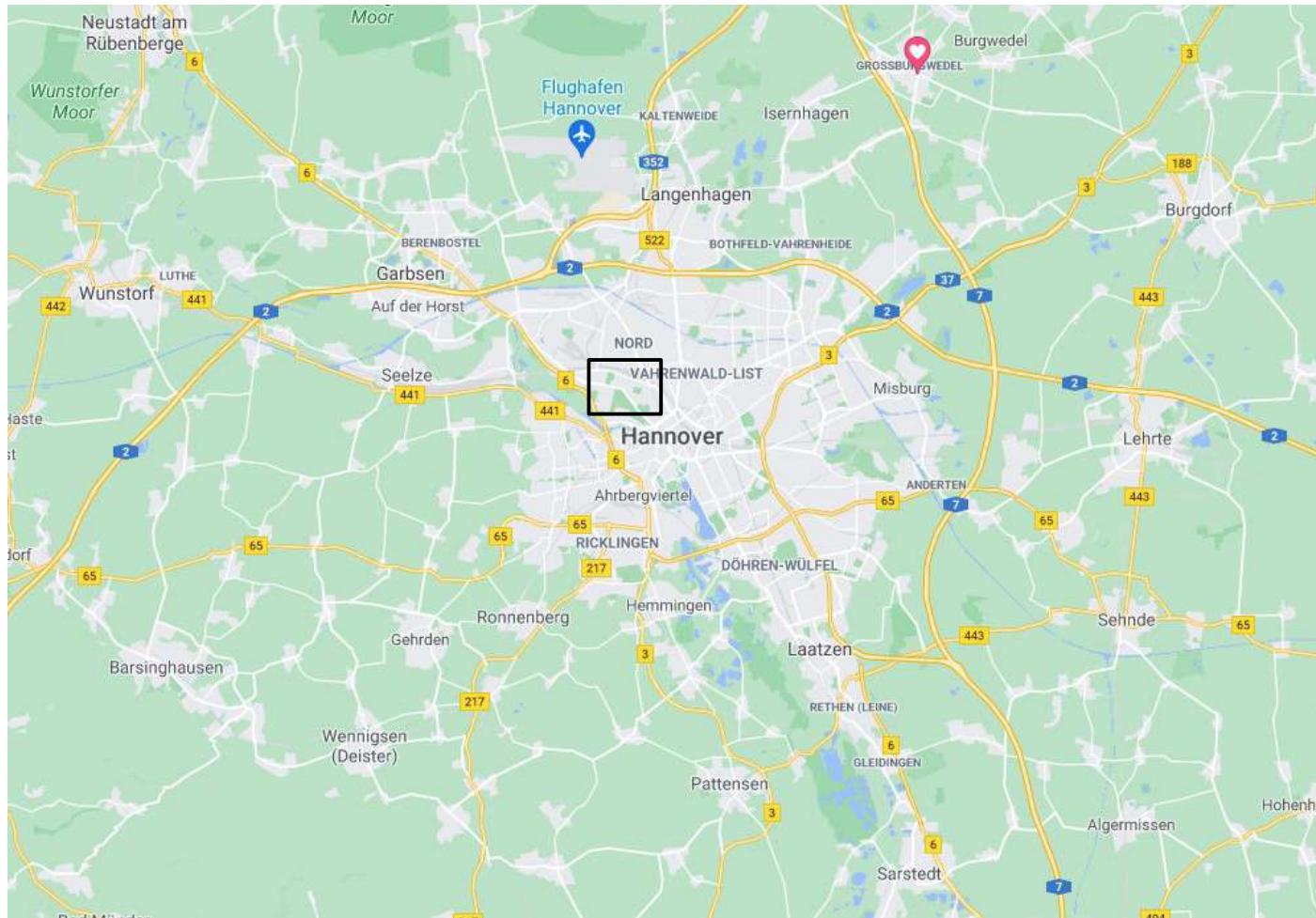
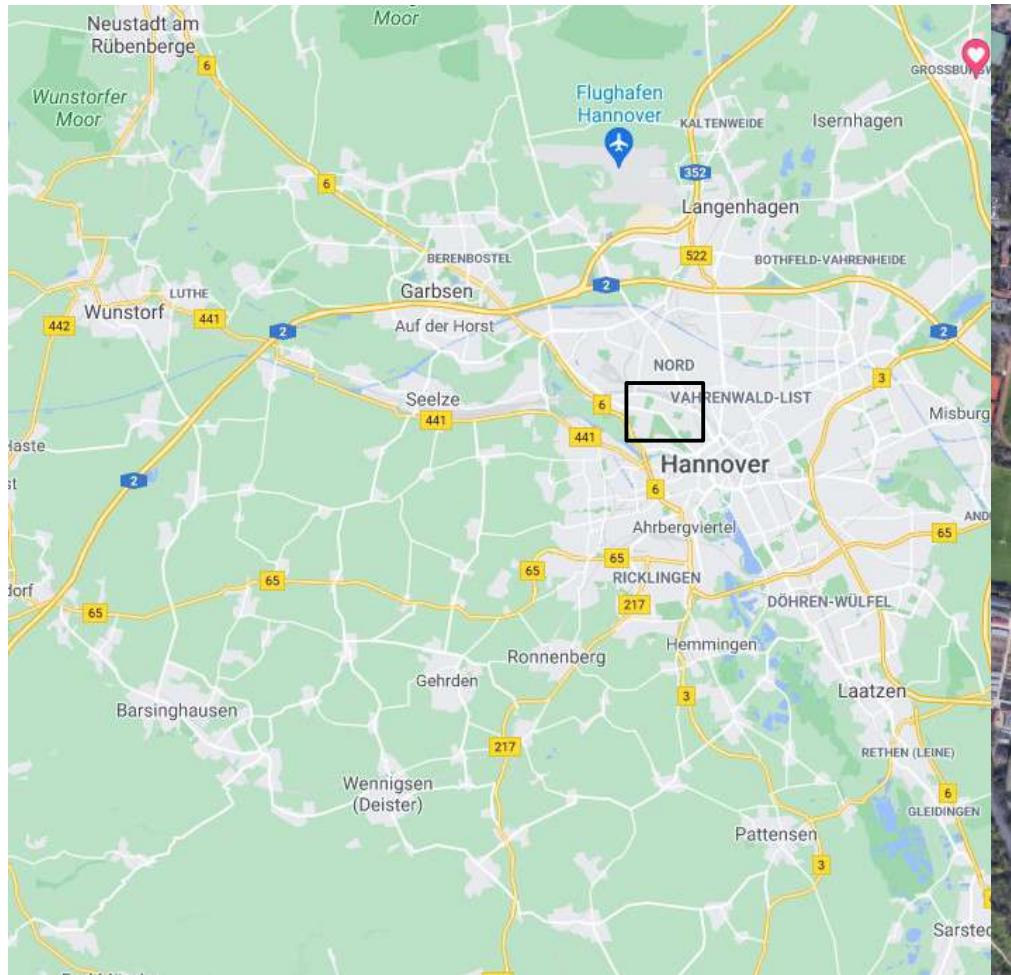


