

ESF Exploratory Workshop, 2006.

Very High Resolution Environmental Modelling (VHREM)

Dates: 22/09/06 to 23/09/06 (Two complete days)

Location: University of Hohenheim, Stuttgart

Version date: 19th September 2006

List of proposed participants:

There are currently 15 funded and 7 possible self-funded from the participant countries.

Confirmed:

Luca Bonaventura, Alan Gadian, Alexander Gohm, Michael Lehning, Martin Ehrendorfer, Mathias Rotach, Felix Schueller, Stephen Mobbs, Fridrich Obleitner, Andreas Dobler, Haraldur Olafsson Alan Burns, Davide Cesari, Henning Lowe, Zhengtong Xie

Juergen Steppeler, (Georg Craig), Francoise Faure, Hans-Stafani Bauer, Volker Wulfmeyer, Andreas Behrendt, (Detlev Majewski), Dubravka Rasol
ESF representative (21 September only) Dr. Inge Jonckheere

Funded (original applicants for the ESF award) .. confirmed (15)

Self funded .. confirmed (7)

Self funded .. not yet confirmed (2)

Funded participants

Austria (4 participants)

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keywords: small-scale modelling, efforts at IMGI, Current status, future perspectives

Confirmed.

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Keywords: local snow / ice energy budget, specific boundary layer effects (roughness, interaction of glacier-, valley- and synoptic winds)

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keywords: mesoscale predictability, flow sensitivity, dynamics
Confirmed.

Iceland (1 participant)

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Keywords: gravity Waves, mountain enhanced precipitation, mountain waves, windstorms
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Italy (2 participants)

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Keywords: semi-lagrangian methods, semi-implicit methods, finite volume techniques, cut cell approaches, radial basis function reconstructions
Confirmed.

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Keywords: code development, terrain-intersecting system, grid staggering, vertical grid refinement, surface fluxes, domain decomposition
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Switzerland (4 funded participants)

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Keywords: mesoscale modelling, numerical methods, predictability
Confirmed

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Keywords: physical processes, steep terrain, turbulent exchange
Confirmed

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Keywords: microscale modelling, cloud physics processes, cloud modelling, dispersion, meteorology
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Keywords: rotor streaming, gravity Waves and Wave breaking, observations and modelling of orographic flows
Confirmed

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Topic: Main experience is in structured and unstructured body-conforming schemes.
Confirmed

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Current self funded participants.

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Topic:- Work with LMK, the high-res version of the model, using polarimetric radar to evaluate cloud microphysical schemes.
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Key words: Numerics, Parallel Computing
(Unable to attend)

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Keywords: NWP, CFD, Implicit, Fourier
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Keywords: ARPS, Downscaling
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Keywords: LES SGS numerical code, including turbulence

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Keywords: orographic Flows. numerical modelling of rotors, gravity Waves

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Keywords: numerical methods in fluid dynamics, structured and unstructured grids

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Keywords: numerical weather prediction in mountainous terrain, foehn, gravity waves, mesoscale Alpine climatology, boundary layer over complex terrain.

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Keywords: code development, terrain-intersecting system, grid staggering, vertical grid refinement, surface fluxes, domain decomposition