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Interaction entre la tectonique salifère et la sédimentation dans des mini-bassins:

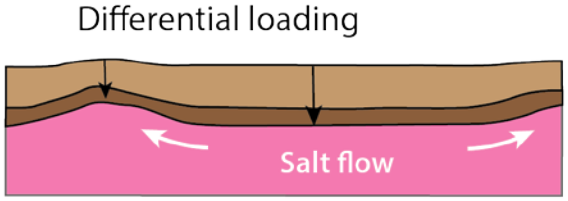
Exemple de l'Oligo-Miocène du bassin de Sivas, Turquie.

Charlotte RIBES

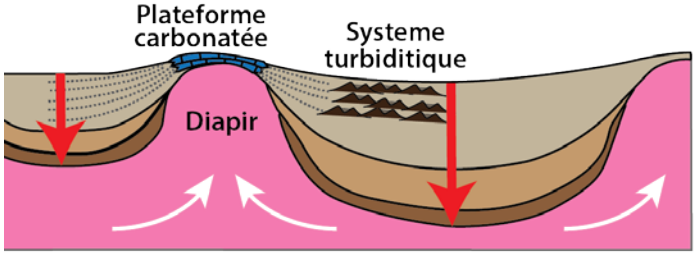
Sous la direction de :

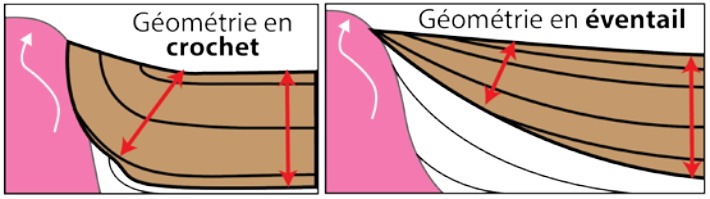
- Jean-Paul Callot, Université de Pau et des Pays de l'Adour
- Michel Lopez, Université de Montpellier II
- Cédric Bonnel, Université de Pau et des Pays de l'Adour
- Philippe Crumeyrolle, Total
- Jean-Claude Ringenbach, Total

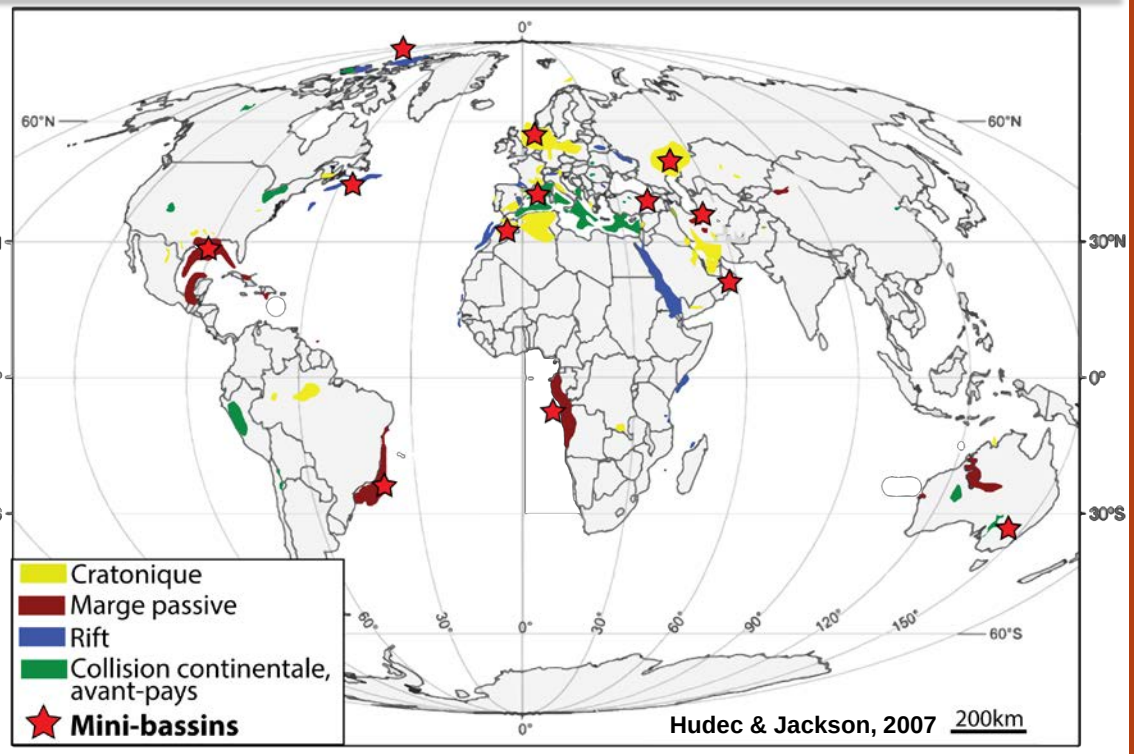
LA TECTONIQUE SALIFÈRE



Hudec *et al.*, 2011, modifié d'après Barton 1933







LES INTERACTIONS ENTRE L'HALOCINÈSE ET LE SYSTÈME SÉDIMENTAIRE

Subsidence différentielle:

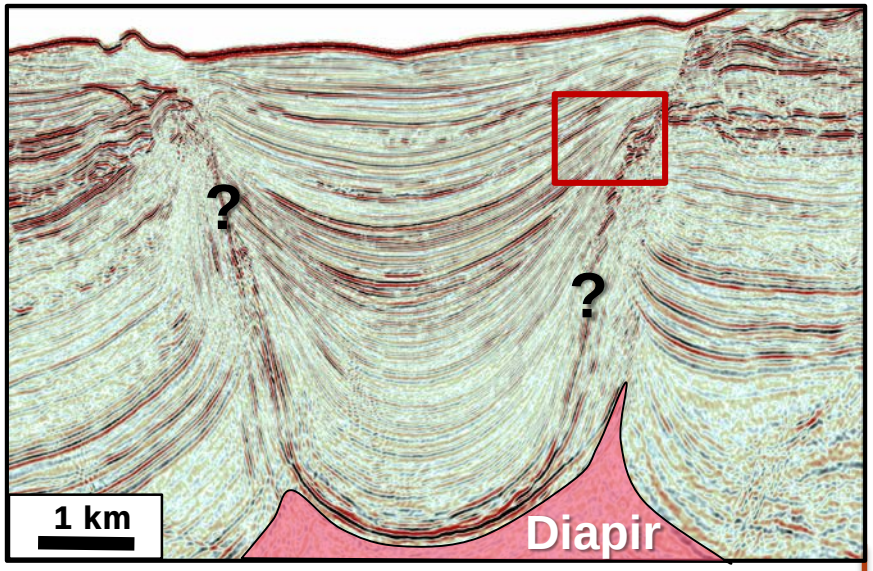
➔ **Variation d'épaisseurs**

Surrection des diapirs:

➔ **Partitionnement des facies**

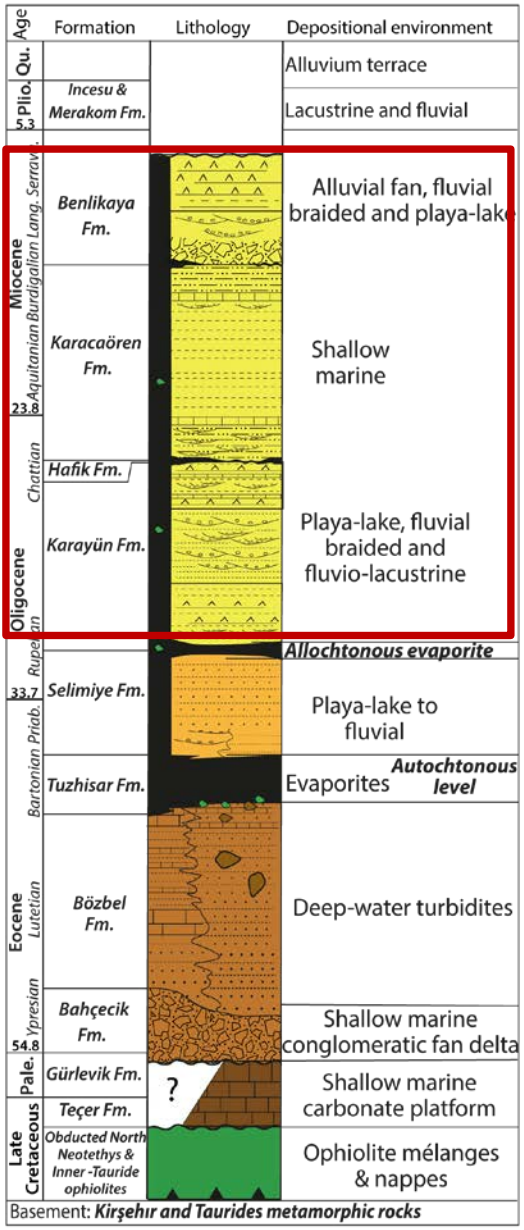
Déformation en bordures de mini-bassins:

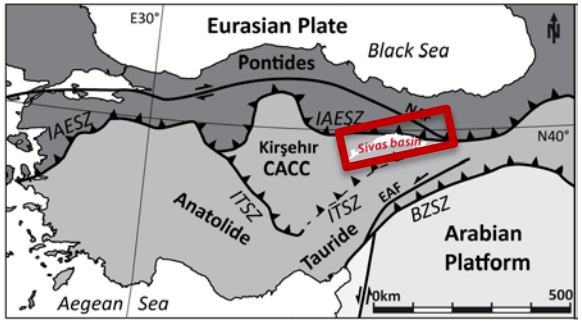
➔ **Séquences halocinétiques**

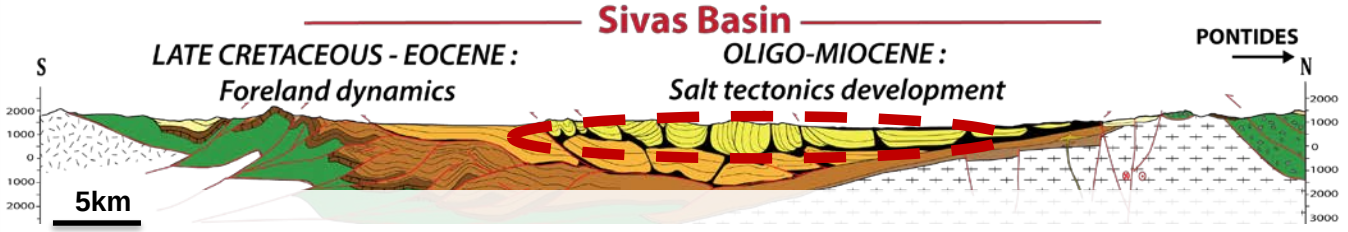


Maharaj & Wood, 2015

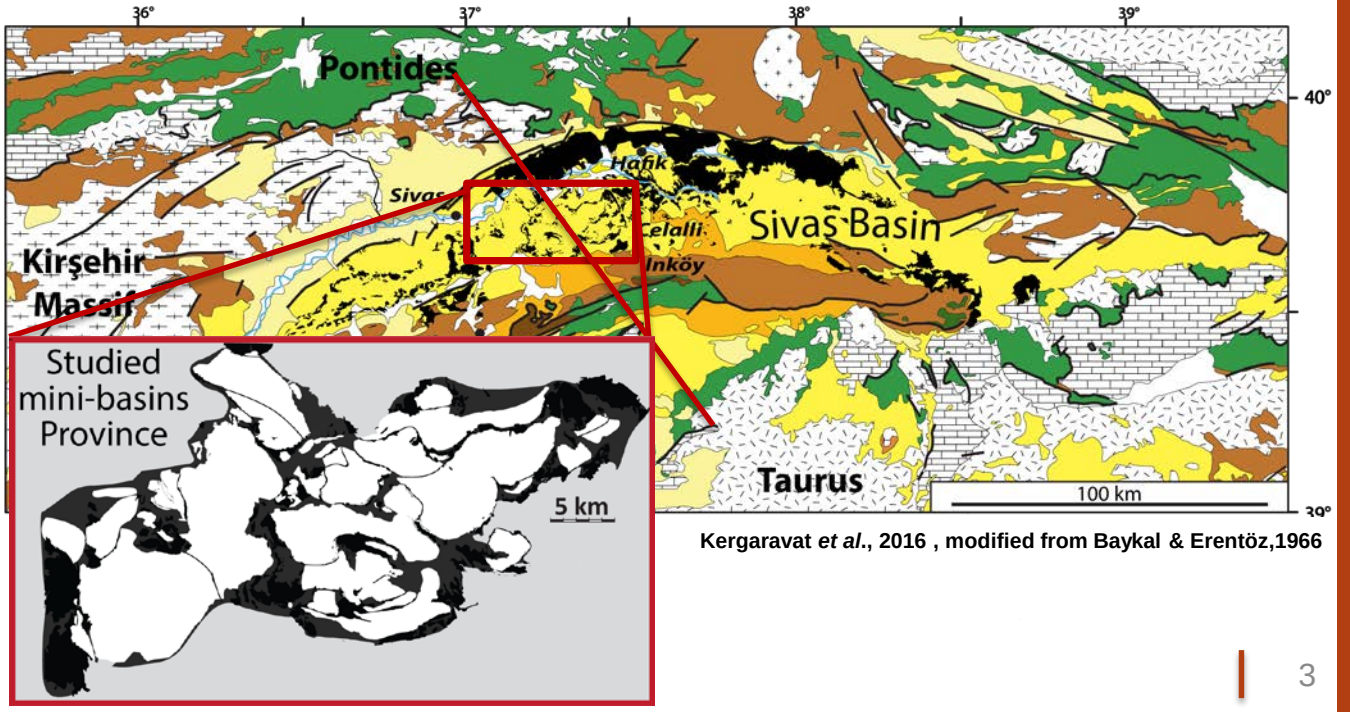
LE BASSIN FLEXURAL DE SIVAS





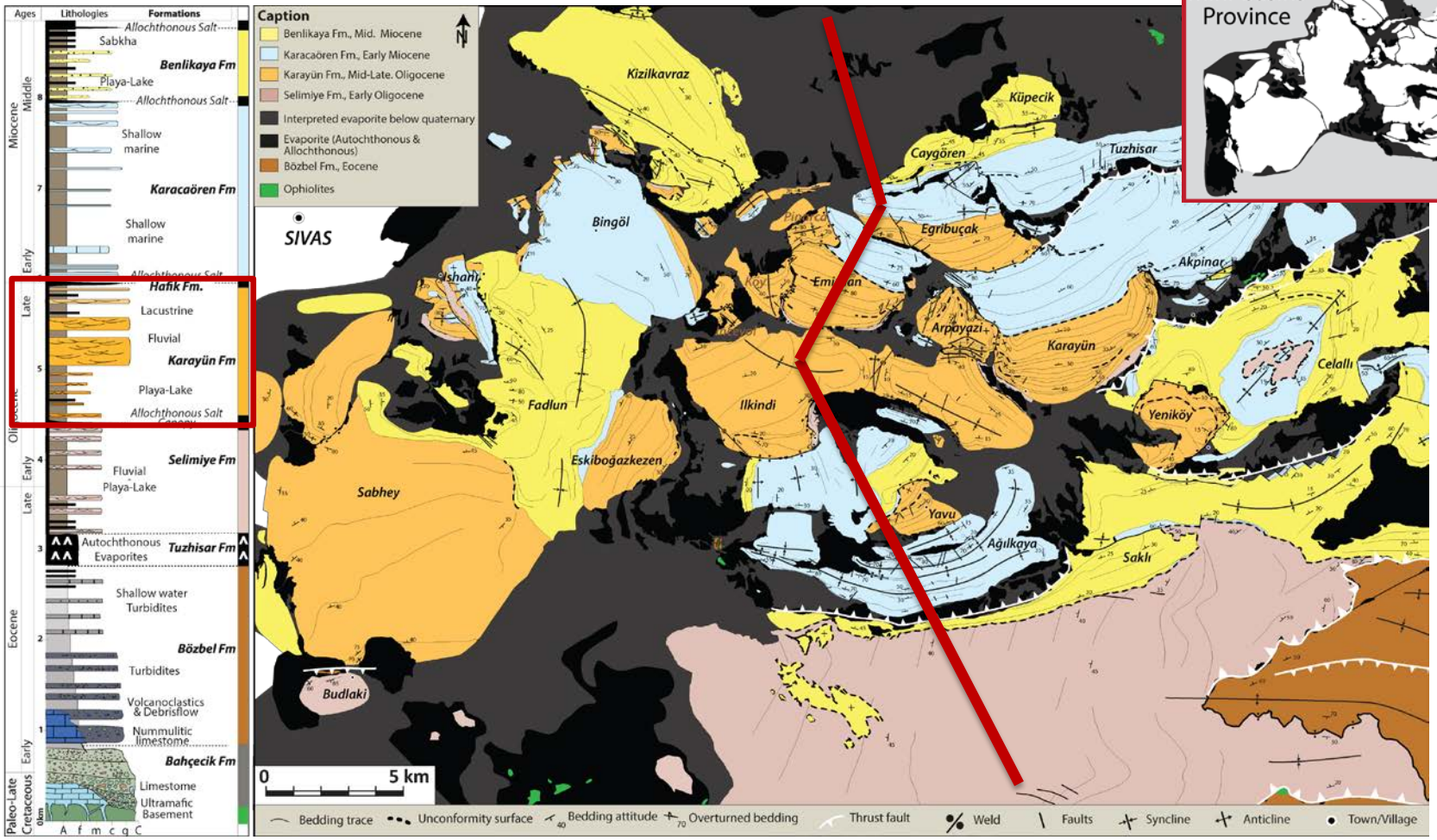


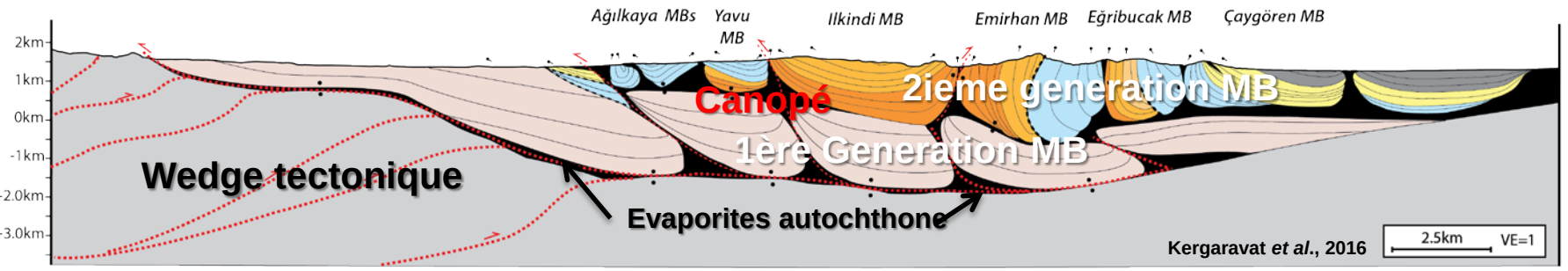
Kergaravat et al. 2016 and Legeay *et al.*, in prep.



