

# Perspectives on the Helsinki Testbed: University and FMI

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# The Testbed supports the basic (noncommercial) mission of FMI.

## ■ Research

- Very strong user base from research (e.g., Testbed Course, Testbed Seminar)

## ■ Operational forecasting

- Important for nowcasting hazardous weather (e.g., rain–snow line, severe convective storms)
- Dense network of observations where people live

## ■ Public Service

- People want weather data close to their home and work
- Testbed user survey: people use the data
- Public relations (e.g., boat shows, press releases)

# Opportunities for the Testbed

- Research–forecast interactions
  - High-resolution vs probabilistic forecasting
  - Custom applications for forecast products
  - Collaboratory
- Education and training
  - Specialized meteorology courses and training
  - Grow Helsinki into a Center of Excellence in Meteorology

# Research Opportunities for the Testbed

- Mesoscale meteorology (e.g., cold fronts)
- High-resolution modelling
- Dual-polarimetric radar
- Snow density
- Field research programs in southern Finland
- What is the predictability of mesoscale phenomena?
- What is the economic value of the Testbed?
- What is an “optimal” observing network?

# Collaboratory at FMI

- *Promote collaboration between researchers, forecasters, application developers, customers, faculty, and students*
- Test new software and forecast applications
  - New SISU workstation for forecasters
  - Dual-polarimetric radar data
  - Lightning software
  - New customer applications
- Showcase for media, customers and politicians
- Control room for simulations/events (severe weather and hazardous releases)
- Social room for weather discussions
- Cognitive ergometrics
- Helsinki Testbed Control Room