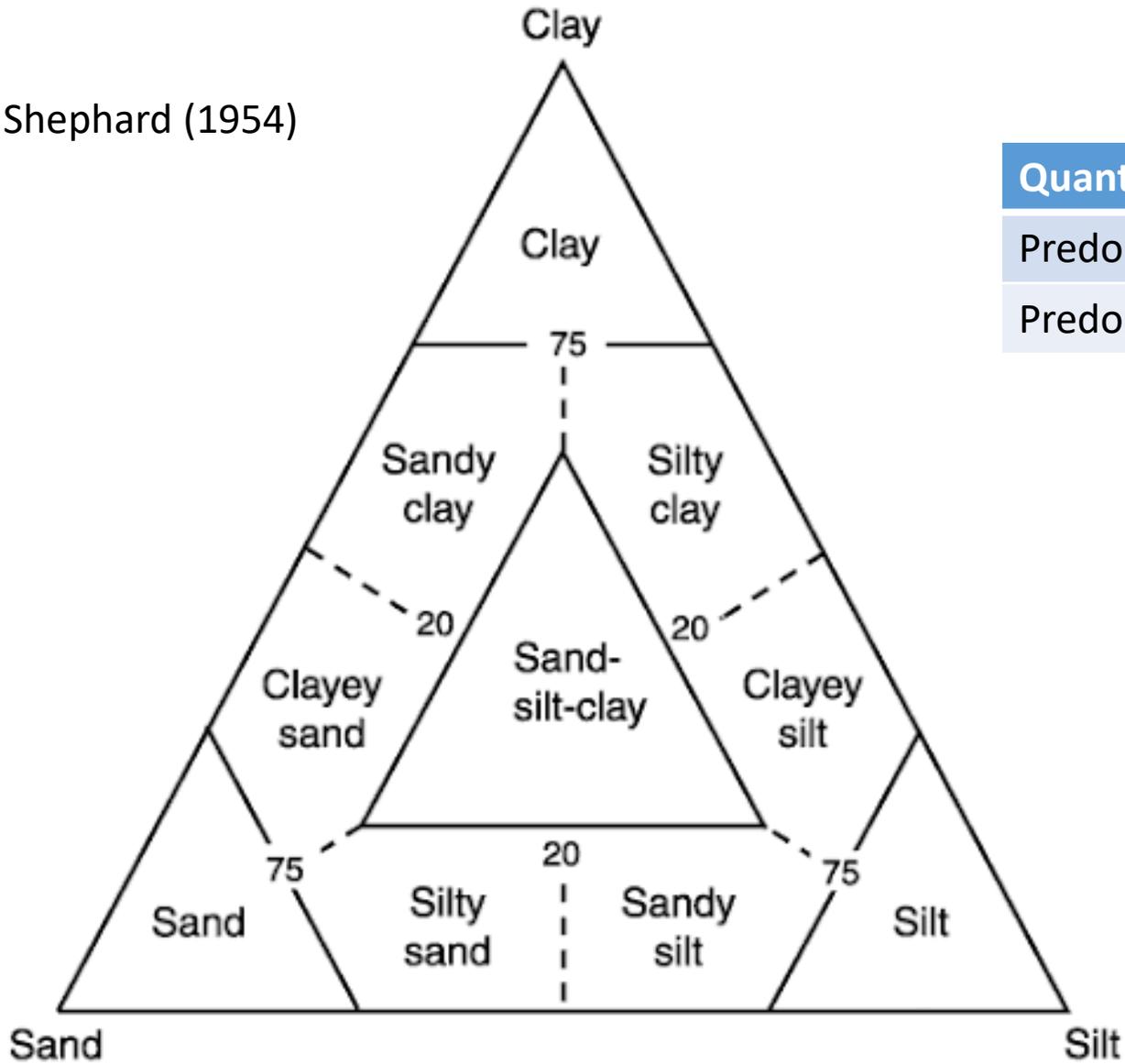


Folhelhos orgânicos

GSA0252-Sedimentologia

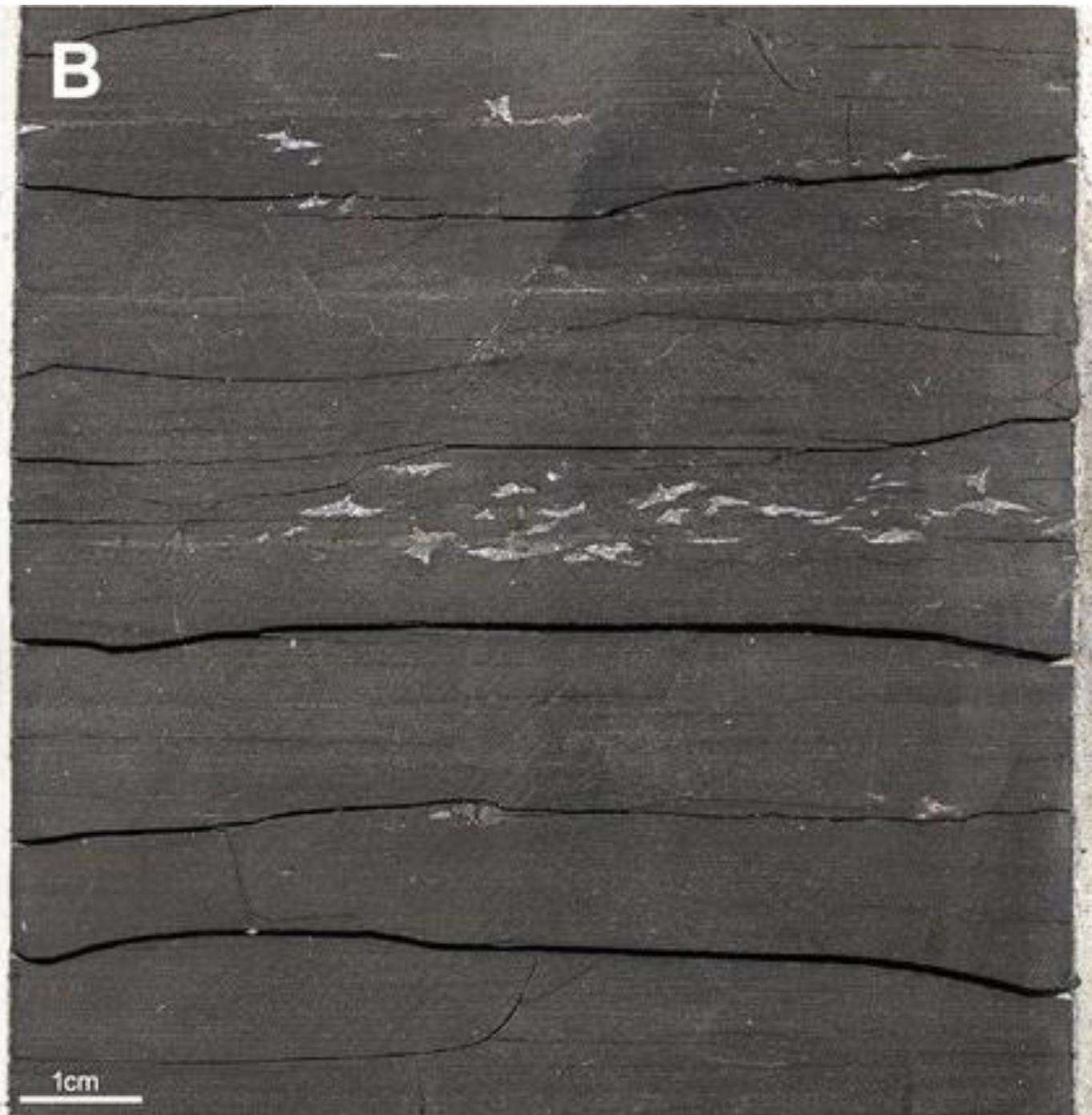
Classificação de rochas pelíticas

Shephard (1954)



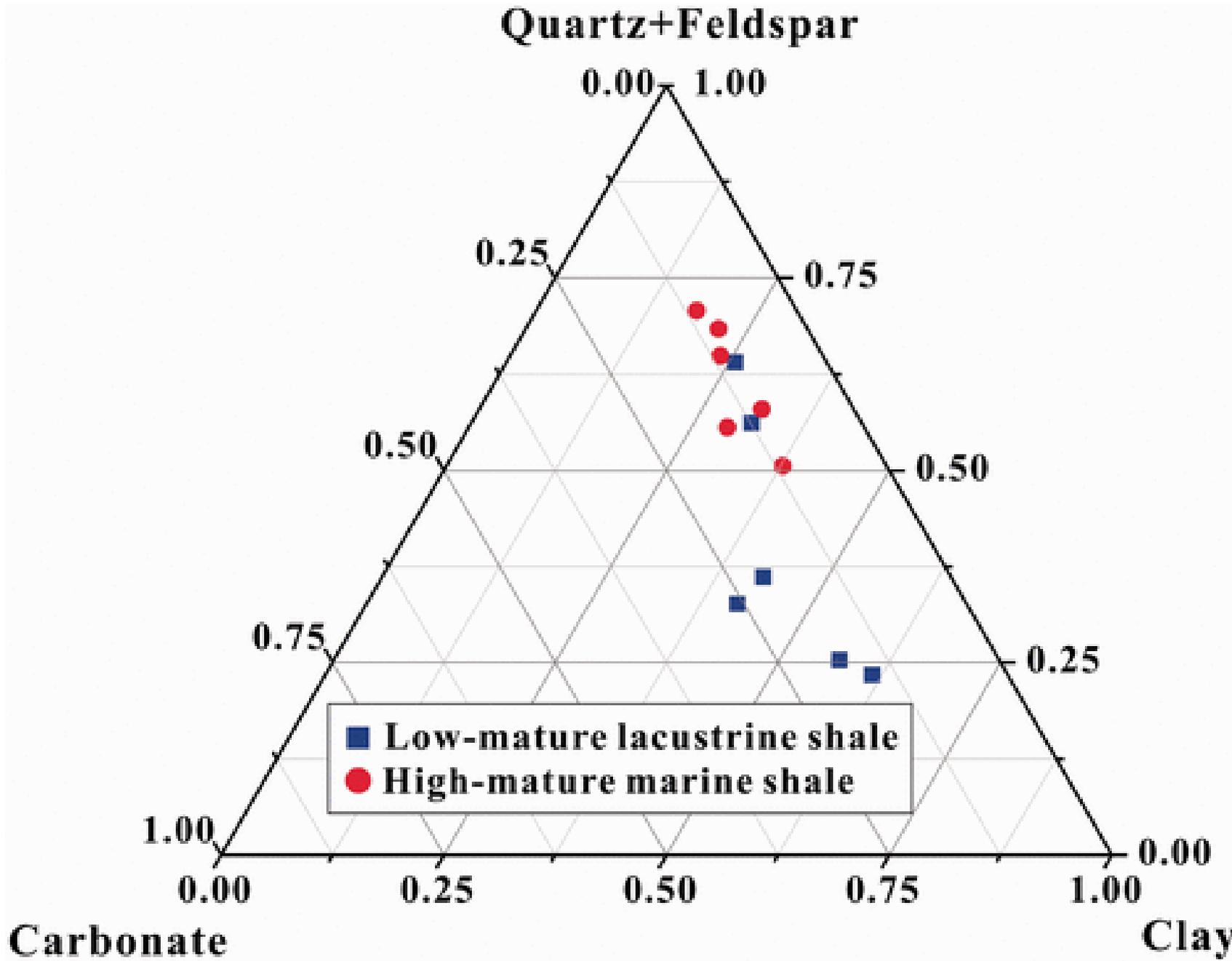
Quantidade de silte e argila	Físsil (laminação)	Maciço
Predomínio de silte	Folhelho siltoso	Siltito
Predomínio de argila	Folhelho argiloso	Argilito



