Old' Rocks Where They Shouldn't be

According to simple plate-tectonic theory (uniformitarian style), the age of the oceanic crust is zero at a spreading oceanic ridge (usually mid-ocean) and increases with distance from the ridge. Thus the crust of the central Atlantic, which current uniformitarian palaeogeographical reconstructions assure us began to open no earlier than 120 million years (Ma) ago, supposedly has a zero age at the Mid-Atlantic Ridge and an age of about 120 Ma close to the landmasses of Africa and South America at the appropriate latitude.[1]

However, Bonatti and others have recently reported their recovery of samples of supposedly 140 Ma pelagic limestones right in the middle of the Atlantic Ocean close to the Mid-Atlantic Ridge.[2] Near the equator, the Atlantic is characterised by an east-west megashear zone which stretches right across the ocean floor, the main fracture zone of which — the Romanche Fracture Zone — offsets the Mid-Atlantic Ridge by about 900 km along a transform fault (see Figure 1). In the vicinity of the ridge, just to the north of the Romanche Fracture Zone and almost parallel to it, runs a transverse ridge crossing the Mid-Atlantic Ridge some 4 km high and several hundred kilometres long (see the Insert, Figure 1).

Bonatti and others found from seismic reflection profiles and rock sampling that west of about 15°30'W the transverse ridge comprises uplifted slivers of oceanic crust, but to the east it changes character, consisting of a thick sequence of consolidated limestones, quartzitic siltstones and biomicrites (fossiliferous limestones). Within Peak D (see the Insert, Figure 1), there are two seismic units: the upper, 'dated' by microfossils as 55-65 Ma, and the lower, 'dated' at about 140 Ma (see Figure 2). The problem is that these 140 Ma (Lower Cretaceous) limestones are 'older' than any other rocks in the floor of the central Atlantic, are in fact supposedly older than the Atlantic Ocean basin itself, and definitely shouldn't be where they are so close to the zero age Mid-Atlantic Ridge.

So how do Bonatti and his colleagues circumvent this obviously embarrassing problem? Since the 'dating' methods cannot ever be questioned or doubted, they are forced to speculate that these 140 Ma pelagic limestones must have been deposited in the ocean in the very earliest stages of continental break-up and spreading, and then became trapped as the spreading proceeded — that is, these rocks failed to move sideways as the Atlantic opened. But how did these particular rocks manage to get left behind in this particular 'odd' location **(within** a major fracture zone that must have formed some considerable time after spreading began) while all other ('younger') rocks were 'carried' with the ocean floors thousands of kilometres in conjunction with the adjoining continental margins? All Bonatti and his colleagues can suggest is to propose a highly improbable possible entrapment process, and then to in effect conclude that this must be what happened because it evidently did!

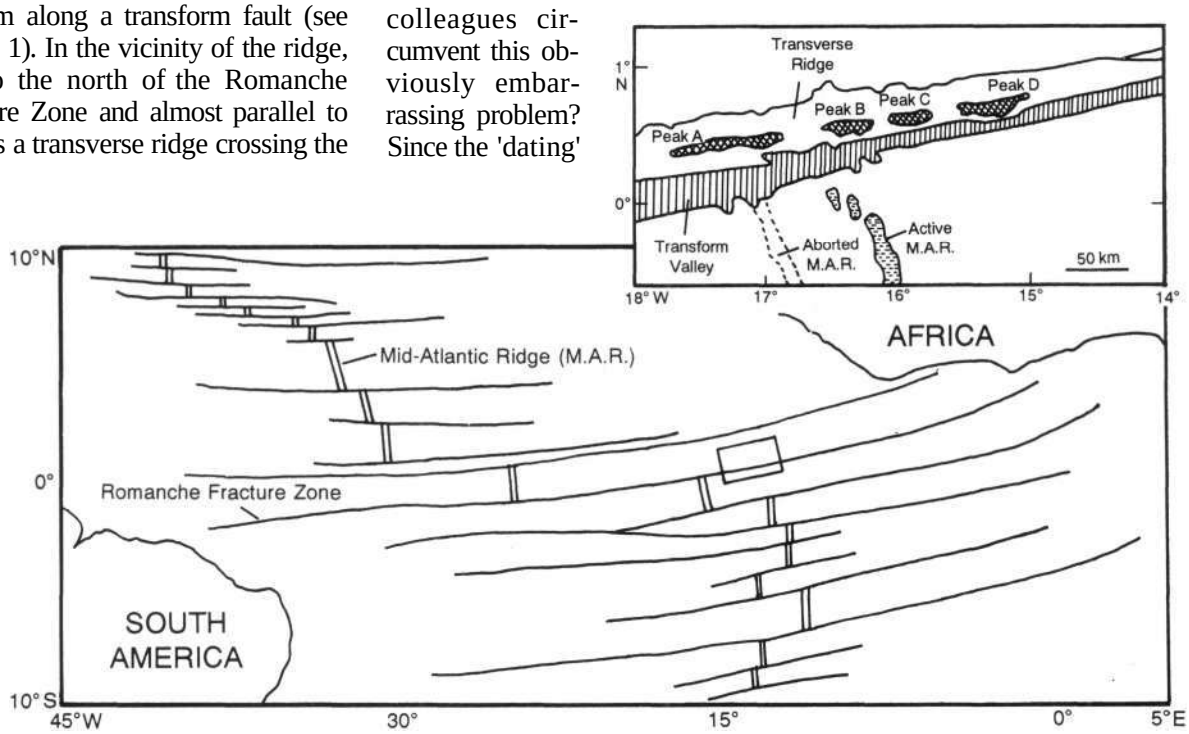


Figure 1. *Map of the equatorial Atlantic sea-floor showing the axis of the Mid-Atlantic Ridge and the large fracture zones offsetting it The Insert represents the marked area of the Romanche Fracture Zone.*

