

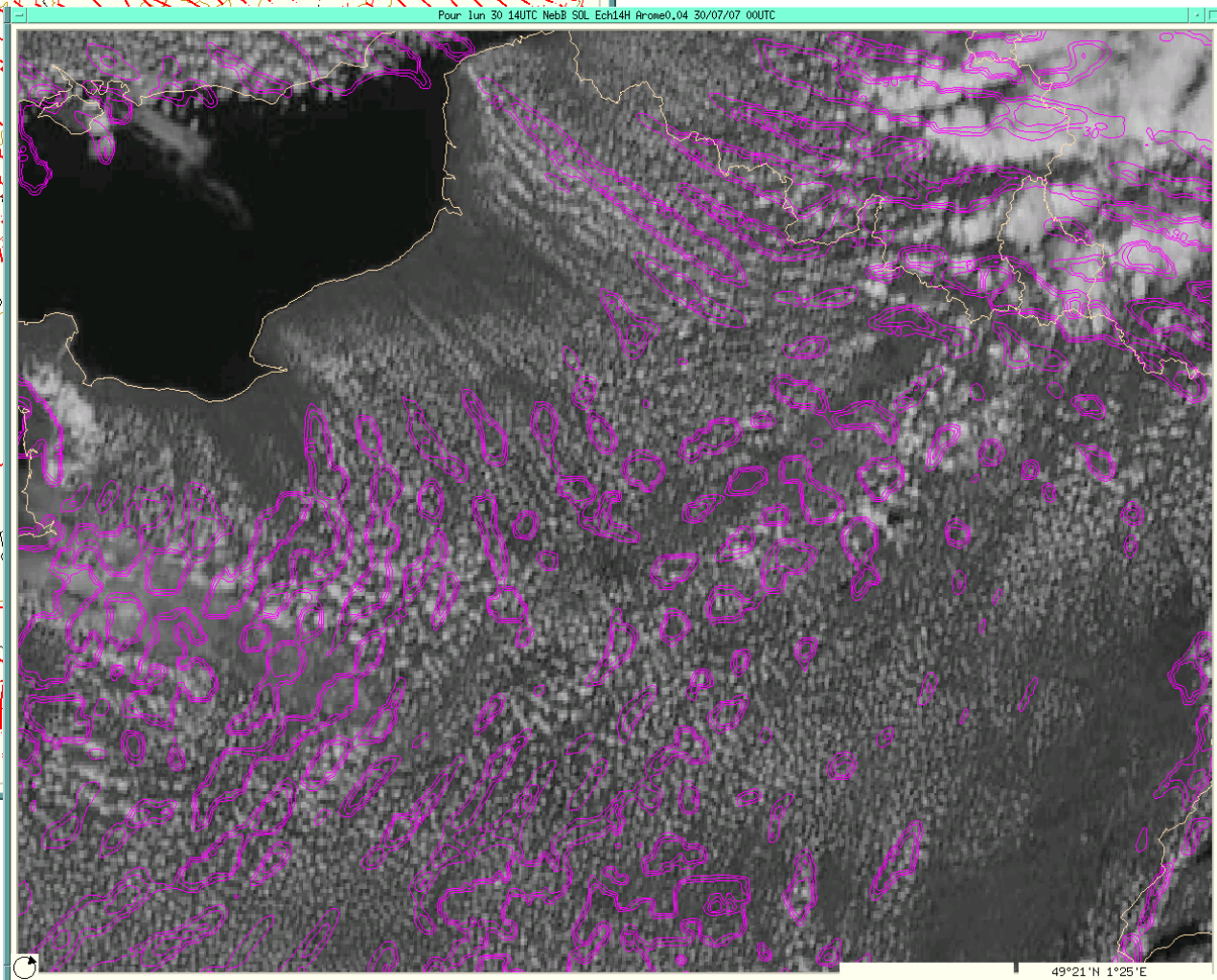
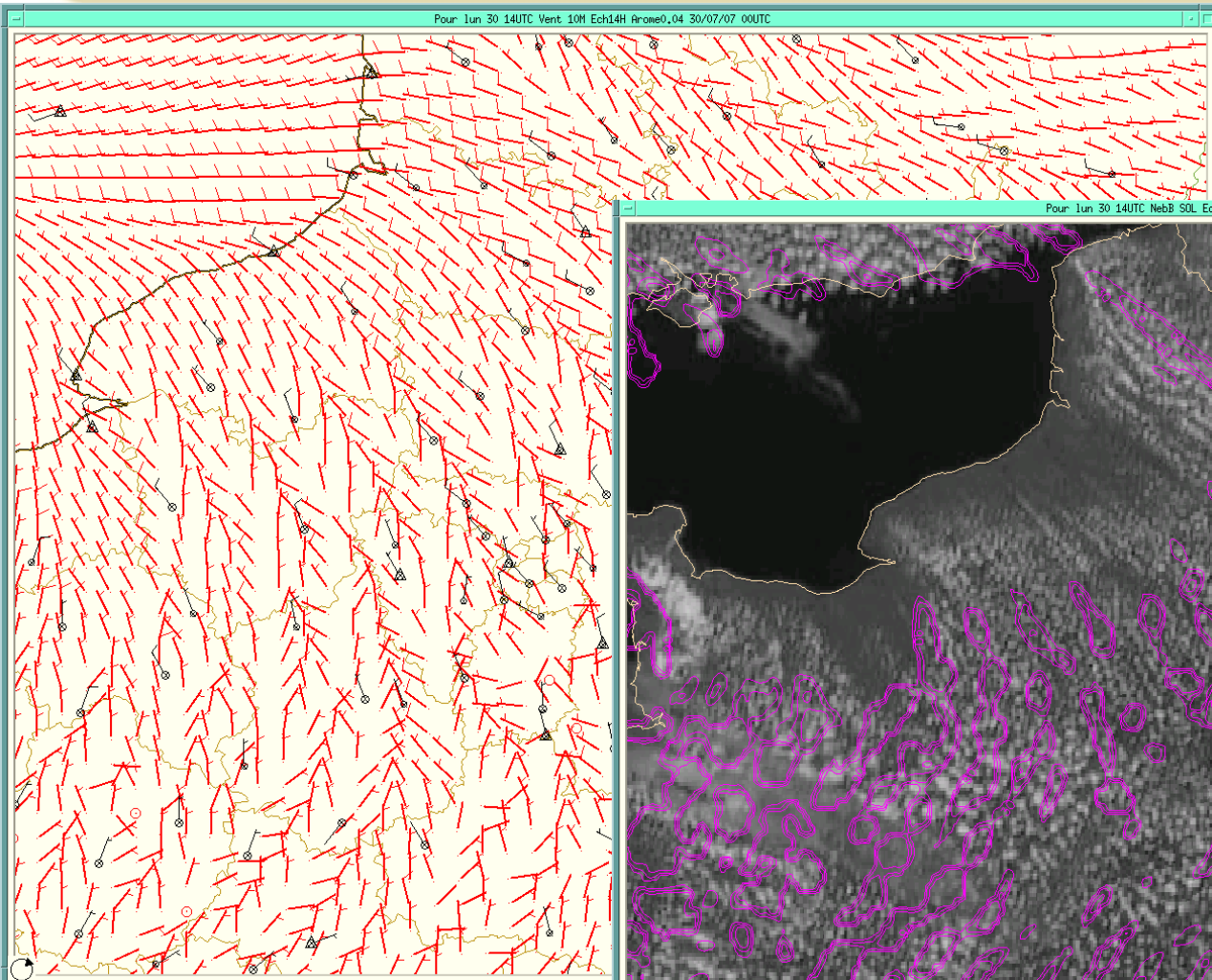
# EDKF (Pergaud et al, 2008)

- An « original » version of EDKF was activated in the prototype at the end of September
- Main impacts on unrealistic organised dry convective « rolls » (herring bones) and shallow convective cloud fraction
- Improved rain scores for small rainfall rates (see presentation of Yann and Eric)
  
- An improved version with entrainment/detrainment rates more appropriate for the treatment of Sc will be implemented as soon as possible (already in Méso-NH MASDEV4.8)

