

Accepted Manuscript

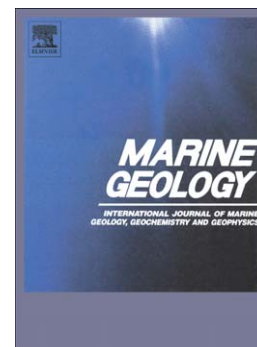
Recurrent mass-wasting in the Sørvestsnaget Basin Southwestern Barents Sea: A test of multiple hypotheses

K.O. Omosanya, D. Harishidayat, L. Marheni, S.E. Johansen, M. Felix, P. Abrahamson

PII: S0025-3227(16)30021-4
DOI: doi: [10.1016/j.margeo.2016.03.003](https://doi.org/10.1016/j.margeo.2016.03.003)
Reference: MARGO 5423

To appear in: *Marine Geology*

Received date: 6 October 2015
Revised date: 12 February 2016
Accepted date: 5 March 2016



Please cite this article as: Omosanya, K.O., Harishidayat, D., Marheni, L., Johansen, S.E., Felix, M., Abrahamson, P., Recurrent mass-wasting in the Sørvestsnaget Basin Southwestern Barents Sea: A test of multiple hypotheses, *Marine Geology* (2016), doi: [10.1016/j.margeo.2016.03.003](https://doi.org/10.1016/j.margeo.2016.03.003)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Recurrent mass-wasting in the Sørvestsnaget Basin Southwestern Barents Sea: A test of multiple hypotheses

Omosanya, K.O.^{1*}, Harishidayat, D¹, Marheni, L.², Johansen, S.E.¹, Felix, M.², Abrahamson, P³

¹ Department of Petroleum Engineering and Applied Geophysics

² Department of Geology and Mineral Resources Engineering

Norwegian University of Science and Technology

Trondheim

³ MultiClient Geophysical, Stasjonsveien 18 1396 Billingstad, Norway

Corresponding author: kamaldeen.o.omosanya@ntnu.no

Abstract

Mass-wasting on the NE Atlantic margin is generally attributed to Cenozoic glaciations. Using high-quality 2D seismic datasets and two exploration wells, this study investigates the types and driving mechanisms of mass-wasting in the Sørvestsnaget Basin, Southwestern Barents Sea. The methods include seismic interpretation of shelf margin clinoforms, mass-transport deposits (MTDs), submarine channels and v-shaped canyons. The shelf-edge trajectory provided information about sea-level conditions, paleo-sediment routes, and dispersal patterns during the evolution of the basin. In terms of the internal geometry of seismic reflectors, the major depositional units are five sedimentary packages (P1 to P5) characterised by distinct southwest dipping shelf margin clinoforms. Seven identified MTDs

Download English Version:

<https://daneshyari.com/en/article/6441478>

Download Persian Version:

<https://daneshyari.com/article/6441478>

[Daneshyari.com](https://daneshyari.com)