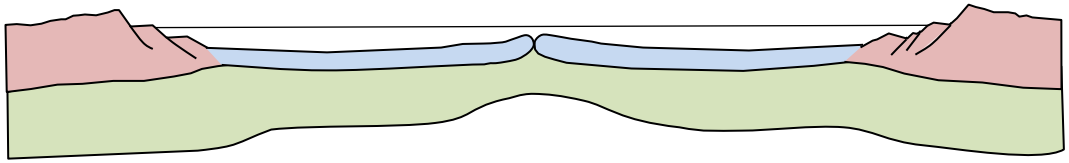
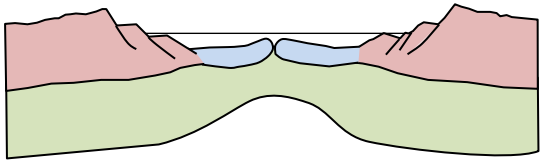
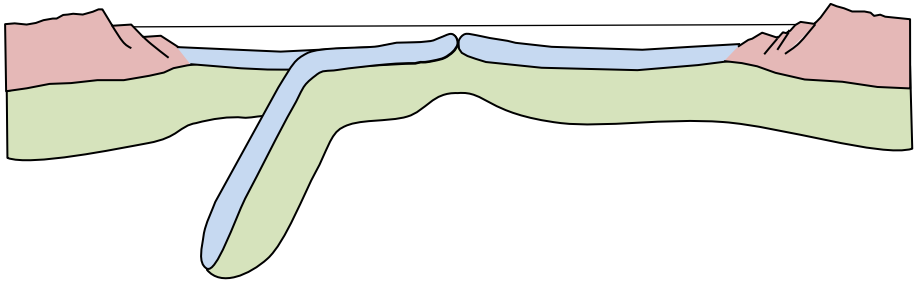
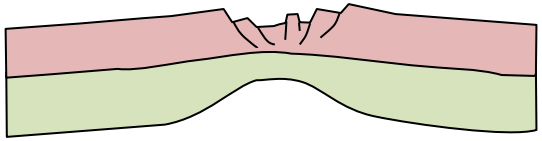
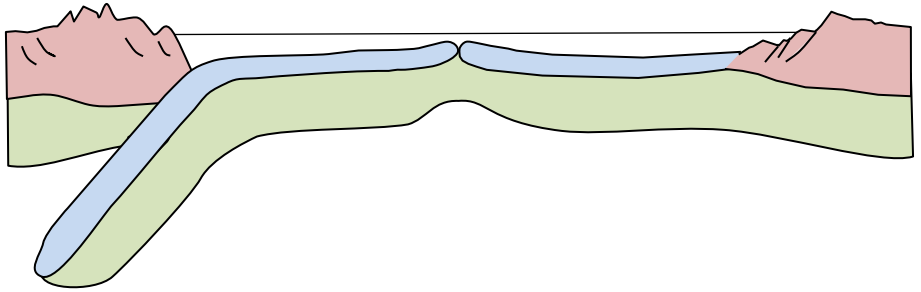
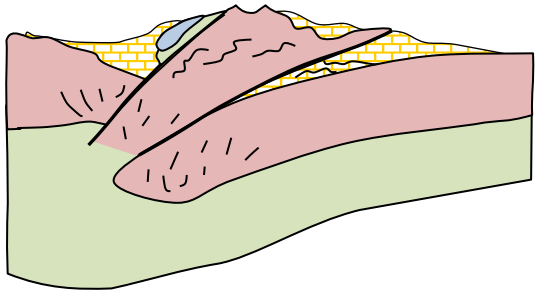






