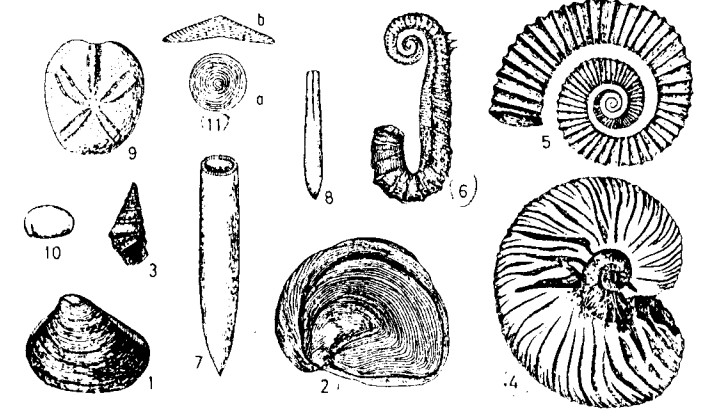
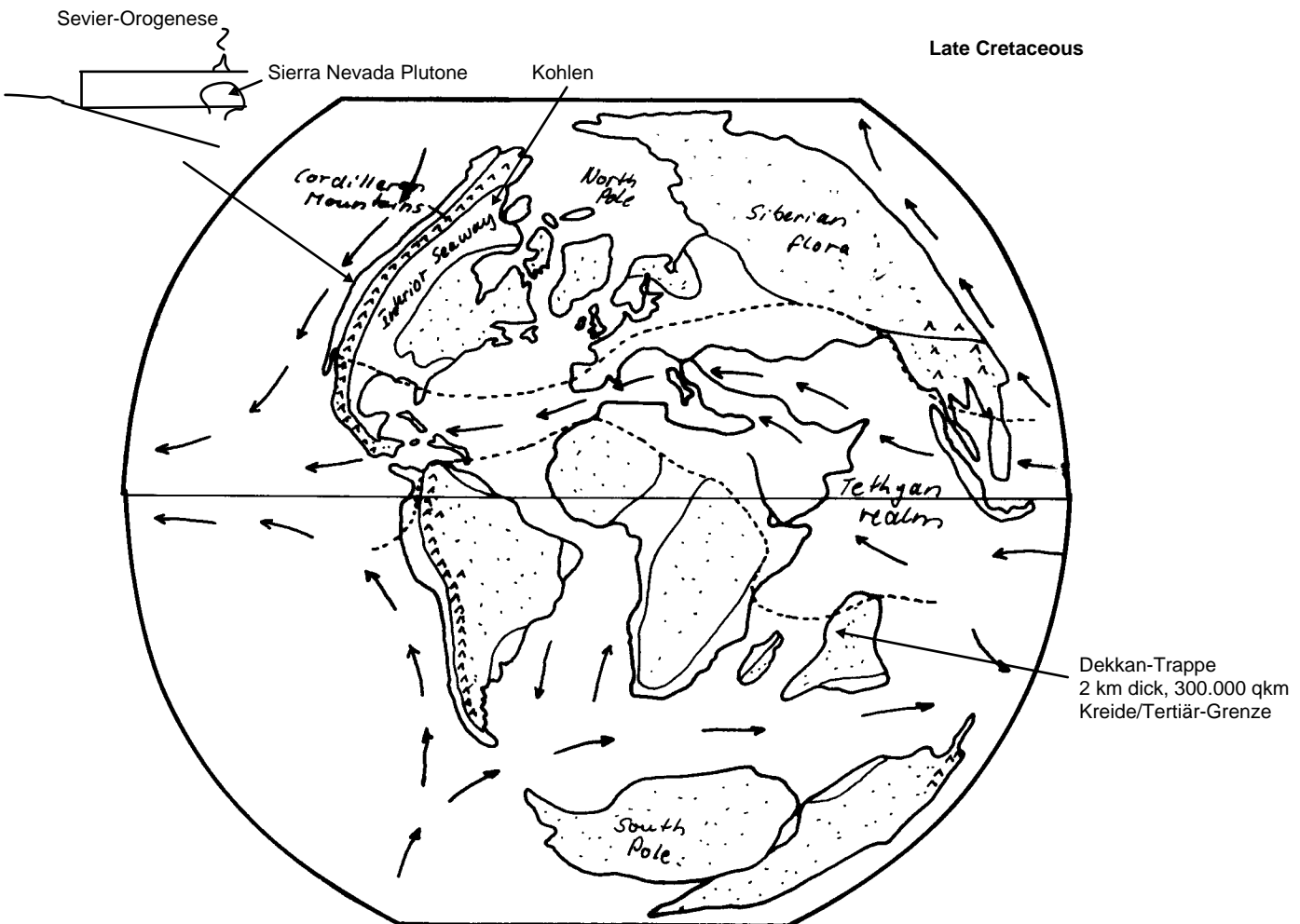
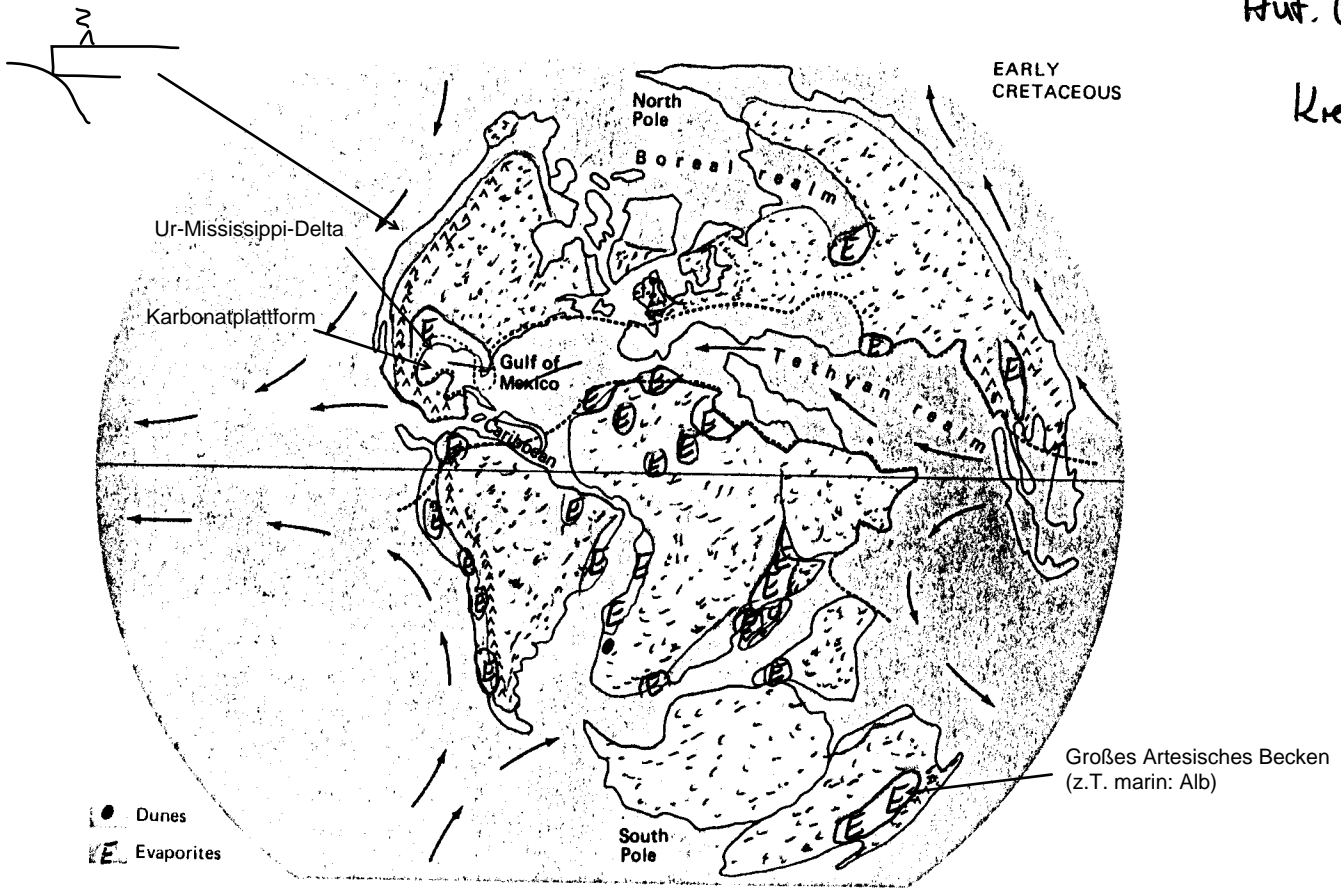


