

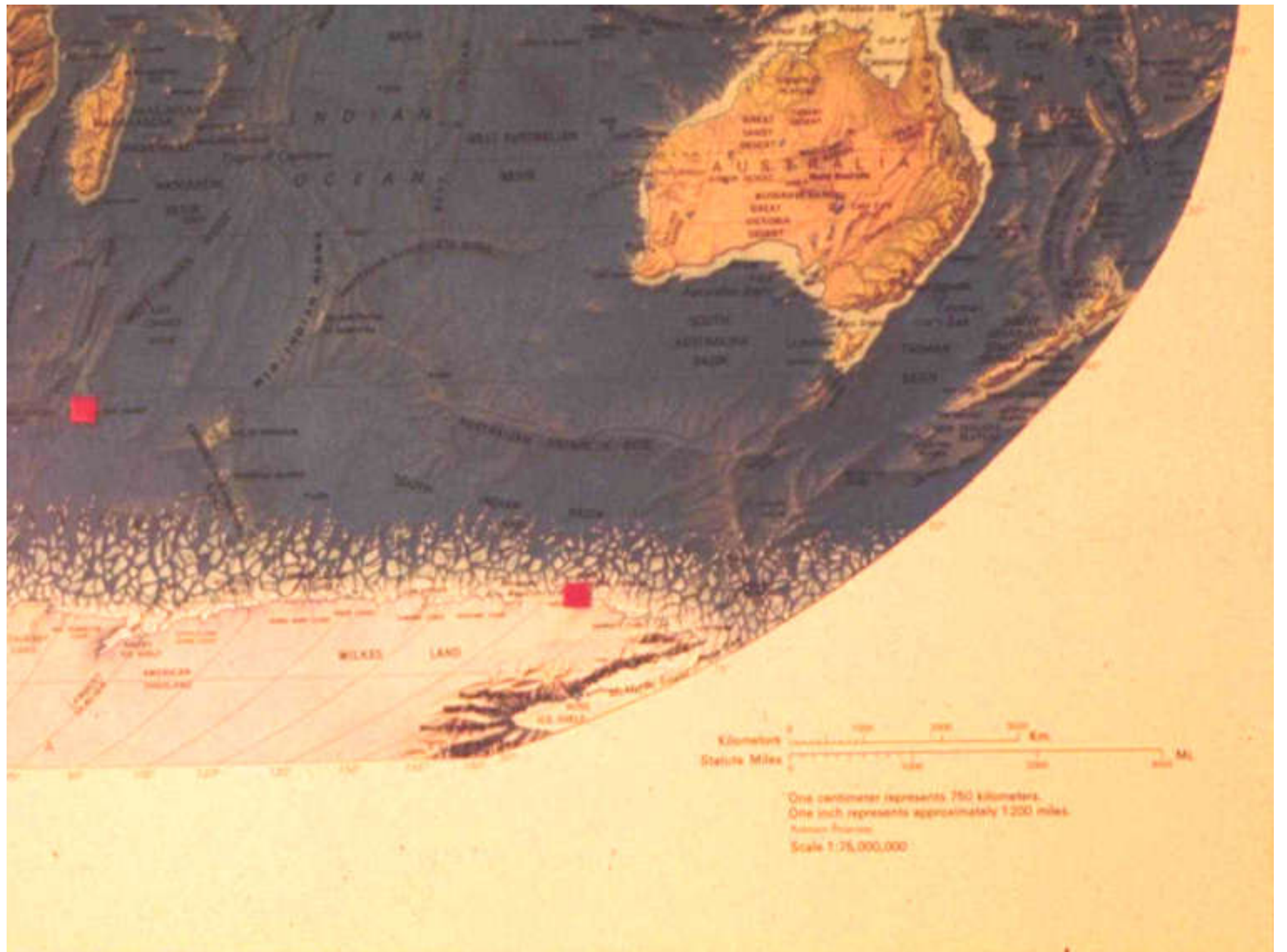
« Interactions biodiversité et changement climatique »

