

BG-C-2 poly 01

Circulations atmosphériques et océaniques

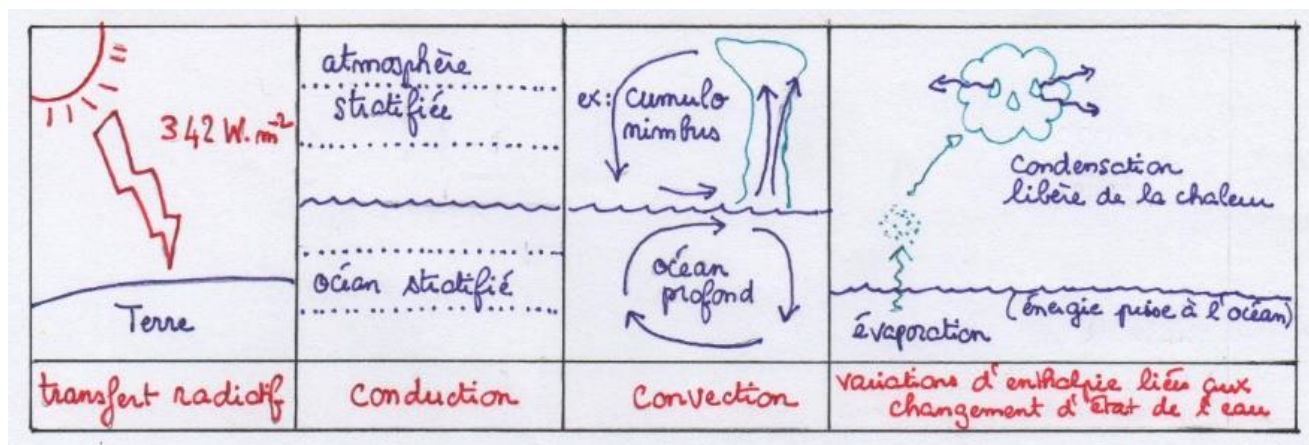


Fig. 1. Différents modes de transfert d'énergie. ★★★ [2]

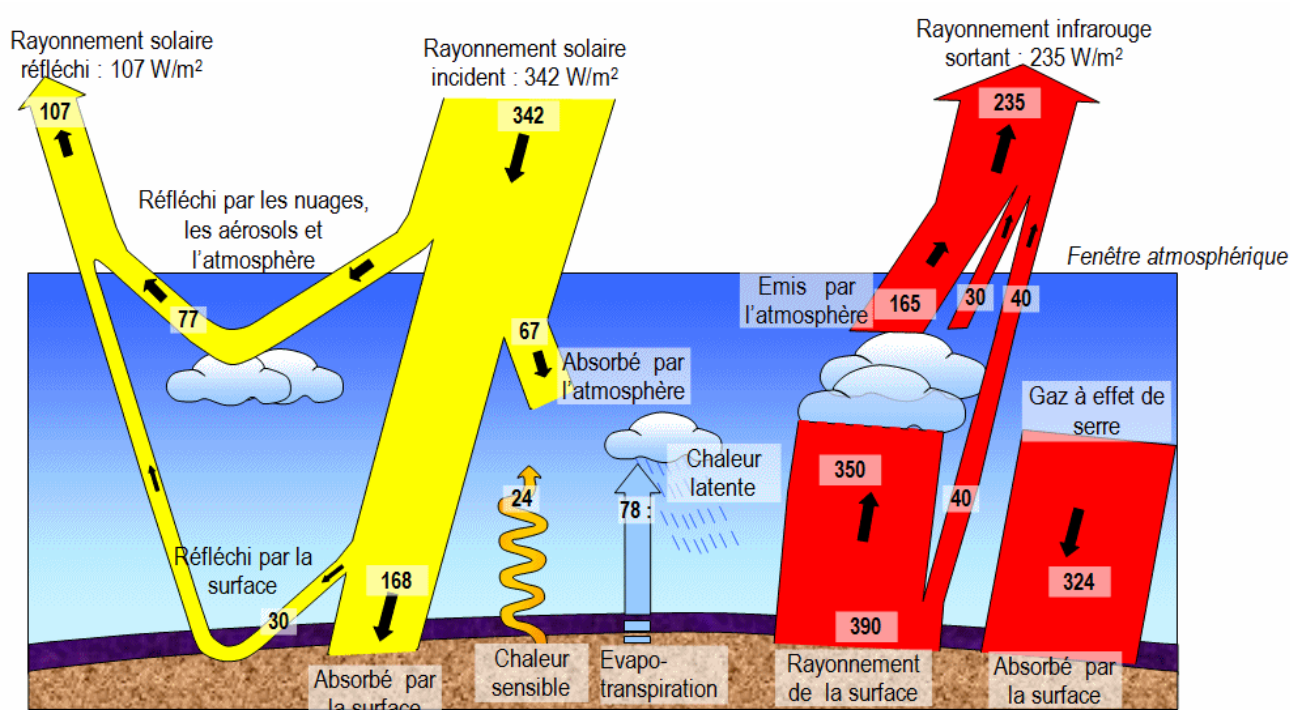


Fig. 2. Bilan radiatif moyen de la Terre. ★★ [3]

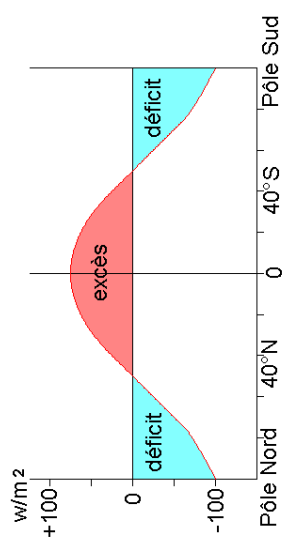
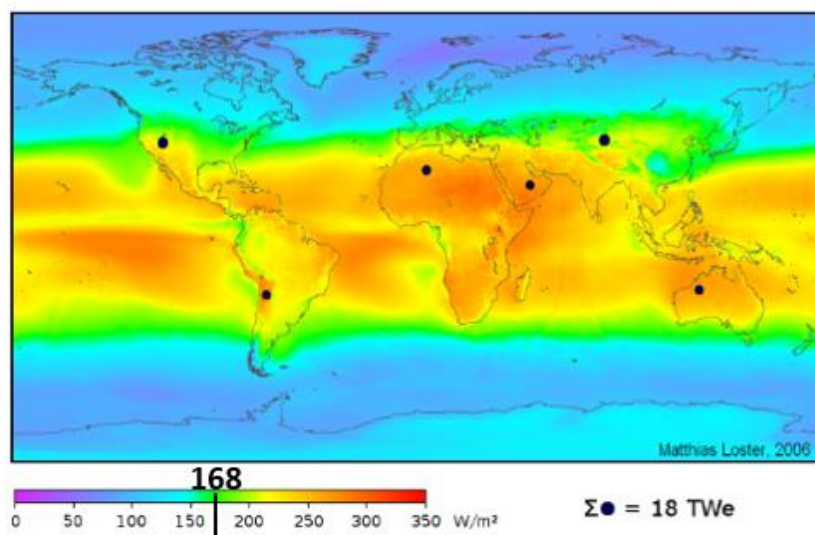


