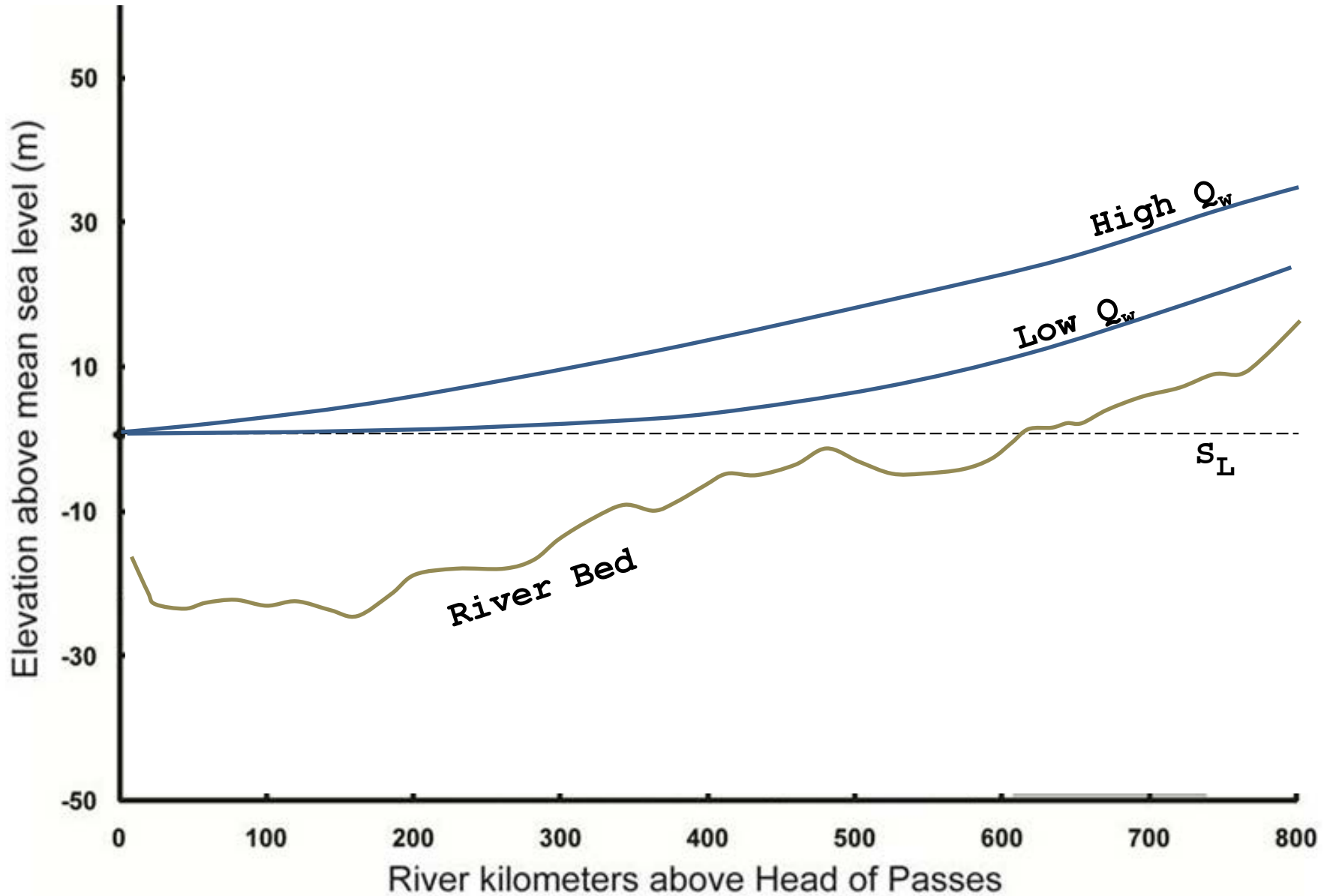


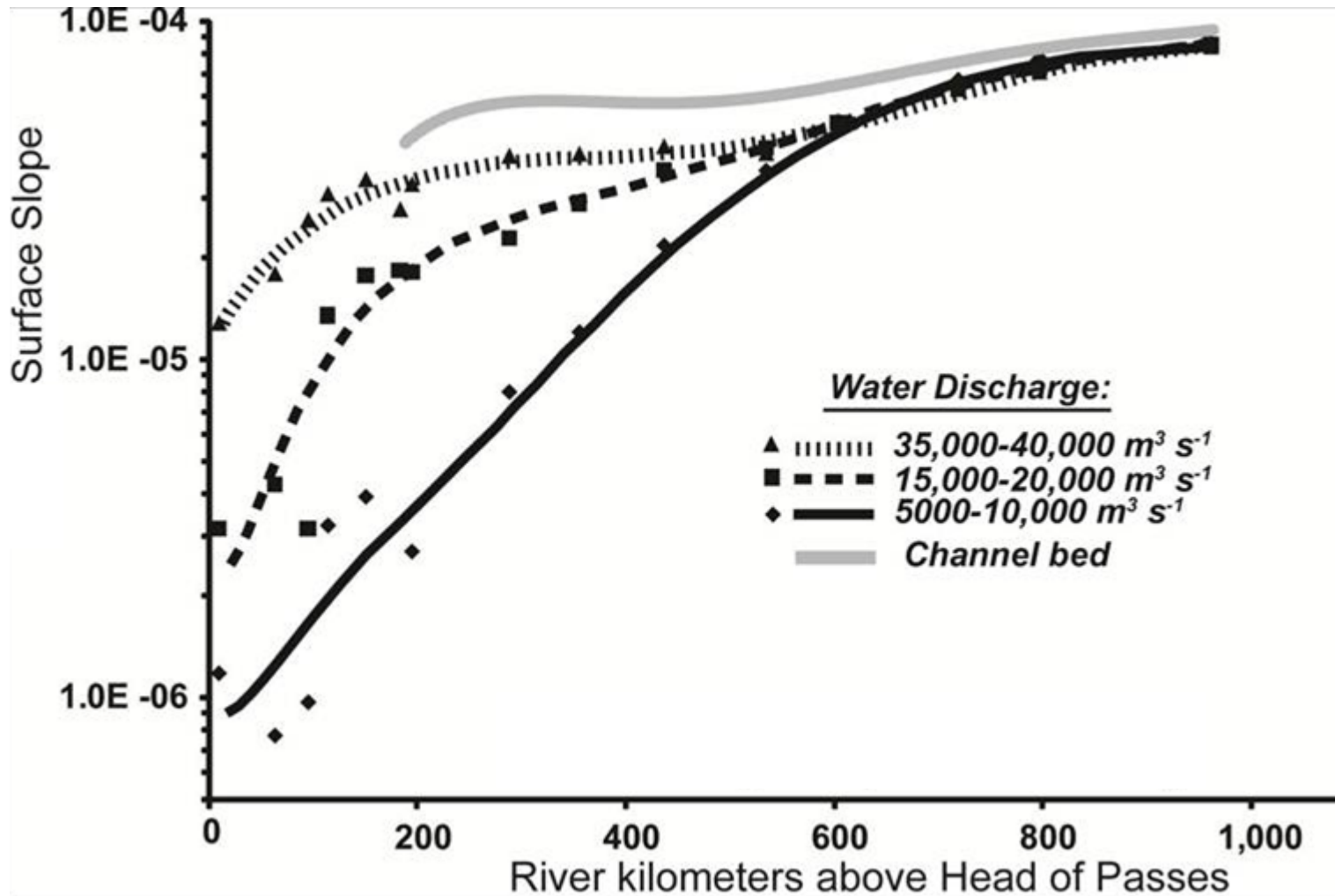
# Lowland Rivers

