

Final Remarks

PALM group

Institute of Meteorology and Climatology, Leibniz Universität Hannover

last update: 21st September 2015

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 - ▶ to understand and to analyze the PALM output data
 - ▶ to add user-defined code to the model
 - ▶ (to debug errors)

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- ▶ Setup/settings for performance optimization
- ▶ Running PALM on GPU
 - ▶ since beginning of 2014, PALM is part of the SPEC ACCEL benchmark (see: <http://www.spec.org/accel>)

More PALM Information ...

- ▶ ... about the current model status (PALM 4.0)

Maronga, B., Gryschka, M., Heinze, R., Hoffmann, F., Kanani-Sühring, F., Keck, M., Ketelsen, K., Letzel, M. O., Sühring, M., and Raasch, S., 2015: The Parallelized Large-Eddy Simulation Model (PALM) version 4.0 for atmospheric and oceanic flows: model formulation, recent developments, and future perspectives, *Geosci. Model Dev.*, 8, 2515-2551, doi:10.5194/gmd-8-2515-2015.

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- ▶ ... about application for urban flows:

Letzel, M.O., M. Krane and S. Raasch, 2008: High resolution urban large-eddy simulation studies from street canyon to neighbourhood scale, *Atmos. Env.*, 42, 8770-8784, doi:10.1016/j.atmosenv.2008.08.001.

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- ▶ ... about non-cyclic boundary conditions:

Gryschka, M. and S. Raasch, 2005: Roll Convection During a Cold Air Outbreak: A Large Eddy Simulation with Stationary Model Domain. *Geophys. Res. Lett.*, 32, L14805, doi:10.1029/2005GL022872.

Gryschka, M., C. Drüe, D. Etling and S. Raasch. 2008: On the influence of sea-ice inhomogeneities onto roll convection in cold-air outbreaks, *Geophys. Res. Lett.*, 35, L23804, doi:10.1029/2008GL035845.

More PALM Information ...

► ... about the Lagrangian particle model:

Steinfeld, G., S. Raasch and T. Markkanen, 2008: Footprints in homogeneously and heterogeneously driven boundary layers derived from a Lagrangian stochastic particle model embedded into large-eddy simulation, *Boundary-Layer Meteorol.*, 129, 225-248.

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► ... on our webpage:

<http://palm.muk.uni-hannover.de>

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Sorry, but we cannot guarantee to solve your problems!

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- ▶ Ready for deep convection using anelastic system of equations
- ▶ Nesting methods are under development

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Good bye!
Have a safe trip home!