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# Coupling of sea level changes and neotectonics activities in the Pearl River Delta-insight from stratigraphic profile and chronology

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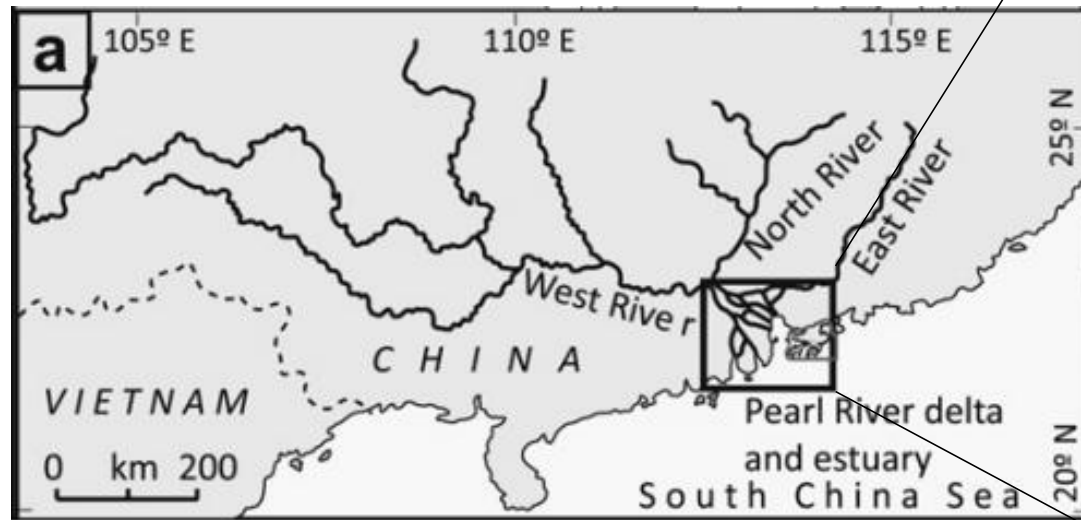


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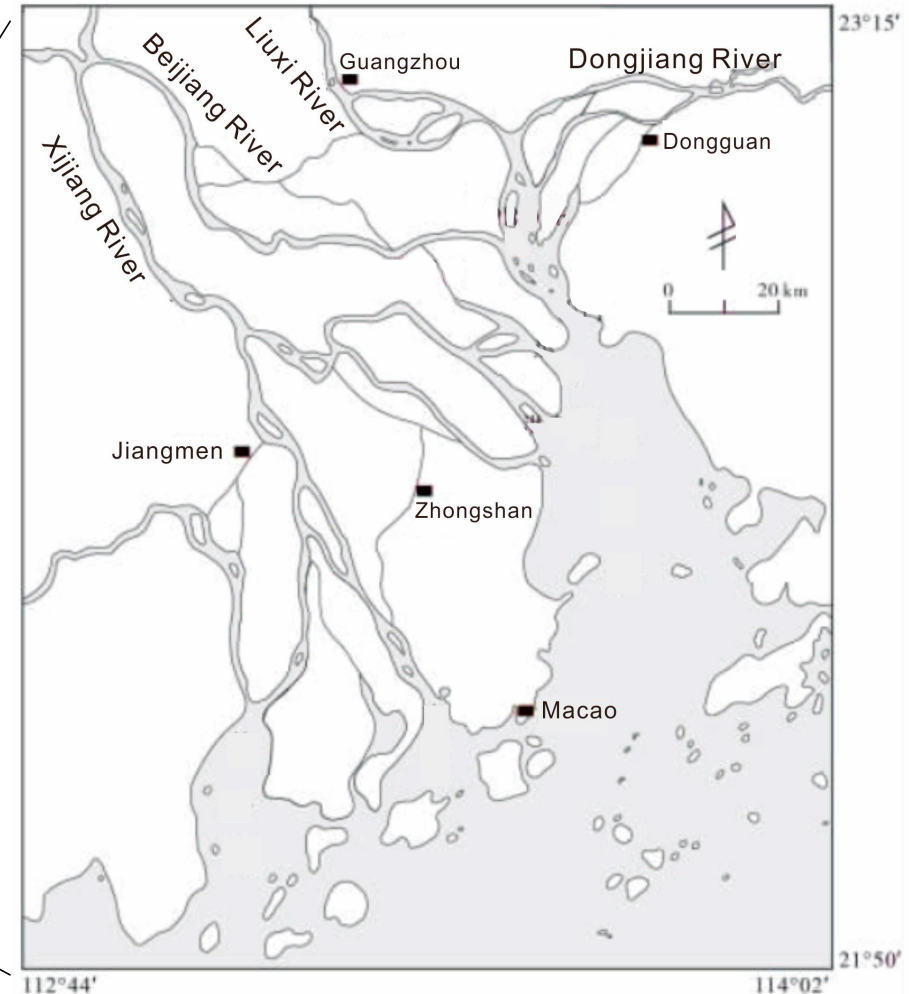