Fig. 3. Bilan radiatif selon la latitude. ★★★ [1]



Moyenne du flux solaire absorbé par le sol

Fig. 4. Flux solaire moyen absorbé par le sol ou l'océan. ★★ [4]

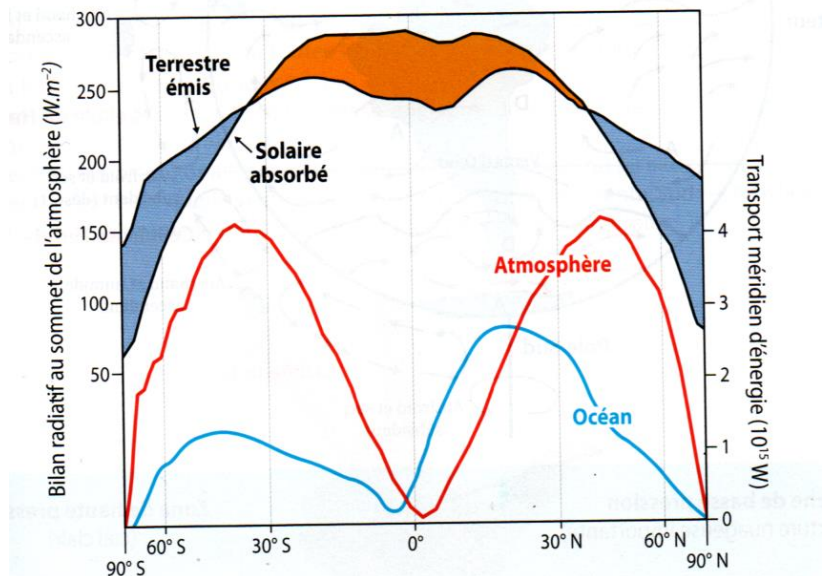
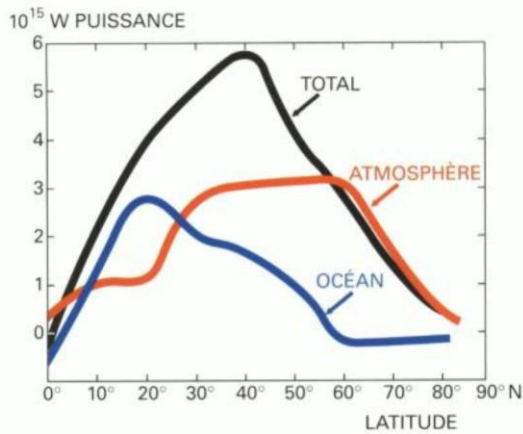


Fig. 5. Intervention de l'atmosphère et de l'océan dans le transport méridien d'énergie. ★★ [

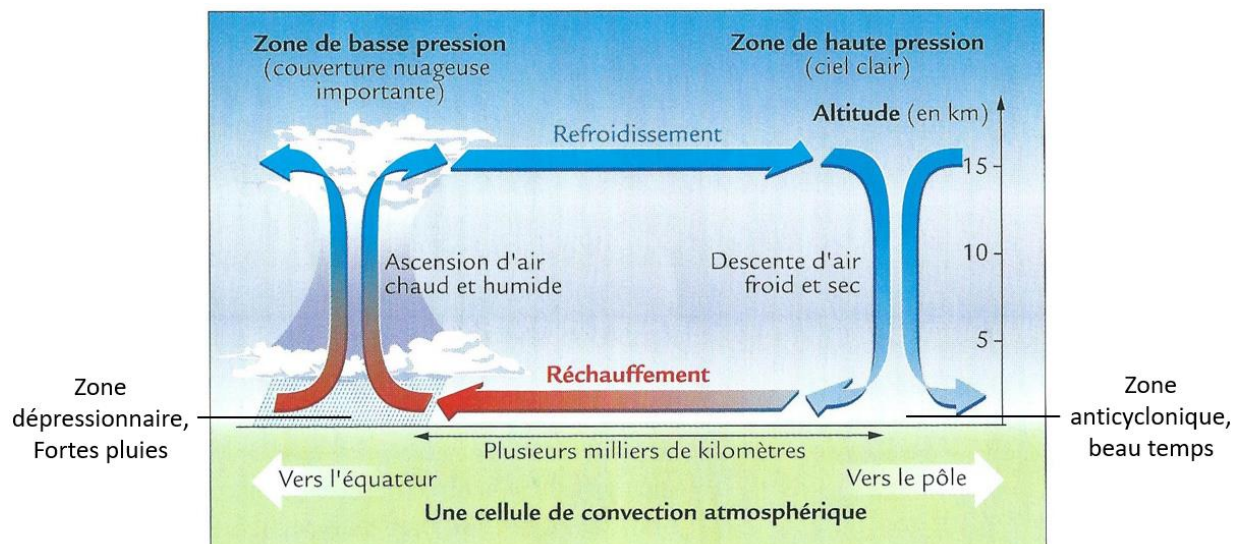


Fig. 6. Cellule de convection atmosphérique. ★★★ [1]