# Problème de « herringbone » pattern ( 30/07/07)

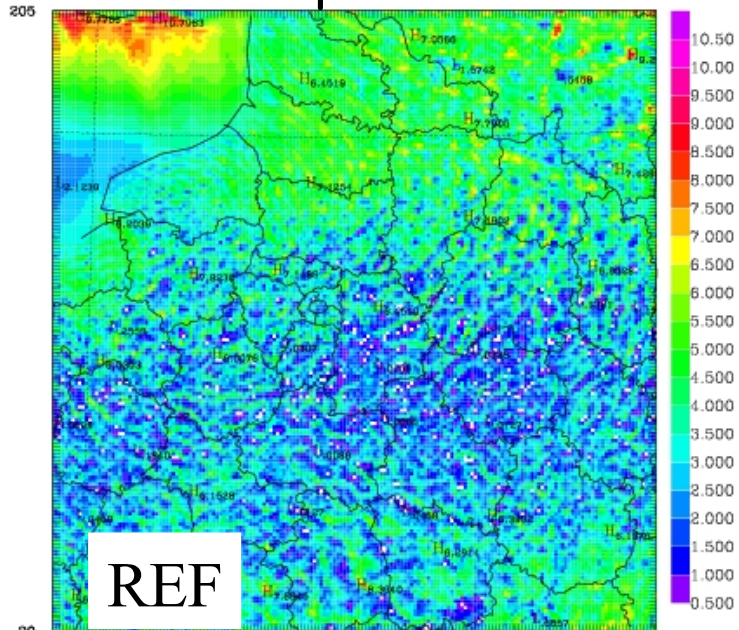
AROME

Nebul

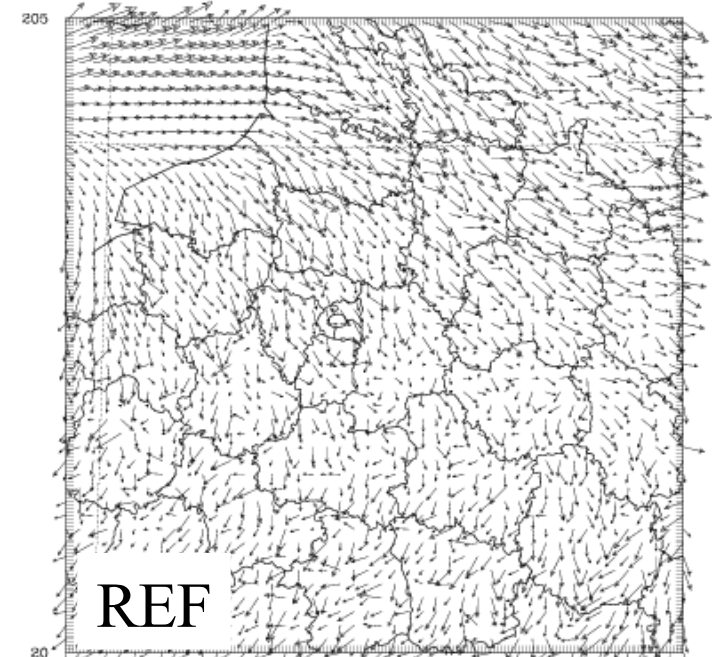




# Wind speed at 17m



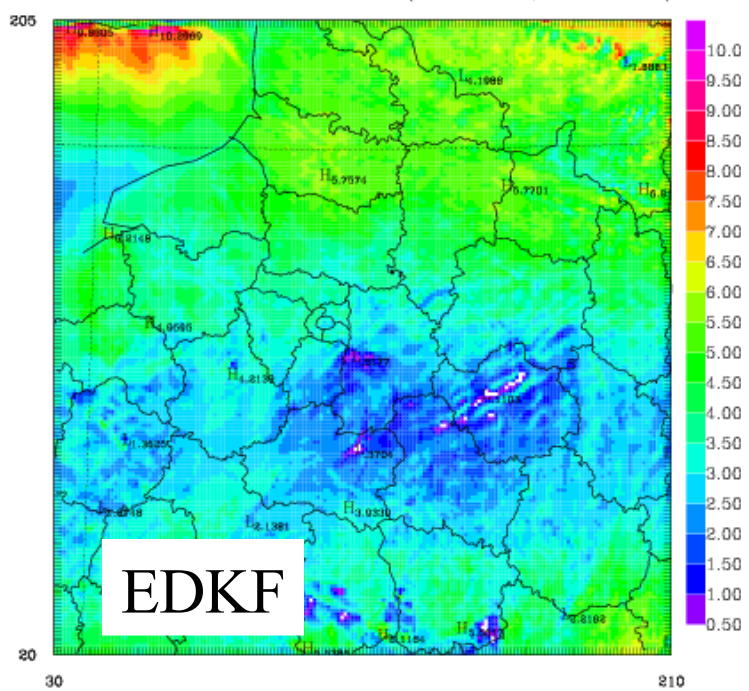
# Wind direction at 17m



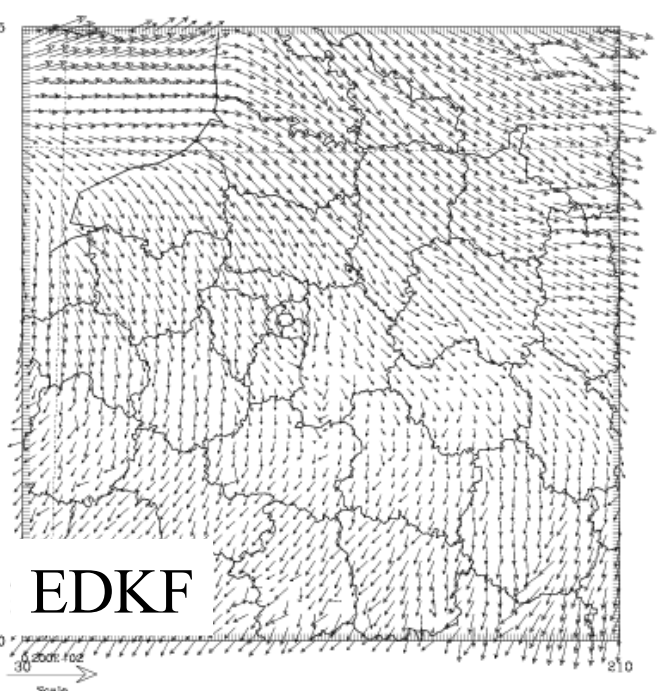
Méso-NH

30/07/07

(Min: 0.110E+00, Max: 0.103E+02)



