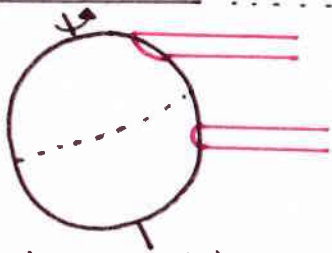
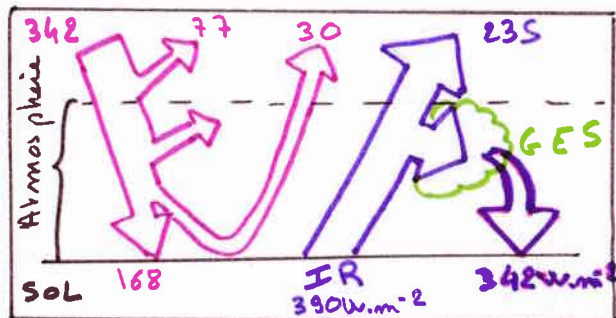


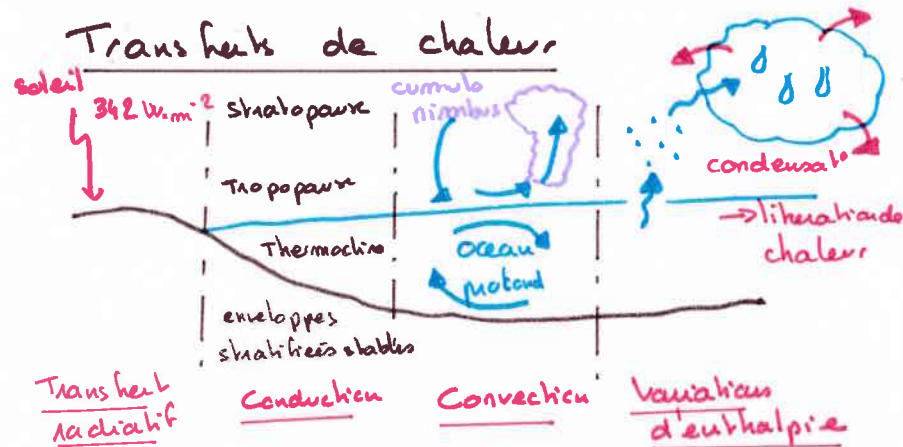
Flux solaire: 342 W.m^{-2}



Bilan radiatif. (W.m^{-2})



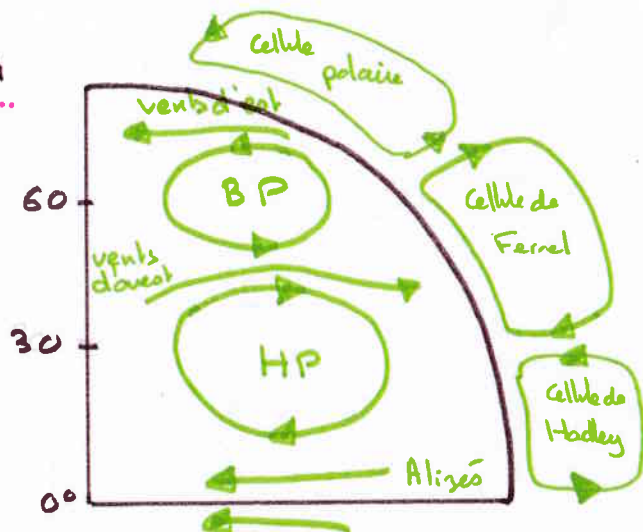
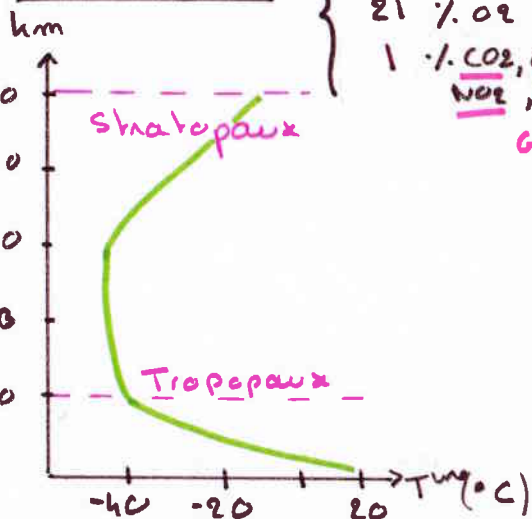
Transferts de chaleur



Inégale répartition

Atmosphère

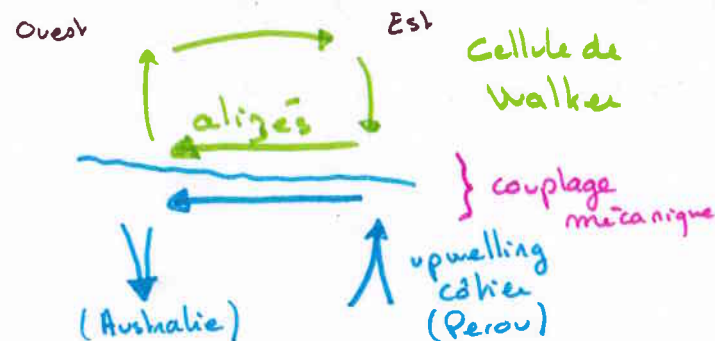
78 % N_2
21 % O_2
1 % $\text{CO}_2, \text{CH}_4, \text{NO}_2, \text{O}_3 \dots$
GES



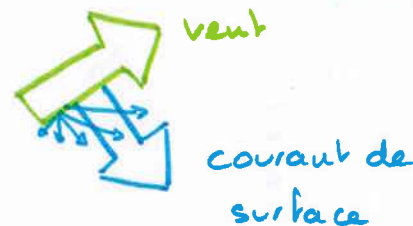
Couplage Océans - Atmosphère:

circulation océanique de surface.

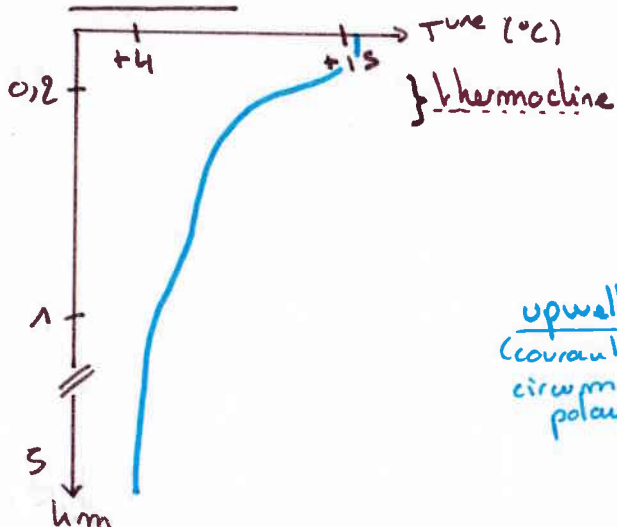
• Équateur - tropiques: ϕ Coriolis



• Latitudes > tropiques: spirale d'Ekman (Hémisphère Nord)



Océans



Circulation profonde

$v \approx 99 \text{ km.an}^{-1}$
10 à 100 fois + lent qu'en surface

