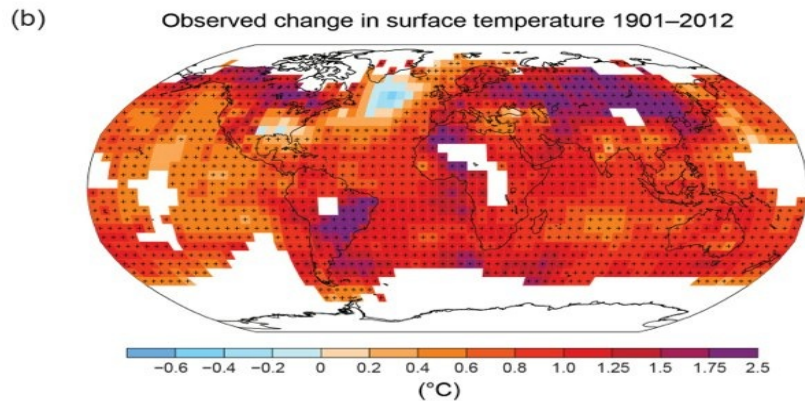
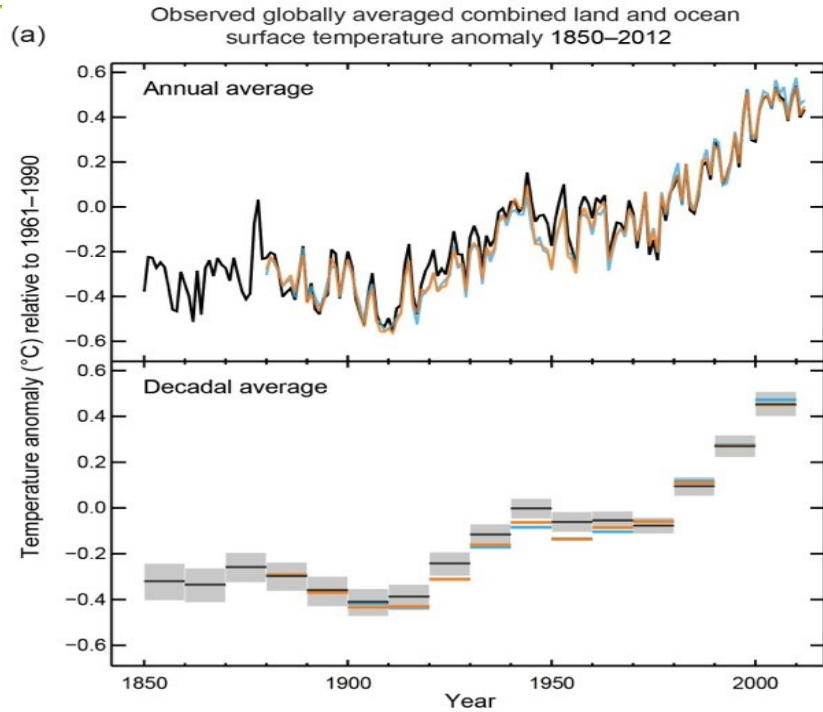


Ecotoxicologie et dérèglement climatique: faut-il prendre en compte l'effet des contaminations des sols sur les flux de gaz à effets de serre ?

