Dear Kerim Nisancioglu,

Thanks a lot for your editorial support with this manuscript.

We have made two minor technical corrections:

- Title and abstract:

As the main focus of this paper is on using knowledge from ice cores from lower latitudes to tackle the increasing challenges of a warming climate for analysis of polar ice cores, and the examples are mostly from polar sites (Greenland, Antarctic, and Svalbard), we have decided to remove "(sub-)" from the title and abstract (line 12 and line 15) for clarity.

- Caption of Figure 1:

To clearly state the obtained rights to reproduce the digital and line scan images used in Fig. 1d and 1h, we have added the phrase "reproduced with permission from Elsevier/SNCSC" in the caption of Fig.1 (line 73 and 78).