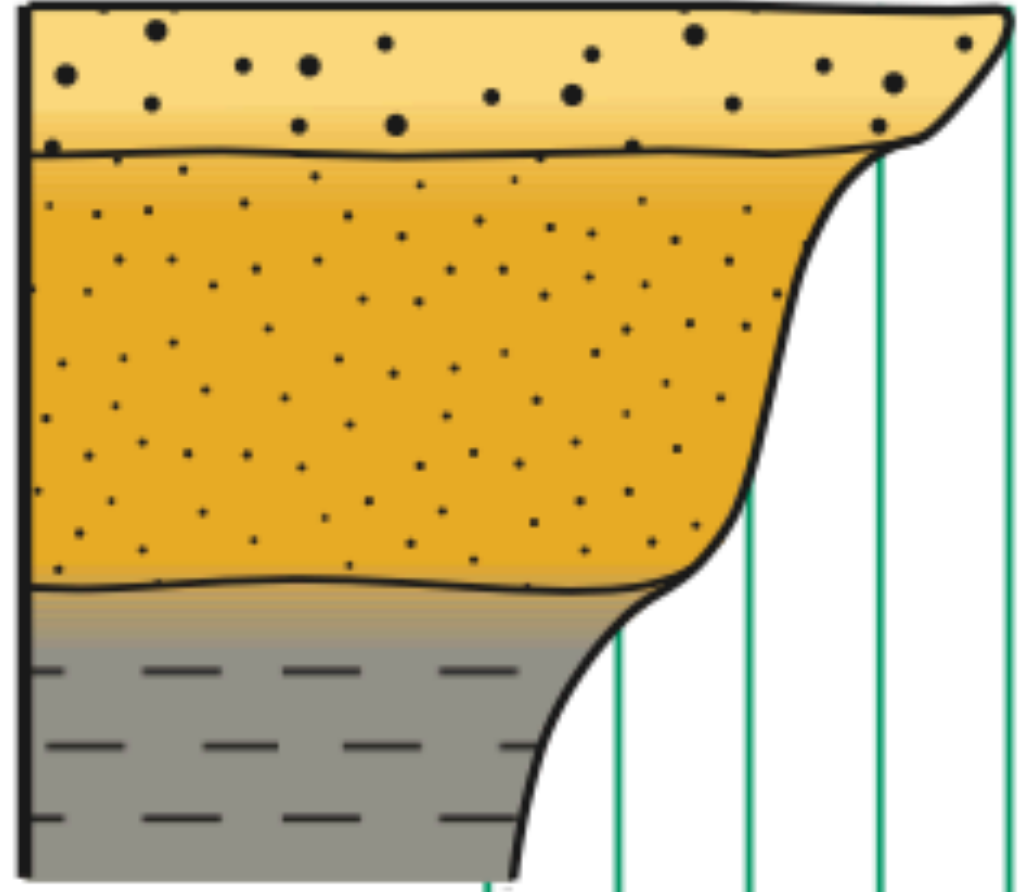




School of Geosciences

(b)

