

Research Unit Forest Dynamics - colloquium

Date: 27.08.2024

Time: 10:30

Room: Engler-Saal

Duration: 25 minutes

Author: Dr. Liangzhi Chen

Title: **Multiyear droughts and ecosystem responses – A global look**

Abstract:

With more regions projected to experience an increase in drought frequency and intensity, the chances that single droughts cumulate into multiyear droughts – events lasting years to decades – increase. We applied a novel method to identify the morphologically contiguous droughts over space and time, thus forming a multi-year droughts inventory at a global scale. In addition, we use the vegetation greenness indicator to proxy ecosystem responses to such multiyear droughts during the satellite era. We found that multiyear droughts have become drier and hotter and led to increasingly diminished vegetation greenness, but such patterns vary across ecosystems around the globe.