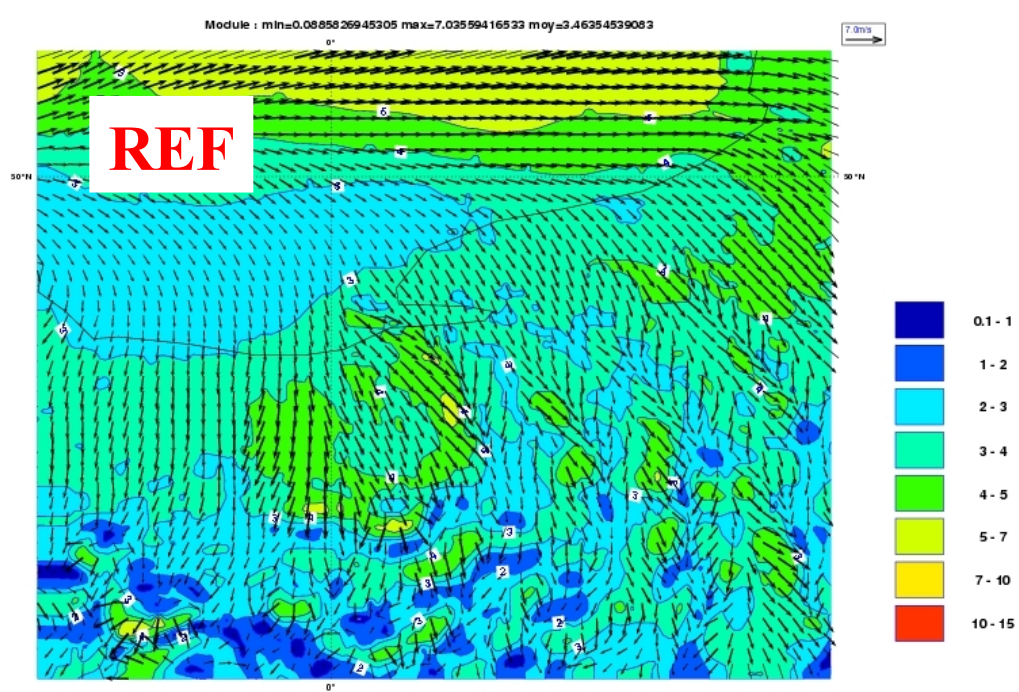
2.125E-01  
imum Vec



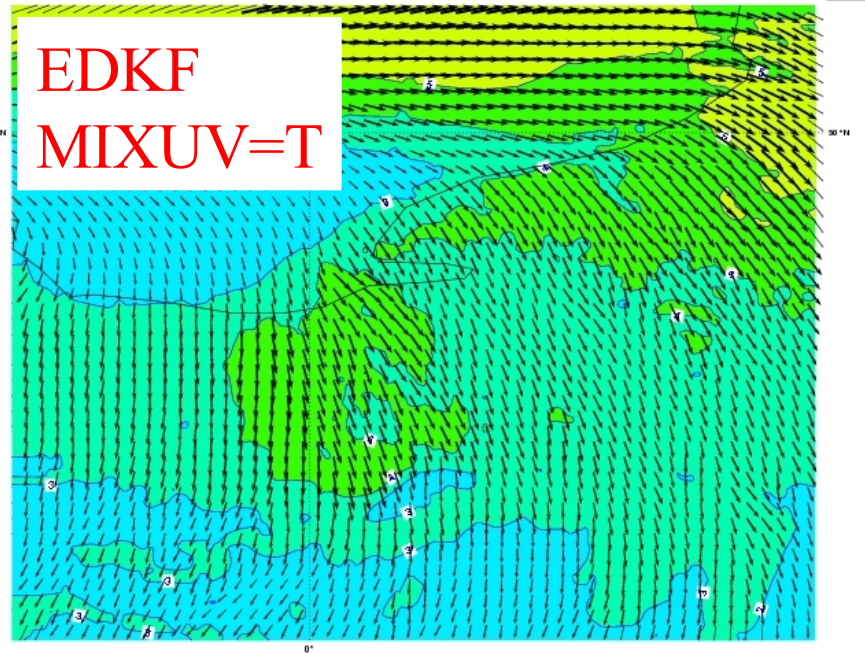


# Arome

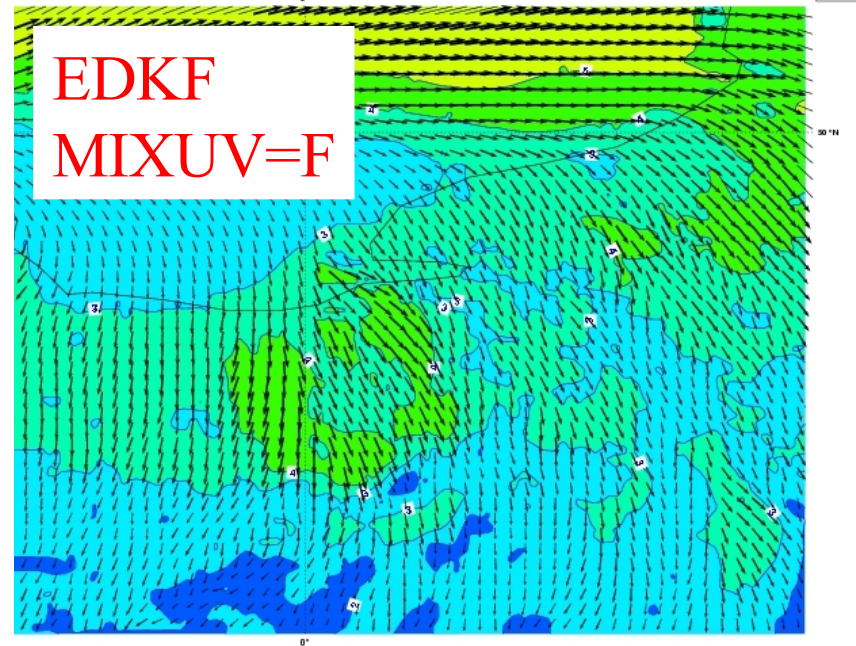
## Wind at 17m



Module : min=1.99260656738 max=6.85252563858 moy=3.72117521954

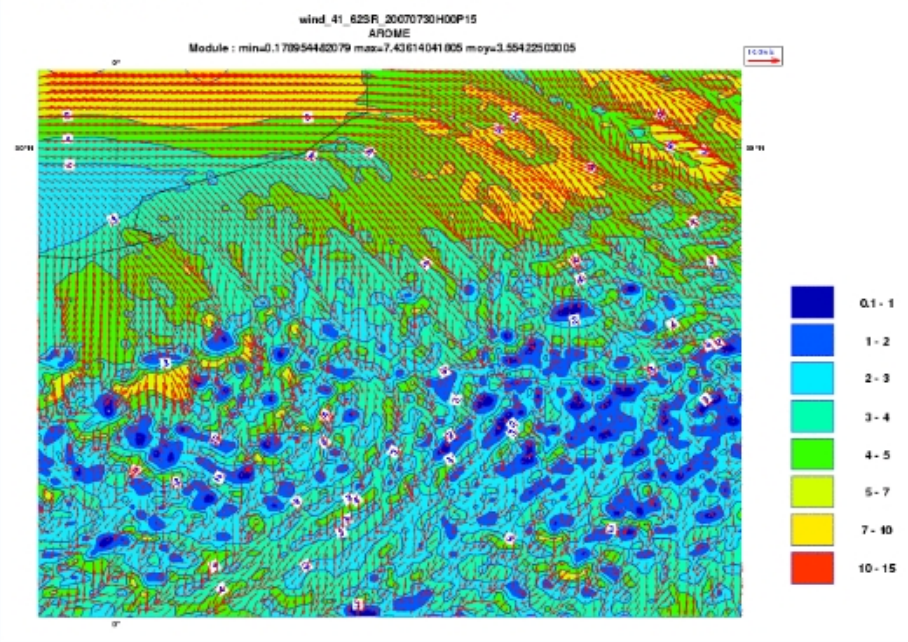


Module : min=1.14095640182 max=6.90364122391 moy=3.37667568001

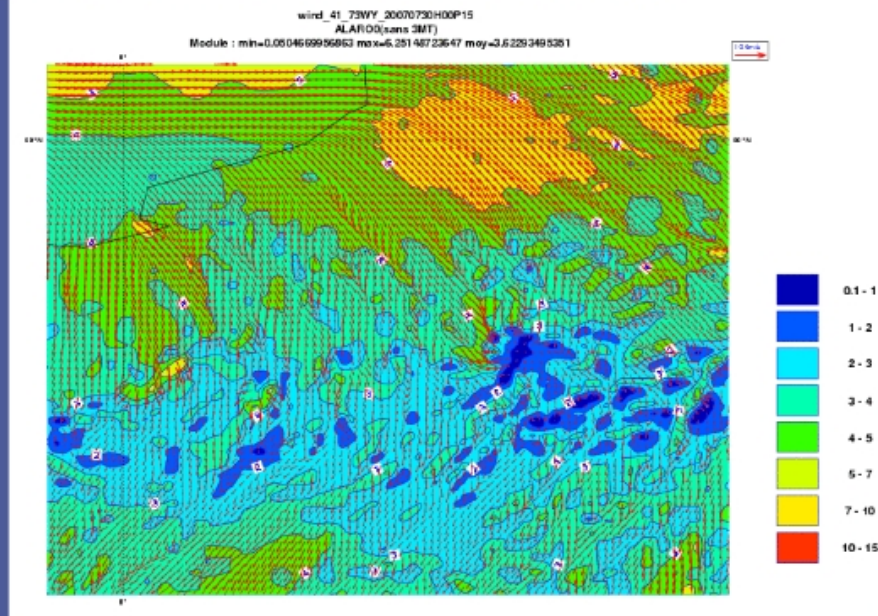




