

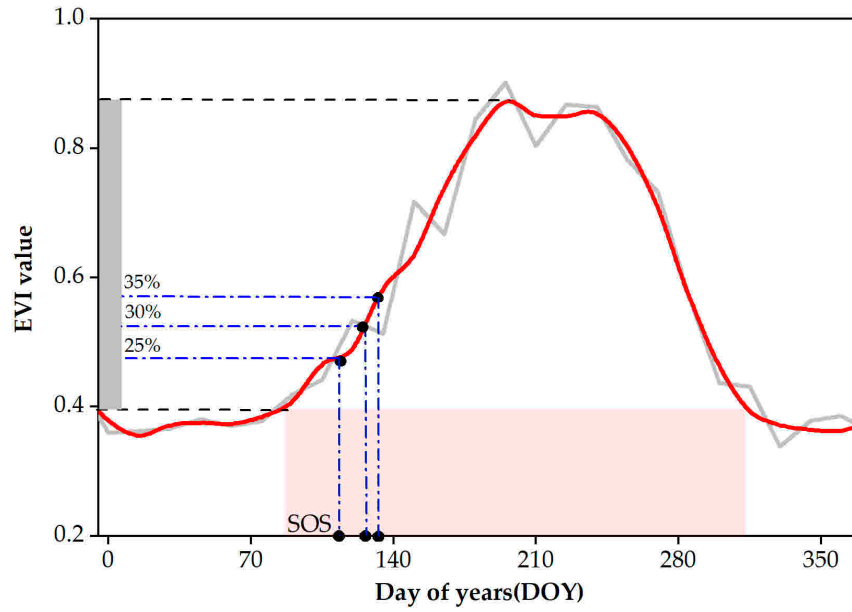


Figure S1. The calculation of vegetation phenology; the grey line in the figure represents the vegetation annual growth curve and the red curve is the fitting line; the gray strips in left represent the amplitude of EVI; the pink strips represent base value.

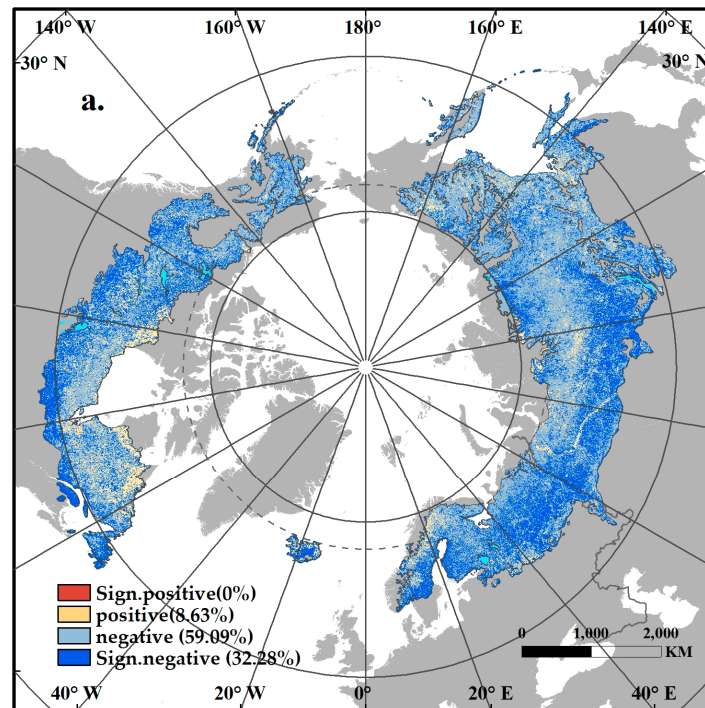


Figure S2. Spatial distribution of the areas with significant trend in boreal forest from 2001 to 2017.

