

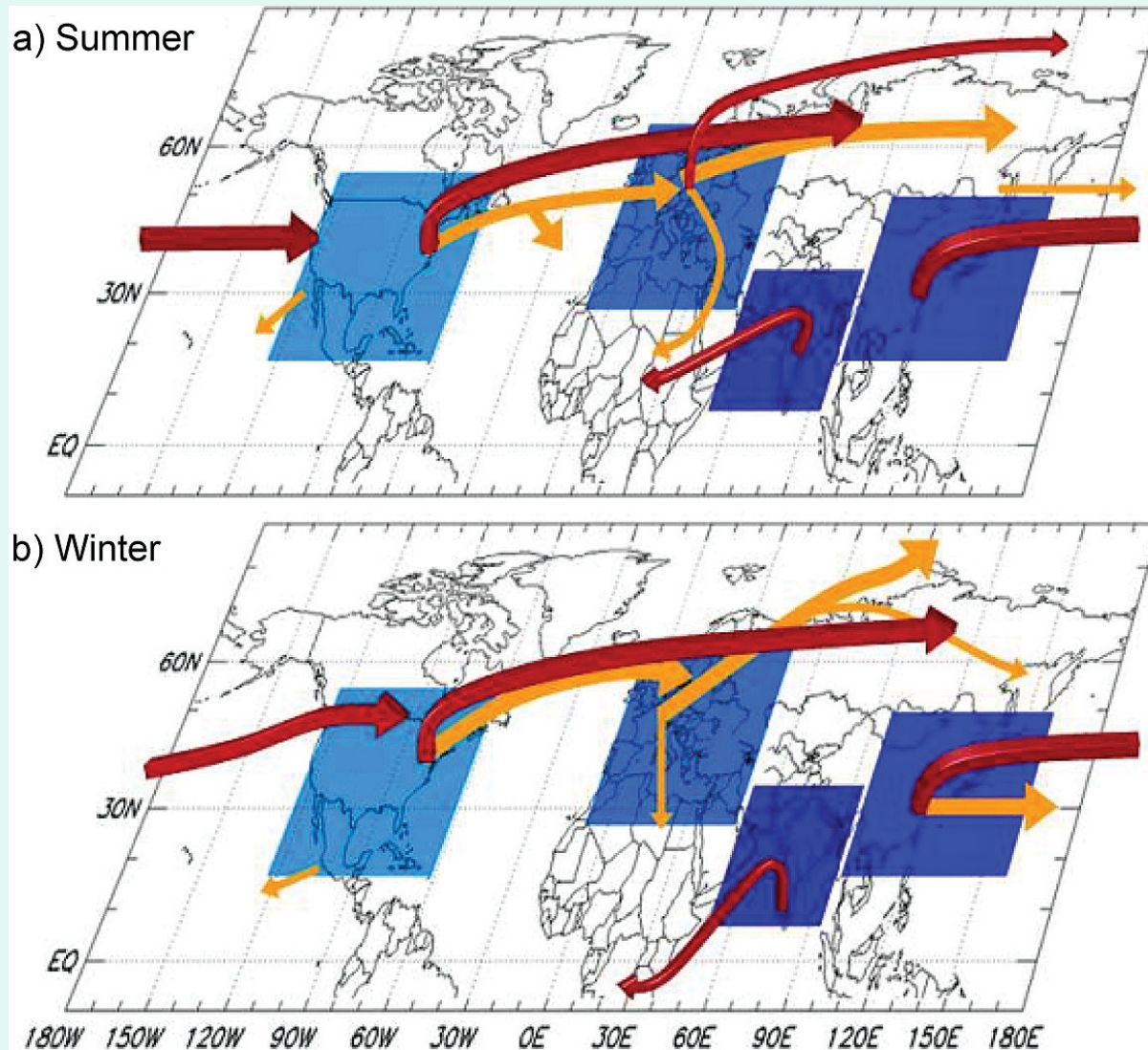
Arshinov M.Yu., Belan B.D., Belan S.B., Ivlev G.A.,
Kozlov A.V., Tolmachev G.N., Fofonov A.V.