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- Centre Scientifique de Monaco



Rencontres scientifiques
d'AllEnvi
Lundi 4 juillet 2016

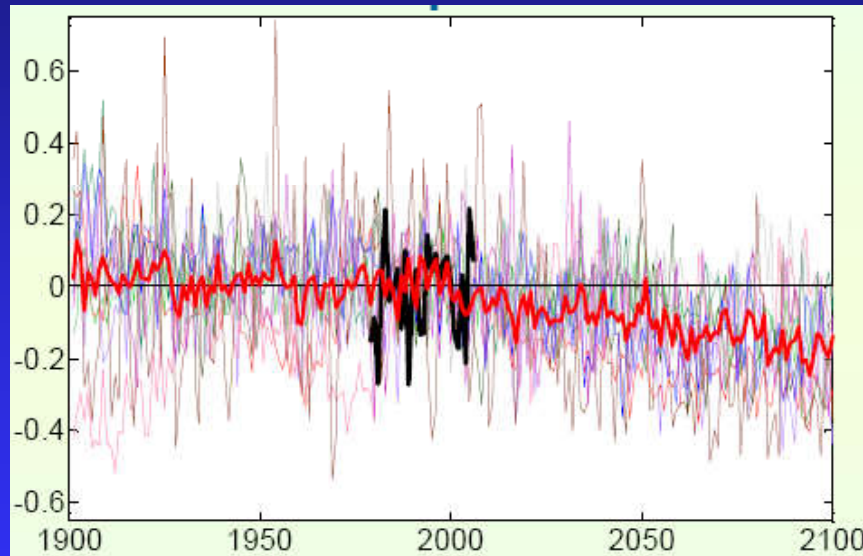
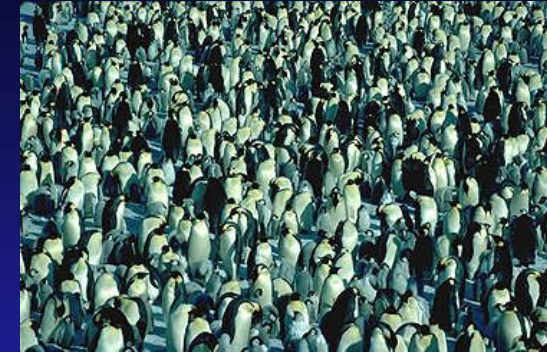




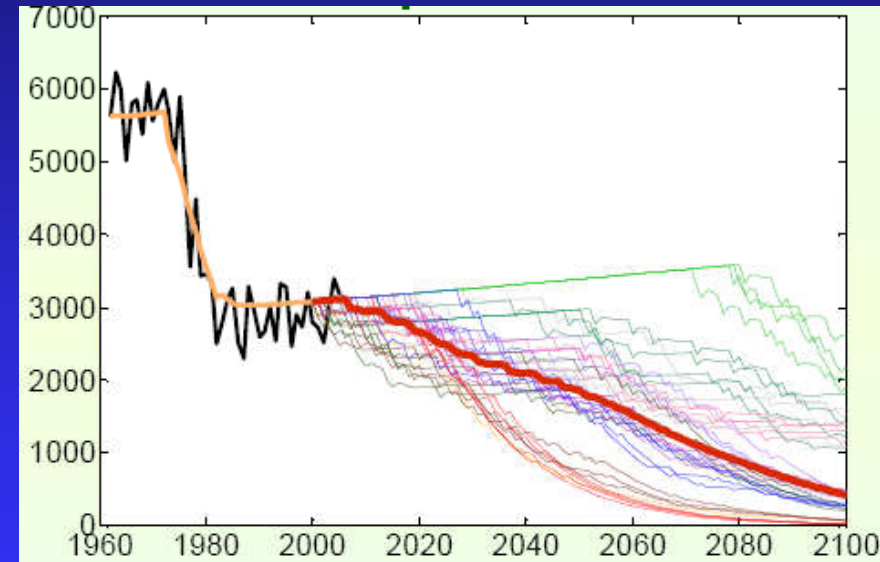
Scénarios pour le futur



Modèle de dynamique de population



Projections de la banquise
(modèles du GIECC)



