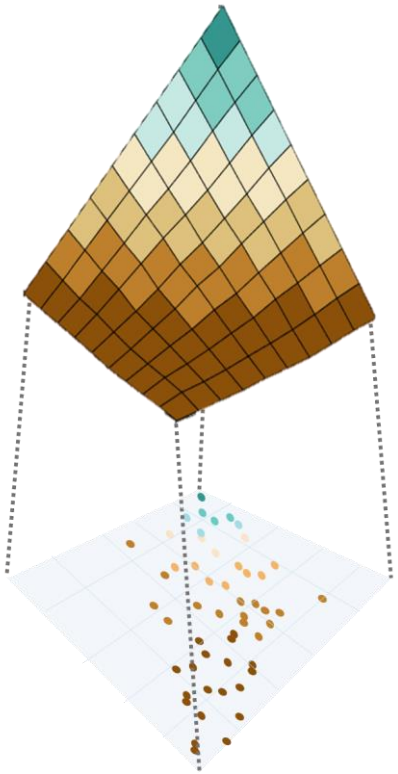
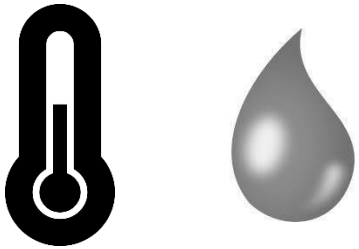


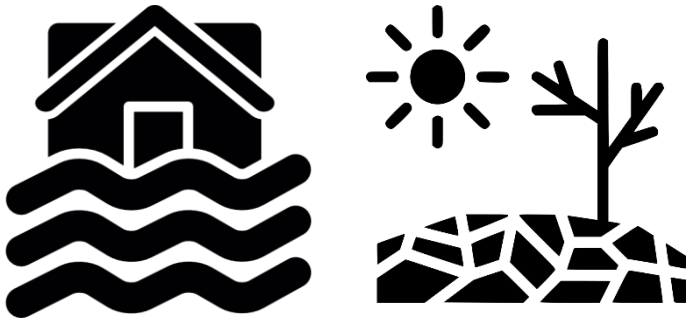
Copulas for hydroclimatic analysis: A practice-oriented overview

Faranak Tootoonchi,
Mojtaba Sadegh, Jan olaf Haerter,
Olle Räty, Thomas Grabs,
Claudia Teutschbein

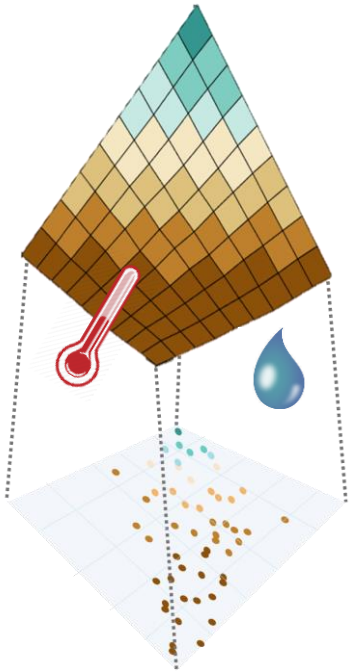
Copulas for hydroclimatic analysis: A practice-oriented overview

Warming Climate → Compound events





Copulas for hydroclimatic analysis: A practice-oriented overview



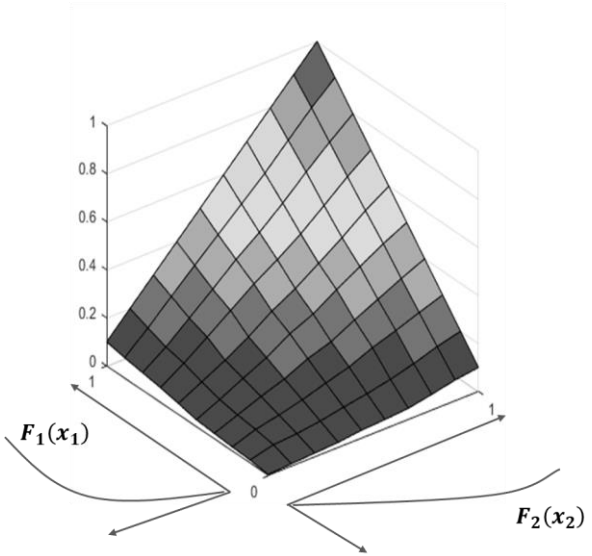
Copula is a mathematical function that couples marginal distributions and represents the joint probability distribution of two or more set of variables (Sklar, 1973)