# Meteorology at Leibniz University Hannover



Prof. Dr. Björn Maronga







## Infrastructure

- 2 measurement sites



Herrenhausen (urban)



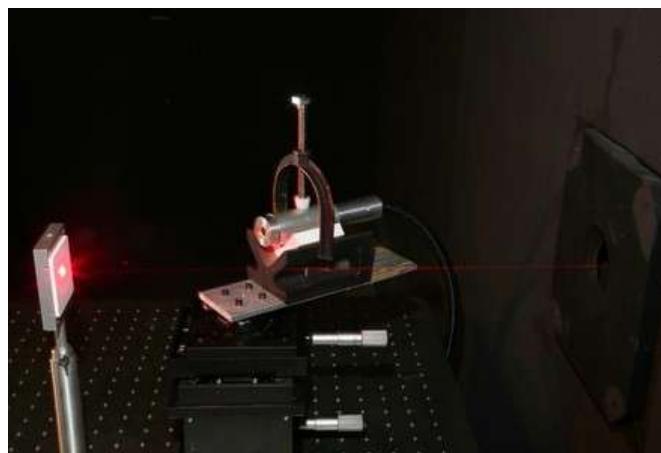
Ruthe (rural)

## Infrastructure

- 2 measurement sites



- Roof-top platform
- Radiation lab
- Multicopter UAVs



## Staff

- Faculty:



Prof. Dr. Günter Groß  
Environmental Meteorology &  
Climatology



Prof. Dr. Björn Maronga  
apl. Prof. Dr. Siegfried Raasch  
Boundary-layer Meteorology



Prof. Dr. Gunther Seckmeyer  
Radiation & Remote Sensing

- Scientific staff:

- 5 Postdocs
- 18 PhD students

- Other staff:

