

# Minutes of the WG1 meeting in Toulouse (F), October 4 2001

Present: Ekaterina Batchvarova, Josef Brechler, Emilia Georgieva (new), Zbynek Janour, Doug Middleton, Victor Prior, Mathias Rotach (chair)  
Guest: Tomas Prager, Hungarian Met Office (part of the time)

The most important points and discussions can be summarised as follows:

## **1 New member:**

Emilia Georgieva (Institute of Geophysics, Bulgarian Academy of Sciences) will join WG1. Welcome to the gang!

## **2 Report on the Zurich workshop**

- Proceedings are edited and finalised. Sent to Brussels.
- The 'summary and conclusions' chapter will be submitted to the *Bulletin of the American Meteorological Society* as a conference report (as suggested by Bob Bornstein).

## **3 Workplan and future work:**

Actual WG work will concentrate on **urban–rural comparisons** for various aspects.

### a) near surface wind:

- Comparison of existing data sets (along the lines of the paper presented by Soriano et al in Zurich). A core group will pursue this question (*Soriano* takes the lead [appointed in absentia.....], Middleton, Batchvarova, Prior, Rotach) with the goal to include more cases, evaluate them in more detail (than in the 'Zurich paper') and finally prepare a true publication.
- Accounting for *near-surface turbulence characteristics* data sets: Birmingham, Basel (BUBBLE), Sofia (the latter made possible through a recently established *Institute partnership* between National Institute of Meteorology and Hydrology, Sofia and ETHZ).  
Middleton & Rotach will pursue establishment of software and start of activity.  
According to the *procedure* as outlined on the WG1 homepage  
GOAL: establishment of  $z_{ref}$  for urban surfaces, → publication

### b) UBL wind profile

- Evaluation and improvement of the Rossby number similarity approach as presented at the Zurich workshop. Janour will take the lead (overview of existing approaches and extension of Rossby number approach).
- Experimental data needed! ZJ will establish a list of requirements for these data sets including recommendations for  $z_o$  and  $d$ .  
→ Prior informed about the availability of simultaneously launched radio sondes in Portugal (rural and urban sites).  
→ a possibility will be to use BUBBLE data (Basel and Payerne)

- Urban turbulence
- Near surface: quite some knowledge available (see contribution of Kastner-Klein at the Zurich workshop). Further studies will follow (e.g., within BUBBLE) - but no immediate action required by WG1.
- Profiles throughout UBL: weakest are so far. Considering all the other aspects to be covered, no immediate action can be taken.

#### c) Urban networks

Victor Prior informed on the state of the network on urban stations in Portugal. A number of stations are available in different cities. Their measurement height for wind is 10m. V.P. will make sure that these observations will be part of the 'urban-rural' comparison (see a), although possibly difficult due to the height of observation (see above).

#### **4 Homepage**

Will be updated soon - including the extended abstracts from the Zurich workshop. Rotach will have to do this.....

#### **5 Final report**

Strategy: publish available WG1 results in the open literature. Keep the actual report as short as possible and add the publications as appendices.

- 6 Explicit session on *urban meteorology* but with an emphasis on urban topics in session OA12 'BASIC STUDIES': '....(iv) The roughness sublayer of the turbulent boundary layer especially over urban areas'.
  - Fourth AMS Symposium on the Urban Environment, 20-24 May 2002, Norfolk, Virginia, deadline for abstracts: November 15 2001
  - Harmonisation conference, Sofia, 14 -17 October 2002, deadline abstracts: March 2002
  - 46th Oholo Conference on Flow and Diffusion in the Urban Environment, October 2002, Eilat, Israel. Information: <http://www.iibr.gov.il/oholo>
  - 5<sup>th</sup> Int. Conference on the Urban Climate (ICUC): September 1-5, 2003 Lodz Poland. Information (<http://www.geography.ohio-state.edu/UrbanClimate/>).
  - 4<sup>th</sup> Urban air quality conference: March 2003

#### **6 Next meeting:**

In connection with the next MC meeting:

April 10 to 12 2002 in Rome – possibly only 2 days (April 11/12).