Nils-Axel Morner et al., J Earth Sci Clim Change 2017, 8:10(Suppl)
DOI: 10.4172/2157-7617-C1-036

Our oceans – Our future: New evidence-based sea level records from the Fiji islands indicating no rise in ocean level

Nils-Axel Morner[1], **Pamela Matlack Klein**[2] and **Willie Soon**[3]
[1]Paleogeophysics & Geodynamics, Sweden
[2]Portuguese Sea Level Project, USA
[3]Astrophysics, USA

The sea level changes in the Fiji Islands have been the focus at the UN conference on Our Oceans, Our Future on June 5-9, hosted by the governments of Sweden and Fiji, and will surely be in the focus again at the COP23 conference in Bonn, November 6-17, hosted by the Government of Fiji. This focus, however, was quite miss-directed,depending on models and preconceived ideas, and ignoring observational facts. Anticipating that this would be the case, we undertook a special sea level investigation in the Fiji Islands themselves, bringing forward evidenced-based observational facts on past and present sea level changes [1]. As an example of what we mean by evidence-based observa-tional facts, we refer to our paper on the sea level changes in the Indian Ocean [2], where we combine multiple observational facts like coastal morphology, stratigraphy, ecology, coastal dynamics, history, archaeology and radiocarbon dating. We have discussed the tide-gauge stations on the island of Vitu Levi [3] and coastal erosion on the Yasawa Islands [4]. Now we summarize our findings with respect to sea level changes [1, 5] as illustrated in Figure 1. The shores of the Yasawa Islands are characterized by a strong coastal stability [1, 4, 5]. The HTL is, on rocky coasts, marked by rock-cut platforms and under-cut notches and sea caves, indicative of multi-decadal sea level stability. At several places we observed the occurrence of coral "mini-atolls" with a living coral rim at 40-60 cm below LTL (Fig. 1). The conclusion is that the regional eustatic ocean level has remained stable in the Fiji region for, at least, several decades, and that there do not exist any observational signs of any present on-going sea level rise. Anyone claiming the opposite does this for reasons other than evidence-based scientific observations.

Biography

Nils-Axel Morner took his Ph.D. in Quaternary Geology at Stockholm University in 1969. Head of the institute of Paleogeophysics & Geodynamics (P&G) at Stockholm University from 1991 up to his retirement in 2005. He has written many hundreds of research papers and several books. He has presented more than 500 papers at major international conferences. He has undertaking field studies in 59 different countries. The P&G institute became an international center for global sea level change, paleoclimate, paleoseismics, neotectonics, paleomagnetism, Earth rotation, planetary-solar-terrestrial interaction, etc. Among his books; Earth Rheology, Isostasy and Eustasy (Wiley, 1984), Climate Change on a Yearly to Millennial Basis (Reidel, 1984), Paleoseismicity of Sweden: a novel paradigm (P&G-print, 2003), The Greatest Lie Ever Told (P&G-print, 2007), The Tsunami Threat: Research & Technology (InTech, 2011), Geochronology: Methods and Case Studies (InTech, 2014), Planetary Influence on the Sun and the Earth, and a Modern Book-Burning (Nova, 2015).

morner@pog.nu

Notes: