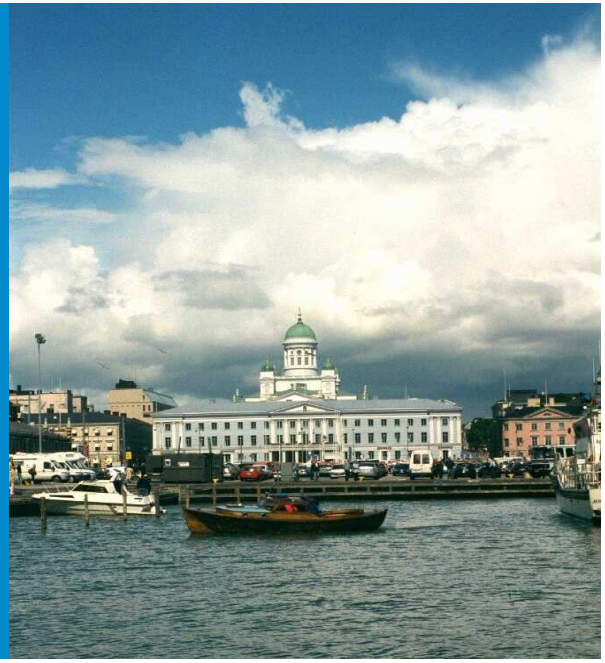
Welcome!



Tours Start at 12:45pm and end at 13:30pm

Group 1 (led by Jouko Jalava)

Meet in Reception Lobby

Clean room + radiosonde factory

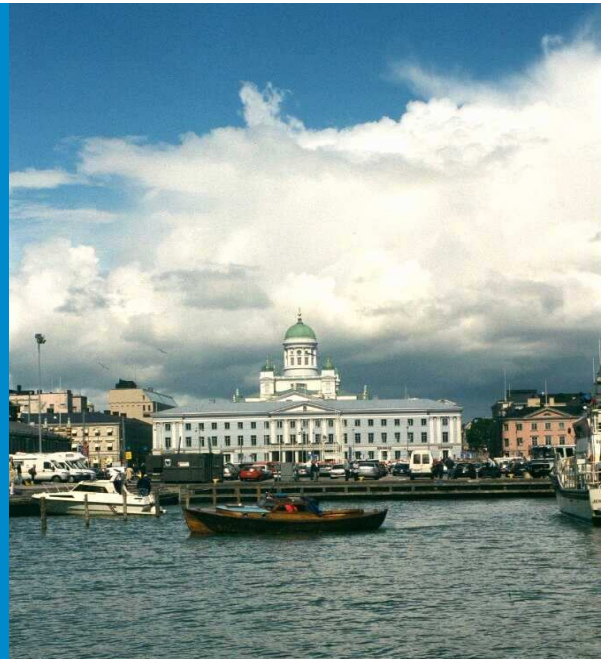
Group 2 (led by Pekka Ravila)

Meet outside Main Entrance

Optical sensors + clean room

VAISALA

What is a “Testbed?”



Walt Dabberdt

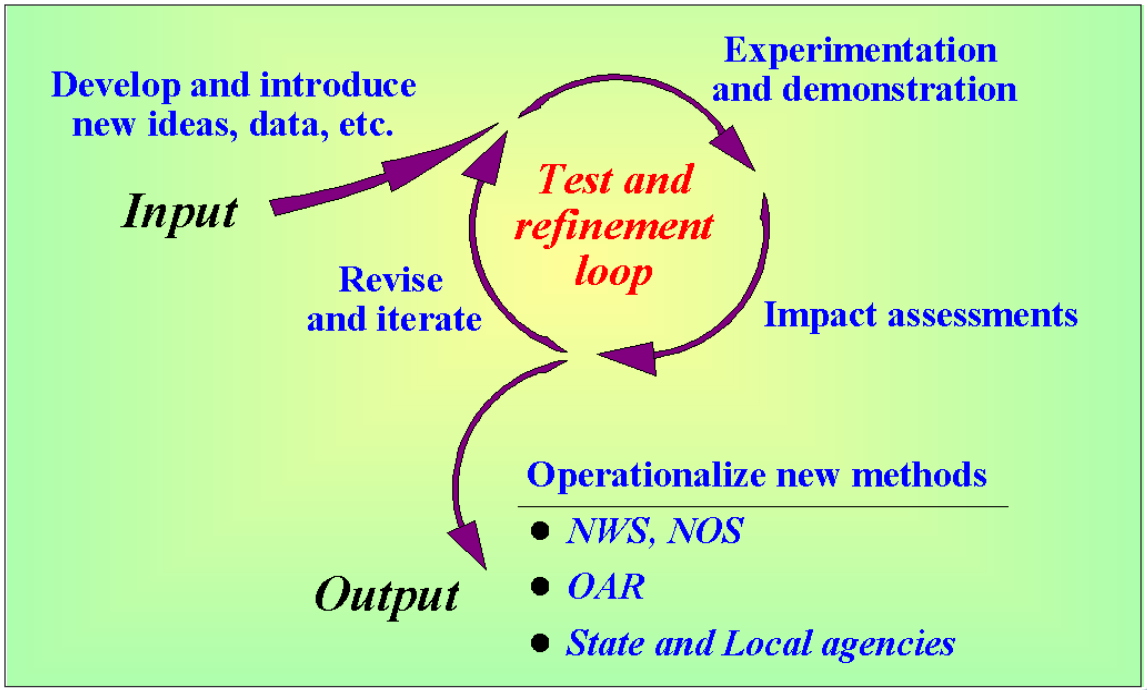
Helsinki Testbed Urban Modeling Workshop

15-16 June 2005

VAISALA

Mesoscale Forecasting -- Testbeds

Testbed Definition: *"A working relationship in quasi-operational framework among forecasters, researchers, private-sector, and government agencies aimed at solving operational and practical regional problems with a strong connection to end-users."*



Testbed Recommendations

Testbed considerations and attributes:

- **Yield improvements** in services, products, economics and public safety
- **Accelerate transition of R&D** to better operations, services, and decision making.
- Testbeds require a **long-term (multi-year) commitment**, probably at multiple locations
- With a view toward improving operational weather services, the observing systems deployed within testbeds should be reliable, cost-effective, commercial off-the-shelf **(COTS)** where possible, and capable of sustained, continuous operation.
- Some **redundancy** in the observational capability of testbeds is needed to make informed decisions about which sites and instruments are needed for long-term operational purposes.

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Testbed Recommendations

Testbeds are crucial in transitioning observing and modeling research into operations; a successful testbed must satisfy the following criteria:

- Address the detection, monitoring, and prediction of **regional phenomena** of particular interest.
- **Engage experts** in the phenomena of interest.
- **Involve stakeholders** in planning, operation, and evaluation of the testbeds.
- **Define expected outcomes,** including transition to operations, **strategies** for achieving them, and **measures of success**.
- Provide resources for the generation and delivery of experimental **products** based upon these observations.
- Provide **special observing networks** (and people, communications, and databases) needed for pilot studies and research

Public, Private & Academic Partners

Vaisala:
1. Distributed weather stations, installations and maintenance
2. Collection of currently non-operational data
3. Database programming
4. Funding
5. Research

Nokia:
1. M2M technology

IAAF WCA 2005:
1. Observation site host
2. Funding
3. User of results

Helsinki metropolitan area council:
1. Observation site host
2. Funding
3. User of results

Unibase:
1. Observation mast host

Finnish Meteorological Institute:
1. Coordination
2. Station planning
3. Current observations
4. Combined database
5. Data distribution
6. Funding
7. Research

