



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

Federal Department of Home Affairs FDHA  
**Federal Office of Meteorology and Climatology MeteoSwiss**

# Numerical Weather Prediction at MeteoSwiss

30th EWGLAM meeting

6th October 2008



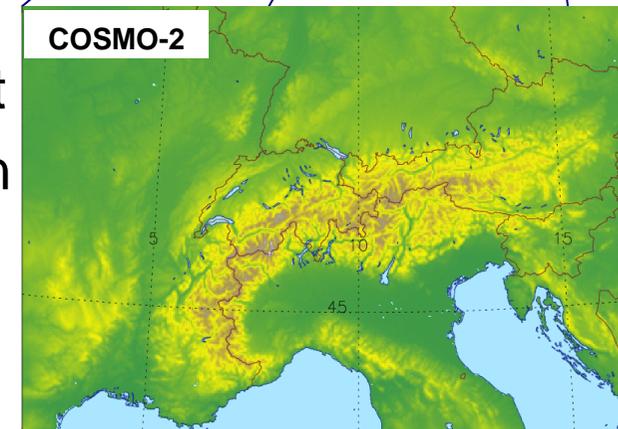
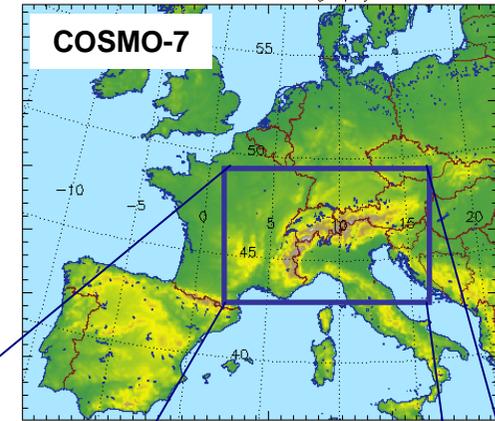
# Status of NWP suite operational since 27<sup>th</sup> February 2008

## COSMO-7 :

6.6km, 393x338x60 GP, 2 x 72h fcst /day

## COSMO-2 :

2.2km, 520x350x60 GP, 8 x 24h fcst  
own assimilation cycle, cut-off 45 min  
t.c. products delivered in <35 min



Production at CSCS, Manno

Main machine: **Cray XT4**, 447 dual cores

Fall-back: **Cray XT3**, 1668 single cores

Service nodes used for front-end functions

Separate servers for DB



# Project MAP D-PHASE

## Demonstration of Probabilistic Hydrological and Atmospheric Simulation of flood Events in the Alpine region



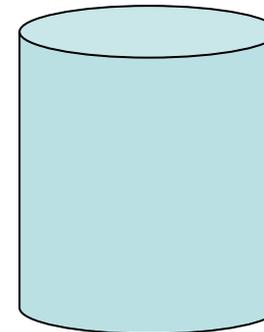
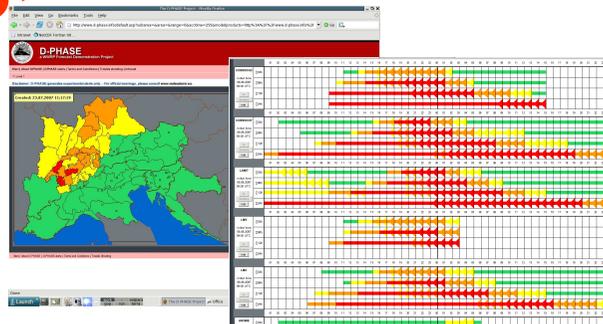
- 2nd WWRP FDP (forecast demonstration program) after Sydney 2000 and before Beijing 2008
- Focused on heavy precipitation, hydrology, high-resolution numerical modeling and ensembles
- Huge number of participants: 30 atmospheric models, 17 hydrological models and more than 35 end users.
- Established an end-to-end forecasting system, which is operated from June until November 2007



[www.d-phase.info](http://www.d-phase.info)

