Malin Waage

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Sand Waves and Sediment Transport on the SW Barents Sea Continental Slope

Errata

The following is a list of errata, consisting of the major typographical errors I found in the thesis after I submitted it. Page and line number refer to the original version of the thesis. The lines that include text are counted (including headline; from top to bottom of page) were the sentence with error starts. The page number is the page number present on the bottom of the page in the right corner.

Page (Abstract), line 10: *Original:* Seismic data reveal that there are no buried sand waves beneath the seafloor, suggesting that the sand waves are being continually eroded and redeposit at the seabed. *Comment:* Repetition. This sentence should be deleted.

Page (Abstract), line 13: *Original:* Seismic data reveal that the depositional environment over the last ~1 Ma has been largely controlled by debris flows during the glaciations and melt-water plumes and channel formation during the glaciations. *New:* Seismic data reveal that the depositional environment over the last ~1 Ma has been largely controlled by debris flows during the glaciations and melt-water plumes and channel formation during the deglaciations.

Page (Acknowledgements), line 9: *Original:* Å delta på sand bølgje-møta i Tromsø (…) *New*: Å delta på sand-bølgje møta i Trondheim (...)

Page 1, line 6: *Original:* The main objectives in this thesis have been. *Comment:* Repetition. This sentence should be deleted.

Page 9, line 4: *Original:* Water depth and current velocity seem to be the most important factor influencing sand wave geometry (Sterilini et al., 2009), *New:* Water depth and current velocity seem to be the most important factor influencing sand-wave geometry (Sterilini et al., 2009),

Page 9, line 10: *Original:* The height becomes a function of other factors such as grain size, wavelength and sand wave formation time. *New:* The height becomes a function of other factors such as grain size, wavelength and sand-wave formation time.

Page 15, line 8: *Original*: Previous numerical models based on stability analyses where used in the modeling from the work of Huschler and Van den Brink, 2001; Besio et al., 2003a, 2004 and Van der Ven et al., 2006. *New*: Previous numerical models based on stability analyses were used in the modeling from the work of Huschler and Van den Brink, 2001; Besio et al., 2003a, 2004 and Van der Ven et al., 2006.

Page 24, line 26: *Original:* The glaciers expanded all the way to the shelf margin. *New:* During the last phase (<1 Ma), the glaciers expanded all the way to the shelf margin.

Page 38, Line 6: *Original:* The sand-wave field is situated on top of a channelized seabed (fig. 52). *New:* The sand-wave field is situated on top of a channelized seabed (fig. 5.2).

Page 49, line 22: *Original:* One can indicate the directions of migration of sand waves based on the assumption that sand waves migrate in a direction perpendicular to the crest orientation in the direction i.e. in the direction from the stoss side-lee side of a sand wave. *Comment:* Repetition. The text with line under should be deleted.

Page 64, line 1: *Original:* Stronger negative acoustic impedance reflectors are observed on mean and max amplitude maps on the elevated highs of the horizon and as thin bands inside or just beneath the middle of the large channels (fig. 5.25). *New:* Stronger negative acoustic impedance reflectors are observed on mean and max amplitude maps on the elevated highs of horizon H1 and as thin bands inside or just beneath the middle of the large channels (fig. 5.25).

Page 73, line 4: *Original:* The high amplitude anomalies of horizon H2 are highlighted in a maximum amplitude map of horizon H2 (fig 5.34). *New:* The high amplitude anomalies of horizon H2 are highlighted in a mean amplitude map of horizon H2 (fig 5.34).

Page 77, line 1: *Original*: Slightly higher amplitude values are restricted in bands on the elevated areas between the elongated depressions (fig. 5.37). *New*: Slightly higher amplitude values are restricted in bands on the elevated areas between the elongated depressions of Horizon H3 (fig. 5.37).

Page 91, line 10: *Original:*, and observations (fig. 5.1) indicate that Atlantic Surface Water Currents enter the seabed where the sand waves are located. *New:*, and observations (fig. 5.1) indicate that the North Atlantic Current enters the seabed where the sand waves are located.

Page 106, line 1: *Original:* The studied sedimentary unit of GIII is compromised of sediments deposited during glacial-interglacial cycles of Late Pleistocene time e.g. Vorren et al. (1991, Faleide et al. (1996), Laberg and Vorren (1996) and Ryseth et al. (2003). *New:* The studied sedimentary unit of GIII is compromised of sediments deposited during glacial-interglacial cycles of Late Pleistocene time (e.g. Vorren et al., 1991; Faleide et al., 1996; Laberg and Vorren, 1996; Ryseth et al., 2003).

Page 107, line 19: *Original:* Pedrosa et al. 2011) however indicated that gullies of similar age, on NW Barents Sea Continental Slope may have been formed due to cold and dense melt-water plumes during the deglaciations. *Comment:* This sentence should be located after the first paragraph (line 4) on the same page instead of here on line 19.

Page 108, line 10: *Original:* Within the 3D seismic data of this work (fig. 5.29) the base of the horizon seem to represent the start of a slope setting influenced by three episodes. *New:* Within the 3D seismic data of this work (fig. 5.29) the base of unit U5 (horizon H2) seem to represent the start of a slope setting influenced by three episodes.

Page 109, line 14: *Original:* , the two horizons that define the unit become very close or meet between channels and at the margins of the sand waves on the seabed. *New:* , the two horizons that define the upper and lower boundary of unit U6 (seabed and horizon H1) become very close or meet between channels and at the margins of the sand waves on the seabed.

Page 111, bullet 3: *Original:* , where the wave height varies between 3 to 6.6 meters and the wavelength between 100 – 140 meters. (…), showing wave heights smaller than 3 meters and wavelengths smaller than 100 meters. *New:* , where the wave height varies between 2 to 6.6 meters and the wavelength between 100 – 140 meters. (…), showing wave heights smaller than 2 meters and wavelengths smaller than 100 meters.

Page 111, bullet 5: *Original:* The sediment flux across the area due to migration of sand waves is calculated to be 2000 – 8700 m^3/year. *New:* The sediment flux across the area due to migration of sand waves is calculated to be ~ 2000 – 8700 m^3/year.