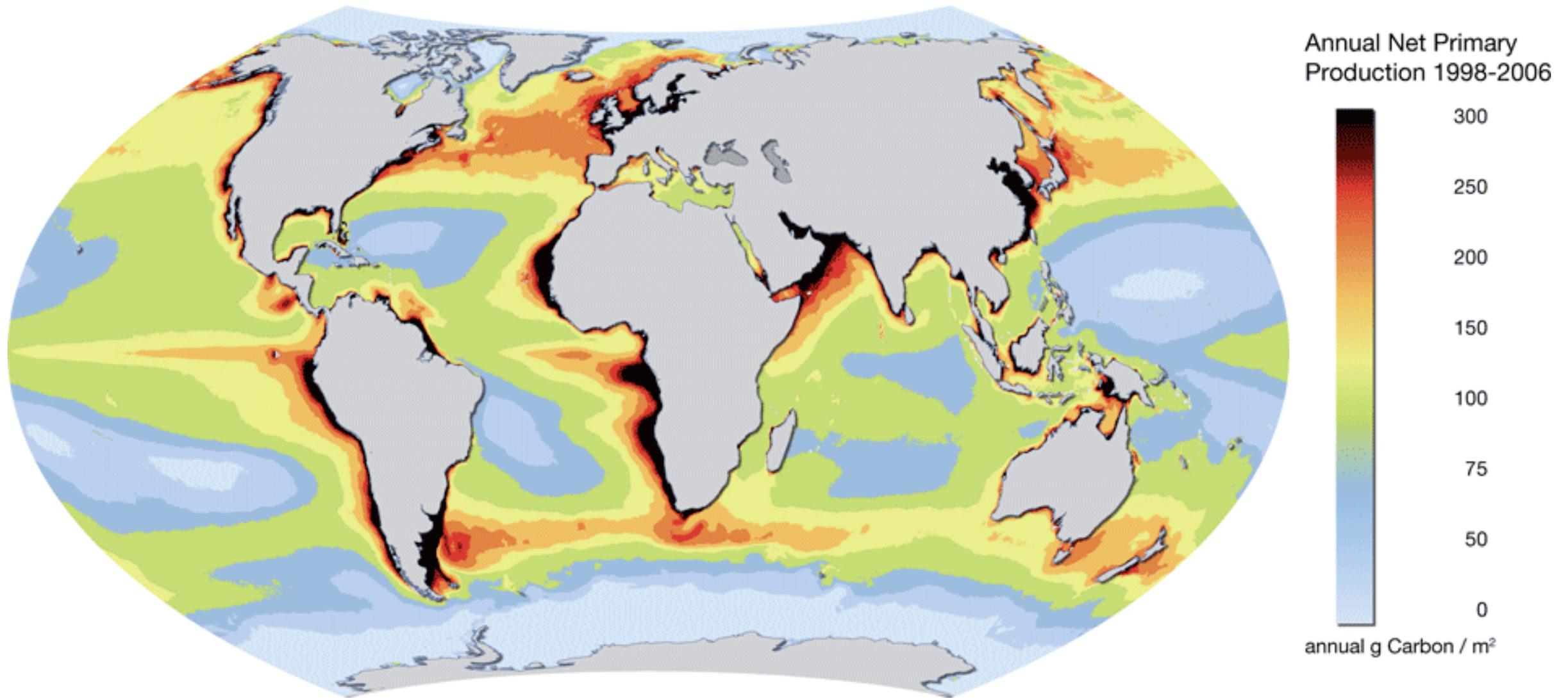


B

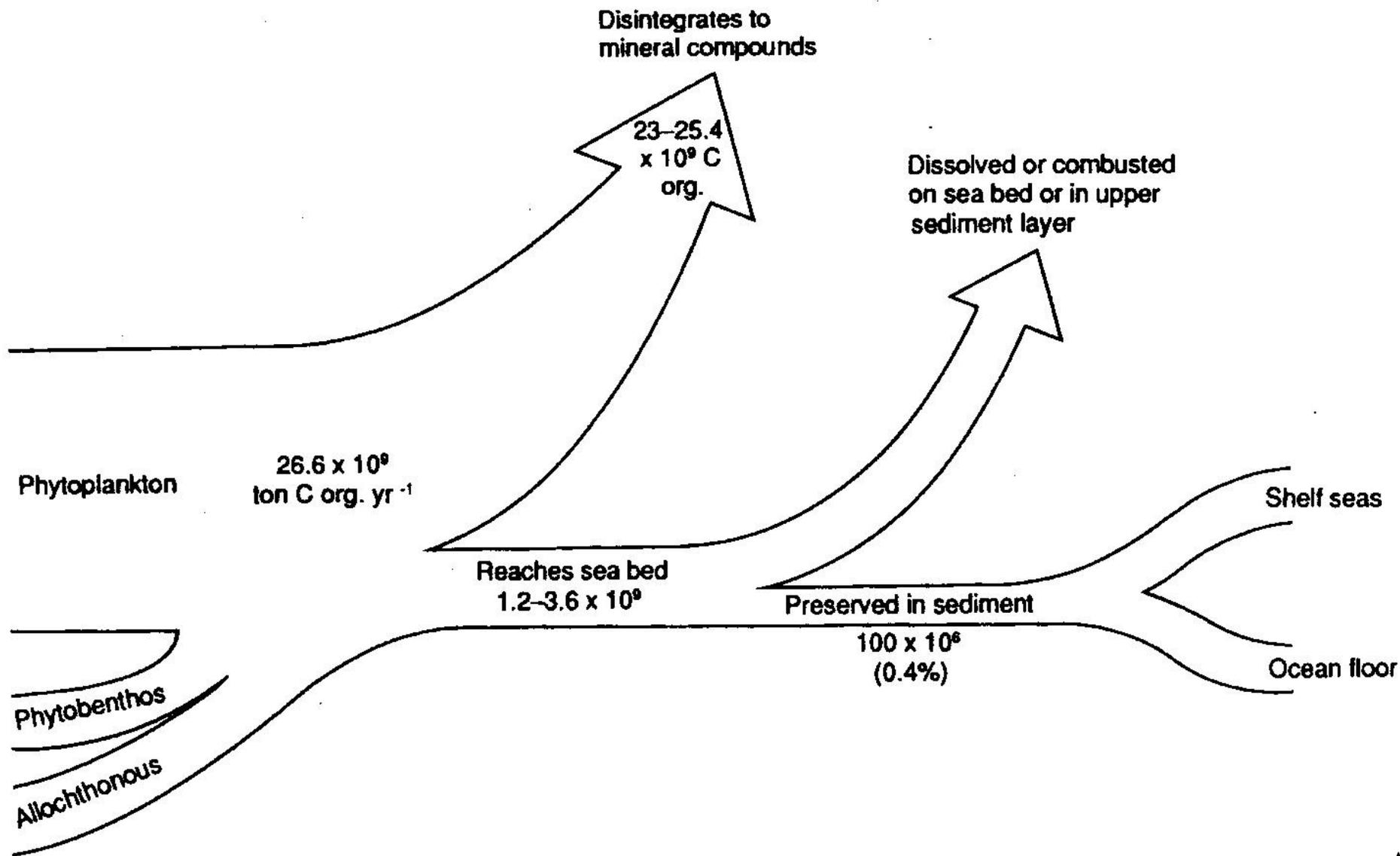
1cm



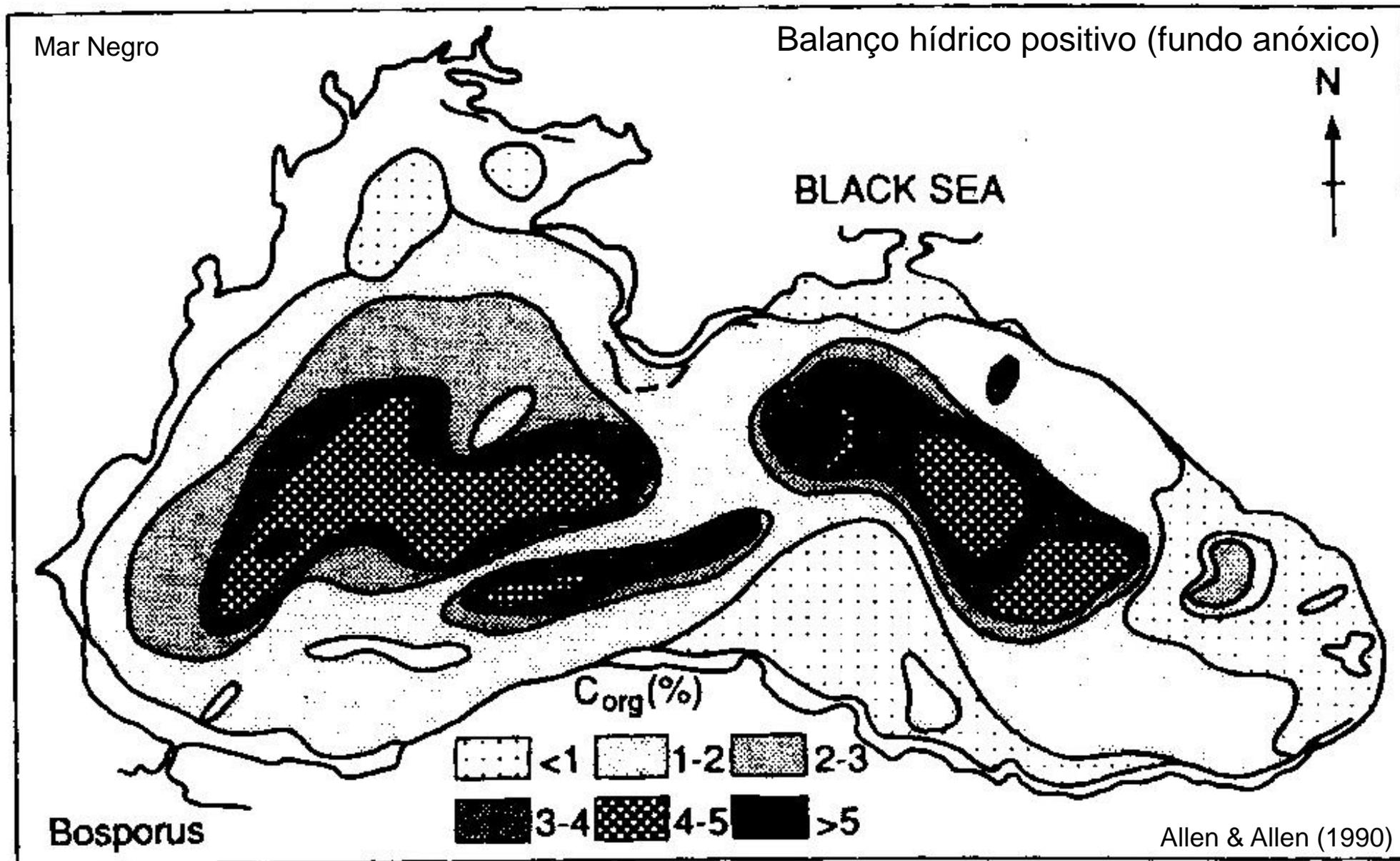
Produtividade orgânica nos oceanos atuais



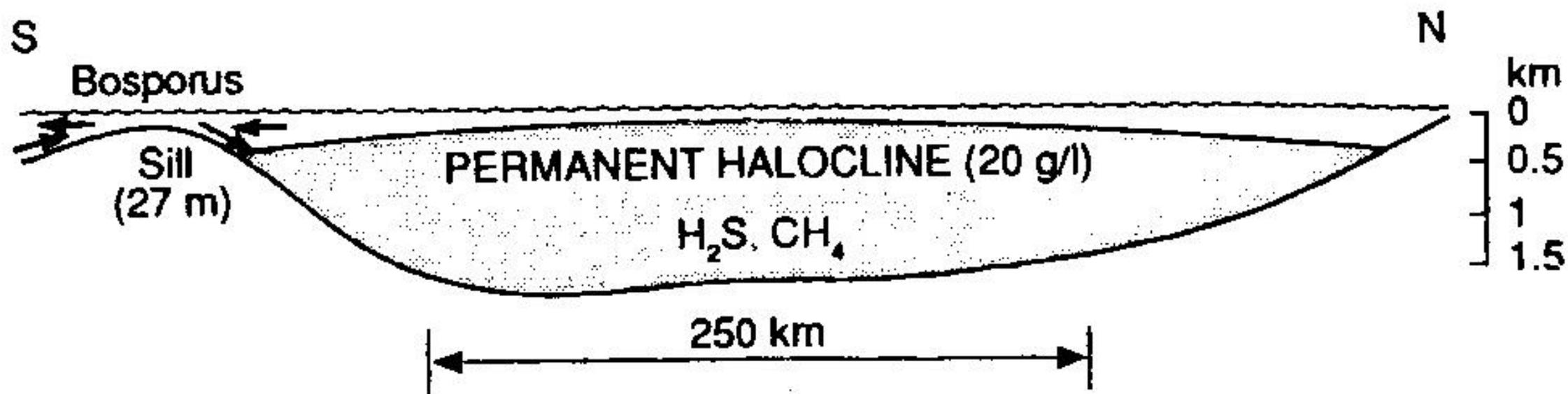
Origem da matéria orgânica dos oceanos atuais