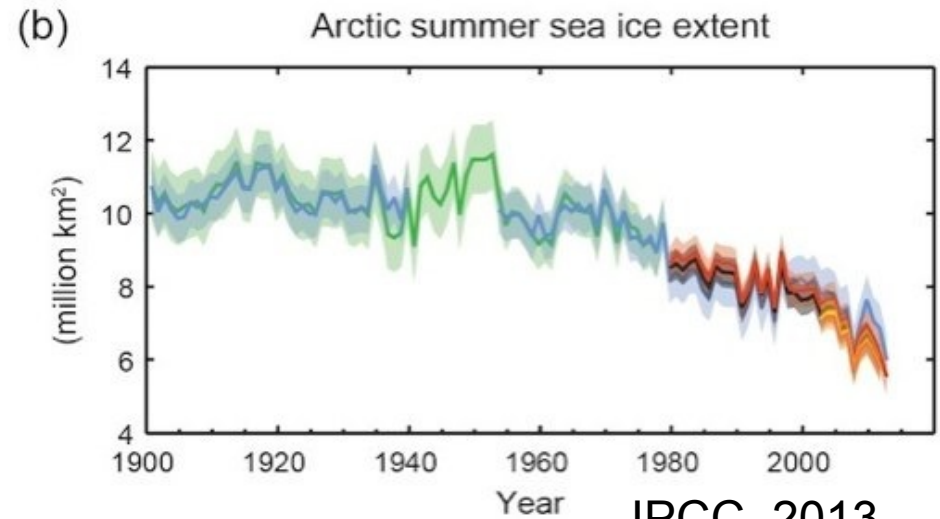
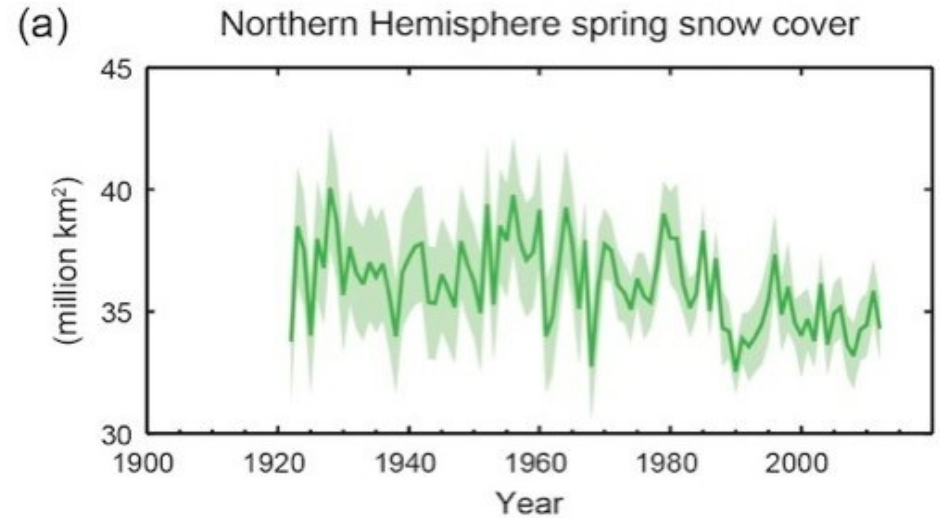
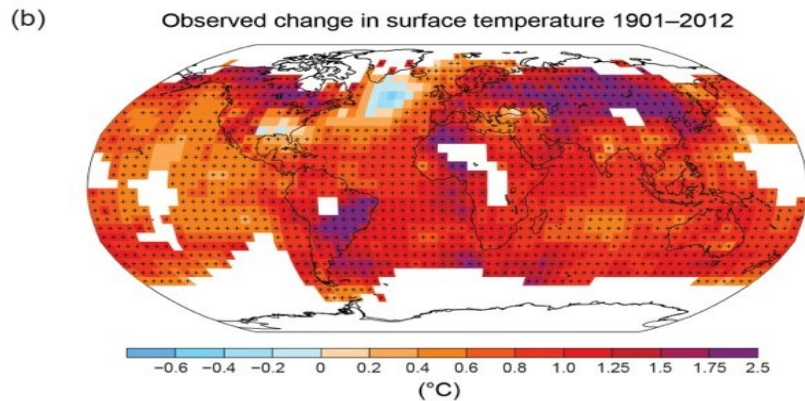
