

Evolution of Life Through Time

Subhronil Mondal

EDIACARAN BIOTA

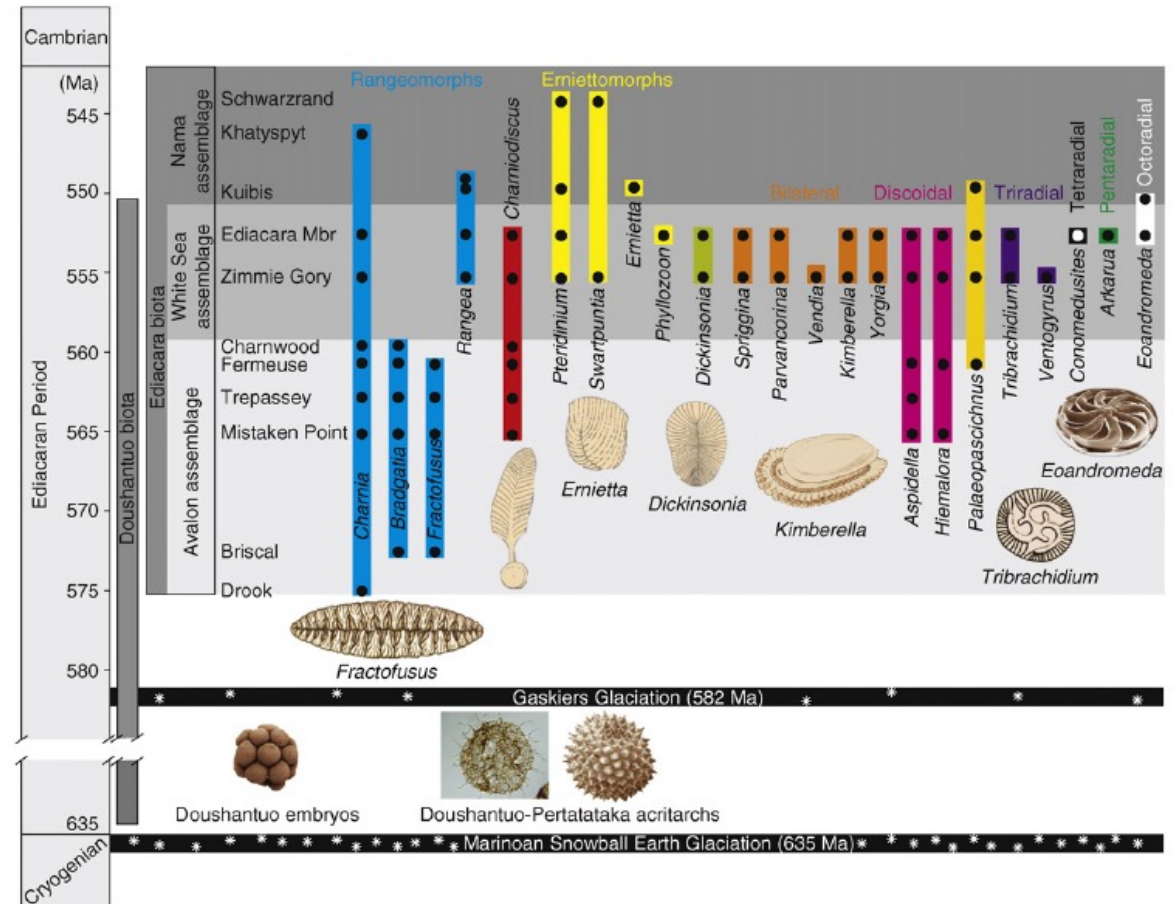
Eon	Era	Period	
Phanerozoic	Cenozoic	Quaternary	← Today
		Neogene	← 11.8 Ka
		Paleogene	
	Mesozoic	Cretaceous	← 66 Ma
		Jurassic	
		Triassic	
	Paleozoic	Permian	← 252 Ma
		Carboniferous	
		Pennsylvanian	
		Mississippian	
		Devonian	
		Silurian	
		Ordovician	
		Cambrian	
Proterozoic	~	~	← 541 Ma
Archean	~	~	← 2.5 Ga
Hadean	~	~	← 4.0 Ga
			← 4.54 Ga

