

7 COSMO Meetings and Events

This section summarizes the main meetings, workshops and seminars as well as management decisions from the previous year. Other COSMO activities such as guest scientists and internal visits are also considered. Finally, an overview of the forthcoming activities in the present COSMO working period is given.

7.1 Meetings in 2003

(1) LM User Seminar

This seminar on scientific applications of the LM was organized by Jürgen Steppeler and was held at DWD in Langen, 31 March - 2 April 2003. It was dedicated to research activities with the LM at various universities and covered various scientific topics. Central issues have been physical processes, high-resolution experiments and climate applications of the LM. The 2003 User Seminar included also tutorials on the LM Package and on numerical methods. Proceedings of the seminar have not been published.

(2) COSMO WG4-WG5 Joint Meeting

The members of Working Group 4 for Physical Aspects and of Working Group 5 for Verification and Case Studies met on 26 - 28 May 2003 at MeteoSwiss in Geneva (Switzerland) for a joint internal COSMO workshop (organized by Pierre Eckert). The first day was dedicated to presentations concerning the present status, evaluation, verification and further development of COSMO-LEPS system. The second day continued with presentations related to recent verification results of the operational systems and to high-resolution verification methods, followed by parallel workshop sessions of the two groups. More detailed information about the workshop and plenum discussion results on the third day is available on the private pages of our web-site.

(3) Meeting of the Work Package Coordinators

The work package coordinators (WPCs, i.e. C. Schraff, J. Steppeler, M. Arpagaus, P. Eckert, C. Cacciamani and U. Schättler), the Scientific Project Manager (SPM, T. Paccagnella) and the Chairman of the Steering Committee (M. Capaldo) met at MeteoSwiss in Zürich on 5 June 2003. The first part of the meeting was dedicated to review the progress in the work packages, to identify problems and delays in specific WPs and to set up a list with model deficiencies and technical problems. The second part concerned some preparations for the next General Meeting at DWD in Langen: set-up of the agenda, proposals for new work packages, interdependencies and priorities of WPs, discussion on goals for 2004 and items for the strategic discussion. The minutes of this meeting are available on the private pages of our web-site.

(4) COSMO WG2 Meeting on Numerical Methods

Members of the COSMO numerics group (WG2) met one day before the General Meeting on 23 September 2003 in Langen. The participants discussed the current state of dynamics and numerics in European NWP models. J. Steppeler gave an overview on numerical activities within SRNWP and within COSMO. Finally, the current state of the z-coordinate developments at DWD and ARPA-SIM have been reviewed and the strategy for the future work has been discussed. Especially, the question of including the physics parameterization

by an interpolating interface to the terrain-following model was addressed. The minutes of this internal workshop will be made available on our web-site.

(5) 5th COSMO General Meeting

The recent COSMO general meeting was held in Langen (Germany) on 24-26 September 2003 and was hosted by DWD. With about 60 participants (see Fig. 15), the meeting was well attended. It was a very stimulating meeting with many interesting presentations, with many discussions on various subjects, and with much organizational work related to concrete work packages. The Vice-President of DWD, S. Mildner, opened the meeting by a welcome address and D. Frühwald informed about further details on organization of the meeting. The Chairman of the STC, M. Capaldo presented an account of the work of the Steering Committee and T. Paccagnella summarized the activities of the SPM and the WPCs during the year.



Figure 15: Participants at the 5th COSMO General Meeting 24-26 September 2003, held at the BTZ in Langen, Germany. A part of the crew is still in the coffee break.

The first (public) part was organized in six main sessions according to our working group structure. The work package coordinators gave an overview on progress in the various research and development activities of the working groups, followed by presentations on selected issues by the responsible scientists. Each session was closed by a general discussion on central topics. Summaries of the talks including the slides are available on our web-site. Section 8 and 9 of this Newsletter contains a number of contributions which emerged from the presentations in Langen.

