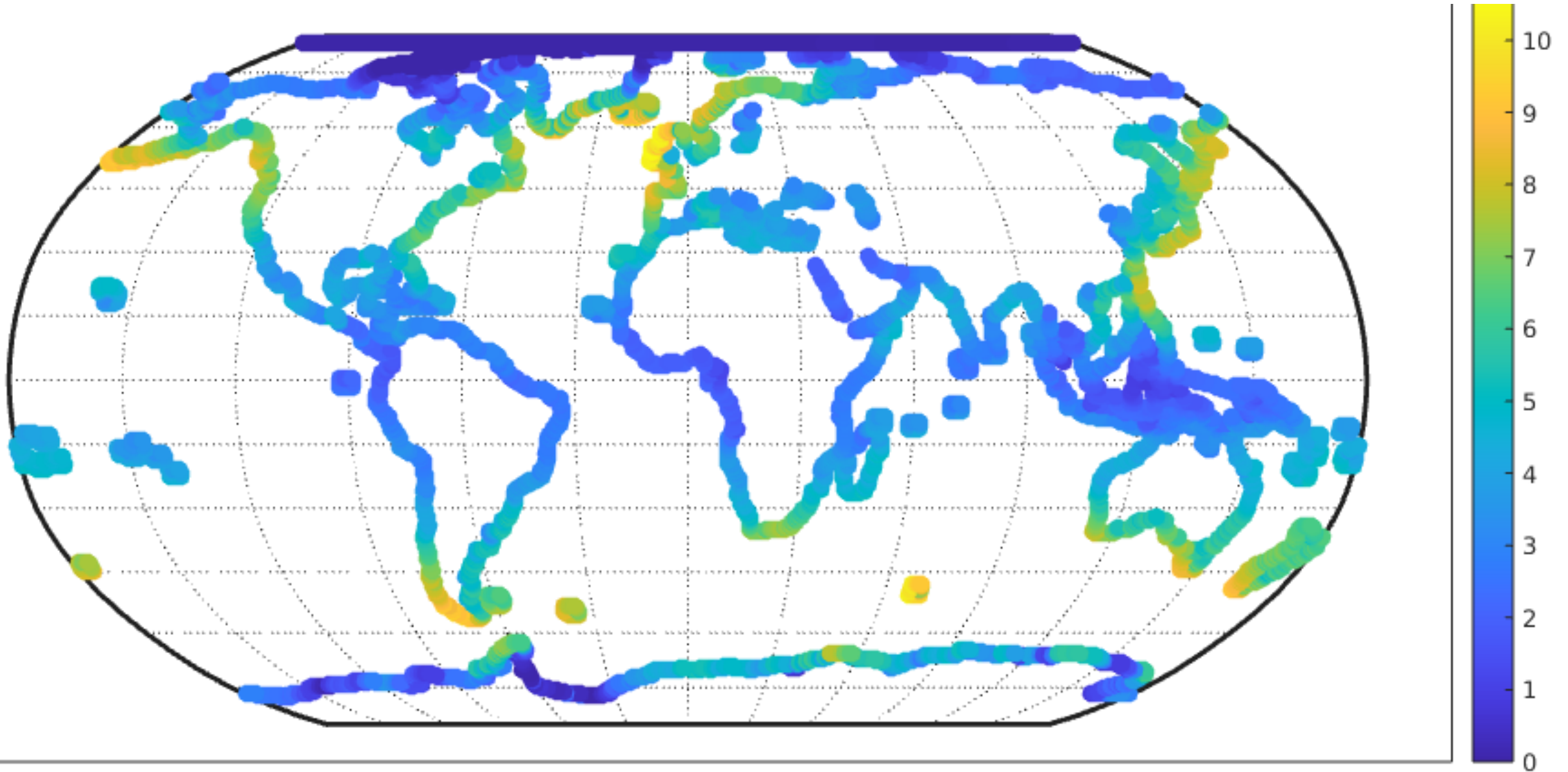


A coastal perspective of global wave trends in CMIP6

Lucy Bricheno, Ben Timmermans Joanne Williams,
UK National Oceanography Centre



Global coastal wave trends



Mean annual maximum Hs (m) in ERA5 forced historic run

