

10th January, 1967.

Dr. H.S. Jansen,
Institute of Nuclear Sciences,
Private Bag, Lower Hutt,
New Zealand.

Dear Dr. Jansen,

Your letter of 8th August, 1966 arrived promptly. The data in the table is just what I was looking for.

I would like you to make a small calculation for me. The usual samples of carbon you process have activities less than normal. A formula exists which gives a relation between time in the past and percent activity less than normal. This formula could be extrapolated forward to give a relation between time in the future and percent activity greater than normal. Please let me know what this formula is and what the future time will be for an activity of 16.8% greater than normal. I suspect it will be somewhere between 1000 and 2000 years in the future.

Sincerely yours,

Grote Reber.

GR/JCA

$$\frac{1.000}{1.168} = .856$$

$$\log_{10} = -.0675$$

$$\log_m = -2.3 \cdot .0675 = -.1556 \times 8033 = -1250 \text{ years,}$$

$$-.0675 \times 8033 = -542 \text{ years. He forgot } \ln = 2.3 \log_{10}$$