“Unlucky Mangkhut” could hit HK with storm tides of 5-7m today

IPCC AR6: By 2100, rising seas with tides reaching 5m in HK cannot be ruled out

Singapore will protect critical infrastructure to 5.5m
Can HK afford not to?

The IPCC says an event like Mangkhut could happen every year by 2050 in low-lying cities

Note: “Unlucky Mangkhut” could have happened if Mangkhut hit HK directly at astronomical high tide
Source: Top & bottom graphic: CWR based on IPCC AR6 & astronomical high tide in Hong Kong, Digital Terrain Model (5m) from the Lands Department of Hong Kong, 3D photo-realistic model based on the Planning Department of Hong Kong, ESRI ; Next page bottom graphic: Designed by CWR interns Fergal Tse & Oscar Wong for illustrative purposes only, no adaptation feasibility studies have been conducted.
What’s underwater at 6m

An “Unlucky Mangkhut” could bring storm tides of 5-7m across HK today. This will have wide-ranging impacts: for example, at 6m, 22% of its population as well as 10% of land along with the airport, port and CBD will be flooded. By 2050, the IPCC says an event like Mangkhut could occur every year.

1.62mn
Affected

111km²
Affected

Airport (HKG) ❌

Port ❌

CBD ❌

While typhoons are one-off events, the IPCC AR6 says that 2m of sea level rise cannot be ruled out by 2100. This means that HK could be permanently submerged by rising seas with tides reaching 5m in 80 years time. Can HK afford not to act? Typhoon-free Singapore has already announced it will raise critical infrastructure to 5.5m.

HK is more vulnerable than Jakarta / Bangkok

HK is in the bottom quartile, ranking #16 and #17 out of 20 APAC cities in the 1.5°C and 4°C CWR APACCT 20 Index respectively. The indices benchmark 20 cities for various types of physical coastal threats (locked-in SLR, storm surges & subsidence) as well as government adaptation action for low emission & current policies scenarios. Over 100 finance professionals from chairs/directors of bank boards to research analysts as well as financial industry associations, asset owners and financial regulators have provided feedback on the development of this index.

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