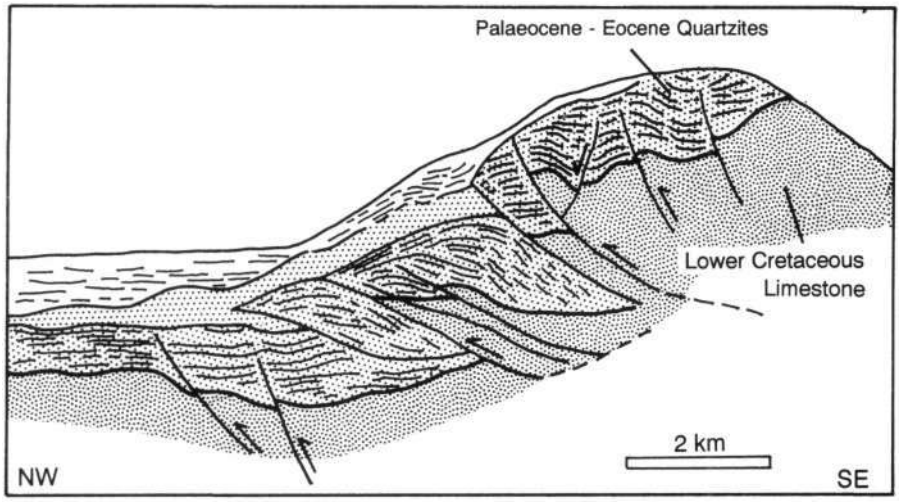


Figure 2. *Northwest-southeast profile through Peak D (Insert, Figure 1) interpreted from the seismic reflection data.*

We really shouldn't be surprised — we are now told that

> *'it would appear that near the present equator the opening of the Atlantic began some 20 million years earlier than hitherto thought',*

and that

> *'thus . . . plate tectonics has its anomalies still, not to mention its surprises'?*

Of course, the reason for this surprising anomaly, and this significant revision of the Earth's tectonic history, is the unchallenged invincibility of the fossil 'dating' of the limestones based as it is on the assumed evolutionary order for life's development and history. And even if these were a block of rocks 'left behind', catastrophic tectonics late in the Flood would more easily explain their current location than the tortuously slow processes of the uniformitarian creed.

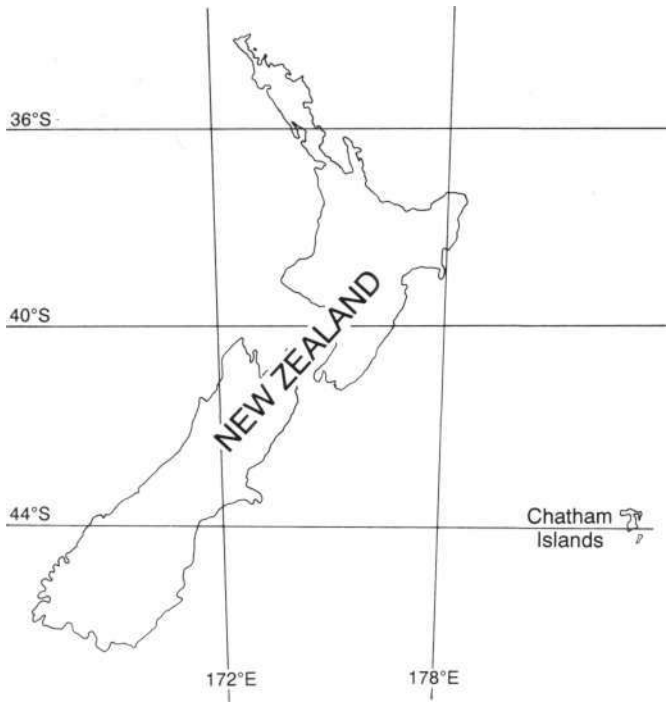
REFERENCES

1. Anonymous, 1997. Old rocks near the Mid-Atlantic Ridge. **Geology Today, 13(1):17.**
2. Bonatti, E., Ligi, M., Borsetti, A. M., Gasperini, L., Negri, A. and Sartori, R., 1996. Lower Cretaceous deposits trapped near the equatorial Mid-Atlantic Ridge. **Nature,** 380:518-520.
3. Ref. 1.

A. A. Snelling

A Challenge to Traditional Cultural Anthropology

The traditional view of so-called 'cultural evolution' is that hunter-gatherer societies became agricultural societies, which then became industrial ones, and so on. Technology, it has long been taken for granted, always increases. When anthropologists came across a hunter-gatherer society, the standard assumption was that they had never, in their cultural past, had an agricultural society.



However, the Bible teaches that human society before the Flood already had the capacity for herding, agriculture, manufacture of musical instruments, metalworking and city-building. When we come across a hunter-gatherer society today, since these are the descendants of people who built a city at Babel, the inference is clear. Even though such hunter-gatherer societies show no sign of (for example) agriculture, they have descended from societies which did practise this.

It is therefore of great interest to creationists whenever evidence emerges that societies can in fact lose technology (such as the Tasmanian aborigines appear to have done). Also, when studies reveal that a particular hunter-gatherer society has descended from an agricultural society in relatively modern times.

One such incidence is the story of the Moriori.[1] Around a thousand years ago, Polynesian farmers colonised New Zealand to