## Backwater

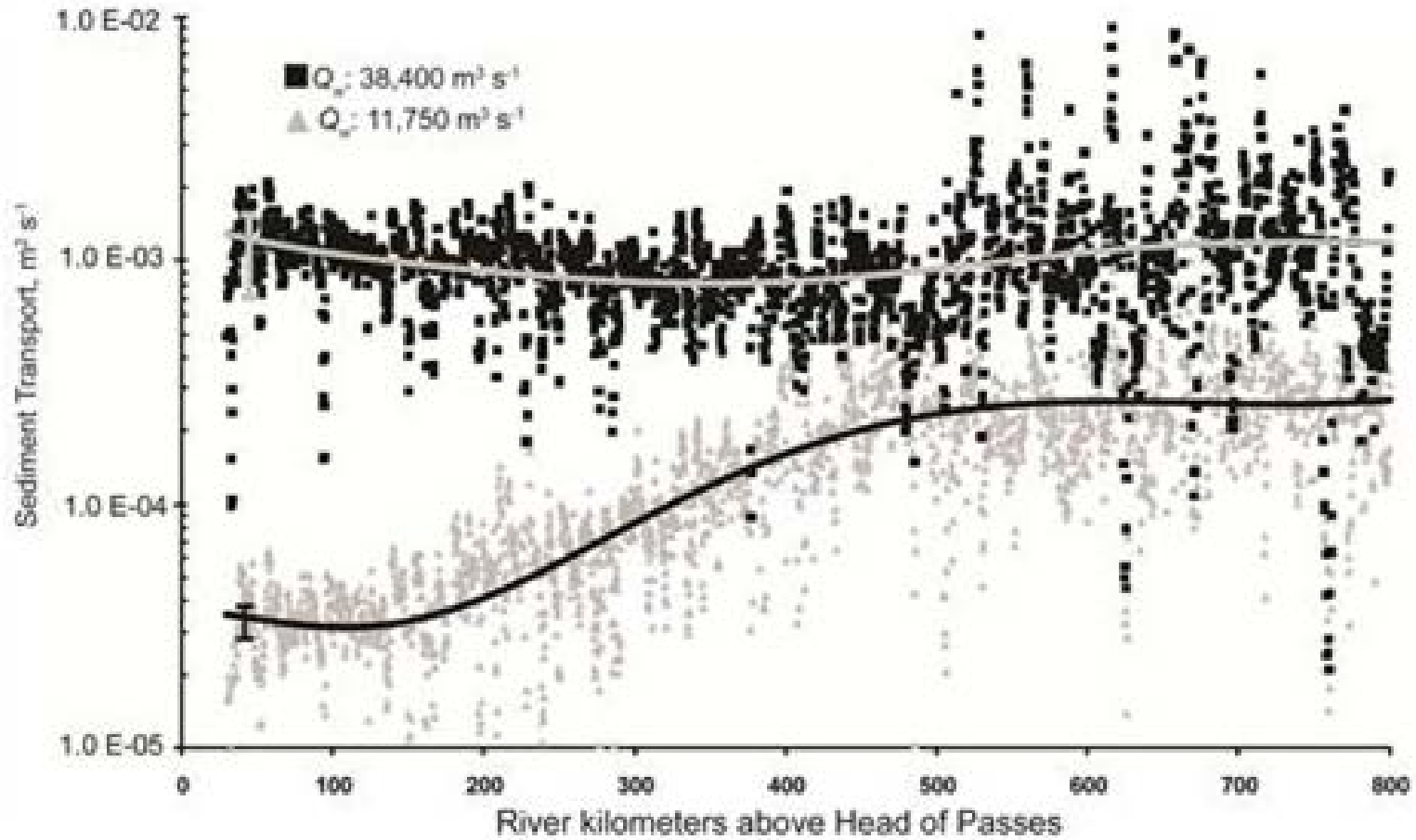


# Lowland Rivers

$$L_B = \frac{H}{S} = \frac{20 \text{ m}}{4 \times 10^{-5}} \approx 500 \text{ km}$$



# Lowland Rivers



[Nittrouer, 2011]

