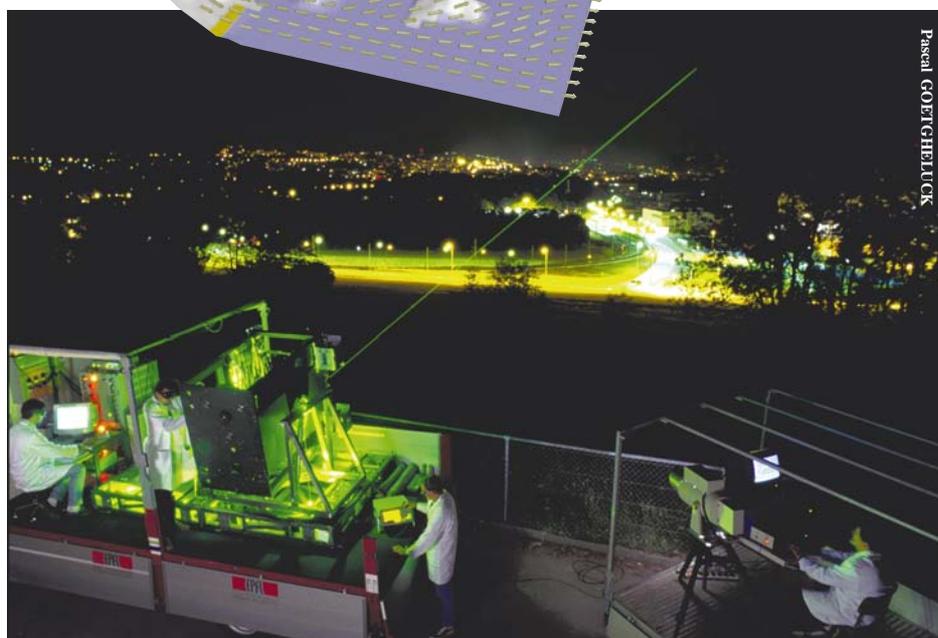
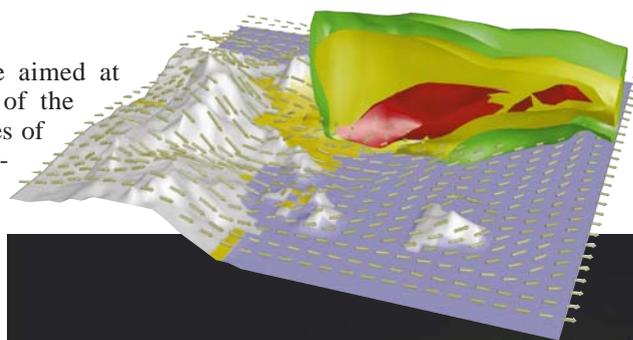


Air Pollution

Measuring techniques and impact on our environment

Air pollution measurements are aimed at improving our understanding of the chemical and physical properties of the atmosphere, thus addressing essentially three issues with very different space and time scales:

- measurement of critical or peak values of air pollutant, close to local emission sources in densely urbanized or industrialized sites,
- long term observation and trend analysis on air quality,
- characterization of photochemical pollution (smog) episodes on a time scale of a few days, with field campaigns aimed at creating a “base case” database for the validation of atmospheric models describing our atmosphere. When such models are able to reproduce adequately the base case, they constitute the only scientifically relevant tool to predict the impact of different air pollution abatement strategies.



Along with these three issues as a guideline, this Dossier came up from the workshop “Air Pollution: Measuring Techniques and Impact on Our Environment” organized by EPFL and held at Lausanne in October 1998. Some specific developments in air pollution monitoring and wind measurement are presented, and also the first results of a field campaign held in April-June 1998 in the Milan area. The impact of air pollution on our environment is investigated by addressing the specific effect of ozone on agriculture, a work which underlines the variability of these effects with different type of plants.

Some of the most recent developments in air pollution science are well represented in the manuscripts collected for this Dossier, and their authors are warmly thanked for providing these relevant contributions.



Coordinated by: Bertrand Calpini

Swiss Federal Institute of Technology
EPF Lausanne, Switzerland

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