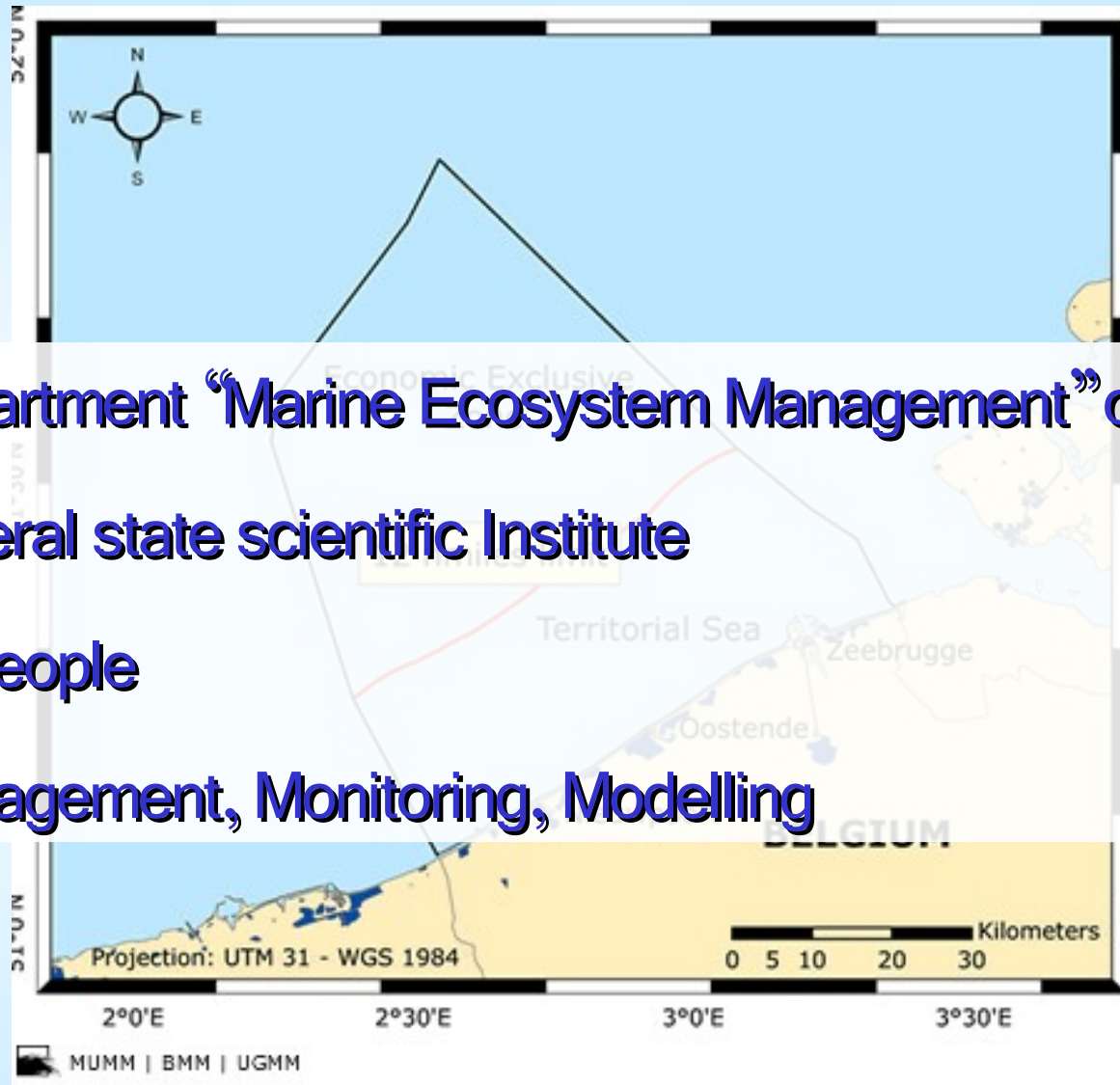
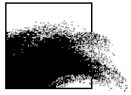


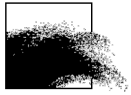
Towards a North Sea Observatory:
What's MUMM
What are we doing
How could we contribute

J. Ozer, S. Legrand and K. Ruddick
MUMM/RBINS (Belgium)

EMECO-NOOS Workshop
02 – 03 June, 2009
Lowestoft (UK)