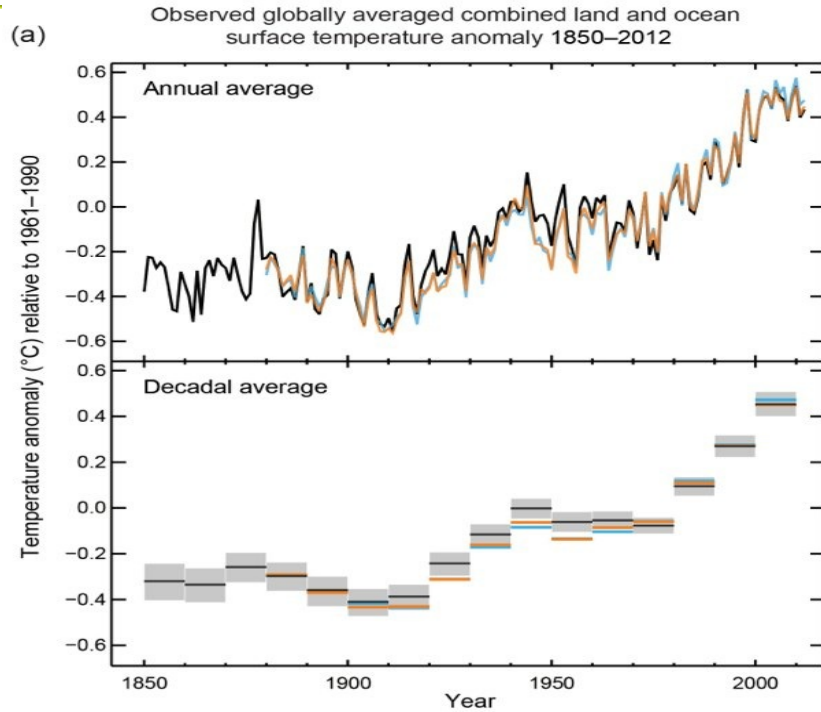
Bertrand Guenet, Paris, le 13 mai 2019



