



ILMATIETEEN LAITOS  
METEOROLOGISKA INSTITUTET  
FINNISH METEOROLOGICAL INSTITUTE

# ***Research and Development***

***Prof. Yrjö Viisanen***

***Finnish meteorological  
institute***

***”Turning research  
and technology into  
high quality services”***





## Finnish Meteorological Institute and University of Helsinki

- *Center of Excellence of Academy of Finland*
- *Atmospheric sciences*
- *Oceanography*
- *Global change*
- *Air quality*
- *Space*
- *Biogeochemistry*





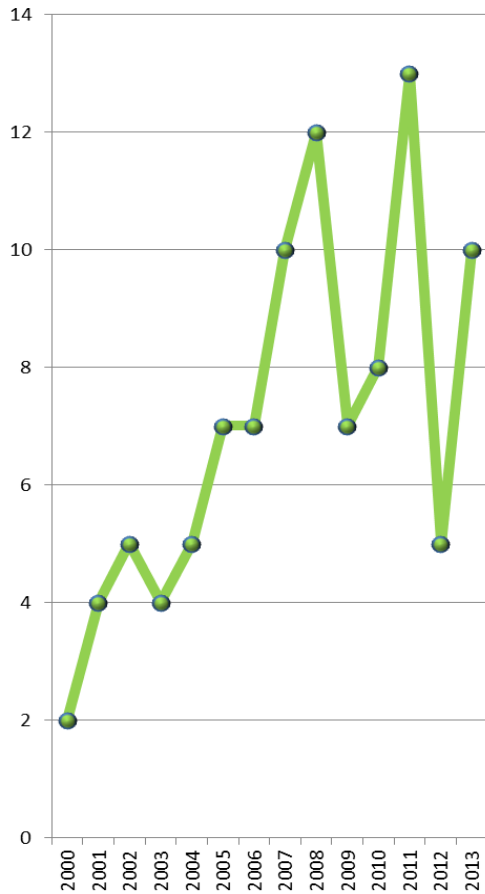
# FMI STAFF & BUDGET

- 730 man-years 60 % academic, 20 % PhD
- 78 M€ 2012
  - 61 % government
  - 39 % from commercial or research activities
- 65 % of R & D activities externally funded
  - EC, ESA, EUMETSAT, Finnish Academy & Technology and Innovation Funding Agency