- 6 Permanent positions in administration, IT, and engineering

## Study programme (current)

### Bachelor Meteorology (German, 6 semester)

- Mathematics
- Physics
- Meteorology

30-40 first semester students / < 10 graduates

### Master Meteorology (German/English, 4 semester)

- Meteorology
- Research-oriented
- One year Master thesis work

about 10 first semester students / ~ 5 graduates

## Study programme (current)

### Bachelor Meteorology (German, 6 semester)

- Mathematics
- Physics
- Meteorology

30-40 first semester students / < 10 graduates

### Master Meteorology (German/English, 4 semester)

- Meteorology
- Research-oriented
- One year Master thesis work

about 10 first semester students / ~ 5 graduates



## Study programme (current)

### Bachelor Meteorology (German, 6 semester)

- Mathematics
- Physics
- Meteorology

30-40 first semester students / < 10 graduates

### Master Meteorology (German/English, 4 semester)

- Meteorology
- Research-oriented
- One year Master thesis work

about 10 first semester students / ~ 5 graduates

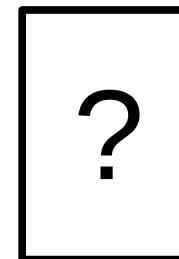


today

since 07/2021

## Study programme (future)

2028



## Study programme (current)

### Bachelor Meteorology (German, 6 semester)

- Mathematics
- Physics
- Meteorology

30-40 first semester students / < 10 graduates

### Master Meteorology (German/English, 4 semester)

- Meteorology
- Research-oriented
- One year Master thesis work

about 10 first semester students / ~ 5 graduates

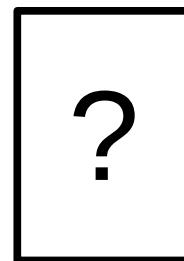
## Study programme (future)

### Bachelor Environmental Meteorology (6 semester)

- Mathematics & Physics
- Meteorology
- Environmental sciences
- Engineering

### Master Environmental Engineering

- Computational fluid mechanics
- Numerical boundary-layer meteorology
- Renewable energies
- Environmental sciences
- Semester abroad
- One semester Master thesis work



## Study programme (current)

### Bachelor Meteorology (German, 6 semester)

- Mathematics
- Physics
- Meteorology

30-40 first semester students / < 10 graduates

### Master Meteorology (German/English, 4 semester)

- Meteorology
- Research-oriented
- One year Master thesis work

about 10 first semester students / ~ 5 graduates

## Study programme (future)

### Bachelor Environmental Meteorology (6 semester)

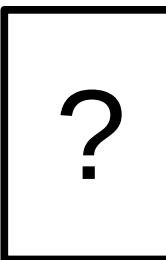
- Mathematics & Physics
- Meteorology
- Environmental science
- Engineering



### Master Environmental Engineering

- Computational fluid mechanics
- Numerical boundary-layer meteorology
- Renewable energies
- Environmental sciences
- Semester abroad
- One semester Master thesis work

2028



- Turbulence in the atmospheric boundary layer
- Turbulence-resolving simulations
- Headquarters of the PALM model system (<http://palm-model.org>)
- Group:

- Siegfried Raasch (head)
- Björn Maronga (co-head since Juli 2021)
- 5 Postdocs
- 9 PhD students
- 3 Master students