Model ensemble

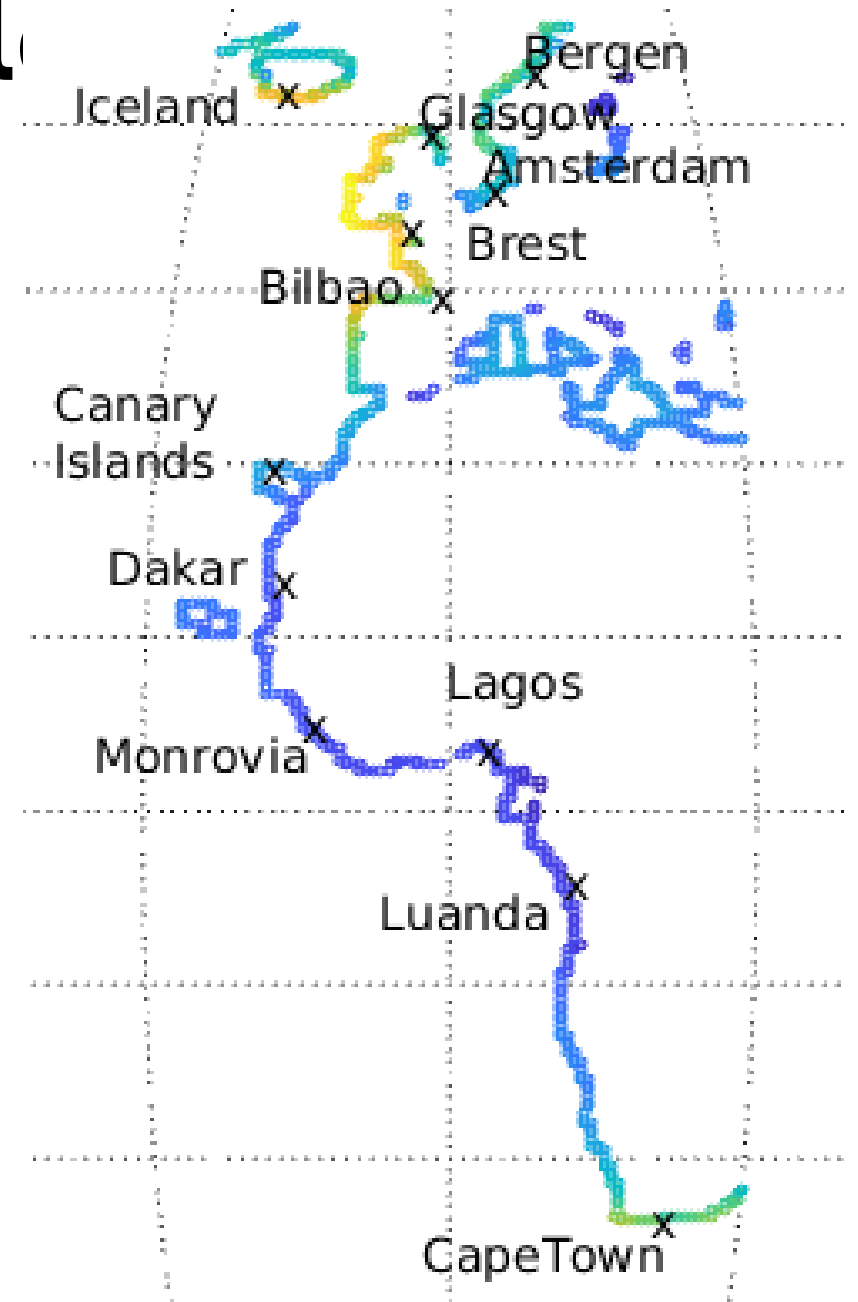
We analyse projections for mid- and end-century change in **mean** and **99th percentile extreme** significant wave height (Hs). Future projections for scenarios SSP126, SSP370, & SSP585; models:

ERA5 reanalysis (1 hourly) ~35 km

HadGEM_GC31_MM (3-hourly) ~35 km

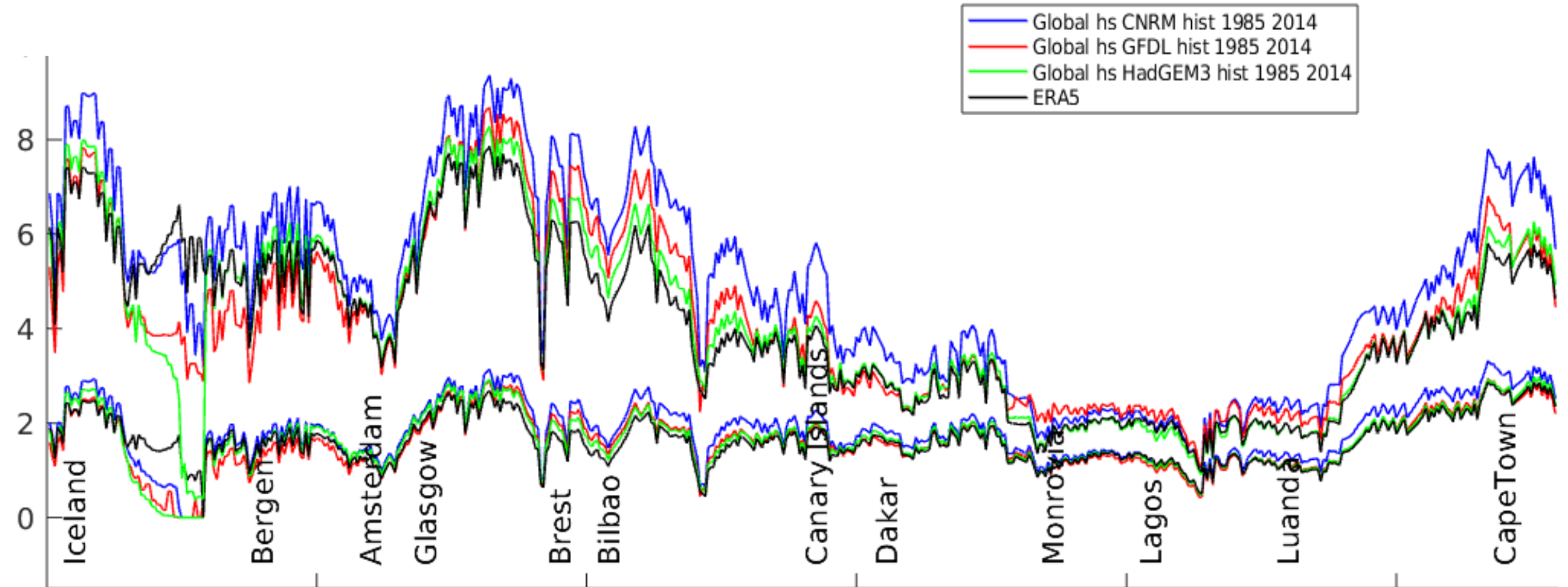
CNRM-CM6-1-HR (3-hourly) ~35 km

GFDL-ESM4 (3-hourly) ~ 100 km



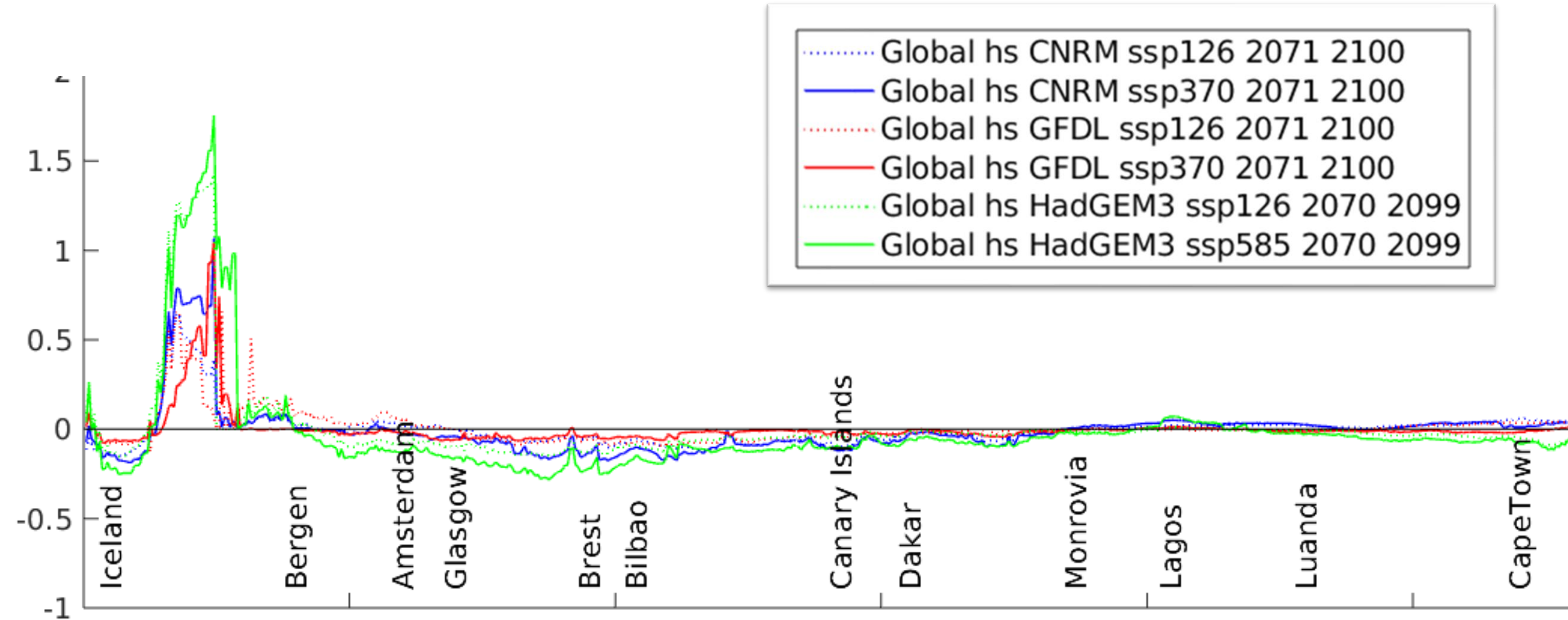