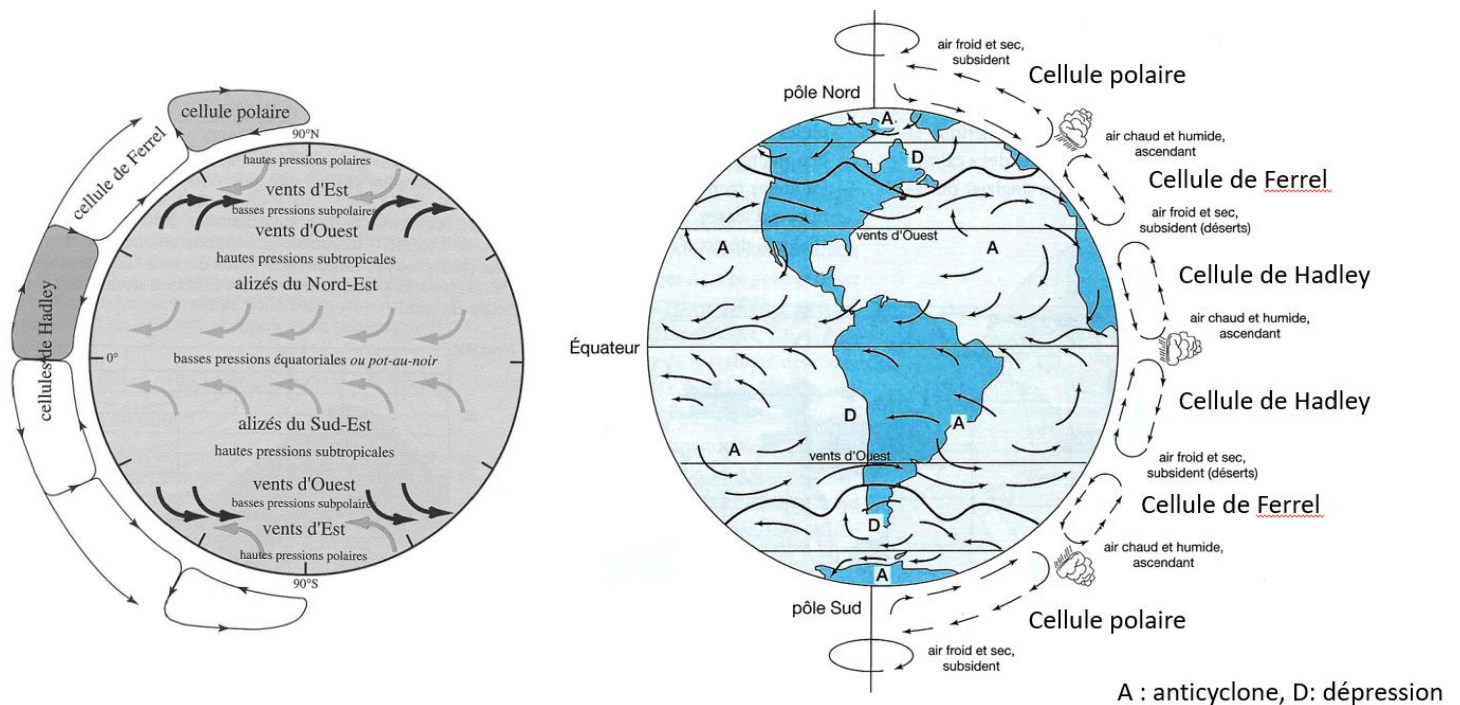


Fig. 7. Cellules de convection troposphérique et vents de surface. ★★★ [1]

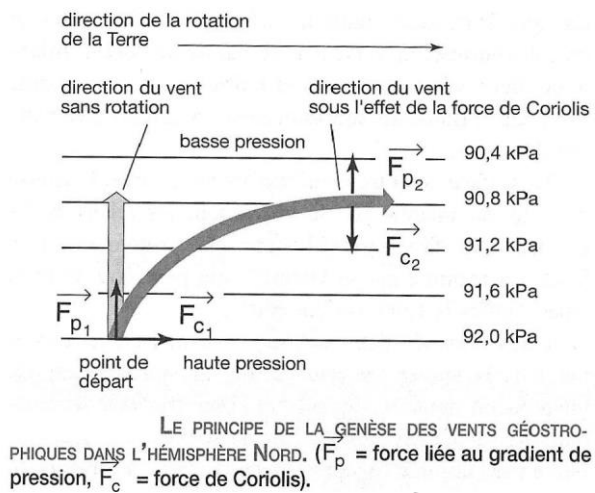


Fig. 9. La force de Coriolis. ★★ [1]

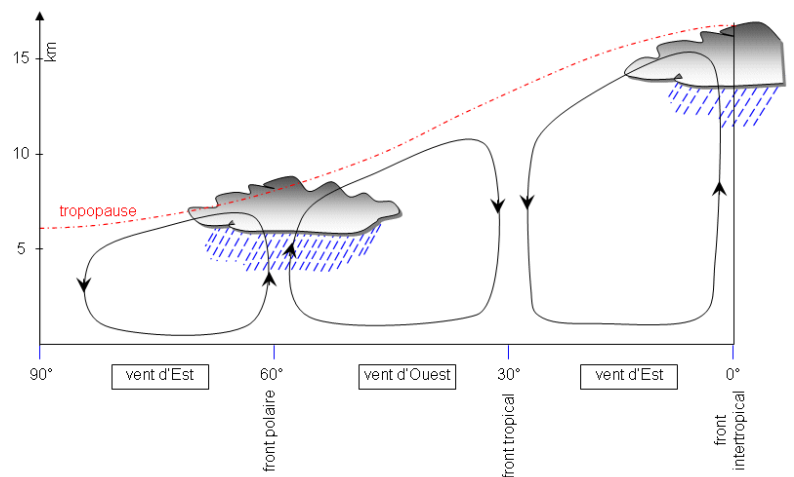


Fig. 8. Les cellules troposphériques ★★ [1]

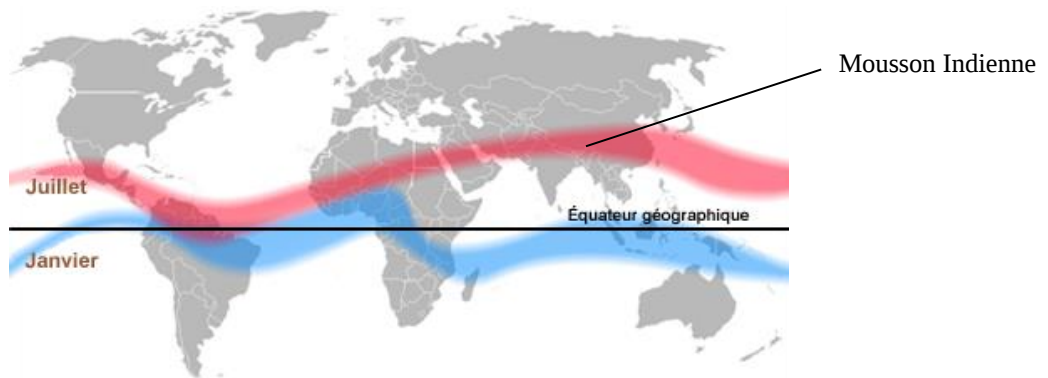


Fig. 10. Oscillation annuelle de la ZCIT (zone de convergence intertropicale). ★ [4]

ZCIT
pleine de
nuage !