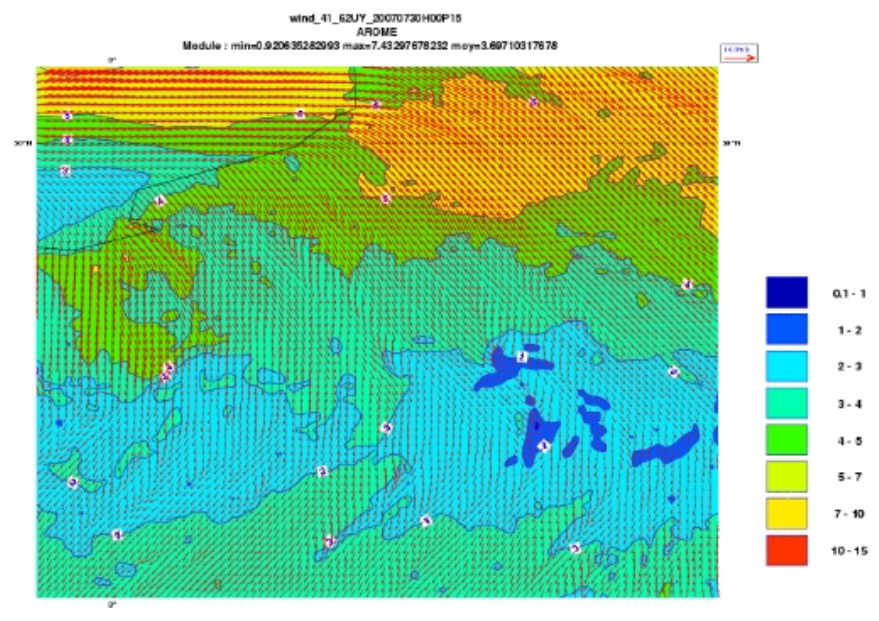
# AROME 62SR 15 UTC Ref



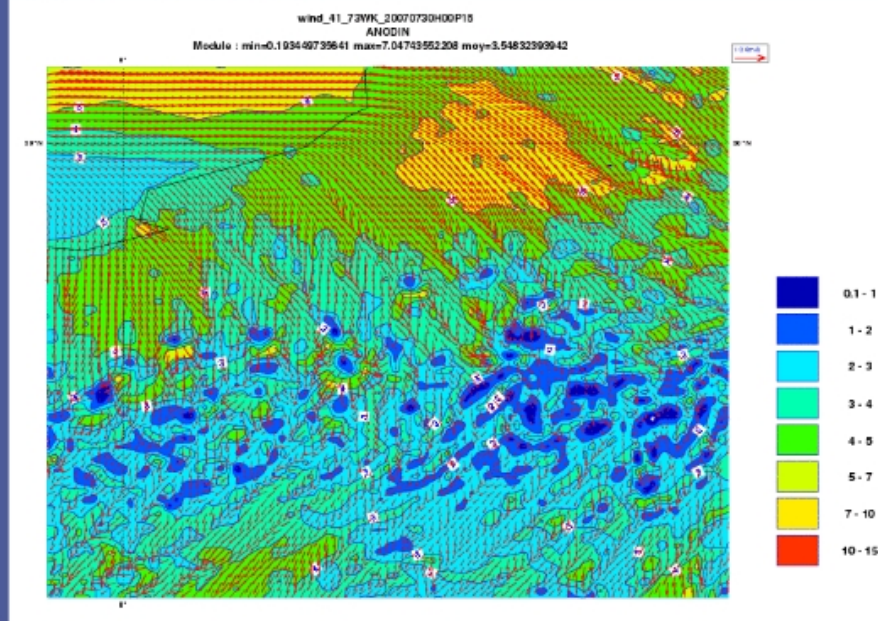
# VENT A 17m ALAROO sans 3MT 73WY



# AROME+EDKF 62UY 15UTC



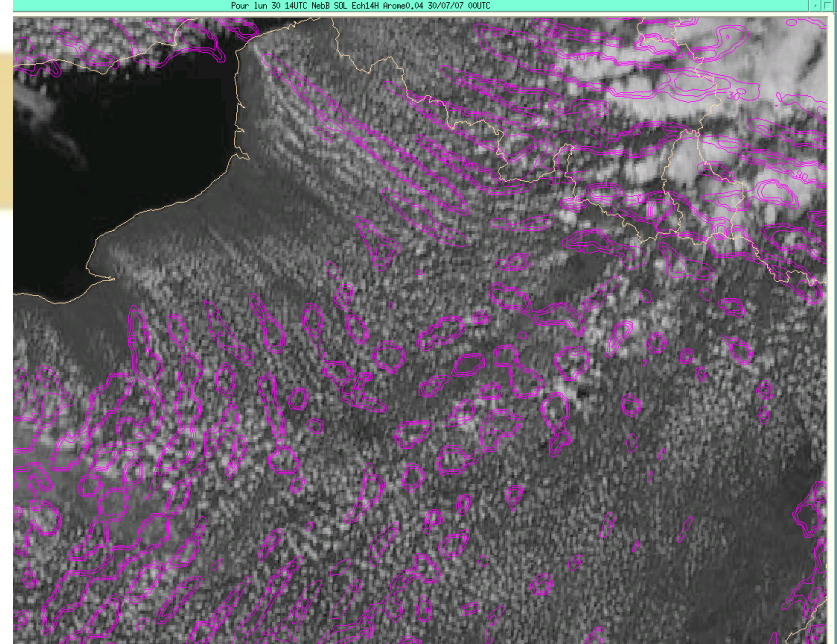
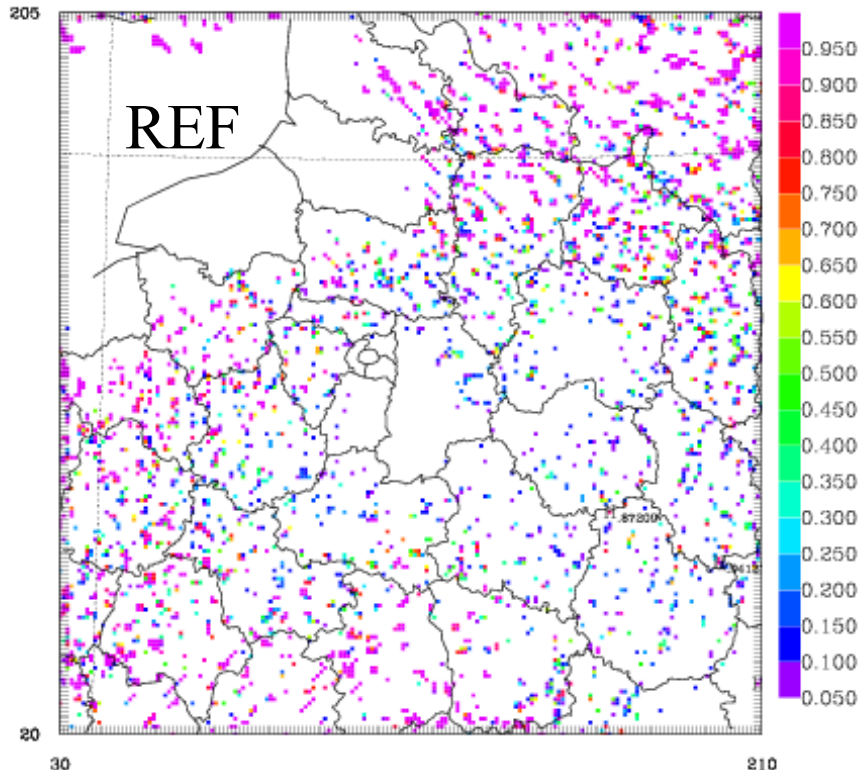
# ANODIN 73WK



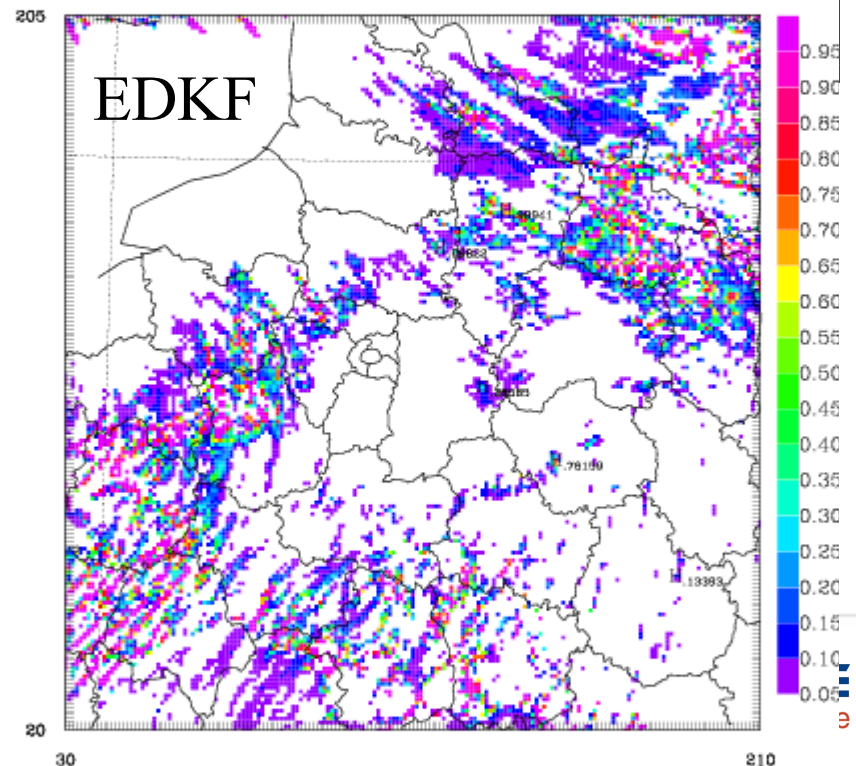


# Méso-NH 30/07/07 Cloud fraction at 1500m

(Min: 0.000E+00, Max: 0.100E+01)