# The location of the Pearl River Delta (PRD)

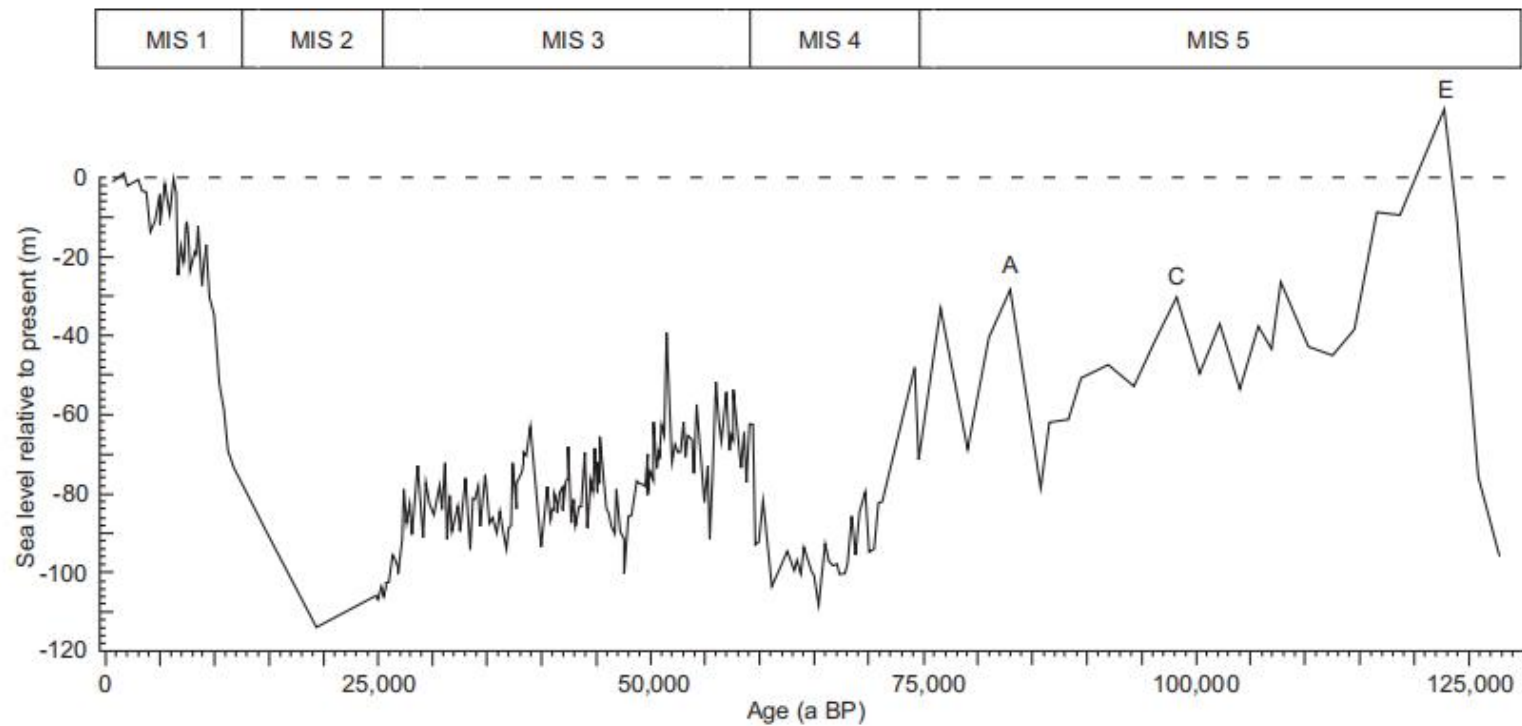
- Only two marine sequences were preserved in the PRD (Pearl River Delta)



(Zong, 2012)



(Liu, 2012)

