



Letter of Endorsement

09 Jan 2018

Dr. Peter Bauer
Deputy Director
Research Department
European Centre for Medium-Range Weather Forecasts
Shinfield Park, Reading RG2 9AX
United Kingdom

Dear Dr. Bauer,

Thank you for information regarding the research initiative ExtremeEarth, and the opportunity for NVIDIA to potentially participate in the high performance computing (HPC) aspects of its development. Following previous collaborations with ECMWF, and with acknowledgement of your important ongoing technical achievements, NVIDIA express our sincere endorsement and support for the ExtremeEarth Proposal.

With the introduction of the general purpose Graphics Processing Unit (GPU) in 2004, NVIDIA set a milestone in HPC. Since then, NVIDIA expertise developed in programmable GPUs has led to breakthroughs in parallel computing, while also providing cost-effective solutions in HPC and artificial intelligence. NVIDIA would like to offer this expertise and other resources you may require to ensure success in ExtremeEarth.

NVIDIA offers our commitment and support that can include the following resources:

- Provide nominal seed hardware of latest generation Tesla GPUs for local development
- Provide remote access to a GPU cluster at NVIDIA HQ for performance testing
- Technical guidance on applications engineering from the NVIDIA Devtech group
- Access to latest PGI compilers including OpenACC collaborations with ExtremeEarth
- Frequent roadmap updates on hardware and system software relevant to ExtremeEarth
- Technical support on local installations; cluster access and use; bug fix support
- Participation and contributions to workshops on HPC for weather/climate modeling
- Marketing support and if desired, worldwide distribution of content on project success

NVIDIA are interested in this initiative in two respects. We are generally interested in supporting innovative and promising approaches that demonstrate the capabilities of GPU-based system architectures with relevant real-life applications. Further, NVIDIA have interest in the experiences to be gained with implementing optimized GPU-routines that can apply to increased accuracy and ultimately societal impact in the science of weather forecasting and climate modeling.

Thank you for the opportunity to review and potentially participate in ExtremeEarth research.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Stan Posey".

Mr. Stan Posey
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Earth System Modeling Domain
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