

Stratosphere – Troposphere Exchange : Sensitivity Analysis using RegCM4.3

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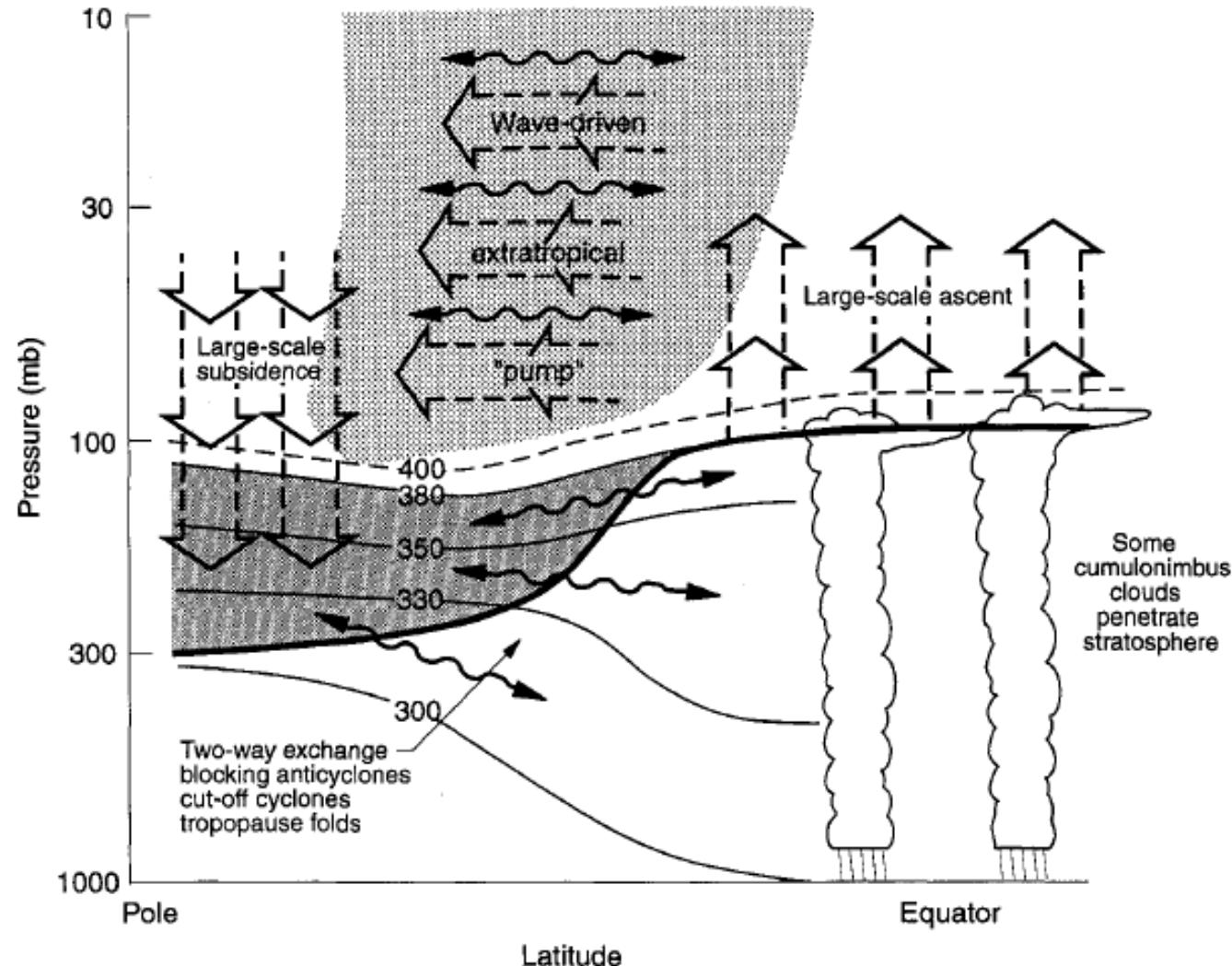
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Lusine, Gevorgyan, EIMC, Armenia

Vijayakumar S Nair, SPL, VSSC, India



Motivation



Experiment Design

RegCM 4.3 (Version 11 !)