Blocking role of Ural in carry of impurity above territory of Eurasia

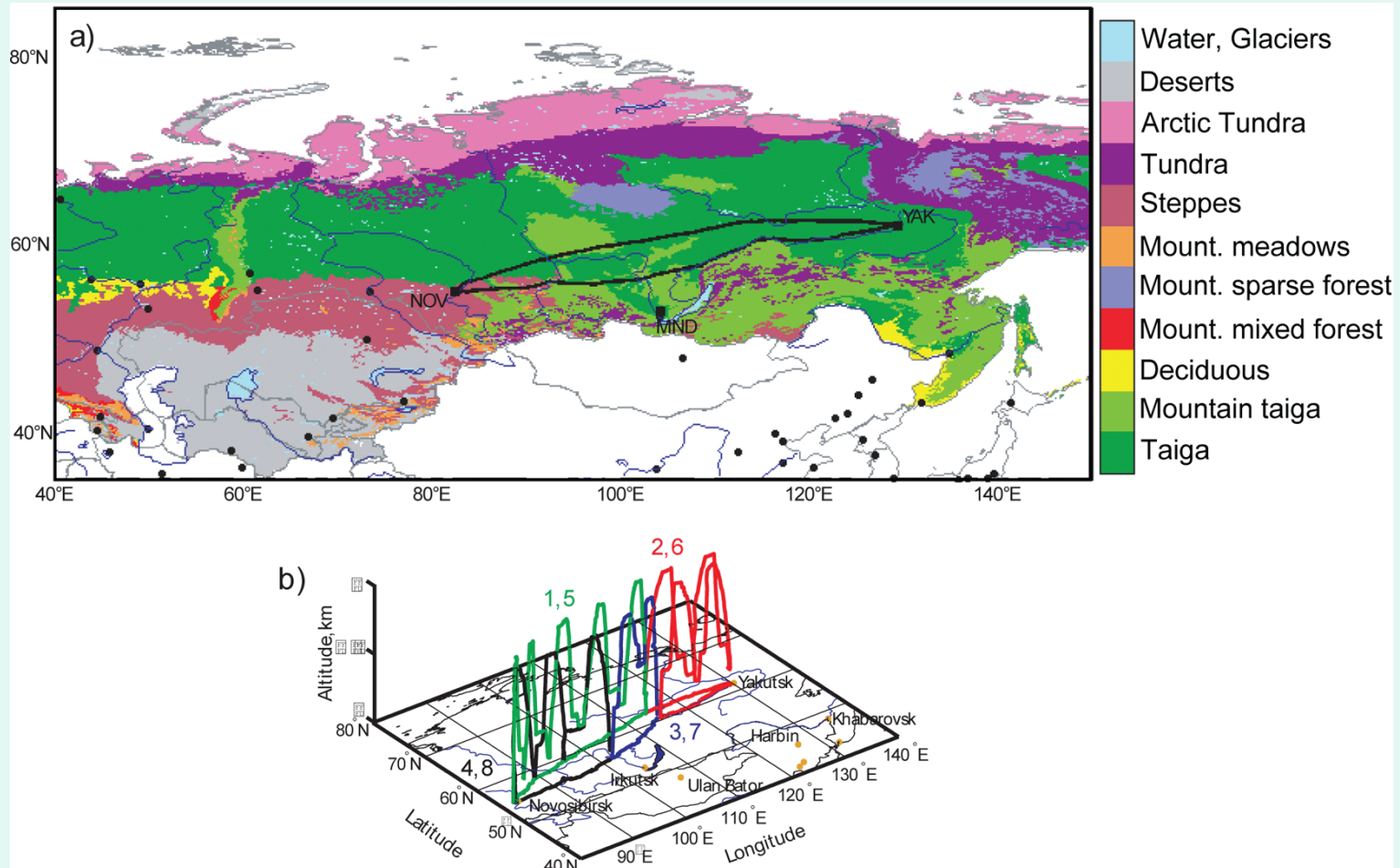
V.E.Zuev Institute of Atmospheric Optics SB RAS