Projections du nombre de couples

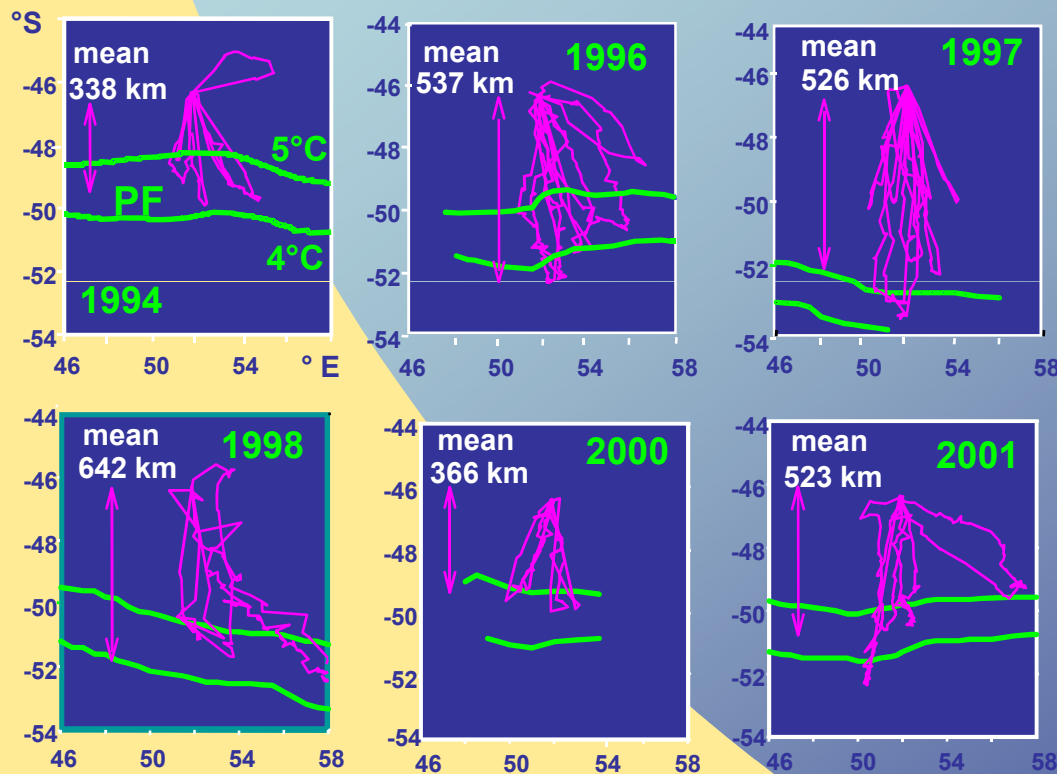
Jenouvrier, Caswell, Barbraud, Holland, Stroeve & Weimerskirch (*PNAS*, 2009)