Mares restritos



Balanço hídrico positivo e coluna d'água estratificada (fundo anóxico)



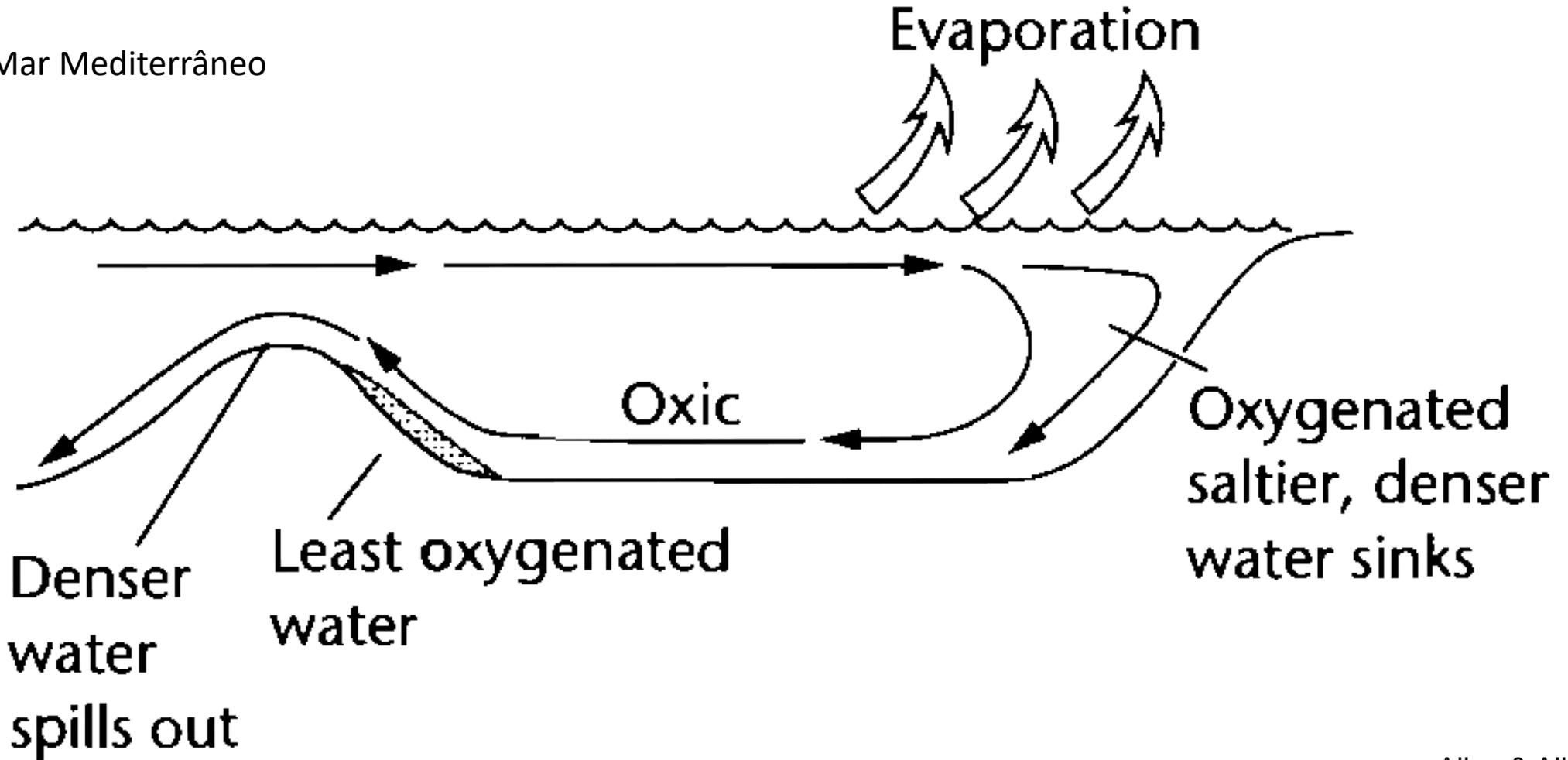
Anoxic sediments Organic carbon 1–15%
Oxic sediments Organic carbon <2.5%
 $U = 0.05\text{--}0.30\text{ mm yr}^{-1}$