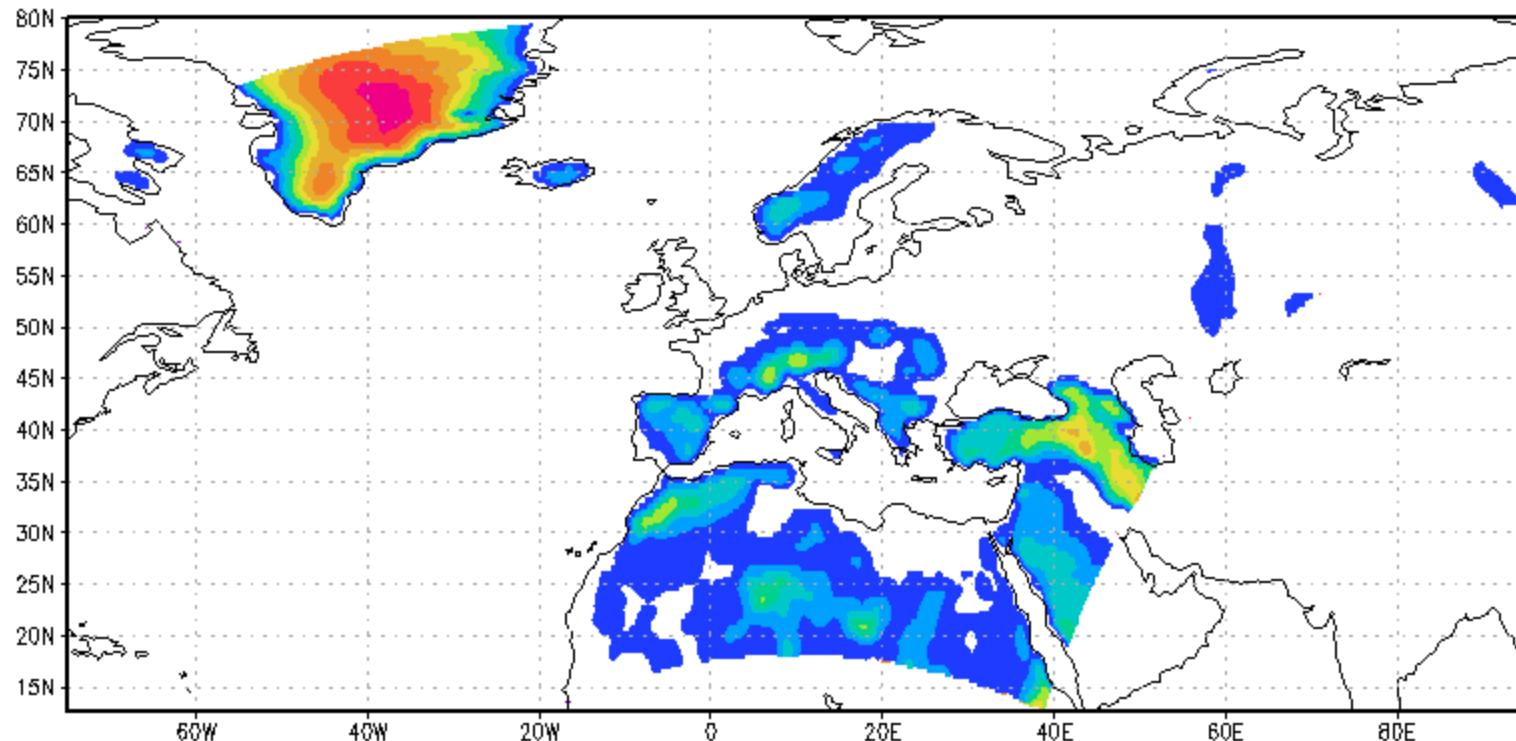
Domain: Euro-CORDEX

Convection : Grell,

Land surface : BATS,