**French-Norwegian Observatory on
the Impacts of Environmental Changes— slide 3**

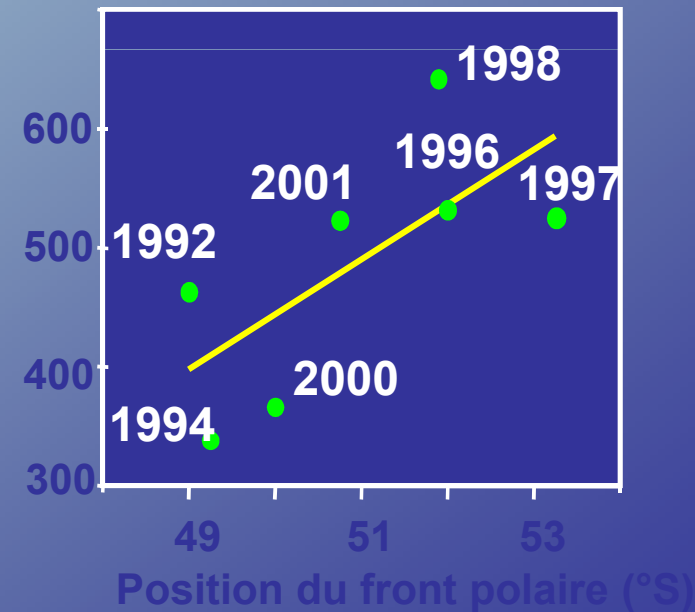




La localisation du front polaire et les voyages alimentaires des manchots royaux



Distance moyenne (km)



