

Pacific islands growing, not sinking

By [Philippa McDonald](#) in Auckland

Updated Thu Jun 3, 2010 9:26am AEST

Climate scientists have expressed surprise at findings that many low-lying Pacific islands are growing, not sinking.

Islands in Tuvalu, Kiribati and the Federated States of Micronesia are among those which have grown, largely due to coral debris, land reclamation and sediment.

The findings, published in the magazine *New Scientist*, were gathered by comparing changes to 27 Pacific islands over the last 20 to 60 years using historical aerial photos and satellite images.

Auckland University's Associate Professor Paul Kench, a member of the team of scientists, says the results challenge the view that Pacific islands are sinking due to rising sea levels associated with climate change.

"Eighty per cent of the islands we've looked at have either remained about the same or, in fact, gotten larger," he said.

"Some of those islands have gotten dramatically larger, by 20 or 30 per cent.

"We've now got evidence the physical foundations of these islands will still be there in 100 years."

Dr Kench says the growth of the islands can keep pace with rising sea levels.

"The reason for this is these islands are so low lying that in extreme events waves crash straight over the top of them," he said.

"In doing that they transport sediment from the beach or adjacent reef platform and they throw it onto the top of the island."

But Dr Kench says this does not mean climate change does not pose dangers.

"The land may still be there but will they still be able to support human habitation?" he asked.

Adelaide University climate scientist Professor Barry Brook says he is surprised by the findings.

"Sea levels are obviously rising - I think in the short term [the study] suggests that there's maybe more time to do something about the problem than we'd first anticipated," he said.



Kiribati is one of the Pacific islands thought to be at risk from rising sea levels. (AAP, file photo)

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"But the key problem is that sea level rise is likely to accelerate much beyond what we've seen in the 20th century."

Naomi Thiroboux, from Kiribati, has studied the shape of Pacific islands for her PhD and says no-one should be lulled into thinking erosion and inundation is not taking its toll and displacing people from their land.

"In a populated area what would happen was that if it's eroding, a few metres would actually displace people," she said.

"In a populated place people can't move back or inland because there's hardly any place to move into, so that's quite dramatic."

Both Dr Kench and Dr Brook and scientists agree further rises in sea levels pose a significant danger to the livelihoods of people living in Tuvalu, Kirabati and the Federated States of Micronesia.

Tags: [environment](#), [climate-change](#), [science-and-technology](#), [research](#), [fs-micronesia](#), [tuvalu](#), [pacific](#)

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- **luke:**

03 Jun 2010 12:55:19pm

Climate change creating bigger islands, its not all doom and gloom as reported by the masses. It seems climate change is all part of continuous evolution.

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- **Balanced:**

03 Jun 2010 1:45:23pm

Not all doom and gloom? So wave action has been found to increase the size of tiny islands in the pacific. OK the masses can stop worrying?...

It's not like the sea level isn't rising or that this in any way disproves climate change.

You still have to worry about, drought, pestilence, land degradation and the 10s or even 100s of millions in low lying areas of Bangladesh and India that will be looking for homes. This wave action won't help there.

I'm just waiting for the sceptics to mis-understand and miss represent this - just like completely baseless, mindless "water vapour is 95% of the greenhouse effect" - argument. Which was just made up and repeated a until the unscientifically unwashed decided it must be fact

And when I say "made up" I mean; basic physics debunks this proposition and in addition, there is no published science, no peer reviewed papers and no complementary papers supporting this idea. None. Nothing. It's MADE UP.

As is the assertion by Abbot that it was warmer during Jesus' time - the just no peer reviewed or even published science - just a dairy farmer who reckons it was warm at that time, determined by looking at one of 50 temperature approximations that is known to have a +/- 30% accuracy and failing to comment that the

other 49 approximations disagree....

[Agree](#) (0) [Alert moderator](#)

- **acker:**

03 Jun 2010 12:56:03pm

It would be interesting to delve into the post inhabitation history of these islands, perhaps they have been dealing with similiar problems all the time they have been there

[Agree](#) (0) [Alert moderator](#)

- **Lizard:**

03 Jun 2010 1:26:17pm

Two corrections/clarifications: "Kiribati" is not an island, it's a country made up of over thirty islands/atolls. There is a fair amount of human land reclamation on Tarawa, the main island of Kiribati, which can explain some of the 'growth' of the islands.

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