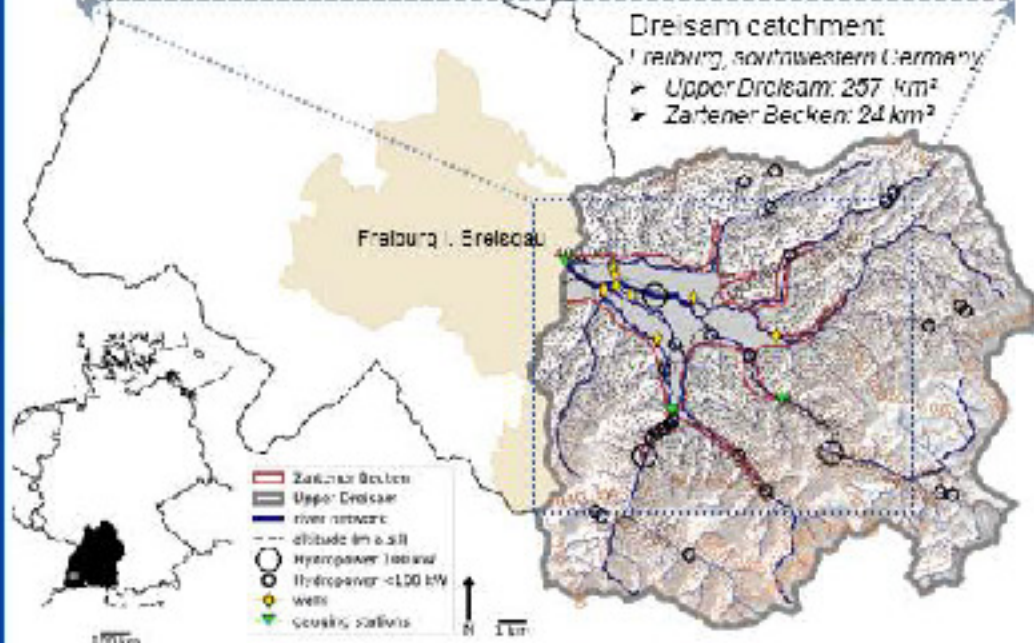




Dreisam catchment
Freiburg, southwestern Germany
➤ Upper Dreisam: 257 km²
➤ Zartener Becken: 24 km²



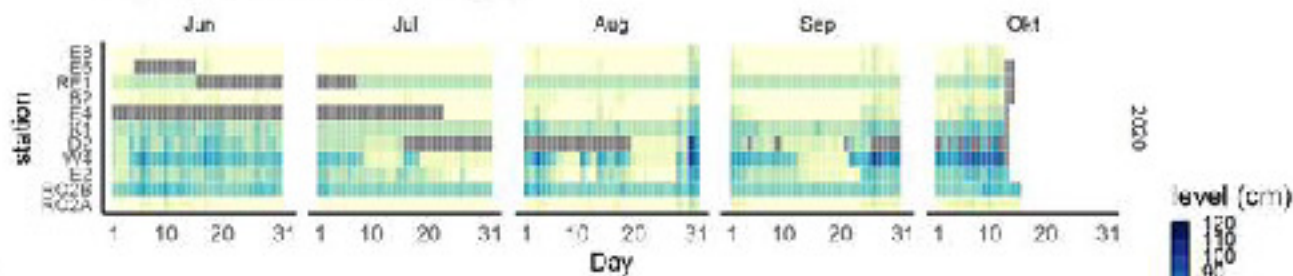
Monitoring zero water level in a drought-affected headwater stream network

- Annually recurrent dry riverbeds since 2015 in the main stream (Dreisam) & tributaries while main gauging stations still record flow
- Water level measurement network:
20 locations using an image based (QR code) and a capacitive (Odyssey) method
- Zero water level event selection
- Longest zero water level event in 2020 was 31 days



W1 tributary in summer 2020, left QR-code plate + camera, right: Odyssey water level logger

Odyssey capacitive water level logging



QR code image based water level logging