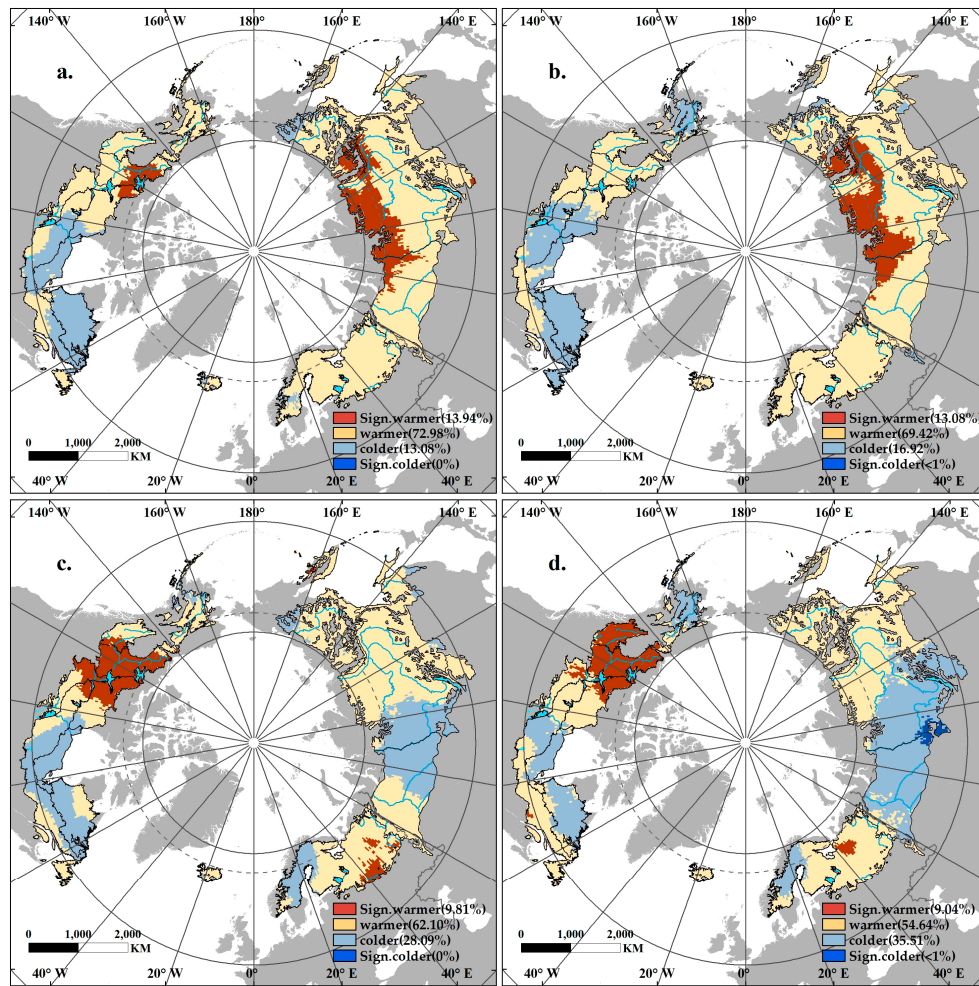


Figure S3. Spatial distribution of the significant trend of diurnal temperature in the boreal forest from 2001 to 2017 during different preseason:(a) TMAX during the TMAX preseason; (b) TMIN during the TMAX preseason; (c) TMAX during the TMIN preseason and (d) TMIN during the TMIN preseason.

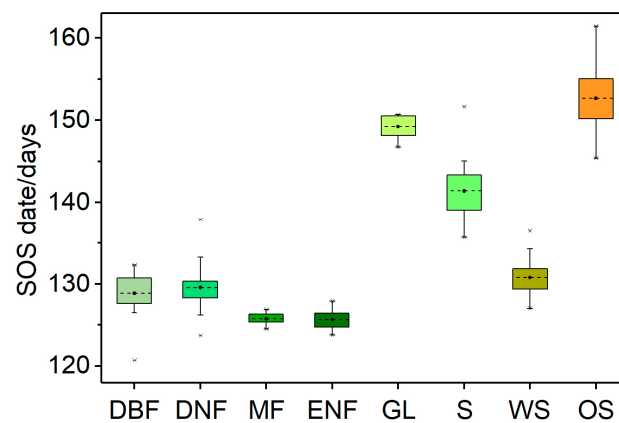


Figure S4. SOS dates in different land cover types. DBF, DNF, MF, ENF, GL, S, WS, and OS correspond to the deciduous broadleaf forest, deciduous needleleaf forest, mixed forest, evergreen needleleaf forest, grassland, savannas, woody savannas, and open shrubland, respectively

