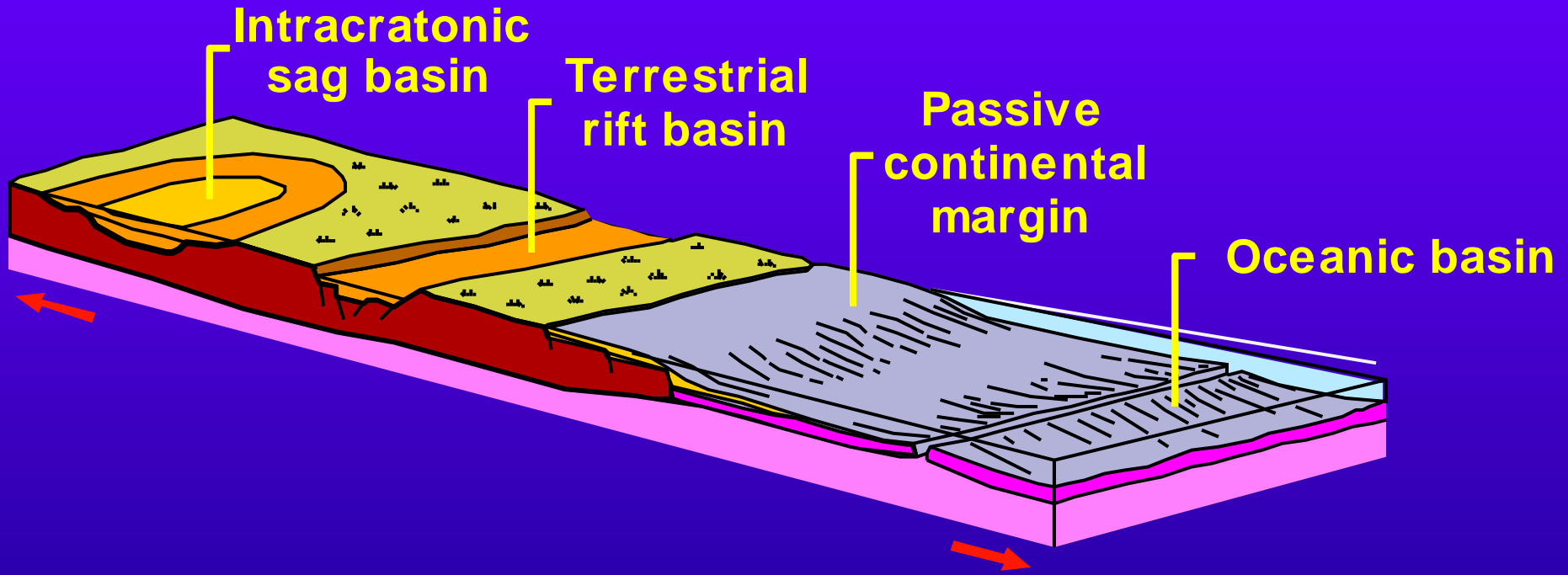


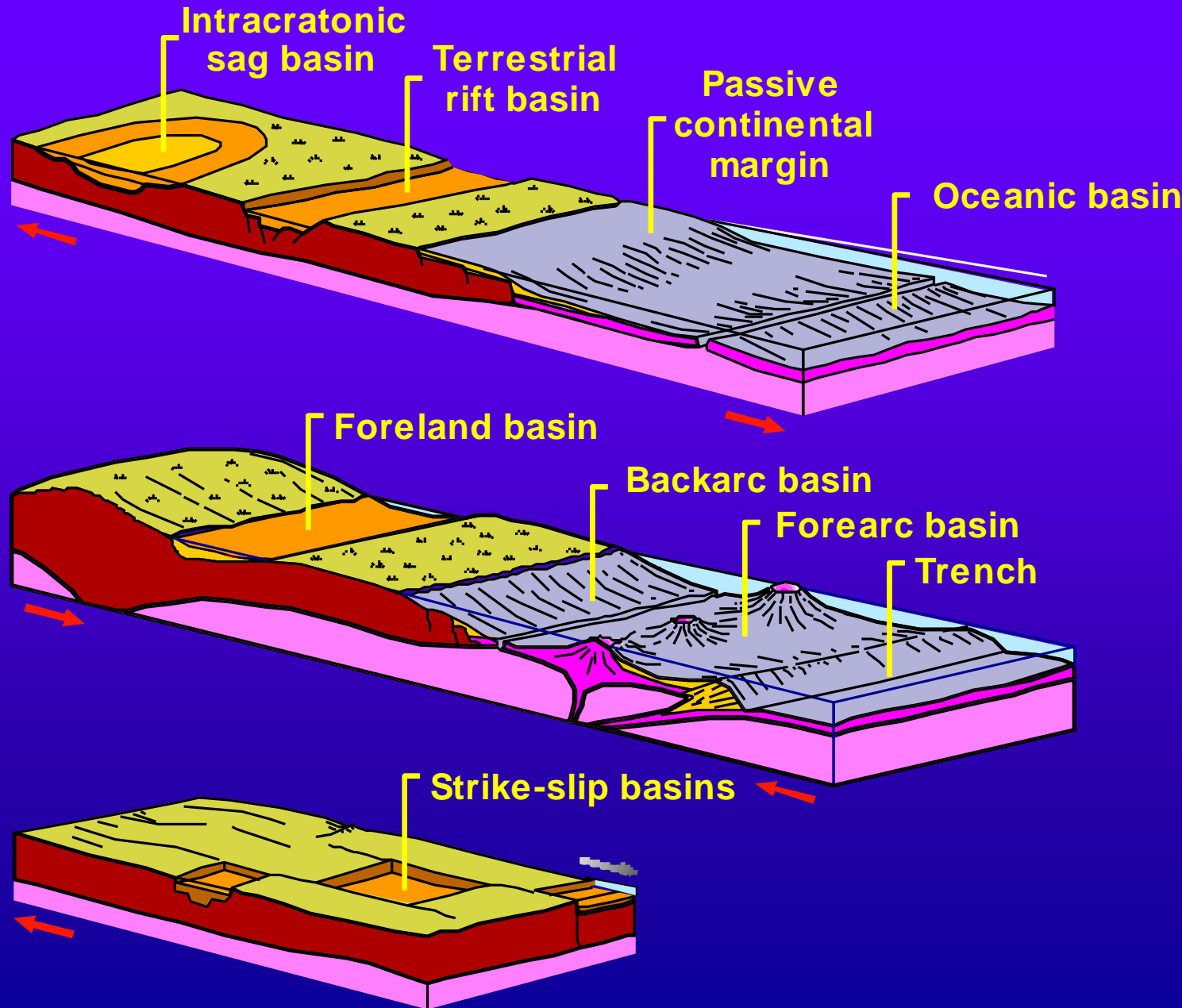
Sedimentary Basins

REMNANT OCEAN BASINS

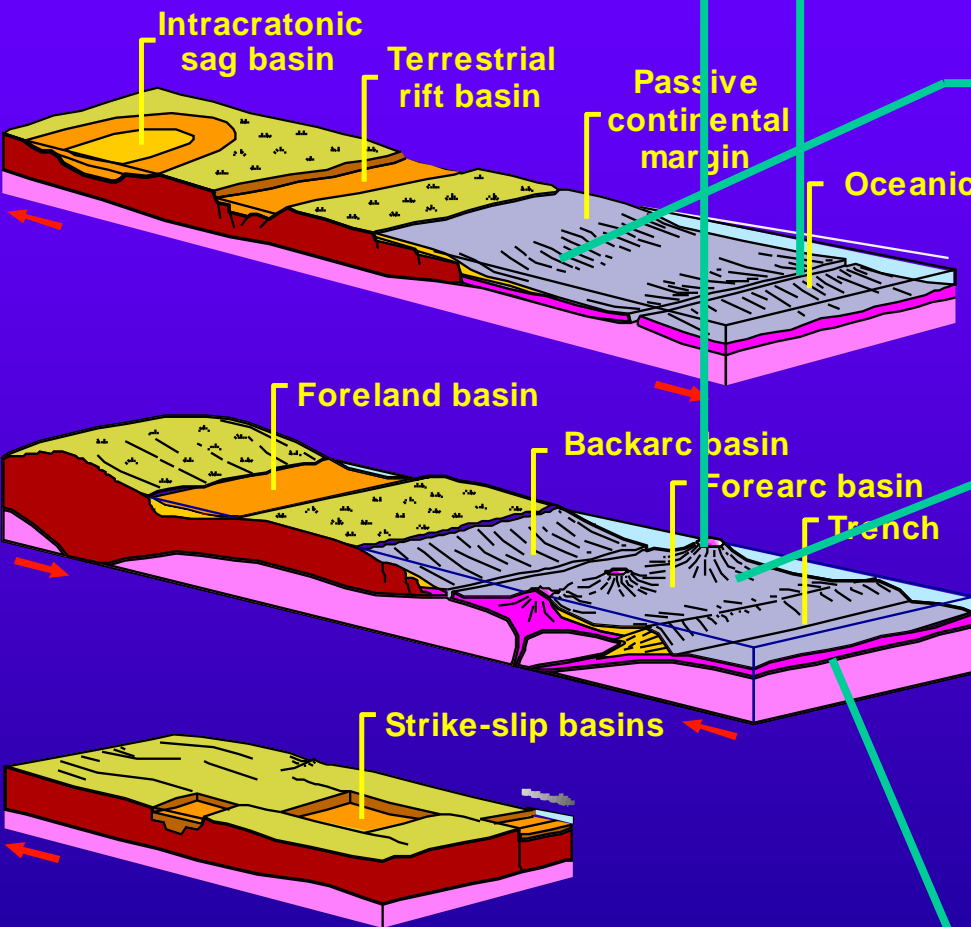
Tectonic setting of sedimentary basins



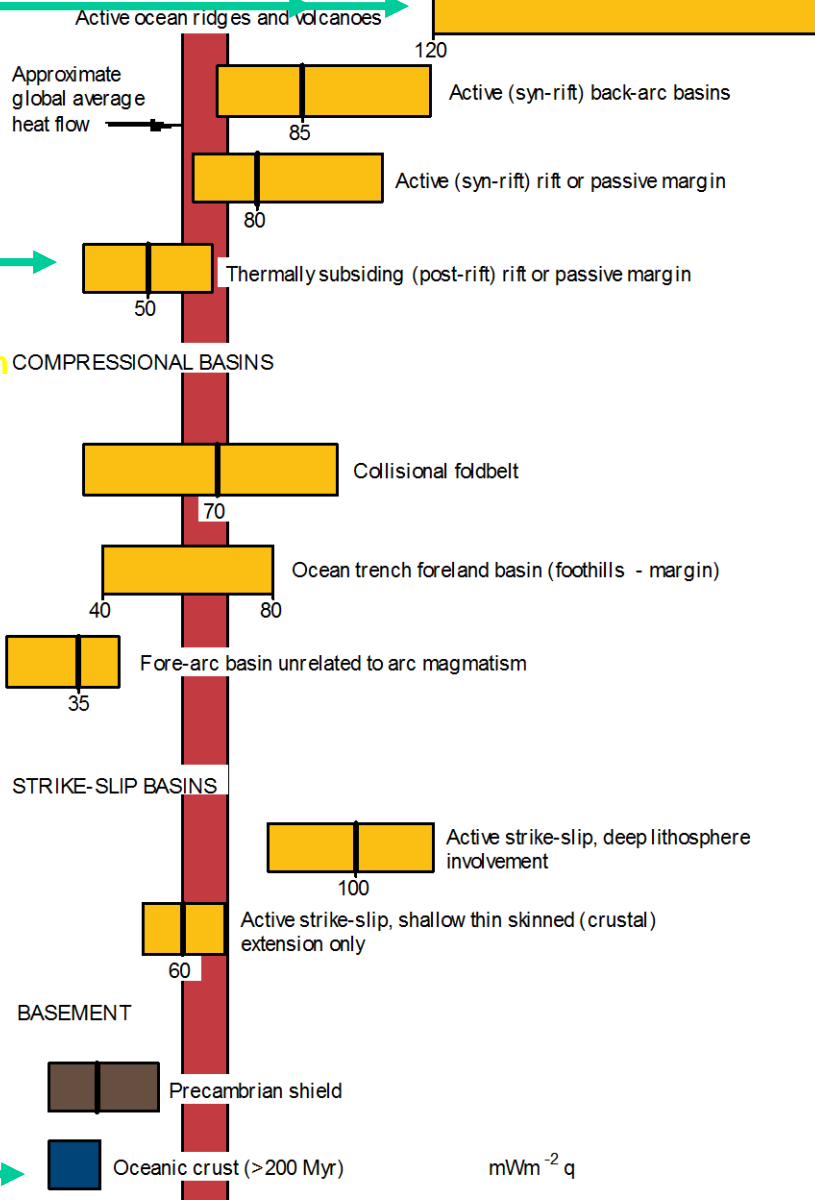
Tectonic setting of sedimentary basins



Basin Heat flow



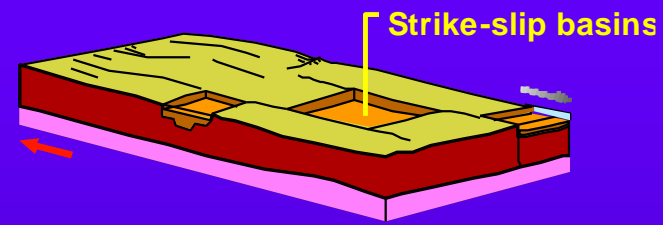
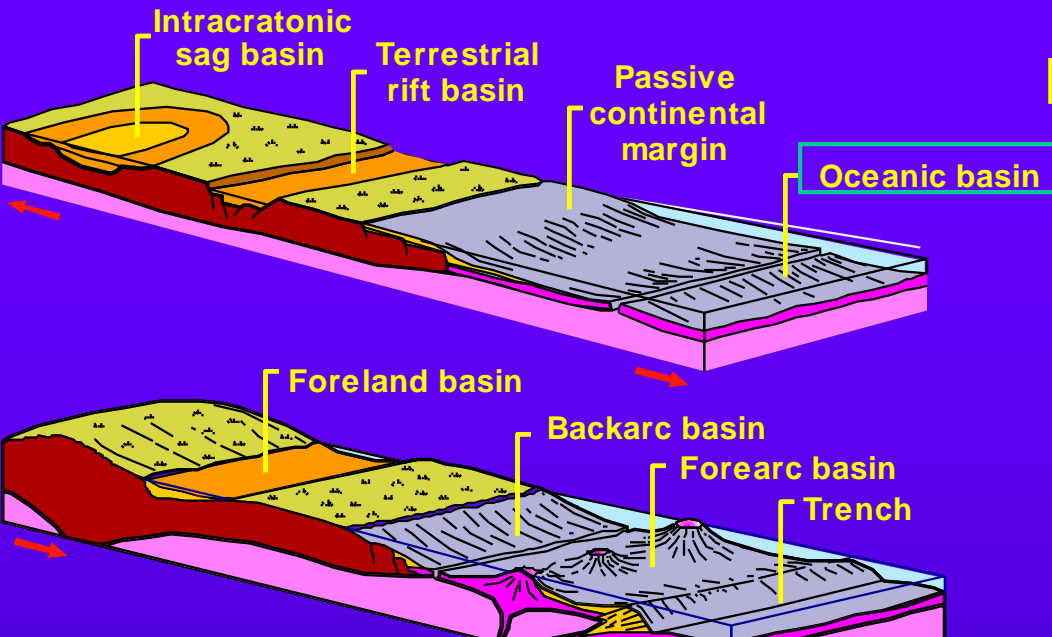