Similar settings:
Baltic sea - Saanich Inlet
Lake Maracaibo

Mares restritos

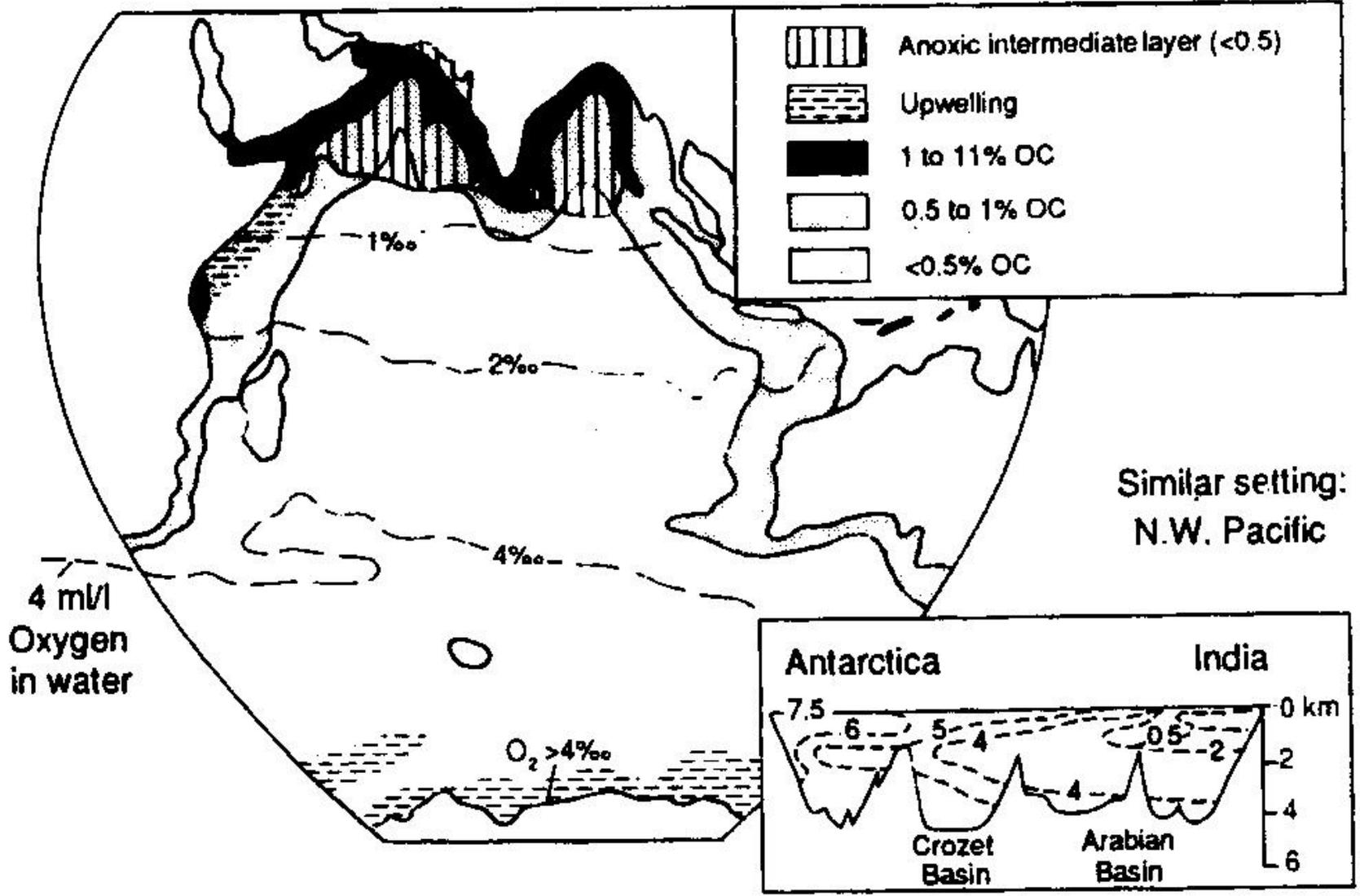
Balanço hídrico negativo e coluna d'água com mistura vertical (fundo oxigenado)

Ex. Mar Mediterrâneo



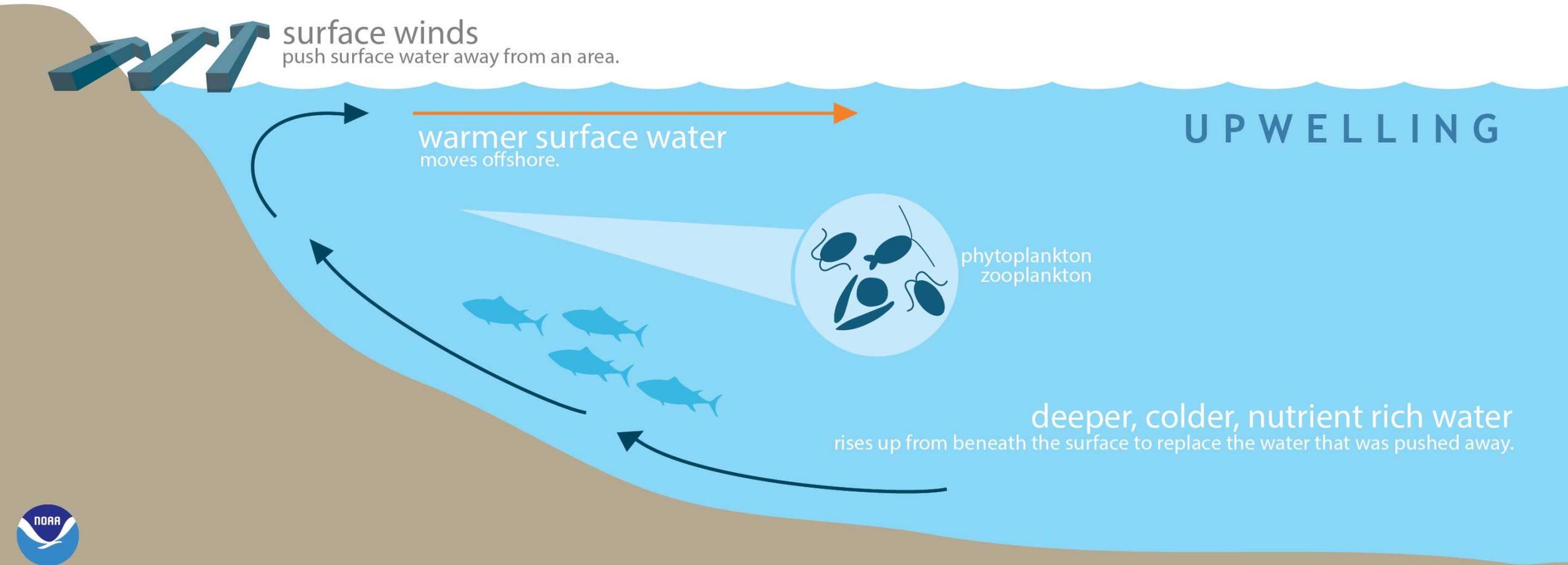
Zona de oxigenação mínima

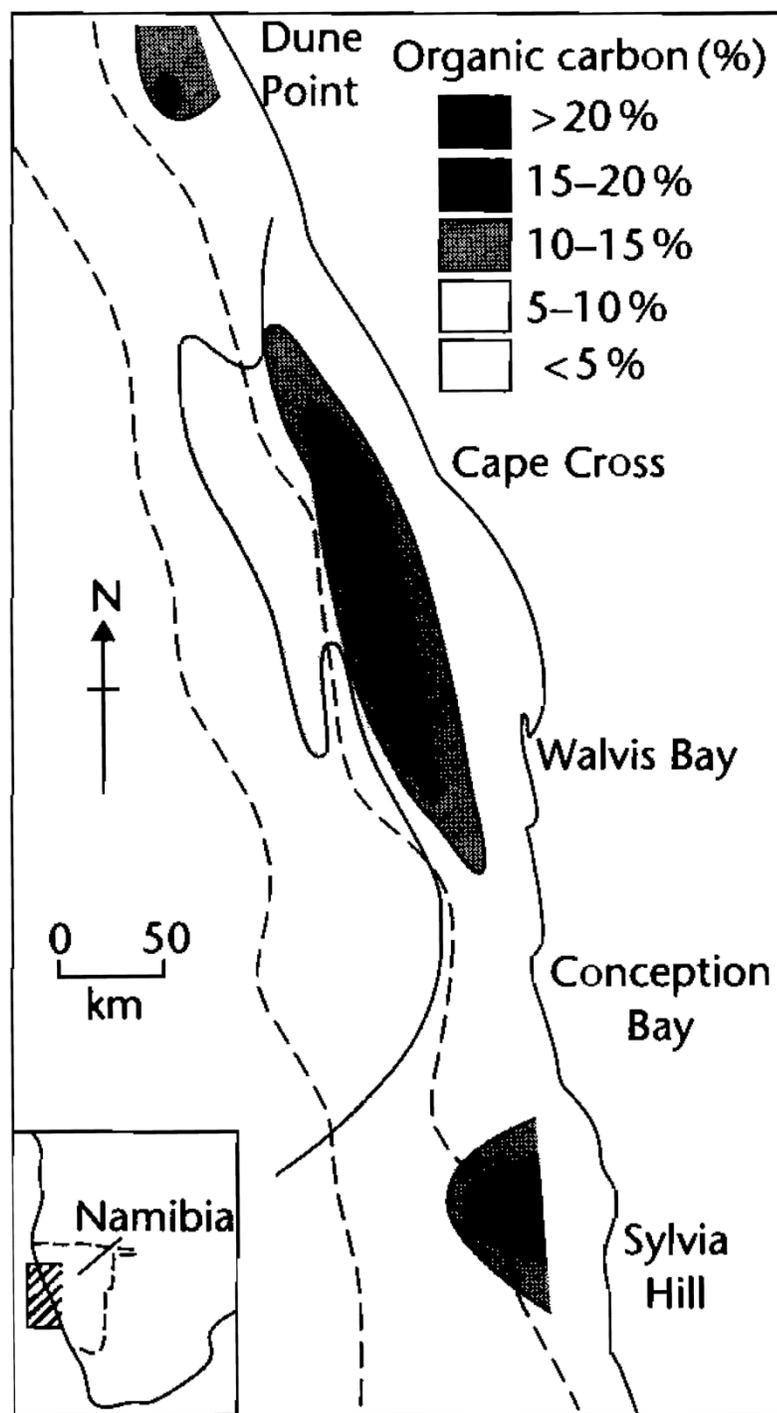
Concentração de O₂ (ml/l) e carbono orgânico (%peso)



