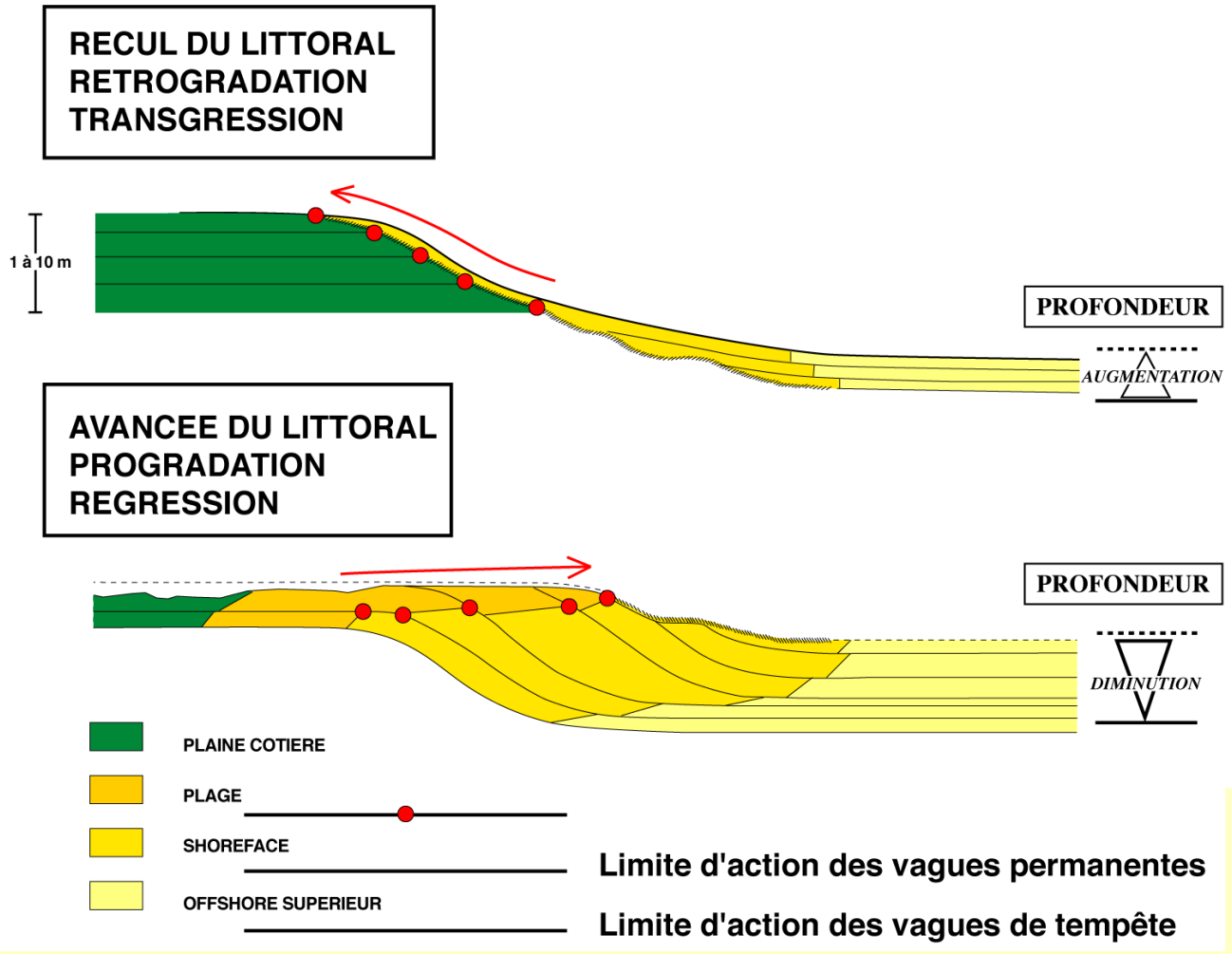
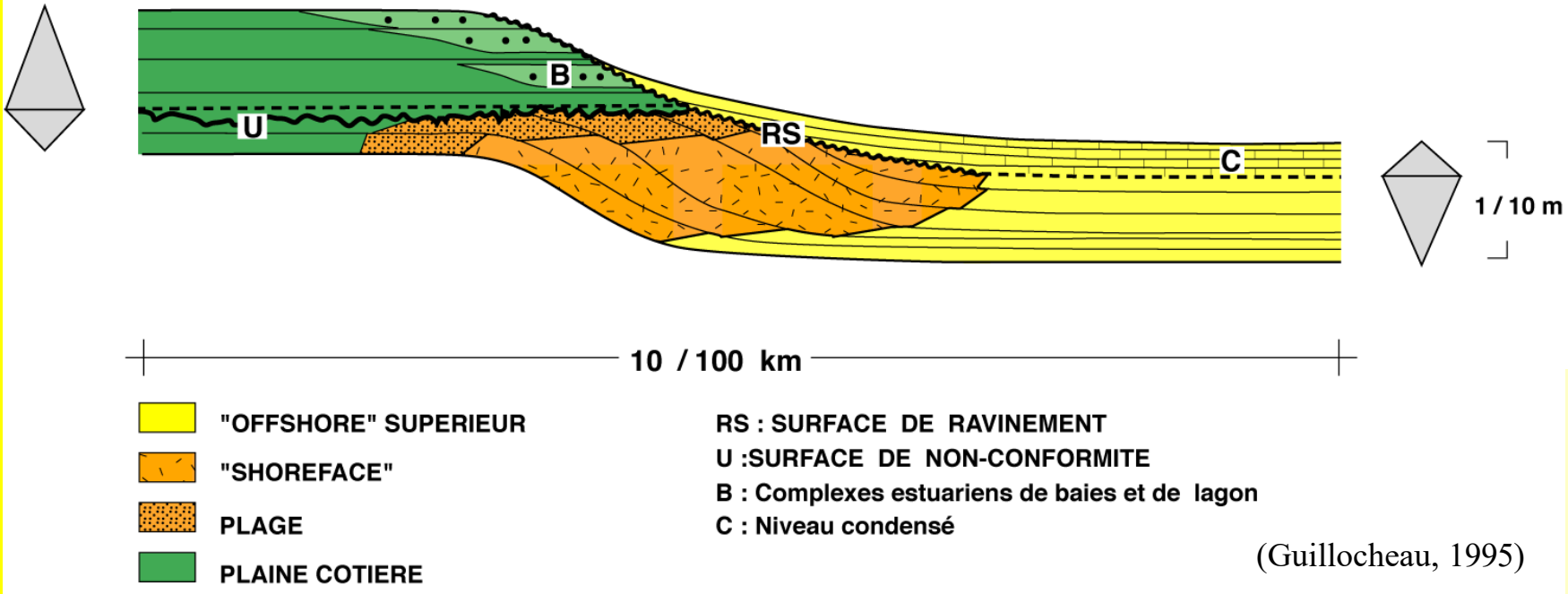
Une séquence transgressive / régressive



(Guillocheau, 1995)

Une séquence transgressive / régressive : Le partitionnement volumétrique



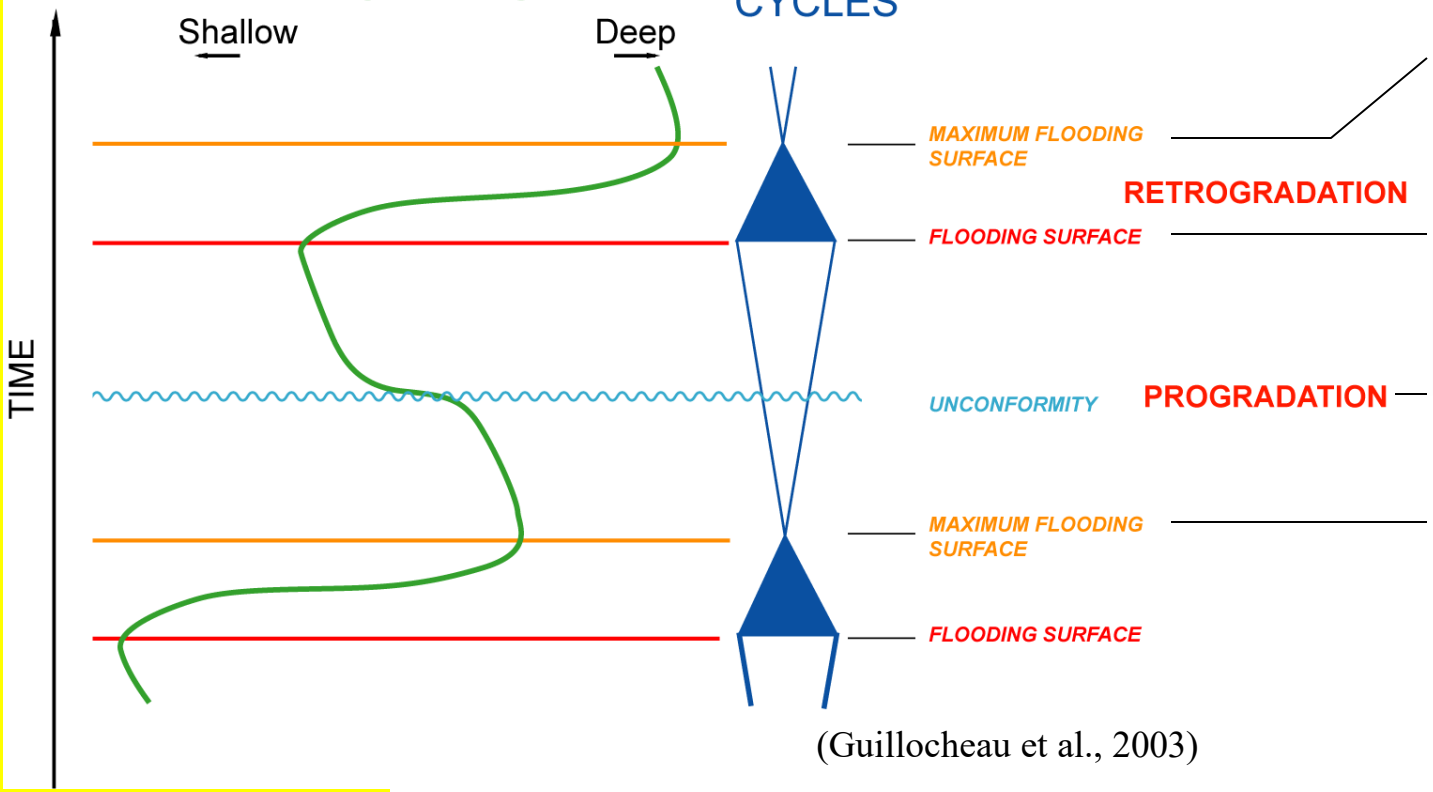
(Guillocheau, 1995)

