AGE OF THE EARTH

RADIOMETRIC DATING

U ²³⁸......LESS THAN 10,000 YEARS C ¹⁴.....LESS THAN 10,000 YEARS

GEOLOGICAL PHENOMENON.....RAPID

Fossils: Detailed, Polystrate Flow Structures, Ripples, Lamination Coal and Oil; Cave Formations

GOD OF EVOLUTIONIST GEORGE WALD, Nobel Laureate, Harvard

"However improbable we regard this event, or any of the steps which it involves, given enough time it will almost certainly happen at least once. Time is in fact the hero of the plot. Given so much time, the 'impossible' becomes possible, the possible probable, and the probable virtually certain. One has only to wait: time itself performs the miracles.", THE PHYSICS AND CHEMISTRY OF LIFE, p.12.

"ASSUMPTIONS" HENRY FAUL

"Two important assumptions are implicit in this equation: First, that we are dealing with a closed system. And second, that no atoms of the daughter were present in the system when it formed. These assumptions furnish the most serious limitations on the accumulation clock. Rigorously closed systems probably do not exist in nature, but surprisingly, many minerals and rocks satisfy the requirement well enough to be useful for nuclear age determination. The problem is one of judicious geologic selection.", AGES OF ROCKS, PLANETS, AND STARS, p. vi.

SHIFTY URANIUM, J.D. Macdougall

The fourth assumption presupposes that the concentration of uranium in any specimen has remained constant over the specimen's life. ground-water percolation can leach away a proportion of the uranium present in the rock crystals. The mobility of the uranium is such that as one part of a rock formation is being improvised another part can become abnormally enriched. Such changes can also take place at relatively low temperatures.

"DATING OF MOON SAMPLES: PITFALLS AND PARADOXES" EVERLY DRISCOLL

"What complicates things for the uranium-lead method is that non-radiogenic lead 204, 206, 207 and 208 also exist naturally, and scientists are not sure what the ratios of non-radiogenic to radiogenic lead were early in the moon's history. The problem of how much lead was around to begin with still remains. If all of the age-dating methods (rubidium-strontium, uranium-lead and potassium-argon) had yielded the same ages, the picture would be neat. But they haven't. " Science News, Vol. 101, p.12.

FOUNDATION DECAYS, Gail, Arden, & Huchenson-Oxford

"We suspect that the lack of concordance may result in some part, from the choice of isotope ratios from primitive lead, rather than from lead gain or Uranium loss. It therefore follows that the whole of the classical interpretation of the meteorite, lead isotope data is in doubt and that the radiometric estimates of the age of the earth are placed in jeopardy." *Nature*, Vol.240, p.67.

<200=22 Million?, C.S.Nobel & J.J.Naughton, Dept of Chem. & HI Inst. of Geophysics</p>

"The radiogenic argon and helium contents of three basalts erupted into the deep ocean from an active volcano (Kilauea) have been measured. Ages calculated from these measurements increase with sample depth up to 22 million years for lavas deduced to be recent. ...it is possible to deduce that these lavas are very young, probably less than 200 years old. The samples, in fact, may be very recent....", Science, Vol.162, p.265

ARBITRARY REJECTION A. HAYATSU, Dept. of Geophysics, University of Western Ontario

"In conventional interpretation of K-Ar age data, it is common to discard ages which are substantially too high or too low compared with the rest of the group or with other available data such as the geological time scale. The discrepancies between the rejected and the accepted are arbitrarily attributed to excess or loss of argon." Canadian Journal Of Earth Science, Vol.16, p. 974

DISSENTERS EJECTED, Richard L. Mauger, Dept. Geology, East Carolina University

"In general, dates in the 'correct ball park' are assumed to be correct and are published, but those in disagreement with other data are seldom published nor or the discrepancies fully explained.", Contribs. To Geology, Vol.15 (1): 17

"RADIOCARBON AGES IN ERROR" ROBERT E. LEE

"The troubles of the radiocarbon dating method are undeniably deep and serious. Despite 35 years of technological refinement and better under-standing, the underlying assumptions have been strongly challenged.... It should be no surprise, then, that fully half of the dates are rejected. The wonder is, surely, that the remaining half come out to be accepted. There are gross discrepancies, the chronology is uneven and relative, and the accepted dates are actually selected dates." Anthropological Journal of Canada, Vol. 19, no. 3, (1981), p.9.

FUNDAMENTAL ASSUMPTION Report on Carbon-14 Conference (145 International Scientists)

"Throughout the conference emphasis was placed on the fact that laboratories do not measure ages, they measure sample activities. The connection between activity and age is made through a set of assumptions.one of the main assumptions of C14 dating is that the atmospheric radiocarbon level has held steady over the age-range to which the method applies." Science, Vol. 150, p. 1490.

INCREASING! "Symposium Organized By International Atomic Energy Authority"

"H. E. Suess[UCLA] presented the latest determinations....as adduced from the current activity of dendrochronologically dated growth rings of the Californian bristle cone pine.... The carbon-14 concentration increases rather steadily during this

time.... These results confirm the change in carbon-14 concentration....and indicate that the concentration increases...." Science, Vol. 157, p. 726.

