UNIVERSITY of HAWAI'I MĀNOA

Department of Atmospheric Sciences Seminar Announcement

Department of Atmospheric Sciences, S.O.E.S.T., University of Hawai'i at Mānoa
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SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY

Analysis of machine learning model used in typhoon intensity prediction

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You are invited to a Zoom meeting.
When: March 24, 2021 at 3:30PM HST

Register in advance for this meeting:
https://hawaii.zoom.us/meeting/register/tJYvfu2urD8jEtb2-aKc4ISPr4W9YuHre-tE

After registering, you will receive a confirmation email containing information about joining the meeting.

Abstract:

There are about eighty to a hundred tropical cyclones generate every year. The Northwest Pacific has the highest frequency of tropical cyclones (TC), with about one third of the global total. And China is most affected by the tropical cyclones among the countries in the Northwest Pacific and South China Sea. We counted the number of TC landings from 1980 to 2017 and found that there are 99 tropical cyclones made the first landfall over China. Generally, when a TC moves closer to the inshore zone, the intensity of it tends to weaken, but there are also some situations that the TC enhances during this process.

Now more and more artificial intelligence is used in the field of weather forecasting. If the two can be well combined, disaster prevention and mitigation can be better achieved. In this seminar, machine learning methods are used to build a preliminary model of typhoon intensity changes prediction.