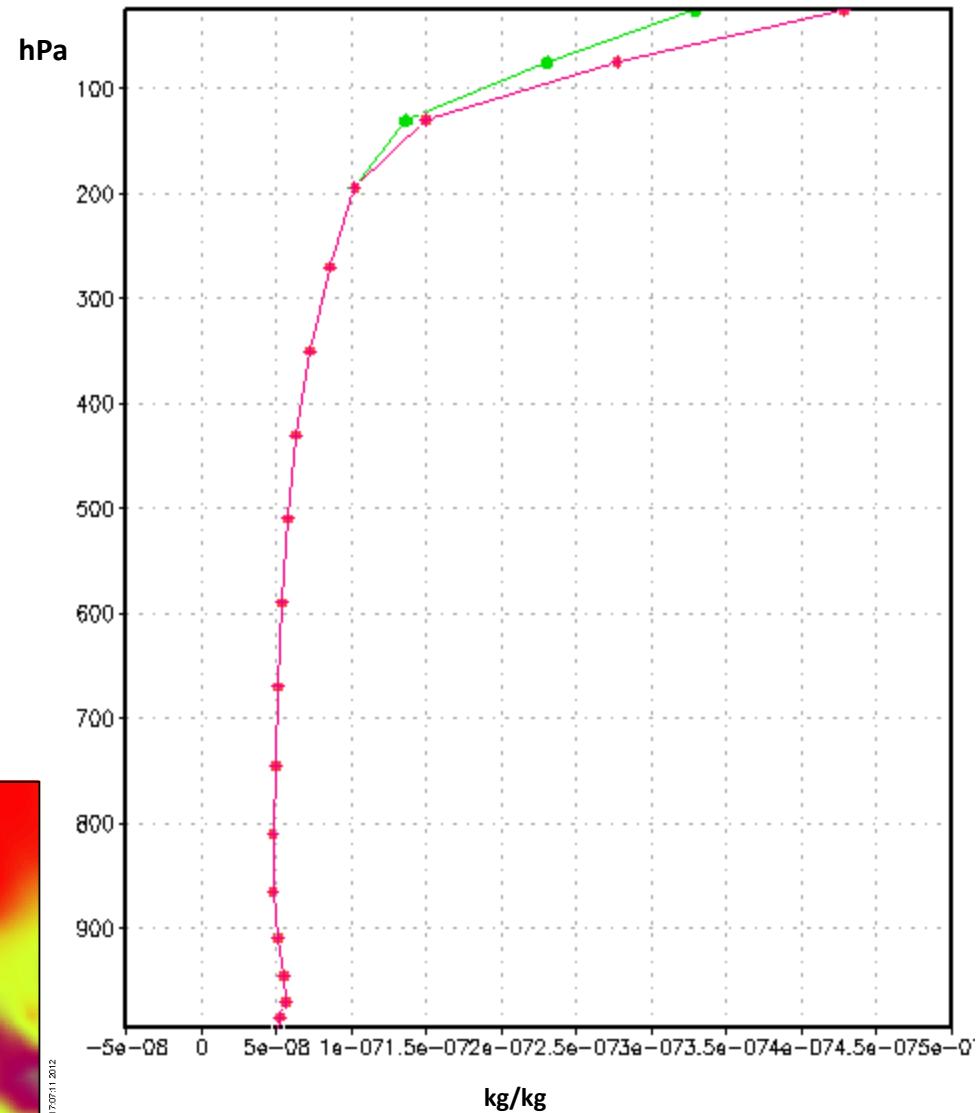
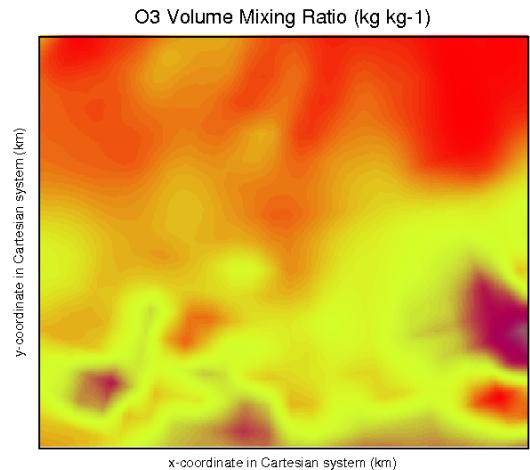
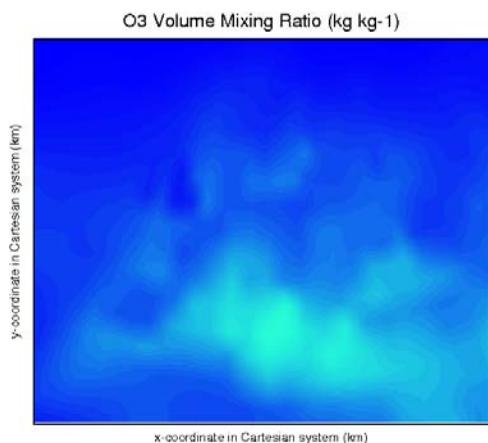
LBC : ERA-Interim