Extinct soft-bodied groups
Complexity

GOE
Cells with Nucleus
Apex Chert fossils
Isua Sediment: Evidence of Life

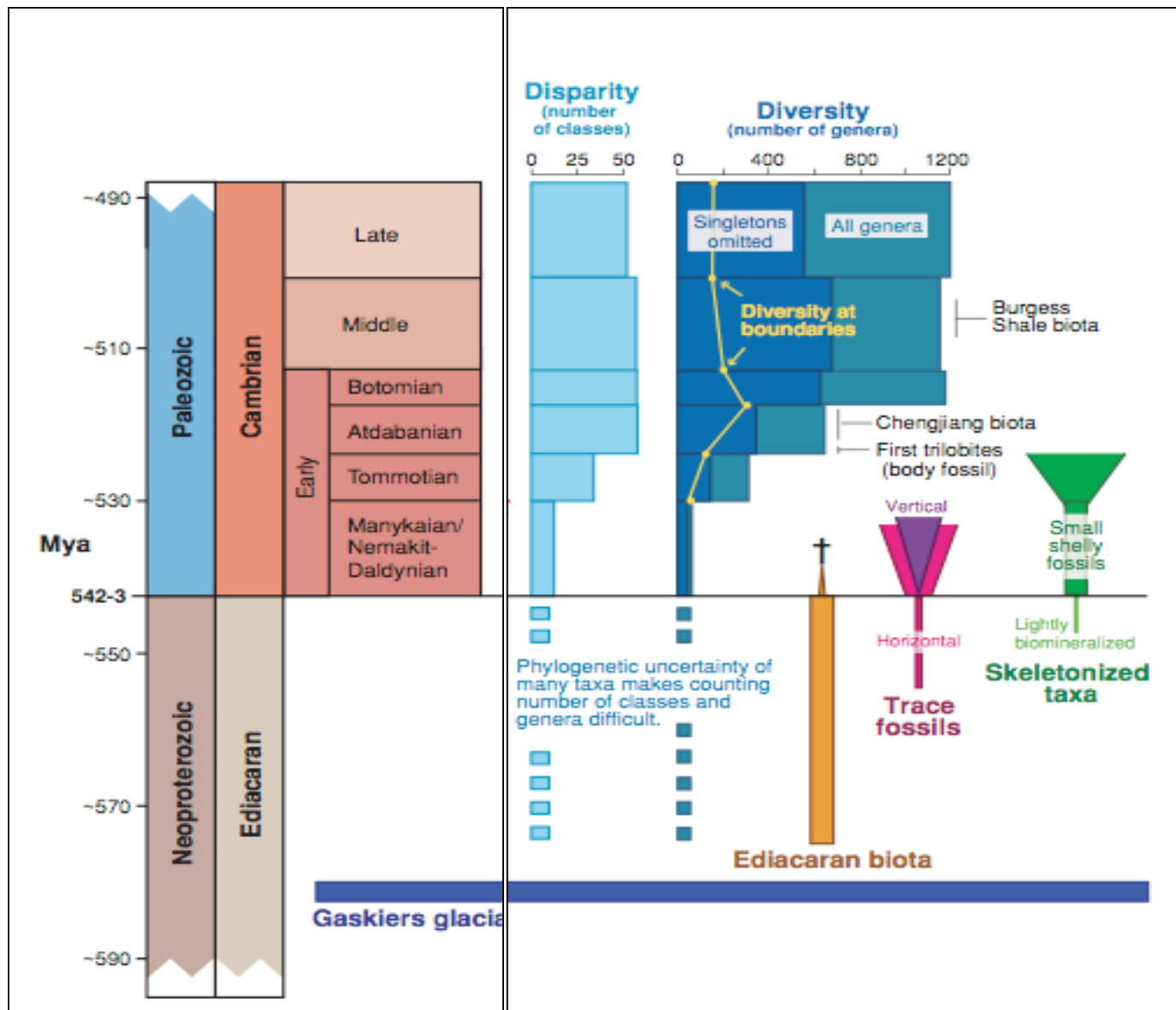
END-EDIACARAN EXTINCTION

Time: 545 Ma