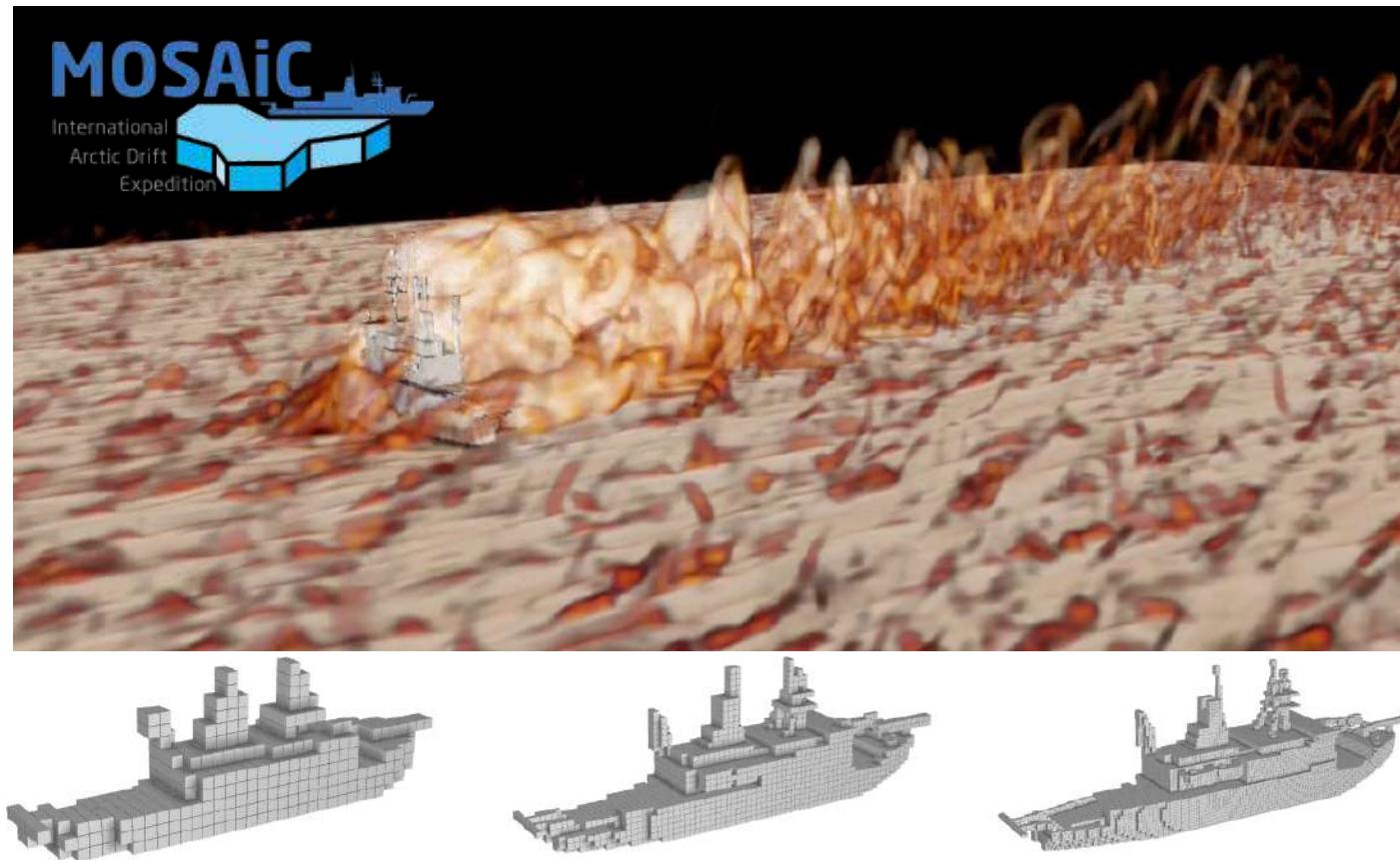
- Turbulence in the atmospheric boundary layer
- Turbulence-resolving simulations
- Headquarters of the PALM model system (<http://palm-model.org>)
- Group:

- Siegfried Raasch (head)
- Björn Maronga (co-head since Juli 2021)
- 5 Postdocs
- 9 PhD students
- 3 Master students