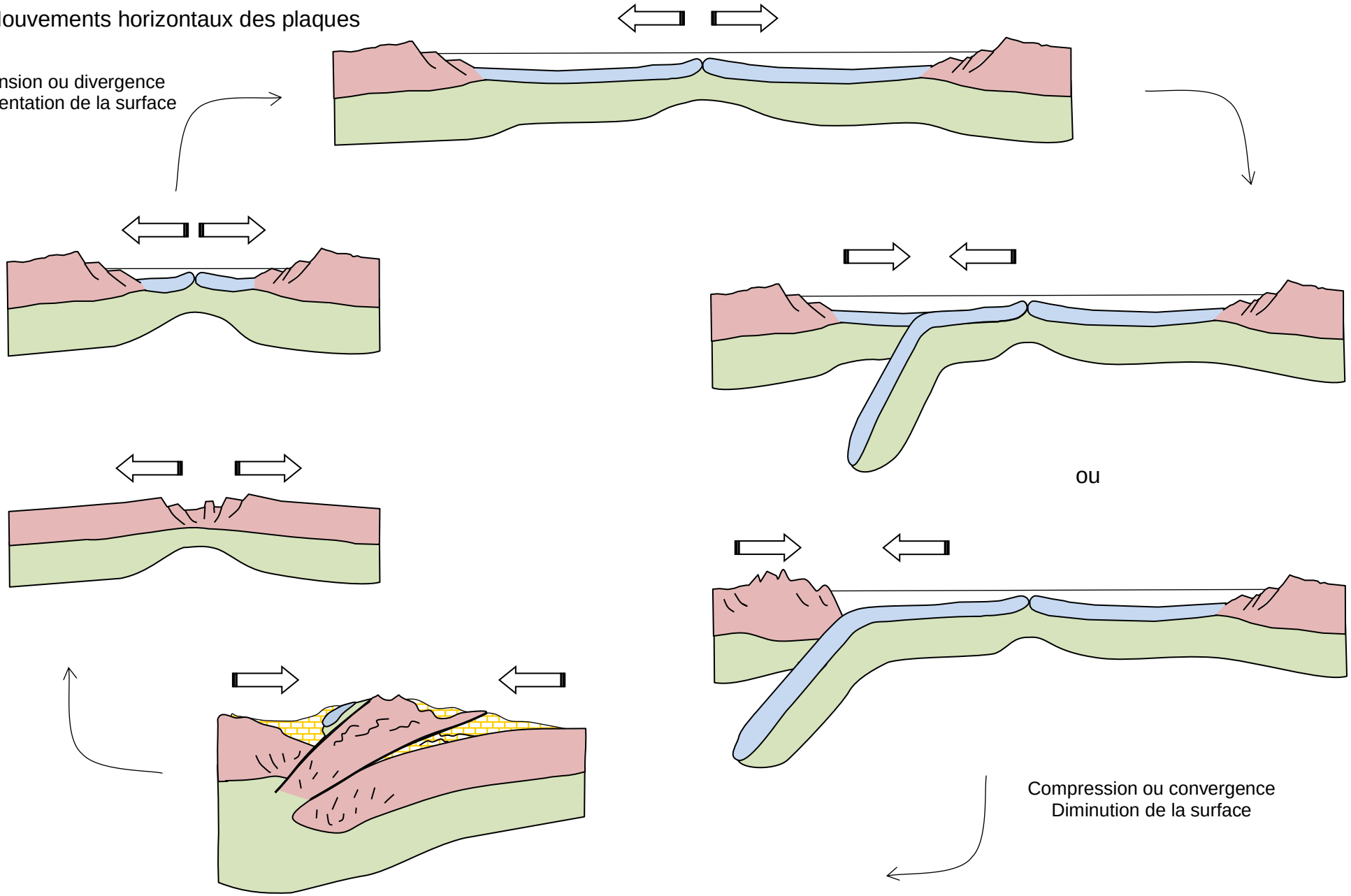






Mouvements horizontaux des plaques

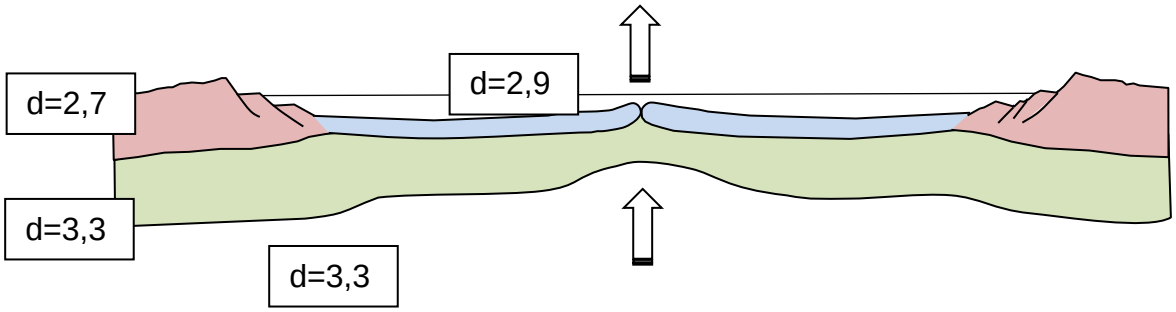
Extension ou divergence
Augmentation de la surface