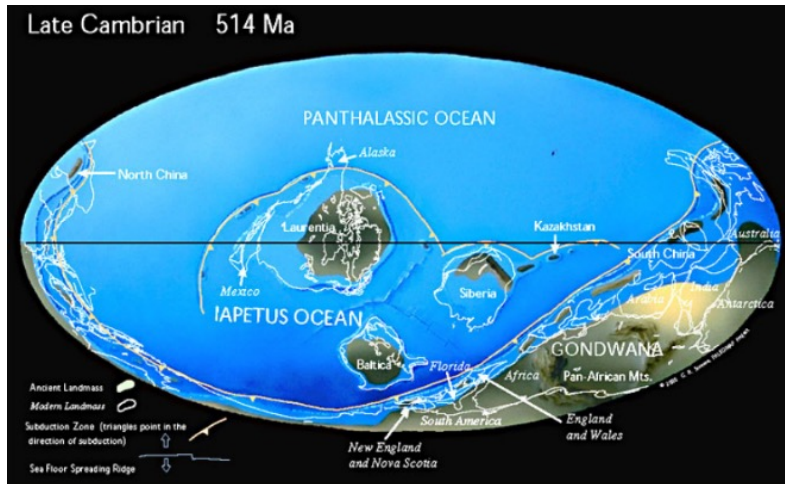


extinct!

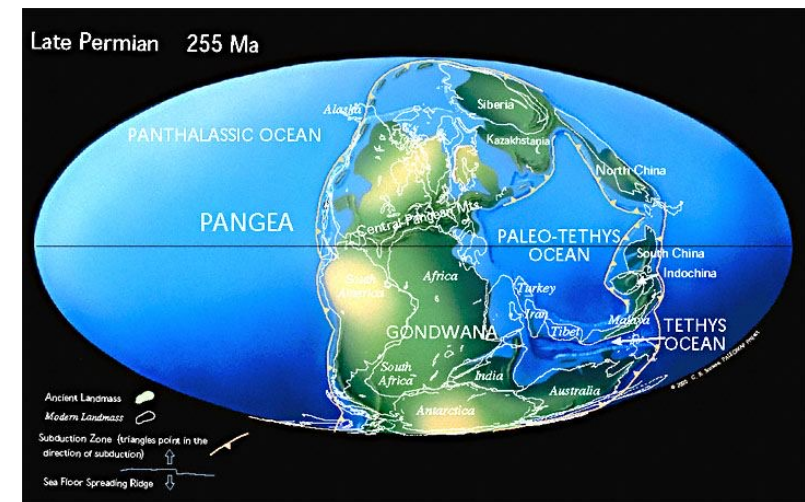
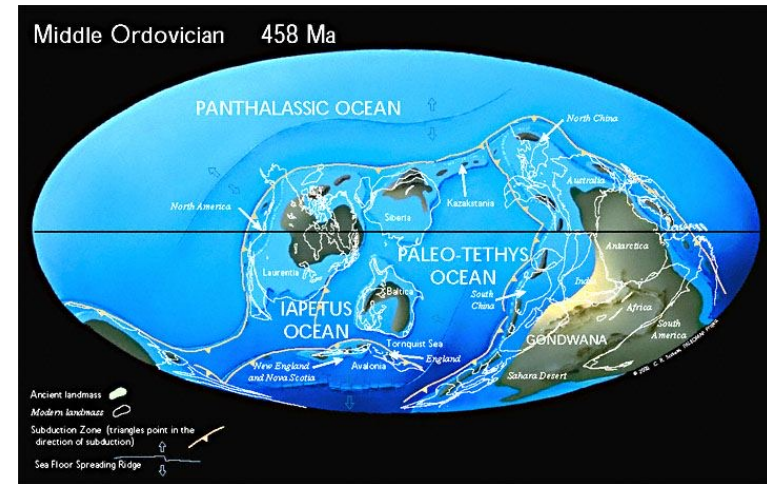
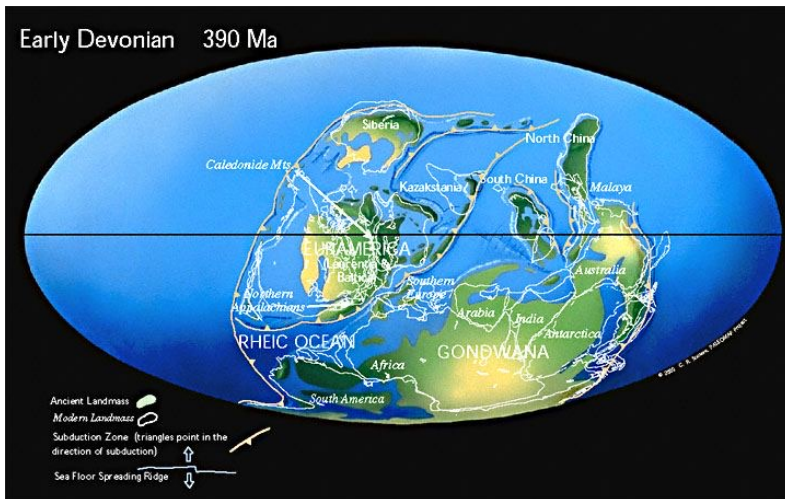
EDIACARAN TO CAMBRIAN