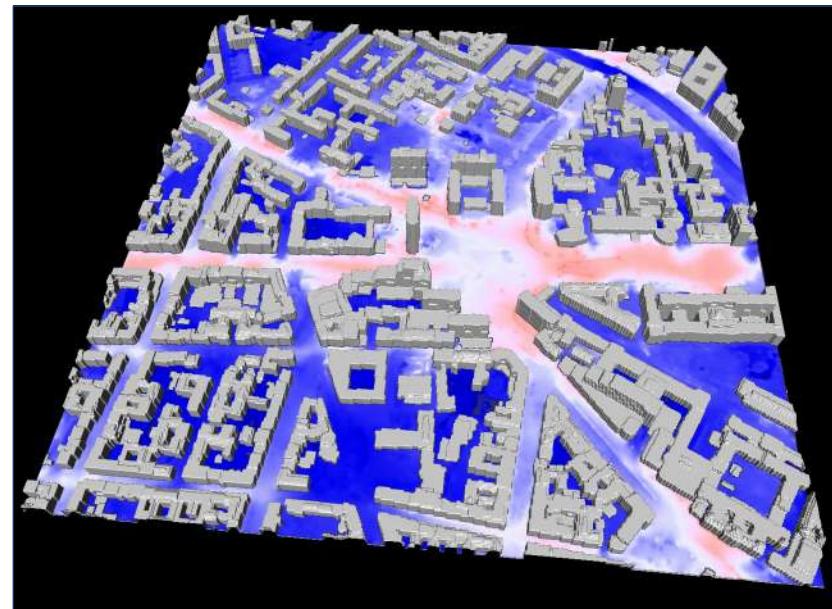
- Current projects and topics

Wake effects of RV Polarstern during MOSAiC



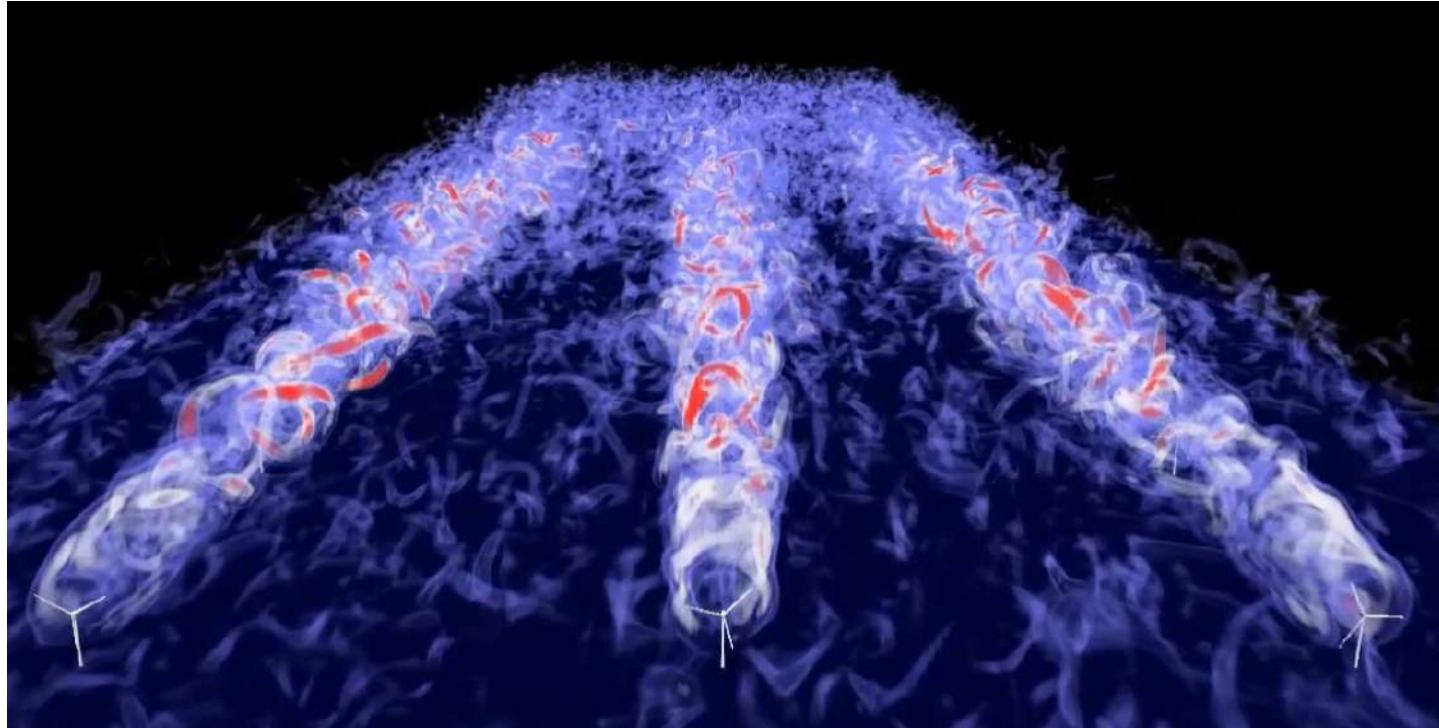
