





HELMHOLTZ

| CENTRE FOR
| ENVIRONMENTAL
| RESEARCH - UFZ





Following the international TERENO conferences organized in Bonn in 2014 and Berlin in 2018, we cordially invite you to join the 2020 international meeting co-organized by the French **OZCAR** and German **TERENO** research networks.

The event will offer keynote lectures and posters sessions reflecting the cutting edge of Critical Zone research, aiming at a better understanding of the most superficial layer of the planet where all human activities concentrate. The meeting will also help a better integrated process understanding using multi-disciplinary Critical Zone observatories.

The meeting is supported by the eLTER research infrastructure - European Longterm Ecosystem, Critical Zone and socio-ecological research infrastructure-

Sessions:

- Innovative sensing methods for the Critical Zone
- ✓ Long-term environmental and biodiversity observation
- ✓ Integration of in-situ and remote sensing data for a better understanding of the soil vegetation atmosphere and Earth System dynamics and services at the regional scale
- ✓ Temporal variability of CZ processes using high-resolution bio-and geoarchives
- Measuring and modelling water storage dynamics
- ✓ Surface groundwater interactions
- Management and integration of environmental observation data
- Monitoring and modelling water and solid transport during extreme events
- ✓ Biogeochemical processes at the soil and catchment scale
- ✓ Earth System models: water and carbon cycle
- ✓ Model data fusion: improving model predictions and process understanding
- ✓ Rates and processes of the CZ formation
- ✓ Mineral/biota interaction in the CZ
- ✓ Hydrogeophysics (incl. ITN « ENIGMA »)
- ✓ Intermittent streams and rivers
- Mountain CZ and sustainability in a changing world
- Challenges in understanding CZ processes in Africa