



GEODUST 2016

**GEOMORPHOLOGY OF DUST SOURCES AND DYNAMICS OF
DUST EMISSION FROM DIFFERENT GEOMORPHIC UNITS**

First meeting of the GEODUST International Focus Group

of the INQUA TERPRO Commission

Tropos, Leipzig, 21-22 November 2016



Organized with the support of
Leibniz Institute for Tropospheric Research, Geological Survey of Israel,
Università degli Studi di Milano

Organizing and scientific committee

Andrea Zerboni (Università degli Studi di Milano)

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First circular



Aims of the meeting

Mineral dust plays multiple roles in mediating physical and biogeochemical exchanges among the atmosphere, land and ocean, and thus is an active component of the Earth system. One of the approaches to study the environmental effects of dust is through numerical models in varying spatial scales. These models depend on a realistic representation of dust source areas and dynamics of dust emission from these sources. Although progress has been made in identifying the geomorphic units that are the major dust sources, and in evaluating the dynamics of dust emission, these first stages of the dust cycle remain fundamental knowledge gaps and need to be further addressed. These gaps are one of the limiting factors for existing global models of dust cycle and thus a more comprehensive treatment of the geomorphic controls on emission is required to improve the performance of dust-cycle models. The investigation of *field and remote sensing geomorphology of dust sources and dynamics of dust emission* are, in summary, the main scientific issues of the GEODUST International Focus Group of INQUA.

We invite scientists interested in the fields of dust sources and dust emission dynamics to take part of this kick-off meeting of the GEODUST project.

The following topics will be discussed in the meeting:

- Dust sources – including identification of geomorphic units as sources of dust in different spatial scales, temporal changes of dust sources, representing dust sources in models, current and paleo sources of dust, field properties of dust sources, maps of potential dust sources, etc.
- Dust emission processes – including field, laboratory and modelling studies of dust emission from various sources, temporal changes in dust emission, representing dust emission processes in models, etc.

The meeting will include a brief presentation of the GEODUST INQUA TERPRO International Focus Group, invited talks, and short presentations from the participants, including young researchers that will be granted by INQUA. The main outcome of the meeting will be a shared strategy to investigate the above-mentioned topics and the build up of a network of researches interested in the relationships between dust, geomorphology, and climate change.



Special note: The 2016 GEODUST meeting will be held next to the "3rd Leipziger Staubtag - interdisciplinary workshop on mineral dust" held in Tropos on Wednesday, the 23th of November 2016 (<http://sds-was.aemet.es/events/3rd-leipziger-staubtag-interdisciplinary-workshop-on-mineral-dust>). This will be a unique opportunity to participate in both dust workshops.

Preliminary program of the meeting:

November the 21nd, Monday:

Late afternoon: meeting at Leibniz Institute for Tropospheric Research, registration of participants and informal ice-break party (more details in the following circulars);

November the 22nd, Tuesday:

8:30: opening of the meeting at Leibniz Institute for Tropospheric Research;

9:00: Presentation of the GeoDust project;

9:30: Invited talks

12:30: Lunch break

14:00: Short presentations of participants and posters

16:00: General discussion and future actions of the IFG

18:30: Conclusion of the meeting

Registration and abstract submission

There is no registration fee for the meeting. We invite you to submit your registration form by November the 9 via email to Andrea Zerboni (andrea.zerboni@unimi.it); on-site registration will be available on November the 21 (late afternoon). The form for early registration is at the end of this circular. If you want to give a presentation, please send an abstract following the template at the end of the circular, including presentation type (oral/poster).

During the meeting there will be few invited talks, but the afternoon will be dedicated to short presentations of the work of early career researcher and to posters. Please submit a short abstract on the main themes of the GEODUST project according to the guidelines at the end of this circular.

Travel grants

GEODUST 2016 represents the first meeting of the GEODUST International Focus Group, funded by INQUA TERPRO COMMISSION.



INQUA Grants are available for partially support the participation of post-graduate students, young researcher (young researchers without a permanent position and within 8 years from the PhD), and scientists from low GDP countries will be available. The grants will cover travel and accommodation costs or part of them.

If you are eligible for a grant, please send the application form to Andrea Zerboni (andrea.zerboni@unimi.it), including a short CV, list of publications and a brief motivation letter. The application will be considered only if the applicant has submitted the registration form available at the end of this circular. The deadline for the submission of grant request is 10th of October 2016.

Important dates:

10 October 2016: submission of application for travel grant.

15 October 2016: decision on grant winners.

9 November 2016: early registration to the meeting and submission of abstract.

21 November 2016: on-site registration.



GEODUST 2016
Meeting Registration Form

First name		
Surname		
Institution name		
Institution address		
Phone number		
E-mail		
Abstract title		
I am an early career scientist and I will submit an application for travel grant		Yes
		NO



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Abstract guidelines

TITLE

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Text of the abstract. Maximum length is c. 300 words, according to this form.