EXTENSIONAL BASINS



20 40 60 80 100 120 140 160 180

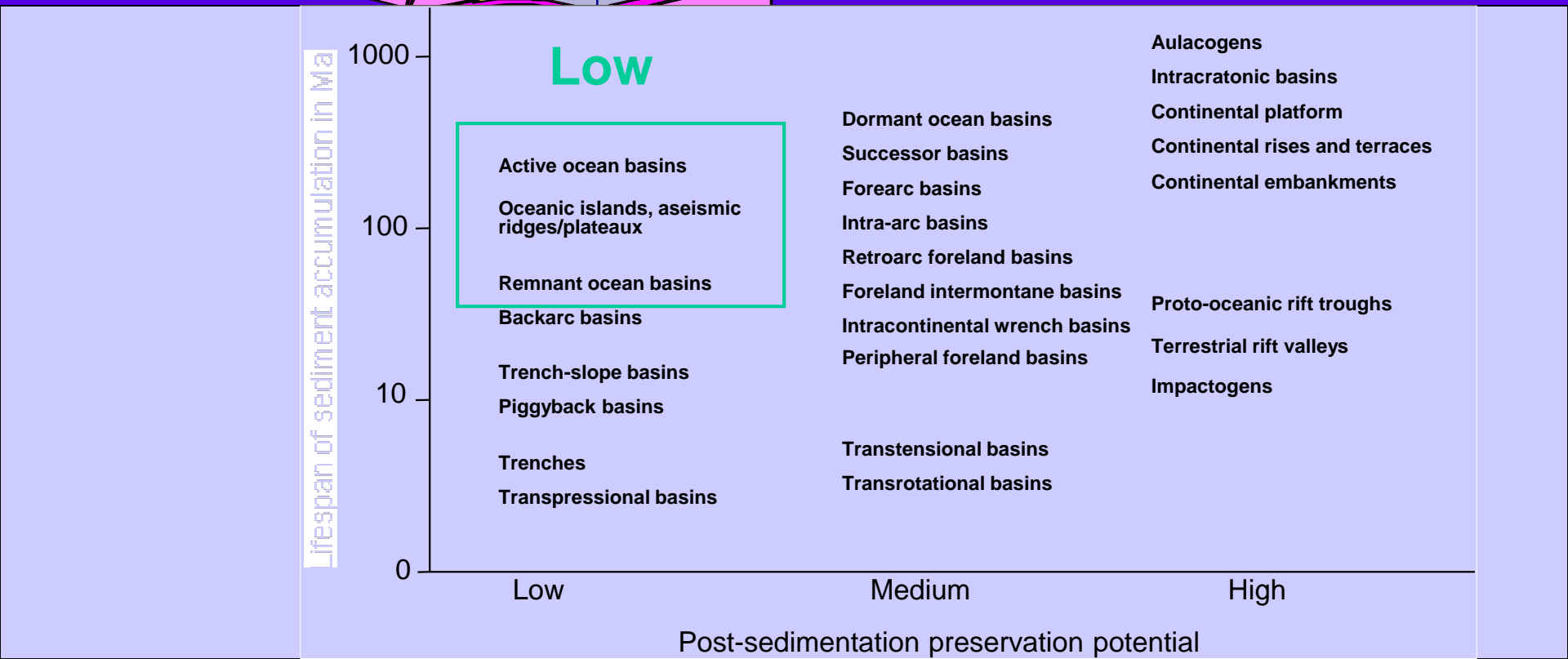
Heat Flow Units

Basin preservation potential

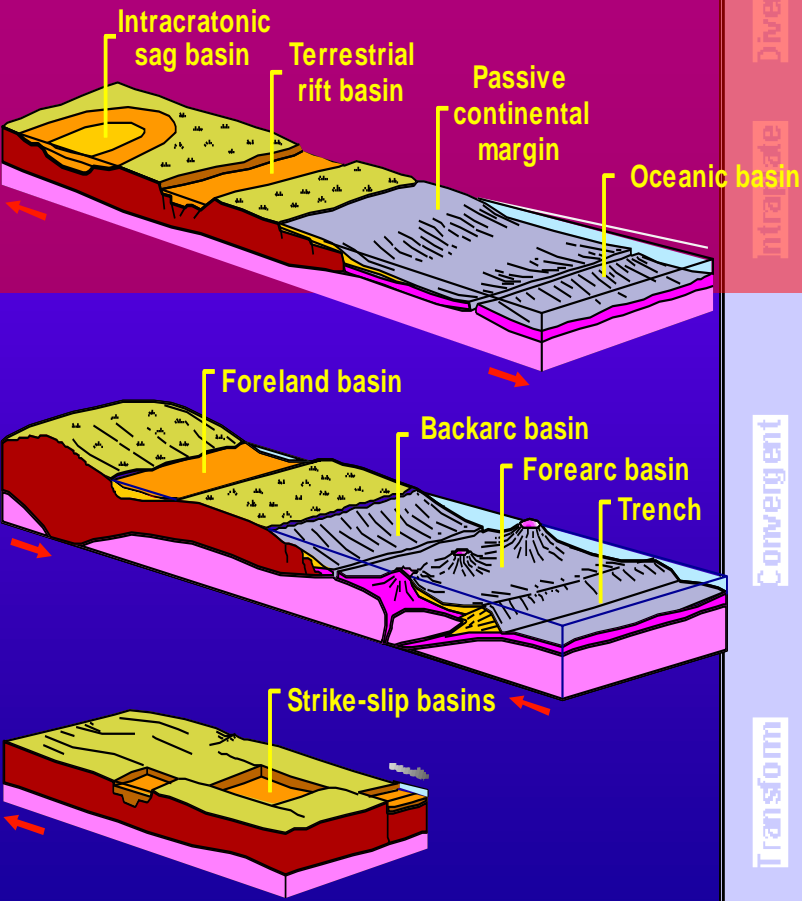


Medium

High



Subsidence mechanism



SUBSIDENCE MECHANISMS

- Minor
- Important
- Dominant

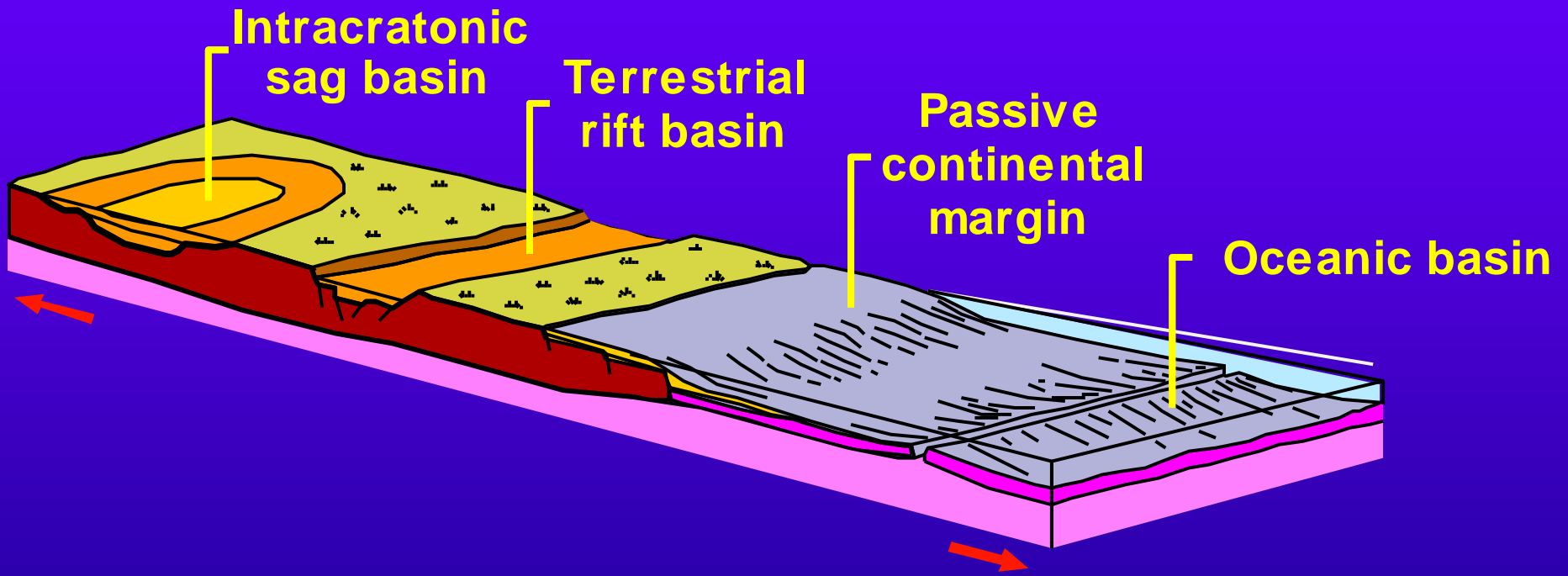
- A. Crustal thinning
- B. Mantle-lithosphere thickening

