

DEPARTMENT OF GEOGRAPHY

Arthur H. Robinson Colloquium

GLOBAL

2018-19 SPEAKER SERIES

AFRICA

***Rapid Climate Change: Evidence from
African Ice Fields and Beyond***

Lonnie G Thompson, Ohio State University

Friday, March 29, 2019

3:30 pm in 1080 Derby Hall

Tropical glaciers are highly sensitive indicators and recorders of climate change. Unfortunately, most are currently retreating, primarily due to the recent anthropogenic warming and in some regions such as Peru, strong El Niño events augment the melting by increasing air temperature and decreasing precipitation. The loss of ice cover has been well documented on Mt. Kilimanjaro and Mt. Kenya. The Kilimanjaro ice core provides ~11,700 year climatic and environmental histories for eastern equatorial Africa and includes evidence for the greatest historically recorded drought in tropical Africa ~4000 years ago during the "First Dark Age in Egypt." On regional to global scales the greatest near-term impacts of Earth's melting low latitude glaciers will be economic, especially in countries that rely on glacial streams for agriculture, hydroelectricity, municipal water supplies, ecosystem support, tourism, and recreation. The loss of these mountain glaciers is also likely to be a "threat multiplier" for growing geopolitical tensions in some regions.

Dr. Thompson is a Distinguished University Professor in OSU's School of Earth Sciences & a Senior Research Scientist in the Byrd Polar & Climate Research Center.

