

Origin of loess in the western Pacific region revealed by the amount of oxygen vacancies in quartz

Toshiro Naruse [1], # Shin Toyoda [2]

[1] Dept.Geogr.,Hyogo Teach.Edu.Univ, [2] Applied Phys., Okayama Univ. Sci.

<http://www.dap.ous.ac.jp/~toyoda/abs99-2.html>

The origins of loess were estimated based on the correlation between the age of granites and the intensity of an ESR signal associated with oxygen vacancies in quartz. MIS 2 eolian dust quartz from Hokkaido to east Setouchi has high intensity, indicating that it came from the northern Asian region. East Setouchi to Okinawa region has relatively low intensities consistent with the region around lat. 40 N of Asian continent. Loess in Miyako to Yonaguni Islands would have come from the Pre-Cambrian rocks in south Asia and that in South Island of New Zealand from the Australian continent.