A B C D E F G

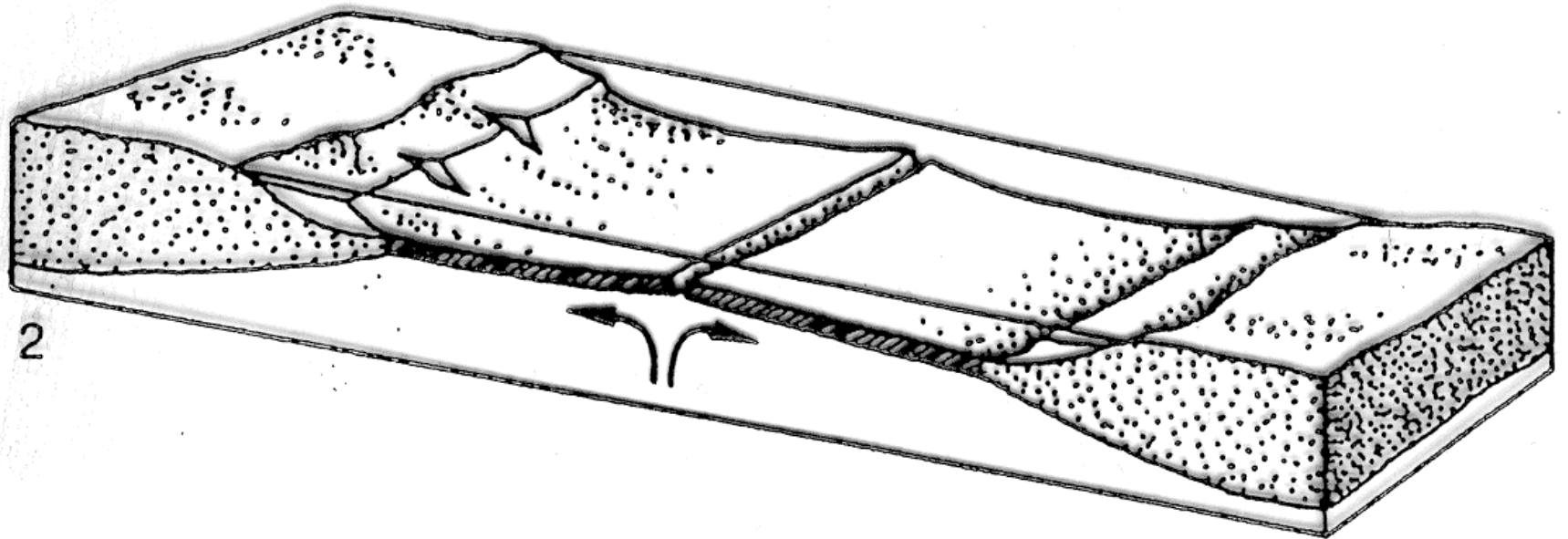
BASIN TYPE

		A	B	C	D	E	F	G
Divergent	Terrestrial rift valleys	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Proto-oceanic rift troughs	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Continental rises and terraces	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Continental embankments	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Intracratonic basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Continental platform	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Active ocean basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
Intra-plate	Oceanic islands, aseismic ridges/plateaux	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Dormant ocean basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Trenches	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Trench-slope basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Forearc basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Intra-arc basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Backarc basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
Convergent	Retroarc foreland basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Remnant ocean basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Peripheral foreland basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Piggyback basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Foreland intermontane basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Transensional basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Transpressional basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
Transform	Transrotational basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Intracontinental wrench basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor
	Hybrid	Minor	Minor	Minor	Minor	Minor	Minor	Minor
Aulacogens	Minor	Minor	Minor	Minor	Minor	Minor	Minor	
Impactogens	Minor	Minor	Minor	Minor	Minor	Minor	Minor	
Successor basins	Minor	Minor	Minor	Minor	Minor	Minor	Minor	

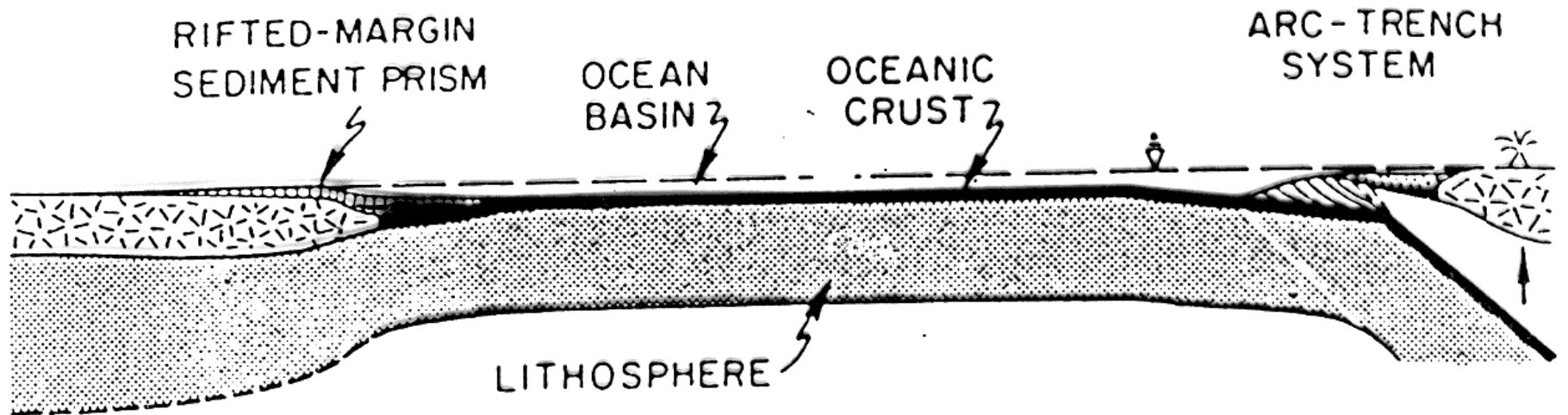
Minority of basins



The 'Wilson Cycle'

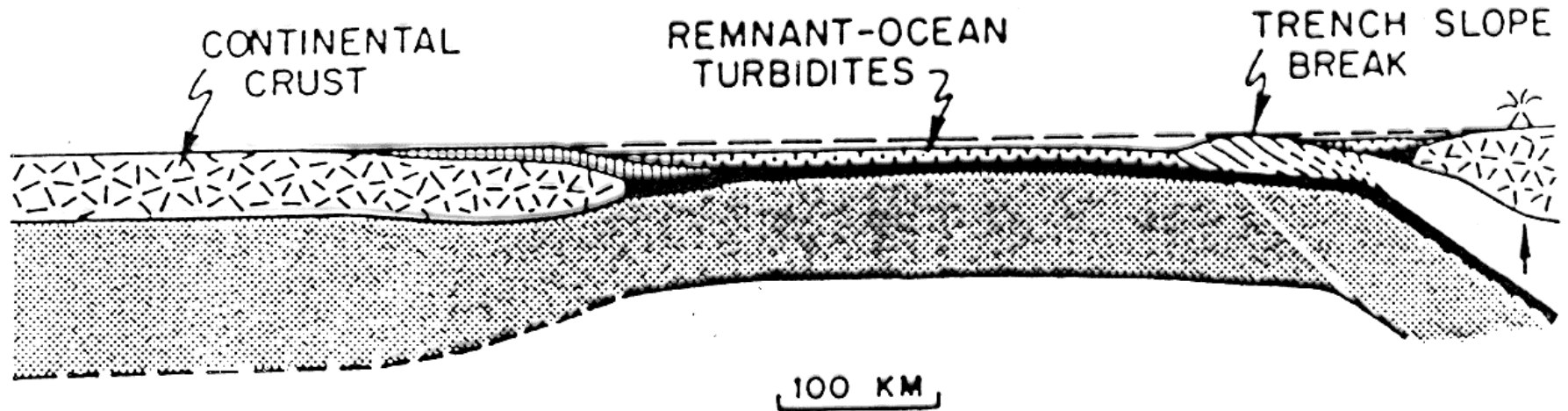


Opening and closure of ocean basins



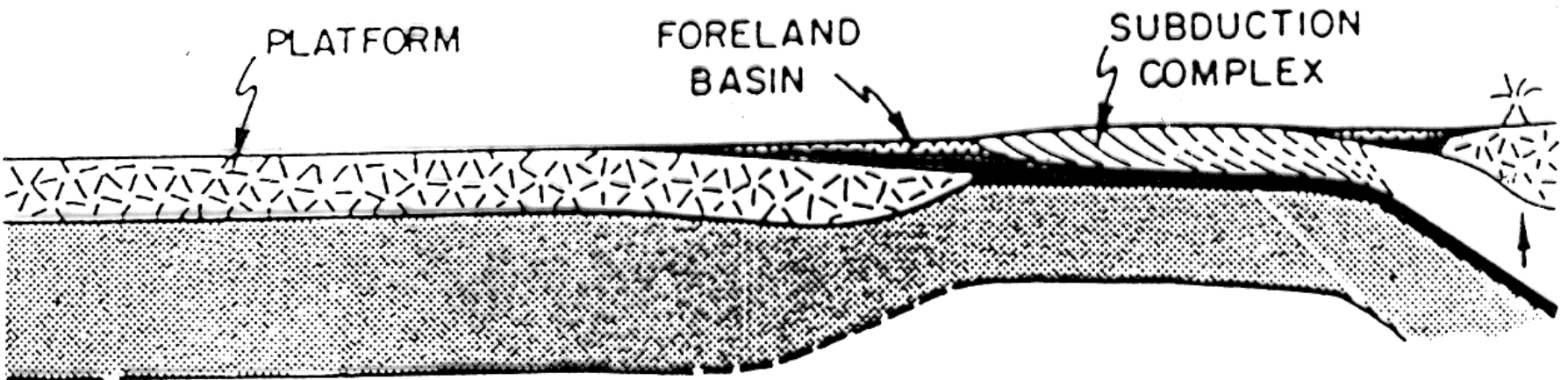
(A)

