

## **Helsinki Mesoscale Testbed: Data Policy for Participants**

This document describes the Helsinki Testbed (HTB) data policy for recognized participants. Researchers who only want to use data measured by the participants, should read the document **Helsinki Mesoscale Testbed: Data Policy for Users**.

Researchers who operate instruments in Helsinki Testbed area during the campaigns, are encouraged to become participants. The participants who provide data measured by their instruments as described here, get

- Formally recognized as HTB participant
- Support of the HTB Consortium (\*)

General Description of the data made available by the HTB Consortium:

- ❑ All surface-based in situ and remotely sensed measurements within the HTB inner domain.
- ❑ All upper-air soundings within the HTB outer domain.
- ❑ Outer-domain (and HEL) commercial aircraft soundings and enroute observations, as available.
- ❑ All operational HIRLAM MBE and HIRLAM RCR analyses and forecasts produced by Finnish Meteorological Institute (FMI) for the HTB outer domain.
- ❑ Special observations made in HTB project using standard or non-standard measurement systems and sensors (see section on non-standard instruments, below).
- ❑ Polar-orbiting and geostationary satellite data, as routinely acquired by FMI.

Measurement Data by Non-Standard Instruments Operated by HTB participants:

- ❑ Definition: Non-Standard Instruments are defined as non-COTS (commercial, off-the-shelf) instruments developed and/or tested by the participant.
- ❑ Real-time availability or latency to be determined by the participant and FMI on a case-by-case basis.
- ❑ Post facto inclusion in the HTB data archive is required and subject to the HTB data policy (below).

Support for Non-Standard Instruments Operated by HTB participants:

- ❑ Assistance with measurement site location and basic infrastructure (such as electricity), where feasible. HTB participants are expected to cover out-of-pocket expenses where necessary (to be determined in consultation with FMI and Vaisala).
- ❑ Assistance with practical arrangements, as feasible.
- ❑ Working facilities during campaign.
- ❑ Central data warehouse (CDW).
- ❑ Access to CDW over Internet.

### **HTB Participant Data Policy:**

- ❑ Participants making supplemental observations with COTS instrumentation are expected to provide their measurement data to the HTB archive in real time if possible and feasible.
- ❑ Where real-time provision of supplemental observations with COTS instrumentation is not possible or feasible, then such data shall be made available to the HTB archive as soon as possible, but not more than 30 days after the end of each month-long intensive measurement period.
- ❑ Appropriate metadata shall be similarly provided as prescribed by FMI. Metadata must include at least description of instrumentation, measurement site, data content, quality assurance, site coordinates and measurement units.
- ❑ It is recognized that participants making supplemental observations with non-standard instrumentation (instruments being developed or tested, batch/grab-type air quality measurements, etc.) should have priority opportunity to analyze such observations before providing them to the HTB data archive. However, participants are expected to submit such measurement data to the HTB data archive not more than six months: 1) after the end of the respective month-long observing period, or 2) after such data have completed laboratory analysis and/or calibration (where relevant), whichever is later.
- ❑ Measurement data from non-standard instruments should be provided in physical units with temporal resolution consistent with the instrument and the parameter being measured; raw instrument outputs in engineering units will not be archived by FMI.
- ❑ All archived meteorological data should be provided in accordance with HTB XML schema. If needed, contact HTB Technical Committee (\*\*) for advice in XML schema implementation.
- ❑ All supplemental observations, in addition to standard HTB observations, will be made available to interested users free of charge.
- ❑ All CDW users must register themselves. Research plan summaries or statement for the purpose of the intended use are required by the HTB Technical Committee. It is also recommended to send a copy of all papers in which HTB data has been used.
- ❑ In any usage of HTB data, the source of the data must be clearly acknowledged.
- ❑ In no case will HTB organizers, users or any third party re-sell HTB data, except where demonstrable value has been added.

Note: Restrictions may apply to any of the guidelines presented. HTB Technical Committee reserves right to alter these policies without notice. Especially, support for Non-Standard Instruments is done case-by-case basis.

Approved on behalf of the HTB Technical Committee:

Jani Poutiainen FMI

Heikki Turtiainen Vaisala

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(\*) HTB Consortium consists of the HTB steering group organizations.

(\*\*) HTB Technical Committee matters should be addressed to Jani.Poutiainen (at) fmi.fi or Heikki.Turtiainen (at) vaisala.com.