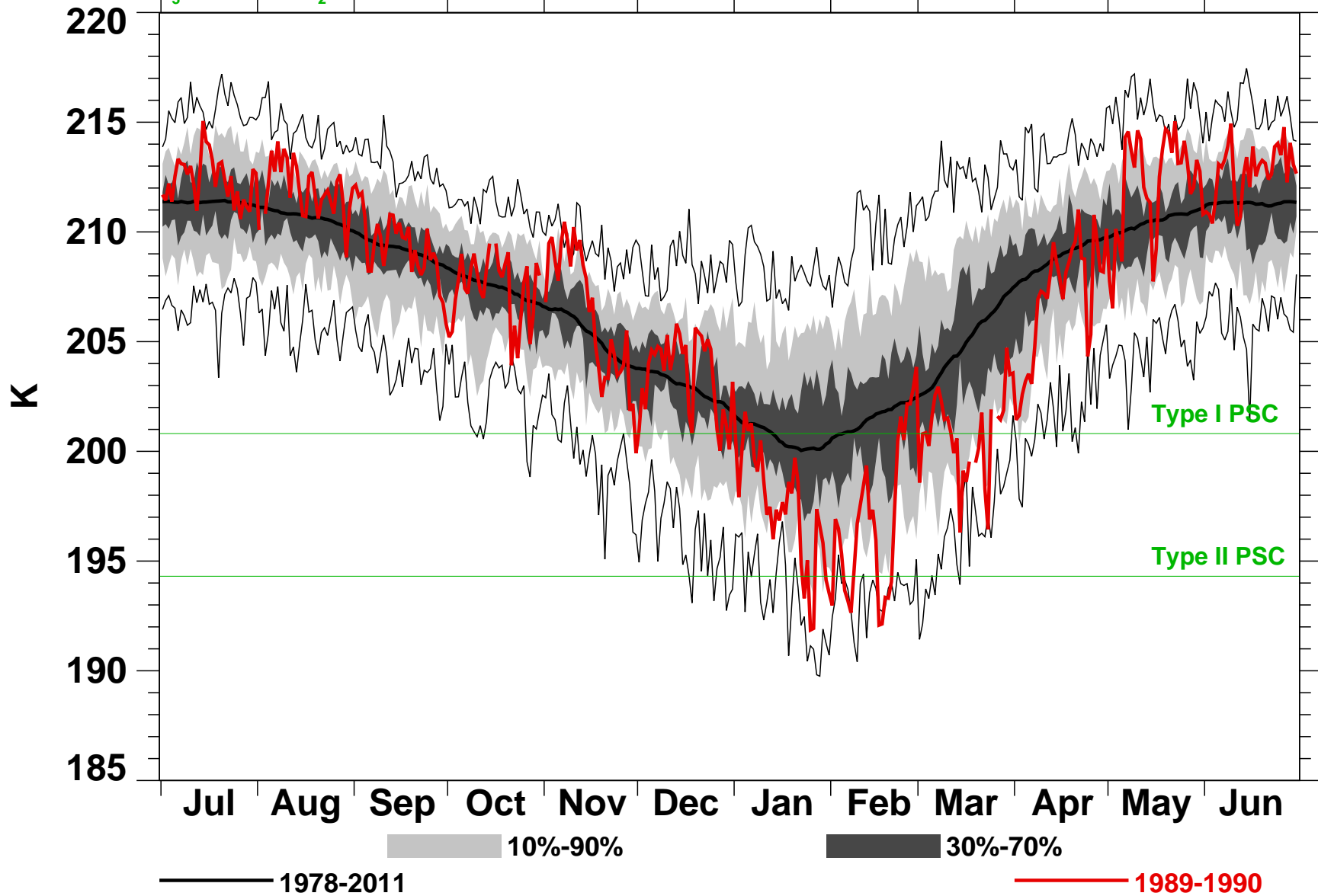


50-90°N Minimum Temperature 150 hPa

$\text{HNO}_3 = 6 \text{ ppbv}$, $\text{H}_2\text{O} = 4 \text{ ppmv}$



P. Newman (NASA), E. Nash (SSAI), C. Long (NOAA)