The second (internal part) of the meeting was dedicated to formulate the research plan for the next period (Oct 2003 - Oct 2004). Delayed work packages and proposals for new ones

have been presented by the WPCs and discussed in the plenum. Allowing time for this plenum discussion on future work packages was found to be a good idea and useful, not only for a cross-checking of interdependencies but also for more scientific input and ideas to the following workshops of the WGs. The proposals for work packages were oriented along some basic guidelines for the next working period, which were presented by the Chairman of the STC.

- Consolidation, Documentation and Upgrade of the LM
 - Quality of precipitation forecasts: Increase efforts on the parameterization scheme
 - Assimilation of remote sensing data
 - Multi-national assessment of COSMO-LEPS products
- Application and Interpretation
 - statistical interpretation of high resolution forecasts
- Paving the way for Meso- γ Scale
 - Acceleration of Z-coordinate model versions
 - New parameterization schemes
 - Forefront verification and case studies

Detailed work plans have then been set-up by the working groups in separate workshops, which afterwards were presented to the plenum. The last part of the meeting was dedicated to presentations on future plans and on external collaborations of COSMO member services by national and international projects (see also Section 10), and a general discussion on further perspectives of work in our group. The following main items have been formulated:

- Variational methods for estimating local parameters,
- Quality certification of the LM-system,
- Increase COSMO members participation to EU projects as a group.

The final version of the work plans and a short description of each work package is available on the member area of our web-site.

(6) 10th Meeting of the COSMO Steering Committee

The 10th Meeting of the STC was held on 26 September 2003 during the COSMO General Meeting in Langen (participants: M. Capaldo, G. Sakellaridis, D. Frühwald and J. Ambühl). The Chairman of the STC (M. Capaldo) will leave the Committee due to other duties at UGM. Dieter Frühwald from DWD was elected as the new Chairman for the next two COSMO periods. Massimo Ferri from UGM was assigned as the new Italian representative in the STC. UGM offered to organize the next COSMO General Meeting in Milano (Italy) from 22-24 September 2004. The minutes of this STC meeting are available on the member pages of our web-site.

(7) 11th Meeting of the COSMO Steering Committee

The 11th meeting of the COSMO Steering Committee was held in Athens at HNMS on 28 November 2003 (participants: M. Ferri, G. Sakellaridis, D. Frühwald, J. Ambühl, R.

Klejnowski, M. Rotach and T. Paccagnella). The SPM (T. Paccagnella) presented the draft work plans for the upcoming COSMO period as prepared by the WPCs. All work packages have been approved. The final version of the work plans are available at the member area of our web-site. Further points of discussion have been computer resources for COSMO LEPS and the exchange of non-GTS observational data between COSMO members.

The Swiss representative in the STC, J. Ambühl will leave the Committee by the end of 2003. Mathias Rotach, the head of research and development at MeteoSwiss was assigned as his successor and already attended the meeting.

C. Cacciamani had finished his activities as WG5 work package coordinator due to other duties. The STC assigned Francis Schubiger from MeteoSwiss to take over the responsibilities as coordinator of WG5 for the next COSMO period. Minutes of this meeting will be available on the member area of our web-site.

7.2 Guest Scientists

Jürgen Steppeler from DWD visited the research group of J. Klemp and B. Skamarock at NCAR in Boulder (USA) and stayed from 25 April - 25 May 2003 as a guest scientist. Various numerical aspects, especially higher-order spatial discretizations and implicit methods, have been investigated.

7.3 Internal Visits

G. Doms and U. Schättler from DWD, and A. Walser from MeteoSwiss visited the Numerical Modelling Group at ARPA-SIM in Bologna from 10-11 February. Various technical aspects and the model set-up of the COSMO-LEPS system running at ECMWF have been discussed.

On 11 March, U. Schättler from DWD visited MeteoSwiss for a workshop on code optimization and portability. Various items from WP 6.1.2 have been discussed.

Marco Arpagaus visited the DWD physics group from 28-31 July. Various topics and problems in WG3 have been discussed. A central aspect that has been worked on was the Kain-Fritsch convection scheme, including implementation details and questions related to further testing and evaluation.

Andrzej Mazur from IMGW visited DWD from 18-19 December. Six new staff members at the IMGW Centre for Development of Numerical Weather Forecasts have started their work. Two of them, Witold Interewicz and Grzegorz Duniec, will support the COSMO physics group in 2004.