Une séquence transgressive / régressive

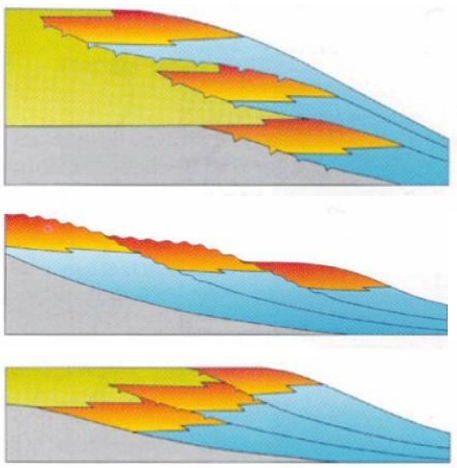
DEFINITION OF STRATIGRAPHIC CYCLES : [A] / [S] CYCLES

[A] / [S] = PALEODEPTH / PALEO-ALTITUDE

PROGRADATION/ RETROGRADATION CYCLES

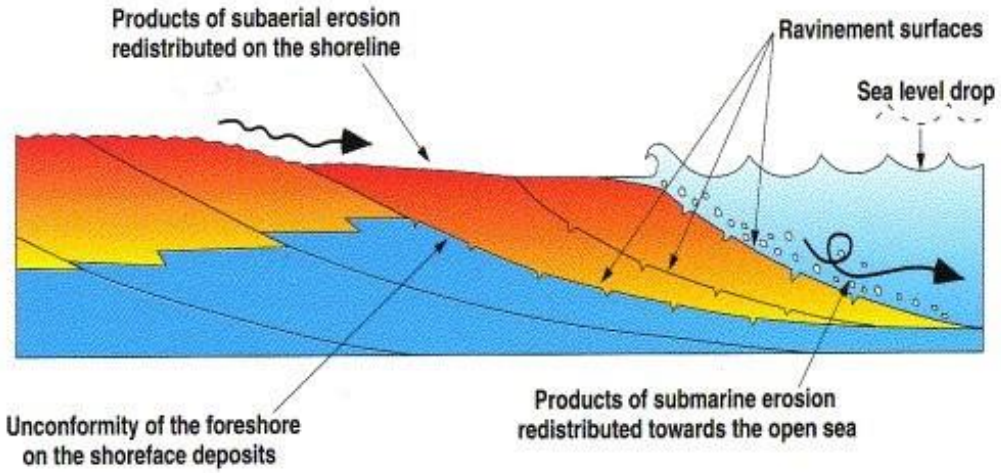


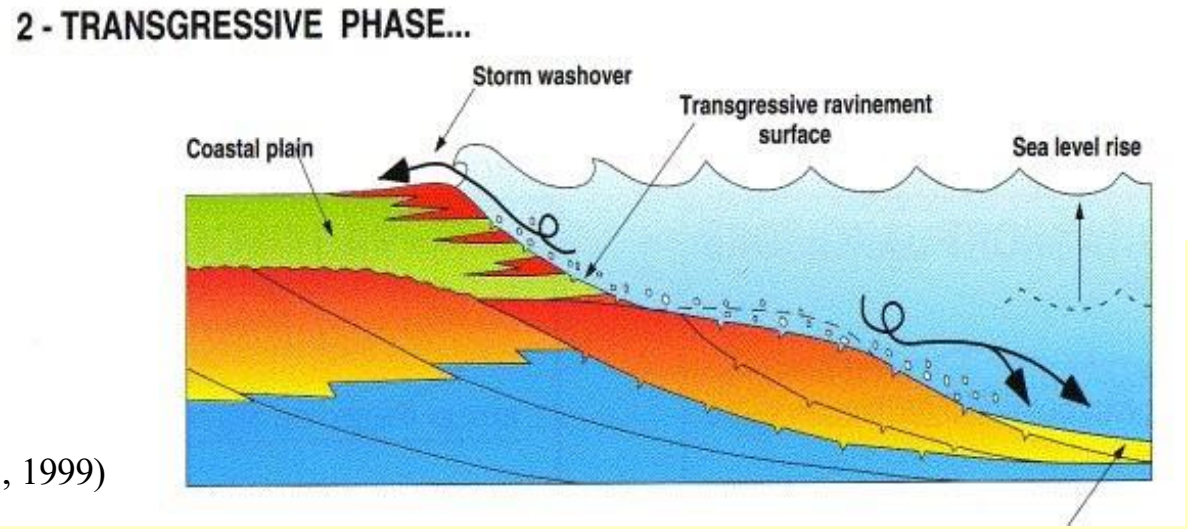
(Guillocheau et al., 2003)



(Homewood et al., 1999)

Une séquence en système terrigène

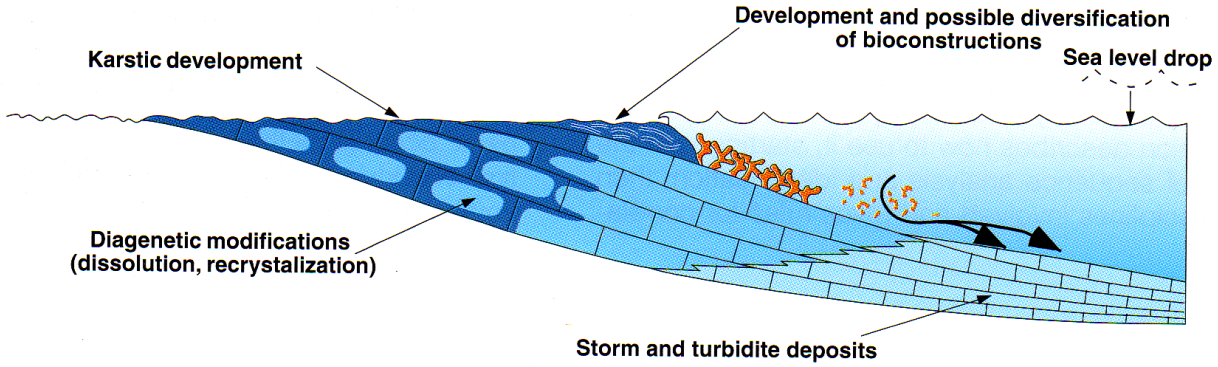




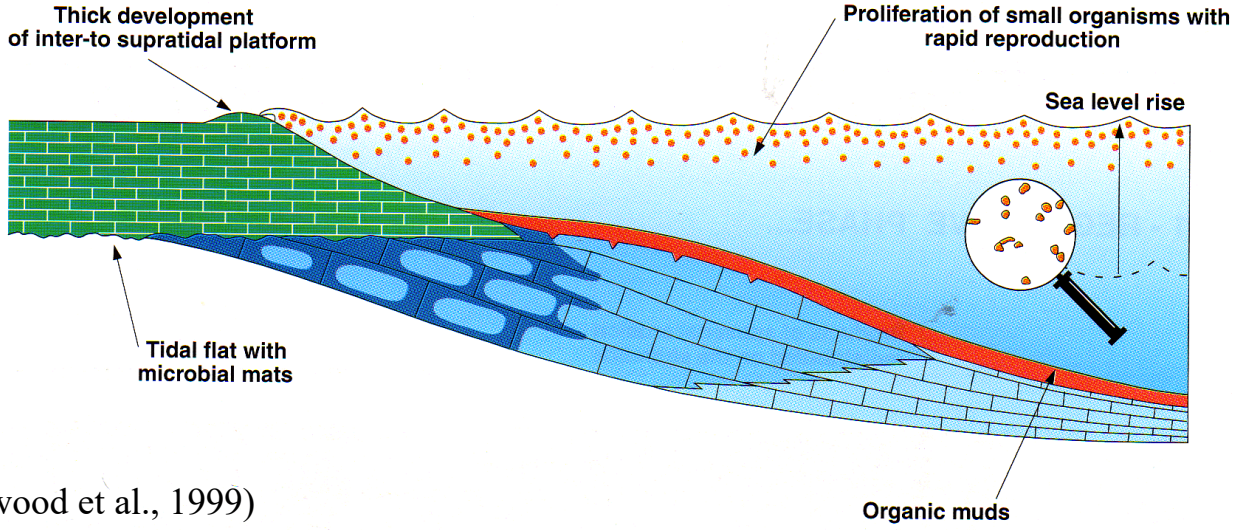
(Homewood et al., 1999)

Une séquence en système carbonaté

1 - REGRESSIVE PHASE ...

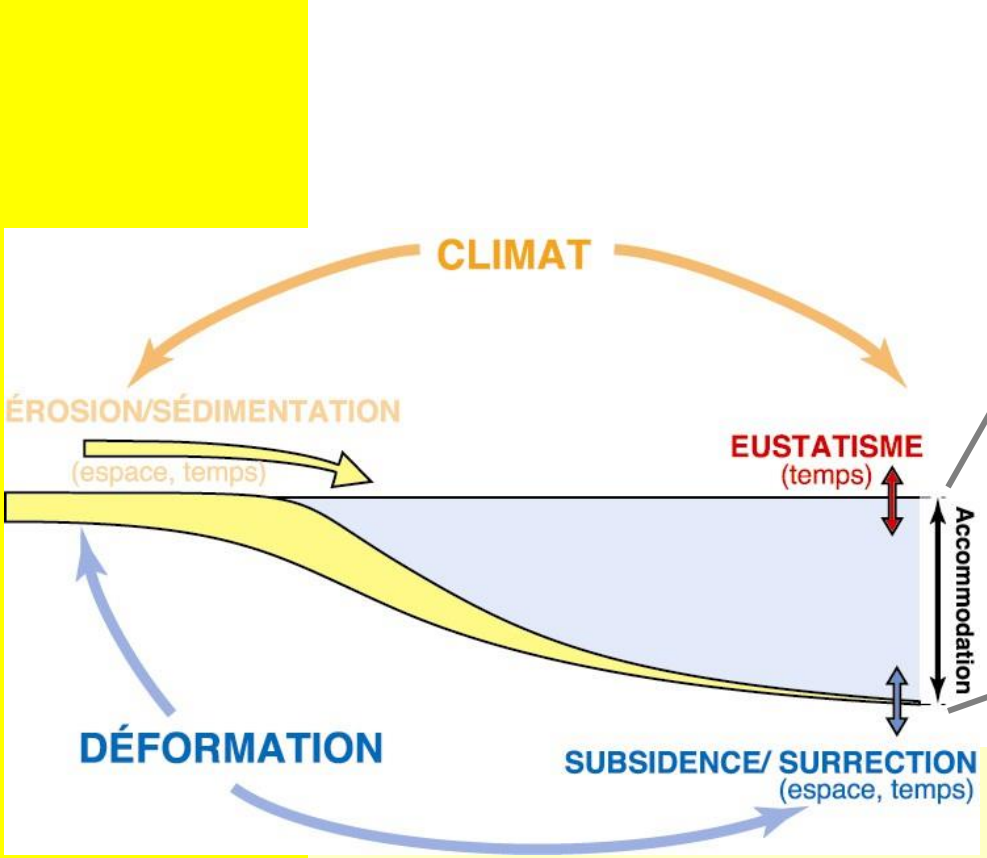


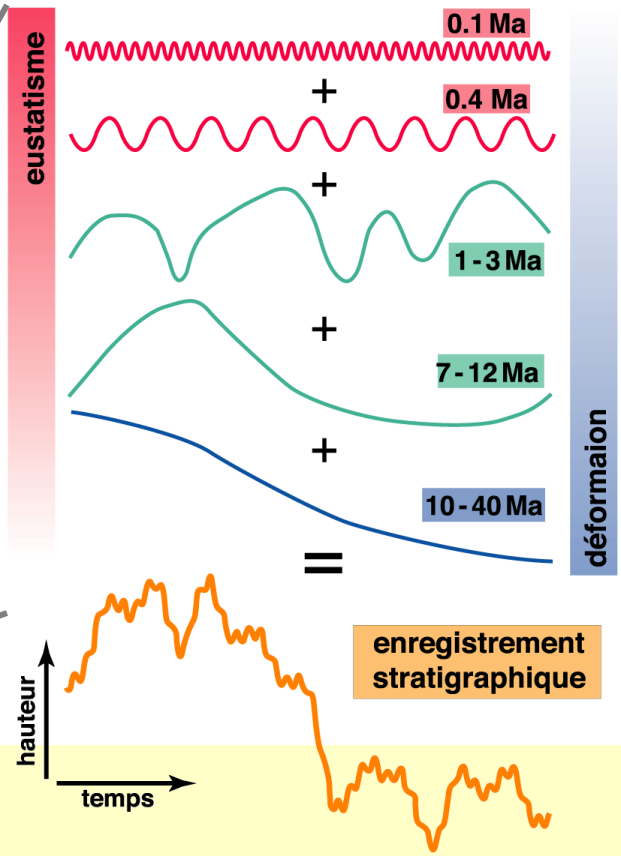
2 - TRANSGRESSIVE PHASE ...



