The Origin of Petroglyphs—Recordings of a Catastrophic Aurora in Human Prehistory?

D.A. Scott and A. L. Peratt

Los Alamos National Laboratory
Los Alamos, New Mexico 87545 USA

Petroglyphs are images created on rock by means of carving or 'pecking' the outer surface to expose the surface underneath. They are found on all continents except Antarctica. The purpose of this paper is an attempt to explain how in man’s prehistory recordings of high-energy-density phenomena (some not experimentally recorded until the last few years) could have been carved on rock in an accurate, systematic, and apparently temporally accurate fashion. Based on the compilation and analysis of the order of 50,000 digitally recorded petroglyphs, we have identified several dozen general categories of instabilities whose morphology is that of a highly nonlinear pinched plasma column generally associated with multi-mega-ampere Z-pinch experiments. We shall present the direct comparison of the temporal evolution of experimental instabilities with petroglyphs, indicating that nearly all archaic carvings match the phenomena that might be produced in an intense and long-lasting aurora. One category is illustrated below.

This work was partially supported for the University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia. We are indebted to Prof. William S-Y. Wang for calling our attention to a connection between archaic petroglyphs and the Chinese Language.

1. University of Massachusetts, Amherst, MA USA