COSMO Activities
in the
Interoperability Programme

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and more colleagues

The „more colleagues"

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The Deliverables

1. A report documenting the standard output format and including a list of parameters for which the output format is to be applied. (Jun 09)

2. Documentation describing the requirements and specification for the adaptor software. (Aug 09)

3. Four 2-way adaptors that transform the output from every LAM to the standard output format and vice versa. (Aug 10)

4. Enhancements to existing software tools that enable all LAMs to process data from the four Global Model providers. This includes the documentation as well as the software. The Global Model providers will be asked to write adaptors to transform their model output to the standard format. Make enhancements to existing software tools that enable all LAMs to process data from any other LAM. This work will be the responsibility of the individual consortia (Aug 11)

Early Contributions

- Contributed to the discussions

  - before the start of the project,

  - for Deliverables 1 and 2,

- and the meetings held so far

- Started to write the necessary documentation(s) for Deliverable 2

First Practical Work

- Conversion of the fields for parameter list 1 and 2 to GRIB2 (for selected dates)
  - Used in-house DWD grib-converter for that
  - Will use GRIB-API in the future
- GRIB2 Issues
  - Familiarization with GRIB-API
  - Working together with ECMWF to include DWD GRIB1 tables
  - Consideration of *ShortNames, Keys*
  - Started to write a "toy application" that reads GRIB2 files
  - Are there parallelization issues?

Work in Progress

- Latest improvements for IFS $\Rightarrow$ COSMO (done at MeteoSwiss)
  - Alternative treatment of IFS humidity variables by vertical interpolation of *extended relative humidity* ($q_v + q_c + q_i$)
  - Alternative treatment of IFS soil humidity, following the introduction of the new hydrological IFS model.
- Consider work done at Aemet for UM $\Rightarrow$ COSMO

Upcoming

- Extend documentation and requirements specification

- (ToDo) Consider work done in Ireland (University College Dublin) for HIRLAM $\Rightarrow$ COSMO

- Implementation of GRIBx input using the GRIB-API

- Familiarization with french grid(s)

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Thank you very much for your attention!

Questions?