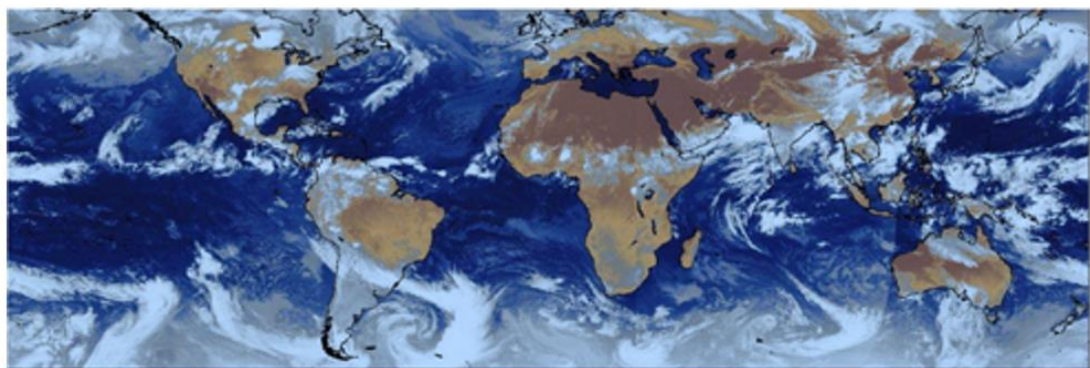


Fig. 11. Une météo nuageuse au niveau de la ZCIT. ★★ [1]

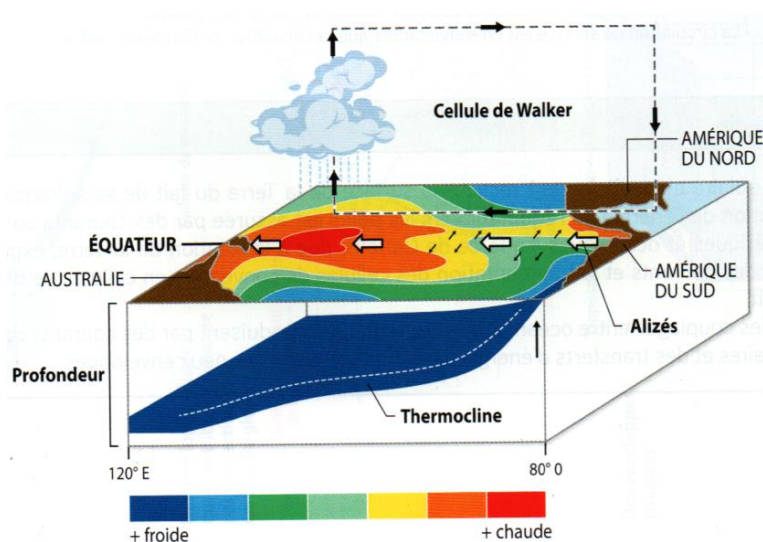
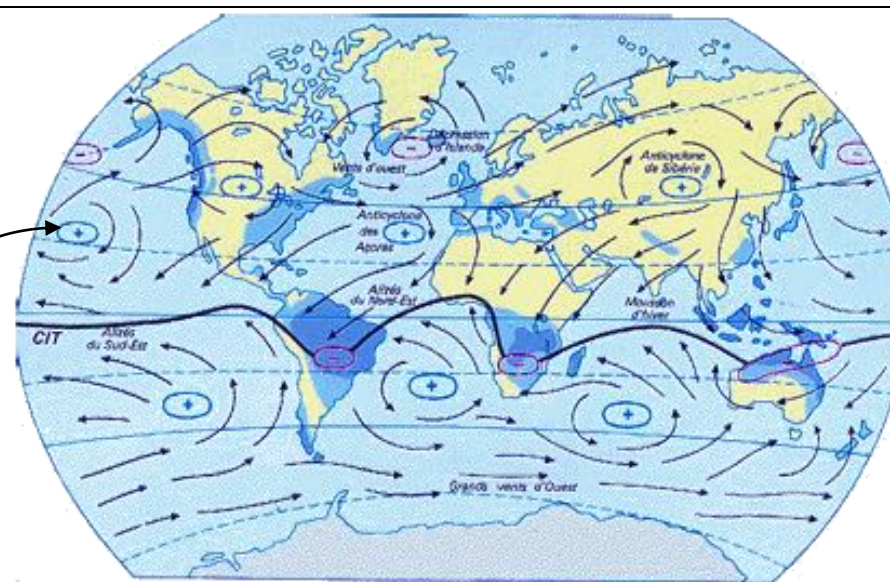
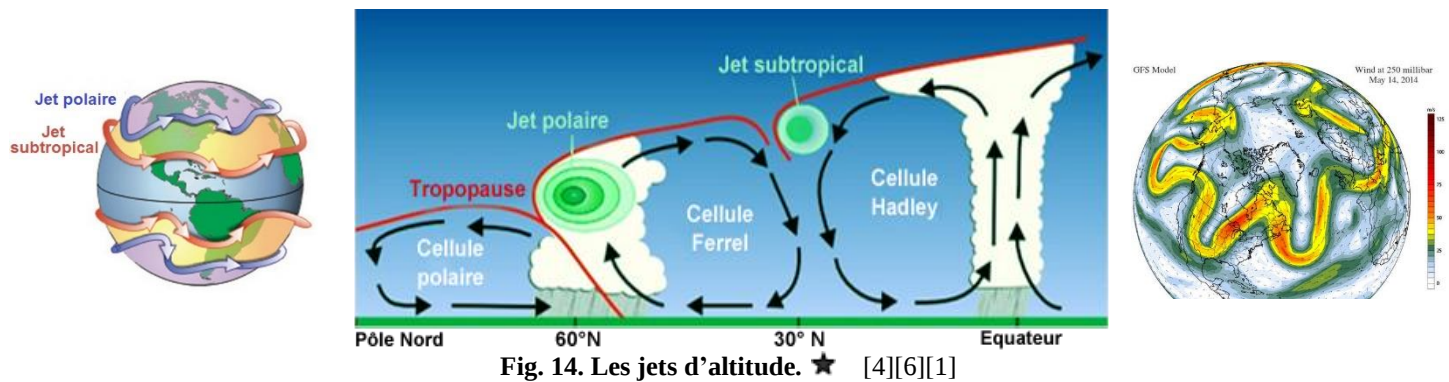
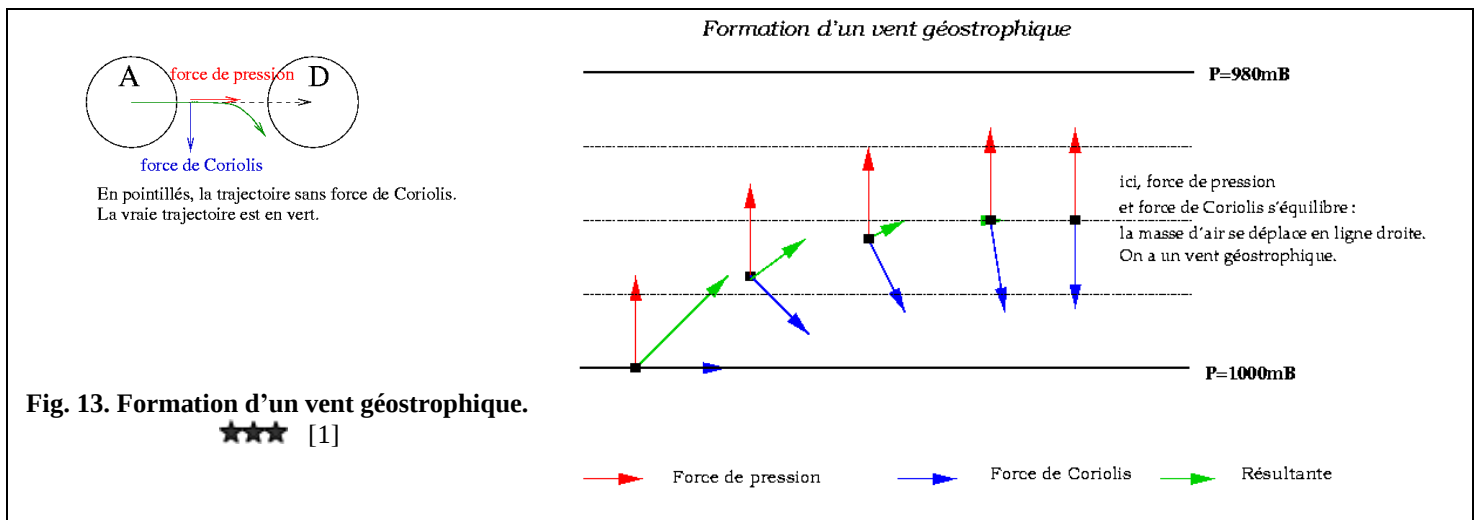


