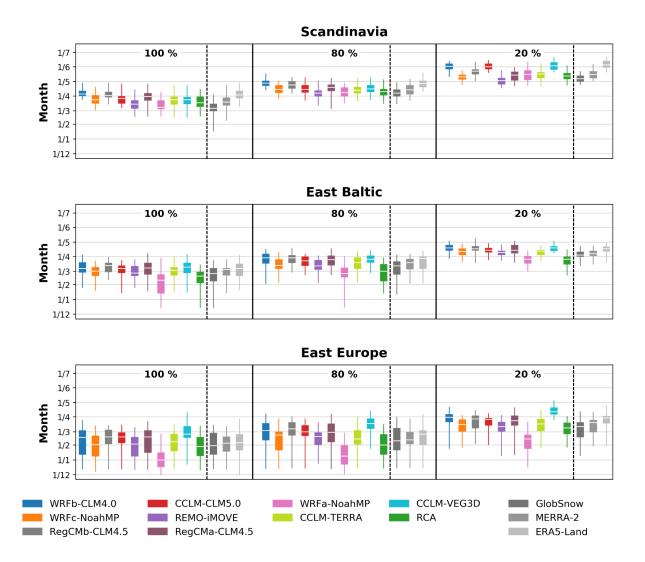
## 1 Supplemental Material



**Figure S1:** Timing of maximum snow mass (100%) and timing of reduction to 80% and 20% snow mass for Scandinavia, East Baltic, and East Europe for RCMs, the satellite product GlobSnow (v3.0; ), MERRA-2, and ERA5-Land. The box-and-whisker plots indicate the interannual variability for the 29 winters between 1986/87 to 2014/15; white lines represent the median, boxes the interquartile range, and whiskers the minimum and maximum values. Note that the 20% snow mass estimates in Scandinavia for GlobSnow only contain 27 years since GlobSnow did not reach 20% snow mass in 1996 and 1997 as it does not provide data during summer months.