Bost *et al.* 2001



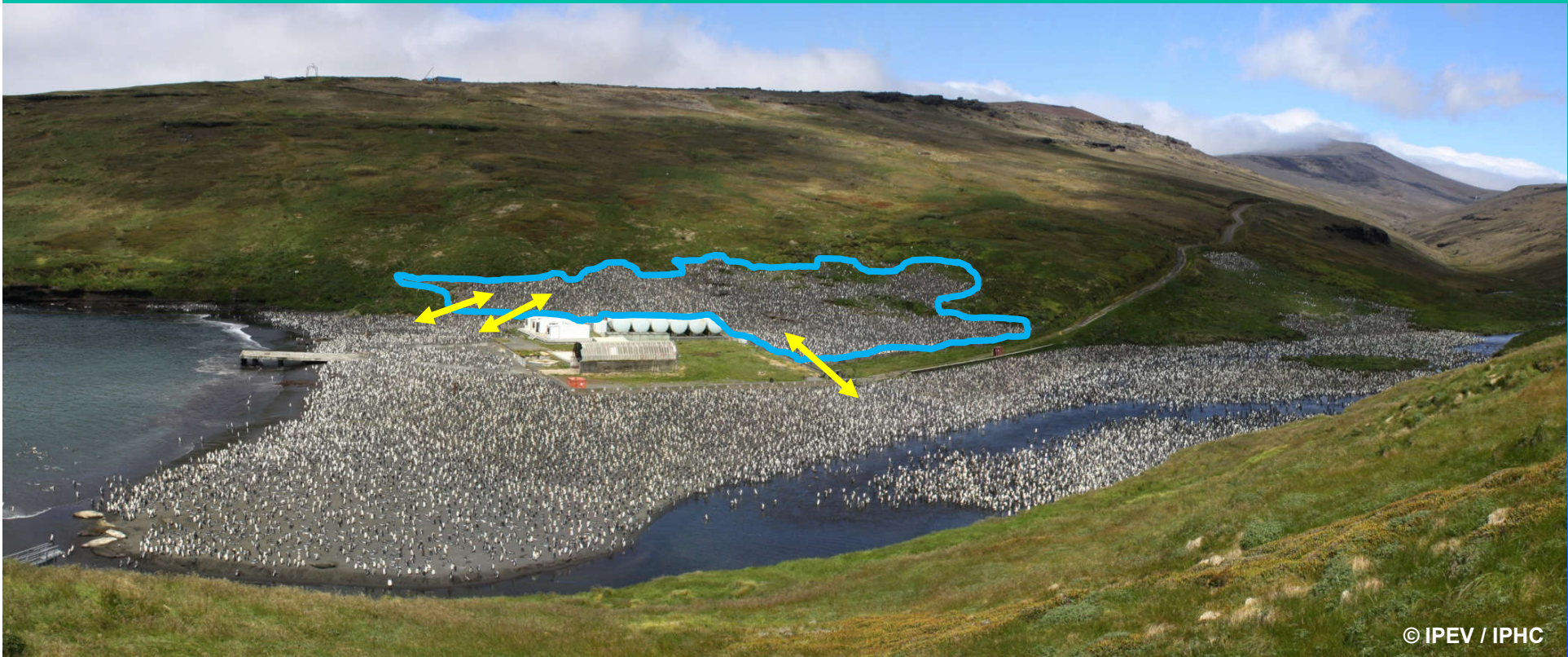
378



Capsule en verre

Antenne

Microprocesseur

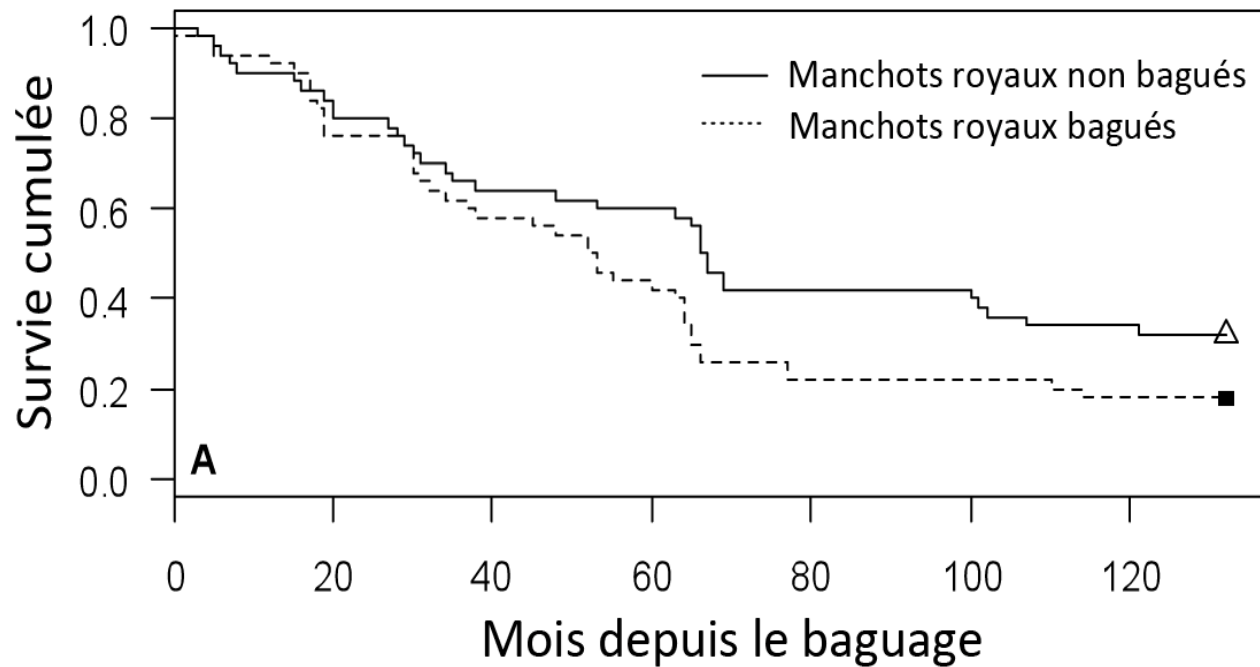





IMPACT DES BAGUES

↓ 44% survie adulte

↓ 41% succès reproducteur