ENVIROMIS-2010

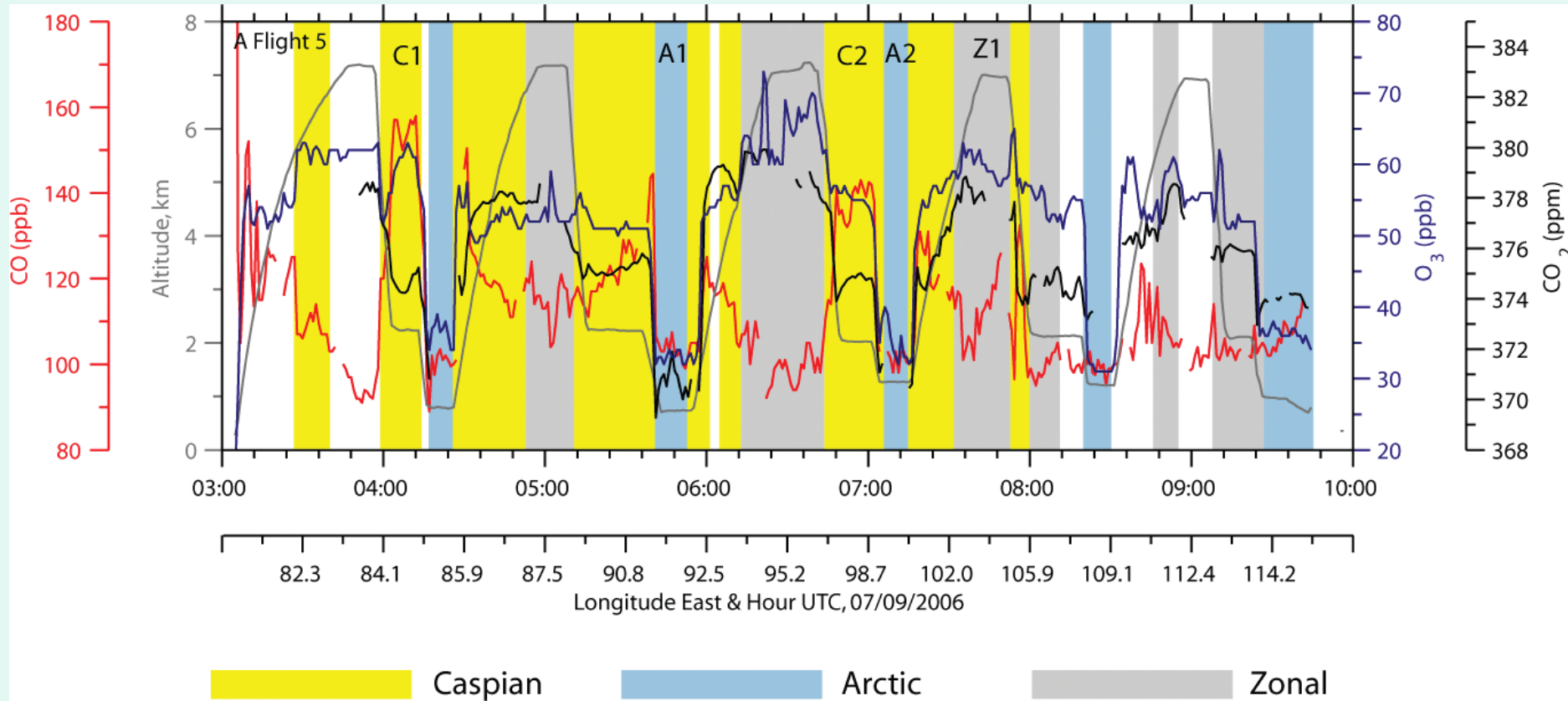
Illustration of pollutant long range transport patterns. Yellow arrows represent transport between the surface and 3 km altitude, and the red arrows represent transport above 3 km altitude. From Stohl and Eckhardt (2004)



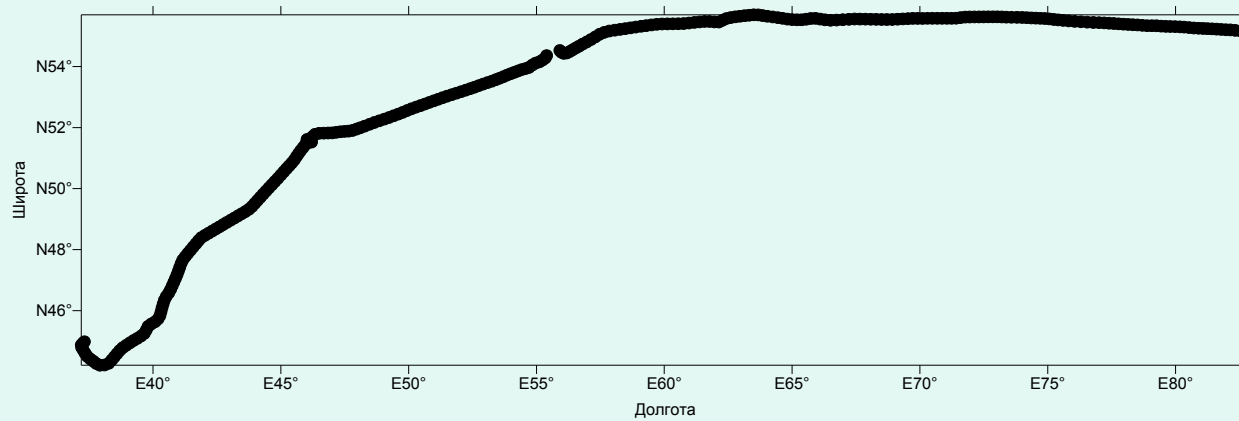
(a) Flight route and landscape classification. Each campaign follows a similar route, starting from Novosibirsk (NOV) in central Siberia, to the pivot point Yakutsk (YAK), and back to NOV. (b) A campaign is composed of four flights: the first is depicted in green, the second in red, the third in blue, and the fourth in black. The landscape classification is derived from Shvidenko et al. (2007).