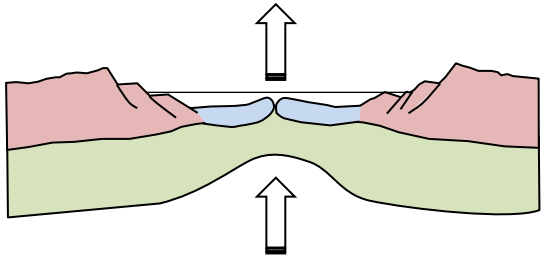


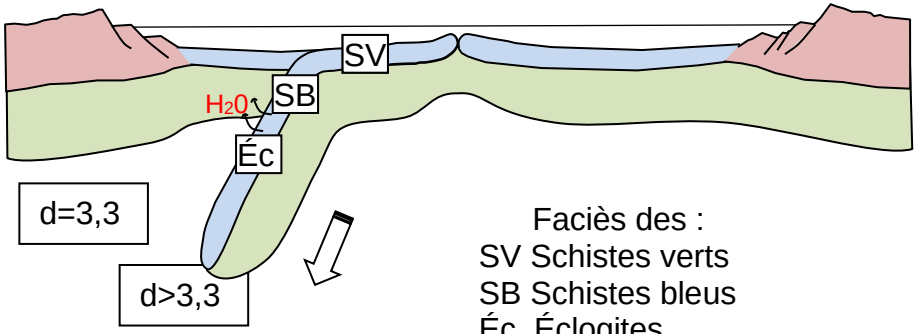
ou

Compression ou convergence
Diminution de la surface

Mouvements verticaux

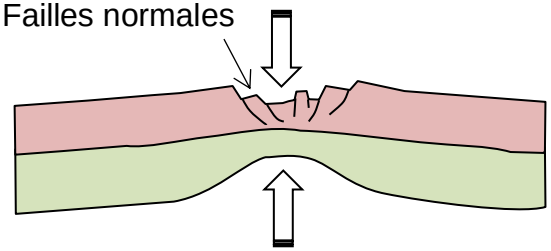






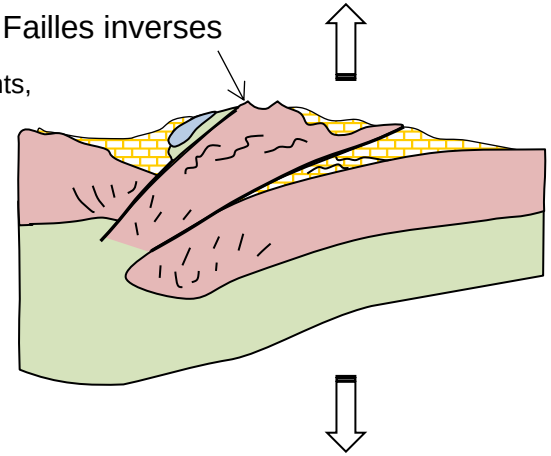
Faciès des :
SV Schistes verts
SB Schistes bleus
Éc Éclogites