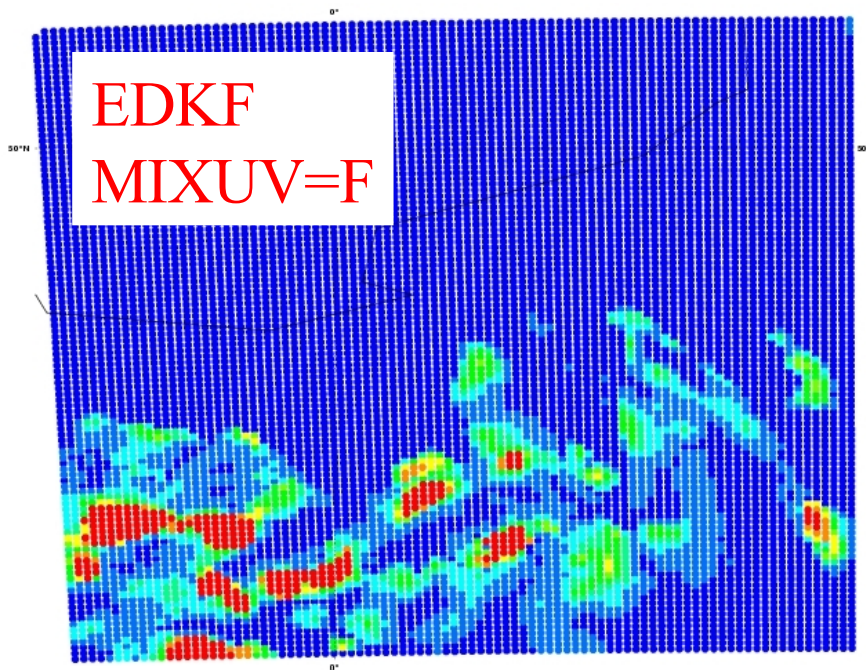
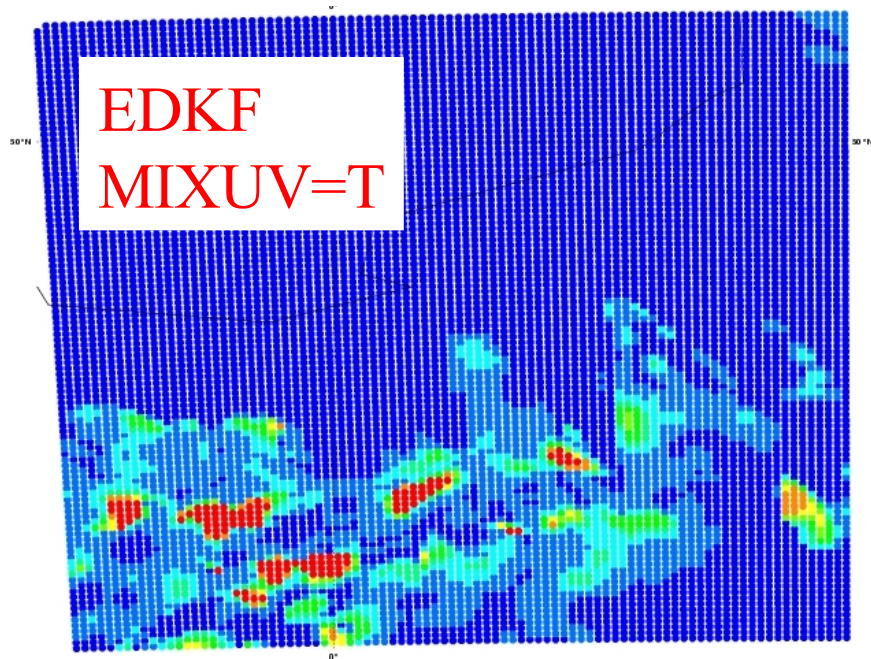
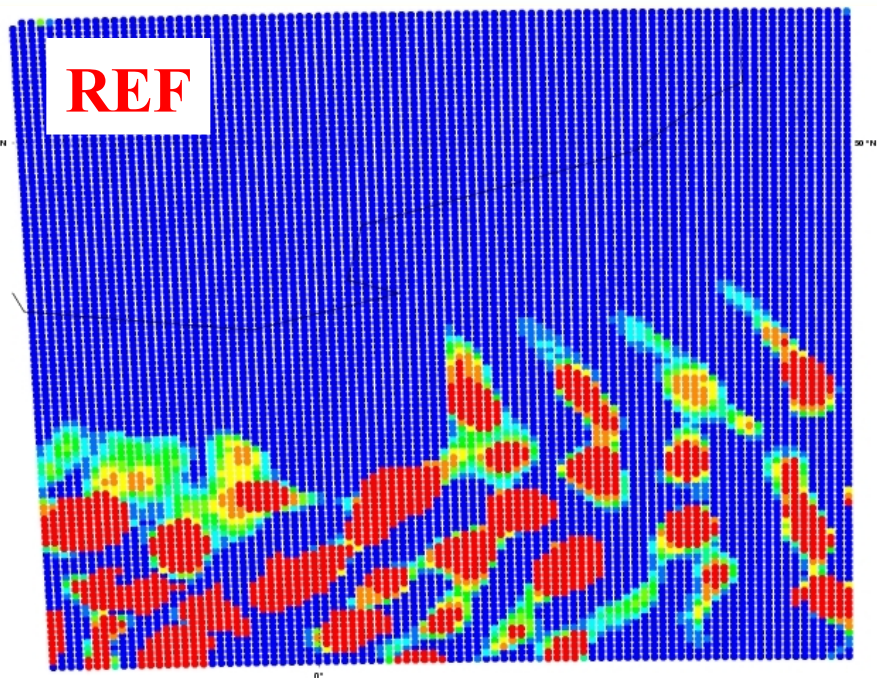
(Min: 0.000E+00, Max: 0.100E+01)