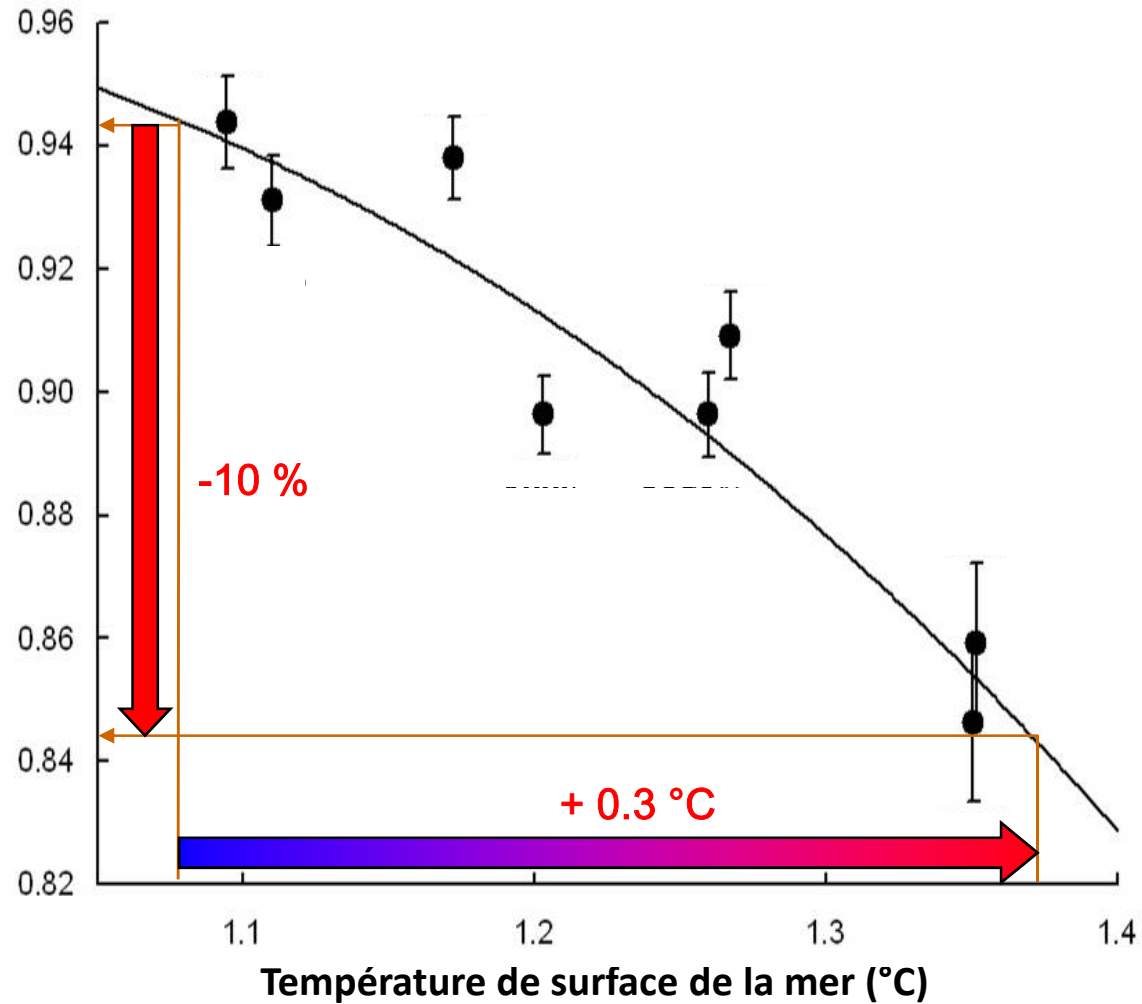



 Saraux, **Le Bohec**, Durant, **Viblanç**, Gauthier-Clerc, Beaune, Park, Yoccoz, Stenseth, **Le Maho** (2011)
Reliability of flipper-banded penguins as indicators of climate change
Nature, 469, 203-206