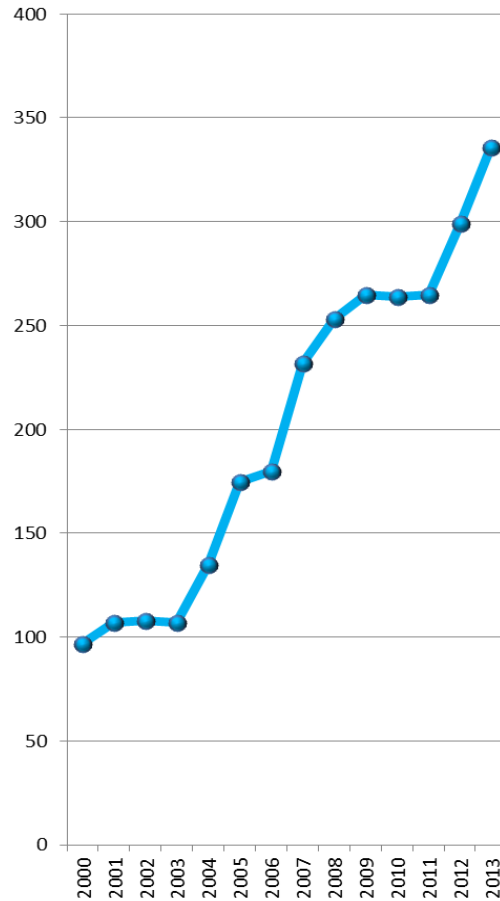




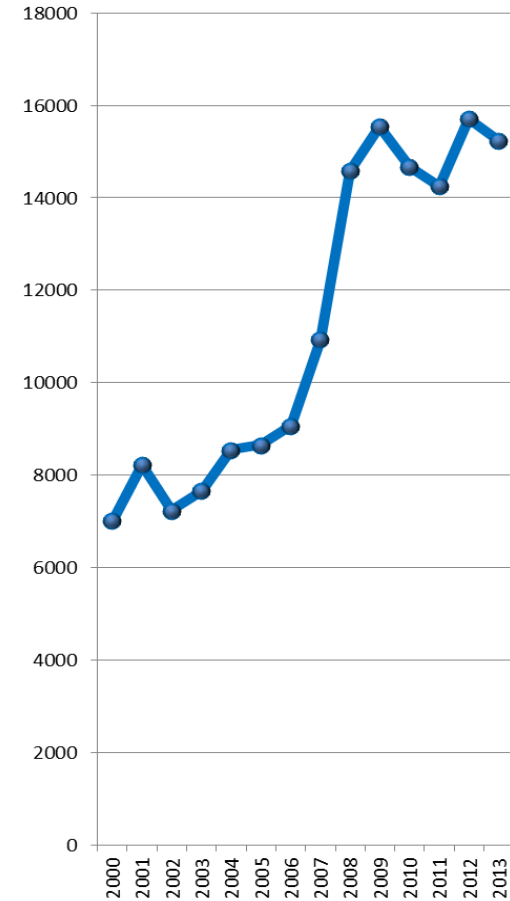
### Doctoral Dissertations



### Peer Refereed Articles



### Publication Index





## **FMI tenure track programme (Selection completed 30.6.2013)**

The Finnish Meteorological Institute (FMI) is a government and research organisation providing national weather and climate services, with extensive research activities in the following fields: atmospheric sciences, including air quality and climate change; marine research; polar research; and space research. There are currently 377 members of research staff at FMI; 20 professors, more than 150 scientists educated to doctoral level.

FMI will allocate the tenure track positions to areas which are strategic for the future success of the institute. Applicants are expected to have a significant contribution to these strategic areas. FMI is announcing open tenure-track positions addressing the following themes:

- 1. Climate modelling (Hannele Korhonen)**
- 2. Atmospheric observations from new technologies (Antti Arola and Ewan O'Connor)**
- 3. Satellite measurements of greenhouse gases (Johanna Tamminen)**
- 4. Arctic research (Petteri Uotila)**
- 5. Seasonal prediction and weather forecasting (Alexey Karpetchko)**





# FOREST DISTRIBUTION



**TROPICAL**



**TEMPERATE**

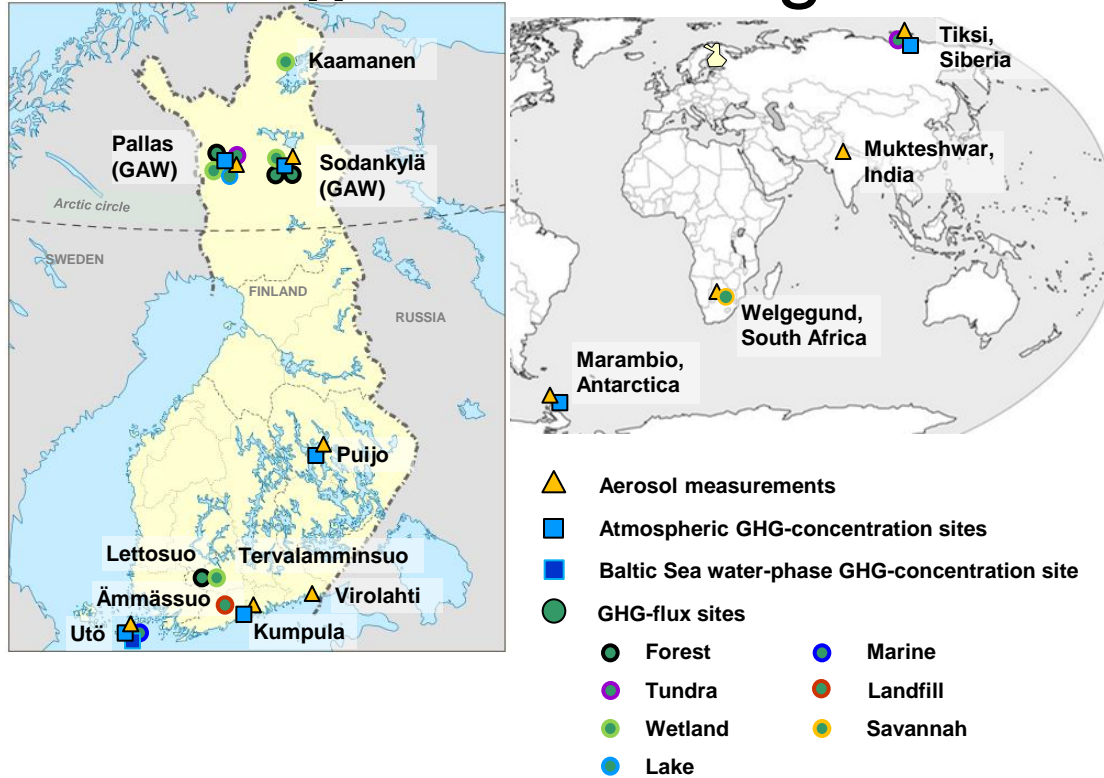


**BOREAL**





# Aerosol and greenhouse gas research stations



Concentrations of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O

CO<sub>2</sub> and CH<sub>4</sub> fluxes (forests, lakes, wetlands, tundra, landfills, sea)

Modeling (e.g. Carbon tracker, JS-Bach etc.)

Observations, research and education in close co-operation with  
University of Helsinki and University of Eastern Finland

Halo-lidars



# ICOS

## Integrated Carbon Observation System

*A research Infrastructure to measure,  
understand and predict  
the global cycles of greenhouse gases*





# WMO/GAW-Arctic