CONTINENTAL POSITIONS



Supercontinent 'Pannotia' broken up (2 clusters – Laurentia+Gondwana), coming out of 'snowball earth' Major continents at south pole

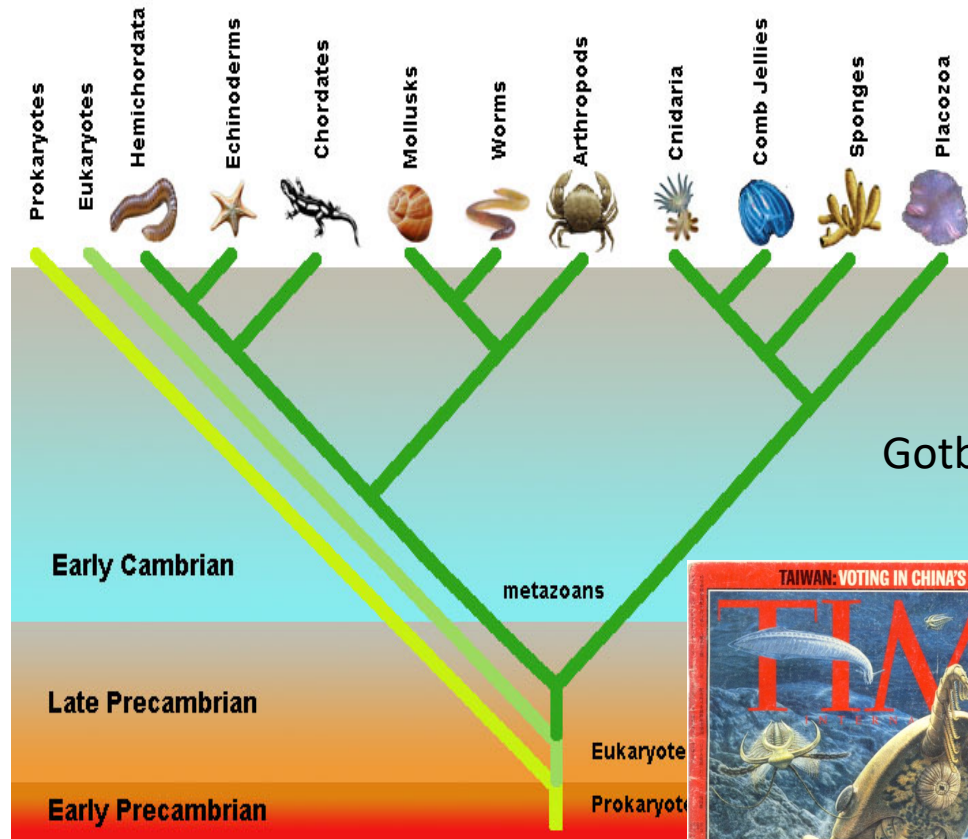


Supercontinent 'Pangaea'

CAMBRIAN EXPLOSION

The "Cambrian Explosion"