(Homewood et al., 1999)

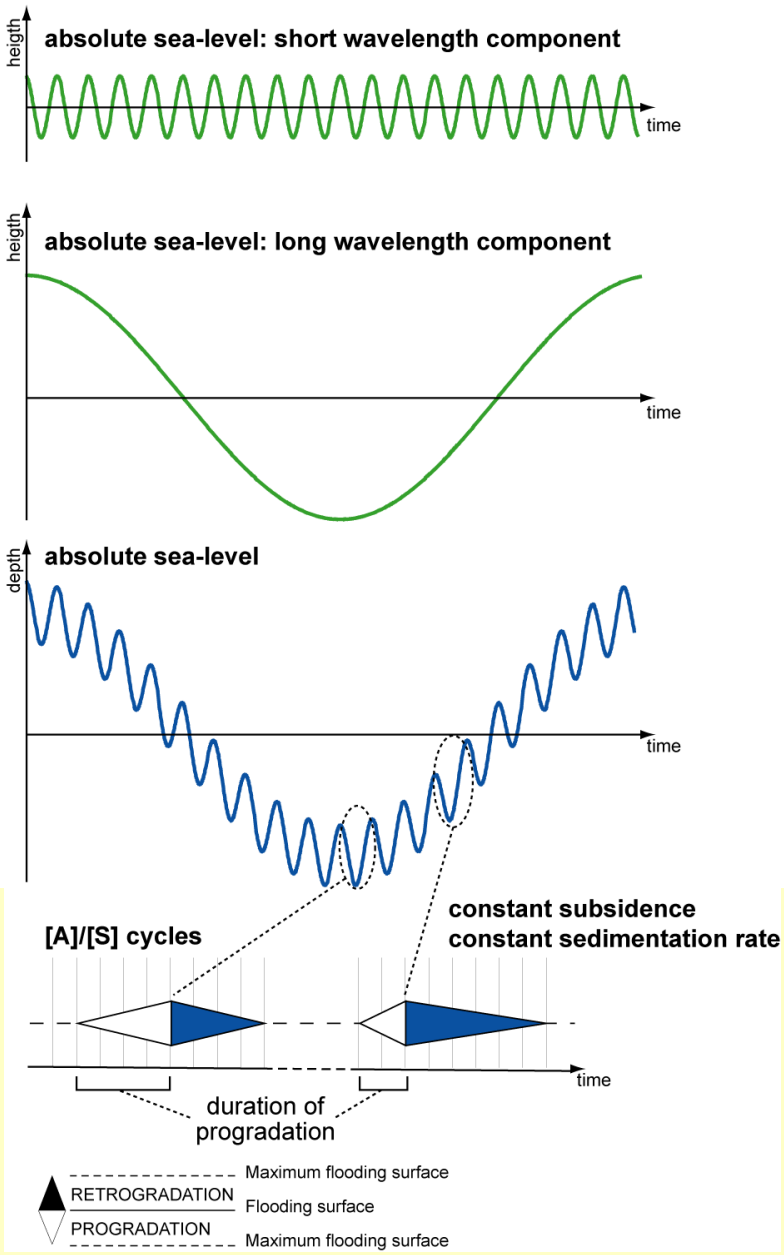
Différents ordres de séquences emboitées





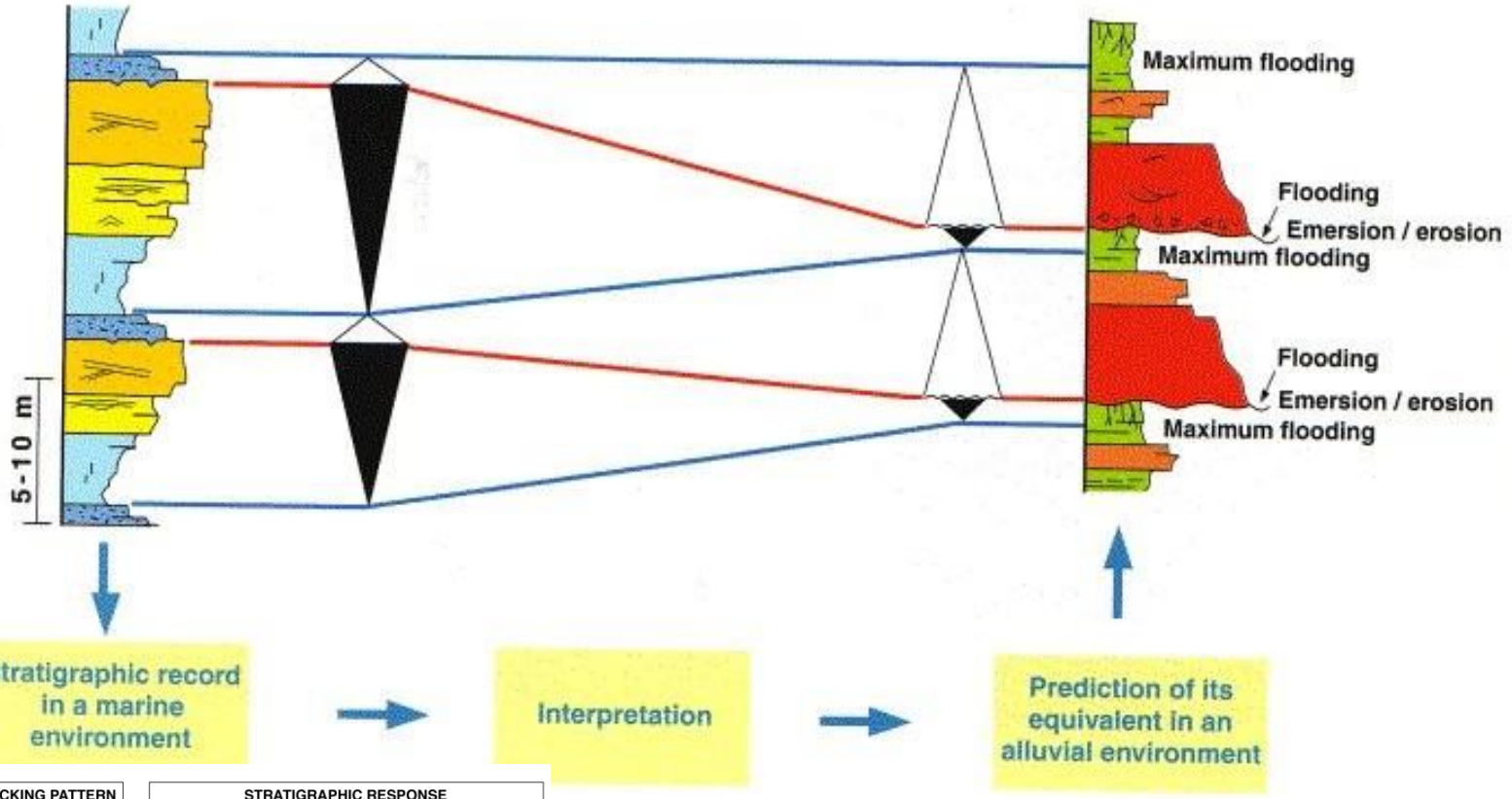
(Guillocheau, 1995)

Distorsion spatiale et temporelle

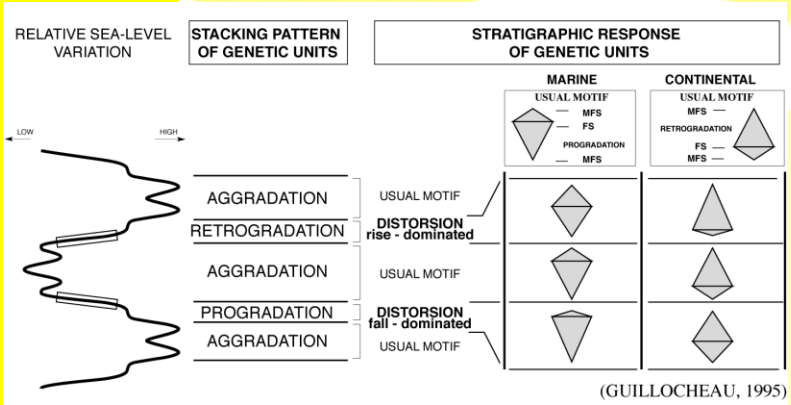


(Robin et al., 2005)

Distorsion spatiale et temporelle

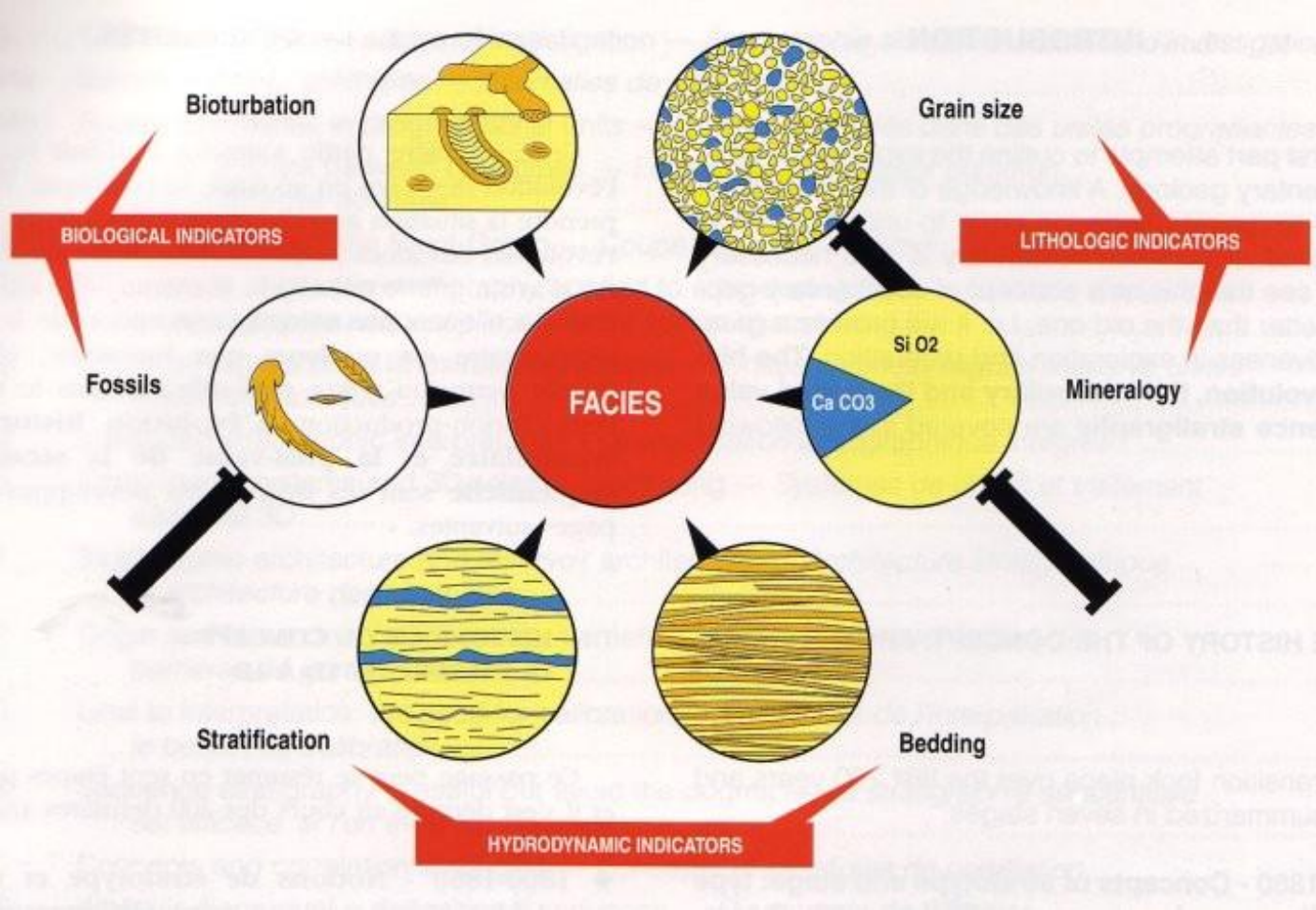


(Homewood et al., 1999)



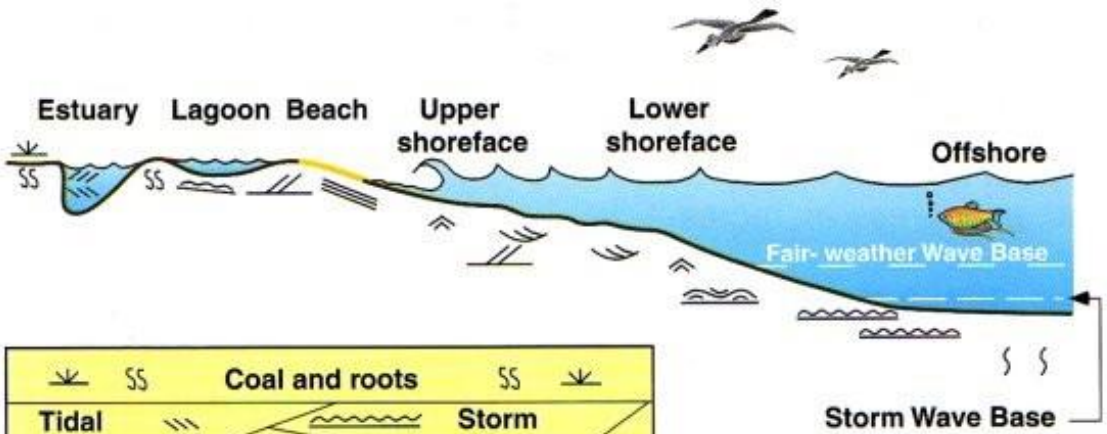
(GUILLOCHEAU, 1995)