Opening and closure of ocean basins



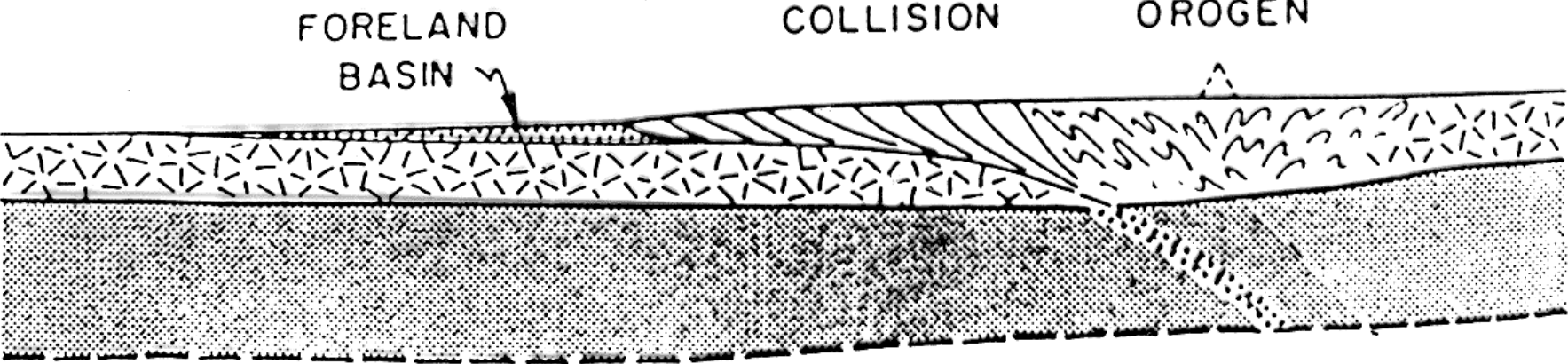
(B)

