

International conference

# MARID VI

## Marine and River Dune Dynamics 2019

1 - 3 April 2019 • Bremen, Germany

### Books of Abstracts

Editors:

Alice Lefebvre, Thierry Garlan and Christian Winter



Kiel University  
Christian-Albrechts-Universität zu Kiel



French Hydrographic &  
Oceanographic Office



# MARID VI

## Marine and River Dune Dynamics

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## Preface & Welcome

Welcome to MARID VI, the sixth 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) and in 2016 (Caernarfon, University of Bangor, North Wales, UK). 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 VI 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 VI is held in Bremen, Germany, organised by MARUM - Center for Marine Environmental Sciences, University of Bremen, the University of Kiel 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 methodologies. Scientific sessions are taking place in Haus der Wissenschaft on 1 and 2 April 2019 including talks from keynote speakers and oral and poster presentations by delegates. On 3 April a field trip is organised to the German North Sea coast and the Weser estuary to allow a convivial exchange between participants.

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

We wish you an enjoyable conference!

Alice Lefebvre, Thierry Garlan & Christian Winter.

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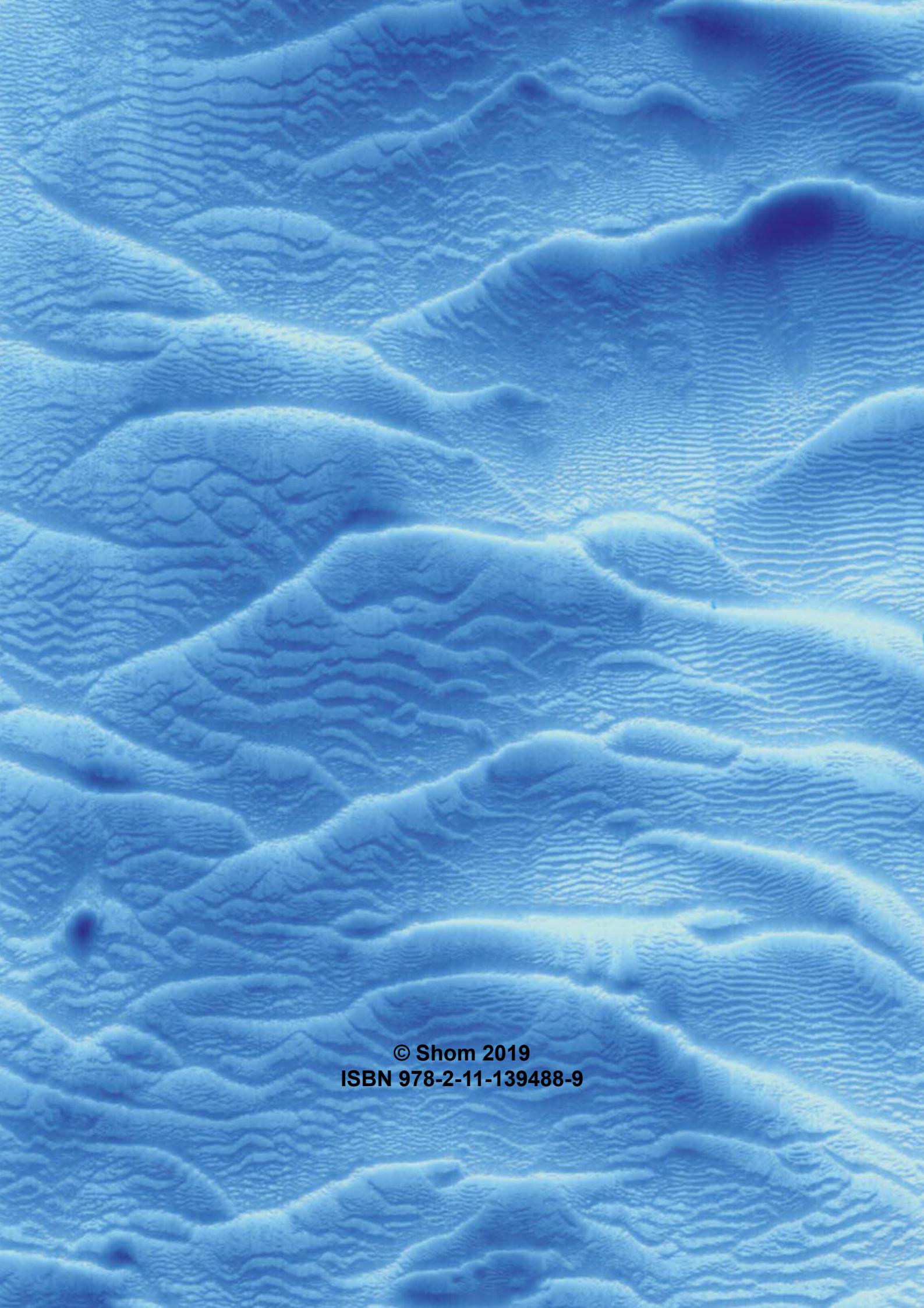
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