Abb. 71. Laubbäume der Kreidezeit.  
 1. *Ficus*, 2. *Betula*, 3. *Sassafras*, 5. *Populites* (n. E. W. BERRY u. L. W. WARD),  
 4. *Credneria* (n. GOTHAN).

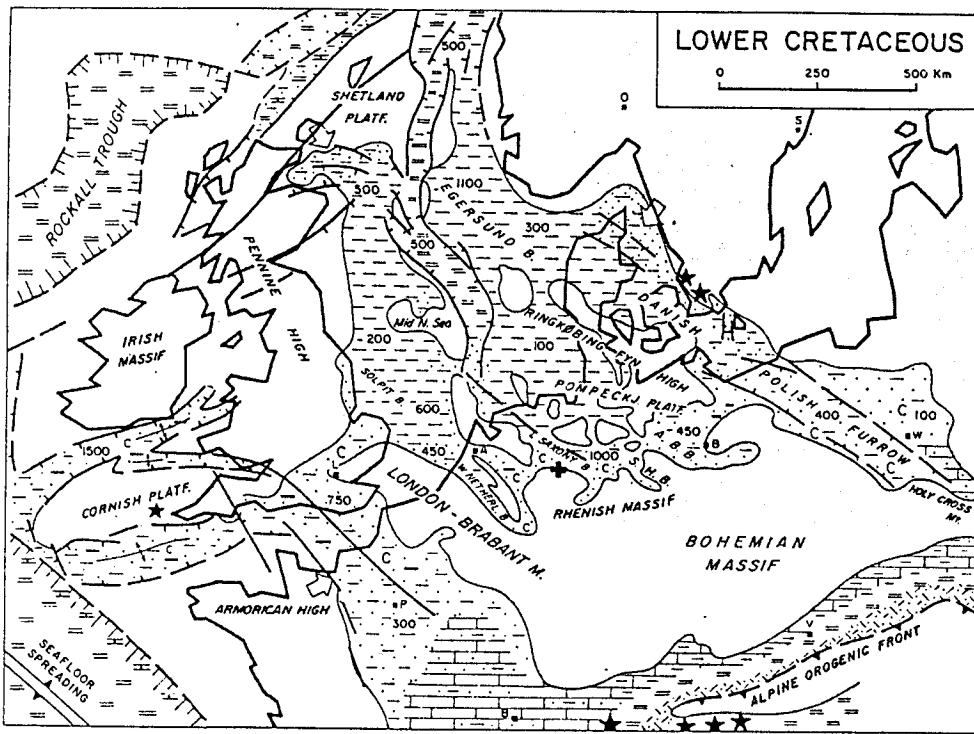
Abb. 72. Fossilien der Kreide. Unterkreide: Lamellibranchiata: 1. *Cyrena bronni* DUNK., Wealden, 2. *Exogyra couloui* d'ORB., 1: 4,5, Valendis.  
 Echinoidea: 3. *Glauconia strombiformis* SCHLOTH., Wealden.  
 Cephalopoda: 4. *Polyptychites keyserlingi* (NEUM. & UHL.), Va-



lendis, 5. *Aegocrioceras capricornu* (ROEM.), Hauterive, 6. *Ancyloceras matheronianum* d'ORB., 1: 7, Apt., 7. *Oxyteuthis brunsvicensis* (STROMB.), Barrême, 8. *Neohibolites minimus* (LIST.), 1: 1, Alb.  
 Echinoidea: 9. *Toxaster complanatus* AG., Hauterive.  
 Ostracoda: 10. *Cypridea valdensis* SOW., × 7, Wealden.  
 Foraminifera: 11. *Orbitolina lenticularis* BLUMB., a × 4,5, b (Querschnitt) × 9, Apt.  
 Oberkreide: Cephalopoda: 12. *Acanthoceras rhotomagense* (DEFR.), 1: 7, Cenoman, 13. *Schloenbachia varians* (SOW.), Cenoman, 14. *Turrilites costatus* LAM., Cenoman, 15. *Baculites anceps* LAM., Campan, 16. *Scaphites spiniger* (SCHLÜT.), Campan, 17. *Cirroceras polyplacum* (ROEM.), 1: 4,5, Ob. Campan, 18. *Actinocamax quadratus* (BLAINV.), Campan.  
 Lamellibranchiata: 19. *Inoceramus lamarcki* PARK., 1: 3, Turon, 20. *Hippurites gosaviensis* DOUV., 1: 7, Coniac-Campan.  
 Echinoidea: 21. *Micraster cortestudinarium* GOLDF., Turon, 22. *Echinocorys vulgaris* BREYN., Campan.  
 Pisces: 23. *Ptychodus latissimus* AG., (Zahn), Turon.  
 Foraminifera: 24. *Globotruncana lapparenti* BROTZ., × 20, Turon - Campan, 25. *Neoflabellina rugosa* (d'ORB.), × 11, Campan.

