

RESEARCH SCHOOL OF PHYSICAL SCIENCES

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6th July, 1956.

Sir R.A. Fisher, F.R.S.,
Department of Genetics,
Whittingehame Lodge,
44, Storey's Way,
CAMBRIDGE. U.K.

Dear Sir Ronald,

Thank you very much indeed for your most encouraging letter. I was very interested in the parallel which you drew between the resistance in peoples minds in the last century to "evolution", and the present agnosticism with regard to drift.

Geoff Watson and I have now finished our paper, and we are sending you a draft for comment. The first half (sections 1,2 and 3) is a discussion of your distribution. The second part (section 4) deals with the sampling problem. It is pointed out that the accuracy of an estimated mean direction of magnetisation of a geological formation - which is the salient endeavour of most contemporary work, as it is from such estimates that the ancient pole is calculated - depends not so much on the number of samples taken, as on the way in which they are selected. The contrasting results from the Deccan Traps and the Triassic sandstones are given to illustrate the principle, that it is many sites which are required, not many samples at each site.

The use of small samples seems to us to be well justified, as Keith's American results admirably demonstrate. Blackett is having a symposium in November, and I shall be in London on a short visit to talk about the Australian rock results. I could give a précis of this paper, but it would obviously be a presumption on my part to speak on statistical matters in public. We therefore would be most grateful if you would include anything of this paper which you think worthwhile in the contribution to the symposium which you will no doubt be making. There seems to be many people abroad in rock magnetism who will not believe results, especially uncomfortable ones, until they are based on what is much more than the necessary data. For my part I feel that something of a showdown in London on this point would be beneficial.

continued.../

Keith has also got a copy of this draft, and he has promised that if it is satisfactory he will communicate it to the Royal Astronomical Society. It should be suitable for inclusion in the Geophysical supplement to the monthly notices, where Watson's other papers are appearing.

Watson has asked me to include his kind regards and best wishes. We look forward very much to having your comments on this.

Yours sincerely,

E. Innes