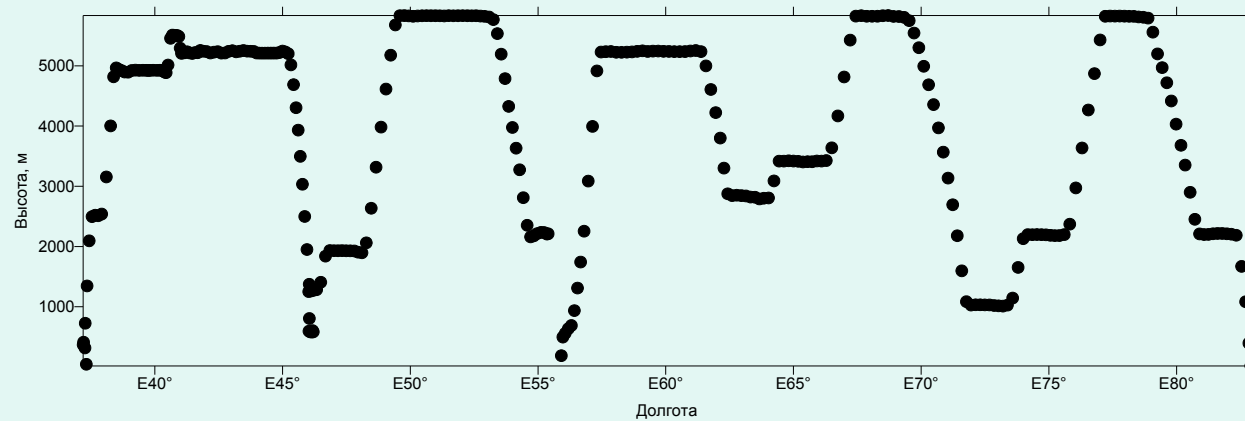
Carbon dioxide, CO, and O₃ concentrations during flight 5. The shading corresponds to the occurrence of “European– Caspian” air masses (yellow) and “Arctic” air mass. The gray shading corresponds to fast zonal transport, encountered mainly in the mid–upper troposphere.



