

World's largest extrusive body of sand?

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Using 3-D seismic and well data from the northern North Sea, Helge Løseth of the Statoil Research Center (Trondheim, Norway) and colleagues describe a large (10 cubic kilometers) body of sand and interpret it as extrusive.

The authors note that to their knowledge, this is the world's largest such sand body, large enough to bury Manhattan (60 square kilometers) under 160 m of sand, or the whole of London (1579 square kilometers) under 6 m of sand. This represents a new type of economically interesting reservoir.

The sand vented to the seafloor when it was more than 500 m deep.

Currently, the sand (1) covers an area of more than 260 square kilometers; (2) is up to 125 m thick; (3) wedges out, away from a central thick zone; and (4) is locally absent along irregular ditches, 20 km long and up to 50 m deep, which overlie feeders on the flanks of the mounds.

High fluid pressure fractured the regional seal in the study area so that fluidized sand moved rapidly to the seafloor through fissures, mixed with seawater, and formed lateral gravity currents. These transported the sand up to 8 km away from the blow-out fissures and formed extruded <u>sand</u> sheets.

More information: Helge Løseth et al., *Geology*, Posted online 19 Mar. 2012; <u>doi: 10.1130/G33117.1</u>



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