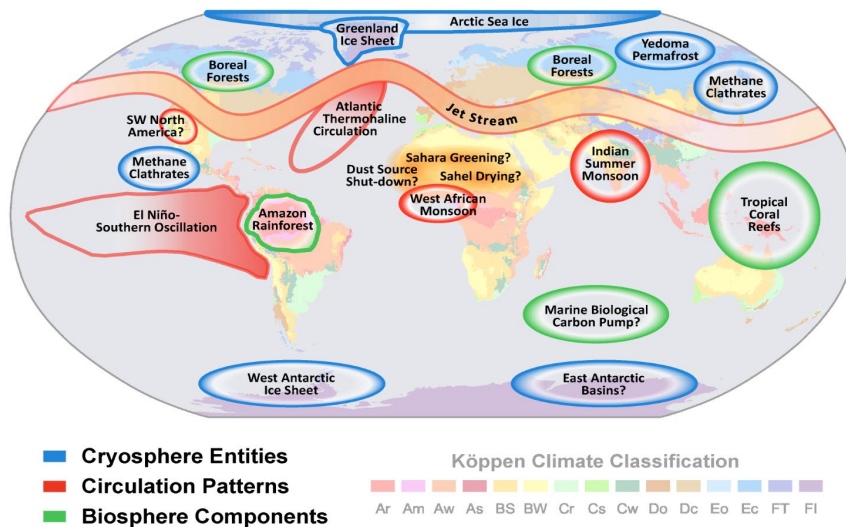


«Stable States and Tipping Points in the Earth System»



Map of the most important tipping elements in the Earth System overlain on the Köppen climate classification. PIK, 2017. CC BY-ND 3.0 DE.

In this seminar, we want to inform and discuss highly topical subjects concerning stable states and tipping points in the climate system. Current global warming trends can potentially lead to tipping points where a steady increase in temperature leads to irreversible changes of the Earth System. This underlines the importance of addressing tipping points for understanding the Earth System. Past, present and future stable states and tipping points will be addressed from different perspectives and disciplines, thereby fostering interdisciplinary exchange.

Thursdays, 3-4 p.m. Connection via Webex.

- Nov 25th: Niklas Boers (PIK)
Observation-based early-warning signals for a collapse of the Atlantic Meridional Overturning Circulation
- Dec 9th: Thomas Kleinen (MPI)
Past abrupt changes, tipping points and cascading impacts in the Earth system
- Jan 13th: Chris Boulton (University of Exeter)
Pronounced loss of Amazon rainforest resilience since the early 2000s
- Jan 20th: Christian Haas (AWI)
Can sea ice still be saved? Sea ice tipping points in the Arctic and Antarctic
- Jan 27th, 1 pm: Judith Hauck (AWI)
Tipping points in Biogeochemistry
- Feb 10th: Jan-Claas Dajka (HIFMB)
How missing social-ecological feedbacks can drive tipping points: a case study on Jamaican coral reefs

The speaker will give an overview presentation (15 minutes) on their topic referring to one key paper. Participants are asked to read the paper in advance. After the presentation, we invite everybody to contribute to a lively discussion.

Bonus: Each PhD student receives one POLMAR-credit point for attending six seminars.