Chemistry : CBMZ , Emission: RCP26

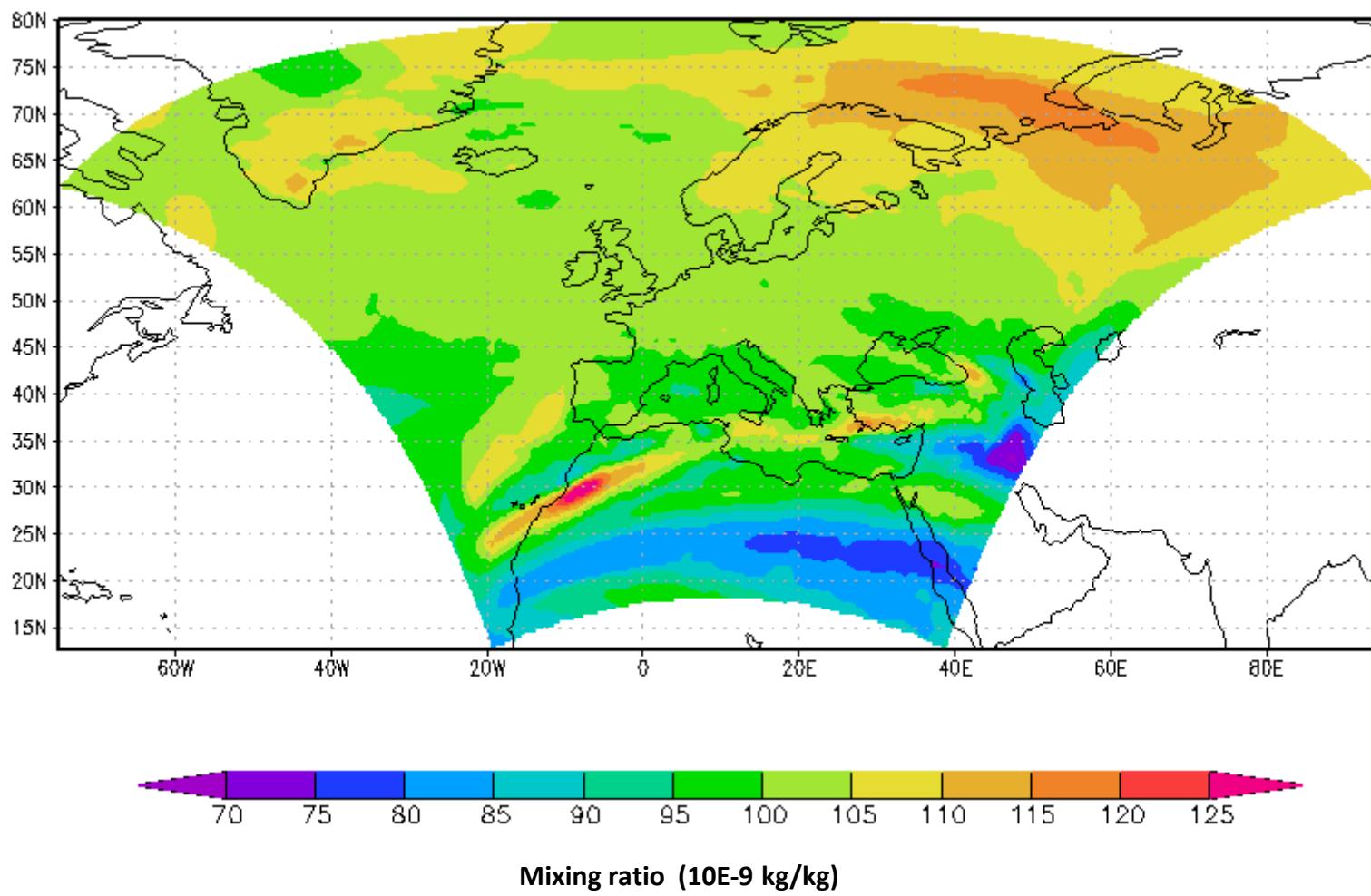


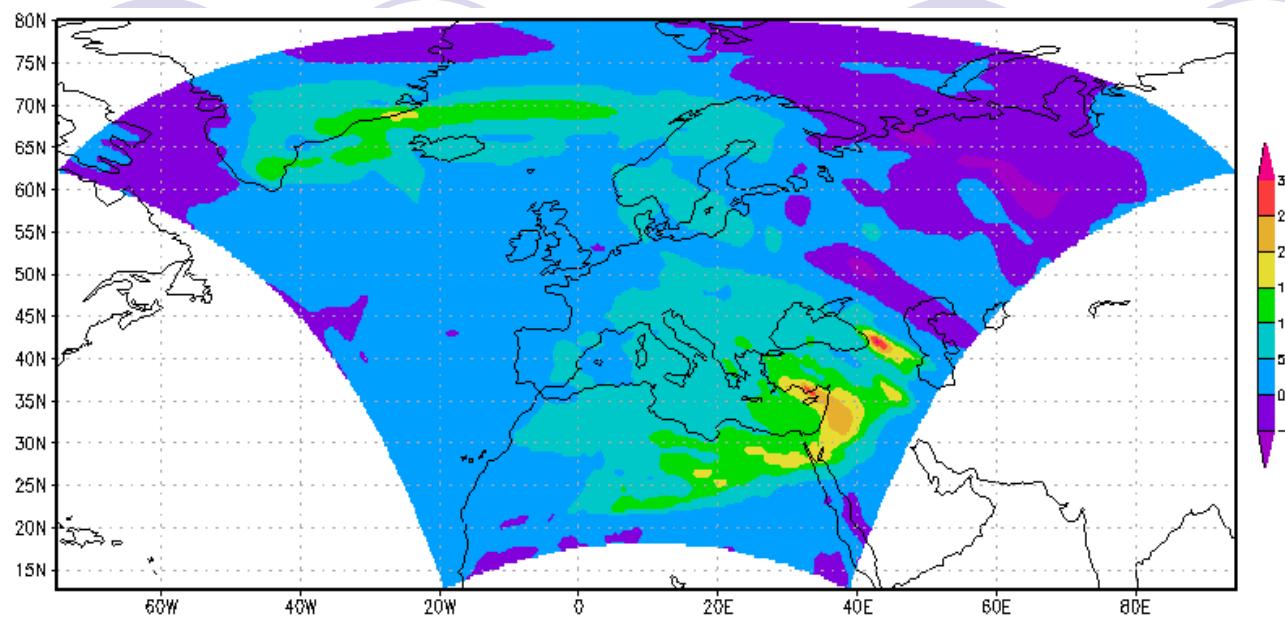
Experiment details

1. Control run (CTL)
CBMZ (standard ozone profile)