LE CHANGEMENT CLIMATIQUE: UNE REALITE



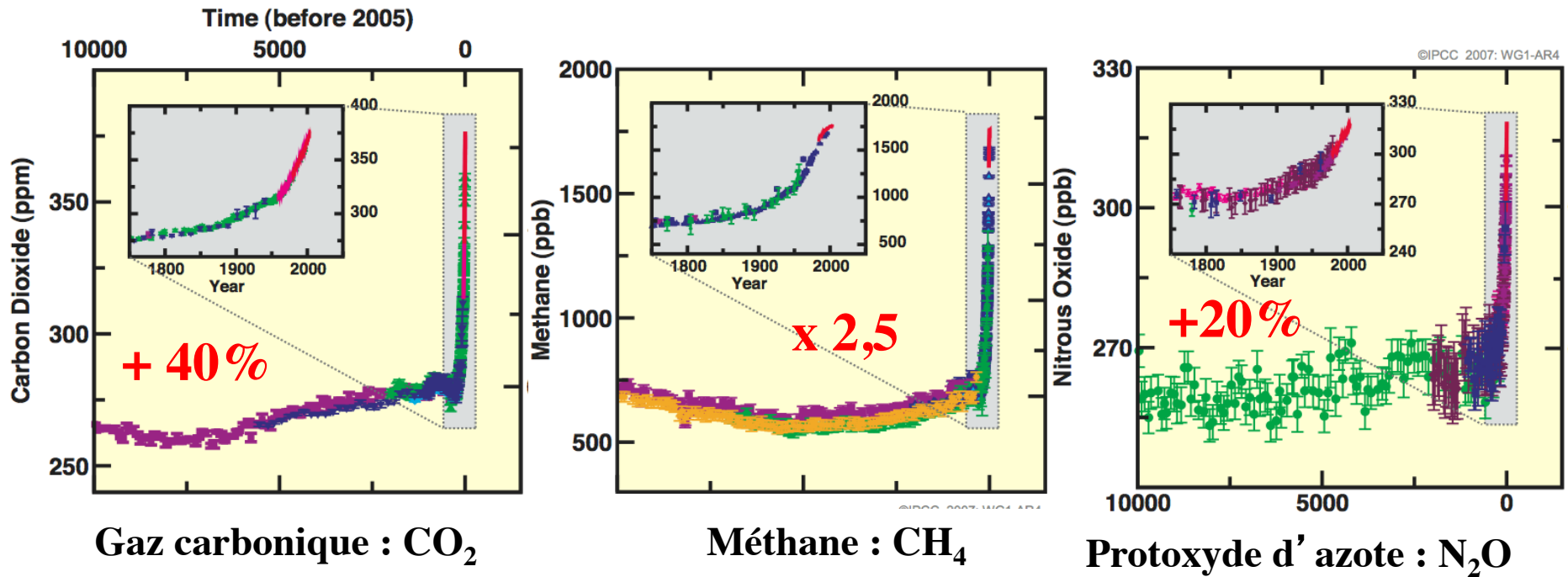
LE CHANGEMENT CLIMATIQUE: UNE REALITE



IPCC, 2013

LE CHANGEMENT CLIMATIQUE: LES CAUSES

- Les émissions de GES d'origine anthropique sont le principale facteur

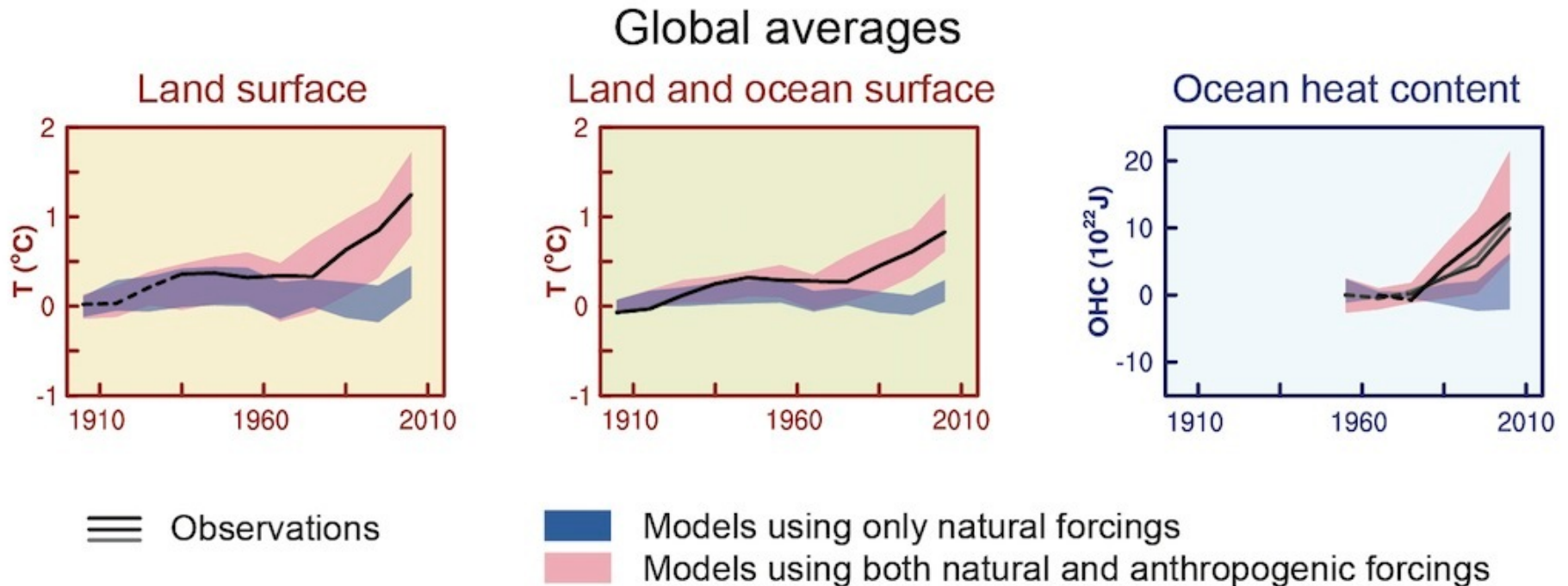


- CO₂ atmosphérique > 400 ppm



LE CHANGEMENT CLIMATIQUE: LES CAUSES

- L'activité humaine est largement responsable du changement climatique