Evidence in the fossil record shows that all major phyla were established in the transition from Late Precambrian to Early Cambrian time

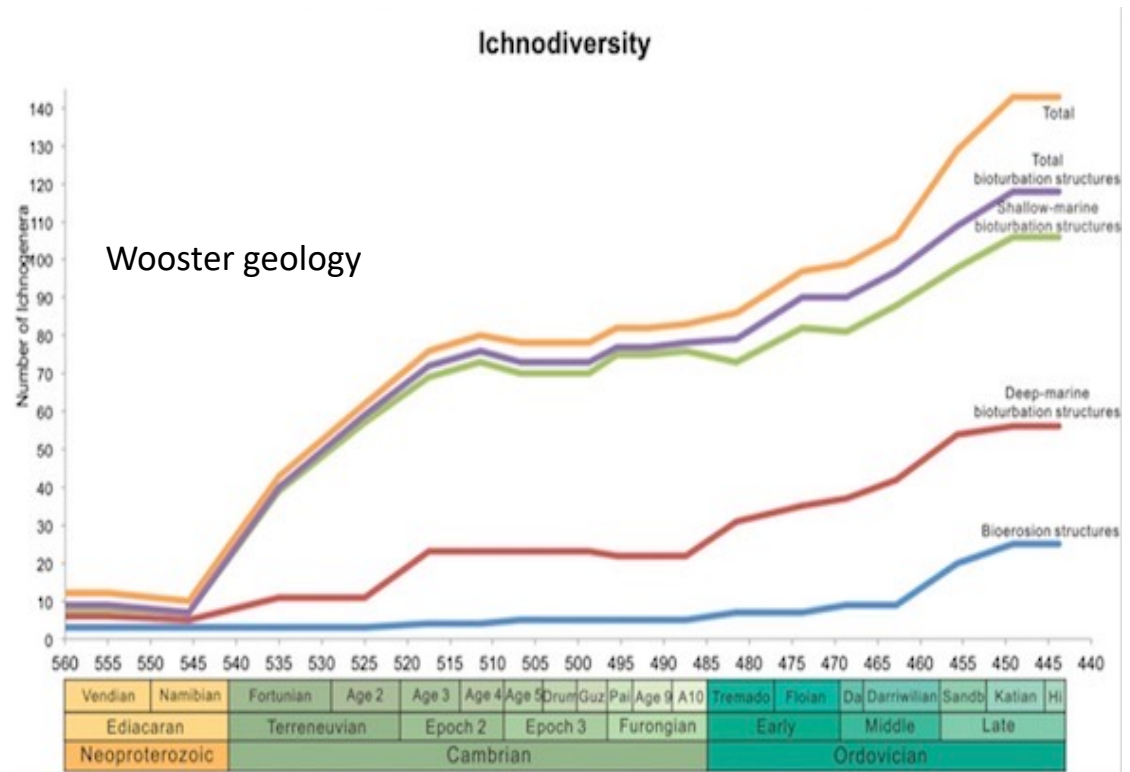


Gotbooks.com



CAMBRIAN EXPLOSION: CAUSES

Skeletonized Vs radiation of soft bodied organisms: Trace fossils



TRILOBITE



PALEOZOIC