Fig. 12. Les alizés et la cellule de Walker dans le Pacifique. ★★★ [5]

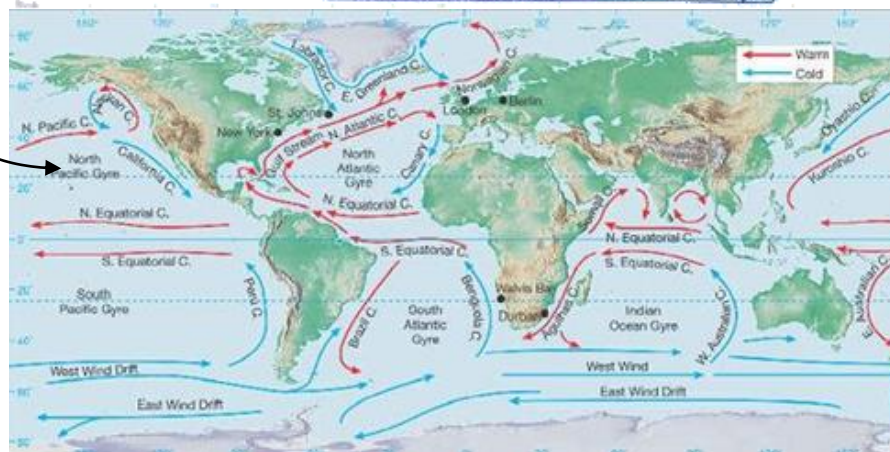
Voir cours BG-C-1 et l'upwelling côtier de l'Amérique du Sud.



Circulation des vents en janvier

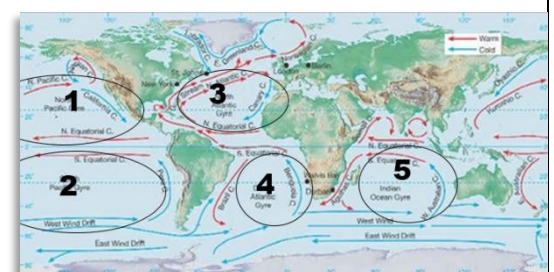
Vitesse : dizaine à centaine de km/h

Fig. 15. Les grandes gyres océaniques et corrélation avec les vents. ★★ [1]



Courants de surface

Vitesse : environ 10 km/h



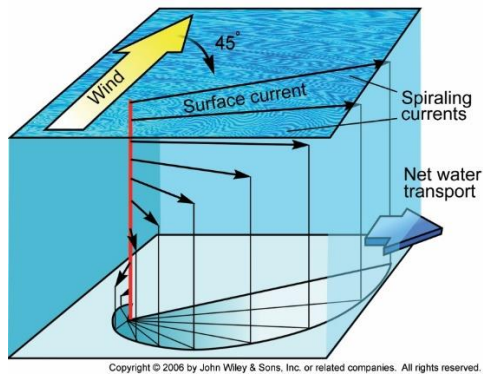


Fig. 16. Couplage mécanique troposphère-océan : la spirale d'Ekman (ici dans l'hémisphère Nord) ★★★ [1]