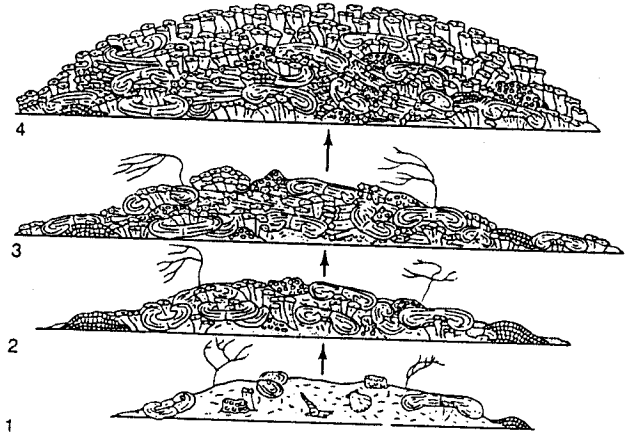
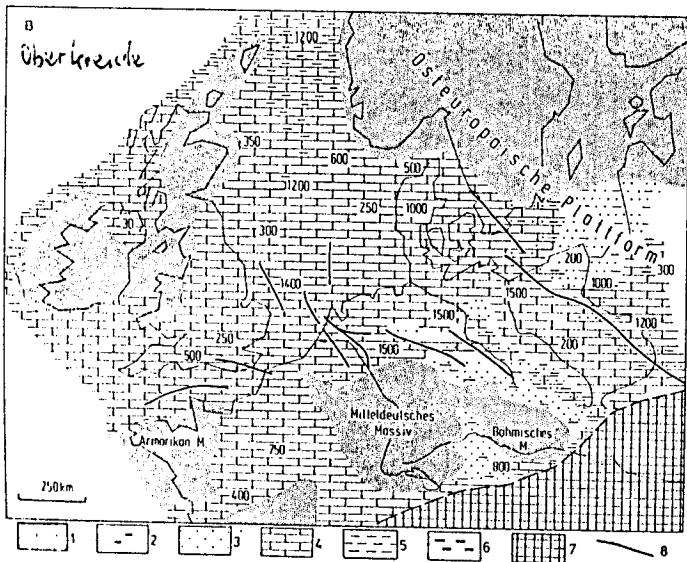






Histon. Geol. (60)  
Kreide

Fig. 16  
Lower Cretaceous palaeogeography.



Stages in the development of a Cretaceous rudist reef of the Caribbean region. Some of the first rudists to colonize the seafloor were unusual forms that looked like buffalo horns stretched out on the substratum; later, upright cone-shaped rudists grew crowded together, dominating the reef surface.

1 Festland, 2 Kohle, 3 Sand, 4 Karbonate, 5 Marine Tone (Flachwasser),  
6 Marine Tone (tieferes Wasser), 7 Geosynklinal, 8 Hebungsachsen („In-  
versionsachsen“). Die Zahlen geben die Schichtmächtigkeit an.

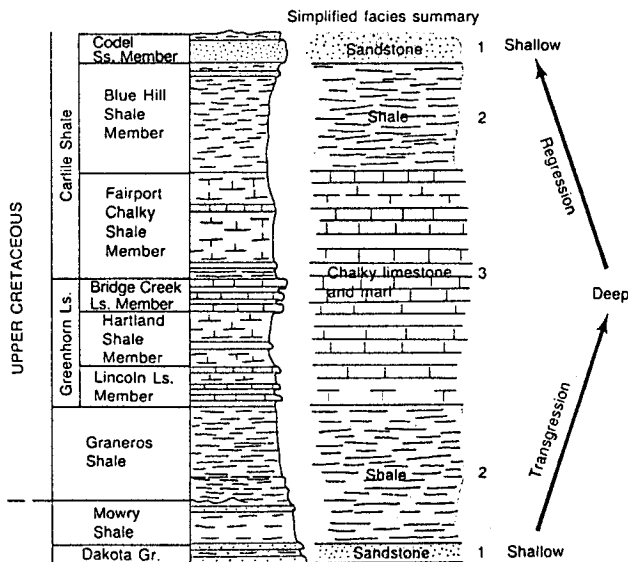
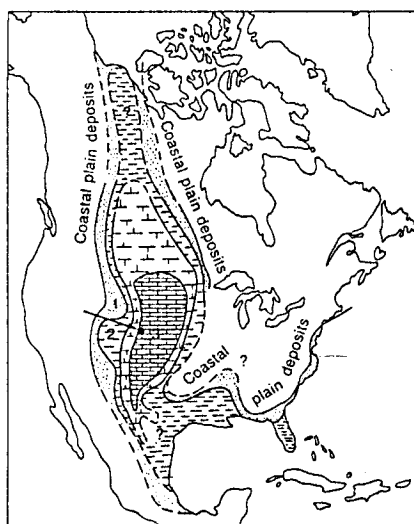


FIGURE 16-44 The early Late Cretaceous "Greenhorn" depositional cycle of the North American interior seaway. The three facies in the simplified facies summary are shown in map view on the left. The stratigraphic section represents the vicinity of eastern Colorado (arrow on map), where the cycle developed by an oscillation of the shoreline (transgression and regression). During the transgression, the area of chalky limestone and marl (limey clay) deposition in the center of the basin (facies 3) expanded; first facies 2 and then facies 3 spread into eastern Colorado. During regression, the area of deposit of facies 3 contracted, and facies 2 and then facies 1 shifted into eastern Colorado. (Modified from E. G. Kauffman, *The Mountain Geologist* 6:227-245, 1969.)

