Suggested edits to abstract:

The ERA5 reanalysis, recently made available by the European Centre for Medium-Range Weather Forecasts (ECMWF), is a new reanalysis product at a high resolution replacing ERA-Interim, and is considered to provide the best climate reanalysis over Greenland to date. However, so far little is known about the performance of ERA5 over the Greenland Ice Sheet (GrIS). In this study, we compare the near-surface climate from the new ERA5 reanalysis to ERA-Interim, ~~to the 5~~ the Arctic System Reanalysis (ASR) as well as to a state-of-the-art polar regional climate model (MAR). The results show (1) that ERA5 does not outperform~~s insignificantly~~ ERA-Interim significantly when ~~in a~~ compared~~rison~~ with near-surface climate observations over GrIS, ~~even if it has to be mentioned tha~~but ASR better models the near-surface temperature than both ERA reanalyses. (2) Polar regional climate models (e.g. MAR) are still a useful tool to downscale the GrIS climate compared to ERA5, as in particular the near-surface temperature in summer ~~that~~ has a key role for representing snow and ice processes such as the surface melt. However, assimilating ~~10~~ satellite data and using a more recent radiative scheme enable both ERA and ASR reanalyses to represent more satisfactorily than MAR the downward solar and infrared fluxes. (3) MAR near-surface climate is not affected when forced at its lateral boundaries by either ERA5 or ERA-Interim. Therefore, forcing polar regional climate models with ERA5 starting from 1950 will enable ~~to perform~~ long and homogeneous surface mass balance reconstructions.