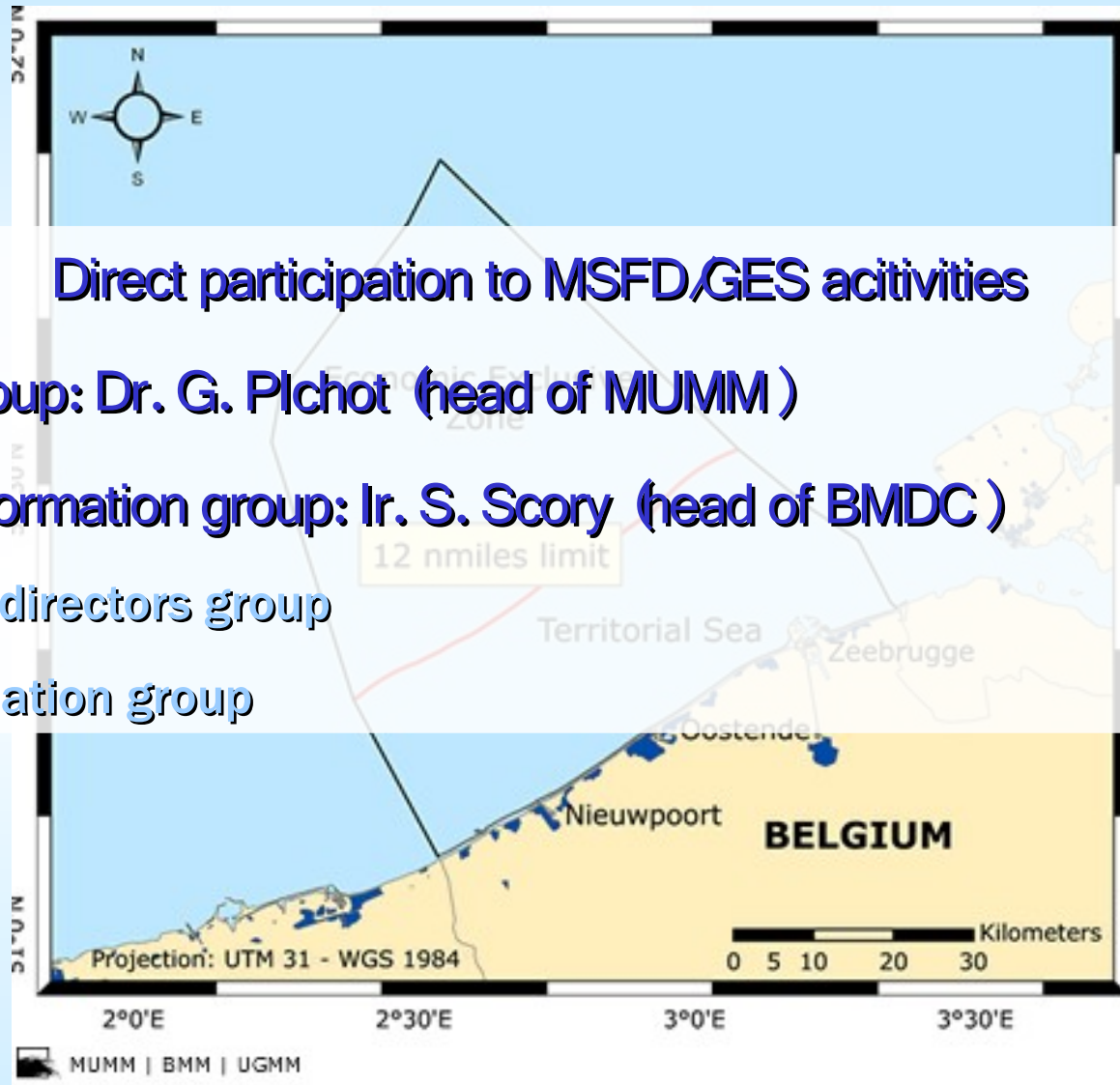


- Department “Marine Ecosystem Management” of RBINS
- Federal state scientific Institute
- 50 people
- Management, Monitoring, Modelling



