

Figure R1. Validation grid cells for the near surface (left) from pre-print and (right) updated data set in revised article. The preprint included 24 validation grid cells in North America, and 244 over Eurasia. The updated dataset now includes 135 validation grid cells over North America (and 247 over Eurasia). Moreover the number of grid cells over the permafrost zone in North America (30 grid cells) and Eurasia (45 grid cells) are also reasonably similar. Note that here we are using the Obu et al. (2019) permafrost distribution (and not MAAT) to classify permafrost.

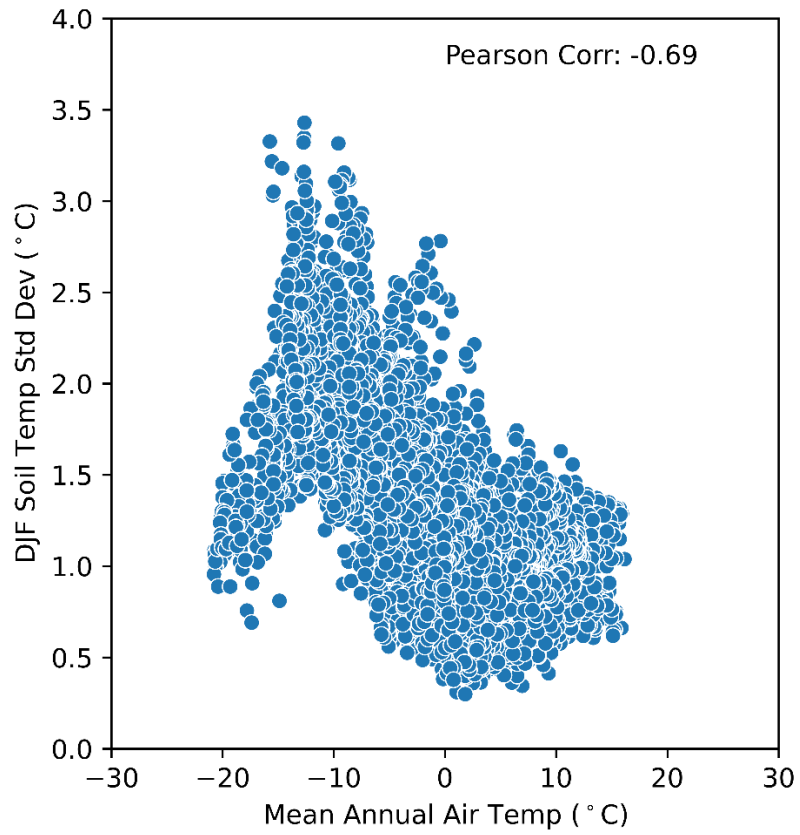


Figure R2. Relationship between soil temperature standard deviation and mean annual air temperature (MAAT) for DJF over the 1991-2010 climatological period.