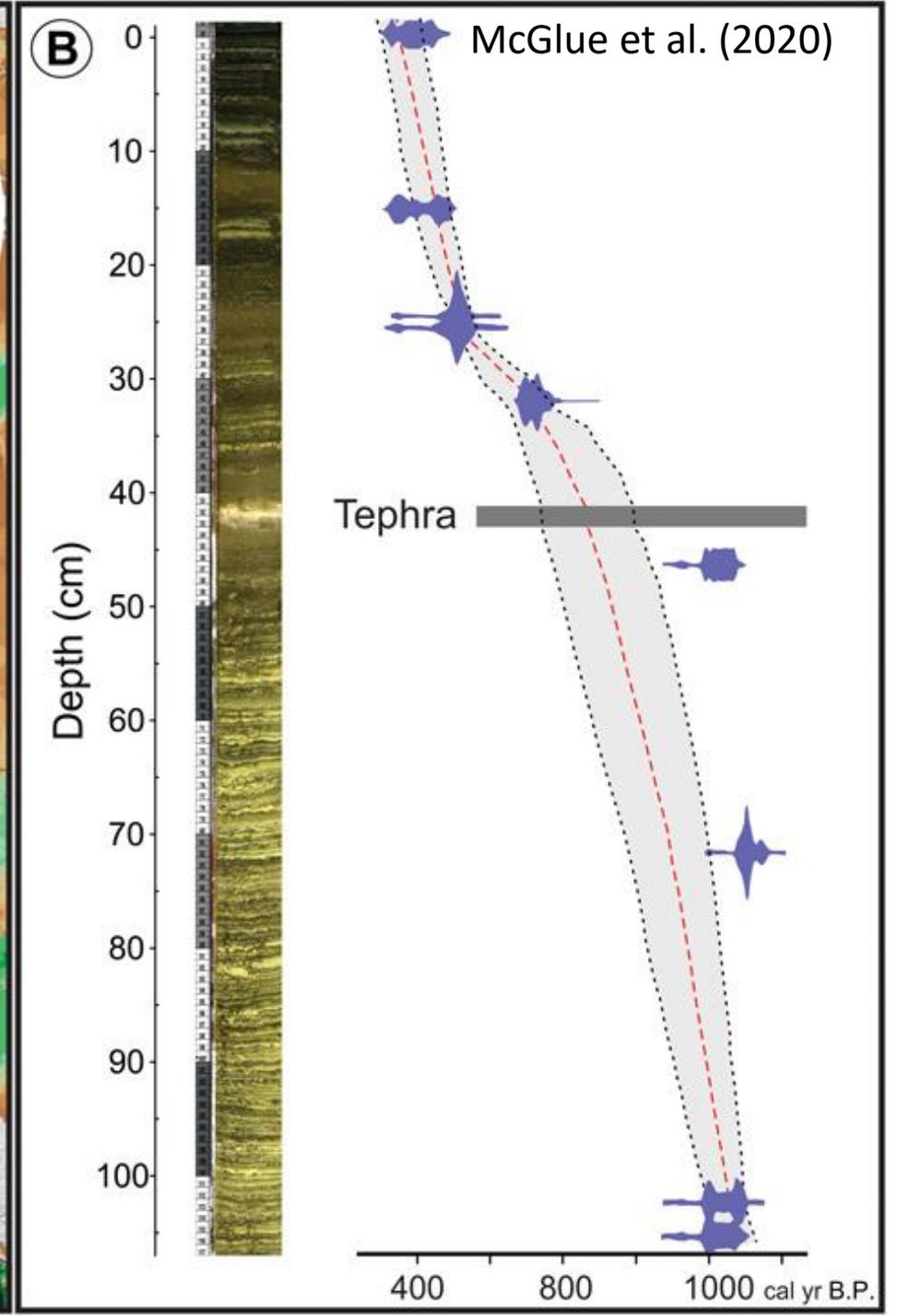
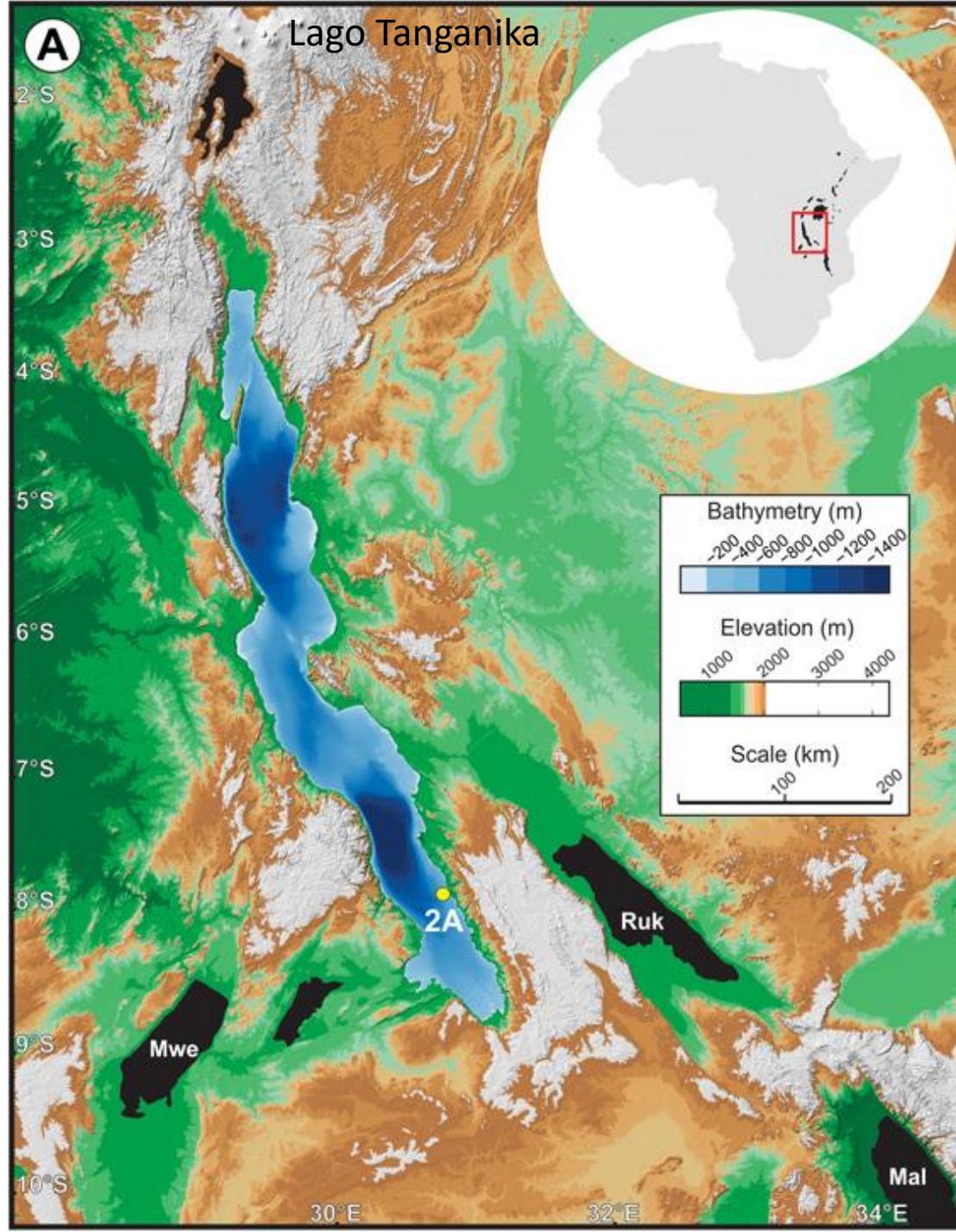
Zonas de ressurgência

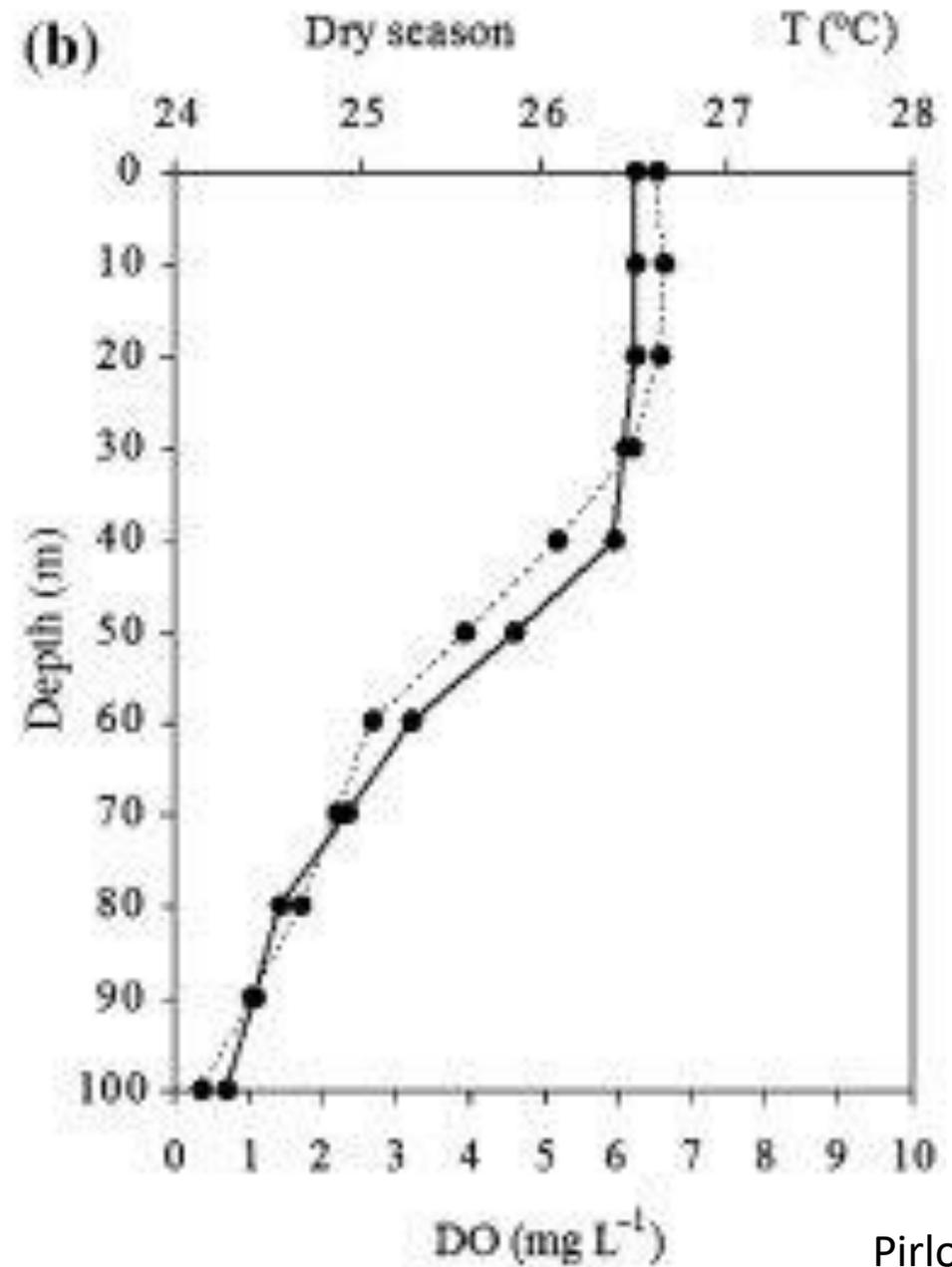
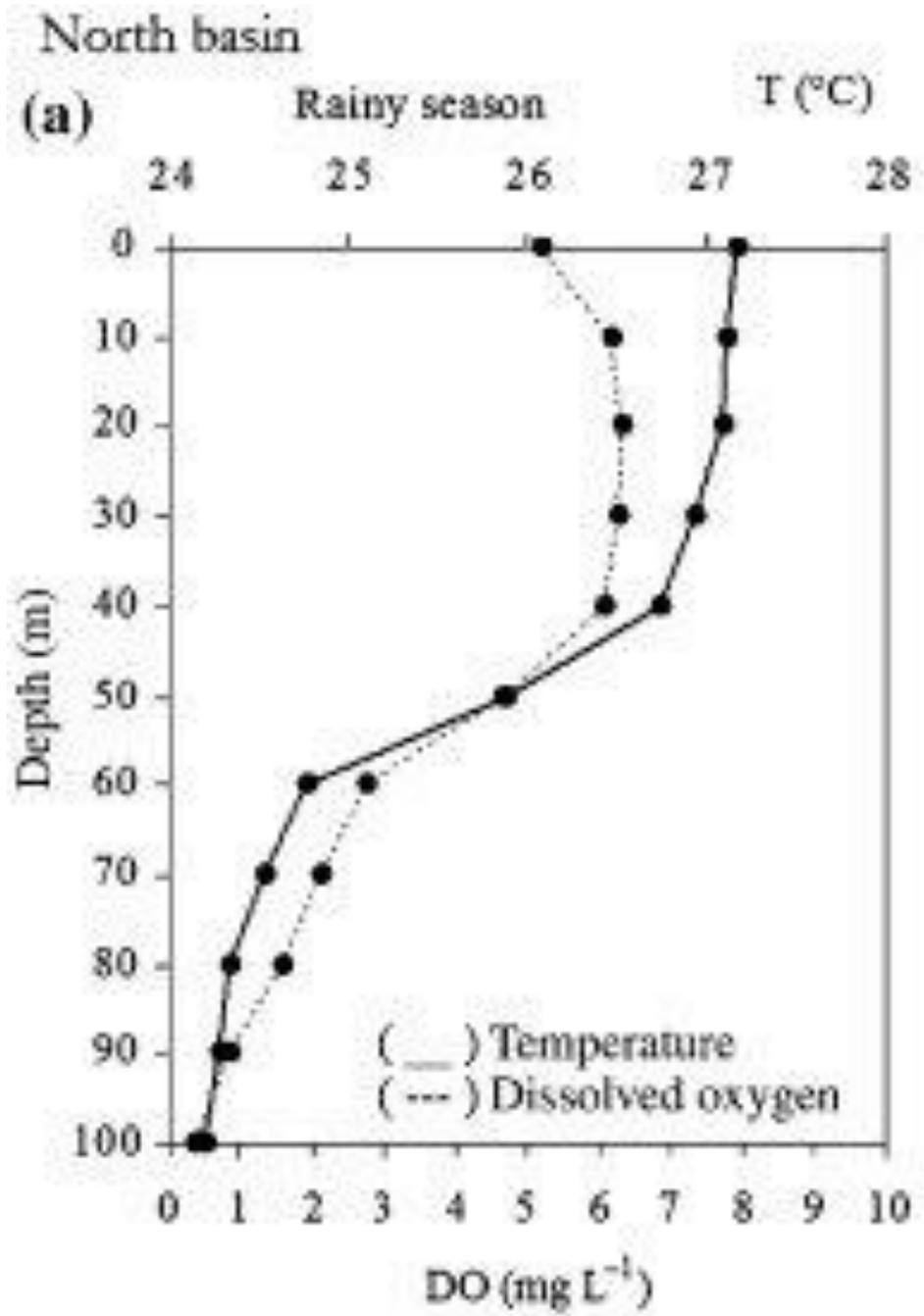
Ex. offshore Peru, Namíbia,
Califórnia, Cabo Frio