Direct participation to MSFD/GES activities

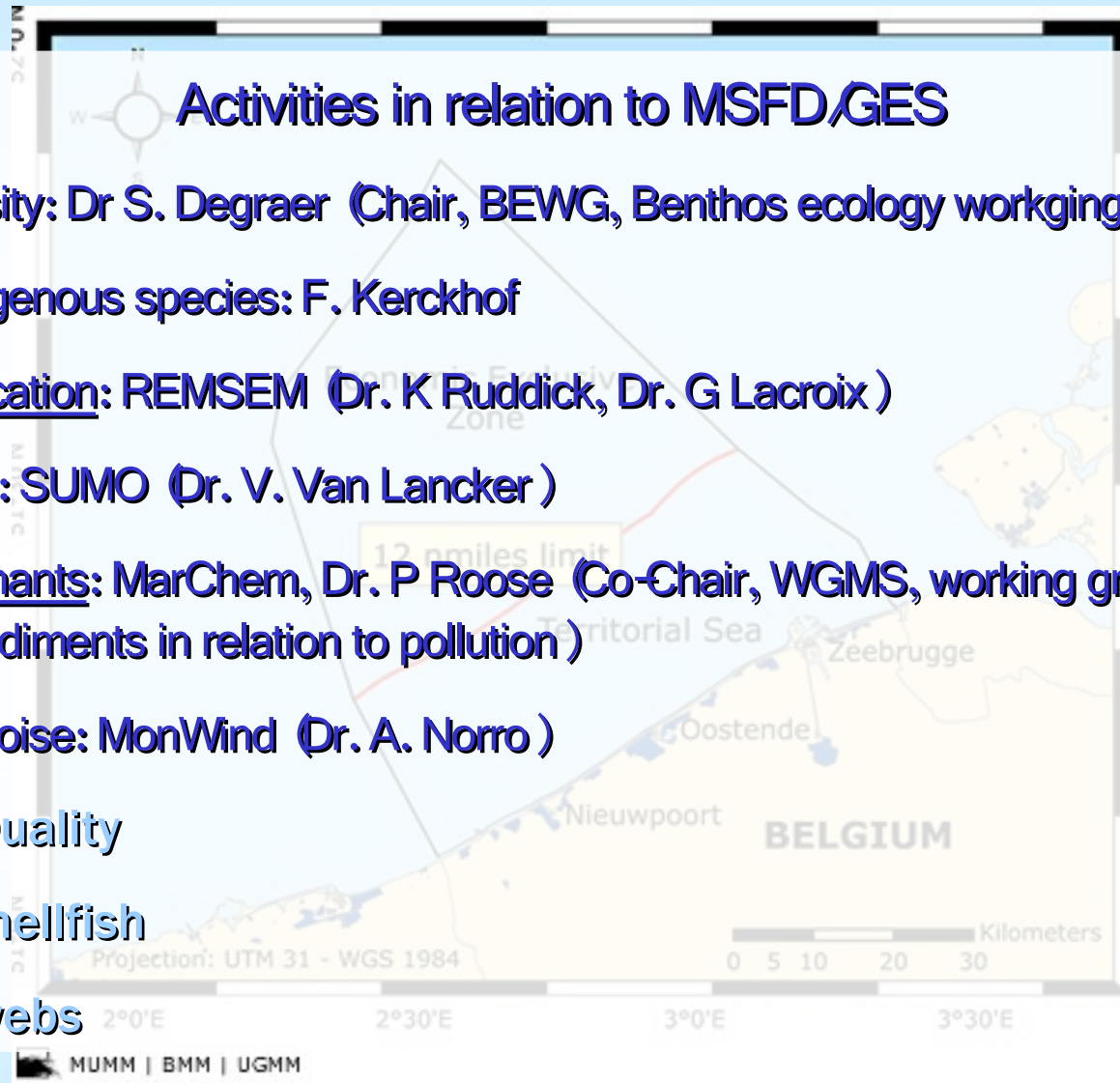
- GES group: Dr. G. Pichot (head of MUMM)
- Data information group: Ir. S. Scory (head of BMDC)
- Marine directors group
- Coordination group