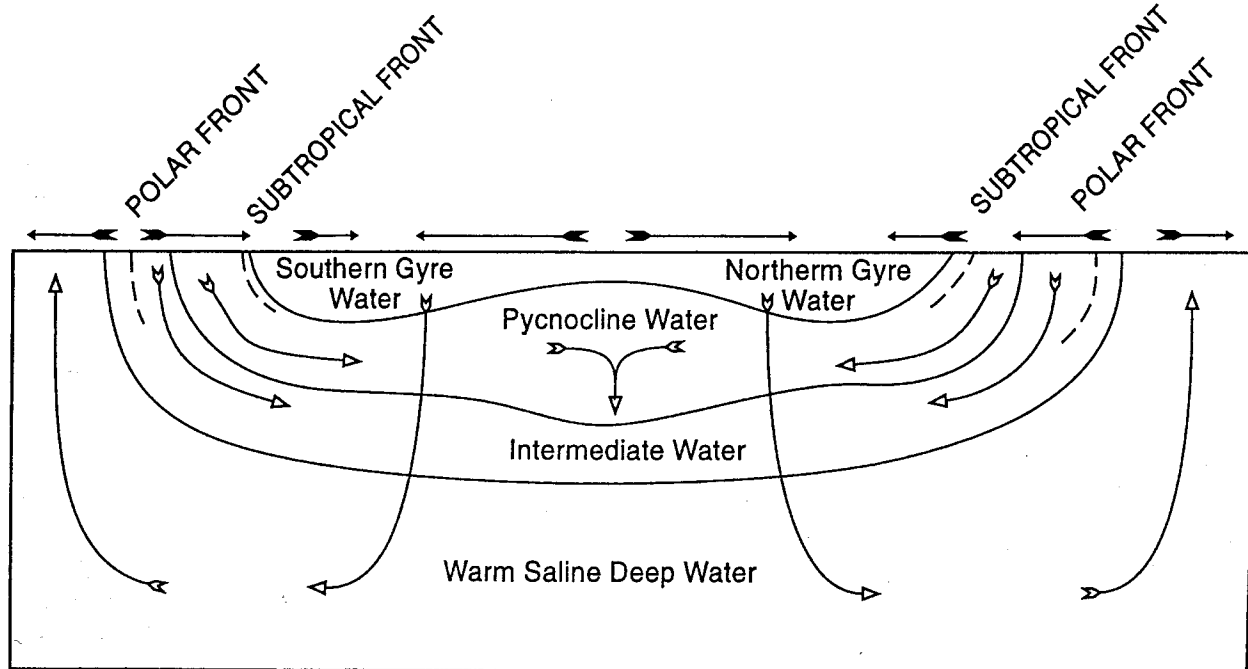


Abb. 14: Theoretische Struktur des kretazischen Ozeans mit Tiefenwasserbildung in den niederen Breiten und Upwelling in den Polargebieten (aus Hay in press).

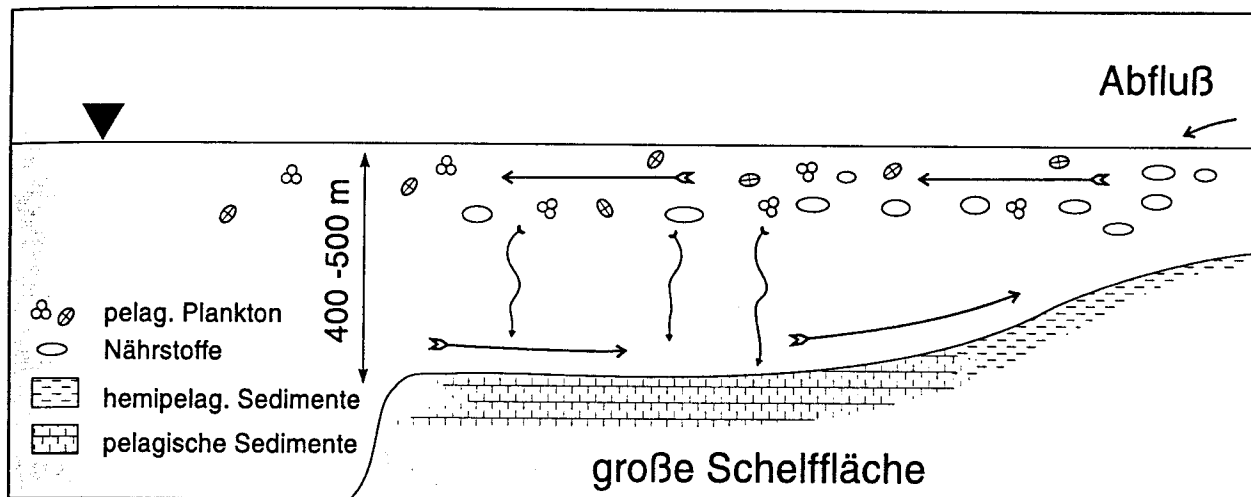


Abb. 11: Das Oberflächenwasser der Schelfe in der Oberkreide war nicht von dem des offenen Ozeans getrennt. Pelagisches Plankton konnte sich auf den Schelfen ausbreiten.

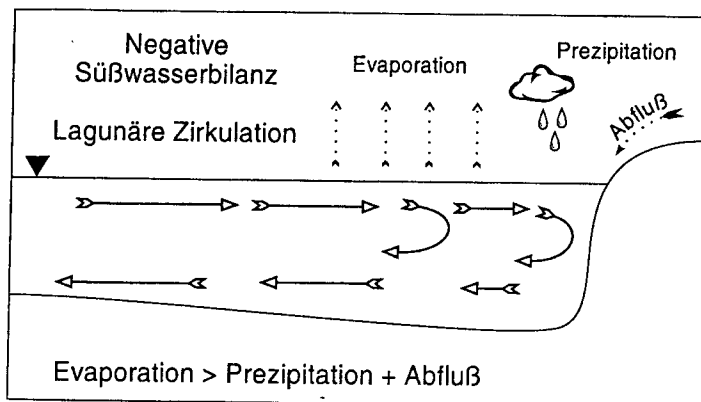
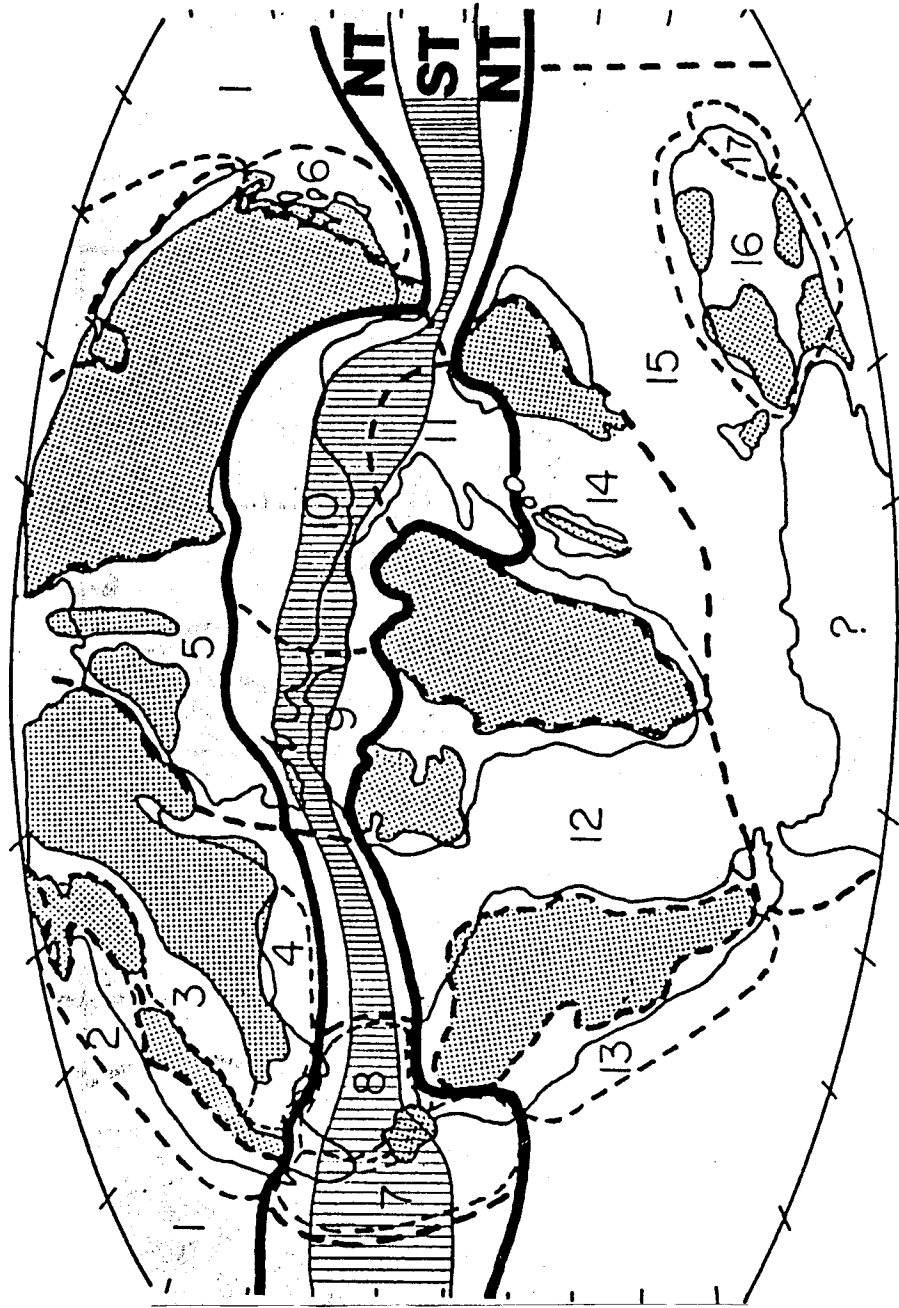