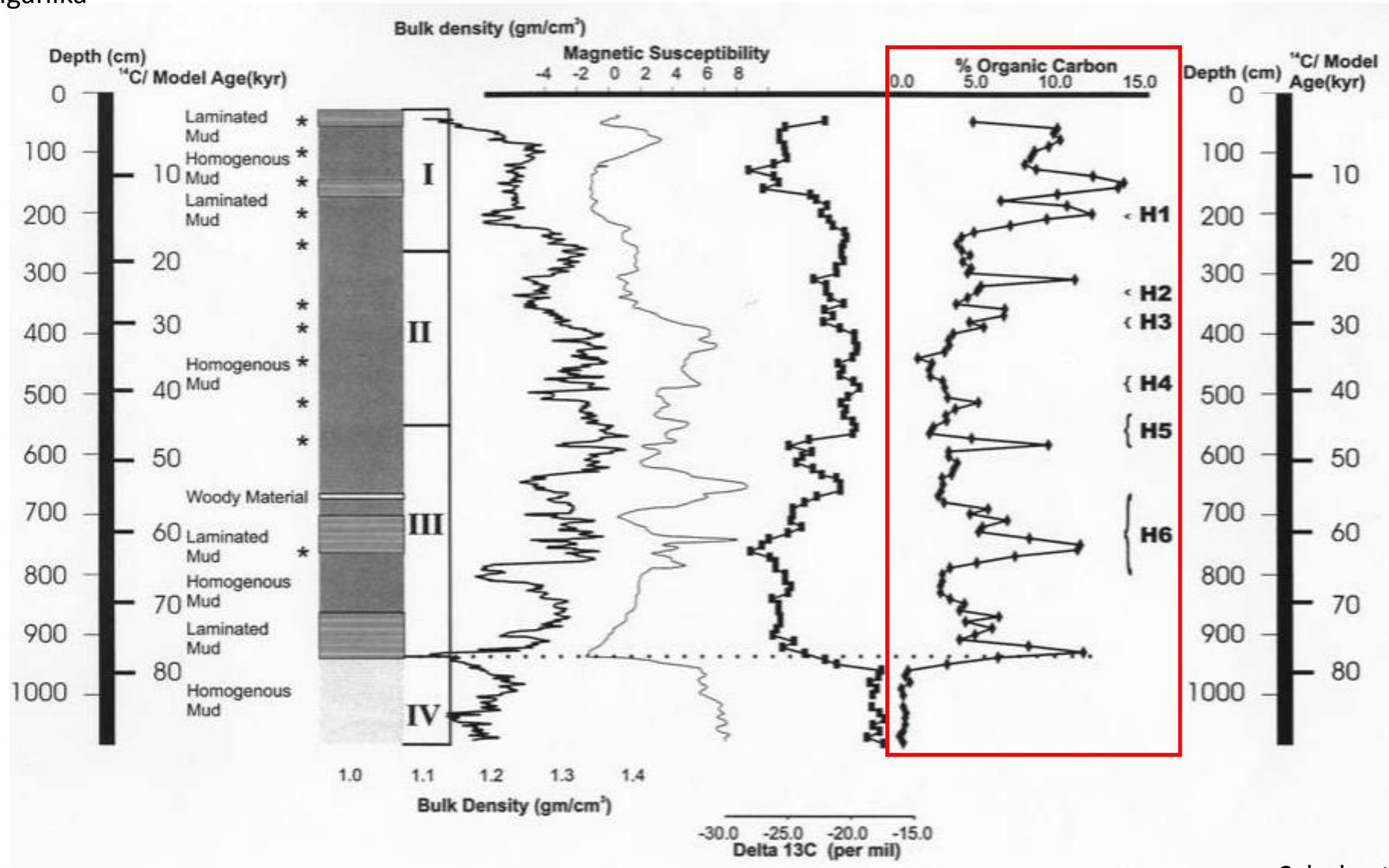




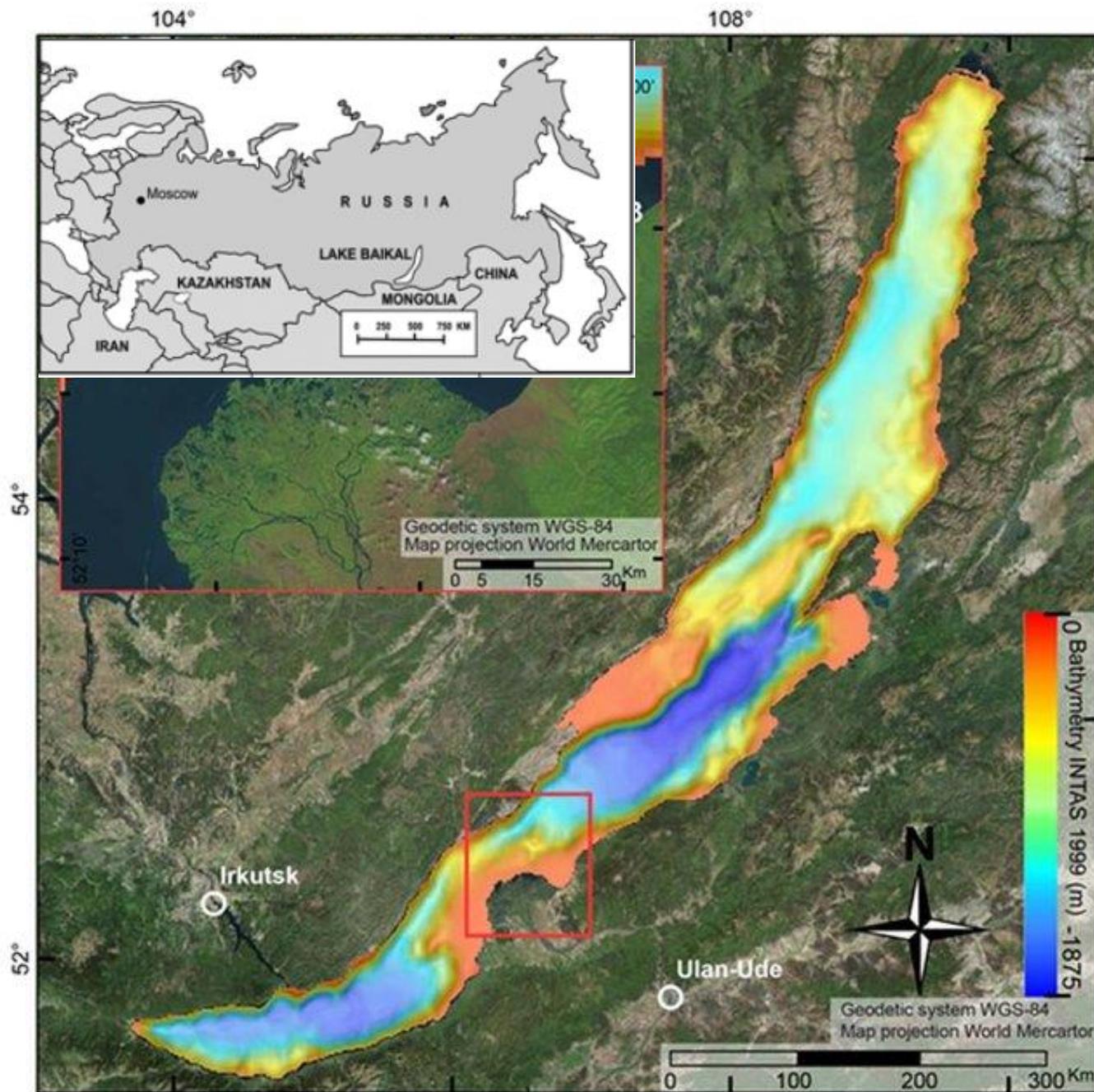
Lagos profundos



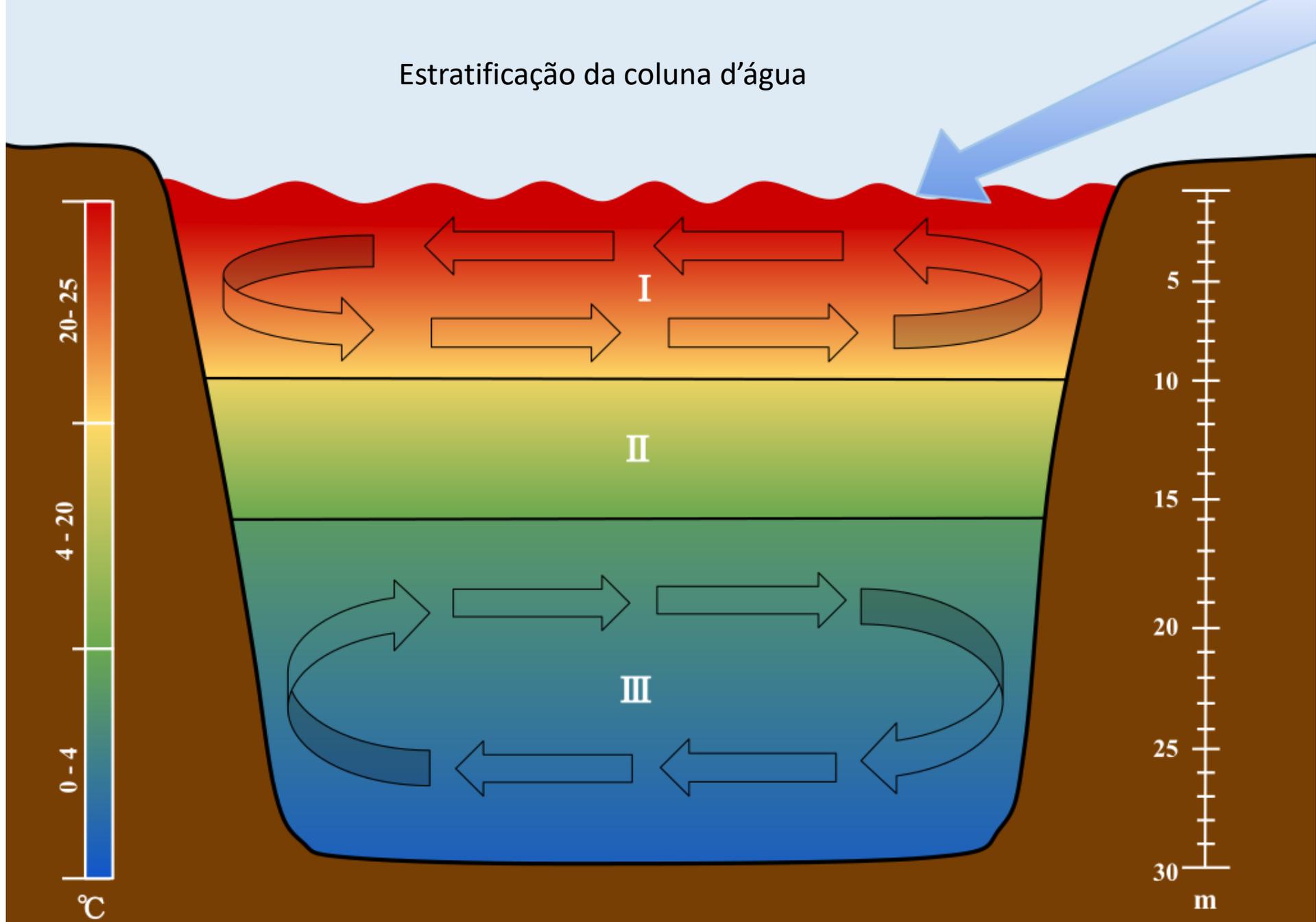




Lago Baikal
(alta latitude)



