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The Kiaman Reversed Polarity Superchron at Kiama

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Debate continues of the long-term strength of Earth's magnetic field. Nevertheless, several data sets (Thellier analyses of single silicate crystals and submarine basaltic glass, and natural remanent magnetization intensities of submarine basalt) suggest an inverse relationship between reversal frequency and field strength for the last approximately 180 million years. This relationship has not, to date, been seen in Thellier results from whole rocks, potentially due to geologic and laboratory-induced alteration. In addition, it is likely that the presently available data base has an underrepresentation of rocks that have seen high-temperature oxidation (and that might otherwise yield more accurate values). Long-term paleointensity trends are largely based on comparisons of values from the Cretaceous Normal Polarity Superchron and preceding and succeeding mixed polarity intervals. Here we discuss similar comparisons using the Kiaman Reversed Polarity Superchron. We will discuss data from whole rocks and single silicate crystals separated from Kiaman lavas from Kiama, Australia.