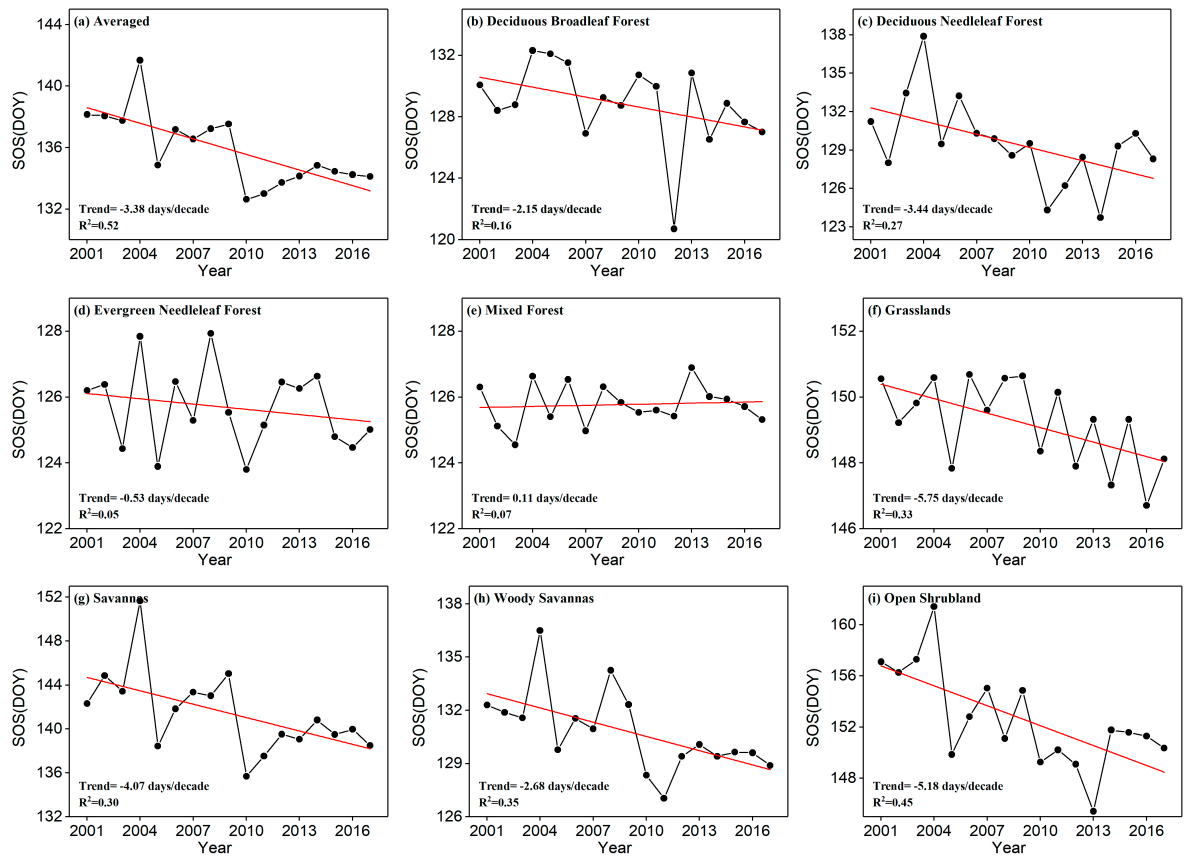


Figure S5. Trends and temporal variations in the SOS for different vegetation types in the boreal forest during 2001-2017.