A COMPOSITE VOLCANIC PALEOINTENSITY RECORD AT HAWAII FOR THE LAST 420 KYR

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We present a record of geomagnetic paleointensity at Hawaii spanning the last 420 kyr. This record was obtained by combining the results from cores SOH-4 and HSDP each considered in the time interval in which it is best defined.

The Thellier-Thellier double heating method was used throughout and the "composite" record comprises more than 820 reliable results. The upper 100 kyr are covered by the data from SOH-4, with 321 reliable determinations (out of 766 examined samples) obtained from the upper 200 units of this core, which belong to the Kilauea volcano. The 506 reliable data covering the 100 to 420 kyr interval, are from 193 units of core HSDP-1, belonging to the Mauna Kea volcano. The interval from 320 to 420 kyr is particularly detailed, because of a high extrusion rate of the volcano.

This communication will focus not only on the characteristics of the geomagnetic field at Hawaii, but also on certain aspects of the experimental technique and on the criteria of selection of the reliable Arai plots.