

BUBBLE – current status of the experiment and planned investigation/evaluation of the mixing height

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BUBBLE – status

- **Surface turbulence**
 - U2 running (6 levels up to 2h)
 - U1 right now being built up (6 levels up to 2h)
 - S1 end of Oct. 2001 (3 levels up to >2h)
 - R1 end of Oct. 2001
- **Wind profiler: operating since June 2001**
- **Lidar: installation Oct. 2001**
- **Sodars (4), RASS, tethered balloon etc.: IOPs only**
- **Modelling**
 - urban exchange parameterisation (Martilli)
 - preparing Basel

BUBBLE – mixing height

- **From Lidar**
 - **Aerosol concentration profile (derivative)**
 - **approach of Steyn et al. (1999) [J ATMOS OCEANIC TECHNOL 16: 953-959, 1999]**
- **From Wind Profiler**
 - **after Cohn and Angevine (2000) [J APPL METEOROL, 39, 1233-1247]**
- **Modelling results**
 - **large influence of the urban surface (for low wind)**

BUBBLE

(*Basel UrBan Boundary Layer Experiment*)

Swiss 'Core project'

Universität Basel

Logistics and Infrastructure, Turbulence
radiation, mean fields...

ETHZ

Scientific co-ordination, turbulence,
Wind profiler

MeteoSwiss

Wind profiler

Obs. de Neuchâtel

Lidar

EPFL

Modelling

BUBBLE

(Basel UrBan Boundary Layer Experiment)

International Partners

University of British Columbia	Canada
Indiana University, University of W Ontario	
Ohio State University	USA
National University of Singapore	Singapore
University of Freiburg, TU Dresden, Forschungszentrum Karlsruhe	Germany
EC Nantes, CORIA Rouen	France
University of Padova	Italy
University of Tasmania	Australia