



Mesospheric dust observations during the MAXIDUSTY campaign

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The MAXIDUSTY rocket payloads, launched from Andøya June 30 and July 8 2016, were equipped with dust impact detectors aiming to characterize mesospheric dust charge state, mass distribution of impact fragments and NLC/PMSE structure. One of the main scientific objectives for the campaign was to confirm that material of meteoric origin is abundant inside the icy mesospheric dust particles. The rockets were launched simultaneously with PMSE and NLC (MAXIDUSTY-1) and PMSE (MAXIDUSTY-1B) respectively, and radar measurements were made coincident with the rocket flight path. We report here on the initial results from the rocket probes and remote soundings, with emphasis on the dust impact detector results. Results from the Multiple Dust Detector (MUDD) confirm that NLC ice particles probably have a relatively high content of meteoric smoke particles with a filling factor of up to several percent. Comparisons of the DUSTY faraday bucket and PMSE show that there is no simple correlation between the two.