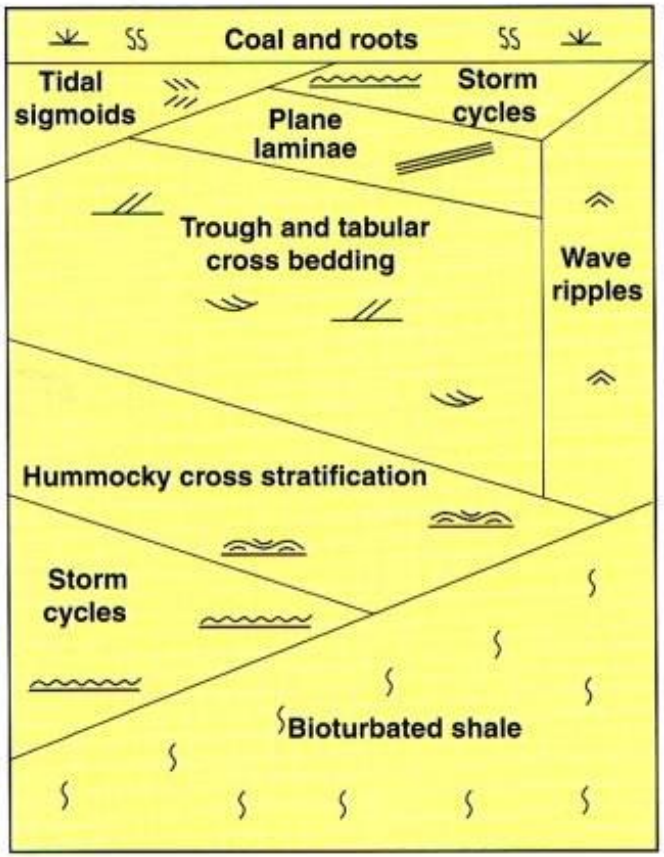
La méthode du « stacking pattern »



(Homewood et al., 1999)

Le modèle de faciès

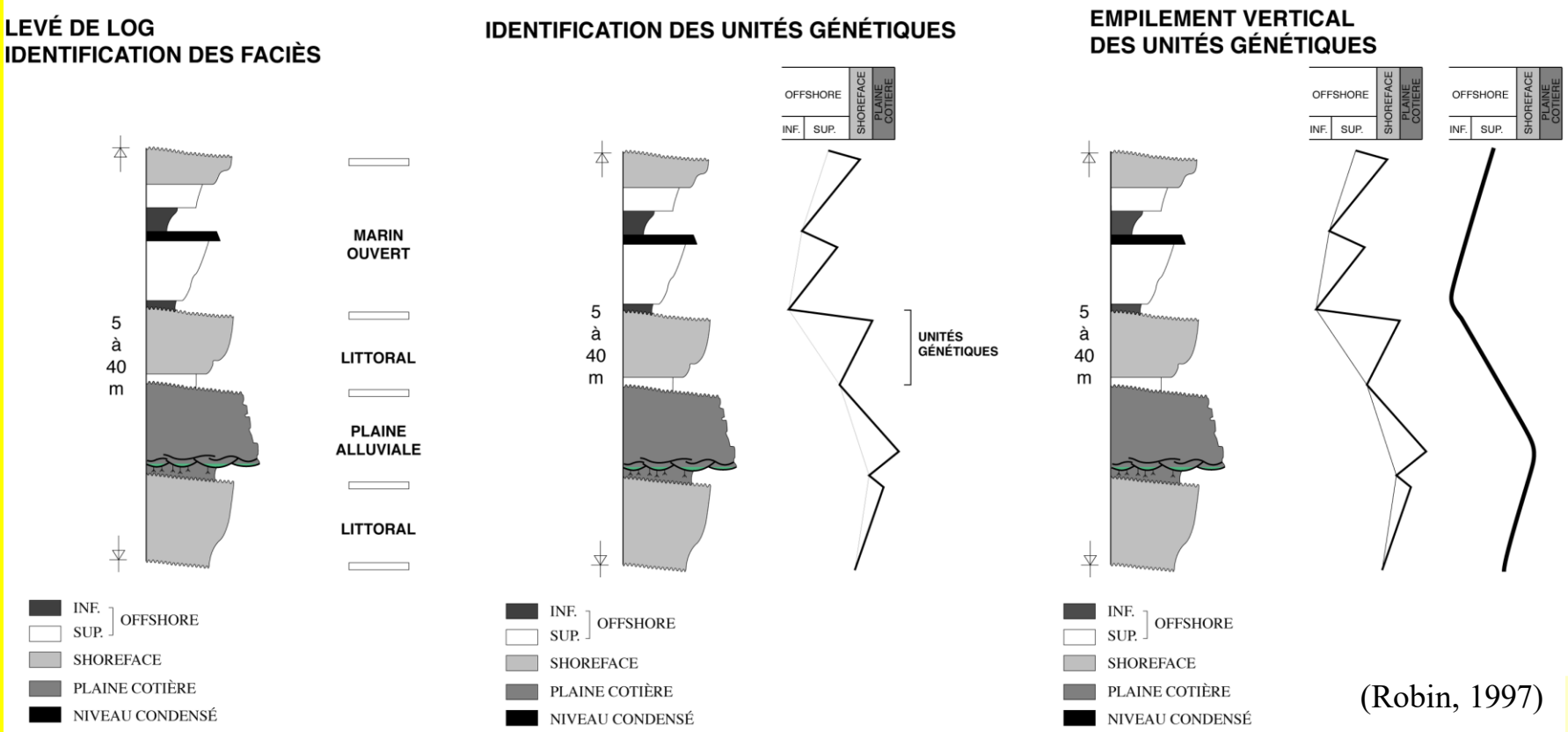




- Marsh facies
- Roots
- Tidal facies
- Heterolithic storm facies
- Low angle/oblique plane lamination
- Wave ripples
- Tabular cross bedding
- Trough cross bedding
- Hummocky cross stratification
- Bioturbated shale

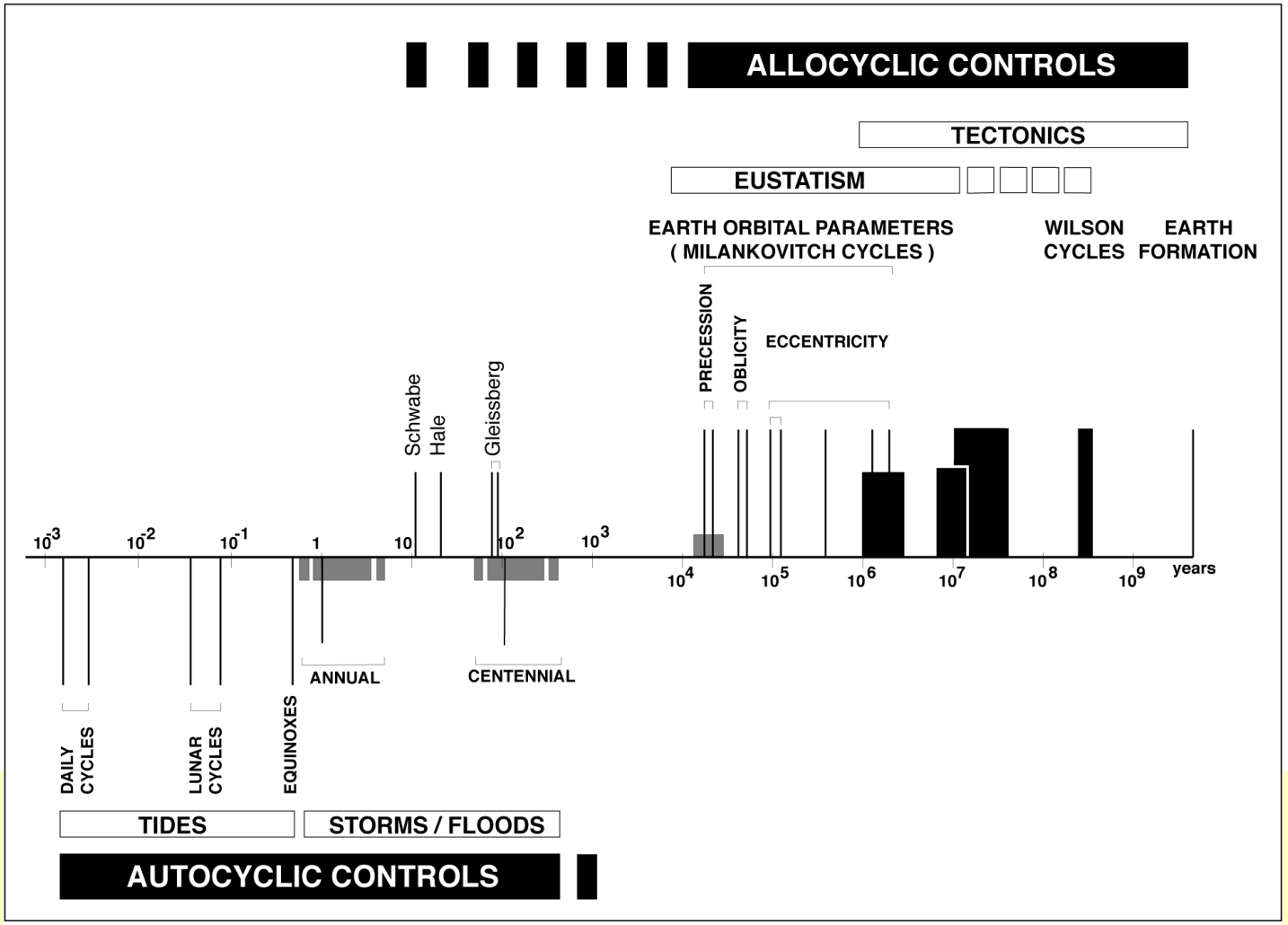
(Homewood et al., 1999)

La méthode du « stacking pattern »



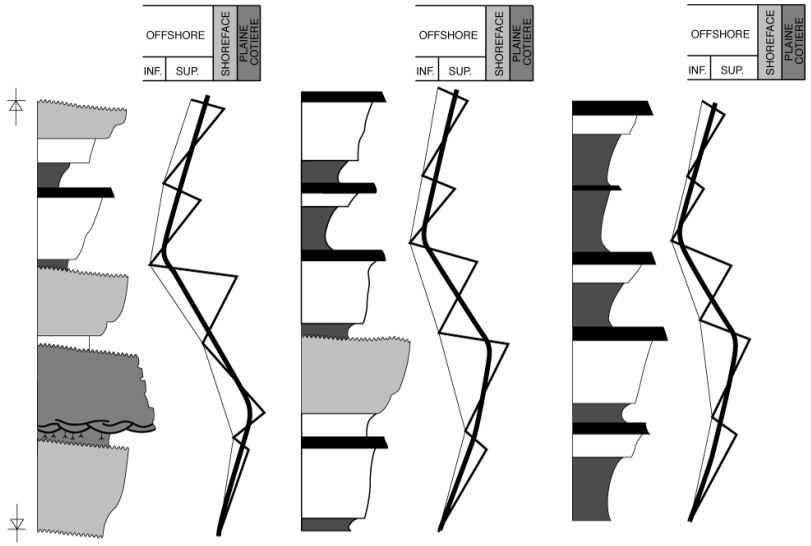
(Robin, 1997)

La méthode du « stacking pattern »

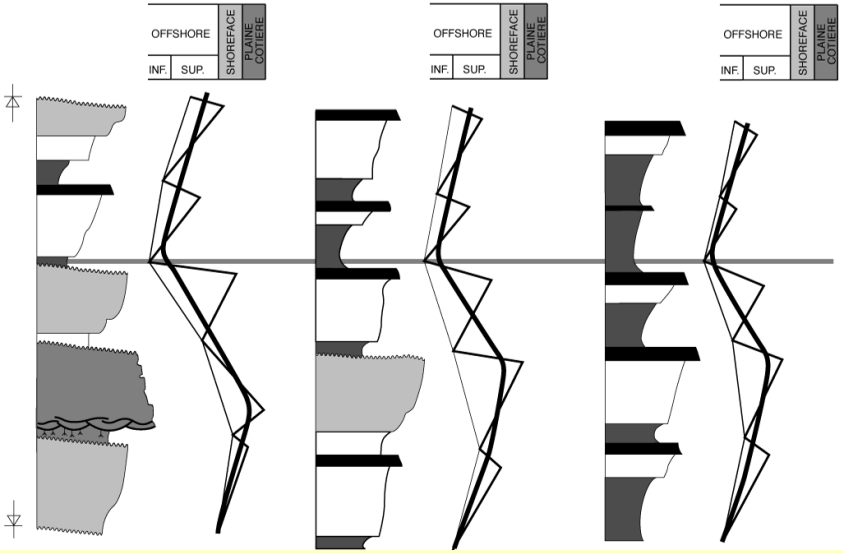


(Guillocheau, 1995)

La méthode du « stacking pattern »