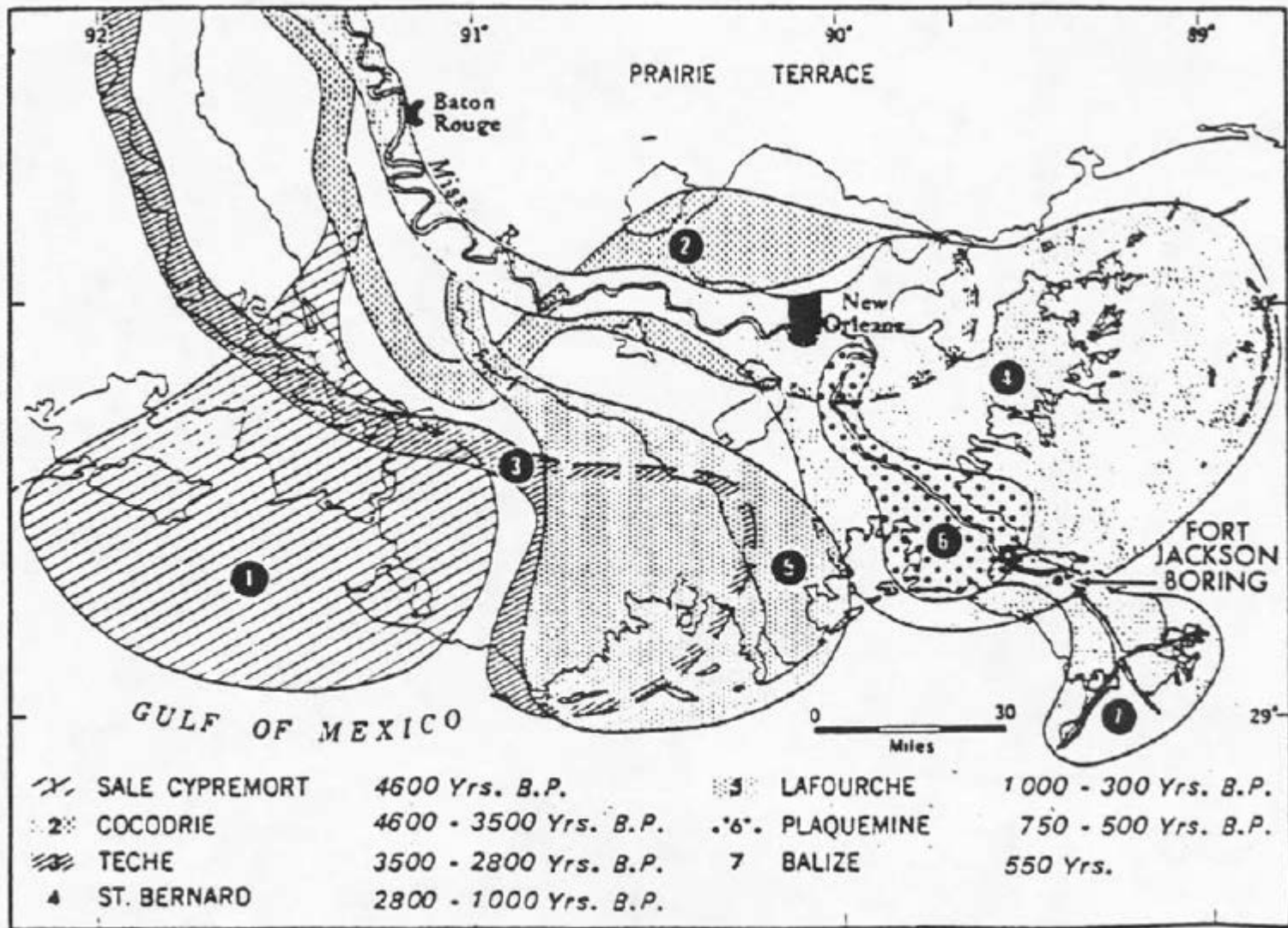


FIGURE 3 - Chronology of delta lobes that compose the Mississippi deltaic plain. (after Fisk and Kolb, and Van Lopik).

# Compensational Stacking

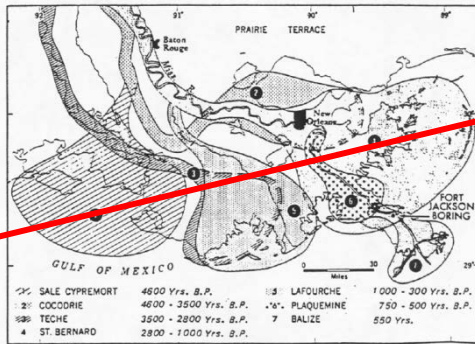
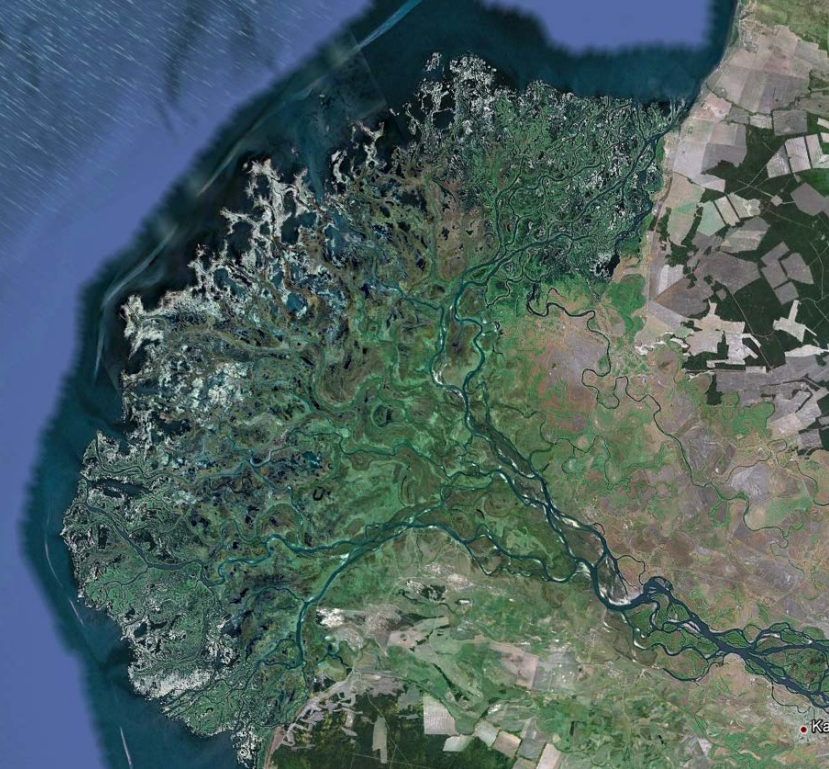