- Current projects and topics

## Urban climate modeling



- Current projects and topics

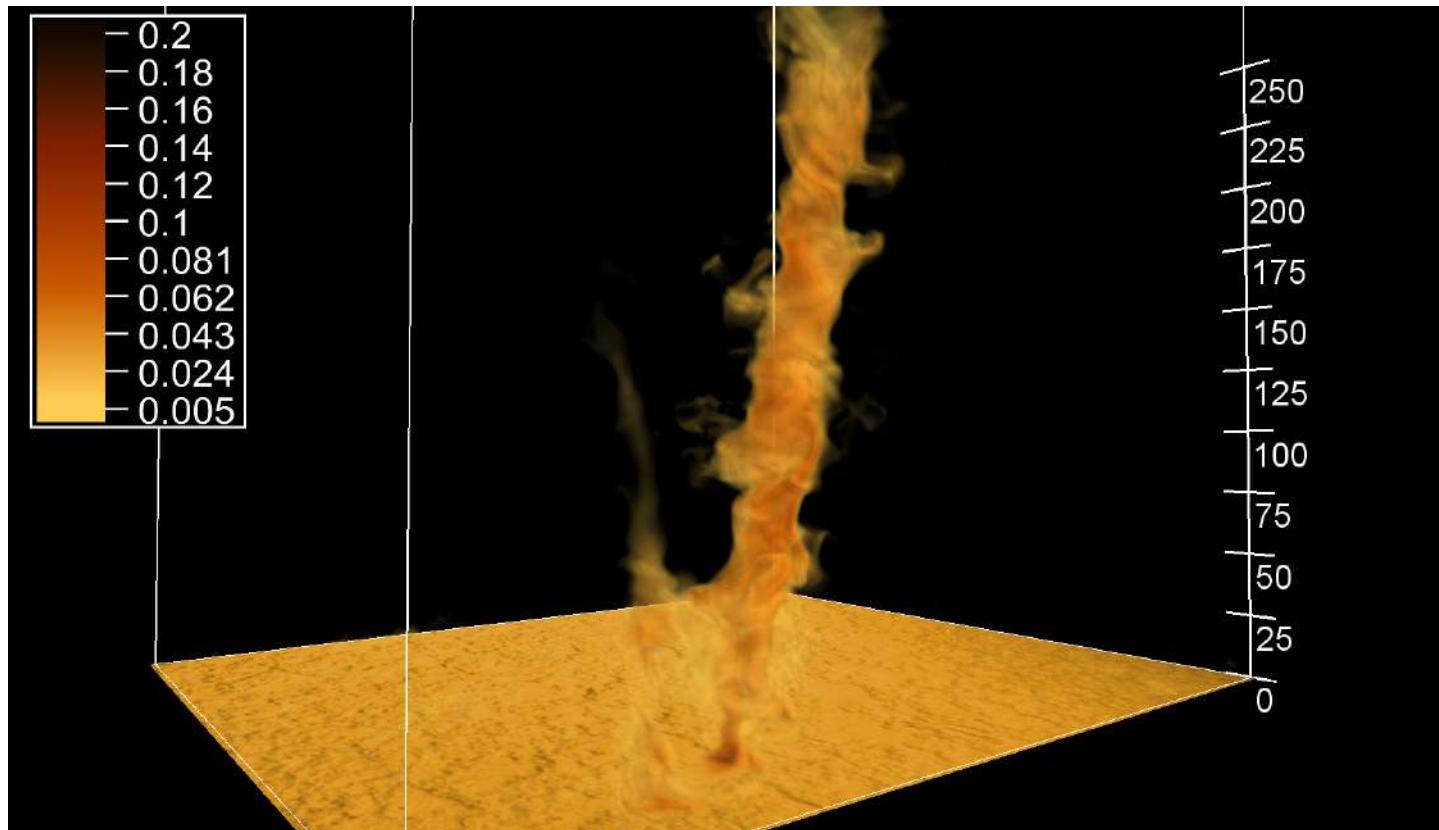