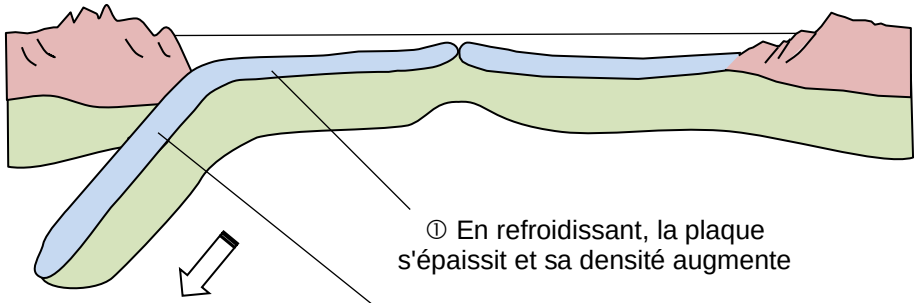
Failles normales



Failles inverses

Plis, failles, chevauchements, charriages



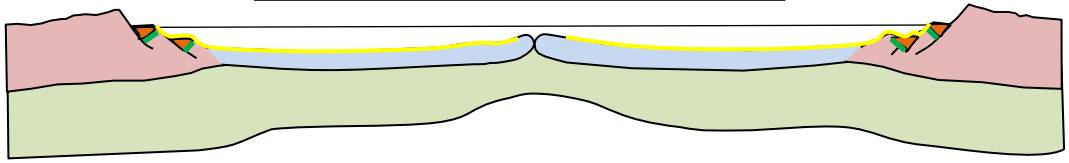


① En refroidissant, la plaque s'épaissit et sa densité augmente

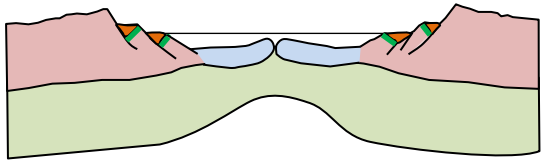
② Le métamorphisme entraîne la libération d'eau, la densité augmente

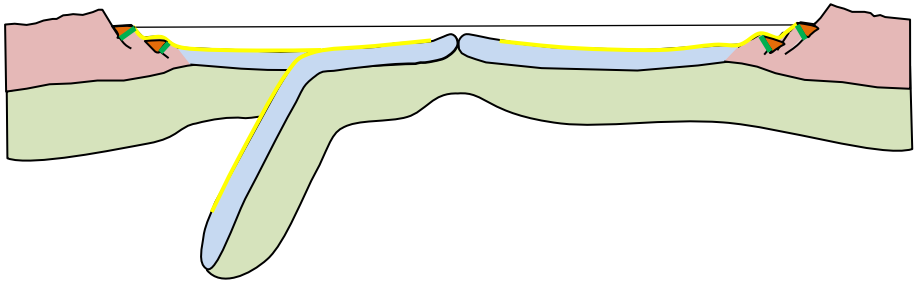
Sédiments et roches sédimentaires

Sédimentation
post rift (carbonatées ou siliceuse)

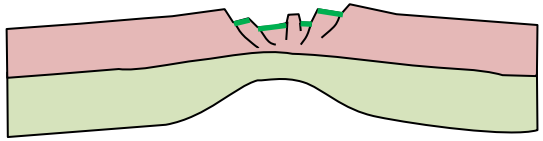


Sédimentation
syn rift



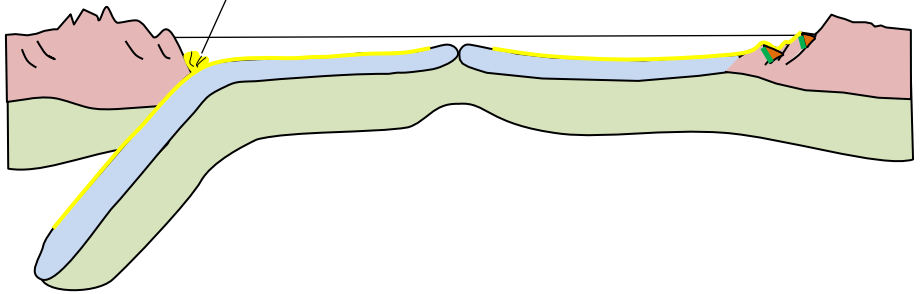


Sédimentation
anté rift (évaporites, grès)



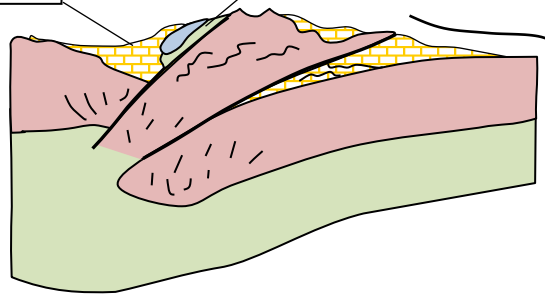
(s'il est présent)

