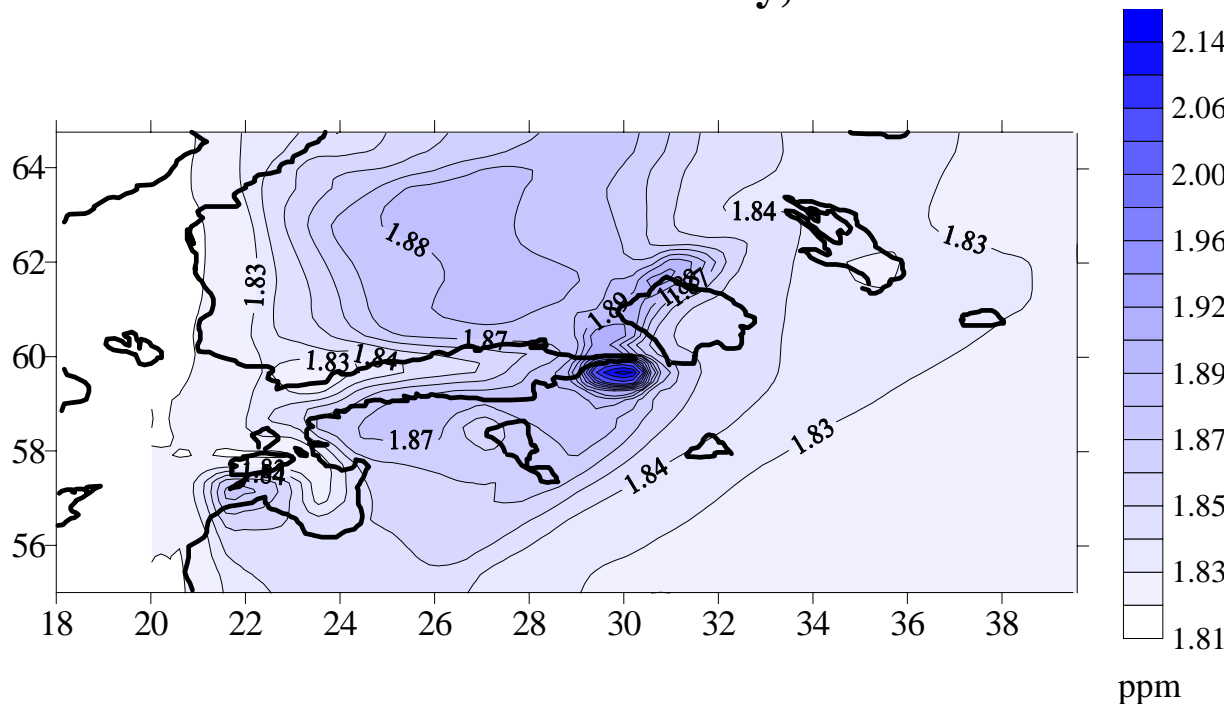


3D regional transport model of MGO

Methane distribution near the surface for February, 24 1996 over St.-Petersburg region



Level Z	Number of levels	Levels	Wind (U,V)	Vertical turb. Coeff. K_{zz}
$Z < PBL$	Calculated	Any 10 levels up to 1 km	Calculated or from data base (ECMWF, NCEP)	Calculated
$PBL < Z < 1.5 \text{ km}$	Calculated		Geostroph. (850 mb) or from ECMWF, NCEP	$0.1 \max(K_{zz}) PBL$ [Lee and Larsen, 1997]
$1.5 \text{ km} < Z < 11 \text{ km}$	10	1.5 km, 2.5 km, 3.5 km...10.5 km	From data base (ECMWF, NCEP)	10 m/s^2 [Prather, Remsberg, 1993]

1. West Siberia region: $X = 62^{\circ} - 81^{\circ} \text{ E}$; $\Delta X = 1^{\circ}$ (38 - 70 km) $Y = 58^{\circ} - 72^{\circ} \text{ N}$; $\Delta Y = 0.5^{\circ}$ (55.5 km)

2. St.Petersburg area: $X = 20^{\circ} - 40^{\circ} \text{ E}$; $\Delta X = 0.5^{\circ}$ (~18 - 32 km) $Y = 55^{\circ} - 65^{\circ} \text{ N}$; $\Delta Y = 0.25^{\circ}$ (~27km)

Time step $\Delta t = 5$ minutes

Meteorological fields: ECMWF - updated 4 times a day; NCEP - updated 2 times a day, 1 - hour time interpolation is applied