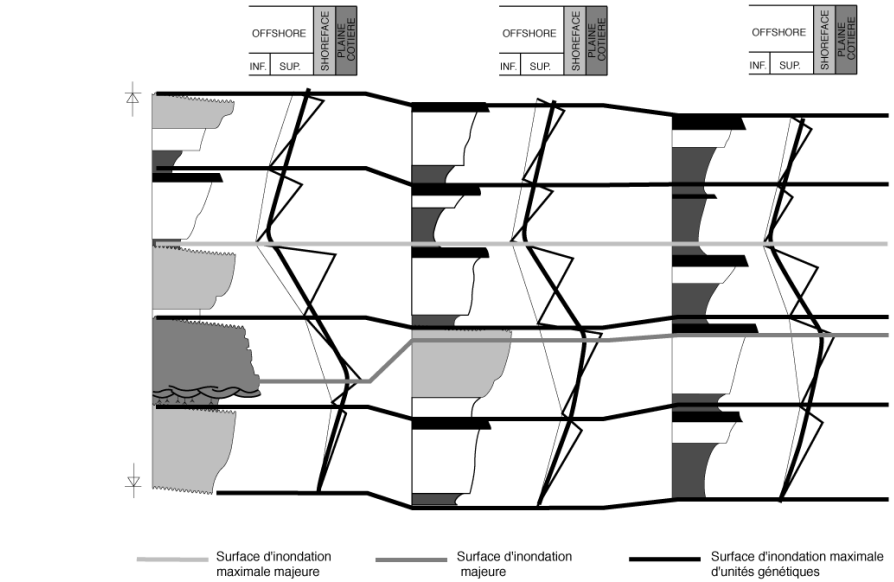


CHOIX D'UN NIVEAU DE RÉFÉRENCE

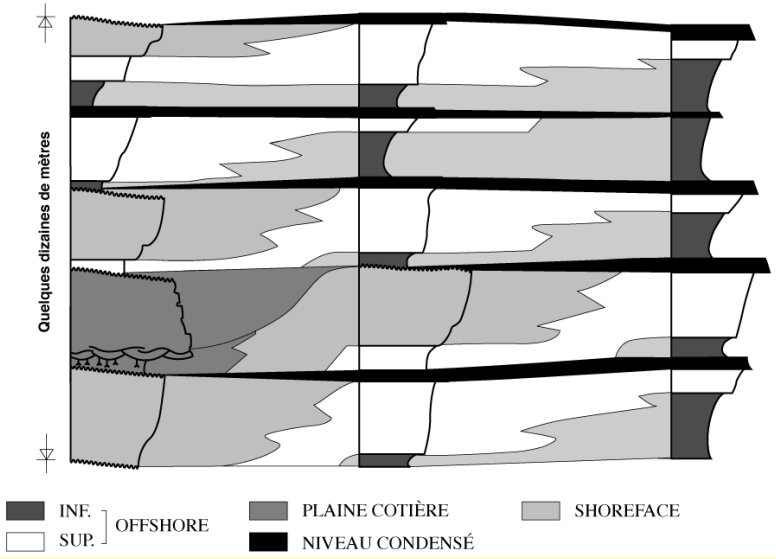


(Robin, 1997)

La méthode du « stacking pattern »



HABILLAGE DES CORRÉLATIONS DES UNITÉS GÉNÉTIQUES EN MILIEUX DE SÉDIMENTATION



(Robin, 1997)

La mesure de l'accommodation

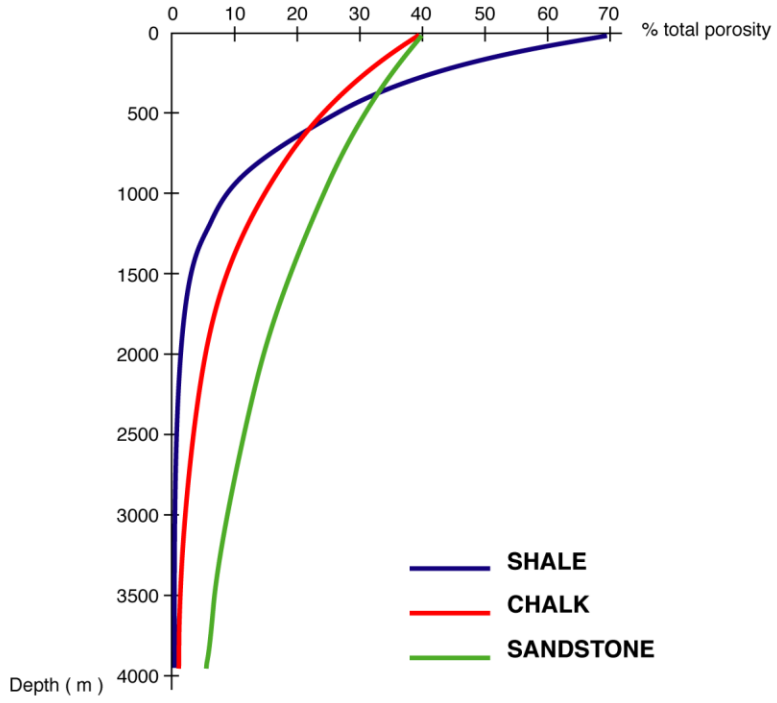
- Lignes temps à haute résolution
  - Corrélation par stacking pattern des unités génétiques
- Datation
  - Biostratigraphie
  - Calage sur affleurements ou carottes
- Porosité et lois de décompaction
  - Cartes d'isolithologies
- Paléobathymétries et paléoaltitudes
  - Expression sédimentaire ou diagraphique

La mesure de l'accommodation

- Porosité et lois de décompaction

Cartes d'isolithologies

Lois de porosité en fonction de la profondeur



Prise en compte des phénomènes de dissolution / recristallisation

La mesure de l'accommodation

- Paléobathymétries et paléoaltitudes

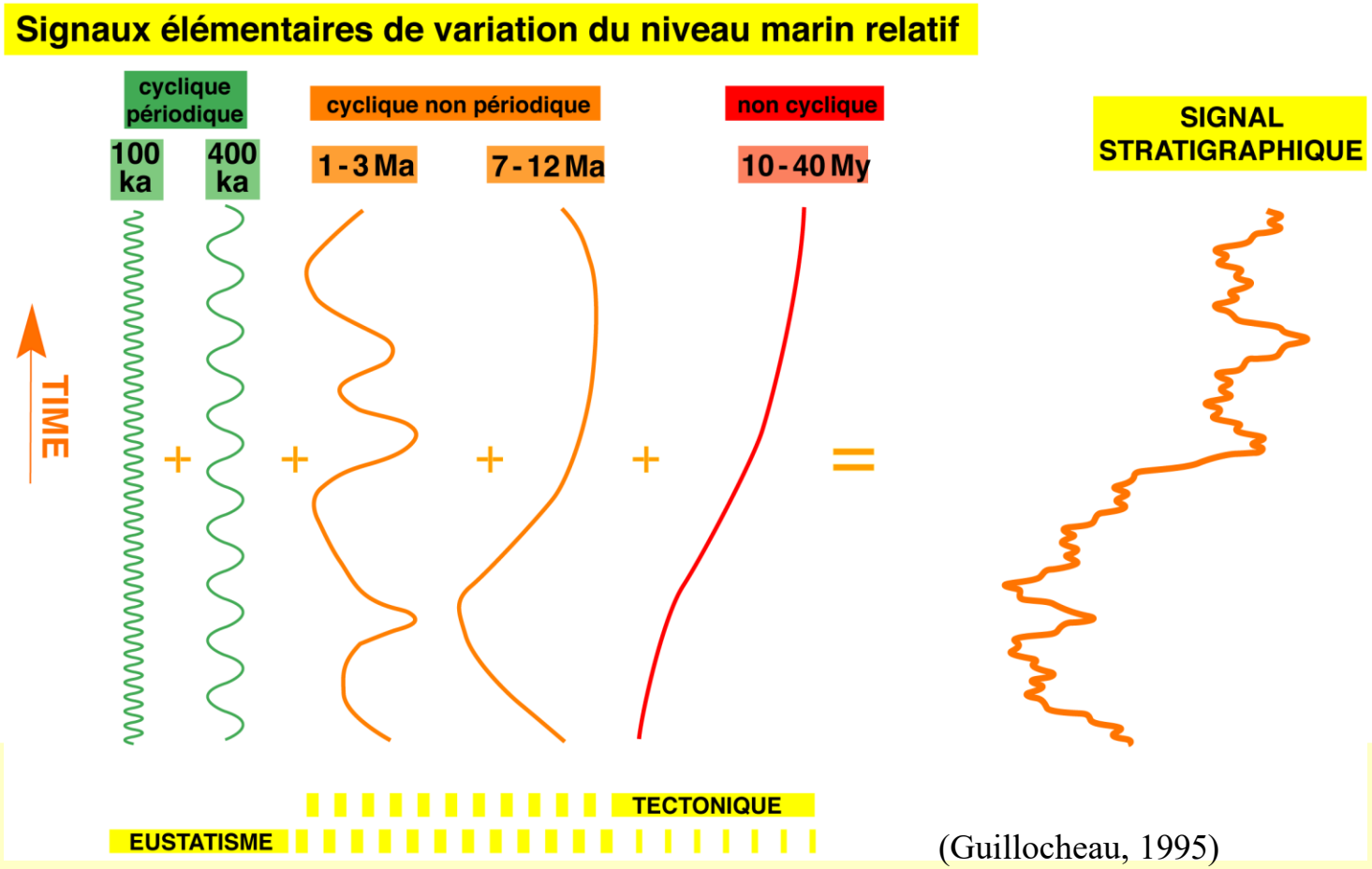
Approche sédimentologique,
biostratigraphique,
géochimique

Résolution des études et barres d'erreur

L'actualisme en domaine marin et continental
en système glaciaire - non glaciaire

Apport de la géomorphologie
de la modélisation analogique
des systèmes sédimentaires

La mesure de l'accommodation



(Guillocheau, 1995)

La mesure de l'accommodation

Accommodation = f(tectonique, eustatisme)

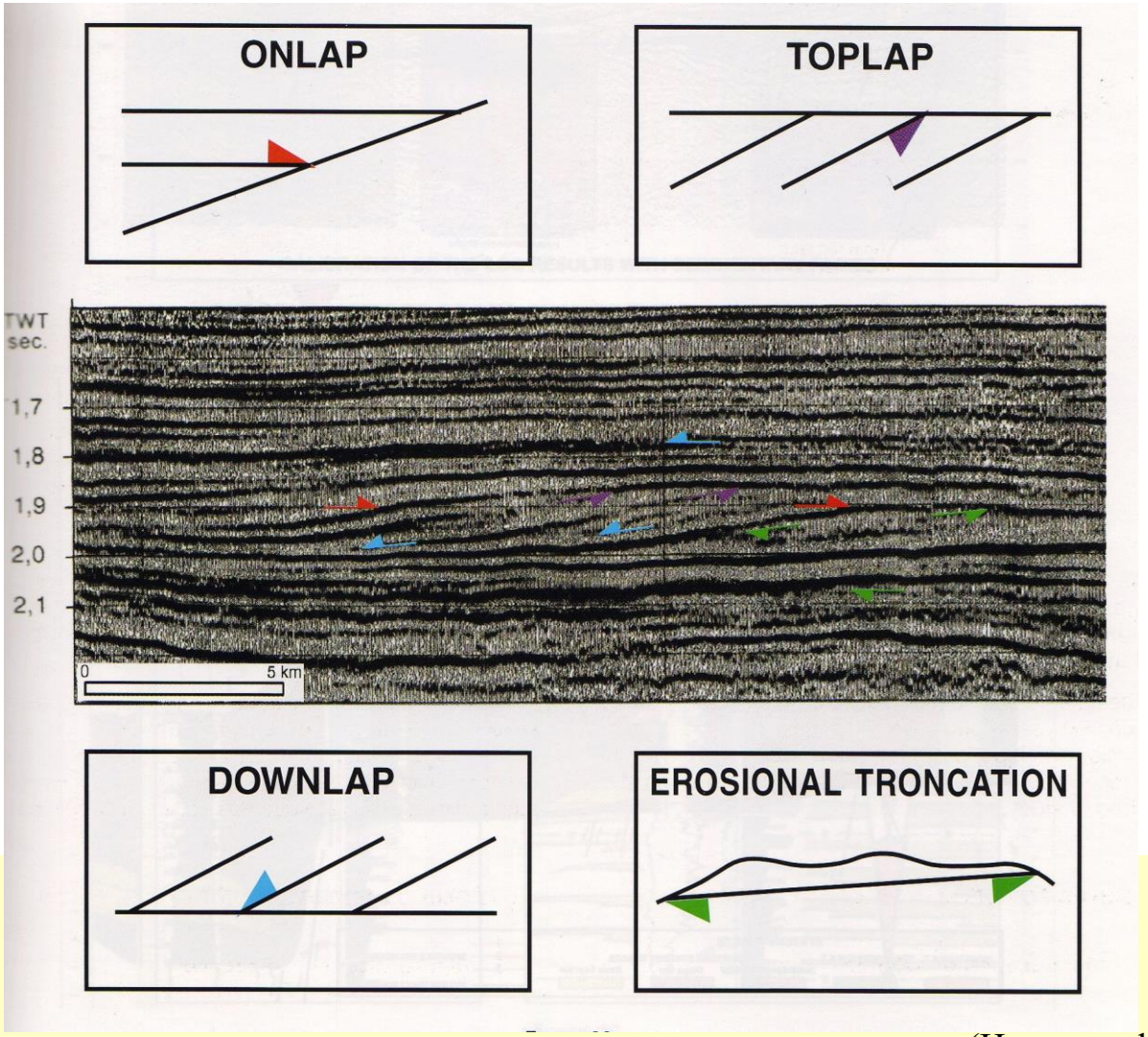
Tectonique = f (temps, espace)