- 2 . Modified run (MOD)
With modified ozone profile

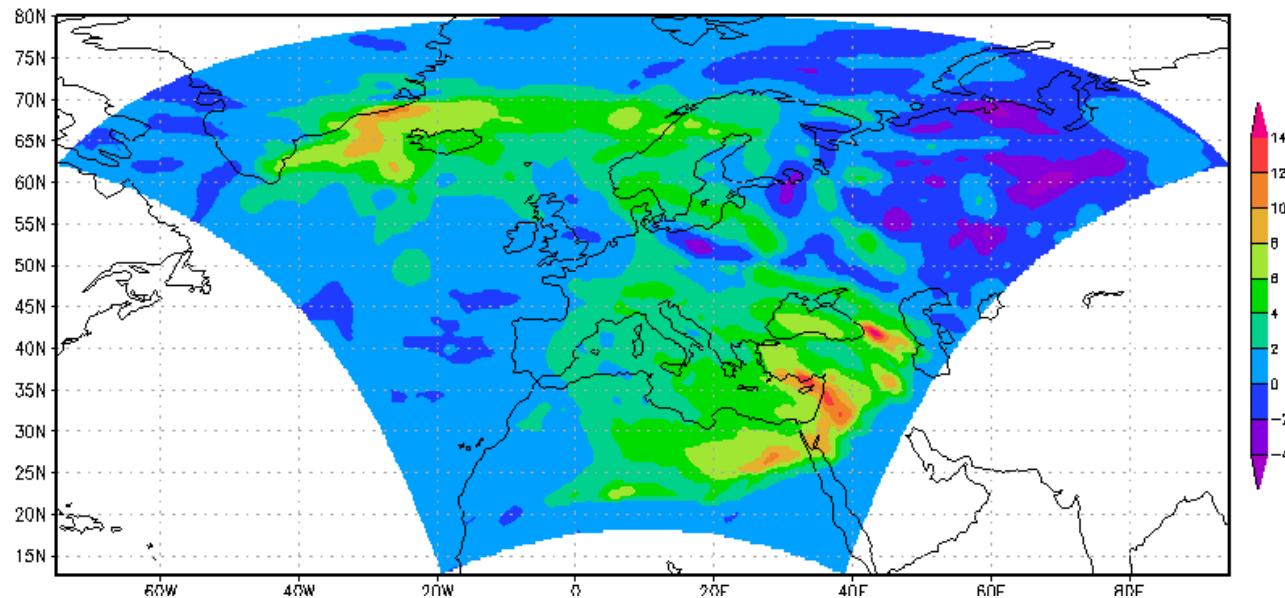


Differences MOD – CTL
Top Level

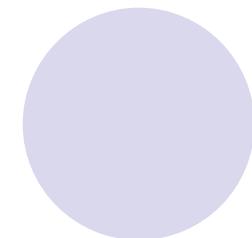
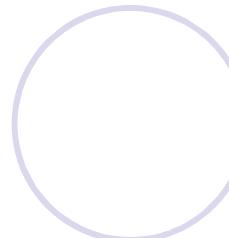
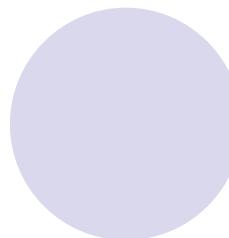
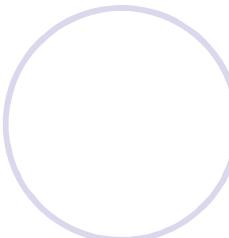
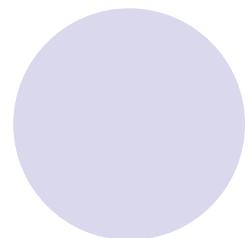