Abb. 55: Lagunäre Zirkulation bei negativer Süßwasserbilanz (nach Hay, 1994).

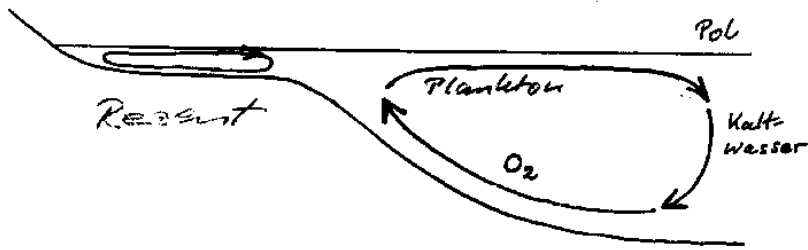
aus Voigt 1996

Mittlere Kreide : Superethys

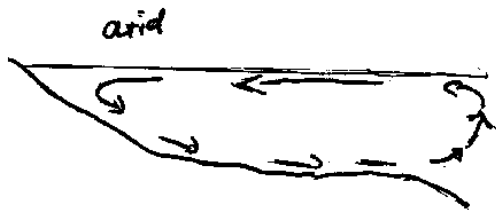
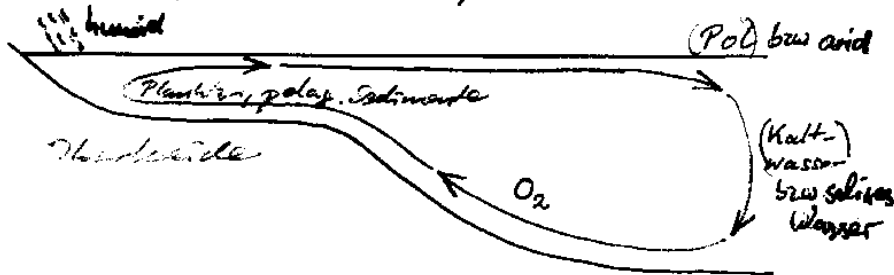


aus Kauffman & Johnson 1988

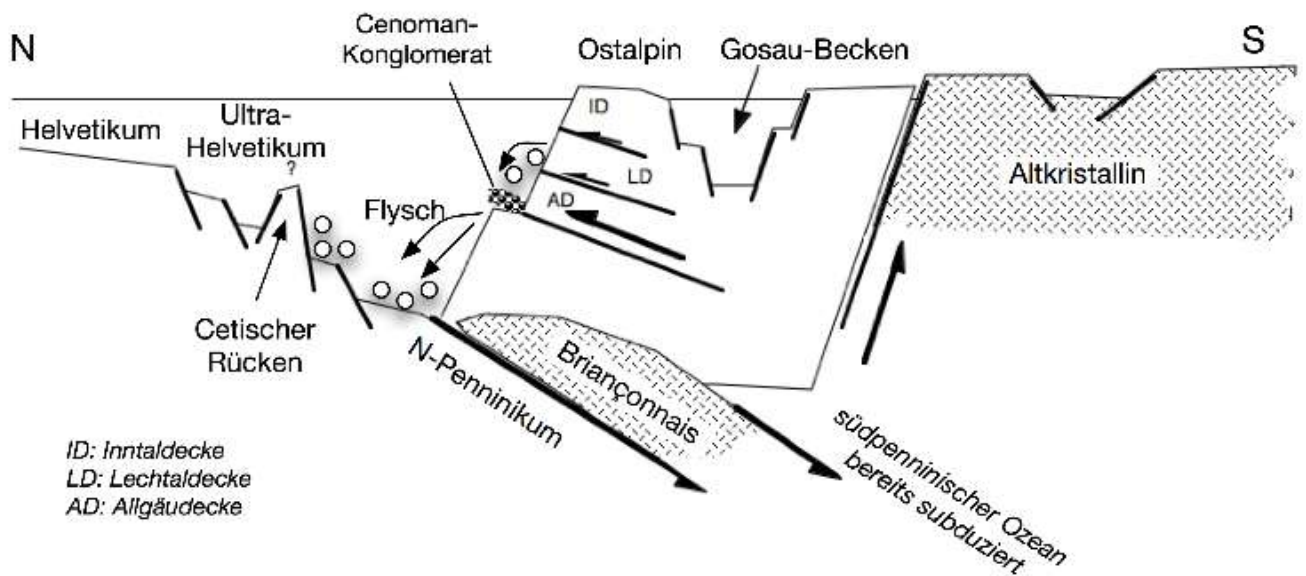
Entkoppelte Schelfsysteme:

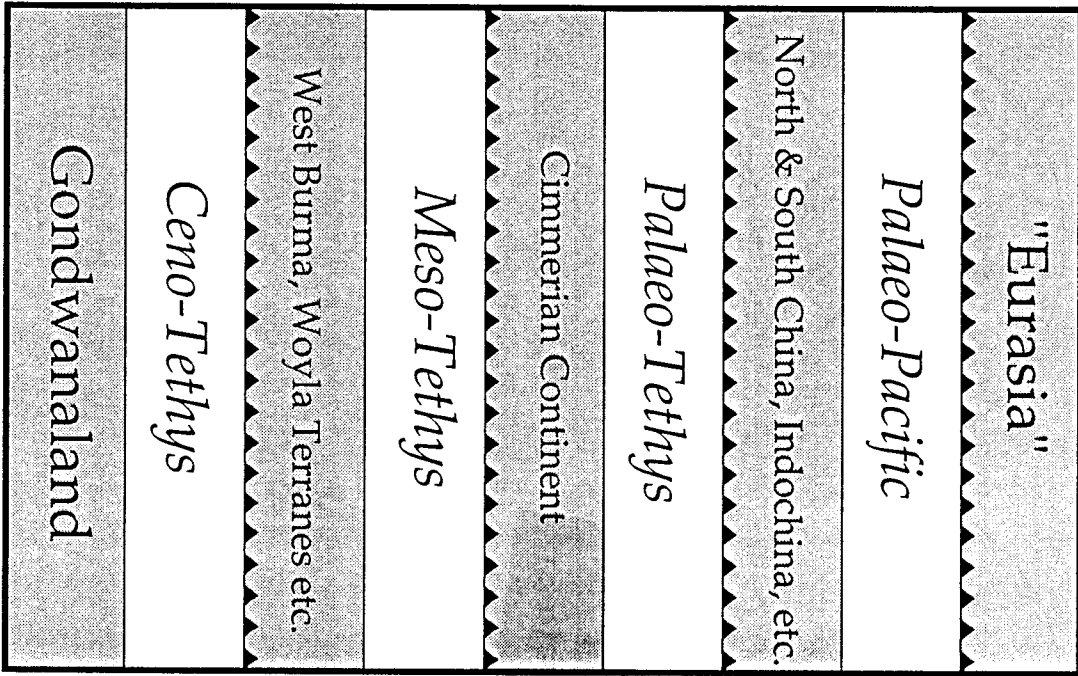


Gekoppelte Schelfsysteme:

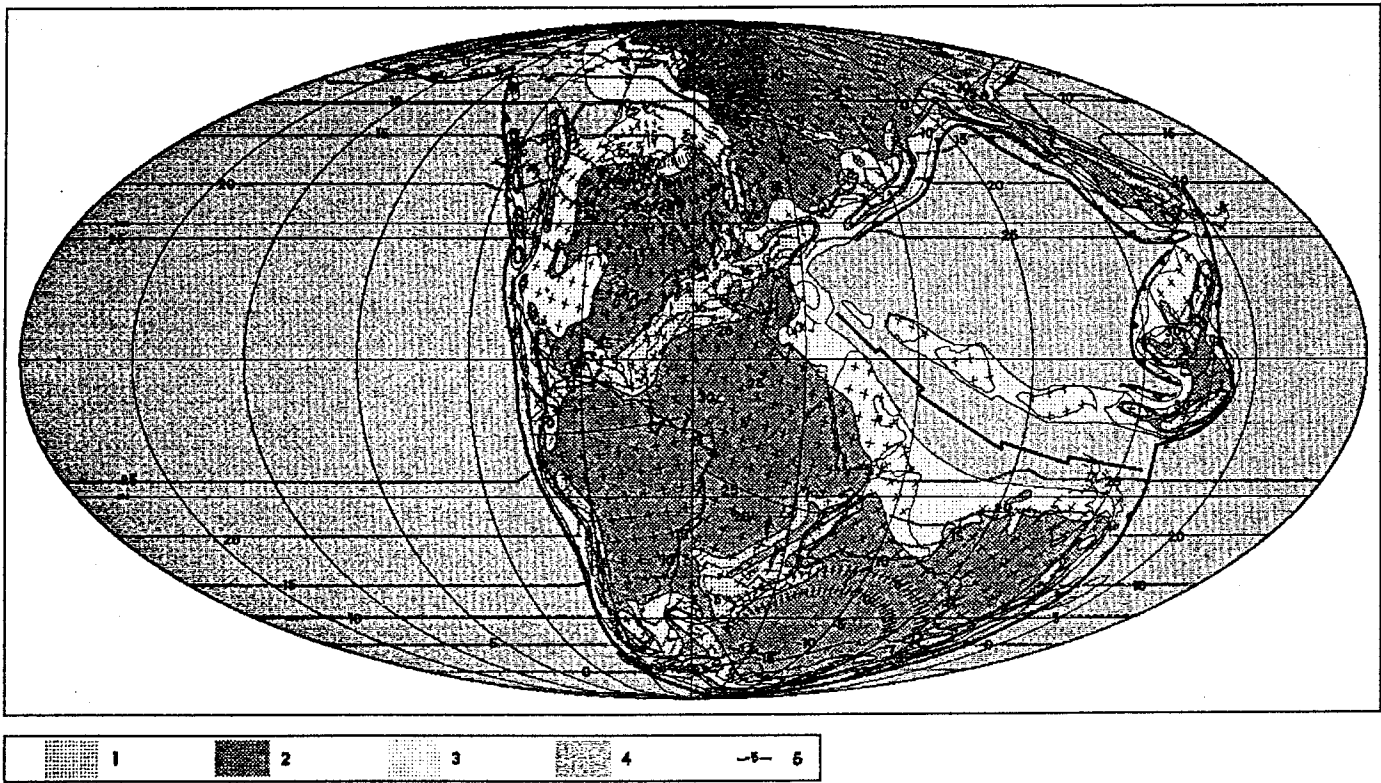


Die Alpen in der Oberkreide-Zeit (stark vereinfacht)





**Fig. 4.** Schematic diagram showing the three continental silvers/collages of terranes, rifted from Gondwanaland and translated northwards by the opening and closing of three successive oceans, Palaeo-Tethys, Meso-Tethys and Ceno-Tethys.



**Fig. 40.** Paleogeography and paleotemperature. Induan - Early Triassic - 237 m.y.a. 1-mountains, 2-land masses, 3-continental margins, 4-deep water, 5-isotherms, temperature in degrees Celsius.



