



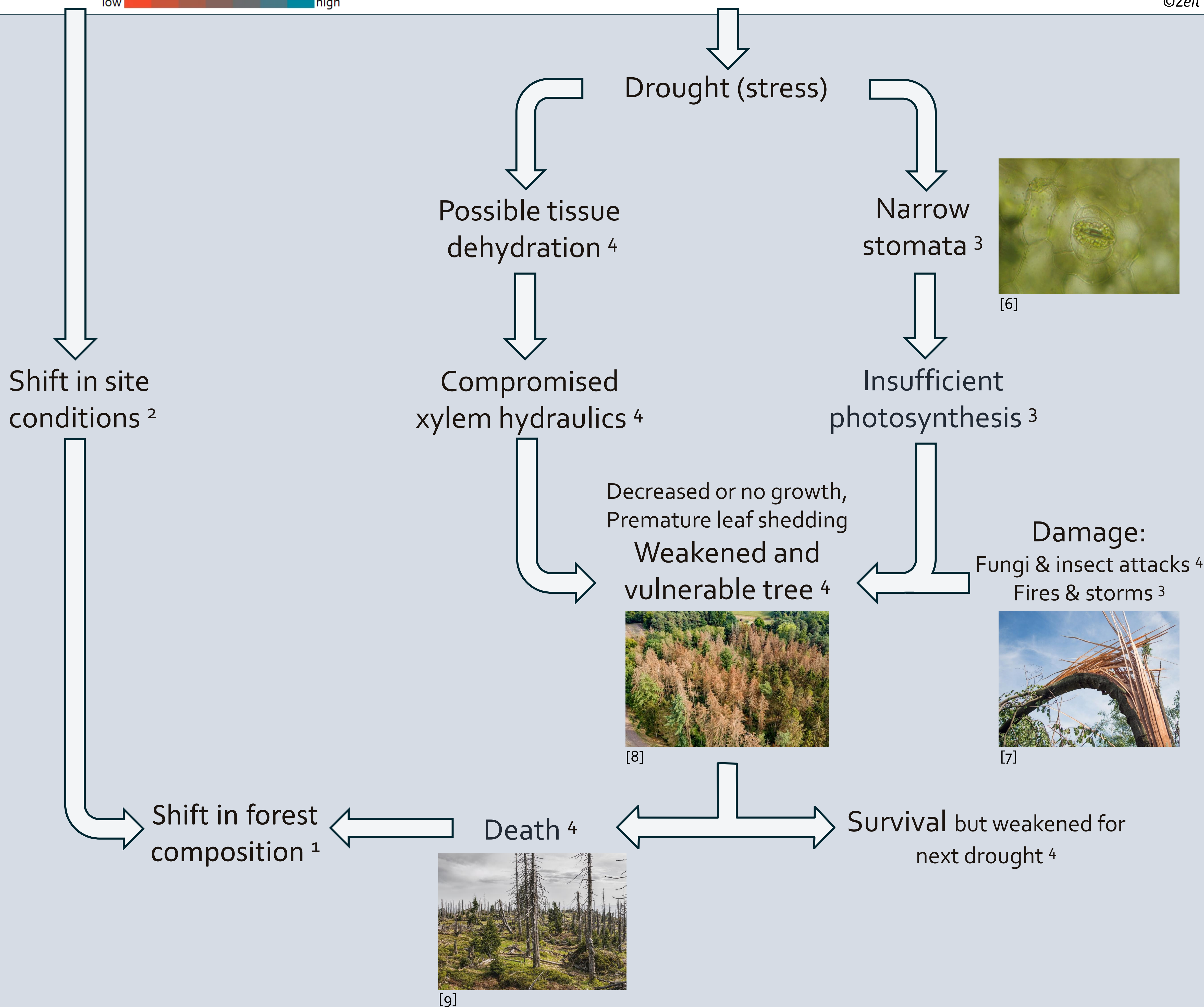
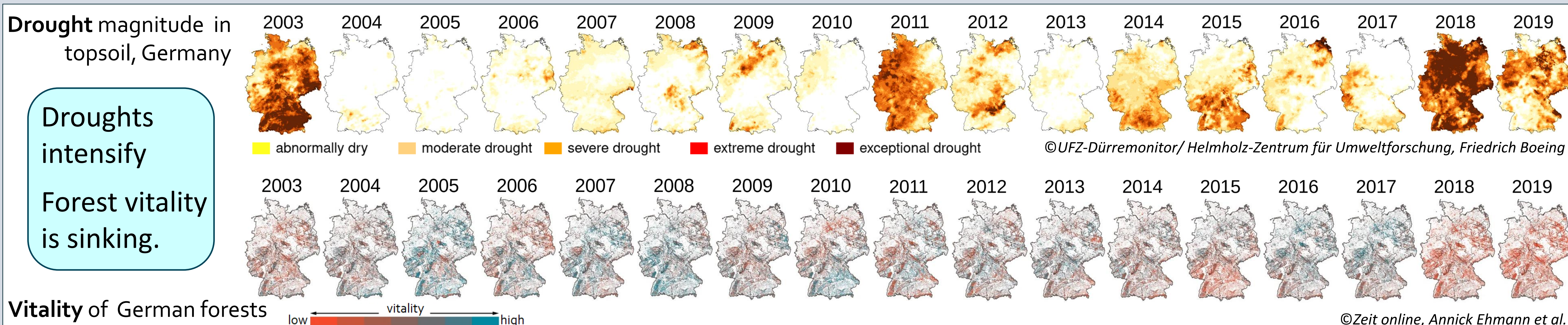
The Cascading Effects of Recent Droughts on German Forests



Luise Werland & Moana Wirth

Take Home Message

Intensifying droughts result in reduction in forest productivity, loss of vitality and even mortality, often followed by a shift in site conditions and forest composition.^{1,4}



Outlook

Tree mortality will likely increase in the future and cause a shift in site conditions and forest composition posing a major challenge for forest management as well as economic and societal sectors.^{1,5}

Contact

luise.werland@stud.uni-greifswald.de
moana.wirth@stud.uni-greifswald.de

Seminar: Climate Change SoSe 2020
Professor: Martin Wilmking

Sources

- [1] Albert, M. et al. (2017): Tree Species Selection in the Face of Drought Risk – Uncertainty in Forest Planning. In: *Forests* 8 (10), S. 363.
[2] Bolte, A.; Wellbrock, N. (Eds.) (2019): Status and Dynamics of Forests in Germany. Springer Open.
[3] Lindner, M. et al. (2010): Climate change impacts, adaptive capacity, and vulnerability of European forest ecosystems. In: *Forest Ecology and Management* 259, S. 698-709.
[4] Schuldt, B. et al. (2020): A first assessment of the impact of the extreme 2018 summer drought on Central European forests. In: *Basic and Applied Ecology* 45, S. 86-103.
[5] Vitali, V. et al. (2017): Silver fir and Douglas fir are more tolerant to extreme droughts than Norway spruce in south-western Germany. In: *Global change biology*, 23(12), S. 5108-5119.

Images

- [6] <https://www.pflanzenforschung.de/de/pflanzenwissen/journal/alte-verwandte-ursprung-von-spaltoeffnungen-entschluss-10737>
[7] <https://www.waldhilfe.de/sturm-und-sturmschaeden-im-wald/>
[8] <http://www.umweltinstitut.org/aktuelle-meldungen/meldungen/2020/klima/der-wald-und-der-wassermangel.html>
[9] https://www.helmholtz.de/erde_und_umwelt/ein-neues-waldsterben/