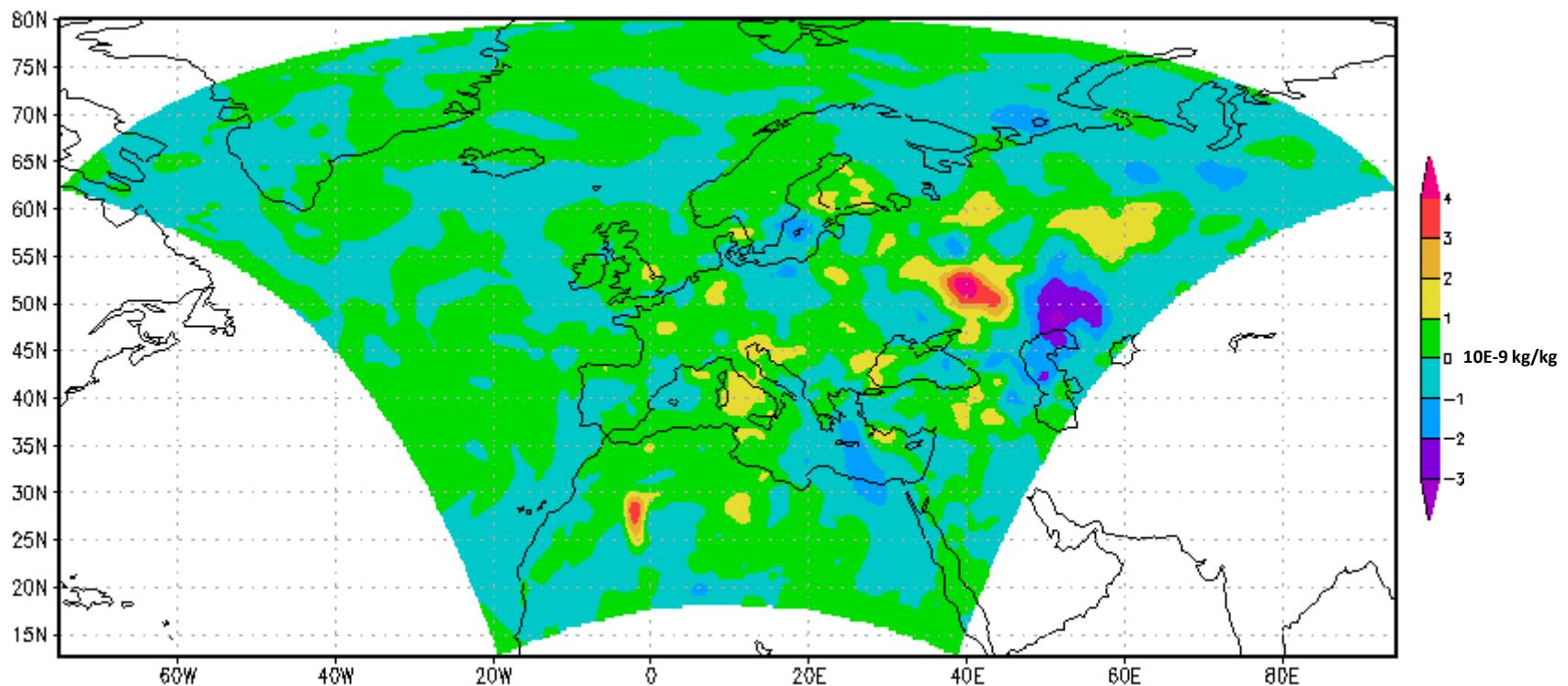
Level 15
~ 200hPa

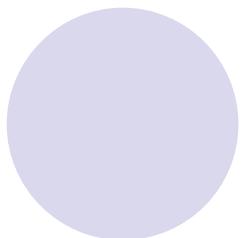
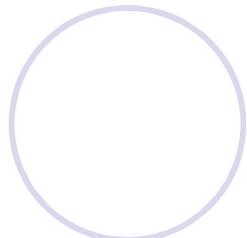
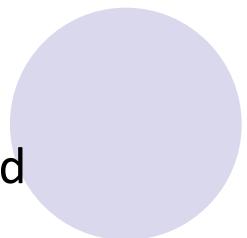
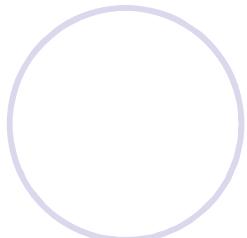
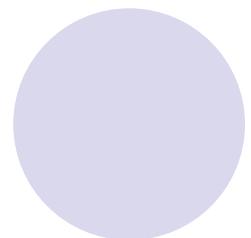