Opening and closure of ocean basins



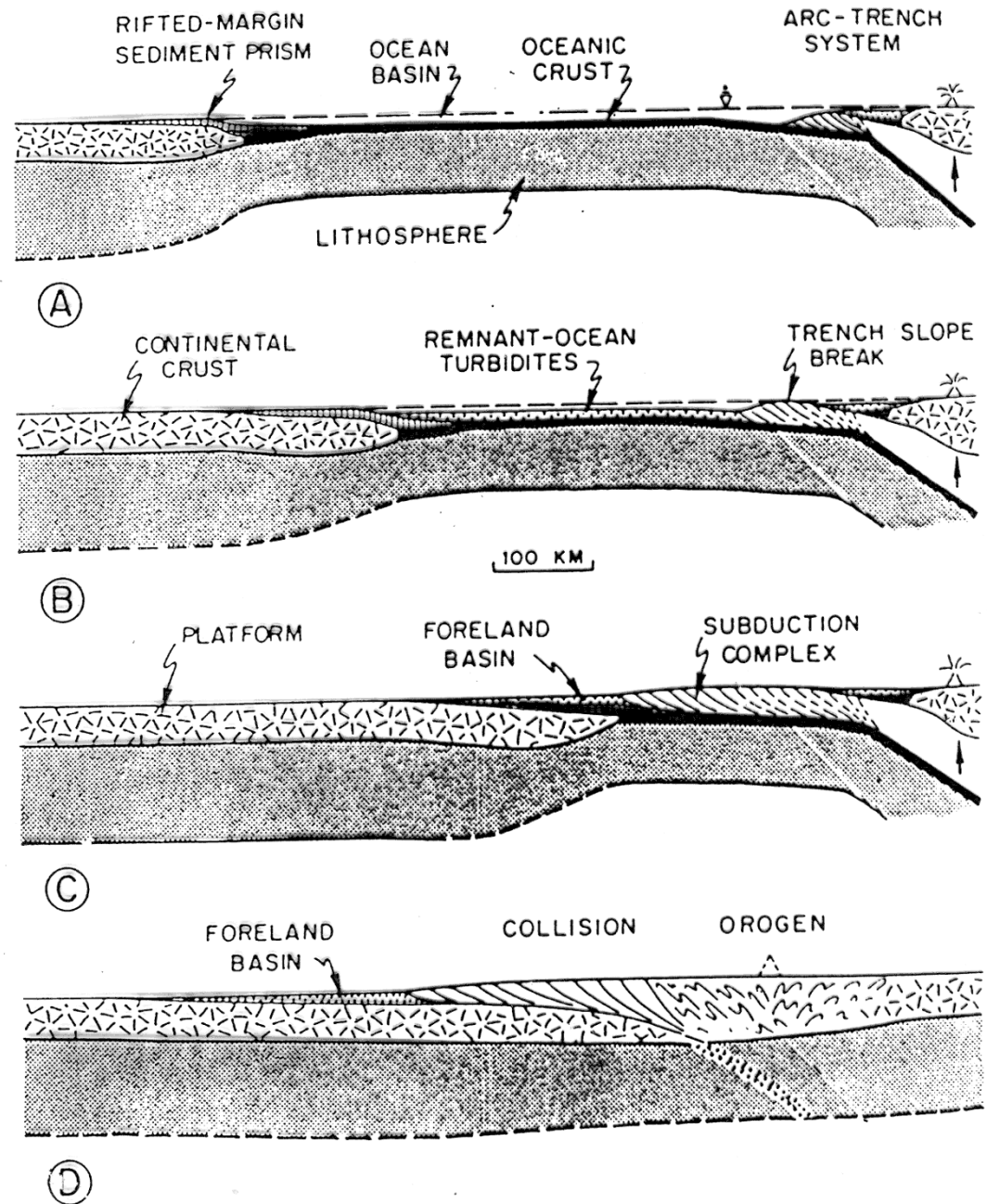
©

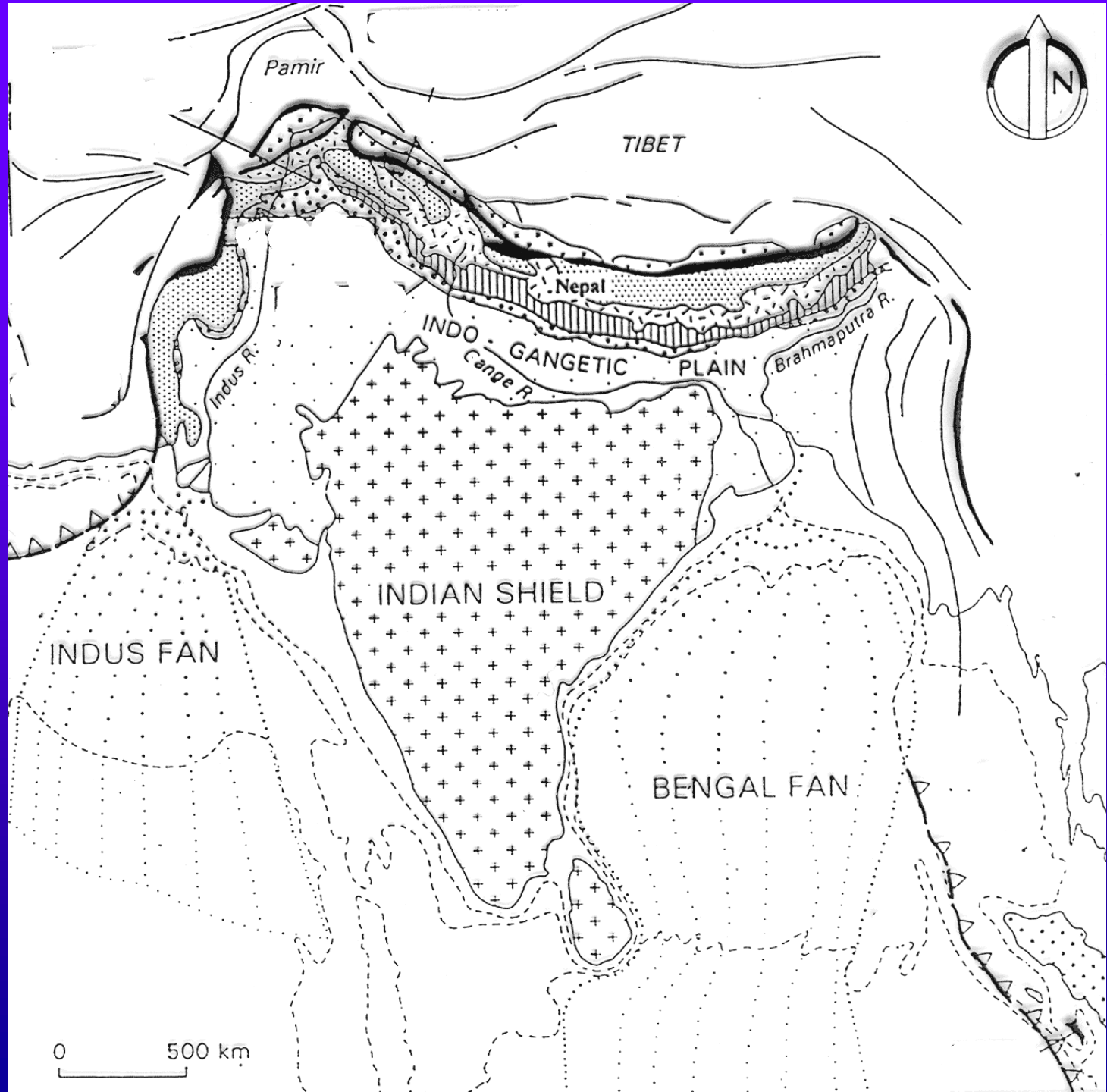
Opening and closure of ocean basins

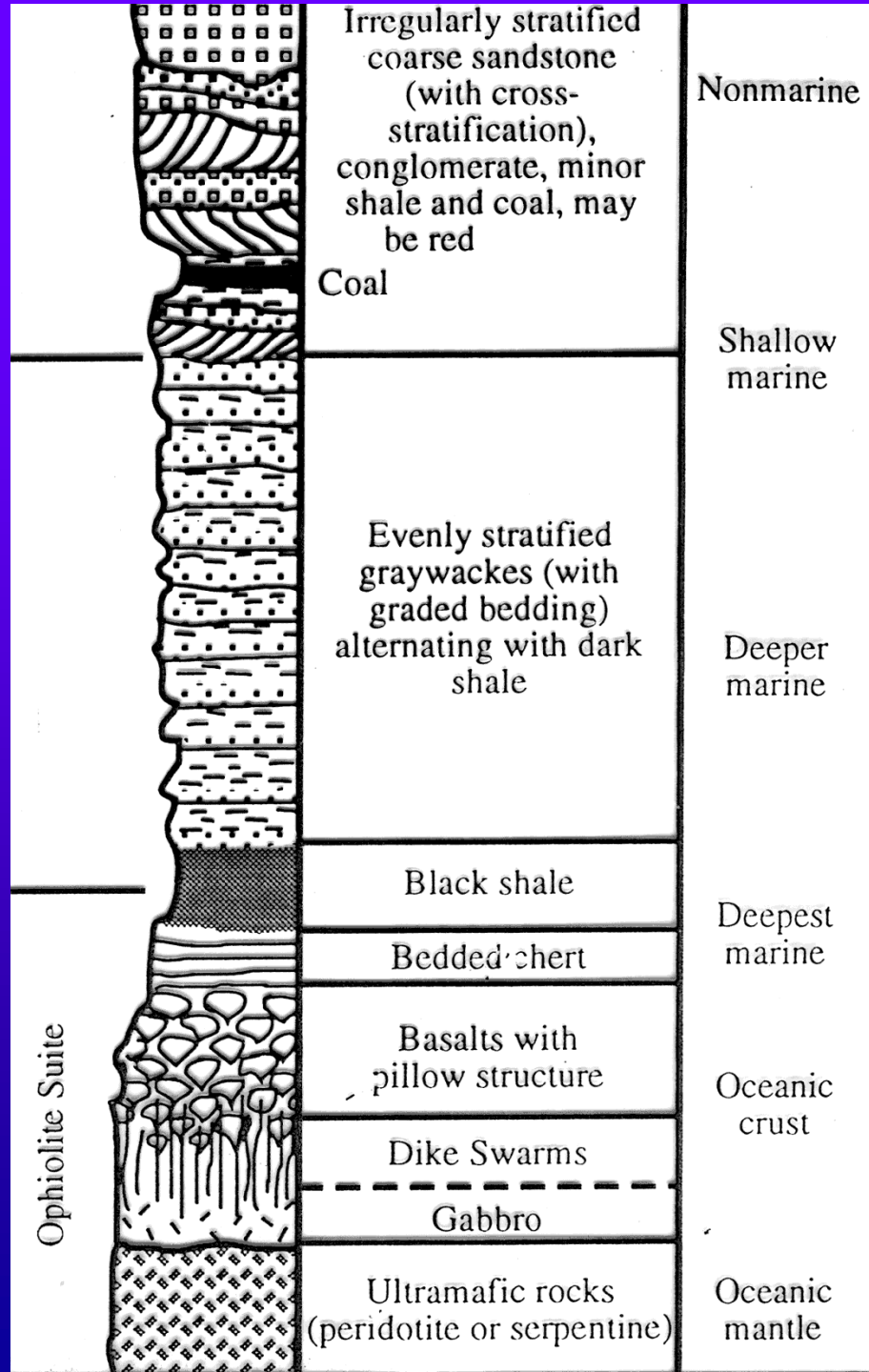


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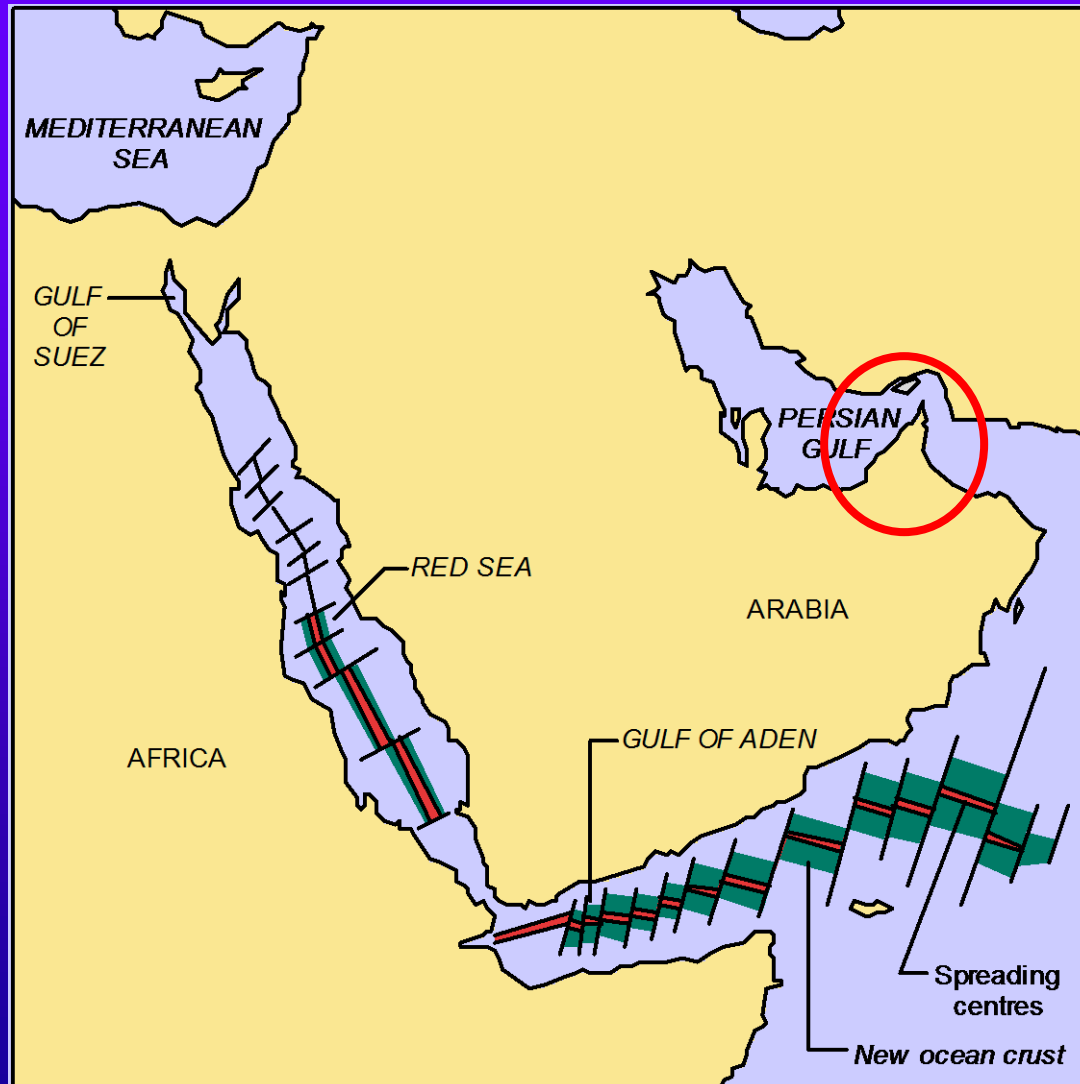
Opening and closure of ocean basins