Eustatisme = f(temps)

Accommodation grande longueur d'onde = eustatisme

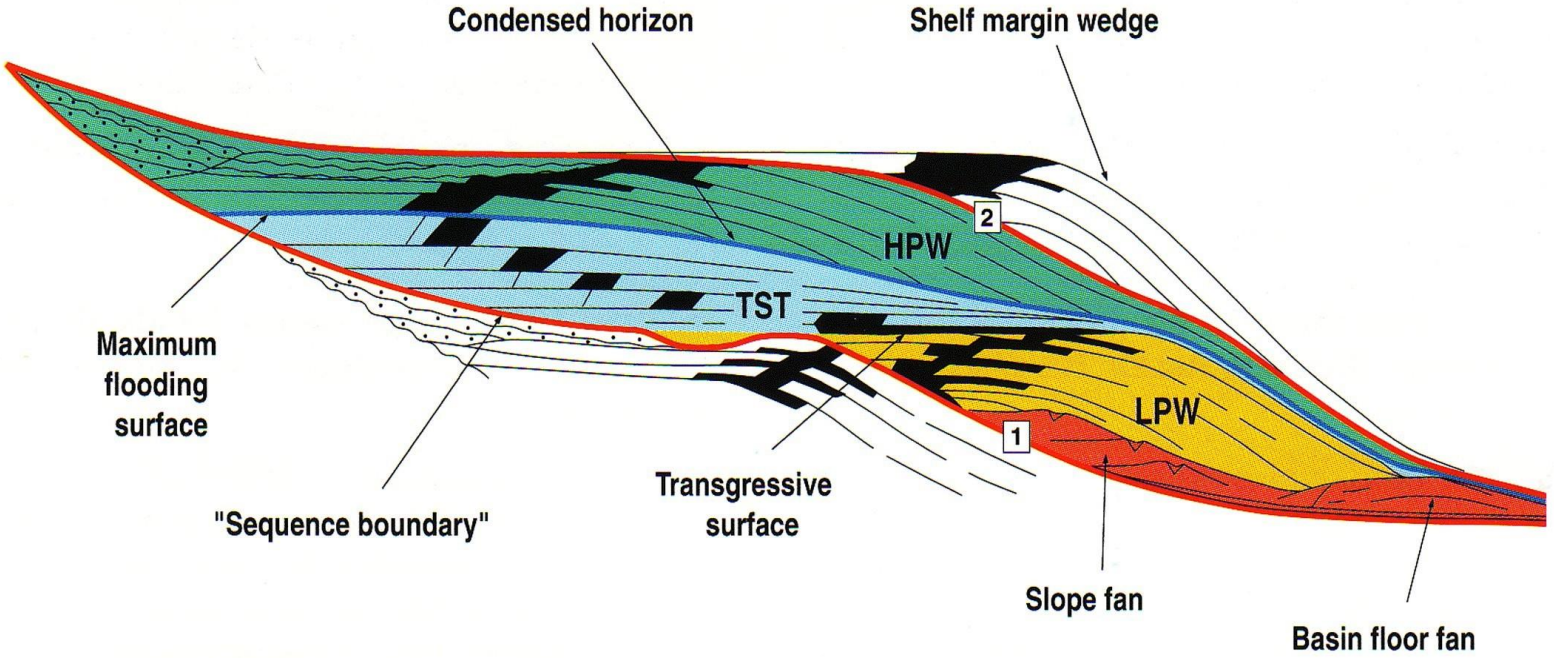
Accommodation courte longueur d'onde = tectonique

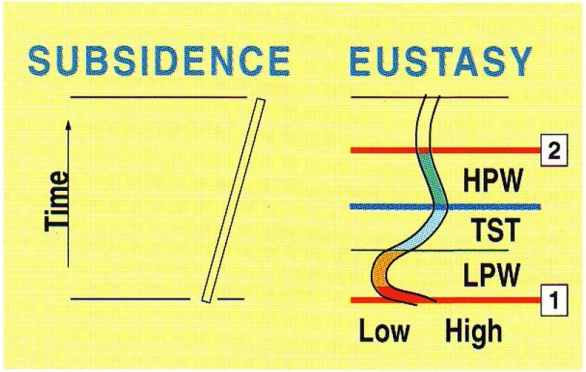
La stratigraphie sismique



(Homewood et al., 1999)

La « limace » d'Exxon - Vail

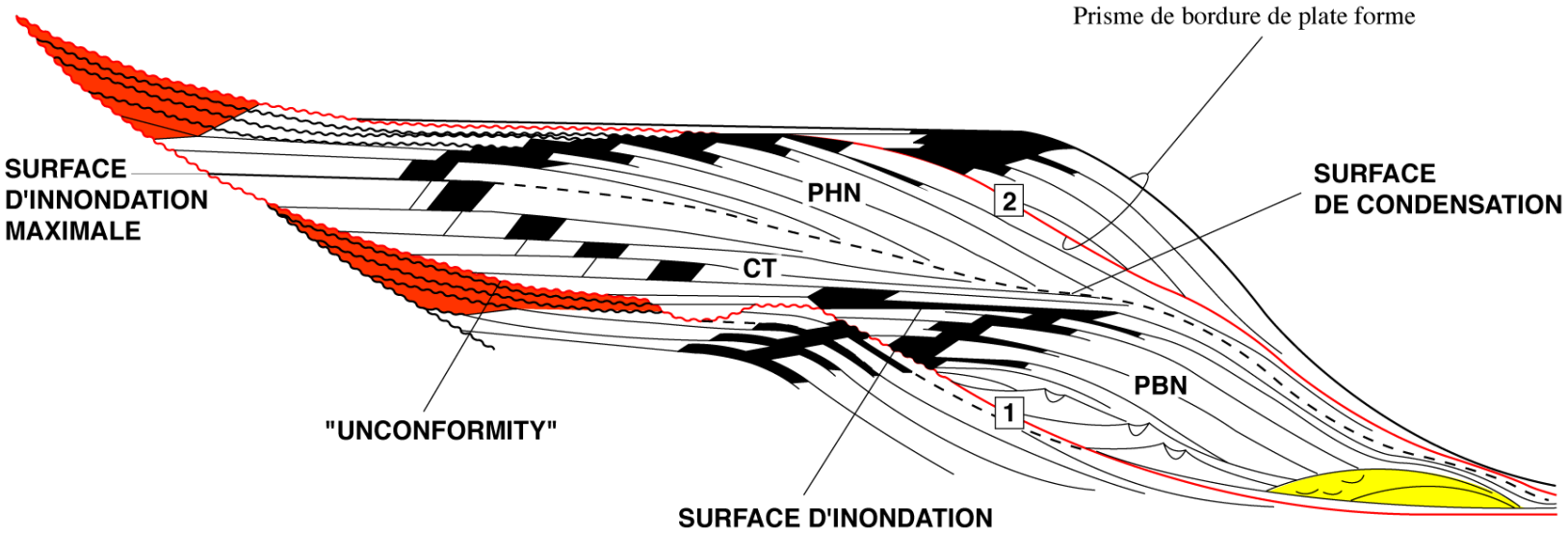


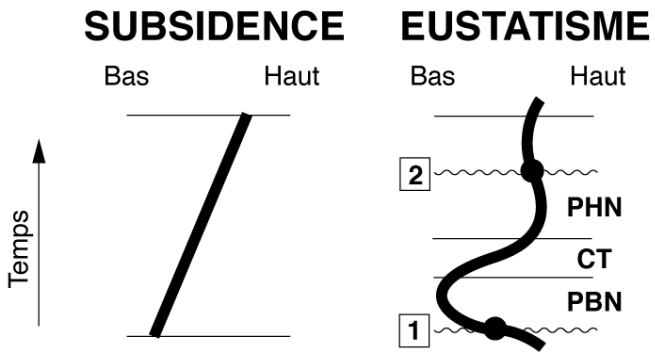


HPW : Highstand Prograding Wedge
TST : Transgressive Systems Tract
LPW : Lowstand Prograding Wedge

(Homewood et al., 1999)

La « limace » d'Exxon - Vail

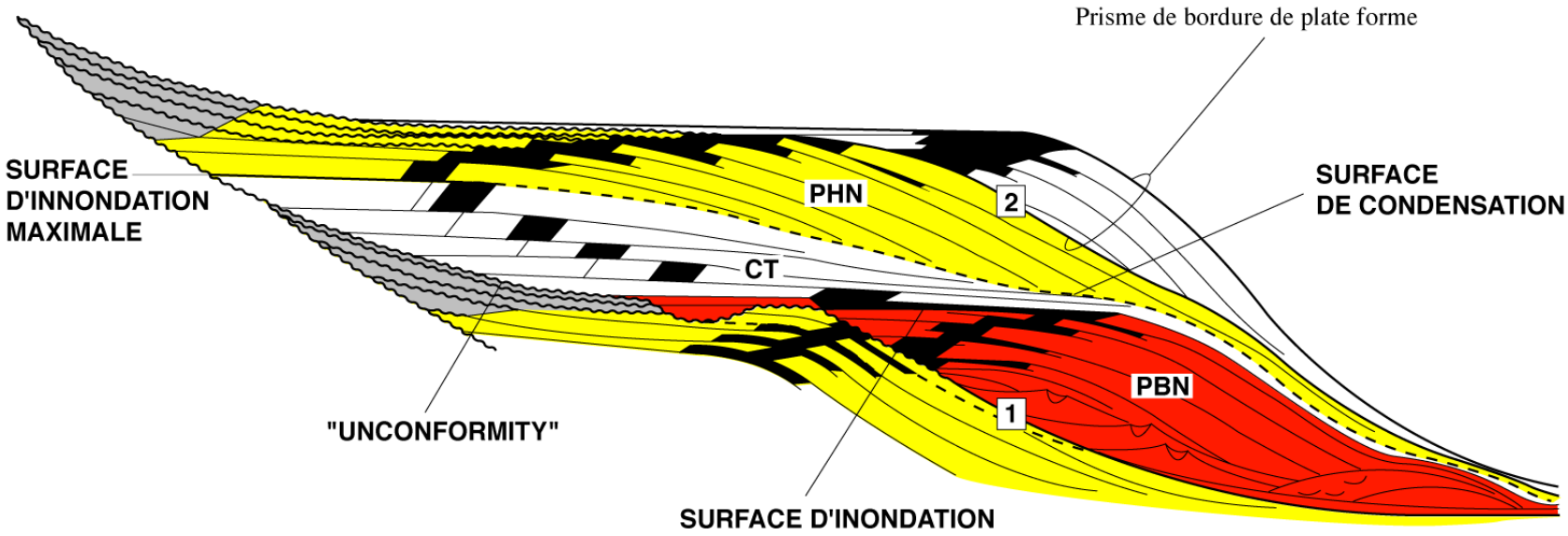


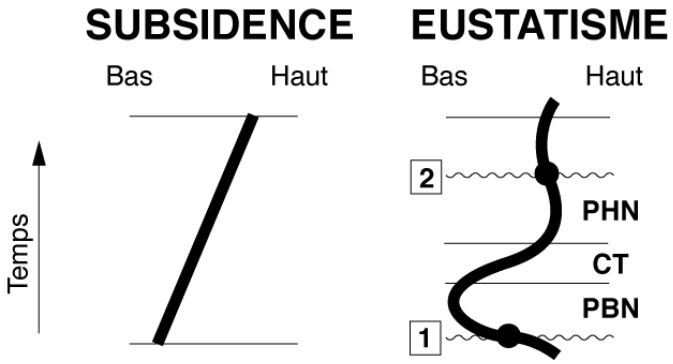


PBN : Prisme de Bas Niveau
CT : Cortège Transgressif
PHN : Prisme de Haut Niveau

(Posamentier *et al.*, 1988)