Estratificação da coluna d'água



Diagênese

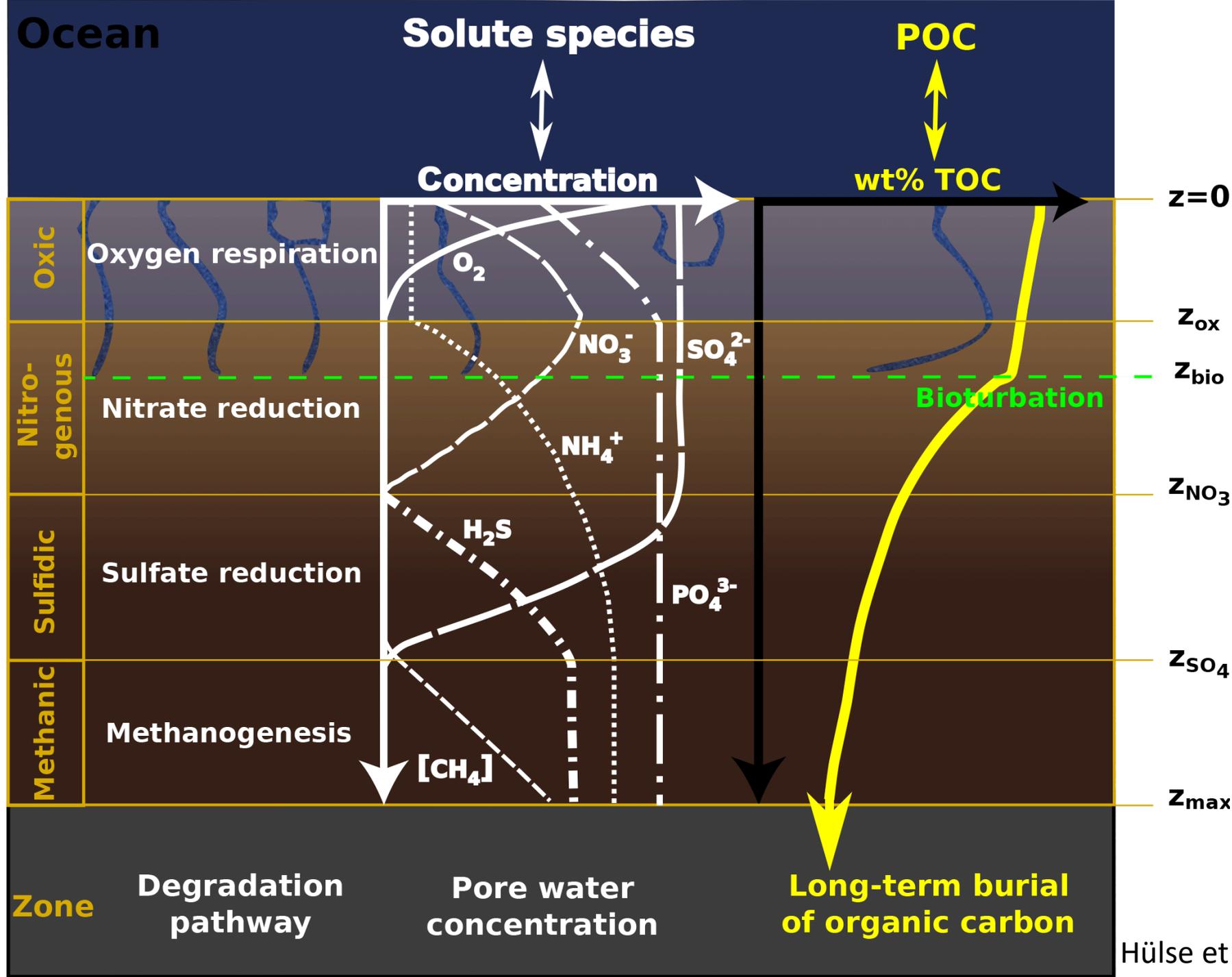
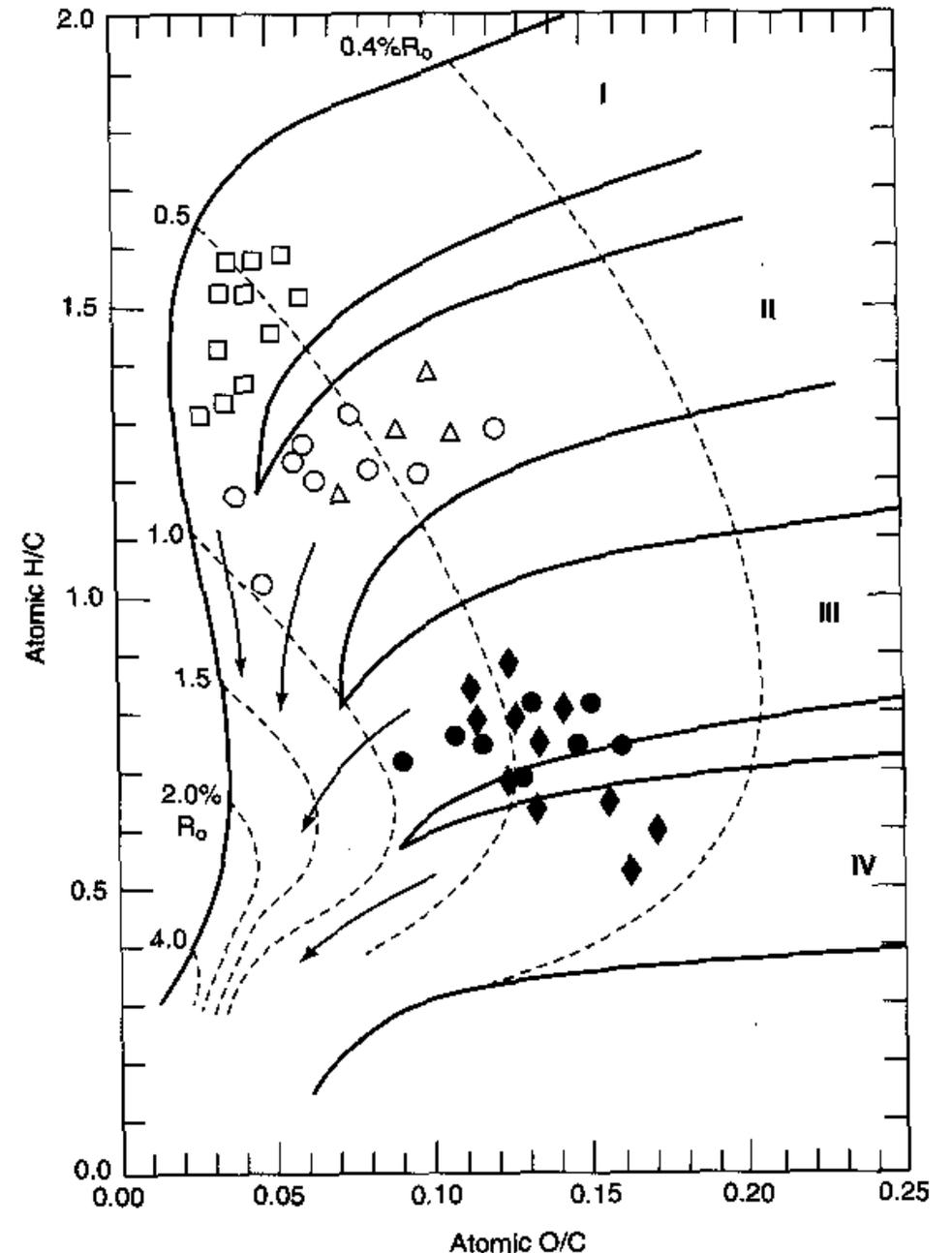
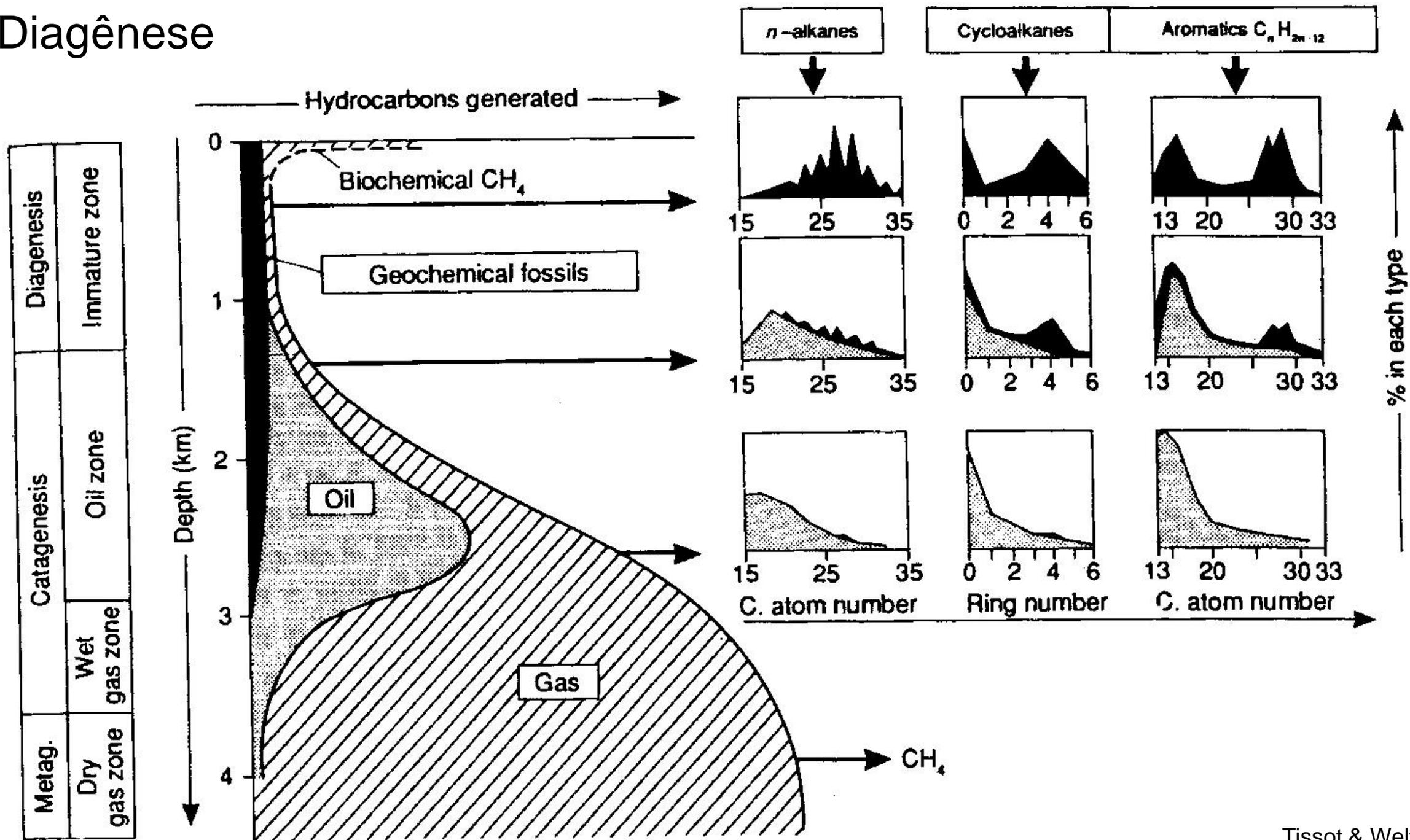


Diagrama de Van Krevelen

Querogênio	H/C	O/C	Origem
Tipo I	1,5 a 1,8	<0,1	Lacustre
Tipo II	1,0 a 1,3	<0,15	Marinha
Tipo III	<1,0	0,2 a 0,3	Plantas terrestres
Tipo IV	<0,5		I,II ou III oxidada