Level 14
~ 270hPa

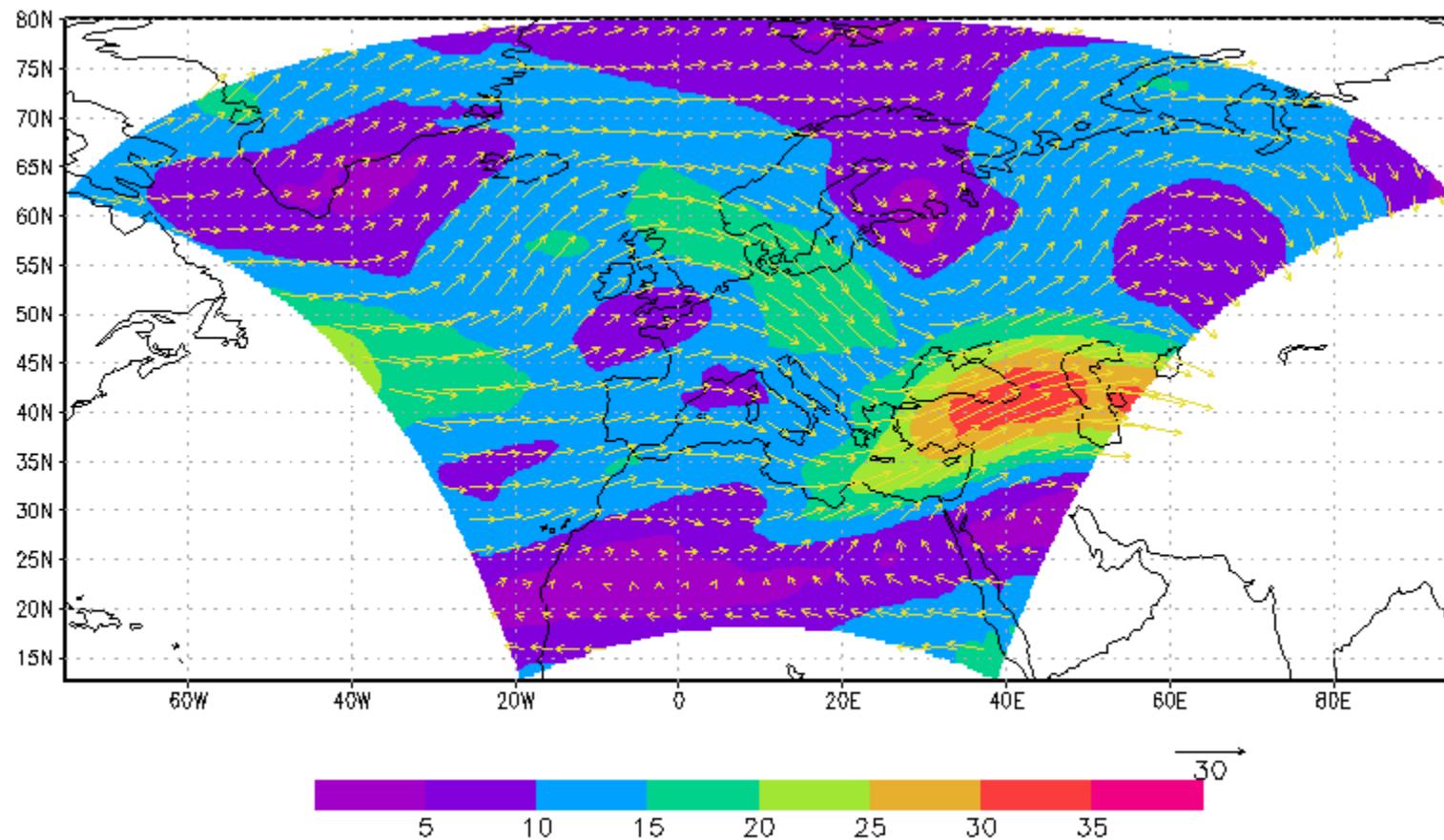


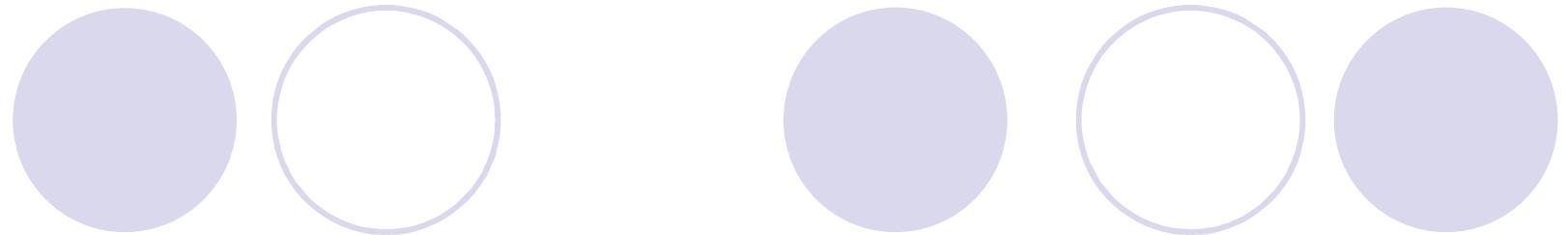
Surface level





200 hPa Wind





Thanks for your attention!