Geophysical Research Abstracts, Vol. 7, 09945, 2005

SRef-ID: 1607-7962/gra/EGU05-A-09945 © European Geosciences Union 2005



Saturn's E ring as seen by the Cassini dust detector CDA

S. Kempf (1), R. Srama (1), M. Horanyi (2), E. Grün (1) and G. Moragas-Klostermeyer (1)

(1) MPI für Kernphysik, Heidelberg, Germany, (2) LASP, University of Boulder, USA

After Cassini's insertion into its Saturnian orbit the spacecraft performed a few traversals through Saturn's dilute E ring. During the ring plane crossings the onboard dust detector recorded a few thousend ring particle impacts. The Cosmic Dust Analyser (CDA) determines the mass, speed, and charge of dust grains striking the target of the instrument. Furthermore, compositional information is collected by the Chemical Analyser (CA) subsystem.

In this presentation we will report about the results of the CDA E ring campaigns. In particular we will present a first analysis of the mass distribution of the ring particles.