Prisme d'accrétion

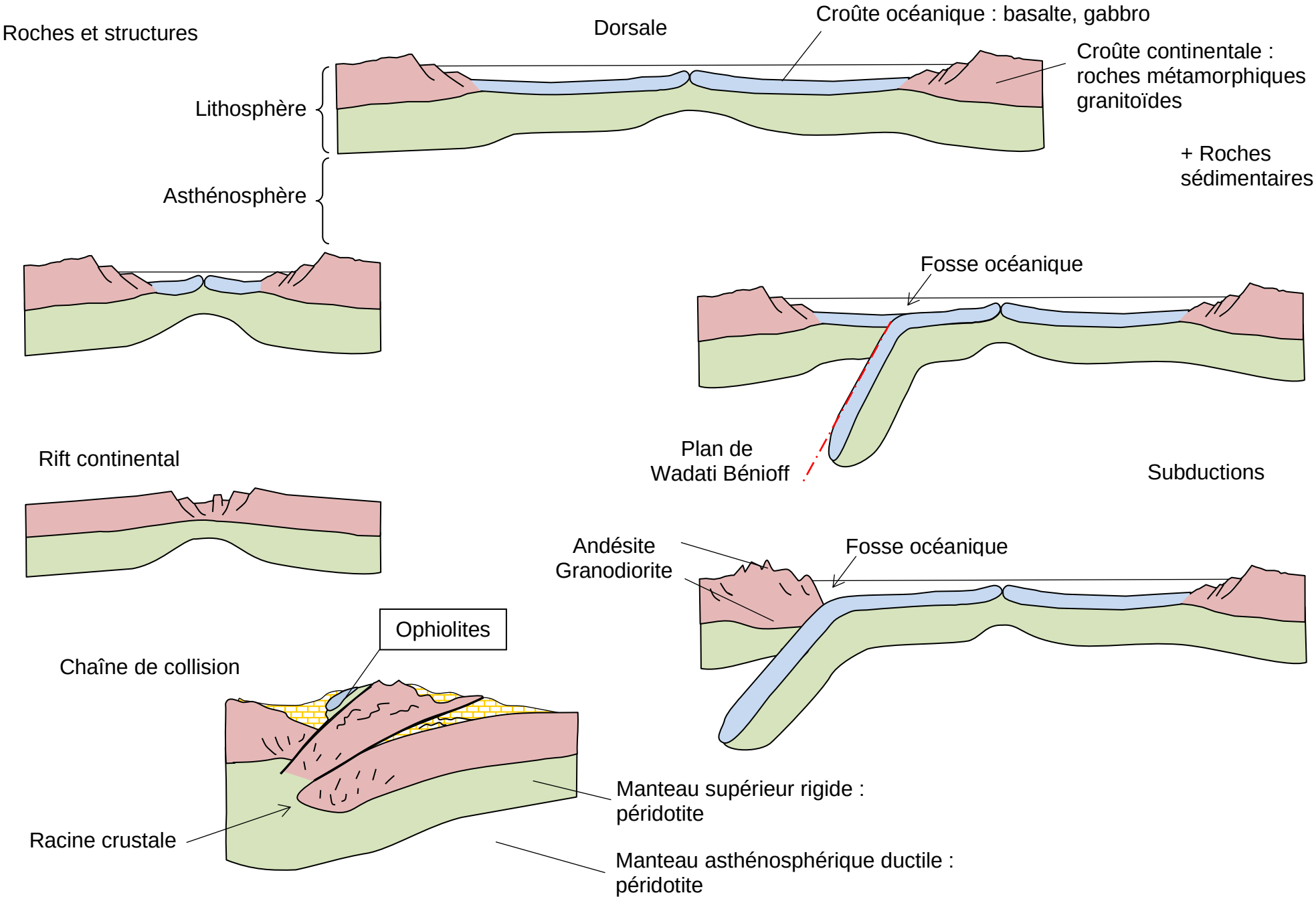


Roche de l'ancienne
marge passive (calcaires)

