

Readiness of HPC Extreme-scale Applications

ISC HPC 2024 Workshop
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Joint Undertaking

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**Weather forecast
Climate research**



High-performance computing



netherlands
eScience center



Software engineering



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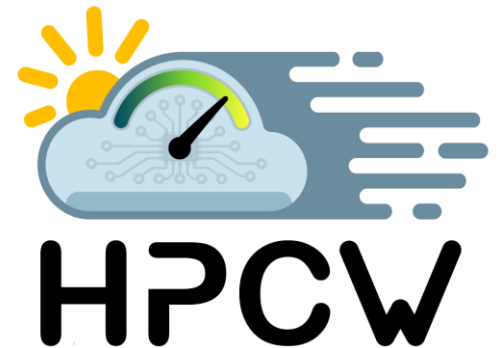
Training and teaching



Communicating academic research

Applications: Services and HPCW

- Services: already 7 applications!
- High Performance Climate and Weather benchmark, the Domain Specific Benchmark for (pre)-exascale application of climate and weather codes:
 - Set of relevant and realistic, near-operational climate and weather workloads.
 - Climate and Weather tuned vehicle to collaborate with technology providers.
- HPCW benchmark provides:
 - Climate and Weather models (applications, mini-applications) from the European community;
 - Easy way to deploy the software stack to build, verify and bench C&W models;
 - SPACK recipes to build the models;
 - A way to use already installed models;
 - Tables to compare trusted and reproducible metrics;
 - ... and soon a ranking!
- Current HPCW components available
 - ICON - Ocean and Atmosphere (open-source)
 - NEMO
 - Mini-applications (dwarfs):
 - ECRad
 - ECTrans
 - Dwarf-P-CloudSC





Interested in getting in touch?



Website: www.esiwace.eu



Twitter: <https://twitter.com/esiwace>



YouTube: <https://www.youtube.com/@esiwace880>

zenodo

ESiWACE is on Zenodo, the Open Access repository for scientific results
<https://zenodo.org/communities/esiwace>



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