## Renewable energies



- Current projects and topics

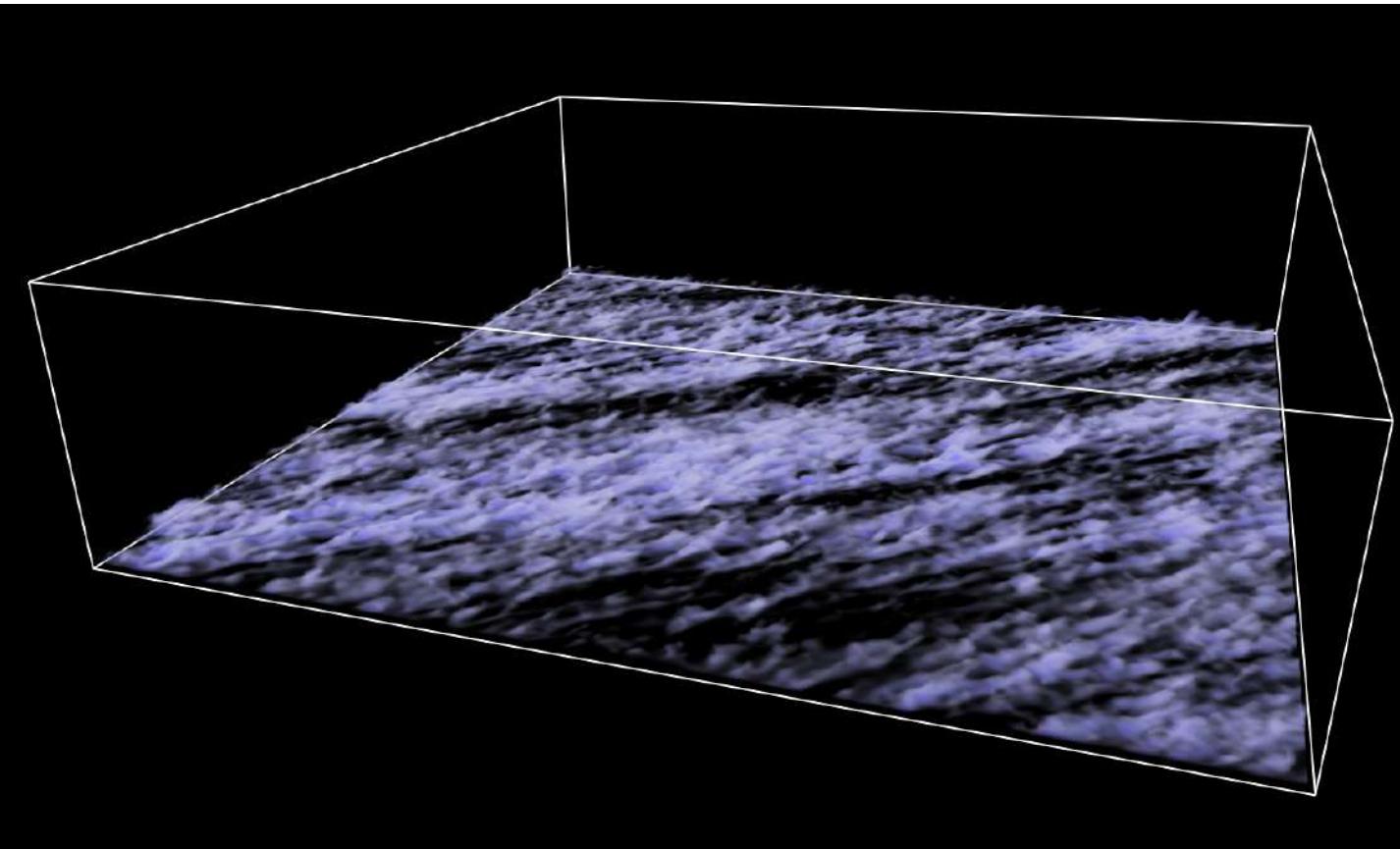


Small-scale coherent structures (e.g. dust devils)