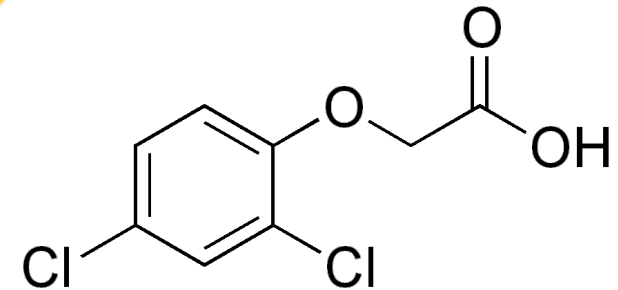
L'ECOTOXICOLOGIE DANS CE CONTEXTE

Biologie

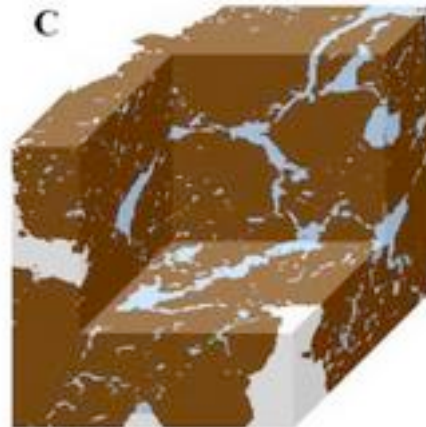


<http://cropandsoil.oregonstate.edu>

Chimie



Physique



<http://www.abdn.ac.uk>



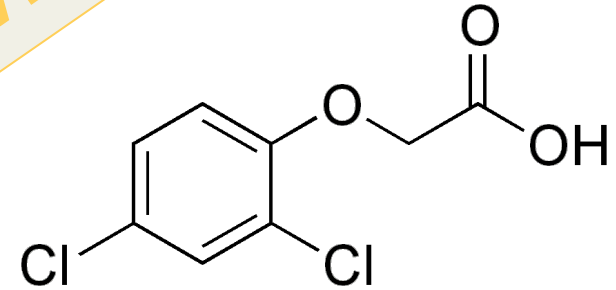
L'ECOTOXICOLOGIE DANS CE CONTEXTE

Biologie

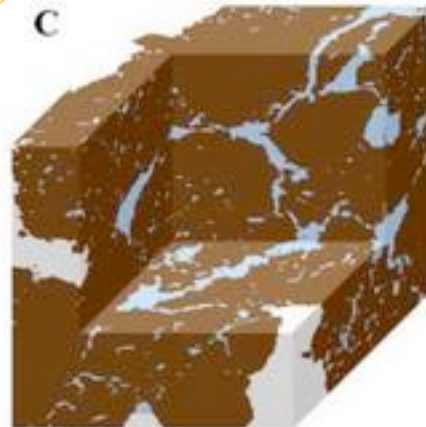


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LE CHANGEMENT CLIMATIQUE



