Figure DR1: Part of a Chirp sub-bottom profile (co-registered with the seismic data) showing that acoustically laminated sediments of 8 – 25 meter thickness occur stratigraphically above the glacigenic debris flow deposits on the studied part of the Scoresby Sund TMF. The acoustically laminated intervals inferred to be hemipelagic and turbiditic deposits.

Figure DR2: Revised schematic diagram for the east Greenland continental margin. Our results shows that at least the Scoresby Sund sector of the East Greenland Ice Sheet had a much more dynamic behavior during the Pleistocene period than previously realized. These fluctuations were most likely responses to the pronounced climatic fluctuations characterizing this period. The diagram is modified from Solheim et al. (1998) and the studied part of ODP Site 987 is included (total depth is ~860 mbsf).

Figure DR1

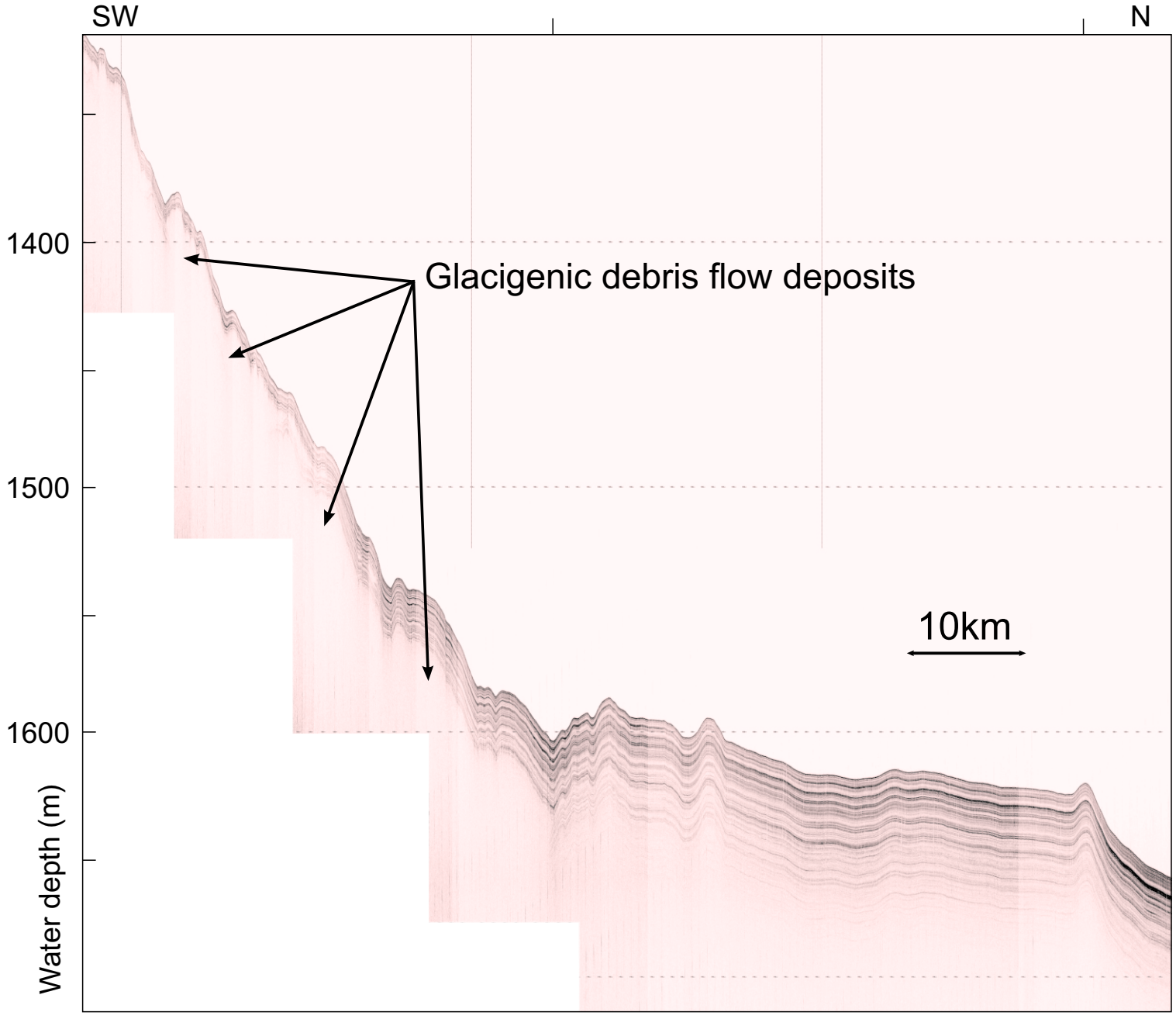
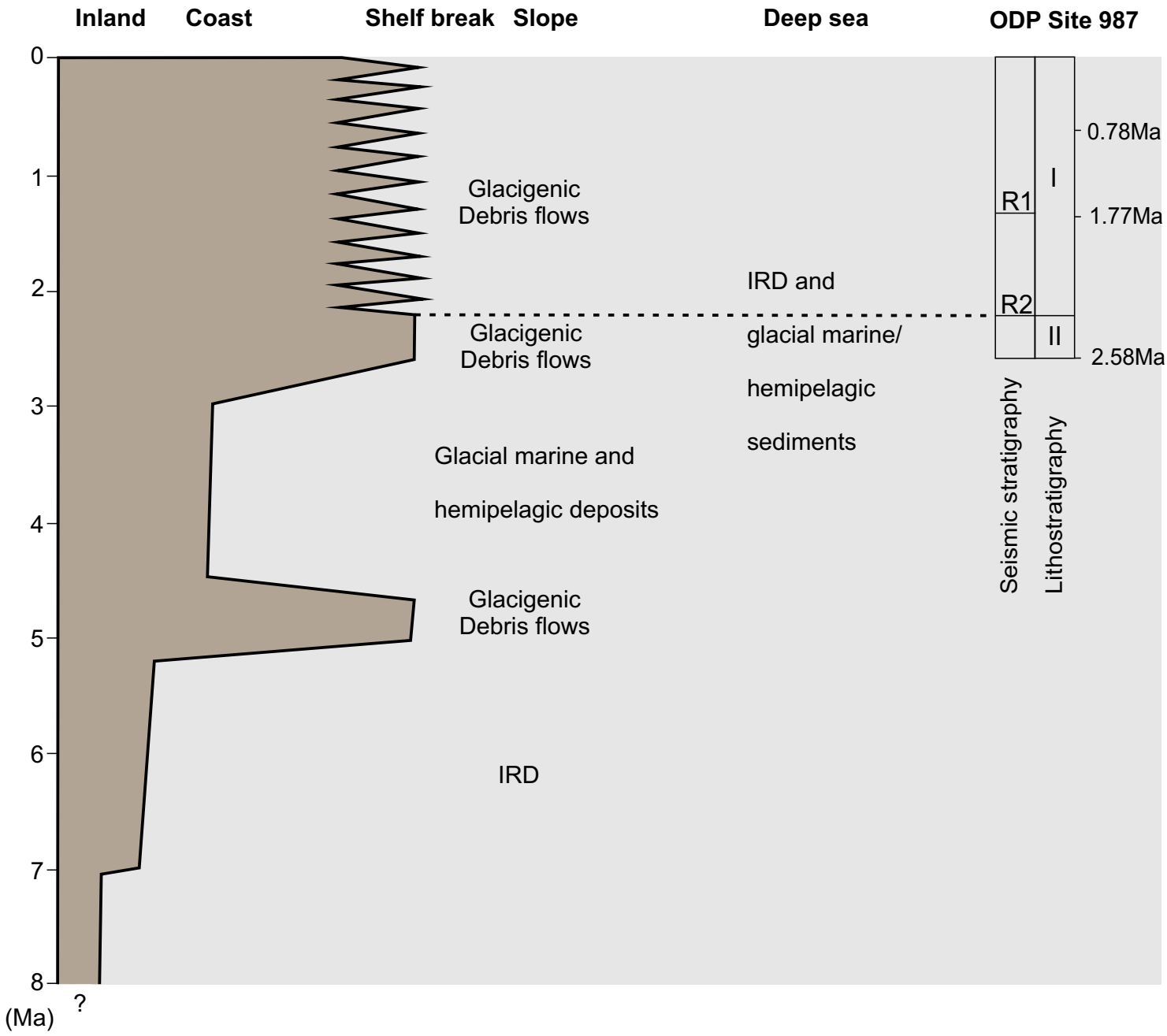

SW
N
1400
1500
1600
Water depth (m)
Glacigenic debris flow deposits
10km

Figure DR2


SCORESBY SUND, EAST GREENLAND
Inland
Coast
Shelf break
Slope
Deep sea
ODP Site 987
0
1
2
3
4
5
6
7
8
(Ma)
?
Glacigenic
Debris flows
IRD and
glacial marine/
hemipelagic
sediments
Glacigenic
Debris flows
Glacial marine and
hemipelagic deposits
Glacigenic
Debris flows
IRD
R1
R2
I
II
0.78Ma
1.77Ma
2.58Ma
Seismic stratigraphy
Lithostratigraphy