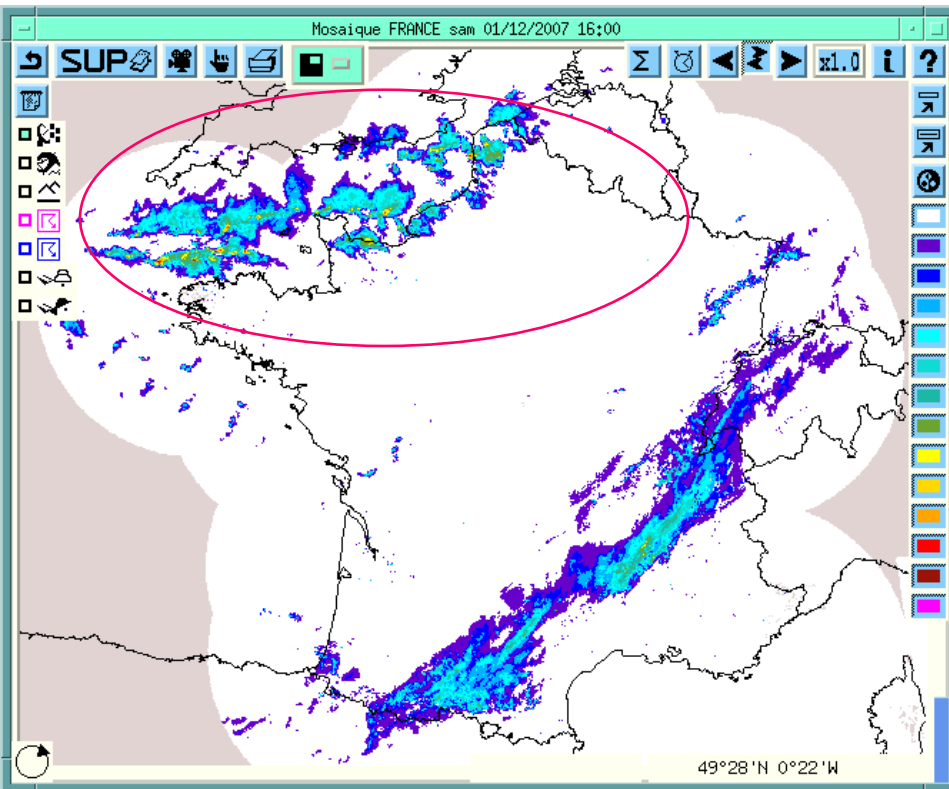
# Arome

## Low level clouds

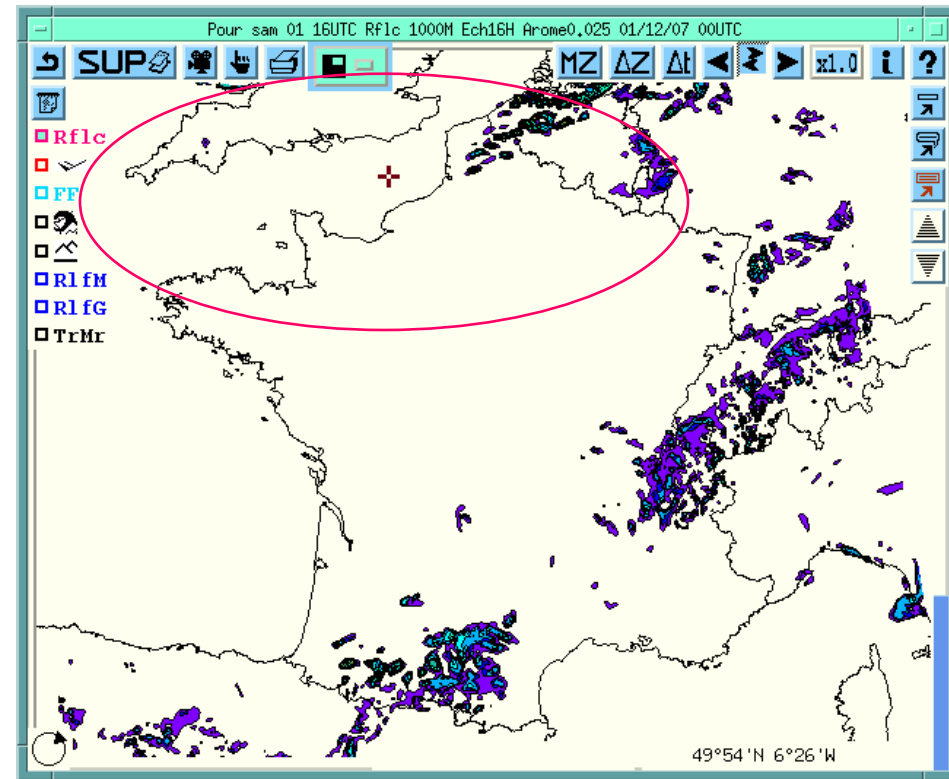


01/12/2007

## RADAR



## « oper » AROME





01/12/2007

REF 5s

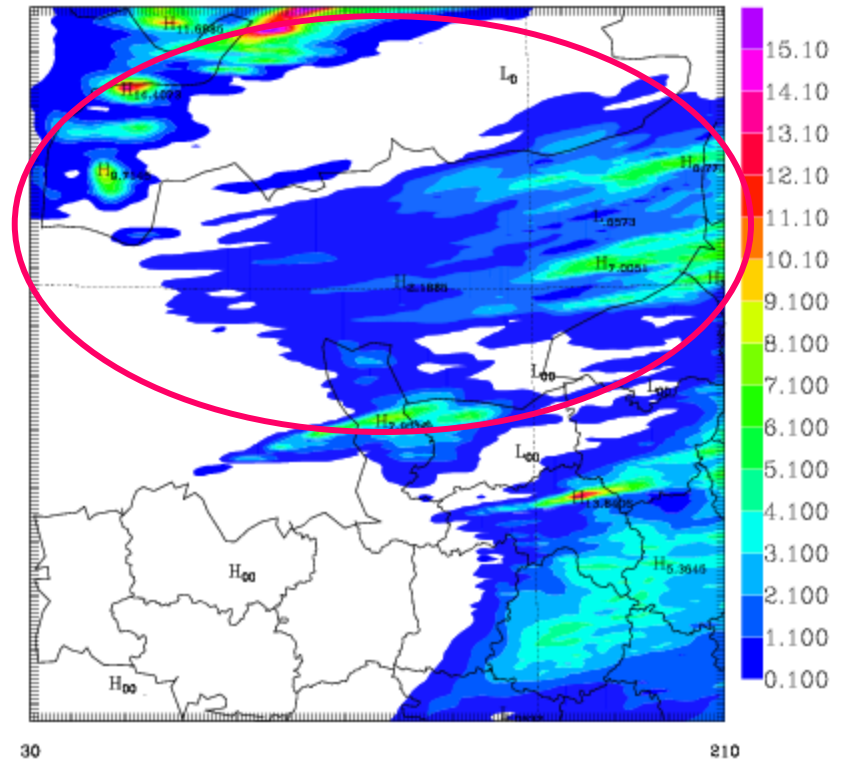
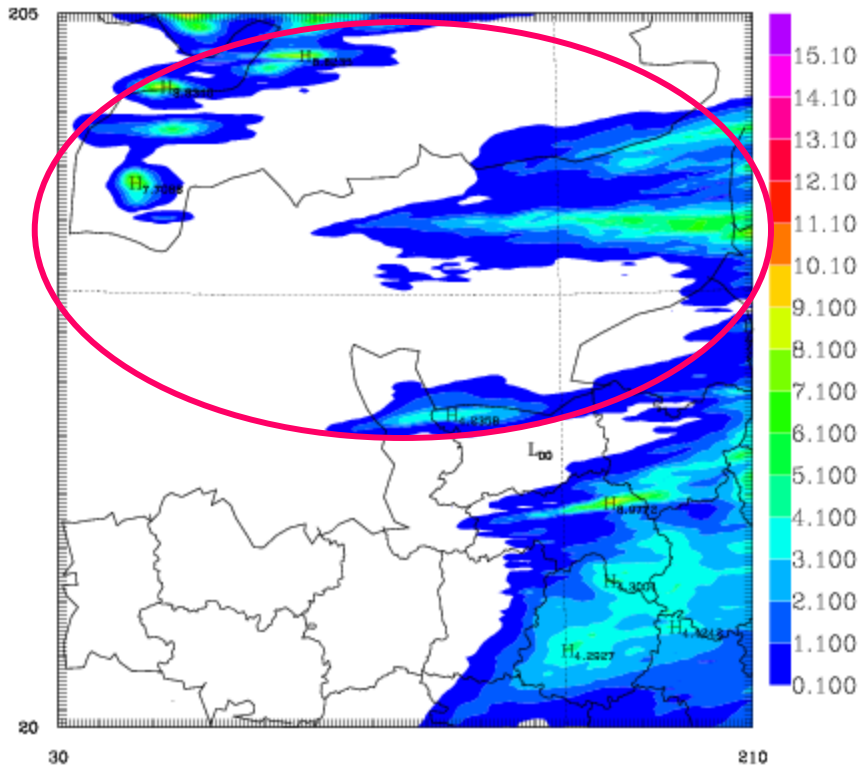
Cumulated Precip. 16TU

Méso-NH KAFR

(Min: 0.000E+00, Max: 0.100E+02)

Méso-NH EDKF

(Min: 0.000E+00, Max: 0.170E+02)



TIME = 57800.  
DATE MOD. 2007/12/ 1 01 01 05 DATE CUR. 2007/12/ 1 16H 01 05  
DATE EXP. 2007/12/ 1 01 01 05 DATE SEG. 2007/12/ 1 01 01 05 LAMBERT

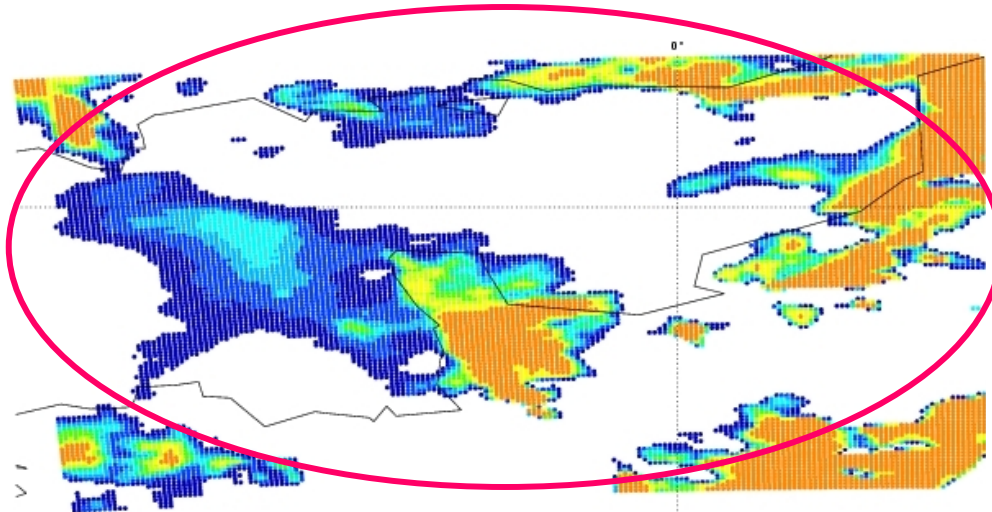
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ACPRT MM1 01 01 05 DATE SEG. 2007/12/ 1 01 01 05 LAMBERT