La « limace » d'Exxon - Vail





PBN : Prisme de Bas Niveau
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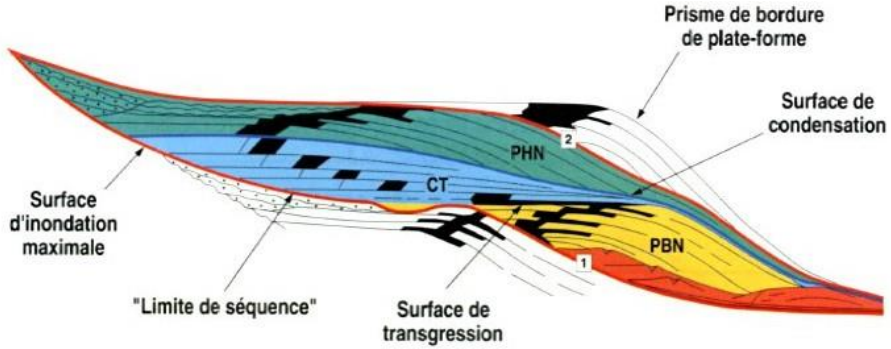
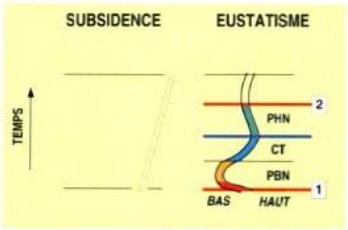
(Posamentier *et al.*, 1988)

La « limace » d'Exxon - Vail





PBN : Prisme de Bas Niveau
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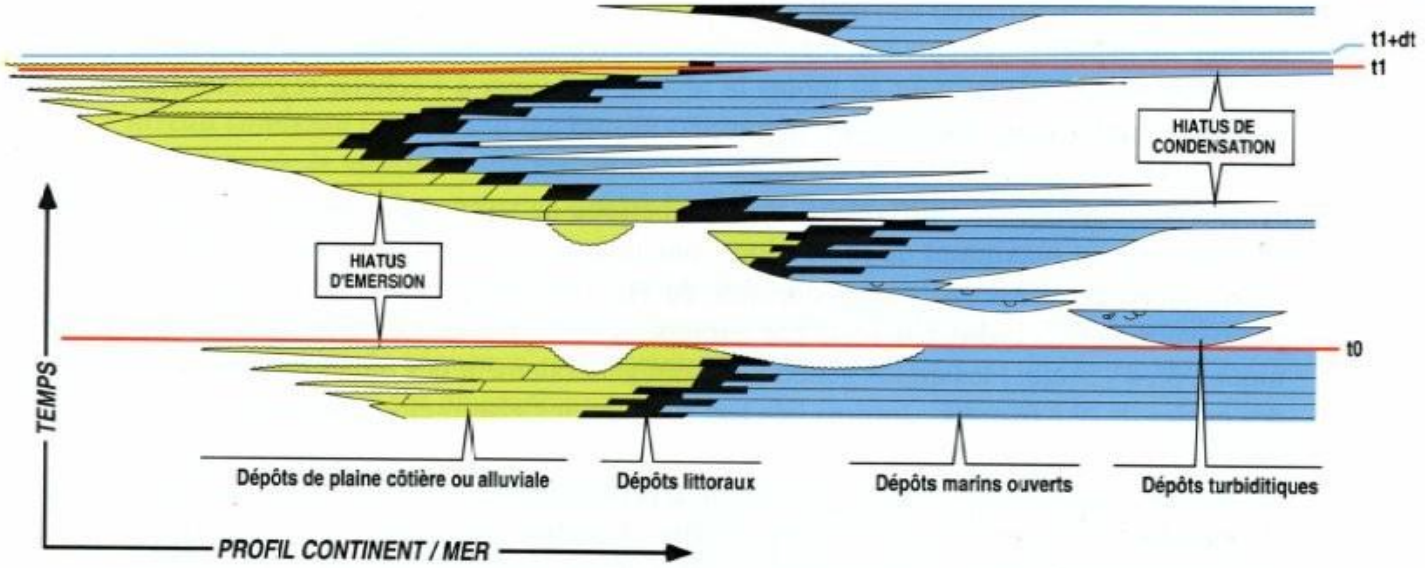
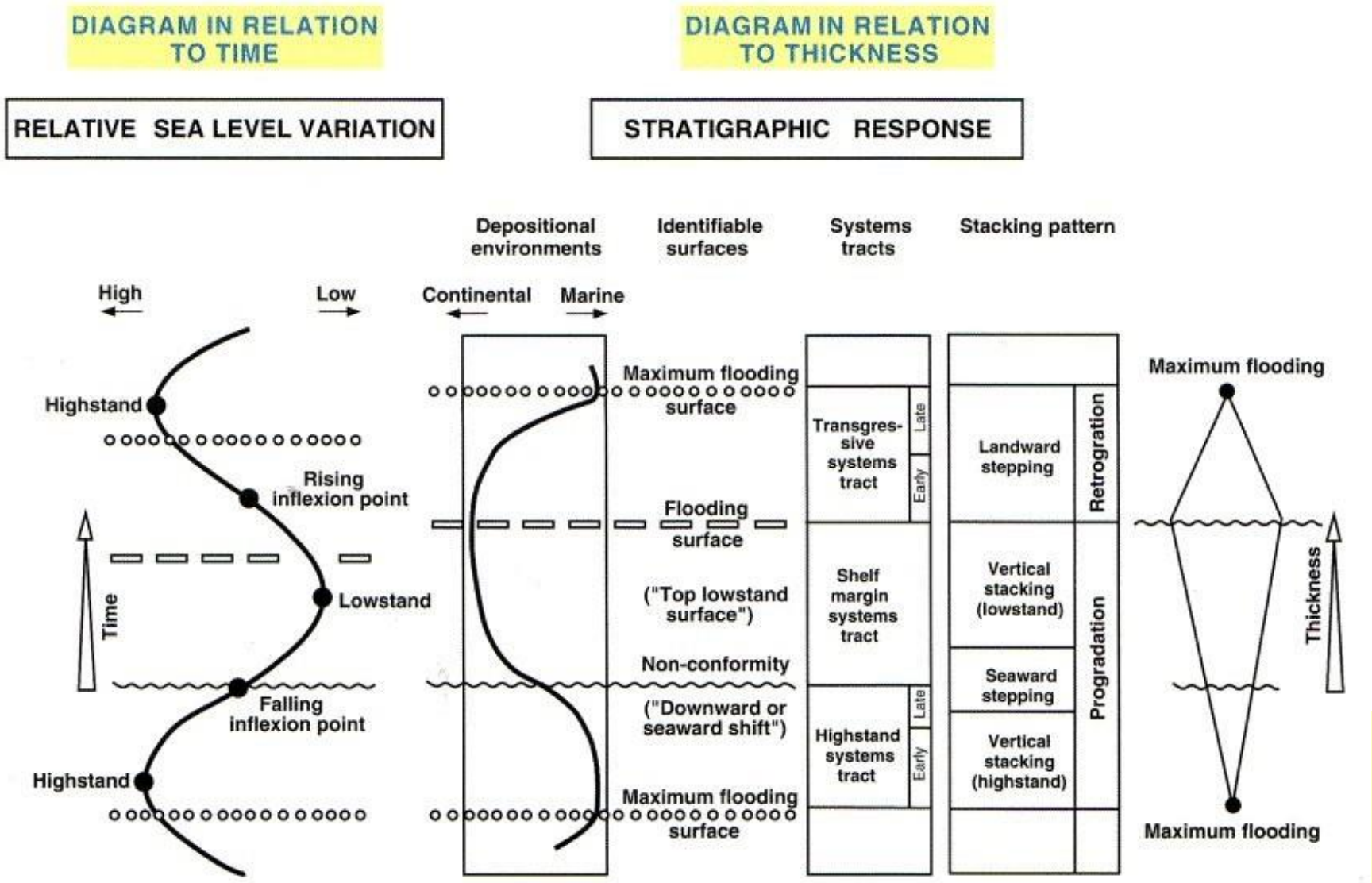
(Homewood et al., 1999)



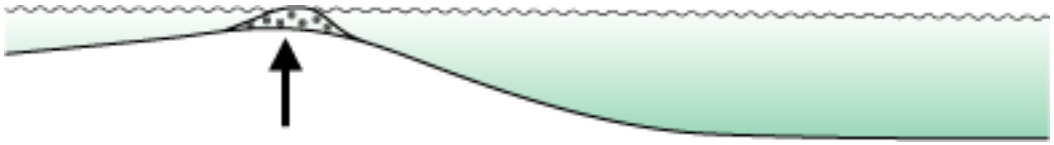
stratigraphie séquentielle / sismique



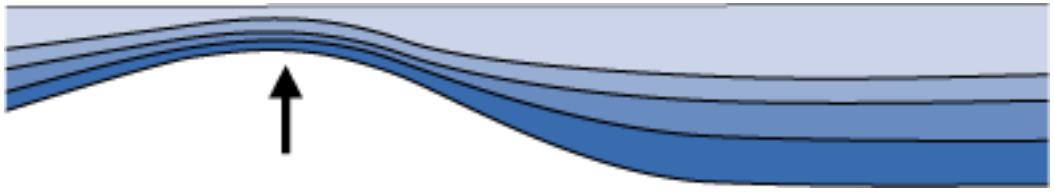
(Homewood et al., 1999)

interactions subsidence sedimentation

subsidence ➲ depositional profil



subsidence ➲ sedimentary thickness



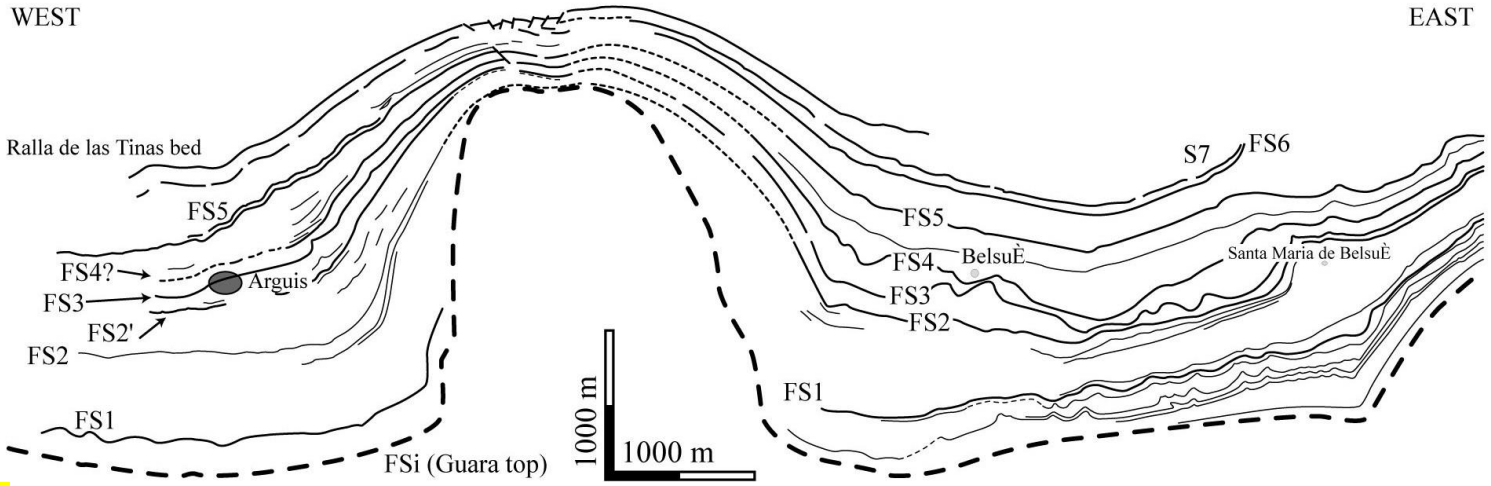
subsidence ➲ stratigraphic sequences

(Robin et al., 2005)

