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Federal Office of Meteorology and Climatology MeteoSwiss

CALMO

Information, discussion point (MeteoSwiss input)

Jean-Marie Bettems / MeteoSwiss

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COSMO GM



CALMO

- **Human resources**

- **HNMS**

- Antigoni – 0.8 FTE
 - Euripides – 0.25 FTE

- **IMS**

- Pavel Khain – 0.35 FTE
 - Itzhak Carmona – 0.3 FTE

- **MCH**

- Jean-Marie is away the whole October
 - Jean-Marie will invest more time for CALMO in the period 11.2014 – 02.2015
 - Support of COSMO-NExT team (see next slides)
 - A **visit of Antigoni** at MCH for 3 full days should be planned in early 11.2014; the main goal is to solve technical problems running COSMO-1 on HPC system
 - the visit can be cancelled if the experiments already run smoothly at that time
 - ... extend this visit to other project members to also discuss other issues?
 - Organize a **workshop** with the full team (COSMO US? ...)



CALMO

- **Computing resources**

- We are waiting for the CSCS decision about the Daint proposal
- According to ETH colleagues, it is normal that we got no feedback up to now
- If our proposal is rejected, Todi could be used instead, but tuning of COSMO-1 should be cancelled (not enough computing capacity)



CALMO

- **Method**

- Short (2-3 weeks) sensitivity experiment to make a definitive selection of parameters to be tuned (this is cheap in term of computing time)
- One year with reference configuration, for sanity check
- **Observation** to use in the performance function

- **Model configuration**

- Which **simulation year** ? Stick with 2008 ?
 - Depends on the observations one would use (e.g. IWV from GPS)
- Which **boundary conditions** ? Operational COSMO-7 ?
- How to solve the **soil spin-up** issue
- Define **output** to (1) produce and (2) archive



CALMO

- **Offer from the COSMO-NExT team**
 - Definition of base COSMO-1 (and COSMO-2) configuration
 - Proposal for a set of tuning parameters (delivered before beginning of October)
 - MCH standard verification of CALMO runs (SYNOP based, on whole model domain)
 - Preliminary sensitivity experiments (many short runs)
 - Sanity check with standard model configuration (full year)
 - Impact of tuning on forecast quality
 - Can be integrated in the performance function