ACPRT MM

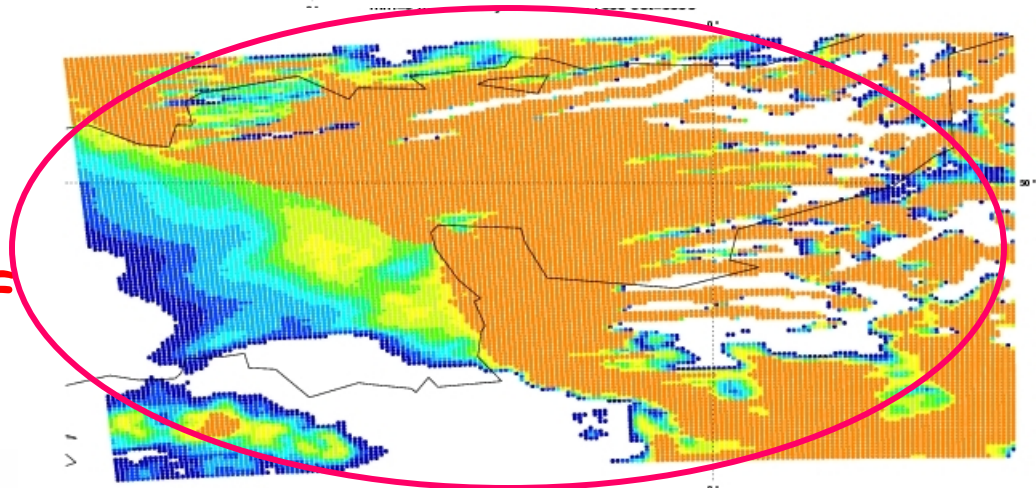


01/12/2007

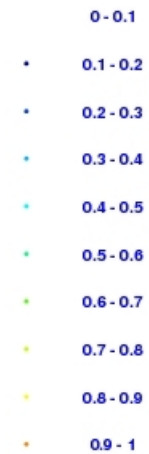
## Low level Cloud 16TU



Arome **KAFR**

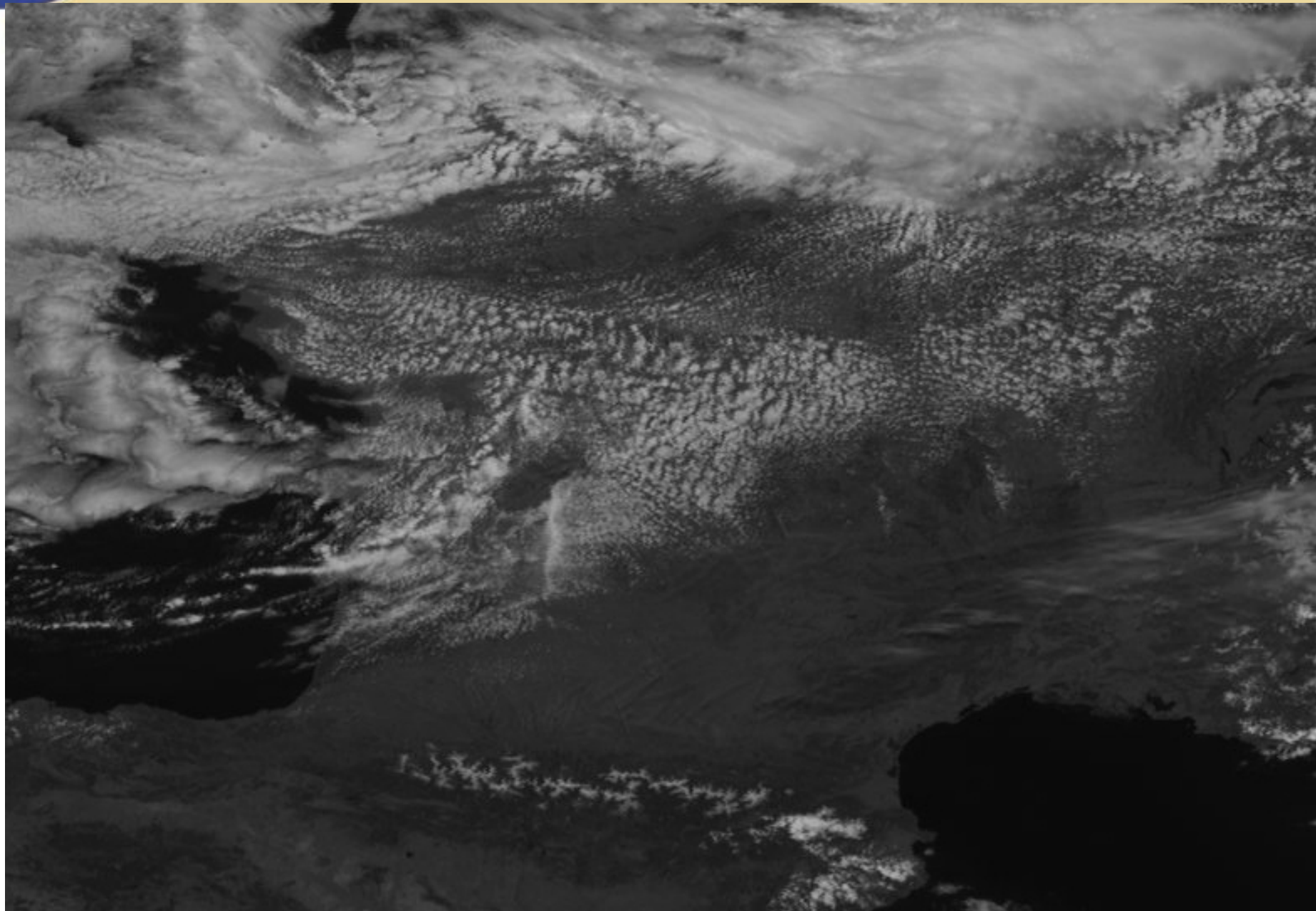


Arome **EDKF**





30/04/2006 12UTC





**REF** : KFB + no cloud scheme for shallow convection  
(what is running every day in the prototype)

**EDKF/DIRE** : EDKF (november version) + DIRE cloud scheme (a cloud content + cloud cover is deduced directly from the updraft cloud content and the updraft cloud fraction) (what is running in the Arome e-suite)

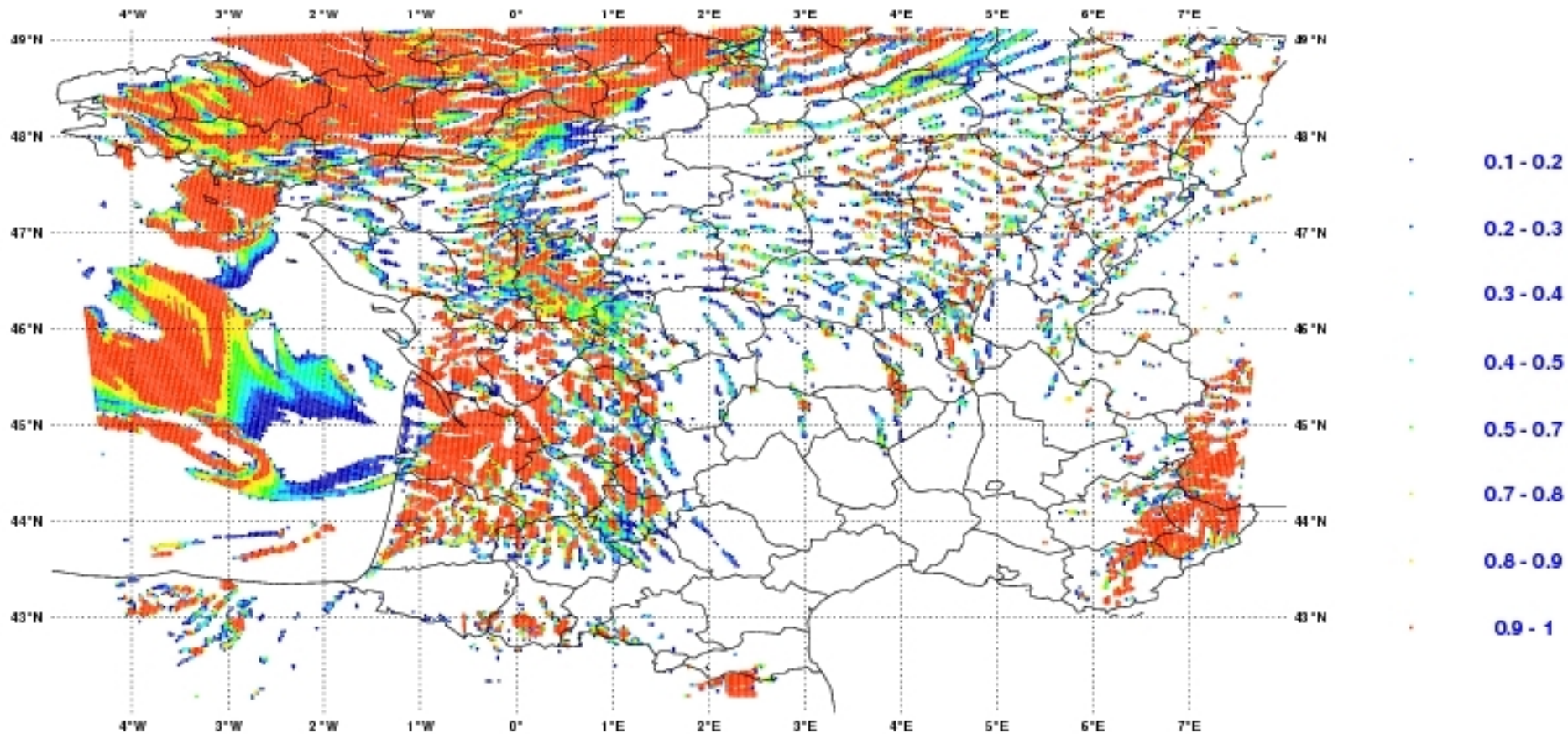
**EDKF/STAT** : EDKF (november version) + STAT cloud scheme (a cloud content + the variance used in the adjustment to saturation (Bougeault functions) contains a contribution computed in the Mass Flux scheme)

