# Mapping the sensitivity of AMOC in a hierarchy of configurations



**Fully-coupled configurations**
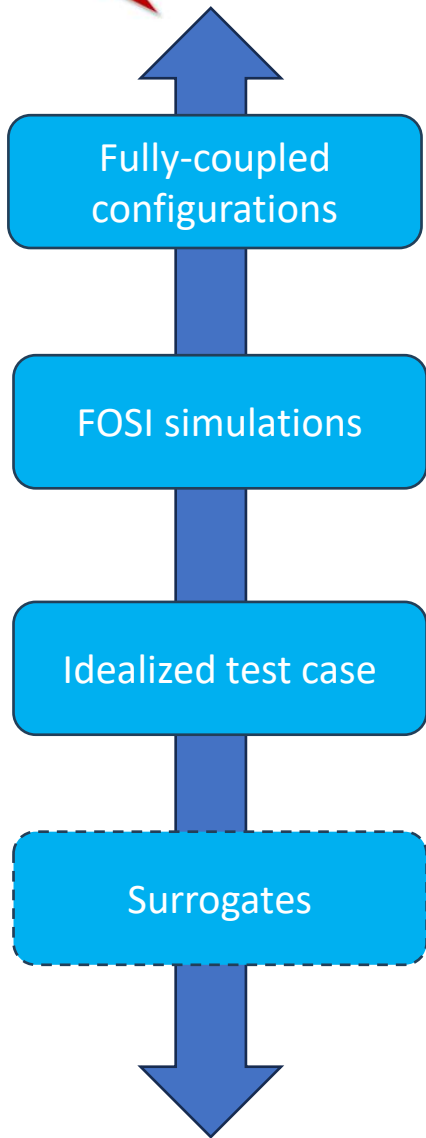
AMOC is a coupled phenomenon and has a long emergence timescale

**FOSI simulations**

Limited feedback but shorter emergence timescale and more samples. Persistent low AMOC but additional insights.

**Idealized test case**

Simplified dynamics; low cost and fast adjustment timescale.

**Surrogates**

Requires large ensemble for training; Allows interpolation and extra samples

Caldwell et al 2019