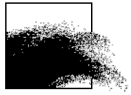




Activities in relation to MSFD/GES

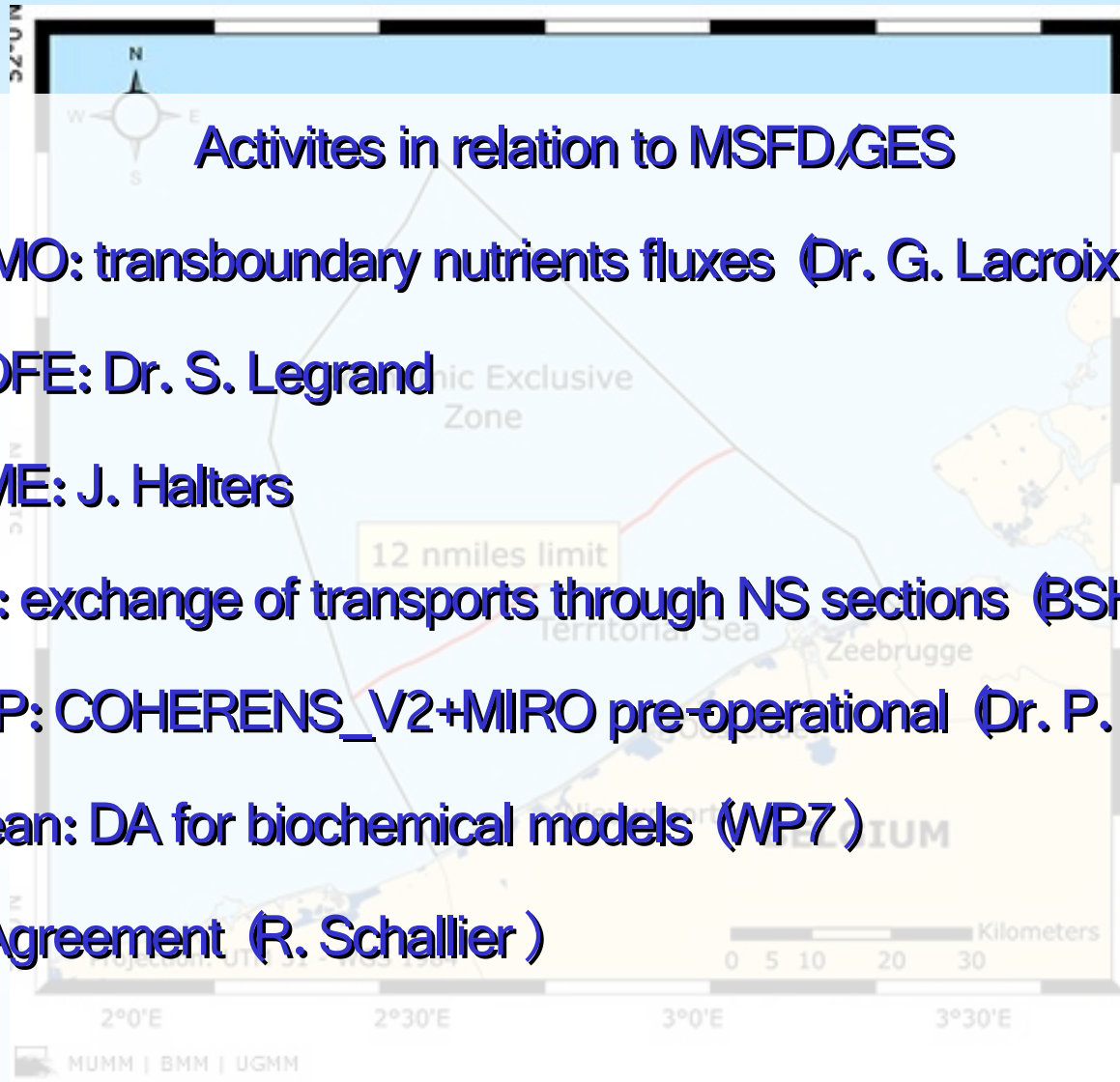
- Biodiversity: Dr S. Degraer (Chair, BEWG, Benthos ecology working group)
- Non-indigenous species: F. Kerckhof
- Eutrophication: REMSEM (Dr. K Ruddick, Dr. G Lacroix)
- Sea floor: SUMO (Dr. V. Van Lancker)
- Contaminants: MarChem, Dr. P Roose (Co-Chair, WGMS, working group on marine sediments in relation to pollution)
- Energy/noise: MonWind (Dr. A. Norro)
- Food Quality
- Fish/shellfish
- Food webs





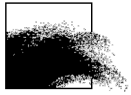
Activities in relation to MSFD/GES

- ICG-EMO: transboundary nutrients fluxes (Dr. G. Lacroix)
- WGOOFE: Dr. S. Legrand
- WGMME: J. Halters
- NOOS: exchange of transports through NS sections (BSH)
- ECOOP: COHERENS_V2+MIRO pre-operational (Dr. P. Luyten)
- MyOcean: DA for biochemical models (WP7)
- Bonn Agreement (R. Schallier)



• ...