Kergaravat *et al.*, 2016 , modified from Baykal & Erentöz,1966

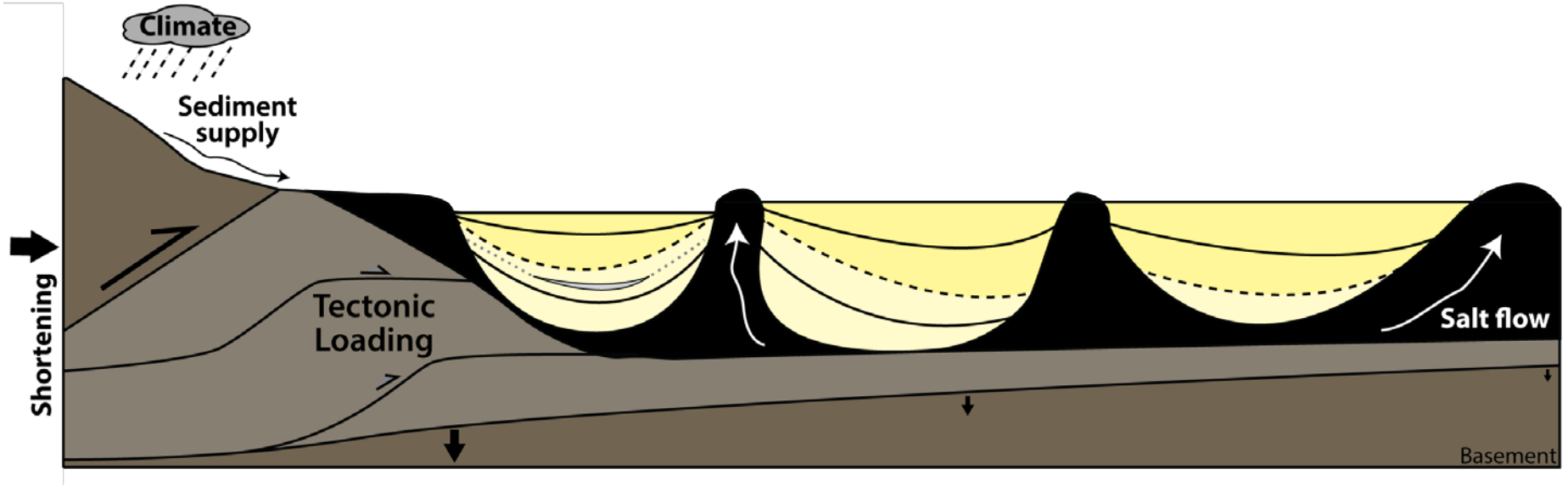
SUCCESSION STRATIGRAPHIQUE ET CARTOGRAPHIE RÉGIONALE





PROBLÉMATIQUE

Quels sont les facteurs de contrôles s'exerçant sur les systèmes sédimentaires dans mini-bassins?



Bassin Flexural

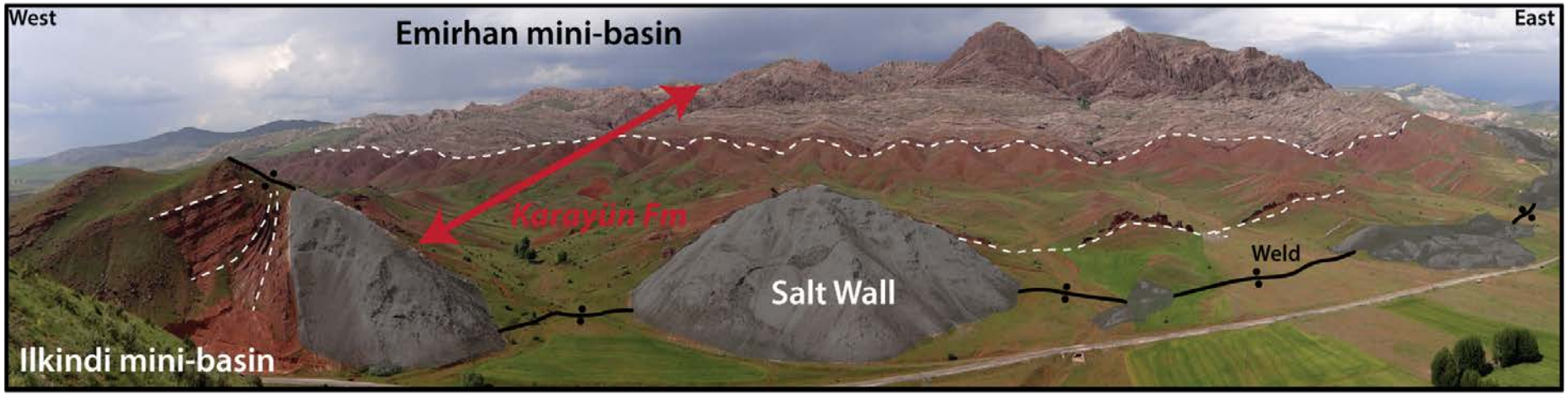
- Chargement tectonique
- Contraintes compressives

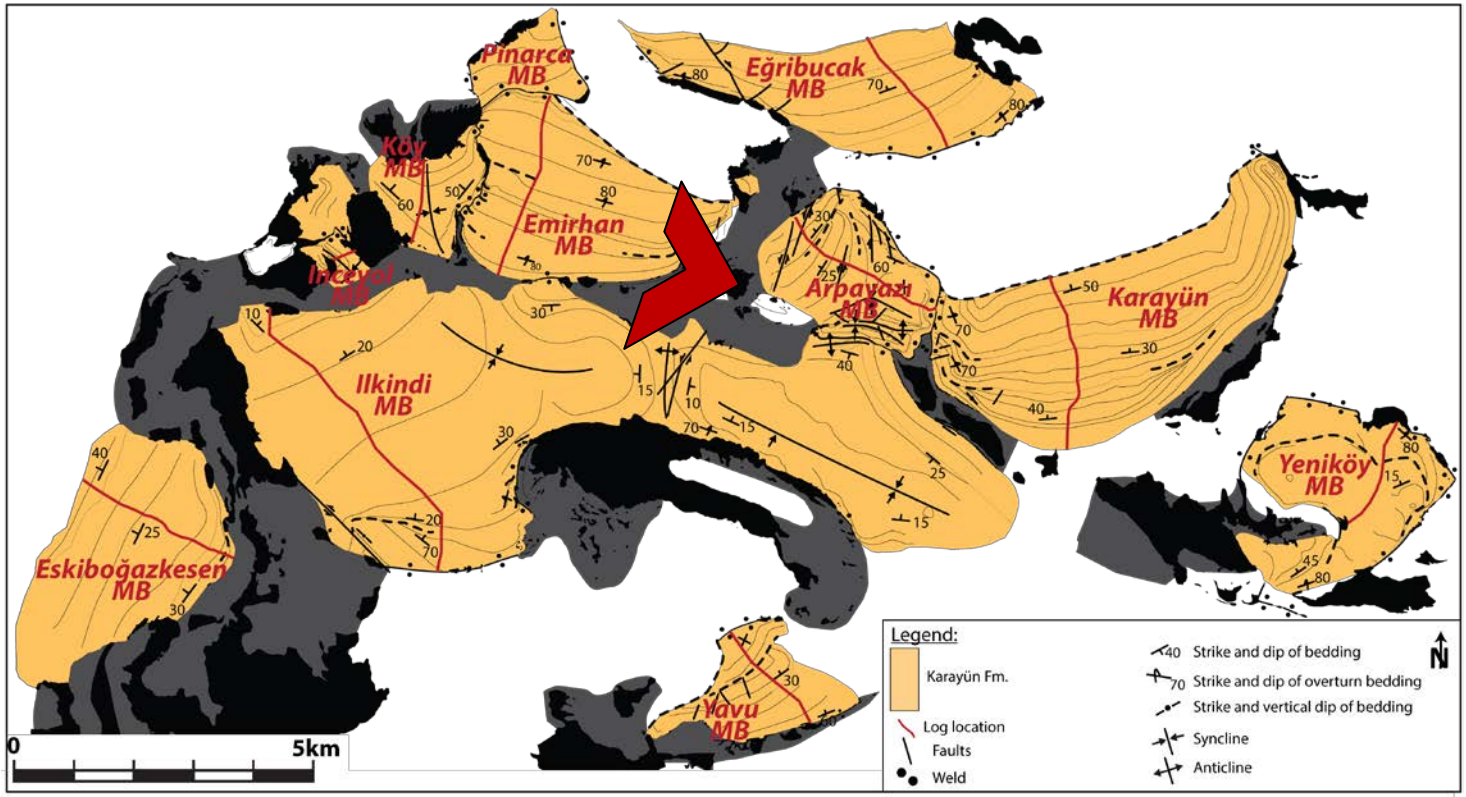
Effets de la tectonique salifère

- Variations latérales de facies et d'épaisseurs
- Séquences halocinétiques
- Diapirs formant des hauts topographiques