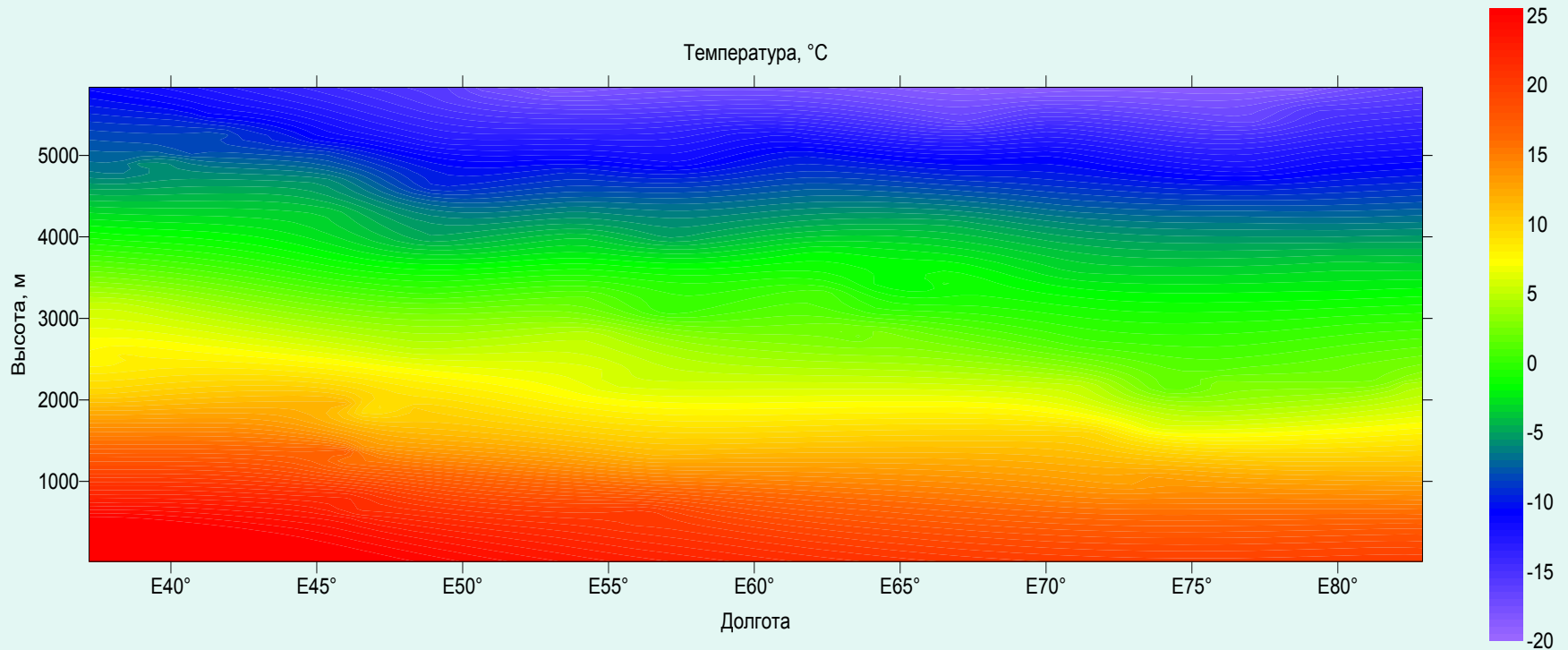
Novosibirsk – Ufa – Saratov – Anapa



Longitude Profile View