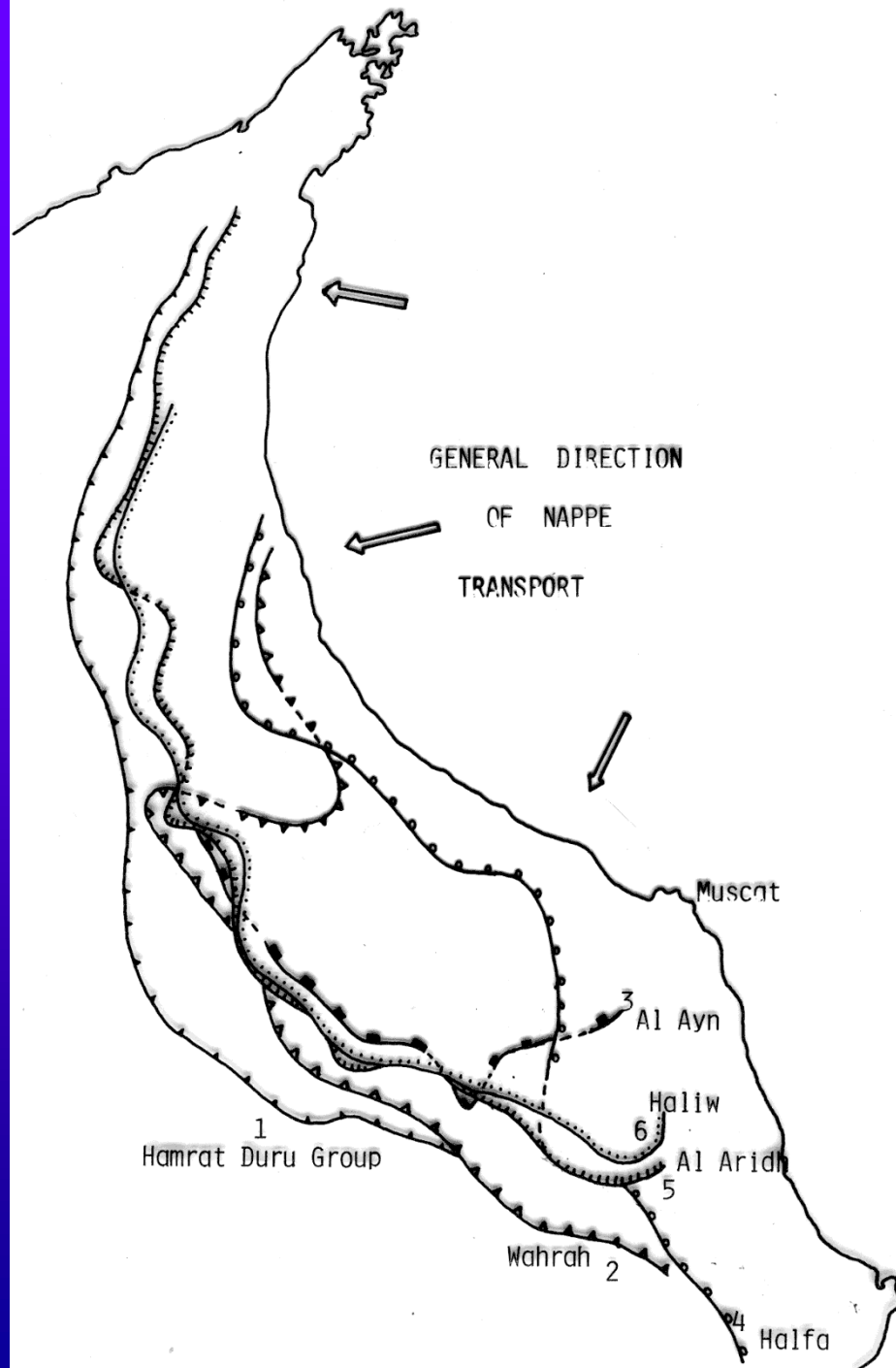
Oman

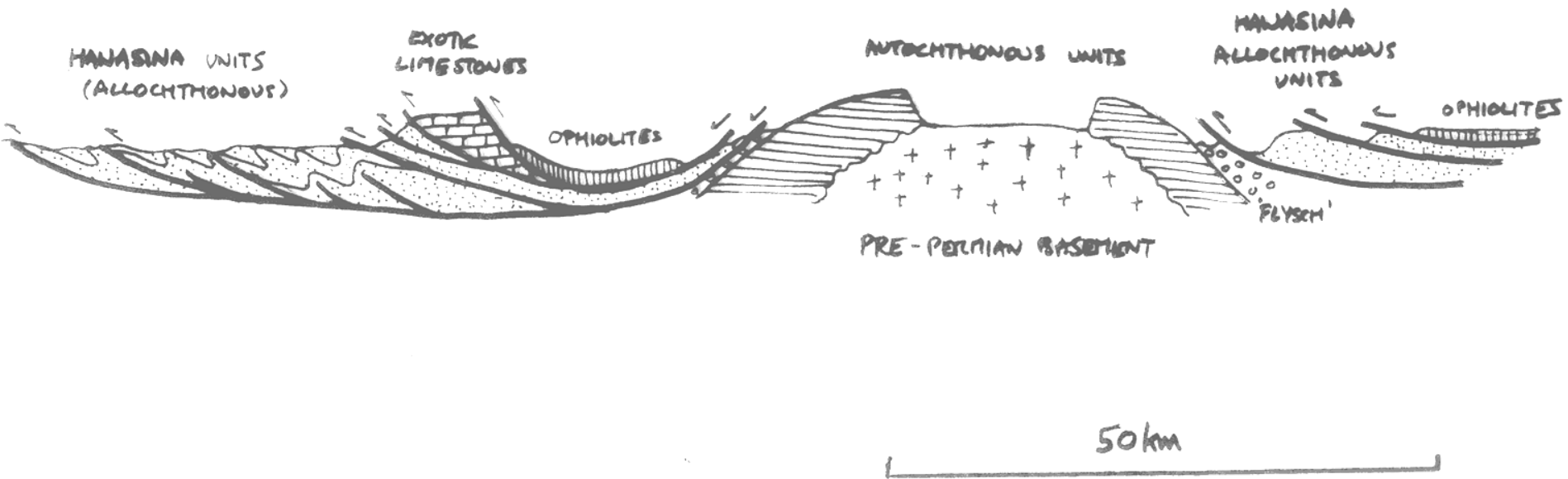






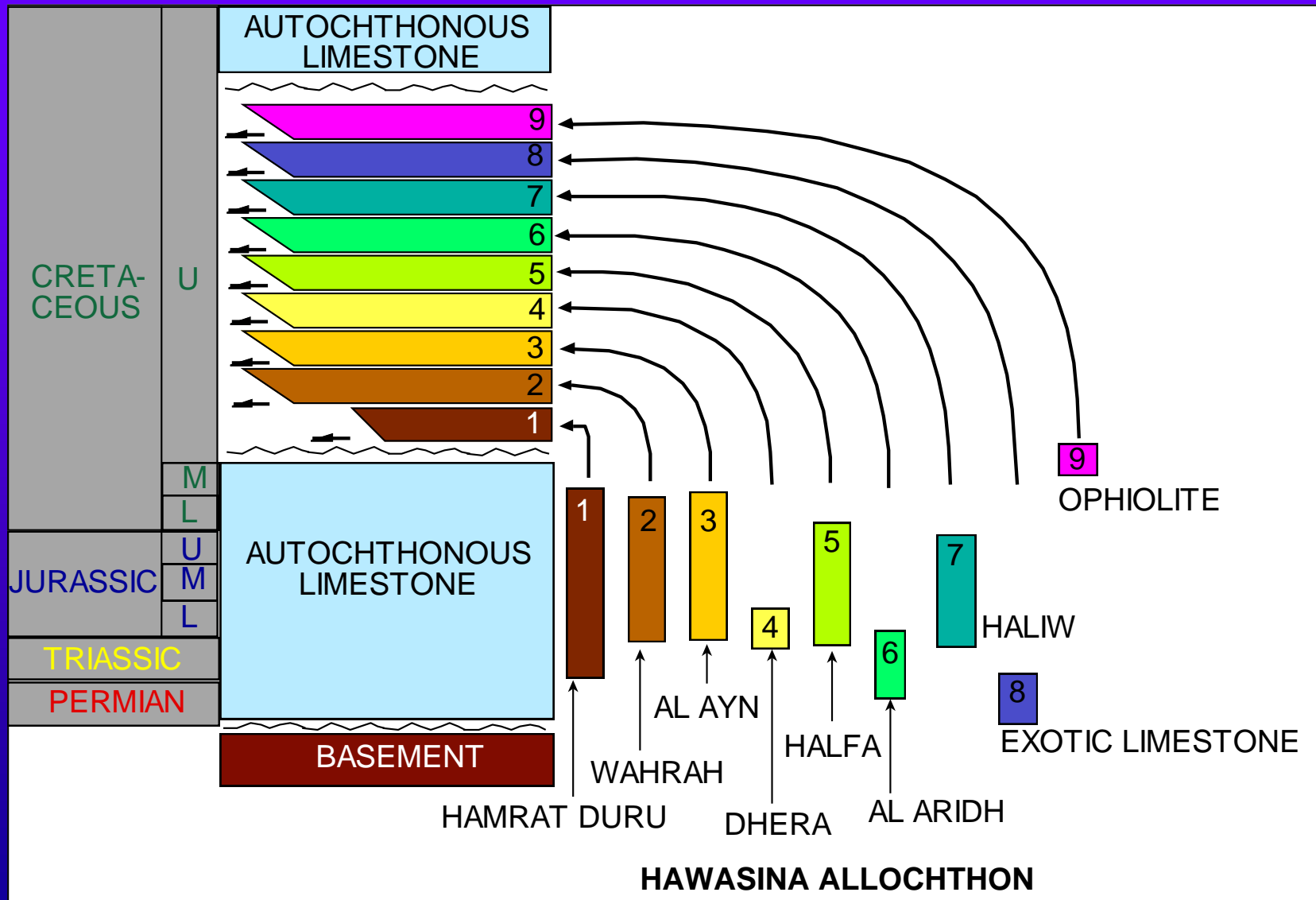






Tectono-stratigraphic relations, Oman mountains

deepening up
20 Ma



relatively shallow marine sst – outer shelf



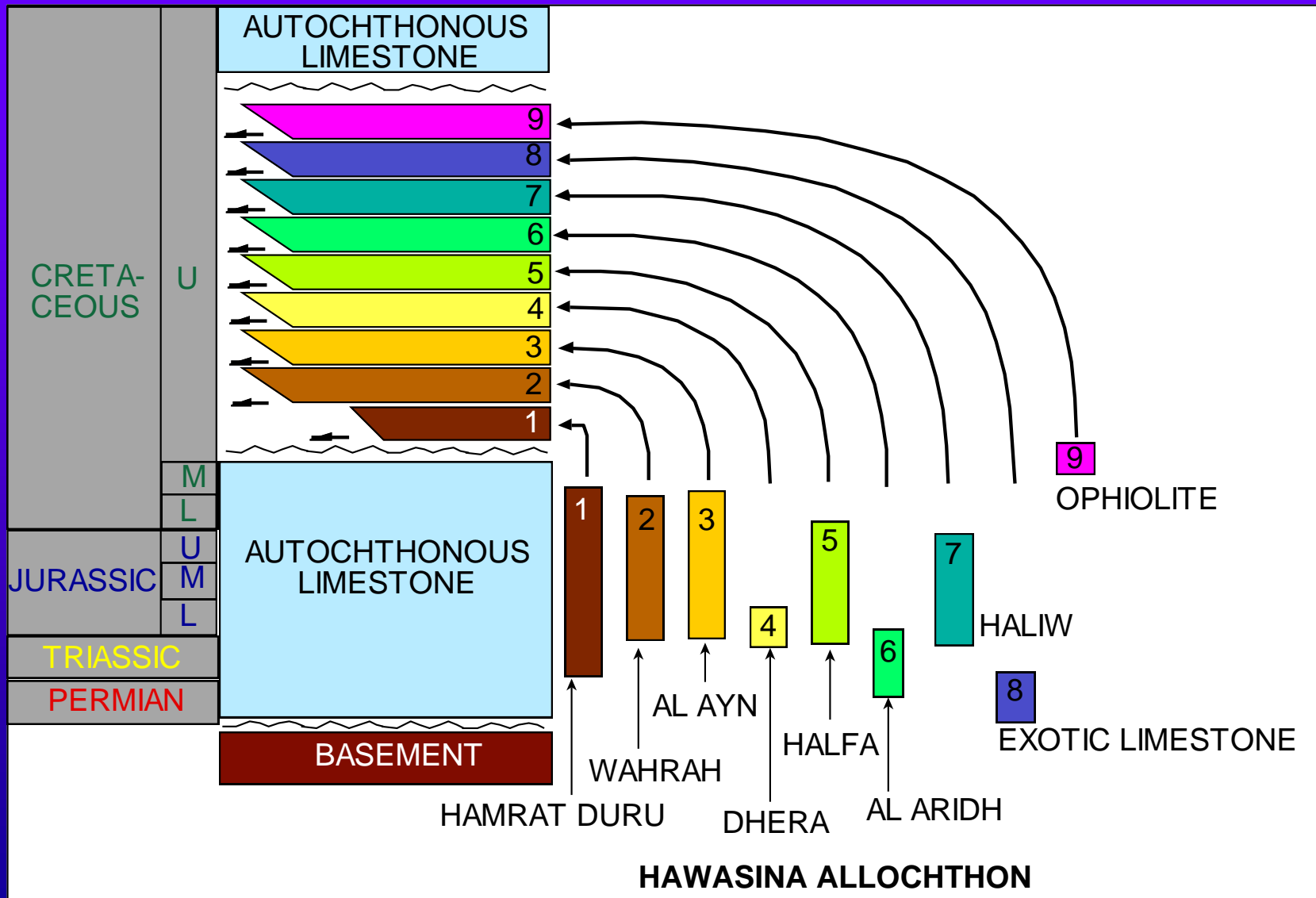




deep marine radiolarian cherts, distal turbidites



Tectono-stratigraphic relations, Oman mountains



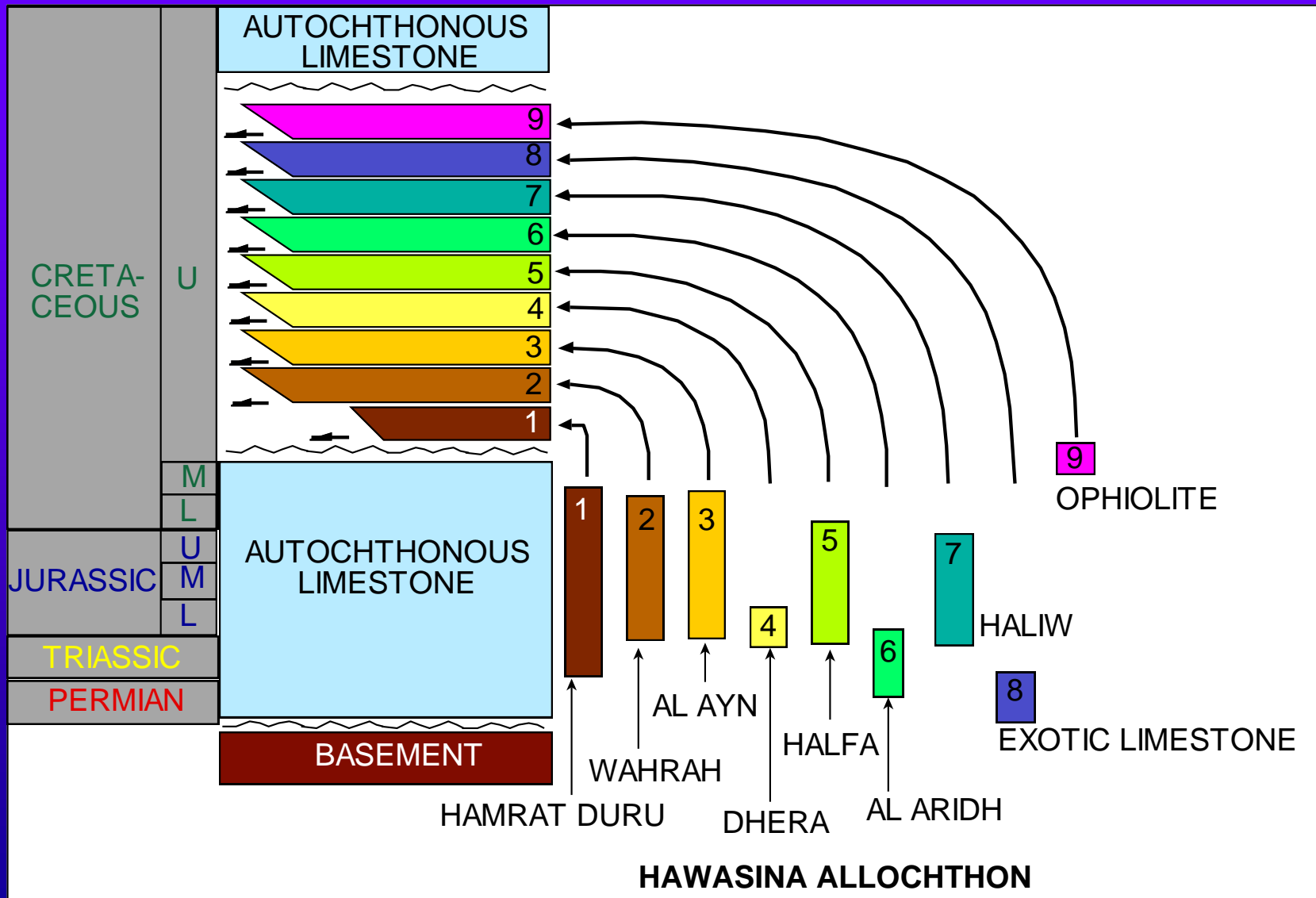
exotic limestone – Permian/Triassic reefal