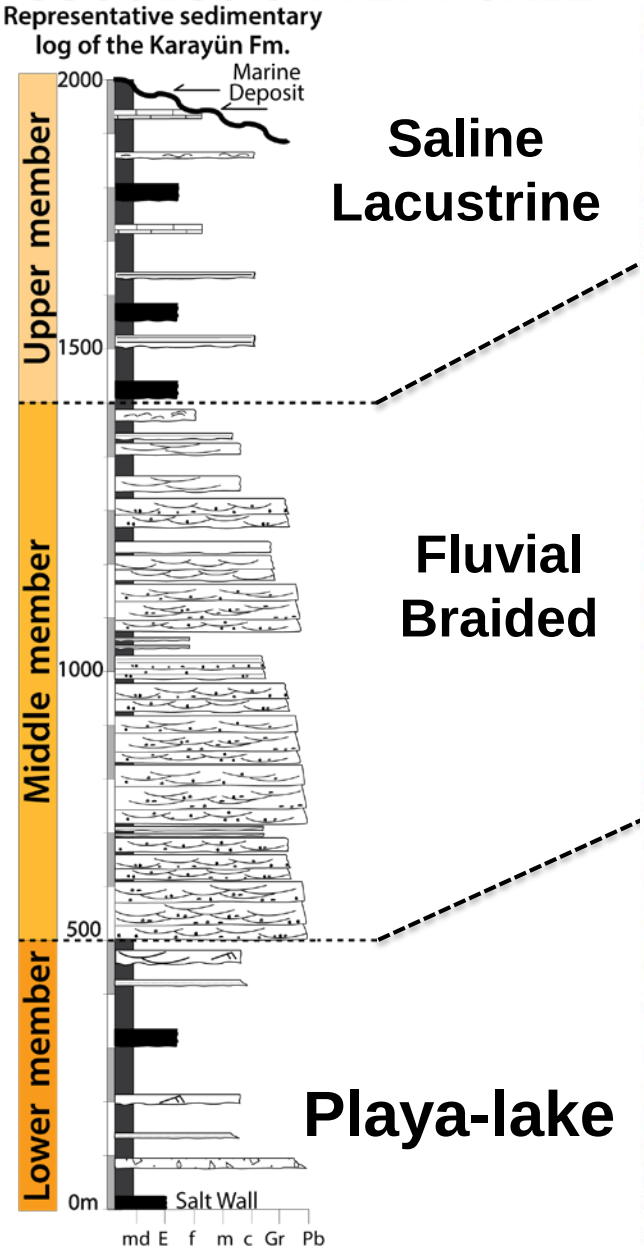
Interactions avec le système sédimentaire