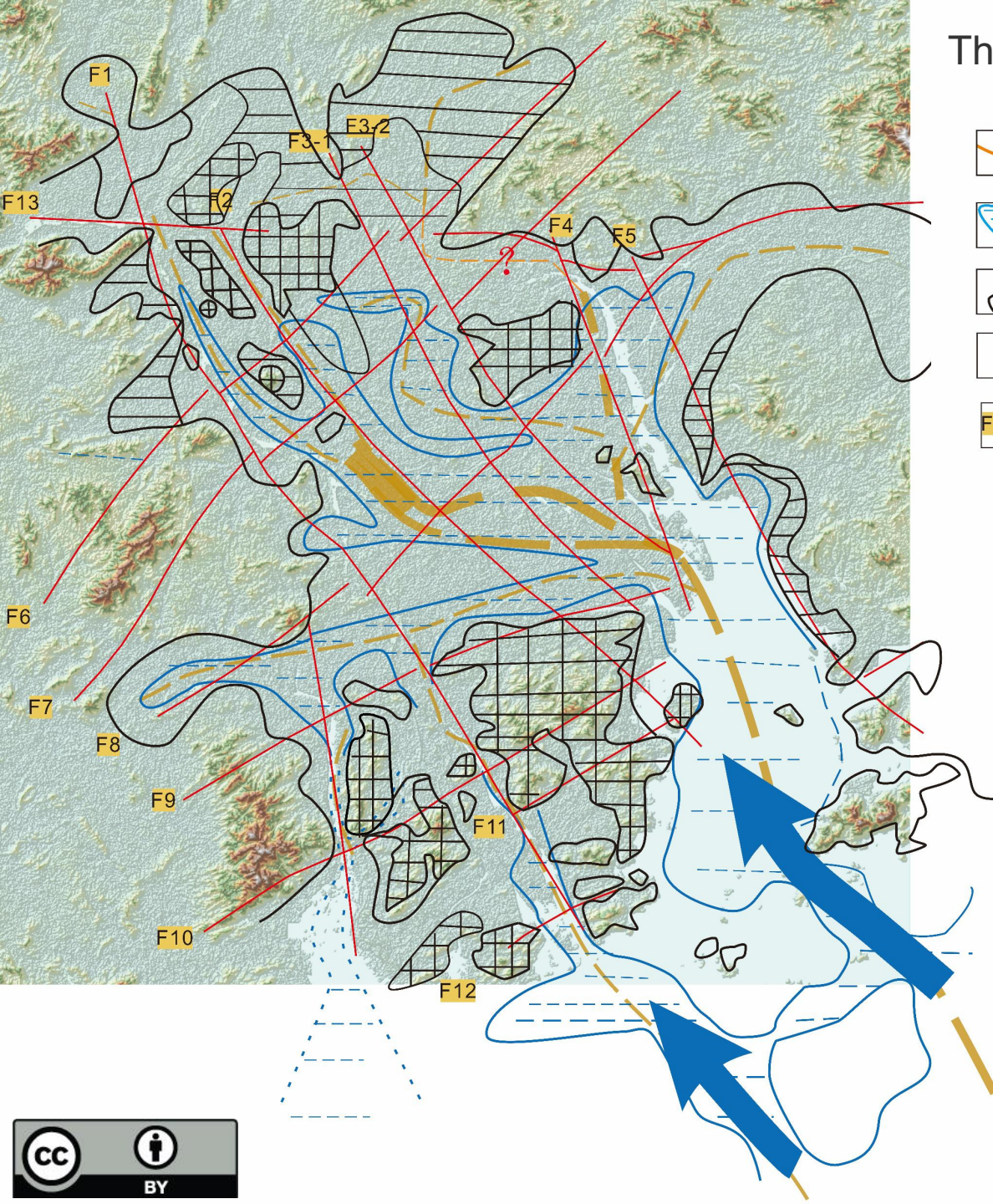







- The younger marine sequence (SQ1)  
——MIS1
- The older marine sequence (SQ2)  
——MIS3 or MIS5? ?

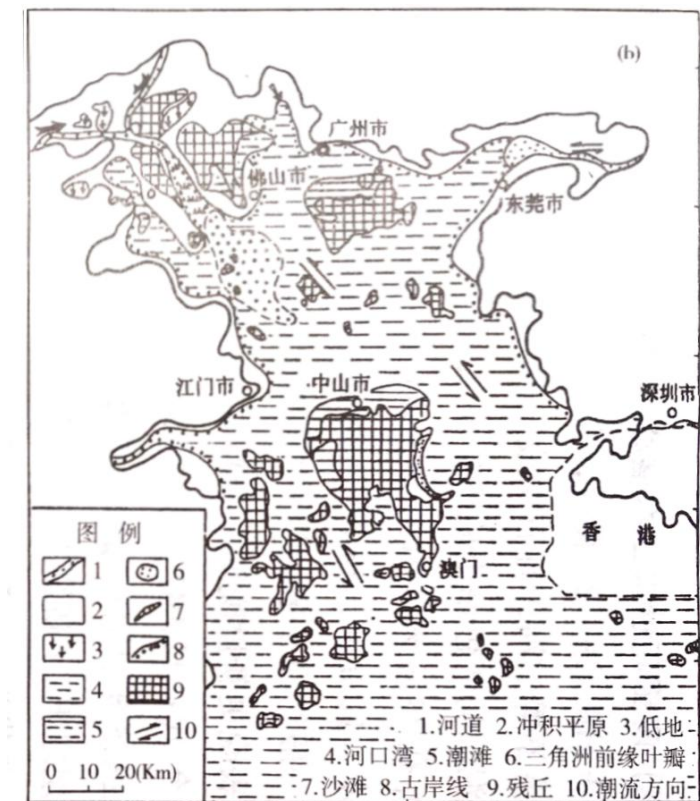
The sea-level curves for the past 130 000 years from the Red Sea (after Siddall et al. 2003; Rohling et al. 2007), Barbados and Haiti (Bard et al. 1990; Dumas et al. 2006), Huon Peninsular (Yokoyama et al. 2001), and west coast of Australia (Stirling et al. 1998).



## The extent of transgression in the late Pleistocene



-  the ancient channel before the 1<sup>st</sup> transgression
-  the inundated area during the 1<sup>st</sup> transgression
-  ancient landform highland
-  monadnock
-  fault line



## The extent of transgression in the Holocene

(Huang et al., 2003)



# -35 meters isobath lithofacies of PRD

The distribution of the older marine sequence (SQ2) is restricted to the southeastern part of the PRD and parts of the valley.