Example coastal waves : East Atlantic

Historic conditions mean and p99 Hs



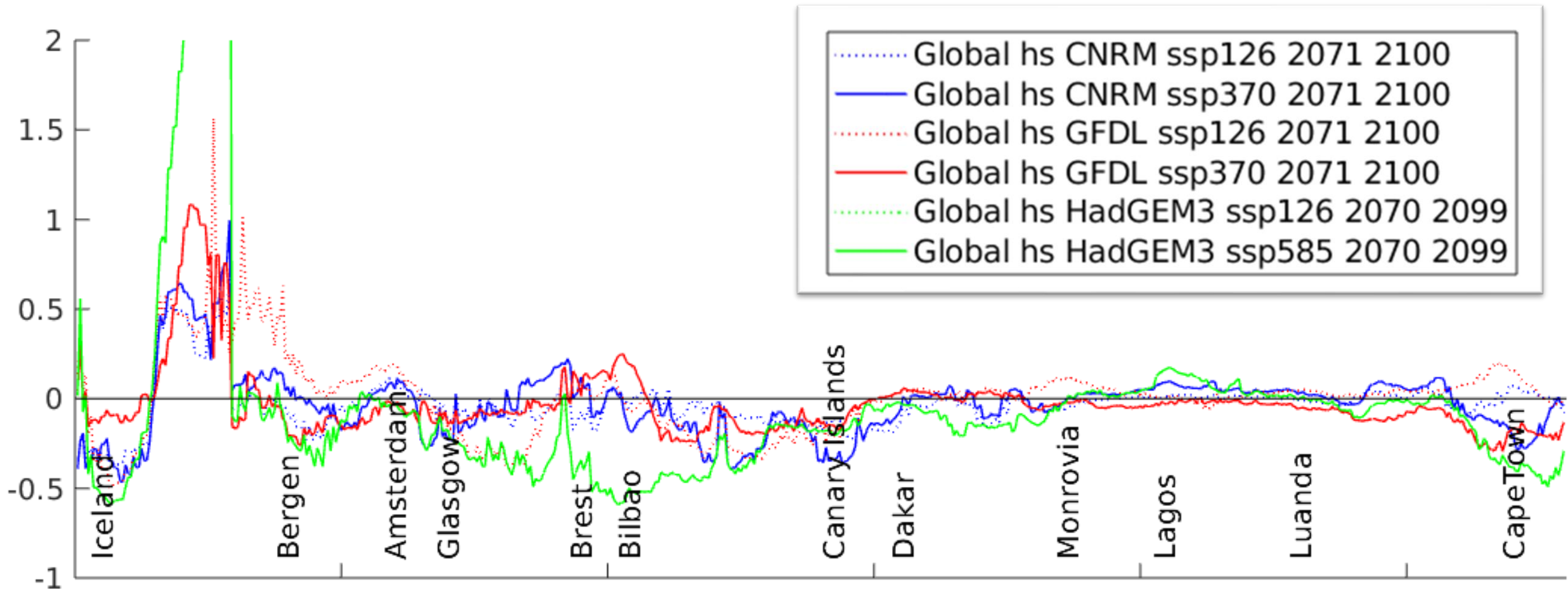
Example coastal waves : East Atlantic

End century change in mean Hs

