URANIUM AND THORIUM CONCENTRATIONS IN WIND-BORNE SAHARAN DUST OVER THE WESTERN EQUATORIAL NORTH ATLANTIC OCEAN

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Received 13 December 1971
Revised version received 3 February 1972

The average uranium and thorium concentration in 15 samples of wind-borne Saharan dust collected at Barbados, West Indies, is 3.6 and 12.4 ppm, respectively; these values are approximately one-third greater than that of average crustal material. The thorium–uranium weight ratio of the dust is 3.5, about the same as that of the crust; the $^{234}$U/$^{238}$U activity ratio is 1.08 and the $^{230}$Th/$^{232}$U activity ratio, 0.97. We conclude that the presence of large amounts of African dust in Atlantic sediments would not significantly affect the validity of the assumptions inherent in the $^{231}$Pa/$^{230}$Th and $^{230}$Th/$^{232}$Th dating methods.