Tectono-stratigraphic relations, Oman mountains

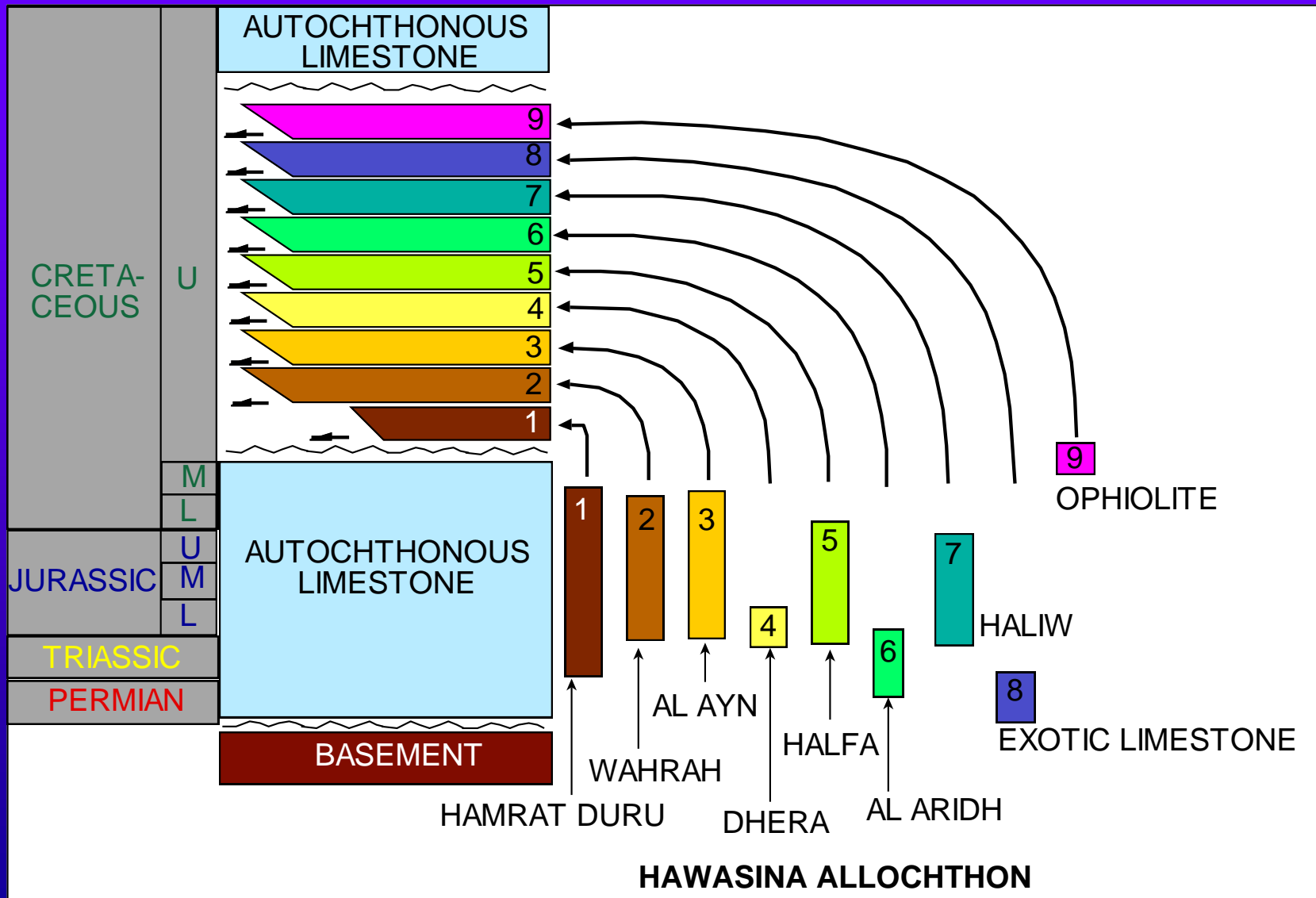




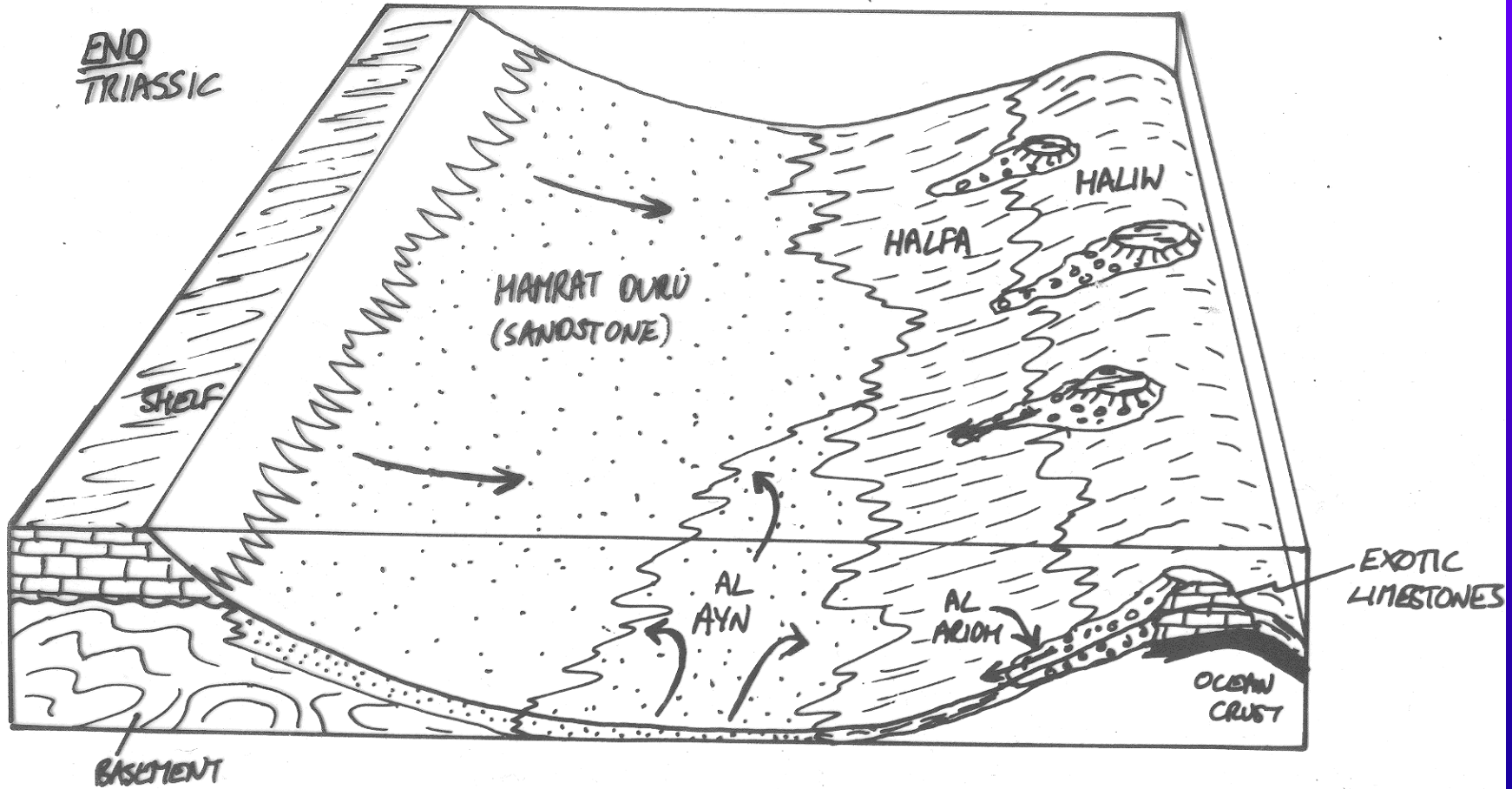




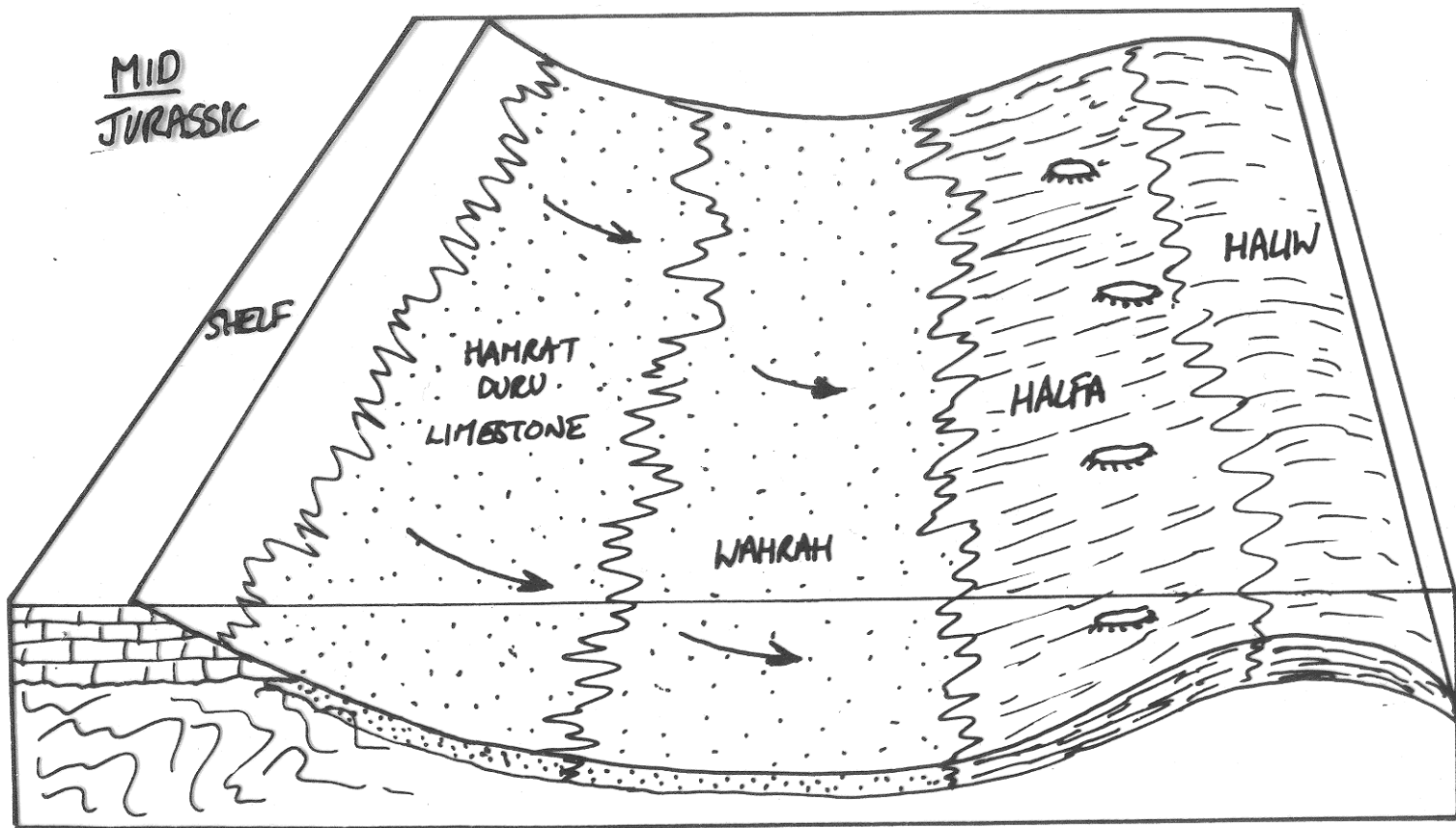
Tectono-stratigraphic relations, Oman mountains