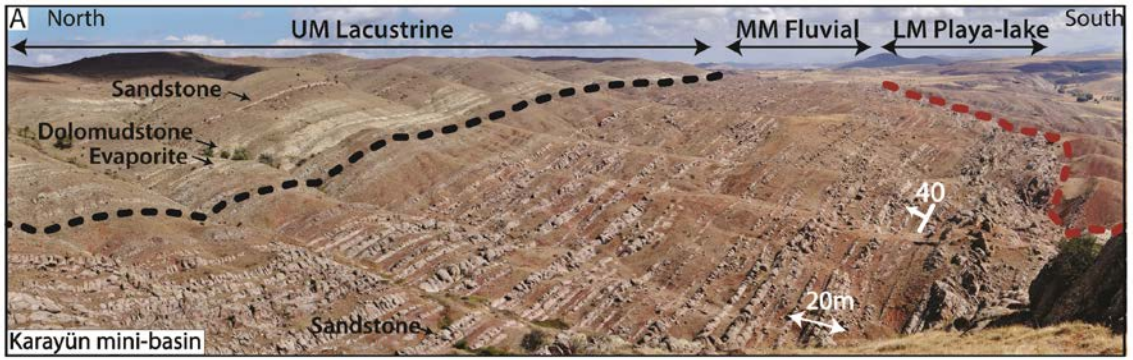
L'OLIGOCÈNE CONTINENTAL: LA FORMATION KARAYÜN

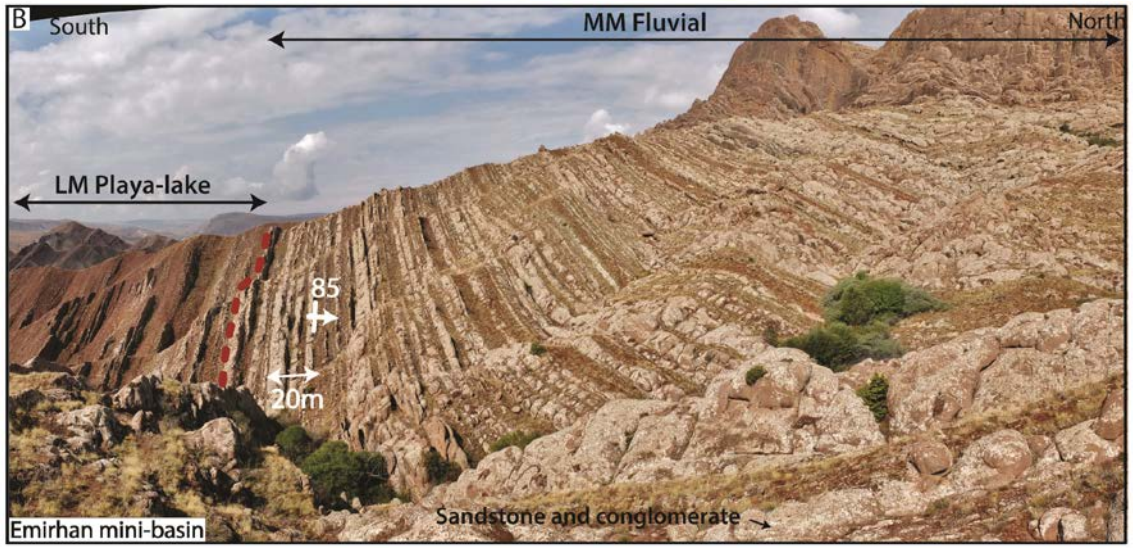


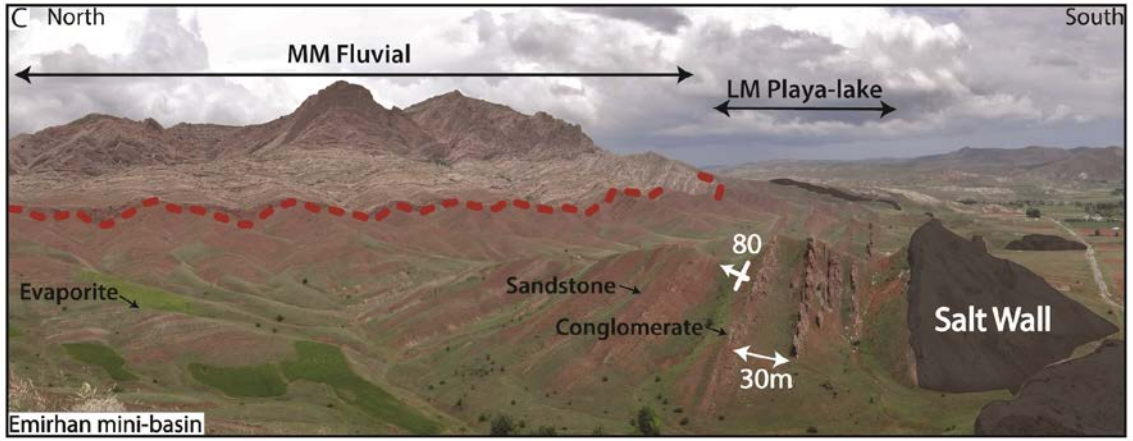


CARACTÉRISATION DE LA SUCCESSION VERTICALE

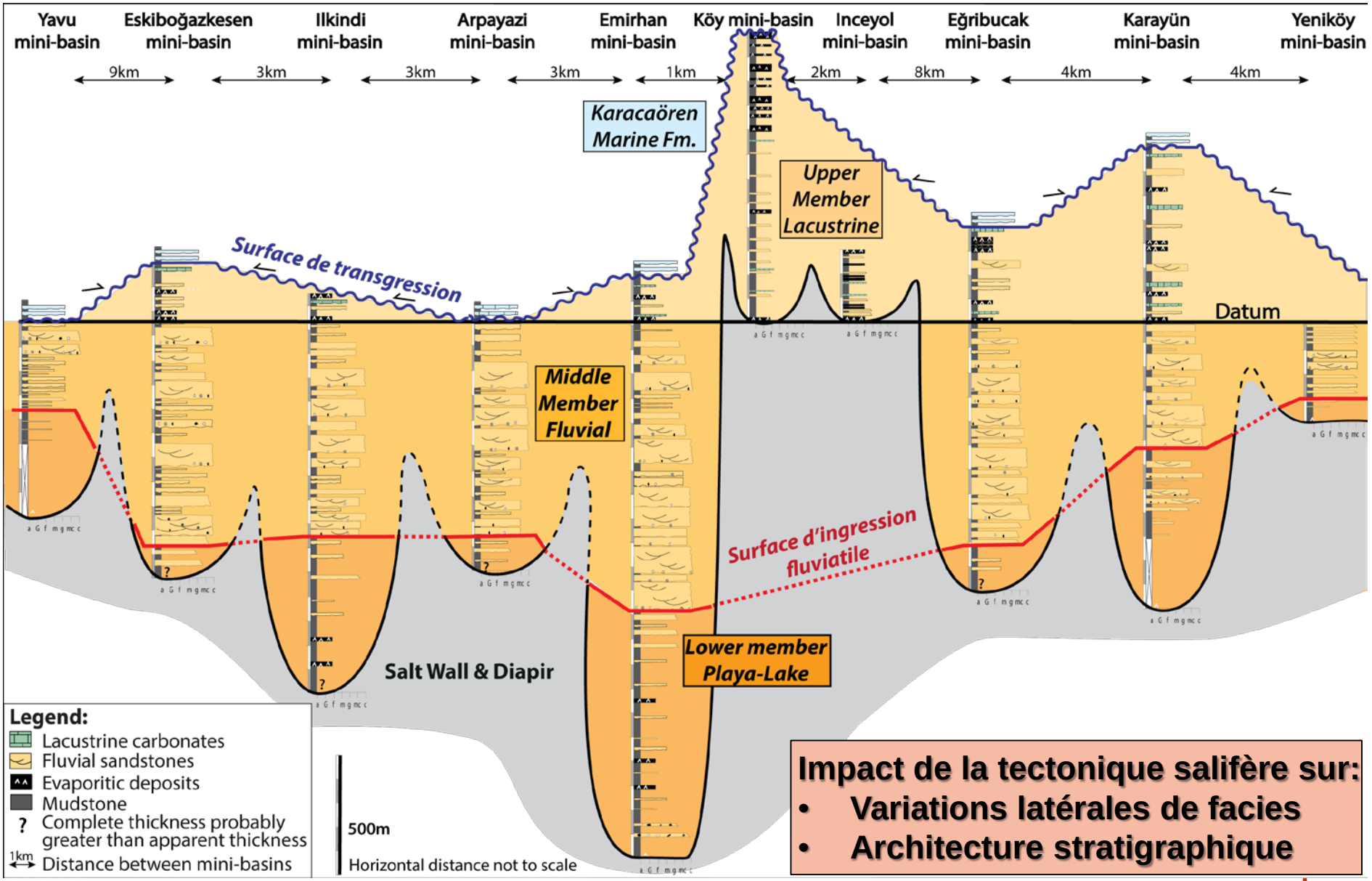








CORRÉLATION RÉGIONALE



Impact de la tectonique salifère sur:

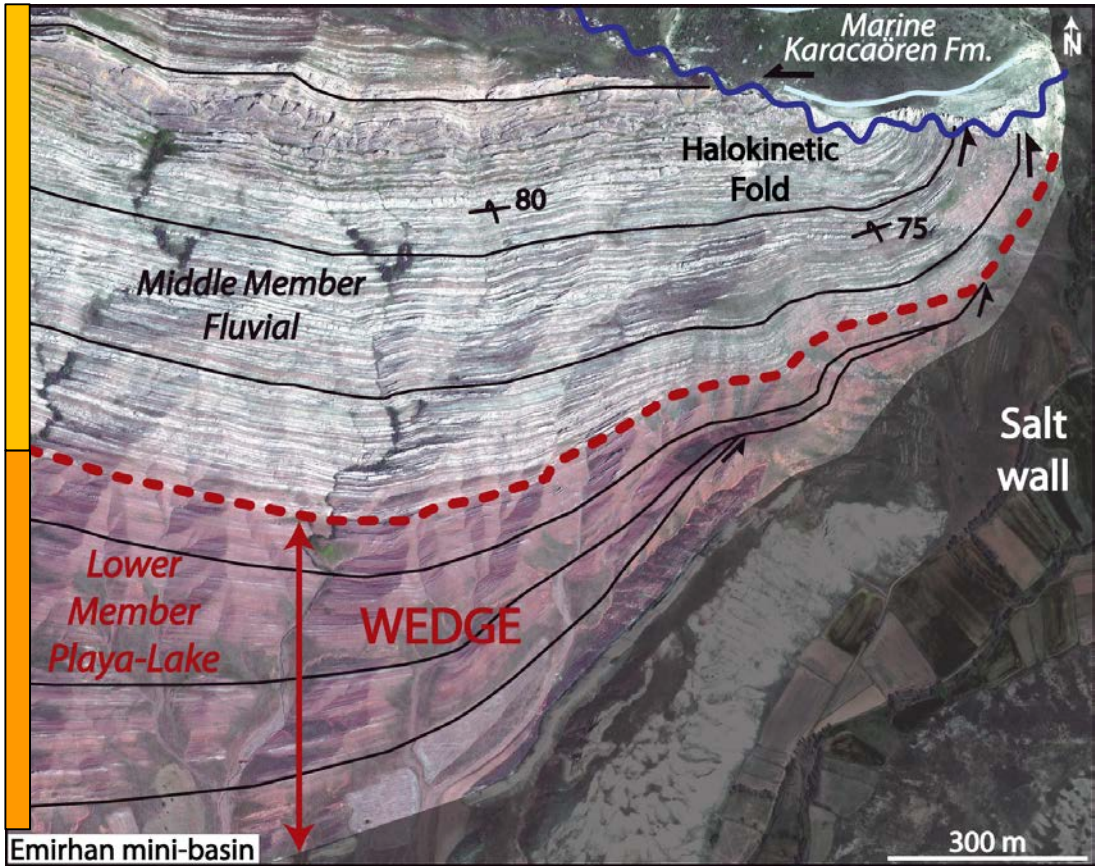
- **Variations latérales de facies**
- **Architecture stratigraphique**