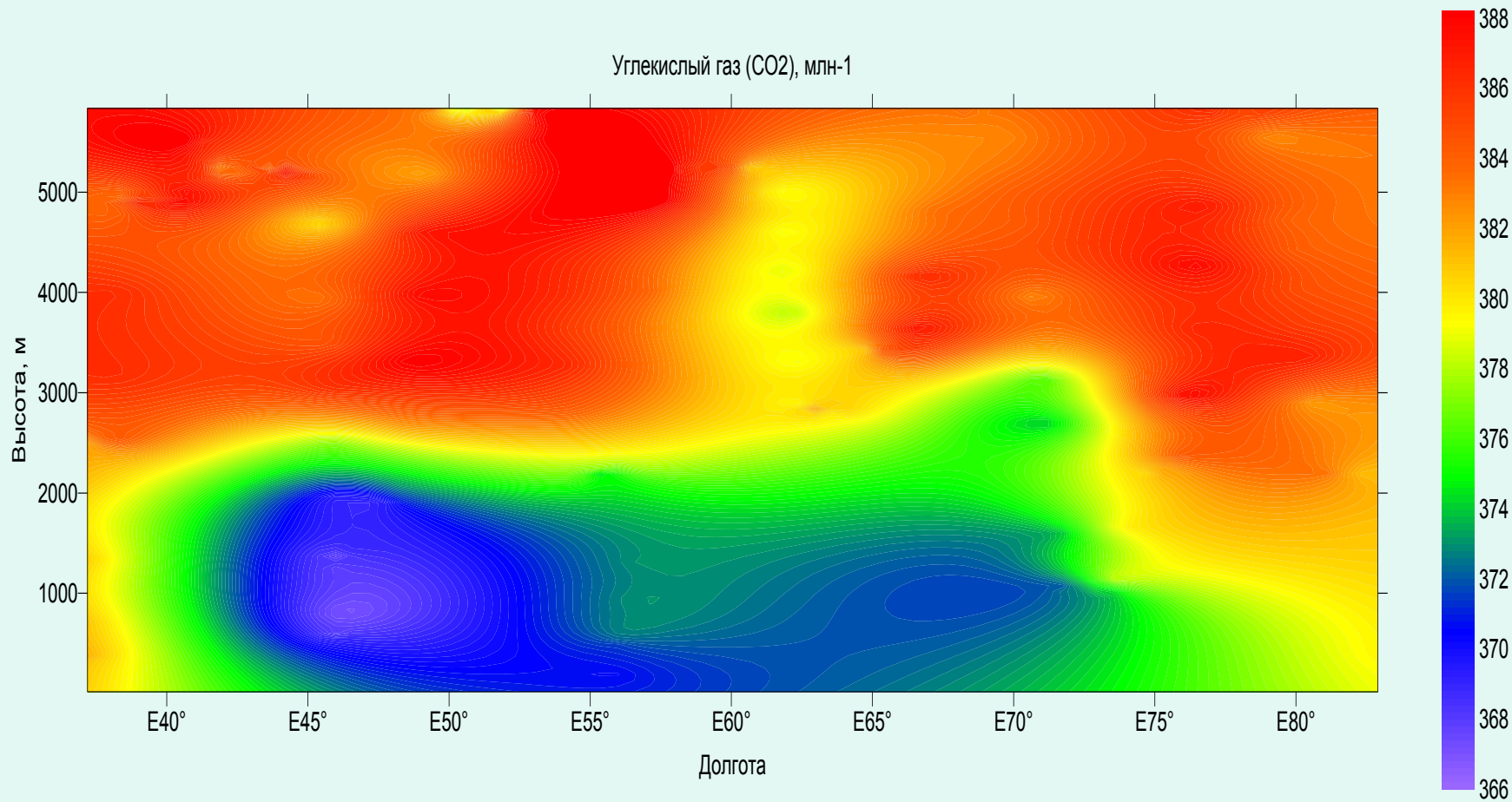


Vertical distribution of temperature of air



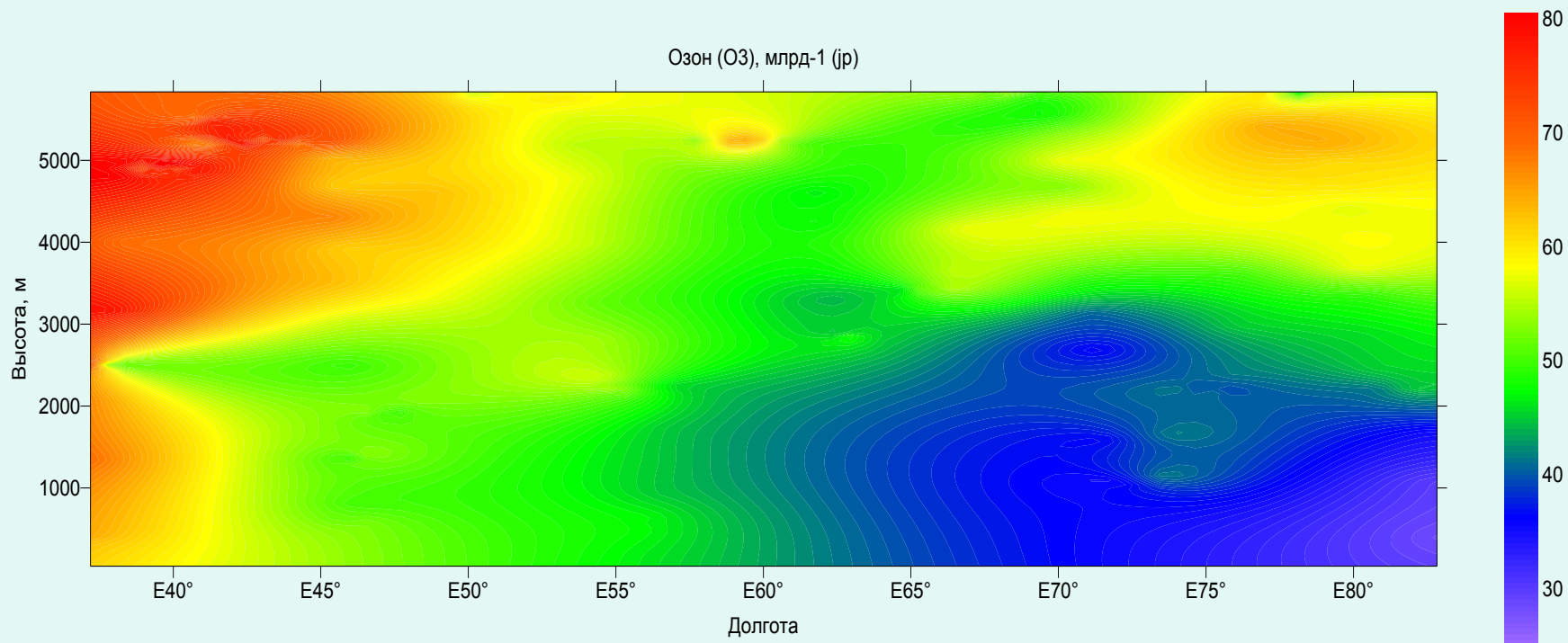
