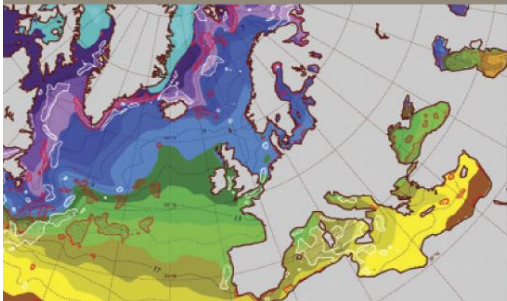


# Shedding light on the greyzone

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GLOBAL PREDICTION



SEVERE WEATHER



ATMOSPHERIC COMPOSITION



CLIMATE MONITORING

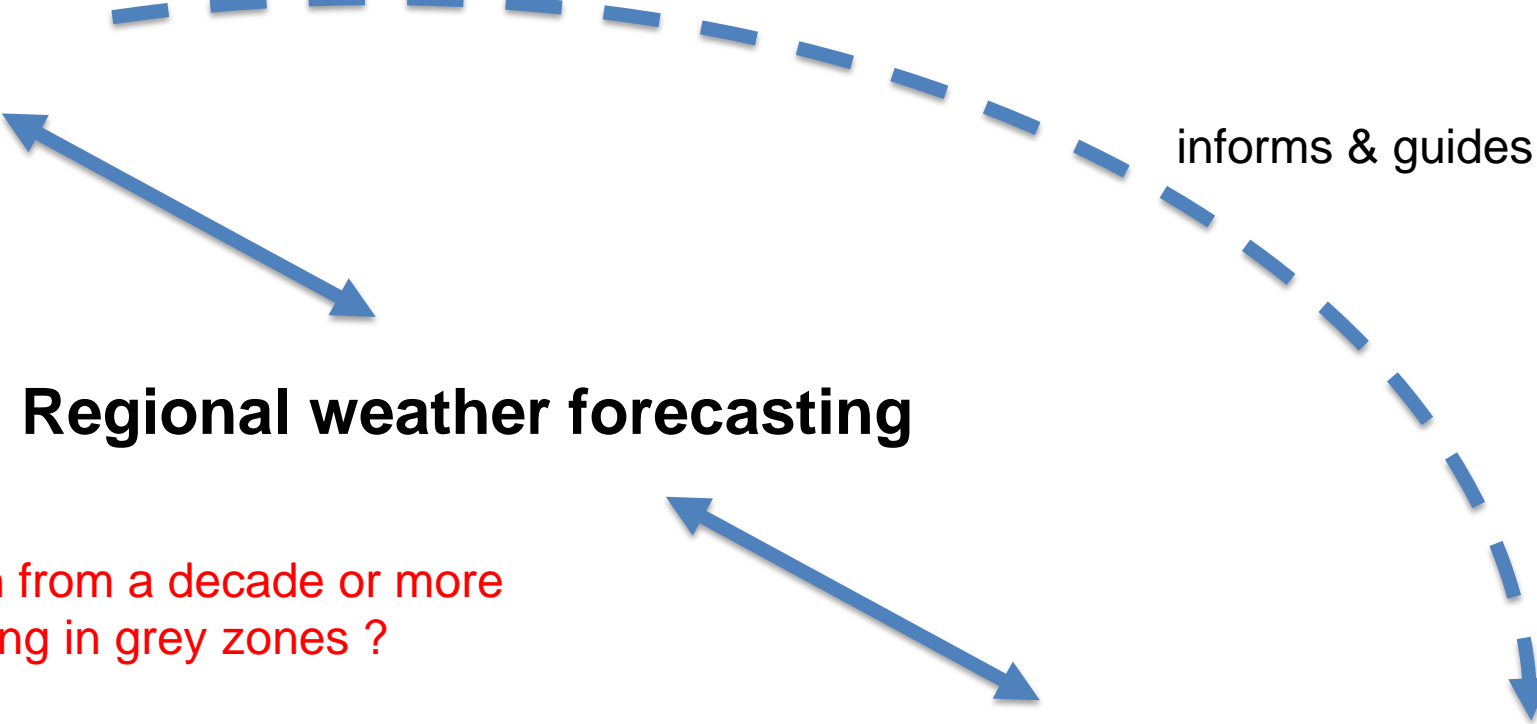


SUPERCOMPUTER CENTRE



# Greyzone(s) – Modelling at the edge of resolution

**LES**



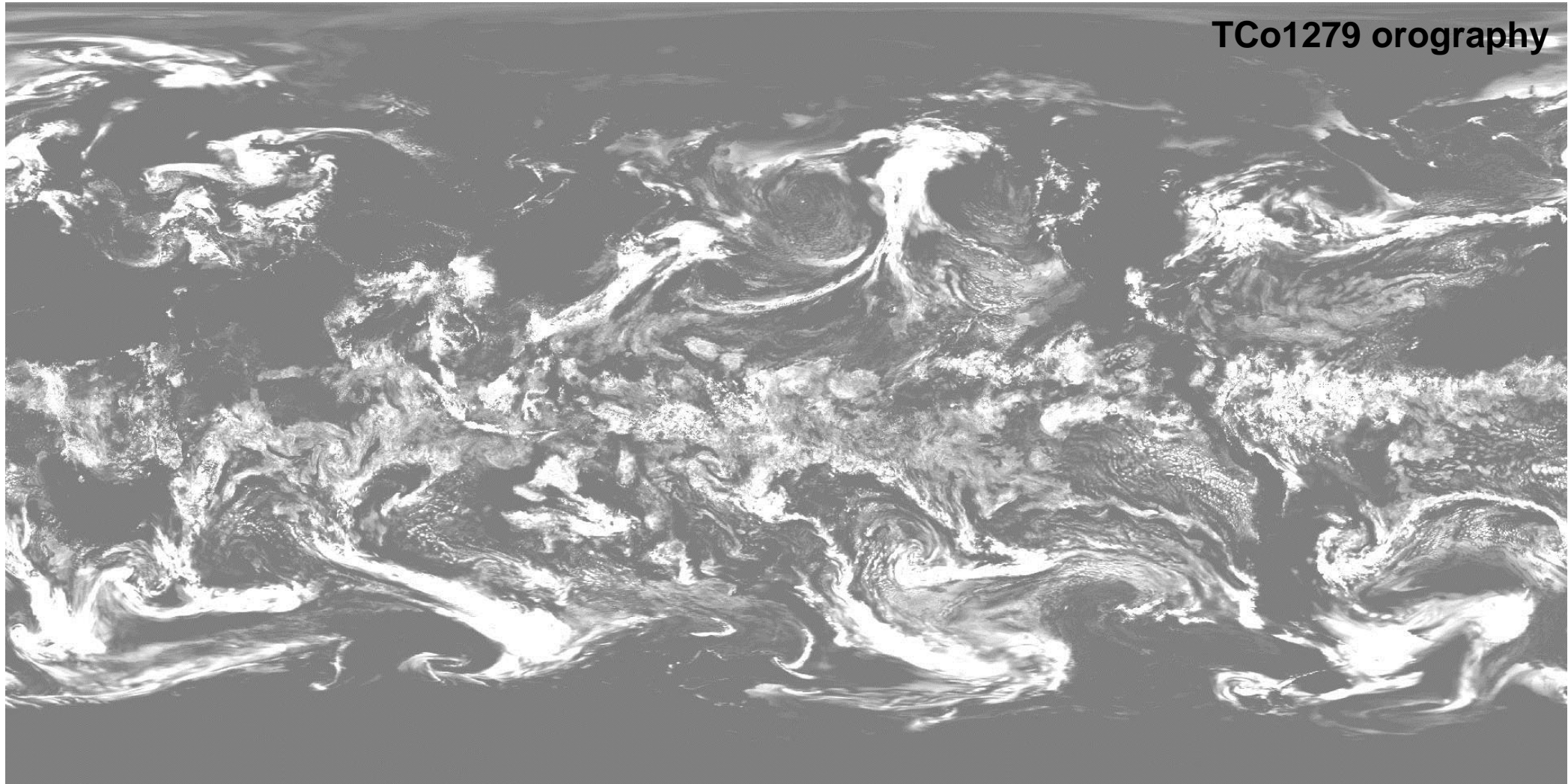
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**Regional weather forecasting**

