Investigates how fisheries regulation interacts with other key drivers of change in shaping potential future fisheries

Uses a spatially resolved, mechanistic size-spectrum model (BOATS), constructed to be able to hindcast the historical development of the global fishery
Open access fishing vs Regulated common target fishing

Results give insight on:
- scope for continually growing global catches
- importance of fishing technology over long time-scales
- profit-biomass tradeoffs under increasing catchability
- the potential for a race between technology and regulation
Technological progress determines the need for strong management

Regulation must keep up with catchability to ensure sustainability; a “Red Queen” race

Climate change effects initially small, but grow over longer time-scales

Technology boosts fisheries profits, but risks to mask biomass decline if regulation is weaker

Results underline the long-term importance of strengthened, robust management measures under continued technological progress
KEY FINDINGS

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With increasing...
With stagnating