Manchot royal

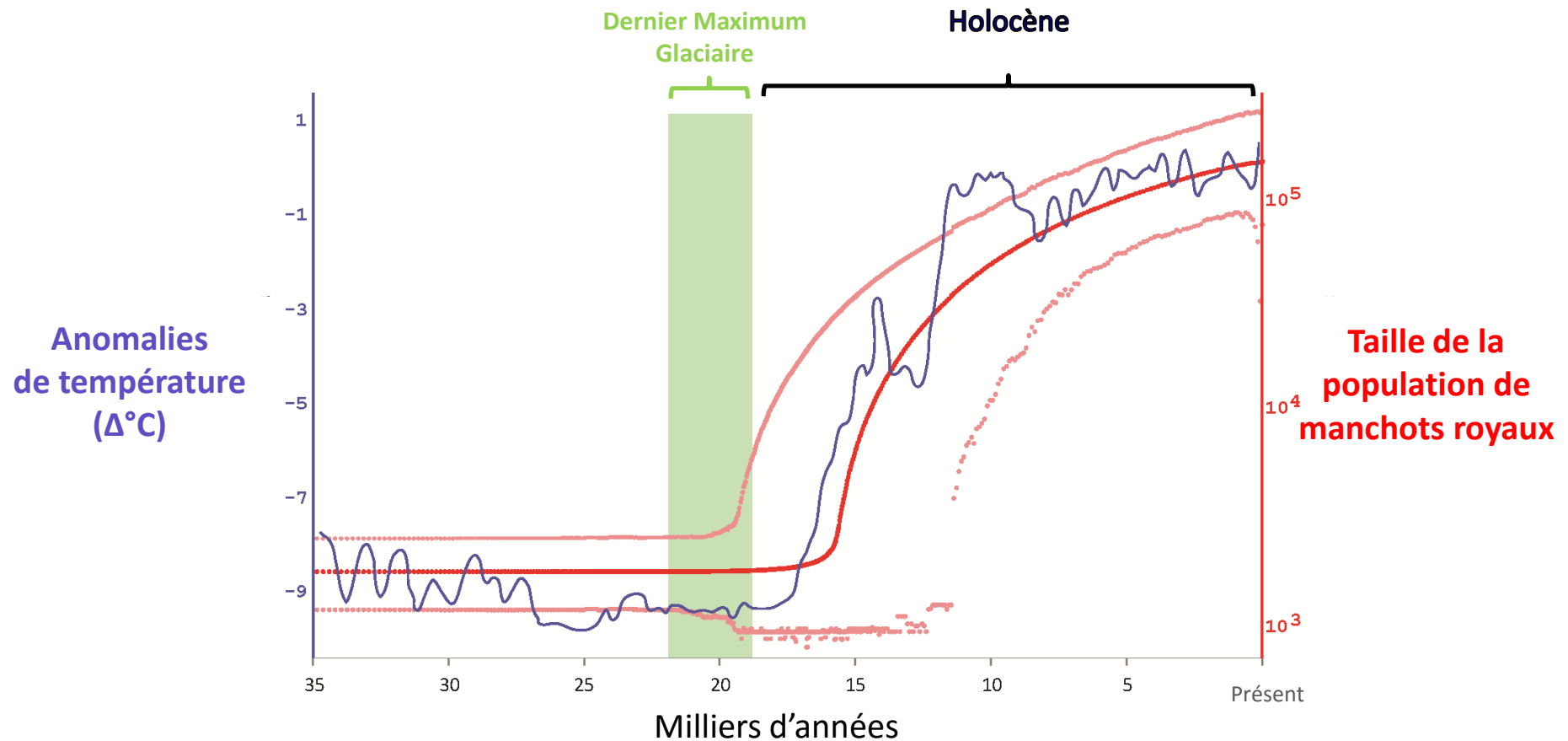
Survie des manchots royaux adultes




 **Le Bohec, Durant, Gauthier-Clerc, Stenseth, Park, Pradel, Grémillet, Gendner, Le Maho (2008)**
King penguin population threatened by the Southern Ocean Warming.
Proceedings of National Academy of Sciences, 105, 2493-2497ns.



