

Earth Surf. Dynam. Discuss., referee comment RC2  
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## **Comment on esurf-2021-47**

David Evans (Referee)

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Referee comment on "Sedimentary architecture and landforms of the Late Saalian (MIS 6) ice sheet margin, offshore The Netherlands" by Víctor Cartelle et al., Earth Surf. Dynam. Discuss., <https://doi.org/10.5194/esurf-2021-47-RC2>, 2021

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This is an important report on, and interpretation of, new offshore data relevant to the reconstruction of MIS 6 glaciation of the North Sea. The interpretations are largely entirely logical and valid but I feel that the authors do not quite make the most of this important database in terms of implications for former glacier dynamics. A significant issue pertaining to the glaciation styles in the North Sea is the potential of surging versus normal active ice recession - this has been debated often for the MIS 2 glaciation and has been re-invigorated by the increasing amounts of offshore data becoming available. Particularly pertinent are the occurrences of large glaciectonic thrust masses and widespread ice stagnation evidence (the latter not as convincingly demonstrated as the former in this paper), both diagnostic of surging glacial landsystems. The authors opt for active recession but the evidence begs further evaluation in this respect. In terms of details on glaciectonic landforms, the authors might also want to consult some recent literature on the development of hill-hole pairs, whereby thrust masses aligned parallel to basins are termed paraxial ridges and are part of the overall development of hill-hole pair development and hence are not mutually exclusive with ridges aligned perpendicular. I have added a number of queries and corrections on the pdf of the manuscript, which I attach here.

Please also note the supplement to this comment:

<https://esurf.copernicus.org/preprints/esurf-2021-47/esurf-2021-47-RC2-supplement.pdf>