MUMM | BMM | UGMM

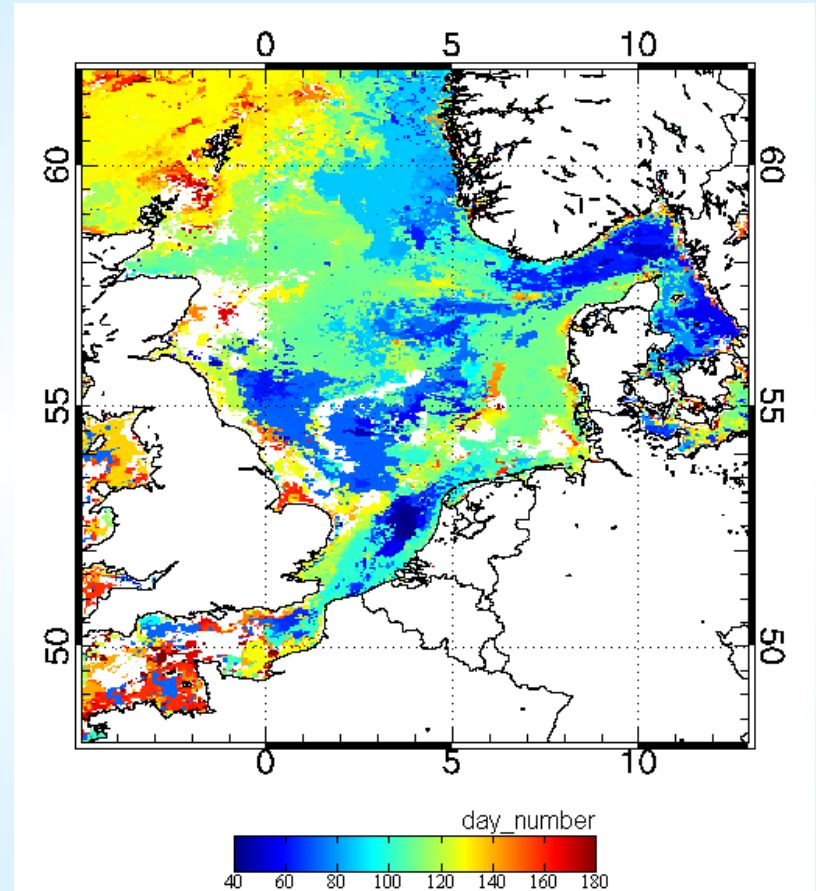


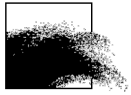
Examples of products

Algae bloom timing

(day # in 2008)

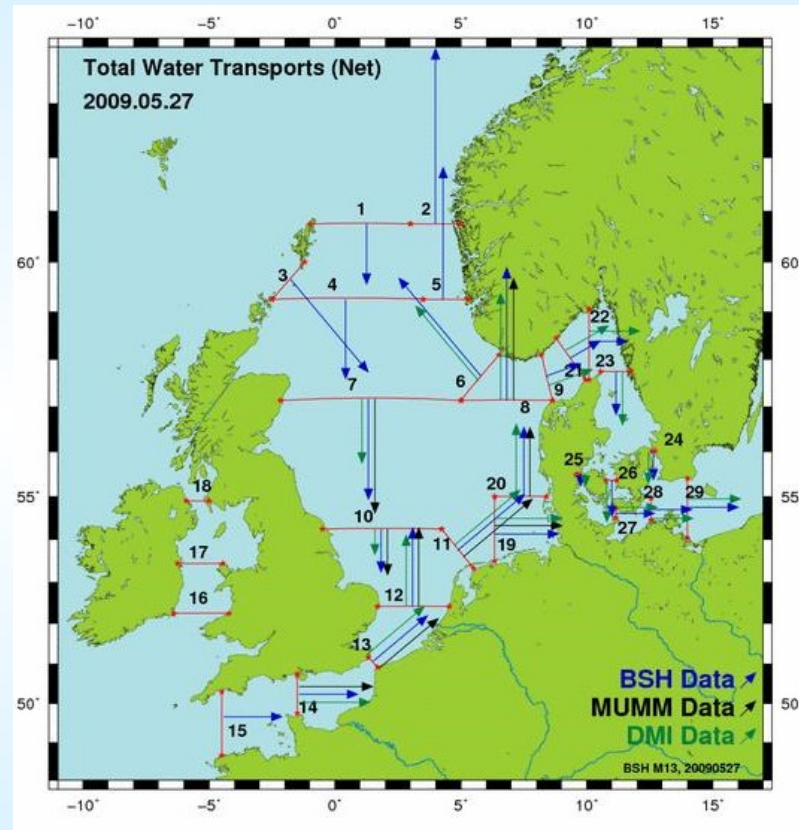
Y. Park and K. Ruddick (2009)