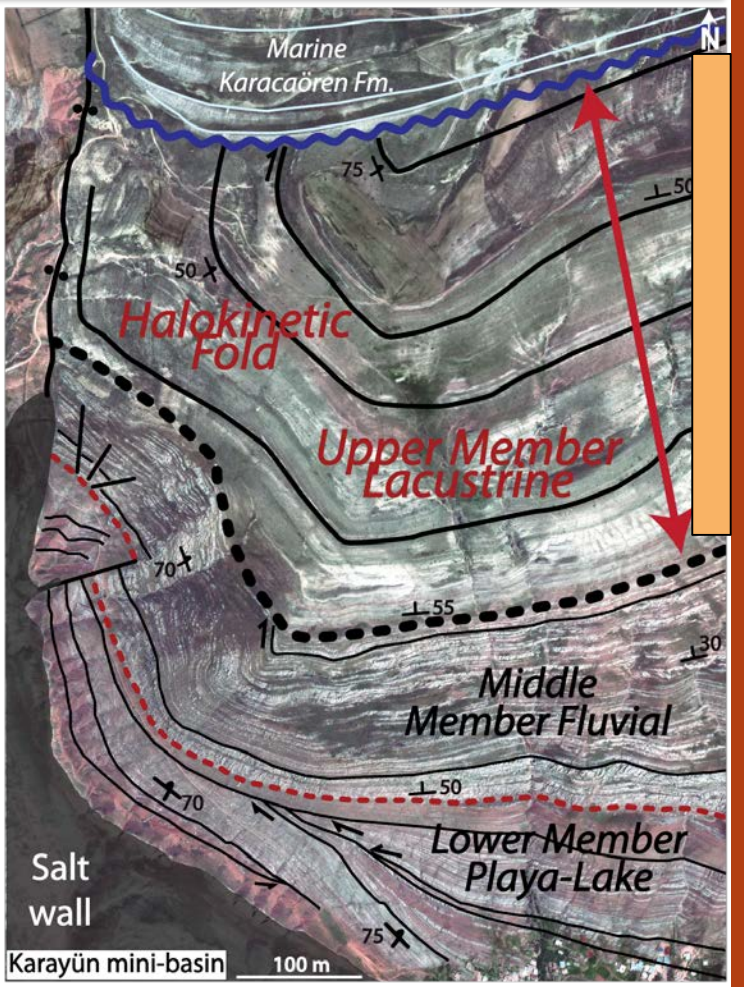
SÉQUENCES HALOCINETIQUES

Middle Member: Fluvial

Upper Member: Lacustrine

- Arrêt subsidence différentielle
- Surrection diapirique discontinue

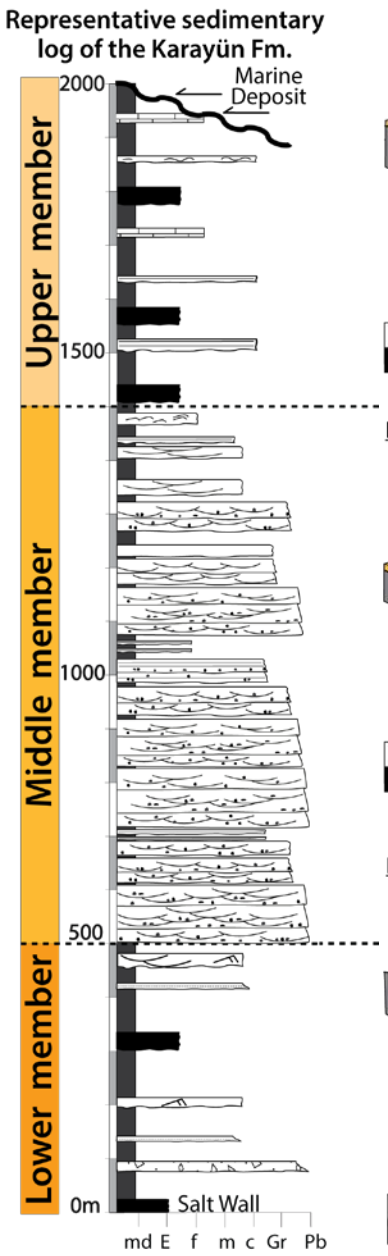


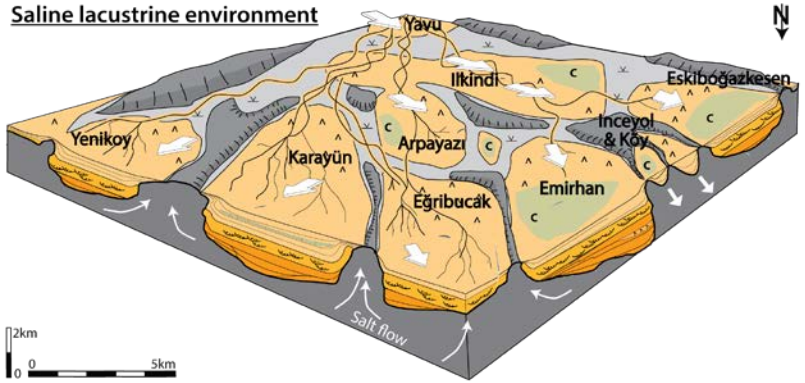


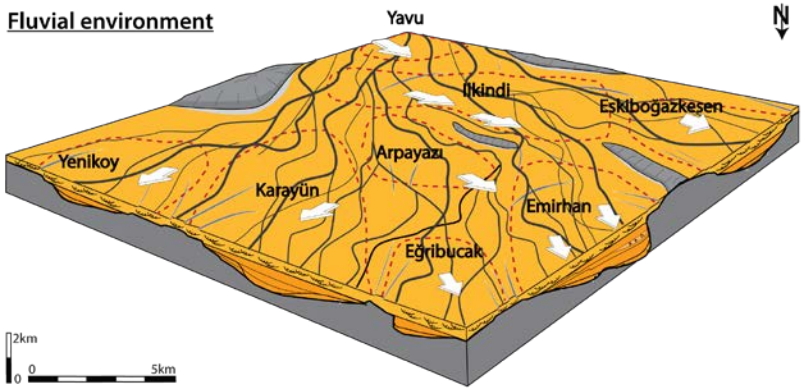
Lower Member: Playa-Lake

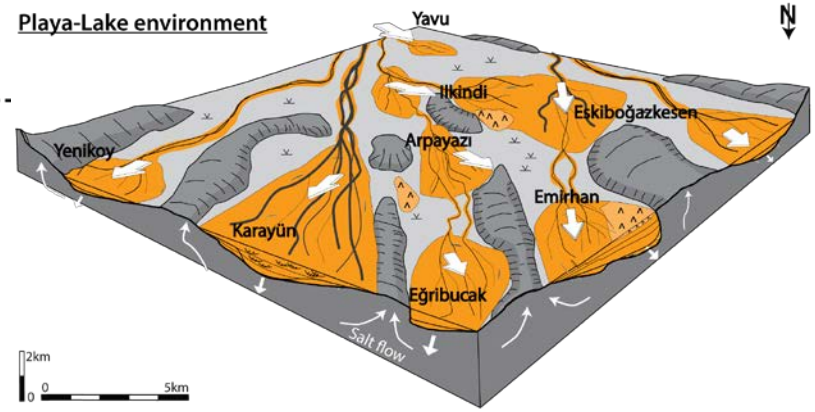
- Subsidence différentielle active
- Surrection diapirique continue

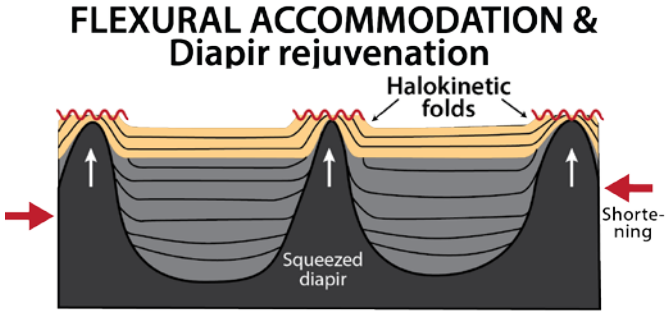
MODÈLE DE PARTITIONNEMENT SÉDIMENTAIRE

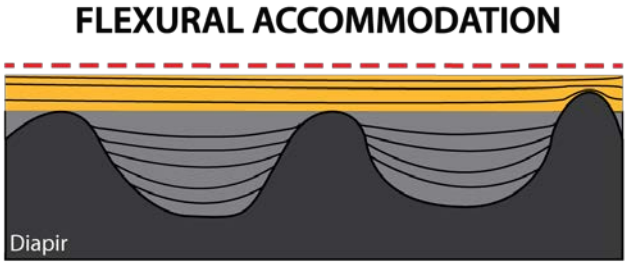


