Long-term strategic issues
General discussion
& identification of future agenda

- **Performance comparison ?** *for a better science*
  - Add in metadata
  - working session Isenes2 WK, incl discussion on metrics
  - + also HPC WK

- **Access to HPC facilities ?** Prace business model vs climate
  - HPC TF : update with feedback from projects; 1st step: PRACE board
  - Longer access to development: port & science; Tier 1 compatible with Tier0
  - multi-year access for « production »

Disruptive Technologies ?

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- **Models for petascale & exascale ?**
  - Revisiting dynamical cores : *already there for atmosphere in US but not in UE, still a question ?*
    - *Science, performance drivers*
    - *With « new » dycores: some can go up to 100 000 cores*
    - *Open issues: low memory/core, threads and/or tasks; silent errors; bandwith*
    - *Still on-going work*
    - Dycores: not disruptive technology ?but important effort
  - Revisiting model structure ? Key topic for a WK
    - Separating model SW and programming model **?**
    - Algorithms with higher parallelism   DT
    - « Community efficiency »: more sharing; issue open access
    - Issue of different timing: increase adaptability and robustness of model common superstructure

  - Science drivers

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- **From « Exaflop » to « Exabyte » challenge ?** Exabyte before
  Data : DT issue

- **Need for interdisciplinary teams:** climate-computing-maths
  On-going activities

Disruptive Technologies ?

IS-ENES
2nd HPC Workshop on Climate Models
Toulouse, 30 January-1rst February 2013