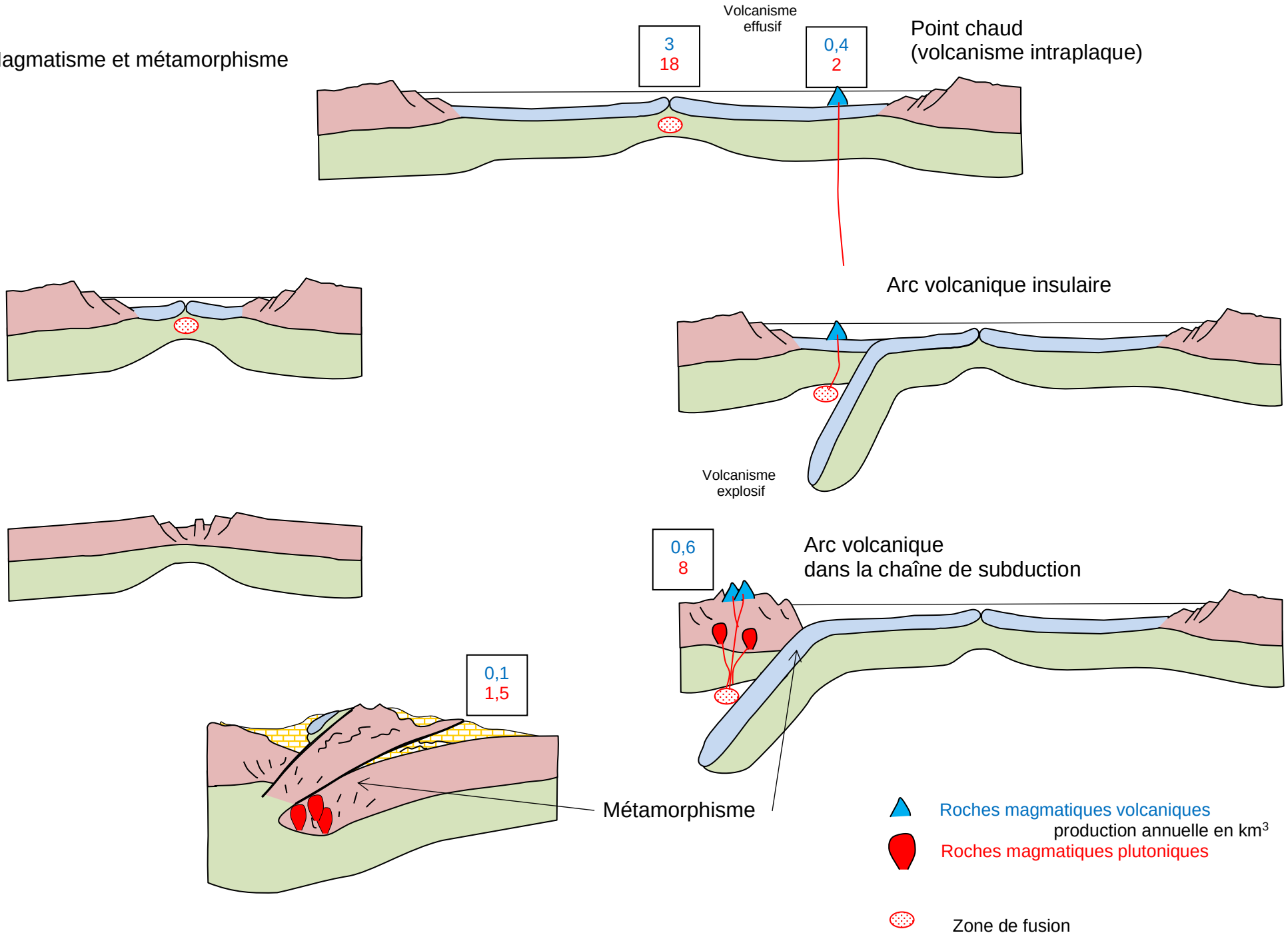
Roche de l'ancien
Océan (radiolarites)



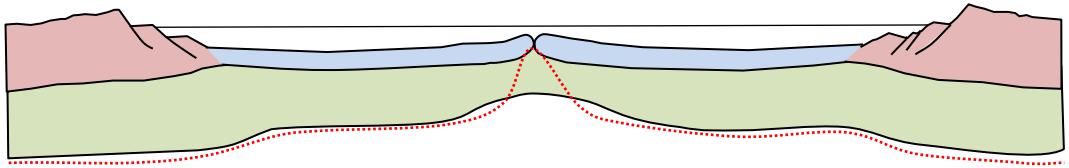
Altération, érosion, transport
(fluviatile, éolien, glaciaire)