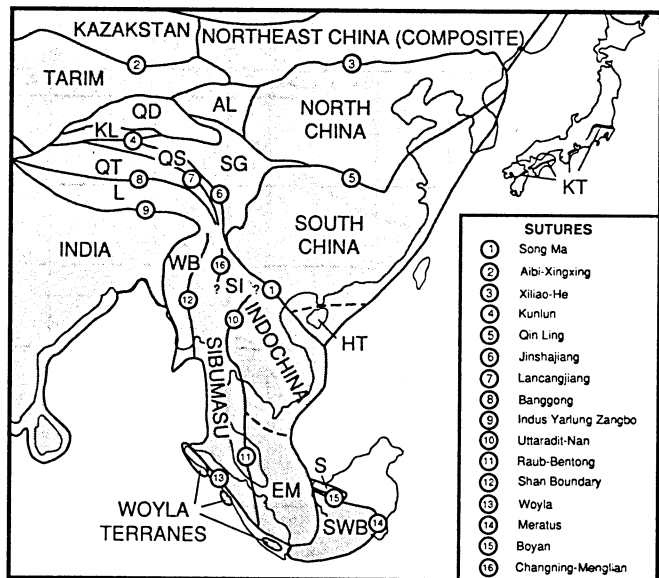


Fig. 1. Distribution of principal continental terranes and sutures of East and Southeast Asia. EM = East Malaya, WB = West Burma, SWB = Southwest Borneo, S = Semitau Terrane, HT = Hainan Island terranes, L = Lhasa Terrane, QT = Qiangtang Terrane, QS = Qamdo-Simao Terrane, SI = Simao Terrane, SG = Songpan Ganzi accretionary complex, KL = Kunlun Terrane, QD = Qaidam Terrane, AL = Ala Shan Terrane, KT = Kurosegawa Terrane.