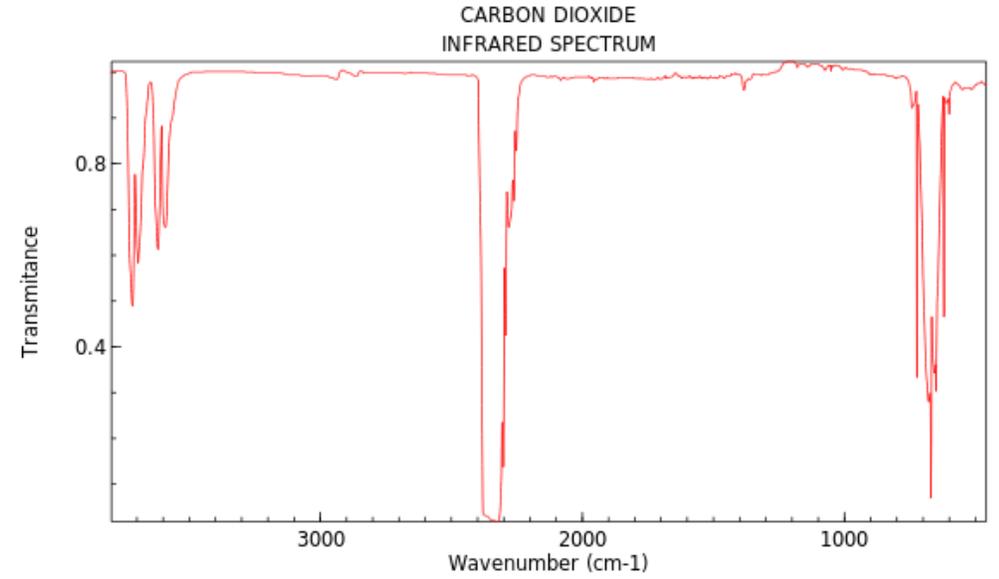
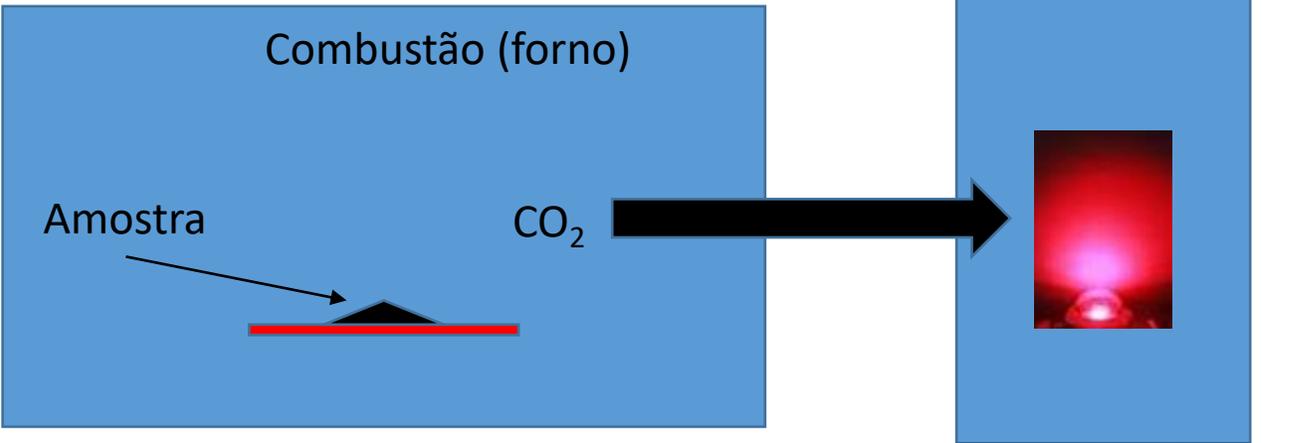
Diagenèse



Como caracterizar rochas pelíticas?

- Presença ou ausência de fissilidade
- **Teor de carbono orgânico (COT)**
- Tipo de querogênio
- Composição mineralógica
- Porosidade

COT (Carbono orgânico total) e CIT (carbono inorgânico total)



NIST Chemistry WebBook (<https://webbook.nist.gov/chemistry>)