$$C(F_1(x_1), F_2(x_2))$$

Copulas for hydroclimatic analysis: A practice-oriented overview

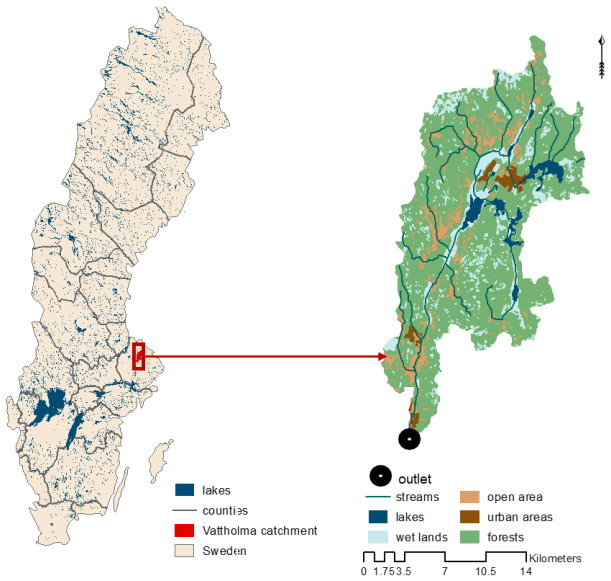
UPPSALA UNIVERSITET

Systematic literature review

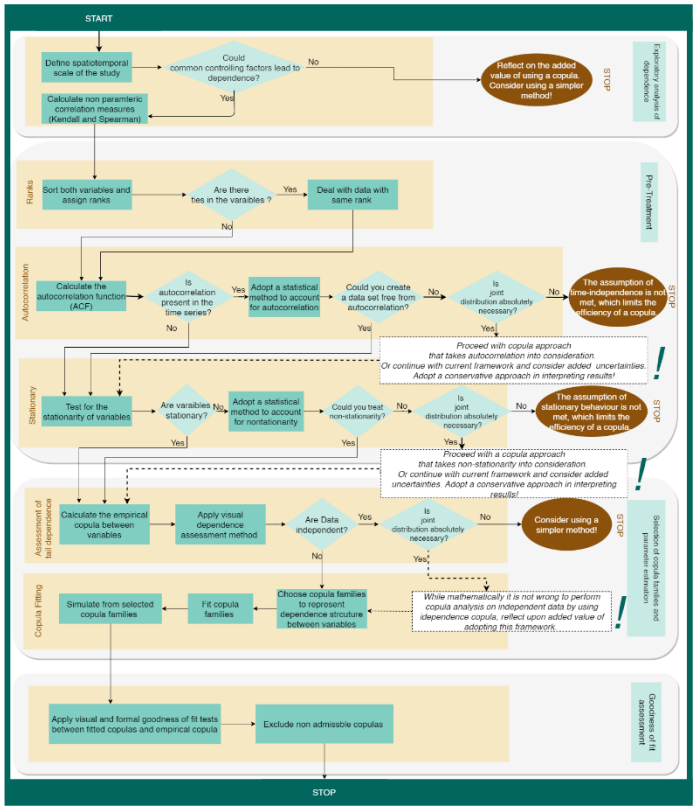


Precipitation + Temperature + Copula

Copulas for hydroclimatic analysis: A practice-oriented overview



1 Synthesized common perceptions and practices on case study in Sweden



2 provided user-friendly decision support framework to employ copulas

Copulas for hydroclimatic analysis: A practice-oriented overview

Want to know more?