parasequence



clay

silt

f

m

c

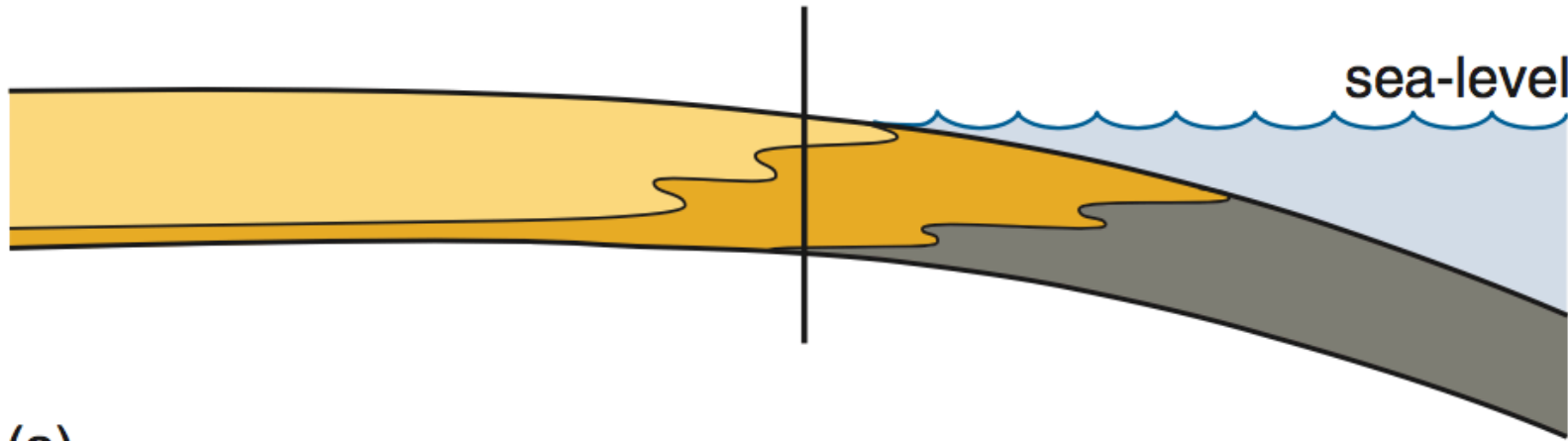
sand

What will happen if there is an increase in the rate of creation of acc. space (i.e. a relative sea-level rise) such that it is greater than the rate of sed. supply?

Development of para sequences

position of
graphic log

sea-level



(a)



transgression of the sea over the succession



transgression

This transgression event is marked either by a much thinner set of facies representing transgression or, more often, by a distinct surface which caps the succession (called a **flooding surface**)