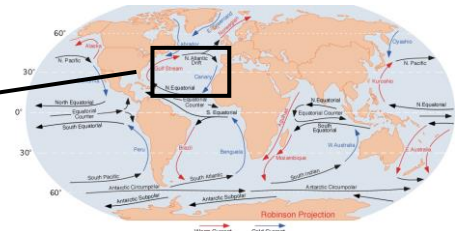
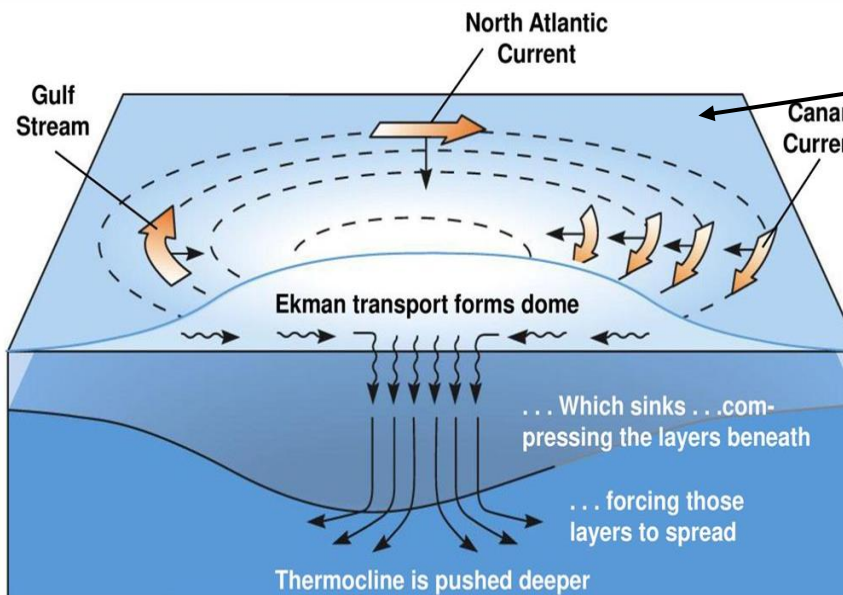


Fig. 17. Dôme d'Ekman et gyre océanique. ★ [1]

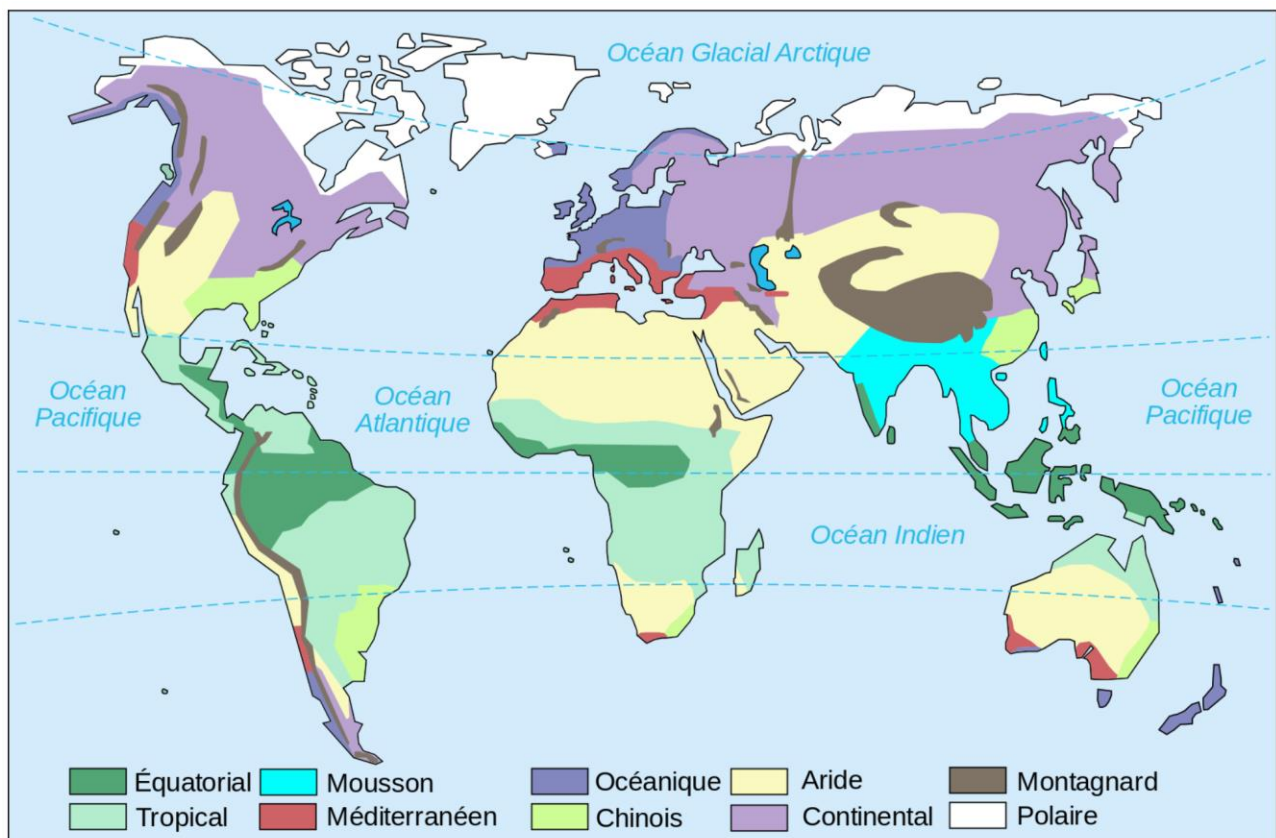
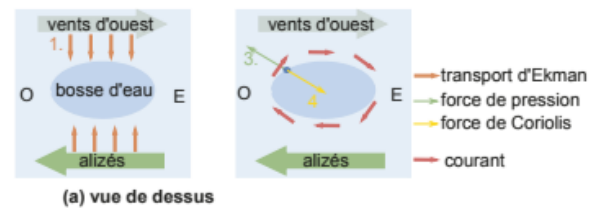


Fig. 18. La répartition des climats ★★ [7]