Real-time

- warnings of all models
- forecast chart



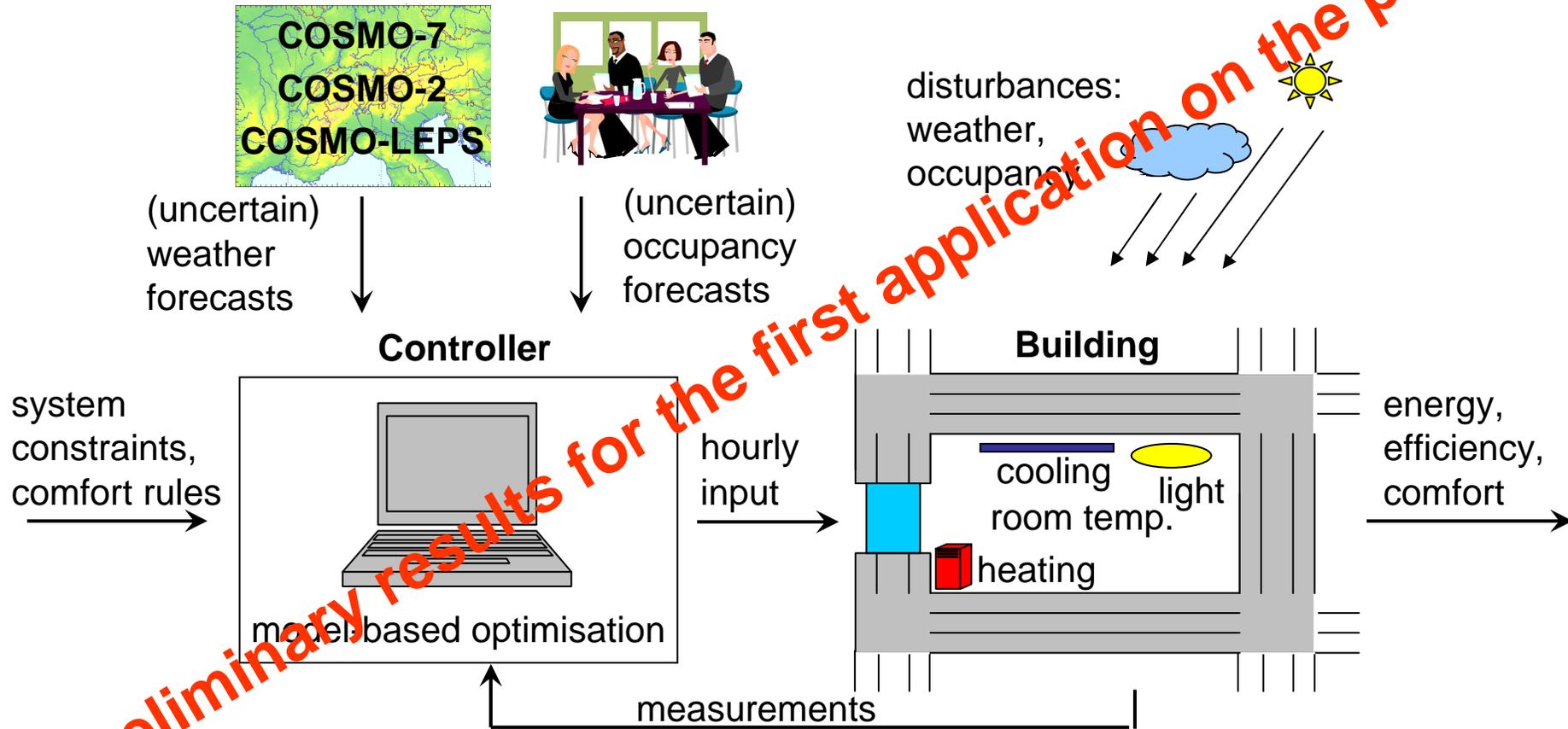
**Data archive**

- >10 TB model data
- in a unified GRIB format for scientific evaluation



# Project OptiControl

## Model predictive control of building climate



Partners: ETH Zurich, Empa, Siemens Building Technologies, swisselectric research