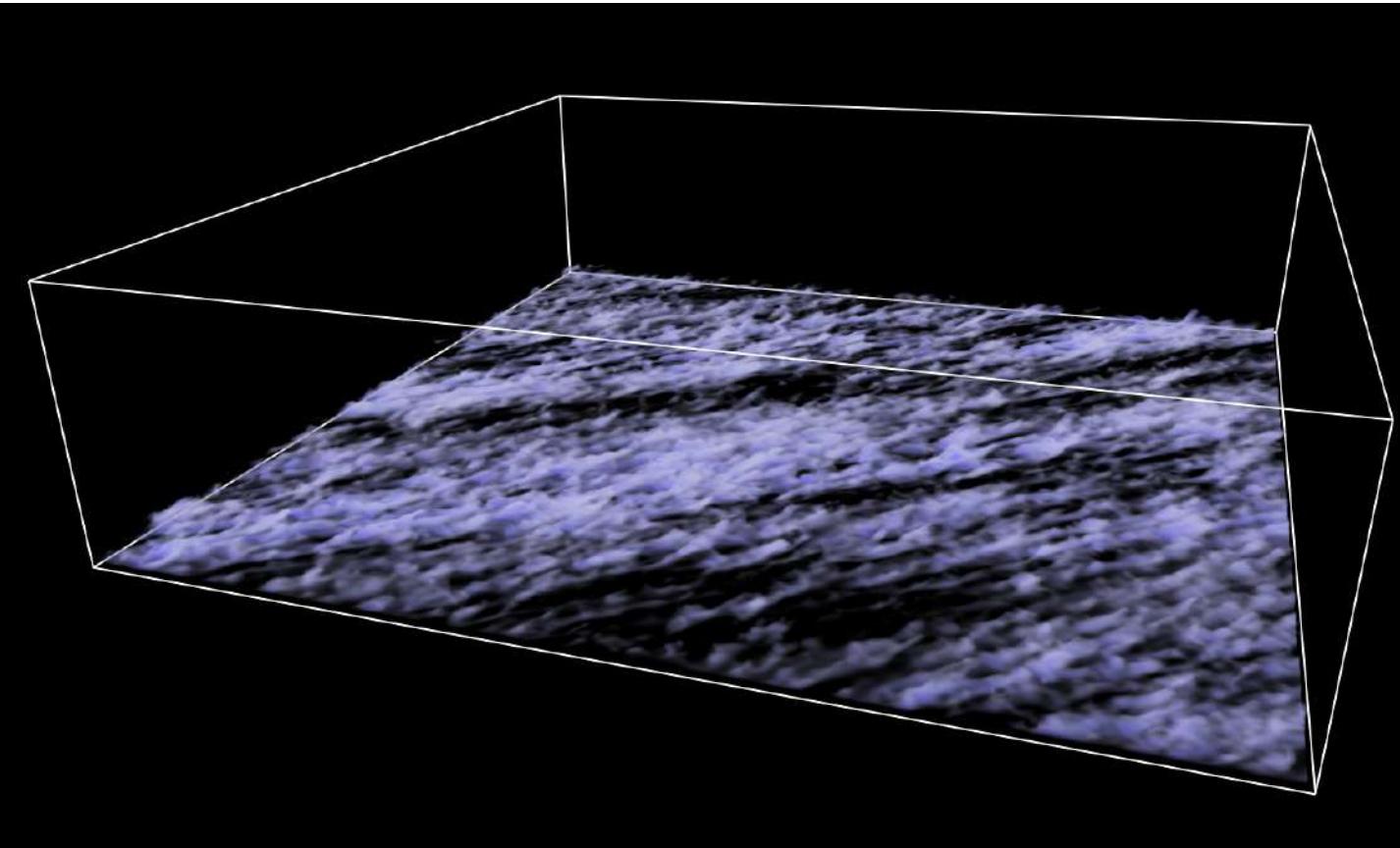
- Current projects and topics

Turbulence effects in radiation fog

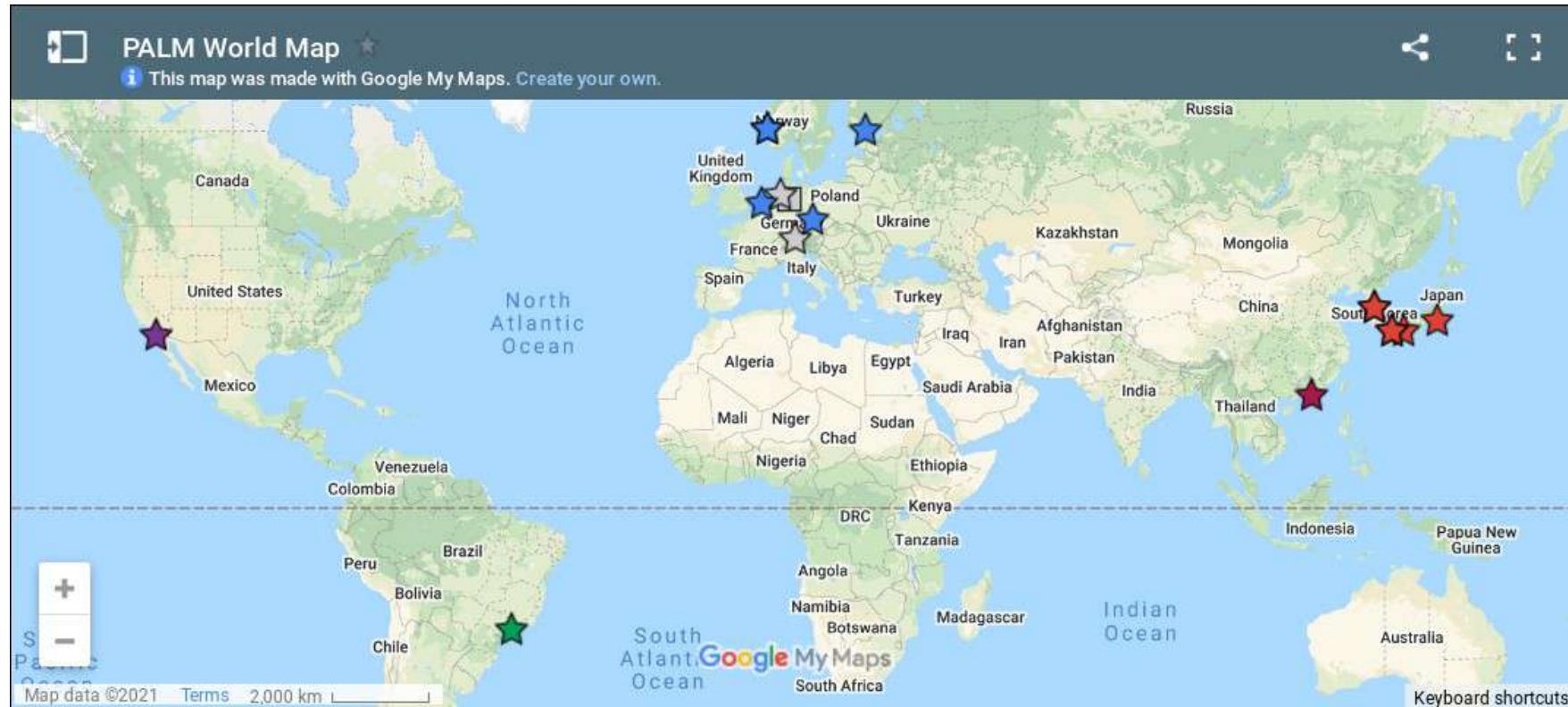


- Current projects and topics

Turbulence effects in radiation fog



- International cooperations (selection)



- International cooperations (selection)

- Prof. Joachim Reuder, University of Bergen, Norway
- Prof. Dan Li, Boston University, USA
- Dr. Antti Hellsten, Finnish Meteorological Institute, Finland
- Prof. Leena Järvi, Helsinki University, Finland
- Dr. Jaroslav Resler, Czech Academy of Sciences, Prague
- Dr. Bosveld, Royal Netherlands Meteorological Institute, Netherlands
- Dr. Arnold Moene, Wageningen University, Netherlands
- Prof. Yign Noh, Yonsei University, Republic of Korea
- Prof. Gilberto Fisch, Universidade de Taubate, Brazil