relative sea-level rise

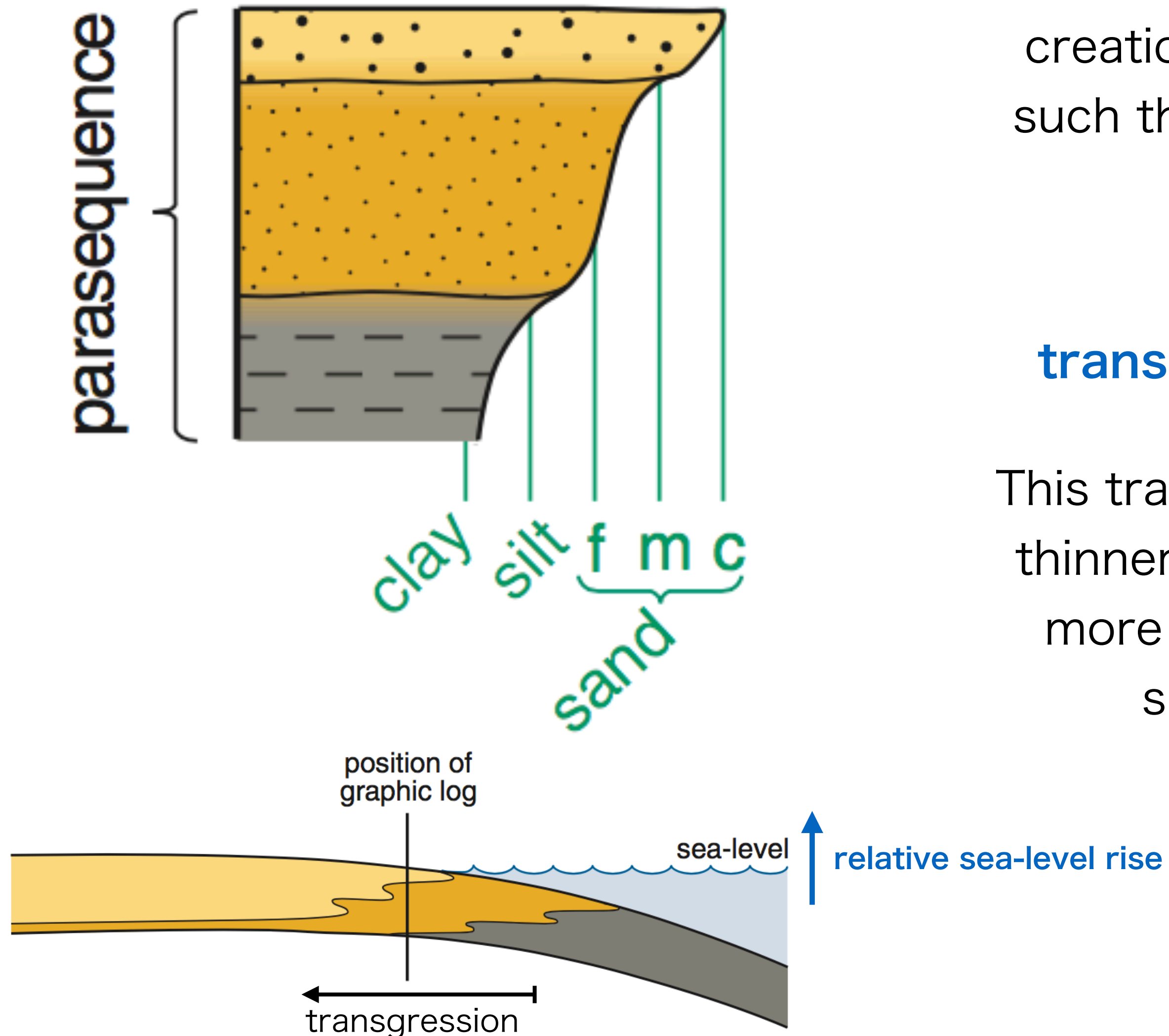
Development of parasequences

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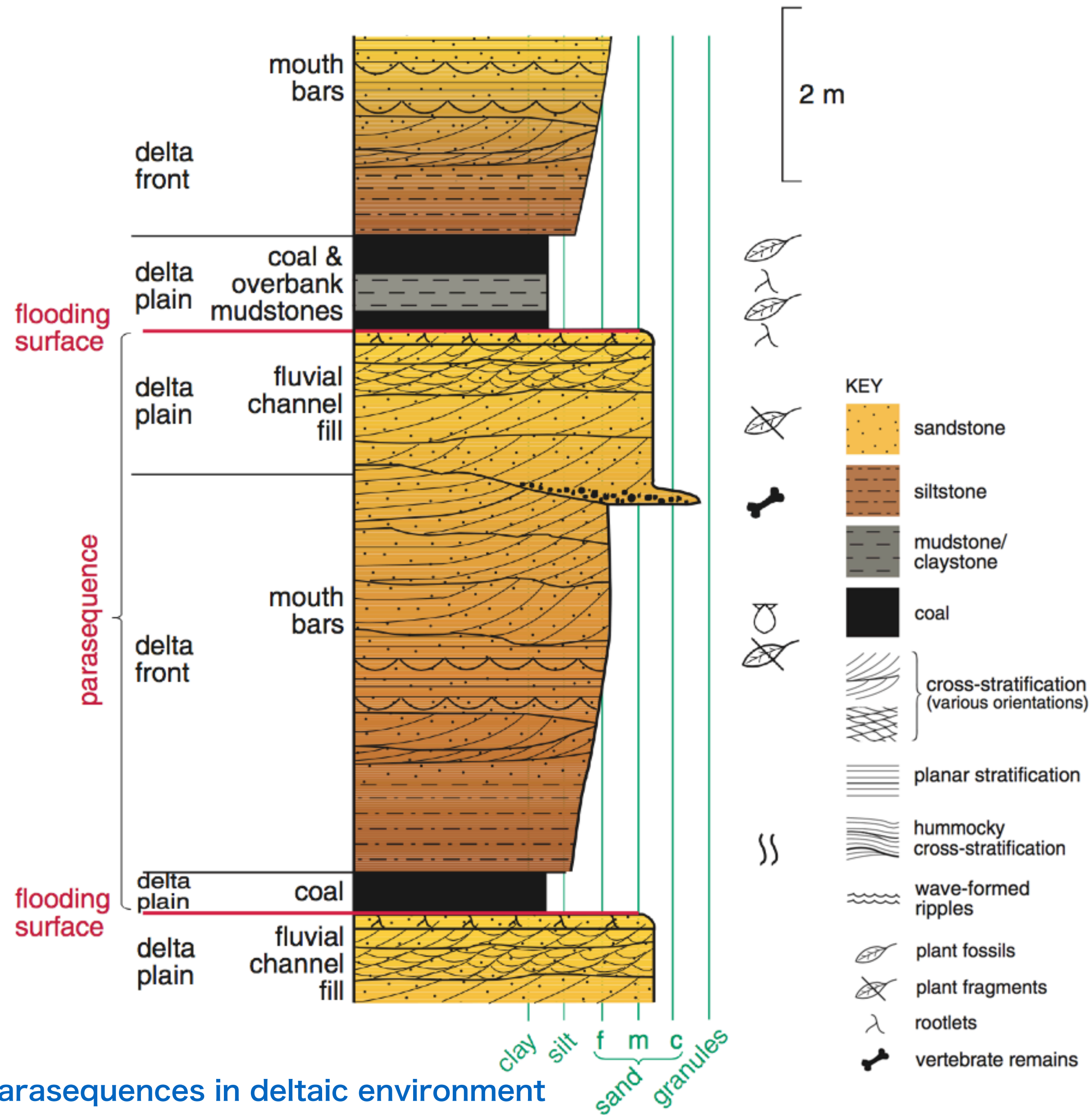


transgression of the sea over the succession

This transgression event is marked either by a much thinner set of facies representing transgression or, more often, by a distinct surface which caps the succession (called a **flooding surface**)



Development of parasequences



Following transgression, a new parasequence will start to build out on top of the first one, utilizing the accommodation space that was newly created as relative sea-level rose.

Parasequence characteristics:

- **thickness:** 1 to tens of m
- **lateral extent:** tens to thousands of km²

They are the smallest bed-scale cycle commonly observed in the sedimentary record and the smallest unit usually considered in sequence stratigraphical analysis.