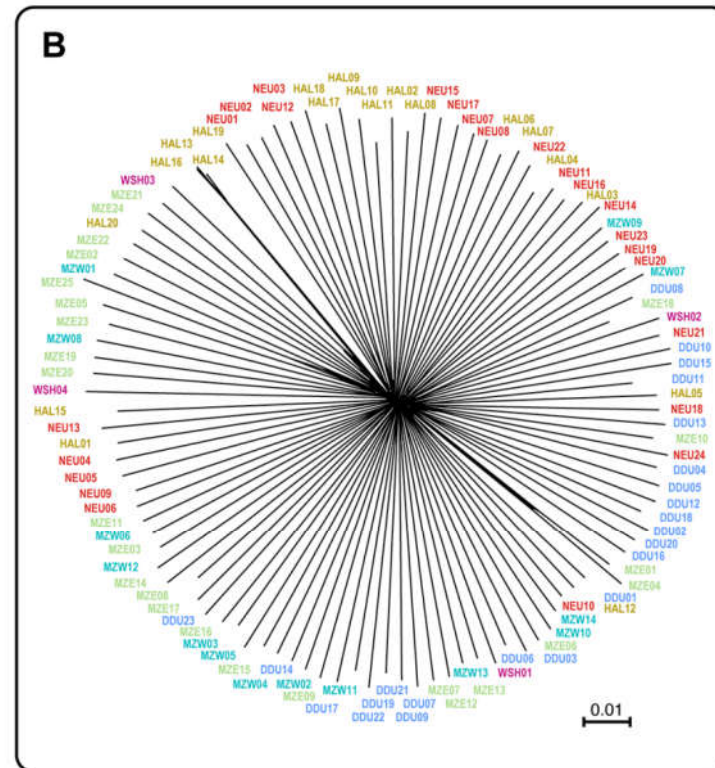
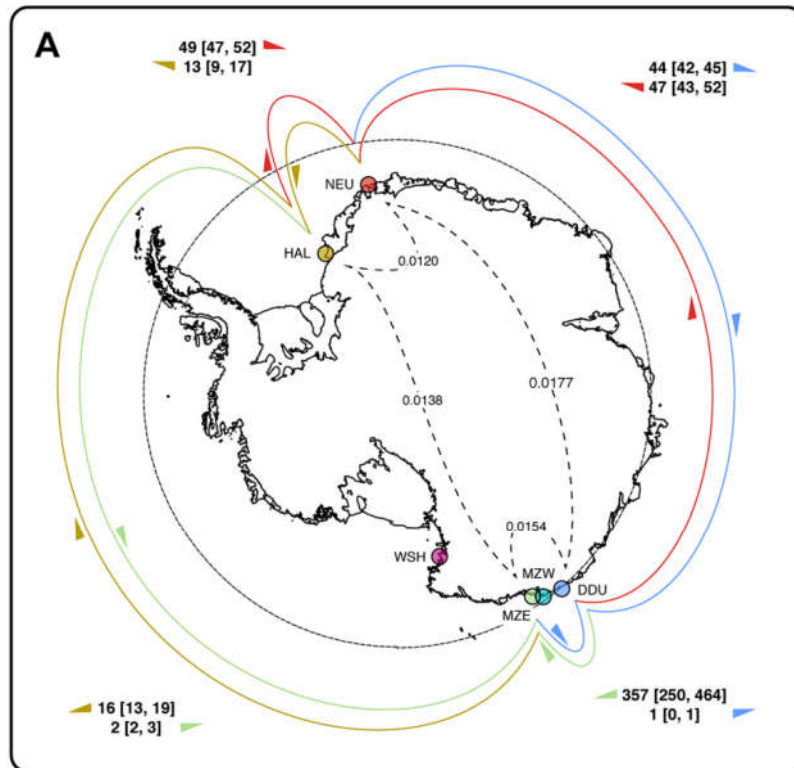
Manchot royal




 Trucchi, Gratton, Whittington, Cristofari, **Le Maho**, Stenseth, **Le Bohec** (2014)
King penguin demography since the last glaciation inferred from genome-wide data.
Proceedings of the Royal Society London B, 281, 20140528.



Manchot empereur




 Cristofari, Bertorelle, **Ancel**, Benazzo, **Le Maho**, Ponganis, Stenseth, Trathan, Whittington, Zanetti, Zitterbart, Trucchi & **Le Bohec** (2016)
 Full circumpolar migration ensures evolutionary unity in the Emperor penguin.
Nature Communications, 7, 11842 (doi:10.1038/ncomms11842).