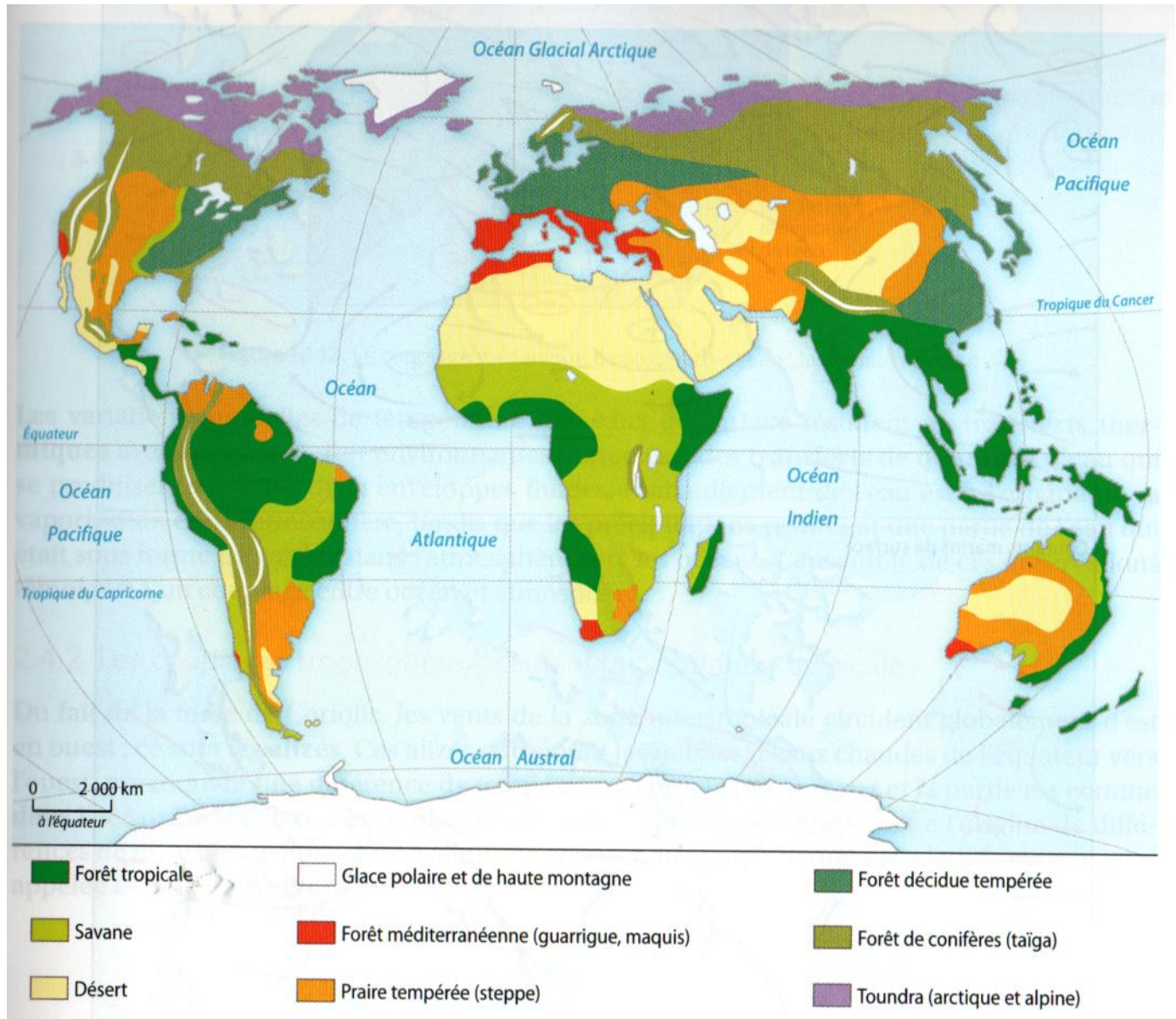


Fig. 19. Les principaux biomes terrestres. ★★★ [5]

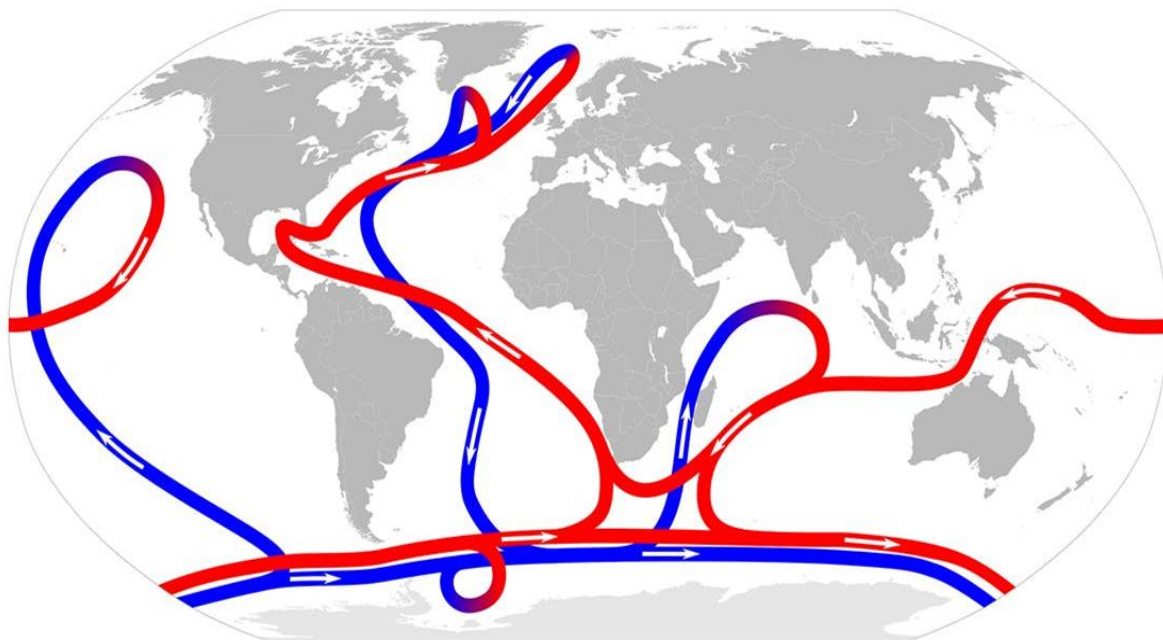


Fig. 20. Circulation méridienne de recouvrement : schéma simplifié. ★★★ [1]