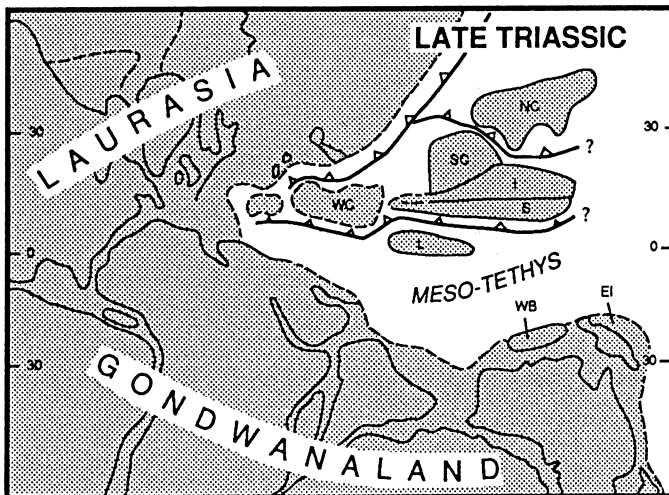
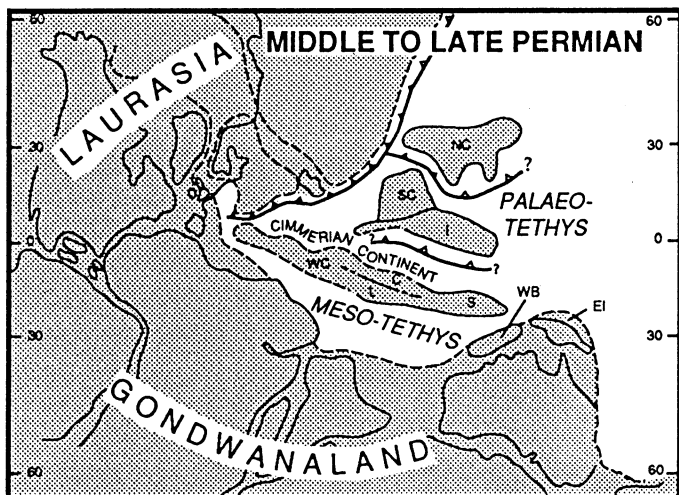
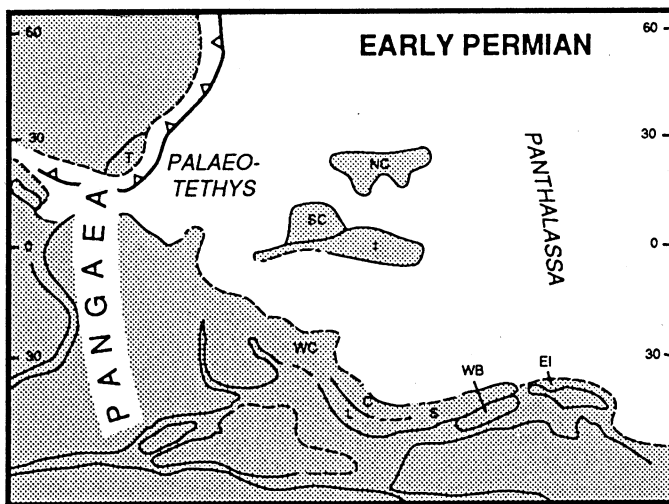
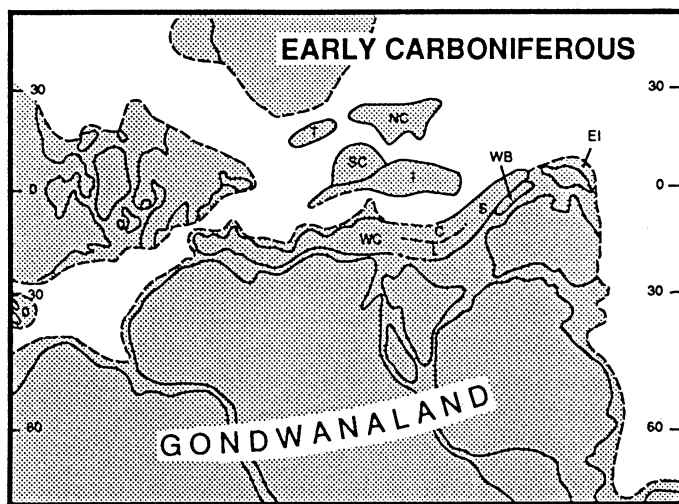
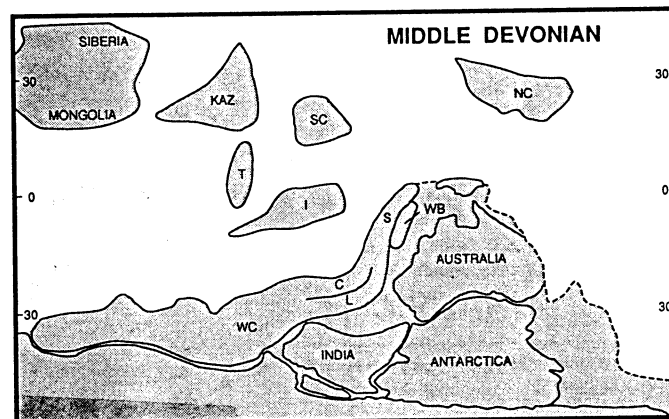
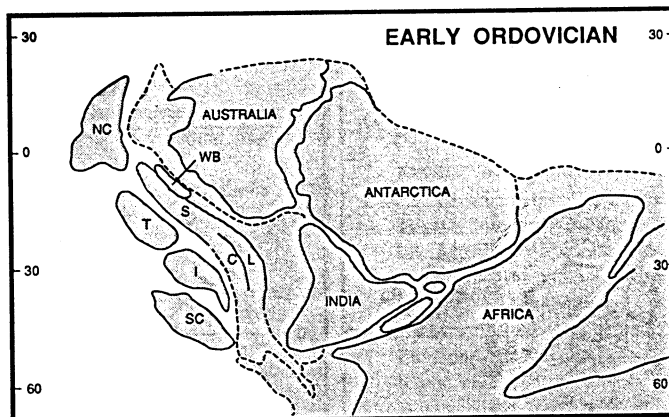
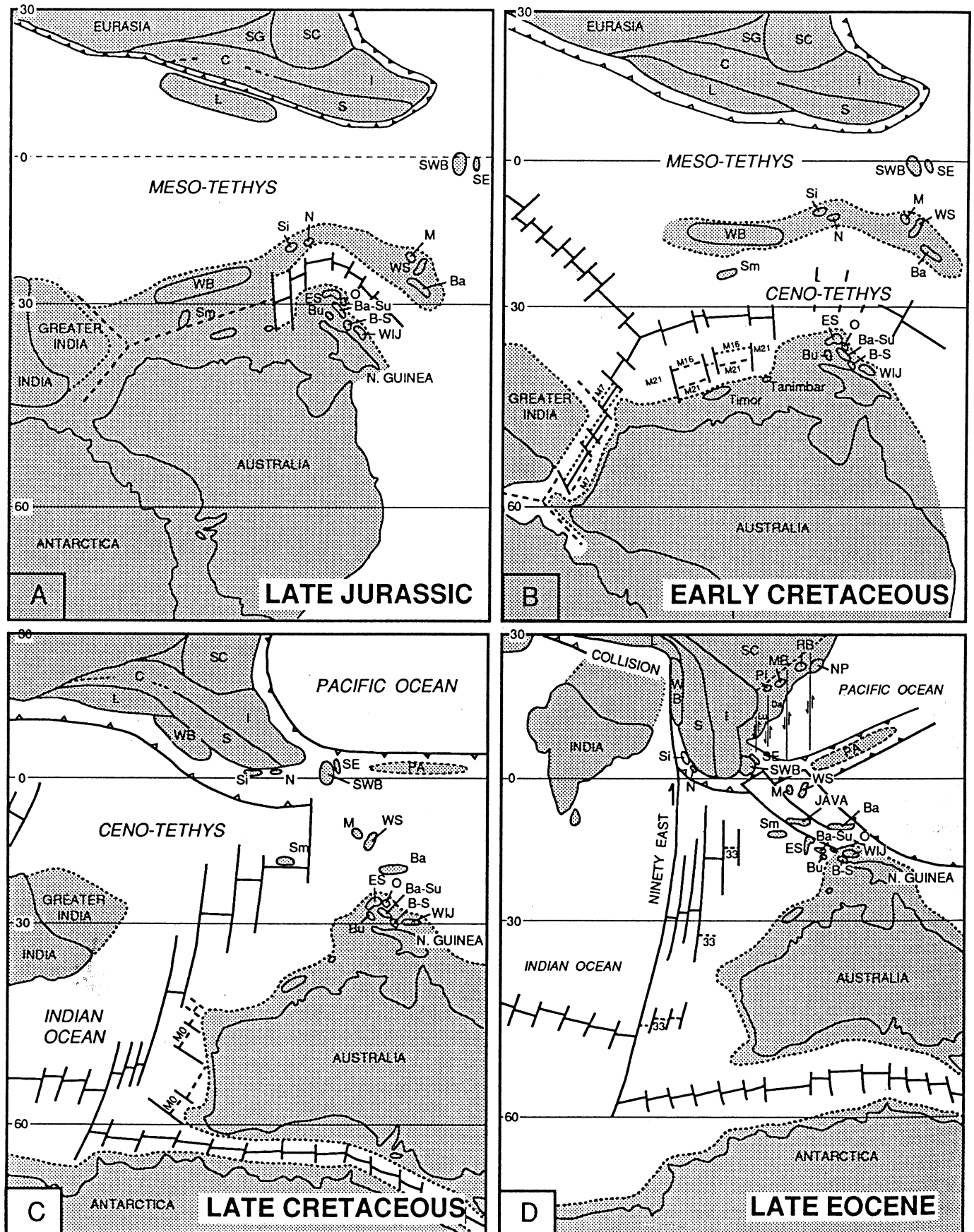


Fig. 7. Palaeogeographic reconstructions of the Tethyan region for Early Carboniferous, Early Permian, Middle-Late Permian and Late Triassic. Modified after Metcalfe (1988, 1990). Present day outlines are for reference only. EI = Eastern Indonesian terranes, other symbols as for figure 5. WC: Wester Cimmerian Continent, L: Lhasa, C: Quiangtang, S: Sibumasu, WB: West Burma, SC: South China, NC: North China, I: Indochina, T: Tarim



**Fig. 9.** Palaeogeographic reconstructions for Eastern Tethys in A: Late Jurassic, B: Early Cretaceous, C: Late Cretaceous and D: Late Eocene times. SG = Songpan Gangzi accretionary complex SWB = Southwest Borneo SE = Semitau Si = Sikuleh N = Natal M = Mangkalihat WS = West Irian Jaya Ba = Banda Allochthon ES = East Sulawesi O = Obi-Bacan Ba-Su = Bangai-Sula Bu = Buton B-S = Buru-Seram WIJ = West Irian Jaya Sm = Sumba PI = Paracel Islands MB = Macclesfield Bank RB = Reed Bank NP = North Palawan Lu = Luconia Da = Spratley Islands-Dangerous Ground PA = Philippine Arc. M numbers represent Indian Ocean magnetic anomalies. Other terrane symbols as in figures 5 and 6. Modified from Metcalfe (1990) and partly after Smith et al. (1981), Audley-Charles (1988) and Audley-Charles et al. (1988). Present day outlines are for reference only.