Roches et structures
Dorsale
Croûte océanique : basalte, gabbro
Croûte continentale : roches métamorphiques granitoïdes
+ Roches sédimentaires
Lithosphère
Asthénosphère
Fosse océanique
Plan de Wadati Bénioff
Subductions
Rift continental
Andésite
Granodiorite
Fosse océanique
Ophiolites
Chaîne de collision
Manteau supérieur rigide : péridotite
Racine crustale
Manteau asthénosphérique ductile : péridotite

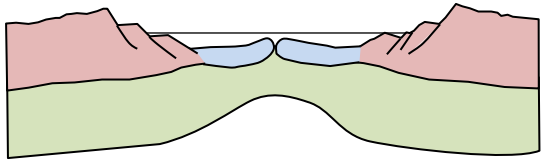
Magmatisme et métamorphisme

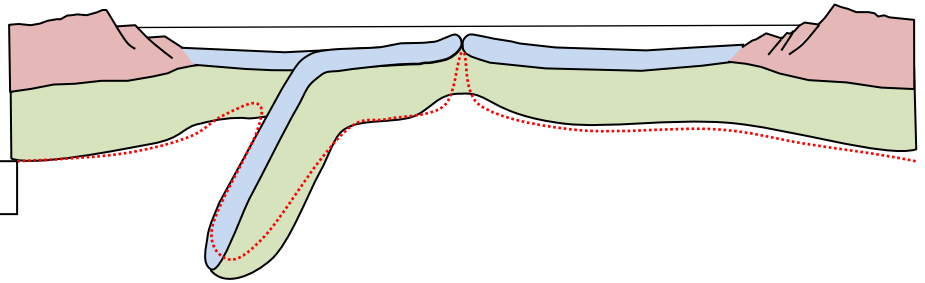


Géothermes

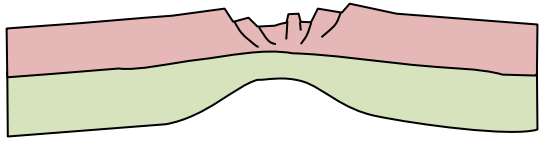


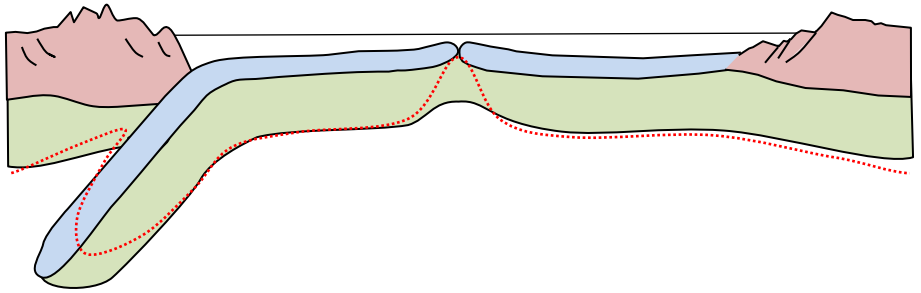
1200 °C



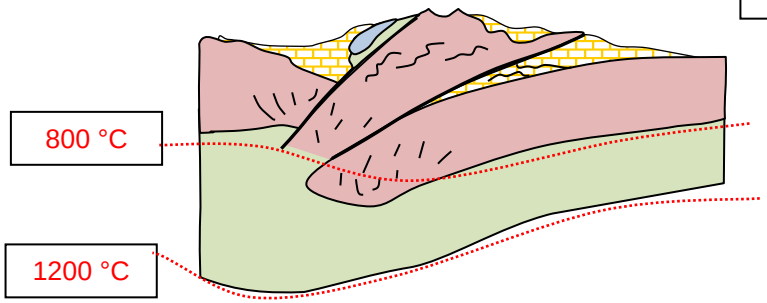


1200 °C





1200 °C



800 °C

1200 °C

Gradient géothermique moyen en surface
1 °C tous les 33 m (30 °C tous les 1000 m)