

Interactive comment on “Initial results from geophysical surveys and shallow coring of the Northeast Greenland Ice Stream (NEGIS)” by P. Vallelonga et al.

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Response to interactive comments on “Initial results from geophysical surveys and shallow coring of the Northeast Greenland Ice Stream (NEGIS)” by P. Vallelonga et al.

In the attached response, the reviewers’ comments are in standard text and our responses are in bold.

Both reviewers stressed that information in this paper is difficult to fully assess without reading the companion paper on surface geophysical surveys (Christianson et al., 2014). We believe these papers to be complementary because the presentation of all details of this large field effort in a single paper would create a long, convoluted

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manuscript that is difficult to read, as well as detracting from the topical focus of the current manuscript. We acknowledge that information about the geophysical dataset is not fully presented in this manuscript. Inclusion of such detailed information would result in a fundamental shift in the focus of this paper, which is to present the viability of future ice-core/climate studies in NEGIS. Hence we opted on a publication strategy of three manuscripts focusing on three different topics: (1) direct examination of the basal interface with several geophysical techniques (Christianson et al., 2014), (2) tracing internal reflecting horizons in radar data from NGRIP to NEGIS and interpretation of radar internal stratigraphy (Keisling et al., 2014), and (3) a synthesis paper that presents the shallow core results with the necessary geophysical background to understand ice dynamics at the core site (this manuscript). Journals were selected by appropriateness of subject matter. The full details of the geophysical surveys are presented in Christianson et al. (2014) and Keisling et al. (2014). We have, however, attempted to clarify details and revise figures as much as possible following reviewer suggestions. Additionally, we now supply a paragraph at the start of section 2.2 where we outline the publication strategy so readers know where to find additional information. We supplied all three manuscripts to the editors of each respective journal as supplementary documents. Keisling et al. (2014) is now in press and Christianson et al. (2014) is in a very similar stage of review to this article. We anticipate that Christianson et al. (2014) will be published almost contemporaneously with this article.

Please also note the supplement to this comment:

<http://www.the-cryosphere-discuss.net/8/C633/2014/tcd-8-C633-2014-supplement.pdf>

Interactive comment on The Cryosphere Discuss., 8, 691, 2014.