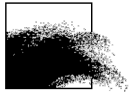




Example of products

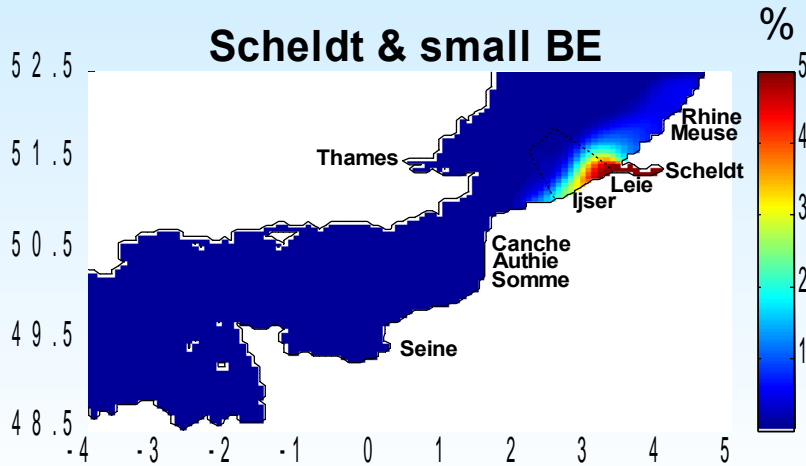
Daily transports through NS cross sections



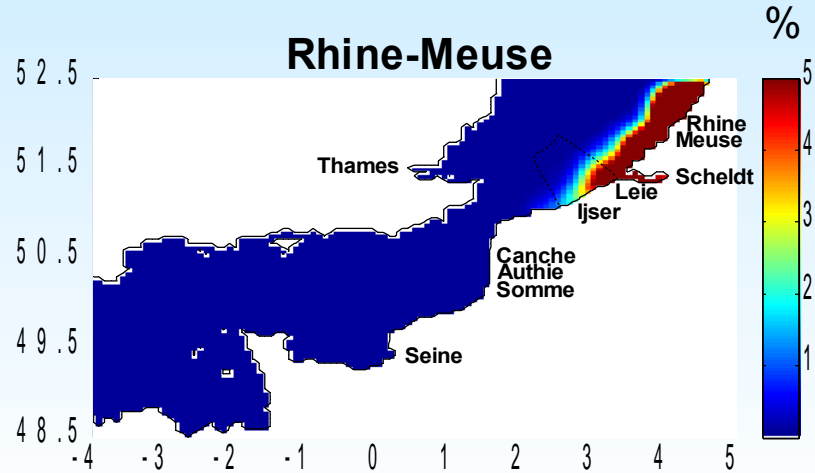


Water mass contribution 10-Jan-2006

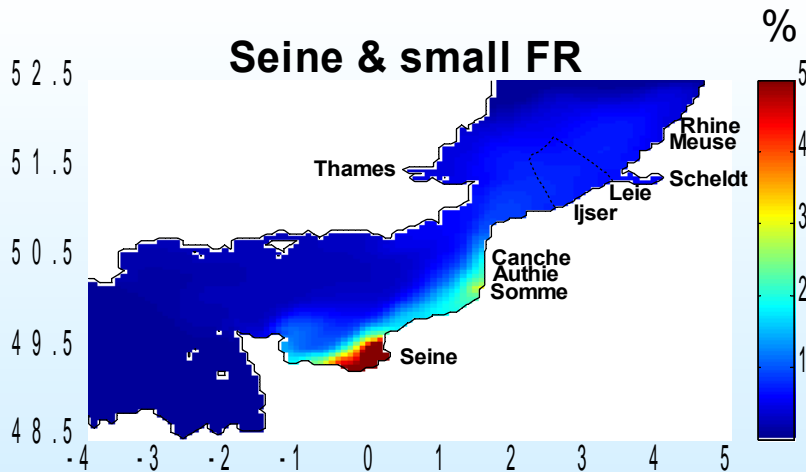
Scheldt & small BE



Rhine-Meuse



Seine & small FR



River that contributes the most

