**Half the world's beaches WON'T be underwater by 2100: Study shows some beaches will cope with sea-level rises by shifting towards land**

* *Researchers have published a scathing rebuttal to a March piece of research*
* *The previous study claimed half of the world's beaches will be gone by 2100*
* *But new analysis says this can not be said for sure and the research was flawed*
* *New study says some beaches will retreat landwards to a new location*

By [JOE PINKSTONE FOR MAILONLINE](https://www.dailymail.co.uk/home/search.html?s=&authornamef=Joe+Pinkstone+For+Mailonline)

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A doomsday climate change [**prediction**](https://www.dailymail.co.uk/sciencetech/article-8065697/Half-worlds-beaches-disappear-end-century-climate-change.html) stating half of the world's beaches will vanish by the end of the 21st century has been rubbished by new research.

The findings claim [**global warming**](https://www.dailymail.co.uk/news/climate_change_global_warming/index.html) will not spell the end of the world's beaches, which are economically and ecologically vital to coastal communities.

The latest research says it is possible beaches will survive climate change by migrating landwards.

Beaches that have a firm barrier behind them however, such as Blackpool and Bournemouth, are still at risk as this prevents the beach from naturally retreating.

But those which do have 'space to move', such as Slapton Sands in Devon, will likely survive.

Researchers led by the universities of Plymouth and Sydney reassessed the previous study which was published in March 2020 in the journal Nature Climate Change.

At the time, the researchers claimed around 50 per cent of the world's sandy beaches are at risk of severe erosion if greenhouse gas emissions continued= at their current rate.

At-risk areas, it claimed, includes Surfers' Paradise in Queensland, St Tropez, Honolulu, Copacabana, the Costa del Sol and Weymouth.

But a scathing rebuttal [**published today**](https://doi.org/10.1038/s41558-020-00934-2) in the same journal says the key to whether a beach is destroyed by global warming hinges on its ability to retreat.

It involved a comprehensive review of the previous study's data, methods and conclusions and found it to be flawed.

The researchers used global data and numerical methods and say it is impossible to make the wide-reaching predictions of the previous study.

The findings apply globally, including the US and Australia to Mexico, Argentina, India and Brazil.

Slapton Sands in Devon and Rivoli Bay in Australia are examples of such beaches which will adjust and survive, the researchers say.

However, beaches that are sandwiched between the water and a wall built as a sea defence will be unable to retreat, putting them at the most risk of extinction.

'The biggest threat to the continued existence of beaches is coastal defence structures that limit their ability to migrate,' Professor Cooper explains.

This include some of Britain's most beloved seaside resorts.

Co-author Professor Gerd Masselink, of the University of Plymouth's coastal processes research group, said Blackpool and Bournemouth's beaches could be lost.

'I would say many popular beaches will disappear,' he said.

'For example, Blackpool has a seawall behind it that prevents the beach from migrating with rising seas level.

'Bournemouth will be in trouble as well as it is backed by cliffs. But beaches with accommodation space will simply move up and back, as argued in the paper.'

Earlier this year he led a [**study**](https://www.dailymail.co.uk/sciencetech/article-8407459/Coral-islands-like-Maldives-survive-sea-level-rise.html)which found that island 'drowning' is not inevitable as sea levels rise.

'In the face of climate change and sea level rise, coral reef islands are among the most vulnerable coastal environments on the planet,' he said in June.

'Previous research into the future habitability of these islands typically considers them inert structures unable to adjust to rising sea level.'

He said previous studies therefore predict enormous risk of island loss due to coastal flooding.

As a result, much of the research looking at preventing this has gone into building coastal defences or removing inhabitants of island communities.

However, Professor Masselink says little attention has been paid to the natural robustness and adaptability of these islands.

'These coral reef islands have developed over hundreds to thousands of years as a result of energetic wave conditions removing material from the reef structure and depositing the material towards the back of reef platforms, thereby creating islands.

'The height of their surface is actually determined by the most energetic wave conditions, therefore overtopping, flooding and island inundation are necessary, albeit inconvenient and sometime hazardous, processes required for island maintenance.'

https://www.dailymail.co.uk/sciencetech/article-8884811/Seaside-holidays-beaches-survive-global-warming.html