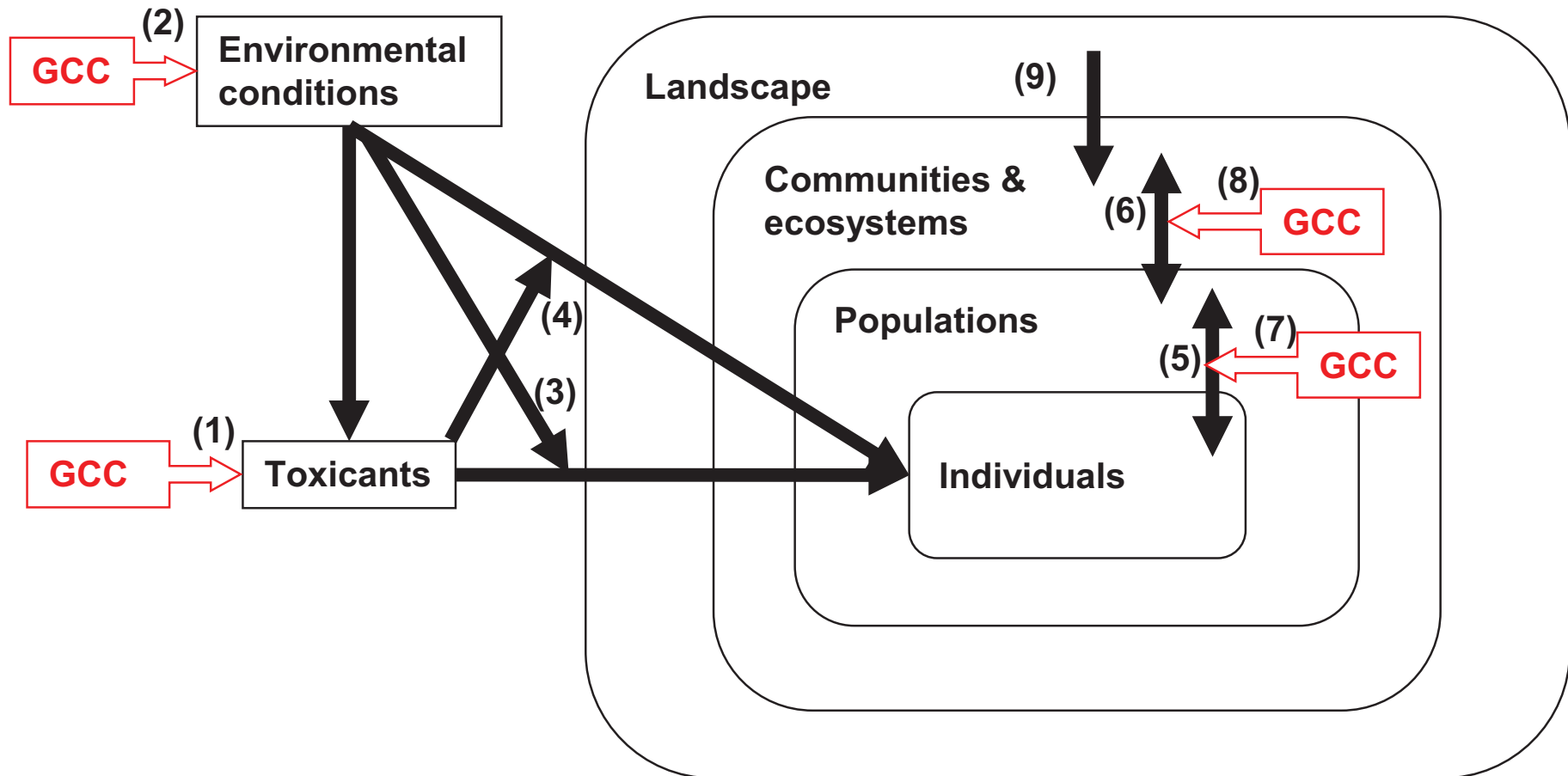
L'ECOTOXICOLOGIE DANS CE CONTEXTE



- Plusieurs études sur l'effet de la température.
- Importance des effets indirects du CC (Kallenborg et al., 2012) -> changement de pratiques agricoles.
- Tradeoffs entre résistance aux stress climatiques vs. Stress écotoxikologiques (Moe et al., 2013, Hooper et al., 2013)
- Quelques études utilisent l'outil de modélisation pour évaluer l'évolution des risques



