

The Institute for Mesoamerican Studies
is pleased to present:

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***Mud and the Maya 'Megadroughts':
Two millennia of environmental context from
northern Yucatán stalagmite records of
hydroclimate and compound extreme events***



Friday, October 28

3:00pm

FA 126

The so-called "collapse" of the high civilization in the Maya lowlands during the Terminal Classic Period (TCP) is associated with evidence for severe and persistent drought conditions in the Yucatán Peninsula. Comparing multiple high-resolution paleoclimate records from cave stalagmites is providing new and surprising insights into the complex climatic context during the TCP, and the region's long experience with hurricanes, droughts, and contrasting seasons. Intriguingly, the unusual stable isotopic composition of hurricane rain plays a key role in these ongoing debates. Was TCP drought in the northern Yucatán moderate and punctuated by brief moist periods? Instead, was TCP drought severe but punctuated by years with major or multiple hurricane strikes? Or, was the TCP drought driven by a lack of normal hurricane rainfall? Dr. Frappier will present results from her research group and others. She will discuss implications for the Maya Lowlands that are emerging from work in the region, as well as current advantages and limitations to speleothem-based paleoclimate interpretations.