**Global weather & climate**

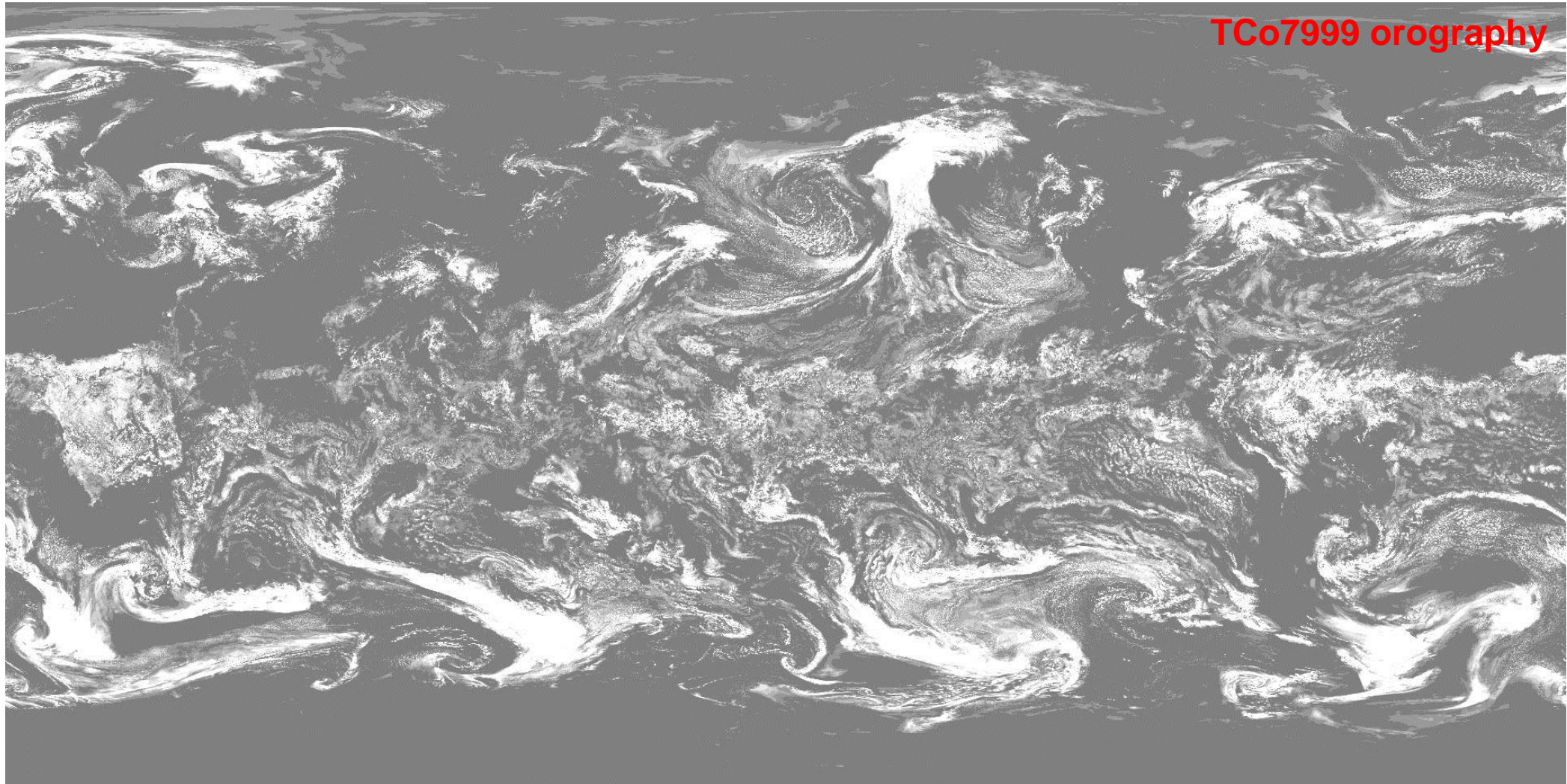
What can we learn from a decade or more of regional modelling in grey zones ?

# TCo1279 ( $\approx 9\text{km}$ ) World's highest resolution global NWP today



(12h forecast, *hydrostatic*, with *deep convection* parametrization, 450s time-step, 240 Broadwell nodes,  $\sim 0.75\text{s}$  per timestep)

# TCo7999 (~1.3km) 256 Megapixel camera



(12 h forecast, *hydrostatic*, no deep convection parametrization, 120s time-step, 960 Broadwell nodes, ~6s per timestep in SP)