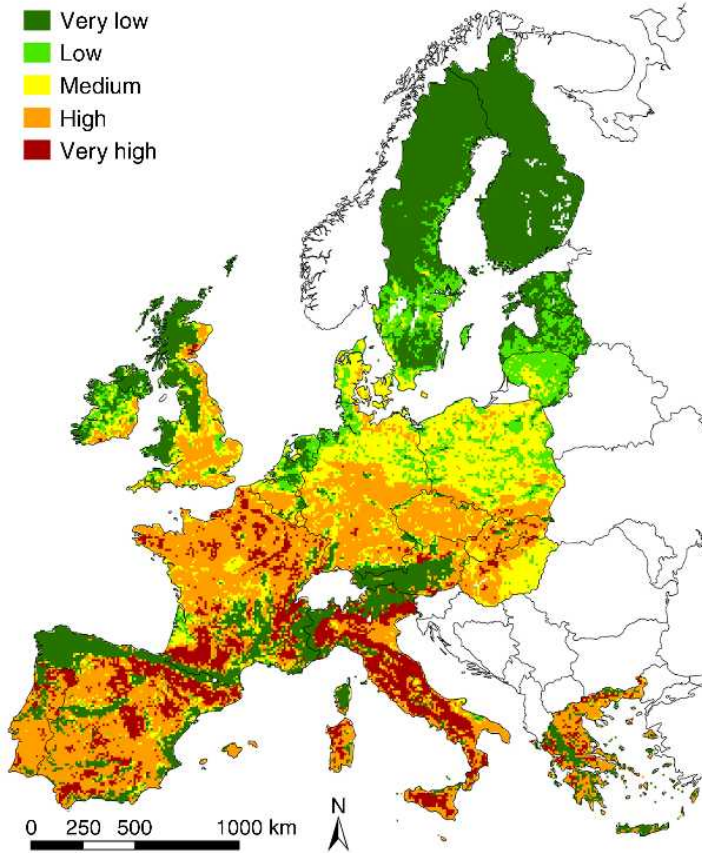
POURQUOI ETUDIER ECOTOX ET CLIMAT



L'ECOTOXICOLOGIE DANS CE CONTEXTE

a) Runoff potential in 1990

- Very low
- Low
- Medium
- High
- Very high



b) Change in runoff potential, 1990–2090

- Lower RP by two classes
- Lower RP by one class
- No change
- Higher RP by one class
- Higher RP by two classes
- Higher RP by three classes

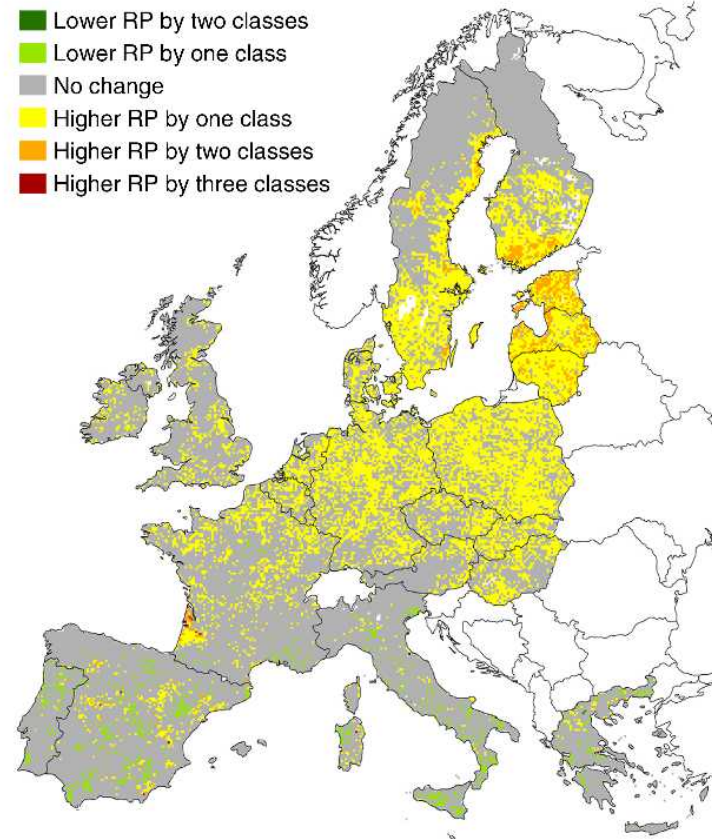


FIG. 3. (a) Runoff potential in 1990 and (b) change in runoff potential from 1990 to 2090 for the A1B scenario given as the change in RP class. RP indicates a logarithmic decrease from class to class in the amount of insecticide runoff. The change in RP is given as the difference between the classes in 2090 and 1990. Hence, an increase in the RP by two classes could represent an increase from low to high (see *Material and methods: GIS modeling*).



Global Climate Change and Contaminants, a Call to Arms Not Yet Heard?

Landis et al., 2014

MERCI POUR VOTRE ATTENTION
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