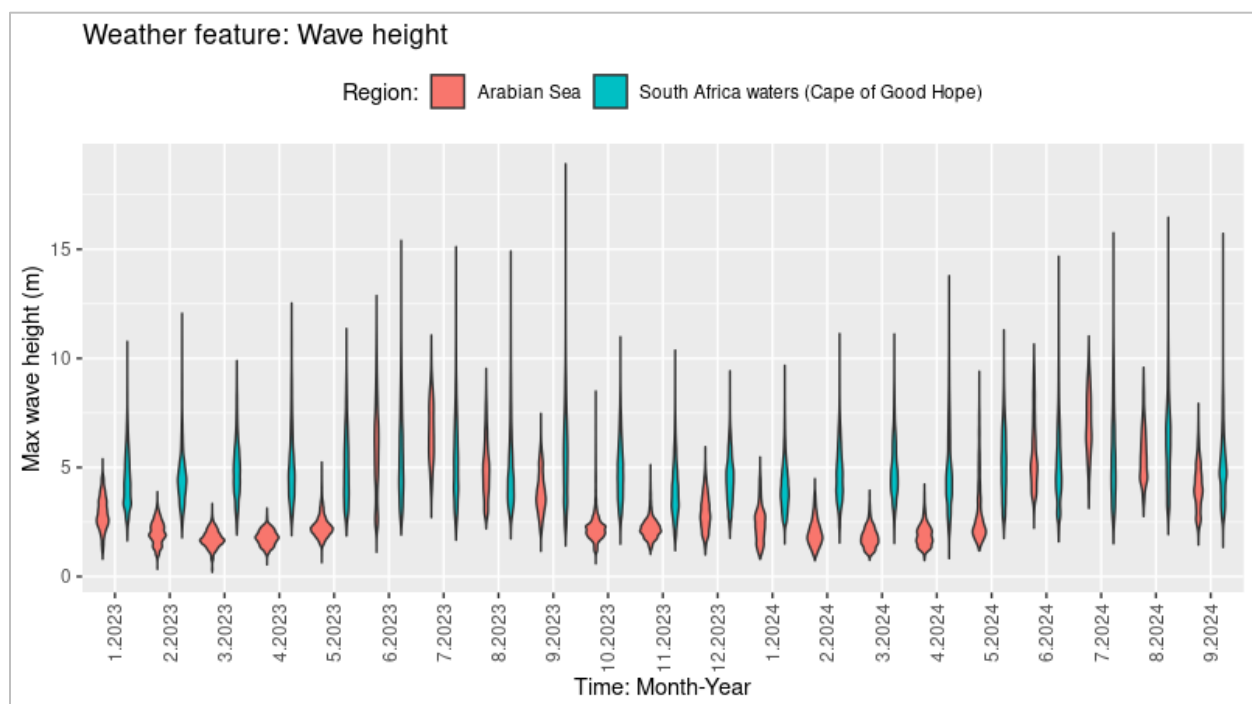
Wave and swell heights

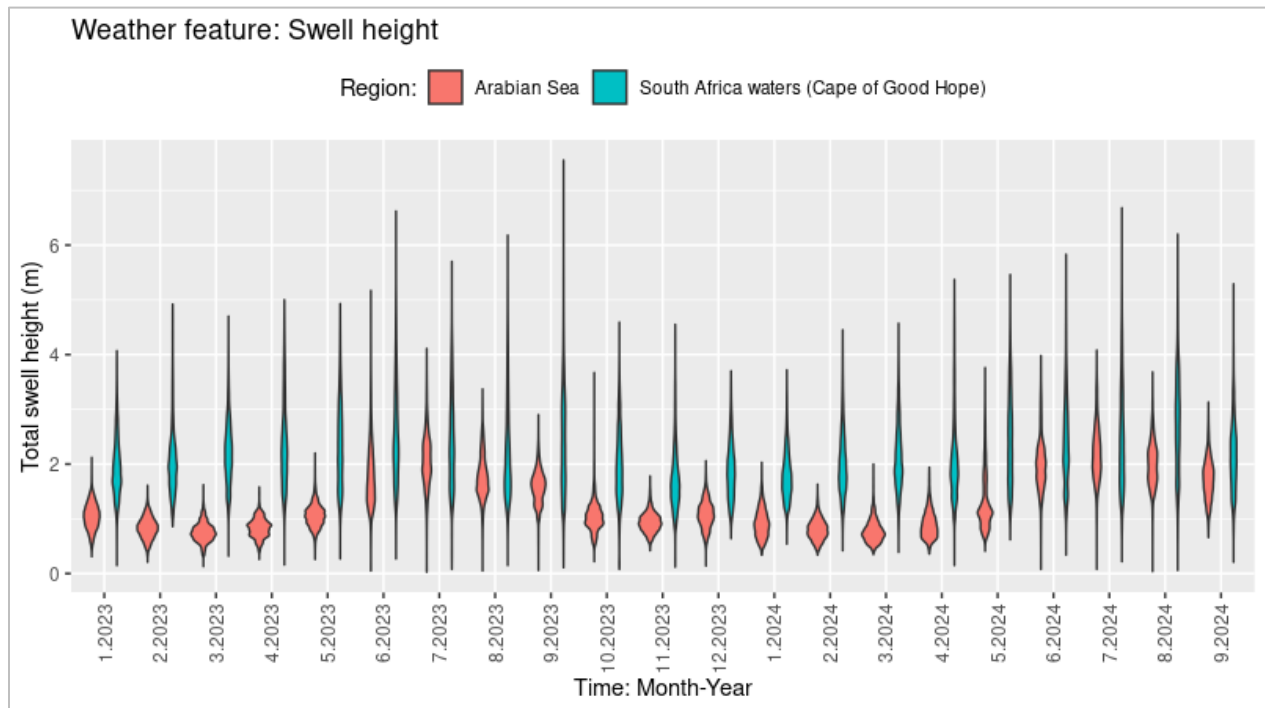
Comparing the Arabian Sea and the waters off South Africa

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As part of Gard's analysis of risks associated with rerouting from the Red Sea to South Africa, we have taken a closer look at maximum wave heights and swell heights in both regions. The two graphs below are mirrored density plots, meaning that they show the distribution/density of the observed values for wave height and swell height. Such a visualization better provides some context to the variation and min/max values observed in the two regions.

We have mapped each month from January 2023 till September 2024, and red plots show the observations from the Arabian Sea whereas blue plots are observations off South Africa. As we can see, both the total swell height and maximum wave height were higher off the Cape than in the Arabian Sea, throughout the whole period. Even when considering the seasons with the worst weather in both regions, i.e. the monsoon period in the Arabian Sea and the southern hemisphere winter months for South Africa, the wave and swell heights are still more severe outside the Cape.





The graphs above are mirrored density plots, meaning a distribution/density plot of the observations of the values for wave height and swell height. Source: Gard, Windward