END
TRIASSIC



MID
JURASSIC

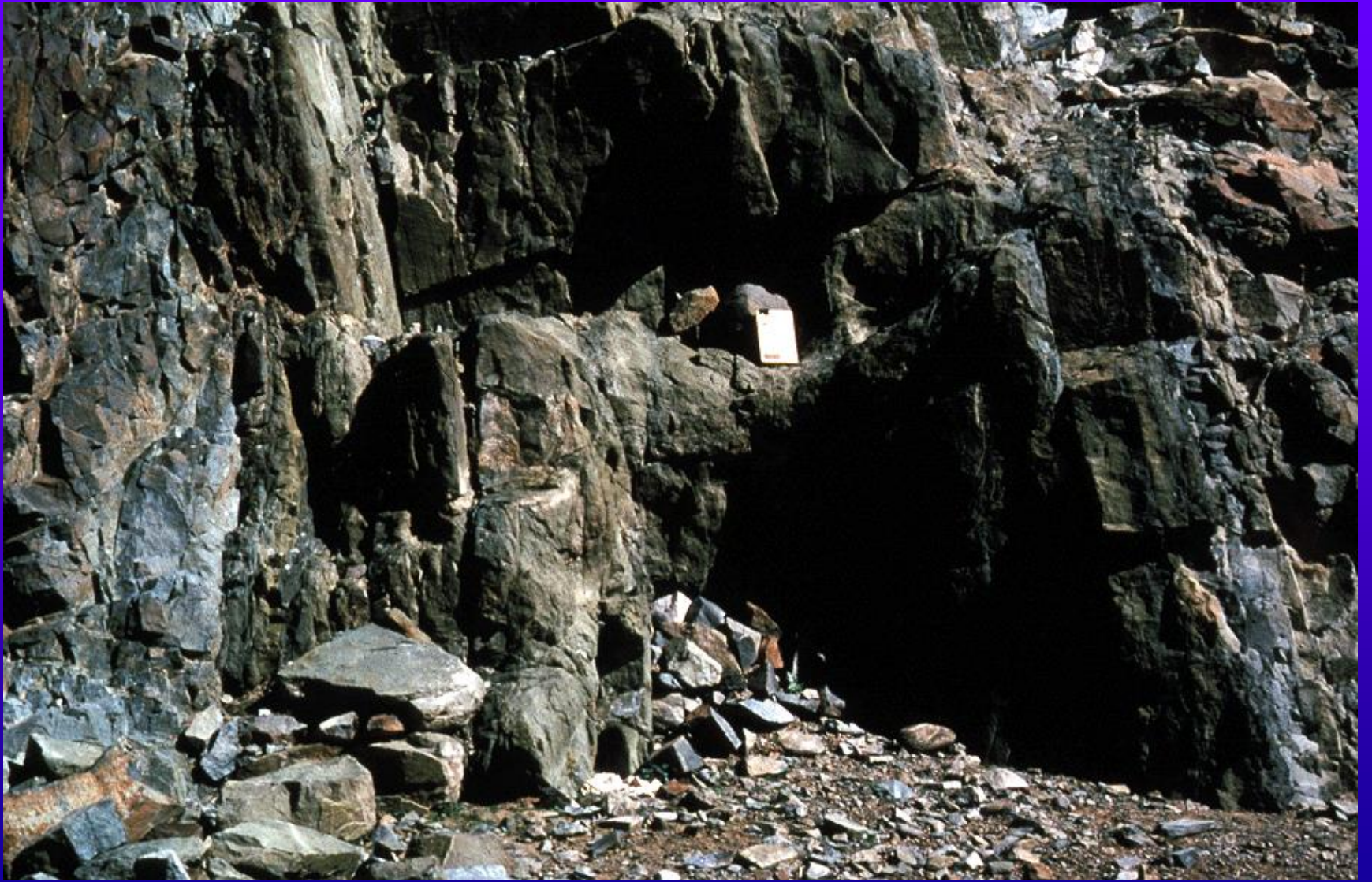


A photograph of a concrete wall with a sign. The wall is topped with seven golden, conical spikes. The sign is rectangular with a black background and white text. The text is written in Arabic and English. The background behind the wall is a dense green hedge.

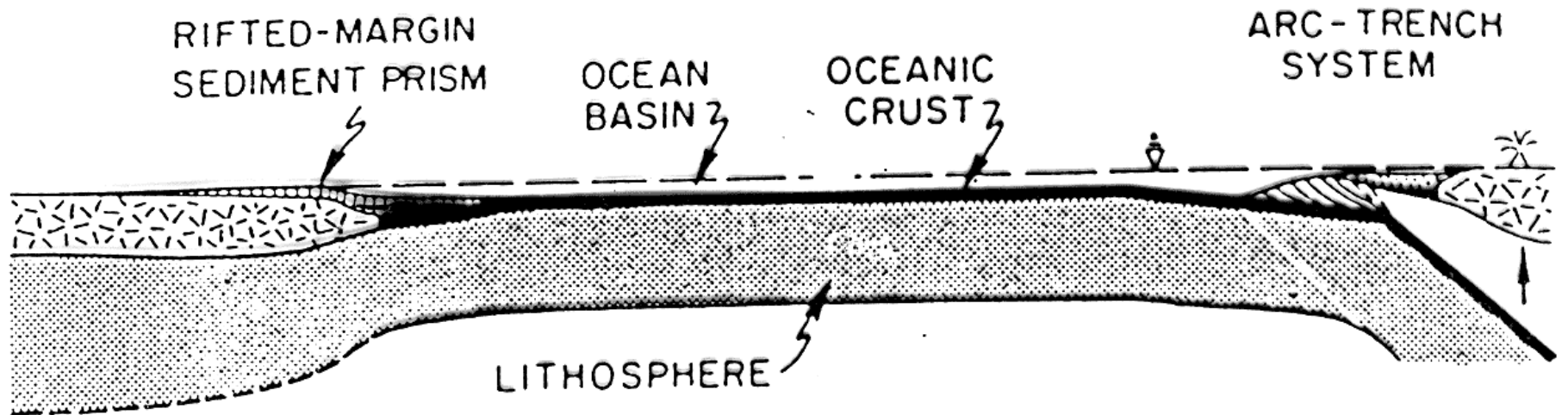
يمنع الجلوس على الحائط
Do NOT SIT ON THE WALL





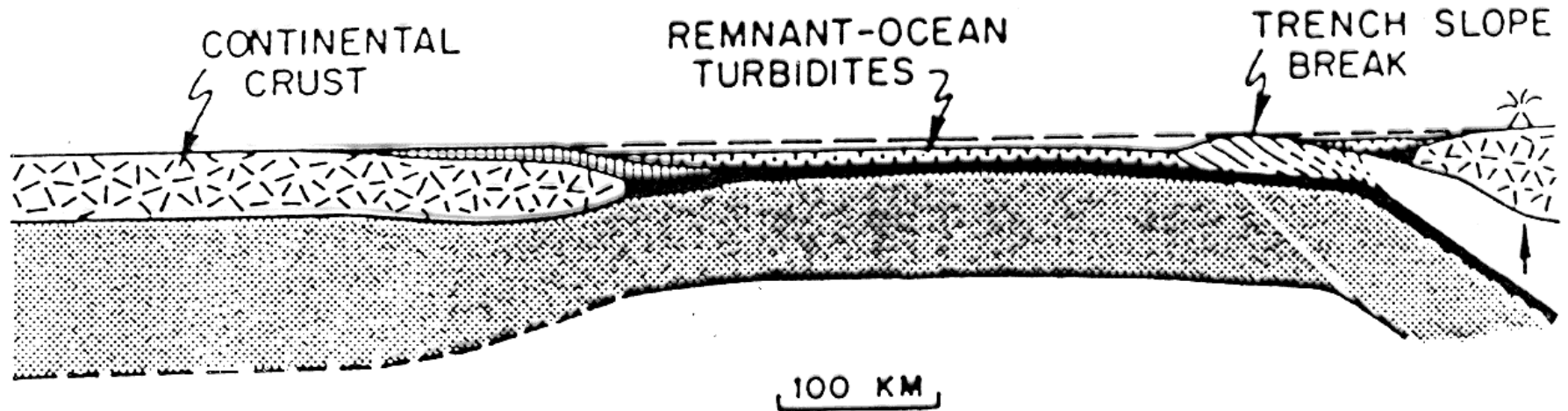


Opening and closure of ocean basins



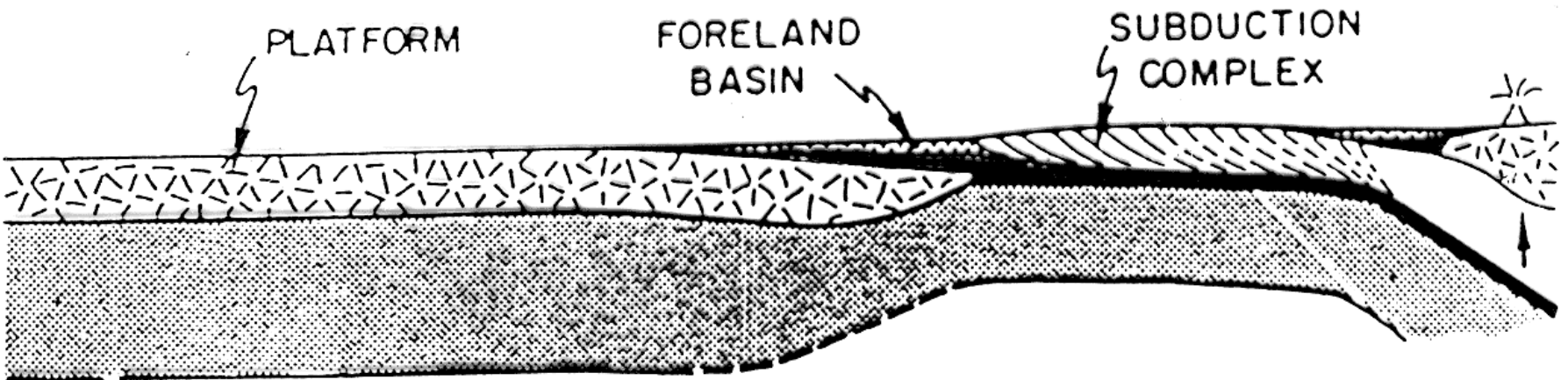
(A)

Opening and closure of ocean basins



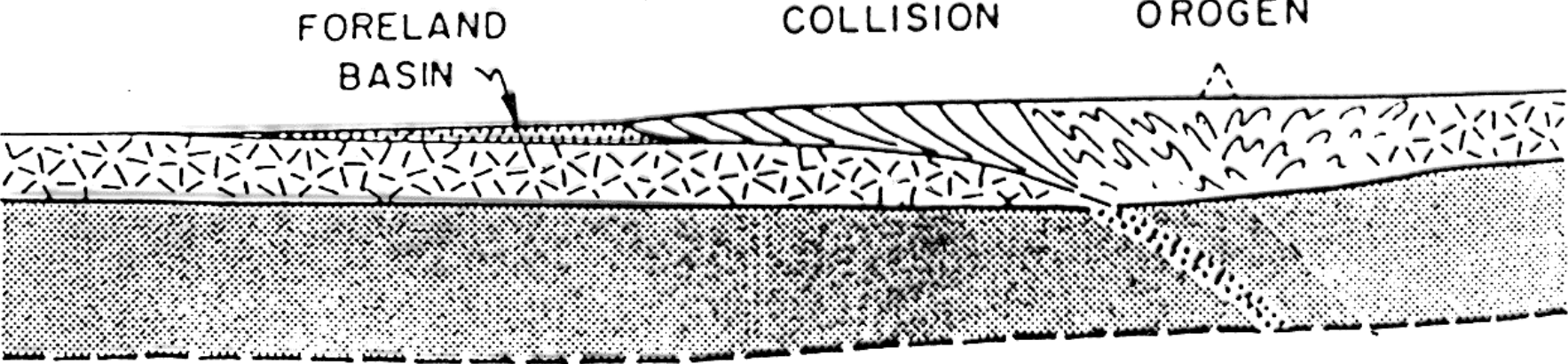
(B)

Opening and closure of ocean basins



©

Opening and closure of ocean basins



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