

Experiments with the Teramobile Facility: A Mobile Terawatt Laser for Atmospheric Research

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Abstract:

A mobile terawatt laser called “Teramobile” was constructed. This unique laser source is used to study the propagation of ultra-intense laser pulses in the earth atmosphere, including filamentation, and white-light generation. Experiments on the measurement of ozone profile using the ultra-violet part of the white-light spectrum are reported as well as the possibility to generate electric atmospheric discharges.