SCAN ME

WIREs WATER

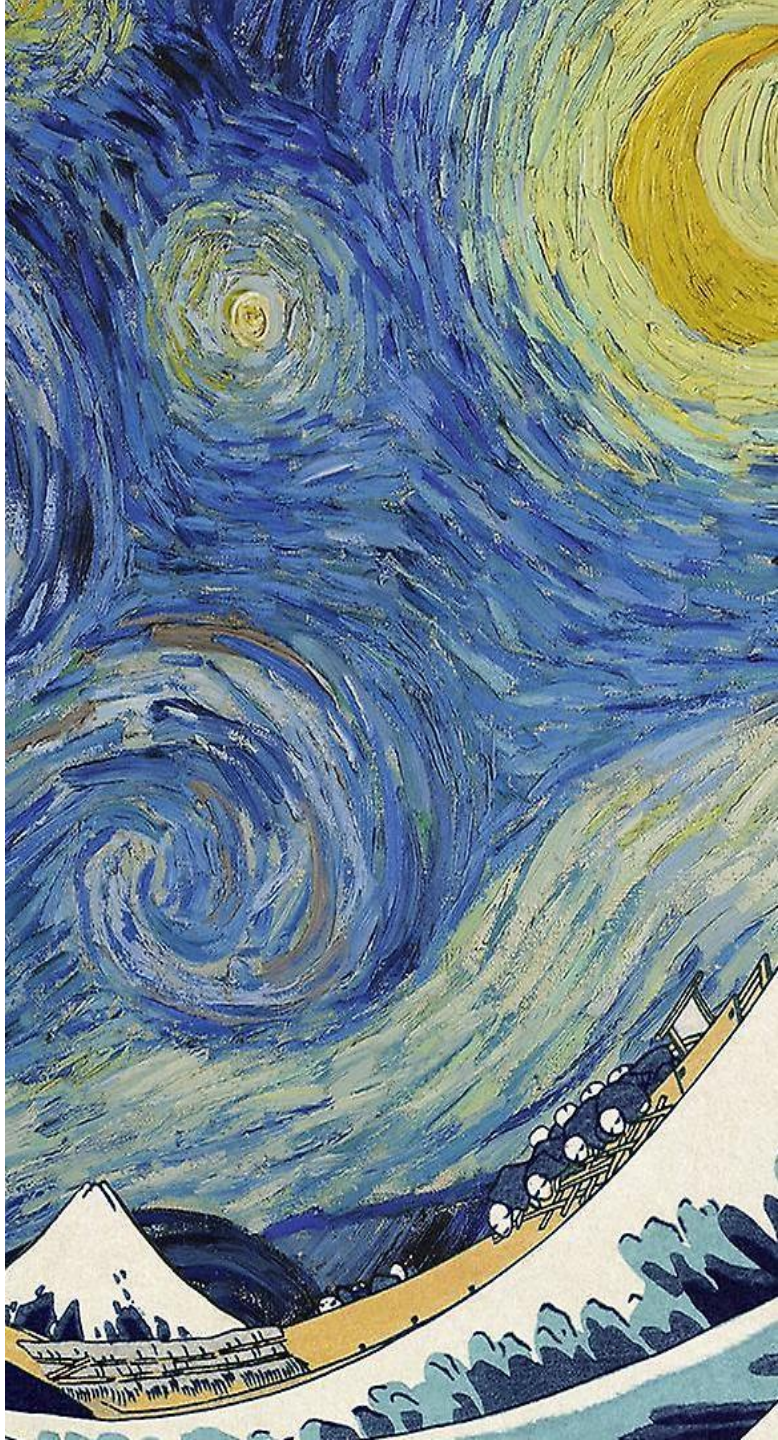
Overview | Open Access

Copulas for hydroclimatic analysis: A practice-oriented overview

Faranak Tootoonchi, Mojtaba Sadegh, Jan Olaf Haerter, Olle Räty, Thomas Grabs, Claudia Teutschbein

First published: 28 January 2022 | https://doi.org/10.1002/wat2.1579

THANK YOU

@faranak_ttch

faranak.tootoonchi@geo.uu.se