NEWSLETTER

New Concepts In Global Tectonics

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FROM THE EDITORS

A LOT MORE DISCUSSION ???

The Newsletter has been very successful in presenting material which has not found an acceptance in mainstream publications. Many creative and stimulating contributions have appeared. Although one of our objectives was to reproduce work "not fitting readily within the scope of Plate Tectonics", we have been quite surprised, that despite some of our contributors accepting Plate Tectonic Theory, their work for some reason or another has not been found acceptable. Certainly, in some cases, this was because facts presented, were regarded as incompatible with the theory. This kind of "scientific" approach must be one of the most peculiar features of the current state of the geological sciences.

Less successful has been the contribution to discussion on what appear to be the many important questions raised in the Newsletter. This was also apparent at the meeting in Japan (a brief interim report appears elsewhere in the Newsletter). At the meeting the only strong sally was about the contention that because virtually all the ocean floor drilling stopped at the "first" basalt, the drilling did not indicate the nature of the oceanic crust and that deeper drilling was required. Deep continental drilling has brought into question many orthodox views in geology and geophysics (Kerr, 1989) although one would hardly know this from most current publications.

In a Newsletter we raised the question of what was the lithosphere, and although there was no response, there was a kind of answer at the meeting in Japan. The term was used in a number of different ways, generally rather vague, without consistency and without definition. The Bates and Jackson AGI, 1987 Glossary of Geology describes the lithosphere as "(a) The solid portion of the earth, as compared with the atmosphere and the hydrosphere (in this case how would it differ from the crust - eds.). (b) In plate tectonics, a layer of strength relative to the underlying asthenosphere for deformation at geologic rates. It includes the crust and part of the upper mantle". Now we can see a source of confusion. The lithospheric plates, whatever that might mean, are supposed to have strength and to skid around on a layer without strength whose nature is apparently unknown. What is the "asthenosphere" in itself, is a rather difficult question? It certainly does not constitute a continuous sphere and is generally restricted to the outside edges of the present continents. It varies greatly in thickness and configuration. Does it have something to do with oceanization??

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