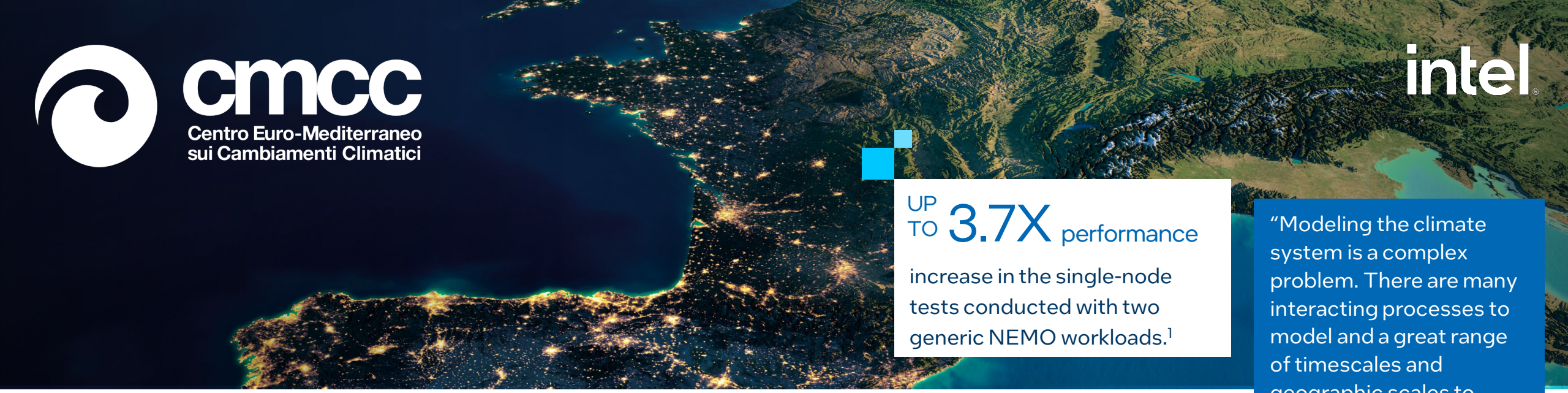

UP TO **3.7X** performance

increase in the single-node tests conducted with two generic NEMO workloads.[1]

Accelerating Climate Change Modeling

The Euro-Mediterranean Centre on Climate Change (CMCC) is a non-profit international research center that collaborates with experienced scientists, economists, and technicians to provide full analyses of climate impacts on socio-economic systems. CMCC's mission is to investigate and model our climate system and its interactions with society to provide reliable, rigorous, and timely scientific results. CMCC needed a new supercomputing cluster to keep up with the demands of its research into climate change. Intel ran performance tests of CMCC's Nucleus for European Modeling of the Ocean (NEMO) workloads and demonstrated that the Intel® Xeon® Max 9480 processor with high-bandwidth memory (HBM) would deliver up to 3.47x the performance of CMCC's old Zeus cluster.[1] CMCC is now in the process of deploying a new cluster called Cassandra based on this processor.

"Modeling the climate system is a complex problem. There are many interacting processes to model and a great range of timescales and geographic scales to analyze. It requires sophisticated mathematics and computational resources. We also need to manage large volumes of data produced by the simulation."

Giovanni Aloisio, strategic advisor, CMCC

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1 For more complete information about performance and benchmark results, visit https://www.intel.com/content/www/us/en/customer-spotlight/stories/cmcc-customer-story.html