"CLOCKS" UNRELIABLE, WILLIAM D. STANSFIELD, Univ. of Calif. (Santa Barbara)

"If we assume that (1) a rock contained no Pb^{206} when it was formed, (2) all Pb^{206} now in the rock was produced by radioactive decay of U^{238} , (3) the rate of decay has been constant, (4) there has been no differential leaching by water of either element, and (5) no U^{238} has been transported into the rock from another source, then we might expect our estimate of age to be fairly accurate. Each assumption is a potential variable, the magnitude of which can seldom be ascertained. In cases where the daughter product is a gas, as in the decay of potassium (K^{40}) to the gas argon (K^{40}) it is essential that none of the gas escapes from the rock over long periods of time.

It is obvious that radiometric technique may not be the absolute dating methods that they are claimed to be. Age estimates on a given geological stratum by different radiometric methods are often quite different (sometimes by hundreds of millions of years). There is no absolutely reliable long-term radiological 'clock''. THE SCIENCE OF EVOLUTION, 1977, p.84.

STRATA SAYS RAPID DUNBAR & ROGERS

"Use of the lead-uranium ratio, however, soon demonstrated its age to be more than two thousand million years,.... To some thoughtful stratigraphers this amazing discovery presented a dilemma, for if the known stratified rocks have been accumulating throughout this vast span of time the average rate of deposition must have been extremely slow, yet there is very good evidence that individual beds accumulated rapidly. Thus Schuchertfound that if a geologic column were built up by superposing the thickest known part of each of the geologic systems in North America, from Cambrian to the present, the composite record would be about 259,000 feet thick. If we combine his results with the latest estimates of time based on radioactive minerals, we get the figures in Table 5, in which the last column indicates the estimated average rate of deposition. Internal evidence in the strata, however, belies these estimates. In the Coal Measures of Nova Scotia, for example, the stumps and trunks of many trees are preserved standing upright as they grew, clearly having been buried before they had time to fall or rot away. Here sediment certainly accumulated to a depth of many feet within a few years. In other formations where articulated skeletons of large animals are preserved, the sediment must have covered them within a few days at the most. Abundant fossil shells likewise indicate rapid burial, for if shells are long exposed on the sea floor they suffer abrasion or corrosion and are overgrown by sessile organisms or perforated by boring animals. At the rate of deposition postulated by Schuchert, 1000 years, more or less, would have been required to bury a shell 5 inches in diameter. With very local exceptions fossil shells show no evidence of such long exposure." *PRINCIPLES OF STRATIGRAPHY*, p. 128.

RAPID COAL, GEORGE R. HILL Dean of College of Mines & Mineral Industries

"A rather startling and serendipitous discovery resulted....These observations suggest that in their formation, high rank coals,....were probably subjected to high temperature at some stage in their history. A possible mechanism for formation of these high rank coals could have been a short time, rapid heating event." [Six Hours] Chemtech, May, 1972, p. 292.

GARBAGE INTO OIL Sentinel Star, Friday, February 26, 1982

"LONDON - British scientists claimed to have invented a way to turn household garbage into oil suitable for home heating or power plant use. 'We are doing in 10 minutes what it has taken nature 150 million years to do', said Noel McAuliffe of Manchester University's Institute of Science and Technology."

TEMPORAL SIGNIFICANCE OF LAYERS ALAN V. JOPLING, Dept. of Geology, Harvard

"...it is reasonable to postulate a very rapid rate of deposition; that is a single lamina would probably be deposited in a period of seconds or minutes rather than in a period of hours.there is factual evidence from both field observation and experiment that laminae composed of bed material are commonly deposited by current action within a period of seconds or minutes." Some Deductions on the Temporal Significance of Laminae Deposited by Current Action in Clastic Rocks, Journal of Sedimentary Petrology, Vol. 36, No. 4, pp.880-887.

RAPID SEDIMENTATION, ADOLF SCILACHER, Geologisches Inst., Univ. Frankfurt

"This proves instantaneous deposition of the individual beds, as postulated by the turbidity-current theory. the sandy layers of the Flysch did not accumulate gradually but were cast instantaneously by turbidity currents each bed in its entire thickness, in a matter of hours or less." *Journal of Geology*, Vol. 70, p. 227.

TEMPORAL SIGNIFICANCE OF RIPPLES EDWIN D. MCKEE

"The chief significance of ripple lamination in the geologic record is that it is an indicator of environments involving large and rapid sand accumulation.areas where addition of new sand normally is at a slow rate, have little chance of developing into superimposed ripple lamination..... In contrast, areas in which sand accumulates periodically but rapidly, as in river flood plains were sandladen waters of strong floods suddenly lose velocity are very favorable for building up ripple-laminated deposits." Primary Sedimentary Structures and Their Hydrodynamic Interpretation, Society of Economic Paleontologists and Mineralogists, p.107.

INDICATORS OF YOUNG EARTH William Stansfield, Prof. Biological Sciences

California Polytechnic State University

1. Water from volcanoes........... -500 million

2. Helium in the atmosphere....... 150 million

3. Lava from volcanoes............ -30 million

4. Uranium accumulation........... -1 million

5. Pressure in oil reservoirs.......... -10 thousand

6. Human population dynamics........ -10 thousand

7. Meteoric dust in strata............ -10 thousand

8. Meteorites in strata................. -10 thousand

9. Radiocarbon in atmosphere..... -20 thousand

SCIENCE OF EVOLUTION, p. 84.

THE NORTH TEXAS SKEPTICS P. O. Box 111794 Carrollton, TX 75011-1794