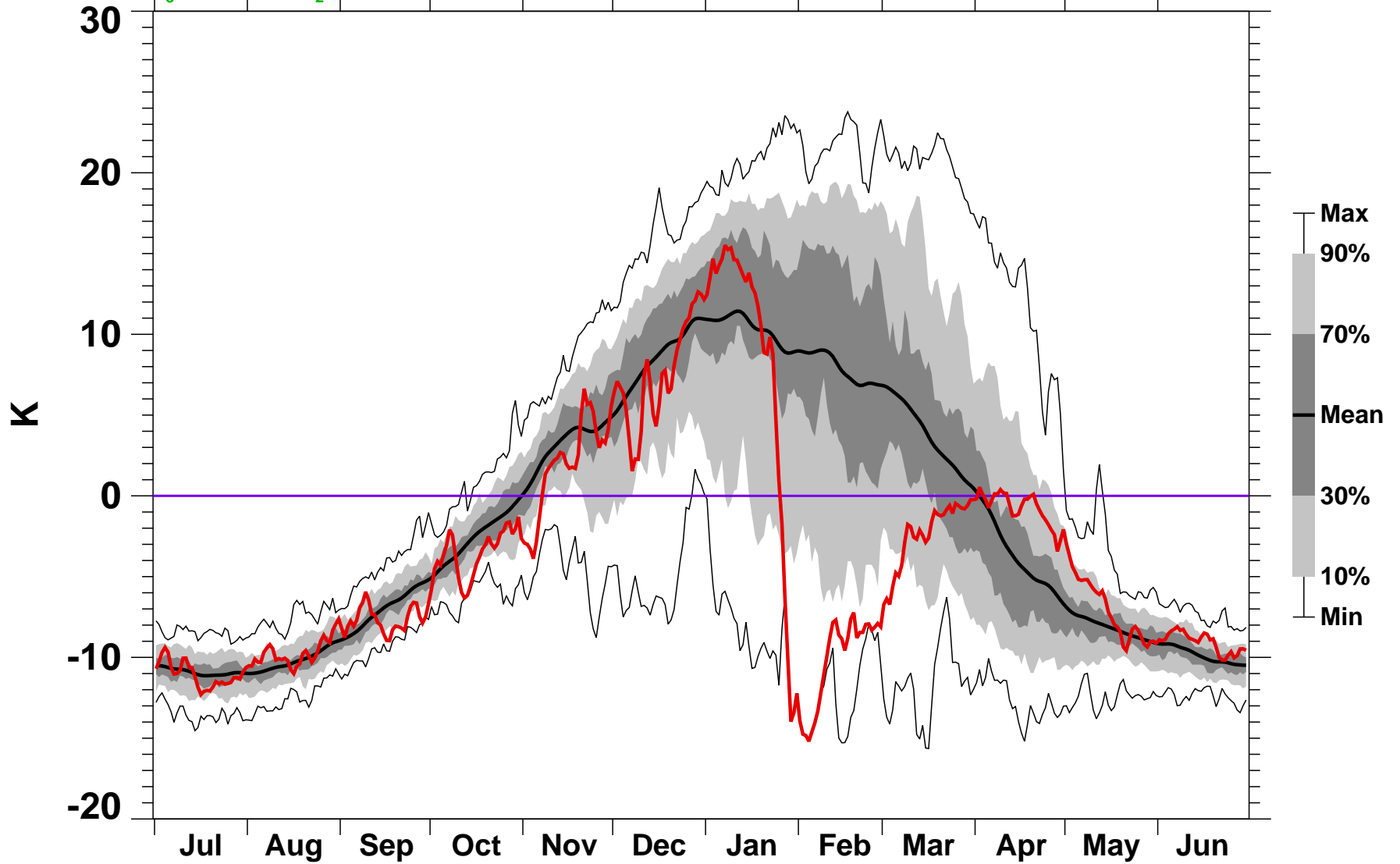


# 50-80°N Zonal Mean Temperature Gradient

100 hPa MERRA2

$\text{HNO}_3 = 6 \text{ ppbv}$ ,  $\text{H}_2\text{O} = 4.5 \text{ ppmv}$



1978/1979–2022/2023

2008/2009