FIGURE 3 - Chronology of delta lobes that compose the Mississippi deltaic plain. (after Fisk and Kolb, and Van Hook).

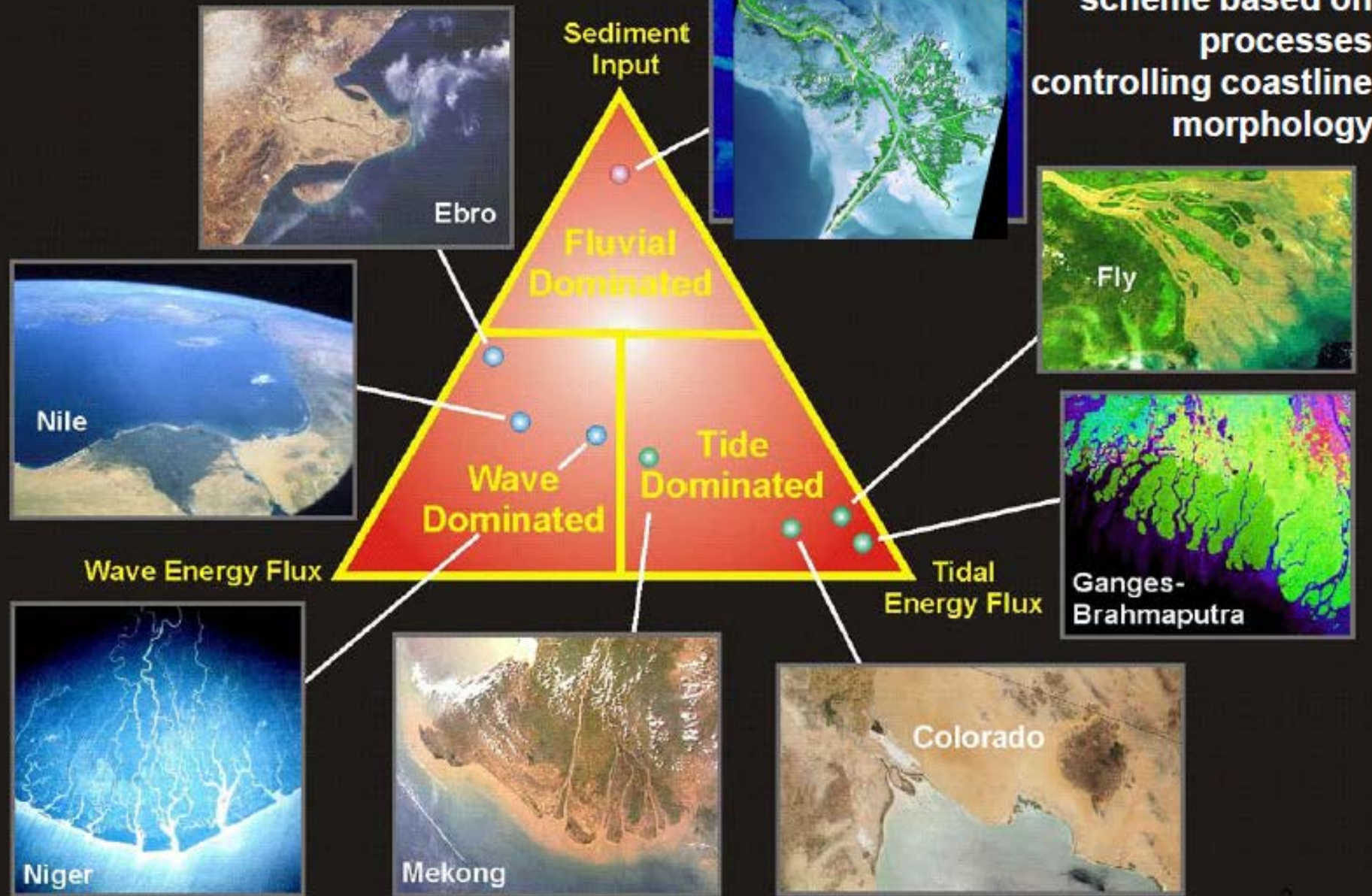
# Delta Types



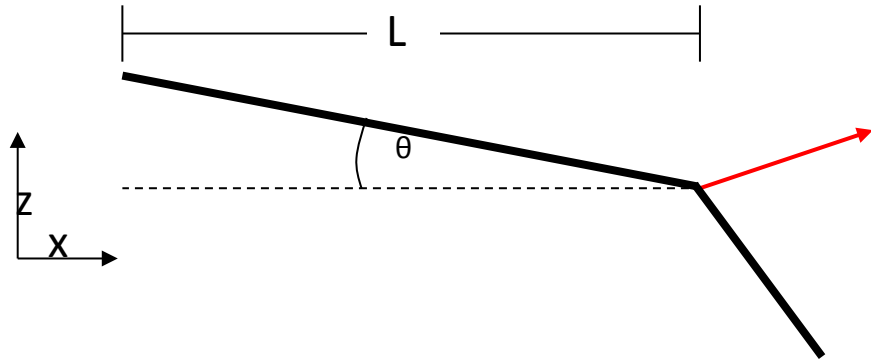
# Delta Types

(Galloway, 1975)

Delta classification scheme based on processes controlling coastline morphology



# Transgression / Regression styles

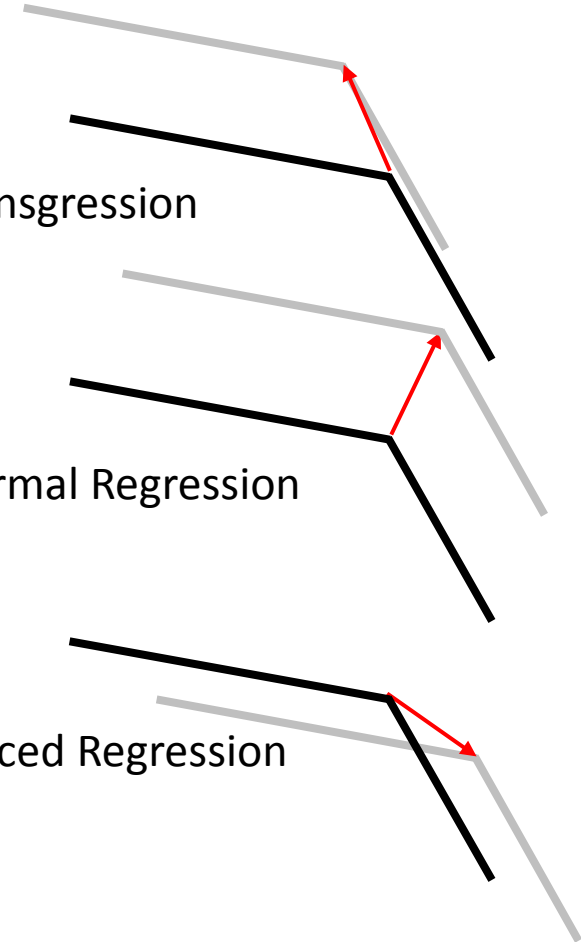


Definitional diagram above shows slope and "map" length of the fluvial part of the setup and a vector describing the evolution of the shoreline position. The three possible behaviors relative to "sea level" forcing are shown to right.

$$SL > \frac{q_s}{L \cos^2 \theta} \quad \text{Transgression}$$

$$SL < \frac{q_s}{L \cos^2 \theta} \quad \text{Normal Regression}$$

$$SL < 0 \quad \text{Forced Regression}$$





Heller



# Delta Architecture

