

MARID VII

Marine and River Dune Dynamics

Rennes, France
3 - 5 April, 2023

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Preface & Welcome

Welcome to MARID VII, the seventh edition of the Marine and River Dune Dynamics conference series.

In 2000, a workshop on marine sand wave dynamics was organised by the French Naval Hydrographic and Oceanographic Office (Shom) and the University of Lille 1 (France) under the aegis of the North Sea Hydrographic Commission. After the success of this first workshop, conferences covering marine and river dune dynamics were organised in 2004 (University of Twente, Enschede, the Netherlands), in 2008 (University of Leeds, United Kingdom), in 2013 (Royal Belgian Institute of Natural Sciences, Bruges Belgium), in 2016 (Caernarfon, University of Bangor, North Wales, UK) and in 2019 (Bremen, University of Bremen, Germany). Now known by the acronym MARID, these conferences provide state-of-the-art overviews and discussions on fundamental and applied knowledge of marine and river bedforms.

Bedforms are ubiquitous and dynamic features on a movable bed, which have been observed in many subaqueous environments, such as rivers, beaches, estuaries, tidal inlets, shallow seas, and deep waters. They are active morphodynamic elements which both reflect and influence hydrodynamic and sediment dynamics processes at various spatiotemporal scales. The study of their presence, size and movement is directly relevant for a wide range of applied and fundamental research. The processes governing bedform formation, dynamics and preservation have still not been unravelled adequately and the MARID VII delegates will outline progress derived from field observations, modelling studies and laboratory experiments across a wide number of disciplines, including earth sciences, oceanography, engineering, hydrography and biology.

MARID VII is held in Rennes, France, organised by the Institute of Physics of Rennes and Geosciences Rennes Laboratory (University of Rennes 1) and the French Naval Hydrographic and Oceanographic Office (Shom). In keeping with the previous MARID conferences, we maintain the concept of a small, focused event with only plenary sessions to stimulate discussion among disciplines and methodology. Scientific sessions are taking place in Amphitheater TA Beaulieu (Pôle Numérique Rennes Bretagne) on 3 and 4 April 2023 including talks from keynote speakers and oral and poster presentations by delegates. On 5 April the field trip to the Mont-Saint-Michel Bay will permit convivial exchange between participants on the sediment dynamics.

We hope that MARID VII will lead to fruitful and productive discussions, which in turn should help and guide future collaborations to further investigate marine and river bedforms. The short format of the MARID conferences has proven to be ideally suited for such networking activities.

We wish you an enjoyable conference!

Alexandre Valance, Thierry Garlan, Alain Crave & Aurélien Gangloff

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