

Abstract Submitted
for the PSF12 Meeting of
The American Physical Society

Zapping Charlemagne's Power Grid: A Solar Superflare in AD 774? ADRIAN MELOTT, University of Kansas — Radiocarbon data indicate a jump in ^{14}C synthesis in AD 774-775. I show that, contrary to the original publication, this is consistent with a solar superflare close to current upper limits. It is also typical for the lower end of flare energies observed on solar-type stars. Such a solar proton event would cause moderate ozone depletion, but not a mass extinction event. About 20 times more powerful than the famous 1859 Carrington Event, it would be disastrous for modern electromagnetic technology. I discuss the probability of such an event in the near future.

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Date submitted: 01 Oct 2012

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