**DUAL/STAT** : test version of the KNMI EDMF scheme with two separate updrafts (dry+cloudy) + STAT cloud scheme

# Arome France for the 30/04/2006 12UTC

**REF**

Low level cloud cover

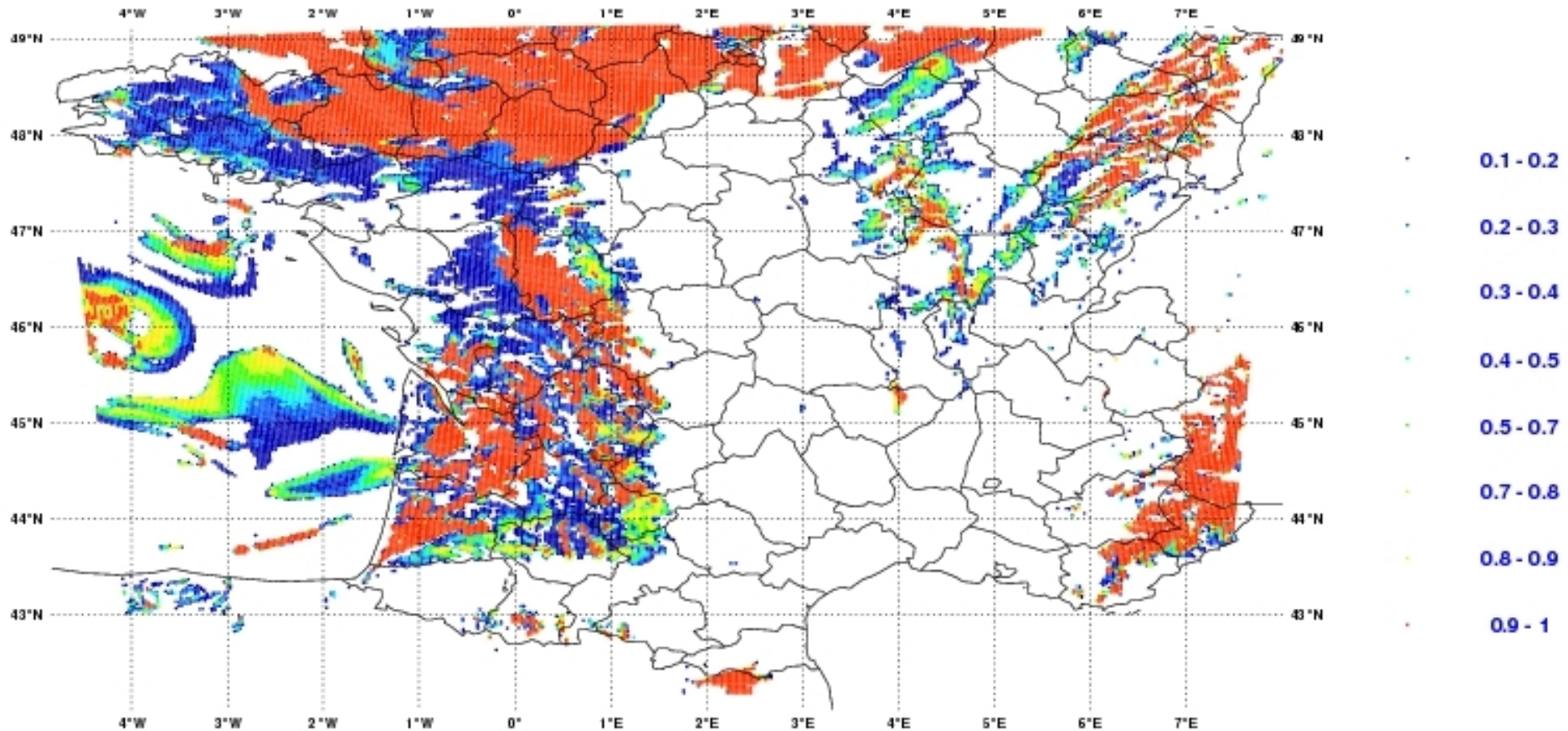




# Arome France for the 30/04/2006 12UTC

## EDKF/DIRE

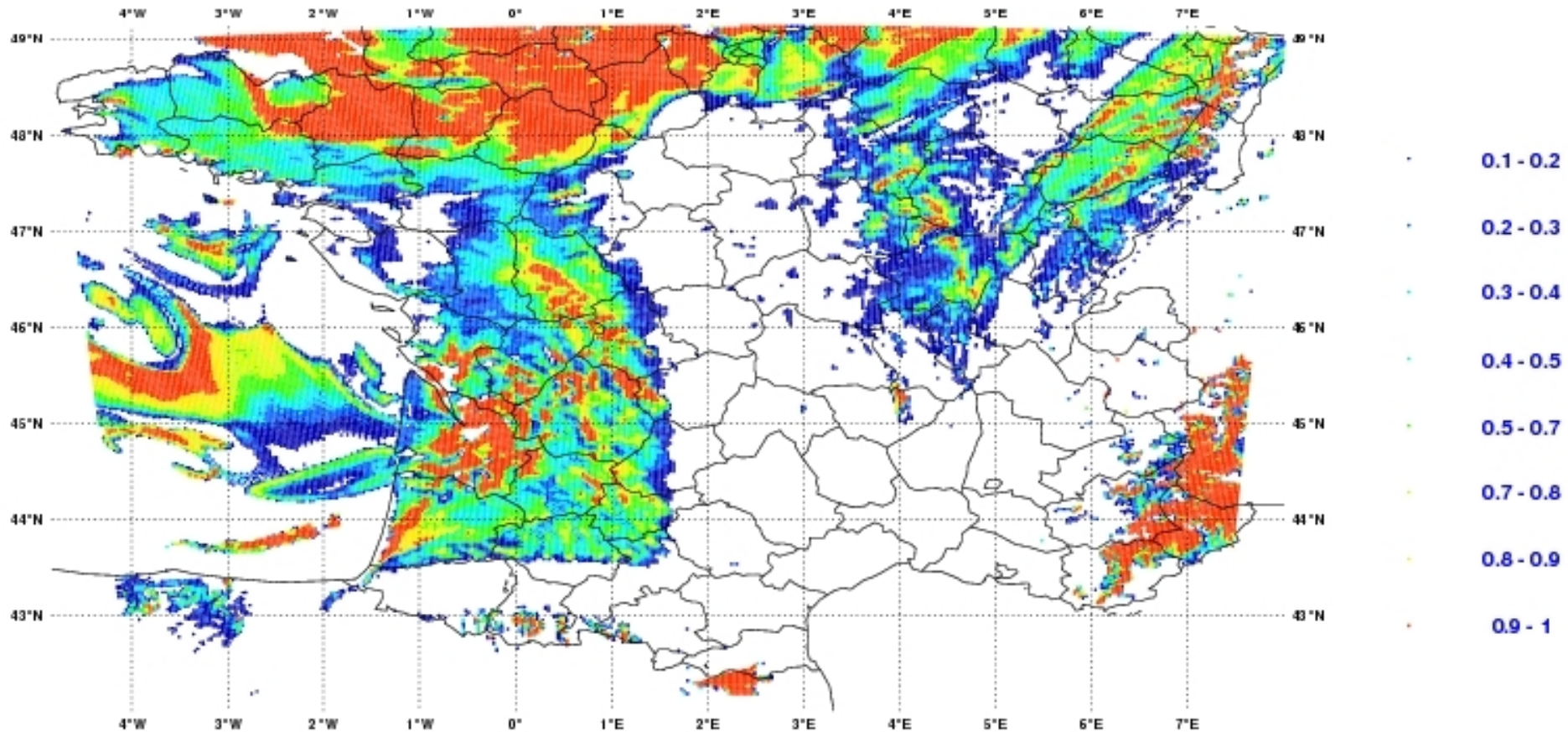
### Low level cloud cover



Arome France for the 30/04/2006 12UTC

**EDKF/STAT**

Low level cloud cover

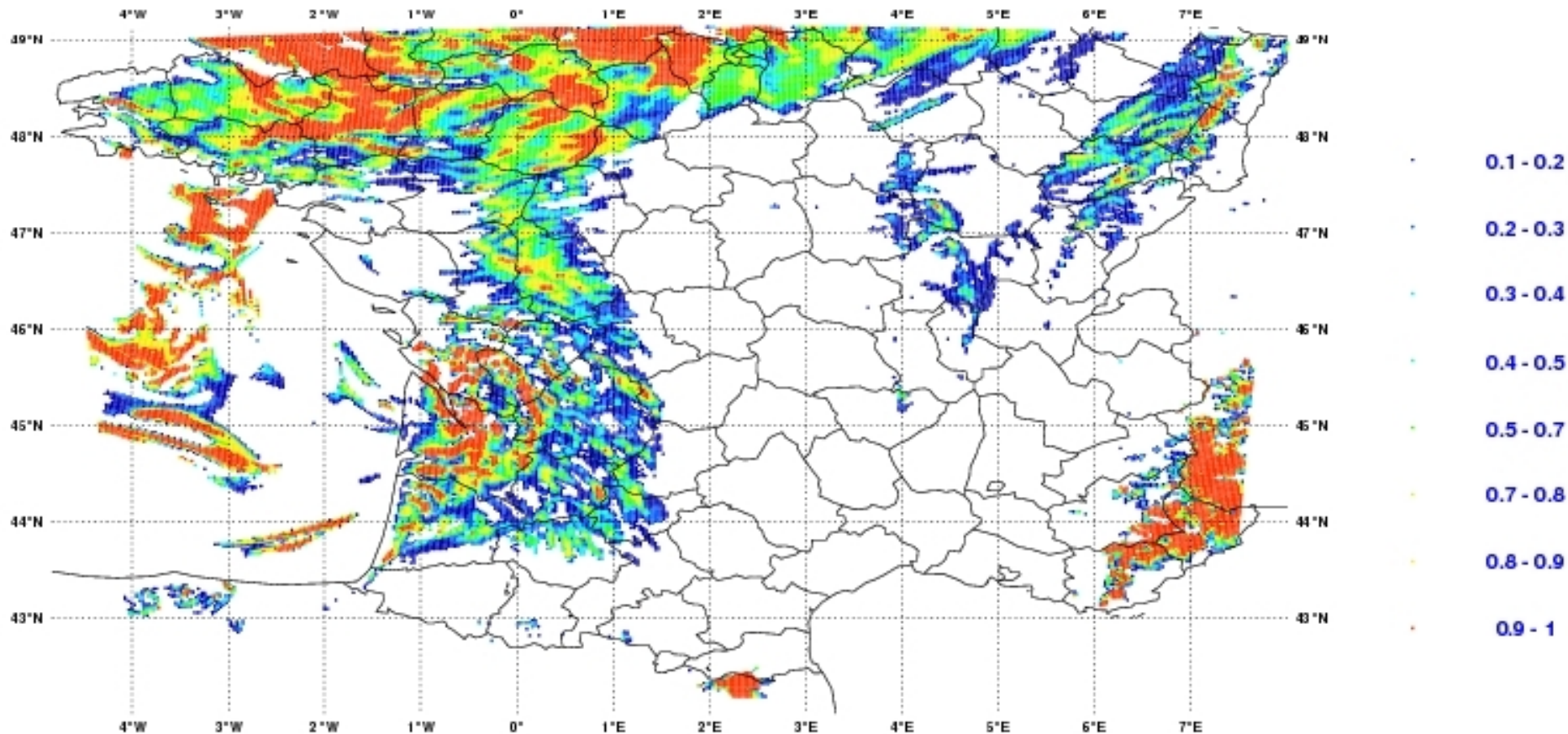




Arome France for the 30/04/2006 12UTC

**DUAL/STAT**

Low level cloud cover



CENTRE NATIONAL  
DE LA RECHERCHE  
SCIENTIFIQUE



**METEO FRANCE**  
Toujours un temps d'avance