L'exemple de l'anticlinal d'Arguis

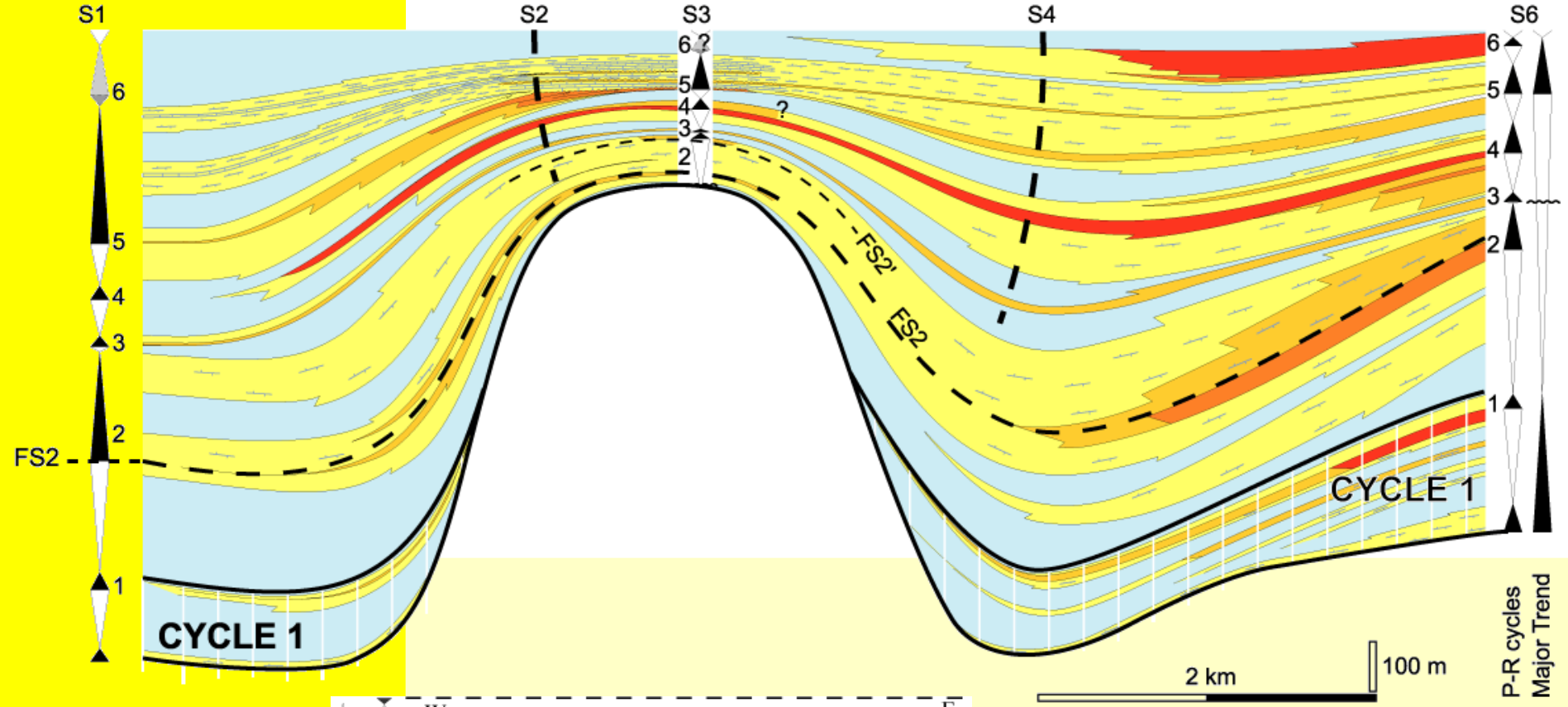
a)

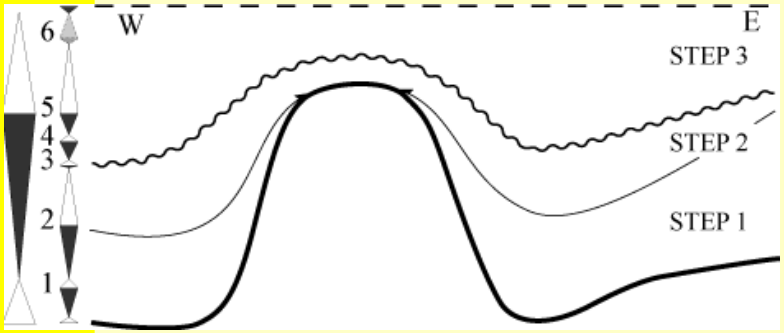
b)



(Castelltort et al., 2003)

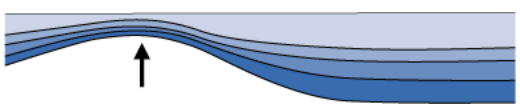
Un anticlinal syn-sédimentaire

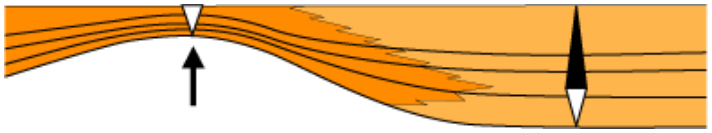


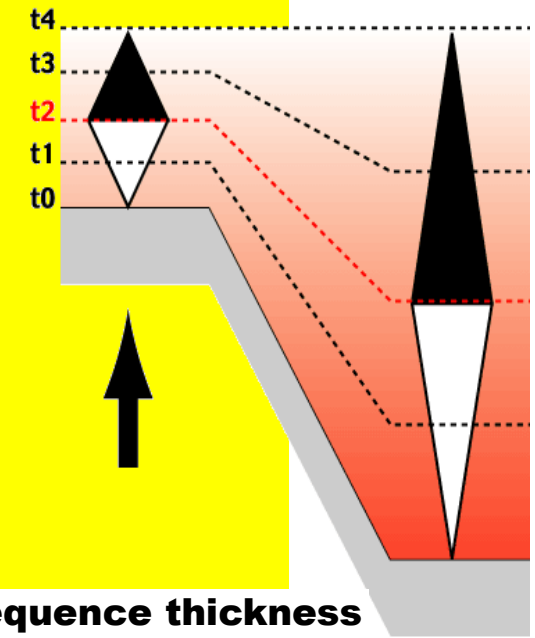


(Castelltort et al., 2003)

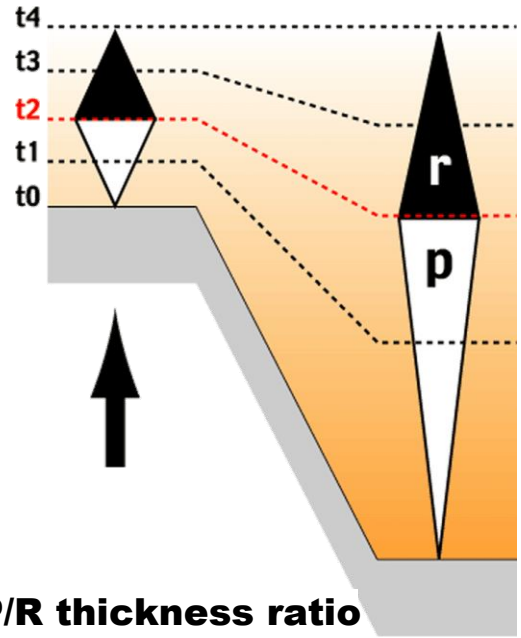
deformation stratigraphic architecture



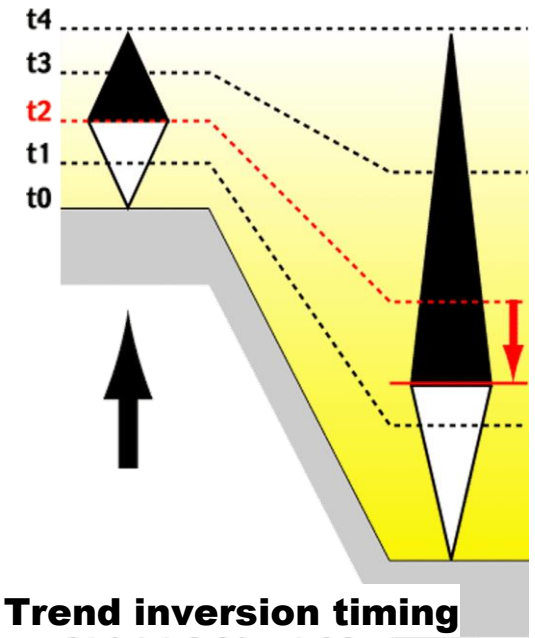




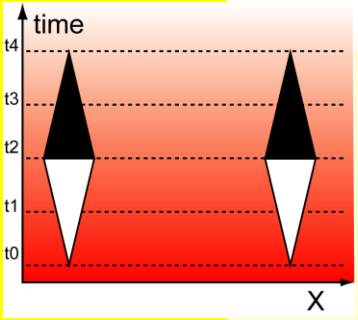
Sequence thickness

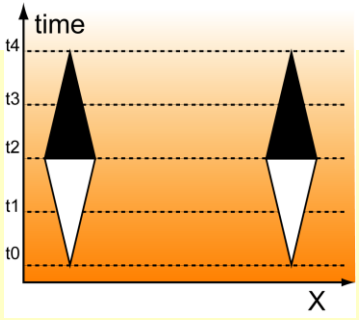


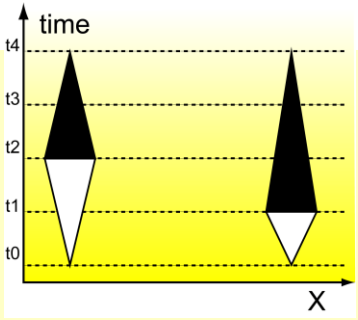
P/R thickness ratio



Trend inversion timing

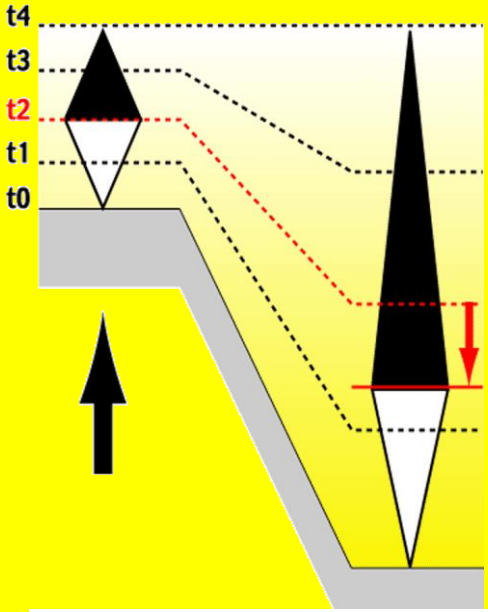




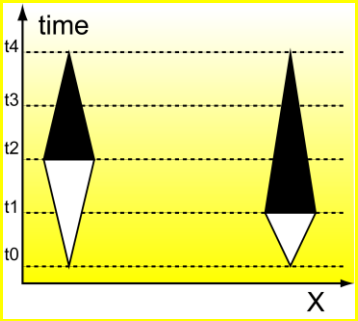


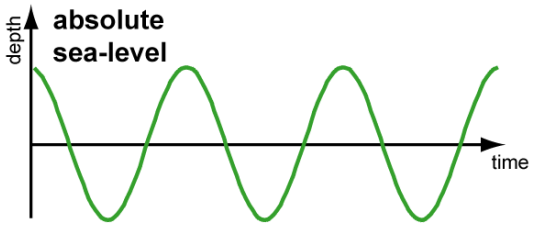
(Robin et al., 2005)

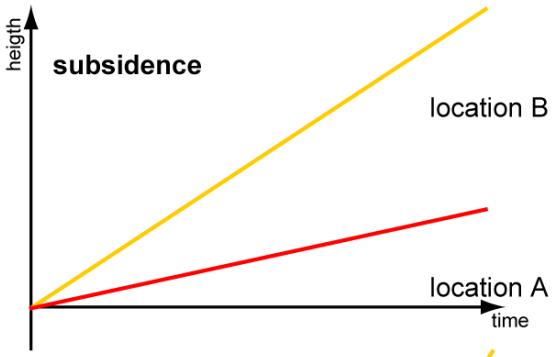
Distorsion spatiale et temporelle

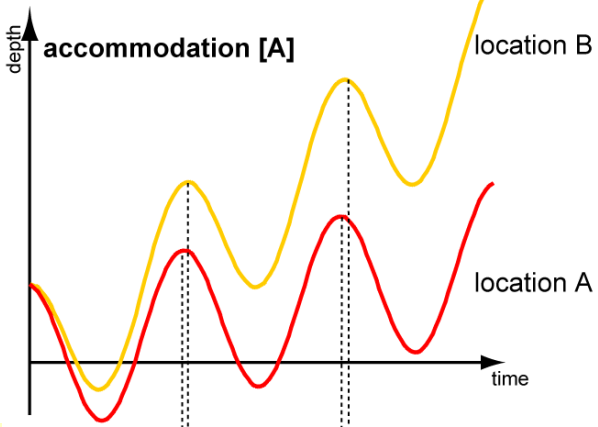


Trend inversion timing









(Robin et al., 2005)