



Royal Netherlands  
Meteorological Institute  
*Ministry of Transport, Public Works  
and Water Management*

# NWP at KNMI

Netherlands National Poster

## Gerrit Burgers

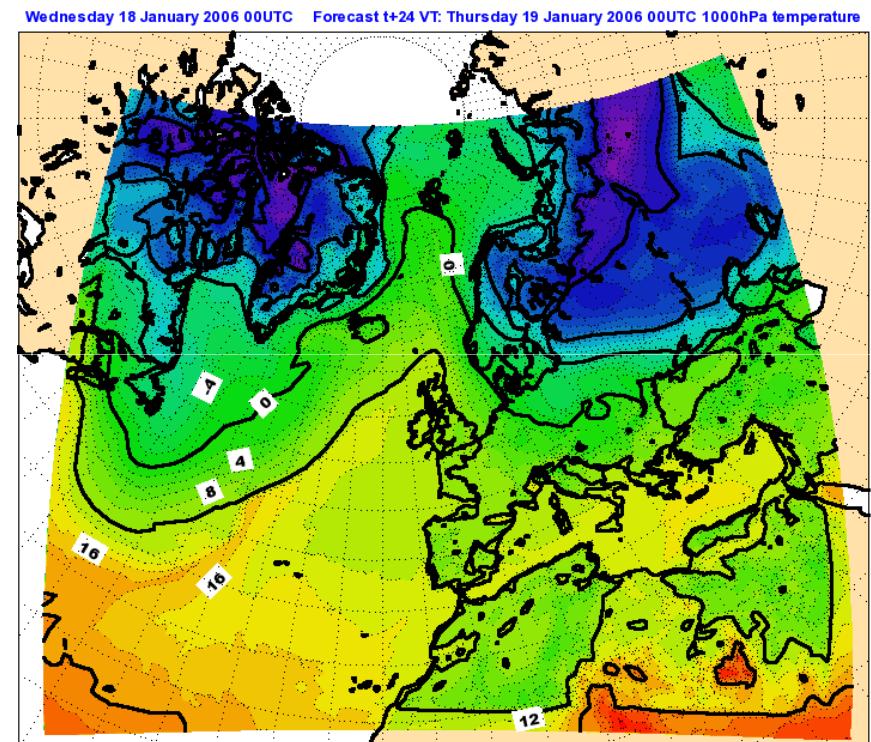
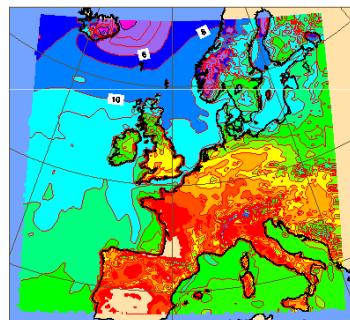
Head Research and Development  
Weather Service  
KNMI  
**Royal Netherlands Meteorological Institute**



# Operational model: Hirlam 11km

Version 7.2, 3-D VAR

- Large domain (NE Atlantic/Europe)  
runs 4x/day, on ECMWF boundaries
- Small domain (Europe center)  
runs 8x/day, on Hirlam boundaries





# KNMI contribution to the Hirlam programme

Frits Brouwer, director of KNMI: chairman Hirlam Council

KNMI members of the Hirlam management group

- Jeanette Onvlee, programme manager
- Sander Tijm, project leader physical parameterization
- Tilly Driesenaar, scientific secretary

KNMI model R&D community

Gerrit Burgers

Jan Barkmeijer

Gerard Cats

Toon Moene

Ben Wijchers Schreur

Pier Siebesma

Wim de Rooy

Cisco de Bruijn

John de Vries

Han The

Siebren de Haan

Sibbo van der Veen

Roel Stappers

Niels Zweers

Albert Jacobs

Wim Verkley

Gertie Geertsema

Hans de Vries

Vladimir Makin



## Present activities

- short-range EPS
- physical parameterization of convection and boundary layer
- use of 'Mode-S' aircraft transponder data

## Future plans

- contribution to GLAMEPS
- transition to Arome/Harmonie on small domain, outphasing Hirlam
- more emphasis on data assimilation

## National Poster contributions

- |                                      |  |
|--------------------------------------|--|
| - Siebren de Haan                    | Use of aircraft transponder observations (MODE-S)  |
| - Toon Moene                         | Hirlam/Harmonie operations at KNMI                 |
| - Wim de Rooy                        | Entrainment & detrainment parameterizations        |
| - Roel Stappers & Sibbo van der Veen | CAPE SV's  |
| - Ben Wijchers Schreur               | A severe fog case study: Hirlam vs WRF             |
| - Roos de Wit & Sander Tijm          | Lightning intensity forecasts with AROME           |
| - Niels Zweers                       | Ocean wind stress response to surface drag changes |