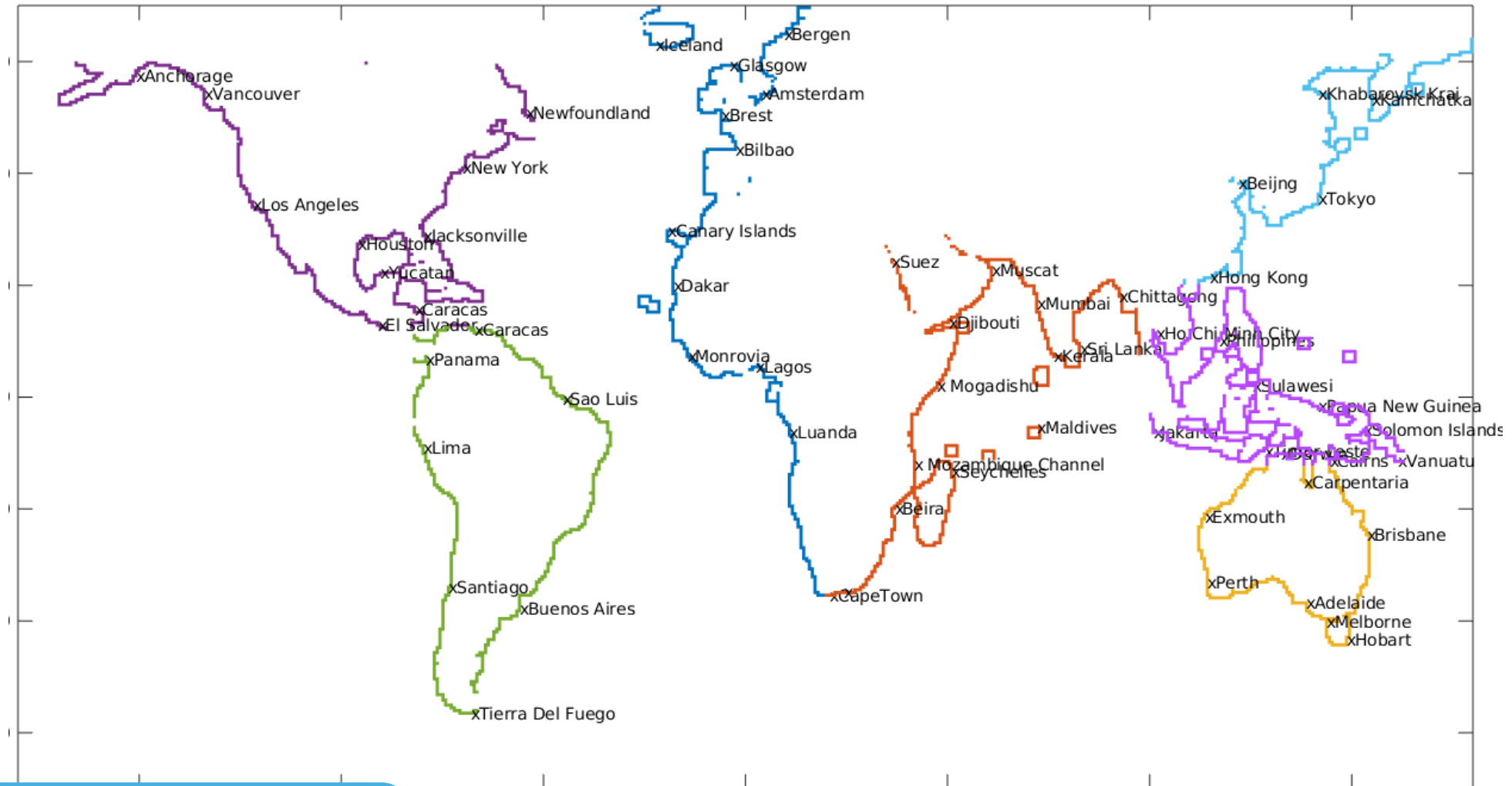


Example coastal waves : East Atlantic

End century change in p99 Hs



Come and see the rest of the word



Poster session Waves II

Thursday 25/9/2025

Lucy Bricheno, luic@noc.ac.uk