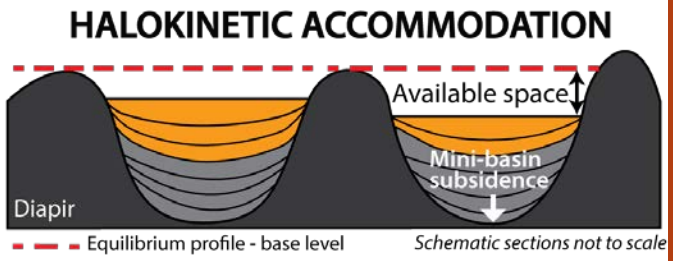






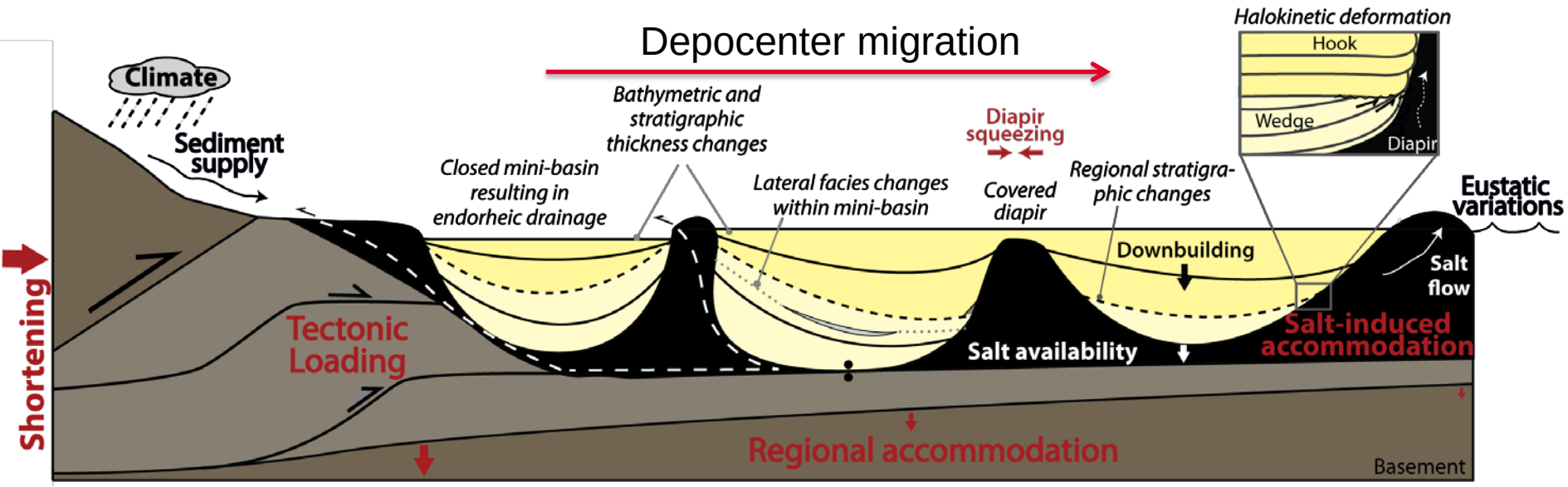






LES FACTEURS DE CONTRÔLES S'EXERÇANT SUR LE SYSTÈME SÉDIMENTAIRE

Hinterland **Mini-basins province**



- **Tectonique salifère**

➔ **Accommodation halocinétique induit des variations de facies, d'épaisseurs et des déformations**

- **Compression & Chargement flexural**

➔ **Accommodation régionale induit préférentiellement une homogénéité des facies et des épaisseurs au sein et entre les mini-basins**

➔ **Réactivation croissance diapirique induit le développements de large plis post-dépôts**

Merci de votre attention