Sea-Level Science in Singapore and Southeast Asia



3:30 p.m.

Conference Room, 3/F, Mong Man Wai Building

Zoom Link (Mixed-mode) ID: 992 4969 9833 Passcode: 983837



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No matter how quickly nations lower emissions now, the world is looking at about 15 to 30 centimeters of sea-level rise through the middle of the century, given the long-drawn impact of climate change on the oceans and ice sheets. Even under a stable climate, sea-level rise is expected to continue slowly for centuries. Beyond 2050, sea-level rise becomes increasingly susceptible to the world's emission choices. If countries choose to continue their current paths, greenhouse gas emissions will likely result in ~3°C of warming by 2100, and a sea-level rise of up to 0.8 meters. Under the most extreme emissions scenario, rapid ice sheet loss from Greenland and Antarctica could lead to a sea-level rise approaching 2 meters by the end of this century and over 5 meters by 2150. Here we illustrate the ways in which current methodologies and historical and geological data sources from Southeast Asia can constrain future projections, and how accurate projections can motivate the development of new sea-level research questions to mitigate and adapt to climate change.

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