CO₂, ppm

Углекислый газ (CO₂), млн-1

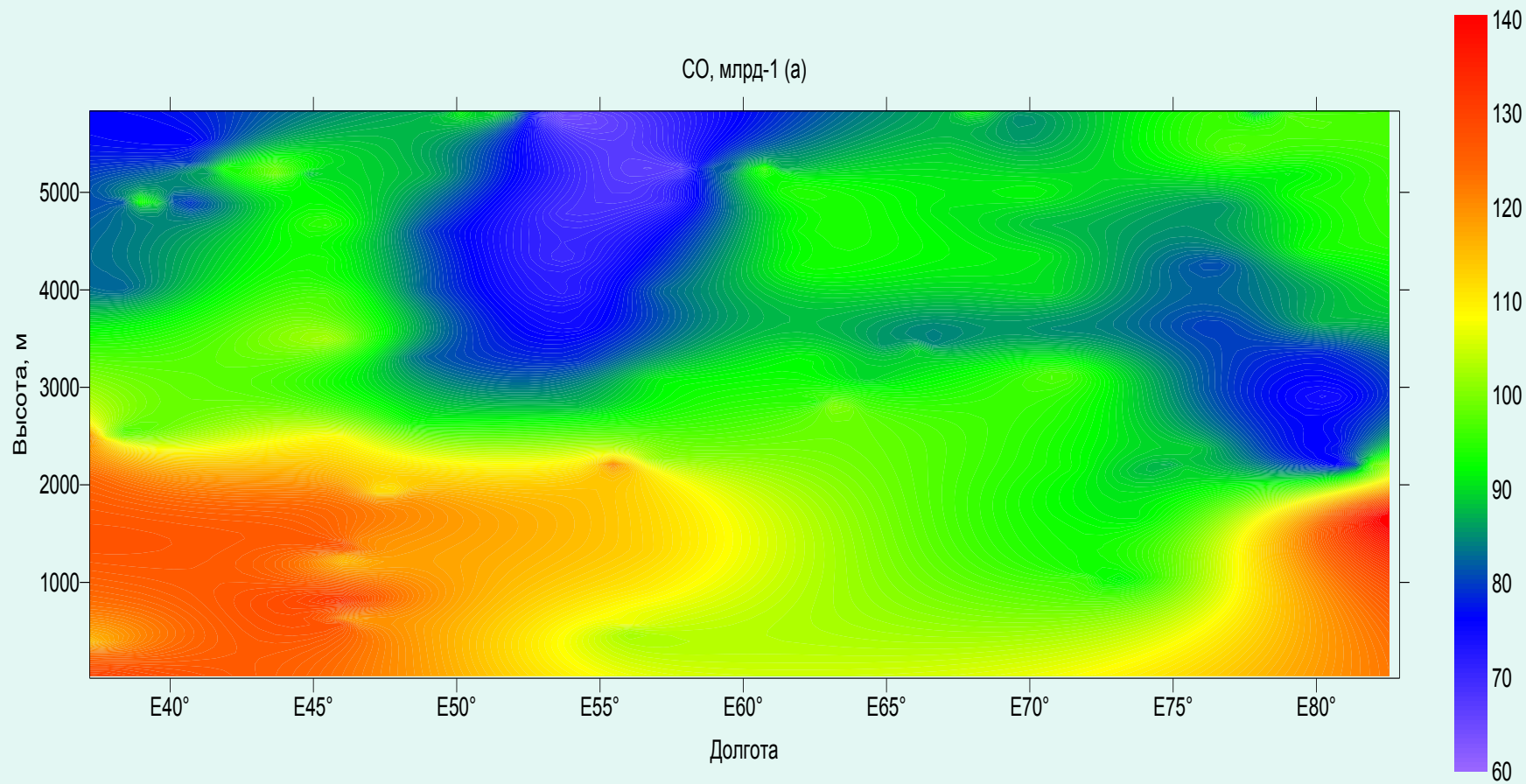


O₃, ppb

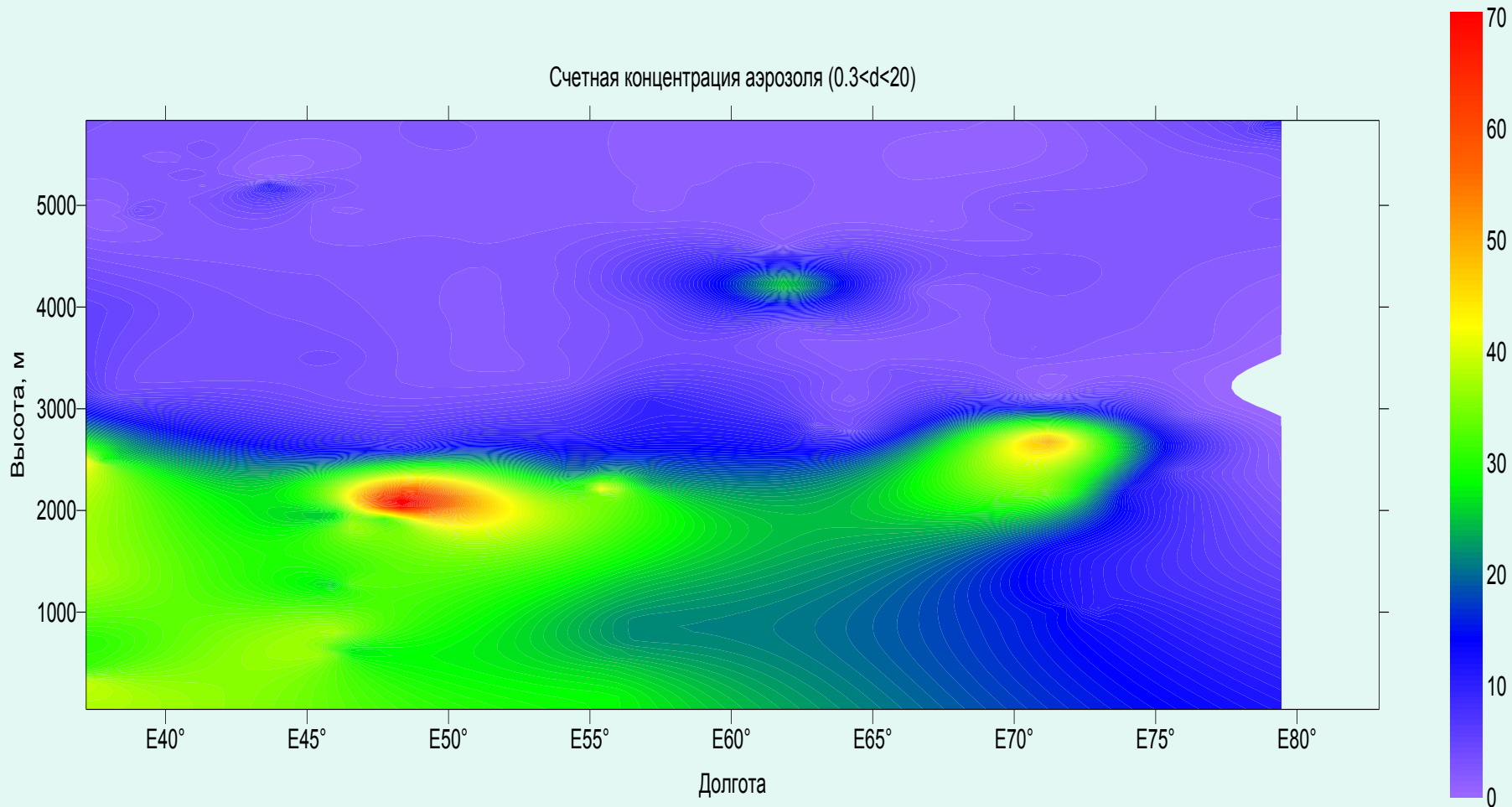
Озон (O₃), млрд-1 (ppb)



CO, ppb



Aerosol ($0.3 < d < 20 \text{ mkm}$), cm^{-3}



Thank for attention