Helsinki Univ. of Technology:
1. Product distribution during WCA2005

Radiation and nuclear safety authority Finland:
1. Funding
2. Research

Technology agency of Finland:
1. Funding

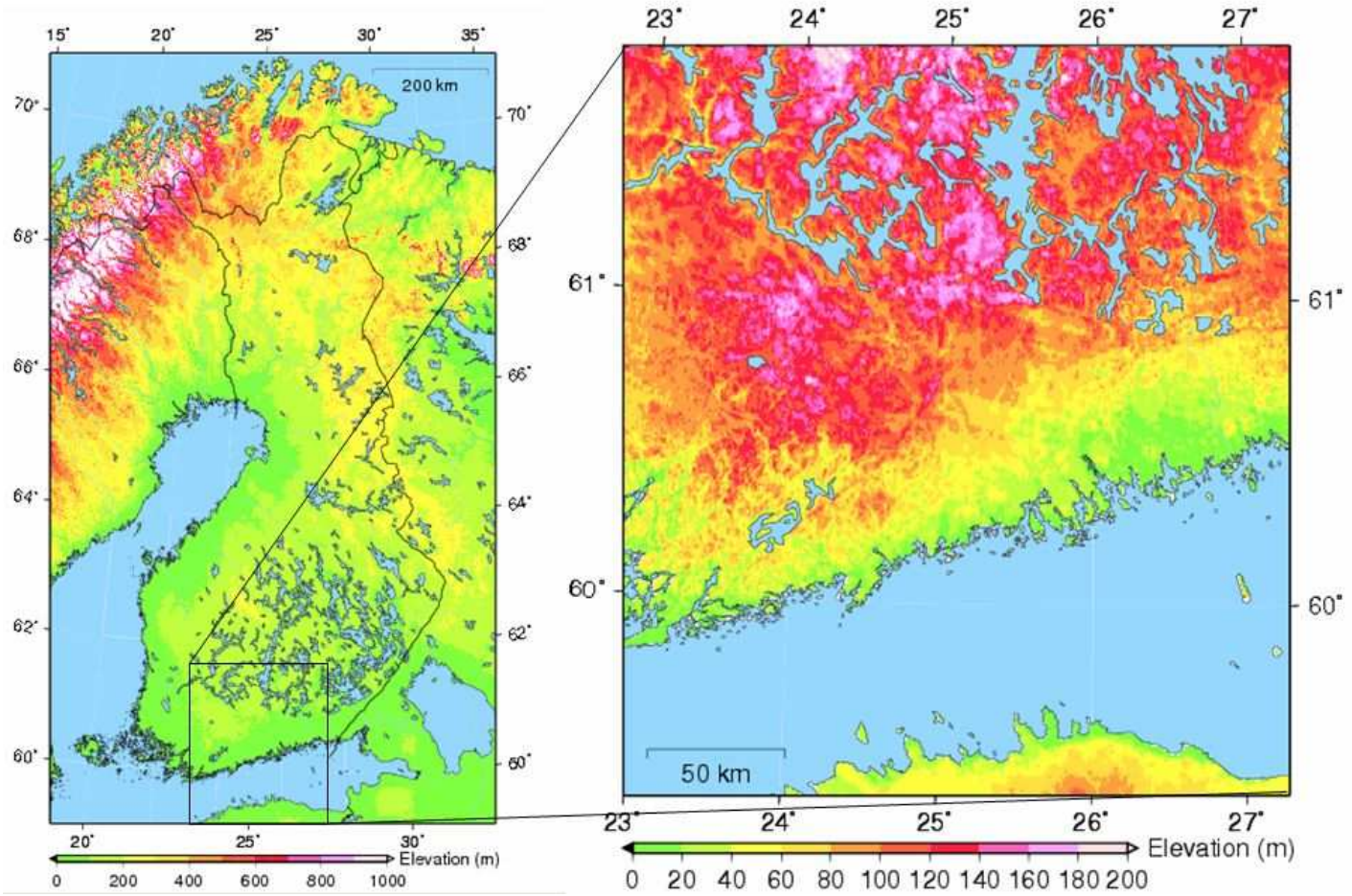
Outsourced services:
1. Data warehouse web-interface

Finnish Road Administration:
1. Road weather observations
2. Funding
3. User of results

Finnish volunteer coast guard association:
1. Observation vessel host

Ferry company X:
1. Observation vessel host

Outer & Inner Domains of the HTB



Invitation to Participate:

- ❑ Instrument tests
- ❑ Network design strategies
- ❑ Data assimilation modeling
- ❑ NWP modeling
- ❑ Dispersion studies
- ❑ Phenomenological studies
- ❑ Applications studies