Giovanni Bonafe from ARPA-SIM visited M. Raschendorfer from the DWD physics group from 12-16 January 2004 to discuss and define further work in WP 3.1.1.6 (on extended parameter tuning).

7.4 Upcoming COSMO Meetings

The following COSMO workshops and meetings are planned for 2004.

8-10 March 2004: LM User Seminar

at DWD, Langen (D)

This seminar is dedicated to research activities and scientific applications of the LM at various

universities and research institutes. This years seminar will also include tutorials on numerics and on the LM Package. Information on the program, registration and accommodation can be found at www.dwd.de/en/FundE/Analyse/Modellierung/Tagungen.

5-6 May 2004: COSMO WG4-WG5 Workshop

at MeteoSwiss Geneva, Geneva (CH)

One day workshop with forecasters on the use of LM products. Discussion of guide lines for forecasters. This workshop will be organized by P. Eckert and F. Schubiger.

6-7 May 2004: Meeting of the Work-Package Coordinators

at MeteoSwiss Geneva, Geneva (CH)

Assessment of the progress of WPs, identification of problems and delays, and some preparations for the next General Meeting. The SPM will invite for this meeting during spring.

6-7 September 2004: Meeting of the Work-Package Coordinators

at ARPA-SIM, Bologna (I).

Assessment of the progress and work done and preparation of the next General Meeting.

21 September 2004: COSMO WG2 Meeting on Numerical Methods

UGM, Milano (I)

Discussion on new numerics and dynamical cores. J. Steppeler will invite for this workshop during the year.

22-24 September 2004: 6th COSMO General Meeting

UGM, Milano (I)

Progress Reports from the Working Groups and presentation of results from the work packages; discussion and set-up of a scientific work plan for 2005.

November 2004: Meeting of the Steering Committee

DWD, Offenbach (D)

Regular business meeting, revision of work packages and definition of the final COSMO work plan for 2005.

7.5 Announcements

This section lists a number of meetings which are of specific interest for active participation. Of course, this list is by no means complete.

EGU 1st General Assembly

25-30 April 2004, Nice, France (www.copernicus.org/egu2004).

2nd SRNWP Workshop on Verification

April 2004, KNMI, De Bilt, Netherlands. Date is still to be defined.

Joint HIRLAM/SRNWP Workshop on Soil Analysis and Processes

Spring 2004, SMHI, Norrköping, Sweden. The date is still to be defined.

14th ALADIN Workshop

1-5 June 2004, Innsbruck, Austria (www.cnrm.meteo.fr/aladin/).

14th International Conference on Clouds and Precipitation

18-23 July 2004, Bologna, Italy (www.isac.cnr.it/iccp).

ECMWF Seminar on Recent developments on numerical methods for atmosphere and ocean modelling

6-10 September 2004, Reading, UK (www.ecmwf.int/newsevents/calendar).

3rd European Conference on Radar in Meteorology and Hydrology

6-10 September 2004, Visby, Sweden (Gotland).

DACH 2004 (in German only)

7-10 September 2004, Karlsruhe, Germany (www-imk.fzk.de/dach2004/).

26th EWGLAM and 11th SRNWP meeting

4-7 October 2004, Oslo, Norway. The special topic of this year EWGLAM session will be *High resolution modelling in mountainous regions*, the meeting will also include a MAP session.

11th Workshop on High-Performance Computing in Meteorology

25-29 October 2004, Reading, UK (www.ecmwf.int/newsevents/calendar/).

Joint HIRLAM/SRNWP Workshop on Variational Methods

November 2004, UK Met Office, Exeter, UK. The date is still to be defined.

ECMWF/ELDAS Workshop on Land Surface Assimilation

8-11 November 2004, Reading, UK (www.ecmwf.int/newsevents/calendar/).

3rd European Conference on Severe Storms

9-12 November 2004, Leon, Spain (www3.unileon.es/congresos/ecss2004/principal.htm).

SRNWP Workshop on Numerical Techniques

December 2004, date and place still to be defined.