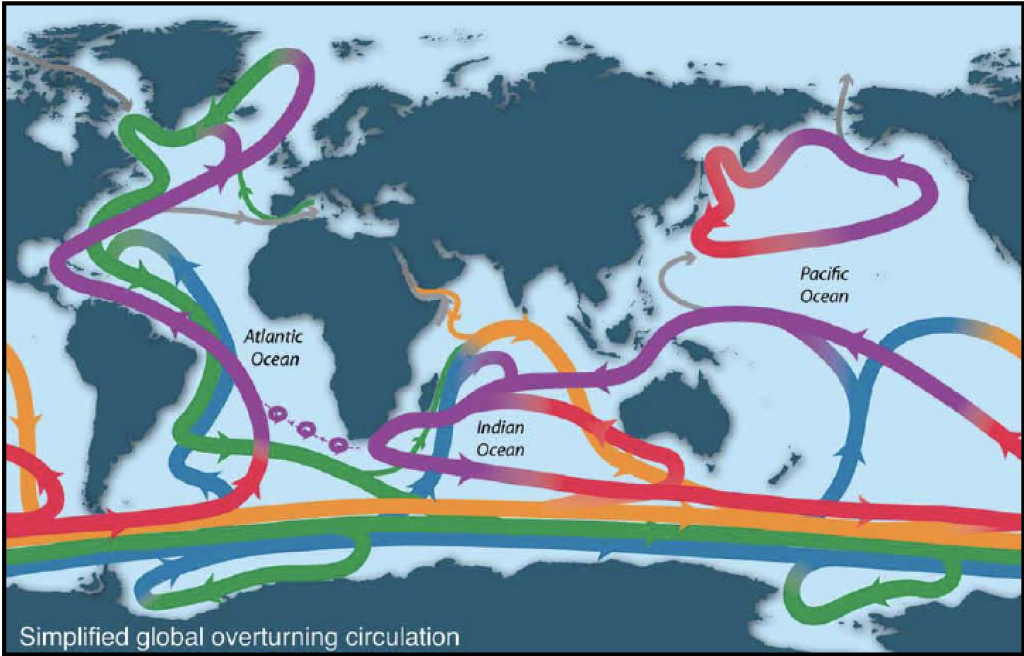


Fig. 21. Circulation méridienne de recouvrement : schéma actualisé. ★★ [1]

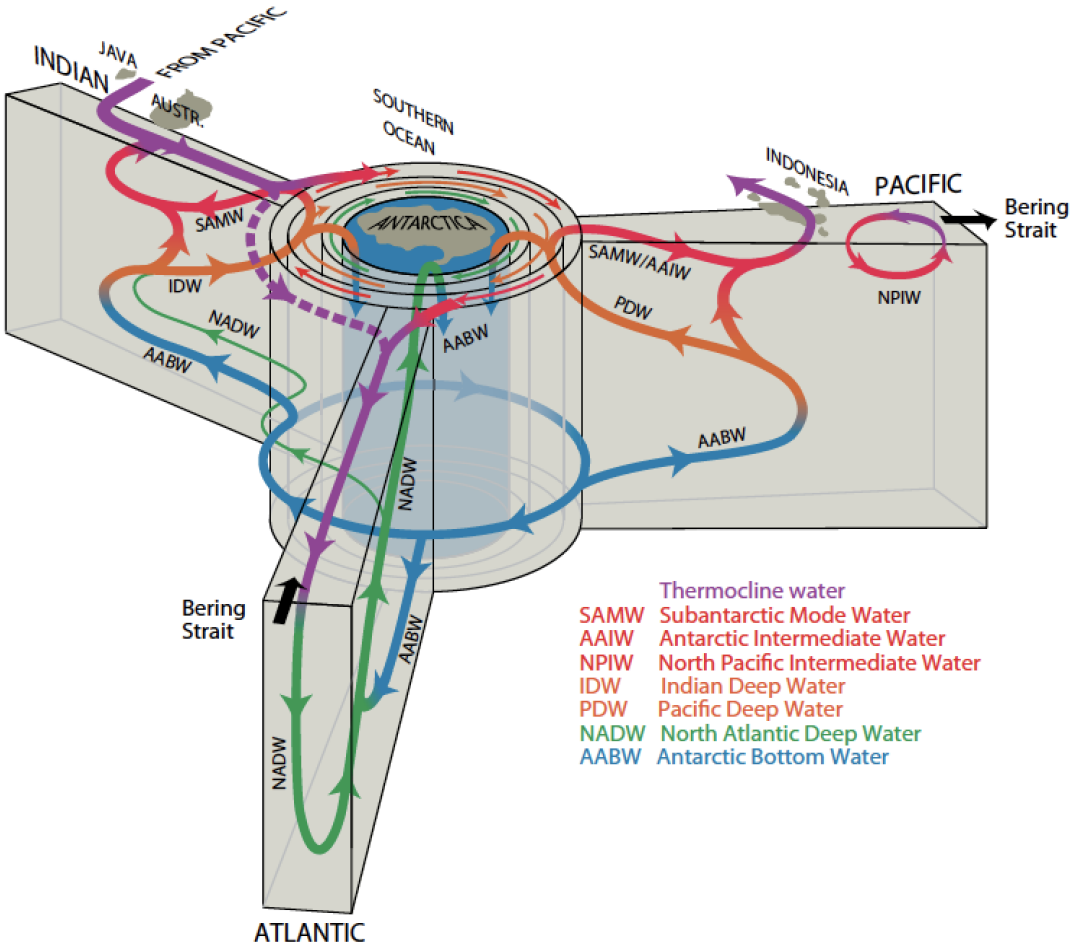


Fig. 22. Vision centrée sur l'océan austral (antarctique) ★★ [1]

Références

[1] Ouvrage ou page Internet non précisé
[2] A. Proust (cours BCPST1)
[3] Banque de schémas SVT – ac-dijon.fr
[4] <http://commons.wikimedia.org>
[5] Biologie-Géologie tout-en-un BCPST1. Vuibert éd.
[6] <https://www.weather.gov/>
[7] [https://commons.wikimedia.org/wiki/File:Map_world_climate_zones_\(simplified_to_10\)-fr.svg](https://commons.wikimedia.org/wiki/File:Map_world_climate_zones_(simplified_to_10)-fr.svg)