Dear Fisher,

If you approve would you stick this into my paper just after the passage about the exponential of a quartic - as far as I remember that is the most natural place? I am not quite clear what will happen if the method is used in this case. I suppose that a few observations keep turning up further and further out, and that the ratio \( \frac{\alpha}{\mu} \) keeps on increasing, so that if there are enough observations \( n \) will tend to 2.5.

I have been testing a lot of alleged periodicities in earthquakes lately. They have usually been found to satisfy the Schuster test for genuineness; but it looks very much as if the amplitudes don't mean periodicity but only that earthquakes in the same phase occur in batches and push up the random error. In a single series of aftershocks I got a quite simple formula to fit by m.l. (a nasty job as there were no sufficient statistics and I had to work out \( \chi^2 \) numerically from scratch) and all periods superposed on this gave \( \chi^2 \) under 4 or so. Apparently as between aftershocks of the same earthquake independence holds, except so far as any two are related to the main one. But if all the Japanese earthquakes for 50 years are analysed you get spurious amplitudes because a main shock is followed by hundreds of others within a month or two, and a test assuming the whole independent goes wrong.

Yours sincerely,

[Signature]

Harold Jeffreys